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.

Testing Engineer : Shawn xiao
(Shawn Xiao)

Technical Manager : David Mao
(David Mao)

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NVLAP® TESTING
NVLAP LAB CODE 200788-0

Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

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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-1-1701C155	Original Report	Feb. 28, 2017
BTL-FCCP-1-1701C155A	Compared with the original report (BTL-FCCP-1-1701C155), 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-1-1701C155E	Compared with the original report (BTL-FCCP-1-1701C155A), 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-1-1701C155L	Compared with previous report (BTL-FCCP-1-1701C155E) 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-1-1701C155L) 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, Subpart C (15.247)			
Standard(s) Section	Test Item	Judgment	Remark
15.207	Conducted Emission	PASS	
15.247(d)	Antenna conducted Spurious Emission	PASS	
15.247 (a)(1)	Hopping Channel Separation	PASS	
15.247(a)(1)	Bandwidth	PASS	
15.247 (b)(1)	Peak Output Power	PASS	
15.247(d) 15.209	Radiated Spurious Emission	PASS	
15.247 (a)(1)(iii)	Number of Hopping Frequency	PASS	
15.247 (a)(1)(iii)	Dwell Time	PASS	
15.205	Restricted Bands	PASS	
15.203	Antenna Requirement	PASS	

Note:

(1)" N/A" denotes test is not applicable in this test report

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 measurement instrumentation uncertainty considerations contained in CISPR 16-4-2.

The reported uncertainty of measurement **y** ± **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

C. Other Measurement:

Test Item	Uncertainty
Conducted Spurious Emission	2.67dB
Hopping Channel Separation	53.46MHz
Peak Output Power	0.95dB
Number of Hopping Frequency	53.46MHz
Temperature	0.08℃
Humidity	1.5%

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	
Output Power (Max.)	Operation Frequency	2402~2480 MHz
	Modulation Technology	GFSK(1Mbps) π/4-DQPSK(2Mbps) 8-DPSK(3Mbps)
	Bit Rate of Transmitter	
	Output Power Max.	7.52 dBm(1Mbps) 6.95 dBm(3Mbps)
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)	Channel	Frequency (MHz)
00	2402	27	2429	54	2456
01	2403	28	2430	55	2457
02	2404	29	2431	56	2458
03	2405	30	2432	57	2459
04	2406	31	2433	58	2460
05	2407	32	2434	59	2461
06	2408	33	2435	60	2462
07	2409	34	2436	61	2463
08	2410	35	2437	62	2464
09	2411	36	2438	63	2465
10	2412	37	2439	64	2466
11	2413	38	2440	65	2467
12	2414	39	2441	66	2468
13	2415	40	2442	67	2469
14	2416	41	2443	68	2470
15	2417	42	2444	69	2471
16	2418	43	2445	70	2472
17	2419	44	2446	71	2473
18	2420	45	2447	72	2474
19	2421	46	2448	73	2475
20	2422	47	2449	74	2476
21	2423	48	2450	75	2477
22	2424	49	2451	76	2478
23	2425	50	2452	77	2479
24	2426	51	2453	78	2480
25	2427	52	2454		
26	2428	53	2455		

3 Table for Filed Antenna

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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 generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible 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 Emission	
Final Test Mode	Description
Mode 1	TX Mode

For Radiated Emission	
Final Test Mode	Description
Mode 1	TX Mode **Note (1)**

Note:

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

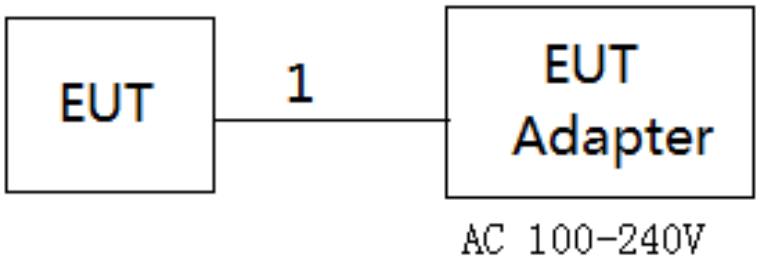
(2) The measurements for Hopping Channel Separation, Bandwidth and Peak Output Power were tested during 1Mbps, 2Mbps and 3Mbps, the worst case are 1Mbps and 3Mbps, only worst case was documented.

3.3 TABLE OF PARAMETERS OF TEXT 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 FHSS

Test Software Version	N/A		
Frequency	2402 MHz	2441 MHz	2480 MHz
Parameters(1Mbps)	7	7	7
Parameters(3Mbps)	7	7	7

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	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.
-	-	-	-	-	-

Item	Shielded Type	Ferrite Core	Length	Note
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 (dBμV)	
	Quasi-peak	Average
0.15 -0.50	66 to 56*	56 to 46*
0.50 -5.0	56	46
5.0 -30.0	60	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 equipment 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.

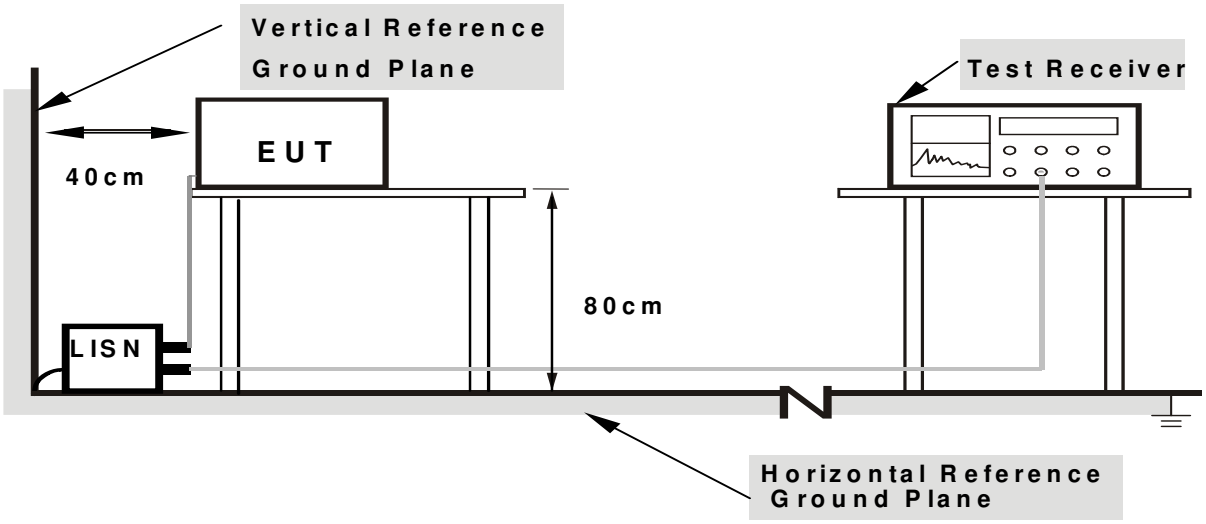
d. LISN at least 80 cm from nearest part of EUT chassis.

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 function (as a customer would normally use it), EUT was programmed to be in continuously transmitting/receiving data or hopping on mode.

4.1.6 EUT TEST CONDITIONS

Temperature: 25°C
Relative Humidity: 55%
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.

4.2 RADIATED EMISSION MEASUREMENT

4.2.1 RADIATED EMISSION LIMITS (Frequency Range 9KHz -1000MHz)

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.

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/RSS-247.

(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)

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

20log d limit/d measure=20log 3/1.5=6dB.

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average

Spectrum 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

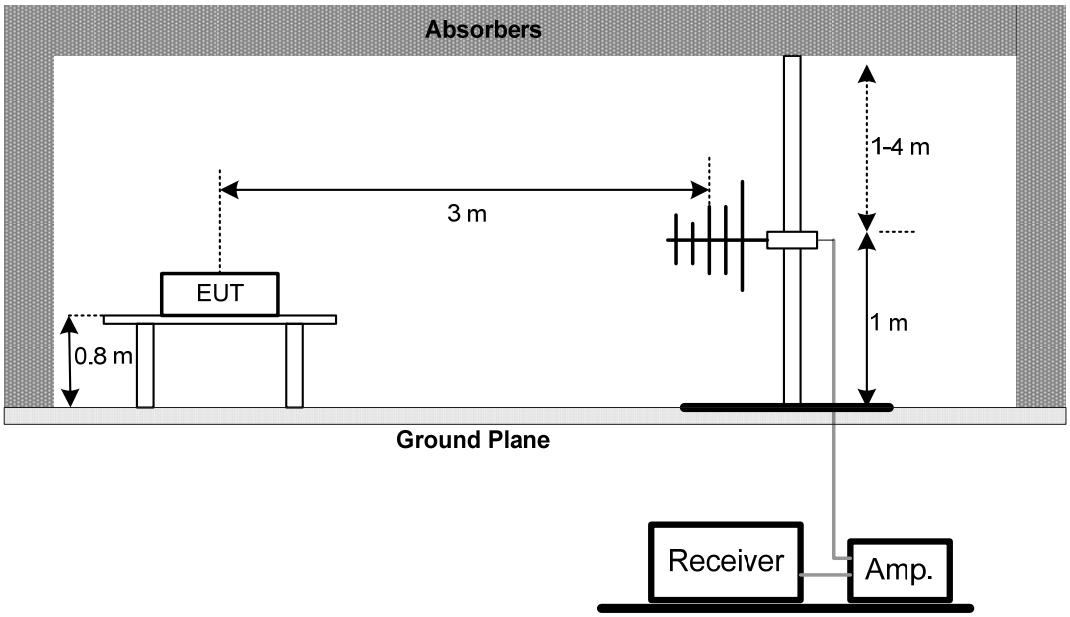
a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
b. The measuring distance 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

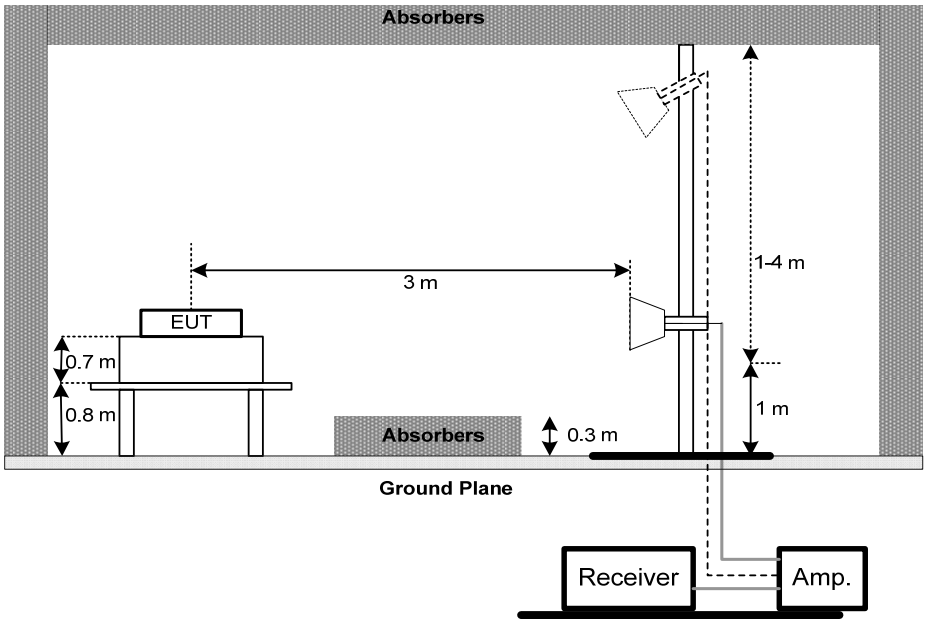
4.2.4 TEST SETUP

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

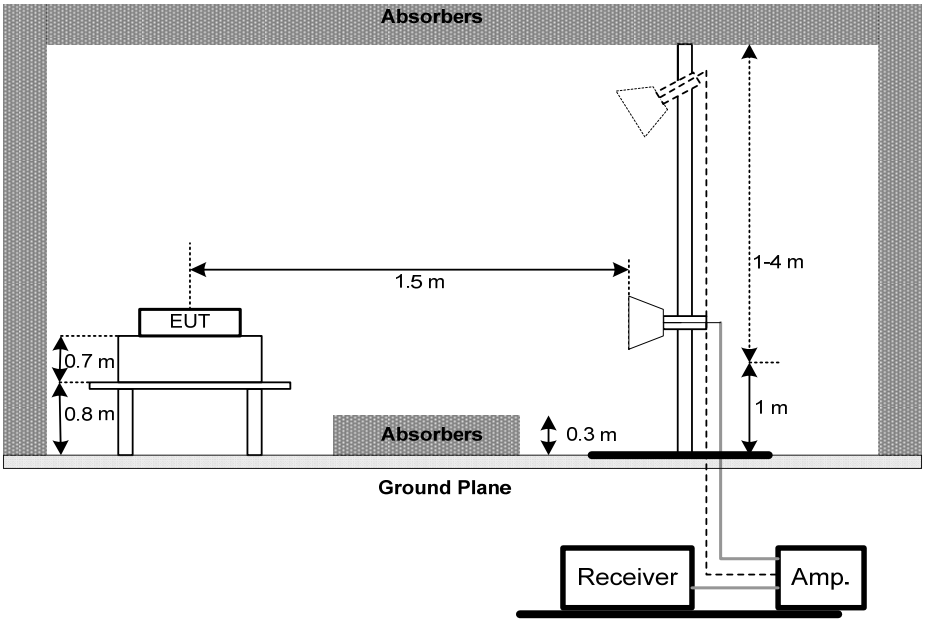


(B) Radiated Emission Test Set-Up Frequency Above 1 GHz

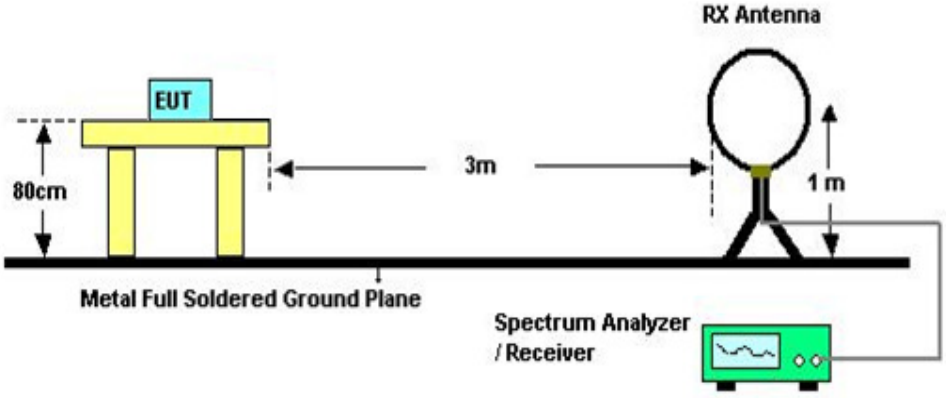
Band edge



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: 25°C
Relative Humidity: 55%
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 (specific distance / 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. NUMBER OF HOPPING CHANNEL

5.1 APPLIED PROCEDURES

FCC Part15 (15.247) , Subpart C			
Section	Test Item	Frequency Range (MHz)	Result
15.247(a)(1)(iii)	Number of Hopping Channel	2400-2483.5	PASS

Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	> Operating Frequency Range
RBW	100 KHz
VBW	100 KHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

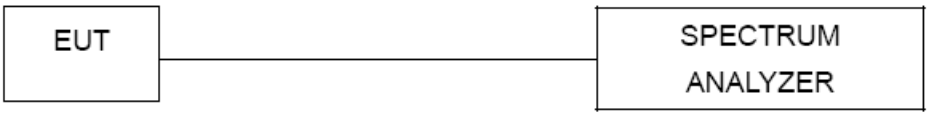
5.1.1 TEST PROCEDURE

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=100KHz, Sweep time = Auto.

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: 25°C
Relative Humidity: 55%
Test Voltage: AC 120V/60Hz

5.1.6 TEST RESULTS

Please refer to the Attachment E

6. AVERAGE TIME OF OCCUPANCY

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(1)(iii)	Average Time of Occupancy	0.4sec	2400-2483.5	PASS

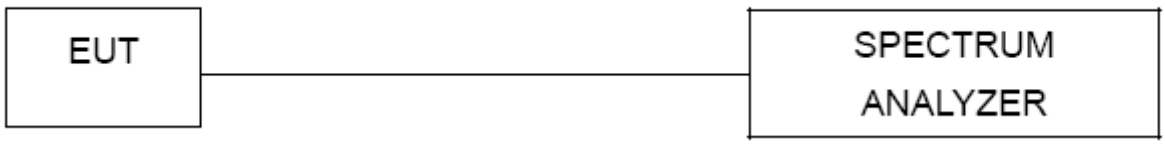
6.1.1 TEST PROCEDURE

a. The transmitter output (antenna port) was connected to the spectrum analyzer
b. Set RBW of spectrum analyzer to 1MHz and VBW to 1MHz.
c. Use a video trigger with the trigger level set to enable triggering only on full pulses.
d. Sweep Time is more than once pulse time.
e. Set the center frequency on any frequency would be measure and set the frequency span to zero span.
f. Measure the maximum time duration of one single pulse.
g. Set the EUT for DH5, DH3 and DH1 packet transmitting.
h. Measure the maximum time duration of one single pulse.
i. DH5 Packet permit maximum 1600/ 79 / 6 = 3.37 hops per second in each channel (5 time slots TX, 1 time slot RX). So, the dwell time is the time duration of the pulse times 3.37 x 31.6 = 106.6 within 31.6 seconds.
j. DH3 Packet permit maximum 1600 / 79 / 4 = 5.06 hops per second in each channel (3 time slots TX, 1 time slot RX). So, the dwell time is the time duration of the pulse times 5.06 x 31.6 = 160 within 31.6 seconds.
k. DH1 Packet permit maximum 1600 / 79 /2 = 10.12 hops per second in each channel (1 time slot TX, 1 time slot RX). So, the dwell time is the time duration of the pulse times 10.12 x 31.6 = 320 within 31.6 seconds.

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: 25°C
Relative Humidity: 55%
Test Voltage: AC 120V/60Hz

6.1.6 TEST RESULTS

Please refer to the Attachment F

7. HOPPING CHANNEL SEPARATION MEASUREMENT

7.1 APPLIED PROCEDURES / LIMIT

Frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 KHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> Measurement Bandwidth or Channel Separation
RBW	30 KHz
VBW	100 KHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

7.1.1 TEST PROCEDURE

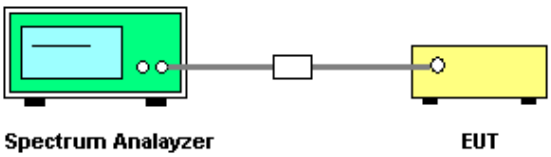
a. The EUT must have its hopping function enabled

b. Span = wide enough to capture the peaks of two adjacent channels
Resolution (or IF) Bandwidth (RBW) ≥ 1% of the span
Video (or Average) Bandwidth (VBW) ≥ RBW
Sweep = Auto
Detector function = Peak
Trace = Max Hold

7.1.2 DEVIATION FROM STANDARD

No deviation.

7.1.3 TEST SETUP



7.1.4 EUT TEST CONDITIONS

Temperature: 25°C
Relative Humidity: 55%
Test Voltage: AC 120V/60Hz

7.1.5 TEST RESULTS

Please refer to the Attachment G

8. BANDWIDTH TEST

8.1 APPLIED PROCEDURES

FCC Part15 (15.247) , Subpart C		
Section	Test Item	Frequency Range (MHz)
15.247(a)(2)	Bandwidth	2400-2483.5

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> Measurement Bandwidth or Channel Separation
RBW	30 KHz (20dB Bandwidth) / 30 KHz (Channel Separation)
VBW	100 KHz (20dB Bandwidth) / 100 KHz (Channel Separation)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

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= 30KHz, VBW=100KHz, 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: 25°C
Relative Humidity: 55%
Test Voltage: AC 120V/60Hz

8.1.6 TEST RESULTS

Please refer to the Attachment H

9. PEAK OUTPUT POWER TEST

9.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(1)	Peak Output Power	1 Watt or 30dBm (hopping channel >75) 0.125Watt or 21dBm (hopping channel <75	2400-2483.5	PASS

9.1.1 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= 1MHz/3MHz, VBW= 1MHz/3MHz, Sweep time = Auto.

9.1.2 DEVIATION FROM STANDARD

No deviation.

9.1.3 TEST SETUP

9.1.4 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.

9.1.5 EUT TEST CONDITIONS

Temperature: 25°C
Relative Humidity: 55%
Test Voltage: AC 120V/60Hz

9.1.6 TEST RESULTS

Please refer to the Attachment I

10. ANTENNA CONDUCTED SPURIOUS EMISSION

10.1 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.

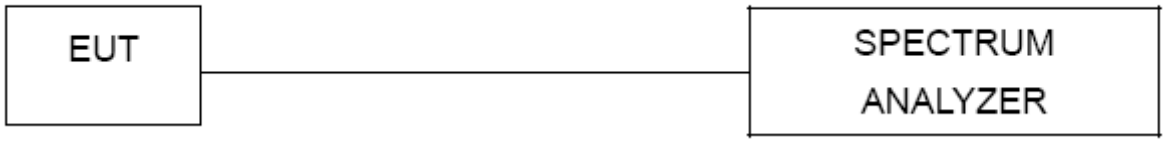
10.1.1 TEST PROCEDURE

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=100KHz, Sweep time = Auto.
c. Offset=antenna gain+cable loss

10.1.2 DEVIATION FROM STANDARD

No deviation.

10.1.3 TEST SETUP



10.1.4 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.

10.1.5 EUT TEST CONDITIONS

Temperature: 25°C
Relative Humidity: 55%
Test Voltage: AC 120V/60Hz

10.1.6 TEST RESULTS

Please refer to the Attachment J

11. 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	Schwarbeck	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

Number of Hopping Channel					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Sep. 04, 2017

Average Time of Occupancy					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Sep. 04, 2017

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

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

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

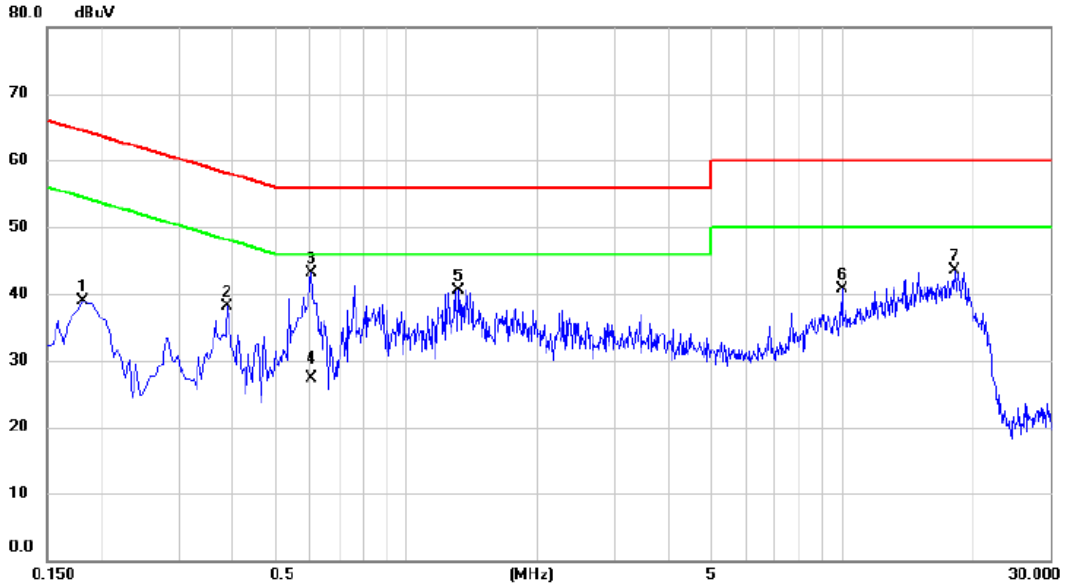
Antenna Conducted Spurious Emission					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Sep. 04, 2017

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

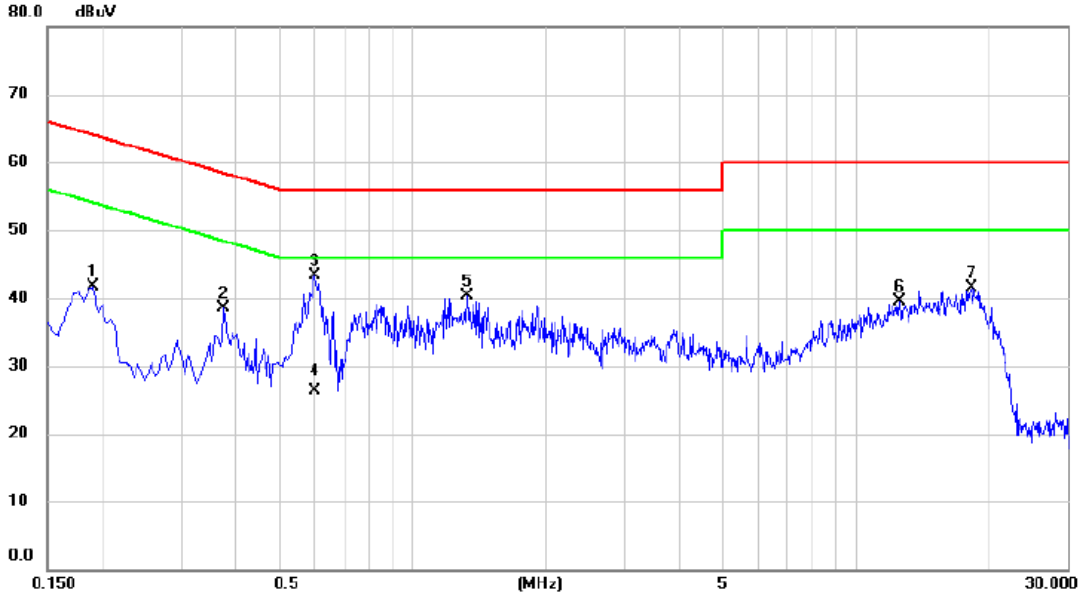
Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	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

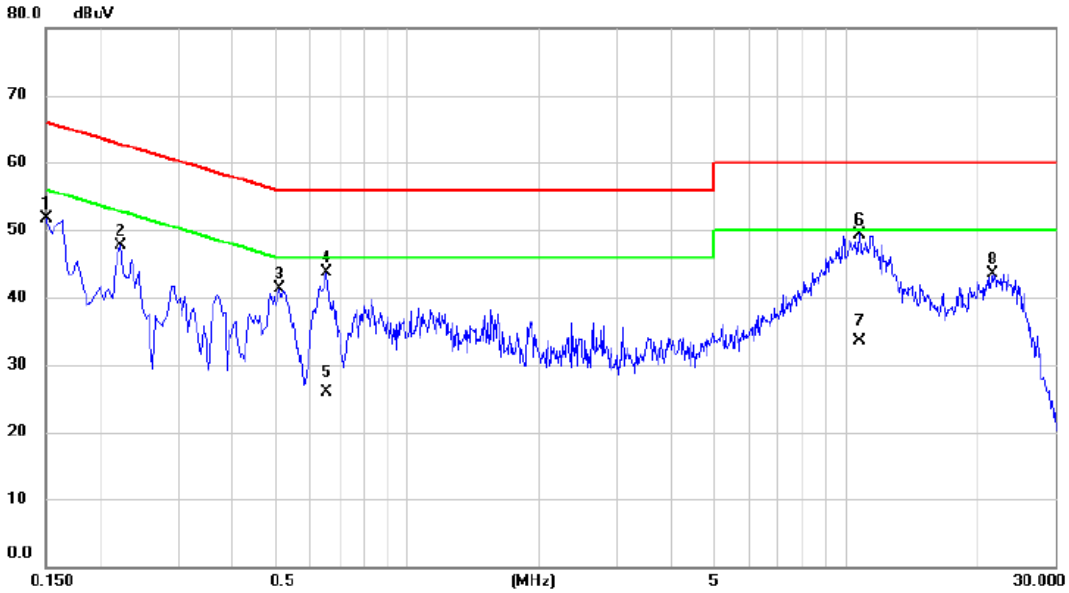
Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	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

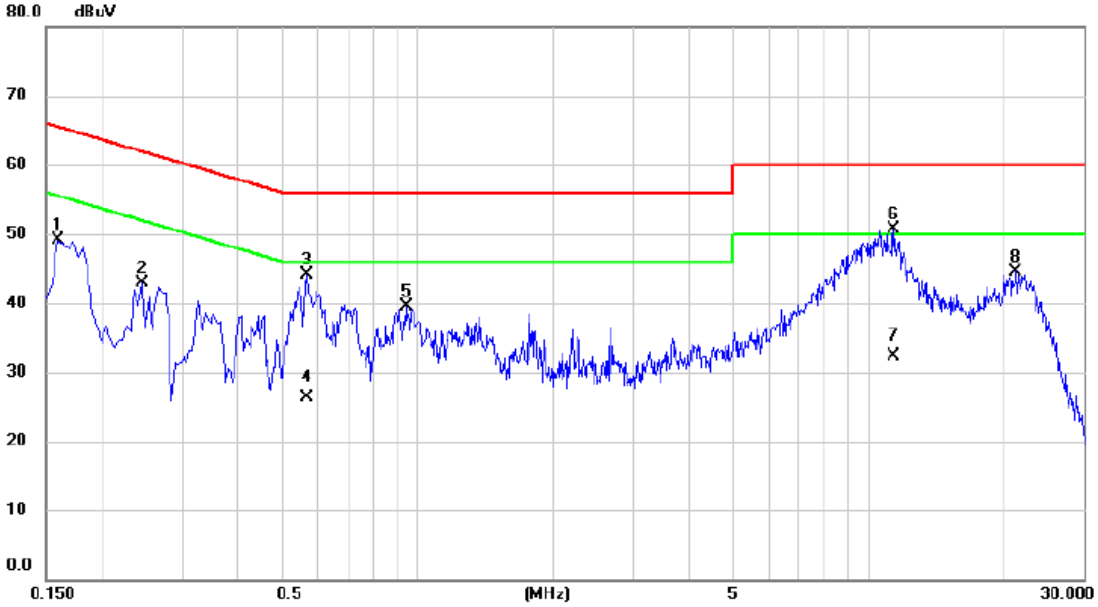
Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	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

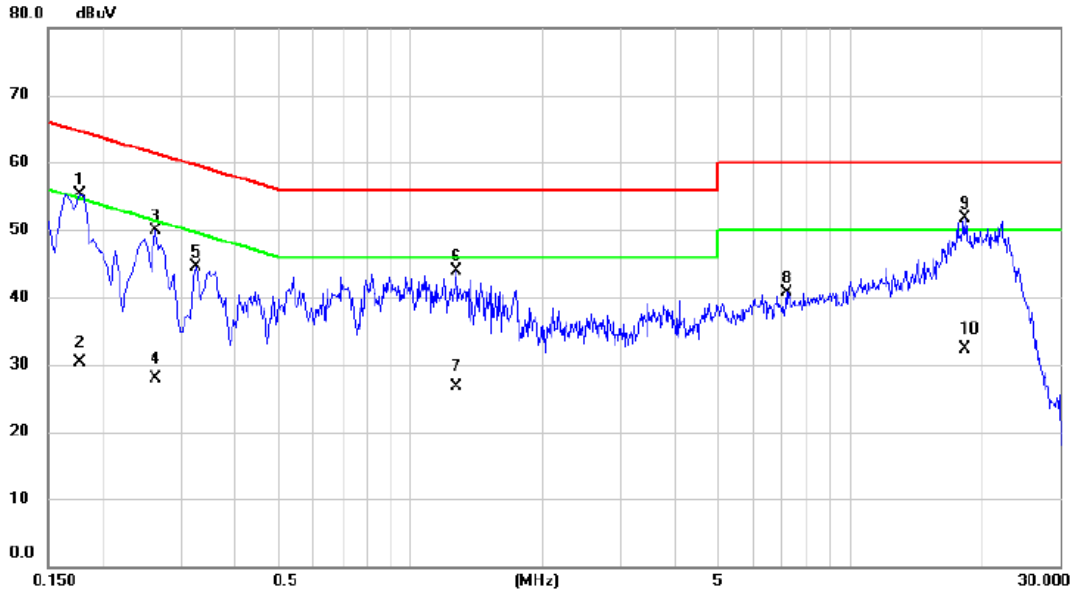
Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	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

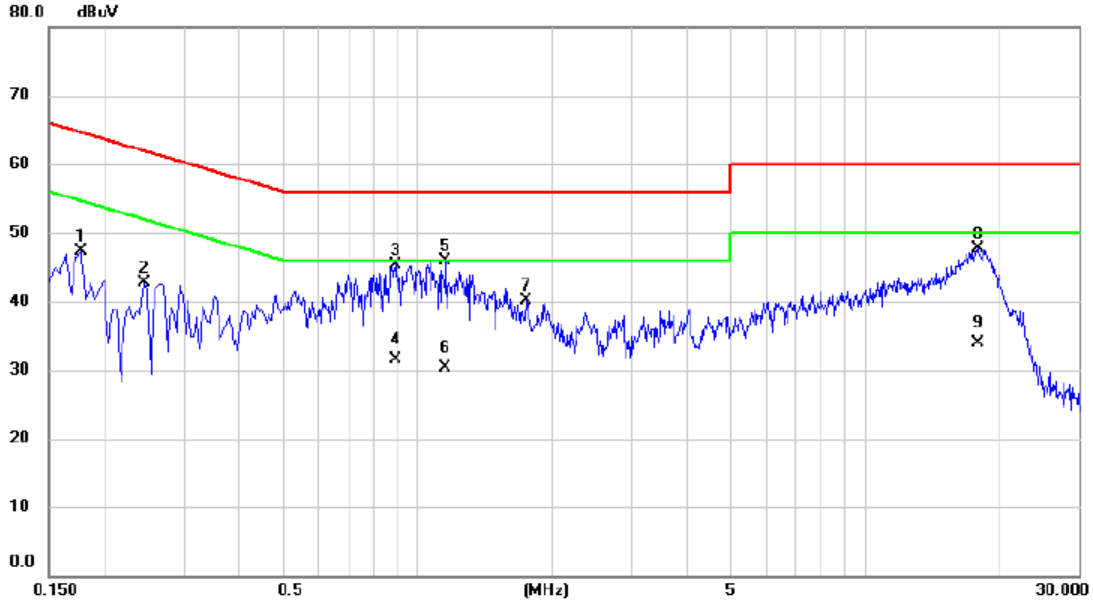
Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	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

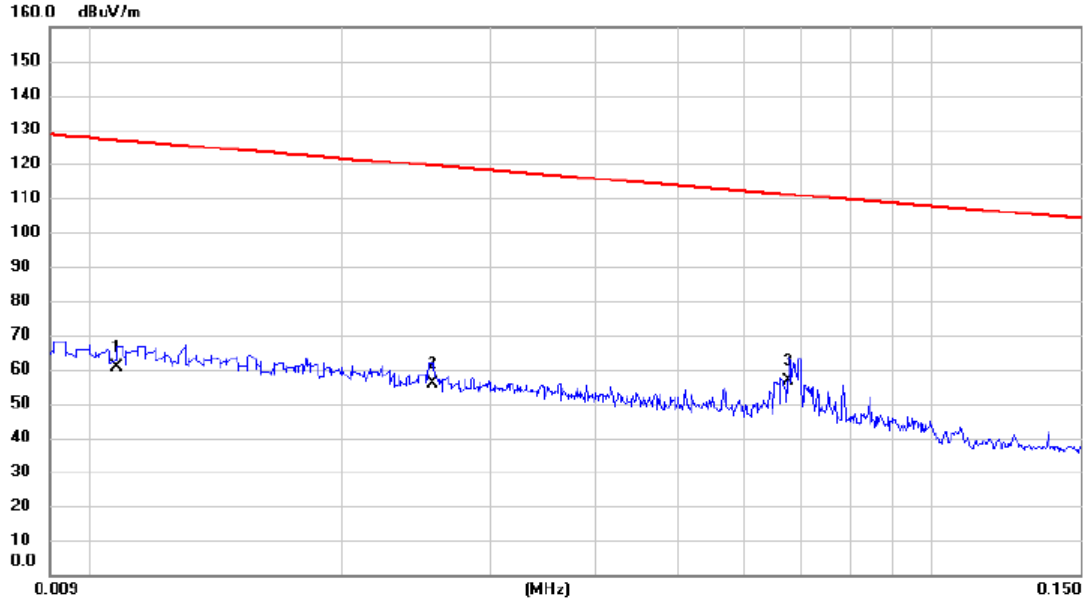


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.177	37.69	9.68	47.37	64.63	-17.26	peak	
2		0.244	33.08	9.67	42.75	61.94	-19.19	peak	
3		0.892	35.50	9.74	45.24	56.00	-10.76	peak	
4		0.892	21.84	9.74	31.58	46.00	-14.42	AVG	
5	*	1.153	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-30MHZ)

