



CFR 47 FCC PART 15 SUBPART C

TEST REPORT

For

Rock Force 1/10 SCALE AWD OFF-ROAD VEHICLE

MODEL NUMBER: VL-6228, NV-6065, GV-6282

FCC ID: 2ASK3VL-6228TW

REPORT NUMBER: 4790053047.1-1

ISSUE DATE: September 23, 2021

Prepared for

**AMAX INDUSTRIAL GROUP CHINA CO.,LTD
NO.3 10/F WITTY COMMERCIAL BUILDING 1A-1L TUNG CHOI STREET
MONGKOK KOWLOON HONGKONG China**

Prepared by

**UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch
Building 10, Innovation Technology Park, No. 1, Li Bin Road, Song Shan Lake Hi-
Tech Development Zone Dongguan, 523808, People's Republic of China**

Tel: +86 769 22038881

Fax: +86 769 33244054

Website: www.ul.com

Revision History

Rev.	Issue Date	Revisions	Revised By
V0	09/02/2021	Initial Issue	
V1	09/23/2021	Updated bandwidth	Jacky Jiang

Summary of Test Results			
Clause	Test Items	FCC Rules	Test Results
1	20dB Bandwidth	CFR 47 FCC §15.215 (c)	Pass
2	Radiated Emission	CFR 47 FCC §15.249 (a)(d)(e) CFR 47 FCC §15.205 and §15.209	Pass
3	Conducted Emission Test for AC Power Port	FCC Part 15.207	Not Applicable (Note 3)
4	Antenna Requirement	CFR 47 FCC §15.203	Pass

Note 1: This test report is only published to and used by the applicant, and it is not for evidence purpose in China.

Note 2: The measurement result for the sample received is <Pass> according to <CFR 47 FCC PART 15 SUBPART C > when <Accuracy Method> decision rule is applied.

Note 3: The EUT was power by battery but can't be charged.

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS	5
2. TEST METHODOLOGY	6
3. FACILITIES AND ACCREDITATION	6
4. CALIBRATION AND UNCERTAINTY	7
4.1. <i>MEASURING INSTRUMENT CALIBRATION</i>	7
4.2. <i>MEASUREMENT UNCERTAINTY</i>	7
5. EQUIPMENT UNDER TEST	8
5.1. <i>DESCRIPTION OF EUT</i>	8
5.2. <i>MAXIMUM FIELD STRENGTH</i>	8
5.3. <i>CHANNEL LIST</i>	8
5.4. <i>DESCRIPTION OF AVAILABLE ANTENNAS</i>	10
5.5. <i>TEST CHANNEL CONFIGURATION</i>	10
5.6. <i>THE WORSE CASE POWER SETTING PARAMETER</i>	10
5.7. <i>TEST ENVIRONMENT</i>	10
5.8. <i>DESCRIPTION OF TEST SETUP</i>	11
5.9. <i>MEASURING INSTRUMENT AND SOFTWARE USED</i>	12
6. ANTENNA PORT TEST RESULTS	13
6.1. <i>ON TIME AND DUTY CYCLE</i>	13
6.2. <i>20 dB BANDWIDTH OCCUPIED BANDWIDTH</i>	16
7. RADIATED TEST RESULTS.....	19
7.1. <i>LIMITS AND PROCEDURE</i>	19
7.2. <i>RESTRICTED BANDEdge AND FIELD STRENGTH OF INTENTIONAL EMISSIONS</i>	25
7.3. <i>SPURIOUS EMISSIONS (1 ~ 3 GHz)</i>	31
7.4. <i>SPURIOUS EMISSIONS (3 ~ 18 GHz)</i>	37
7.5. <i>SPURIOUS EMISSIONS (18 ~ 26 GHz)</i>	43
7.6. <i>SPURIOUS EMISSIONS BELOW 30 MHz</i>	45
7.7. <i>SPURIOUS EMISSIONS BELOW 1 GHz AND ABOVE 30 MHz</i>	48
8. ANTENNA REQUIREMENTS.....	50

1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: AMAX INDUSTRIAL GROUP CHINA CO.,LTD
Address: NO.3 10/F WITTY COMMERCIAL BUILDING 1A-1L TUNG
CHOI STREET MONGKOK KOWLOON HONGKONG China

Manufacturer Information

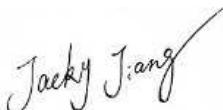
Company Name: AMAX INDUSTRIAL GROUP CHINA CO.,LTD
Address: NO.3 10/F WITTY COMMERCIAL BUILDING 1A-1L TUNG
CHOI STREET MONGKOK KOWLOON HONGKONG China

EUT Information

EUT Name: Rock Force 1/10 SCALE AWD OFF-ROAD VEHICLE
Model: VL-6228
Serial Model: NV-6065, GV-6282
Model Difference: Please refer to clause 5.1. Description of EUT
Sample Received Date: August 6, 2021
Sample Status: Normal
Sample ID: 4124028
Date of Tested: August 6, 2021~ August 27, 2021 & September 22, 2021

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 FCC PART 15 SUBPART C	PASS

Prepared By:



Jacky Jiang
Project Engineer

Checked By:



Shawn Wen
Laboratory Leader

Approved By:



Stephen Guo
Laboratory Manager

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with KDB 414788 D01 Radiated Test Site v01r01, FCC CFR 47 Part 2, FCC CFR 47 Part 15, ANSI C63.10-2013.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	<p>A2LA (Certificate No.: 4102.01) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.</p> <p>FCC (FCC Designation No.: CN1187) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules.</p> <p>ISED (Company No.: 21320) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046.</p> <p>VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793.</p> <p>Facility Name: Chamber D, the VCCI registration No. is G-20019 and R-20004 Shielding Room B , the VCCI registration No. is C-20012 and T-20011</p>
---------------------------	---

Note:

1. All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China
2. The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.
3. For below 30MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30MHz had been correlated to measurements performed on an OFS.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognized national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Uncertainty
Conduction emission	3.62 dB
Radiation Emission test (include Fundamental emission) (9 kHz ~ 30 MHz)	2.2 dB
Radiation Emission test (include Fundamental emission) (30 MHz ~ 1 GHz)	4.00 dB
Radiation Emission test (1 GHz ~ 26 GHz) (include Fundamental emission)	5.78 dB (1 GHz ~ 18 GHz)
	5.23 dB (18 GHz ~ 26 GHz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT Name	Rock Force 1/10 SCALE AWD OFF-ROAD VEHICLE		
EUT Description	The EUT is a wireless controller.		
Model	VL-6228		
Serial Model	NV-6065, GV-6282		
Model Difference	Their electrical circuit design, layout, components used and internal wiring are identical, only the color and model name is different. We select "VL-6228" as the representative model for compliance test		
Product Description	Operation Frequency	2405 MHz ~ 2475 MHz	
	Modulation Type	GFSK	
Battery	DC 3 V by AA Battery		

5.2. MAXIMUM FIELD STRENGTH

Frequency (MHz)	Channel Number	Max Peak field strength (dB μ V/m)
2475	71[71]	95.49

5.3. CHANNEL LIST

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2405	32	2436
2	2406	33	2437
3	2407	34	2438
4	2408	35	2439
5	2409	36	2440
6	2410	37	2441
7	2411	38	2442
8	2412	39	2443
9	2413	40	2444
10	2414	41	2445
11	2415	42	2446
12	2416	43	2447
13	2417	44	2448
14	2418	45	2449
15	2419	46	2450
16	2420	47	2451

17	2421	48	2452
18	2422	49	2453
19	2423	50	2454
20	2424	51	2455
21	2425	52	2456
22	2426	53	2457
23	2427	54	2458
24	2428	55	2459
25	2429	56	2460
26	2430	57	2461
27	2431	58	2462
28	2432	59	2463
29	2433	60	2464
30	2434	61	2465
31	2435	62	2466
63	2467	70	2474
64	2468	71	2475
65	2469		
66	2470		
67	2471		
68	2472		
69	2473		

5.4. DESCRIPTION OF AVAILABLE ANTENNAS

Ant.	Frequency (MHz)	Antenna Type	Antenna Gain (dBi)
1	2405 ~ 2475	integral antenna	0

Test Mode	Transmit and Receive Mode	Description
GFSK	<input checked="" type="checkbox"/> 1TX	Antenna 1 can be used as transmitting antenna.

5.5. TEST CHANNEL CONFIGURATION

Test Mode	Test Channel	Frequency
GFSK	CH 1, CH 41, CH 71	2405 MHz, 2445 MHz, 2475 MHz

5.6. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter under 2405 MHz ~ 2475 MHz Band				
Test Software Version		/		
Modulation Type	Transmit Antenna Number	Test Channel		
		CH 1	CH 36	CH 71
GFSK	1	Default	Default	Default

5.7. TEST ENVIRONMENT

Environment Parameter	Selected Values During Tests	
Relative Humidity	55 ~ 65 %	
Atmospheric Pressure:	1025 Pa	
Temperature	TN	22 ~ 28 °C
Voltage:	VL	/
	VN	DC 3 V
	VH	/

Note: VL= Lower Extreme Test Voltage

VN= Nominal Voltage

VH= Upper Extreme Test Voltage

TN= Normal Temperature

5.8. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	P/N
/	/	/	/	/

I/O CABLES

Cable No	Port	Connector Type	Cable Type	Cable Length(m)	Remarks
/	/	/	/	/	/

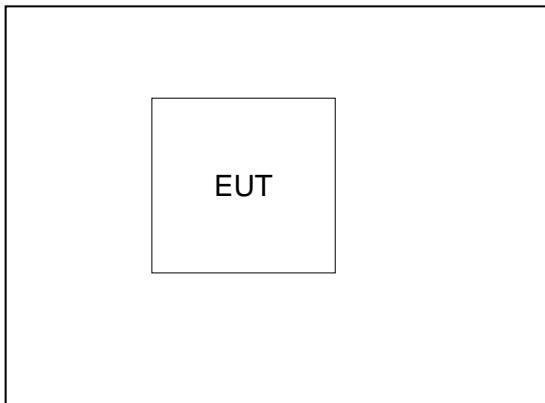
ACCESSORY

Item	Equipment	Mfr/Brand	Model/Type No.	Specification	Series No.
/	/	/	/	/	/

TEST SETUP

The EUT have the engineer mode inside.

SETUP DIAGRAM FOR TEST



Note: New battery was used during all tests.

5.9. MEASURING INSTRUMENT AND SOFTWARE USED

Radiated Emissions						
Instrument						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
<input checked="" type="checkbox"/>	MXE EMI Receiver	KESIGHT	N9038A	MY56400036	Nov. 12, 2020	Nov. 11, 2021
<input checked="" type="checkbox"/>	Hybrid Log Periodic Antenna	TDK	HLP-3003C	130960	Aug. 02, 2021	Aug. 01, 2023
<input checked="" type="checkbox"/>	Preamplifier	HP	8447D	2944A09099	Nov. 12, 2020	Nov. 11, 2021
<input checked="" type="checkbox"/>	EMI Measurement Receiver	R&S	ESR26	101377	Nov. 12, 2020	Nov. 11, 2021
<input checked="" type="checkbox"/>	Horn Antenna	TDK	HRN-0118	130939	Aug. 02, 2021	Aug. 01, 2023
<input checked="" type="checkbox"/>	Preamplifier	TDK	PA-02-0118	TRS-305-00067	Nov. 20, 2020	Nov. 19, 2021
<input checked="" type="checkbox"/>	Horn Antenna	Schwarzbeck	BBHA9170	#691	Jul. 20, 2021	Jul. 19, 2023
<input checked="" type="checkbox"/>	Preamplifier	TDK	PA-02-2	TRS-307-00003	Nov. 12, 2020	Nov. 11, 2021
<input checked="" type="checkbox"/>	Preamplifier	TDK	PA-02-3	TRS-308-00002	Nov. 12, 2020	Nov. 11, 2021
<input checked="" type="checkbox"/>	Loop antenna	Schwarzbeck	1519B	00008	Jan.17, 2019	Jan.17,2022
<input checked="" type="checkbox"/>	Preamplifier	TDK	PA-02-001-3000	TRS-302-00050	Nov. 12, 2020	Nov. 11, 2021
<input checked="" type="checkbox"/>	Preamplifier	Mini-Circuits	ZX60-83LN-S+	SUP01201941	Nov. 20, 2020	Nov. 19, 2021
<input checked="" type="checkbox"/>	High Pass Filter	Wi	WHKX10-2700-3000-18000-40SS	23	Nov. 12, 2020	Nov. 11, 2021
<input checked="" type="checkbox"/>	Band Reject Filter	Wainwright	WRCJV8-2350-2400-2483.5-2533.5-40SS	4	Nov. 12, 2020	Nov. 11, 2021
<input checked="" type="checkbox"/>	Signal Analyzer	R&S	FSV40	101118	Nov.20, 2020	Nov.19, 2021
Software						
Used	Description		Manufacturer	Name		Version
<input checked="" type="checkbox"/>	Test Software for Radiated disturbance		Farad	EZ-EMC		Ver. UL-3A1

6. ANTENNA PORT TEST RESULTS

6.1. ON TIME AND DUTY CYCLE

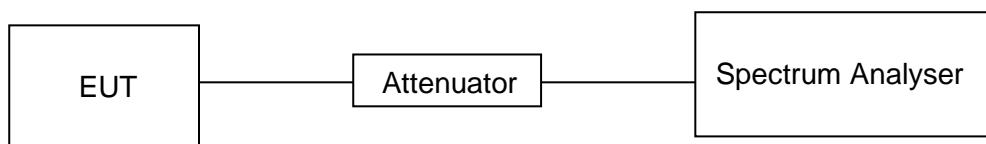
LIMITS

None; for reporting purposes only

PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method

TEST SETUP



TEST ENVIRONMENT

Temperature	24.3 °C	Relative Humidity	61 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 3 V

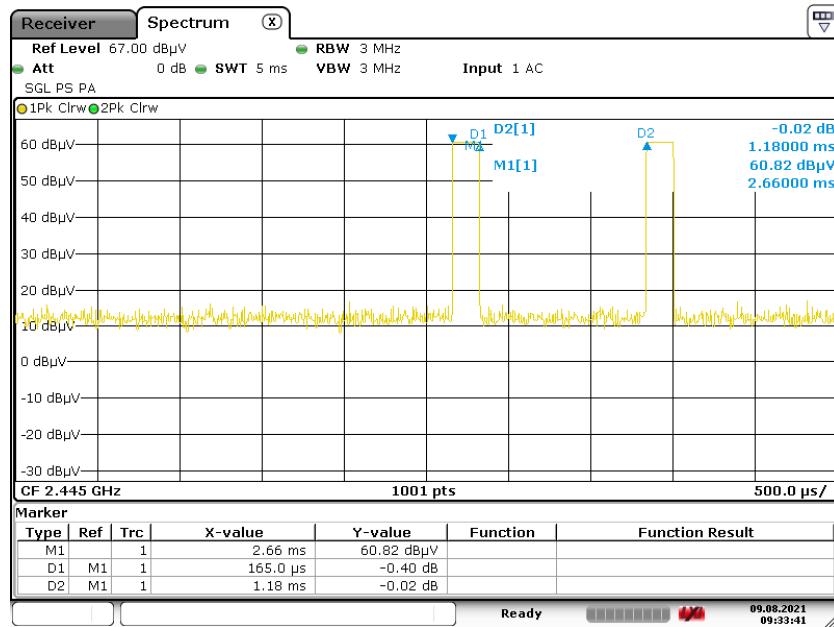
RESULTS

Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (db)
GFSK	4.62	100	0.0462	4.62	-26.71

Note: Duty Cycle Correction Factor=20log(x).

