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Appendix B

Test Data and Result Details of GZEM2101000418CR



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1 Authorized frequency band verification

Note:

- 1. EUT amplifies Lower 700MHz downlink (728-746MHz) and upper 700MHz downlink (746-756MHz) together, so combined frequency response plot was shown for authorized frequency band verification in this report.
- 2. Refer to the following plots, the frequency with the highest power level in each operational band f_0 is as below:

a) UPLINK

Lower 700MHz: 709.63MHz Upper 700MHz: 781.97MHz

Cellular: 836.35MHz AWS-1: 1745.29MHz

Broadband PCS: 1883.38MHz

b) DOWNLINK

700MHz: 746.10MHz Cellular: 887.45MHz AWS-1: 2149.83MHz

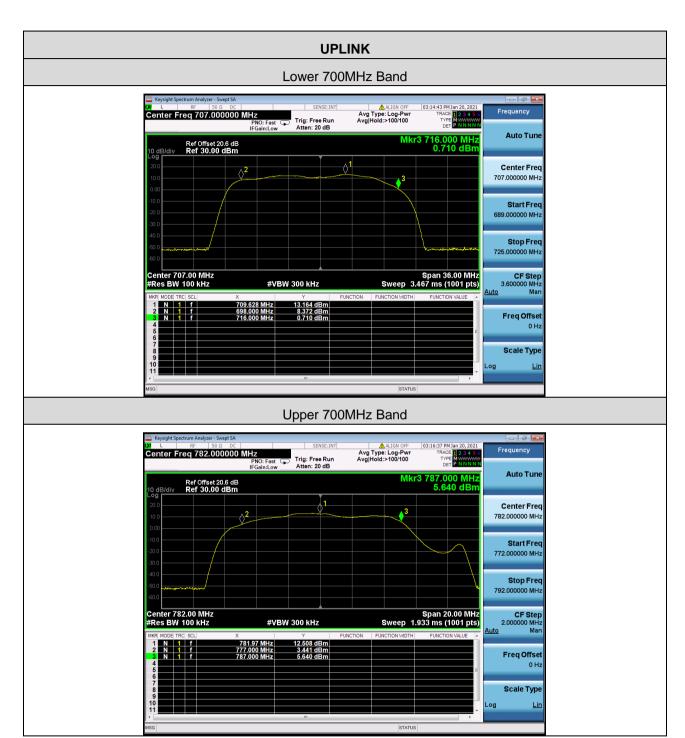
Broadband PCS: 1958.68MHz





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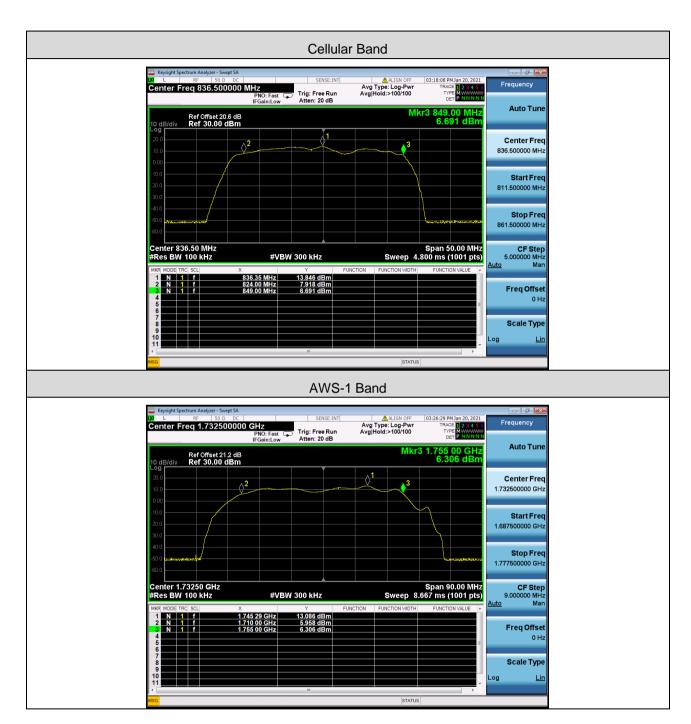
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Broadband PCS Band Avg Type: Log-Pwr Avg|Hold:>100/100 Center Freq 1.880000000 GHz Trig: Free Run Atten: 20 dB Auto Tun Ref Offset 21.2 dB Ref 30.00 dBm Center Free 1.880000000 GH Start Free 1.820000000 GH Stop Fred 1.940000000 GH ter 1.88000 GHz Span 120.0 MHz Sweep 11.53 ms (1001 pts CF Step 12.000000 MHz #VBW 300 kHz Freq Offse Scale Type **DOWNLINK** 700MHz (Lower 700MHz + Upper 700MHz) Band Avg Type: Log-Pwr Avg|Hold:>400/400 Frequency Center Freq 742.000000 MHz Center Fred 742.000000 MH: Start Fred 714.000000 MH Stop Free 770.000000 MH Center 742.00 MHz Span 56.00 MHz Sweep 5.400 ms (1001 pts) CF Step 5.600000 MH: Mar **#VBW** 300 kHz Freq Offset Scale Type



