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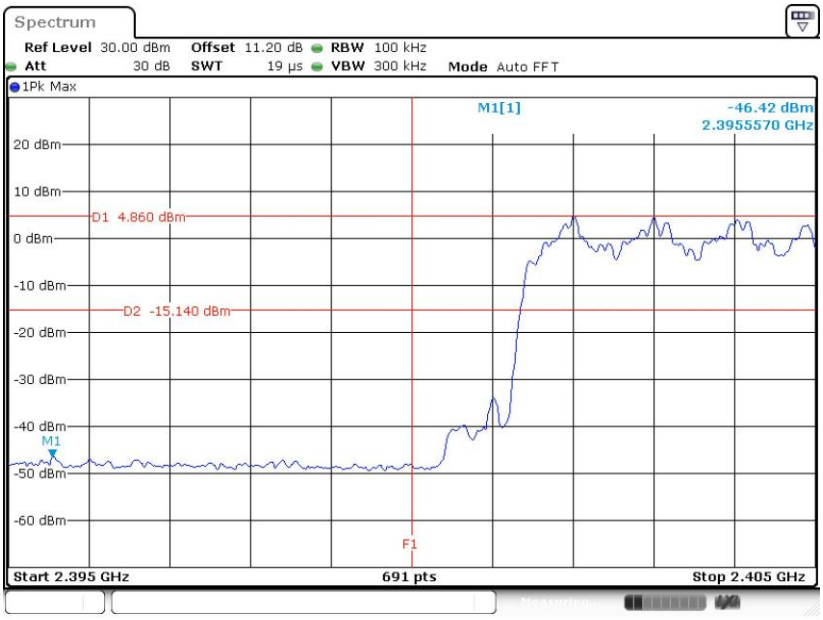

Date: 29.MAY.2022 13:13:00

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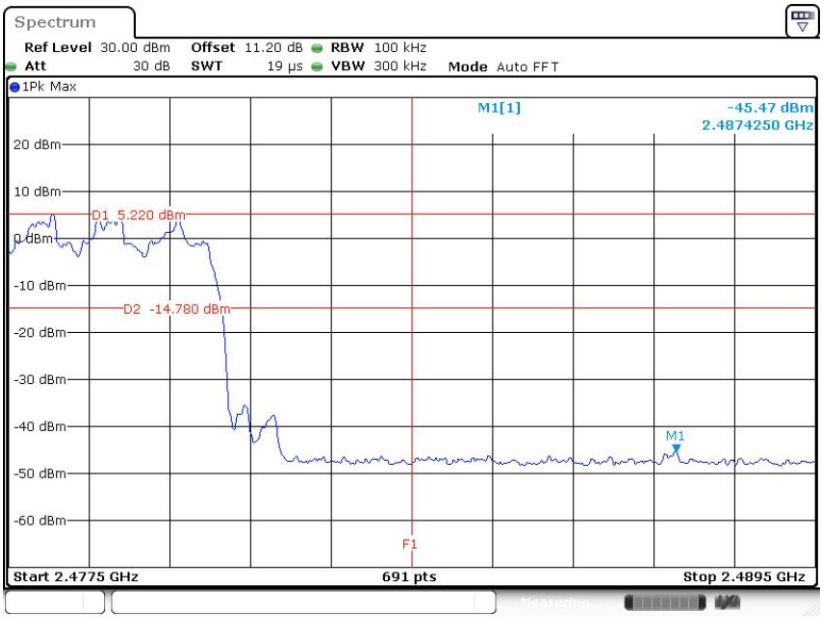

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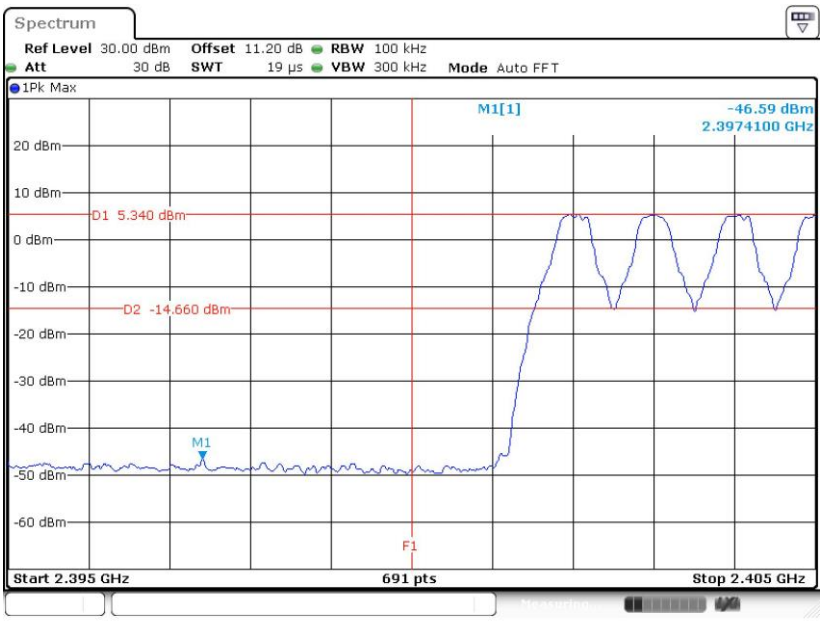

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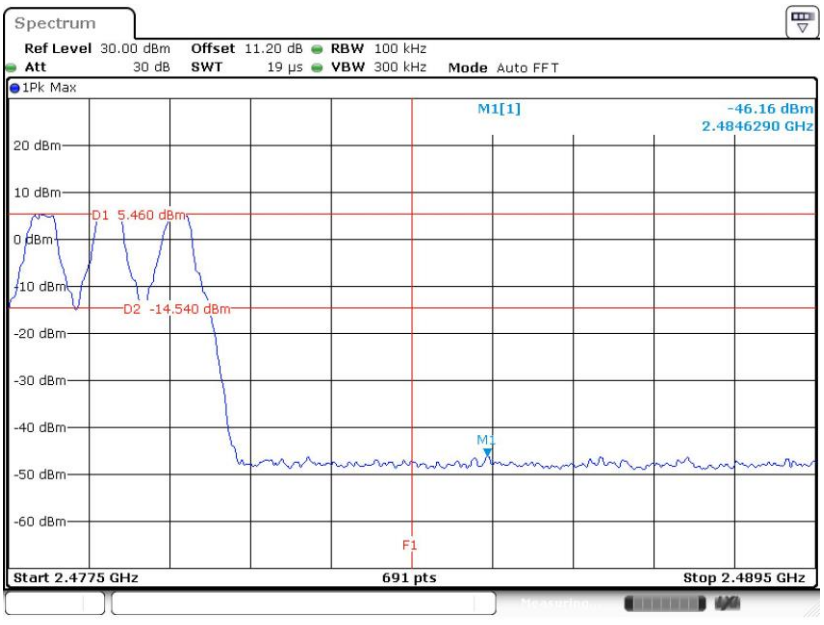

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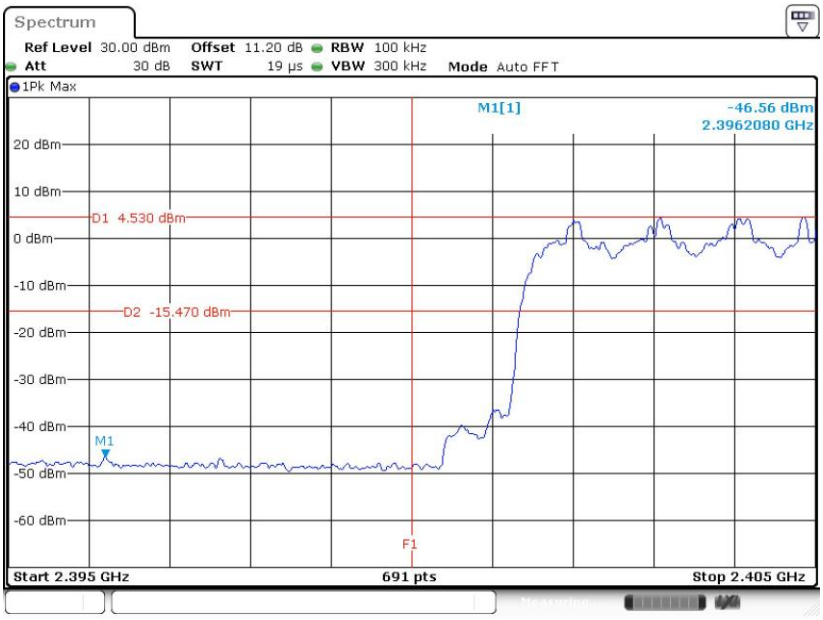

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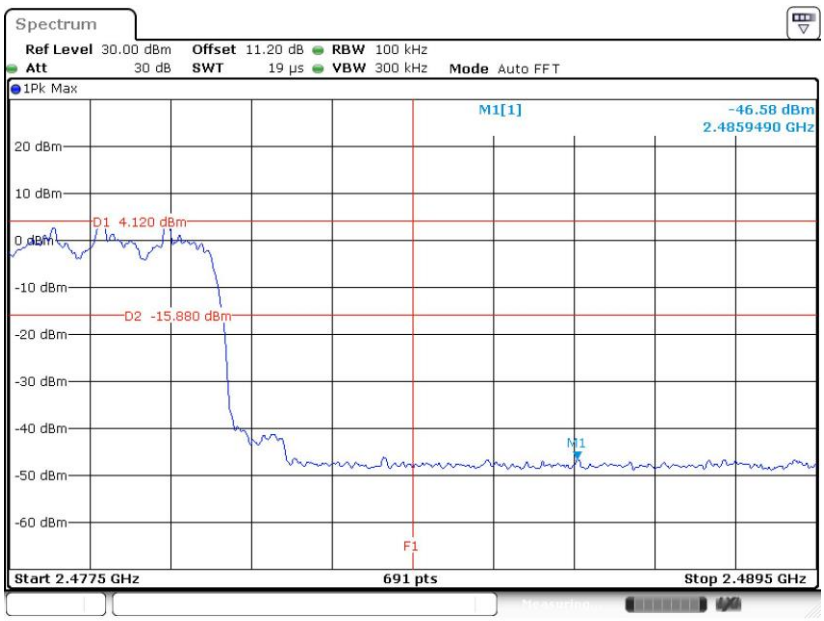

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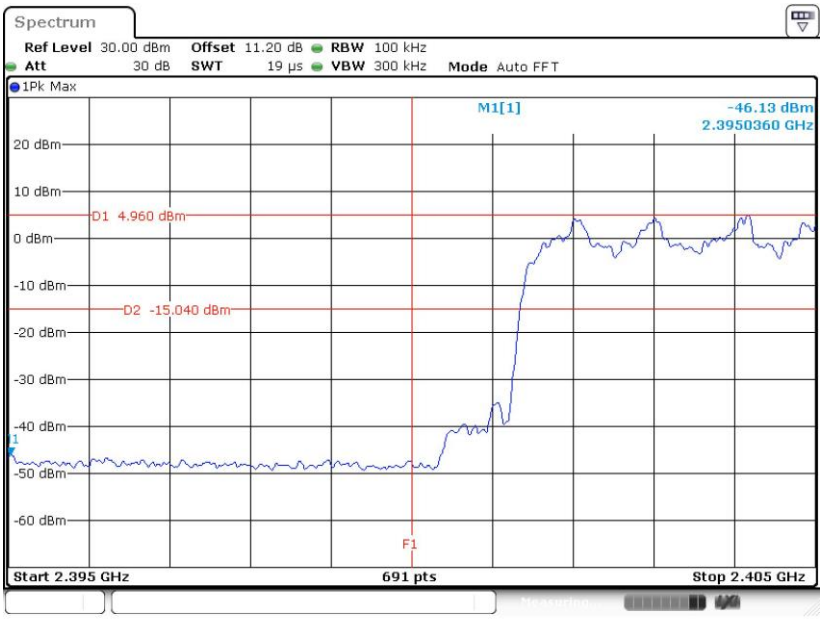

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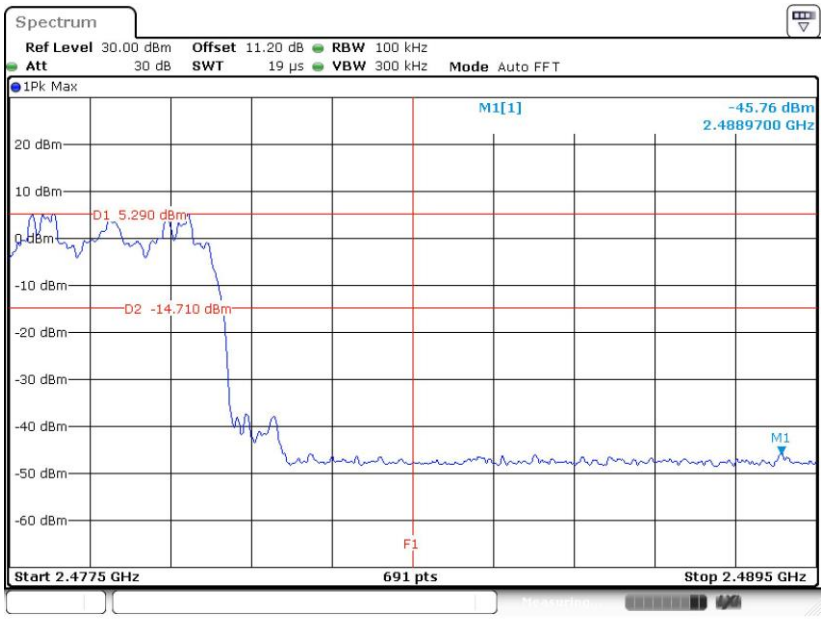

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3.7 Conducted Spurious Emission Measurement

3.7.1 Limit of Spurious Emission Measurement

In any 100 kHz bandwidth outside the intentional radiation frequency band, the radio frequency power shall be at least 20 dB below the highest level of the radiated power. In addition, radiated emissions which fall in the restricted bands must also comply with the radiated emission limits.

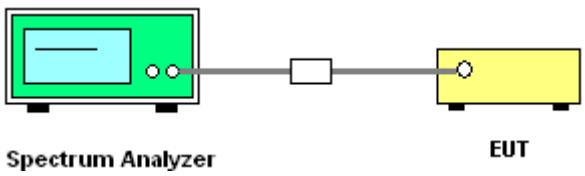
3.7.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.7.3 Test Procedure

1. The testing follows ANSI C63.10-2013 clause 7.8.8.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Set RBW = 100 kHz, VBW = 300kHz, scan up through 10th harmonic. All harmonics / spurs must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.
5. Measure and record the results in the test report.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

3.7.4 Test Setup



3.7.5 Test Result of Conducted Spurious Emission

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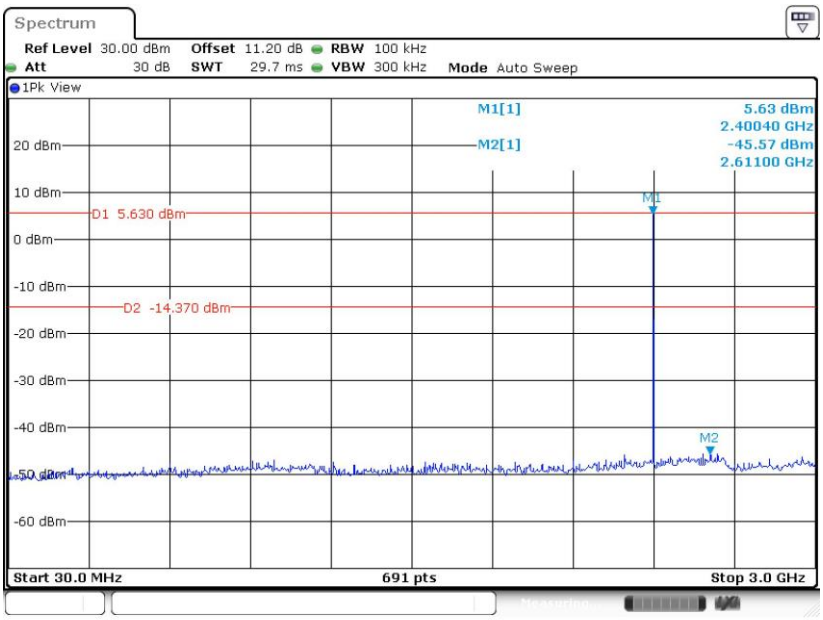

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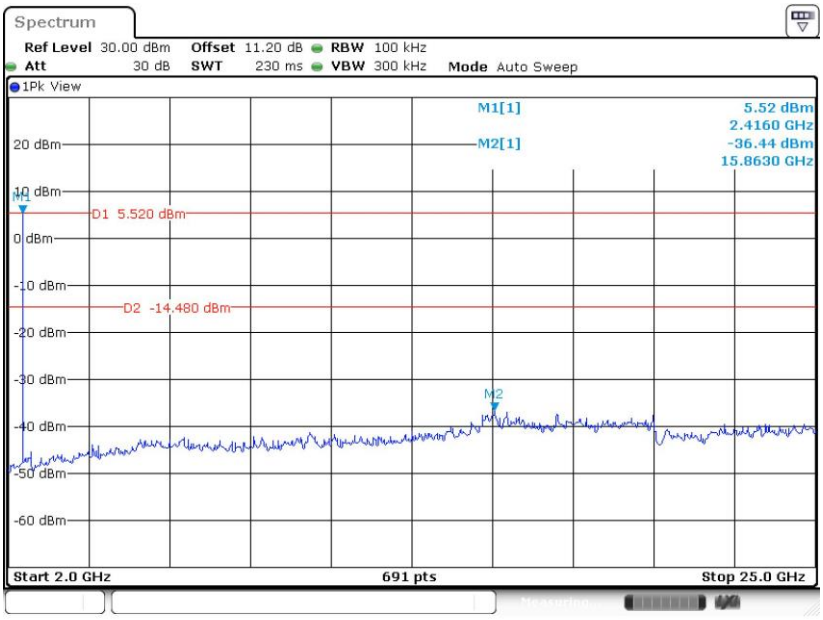
CSE Plot on Ch 00 between 2 GHz ~ 25 GHz



