



Radio Test Report

FCC ID: XVG500106RTBT**IC: 6800A-500106RTBT**

Report No. : TBR-C-202302-0069-51

Applicant : Amino Communications Ltd

Equipment Under Test (EUT)

EUT Name : IPTV Receiver

Model(s) No. : Amigo 7Y, AMIGO 7Y, Amigo 7Yzzzzzzzzz, AMIGO 7Yzzzzzzzzz
(zzzzzzzz can be combination of A-Z, a-z, 0-9, "-", "/", "blank" for marketing purpose)

Brand Name : AMINO

Sample ID : 202302-0069-5-1#&202302-0069-5-2#

Receipt Date : 2023-04-06

Test Date : 2023-04-07 to 2023-12-23

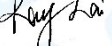
Issue Date : 2023-12-25

Standards : FCC Part 15 Subpart C 15.247
RSS-247 Issue 3 August 2023
RSS-Gen Issue 5 Amendment 2 February 2021

Test Method : ANSI C63.10: 2013
KDB 558074 D01 15.247 Meas Guidance v05r02

Conclusions : **PASS**

In the configuration tested, the EUT complied with the standards specified above.

Witness Engineer: **Engineer Supervisor**: **Engineer Manager**: 

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

Contents

CONTENTS.....	2
1. GENERAL INFORMATION ABOUT EUT.....	6
1.1 Client Information.....	6
1.2 General Description of EUT (Equipment Under Test)	6
1.3 Block Diagram Showing the Configuration of System Tested.....	8
1.4 Description of Support Units	8
1.5 Description of Test Mode.....	9
1.6 Description of Test Software Setting	10
1.7 Measurement Uncertainty	10
1.8 Test Facility.....	11
2. TEST SUMMARY	12
3. TEST SOFTWARE.....	12
4. TEST EQUIPMENT.....	13
5. CONDUCTED EMISSION.....	15
5.1 Test Standard and Limit.....	15
5.2 Test Setup.....	15
5.3 Test Procedure.....	15
5.4 Deviation From Test Standard.....	16
5.5 EUT Operating Mode	16
5.6 Test Data.....	16
6. RADIATED AND CONDUCTED UNWANTED EMISSIONS.....	21
6.1 Test Standard and Limit.....	21
6.2 Test Setup.....	22
6.3 Test Procedure.....	23
6.4 Deviation From Test Standard.....	24
6.5 EUT Operating Mode	24
6.6 Test Data.....	24
7. EMISSIONS IN RESTRICTED BANDS AND BAND EDGE.....	57
7.1 Test Standard and Limit.....	57
7.2 Test Setup.....	57
7.3 Test Procedure.....	58
7.4 Deviation From Test Standard.....	58
7.5 EUT Operating Mode	59



7.6 Test Data.....	59
8. 99% OCCUPIED AND 20DB BANDWIDTH.....	77
8.1 Test Standard and Limit.....	77
8.2 Test Setup.....	77
8.3 Test Procedure.....	77
8.4 Deviation From Test Standard.....	78
8.5 EUT Operating Mode	78
8.6 Test Data.....	78
9. PEAK OUTPUT POWER TEST.....	86
9.1 Test Standard and Limit.....	86
9.2 Test Setup.....	86
9.3 Test Procedure.....	86
9.4 Deviation From Test Standard.....	87
9.5 EUT Operating Mode	87
9.6 Test Data.....	87
10. CARRIER FREQUENCY SEPARATION	95
10.1 Test Standard and Limit	95
10.2 Test Setup.....	95
10.3 Test Procedure.....	95
10.4 Deviation From Test Standard.....	96
10.5 Antenna Connected Construction	96
10.6 Test Data.....	96
11. TIME OF OCCUPANCY (DWELL TIME)	99
11.1 Test Standard and Limit	99
11.2 Test Setup.....	99
11.3 Test Procedure.....	99
11.4 Deviation From Test Standard.....	100
11.5 Antenna Connected Construction	100
11.6 Test Data.....	100
12. NUMBER OF HOPPING FREQUENCIES	105
12.1 Test Standard and Limit	105
12.2 Test Setup.....	105
12.3 Test Procedure.....	105
12.4 Deviation From Test Standard.....	106
12.5 Antenna Connected Construction	106
12.6 Test Data.....	106



13. ANTENNA REQUIREMENT.....109

13.1 Test Standard and Limit109

13.2 Deviation From Test Standard.....109

13.3 Antenna Connected Construction.....109

13.4 Test Data.....109



Revision History

Report No.	Version	Description	Issued Date
TBR-C-202302-0069-51	Rev.01	Initial issue of report	2023-12-25



1. General Information about EUT

1.1 Client Information

Applicant	:	Amino Communications Ltd
Address	:	1010 Cambourne Business Park, Cambourne, Cambridge, CB23 6DP, United Kingdom.
Manufacturer	:	Shenzhen SDMC Technology Co., Ltd.
Address	:	Room 1022, Floor 10, Building A, Customs Building, No. 2, Xin'an 3rd Road, Dalang Community, Xin'an Street, Bao'an District, Shenzhen, China

1.2 General Description of EUT (Equipment Under Test)

EUT Name		:	IPTV Receiver	
For IC	Models No.	:	AMIGO 7Y	
For FCC	Models No.	:	Amigo 7Y, Amigo 7Yzzzzzzzzz, AMIGO 7Yzzzzzzzzz (zzzzzzzzz can be combination of A-Z, a-z, 0-9, “-”, “/”, “blank” for marketing purpose)	
	Model Different	:	All these models are identical in the same PCB, layout and electrical circuit, The only difference is model name for marketing purpose.	
Product Description		:	Operation Frequency:	Bluetooth 5.2(BDR+EDR): 2402MHz~2480MHz
		:	Number of Channel:	79 channels
		:	Antenna Gain:	0.85dBi PCB Antenna
		:	Modulation Type:	GFSK(1Mbps) π /4-DQPSK(2Mbps) 8DPSK(3Mbps)
Power Rating		:	AC Adapter 1# (Model: SA12BV-120100U SUNUN): Input: 100-240V~50/60Hz, 0.4A Output: 12.0V=1.0A 12W AC Adapter 2# (Model: DCT12W120100US-A0 DACHUAN): Input: 100-240V~50/60Hz, 0.3A Max. Output: 12.0V=1.0A 12W	
Software Version		:	Android 12	
Hardware Version		:	MB.024.B	
Remark: (1)The antenna gain and adapter provided by the manufacturer, the verified for the RF conduction test provided by TOBY test lab. (2)For a more detailed features description, please refer to the manufacturer’s specifications or the User’s Manual.				

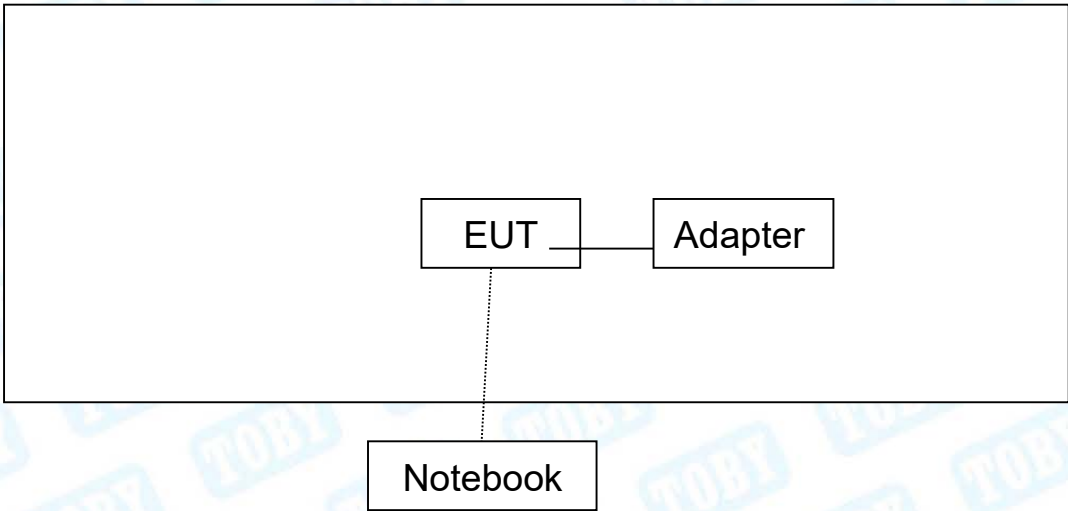


(3)Channel List:

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



1.3 Block Diagram Showing the Configuration of System Tested



1.4 Description of Support Units

Equipment Information				
Name	Model	S/N	Manufacturer	Used “√”
Notebook	Inspiron 5493	----	DELL	√



1.5 Description of Test Mode

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

For Conducted Test(AC POWER)	
Final Test Mode	Description
Mode 1	TX GFSK Mode Channel 00
For Radiated Test and RF Test	
Final Test Mode	Description
Mode 1	TX GFSK Mode Channel 00
Mode 2	TX Mode(GFSK) Channel 00/39/78
Mode 3	TX Mode($\pi/4$ -DQPSK) Channel 00/39/78
Mode 4	TX Mode(8DPSK) Channel 00/39/78
Mode 5	Hopping Mode(GFSK)
Mode 6	Hopping Mode($\pi/4$ -DQPSK)
Mode 7	Hopping Mode(8DPSK)

Note:

- (1) For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate.

According to ANSI C63.10 standards, the measurements are performed at the highest, middle, lowest available channels, and the worst case data rate as follows:

TX Mode: GFSK (1 Mbps)
TX Mode: $\pi/4$ -DQPSK (2 Mbps)
TX Mode: 8DPSK (3 Mbps)

- (2) During the testing procedure, the continuously transmitting with the maximum power mode was programmed by the customer.
- (3) The EUT is considered a Mobile unit; in normal use it was positioned on X-plane. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.



1.6 Description of Test Software Setting

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

Test Software Version	adb command		
Frequency	2402 MHz	2441MHz	2480 MHz
GFSK	DEF	DEF	DEF
$\pi/4$ -DQPSK	DEF	DEF	DEF
8DPSK	DEF	DEF	DEF

1.7 Measurement Uncertainty

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

Test Item	Parameters	Expanded Uncertainty (U_{Lab})
Conducted Emission	Level Accuracy: 9kHz~150kHz 150kHz to 30MHz	± 3.50 dB ± 3.10 dB
Radiated Emission	Level Accuracy: 9kHz to 30 MHz	± 4.60 dB
Radiated Emission	Level Accuracy: 30MHz to 1000 MHz	± 4.50 dB
Radiated Emission	Level Accuracy: Above 1000MHz	± 4.20 dB



1.8 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1/F., Building 6, Rundongsheng Industrial Zone, Longzhu, Xixiang, Bao'an District, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

CNAS (L5813)

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

A2LA Certificate No.: 4750.01

The laboratory has been accredited by American Association for Laboratory Accreditation(A2LA) to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the technical competence in the field of Electrical Testing. And the A2LA Certificate No.: 4750.01.FCC Accredited Test Site Number: 854351. Designation Number: CN1223.

IC Registration No.: (11950A)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A. CAB identifier: CN0056.



2. Test Summary

Standard Section		Test Item	Test Sample(s)	Judgment	Remark
FCC	IC				
FCC 15.207(a)	RSS-Gen 8.8	Conducted Emission	202302-0069-5-1#	PASS	N/A
FCC 15.209 & 15.247(d)	RSS-Gen 8.9 & RSS 247 5.5	Radiated Unwanted Emissions	202302-0069-5-1#	PASS	N/A
FCC 15.203	RSS-247 6.8	Antenna Requirement	202302-0069-5-2#	PASS	N/A
FCC 15.247(a)	RSS-Gen 6.7 RSS 247 5.1 (1)	99% Occupied Bandwidth & 20dB Bandwidth	202302-0069-5-1#	PASS	N/A
FCC 15.247(b)(1)	RSS 247 5.4 (2)	Peak Output Power	202302-0069-5-1#	PASS	N/A
FCC 15.247(a)(1)	RSS 247 5.1 (2)	Carrier frequency separation	202302-0069-5-1#	PASS	N/A
FCC 15.247(a)(1)	RSS 247 5.1 (4)	Time of occupancy	202302-0069-5-1#	PASS	N/A
FCC 15.247(b)(1)	RSS 247 5.1 (4)	Number of Hopping Frequency	202302-0069-5-1#	PASS	N/A
FCC 15.247(d)	RSS-Gen 8.10 RSS-247 5.5	Band Edge	202302-0069-5-2#	PASS	N/A
FCC 15.207(a)	RSS-247 5.5	Conducted Unwanted Emissions	202302-0069-5-2#	PASS	N/A
FCC 15.205	RSS-Gen 8.10	Emissions in Restricted Bands	202302-0069-5-1#	PASS	N/A
/	/	On Time and Duty Cycle	202302-0069-5-1#	/	N/A

Note: N/A is an abbreviation for Not Applicable.

3. Test Software

Test Item	Test Software	Manufacturer	Version No.
Conducted Emission	EZ-EMC	EZ	CDI-03A2
Radiation Emission	EZ-EMC	EZ	FA-03A2RE
Radiation Emission	EZ-EMC	EZ	FA-03A2RE+
RF Conducted Measurement	MTS-8310	MWRFTtest	V2.0.0.0
RF Test System	JS1120	Tonscend	V3.2.22



4. Test Equipment

Conducted Emission Test					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jun. 23, 2022	Jun. 22, 2023
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jun. 23, 2022	Jun. 22, 2023
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jun. 22, 2022	Jun. 21, 2023
LISN	Rohde & Schwarz	ENV216	101131	Jun. 22, 2022	Jun. 21, 2023
Radiation Emission Test					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100060	Sep. 01, 2022	Aug. 31, 2023
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 23, 2022	Jun. 22, 2023
EMI Test Receiver	Rohde & Schwarz	ESU-8	100472/008	Feb. 22, 2023	Feb.22, 2024
Bilog Antenna	SCHWARZBECK	VULB 9168	1225	Dec. 05, 2021	Dec. 04, 2023
Horn Antenna	SCHWARZBECK	BBHA 9120 D	2463	Feb. 26, 2022	Feb.25, 2024
Horn Antenna	SCHWARZBECK	BBHA 9170	1118	Jun. 26, 2022	Jun.25, 2024
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jun. 26, 2022	Jun.25, 2024
HF Amplifier	Tonscend	TAP9E6343	AP21C806117	Sep. 01, 2022	Aug. 31, 2023
HF Amplifier	Tonscend	TAP051845	AP21C806141	Sep. 01, 2022	Aug. 31, 2023
HF Amplifier	Tonscend	TAP0184050	AP21C806129	Sep. 01, 2022	Aug. 31, 2023
Pre-amplifier	HP	8449B	3008A00849	Feb. 22, 2023	Feb.22, 2024
Highpass Filter	CD	HPM-6.4/18G	---	N/A	N/A
Highpass Filter	CD	HPM-2.8/18G	---	N/A	N/A
Highpass Filter	XINBO	XBLBQ-HTA67(8-25G)	22052702-1	N/A	N/A
Antenna Conducted Emission					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 23, 2022	Jun. 22, 2023
MXA Signal Analyzer	Agilent	N9020A	MY49100060	Sep. 01, 2022	Aug. 31, 2023
Spectrum Analyzer	KEYSIHGT	N9020B	MY60110172	Sep. 01, 2022	Aug. 31, 2023
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO26	Sep. 01, 2022	Aug. 31, 2023
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO29	Sep. 01, 2022	Aug. 31, 2023
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Sep. 01, 2022	Aug. 31, 2023
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO33	Sep. 01, 2022	Aug. 31, 2023
RF Control Unit	Tonsced	JS0806-2	21F8060439	Sep. 01, 2022	Aug. 31, 2023
Power Control Box	Tonsced	JS0806-4ADC	21C8060387	N/A	N/A



Conducted Emission Test					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jun. 20, 2023	Jun. 19, 2024
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jun. 20, 2023	Jun. 19, 2024
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jun. 20, 2023	Jun. 19, 2024
LISN	Rohde & Schwarz	ENV216	101131	Jun. 20, 2023	Jun. 19, 2024
Radiation Emission Test					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100060	Aug. 30, 2023	Aug. 29, 2024
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 20, 2023	Jun. 19, 2024
EMI Test Receiver	Rohde & Schwarz	ESU-8	100472/008	Feb. 22, 2023	Feb.22, 2024
Bilog Antenna	SCHWARZBECK	VULB 9168	1225	Nov. 13, 2023	Nov. 12, 2025
Horn Antenna	SCHWARZBECK	BBHA 9120 D	2463	Feb. 26, 2022	Feb.25, 2024
Horn Antenna	SCHWARZBECK	BBHA 9170	1118	Jun. 26, 2022	Jun.25, 2024
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jun. 26, 2022	Jun.25, 2024
HF Amplifier	Tonsced	TAP9E6343	AP21C806117	Aug. 30, 2023	Aug. 29, 2024
HF Amplifier	Tonsced	TAP051845	AP21C806141	Aug. 30, 2023	Aug. 29, 2024
HF Amplifier	Tonsced	TAP0184050	AP21C806129	Aug. 30, 2023	Aug. 29, 2024
Pre-amplifier	HP	8449B	3008A00849	Feb. 22, 2023	Feb.22, 2024
Highpass Filter	CD	HPM-6.4/18G	---	N/A	N/A
Highpass Filter	CD	HPM-2.8/18G	---	N/A	N/A
Highpass Filter	XINBO	XBLBQ-HTA67(8-25G)	22052702-1	N/A	N/A
Antenna Conducted Emission					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 20, 2023	Jun. 19, 2024
MXA Signal Analyzer	Agilent	N9020A	MY49100060	Aug. 30, 2023	Aug. 29, 2024
Spectrum Analyzer	KEYSIGHT	N9020B	MY60110172	Aug. 30, 2023	Aug. 29, 2024
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO26	Aug. 30, 2023	Aug. 29, 2024
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO29	Aug. 30, 2023	Aug. 29, 2024
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Aug. 30, 2023	Aug. 29, 2024
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO33	Aug. 30, 2023	Aug. 29, 2024
RF Control Unit	Tonsced	JS0806-2	21F8060439	Aug. 30, 2023	Aug. 29, 2024
Power Control Box	Tonsced	JS0806-4ADC	21C8060387	N/A	N/A



5. Conducted Emission

5.1 Test Standard and Limit

5.1.1 Test Standard

RSS-Gen 8.8

FCC Part 15.207

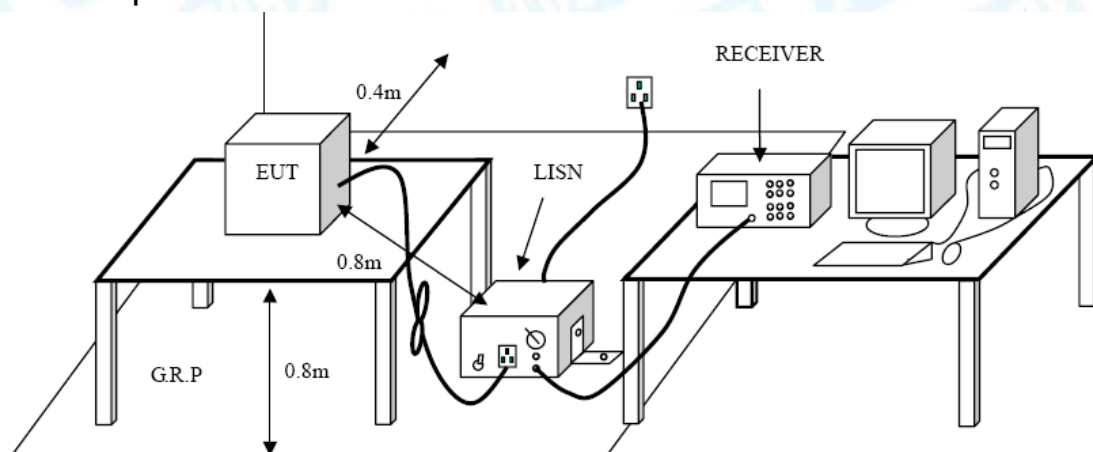
5.1.2 Test Limit

Frequency	Maximum RF Line Voltage (dB μ V)	
	Quasi-peak Level	Average Level
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *
500kHz~5MHz	56	46
5MHz~30MHz	60	50

Notes:

- (1) *Decreasing linearly with logarithm of the frequency.
- (2) The lower limit shall apply at the transition frequencies.
- (3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

5.2 Test Setup



5.3 Test Procedure

- The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- 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.
- 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.
- LISN at least 80 cm from nearest part of EUT chassis.



- The bandwidth of EMI test receiver is set at 9 kHz, and the test frequency band is from 0.15MHz to 30MHz.

5.4 Deviation From Test Standard

No deviation

5.5 EUT Operating Mode

Please refer to the description of test mode.