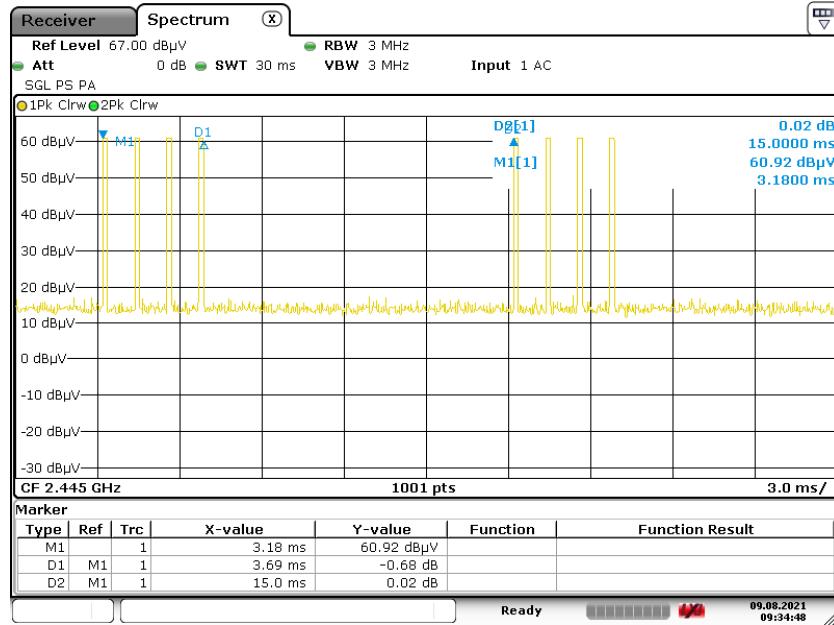
Where: x is Duty Cycle

ON TIME AND DUTY CYCLE MID CH PLOT



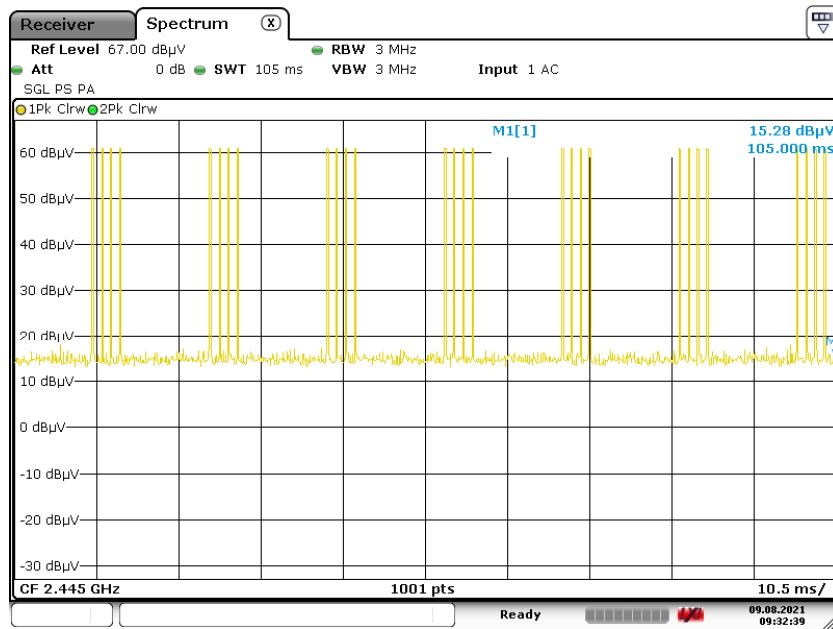
Date: 9.AUG.2021 09:33:41

ON TIME AND DUTY CYCLE MID CH PLOT-2



Date: 9.AUG.2021 09:34:48

ON TIME AND DUTY CYCLE MID CH PLOT-3



Date: 9.AUG.2021 09:32:39

Note: All the modes had been tested, but only the worst duty cycle recorded in the report.

6.2. 20 dB BANDWIDTH OCCUPIED BANDWIDTH

LIMITS

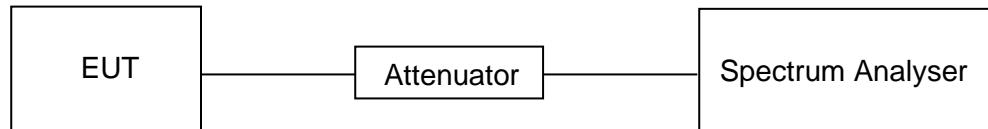
CFR 47 FCC Part15 (15.249) Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC §15.215 (c)	20dB Bandwidth	for reporting purposes only	2400-2483.5

TEST PROCEDURE

Connect the UUT to the spectrum analyser and use the following settings:

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	1% to 5% of the occupied bandwidth
VBW	approximately 3xRBW
Trace	Max hold
Sweep	Auto couple

TEST SETUP



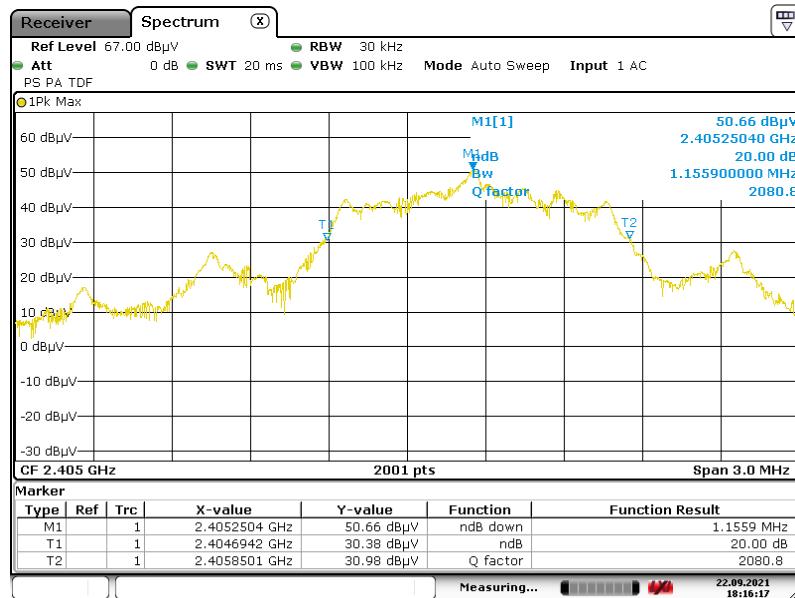
TEST ENVIRONMENT

Temperature	24.3 °C	Relative Humidity	61 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 3 V

RESULTS

Frequency (MHz)	20dB bandwidth (MHz)	Result
2405	1.1559	PASS

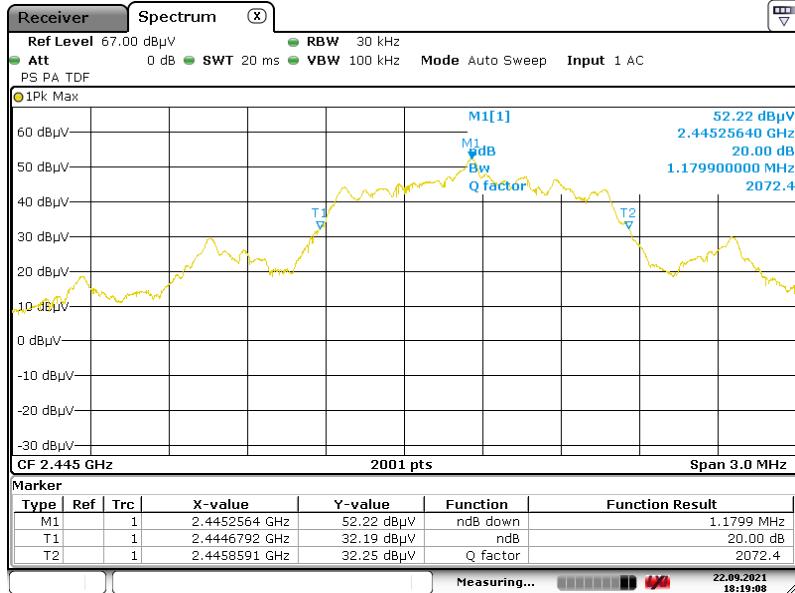
20 dB BANDWIDTH LOW CH



Date: 22.SEP.2021 18:16:17

Frequency (MHz)	20dB bandwidth (MHz)	Result
2445	1.1799	PASS

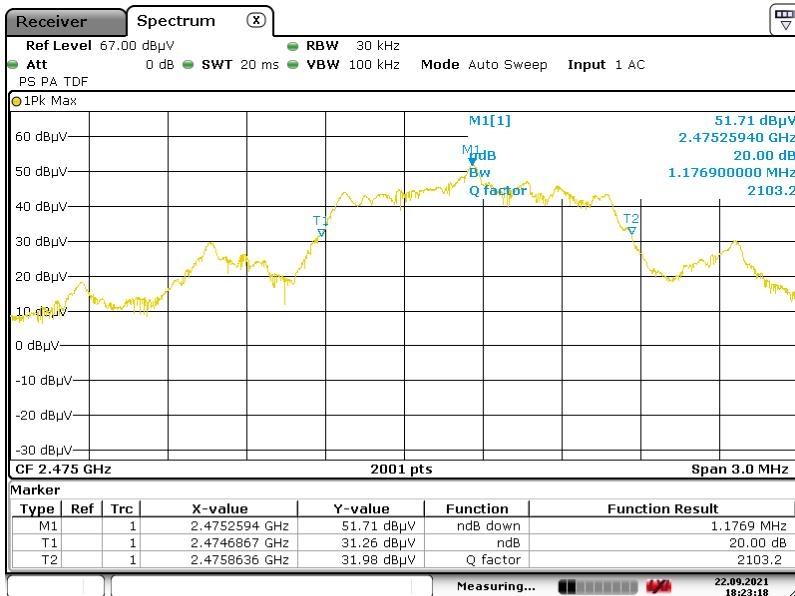
20 dB BANDWIDTH MID CH



Date: 22.SEP.2021 18:19:08

Frequency (MHz)	20dB bandwidth (MHz)	Result
2475	1.1769	PASS

20 dB BANDWIDTH HIG CH



Date: 22.SEP.2021 18:23:19

7. RADIATED TEST RESULTS

7.1. LIMITS AND PROCEDURE

LIMITS

CFR 47 FCC §15.205 and §15.209

CFR 47 FCC §15.249 (a)(d)(c)(e)

The field strength of emissions from intentional radiators operated within these frequency bands			
Frequency (MHz)	Field strength of Fundamental	Field strength of Harmonics	Distance (m)
902 - 928	50 mV/m (94dB _{UV} /m)	500 uV/m (54dB _{UV} /m)	3
2400 – 2483.5	50 mV/m (94dB _{UV} /m)	500 uV/m (54dB _{UV} /m)	3
5725 – 5875	50 mV/m (94dB _{UV} /m)	500 uV/m (54dB _{UV} /m)	3

Emissions radiated outside of the specified frequency bands above 30MHz			
Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dB _{UV} /m) at 3 m	
		Quasi-Peak	
30 - 88	100		40
88 - 216	150		43.5
216 - 960	200		46
Above 960	500		54
Above 1000	500	Peak	Average
		74	54

FCC Emissions radiated outside of the specified frequency bands below 30MHz		
Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30

FCC Restricted bands of operation:



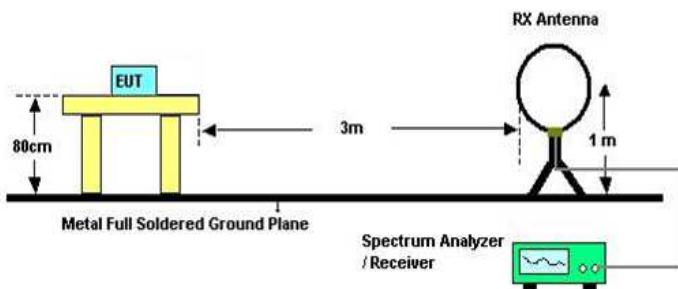
MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(²)
13.36-13.41			

Note: ¹Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

²Above 38.6c

TEST SETUP AND PROCEDURE

Below 30MHz

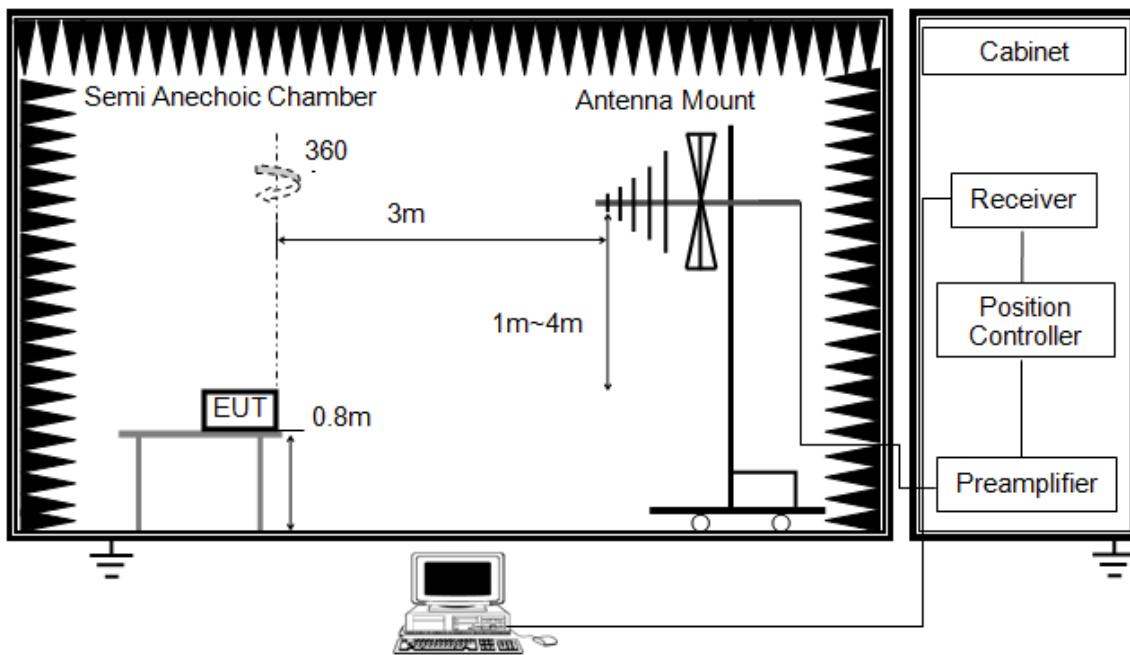


The setting of the spectrum analyser

RBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
VBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
Sweep	Auto
Detector	Peak/QP/ Average
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013.
2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 80 cm above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1 m height antenna tower.
5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.
6. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak and average detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak and average detector and reported.
7. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30 m open field site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.
8. The limits in CFR 47, Part 15, Subpart C, paragraph 15.209 (a), are identical to those in RSS-GEN Section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table) using the free space impedance of 377Ω . For example, the measurement frequency X kHz resulted in a level of Y dBuV/m, which is equivalent to $Y - 51.5 = Z$ dBuA/m, which has the same margin, W dB, to the corresponding RSS-GEN Table 6 limit as it has to be 15.209(a) limit.

