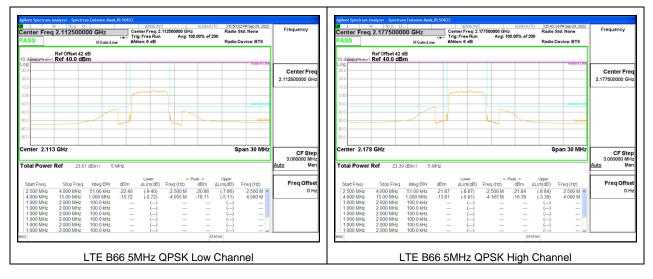
# 9.2.16. LTE BAND 66 EMISSION MASK

## <u>LIMITS</u>

FCC: §27.53(h)

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

# LTE BAND 66 BANDEDGE



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# 9.2.17. LTE BAND 71 AND 5G NR n71 EMISSION MASK

# **LIMITS**

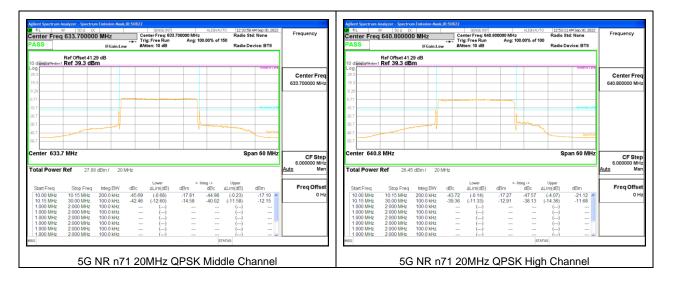
#### FCC: §27.53

(g) For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

### LTE BAND 71 and 5G NR n71 mask



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# 9.3. OUT OF BAND EMISSIONS

### RULE PART(S)

FCC: §2.1051, 22.917, 24.238, 27.53, 27.53, 27.53, 90.543, 90.691

### LIMITS

FCC: §2.1051, 22.917 (a), 24.238 (a), 27.53 (h), 27.53 (g), 27.53 (c) (f), 90.543 (e)(f), 90.691 (a)

The minimum permissible attenuation level of any spurious emissions is  $43 + 10 \log (P) dB$  where transmitting power (P) in Watts.

#### TEST PROCEDURE

The RF output of the transmitter was connected to a spectrum analyzer through a calibrated coaxial cable. Sufficient scans were taken to show the out-of-band Emissions, if any, up to 10th harmonic. Multiple sweeps were recorded in maximum hold mode using a peak detector to ensure that the worst-case emissions were caught.

For each out of band emissions measurement:

- Set display line at -13dBm according to the band limit.
- Set RBW & VBW to 100 kHz for the measurement below 1 GHz, and 1 MHz for the measurement above 1 GHz. (NOTE: Worst case set RBW/VBW to 1MHz/3MHz)

#### **RESULTS**

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# 9.3.1. GSM 850



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# 9.3.2. <u>GSM 1900</u>

L RF 50 P DC Int Freq 30.000000 M		#Avg Type: RMS Avg Hold: 100/100	TRACE 1 2 3 4 5 6 TYPE M MMMMMM	Frequency	Start Freq 30.00000		ree Run Ava	g Type: RMS  Hold: 100/100	TRACE 1 2 3 4 5 TYPE M WWWWW	Frequency
Ref Offset 42 dB	IFGain:Low #Atten: 10 dB		2 19.192 2 GHz	Auto Tune	Ref Offset 42	IFGain:Low #Atten	: 10 dB		2 19.064 9 GHz	Auto Tu
B/div Ref 42.00 dBn	n		-22.966 dBm		10 dB/div Ref 42.00 d	Bm			-23.575 dBm	
0				Center Freq 10.015000000 GHz	32.0 22.0 12.0					Center Fr 10.015000000 G
			-13.05 _m	Start Freq 30.00000 MHz	2.00 -8.00				-13.07_*9m	Start Fr 30.000000 N
				Stop Freq	-18.0					Stop Fi
				20.00000000 GHz	-48.0					20.000000000
rt 30 MHz Is BW 1.0 MHz	#VBW 3.0 MHz		Stop 20.000 GHz I.67 ms (40001 pts)		Start 30 MHz #Res BW 1.0 MHz	#VBW 3.0 M			Stop 20.000 GHz 67 ms (40001 pts	1.997000000
MODE TRO SCL	1.930 1 GHz 36.423 dBm	INCTION FUNCTION WIDTH	FUNCTION VALUE	Auto Man		1.960 1 GHz 36.508	3 dBm	FUNCTION WIDTH	FUNCTION VALUE	Auto
NIT	19.192 2 GHz -22.966 dBm			Freq Offset 0 Hz	2 N 1 f 3 4	19.064 9 GHz -23.575	aBm			FreqOff
					6					
					8 9 10					
			×		10 11 <	11			×	
								STATUS		
	00M 4000 0DD				MSG	CCM 4000				
	GSM 1900 GPR				MSG	GSM 1900	GPRS Mi	ddle Ch	annel	
	.8.16,39005,Conducted C	S Low Cha	annel		MSG	GSM 1900 (	GPRS Mi	ddle Ch	annel	
L RF 50 @ DC	.8.16,39005,Conducted C SENSE:INT HZ PNO: Fast - + Trig: Free Run		12:31:30 AMOct 05, 2022 TRACE 12:34 5.6	Frequency	MSG	GSM 1900 (	GPRS Mi	ddle Ch	annel	
L RF 50 8 DC rt Freq 30.000000 M NFE	.8.16,39005,Conducted C SENSE:INT HZ PNO: Fast +++ IFGain:Low #Atten: 10 dB	ALGANAUTO BAvg Type: RMS Avg Hold: 100/100	12:31:30 AMOCTOS, 2022 TRACE   12:34:5 G TYPE   12:34:5 G TYPE   NNNNN 2 19:104 3 GHz	- Frequency Auto Tune	MSG	GSM 1900 (	GPRS Mi	ddle Ch	annel	
L RF 50 0 DC rt Freq 30.000000 M NFE Ref Offset 42 dB	LE 16,39005, Conducted C SENSEINT IFG IFGainLow SAtter: 10 dB	ALGANAUTO BAvg Type: RMS Avg Hold: 100/100	12:31:30 AMOLT 05, 2022 TRACE [1:2 3 4 5 6 TYPE M WANNING DET P N.N.N.N.			GSM 1900 (	GPRS Mi	ddle Ch	annel	
L RF 50 Q DC rt Freq 30.000000 M NFE Ref Offset 42 dB	LE 16,39005, Conducted C SENSEINT IFG IFGainLow SAtter: 10 dB	ALGANAUTO BAvg Type: RMS Avg Hold: 100/100	12:31:30 AMOCTOS, 2022 TRACE   12:34:5 G TYPE   12:34:5 G TYPE   NNNNN 2 19:104 3 GHz	Auto Tune Center Freq		GSM 1900 (	GPRS Mi	ddle Ch	annel	
L RF 50 Q DC rt Freq 30.000000 M NFE Ref Offset 42 dB	LE 16,39005, Conducted C SENSEINT IFG IFGainLow SAtter: 10 dB	ALGANAUTO BAvg Type: RMS Avg Hold: 100/100	12:31:30 AMOCTOS, 2022 TRACE   12:34:5 G TYPE   12:34:5 G TYPE   NNNNN 2 19:104 3 GHz	Auto Tune		GSM 1900 (	GPRS Mi	ddle Ch	annel	
t Freq 30.000000 M NFE Ref Offset 42 dB	LE 16,39005, Conducted C SENSEINT IFG IFGainLow SAtter: 10 dB	ALGANAUTO BAvg Type: RMS Avg Hold: 100/100	2 19.104 3 GHz -23.569 dBm	Auto Tune Center Freq 10.01500000 GHz Start Freq		GSM 1900 (	GPRS Mi	ddle Ch	annel	
t Freq 30.000000 M NFE Ref Offset 42 dB	LE 16,39005, Conducted C SENSEINT IFG IFGainLow SAtter: 10 dB	ALGANAUTO BAvg Type: RMS Avg Hold: 100/100	12:31:30 AMOCTOS, 2022 TRACE   12:34:5 G TYPE   12:34:5 G TYPE   NNNNN 2 19:104 3 GHz	Auto Tune Center Freq 10.01500000 GHz		GSM 1900 (	GPRS Mi	ddle Ch	annel	
t Freq 30.000000 M	LE 16,39005, Conducted C SENSEINT IFG IFGainLow SAtter: 10 dB	ALGANAUTO BAvg Type: RMS Avg Hold: 100/100	2 19.104 3 GHz -23.569 dBm	Auto Tune Center Freq 10.015000000 GHz Start Freq 30.000000 MHz Stop Freq		GSM 1900 (	GPRS Mi	ddle Ch	annel	
t Freq 30.000000 M	A 16,00001,Cendenter C EXPERIMENT IF Control of Contr	ALGANAUTO BAvg Type: RMS Avg Hold: 100/100	2 19.104 3 GHz -23.569 dBm	Auto Tune		GSM 1900 (	GPRS Mi	ddle Ch	annel	
L = # 100 b CC rtt Freq 30.000000 M MFE Bridiv Ref 42.00 dBn ↓ 1 ↓ 1 ↓ 1 ↓ 1 ↓ 1 ↓ 1 ↓ 1 ↓ 1	# 16,0000;Genderter C EVENT Constraints of the second sec	S Low Cha Assertion AvgTreis Rts AvgTreis tionno Mkr	1221 30 MORTOL 5, 2022 THE DESCRIPTION OF THE DESC	Auto Tune           Center Freq           10.01500000 GHz           Start Freq           30.00000 GHz           Stop Freq           20.0000000 GHz           CF Step           1.99700000 GHz		GSM 1900 (	GPRS Mi	ddle Ch	annel	
L # # 300 BOOD M TT Freq 30.000000 M NFE Reforment 24 ab EValue Ref 42.00 dBm V1 V1 V1 V1 V1 V1 V1 V1 V1 V1	# 16,00001,Genderster (	Assertion	1221 30 MORTOL 5, 2022 THE DESCRIPTION OF THE DESC	Auto Tune           Center Freq           10.01500000 GHz           Start Freq           30.000000 MHz           Stop Freq           20.00000000 GHz           1.97700000 GHz           Auto           Man		GSM 1900 (	GPRS Mi	ddle Ch	annel	
Ref Offset 22 08 Ref Offset 22 08 Ref Offset 22 08 Ref 22.00 dBm 10 00 00 00 10 00 00 00 10 00 00 00 10 00 00 00 10 00 100	# 16, 3700% Conductor 0         Excel avr)           IH2         Excel avr)           PRO: Fast         Trig: Pree Run           #VEW 3.0 MHz         #VEW 3.0 MHz	S Low Cha Assertion AvgTreis Rts AvgTreis tionno Mkr	1221 30 MORTOL 5, 2022 THE DESCRIPTION OF THE DESC	Auto Tune           Center Freq           10.01500000 GHz           Start Freq           30.00000 GHz           Stop Freq           20.0000000 GHz           CF Step           1.99700000 GHz		GSM 1900 (	GPRS Mi	ddle Ch	annel	
L # # 300 BOOD M TT Freq 30.000000 M NFE Reforment 24 ab EValue Ref 42.00 dBm V1 V1 V1 V1 V1 V1 V1 V1 V1 V1	# 16,00001,Genderster (	S Low Cha Assertion AvgTreis Rts AvgTreis tionno Mkr	1221 30 MORTOL 5, 2022 THE DESCRIPTION OF THE DESC	Auto Tune           Center Freq           10.015000000 GHz           Start Freq           20.000000 GHz           1.97000000 GHz           1.97000000 GHz           Auto           Man           Freq Offset		GSM 1900 (	GPRS Mi	ddle Ch	annel	
Ref Offset 22 08 Ref Offset 22 08 Ref Offset 22 08 Ref 22.00 dBm 10 00 00 00 10 00 00 00 10 00 00 00 10 00 00 00 10 00 100	# 16,00001,Genderster (	S Low Cha Assertion AvgTreis Rts AvgTreis tionno Mkr	1221 30 MORTOL 5, 2022 THE DESCRIPTION OF THE DESC	Auto Tune           Center Freq           10.015000000 GHz           Start Freq           20.000000 GHz           1.97000000 GHz           1.97000000 GHz           Auto           Man           Freq Offset		GSM 1900 (	GPRS Mi	ddle Ch	annel	
L # # 300 BOOD M TT Freq 30.000000 M NFE Reforment 24 ab EValue Ref 42.00 dBm V1 V1 V1 V1 V1 V1 V1 V1 V1 V1	# 16,00001,Genderster (	S Low Cha Assertion AvgTreis Rts AvgTreis tionno Mkr	1221 30 MORTOL 5, 2022 THE DESCRIPTION OF THE DESC	Auto Tune           Center Freq           10.015000000 GHz           Start Freq           20.000000 GHz           1.97000000 GHz           1.97000000 GHz           Auto           Man           Freq Offset		GSM 1900 (	GPRS Mi	ddle Ch	annel	
Ref Offset 42 dB Ref 42.00 dBn	# 16,00001,Genderster (	S Low Cha	12:33 30 MON(106, 2002 THAT [] 3 9 5 6 0 THAT [] 3 9 5 6 0 3 3 5 5 0 5 5 0 p 2 0.000 CHz 1.67 ms (40001 pts)	Auto Tune           Center Freq           10.015000000 GHz           Start Freq           20.000000 GHz           1.97000000 GHz           1.97000000 GHz           Auto           Man           Freq Offset		GSM 1900 (	GPRS Mi	ddle Ch	annel	

