TEST REPORT

APPLICANT	:	BLU Products, Inc.
PRODUCT NAME	:	Smart Phone
MODEL NAME	:	X5+
BRAND NAME	:	BLU
FCC ID	:	YHLBLUX5PUL
STANDARD(S)	:	47 CFR Part 2 47 CFR Part 22 Subpart H 47 CFR Part 24 Subpart E 47 CFR Part 27 Subpart L
RECEIPT DATE	:	2025-05-14
TEST DATE	:	2025-05-16 to 2025-06-04
ISSUE DATE	:	2025-06-13

Edited by: Zeng Xiaoying (Rapporteur)

Approved by: Shen Junsheng (Supervisor)

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MORLAB
Shenzhen Morlab Communications Technology Co., Ltd.
FL.1-3, Building A, FeiYang Science Park, No.8 LongChang Road,
Block67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Tel: 86-755-36698555 Fax: 86-755-36698525
Http://www.morlab.cn E-mail: service@morlab.cn

DIRECTORY

1. Technical Information ····· 3
1.1. Applicant and Manufacturer Information ····· 3
1.2. Equipment Under Test (EUT) Description ····· 3
1.3. Maximum E.R.P./E.I.R.P. and Emission Designator ····· 5
1.4. Test Standards and Results ····· 6
1.5. Environmental Conditions ····· 7
2. 47 CFR Part 2, Part 22H, 24E&27L Requirements ····· 8
2.1. Conducted RF Output Power ····· 8
2.2. Peak to Average Ratio ····· 12
2.3. Occupied Bandwidth ····· 18
2.4. Frequency Stability ····· 27
2.5. Conducted Out of Band Emissions ····· 32
2.6. Band Edge ····· 40
2.7. Determining E.R.P. and/or E.I.R.P. from conducted RF output power measurements ····· 44
2.8. Radiated Out of Band Emissions ····· 49
Annex A Test Uncertainty ····· 135
Annex B Testing Laboratory Information ····· 136

Change History		
Version	Date	Reason for change
1.0	2025-06-13	First edition

1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	BLU Products, Inc.
Applicant Address:	8600 NW 36th Street, Suite #300 Miami, FL 33166, USA
Manufacturer:	BLU Products, Inc.
Manufacturer Address:	8600 NW 36th Street, Suite #300 Miami, FL 33166, USA

1.2. Equipment Under Test (EUT) Description

Product Name:	Smart Phone	
Sample No.:	2#, 4#	
Hardware Version:	A507-MB-V3.6F	
Software Version:	sp9832e_1h10_go2g_k515-user-gms_0513_1058.pac	
Modulation Type:	GSM/GPRS Mode with GMSK Modulation EDGE Mode with 8PSK Modulation WCDMA Mode with QPSK Modulation HSDPA Mode with QPSK Modulation HSUPA Mode with QPSK Modulation HSPA+ Mode with 16QAM Modulation	
Operating Frequency Range:	GSM 850MHz	Tx: 824MHz-849MHz
		Rx: 869MHz-894MHz
	GSM 1900MHz	Tx: 1850MHz-1910MHz
		Rx: 1930MHz-1990MHz
	WCDMA Band V	Tx: 824MHz-849MHz
		Rx: 869MHz-894MHz
	WCDMA Band IV	Tx: 1710MHz-1755MHz
		Rx: 2110MHz-2155MHz
	WCDMA Band II	Tx: 1850MHz-1910MHz
		Rx: 1930MHz-1990MHz
Antenna Type:	PIFA Antenna	
Antenna Gain:	GSM 850:	0.16dBi
	GSM1900:	3.01dBi

Antenna Gain:	WCDMA Band V:	0.16dBi
	WCDMA Band IV:	2.14dBi
	WCDMA Band II:	2.80dBi
Accessory Information:	Battery	
	Brand Name:	N/A
	Model No.:	C775448200L
	Serial No.:	N/A
	Capacity:	2000mAh
	Rated Voltage:	3.8V
	Charge Limit:	4.35V
	Manufacturer:	PHENIX NEW ENERGY(HUIZHOU)CO., LTD
	AC Adapter	
	Brand Name:	N/A
	Model No.:	US-DC-0750
	Serial No.:	N/A
	Rated Output:	5.0V⎓0.75A
	Rated Input:	100-240V~50/60Hz, 0.2A
	Manufacturer:	SHENZHEN EAST SUN ELECTRONIC CO., LTD

Note 1: The transmitter (Tx) frequency arrangement of the Cellular 850MHz band used by the EUT can be represented with the formula F(n)=824.2+0.2*(n-128), 128<=n<=251; the lowest, middle, highest channel numbers (ARFCHs) used and tested in this report are separately 128 (824.2MHz), 189 (836.4MHz) and 251 (848.8MHz).

Note 2: The transmitter (Tx) frequency arrangement of the PCS 1900MHz band used by the EUT can be represented with the formula F(n)=1850.2+0.2*(n-512), 512<=n<=810; the lowest, middle and highest channel numbers (ARFCHs) used and tested in this report are separately 512 (1850.2MHz), 661 (1880.0MHz) and 810 (1909.8MHz).

Note 3: The transmitter (Tx) frequency arrangement of the WCDMA Band V used by the EUT can be represented with the formula F(n)=826.4+0.2*(n-4132), 4132<=n<=4233; the lowest, middle and highest channel numbers (ARFCHs) used and tested in this report are separately 4132 (826.4MHz), 4182(836.4MHz) and 4233 (846.6MHz).

Note 4: The transmitter (Tx) frequency arrangement of the WCDMA IV band used by the EUT can be represented with the formula F(n)=1712.4+0.2*(n-1312), 1312<=n<=1513; the lowest, middle and highest channel numbers (ARFCHs) used and tested in this report are separately 1312 (1712.4MHz), 1413 (1732.6MHz) and 1513 (1752.6MHz).

Note 5: The transmitter (Tx) frequency arrangement of the WCDMA Band II used by the EUT can be represented with the formula F(n)=1852.4+0.2*(n-9262), 9262<=n<=9538; the lowest, middle

and highest channel numbers (ARFCHs) used and tested in this report are separately 9262 (1852.4MHz), 9400 (1880MHz) and 9538 (1907.6MHz).

Note 6: All test modes and data rates were considered and evaluated respectively by performing full test. Test modes are chosen to be reported as the worst case below:

GSM mode and EDGE mode for GSM 850;

GSM mode and EDGE mode for GSM 1900;

WCDMA mode for WCDMA band V;

WCDMA mode for WCDMA band IV;

WCDMA mode for WCDMA band II;

Note 7: The EUT description presented in the report are provided by applicant and/or manufacturer, and the test laboratory is not responsible for the accuracy of the information. For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

1.3. Maximum E.R.P./E.I.R.P. and Emission Designator

Test Mode	Maximum E.R.P./E.I.R.P. (W)	Emission Designator
GSM850(GSM)	1.167	250KGXW
GSM850(EDGE)	0.228	247KG7W
GSM1900(GSM)	1.633	247KGXW
GSM1900(EDGE)	0.635	247KG7W
WCDMA Band V	0.125	4M16F9W
WCDMA Band IV	0.326	4M16F9W
WCDMA Band II	0.387	4M17F9W

1.4. Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 2, Part 22, Part 24 and Part 27 for the EUT FCC ID Certification:

No.	Identity	Document Title
1	47 CFR Part 2 (10-1-12 Edition)	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	47 CFR Part 22 (10-1-12 Edition)	Public Mobile Services
3	47 CFR Part 24 (10-1-12 Edition)	Personal Communications Services
4	47 CFR Part 27 (10-1-12 Edition)	Miscellaneous Wireless Communications Services

Test detailed items/section required by FCC rules and results are as below:

No.	Section	Description	Test Date	Test Engineer	Result	Remark
1	2.1046	Conducted RF Output Power	Jun. 10, 2025	Zheng Jianhua	PASS	/
2	24.232(d)	Peak -Average Ratio	May 27, 2025	Liu Huiyan	PASS	/
3	2.1049	Occupied Bandwidth	May 27, 2025	Liu Huiyan	PASS	/
4	2.1055, 22.355, 24.235, 27.54	Frequency Stability	Jun. 10, 2025	Liu Huiyan	PASS	/
5	2.1051, 22.917(a), 24.238(a), 27.53(h)	Conducted Out of Band Emissions	May 27, 2025	Liu Huiyan	PASS	/
6	2.1051, 22.917(a), 24.238(a), 27.53(h)	Band Edge	May 27, 2025	Liu Huiyan	PASS	/
7	22.913(a), 24.232(c) 27.50(d)	Transmitter Radiated Power (E.I.P.R./E.R.P.)	Jun. 10, 2025	Liu Huiyan	PASS$_{Note3}$	/
8	2.1051, 22.917(a), 24.238(a),	Radiated Out of Band Emissions	May 21, 2025	Wang Deyong	PASS	/

	27.53(h)					

Note 1: The tests were performed according to the method of measurements prescribed in KDB 971168 D01 v03r01 and ANSI/TIA-603-E-2016.
Note 2: Any additions, deviation, or exclusions from the method shall be noted in the "Remark".
Note 3: The antenna gain presented in the report are provided by applicant and/or manufacturer, and the test laboratory is not responsible for the accuracy of the information.

1.5. Environmental Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	15-35
Relative Humidity (%):	30-60
Atmospheric Pressure (kPa):	86-106

2. 47 CFR Part 2, Part 22H, 24E&27L Requirements

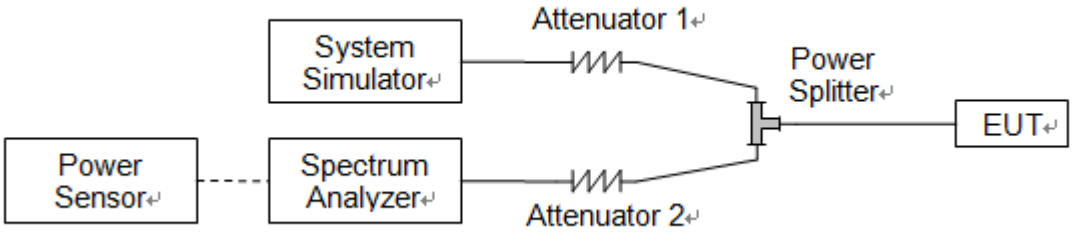
2.1. Conducted RF Output Power

2.1.1. Requirement

According to FCC section 2.1046(a), for transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in FCC section 2.1033(c)(8).

2.1.2. Test Description

Test Setup:



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power i.e. Power Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS.

2.1.3.Test Results

GSM850	Average Power (dBm)		
TX Channel	**128**	**189**	**251**
Frequency (MHz)	**824.2**	**836.4**	**848.8**
GSM 1 Tx slot	32.58	32.64	32.60
GPRS 1 Tx slot	32.60	32.66	32.62
GPRS 2 Tx slots	30.55	30.58	30.57
GPRS 3 Tx slots	28.52	28.59	28.49
GPRS 4 Tx slots	26.48	26.44	26.42
EDGE 1 Tx slot	25.51	25.57	25.54
EDGE 2 Tx slots	24.02	24.09	24.05
EDGE 3 Tx slots	21.48	21.53	21.51
EDGE 4 Tx slots	19.15	19.21	19.18

GSM1900	Average Power (dBm)		
TX Channel	**512**	**661**	**810**
Frequency (MHz)	**1850.2**	**1880**	**1909.8**
GSM 1 Tx slot	29.05	29.10	29.00
GPRS 1 Tx slot	29.09	29.12	29.02
GPRS 2 Tx slots	26.51	26.54	26.48
GPRS 3 Tx slots	24.75	24.79	24.69
GPRS 4 Tx slots	22.56	22.58	22.53
EDGE 1 Tx slot	24.96	25.02	24.95
EDGE 2 Tx slots	22.98	23.01	22.94
EDGE 3 Tx slots	20.93	20.97	20.91
EDGE 4 Tx slots	17.92	17.94	17.90

WCDMA Band V	Average Power (dBm)		
TX Channel	**4132**	**4182**	**4233**
Frequency (MHz)	**826.4**	**836.4**	**846.6**
RMC 12.2Kbps	22.92	22.96	22.94
HSDPA Subtest-1	21.75	21.87	22.01
HSDPA Subtest-2	21.74	21.61	21.56
HSDPA Subtest-3	21.40	21.31	21.26
HSDPA Subtest-4	21.29	21.17	21.16
HSUPA Subtest-1	22.45	22.66	22.80
HSUPA Subtest-2	22.45	22.63	22.79
HSUPA Subtest-3	22.42	22.65	22.83
HSUPA Subtest-4	22.41	22.57	22.73
HSUPA Subtest-5	22.44	22.65	22.80

WCDMA Band IV	Average Power (dBm)		
TX Channel	**1312**	**1413**	**1513**
Frequency (MHz)	**1712.4**	**1732.6**	**1752.6**
RMC 12.2Kbps	22.96	22.99	22.97
HSDPA Subtest-1	22.42	22.19	22.17
HSDPA Subtest-2	22.32	22.20	22.15
HSDPA Subtest-3	22.24	22.16	22.10
HSDPA Subtest-4	22.26	22.20	22.14
HSUPA Subtest-1	22.28	22.20	22.19
HSUPA Subtest-2	22.32	22.17	22.21
HSUPA Subtest-3	22.22	22.14	22.15
HSUPA Subtest-4	22.32	22.15	22.19
HSUPA Subtest-5	22.26	22.16	22.18

WCDMA Band II	Average Power (dBm)		
TX Channel	**9262**	**9400**	**9538**
Frequency (MHz)	**1852.4**	**1880.0**	**1907.6**
RMC 12.2Kbps	23.05	23.08	23.00
HSDPA Subtest-1	22.55	22.43	22.43
HSDPA Subtest-2	22.30	22.42	22.38
HSDPA Subtest-3	22.46	22.31	22.17
HSDPA Subtest-4	22.15	22.00	22.20
HSUPA Subtest-1	22.77	22.57	22.29
HSUPA Subtest-2	22.75	22.46	22.38
HSUPA Subtest-3	22.74	22.48	22.33
HSUPA Subtest-4	22.70	22.51	22.42
HSUPA Subtest-5	22.86	22.52	22.40

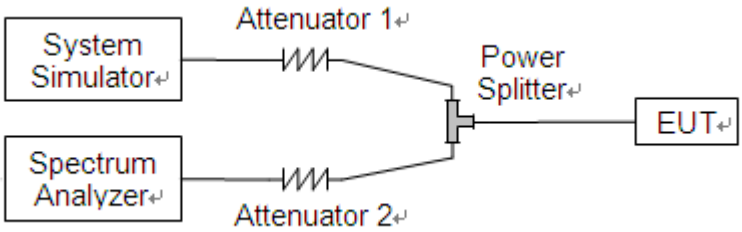
2.2. Peak to Average Ratio

2.2.1.Requirement

According to FCC 24.232(d) and 27.50(d), the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

2.2.2.Test Description

Test Setup:



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power i.e. Power Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS.

2.2.3.Test procedure

1. For GSM/EDGE operating mode:

a. Set RBW=1MHz, VBW=3MHz, peak detector in spectrum analyzer.

b. Set EUT in maximum output power, and triggered the bust signal.

c. Measured respectively the peak level and mean level, and the deviation was recorded as Peak to Average ratio.

2. For UMTS operating mode:

a. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.

b. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1%.

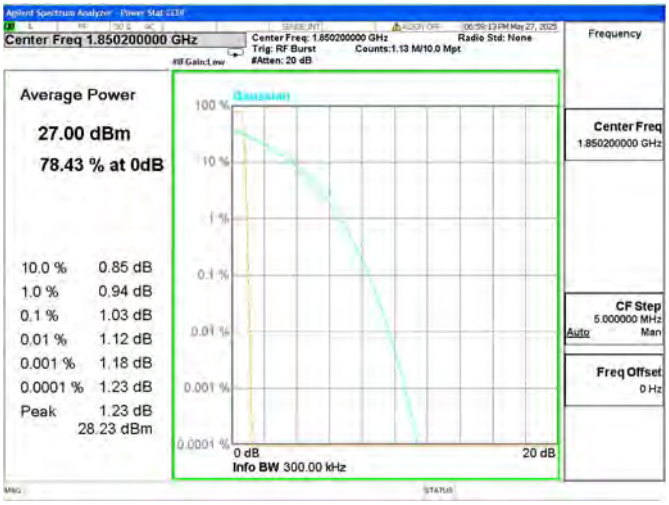
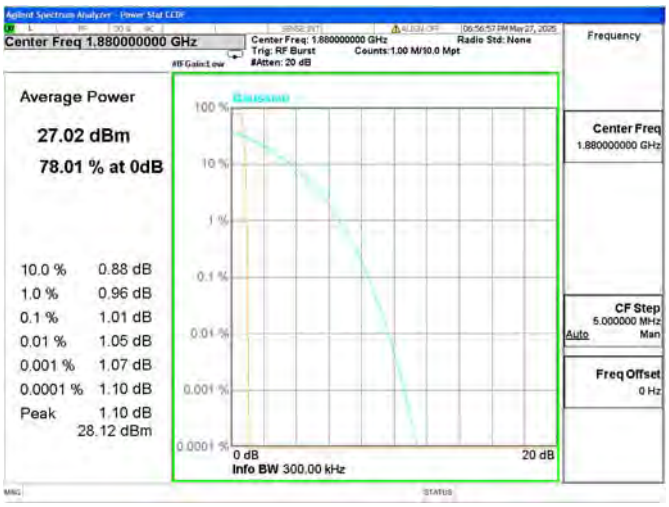
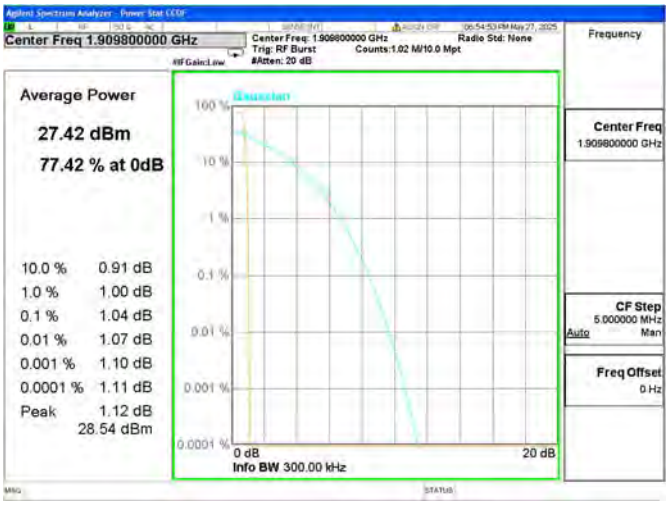
2.2.4.Test Result

A. Test Verdict:

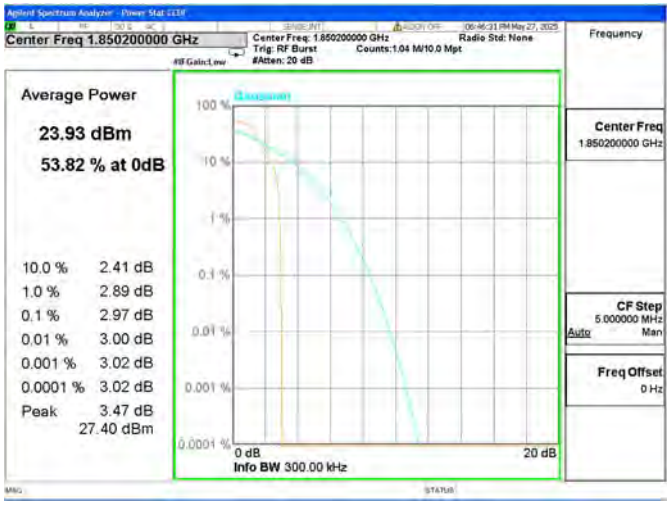
GSM1900					
Mode	**Channel**	**Frequency (MHz)**	**Peak to Average ratio (dB)**	**Limit (dB)**	**Verdict**
GSM	512	1850.2	1.03	13	PASS
	661	1880.0	1.01		PASS
	810	1909.8	1.04		PASS
EDGE	512	1850.2	2.97		PASS
	661	1880.0	2.95		PASS
	810	1909.8	3.04		PASS

WCDMA Band IV					
Mode	**Channel**	**Frequency (MHz)**	**Peak to Average ratio (dB)**	**Limit (dB)**	**Verdict**
WCDMA	1312	1712.4	2.70	13	PASS
	1413	1732.6	2.98		PASS
	1513	1752.6	2.65		PASS

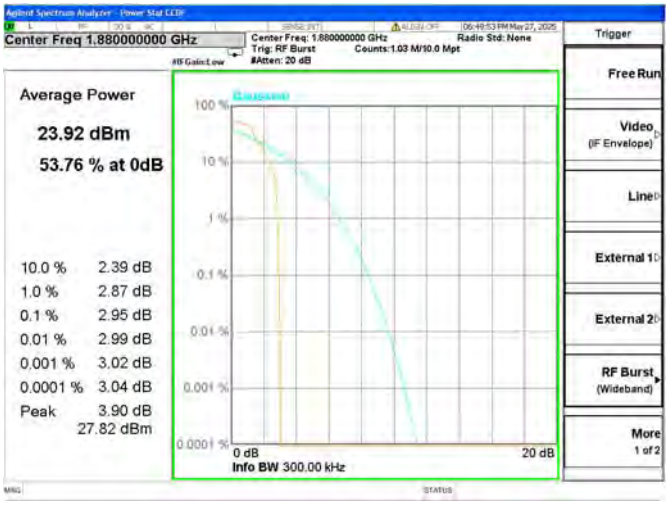
WCDMA Band II					
Mode	**Channel**	**Frequency (MHz)**	**Peak to Average ratio (dB)**	**Limit (dB)**	**Verdict**
WCDMA	9262	1852.4	3.10	13	PASS
	9400	1880.0	3.03		PASS
	9538	1907.6	3.15		PASS

GSM1900(GSM), CH512, 1850.2MHz	GSM1900(GSM), CH661, 1880.0MHz
	
GSM1900(GSM), CH810, 1909.8MHz	
	

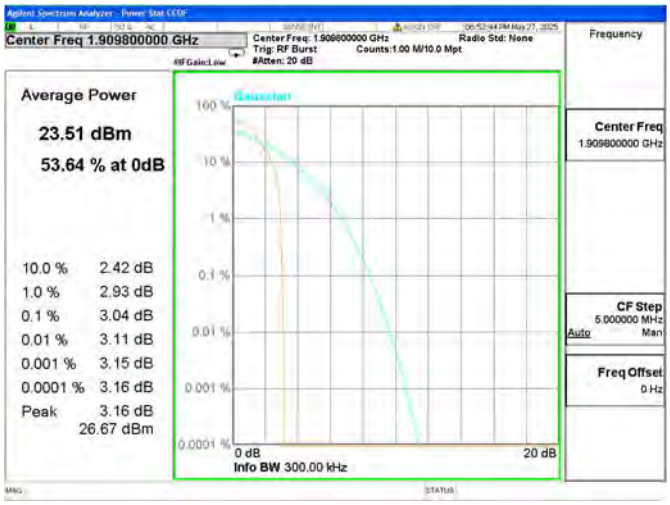
GSM1900(EDGE), CH512, 1850.2MHz

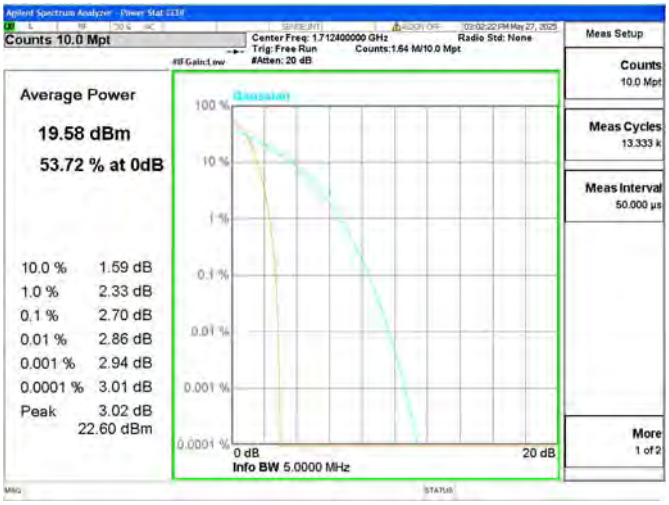
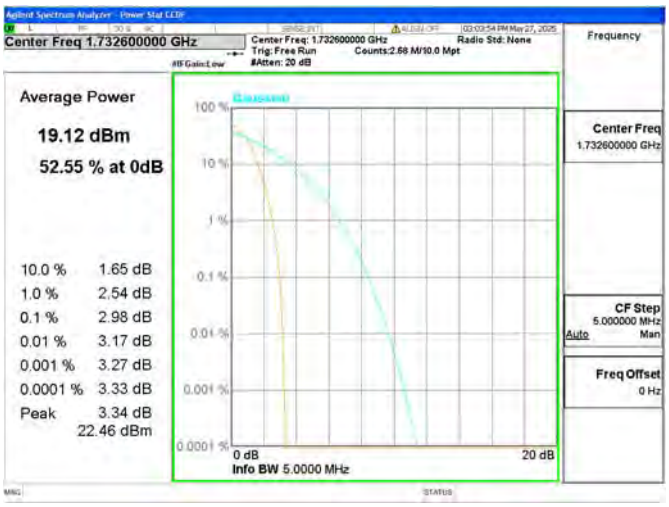
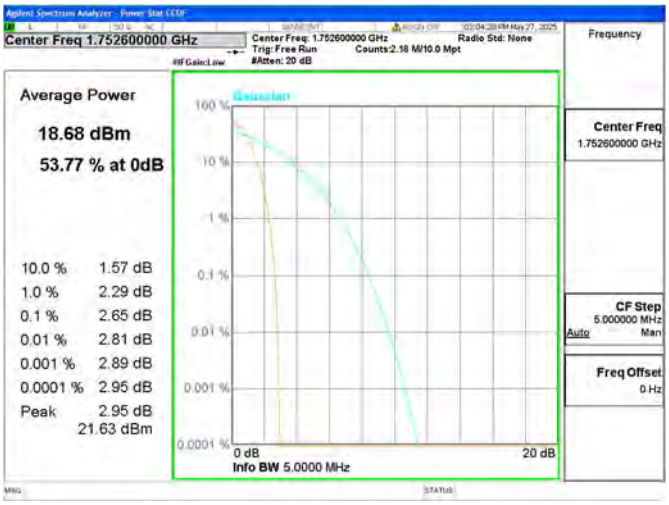


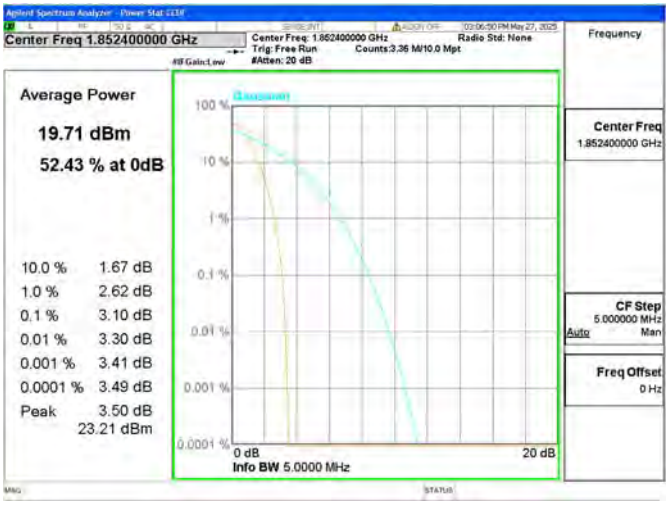
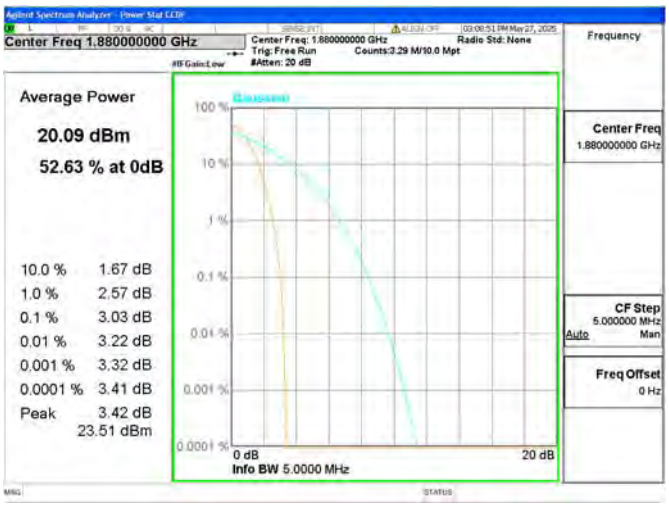
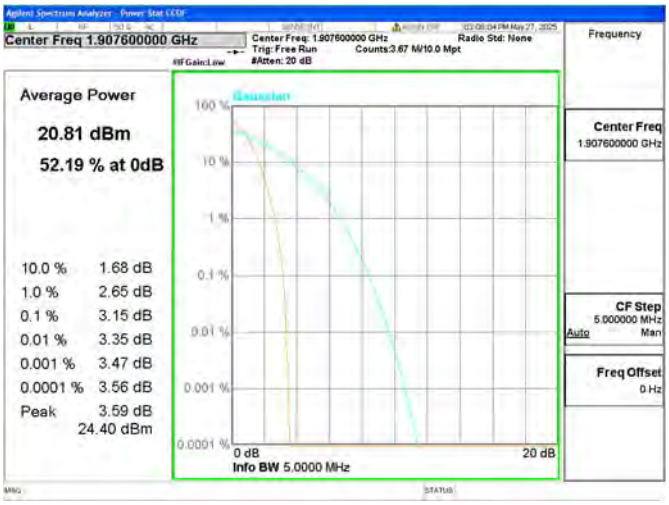
GSM1900(EDGE), CH661, 1880.0MHz



GSM1900(EDGE), CH810, 1909.8MHz



WCDMA Band IV, CH1312, 1712.4MHz	WCDMA Band IV, CH1413, 1732.6MHz
	
WCDMA Band IV, CH1513, 1752.6MHz	
	

WCDMA Band II, CH9262, 1852.4MHz	WCDMA Band II, CH9400, 1880.0MHz
	
WCDMA Band II, CH9538, 1907.6MHz	
	

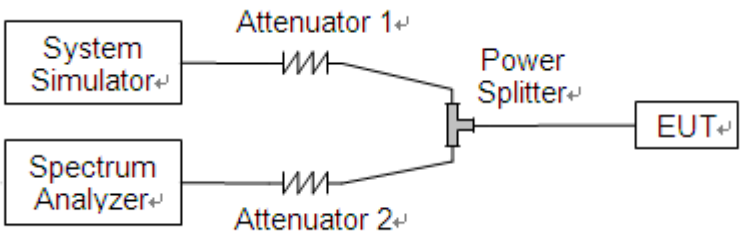
2.3. Occupied Bandwidth

2.3.1.Requirement

According to FCC section 2.1049, the occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission. Occupied bandwidth is also known as the 99% emission bandwidth.

