

FCC Radio Test Report

FCC ID: QISCAG-L23

This report concerns (check one): Original Grant Class I Change Class II Change

Project No. : 1701C155L
Equipment : Smart Phone
Model Name : CAG-L23
Applicant : Huawei Technologies Co.,Ltd.
Address : Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District Shenzhen China

Date of Receipt : Jan. 18, 2017
May 09, 2017
Date of Test : Jan. 18, 2017 ~ Feb. 27, 2017
May 14, 2017 ~ Jun. 05, 2017
Issued Date : Jan. 19, 2018
Tested by : BTL Inc.

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Declaration

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Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

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REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-2-1701C155	Original Report.	Feb. 28, 2017
BTL-FCCP-2-1701C155A	Compared with the original report (BTL-FCCP-2-1701C155), the model CRO-L23 is added and differences please see the below table. According to the differences description below table, CRO-L23 shares the same test data of CRO-L03 of the same bands which does not affect the test results of the test report.	Mar. 23, 2017
BTL-FCCP-2-1701C155E	Compared with the original report (BTL-FCCP-2-1701C155A), the antenna is changed and battery, earphone are added. The Radiated Spurious Emissions had been evaluated and recorded in the test report, the rest are the same.	Jun.06, 2017
BTL-FCCP-2-1701C155L	Compared with previous report (BTL-FCCP-2-1701C155E) 1. Changed FCC ID. 2. Changed model name CRO-L03, CRO-L23 to CAG-L23. (Only differ in Android Edition) The changes do not affect the test results, the rest are kept the same.	Jan. 19, 2018

1. CERTIFICATION

Equipment : Smart Phone
Brand Name : HUAWEI
Model Name : CAG-L23
Applicant : Huawei Technologies Co.,Ltd.
Manufacturer : Huawei Technologies Co.,Ltd.
Address : Administration Building, Headquarters of Huawei Technologies Co., Ltd.,
Bantian, Longgang District Shenzhen China
Factory : Huawei Technologies Co.,Ltd.
Address : Administration Building, Headquarters of Huawei Technologies Co., Ltd.,
Bantian, Longgang District Shenzhen China
Date of Test : Jan. 18, 2017 ~ Feb. 27, 2017
May 14, 2017 ~ Jun, 05, 2017
Test Sample : Engineering Sample
Standard(s) : FCC Part15, Subpart C (15.247)
ANSI C63.10-2013

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-2-1701C155L) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of NVLAP according to the ISO-17025 quality assessment standard and technical standard(s).

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

Applied Standard(s): FCC Part15 (15.247) , Subpart C			
Standard(s) Section	Test Item	Judgment	Remark
15.207	Conducted Emission	PASS	
15.247(d)	Antenna conducted Spurious Emission	PASS	
15.247(a)(2)	6dB Bandwidth	PASS	
15.247(b)(3)	Peak Output Power	PASS	
15.247(e)	Power Spectral Density	PASS	
15.203	Antenna Requirement	PASS	
15.247(d)/ 15.205/ 15.209	Transmitter Radiated Emissions	PASS	

NOTE:

(1) "N/A" denotes test is not applicable to this device.

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

BTL's test firm number for FCC: 854385

BTL's designation number for FCC: CN5020

2.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2 U_{CISPR} requirement.

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

A. Conducted Measurement:

Test Site	Method	Measurement Frequency Range	U, (dB)
DG-C02	CISPR	150 KHz ~ 30MHz	2.32

B. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
DG-CB03	CISPR	9KHz~30MHz	V	3.79
		9KHz~30MHz	H	3.57
		30MHz ~ 200MHz	V	3.82
		30MHz ~ 200MHz	H	3.78
		200MHz ~ 1,000MHz	V	4.10
		200MHz ~ 1,000MHz	H	4.06
		1GHz~18GHz	V	3.12
		1GHz~18GHz	H	3.68
		18GHz~40GHz	V	4.15
		18GHz~40GHz	H	4.14

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	Smart Phone	
Brand Name	HUAWEI	
Model Name	CAG-L23	
Model Difference	N/A	
Product Description	Operation Frequency	2402~2480 MHz
	Modulation Technology	GFSK(1Mbps)
	Bit Rate of Transmitter	
	Output Power (Max.)	0.48 dBm (1Mbps)
Power Source	#1 DC Voltage supplied from AC/DC adapter. #2 Battery Supplied.	
Power Rating	#1:AC 100–240V 50/60Hz DC 5V 1A #2:DC 3.82V 2200mAh	
HW Version	HL1CROM	
SW Version	Cairo-L23C469B022	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

2.

Item	Mfr/Brand	Model.
Battery	SCUD (FUJIAN) Electronics Co., Ltd	HB3742A0EZC+
	Shenzhen Desay Battery Tech Co., Ltd.	
	Sunwoda Electronic Co.,LTD.	
USB Cable	FOXCONN INTERCONNECT TECHNOLOGY LIMITED	CUBB01M-HC208-DH
	HONGLIN TECHNOLOGY CO.,LTD	130-26654
	Luxshare Precision Industry Co., Ltd.	L99U2013-CS-H
Earphone	Jiangxi Lianchuang Hongsheng Electronic Co.,LTD	MEMD1632B580C00
	BOLUO COUNTY QUANCHENG ELECTRONIC CO.,LTD	1311-3291-3.5mm-229
	MERRY ELECTRONICS CO., LTD.	EMC309-001
	Jiangxi Lianchuang Hongsheng Electronic Co.,LTD (Black)	MEMD1532B528000
	BOLUO COUNTY QUANCHENG ELECTRONIC CO.,LTD (Black)	1293#+3283# 3.5MM-150
	GoerTek (Black),	HA1-3
	GoerTek (White)	NA12
Adapter	HUIZHOU BYD ELECTRONIC CO., LTD.	HW-050100U01
	Shenzhen Huntkey Electric Co., Ltd.	
	DONG GUAN PHITEK ELECTRONICS CO., LTD.	

2. Channel List:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2402	20	2442
01	2404	21	2444
02	2406	22	2446
03	2408	23	2448
04	2410	24	2450
05	2412	25	2452
06	2414	26	2454
07	2416	27	2456
08	2418	28	2458
09	2420	29	2460
10	2422	30	2462
11	2424	31	2464
12	2426	32	2466
13	2428	33	2468
14	2430	34	2470
15	2432	35	2472
16	2434	36	2474
17	2436	37	2476
18	2438	38	2478
19	2440	39	2480

3. Table for Filed Antenna:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	Internal	N/A	2.14

3.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possibly have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	TX Mode NOTE (1)

The EUT system operated these modes were found to be the worst case during the pre-scanning test as following:

For Conducted Test	
Final Test Mode	Description
Mode 1	TX Mode

For Radiated Test	
Final Test Mode	Description
Mode 1	TX Mode NOTE (1)

Note:

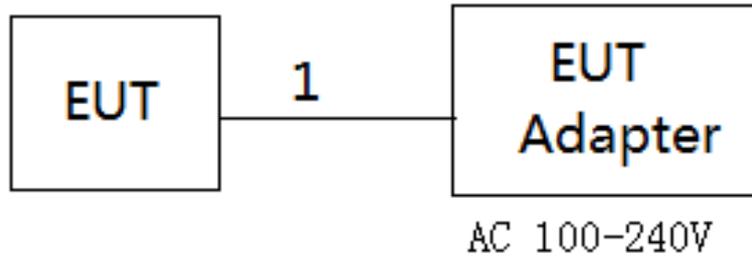
(1) The measurements are performed at the high, middle, low available channels.

3.3 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of BT LE

Test Software Version	N/A		
Frequency (MHz)	2402	2440	2480
BT LE	N/A	N/A	N/A

3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Shielded Type	Ferrite Core	Length	Note
-	-	-	-	-

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.
1	NO	NO	1.2m	USB Cable	-

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 POWER LINE CONDUCTED EMISSION LIMITS (Frequency Range 150KHz-30MHz)

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
	Quasi-peak	Average
0.15 -0.5	66 to 56*	56 to 46*
0.50 -5.0	56	46
5.0 -30.0	0	50

Note:

- (1) The limit of " * " decreases with the logarithm of the frequency
- (2) The test result calculated as following:
 Measurement Value = Reading Level + Correct Factor
 Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor(if use)
 Margin Level = Measurement Value - Limit Value

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

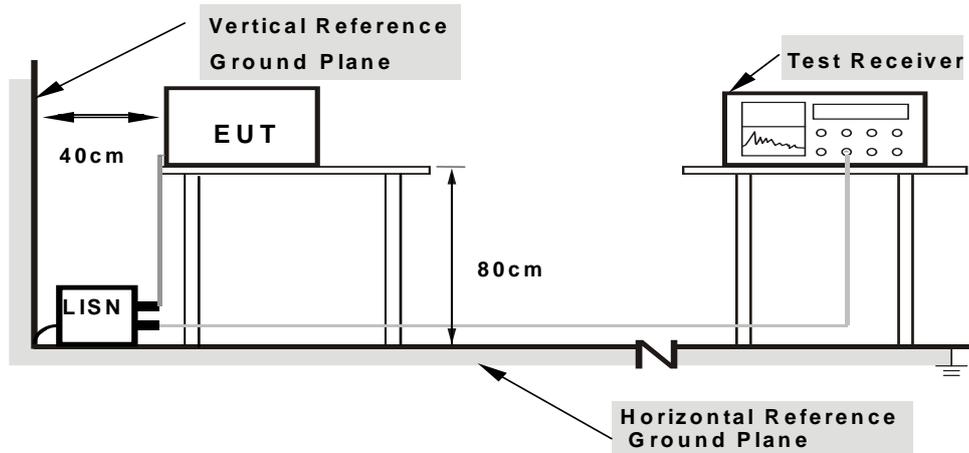
4.1.2 TEST PROCEDURE

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.1.3 DEVIATION FROM TEST STANDARD

No deviation

4.1.4 TEST SETUP



- Note: 1.Support units were connected to second LISN.
 2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

4.1.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

4.1.6 EUT TEST CONDITIONS

Temperature: 24°C Relative Humidity: 60% Test Voltage: AC 120V/60Hz

4.1.7 TEST RESULTS

Please refer to the Attachment A.

Remark:

- (1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform.In this case, a “ * ” marked in AVG Mode column of Interference Voltage Measured.
- (2) Measuring frequency range from 150KHz to 30MHz.
- (3) “ N/A” denotes test is not applicable to this device.

4.2 RADIATED EMISSION MEASUREMENT

4.2.1 RADIATED EMISSION LIMITS

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT (9KHz-1000MHz)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

Frequency (MHz)	Band edge at 3m (dBµV/m)		Harmonic at 1.5m (dBµV/m)	
	Peak	Average	Peak	Average
Above 1000	74	54	80 (Note 5)	60(Note 5)

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).
- (4) The test result calculated as following:
 Measurement Value = Reading Level + Correct Factor
 Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)
 Margin Level = Measurement Value - Limit Value

$$(5) \quad FS_{\text{limit}} = FS_{\text{max}} - 20 \log \left(\frac{d_{\text{limit}}}{d_{\text{measure}}} \right)$$

$$20 \log d_{\text{limit}}/d_{\text{measure}} = 20 \log 3/1.5 = 6 \text{dB.}$$

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW (Emission in restricted band)	RBW 1MHz VBW 3MHz peak detector for Pk value RMS detector for AV value

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9KHz~90KHz for PK/AVG detector
Start ~ Stop Frequency	90KHz~110KHz for QP detector
Start ~ Stop Frequency	110KHz~490KHz for PK/AVG detector
Start ~ Stop Frequency	490KHz~30MHz for QP detector
Start ~ Stop Frequency	30MHz~1000MHz for QP detector

4.2.2 TEST PROCEDURE

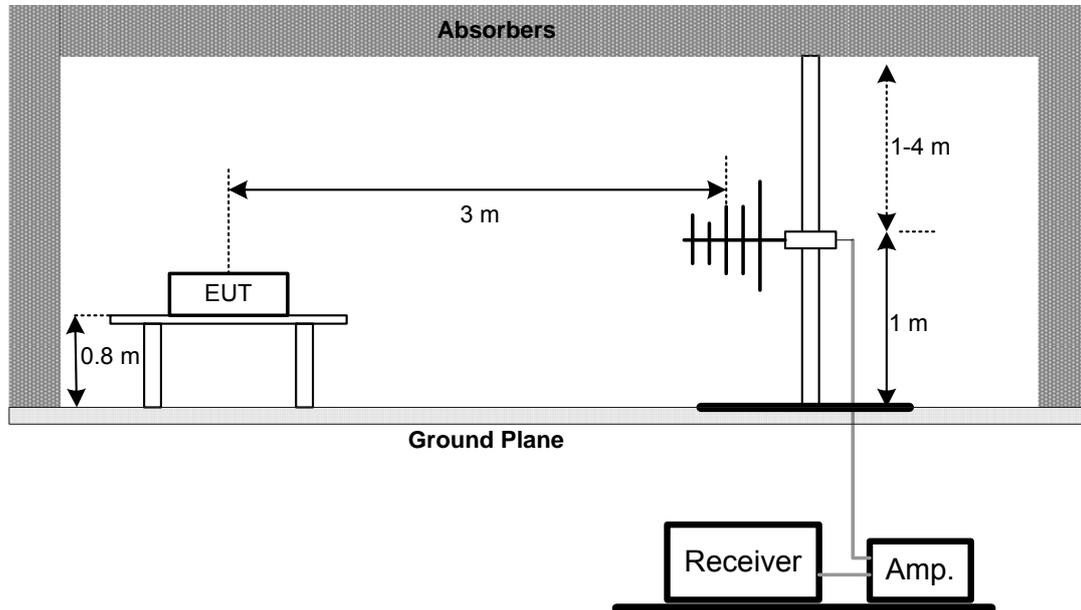
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance of 3 m or 1.5m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
- f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1GHz)
- h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1GHz)
- i. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.2.3 DEVIATION FROM TEST STANDARD

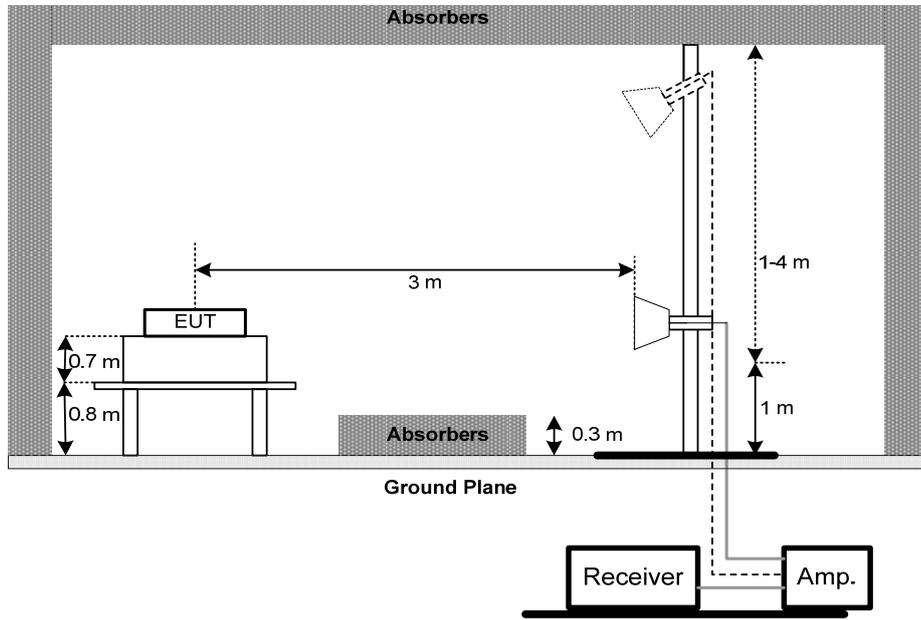
No deviation

4.2.4 TEST SETUP

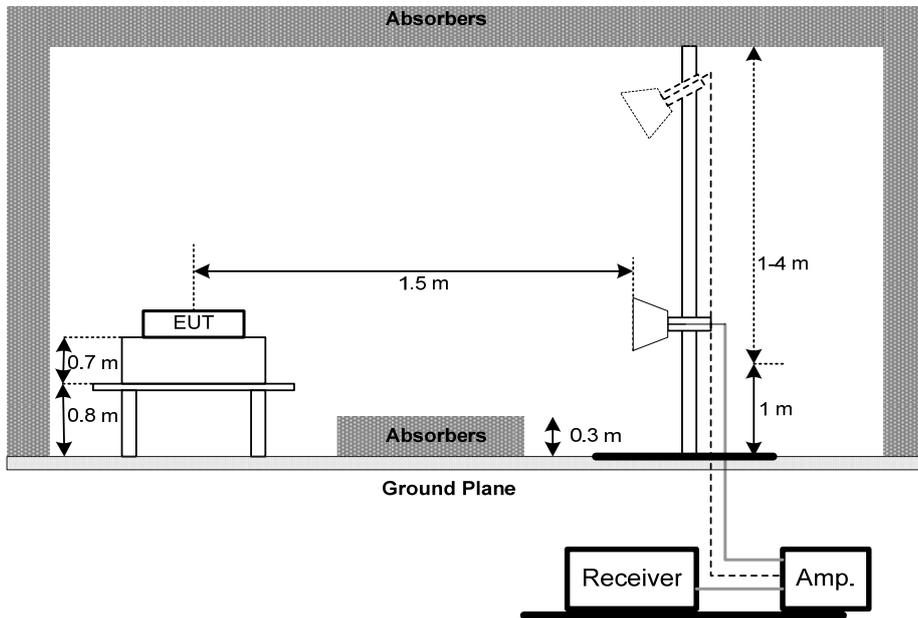
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



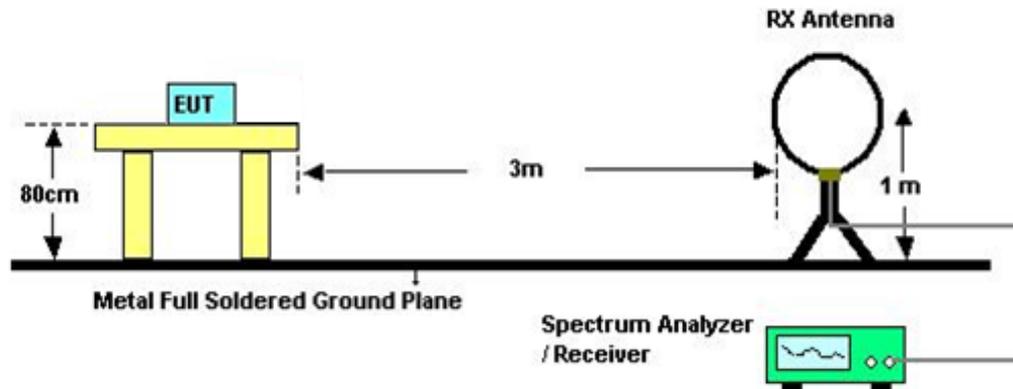
(B) Radiated Emission Test Set-Up Frequency Above 1 GHz
Band edge



Harmonic



(C) For radiated emissions below 30MHz



4.2.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

4.2.6 EUT TEST CONDITIONS

Temperature: 22°C Relative Humidity: 56% Test Voltage: AC 120V/60Hz

4.2.7 TEST RESULTS (9KHZ TO 30MHZ)

Please refer to the Attachment B

Remark:

- (1) The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
- (2) Distance extrapolation factor = $40 \log(\text{specific distance} / \text{test distance})$ (dB).
- (3) Limit line = specific limits (dBuV) + distance extrapolation factor.

4.2.8 TEST RESULTS (30MHZ TO 1000 MHZ)

Please refer to the Attachment C.

4.2.9 TEST RESULTS (ABOVE 1000 MHZ)

Please refer to the Attachment D.

Remark:

- (1) No limit: This is fundamental signal, the judgment is not applicable.
For fundamental signal judgment was referred to Peak output test.

5. BANDWIDTH TEST

5.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	$\geq 500\text{KHz}$ (6dB bandwidth)	2400-2483.5	PASS

5.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting : RBW= 100KHz, VBW=300KHz, Sweep time = 2.5 ms.

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP



5.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

5.1.5 EUT TEST CONDITIONS

Temperature: 24°C Relative Humidity: 60% Test Voltage: AC 120V/60Hz

5.1.6 TEST RESULTS

Please refer to the Attachment E.

6. MAXIMUM OUTPUT POWER TEST

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Maximum Output Power	1 watt or 30dBm	2400-2483.5	PASS

6.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,
- b. The maximum peak conducted output power was performed in accordance with method 9.1.2 of FCC KDB 558074 D01 DTS Meas Guidance.

