



**SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch**

No. 1 Workshop, M-10, Middle section, Science & Technology Park,
Shenzhen, Guangdong, China 518057

Telephone: +86 (0) 755 2601 2053
Fax: +86 (0) 755 2671 0594
Email: ee.shenzhen@sgs.com

Report No.: SZEM180700600602
Page: 1 of 59

TEST REPORT

Application No.: SZEM1807006006CR
Applicant: SZ DJI TECHNOLOGY CO., LTD
Address of Applicant: 14th floor, West Wing, Skyworth Semiconductor Design Building NO.18
Gaoxin South 4th Ave, Nanshan District, Shenzhen, China
Manufacturer: SZ DJI TECHNOLOGY CO., LTD
Address of Manufacturer: 4th floor, West Wing, Skyworth Semiconductor Design Building NO.18
Gaoxin South 4th Ave, Nanshan District, Shenzhen, China
Factory: SZ DJI TECHNOLOGY CO., LTD
Address of Factory: 4th floor, West Wing, Skyworth Semiconductor Design Building NO.18
Gaoxin South 4th Ave, Nanshan District, Shenzhen, China

Equipment Under Test (EUT):

EUT Name: Mavic 2 Enterprise
Model No.: L1ZE
Trade mark: DJI
FCC ID: SS3-L1ZE1807
Standard(s) : 47 CFR Part 15, Subpart C 15.247
Date of Receipt: 2018-07-09
Date of Test: 2018-07-13 to 2018-07-28
Date of Issue: 2018-08-03

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.



Keny Xu
EMC Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

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<i>Revision Record</i>				
<i>Version</i>	<i>Chapter</i>	<i>Date</i>	<i>Modifier</i>	<i>Remark</i>
01		2018-08-03		Original

Authorized for issue by:				
				
		<hr/>		
		Hank Yan /Project Engineer		
				
		<hr/>		
		Eric Fu /Reviewer		



2 Test Summary

In this report, below test items refer to the granted FCC ID: SS3-L1Z1805. Since the RF part of the product (L1ZE) is same to the referred granted product (L1Z), the only difference is on the GPS board. Compare to L1Z, the GPS board on L1ZE active ADS-B function (receiver only) and add an extended micro-USB port which used to connect to accessories. The applicant takes full responsibility that the test data as referenced in this report represents compliance for the new FCC ID.

Information of the referenced FCC ID is below:

Referenced FCC ID: SS3-L1Z1805	
Equipment class:	DTS
Rule parts:	15C
Frequency Bands:	2403.5MHz ~ 2477.5MHz 2405.5MHz to 2477.5MHz 2410.5MHz to 2472.5MHz
Report Title:	Test Report
Exhibit type:	Test Report

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Minimum 6dB Bandwidth	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.8.1	47 CFR Part 15, Subpart C 15.247a(2)	Pass
Conducted Output Power (Average)	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.9.2	47 CFR Part 15, Subpart C 15.247(b)(3)	Pass
Power Spectrum Density	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.10.2	47 CFR Part 15, Subpart C 15.247(e)	Pass
Conducted Band Edges Measurement	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.13.3.2	47 CFR Part 15, Subpart C 15.247(d)	Pass
Conducted Spurious Emissions	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.11	47 CFR Part 15, Subpart C 15.247(d)	Pass
Radiated Emissions which fall in the restricted bands	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.10.5	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass
Radiated Spurious Emissions	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.4,6.5,6.6	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass



The spot-check was performed on below items based on worst-case results reported in the original FCC ID filing.

Summary for Spot-check				
Item	Standard	Method	Requirement	Result
Conducted Output Power (Average)	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.9.2	47 CFR Part 15, Subpart C 15.247(b)(3)	Pass
Power Spectrum Density	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.10.2	47 CFR Part 15, Subpart C 15.247(e)	Pass
Radiated Emissions which fall in the restricted bands	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.10.5	47 CFR Part 15, Subpart C 15.209 & 15.247(d)	Pass
Radiated Spurious Emissions	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.4,6.5,6.6	47 CFR Part 15, Subpart C 15.209 & 15.247(d)	Pass



3 Contents

	Page
1 COVER PAGE	1
2 TEST SUMMARY	3
3 CONTENTS	5
4 GENERAL INFORMATION	6
4.1 DETAILS OF E.U.T.	6
4.2 DESCRIPTION OF SUPPORT UNITS	9
4.3 MEASUREMENT UNCERTAINTY	9
4.4 TEST LOCATION	10
4.5 TEST FACILITY	10
4.6 DEVIATION FROM STANDARDS	10
4.7 ABNORMALITIES FROM STANDARD CONDITIONS	10
5 EQUIPMENT LIST	11
6 RADIO SPECTRUM MATTER TEST RESULTS (SPOT-CHECK)	13
6.1 CONDUCTED OUTPUT POWER (AVERAGE)	13
6.1.1 <i>E.U.T. Operation</i>	13
6.1.2 <i>Test Setup Diagram</i>	13
6.1.3 <i>Measurement Procedure and Data</i>	13
6.2 POWER SPECTRUM DENSITY	14
6.2.1 <i>E.U.T. Operation</i>	14
6.2.2 <i>Test Setup Diagram</i>	14
6.2.3 <i>Measurement Procedure and Data</i>	14
6.3 RADIATED EMISSIONS WHICH FALL IN THE RESTRICTED BANDS	15
6.3.1 <i>E.U.T. Operation</i>	15
6.3.2 <i>Test Setup Diagram</i>	15
6.3.3 <i>Measurement Procedure and Data</i>	16
6.4 RADIATED SPURIOUS EMISSIONS	41
6.4.1 <i>E.U.T. Operation</i>	41
6.4.2 <i>Test Setup Diagram</i>	42
6.4.3 <i>Measurement Procedure and Data</i>	43
7 PHOTOGRAPHS	52
7.1 TEST SETUP	52
7.2 EUT CONSTRUCTIONAL DETAILS (EUT PHOTOS)	52
9 APPENDIX	53
7.3 APPENDIX 15.247	53

4 General Information

4.1 Details of E.U.T.

Power supply:	DC 15.4V, 3850mAh Li-Po Battery
Cable:	USB Type-C Cable: 100cm
Operation Frequency:	1.4MHz BW: 2403.5MHz ~ 2477.5MHz 10MHz BW: 2405.5MHz to 2477.5MHz 20MHz BW: 2410.5MHz to 2472.5MHz
Modulation Type:	1.4MHz BW: OFDM 10MHz BW: OFDM 20MHz BW: OFDM
Number of Channels:	1.4MHz BW: 38 10MHz BW: 73 20MHz BW:63
Channel Spacing:	1.4MHz BW: 2MHz 10MHz BW: 1MHz 20MHz BW: 1MHz
Antenna Type:	PCB Antenna
Antenna Gain:	3.5dBi

Channel List and nominal power for 1.4MHz BW

CH No.	Fre. (MHz)	Nominal Power (EIRP) (dBm)	CH No.	Fre. (MHz)	Nominal Power (EIRP) (dBm)	CH No.	Fre. (MHz)	Nominal Power (EIRP) (dBm)
1 ^{abc}	2403.5	25.5	14	2429.5	25.5	27	2455.5	25.5
2	2405.5	25.5	15	2431.5	25.5	28	2457.5	25.5
3	2407.5	25.5	16	2433.5	25.5	29	2459.5	25.5
4	2409.5	25.5	17	2435.5	25.5	30	2461.5	25.5
5	2411.5	25.5	18	2437.5	25.5	31	2463.5	25.5
6	2413.5	25.5	19	2439.5	25.5	32	2465.5	25.5
7	2415.5	25.5	20 ^{abc}	2441.5	25.5	33	2467.5	25.5
8	2417.5	25.5	21	2443.5	25.5	34	2469.5	25.5
9	2419.5	25.5	22	2445.5	25.5	35	2471.5	25.5
10	2421.5	25.5	23	2447.5	25.5	36	2473.5	25.5
11	2423.5	25.5	24	2449.5	25.5	37	2475.5	25.5
12	2425.5	25.5	25	2451.5	25.5	38 ^{abc}	2477.5	25.5
13	2427.5	25.5	26	2453.5	25.5			

Note a: Channels chosen for RF conducted test.

Note b: Channels chosen for Radiated spurious emission

Note c: Channels chosen for Radiated Emissions which fall in the restricted bands test



Channel List and nominal power for 10MHz BW								
CH No.	Fre. (MHz)	Nominal Power (EIRP) (dBm)	CH No.	Fre. (MHz)	Nominal Power (EIRP) (dBm)	CH No.	Fre. (MHz)	Nominal Power (EIRP) (dBm)
1 ^{a b c d}	2405.5	14.5	26	2430.5	22.5	51 ^{b c d}	2455.5	22.5
2	2406.5	15.5	27	2431.5	22.5	52	2456.5	21.5
3	2407.5	16.5	28	2432.5	22.5	53	2457.5	21.5
4 ^b	2408.5	17.5	29	2433.5	22.5	54	2458.5	20.5
5 ^{c d}	2409.5	18.5	30	2434.5	22.5	55 ^{b c d}	2459.5	20.5
6	2410.5	18.5	31	2435.5	22.5	56	2460.5	19.5
7	2411.5	19.5	32	2436.5	22.5	57	2461.5	19.5
8	2412.5	19.5	33	2437.5	22.5	58	2462.5	18.5
9	2413.5	20.5	34	2438.5	22.5	59 ^b	2463.5	18.5
10	2414.5	20.5	35	2439.5	22.5	60 ^b	2464.5	17.5
11 ^b	2415.5	21.5	36	2440.5	22.5	61	2465.5	17.5
12	2416.5	21.5	37 ^{a c}	2441.5	22.5	62	2466.5	16.5
13 ^{b c d}	2417.5	22.5	38	2442.5	22.5	63 ^{b c d}	2467.5	16.5
14	2418.5	22.5	39	2443.5	22.5	64	2468.5	15.5
15	2419.5	22.5	40	2444.5	22.5	65 ^{b c d}	2469.5	13.5
16	2420.5	22.5	41	2445.5	22.5	66	2470.5	11.5
17	2421.5	22.5	42	2446.5	22.5	67 ^{b c d}	2471.5	9.5
18	2422.5	22.5	43	2447.5	22.5	68 ^b	2472.5	7.5
19	2423.5	22.5	44	2448.5	22.5	69	2473.5	6.5
20	2424.5	22.5	45	2449.5	22.5	70	2474.5	5.5
21	2425.5	22.5	46	2450.5	22.5	71	2475.5	5.5
22	2426.5	22.5	47	2451.5	22.5	72 ^{b c d}	2476.5	4.5
23	2427.5	22.5	48	2452.5	22.5	73 ^{a b c d}	2477.5	-11.5
24	2428.5	22.5	49	2453.5	22.5			
25	2429.5	22.5	50	2454.5	22.5			

Note a: Channels chosen for RF conducted test.
 Note b: Additional channel for maximum output power test.
 Note c: Channels chosen for Radiated spurious emission
 Note d: Channels chosen for Radiated Emissions which fall in the restricted bands test



Channel List and nominal power for 20MHz BW								
CH No.	Fre. (MHz)	Nominal Power (EIRP) (dBm)	CH No.	Fre. (MHz)	Nominal Power (EIRP) (dBm)	CH No.	Fre. (MHz)	Nominal Power (EIRP) (dBm)
1 ^{a b c d}	2410.5	8.5	22	2431.5	20.5	43	2452.5	16.5
2	2411.5	9.5	23	2432.5	21.5	44	2453.5	16.5
3	2412.5	10.5	24	2433.5	21.5	45	2454.5	15.5
4	2413.5	11.5	25 ^{b c d}	2434.5	22.5	46	2455.5	15.5
5 ^b	2414.5	11.5	26	2435.5	22.5	47	2456.5	15.5
6 ^{c d}	2415.5	12.5	27	2436.5	22.5	48	2457.5	14.5
7	2416.5	13.5	28	2437.5	22.5	49 ^{b c d}	2458.5	14.5
8	2417.5	14.5	29	2438.5	22.5	50 ^b	2459.5	13.5
9	2418.5	15.5	30	2439.5	22.5	51	2460.5	13.5
10 ^b	2419.5	15.5	31	2440.5	22.5	52	2461.5	12.5
11 ^{b c d}	2420.5	16.5	32 ^{a b c d}	2441.5	22.5	53	2462.5	12.5
12	2421.5	16.5	33 ^b	2442.5	21.5	54	2463.5	11.5
13	2422.5	16.5	34	2443.5	21.5	55 ^{b c d}	2464.5	10.5
14	2423.5	17.5	35	2444.5	20.5	56 ^b	2465.5	9.5
15	2424.5	17.5	36	2445.5	20.5	57	2466.5	9.5
16	2425.5	18.5	37	2446.5	19.5	58	2467.5	9.5
17	2426.5	18.5	38	2447.5	19.5	59	2468.5	8.5
18	2427.5	18.5	39 ^{b c d}	2448.5	18.5	60	2469.5	8.5
19	2428.5	19.5	40	2449.5	18.5	61	2470.5	7.5
20	2429.5	19.5	41 ^b	2450.5	17.5	62 ^{b c d}	2471.5	6.5
21 ^{b c d}	2430.5	20.5	42	2451.5	17.5	63 ^{a b c d}	2472.5	-2.5

Note a: Channels chosen for RF conducted test.

Note b: Additional channel for maximum output power test.

Note c: Channels chosen for Radiated spurious emission

Note d: Channels chosen for Radiated Emissions which fall in the restricted bands test

4.2 Description of Support Units

The EUT has been tested as an independent unit.

4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	$\pm 7.25 \times 10^{-8}$
2	Duty cycle	$\pm 0.37\%$
3	Occupied Bandwidth	$\pm 3\%$
4	RF conducted power	$\pm 0.75\text{dB}$
5	RF power density	$\pm 2.84\text{dB}$
6	Conducted Spurious emissions	$\pm 0.75\text{dB}$
7	RF Radiated power	$\pm 4.5\text{dB}$ (below 1GHz)
		$\pm 4.8\text{dB}$ (above 1GHz)
8	Radiated Spurious emission test	$\pm 4.5\text{dB}$ (Below 1GHz)
		$\pm 4.8\text{dB}$ (Above 1GHz)
9	Temperature test	$\pm 1^\circ\text{C}$
10	Humidity test	$\pm 3\%$
11	Supply voltages	$\pm 1.5\%$
12	Time	$\pm 3\%$



4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China.
518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **CNAS (No. CNAS L2929)**

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

- **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

- **VCCI**

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

- **FCC –Designation Number: CN1178**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

- **Industry Canada (IC)**

Two 3m Semi-anechoic chambers and the 10m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1, 4620C-2, 4620C-3.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None

5 Equipment List

Conducted Output Power (Average)					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
DC Power Supply	ZhaoXin	RXN-305D	SEM011-02	2017-09-27	2018-09-26
Spectrum Analyzer	Rohde & Schwarz	FSU43	SEM004-08	2018-04-02	2019-04-01
Measurement Software	JS Tonscend	JS1120-2 BT/WIFI V2.	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM031-01	2018-07-12	2019-07-11
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2017-09-27	2018-09-26
Power Meter	Rohde & Schwarz	NRVS	SEM014-02	2017-09-27	2018-09-26

Power Spectrum Density					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
DC Power Supply	ZhaoXin	RXN-305D	SEM011-02	2017-09-27	2018-09-26
Spectrum Analyzer	Rohde & Schwarz	FSU43	SEM004-08	2018-04-02	2019-04-01
Measurement Software	JS Tonscend	JS1120-2 BT/WIFI V2.	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM031-01	2018-07-12	2019-07-11
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2017-09-27	2018-09-26
Power Meter	Rohde & Schwarz	NRVS	SEM014-02	2017-09-27	2018-09-26

Radiated Emissions which fall in the restricted bands					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2018-03-13	2021-03-12
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2018-07-12	2019-07-11
Spectrum Analyzer	Rohde & Schwarz	FSU43	SEM004-08	2018-04-02	2019-04-01
BiConiLog Antenna (26-3000MHz)	ETS-Lindgren	3142C	SEM003-01	2017-06-27	2020-06-26
Horn Antenna (1-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2018-04-13	2021-04-12
Horn Antenna(15GHz-40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2017-10-17	2020-10-16
Pre-amplifier (0.1-1300MHz)	HP	8447D	SEM005-02	2017-09-27	2018-09-26
Low Noise Amplifier(100MHz-18GHz)	Black Diamond Series	BDLNA-0118-352810	SEM005-05	2017-09-27	2018-09-27
Pre-amplifier(18-26GHz)	Rohde & Schwarz	CH14-H052	SEM005-17	2018-04-02	2019-04-01



Pre-amplifier(26GHz-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2018-04-02	2019-04-01
DC Power Supply	Zhao Xin	RXN-305D	SEM011-02	2017-09-27	2018-09-26
Active Loop Antenna	ETS-Lindgren	6502	SEM003-08	2017-08-22	2020-08-21
Band filter	N/A	N/A	SEM023-01	N/A	N/A