2.3.2.Test Description

Test Setup:



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2.3.3.Test Result

GSM850				
Mode	**Channel**	**Frequency (MHz)**	**99% Occupied Bandwidth (kHz)**	**26dB Bandwidth (kHz)**
GSM	128	824.2	250.26	311.70
	189	836.4	245.39	316.70
	251	848.8	245.95	311.60
EDGE	128	824.2	246.89	311.50
	189	836.4	243.19	312.80
	251	848.8	240.97	311.70

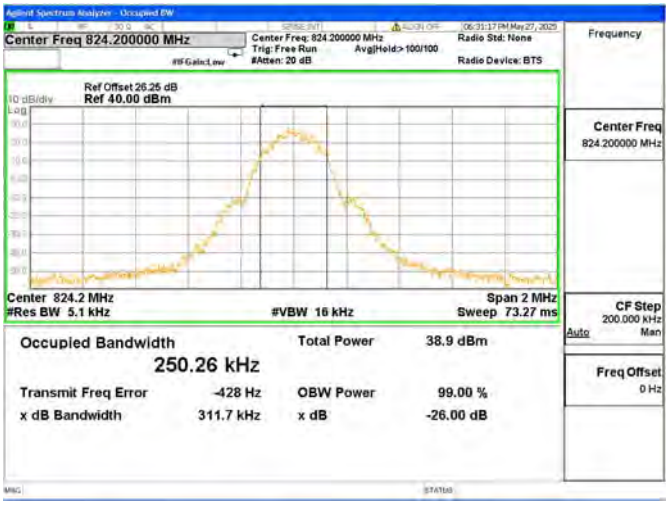
GSM1900				
Mode	**Channel**	**Frequency (MHz)**	**99% Occupied Bandwidth (kHz)**	**26dB Bandwidth (kHz)**
GSM	512	1850.2	246.62	310.10
	661	1880.0	244.23	320.00
	810	1909.8	244.28	302.80
EDGE	512	1850.2	246.68	307.70
	661	1880.0	246.39	314.60
	810	1909.8	239.22	307.10

WCDMA Band V				
Mode	**Channel**	**Frequency (MHz)**	**99% Occupied Bandwidth (MHz)**	**26dB Bandwidth (MHz)**
WCDMA	4132	826.4	4.16	4.68
	4182	836.4	4.16	4.69
	4233	846.6	4.16	4.68

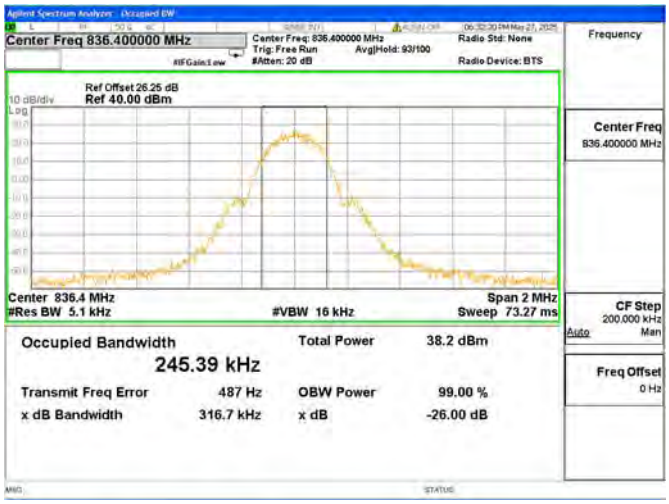
WCDMA Band IV				
Mode	**Channel**	**Frequency (MHz)**	**99% Occupied Bandwidth (MHz)**	**26dB Bandwidth (MHz)**
WCDMA	1312	1712.4	4.15	4.71
	1413	1732.6	4.14	4.69
	1513	1752.6	4.16	4.70

WCDMA Band II				
Mode	**Channel**	**Frequency (MHz)**	**99% Occupied Bandwidth (MHz)**	**26dB Bandwidth (MHz)**
WCDMA	9262	1852.4	4.16	4.69
	9400	1880.0	4.14	4.67
	9538	1907.6	4.17	4.68

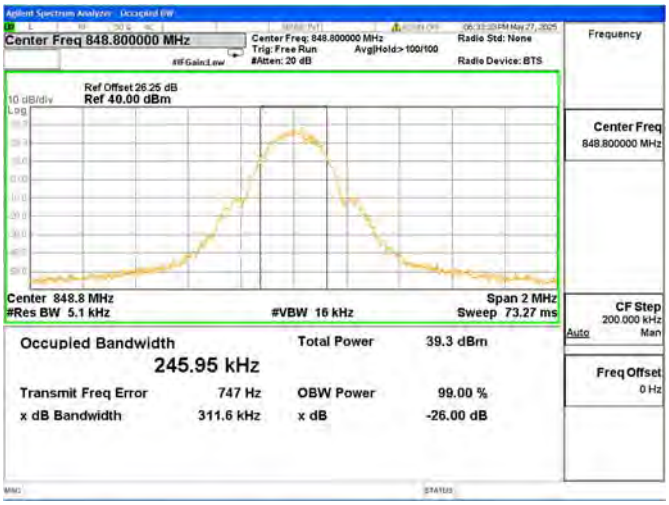
GSM850(GSM), CH128, 824.2MHz



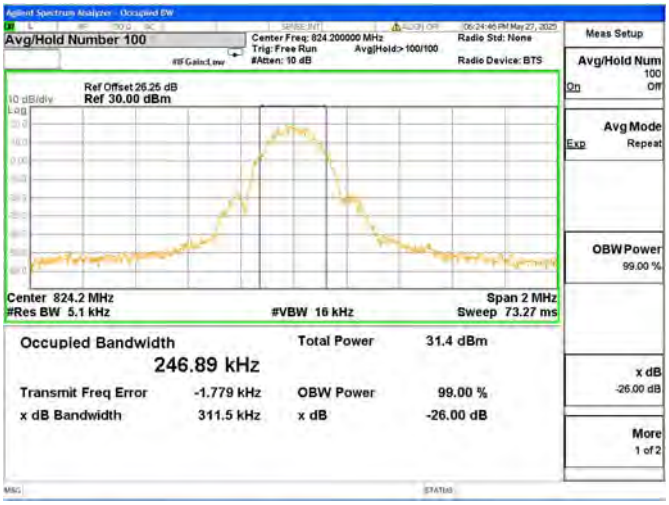
GSM850(GSM), CH189, 836.4MHz



GSM850(GSM), CH251, 848.8MHz

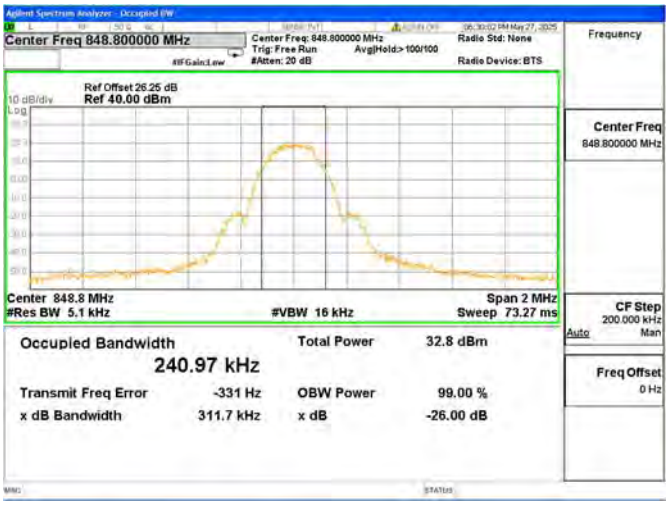


GSM850(EDGE), CH128, 824.2MHz

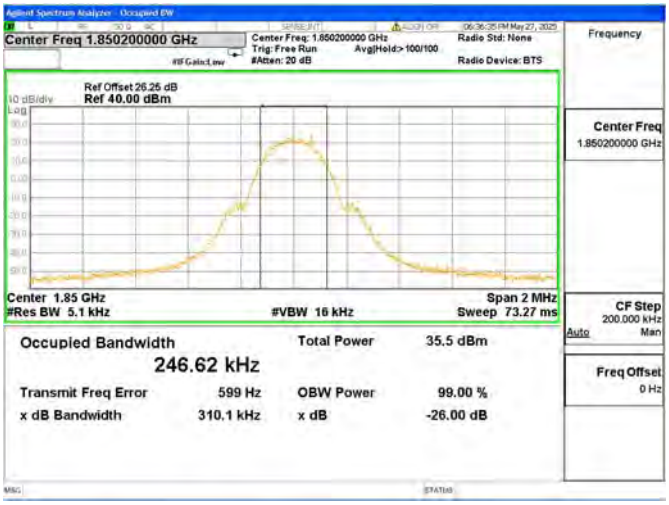


GSM850(EDGE), CH189, 836.4MHz

GSM850(EDGE), CH251, 848.8MHz

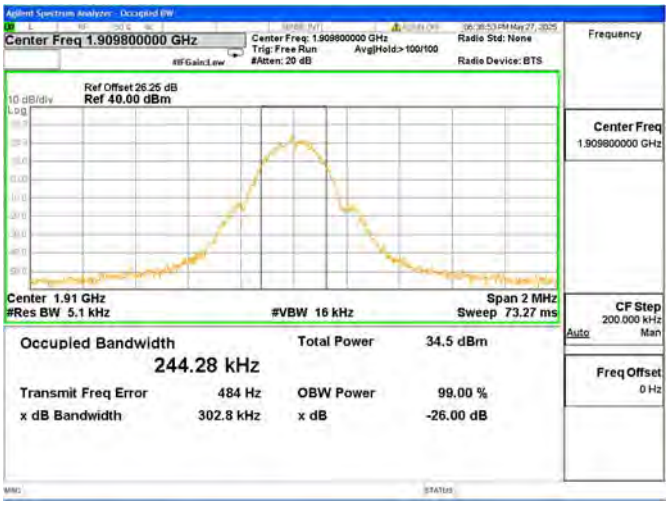


GSM1900(GSM), CH512, 1850.2MHz

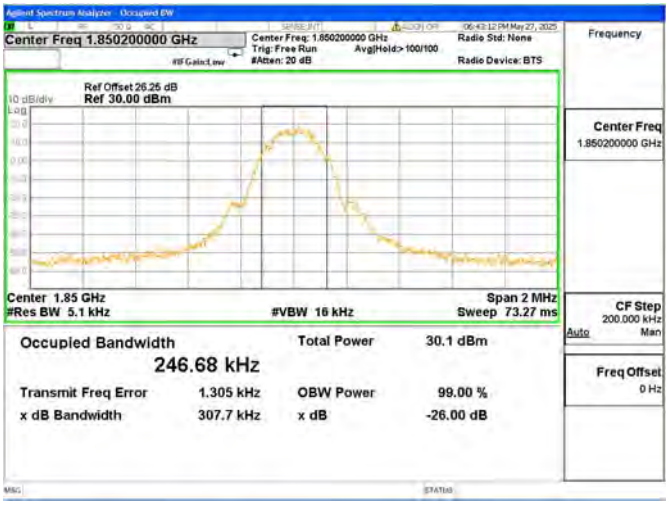


GSM1900(GSM), CH661, 1880.0MHz

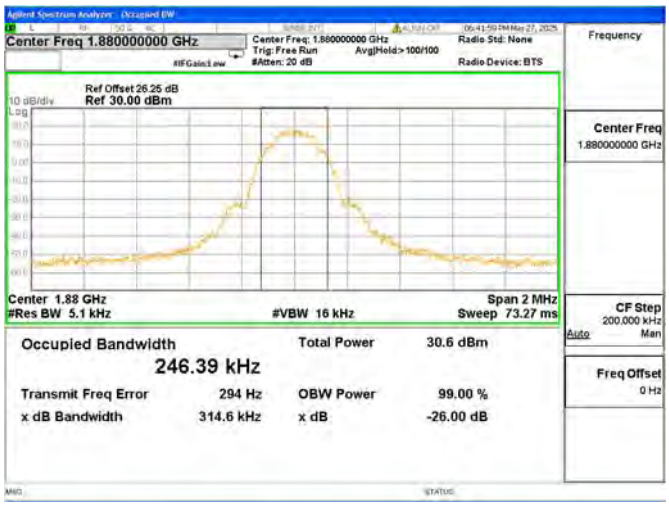
GSM1900(GSM), CH810, 1909.8MHz



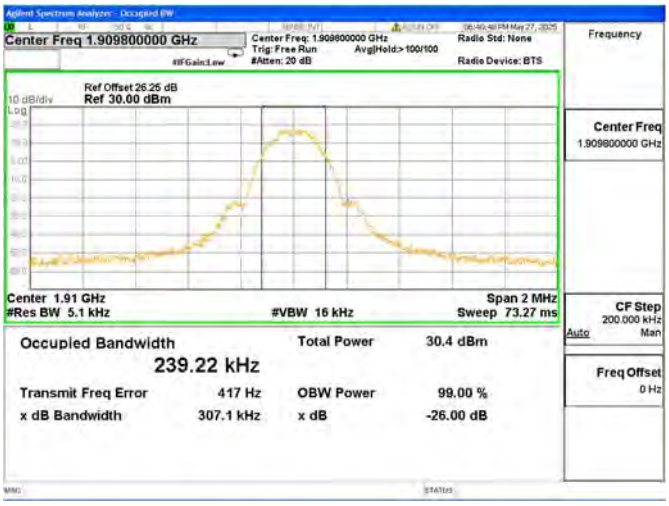
GSM1900(EDGE), CH512, 1850.2MHz

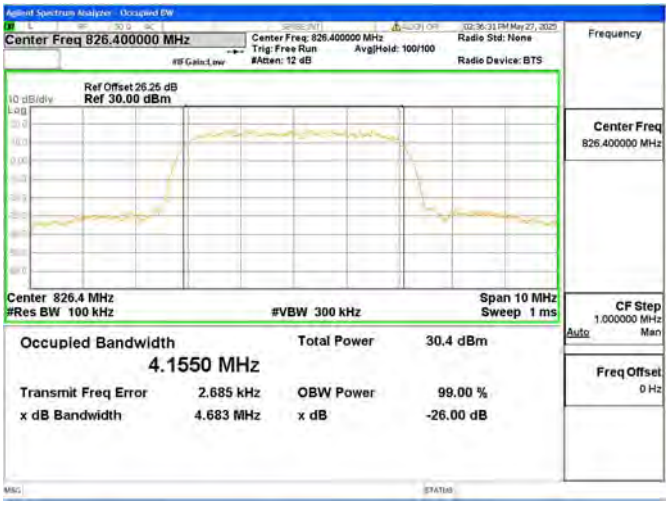
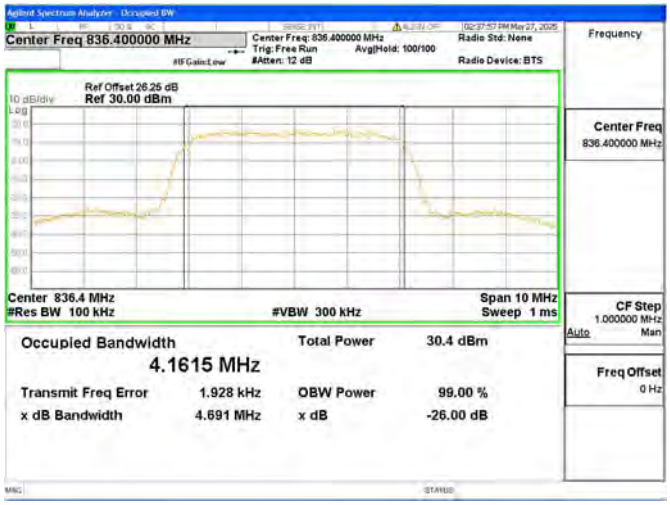
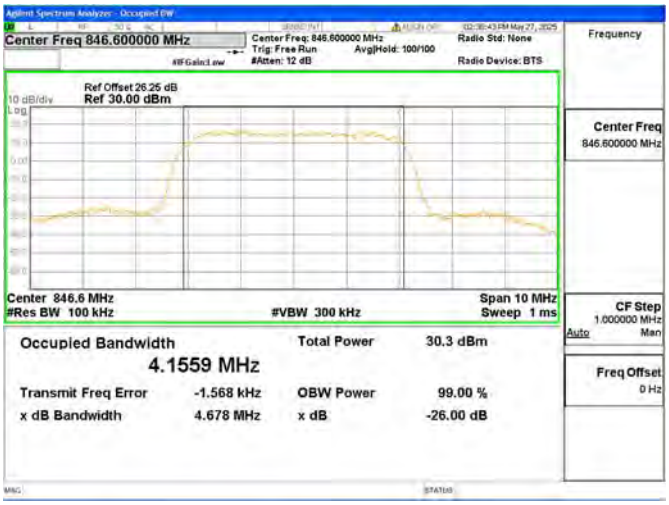


GSM1900(EDGE), CH661, 1880.0MHz



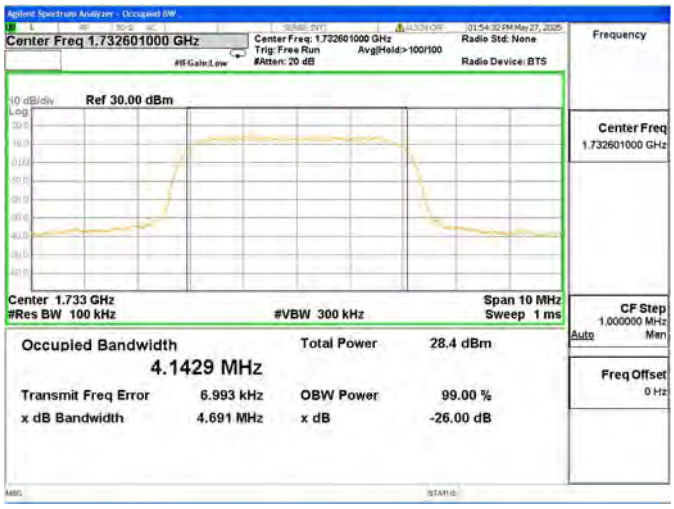
GSM1900(EDGE), CH810, 1909.8MHz



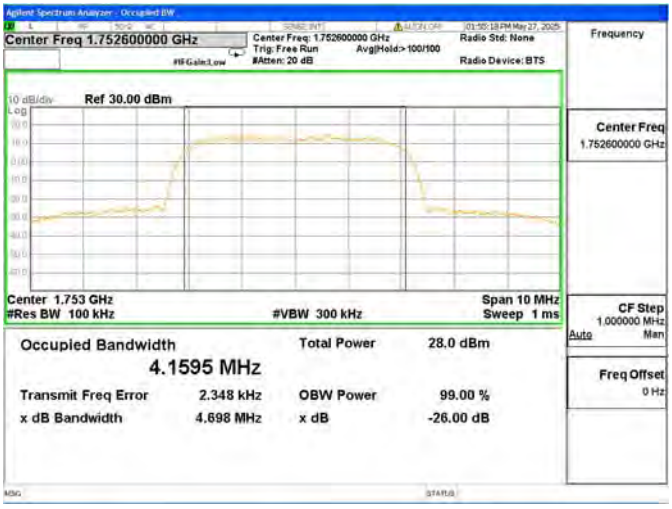
WCDMA Band V, CH4132, 826.4MHz	WCDMA Band V, CH4182, 836.4MHz
	
WCDMA Band V, CH4233, 846.6MHz	
	

WCDMA Band IV, CH1312, 1712.4MHz

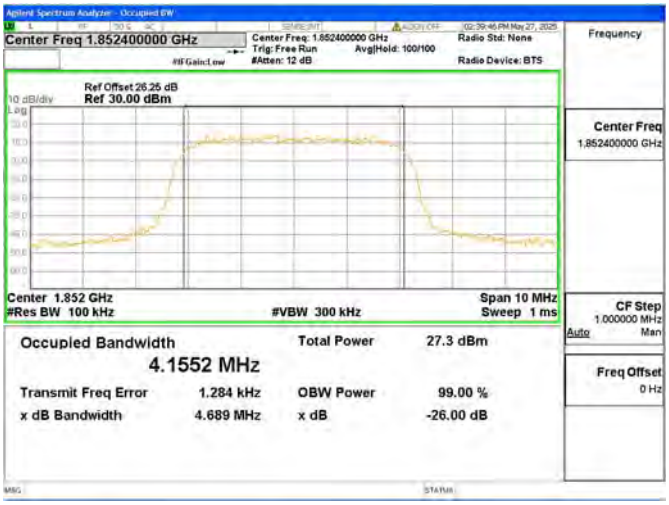
WCDMA Band IV, CH1413, 1732.6MHz



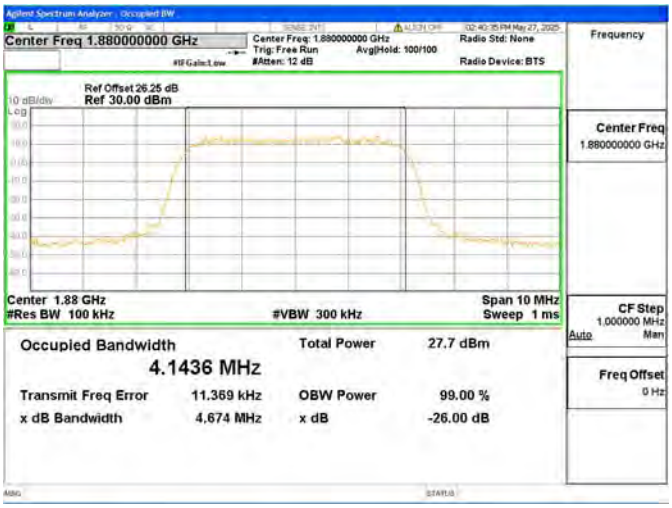
WCDMA Band IV, CH1513, 1752.6MHz



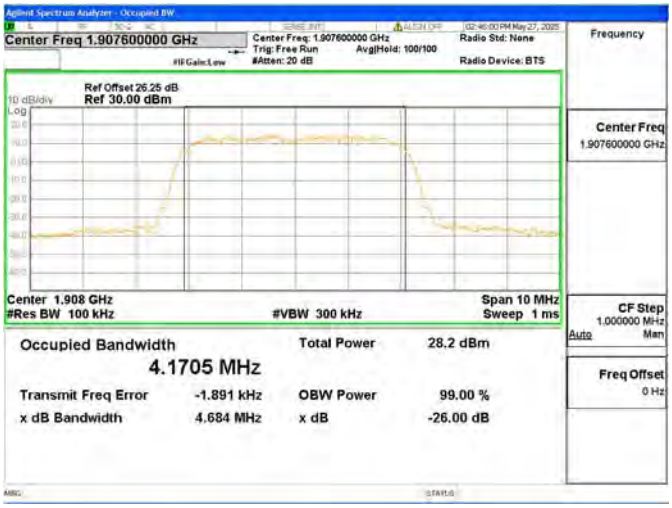
WCDMA Band II, CH9262, 1852.4MHz



WCDMA Band II, CH9400, 1880.0MHz



WCDMA Band II, CH9538, 1907.6MHz



2.4. Frequency Stability

2.4.1.Requirement

According to FCC section 22.355, 24.235 and 27.54 the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. According to FCC section 2.1055, the test conditions are:

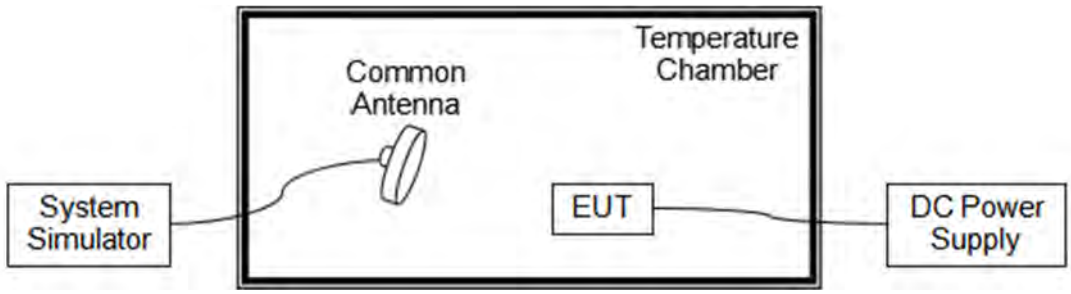
(a) The temperature is varied from-30°C to +50°C at intervals of not more than 10°C.

(b) For hand carried battery powered equipment, the primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacture. The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

Note: The operating temperature of EUT is from -20°C to 55°C, which are specified by the applicant.

2.4.2.Test Description

Test Setup:



The EUT, which is powered by the DC Power Supply directly, is located in the Temperature Chamber. The EUT is commanded by the System Simulator (SS) to operate at the maximum output power i.e. Power Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS via a Common Antenna.

2.4.3.Test Result

The nominal, highest and lowest extreme voltages are separately 3.80V, 4.35V and 3.55V, which are specified by the applicant; the normal temperature here used is 20°C.

GSM850(GSM), CH189, 836.4MHz Limit =±2.5ppm					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.80	+20(Ref)	34	0.041	PASS
Normal		-20	30	0.036	
Normal		-10	24	0.029	
Normal		0	-28	-0.033	
Normal		+10	15	0.018	
Normal		+20	-54	-0.065	
Normal		+30	21	0.025	
Normal		+40	29	0.035	
Normal		+50	16	0.019	
Normal		+55	22	0.026	
High	4.35	+20	-13	-0.016	
BATT.ENDPOINT	3.55	+20	-34	-0.041	

GSM850(EDGE), CH189, 836.4MHz Limit =±2.5ppm					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.80	+20(Ref)	31	0.037	PASS
Normal		-20	56	0.067	
Normal		-10	14	0.017	
Normal		0	46	0.055	
Normal		+10	31	0.037	
Normal		+20	36	0.043	
Normal		+30	38	0.045	
Normal		+40	-46	-0.055	
Normal		+50	-34	-0.041	
Normal		+55	51	0.061	
High	4.35	+20	-21	-0.025	
BATT.ENDPOINT	3.55	+20	-49	-0.059	

GSM1900(GSM), CH661, 1880.0MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.80	+20(Ref)	36	0.019	PASS
Normal		-20	-25	-0.013	
Normal		-10	48	0.026	
Normal		0	36	0.019	
Normal		+10	-23	-0.012	
Normal		+20	22	0.012	
Normal		+30	-46	-0.024	
Normal		+40	42	0.022	
Normal		+50	27	0.014	
Normal		+55	24	0.013	
High	4.35	+20	42	0.022	
BATT.ENDPOINT	3.55	+20	-26	-0.014	

GSM1900(EDGE), CH661, 1880.0MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.80	+20(Ref)	-45	-0.024	PASS
Normal		-20	44	0.023	
Normal		-10	48	0.026	
Normal		0	18	0.010	
Normal		+10	27	0.014	
Normal		+20	-57	-0.030	
Normal		+30	-53	-0.028	
Normal		+40	56	0.030	
Normal		+50	52	0.028	
Normal		+55	-23	-0.012	
High	4.35	+20	49	0.026	
BATT.ENDPOINT	3.55	+20	23	0.012	

WCDMA Band V, CH4182, 836.4MHz Limit =±2.5ppm					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.80	+20(Ref)	34	0.041	PASS
Normal		-20	-48	-0.057	
Normal		-10	-40	-0.048	
Normal		0	-43	-0.051	
Normal		+10	33	0.039	
Normal		+20	-51	-0.061	
Normal		+30	22	0.026	
Normal		+40	50	0.060	
Normal		+50	31	0.037	
Normal		+55	42	0.050	
High	4.35	+20	-49	-0.059	
BATT.ENDPOINT	3.55	+20	-21	-0.025	

WCDMA Band IV, CH1413, 1732.6MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.80	+20(Ref)	52	0.030	PASS
Normal		-20	16	0.009	
Normal		-10	45	0.026	
Normal		0	-41	-0.024	
Normal		+10	-34	-0.020	
Normal		+20	24	0.014	
Normal		+30	-20	-0.012	
Normal		+40	21	0.012	
Normal		+50	52	0.030	
Normal		+55	26	0.015	
High	4.35	+20	36	0.021	
BATT.ENDPOINT	3.55	+20	-47	-0.027	

WCDMA Band II, CH9400, 1880.0MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.80	+20(Ref)	-17	-0.009	PASS
Normal		-20	45	0.024	
Normal		-10	18	0.010	
Normal		0	14	0.007	
Normal		+10	-31	-0.016	
Normal		+20	56	0.030	
Normal		+30	26	0.014	
Normal		+40	46	0.024	
Normal		+50	51	0.027	
Normal		+55	47	0.025	
High	4.35	+20	23	0.012	
BATT.ENDPOINT	3.55	+20	-59	-0.031	

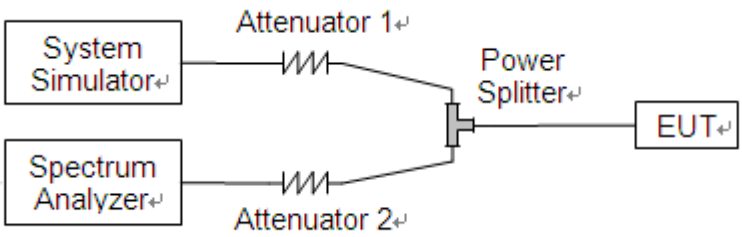
2.5. Conducted Out of Band Emissions

2.5.1. Requirement

According to FCC section 22.917(a), 24.238(a) and 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. This calculated to be -13dBm. The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency.

2.5.2. Test Description

Test Setup:



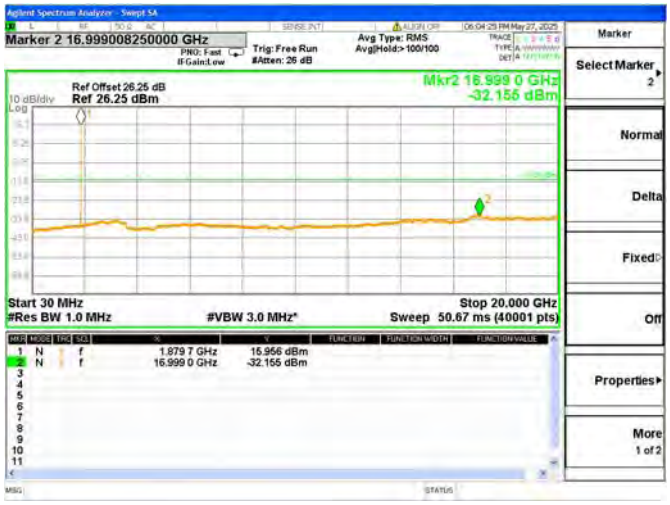
The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power i.e. Power Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS.

2.5.3.Test Result

GSM850(GSM), CH128, 824.2MHz	GSM850(GSM), CH189, 836.4MHz
GSM850(GSM), CH251, 848.8MHz	

GSM850(EDGE), CH128, 824.2MHz	GSM850(EDGE), CH189, 836.4MHz
GSM850(EDGE), CH251, 848.8MHz	

GSM1900(GSM), CH512, 1850.2MHz	GSM1900(GSM), CH661, 1880.0MHz
GSM1900(GSM), CH810, 1909.8MHz	

GSM1900(EDGE), CH512, 1850.2MHz	GSM1900(EDGE), CH661, 1880.0MHz
	
GSM1900(EDGE), CH810, 1909.8MHz	

WCDMA Band V, CH4132, 826.4MHz	WCDMA Band V, CH4182, 836.4MHz
WCDMA Band V, CH4233, 846.6MHz	

WCDMA Band IV,CH1312, 1712.4MHz	WCDMA Band IV, CH1413, 1732.6MHz
WCDMA Band IV, CH1513, 1752.6MHz	

WCDMA Band II, CH9262, 1852.4MHz	WCDMA Band II, CH9400, 1880.0MHz
WCDMA Band II, CH9538, 1907.6MHz	

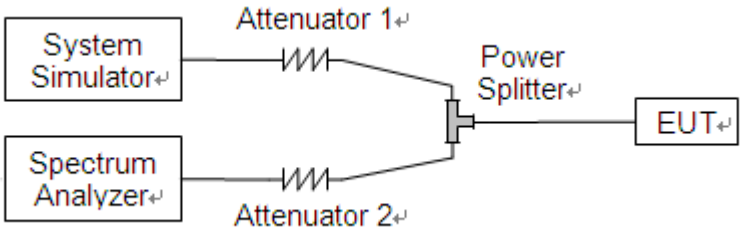
2.6. Band Edge

2.6.1.Requirement

According to FCC section 22.917(a), 24.238(a) and 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.

2.6.2.Test Description

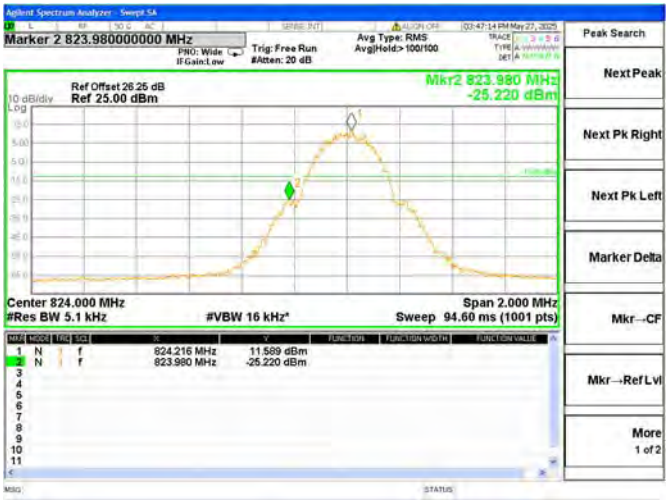
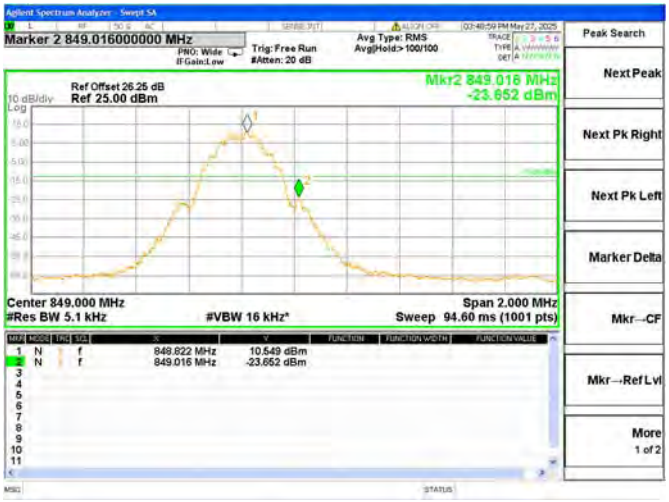
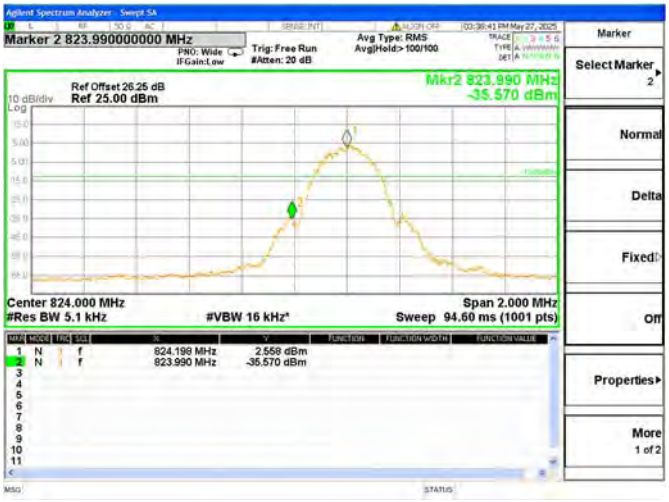
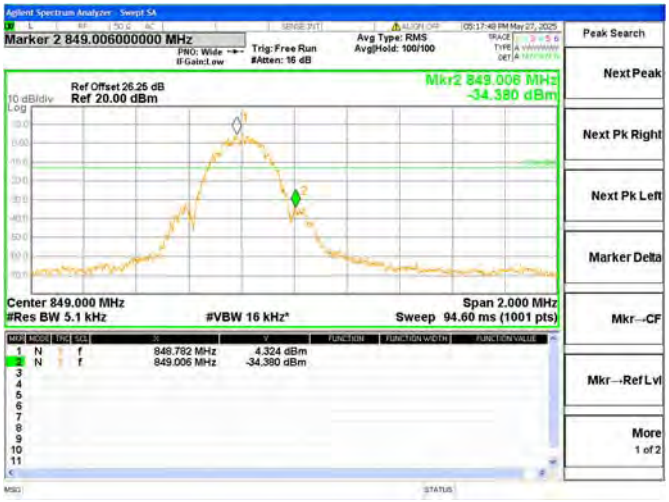
Test Setup:



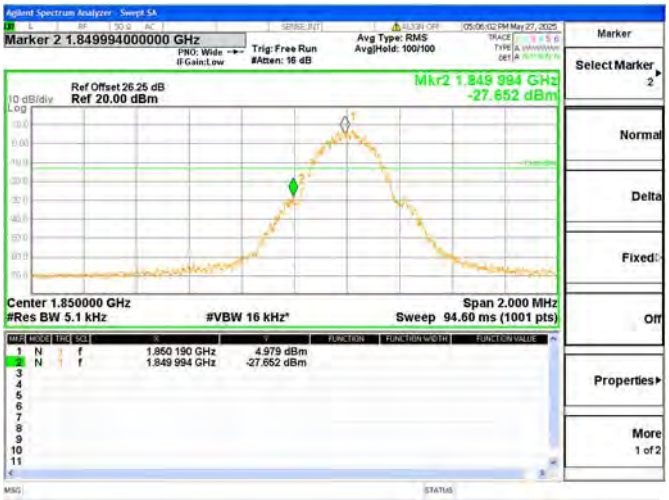
The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power i.e. Power Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS.

2.6.3.Test Result

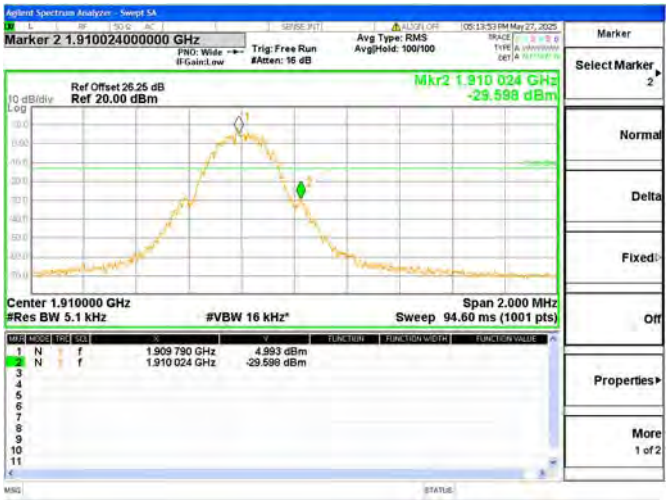
The lowest and highest channels are tested to verify the band edge emissions.