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP



6.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

6.1.5 EUT TEST CONDITIONS

Temperature: 24°C Relative Humidity: 60% Test Voltage: AC 120V/60Hz

6.1.6 TEST RESULTS

Please refer to the Attachment F.

7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 APPLIED PROCEDURES / LIMIT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits.

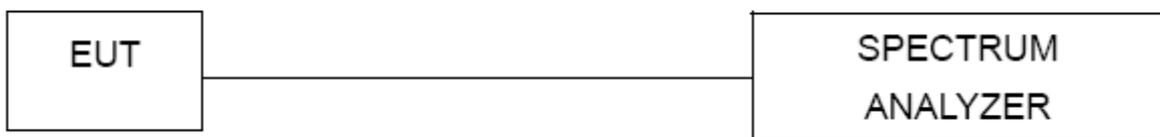
7.1.1 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- Spectrum Setting : RBW= 100KHz, VBW=300KHz, Sweep time = 10 ms.
- Offset=antenna gain+cable loss

7.1.2 DEVIATION FROM STANDARD

No deviation.

7.1.3 TEST SETUP



7.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

7.1.5 EUT OPERATION CONDITIONS

Temperature: 24°C Relative Humidity: 60% Test Voltage: AC 120V/60Hz

7.1.6 TEST RESULTS

Please refer to the Attachment G.

8. POWER SPECTRAL DENSITY TEST

8.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(e)	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS

8.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW=3KHz, VBW=10 KHz, Sweep time = auto.

8.1.2 DEVIATION FROM STANDARD

No deviation.

8.1.3 TEST SETUP



8.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

8.1.5 EUT TEST CONDITIONS

Temperature: 24°C Relative Humidity: 60% Test Voltage: AC 120V/60Hz

8.1.6 TEST RESULTS

Please refer to the Attachment H.

9. MEASUREMENT INSTRUMENTS LIST

Conducted Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EMI Test Receiver	R&S	ESCI	100382	Mar. 26, 2018
2	LISN	EMCO	3816/2	52765	Mar. 26, 2018
3	50Ω Terminator	SHX	TF2-3G-A	8122901	Mar. 26, 2018
4	TWO-LINE V-NETWORK	R&S	ENV216	101447	Mar. 26, 2018
5	Cable	emci	RG223(9KHz-30 MHz)(5m)	N/A	Mar. 09, 2018
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emission Measurement - Below 1GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarzbeck	VULB9160	9160-3232	Mar. 26, 2018
2	Amplifier	HP	8447D	2944A09673	Aug. 20, 2018
3	Receiver	Agilent	N9038A	MY52130039	Aug. 20, 2018
4	Cable	emci	LMR-400(30MHz-1 GHz)(8m+5m)	N/A	Jun. 26, 2018
5	Controller	CT	SC100	N/A	N/A
6	Controller	MF	MF-7802	MF780208416	N/A
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
8	Antenna	EM	EM-6876-1	230	Mar. 06, 2018

Radiated Emission Measurement - Above 1GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double Ridged Guide Antenna	ETS	3115	75789	Mar. 26, 2018
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jun. 08, 2018
3	Amplifier	Agilent	8449B	3008A02274	May 16, 2018
4	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 26, 2018
5	Receiver	Agilent	N9038A	MY52130039	Aug. 20, 2018
6	Controller	CT	SC100	N/A	N/A
7	Controller	MF	MF-7802	MF780208416	N/A
8	Cable	emci	EMC104-SM-SM-1 2000(12m)	N/A	Jun. 26, 2018
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

6dB Bandwidth Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Sep. 04, 2017

Peak Output Power Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	ANRITSU	ML2495A	1128009	Apr. 25, 2018
2	Pulse Power Sensor	ANRITSU	MA 2411B	1027500	Apr. 25, 2018

Antenna Conducted Spurious Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Sep. 04, 2017

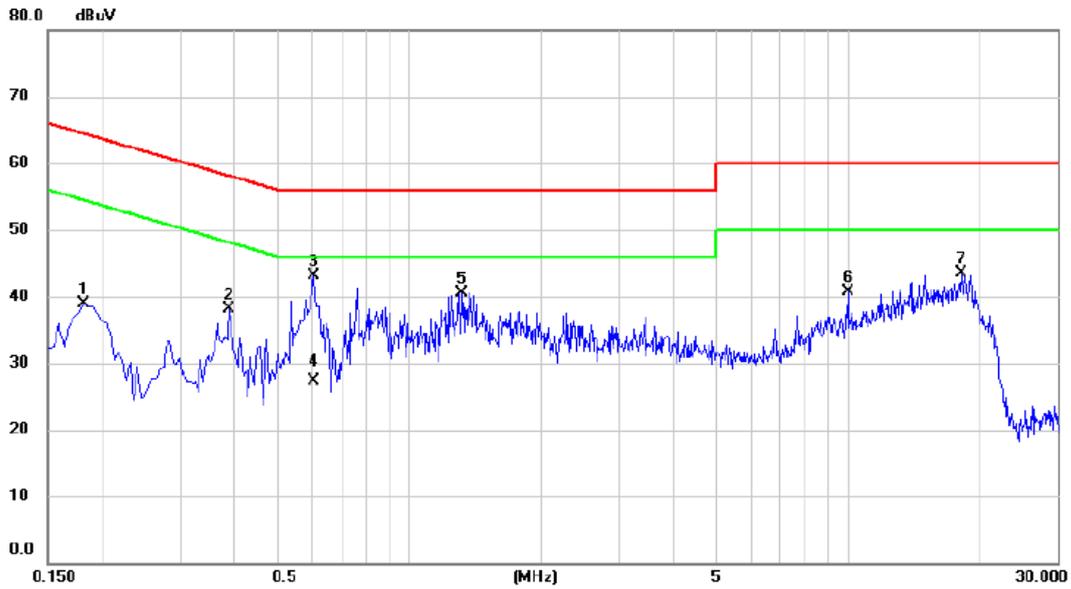
Power Spectral Density Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Sep. 04, 2017

Remark: "N/A" denotes no model name, serial no. or calibration specified.
 All calibration period of equipment list is one year.

ATTACHMENT A - CONDUCTED EMISSION

Test Mode: TX Mode_Adapter: BYD

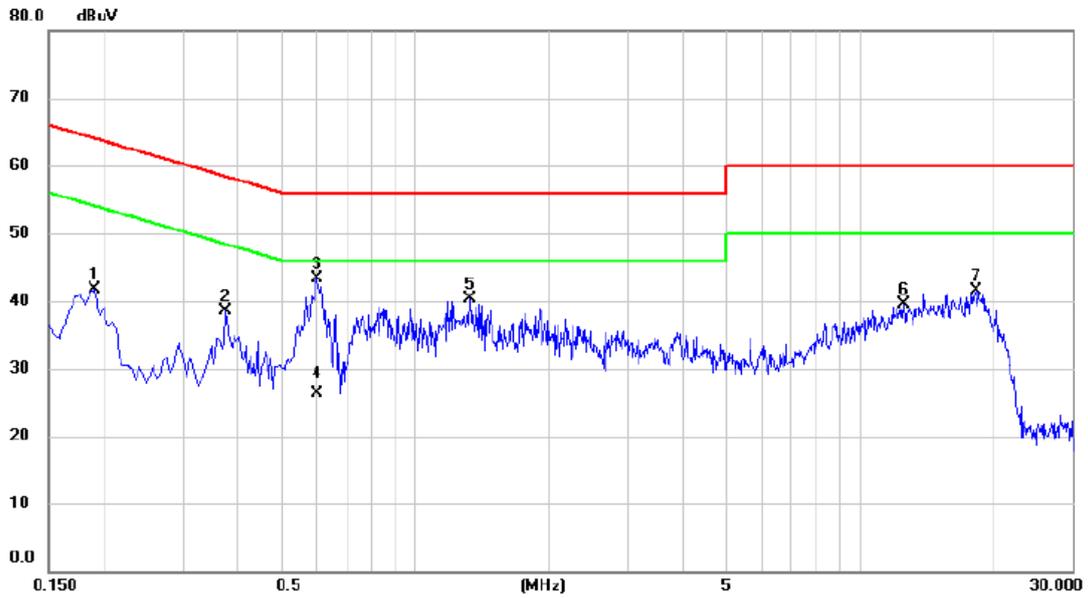
Line



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.181	29.24	9.68	38.92	64.42	-25.50	peak	
2		0.389	28.45	9.68	38.13	58.10	-19.97	peak	
3	*	0.605	33.37	9.71	43.08	56.00	-12.92	peak	
4		0.605	17.64	9.71	27.35	46.00	-18.65	AVG	
5		1.315	30.83	9.76	40.59	56.00	-15.41	peak	
6		10.009	30.52	10.27	40.79	60.00	-19.21	peak	
7		18.132	32.86	10.70	43.56	60.00	-16.44	peak	

Test Mode: TX Mode_ Adapter: BYD

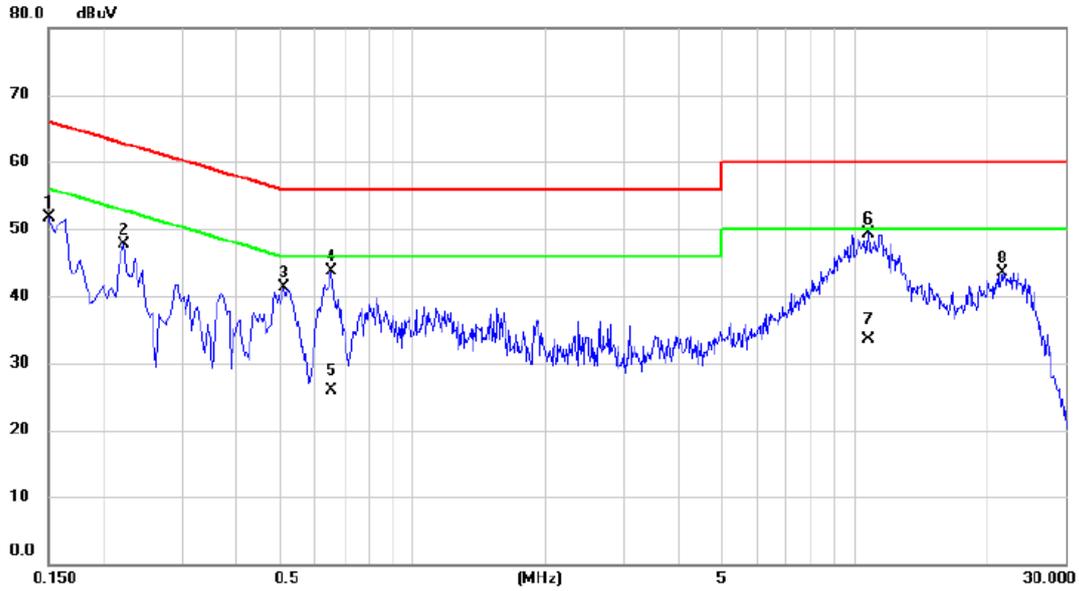
Neutral



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.191	31.97	9.69	41.66	64.01	-22.35	peak	
2		0.375	28.90	9.69	38.59	58.39	-19.80	peak	
3	*	0.600	33.53	9.71	43.24	56.00	-12.76	peak	
4		0.600	16.59	9.71	26.30	46.00	-19.70	AVG	
5		1.329	30.55	9.76	40.31	56.00	-15.69	peak	
6		12.534	28.98	10.46	39.44	60.00	-20.56	peak	
7		18.227	30.75	10.70	41.45	60.00	-18.55	peak	

Test Mode: TX Mode_ Adapter: PHITEK

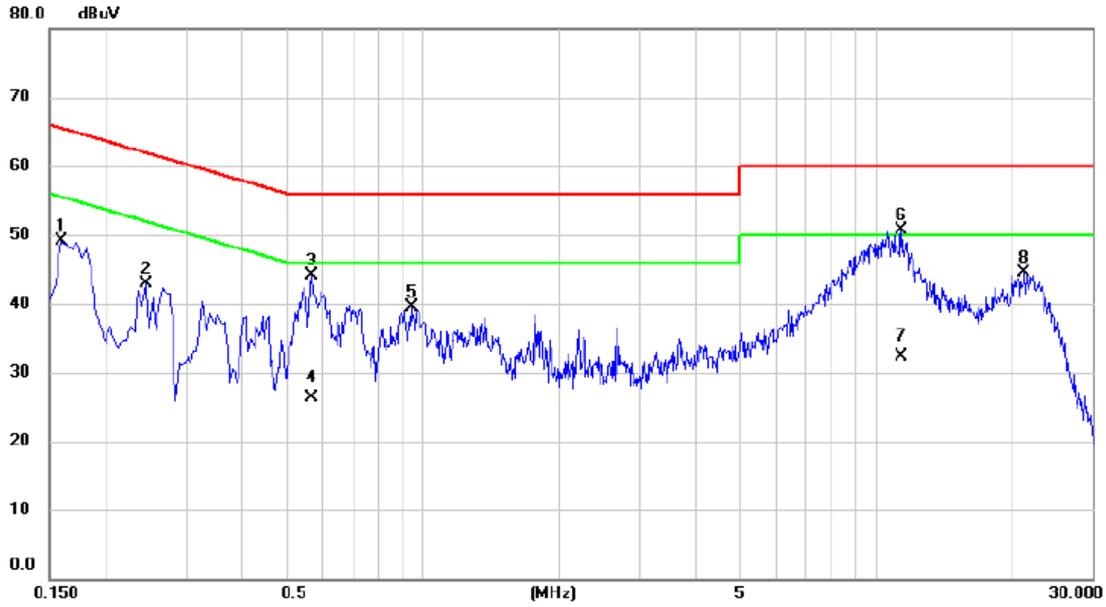
Line



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.150	41.93	9.79	51.72	66.00	-14.28	peak	
2		0.222	37.92	9.76	47.68	62.74	-15.06	peak	
3		0.510	31.59	9.80	41.39	56.00	-14.61	peak	
4		0.654	33.84	9.82	43.66	56.00	-12.34	peak	
5		0.654	16.12	9.82	25.94	46.00	-20.06	AVG	
6	*	10.757	39.03	10.37	49.40	60.00	-10.60	peak	
7		10.757	23.21	10.37	33.58	50.00	-16.42	AVG	
8		21.534	32.90	10.70	43.60	60.00	-16.40	peak	

Test Mode: TX Mode_ Adapter: PHITEK

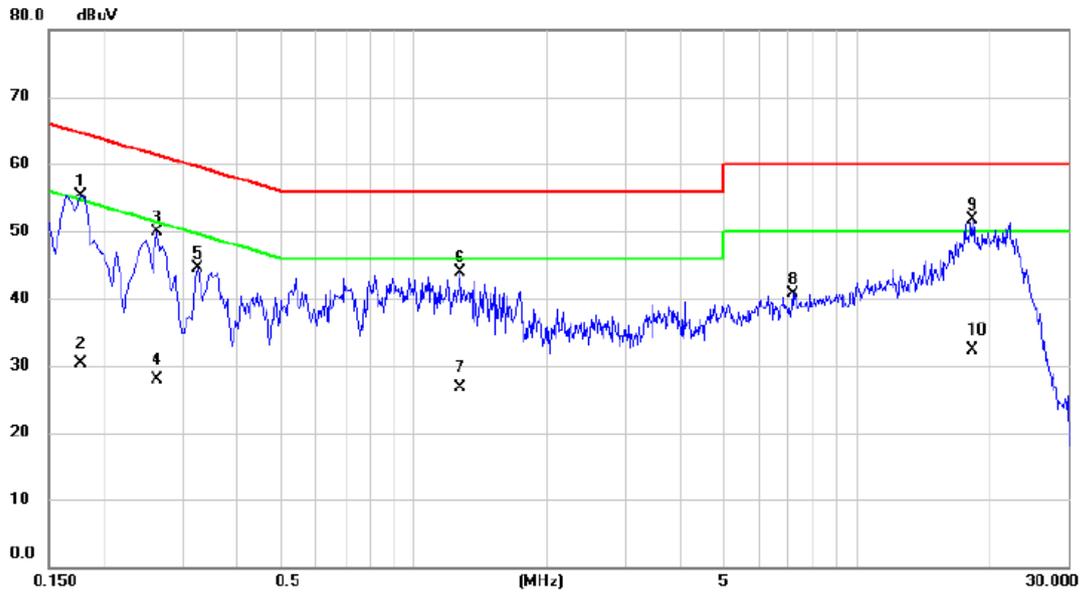
Neutral



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.159	39.25	9.79	49.04	65.52	-16.48	peak	
2		0.244	33.23	9.76	42.99	61.94	-18.95	peak	
3		0.569	34.34	9.81	44.15	56.00	-11.85	peak	
4		0.569	16.48	9.81	26.29	46.00	-19.71	AVG	
5		0.942	29.75	9.84	39.59	56.00	-16.41	peak	
6 *		11.386	40.22	10.40	50.62	60.00	-9.38	peak	
7		11.386	21.95	10.40	32.35	50.00	-17.65	AVG	
8		21.156	33.92	10.68	44.60	60.00	-15.40	peak	

Test Mode: TX Mode_ Adapter: Huntkey

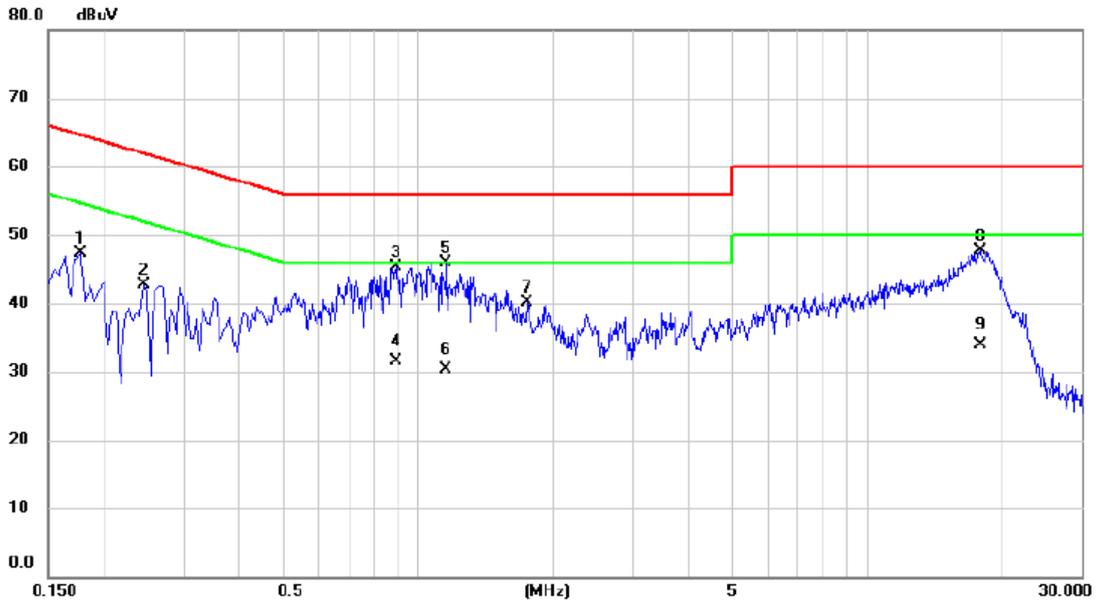
Line



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.177	45.58	9.78	55.36	64.63	-9.27	peak	
2		0.177	20.49	9.78	30.27	54.63	-24.36	AVG	
3		0.263	40.05	9.76	49.81	61.35	-11.54	peak	
4		0.263	18.16	9.76	27.92	51.35	-23.43	AVG	
5		0.326	34.73	9.78	44.51	59.57	-15.06	peak	
6		1.275	33.98	9.88	43.86	56.00	-12.14	peak	
7		1.275	16.78	9.88	26.66	46.00	-19.34	AVG	
8		7.165	30.49	10.19	40.68	60.00	-19.32	peak	
9 *		18.213	41.13	10.63	51.76	60.00	-8.24	peak	
10		18.213	21.75	10.63	32.38	50.00	-17.62	AVG	