Radiated Spurious Emissions					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2018-03-13	2021-03-12
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2018-07-12	2019-07-11
Spectrum Analyzer	Rohde & Schwarz	FSU43	SEM004-08	2018-04-02	2019-04-01
BiConiLog Antenna (26-3000MHz)	ETS-Lindgren	3142C	SEM003-01	2017-06-27	2020-06-26
Horn Antenna (1-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2018-04-13	2021-04-12
Horn Antenna(15GHz-40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2017-10-17	2020-10-16
Pre-amplifier (0.1-1300MHz)	HP	8447D	SEM005-02	2017-09-27	2018-09-26
Low Noise Amplifier(100MHz-18GHz)	Black Diamond Series	BDLNA-0118-352810	SEM005-05	2017-09-27	2018-09-27
Pre-amplifier(18-26GHz)	Rohde & Schwarz	CH14-H052	SEM005-17	2018-04-02	2019-04-01
Pre-amplifier(26GHz-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2018-04-02	2019-04-01
DC Power Supply	Zhao Xin	RXN-305D	SEM011-02	2017-09-27	2018-09-26
Active Loop Antenna	ETS-Lindgren	6502	SEM003-08	2017-08-22	2020-08-21
Band filter	N/A	N/A	SEM023-01	N/A	N/A

General used equipment					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-03	2017-09-29	2018-09-28
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-04	2017-09-29	2018-09-28
Humidity/ Temperature Indicator	Mingle	N/A	SEM002-08	2017-09-29	2018-09-28
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2018-04-08	2019-04-07

6 Radio Spectrum Matter Test Results (Spot-check)

6.1 Conducted Output Power (Average)

Test Requirement 47 CFR Part 15, Subpart C 15.247(b)(3)
 Test Method: ANSI C63.10 (2013) Section 11.9.1
 Limit:

Frequency range(MHz)	Output power of the intentional radiator(watt)
902-928	1 for ≥ 50 hopping channels
	0.25 for $25 \leq$ hopping channels < 50
	1 for digital modulation
2400-2483.5	1 for ≥ 75 non-overlapping hopping channels
	0.125 for all other frequency hopping systems
	1 for digital modulation
5725-5850	1 for frequency hopping systems and digital modulation

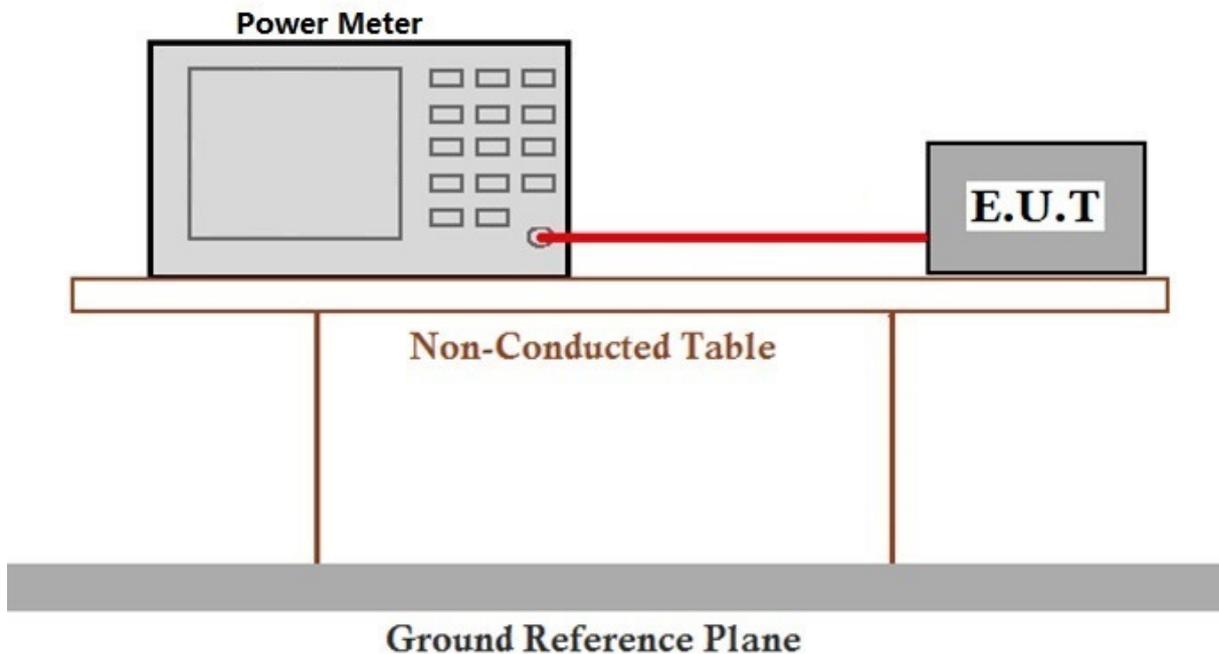
6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 22.4 °C Humidity: 52.4 % RH Atmospheric Pressure: 1005 mbar

Test mode a: TX mode_Keep the EUT in continuously transmitting mode with modulation

6.1.2 Test Setup Diagram



6.1.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.247

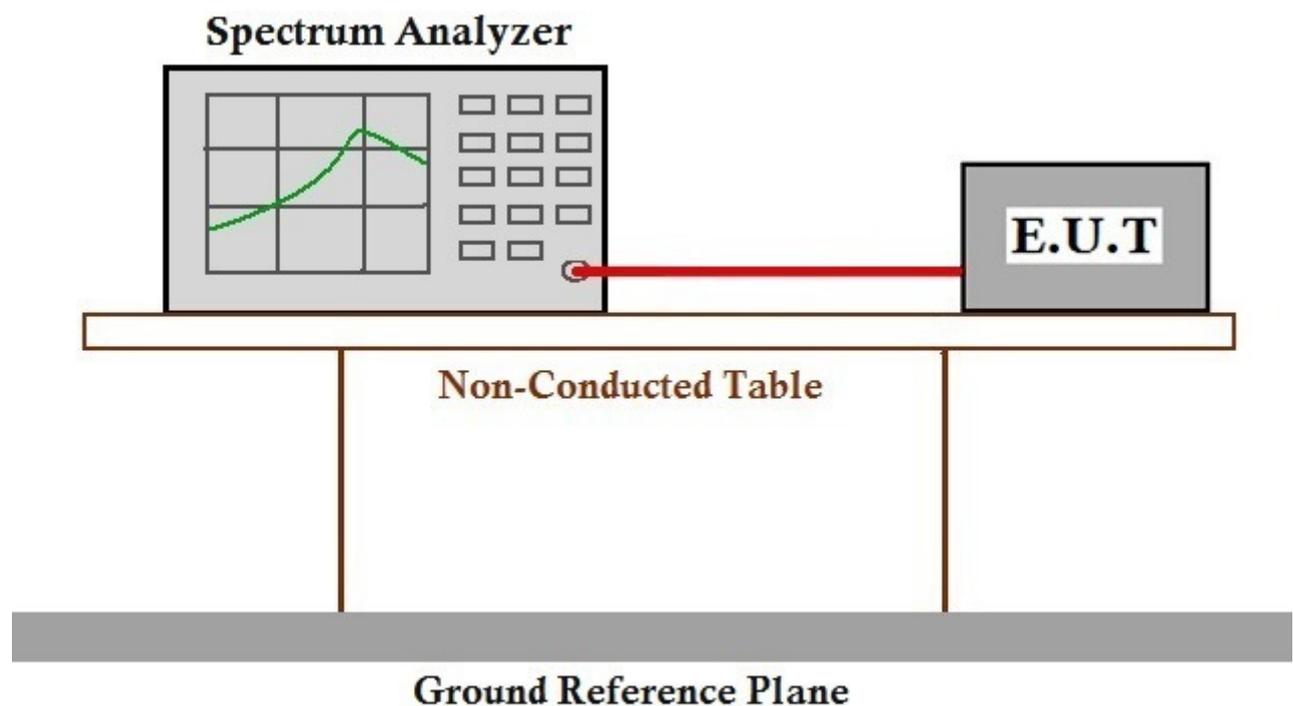
6.2 Power Spectrum Density

Test Requirement 47 CFR Part 15, Subpart C 15.247(e)
 Test Method: ANSI C63.10 (2013) Section 11.10.2
 Limit: $\leq 8\text{dBm}$ in any 3 kHz band during any time interval of continuous transmission

6.2.1 E.U.T. Operation

Operating Environment:
 Temperature: 25.1 °C Humidity: 59.1 % RH Atmospheric Pressure: 1010 mbar
 Test mode a:TX mode_Keep the EUT in continuously transmitting mode with modulation

6.2.2 Test Setup Diagram



6.2.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.247

6.3 Radiated Emissions which fall in the restricted bands

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.247(d)

Test Method: ANSI C63.10 (2013) Section 6.10.5

Measurement Distance: 3m

Limit:

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

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

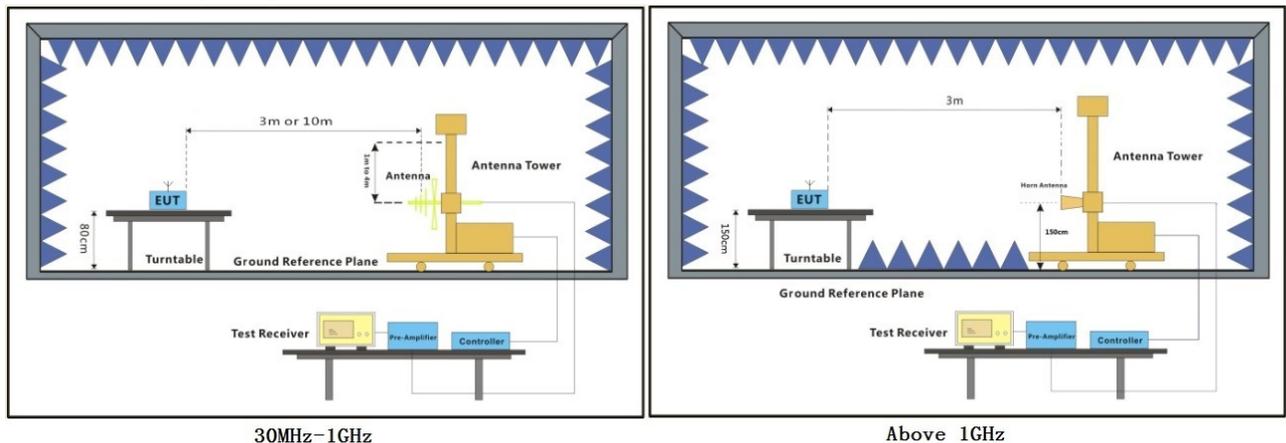
6.3.1 E.U.T. Operation

Operating Environment:

Temperature: 22.3 °C Humidity: 55.6 % RH Atmospheric Pressure: 1005 mbar

Test mode a: TX mode_Keep the EUT in continuously transmitting mode with modulation

6.3.2 Test Setup Diagram



6.3.3 Measurement Procedure and Data

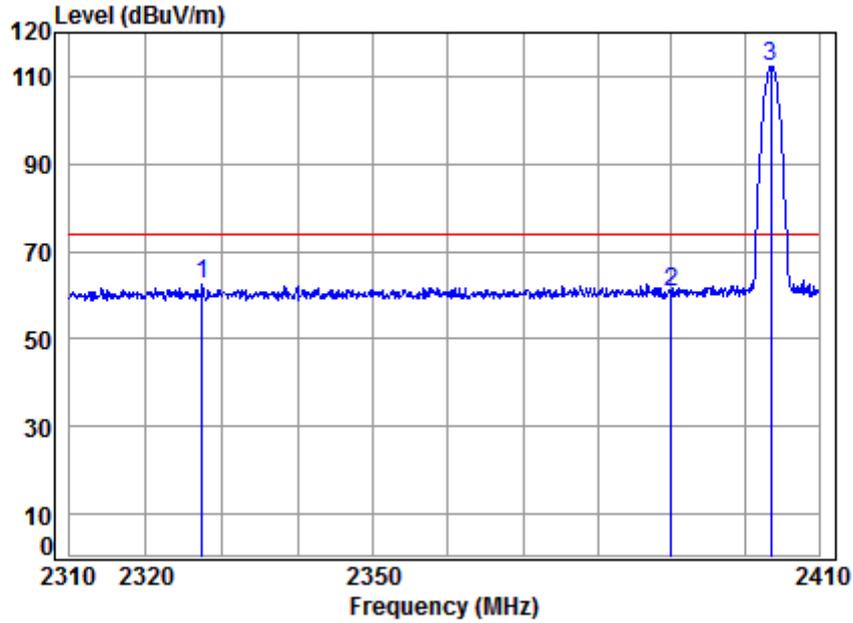
- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

Remark 1: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Remark 2: For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.



Mode:a; Polarization:Horizontal; Bandwidth:1.4MHz; Channel:Low; Value:Peak



Condition: 3m HORIZONTAL

Job No : 06006CR

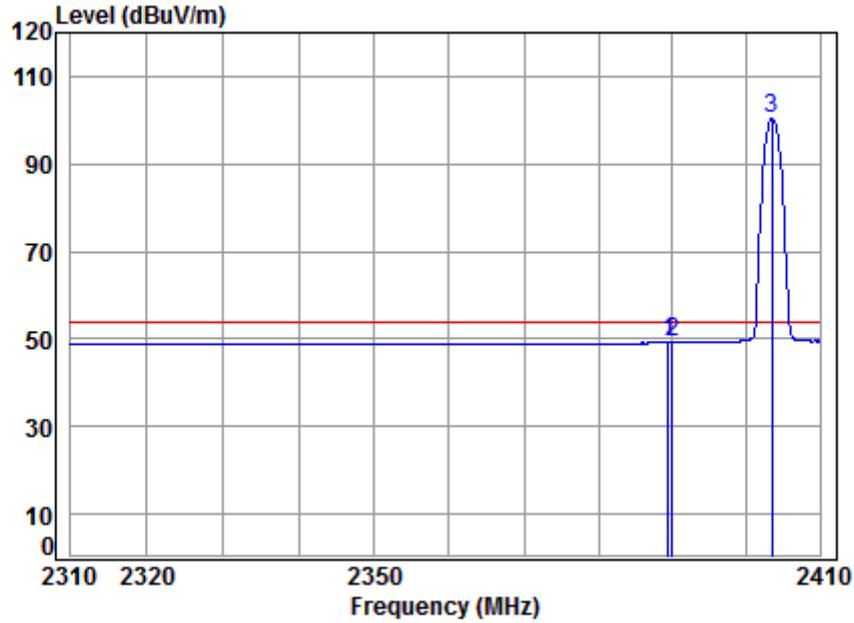
Mode : 2403.5 Band edge

Note : 1.4M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	2327.393	5.39	28.41	0.00	28.67	62.47	74.00	-11.53	peak
2	2390.000	5.47	28.52	0.00	26.68	60.67	74.00	-13.33	peak
3 pp	2403.500	5.49	28.54	0.00	78.40	112.43	74.00	38.43	peak



Mode:a; Polarization:Horizontal; Bandwidth:1.4MHz; Channel:Low; Value:Average



Condition: 3m HORIZONTAL

Job No : 06006CR

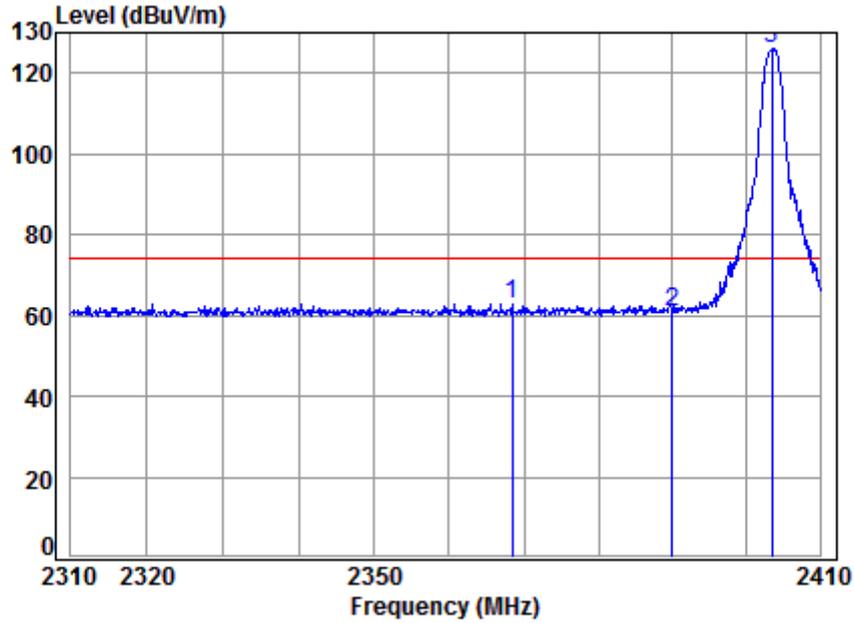
Mode : 2403.5 Band edge

Note : 1.4M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	2389.356	5.47	28.52	0.00	15.15	49.14	54.00	-4.86	Average
2	2390.000	5.47	28.52	0.00	15.11	49.10	54.00	-4.90	Average
3	pp 2403.500	5.49	28.54	0.00	66.47	100.50	54.00	46.50	Average