Test Mode:	TX Mode_ Adapter: BYD

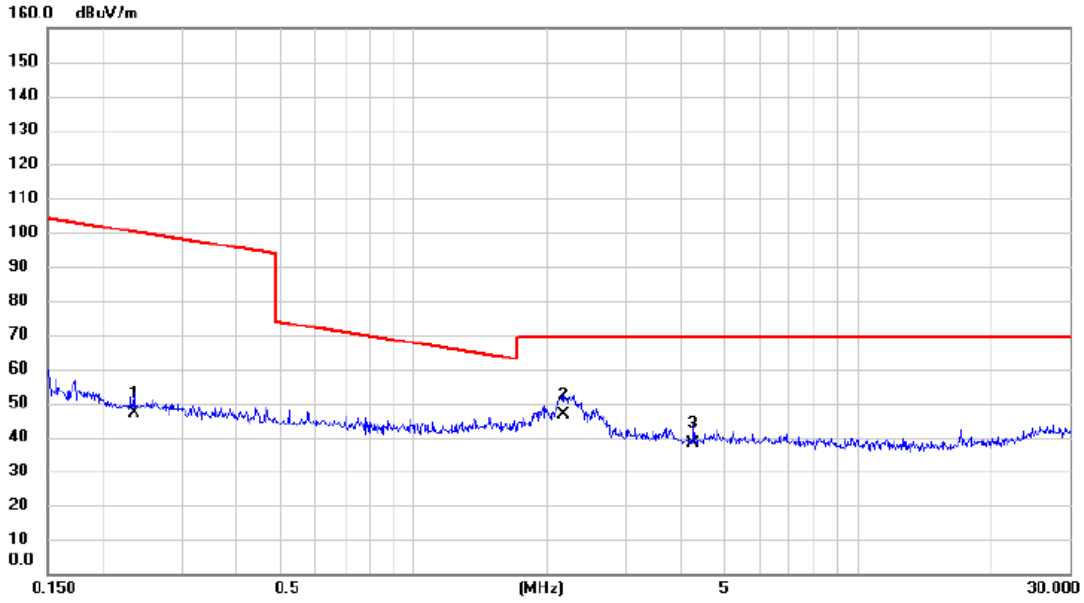
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	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

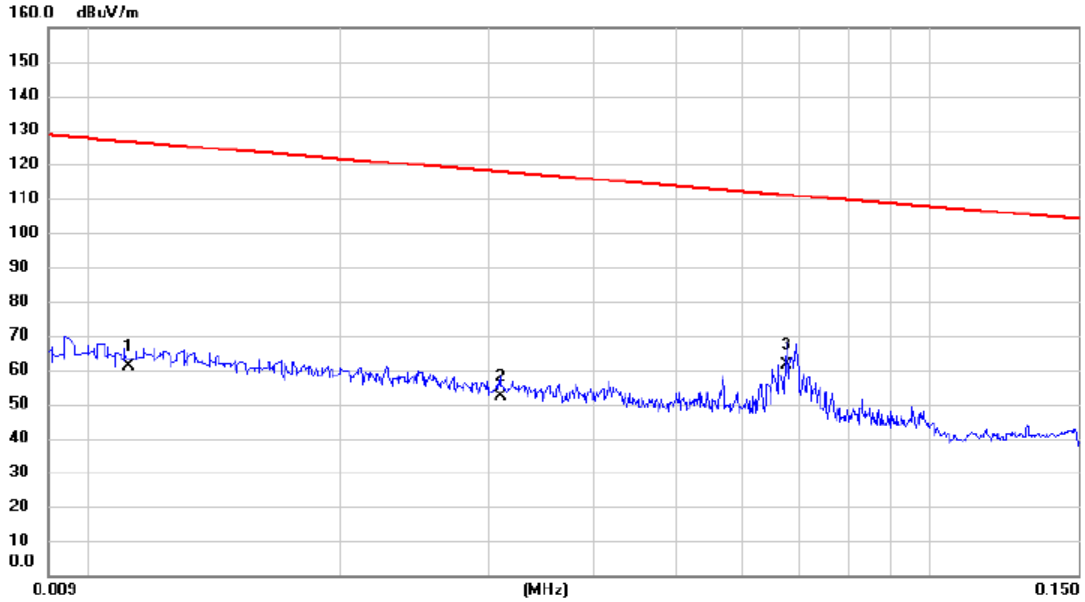
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	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

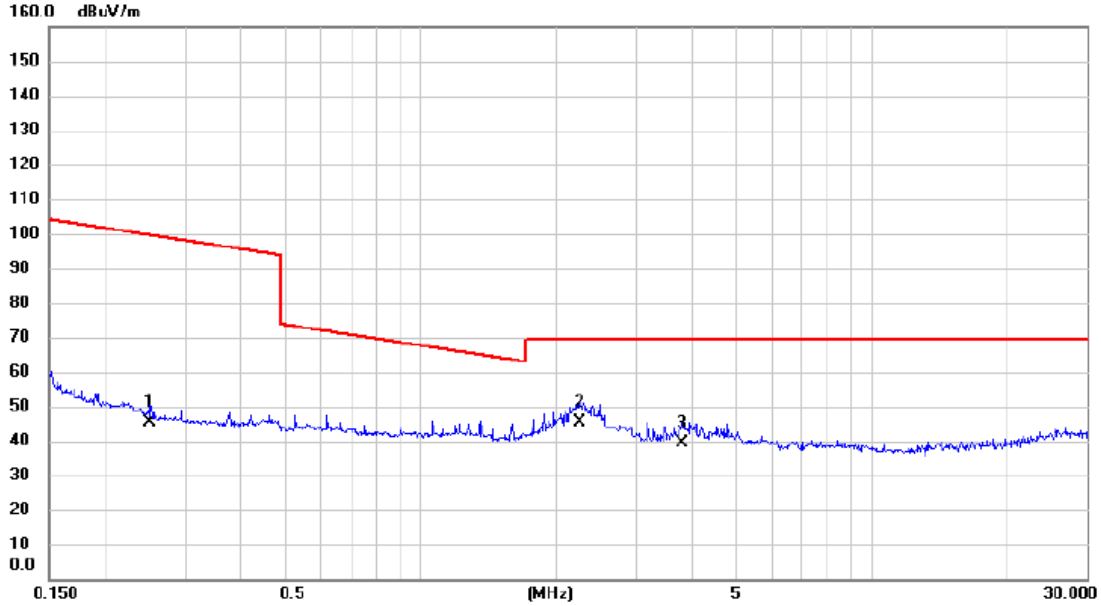
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	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

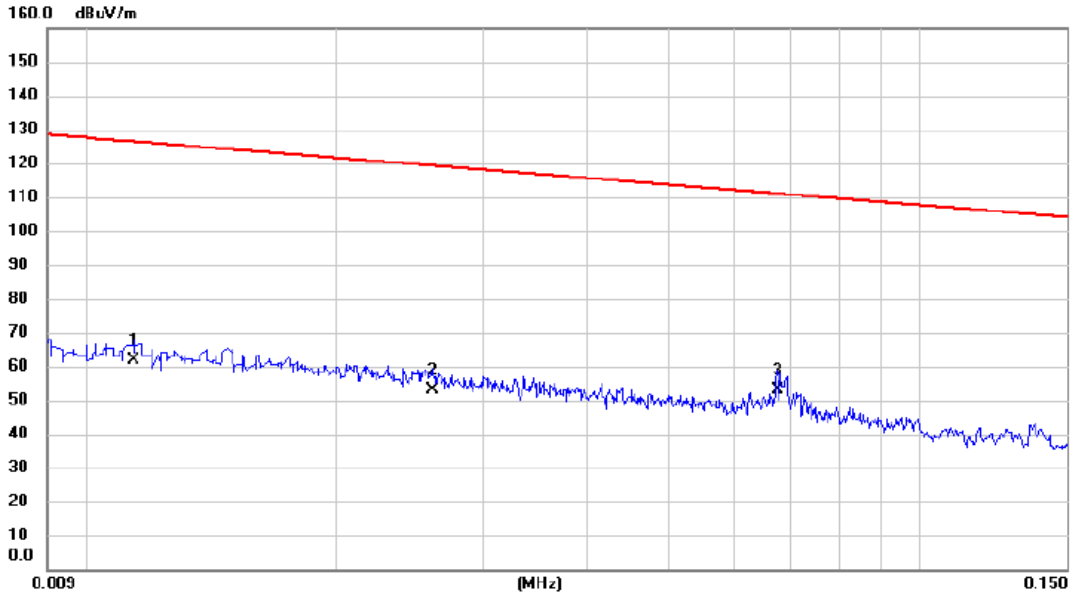
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	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

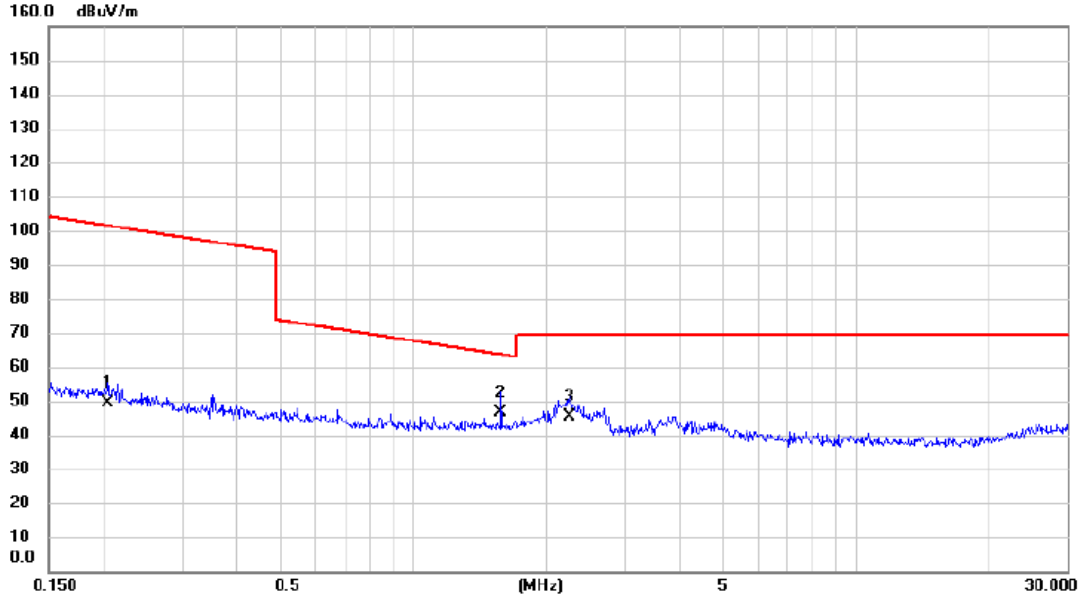
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	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

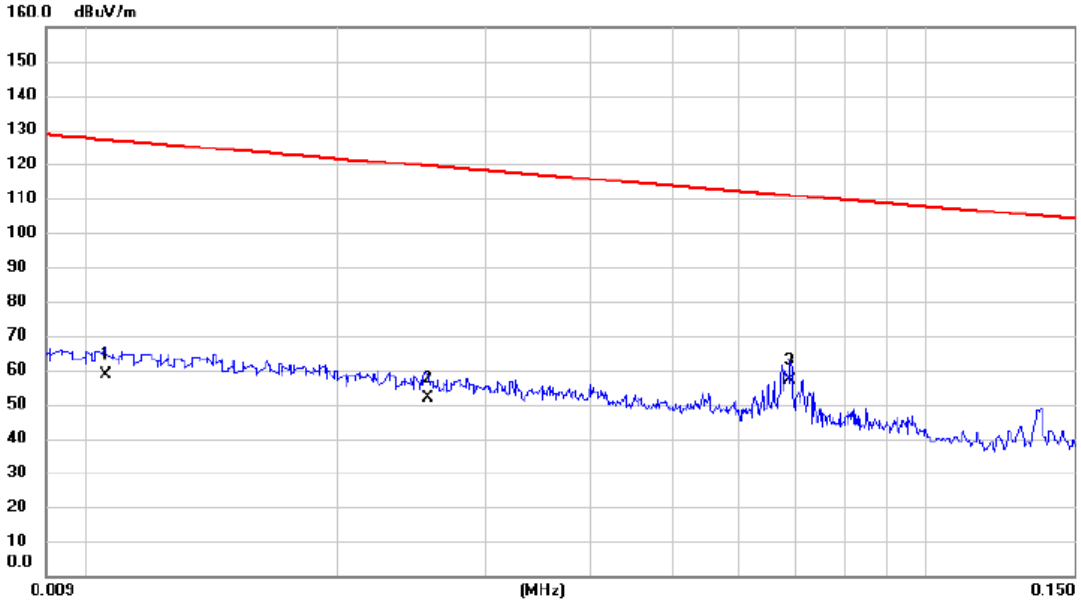
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	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

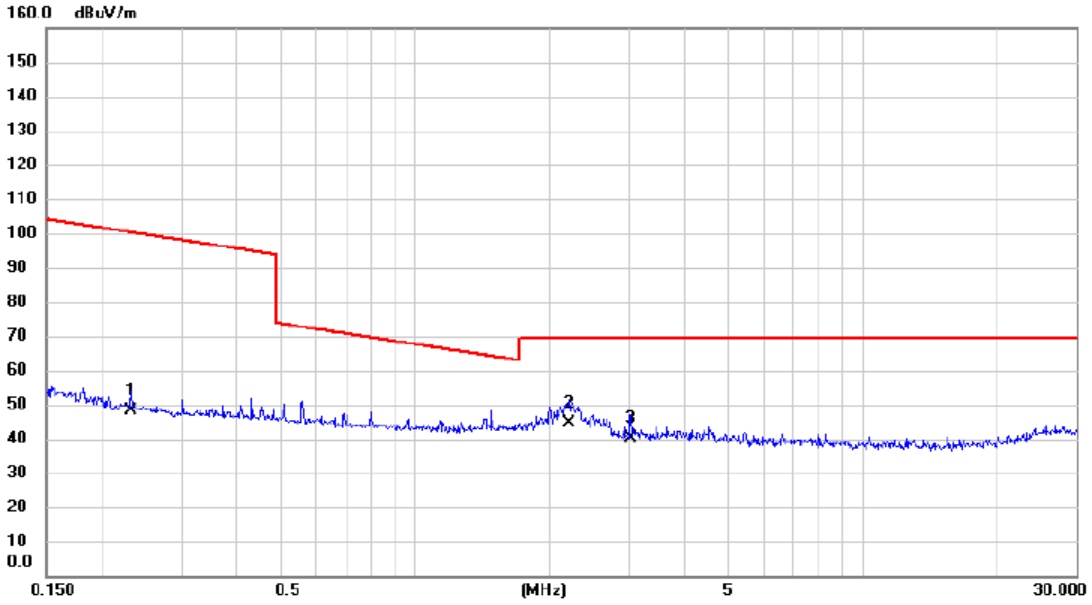
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	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

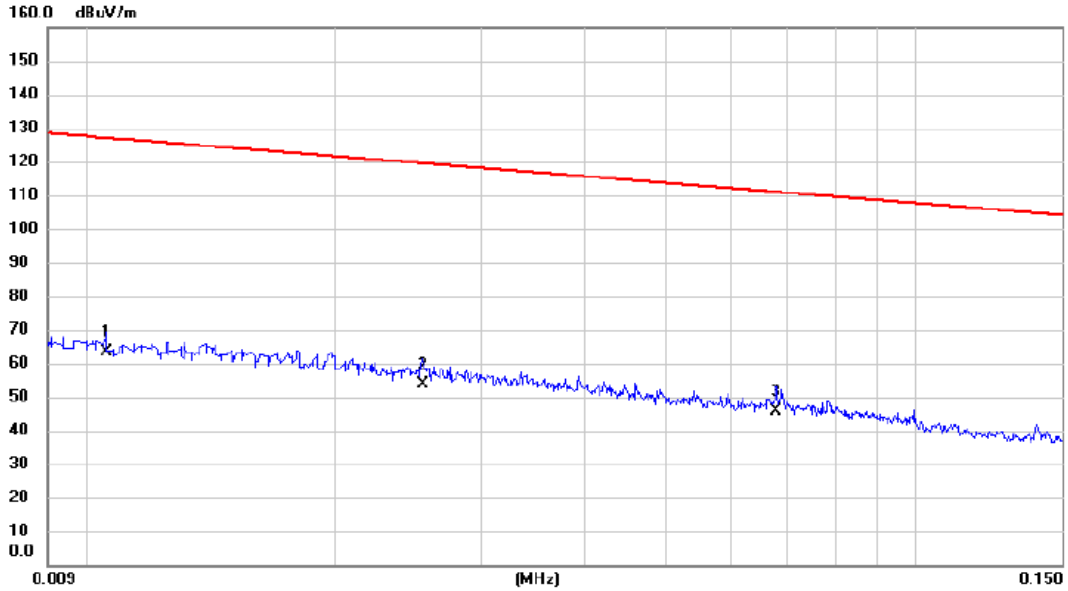
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	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

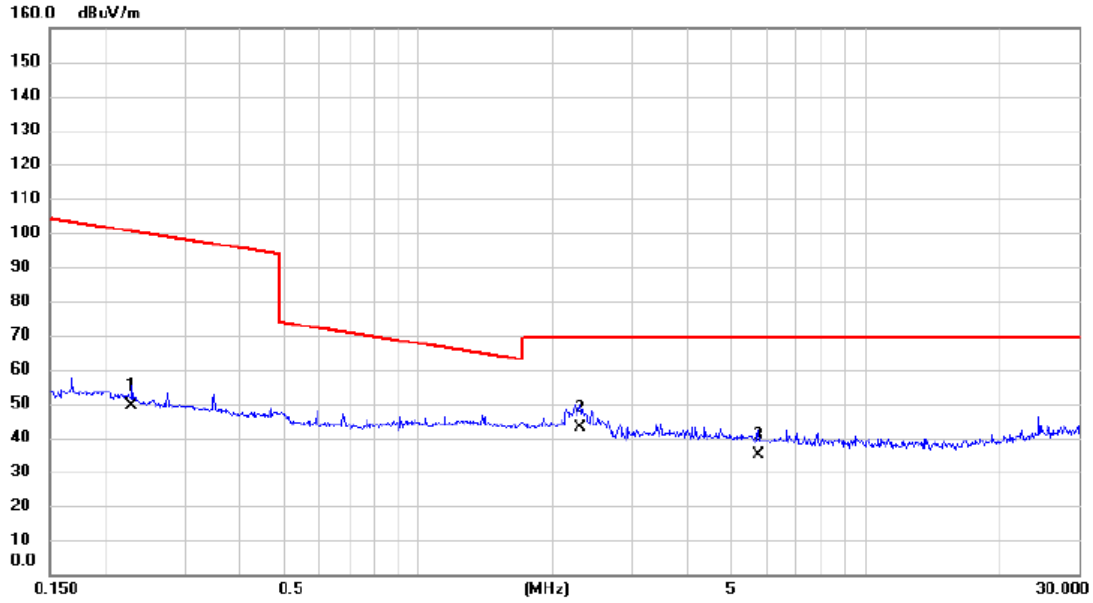
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	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

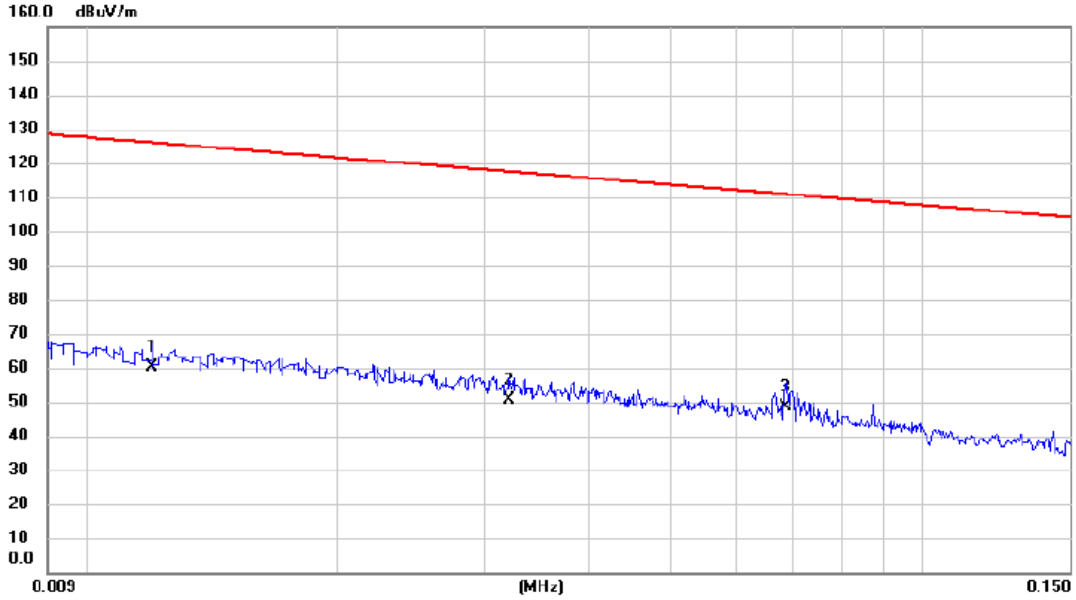
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	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

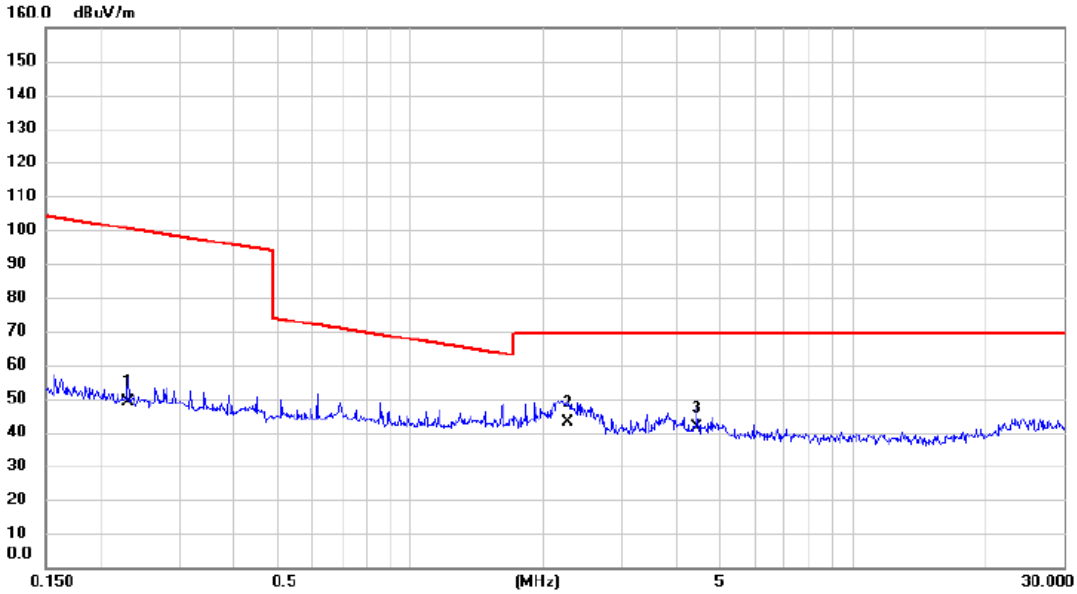
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	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°

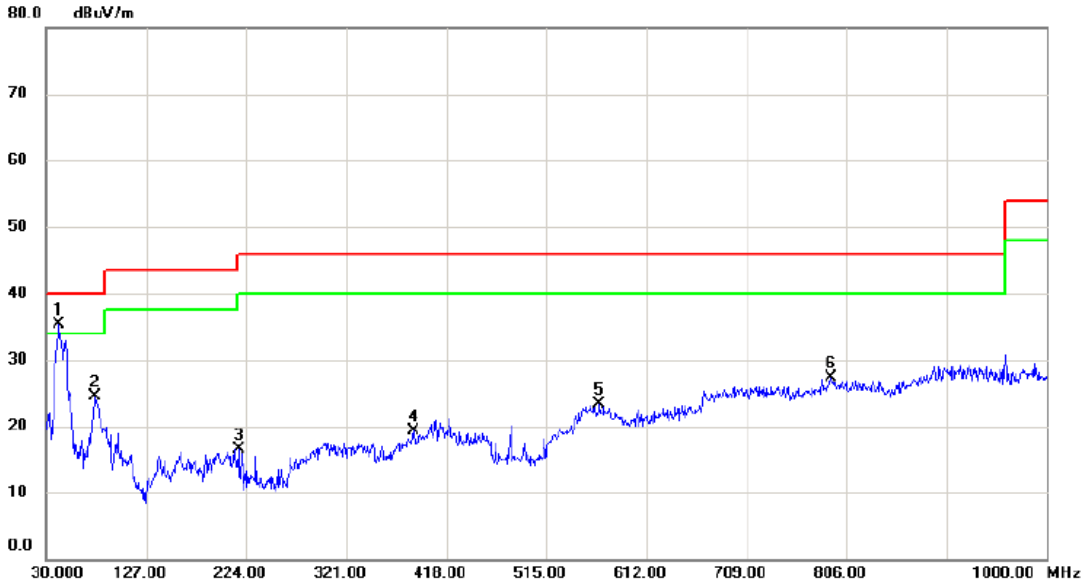


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.230	32.41	16.71	49.12	100.36	-51.24	AVG	
2	*	2.272	27.49	15.43	42.92	69.54	-26.62	QP	
3		4.431	26.68	14.71	41.39	69.54	-28.15	QP	

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

Test Mode:	TX 2402MHz _CH00_1Mbps_Adapter: BYD

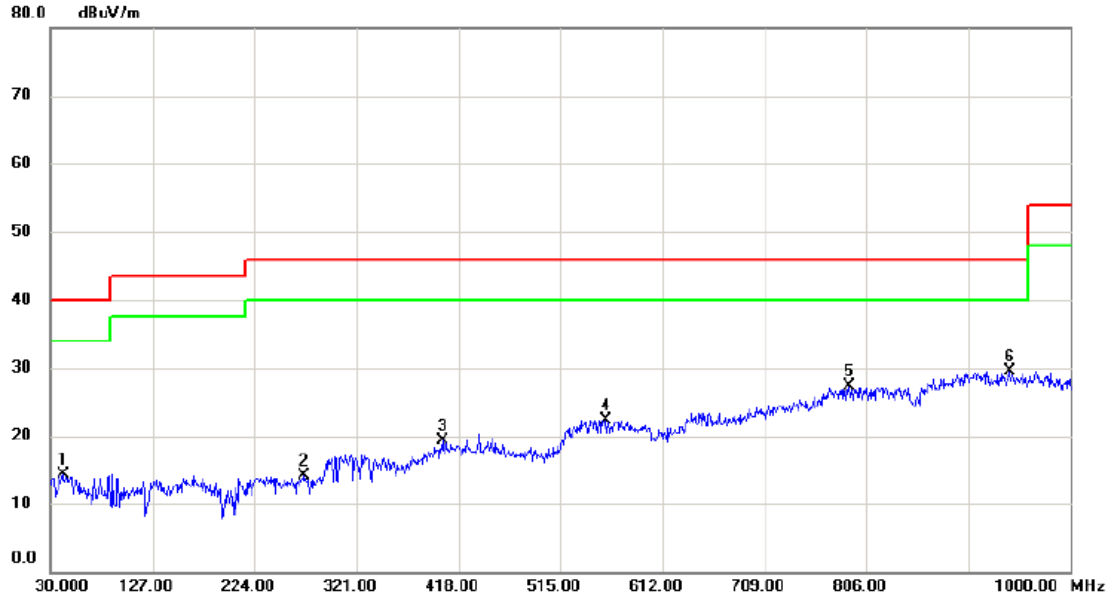
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	42.610	48.58	-13.36	35.22	40.00	-4.78	peak	
2		77.530	40.76	-16.31	24.45	40.00	-15.55	peak	
3		216.240	30.95	-14.40	16.55	46.00	-29.45	peak	
4		385.990	28.03	-8.74	19.29	46.00	-26.71	peak	
5		566.410	28.67	-5.37	23.30	46.00	-22.70	peak	
6		790.480	27.46	-0.16	27.30	46.00	-18.70	peak	

Test Mode:	TX 2402MHz _CH00_1Mbps_Adapter: BYD

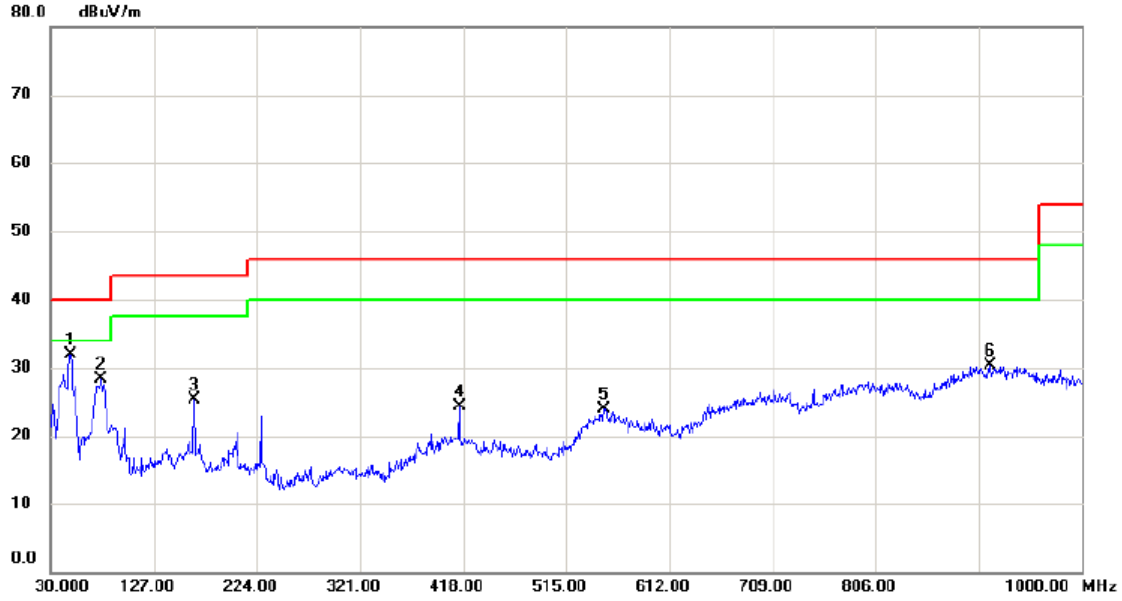
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		41.640	27.86	-13.56	14.30	40.00	-25.70	peak	
2		271.530	27.24	-13.21	14.03	46.00	-31.97	peak	
3		402.480	27.11	-7.80	19.31	46.00	-26.69	peak	
4		558.650	27.36	-4.98	22.38	46.00	-23.62	peak	
5		789.510	27.48	-0.20	27.28	46.00	-18.72	peak	
6	*	941.800	27.04	2.47	29.51	46.00	-16.49	peak	

Test Mode:	TX 2480MHz _CH78_1Mbps_Adapter: BYD

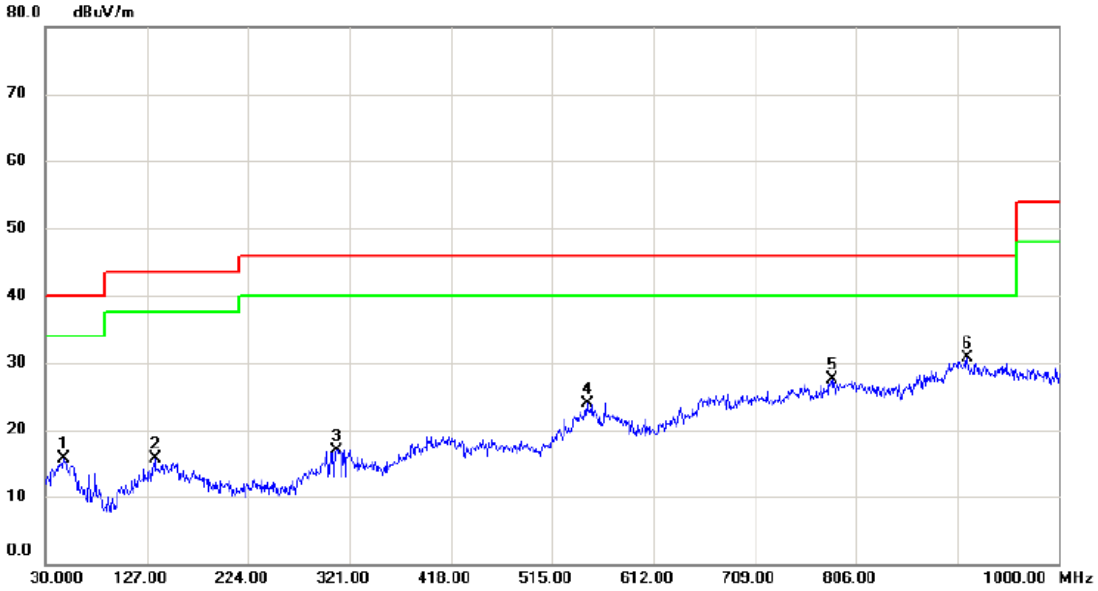
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	48.430	45.08	-13.11	31.97	40.00	-8.03	peak	
2		77.530	44.52	-16.31	28.21	40.00	-11.79	peak	
3		164.830	37.45	-12.20	25.25	43.50	-18.25	peak	
4		414.120	32.14	-7.85	24.29	46.00	-21.71	peak	
5		550.890	28.52	-4.59	23.93	46.00	-22.07	peak	
6		913.670	27.77	2.59	30.36	46.00	-15.64	peak	

Test Mode:	TX 2480MHz _CH78_1Mbps_Adapter: BYD

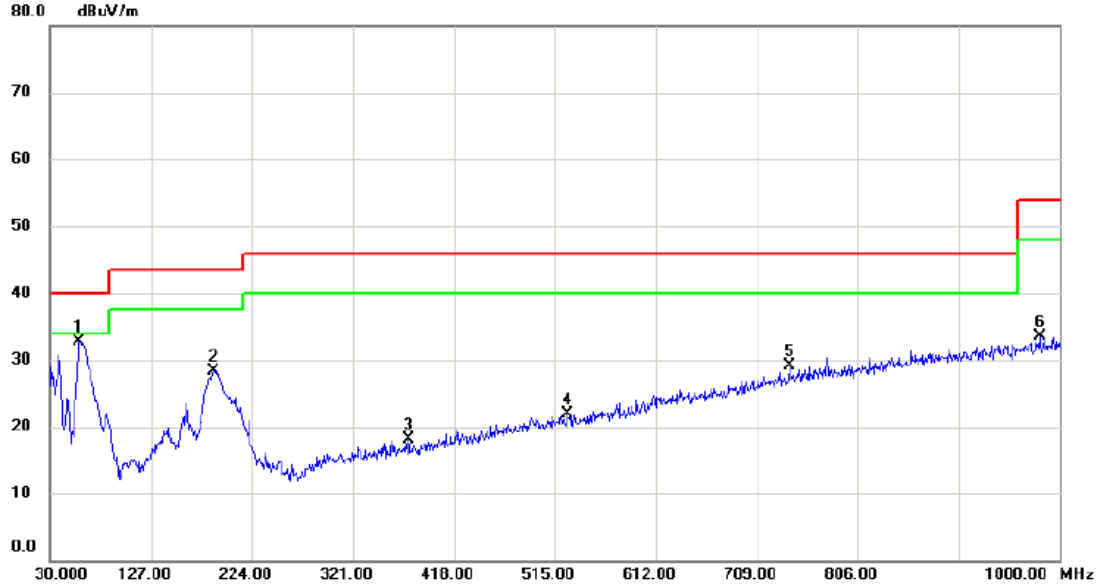
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		47.460	28.54	-12.87	15.67	40.00	-24.33	peak	
2		134.760	28.74	-13.01	15.73	43.50	-27.77	peak	
3		308.390	27.30	-10.34	16.96	46.00	-29.04	peak	
4		548.950	28.60	-4.64	23.96	46.00	-22.04	peak	
5		783.690	27.99	-0.46	27.53	46.00	-18.47	peak	
6	*	912.700	28.05	2.59	30.64	46.00	-15.36	peak	