Test Mode: TX Mode _ Adapter: Huntkey

Neutral

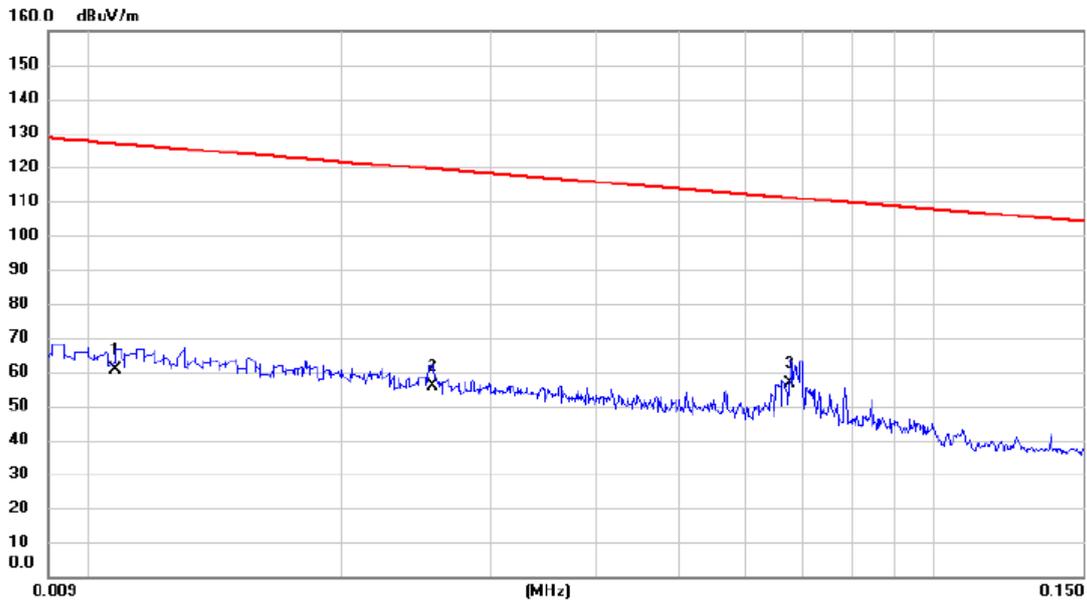


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.177	37.69	9.68	47.37	64.63	-17.26	peak	
2	0.244	33.08	9.67	42.75	61.94	-19.19	peak	
3	0.892	35.50	9.74	45.24	56.00	-10.76	peak	
4	0.892	21.84	9.74	31.58	46.00	-14.42	AVG	
5 *	1.153	36.14	9.75	45.89	56.00	-10.11	peak	
6	1.153	20.53	9.75	30.28	46.00	-15.72	AVG	
7	1.743	30.22	9.81	40.03	56.00	-15.97	peak	
8	17.826	37.00	10.70	47.70	60.00	-12.30	peak	
9	17.826	23.17	10.70	33.87	50.00	-16.13	AVG	

ATTACHMENT B - RADIATED EMISSION (9KHZ TO 30MHZ)

Test Mode: TX Mode_Adapter: BYD

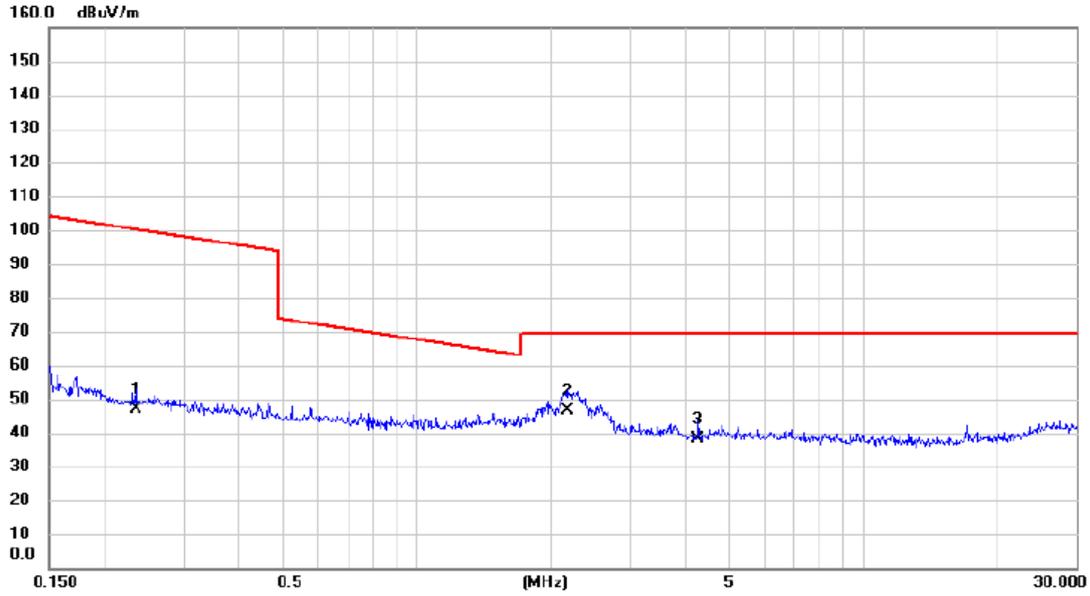
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.011	39.85	20.82	60.67	126.94	-66.27	AVG	
2		0.026	36.51	19.45	55.96	119.44	-63.48	AVG	
3	*	0.068	38.28	18.38	56.66	110.99	-54.33	AVG	

Test Mode: TX Mode_Adapter: BYD

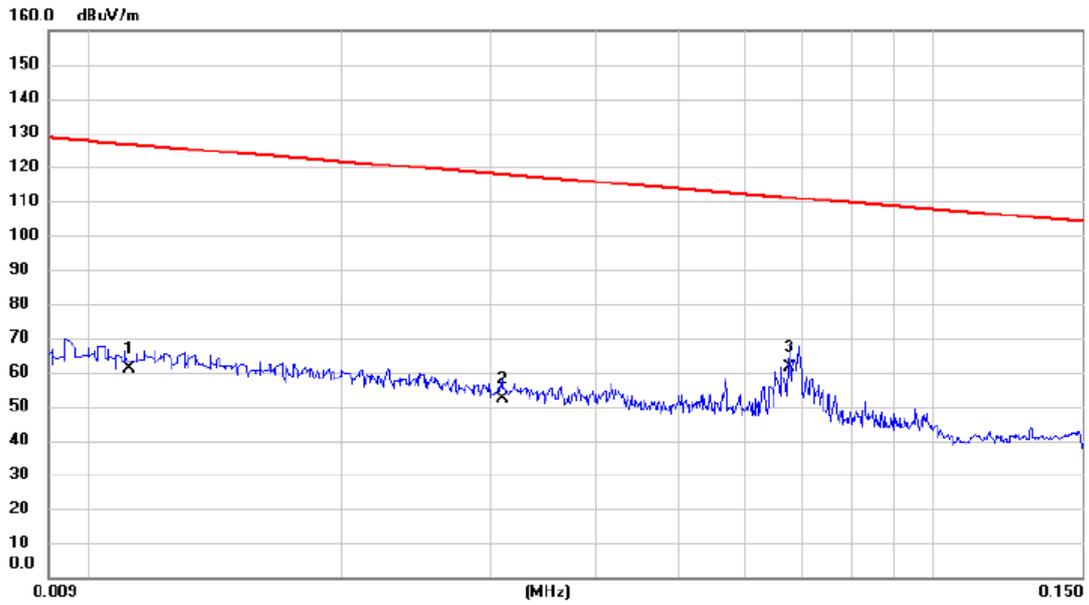
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.234	30.11	16.70	46.81	100.22	-53.41	AVG	
2	*	2.178	31.15	15.46	46.61	69.54	-22.93	QP	
3		4.269	23.36	14.80	38.16	69.54	-31.38	QP	

Test Mode: TX Mode_Adapter: BYD

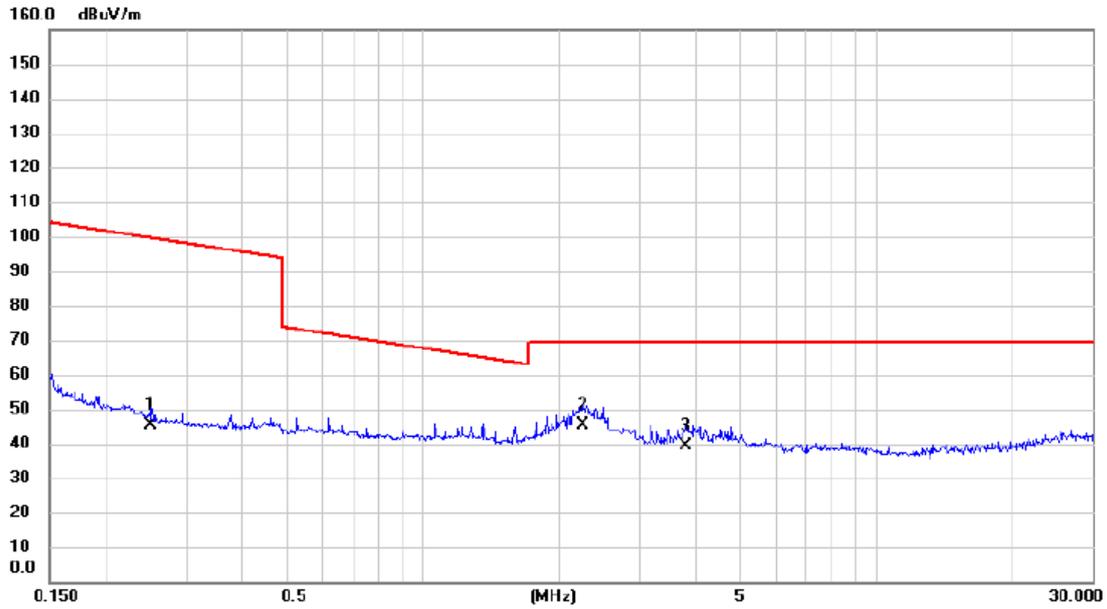
Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.011	40.42	20.76	61.18	126.62	-65.44	AVG	
2		0.031	32.94	19.29	52.23	117.78	-65.55	AVG	
3	*	0.068	42.88	18.38	61.26	111.01	-49.75	AVG	

Test Mode: TX Mode_Adapter: BYD

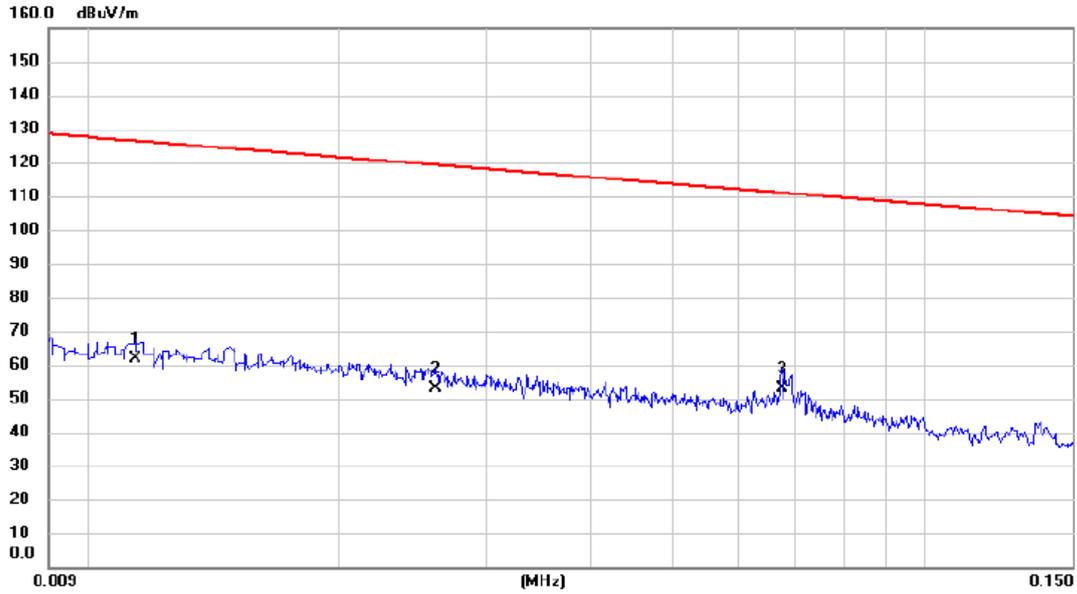
Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.251	28.91	16.65	45.56	99.62	-54.06	AVG	
2	*	2.249	29.77	15.44	45.21	69.54	-24.33	QP	
3		3.799	24.28	15.01	39.29	69.54	-30.25	QP	

Test Mode: TX Mode_Adapter: PHITEK

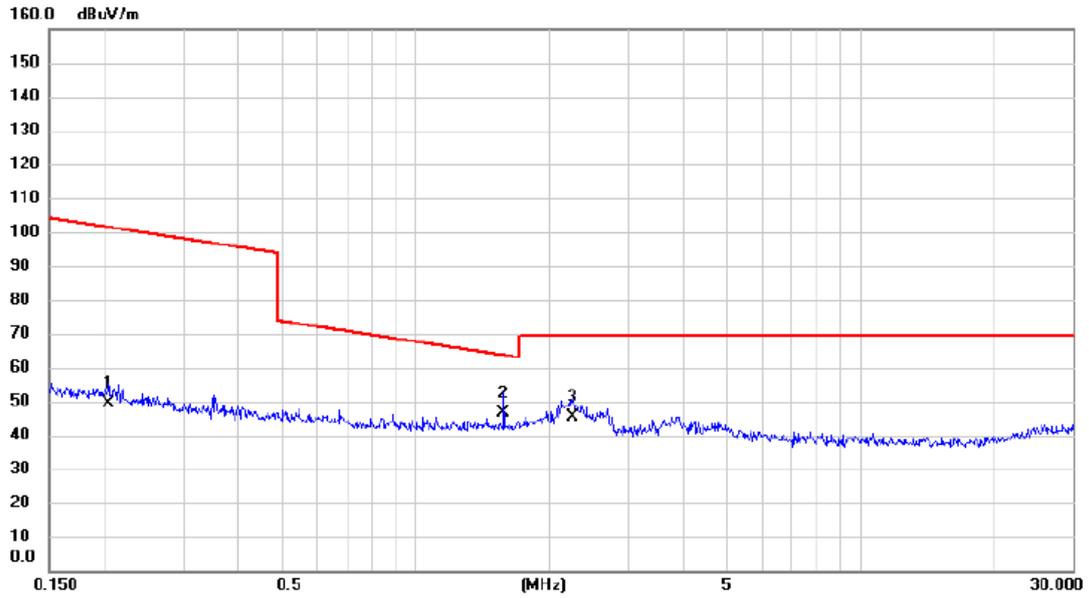
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.011	41.14	20.74	61.88	126.47	-64.59	AVG	
2		0.026	33.54	19.44	52.98	119.27	-66.29	AVG	
3	*	0.068	34.64	18.38	53.02	111.02	-58.00	AVG	

Test Mode: TX Mode_ Adapter: PHITEK

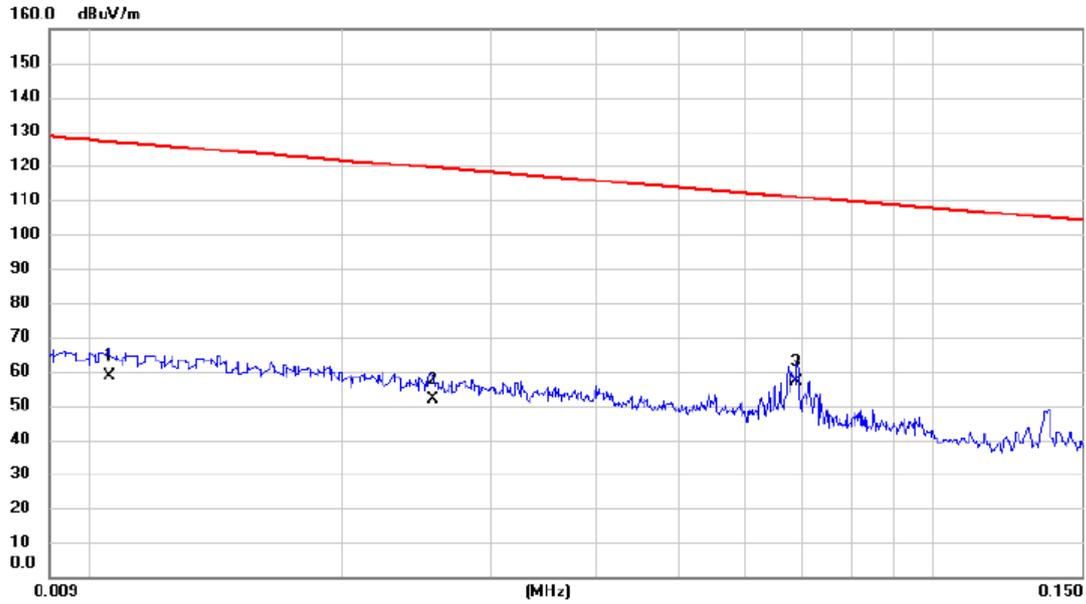
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.204	32.63	16.78	49.41	101.41	-52.00	AVG	
2	*	1.577	31.10	15.66	46.76	63.65	-16.89	QP	
3		2.249	29.92	15.44	45.36	69.54	-24.18	QP	

Test Mode: TX Mode_Adapter: PHITEK

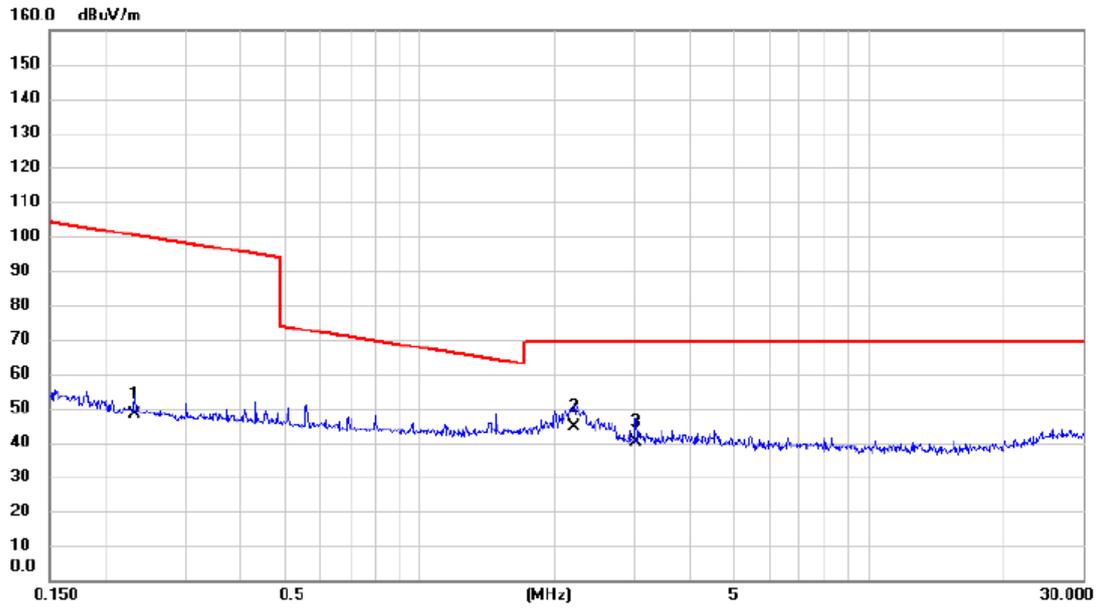
Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.011	37.66	20.84	58.50	127.10	-68.60	AVG	
2		0.026	32.46	19.45	51.91	119.44	-67.53	AVG	
3	*	0.069	38.68	18.35	57.03	110.83	-53.80	AVG	

Test Mode: TX Mode_Adapter: PHITEK

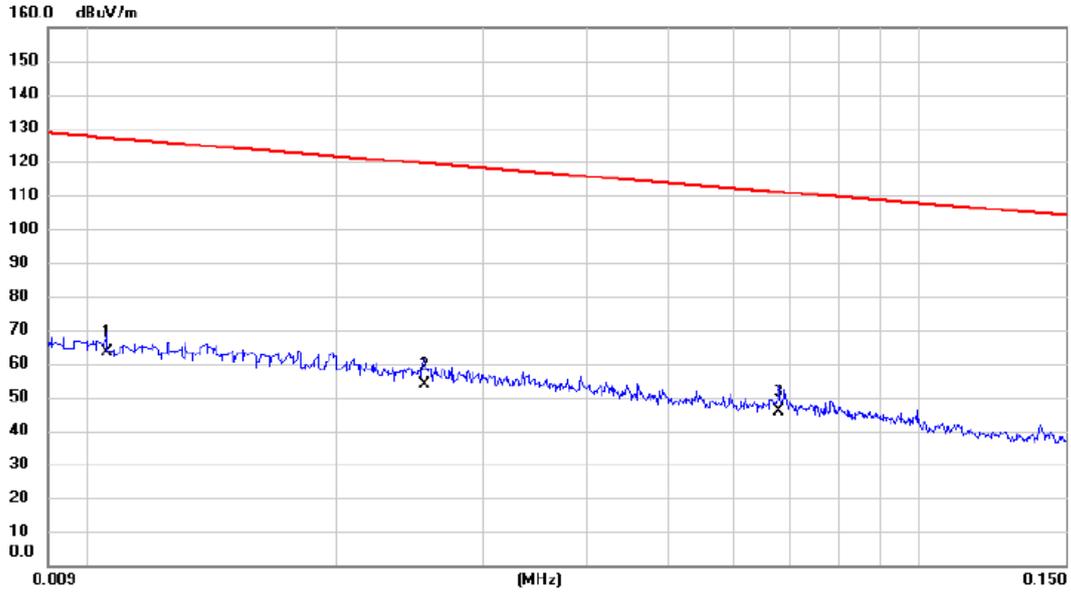
Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.232	31.58	16.71	48.29	100.31	-52.02	AVG	
2	*	2.213	28.97	15.45	44.42	69.54	-25.12	QP	
3		3.025	24.90	15.22	40.12	69.54	-29.42	QP	