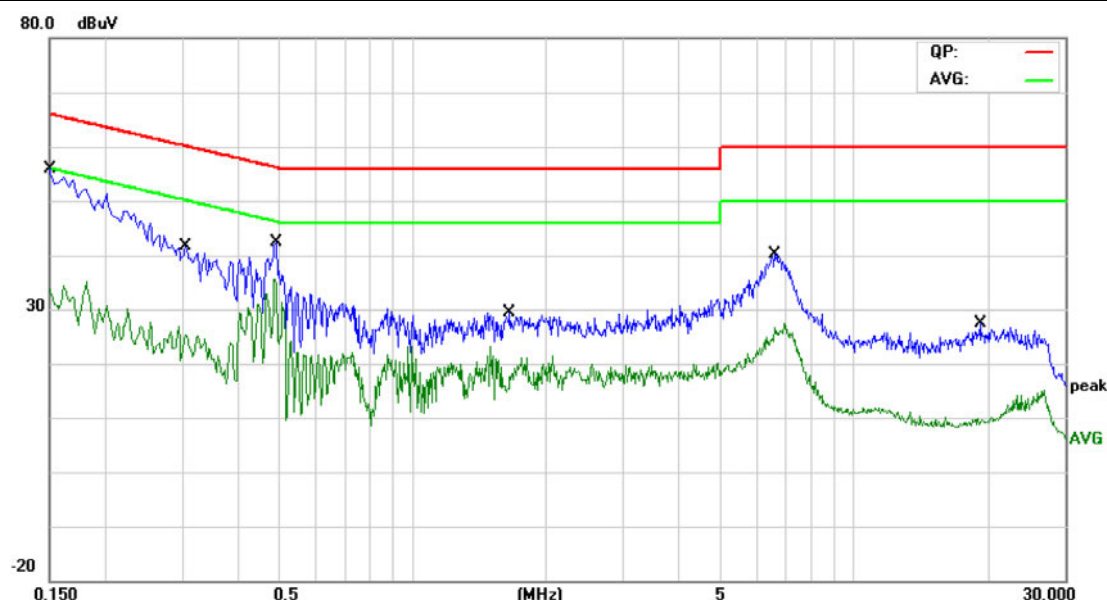
5.6 Test Data

Please refer to the following pages.



---Test Data

Temperature:	24.6°C	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Terminal:	Line		
Test Mode:	Mode 1 with adapter 1#		
Remark:	Only worse case is reported.		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1516	39.89	11.10	50.99	65.91	-14.92	QP
2		0.1516	19.04	11.10	30.14	55.91	-25.77	AVG
3		0.3060	27.03	10.87	37.90	60.08	-22.18	QP
4		0.3060	11.60	10.87	22.47	50.08	-27.61	AVG
5		0.4900	28.96	10.93	39.89	56.17	-16.28	QP
6	*	0.4900	21.93	10.93	32.86	46.17	-13.31	AVG
7		1.6580	12.93	10.56	23.49	56.00	-32.51	QP
8		1.6580	5.80	10.56	16.36	46.00	-29.64	AVG
9		6.6140	23.04	10.03	33.07	60.00	-26.93	QP
10		6.6140	13.48	10.03	23.51	50.00	-26.49	AVG
11		19.2900	5.37	10.68	16.05	60.00	-43.95	QP
12		19.2900	-2.50	10.68	8.18	50.00	-41.82	AVG

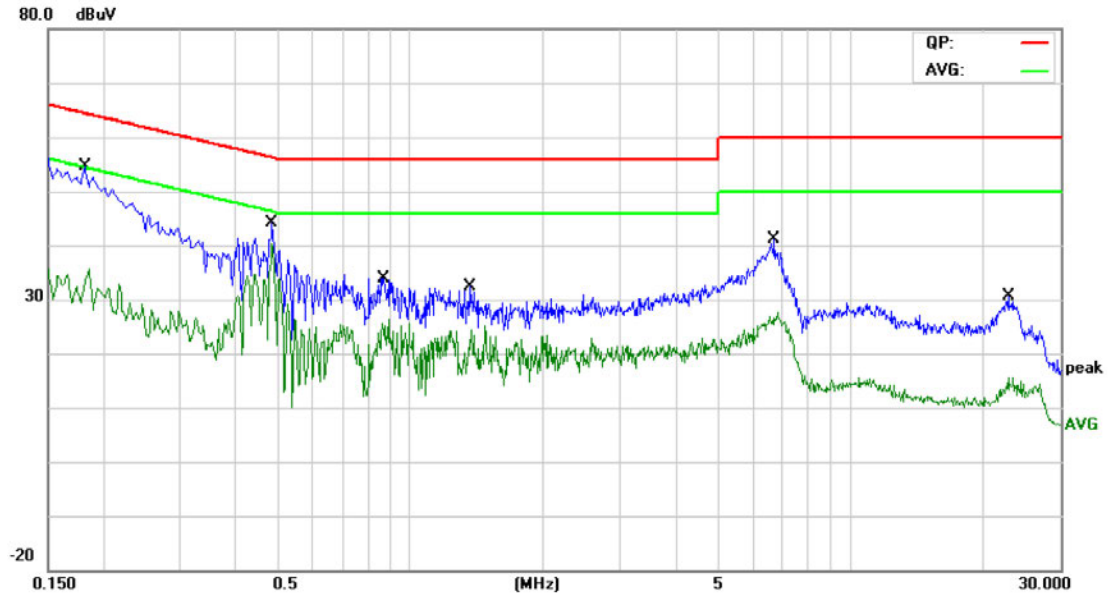
Remark:

1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)

2. Margin (dB) = QuasiPeak/Average (dBuV) - Limit (dBuV)



Temperature:	24.6°C	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Terminal:	Neutral		
Test Mode:	Mode 1 with adapter 1#		
Remark:	Only worse case is reported.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1819	39.28	11.04	50.32	64.39	-14.07	QP
2		0.1819	20.24	11.04	31.28	54.39	-23.11	AVG
3		0.4860	30.94	10.93	41.87	56.24	-14.37	QP
4	*	0.4860	28.20	10.93	39.13	46.24	-7.11	AVG
5		0.8700	18.30	10.76	29.06	56.00	-26.94	QP
6		0.8700	12.14	10.76	22.90	46.00	-23.10	AVG
7		1.3619	15.27	10.62	25.89	56.00	-30.11	QP
8		1.3619	8.04	10.62	18.66	46.00	-27.34	AVG
9		6.6980	23.91	10.03	33.94	60.00	-26.06	QP
10		6.6980	14.64	10.03	24.67	50.00	-25.33	AVG
11		22.8779	15.03	10.78	25.81	60.00	-34.19	QP
12		22.8779	3.01	10.78	13.79	50.00	-36.21	AVG

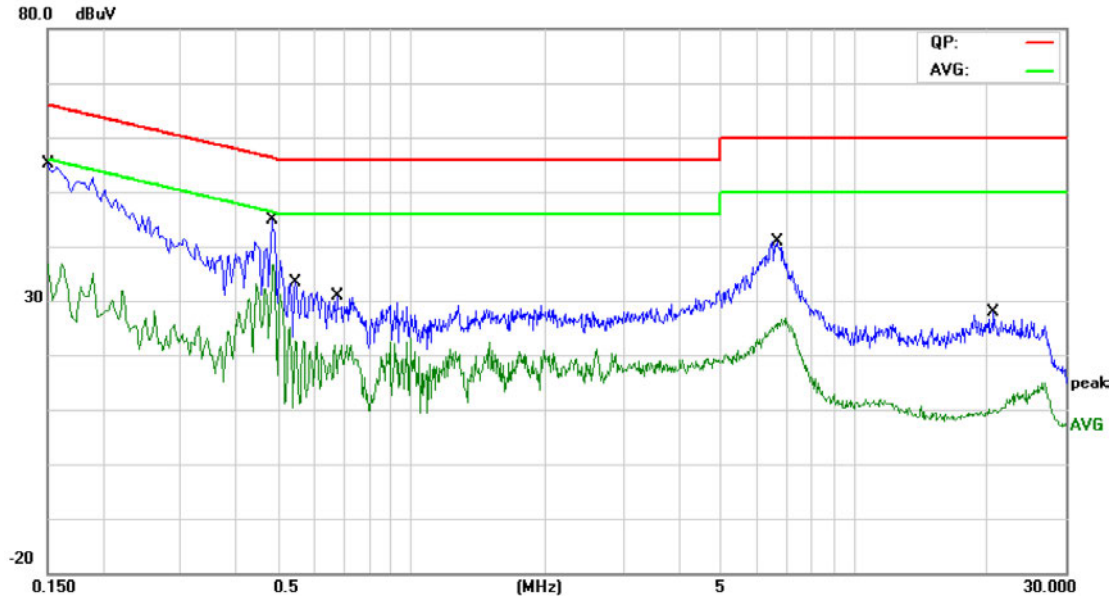
Remark:

1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)

2. Margin (dB) = QuasiPeak/Average (dBuV) - Limit (dBuV)



Temperature:	24.6°C	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Terminal:	Line		
Test Mode:	Mode 1 with adapter 2#		
Remark:	Only worse case is reported.		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1500	40.56	11.11	51.67	65.99	-14.32	QP
2		0.1500	19.95	11.11	31.06	55.99	-24.93	AVG
3		0.4820	28.10	10.93	39.03	56.30	-17.27	QP
4	*	0.4820	21.19	10.93	32.12	46.30	-14.18	AVG
5		0.5460	19.41	10.92	30.33	56.00	-25.67	QP
6		0.5460	10.92	10.92	21.84	46.00	-24.16	AVG
7		0.6780	14.93	10.89	25.82	56.00	-30.18	QP
8		0.6780	7.49	10.89	18.38	46.00	-27.62	AVG
9		6.6820	22.78	10.03	32.81	60.00	-27.19	QP
10		6.6820	13.72	10.03	23.75	50.00	-26.25	AVG
11		20.6460	6.19	10.75	16.94	60.00	-43.06	QP
12		20.6460	-2.30	10.75	8.45	50.00	-41.55	AVG

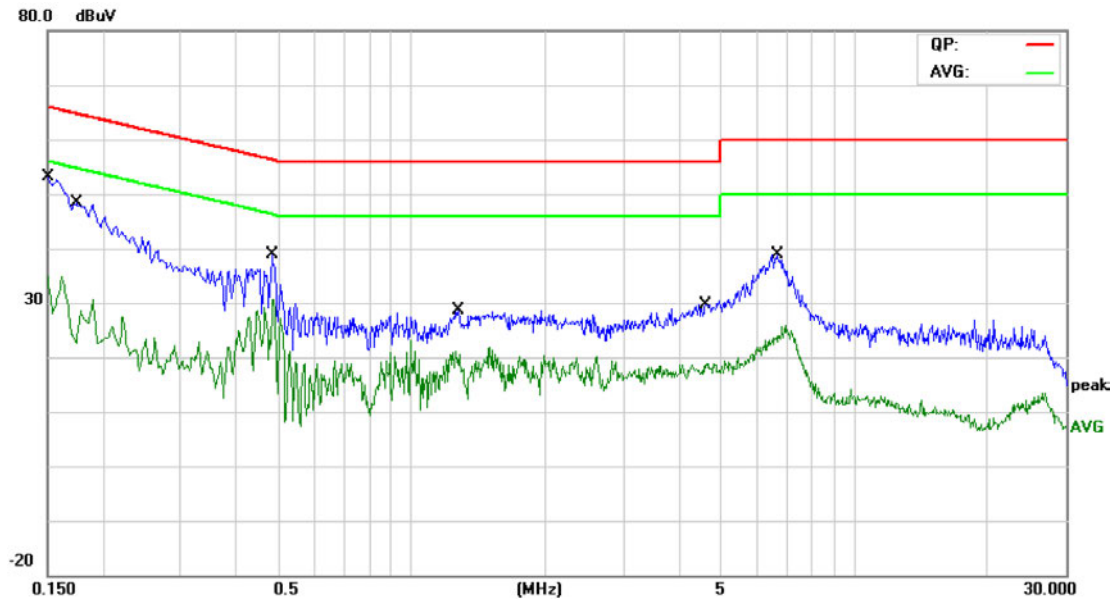
Remark:

1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)

2. Margin (dB) = QuasiPeak/Average (dBuV) - Limit (dBuV)



Temperature:	24.6°C	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		
Terminal:	Neutral		
Test Mode:	Mode 1 with adapter 2#		
Remark:	Only worse case is reported.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1500	40.19	11.11	51.30	65.99	-14.69	QP
2		0.1500	19.45	11.11	30.56	55.99	-25.43	AVG
3		0.1740	37.76	11.06	48.82	64.76	-15.94	QP
4		0.1740	17.60	11.06	28.66	54.76	-26.10	AVG
5		0.4820	29.25	10.93	40.18	56.30	-16.12	QP
6	*	0.4820	21.46	10.93	32.39	46.30	-13.91	AVG
7		1.2700	13.57	10.63	24.20	56.00	-31.80	QP
8		1.2700	6.95	10.63	17.58	46.00	-28.42	AVG
9		4.6220	13.18	10.05	23.23	56.00	-32.77	QP
10		4.6220	6.61	10.05	16.66	46.00	-29.34	AVG
11		6.6820	22.62	10.03	32.65	60.00	-27.35	QP
12		6.6820	13.31	10.03	23.34	50.00	-26.66	AVG

Remark:

1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)

2. Margin (dB) = QuasiPeak/Average (dBuV) - Limit (dBuV)



6. Radiated and Conducted Unwanted Emissions

6.1 Test Standard and Limit

6.1.1 Test Standard

RSS-Gen 8.9 & RSS 247 5.5

FCC Part 15.209 & FCC Part 15.247(d)

6.1.2 Test Limit

General field strength limits at frequencies Below 30MHz		
Frequency (MHz)	Field Strength (microvolt/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

Note: 1, The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

General field strength limits at frequencies above 30 MHz		
Frequency (MHz)	Field strength (µV/m at 3 m)	Measurement Distance (meters)
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

General field strength limits at frequencies Above 1000MHz		
Frequency (MHz)	Distance of 3m (dBuV/m)	
	Peak	Average
Above 1000	74	54

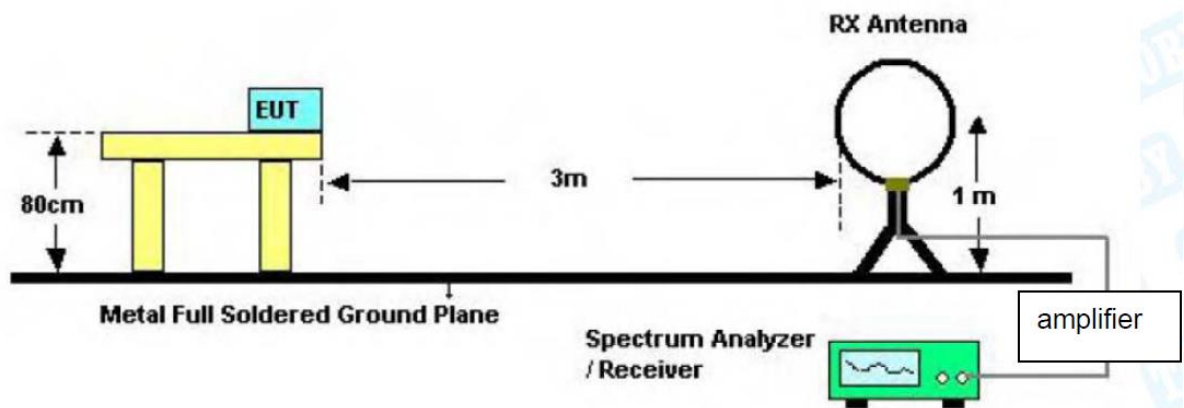
Note:
(1) The tighter limit applies at the band edges.
(2) Emission Level(dBuV/m)=20log Emission Level(uV/m)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 5.4(d), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

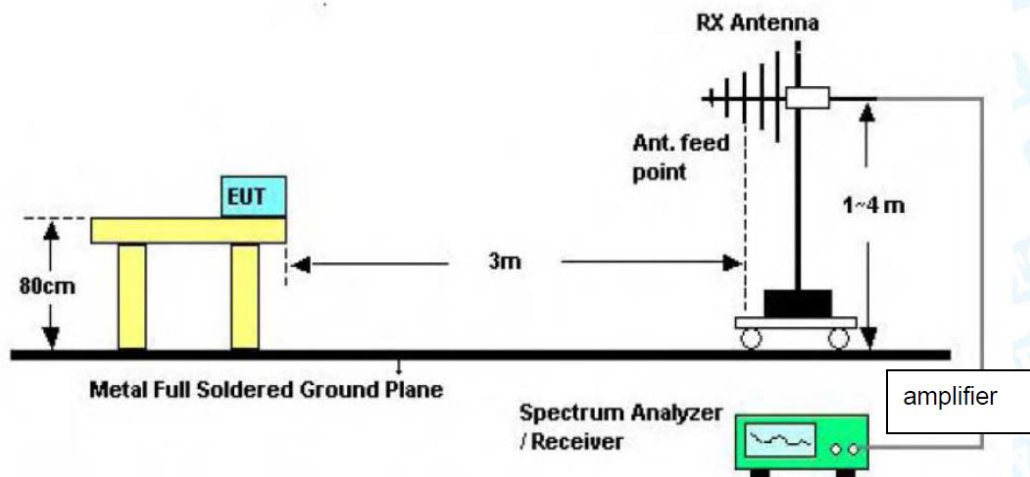


6.2 Test Setup

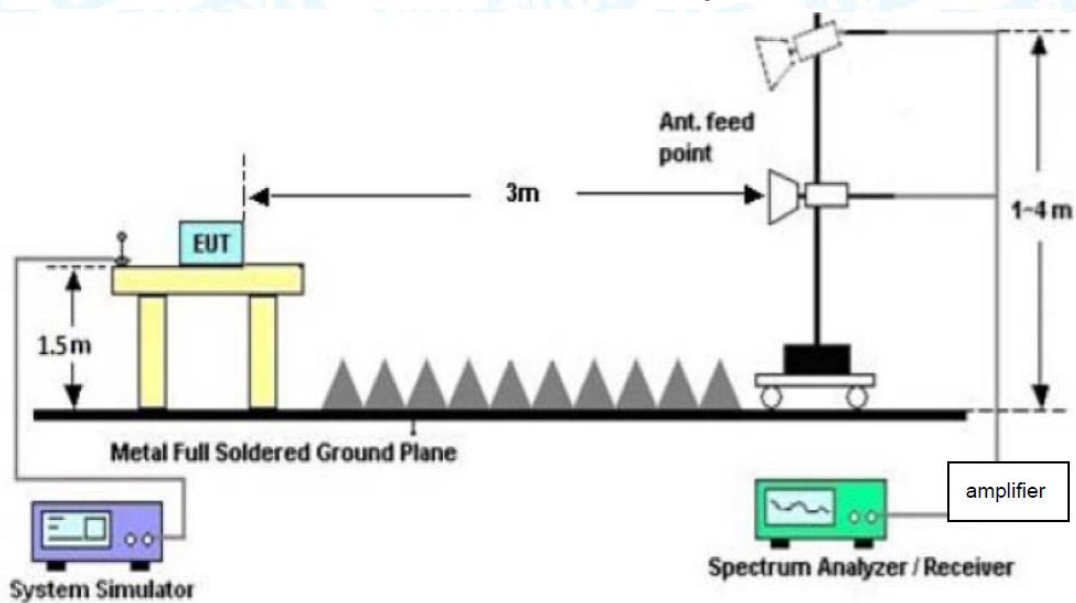
Radiated measurement



Below 30MHz Test Setup



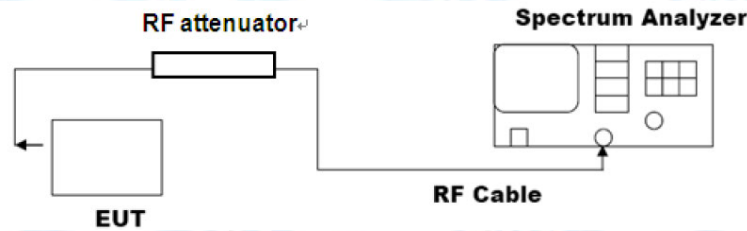
Below 1000MHz Test Setup



Above 1GHz Test Setup



Conducted measurement



6.3 Test Procedure

---Radiated measurement

- The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Below 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- Testing frequency range 30MHz-1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection. Testing frequency range 9KHz-150Hz the measuring instrument use VBW=200Hz with Quasi-peak detection. Testing frequency range 9KHz-30MHz the measuring instrument use VBW=9kHz with Quasi-peak detection.
- Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- For the actual test configuration, please see the test setup photo.

--- Conducted measurement

● Reference level measurement

Establish a reference level by using the following procedure:

- a) Set instrument center frequency to DTS channel center frequency.
- b) Set the span to ≥ 1.5 times the DTS bandwidth.
- c) Set the RBW = 100 kHz.
- d) Set the VBW $\geq [3 \times \text{RBW}]$.
- e) Detector = peak.
- f) Sweep time = auto couple.
- g) Trace mode = max hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum PSD level.

Note that the channel found to contain the maximum PSD level can be used to establish the reference level.

● Emission level measurement

Establish an emission level by using the following procedure:

- a) Set the center frequency and span to encompass frequency range to be measured.
- b) Set the RBW = 100 kHz.
- c) Set the VBW $\geq [3 \times \text{RBW}]$.
- d) Detector = peak.
- e) Sweep time = auto couple.
- f) Trace mode = max hold.



- g) Allow trace to fully stabilize.
 - h) Use the peak marker function to determine the maximum amplitude level.
- Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11. Report the three highest emissions relative to the limit.

6.4 Deviation From Test Standard

No deviation

6.5 EUT Operating Mode

Please refer to the description of test mode.

6.6 Test Data

Please refer to the following pages.