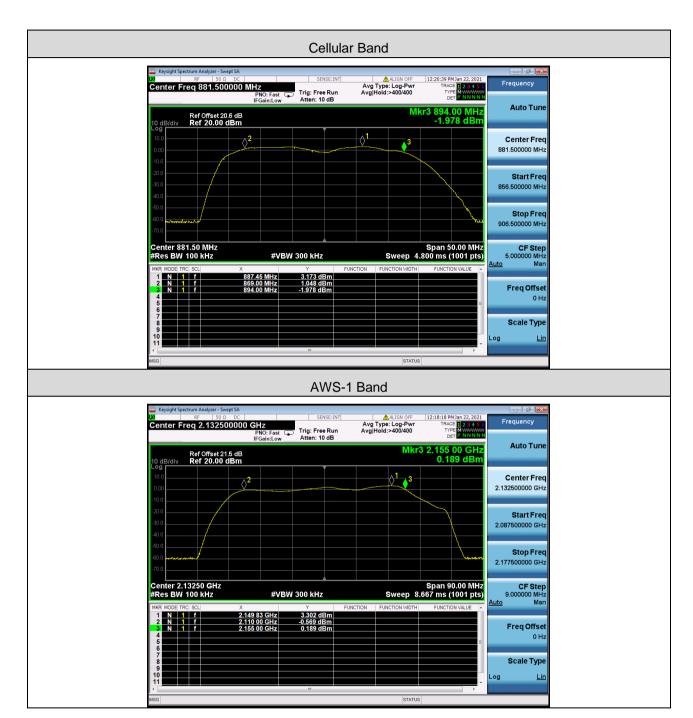
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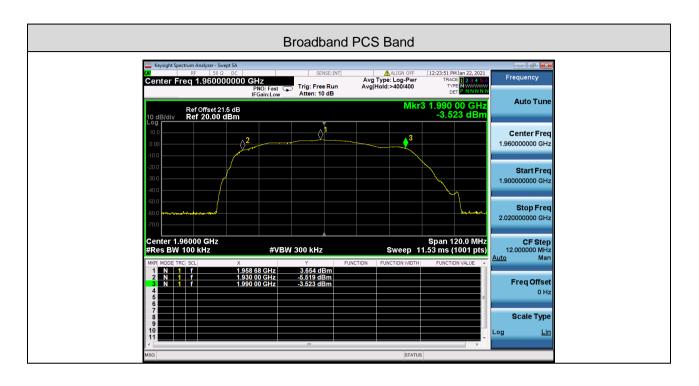
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2 Maximum power

Note: 1. The following information was declared by the manufacturer:

a) the highest antenna gain: 10dBib) the minimum cable loss: 1dB

c) coupling device: no

2. The test frequency f₀ was determined in Authorized frequency band verification, please refer to clause 1 in this report for more details.



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Maximum Output Power								
Path	Band	Signal Type	Input Power ¹ (dBm)	Conducted Output Power (dBm)	EIRP ² (dBm)	Limit (dBm)	Verdict	
	Lower	AWGN	-44.9	14.16	23.16		PASS	
	700MHz	GSM	-42.4	16.23	25.23		PASS	
	Upper	AWGN	-43.5	14.95	23.95		PASS	
	700MHz	GSM	-42.6	15.83	24.83		PASS	
UPLINK	Cellular	AWGN	-43.9	13.96	22.96	≥17 & ≤30	PASS	
		GSM	-40.3	15.72	24.72		PASS	
	AWS-1	AWGN	-46.3	12.74	21.74		PASS	
		GSM	-42.2	15.16	24.16		PASS	
	Broadband	AWGN	-46.1	13.23	22.23		PASS	
	PCS	GSM	-42.9	16.16	25.16		PASS	
	700MHz	AWGN	-54.3	6.93	15.93		PASS	
		GSM	-54.9	4.96	13.96		PASS	
	Cellular	AWGN	-53.7	6.53	15.53		PASS	
		GSM	-54.6	5.22	14.22		PASS	
DOWNLINK	AWS-1	AWGN	-51.1	7.36	16.36	≤17	PASS	
		GSM	-53.4	5.27	14.27		PASS	
	Broadband	AWGN	-53.4	7.34	16.34		PASS	
	PCS	GSM	-55.0	5.62	14.62		PASS	

Remark:

1. The input power was a level just below and within 0.5dB of the AGC limit without triggering the AGC.

Please refer to the following table for more details for AGC level.

2. ERIP = Conducted Output Power + Antenna Gain – Cable loss



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Maximum Input Power							
Path	Band	Signal Type	Maximum Input Power (dBm)	AGC Level (dBm)	Limit (dBm)	Verdict	
	Lower 700MHz	AWGN	-23.5	-44.5		PASS	
		GSM	-20.7	-41.9		PASS	
	Upper	AWGN	-20.8	-42.8		PASS	
	700MHz	GSM	-22.6	-42.3		PASS	
		AWGN	-22.4	-43.6	≤27	PASS	
UPLINK	Cellular	GSM	-19.3	-40.0		PASS	
	AWS-1	AWGN	-24.9	-46.0		PASS	
		GSM	-21.4	-41.9		PASS	
		AWGN	-23.5	-45.8		PASS	
	PCS	GSM	-20.3	-42.5		PASS	
DOWNLINK	700MHz	AWGN	-32.4	-53.9	≤-20	PASS	
		GSM	-33.1	-54.5		PASS	
	Cellular	AWGN	-31.8	-53.4		PASS	
		GSM	-32.7	-54.2		PASS	
	AWS-1	AWGN	-29.6	-50.7		PASS	
		GSM	-31.4	-53.0		PASS	
	Broadband	AWGN	-30.7	-52.9		PASS	
	PCS	GSM	-33.5	-54.6		PASS	

Remark:

Above test data of maximum input power was obtained at the point that caused the EUT shutdown and complied at 10dB above AGC level.



