

CFR 47 FCC PART 15 SUBPART E

TEST REPORT

For

SPECTA Mini RC

MODEL NUMBER: GL32

REPORT NUMBER: 4791156651.1-1-RF-2

ISSUE DATE: February 2, 2024

FCC ID: 2BCHV-GL3223

Prepared for

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Prepared by

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	February 2, 2024	Initial Issue	

Summary of Test Results

Test Item	Clause	Limit/Requirement	Result
On Time And Duty Cycle	ANSI C63.10-2013, Clause 12.2	None; for reporting purposes only.	Pass
6db AND 26db EMISSION BANDWIDTH AND 99% OCCUPIED BANDWIDTH	KDB 789033 D02 v02r01 Section C.1	FCC Part 15.407 (a)/(e)	Pass
Conducted Output Power	KDB 789033 D02 v02r01 Section E.3.a (Method PM)	FCC 15.407 (a)	Pass
Power Spectral Density	KDB 789033 D02 v02r01 Section F	FCC 15.407 (a)	Pass
Ac Power Line Conducted Emission	ANSI C63.10-2013, Clause 6.2.	FCC 15.207	Pass
Radiated Emissions And Band Edge Measurement	KDB 789033 D02 v02r01 Section G.3, G.4, G.5, and G.6	FCC 15.407 (b) FCC 15.209 FCC 15.205	Pass
Frequency Stability	ANSI C63.10-2013, Clause 6.8	FCC 15.407 (g)	Pass
Antenna Requirement	/	FCC 47 CFR Part 15.203/ 15.407(a)(1) (2)	Pass

*This test report is only published to and used by the applicant, and it is not for evidence purpose in China.

*The measurement result for the sample received is <Pass> according to <CFR 47 FCC PART 15 SUBPART E > when <Simple Acceptance> decision rule is applied.

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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: COGITO TECH COMPANY LIMITED
Address: 21/F Tai Yau Building, 181 Johnston Road, Wanchai Hong Kong

Manufacturer Information

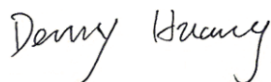
Company Name: COGITO TECH COMPANY LIMITED
Address: 21/F Tai Yau Building, 181 Johnston Road, Wanchai Hong Kong

EUT Information

EUT Name: SPECTA Mini RC
Model: GL32
Brand: SPECTA
Sample Received Date: January 15, 2024
Sample Status: Normal
Sample ID: 6847974
Date of Tested: January 29, 2024 to February 1, 2024

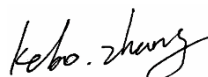
APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 FCC PART 15 SUBPART E	Pass

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2. TEST METHODOLOGY

All tests were performed in accordance with the standard CFR 47 FCC PART 15 SUBPART E, ANSI C63.10-2013, CFR 47 FCC Part 2, KDB 789033 D02 v02r01, KDB414788 D01 Radiated Test Site v01, KDB 662911 D01 Multiple Transmitter Output v02r01.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	<p>A2LA (Certificate No.: 4102.01) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.</p> <p>FCC (FCC Designation No.: CN1187) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules</p> <p>ISED (Company No.: 21320) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046.</p> <p>VCCI (Registration No.: G-20192, C-20153, T-20155 and R-20202) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber D, the VCCI registration No. is G-20192 and R-20202 Shielding Room B, the VCCI registration No. is C-20153 and T-20155</p>
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Note 1:

All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, No. 1, Li Bin Road, Song Shan Lake Hi-Tech Development Zone Dongguan, 523808, People's Republic of China.

