FCC Radio Test Report

FCC ID: Q78-ZXHNH167A

This report concerns: Original Grant

Project No.	:	1902H001
Equipment	:	VDSL CPE
Test Model	:	ZXHN H167A
Series Model	:	N/A
Applicant	:	ZTE Corporation
Address	:	ZTE Plaza, Hi-Tech Park, Nanshan District, Shenzhen, Guangdong, P.R.China
Date of Receipt	:	Feb. 13, 2019
Date of Test	:	Feb. 13, 2019~Mar. 08, 2019
Issued Date	:	Mar. 28, 2019
Tested by	:	BTL Inc.

Testing Engineer : Krain. Wu
(Krain Wu)

Technical Manager : David Mao
(David Mao)

Authorized Signatory : James Chiu
(James Chiu)

BTL INC.

No. 29, Jintang Road, Tangzhen Industry Park, Pudong New Area,
Shanghai 201210,China
TEL: +86-021-61765666

Certificate # 5123.03

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

Report Version	Description	Issued Date
R00	Original Issue.	Mar. 20, 2019
R00	Revised report to address TCB's omments.	Mar. 28, 2019

1. GENERAL SUMMARY

Equipment	:	VDSL CPE
Brand Name	:	ZTE
Test Model	:	ZXHN H167A
Series Model	:	N/A
Applicant	:	ZTE Corporation
Manufacturer	:	ZTE Corporation
Address	:	ZTE Plaza, Hi-Tech Park, Nanshan District, Shenzhen, Guangdong, P.R.China
Date of Test	:	Feb. 13, 2019~Mar. 08, 2019
Test Sample	:	Engineering Sample No.: B190200035
Standard(s)	:	FCC Part15, Subpart C (15.247) ANSI C63.10-2013 558074 D01 15.247 Meas Guidance v05r01

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-1-1902H001) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of A2LA according to the ISO/IEC 17025 quality assessment standard and technical standard(s).

Test results included in this report are only for the WLAN 2.4 GHz part.

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**	**Test Result**	**Judgment**	**Remark**
15.207	AC Power Line Conducted Emissions	APPENDIX A	PASS	------
15.247(d) 15.205(a) 15.209(a)	Radiated Emissions	APPENDIX B APPENDIX C APPENDIX D	PASS	------
15.247(a)(2)	Bandwidth	APPENDIX E	PASS	------
15.247(b)(3)	Maximum Output Power	APPENDIX F	PASS	------
15.247(d)	Conducted Spurious Emissions	APPENDIX G	PASS	------
15.247(e)	Power Spectral Density	APPENDIX H	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. 29, Jintang Road, Tangzhen Industry Park, Pudong New Area, Shanghai 201210,China
BTL's Test Firm Registration Number for FCC: 476765
BTL's Designation Number for FCC: CN1241

2.2 MEASUREMENT UNCERTAINTY

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)
The BTL measurement uncertainty as below table:

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	U, (dB)
SH-C01	CISPR	150 kHz ~ 30 MHz	2.70

B. Radiated emissions test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
SH-CB01	CISPR	9 KHz~30 MHz	V	3.79
		9 KHz~30 MHz	H	3.57
		30 MHz~200 MHz	V	4.04
		30 MHz~200 MHz	H	3.76
		200 MHz~1,000 MHz	V	4.24
		200 MHz~1,000 MHz	H	3.84
		1 GHz~18 GHz	V	4.46
		1 GHz~18 GHz	H	4.40
		18 GHz~40 GHz	V	3.95
		18 GHz~40 GHz	H	3.95

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	VDSL CPE
Brand Name	ZTE
Test Model	ZXHN H167A
Series Model	N/A
Model Difference(s)	N/A
Software Version	V1.0.x
Hardware Version	V1.0.x
Power Source	DC voltage supplied from AC/DC adapter. model RD1201000-C55-91MG
Power Rating	I/P: 100-240V~ 50/60Hz, 0.6A MAX O/P:12V⎓1A
Operation Frequency	2412 MHz ~ 2462 MHz
Modulation Type	IEEE 802.11b: DSSS IEEE 802.11g: OFDM IEEE 802.11n: OFDM
Bit Rate of Transmitter	IEEE 802.11b: 11/5.5/2/1 Mbps IEEE 802.11g: 54/48/36/24/18/12/9/6 Mbps IEEE 802.11n: up to 300 Mbps
Maximum Output Power Non-Beamforming	IEEE 802.11b: 22.63 dBm (0.1831 W) IEEE 802.11g: 26.34 dBm (0.4305 W) IEEE 802.11n (HT20): 26.36 dBm (0.4325 W) IEEE 802.11n (HT40): 26.53 dBm (0.4498 W)

Note:

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

CH01 - CH11 for 802.11b, 802.11g, 802.11n(20 MHz) CH03 - CH09 for 802.11n(40 MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	04	2427	07	2442	10	2457
02	2417	05	2432	08	2447	11	2462
03	2422	06	2437	09	2452		

3. Antenna Specification:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	PIFA	IPEX	3
2	N/A	N/A	PIFA	IPEX	3

Note:

This EUT supports MIMO 2X2, any transmit signals are correlated with each other, so Directional gain = G_{ANT}+10log(N)dBi, that is Directional gain=3+10log(2)dBi=6.01; Antenna Gain=6.01 dBi. So, the out power limit is 30-6.01+6=29.99, the power density limit is 8-6.01+6=7.99.

4. Table for Antenna Configuration:

Operating Mode / TX Mode	2TX
802.11b	V (ANT 1 + ANT 2)
802.11g	V (ANT 1 + ANT 2)
802.11n(20 MHz)	V (ANT 1 + ANT 2)
802.11n(40 MHz)	V (ANT 1 + ANT 2)

3.2 DESCRIPTION OF TEST MODES

The test system was pre-tested based on the consideration of all possible combinations of EUT operation mode.

Pretest Mode	Description
Mode 1	TX B Mode Channel 01/06/11
Mode 2	TX G Mode Channel 01/06/11
Mode 3	TX N-20 MHz Mode Channel 01/06/11
Mode 4	TX N-40 MHz Mode Channel 03/06/09
Mode 5	TX N40 Mode Channel 06

Following mode(s) as (were) found to be the worst case(s) and selected for the final test.

AC power line conducted emissions test	
Final Test Mode:	Description
Mode 5	TX N40 Mode Channel 06

Radiated emissions test	
Final Test Mode:	Description
Mode 1	TX B Mode Channel 01/06/11
Mode 2	TX G Mode Channel 01/06/11
Mode 3	TX N-20 MHz Mode Channel 01/06/11
Mode 4	TX N-40 MHz Mode Channel 03/06/09

Conducted test	
Final Test Mode:	Description
Mode 1	TX B Mode Channel 01/06/11
Mode 2	TX G Mode Channel 01/06/11
Mode 3	TX N-20 MHz Mode Channel 01/06/11
Mode 4	TX N-40 MHz Mode Channel 03/06/09

NOTE:

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

(2) 802.11b mode: DBPSK (1 Mbps)
802.11g mode: OFDM (6 Mbps)
802.11n HT20 mode : BPSK (13 Mbps)
802.11n HT40 mode : BPSK (27 Mbps)
For radiated emission tests, the highest output powers were set for final test.

(3) For radiated emission below 1 GHz test, the IEEE 802.11n(HT20) is found to be the worst case and recorded.

(4) For radiated emission above 1 GHz test, 1GHz~26.5GHz have been pre-tested and in this report only recorded the worst case. The remaining spurious points are all below the limit value of 20dB.

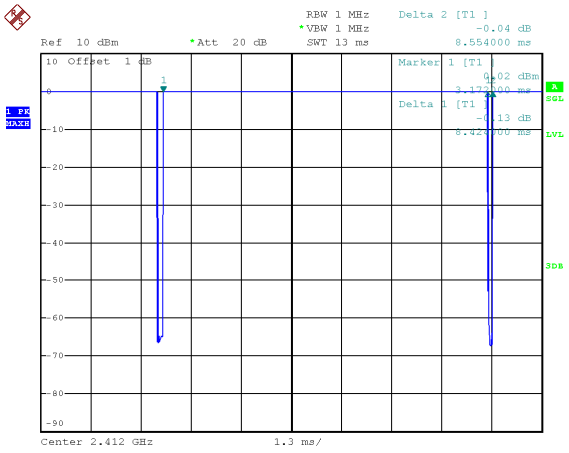
3.3 PARAMETERS OF TEST SOFTWARE

Test Software	7603E-QA		
Test Frequency (MHz)	2412	2437	2462
IEEE 802.11b	18	1B	1F
IEEE 802.11g	18	1C	1B
IEEE 802.11n (HT20)	1A	1E	1C
Test Frequency (MHz)	2422	2437	2452
IEEE 802.11n (HT40)	16	1E	18

3.4 DUTY CYCLE

If duty cycle is ≥ 98 %, duty factor is not required.
If duty cycle is < 98 %, duty factor shall be considered.

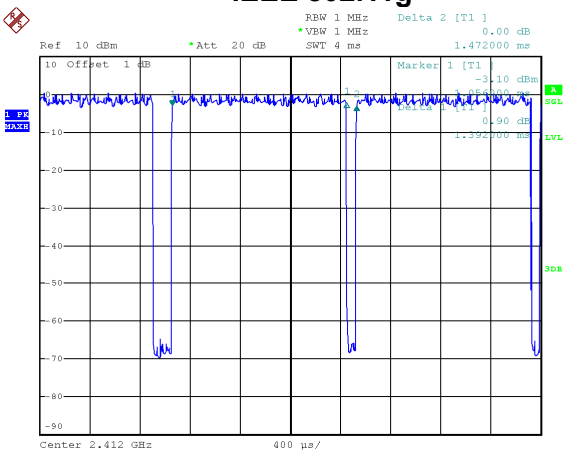
IEEE 802.11b



Date: 13.FEB.2019 11:00:17

Duty cycle = 8.424 ms / 8.554 ms = 98.48%

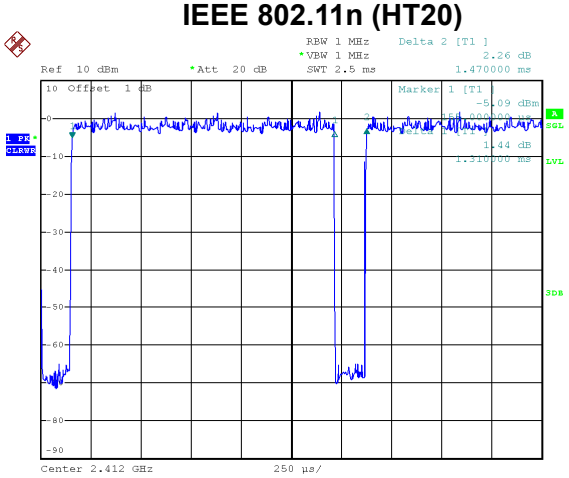
IEEE 802.11g



Date: 13.FEB.2019 11:03:43

Duty cycle = 1.392 ms / 1.472 ms = 94.57%

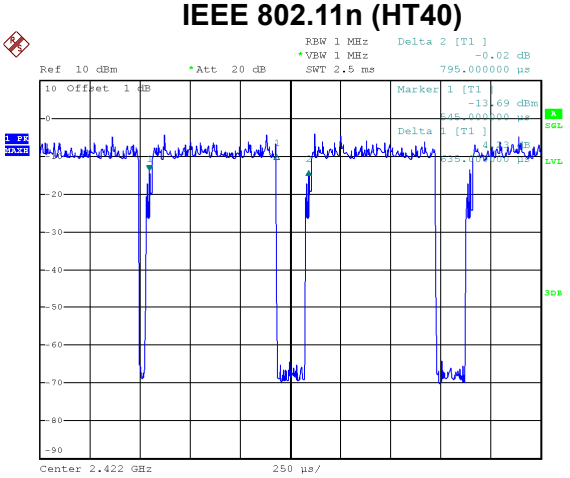
IEEE 802.11n (HT20)



Date: 13.FEB.2019 11:04:53

Duty cycle = 1.310 ms / 1.470 ms = 89.12%

IEEE 802.11n (HT40)



Date: 13.FEB.2019 11:06:01

Duty cycle = 0.635 ms / 0.795 ms = 79.87%

NOTE:
For IEEE 802.11g and IEEE 802.11n (HT20):
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1 kHz (Duty cycle < 98%).

For IEEE 802.11n (HT40):
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 2 kHz (Duty cycle < 98%).

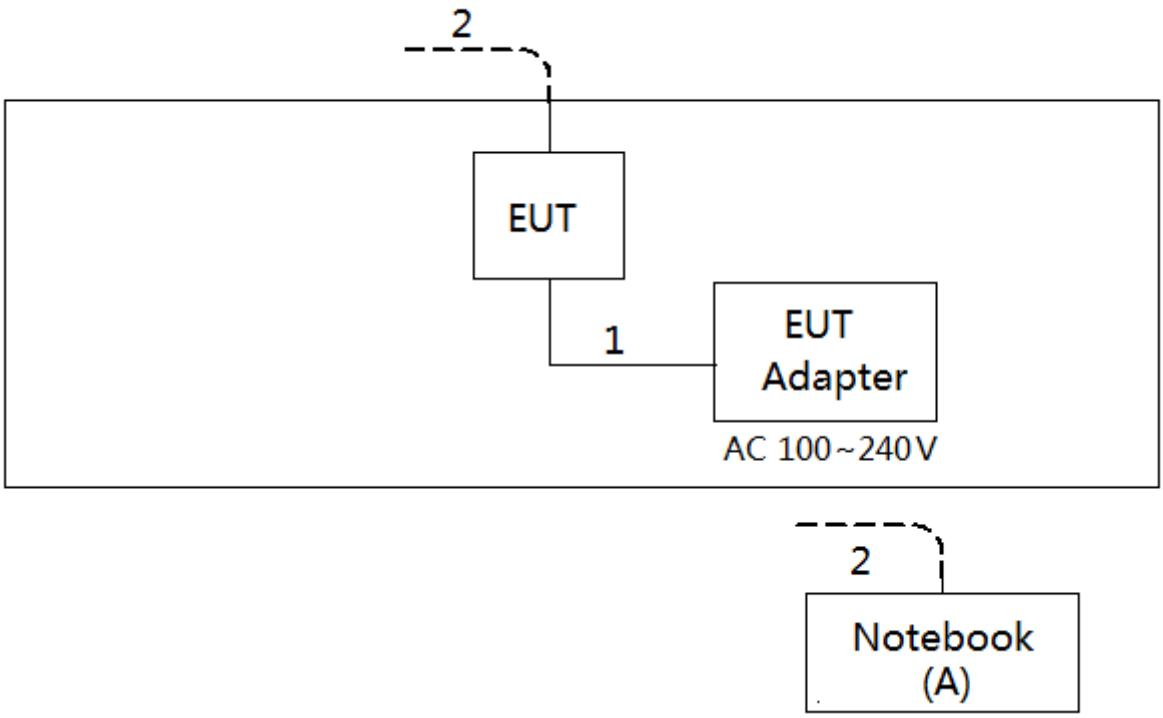
For IEEE 802.11b:
Duty Factor = 10 log(1/Duty cycle) = 0.00, the output power = measured power + duty factor.

For IEEE 802.11g:
Duty Factor = 10 log(1/Duty cycle) = 0.24, the output power = measured power + duty factor.

For IEEE IEEE 802.11n (HT20):
Duty Factor = 10 log(1/Duty cycle) = 0.50, the output power = measured power + duty factor.

For IEEE IEEE 802.11n (HT40):
Duty Factor = 10 log(1/Duty cycle) = 0.98, the output power = measured power + duty factor.

3.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.6 SUPPORT UNITS

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.
A	Notebook	Lenovo	#P152014	N/A

Item	Shielded Type	Ferrite Core	Length	Note
1	No	No	1.5m	DC Cable
2	No	No	10m	RJ45 Cable

4. AC POWER LINE CONDUCTED EMISSIONS TEST

4.1 LIMIT

Frequency of Emission (MHz)	Limit (dBμV)	
	Quasi-peak	Average
0.15 - 0.50	66 to 56*	56 - 46*
0.50 - 5.0	56	46
5.0 - 30.0	60	50

NOTE:
(1) The tighter limit applies at the band edges.
(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.
(3) 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

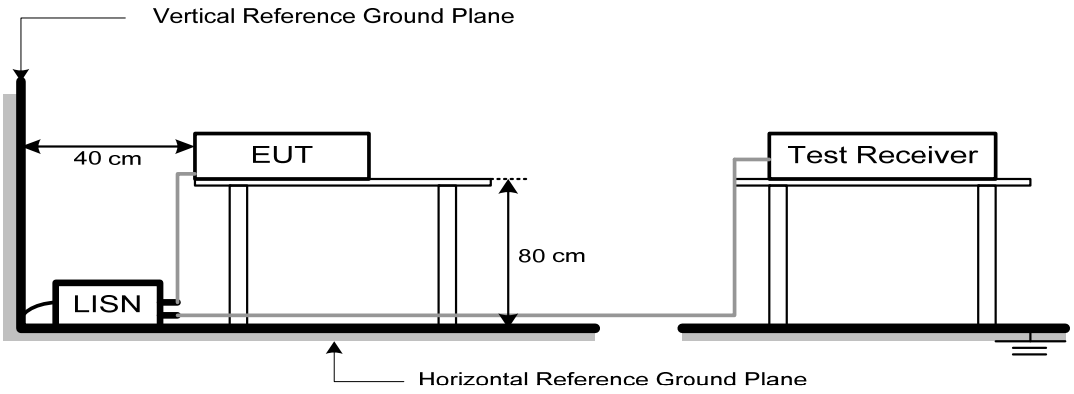
4.2 TEST PROCEDURE

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.

4.3 DEVIATION FROM TEST STANDARD

No deviation

4.4 TEST SETUP



4.5 EUT OPERATION CONDITIONS

The EUT was placed on the test table and programmed in normal function.

4.6 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 53% Test Voltage: AC 120V/60Hz

4.7 TEST RESULTS

Please refer to the APPENDIX A.

5. RADIATED EMISSIONS TEST

5.1 LIMIT

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 (9 kHz-1000 MHz)

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

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000 MHz)

Frequency (MHz)	(dBuV/m at 3 m)	
	Peak	Average
Above 1000	74	54

NOTE:

(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

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW (Emission in restricted band)	1 MHz / 3 MHz for Peak, 1 MHz / 1/T for Average

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

5.2 TEST PROCEDURE

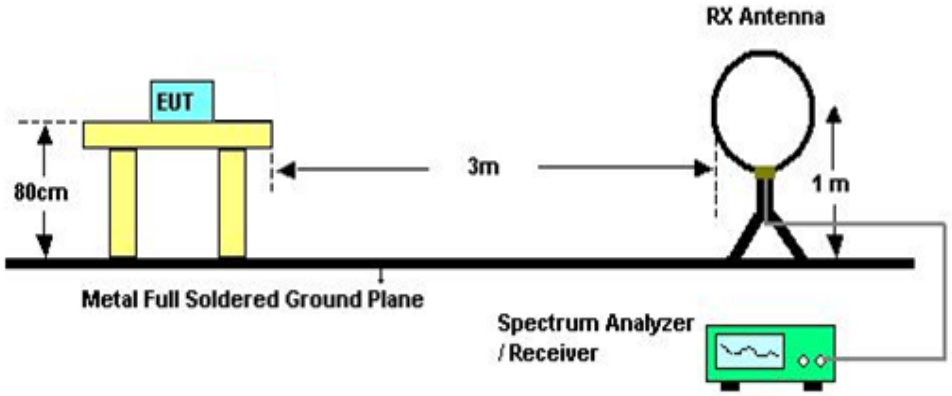
a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
b. The measuring distance of 3 m 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 1 GHz)
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 1 GHz.
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 1 GHz)
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 1 GHz)
i. For the actual test configuration, please refer to the related Item -EUT Test Photos.

5.3 DEVIATION FROM TEST STANDARD

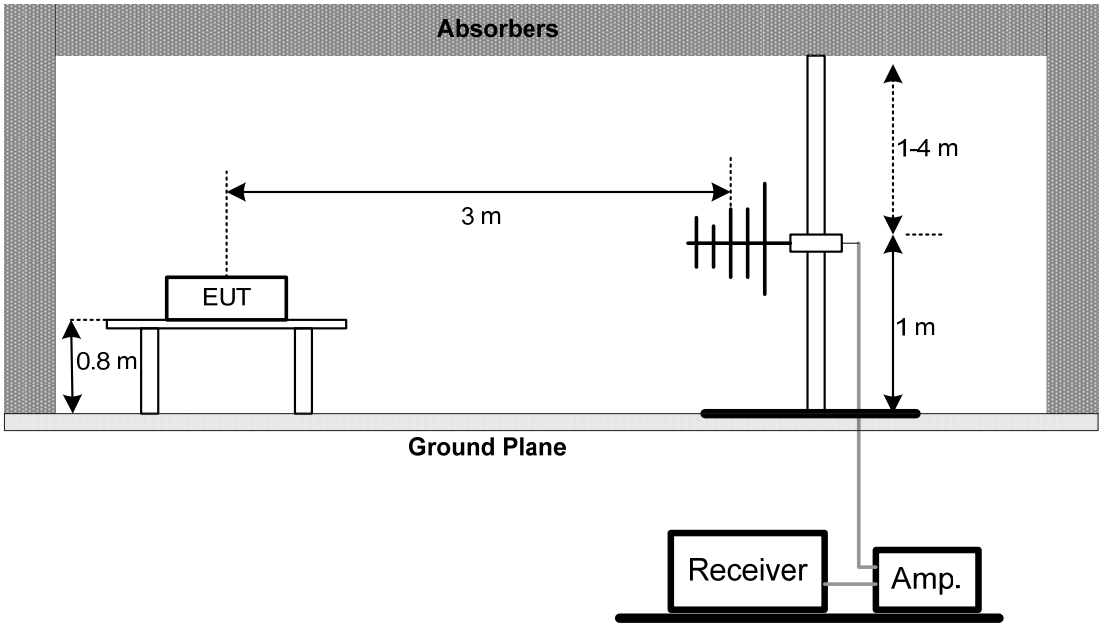
No deviation

5.4 TEST SETUP

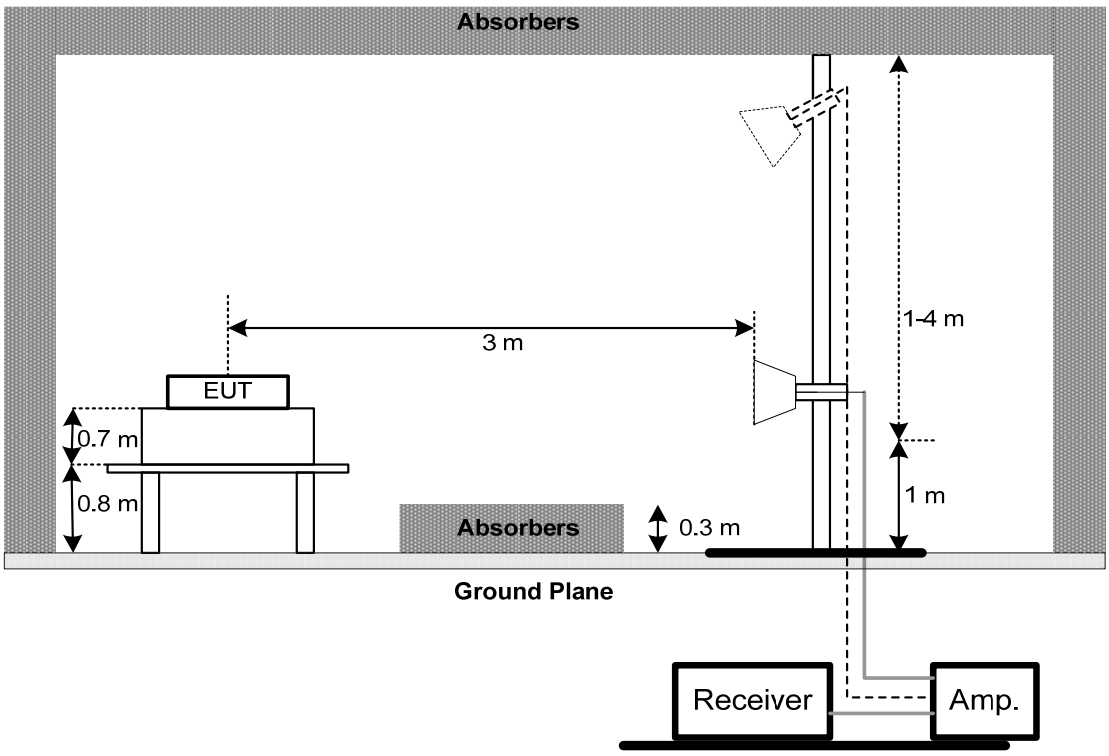
9 kHz-30 MHz



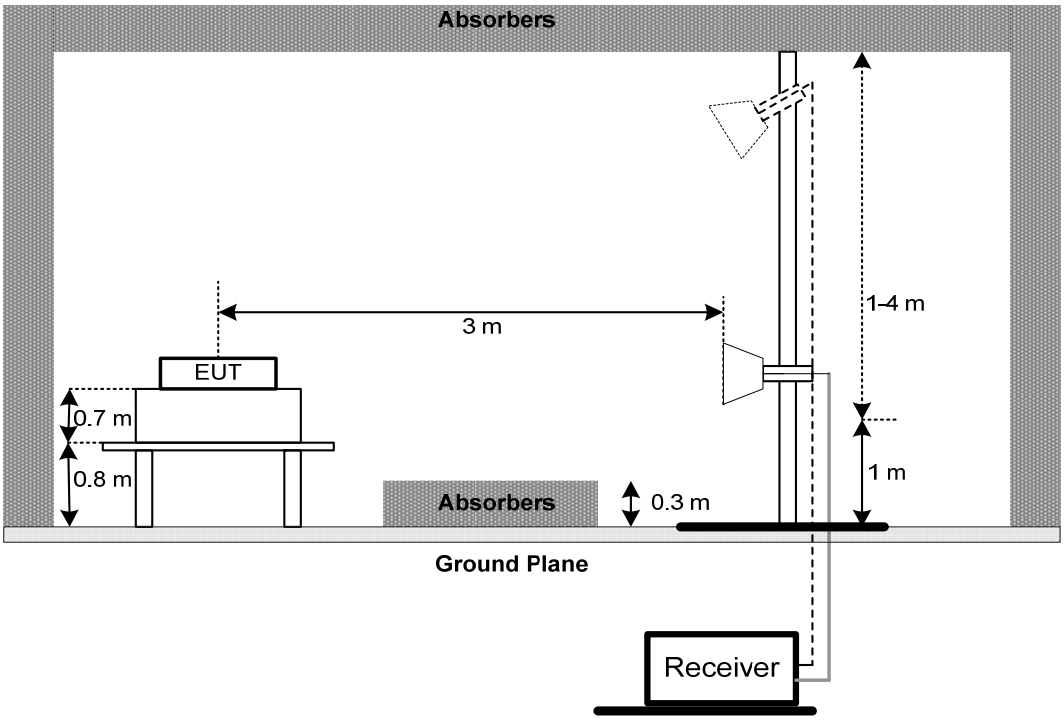
30 MHz to 1 GHz



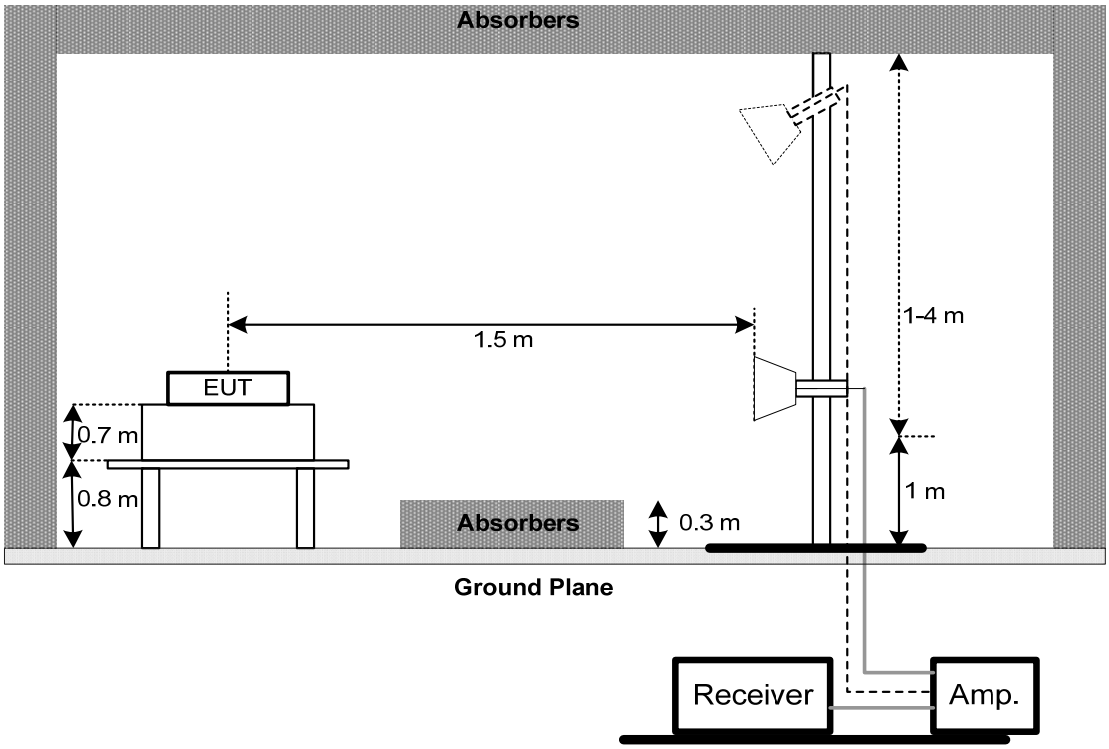
Above 1 GHz



Above 1 GHz
Band edge



Harmonic


Absorbers
1.5 m
1-4 m
EUT
0.7 m
0.8 m
Absorbers
0.3 m
1 m
Ground Plane
Receiver
Amp.

5.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.6 EUT TEST CONDITIONS

Temperature: 17°C Relative Humidity: 58% Test Voltage: AC 120V/60Hz

5.7 TEST RESULTS - 9 KHZ TO 30 MHZ

Please refer to the APPENDIX B

Remark:

(1) Distance extrapolation factor = 40 log (specific distance / test distance) (dB).
(2) Limit line = specific limits (dBuV) + distance extrapolation factor.

5.8 TEST RESULTS - 30 MHZ TO 1000 MHZ

Please refer to the APPENDIX C.

5.9 TEST RESULTS - ABOVE 1000 MHZ

Please refer to the APPENDIX D.

Remark:

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

6. BANDWIDTH TEST

6.1 LIMIT

FCC Part15 (15.247) , Subpart C		
Section	Test Item	Limit
15.247(a)(2)	6 dB Bandwidth	Minimum 500 kHz
	99% Emission Bandwidth	-

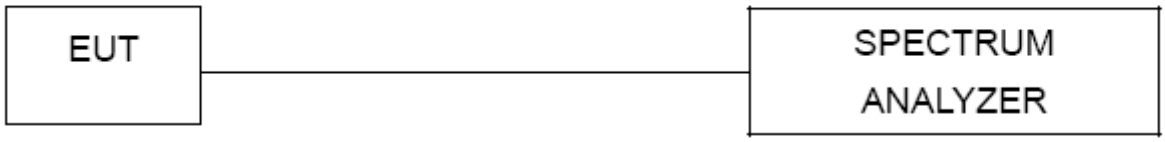
6.2 TEST PROCEDURE

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= 100 kHz, VBW=300 kHz, Sweep time = 2.5 ms.
c. The bandwidth was performed in accordance with method 11.8 of ANSI C63.10-2013.