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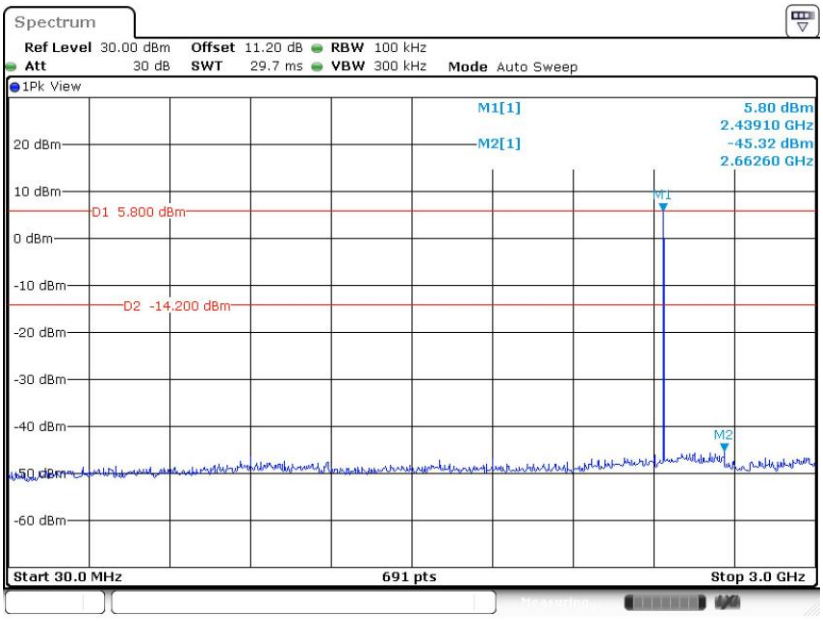

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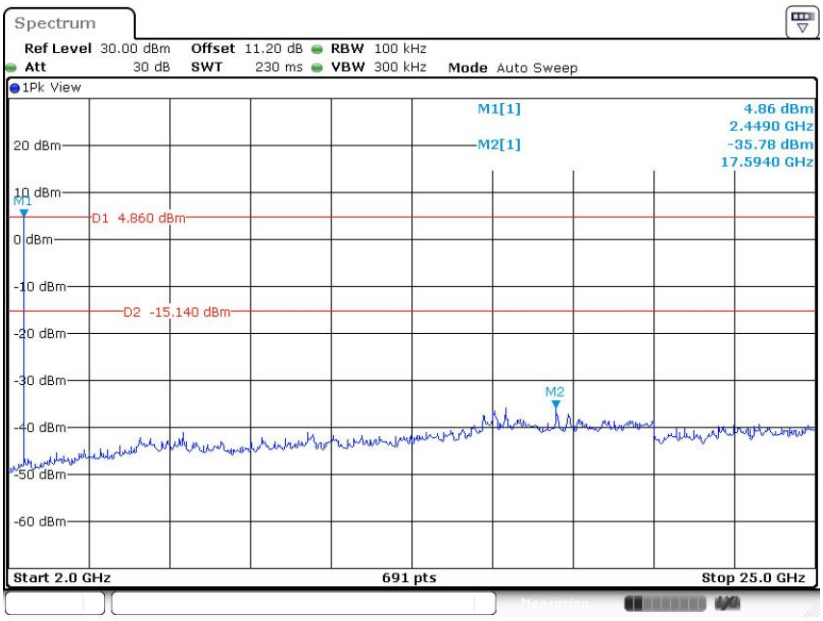

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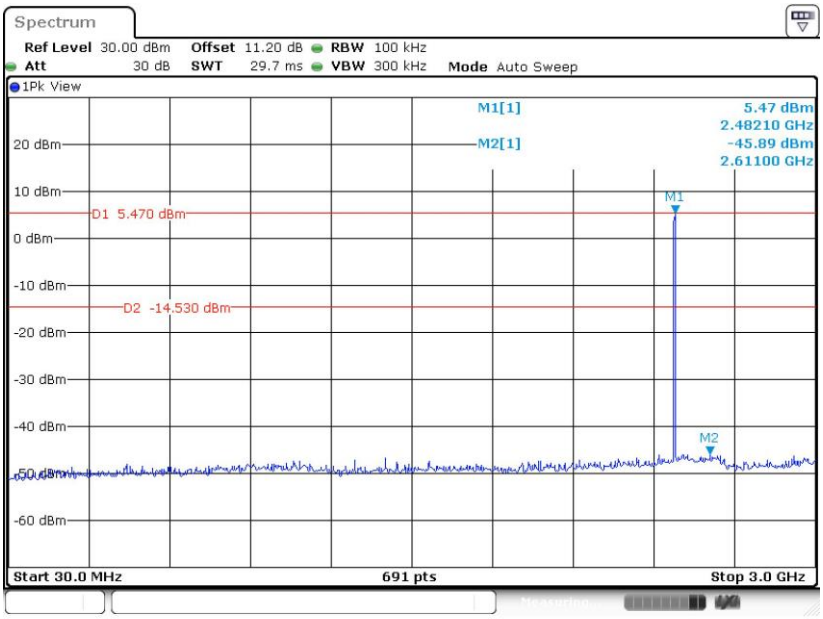
CSE Plot on Ch 78 between 30MHz ~ 3 GHz



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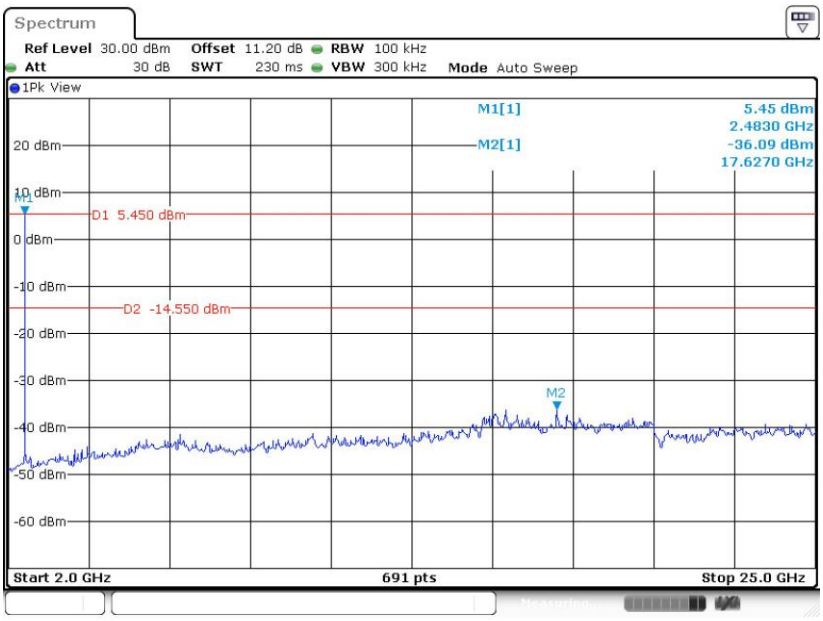

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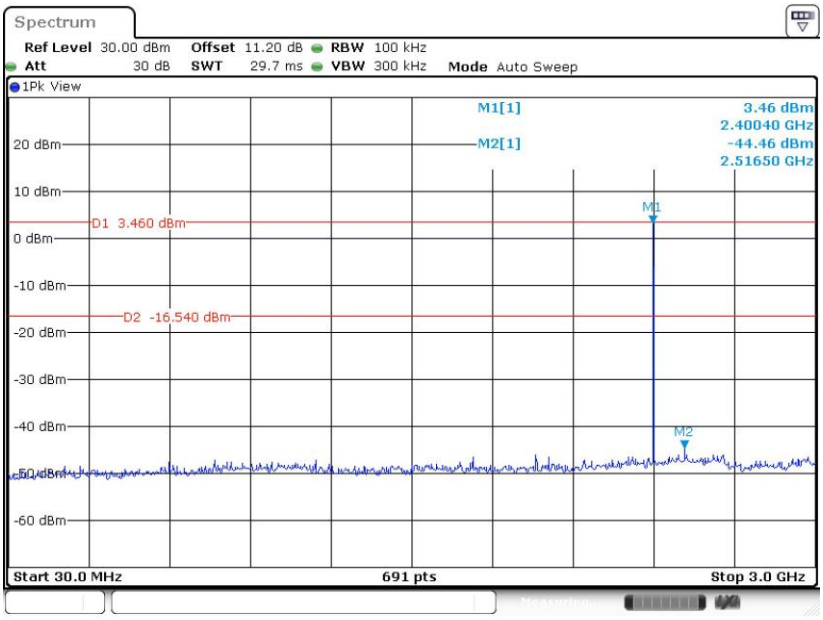

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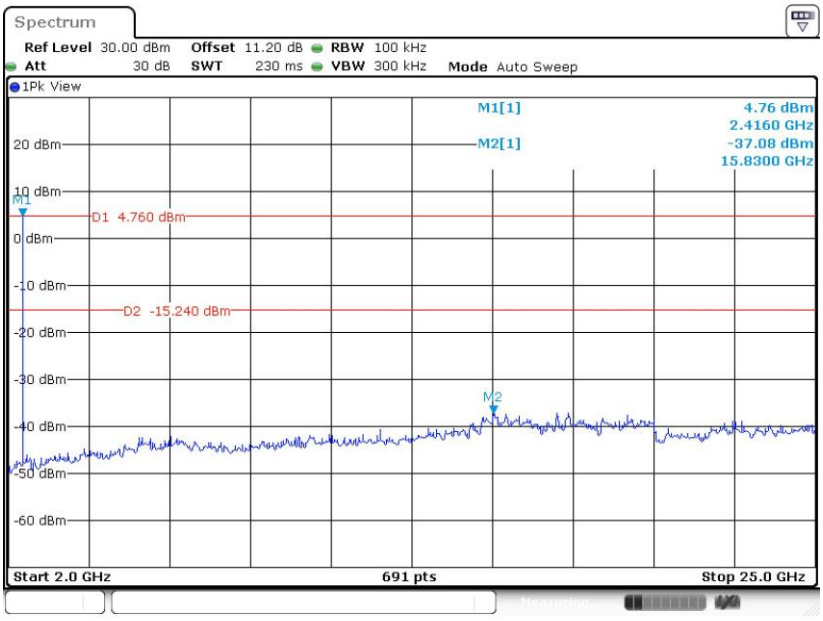

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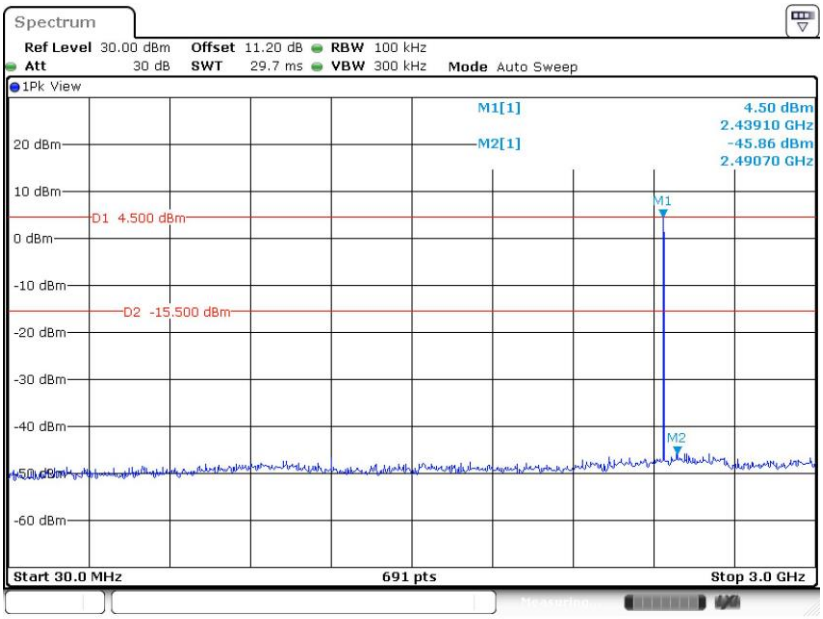

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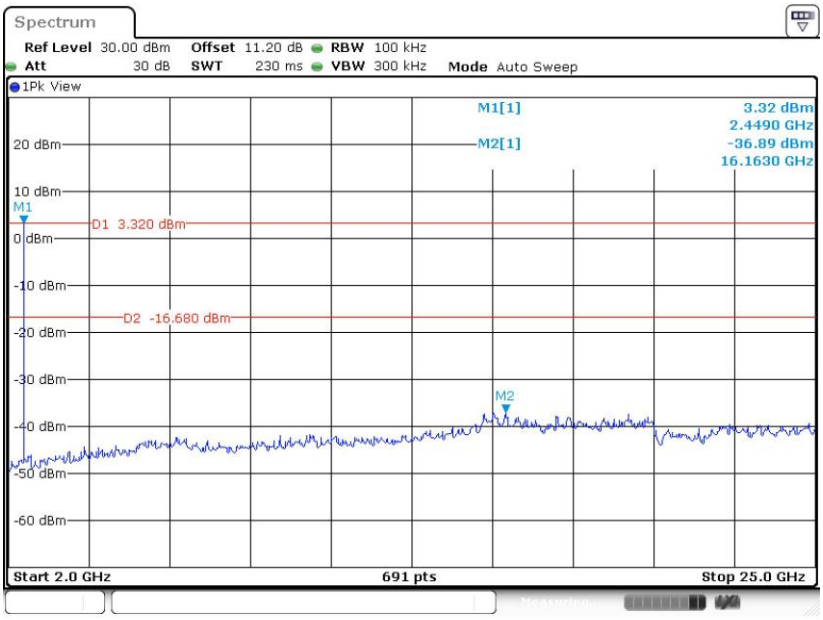

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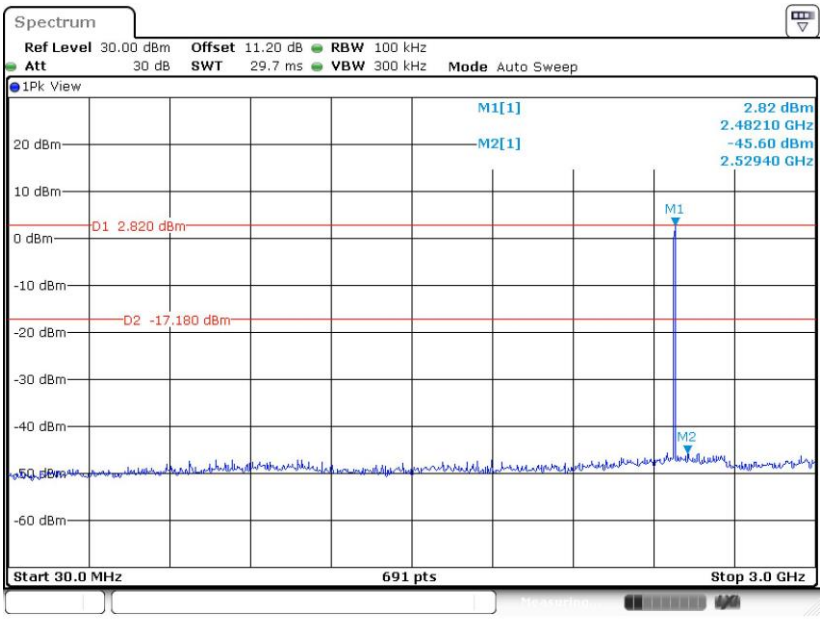

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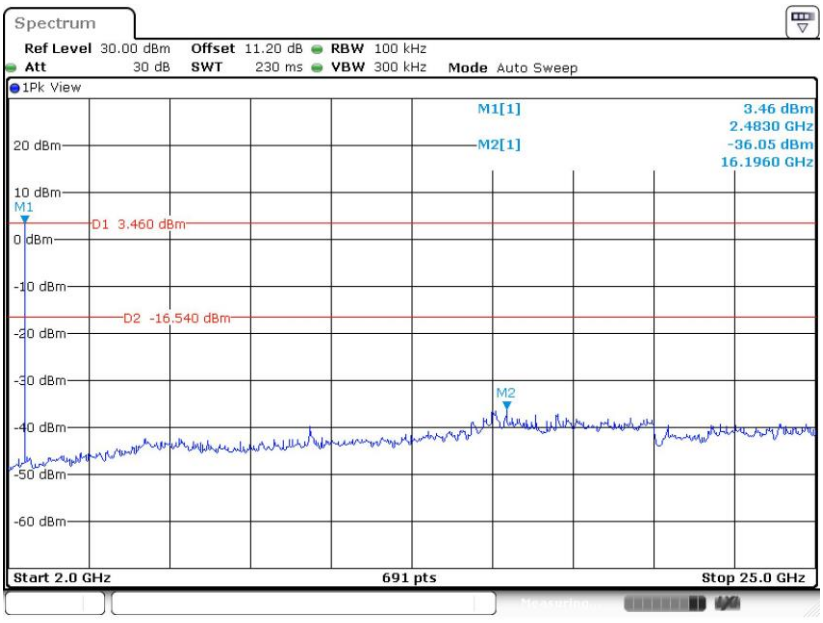

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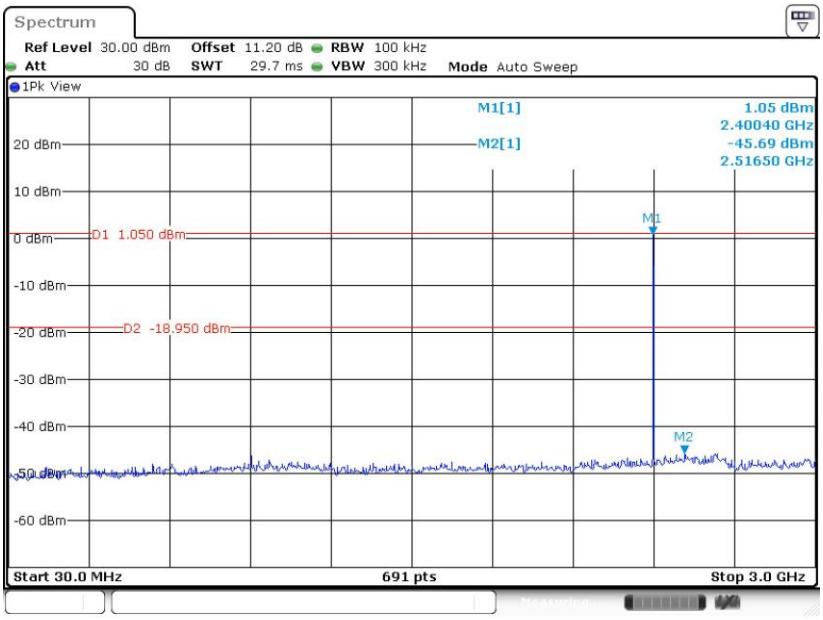