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3 Maximum booster gain computation

Note: 1. Fixed Booster maximum gain shall not exceed 6.5 dB + 20 Log₁₀ (F), F is the uplink

mid-band frequency of the supported spectrum bands in MHz, so,

for Lower 700MHz, limit = 6.5 dB + 20 Log10 (707) = 63.49dB for Upper 700MHz, limit = 6.5 dB + 20 Log10 (782) = 64.36dB

for Cellular, limit = 6.5 dB + 20 Log10 (836.5) = 64.95dB

for AWS-1, limit = 6.5 dB + 20 Log10 (1732.5) = 71.27 dB

for Broadband PCS, limit = 6.5 dB + 20 Log10 (1880) = 71.98dB

2. Equivalent uplink and downlink gain, limit:

|UL Gain – DL Gain| ≤9dB



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Maximum Gain								
Path	Band	Signal Type	Input Power ¹ (dBm)	Conducted Output Power (dBm)	Gain (dB)	Limit (dB)	Verdict	
UPLINK	Lower	AWGN	-44.9	14.16	59.06	≤63.49	PASS	
	700MHz	GSM	-42.4	16.23	58.63		PASS	
	Upper	AWGN	-43.5	14.95	58.45		PASS	
	700MHz	GSM	-42.6	15.83	58.43	≤64.36	PASS	
	Cellular	AWGN	-43.9	13.96	57.86		PASS	
		GSM	-40.3	15.72	56.02	≤64.95	PASS	
	AWS-1	AWGN	-46.3	12.74	59.04	≤71.27	PASS	
		GSM	-42.2	15.16	57.36		PASS	
	Broadband	AWGN	-46.1	13.23	59.33	≤71.98	PASS	
	PCS	GSM	-42.9	16.16	59.06		PASS	
DOWNLINK	700MHz	AWGN	-54.3	6.93	61.23	≤63.49	PASS	
		GSM	-54.9	4.96	59.86		PASS	
	Cellular	AWGN	-53.7	6.53	60.23	≤64.95	PASS	
		GSM	-54.6	5.22	59.82		PASS	
	AWS-1	AWGN	-51.1	7.36	58.46	≤71.27	PASS	
		GSM	-53.4	5.27	58.67		PASS	
	Broadband	AWGN	-53.4	7.34	60.74	≤71.98	PASS	
	PCS	GSM	-55.0	5.62	60.62		PASS	

Remark:

1. The input power was a level just below and within 0.5dB of the AGC limit without triggering the AGC. Please refer to clause 2 in this report for more details for AGC level.



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Equivalent Uplink and Downlink Gain							
Band	Signal Type	Uplink Gain (dB)	Downlink Gain (dB)	UL Gain – DL Gain (dB)	Limit (dB)	Verdict	
Lower	AWGN	59.06	61.23	2.17		PASS	
700MHz	GSM	58.63	59.86	1.23		PASS	
Upper	AWGN	58.45	61.23	2.78		PASS	
700MHz	GSM	58.43	59.86	1.43		PASS	
	AWGN	57.86	60.23	2.37		PASS	
Cellular	GSM	56.02	59.82	3.8	≤9	PASS	
AWS-1	AWGN	59.04	58.46	0.58		PASS	
	GSM	57.36	58.67	1.31		PASS	
Broadband	AWGN	59.33	60.74	1.41		PASS	
PCS	GSM	59.06	60.62	1.56		PASS	



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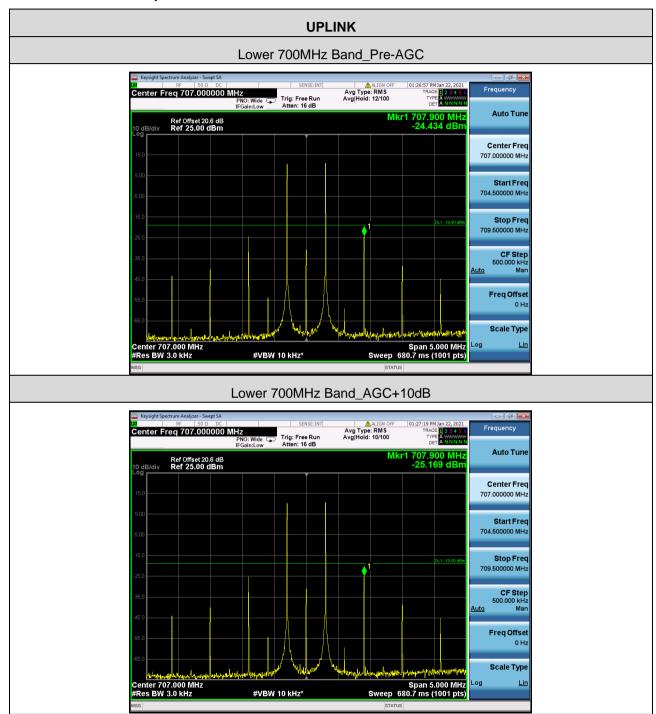
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4 Intermodulation product