Mode:a; Polarization:Vertical; Bandwidth:1.4MHz; Channel:Low; Value:Peak



Condition: 3m Vertical

Job No : 06006CR

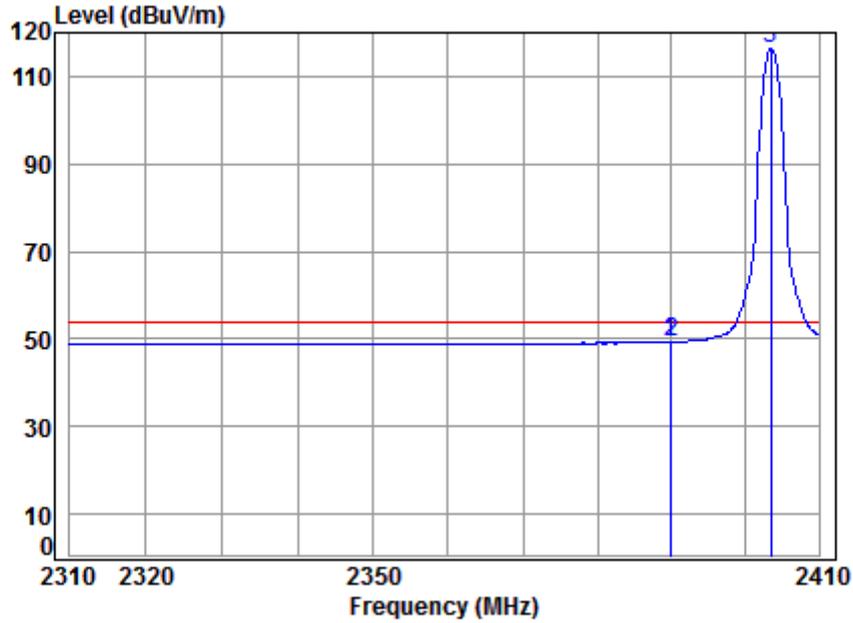
Mode : 2403.5 Band edge

Note : 1.4M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Over Line	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	2368.386	5.45	28.48	0.00	28.97	62.90	74.00	-11.10 peak
2	2390.000	5.47	28.52	0.00	26.84	60.83	74.00	-13.17 peak
3 pp	2403.500	5.49	28.54	0.00	92.01	126.04	74.00	52.04 peak



Mode:a; Polarization:Vertical; Bandwidth:1.4MHz; Channel:Low; Value:Average

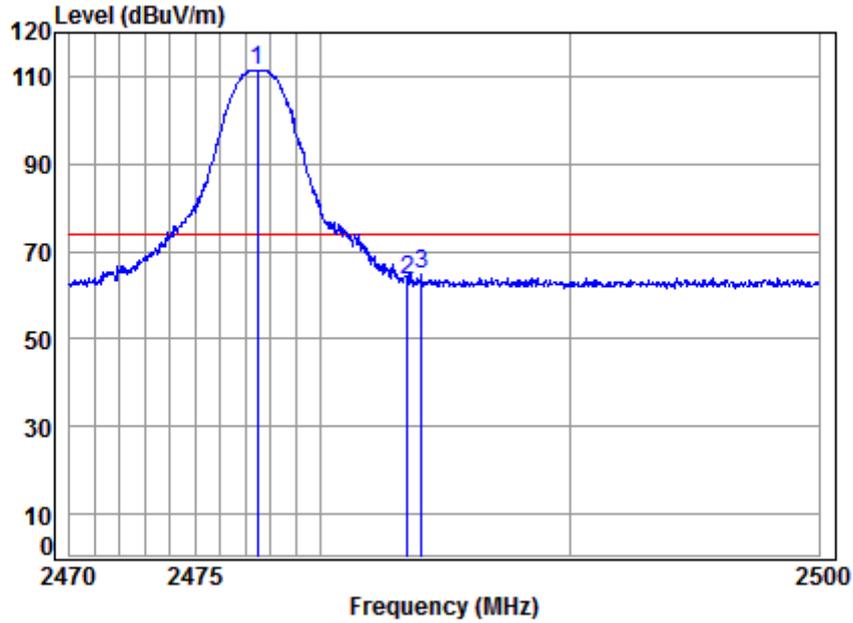


Condition: 3m Vertical
Job No : 06006CR
Mode : 2403.5 Band edge
Note : 1.4M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	2389.862	5.47	28.52	0.00	15.30	49.29	54.00	-4.71	Average
2	2390.000	5.47	28.52	0.00	15.32	49.31	54.00	-4.69	Average
3	pp 2403.500	5.49	28.54	0.00	82.54	116.57	54.00	62.57	Average



Mode:a; Polarization:Horizontal; Bandwidth:1.4MHz; Channel:High; Value:Peak

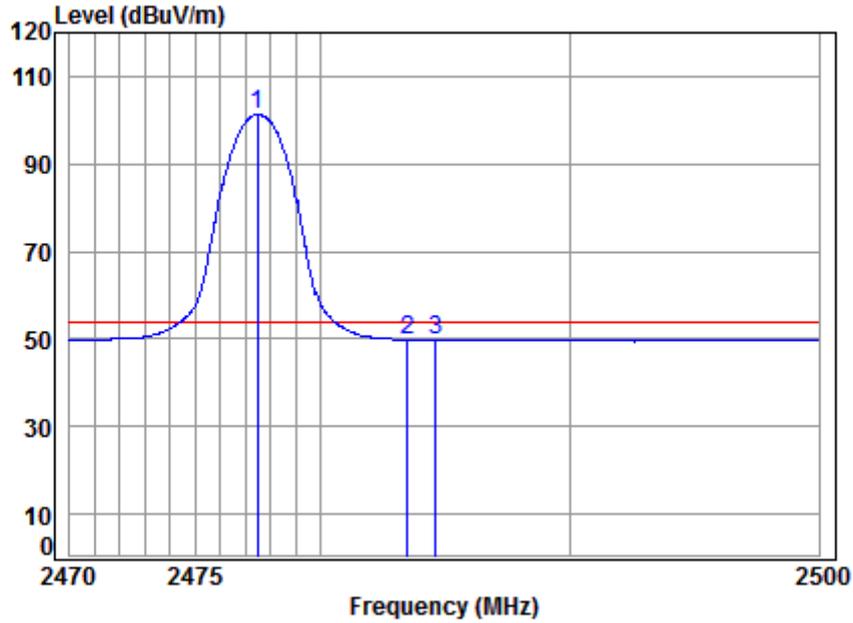


Condition: 3m Horizontal
Job No : 06006CR
Mode : 2477.5 Band edge
Note : 1.4M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp 2477.500	5.59	28.66	0.00	77.24	111.49	74.00	37.49	peak
2	2483.500	5.60	28.67	0.00	29.23	63.50	74.00	-10.50	peak
3	2484.055	5.60	28.67	0.00	30.41	64.68	74.00	-9.32	peak



Mode:a; Polarization:Horizontal; Bandwidth:1.4MHz; Channel:High; Value:Average

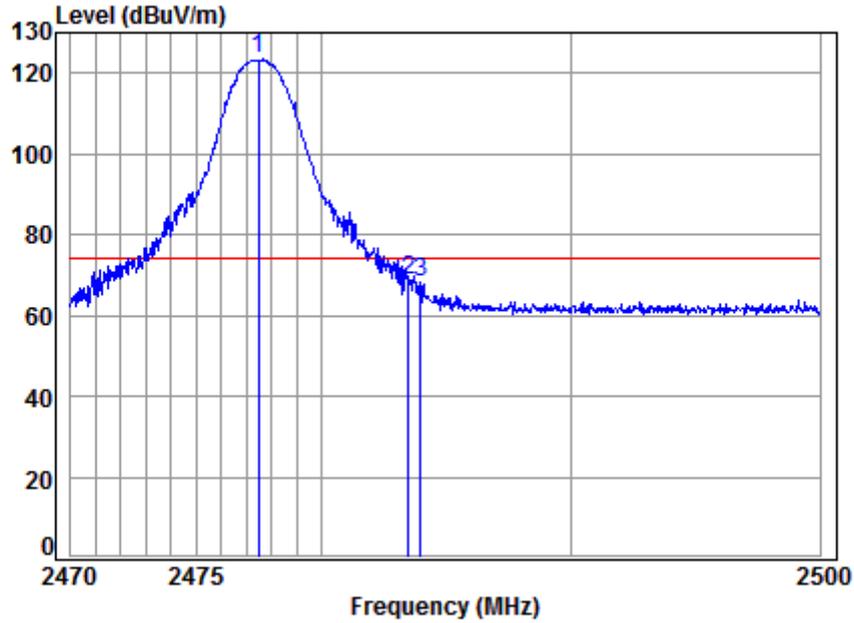


Condition: 3m Horizontal
Job No : 06006CR
Mode : 2477.5 Band edge
Note : 1.4M ANT1

		Cable	Ant	Preamp	Read	Limit	Over		
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp 2477.500	5.59	28.66	0.00	67.06	101.31	54.00	47.31	Average
2	2483.500	5.60	28.67	0.00	15.59	49.86	54.00	-4.14	Average
3	2484.625	5.60	28.68	0.00	15.56	49.84	54.00	-4.16	Average



Mode:a; Polarization:Vertical; Bandwidth:1.4MHz; Channel:High; Value:Peak

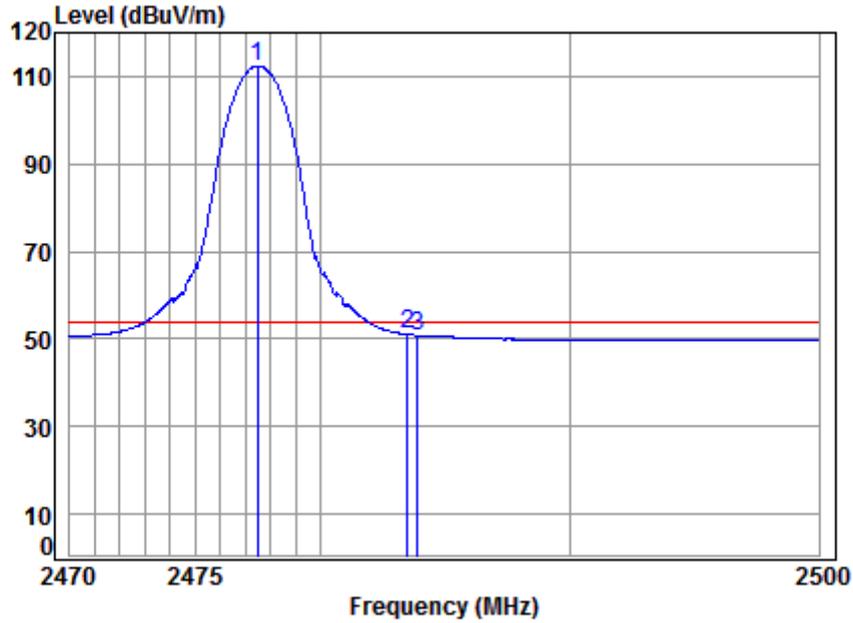


Condition: 3m Vertical
Job No : 06006CR
Mode : 2477.5 Band edge
Note : 1.4M ANT1

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	pp 2477.500	5.59	28.66	0.00	89.13	123.38	74.00	49.38 peak
2	2483.500	5.60	28.67	0.00	34.25	68.52	74.00	-5.48 peak
3	2483.965	5.60	28.67	0.00	33.90	68.17	74.00	-5.83 peak



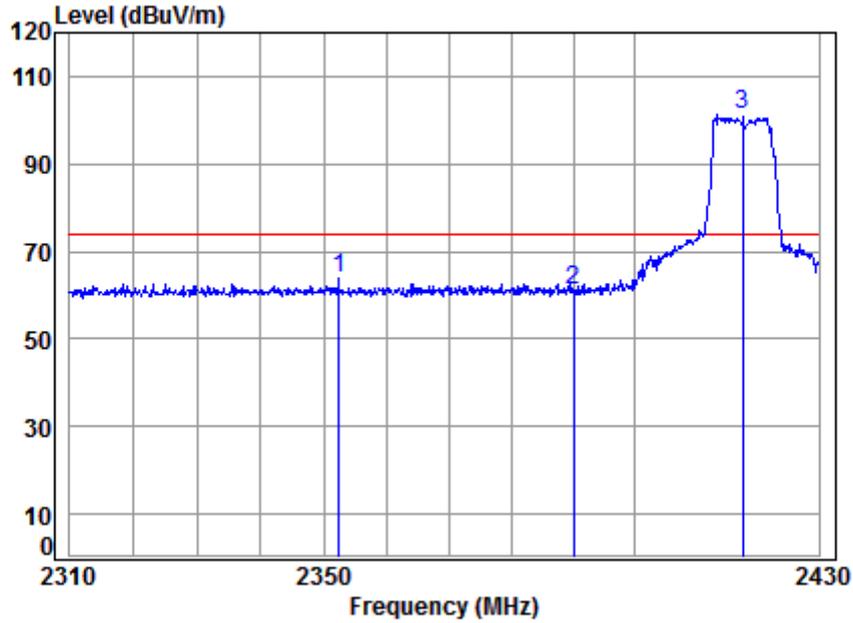
Mode:a; Polarization:Vertical; Bandwidth:1.4MHz; Channel:High; Value:Average



Condition: 3m Vertical
Job No : 06006CR
Mode : 2477.5 Band edge
Note : 1.4M ANT1

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	pp 2477.500	5.59	28.66	0.00	78.15	112.40	54.00	58.40 Average
2	2483.500	5.60	28.67	0.00	16.76	51.03	54.00	-2.97 Average
3	2483.875	5.60	28.67	0.00	16.50	50.77	54.00	-3.23 Average

Mode:a; Polarization:Horizontal; Bandwidth:10MHz; Channel:2417.5MHz; Value:Peak



Condition: 3m HORIZONTAL

Job No : 06006CR

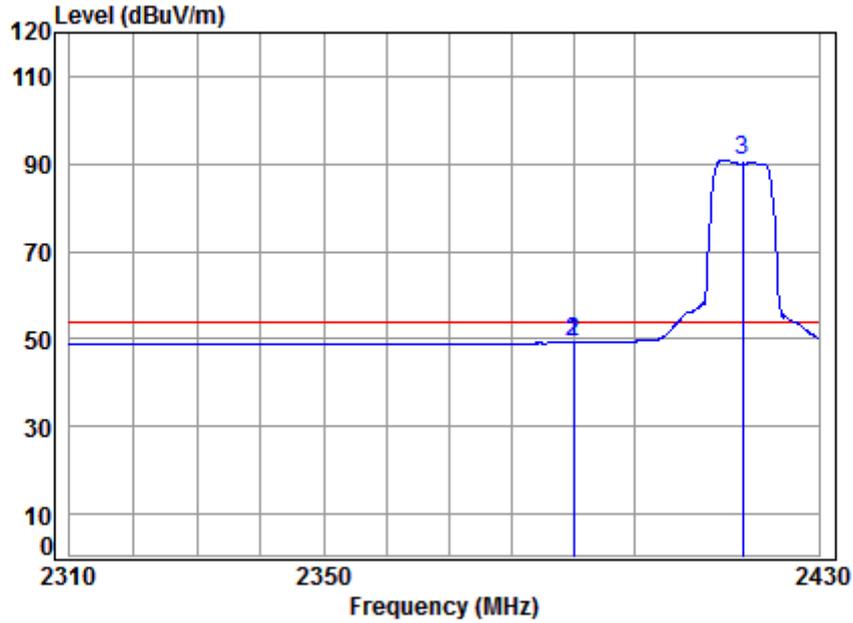
Mode : 2417.5 Band edge

Note : 10M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	2352.383	5.42	28.45	0.00	29.96	63.83	74.00	-10.17	peak
2	2390.000	5.47	28.52	0.00	27.26	61.25	74.00	-12.75	peak
3 pp	2417.500	5.51	28.56	0.00	67.04	101.11	74.00	27.11	peak



Mode:a; Polarization:Horizontal; Bandwidth:10MHz; Channel:2417.5MHz; Value:Average



Condition: 3m HORIZONTAL

Job No : 06006CR

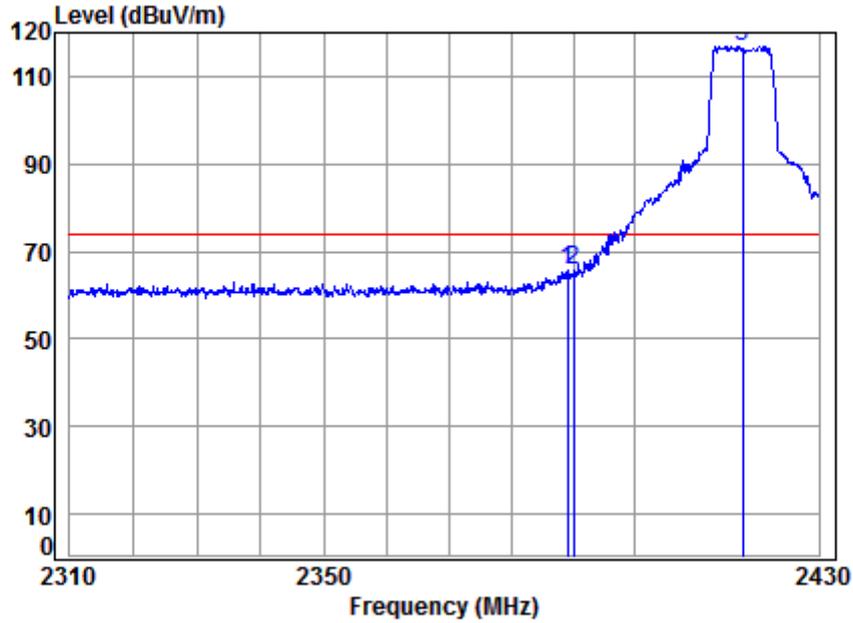
Mode : 2417.5 Band edge

Note : 10M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	2389.968	5.47	28.52	0.00	15.13	49.12	54.00	-4.88	Average
2	2390.000	5.47	28.52	0.00	15.13	49.12	54.00	-4.88	Average
3 pp	2417.500	5.51	28.56	0.00	56.71	90.78	54.00	36.78	Average