GSM850(GSM), CH128, 824.2MHz	GSM850(GSM), CH251, 848.8MHz
	
GSM850(EDGE), CH128, 824.2MHz	**GSM850(EDGE), CH251, 848.8MHz**
	

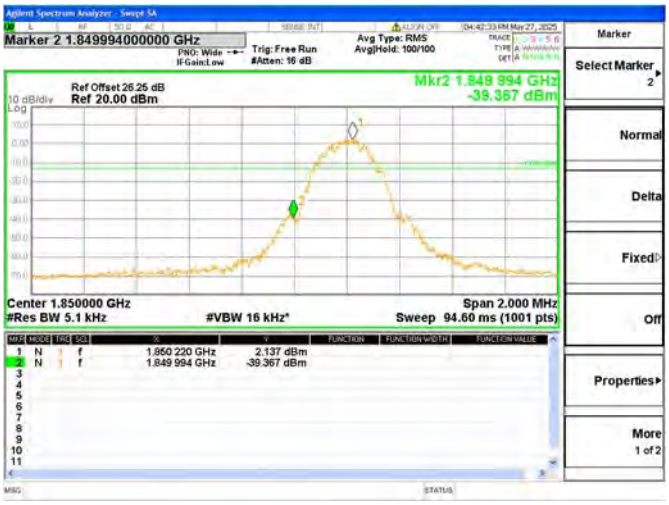
GSM1900(GSM), CH512, 1850.2MHz



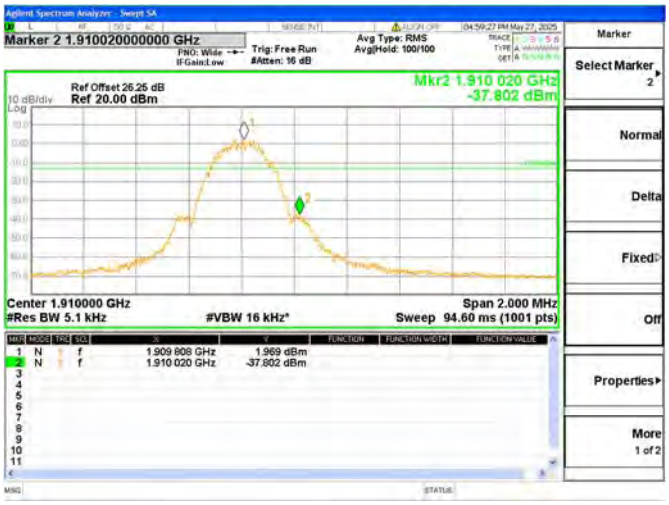
GSM1900(GSM), CH810, 1909.8MHz



GSM1900(EDGE), CH512, 1850.2MHz



GSM1900(EDGE), CH810, 1909.8MHz



WCDMA Band V, CH4132, 826.4MHz

WCDMA Band V, CH4233, 846.6MHz

WCDMA Band IV, CH1312, 1712.4MHz

WCDMA Band IV, CH1513, 1752.6MHz

WCDMA Band II, CH9262, 1852.4MHz

WCDMA Band II, CH9538, 1907.6MHz

2.7. Determining E.R.P. and/or E.I.R.P. from conducted RF output power measurements

2.7.1. Requirement

According to FCC section 22.913, the Effective Radiated Power (E.R.P.) of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.
According to FCC section 24.232, the broadband PCS mobile station is limited to 2 Watts e.i.r.p. peak power.
According to FCC section 27.50, mobile, and portable (hand-held) stations is limited to 1 Watts e.i.r.p. peak power.

2.7.2. Test Description

The test setups refer to section 2.1.3
A call is established between the EUT and the SS via a Common Antenna. The EUT is commanded by the SS to operate at the maximum and minimum output power (i.e. GSM850MHz band Power Control Level (PCL) = 5/19 and Power Class = 4, GSM1900MHz band Power Control Level (PCL) = 0/15 and Power Class = 1), and only the test result of the maximum output power was recorded. Please refer to section 2.1.3 of this report.
The relevant equation for determining the maximum E.R.P. or E.I.R.P. from the measured RF output power is given in Equation (1) as follows:
E.R.P. or E.I.R.P. = $P_{Meas} + G_T$
Where:
E.R.P. or E.I.R.P. effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas}, e.g., dBm or dBW)
P_{Meas} measured transmitter output power or PSD, in dBm or dBW
G_T gain of the transmitting antenna, in dBd (E.R.P.) or dBi (E.I.R.P.)
For devices utilizing multiple antennas, see ANSI C63.25-2015 6.4 for guidance with respect to determining the effective array transmit antenna gain term to be used in the above equation.
The following equations demonstrate the mathematical relationship between E.R.P. and E.I.R.P.:
a) E.R.P. = E.I.R.P. − 2.15, where E.R.P. and E.I.R.P. are expressed in consistent units.
b) E.I.R.P. = E.R.P. + 2.15, where E.R.P. and E.I.R.P. are expressed in consistent units.

2.7.3.Test Result

GSM850								
Band	Channel	Frequency (MHz)	PCL	Measured E.R.P.		Limit		Verdict
				dBm	W	dBm	W	
GSM	128	824.20	5	30.59	1.146	38.5	7	PASS
	189	836.40	5	30.65	1.161			PASS
	251	848.80	5	30.61	1.151			PASS
GPRS	128	824.20	5	30.61	1.151	38.5	7	PASS
	189	836.40	5	30.67	1.167			PASS
	251	848.80	5	30.63	1.156			PASS
EDGE	128	824.20	5	23.52	0.225	38.5	7	PASS
	189	836.40	5	23.58	0.228			PASS
	251	848.80	5	23.55	0.226			PASS
Note 1: For the GPRS and EDGE mode, all the slots were tested and just the worst data were recorded in this report.								

GSM1900								
Band	Channel	Frequency (MHz)	PCL	Measured E.I.R.P.		Limit		Verdict
				dBm	W	dBm	W	
GSM	512	1850.2	0	32.06	1.607	33	2	PASS
	661	1880.0	0	32.11	1.626			PASS
	810	1909.8	0	32.01	1.589			PASS
GPRS	512	1850.2	0	32.10	1.622	33	2	PASS
	661	1880.0	0	32.13	1.633			PASS
	810	1909.8	0	32.03	1.596			PASS
EDGE	512	1850.2	0	27.97	0.627	33	2	PASS
	661	1880.0	0	28.03	0.635			PASS
	810	1909.8	0	27.96	0.625			PASS
Note 1: For the GPRS and EDGE mode, all the slots were tested and just the worst data were recorded in this report.								

WCDMA Band V							
Band	Channel	Frequency (MHz)	Measured E.R.P.		Limit		Verdict
			dBm	W	dBm	W	
WCDMA	4132	826.4	20.93	0.124	38.5	7	PASS
	4182	836.4	20.97	0.125			PASS
	4233	846.6	20.95	0.124			PASS
HSDPA	4132	826.4	19.76	0.095	38.5	7	PASS
	4182	836.4	19.88	0.097			PASS
	4233	846.6	20.02	0.100			PASS
HSUPA	4132	826.4	20.46	0.111	38.5	7	PASS
	4182	836.4	20.67	0.117			PASS
	4233	846.6	20.84	0.121			PASS
HSUP+	4132	826.4	20.74	0.119	38.5	7	PASS
	4182	836.4	20.91	0.123			PASS
	4233	846.6	20.85	0.122			PASS
Note 1: For the HSDPA and HSUPA mode, all the subtests were tested and just the worst data were recorded in this report.							

WCDMA Band IV							
Band	Channel	Frequency (MHz)	Measured E.I.R.P.		Limit		Verdict
			dBm	W	dBm	W	
WCDMA	1312	1712.4	25.10	0.324	30	1	PASS
	1413	1732.6	25.13	0.326			PASS
	1513	1752.6	25.11	0.324			PASS
HSDPA	1312	1712.4	24.56	0.286	30	1	PASS
	1413	1732.6	24.34	0.272			PASS
	1513	1752.6	24.31	0.270			PASS
HSUPA	1312	1712.4	24.46	0.279	30	1	PASS
	1413	1732.6	24.34	0.272			PASS
	1513	1752.6	24.35	0.272			PASS
HSUP+	1312	1712.4	24.13	0.259	30	1	PASS
	1413	1732.6	24.10	0.257			PASS
	1513	1752.6	24.03	0.253			PASS
Note 1: For the HSDPA and HSUPA mode, all the subtests were tested and just the worst data were recorded in this report.							

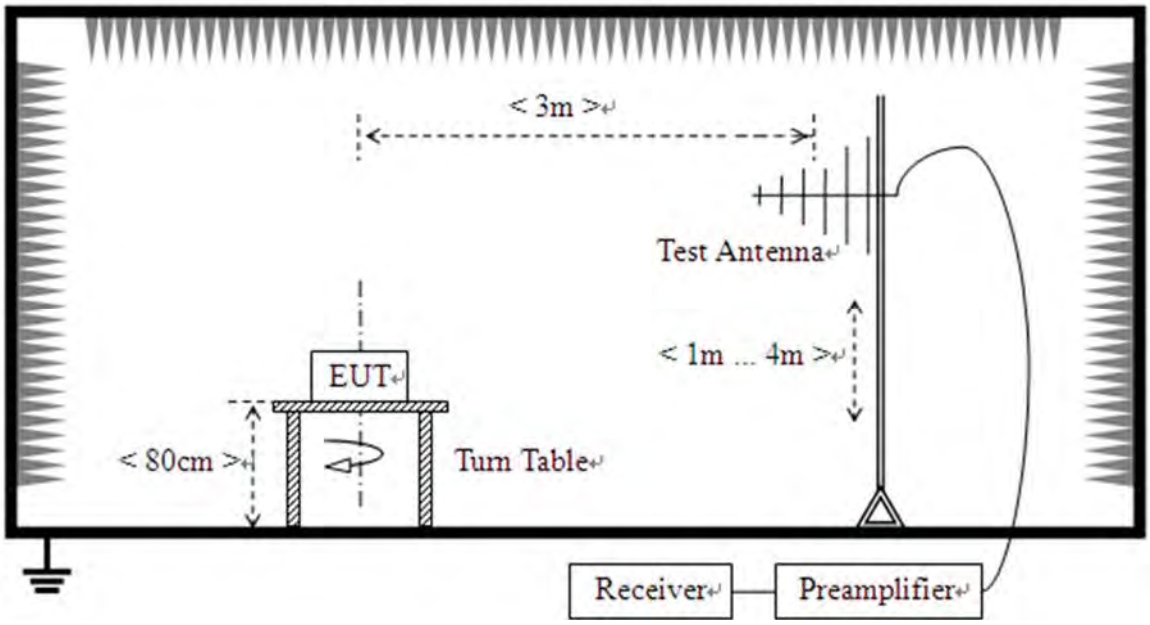
WCDMA Band II							
Band	Channel	Frequency (MHz)	Measured E.I.R.P.		Limit		Verdict
			dBm	W	dBm	W	
WCDMA	9262	1852.4	25.85	0.385	33	2	PASS
	9400	1880.0	25.88	0.387			PASS
	9538	1907.6	25.80	0.380			PASS
HSDPA	9262	1852.4	25.35	0.343	33	2	PASS
	9400	1880.0	25.23	0.333			PASS
	9538	1907.6	25.23	0.333			PASS
HSUPA	9262	1852.4	25.66	0.368	33	2	PASS
	9400	1880.0	25.37	0.344			PASS
	9538	1907.6	25.22	0.333			PASS
HSUP+	9262	1852.4	25.50	0.355	33	2	PASS
	9400	1880.0	25.25	0.335			PASS
	9538	1907.6	25.23	0.333			PASS
Note 1: For the HSDPA and HSUPA mode, all the subtests were tested and just the worst data were recorded in this report.							

2.8. Radiated Out of Band Emissions

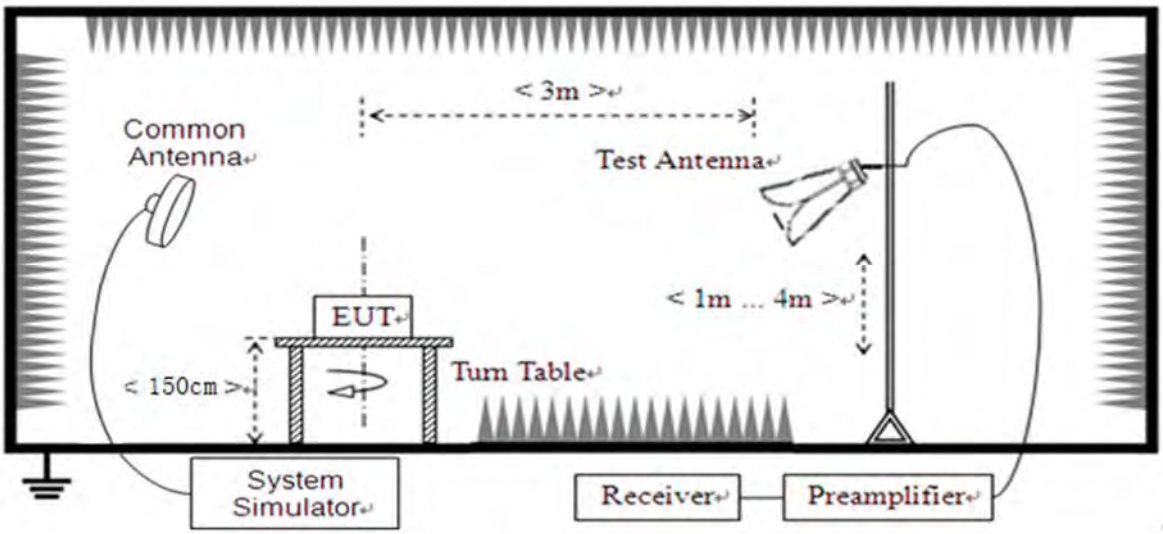
2.8.1.Requirement

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. This calculated to be -13dBm. The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency.

2.8.2.Test Description



(For the test frequency from 30MHz to1GHz)



(For the test frequency above 1GHz)

The EUT is located in a 3m Full-Anechoic Chamber, the cable loss, air loss and so on of the site as factors are pre-calibrated using the "Substitution" method, and calculated to correct the reading.
A call is established between the EUT and the SS via a Common Antenna. The EUT is commanded by the SS to operate at the maximum and minimum output power and only the test result of the maximum output power was recorded.
In the frequency range above 30MHz, Bi-Log Test Antenna (30MHz to 1GHz) and Horn Test Antenna (above 1GHz) are used. Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground and the Turn Table is actuated to turn from 0° to 360°to determine the maximum value of the radiated power. The emission levels at both horizontal and vertical polarizations should be tested. The Filters consists of Notch Filters and High Pass Filter.
Note: When doing measurements above 1GHz, the EUT has been within the 3dB cone width of the horn antenna during horizontal antenna.

2.8.3.Test Procedure

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements.

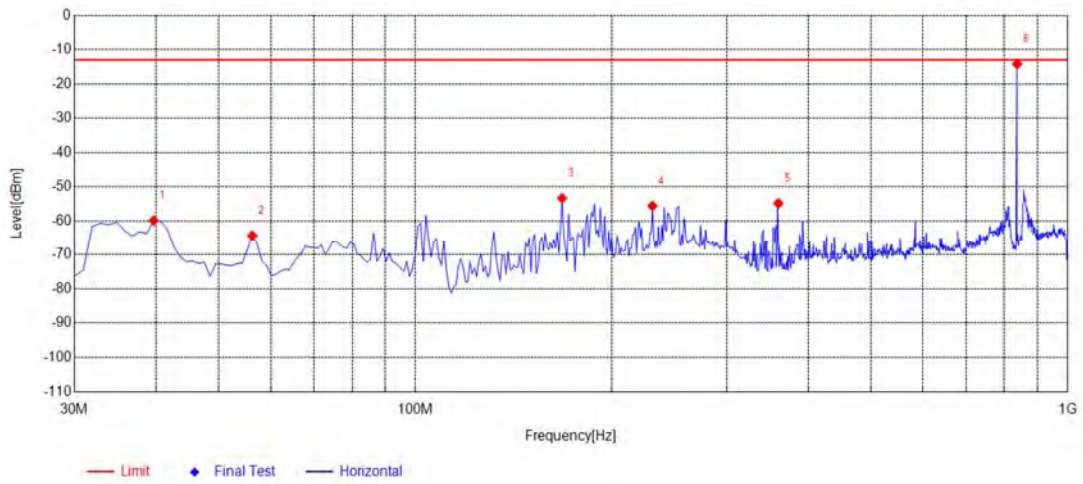
For measurements above 1GHz the resolution bandwidth is set to 1MHz, the video band width is set to 3MHz for peak measurements.

2.8.4.Test Result

Note1: The power of the EUT transmitting frequency should be ignored.
Note2: All test mode and condition mentioned were considered and evaluated respectively by performing full test, only the worst data were recorded and reported.
Note3: All spurious emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.
Note4: NA means the frequency is the basic frequency or the base station frequency, they are no need to verdict.

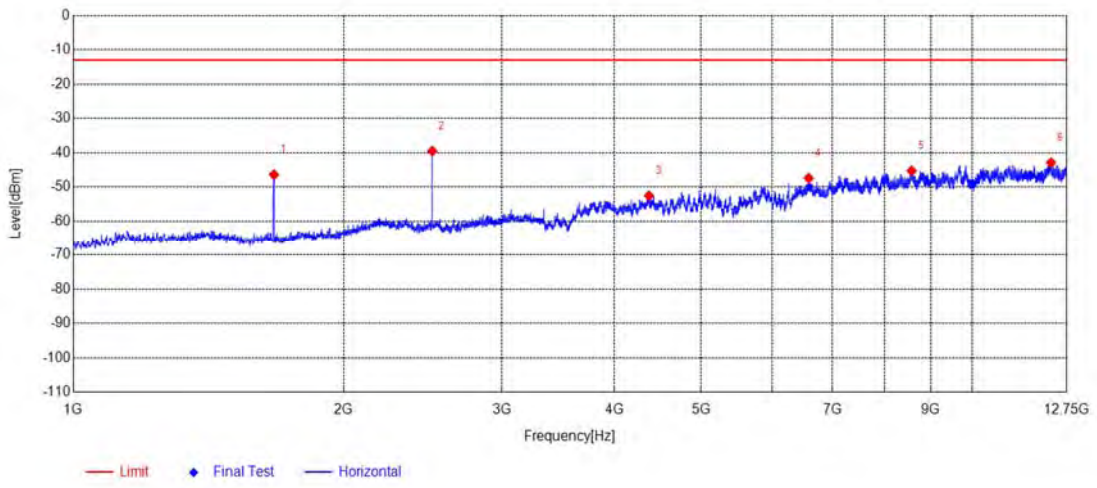
GSM850(GSM)

Plot for Low Channel



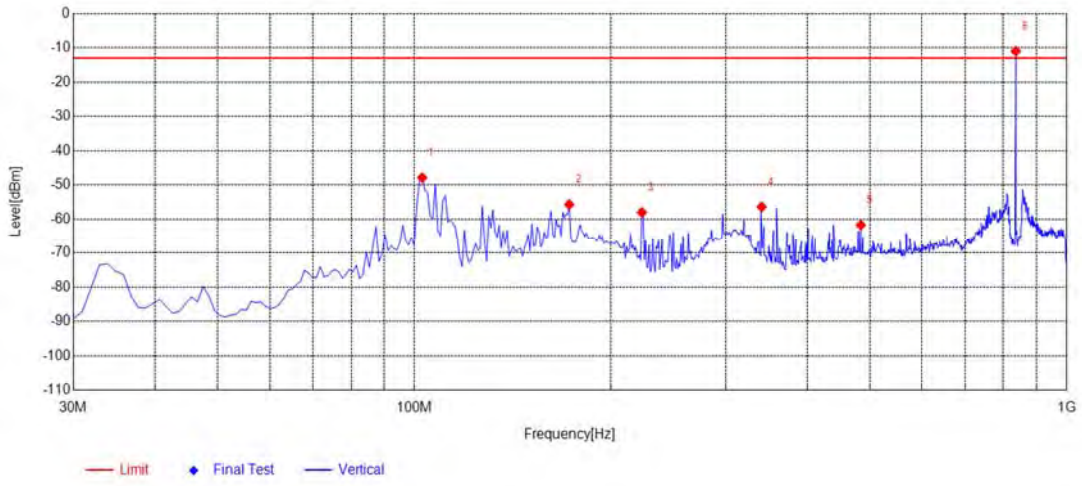
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
39.7097	-44.28	-59.87	-13.00	46.87	-15.59	Horizontal	PASS
56.2162	-53.15	-64.32	-13.00	51.32	-11.17	Horizontal	PASS
167.8779	-40.82	-53.35	-13.00	40.35	-12.53	Horizontal	PASS
230.9910	-52.34	-55.59	-13.00	42.59	-3.25	Horizontal	PASS
360.1301	-49.03	-54.83	-13.00	41.83	-5.80	Horizontal	PASS
836.8769	-17.15	-14.16	-13.00	1.16	2.99	Horizontal	NA



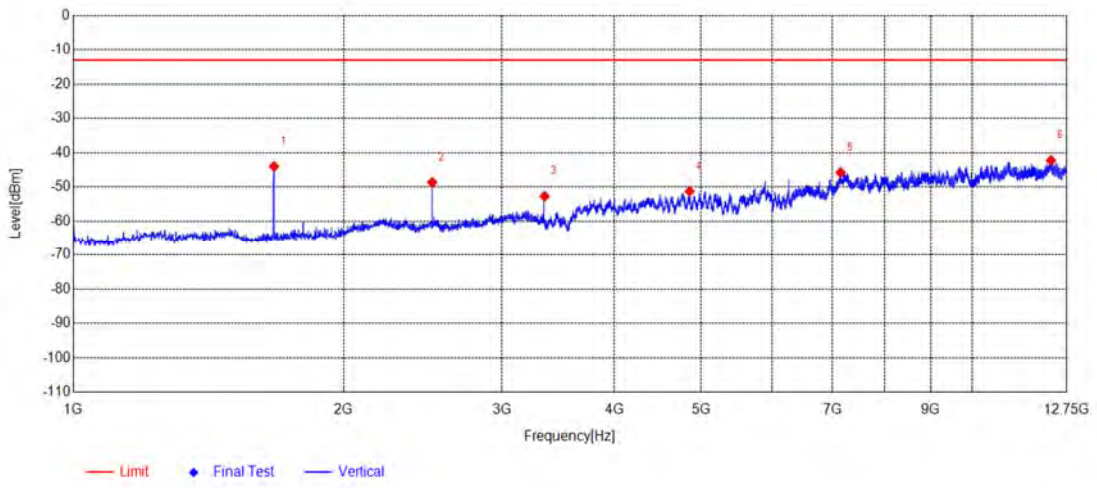
(Antenna Horizontal, 1GHz to 12.75GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1672.6121	-32.39	-46.43	-13.00	33.43	-14.04	Horizontal	PASS
2509.4182	-29.96	-39.52	-13.00	26.52	-9.56	Horizontal	PASS
4372.2287	-49.54	-52.55	-13.00	39.55	-3.01	Horizontal	PASS
6584.3149	-52.41	-47.43	-13.00	34.43	4.98	Horizontal	PASS
8570.5356	-55.45	-45.27	-13.00	32.27	10.18	Horizontal	PASS
12252.6947	-58.65	-42.91	-13.00	29.91	15.74	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

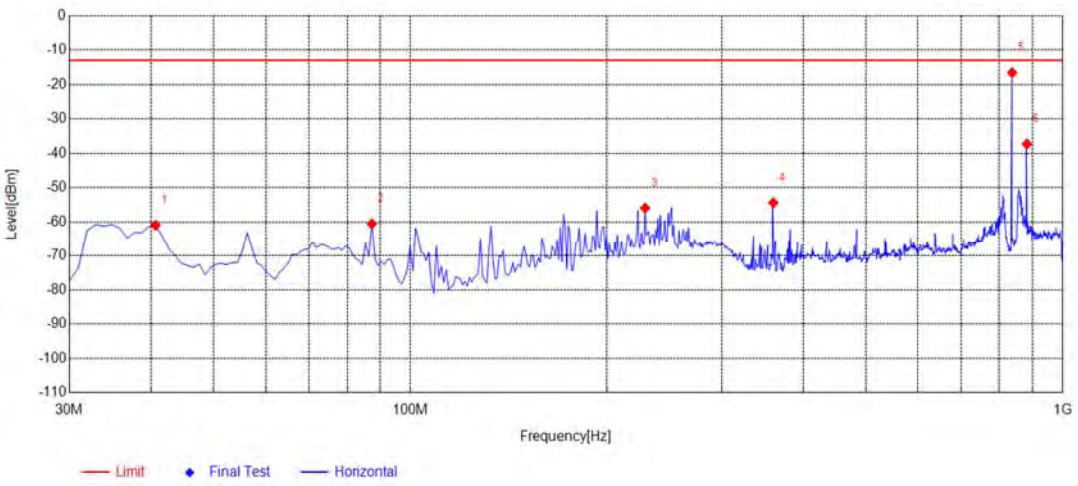
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
102.8228	-40.99	-47.87	-13.00	34.87	-6.88	Vertical	PASS
172.7327	-44.19	-55.70	-13.00	42.70	-11.51	Vertical	PASS
223.2232	-48.72	-58.00	-13.00	45.00	-9.28	Vertical	PASS
340.7107	-52.01	-56.38	-13.00	43.38	-4.37	Vertical	PASS
483.4434	-60.39	-61.70	-13.00	48.70	-1.31	Vertical	PASS
835.9059	-14.15	-10.97	-13.00	-2.03	3.18	Vertical	NA



(Antenna Vertical, 1GHz to 12.75GHz)

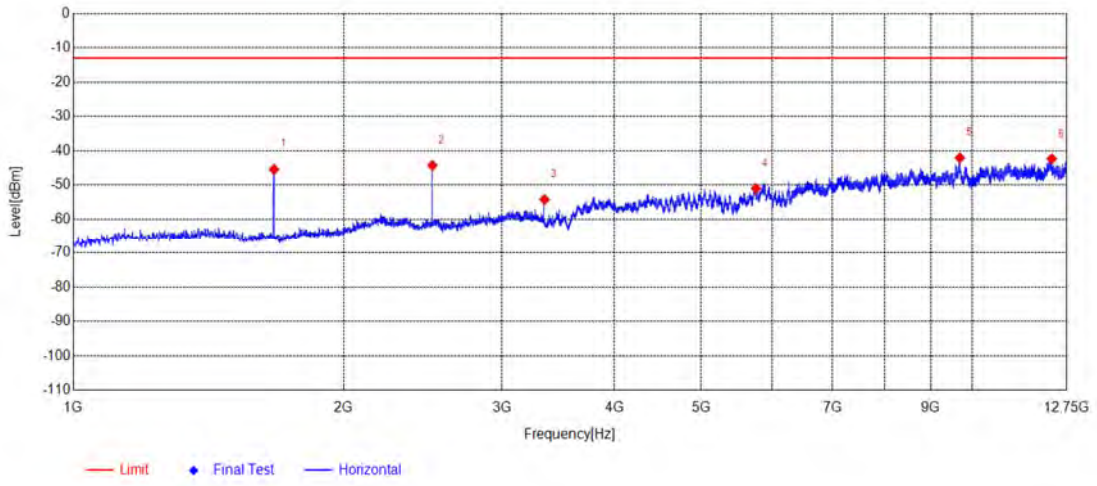
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1672.6121	-30.22	-44.00	-13.00	31.00	-13.78	Vertical	PASS
2509.4182	-39.37	-48.65	-13.00	35.65	-9.28	Vertical	PASS
3345.3909	-45.44	-52.73	-13.00	39.73	-7.29	Vertical	PASS
4852.3087	-50.64	-51.28	-13.00	38.28	-0.64	Vertical	PASS
7143.1270	-53.65	-45.80	-13.00	32.80	7.85	Vertical	PASS
12247.4442	-58.45	-42.25	-13.00	29.25	16.20	Vertical	PASS

Plot for Mid Channel



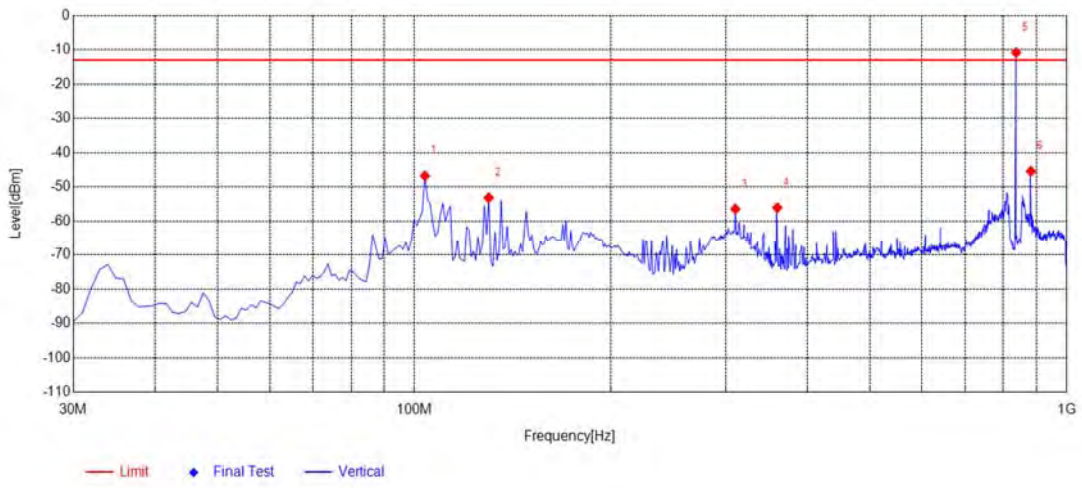
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
40.6807	-45.60	-60.93	-13.00	47.93	-15.33	Horizontal	PASS
87.2873	-43.38	-60.49	-13.00	47.49	-17.11	Horizontal	PASS
229.0490	-52.56	-55.91	-13.00	42.91	-3.35	Horizontal	PASS
360.1301	-48.58	-54.38	-13.00	41.38	-5.80	Horizontal	PASS
836.8769	-19.60	-16.61	-13.00	3.61	2.99	Horizontal	NA
881.5415	-39.86	-37.30	-13.00	24.30	2.56	Horizontal	NA



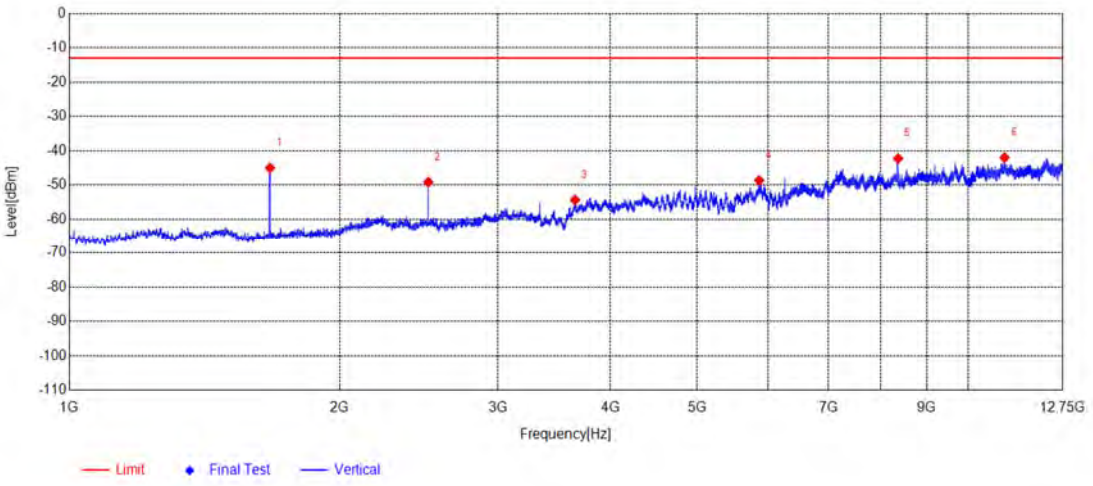
(Antenna Horizontal, 1GHz to 12.75GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1672.6121	-31.40	-45.44	-13.00	32.44	-14.04	Horizontal	PASS
2509.4182	-34.73	-44.29	-13.00	31.29	-9.56	Horizontal	PASS
3345.3909	-46.65	-54.23	-13.00	41.23	-7.58	Horizontal	PASS
5751.6253	-52.82	-51.00	-13.00	38.00	1.82	Horizontal	PASS
9697.9109	-56.39	-42.07	-13.00	29.07	14.32	Horizontal	PASS
12272.9470	-57.64	-42.37	-13.00	29.37	15.27	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

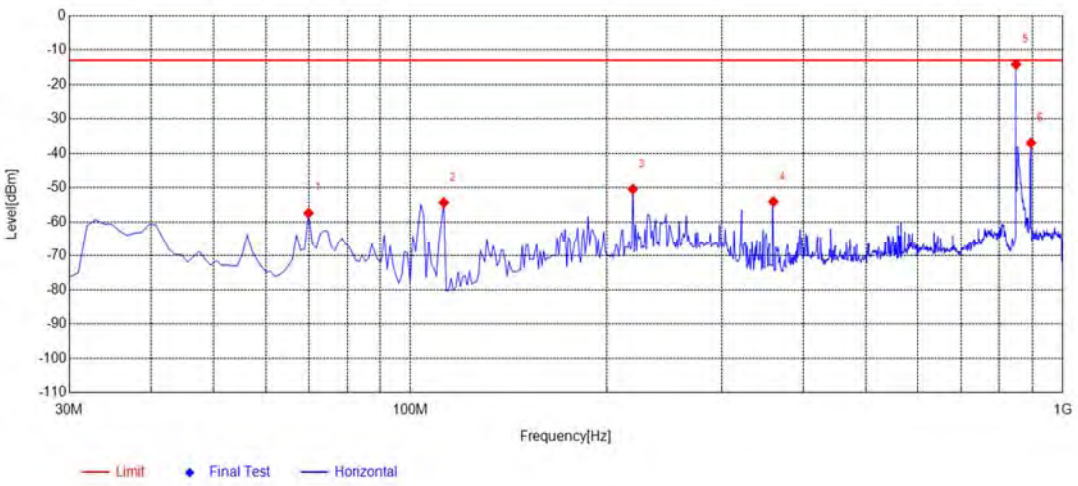
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
103.7938	-40.40	-46.76	-13.00	33.76	-6.36	Vertical	PASS
130.0100	-43.54	-53.15	-13.00	40.15	-9.61	Vertical	PASS
310.6106	-50.88	-56.43	-13.00	43.43	-5.55	Vertical	PASS
360.1301	-50.84	-56.04	-13.00	43.04	-5.20	Vertical	PASS
836.8769	-14.01	-10.81	-13.00	-2.19	3.20	Vertical	NA
881.5415	-49.59	-45.44	-13.00	32.44	4.15	Vertical	NA



(Antenna Vertical, 1GHz to 12.75GHz)