Test Mode: TX Mode_Adapter: Huntkey

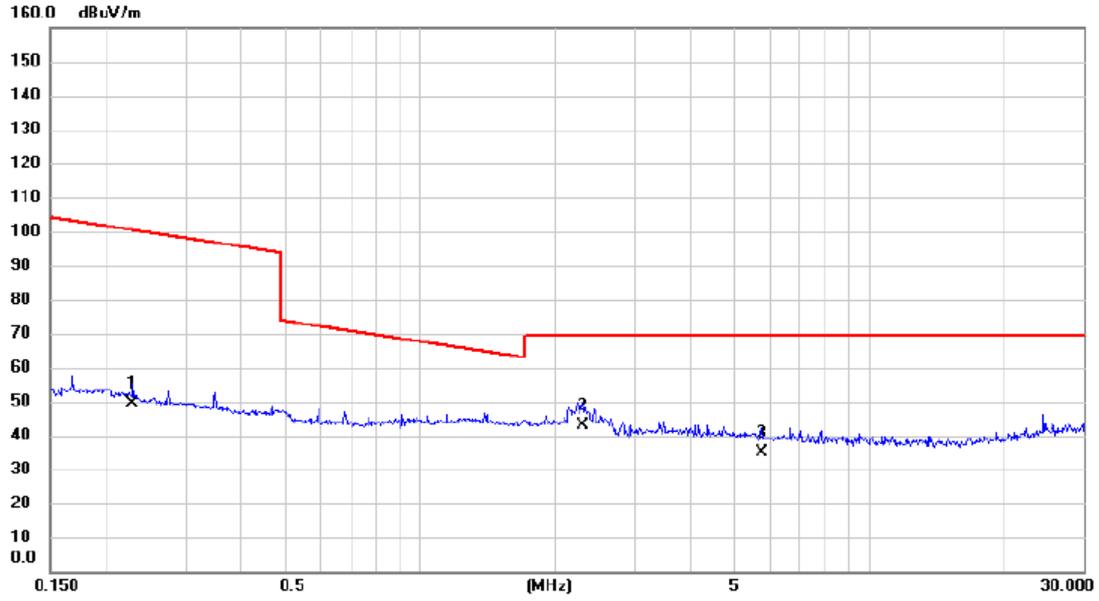
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.011	42.76	20.84	63.60	127.10	-63.50	AVG	
2		0.025	34.27	19.46	53.73	119.47	-65.74	AVG	
3		0.068	27.27	18.37	45.64	110.98	-65.34	AVG	

Test Mode: TX Mode_Adapter: Huntkey

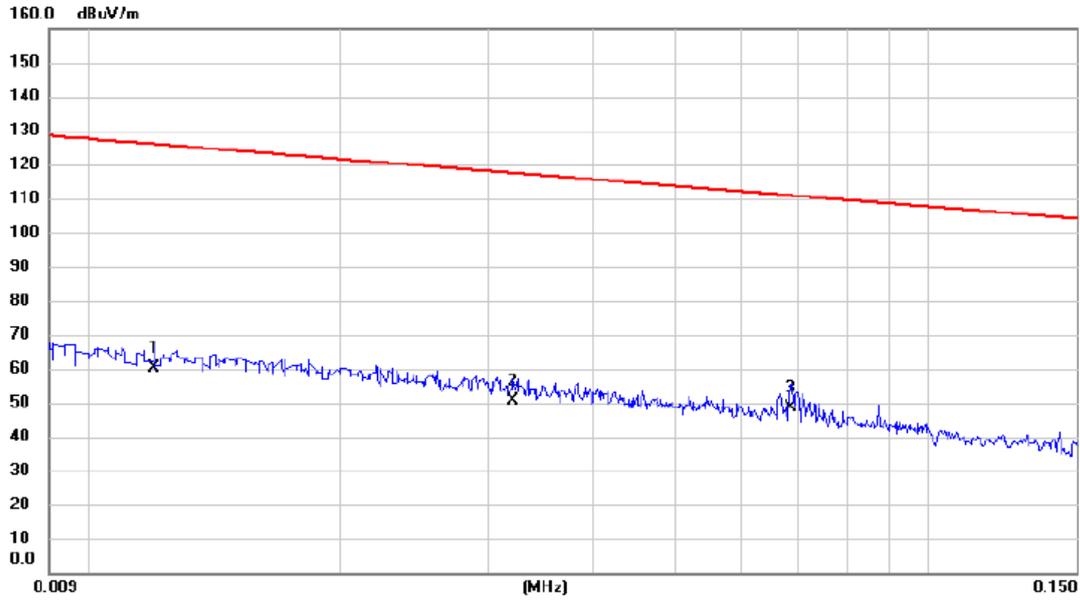
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.229	32.83	16.71	49.54	100.41	-50.87	AVG	
2	*	2.297	27.52	15.42	42.94	69.54	-26.60	QP	
3		5.774	20.81	14.28	35.09	69.54	-34.45	QP	

Test Mode: TX Mode_Adapter: Huntkey

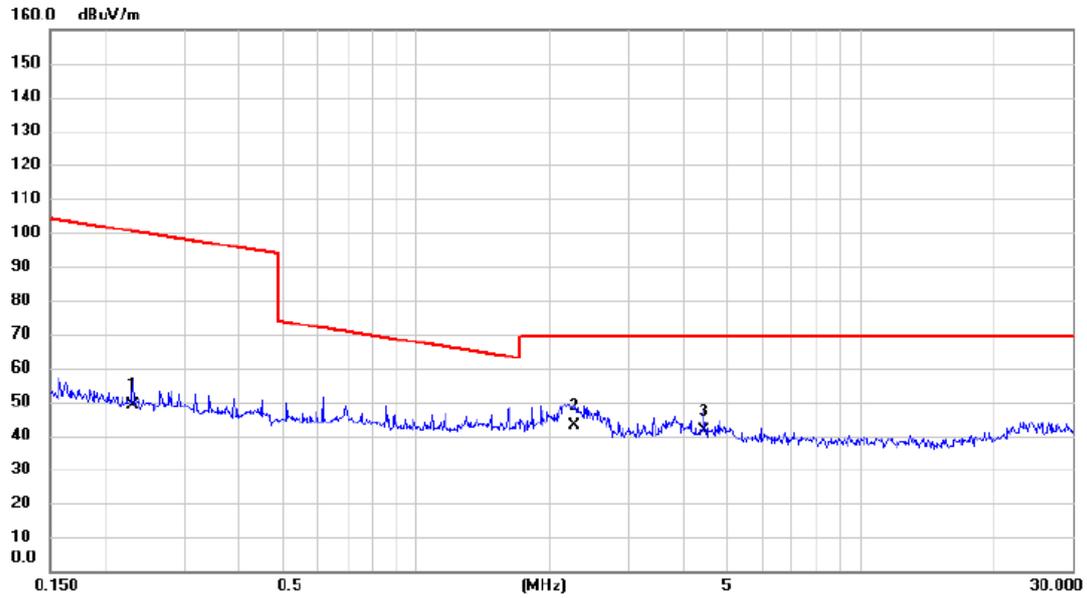
Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.012	39.57	20.66	60.23	126.02	-65.79	AVG	
2		0.032	31.45	19.26	50.71	117.47	-66.76	AVG	
3	*	0.069	30.26	18.36	48.62	110.87	-62.25	AVG	

Test Mode: TX Mode_Adapter: Huntkey

Ant 90°

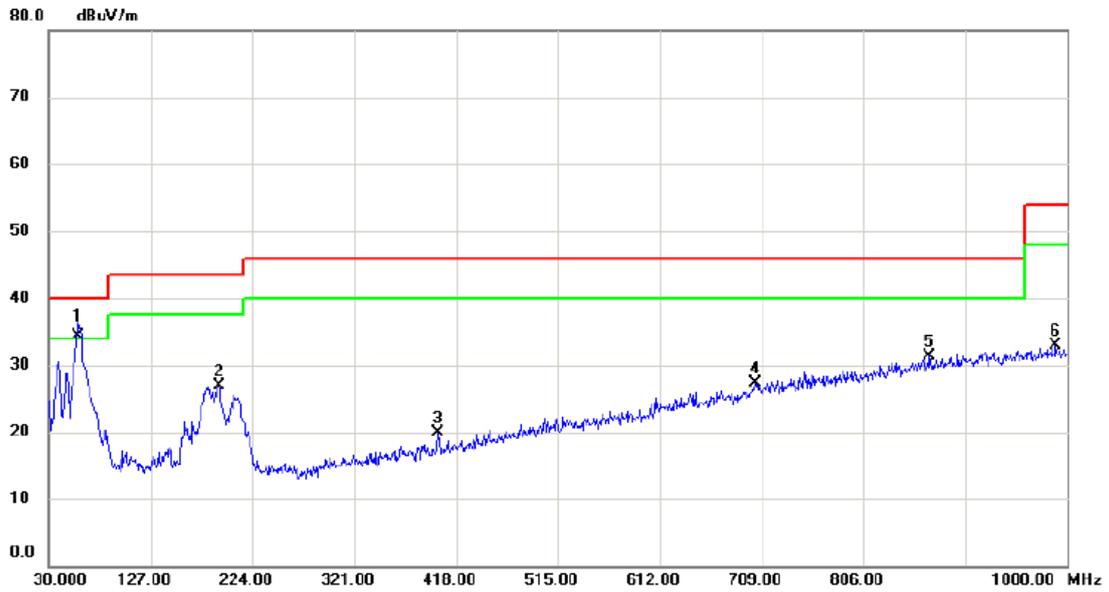


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.230	32.41	16.71	49.12	100.36	-51.24	AVG	
2	*	2.272	27.49	15.43	42.92	69.54	-26.62	QP	
3		4.431	26.68	14.71	41.39	69.54	-28.15	QP	

ATTACHMENT C - RADIATED EMISSION (30MHZ TO 1000MHZ)

Test Mode: TX 2402MHz_CH00_1Mbps_Adapter: BYD

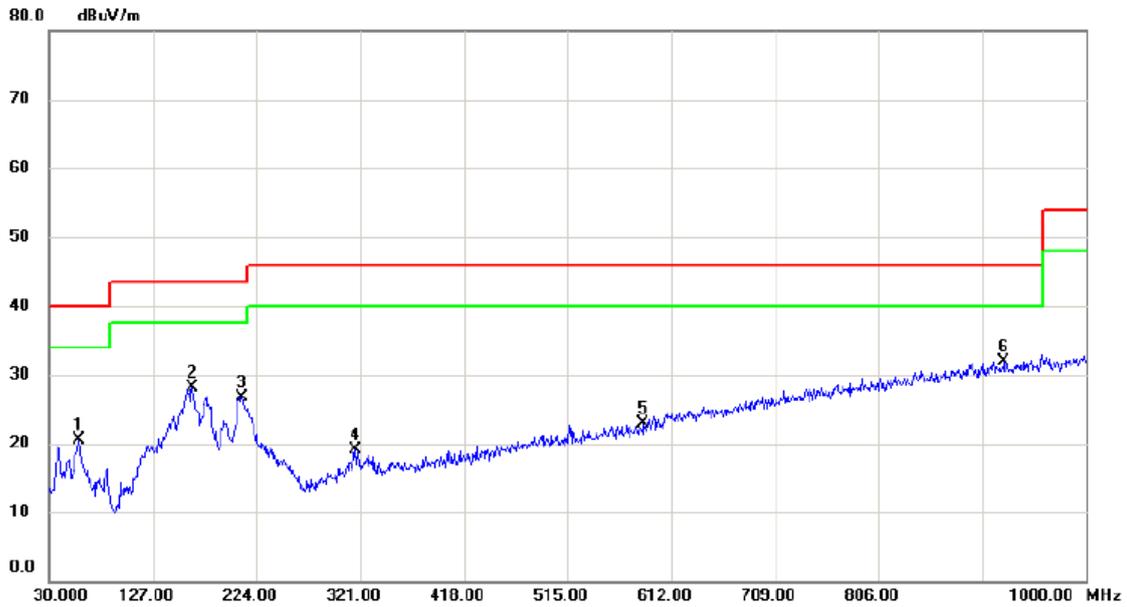
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	58.130	48.08	-13.85	34.23	40.00	-5.77	AVG	
2		191.990	39.43	-12.62	26.81	43.50	-16.69	peak	
3		400.540	30.63	-10.68	19.95	46.00	-26.05	peak	
4		703.180	30.05	-2.82	27.23	46.00	-18.77	peak	
5		869.050	29.82	1.54	31.36	46.00	-14.64	peak	
6		989.330	28.82	4.00	32.82	54.00	-21.18	peak	

Test Mode: TX 2402MHz_CH00_1Mbps_Adapter: BYD

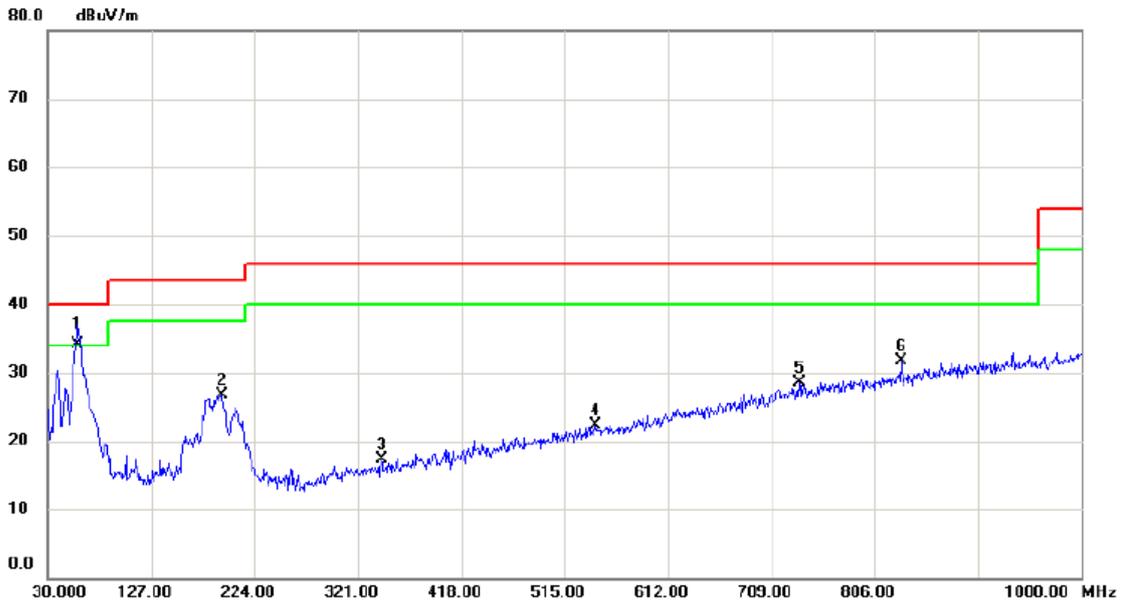
Horizontal



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	58.130	34.44	-13.85	20.59	40.00	-19.41	peak	
2	163.860	40.44	-12.32	28.12	43.50	-15.38	peak	
3	210.420	40.29	-13.55	26.74	43.50	-16.76	peak	
4	316.150	31.00	-11.98	19.02	46.00	-26.98	peak	
5	585.810	28.87	-5.88	22.99	46.00	-23.01	peak	
6 *	923.370	29.31	2.68	31.99	46.00	-14.01	peak	

Test Mode: TX 2480MHz _CH39_1Mbps_Adapter: BYD

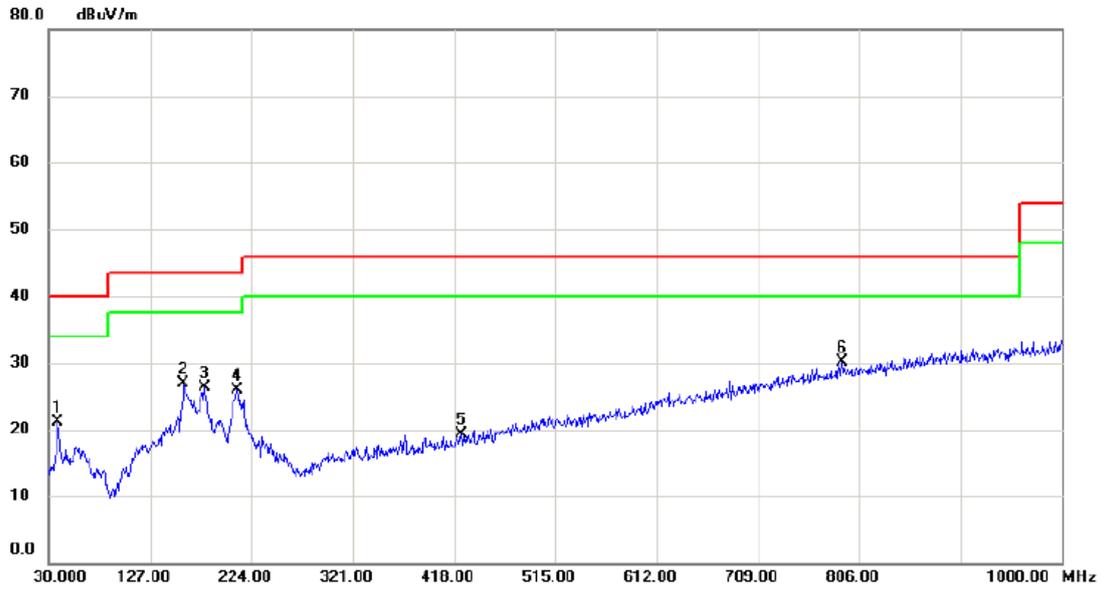
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	58.130	48.02	-13.85	34.17	40.00	-5.83	AVG	
2		192.960	39.38	-12.72	26.66	43.50	-16.84	peak	
3		343.310	28.70	-11.46	17.24	46.00	-28.76	peak	
4		544.100	29.33	-6.99	22.34	46.00	-23.66	peak	
5		735.190	30.39	-1.85	28.54	46.00	-17.46	peak	
6		831.220	31.03	0.59	31.62	46.00	-14.38	peak	

Test Mode: TX 2480MHz _CH39_ 1Mbps_Adapter: BYD

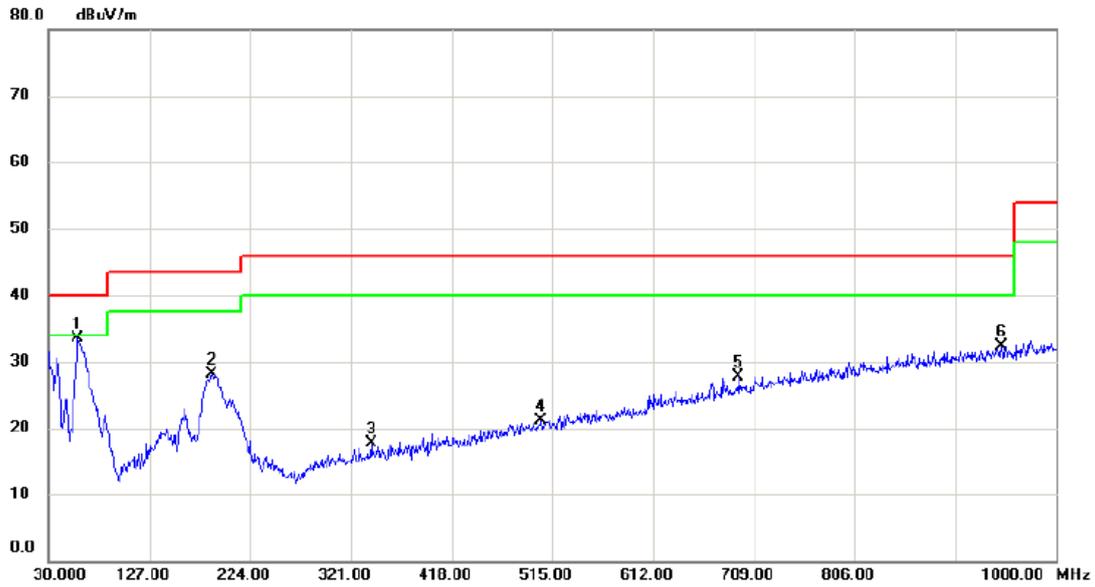
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		38.730	35.05	-13.93	21.12	40.00	-18.88	peak	
2		159.010	39.55	-12.61	26.94	43.50	-16.56	peak	
3		179.380	38.06	-11.66	26.40	43.50	-17.10	peak	
4		210.420	39.50	-13.55	25.95	43.50	-17.55	peak	
5		424.790	29.19	-9.96	19.23	46.00	-26.77	peak	
6	*	789.510	30.53	-0.50	30.03	46.00	-15.97	peak	