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.6 EUT TEST CONDITIONS

Temperature: 19°C Relative Humidity: 52% Test Voltage: AC 120V/60Hz

6.7 TEST RESULTS

Please refer to the APPENDIX E.

7. MAXIMUM OUTPUT POWER TEST

7.1 LIMIT

FCC Part15 (15.247) , Subpart C		
Section	Test Item	Limit
15.247(b)(3)	Maximum Output Power	1 Watt or 30dBm

7.2 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 conducted output power was performed in accordance with method 11.9.1.3 (for peak power) of ANSI C63.10-2013 and FCC KDB 662911 D01 v02r01 Multiple Transmitter Output.

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP

7.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

7.6 EUT TEST CONDITIONS

Temperature: 19°C Relative Humidity: 52% Test Voltage: AC 120V/60Hz

7.7 TEST RESULTS

Please refer to the APPENDIX F.

8. CONDUCTED SPURIOUS EMISSIONS

8.1 LIMIT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator 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 the transmitter demonstrates compliance with the peak Output Power limits. If the transmitter complies with the Output Power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

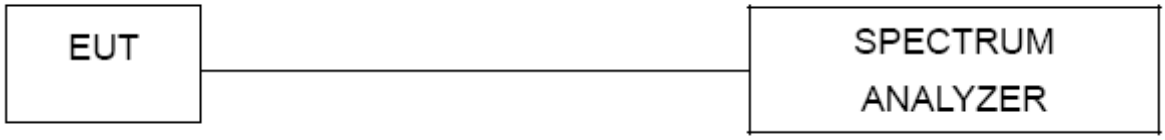
8.2 TEST PROCEDURE

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= 100 kHz, VBW=300 kHz, Sweep time = Auto.

8.3 DEVIATION FROM STANDARD

No deviation.

8.4 TEST SETUP



8.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

8.6 EUT TEST CONDITIONS

Temperature: 19°C Relative Humidity: 52% Test Voltage: AC 120V/60Hz

8.7 TEST RESULTS

Please refer to the APPENDIX G.

9. POWER SPECTRAL DENSITY TEST

9.1 LIMIT

FCC Part15 (15.247) , Subpart C		
Section	Test Item	Limit
15.247(e)	Power Spectral Density	8 dBm (in any 3 kHz)

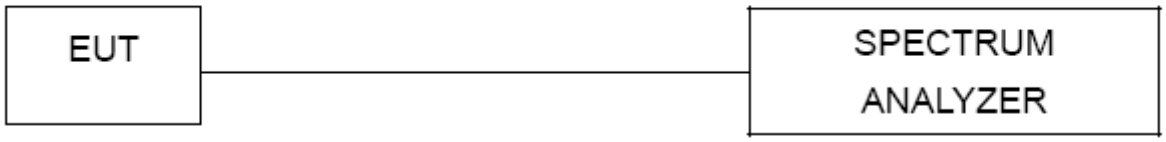
9.2 TEST PROCEDURE

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=3 kHz, VBW=10 kHz, Sweep time = Auto.
c. The Power Spectral Density was performed in accordance with method 11.10.2 of ANSI C63.10-2013.

9.3 DEVIATION FROM STANDARD

No deviation.

9.4 TEST SETUP



9.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

9.6 EUT TEST CONDITIONS

Temperature: 19°C Relative Humidity: 52% Test Voltage: AC 120V/60Hz

9.7 TEST RESULTS

Please refer to the APPENDIX H.

10. MEASUREMENT INSTRUMENTS LIST

AC Power Line Conducted Emissions					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Line Impedance Stabilisation Network	Schwarzbeck	NNLK 8121	8121-822	Mar. 30, 2019
2	TWO-LINE V-NETWORK	R&S	ENV216	101340	Nov. 21, 2019
3	EMI Test Receiver	R&S	ESCI	100082	Mar. 30, 2019
4	50Ω coaxial switch	Anritsu	MP59B	6201750902	Jul. 17, 2019
5	Cable	10m	EMCRG400-BM-NM-10000	170628	Jun. 10, 2019
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Loop Antenna	EMCI	EMCI LPA600	275	Mar. 31, 2019
2	Cable	N/A	EMCRG400-BM-NM-10000	170628	Jun. 10, 2019
3	MXE EMI Receiver	Keysight	N9038A	MY57150106	Mar. 30, 2019
4	Measurement Software	Farad	EZ-EMC Ver.BTL-2ANT-1	N/A	N/A

Radiated Emissions - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	TRILOG Broadband Antenna	Schwarzbeck	VULB 9168	719	Mar. 30, 2019
2	Pre-Amplifier	emci	EMC9135	980400	Mar. 30, 2019
3	MXE EMI Receiver	Keysight	N9038A	MY57150106	Mar. 30, 2019
4	Attenuator	emci	EMCI-N-6-06	AT-N0644	Mar. 30, 2019
5	Cable	7m	EMC104-SM-SM-7000	170330	Jun. 10, 2019
6	Cable	1m	EMC104-SM-SM-1000	170331	Jun. 10, 2019
7	Cable	3.5m	EMC104-SM-NM-3500	170621	Jun. 10, 2019
8	Measurement Software	Farad	EZ-EMC Ver.BTL-2ANT-1	N/A	N/A

Radiated Emissions - Above 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double-Ridged Waveguide Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-1787	Mar. 30, 2019
2	Double-Ridged Waveguide Horn Antenna	ETS-Lindgren	3116C	00203919	Mar. 30, 2019
3	Pre-Amplifier	emci	EMC012645SE	980421	Mar. 30, 2019
4	Pre-Amplifier	emci	EMC184045SE	980409	Mar. 30, 2019
5	EXA Spectrum Analyzer	Keysight	N9010A	MY56480559	Mar. 30, 2019
6	MXE EMI Receiver	Keysight	N9038A	MY56400088	Mar. 30, 2019
7	Cable	7m	EMC104-SM-SM-7000	170330	Jun. 10, 2019
8	Cable	1m	EMC104-SM-SM-1000	170331	Jun. 10, 2019
9	Cable	3.5m	EMC104-SM-NM-3500	170621	Jun. 10, 2019
10	Cable	0.8m	EMC102-SM-SM-800	170335	Jun. 10, 2019
11	Cable	6m	EMC102-SM-SM-6000	170336	Jun. 10, 2019
12	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Bandwidth					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100626	Mar. 31, 2019

Peak Output Power					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	Keysight	8990B	MY51000507	Jul. 27, 2019
2	Pulse Power Sensor	Keysight	N1923A	MY58310003	Aug. 07, 2019

Antenna Conducted Spurious Emissions					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100626	Mar. 31, 2019

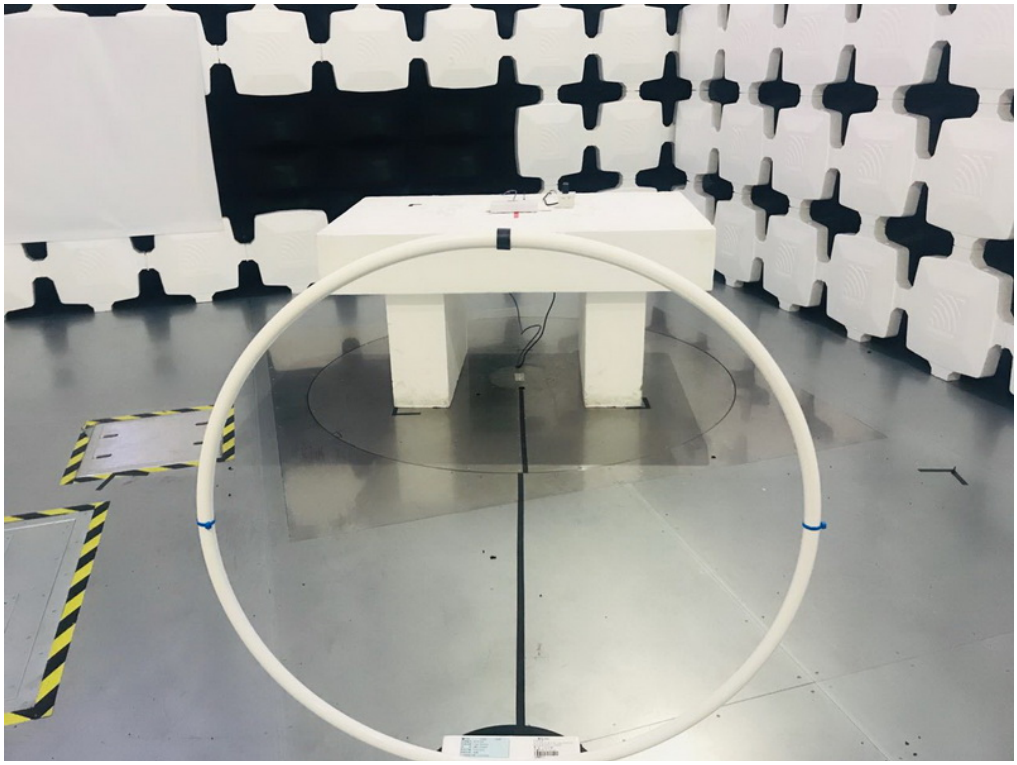
Power Spectral Density					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100626	Mar. 31, 2019

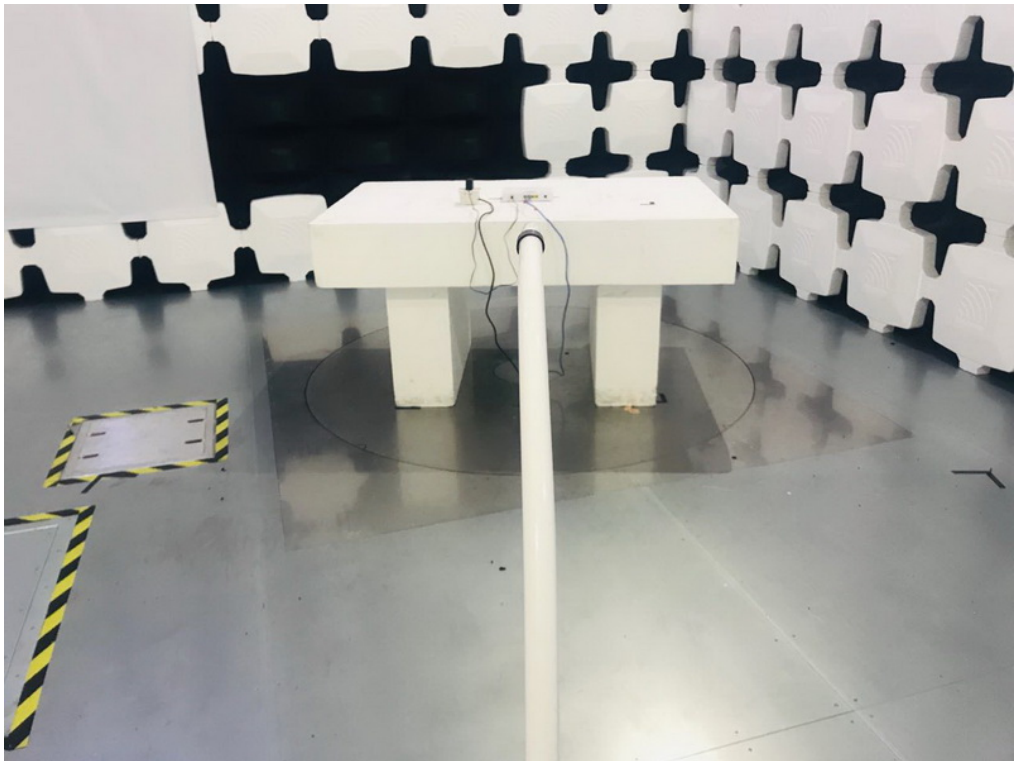
Remark: ”N/A” denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

11. EUT TEST PHOTO

Radiated Emissions Test Photos

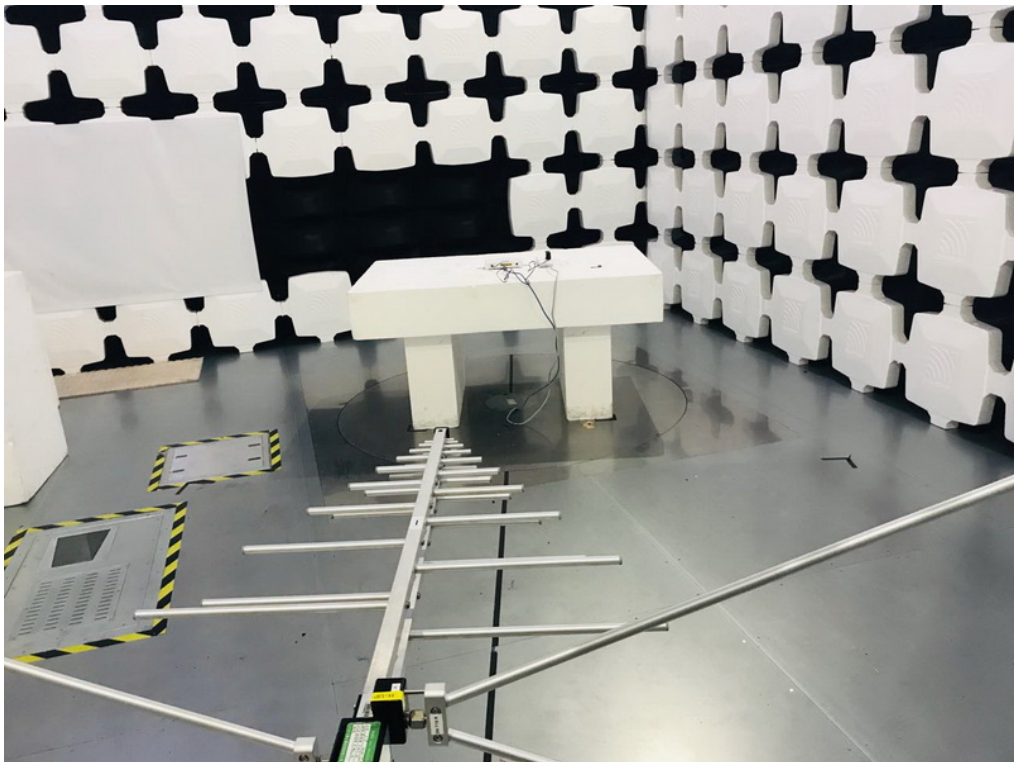
9 kHz to 30 MHz

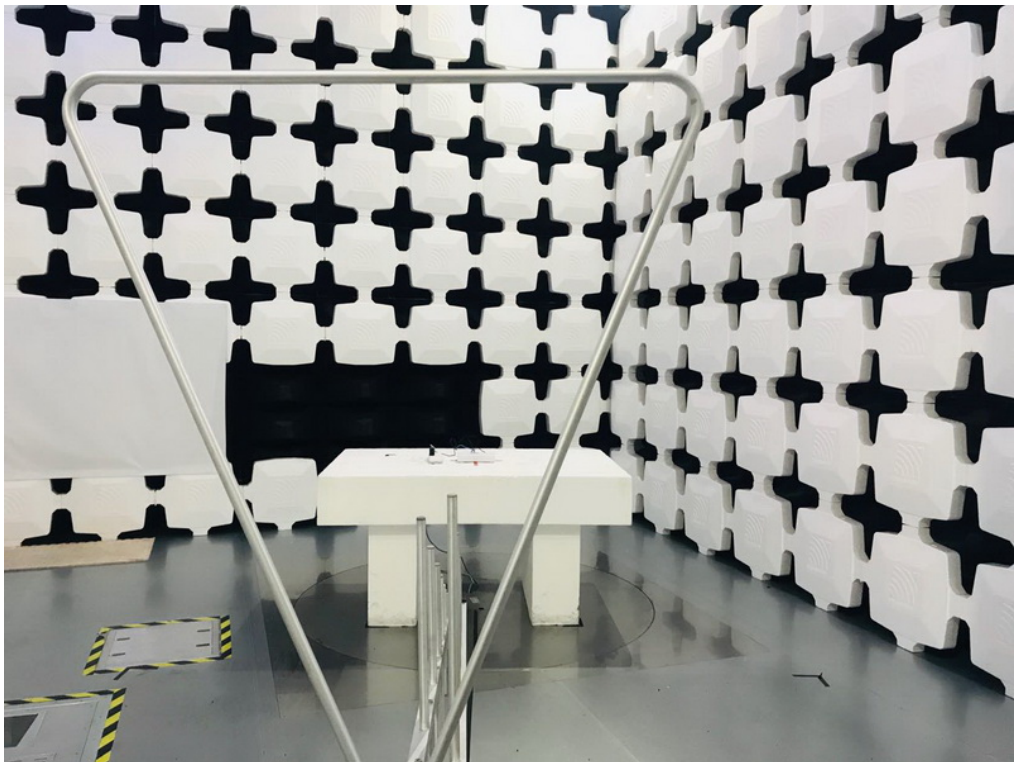




Radiated Emissions Test Photos

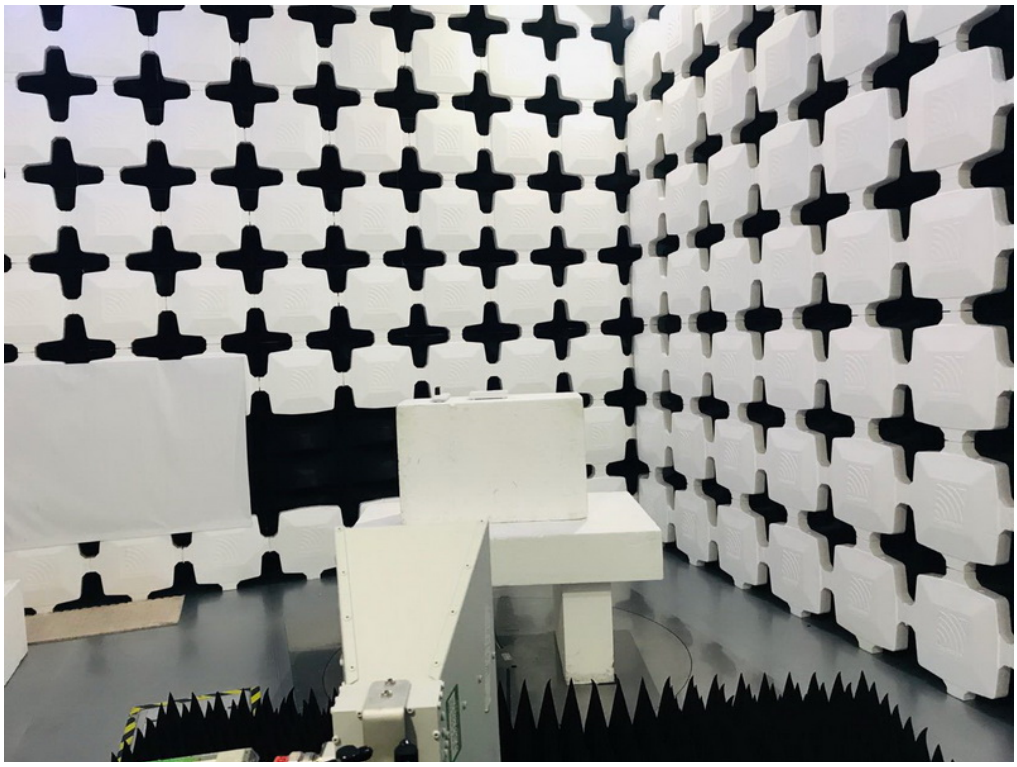
30 MHz to 1 GHz

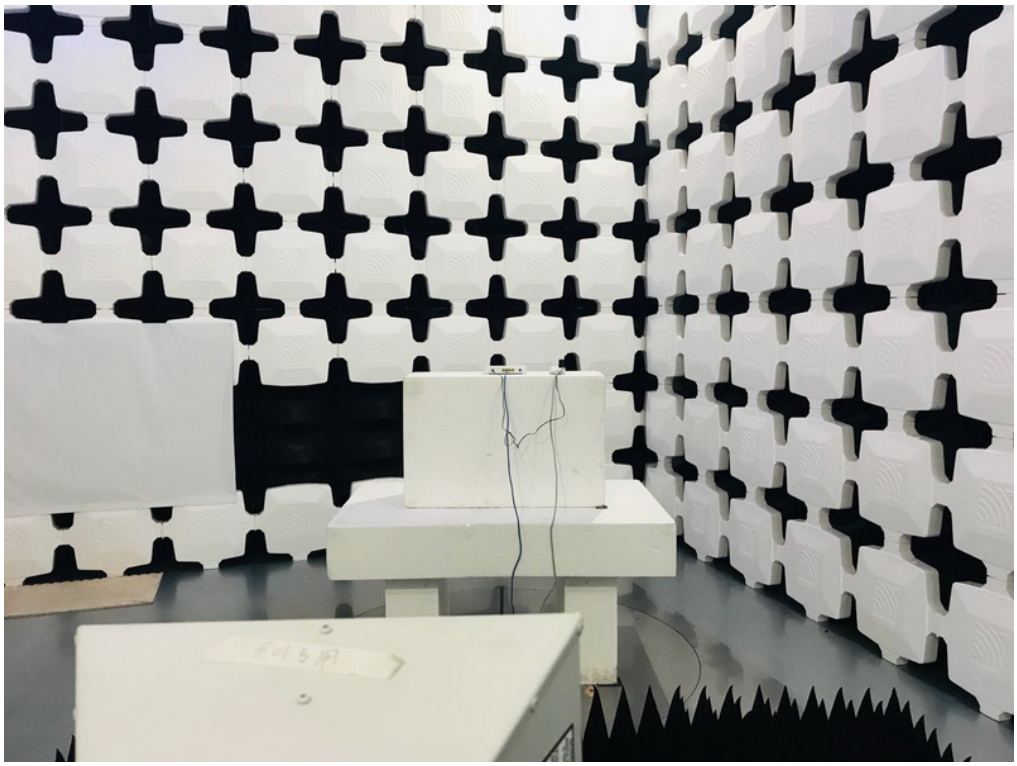




Radiated Emissions Test Photos

Above 1 GHz

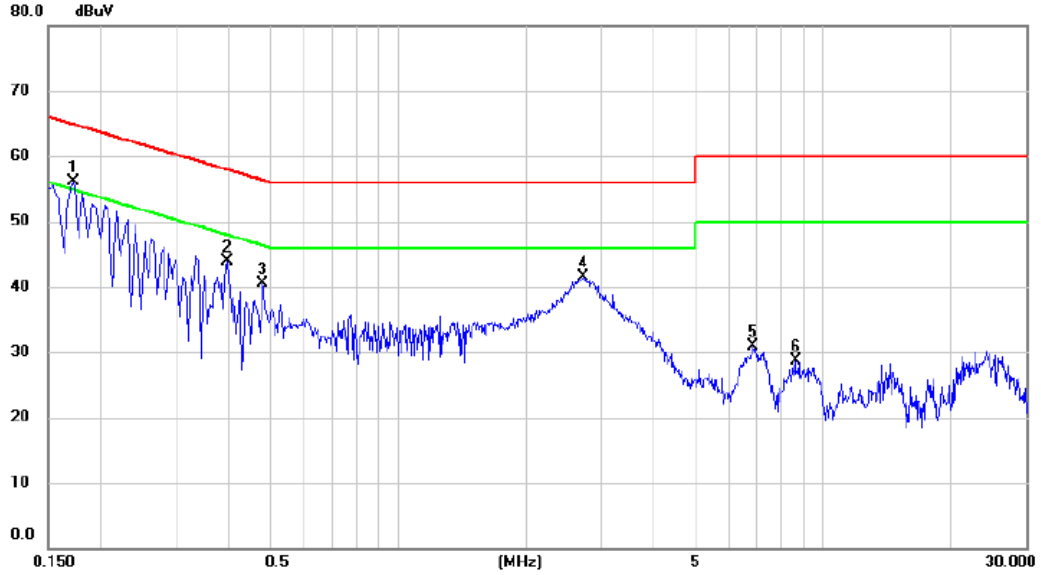




APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

Test Mode:	TX N40 Mode Channel 06

Line

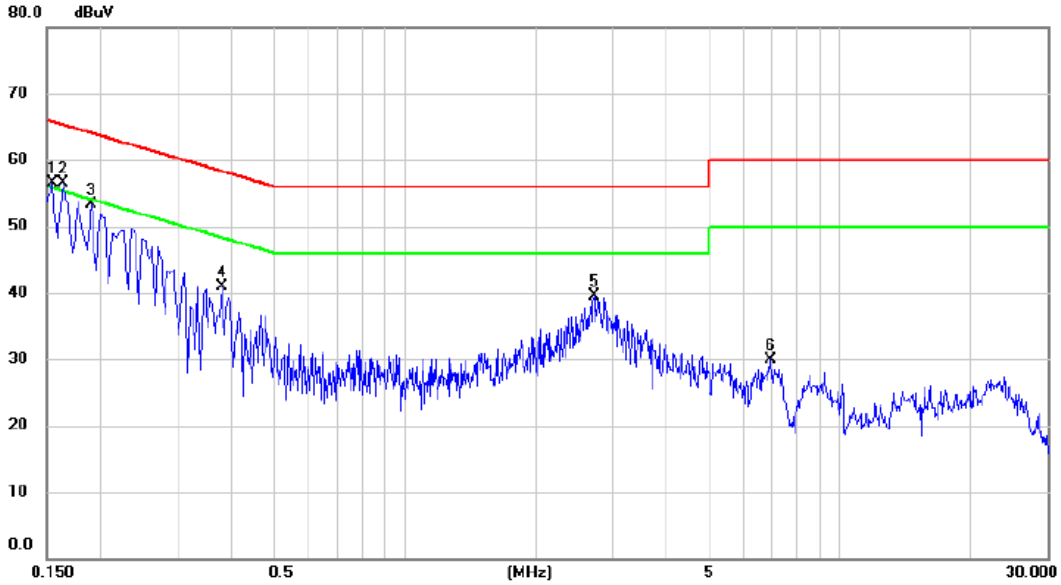


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1725	46.34	9.81	56.15	64.84	-8.69	peak	
2		0.3975	33.80	10.02	43.82	57.91	-14.09	peak	
3		0.4785	30.44	9.99	40.43	56.37	-15.94	peak	
4		2.7195	31.57	10.01	41.58	56.00	-14.42	peak	
5		6.8460	20.82	10.07	30.89	60.00	-29.11	peak	
6		8.6100	18.48	10.20	28.68	60.00	-31.32	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX N40 Mode Channel 06

Neutral



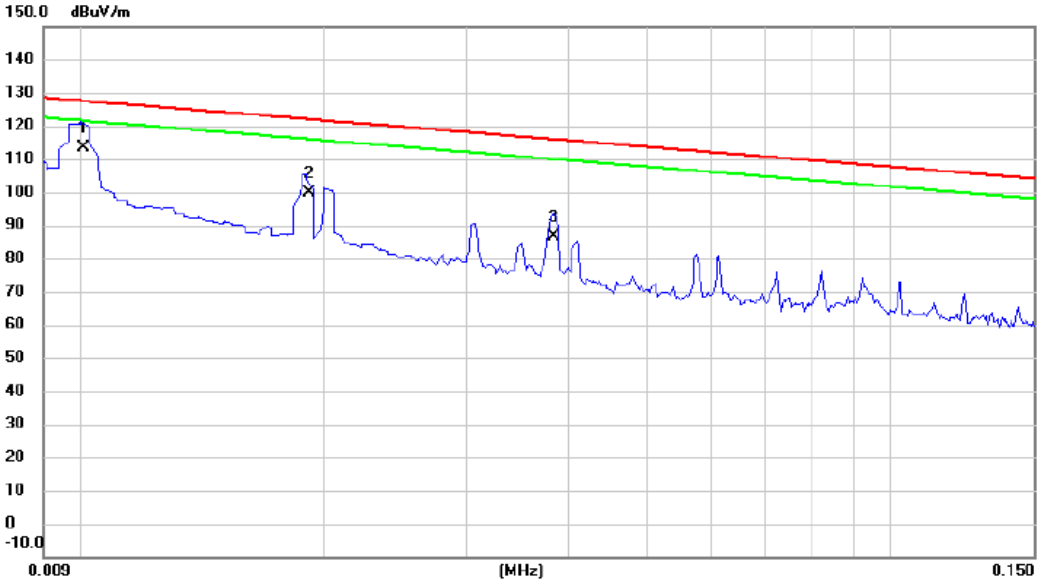
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1544	46.65	9.79	56.44	65.76	-9.32	peak	
2	*	0.1635	46.65	9.80	56.45	65.28	-8.83	peak	
3		0.1905	43.53	9.84	53.37	64.01	-10.64	peak	
4		0.3795	30.88	9.94	40.82	58.29	-17.47	peak	
5		2.7195	29.49	10.06	39.55	56.00	-16.45	peak	
6		6.9270	19.80	10.03	29.83	60.00	-30.17	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ

Test Mode:	TX N(HT20) MODE CHANNEL 06

Ant 0°

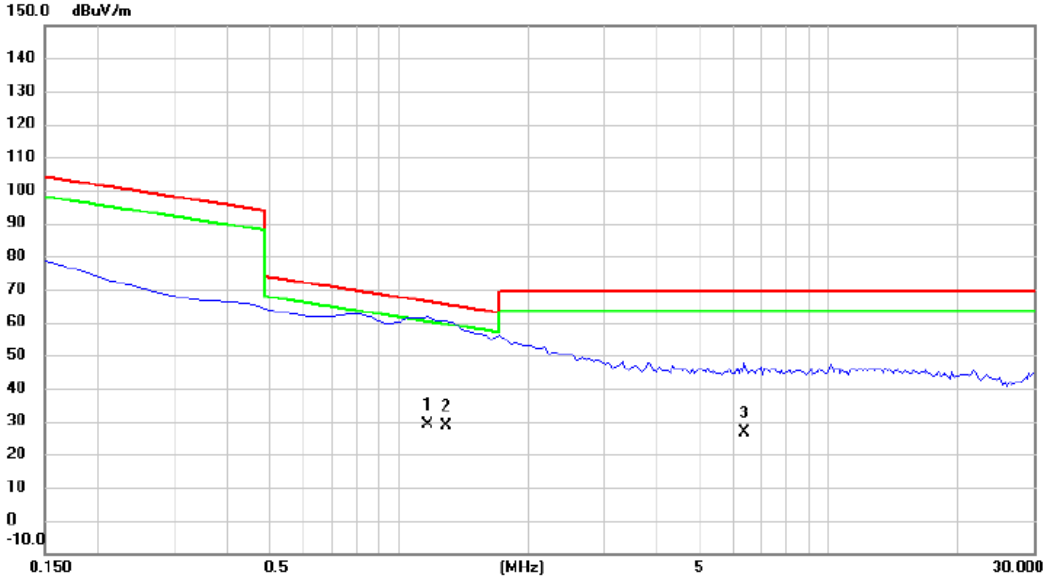


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0101	35.10	78.34	113.44	127.52	-14.08	AVG	
2		0.0192	27.12	72.79	99.91	121.94	-22.03	AVG	
3		0.0384	19.31	67.18	86.49	115.92	-29.43	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX N(HT20) MODE CHANNEL 06