Mode:a; Polarization:Vertical; Bandwidth:10MHz; Channel:2417.5MHz; Value:Peak

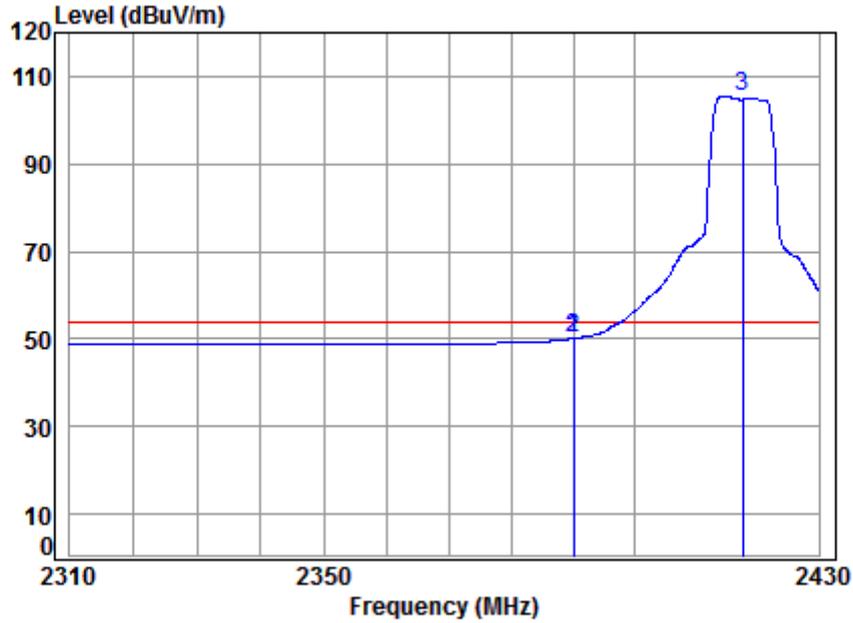


Condition: 3m Vertical
Job No : 06006CR
Mode : 2417.5 Band edge
Note : 10M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	2389.121	5.47	28.52	0.00	31.85	65.84	74.00	-8.16	peak
2	2390.000	5.47	28.52	0.00	31.80	65.79	74.00	-8.21	peak
3 pp	2417.500	5.51	28.56	0.00	82.96	117.03	74.00	43.03	peak



Mode:a; Polarization:Vertical; Bandwidth:10MHz; Channel:2417.5MHz; Value:Average



Condition: 3m Vertical

Job No : 06006CR

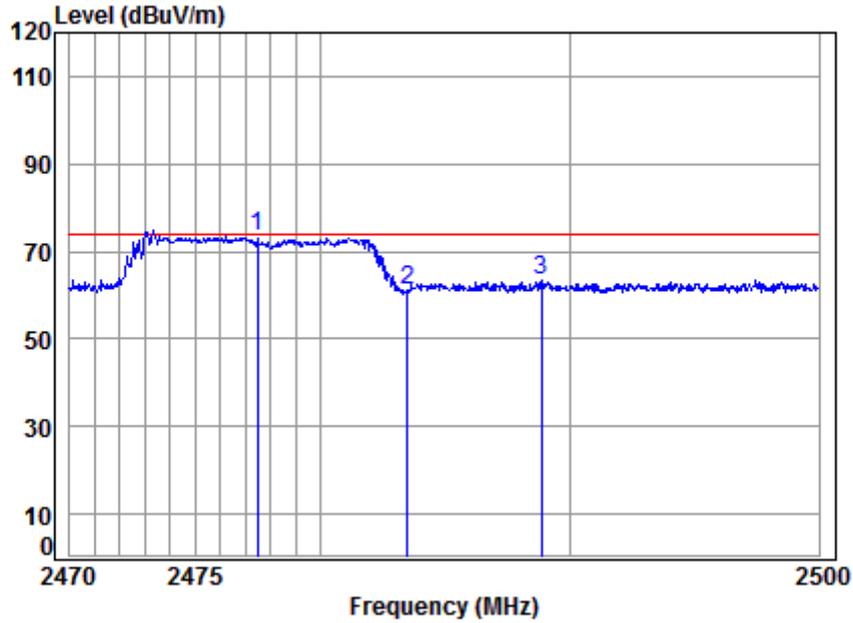
Mode : 2417.5 Band edge

Note : 10M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	2389.968	5.47	28.52	0.00	16.13	50.12	54.00	-3.88	Average
2	2390.000	5.47	28.52	0.00	16.13	50.12	54.00	-3.88	Average
3 pp	2417.500	5.51	28.56	0.00	71.32	105.39	54.00	51.39	Average



Mode:a; Polarization:Horizontal; Bandwidth:10MHz; Channel:2477.5MHz; Value:Peak

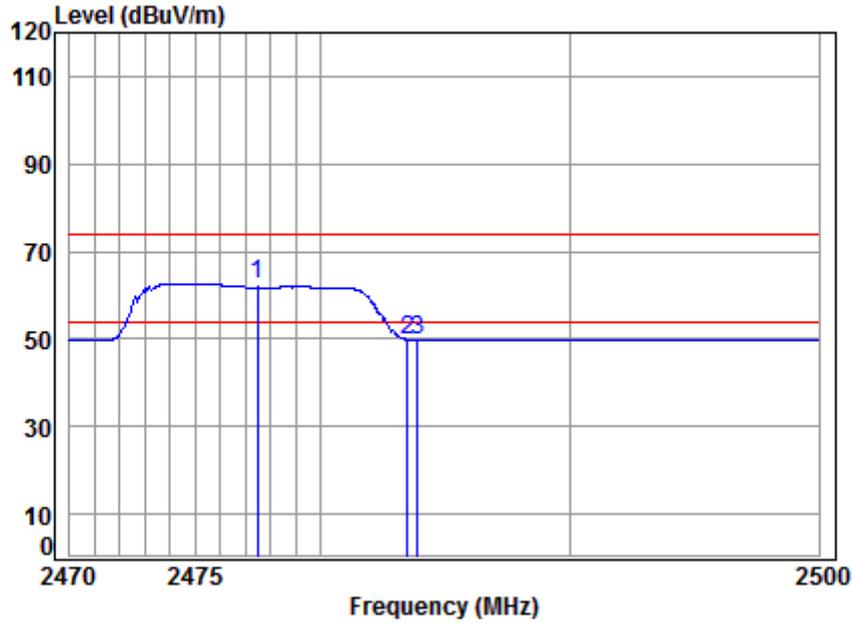


Condition: 3m Horizontal
Job No : 06006CR
Mode : 2477.5 Band edge
Note : 10M ANT1

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	pp 2477.500	5.59	28.66	0.00	39.41	73.66	74.00	-0.34 peak
2	2483.500	5.60	28.67	0.00	27.08	61.35	74.00	-12.65 peak
3	2488.828	5.61	28.68	0.00	29.27	63.56	74.00	-10.44 peak



Mode:a; Polarization:Horizontal; Bandwidth:10MHz; Channel:2477.5MHz; Value:Average

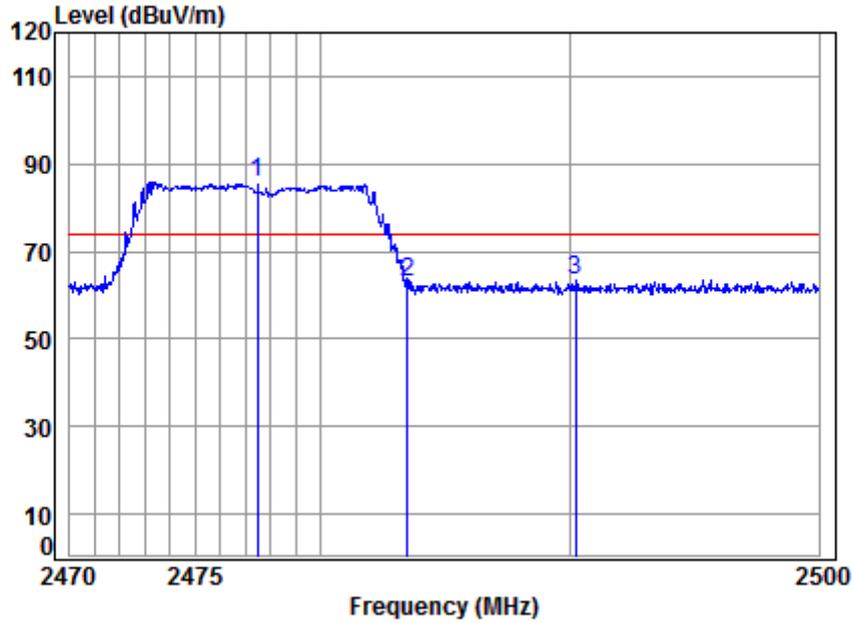


Condition: 3m Horizontal
Job No : 06006CR
Mode : 2477.5 Band edge
Note : 10M ANT1

		Cable	Ant	Preamp	Read	Limit	Over		
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp 2477.500	5.59	28.66	0.00	28.38	62.63	74.00	-11.37	Average
2	2483.500	5.60	28.67	0.00	15.58	49.85	74.00	-24.15	Average
3	2483.905	5.60	28.67	0.00	15.44	49.71	74.00	-24.29	Average



Mode:a; Polarization:Vertical; Bandwidth:10MHz; Channel:2477.5MHz; Value:Peak

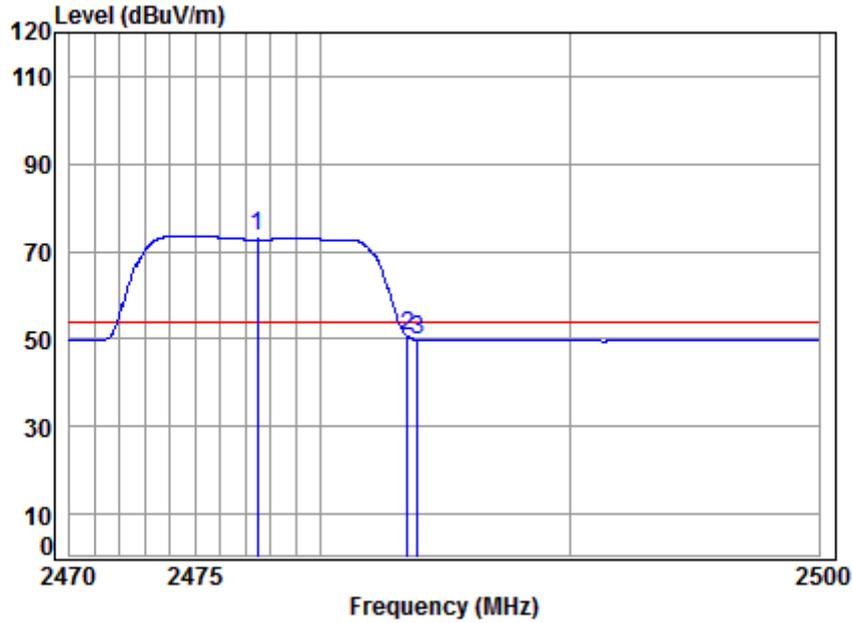


Condition: 3m Vertical
Job No : 06006CR
Mode : 2477.5 Band edge
Note : 10M ANT1

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	pp 2477.500	5.59	28.66	0.00	51.60	85.85	74.00	11.85 peak
2	2483.500	5.60	28.67	0.00	28.86	63.13	74.00	-10.87 peak
3	2490.210	5.61	28.68	0.00	29.29	63.58	74.00	-10.42 peak



Mode:a; Polarization:Vertical; Bandwidth:10MHz; Channel:2477.5MHz; Value:Average

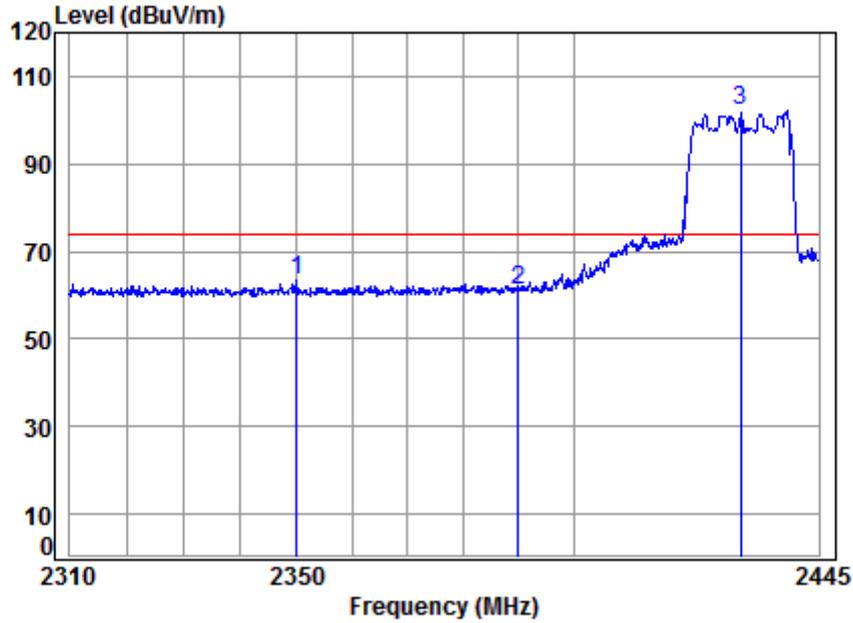


Condition: 3m Vertical
Job No : 06006CR
Mode : 2477.5 Band edge
Note : 10M ANT1

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	pp 2477.500	5.59	28.66	0.00	39.24	73.49	54.00	19.49 Average
2	2483.500	5.60	28.67	0.00	16.28	50.55	54.00	-3.45 Average
3	2483.905	5.60	28.67	0.00	15.55	49.82	54.00	-4.18 Average



Mode:a; Polarization:Horizontal; Bandwidth:20MHz; Channel:2430.5MHz; Value:Peak

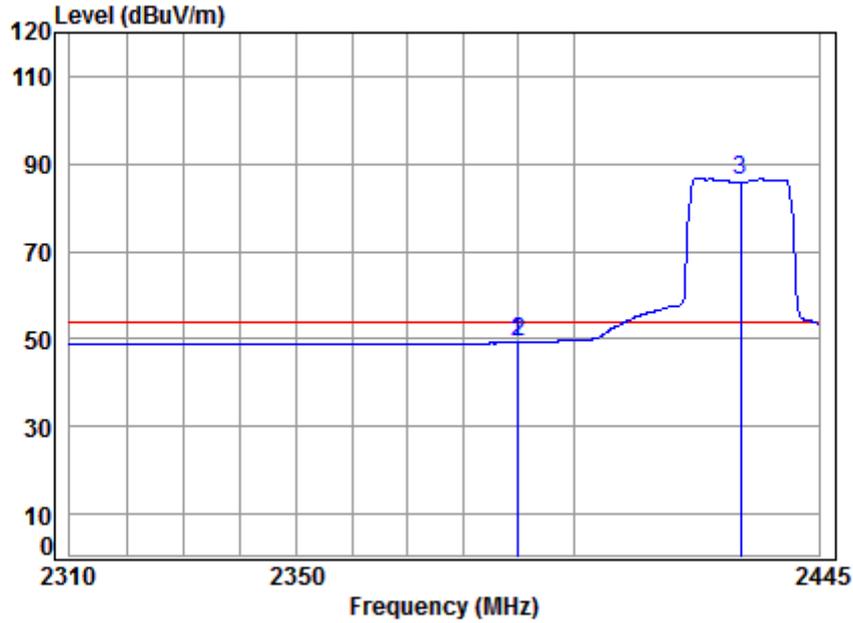


Condition: 3m HORIZONTAL
Job No : 06006CR
Mode : 2430.5 Band edge
Note : 20M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	2350.098	5.42	28.45	0.00	29.77	63.64	74.00	-10.36	peak
2	2390.000	5.47	28.52	0.00	27.20	61.19	74.00	-12.81	peak
3 pp	2430.500	5.54	28.60	0.00	67.86	102.00	74.00	28.00	peak



Mode:a; Polarization:Horizontal; Bandwidth:20MHz; Channel:2430.5MHz; Value:Average



Condition: 3m HORIZONTAL

Job No : 06006CR

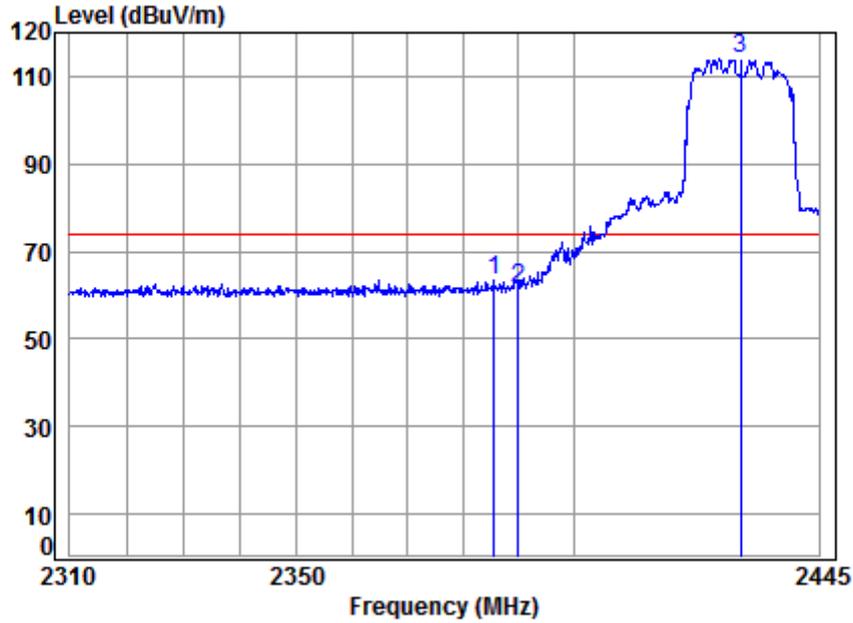
Mode : 2430.5 Band edge

Note : 20M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	2389.671	5.47	28.52	0.00	15.21	49.20	54.00	-4.80	Average
2	2390.000	5.47	28.52	0.00	15.23	49.22	54.00	-4.78	Average
3 pp	2430.500	5.52	28.57	0.00	52.19	86.28	54.00	32.28	Average