Test Mode: TX 2402MHz_CH00_1Mbps_Adapter: PHITEK

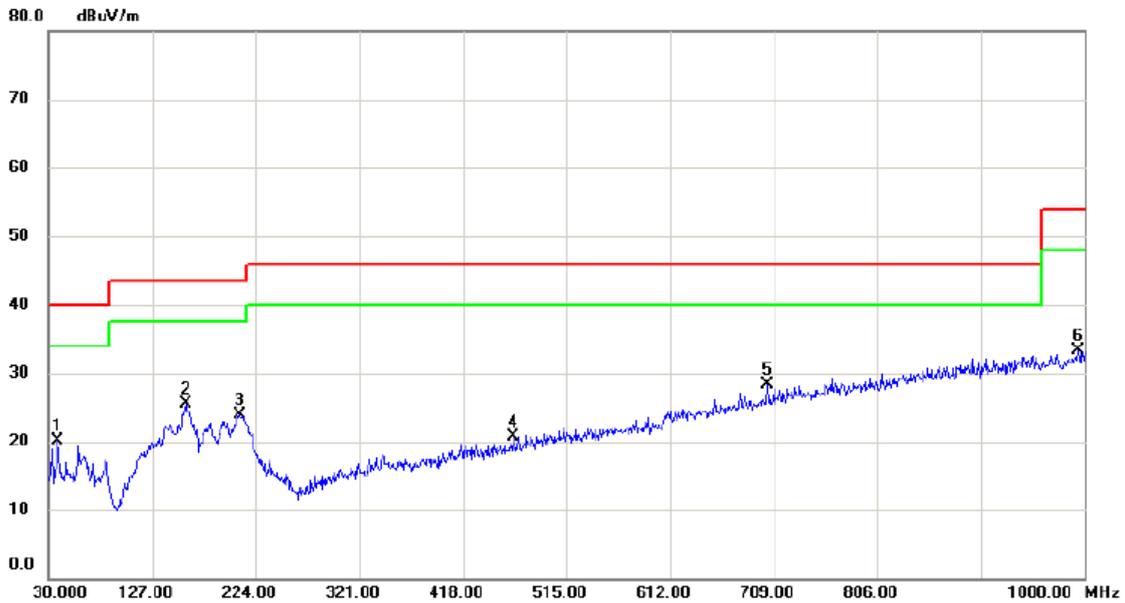
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	58.130	47.26	-13.85	33.41	40.00	-6.59	peak	
2		187.140	40.30	-12.21	28.09	43.50	-15.41	peak	
3		340.400	29.25	-11.52	17.73	46.00	-28.27	peak	
4		504.330	28.99	-7.84	21.15	46.00	-24.85	peak	
5		694.450	30.79	-3.09	27.70	46.00	-18.30	peak	
6		947.620	29.18	3.16	32.34	46.00	-13.66	peak	

Test Mode: TX 2402MHz_CH00_1Mbps_Adapter: PHITEK

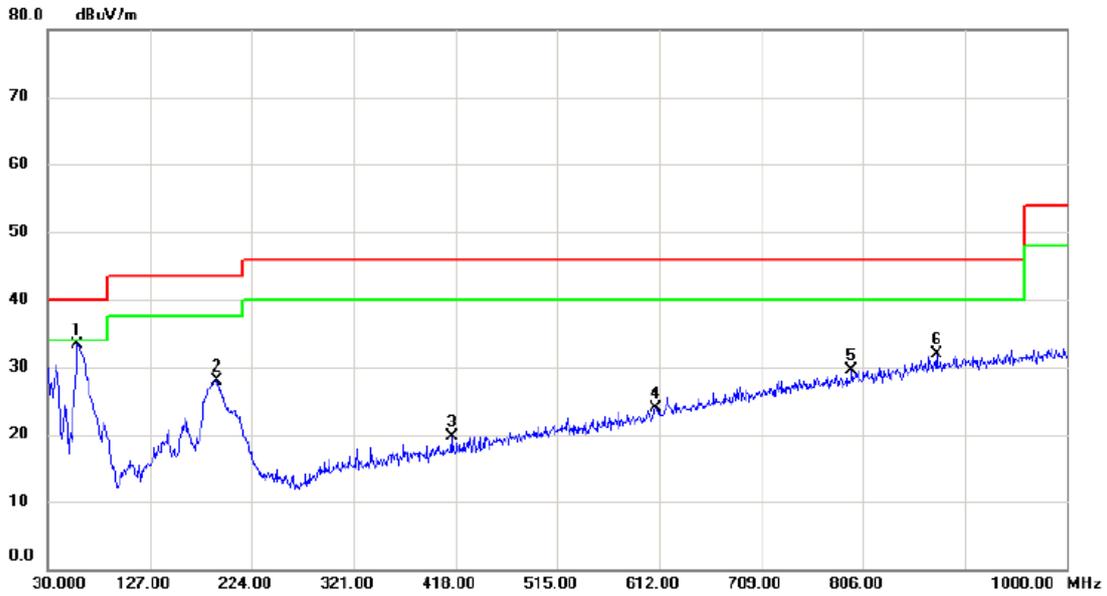
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		38.730	34.13	-13.93	20.20	40.00	-19.80	peak	
2		158.040	38.12	-12.67	25.45	43.50	-18.05	peak	
3		208.480	37.48	-13.51	23.97	43.50	-19.53	peak	
4		465.530	29.54	-8.82	20.72	46.00	-25.28	peak	
5	*	703.180	31.03	-2.82	28.21	46.00	-17.79	peak	
6		994.180	29.16	4.09	33.25	54.00	-20.75	peak	

Test Mode: TX 2480MHz_CH39_1Mbps_Adapter: PHITEK

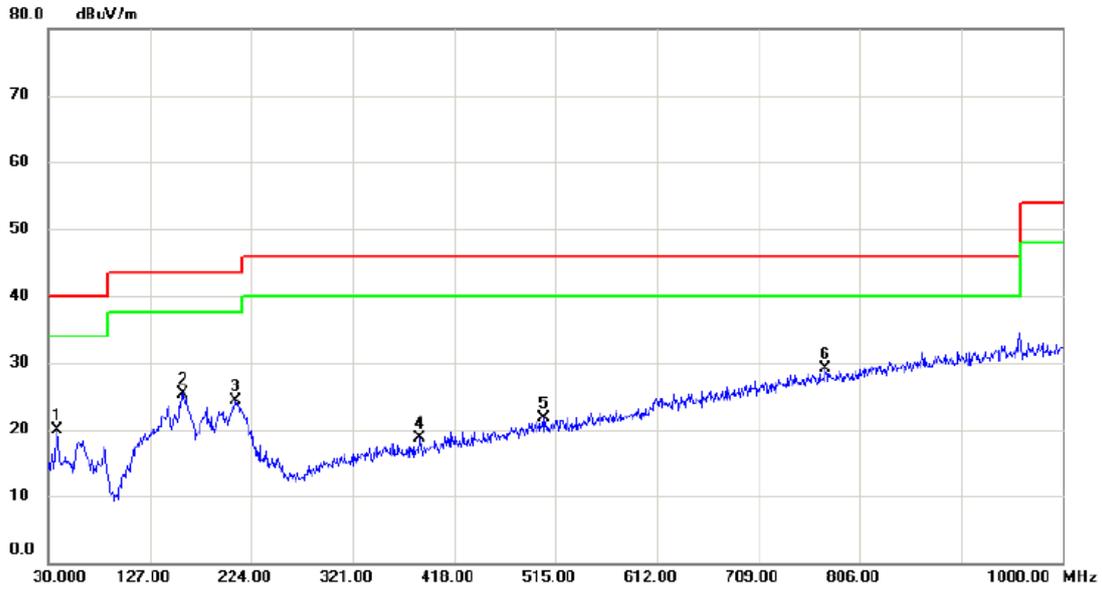
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	58.130	47.21	-13.85	33.36	40.00	-6.64	peak	
2		191.020	40.45	-12.54	27.91	43.50	-15.59	peak	
3		414.120	30.00	-10.29	19.71	46.00	-26.29	peak	
4		608.120	29.28	-5.34	23.94	46.00	-22.06	peak	
5		795.330	29.87	-0.37	29.50	46.00	-16.50	peak	
6		875.840	30.25	1.68	31.93	46.00	-14.07	peak	

Test Mode: TX 2480MHz_CH39_1Mbps_Adapter: PHITEK

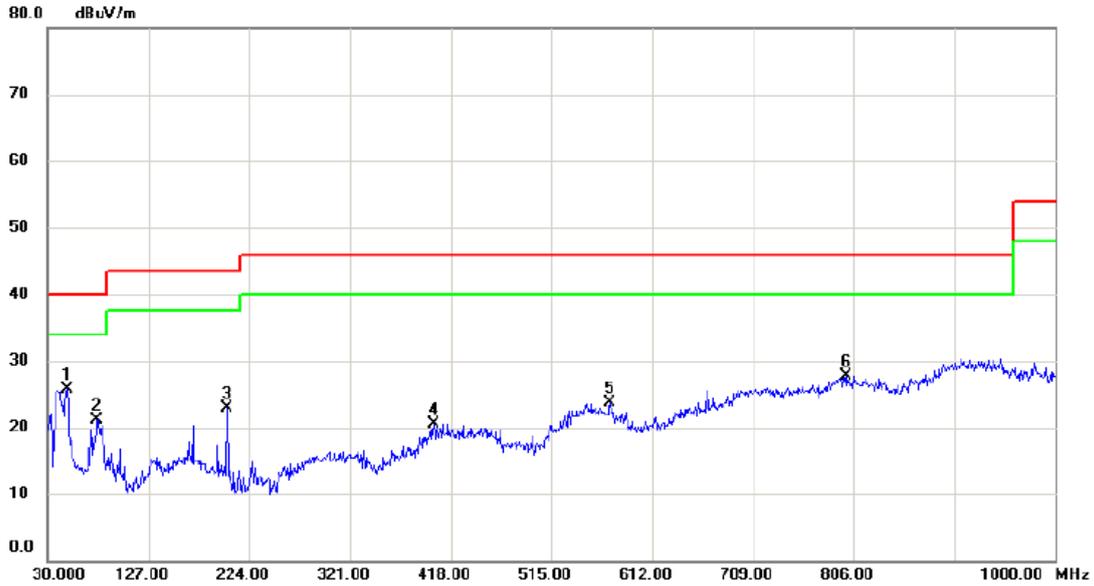
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		38.730	33.78	-13.93	19.85	40.00	-20.15	peak	
2		158.040	38.07	-12.67	25.40	43.50	-18.10	peak	
3		209.450	37.77	-13.54	24.23	43.50	-19.27	peak	
4		385.020	29.59	-10.89	18.70	46.00	-27.30	peak	
5		503.360	29.48	-7.86	21.62	46.00	-24.38	peak	
6	*	773.020	30.01	-0.88	29.13	46.00	-16.87	peak	

Test Mode: TX 2402MHz_CH00_1Mbps_Adapter: Huntkey

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	48.430	38.76	-13.11	25.65	40.00	-14.35	peak	
2		77.530	37.44	-16.31	21.13	40.00	-18.87	peak	
3		202.660	37.41	-14.48	22.93	43.50	-20.57	peak	
4		401.510	28.36	-7.79	20.57	46.00	-25.43	peak	
5		571.260	29.22	-5.61	23.61	46.00	-22.39	peak	
6		799.210	27.55	0.23	27.78	46.00	-18.22	peak	

Test Mode: TX 2402MHz_CH00_1Mbps_Adapter: Huntkey

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		77.530	31.06	-16.31	14.75	40.00	-25.25	peak	
2		159.980	26.42	-12.15	14.27	43.50	-29.23	peak	
3		314.210	27.08	-10.46	16.62	46.00	-29.38	peak	
4		413.150	27.59	-7.83	19.76	46.00	-26.24	peak	
5		548.950	27.66	-4.64	23.02	46.00	-22.98	peak	
6	*	899.120	27.15	2.58	29.73	46.00	-16.27	peak	

Test Mode: TX 2480MHz_CH39_1Mbps_Adapter: Huntkey

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	40.670	46.87	-13.77	33.10	40.00	-6.90	peak	
2		153.190	36.12	-12.70	23.42	43.50	-20.08	peak	
3		268.620	30.17	-13.53	16.64	46.00	-29.36	peak	
4		438.370	26.64	-7.94	18.70	46.00	-27.30	peak	
5		553.800	27.70	-4.73	22.97	46.00	-23.03	peak	
6		802.120	27.27	0.20	27.47	46.00	-18.53	peak	

Test Mode: TX 2480MHz_CH39_1Mbps_Adapter: Huntkey

Horizontal

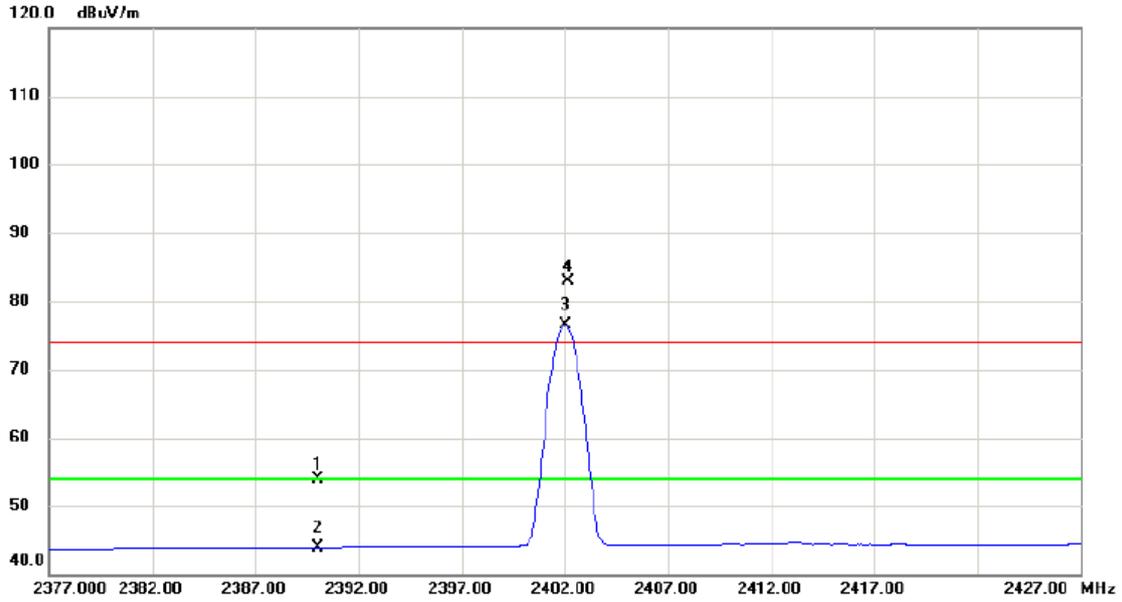


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		134.760	28.43	-13.01	15.42	43.50	-28.08	peak	
2		300.630	27.74	-10.17	17.57	46.00	-28.43	peak	
3		443.220	28.62	-7.97	20.65	46.00	-25.35	peak	
4		547.980	28.86	-4.75	24.11	46.00	-21.89	peak	
5		715.790	28.08	-2.06	26.02	46.00	-19.98	peak	
6	*	898.150	27.38	2.50	29.88	46.00	-16.12	peak	

ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)

Test Mode : TX 2402MHz_CH00_1Mbps

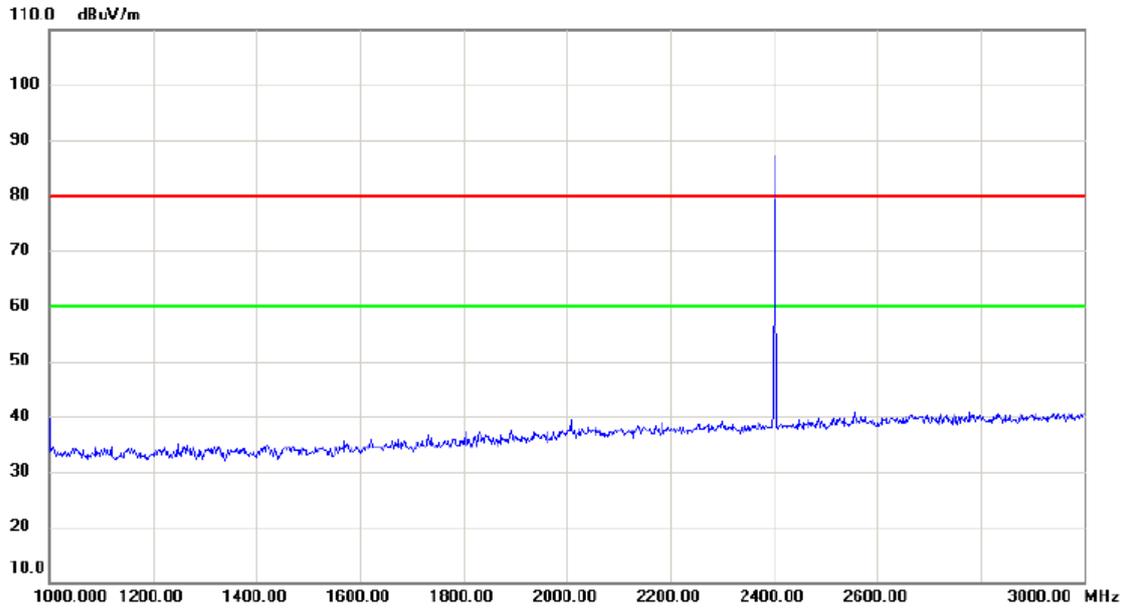
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	21.47	32.37	53.84	74.00	-20.16	peak	
2		2390.000	11.60	32.37	43.97	54.00	-10.03	AVG	
3	*	2402.000	44.18	32.42	76.60	54.00	22.60	AVG	No Limit
4	X	2402.200	50.54	32.42	82.96	74.00	8.96	peak	No Limit