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# 9.3.3. UMTS BAND 5



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# 9.3.4. UMTS BAND 2

Int Spectrum Analyzer - AP2022.8.16,39005,Conducted C L 8F 50	E:INT ALIGNAUTO 12:24:11 AMOct 05, 20 #Avg Type: RMS TRACE 1 2 3 4	Frequency	Addmin Spectram Analyzer . AP2022.8.16.39005/Conducted C 35 933 DC 9 Start Freq 30.000000 MHz AAvg Type: RMS TRACE[]: 34.5.5 Frequency
NFE PNO: Fast Trig: Free I IFGain:Low #Atten: 10	Run Avg Hold: 100/100 TYPE M WWW	N N	NFE PNO: Fast Trig: Pree Run Avgineid: 100100 DET PNNNN IFGain:Low #Atten: 10 dB DET PNNNN
Ref Offset 42 dB B/div Ref 42.00 dBm	Mkr2 19.119 8 GF -23.505 dB	Auto Tune	Ref Offset 42 dB         Mkr2 19.328 0 GHz         Auto Tu           10 dB/dlv         Ref 42.00 dBm         -22.790 dBm         -
<u>^</u> 1		Center Freq 10.015000000 GHz	Center Fr 200 100 100 100 100 100 100 100 100 100
		Start Freq 30.000000 MHz	200
		Stop Freq 20.000000000 GHz	300         Stop Fr           201         200           400         200
30 MHz 5 BW 1.0 MHz #VBW 3.0 MHz	Stop 20.000 G Sweep 34.67 ms (40001 p	Iz CF Step 1.997000000 GHz Auto Man	Start 30 MHz \$50p 20.000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz \$50p 20.000 GHz 1.99700000 CH2 CH2 MH2 MH2 CH2 CH2 CH2 CH2 CH2 CH2 CH2 CH2 CH2 C
2008 H29 B50 X Y N 1 f 1.932 6 GHz 39 276 dB/ N 1 f 19.119 8 GHz -23.505 dBr	FUNCTION FUNCTION WIDTH FUNCTION VALUE m m	Freq Offset	Iway Model Risk Scott         Y         Addition         Exection which it         Exection which
		~	7 9 10 11
LI LI	STATUS		STATUS
			and and a
UMTS Band 2	ENT ALGUAUTO (1222/57 AMOGEDS &		UMTS Band 2 QPSK Middle Channel
1 Spectram Analyzer - AP2072.6.16, 39005, Canadasted C 99 50 0 00 Part - 5000 0000 NFC PN0; Fast - Trigs Free If GainLaw Atten: 10 Ref Offset 42 dB	Al 3944/10 1222797440ct00, 22     Avg Type: RMs     Avg Type: RMS     Avg/life/ct: 100/100     Control Linux     Avg/life/ct: 100/100     Av	Auto Tune Center Freq 10.01500000 GHz Start Freq	
a Sovetram Analyzer - 497027.8.16,39005/Gendacted C L 87 50.0 CC + 987 NFC PNO/Faar ++ IFGainLow #Atten: 10	EINT 122757 AMORTO 122757 AMORTO, 2	Auto Tune Center Freq 10.01500000 GHz Start Freq	
If gettine Auditory         AP30723.1.64.3900 (conducted C           IF         IF         IF           IF         IF<	EINT ALSONATIO 1222/57 AMORTON X Aveg Type: RMB Control Type: RMB	Start Frequency           Auto Tune           Center Freq           10.015000000 GHz           Start Freq           20.0000000 GHz           20.0000000 GHz           Z           CF Step	
If Sectara Adalyzer A2/30737.8.16.31900 f. Endethed E III 200 C C C C C C C C C C C C C C C C C C	ALIGUANTO     122275744000105    122275744000105    122275744000105    122275744000105    122275744000105     Alignetic toxicology	Frequency           Auto Tune           Mile           Center Freq           10.015000000 GHz           30.000000 GHz           20.0000000 GHz           1.95700000 GHz	
In Sportram Adaptors - AP30737.8 16, 19905, Candidad E INFE PROF. East Default of the Prof. Fast Default of the Prof. Fas	ALIGUANTO     122275744000105    122275744000105    122275744000105    122275744000105    122275744000105     Alignetic toxicology	Frequency           Auto Tune           Auto Tune           Marco Center Freq           10.015000000 GHz           Start Freq           20.0000000 GHz           Stop Freq           20.0000000 GHz           1.970000 GHz           Auto Canter Freq           20.0000000 GHz           1.970000 GHz           Auto Canter Freq           0.000000 GHz           1.970000 GHz           0 Hz           V	

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# 9.3.5. UMTS BAND 4

	12 BMO: East the Trig: Free Run	#Avg Type: RMS Avg Hold: 100/100	12:37:37 AMOct 05, 2022 TRACE 1 2 3 4 5 6 TYPE M WWWWWW	Frequency	Start Freq 30.0000	00 MHz	rig: Free Run	#Avg Type: RMS Avg[Hold: 100/100	12:38:38 AMOct 05, 2022 TRACE 1 2 3 4 5 6 TYPE M WWWWWW	Frequency
NFE	IFGain:Low #Atten: 10 dB		DET P NNNNN	Auto Tune		NFE PNO: Fast ++- I IFGain:Low #/	rig: Free Run Atten: 10 dB		DET P NNNN	Auto Tu
dB/div Ref Offset 42 dB	1	MKr	2 26.174 7 GHz -20.669 dBm		10 dB/div Ref Offset	42 dB 0 dBm		MKG	2 25.412 8 GHz -20.577 dBm	
0				Center Freq	Log 1 32.0					Center Fr
				13.515000000 GHz	22.0					13.515000000 0
				Start Freq	2.00					Start Fr
			-13.00 2	30.000000 MHz	-8.00				- 2 dbr	30.000000 N
and the second				Stop Freg	-28.0					Stop F
				27.00000000 GHz	-38.0					27.000000000
t 30 MHz			Stop 27.00 GHz	CF Step	Start 30 MHz				Stop 27.00 GHz	CF S
S BW 1.0 MHz	#VBW 3.0 MHz	Sweep 45	.33 ms (40001 pts)	2.697000000 GHz Auto Man	#Res BW 1.0 MHz	#VBW 3.0		Sweep 45.	33 ms (40001 pts)	2.697000000 Auto
N 1 f	2.113 4 GHz 41.997 dBm 6.174 7 GHz -20.669 dBm	PONCTION PONCTION WIDTH	FORCTON WALDE		1 N 1 f 2 N 1 f	2.133 7 GHz 42 25.412 8 GHz -20	2.844 dBm 0.577 dBm	TONCTION WIDTH	POINCHION MALOE	
				Freq Offset 0 Hz	3 4 5					FreqOff
					67					
					8 9 10 11					
	11		>		<				>	
		STATUS			MSG			STATUS		
l	UMTS Band 4 QF	-SK Low Ch	nannel						nannal	
						UMTS Band	u 4 QFSr			
	3.16,39005,Conducted C						u 4 QFSr			
t Spectrum Analyzer - AP2022.8 RF 50 © DC t Freq 30.000000 MH	SENSE:INT	ALISNAUTO #Avg Type: RMS	12:39:49 AMOct 05, 2022	Frequency		UNITS Band	u 4 QFSr			
t Spectrum Analyzer - AP2022.8 RF 50 © DC	SENSE:INT	#Avg Type: RMS Avg Hold: 100/100	12:39:49 AMOct 05, 2022 TRACE 1 2:3 4 5 6 TYPE M WHINNIN DET P NINNIN			UMIS Band				
nt Spectrum Analyzer _ AP2022.8 L	PNO: Fast +++ IFGain:Low #Atten: 10 dB	#Avg Type: RMS Avg Hold: 100/100	12:39:49 AMOct 05, 2022 TRACE 1 2 3 4 5 6 TYPE M MOMM	Frequency Auto Tune						
Spectrum Analyzer - AP2072.6           RF         50 0         00           Treq 30.000000 MH         NFE           Ref Offset 42 dB         Ref Offset 42 dB	PNO: Fast +++ IFGain:Low #Atten: 10 dB	#Avg Type: RMS Avg Hold: 100/100	12:39:49 AMOct 05, 2022 TRACE [1:2:3:4:5.6 TVPE MUMANANA Det P NNNN (r2 4.307 4 GHz							
t Spectrum Analyzer _ AP2022.8 RF _ 50 @ DC t Freq 30.000000 MH NFE	PNO: Fast +++ IFGain:Low #Atten: 10 dB	#Avg Type: RMS Avg Hold: 100/100	12:39:49 AMOct 05, 2022 TRACE [1:2:3:4:5.6 TVPE MUMANANA Det P NNNN (r2 4.307 4 GHz	Auto Tune						
t Spectrum Analyzer _ AP2022.8 RF _ 50 @ DC t Freq 30.000000 MH NFE	PNO: Fast +++ IFGain:Low #Atten: 10 dB	#Avg Type: RMS Avg Hold: 100/100	12:39:49 AMOct 05, 2022 TRACE [1:2:3:4:5.6 TVPE MUMANANA Det P NNNN (r2 4.307 4 GHz	Auto Tune Center Freq 13.51500000 GHz			u 4 QF Sr			
t Spectrum Analyzer _ AP2022.8 RF _ 50 @ DC t Freq 30.000000 MH NFE	PNO: Fast +++ IFGain:Low #Atten: 10 dB	#Avg Type: RMS Avg Hold: 100/100	12:39:49 AMOct 05, 2022 TRACE [1:2:3:4:5.6 TVPE MUMANANA Det P NNNN (r2 4.307 4 GHz	Auto Tune Center Freq			u 4 QF Sr			
t Spectrum Analyzer _ AP2022.8 RF _ 50 @ DC t Freq 30.000000 MH NFE	PNO: Fast +++ IFGain:Low #Atten: 10 dB	#Avg Type: RMS Avg Hold: 100/100	12:39:40 AMOCHOS, 2022 TRACE[1::::::::::::::::::::::::::::::::::::	Auto Tune Center Freq 13.51500000 GHz Start Freq 30.00000 MHz			u 4 QF Sr			
Spectrum Analyzer - AP2027.8 RF 90 R CC I Freq 30.000000 MH NFE	PNO: Fast +++ IFGain:Low #Atten: 10 dB	#Avg Type: RMS Avg Hold: 100/100	12:39:40 AMOCHOS, 2022 TRACE[1::::::::::::::::::::::::::::::::::::	Auto Tune Center Freq 13.51500000 GHz Start Freq						
Elsevitree Malyrer, A27072 fb 1 89 500 000 HE Freq 30.000000 MHE Ref 075st 42 dB Ref 42.00 dBm 1 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4	PNO: Fast +++ IFGain:Low #Atten: 10 dB	#Avg Type: RMS Avg Hold: 100/100	12:39:49:440ct (8, 302) TRAC [1:3:3:50 traff + 1:3:3:50 traff + 1:3:50 traff + 1:3:50	Auto Tune Center Freq 13.5/500000 GHz Start Freq 30.000000 MHz Stop Freq 27.00000000 GHz						
Ref Offset 42 dB Ref 000 000 MH2 Ref 42.00 dBm	PNO: Fast +++ IFGain:Low #Atten: 10 dB	Avg Type: RMS AvgIrles: toonoo Mik	12:39:40 AMOCHOS, 2022 TRACE[1::::::::::::::::::::::::::::::::::::	Auto Tune           Center Freq           13.515000000 GHz           Start Freq           30.000000 HHz           Stop Freq           27.0000000 GHz           CF Step           2.89700000 GHz						
A Sector Malyne, A2022 D B B SO CC Tt Freq 30.000000 M ME Ref 0ffset 42 dB Ref 42.00 dBm 1 1 4 2 4 4 2 4 4 4 4 4 4 4 4 4 4 4 4 4	1         9906 and           PROF fair         7 (ijf Free fair           Produkt         Faiter: 10 dB           #VEW 3.0 MHz         10 dB           #VEW 3.0 MHz         10 dB	Avg Type: RMS AvgIrles: toonoo Mik	12:39-04440ct 05.302 PM-02 [1:3:4:50 ref P Hand 1:2:3:4:50 ref P Hand -13:8:65 -13:8:65 -13:8:65 Stop 27.00 GHz	Auto Tune Center Freq 13.515000000 GHz Start Freq 30.000000 MHz Stop Freq 27.000000000 GHz CF Step						
A Sector Malyne, A2022 D B B SO CC Tt Freq 30.000000 M ME Ref 0ffset 42 dB Ref 42.00 dBm 1 1 4 2 4 4 2 4 4 4 4 4 4 4 4 4 4 4 4 4	PROTECT TO FREE TO THE TOP THE	Ave Type: RMS Avg)tels: toorioo	12:39-04440ct 05.302 PM-02 [1:3:4:50 ref P Hand 1:2:3:4:50 ref P Hand -13:8:65 -13:8:65 -13:8:65 Stop 27.00 GHz	Auto Tune           Center Freq           13.616000000 GHz           Start Freq           30.00000 MHz           Stop Freq           27.0000000 GHz           CF Step           2.68700000 GHz           Auto           Man           Freq Offset						
A Sector Malyne, A2022 D B B SO CC Tt Freq 30.000000 M ME Ref 0ffset 42 dB Ref 42.00 dBm 1 1 4 2 4 4 2 4 4 4 4 4 4 4 4 4 4 4 4 4	1         9906 and           PROF fair         7 (ijf Free fair           Produkt         Faiter: 10 dB           #VEW 3.0 MHz         10 dB           #VEW 3.0 MHz         10 dB	Ave Type: RMS Avg)tels: toorioo	12:39-04440ct 05.302 PM-02 [1:3:4:50 ref P Hand 1:2:3:4:50 ref P Hand -13:8:65 -13:8:65 -13:8:65 Stop 27.00 GHz	Auto Tune           Center Freq           13.615000000 GHz           Start Freq           30.00000 MHz           27.0000000 GHz           27.000000 GHz           2.83700000 GHz           2.83700000 GHz           Auto						
Restrue Antiyer, A2022 II 1 IF 1900 CC TT Freq 30.000000 Mile Ref 0ffset 42 dB Ref 42.00 dBm 1 I 2 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	1         9906 and           PROF fair         7 (ijf Free fair           Produkt         Faiter: 10 dB           #VEW 3.0 MHz         10 dB           #VEW 3.0 MHz         10 dB	Ave Type: RMS Avg)tels: toorioo	12:39-04440ct 05.302 PM-02 [1:3:4:50 ref P Hand 1:2:3:4:50 ref P Hand -13:8:65 -13:8:65 -13:8:65 Stop 27.00 GHz	Auto Tune           Center Freq           13.616000000 GHz           Start Freq           30.00000 MHz           Stop Freq           27.0000000 GHz           CF Step           2.68700000 GHz           Auto           Man           Freq Offset						
Algorithm Analyses, A22022 B L BF 900 000 HE 1990 00000 MHE Ref 0ffset 42 dB Ref 42.00 dBm 1 1 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4	1         9906 and           PROF fair         7 (ijf Free fair           Produkt         Faiter: 10 dB           #VEW 3.0 MHz         10 dB           #VEW 3.0 MHz         10 dB	Ave Type: RMS Avg)tels: toorioo	12:39-04440ct 05.302 PM-02 [1:3:4:50 ref P Hand 1:2:3:4:50 ref P Hand -13:8:65 -13:8:65 -13:8:65 Stop 27.00 GHz	Auto Tune           Center Freq           13.616000000 GHz           Start Freq           30.00000 MHz           Stop Freq           27.0000000 GHz           CF Step           2.68700000 GHz           Auto           Man           Freq Offset						
It Seatture Analyses A 20202 I D t 99 1900 000 rtt Freq 30.000000 M MFE IB/div Ref 42.00 dBm 1000 m 100	1         9906 and           PROF fair         7 (ijf Free fair           Produkt         Faiter: 10 dB           #VEW 3.0 MHz         10 dB           #VEW 3.0 MHz         10 dB	Ave Type: RMS Avgitele: toonoo Mk Mk Sweep 45 Sweep 45	12:39:49.449Cet (0, 302) Prod 1:33 8 0 ref Pintan	Auto Tune           Center Freq           13.616000000 GHz           Start Freq           30.00000 MHz           Stop Freq           27.0000000 GHz           CF Step           2.68700000 GHz           Auto           Man           Freq Offset						
Ref Offset 42 dB Ref Offset 42 dB Ref Offset 42 dB Comparison of the set o	1         9906 and           PROF fair         7 (ijf Free fair           Produkt         Faiter: 10 dB           #VEW 3.0 MHz         10 dB           #VEW 3.0 MHz         10 dB	Avg Type: RMS Avg/Hele: 100100 Mk	12:39-04 AMORT 05, 302 TMAC 10:33-50 TMAC 10:33-5	Auto Tune           Center Freq           13.616000000 GHz           Start Freq           30.00000 MHz           Stop Freq           27.0000000 GHz           CF Step           2.68700000 GHz           Auto           Man           Freq Offset						