Mode:a; Polarization:Vertical; Bandwidth:20MHz; Channel:2430.5MHz; Value:Peak



Condition: 3m Vertical

Job No : 06006CR

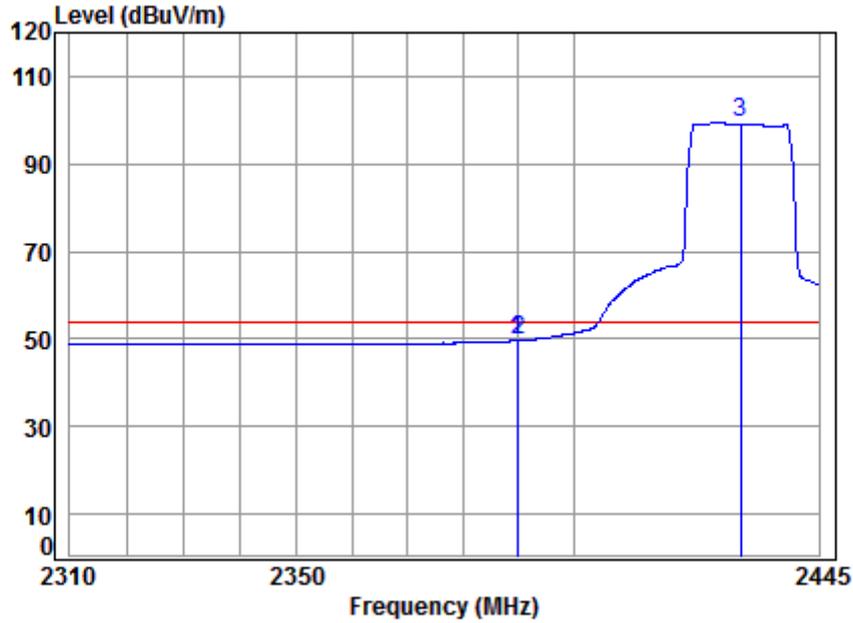
Mode : 2430.5 Band edge

Note : 20M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	2385.467	5.47	28.51	0.00	29.50	63.48	74.00	-10.52 peak
2	2390.000	5.47	28.52	0.00	27.55	61.54	74.00	-12.46 peak
3 pp	2430.500	5.53	28.59	0.00	79.78	113.90	74.00	39.90 peak



Mode:a; Polarization:Vertical; Bandwidth:20MHz; Channel:2430.5MHz; Value:Average



Condition: 3m Vertical

Job No : 06006CR

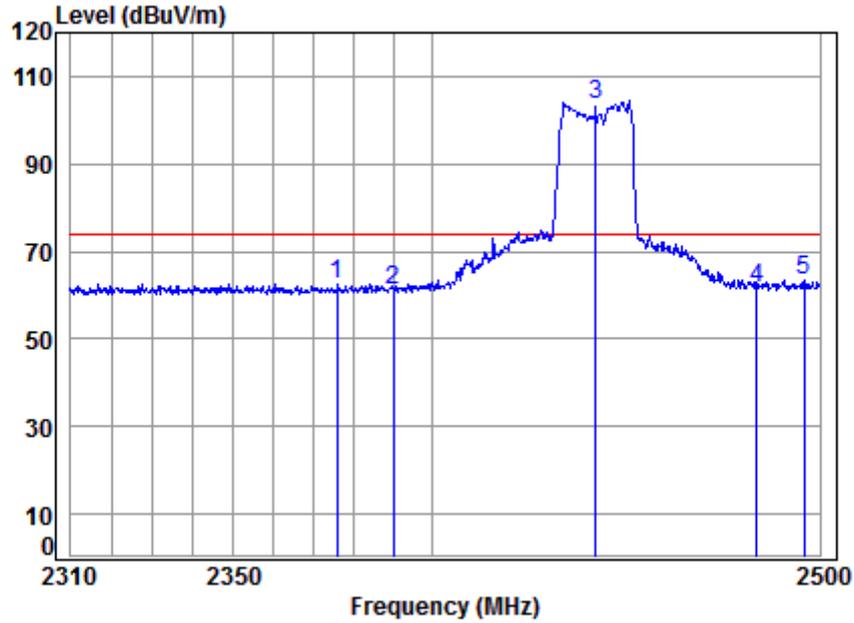
Mode : 2430.5 Band edge

Note : 20M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	2389.807	5.47	28.52	0.00	15.63	49.62	54.00	-4.38	Average
2	2390.000	5.47	28.52	0.00	15.64	49.63	54.00	-4.37	Average
3 pp	2430.500	5.52	28.58	0.00	65.27	99.37	54.00	45.37	Average



Mode:a; Polarization:Horizontal; Bandwidth:20MHz; Channel:2441.5MHz; Value:Peak

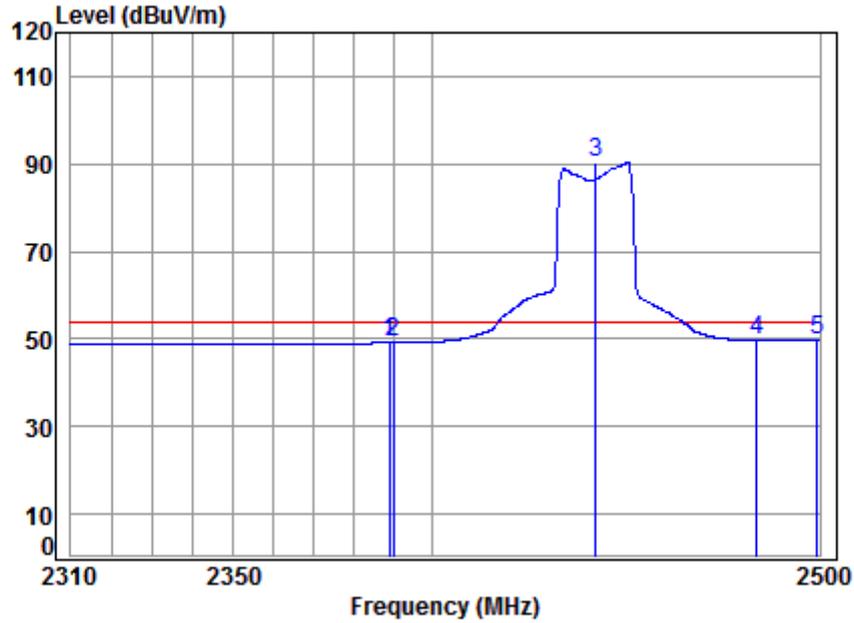


Condition: 3m Horizontal
Job No : 06006CR
Mode : 2441.5 Band edge
Note : 20M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	2375.925	5.46	28.49	0.00	28.70	62.65	74.00	-11.35	peak
2	2390.000	5.47	28.52	0.00	27.38	61.37	74.00	-12.63	peak
3 pp	2441.500	5.54	28.60	0.00	69.57	103.71	74.00	29.71	peak
4	2483.500	5.60	28.67	0.00	27.36	61.63	74.00	-12.37	peak
5	2495.854	5.61	28.69	0.00	28.94	63.24	74.00	-10.76	peak



Mode:a; Polarization:Horizontal; Bandwidth:20MHz; Channel:2441.5MHz; Value:Average

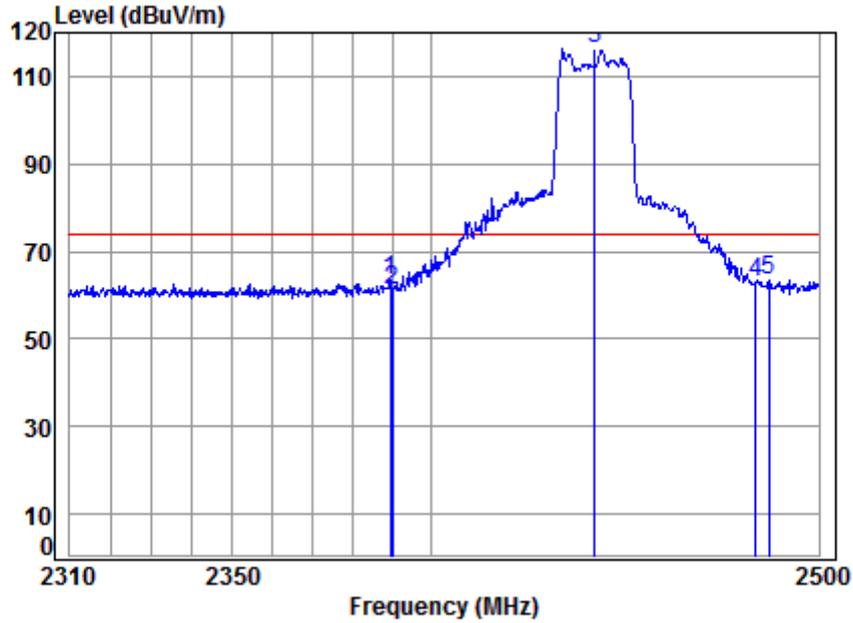


Condition: 3m Horizontal
Job No : 06006CR
Mode : 2441.5 Band edge
Note : 20M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBUV/m	dBUV/m	dB	
1	2389.108	5.47	28.52	0.00	15.17	49.16	54.00	-4.84	Average
2	2390.000	5.47	28.52	0.00	15.19	49.18	54.00	-4.82	Average
3 pp	2441.500	5.55	28.62	0.00	56.14	90.31	54.00	36.31	Average
4	2483.500	5.60	28.67	0.00	15.39	49.66	54.00	-4.34	Average
5	2499.407	5.62	28.70	0.00	15.40	49.72	54.00	-4.28	Average



Mode:a; Polarization:Vertical; Bandwidth:20MHz; Channel:2441.5MHz; Value:Peak

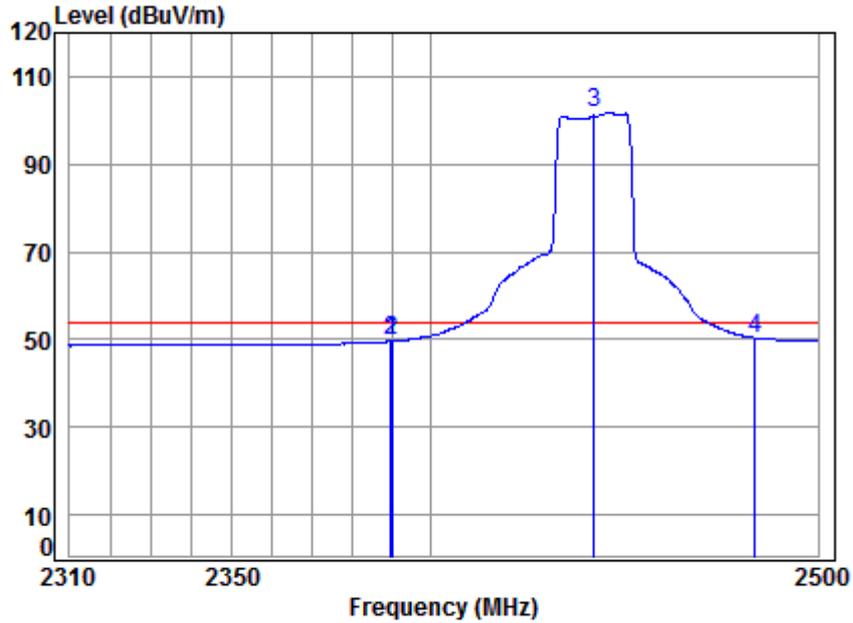


Condition: 3m Vertical
Job No : 06006CR
Mode : 2441.5 Band edge
Note : 20M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dB	
1	2389.485	5.47	28.52	0.00	29.60	63.59	-10.41	peak
2	2390.000	5.47	28.52	0.00	27.32	61.31	-12.69	peak
3 pp	2441.500	5.54	28.60	0.00	82.31	116.45	42.45	peak
4	2483.500	5.60	28.67	0.00	28.63	62.90	-11.10	peak
5	2486.992	5.60	28.68	0.00	29.11	63.39	-10.61	peak



Mode:a; Polarization:Vertical; Bandwidth:20MHz; Channel:2441.5MHz; Value:Average



Condition: 3m Vertical

Job No : 06006CR

Mode : 2441.5 Band edge

Note : 20M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	2389.674	5.47	28.52	0.00	15.61	49.60	54.00	-4.40	Average
2	2390.000	5.47	28.52	0.00	15.59	49.58	54.00	-4.42	Average
3 pp	2441.500	5.54	28.60	0.00	67.62	101.76	54.00	47.76	Average
4	2483.500	5.60	28.67	0.00	16.11	50.38	54.00	-3.62	Average



6.4 Radiated Spurious Emissions

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.247(d)
Test Method: ANSI C63.10 (2013) Section 6.4,6.5,6.6
Measurement Distance: 3m
Limit:

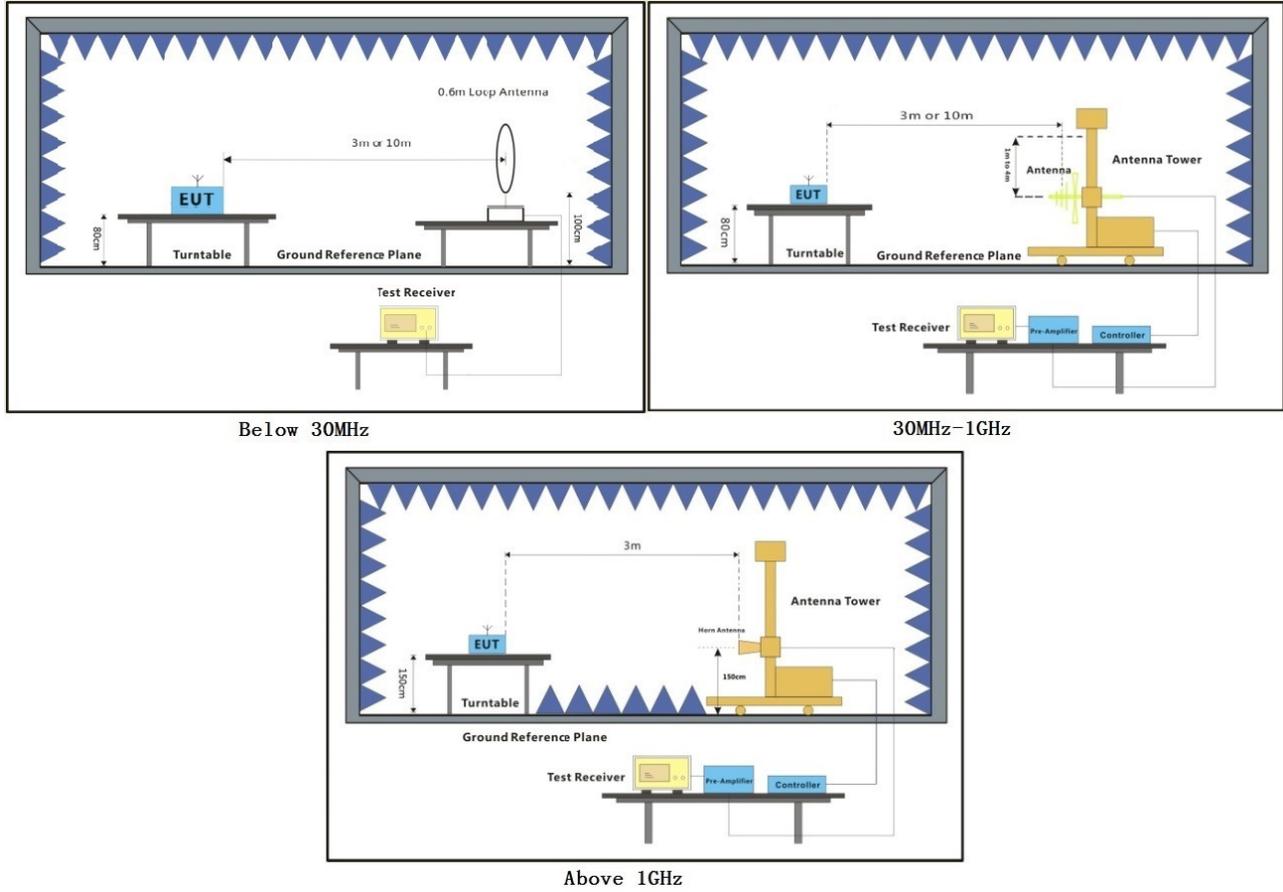
Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

6.4.1 E.U.T. Operation

Operating Environment:
Temperature: 24.8 °C Humidity: 54.6 % RH Atmospheric Pressure: 1005 mbar
Test mode a: TX mode_Keep the EUT in continuously transmitting mode with modulation

6.4.2 Test Setup Diagram



6.4.3 Measurement Procedure and Data

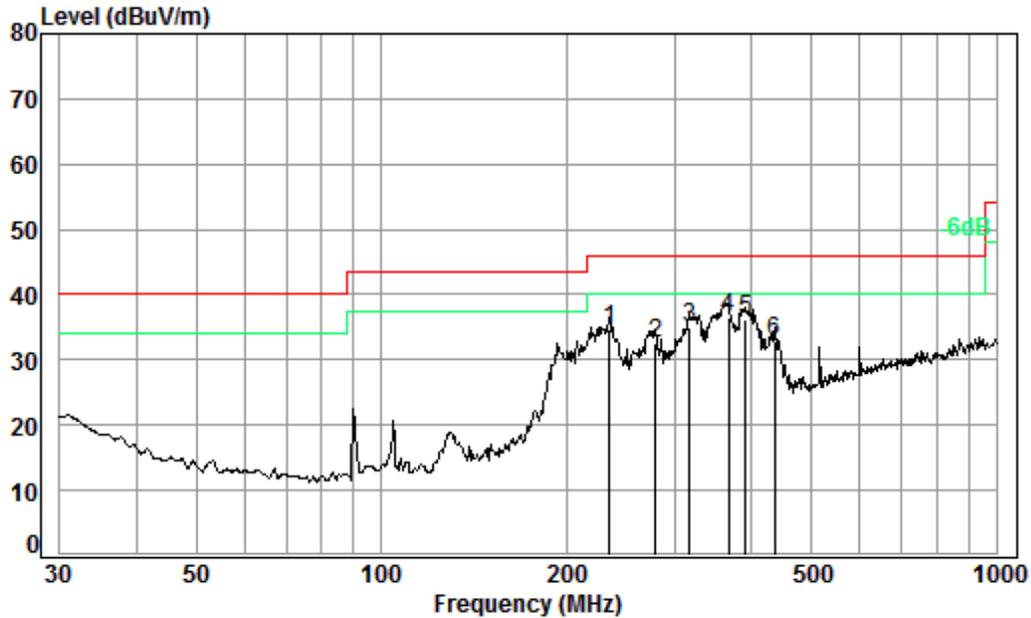
- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

Remark:

- 1) For emission below 1GHz, through pre-scan found the worst case is the lowest channel. Only the worst case is recorded in the report.
- 2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
- 3) Scan from 9kHz to 25GHz, the disturbance above 18GHz and below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- 4) For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.