Test Mode:	TX 2402MHz_CH00_1Mbps_Adapter: PHITEK

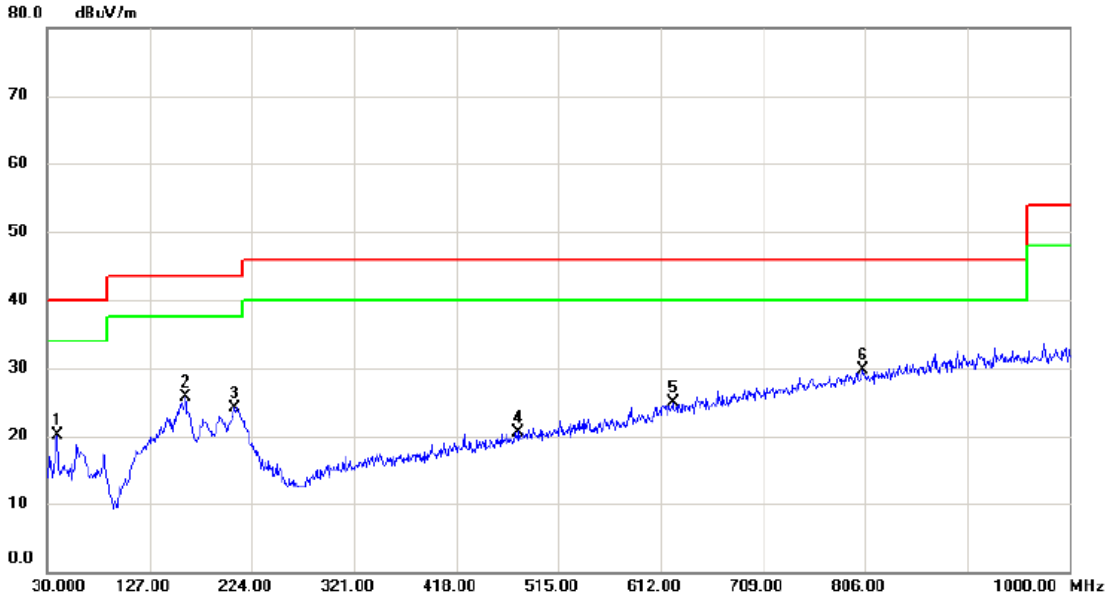
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	58.130	46.63	-13.85	32.78	40.00	-7.22	peak	
2		187.140	40.59	-12.21	28.38	43.50	-15.12	peak	
3		374.350	29.18	-11.03	18.15	46.00	-27.85	peak	
4		526.640	29.27	-7.36	21.91	46.00	-24.09	peak	
5		740.040	30.72	-1.70	29.02	46.00	-16.98	peak	
6		980.600	29.66	3.82	33.48	54.00	-20.52	peak	

Test Mode:	TX 2402MHz_CH00_1Mbps_Adapter: PHITEK

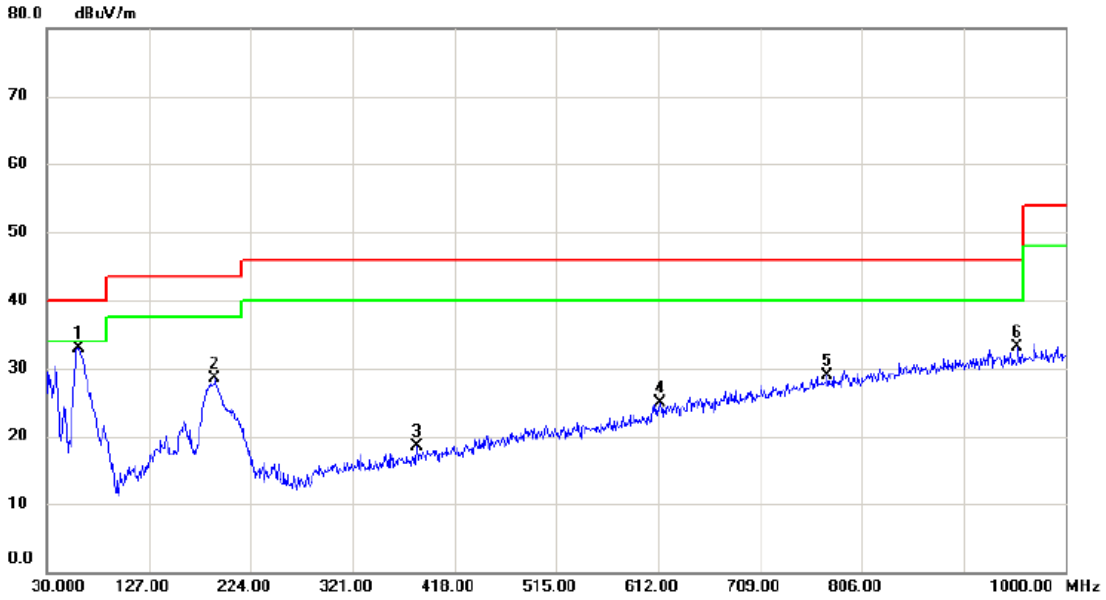
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		39.700	33.88	-13.77	20.11	40.00	-19.89	peak	
2		160.950	38.18	-12.49	25.69	43.50	-17.81	peak	
3		207.510	37.61	-13.51	24.10	43.50	-19.40	peak	
4		477.170	29.11	-8.51	20.60	46.00	-25.40	peak	
5		623.640	30.00	-5.02	24.98	46.00	-21.02	peak	
6	*	804.060	29.84	-0.16	29.68	46.00	-16.32	peak	

Test Mode:	TX 2480MHz_CH78_1Mbps_Adapter: PHITEK

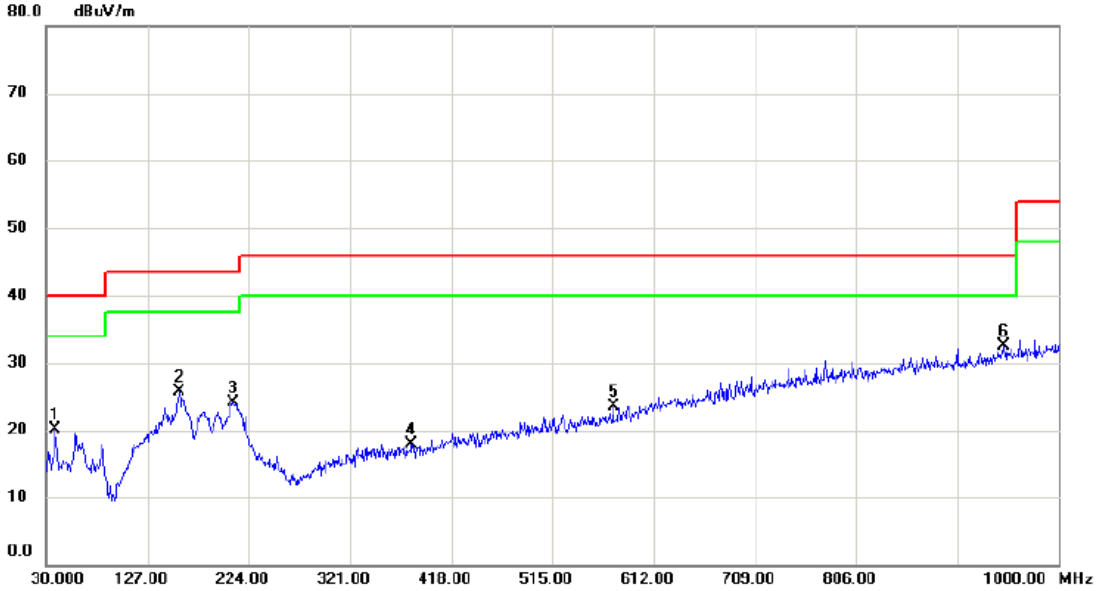
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	60.070	46.91	-14.04	32.87	40.00	-7.13	peak	
2		190.050	40.97	-12.45	28.52	43.50	-14.98	peak	
3		382.110	29.47	-10.93	18.54	46.00	-27.46	peak	
4		613.940	30.09	-5.21	24.88	46.00	-21.12	peak	
5		773.020	29.84	-0.88	28.96	46.00	-17.04	peak	
6		954.410	29.83	3.30	33.13	46.00	-12.87	peak	

Test Mode:	TX 2480MHz_CH78_1Mbps_Adapter: PHITEK

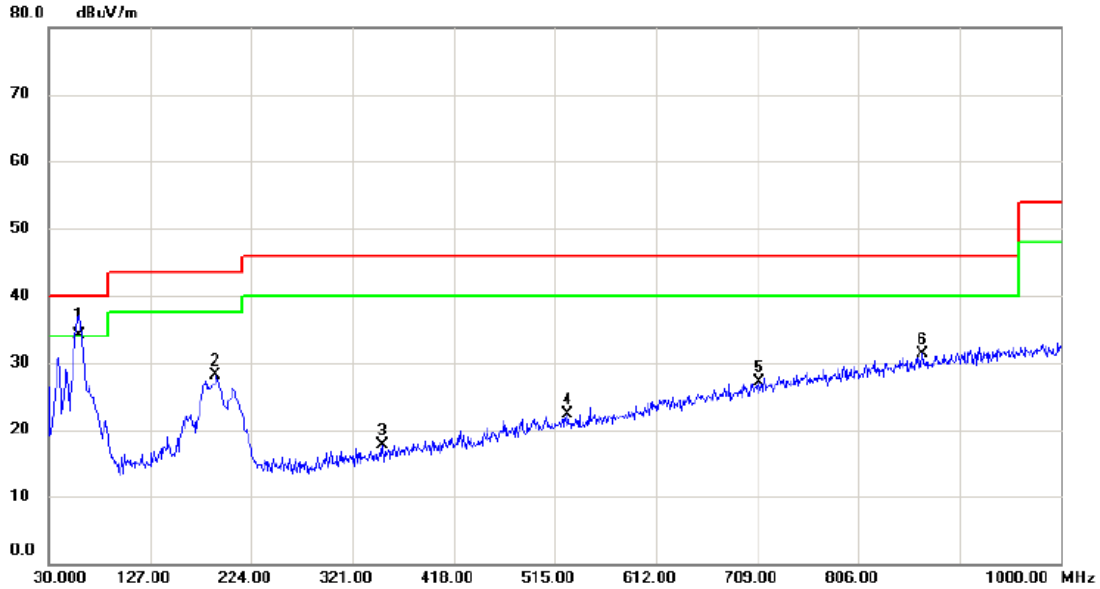
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		38.730	34.00	-13.93	20.07	40.00	-19.93	peak	
2		157.070	38.45	-12.73	25.72	43.50	-17.78	peak	
3		208.480	37.53	-13.51	24.02	43.50	-19.48	peak	
4		380.170	28.89	-10.95	17.94	46.00	-28.06	peak	
5		573.200	29.67	-6.22	23.45	46.00	-22.55	peak	
6	*	947.620	29.43	3.16	32.59	46.00	-13.41	peak	

Test Mode:	TX 2402MHz_CH00_1Mbps_Adapter: Huntkey

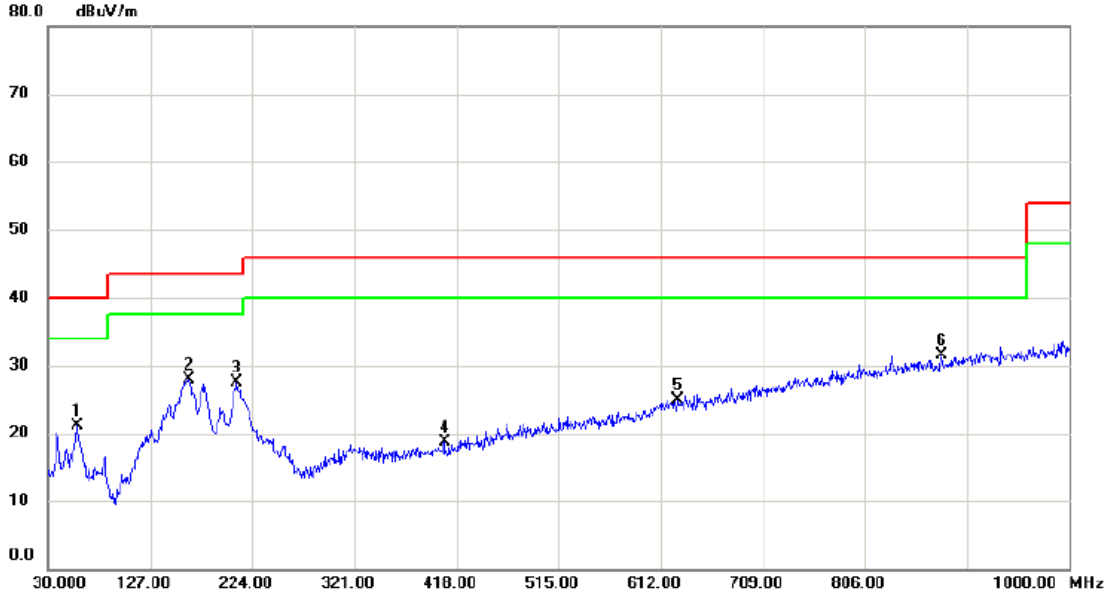
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	59.100	47.98	-13.95	34.03	40.00	-5.97	QP	
2		190.050	40.50	-12.45	28.05	43.50	-15.45	peak	
3		350.100	29.02	-11.34	17.68	46.00	-28.32	peak	
4		527.610	29.61	-7.33	22.28	46.00	-23.72	peak	
5		710.940	29.64	-2.59	27.05	46.00	-18.95	peak	
6		867.110	29.87	1.49	31.36	46.00	-14.64	peak	

Test Mode:	TX 2402MHz_CH00_1Mbps_Adapter: Huntkey

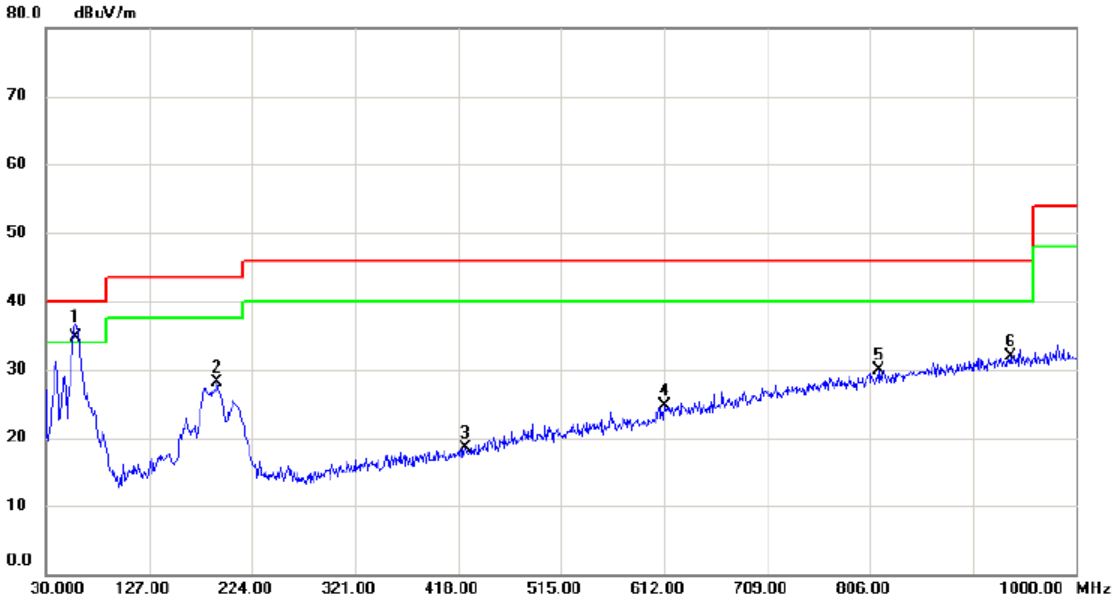
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		57.160	34.83	-13.77	21.06	40.00	-18.94	peak	
2		163.860	40.19	-12.32	27.87	43.50	-15.63	peak	
3		209.450	41.11	-13.54	27.57	43.50	-15.93	peak	
4		406.360	29.13	-10.51	18.62	46.00	-27.38	peak	
5		628.490	29.89	-4.93	24.96	46.00	-21.04	peak	
6	*	878.750	29.66	1.75	31.41	46.00	-14.59	peak	

Test Mode:	TX 2480MHz_CH78_1Mbps_Adapter: Huntkey

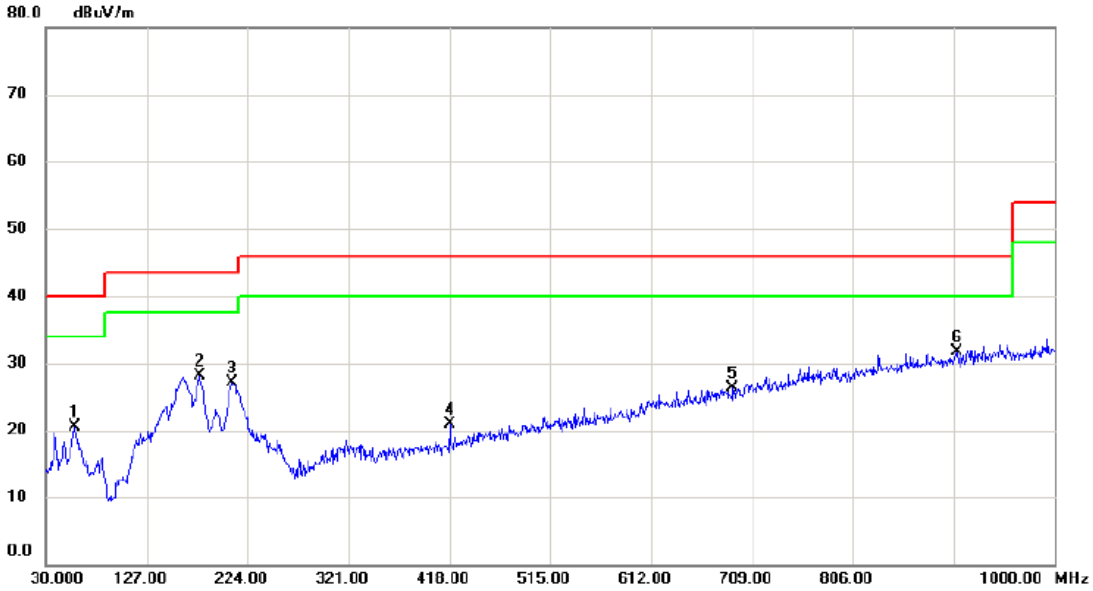
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	58.130	48.55	-13.85	34.70	40.00	-5.30	QP	
2		191.020	40.72	-12.54	28.18	43.50	-15.32	peak	
3		424.790	28.44	-9.96	18.48	46.00	-27.52	peak	
4		612.000	30.02	-5.26	24.76	46.00	-21.24	peak	
5		814.730	29.67	0.14	29.81	46.00	-16.19	peak	
6		937.920	28.88	2.97	31.85	46.00	-14.15	peak	

Test Mode:	TX 2480MHz_CH78_1Mbps_Adapter: Huntkey

Horizontal

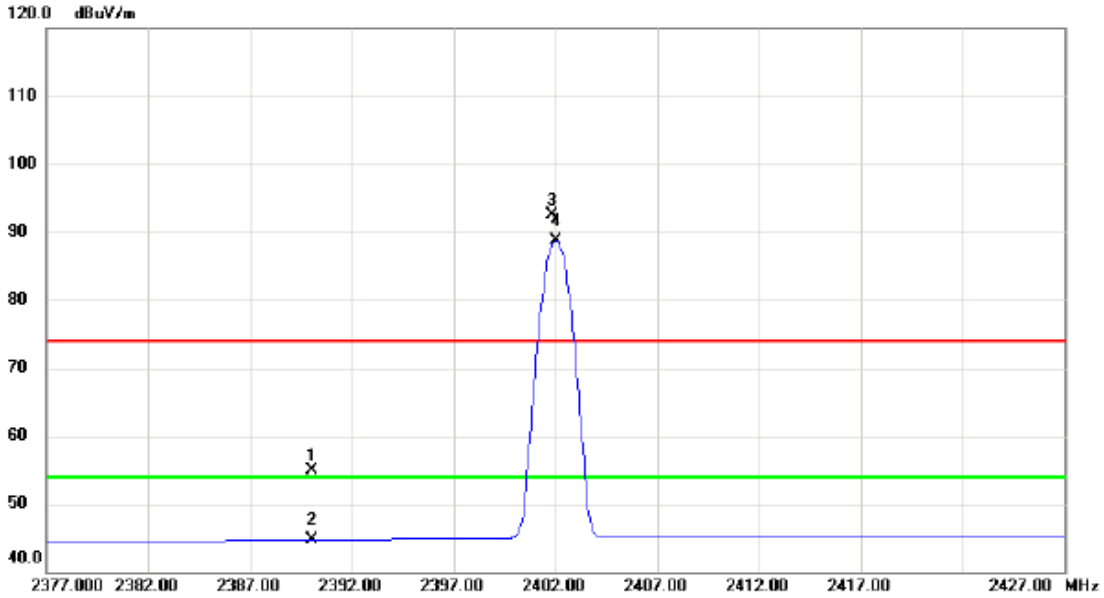


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		57.160	34.31	-13.77	20.54	40.00	-19.46	peak	
2		177.440	39.74	-11.72	28.02	43.50	-15.48	peak	
3		209.450	40.67	-13.54	27.13	43.50	-16.37	peak	
4		418.000	31.06	-10.16	20.90	46.00	-25.10	peak	
5		690.570	29.47	-3.22	26.25	46.00	-19.75	peak	
6	*	905.910	29.39	2.33	31.72	46.00	-14.28	peak	

ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)

Test Mode :	TX 2402MHz _CH00_1Mbps

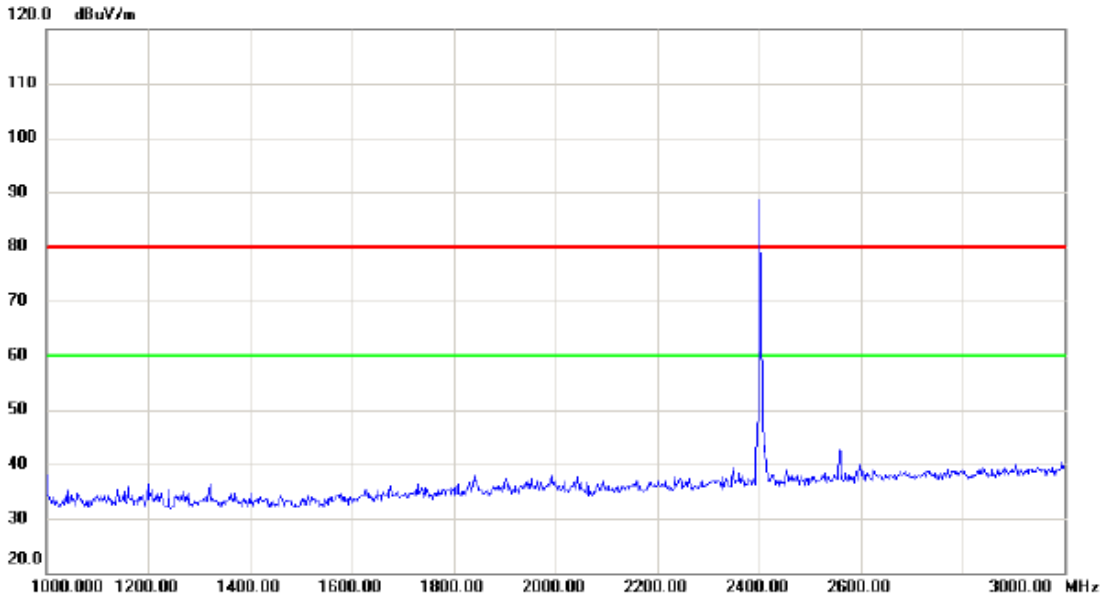
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	21.92	33.01	54.93	74.00	-19.07	peak	
2		2390.000	11.67	33.01	44.68	54.00	-9.32	AVG	
3	X	2401.850	59.47	33.06	92.53	74.00	18.53	peak	No Limit
4	*	2402.050	55.74	33.06	88.80	54.00	34.80	AVG	No Limit

Test Mode :	TX 2402MHz _CH00_1Mbps

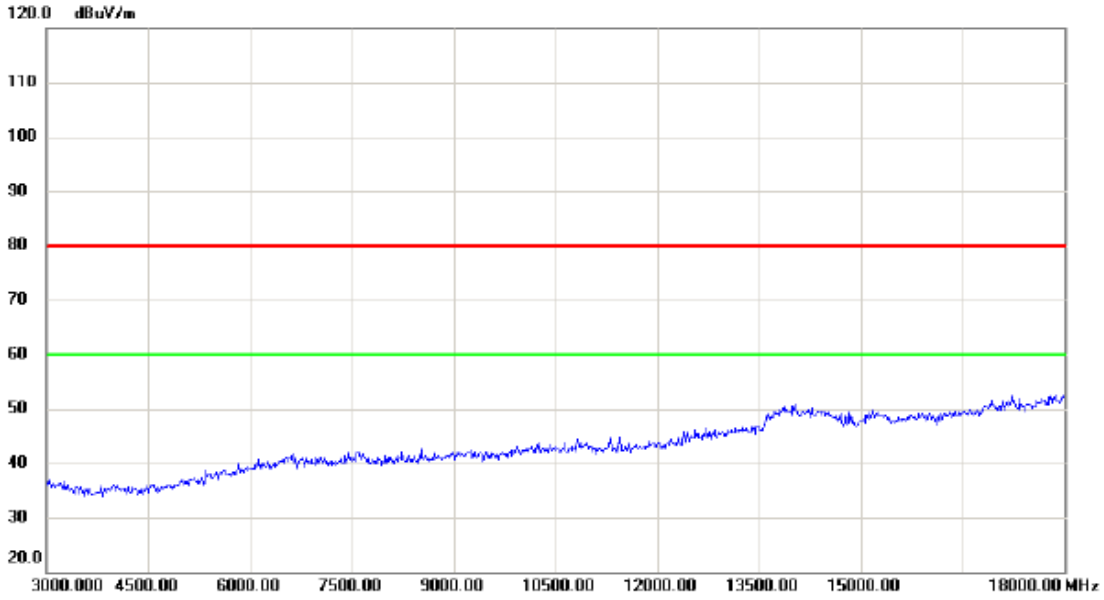
Vertical



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

Test Mode :	TX 2402MHz _CH00_1Mbps

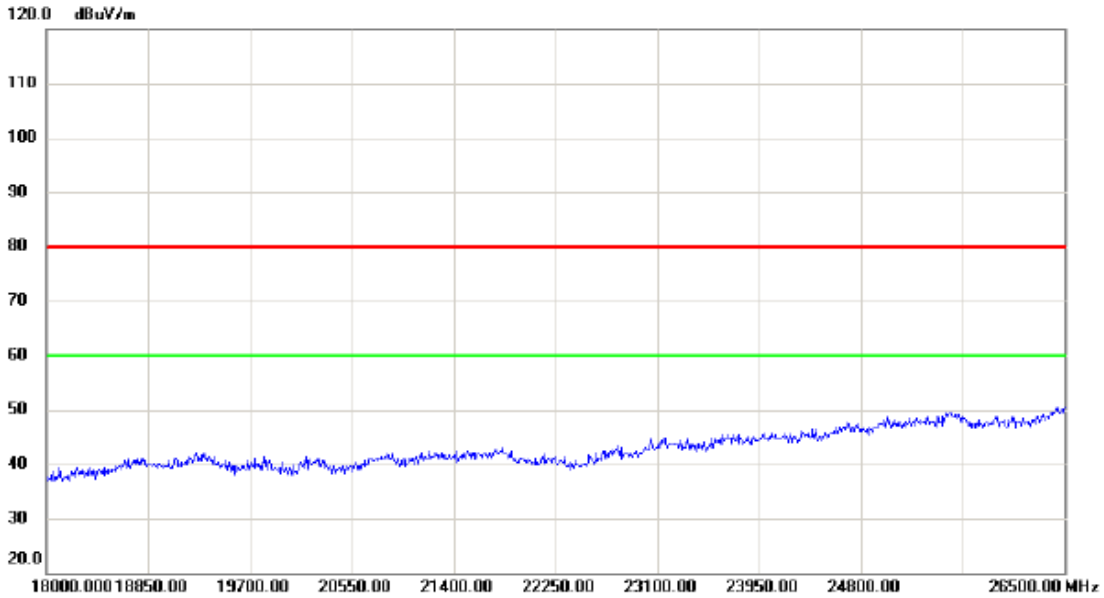
Vertical



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

Test Mode :	TX 2402MHz _CH00_1Mbps

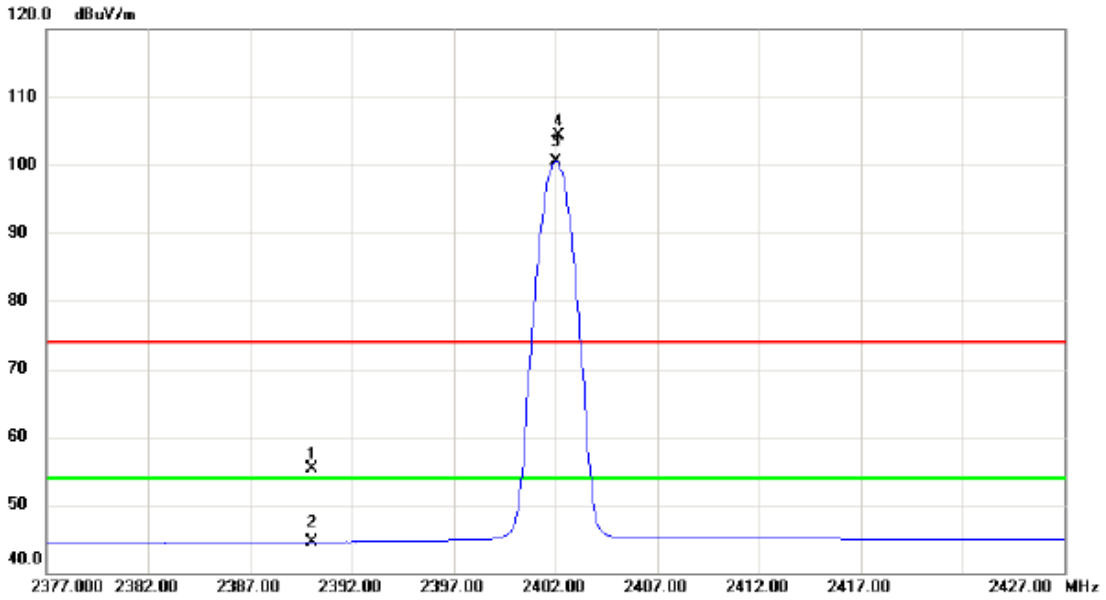
Vertical



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

Test Mode :	TX 2402MHz _CH00_1Mbps

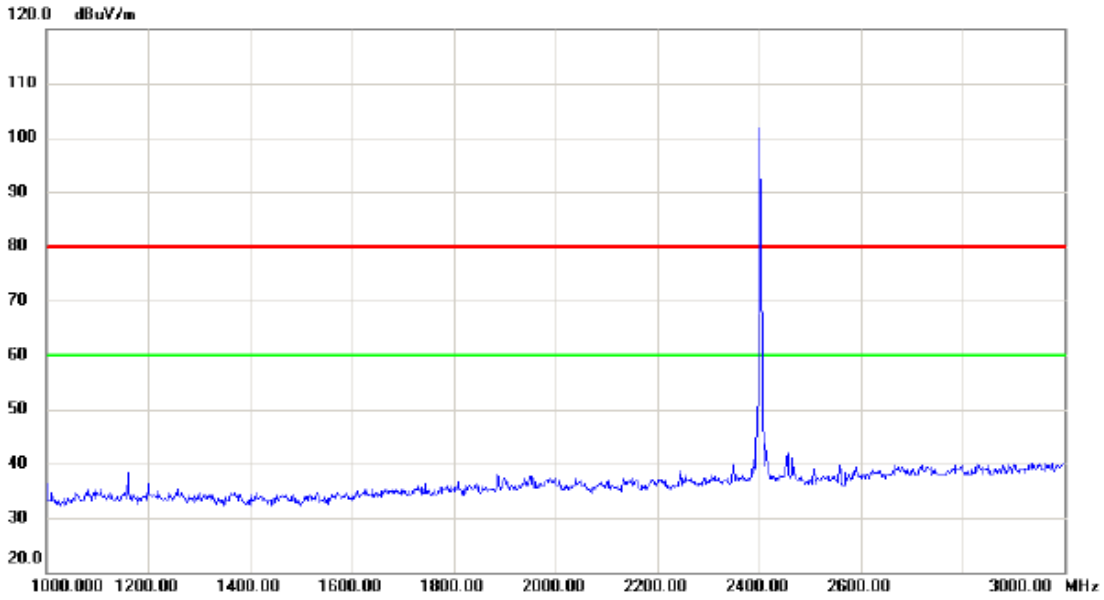
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	22.24	33.01	55.25	74.00	-18.75	peak	
2		2390.000	11.54	33.01	44.55	54.00	-9.45	AVG	
3	*	2402.050	67.48	33.06	100.54	54.00	46.54	AVG	No Limit
4	X	2402.150	71.25	33.06	104.31	74.00	30.31	peak	No Limit