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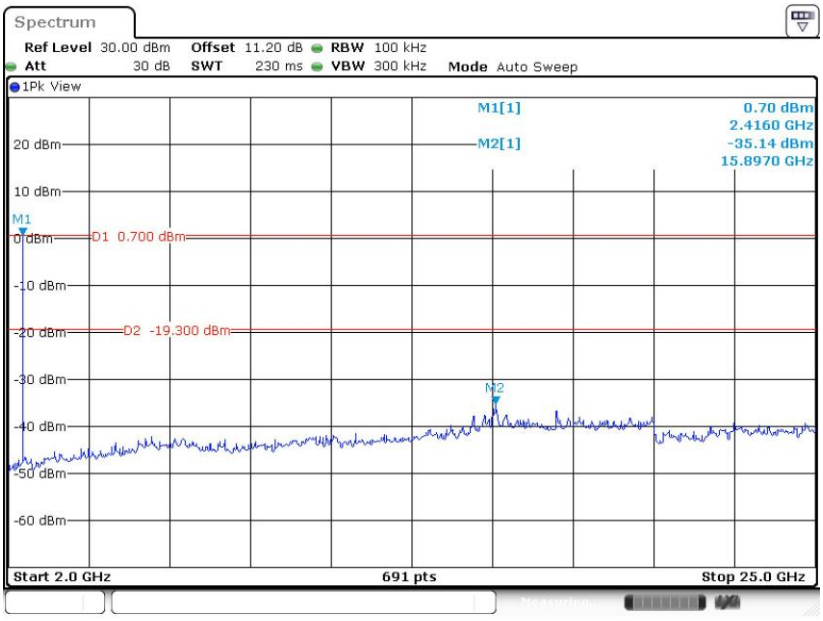

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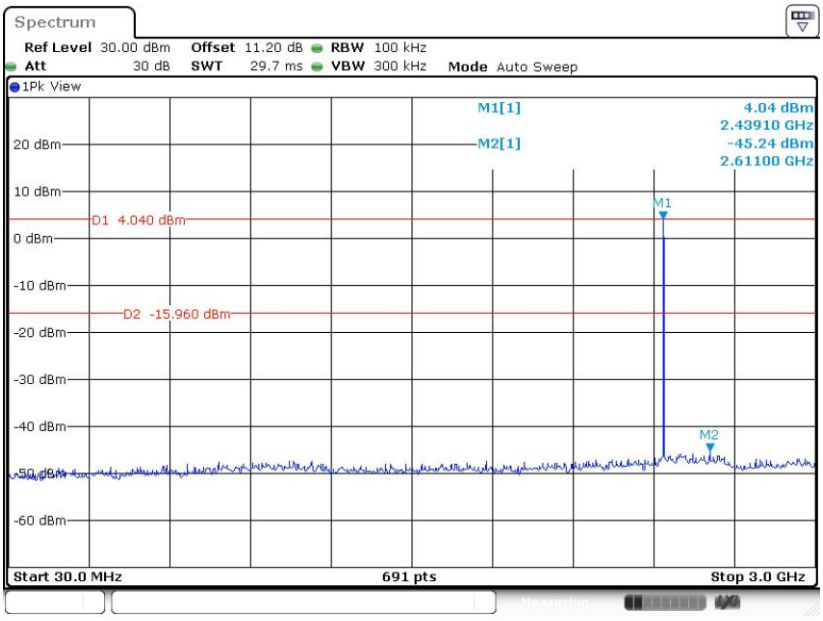

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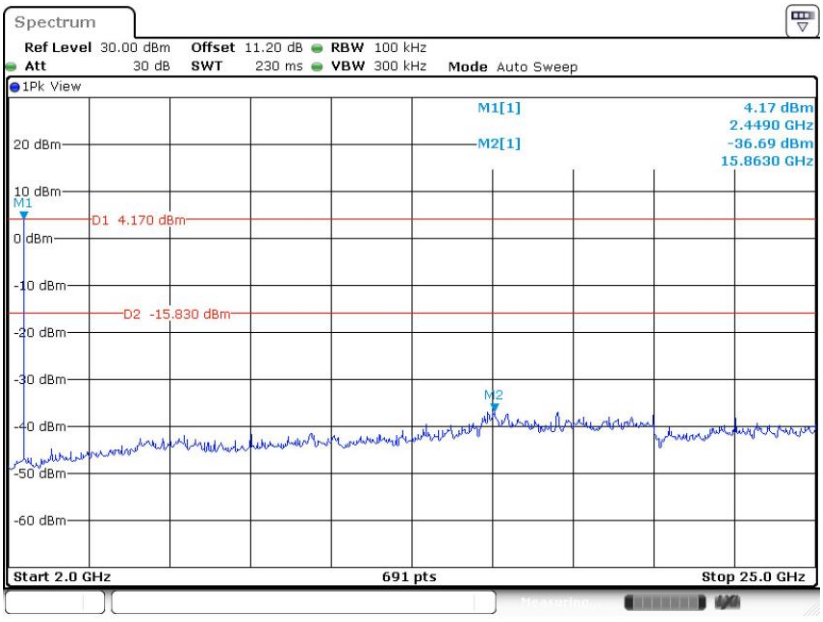

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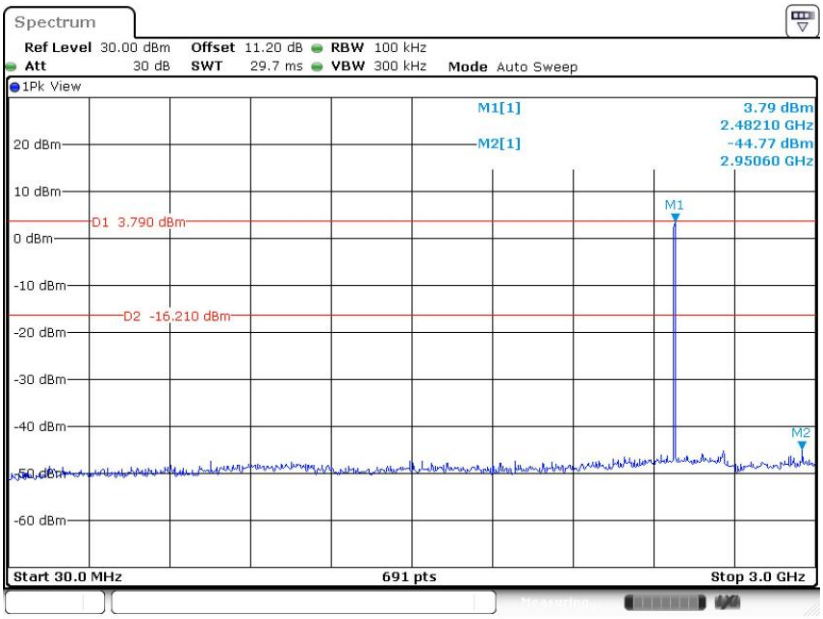

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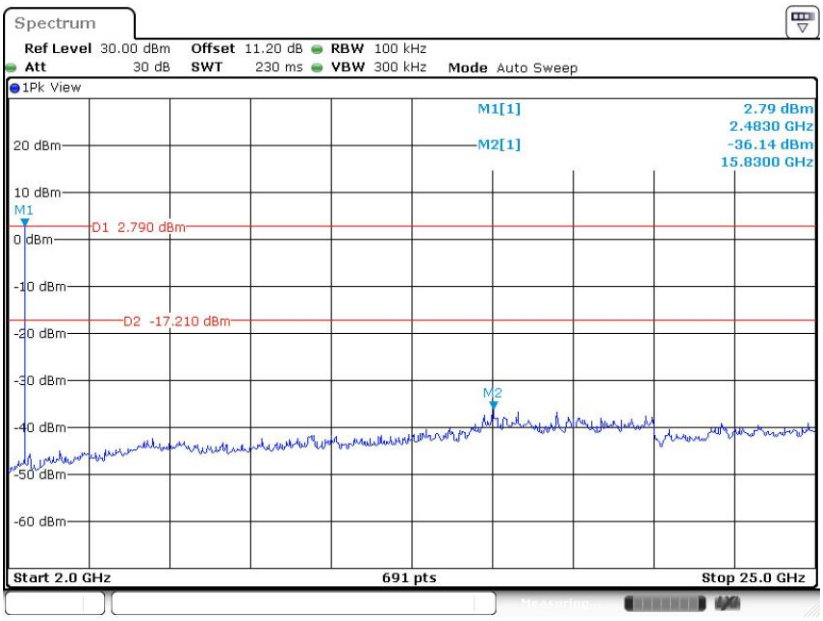

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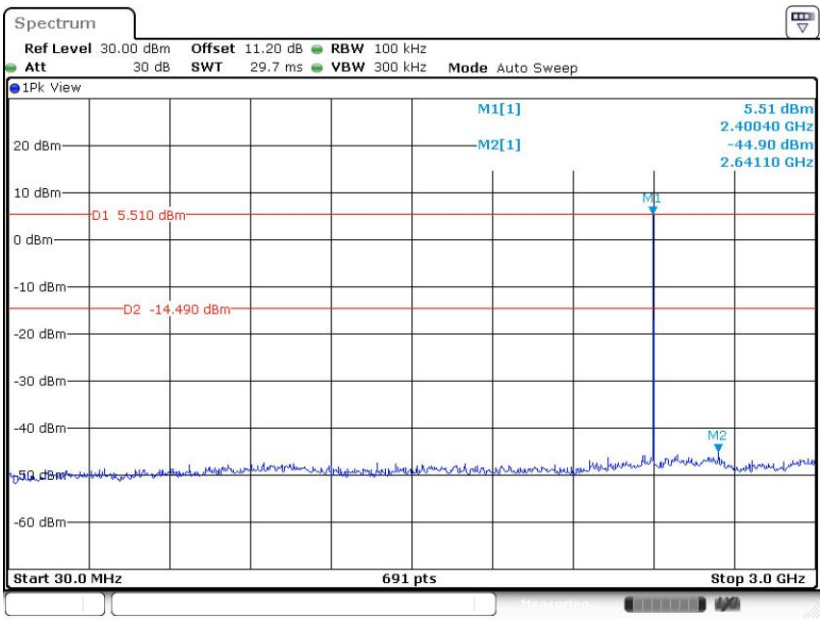

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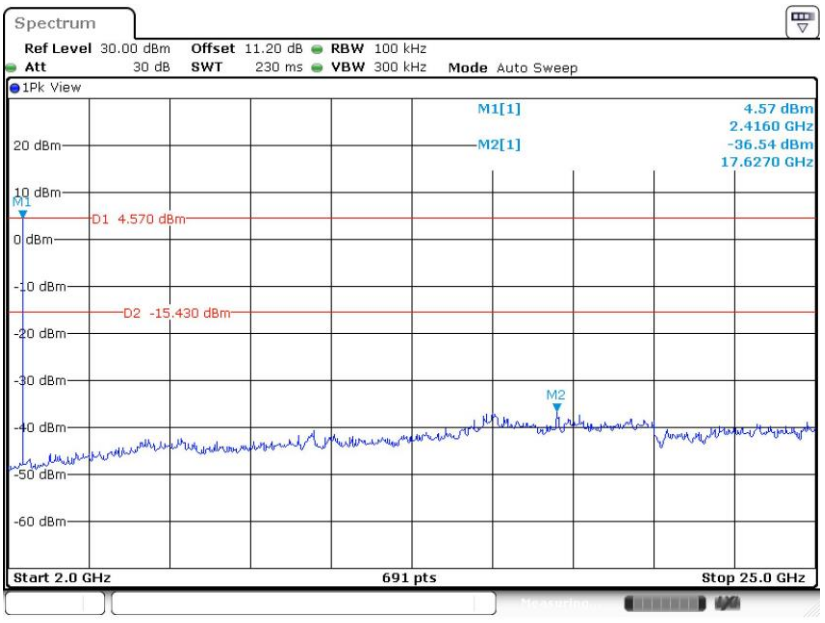

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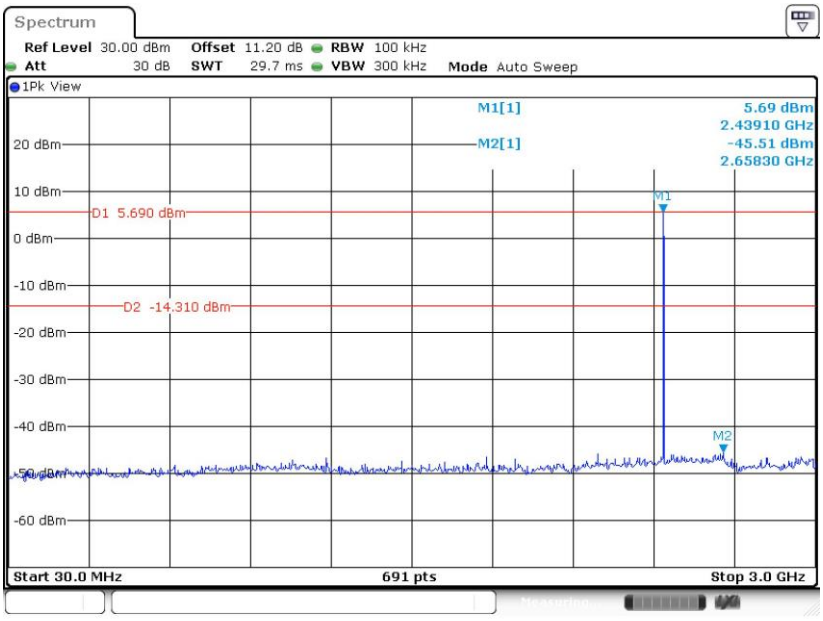

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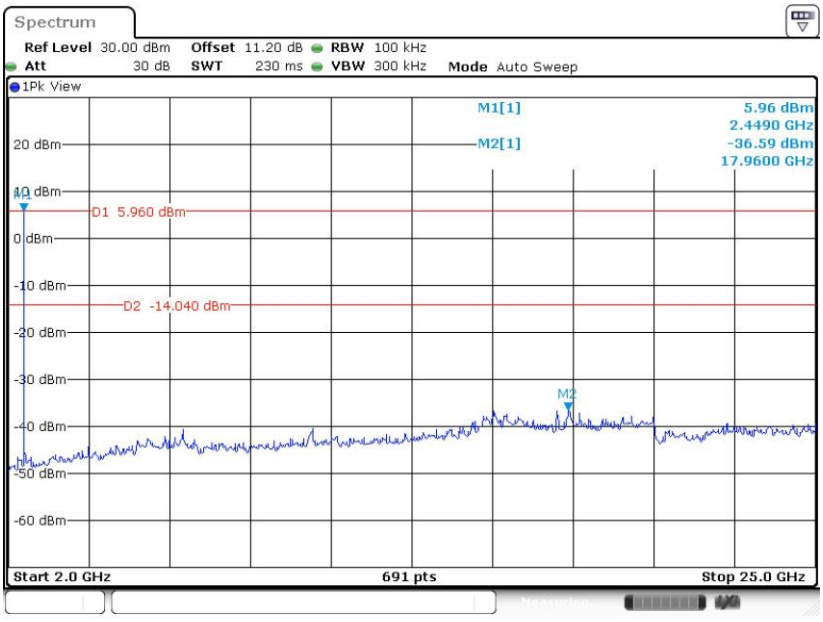

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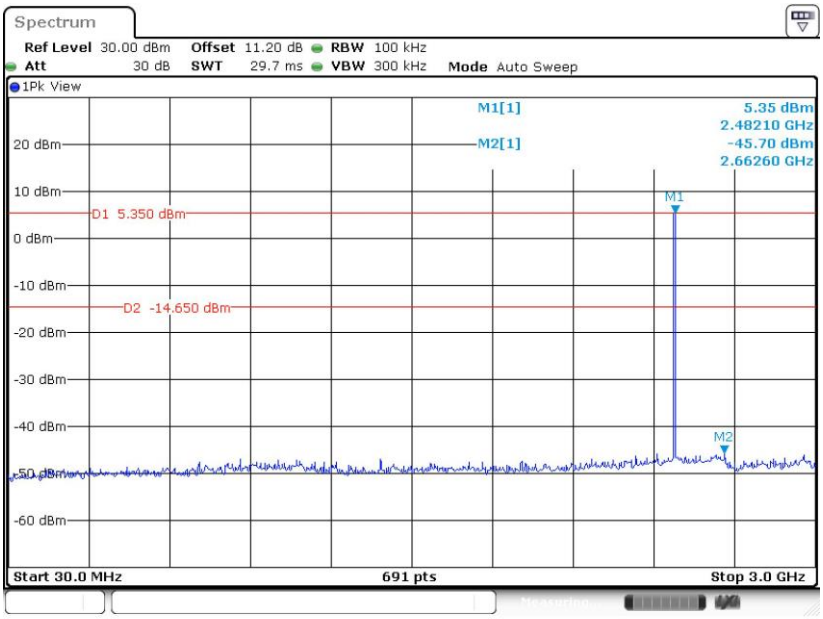