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# 9.3.6. LTE BAND 2

### **LIMITS**

FCC: §24.238 (a)

The minimum permissible attenuation level of any spurious emissions is 43 + 10 log (P) dB where transmitting power (P) in Watts.

### LTE BAND 2

L RF 50.9 DC	8.16,39005,Conducted C				Agilent Spectrum Analyzer - AP2	022.8.16,39005,Conducted C			
art Freq 30.000000 MH	SENSE:INT	ALIGNAUTO #Avg Type: RMS Avg Hold: 100/100	12:51:18 AMOct 05, 2022 TRACE 1 2 3 4 5 6 TYPE M MANNAN DET P N N N N N	Frequency	02 L RF 50 ₽ Start Freq 30.000000	DC SENSE	EINT ALIGNAUTO #Avg Type: RMS Run Avg Hold: 100/100	12:52:02 AMOct 05, 2022 TRACE 1 2 3 4 5 6 TVPE M NNNNN DET P NNNNN	quency
Ref Offset 42 dB dB/div Ref 42.00 dBm		Mkr	2 26.548 3 GHz -20.585 dBm	Auto Tune	Ref Offset 42 10 dB/div Ref 42.00 d	dB			Auto Tu
				Center Freq 13.515000000 GHz	12.0 12.0				enter Fi 000000 G
			-13.00 -	Start Freq 30.000000 MHz	2.00 -8.00 -18.0				Start Fi
				Stop Freq 27.00000000 GHz	-28.0 -38.0 -48.0				Stop Fr 000000 (
nt 30 MHz es BW 1.0 MHz	#VBW 3.0 MHz		Stop 27.00 GHz 33 ms (40001 pts)	CF Step 2.697000000 GHz Auto Man	Start 30 MHz #Res BW 1.0 MHz	#VBW 3.0 MHz			CF S
N 1 F 1 N 1 F 26	2 933 4 GHz 29 106 dBm 165 548 3 GHz -20,585 dBm	PUNCTION WIDTH	FUNCTION VALUE	Freq Offset 0 Hz	INTER FATOR         Filter           1         N         1           2         N         1           3         1         7           4         5         6           7         8         8	1.961 1 GHz 28.325 dBn 25.625 9 GHz -20.864 dBn	FUNCTION FUNCTION WIDTH		req Off: 0
	Li L	STATUS	×		9 10 11 <	U	STAT	15	
1	LTE B2 5MHz QP	PSK Low Ch							
			lannel			LTE B2 5MHz C	QPSK Middle (	Channel	
L RF 50 C CC rt Freq 30.00000 MH NFE Ref Offset 42 dB	HZ PN0: Fast IFGain:Low #Atten: 10 dB	ALIGNAUTO #Avg Type: RMS Avg Heid: 100/100	12:53:05 AMOct 05, 2022 TRACE 12:3 4 5 6 TYPE M MONTH OF THE MENNING DET P NNNNN 2 26.301 5 GHz -20.609 dBm	Frequency Auto Tune		<u>LTE B2 5MHz (</u>	QPSK Middle (	Channel	
L 8F 300 CC III Freq 30.00000 MH NFE HB/div Ref 0ffset 42 dB Ref 0ffset 42.00 dBm	HZ PN0: Fast IFGain:Low #Atten: 10 dB	ALIGNAUTO #Avg Type: RMS Avg Heid: 100/100	12:53:05 AMOct 05, 2022 TRACE 12:34:5.6 TYPE MANNAN DET PINNNN 2 26:301 5 GHZ			LTE B2 5MHz C	QPSK Middle (	Channel	
L         BF         SOD CC           rt Freq 30.000000 MH         NFE           B/div         Ref 0ffset 42 dB           B/div         0           0         0	HZ PN0: Fast IFGain:Low #Atten: 10 dB	ALIGNAUTO #Avg Type: RMS Avg Heid: 100/100	12:53:05 AMOct 05, 2022 TRACE 12:34:5.6 TYPE MANNAN DET PINNNN 2 26:301 5 GHZ	Auto Tune Center Freq		LTE B2 5MHz C	QPSK Middle (	Channel	
Ref 42.00 and an and a set of the	Z PRO: Fair →→ IFGainLaw IFGainLaw	ALIGNAUTO #Avg Type: RMS Avg Heid: 100/100	12-53 (5 MAO(105, 302) 1993 [12:3 + 3 + 6 12:9 + 3 + 5 12:9 +	Auto Tune Center Freq 13.51500000 GHz Start Freq		<u>LTE B2 5MHz C</u>	ΩPSK Middle(	Channel	
E PP 1908 BCC Intr Freq 30.000000 MH Ref Bldid Bldid Ref 42.00 dBm C PP 100 PC Ref 42.00 dBm C PP 100 PC Ref 42.00 dBm C PP 100 PC Ref 42.00 dBm C PP 100 PC C PP	PRO: Fail	ACCOUNTS Avg Type (DAS AvgFraie toonso Mkr2	12:53:05 AMO(1:05,202 THASE [1:2:3:5:5 TYPE NYNNYN 22:06:301 5 GHz -20:609 dBm	Auto Tune Center Freq 13.51500000 GHz Start Freq 30.00000 MHz Stop Freq		<u>LTE B2 5MHz C</u>	ΩPSK Middle(	Channel	
Ref officed 24 as Ref officed 24 as Ref 2.000 as Ref 2.0000 as Ref 2.0000 as Ref 2.0000 as Ref 2.00	PRO: Fail	Augusto	12-53:00 M00et 05, 3022 12-53:00 M00et 05, 3022 12-20.609 dBm -20.609 dBm -13572 -20.609 dBm -13572 -20.609 dBm -35727,00 GHz 33 ms (40001 pts)	Auto Tune           Center Freq           13.515000000 GH2           Start Freq           30.00000 MH2           Stop Freq           27.0000000 GH2           CF Step           2.68700000 GH2		<u>LTE B2 5MHz C</u>	ΩPSK Middle (	Channel	
L         IP         1900         000           Artt Freq 30.0000000 MH/RF         Ref 07504124 BB         B         0         0           Biblind         Ref 07504124 BB         D         0	#UBU Fair - Tig Free Run Froduction - Tig Free Run Foodstow - Fatter: 10 dB #UBU Fair - Tig Free Run Fatter: 10 dB	Augusto	250/2400-000 X002 TRADE 100 4 5 6 0 CEP 10 10 10 10 10 2 66.301 5 GHz -20.609 dBm -375 2 5 top 27.00 GHz 33 ms (4000 1 pts)	Auto Tune           Center Freq           13.515000000 GHz           Start Freq           30.00000 MHz           Stop Freq           27.000000 GHz           2.68700000 GHz           Auto           Man           Freq Offset		<u>LTE B2 5MHz C</u>	ΩPSK Middle (	Channel	
Ref Offset 42 dB Ref Offset 42 dB ref 42.00 dBm ref 42.00 dBm	#UBU Fair - Tig Free Run Froduction - Tig Free Run Foodstow - Fatter: 10 dB #UBU Fair - Tig Free Run Fatter: 10 dB	Augusto	12-53:00 M00et 05, 3022 12-53:00 M00et 05, 3022 12-20.609 dBm -20.609 dBm -13572 -20.609 dBm -13572 -20.609 dBm -35727,00 GHz 33 ms (40001 pts)	Auto Tune           Center Freq           13.515000000 GHz           Start Freq           30.00000 MHz           Stop Freq           27.000000 GHz           2.68700000 GHz           Auto           Man           Freq Offset		<u>LTE B2 5MHz C</u>	ΩPSK Middle (	Channel	

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# 9.3.7. LTE BAND 4

### LIMITS

FCC: §27.53 (h)

The minimum permissible attenuation level of any spurious emissions is 43 + 10 log (P) dB where transmitting power (P) in Watts.