Below 1 GHz and Above 30 MHz

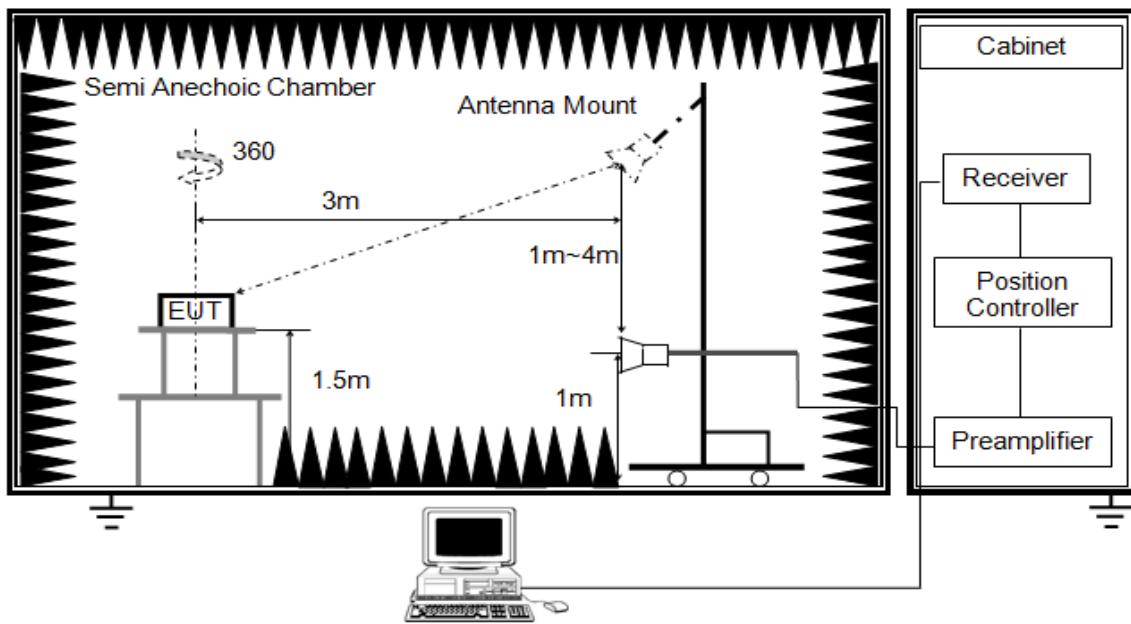


The setting of the spectrum analyser

RBW	120 kHz
VBW	300 kHz
Sweep	Auto
Detector	Peak/QP
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 80cm above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured

Above 1 GHz



The setting of the spectrum analyser. (For Bandedge and Field strength)

RBW	\geq OBW (3MHz)
VBW	PEAK: $\geq 3 \times$ RBW AVG: see note 5
Sweep	Auto
Detector	Peak
Trace	Max hold

The setting of the spectrum analyser. (For Spurious emissions)

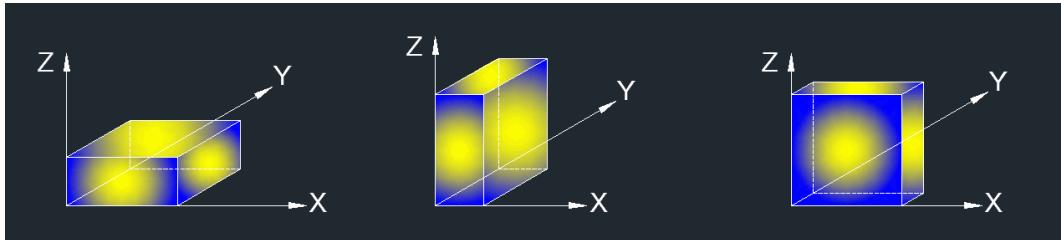
RBW	1MHz
VBW	PEAK: 3MHz AVG: see note 5
Sweep	Auto
Detector	Peak
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013.
2. The EUT was arranged to its worst case and then tune the antenna tower (1.5 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter or band reject filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 150cm above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements. Where necessary, average emission are determined by applying the Duty Cycle Correction Factor to the peak measurements. For the Duty Cycle and Correction Factor please refer to clause 6.1. ON TIME AND DUTY CYCLE.

6. For measurements Bandedge above 1 GHz, the resolution bandwidth is set to 3 MHz, then the video bandwidth is set to $\geq 3 \times \text{RBW}$ for peak measurements. This test results are worse than using 1MHz resolution bandwidth, so if the result is pass, the test is considered to meet the standard requirements.

X axis, Y axis, Z axis positions:



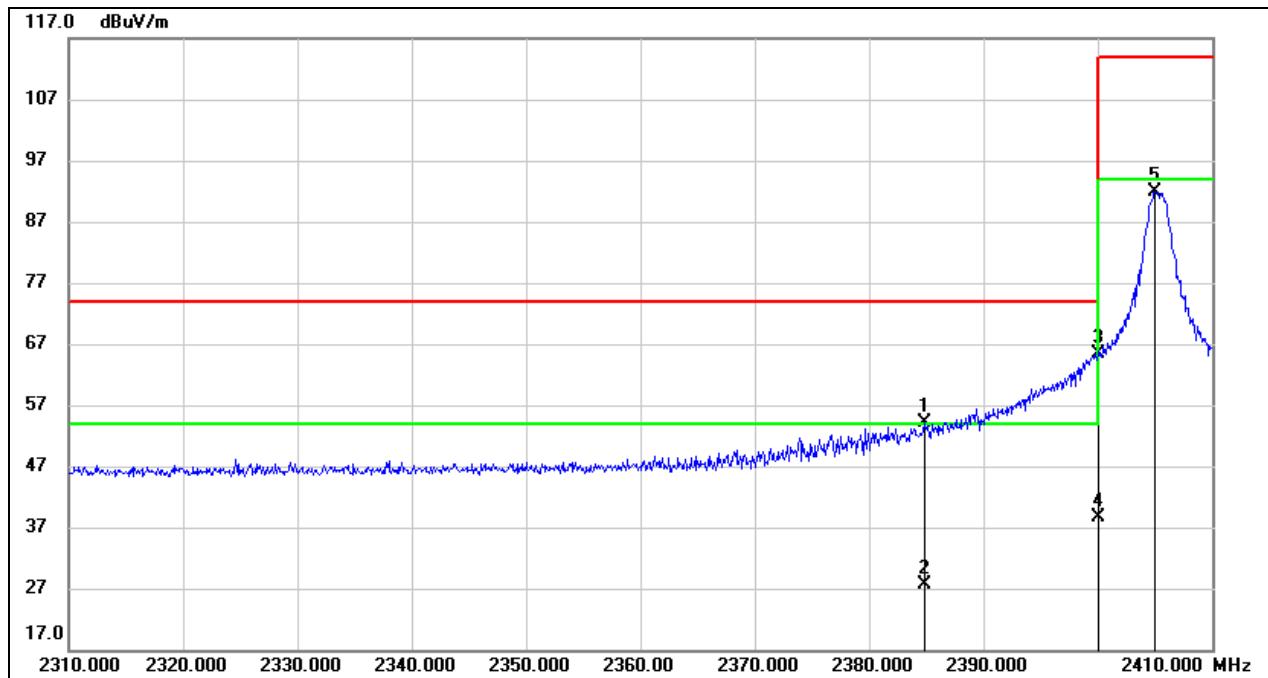
Note: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

TEST ENVIRONMENT

Temperature	24.3 °C	Relative Humidity	61 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 3 V

7.2. RESTRICTED BANDEdge AND FIELD STRENGTH OF INTENTIONAL EMISSIONS

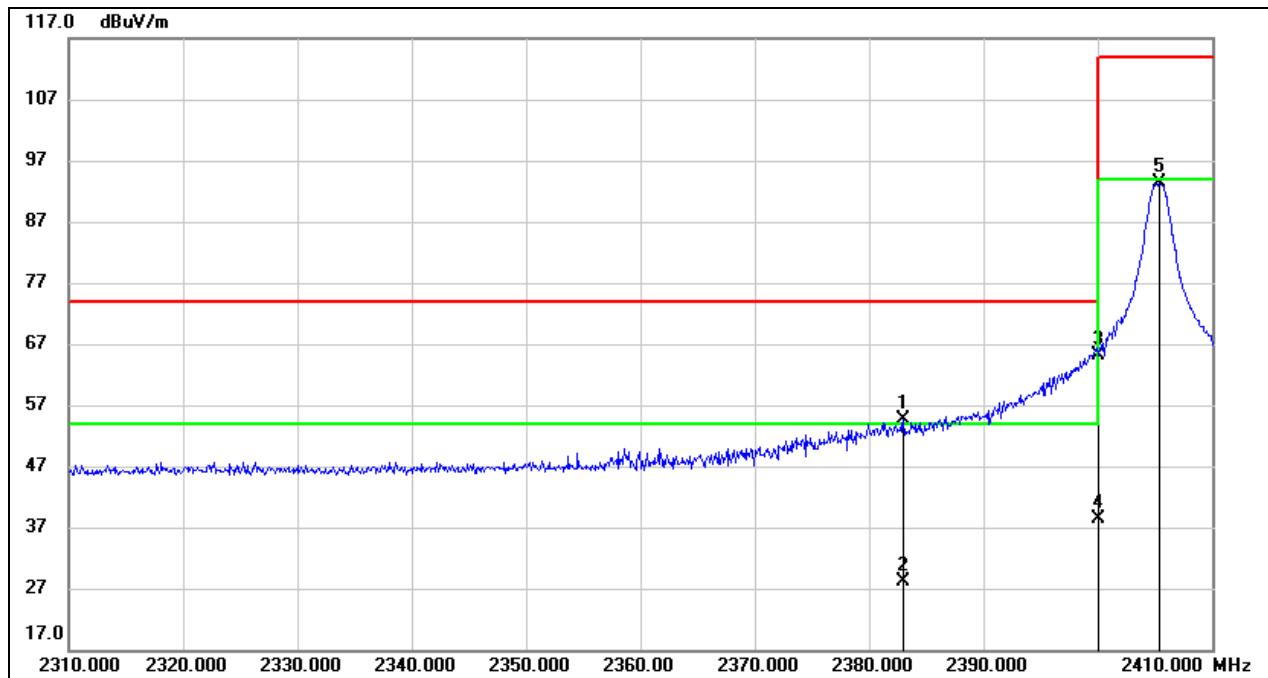
RESTRICTED BANDEdge AND FIELD STRENGTH OF INTENTIONAL EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2384.800	20.92	33.31	54.23	74.00	-19.77	peak
2	2384.800	/	/	27.52	54.00	-26.48	AVG
3	2400.000	31.83	33.43	65.26	74.00	-8.74	peak
4	2400.000	/	/	38.55	54.00	-15.45	AVG
5	2405.000	58.47	33.45	91.92	114.00	-22.08	peak

Note:

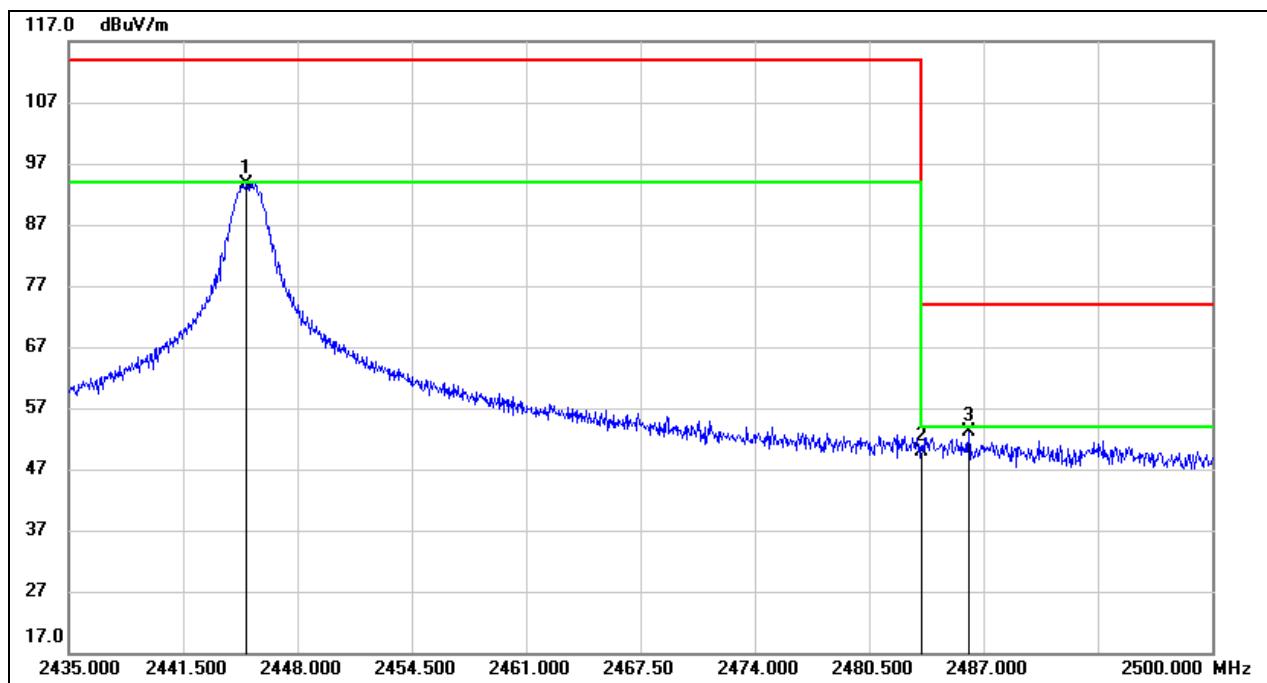
1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG Result=Peak Result + Duty Cycle Correction Factor.
5. For the Duty Cycle and Correction Factor, please refer to clause 6.1.
6. Only the worst emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

RESTRICTED BANDEdge AND FIELD STRENGTH OF INTENTIONAL EMISSIONS (LOW CHANNEL, VERTICAL)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2383.000	21.44	33.30	54.74	74.00	-19.26	peak
2	2383.000	/	/	28.03	54.00	-25.97	AVG
3	2400.000	31.70	33.43	65.13	74.00	-8.87	peak
4	2400.000	/	/	38.42	54.00	-15.58	AVG
5	2405.400	59.93	33.45	93.38	114.00	-20.62	peak