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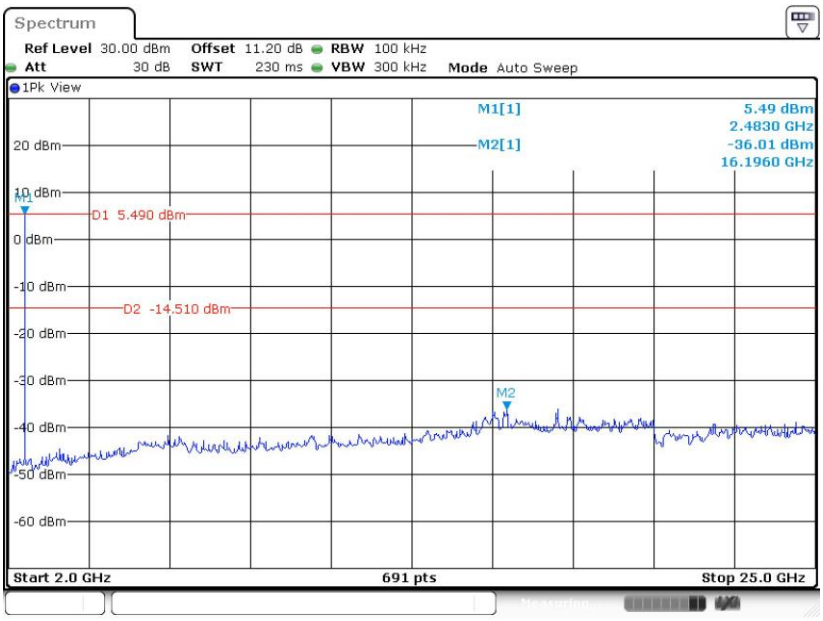

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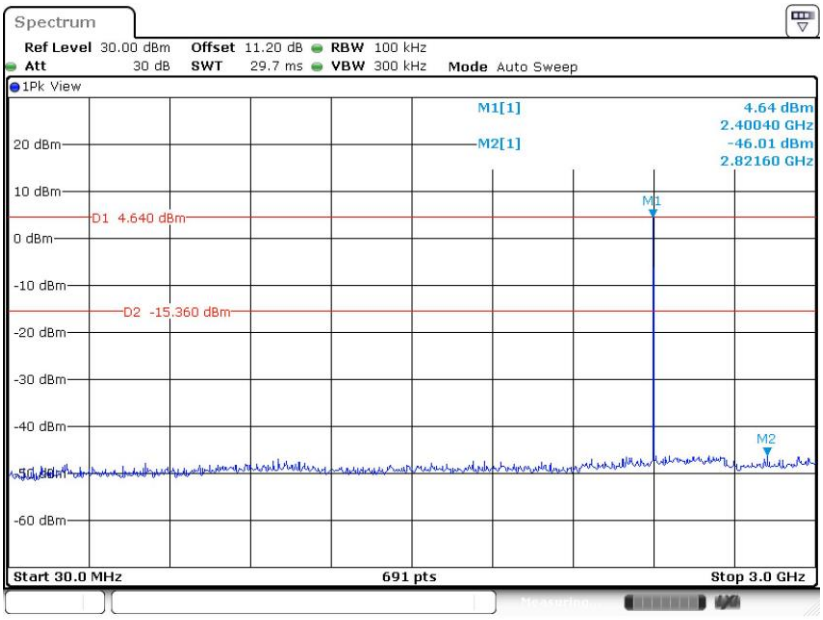

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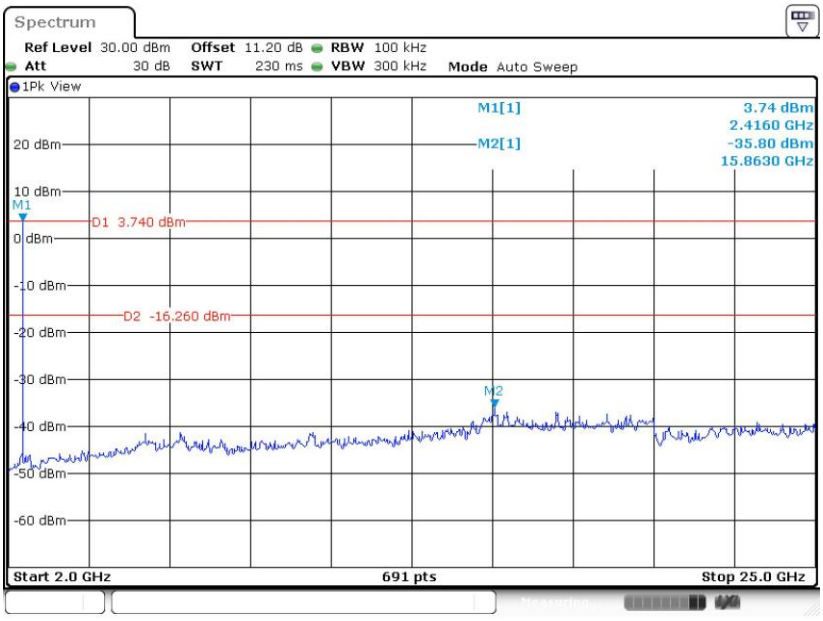

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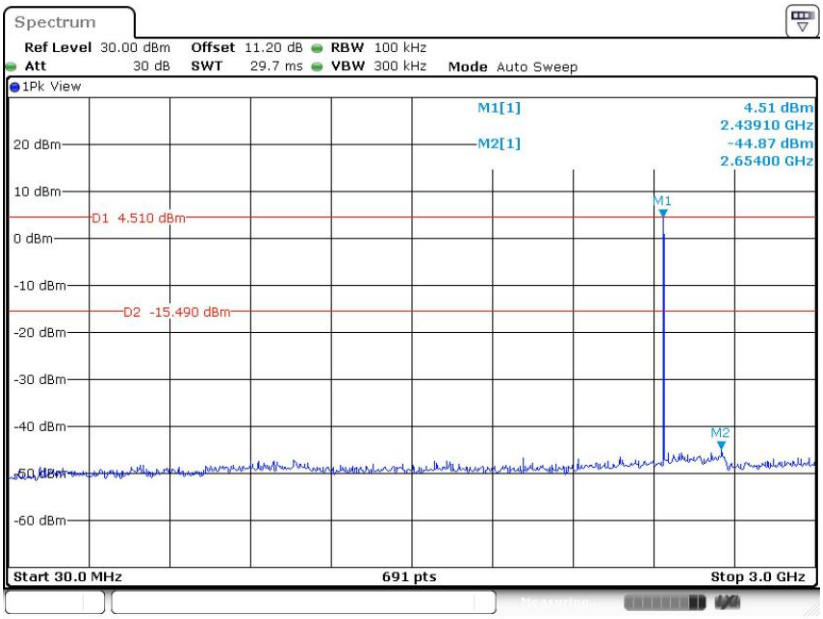

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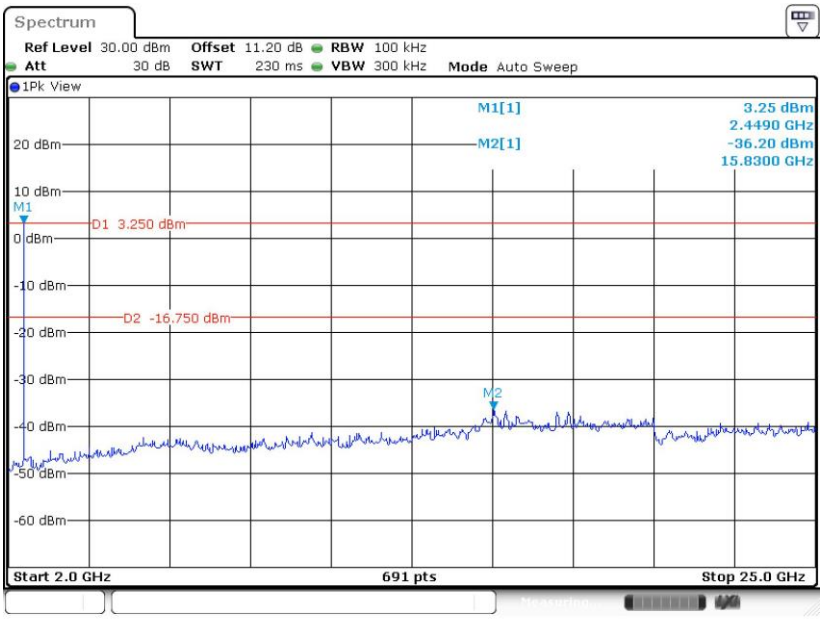

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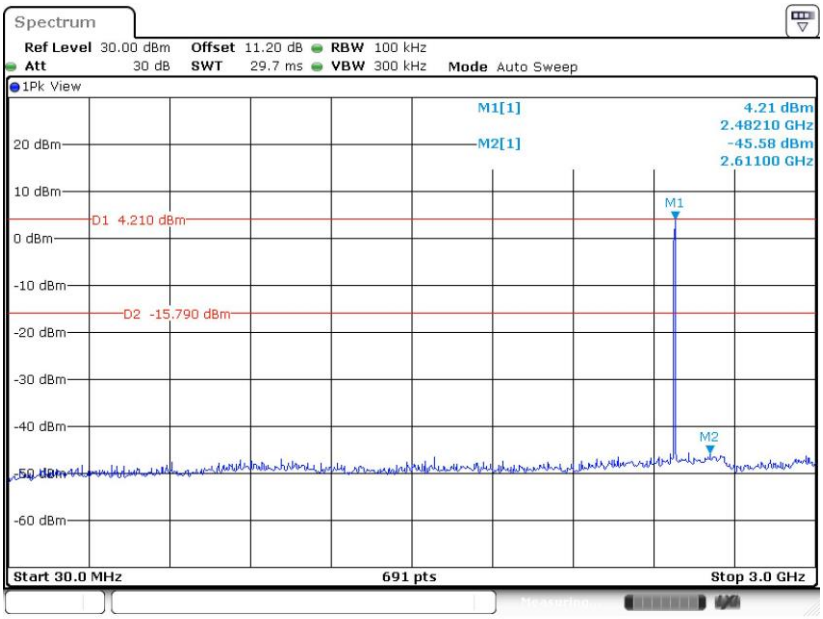

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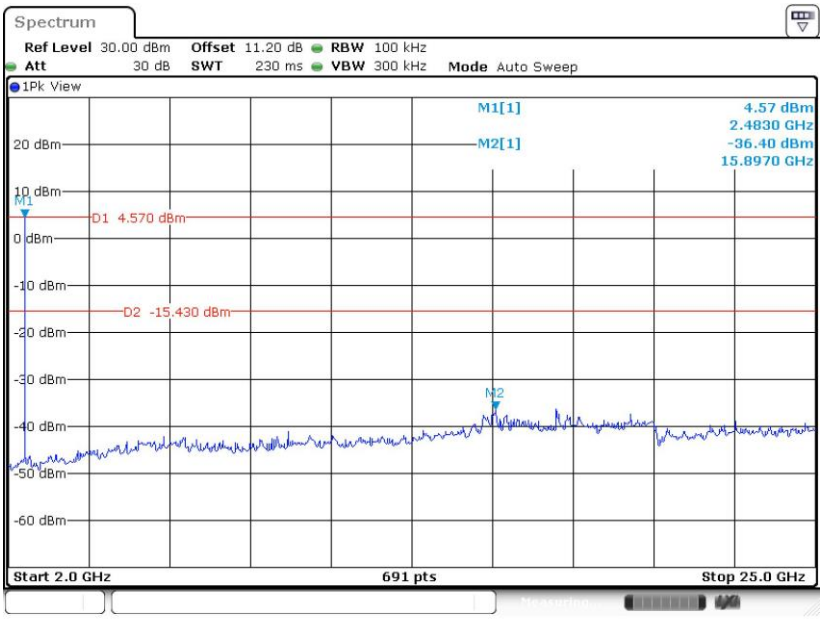

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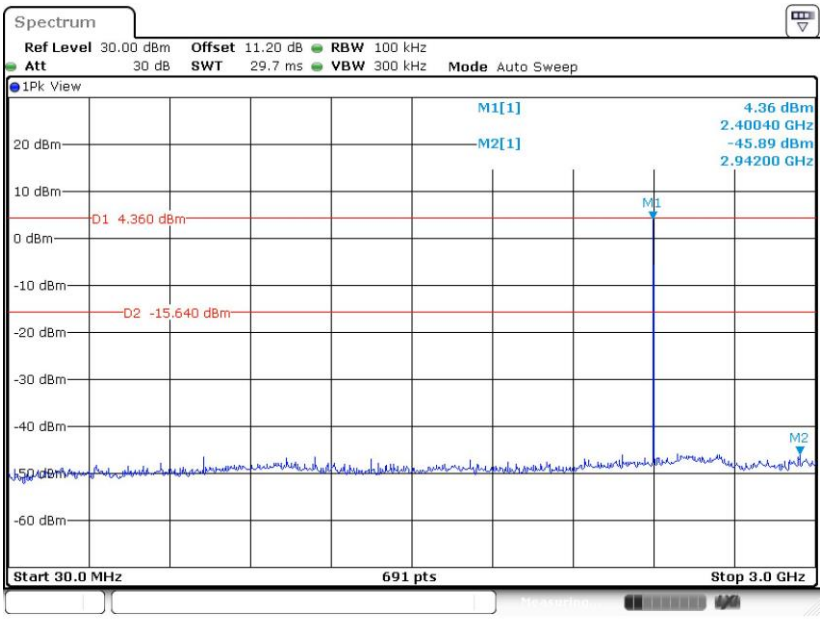

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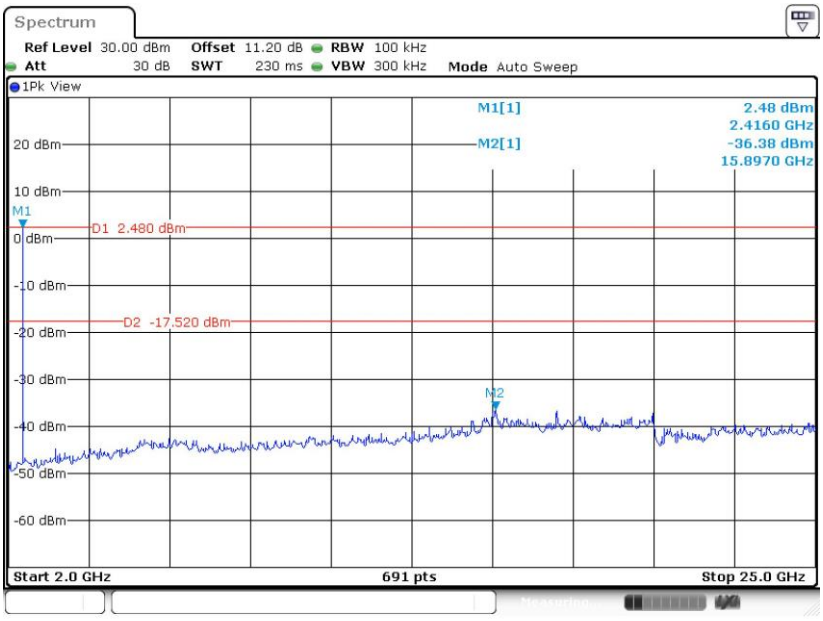

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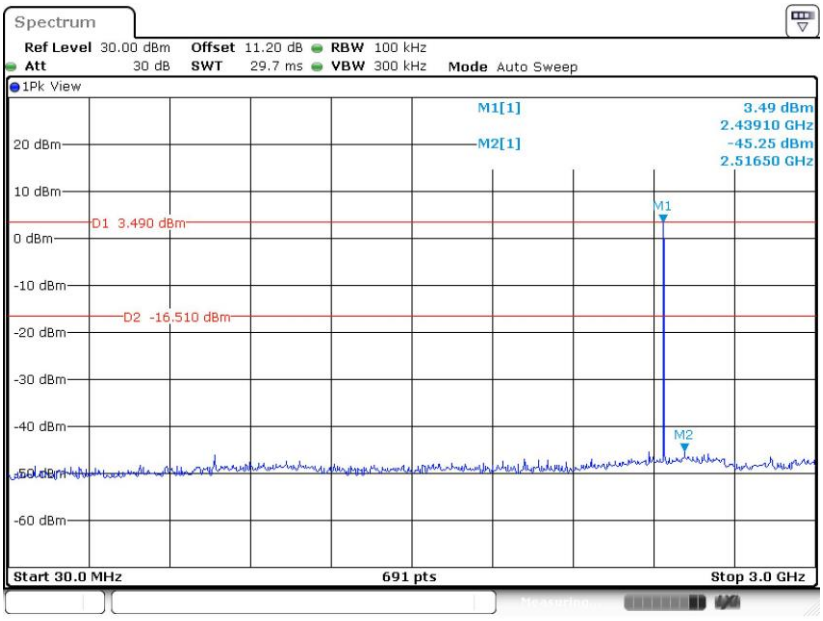

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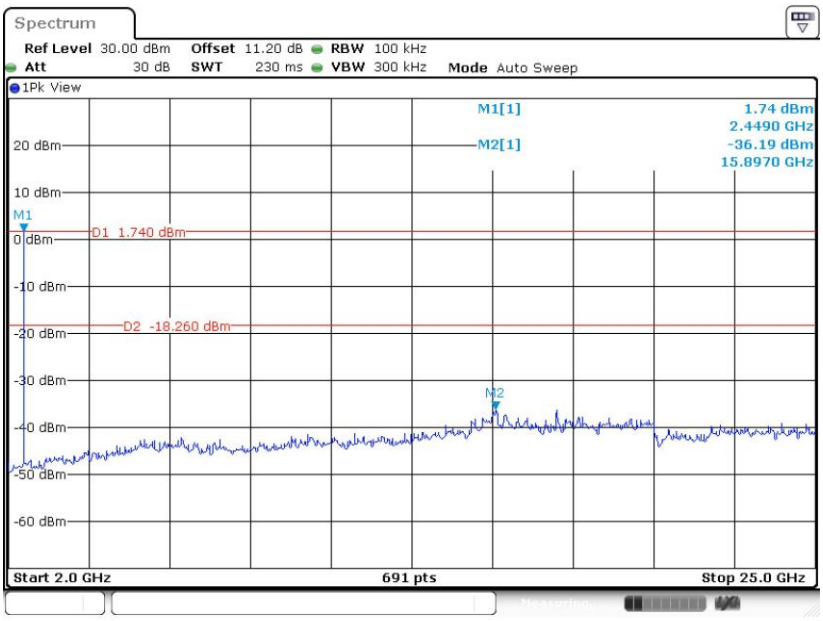