Aglent Spectrum Analyzer - AP2022.8.16,39005,Conducted C L RF 50 © C SENSEINT ALX344.170 12:41:40 AMOct	5,2022 Frequency	Aglent Spectrum Analyzer - AP1072.8.16, 19005, Conducted C           B         L         RF         50.9         CC         SPISEINT         ALIONAUTO         12x42x44 AMORt05, 2022           Cat. L         RF         50.9         CC         SPISEINT         ALIONAUTO         12x42x44 AMORt05, 2022           Cat. L         RF         50.9         CC         SPISEINT         ALIONAUTO         12x42x44 AMORt05, 2022           Cat. L         RF         30.9         DCC         SPISEINT         ALIONAUTO         12x42x44 AMORt05, 2022
Start Freq 30.000000 MHz NFE PN0: Fast →→ Trig: Free Run AvgiHeid: 100/100 TRACE IFGain:.ow #Atten: 10 dB certP1	INNNN	Start Freq 30.000000 MHz #AvgType: RMS TRACE TO THE Frequency NFE PNO: Fast
Ref Offiset 42.00 dBm -21.132	GHz dBm	Ref Offset 42 dB Mkr2 25.725 0 GHz 10 dB/d/w Ref 42.00 dBm -20.518 dBm
32.0	Center Freq	200 Center Freq
220	13.515000000 GHz	220 13.51500000 GHz
200	Start Freq	200 Start Freq
4.00	300,000000 MHz	400
	Stop Freq 27.00000000 GHz	220 Stop Freq 27.00000000 GHz
Start 30 MHz Stop 27.00	GHz CF Step	Start 30 MHz Stop 27.00 GHz CF Step
#Res BW 1.0 MHz #VBW 3.0 MHz Sweep 45.33 ms (4000	1 pts) 2.697000000 GHz	#Res BW 1.0 MHz #VBW 3.0 MHz Sweep 45.33 ms (40001 pts)
TOTAL DOOR FILE (EX)         X         Y         ARREND         BUTCH DOOR FILE (EX)         BUTCH DOOR FILE (EX) <td>Freq Offset 0 Hz</td> <td>I         N         I         Could of a could be addressed         Cou</td>	Freq Offset 0 Hz	I         N         I         Could of a could be addressed         Cou
6 7 8 9		6 7 9 9
10	*	
ASG STATUS		MBG STATUS
LTE B4 5MHz QPSK Low Channel		LTE B4 5MHz QPSK Middle Channel
Aglient Spectrum Analyzer - AP2022.8.16,39005,Conducted C		
L RF 50 R DC SENSEINT ALIGNAUTO 12:43:55 AMORTI Start Freq 30.000000 MHz #Avg Type: RMS TRACE	3456 Frequency	
NFE PN0: Fast - Trig: Free Run Avg Hold: 100/100 TVPEMI IFGain:Low #Atten: 10 dB DET P 7	INNNN	
Ref Offset 42 dB Mkr2 26.171 3 10 dB/div Ref 42.00 dBm -20.431	GHZ	
22.0 V1	Center Freq	
220	13.515000000 GHz	
200 am	Start Freq	
180	300,000000 MHz	
	Stop Freq	
480	27.00000000 GHz	
Start 30 MHz Stop 27.00 #Res BW 1.0 MHz #VBW 3.0 MHz Sweep 45.33 ms (4000	0 GHz CF Step 1 pts) 2.697000000 GHz	
NODE         TROP         State         State         Runction         Runction with the Runctin with the Runction with the Runctin with the Runctin withe Runct	i de star de star	
2 N 1 f 26.171 3 GHz -20.431 dBm	FreqOffset	
4 5 6	0 Hz	
7 8 9		
10	×	
STATUS		
LTE B4 5MHz QPSK High Channel		

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# 9.3.8. LTE BAND 5

### LIMITS

FCC: §22.917 (a)

The minimum permissible attenuation level of any spurious emissions is 43 + 10 log (P) dB where transmitting power (P) in Watts.

### LTE BAND 5



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# 9.3.9. LTE BAND 12

## **LIMITS**

FCC: §27.53 (g)

The minimum permissible attenuation level of any spurious emissions is 43 + 10 log (P) dB where transmitting power (P) in Watts.

### LTE BAND 12



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# 9.3.10. LTE BAND 13

### <u>LIMITS</u>

FCC: §27.53 (c)

(1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;

(3) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations;

(5) Compliance with the provisions of paragraphs (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

(6) Compliance with the provisions of paragraphs (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

(f) or operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals. (-70 dBW/MHz = -40dBm/MHz

Note: Radiated data in section 10.1.10 confirms a compliance for the emissions in GPS 1559-1610 MHz band were wideband emissions therefore the -40dBm/MHz limit was used.

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# LTE BAND 13



Note: Radiated data in section 10.1.10 confirms a compliance with narrowband limits for GPS1559-1610 MHz band.

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# 9.3.11. LTE BAND 14

### <u>LIMITS</u>

FCC: §90.543 (e)

(1) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations.

(3) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.

(4) Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

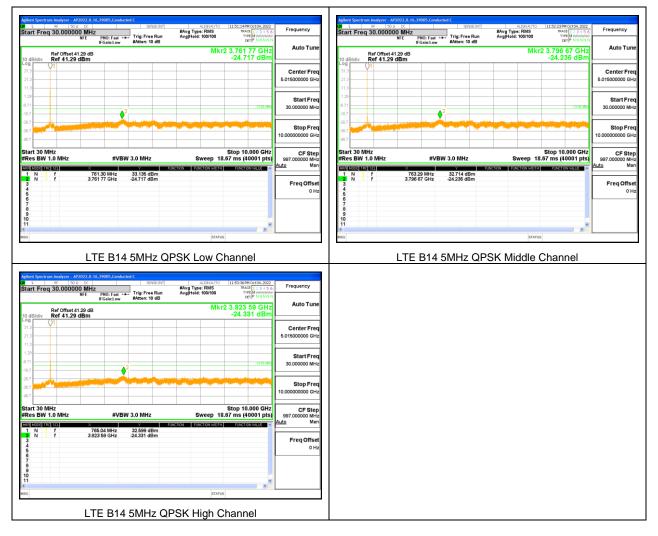
(5) Compliance with the provisions of paragraph (e)(3) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of 30 kHz may be employed.

(f) For operations in the 758-775 MHz and 788-805 MHz bands, all emissions including harmonics in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

Note: Radiated data in section 10.1.11 confirms a compliance for the emissions in GPS 1559-1610 MHz band were wideband emissions therefore the -40dBm/MHz limit was used.

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# LTE BAND 14



Note: Radiated data in section 10.1.11 confirms a compliance with narrowband limits for GPS1559-1610 MHz band.

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# 9.3.12. LTE BAND 17

## LIMITS

FCC: §27.53 (g)

The minimum permissible attenuation level of any spurious emissions is 43 + 10 log (P) dB where transmitting power (P) in Watts.

### LTE BAND 17



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# 9.3.13. LTE BAND 25

### <u>LIMITS</u>

FCC: §24.238 (a)

The minimum permissible attenuation level of any spurious emissions is 43 + 10 log (P) dB where transmitting power (P) in Watts.