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Upper 700MHz Band Pre-AGC Avg Type: RMS Avg|Hold: 7/100 enter Freq 782.000000 MHz PNO: Wide Trig: Free Run Atten: 16 dB Auto Tun 780.100 MH -26.090 dBr Ref Offset 20.6 dB Ref 25.00 dBm Center Free 782.000000 MH Start Fre 779.500000 MH 784.500000 MH CF Step 500.000 kH Freq Offse Scale Type Span 5.000 MHz Sweep 680.7 ms (1001 pts) enter 782.000 MHz Res BW 3.0 kHz #VBW 10 kHz* Upper 700MHz Band AGC+10dB Avg Type: RMS Avg|Hold: 3/100 Center Freq 782.000000 MHz Trig: Free Run Atten: 16 dB Auto Tun Ref Offset 20.6 dB Ref 25.00 dBm Center Free 782.000000 MH: Start Freq 779.500000 MH Stop Freq 784.500000 MH

#VBW 10 kHz*



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Span 5.000 MHz Sweep 680.7 ms (1001 pts)

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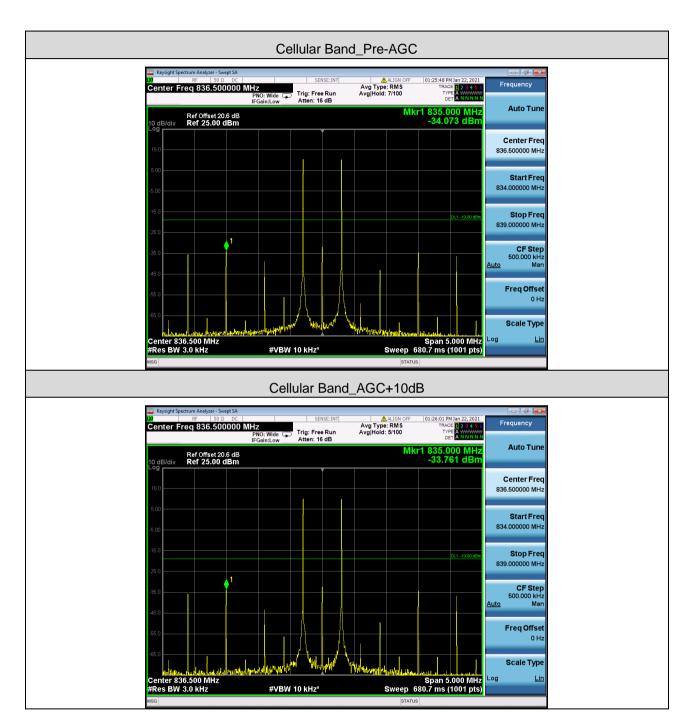
Scale Type

Log



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AWS-1 Band Pre-AGC Avg Type: RMS Avg|Hold: 7/100 Center Freq 1.732500000 GHz Trig: Free Run Atten: 14 dB Auto Tun /31 600 GH -22.930 dBi Ref Offset 21.2 dB Ref 25.00 dBm Center Free 1.732500000 GH Start Free 1.730000000 GH 1.735000000 GH CF Step 500.000 kH: Freq Offse Scale Type enter 1.732500 GHz Res BW 3.0 kHz Span 5.000 MHz Sweep 680.7 ms (1001 pts) #VBW 10 kHz* AWS-1 Band AGC+10dB Center Freq 1.732500000 GHz Avg Type: RMS AvgHold: 5/100 PNO: Wide Trig: Free Run Auto Tur Ref Offset 21.2 dB Ref 25.00 dBm Center Fred 1.732500000 GH: Start Fred 1.730000000 GH Stop Fred 1.735000000 GH CF Step 500.000 kHz Freq Offset Scale Type Center 1.732500 GHz #Res BW 3.0 kHz Span 5.000 MHz Sweep 680.7 ms (1001 pts)

#VBW 10 kHz*



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Broadband PCS Band Pre-AGC Avg Type: RMS Avg|Hold: 4/100 Center Freq 1.880000000 GHz PNO: Wide Trig: Free Run IFGain:Low Atten: 14 dB Auto Tun 879 100 GH -28.209 dBi Ref Offset 21.2 dB Ref 25.00 dBm Center Free 1.880000000 GH Start Free 1.877500000 GH 1.882500000 GH CF Step 500.000 kH Freq Offse Scale Type enter 1.880000 GHz Res BW 3.0 kHz Span 5.000 MHz Sweep 680.7 ms (1001 pts) #VBW 10 kHz* Broadband PCS Band AGC+10dB Center Freq 1.880000000 GHz PNC: Wide PRO: Wide Reain: Low Atten: 14 dB Avg Type: RMS AvgHold: 3/100 Auto Tur Ref Offset 21.2 dB Ref 25.00 dBm Center Fred 1.880000000 GH Start Fred 1.877500000 GH Stop Free CF Step 500.000 kHz Freq Offset



Center 1.880000 GHz #Res BW 3.0 kHz

#VBW 10 kHz*

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Span 5.000 MHz Sweep 680.7 ms (1001 pts)