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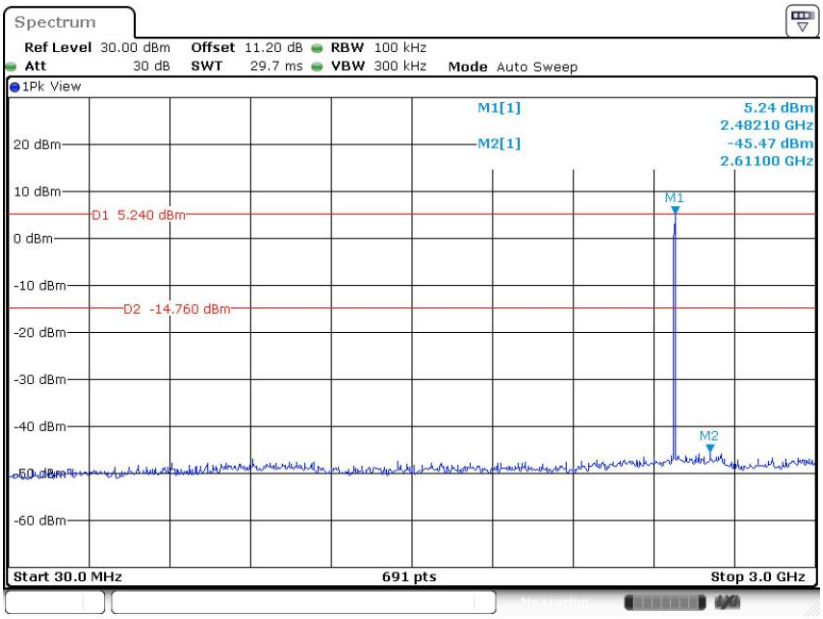
CSE Plot on Ch 78 between 30MHz ~ 3 GHz



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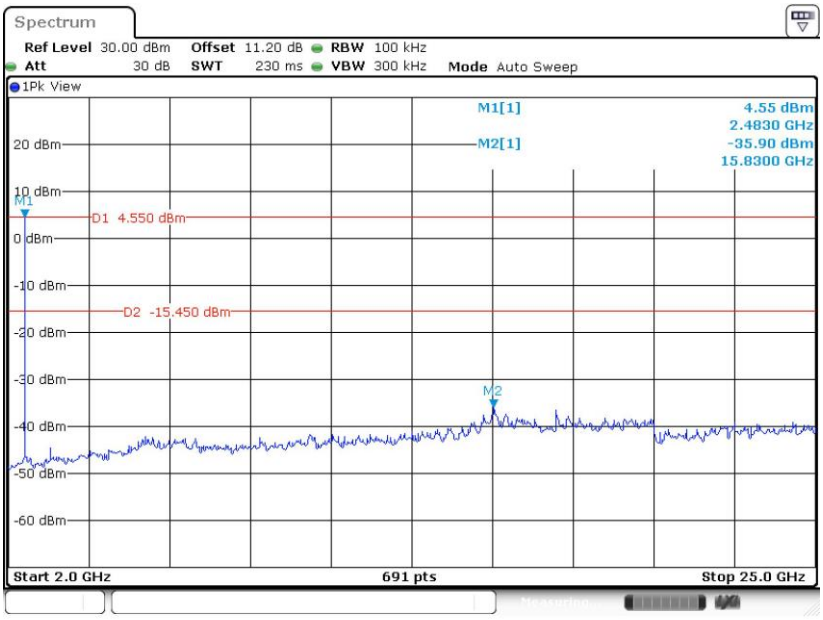
CSE Plot on Ch 78 between 2 GHz ~ 25 GHz



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3.8 Radiated Band Edges and Spurious Emission Measurement

3.8.1 Limit of Radiated Band Edges and Spurious Emission

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. In addition, radiated emissions which fall in the restricted bands must also comply with the limits as below.

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

3.8.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

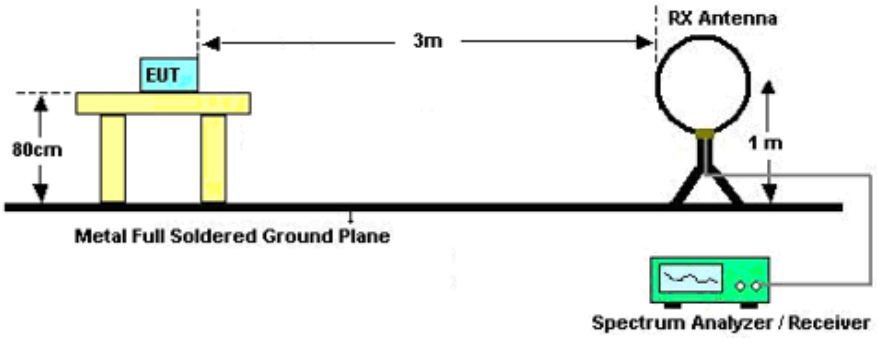
3.8.3 Test Procedures

1. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
4. Set to the maximum power setting and enable the EUT transmit continuously.
5. Use the following spectrum analyzer settings:
   (1) Span shall wide enough to fully capture the emission being measured;
   (2) Set RBW=100 kHz for f < 1 GHz, RBW=1MHz for f>1GHz ; VBW ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold for peak
   (3) For average measurement: use duty cycle correction factor method per 15.35(c).
   Duty cycle = On time/100 milliseconds
   On time = $N_1*L_1+N_2*L_2+...+N_{n-1}*LN_{n-1}+N_n*L_n$
   Where N_1 is number of type 1 pulses, L_1 is length of type 1 pulses, etc.
   Average Emission Level = Peak Emission Level + 20*log(Duty cycle)
6. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
7. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
8. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than peak limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

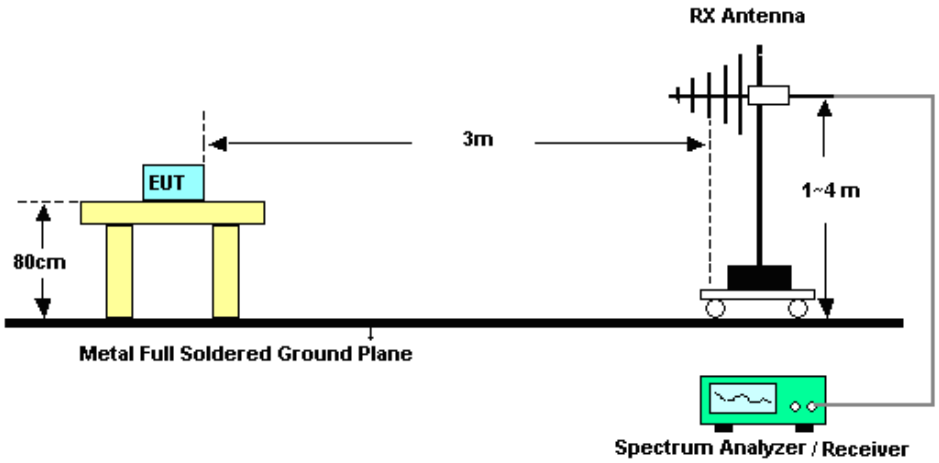
Note: The average levels were calculated from the peak level corrected with duty cycle correction factor (-24.79dB) derived from 20log (dwell time/100ms). This correction is only for signals that hop with the fundamental signal, such as band-edge and harmonic. Other spurious signals that are independent of the hopping signal would not use this correction.

3.8.4 Test Setup

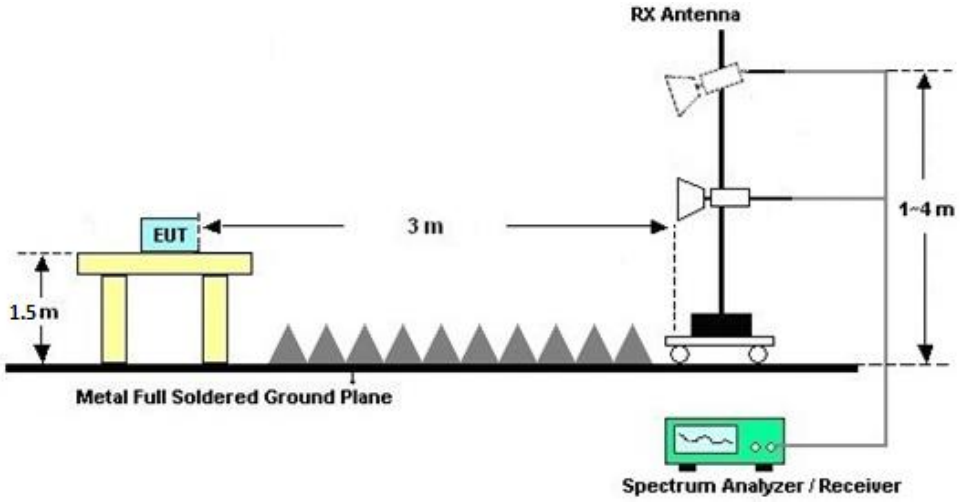
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.8.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

3.8.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C & D.

3.8.7 Test Result of Radiated Spurious Emission (30MHz ~ 10th Harmonic or 40GHz, whichever is lower)

Please refer to Appendix C & D.

3.8.8 Duty cycle correction factor for average measurement

Please refer to Appendix E.

3.9 AC Conducted Emission Measurement

3.9.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

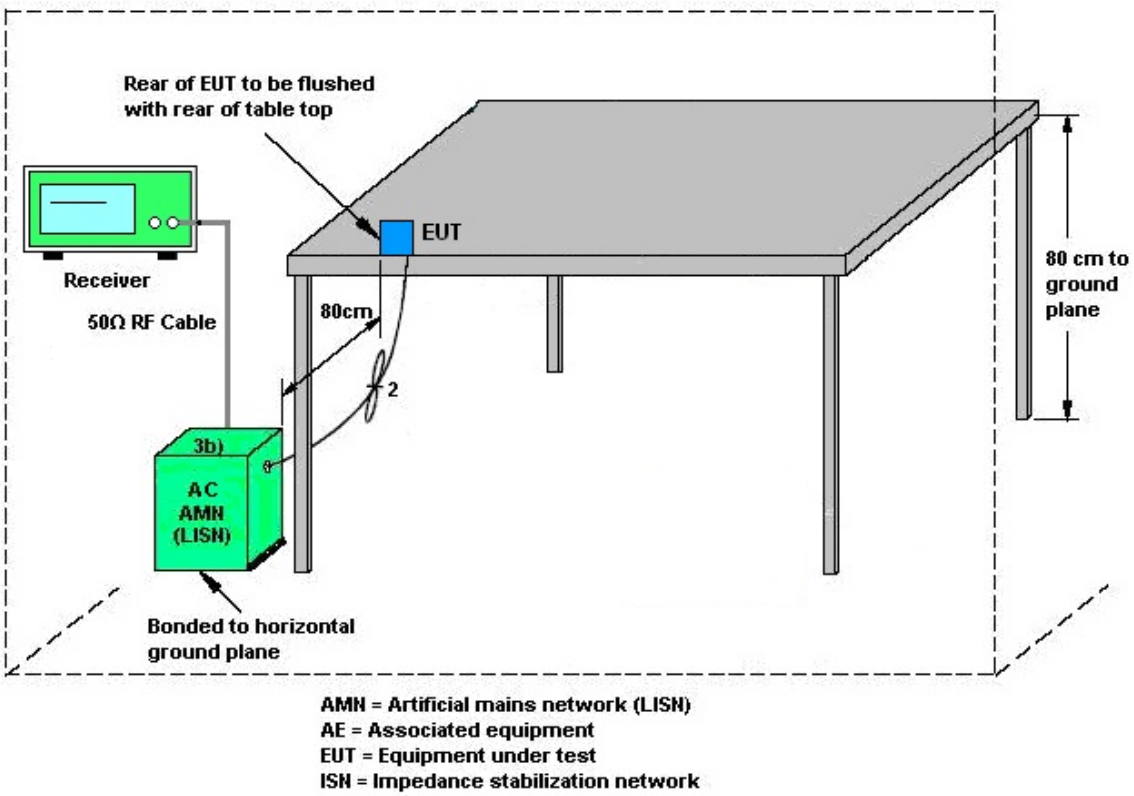
3.9.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.9.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

3.9.4 Test Setup



3.9.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.10 Antenna Requirements

3.10.1 Standard Applicable

If directional gain of transmitting antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the rule.

3.10.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.10.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 07, 2022	May 27, 2022~ Jun. 09, 2022	Apr. 06, 2023	Conducted (TH01-SZ)
Pulse Power Senor	Anritsu	MA2411B	1339473	30MHz~40GHz	Dec. 28, 2021	May 27, 2022~ Jun. 09, 2022	Dec. 27, 2022	Conducted (TH01-SZ)
Power Meter	Anritsu	ML2495A	1542004	50MHz Bandwidth	Dec. 28, 2021	May 27, 2022~ Jun. 09, 2022	Dec. 27, 2022	Conducted (TH01-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Jul. 14, 2021	May 28, 2022~ Jun. 08, 2022	Jul. 13, 2022	Radiation (03CH02-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jun. 22, 2021	May 28, 2022~ Jun. 08, 2022	Jun. 21, 2022	Radiation (03CH02-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Sep. 28, 2021	May 28, 2022~ Jun. 08, 2022	Sep. 27, 2022	Radiation (03CH02-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 18, 2021	May 28, 2022~ Jun. 08, 2022	Jul. 17, 2022	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 13, 2021	May 28, 2022~ Jun. 08, 2022	Jul. 12, 2022	Radiation (03CH02-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 10, 2022	May 28, 2022~ Jun. 08, 2022	Apr. 10, 2023	Radiation (03CH02-SZ)
LF Amplifier	Burgeon	BPA-530	102211	0.01~3000Mhz	Oct. 22, 2021	May 28, 2022~ Jun. 08, 2022	Oct. 21, 2022	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	AMF-7D-00101800-30-10P-R	1943528	1GHz~18GHz	Oct. 22, 2021	May 28, 2022~ Jun. 08, 2022	Oct. 21, 2022	Radiation (03CH02-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5Ghz	Oct. 22, 2021	May 28, 2022~ Jun. 08, 2022	Oct. 21, 2022	Radiation (03CH02-SZ)
AC Power Source	Chroma	61601	616010002470	N/A	NCR	May 28, 2022~ Jun. 08, 2022	NCR	Radiation (03CH02-SZ)
Turn Table	Chaintek	T-200	N/A	0~360 degree	NCR	May 28, 2022~ Jun. 08, 2022	NCR	Radiation (03CH02-SZ)
Antenna Mast	Chaintek	MBS-400	N/A	1 m~4 m	NCR	May 28, 2022~ Jun. 08, 2022	NCR	Radiation (03CH02-SZ)
EMI Receiver	R&S	ESR7	102297	9kHz~7GHz;	Jul. 14, 2021	Jun. 03, 2022	Jul. 13, 2022	Conduction (CO02-SZ)
AC LISN	R&S	ENV216	101499	9kHz~30MHz	Jul. 14, 2021	Jun. 03, 2022	Jul. 13, 2022	Conduction (CO02-SZ)
AC Power Source	CHROMA	61601	616010002470	100Vac~250Vac	NCR	Jun. 03, 2022	NCR	Conduction (CO02-SZ))

NCR: No Calibration Required

5 Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.10-2013. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Measurement

Test Item	Uncertainty
Conducted Power	±1.34 dB
Conducted Emissions	±1.34 dB
Occupied Channel Bandwidth	±0.13 %

Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.2dB

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.0dB

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.1dB

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.1dB

---------- THE END ----------

Appendix A. Conducted Test Results

Bluetooth ANT1

Test Engineer:	Ma Jie	Temperature:	21~25	°C
Test Date:	2022/5/27~2022/6/9	Relative Humidity:	51~54	%

TEST RESULTS DATA
20dB and 99% Occupied Bandwidth and Hopping Channel Separation

Mod.	Data Rate	ANT	CH.	Freq. (MHz)	20db BW (MHz)	99% Bandwidth (MHz)	Hopping Channel Separation Measurement (MHz)	Hopping Channel Separation Measurement Limit (MHz)	Pass/Fail
DH	1Mbps	1	0	2402	0.857	0.758	0.994	0.5711	Pass
DH	1Mbps	1	39	2441	0.857	0.755	0.999	0.5711	Pass
DH	1Mbps	1	78	2480	0.857	0.758	0.999	0.5711	Pass
2DH	2Mbps	1	0	2402	1.255	1.143	1.003	0.8365	Pass
2DH	2Mbps	1	39	2441	1.250	1.143	1.003	0.8336	Pass
2DH	2Mbps	1	78	2480	1.255	1.143	1.003	0.8365	Pass
3DH	3Mbps	1	0	2402	1.250	1.143	1.003	0.8336	Pass
3DH	3Mbps	1	39	2441	1.250	1.143	1.003	0.8336	Pass
3DH	3Mbps	1	78	2480	1.255	1.143	0.999	0.8365	Pass

TEST RESULTS DATA
Dwell Time

Mod.	Hopping Channel Number Rate	Hops Over Occupancy Time(hops)	Package Transfer Time (msec)	Dwell Time (sec)	Limits (sec)	Pass/Fail
Nomal	79	106.67	2.8928	0.31	0.4	Pass
AFH	20	53.33	2.8928	0.15	0.4	Pass

TEST RESULTS DATA
Peak Power Table

DH	CH.	NTX	Peak Power (dBm)	Power Limit (dBm)	Test Result
DH5	0	1	6.05	20.97	Pass
	39	1	6.19	20.97	Pass
	78	1	**6.23**	20.97	Pass

2DH	CH.	NTX	Peak Power (dBm)	Power Limit (dBm)	Test Result
2DH5	0	1	5.49	20.97	Pass
	39	1	**5.50**	20.97	Pass
	78	1	**5.50**	20.97	Pass