---Radiated Unwanted Emissions

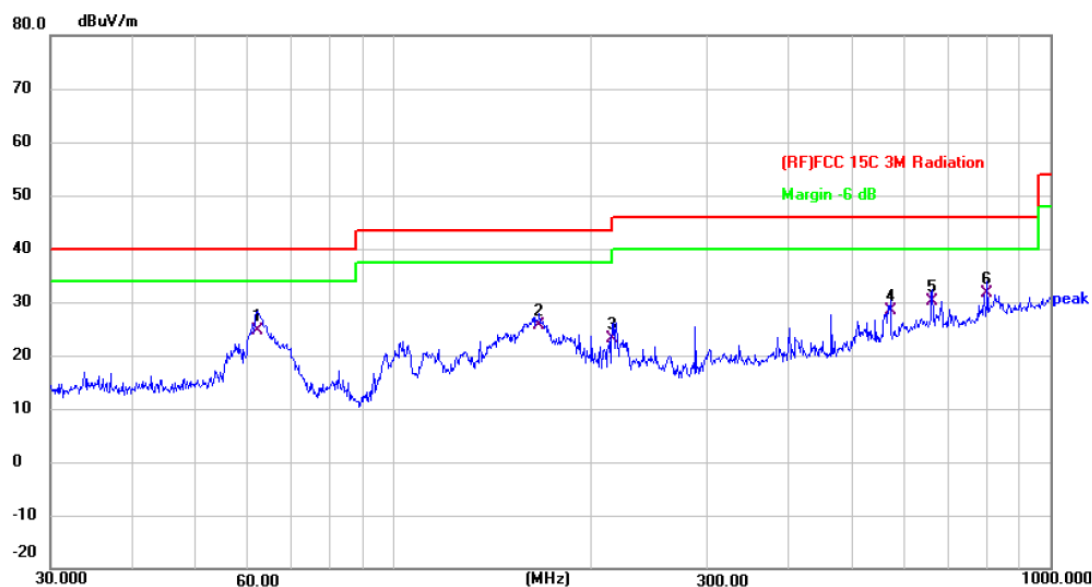
9 KHz~30 MHz

From 9 KHz to 30 MHz: Conclusion: PASS

Note: The amplitude of spurious emissions which are attenuated by more than 20dB
Below the permissible value has no need to be reported.

30MHz~1GHz

Temperature:	23.9℃	Relative Humidity:	44%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	Mode 1 with adapter 1#		
Remark:	Only worse case is reported.		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	61.9950	48.34	-23.80	24.54	40.00	-15.46	QP	P
2	166.6513	48.26	-22.71	25.55	43.50	-17.95	QP	P
3	215.2678	47.30	-24.16	23.14	43.50	-20.36	QP	P
4	570.6100	42.04	-13.56	28.48	46.00	-17.52	QP	P
5	661.1504	41.83	-11.78	30.05	46.00	-15.95	QP	P
6 *	801.7863	40.57	-9.02	31.55	46.00	-14.45	QP	P

Remark:

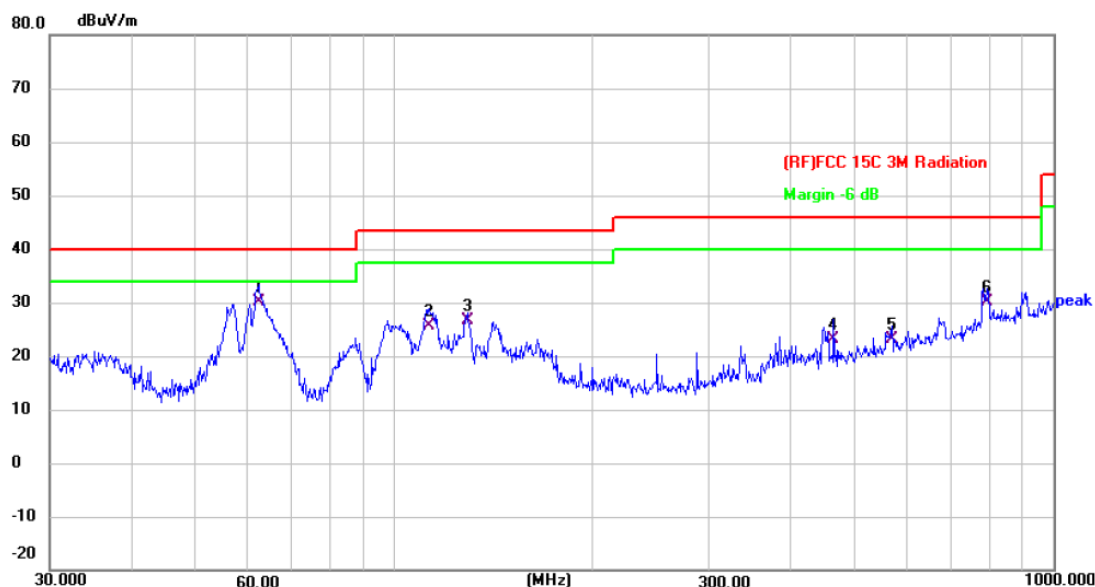
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)

2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)

3. Margin (dB) = QuasiPeak (dBμV/m)-Limit QPK(dBμV/m)



Temperature:	23.9°C	Relative Humidity:	44%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	Mode 1 with adapter 1#		
Remark:	Only worse case is reported.		



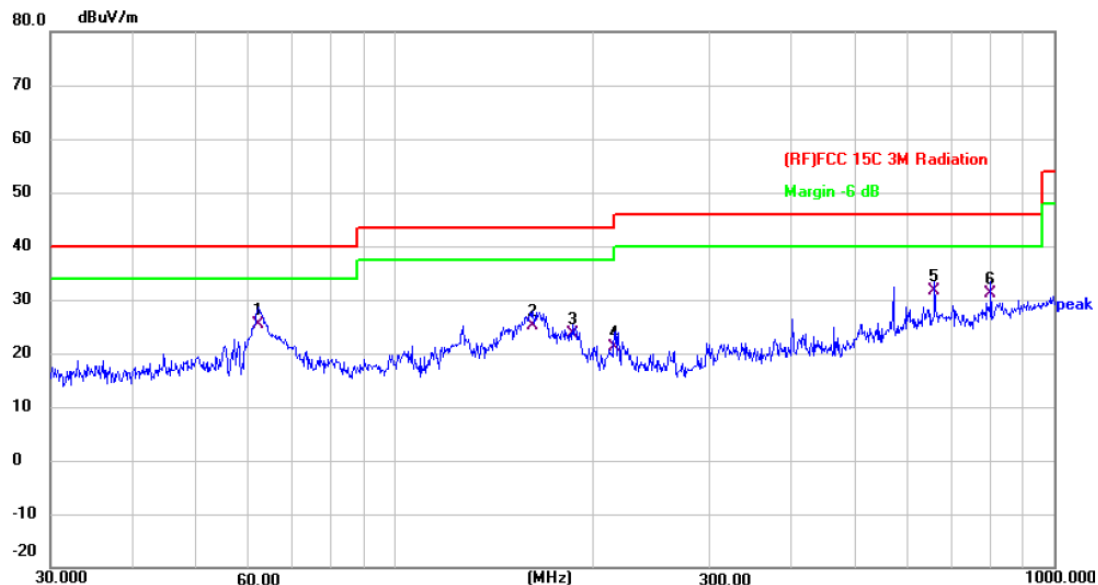
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1 *	62.2128	53.87	-23.82	30.05	40.00	-9.95	QP	P
2	112.9196	49.97	-24.46	25.51	43.50	-17.99	QP	P
3	129.0146	49.84	-23.30	26.54	43.50	-16.96	QP	P
4	463.9696	39.54	-16.29	23.25	46.00	-22.75	QP	P
5	568.6127	36.86	-13.61	23.25	46.00	-22.75	QP	P
6	793.3960	39.25	-9.24	30.01	46.00	-15.99	QP	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = QuasiPeak (dBμV/m)-Limit QPK(dBμV/m)



Temperature:	23.9°C	Relative Humidity:	44%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	Mode 1 with adapter 2#		
Remark:	Only worse case is reported.		



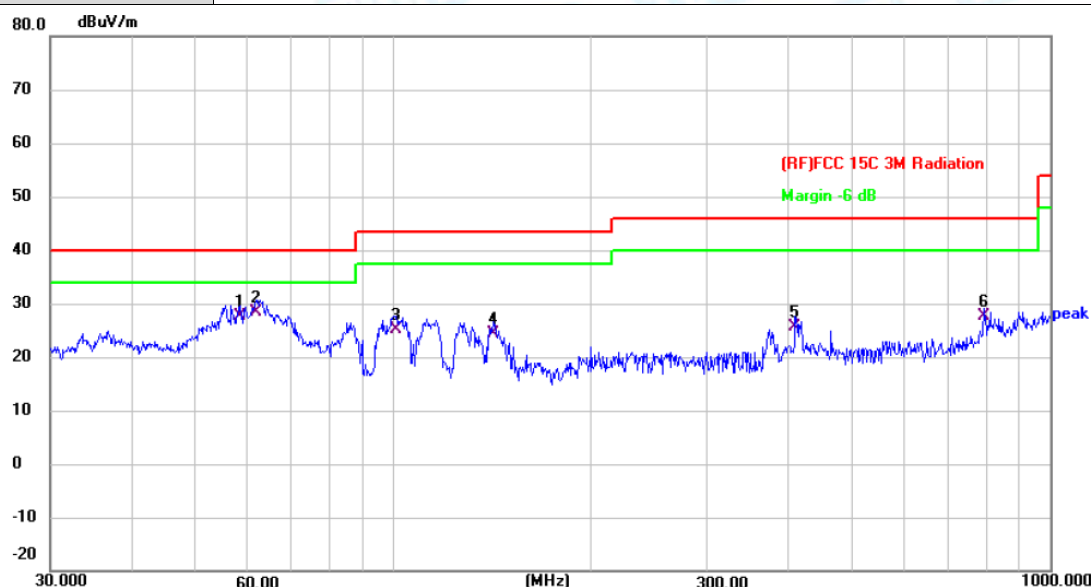
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	61.9949	49.27	-23.80	25.47	40.00	-14.53	QP	P
2	161.4738	47.41	-22.27	25.14	43.50	-18.36	QP	P
3	185.7880	47.73	-24.18	23.55	43.50	-19.95	QP	P
4	215.2675	45.41	-24.16	21.25	43.50	-22.25	QP	P
5 *	658.8360	43.36	-11.81	31.55	46.00	-14.45	QP	P
6	801.7862	40.07	-9.02	31.05	46.00	-14.95	QP	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = QuasiPeak (dBμV/m)-Limit QPK(dBμV/m)



Temperature:	23.9°C	Relative Humidity:	44%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	Mode 1 with adapter 2#		
Remark:	Only worse case is reported.		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	58.4074	51.03	-23.47	27.56	40.00	-12.44	QP	P
2 *	61.7779	52.20	-23.79	28.41	40.00	-11.59	QP	P
3	100.9338	50.74	-25.60	25.14	43.50	-18.36	QP	P
4	141.8262	47.00	-22.63	24.37	43.50	-19.13	QP	P
5	408.9458	43.22	-17.67	25.55	46.00	-20.45	QP	P
6	793.3958	36.88	-9.24	27.64	46.00	-18.36	QP	P

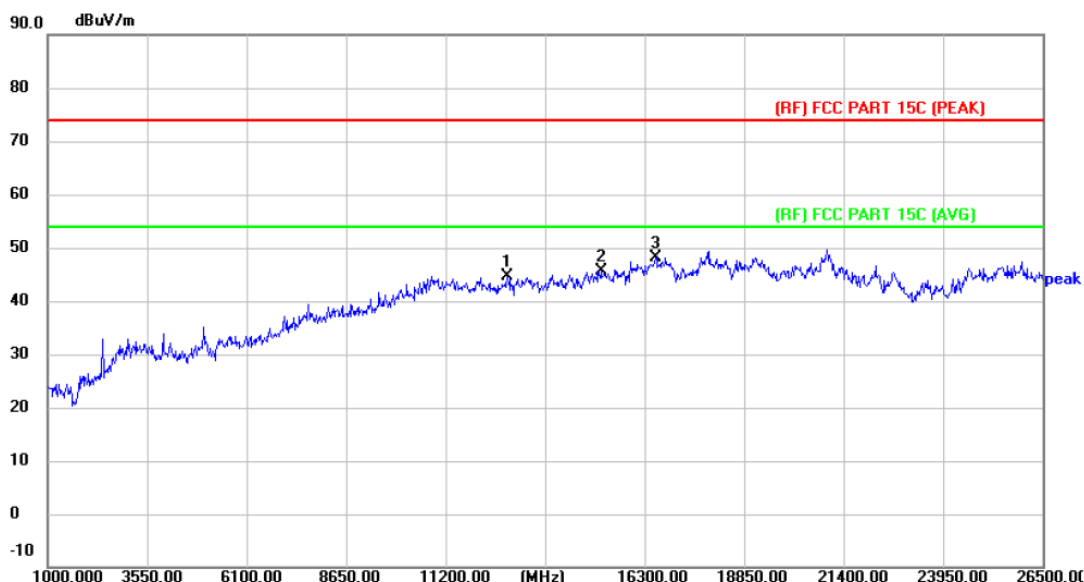
Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = QuasiPeak (dBμV/m)-Limit QPK(dBμV/m)



Above 1GHz

Temperature:	23.8℃	Relative Humidity:	45%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	1DH5 Mode TX 2402 MHz		
Remark:	Only worse case is reported.		



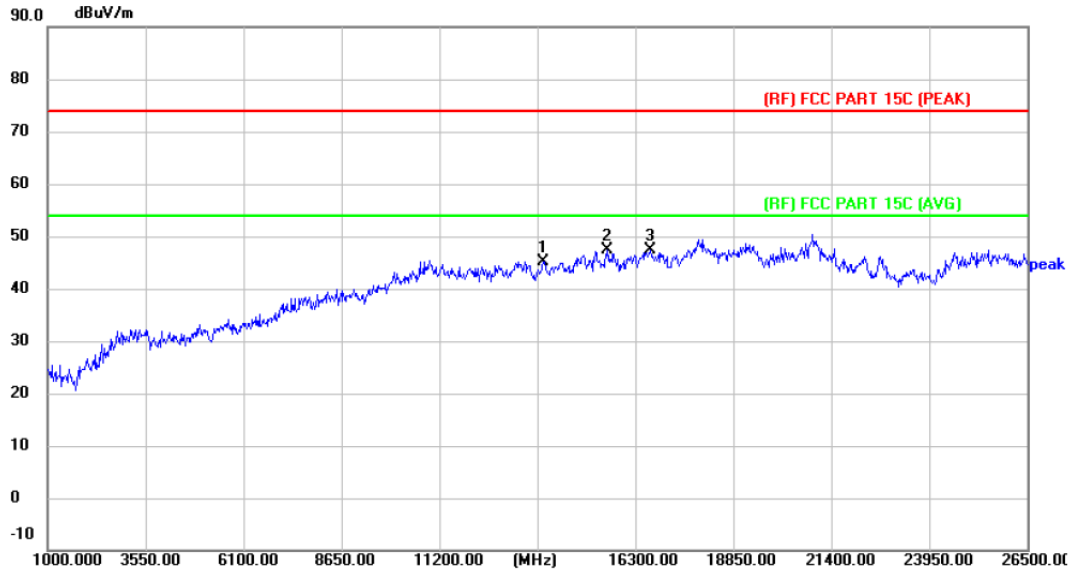
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	12781.000	39.16	5.42	44.58	74.00	-29.42	peak	P
2	15178.000	39.21	6.49	45.70	74.00	-28.30	peak	P
3 *	16580.500	42.37	5.82	48.19	74.00	-25.81	peak	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m) = Corr. (dB/m) + Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m) - Limit PK/AVG (dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.
6. The peak value < average limit, So only show the peak value.



Temperature:	23.8℃	Relative Humidity:	45%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	1DH5 Mode TX 2402 MHz		
Remark:	Only worse case is reported.		



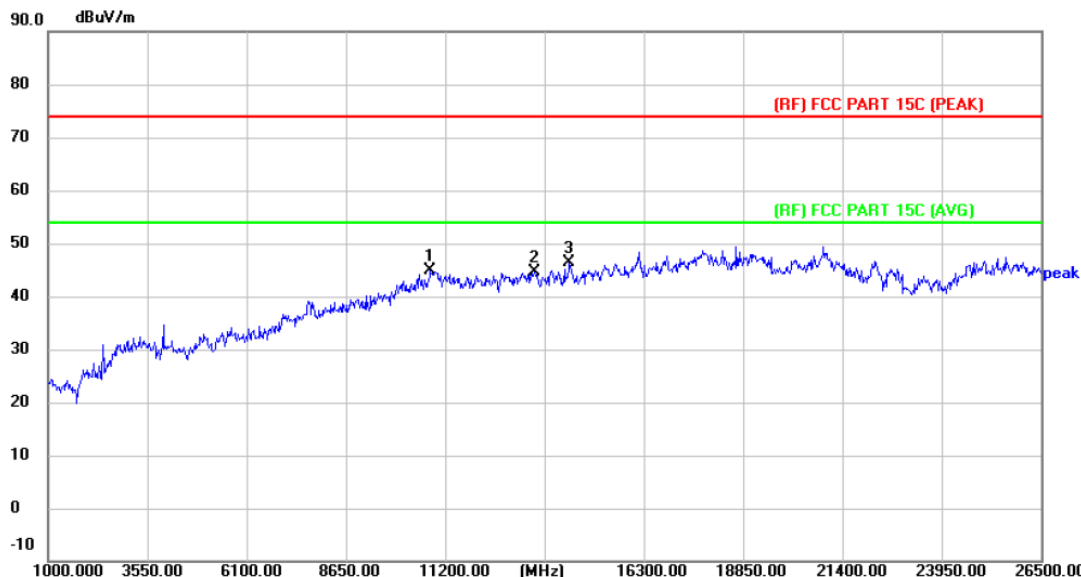
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	13903.000	38.24	7.01	45.25	74.00	-28.75	peak	P
2	15560.500	42.12	5.17	47.29	74.00	-26.71	peak	P
3 *	16682.500	41.18	6.15	47.33	74.00	-26.67	peak	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m) = Corr. (dB/m) + Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m) - Limit PK/AVG (dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.
6. The peak value < average limit, So only show the peak value.



Temperature:	23.8℃	Relative Humidity:	45%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	1DH5 Mode TX 2441MHz		
Remark:	Only worse case is reported.		



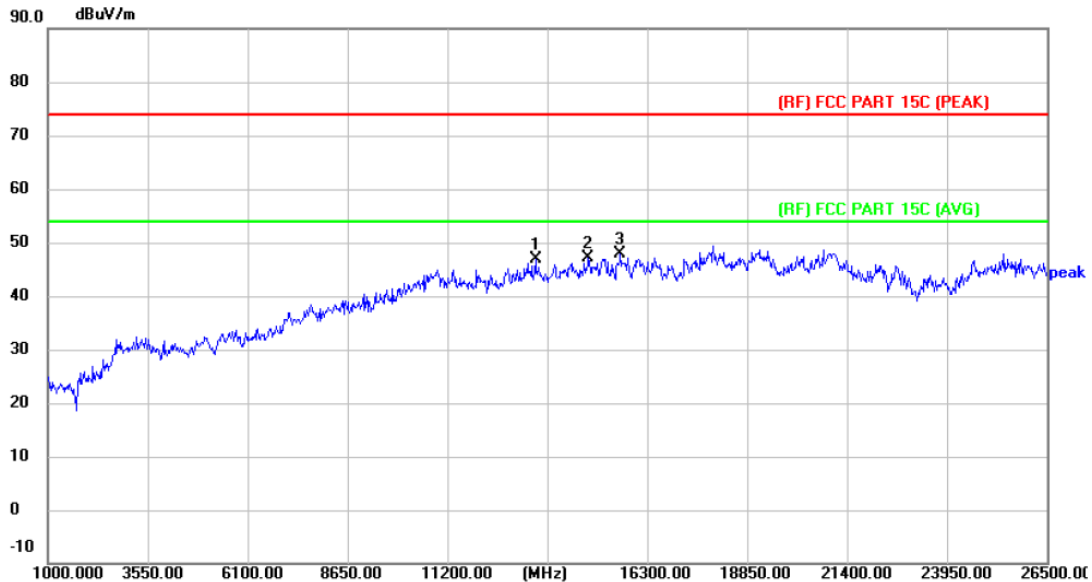
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10817.500	40.97	3.83	44.80	74.00	-29.20	peak	P
2	13495.000	38.63	6.11	44.74	74.00	-29.26	peak	P
3 *	14387.500	39.54	6.91	46.45	74.00	-27.55	peak	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.
6. The peak value<average limit, So only show the peak value.



Temperature:	23.8℃	Relative Humidity:	45%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	1DH5 Mode TX 2441MHz		
Remark:	Only worse case is reported.		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	13444.000	40.74	6.15	46.89	74.00	-27.11	peak	P
2	14795.500	40.63	6.58	47.21	74.00	-26.79	peak	P
3 *	15611.500	42.86	4.90	47.76	74.00	-26.24	peak	P

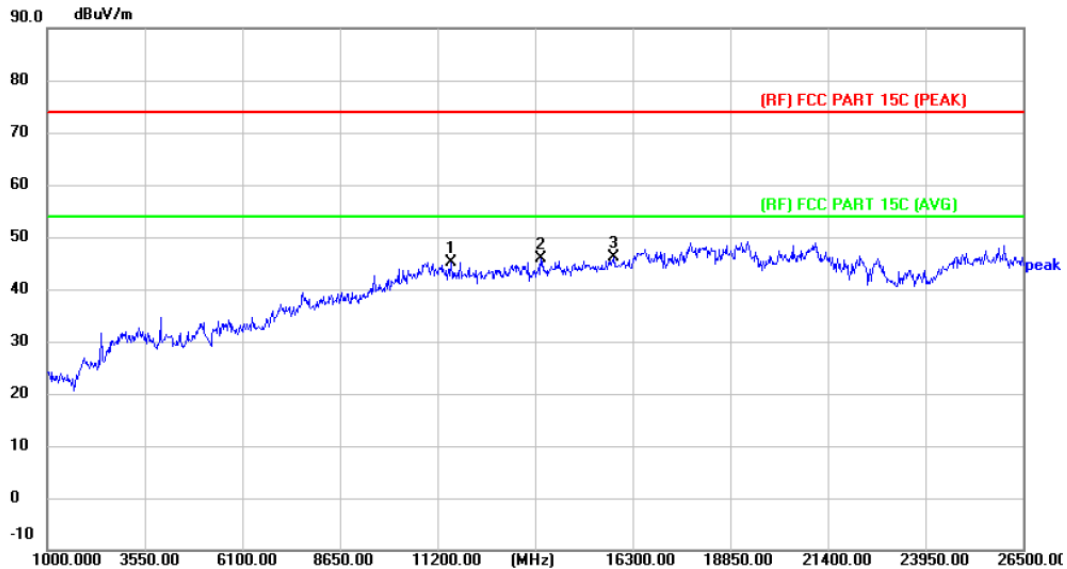
Remark:

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBuV/m) = Corr. (dB/m) + Read Level (dBuV)
3. Margin (dB) = Peak/AVG (dBuV/m) - Limit PK/AVG (dBuV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.
6. The peak value < average limit, So only show the peak value.