### LTE BAND 25

lent Spectrum Analyzer - AP2022.8.16,39005,Co	onducted C SENSE:INT	ALIGNAUTO	12:54:39 AMOct 05, 2022		Agilent Spectrum Analyzer - AP2	022.8.16,39005,Conducted C	NSE.INT ALIGNAL	JTO 12:55:31 AMOct 05, 2022	
art Freq 30.000000 MHz	st +++ Trig: Free Run	#Avg Type: RMS Avg Hold: 100/100	TRACE 1 2 3 4 5 6 TYPE M WWWWWWW DET P N N N N N	Frequency	Start Freq 30.00000	MHz		TRACE 1 2 3 4 5 6	Frequency
IFGain:L	ow #Atten: 10 dB	Mkr2	2 26.129 5 GHz	Auto Tune		IFGain:Low #Atten: 1		Akr2 26.169 3 GHz	Auto Tu
dB/div Ref 0ffset 42 dB		WIKI 2	-21.030 dBm		10 dB/div Ref 42.00 d	dB Bm		-20.370 dBm	
2.0 01				Center Freq	32.0 0 <sup>1</sup>				Center F
1.0				13.515000000 GHz	22.0				13.515000000 0
0					12.0				
10			-1300(0)	Start Freq 30.000000 MHz	-8.00			-13.04 2	Start Fr 30.000000 M
0			-1300 2	30.000000 MHz	-18.0			-1300 2	30.000000
				Stop Freq	-28.0				Stop F
				27.00000000 GHz	-38.0				27.000000000
art 30 MHz			Stop 27.00 GHz		Start 30 MHz			Stop 27.00 GHz	
	VBW 3.0 MHz	Sweep 45.	33 ms (40001 pts)	CF Step 2.69700000 GHz	#Res BW 1.0 MHz	#VBW 3.0 MHz	sweep	45.33 ms (40001 pts)	2.697000000
MODE TRO SCL X	Y FUNCH	ION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Man	MCR MODE TRO SCL	X 024 7 01 - 00 703 d	FUNCTION FUNCTION W	IDTH FUNCTION VALUE	Auto
N 1 f 1.932 1 GH: N 1 f 26.129 5 GH:	z 27.529 dBm z -21.030 dBm			Freq Offset	1 N 1 f 2 N 1 f 3	1.961 7 GHz 28.793 d 26.169 3 GHz -20.370 d	Bm		FreqOff
				0 Hz	4 6				
					6 7				
					8 9				
			~		10			×	
		STATUS			MSG		s	TATUS	
	25 5MHz QPS	SK Low Cł	hannel			LTE B25 5MHz	QPSK Middle	e Channel	
nt Spectrum Analyzer - AP2022.8.16,39005,Cc	onducted C	ALIGNAUTO	12-56-43 aM 0+105-2022	Fraguency		LTE B25 5MHz	QPSK Middle	e Channel	
nt Spectrum Analyzer - AP2022.8.16,39005,02 L BF 50 0 DC H rt Freq 30.00000 MHz NFE PNO: Fa	sense:INT		12:56:43 AMOct 05, 2022 TRACE 1 2 3 4 5 6	Frequency		LTE B25 5MHz	2 QPSK Middle	e Channel	
nt Spectrum Analyzer - A92022, 8, 16, 39005, G L 85 900 DC rt Freq 30.000000 MHz NFE PN0: Fa IFGaintu	SENSE:INT	ALIGNAUTO #Avg Type: RMS Avg Hold: 100/100	12:56:43 AMOct 05, 2022 TRACE 1 2 3 4 5 6 TYPE M WARMAN DET P NINNIN	Frequency Auto Tune		LTE B25 5MHz	2 QPSK Middle	e Channel	
nt Spectrum Analyzer - A52072.8.16,19005.02 L BF 500 DC <b>tt Freq 30.000000 MHz</b> NFE PRO: Fa IFGaintu Ref Offset 42 dB	sense:INT	ALIGNAUTO #Avg Type: RMS Avg Hold: 100/100	12:56:43 AMOct 05, 2022 TRACE 1 2 3 4 5 6			LTE B25 5MHz	QPSK Middle	e Channel	
nt Spectrum Analyzer - A52072.8.16,19005.02 L BF 500 DC <b>tt Freq 30.000000 MHz</b> NFE PRO: Fa IFGaintu Ref Offset 42 dB	sense:INT	ALIGNAUTO #Avg Type: RMS Avg Hold: 100/100	12:56:43 AMOct 05, 2022 TRACE 12:34:5, 6 TYPE M WWWW DET P NNNN 2 26.344 6 GHz	Auto Tune Center Freq		LTE B25 5MHz	QPSK Middle	e Channel	
Int Spectrum Analyses _ AP2022 & 16, 39005, 0 L 97 90 9 00 Int Freq 30.000000 MHz NFE PR0. Fa FGGala.t Bildly Ref 07,00 dBm	sense:INT	ALIGNAUTO #Avg Type: RMS Avg Hold: 100/100	12:56:43 AMOct 05, 2022 TRACE 12:34:5, 6 TYPE M WWWW DET P NNNN 2 26.344 6 GHz	Auto Tune		_TE B25 5MHz	<u>: QPSK Middle</u>	e Channel	
nt Spectrum Analyzer - AP2072.8.16,19005.02 L BF 500 DC Tt Freq 30,000000 MHz NFE PRO: Fa IFGaintu Ref Offset 42 dB	sense:INT	ALIGNAUTO #Avg Type: RMS Avg Hold: 100/100	12:56:43 AMOct 05, 2022 TRACE 12:34:5, 6 TYPE M WWWW DET P NNNN 2 26.344 6 GHz	Auto Tune Center Freq 13.51500000 GHz		_TE B25 5MHz	<u>: QPSK Middle</u>	e Channel	
nt Spectrum Analyzer - AP2072.8.16,19005.02 L BF 500 DC Tt Freq 30,000000 MHz NFE PRO: Fa IFGaintu Ref Offset 42 dB	sense:INT	ALIGNAUTO #Avg Type: RMS Avg Hold: 100/100	12:56:43 AMOct 05, 2022 TRACE 12:34:5, 6 TYPE M WWWW DET P NNNN 2 26.344 6 GHz	Auto Tune Center Freq 13.51500000 GHz Start Freq		LTE B25 5MHz	: QPSK Middle	e Channel	
It Spectrum Analyses _ AP2022 & 16, 39005, 0 L 97 190 0 00 Tt Freq 30.000000 MHz NFE PR0.76 FGainst. Bildity Ref 42.00 dBm	sense:INT	ALIGNAUTO #Avg Type: RMS Avg Hold: 100/100	12:28:49 AMO(105,202 THASE 12:3:3:5 G TYPE NYNNYN 22:05.344 6 GHz -20.225 dBm	Auto Tune Center Freq 13.51500000 GHz		LTE B25 5MHz	<u>: QPSK Middle</u>	e Channel	
A Spectrum Analyzer AP2022.8.16,39005,00 L RF 500 00: K Freq 30.000000 MHz NFE PR0: Fa IFGaintu Ref Offset 42 dB	sense:INT	ALIGNAUTO #Avg Type: RMS Avg Hold: 100/100	12:28:49 AMO(105,202 THASE 12:3:3:5 G TYPE NYNNYN 22:05.344 6 GHz -20.225 dBm	Auto Tune Center Freq 13.515000000 GHz Start Freq 30.000000 MHz Stop Freq		LTE B25 5MHz	<u>: QPSK Middle</u>	e Channel	
Idsectron Analyzer         A0/192.0         16, 19005 (C)           L         100         100         100           It         Freq 30.000000 MHz         PR0 for	sense:INT	ALIGNAUTO #Avg Type: RMS Avg Hold: 100/100	12:28:49 AMO(105,202 THASE 12:3:3:5 G TYPE NYNNYN 22:05.344 6 GHz -20.225 dBm	Auto Tune Center Freq 13.51500000 GHz Start Freq 30.00000 MHz		LTE B25 5MHz	<u>: QPSK Middle</u>	e Channel	
1 Spectrum Analyser A 2/12/2 16, 39005 (2 L BP 500 02 HT Freq 30.000000 MHz MFE PHO: fo Fromto Ref 0ffset 42 dB Ref 42.00 dBm	sense:INT	ALIGNAUTO #Avg Type: RMS Avg Hold: 100/100	12-56-43 MAOREG, 5022 19-04 11:2:3:4:5:0 10:2:1:1:2:5:4:5:0 10:2:5:4:5:4:5:4:5:4:5:4:5:4:5:4:5:4:5:4:5	Auto Tune Center Freq 13.5/5000000 GHz Start Freq 30.000000 MHz Stop Freq 27.00000000 GHz		LTE B25 5MHz	<u>: QPSK Middle</u>	e Channel	
It Sectrum Analyse:	sense:INT	Avgirist Toproo Mrvg Type RMS Avgirist 100100 Mkr2	12:28:49 AMO(105,202 THASE 12:3:3:5 G TYPE NYNNYN 22:05.344 6 GHz -20.225 dBm	Auto Tune Center Freq 13.51500000 GHz Start Freq 30.00000 MHz 27.0000000 GHz CF Step 2.68700000 GHz		LTE B25 5MHz	: QPSK Middle	e Channel	
In Spectrum Andyrer, AP 2072 & 16, 39000 CC L 079 1000 000 Hz HT Freq 30,0000000 MHz HC free 42 dB Blodin Ref 42,00 dBm 100 free 42 dB 100 free 42 dB 1	Inducted C	Avgirist Toproo Mrvg Type RMS Avgirist 100100 Mkr2	12-20-040-010302 THAT STATE STATE STATE THAT STATE STATE STATE THAT STATE STATE THAT STATE STATE THAT STATE	Auto Tune Center Freq 13.515000000 GHz Start Freq 30.000000 MHz Stop Freq 27.000000000 GHz CF Step		LTE B25 5MHz	<u>: QPSK Middle</u>	e Channel	
nt Seettram Analyzer AV/022 L16, 1900/C L 02 100 000 MH2 HF Freq 30,000000 MH2 HF Ref 42.00 dBm 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Inducted C	Avgirist Toproo Mrvg Type RMS Avgirist 100100 Mkr2	12-20-040-010302 THAT STATE STATE STATE THAT STATE STATE STATE THAT STATE STATE THAT STATE STATE THAT STATE	Auto Tune           Center Freq           13.515000000 GHz           Start Freq           30.00000 MHz           Stop Freq           27.0000000 GHz           2.687000000 GHz           2.687000000 GHz           Auto           Man           Freq Offset		LTE B25 5MHz	<u>: QPSK Middle</u>	e Channel	
and Security Analysis         A2/07/2 4 (b, 1900) (c)           L         ab         (b) (c)           art Freq 30.0000000 MHz         WC           WE         WC         Filled           addition         Ref Offset 42 dB         WC           addition         Ref 41.00 dBm         WC           addition         Ref 30.0000 MHz         WC           addition         Ref 30.0000 MHz         WC           addition         Ref 30.0000 MHz         WC           N         f         1992 7 0Ht           N         f         25344 6 GHz	Inducted C	Avgirist Toproo Mrvg Type RMS Avgirist 100100 Mkr2	12-20-040-010302 THAT STATE STATE STATE THAT STATE STATE STATE THAT STATE STATE THAT STATE STATE THAT STATE	Auto Tune Center Freq 13.5.1500000 GHz 30.000000 MHz 21.00000000 GHz 2.500 Freq 2.83700000 GHz Auto Man		LTE B25 5MHz	<u>: QPSK Middle</u>	e Channel	
end Spectrum Analyzer AP2072 II.16, 30000 C L 99 1000 DX art Freq 30.000000 MHz WE Blodov Ref Offset 42 dB Control of the termination of termination of the termination of termination of the termination of ter	Inducted C	Avgirist Toproo Mrvg Type RMS Avgirist 100100 Mkr2	12-20-040-010302 THAT STATE STATE STATE THAT STATE STATE STATE THAT STATE STATE THAT STATE STATE THAT STATE	Auto Tune           Center Freq           13.515000000 GHz           Start Freq           30.00000 MHz           Stop Freq           27.0000000 GHz           2.687000000 GHz           2.687000000 GHz           Auto           Man           Freq Offset		LTE B25 5MHz	: QPSK Middle	e Channel	
and Security Analysis         A2/07/2 4 (b, 1900) (c)           L         ab         (b) (c)           art Freq 30.0000000 MHz         WC           WE         WC         Filled           addition         Ref Offset 42 dB         WC           addition         Ref 41.00 dBm         WC           addition         Ref 30.0000 MHz         WC           addition         Ref 30.0000 MHz         WC           addition         Ref 30.0000 MHz         WC           N         f         1992 7 0Ht           N         f         25344 6 GHz	Inducted C	Avgirist Toproo Mrvg Type RMS Avgirist 100100 Mkr2	12-20-040-010302 THAT STATE STATE STATE THAT STATE STATE STATE THAT STATE STATE THAT STATE STATE THAT STATE	Auto Tune           Center Freq           13.515000000 GHz           Start Freq           30.00000 MHz           Stop Freq           27.0000000 GHz           2.687000000 GHz           2.687000000 GHz           Auto           Man           Freq Offset		LTE B25 5MHz	<u>: QPSK Middl</u>	e Channel	
In Spectrum Andyrer, AP 2072 & 16, 39000 CC L 079 1000 000 Hz HT Freq 30,0000000 MHz HC free 42 dB Blodin Ref 42,00 dBm 100 free 42 dB 100 free 42 dB 1	Inducted C	Avgirist Toproo Mrvg Type RMS Avgirist 100100 Mkr2	12-20-040-010302 THAT STATE STATE STATE THAT STATE STATE STATE THAT STATE STATE THAT STATE STATE THAT STATE	Auto Tune           Center Freq           13.515000000 GHz           Start Freq           30.00000 MHz           Stop Freq           27.0000000 GHz           2.687000000 GHz           2.687000000 GHz           Auto           Man           Freq Offset		LTE B25 5MHz	<u>: QPSK Middle</u>	e Channel	
It Spectrum Andyrer AP 2072 & 10, 1900 CC L 07 100 CC TT Freq 30,000000 MHz N/E Friday Ref Offset 42 dB AP 10 for a 100 CC Friday Frida	Inducted C	Avgirist Toproo Mrvg Type RMS Avgirist 100100 Mkr2	12-26-63 AMORT 05, 2022 That I and a second	Auto Tune           Center Freq           13.515000000 GHz           Start Freq           30.00000 MHz           Stop Freq           27.0000000 GHz           2.687000000 GHz           2.687000000 GHz           Auto           Man           Freq Offset		LTE B25 5MHz	<u>: QPSK Middle</u>	e Channel	
It Spectrum Andyrat: A2 1022 & 16, 1900; 6 L Bill State (Comparison of the State (Comparison of	Inducted C	Avgirter Type RMS Avgirter Type RMS Avgirter Toortoo Mkr2	1236-0440-010302 Transport (1200) 1240-0440-01040 1240-0440-01040 1350-0240-0440 1350-0240	Auto Tune           Center Freq           13.515000000 GHz           Start Freq           30.00000 MHz           Stop Freq           27.0000000 GHz           2.687000000 GHz           2.687000000 GHz           Auto           Man           Freq Offset		LTE B25 5MHz	<u>: QPSK Middle</u>	e Channel	

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# 9.3.14. LTE BAND 26 (FCC PART 90S)

## LIMITS

FCC: §90.691(a)

The minimum permissible attenuation level of any spurious emissions is 43 + 10 log (P) dB where transmitting power (P) in Watts.

#### LTE BAND 26



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# 9.3.15. LTE BAND 26 (FCC PART 22)

### LIMITS

FCC: §22.917 (a)

The minimum permissible attenuation level of any spurious emissions is 43 + 10 log (P) dB where transmitting power (P) in Watts.

### LTE BAND 26



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# 9.3.16. LTE BAND 66

## LIMITS

FCC: §27.53 (h)

The minimum permissible attenuation level of any spurious emissions is 43 + 10 log (P) dB where transmitting power (P) in Watts.