Test Mode :	TX 2402MHz _CH00_1Mbps

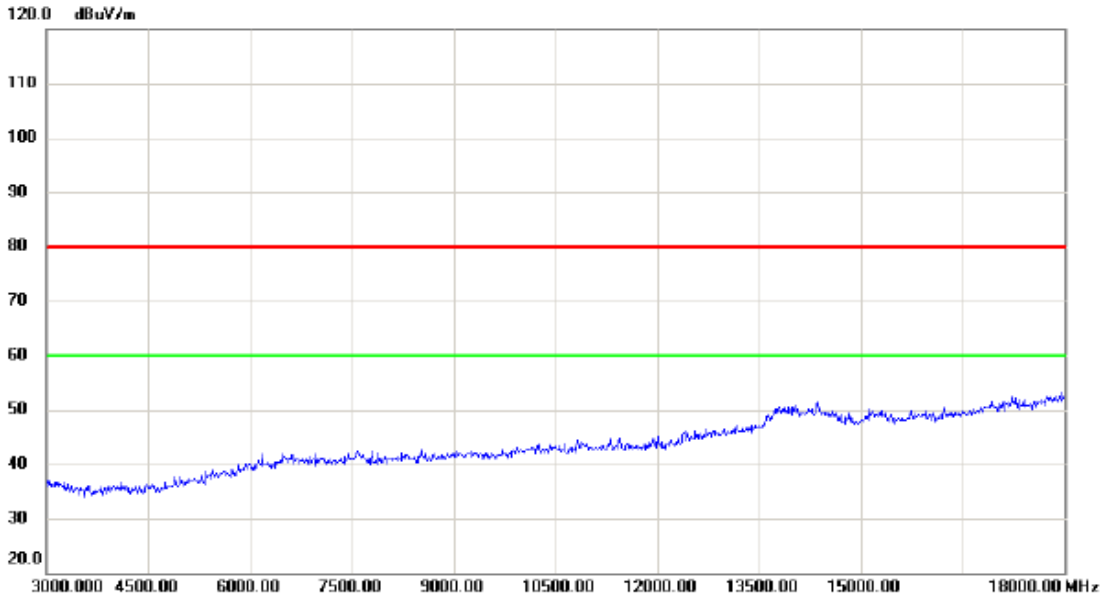
Horizontal



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

Test Mode :	TX 2402MHz _CH00_1Mbps

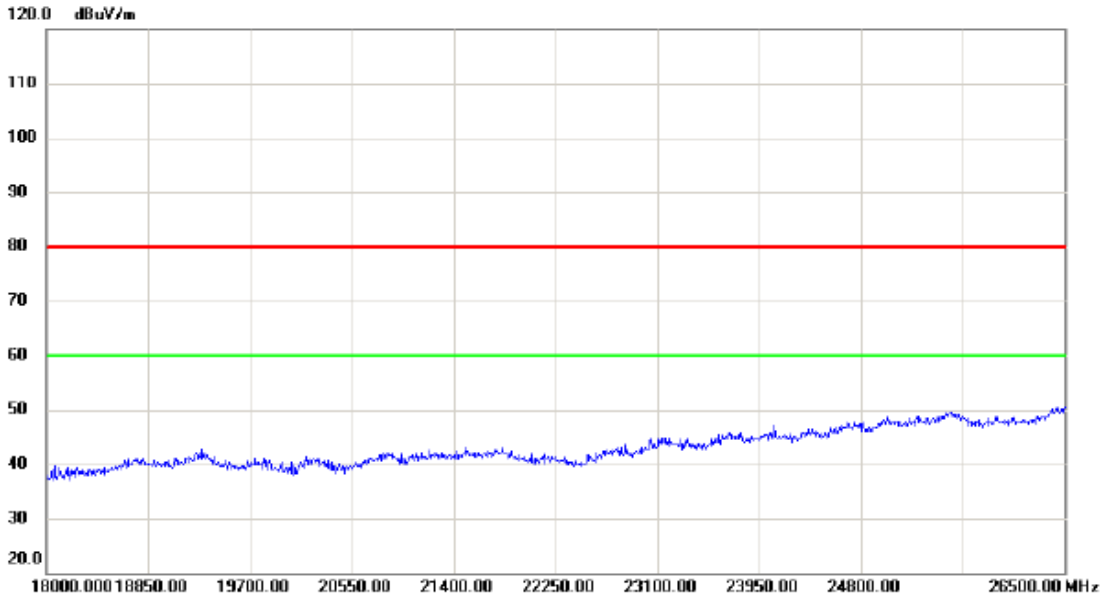
Horizontal



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

Test Mode :	TX 2402MHz _CH00_1Mbps

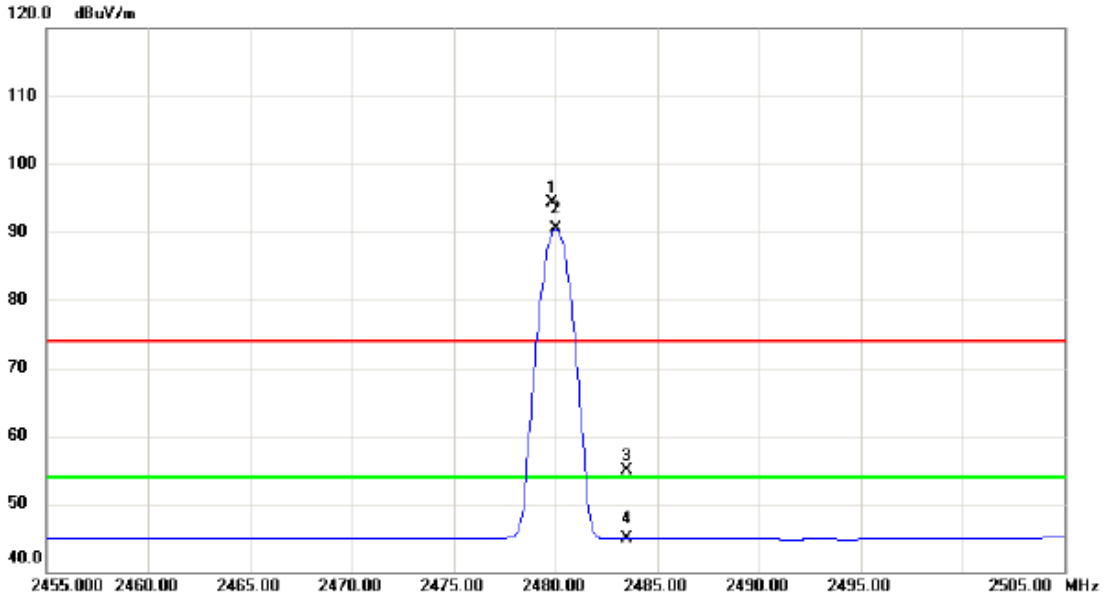
Horizontal



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

Test Mode :	TX 2480MHz _CH78_1Mbps

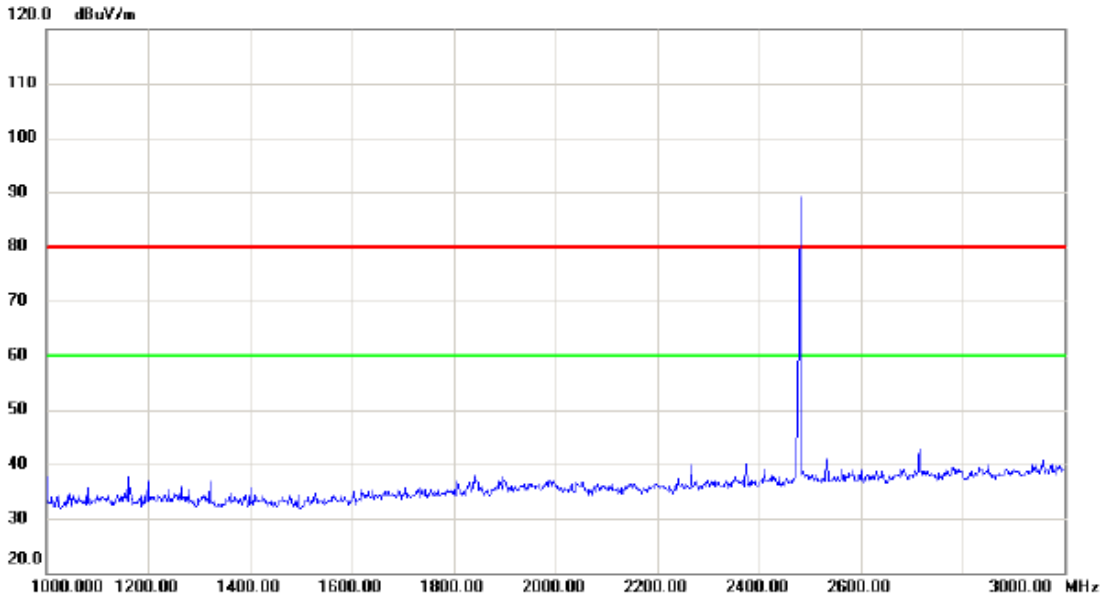
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2479.850	60.86	33.39	94.25	74.00	20.25	peak	No Limit
2	*	2480.050	57.08	33.39	90.47	54.00	36.47	AVG	No Limit
3		2483.500	21.41	33.40	54.81	74.00	-19.19	peak	
4		2483.500	11.45	33.40	44.85	54.00	-9.15	AVG	

Test Mode :	TX 2480MHz _CH78_1Mbps

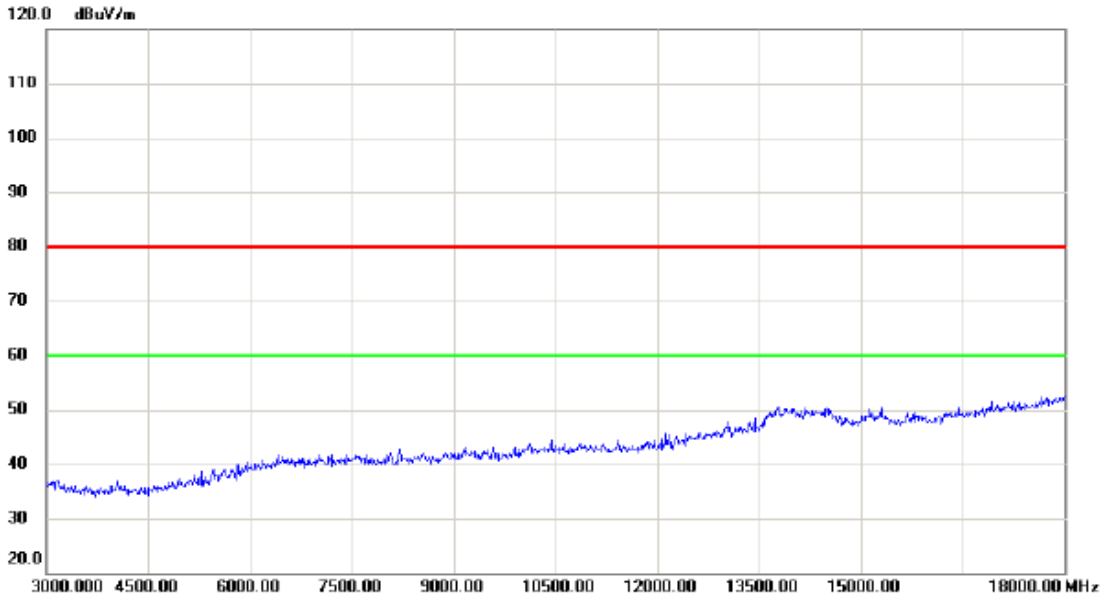
Vertical



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

Test Mode :	TX 2480MHz _CH78_1Mbps

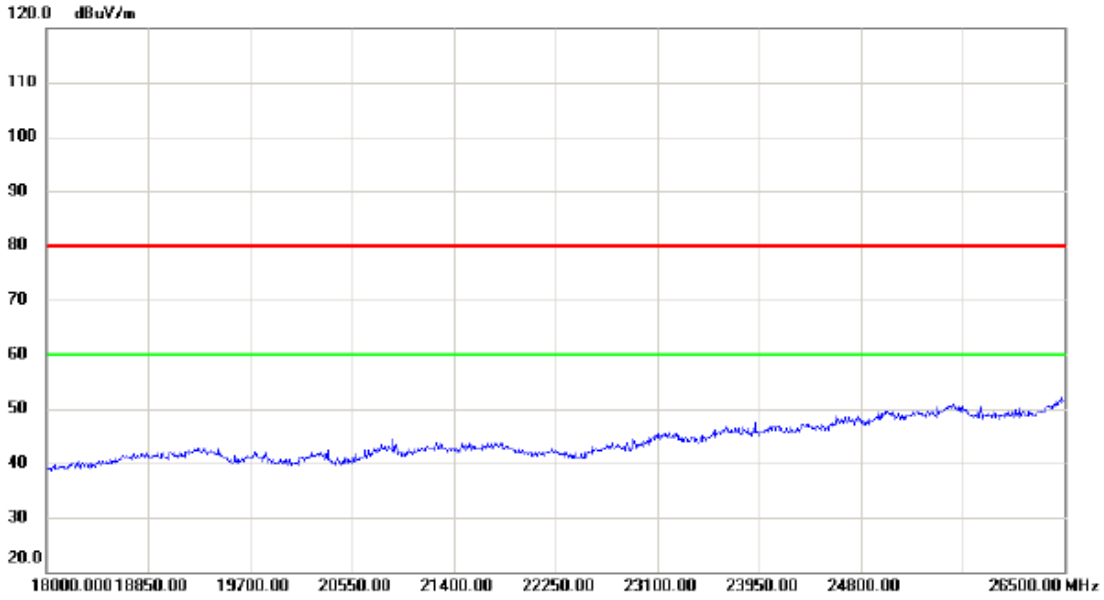
Vertical



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

Test Mode :	TX 2480MHz _CH78_1Mbps

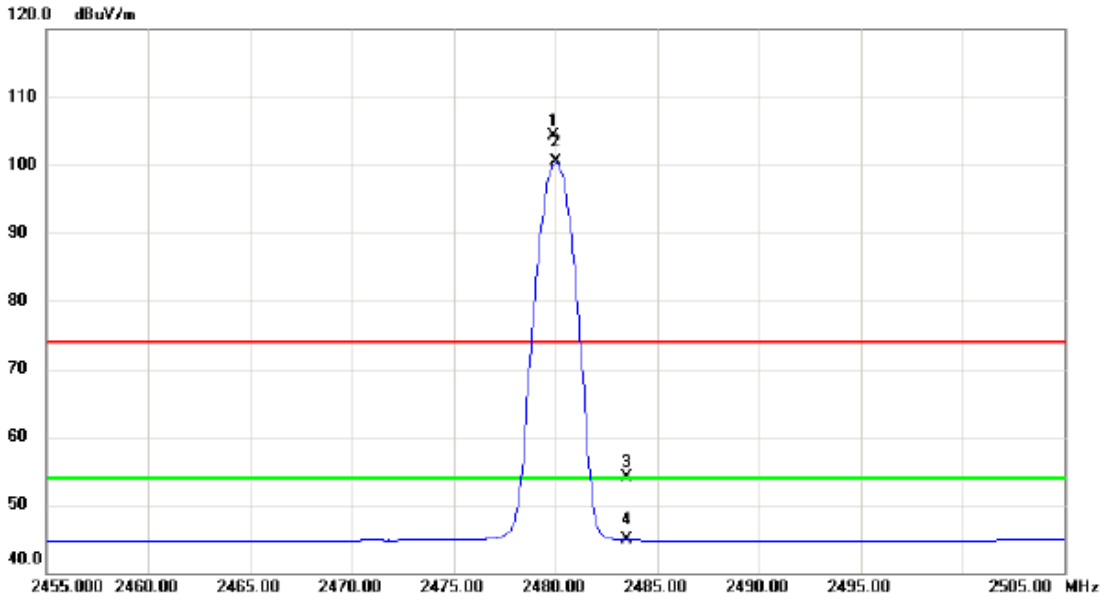
Vertical



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

Test Mode :	TX 2480MHz _CH78_1Mbps

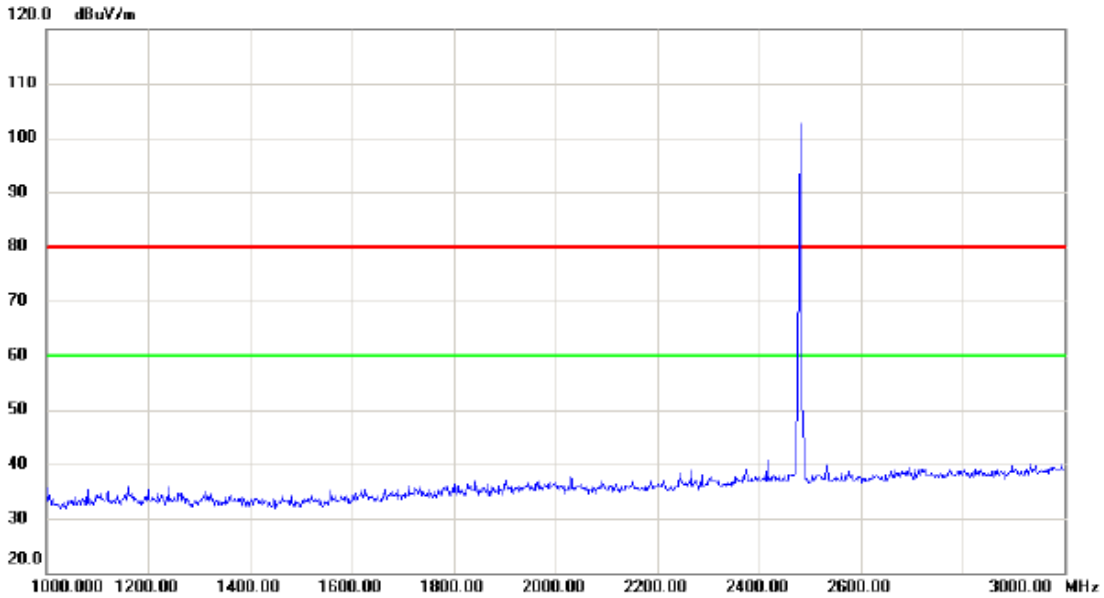
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2479.900	70.88	33.39	104.27	74.00	30.27	peak	No Limit
2	*	2480.050	67.05	33.39	100.44	54.00	46.44	AVG	No Limit
3		2483.500	20.71	33.40	54.11	74.00	-19.89	peak	
4		2483.500	11.44	33.40	44.84	54.00	-9.16	AVG	

Test Mode :	TX 2480MHz _CH78_1Mbps

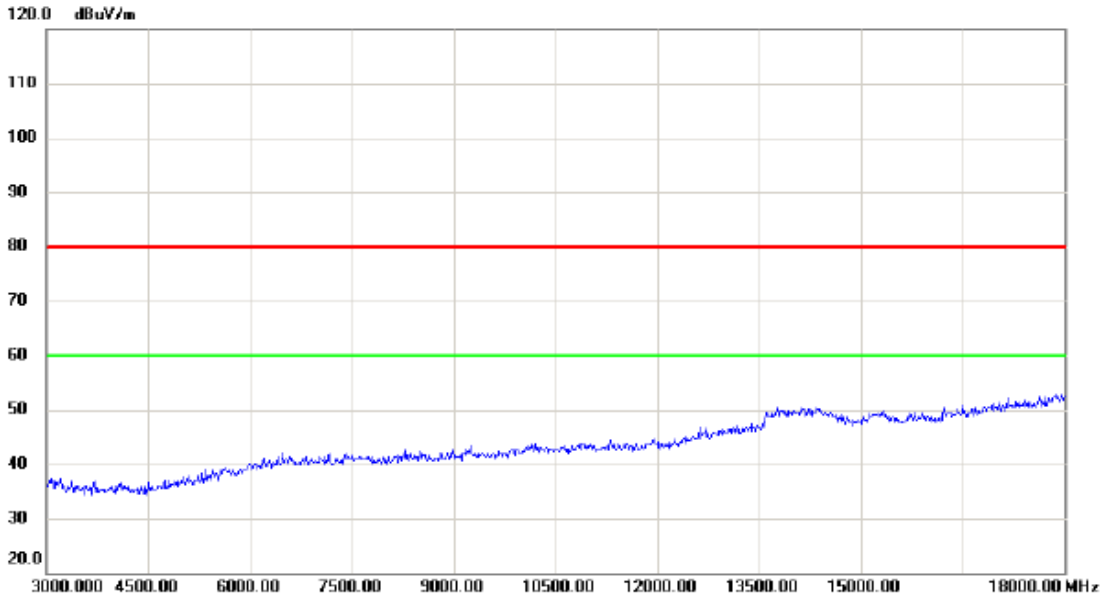
Horizontal



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

Test Mode :	TX 2480MHz _CH78_1Mbps

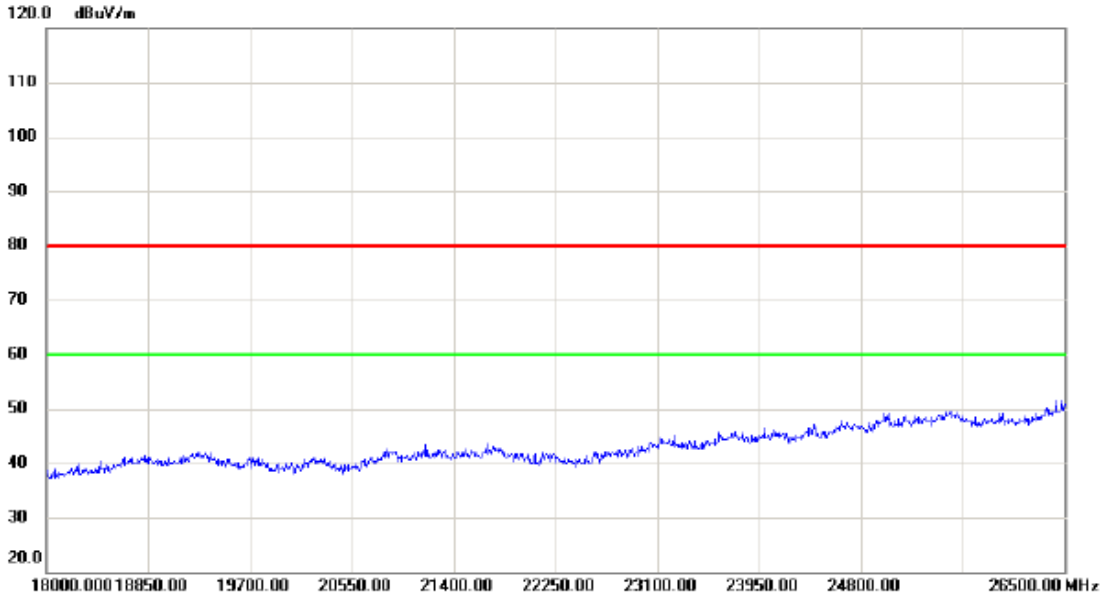
Horizontal



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

Test Mode :	TX 2480MHz _CH78_1Mbps

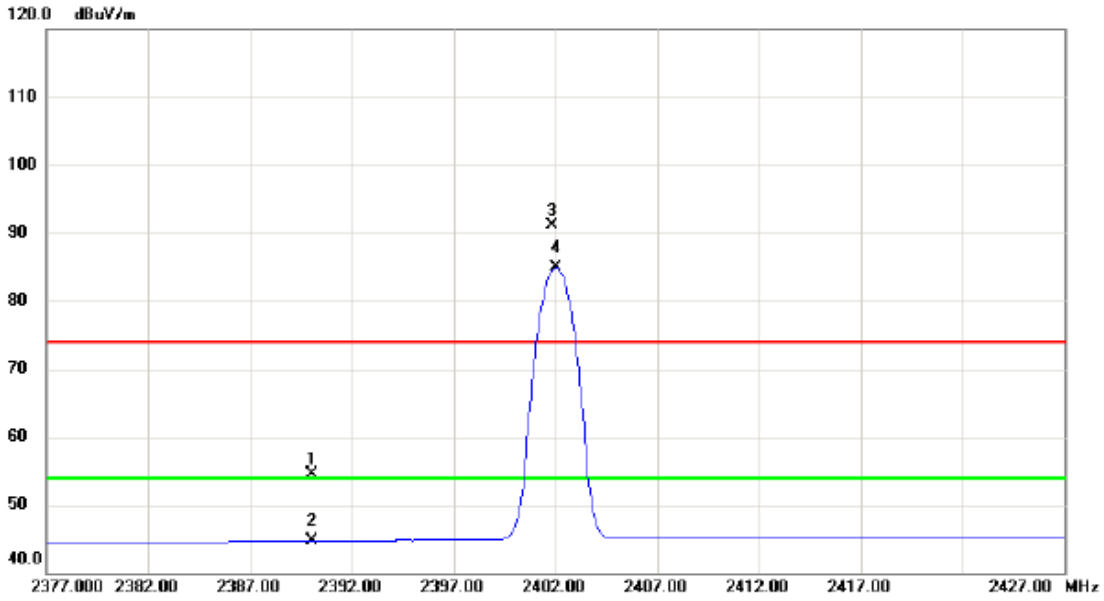
Horizontal



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

Test Mode :	TX 2402MHz _CH00_3Mbps

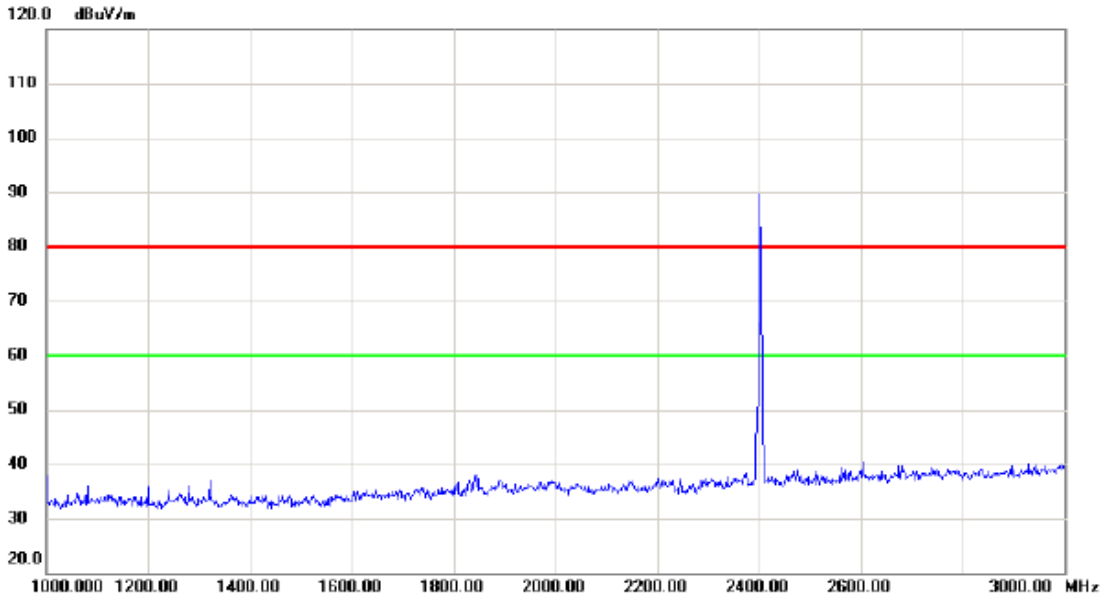
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	21.48	33.01	54.49	74.00	-19.51	peak	
2		2390.000	11.67	33.01	44.68	54.00	-9.32	AVG	
3	X	2401.850	58.03	33.06	91.09	74.00	17.09	peak	No Limit
4	*	2402.050	51.84	33.06	84.90	54.00	30.90	AVG	No Limit

Test Mode :	TX 2402MHz _CH00_3Mbps

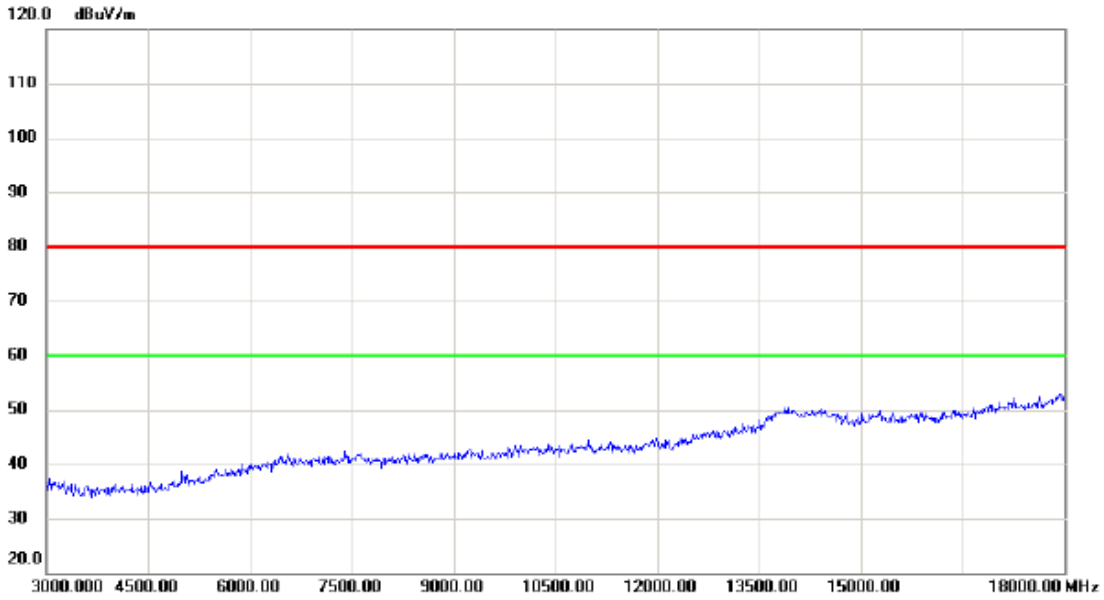
Vertical



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

Test Mode :	TX 2402MHz _CH00_3Mbps

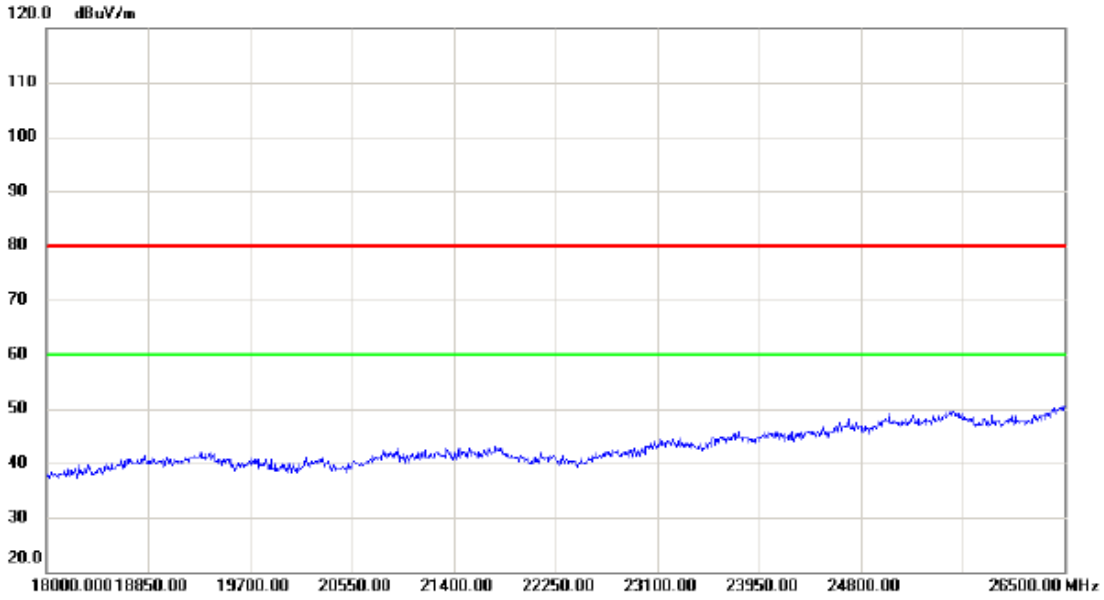
Vertical



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

Test Mode :	TX 2402MHz _CH00_3Mbps

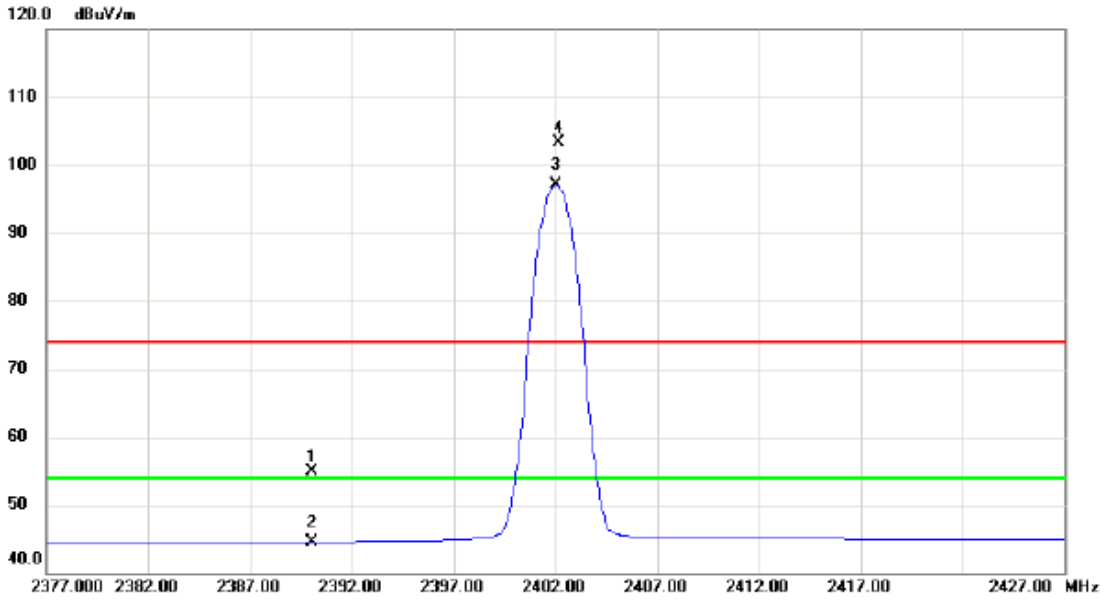
Vertical



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

Test Mode :	TX 2402MHz _CH00_3Mbps

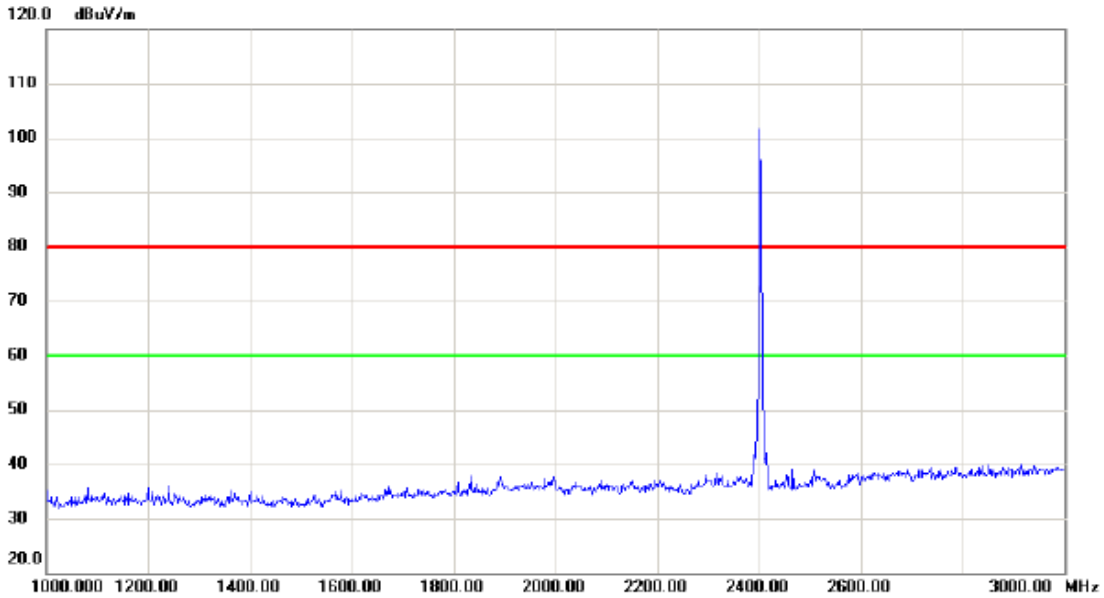
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	21.93	33.01	54.94	74.00	-19.06	peak	
2		2390.000	11.53	33.01	44.54	54.00	-9.46	AVG	
3	*	2402.050	63.98	33.06	97.04	54.00	43.04	AVG	No Limit
4	X	2402.200	70.26	33.06	103.32	74.00	29.32	peak	No Limit