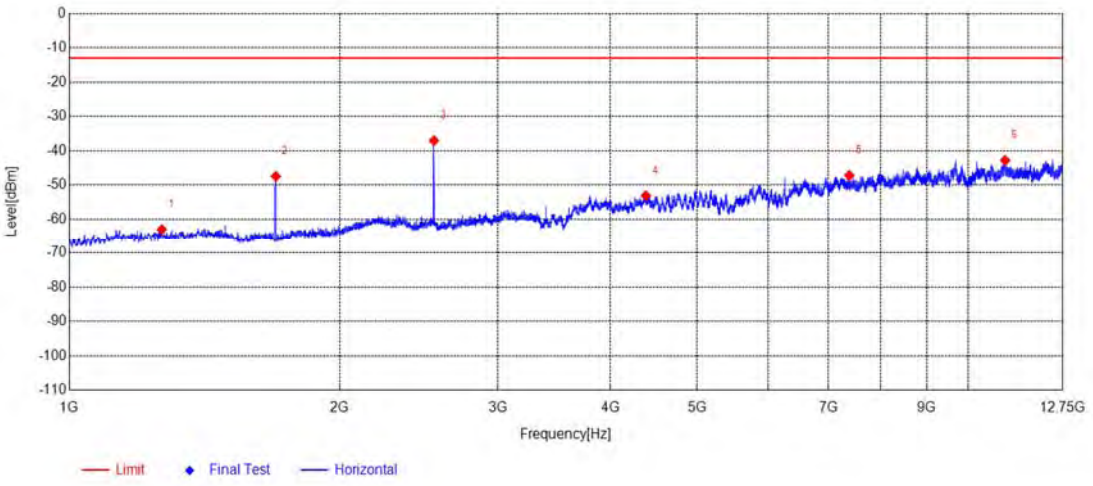
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1672.6121	-31.27	-45.05	-13.00	32.05	-13.78	Vertical	PASS
2509.4182	-39.87	-49.15	-13.00	36.15	-9.28	Vertical	PASS
3654.6091	-48.82	-54.38	-13.00	41.38	-5.56	Vertical	PASS
5858.3097	-51.22	-48.66	-13.00	35.66	2.56	Vertical	PASS
8364.2627	-50.63	-42.30	-13.00	29.30	8.33	Vertical	PASS
10988.8043	-56.89	-42.00	-13.00	29.00	14.89	Vertical	PASS

Plot for High Channel



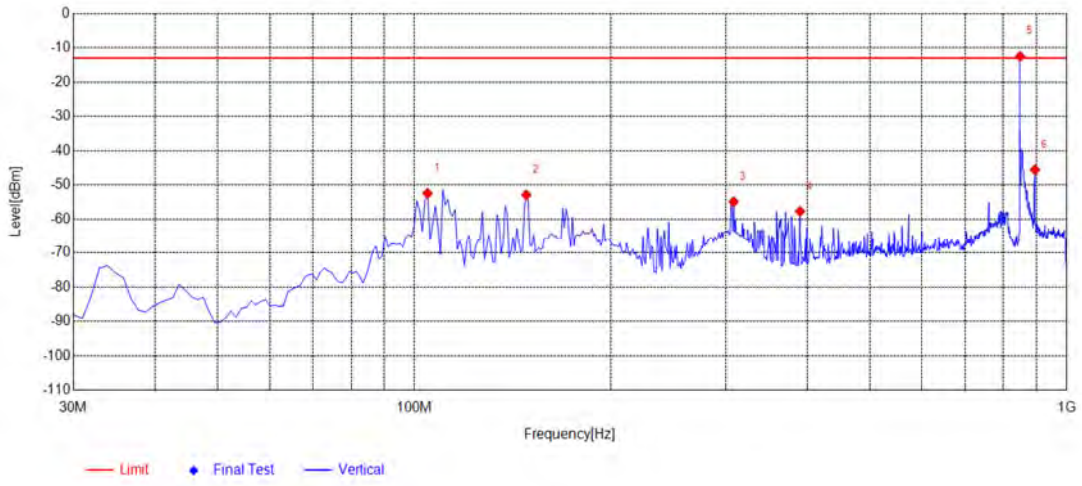
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
69.8098	-37.43	-57.40	-13.00	44.40	-19.97	Horizontal	PASS
112.5325	-36.61	-54.32	-13.00	41.32	-17.71	Horizontal	PASS
219.3393	-45.39	-50.42	-13.00	37.42	-5.03	Horizontal	PASS
360.1301	-48.24	-54.04	-13.00	41.04	-5.80	Horizontal	PASS
848.5285	-16.57	-14.14	-13.00	1.14	2.43	Horizontal	NA
894.1642	-39.77	-37.00	-13.00	24.00	2.77	Horizontal	NA



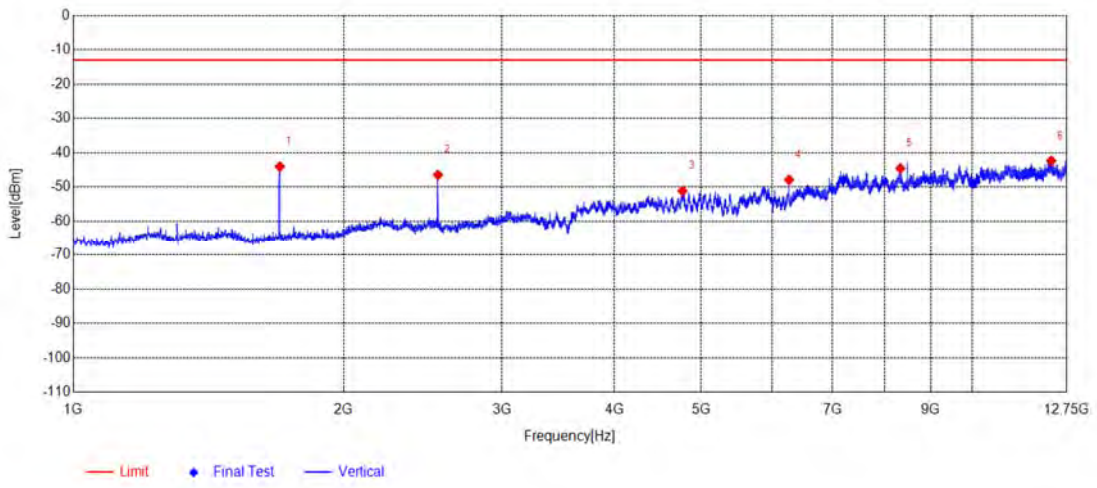
(Antenna Horizontal, 1GHz to 12.75GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1267.5446	-49.22	-63.03	-13.00	50.03	-13.81	Horizontal	PASS
1697.6163	-33.03	-47.48	-13.00	34.48	-14.45	Horizontal	PASS
2546.0910	-27.77	-37.05	-13.00	24.05	-9.28	Horizontal	PASS
4383.0638	-50.30	-53.12	-13.00	40.12	-2.82	Horizontal	PASS
7381.6535	-53.62	-47.21	-13.00	34.21	6.41	Horizontal	PASS
11003.0559	-57.34	-42.81	-13.00	29.81	14.53	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
104.7648	-45.87	-52.45	-13.00	39.45	-6.58	Vertical	PASS
148.4585	-42.61	-52.91	-13.00	39.91	-10.30	Vertical	PASS
308.6687	-49.22	-54.89	-13.00	41.89	-5.67	Vertical	PASS
390.2302	-52.31	-57.68	-13.00	44.68	-5.37	Vertical	PASS
848.5285	-14.76	-12.49	-13.00	-0.51	2.27	Vertical	NA
894.1642	-49.78	-45.57	-13.00	32.57	4.21	Vertical	NA

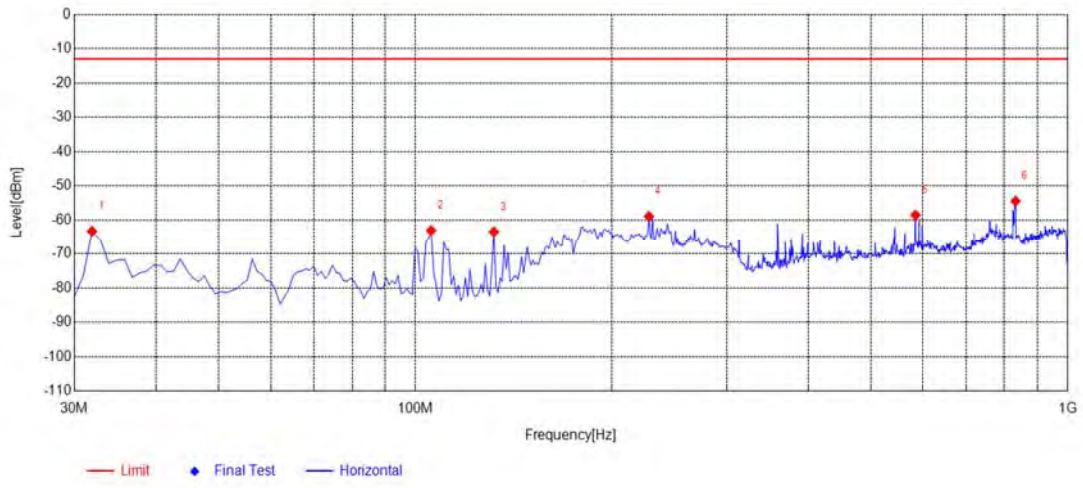


(Antenna Vertical, 1GHz to 12.75GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1697.6163	-30.34	-44.05	-13.00	31.05	-13.71	Vertical	PASS
2546.0910	-37.27	-46.49	-13.00	33.49	-9.22	Vertical	PASS
4763.9607	-50.73	-51.14	-13.00	38.14	-0.41	Vertical	PASS
6261.7791	-50.31	-47.92	-13.00	34.92	2.39	Vertical	PASS
8326.0084	-53.72	-44.56	-13.00	31.56	9.16	Vertical	PASS
12255.6951	-58.50	-42.37	-13.00	29.37	16.13	Vertical	PASS

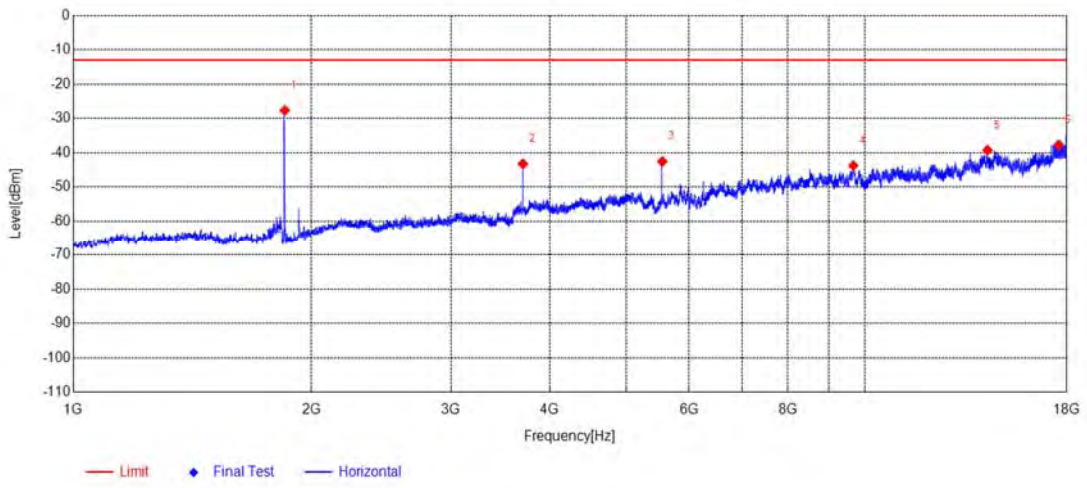
GSM1900(GSM)

Plot for Low Channel



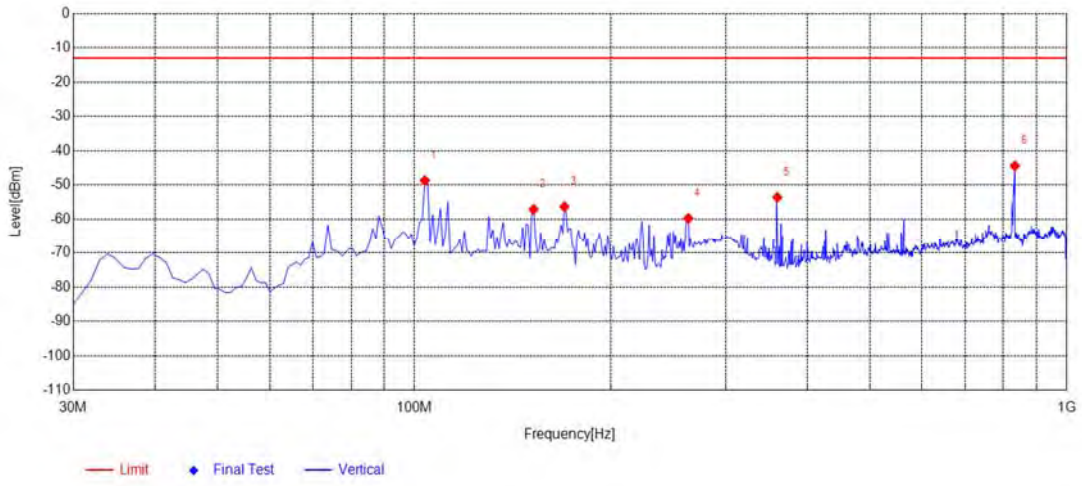
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
31.9419	-49.93	-63.26	-13.00	50.26	-13.33	Horizontal	PASS
105.7357	-45.28	-63.06	-13.00	50.06	-17.78	Horizontal	PASS
131.9520	-47.31	-63.46	-13.00	50.46	-16.15	Horizontal	PASS
228.0781	-55.52	-58.91	-13.00	45.91	-3.39	Horizontal	PASS
584.4244	-59.76	-58.54	-13.00	45.54	1.22	Horizontal	PASS
832.0220	-57.61	-54.43	-13.00	41.43	3.18	Horizontal	PASS



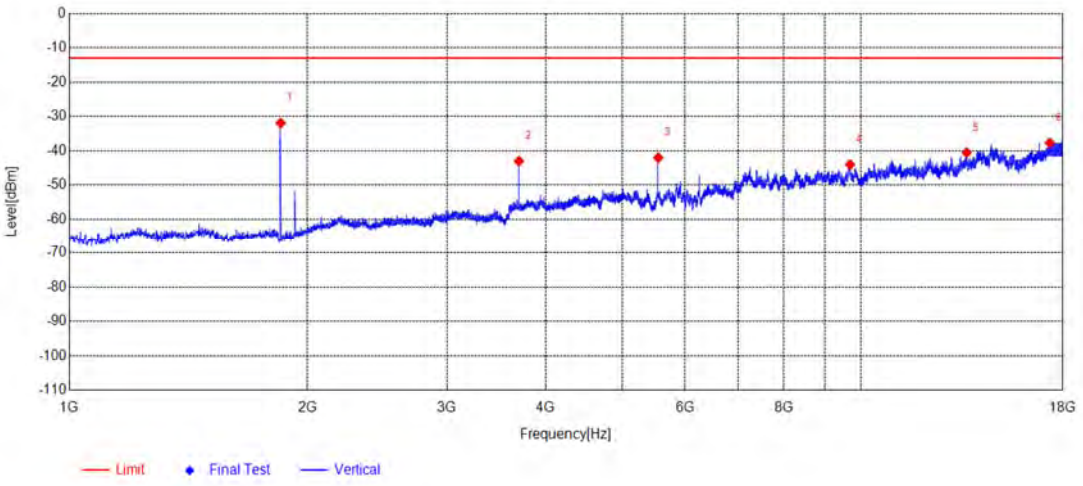
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1850.1417	-14.55	-27.69	-13.00	14.69	-13.14	Horizontal	NA
3700.4501	-37.05	-43.27	-13.00	30.27	-6.22	Horizontal	PASS
5550.7585	-43.56	-42.55	-13.00	29.55	1.01	Horizontal	PASS
9676.4085	-56.76	-43.77	-13.00	30.77	12.99	Horizontal	PASS
14298.2554	-58.21	-39.27	-13.00	26.27	18.94	Horizontal	PASS
17589.2877	-61.25	-37.71	-13.00	24.71	23.54	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

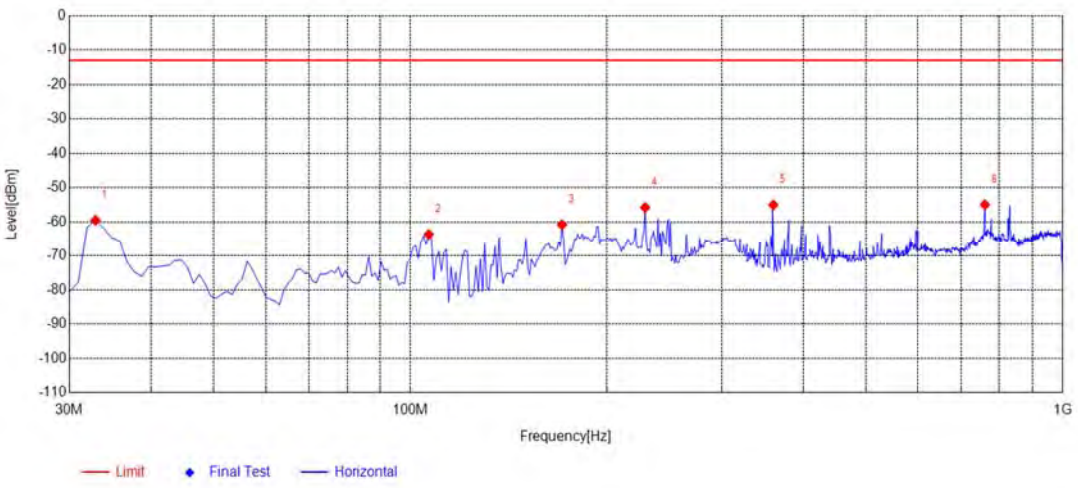
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
103.7938	-42.33	-48.69	-13.00	35.69	-6.36	Vertical	PASS
152.3423	-46.58	-57.13	-13.00	44.13	-10.55	Vertical	PASS
169.8198	-45.53	-56.32	-13.00	43.32	-10.79	Vertical	PASS
263.0330	-51.62	-59.72	-13.00	46.72	-8.10	Vertical	PASS
360.1301	-48.39	-53.59	-13.00	40.59	-5.20	Vertical	PASS
832.9930	-47.98	-44.42	-13.00	31.42	3.56	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

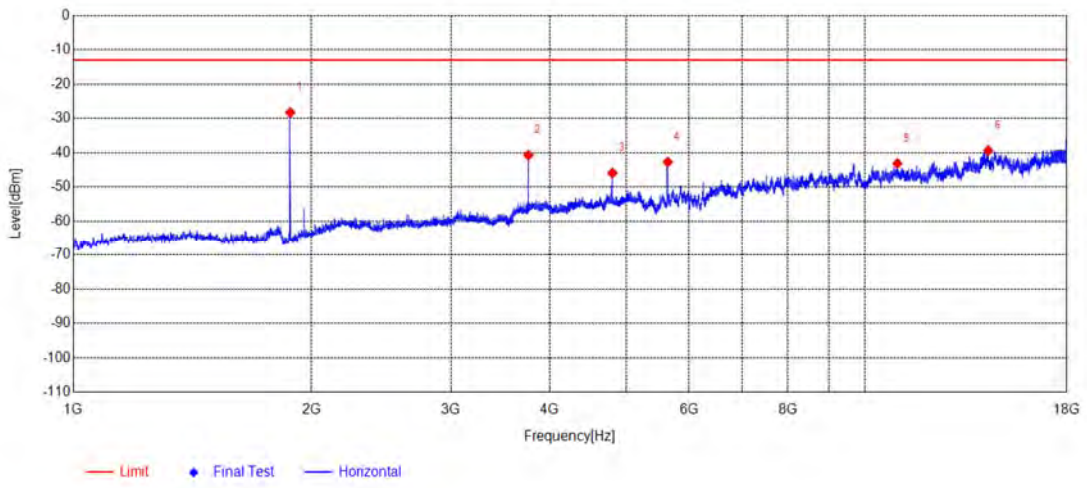
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1850.1417	-18.70	-31.95	-13.00	18.95	-13.25	Vertical	NA
3700.4501	-37.19	-43.04	-13.00	30.04	-5.85	Vertical	PASS
5550.7585	-44.08	-42.05	-13.00	29.05	2.03	Vertical	PASS
9697.7442	-57.76	-44.05	-13.00	31.05	13.71	Vertical	PASS
13614.1794	-58.41	-40.57	-13.00	27.57	17.84	Vertical	PASS
17337.2597	-60.15	-37.74	-13.00	24.74	22.41	Vertical	PASS

Plot for Mid Channel



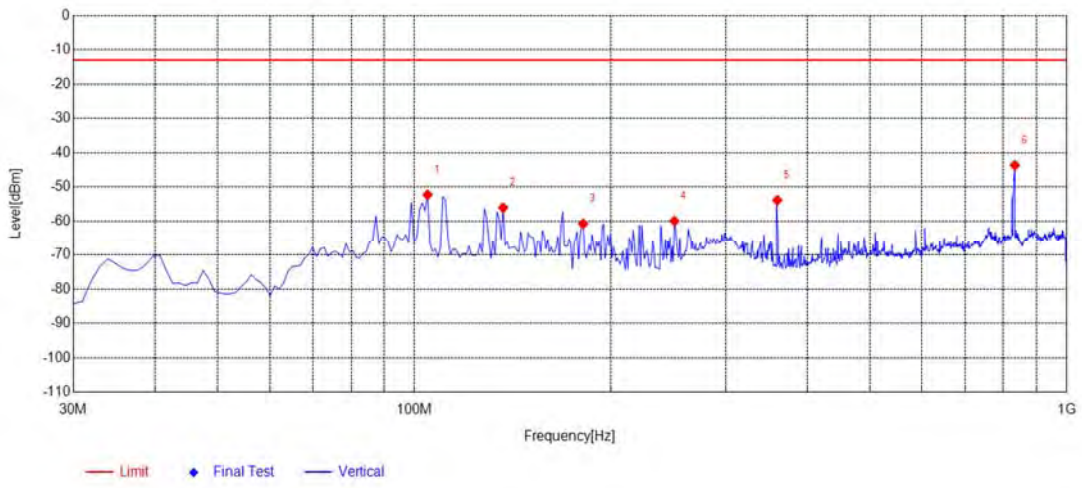
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
32.9129	-44.44	-59.47	-13.00	46.47	-15.03	Horizontal	PASS
106.7067	-45.49	-63.62	-13.00	50.62	-18.13	Horizontal	PASS
170.7908	-48.18	-60.76	-13.00	47.76	-12.58	Horizontal	PASS
229.0490	-52.39	-55.74	-13.00	42.74	-3.35	Horizontal	PASS
360.1301	-49.20	-55.00	-13.00	42.00	-5.80	Horizontal	PASS
760.1702	-59.50	-54.95	-13.00	41.95	4.55	Horizontal	PASS



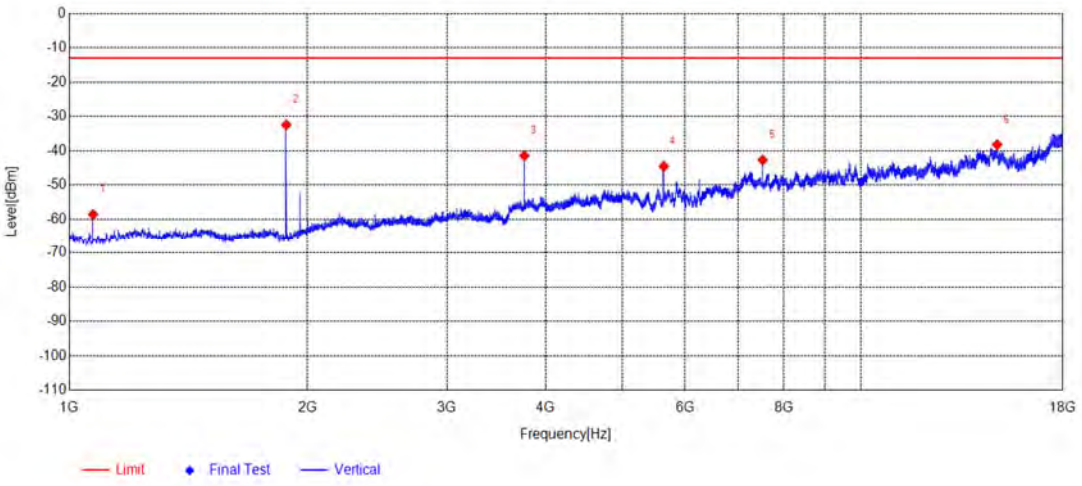
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1880.1467	-15.47	-28.30	-13.00	15.30	-12.83	Horizontal	NA
3759.6266	-34.89	-40.72	-13.00	27.72	-5.83	Horizontal	PASS
4800.6334	-44.93	-45.95	-13.00	32.95	-1.02	Horizontal	PASS
5639.9400	-42.09	-42.70	-13.00	29.70	-0.61	Horizontal	PASS
11001.8891	-57.70	-43.14	-13.00	30.14	14.56	Horizontal	PASS
14330.2589	-58.18	-39.36	-13.00	26.36	18.82	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

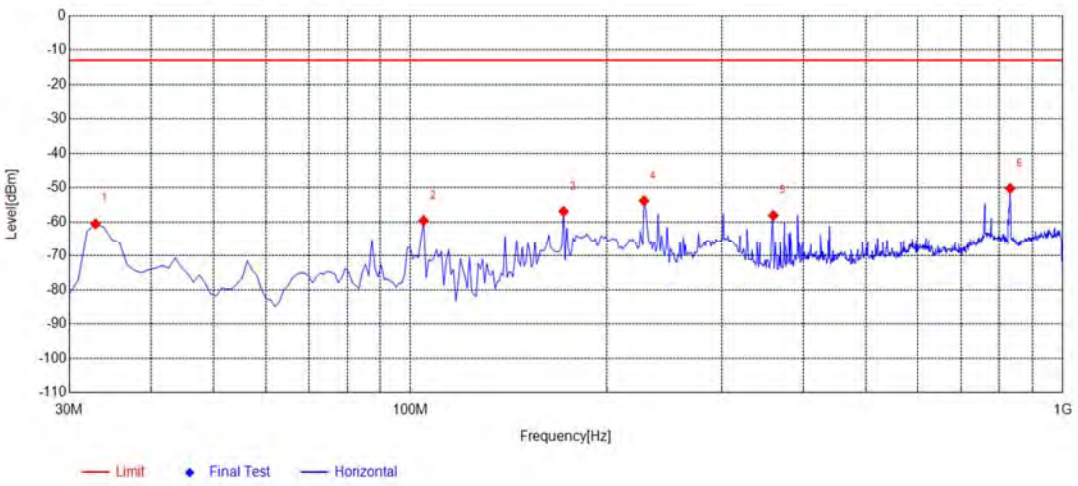
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
104.7648	-45.69	-52.27	-13.00	39.27	-6.58	Vertical	PASS
136.8068	-49.01	-56.04	-13.00	43.04	-7.03	Vertical	PASS
181.4715	-50.30	-60.75	-13.00	47.75	-10.45	Vertical	PASS
250.4104	-50.86	-59.97	-13.00	46.97	-9.11	Vertical	PASS
360.1301	-48.66	-53.86	-13.00	40.86	-5.20	Vertical	PASS
832.9930	-47.23	-43.67	-13.00	30.67	3.56	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

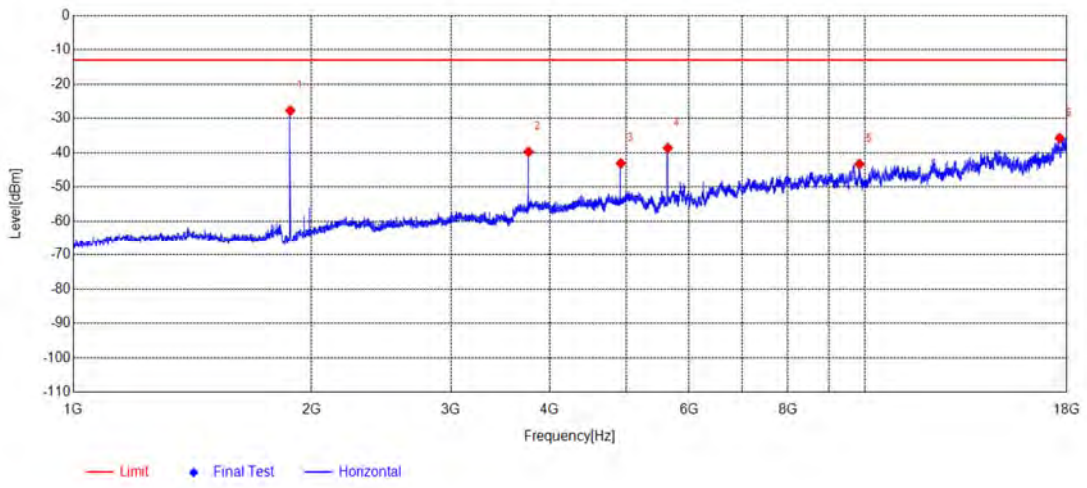
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1071.6786	-43.32	-58.58	-13.00	45.58	-15.26	Vertical	PASS
1880.1467	-19.62	-32.47	-13.00	19.47	-12.85	Vertical	NA
3759.6266	-35.71	-41.49	-13.00	28.49	-5.78	Vertical	PASS
5639.9400	-44.00	-44.56	-13.00	31.56	-0.56	Vertical	PASS
7520.1689	-49.72	-42.75	-13.00	29.75	6.97	Vertical	PASS
14880.9868	-57.92	-38.25	-13.00	25.25	19.67	Vertical	PASS

Plot for High Channel



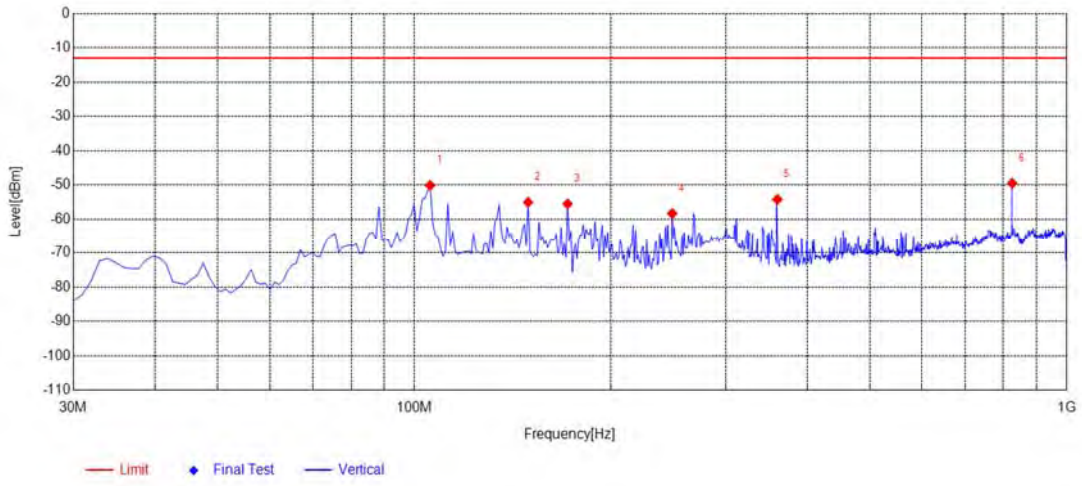
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
32.9129	-45.48	-60.51	-13.00	47.51	-15.03	Horizontal	PASS
104.7648	-42.09	-59.54	-13.00	46.54	-17.45	Horizontal	PASS
171.7618	-43.85	-56.90	-13.00	43.90	-13.05	Horizontal	PASS
228.0781	-50.39	-53.78	-13.00	40.78	-3.39	Horizontal	PASS
360.1301	-52.27	-58.07	-13.00	45.07	-5.80	Horizontal	PASS
831.0511	-53.49	-50.22	-13.00	37.22	3.27	Horizontal	PASS



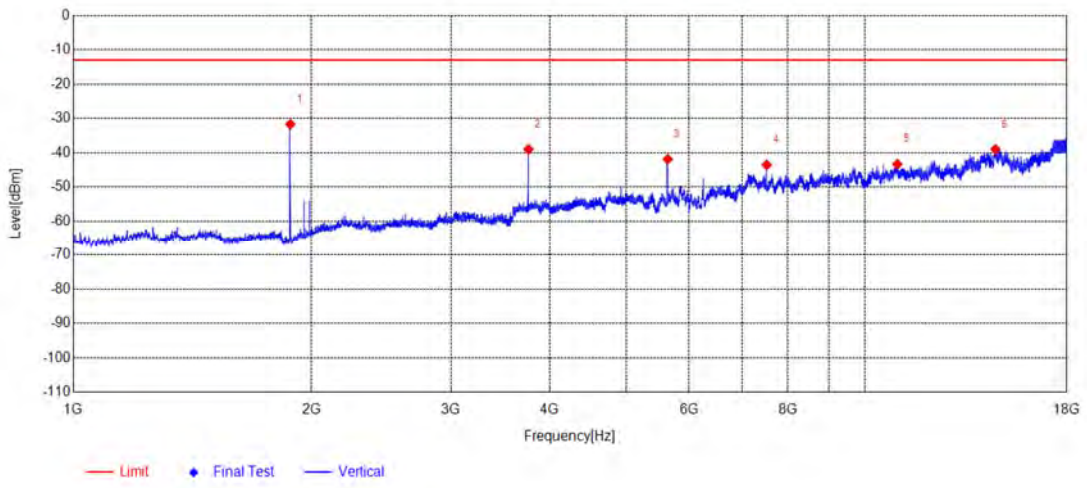
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1880.1467	-14.89	-27.72	-13.00	14.72	-12.83	Horizontal	NA
3760.4601	-33.94	-39.74	-13.00	26.74	-5.80	Horizontal	PASS
4918.9865	-41.49	-43.11	-13.00	30.11	-1.62	Horizontal	PASS
5639.9400	-38.04	-38.65	-13.00	25.65	-0.61	Horizontal	PASS
9851.0946	-57.48	-43.30	-13.00	30.30	14.18	Horizontal	PASS
17639.9600	-58.84	-35.76	-13.00	22.76	23.08	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
105.7357	-43.16	-50.11	-13.00	37.11	-6.95	Vertical	PASS
149.4294	-44.42	-55.04	-13.00	42.04	-10.62	Vertical	PASS
171.7618	-43.70	-55.51	-13.00	42.51	-11.81	Vertical	PASS
248.4685	-49.34	-58.32	-13.00	45.32	-8.98	Vertical	PASS
360.1301	-49.00	-54.20	-13.00	41.20	-5.20	Vertical	PASS
825.2252	-53.11	-49.51	-13.00	36.51	3.60	Vertical	PASS