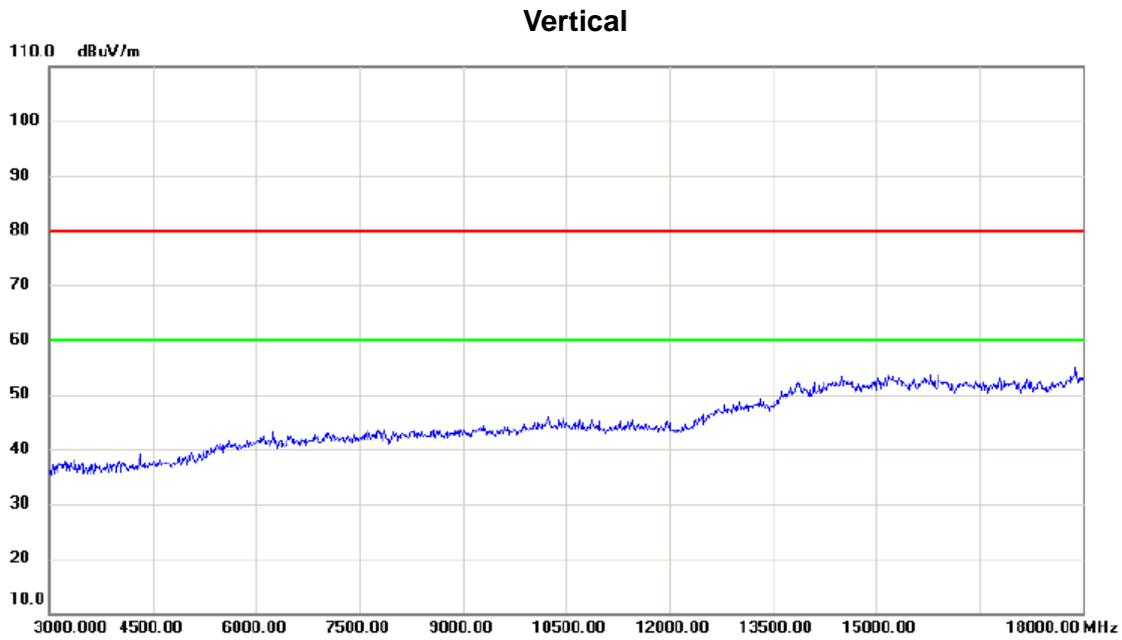
Test Mode : TX 2402MHz _CH00_1Mbps

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
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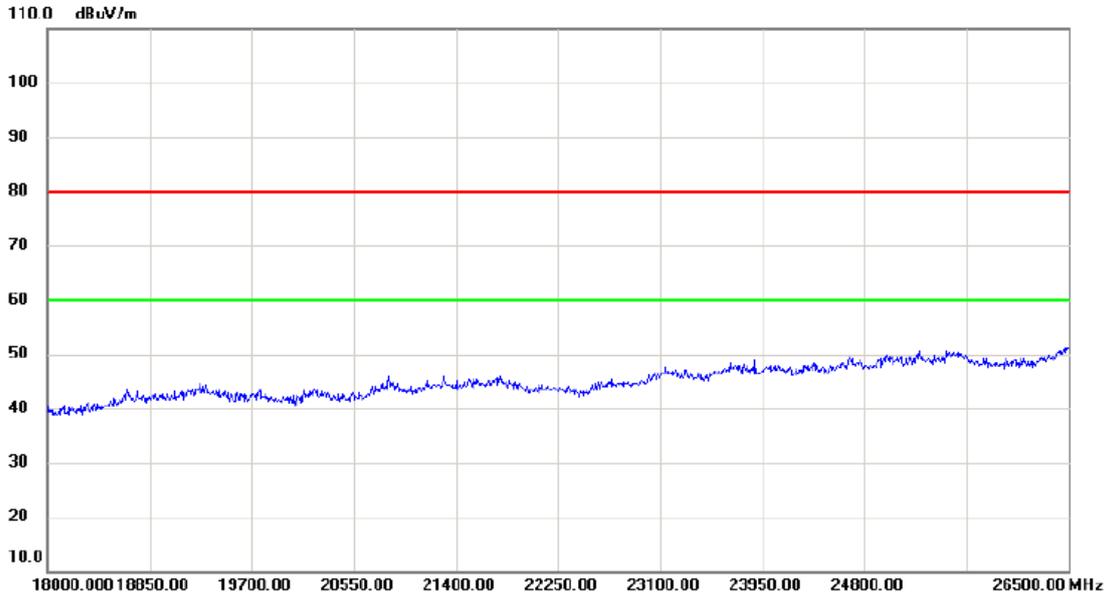
Test Mode : TX 2402MHz _CH00_1Mbps



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		

Test Mode : TX 2402MHz _CH00_1Mbps

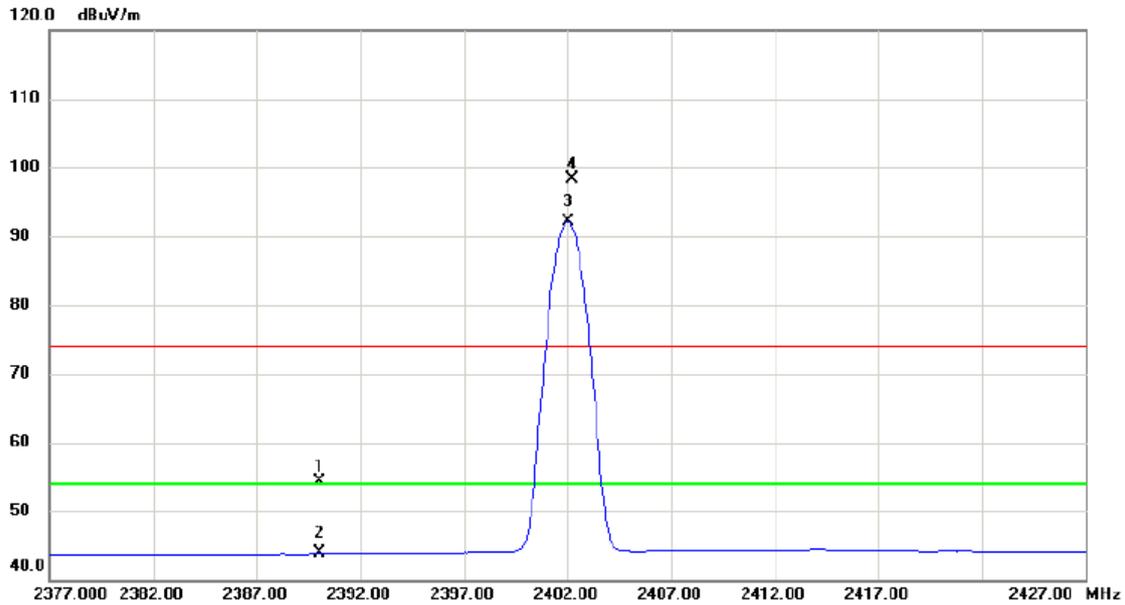
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
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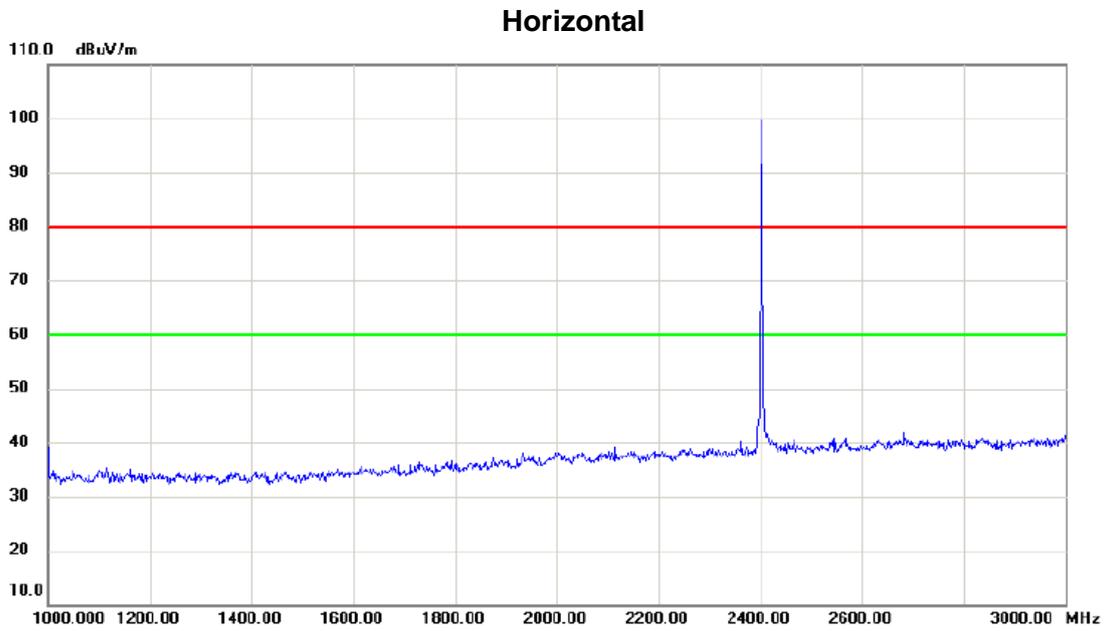
Test Mode : TX 2402MHz _CH00_1Mbps

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	21.92	32.37	54.29	74.00	-19.71	peak	
2		2390.000	11.45	32.37	43.82	54.00	-10.18	AVG	
3	*	2402.000	59.73	32.42	92.15	54.00	38.15	AVG	No Limit
4	X	2402.250	65.98	32.42	98.40	74.00	24.40	peak	No Limit

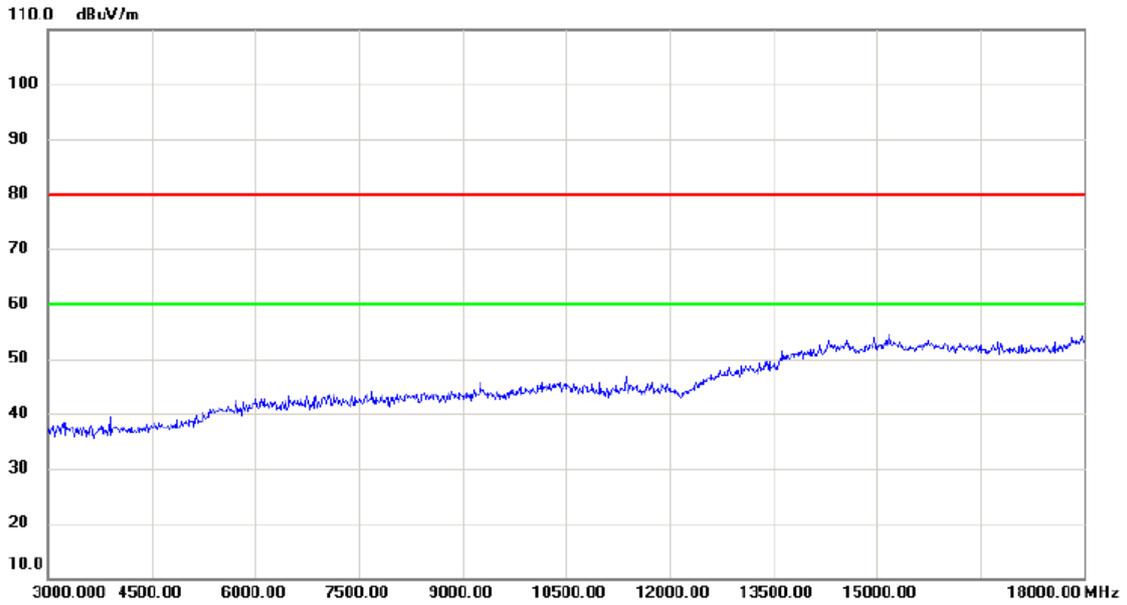
Test Mode : TX 2402MHz _CH00_1Mbps



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
		2402	100		100	80	20		

Test Mode : TX 2402MHz _CH00_1Mbps

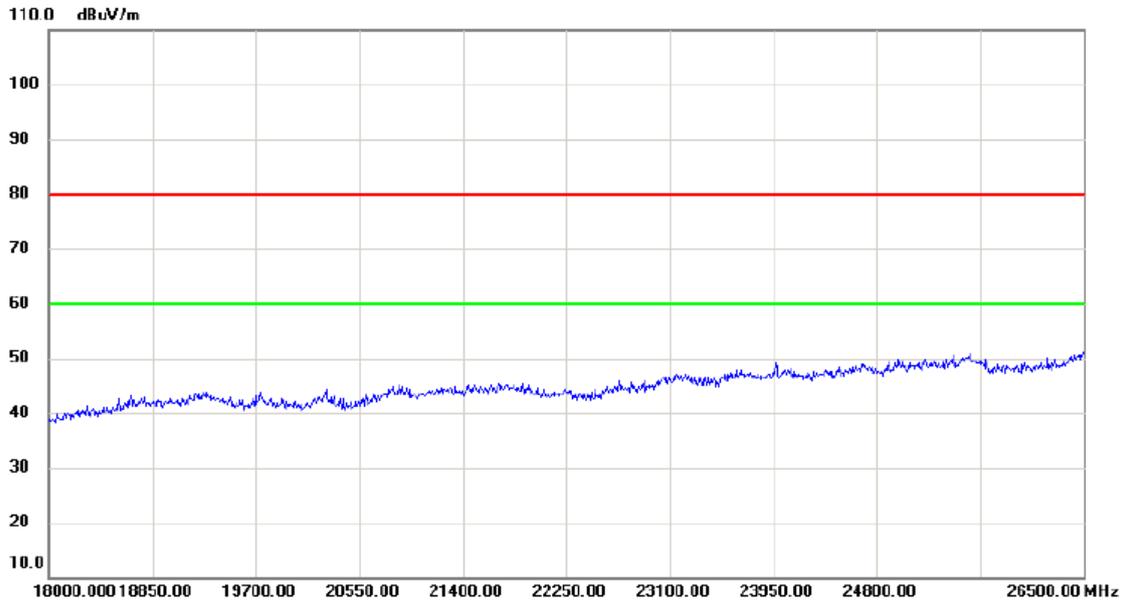
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		

Test Mode : TX 2402MHz _CH00_1Mbps

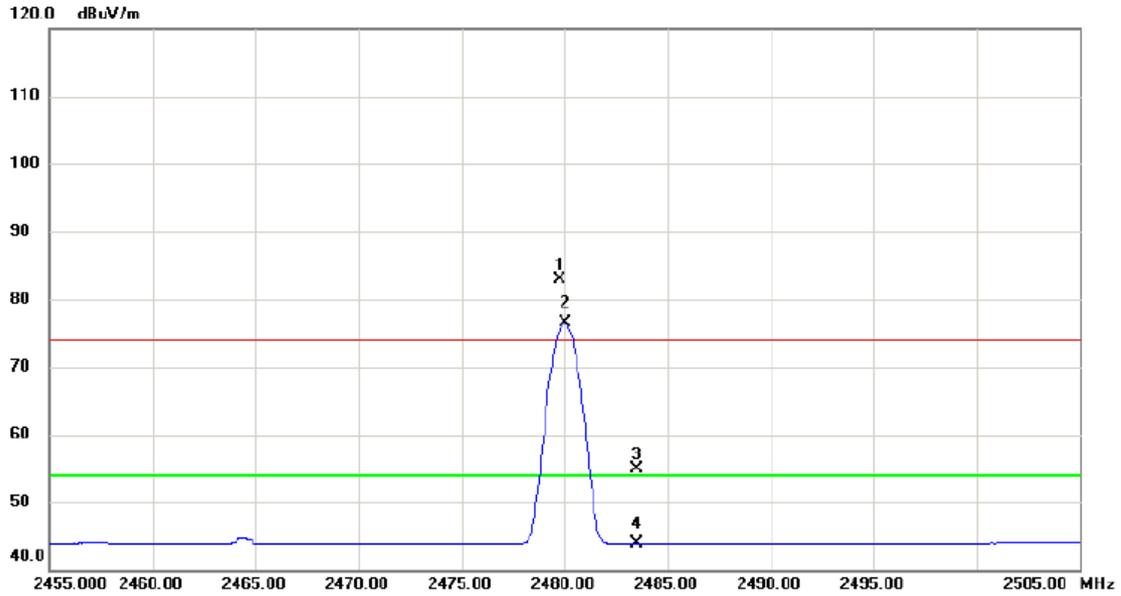
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
		18000.000	~40		~40	60	~20		
		18850.00	~42		~42	60	~18		
		19700.00	~41		~41	60	~19		
		20550.00	~43		~43	60	~17		
		21400.00	~44		~44	60	~16		
		22250.00	~43		~43	60	~17		
		23100.00	~45		~45	60	~15		
		23950.00	~46		~46	60	~14		
		24800.00	~47		~47	60	~13		
		25650.00	~48		~48	60	~12		

Test Mode : TX 2480MHz _CH39_1Mbps

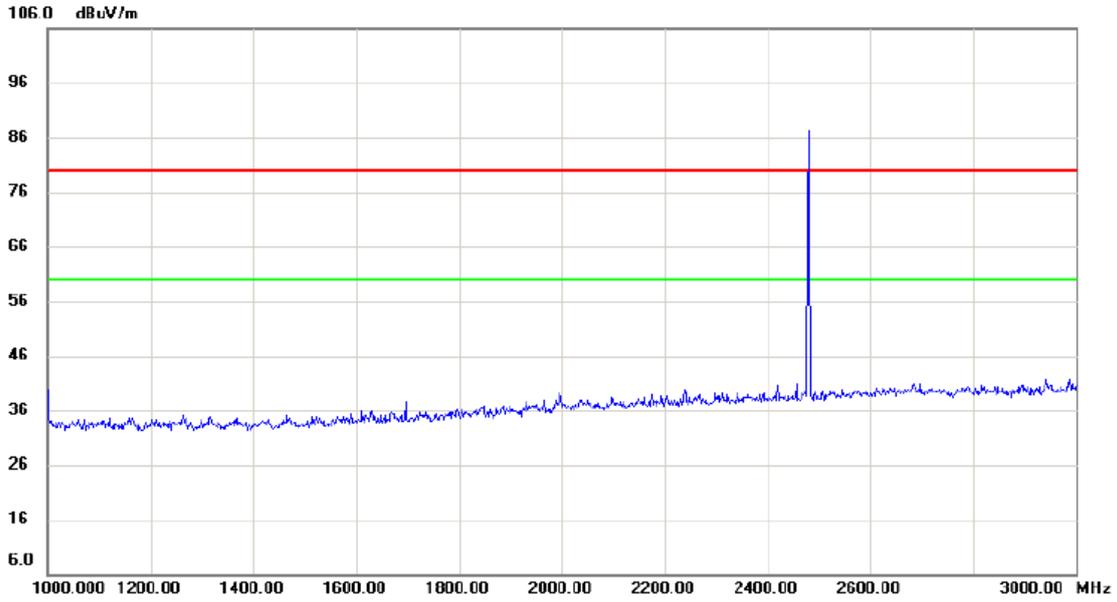
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2479.750	50.11	32.70	82.81	74.00	8.81	peak	No Limit
2	*	2480.000	43.77	32.70	76.47	54.00	22.47	AVG	No Limit
3		2483.500	22.19	32.71	54.90	74.00	-19.10	peak	
4		2483.500	11.21	32.71	43.92	54.00	-10.08	AVG	

Test Mode : TX 2480MHz _CH39_1Mbps

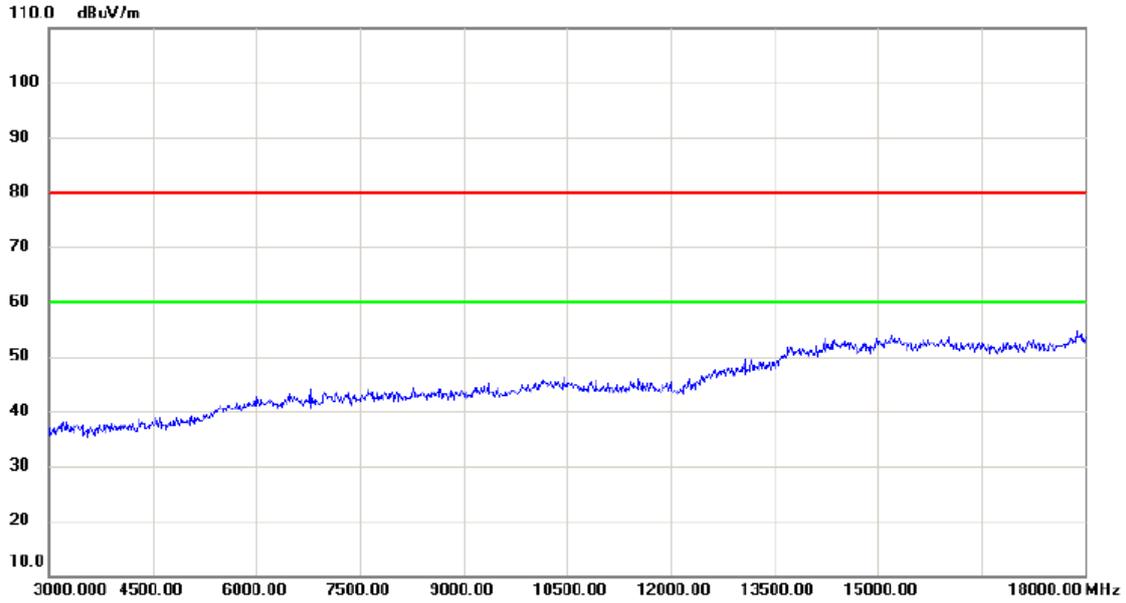
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
		2480.00	86.0		86.0	78.0	8.0		