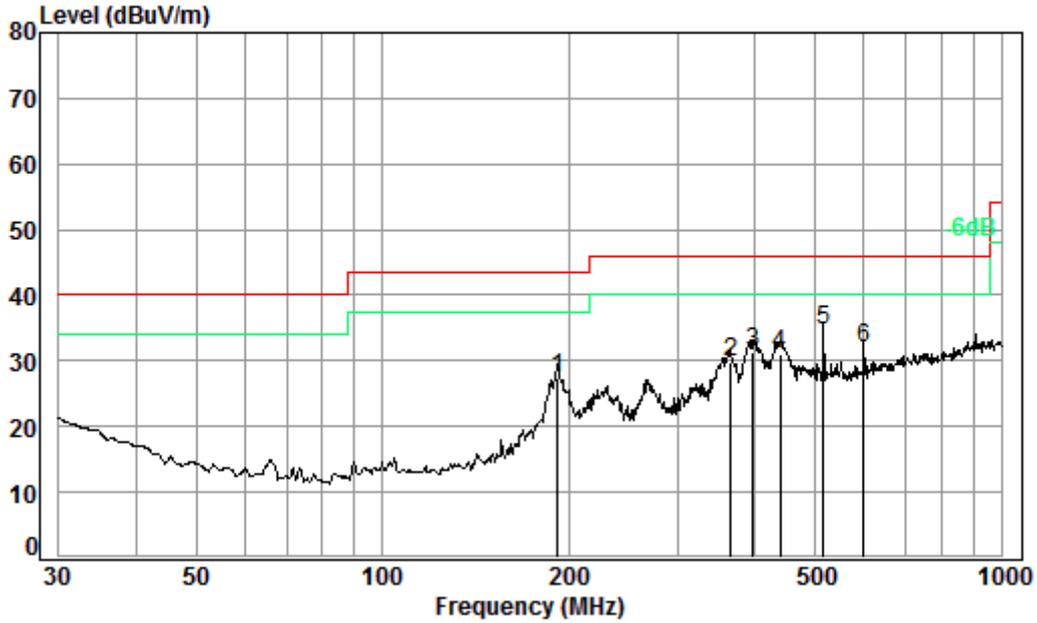
Radiated emission below 1GHz
Mode:a; Polarization:Horizontal



Condition: 3m HORIZONTAL
Job No. : 06006CR
Test mode: a

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	234.99	1.60	18.41	27.53	42.11	34.59	46.00	-11.41
2	279.04	1.81	18.81	27.54	39.56	32.64	46.00	-13.36
3	316.59	1.95	20.12	27.58	40.55	35.04	46.00	-10.96
4 pp	366.82	2.11	21.56	27.67	40.64	36.64	46.00	-9.36
5	390.72	2.17	22.17	27.72	39.51	36.13	46.00	-9.87
6	435.59	2.35	23.24	27.79	35.06	32.86	46.00	-13.14

Mode:a; Polarization:Vertical



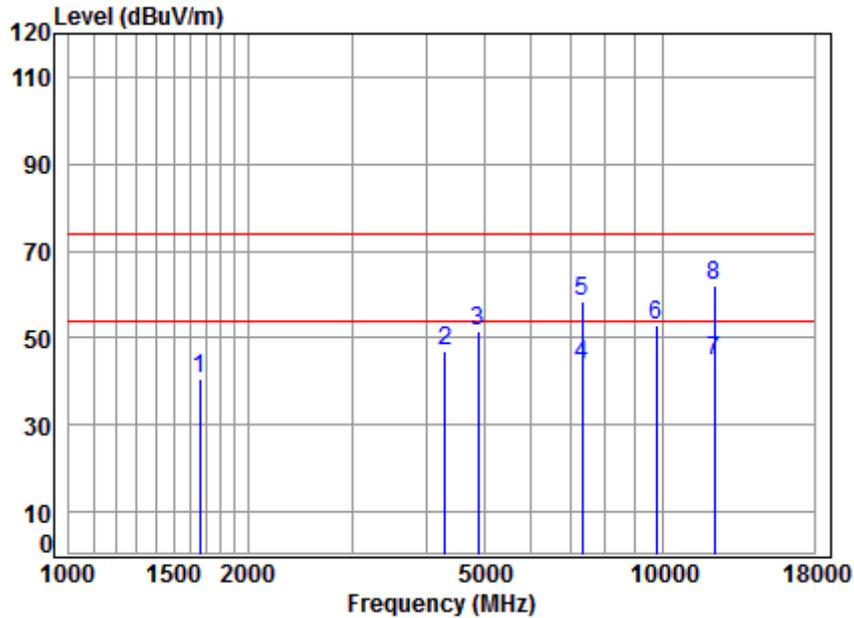
Condition: 3m VERTICAL
 Job No. : 06006CR
 Test mode: a

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	191.75	1.39	16.26	27.53	37.26	27.38	43.50	-16.12
2	365.54	2.10	21.52	27.67	33.74	29.69	46.00	-16.31
3	396.24	2.19	22.31	27.73	34.53	31.30	46.00	-14.70
4	438.66	2.37	23.31	27.79	33.15	31.04	46.00	-14.96
5 pp	515.44	2.62	24.93	27.85	34.96	34.66	46.00	-11.34
6	599.32	2.70	26.59	27.70	30.28	31.87	46.00	-14.13



Transmitter emission above 1GHz

Mode:a; Polarization: Horizontal; Bandwidth:1.4MHz; Channel:2441.5MHz;

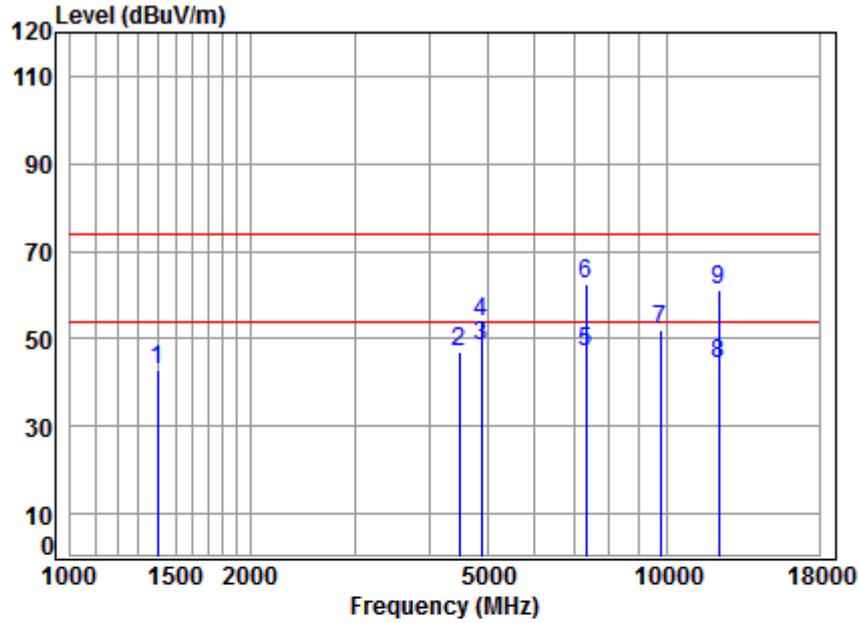


Condition: 3m HORIZONTAL
Job No : 06006CR
Mode : 2441.5 TX SE
Note : 1.4M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1663.137	5.27	26.52	41.51	50.42	40.70	74.00	-33.30	peak
2	4304.400	7.34	33.26	42.38	48.95	47.17	74.00	-26.83	peak
3	4883.000	7.97	34.07	42.48	51.94	51.50	74.00	-22.50	peak
4	7324.500	10.04	36.16	40.63	38.25	43.82	54.00	-10.18	Average
5	7324.500	10.04	36.16	40.63	52.70	58.27	74.00	-15.73	peak
6	9766.000	10.82	37.76	37.52	41.67	52.73	74.00	-21.27	peak
7	pp12207.500	12.49	37.79	38.50	32.73	44.51	54.00	-9.49	Average
8	pk12207.500	12.49	37.79	38.50	50.09	61.87	74.00	-12.13	Peak



Mode:a; Polarization:Vertical; Bandwidth:1.4MHz; Channel:2441.5MHz;

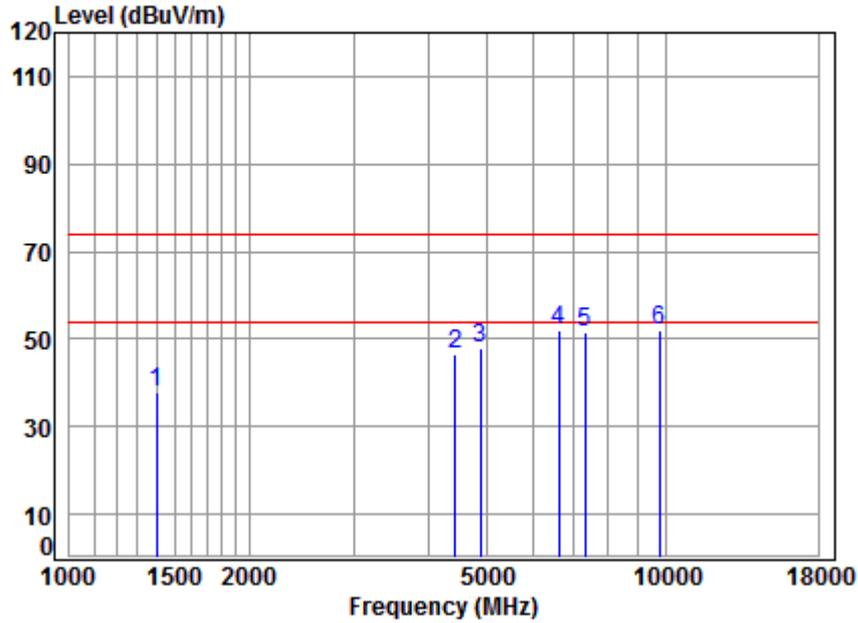


Condition: 3m VERTICAL
Job No : 06006CR
Mode : 2441.5 TX SE
Note : 1.4M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1398.336	5.15	25.42	41.34	53.63	42.86	74.00	-31.14	peak
2	4482.150	7.54	33.57	42.41	48.07	46.77	74.00	-27.23	peak
3	pp 4883.000	7.97	34.07	42.48	48.60	48.16	54.00	-5.84	Average
4	4883.000	7.97	34.07	42.48	54.46	54.02	74.00	-19.98	peak
5	7324.500	10.04	36.16	40.63	41.27	46.84	54.00	-7.16	Average
6	pk 7324.500	10.04	36.16	40.63	56.97	62.54	74.00	-11.46	peak
7	9766.000	10.82	37.76	37.52	41.03	52.09	74.00	-21.91	peak
8	12207.500	12.49	37.79	38.50	32.32	44.10	54.00	-9.90	Average
9	12207.500	12.49	37.79	38.50	49.28	61.06	74.00	-12.94	Peak



Mode:a; Polarization:Horizontal; Bandwidth:10MHz; Channel:2441.5MHz;

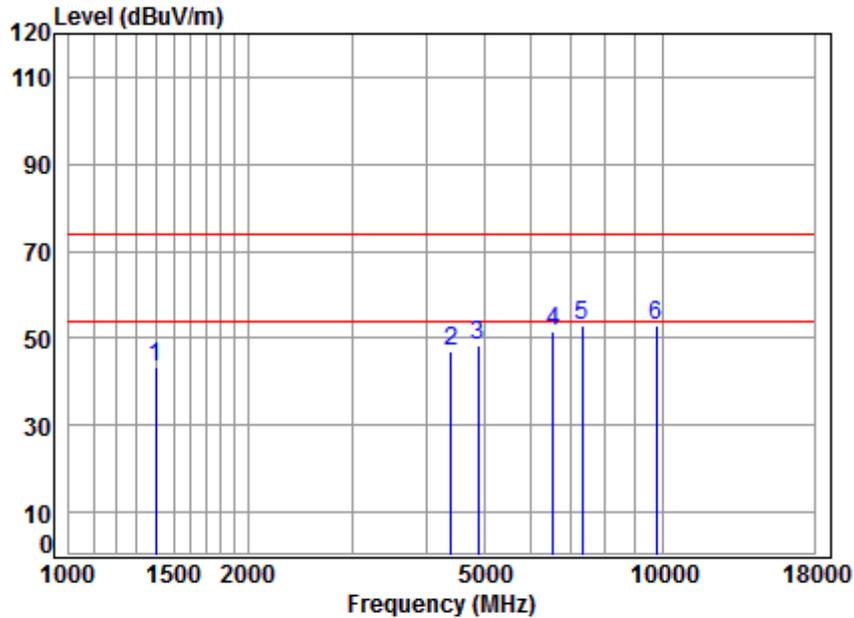


Condition: 3m HORIZONTAL
Job No : 06006CR
Mode : 2441.5 TX SE
Note : 10M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1398.336	5.15	25.42	41.34	48.44	37.67	74.00	-36.33	peak
2	4443.453	7.50	33.50	42.41	48.07	46.66	74.00	-27.34	peak
3	4883.000	7.97	34.07	42.48	48.21	47.77	74.00	-26.23	peak
4	6621.375	11.19	35.67	41.13	46.21	51.94	74.00	-22.06	peak
5	7324.500	10.04	36.16	40.63	45.89	51.46	74.00	-22.54	peak
6 pp	9766.000	10.82	37.76	37.52	41.10	52.16	74.00	-21.84	peak



Mode:a; Polarization:Vertical; Bandwidth:10MHz; Channel:2441.5MHz;

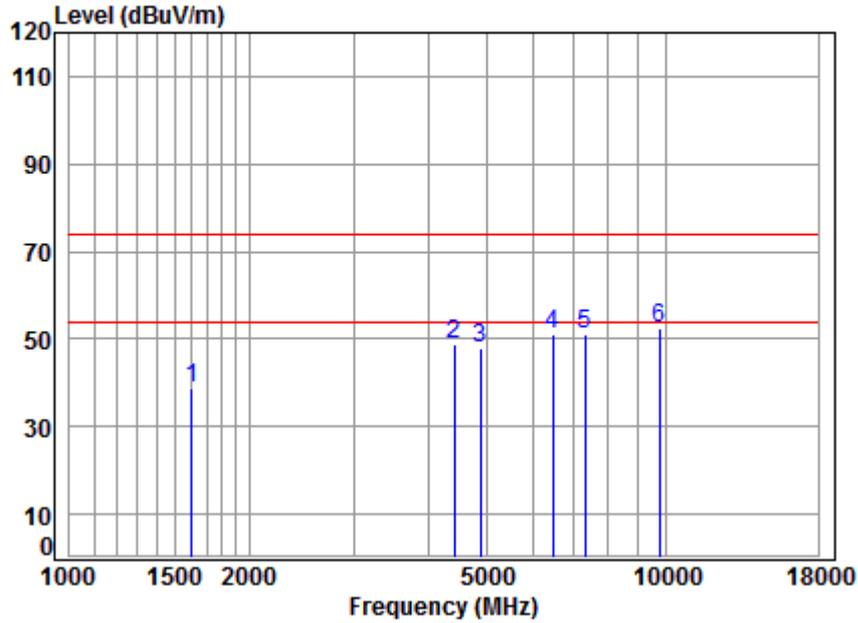


Condition: 3m VERTICAL
 Job No : 06006CR
 Mode : 2441.5 TX SE
 Note : 10M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1398.336	5.15	25.42	41.34	54.21	43.44	74.00	-30.56	peak
2	4405.090	7.46	33.44	42.40	48.57	47.07	74.00	-26.93	peak
3	4883.000	7.97	34.07	42.48	48.96	48.52	74.00	-25.48	peak
4	6545.263	11.41	35.63	41.18	45.80	51.66	74.00	-22.34	peak
5	7324.500	10.04	36.16	40.63	47.25	52.82	74.00	-21.18	peak
6	9766.000	10.82	37.76	37.52	41.79	52.85	74.00	-21.15	peak



Mode:a; Polarization:Horizontal; Bandwidth:20MHz; Channel:2441.5MHz;