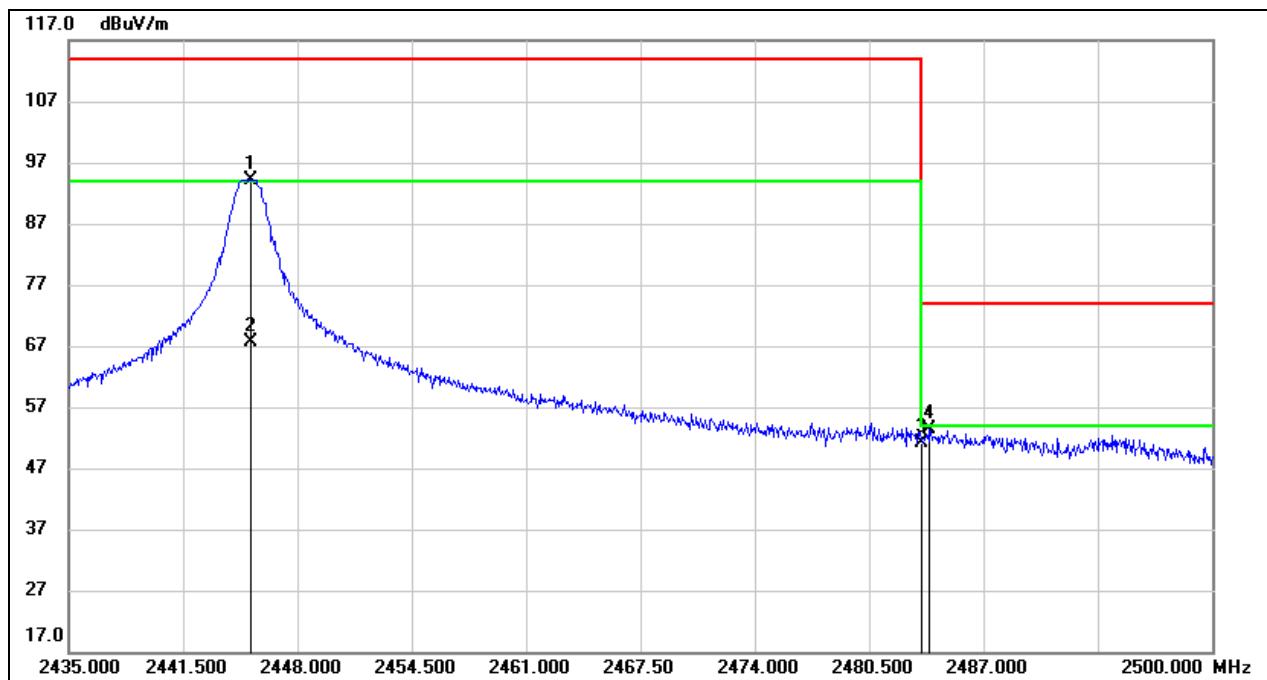
Note:

1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG Result=Peak Result + Duty Cycle Correction Factor.
5. For the Duty Cycle and Correction Factor, please refer to clause 6.1.
6. Only the worst emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

FIELD STRENGTH OF INTENTIONAL EMISSIONS (MIDDLE CHANNEL, HORIZONTAL)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2445.075	59.97	33.58	93.55	114.00	-20.45	peak
2	2483.500	16.07	33.71	49.78	74.00	-24.22	peak
3	2486.155	19.35	33.71	53.06	74.00	-20.94	peak

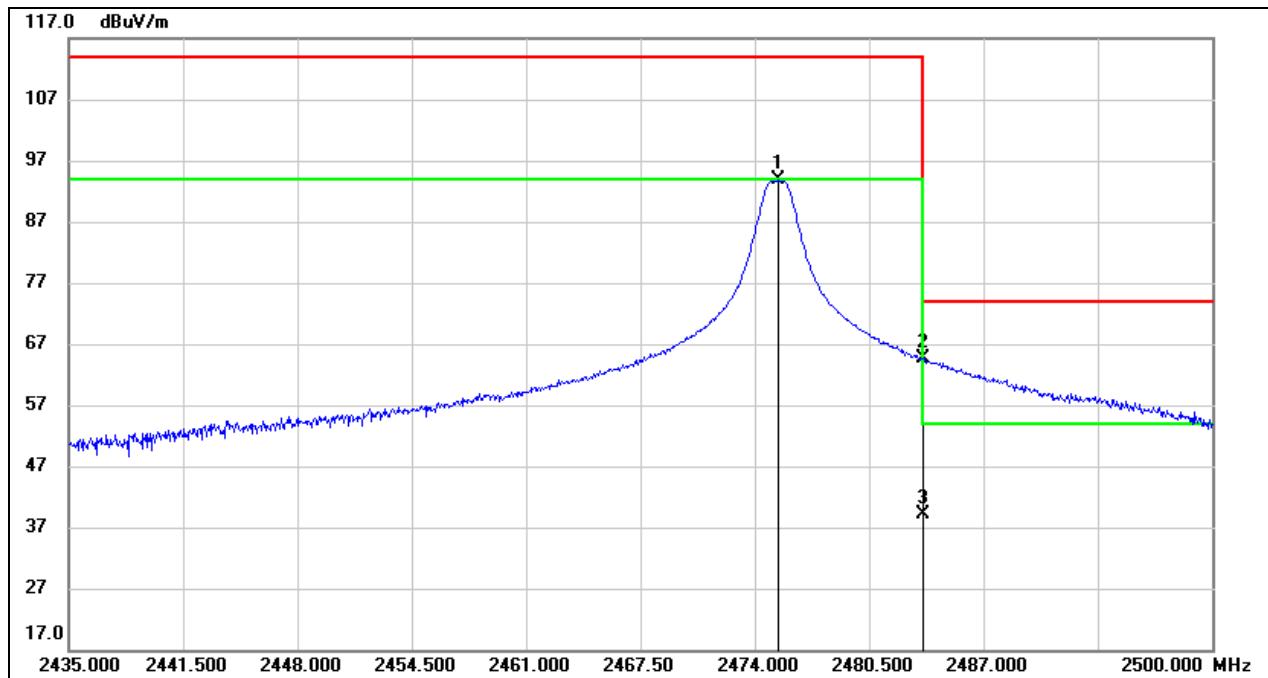
Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. Only the worst emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

FIELD STRENGTH OF INTENTIONAL EMISSIONS (MIDDLE CHANNEL, VERTICAL)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2445.335	60.65	33.58	94.23	114.00	-19.77	peak
2	2445.335	/	/	67.52	94.00	-26.48	AVG
3	2483.500	17.33	33.71	51.04	74.00	-22.96	peak
4	2483.945	19.65	33.71	53.36	74.00	-20.64	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. For the Duty Cycle and Correction Factor, please refer to clause 6.1.
5. Only the worst emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

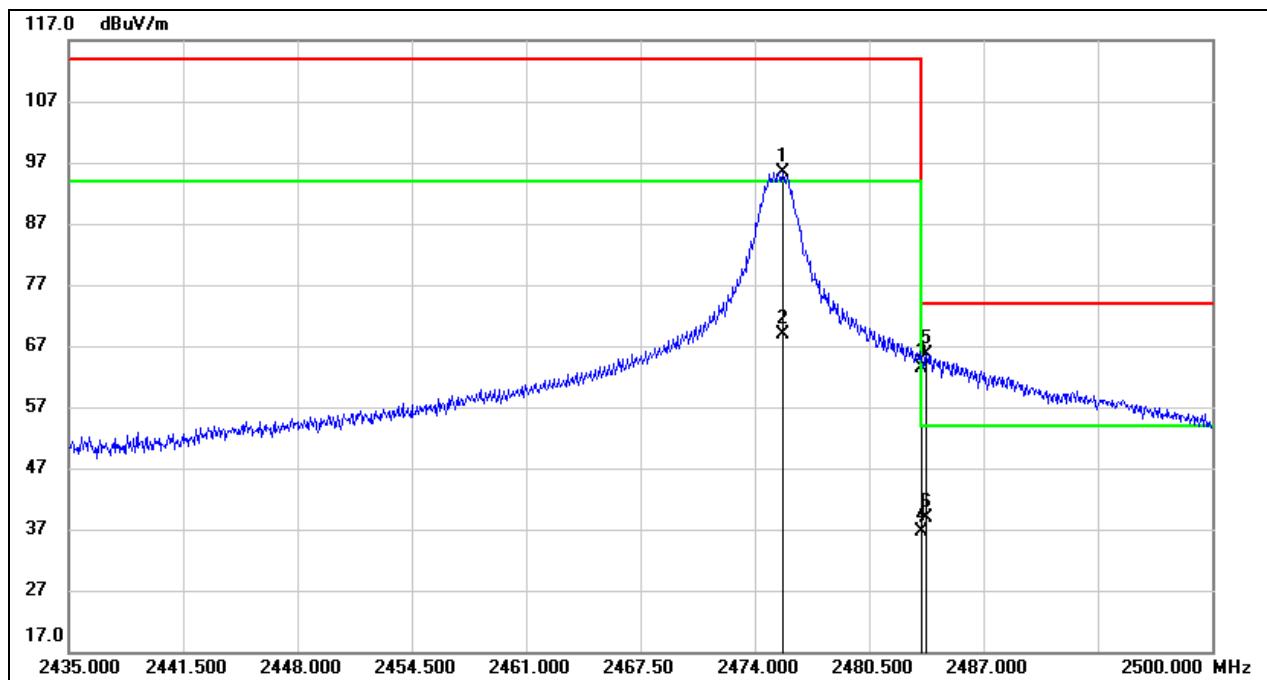
RESTRICTED BANDEdge AND FIELD STRENGTH OF INTENTIONAL EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2475.300	60.09	33.68	93.77	114.00	-20.23	peak
2	2483.500	31.01	33.71	64.72	74.00	-9.28	peak
3	2483.500	/	/	39.01	54.00	-14.99	AVG

Note:

1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG Result=Peak Result + Duty Cycle Correction Factor.
5. For the Duty Cycle and Correction Factor, please refer to clause 6.1.
6. Only the worst emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

RESTRICTED BANDEdge AND FIELD STRENGTH OF INTENTIONAL EMISSIONS (HIGH CHANNEL, VERTICAL)

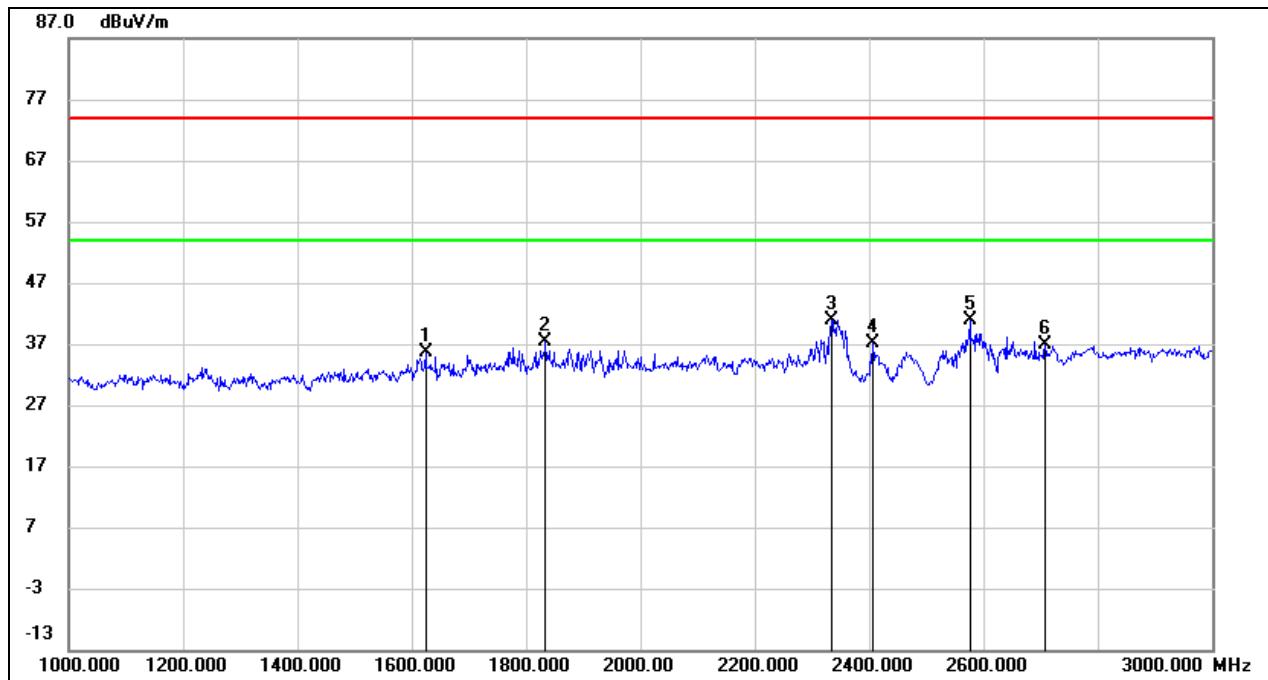
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2475.625	61.81	33.68	95.49	114.00	-18.51	peak
2	2475.625	/	/	68.78	94.00	-25.22	AVG
3	2483.500	29.58	33.71	63.29	74.00	-10.71	peak
4	2483.500	/	/	36.58	54.00	-17.42	AVG
5	2483.750	31.97	33.71	65.68	74.00	-8.32	peak
6	2483.750	/	/	38.97	54.00	-15.03	AVG

Note:

1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG Result=Peak Result + Duty Correction Factor.
5. For the Duty Cycle and Correction Factor, please refer to clause 6.1.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

7.3. SPURIOUS EMISSIONS (1 ~ 3 GHz)

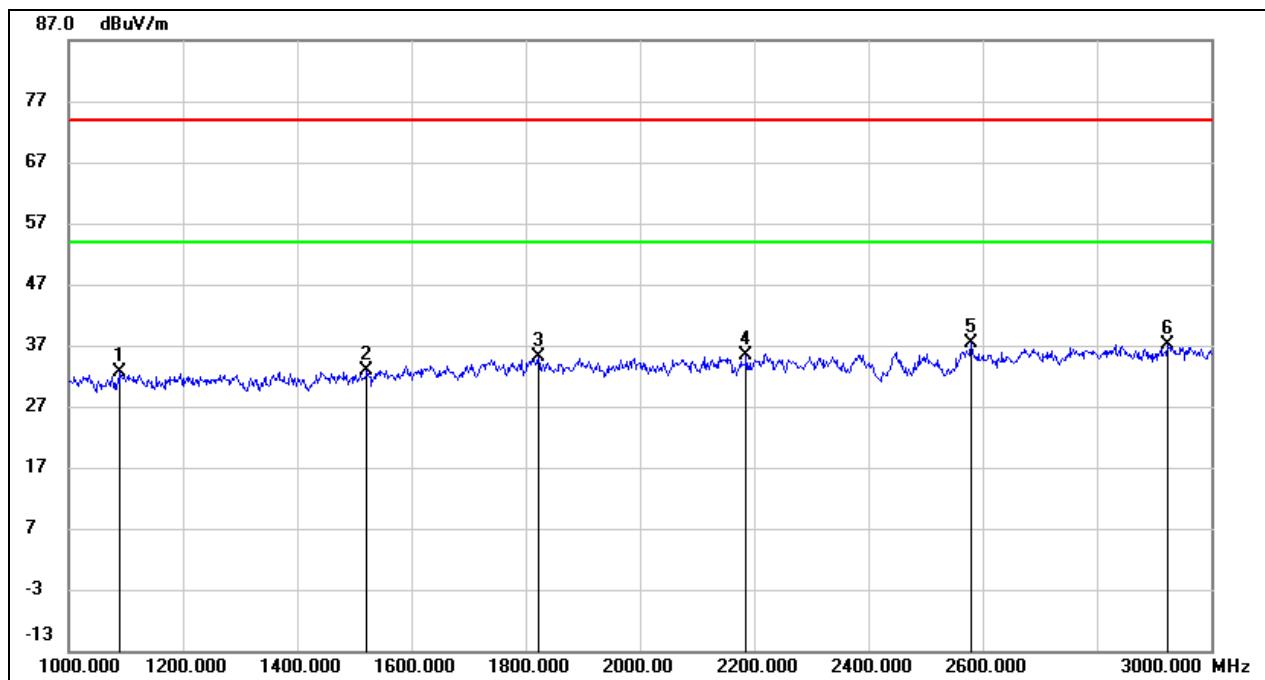
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1624.000	47.00	-11.38	35.62	74.00	-38.38	peak
2	1834.000	47.44	-10.08	37.36	74.00	-36.64	peak
3	2334.000	49.54	-8.61	40.93	74.00	-33.07	peak
4	2405.000	45.48	-8.38	37.10	74.00	-36.90	peak
5	2576.000	48.90	-7.96	40.94	74.00	-33.06	peak
6	2708.000	44.03	-7.15	36.88	74.00	-37.12	peak