Temperature:	23.8°C	Relative Humidity:	45%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	1DH5 Mode TX 2480MHz		
Remark:	Only worse case is reported.		



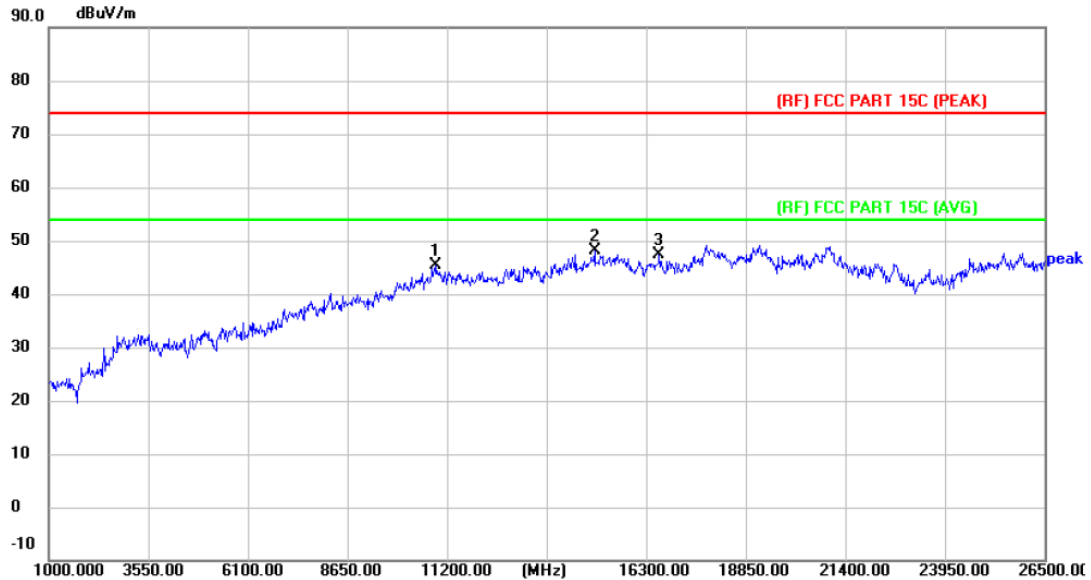
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	11557.000	40.43	4.79	45.22	74.00	-28.78	peak	P
2	13903.000	38.88	7.01	45.89	74.00	-28.11	peak	P
3 *	15815.500	41.99	4.12	46.11	74.00	-27.89	peak	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m) = Corr. (dB/m) + Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m) - Limit PK/AVG (dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.
6. The peak value < average limit, So only show the peak value.



Temperature:	23.8℃	Relative Humidity:	45%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	1DH5 Mode TX 2480MHz		
Remark:	Only worse case is reported.		



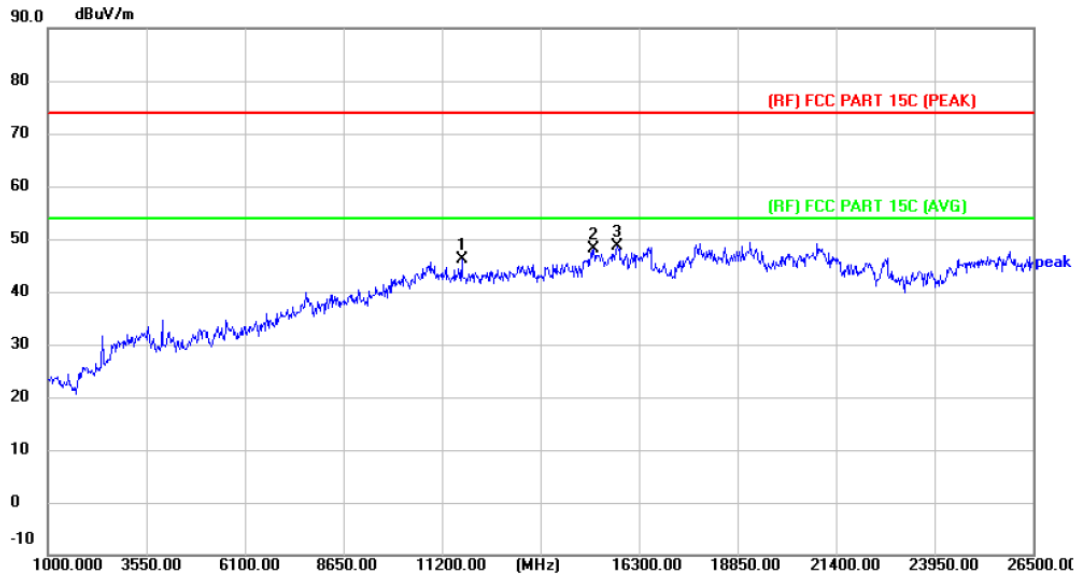
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10919.500	41.28	4.21	45.49	74.00	-28.51	peak	P
2 *	14974.000	40.64	7.37	48.01	74.00	-25.99	peak	P
3	16631.500	41.32	6.03	47.35	74.00	-26.65	peak	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.
6. The peak value<average limit, So only show the peak value.



Temperature:	23.8°C	Relative Humidity:	45%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	2DH5 Mode TX 2402MHz		
Remark:	Only worse case is reported.		



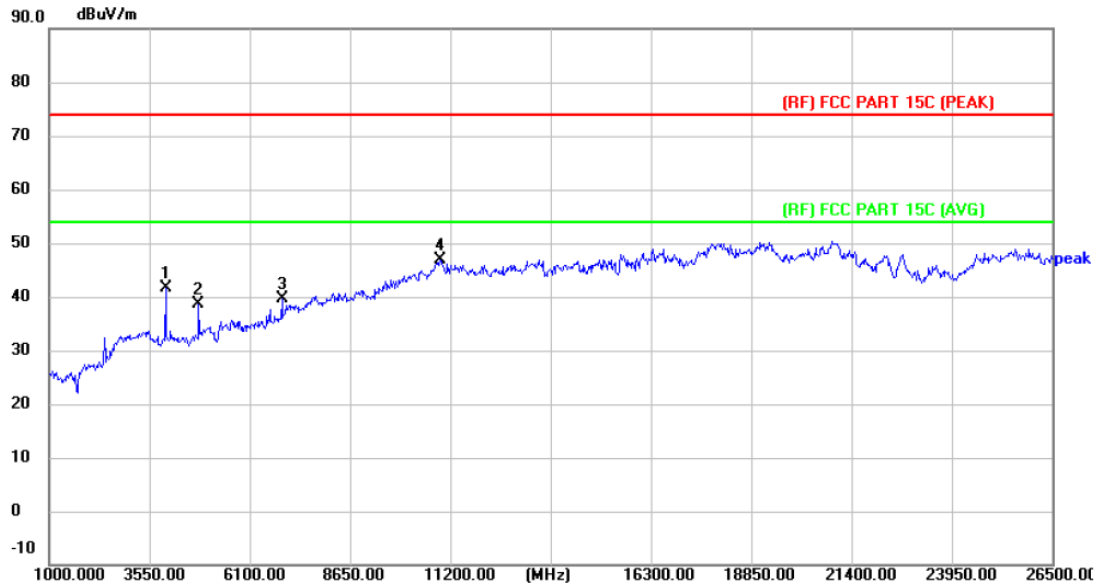
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	11710.000	41.23	4.78	46.01	74.00	-27.99	peak	P
2	15127.000	40.77	7.24	48.01	74.00	-25.99	peak	P
3 *	15739.000	44.37	4.18	48.55	74.00	-25.45	peak	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m) = Corr. (dB/m) + Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m) - Limit PK/AVG (dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.
6. The peak value < average limit, So only show the peak value.



Temperature:	23.8℃	Relative Humidity:	45%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	2DH5 Mode TX 2402MHz		
Remark:	Only worse case is reported.		



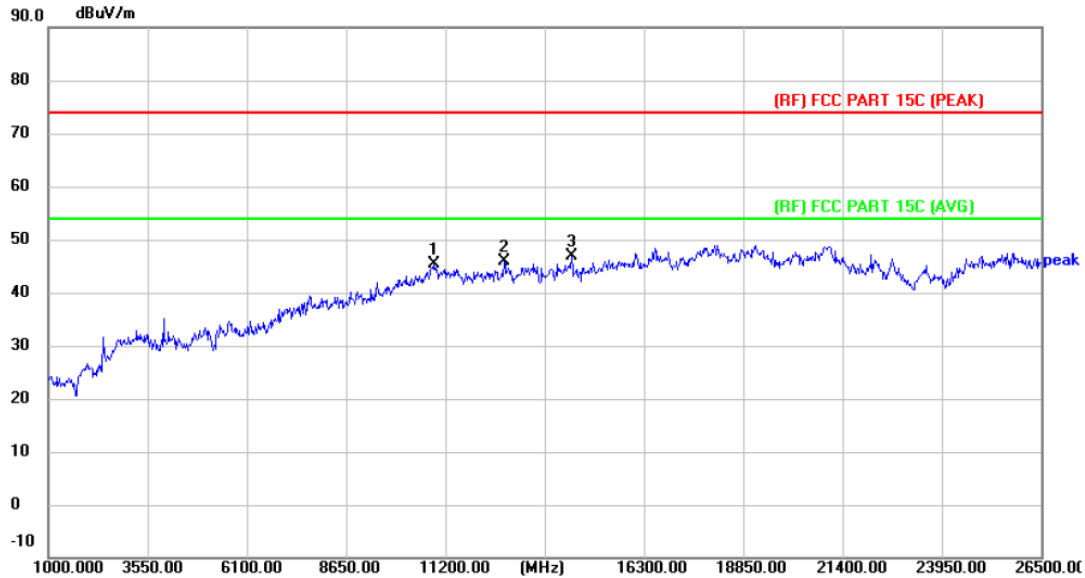
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	3958.000	58.47	-16.81	41.66	74.00	-32.34	peak	P
2	4799.500	52.75	-14.03	38.72	74.00	-35.28	peak	P
3	6916.000	48.99	-9.27	39.72	74.00	-34.28	peak	P
4 *	10945.000	42.60	4.20	46.80	74.00	-27.20	peak	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m) = Corr. (dB/m) + Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m) - Limit PK/AVG (dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.
6. The peak value < average limit, So only show the peak value.



Temperature:	23.8°C	Relative Humidity:	45%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	2DH5 Mode TX 2441MHz		
Remark:	Only worse case is reported.		



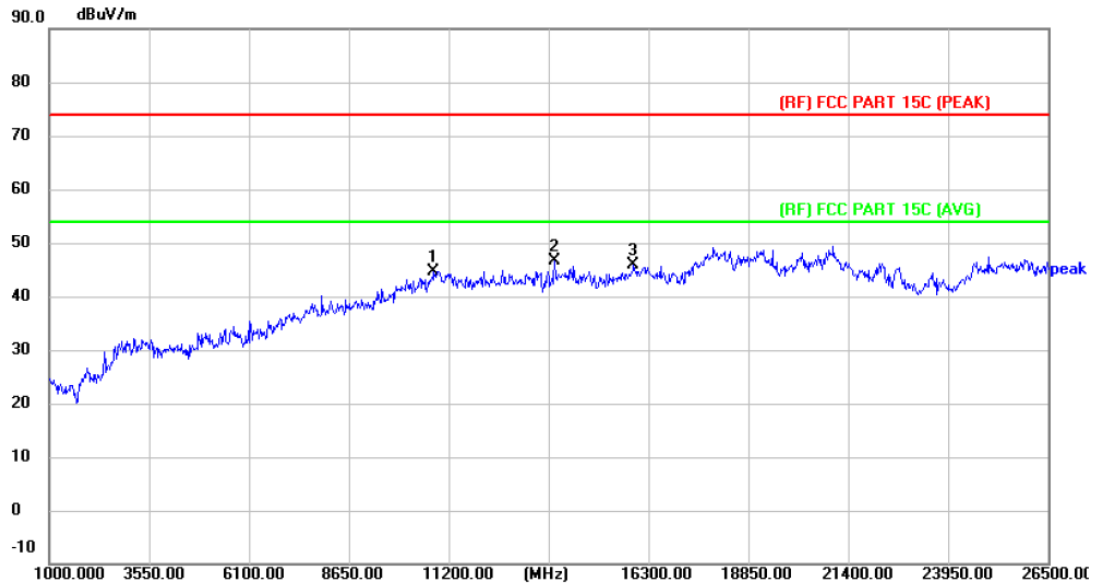
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10919.500	41.08	4.21	45.29	74.00	-28.71	peak	P
2	12704.500	40.22	5.63	45.85	74.00	-28.15	peak	P
3 *	14438.500	40.01	6.86	46.87	74.00	-27.13	peak	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m) = Corr. (dB/m) + Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m) - Limit PK/AVG (dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.
6. The peak value < average limit, So only show the peak value.



Temperature:	23.8℃	Relative Humidity:	45%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	2DH5 Mode TX 2441MHz		
Remark:	Only worse case is reported.		



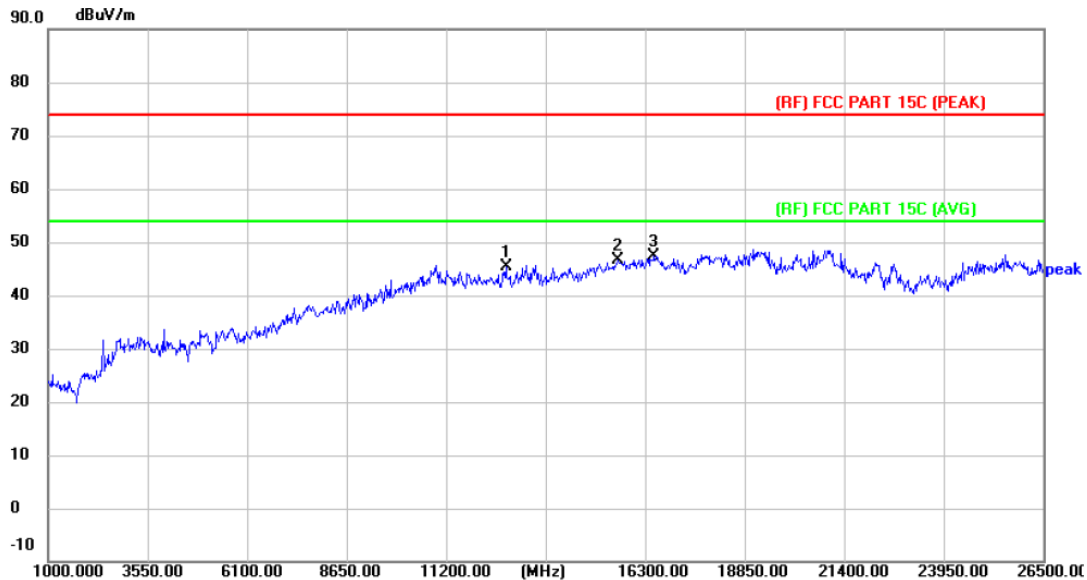
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10817.500	40.91	3.83	44.74	74.00	-29.26	peak	P
2 *	13903.000	39.55	7.01	46.56	74.00	-27.44	peak	P
3	15917.500	42.56	3.39	45.95	74.00	-28.05	peak	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.
6. The peak value<average limit, So only show the peak value.



Temperature:	23.8°C	Relative Humidity:	45%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	2DH5 Mode TX 2480MHz		
Remark:	Only worse case is reported.		



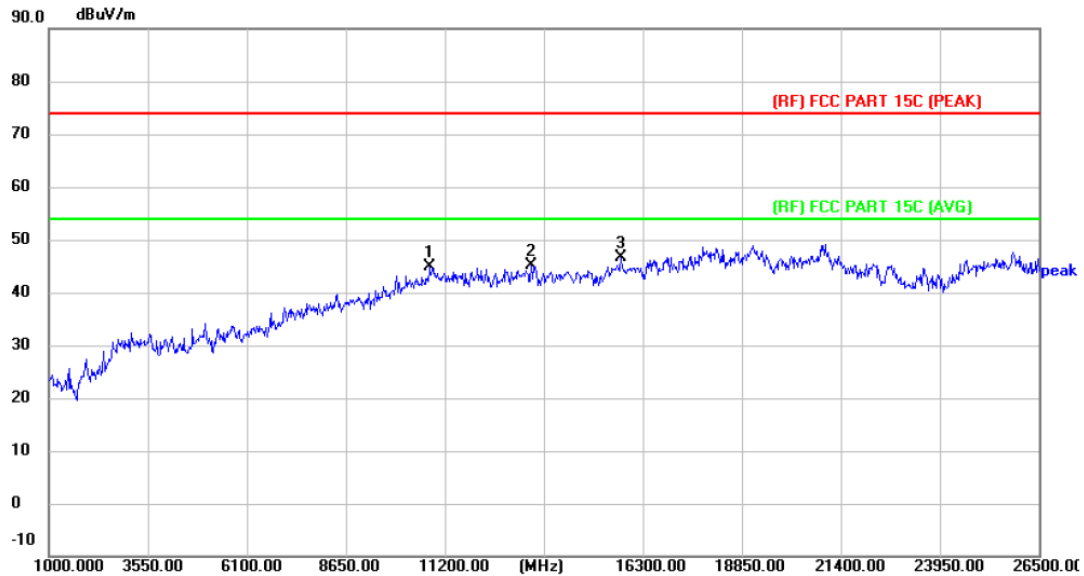
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	12730.000	39.88	5.56	45.44	74.00	-28.56	peak	P
2	15611.500	41.61	4.90	46.51	74.00	-27.49	peak	P
3 *	16529.500	41.93	5.47	47.40	74.00	-26.60	peak	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m) = Corr. (dB/m) + Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m) - Limit PK/AVG (dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.
6. The peak value < average limit, So only show the peak value.



Temperature:	23.8°C	Relative Humidity:	45%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	2DH5 Mode TX 2480MHz		
Remark:	Only worse case is reported.		



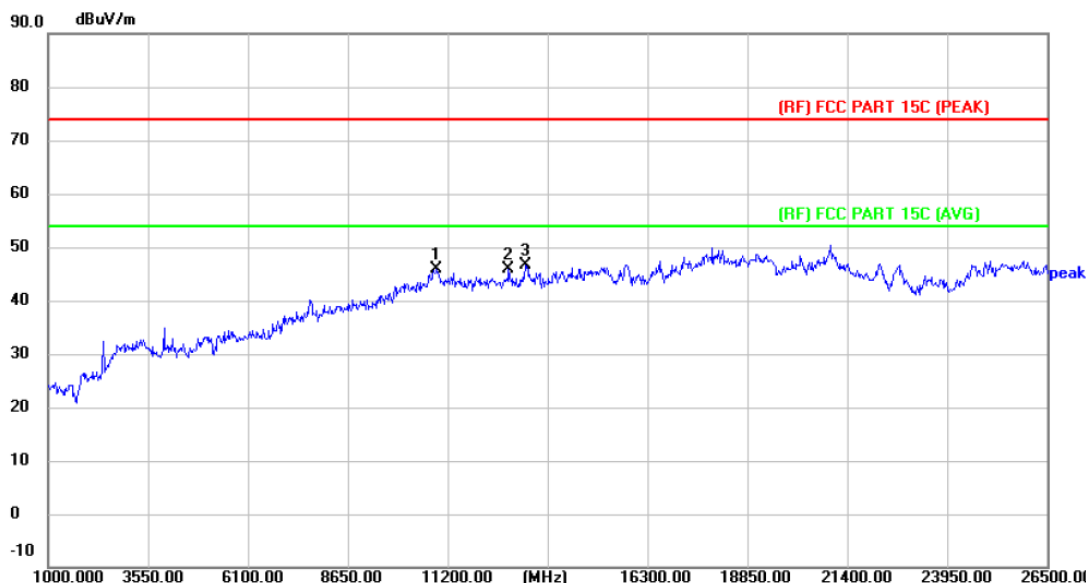
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10817.500	41.02	3.83	44.85	74.00	-29.15	peak	P
2	13418.500	38.99	6.17	45.16	74.00	-28.84	peak	P
3 *	15739.000	42.46	4.18	46.64	74.00	-27.36	peak	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m) = Corr. (dB/m) + Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m) - Limit PK/AVG (dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.
6. The peak value < average limit, So only show the peak value.



Temperature:	23.8°C	Relative Humidity:	45%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	3DH5 Mode TX 2402MHz		
Remark:	Only worse case is reported.		