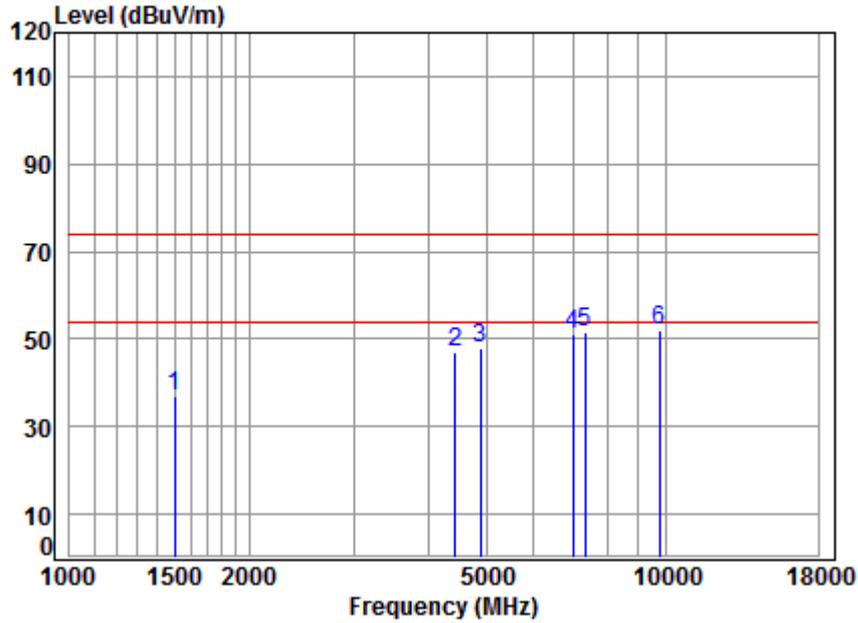


Condition: 3m HORIZONTAL
Job No : 06006CR
Mode : 2441.5 TX SE
Note : 20M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1606.441	5.34	26.28	41.47	48.80	38.95	74.00	-35.05	peak
2	4417.841	7.47	33.46	42.40	50.33	48.86	74.00	-25.14	peak
3	4883.000	7.97	34.07	42.48	48.27	47.83	74.00	-26.17	peak
4	6470.026	11.48	35.57	41.24	45.48	51.29	74.00	-22.71	peak
5	7324.500	10.04	36.16	40.63	45.73	51.30	74.00	-22.70	peak
6 pp	9766.000	10.82	37.76	37.52	41.40	52.46	74.00	-21.54	peak



Mode:a; Polarization:Vertical; Bandwidth:20MHz; Channel:2441.5MHz;



Condition: 3m VERTICAL
Job No : 06006CR
Mode : 2441.5 TX SE
Note : 20M ANT1

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1503.119	5.48	25.81	41.41	47.00	36.88	74.00	-37.12	peak
2	4430.628	7.48	33.48	42.41	48.54	47.09	74.00	-26.91	peak
3	4883.000	7.97	34.07	42.48	48.42	47.98	74.00	-26.02	peak
4	6995.172	10.14	35.90	40.86	46.07	51.25	74.00	-22.75	peak
5	7324.500	10.04	36.16	40.63	46.16	51.73	74.00	-22.27	peak
6 pp	9766.000	10.82	37.76	37.52	40.95	52.01	74.00	-21.99	peak



7 Photographs

7.1 Test Setup

Please refer to setup photos.

7.2 EUT Constructional Details (EUT Photos)

Please refer to external and internal photos.

9 Appendix

7.3 Appendix 15.247

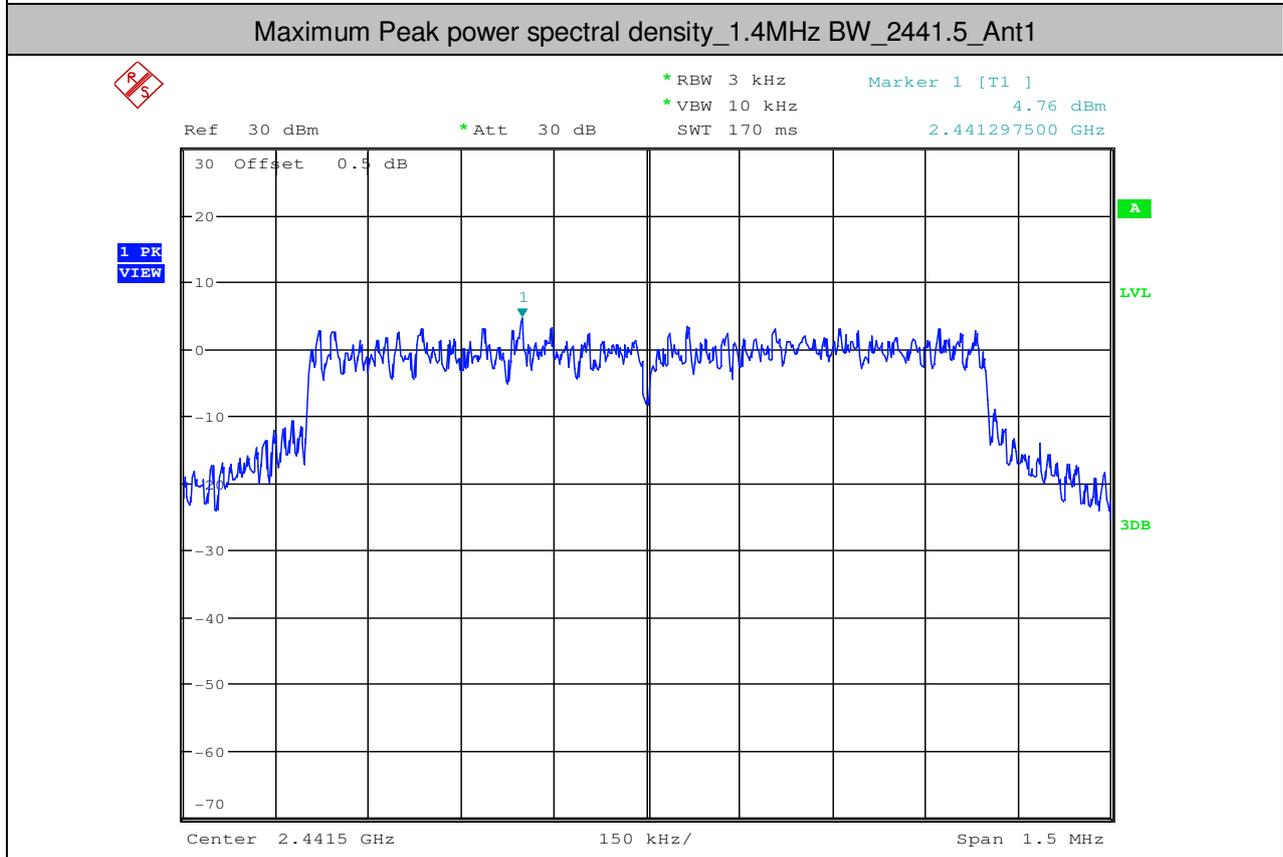
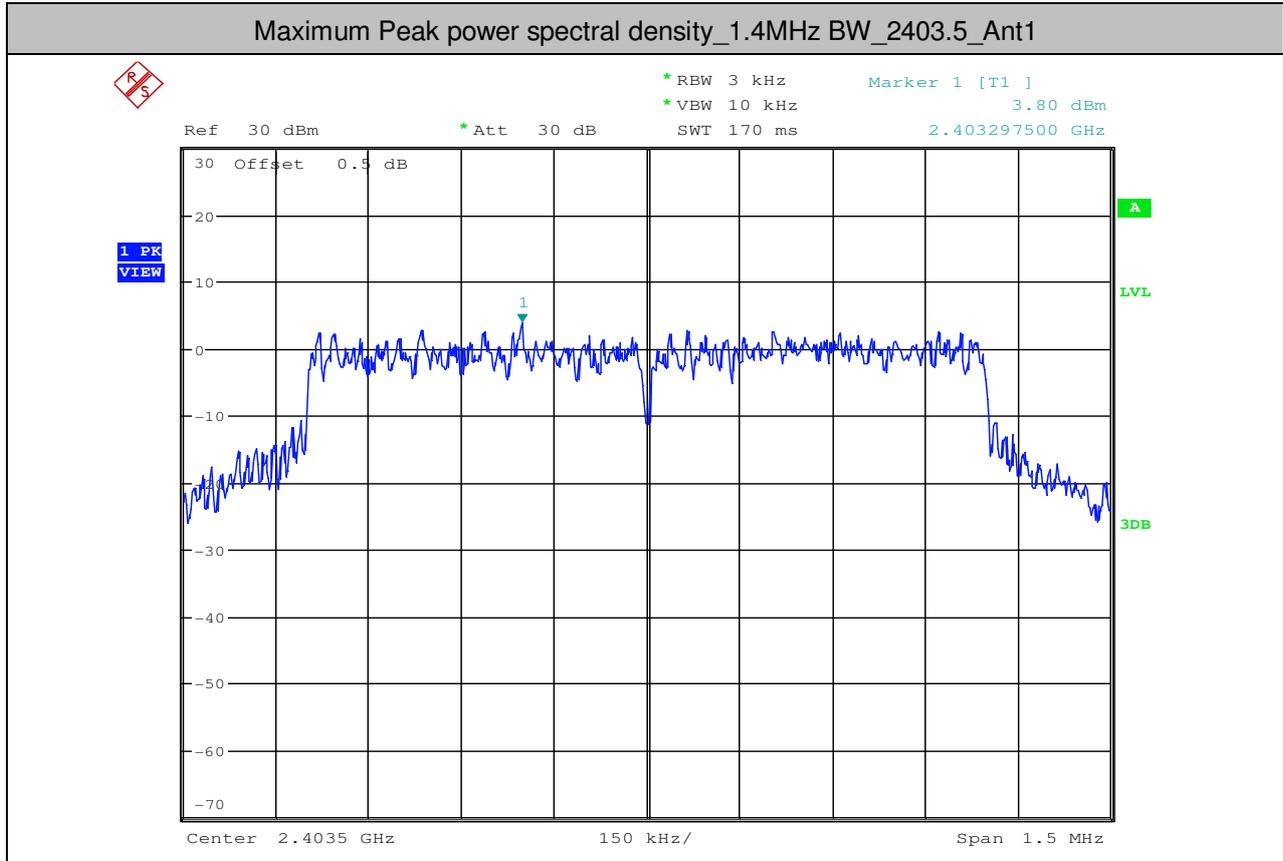
1.Maximum conducted output power (Average)

Test Mode	Test Channel	Ant	Power[dBm]	Limit[dBm]	Verdict
1.4MHz BW	2403.5	Ant1	20.96	<30	PASS
1.4MHz BW	2441.5	Ant1	21.08	<30	PASS
1.4MHz BW	2477.5	Ant1	20.80	<30	PASS
10MHz BW	2405.5	Ant1	10.91	<30	PASS
10MHz BW	2408.5	Ant1	11.91	<30	PASS
10MHz BW	2409.5	Ant1	12.97	<30	PASS
10MHz BW	2415.5	Ant1	15.97	<30	PASS
10MHz BW	2417.5	Ant1	18.03	<30	PASS
10MHz BW	2441.5	Ant1	17.88	<30	PASS
10MHz BW	2455.5	Ant1	17.92	<30	PASS
10MHz BW	2459.5	Ant1	17.24	<30	PASS
10MHz BW	2463.5	Ant1	14.00	<30	PASS
10MHz BW	2464.5	Ant1	12.98	<30	PASS
10MHz BW	2467.5	Ant1	10.91	<30	PASS
10MHz BW	2469.5	Ant1	9.87	<30	PASS
10MHz BW	2471.5	Ant1	7.09	<30	PASS
10MHz BW	2472.5	Ant1	2.74	<30	PASS
10MHz BW	2476.5	Ant1	0.23	<30	PASS
10MHz BW	2477.5	Ant1	-11.04	<30	PASS
20MHz BW	2410.5	Ant1	3.84	<30	PASS
20MHz BW	2414.5	Ant1	7.68	<30	PASS
20MHz BW	2415.5	Ant1	8.89	<30	PASS
20MHz BW	2419.5	Ant1	11.00	<30	PASS
20MHz BW	2420.5	Ant1	11.85	<30	PASS
20MHz BW	2430.5	Ant1	15.22	<30	PASS
20MHz BW	2434.5	Ant1	18.16	<30	PASS
20MHz BW	2441.5	Ant1	18.18	<30	PASS
20MHz BW	2442.5	Ant1	17.06	<30	PASS
20MHz BW	2448.5	Ant1	14.22	<30	PASS
20MHz BW	2450.5	Ant1	12.84	<30	PASS
20MHz BW	2458.5	Ant1	9.92	<30	PASS
20MHz BW	2459.5	Ant1	9.13	<30	PASS
20MHz BW	2464.5	Ant1	6.86	<30	PASS
20MHz BW	2465.5	Ant1	5.87	<30	PASS
20MHz BW	2471.5	Ant1	1.09	<30	PASS
20MHz BW	2472.5	Ant1	-6.83	<30	PASS

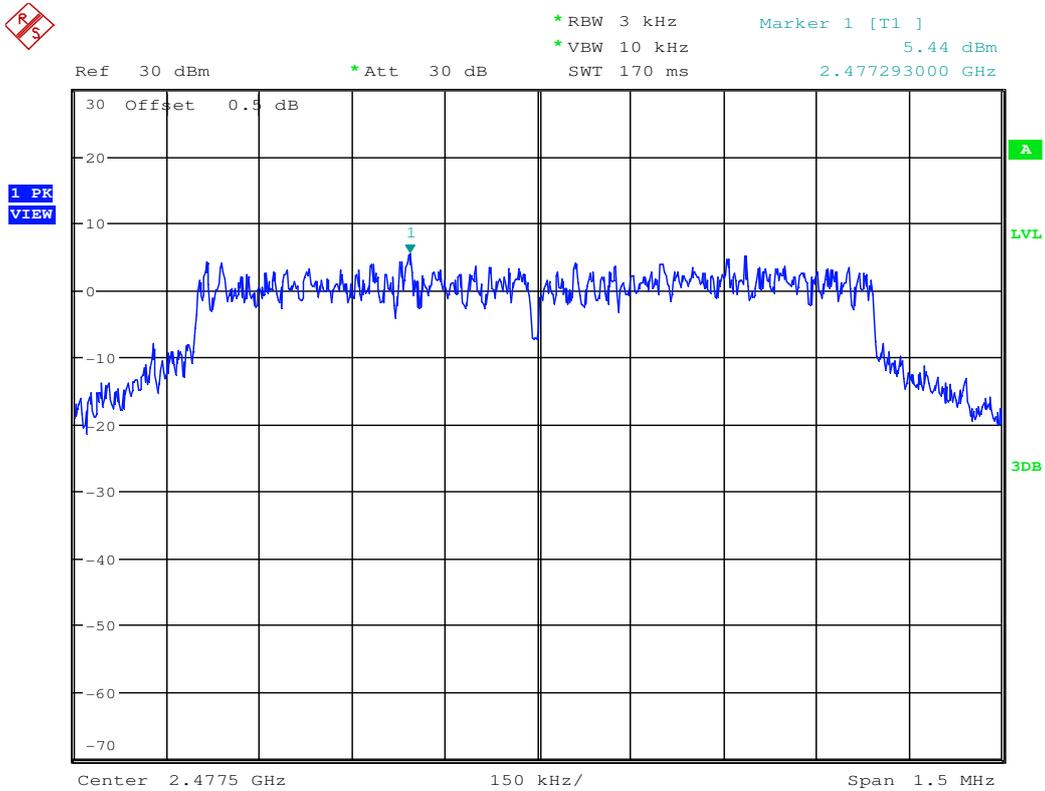


2. Maximum Peak power spectral density

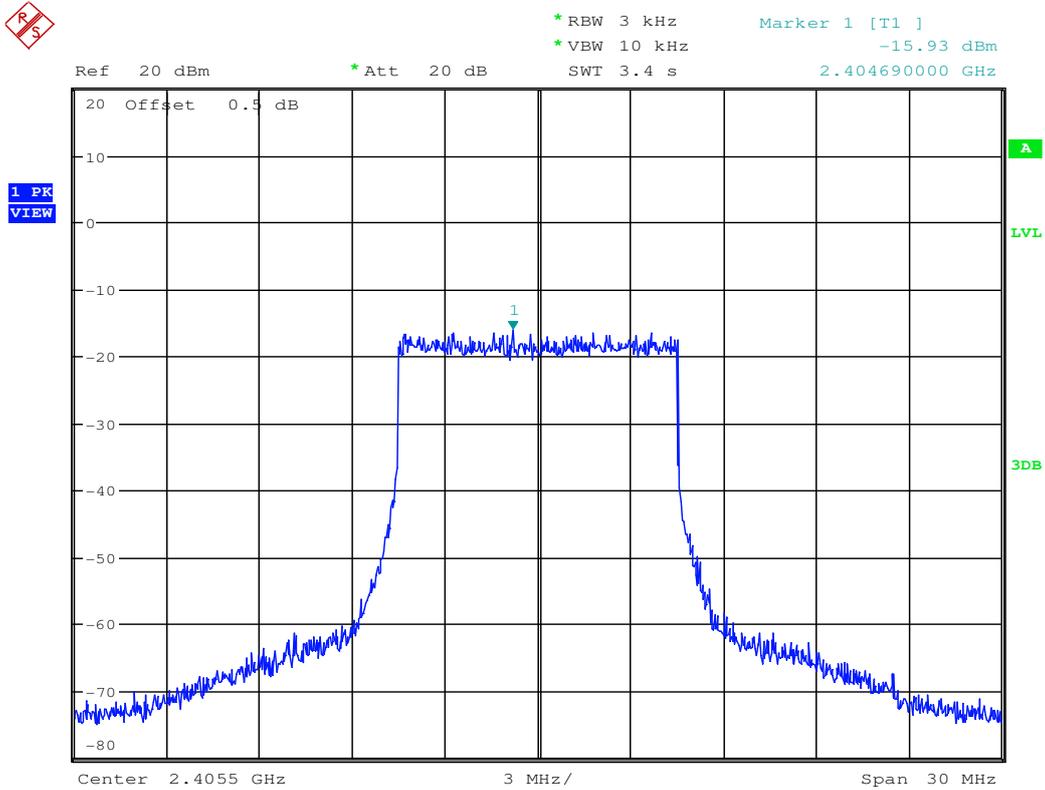
Test Mode	Test Channel	Ant	PSD[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
1.4MHz BW	2403.5	Ant1	3.8	<8.00	PASS
1.4MHz BW	2441.5	Ant1	4.76	<8.00	PASS
1.4MHz BW	2477.5	Ant1	5.44	<8.00	PASS
10MHz BW	2405.5	Ant1	-15.93	<8.00	PASS
10MHz BW	2441.5	Ant1	-7.92	<8.00	PASS
10MHz BW	2477.5	Ant1	-37.09	<8.00	PASS
20MHz BW	2410.5	Ant1	-25.18	<8.00	PASS
20MHz BW	2441.5	Ant1	-10.11	<8.00	PASS
20MHz BW	2472.5	Ant1	-29.01	<8.00	PASS