Note 2:

The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

Note 3:

For below 30 MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30 MHz had been correlated to measurements performed on an OFS.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognized national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Uncertainty
Conduction emission	3.62 dB
Radiated Emission (Included Fundamental Emission) (9 kHz ~ 30 MHz)	2.2 dB
Radiated Emission (Included Fundamental Emission) (30 MHz ~ 1 GHz)	4.00 dB
Radiated Emission (Included Fundamental Emission) (1 GHz to 40 GHz)	5.78 dB (1 GHz ~ 18 GHz)
	5.23 dB (18 GHz ~ 26 GHz)
	5.37 dB (26 GHz ~ 40 GHz)
Duty Cycle	±0.028%
Emission Bandwidth and 99% Occupied Bandwidth	±0.0196%
Maximum Conducted Output Power	±0.766 dB
Maximum Power Spectral Density Level	±1.22 dB
Frequency Stability	±2.76%
Dynamic Frequency Selection	±1.01 dB
Conducted Band-edge Compliance	±1.328 dB
Conducted Unwanted Emissions In Non-restricted Frequency Bands	±0.746 dB (9 kHz ~ 1 GHz)
	±1.328dB (1 GHz ~ 26 GHz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT Name	SPECTA Mini RC
Model	GL32
Ratings	Input: DC 5 V, 2 A Battery: DC 3.6 V, 18.72 Wh

Radio Technology	SRD 5.8G
Operation Frequency	5.8GHz 1.4 MHz Bandwidth (5728.5 MHz ~ 5844.5 MHz) 5.8GHz 1.4 MHz Bandwidth (CA Mode) (5730.12 MHz ~ 5846.12 MHz) 5.8GHz 3 MHz Bandwidth (5730.5 MHz ~ 5844.5 MHz) 5.8GHz 10 MHz Bandwidth (5732.5 MHz ~ 5844.5 MHz) 5.8GHz 20 MHz Bandwidth (5735.5 MHz ~ 5839.5 MHz)
Modulation	OFDM (QPSK, 16QAM, 64QAM)

5.2. CHANNEL LIST

5.8G 1.4 MHz Bandwidth (5728.5 MHz ~ 5844.5 MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	5728.5	17	5760.5	33	5792.5	49	5824.5
2	5730.5	18	5762.5	34	5794.5	50	5826.5
3	5732.5	19	5764.5	35	5796.5	51	5828.5
4	5734.5	20	5766.5	36	5798.5	52	5830.5
5	5736.5	21	5768.5	37	5800.5	53	5832.5
6	5738.5	22	5770.5	38	5802.5	54	5834.5
7	5740.5	23	5772.5	39	5804.5	55	5836.5
8	5742.5	24	5774.5	40	5806.5	56	5838.5
9	5744.5	25	5776.5	41	5808.5	57	5840.5
10	5746.5	26	5778.5	42	5810.5	58	5842.5
11	5748.5	27	5780.5	43	5812.5	59	5844.5
12	5750.5	28	5782.5	44	5814.5	/	/
13	5752.5	29	5784.5	45	5816.5	/	/
14	5754.5	30	5786.5	46	5818.5	/	/
15	5756.5	31	5788.5	47	5820.5	/	/
16	5758.5	32	5790.5	48	5822.5	/	/

5.8G 1.4 MHz Bandwidth CA Mode (5730.12 MHz ~ 5846.12 MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	5730.12	17	5762.12	33	5794.12	49	5826.12
2	5732.12	18	5764.12	34	5796.12	50	5828.12
3	5734.12	19	5766.12	35	5798.12	51	5830.12
4	5736.12	20	5768.12	36	5800.12	52	5832.12
5	5738.12	21	5770.12	37	5802.12	53	5834.12
6	5740.12	22	5772.12	38	5804.12	54	5836.12
7	5742.12	23	5774.12	39	5806.12	55	5838.12
8	5744.12	24	5776.12	40	5808.12	56	5840.12
9	5746.12	25	5778.12	41	5810.12	57	5842.12
10	5748.12	26	5780.12	42	5812.12	58	5844.12
11	5750.12	27	5782.12	43	5814.12	59	5846.12
12	5752.12	28	5784.12	44	5816.12	/	/
13	5754.12	29	5786.12	45	5818.12	/	/
14	5756.12	30	5788.12	46	5820.12	/	/
15	5758.12	31	5790.12	47	5822.12	/	/
16	5760.12	32	5792.12	48	5824.12	/	/