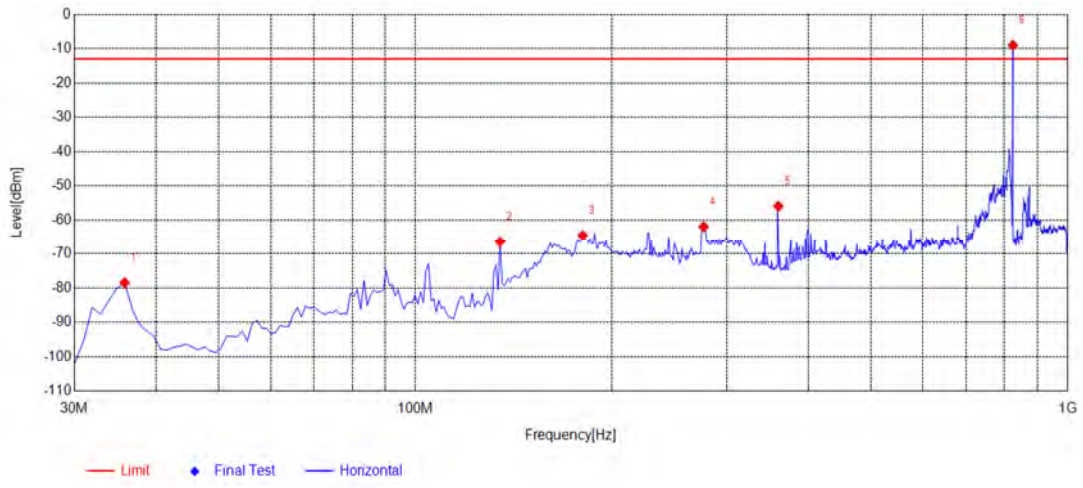


(Antenna Vertical, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1880.1467	-18.87	-31.72	-13.00	18.72	-12.85	Vertical	NA
3759.6266	-33.26	-39.04	-13.00	26.04	-5.78	Vertical	PASS
5639.9400	-41.33	-41.89	-13.00	28.89	-0.56	Vertical	PASS
7520.1689	-50.52	-43.55	-13.00	30.55	6.97	Vertical	PASS
11001.8891	-58.32	-43.36	-13.00	30.36	14.96	Vertical	PASS
14635.6262	-60.16	-39.04	-13.00	26.04	21.12	Vertical	PASS

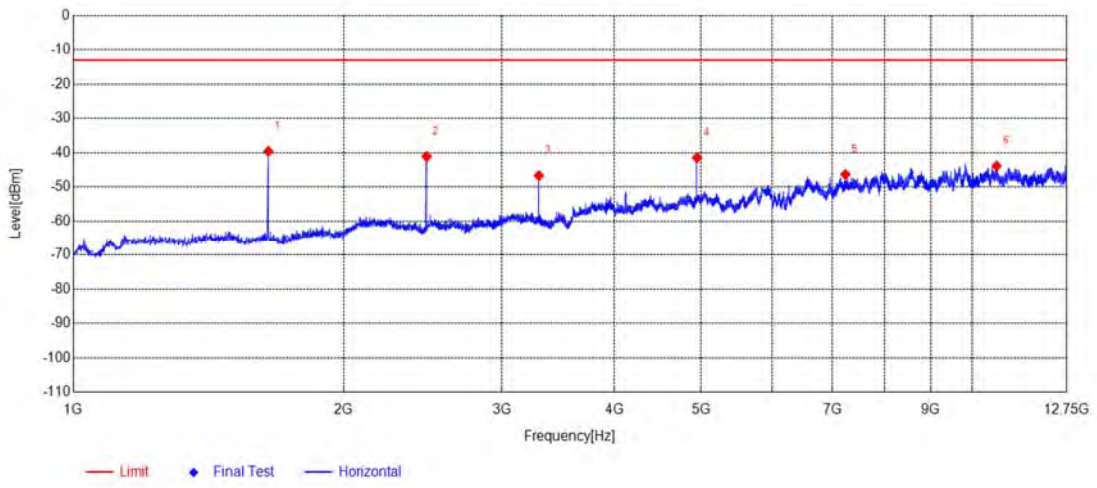
GSM850(EDGE)

Plot for Low Channel



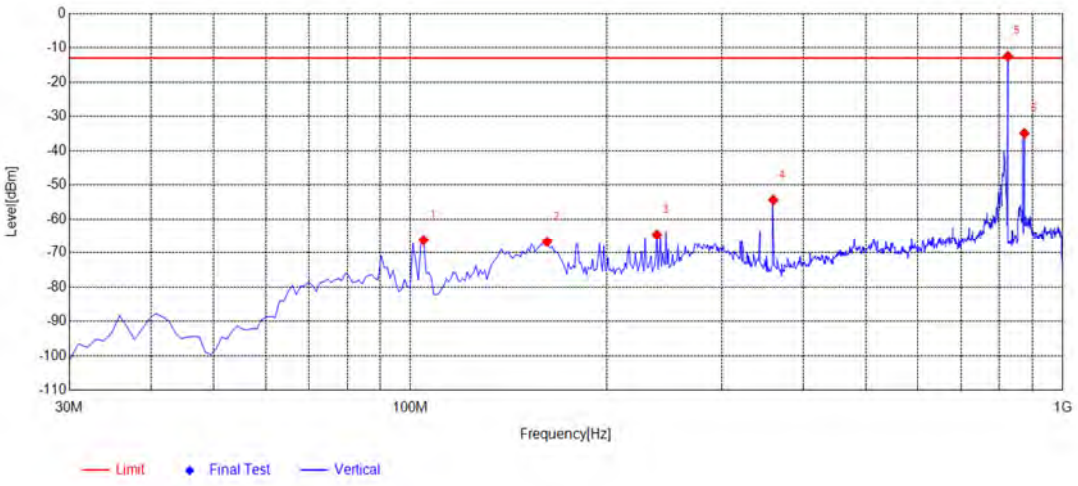
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
35.8258	-46.48	-78.47	-13.00	65.47	-31.99	Horizontal	PASS
134.8649	-49.15	-66.42	-13.00	53.42	-17.27	Horizontal	PASS
180.5005	-53.40	-64.54	-13.00	51.54	-11.14	Horizontal	PASS
276.6266	-55.74	-61.93	-13.00	48.93	-6.19	Horizontal	PASS
360.1301	-50.04	-55.93	-13.00	42.93	-5.89	Horizontal	PASS
824.2543	-13.72	-8.99	-13.00	-4.01	4.73	Horizontal	NA



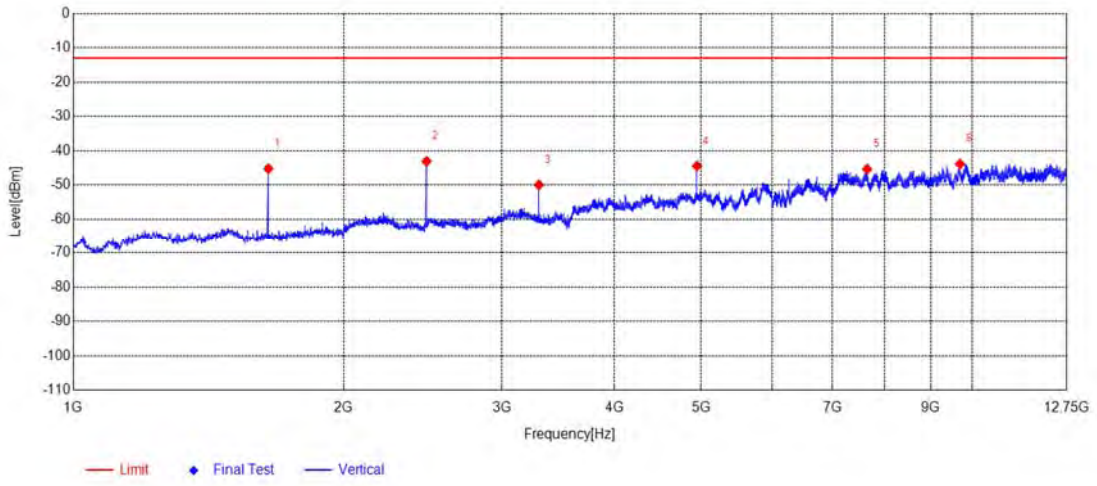
(Antenna Horizontal, 1GHz to 12.75GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1648.4414	-26.22	-39.59	-13.00	26.59	-13.37	Horizontal	PASS
2472.7455	-31.00	-41.09	-13.00	28.09	-10.09	Horizontal	PASS
3297.0495	-39.28	-46.71	-13.00	33.71	-7.43	Horizontal	PASS
4945.6576	-41.40	-41.47	-13.00	28.47	-0.07	Horizontal	PASS
7233.1370	-53.54	-46.34	-13.00	33.34	7.20	Horizontal	PASS
10656.5174	-59.80	-43.88	-13.00	30.88	15.92	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

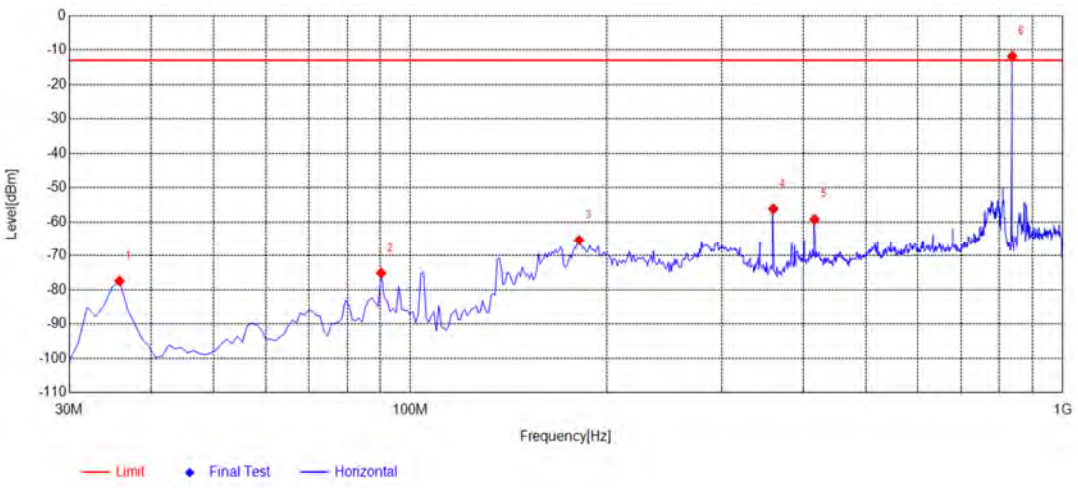
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
104.7648	-52.37	-66.20	-13.00	53.20	-13.83	Vertical	PASS
162.0521	-55.28	-66.73	-13.00	53.73	-11.45	Vertical	PASS
238.7588	-55.14	-64.58	-13.00	51.58	-9.44	Vertical	PASS
360.1301	-49.07	-54.37	-13.00	41.37	-5.30	Vertical	PASS
824.2543	-17.74	-12.49	-13.00	-0.51	5.25	Vertical	NA
873.7738	-39.61	-34.94	-13.00	21.94	4.67	Vertical	PASS



(Antenna Vertical, 1GHz to 12.75GHz)

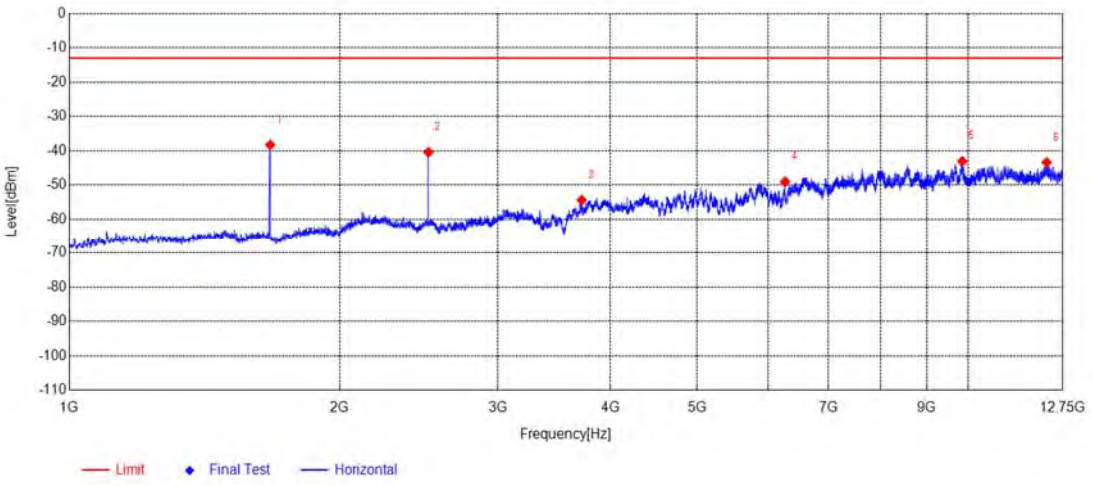
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1648.4414	-31.69	-45.24	-13.00	32.24	-13.55	Vertical	PASS
2472.7455	-33.37	-43.09	-13.00	30.09	-9.72	Vertical	PASS
3297.0495	-42.13	-49.97	-13.00	36.97	-7.84	Vertical	PASS
4944.8241	-44.36	-44.44	-13.00	31.44	-0.08	Vertical	PASS
7646.4329	-55.36	-45.38	-13.00	32.38	9.98	Vertical	PASS
9700.9112	-58.18	-43.89	-13.00	30.89	14.29	Vertical	PASS

Plot for Mid Channel



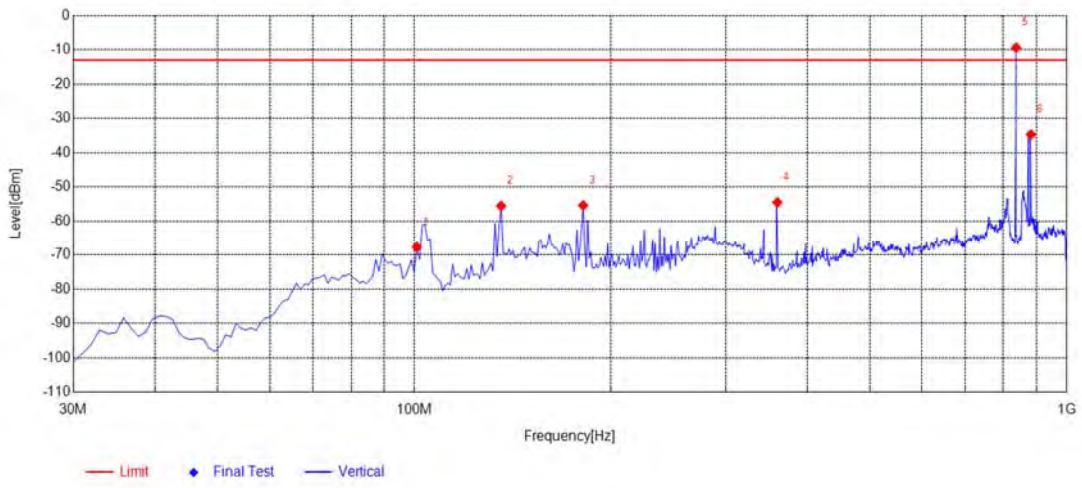
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
35.8258	-45.42	-77.41	-13.00	64.41	-31.99	Horizontal	PASS
90.2002	-51.55	-75.07	-13.00	62.07	-23.52	Horizontal	PASS
181.4715	-54.86	-65.37	-13.00	52.37	-10.51	Horizontal	PASS
360.1301	-50.24	-56.13	-13.00	43.13	-5.89	Horizontal	PASS
416.4464	-58.31	-59.22	-13.00	46.22	-0.91	Horizontal	PASS
836.8769	-16.13	-11.83	-13.00	-1.17	4.30	Horizontal	NA



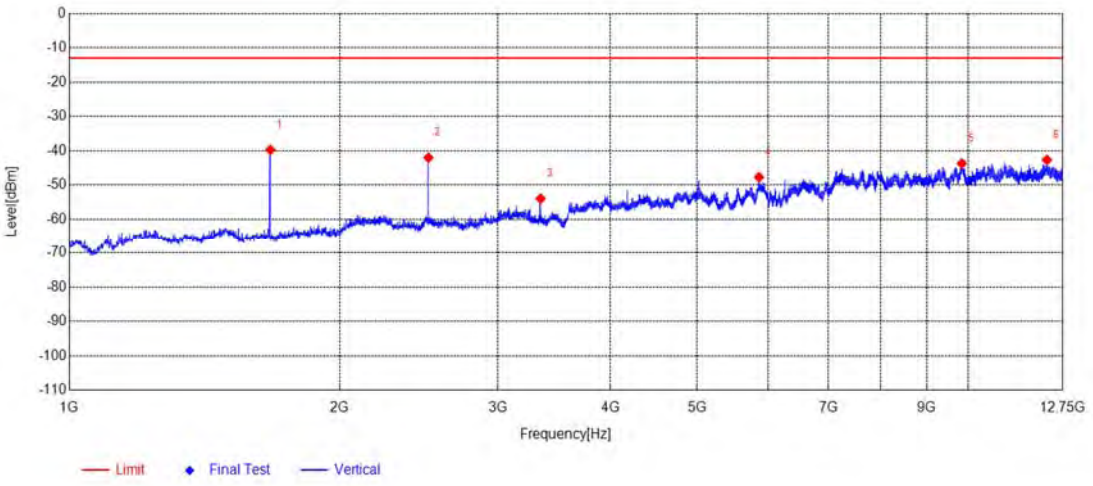
(Antenna Horizontal, 1GHz to 12.75GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1673.4456	-24.30	-38.33	-13.00	25.33	-14.03	Horizontal	PASS
2510.2517	-31.56	-40.46	-13.00	27.46	-8.90	Horizontal	PASS
3717.9530	-48.35	-54.40	-13.00	41.40	-6.05	Horizontal	PASS
6261.0290	-52.30	-49.05	-13.00	36.05	3.25	Horizontal	PASS
9858.4287	-58.29	-43.09	-13.00	30.09	15.20	Horizontal	PASS
12239.9433	-59.28	-43.43	-13.00	30.43	15.85	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

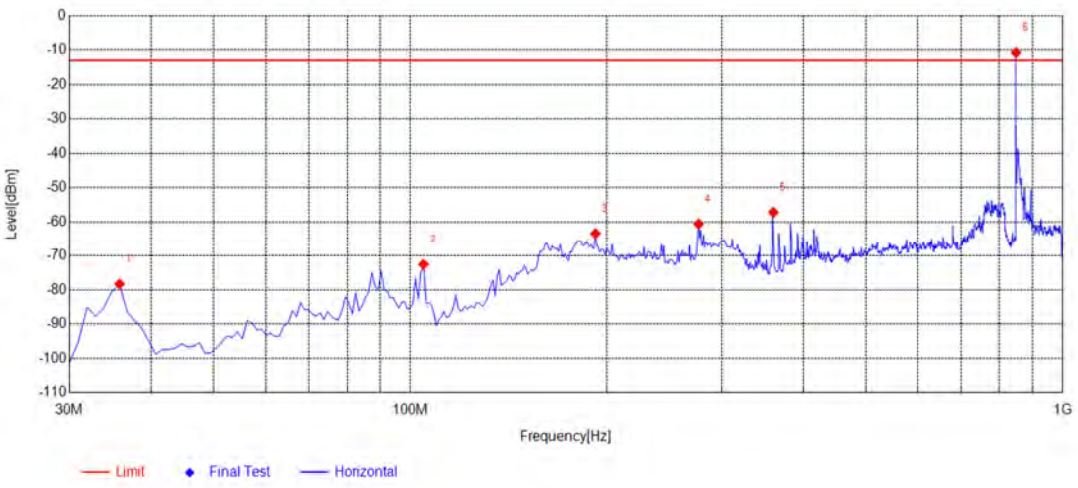
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
100.8809	-54.07	-67.78	-13.00	54.78	-13.71	Vertical	PASS
135.8358	-47.69	-55.53	-13.00	42.53	-7.84	Vertical	PASS
181.4715	-45.17	-55.39	-13.00	42.39	-10.22	Vertical	PASS
360.1301	-49.16	-54.46	-13.00	41.46	-5.30	Vertical	PASS
836.8769	-13.89	-9.38	-13.00	-3.62	4.51	Vertical	NA
881.5415	-40.16	-34.73	-13.00	21.73	5.43	Vertical	PASS



(Antenna Vertical, 1GHz to 12.75GHz)

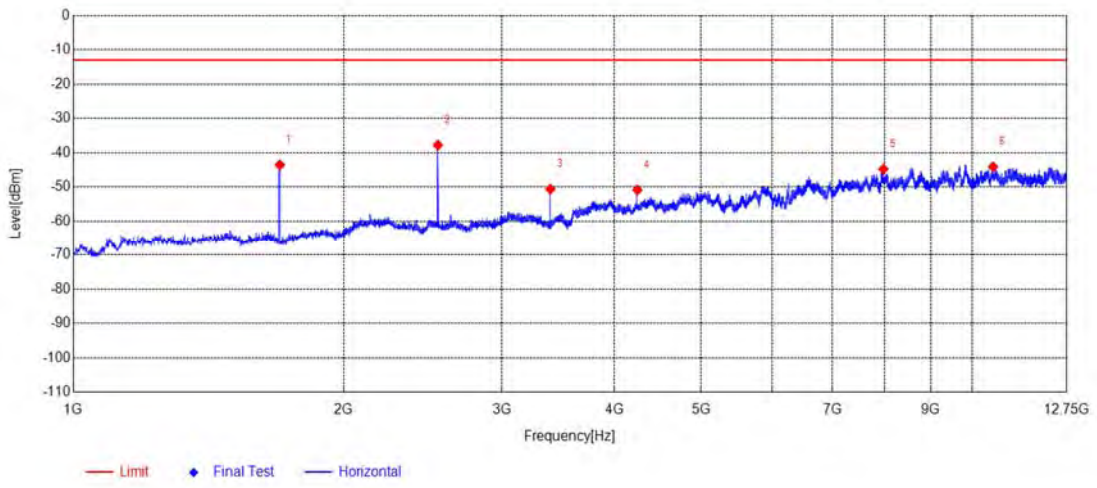
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1673.4456	-26.01	-39.77	-13.00	26.77	-13.76	Vertical	PASS
2510.2517	-33.40	-42.03	-13.00	29.03	-8.63	Vertical	PASS
3346.2244	-46.40	-54.00	-13.00	41.00	-7.60	Vertical	PASS
5855.8093	-51.31	-47.73	-13.00	34.73	3.58	Vertical	PASS
9847.1775	-59.10	-43.72	-13.00	30.72	15.38	Vertical	PASS
12247.4442	-59.12	-42.68	-13.00	29.68	16.44	Vertical	PASS

Plot for High Channel



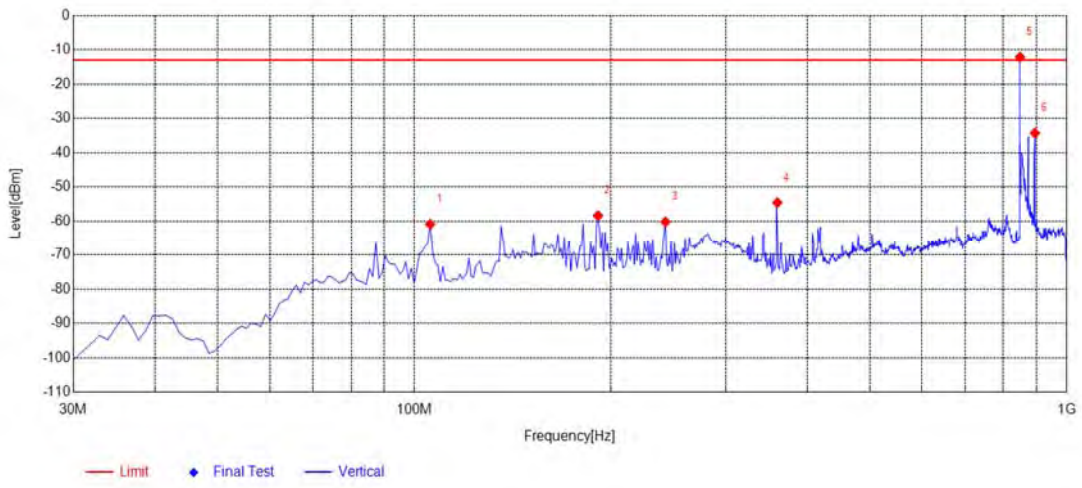
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
35.8258	-46.30	-78.29	-13.00	65.29	-31.99	Horizontal	PASS
104.7648	-47.81	-72.51	-13.00	59.51	-24.70	Horizontal	PASS
192.1522	-55.48	-63.40	-13.00	50.40	-7.92	Horizontal	PASS
276.6266	-54.40	-60.59	-13.00	47.59	-6.19	Horizontal	PASS
360.1301	-51.29	-57.18	-13.00	44.18	-5.89	Horizontal	PASS
848.5285	-13.99	-10.74	-13.00	-2.26	3.25	Horizontal	NA



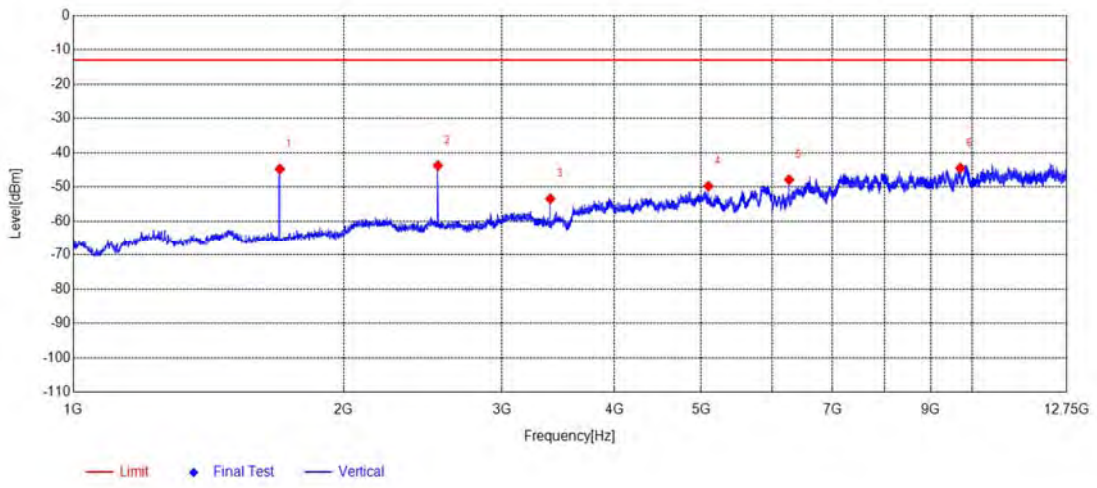
(Antenna Horizontal, 1GHz to 12.75GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1697.6163	-28.84	-43.56	-13.00	30.56	-14.72	Horizontal	PASS
2546.0910	-28.66	-37.78	-13.00	24.78	-9.12	Horizontal	PASS
3395.3992	-41.85	-50.62	-13.00	37.62	-8.77	Horizontal	PASS
4243.8740	-47.55	-50.84	-13.00	37.84	-3.29	Horizontal	PASS
7972.7192	-54.33	-44.77	-13.00	31.77	9.56	Horizontal	PASS
10560.5067	-59.19	-44.10	-13.00	31.10	15.09	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
105.7357	-46.74	-60.89	-13.00	47.89	-14.15	Vertical	PASS
191.1812	-48.70	-58.37	-13.00	45.37	-9.67	Vertical	PASS
242.6426	-51.34	-60.19	-13.00	47.19	-8.85	Vertical	PASS
360.1301	-49.27	-54.57	-13.00	41.57	-5.30	Vertical	PASS
848.5285	-15.20	-12.11	-13.00	-0.89	3.09	Vertical	NA
894.1642	-39.57	-34.29	-13.00	21.29	5.28	Vertical	PASS

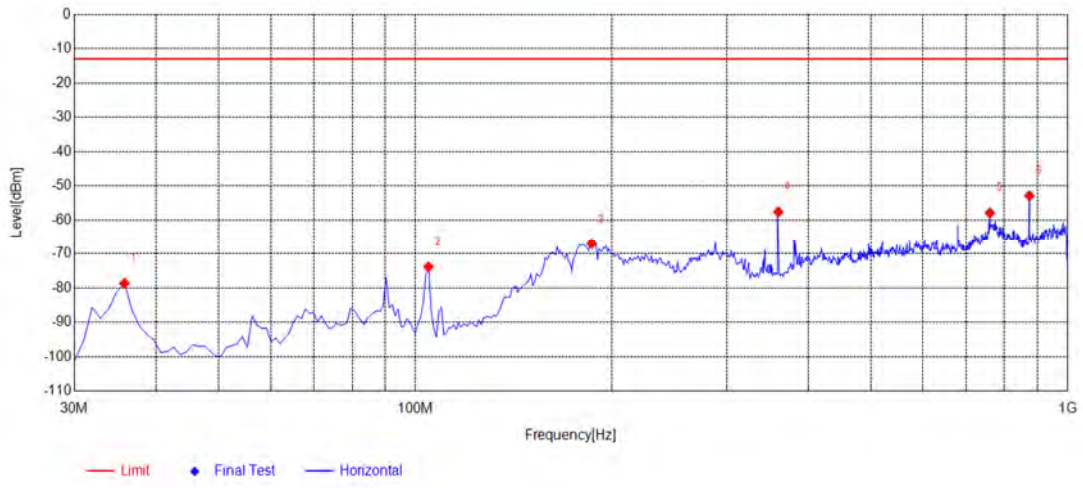


(Antenna Vertical, 1GHz to 12.75GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1697.6163	-30.81	-44.79	-13.00	31.79	-13.98	Vertical	PASS
2546.0910	-34.69	-43.75	-13.00	30.75	-9.06	Vertical	PASS
3395.3992	-45.15	-53.44	-13.00	40.44	-8.29	Vertical	PASS
5092.3487	-49.68	-49.74	-13.00	36.74	-0.06	Vertical	PASS
6261.7791	-50.91	-47.88	-13.00	34.88	3.03	Vertical	PASS
9709.9122	-58.28	-44.49	-13.00	31.49	13.79	Vertical	PASS

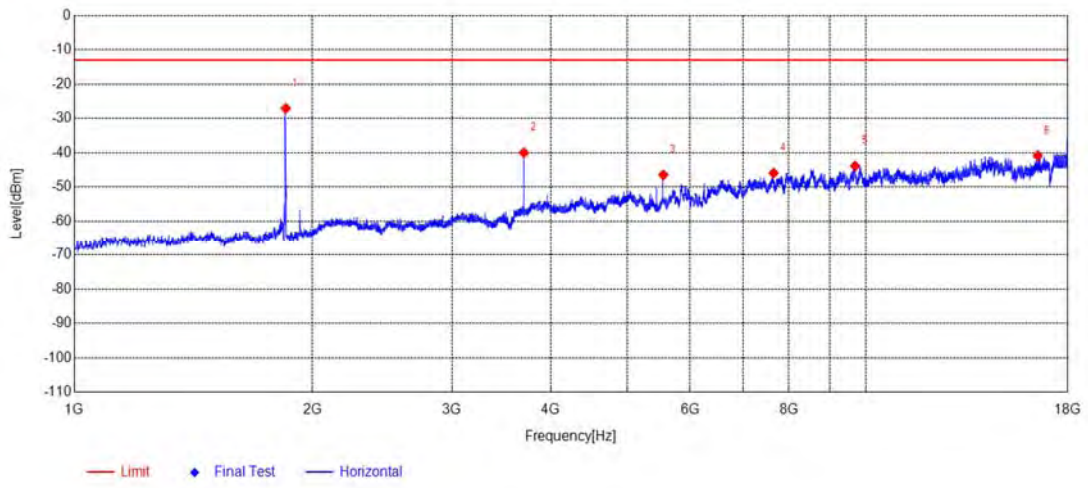
GSM1900(EDGE)

Plot for Low Channel



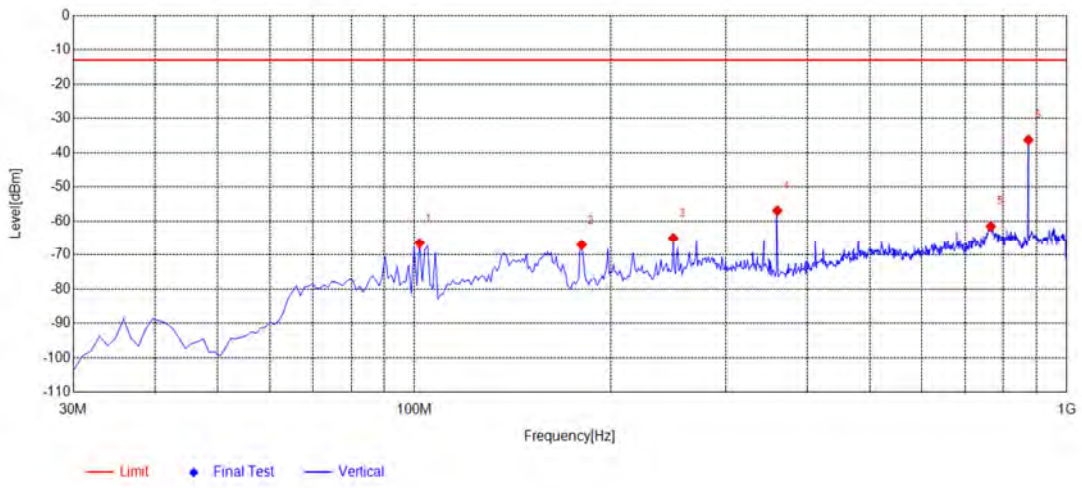
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
35.8258	-46.63	-78.62	-13.00	65.62	-31.99	Horizontal	PASS
104.7648	-49.16	-73.86	-13.00	60.86	-24.70	Horizontal	PASS
186.3263	-56.43	-67.03	-13.00	54.03	-10.60	Horizontal	PASS
360.1301	-51.69	-57.58	-13.00	44.58	-5.89	Horizontal	PASS
760.1702	-65.57	-57.90	-13.00	44.90	7.67	Horizontal	PASS
873.7738	-56.36	-52.91	-13.00	39.91	3.45	Horizontal	PASS



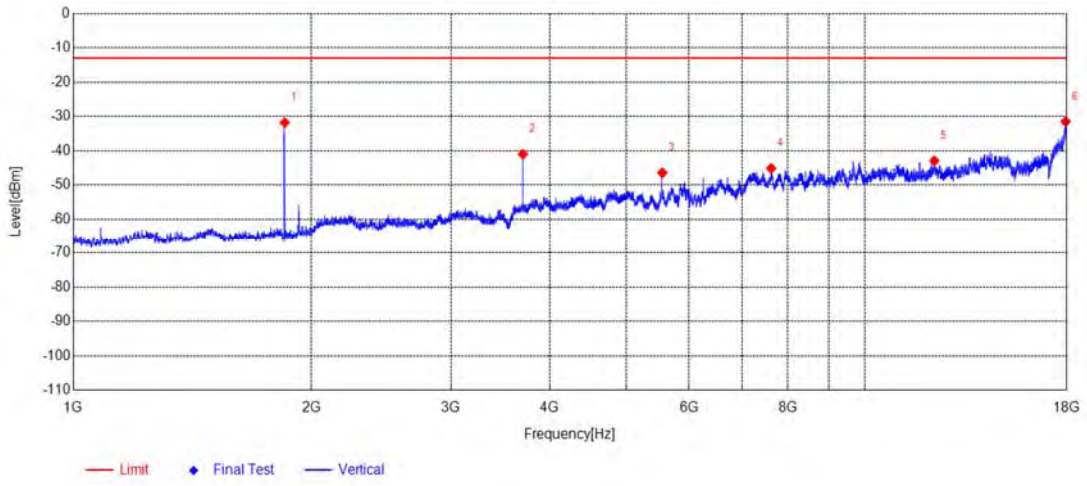
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1850.1417	-14.86	-27.10	-13.00	14.10	-12.24	NA	PASS
3700.4501	-33.79	-40.01	-13.00	27.01	-6.22	Horizontal	PASS
5550.7585	-48.27	-46.47	-13.00	33.47	1.80	Horizontal	PASS
7652.1836	-55.18	-45.93	-13.00	32.93	9.25	Horizontal	PASS
9699.0777	-58.79	-43.89	-13.00	30.89	14.90	Horizontal	PASS
16502.5003	-61.30	-40.86	-13.00	27.86	20.44	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