Note:

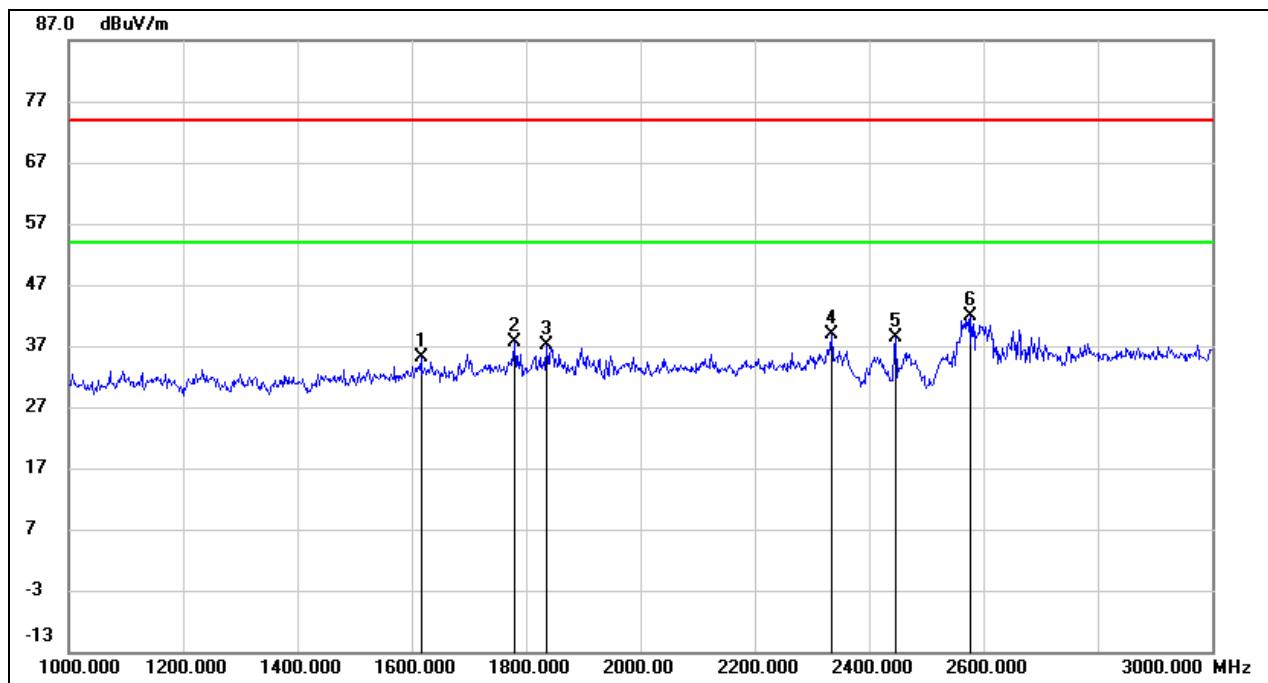
1. Peak Result = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1090.000	46.21	-13.54	32.67	74.00	-41.33	peak
2	1522.000	45.07	-12.09	32.98	74.00	-41.02	peak
3	1822.000	45.18	-10.06	35.12	74.00	-38.88	peak
4	2186.000	44.51	-9.13	35.38	74.00	-38.62	peak
5	2580.000	45.23	-7.93	37.30	74.00	-36.70	peak
6	2924.000	43.08	-5.95	37.13	74.00	-36.87	peak

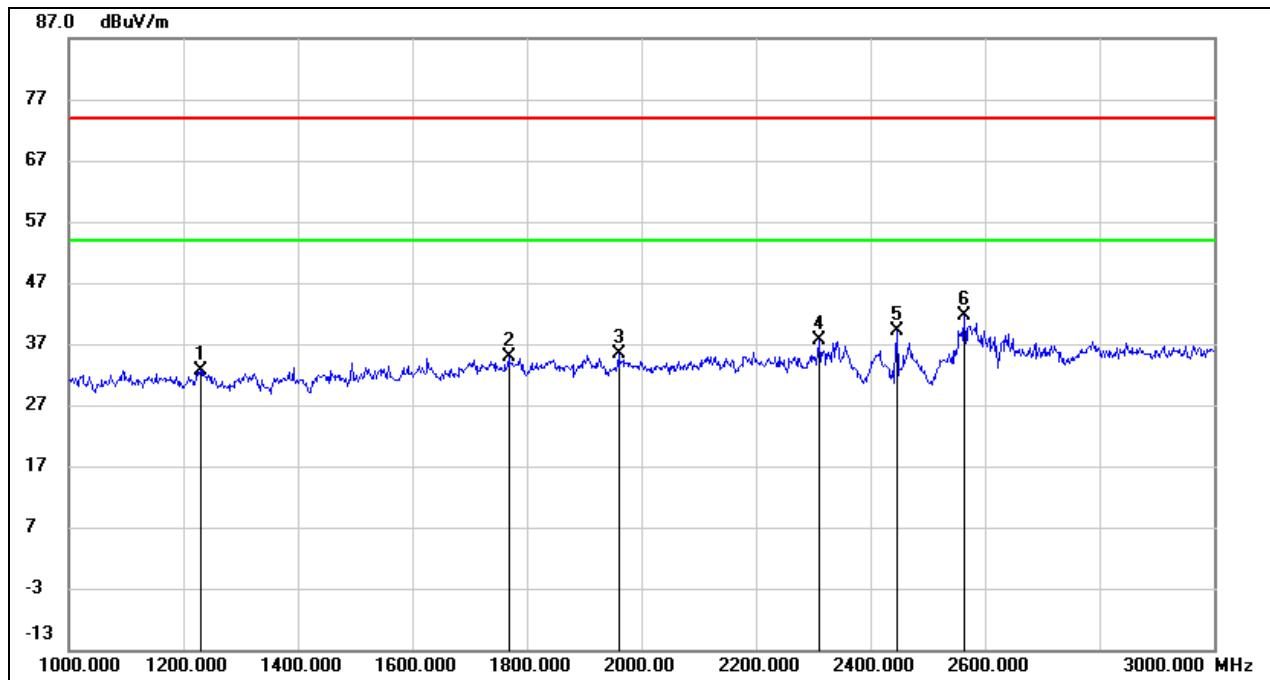
Note:

1. Peak Result = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. Filter losses were only considered in then spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

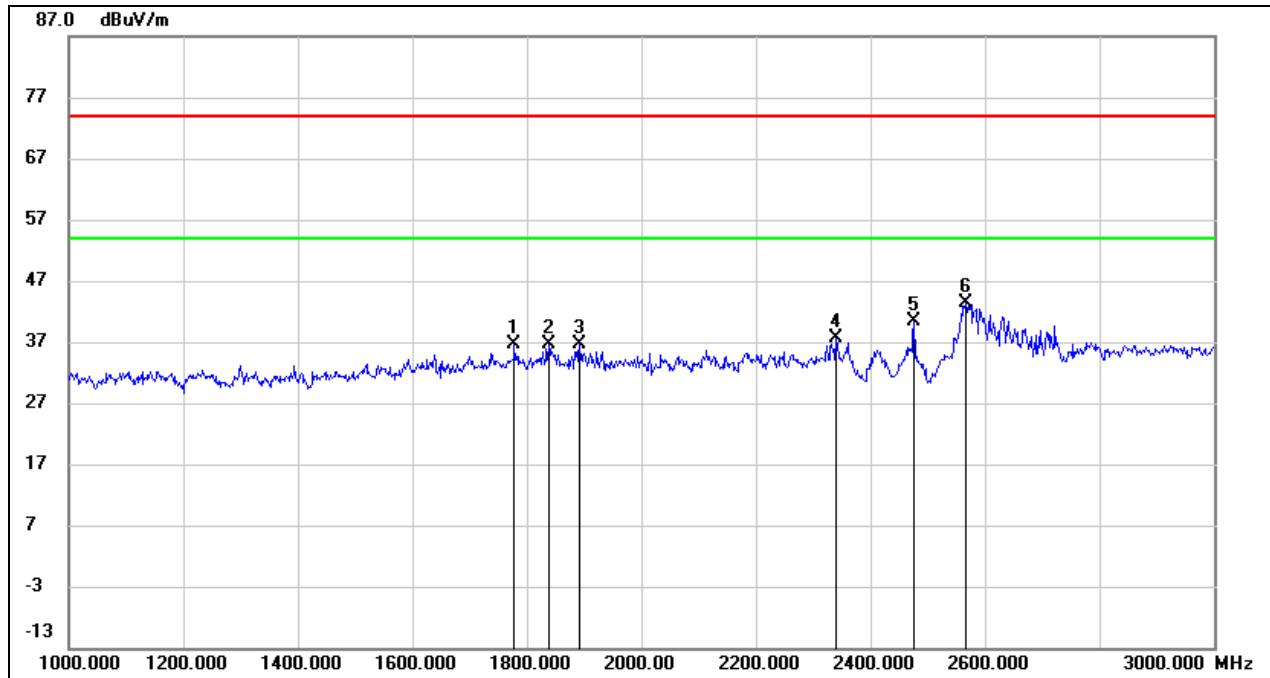
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1616.000	46.59	-11.44	35.15	74.00	-38.85	peak
2	1780.000	47.75	-10.20	37.55	74.00	-36.45	peak
3	1836.000	47.11	-10.07	37.04	74.00	-36.96	peak
4	2334.000	47.38	-8.61	38.77	74.00	-35.23	peak
5	2446.000	46.69	-8.32	38.37	74.00	-35.63	peak
6	2578.000	49.92	-7.95	41.97	74.00	-32.03	peak

Note: 1. Peak Result = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. Filter losses were only considered in then spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

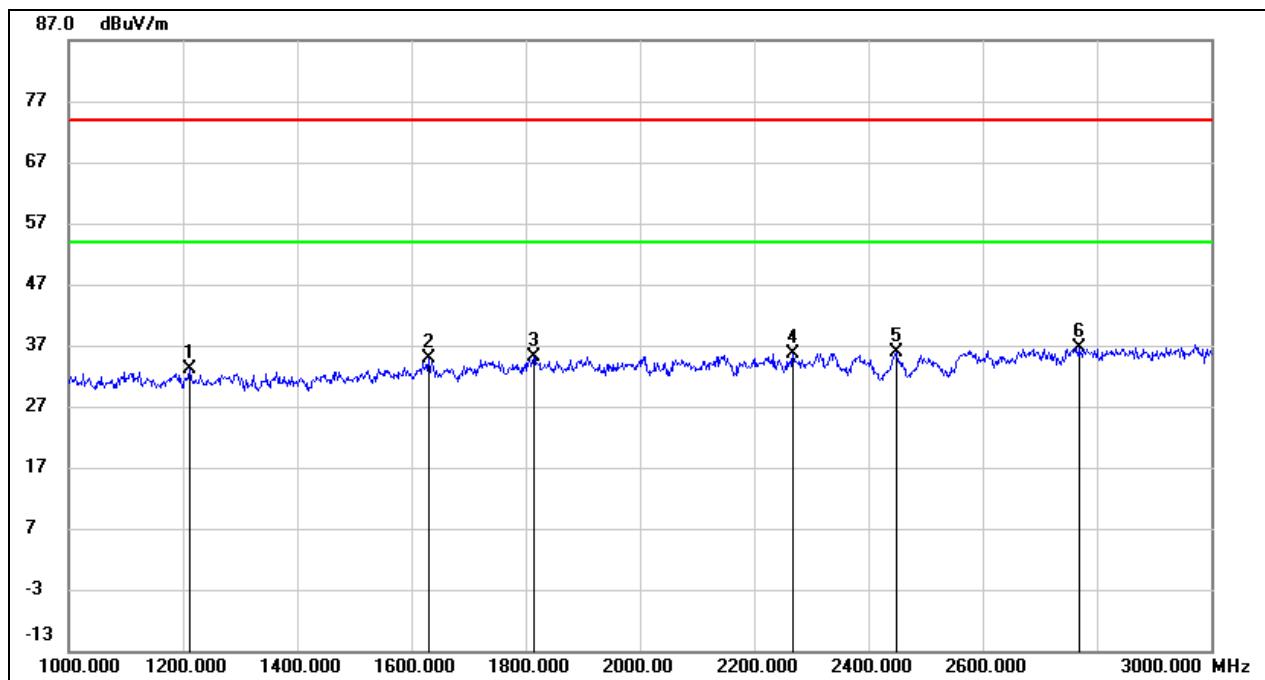
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1230.000	45.70	-12.95	32.75	74.00	-41.25	peak
2	1768.000	45.15	-10.29	34.86	74.00	-39.14	peak
3	1960.000	45.45	-10.16	35.29	74.00	-38.71	peak
4	2310.000	46.36	-8.69	37.67	74.00	-36.33	peak
5	2445.000	47.36	-8.31	39.05	74.00	-34.95	peak
6	2564.000	49.73	-7.99	41.74	74.00	-32.26	peak

Note: 1. Peak Result = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. Filter losses were only considered in then spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1778.000	46.73	-10.21	36.52	74.00	-37.48	peak
2	1838.000	46.60	-10.08	36.52	74.00	-37.48	peak
3	1892.000	46.67	-10.12	36.55	74.00	-37.45	peak
4	2340.000	46.33	-8.59	37.74	74.00	-36.26	peak
5	2476.000	48.68	-8.26	40.42	74.00	-33.58	peak
6	2566.000	51.28	-7.99	43.29	74.00	-30.71	peak

Note: 1. Peak Result = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. Filter losses were only considered in then spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)