Test Mode : TX 2480MHz _CH39_1Mbps

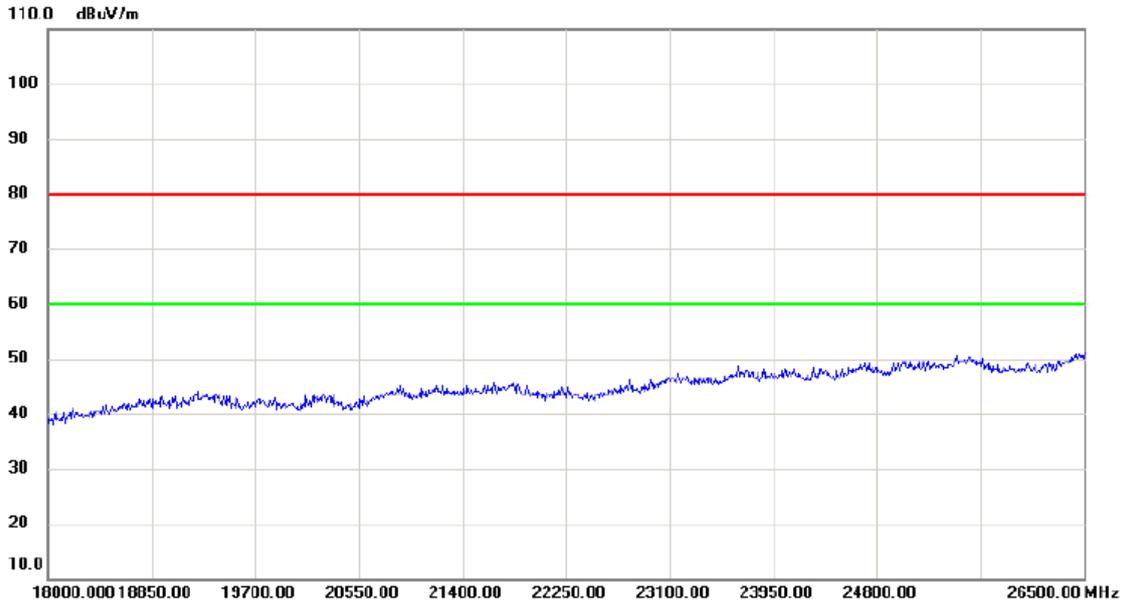
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		

Test Mode : TX 2480MHz _CH39_1Mbps

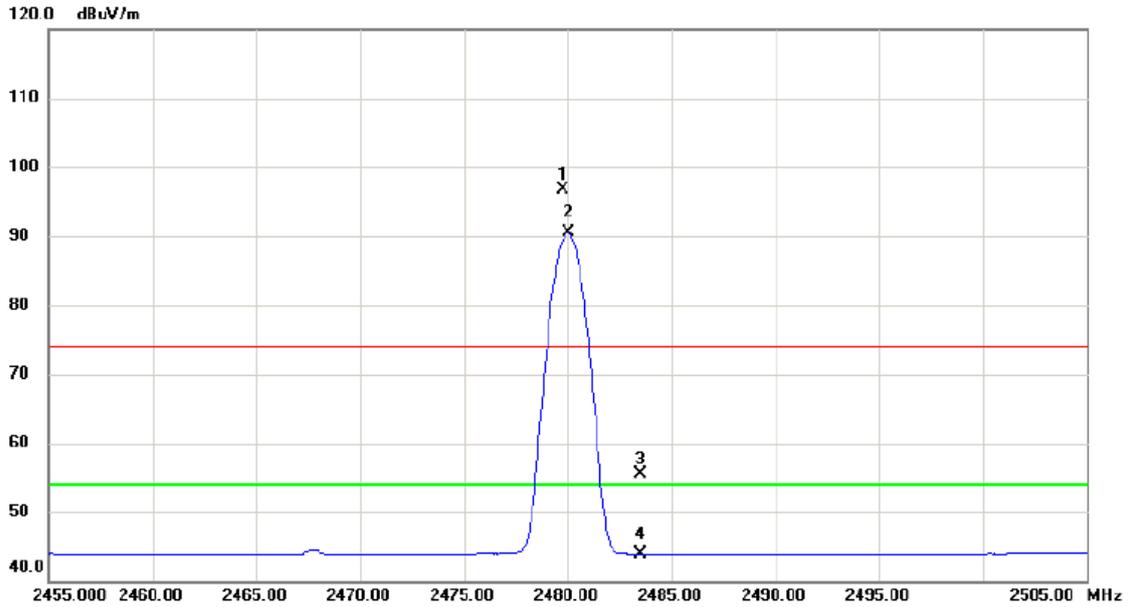
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
		18000.00	40		40	80	40		
		18850.00	42		42	80	38		
		19700.00	41		41	80	39		
		20550.00	43		43	80	37		
		21400.00	44		44	80	36		
		22250.00	43		43	80	37		
		23100.00	45		45	80	35		
		23950.00	46		46	80	34		
		24800.00	47		47	80	33		
		25650.00	48		48	80	32		
		26500.00	49		49	80	31		

Test Mode : TX 2480MHz _CH39_1Mbps

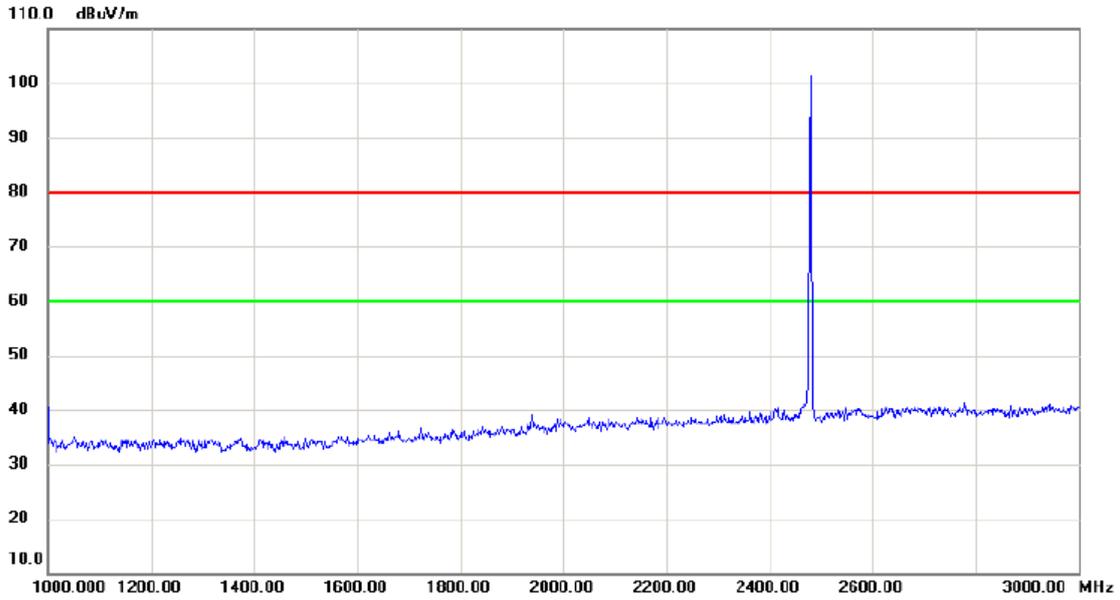
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2479.750	64.04	32.70	96.74	74.00	22.74	peak	No Limit
2	*	2480.000	57.74	32.70	90.44	54.00	36.44	AVG	No Limit
3		2483.500	22.76	32.71	55.47	74.00	-18.53	peak	
4		2483.500	11.24	32.71	43.95	54.00	-10.05	AVG	

Test Mode : TX 2480MHz _CH39_1Mbps

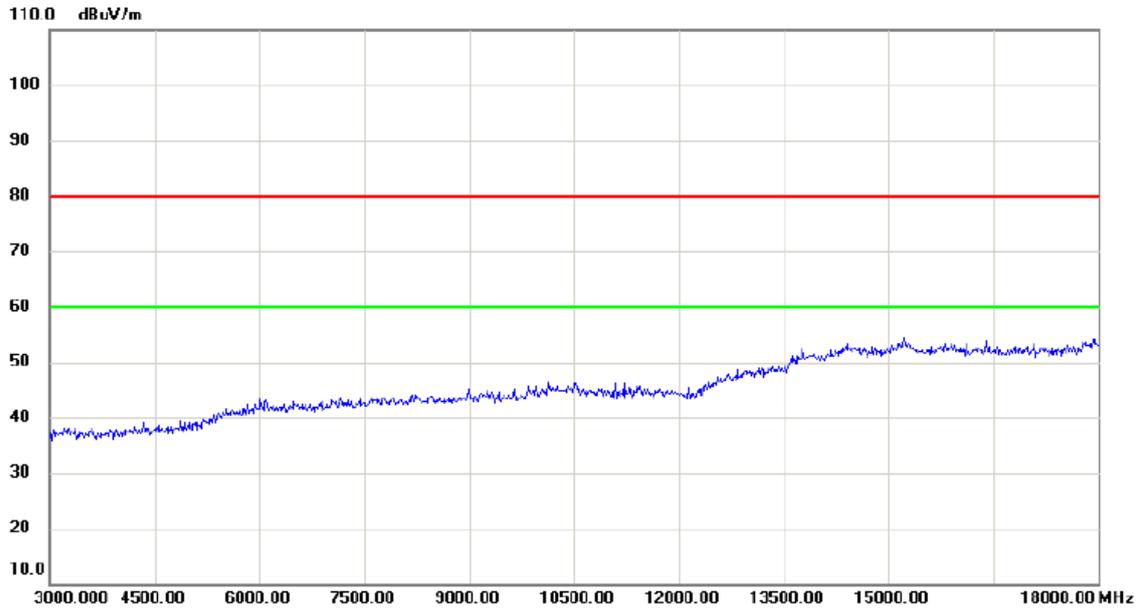
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
		2480.000	100.0	0.0	100.0	80.0	20.0		

Test Mode : TX 2480MHz _CH39_1Mbps

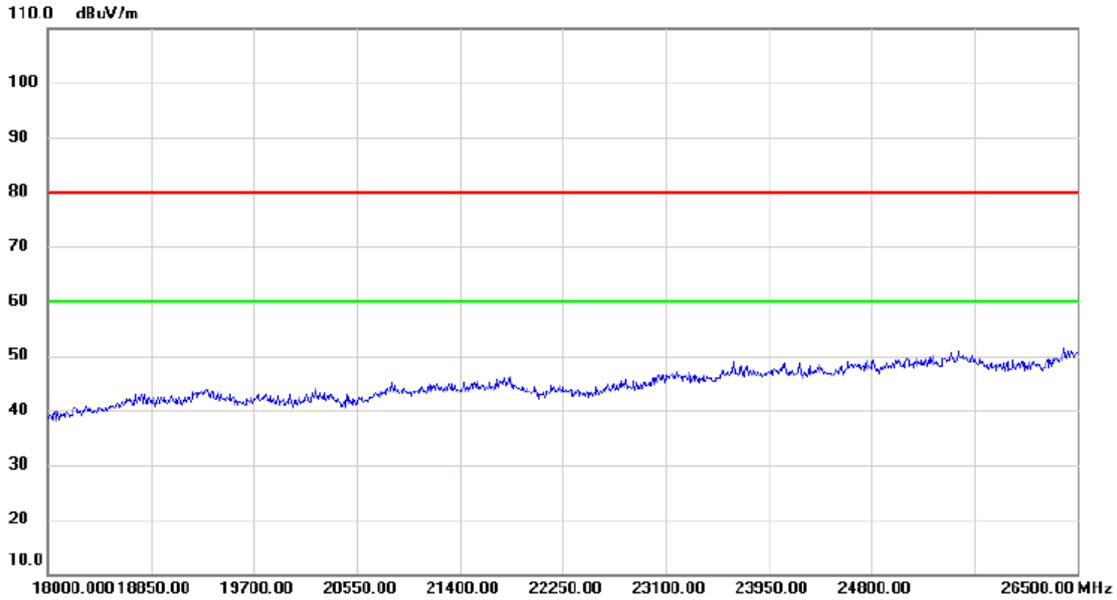
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
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Test Mode : TX 2480MHz _CH39_1Mbps

Horizontal



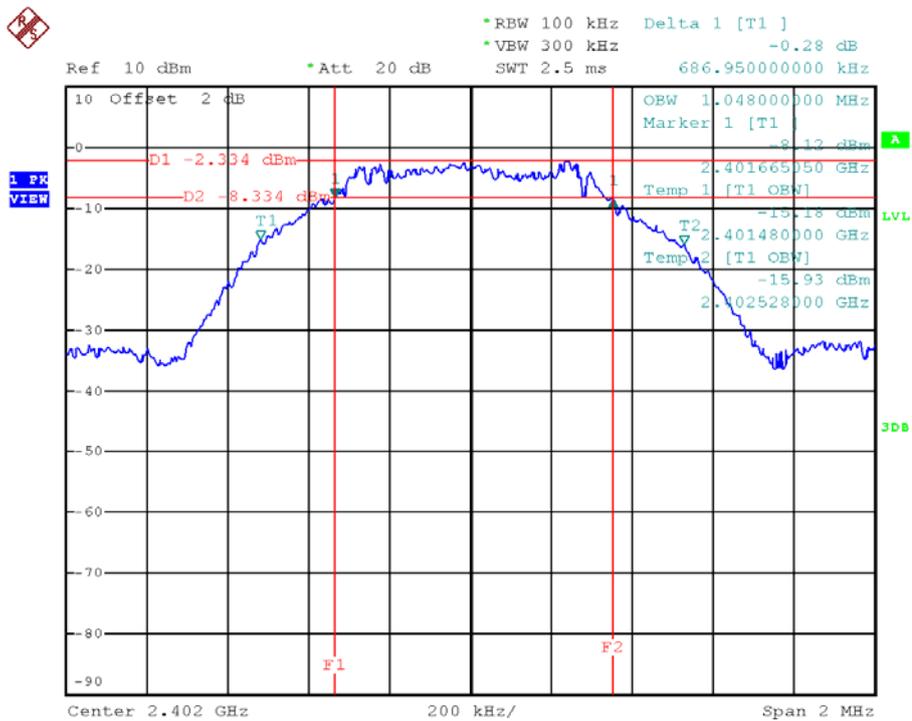
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		

ATTACHMENT E - BANDWIDTH

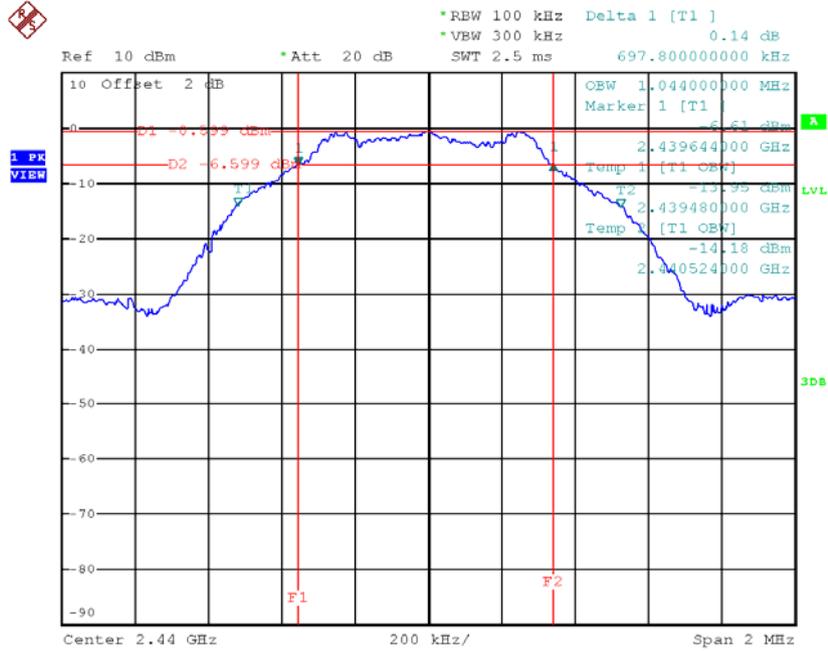
Test Mode: TX Mode

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2402	0.687	1.048	500	Pass
2440	0.698	1.044	500	Pass
2480	0.694	1.044	500	Pass

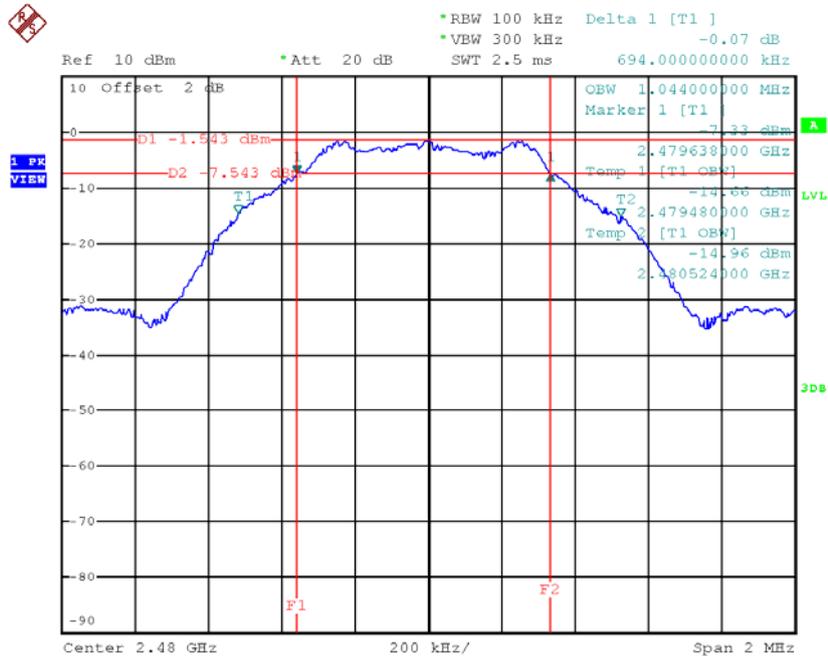
TX CH00



TX CH19



TX CH39



ATTACHMENT F - MAXIMUM OUTPUT POWER TEST

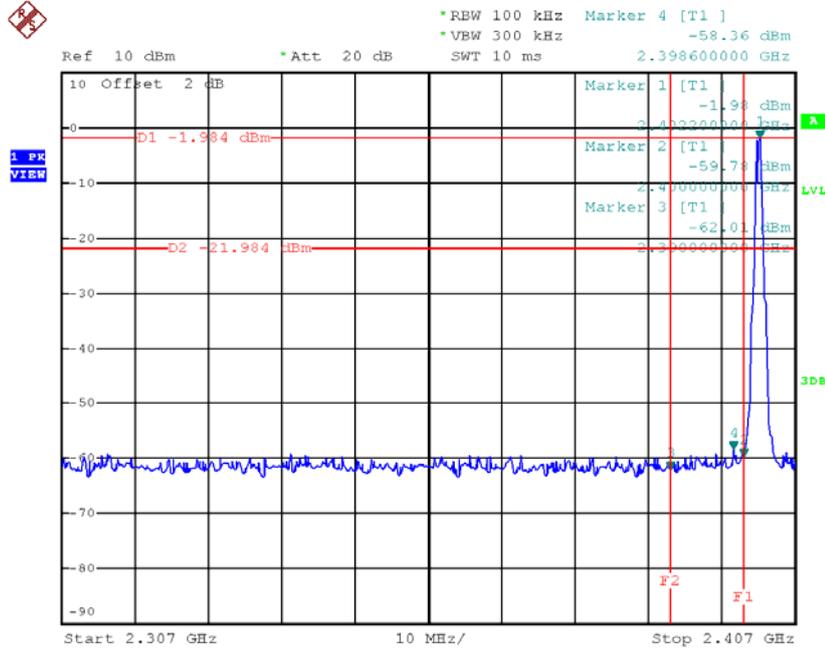
Test Mode : CH00, CH19 , CH39 - 1Mbps

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Test Result
2402	-0.96	0.0008	30.00	1.00	Pass
2440	0.48	0.0011	30.00	1.00	Pass
2480	-0.31	0.0009	30.00	1.00	Pass