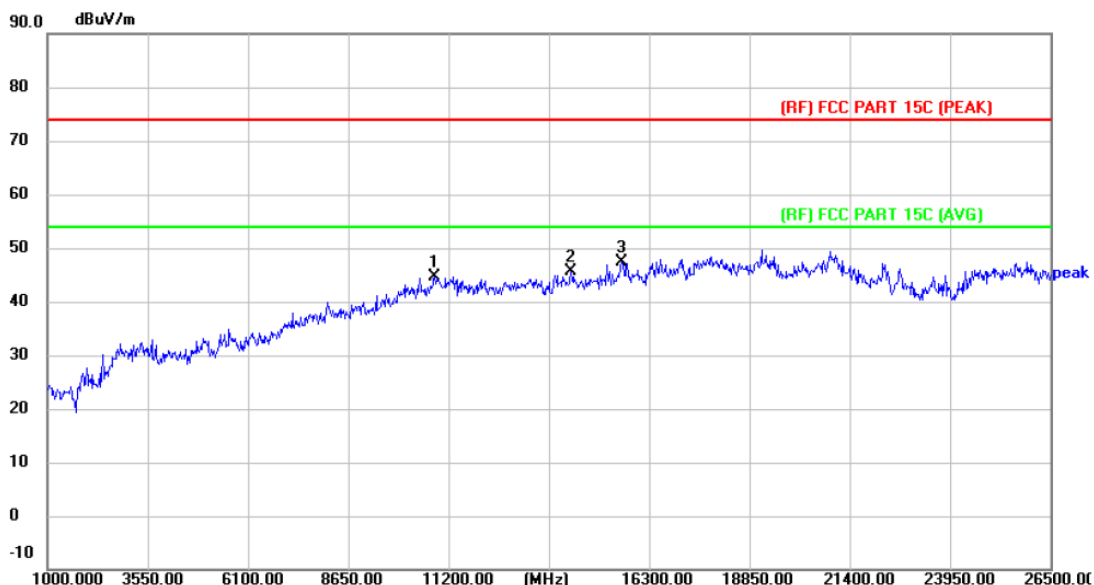
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10919.500	41.62	4.21	45.83	74.00	-28.17	peak	P
2	12755.500	40.49	5.49	45.98	74.00	-28.02	peak	P
3 *	13189.000	40.79	5.81	46.60	74.00	-27.40	peak	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m) = Corr. (dB/m) + Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m) - Limit PK/AVG (dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.
6. The peak value < average limit, So only show the peak value.



Temperature:	23.8°C	Relative Humidity:	45%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	3DH5 Mode TX 2402MHz		
Remark:	Only worse case is reported.		



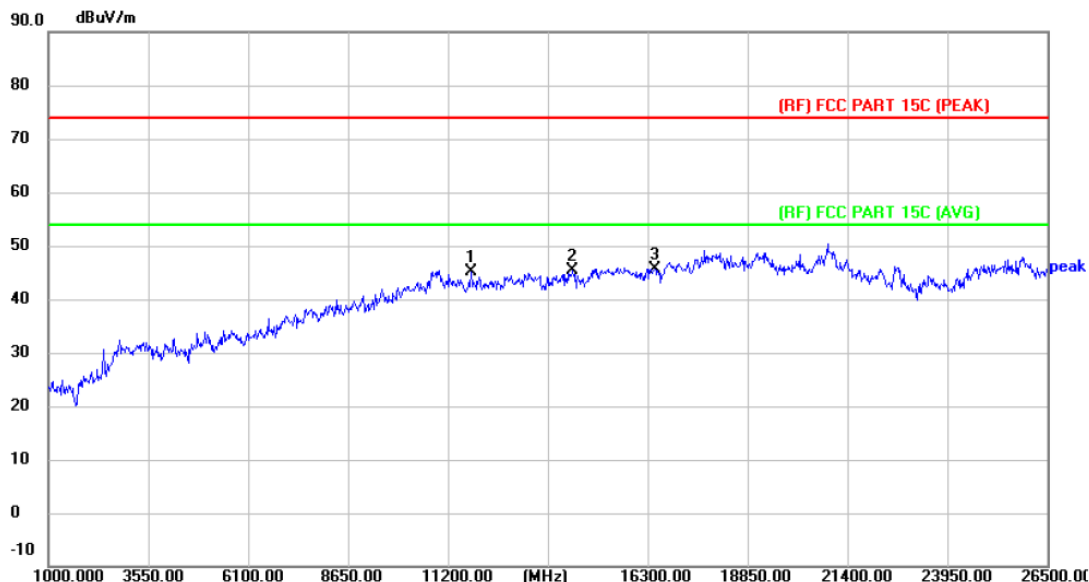
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10843.000	40.75	3.96	44.71	74.00	-29.29	peak	P
2	14311.000	39.38	6.37	45.75	74.00	-28.25	peak	P
3 *	15586.000	42.20	5.06	47.26	74.00	-26.74	peak	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBuV/m) = Corr. (dB/m) + Read Level (dBuV)
3. Margin (dB) = Peak/AVG (dBuV/m) - Limit PK/AVG (dBuV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.
6. The peak value < average limit, So only show the peak value.



Temperature:	23.8℃	Relative Humidity:	45%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	3DH5 Mode TX 2441MHz		
Remark:	Only worse case is reported.		



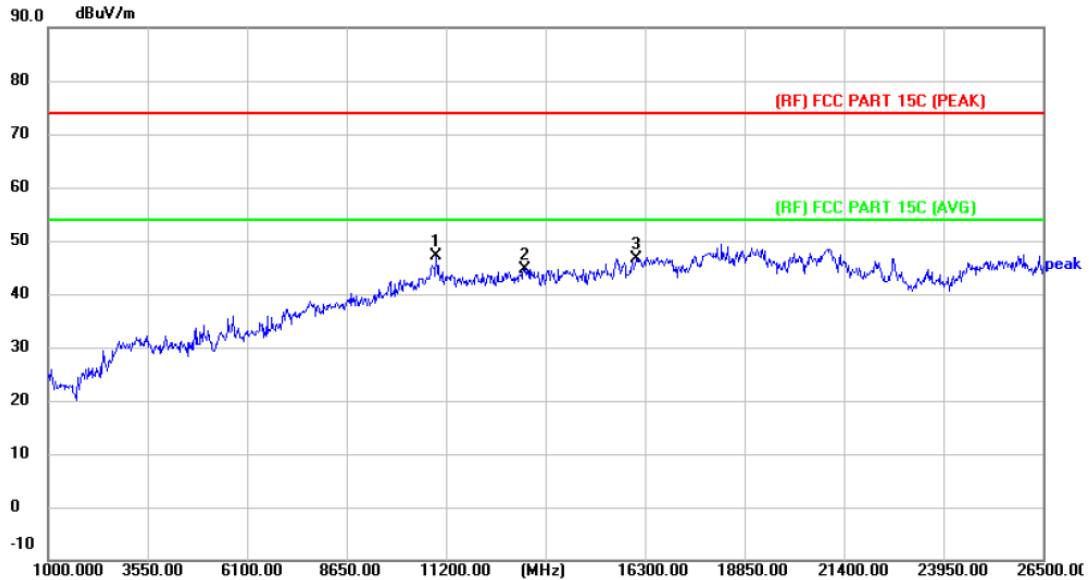
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	11786.500	40.03	5.04	45.07	74.00	-28.93	peak	P
2	14387.500	38.35	6.91	45.26	74.00	-28.74	peak	P
3 *	16478.500	40.67	5.08	45.75	74.00	-28.25	peak	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m) = Corr. (dB/m) + Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m) - Limit PK/AVG (dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.
6. The peak value < average limit, So only show the peak value.



Temperature:	23.8°C	Relative Humidity:	45%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	3DH5 Mode TX 2441MHz		
Remark:	Only worse case is reported.		



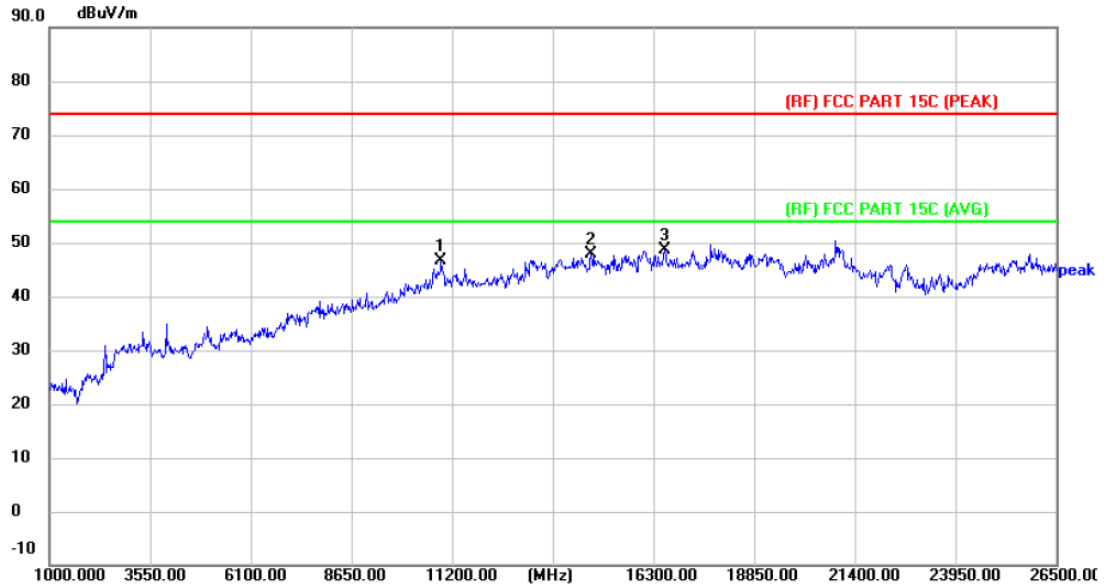
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1 *	10945.000	42.91	4.20	47.11	74.00	-26.89	peak	P
2	13214.500	38.95	5.80	44.75	74.00	-29.25	peak	P
3	16070.500	42.80	3.91	46.71	74.00	-27.29	peak	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m) = Corr. (dB/m) + Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m) - Limit PK/AVG (dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.
6. The peak value < average limit, So only show the peak value.



Temperature:	23.8°C	Relative Humidity:	45%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	3DH5 Mode TX 2480MHz		
Remark:	Only worse case is reported.		



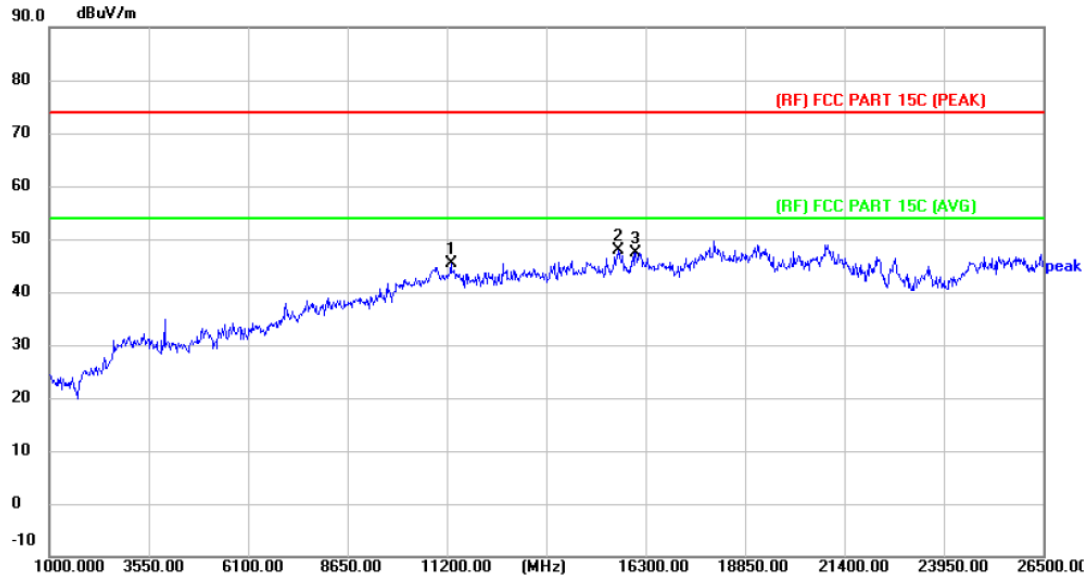
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10919.500	42.49	4.21	46.70	74.00	-27.30	peak	P
2	14719.000	40.96	6.82	47.78	74.00	-26.22	peak	P
3 *	16580.500	42.69	5.82	48.51	74.00	-25.49	peak	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m) = Corr. (dB/m) + Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m) - Limit PK/AVG (dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.
6. The peak value < average limit, So only show the peak value.



Temperature:	23.8°C	Relative Humidity:	45%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	3DH5 Mode TX 2480MHz		
Remark:	Only worse case is reported.		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	11302.000	40.65	4.85	45.50	74.00	-28.50	peak	P
2 *	15611.500	42.87	4.90	47.77	74.00	-26.23	peak	P
3	16045.000	43.75	3.72	47.47	74.00	-26.53	peak	P

Remark:

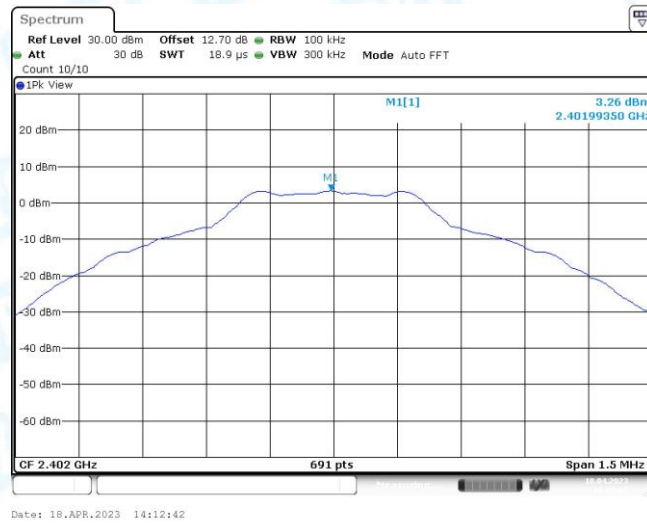
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m) = Corr. (dB/m) + Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m) - Limit PK/AVG (dBμV/m)
4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
5. No report for the emission which more than 20dB below the prescribed limit.
6. The peak value < average limit, So only show the peak value.



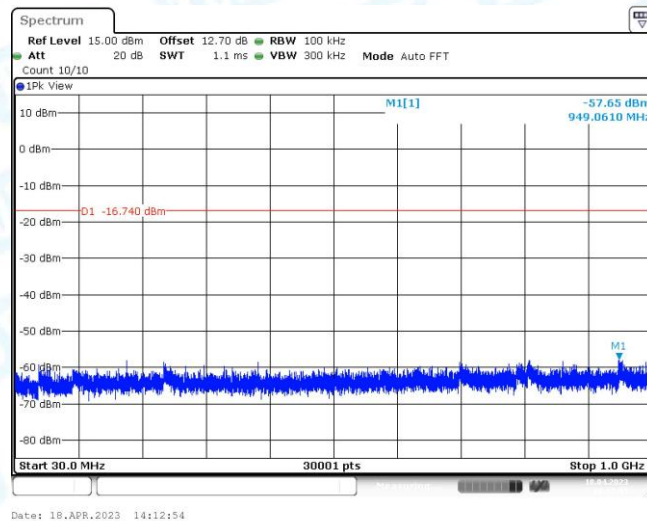
---Conducted Unwanted Emissions

Test Mode	Channel	Freq Range [MHz]	Ref Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	2402	Reference	3.26	3.26	---	PASS
		30~1000	3.26	-57.65	≤-16.74	PASS
		1000~26500	3.26	-47.9	≤-16.74	PASS
	2441	Reference	5.09	5.09	---	PASS
		30~1000	5.09	-57.07	≤-14.91	PASS
		1000~26500	5.09	-47.49	≤-14.91	PASS
	2480	Reference	4.24	4.24	---	PASS
		30~1000	4.24	-56.83	≤-15.76	PASS
		1000~26500	4.24	-48.87	≤-15.76	PASS
2DH5	2402	Reference	6.71	6.71	---	PASS
		30~1000	6.71	-57.47	≤-13.29	PASS
		1000~26500	6.71	-46.83	≤-13.29	PASS
	2441	Reference	5.94	5.94	---	PASS
		30~1000	5.94	-56.89	≤-14.06	PASS
		1000~26500	5.94	-48.8	≤-14.06	PASS
	2480	Reference	4.91	4.91	---	PASS
		30~1000	4.91	-57.65	≤-15.09	PASS
		1000~26500	4.91	-48.79	≤-15.09	PASS
3DH5	2402	Reference	6.69	6.69	---	PASS
		30~1000	6.69	-57.23	≤-13.31	PASS
		1000~26500	6.69	-48.77	≤-13.31	PASS
	2441	Reference	5.94	5.94	---	PASS
		30~1000	5.94	-58.1	≤-14.06	PASS
		1000~26500	5.94	-48.35	≤-14.06	PASS
	2480	Reference	4.89	4.89	---	PASS
		30~1000	4.89	-57.65	≤-15.11	PASS
		1000~26500	4.89	-47.65	≤-15.11	PASS