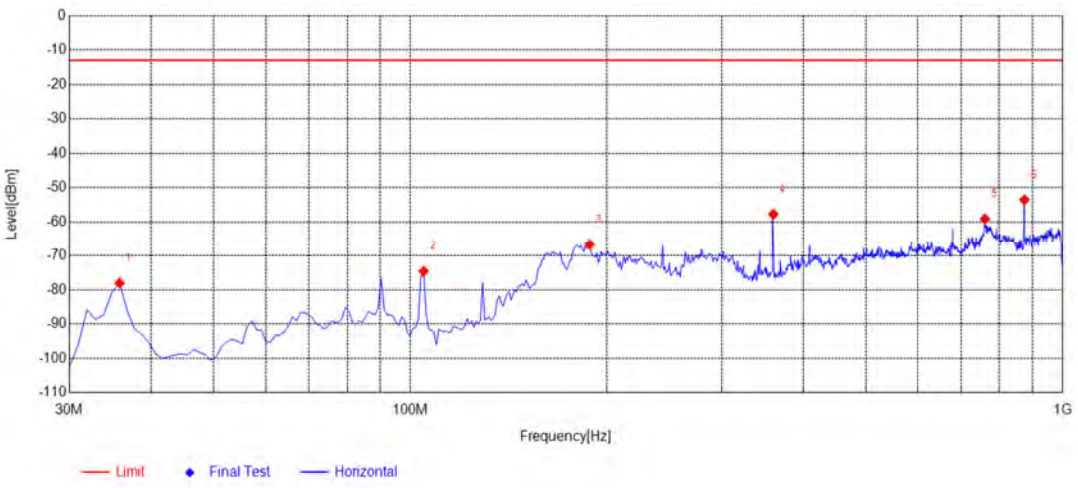
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
101.8519	-52.00	-66.55	-13.00	53.55	-14.55	Vertical	PASS
180.5005	-56.27	-67.03	-13.00	54.03	-10.76	Vertical	PASS
249.4394	-55.86	-65.03	-13.00	52.03	-9.17	Vertical	PASS
360.1301	-51.62	-56.92	-13.00	43.92	-5.30	Vertical	PASS
765.0250	-68.86	-61.50	-13.00	48.50	7.36	Vertical	PASS
873.7738	-40.95	-36.28	-13.00	23.28	4.67	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

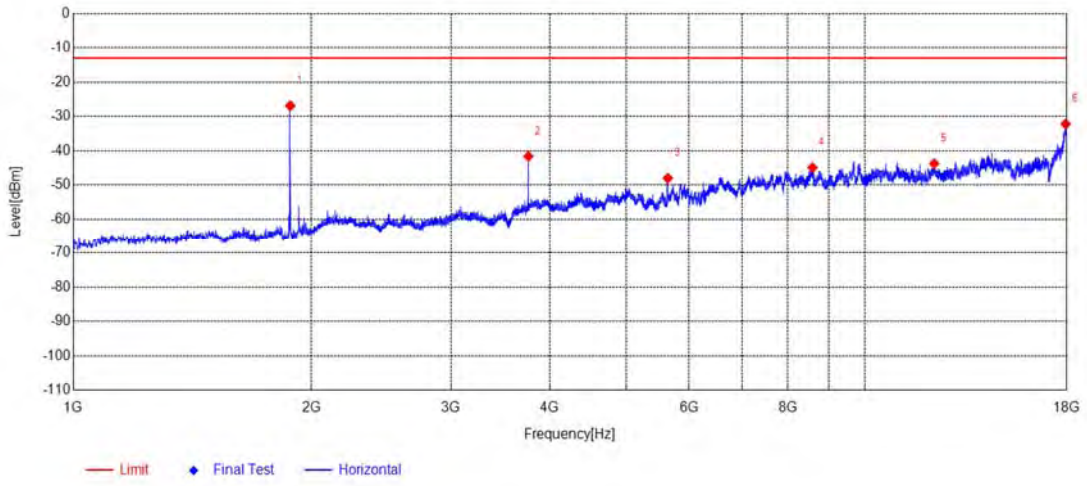
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1850.1417	-19.46	-31.81	-13.00	18.81	-12.35	Vertical	NA
3700.4501	-35.16	-41.01	-13.00	28.01	-5.85	Vertical	PASS
5550.7585	-49.27	-46.44	-13.00	33.44	2.83	Vertical	PASS
7620.1800	-54.77	-45.18	-13.00	32.18	9.59	Vertical	PASS
12246.0273	-59.37	-42.96	-13.00	29.96	16.41	Vertical	PASS
17949.3277	-61.70	-31.50	-13.00	18.50	30.20	Vertical	PASS

Plot for Mid Channel



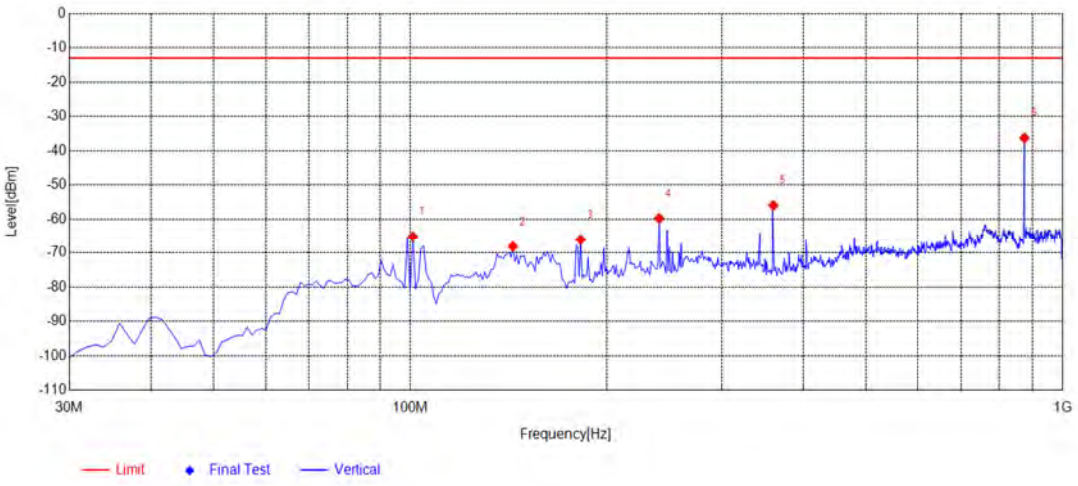
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
35.8258	-46.00	-77.99	-13.00	64.99	-31.99	Horizontal	PASS
104.7648	-49.83	-74.53	-13.00	61.53	-24.70	Horizontal	PASS
188.2683	-57.12	-66.68	-13.00	53.68	-9.56	Horizontal	PASS
360.1301	-51.82	-57.71	-13.00	44.71	-5.89	Horizontal	PASS
760.1702	-66.77	-59.10	-13.00	46.10	7.67	Horizontal	PASS
873.7738	-56.97	-53.52	-13.00	40.52	3.45	Horizontal	PASS



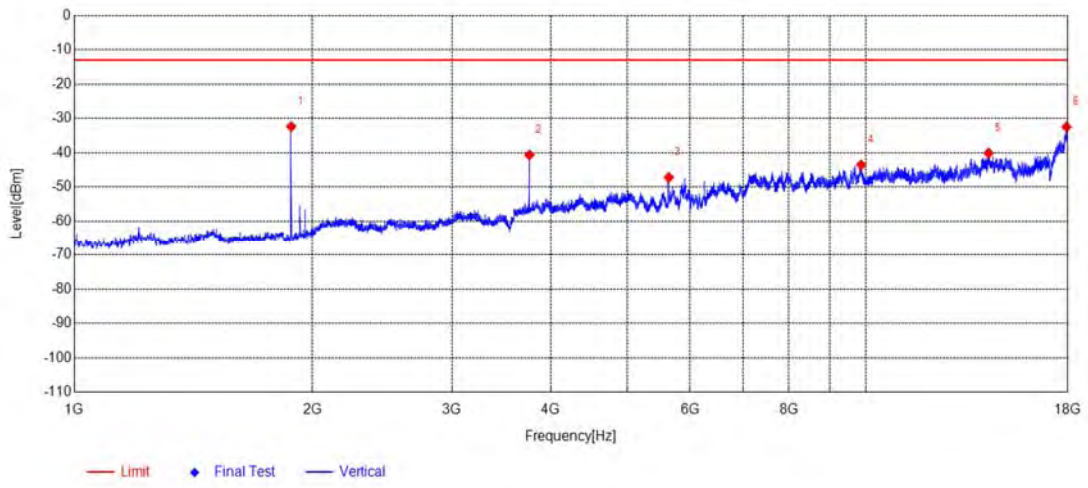
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1880.1467	-14.91	-26.90	-13.00	13.90	-11.99	Horizontal	NA
3759.6266	-36.22	-41.63	-13.00	28.63	-5.41	Horizontal	PASS
5640.7735	-48.24	-48.02	-13.00	35.02	0.22	Horizontal	PASS
8592.2880	-56.53	-44.93	-13.00	31.93	11.60	Horizontal	PASS
12243.3604	-59.70	-43.78	-13.00	30.78	15.92	Horizontal	PASS
17953.3281	-62.75	-32.22	-13.00	19.22	30.53	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

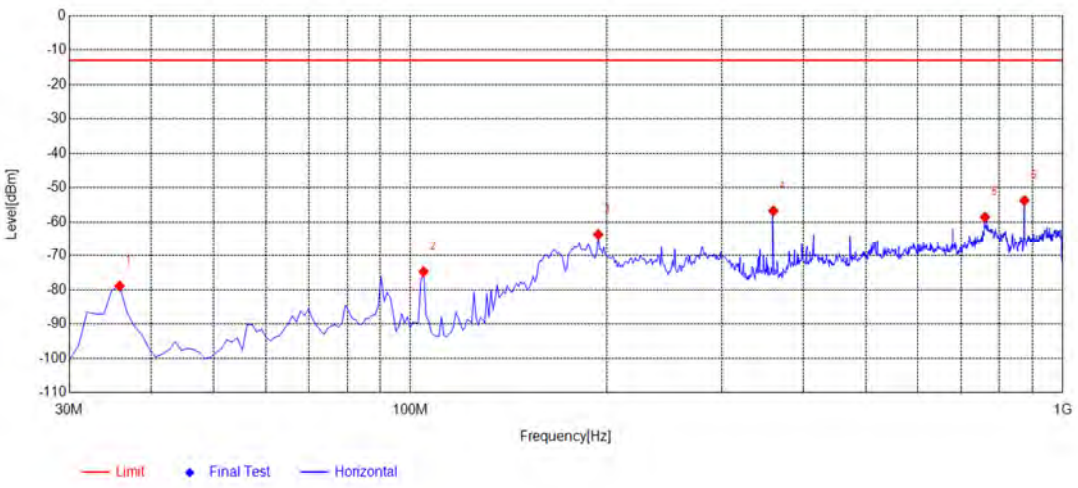
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
100.8809	-51.48	-65.19	-13.00	52.19	-13.71	Vertical	PASS
143.6036	-56.20	-68.14	-13.00	55.14	-11.94	Vertical	PASS
182.4424	-55.80	-66.08	-13.00	53.08	-10.28	Vertical	PASS
240.7007	-50.72	-59.75	-13.00	46.75	-9.03	Vertical	PASS
360.1301	-50.66	-55.96	-13.00	42.96	-5.30	Vertical	PASS
873.7738	-40.95	-36.28	-13.00	23.28	4.67	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

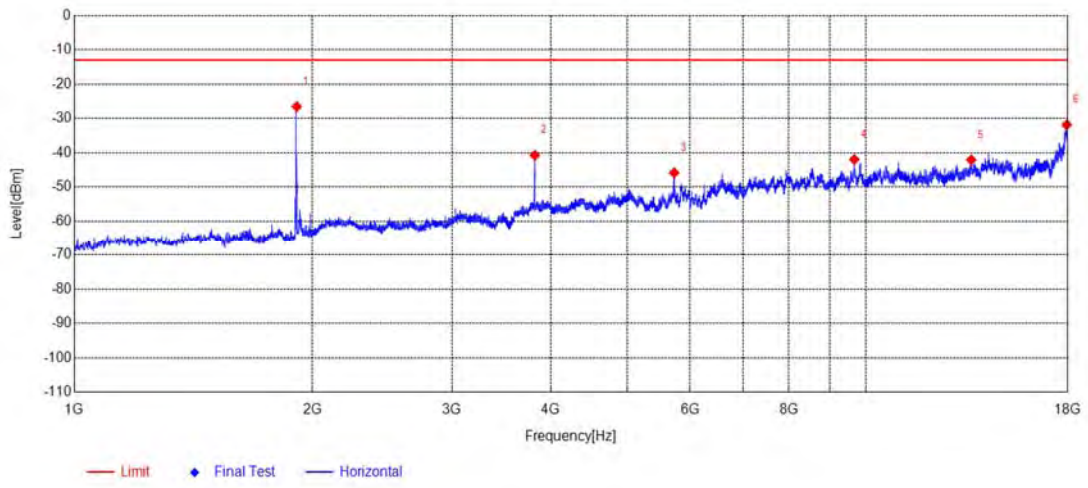
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1880.1467	-20.38	-32.39	-13.00	19.39	-12.01	Vertical	NA
3759.6266	-35.30	-40.66	-13.00	27.66	-5.36	Vertical	PASS
5639.9400	-47.49	-47.23	-13.00	34.23	0.26	Vertical	PASS
9873.7638	-58.56	-43.57	-13.00	30.57	14.99	Vertical	PASS
14302.2558	-60.16	-40.14	-13.00	27.14	20.02	Vertical	PASS
17942.6603	-62.21	-32.48	-13.00	19.48	29.73	Vertical	PASS

Plot for High Channel



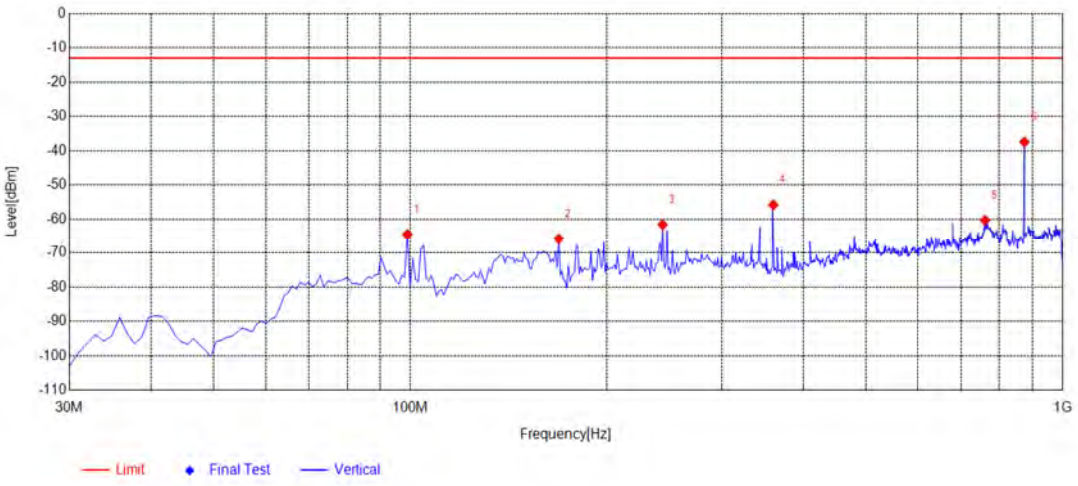
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
35.8258	-46.86	-78.85	-13.00	65.85	-31.99	Horizontal	PASS
104.7648	-49.96	-74.66	-13.00	61.66	-24.70	Horizontal	PASS
194.0941	-56.13	-63.59	-13.00	50.59	-7.46	Horizontal	PASS
360.1301	-50.85	-56.74	-13.00	43.74	-5.89	Horizontal	PASS
760.1702	-66.21	-58.54	-13.00	45.54	7.67	Horizontal	PASS
873.7738	-57.16	-53.71	-13.00	40.71	3.45	Horizontal	PASS



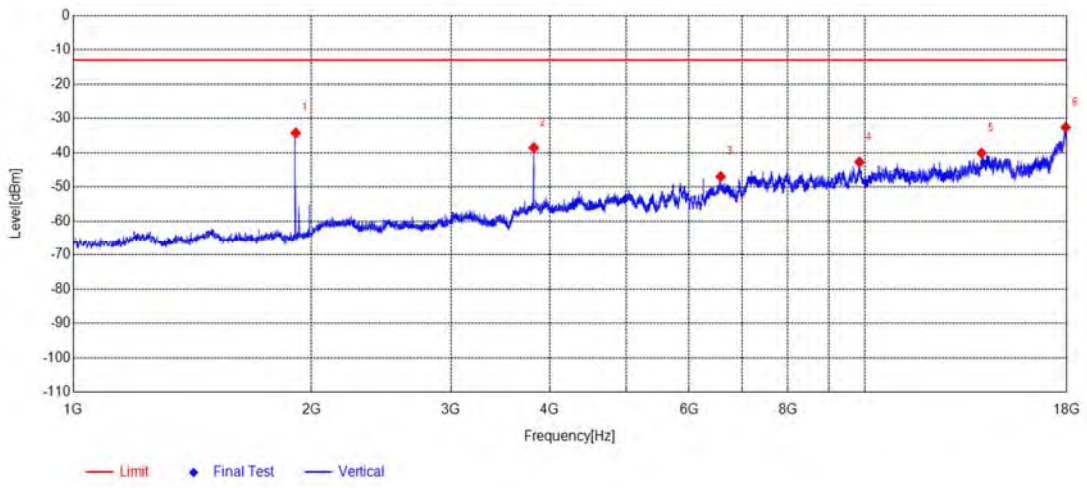
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1910.1517	-14.65	-26.55	-13.00	13.55	-11.90	Horizontal	NA
3819.6366	-36.80	-40.76	-13.00	27.76	-3.96	Horizontal	PASS
5729.1215	-48.28	-45.86	-13.00	32.86	2.42	Horizontal	PASS
9676.4085	-55.55	-41.96	-13.00	28.96	13.59	Horizontal	PASS
13598.1776	-60.49	-42.11	-13.00	29.11	18.38	Horizontal	PASS
17947.9942	-62.45	-31.88	-13.00	18.88	30.57	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
98.9389	-49.31	-64.48	-13.00	51.48	-15.17	Vertical	PASS
168.8488	-54.97	-65.82	-13.00	52.82	-10.85	Vertical	PASS
243.6136	-52.85	-61.61	-13.00	48.61	-8.76	Vertical	PASS
360.1301	-50.52	-55.82	-13.00	42.82	-5.30	Vertical	PASS
760.1702	-67.67	-60.29	-13.00	47.29	7.38	Vertical	PASS
873.7738	-42.15	-37.48	-13.00	24.48	4.67	Vertical	PASS

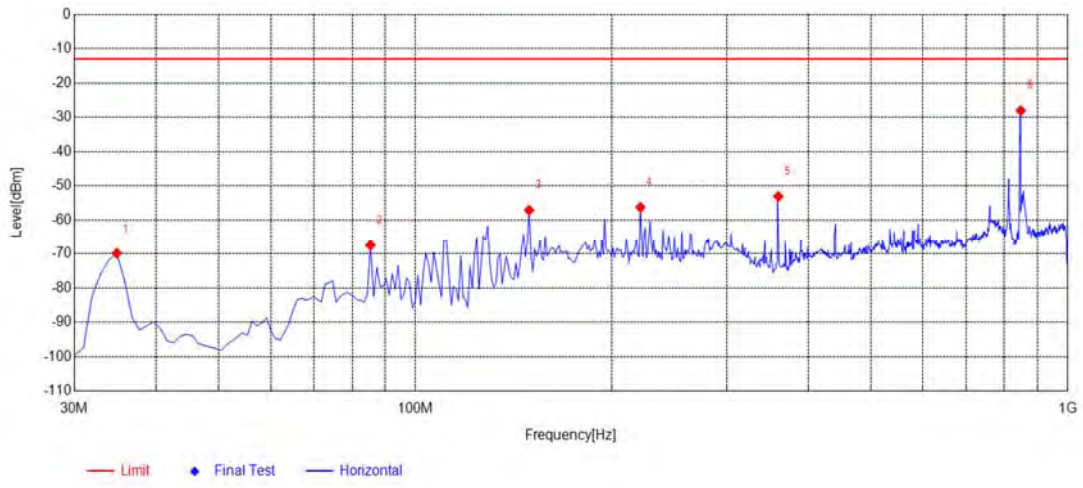


(Antenna Vertical, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1910.1517	-22.36	-34.25	-13.00	21.25	-11.89	Vertical	NA
3819.6366	-34.54	-38.54	-13.00	25.54	-4.00	Vertical	PASS
6578.7310	-52.81	-46.97	-13.00	33.97	5.84	Vertical	PASS
9849.7611	-58.27	-42.72	-13.00	29.72	15.55	Vertical	PASS
14052.8948	-59.30	-40.10	-13.00	27.10	19.20	Vertical	PASS
17951.9947	-62.74	-32.61	-13.00	19.61	30.13	Vertical	PASS

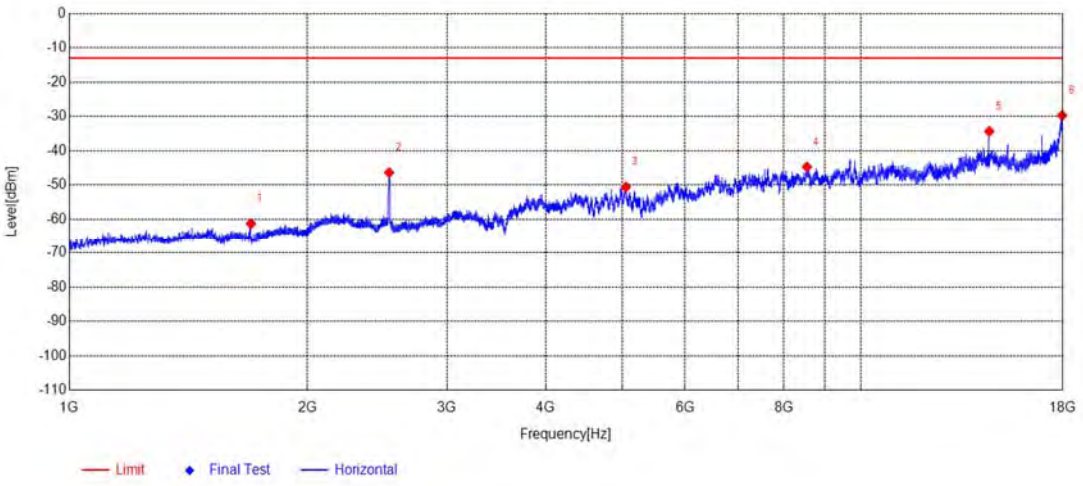
WCDMA Band V(WCDMA)

Plot for Low Channel



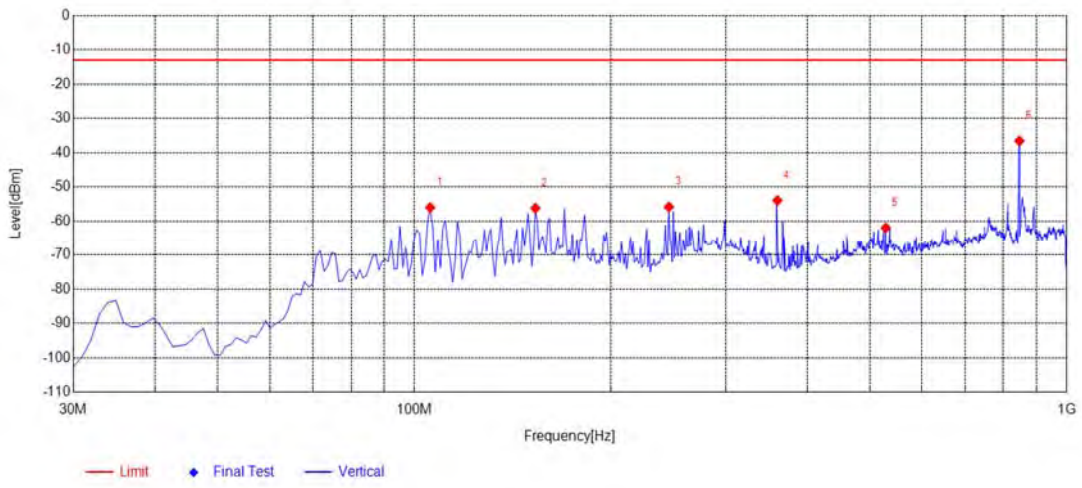
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
34.8549	-37.23	-69.91	-13.00	56.91	-32.68	Horizontal	PASS
85.3453	-43.94	-67.49	-13.00	54.49	-23.55	Horizontal	PASS
149.4294	-40.83	-57.09	-13.00	44.09	-16.26	Horizontal	PASS
221.2813	-51.63	-56.25	-13.00	43.25	-4.62	Horizontal	PASS
360.1301	-47.18	-53.07	-13.00	40.07	-5.89	Horizontal	PASS
847.5576	-31.46	-28.07	-13.00	15.07	3.39	Horizontal	NA



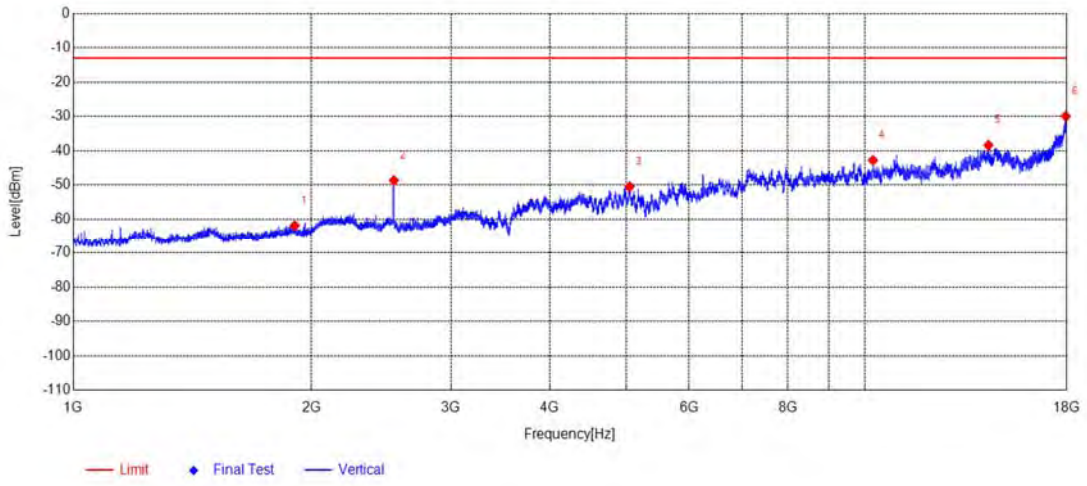
(Antenna Horizontal, 1GHz to 12.75GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1696.0696	-46.61	-61.29	-13.00	48.29	-14.68	Horizontal	PASS
2536.6537	-37.32	-46.38	-13.00	33.38	-9.06	Horizontal	PASS
5049.4049	-51.89	-50.60	-13.00	37.60	1.29	Horizontal	PASS
8553.8554	-55.78	-44.72	-13.00	31.72	11.06	Horizontal	PASS
14542.4542	-52.61	-34.35	-13.00	21.35	18.26	Horizontal	PASS
17974.7975	-59.03	-29.72	-13.00	16.72	29.31	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

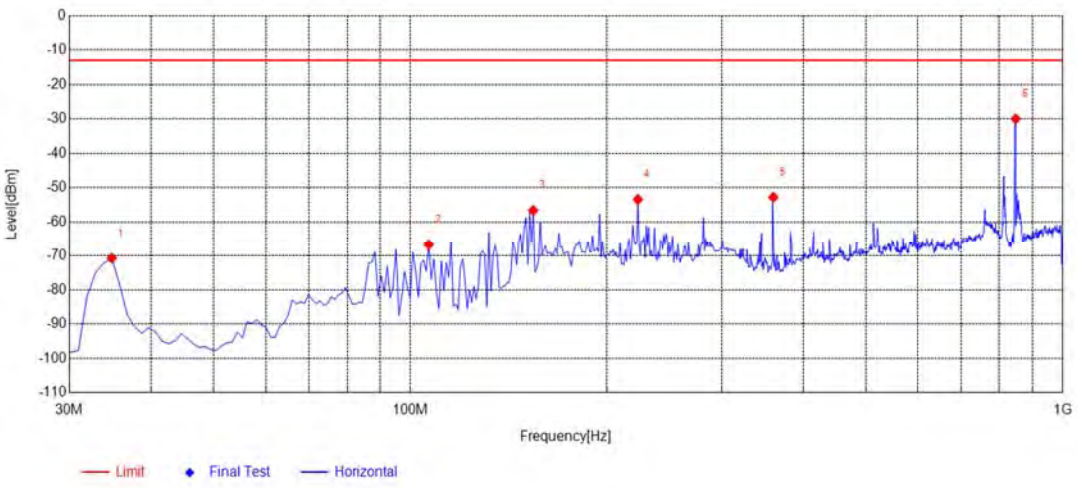
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
105.7357	-41.85	-56.00	-13.00	43.00	-14.15	Vertical	PASS
153.3133	-45.31	-56.19	-13.00	43.19	-10.88	Vertical	PASS
245.5556	-47.12	-55.82	-13.00	42.82	-8.70	Vertical	PASS
360.1301	-48.64	-53.94	-13.00	40.94	-5.30	Vertical	PASS
528.1081	-62.26	-61.93	-13.00	48.93	0.33	Vertical	PASS
846.5866	-40.05	-36.55	-13.00	23.55	3.50	Vertical	NA



(Antenna Vertical, 1GHz to 12.75GHz)

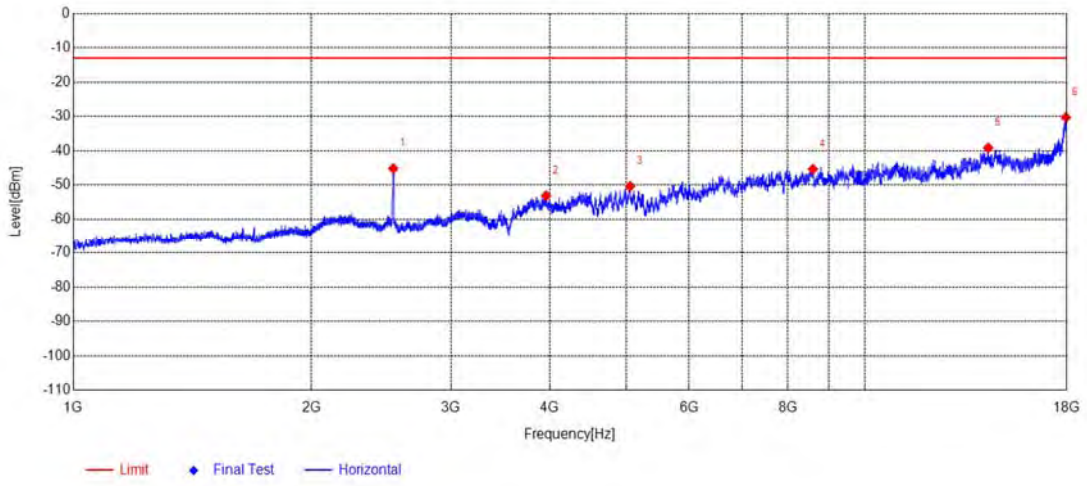
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1904.5905	-50.04	-61.87	-13.00	48.87	-11.83	Vertical	PASS
2541.6542	-39.67	-48.68	-13.00	35.68	-9.01	Vertical	PASS
5046.9047	-51.45	-50.50	-13.00	37.50	0.95	Vertical	PASS
10246.0246	-57.20	-42.80	-13.00	29.80	14.40	Vertical	PASS
14339.6340	-58.31	-38.39	-13.00	25.39	19.92	Vertical	PASS
17959.1959	-59.65	-29.94	-13.00	16.94	29.71	Vertical	PASS

Plot for Mid Channel



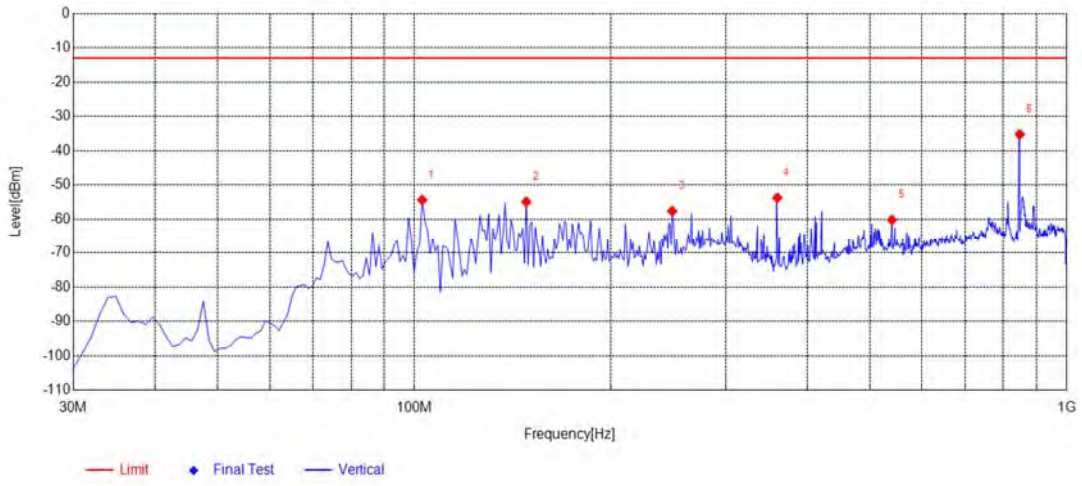
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
34.8549	-38.04	-70.72	-13.00	57.72	-32.68	Horizontal	PASS
106.7067	-41.66	-66.71	-13.00	53.71	-25.05	Horizontal	PASS
154.2843	-40.80	-56.59	-13.00	43.59	-15.79	Horizontal	PASS
223.2232	-49.62	-53.39	-13.00	40.39	-3.77	Horizontal	PASS
360.1301	-46.88	-52.77	-13.00	39.77	-5.89	Horizontal	NA
847.5576	-33.36	-29.97	-13.00	16.97	3.39	Horizontal	NA