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Scale Type

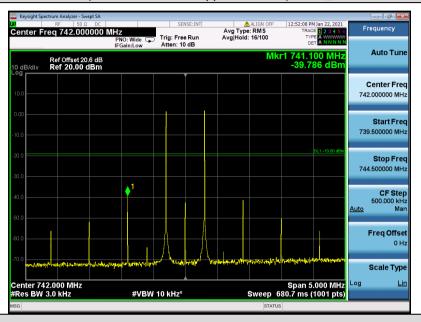


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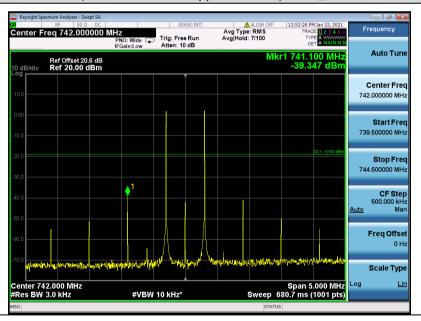
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DOWNLINK

700MHz (Lower 700MHz + Upper 700MHz) Band Pre-AGC



700MHz (Lower 700MHz + Upper 700MHz) Band_AGC+10dB



Remark: EUT amplifies Lower 700MHz downlink (728-746MHz) and upper 700MHz downlink (746-756MHz) together, so combined frequency was measured for intermodulation product in this report, the center frequency is 742MHz.



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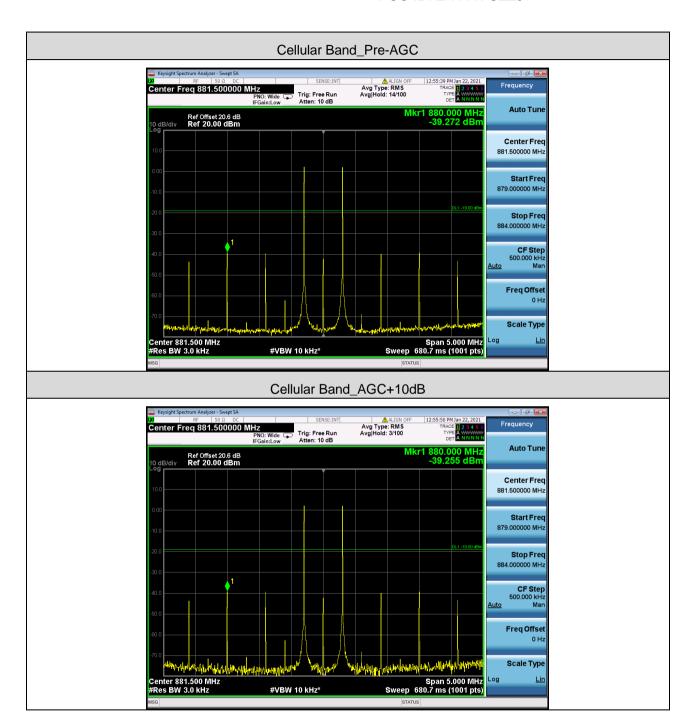
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AWS-1 Band Pre-AGC Avg Type: RMS Avg|Hold: 4/100 enter Freq 2.132500000 GHz Trig: Free Run Atten: 10 dB Auto Tun .131 600 GH -32.522 dBı Ref Offset 21.5 dB Ref 20.00 dBm Center Free 2.132500000 GH Start Free 2.130000000 GH 2.135000000 GH CF Step 500.000 kH: Freq Offse Scale Type enter 2.132500 GHz Res BW 3.0 kHz Span 5.000 MHz Sweep 680.7 ms (1001 pts) #VBW 10 kHz* AWS-1 Band AGC+10dB Avg Type: RMS AvgHold: 3/100 Center Freq 2.132500000 GHz PNO: Wide Trig: Free Run Atten: 10 dB Auto Tur Ref Offset 21.5 dB Ref 20.00 dBm Center Fred 2.132500000 GH: Start Fred 2.130000000 GH Stop Fred 2.135000000 GH CF Step 500.000 kHz Freq Offset Scale Type Center 2.132500 GHz #Res BW 3.0 kHz Span 5.000 MHz Sweep 680.7 ms (1001 pts) Log #VBW 10 kHz*



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Broadband PCS Band Pre-AGC Avg Type: RMS Avg|Hold: 18/100 Center Freq 1.960000000 GHz PNO: Wide Trig: Free Run Atten: 10 dB Auto Tun 960 900 GH -34.622 dBr Ref Offset 21.5 dB Ref 20.00 dBm Center Free 1.960000000 GH Start Free 1.957500000 GH 1.962500000 GH CF Step 500.000 kH: Freq Offse Scale Type enter 1.960000 GHz Res BW 3.0 kHz Span 5.000 MHz Sweep 680.7 ms (1001 pts) #VBW 10 kHz* Broadband PCS Band AGC+10dB Center Freq 1.960000000 GHz PNC: Wide PRO: Wide Reain: 10 dB Avg Type: RMS AvgHold: 5/100 Auto Tun Ref Offset 21.5 dB Ref 20.00 dBm Center Fred 1.960000000 GH Start Fred 1.957500000 GH Stop Free 1.962500000 GH CF Step 500.000 kHz Freq Offset Scale Type Center 1.960000 GHz #Res BW 3.0 kHz Span 5.000 MHz Sweep 680.7 ms (1001 pts) Log #VBW 10 kHz*



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5 Out-of-band emissions

Note:

1. 20.21(e)(8)(i)(E) Out of Band Emission Limits:

Booster out of band emissions (OOBE) shall be at least 6 dB below the FCC's mobile emission limits for the supported bands of operation.

According to the requirement of part 27.53(c), 27.53(g), 27.53(h), 22.917, 24.238, the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) in watts by at least 43 + 10 log10 (P) dB. So.