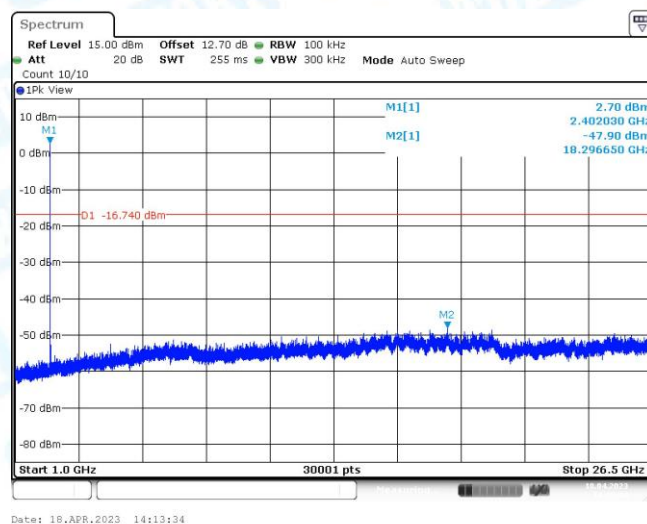




DH5_2402_0~Reference

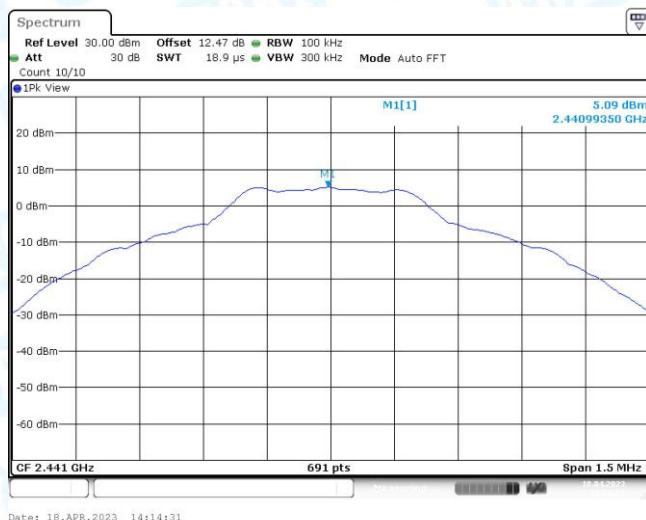


DH5_2402_30~1000

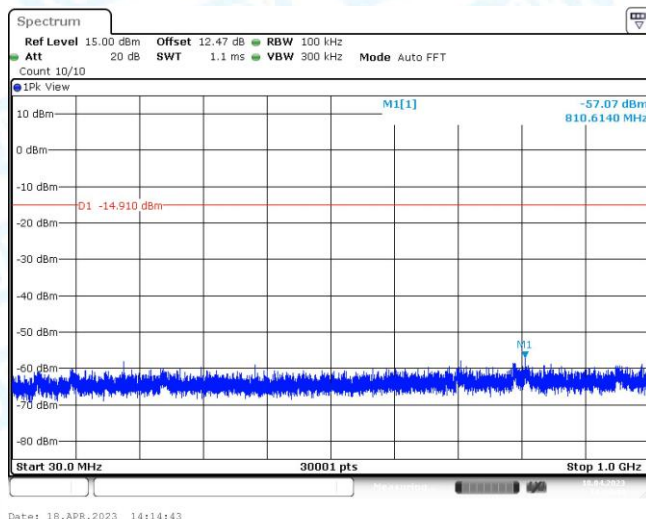


DH5_2402_1000~26500

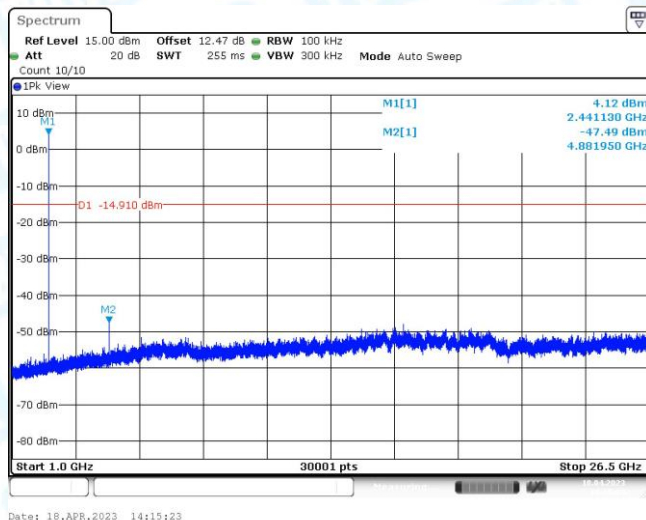




DH5_2441_0~Reference

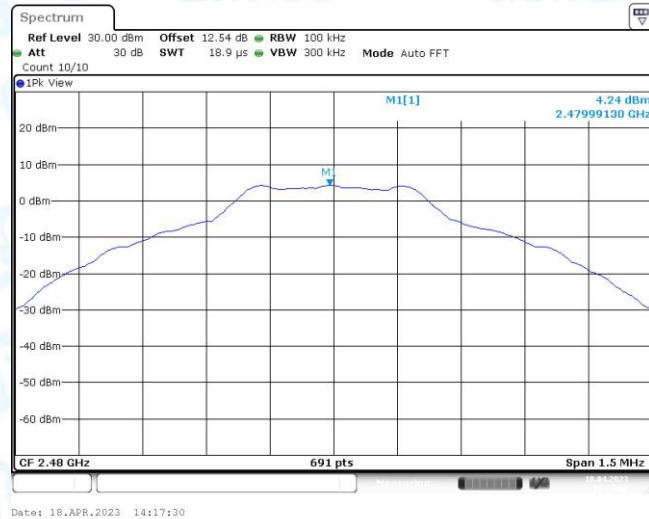


DH5_2441_30~1000

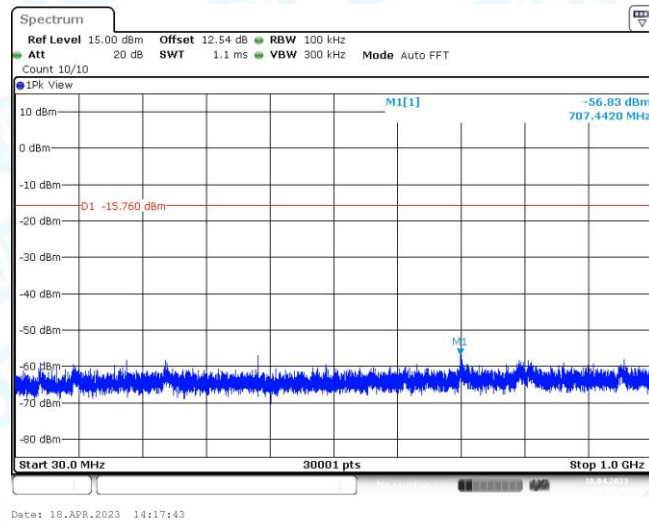


DH5_2441_1000~26500

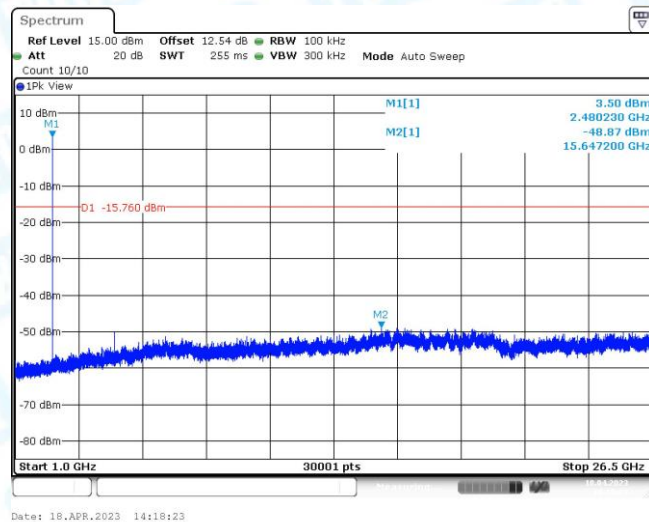




DH5_2480_0~Reference

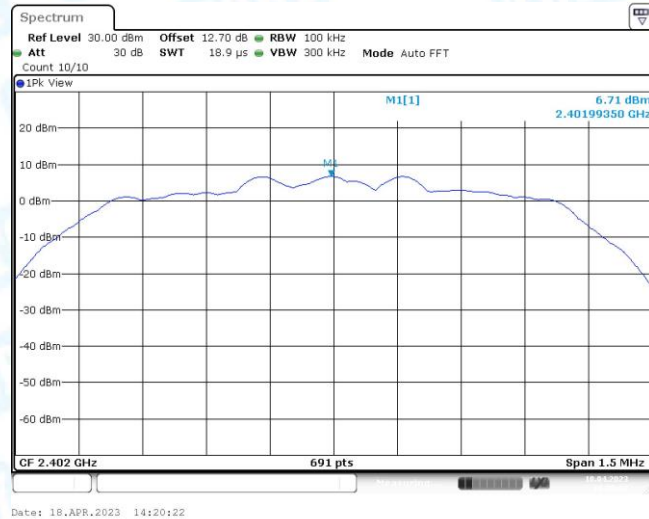


DH5_2480_30~1000

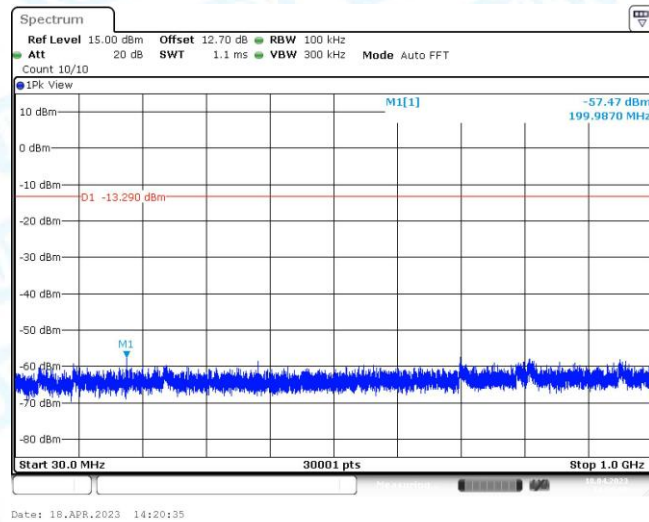


DH5_2480_1000~26500

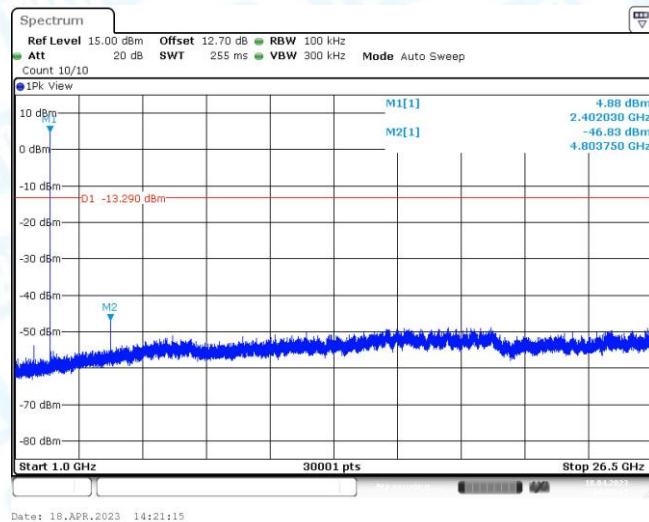




2DH5_2402_0~Reference

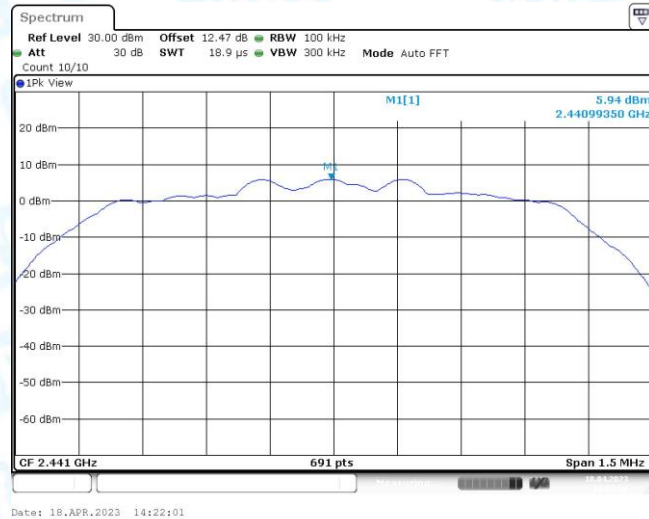


2DH5_2402_30~1000

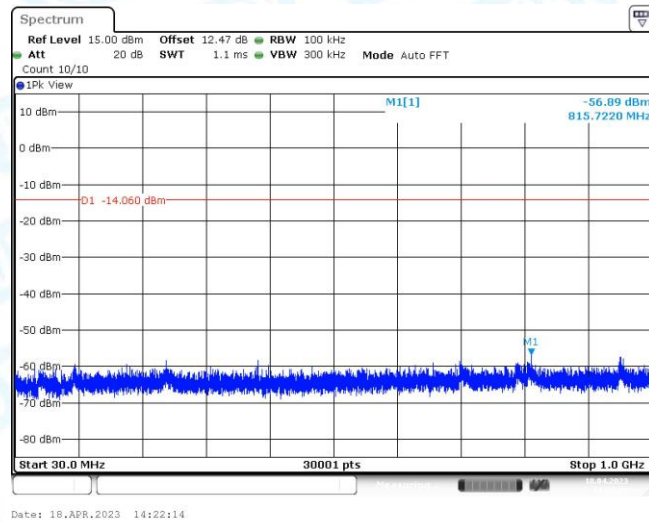


2DH5_2402_1000~26500

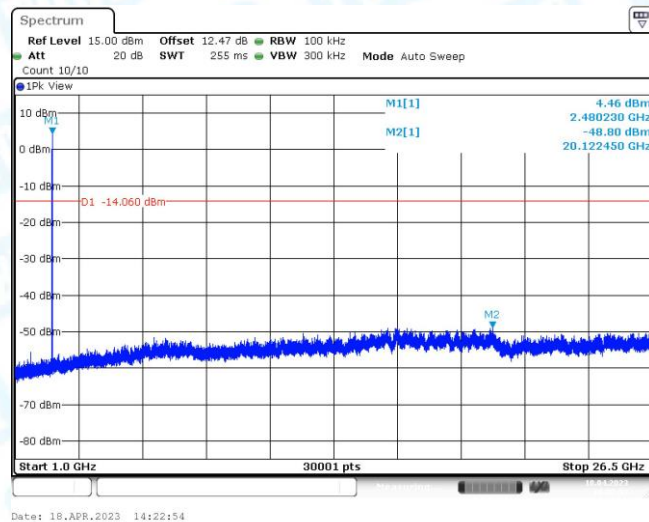




2DH5_2441_0~Reference

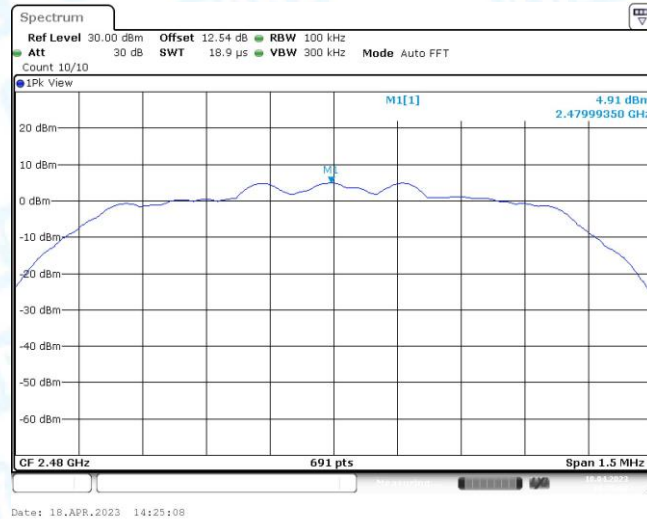


2DH5_2441_30~1000

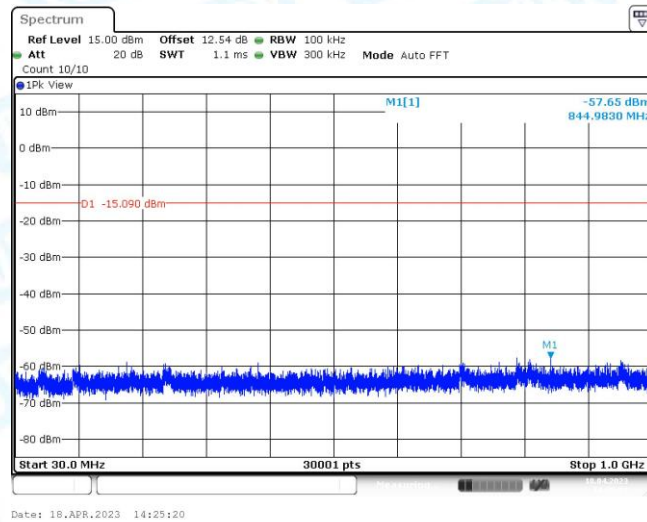


2DH5_2441_1000~26500

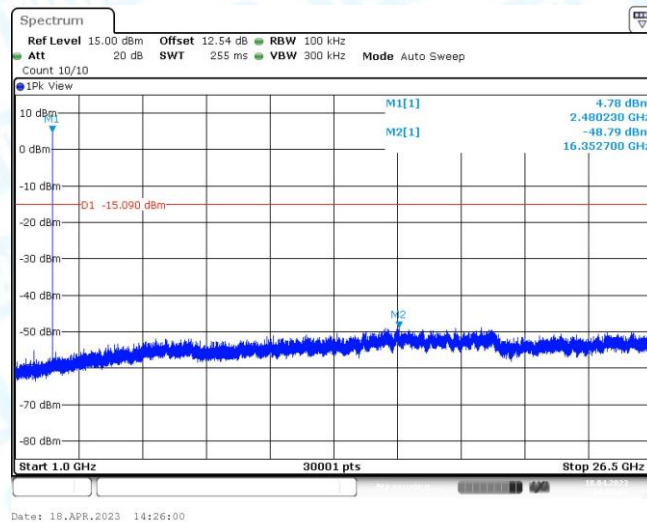




2DH5_2480_0~Reference

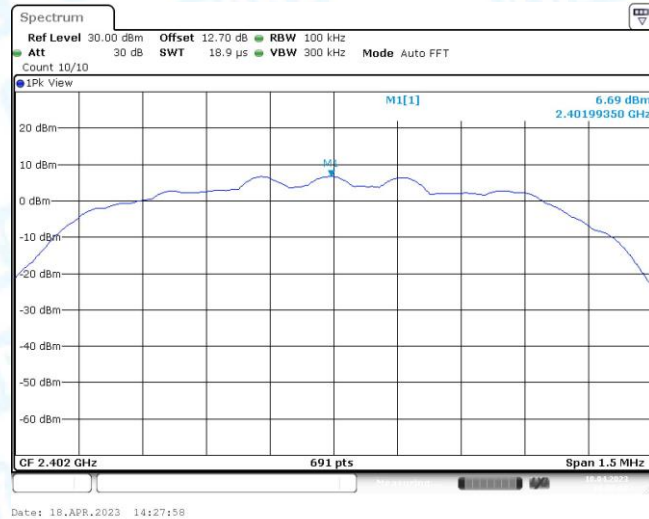


2DH5_2480_30~1000

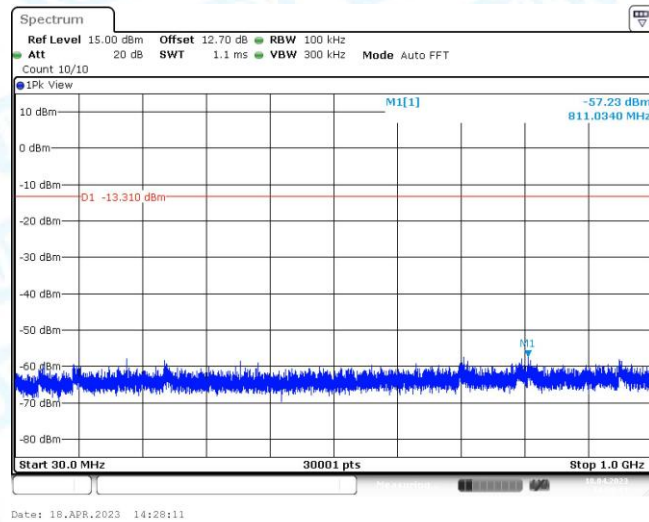


2DH5_2480_1000~26500

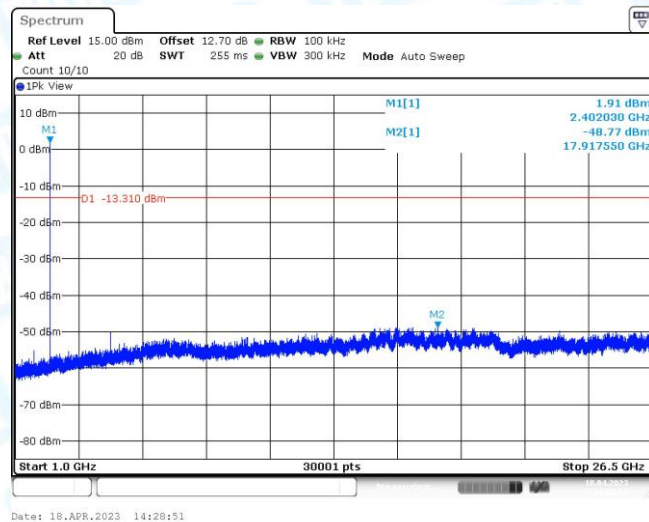




3DH5_2402_0~Reference

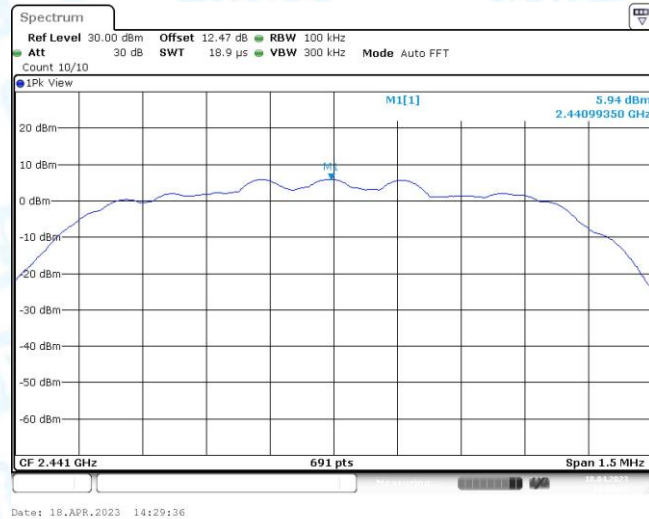


3DH5_2402_30~1000

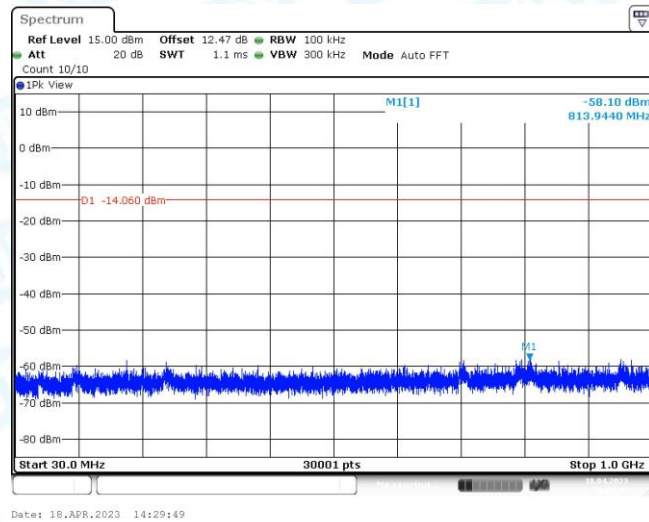


3DH5_2402_1000~26500

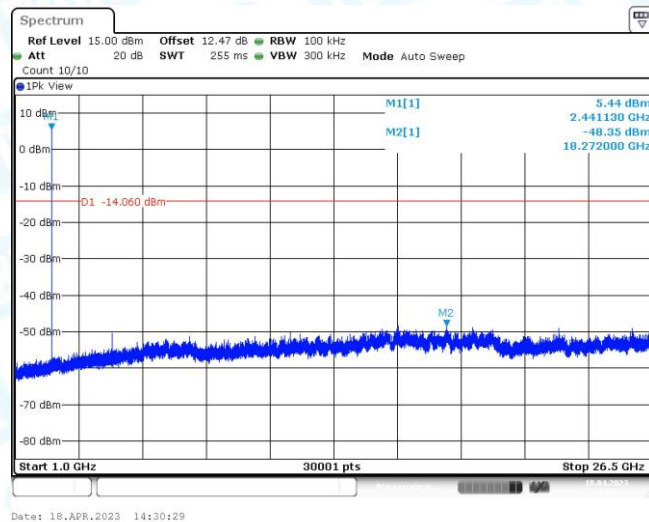




3DH5_2441_0~Reference

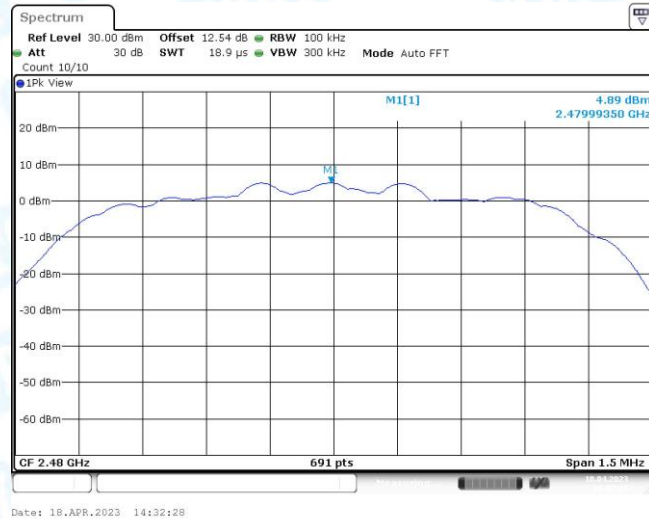


3DH5_2441_30~1000

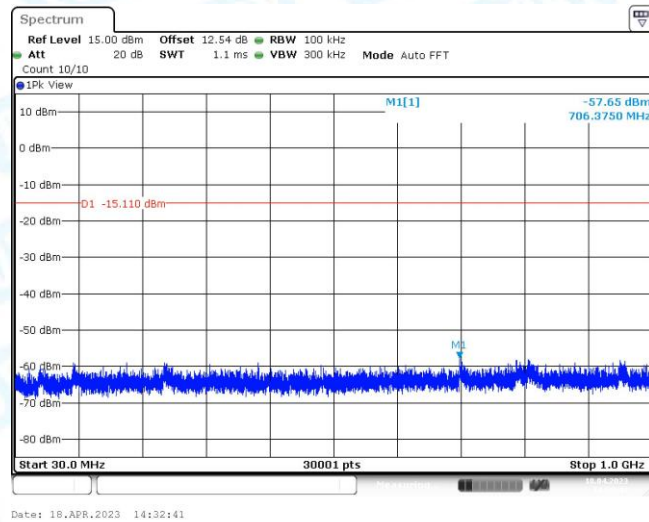


3DH5_2441_1000~26500

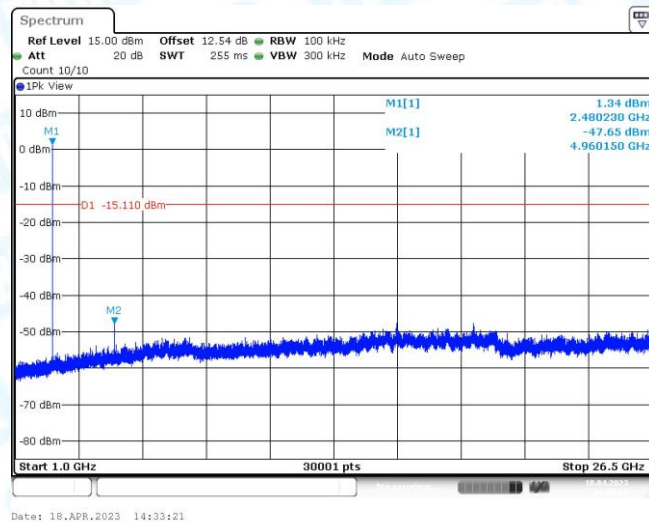




3DH5_2480_0~Reference



3DH5_2480_30~1000



3DH5_2480_1000~26500



7. Emissions in Restricted Bands and Band Edge

7.1 Test Standard and Limit

7.1.1 Test Standard

RSS-Gen 8.10 & RSS 247 5.5

FCC Part 15.205 & FCC Part 15.247(d)