### LTE BAND 66

ent Spectrum Analyzer - A27022.8.16, 39005, Conducted C	ALIGNAUTO 12:46:34 AMOct 05 #Avg Type: RMS TRACE 1.2	2022 Frequency	Adjent Spectrum Analyzer - AP3077.8.16,39005, Conducted C           W         8F         50.6         SENEE-RIT         AL391A/TO         12-47:33 AMOCt06, 2022           Start Freq 30.00000000 MHz         8Avg Type, RMS         TRACE [1:3:3 + 5:6         Frequence
NFE PNO: Fast Trig: Free Ru	#Avg Type: RMS TRACE 12	456 Prequency	
IFGalli:LUW Instant. 10 db	In Avg Hold: 100/100		NFE PHO: Fast Trig: Free Run Avg Hold: 100/100 Trig: Photosoft
Ref Offset 42 dB	Mkr2 26.321 7 0 -20.291 d	Auto Tune	Ref Offset 42 dB Mkr2 26.192 2 GHz
dB/div Ref 42.00 dBm	-20.251 0		
0		Center Freq 13.515000000 GHz	220 Cen 220 13.51500
10			
0		Start Freq 30.000000 MHz	8.00 St 1300_2 30.00
		Stop Freq 27.00000000 GHz	380 Contract and a state of the
			-48.0
art 30 MHz es BW 1.0 MHz #VBW 3.0 MHz	Stop 27.00 Sweep 45.33 ms (40001	pts) 2.697000000 GHz	Start 30 MHz         Stop 27.00 GHz           #Res BW 1.0 MHz         #VBW 3.0 MHz         Sweep 45.33 ms (40001 pts)           2.697001
M008 TR0 50 X Y N 1 f 2.111 4 GHz 24.110 dBm	FUNCTION FUNCTION WIDTH FUNCTION VALU	Auto Man	DWRINDORE THE SEL X Y FUNCTION WOTH FUNCTION VALUE A
N 1 f 2.111 4 GHz 24.110 dBm N 1 f 26.321 7 GHz -20.291 dBm		Freq Offset	1 N 1 f 2:165 9 GHz 27.487 dBm 2 N 1 f 26:192 2 GHz -20.519 dBm 4 Fre
		0 Hz	6
			7 8 9
		×	10
	STATUS		KSG STATUS
	OPSK Low Channel		LTE B66 5MHz OPSK Middle Channel
LTE B66 5MHz	QPSK Low Channel		LTE B66 5MHz QPSK Middle Channel
nt Spectrum Analyzer - AP2022.8.16,39005,Conducted C	2011 al (2011) 12-67-53 amort 05	2022	LTE B66 5MHz QPSK Middle Channel
Int Spectrum Analyzer - AP2072.8.16,39005,Conducted C L RF S0 0 DC SPISE Int Freq 30,000000 MHz NFC PND Ear - Trig: Free Ru	NT ALIGNAUTO 12:48:53 AMOCTO #Avg Type: RMS TRACE 12: Avg/Hold: 100/100 TYPE MW	2022 1456 Frequency	LTE B66 5MHz QPSK Middle Channel
nt Spectrum Analyzer . A02022.8.16, 39005, Ceeduated C L 89 000 0C 9900000000 htt Freq 30.00000000000000000000000000000000000	MT         ALSGUUTO         12-48-53 AMOCICE           #Avg Type: RMS         TRACE         12           in         Avg[Hold: 100/100         TVP[MM]           S         TMC         12           MKr2 26.218 5         C         12	Auto Tune	LTE B66 5MHz QPSK Middle Channel
It See true Analyzy AP 027.8.16,1905,Conducted C L 07 02 00 00 00000000000000000000000000	NT 41014170 12:48:53.440ct.00 #Avg Type: RMS TRACE 10 n Avg/Held: 100/100 reif N1 6	Auto Tune	LTE B66 5MHz QPSK Middle Channel
nd Spectrum Analyzer AP2102.6.16, 19005, Conducted C L 87 300 0C 10000000000000000000000000000000	MT         ALSGUUTO         12-48-53 AMOCICE           #Avg Type: RMS         TRACE         12           in         Avg[Hold: 100/100         TVP[MM]           S         TMC         12           MKr2 26.218 5         C         12	Auto Tune	LTE B66 5MHz QPSK Middle Channel
Ind Spectrum Analyzer (AP202) & 16,31003 Conducted C L (20) 2020 CS (20) CS (	MT         ALSGUUTO         12-48-53 AMOCICE           #Avg Type: RMS         TRACE         12           in         Avg[Hold: 100/100         TVP[MM]           S         TMC         12           MKr2 26.218 5         C         12	Auto Tune	LTE B66 5MHz QPSK Middle Channel
nt Synetram Analyzer AP2022. E 16, 19005, Conducted C L BF 20.9 CC Stress TT Freq 30.000000 MHZ NFC BIOL Fort → If GalanLow Ref Offset 42 dB Ref 42.00 dBm	NTI         ALIGNAUTO         12-98-53 AMOCTO           #Avg Type: RMS         Trace []         Trace []           n         Avg[Heid: 100*100         Trace []           Mkr2 26: 218 5 (         -20, 106 d	Auto Tune Bm Center Freq 13.51500000 GHz Start Freq	LTE B66 5MHz QPSK Middle Channel
nd Spectrum Analyzer AP2102.6.16, 19005, Conducted C L 87 300 0C 10000000000000000000000000000000	MT         ALSGUUTO         12-48-53 AMOCICE           #Avg Type: RMS         TRACE         12           in         Avg[Hold: 100/100         TVP[MM           S         TMC         12           MKr2 26.218 5         C         12	Auto Tune Bm Center Freq 13.51500000 GHz Start Freq	LTE B66 5MHz QPSK Middle Channel
It Section Analyses _A2/02/2 & 16,0005,Conducted C t _ 102	NTI         ALIGNAUTO         12-98-53 AMOCTO           #Avg Type: RMS         Trace[]         Trace[]           n         Avg[]Heid: 100*100         Trace[]           Mkr2 26: 218 5 ( -20, 106 d)         Mkr2 26: 218 5 ( -20, 106 d)	Auto Tune Bm Center Freq 13.51500000 GHz Start Freq	LTE B66 5MHz QPSK Middle Channel
It Section Analyses _A2/02/2 & 16,0005,Conducted C t _ 102	NTI         ALIGNAUTO         12-98-53 AMOCTO           #Avg Type: RMS         Trace[]         Trace[]           n         Avg[]Heid: 100*100         Trace[]           Mkr2 26: 218 5 ( -20, 106 d)         Mkr2 26: 218 5 ( -20, 106 d)	Frequency     Frequency     Auto Tune     Center Freq     13.51500000 GHz     Start Freq     3.000000 MHz	LTE B66 5MHz QPSK Middle Channel
Int Section Analyses _ AC/07/2 & 16,01005, Conducted C L _ 102 _ 1020 _ CC _ 1020 _ 1	NI         Accuration         12-88-53 address to the provided in the	Frequency     Frequency     Auto Tune     Bm     Center Freq     13.51500000 GHz     30.00000 MHz     27.00000000 GHz     GHz     CF Step	LTE B66 5MHz QPSK Middle Channel
In Section Analyses (AP202) E. 16, 3900 (conducted C L 02 000 00 ML2 000 fait - If Freq 30,00000 ML2 00 fait - If Galacia - Ref Offset 42 dB Ref 42,00 dBm	NT         ALCOUNTO         12-08-33 AMOCTO           Marg Type: RMS         Marg Type: RMS         Marg Type: RMS           Margetive: Tooling         Margetive: Tooling         Margetive: Tooling           MKR2 26.218 5 ( -20,106 d         -20,106 d         -20,106 d	Frequency     Frequency     Auto Tune     Bm     Center Freq     13.51500000 GHz     30.00000 MHz     27.00000000 GHz     CF Step	LTE B66 5MHz QPSK Middle Channel
In Section Analyses (AP202) E. 16, 3900 (conducted C L 02 000 00 ML2 000 fait - If Freq 30,00000 ML2 00 fait - If Galacia - Ref Offset 42 dB Ref 42,00 dBm	N1         22020/010         12-8820 a00/01           m         Avg1tyst RMS         Trace [17]           Mkr2 28:218 5 C         -20.106 C           -20.106 C         -20.106 C           Stop 27.00         Stop 27.00           Stop 27.00         Stop 27.00           Stop 27.00         Stop 27.00           Stop 20.00         Stop 27.00	Frequency     Auto Tune     Genter Freq     13.51500000 GHz     30.000000 MHz     2.00000000 GHz     2.6970000 GHz     2.6970000 GHz     2.6970000 GHz	LTE B66 5MHz QPSK Middle Channel
and Sectrom Analyzer (2010/2, 616, 1900) Conducted C L 020 000 00 Hz 1000 Far - HC 1900 100 100 Far - HC 1900 Far - HC	N1         22020/010         12-8820 a00/01           m         Avg1tyst RMS         Trace [17]           Mkr2 28:218 5 C         -20.106 C           -20.106 C         -20.106 C           Stop 27.00         Stop 27.00           Stop 27.00         Stop 27.00           Stop 27.00         Stop 27.00           Stop 20.00         Stop 27.00	Center Frequency           Center Freq           Center Freq           13.51500000 GHz           Stop Freq           27.00000000 GHz           27.00000000 GHz           CF Step           Certer Step	LTE B66 5MHz QPSK Middle Channel
ent Spectrum Analyzer _ 6/2022 6.16,30003,Conducted C L	N1         22020/010         12-8820 a00/01           m         Avg1tyst RMS         Trace [17]           Mkr2 28:218 5 C         -20.106 C           -20.106 C         -20.106 C           Stop 27.00         Stop 27.00           Stop 27.00         Stop 27.00           Stop 27.00         Stop 27.00           Stop 20.00         Stop 27.00	Frequency     Auto Tune     Center Freq     13.51500000 GHz     30.00000 MHz     Z7.00000000 GHz     Z7.0000000 GHz     Auto Man     Freq Offset	LTE B66 5MHz QPSK Middle Channel
and Sections Analyses' AV3022 & 16,3000 (sendenced C L 020 100 100 100 100 100 100 100 100 100	N1         22020/010         12-8820 a00/01           m         Avg1tyst RMS         Trace [17]           Mkr2 28:218 5 C         -20.106 C           -20.106 C         -20.106 C           Stop 27.00         Stop 27.00           Stop 27.00         Stop 27.00           Stop 27.00         Stop 27.00           Stop 20.00         Stop 27.00	Frequency     Auto Tune     Center Freq     13.51500000 GHz     30.00000 MHz     Z7.00000000 GHz     Z7.0000000 GHz     Auto Man     Freq Offset	LTE B66 5MHz QPSK Middle Channel
And Spentrum Analyzer # 2/0/07.8 16, 1940/, Spentrum Analyzer # 2/0/07.8 16, 1940/, Spentrum C ( L 2 2000 00 142 HI Frag 30.0000000000Hz HIGhrand 2000 00 142 HIGhrand 2000 00 142 HIGhrand 2000 142	NI         ASS/07/0         12-86-53 Address           m         Avg/Trai-RMS         Trai-RMS           Mkg/Trai-RMS         Mkg/Trai-RMS         Trai-RMS           Mkg/Trai-RMS         Mkg/Trai-RMS         Trai-RMS           Mkg/Trai-RMS         Mkg/Trai-RMS         Trai-RMS           Mkg/Trai-RMS         Mkg/Trai-RMS         Trai-RMS           Stop 27.00         Sweep 45.33 ms (40001         Reschowed 14.33 ms (40001)	Frequency     Auto Tune     Center Freq     13.51500000 GHz     30.00000 MHz     Z7.00000000 GHz     Z7.0000000 GHz     Auto Man     Freq Offset	LTE B66 5MHz QPSK Middle Channel
In Section Analyse AP202.5.16,0005,Conducted C L 82 900 00 INTERCED IFC FIG 30.00000 MHZ IFC FIG 30.00000 MHZ IFC FIG 10 FIG	N1         22020/010         12-8820 a00/01           m         Avg1tyst RMS         Trace [17]           Mkr2 28:218 5 C         -20.106 C           -20.106 C         -20.106 C           Stop 27.00         Stop 27.00           Stop 27.00         Stop 27.00           Stop 27.00         Stop 27.00           Stop 20.00         Stop 27.00	Frequency     Auto Tune     Center Freq     13.51500000 GHz     30.00000 MHz     Z7.00000000 GHz     Z7.0000000 GHz     Auto Man     Freq Offset	LTE B66 5MHz QPSK Middle Channel

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# 9.3.17. LTE BAND 71 AND 5G NR n71

# LIMITS

FCC: §27.53 (g)

The minimum permissible attenuation level of any spurious emissions is 43 + 10 log (P) dB where transmitting power (P) in Watts.

### LTE BAND 71 and 5G NR n71



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Addres Severtrans Andrews - 4/2027.8.16, 19005/Greducted C 8 L 928 - 500 9 Col Start Freq 30.0000000 MHz IFE PROTotal	#Avg Type: RMS Run Avg Hold: 100/100 dB	12:07:13 AMOct 05, 2022 TRACE 1 2 3 4 5 6 TYPE M WWWWWW DET P N N N N DET P N N N N 3,776 48 GHz	Frequency Auto Tune	Aglent Spectrum Analyzer - A92072.8.16 B L 8F 50 2 0C Start Freq 30.000000 MHz NFE Ref Offset 41.29 dB	39005,Cenducted C SENSEINT PNO: Fast ↔ Trig: Free Run IFGain:Low #Atten: 10 dB	#Avg Type: RMS Avg Hold: 100/100	09:13 AMOct 05, 2022 TRACE 1 2 3 4 5 6 TYPE M MMMMM DET P NNNN N 754 04 GHz	Frequency Auto Tune
10 dBdliv Ref 41.29 dBm 10 dBdliv Ref 41.29 dBm 20 31 3 21 3 11 3	· · · · · · · · · · · · · · · · · · ·	-24.565 dBm	Center Freq 5.01500000 GHz	10 dB/div Ref 41.29 dBm Log 31.3 1 21.3 1			24.735 dBm	Center Freq 5.015000000 GHz
129 871 -187		-13.00 abm	Start Freq 30.000000 MHz	1.29 -8.71 -18.7			-13.00 aBm	Start Freq 30.000000 MHz
-48.7			Stop Freq 0.000000000 GHz	-28.7 -38.7 -48.7				Stop Freq 10.00000000 GHz
Start 30 MHz         #VBW 3.0 MHz           #Res BW 1.0 MHz         #VBW 3.0 MHz           Training Body         30           1         N         1           1         N         1           1         N         1	Sweep 18.67		CF Step 997.000000 MHz <u>ito</u> Man	Start 30 MHz #Res BW 1.0 MHz 1 N 1 f 64	#VBW 3.0 MHz	Sweep 18.67 r	op 10.000 GHz ns (40001 pts)	CF Step 997.000000 MHz <u>Auto</u> Man
3 N 1 f 3.776 48 GHz -24.566 dBr 4 5 6 7	m		Freq Offset 0 Hz	2 N 1 f 3.76 3 4 6 6 7 7	4 04 GHz -24.735 dBm			Freq Offset 0 Hz
8 9 10 11 11	STATUS	×		8 9 10 11 < < MSG		STATUS	×	
5G NR n71 20MH	z QPSK Middle	Channel		5G N	IR n71 20MHz (	QPSK High Cl	hannel	

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# 9.4. FREQUENCY STABILITY

### RULE PART(S)

FCC: §2.1055, 22.355, 24.235, 27.54, 90.539, 90.213

#### **LIMITS**

FCC §90.213

The carrier frequency shall not depart from the reference frequency in excess of ±1.5 ppm for Base, fixed.