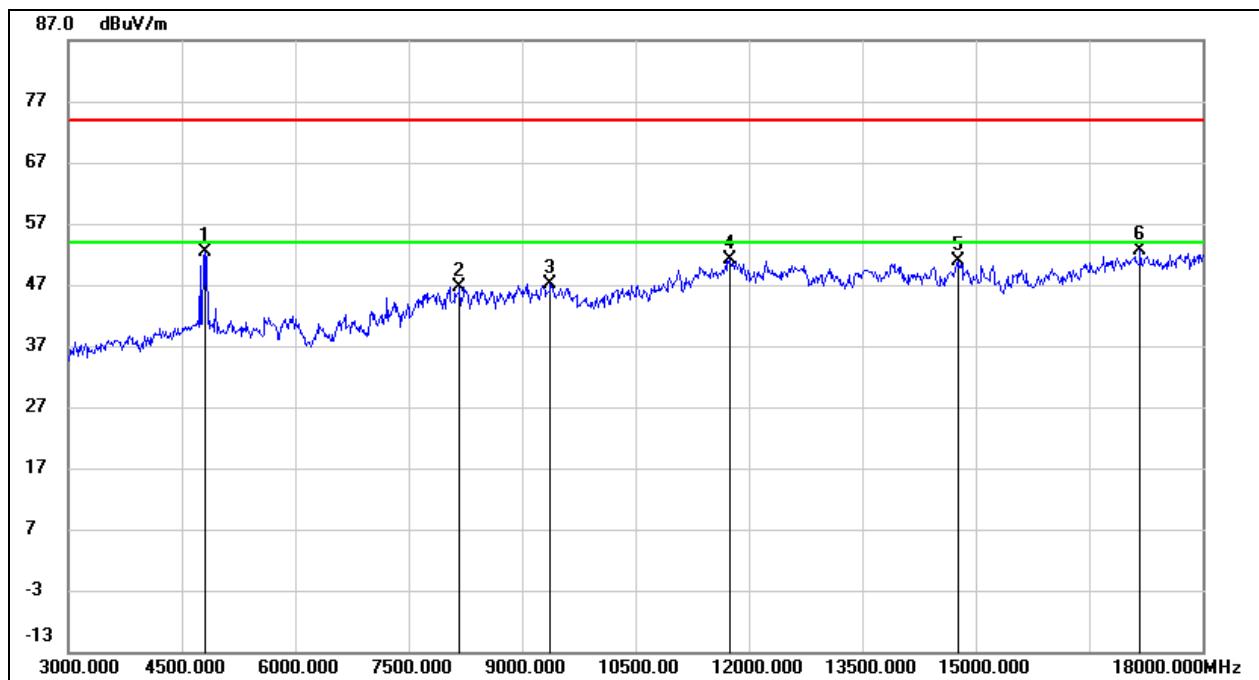
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1212.000	46.11	-12.97	33.14	74.00	-40.86	peak
2	1630.000	46.14	-11.33	34.81	74.00	-39.19	peak
3	1814.000	45.25	-10.06	35.19	74.00	-38.81	peak
4	2268.000	44.58	-8.83	35.75	74.00	-38.25	peak
5	2448.000	44.21	-8.31	35.90	74.00	-38.10	peak
6	2768.000	43.36	-6.76	36.60	74.00	-37.40	peak

Note:

1. Peak Result = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. Filter losses were only considered in then spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

7.4. SPURIOUS EMISSIONS (3 ~ 18 GHz)

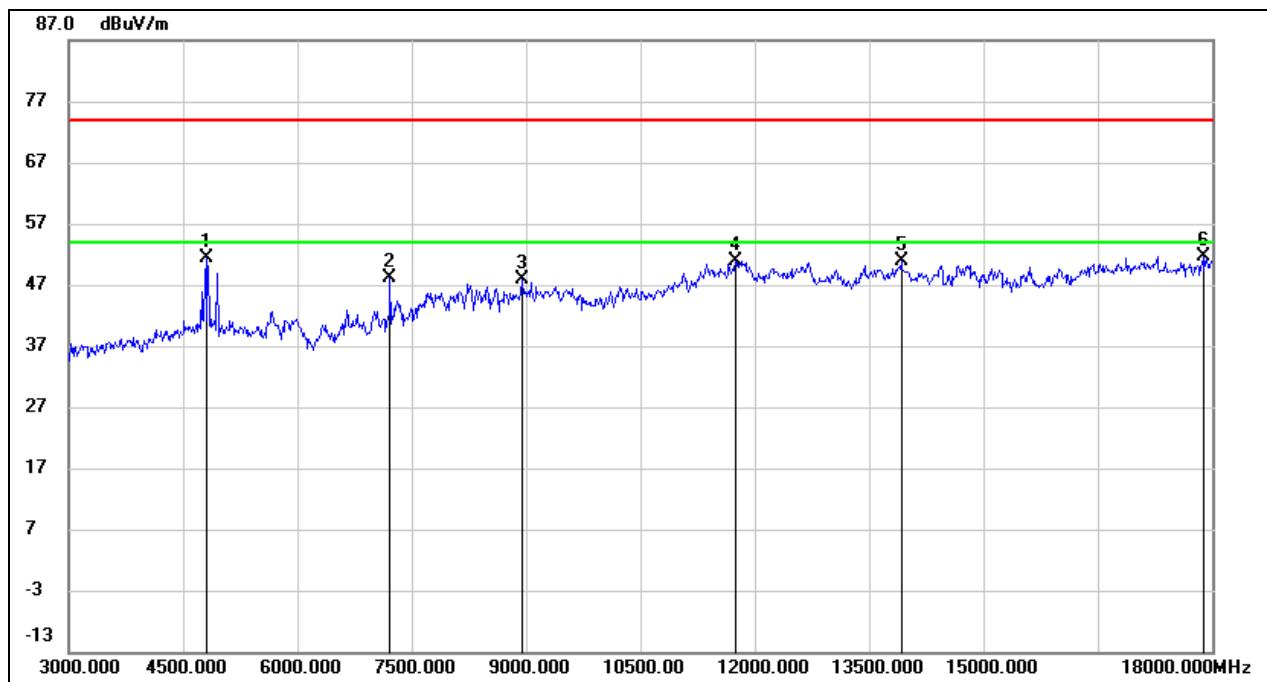
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4800.000	51.74	0.59	52.33	74.00	-21.67	peak
2	8175.000	37.47	9.14	46.61	74.00	-27.39	peak
3	9375.000	37.05	10.19	47.24	74.00	-26.76	peak
4	11745.000	35.75	15.31	51.06	74.00	-22.94	peak
5	14775.000	34.09	16.75	50.84	74.00	-23.16	peak
6	17175.000	31.77	20.94	52.71	74.00	-21.29	peak

Note:

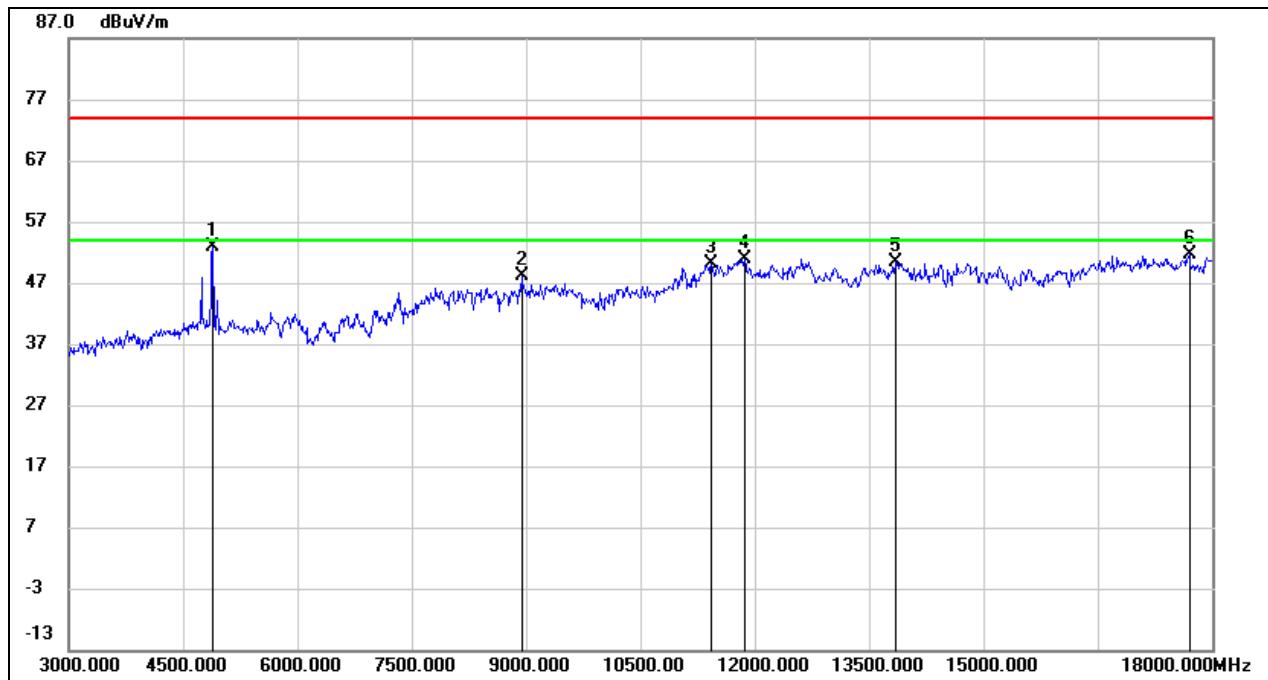
1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG Result=Peak Result + Duty Cycle Correction Factor.
5. For the Duty Cycle and Correction Factor, please refer to clause 6.1.
6. The High Pass filter loss factor already add into the correct factor.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4800.000	50.84	0.59	51.43	74.00	-22.57	peak
2	7215.000	41.18	7.03	48.21	74.00	-25.79	peak
3	8940.000	37.78	9.99	47.77	74.00	-26.23	peak
4	11745.000	35.66	15.31	50.97	74.00	-23.03	peak
5	13920.000	33.87	16.89	50.76	74.00	-23.24	peak
6	17880.000	28.96	22.70	51.66	74.00	-22.34	peak

Note:

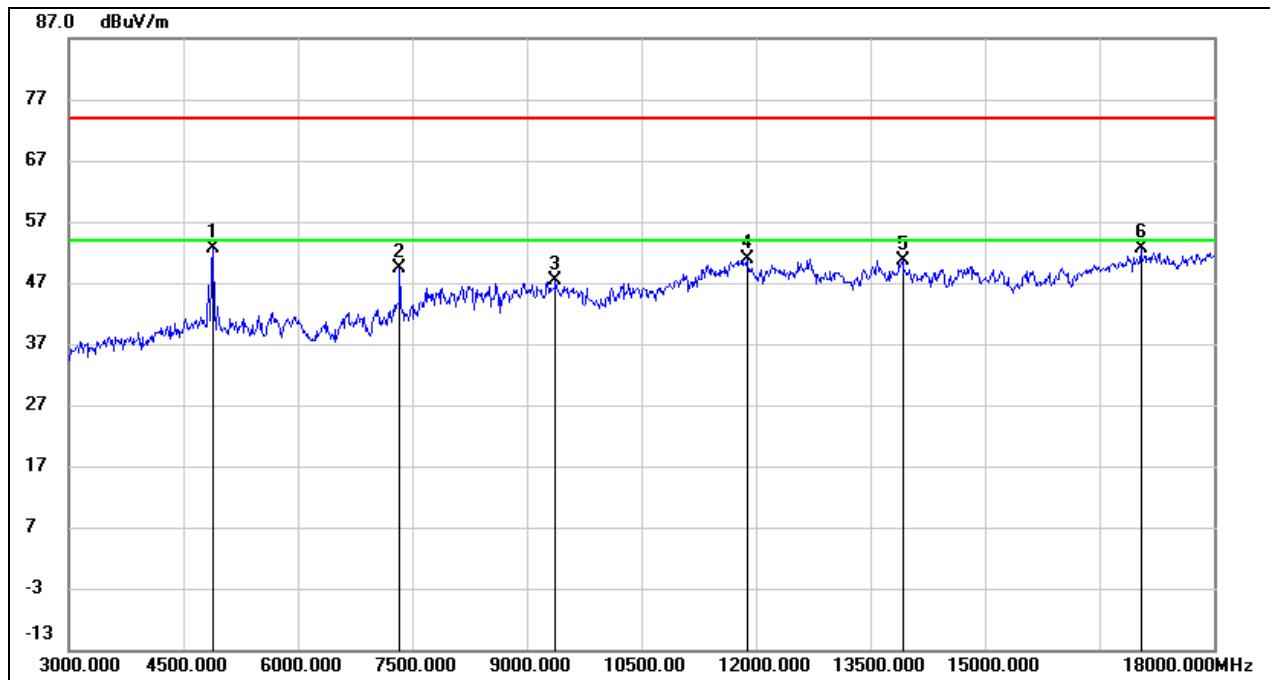
1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. The High Pass filter loss factor already add into the correct factor.
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4890.000	52.24	0.73	52.97	74.00	-21.03	peak
2	8940.000	38.24	9.99	48.23	74.00	-25.77	peak
3	11430.000	35.91	14.26	50.17	74.00	-23.83	peak
4	11865.000	35.48	15.52	51.00	74.00	-23.00	peak
5	13845.000	33.48	16.93	50.41	74.00	-23.59	peak
6	17700.000	29.61	21.94	51.55	74.00	-22.45	peak

Note:

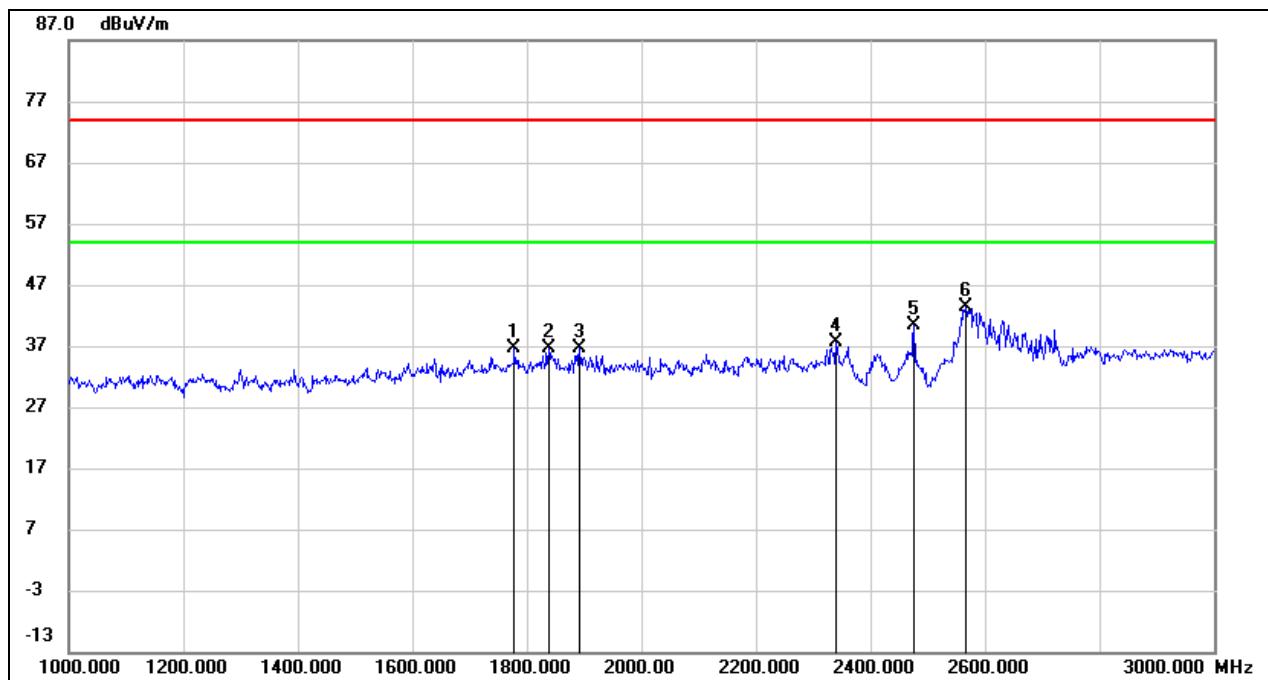
1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG Result=Peak Result + Duty Cycle Correction Factor.
5. For the Duty Cycle and Correction Factor, please refer to clause 6.1.
6. The High Pass filter loss factor already add into the correct factor.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4890.000	51.94	0.73	52.67	74.00	-21.33	peak
2	7335.000	41.93	7.49	49.42	74.00	-24.58	peak
3	9375.000	37.08	10.19	47.27	74.00	-26.73	peak
4	11880.000	35.42	15.49	50.91	74.00	-23.09	peak
5	13920.000	33.75	16.89	50.64	74.00	-23.36	peak
6	17040.000	32.12	20.39	52.51	74.00	-21.49	peak