7.1.2 Test Limit

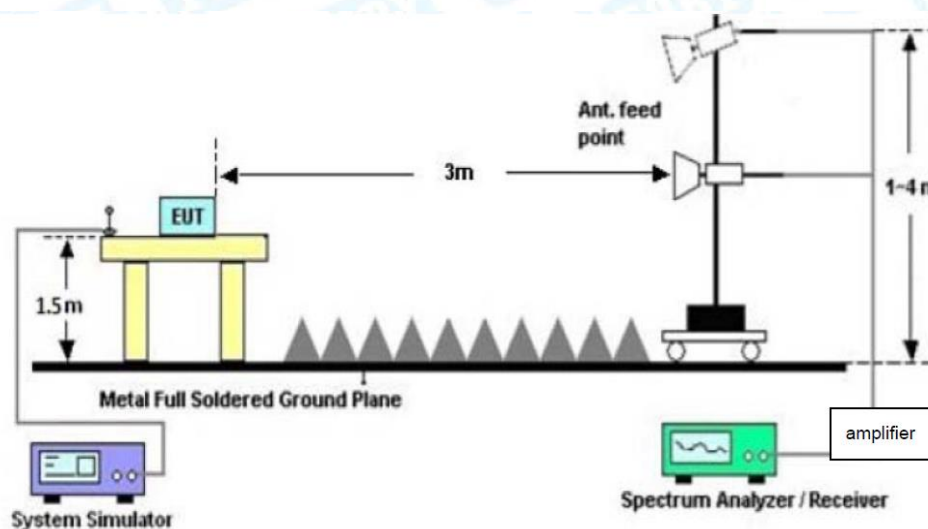
Restricted Frequency Band (MHz)	Distance Meters(at 3m)	
	Peak (dBuV/m)	Average (dBuV/m)
2310 ~2390	74	54
2483.5 ~2500	74	54
	Peak (dBm) _{see 7.3 e)}	Average (dBm) _{see 7.3 e)}
2310 ~2390	-21.20	-41.20
2483.5 ~2500	-21.20	-41.20

Note: According the ANSI C63.10 11.12.2 antenna-port conducted measurements may also be used as an alternative to radiated measurements for determining compliance in the restricted frequency bands requirements. If conducted measurements are performed, then proper impedance matching must be ensured and an additional radiated test for cabinet/case emissions is required.

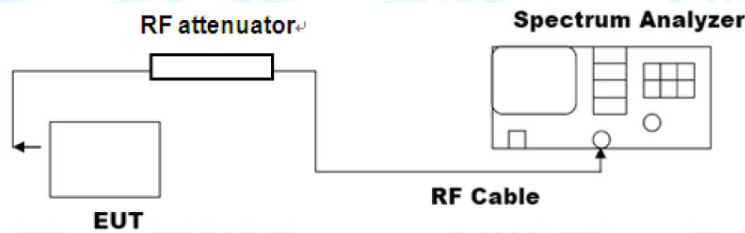
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 5.4(d), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

7.2 Test Setup

Radiated measurement



Conducted measurement



7.3 Test Procedure

---Radiated measurement

- Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- The Peak Value and average value both need to comply with applicable limit above 1 GHz.
- Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- For the actual test configuration, please see the test setup photo.

--- Conducted measurement

●Reference level measurement

Establish a reference level by using the following procedure:

- a) Set instrument center frequency to DTS channel center frequency.
- b) Set the span to ≥ 1.5 times the DTS bandwidth.
- c) Set the RBW = 100 kHz.
- d) Set the VBW $\geq [3 \times \text{RBW}]$.
- e) Detector = peak.
- f) Sweep time = auto couple.
- g) Trace mode = max hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum PSD level.

Note that the channel found to contain the maximum PSD level can be used to establish the reference level.

●Emission level measurement

Establish an emission level by using the following procedure:

- a) Set the center frequency and span to encompass frequency range to be measured.
- b) Set the RBW = 100 kHz.
- c) Set the VBW $\geq [3 \times \text{RBW}]$.
- d) Detector = peak.
- e) Sweep time = auto couple.
- f) Trace mode = max hold.
- g) Allow trace to fully stabilize.
- h) Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11. Report the three highest emissions relative to the limit.

7.4 Deviation From Test Standard

No deviation



7.5 EUT Operating Mode

Please refer to the description of test mode.

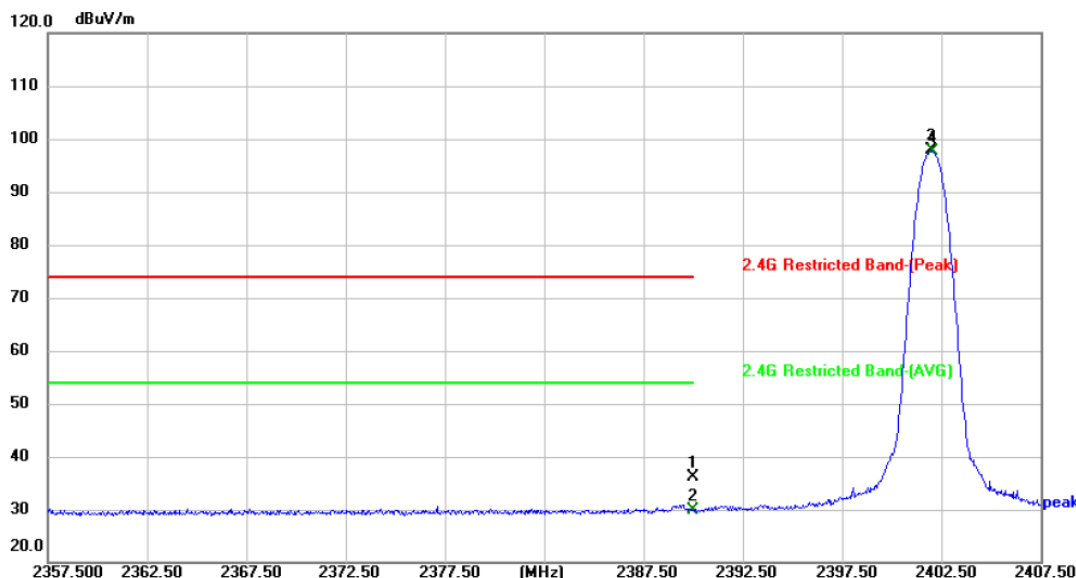
7.6 Test Data

Please refer to the following pages.



--- Restricted Bands (Radiation Measurements)

Temperature:	24.6 °C	Relative Humidity:	53%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	1DH5 Mode TX 2402MHz		
Remark:	N/A		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2390.000	51.86	-15.66	36.20	74.00	-37.80	peak	P
2 *	2390.000	45.50	-15.66	29.84	54.00	-24.16	AVG	P
3	2402.000	113.44	-15.64	97.80			peak	
4	2402.050	113.17	-15.64	97.53			AVG	

Remark:

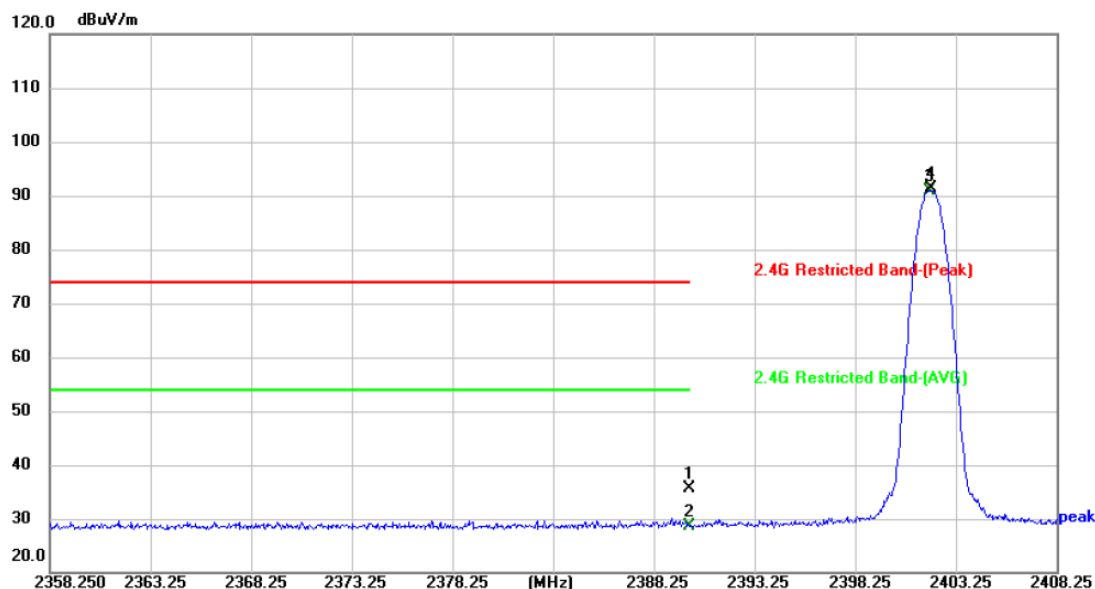
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)

2. Peak/AVG (dBuV/m)= Corr. (dB/m)+ Read Level (dBuV)

3. Margin (dB) = Peak/AVG (dBuV/m)-Limit PK/AVG(dBuV/m)



Temperature:	24.6 °C	Relative Humidity:	53%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	1DH5 Mode TX 2402MHz		
Remark:	N/A		



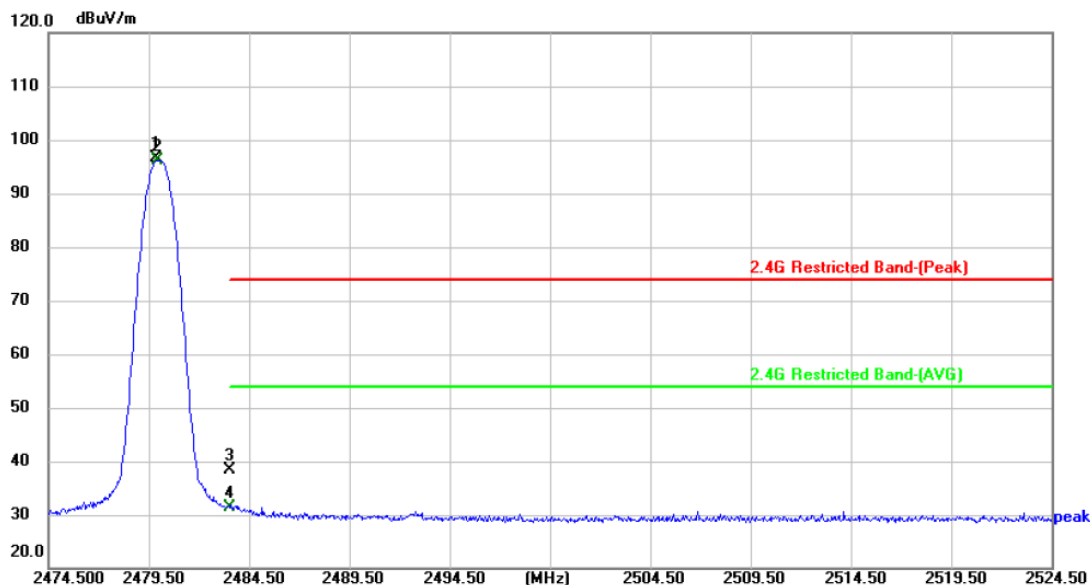
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2390.000	51.41	-15.66	35.75	74.00	-38.25	peak	P
2 *	2390.000	44.17	-15.66	28.51	54.00	-25.49	AVG	P
3	2401.950	106.63	-15.64	90.99			AVG	
4	2402.000	107.06	-15.64	91.42			peak	

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBuV/m)= Corr. (dB/m)+ Read Level (dBuV)
3. Margin (dB) = Peak/AVG (dBuV/m)-Limit PK/AVG(dBuV/m)



Temperature:	24.6 °C	Relative Humidity:	53%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	1DH5 Mode TX 2480MHz		
Remark:	N/A		



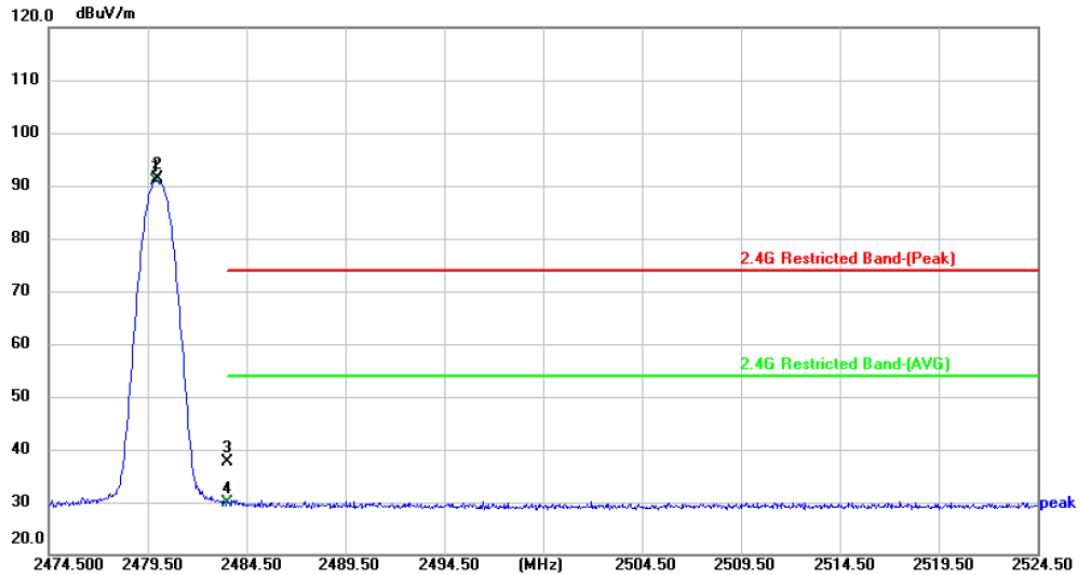
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2479.850	111.97	-15.37	96.60			peak	
2	2479.900	111.61	-15.37	96.24			AVG	
3	2483.500	53.74	-15.35	38.39	74.00	-35.61	peak	P
4 *	2483.500	46.77	-15.35	31.42	54.00	-22.58	AVG	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)



Temperature:	24.6 °C	Relative Humidity:	53%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	1DH5 Mode TX 2480MHz		
Remark:	N/A		



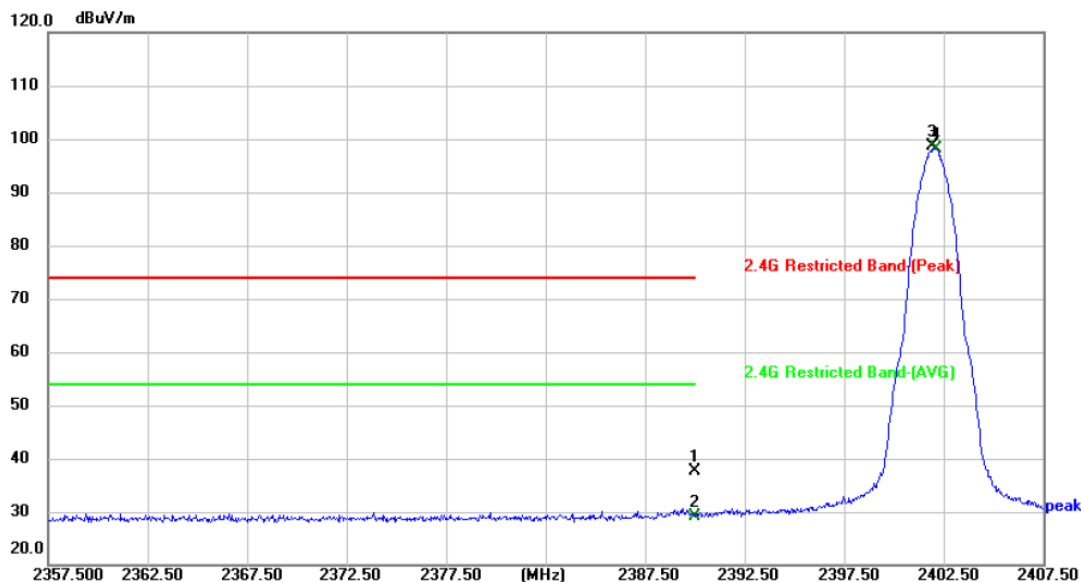
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2479.900	106.30	-15.37	90.93			AVG	
2	2480.000	106.69	-15.37	91.32			peak	
3	2483.500	53.06	-15.35	37.71	74.00	-36.29	peak	P
4 *	2483.500	45.30	-15.35	29.95	54.00	-24.05	AVG	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBuV/m) = Corr. (dB/m) + Read Level (dBuV)
3. Margin (dB) = Peak/AVG (dBuV/m) - Limit PK/AVG (dBuV/m)



Temperature:	24.6 °C	Relative Humidity:	53%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	2DH5 Mode TX 2402MHz		
Remark:	N/A		



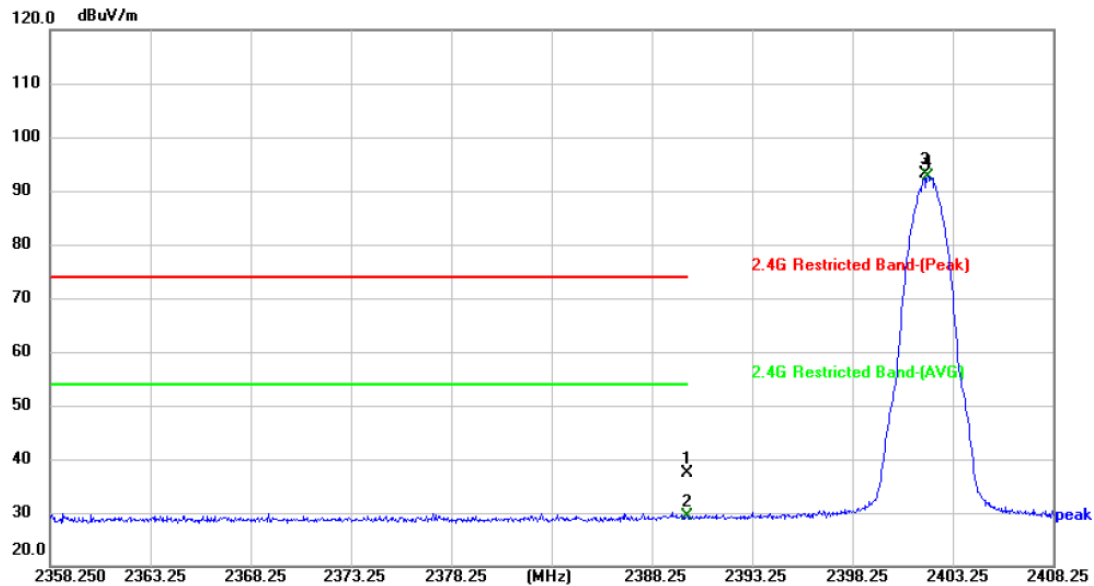
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2390.000	53.23	-15.66	37.57	74.00	-36.43	peak	P
2 *	2390.000	44.90	-15.66	29.24	54.00	-24.76	AVG	P
3	2401.950	114.20	-15.64	98.56			peak	
4	2402.150	113.69	-15.63	98.06			AVG	