3DH	CH.	NTX	Peak Power (dBm)	Power Limit (dBm)	Test Result
3DH5	0	1	5.59	20.97	Pass
	39	1	5.59	20.97	Pass
	78	1	**5.61**	20.97	Pass

TEST RESULTS DATA
Number of Hopping Frequency

Number of Hopping (Channel)	Adaptive Frequency Hopping (Channel)	Limits (Channel)	Pass/Fail
79	20	> 15	Pass

Bluetooth ANT2

Test Engineer:	Ma Jie	Temperature:	21~25	°C
Test Date:	2022/5/27~2022/6/9	Relative Humidity:	51~54	%

TEST RESULTS DATA
20dB and 99% Occupied Bandwidth and Hopping Channel Separation

Mod.	Data Rate	ANT	CH.	Freq. (MHz)	20db BW (MHz)	99% Bandwidth (MHz)	Hopping Channel Separation Measurement (MHz)	Hopping Channel Separation Measurement Limit (MHz)	Pass/Fail
DH	1Mbps	2	0	2402	0.857	0.755	1.003	0.5711	Pass
DH	1Mbps	2	39	2441	0.857	0.758	1.003	0.5711	Pass
DH	1Mbps	2	78	2480	0.857	0.755	1.003	0.5711	Pass
2DH	2Mbps	2	0	2402	1.255	1.143	1.003	0.8367	Pass
2DH	2Mbps	2	39	2441	1.255	1.143	1.003	0.8367	Pass
2DH	2Mbps	2	78	2480	1.255	1.143	0.999	0.8367	Pass
3DH	3Mbps	2	0	2402	1.250	1.143	0.999	0.8336	Pass
3DH	3Mbps	2	39	2441	1.250	1.143	0.999	0.8336	Pass
3DH	3Mbps	2	78	2480	1.250	1.143	0.999	0.8336	Pass

TEST RESULTS DATA
Dwell Time

Mod.	Hopping Channel Number Rate	Hops Over Occupancy Time(hops)	Package Transfer Time (msec)	Dwell Time (sec)	Limits (sec)	Pass/Fail
Nomal	79	106.67	2.8928	0.31	0.4	Pass
AFH	20	53.33	2.8928	0.15	0.4	Pass

TEST RESULTS DATA
Peak Power Table

DH	CH.	NTX	Peak Power (dBm)	Power Limit (dBm)	Test Result
DH5	0	2	6.05	20.97	Pass
	39	2	6.19	20.97	Pass
	78	2	**6.23**	20.97	Pass

2DH	CH.	NTX	Peak Power (dBm)	Power Limit (dBm)	Test Result
2DH5	0	2	5.55	20.97	Pass
	39	2	**5.56**	20.97	Pass
	78	2	**5.56**	20.97	Pass

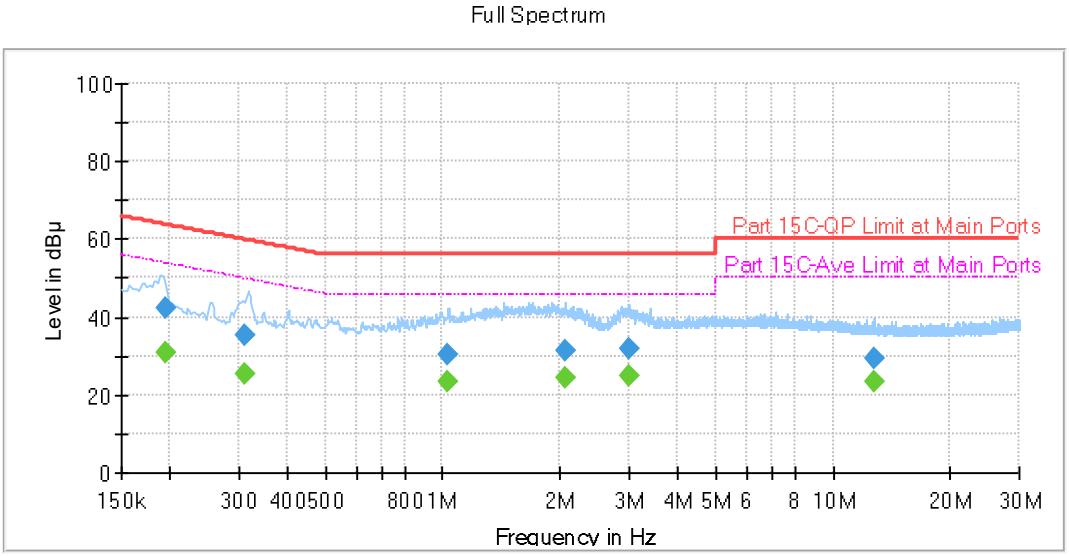
3DH	CH.	NTX	Peak Power (dBm)	Power Limit (dBm)	Test Result
3DH5	0	2	5.65	20.97	Pass
	39	2	5.65	20.97	Pass
	78	2	**5.67**	20.97	Pass

TEST RESULTS DATA
Number of Hopping Frequency

Number of Hopping (Channel)	Adaptive Frequency Hopping (Channel)	Limits (Channel)	Pass/Fail
79	20	> 15	Pass

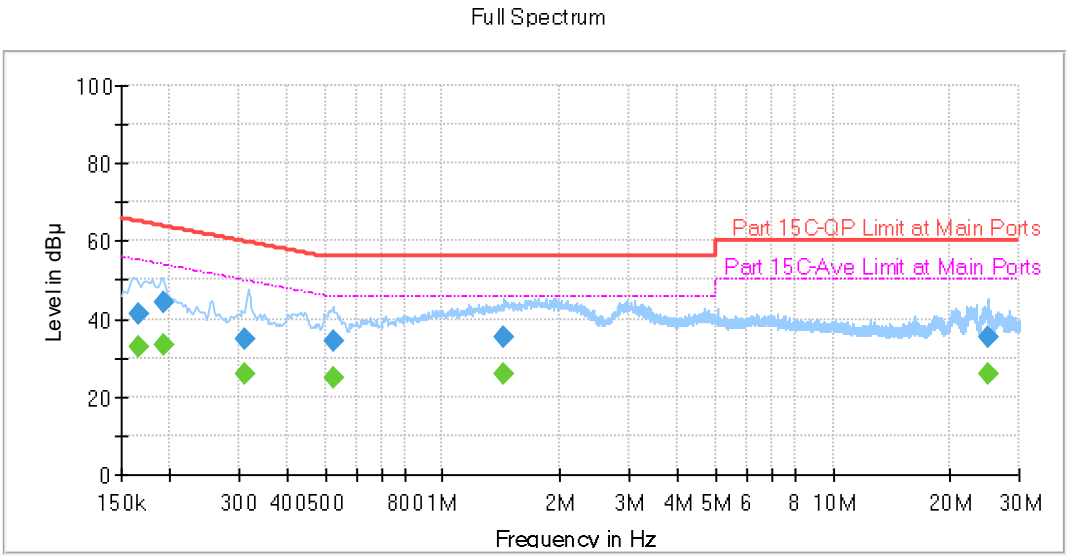
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Zhang Tao	**Temperature :**	22~25℃
		Relative Humidity :	50~55%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.195000	42.27	---	63.82	21.55	L1	OFF	19.7
0.195000	---	30.86	53.82	22.96	L1	OFF	19.7
0.312000	35.39	---	59.92	24.53	L1	OFF	19.7
0.312000	---	25.45	49.92	24.46	L1	OFF	19.7
1.029750	30.16	---	56.00	25.84	L1	OFF	19.8
1.029750	---	23.57	46.00	22.43	L1	OFF	19.8
2.066550	31.55	---	56.00	24.45	L1	OFF	19.8
2.066550	---	24.55	46.00	21.45	L1	OFF	19.8
3.007500	31.69	---	56.00	24.31	L1	OFF	19.8
3.007500	---	25.12	46.00	20.88	L1	OFF	19.8
12.823530	29.40	---	60.00	30.60	L1	OFF	20.1
12.823530	---	23.57	50.00	26.43	L1	OFF	20.1

Test Engineer :	Zhang Tao	**Temperature :**	22~25℃
		Relative Humidity :	50~55%
Test Voltage :	120Vac / 60Hz	**Phase :**	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.165480	41.20	---	65.18	23.99	N	OFF	19.7
0.165480	---	32.65	55.18	22.53	N	OFF	19.7
0.192480	44.20	---	63.93	19.72	N	OFF	19.7
0.192480	---	33.40	53.93	20.53	N	OFF	19.7
0.312000	34.70	---	59.92	25.22	N	OFF	19.7
0.312000	---	25.65	49.92	24.27	N	OFF	19.7
0.528000	34.34	---	56.00	21.66	N	OFF	19.7
0.528000	---	25.05	46.00	20.95	N	OFF	19.7
1.439250	35.26	---	56.00	20.74	N	OFF	19.8
1.439250	---	25.87	46.00	20.13	N	OFF	19.8
24.891270	35.54	---	60.00	24.46	N	OFF	20.4
24.891270	---	25.89	50.00	24.11	N	OFF	20.4

Appendix C. Radiated Spurious Emission

<ANT 1>

2.4GHz 2400~2483.5MHz

BT (Band Edge @ 3m)

BT	Note	Frequency	Level	Margin	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
BT CH00 2402MHz		2387.49	44.89	-29.11	74	39.89	31.7	5.55	32.25	283	151	P	H
		2387.49	20.1	-33.9	54	-	-	-	-	283	151	A	H
		2402	95.87	-	-	90.86	31.7	5.55	32.24	283	151	P	H
	*	2402	71.08	-	-	-	-	-	-	283	151	A	H
		2348.745	44.78	-29.22	74	39.85	31.7	5.49	32.26	100	247	P	V
		2348.745	19.99	-34.01	54	-	-	-	-	100	247	A	V
		2402	89.4	-	-	84.39	31.7	5.55	32.24	100	247	P	V
	*	2402	64.61	-	-	-	-	-	-	100	247	A	V
BT CH 39 2441MHz		2353.54	44.45	-29.55	74	39.5	31.7	5.51	32.26	201	151	P	H
		2353.54	19.66	-34.34	54	-	-	-	-	201	151	A	H
		2441	95.21	-	-	89.65	32	5.61	32.05	201	151	P	H
	*	2441	70.42	-	-	-	-	-	-	201	151	A	H
		2487.4	45.97	-28.03	74	40.19	32.07	5.66	31.95	201	151	P	H
		2487.4	21.18	-32.82	54	-	-	-	-	201	151	A	H
		2372.58	44.96	-29.04	74	39.98	31.7	5.53	32.25	119	195	P	V
		2372.58	20.17	-33.83	54	-	-	-	-	119	195	A	V
		2441	94.11	-	-	88.55	32	5.61	32.05	119	195	P	V
	*	2441	69.32	-	-	-	-	-	-	119	195	A	V
		2484.74	45.24	-28.76	74	39.46	32.07	5.66	31.95	119	195	P	V
		2484.74	20.45	-33.55	54	-	-	-	-	119	195	A	V

BT CH 78 2480MHz		2480	94.57	-	-	88.79	32.07	5.66	31.95	237	146	P	H
	*	2480	69.78	-	-	-	-	-	-	237	146	A	H
		2486.84	46.14	-27.86	74	40.36	32.07	5.66	31.95	237	146	P	H
		2486.84	21.35	-32.65	54	-	-	-	-	237	146	A	H
		2480	95.02	-	-	89.24	32.07	5.66	31.95	114	204	P	V
	*	2480	70.23	-	-	-	-	-	-	114	204	A	V
		2497.76	45.75	-28.25	74	39.82	32.1	5.68	31.85	114	204	P	V
		2497.76	20.96	-33.04	54	-	-	-	-	114	204	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

BT (Harmonic @ 3m)

BT	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
BT CH 00 2402MHz		4804	41.78	-32.22	74	57.2	33.8	8.68	57.9	-	-	P	H
		4804	16.99	-37.01	54	-	-	-	-	-	-	A	H
		4804	42.03	-31.97	74	57.45	33.8	8.68	57.9	-	-	P	V
		4804	17.24	-36.76	54	-	-	-	-	-	-	A	V
BT CH 39 2441MHz		4882	42.85	-31.15	74	58.23	33.73	8.79	57.9	-	-	P	H
		4882	18.06	-35.94	54	-	-	-	-	-	-	A	H
		7323	45.49	-28.51	74	58.19	35.73	11.09	59.52	-	-	P	H
		7323	20.7	-33.3	54	-	-	-	-	-	-	A	H
		4882	42.75	-31.25	74	58.13	33.73	8.79	57.9	-	-	P	V
		4882	17.96	-36.04	54	-	-	-	-	-	-	A	V
		7323	45.62	-28.38	74	58.32	35.73	11.09	59.52	-	-	P	V
		7323	20.83	-33.17	54	-	-	-	-	-	-	A	V
BT CH 78 2480MHz		4960	43.45	-30.55	74	58.64	33.73	8.98	57.9	-	-	P	H
		4960	18.66	-35.34	54	-	-	-	-	-	-	A	H
		7440	45.43	-28.57	74	58.39	35.78	11.12	59.86	-	-	P	H
		7440	20.64	-33.36	54	-	-	-	-	-	-	A	H
		4960	43.04	-30.96	74	58.23	33.73	8.98	57.9	-	-	P	V
		4960	18.25	-35.75	54	-	-	-	-	-	-	A	V
		7440	44.88	-29.12	74	57.84	35.78	11.12	59.86	-	-	P	V
		7440	20.09	-33.91	54	-	-	-	-	-	-	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

2.4GHz BT (LF)

BT	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz BT LF		30	26.93	-13.07	40	32.87	24.8	0.56	31.3	-	-	P	H
		131.85	24.67	-18.83	43.5	37.5	17.46	1.19	31.48	-	-	P	H
		231.76	24.61	-21.39	46	37.96	16.62	1.59	31.56	-	-	P	H
		506.27	29.91	-16.09	46	34.7	24.01	2.41	31.21	-	-	P	H
		618.79	29.46	-16.54	46	32.31	25.97	2.71	31.53	-	-	P	H
		826.37	29.29	-16.71	46	28.86	28.63	3.15	31.35	-	-	P	H
		30	28.55	-11.45	40	34.49	24.8	0.56	31.3	-	-	P	V
		130.88	26.88	-16.62	43.5	39.72	17.45	1.19	31.48	-	-	P	V
		240.49	26.51	-19.49	46	38.88	17.64	1.62	31.63	-	-	P	V
		638.19	28.78	-17.22	46	31.34	26.14	2.75	31.45	-	-	P	V
		798.24	29.36	-16.64	46	29.09	28.47	3.1	31.3	-	-	P	V
		912.7	30.86	-15.14	46	29.77	29.2	3.34	31.45	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

<ANT 2>

2.4GHz 2400~2483.5MHz

BT (Band Edge @ 3m)

BT	Note	Frequency	Level	Margin	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
BT CH00 2402MHz		2371.32	45.09	-28.91	74	40.11	31.7	5.53	32.25	100	132	P	H
		2371.32	20.3	-33.7	54	-	-	-	-	100	132	A	H
		2402	93.71	-	-	88.7	31.7	5.55	32.24	100	132	P	H
	*	2402	68.92	-	-	-	-	-	-	100	132	A	H
		2339.19	44.54	-29.46	74	39.61	31.7	5.49	32.26	100	165	P	V
		2339.19	19.75	-34.25	54	-	-	-	-	100	165	A	V
		2402	95.56	-	-	90.55	31.7	5.55	32.24	100	165	P	V
	*	2402	70.77	-	-	-	-	-	-	100	165	A	V
BT CH 39 2441MHz		2319.24	45.25	-28.75	74	40.42	31.63	5.47	32.27	100	152	P	H
		2319.24	20.46	-33.54	54	-	-	-	-	100	152	A	H
		2441	94.27	-	-	88.71	32	5.61	32.05	100	152	P	H
	*	2441	69.48	-	-	-	-	-	-	100	152	A	H
		2495.1	45.31	-28.69	74	39.38	32.1	5.68	31.85	100	152	P	H
		2495.1	20.52	-33.48	54	-	-	-	-	100	152	A	H
		2312.8	44.41	-29.59	74	39.67	31.57	5.45	32.28	100	134	P	V
		2312.8	19.62	-34.38	54	-	-	-	-	100	134	A	V
		2441	95.77	-	-	90.21	32	5.61	32.05	100	134	P	V
	*	2441	70.98	-	-	-	-	-	-	100	134	A	V
		2491.04	44.69	-29.31	74	38.86	32.1	5.68	31.95	100	134	P	V
		2491.04	19.9	-34.1	54	-	-	-	-	100	134	A	V

BT CH 78 2480MHz		2480	94.76	-	-	88.98	32.07	5.66	31.95	100	165	P	H
	*	2480	69.97	-	-	-	-	-	-	100	165	A	H
		2497.56	46.13	-27.87	74	40.2	32.1	5.68	31.85	100	165	P	H
		2497.56	21.34	-32.66	54	-	-	-	-	100	165	A	H
		2480	95.52	-	-	89.74	32.07	5.66	31.95	100	134	P	V
	*	2480	70.73	-	-	-	-	-	-	100	134	A	V
		2490.76	45.52	-28.48	74	39.69	32.1	5.68	31.95	100	134	P	V
		2490.76	20.73	-33.27	54	-	-	-	-	100	134	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

BT (Harmonic @ 3m)