FCC: §90.539

(d) The frequency stability of base transmitters operating in the wideband segment must be 1 part per million or better.(e) The frequency stability of mobile, portable and control transmitters operating in the wideband segment must be 1.25 parts per million or better when AFC is locked to a base station, and 5 parts per million or better when AFC is not locked.

FCC §§2.1055, 22.355, 24.235, 27.54, 90.539, 90.213

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

#### TEST PROCEDURE

• Temp. =  $0^{\circ}C$  to  $+50^{\circ}C$ 

Low voltage, -15% of normal volt, Normal, 120VAC and High voltage, +15% of normal volt.

#### Frequency Stability vs Temperature:

The EUT is place inside a temperature chamber. The temperature is set to 20°C and allowed to stabilize. After sufficient soak time, the transmitting frequency error is measured. The temperature is increased by 10 degrees, allowed to stabilize and soak, and then the measurement is repeated. This is repeated until +50°C is reached.

#### Frequency Stability vs Voltage:

The peak frequency error is recorded (worst-case).

#### **RESULTS**

See the following pages.

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### 9.4.1. GSM

Test Engineer ID:	39005	Test Date:	10/5/2022
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#### **GPRS 850**

Band	5	Frequen	cy Range		Limit		
O a malif		869	894	Frequency	1.5		
Condit	ion	Freq Reading	Freq Reading	Error Reading	Frequency	Within Authorized	
Temperature	Voltage	@ Low End (MHz)	@ High End (MHz)	(Hz)	Stability	Frequency	
Normal (20°C)		869.0249	893.9735		(ppm)	Block (Hz)	
Extreme (50°C)		869.0249	893.9735	-0.3	0.000	Yes	
Extreme (40°C)	Normal	869.0249	893.9735	0.5	0.001	Yes	
Extreme (30°C)	Normai	869.0249	893.9735	0.13	0.000	Yes	
Extreme (10°C)		869.0249	893.9735	-0.05	0.000	Yes	
Extreme (0°C)		869.0249	893.9735	-0.03	0.000	Yes	
20°C	15%	869.0249	893.9735	0.02	0.000	Yes	
20 0	-15%	869.0249	893.9735	-0.03	0.000	Yes	

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#### GPRS 1900

Band	2	Frequen	cy Range		Lin	imit	
	•	1930	1990		NA		
Condit	ion	Freq Reading	Freq Reading	Delta	Frequency	Within Authorized	
Temperature	Voltage	@ Low End (MHz)	@ High End (MHz)		Stability	Frequency	
Normal (20°C)		1930.0251	1989.9734		(ppm)	Block (Hz)	
Extreme (50°C)		1930.0250	1989.9735	0.0000	NA	Yes	
Extreme (40°C)	Normal	1930.0251	1989.9737	0.0002	NA	Yes	
Extreme (30°C)	Normai	1930.0251	1989.9736	0.0001	NA	Yes	
Extreme (10°C)		1930.0251	1989.9742	0.0004	NA	Yes	
Extreme (0°C)		1930.0251	1989.9737	0.0002	NA	Yes	
20°C	15%	1930.0251	1989.9741	0.0004	NA	Yes	
20 C	-15%	1930.0254	1989.9732	0.0000	NA	Yes	

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# 9.4.2. WCDMA

Test Engineer ID:	39005	Test Date:	10/5/2022
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#### WCDMA QPSK BAND 5

Band	5	Frequency Range			Limit	
Condition		869	894	Frequency	1.5	
		Freq Reading		Error Reading	Frequency	Within Authorized
Temperature	Voltage	@ Low End (MHz)	@ High End (MHz)	(Hz)	Frequency Stability	Frequency
Normal (20°C)		869.0549	893.9437		(ppm)	Block (Hz)
Extreme (50°C)		869.0549	893.9437	-0.1	0.000	Yes
Extreme (40°C)	- Normal	869.0549	893.9437	0.46	0.001	Yes
Extreme (30°C)		869.0549	893.9437	0.65	0.001	Yes
Extreme (10°C)		869.0549	893.9437	-0.14	0.000	Yes
Extreme (0°C)		869.0549	893.9437	-0.03	0.000	Yes
20°C	15%	869.0549	893.9437	0.15	0.000	Yes
2010	-15%	869.0549	893.9437	0.19	0.000	Yes

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#### WCDMA QPSK BAND 2

Band	2	Frequency Range			Limit	
			1990		NA	
Condition		Freq Reading	Freq Reading	Delta	Frequency	Within Authorized
Temperature	Voltage	@ Low End (MHz)	@ High End (MHz)		Frequency Stability	Frequency
Normal (20°C)		1930.0470	1989.9688		(ppm)	Block (Hz)
Extreme (50°C)		1930.0585	1989.9537	-0.0018	NA	Yes
Extreme (40°C)	- Normal	1930.0312	1989.9605	-0.0121	NA	Yes
Extreme (30°C)		1930.0523	1989.9636	0.0001	NA	Yes
Extreme (10°C)		1930.0424	1989.9526	-0.0104	NA	Yes
Extreme (0°C)		1930.0453	1989.9683	-0.0011	NA	Yes
20°C	15%	1930.0466	1989.9687	-0.0003	NA	Yes
20 C	-15%	1930.0466	1989.9688	-0.0002	NA	Yes

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#### WCDMA QPSK BAND 4

Band	4	Frequency Range			Limit	
Condition		2110	2155		NA	
		Freq Reading	Freq Reading	Delta	Frequency	Within Authorized
Temperature	Voltage	@ Low End (MHz)	@ High End (MHz)		Frequency Stability	Frequency
Normal (20°C)		2110.0492	2154.9670		(ppm)	Block (Hz)
Extreme (50°C)		2110.0450	2154.9728	0.0008	NA	Yes
Extreme (40°C)	Normal	2110.0592	2154.9564	-0.0003	NA	Yes
Extreme (30°C)		2110.0588	2154.9628	0.0027	NA	Yes
Extreme (10°C)		2110.0586	2154.9660	0.0042	NA	Yes
Extreme (0°C)		2110.0421	2154.9503	-0.0119	NA	Yes
20°C	15%	2110.0491	2154.9668	-0.0001	NA	Yes
20 C	-15%	2110.0490	2154.9668	-0.0002	NA	Yes

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# 9.4.3. LTE BAND 2

## <u>LIMITS</u>

FCC: §24.235

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Engineer ID:         39005         Test Date:         10/13/2022
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### LTE BAND 2 QPSK (5MHz BANDWIDTH)

Band	2	Frequency Range			Limit	
Condition		1930	1990		NA	
		Freq Reading	Freq Reading	Delta	Frequency	Within Authorized
Temperature	Voltage	@ Low End (MHz)	@ High End (MHz)		Stability	Frequency
Normal (20°C)		1930.2356	1989.7586		(ppm)	Block (Hz)
Extreme (50°C)		1930.2447	1989.7505	0.0005	NA	Yes
Extreme (40°C)	• Normal	1930.2431	1989.7523	0.0006	NA	Yes
Extreme (30°C)		1930.2360	1989.7610	0.0014	NA	Yes
Extreme (10°C)		1930.2414	1989.8131	0.0302	NA	Yes
Extreme (0°C)		1930.0985	1989.8540	-0.0208	NA	Yes
20°C	15%	1930.2356	1989.7586	0.0000	NA	Yes
20 C	-15%	1930.2356	1989.7584	-0.0001	NA	Yes

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# 9.4.4. LTE BAND 4

# <u>LIMITS</u>

FCC: §27.54

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Engineer ID:	39005	Test Date:	10/13/2022

#### LTE BAND 4 QPSK (5MHz BANDWIDTH)

Band	4	Frequency Range			Limit	
Condition		2110	2155		NA	
		Freq Reading @ Low End	Freq Reading	Delta	Frequency	Within Authorized
Temperature	Voltage	(MHz)	@ High End (MHz)		Stability	Frequency
Normal (20°C)		2110.0774	2154.8892		(ppm)	Block (Hz)
Extreme (50°C)		2110.1000	2154.7957	-0.0354	NA	Yes
Extreme (40°C)	- Normal	2110.2106	2154.8331	0.0386	NA	Yes
Extreme (30°C)		2110.0948	2154.8729	0.0005	NA	Yes
Extreme (10°C)		2110.1709	2154.7874	-0.0041	NA	Yes
Extreme (0°C)		2110.0816	2154.8828	-0.0011	NA	Yes
20°C	15%	2110.0773	2154.8892	0.0000	NA	Yes
2010	-15%	2110.0773	2154.8892	0.0000	NA	Yes

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# 9.4.5. LTE BAND 5

# **LIMITS**

FCC: §22.355

The carrier frequency shall not depart from the reference frequency in excess of  $\pm 1.5$  ppm for Base, fixed.

 Test Engineer ID:
 39005
 Test Date:
 10/5/2022

#### LTE BAND 5 QPSK (5MHz BANDWIDTH)

Band	5	Frequency Range			Limit	
Condition		869	894	Frequency	1.5	
		Freq Reading Freq Reading	Error Reading	Frequency	Within Authorized	
Temperature	Voltage	@ Low End (MHz)	@ High End (MHz)	(Hz)	Stability	Frequency
Normal (20°C)		869.1803	893.9086		(ppm)	Block (Hz)
Extreme (50°C)		869.1802	893.9085	-52	-0.059	Yes
Extreme (40°C)	Normal	869.1803	893.9086	-45	-0.051	Yes
Extreme (30°C)		869.1803	893.9086	-45.06	-0.051	Yes
Extreme (10°C)		869.1803	893.9086	-46.21	-0.052	Yes
Extreme (0°C)		869.1802	893.9085	-53	-0.060	Yes
20°C	15%	869.1802	893.9085	-51	-0.058	Yes
20 0	-15%	869.1802	893.9085	-54	-0.061	Yes

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# 9.4.6. LTE BAND 12

# LIMITS

FCC: §27.54

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

	Test Engineer ID:	39005	Test Date:	10/5/2022
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### LTE BAND 12 QPSK (5MHz BANDWIDTH)

Band	12	Frequency Range			Limit	
Condition		729	746		NA	
		Freq Reading @ Low End	Freq Reading	Delta	Frequency	Within Authorized
Temperature	Voltage	(MHz)	@ High End (MHz)		Stability	Frequency
Normal (20°C)		729.0786	745.8277		(ppm)	Block (Hz)
Extreme (50°C)		729.1170	745.9000	0.0553	NA	Yes
Extreme (40°C)	- Normal	729.1923	745.9433	0.1146	NA	Yes
Extreme (30°C)		729.0776	745.8943	0.0328	NA	Yes
Extreme (10°C)		729.1230	745.9078	0.0622	NA	Yes
Extreme (0°C)		729.1877	745.9082	0.0948	NA	Yes
20°C	15%	729.0786	745.8278	0.0000	NA	Yes
2010	-15%	729.0786	745.8277	0.0000	NA	Yes

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# 9.4.7. LTE BAND 13

# <u>LIMITS</u>

FCC: §27.54

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Engineer ID:	39005	Test Date:	10/5/2022
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#### LTE BAND 13 QPSK (5MHz BANDWIDTH)

Band	13	Frequency Range			Limit	
Condition		746	756		NA	
		Freq Reading @ Low End	Freq Reading @ High End	Delta	Frequency	Within Authorized
Temperature	Voltage	(MHz)	(MHz)		Stability	Frequency
Normal (20°C)		746.1368	755.8006		(ppm)	Block (Hz)
Extreme (50°C)		746.1001	755.9000	0.0313	NA	Yes
Extreme (40°C)	- Normal	746.0771	755.9293	0.0345	NA	Yes
Extreme (30°C)		746.0605	755.9070	0.0151	NA	Yes
Extreme (10°C)		746.1050	755.8509	0.0092	NA	Yes
Extreme (0°C)		746.0646	755.9178	0.0225	NA	Yes
20°C	15%	746.1368	755.8004	-0.0001	NA	Yes
2010	-15%	746.1369	755.8003	-0.0001	NA	Yes

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# 9.4.8. LTE BAND 14

#### <u>LIMITS</u>

FCC: §90.539

(d) The frequency stability of base transmitters operating in the wideband segment must be 1 part per million or better.(e) The frequency stability of mobile, portable and control transmitters operating in the wideband segment must be 1.25 parts per million or better when AFC is locked to a base station, and 5 parts per million or better when AFC is not locked.