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)



Temperature:	24.6 °C	Relative Humidity:	53%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	2DH5 Mode TX 2402MHz		
Remark:	N/A		



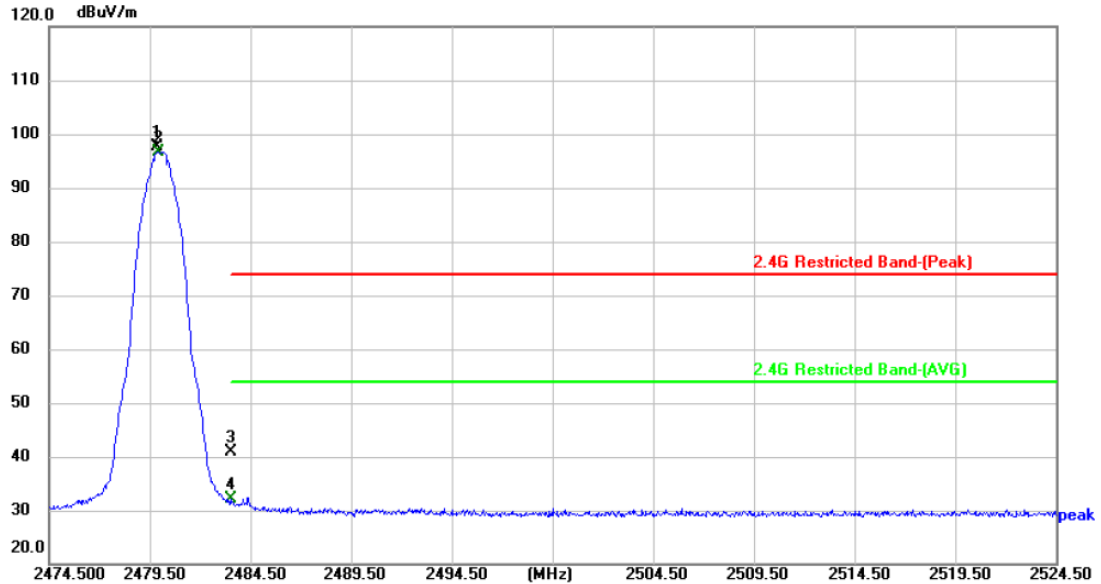
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2390.000	53.12	-15.66	37.46	74.00	-36.54	peak	P
2 *	2390.000	45.11	-15.66	29.45	54.00	-24.55	AVG	P
3	2401.850	108.84	-15.64	93.20			peak	
4	2402.000	108.16	-15.64	92.52			AVG	

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBuV/m)= Corr. (dB/m)+ Read Level (dBuV)
3. Margin (dB) = Peak/AVG (dBuV/m)-Limit PK/AVG(dBuV/m)



Temperature:	24.6 °C	Relative Humidity:	53%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	2DH5 Mode TX 2480MHz		
Remark:	N/A		



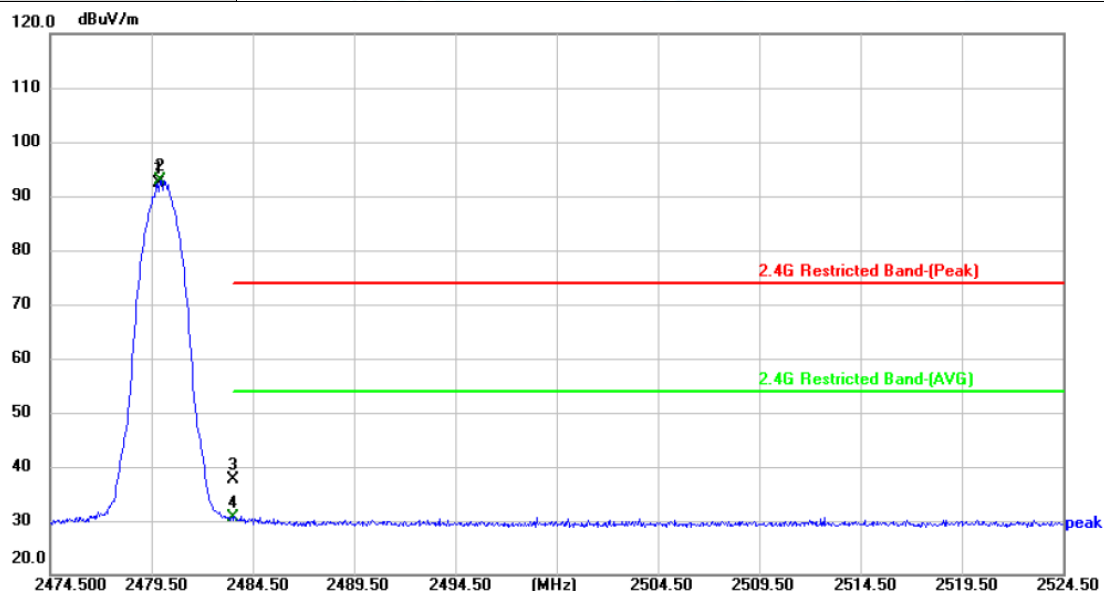
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2479.850	112.93	-15.37	97.56			peak	
2	2479.950	112.11	-15.37	96.74			AVG	
3	2483.500	56.32	-15.35	40.97	74.00	-33.03	peak	P
4 *	2483.500	47.54	-15.35	32.19	54.00	-21.81	AVG	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)



Temperature:	24.6 °C	Relative Humidity:	53%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	2DH5 Mode TX 2480MHz		
Remark:	N/A		



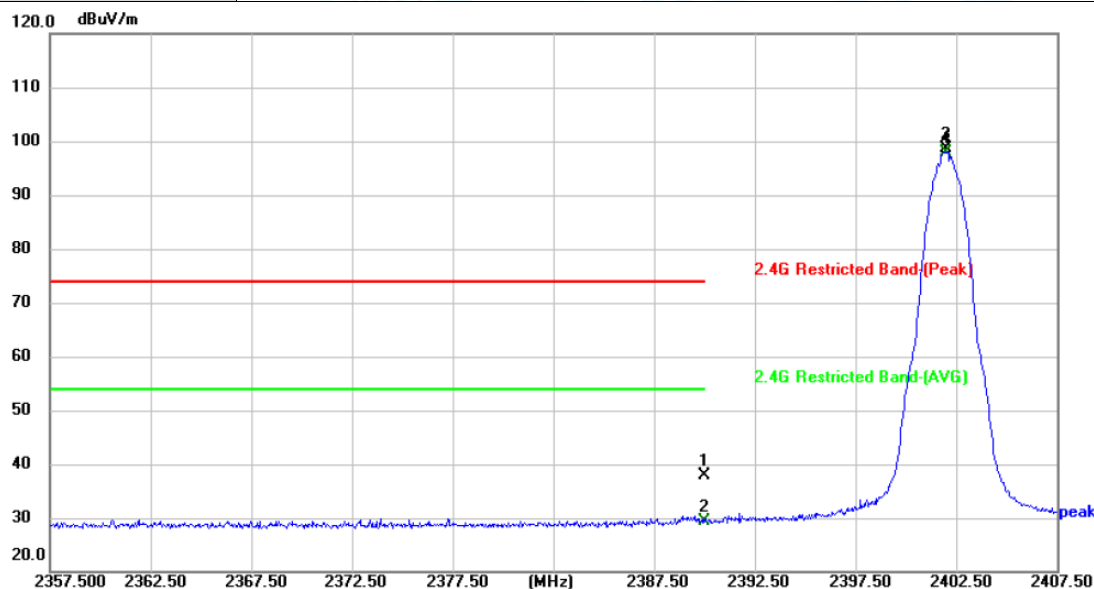
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2479.850	107.72	-15.37	92.35			peak	
2	2479.900	108.18	-15.37	92.81			AVG	
3	2483.500	52.86	-15.35	37.51	74.00	-36.49	peak	P
4 *	2483.500	45.95	-15.35	30.60	54.00	-23.40	AVG	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBuV/m)= Corr. (dB/m)+ Read Level (dBuV)
3. Margin (dB) = Peak/AVG (dBuV/m)-Limit PK/AVG(dBuV/m)



Temperature:	24.6 °C	Relative Humidity:	53%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	3DH5 Mode TX 2402MHz		
Remark:	N/A		



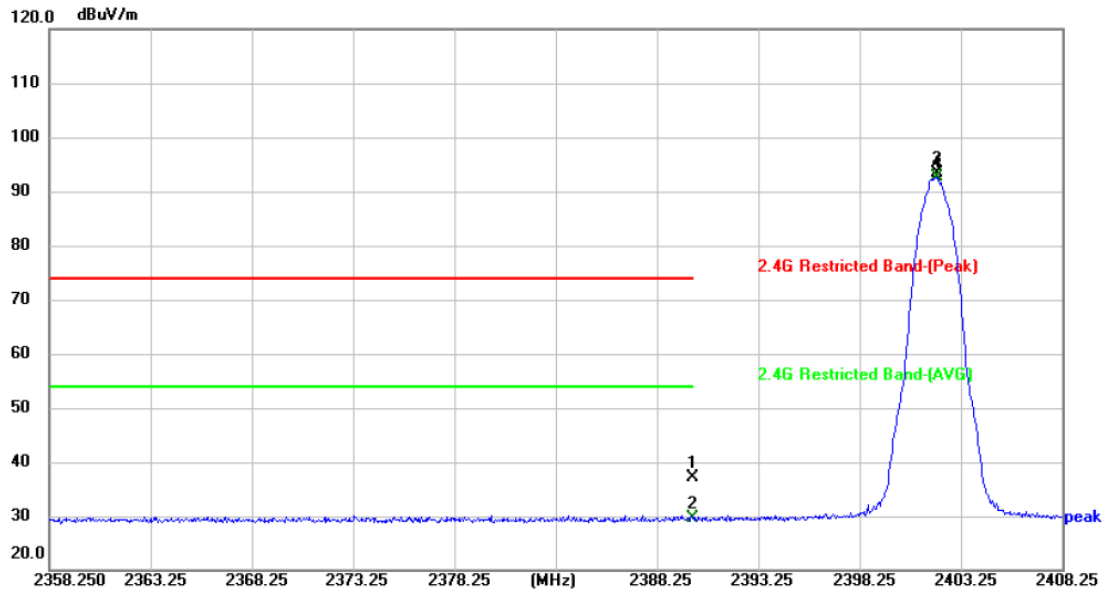
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2390.000	53.66	-15.66	38.00	74.00	-36.00	peak	P
2 *	2390.000	44.94	-15.66	29.28	54.00	-24.72	AVG	P
3	2402.000	114.25	-15.64	98.61			peak	
4	2402.000	113.63	-15.64	97.99			AVG	

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBuV/m) = Corr. (dB/m) + Read Level (dBuV)
3. Margin (dB) = Peak/AVG (dBuV/m) - Limit PK/AVG (dBuV/m)



Temperature:	24.6 °C	Relative Humidity:	53%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	3DH5 Mode TX 2402MHz		
Remark:	N/A		



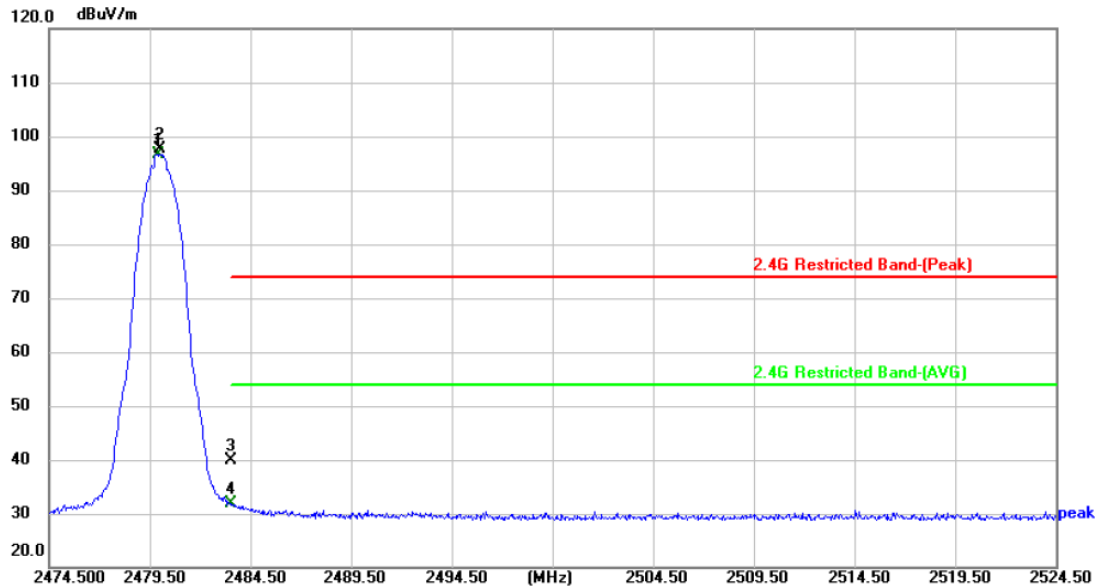
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2390.000	52.68	-15.66	37.02	74.00	-36.98	peak	P
2 *	2390.000	45.27	-15.66	29.61	54.00	-24.39	AVG	P
3	2402.050	109.09	-15.64	93.45			peak	
4	2402.050	108.16	-15.64	92.52			AVG	

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)



Temperature:	24.6 °C	Relative Humidity:	53%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	3DH5 Mode TX 2480MHz		
Remark:	N/A		



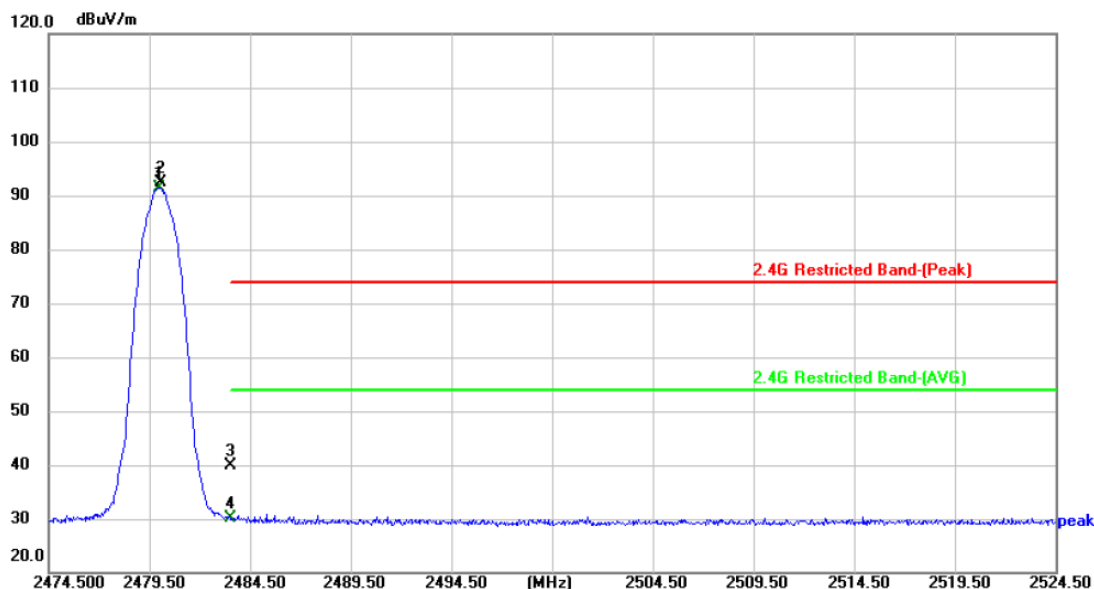
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2479.950	112.10	-15.37	96.73			AVG	
2	2480.000	113.02	-15.37	97.65			peak	
3	2483.500	55.34	-15.35	39.99	74.00	-34.01	peak	P
4 *	2483.500	47.13	-15.35	31.78	54.00	-22.22	AVG	P

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBuV/m) = Corr. (dB/m) + Read Level (dBuV)
3. Margin (dB) = Peak/AVG (dBuV/m) - Limit PK/AVG (dBuV/m)



Temperature:	24.6 °C	Relative Humidity:	53%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	3DH5 Mode TX 2480MHz		
Remark:	N/A		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2480.000	106.73	-15.37	91.36			AVG	
2	2480.050	107.84	-15.37	92.47			peak	
3	2483.500	55.12	-15.35	39.77	74.00	-34.23	peak	P
4 *	2483.500	45.37	-15.35	30.02	54.00	-23.98	AVG	P

Remark:

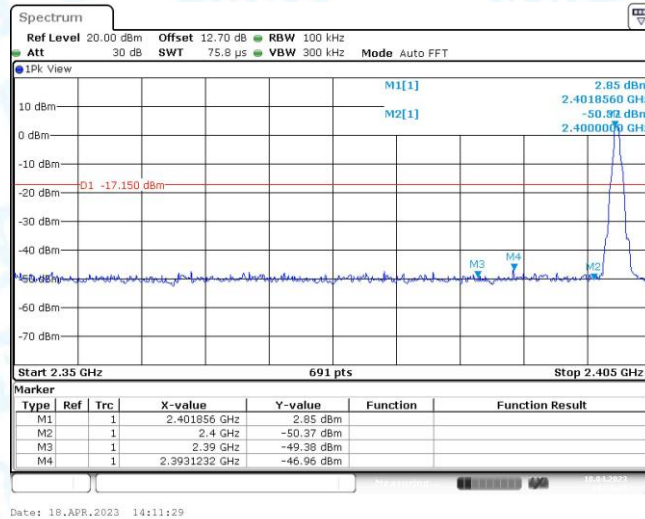
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)



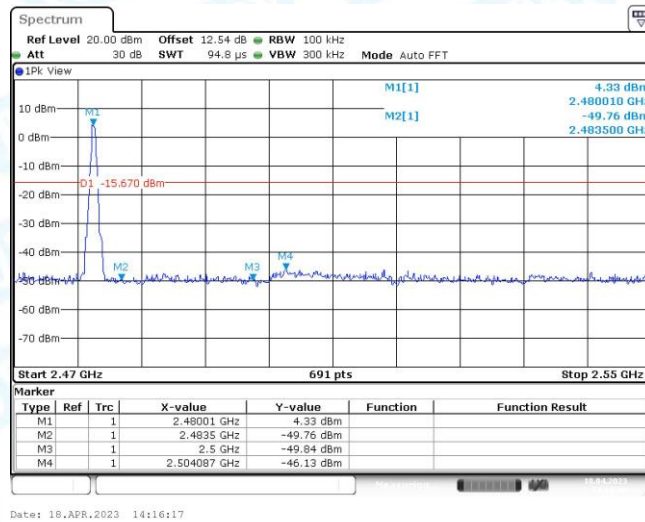
---Band Edge (Conducted Measurements)

Test Mode	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Low	2402	2.85	-46.96	≤ -17.15	PASS
	High	2480	4.33	-46.13	≤ -15.67	PASS
	Low	Hop_2402	4.92	-47.61	≤ -15.08	PASS
	High	Hop_2480	3.64	-44.91	≤ -16.36	PASS
2DH5	Low	2402	6.86	-46.07	≤ -13.14	PASS
	High	2480	5.01	-45.79	≤ -14.99	PASS
	Low	Hop_2402	3.42	-47.63	≤ -16.58	PASS
	High	Hop_2480	4.11	-45.61	≤ -15.89	PASS
3DH5	Low	2402	6.43	-46.98	≤ -13.57	PASS
	High	2480	4.94	-45.71	≤ -15.06	PASS
	Low	Hop_2402	2.82	-47.69	≤ -17.18	PASS
	High	Hop_2480	1.55	-46.41	≤ -18.45	PASS

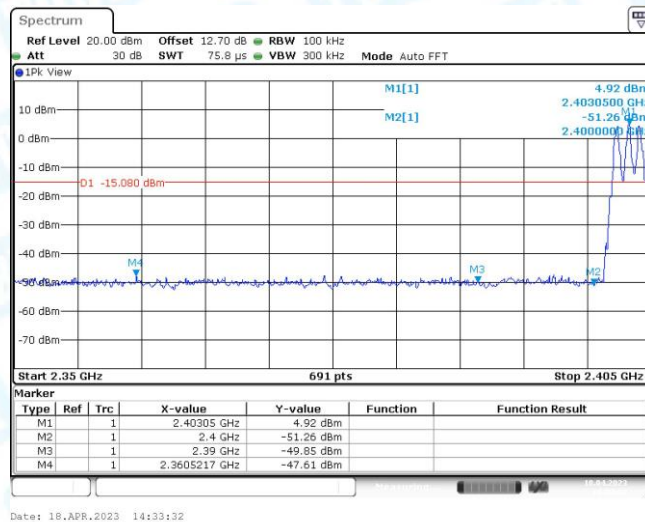




DH5_Low_2402



DH5_High_2480



DH5_Low_Hop_2402