Ant 0°

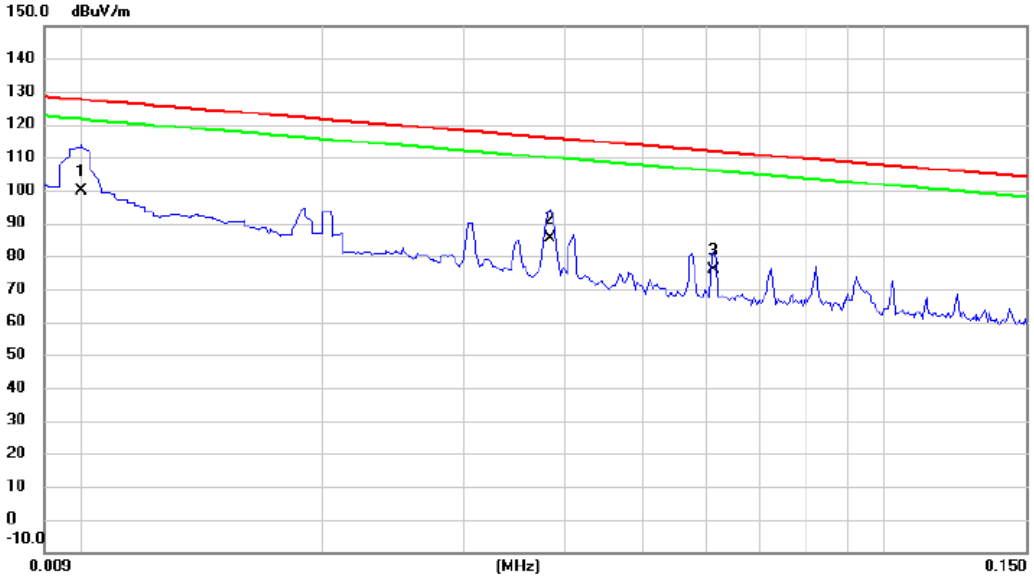


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		1.1670	-11.72	40.80	29.08	66.26	-37.18	QP	
2	*	1.2865	-12.08	40.51	28.43	65.42	-36.99	QP	
3		6.3712	-11.05	37.80	26.75	69.54	-42.79	QP	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX N(HT20) MODE CHANNEL 06

Ant 90°

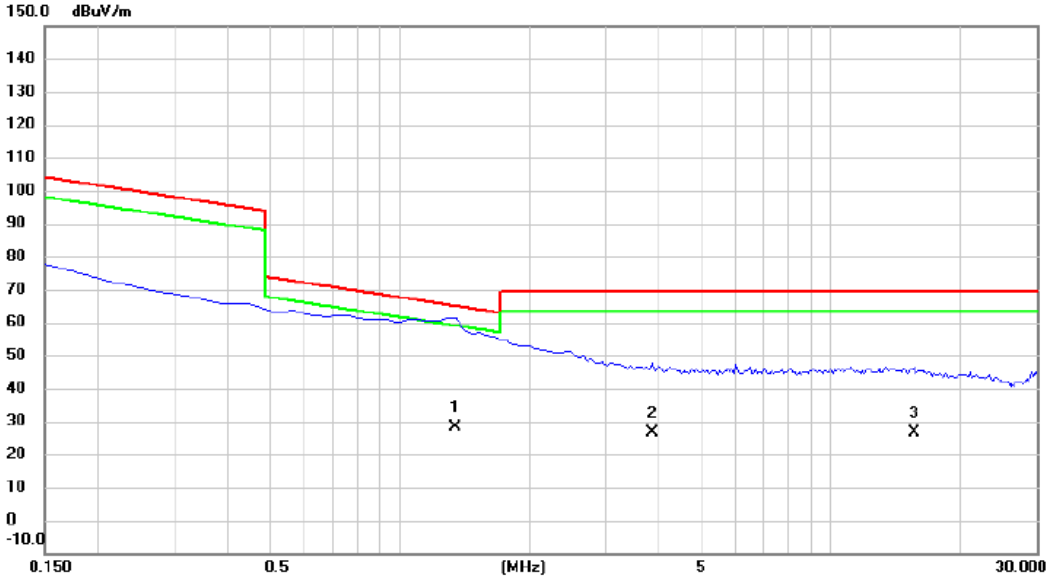


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0100	21.37	78.40	99.77	127.60	-27.83	AVG	
2		0.0383	18.17	67.21	85.38	115.94	-30.56	AVG	
3		0.0614	13.21	62.59	75.80	111.84	-36.04	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX N(HT20) MODE CHANNEL 06

Ant 90°



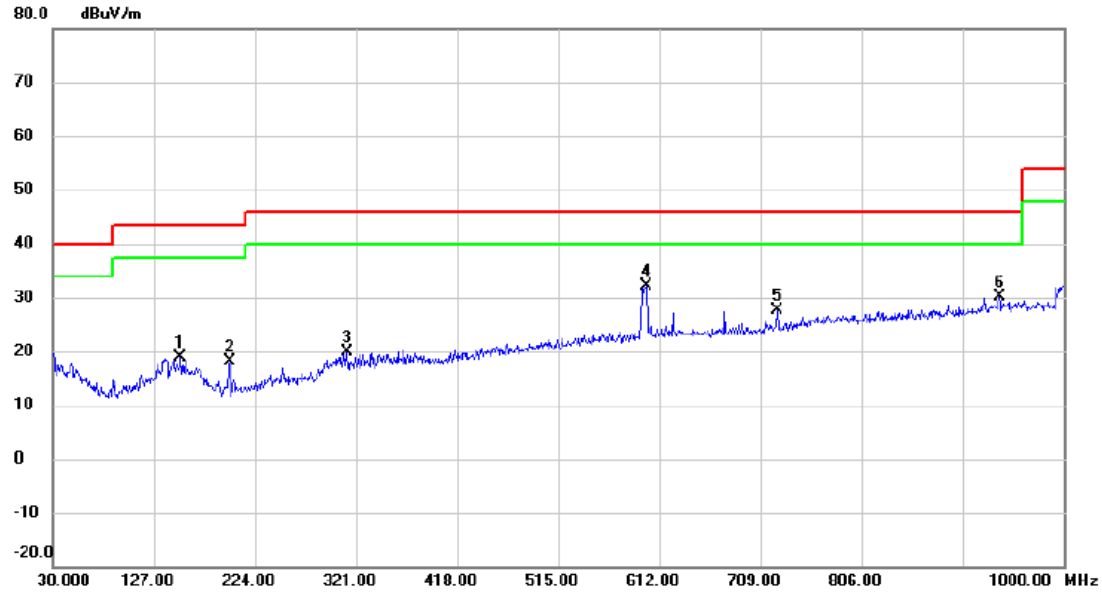
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	1.3463	-12.01	40.37	28.36	65.02	-36.66	QP	
2		3.8588	-11.24	37.91	26.67	69.54	-42.87	QP	
3		15.6432	-11.12	37.58	26.46	69.54	-43.08	QP	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ

Test Mode:	TX B MODE CHANNEL 11

Vertical

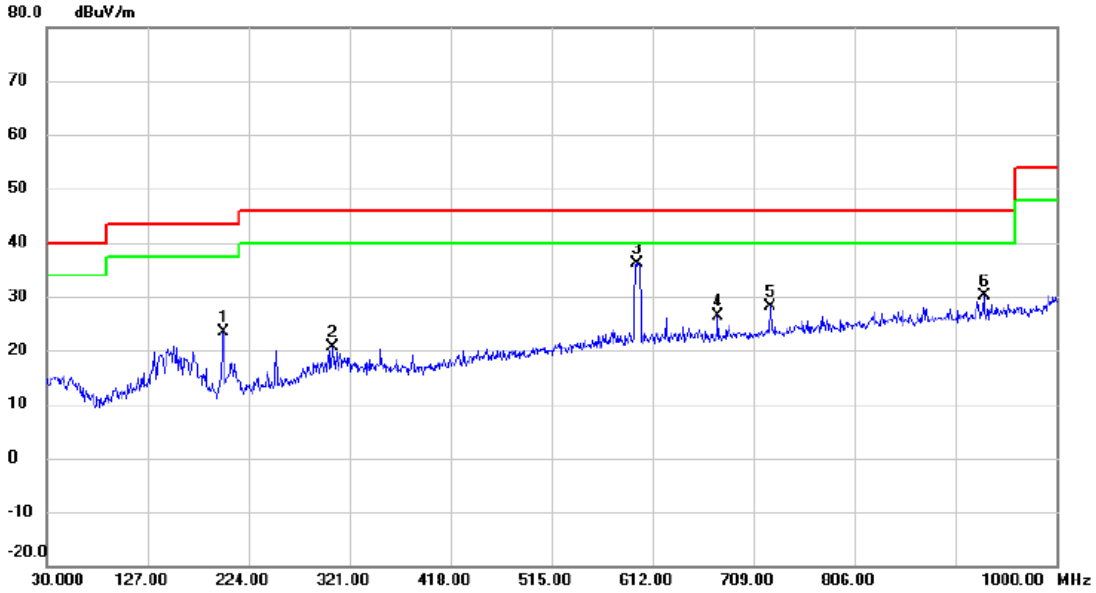


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		152.7050	34.61	-15.62	18.99	43.50	-24.51	peak	
2		199.7500	37.89	-19.84	18.05	43.50	-25.45	peak	
3		312.7550	35.34	-15.41	19.93	46.00	-26.07	peak	
4	*	599.8750	41.98	-9.79	32.19	46.00	-13.81	peak	
5		725.0050	36.18	-8.60	27.58	46.00	-18.42	peak	
6		937.9200	35.55	-5.54	30.01	46.00	-15.99	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX B MODE CHANNEL 11

Horizontal



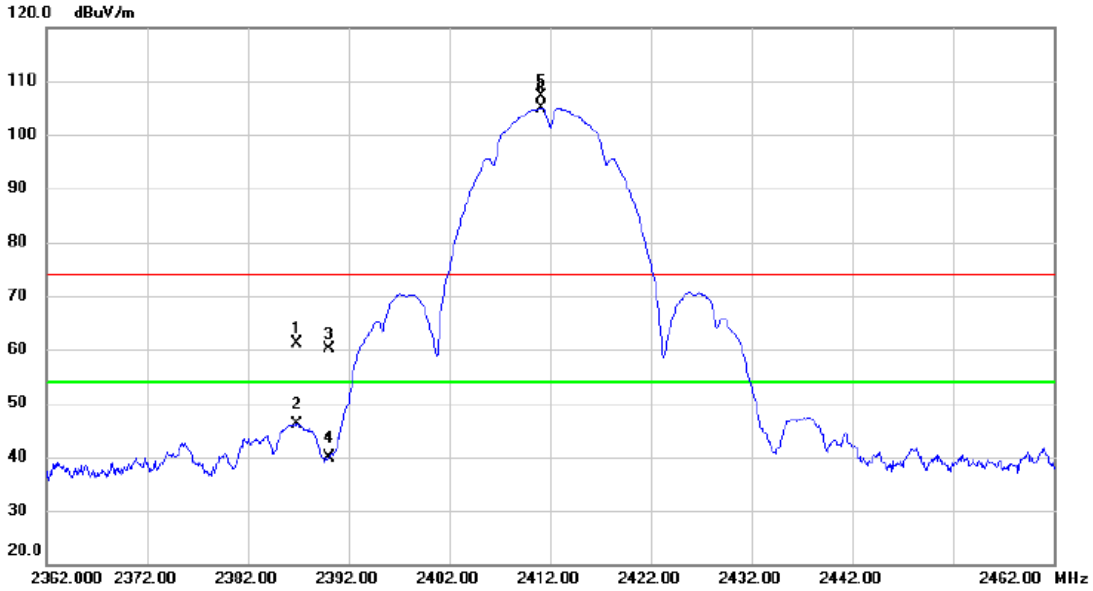
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		199.7500	43.26	-19.84	23.42	43.50	-20.08	peak	
2		304.5100	36.53	-15.80	20.73	46.00	-25.27	peak	
3	*	597.4500	45.87	-9.82	36.05	46.00	-9.95	peak	
4		675.0500	35.52	-9.25	26.27	46.00	-19.73	peak	
5		725.0050	36.75	-8.60	28.15	46.00	-17.85	peak	
6		930.1600	35.79	-5.67	30.12	46.00	-15.88	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX D - RADIATED EMISSION- ABOVE 1000 MHZ

Orthogonal Axis	X
Test Mode:	TX B Mode 2412 MHz

Vertical

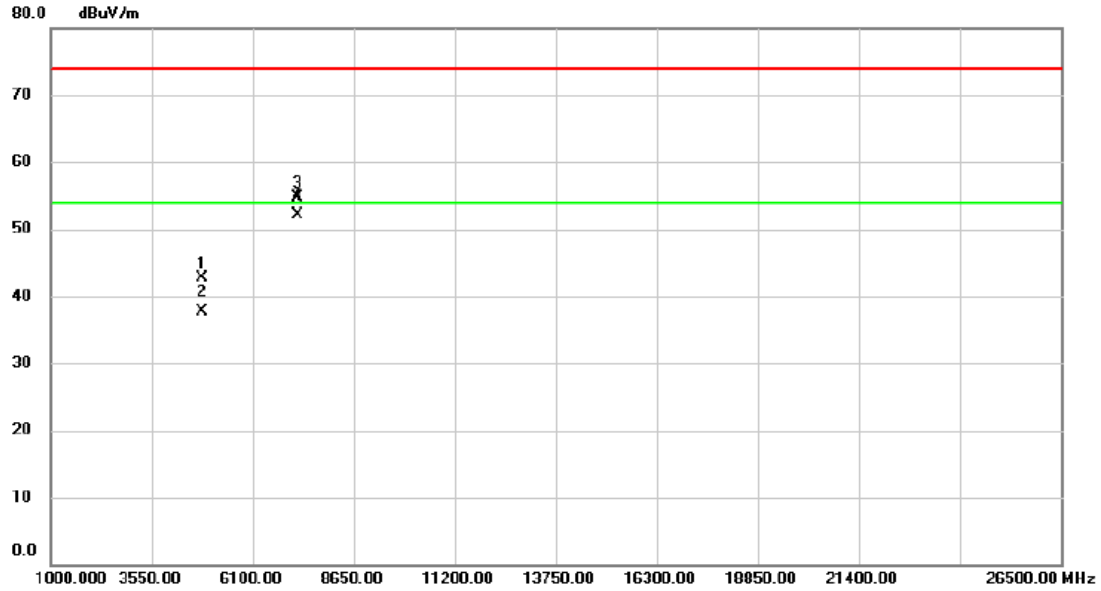


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2386.900	29.29	31.78	61.07	74.00	-12.93	peak	
2		2386.900	14.29	31.78	46.07	54.00	-7.93	AVG	
3		2390.000	28.32	31.79	60.11	74.00	-13.89	peak	
4		2390.000	8.07	31.79	39.86	54.00	-14.14	AVG	
5	X	2411.100	75.22	31.85	107.07	74.00	33.07	peak	No Limit
6	*	2411.100	73.12	31.85	104.97	54.00	50.97	AVG	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX B Mode 2412 MHz

Vertical

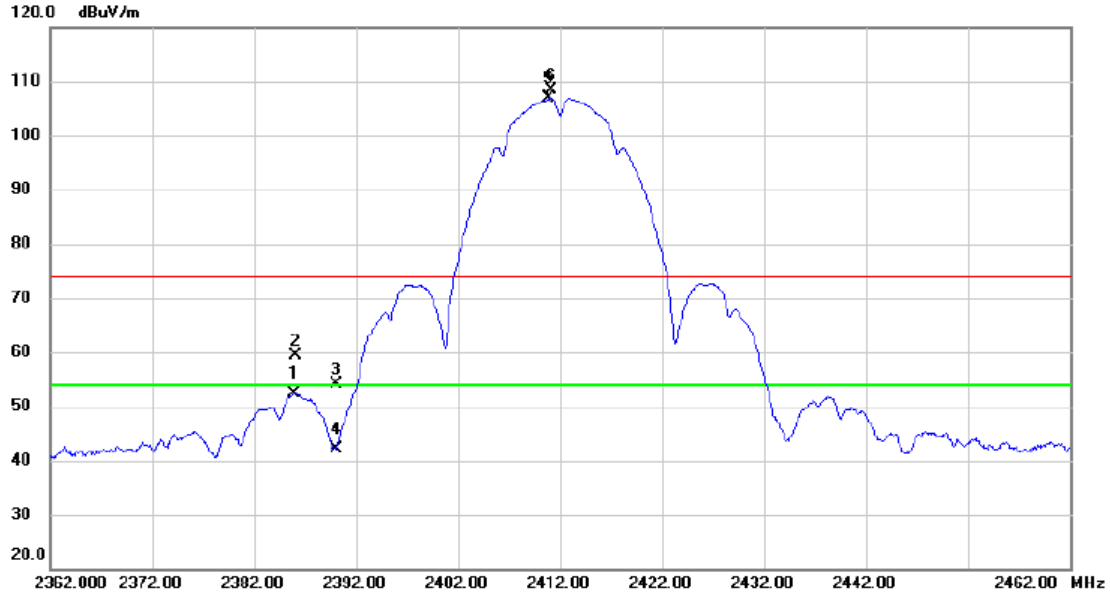


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4823.800	53.43	-10.72	42.71	74.00	-31.29	peak	
2		4824.060	48.34	-10.72	37.62	54.00	-16.38	AVG	
3		7235.100	57.86	-3.06	54.80	74.00	-19.20	peak	
4	*	7236.900	55.16	-3.06	52.10	54.00	-1.90	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX B Mode 2412 MHz

Horizontal

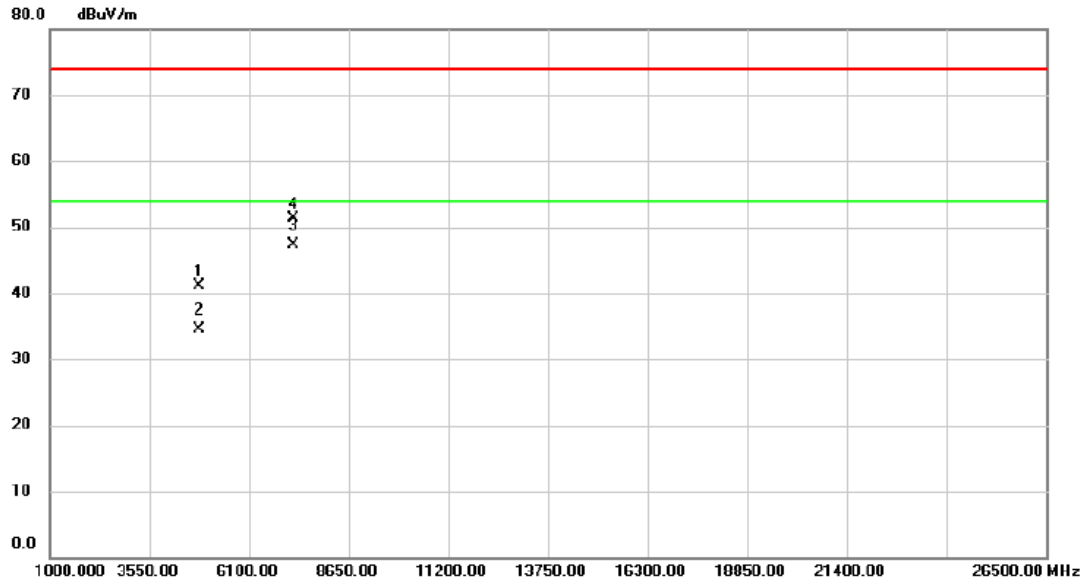


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2385.900	20.66	31.77	52.43	54.00	-1.57	AVG	
2		2386.120	27.63	31.78	59.41	74.00	-14.59	peak	
3		2390.000	22.31	31.79	54.10	74.00	-19.90	peak	
4		2390.000	10.43	31.79	42.22	54.00	-11.78	AVG	
5	*	2410.900	74.99	31.85	106.84	54.00	52.84	AVG	No Limit
6	X	2411.105	76.54	31.85	108.39	74.00	34.39	peak	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX B Mode 2412 MHz

Horizontal

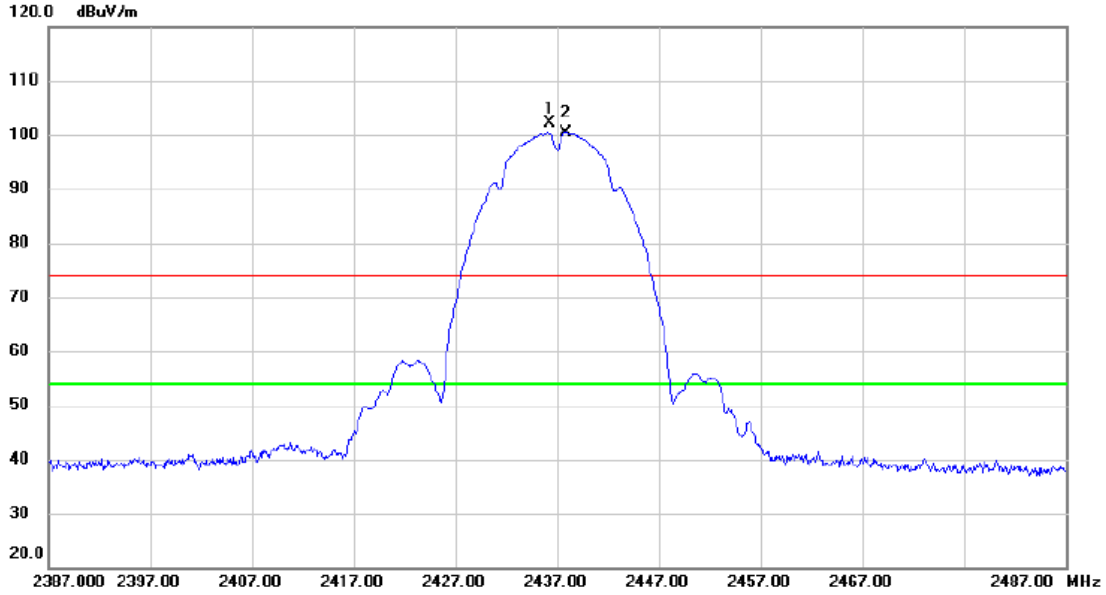


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4823.925	51.91	-10.72	41.19	74.00	-32.81	peak	
2		4824.040	45.27	-10.72	34.55	54.00	-19.45	AVG	
3	*	7236.840	50.42	-3.06	47.36	54.00	-6.64	AVG	
4		7236.900	54.35	-3.06	51.29	74.00	-22.71	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX B Mode 2437 MHz

Vertical

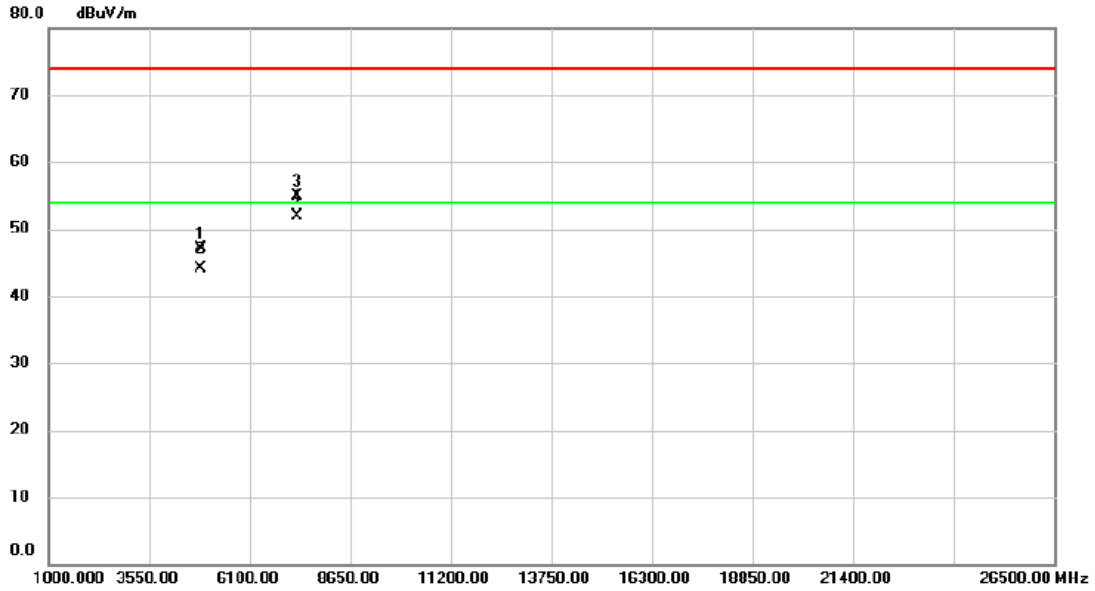


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2436.250	70.28	31.92	102.20	74.00	28.20	peak	No Limit
2	*	2437.900	68.48	31.93	100.41	54.00	46.41	AVG	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX B Mode 2437 MHz

Vertical

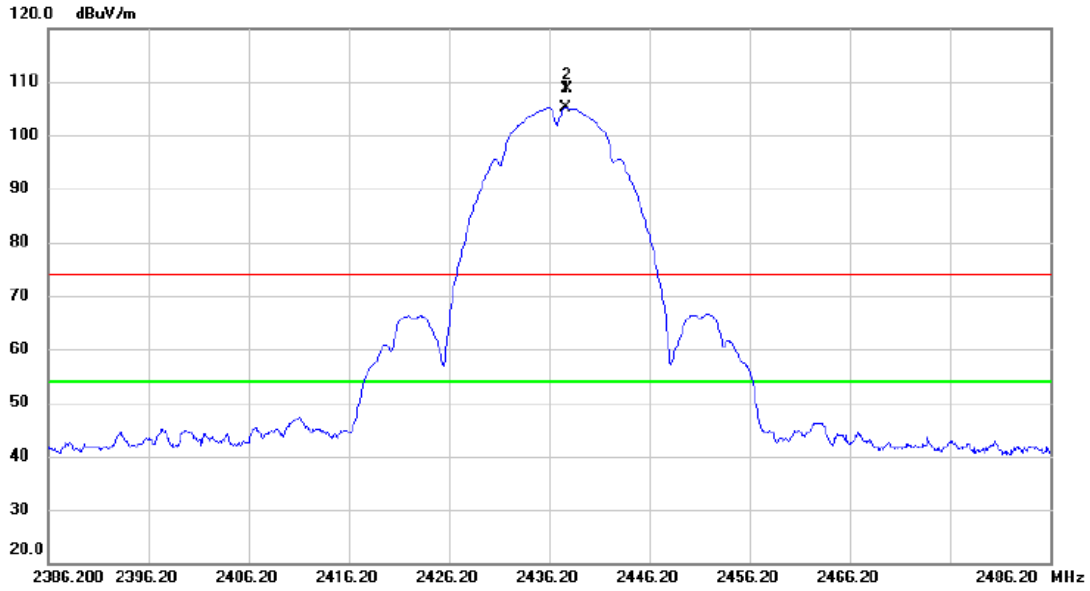


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4873.925	57.53	-10.51	47.02	74.00	-26.98	peak	
2		4874.035	54.58	-10.51	44.07	54.00	-9.93	AVG	
3		7310.140	57.76	-2.91	54.85	74.00	-19.15	peak	
4	*	7310.220	54.86	-2.91	51.95	54.00	-2.05	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX B Mode 2437 MHz

Horizontal

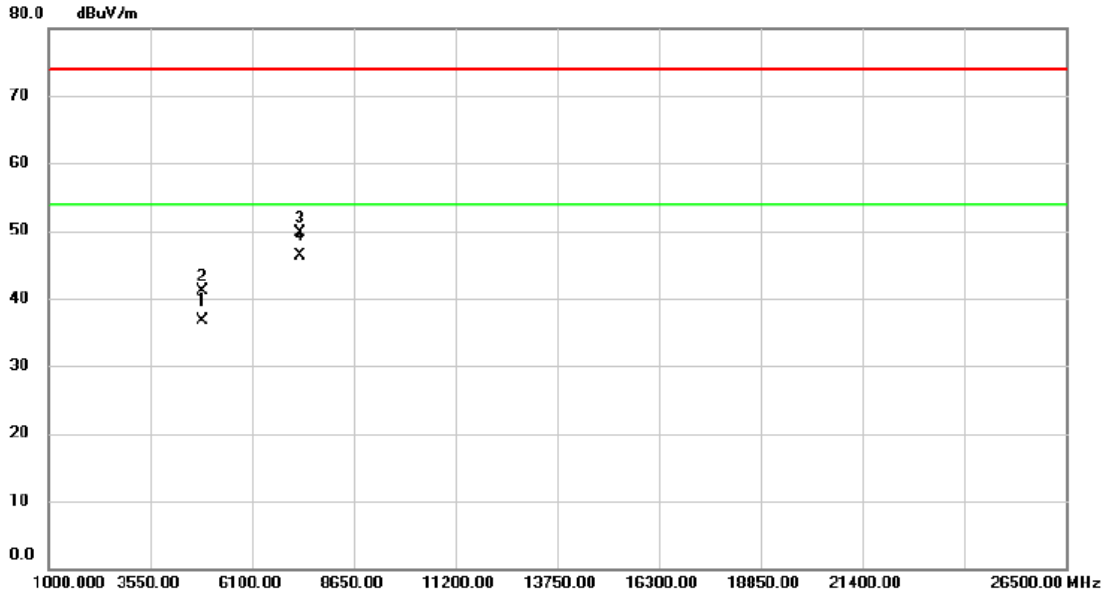


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2437.900	73.30	31.93	105.23	54.00	51.23	AVG	No Limit
2	X	2438.000	76.82	31.93	108.75	74.00	34.75	peak	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX B Mode 2437 MHz

Horizontal

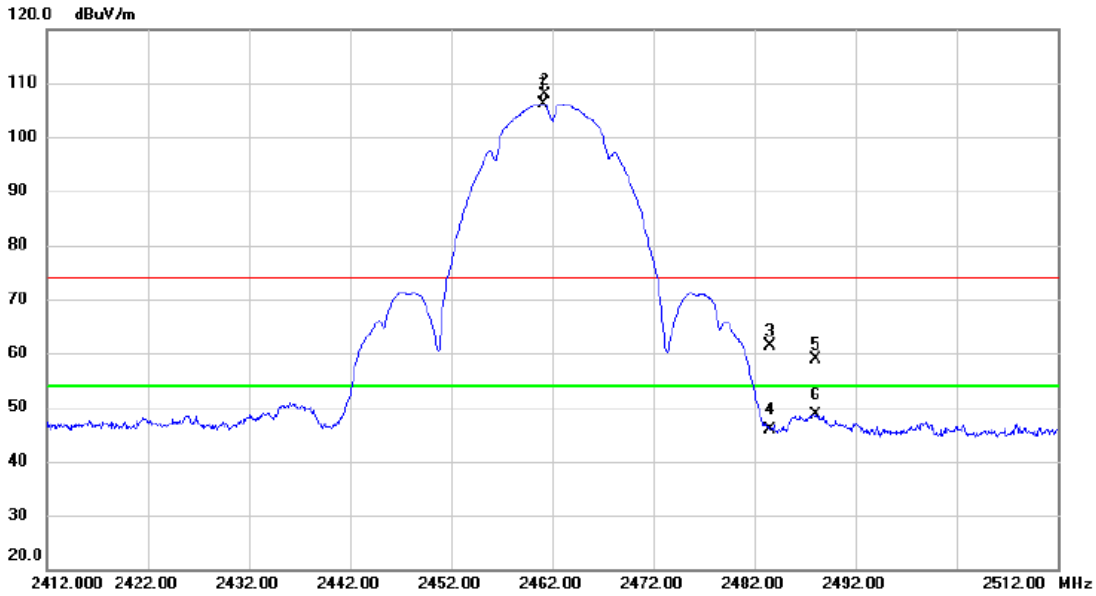


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4874.000	47.12	-10.51	36.61	54.00	-17.39	AVG	
2		4874.140	51.68	-10.51	41.17	74.00	-32.83	peak	
3		7309.480	52.68	-2.92	49.76	74.00	-24.24	peak	
4	*	7310.260	49.13	-2.91	46.22	54.00	-7.78	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX B Mode 2462 MHz