BT	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
BT CH 00 2402MHz		4804	43.45	-30.55	74	58.87	33.8	8.68	57.9	-	-	P	H
		4804	18.66	-35.34	54	-	-	-	-	-	-	A	H
		4804	42.65	-31.35	74	58.07	33.8	8.68	57.9	-	-	P	V
		4804	17.86	-36.14	54	-	-	-	-	-	-	A	V
BT CH 39 2441MHz		4882	43.24	-30.76	74	58.62	33.73	8.79	57.9	-	-	P	H
		4882	18.45	-35.55	54	-	-	-	-	-	-	A	H
		7323	45.33	-28.67	74	58.03	35.73	11.09	59.52	-	-	P	H
		7323	20.54	-33.46	54	-	-	-	-	-	-	A	H
		4882	43.35	-30.65	74	58.73	33.73	8.79	57.9	-	-	P	V
		4882	18.56	-35.44	54	-	-	-	-	-	-	A	V
		7323	45.02	-28.98	74	57.72	35.73	11.09	59.52	-	-	P	V
		7323	20.23	-33.77	54	-	-	-	-	-	-	A	V
BT CH 78 2480MHz		4960	43.79	-30.21	74	58.98	33.73	8.98	57.9	-	-	P	H
		4960	19	-35	54	-	-	-	-	-	-	A	H
		7440	45.42	-28.58	74	58.38	35.78	11.12	59.86	-	-	P	H
		7440	20.63	-33.37	54	-	-	-	-	-	-	A	H
		4960	43.08	-30.92	74	58.27	33.73	8.98	57.9	-	-	P	V
		4960	18.29	-35.71	54	-	-	-	-	-	-	A	V
		7440	45.32	-28.68	74	58.28	35.78	11.12	59.86	-	-	P	V
		7440	20.53	-33.47	54	-	-	-	-	-	-	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

2.4GHz BT (LF)

BT	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz BT LF		30	25.93	-14.07	40	31.87	24.8	0.56	31.3	-	-	P	H
		80.44	20.97	-19.03	40	38.24	13.4	0.93	31.6	-	-	P	H
		131.85	23.67	-19.83	43.5	36.5	17.46	1.19	31.48	-	-	P	H
		231.76	23.61	-22.39	46	36.96	16.62	1.59	31.56	-	-	P	H
		331.67	23.52	-22.48	46	32.77	20.17	1.92	31.34	-	-	P	H
		882.63	29.15	-16.85	46	28.42	28.91	3.28	31.46	-	-	P	H
		30	29.55	-10.45	40	35.49	24.8	0.56	31.3	-	-	P	V
		81.41	22.58	-17.42	40	39.7	13.54	0.94	31.6	-	-	P	V
		130.88	26.88	-16.62	43.5	39.72	17.45	1.19	31.48	-	-	P	V
		240.49	24.51	-21.49	46	36.88	17.64	1.62	31.63	-	-	P	V
		566.41	26.83	-19.17	46	30.5	25.15	2.59	31.41	-	-	P	V
		912.7	29.86	-16.14	46	28.77	29.2	3.34	31.45	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Note symbol

*	**Fundamental Frequency** which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is **Margin** line.
P/A	**P**eak or **A**verage
H/V	**H**orizontal or **V**ertical

A calculation example for radiated spurious emission is shown as below:

BT	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
BT CH 00 2402MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) =

Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

3. Margin (dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Margin (dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Margin (dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

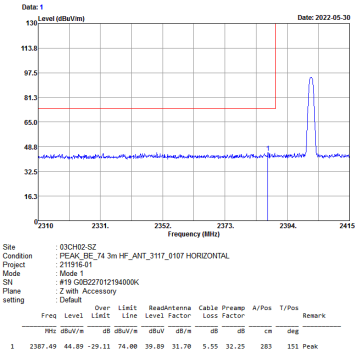
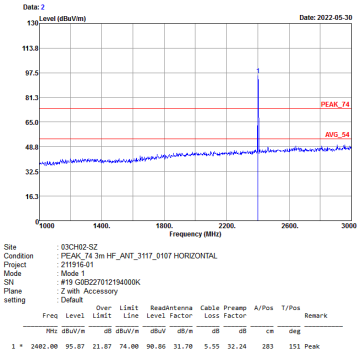
Both peak and average measured complies with the limit line, so test result is “PASS”.

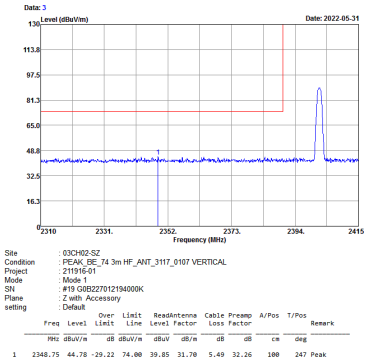
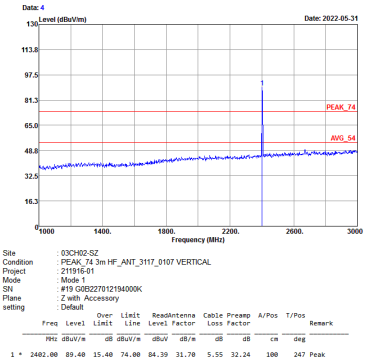
Appendix D. Radiated Spurious Emission Plots

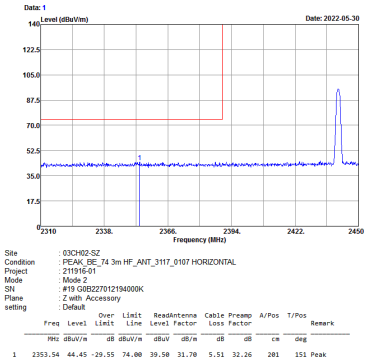
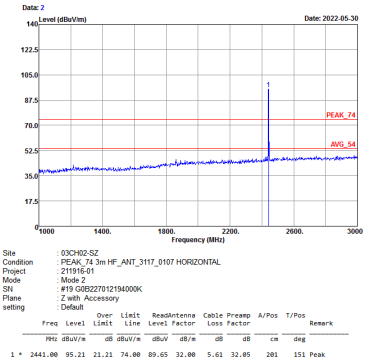
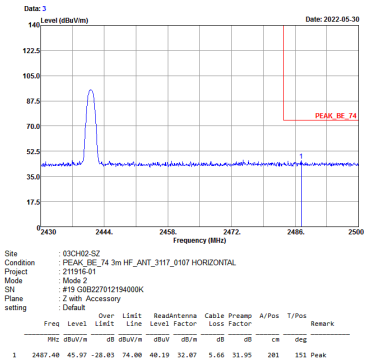
<ANT 1>

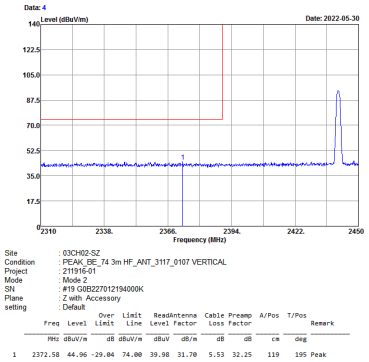
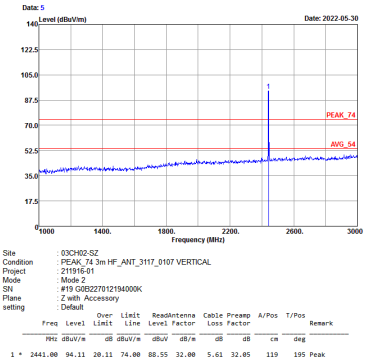
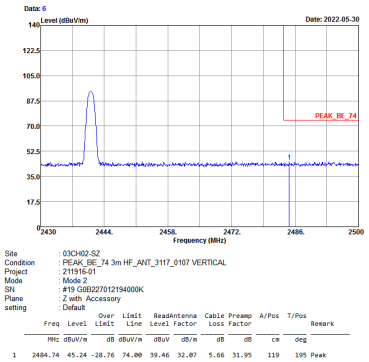
2.4GHz 2400~2483.5MHz

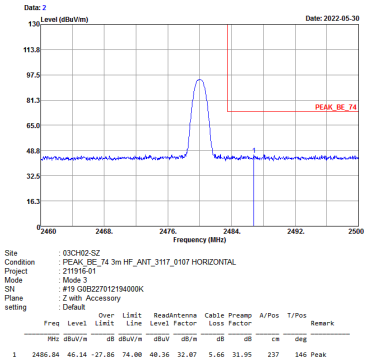
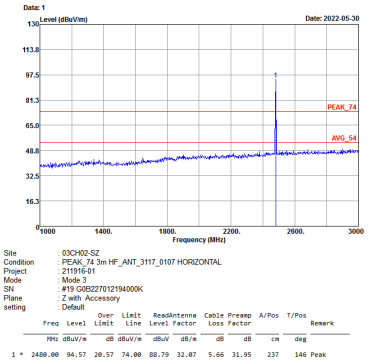
BT (Band Edge @ 3m)

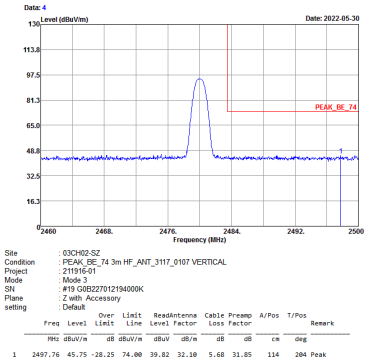
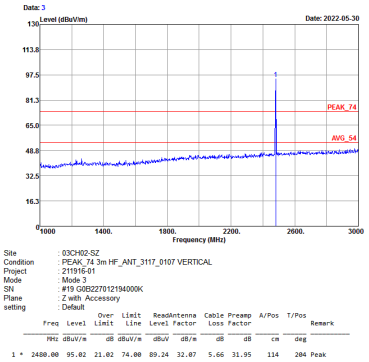
BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH00 2402MHz	
1	Horizontal	Fundamental
Peak		

BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH00 2402MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH02-SZ Condition : PEAK_BE_74 3m HF_ANT_3117_0107 VERTICAL Project : 211916-01 Mode : Mode 1 SN : #19 GQB227012194000K Plane : Z with Accessory setting : Default Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 2348.75 44.78 -29.22 74.00 39.85 31.70 5.49 32.26 100 247 Peak	 Site : 03CH02-SZ Condition : PEAK_74 3m HF_ANT_3117_0107 VERTICAL Project : 211916-01 Mode : Mode 1 SN : #19 GQB227012194000K Plane : Z with Accessory setting : Default Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 * 2402.00 89.40 15.40 74.00 84.39 31.70 5.55 32.24 100 247 Peak

BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH39 2441MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH02-SZ Condition : PEAK_BE_74 3m HF_ANT_3117_0107 HORIZONTAL Project : 211916-01 Mode : Mode 2 SN : #19 GBB227012194000K Plane : Z with Accessory setting : Default Freq / Level / Over Limit / Limit Line / ReadAntenna Level Factor / Cable Preamp Loss Factor / A/Pos / T/Pos / Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 2353.54 44.45 -29.55 74.00 39.50 31.70 5.51 32.26 201 151 Peak	 Site : 03CH02-SZ Condition : PEAK_74 3m HF_ANT_3117_0107 HORIZONTAL Project : 211916-01 Mode : Mode 2 SN : #19 GBB227012194000K Plane : Z with Accessory setting : Default Freq / Level / Over Limit / Limit Line / ReadAntenna Level Factor / Cable Preamp Loss Factor / A/Pos / T/Pos / Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 * 2441.00 95.21 21.21 74.00 89.65 32.00 5.61 32.05 201 151 Peak
Peak	 Site : 03CH02-SZ Condition : PEAK_BE_74 3m HF_ANT_3117_0107 HORIZONTAL Project : 211916-01 Mode : Mode 2 SN : #19 GBB227012194000K Plane : Z with Accessory setting : Default Freq / Level / Over Limit / Limit Line / ReadAntenna Level Factor / Cable Preamp Loss Factor / A/Pos / T/Pos / Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 2487.40 45.97 -28.03 74.00 40.19 32.07 5.66 31.95 201 151 Peak	Left blank

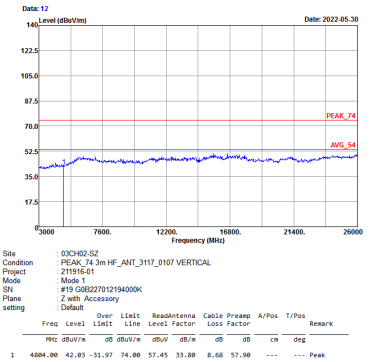
BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH39 2441MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH02-SZ Condition : PEAK_BE_74 3m HF_ANT_3117_0107 VERTICAL Project : 211916-01 Mode : Mode 2 SN : #19 GB822701219400 0K Plane : Z with Accessory setting : Default Freq / Level / Over Limit / Limit Line / ReadAntenna Level Factor / Cable Preamp Loss Factor / A/Pos / T/Pos / Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 2372.58 44.96 -29.04 74.00 39.98 31.70 5.53 32.25 119 195 Peak	 Site : 03CH02-SZ Condition : PEAK_74 3m HF_ANT_3117_0107 VERTICAL Project : 211916-01 Mode : Mode 2 SN : #19 GB822701219400 0K Plane : Z with Accessory setting : Default Freq / Level / Over Limit / Limit Line / ReadAntenna Level Factor / Cable Preamp Loss Factor / A/Pos / T/Pos / Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 * 2441.00 94.11 20.11 74.00 88.55 32.00 5.61 32.05 119 195 Peak
Peak	 Site : 03CH02-SZ Condition : PEAK_BE_74 3m HF_ANT_3117_0107 VERTICAL Project : 211916-01 Mode : Mode 2 SN : #19 GB822701219400 0K Plane : Z with Accessory setting : Default Freq / Level / Over Limit / Limit Line / ReadAntenna Level Factor / Cable Preamp Loss Factor / A/Pos / T/Pos / Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 2484.74 45.24 -28.76 74.00 39.46 32.07 5.66 31.95 119 195 Peak	Left blank

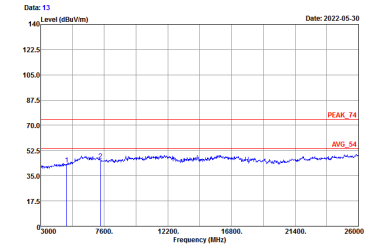
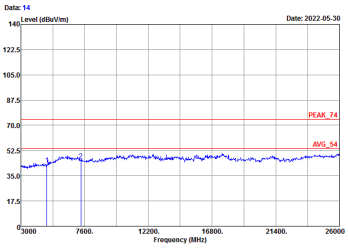
BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH78 2480MHz	
1	Horizontal	Fundamental
Peak		

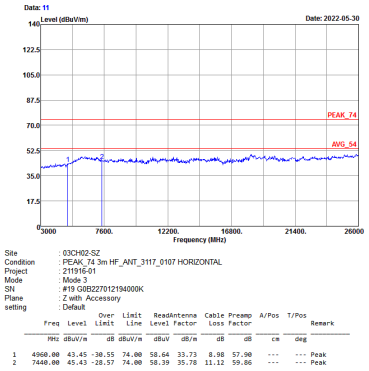
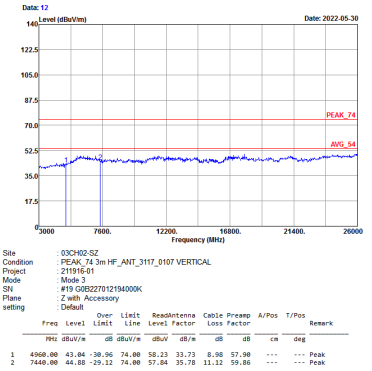
BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH78 2480MHz	
1	Vertical	Fundamental
Peak		

2.4GHz 2400~2483.5MHz

BT (Harmonic @ 3m)

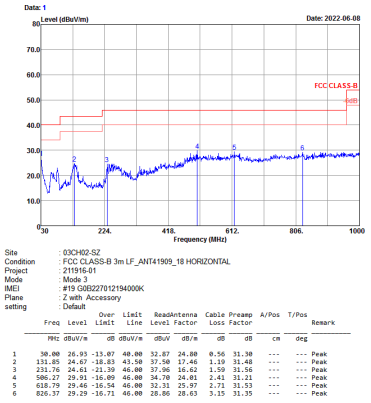
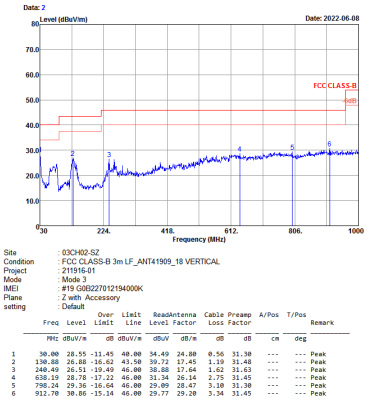
BT	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	BT CH00 2402MHz	
1	Horizontal	Vertical
Peak Avg.		