Out-of-band emission limit = $\{P-[43 + 10 \log 10 (P)]\} - 6dB = -19dBm$

2. EUT amplifies Lower 700MHz downlink (728-746MHz) and upper 700MHz downlink (746-756MHz) together, so combined frequency was measured for out-of-band emissions in this report.



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UPLINK_GSM signal type

Lower 700MHz Band Lower band edge Pre-AGC



Lower 700MHz Band_Lower band edge_AGC+10dB





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Lower 700MHz Band_Upper band edge_Pre-AGC



Lower 700MHz Band_Upper band edge_AGC+10dB





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Upper 700MHz Band Lower band edge Pre-AGC



Upper 700MHz Band Lower band edge AGC+10dB





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Upper 700MHz Band Upper band edge Pre-AGC



Upper 700MHz Band Upper band edge AGC+10dB





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Cellular Band Lower band edge Pre-AGC ALIGN OFF Avg Type: RMS Avg|Hold:>150/150 Start Freq 823.700000 MHz Trig: Free Run #Atten: 10 dB Auto Tun 824.000 0 MH: -25.014 dBn Ref Offset 20.6 dB Ref 19.10 dBm Center Fre 823.850000 MH Start Fre 823.700000 MH 824.000000 MH CF Step 30.000 kH Freq Offse Scale Type Start 823.7000 MHz #Res BW 100 kHz Stop 824.0000 MHz Sweep 1.000 ms (1001 pts) #VBW 300 kHz* Cellular Band Lower band edge AGC+10dB Avg Type: RMS AvalHold:>150/150 Freque Start Freq 823.700000 MHz PNO: Wide Trig: Free Run Auto Tun Ref Offset 20.6 dB Ref 19.10 dBm Center Fred 823.850000 MH Start Fred 823.700000 MH Stop Fred CF Step 30.000 kHz Freq Offset Scale Type



Start 823.7000 MHz #Res BW 100 kHz

#VBW 300 kHz*

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Stop 824.0000 MHz Sweep 1.000 ms (1001 pts)

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Cellular Band Upper band edge Pre-AGC ALIGN OFF Avg Type: RMS Avg|Hold:>150/150 Start Freq 849.000000 MHz Trig: Free Run Auto Tun 49.000 0 MH -25.062 dBn Ref Offset 20.6 dB Ref 19.10 dBm Center Fre 849.150000 MH Start Fre 849.000000 MH 849.300000 MH CF Step 30.000 kH Freq Offse Scale Type Start 849.0000 MHz #Res BW 100 kHz Stop 849.3000 MHz Sweep 1.000 ms (1001 pts) #VBW 300 kHz* Cellular Band Upper band edge AGC+10dB Avg Type: RMS AvalHold:>150/150 Freque Start Freq 849.000000 MHz PNO: Wide Trig: Free Run Auto Tun Ref Offset 20.6 dB Ref 19.10 dBm Center Fred 849.150000 MH Start Fred 849.000000 MH Stop Free CF Step 30.000 kHz Freq Offset Scale Type



Start 849.0000 MHz #Res BW 100 kHz

#VBW 300 kHz*

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Stop 849.3000 MHz Sweep 1.000 ms (1001 pts)

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AWS-1 Band Lower band edge Pre-AGC



AWS-1 Band Lower band edge AGC+10dB





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AWS-1 Band_Upper band edge_Pre-AGC



AWS-1 Band_Upper band edge_AGC+10dB





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Broadband PCS Band Lower band edge Pre-AGC



Broadband PCS Band Lower band edge AGC+10dB





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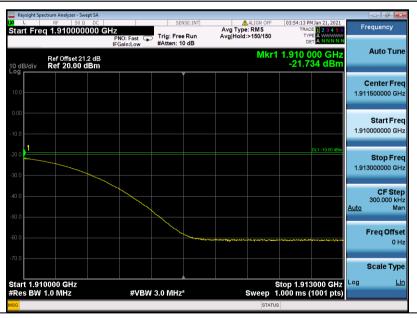
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Broadband PCS Band_Upper band edge_Pre-AGC



Broadband PCS Band_Upper band edge_AGC+10dB





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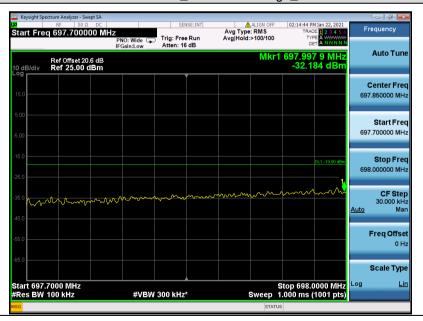
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UPLINK 1.25MHz AWGN signal type

Lower 700MHz Band Lower band edge Pre-AGC



Lower 700MHz Band_Lower band edge_AGC+10dB





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Lower 700MHz Band Upper band edge Pre-AGC



Lower 700MHz Band Upper band edge AGC+10dB





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Upper 700MHz Band_Lower band edge_Pre-AGC



Upper 700MHz Band_Lower band edge_AGC+10dB





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Upper 700MHz Band_Upper band edge_Pre-AGC