Test Mode :	TX 2402MHz _CH00_3Mbps

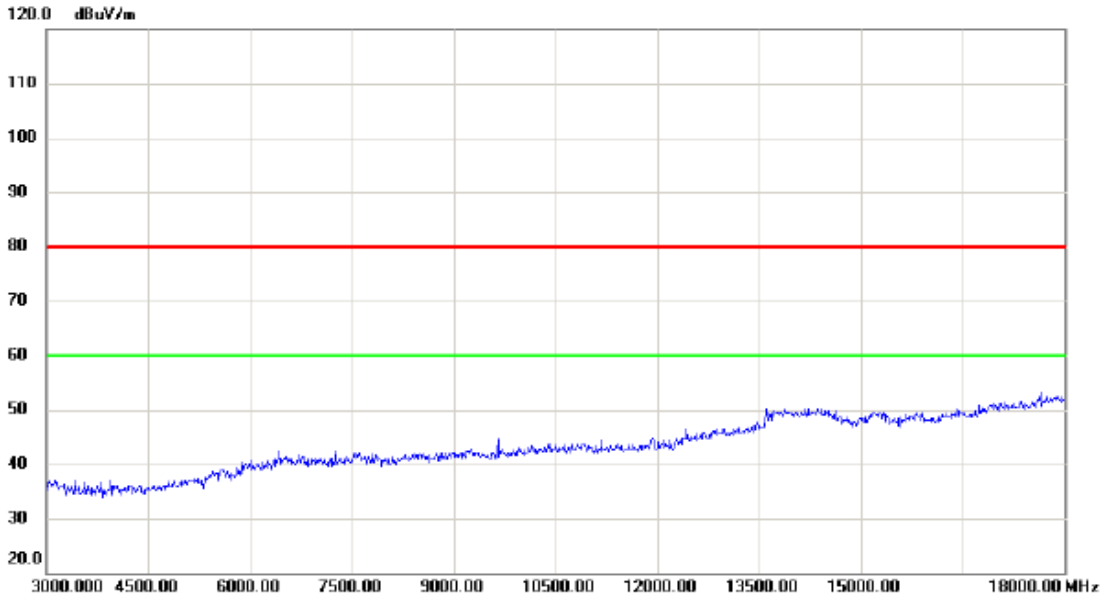
Horizontal



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

Test Mode :	TX 2402MHz _CH00_3Mbps

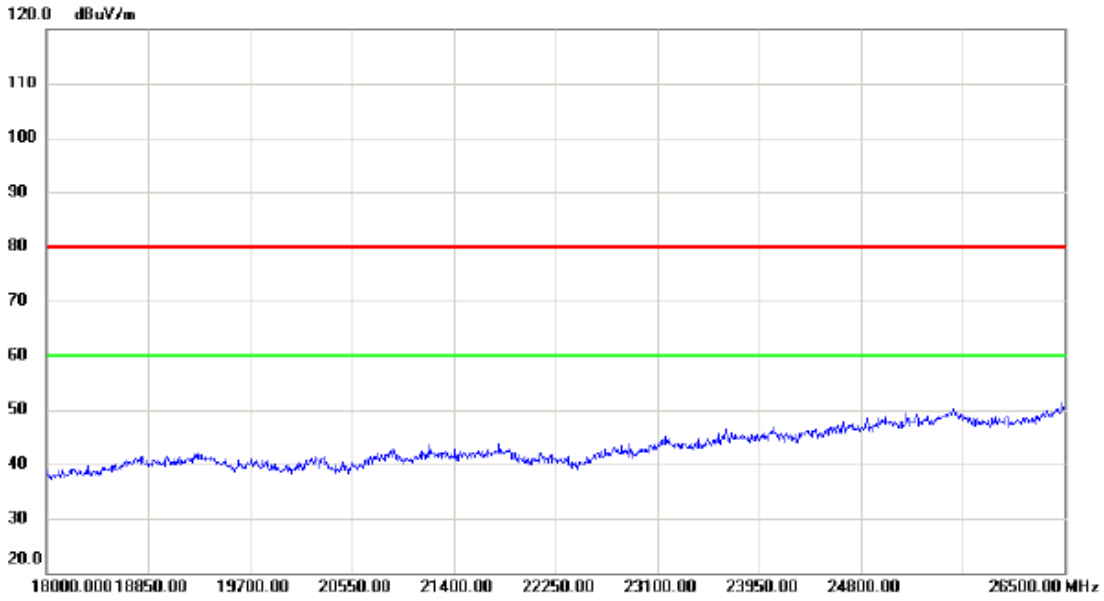
Horizontal



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

Test Mode :	TX 2402MHz _CH00_3Mbps

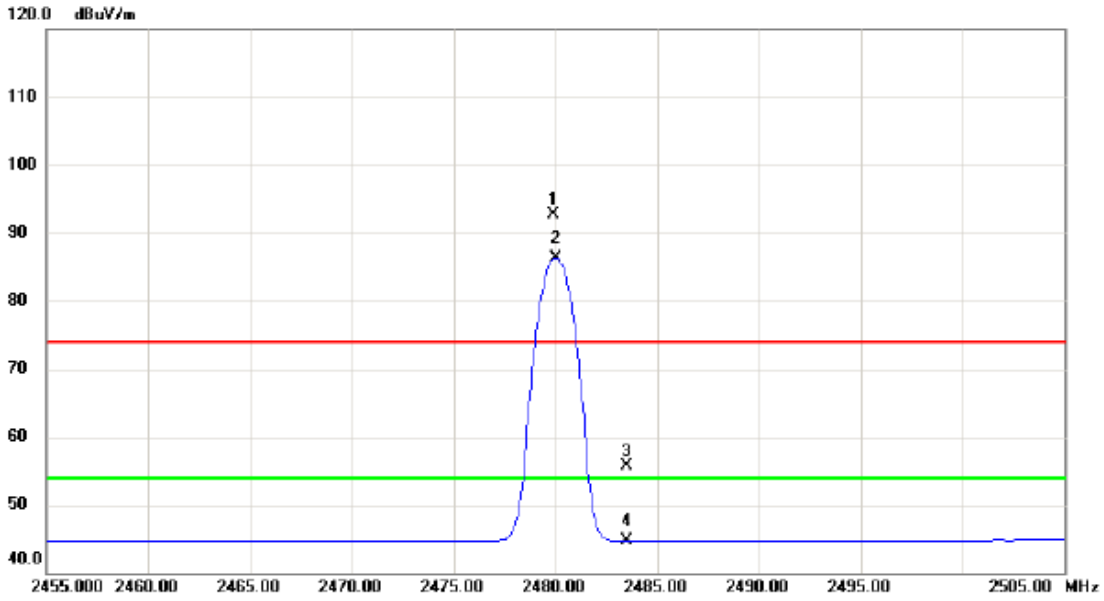
Horizontal



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

Test Mode :	TX 2480MHz _CH78_3Mbps

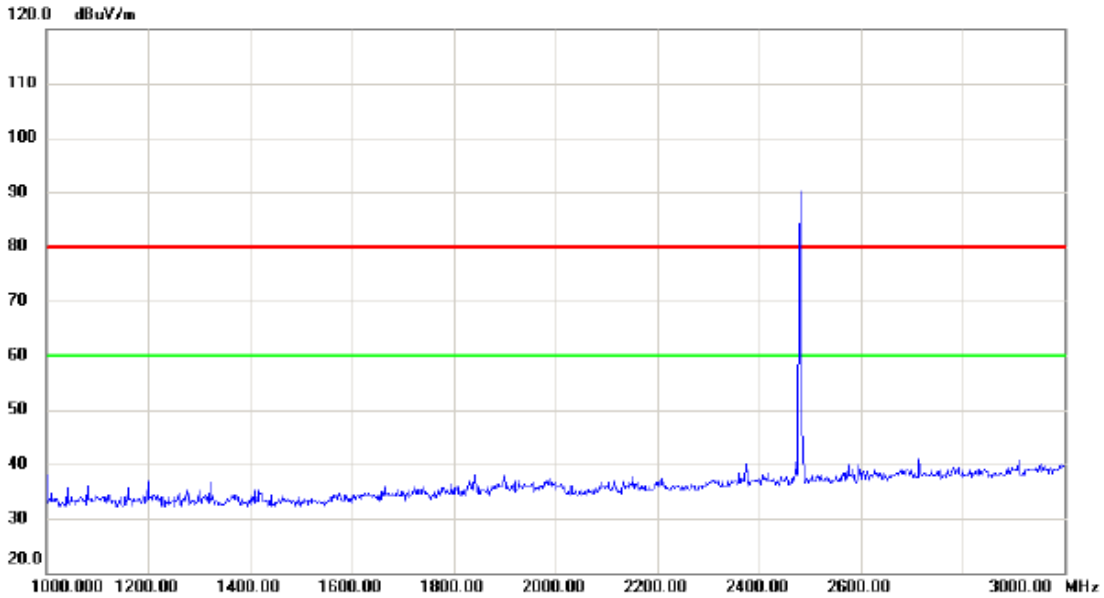
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2479.900	59.34	33.39	92.73	74.00	18.73	peak	No Limit
2	*	2480.000	52.96	33.39	86.35	54.00	32.35	AVG	No Limit
3		2483.500	22.27	33.40	55.67	74.00	-18.33	peak	
4		2483.500	11.33	33.40	44.73	54.00	-9.27	AVG	

Test Mode :	TX 2480MHz _CH78_3Mbps

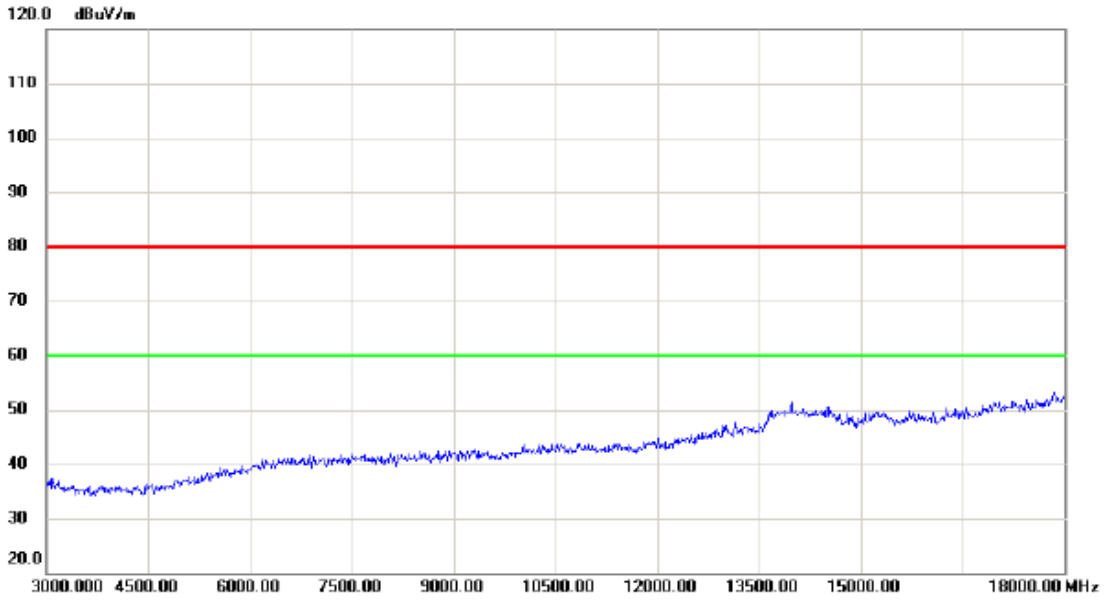
Vertical



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

Test Mode :	TX 2480MHz _CH78_3Mbps

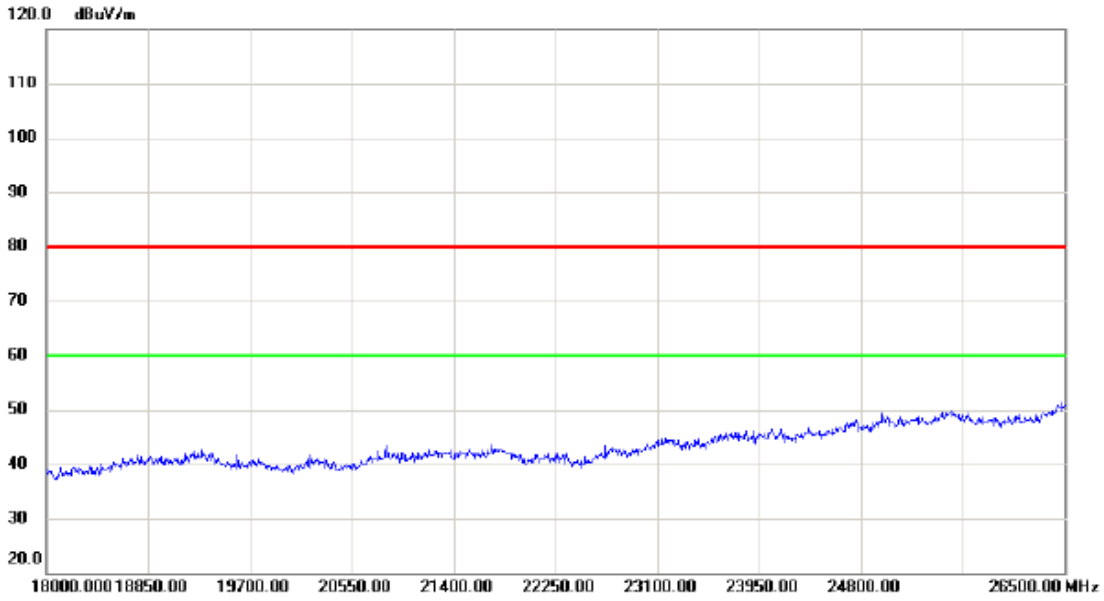
Vertical



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

Test Mode :	TX 2480MHz _CH78_3Mbps

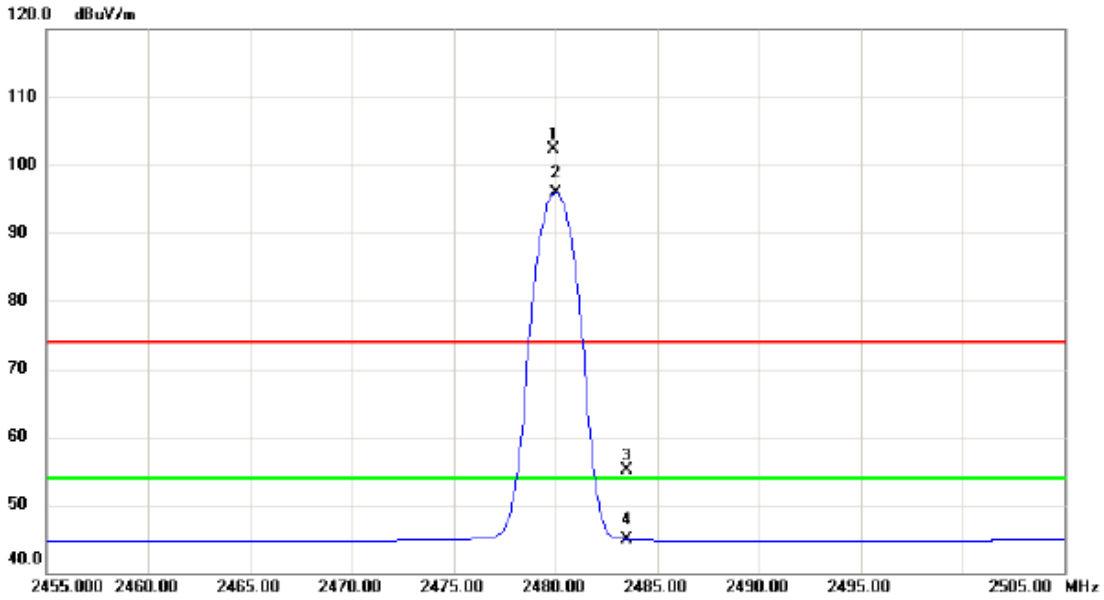
Vertical



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

Test Mode :	TX 2480MHz _CH78_3Mbps

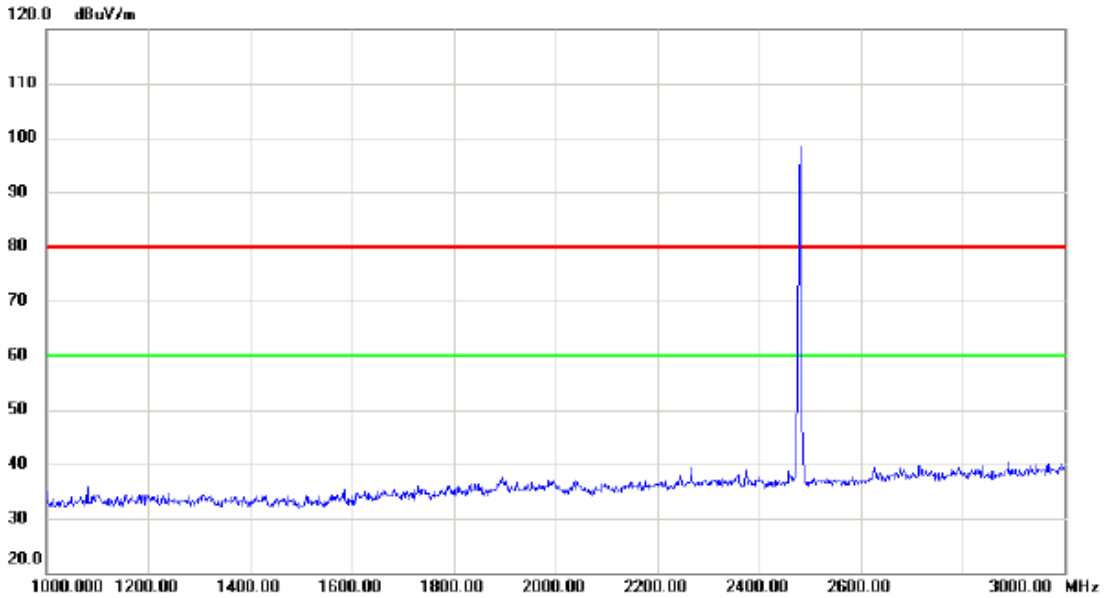
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2479.900	68.82	33.39	102.21	74.00	28.21	peak	No Limit
2	*	2480.000	62.50	33.39	95.89	54.00	41.89	AVG	No Limit
3		2483.500	21.68	33.40	55.08	74.00	-18.92	peak	
4		2483.500	11.55	33.40	44.95	54.00	-9.05	AVG	

Test Mode :	TX 2480MHz _CH78_3Mbps

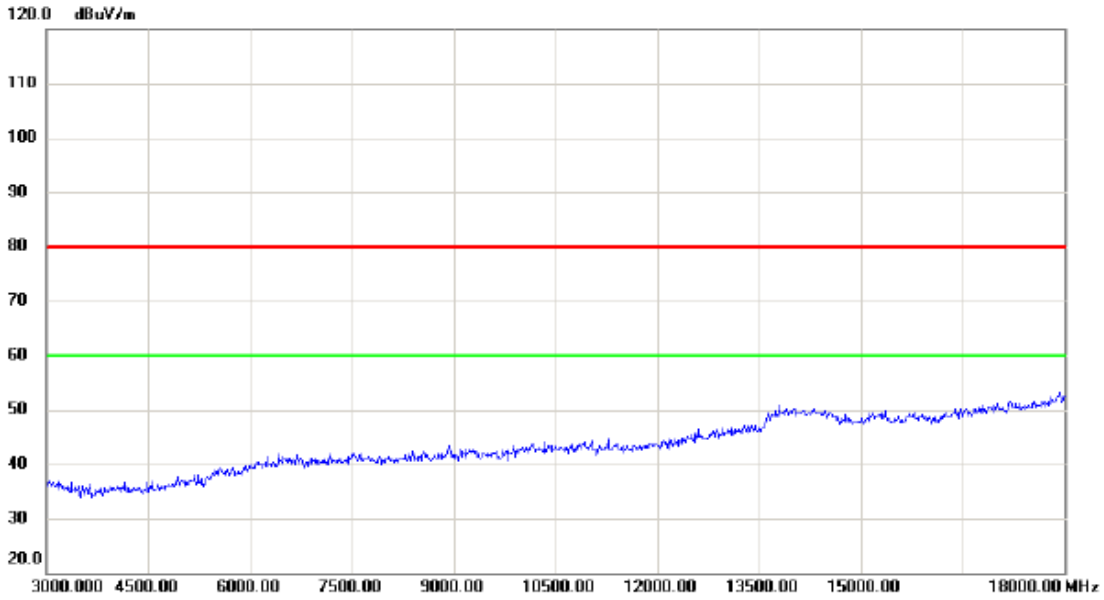
Horizontal



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

Test Mode :	TX 2480MHz _CH78_3Mbps

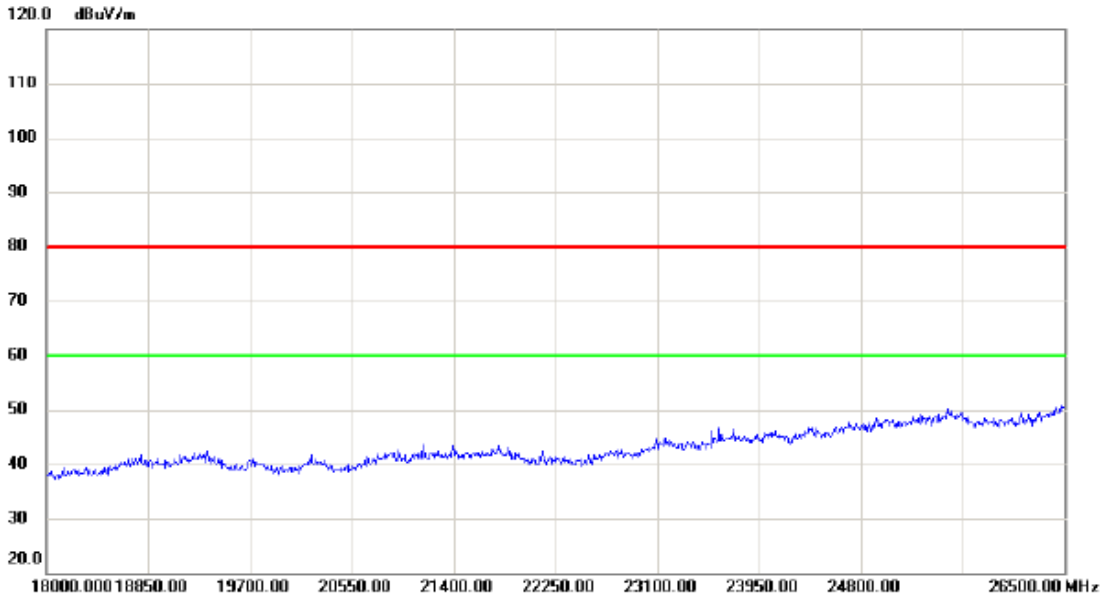
Horizontal



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

Test Mode :	TX 2480MHz _CH78_3Mbps

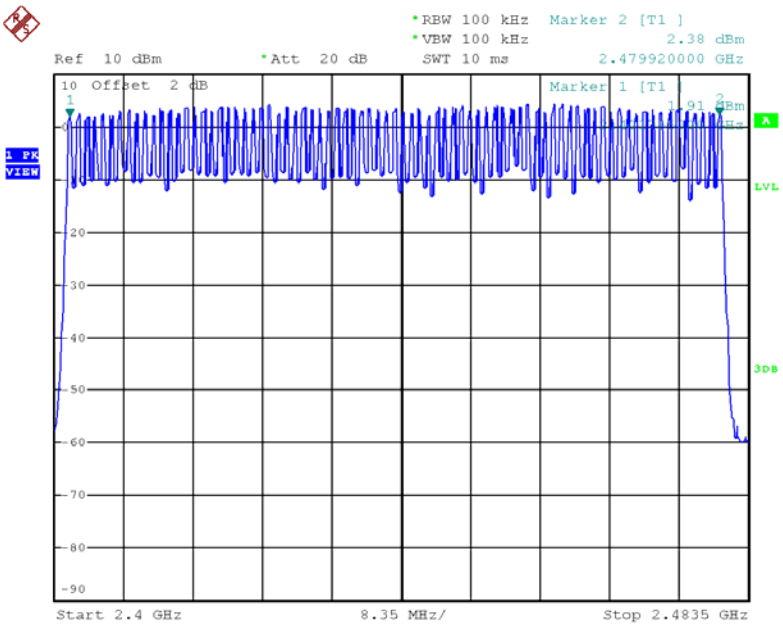
Horizontal



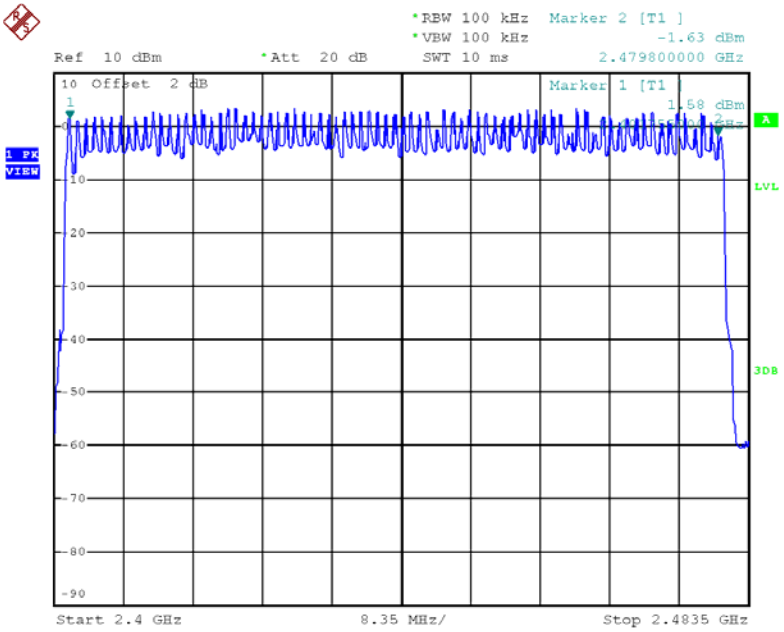
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment

ATTACHMENT E - NUMBER OF HOPPING CHANNEL

Test Mode	Hopping Mode_1Mbps
Number of Hopping Channel	79



Test Mode	Hopping Mode_3Mbps
Number of Hopping Channel	79

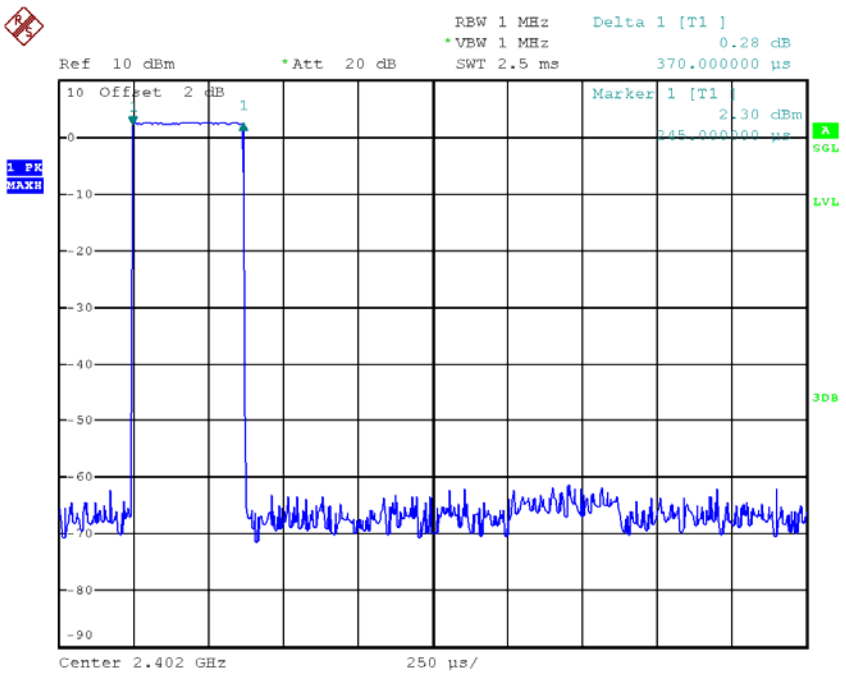


ATTACHMENT F - AVERAGE TIME OF OCCUPANCY

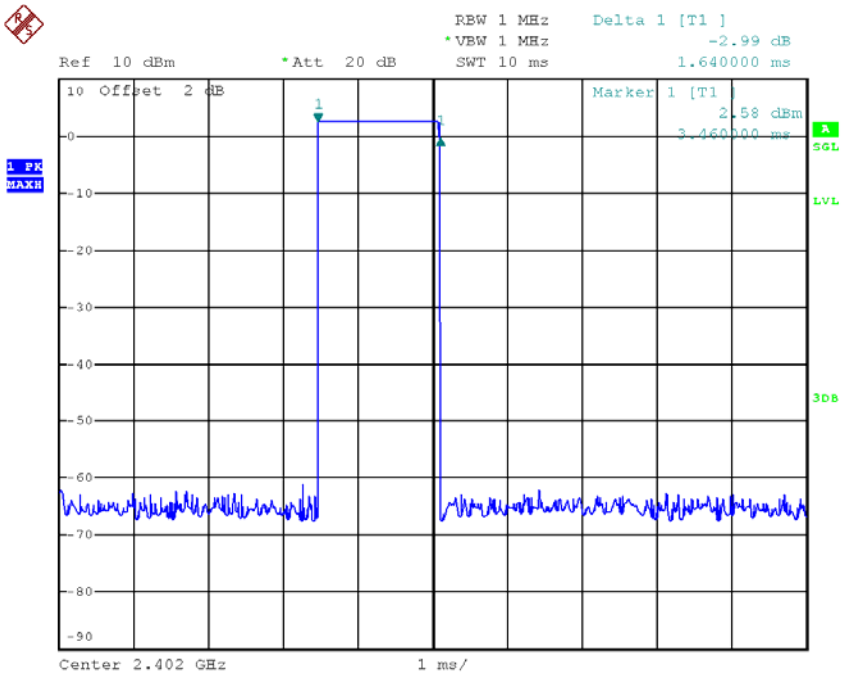
Test Mode :	TX Mode_1Mbps

Data Packet	Frequency (MHz)	Pulse Duration (ms)	Dwell Time (s)	Limits (s)	Test Result
DH5	2402	2.8800	0.3072	0.4000	Pass
DH3	2402	1.6400	0.2624	0.4000	Pass
DH1	2402	0.3700	0.1184	0.4000	Pass
DH5	2441	2.8800	0.3072	0.4000	Pass
DH3	2441	1.6200	0.2592	0.4000	Pass
DH1	2441	0.3750	0.1200	0.4000	Pass
DH5	2480	2.8800	0.3072	0.4000	Pass
DH3	2480	1.6200	0.2592	0.4000	Pass
DH1	2480	0.3750	0.1200	0.4000	Pass

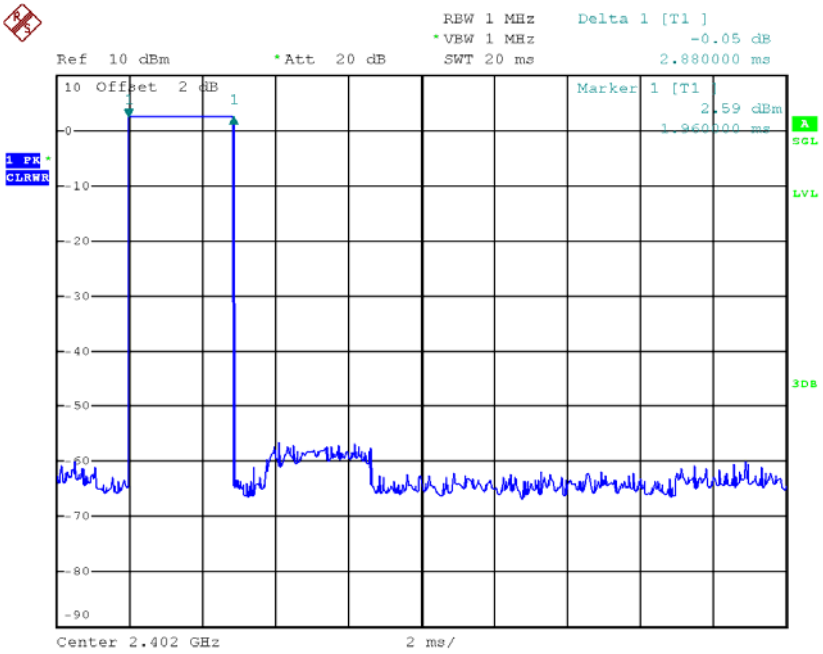
CH00-DH1



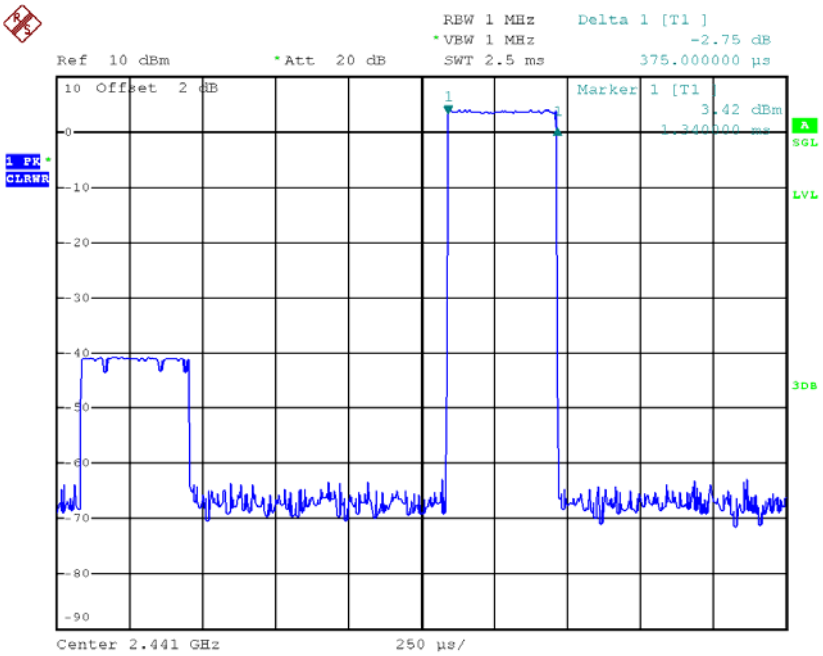
CH00-DH3



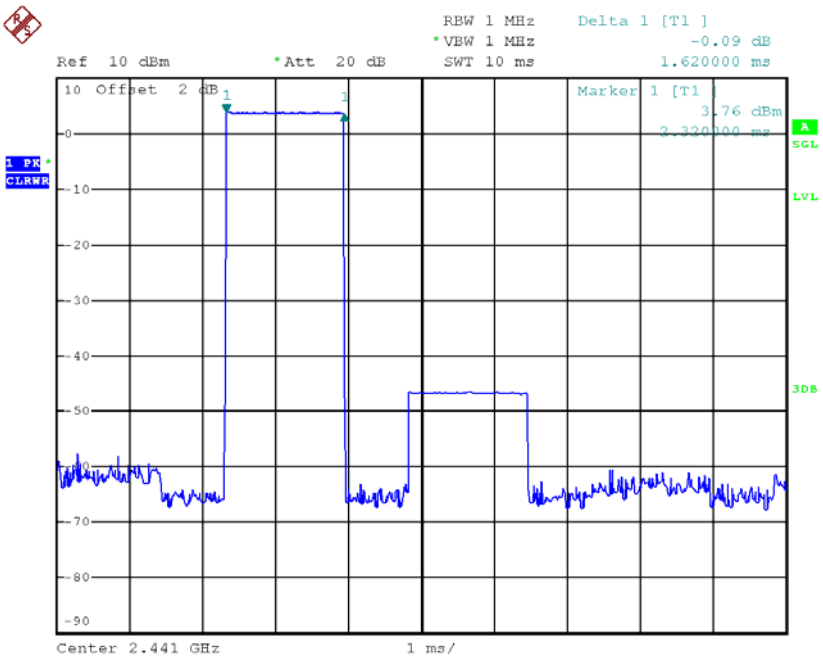
CH00-DH5



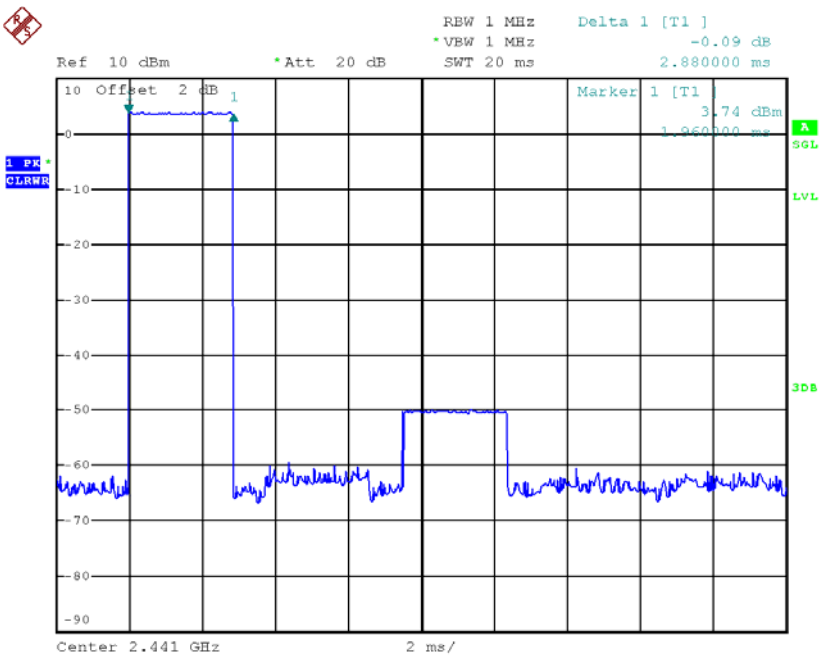
CH39-DH1



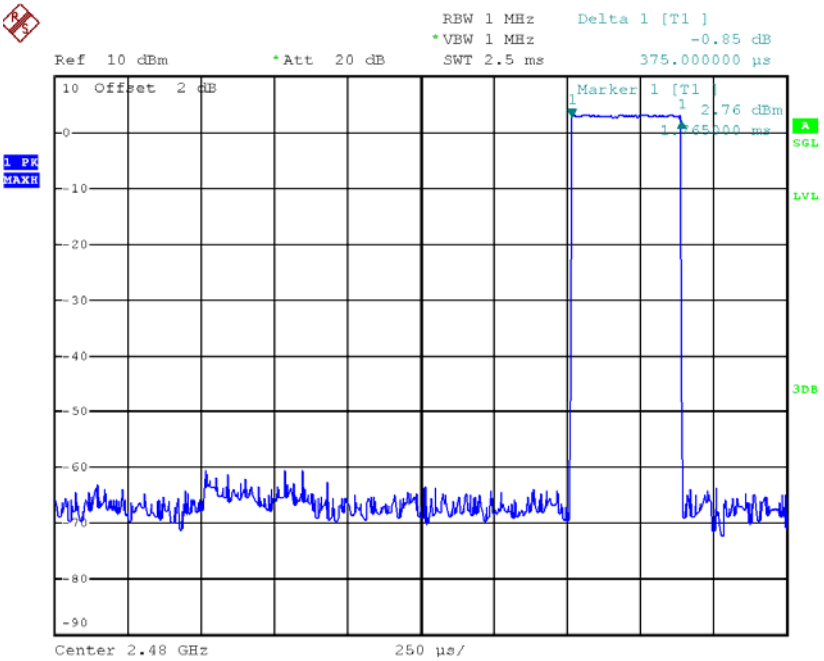
CH39-DH3



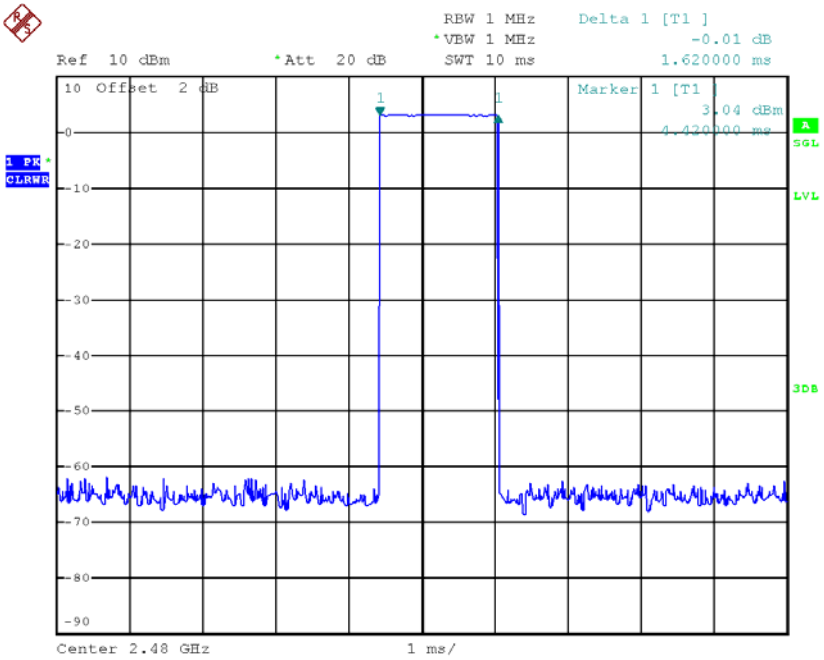
CH39-DH5



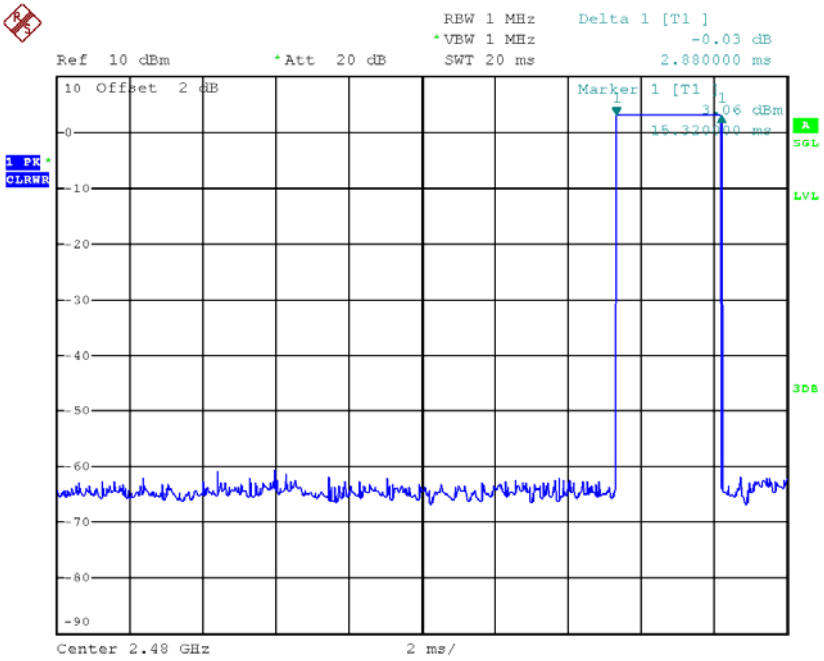
CH78-DH1



CH78-DH3



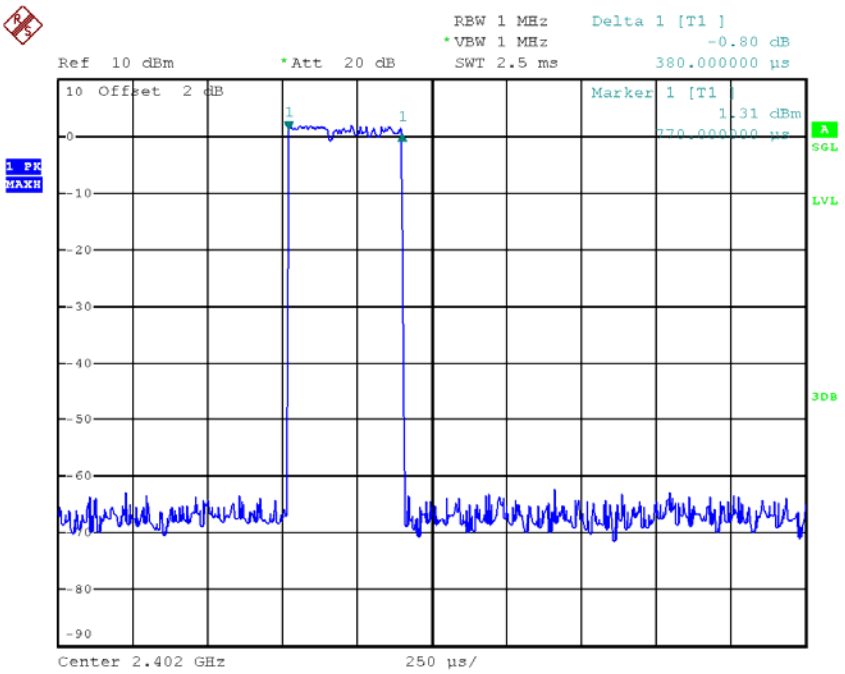
CH78-DH5


RBW 1 MHz
VBW 1 MHz
SWT 20 ms
Delta 1 [T1]
-0.03 dB
2.880000 ms
Ref 10 dBm
Att 20 dB
10 Offset 2 dB
Marker 1 [T1]
3.06 dBm
1 PK
CLRWR
SGL
LVL
3DB
Center 2.48 GHz
2 ms/