Test Engineer ID:	39005	Test Date:	10/5/2022
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# LTE BAND 14 QPSK (5MHz BANDWIDTH)

Band	14	Frequency Range			Limit			
	•	758	768	Frequency	1			
Conditi	ion	Freq Reading	Freq Reading	Error Reading	Fraguanay	Within Authorized		
Temperature	Voltage	@ Low End (MHz)	@ High End (MHz)	(Hz)	Frequency Stability	Frequency		
Normal (20°C)		758.1931	767.7948		(ppm)	Block (Hz)		
Extreme (50°C)		758.1931	767.7948	22	0.029	Yes		
Extreme (40°C)		758.1931	767.7948	19	0.025	Yes		
Extreme (30°C)	Normal	758.1931	767.7948	23	0.030	Yes		
Extreme (10°C)		758.1931	767.7948	-31	-0.041	Yes		
Extreme (0°C)		758.1931	767.7948	-28.56	-0.037	Yes		
20°C	15%	758.1931	767.7948	21	0.028	Yes		
20 0	-15%	758.1931	767.7948	24	0.031	Yes		

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# 9.4.9. LTE BAND 17

# LIMITS

FCC: §27.54

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Engineer ID:	39005	Test Date:	10/5/2022
<u> </u>			

### LTE BAND 17 QPSK (5MHz BANDWIDTH)

Band	17	Frequency Range			Li	mit		
	•	734	746		NA			
Condit	ION	Freq Reading @ Low End	Freq Reading @ High End	Delta	Frequency	Within Authorized		
Temperature	Voltage	(MHz)	(MHz)		Stability	Frequency		
Normal (20°C)		734.0953	745.8128		(ppm)	Block (Hz)		
Extreme (50°C)		734.0671	745.9170	0.0380	NA	Yes		
Extreme (40°C)	Normal	734.0776	745.7830	-0.0238	NA	Yes		
Extreme (30°C)	Normai	734.1255	745.9358	0.0766	NA	Yes		
Extreme (10°C)		734.1949	745.9085	0.0976	NA	Yes		
Extreme (0°C)		734.1895	745.8372	0.0593	NA	Yes		
20°C	15%	734.0953	745.8128	0.0000	NA	Yes		
	-15%	734.0953	745.8128	0.0000	NA	Yes		

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# 9.4.10. LTE BAND 25

# **LIMITS**

FCC: §24.235

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Engineer ID:	39005	Test Date:	10/13/2022
<u>.</u>			

#### LTE BAND 25 QPSK (5MHz BANDWIDTH)

Band	25	Frequency Range			Limit			
<b>0</b>		1930	1995		NA			
Condit	ion	Freq Reading @ Low End	Freq Reading @ High End	Delta	Frequency	Within Authorized		
Temperature	Voltage	(MHz)	(MHz)		Stability	Frequency		
Normal (20°C)		1930.2318	1994.7614		(ppm)	Block (Hz)		
Extreme (50°C)		1930.2432	1994.7508	0.0004	NA	Yes		
Extreme (40°C)	Normal	1930.2431	1994.7585	0.0042	NA	Yes		
Extreme (30°C)	Normai	1930.2381	1994.7610	0.0030	NA	Yes		
Extreme (10°C)		1930.2397	1994.7657	0.0061	NA	Yes		
Extreme (0°C)		1930.2396	1994.8229	0.0347	NA	Yes		
20°C	15%	1930.2317	1994.7612	-0.0001	NA	Yes		
	-15%	1930.2317	1994.7622	0.0004	NA	Yes		

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# 9.4.11. LTE BAND 26(FCC PART 90S)

# **LIMITS**

FCC: §90.213

The carrier frequency shall not depart from the reference frequency in excess of ±1.5 ppm for Fixed and Base Stations.

 Test Engineer ID:
 39005
 Test Date:
 10/5/2022

#### LTE BAND 26 QPSK (5MHz BANDWIDTH)

Band	26	Frequency Range			Limit		
	•	859	869	Frequency	1.5		
Condit	ion	Freq Reading	Freq Reading	Error Reading	Frequency	Within Authorized	
Temperature	Voltage	@ Low End (MHz)	@ High End (MHz)	(Hz)	Stability	Frequency	
Normal (20°C)		859.1316	868.9374		(ppm)	Block (Hz)	
Extreme (50°C)		859.1316	868.9374	-10.12	-0.012	Yes	
Extreme (40°C)	Normal	859.1316	868.9374	-22.4	-0.026	Yes	
Extreme (30°C)	Normai	859.1316	868.9374	-21.11	-0.024	Yes	
Extreme (10°C)		859.1316	868.9374	39	0.045	Yes	
Extreme (0°C)		859.1316	868.9374	20	0.023	Yes	
20°C	15%	859.1316	868.9374	-10.15	-0.012	Yes	
20°C	-15%	859.1316	868.9374	-15	-0.017	Yes	

# 9.4.12. LTE BAND 26(FCC PART 22)

### <u>LIMITS</u>

FCC: §22.355

The carrier frequency shall not depart from the reference frequency in excess of ±1.5 ppm for Base, fixed

 Test Engineer ID:
 39005
 Test Date:
 10/5/2022

#### LTE BAND 26 QPSK (5MHz BANDWIDTH)

Band	26	Frequency Range			Limit	
O and lite	•	869	894	Frequency	1.5	
Condit	ion	Freq Reading @ Low End	Freq Reading @ High End	Error Reading	Frequency	Within Authorized
Temperature	Voltage	(MHz)	(MHz)	(Hz)	Stability	Frequency
Normal (20°C)		869.1070	893.9220		(ppm)	Block (Hz)
Extreme (50°C)		869.1070	893.9220	-11	-0.012	Yes
Extreme (40°C)	Normal	869.1070	893.9220	-18	-0.020	Yes
Extreme (30°C)	Horman	869.1070	893.9220	-20	-0.023	Yes
Extreme (10°C)		869.1070	893.9220	21	0.024	Yes
Extreme (0°C)		869.1070	893.9220	17	0.019	Yes
20°C	15%	869.1070	893.9220	-10.21	-0.012	Yes
20°C	-15%	869.1070	893.9220	-14	-0.016	Yes

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# 9.4.13. LTE BAND 66

# **LIMITS**

FCC: §27.54

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Engineer ID:	39005	Test Date:	10/13/2022

#### LTE BAND 66 QPSK (5MHz BANDWIDTH)

Band	66	Frequency Range			Li	mit	
	•	2110	2200		NA		
Condit	ion	Freq Reading @ Low End	Freq Reading @ High End	Delta	Frequency	Within Authorized	
Temperature	Voltage	(MHz)	(MHz)		Stability	Frequency	
Normal (20°C)		2110.2292	2179.8669		(ppm)	Block (Hz)	
Extreme (50°C)		2110.2242	2179.8053	-0.0333	NA	Yes	
Extreme (40°C)	Normal	2110.1853	2179.7954	-0.0577	NA	Yes	
Extreme (30°C)	Normai	2110.2167	2179.8004	-0.0395	NA	Yes	
Extreme (10°C)		2110.2021	2179.9072	0.0066	NA	Yes	
Extreme (0°C)		2110.2092	2179.8623	-0.0123	NA	Yes	
20°C	15%	2110.2293	2179.8668	0.0000	NA	Yes	
	-15%	2110.2290	2179.8669	-0.0001	NA	Yes	

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# 9.4.14. LTE BAND 71 AND 5G NR n71

# **LIMITS**

FCC: §27.54

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Engineer ID:	39005	Test Date:	10/5/2022
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#### LTE BAND 71 QPSK (5MHz BANDWIDTH)

Band	71	Frequency Range			Limit			
	•	617	652		NA			
Condit	ion	Freq Reading @ Low End	Freq Reading @ High End	Delta	Frequency	Within Authorized		
Temperature	Voltage	(MHz)	(MHz)		Stability	Frequency		
Normal (20°C)		617.0861	651.8593		(ppm)	Block (Hz)		
Extreme (50°C)	Normal	617.1230	651.9000	0.0388	NA	Yes		
Extreme (40°C)		617.1948	651.9037	0.0765	NA	Yes		
Extreme (30°C)	Normai	617.1616	651.9147	0.0655	NA	Yes		
Extreme (10°C)		617.2189	651.7931	0.0333	NA	Yes		
Extreme (0°C)		617.2180	651.9146	0.0936	NA	Yes		
20%0	15%	617.0860	651.8591	-0.0002	NA	Yes		
20°C	-15%	617.0861	651.8600	0.0004	NA	Yes		

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#### 5G NR n71 BPSK (20MHz BANDWIDTH)

Band	n71	Frequency Range			Limit	
Condition		617	652	Delta	NA	
		Freq Reading	Freq Reading		Frequency	Within Authorized
Temperature	Voltage	@ Low End (MHz)	@ High End (MHz)		Stability (ppm)	Frequency
Normal (20°C)	- Normal	618.1505	650.3868			Block (Hz)
Extreme (50°C)		617.8612	650.6500	-0.0131	NA	Yes
Extreme (40°C)		617.9574	650.3273	-0.1263	NA	Yes
Extreme (30°C)		618.1320	650.3334	-0.0359	NA	Yes
Extreme (10°C)		617.8877	650.3551	-0.1472	NA	Yes
Extreme (0°C)		617.5620	650.3263	-0.3245	NA	Yes
20°C	15%	618.1503	650.3866	-0.0002	NA	Yes
	-15%	618.1505	650.3871	0.0002	NA	Yes

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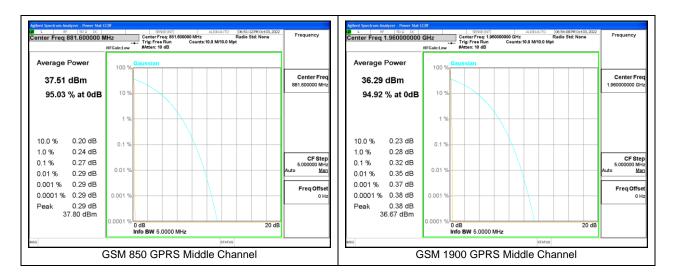
# 9.5. PEAK-TO-AVERAGE POWER RATIO

#### <u>LIMIT</u>

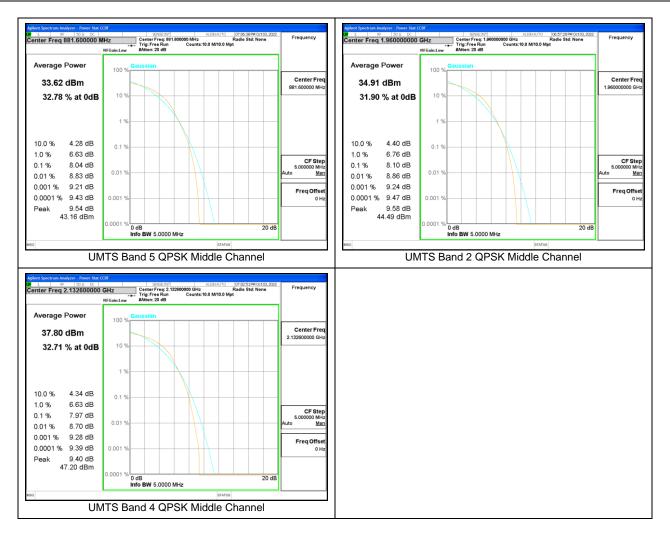
In addition, the peak-to-average power ratio (PAPR) of the transmitter shall not exceed 13 dB for more than 0.1% of the time and shall use a signal corresponding to the highest PAPR during periods of continuous transmission.

### <u>RESULT</u>

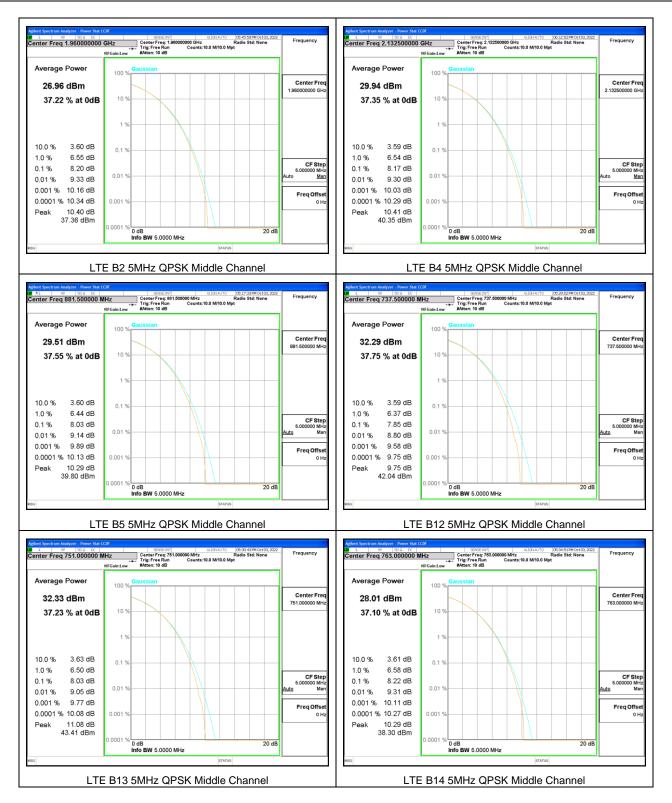
The results from all CCDF measurements are passed with 13dB peak-to-average power ratio criteria.



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