Note:

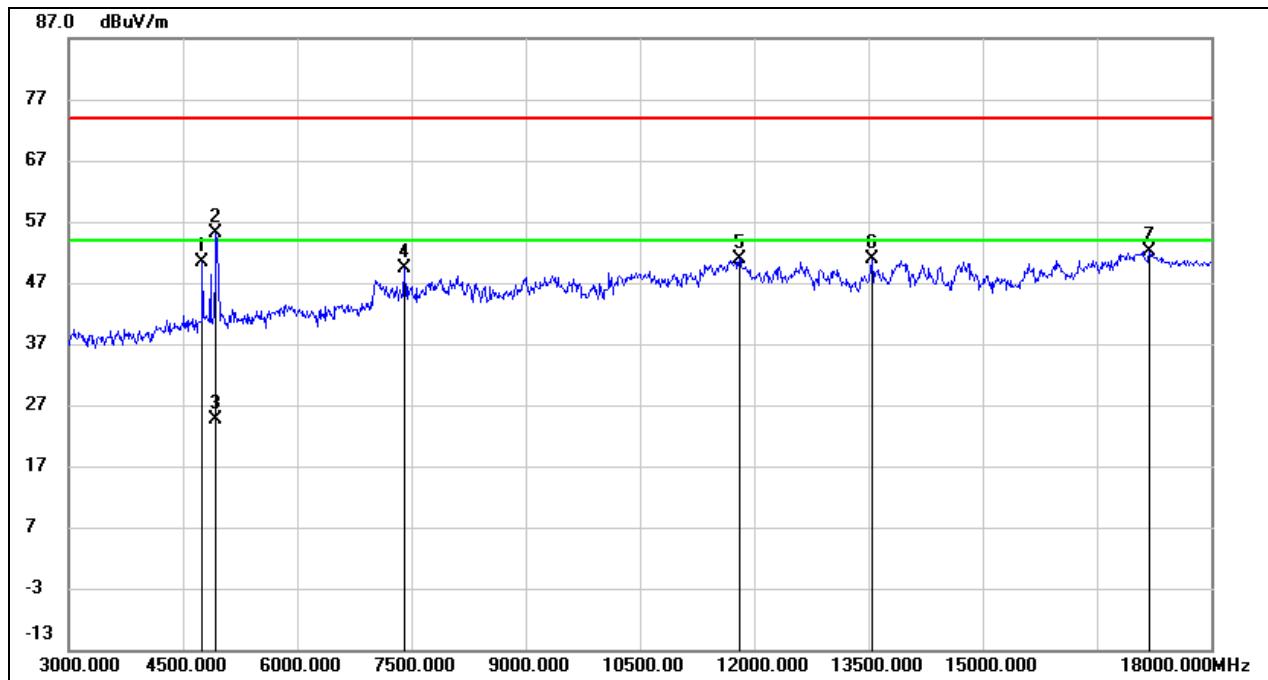
1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. The High Pass filter loss factor already add into the correct factor.
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1778.000	46.73	-10.21	36.52	74.00	-37.48	peak
2	1838.000	46.60	-10.08	36.52	74.00	-37.48	peak
3	1892.000	46.67	-10.12	36.55	74.00	-37.45	peak
4	2340.000	46.33	-8.59	37.74	74.00	-36.26	peak
5	2476.000	48.68	-8.26	40.42	74.00	-33.58	peak
6	2566.000	51.28	-7.99	43.29	74.00	-30.71	peak

Note:

1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG Result=Peak Result + Duty Cycle Correction Factor.
5. For the Duty Cycle and Correction Factor, please refer to clause 6.1.
6. The High Pass filter loss factor already add into the correct factor.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)

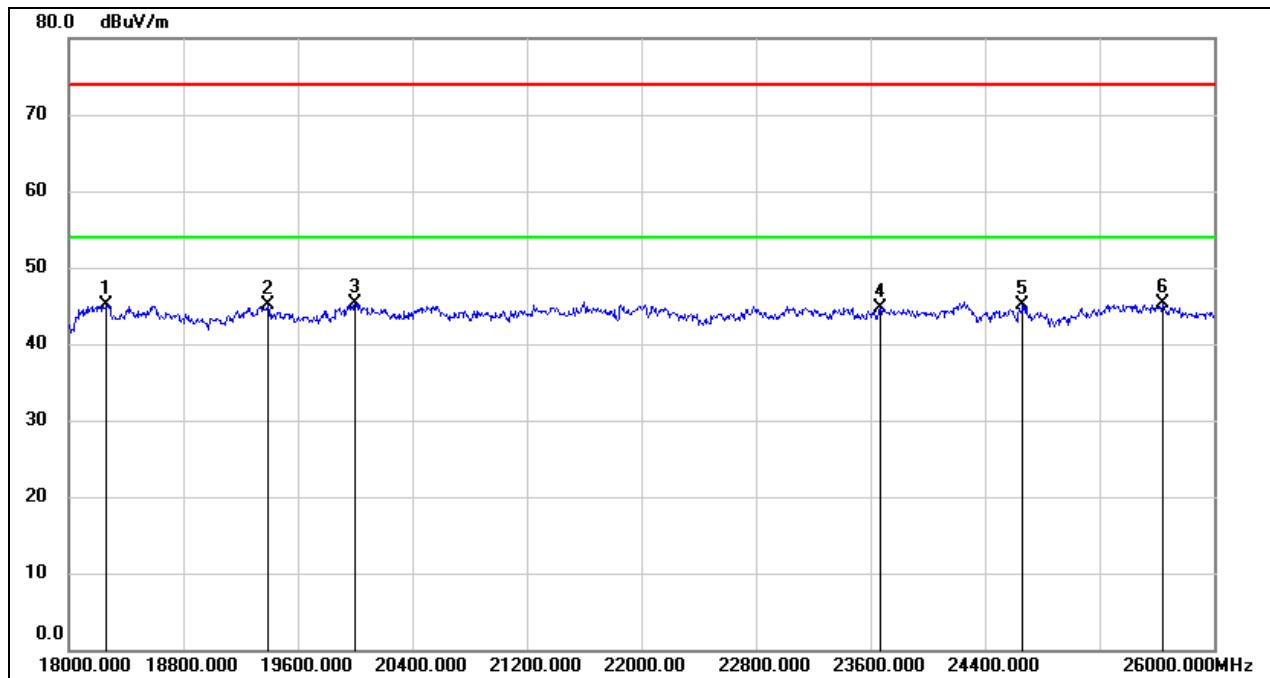
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4755.000	49.37	0.89	50.26	74.00	-23.74	peak
2	4935.000	53.53	1.59	55.12	74.00	-18.88	peak
3	4935.000	/	/	28.41	54.00	-25.59	AVG
4	7410.000	41.27	8.02	49.29	74.00	-24.71	peak
5	11805.000	35.65	15.26	50.91	74.00	-23.09	peak
6	13545.000	33.71	17.16	50.87	74.00	-23.13	peak
7	17190.000	30.16	21.98	52.14	74.00	-21.86	peak

Note:

1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG Result=Peak Result + Duty Cycle Correction Factor.
5. For the Duty Cycle and Correction Factor, please refer to clause 6.1.
6. The High Pass filter loss factor already add into the correct factor.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

7.5. SPURIOUS EMISSIONS (18 ~ 26 GHz)

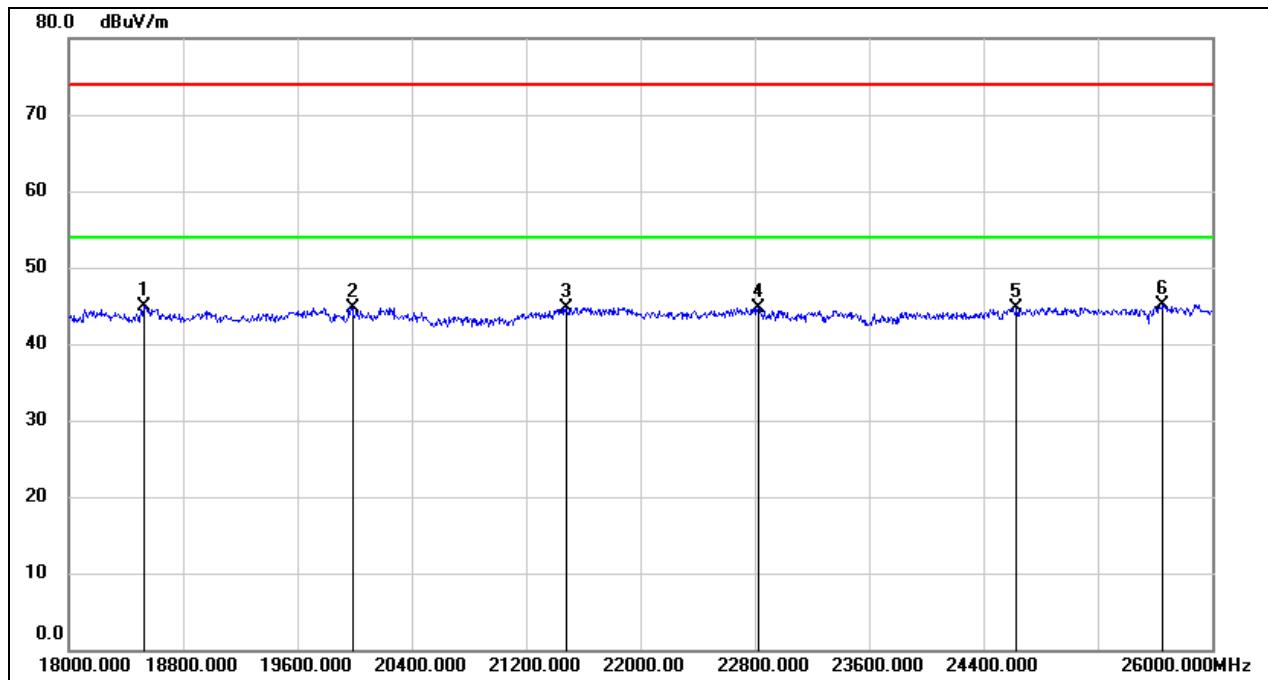
HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, WORST-CASE CONFIGURATION, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18264.000	50.65	-5.53	45.12	74.00	-28.88	peak
2	19392.000	50.62	-5.57	45.05	74.00	-28.95	peak
3	20000.000	50.81	-5.45	45.36	74.00	-28.64	peak
4	23664.000	47.82	-3.18	44.64	74.00	-29.36	peak
5	24664.000	47.40	-2.33	45.07	74.00	-28.93	peak
6	25640.000	46.34	-1.12	45.22	74.00	-28.78	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, WORST-CASE CONFIGURATION, VERTICAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18528.000	50.11	-5.26	44.85	74.00	-29.15	peak
2	19984.000	50.21	-5.44	44.77	74.00	-29.23	peak
3	21480.000	49.49	-4.70	44.79	74.00	-29.21	peak
4	22824.000	48.42	-3.62	44.80	74.00	-29.20	peak
5	24632.000	46.96	-2.31	44.65	74.00	-29.35	peak
6	25656.000	46.18	-1.05	45.13	74.00	-28.87	peak

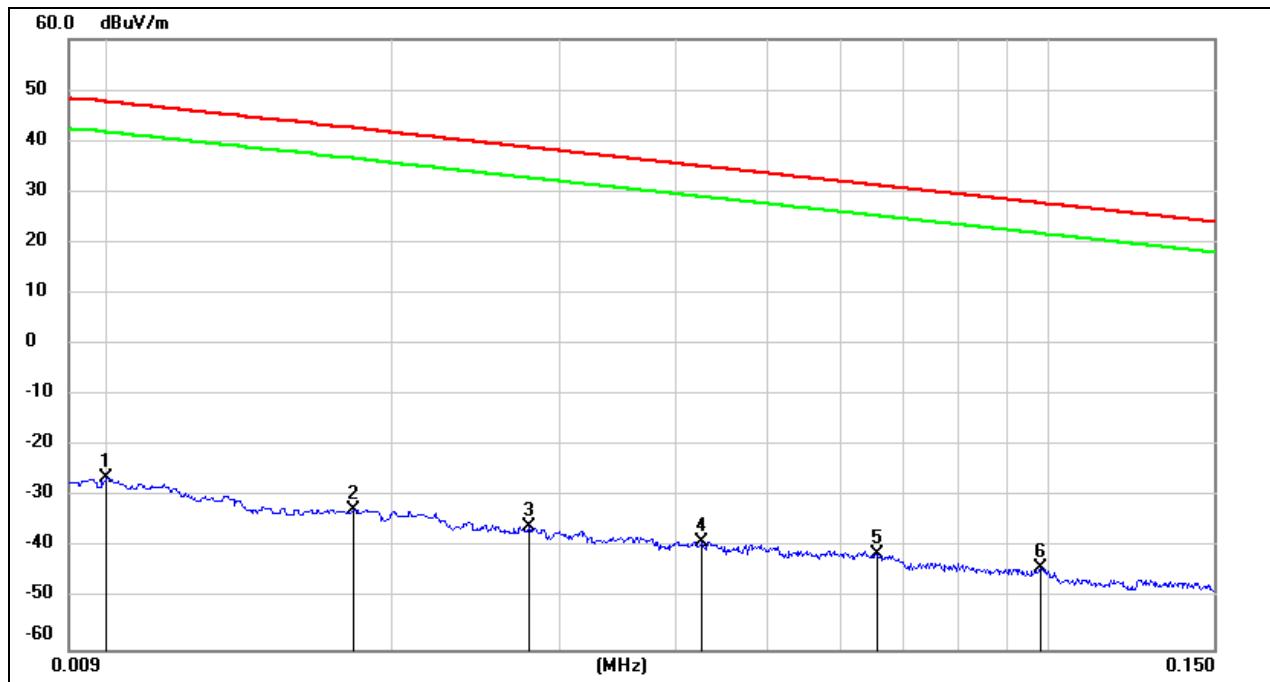
Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.