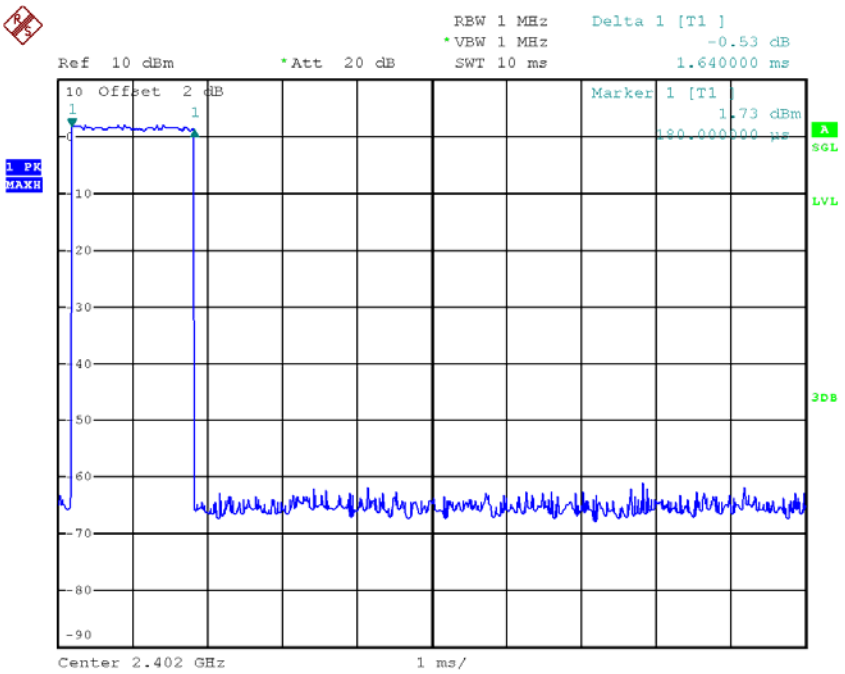
Test Mode :	TX Mode_3Mbps

Data Packet	Frequency	Pulse Duration(ms)	Dwell Time(s)	Limits(s)	Test Result
DH5	2402	2.8800	0.3072	0.4000	Pass
DH3	2402	1.6400	0.2624	0.4000	Pass
DH1	2402	0.3800	0.1216	0.4000	Pass
DH5	2441	2.8800	0.3072	0.4000	Pass
DH3	2441	1.6400	0.2624	0.4000	Pass
DH1	2441	0.3800	0.1216	0.4000	Pass
DH5	2480	2.8800	0.3072	0.4000	Pass
DH3	2480	1.6400	0.2624	0.4000	Pass
DH1	2480	0.3800	0.1216	0.4000	Pass

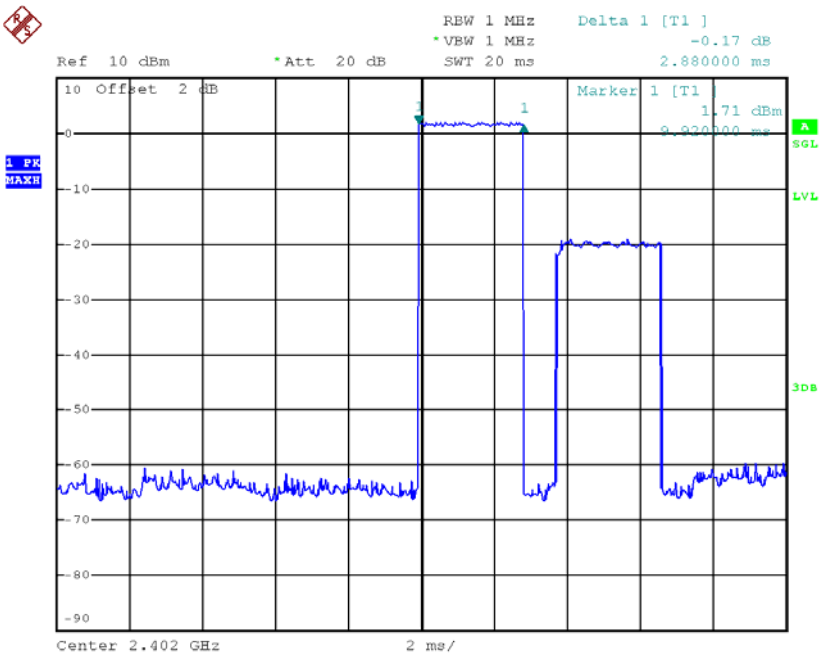
CH00-DH1



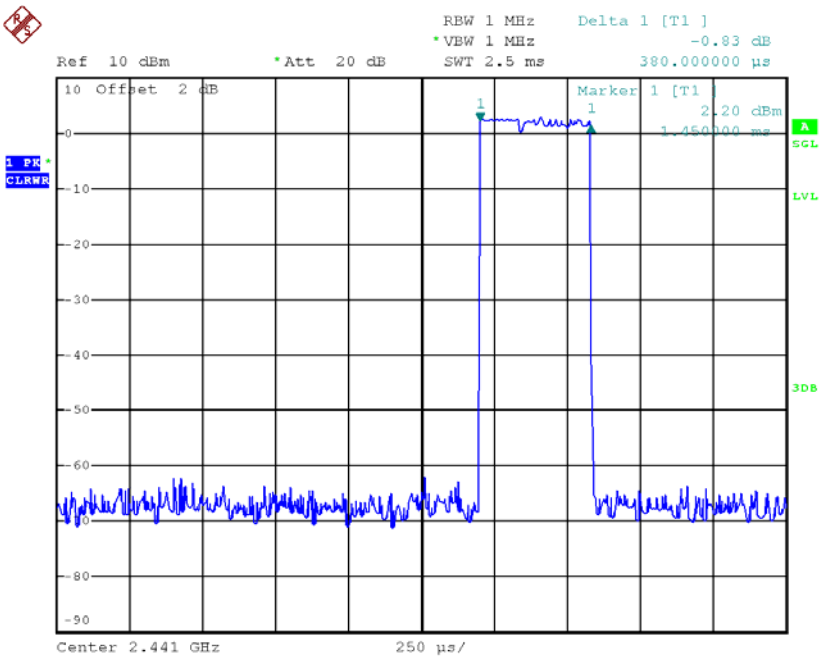
CH00-DH3



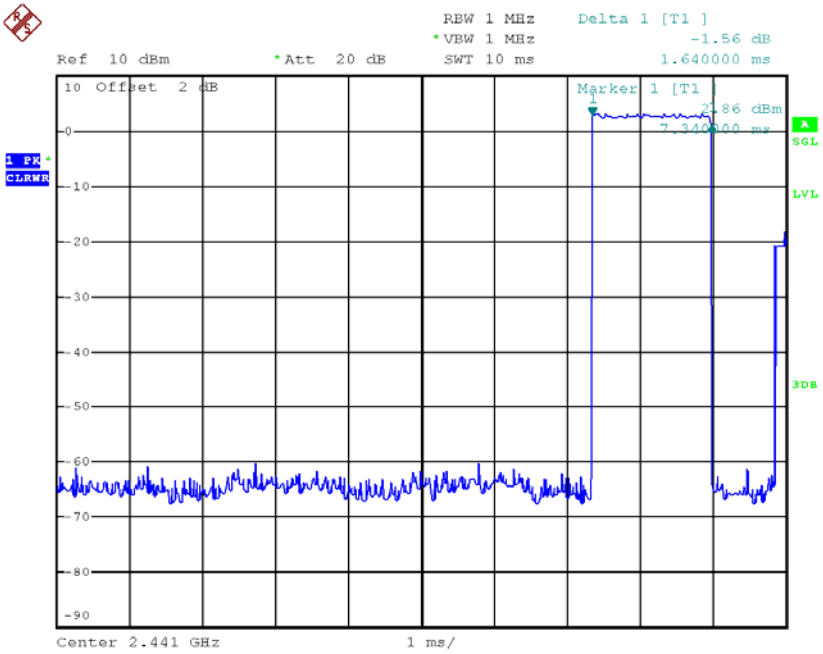
CH00-DH5



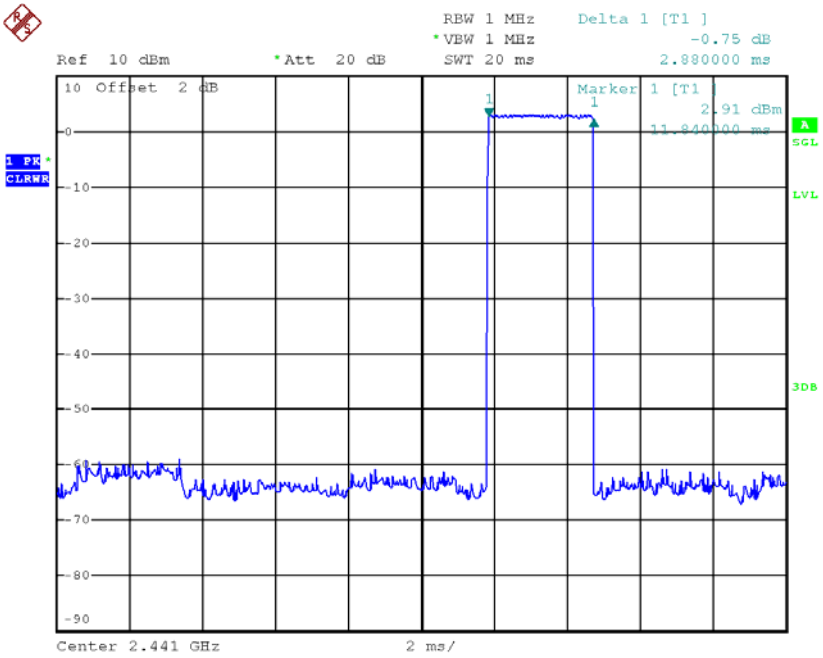
CH39-DH1



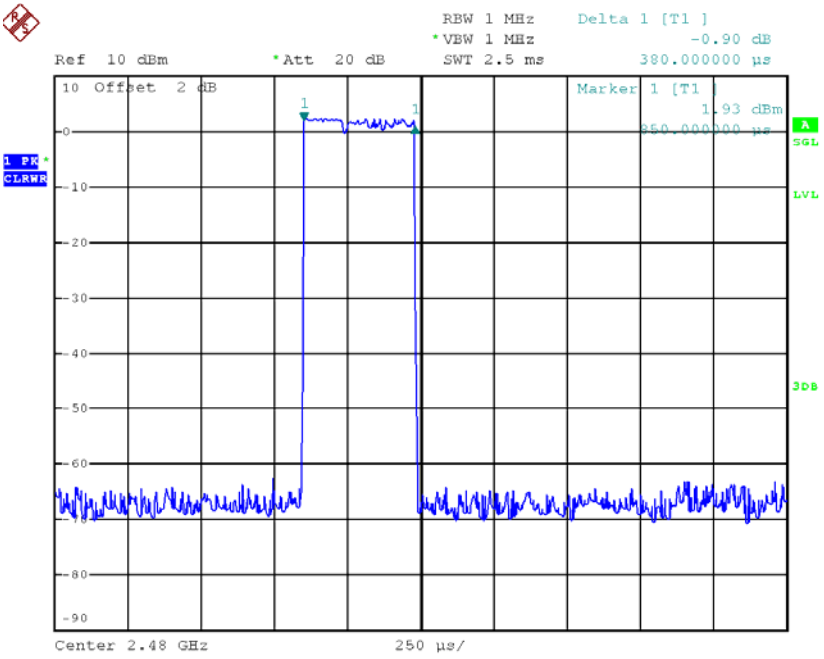
CH39-DH3



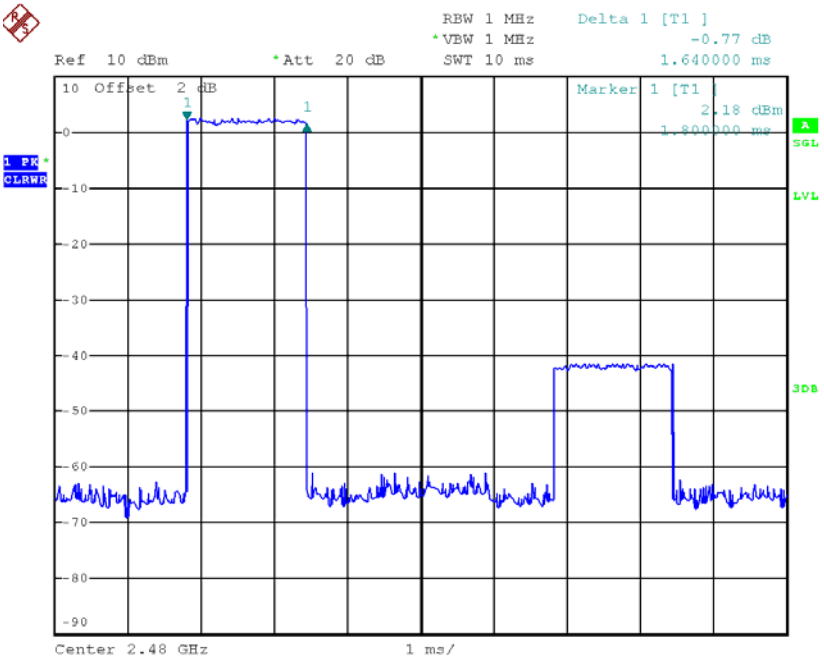
CH39-DH5



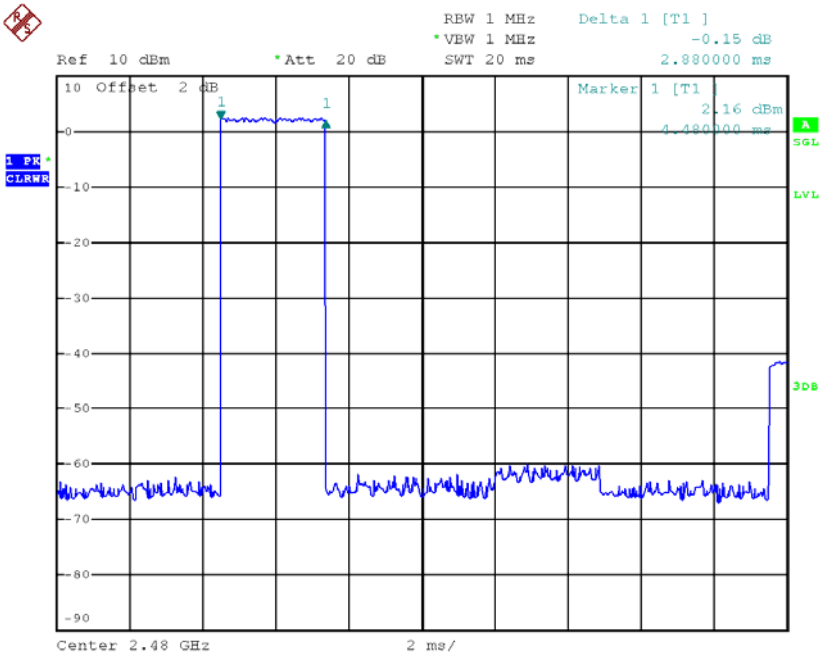
CH78-DH1



CH78-DH3



CH78-DH5

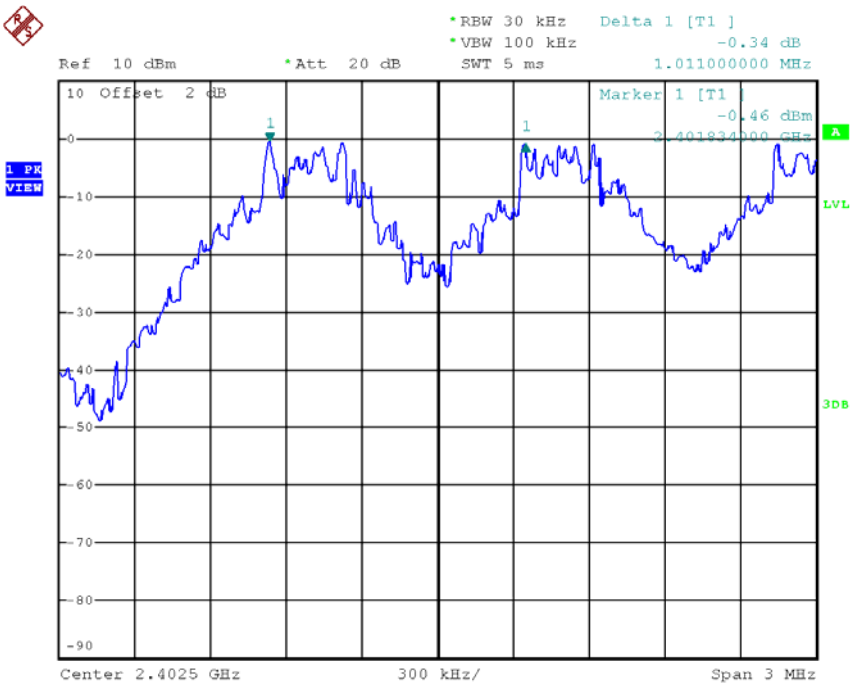

RBW 1 MHz
VBW 1 MHz
SWT 20 ms
Delta 1 [T1]
-0.15 dB
2.880000 ms
Ref 10 dBm
Att 20 dB
10 Offset 2 dB
Marker 1 [T1]
2.16 dBm
1 PK
CLRWR
A
SGL
LVL
3DB
Center 2.48 GHz
2 ms/

ATTACHMENT G - HOPPING CHANNEL SEPARATION MEASUREMENT

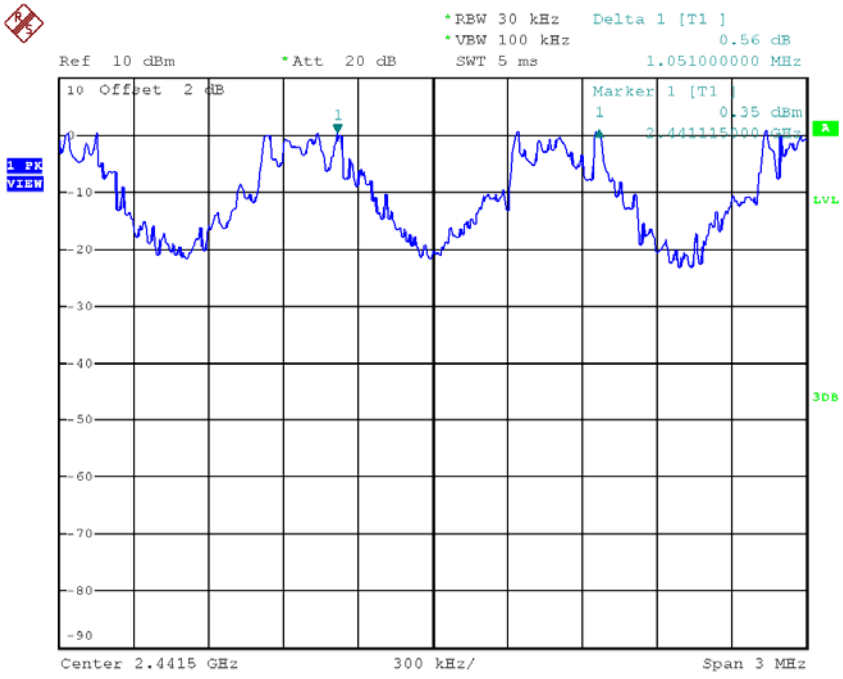
Test Mode :	Hopping on _1Mbps

Frequency (MHz)	Channel Separation (MHz)	2/3 of 20dB Bandwidth (MHz)	Test Result
2402	1.011	0.689	Pass
2441	1.051	0.644	Pass
2480	1.336	0.672	Pass

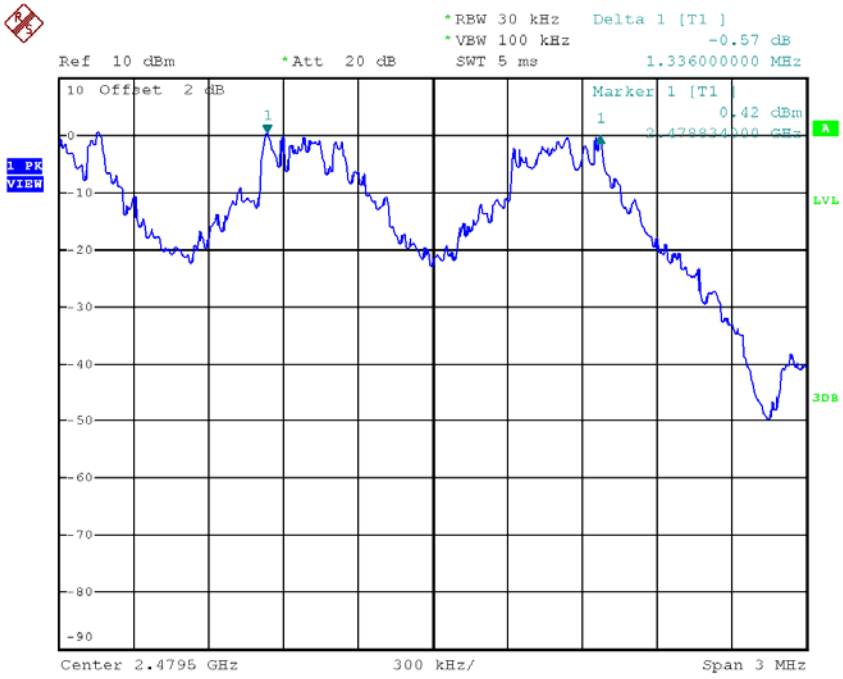
CH00



CH39


*RBW 30 kHz
*VBW 100 kHz
SWT 5 ms
Delta 1 [T1]
0.56 dB
1.051000000 MHz
Ref 10 dBm
*Att 20 dB
10 Offset 2 dB
Marker 1 [T1]
1 0.35 dBm
1 PK VIEW
A
LVL
3DB
Center 2.4415 GHz
300 kHz/
Span 3 MHz

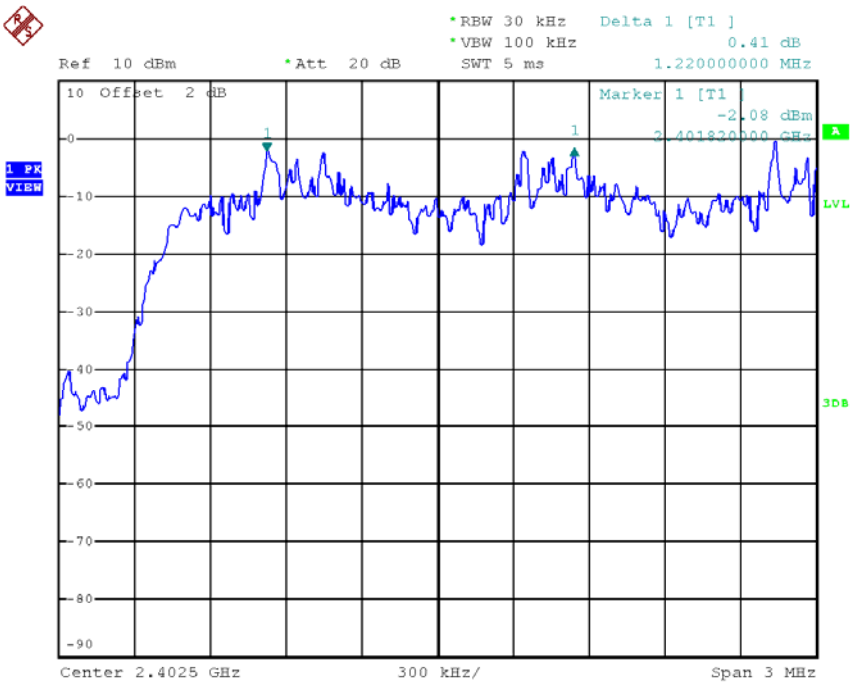
CH78


*RBW 30 kHz
*VBW 100 kHz
SWT 5 ms
Delta 1 [T1]
-0.57 dB
1.336000000 MHz
Ref 10 dBm
*Att 20 dB
10 Offset 2 dB
Marker 1 [T1]
1 0.42 dBm
1 PK VIEW
A
LVL
3DB
Center 2.4795 GHz
300 kHz/
Span 3 MHz

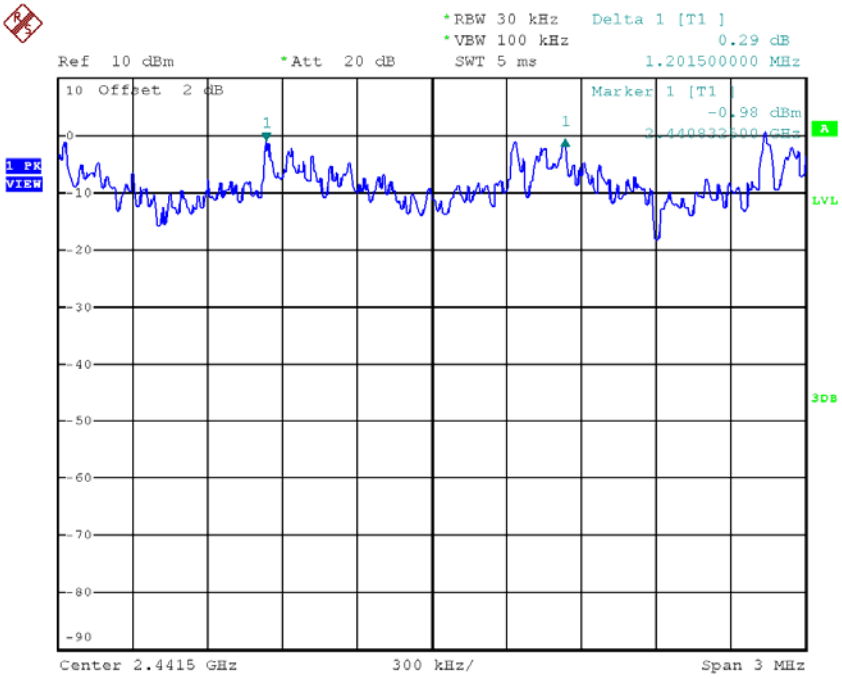
Test Mode :	Hopping on _3Mbps

Frequency (MHz)	Channel Separation (MHz)	2/3 of 20dB Bandwidth (MHz)	Test Result
2402	1.220	0.863	Pass
2441	1.202	0.865	Pass
2480	1.200	0.859	Pass

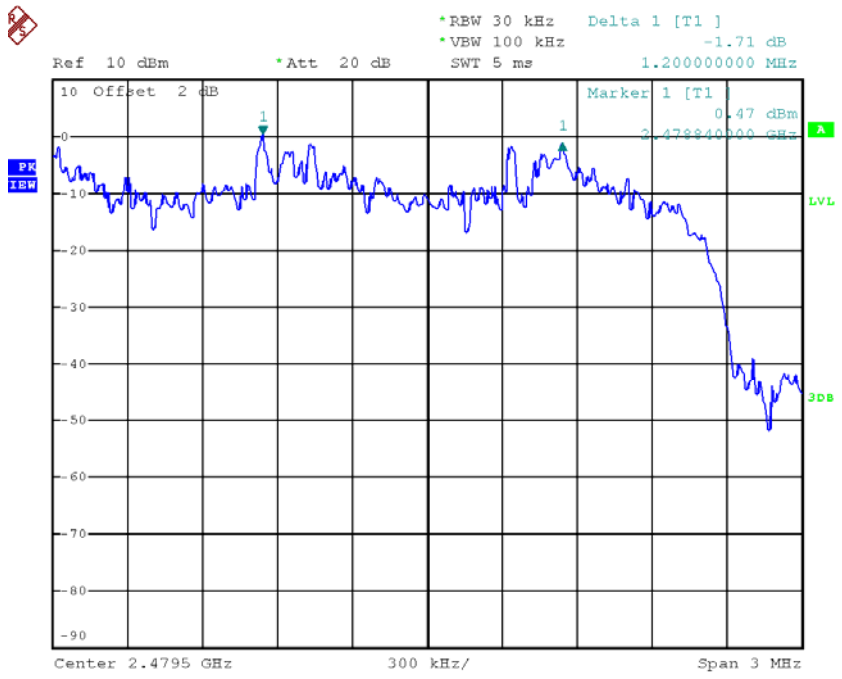
CH00



CH39


*RBW 30 kHz
Delta 1 [T1]
*VBW 100 kHz
0.29 dB
Ref 10 dBm
*Att 20 dB
SWT 5 ms
1.201500000 MHz
10 Offset 2 dB
Marker 1 [T1]
-0.98 dBm
1 PK VIEW
LVL
3DB
Center 2.4415 GHz
300 kHz/
Span 3 MHz

CH78

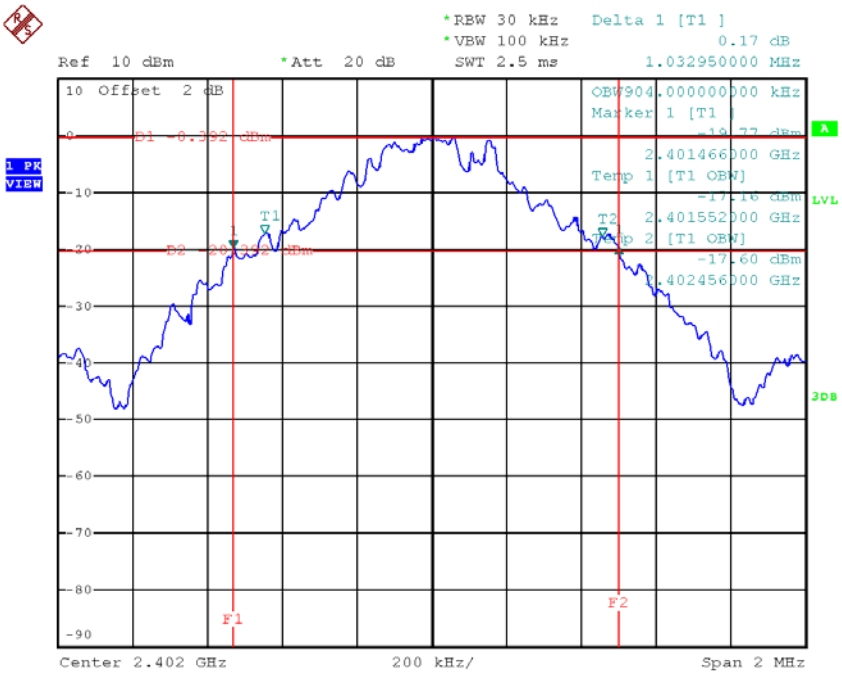

*RBW 30 kHz
Delta 1 [T1]
*VBW 100 kHz
-1.71 dB
Ref 10 dBm
*Att 20 dB
SWT 5 ms
1.200000000 MHz
10 Offset 2 dB
Marker 1 [T1]
0.47 dBm
PK VIEW
LVL
3DB
Center 2.4795 GHz
300 kHz/
Span 3 MHz