Vertical

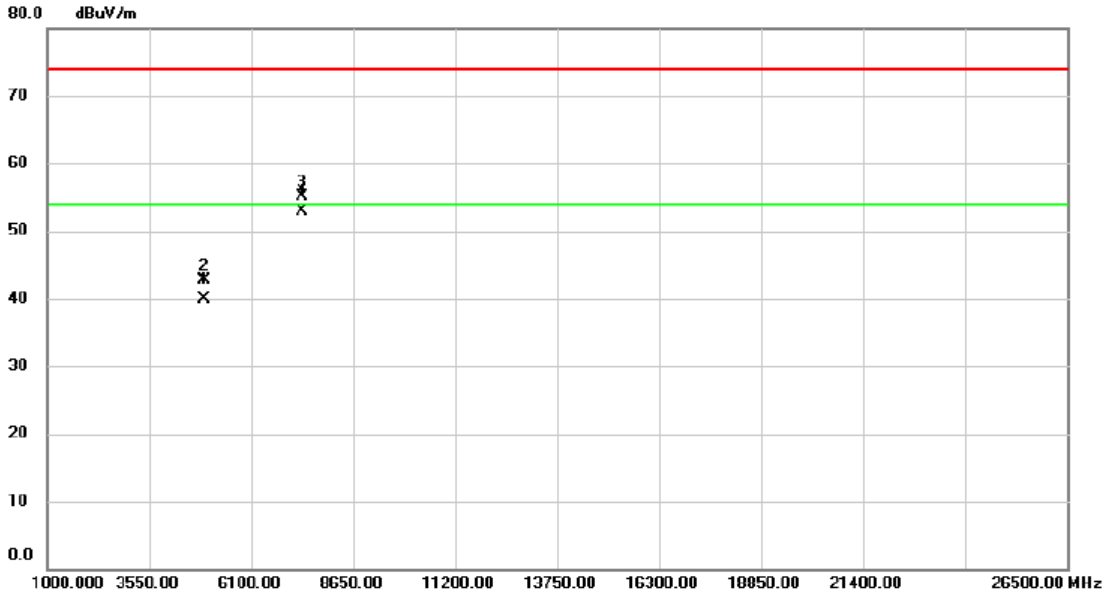


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2461.100	74.25	31.99	106.24	54.00	52.24	AVG	No Limit
2	X	2461.300	75.80	31.99	107.79	74.00	33.79	peak	No Limit
3		2483.500	29.33	32.05	61.38	74.00	-12.62	peak	
4		2483.500	13.85	32.05	45.90	54.00	-8.10	AVG	
5		2488.000	26.86	32.07	58.93	74.00	-15.07	peak	
6		2488.000	16.62	32.07	48.69	54.00	-5.31	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX B Mode 2462 MHz

Vertical

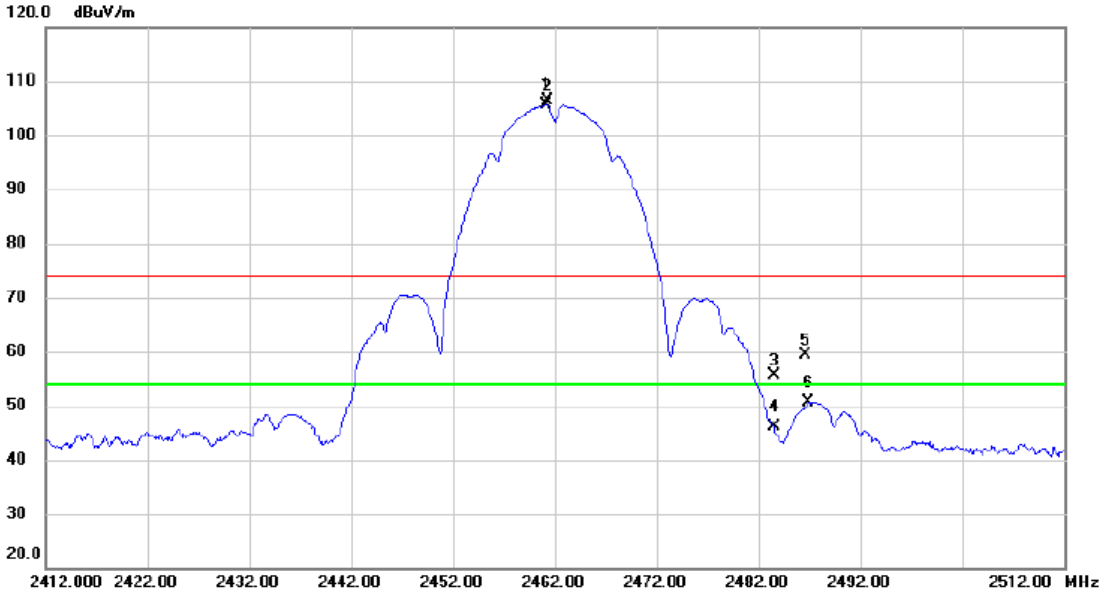


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.020	50.14	-10.30	39.84	54.00	-14.16	AVG	
2		4924.160	53.05	-10.30	42.75	74.00	-31.25	peak	
3		7386.820	57.95	-2.77	55.18	74.00	-18.82	peak	
4	*	7386.920	55.63	-2.77	52.86	54.00	-1.14	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX B Mode 2462 MHz

Horizontal

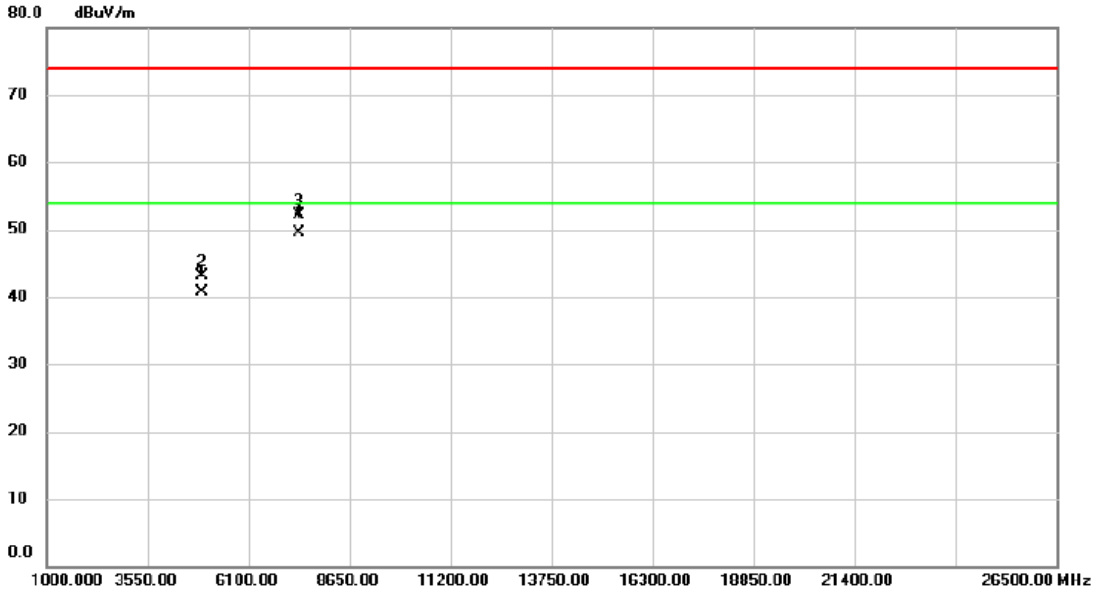


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2461.100	73.63	31.99	105.62	54.00	51.62	AVG	No Limit
2	X	2461.265	74.50	31.99	106.49	74.00	32.49	peak	No Limit
3		2483.500	23.46	32.05	55.51	74.00	-18.49	peak	
4		2483.500	13.99	32.05	46.04	54.00	-7.96	AVG	
5		2486.595	27.20	32.07	59.27	74.00	-14.73	peak	
6		2486.900	18.61	32.07	50.68	54.00	-3.32	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX B Mode 2462 MHz

Horizontal

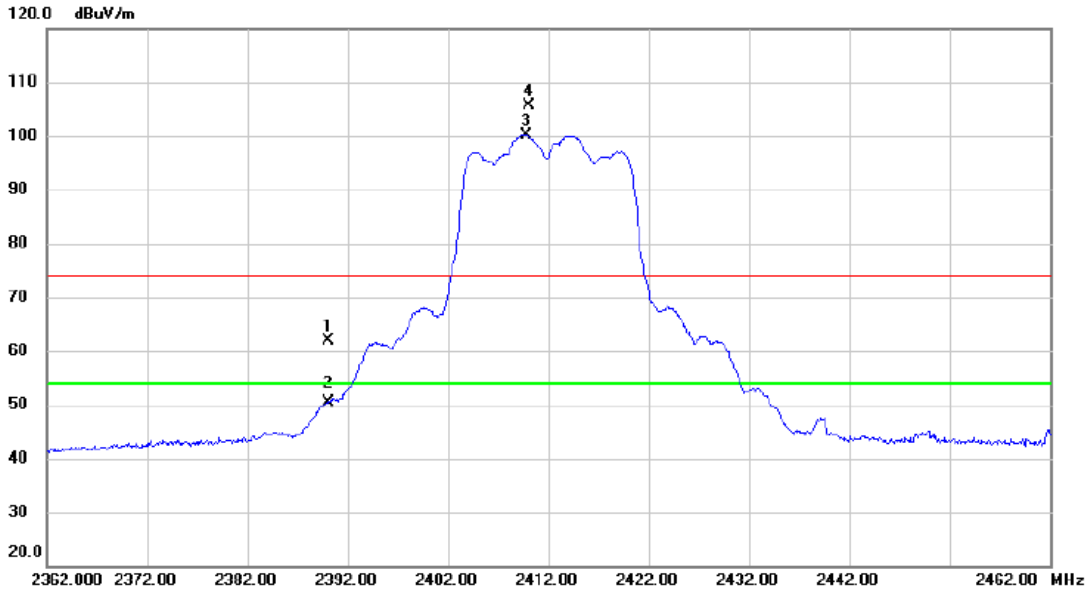


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.020	50.97	-10.30	40.67	54.00	-13.33	AVG	
2		4924.080	53.39	-10.30	43.09	74.00	-30.91	peak	
3		7385.280	54.92	-2.77	52.15	74.00	-21.85	peak	
4	*	7386.960	52.29	-2.77	49.52	54.00	-4.48	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX G Mode 2412 MHz

Vertical

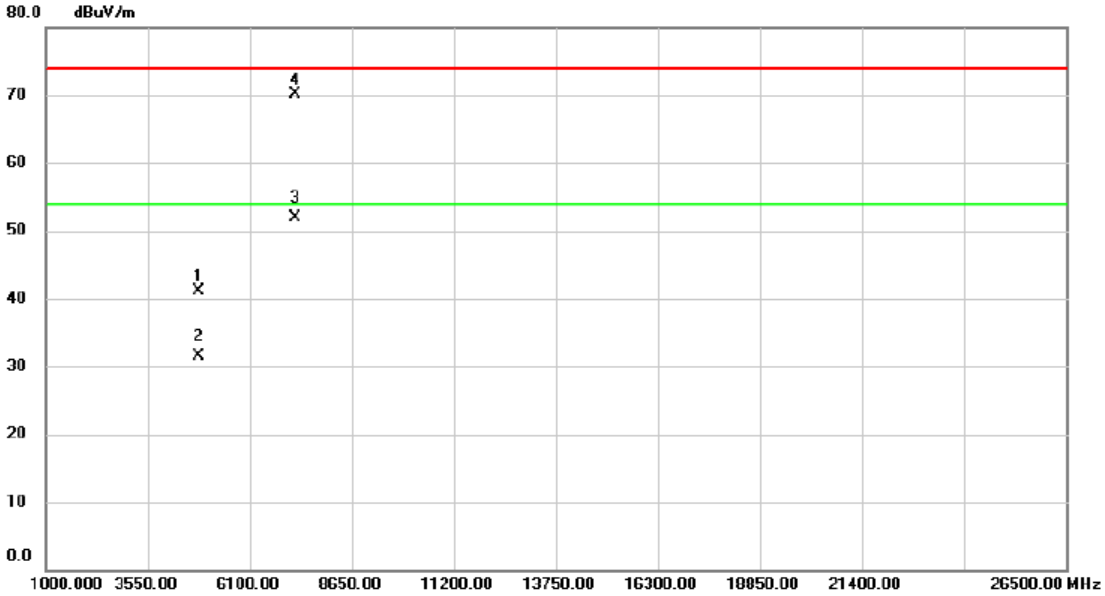


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	30.09	31.79	61.88	74.00	-12.12	peak	
2		2390.000	18.67	31.79	50.46	54.00	-3.54	AVG	
3	X	2409.800	68.26	31.85	100.11	74.00	26.11	peak	No Limit
4	*	2410.000	73.72	31.85	105.57	74.00	31.57	peak	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX G Mode 2412 MHz

Vertical

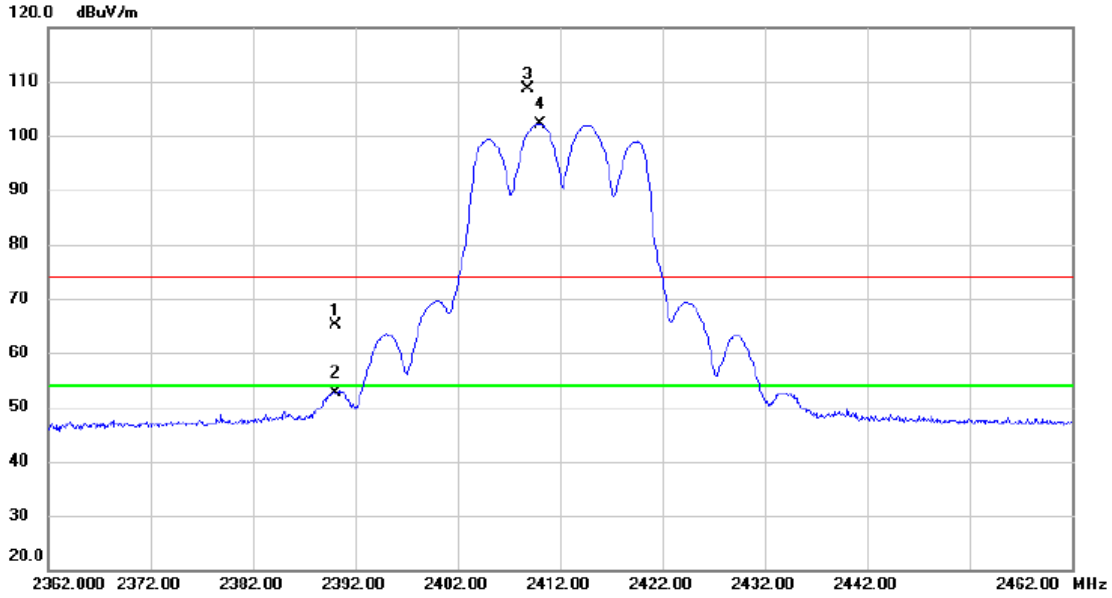


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4820.600	51.84	-10.73	41.11	74.00	-32.89	peak	
2		4825.720	42.31	-10.72	31.59	54.00	-22.41	AVG	
3	*	7233.800	54.98	-3.06	51.92	54.00	-2.08	AVG	
4		7234.300	73.19	-3.06	70.13	74.00	-3.87	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX G Mode 2412 MHz

Horizontal

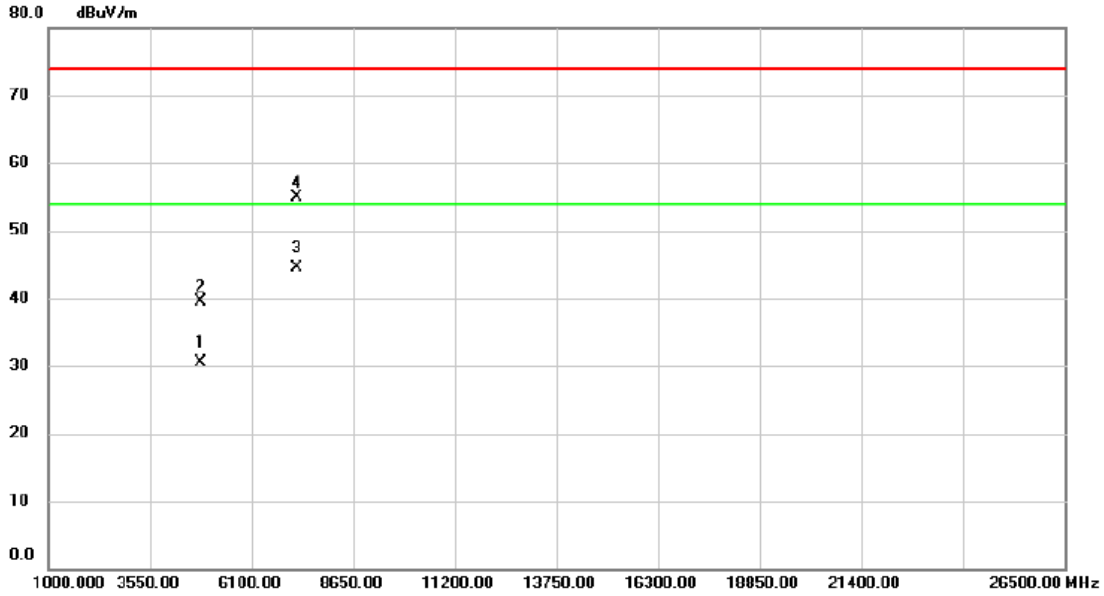


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	33.32	31.79	65.11	74.00	-8.89	peak	
2		2390.000	20.79	31.79	52.58	54.00	-1.42	AVG	
3	X	2408.900	76.83	31.85	108.68	74.00	34.68	peak	No Limit
4	*	2410.100	70.30	31.85	102.15	54.00	48.15	AVG	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX G Mode 2412 MHz

Horizontal

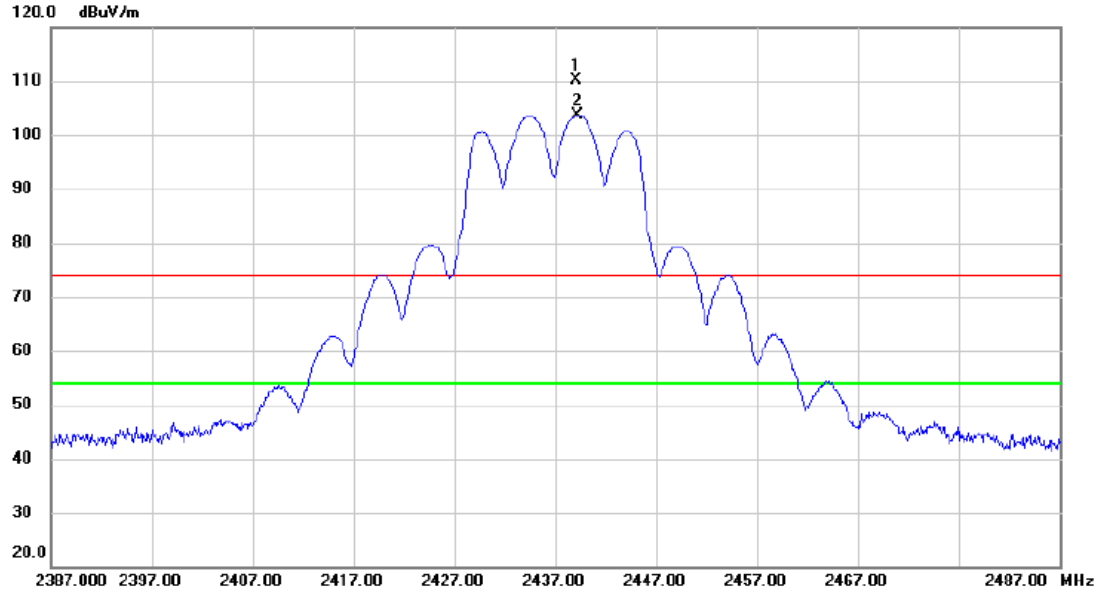


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4825.000	41.17	-10.72	30.45	54.00	-23.55	AVG	
2		4825.600	50.17	-10.72	39.45	74.00	-34.55	peak	
3	*	7234.200	47.54	-3.06	44.48	54.00	-9.52	AVG	
4		7239.750	58.00	-3.05	54.95	74.00	-19.05	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX G Mode 2437 MHz

Vertical

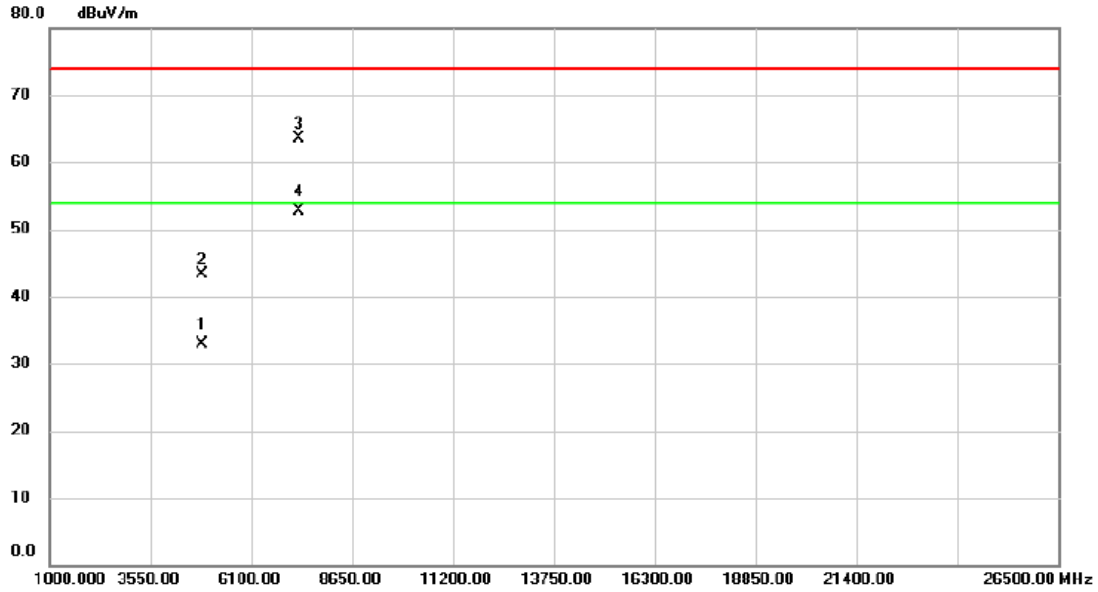


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2439.100	78.23	31.93	110.16	74.00	36.16	peak	No Limit
2	X	2439.200	71.77	31.93	103.70	74.00	29.70	peak	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX G Mode 2437 MHz

Vertical

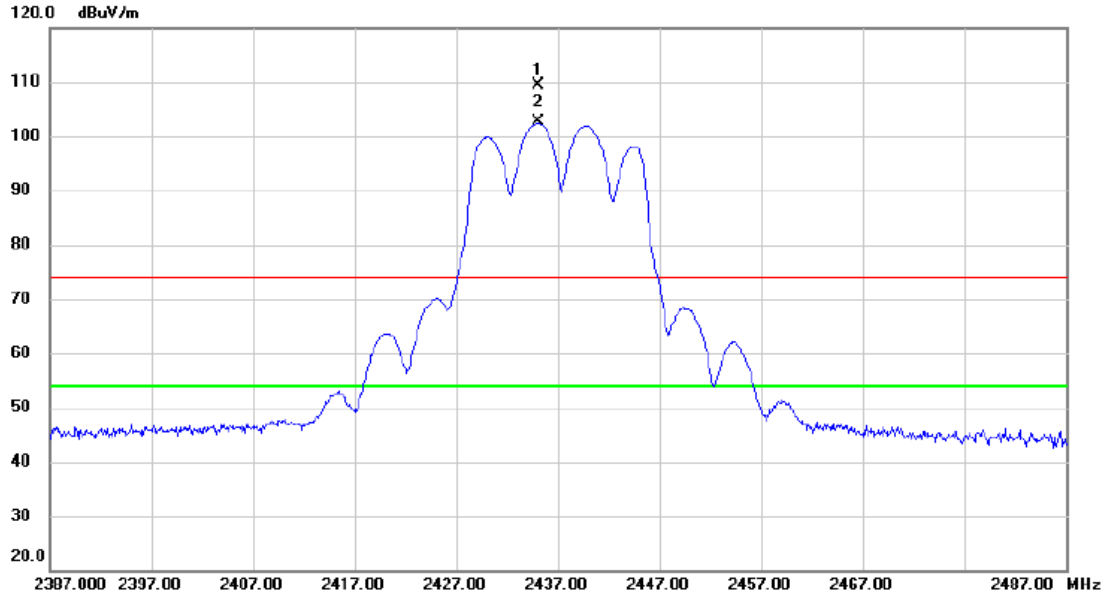


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4875.150	43.48	-10.51	32.97	54.00	-21.03	AVG	
2		4875.750	53.83	-10.51	43.32	74.00	-30.68	peak	
3		7308.550	66.38	-2.92	63.46	74.00	-10.54	peak	
4	*	7308.600	55.71	-2.92	52.79	54.00	-1.21	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX G Mode 2437 MHz

Horizontal

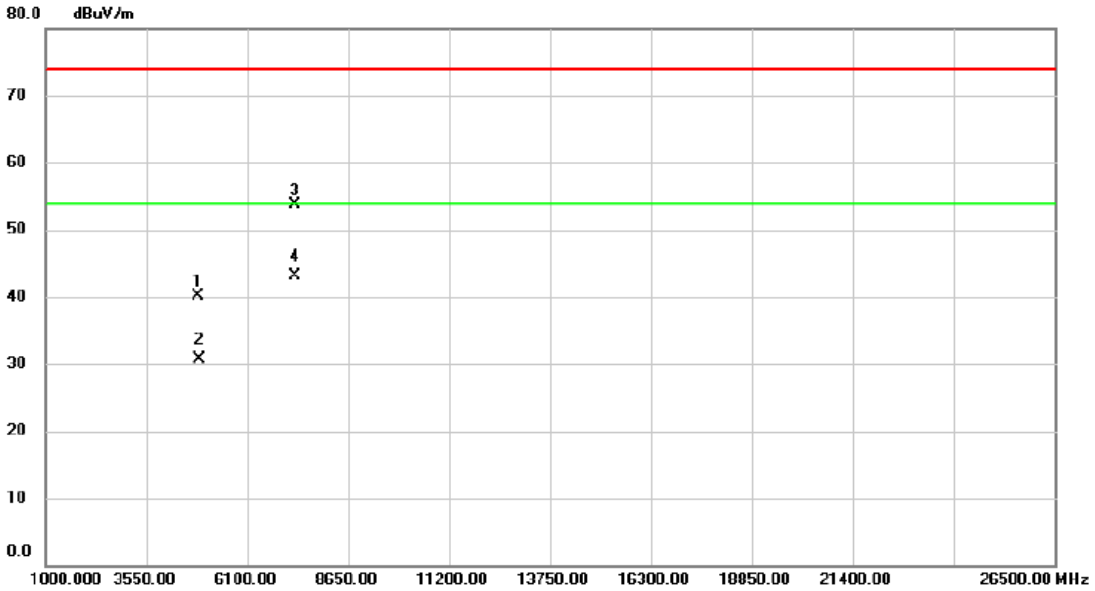


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2435.100	77.37	31.91	109.28	74.00	35.28	peak	No Limit
2	*	2435.100	70.71	31.91	102.62	54.00	48.62	AVG	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX G Mode 2437 MHz

Horizontal

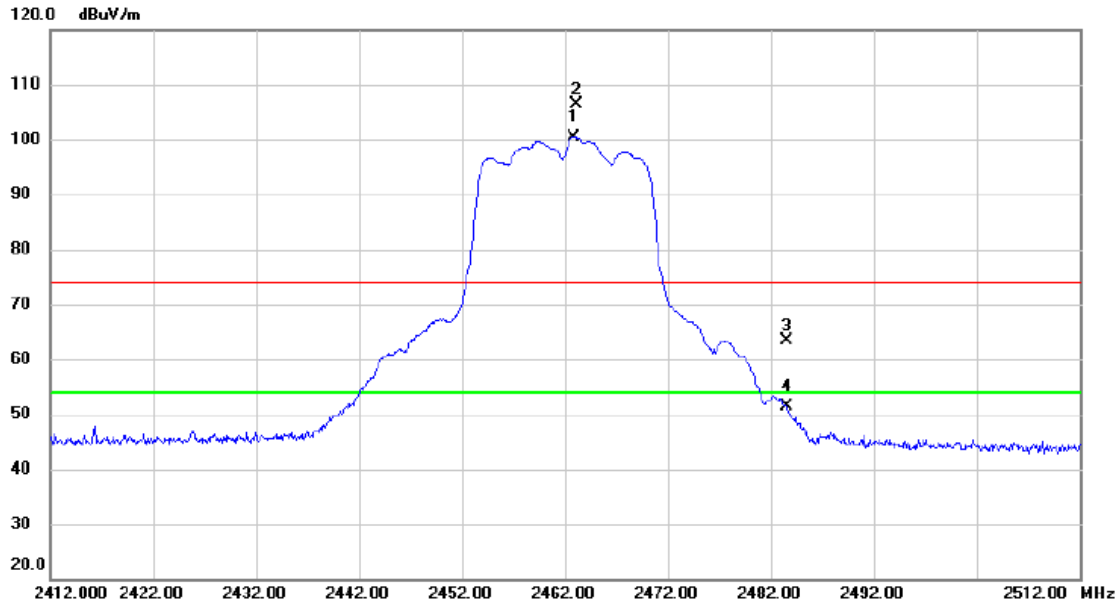


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4873.000	50.72	-10.52	40.20	74.00	-33.80	peak	
2		4877.500	41.17	-10.50	30.67	54.00	-23.33	AVG	
3		7305.500	56.66	-2.92	53.74	74.00	-20.26	peak	
4	*	7310.750	46.01	-2.91	43.10	54.00	-10.90	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX G Mode 2462 MHz

Vertical

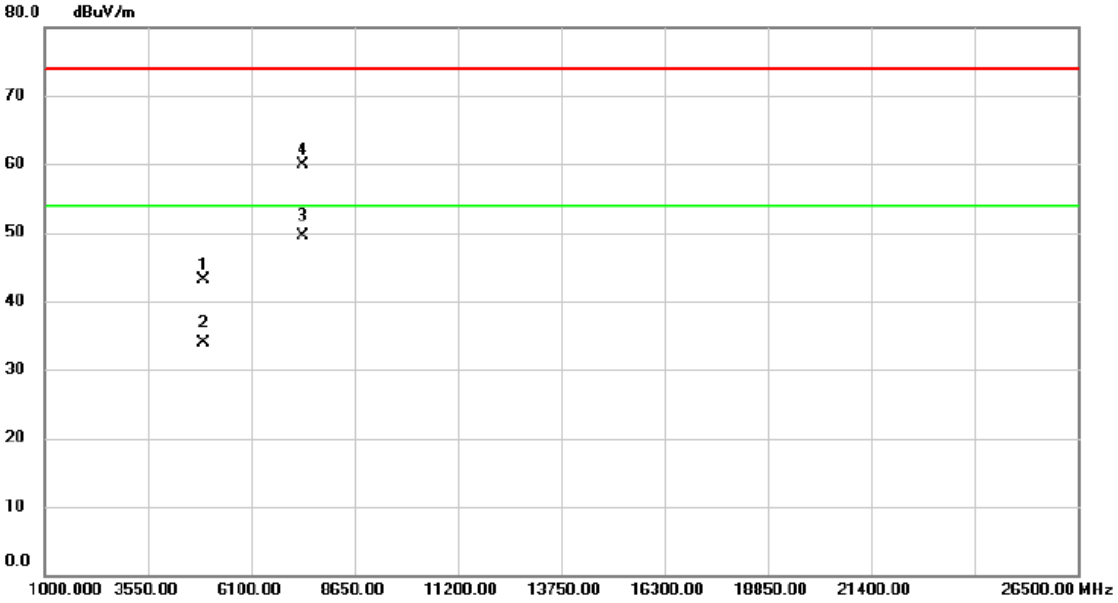


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2462.900	68.41	31.99	100.40	54.00	46.40	AVG	No Limit
2	X	2463.200	74.48	31.99	106.47	74.00	32.47	peak	No Limit
3		2483.500	31.45	32.05	63.50	74.00	-10.50	peak	
4		2483.500	19.37	32.05	51.42	54.00	-2.58	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX G Mode 2462 MHz