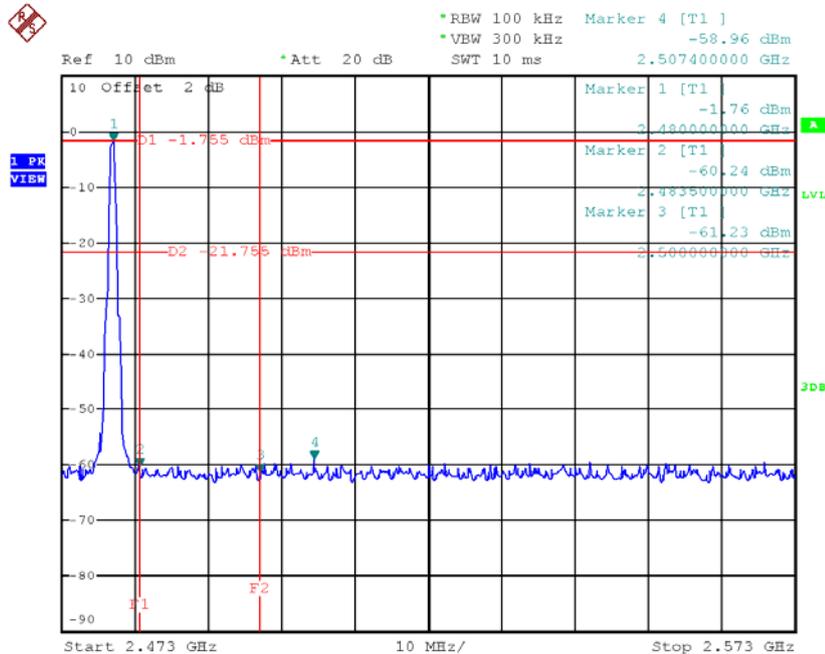
**ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS
EMISSION**

Test Mode : CH00, CH19 , CH39 - 1Mbps

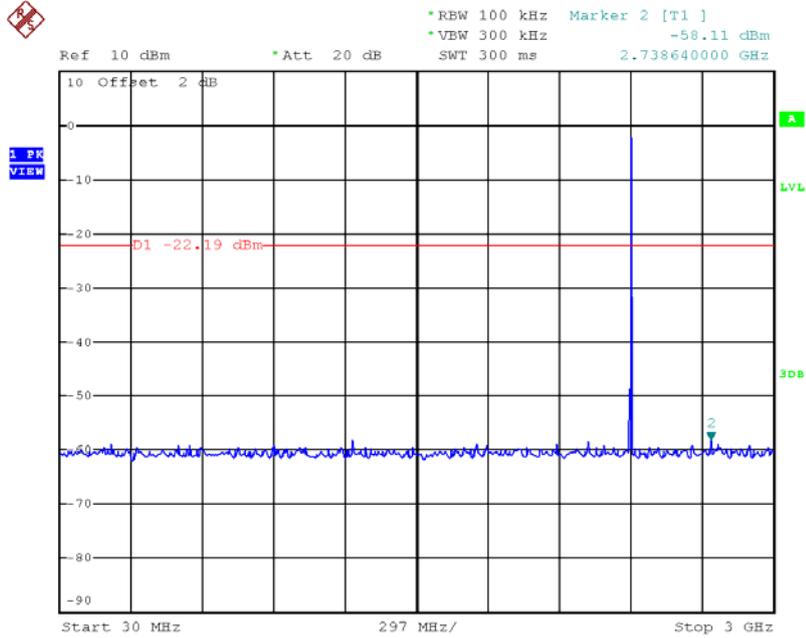
CH00 (Lower) - 1Mbps



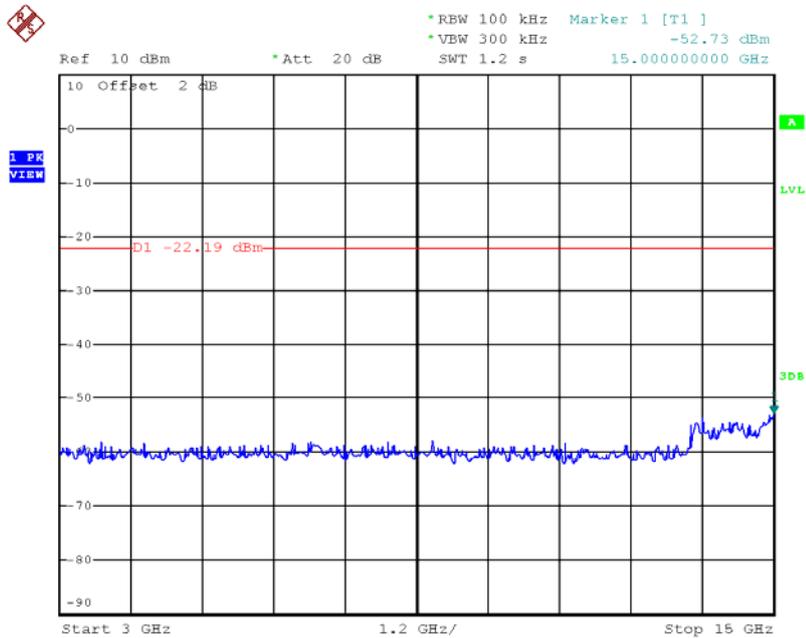
CH39 (upper) - 1Mbps



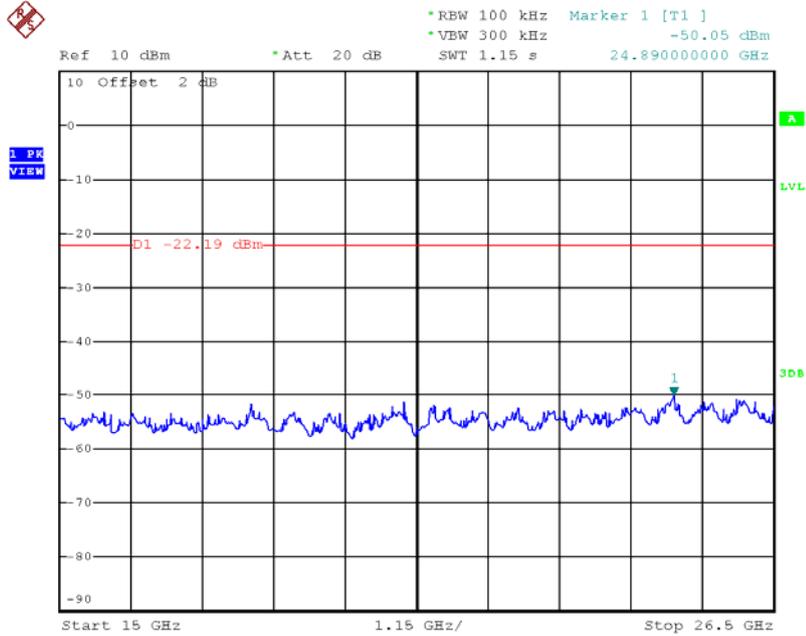
CH00 (10 Harmonic of the frequency) 1



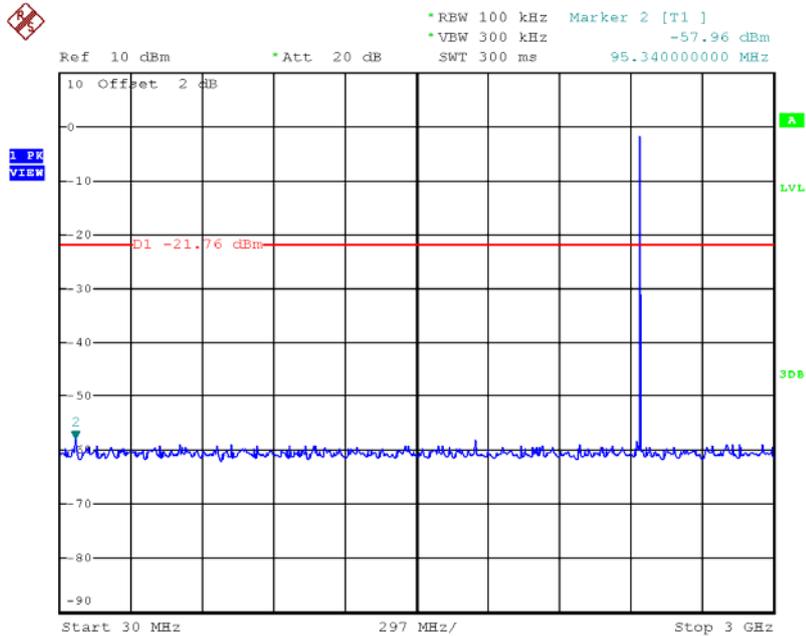
CH00 (10 Harmonic of the frequency) 2



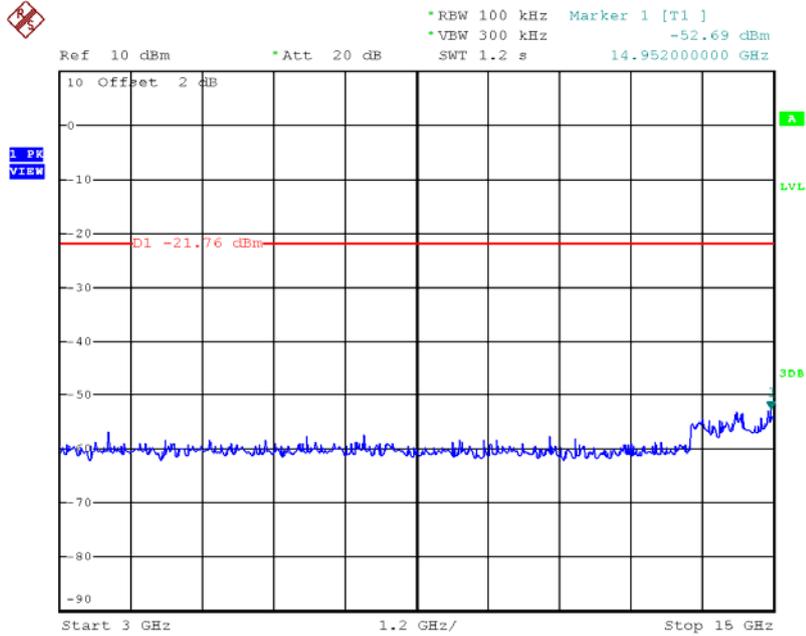
CH00 (10 Harmonic of the frequency) 3



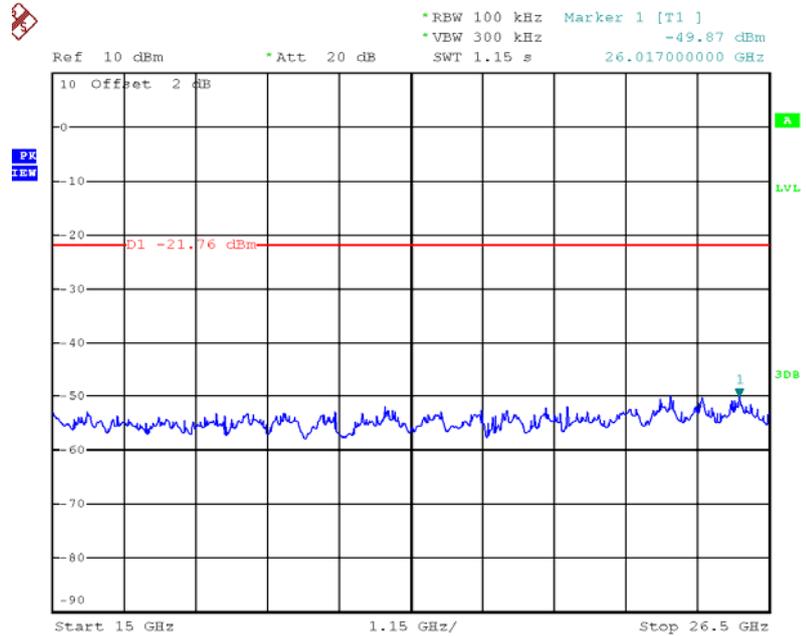
CH19 (10 Harmonic of the frequency) 1



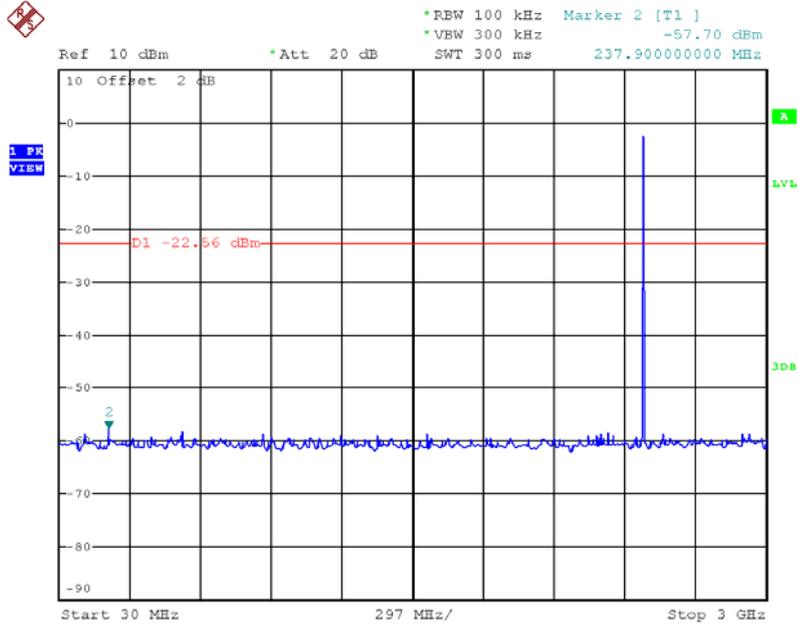
CH19 (10 Harmonic of the frequency) 2



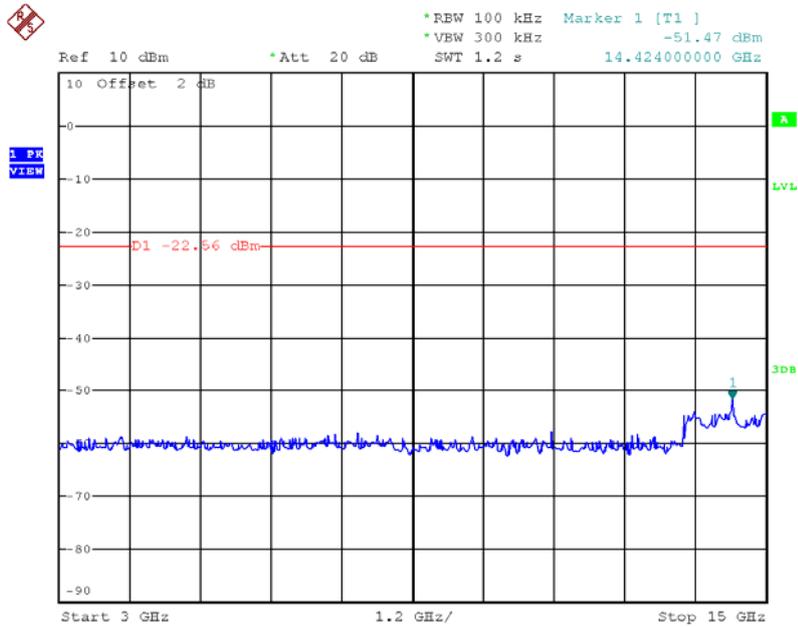
CH19 (10 Harmonic of the frequency) 3



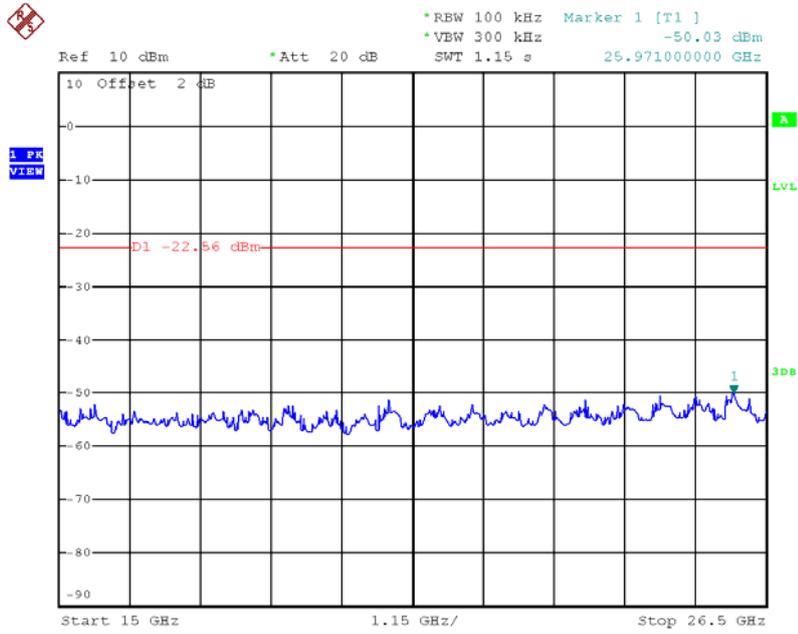
CH39 (10 Harmonic of the frequency) 1



CH39 (10 Harmonic of the frequency) 2



CH39 (10 Harmonic of the frequency) 3

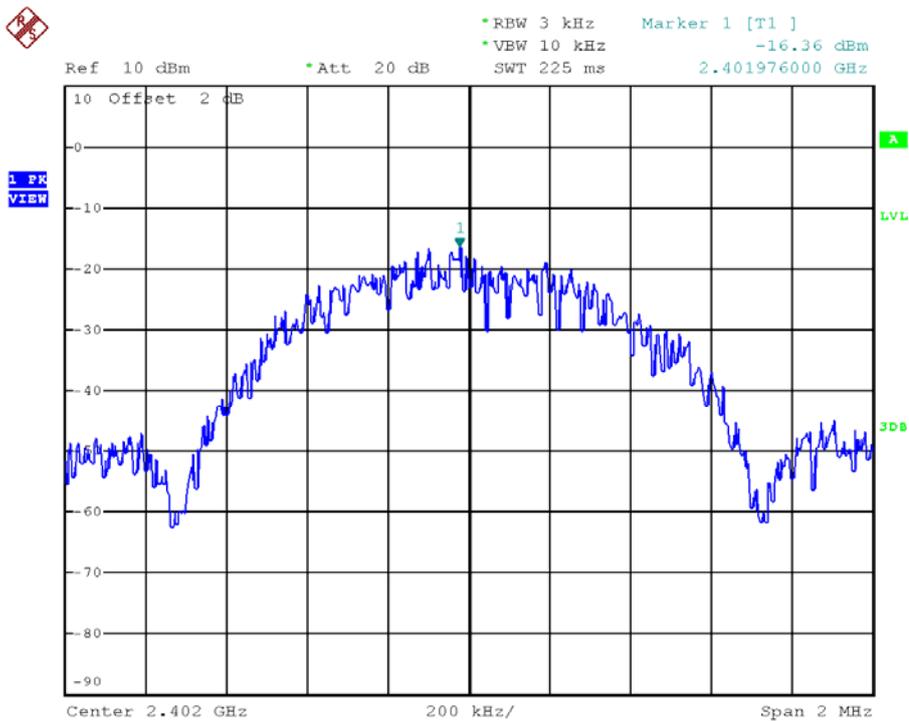


ATTACHMENT H - POWER SPECTRAL DENSITY TEST

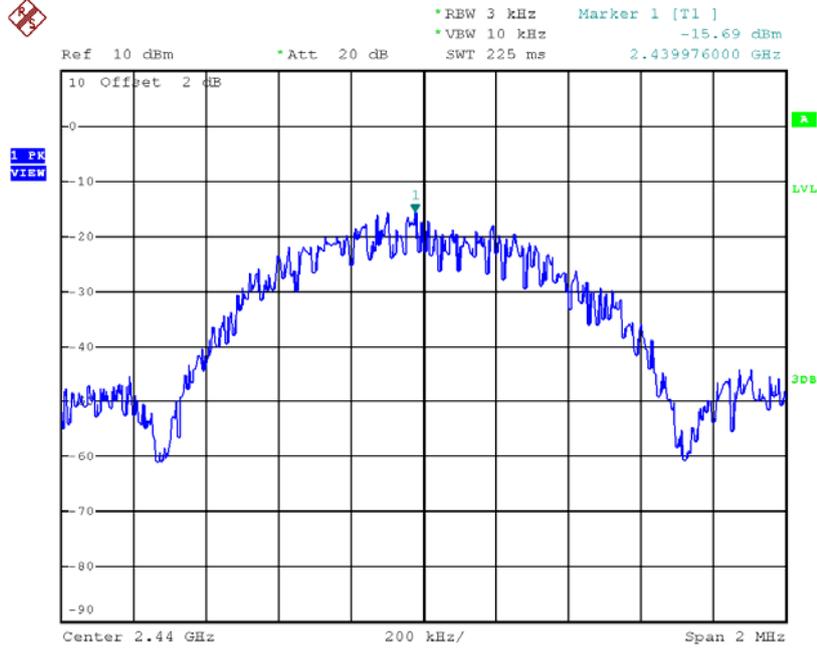
Test Mode: CH00, CH19 , CH39 - 1Mbps

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Test Result
2402	-16.360	0.023	8.00	Pass
2440	-15.690	0.027	8.00	Pass
2480	-16.120	0.024	8.00	Pass

TX CH00



TX CH19



TX CH39