ATTACHMENT H - BANDWIDTH

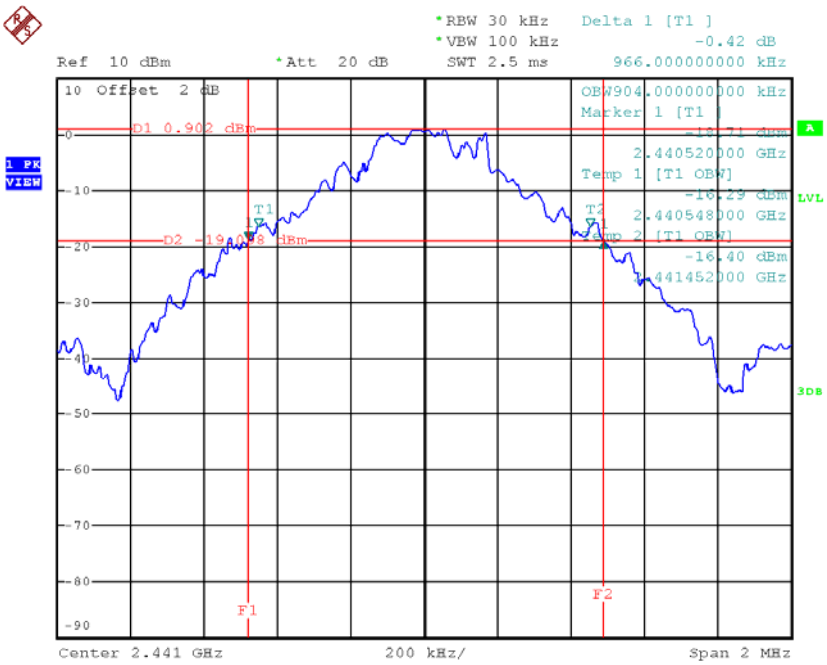
Test Mode :	TX Mode _1Mbps

Frequency (MHz)	20dB Bandwidth (MHz)	99% Occupied BW (MHz)	Test Result
2402	1.033	0.904	Pass
2441	0.966	0.904	Pass
2480	1.007	0.896	Pass

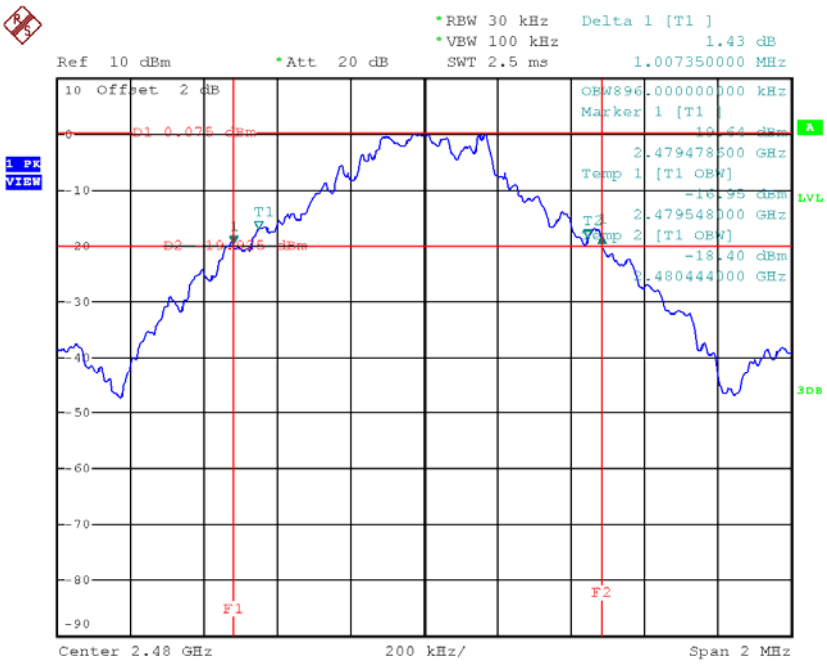
CH00



CH39


RBW 30 kHz
VBW 100 kHz
SWT 2.5 ms
Delta 1 [T1]
-0.42 dB
966.000000000 kHz
Ref 10 dBm
Att 20 dB
10 Offset 2 dB
D1 0.902 dBm
D2 -19.098 dBm
OBW904.000000000 kHz
Marker 1 [T1]
2.440520000 GHz
Temp 1 [T1 OBW]
-16.29 dBm
2.440548000 GHz
Temp 2 [T1 OBW]
-16.40 dBm
2.441452000 GHz
Center 2.441 GHz
200 kHz/
Span 2 MHz

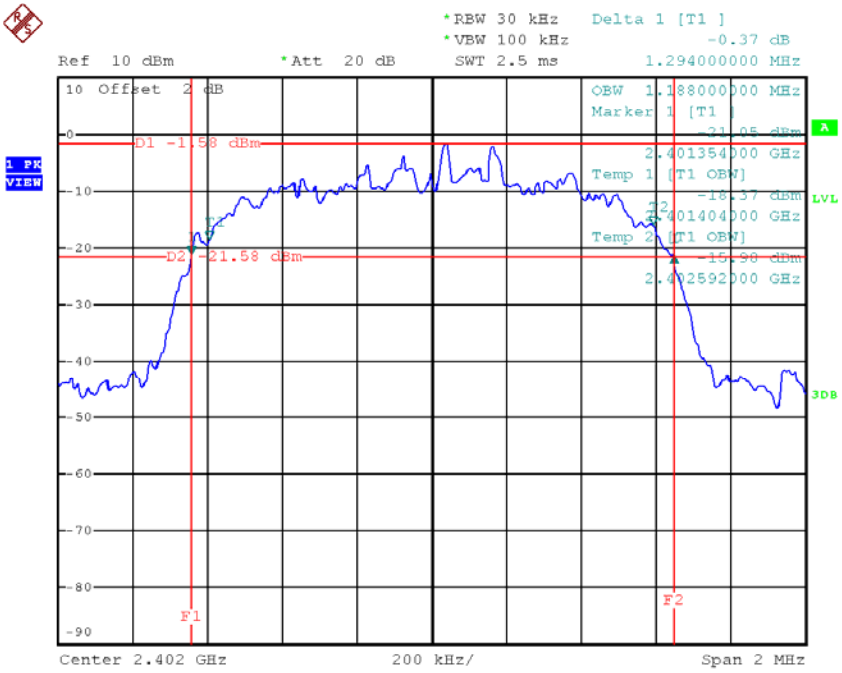
CH78


RBW 30 kHz
VBW 100 kHz
SWT 2.5 ms
Delta 1 [T1]
1.43 dB
1.007350000 MHz
Ref 10 dBm
Att 20 dB
10 Offset 2 dB
D1 0.075 dBm
OBW896.000000000 kHz
Marker 1 [T1]
2.479478500 GHz
Temp 1 [T1 OBW]
2.479548000 GHz
Temp 2 [T1 OBW]
-18.40 dBm
Center 2.48 GHz
200 kHz/
Span 2 MHz

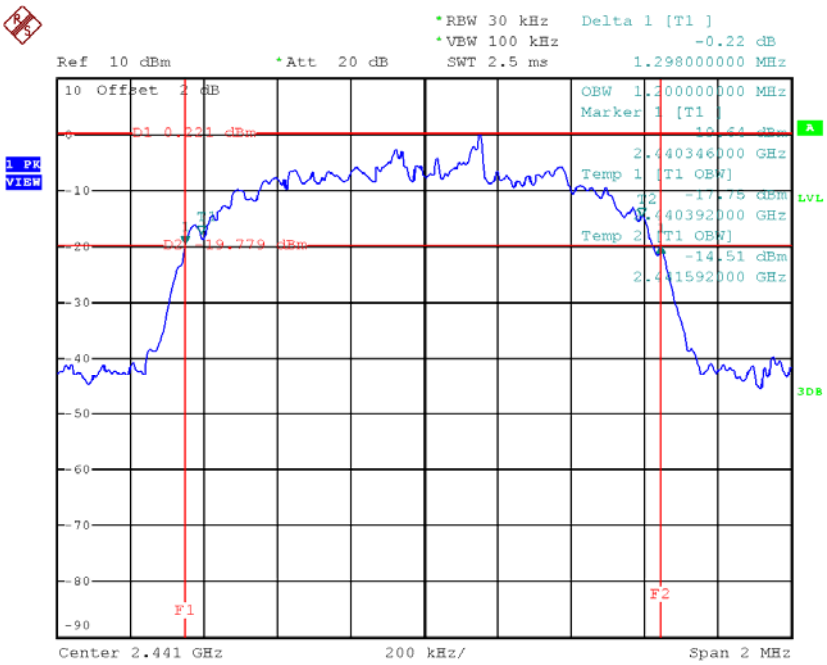
Test Mode :	TX Mode _3Mbps

Frequency (MHz)	20dB Bandwidth (MHz)	99% Occupied BW (MHz)	Test Result
2402	1.294	1.188	Pass
2441	1.298	1.200	Pass
2480	1.288	1.192	Pass

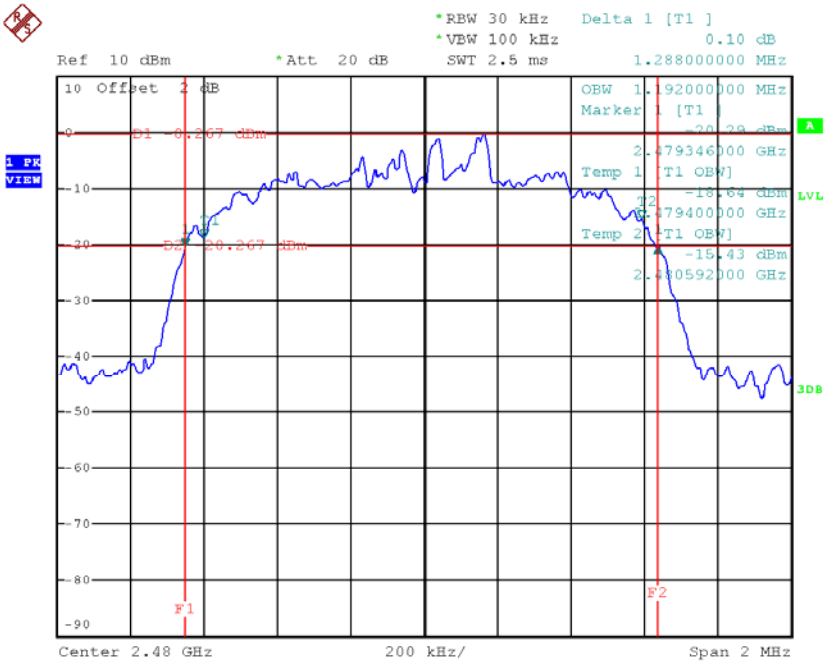
CH00



CH39


RBW 30 kHz
VBW 100 kHz
SWT 2.5 ms
Delta 1 [T1]
-0.22 dB
1.298000000 MHz
Ref 10 dBm
Att 20 dB
Offset 2 dB
OBW 1.200000000 MHz
Marker 1 [T1]
2.440346000 GHz
Temp 1 [T1 OBW]
2.440392000 GHz
Temp 2 [T1 OBW]
-14.51 dBm
2.441592000 GHz
1 PK VIEW
A
LVL
3DB
F1
F2
Center 2.441 GHz
200 kHz/
Span 2 MHz

CH78

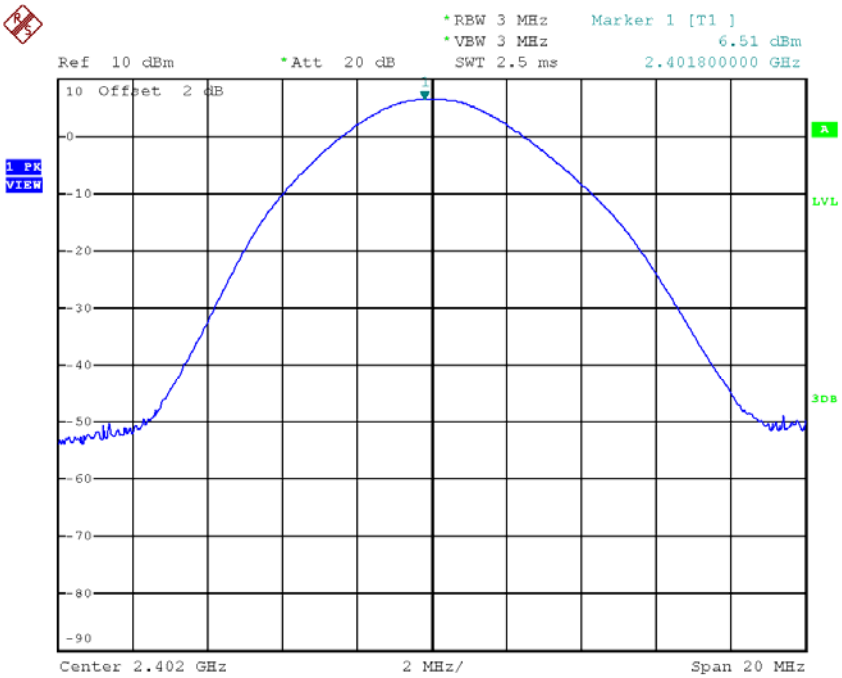

RBW 30 kHz
VBW 100 kHz
SWT 2.5 ms
Delta 1 [T1]
0.10 dB
1.288000000 MHz
Ref 10 dBm
Att 20 dB
Offset 2 dB
OBW 1.192000000 MHz
Marker 1 [T1]
2.479346000 GHz
Temp 1 [T1 OBW]
2.479400000 GHz
Temp 2 [T1 OBW]
-15.43 dBm
1 PK VIEW
A
LVL
3DB
F1
F2
Center 2.48 GHz
200 kHz/
Span 2 MHz

ATTACHMENT I - PEAK OUTPUT POWER

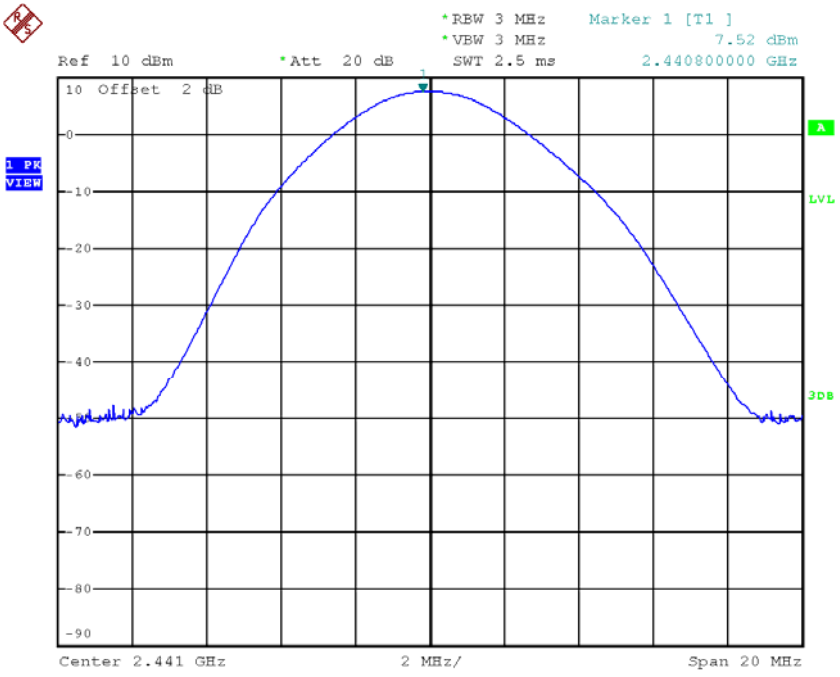
Test Mode :	TX Mode _1Mbps

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Test Result
2402	6.51	0.0045	30.00	1.00	Pass
2441	7.52	0.0056	30.00	1.00	Pass
2480	7.19	0.0052	30.00	1.00	Pass

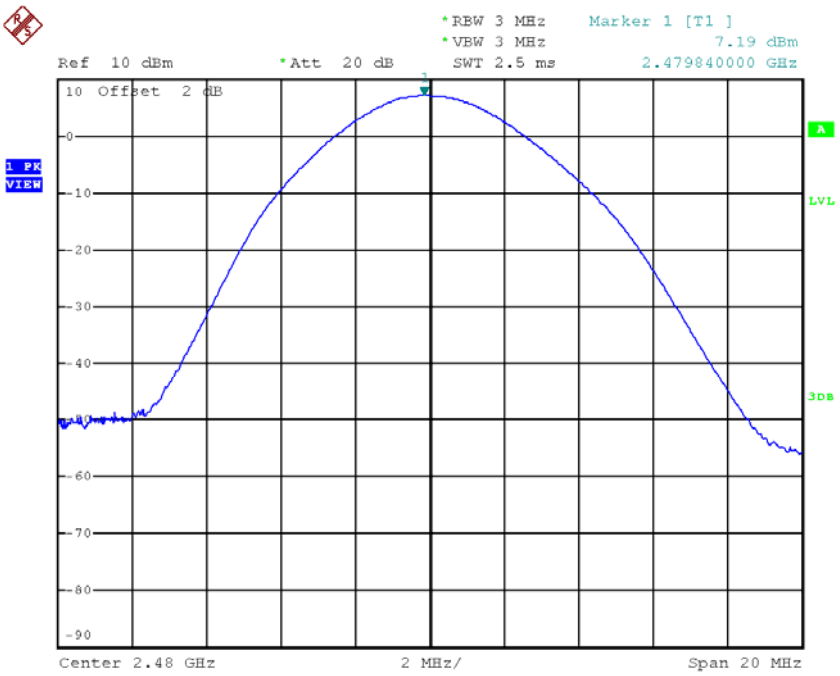
CH00



CH39


*RBW 3 MHz
*VBW 3 MHz
SWT 2.5 ms
Marker 1 [T1]
7.52 dBm
2.440800000 GHz
Ref 10 dBm
*Att 20 dB
10 Offset 2 dB
1 PK VIEW
A
LVL
3DB
0
-10
-20
-30
-40
-60
-70
-80
-90
Center 2.441 GHz
2 MHz/
Span 20 MHz

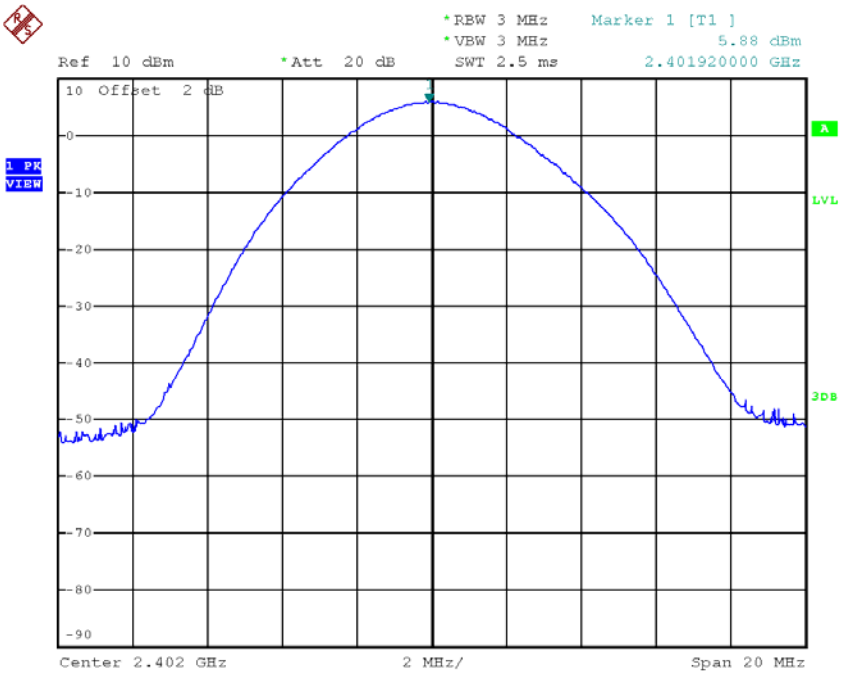
CH78


*RBW 3 MHz
*VBW 3 MHz
SWT 2.5 ms
Marker 1 [T1]
7.19 dBm
2.479840000 GHz
Ref 10 dBm
*Att 20 dB
10 Offset 2 dB
1 PK VIEW
A
LVL
3DB
0
-10
-20
-30
-40
-60
-70
-80
-90
Center 2.48 GHz
2 MHz/
Span 20 MHz

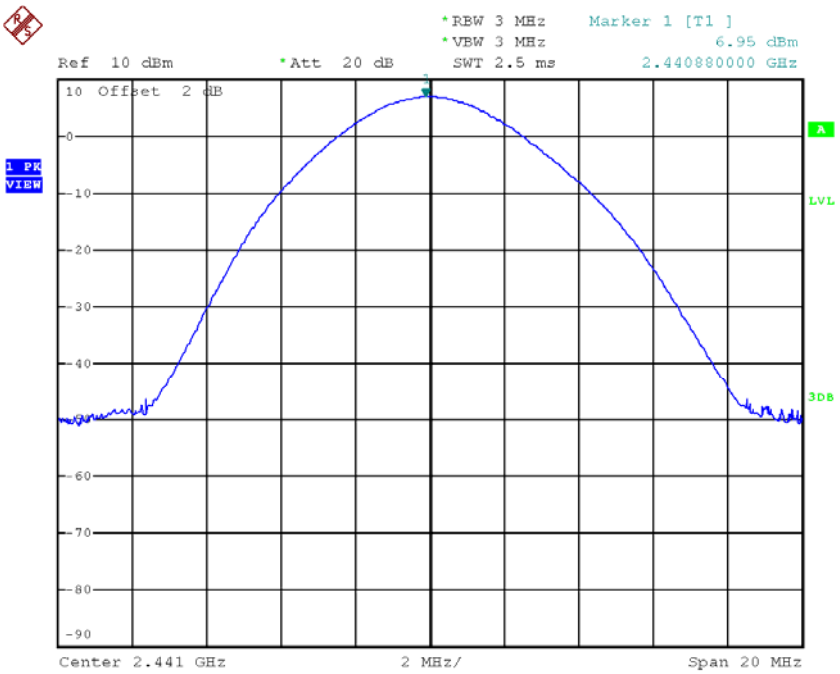
Test Mode :	TX Mode _3Mbps

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Test Result
2402	5.88	0.0039	30.00	1.00	Pass
2441	6.95	0.0050	30.00	1.00	Pass
2480	6.46	0.0044	30.00	1.00	Pass

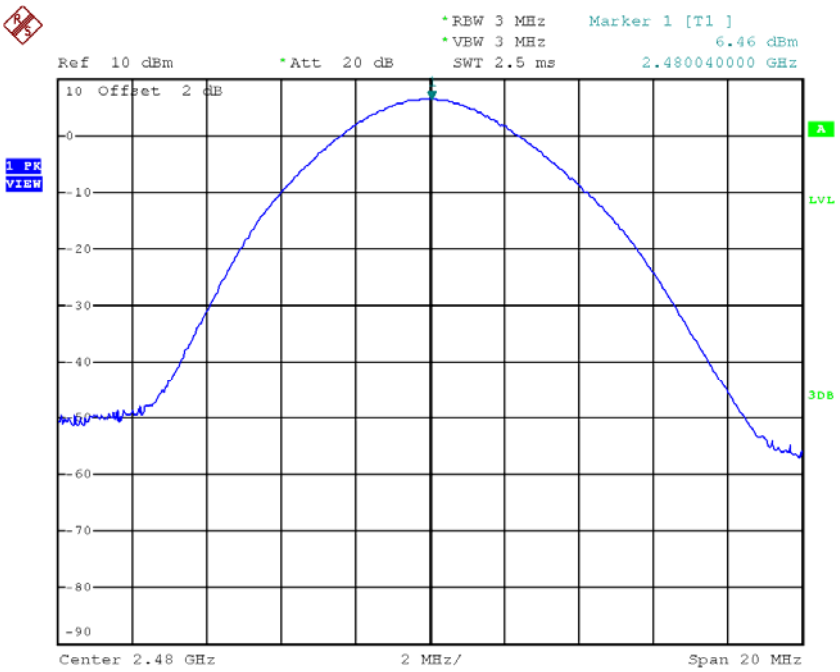
CH00



CH39

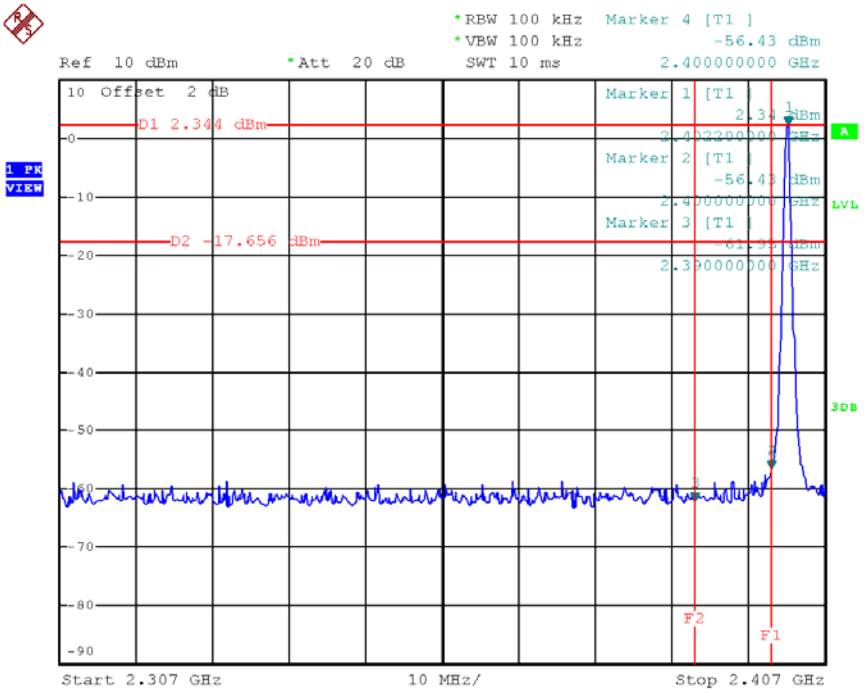

*RBW 3 MHz
Marker 1 [T1]
*VBW 3 MHz
6.95 dBm
Ref 10 dBm
*Att 20 dB
SWT 2.5 ms
2.440880000 GHz
10 Offset 2 dB
1 PK VIEW
A
LVL
3DB
Center 2.441 GHz
2 MHz/
Span 20 MHz

CH78

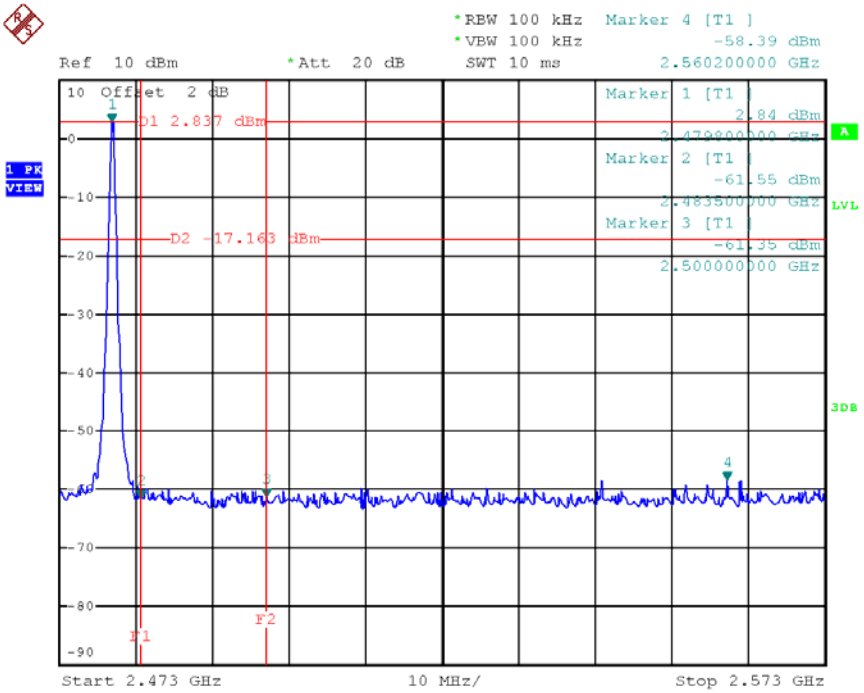

*RBW 3 MHz
Marker 1 [T1]
*VBW 3 MHz
6.46 dBm
Ref 10 dBm
*Att 20 dB
SWT 2.5 ms
2.480040000 GHz
10 Offset 2 dB
1 PK VIEW
A
LVL
3DB
Center 2.48 GHz
2 MHz/
Span 20 MHz

ATTACHMENT J - ANTENNA CONDUCTED SPURIOUS EMISSION

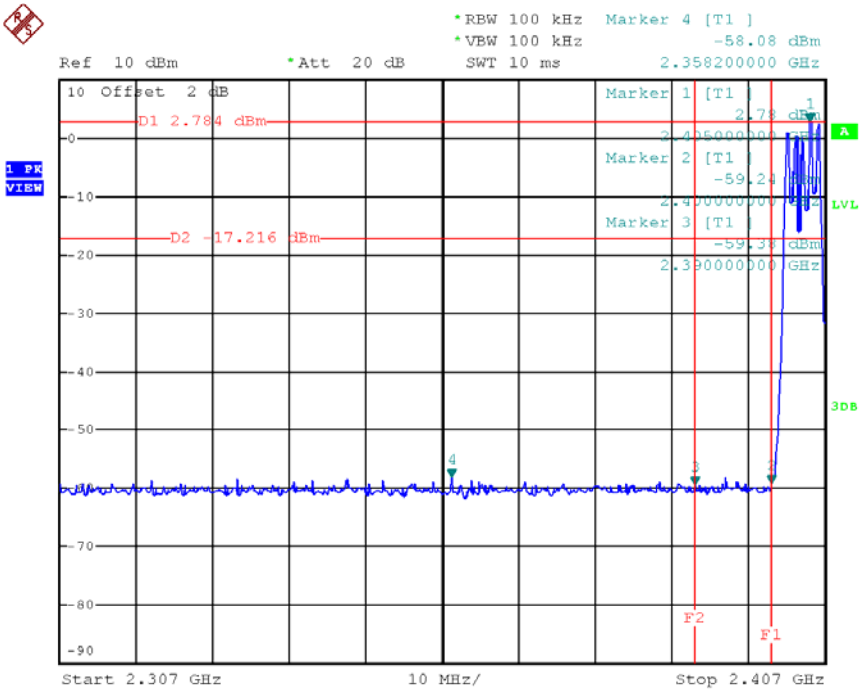
CH00 (Lower)_1Mbps



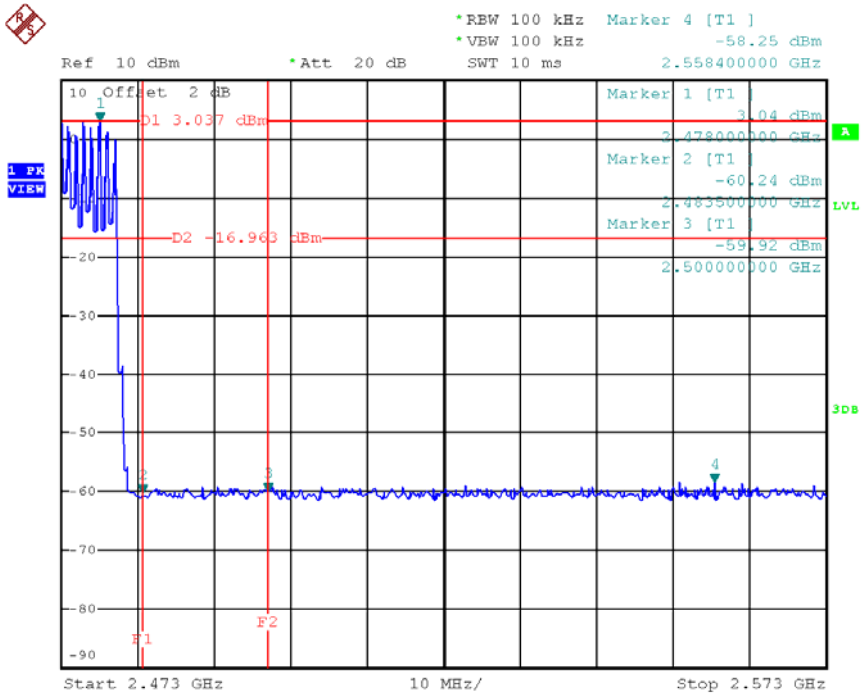
CH78 (Upper) _1Mbps



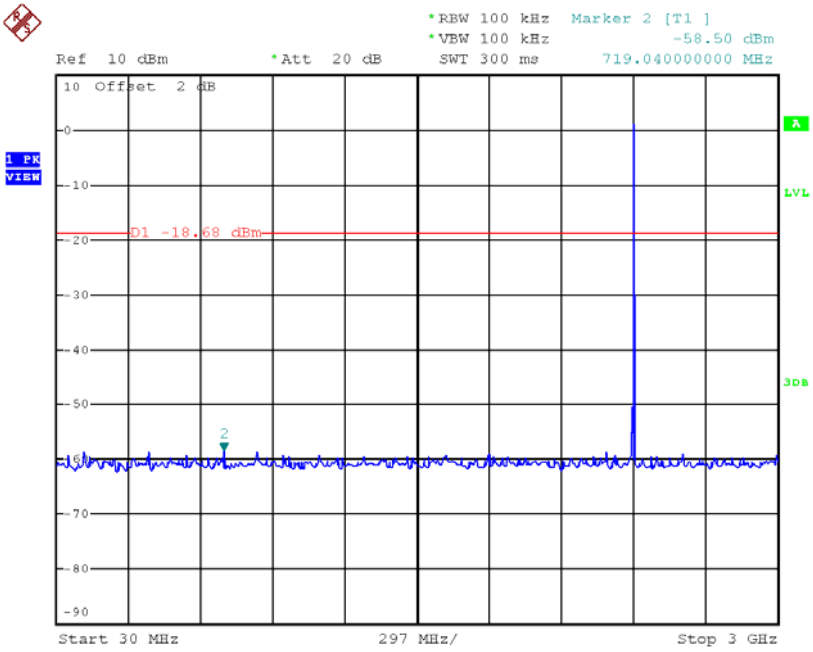
CH00 Hopping on mode (Lower)_1Mbps

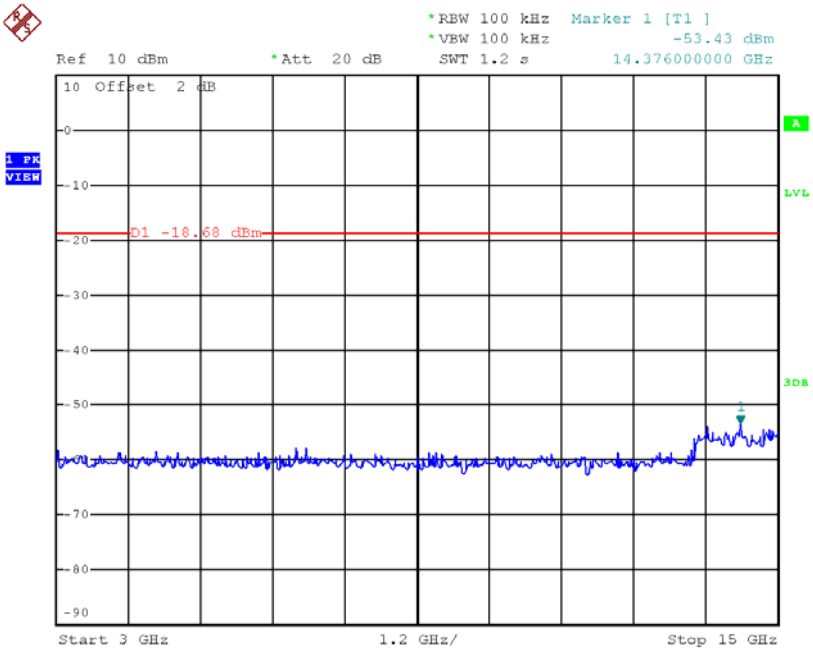


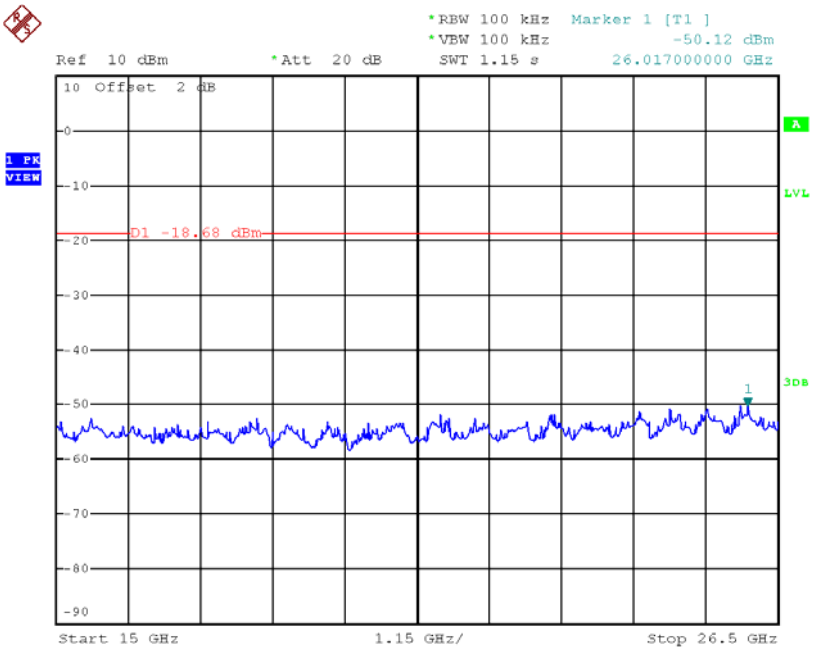
CH78 Hopping on mode (Upper) _1Mbps



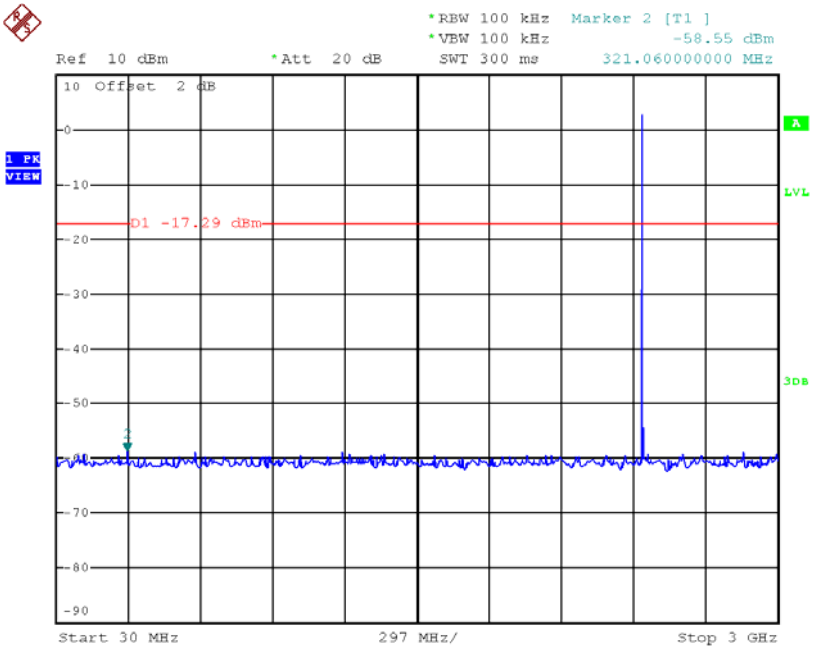
CH00 (10 Harmonic of the frequency) _1Mbps