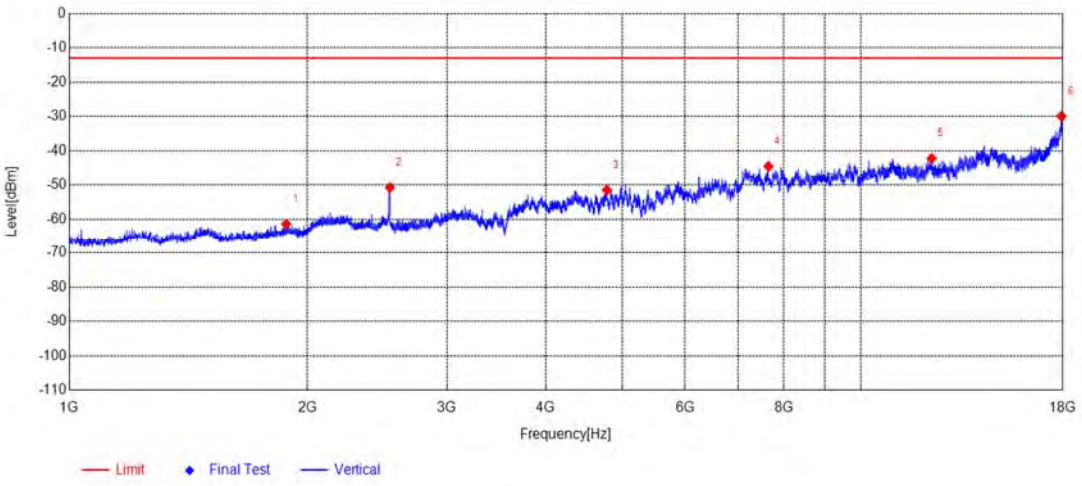
(Antenna Horizontal, 1GHz to 12.75GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
2537.6538	-36.13	-45.20	-13.00	32.20	-9.07	Horizontal	PASS
3958.2958	-50.04	-53.14	-13.00	40.14	-3.10	Horizontal	PASS
5054.9055	-51.52	-50.36	-13.00	37.36	1.16	Horizontal	PASS
8603.0603	-56.88	-45.38	-13.00	32.38	11.50	Horizontal	PASS
14328.8329	-58.57	-39.16	-13.00	26.16	19.41	Horizontal	PASS
17959.1959	-60.53	-30.33	-13.00	17.33	30.20	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

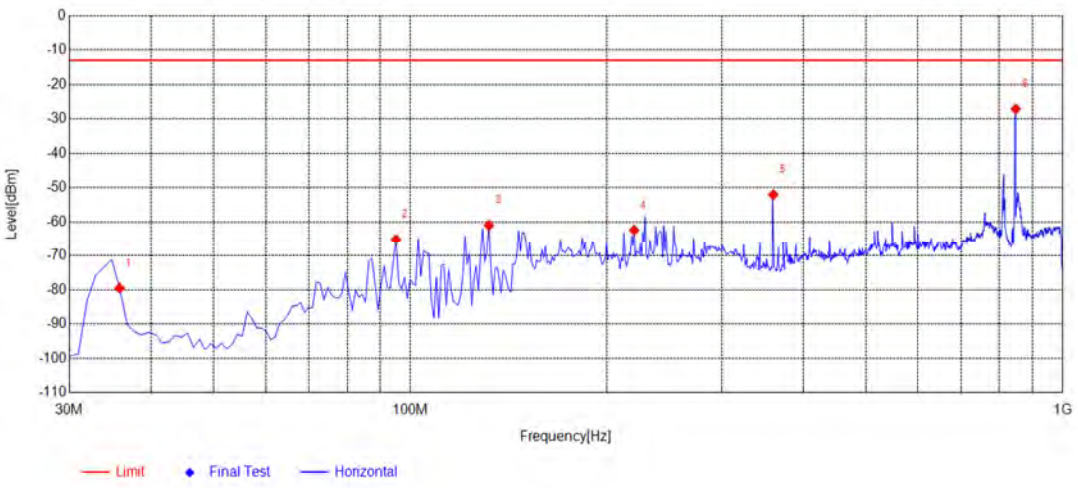
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
102.8228	-40.37	-54.36	-13.00	41.36	-13.99	Vertical	PASS
148.4585	-44.27	-54.91	-13.00	41.91	-10.64	Vertical	PASS
248.4685	-48.57	-57.62	-13.00	44.62	-9.05	Vertical	PASS
360.1301	-48.44	-53.74	-13.00	40.74	-5.30	Vertical	PASS
539.7598	-61.43	-60.18	-13.00	47.18	1.25	Vertical	NA
847.5576	-38.54	-35.24	-13.00	22.24	3.30	Vertical	NA



(Antenna Vertical, 1GHz to 12.75GHz)

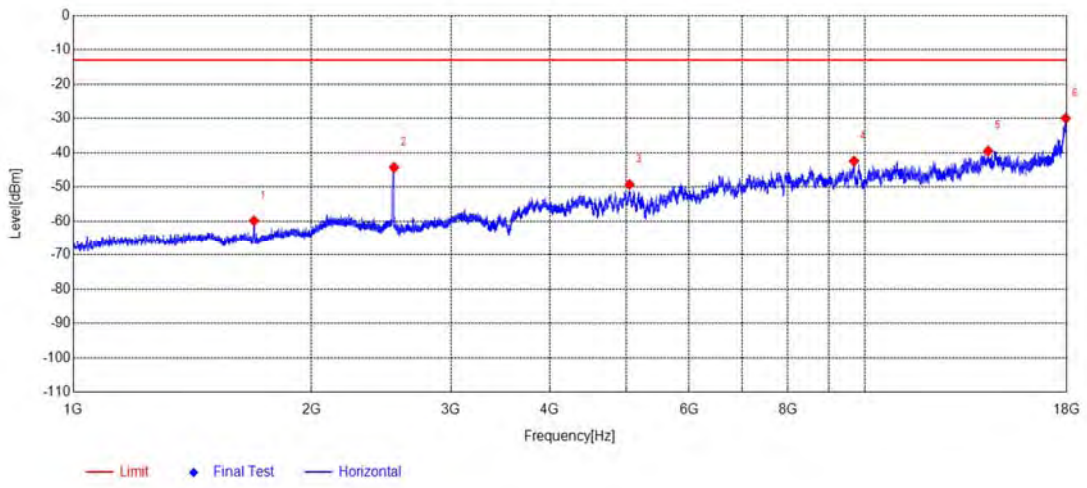
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1880.5881	-49.44	-61.44	-13.00	48.44	-12.00	Vertical	PASS
2542.1542	-41.72	-50.73	-13.00	37.73	-9.01	Vertical	PASS
4779.8780	-51.53	-51.48	-13.00	38.48	0.05	Vertical	PASS
7648.9649	-54.56	-44.55	-13.00	31.55	10.01	Vertical	PASS
12294.6295	-58.01	-42.28	-13.00	29.28	15.73	Vertical	PASS
17945.9946	-59.94	-29.98	-13.00	16.98	29.96	Vertical	PASS

Plot for High Channel



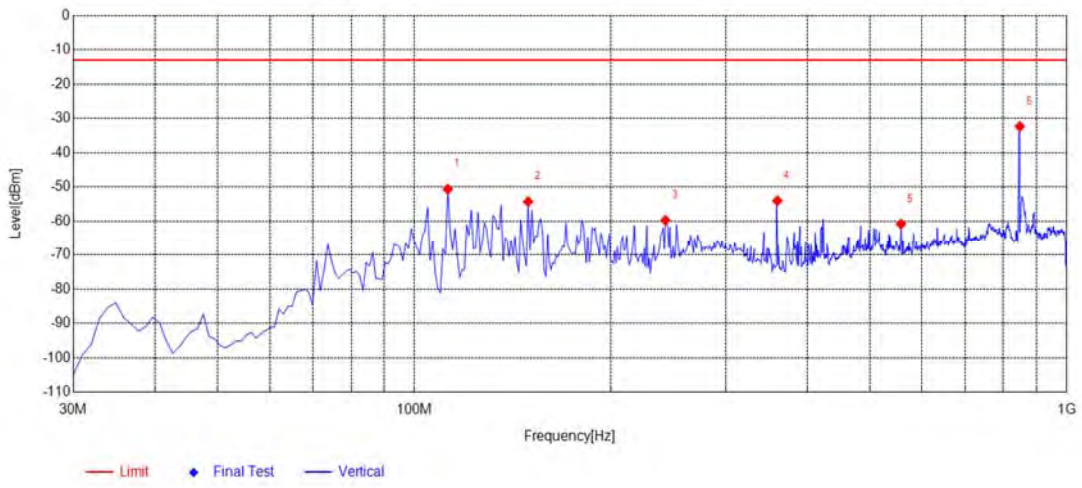
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
35.8258	-47.48	-79.47	-13.00	66.47	-31.99	Horizontal	PASS
95.0551	-41.33	-65.18	-13.00	52.18	-23.85	Horizontal	PASS
131.9520	-42.09	-60.96	-13.00	47.96	-18.87	Horizontal	PASS
220.3103	-57.33	-62.37	-13.00	49.37	-5.04	Horizontal	PASS
360.1301	-46.12	-52.01	-13.00	39.01	-5.89	Horizontal	PASS
847.5576	-30.50	-27.11	-13.00	14.11	3.39	Horizontal	NA



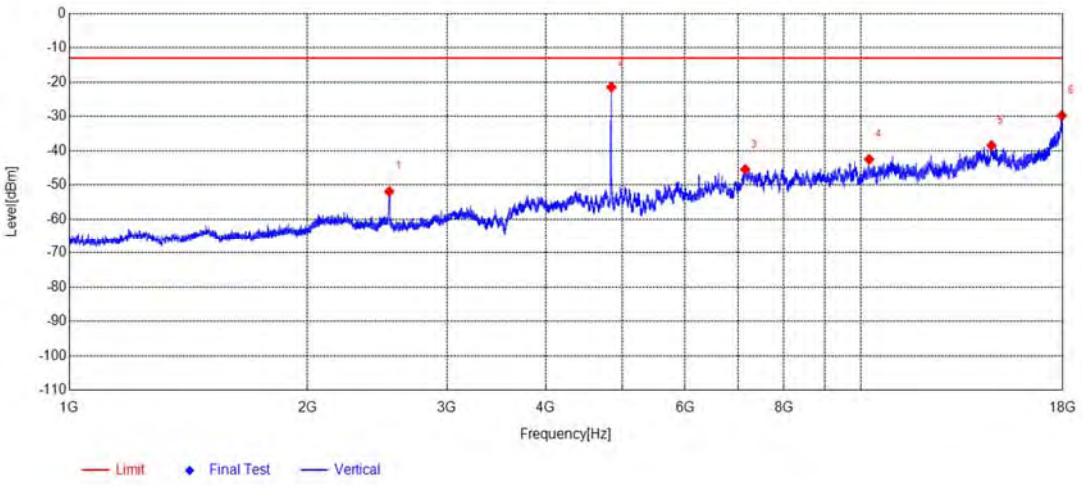
(Antenna Horizontal, 1GHz to 12.75GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1691.5692	-45.30	-59.85	-13.00	46.85	-14.55	Horizontal	PASS
2543.1543	-35.20	-44.31	-13.00	31.31	-9.11	Horizontal	PASS
5045.9046	-50.44	-49.23	-13.00	36.23	1.21	Horizontal	PASS
9696.3696	-57.18	-42.44	-13.00	29.44	14.74	Horizontal	PASS
14324.0324	-58.91	-39.48	-13.00	26.48	19.43	Horizontal	PASS
17948.3948	-60.57	-29.97	-13.00	16.97	30.60	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
112.5325	-38.75	-50.65	-13.00	37.65	-11.90	Vertical	PASS
149.4294	-43.15	-54.27	-13.00	41.27	-11.12	Vertical	PASS
242.6426	-50.84	-59.69	-13.00	46.69	-8.85	Vertical	PASS
360.1301	-48.72	-54.02	-13.00	41.02	-5.30	Vertical	PASS
557.2372	-60.97	-60.82	-13.00	47.82	0.15	Vertical	PASS
847.5576	-35.65	-32.35	-13.00	19.35	3.30	Vertical	NA

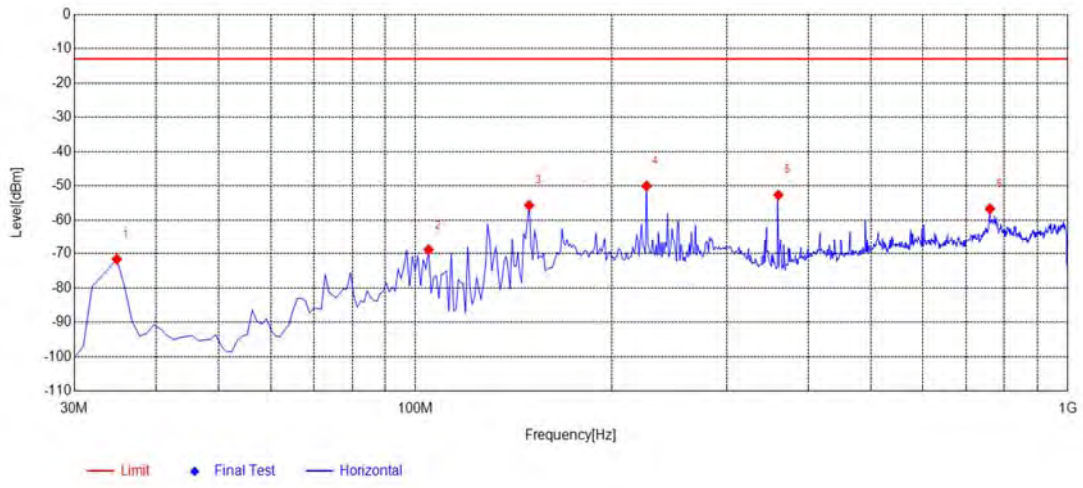


(Antenna Vertical, 1GHz to 12.75GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
2537.1537	-42.95	-51.90	-13.00	38.90	-8.95	Vertical	PASS
4843.8844	-21.81	-21.45	-13.00	8.45	0.36	Vertical	PASS
7147.3147	-54.46	-45.48	-13.00	32.48	8.98	Vertical	PASS
10252.0252	-56.99	-42.52	-13.00	29.52	14.47	Vertical	PASS
14632.4632	-59.13	-38.50	-13.00	25.50	20.63	Vertical	PASS
17957.9958	-59.55	-29.77	-13.00	16.77	29.78	Vertical	PASS

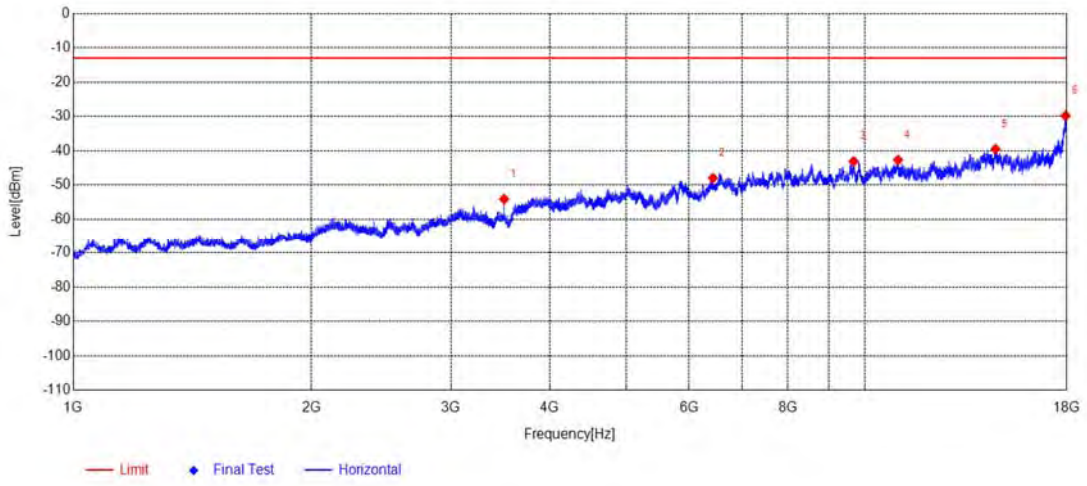
WCDMA Band IV(WCDMA)

Plot for Low Channel



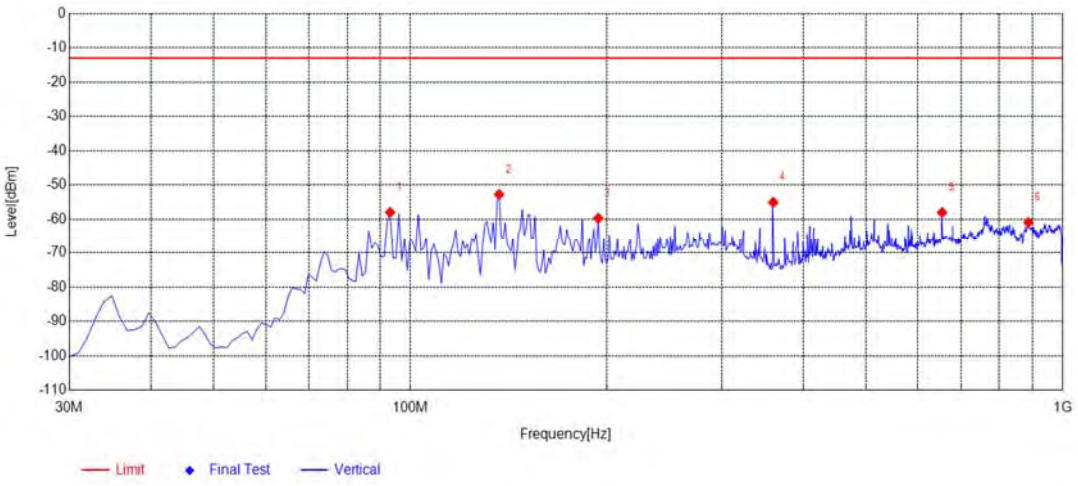
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
34.8549	-38.95	-71.63	-13.00	58.63	-32.68	Horizontal	PASS
104.7648	-44.16	-68.86	-13.00	55.86	-24.70	Horizontal	PASS
149.4294	-39.43	-55.69	-13.00	42.69	-16.26	Horizontal	PASS
226.1361	-46.92	-50.03	-13.00	37.03	-3.11	Horizontal	PASS
360.1301	-46.76	-52.65	-13.00	39.65	-5.89	Horizontal	PASS
760.1702	-64.33	-56.66	-13.00	43.66	7.67	Horizontal	PASS



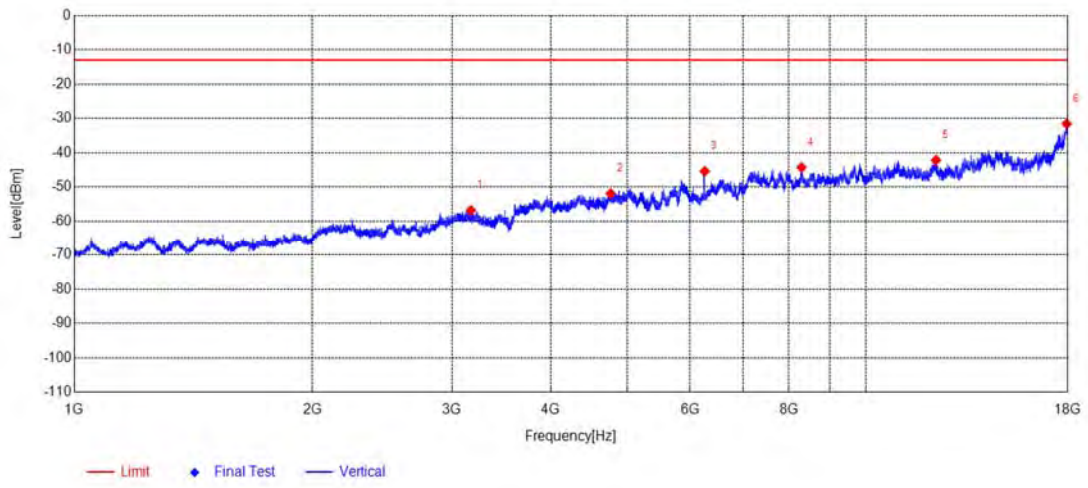
(Antenna Horizontal, 1GHz to 12.75GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
3502.7503	-47.37	-54.09	-13.00	41.09	-6.72	Horizontal	PASS
6432.0432	-52.39	-47.97	-13.00	34.97	4.42	Horizontal	PASS
9683.1683	-57.09	-43.11	-13.00	30.11	13.98	Horizontal	PASS
11020.1020	-57.38	-42.73	-13.00	29.73	14.65	Horizontal	PASS
14636.0636	-59.53	-39.51	-13.00	26.51	20.02	Horizontal	PASS
17948.3948	-60.41	-29.81	-13.00	16.81	30.60	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

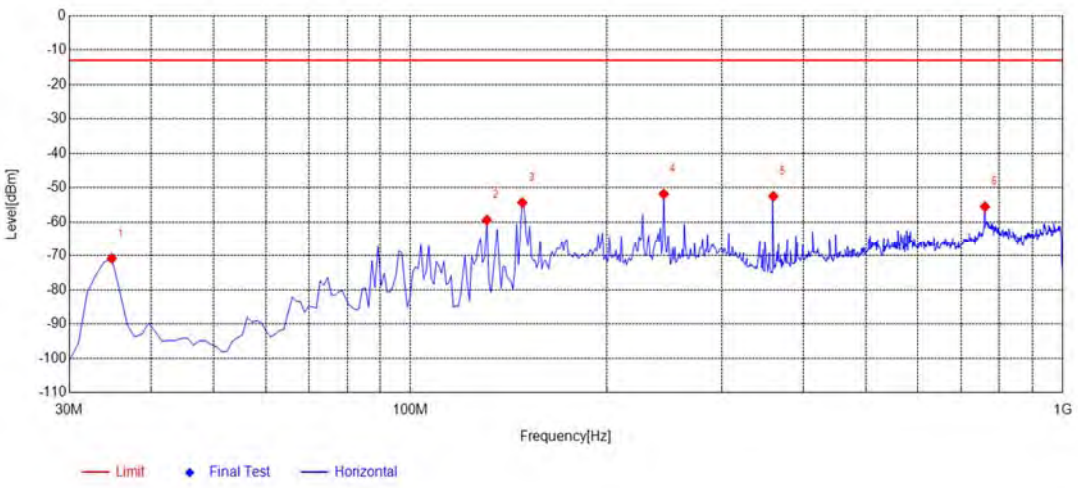
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
93.1131	-43.23	-57.99	-13.00	44.99	-14.76	Vertical	PASS
136.8068	-44.49	-52.74	-13.00	39.74	-8.25	Vertical	PASS
194.0941	-50.54	-59.70	-13.00	46.70	-9.16	Vertical	PASS
360.1301	-49.76	-55.06	-13.00	42.06	-5.30	Vertical	PASS
653.3634	-60.65	-58.02	-13.00	45.02	2.63	Vertical	PASS
886.3964	-66.97	-60.91	-13.00	47.91	6.06	Vertical	NA



(Antenna Vertical, 1GHz to 12.75GHz)

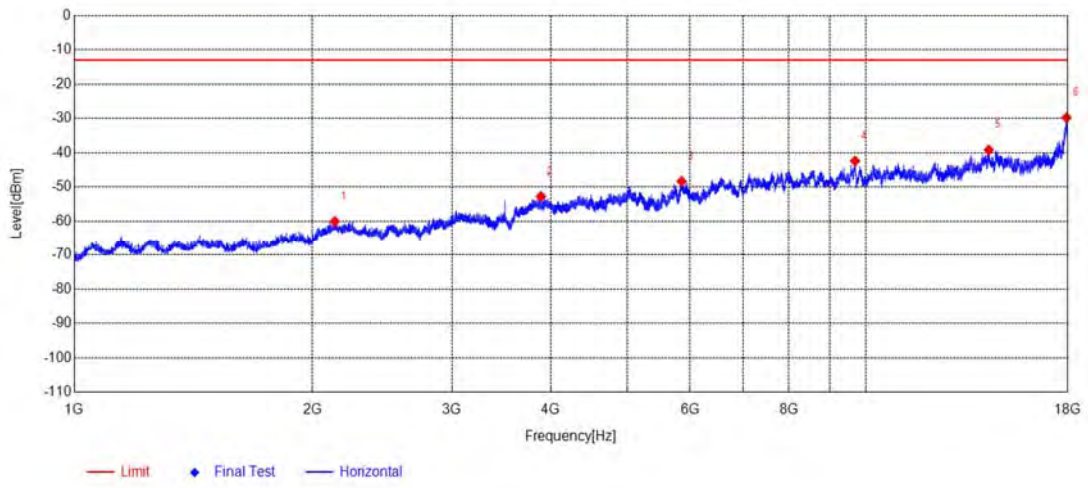
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
3171.2171	-50.51	-56.80	-13.00	43.80	-6.29	Vertical	PASS
4760.8761	-51.93	-51.91	-13.00	38.91	0.02	Vertical	PASS
6261.6262	-48.43	-45.40	-13.00	32.40	3.03	Vertical	PASS
8299.4299	-54.71	-44.31	-13.00	31.31	10.40	Vertical	PASS
12271.8272	-58.31	-42.19	-13.00	29.19	16.12	Vertical	PASS
17949.5950	-61.82	-31.60	-13.00	18.60	30.22	Vertical	PASS

Plot for Mid Channel



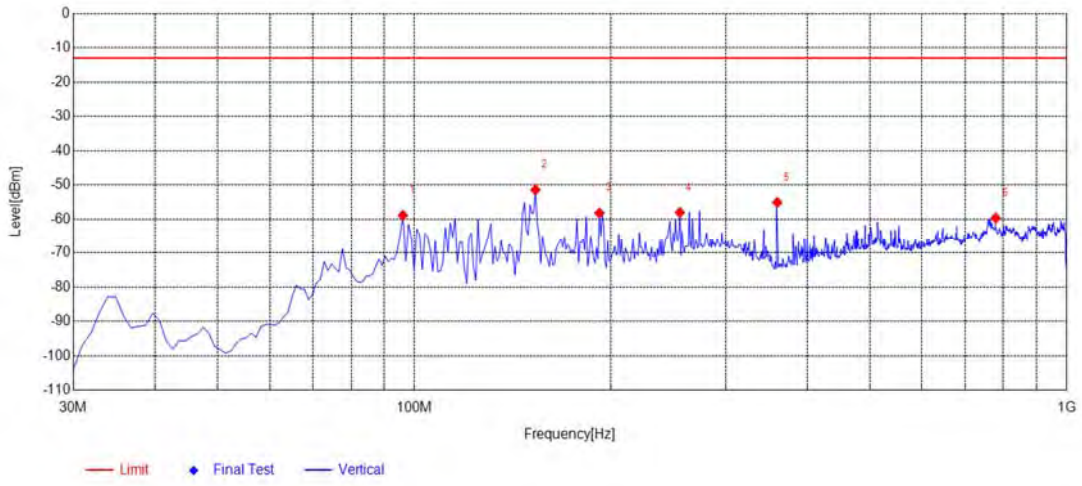
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
34.8549	-38.11	-70.79	-13.00	57.79	-32.68	Horizontal	PASS
130.9810	-39.27	-59.38	-13.00	46.38	-20.11	Horizontal	PASS
148.4585	-38.56	-54.34	-13.00	41.34	-15.78	Horizontal	PASS
244.5846	-47.50	-51.83	-13.00	38.83	-4.33	Horizontal	PASS
360.1301	-46.60	-52.49	-13.00	39.49	-5.89	Horizontal	PASS
760.1702	-63.20	-55.53	-13.00	42.53	7.67	Horizontal	PASS



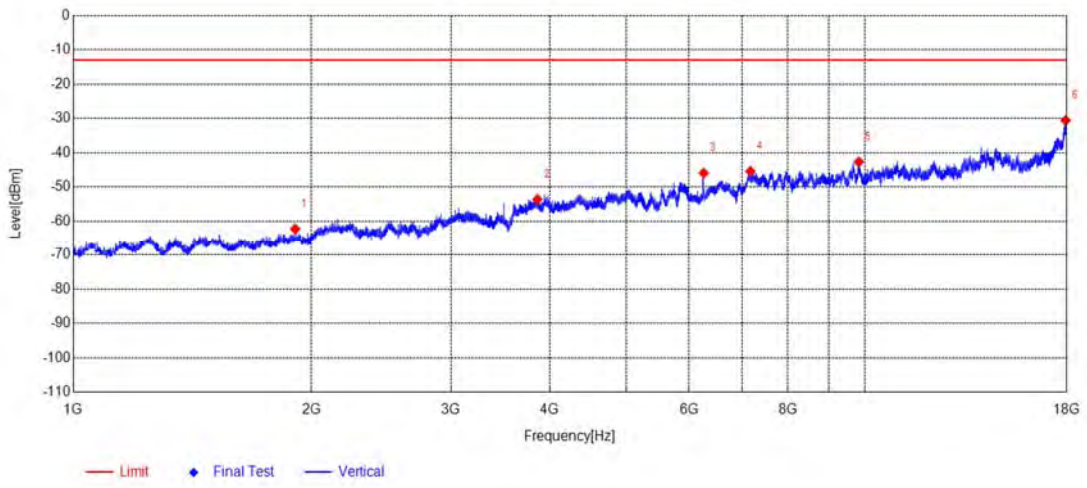
(Antenna Horizontal, 1GHz to 12.75GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
2133.6134	-51.46	-60.05	-13.00	47.05	-8.59	Horizontal	PASS
3887.2887	-48.37	-52.74	-13.00	39.74	-4.37	Horizontal	PASS
5854.9855	-52.07	-48.37	-13.00	35.37	3.70	Horizontal	PASS
9697.5698	-57.24	-42.43	-13.00	29.43	14.81	Horizontal	PASS
14313.2313	-58.66	-39.19	-13.00	26.19	19.47	Horizontal	PASS
17944.7945	-60.12	-29.79	-13.00	16.79	30.33	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

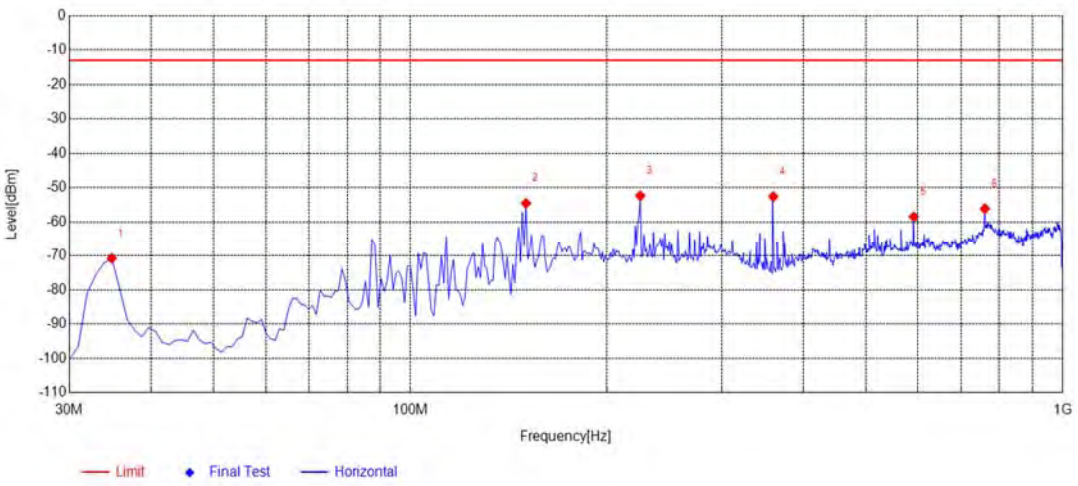
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
96.0260	-45.39	-58.85	-13.00	45.85	-13.46	Vertical	PASS
153.3133	-40.53	-51.41	-13.00	38.41	-10.88	Vertical	PASS
192.1522	-48.90	-58.17	-13.00	45.17	-9.27	Vertical	PASS
255.2653	-49.58	-58.02	-13.00	45.02	-8.44	Vertical	PASS
360.1301	-49.77	-55.07	-13.00	42.07	-5.30	Vertical	PASS
778.6186	-65.82	-59.60	-13.00	46.60	6.22	Vertical	PASS



(Antenna Vertical, 1GHz to 12.75GHz)

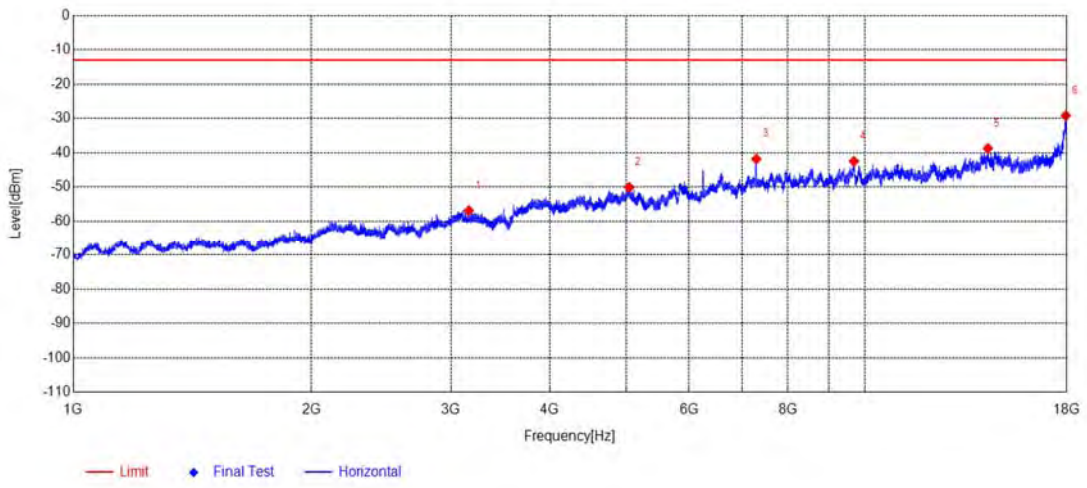
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1907.0907	-50.42	-62.28	-13.00	49.28	-11.86	Vertical	PASS
3859.2859	-49.63	-53.61	-13.00	40.61	-3.98	Vertical	PASS
6261.6262	-48.97	-45.94	-13.00	32.94	3.03	Vertical	PASS
7172.5173	-54.20	-45.45	-13.00	32.45	8.75	Vertical	PASS
9834.3834	-57.21	-42.67	-13.00	29.67	14.54	Vertical	PASS
17948.3948	-60.72	-30.58	-13.00	17.58	30.14	Vertical	PASS

Plot for High Channel



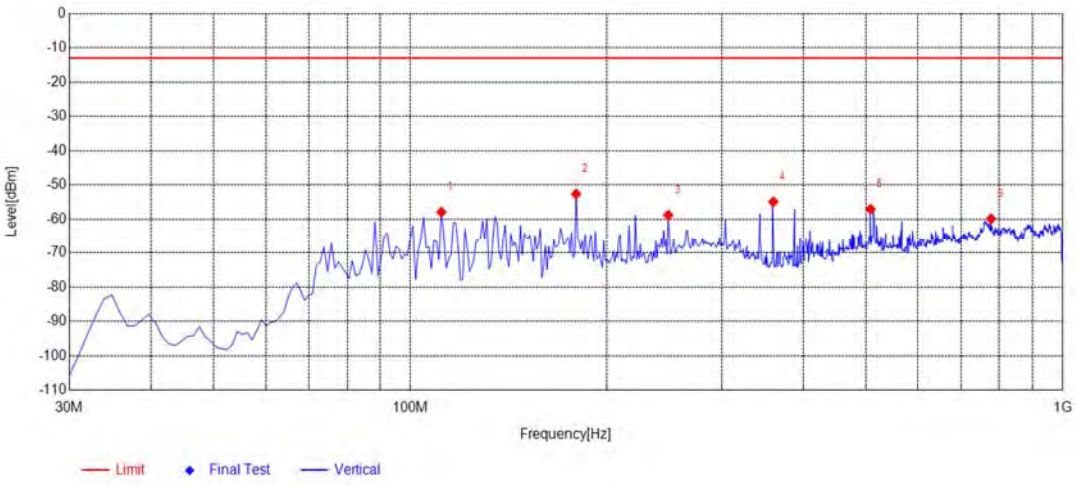
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
34.8549	-38.08	-70.76	-13.00	57.76	-32.68	Horizontal	PASS
150.4004	-38.07	-54.52	-13.00	41.52	-16.45	Horizontal	PASS
225.1652	-49.33	-52.34	-13.00	39.34	-3.01	Horizontal	PASS
360.1301	-46.70	-52.59	-13.00	39.59	-5.89	Horizontal	PASS
591.2212	-60.59	-58.47	-13.00	45.47	2.12	Horizontal	NA
760.1702	-63.78	-56.11	-13.00	43.11	7.67	Horizontal	NA