Upper 700MHz Band_Upper band edge_AGC+10dB





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Cellular Band Lower band edge Pre-AGC ALIGN OFF Avg Type: RMS Avg|Hold:>100/100 tart Freq 823.700000 MHz PNO: Wide Trig: Free Run IFGain:Low Atten: 16 dB Auto Tun 23.999 7 MH -41.185 dBr Ref Offset 20.6 dB Ref 25.00 dBm Center Fre 823.850000 MH Start Fre 823.700000 MH 824.000000 MH CF Step 30.000 kHz Freq Offse Scale Type Start 823.7000 MHz #Res BW 100 kHz Stop 824.0000 MHz Sweep 1.000 ms (1001 pts) #VBW 300 kHz* Cellular Band Lower band edge AGC+10dB Avg Type: RMS AvgHold:>100/100 Freque Start Freq 823.700000 MHz





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Cellular Band Upper band edge Pre-AGC ALIGN OFF Avg Type: RMS Avg|Hold:>100/100 tart Freq 848.700000 MHz PNO: Wide Trig: Free Run IFGain:Low Atten: 16 dB Auto Tun 18.700 0 MH -20.865 dBn Ref Offset 20.6 dB Ref 25.00 dBm 848.850000 MH Start Free 848.700000 MH 849.000000 MH CF Step 30.000 kH Freq Offse Scale Type Start 848.7000 MHz #Res BW 100 kHz Stop 849.0000 MHz Sweep 1.000 ms (1001 pts) #VBW 300 kHz* Cellular Band Upper band edge AGC+10dB





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AWS-1 Band Lower band edge Pre-AGC



AWS-1 Band Lower band edge AGC+10dB





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AWS-1 Band_Upper band edge_Pre-AGC



AWS-1 Band_Upper band edge_AGC+10dB





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Broadband PCS Band Lower band edge Pre-AGC



Broadband PCS Band Lower band edge AGC+10dB





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Broadband PCS Band_Upper band edge_Pre-AGC



Broadband PCS Band_Upper band edge_AGC+10dB





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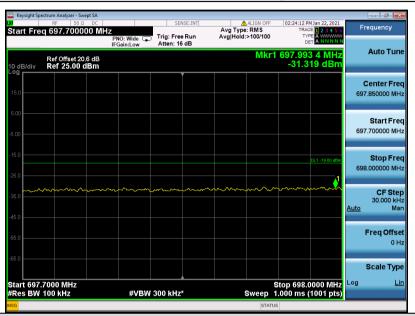


Application No.: GZEM2101000418CR

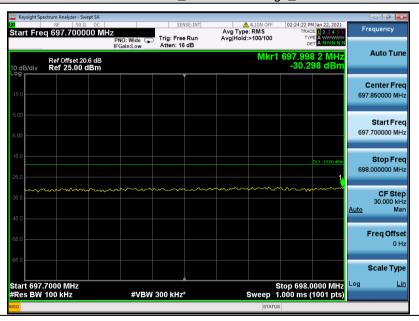
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UPLINK 4.1MHz AWGN signal type

Lower 700MHz Band Lower band edge Pre-AGC



Lower 700MHz Band_Lower band edge_AGC+10dB





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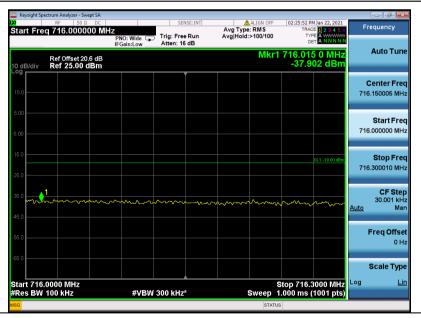
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Lower 700MHz Band_Upper band edge_Pre-AGC



Lower 700MHz Band_Upper band edge_AGC+10dB





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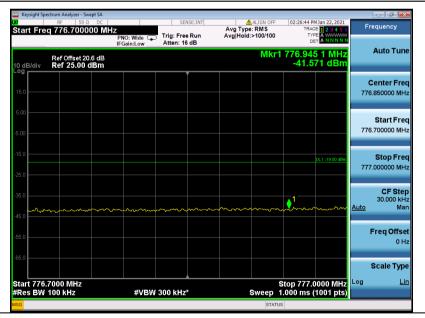
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Upper 700MHz Band Lower band edge Pre-AGC



Upper 700MHz Band Lower band edge AGC+10dB





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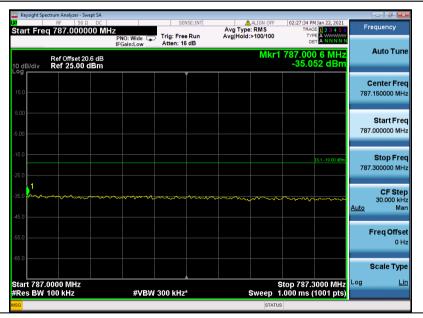
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Upper 700MHz Band Upper band edge Pre-AGC



Upper 700MHz Band Upper band edge AGC+10dB





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Cellular Band Lower band edge Pre-AGC ALIGN OFF Avg Type: RMS Avg|Hold:>100/100 tart Freq 823.700000 MHz PNO: Wide Trig: Free Run IFGain:Low Atten: 16 dB Auto Tun 23.987 7 MH -43.230 dBr Ref Offset 20.6 dB Ref 25.00 dBm Center Fre 823.850000 MH Start Fre 823.700000 MH 824.000000 MH CF Step 30.000 kHz • Freq Offse Scale Type Start 823.7000 MHz #Res BW 100 kHz Stop 824.0000 MHz Sweep 1.000 ms (1001 pts) #VBW 300 kHz* Cellular Band Lower band edge AGC+10dB Avg Type: RMS AvalHold:>100/100 Freque Start Freq 823.700000 MHz PNO: Wide Trig: Free Run IFGain:Low Atten: 16 dB Auto Tun Ref Offset 20.6 dB Ref 25.00 dBm Center Fred 823.850000 MH Start Fred 823.700000 MH