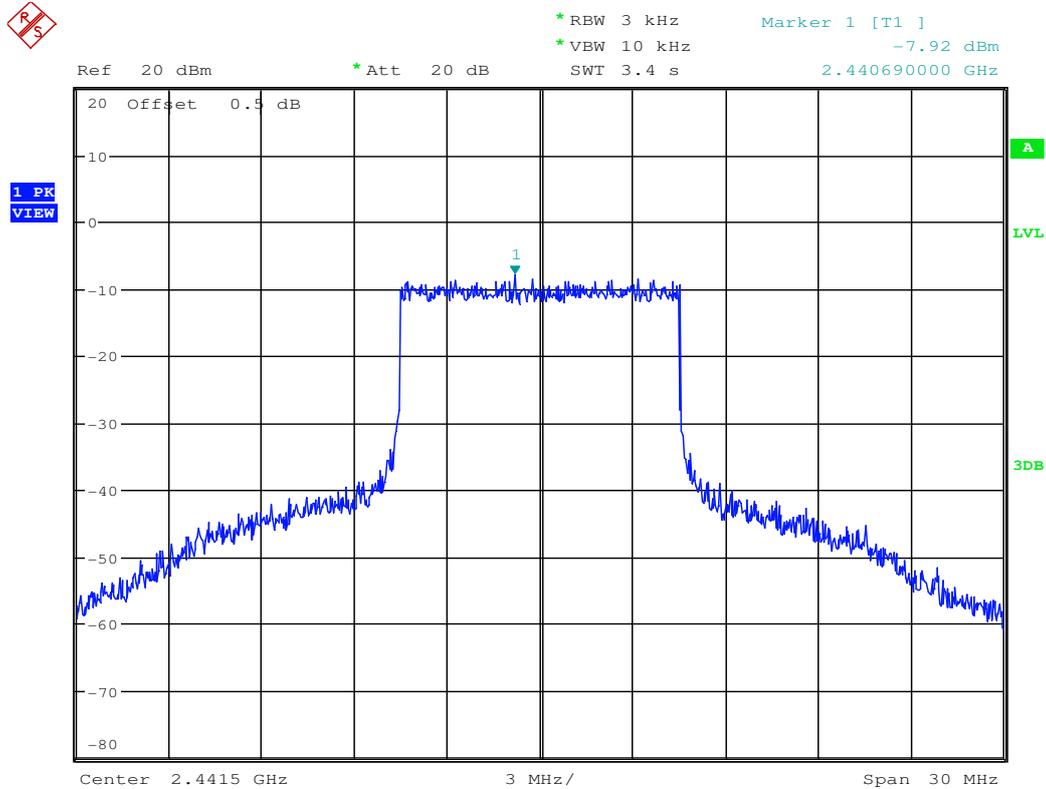
Maximum Peak power spectral density_1.4MHz BW_2477.5_Ant1



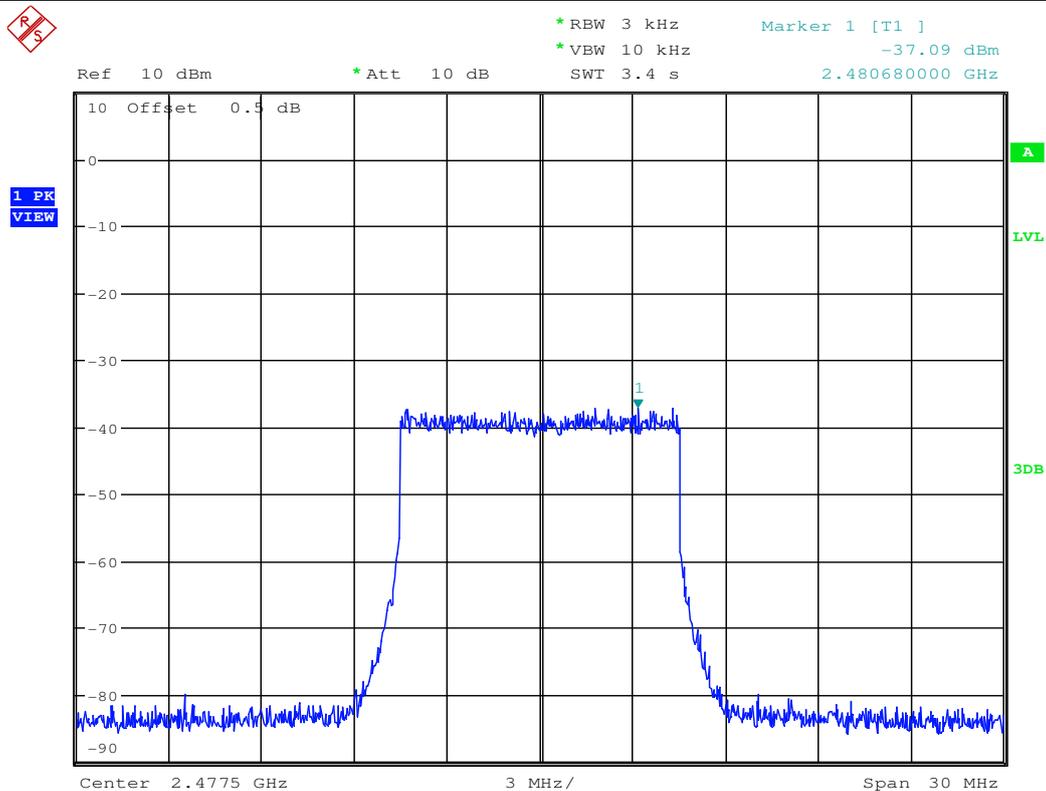
Maximum Peak power spectral density_10MHz BW_2405.5_Ant1



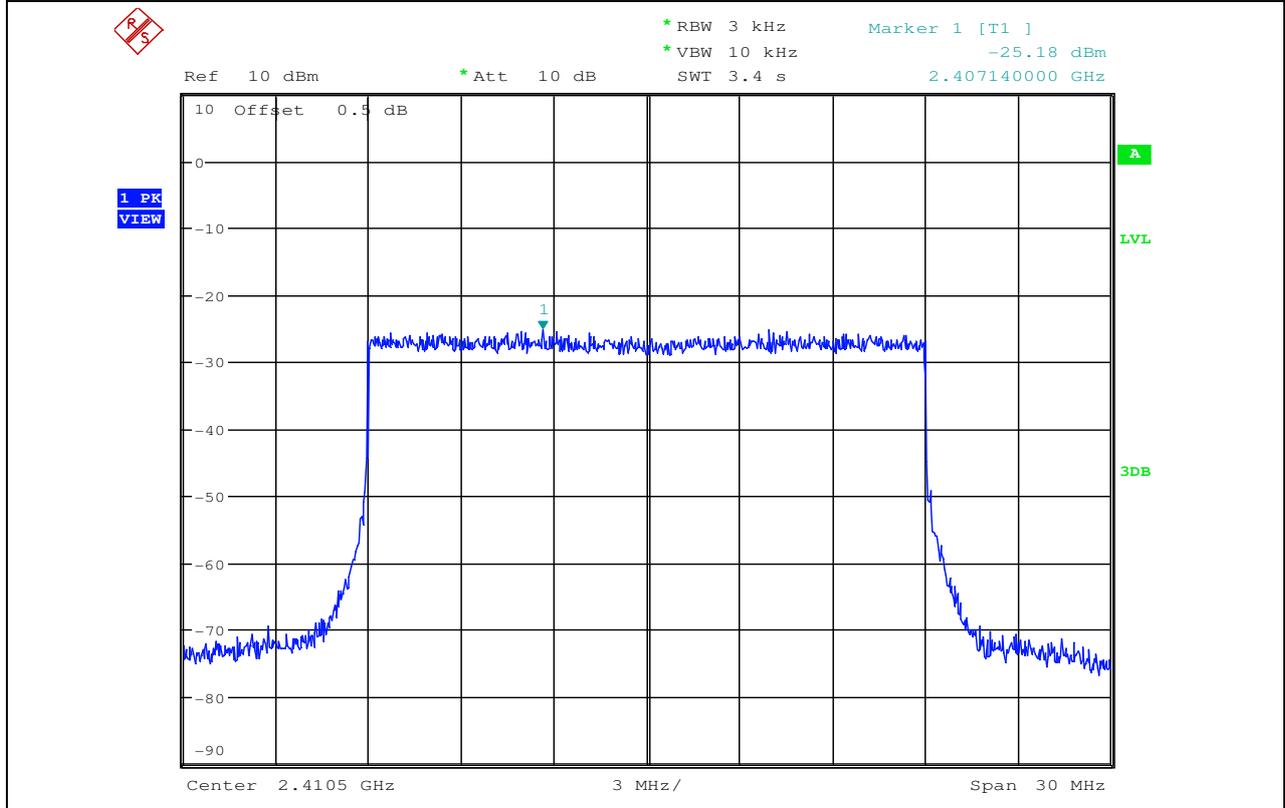
Maximum Peak power spectral density_10MHz BW_2441.5_Ant1



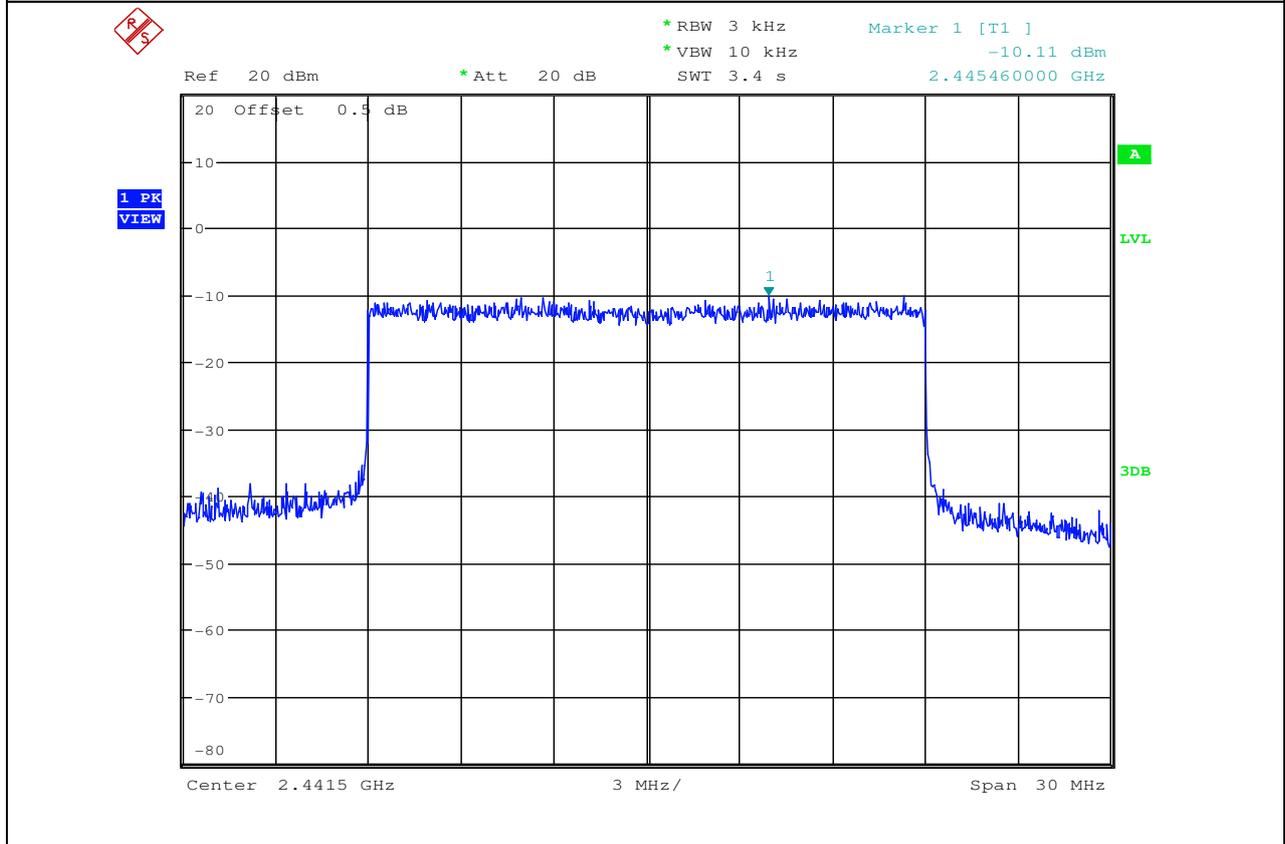
Maximum Peak power spectral density_10MHz BW_2477.5_Ant1

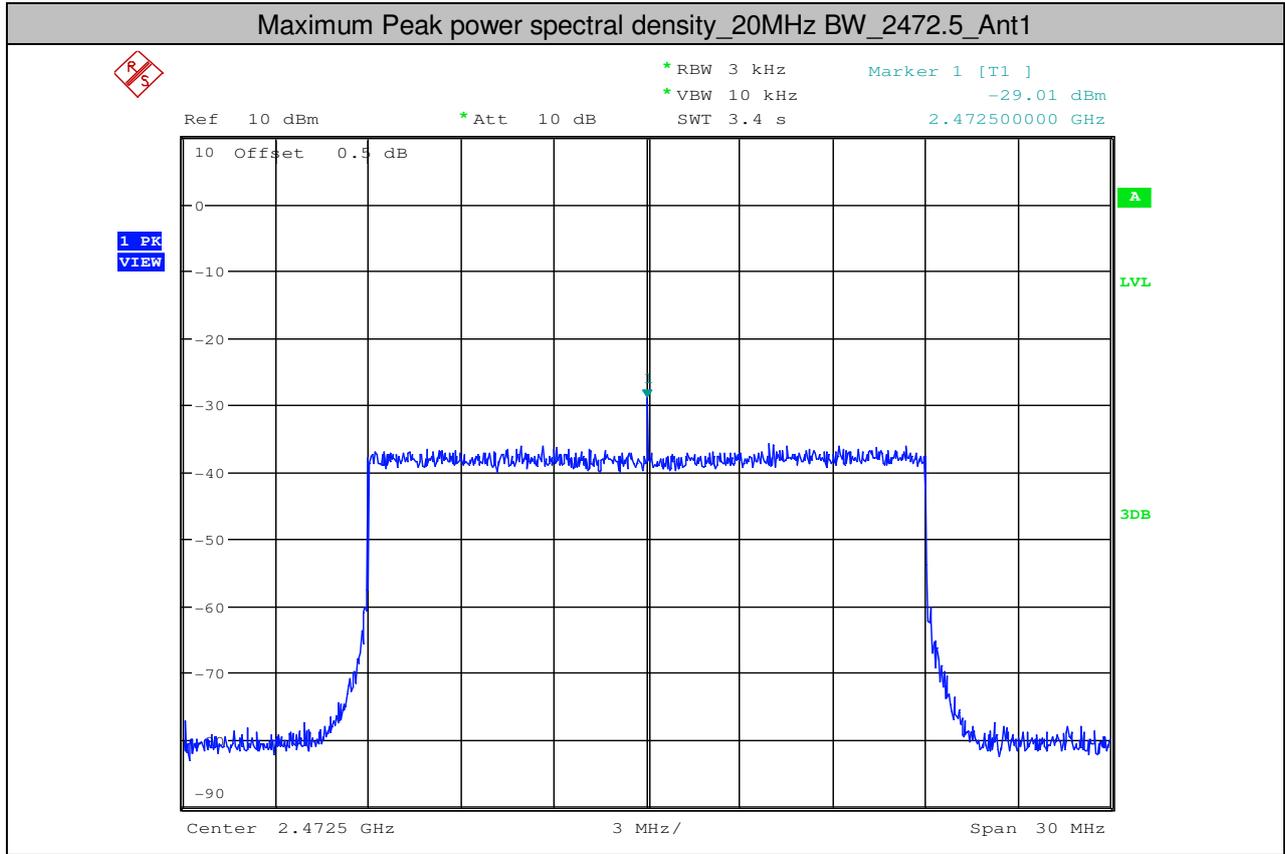


Maximum Peak power spectral density_20MHz BW_2410.5_Ant1



Maximum Peak power spectral density_20MHz BW_2441.5_Ant1





- End of the Report -