BT	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	BT CH39 2441MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH02-SZ Condition : PEAK_74 3m HF_ANT_3117_0107 HORIZONTAL Project : 211916-01 Mode : Mode 2 SN : #19 GBB227012194000K Plane setting : Z with Accessory : Default Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 4882.00 42.85 -31.15 74.00 58.23 33.73 8.79 57.90 --- --- Peak 2 7323.00 45.49 -28.51 74.00 58.19 35.73 11.09 59.52 --- --- Peak	 Site : 03CH02-SZ Condition : PEAK_74 3m HF_ANT_3117_0107 VERTICAL Project : 211916-01 Mode : Mode 2 SN : #19 GBB227012194000K Plane setting : Z with Accessory : Default Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 4882.00 42.75 -31.25 74.00 58.13 33.73 8.79 57.90 --- --- Peak 2 7323.00 45.62 -28.38 74.00 58.32 35.73 11.09 59.52 --- --- Peak

BT	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	BT CH78 2480MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH02-SZ Condition : PEAK_74 3m HF_ANT_3117_0107 HORIZONTAL Project : 211916-01 Mode : Mode 3 SN : #19 GBB227012194000K Plane setting : Z with Accessory : Default Freq / Level / Over Limit / Limit Line / ReadAntenna Level / Cable Factor / Preamp Factor / A/Pos / T/Pos / Remark MHz / dBuV/m / dB / dBuV/m / dBuV / dB/m / dB / dB / cm / deg 1 4960.00 43.45 -30.55 74.00 58.64 33.73 8.98 57.90 --- --- Peak 2 7440.00 45.43 -28.57 74.00 58.39 35.78 11.12 59.86 --- --- Peak	 Site : 03CH02-SZ Condition : PEAK_74 3m HF_ANT_3117_0107 VERTICAL Project : 211916-01 Mode : Mode 3 SN : #19 GBB227012194000K Plane setting : Z with Accessory : Default Freq / Level / Over Limit / Limit Line / ReadAntenna Level / Cable Factor / Preamp Factor / A/Pos / T/Pos / Remark MHz / dBuV/m / dB / dBuV/m / dBuV / dB/m / dB / dB / cm / deg 1 4960.00 43.04 -30.96 74.00 58.23 33.73 8.98 57.90 --- --- Peak 2 7440.00 44.88 -29.12 74.00 57.84 35.78 11.12 59.86 --- --- Peak

Emission below 1GHz

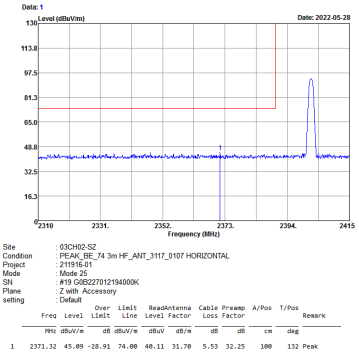
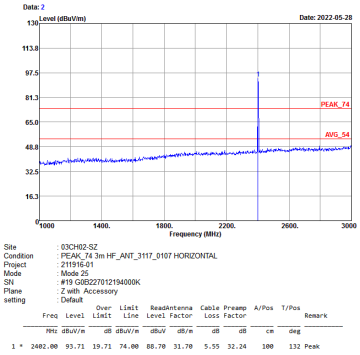
2.4GHz BT (LF)

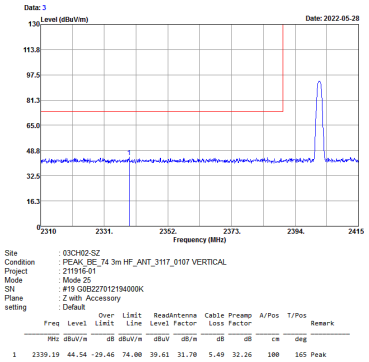
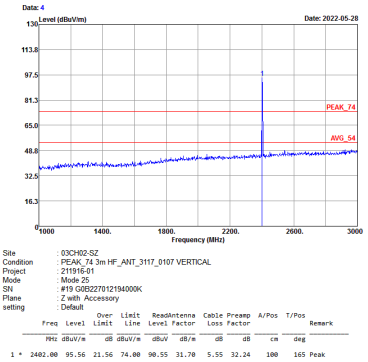
BT	2.4GHz 2400~2483.5MHz	
ANT	BT LF	
1	Horizontal	Vertical
QP / Peak		

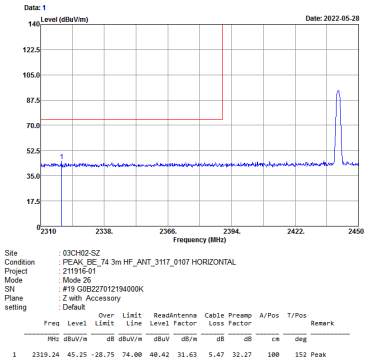
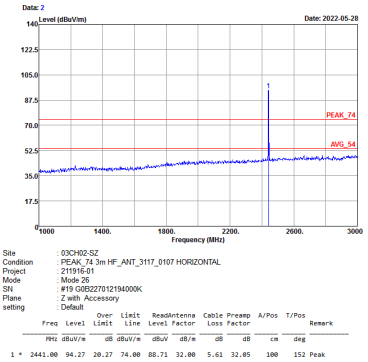
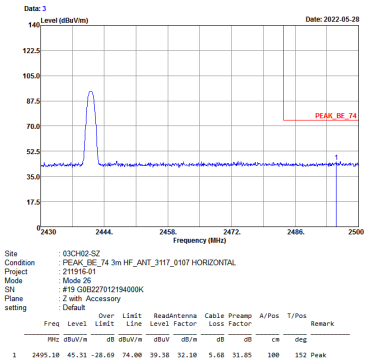
<ANT 2>

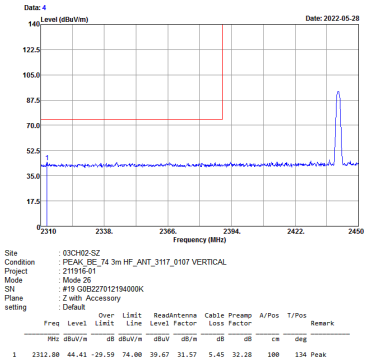
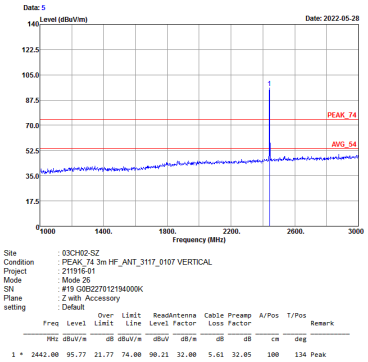
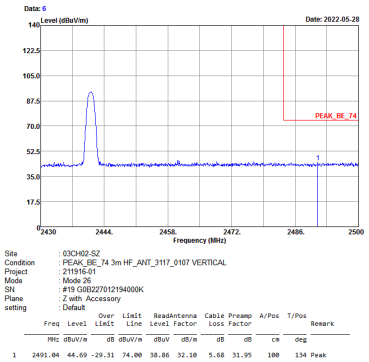
2.4GHz 2400~2483.5MHz

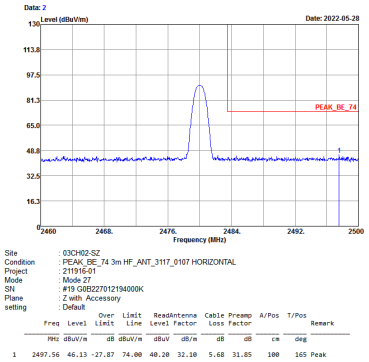
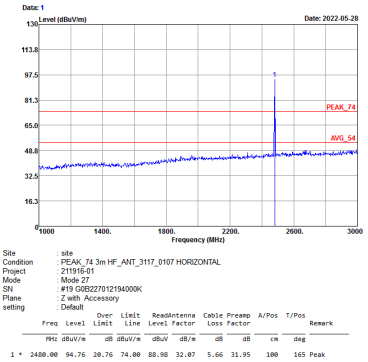
BT (Band Edge @ 3m)

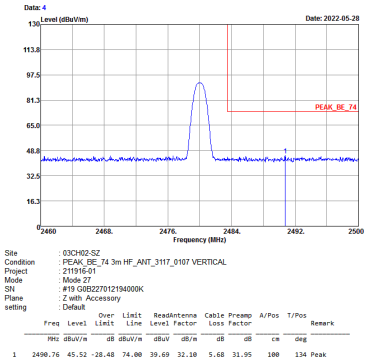
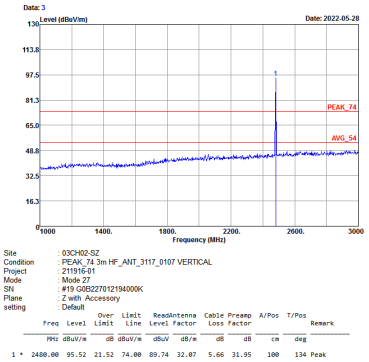
BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH00 2402MHz	
2	Horizontal	Fundamental
Peak		

BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH00 2402MHz	
2	Vertical	Fundamental
Peak	 Site : 03CH02-SZ Condition : PEAK_BE_74 3m HF_ANT_3117_0107 VERTICAL Project : 211916-01 Mode : Mode 25 SN : #19 GXB227012194000K Plane : Z with Accessory setting : Default Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 2339.19 44.54 -29.46 74.00 39.61 31.70 5.49 32.26 100 165 Peak	 Site : 03CH02-SZ Condition : PEAK_74 3m HF_ANT_3117_0107 VERTICAL Project : 211916-01 Mode : Mode 25 SN : #19 GXB227012194000K Plane : Z with Accessory setting : Default Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 * 2402.00 95.56 21.56 74.00 90.55 31.70 5.55 32.24 100 165 Peak

BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH39 2441MHz	
2	Horizontal	Fundamental
Peak	 Site : 03CH02-SZ Condition : PEAK_BE_74 3m HF_ANT_3117_0107 HORIZONTAL Project : 211916-01 Mode : Mode 26 SN : #19 GB822701219400OK Plane : Z with Accessory setting : Default Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 2319.24 45.25 -28.75 74.00 40.42 31.63 5.47 32.27 100 152 Peak	 Site : 03CH02-SZ Condition : PEAK_74 3m HF_ANT_3117_0107 HORIZONTAL Project : 211916-01 Mode : Mode 26 SN : #19 GB822701219400OK Plane : Z with Accessory setting : Default Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 * 2441.00 94.27 20.27 74.00 88.71 32.00 5.61 32.05 100 152 Peak
Peak	 Site : 03CH02-SZ Condition : PEAK_BE_74 3m HF_ANT_3117_0107 HORIZONTAL Project : 211916-01 Mode : Mode 26 SN : #19 GB822701219400OK Plane : Z with Accessory setting : Default Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Factor Preamp A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 2495.10 45.31 -28.69 74.00 39.38 32.10 5.68 31.85 100 152 Peak	Left blank

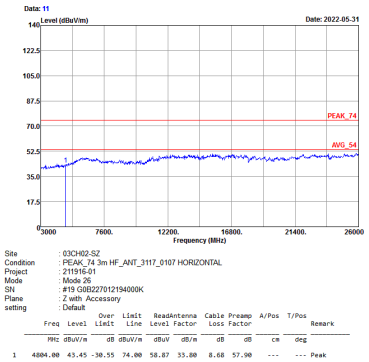
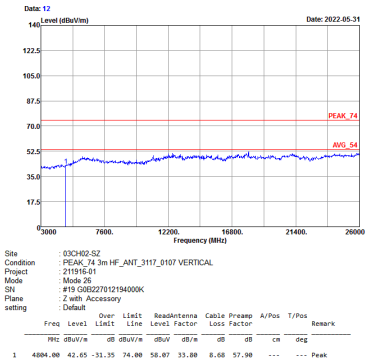
BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH39 2441MHz	
2	Vertical	Fundamental
Peak		
Peak		Left blank

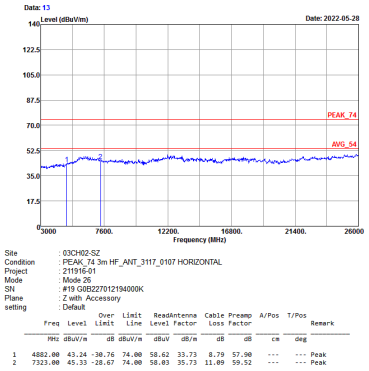
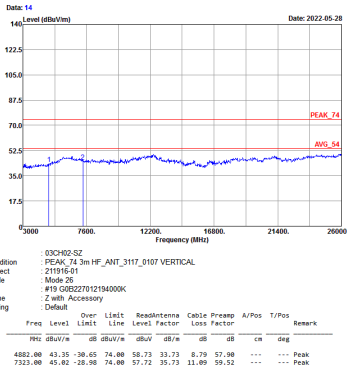
BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH78 2480MHz	
2	Horizontal	Fundamental
Peak	 Site : 03CH02-SZ Condition : PEAK_BE_74 3m HF_ANT_3117_0107 HORIZONTAL Project : 211916-01 Mode : Mode 27 SN : #19 GB822701219400OK Plane : Z with Accessory setting : Default Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 2497.56 46.13 -27.87 74.00 40.20 32.10 5.68 31.85 100 165 Peak	 Site : site Condition : PEAK_74 3m HF_ANT_3117_0107 HORIZONTAL Project : 211916-01 Mode : Mode 27 SN : #19 GB822701219400OK Plane : Z with Accessory setting : Default Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 * 2480.00 94.76 20.76 74.00 88.98 32.07 5.66 31.95 100 165 Peak

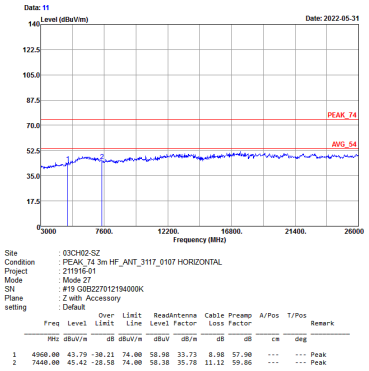
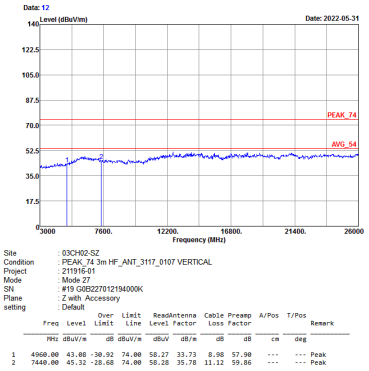
BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH78 2480MHz	
2	Vertical	Fundamental
Peak		

2.4GHz 2400~2483.5MHz

BT (Harmonic @ 3m)

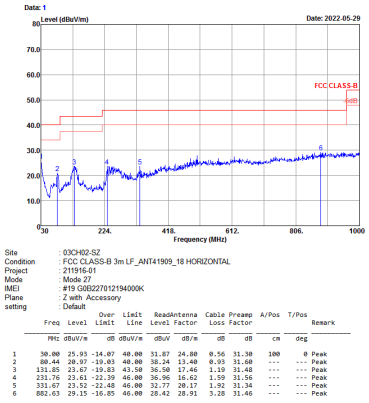
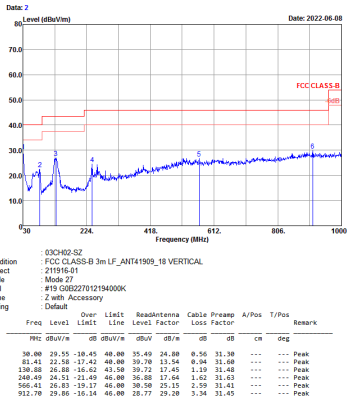
BT	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	BT CH00 2402MHz	
2	Horizontal	Vertical
Peak Avg.		

BT	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	BT CH39 2441MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH02-SZ Condition : PEAK_74 3m HF_ANT_3117_0107 HORIZONTAL Project : 211916-01 Mode : Mode 26 SN : #19 GXB2270121940O0K Plane : Z with Accessory setting : Default Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 4882.00 43.24 -30.76 74.00 58.62 33.73 8.79 57.90 --- --- Peak 2 7323.00 45.33 -28.67 74.00 58.03 35.73 11.09 59.52 --- --- Peak	 Site : 03CH02-SZ Condition : PEAK_74 3m HF_ANT_3117_0107 VERTICAL Project : 211916-01 Mode : Mode 26 SN : #19 GXB2270121940O0K Plane : Z with Accessory setting : Default Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 1 4882.00 43.35 -30.65 74.00 58.73 33.73 8.79 57.90 --- --- Peak 2 7323.00 45.02 -28.98 74.00 57.72 35.73 11.09 59.52 --- --- Peak

BT	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	BT CH78 2480MHz	
2	Horizontal	Vertical
Peak Avg.		

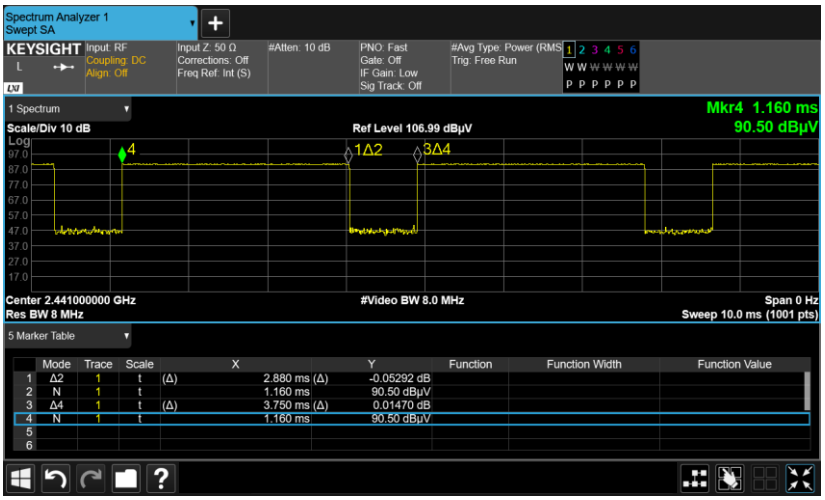
Emission below 1GHz

2.4GHz BT (LF)

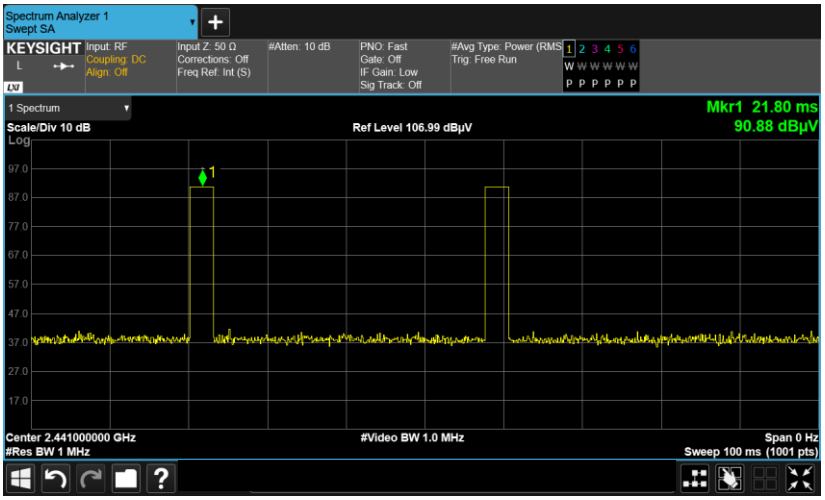
BT	2.4GHz 2400~2483.5MHz	
ANT	BT LF	
2	Horizontal	Vertical
QP / Peak		

Appendix E. Duty Cycle Plots

DH5 on time (One Pulse) Plot on Channel 39



DH5 on time (Count Pulses) Plot on Channel 39



Note:

1. Worst case Duty cycle = on time/100 milliseconds = 2 * 2.88 / 100 = 5.76 %
2. Worst case Duty cycle correction factor = 20*log(Duty cycle) = -24.79 dB
3. DH5 has the highest duty cycle worst case and is reported.