Vertical

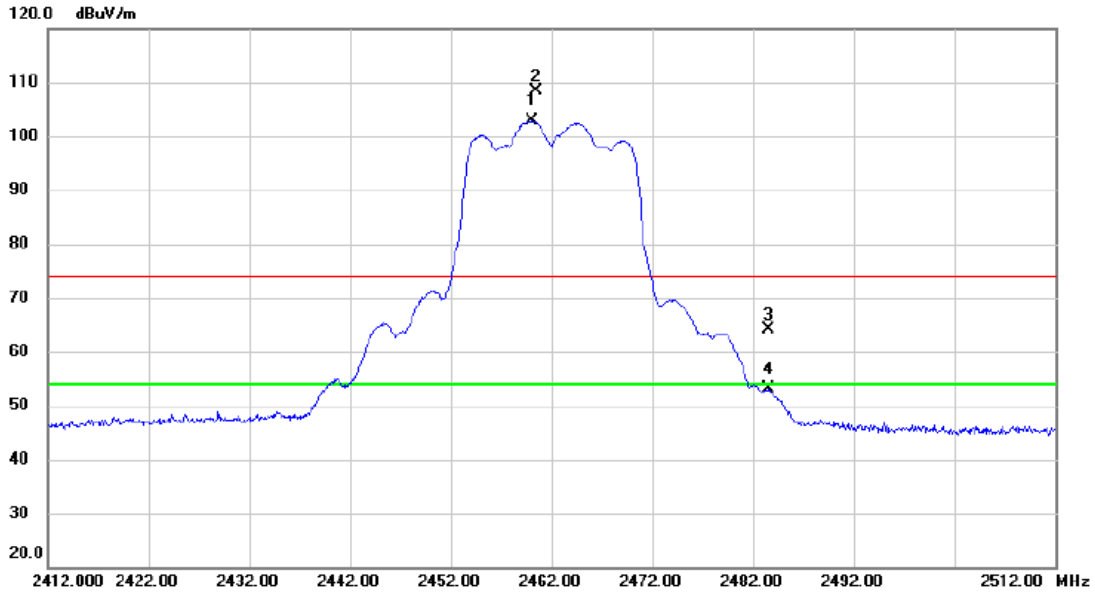


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4920.450	53.46	-10.32	43.14	74.00	-30.86	peak	
2		4925.050	44.15	-10.30	33.85	54.00	-20.15	AVG	
3	*	7389.250	52.23	-2.76	49.47	54.00	-4.53	AVG	
4		7389.900	62.58	-2.76	59.82	74.00	-14.18	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX G Mode 2462 MHz

Horizontal

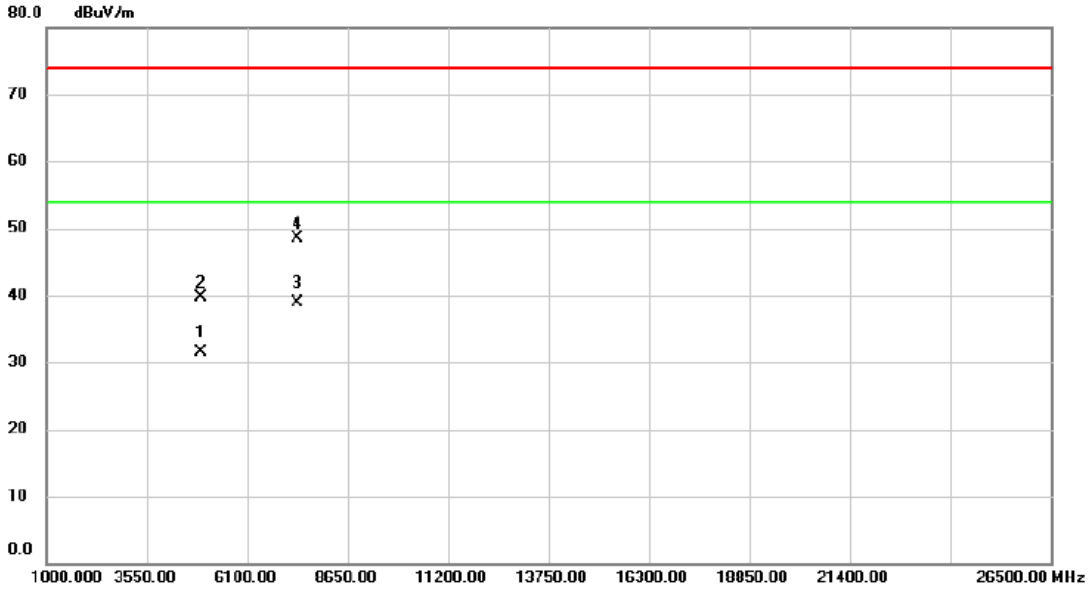


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2460.000	70.78	31.99	102.77	54.00	48.77	AVG	No Limit
2	X	2460.400	76.47	31.99	108.46	74.00	34.46	peak	No Limit
3		2483.500	32.00	32.05	64.05	74.00	-9.95	peak	
4		2483.500	21.03	32.05	53.08	54.00	-0.92	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX G Mode 2462 MHz

Horizontal

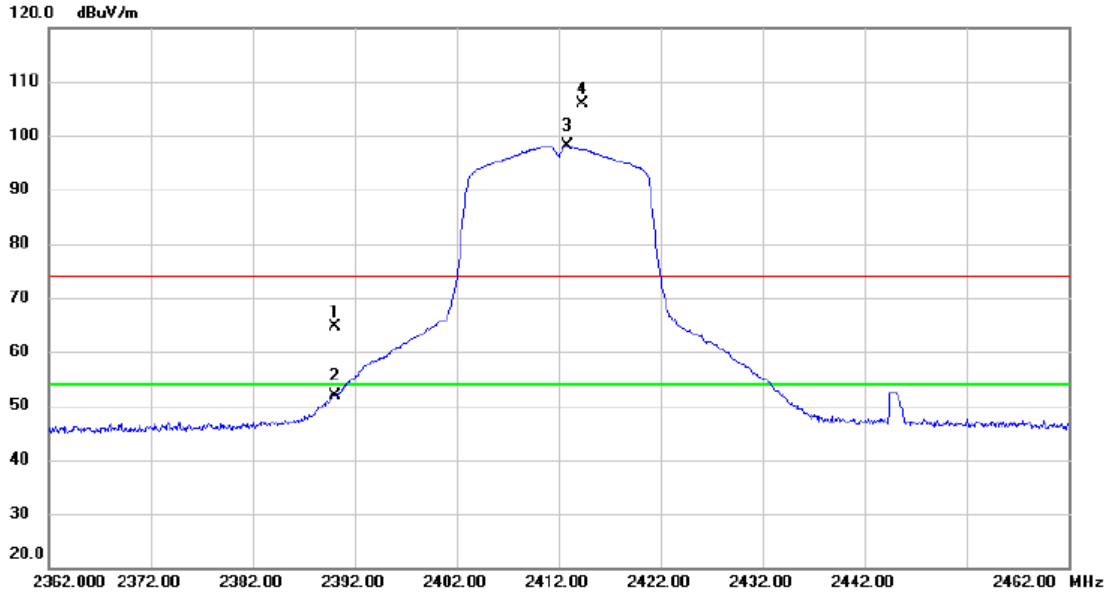


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4922.400	41.74	-10.32	31.42	54.00	-22.58	AVG	
2		4922.700	49.95	-10.32	39.63	74.00	-34.37	peak	
3	*	7385.850	41.75	-2.77	38.98	54.00	-15.02	AVG	
4		7390.500	51.23	-2.75	48.48	74.00	-25.52	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-20M Mode 2412 MHz

Vertical

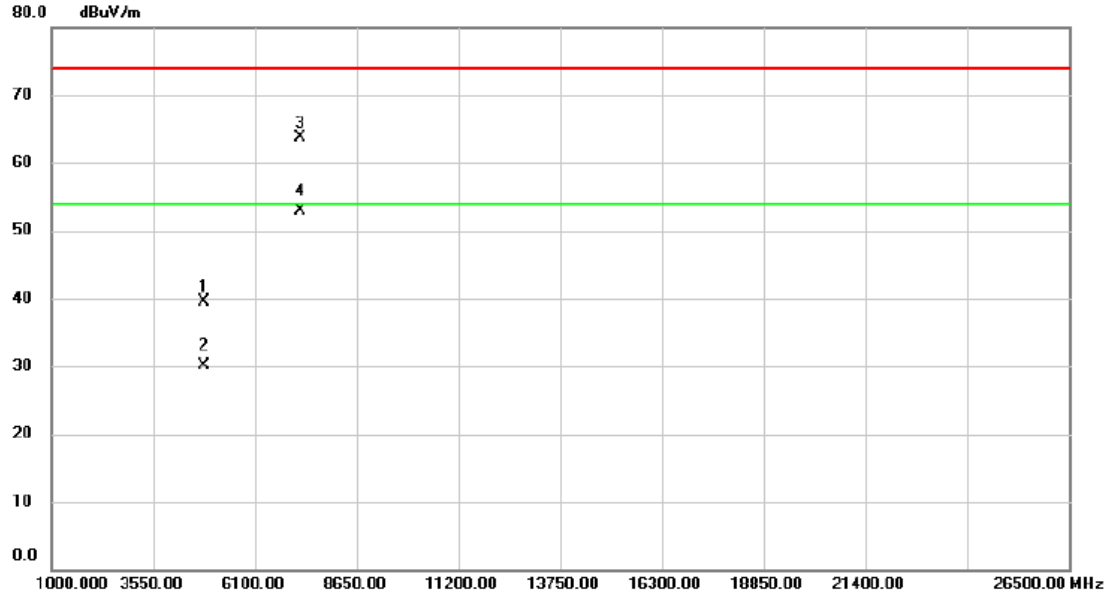


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	32.78	31.79	64.57	74.00	-9.43	peak	
2		2390.000	20.09	31.79	51.88	54.00	-2.12	AVG	
3	*	2412.800	66.26	31.85	98.11	54.00	44.11	AVG	No Limit
4	X	2414.300	74.01	31.86	105.87	74.00	31.87	peak	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-20M Mode 2412 MHz

Vertical

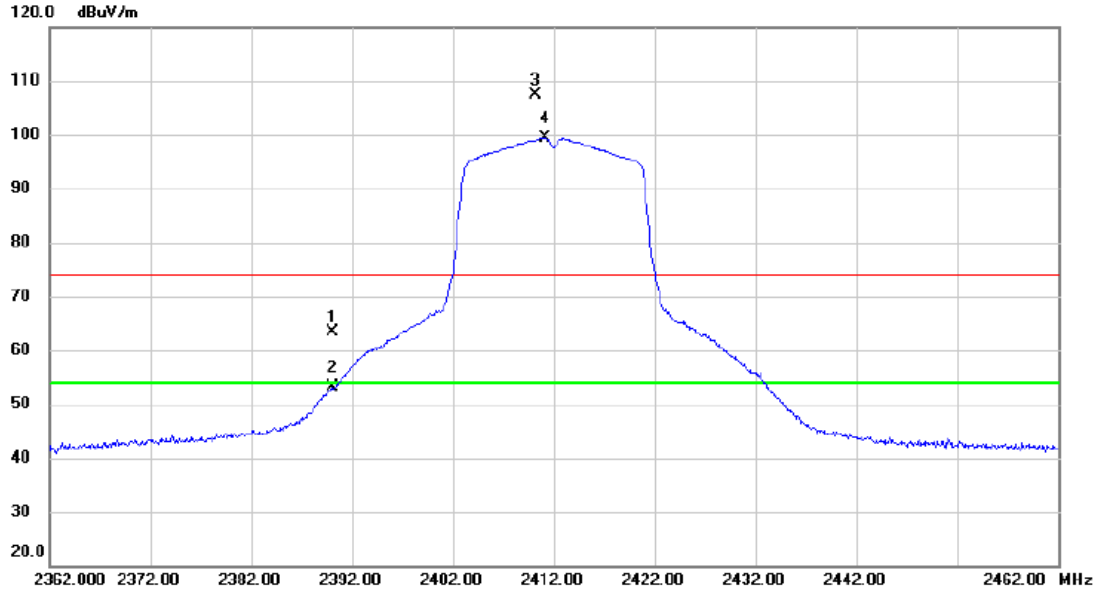


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4820.600	50.30	-10.73	39.57	74.00	-34.43	peak	
2		4822.600	40.79	-10.73	30.06	54.00	-23.94	AVG	
3		7230.800	66.77	-3.07	63.70	74.00	-10.30	peak	
4	*	7232.550	55.91	-3.06	52.85	54.00	-1.15	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-20M Mode 2412 MHz

Horizontal

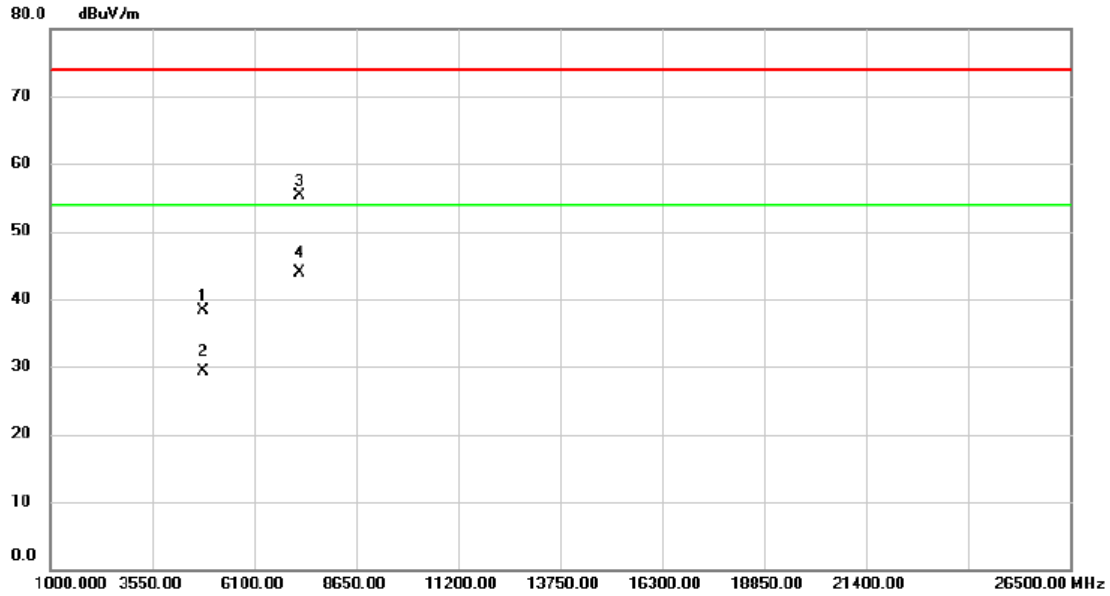


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	31.51	31.79	63.30	74.00	-10.70	peak	
2		2390.000	21.22	31.79	53.01	54.00	-0.99	AVG	
3	X	2410.200	75.59	31.85	107.44	74.00	33.44	peak	No Limit
4	*	2411.100	67.54	31.85	99.39	54.00	45.39	AVG	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-20M Mode 2412 MHz

Horizontal

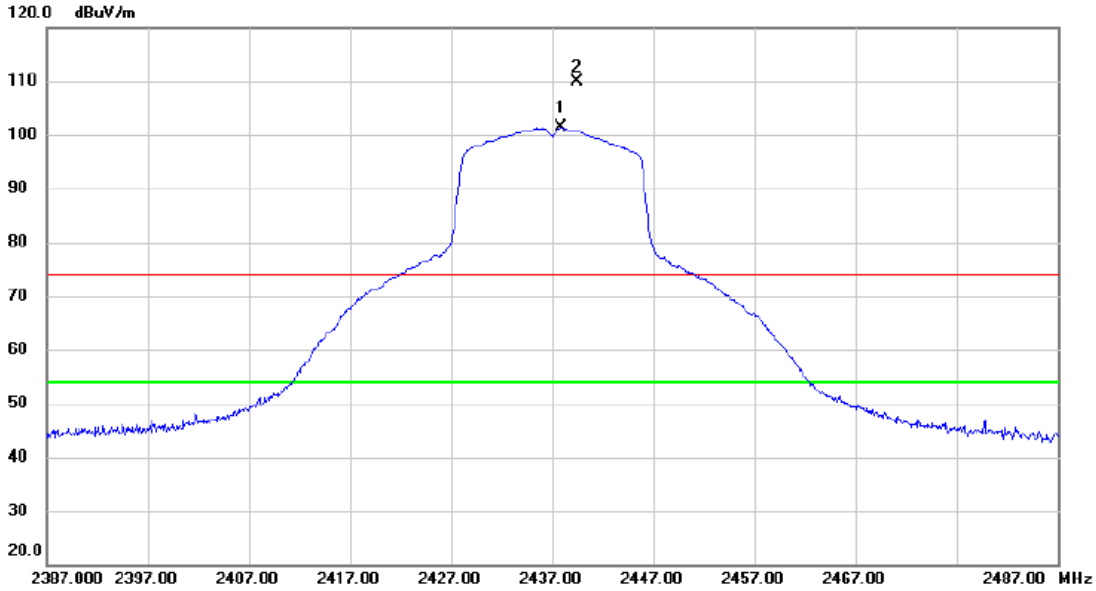


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4818.150	49.00	-10.75	38.25	74.00	-35.75	peak	
2		4822.750	40.01	-10.73	29.28	54.00	-24.72	AVG	
3		7228.700	58.37	-3.09	55.28	74.00	-18.72	peak	
4	*	7237.200	46.99	-3.06	43.93	54.00	-10.07	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-20M Mode 2437 MHz

Vertical

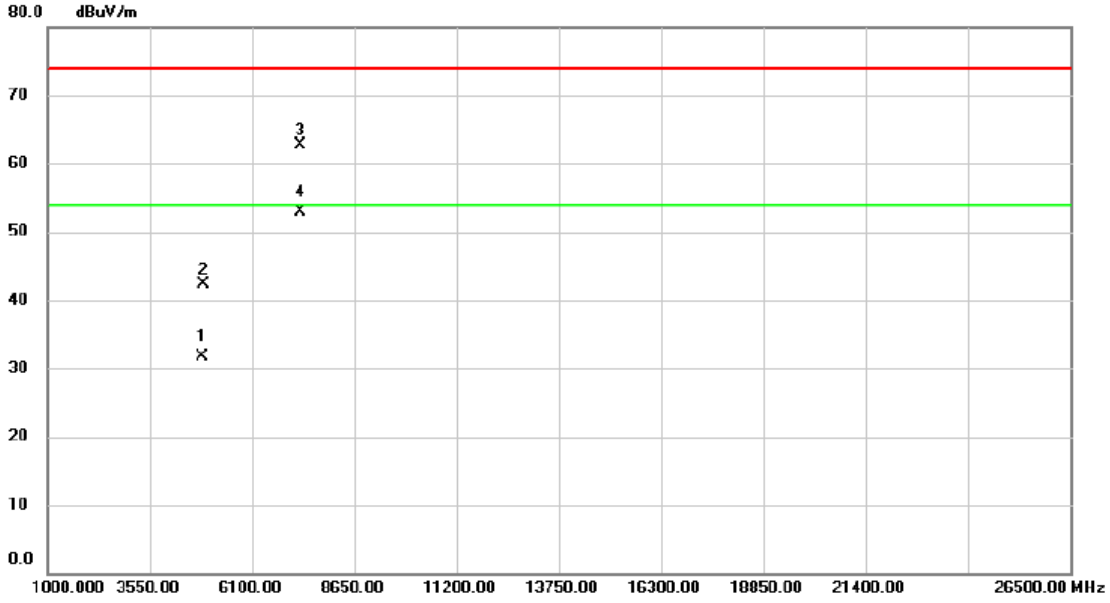


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2437.900	69.37	31.93	101.30	54.00	47.30	AVG	No Limit
2	X	2439.400	77.84	31.93	109.77	74.00	35.77	peak	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-20M Mode 2437 MHz

Vertical

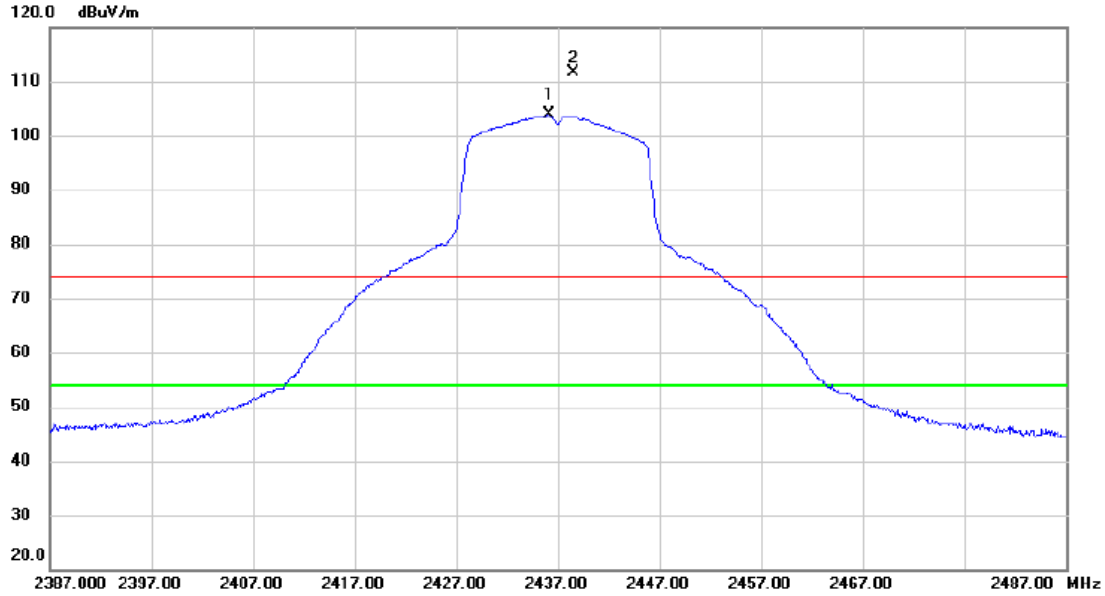


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4875.050	42.30	-10.51	31.79	54.00	-22.21	AVG	
2		4876.800	52.90	-10.50	42.40	74.00	-31.60	peak	
3		7307.250	65.72	-2.92	62.80	74.00	-11.20	peak	
4	*	7310.100	55.79	-2.91	52.88	54.00	-1.12	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-20M Mode 2437 MHz

Horizontal

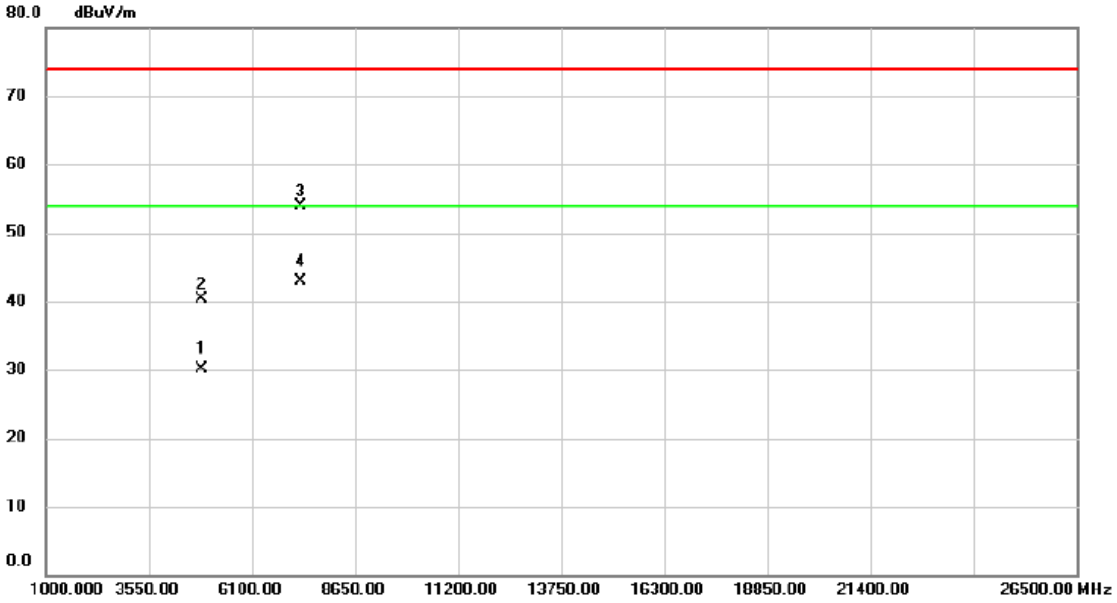


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2436.200	71.86	31.92	103.78	54.00	49.78	AVG	No Limit
2	X	2438.600	79.58	31.93	111.51	74.00	37.51	peak	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-20M Mode 2437 MHz

Horizontal

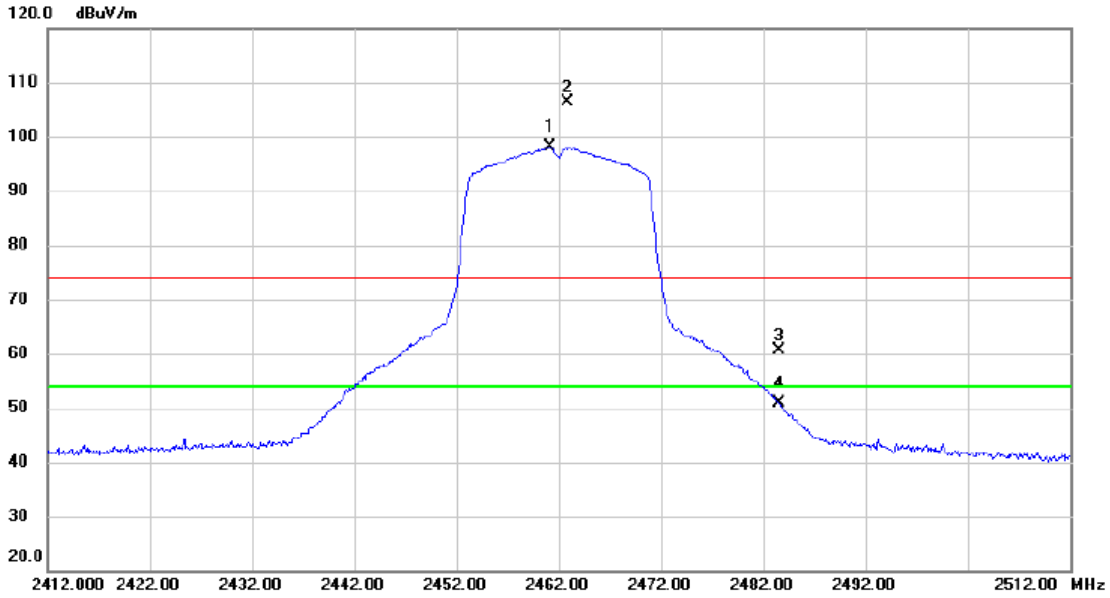


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4872.600	40.66	-10.52	30.14	54.00	-23.86	AVG	
2		4872.750	50.84	-10.52	40.32	74.00	-33.68	peak	
3		7303.650	56.77	-2.93	53.84	74.00	-20.16	peak	
4	*	7308.400	45.77	-2.92	42.85	54.00	-11.15	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-20M Mode 2462 MHz

Vertical

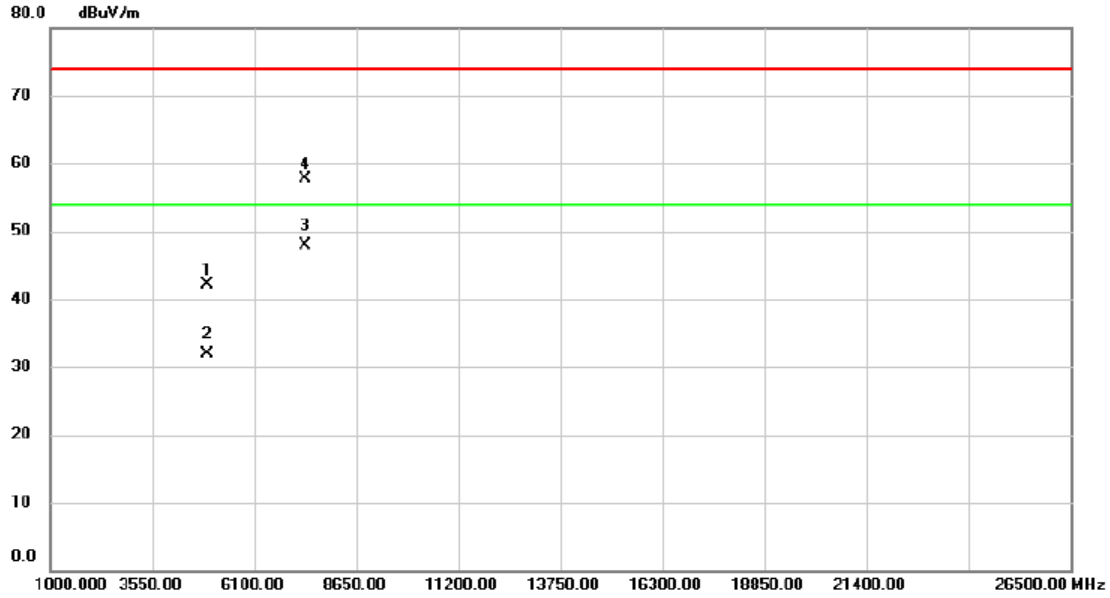


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2461.200	66.07	31.99	98.06	54.00	44.06	AVG	No Limit
2	X	2462.900	74.47	31.99	106.46	74.00	32.46	peak	No Limit
3		2483.500	28.70	32.05	60.75	74.00	-13.25	peak	
4		2483.500	18.76	32.05	50.81	54.00	-3.19	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-20M Mode 2462 MHz

Vertical

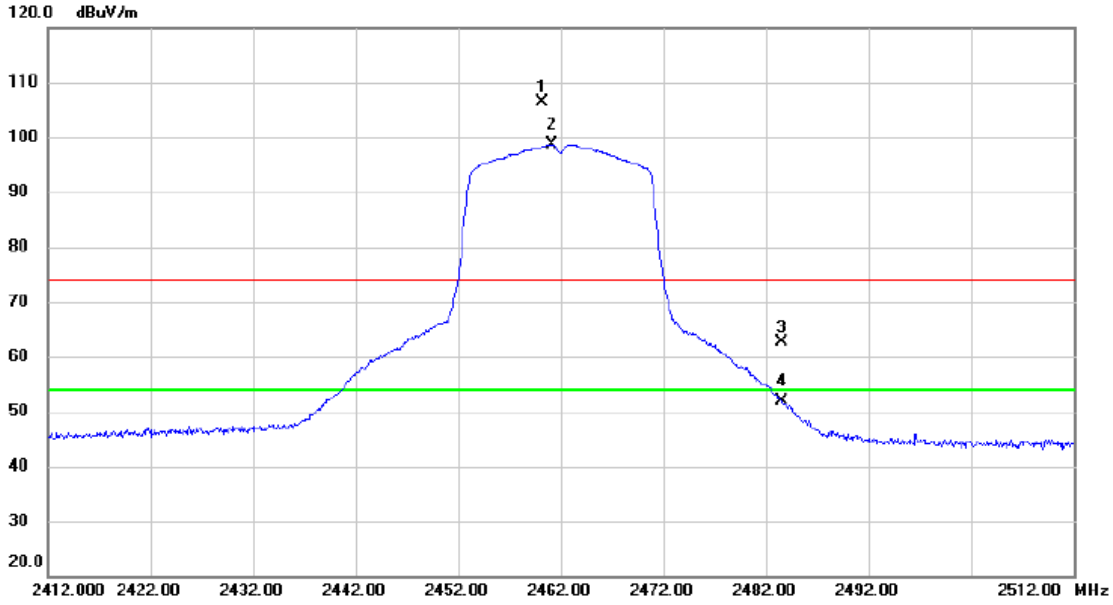


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4921.100	52.35	-10.32	42.03	74.00	-31.97	peak	
2		4921.900	42.32	-10.32	32.00	54.00	-22.00	AVG	
3	*	7387.550	50.64	-2.76	47.88	54.00	-6.12	AVG	
4		7390.350	60.43	-2.75	57.68	74.00	-16.32	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-20M Mode 2462 MHz