5.8G 3 MHz Bandwidth Mode (5730.5 MHz ~ 5844.5 MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	5730.5	11	5760.5	21	5790.5	31	5820.5
2	5733.5	12	5763.5	22	5793.5	32	5823.5
3	5736.5	13	5766.5	23	5796.5	33	5826.5
4	5739.5	14	5769.5	24	5799.5	34	5829.5
5	5742.5	15	5772.5	25	5802.5	35	5832.5
6	5745.5	16	5775.5	26	5805.5	36	5835.5
7	5748.5	17	5778.5	27	5808.5	37	5838.5
8	5751.5	18	5781.5	28	5811.5	38	5841.5
9	5754.5	19	5784.5	29	5814.5	39	5844.5
10	5757.5	20	5787.5	30	5817.5	/	/

5.8G 10 MHz Bandwidth (5732.5 MHz ~ 5844.5 MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	5732.5	30	5761.5	59	5790.5	88	5819.5
2	5733.5	31	5762.5	60	5791.5	89	5820.5
3	5734.5	32	5763.5	61	5792.5	90	5821.5
4	5735.5	33	5764.5	62	5793.5	91	5822.5
5	5736.5	34	5765.5	63	5794.5	92	5823.5
6	5737.5	35	5766.5	64	5795.5	93	5824.5
7	5738.5	36	5767.5	65	5796.5	94	5825.5
8	5739.5	37	5768.5	66	5797.5	95	5826.5
9	5740.5	38	5769.5	67	5798.5	96	5827.5
10	5741.5	39	5770.5	68	5799.5	97	5828.5
11	5742.5	40	5771.5	69	5800.5	98	5829.5
12	5743.5	41	5772.5	70	5801.5	99	5830.5
13	5744.5	42	5773.5	71	5802.5	100	5831.5
14	5745.5	43	5774.5	72	5803.5	101	5832.5
15	5746.5	44	5775.5	73	5804.5	102	5833.5
16	5747.5	45	5776.5	74	5805.5	103	5834.5
17	5748.5	46	5777.5	75	5806.5	104	5835.5
18	5749.5	47	5778.5	76	5807.5	105	5836.5
19	5750.5	48	5779.5	77	5808.5	106	5837.5
20	5751.5	49	5780.5	78	5809.5	107	5838.5
21	5752.5	50	5781.5	79	5810.5	108	5839.5
22	5753.5	51	5782.5	80	5811.5	109	5840.5
23	5754.5	52	5783.5	81	5812.5	110	5841.5
24	5755.5	53	5784.5	82	5813.5	111	5842.5
25	5756.5	54	5785.5	83	5814.5	112	5843.5
26	5757.5	55	5786.5	84	5815.5	113	5844.5
27	5758.5	56	5787.5	85	5816.5	/	/
28	5759.5	57	5788.5	86	5817.5	/	/
29	5760.5	58	5789.5	87	5818.5	/	/

5.8G 20 MHz Bandwidth (5735.5 MHz ~ 5839.5 MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	5735.5	28	5762.5	55	5789.5	82	5816.5
2	5736.5	29	5763.5	56	5790.5	83	5817.5
3	5737.5	30	5764.5	57	5791.5	84	5818.5
4	5738.5	31	5765.5	58	5792.5	85	5819.5
5	5739.5	32	5766.5	59	5793.5	86	5820.5
6	5740.5	33	5767.5	60	5794.5	87	5821.5
7	5741.5	34	5768.5	61	5795.5	88	5822.5
8	5742.5	35	5769.5	62	5796.5	89	5823.5
9	5743.5	36	5770.5	63	5797.5	90	5824.5
10	5744.5	37	5771.5	64	5798.5	91	5825.5
11	5745.5	38	5772.5	65	5799.5	92	5826.5
12	5746.5	39	5773.5	66	5800.5	93	5827.5
13	5747.5	40	5774.5	67	5801.5	94	5828.5
14	5748.5	41	5775.5	68	5802.5	95	5829.5
15	5749.5	42	5776.5	69	5803.5	96	5830.5
16	5750.5	43	5777.5	70	5804.5	97	5831.5
17	5751.5	44	5778.5	71	5805.5	98	5832.5
18	5752.5	45	5779.5	72	5806.5	99	5833.5
19	5753.5	46	5780.5	73	5807.5	100	5834.5
20	5754.5	47	5781.5	74	5808.5	101	5835.5
21	5755.5	48	5782.5	75	5809.5	102	5836.5
22	5756.5	49	5783.5	76	5810.5	103	5837.5
23	5757.5	50	5784.5	77	5811.5	104	5838.5
24	5758.5	51	5785.5	78	5812.5	105	5839.5
25	5759.5	52	5786.5	79	5813.5	/	/
26	5760.5	53	5787.5	80	5814.5	/	/
27	5761.5	54	5788.5	81	5815.5	/	/