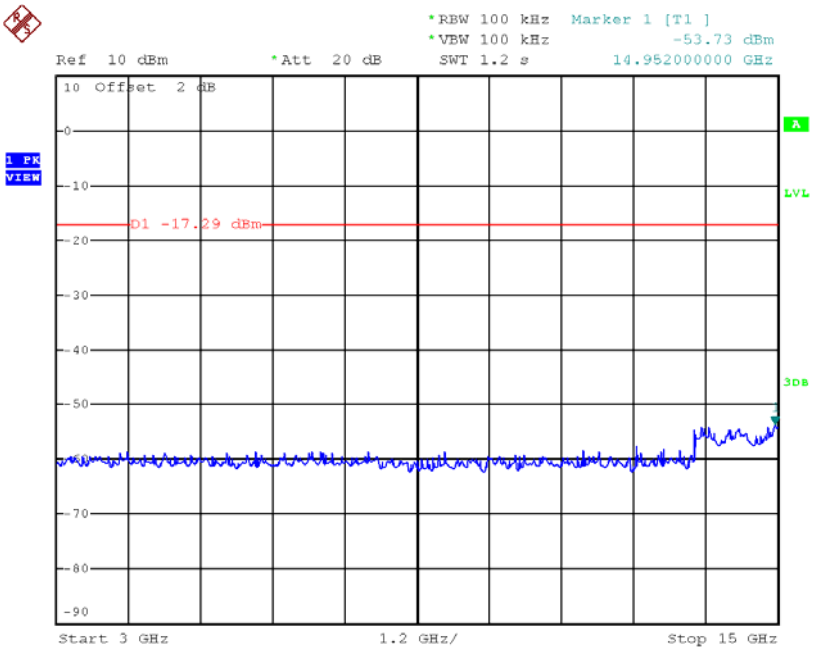


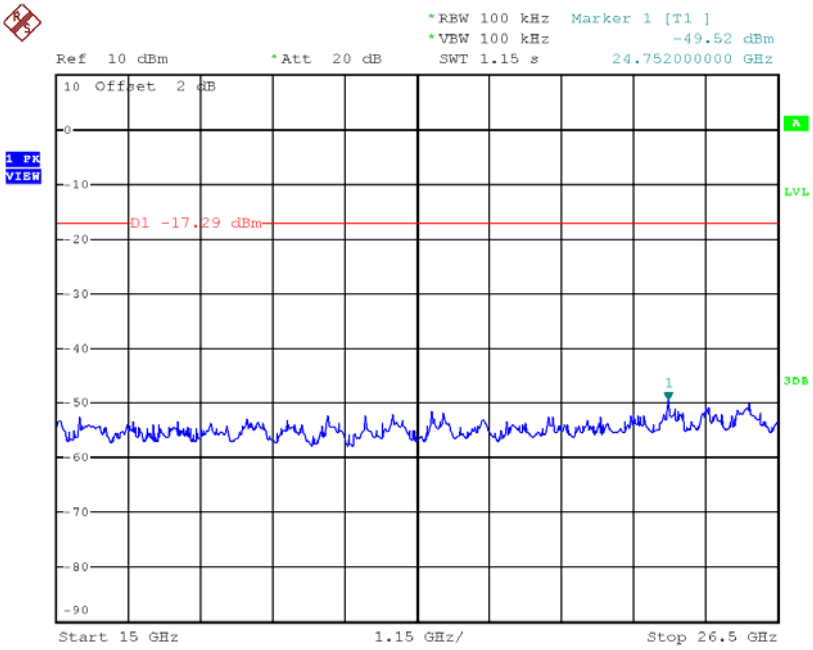




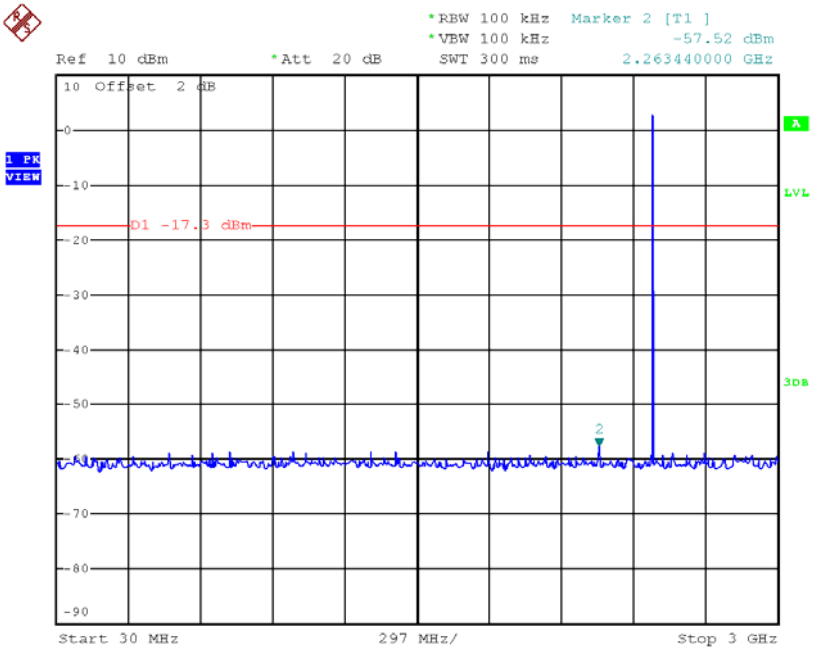
CH39 (10 Harmonic of the frequency) _1Mbps

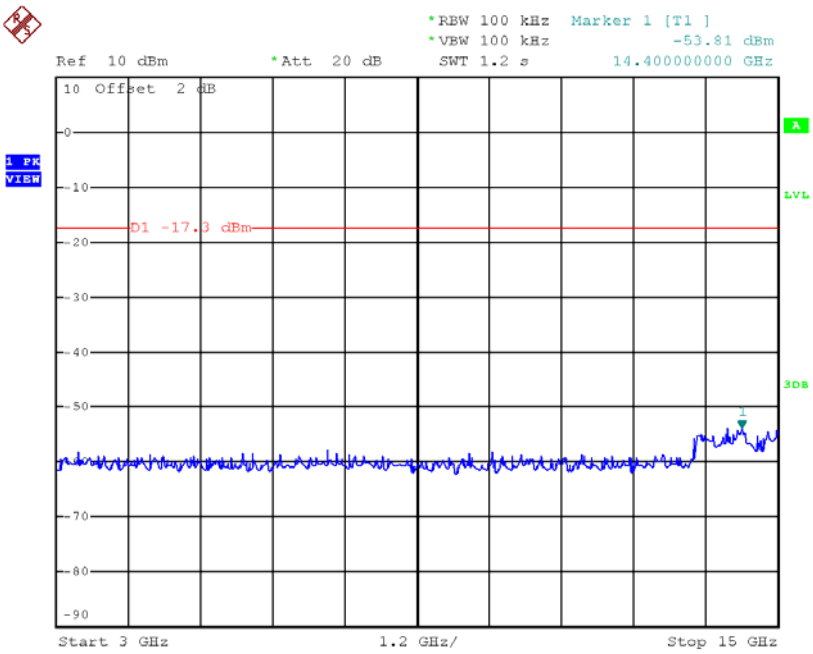


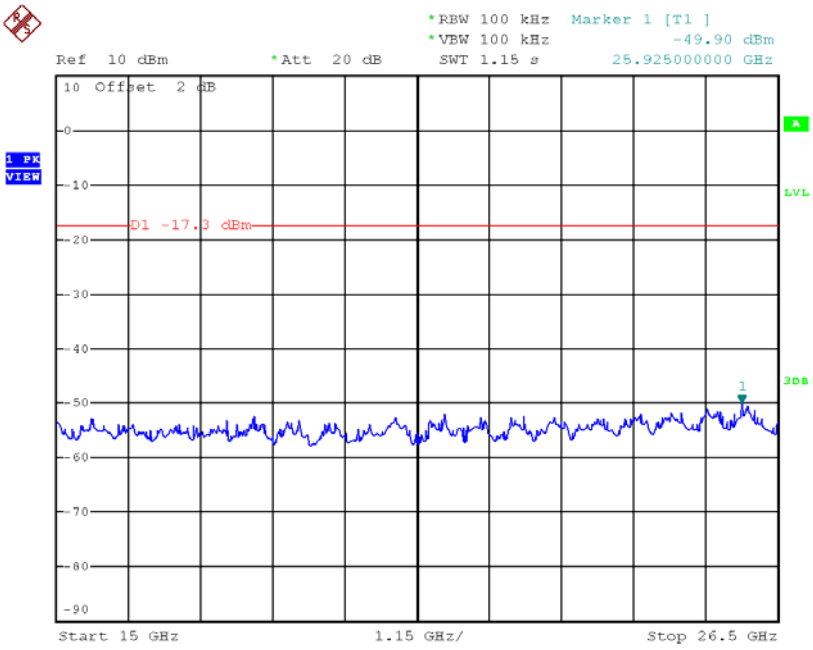

*RBW 100 kHz
Marker 1 [T1]
*VBW 100 kHz
-53.73 dBm
Ref 10 dBm
*Att 20 dB
SWT 1.2 s
14.952000000 GHz
10 Offset 2 dB
1 PK VIEW
D1 -17.29 dBm
A
LVL
3DB
Start 3 GHz
1.2 GHz/
Stop 15 GHz


*RBW 100 kHz
Marker 1 [T1]
*VBW 100 kHz
-49.52 dBm
Ref 10 dBm
*Att 20 dB
SWT 1.15 s
24.752000000 GHz
10 Offset 2 dB
1 PK VIEW
D1 -17.29 dBm
A
LVL
3DB
Start 15 GHz
1.15 GHz/
Stop 26.5 GHz

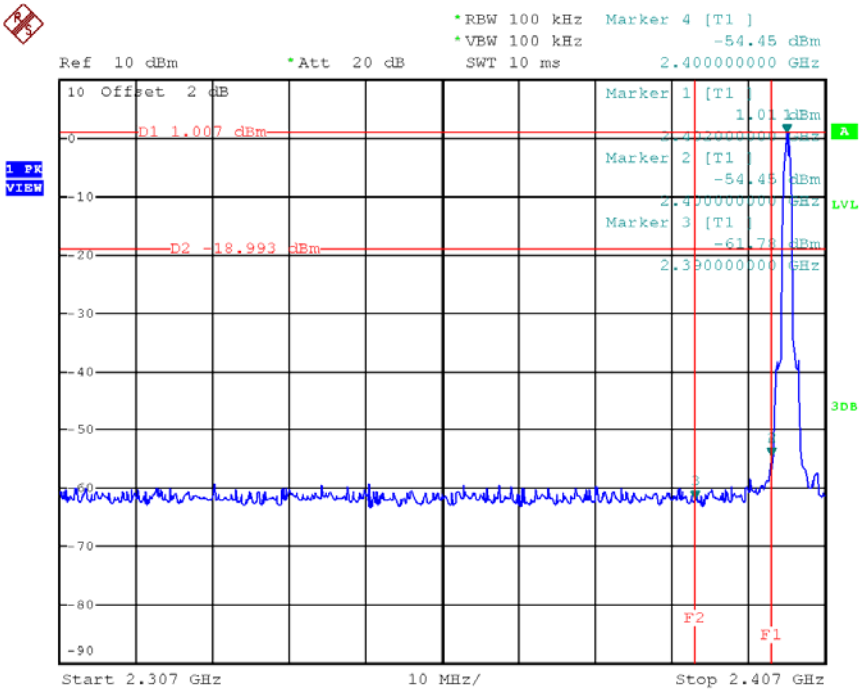
CH78 (10 Harmonic of the frequency) _1Mbps



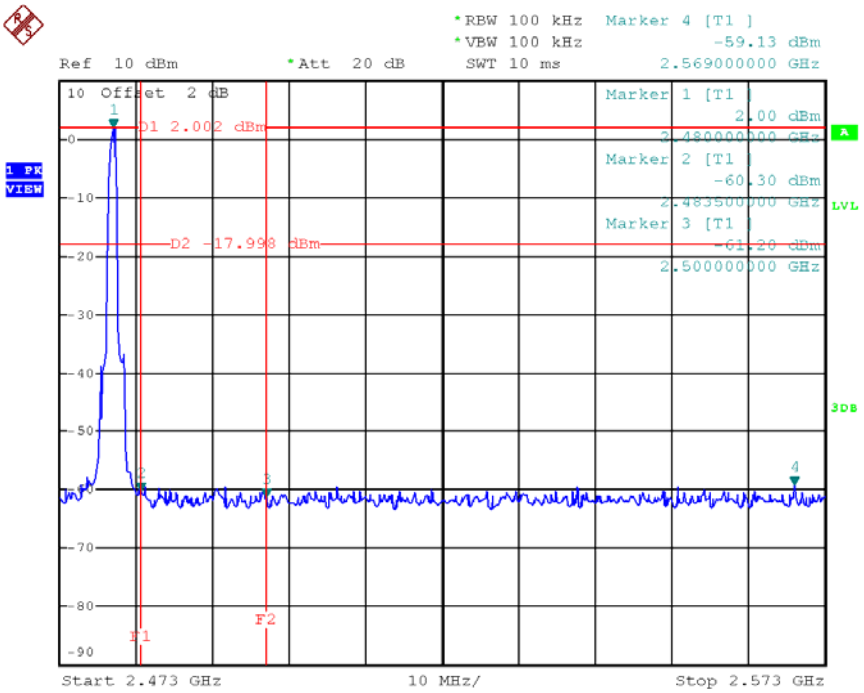



*RBW 100 kHz
Marker 1 [T1]
*VBW 100 kHz
-49.90 dBm
Ref 10 dBm
*Att 20 dB
SWT 1.15 s
25.925000000 GHz
10 Offset 2 dB
1 PK VIEW
D1 -17.3 dBm
A
LVL
3DB
Start 15 GHz
1.15 GHz/
Stop 26.5 GHz

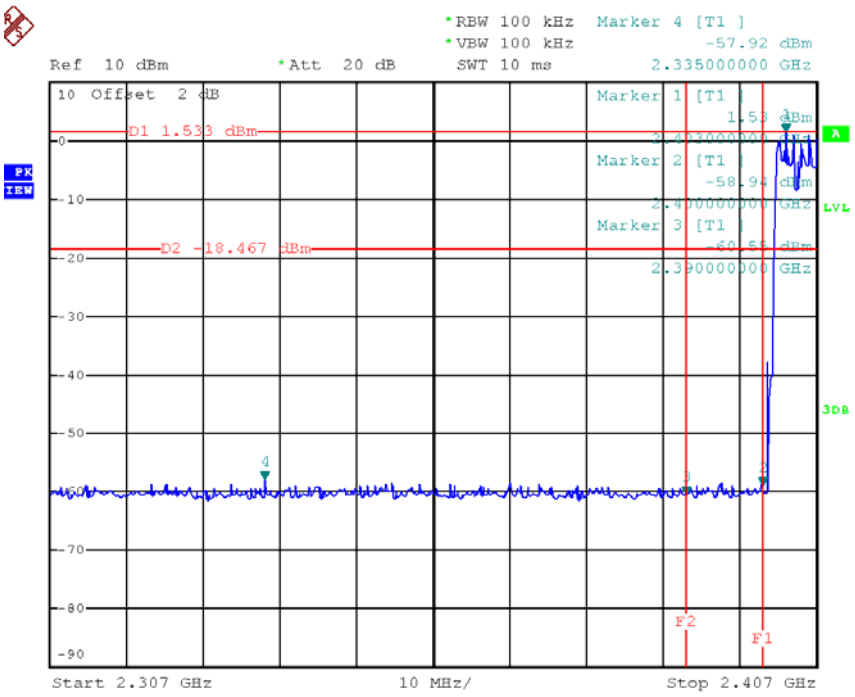
CH00 (Lower) _3Mbps



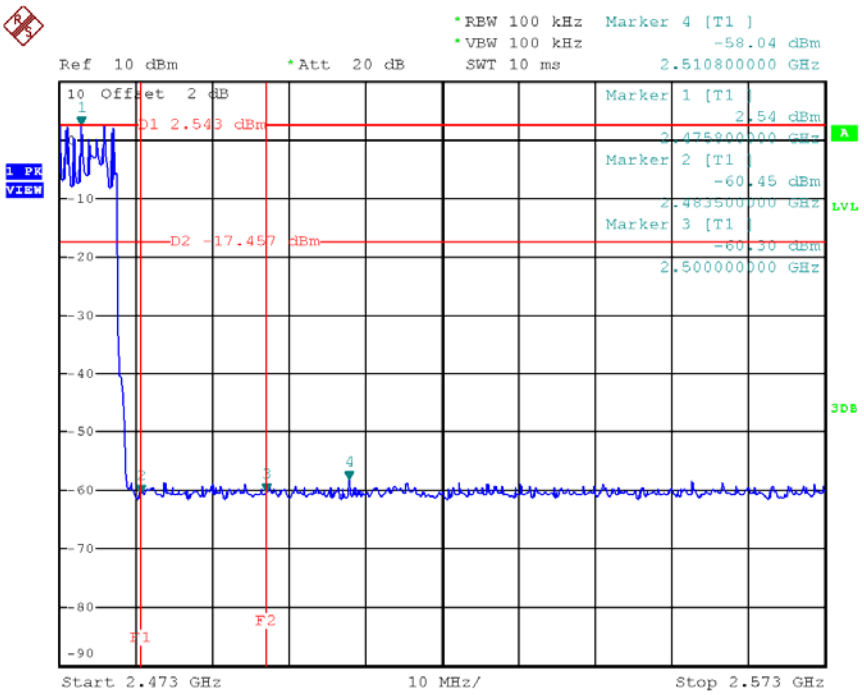
CH78 (Upper) _3Mbps



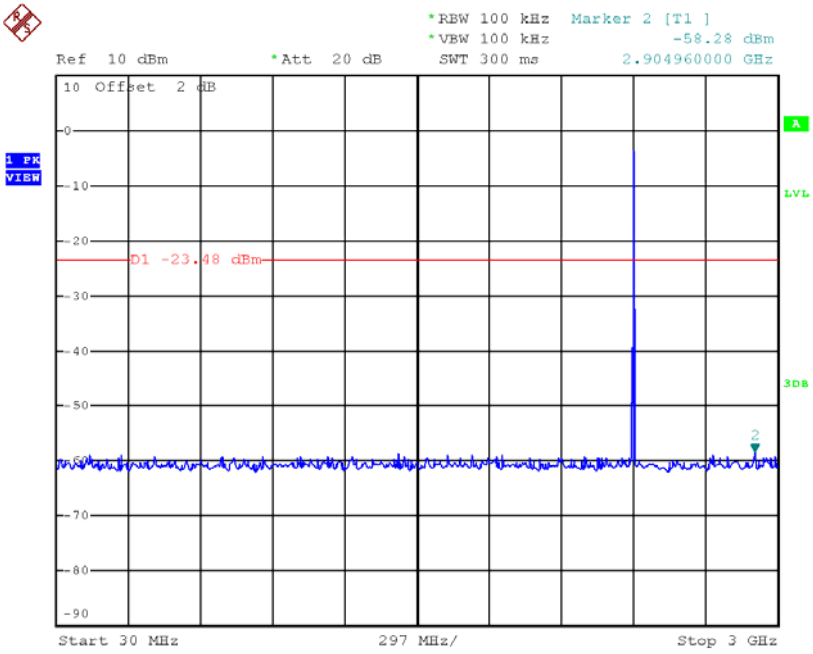
CH00 Hopping on mode (Lower)_3Mbps

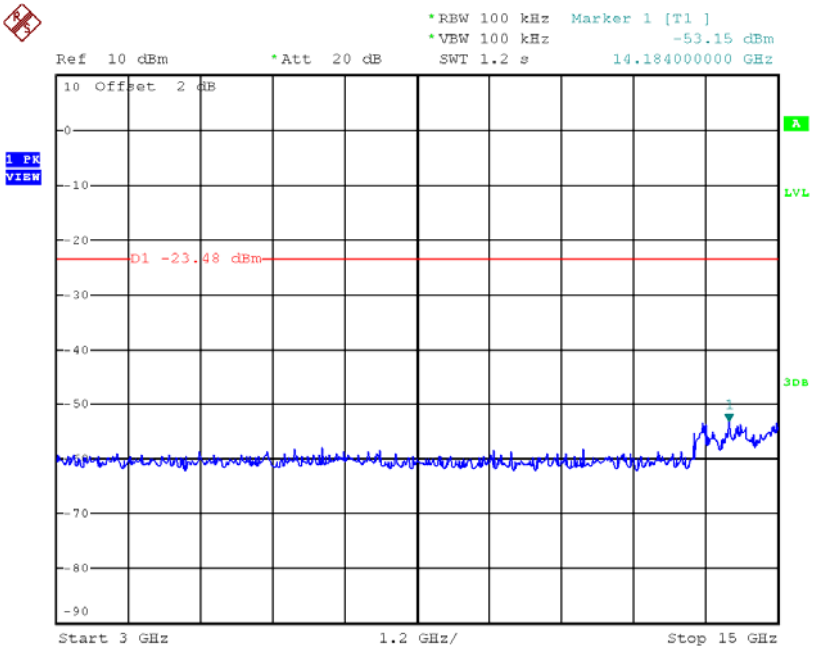


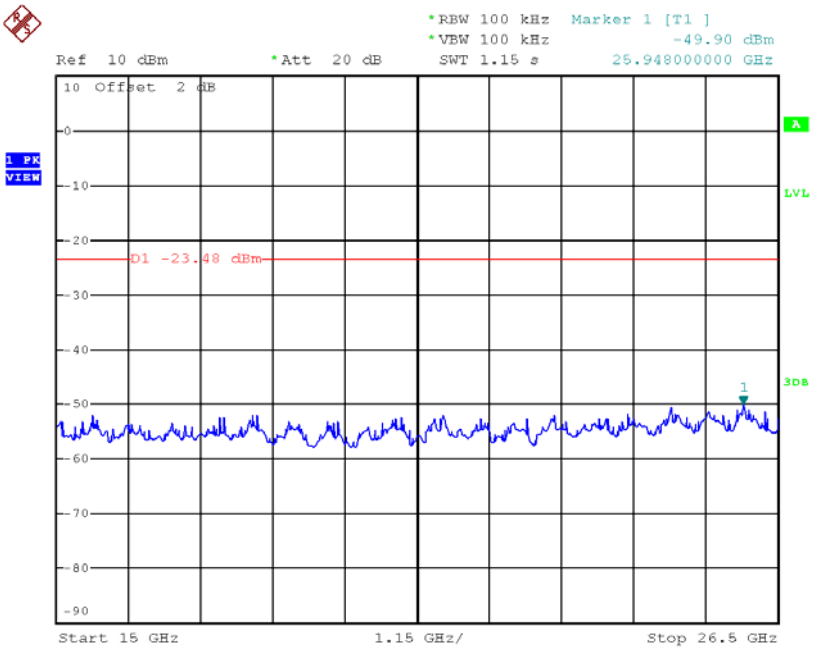
CH78 Hopping on mode (Upper) _3Mbps



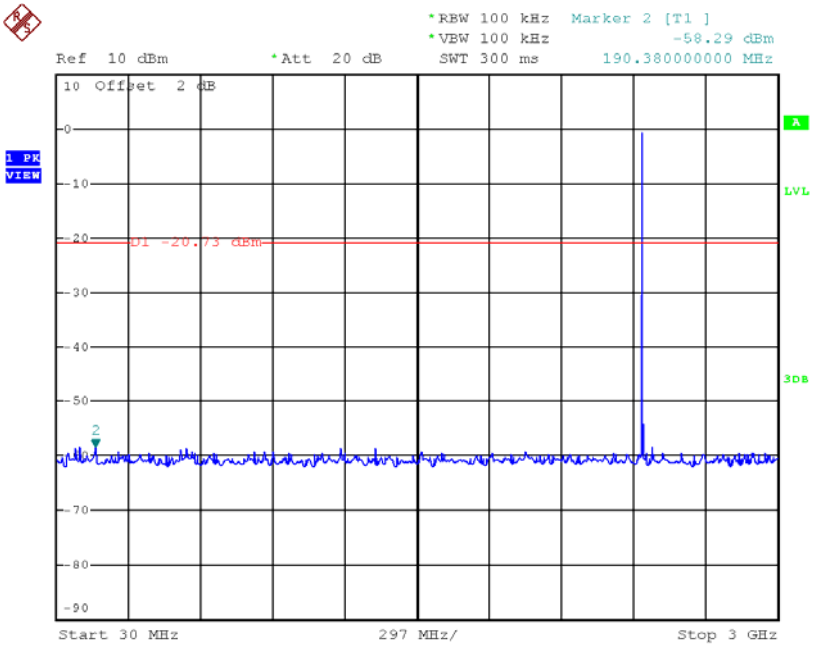
CH00 (10 Harmonic of the frequency) _3Mbps

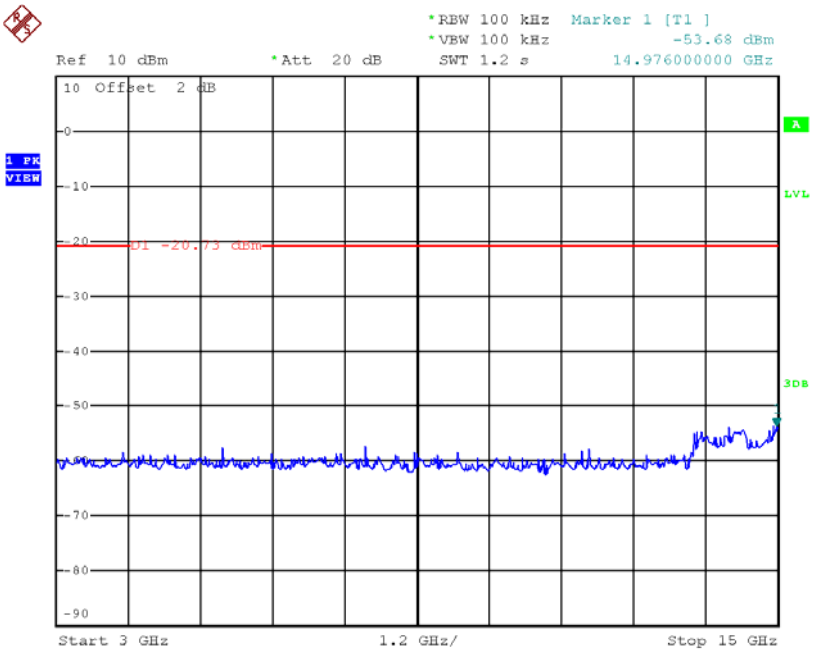


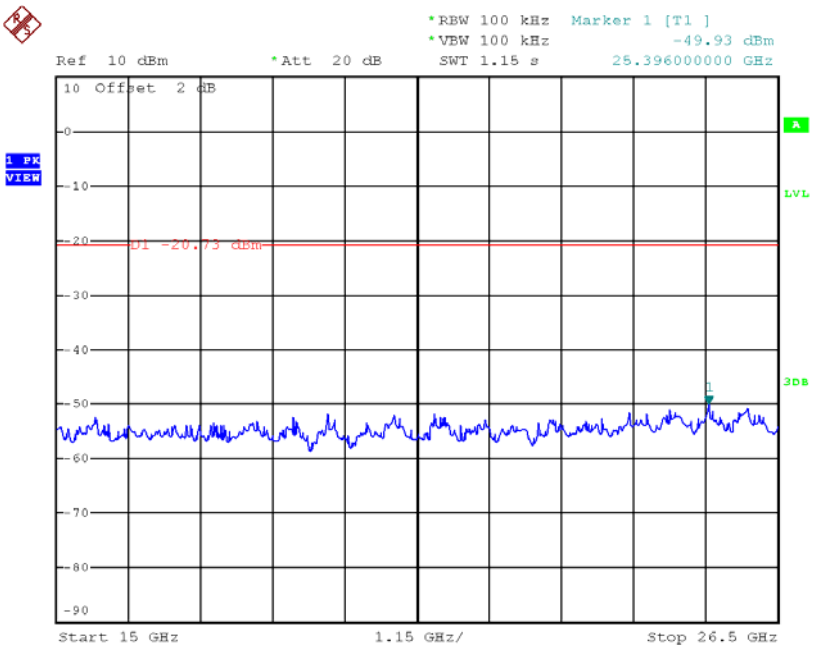




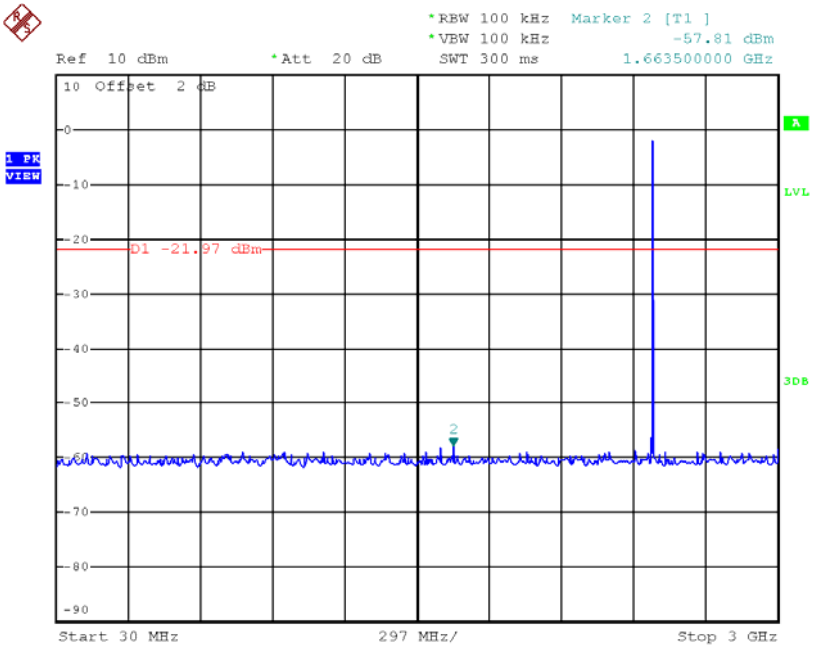
CH39 (10 Harmonic of the frequency) _3Mbps

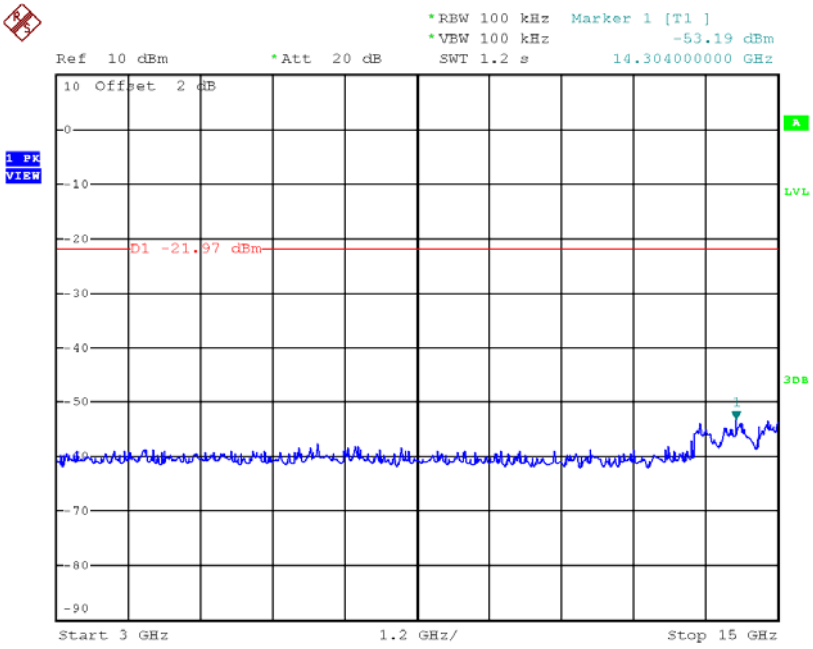


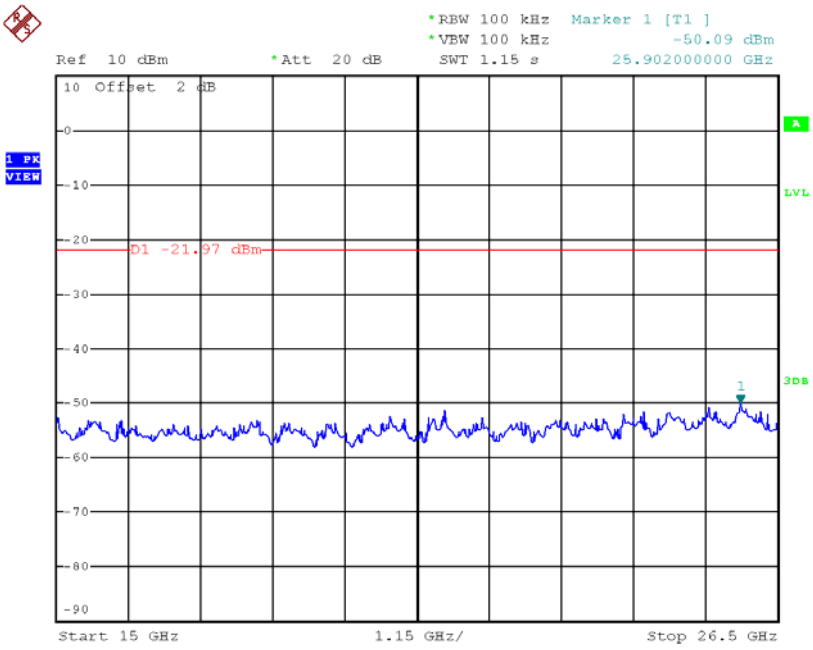

*RBW 100 kHz
Marker 1 [T1]
*VBW 100 kHz
-53.68 dBm
Ref 10 dBm
*Att 20 dB
SWT 1.2 s
14.976000000 GHz
10 Offset 2 dB
1 PK VIEW
D1 -20.73 dBm
A
LVL
3DB
Start 3 GHz
1.2 GHz/
Stop 15 GHz


*RBW 100 kHz
Marker 1 [T1]
*VBW 100 kHz
-49.93 dBm
Ref 10 dBm
*Att 20 dB
SWT 1.15 s
25.396000000 GHz
10 Offset 2 dB
1 PK VIEW
D1 -20.73 dBm
A
LVL
3DB
Start 15 GHz
1.15 GHz/
Stop 26.5 GHz

CH78 (10 Harmonic of the frequency) _3Mbps






*RBW 100 kHz
Marker 1 [T1]
*VBW 100 kHz
-50.09 dBm
Ref 10 dBm
*Att 20 dB
SWT 1.15 s
25.902000000 GHz
10 Offset 2 dB
1 PK VIEW
A
LVL
3DB
D1 -21.97 dBm
Start 15 GHz
1.15 GHz/
Stop 26.5 GHz