Note: All test modes had been tested, only the worst data record in the report.

7.6. SPURIOUS EMISSIONS BELOW 30 MHz

SPURIOUS EMISSIONS (HIGH CHANNEL, LOOP ANTENNA FACE ON TO THE EUT, WORST-CASE CONFIGURATION)

9 kHz ~ 150 kHz

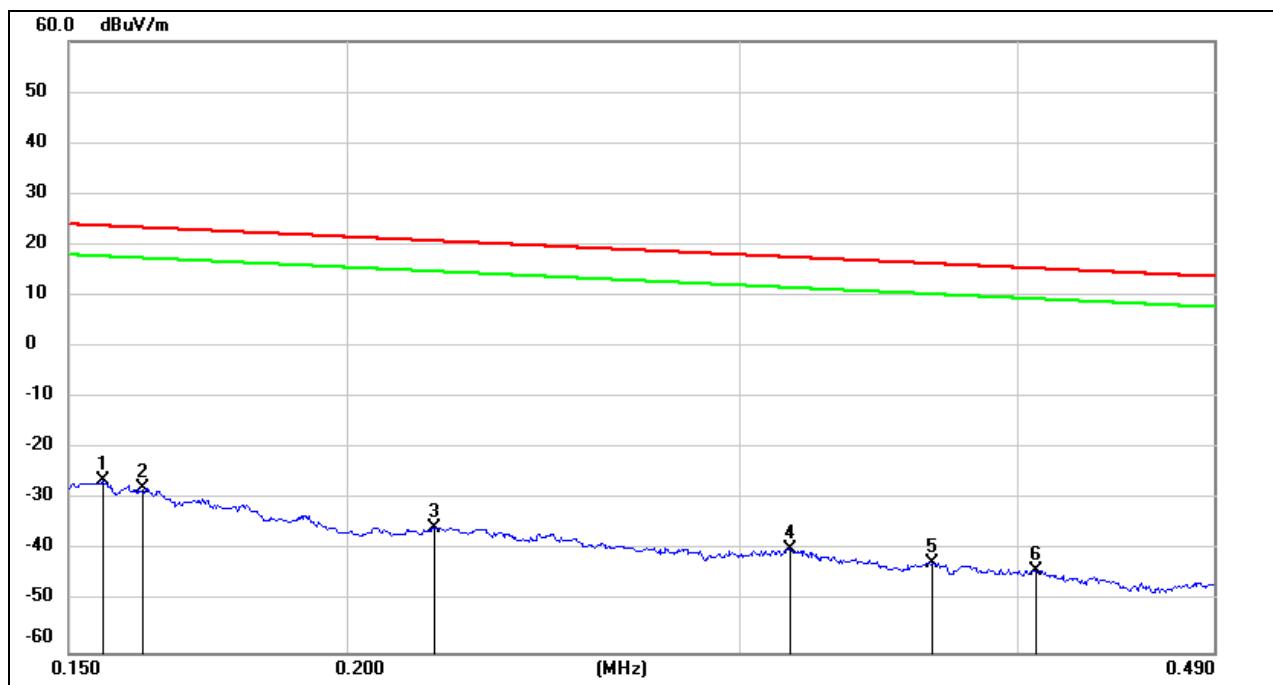


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0100	75.22	-101.40	-26.18	47.60	-73.78	peak
2	0.0181	68.85	-101.36	-32.51	42.45	-74.96	peak
3	0.0279	65.67	-101.38	-35.71	38.69	-74.40	peak
4	0.0427	62.64	-101.45	-38.81	34.99	-73.80	peak
5	0.0656	60.36	-101.55	-41.19	31.26	-72.45	peak
6	0.0981	57.77	-101.78	-44.01	27.77	-71.78	peak

Note: 1. Measurement = Reading Level + Correct Factor.

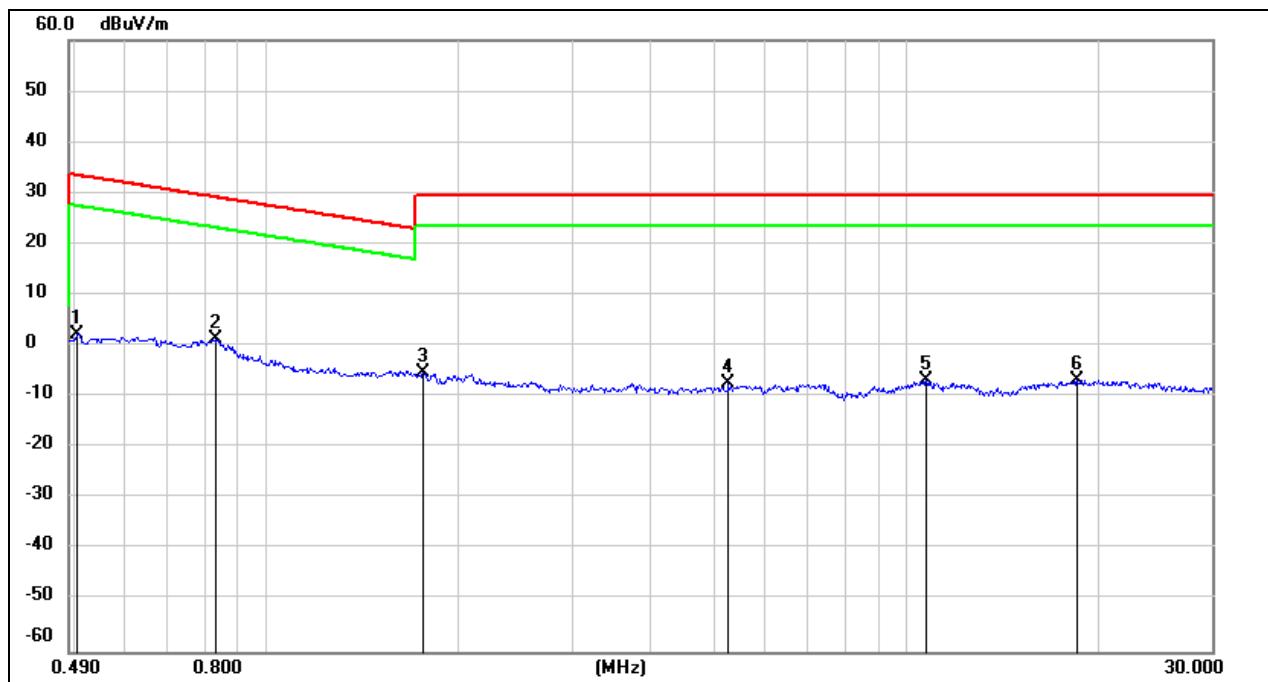
2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.

3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.

150 kHz ~ 490 kHz

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.1554	75.27	-101.65	-26.38	23.77	-50.15	peak
2	0.1621	73.92	-101.65	-27.73	23.41	-51.14	peak
3	0.2190	66.27	-101.75	-35.48	20.79	-56.27	peak
4	0.3163	62.20	-101.87	-39.67	17.60	-57.27	peak
5	0.3662	59.58	-101.93	-42.35	16.33	-58.68	peak
6	0.4081	58.08	-101.97	-43.89	15.39	-59.28	peak

Note: 1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
 3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.

490 kHz ~ 30 MHz

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.5039	64.44	-62.07	2.37	33.56	-31.19	peak
2	0.8296	63.44	-62.17	1.27	29.23	-27.96	peak
3	1.7580	56.58	-61.93	-5.35	29.54	-34.89	peak
4	5.2705	54.04	-61.45	-7.41	29.54	-36.95	peak
5	10.7299	53.98	-60.83	-6.85	29.54	-36.39	peak
6	18.4908	54.06	-60.89	-6.83	29.54	-36.37	peak

Note: 1. Measurement = Reading Level + Correct Factor.

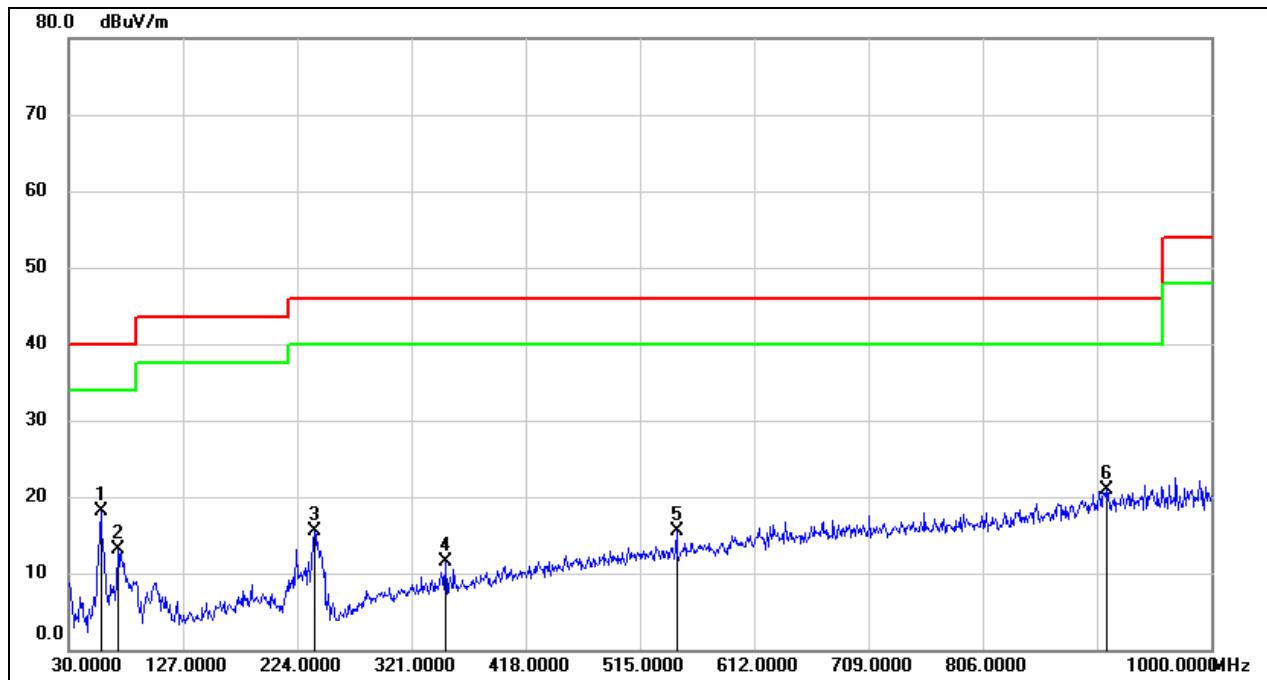
2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.

3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.

Note: All test modes had been tested, only the worst data record in the report.

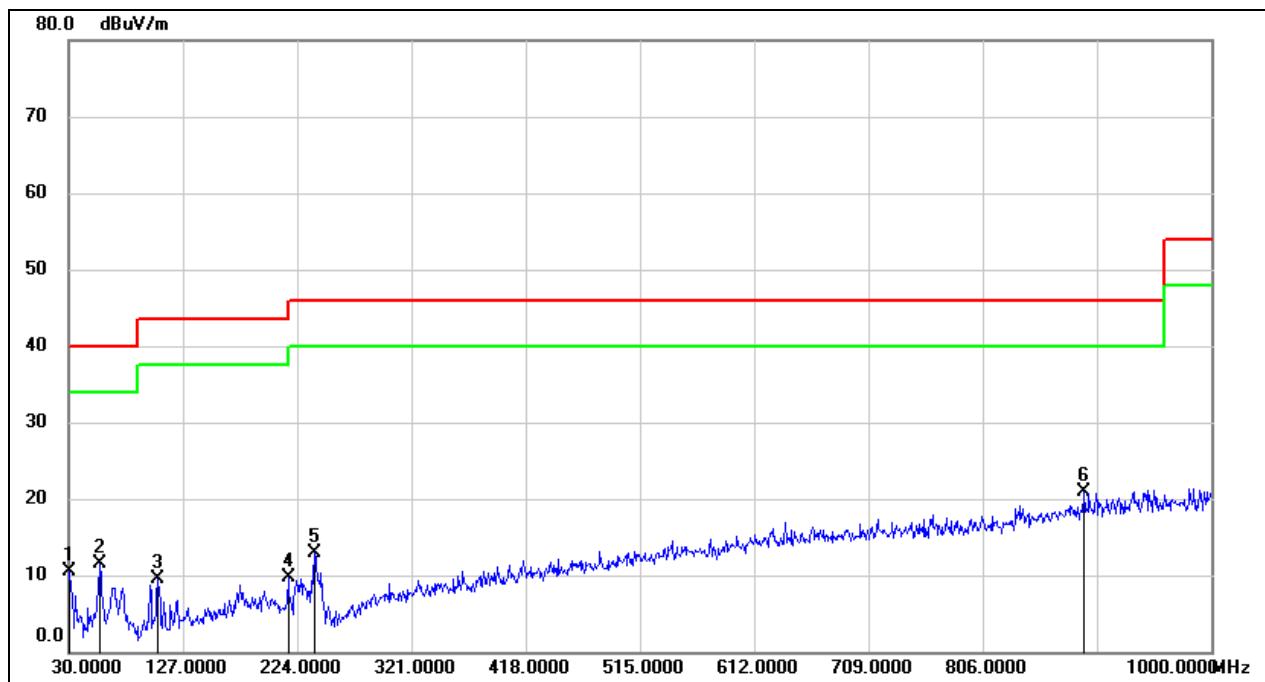
7.7. SPURIOUS EMISSIONS BELOW 1 GHz AND ABOVE 30 MHz

SPURIOUS EMISSIONS (HIGH CHANNEL, WORST-CASE CONFIGURATION, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	57.1600	38.67	-20.58	18.09	40.00	-21.91	QP
2	71.7100	33.79	-20.70	13.09	40.00	-26.91	QP
3	238.5500	34.51	-19.10	15.41	46.00	-30.59	QP
4	350.1000	25.88	-14.32	11.56	46.00	-34.44	QP
5	546.0400	25.95	-10.49	15.46	46.00	-30.54	QP
6	910.7600	25.83	-4.97	20.86	46.00	-25.14	QP

Note: 1. Result Level = Read Level + Correct Factor.
 2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
 3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

SPURIOUS EMISSIONS (HIGH CHANNEL, WORST-CASE CONFIGURATION, VERTICAL)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	30.9700	29.52	-19.04	10.48	40.00	-29.52	QP
2	56.1900	32.06	-20.61	11.45	40.00	-28.55	QP
3	105.6600	30.29	-20.70	9.59	43.50	-33.91	QP
4	216.2400	27.59	-17.84	9.75	46.00	-36.25	QP
5	238.5500	31.98	-19.10	12.88	46.00	-33.12	QP
6	892.3300	26.06	-5.23	20.83	46.00	-25.17	QP

Note: 1. Result Level = Read Level + Correct Factor.
 2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
 3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto

Note: All the channels have been tested, only the worst data was recorded in the report.

8. ANTENNA REQUIREMENTS

APPLICABLE REQUIREMENTS

Please refer to FCC §15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Please refer to FCC §15.247(b)(4)

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

RESULTS

Complies

END OF REPORT