Horizontal

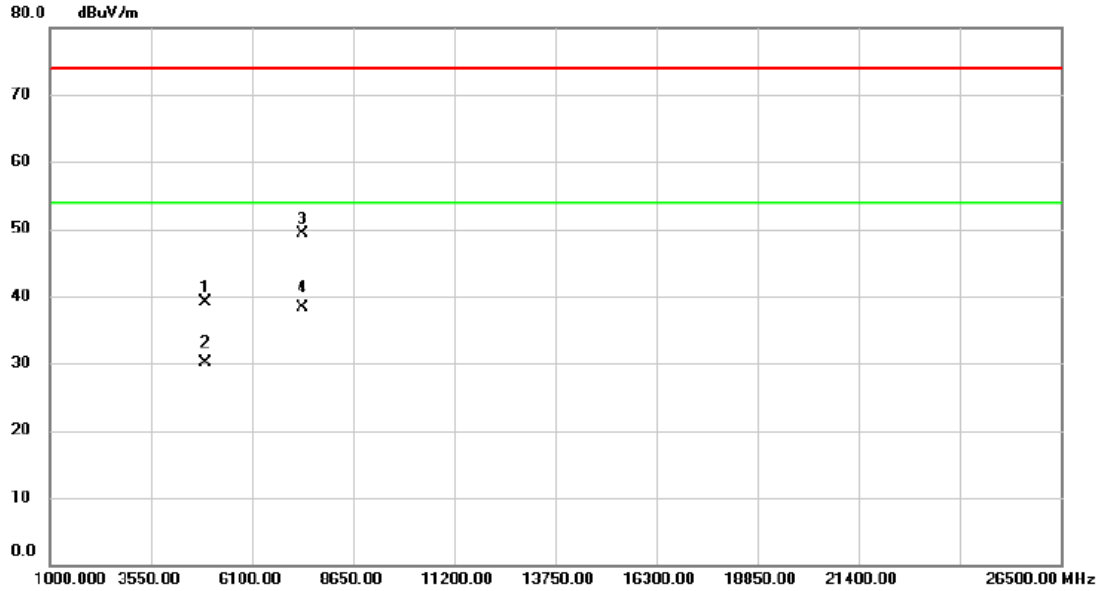


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2460.200	74.42	31.99	106.41	74.00	32.41	peak	No Limit
2	*	2461.100	66.72	31.99	98.71	54.00	44.71	AVG	No Limit
3		2483.500	30.58	32.05	62.63	74.00	-11.37	peak	
4		2483.500	19.80	32.05	51.85	54.00	-2.15	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-20M Mode 2462 MHz

Horizontal

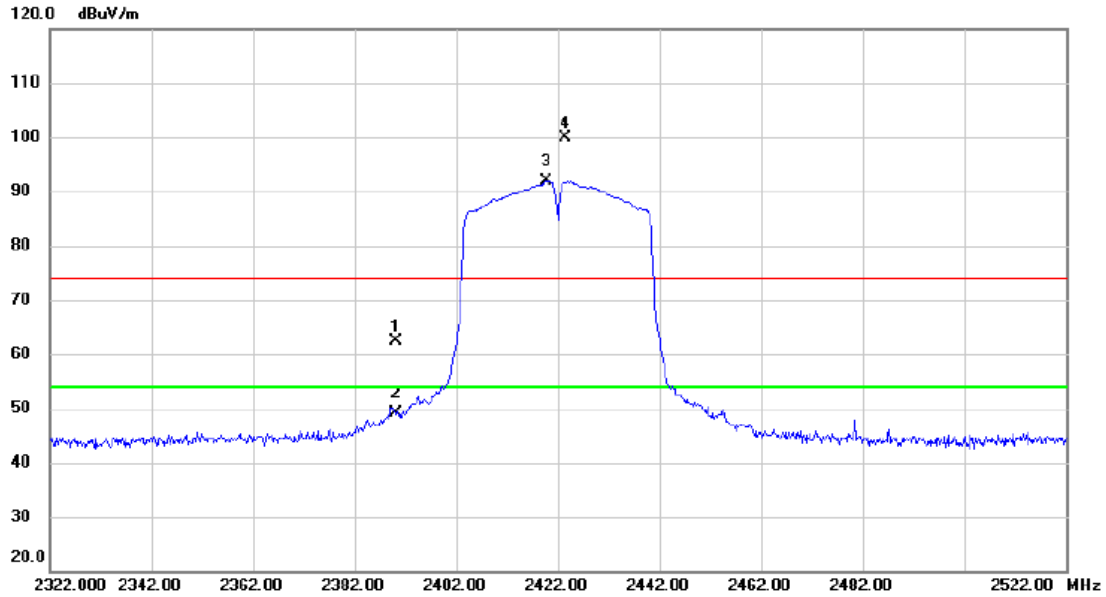


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4919.050	49.48	-10.33	39.15	74.00	-34.85	peak	
2		4924.950	40.38	-10.30	30.08	54.00	-23.92	AVG	
3		7378.600	52.10	-2.78	49.32	74.00	-24.68	peak	
4	*	7387.900	41.08	-2.76	38.32	54.00	-15.68	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-40M Mode 2422MHz

Vertical

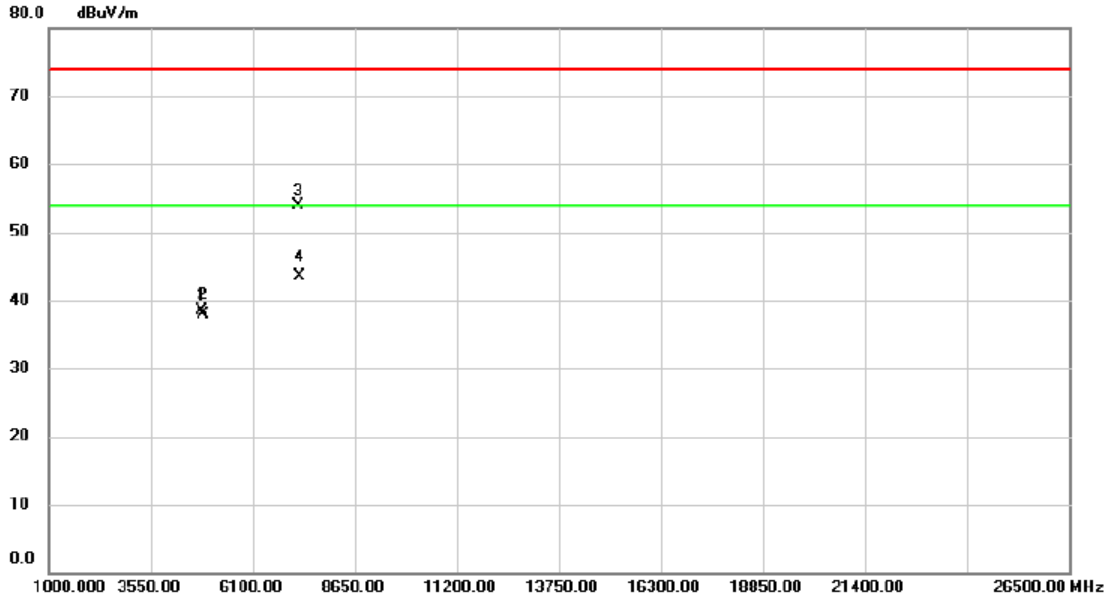


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	30.71	31.79	62.50	74.00	-11.50	peak	
2		2390.000	17.38	31.79	49.17	54.00	-4.83	AVG	
3	*	2419.800	60.02	31.88	91.90	54.00	37.90	AVG	No Limit
4	X	2423.400	68.08	31.88	99.96	74.00	25.96	peak	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-40M Mode 2422MHz

Vertical

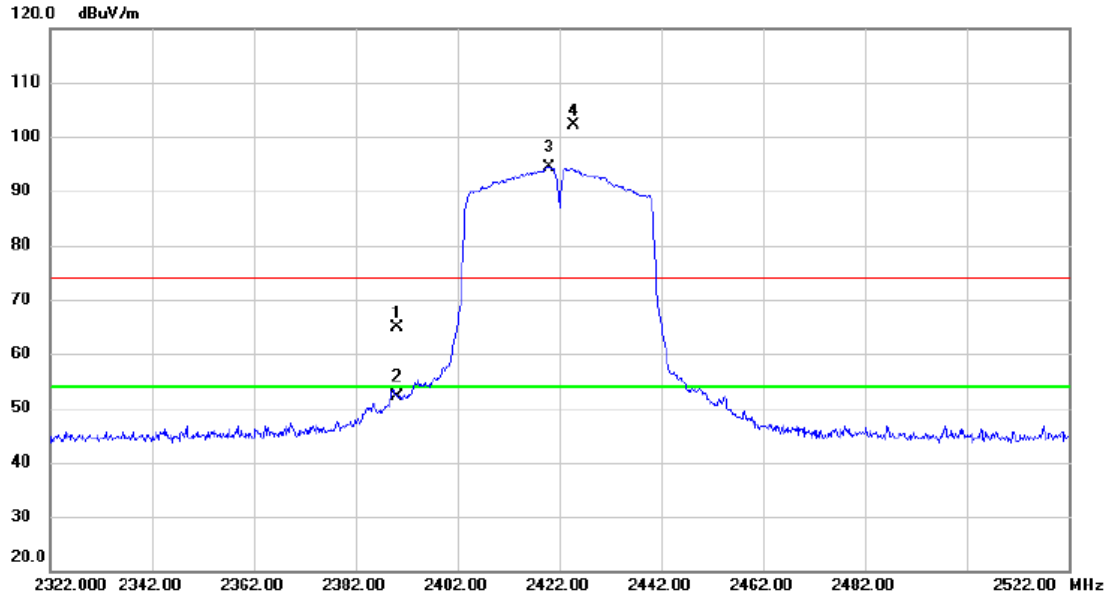


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4840.220	49.08	-10.66	38.42	74.00	-35.58	peak	
2		4849.520	48.54	-10.62	37.92	54.00	-16.08	AVG	
3		7252.860	56.86	-3.03	53.83	74.00	-20.17	peak	
4	*	7266.960	46.57	-3.01	43.56	54.00	-10.44	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-40M Mode 2422MHz

Horizontal

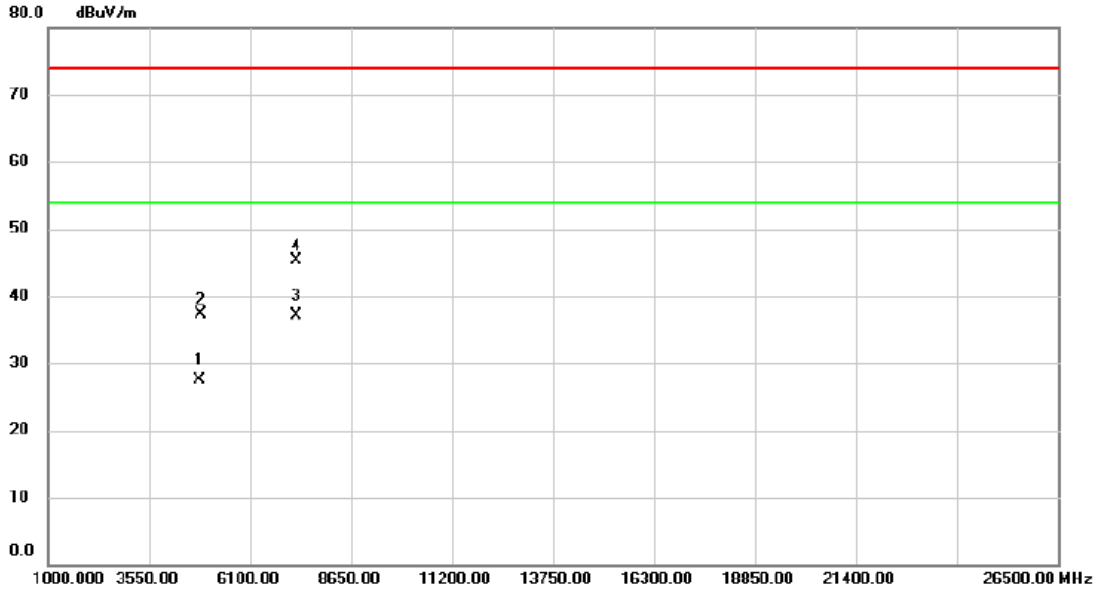


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	33.04	31.79	64.83	74.00	-9.17	peak	
2		2390.000	20.46	31.79	52.25	54.00	-1.75	AVG	
3	*	2420.000	62.58	31.88	94.46	54.00	40.46	AVG	No Limit
4	X	2424.800	70.26	31.88	102.14	74.00	28.14	peak	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-40M Mode 2422MHz

Horizontal

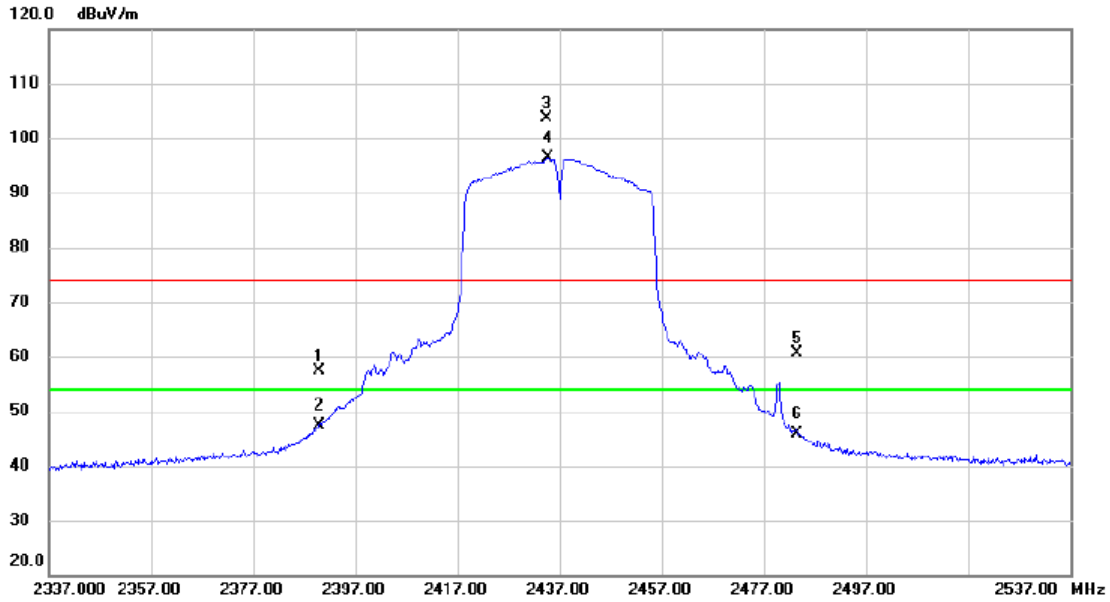


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.950	38.24	-10.72	27.52	54.00	-26.48	AVG	
2		4851.700	47.91	-10.61	37.30	74.00	-36.70	peak	
3	*	7267.900	40.11	-3.00	37.11	54.00	-16.89	AVG	
4		7276.150	48.24	-2.98	45.26	74.00	-28.74	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-40M Mode 2437 MHz

Vertical

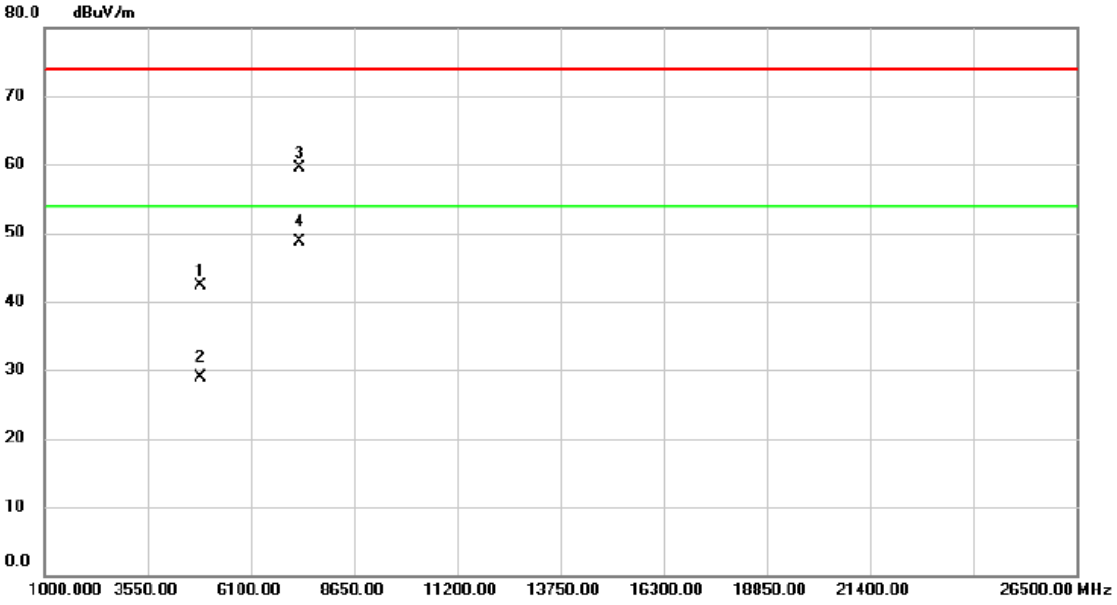


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2389.800	25.60	31.79	57.39	74.00	-16.61	peak	
2		2390.000	15.55	31.79	47.34	54.00	-6.66	AVG	
3	X	2434.600	71.78	31.91	103.69	74.00	29.69	peak	No Limit
4	*	2434.800	64.36	31.91	96.27	54.00	42.27	AVG	No Limit
5		2483.500	28.68	32.05	60.73	74.00	-13.27	peak	
6		2483.500	13.72	32.05	45.77	54.00	-8.23	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-40M Mode 2437 MHz

Vertical

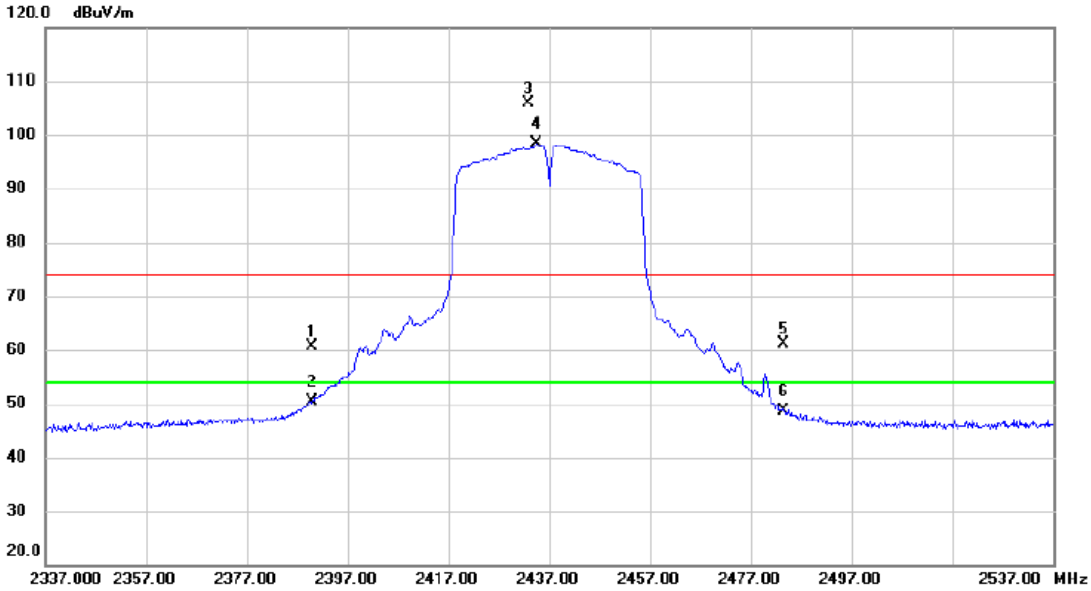


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4867.700	52.90	-10.54	42.36	74.00	-31.64	peak	
2		4875.400	39.42	-10.51	28.91	54.00	-25.09	AVG	
3		7306.600	62.50	-2.92	59.58	74.00	-14.42	peak	
4	*	7309.000	51.70	-2.92	48.78	54.00	-5.22	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-40M Mode 2437 MHz

Horizontal

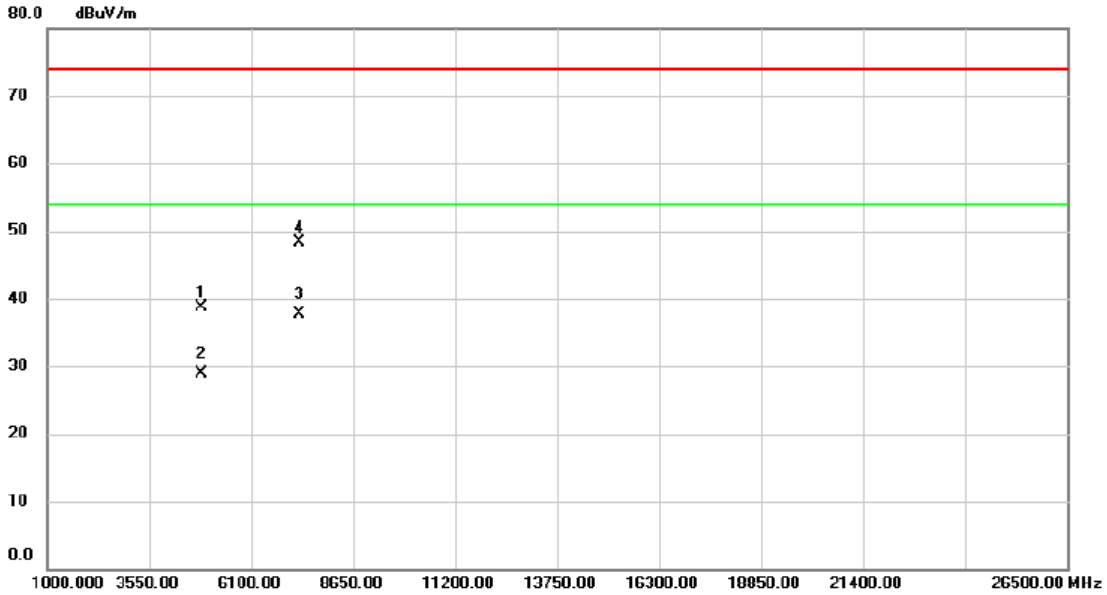


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	28.89	31.79	60.68	74.00	-13.32	peak	
2		2390.000	18.54	31.79	50.33	54.00	-3.67	AVG	
3	X	2432.800	74.08	31.91	105.99	74.00	31.99	peak	No Limit
4	*	2434.600	66.39	31.91	98.30	54.00	44.30	AVG	No Limit
5		2483.500	29.05	32.05	61.10	74.00	-12.90	peak	
6		2483.500	16.46	32.05	48.51	54.00	-5.49	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-40M Mode 2437 MHz

Horizontal

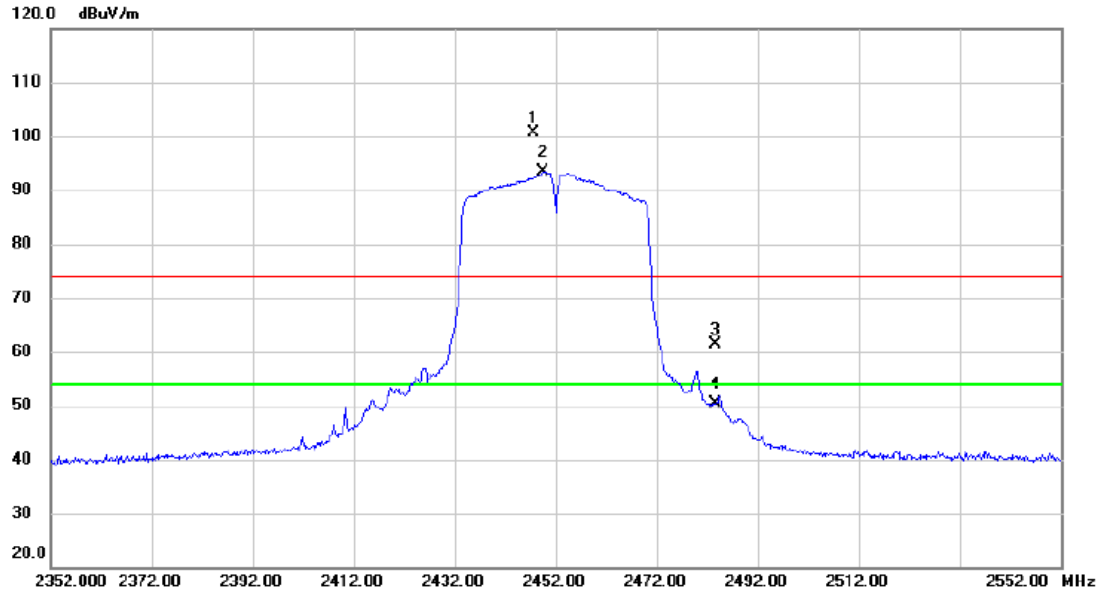


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4870.850	49.20	-10.52	38.68	74.00	-35.32	peak	
2		4872.550	39.49	-10.52	28.97	54.00	-25.03	AVG	
3	*	7307.600	40.68	-2.92	37.76	54.00	-16.24	AVG	
4		7312.950	51.11	-2.90	48.21	74.00	-25.79	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-40M Mode 2452 MHz

Vertical

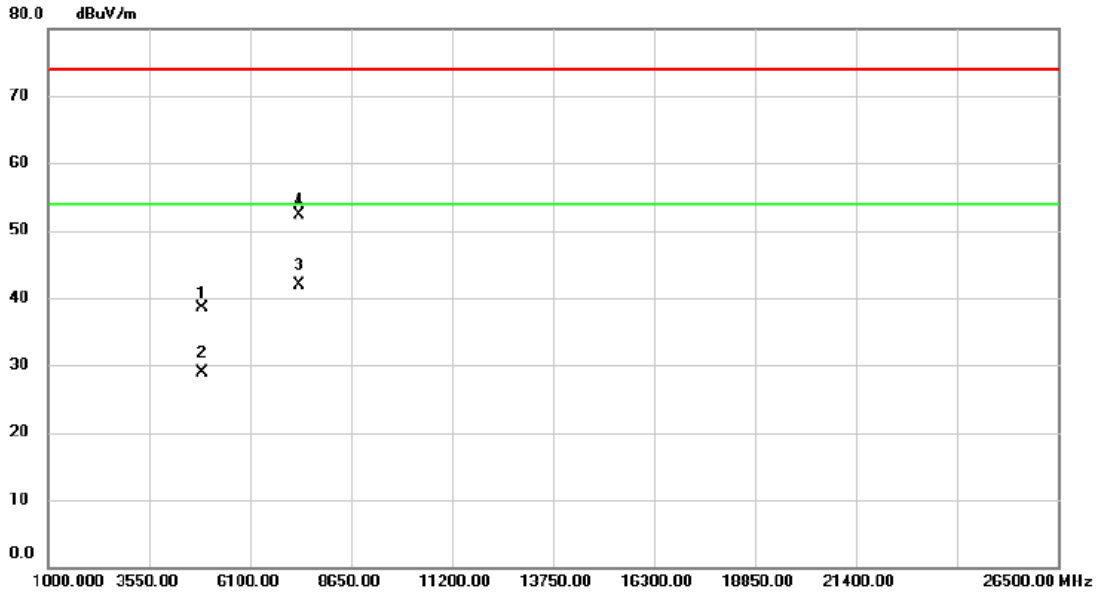


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2447.600	68.64	31.96	100.60	74.00	26.60	peak	No Limit
2	*	2449.400	61.38	31.96	93.34	54.00	39.34	AVG	No Limit
3		2483.500	29.43	32.05	61.48	74.00	-12.52	peak	
4		2483.500	18.44	32.05	50.49	54.00	-3.51	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-40M Mode 2452 MHz

Vertical

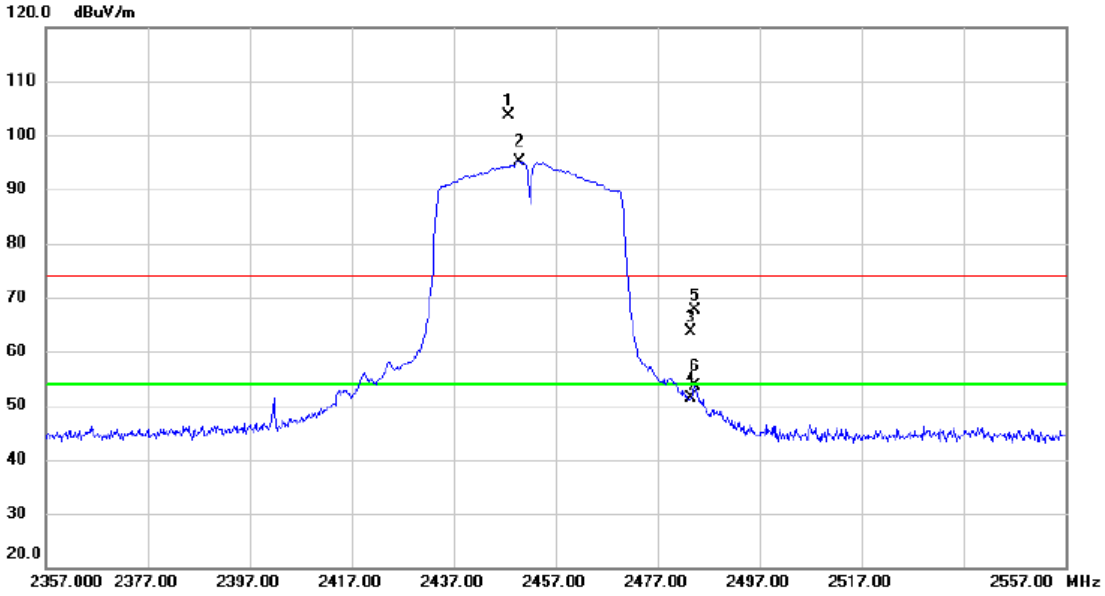


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4900.450	48.87	-10.40	38.47	74.00	-35.53	peak	
2		4905.100	39.35	-10.38	28.97	54.00	-25.03	AVG	
3	*	7348.600	44.68	-2.84	41.84	54.00	-12.16	AVG	
4		7352.050	55.21	-2.83	52.38	74.00	-21.62	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-40M Mode 2452 MHz