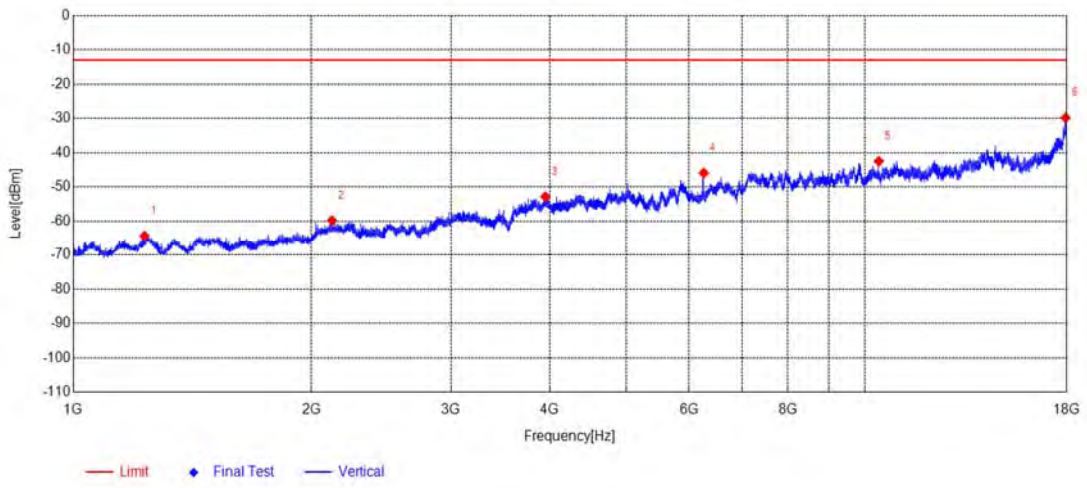
(Antenna Horizontal, 1GHz to 12.75GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
3160.2160	-50.00	-56.89	-13.00	43.89	-6.89	Horizontal	PASS
5040.9041	-51.20	-50.10	-13.00	37.10	1.10	Horizontal	PASS
7297.3297	-48.81	-41.82	-13.00	28.82	6.99	Horizontal	PASS
9691.5692	-56.98	-42.52	-13.00	29.52	14.46	Horizontal	PASS
14313.2313	-58.25	-38.78	-13.00	25.78	19.47	Horizontal	PASS
17953.1953	-59.74	-29.21	-13.00	16.21	30.53	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
111.5616	-45.35	-57.89	-13.00	44.89	-12.54	Vertical	PASS
179.5295	-41.48	-52.64	-13.00	39.64	-11.16	Vertical	PASS
248.4685	-49.72	-58.77	-13.00	45.77	-9.05	Vertical	PASS
360.1301	-49.60	-54.90	-13.00	41.90	-5.30	Vertical	PASS
507.7177	-58.49	-57.04	-13.00	44.04	1.45	Vertical	NA
776.6767	-66.13	-59.89	-13.00	46.89	6.24	Vertical	NA

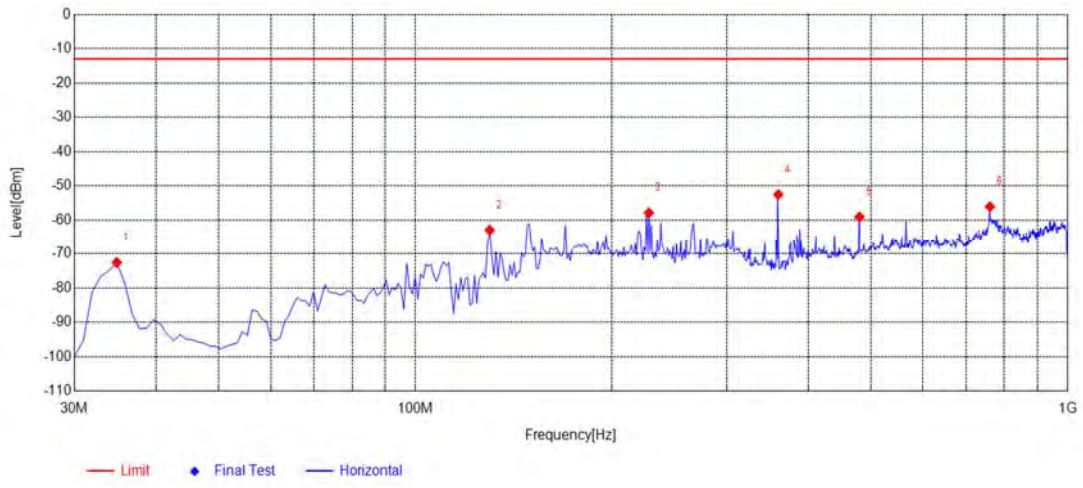


(Antenna Vertical, 1GHz to 12.75GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1230.5231	-50.86	-64.36	-13.00	51.36	-13.50	Vertical	PASS
2123.1123	-50.98	-59.82	-13.00	46.82	-8.84	Vertical	PASS
3950.2950	-50.10	-52.86	-13.00	39.86	-2.76	Vertical	PASS
6261.6262	-48.96	-45.93	-13.00	32.93	3.03	Vertical	PASS
10423.6424	-56.70	-42.48	-13.00	29.48	14.22	Vertical	PASS
17948.3948	-59.95	-29.81	-13.00	16.81	30.14	Vertical	PASS

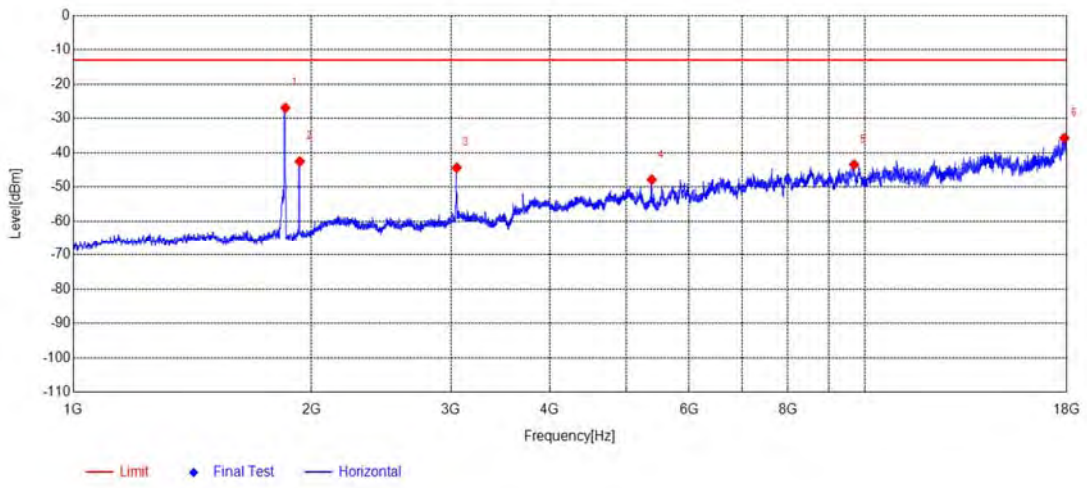
WCDMA Band II(WCDMA)

Plot for Low Channel



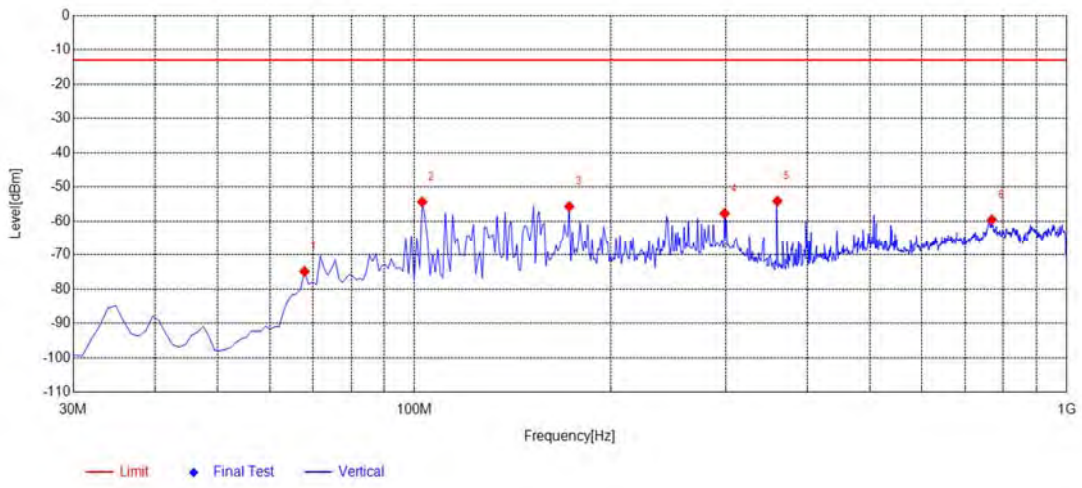
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
34.8549	-39.91	-72.59	-13.00	59.59	-32.68	Horizontal	PASS
130.0100	-42.85	-62.94	-13.00	49.94	-20.09	Horizontal	PASS
228.0781	-54.55	-57.87	-13.00	44.87	-3.32	Horizontal	PASS
360.1301	-46.66	-52.55	-13.00	39.55	-5.89	Horizontal	PASS
479.5596	-57.78	-59.07	-13.00	46.07	-1.29	Horizontal	PASS
760.1702	-63.74	-56.07	-13.00	43.07	7.67	Horizontal	NA



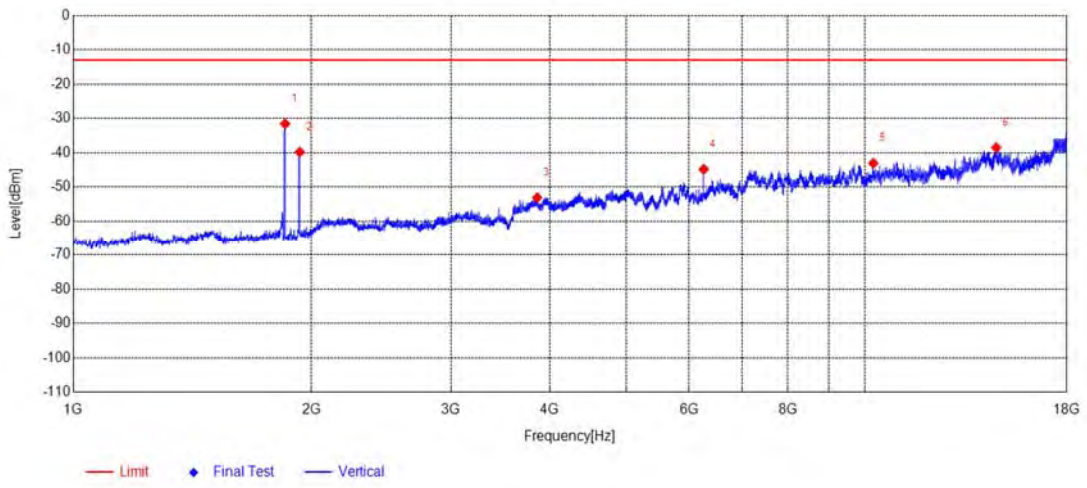
(Antenna Horizontal, 1GHz to 12.75GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1853.4756	-14.70	-26.91	-13.00	13.91	-12.21	Horizontal	NA
1932.6554	-30.48	-42.54	-13.00	29.54	-12.06	Horizontal	NA
3051.1752	-37.79	-44.41	-13.00	31.41	-6.62	Horizontal	PASS
5382.3971	-48.06	-47.86	-13.00	34.86	0.20	Horizontal	PASS
9697.7442	-58.31	-43.49	-13.00	30.49	14.82	Horizontal	PASS
17886.6541	-62.62	-35.73	-13.00	22.73	26.89	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

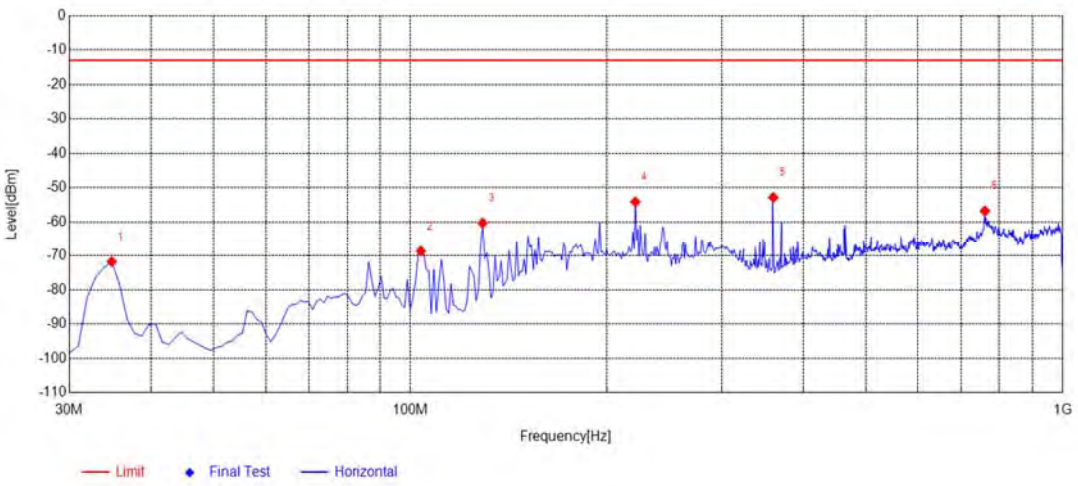
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
67.8679	-44.02	-74.89	-13.00	61.89	-30.87	Vertical	PASS
102.8228	-40.37	-54.36	-13.00	41.36	-13.99	Vertical	PASS
172.7327	-43.98	-55.69	-13.00	42.69	-11.71	Vertical	PASS
298.9590	-51.84	-57.74	-13.00	44.74	-5.90	Vertical	PASS
360.1301	-48.83	-54.13	-13.00	41.13	-5.30	Vertical	PASS
767.9379	-66.42	-59.54	-13.00	46.54	6.88	Vertical	PASS



(Antenna Vertical, 1GHz to 12.75GHz)

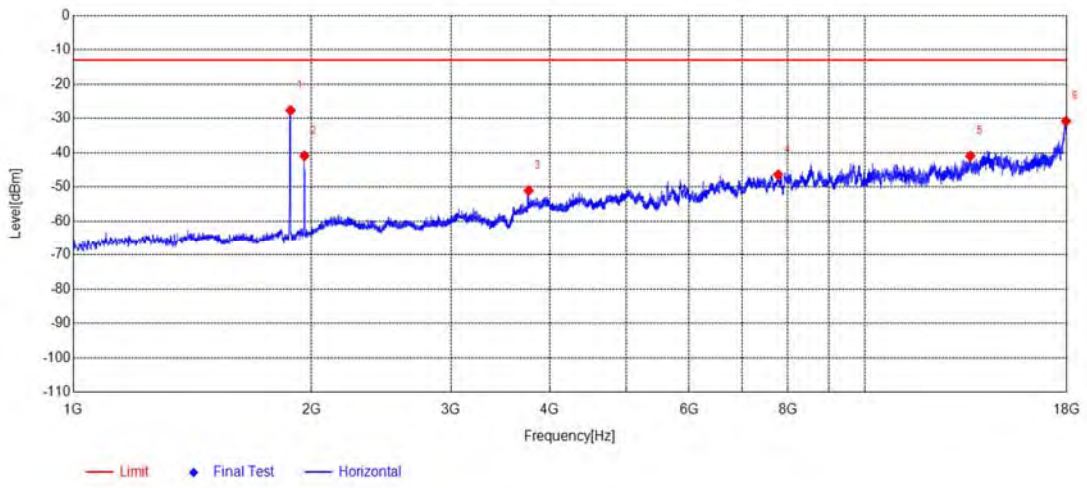
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1851.8086	-19.23	-31.56	-13.00	18.56	-12.33	Vertical	NA
1932.6554	-27.66	-39.79	-13.00	26.79	-12.13	Vertical	NA
3857.1429	-49.17	-53.08	-13.00	40.08	-3.91	Vertical	PASS
6261.3624	-47.87	-44.84	-13.00	31.84	3.03	Vertical	PASS
10259.1399	-57.41	-43.08	-13.00	30.08	14.33	Vertical	PASS
14666.2963	-59.31	-38.51	-13.00	25.51	20.80	Vertical	PASS

Plot for Mid Channel



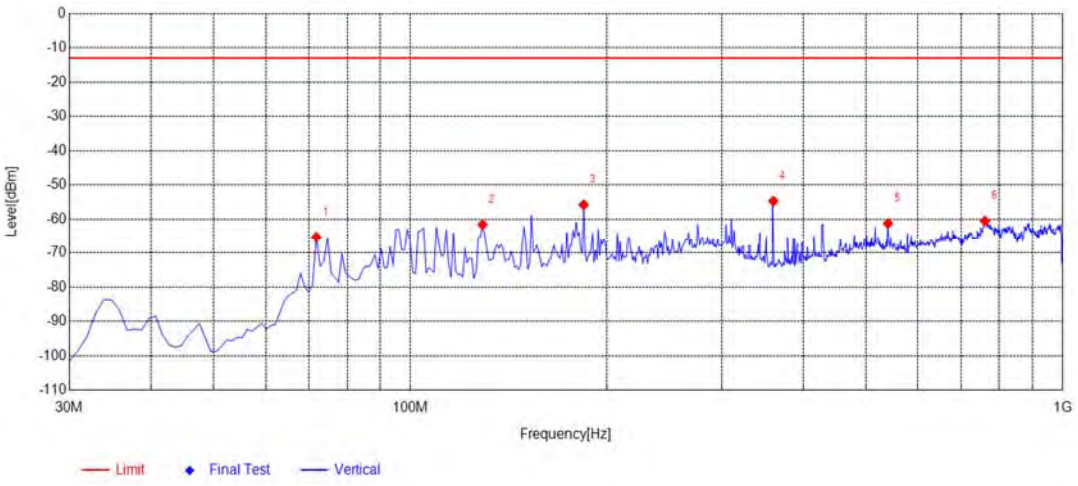
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
34.8549	-39.08	-71.76	-13.00	58.76	-32.68	Horizontal	PASS
103.7938	-44.18	-68.64	-13.00	55.64	-24.46	Horizontal	PASS
129.0390	-40.09	-60.30	-13.00	47.30	-20.21	Horizontal	PASS
221.2813	-49.51	-54.13	-13.00	41.13	-4.62	Horizontal	PASS
360.1301	-46.93	-52.82	-13.00	39.82	-5.89	Horizontal	NA
760.1702	-64.43	-56.76	-13.00	43.76	7.67	Horizontal	NA



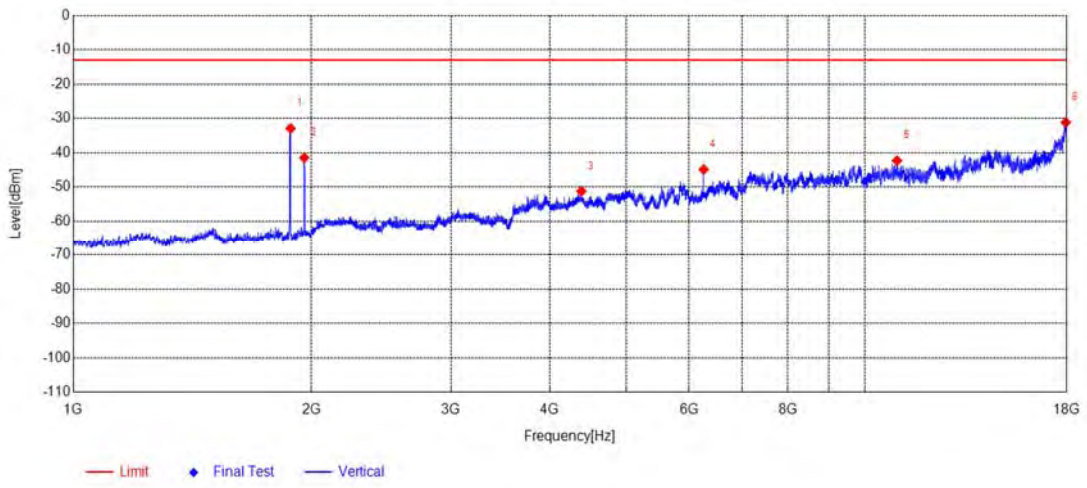
(Antenna Horizontal, 1GHz to 12.75GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1881.8136	-15.69	-27.66	-13.00	14.66	-11.97	Horizontal	NA
1959.3266	-28.74	-40.90	-13.00	27.90	-12.16	Horizontal	NA
3762.1270	-45.72	-51.04	-13.00	38.04	-5.32	Horizontal	PASS
7776.1974	-54.96	-46.41	-13.00	33.41	8.55	Horizontal	PASS
13598.1776	-59.35	-40.97	-13.00	27.97	18.38	Horizontal	PASS
17966.6630	-60.60	-30.83	-13.00	17.83	29.77	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

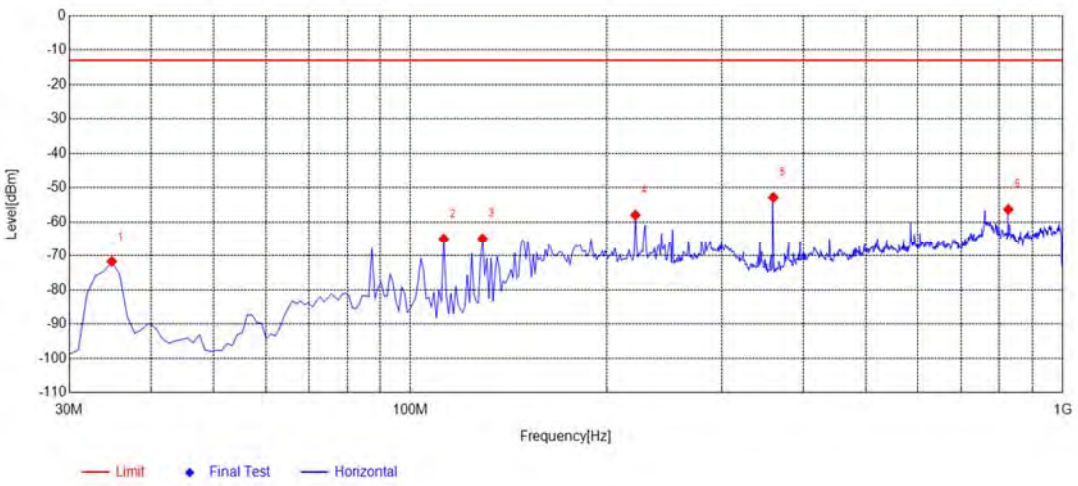
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
71.7518	-36.17	-65.35	-13.00	52.35	-29.18	Vertical	PASS
129.0390	-48.51	-61.58	-13.00	48.58	-13.07	Vertical	PASS
184.3844	-44.34	-55.79	-13.00	42.79	-11.45	Vertical	PASS
360.1301	-49.40	-54.70	-13.00	41.70	-5.30	Vertical	PASS
539.7598	-62.46	-61.21	-13.00	48.21	1.25	Vertical	PASS
760.1702	-67.87	-60.49	-13.00	47.49	7.38	Vertical	PASS



(Antenna Vertical, 1GHz to 12.75GHz)

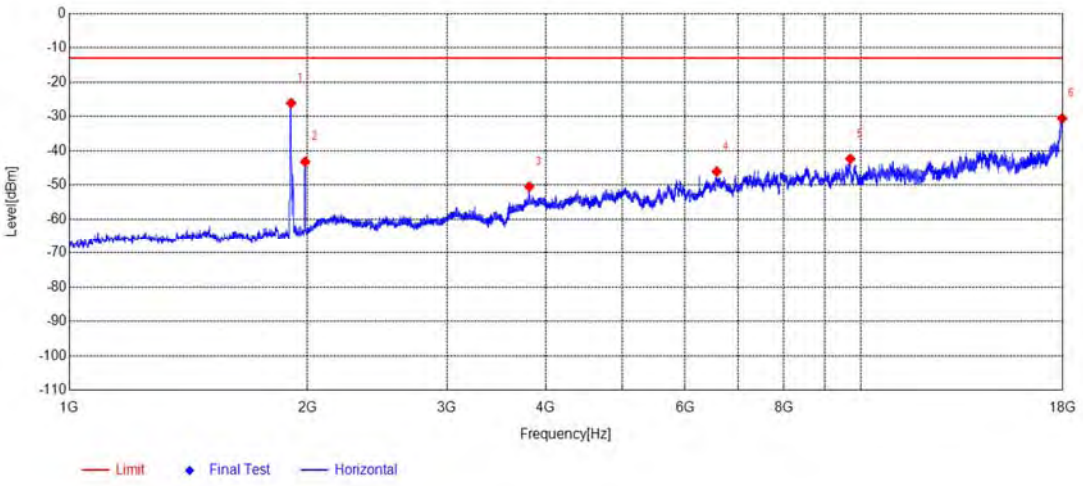
Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1881.8136	-20.95	-32.94	-13.00	19.94	-11.99	Vertical	NA
1958.4931	-29.21	-41.46	-13.00	28.46	-12.25	Vertical	NA
4387.2312	-49.64	-51.22	-13.00	38.22	-1.58	Vertical	PASS
6261.3624	-47.91	-44.88	-13.00	31.88	3.03	Vertical	PASS
10989.8878	-57.91	-42.34	-13.00	29.34	15.57	Vertical	PASS
17957.3286	-60.98	-31.16	-13.00	18.16	29.82	Vertical	PASS

Plot for High Channel



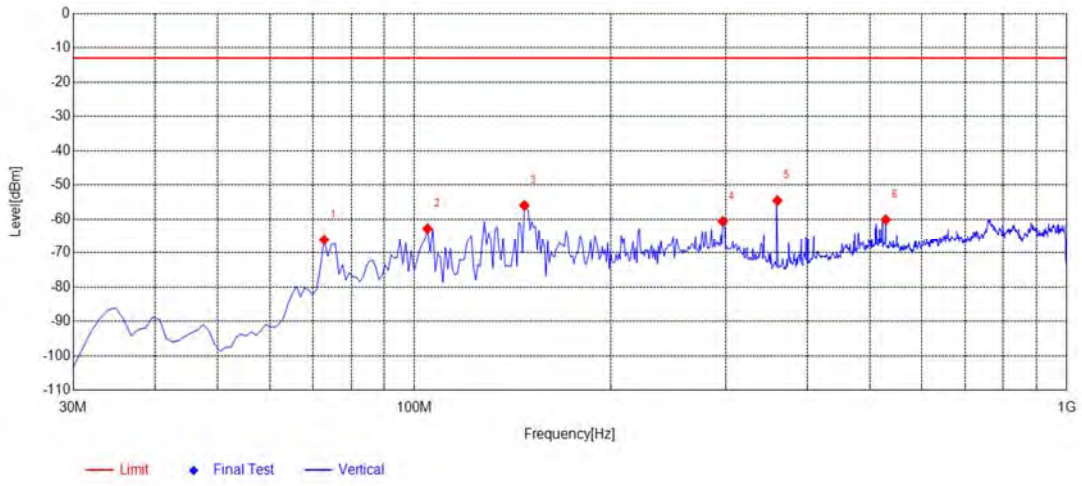
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
34.8549	-39.03	-71.71	-13.00	58.71	-32.68	Horizontal	PASS
112.5325	-41.38	-64.99	-13.00	51.99	-23.61	Horizontal	PASS
129.0390	-44.70	-64.91	-13.00	51.91	-20.21	Horizontal	PASS
221.2813	-53.34	-57.96	-13.00	44.96	-4.62	Horizontal	PASS
360.1301	-46.93	-52.82	-13.00	39.82	-5.89	Horizontal	PASS
825.2252	-61.06	-56.33	-13.00	43.33	4.73	Horizontal	PASS



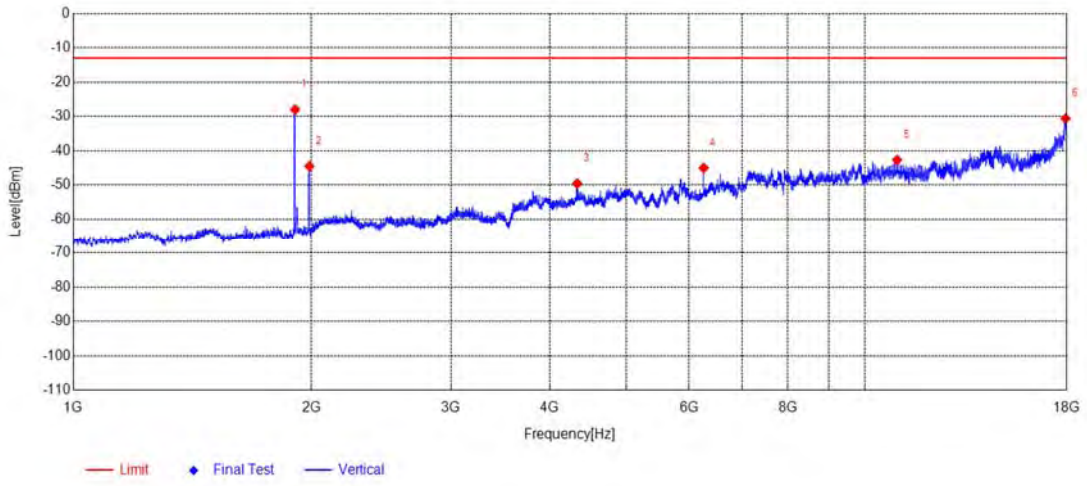
(Antenna Horizontal, 1GHz to 12.75GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1906.8178	-14.25	-26.12	-13.00	13.12	-11.87	Horizontal	NA
1986.8311	-31.15	-43.24	-13.00	30.24	-12.09	Horizontal	NA
3812.9688	-46.53	-50.49	-13.00	37.49	-3.96	Horizontal	PASS
6578.7310	-52.75	-46.07	-13.00	33.07	6.68	Horizontal	PASS
9703.0781	-57.10	-42.39	-13.00	29.39	14.71	Horizontal	PASS
17971.9969	-60.05	-30.58	-13.00	17.58	29.47	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
72.7227	-38.56	-66.11	-13.00	53.11	-27.55	Vertical	PASS
104.7648	-48.93	-62.76	-13.00	49.76	-13.83	Vertical	PASS
147.4875	-45.03	-55.97	-13.00	42.97	-10.94	Vertical	PASS
297.0170	-54.49	-60.59	-13.00	47.59	-6.10	Vertical	PASS
360.1301	-49.23	-54.53	-13.00	41.53	-5.30	Vertical	PASS
528.1081	-60.47	-60.14	-13.00	47.14	0.33	Vertical	PASS



(Antenna Vertical, 1GHz to 12.75GHz)

Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity	Verdict
1906.8178	-16.19	-28.04	-13.00	15.04	-11.85	Vertical	NA
1987.6646	-32.45	-44.50	-13.00	31.50	-12.05	Vertical	NA
4333.0555	-47.42	-49.57	-13.00	36.57	-2.15	Vertical	PASS
6261.3624	-48.07	-45.04	-13.00	32.04	3.03	Vertical	PASS
10991.2212	-58.29	-42.70	-13.00	29.70	15.59	Vertical	PASS
17946.6607	-60.62	-30.61	-13.00	17.61	30.01	Vertical	PASS

Annex A Test Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for test performed on the EUT as specified in CISPR 16-1-2:

Test Items	Uncertainty
Output Power	±2.22dB
Bandwidth	±5%
Conducted Spurious Emission	±2.77dB
Radiated Emission	±2.95dB

This uncertainty represent an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Annex B Testing Laboratory Information

1. Identification of the Responsible Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

2. Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

3. Facilities and Accreditations

All measurement facilities used to collect the measurement data are located at FL.3, Building A, FeiYang Science Park, Block 67, BaoAn District, Shenzhen, 518101 P. R. China. The test site is constructed in conformance with the requirements of ANSI C63.10-2013 and CISPR Publication 22; the FCC designation number is CN1192, the test firm registration number is 226174.

4. Test Equipment Utilized

4.1 Conducted Test Equipment

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
EXA Signal Analyzer	MY51511149	N9020A	Agilent	2024.06.19	2025.06.18
Communication Test Station	6200995016	MT8820C	Anritsu	2024.09.11	2025.09.10
Temperature Chamber	S02217710100089002	KMT-36LF 1A0	KOMEG	2024.09.11	2025.09.10

4.2 List of Software Used

Description	Manufacturer	Software Version
JS36-RSE	Tonscend	5.0.0

4.3 Radiated Test Equipment

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
System Simulator	152038	CMW500	R&S	2024.09.11	2025.09.10
Receiver	MY56060145	N9020A	Agilent	2025.05.13	2026.05.12
Test Antenna - Bi-Log	9163-519	VULB 9163	Schwarzbeck	2025.05.13	2026.05.12
Test Antenna - Horn	9120D-963	BBHA 9120D	Schwarzbeck	2024.06.22	2025.06.21
RF Coaxial Cable (DC-18GHz)	MRE001	PE330	Pasternack	2025.05.13	2026.05.12
RF Coaxial Cable (DC-18GHz)	MRE002	CLU18	Pasternack	2025.05.13	2026.05.12
RF Coaxial Cable (DC-18GHz)	MRE003	CLU18	Pasternack	2025.05.13	2026.05.12
RF Coaxial Cable (DC-40GHz)	22290045	QA360-40-K K-0.5	Qualwave	2024.07.03	2025.07.02
RF Coaxial Cable (DC-40GHz)	22290046	QA360-40-K KF-2	Qualwave	2024.07.03	2025.07.02
Preamplifier (10MHz-6GHz)	46732	S10M100L3802	LUCIX CORP.	2025.05.13	2026.05.12
Preamplifier (2GHz-18GHz)	61171/61172	S020180L3203	LUCIX CORP.	2025.05.13	2026.05.12
Preamplifier	DS77209	DCLNA0118-	Decentest	2025.05.13	2026.05.12

(18GHz-40GHz)		40C-S			
Notch Filter	N/A	WRCG-GSM 850	Wainwright	N/A	N/A
Notch Filter	N/A	WRCG-GSM 1900	Wainwright	N/A	N/A
Notch Filter	N/A	WRCGV-W Band V	Wainwright	N/A	N/A
Notch Filter	N/A	WRCGV-W Band II	Wainwright	N/A	N/A
Notch Filter	N/A	WRCGV-W Band IV	Wainwright	N/A	N/A
Anechoic Chamber	N/A	9m*6m*6m	CRT	2025.04.19	2028.04.18
Anechoic Chamber	N/A	9m*6m*6m	CRT	2022.11.30	2025.11.29

END OF REPORT