Start 823.7000 MHz #Res BW 100 kHz

#VBW 300 kHz*

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Stop 824.0000 MHz Sweep 1.000 ms (1001 pts)

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Stop Fred

CF Step 30.000 kHz

Freq Offset

Scale Type

Log



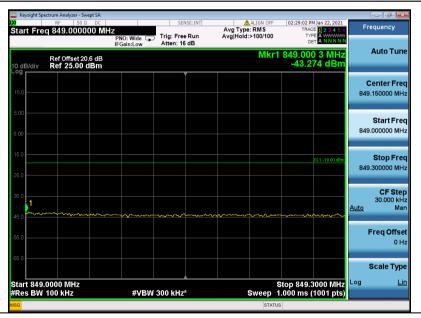
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Cellular Band Upper band edge Pre-AGC



Cellular Band Upper band edge AGC+10dB





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AWS-1 Band Lower band edge Pre-AGC ALIGN OFF Avg Type: RMS Avg|Hold:>100/100 tart Freq 1.707000000 GHz PNO: Fast Trig: Free Run IFGain:Low Atten: 14 dB Auto Tun 709 994 GH -20.603 dBn Ref Offset 21.2 dB Ref 25.00 dBm 1.708500000 GH Start Free 1.707000000 GH: 1.710000000 GH CF Step 300.000 kH Freq Offse Scale Type Start 1.707000 GHz #Res BW 1.0 MHz Stop 1.710000 GHz Sweep 1.000 ms (1001 pts) #VBW 3.0 MHz*

AWS-1 Band_Lower band edge_AGC+10dB





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AWS-1 Band_Upper band edge_Pre-AGC



AWS-1 Band_Upper band edge_AGC+10dB





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Broadband PCS Band_Lower band edge_Pre-AGC



Broadband PCS Band_Lower band edge_AGC+10dB





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Broadband PCS Band_Upper band edge_Pre-AGC



Broadband PCS Band_Upper band edge_AGC+10dB





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DOWNLINK GSM signal type

700MHz (Lower 700MHz + Upper 700MHz) Band Lower band edge Pre-AGC



700MHz (Lower 700MHz + Upper 700MHz) Band_Lower band edge_AGC+10dB





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700MHz (Lower 700MHz + Upper 700MHz) Band_Upper band edge_Pre-AGC



700MHz (Lower 700MHz + Upper 700MHz) Band_Upper band edge_AGC+10dB





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Cellular Band Lower band edge Pre-AGC Avg Type: RMS Avg|Hold:>150/150 Start Freq 868.700000 MHz Trig: Free Run #Atten: 10 dB 68.997 9 MH: -21.217 dBn Auto Tun Ref Offset 20.6 dB Ref 20.00 dBm 868.850000 MH Start Free 868.700000 MH 869.000000 MH CF Step 30.000 kH Freq Offse Scale Type Start 868.7000 MHz #Res BW 100 kHz Stop 869.0000 MHz Sweep 1.000 ms (1001 pts) #VBW 300 kHz* Cellular Band Lower band edge AGC+10dB Avg Type: RMS AvalHold:>150/150 Freque Start Freq 868.700000 MHz PNO: Wide Trig: Free Run Auto Tun Ref Offset 20.6 dB Ref 20.00 dBm Center Fred Start Fred 868.700000 MH Stop Fred CF Step 30.000 kHz Freq Offset



Start 868.7000 MHz #Res BW 100 kHz

#VBW 300 kHz*

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Stop 869.0000 MHz Sweep 1.000 ms (1001 pts)

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Scale Type

Log

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Cellular Band Upper band edge Pre-AGC ALIGN OFF Avg Type: RMS Avg|Hold:>150/150 Start Freq 894.000000 MHz Trig: Free Run #Atten: 10 dB 94.000 0 MHz -23.027 dBn Auto Tun Ref Offset 20.6 dB Ref 20.00 dBm Center Fre 894.150000 MH Start Free 894.000000 MH 894.300000 MH CF Step 30.000 kH Freq Offse Scale Type Start 894.0000 MHz #Res BW 100 kHz Stop 894.3000 MHz Sweep 1.000 ms (1001 pts) #VBW 300 kHz* Cellular Band Upper band edge AGC+10dB Avg Type: RMS AvalHold:>150/150 Freque Start Freq 894.000000 MHz PNO: Wide Trig: Free Run Auto Tun Ref Offset 20.6 dB Ref 20.00 dBm Center Fred 894.150000 MH Start Fred 894.000000 MH Stop Fred CF Step 30.000 kHz Freq Offset Scale Type Stop 894.3000 MHz Sweep 1.000 ms (1001 pts) Start 894.0000 MHz #Res BW 100 kHz Log

#VBW 300 kHz*



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AWS-1 Band Lower band edge Pre-AGC



AWS-1 Band Lower band edge AGC+10dB





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AWS-1 Band_Upper band edge_Pre-AGC



AWS-1 Band_Upper band edge_AGC+10dB





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Broadband PCS Band Lower band edge Pre-AGC



Broadband PCS Band_Lower band edge_AGC+10dB





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