Horizontal

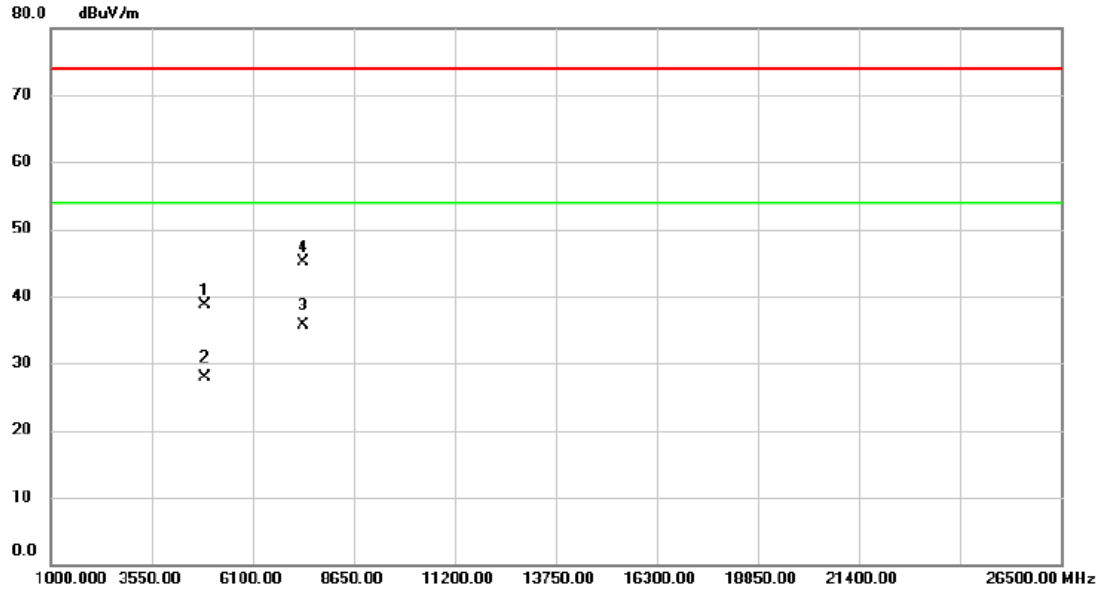


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2447.800	71.70	31.96	103.66	74.00	29.66	peak	No Limit
2	*	2450.000	63.11	31.96	95.07	54.00	41.07	AVG	No Limit
3		2483.500	31.66	32.05	63.71	74.00	-10.29	peak	
4		2483.500	19.38	32.05	51.43	54.00	-2.57	AVG	
5		2484.400	35.47	32.05	67.52	74.00	-6.48	peak	
6		2484.400	21.57	32.05	53.62	54.00	-0.38	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Orthogonal Axis	X
Test Mode:	TX N-40M Mode 2452 MHz

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4900.550	49.09	-10.40	38.69	74.00	-35.31	peak	
2		4909.350	38.24	-10.37	27.87	54.00	-26.13	AVG	
3	*	7360.400	38.46	-2.82	35.64	54.00	-18.36	AVG	
4		7363.150	47.85	-2.81	45.04	74.00	-28.96	peak	

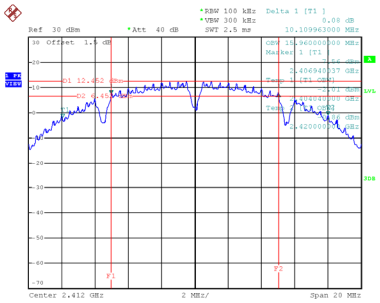
REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX E - BANDWIDTH

Test Mode	TX B Mode

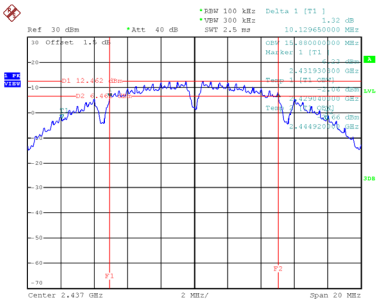
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	10.11	15.96	500	Complies
06	2437	10.13	15.88	500	Complies
11	2462	10.15	16.00	500	Complies

CH01



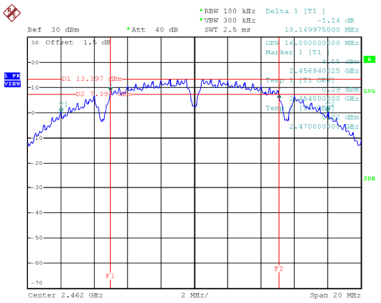
Date: 14.FEB.2019 10:57:21

CH06



Date: 14.FEB.2019 13:40:57

CH11

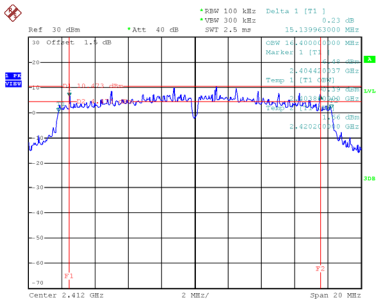


Date: 14.FEB.2019 11:04:11

Test Mode	TX G Mode

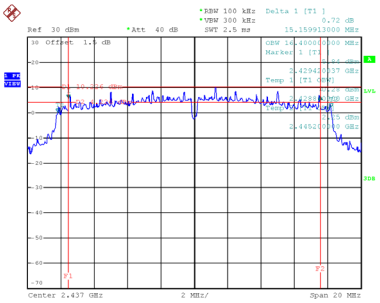
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	15.14	16.40	500	Complies
06	2437	15.16	16.40	500	Complies
11	2462	15.12	16.40	500	Complies

CH01



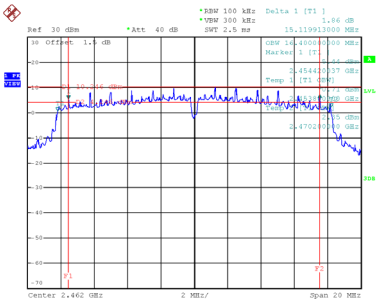
Date: 14.FEB.2019 11:07:31

CH06



Date: 14.FEB.2019 12:37:08

CH11

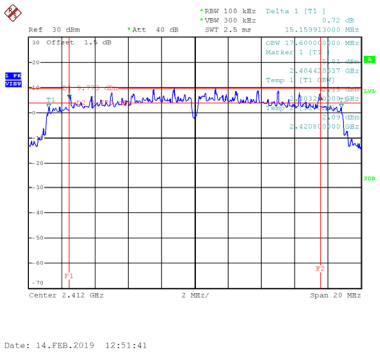


Date: 14.FEB.2019 12:39:15

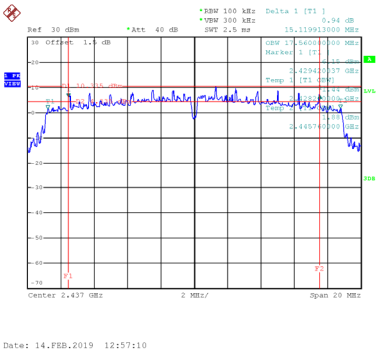
Test Mode	TX N (HT20) Mode

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	15.16	17.60	500	Complies
06	2437	15.12	17.56	500	Complies
11	2462	15.14	17.56	500	Complies

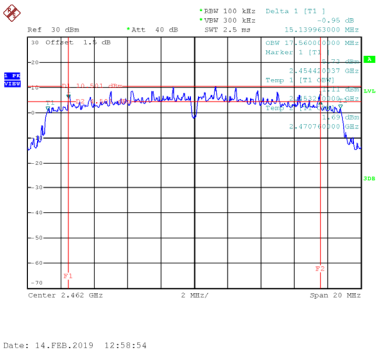
CH01



CH06



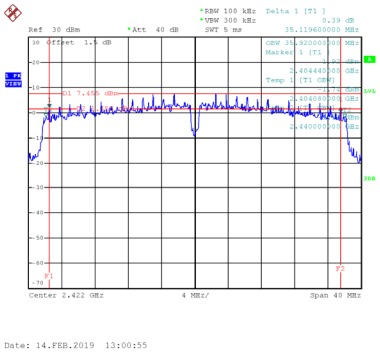
CH11



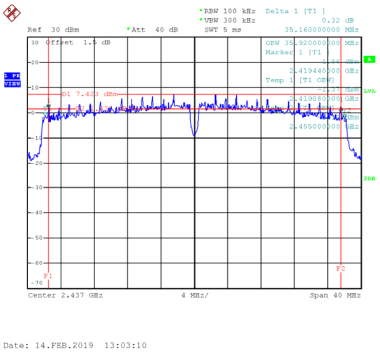
Test Mode	TX N (HT40) Mode

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
03	2422	35.12	35.92	500	Complies
06	2437	35.16	35.92	500	Complies
09	2452	35.08	35.84	500	Complies

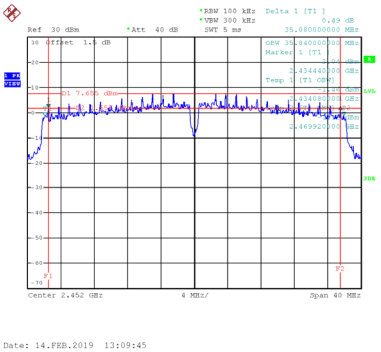
CH03



CH06



CH09



APPENDIX F - MAXIMUM OUTPUT POWER

Test Mode	TX B Mode_Ant. 1

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	16.10	0.0407	30.00	1.0000	Complies
06	2437	17.70	0.0589	30.00	1.0000	Complies
11	2462	19.72	0.0938	30.00	1.0000	Complies

Test Mode	TX B Mode_Ant. 2

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	15.89	0.0388	30.00	1.0000	Complies
06	2437	17.63	0.0579	30.00	1.0000	Complies
11	2462	19.51	0.0893	30.00	1.0000	Complies

Test Mode	TX B Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	19.01	0.0796	30.00	1.0000	Complies
06	2437	20.68	0.1168	30.00	1.0000	Complies
11	2462	22.63	0.1831	30.00	1.0000	Complies

Test Mode	TX G Mode_Ant. 1

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	22.31	0.1702	30.00	1.0000	Complies
06	2437	23.16	0.2070	30.00	1.0000	Complies
11	2462	23.26	0.2118	30.00	1.0000	Complies

Test Mode	TX G Mode_Ant. 2

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	22.36	0.1722	30.00	1.0000	Complies
06	2437	23.49	0.2234	30.00	1.0000	Complies
11	2462	23.33	0.2153	30.00	1.0000	Complies

Test Mode	TX G Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	25.35	0.3428	30.00	1.0000	Complies
06	2437	26.34	0.4305	30.00	1.0000	Complies
11	2462	26.31	0.4276	30.00	1.0000	Complies

Test Mode	TX N (HT20) Mode_Ant. 1

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	22.71	0.1866	30.00	1.0000	Complies
06	2437	23.22	0.2099	30.00	1.0000	Complies
11	2462	22.74	0.1879	30.00	1.0000	Complies

Test Mode	TX N (HT20) Mode_Ant. 2

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	22.26	0.1683	30.00	1.0000	Complies
06	2437	23.47	0.2223	30.00	1.0000	Complies
11	2462	22.78	0.1897	30.00	1.0000	Complies

Test Mode	TX N (HT20) Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	25.50	0.3548	30.00	1.0000	Complies
06	2437	26.36	0.4325	30.00	1.0000	Complies
11	2462	25.77	0.3776	30.00	1.0000	Complies

Test Mode	TX N (HT40) Mode_Ant. 1

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	21.03	0.1268	30.00	1.0000	Complies
06	2437	23.55	0.2264	30.00	1.0000	Complies
09	2452	22.95	0.1972	30.00	1.0000	Complies

Test Mode	TX N (HT40) Mode_Ant. 2

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	20.72	0.1180	30.00	1.0000	Complies
06	2437	23.49	0.2234	30.00	1.0000	Complies
09	2452	21.63	0.1455	30.00	1.0000	Complies

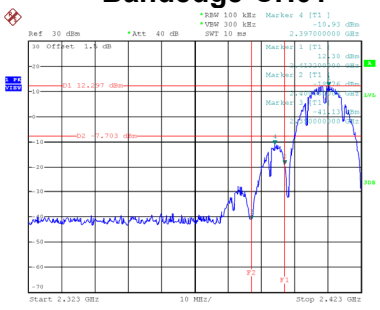
Test Mode	TX N (HT40) Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	23.89	0.2449	30.00	1.0000	Complies
06	2437	26.53	0.4498	30.00	1.0000	Complies
09	2452	25.35	0.3428	30.00	1.0000	Complies

APPENDIX G - CONDUCTED SPURIOUS EMISSIONS

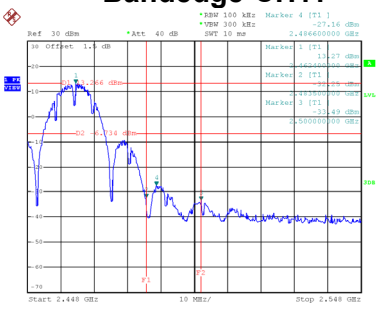
Test Mode	TX B Mode_Ant. 1

Bandedge-CH01



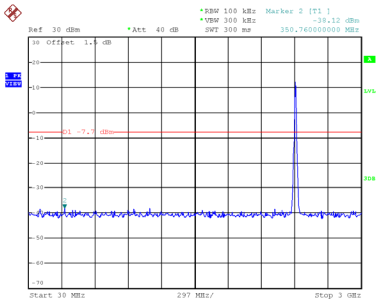
Date: 14.FEB.2019 10:57:45

Bandedge-CH11



Date: 14.FEB.2019 11:04:35

CH01 – 10th Harmonic of the fundamental frequency



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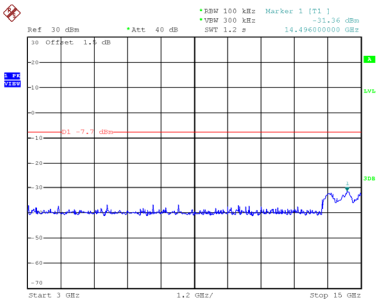
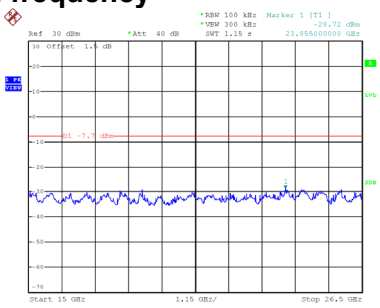
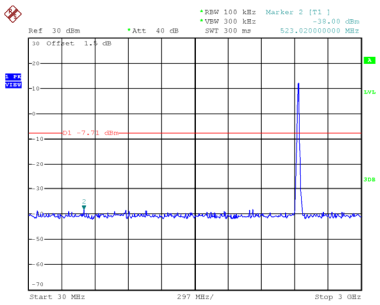


Date: 14.FEB.2019 10:58:05

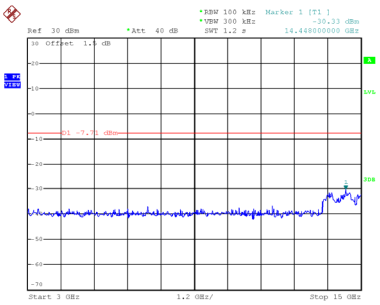


Date: 14.FEB.2019 10:58:11

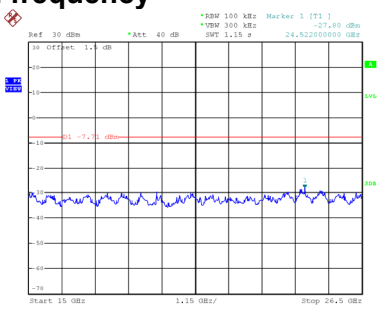
CH06 – 10th Harmonic of the fundamental frequency



Date: 14.FEB.2019 13:41:33

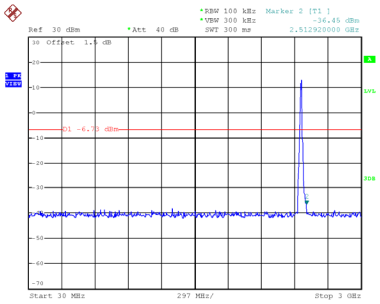


Date: 14.FEB.2019 13:41:40



Date: 14.FEB.2019 13:41:47

CH11 – 10th Harmonic of the fundamental frequency



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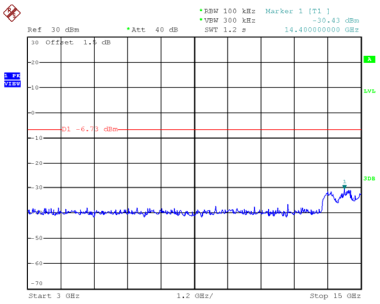

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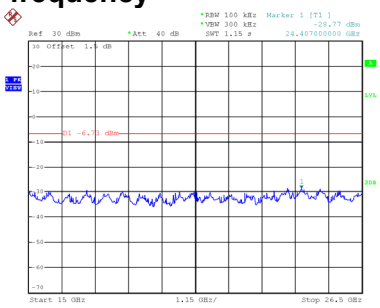
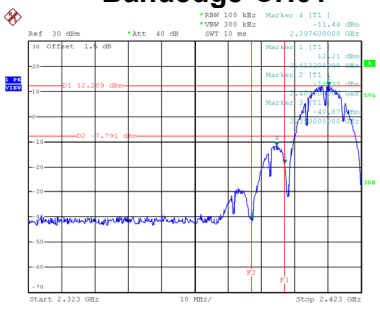


Date: 14.FEB.2019 11:05:01

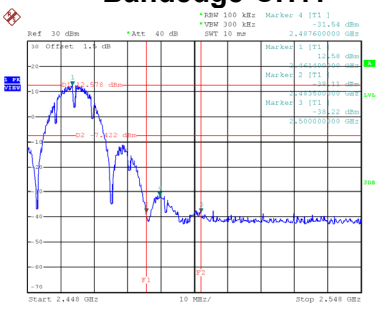
Test Mode	TX B Mode_Ant. 2

Bandedge-CH01



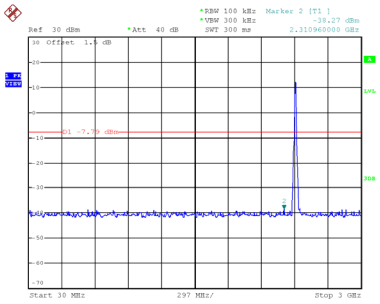
Date: 14.FEB.2019 13:36:13

Bandedge-CH11



Date: 14.FEB.2019 13:47:05

CH01 – 10th Harmonic of the fundamental frequency



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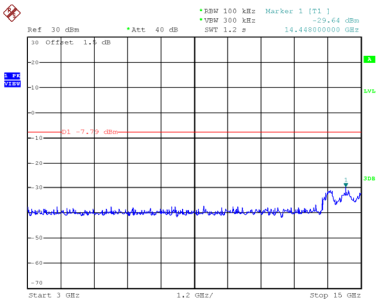

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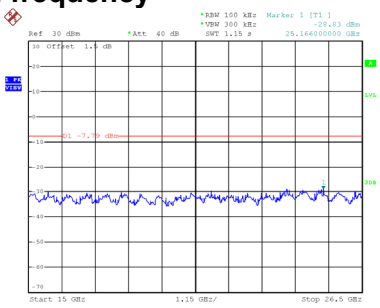
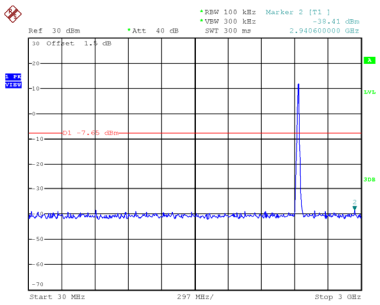


Date: 14.FEB.2019 13:36:39

CH06 – 10th Harmonic of the fundamental frequency



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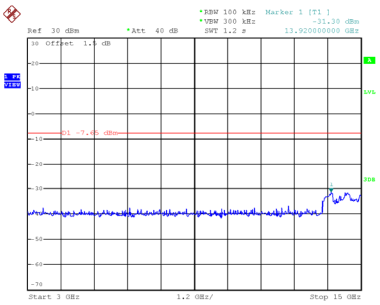

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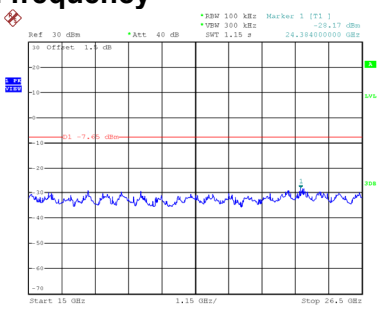

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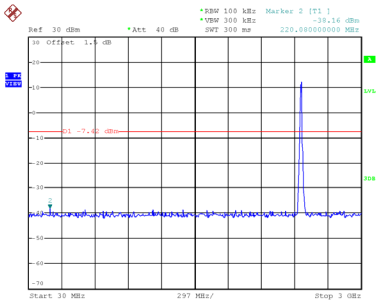
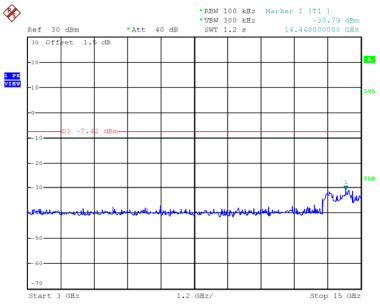
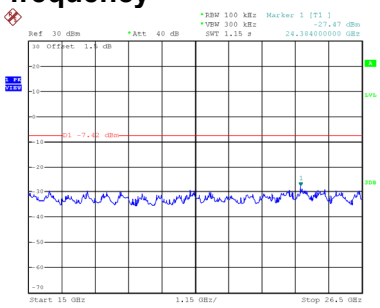
CH11 – 10th Harmonic of the fundamental frequency



Date: 14.FEB.2019 13:47:18



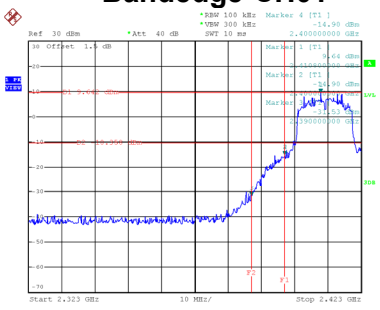
Date: 14.FEB.2019 13:47:24



Date: 14.FEB.2019 13:47:31

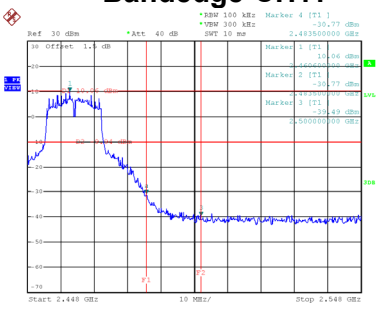
Test Mode	TX G Mode_Ant. 1

Bandedge-CH01



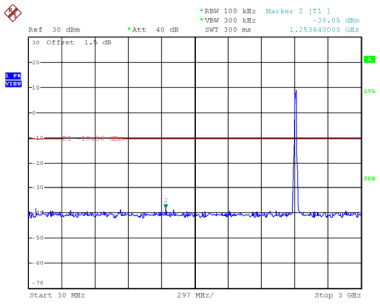
Date: 14.FEB.2019 11:07:54

Bandedge-CH11

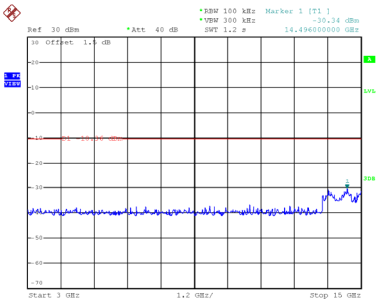


Date: 14.FEB.2019 12:39:39

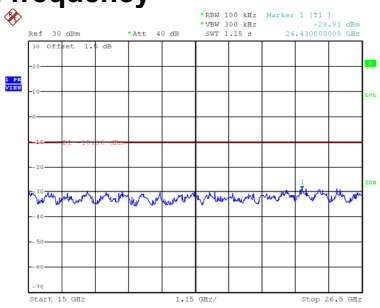
CH01 – 10th Harmonic of the fundamental frequency



Date: 14.FEB.2019 11:08:07

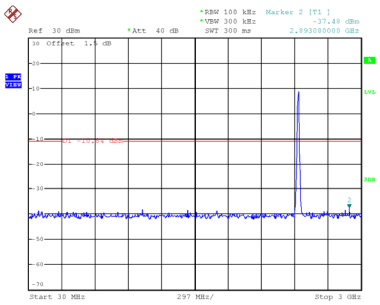


Date: 14.FEB.2019 11:08:14

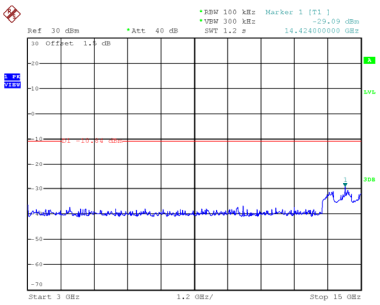


Date: 14.FEB.2019 11:08:20

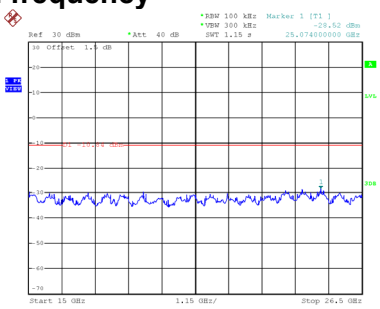
CH06 – 10th Harmonic of the fundamental frequency



Date: 14.FEB.2019 12:37:28

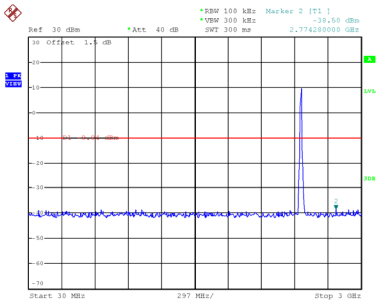


Date: 14.FEB.2019 12:37:34

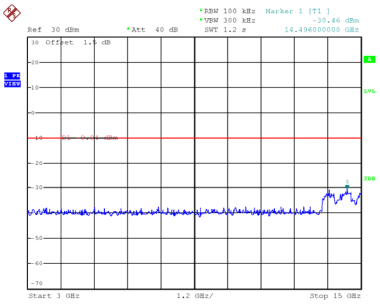


Date: 14.FEB.2019 12:37:41

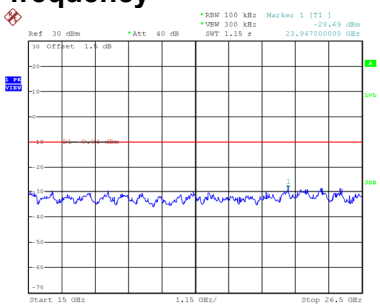
CH11 – 10th Harmonic of the fundamental frequency



Date: 14.FEB.2019 12:39:51



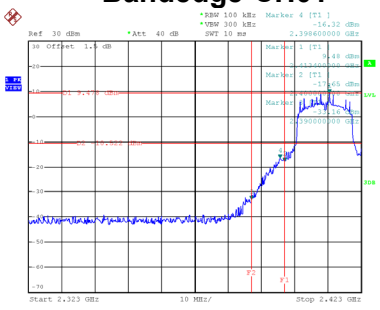
Date: 14.FEB.2019 12:39:58



Date: 14.FEB.2019 12:40:05

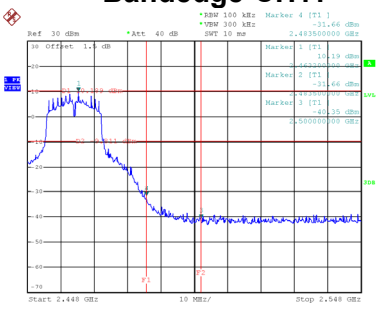
Test Mode	TX G Mode_Ant. 2

Bandedge-CH01



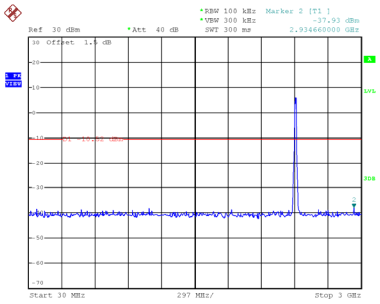
Date: 14.FEB.2019 13:49:29

Bandedge-CH11

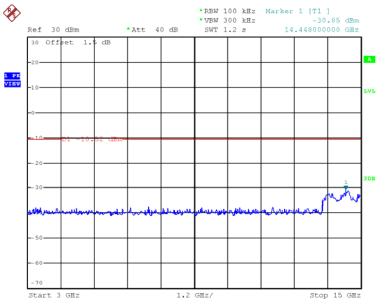


Date: 14.FEB.2019 13:55:24

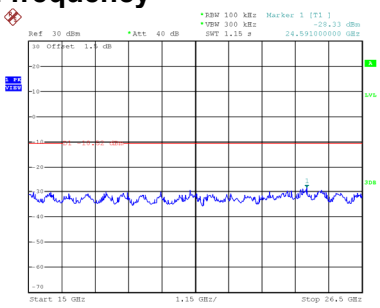
CH01 – 10th Harmonic of the fundamental frequency



Date: 14.FEB.2019 13:49:41

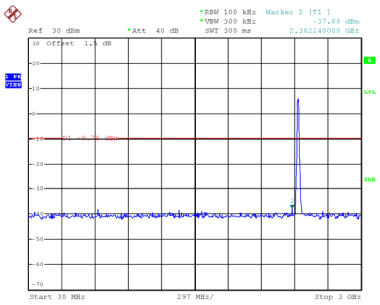


Date: 14.FEB.2019 13:49:48

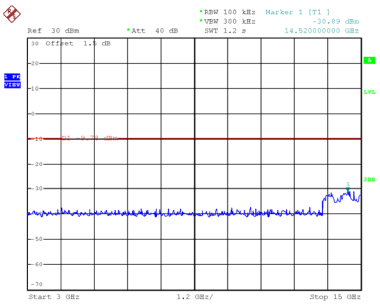


Date: 14.FEB.2019 13:49:54

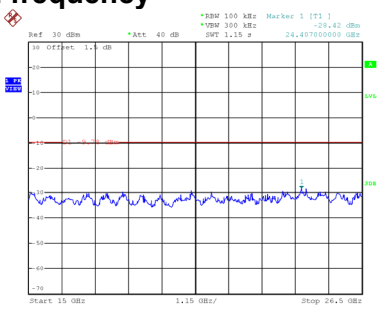
CH06 – 10th Harmonic of the fundamental frequency



Date: 14.FEB.2019 13:54:05

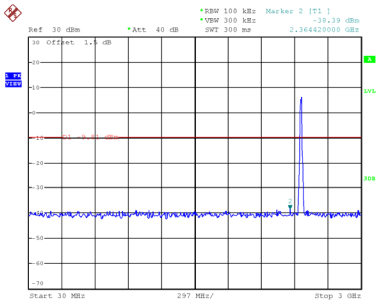


Date: 14.FEB.2019 13:54:12

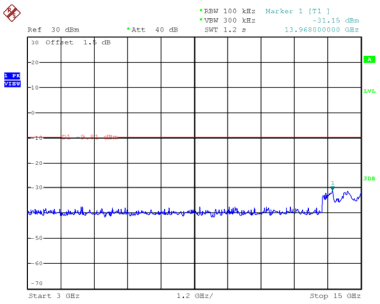


Date: 14.FEB.2019 13:54:19

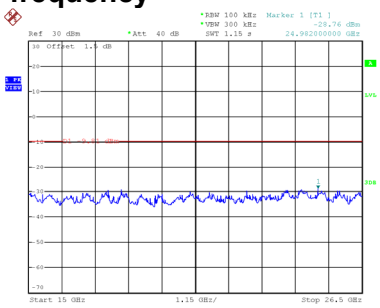
CH11 – 10th Harmonic of the fundamental frequency



Date: 14.FEB.2019 13:55:37



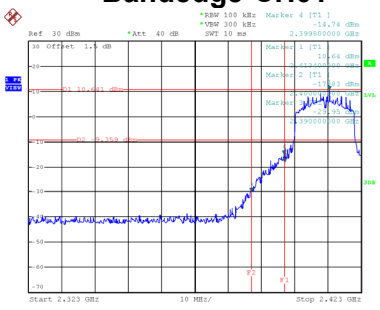
Date: 14.FEB.2019 13:55:43



Date: 14.FEB.2019 13:55:50

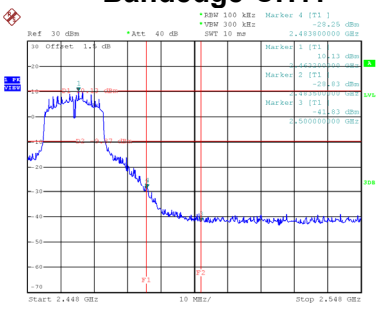
Test Mode	TX N (HT20) Mode_Ant. 1

Bandedge-CH01



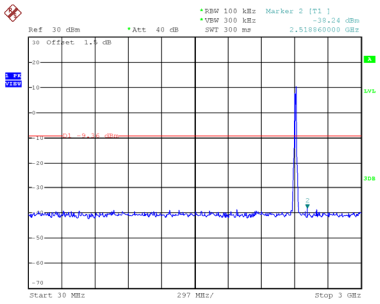
Date: 14.FEB.2019 12:52:05

Bandedge-CH11

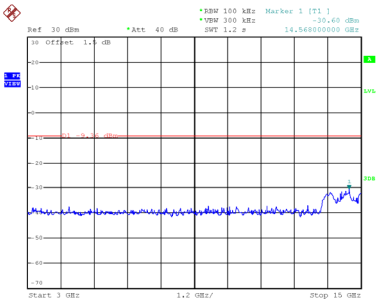


Date: 14.FEB.2019 12:59:18

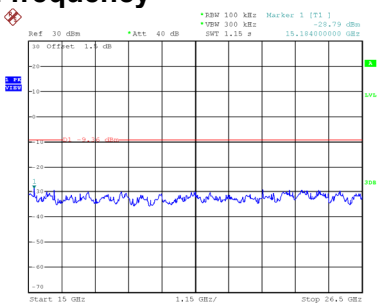
CH01 – 10th Harmonic of the fundamental frequency



Date: 14.FEB.2019 12:52:18

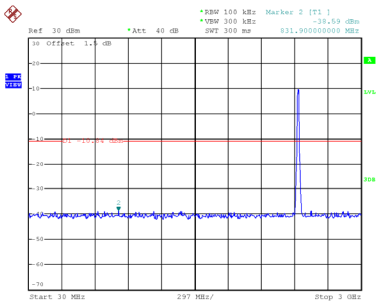


Date: 14.FEB.2019 12:52:25

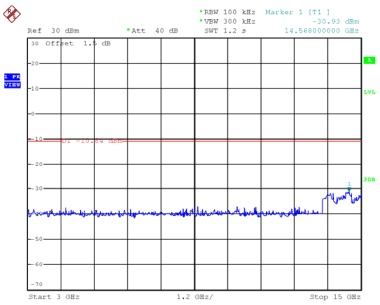


Date: 14.FEB.2019 12:52:31

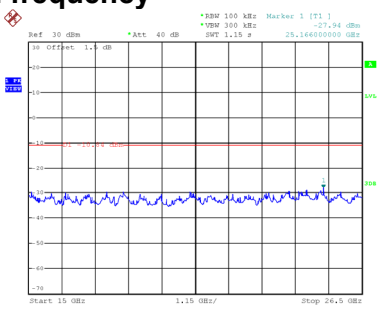
CH06 – 10th Harmonic of the fundamental frequency



Date: 14.FEB.2019 12:57:47

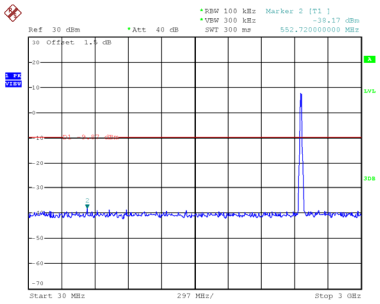


Date: 14.FEB.2019 12:57:53

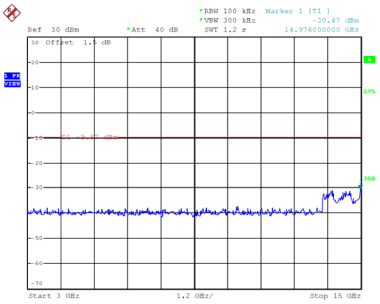


Date: 14.FEB.2019 12:58:00

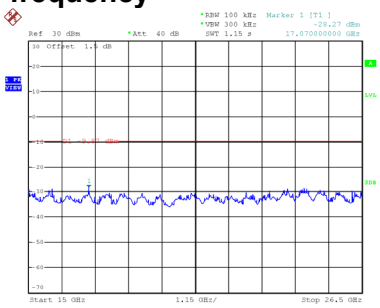
CH11 – 10th Harmonic of the fundamental frequency



Date: 14.FEB.2019 12:59:30



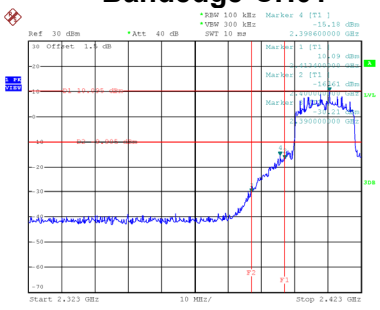
Date: 14.FEB.2019 12:59:37



Date: 14.FEB.2019 12:59:44

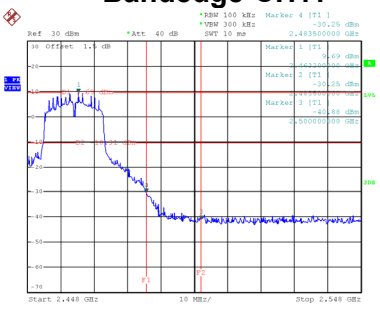
Test Mode	TX N (HT20) Mode_Ant. 2

Bandedge-CH01



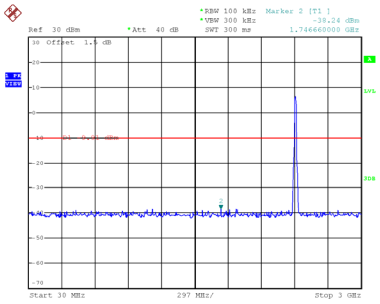
Date: 14.FEB.2019 13:57:09

Bandedge-CH11

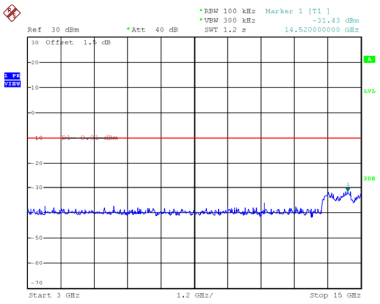


Date: 14.FEB.2019 14:08:36

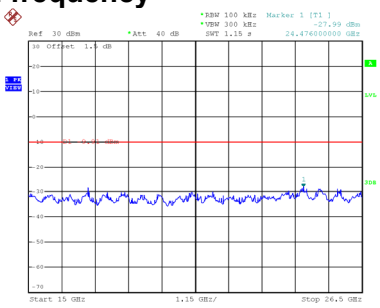
CH01 – 10th Harmonic of the fundamental frequency



Date: 14.FEB.2019 13:57:22

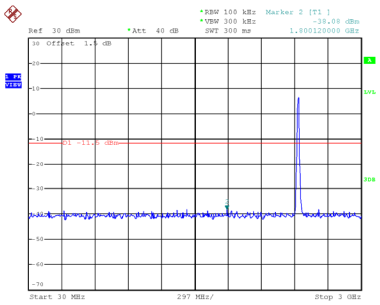


Date: 14.FEB.2019 13:57:28

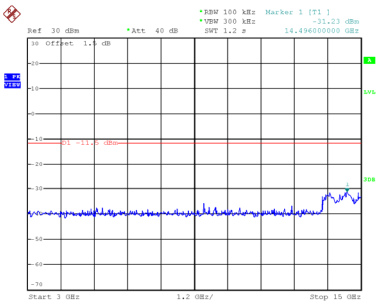


Date: 14.FEB.2019 13:57:35

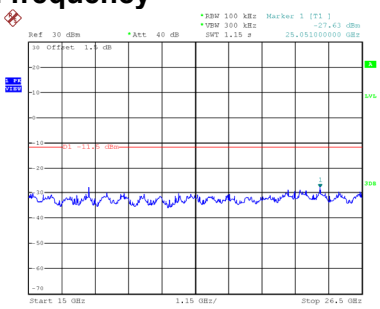
CH06 – 10th Harmonic of the fundamental frequency



Date: 14.FEB.2019 14:06:46

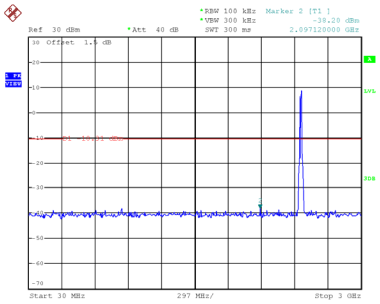


Date: 14.FEB.2019 14:06:52

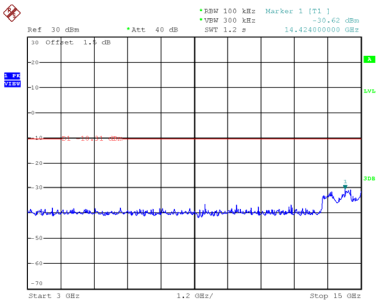


Date: 14.FEB.2019 14:06:59

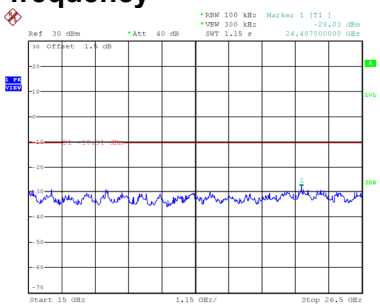
CH11 – 10th Harmonic of the fundamental frequency



Date: 14.FEB.2019 14:08:49



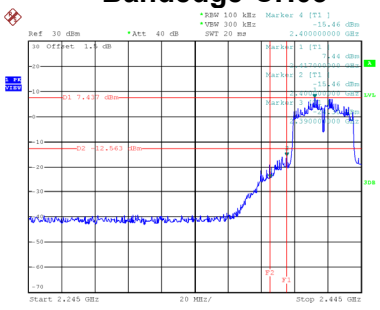
Date: 14.FEB.2019 14:08:56



Date: 14.FEB.2019 14:09:02

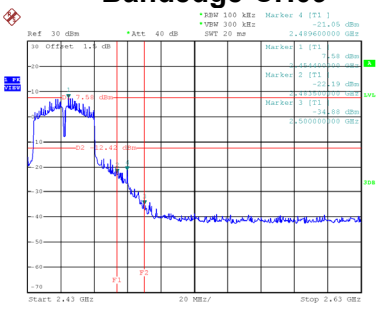
Test Mode	TX N (HT40) Mode_Ant. 1

Bandedge-CH03



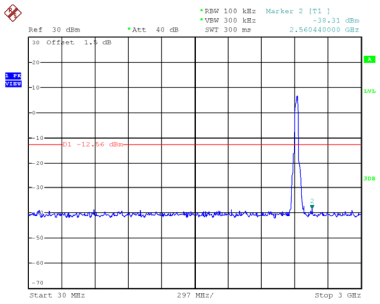
Date: 14.FEB.2019 13:01:18

Bandedge-CH09

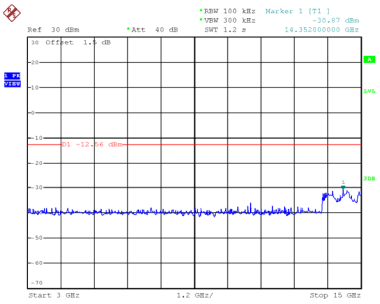


Date: 14.FEB.2019 13:10:09

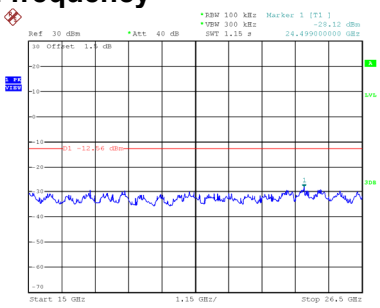
CH03 – 10th Harmonic of the fundamental frequency



Date: 14.FEB.2019 13:01:31

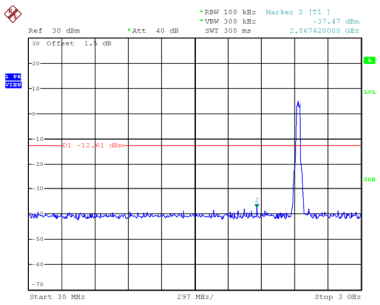


Date: 14.FEB.2019 13:01:38

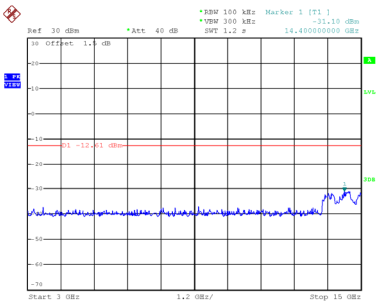


Date: 14.FEB.2019 13:01:44

CH06 – 10th Harmonic of the fundamental frequency



Date: 14.FEB.2019 13:03:47



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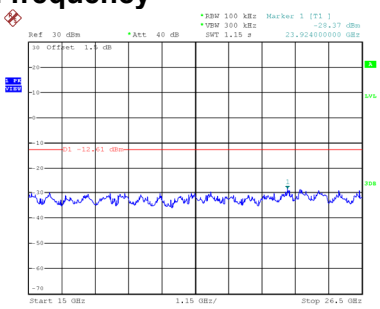
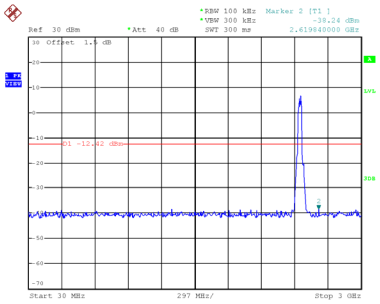


Date: 14.FEB.2019 13:04:00

CH09 – 10th Harmonic of the fundamental frequency



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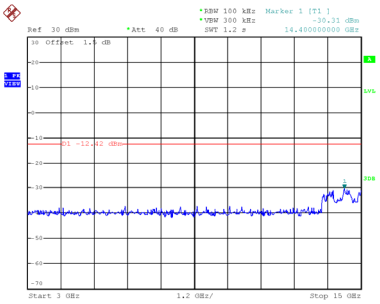

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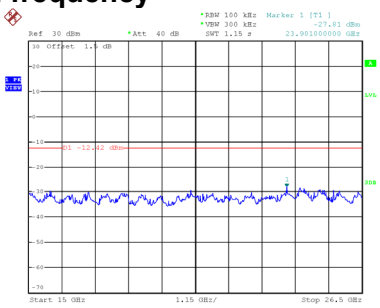

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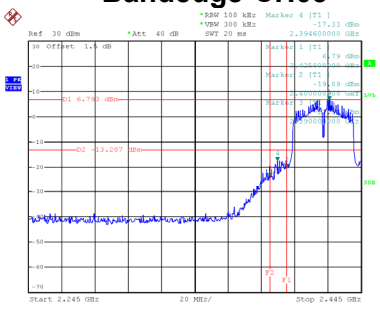
Test Mode	TX N (HT40) Mode_Ant. 2

Bandedge-CH03



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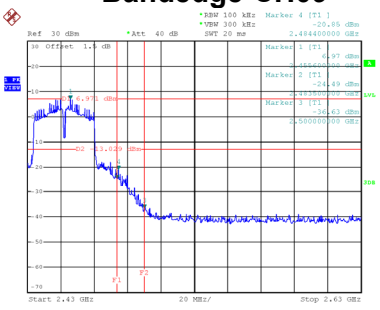
Bandedge-CH09



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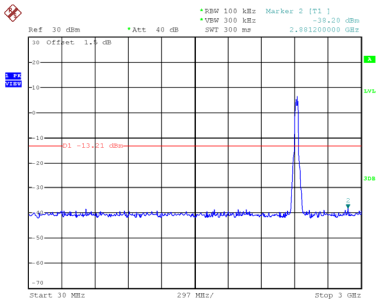
CH03 – 10th Harmonic of the fundamental frequency



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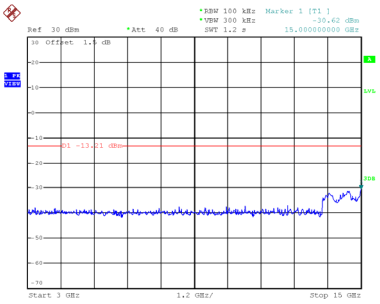

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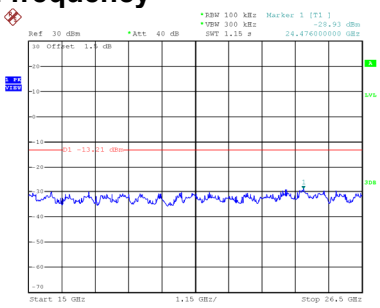

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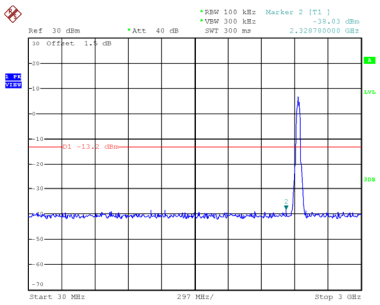
CH06 – 10th Harmonic of the fundamental frequency



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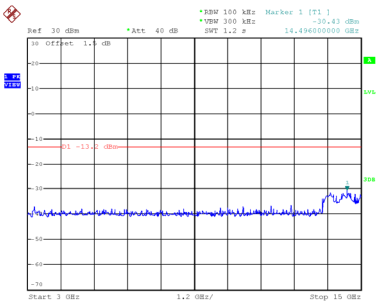

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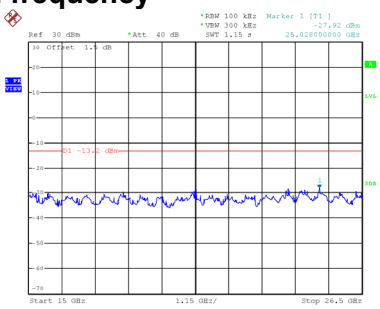

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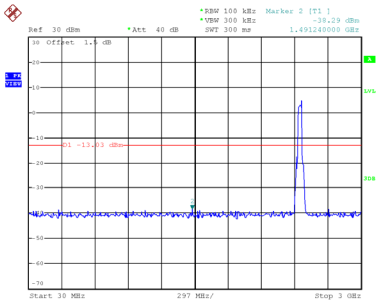
CH09 – 10th Harmonic of the fundamental frequency



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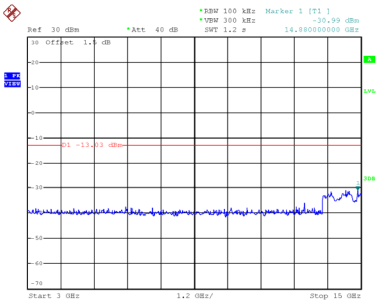

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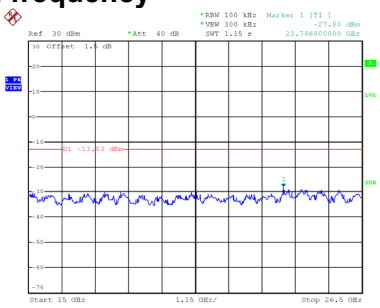


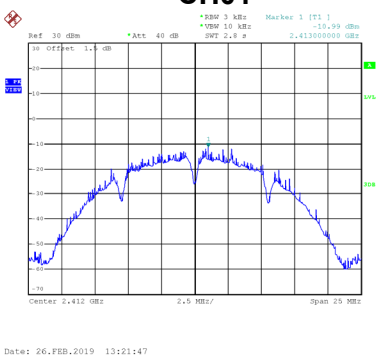
Date: 14.FEB.2019 14:14:12

APPENDIX H - POWER SPECTRAL DENSITY

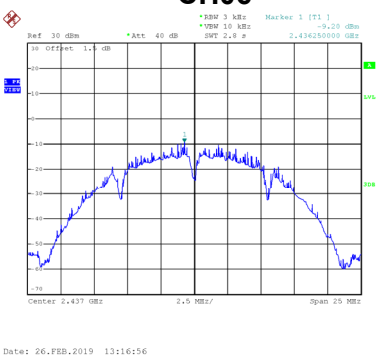
Test Mode	TX B Mode_Ant. 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-10.99	8	Complies
06	2437	-9.20	8	Complies
11	2462	-7.57	8	Complies

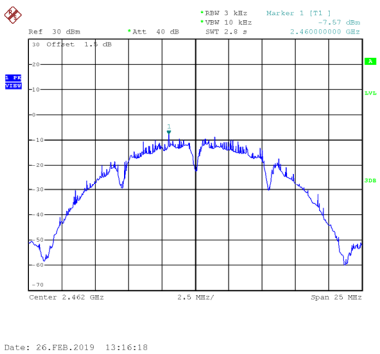
CH01



CH06



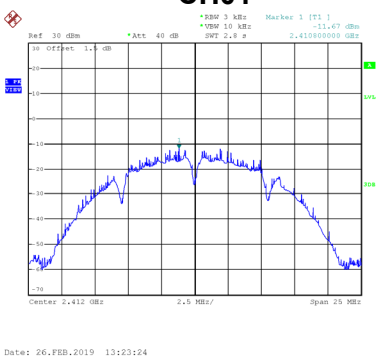
CH11



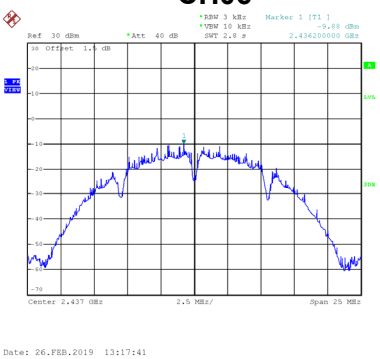
Test Mode	TX B Mode_Ant. 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-11.67	8	Complies
06	2437	-9.88	8	Complies
11	2462	-7.71	8	Complies

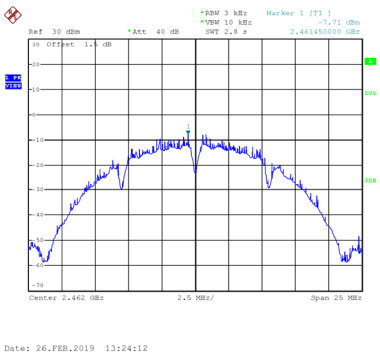
CH01



CH06



CH11



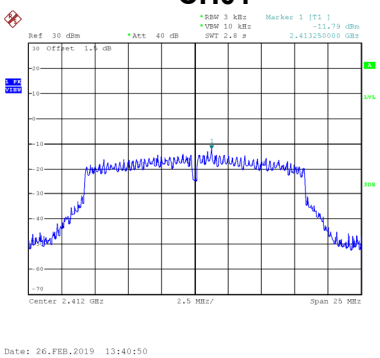
Test Mode	TX B Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-8.31	8	Complies
06	2437	-6.52	8	Complies
11	2462	-4.63	8	Complies

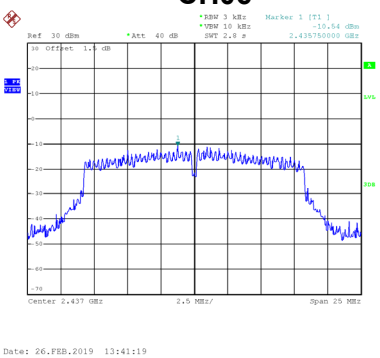
Test Mode	TX G Mode_Ant. 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-11.55	8	Complies
06	2437	-10.30	8	Complies
11	2462	-11.61	8	Complies

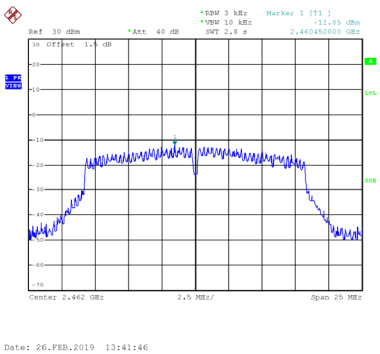
CH01



CH06



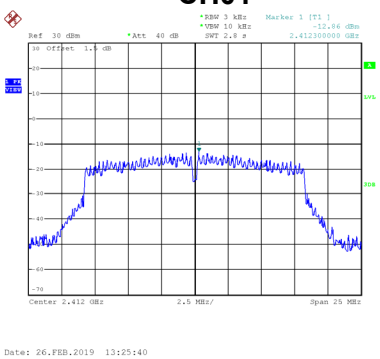
CH11



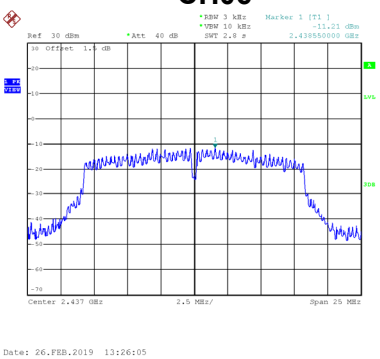
Test Mode	TX G Mode_Ant. 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-12.62	8	Complies
06	2437	-10.97	8	Complies
11	2462	-11.60	8	Complies

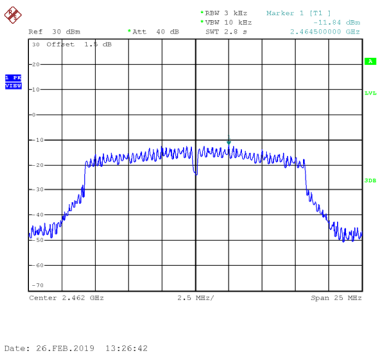
CH01



CH06



CH11



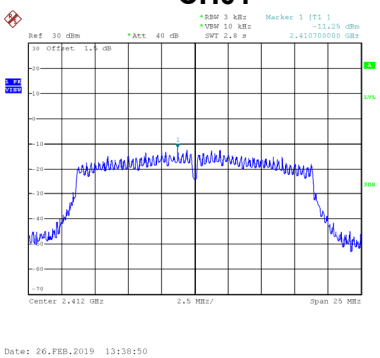
Test Mode	TX G Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-9.04	8	Complies
06	2437	-7.61	8	Complies
11	2462	-8.59	8	Complies

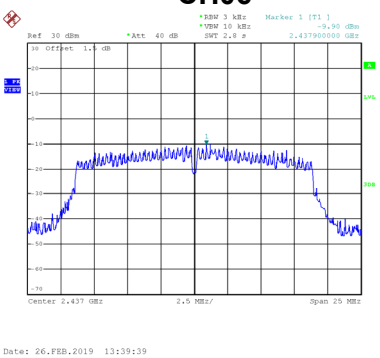
Test Mode	TX N (HT20) Mode_Ant. 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-10.75	8	Complies
06	2437	-9.40	8	Complies
11	2462	-9.58	8	Complies

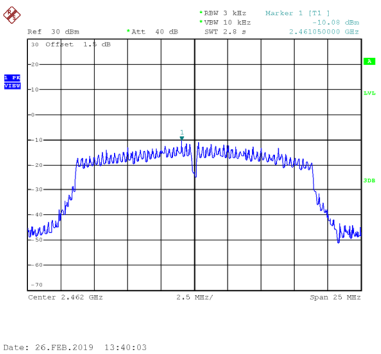
CH01



CH06



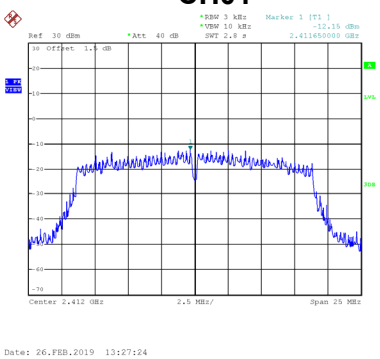
CH11



Test Mode	TX N (HT20) Mode_Ant. 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-11.65	8	Complies
06	2437	-9.99	8	Complies
11	2462	-11.05	8	Complies

CH01



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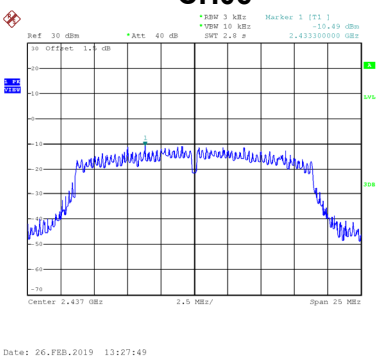
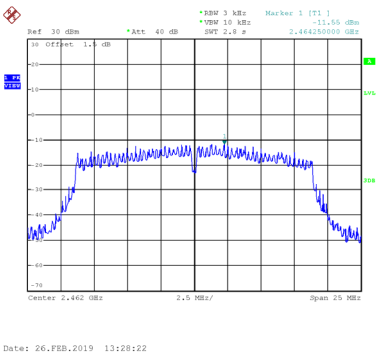


CH11



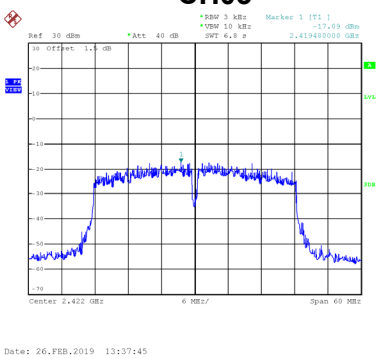
Test Mode	TX N (HT20) Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-8.17	8	Complies
06	2437	-6.67	8	Complies
11	2462	-7.24	8	Complies

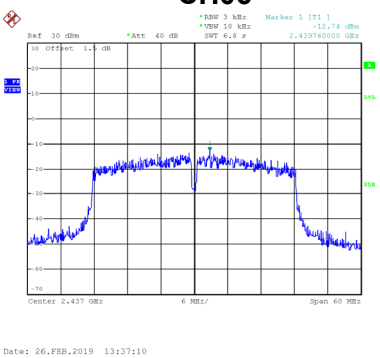
Test Mode	TX N (HT40) Mode_Ant. 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
03	2412	-16.11	8	Complies
06	2437	-11.76	8	Complies
09	2452	-14.78	8	Complies

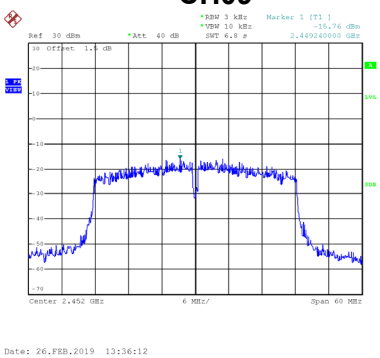
CH03



CH06



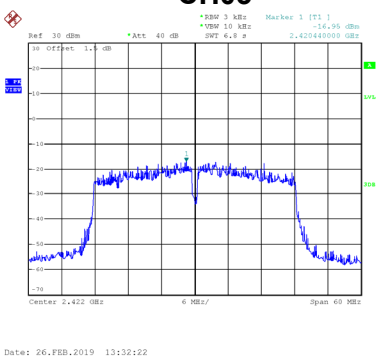
CH09



Test Mode	TX N (HT40) Mode_Ant. 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
03	2412	-15.97	8	Complies
06	2437	-11.56	8	Complies
09	2452	-15.14	8	Complies

CH03



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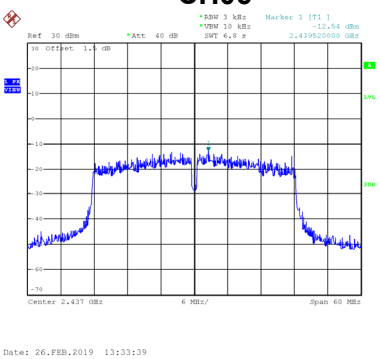
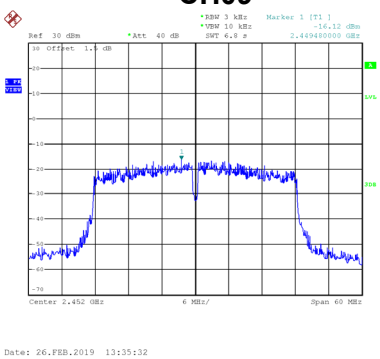


CH09



Test Mode	TX N (HT40) Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
03	2412	-13.03	8	Complies
06	2437	-8.65	8	Complies
09	2452	-11.95	8	Complies

End of Test Report