5.3. MAXIMUM OUTPUT POWER

SRD 5G	Frequency (MHz)	Maximum Conducted Average Output Power (dBm)
1.4 MHz Mode	5728.5 MHz ~ 5844.5 MHz	22.41
1.4 MHz CA Mode	5730.12 MHz ~ 5846.12 MHz	22.44
3 MHz Mode	5730.5 MHz ~ 5844.5 MHz	22.03
10 MHz Mode	5732.5 MHz ~ 5844.5 MHz	11.87
20 MHz Mode	5735.5 MHz ~ 5839.5 MHz	11.91

5.4. TEST CHANNEL CONFIGURATION

SRD 5.8G	Test Channel Number	Frequency
1.4 MHz Mode	CH 1(Low Channel), CH 30(MID Channel), CH 60(High Channel)	5728.5 MHz, 5786.5 MHz, 5844.5 MHz
1.4 MHz CA Mode	CH 1(Low Channel), CH 30(MID Channel), CH 60(High Channel)	5730.12 MHz, 5788.12 MHz, 5846.12 MHz
3 MHz Mode	CH 1(Low Channel), CH 20(MID Channel), CH 40(High Channel)	5730.5 MHz, 5787.5 MHz, 5844.5 MHz
10 MHz Mode	CH 1(Low Channel), CH 58(MID Channel), CH 115(High Channel)	5732.5 MHz, 5787.5 MHz, 5844.5 MHz
20 MHz Mode	CH 1(Low Channel), CH 53(MID Channel), CH 105(High Channel)	5735.5 MHz, 5787.5 MHz, 5839.5 MHz

5.5. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter under 5728.5 ~ 5846.12 MHz Band				
Test Software		SdrConsole		
Mode	Transmit Antenna Number	Test Software setting value		
		NCB: 1.4 MHz/1.4 MHz CA/3 MHz/10 MHz/20 MHz		
		Low Channel	MID Channel	High Channel
1.4 MHz Mode	1	-5	-5	-5
1.4 MHz Mode CA	1	-5	-5	-5
3 MHz Mode	1	-5	-3	-3
10 MHz Mode	1	-4	-4	-4
20 MHz Mode	1	-4	-4	-4

5.6. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna	Frequency (MHz)	Antenna Type	Maximum Antenna Gain (dBi)
1	5728.5 ~ 5846.12	Integral Antenna	4

Test Mode	Transmit and Receive Mode	Description
1.4 MHz Mode	<input checked="" type="checkbox"/> 1TX, 2RX	ANT 1 can be used as transmitting antenna. ANT 1 & 2 can be used as receiving antenna.
1.4 MHz CA Mode	<input checked="" type="checkbox"/> 1TX, 2RX	ANT 1 can be used as transmitting antenna. ANT 1 & 2 can be used as receiving antenna.
3 MHz Mode	<input checked="" type="checkbox"/> 1TX, 2RX	ANT 1 can be used as transmitting antenna. ANT 1 & 2 can be used as receiving antenna.
10 MHz Mode	<input checked="" type="checkbox"/> 1TX, 2RX	ANT 1 can be used as transmitting antenna. ANT 1 & 2 can be used as receiving antenna.
20 MHz Mode	<input checked="" type="checkbox"/> 1TX, 2RX	ANT 1 can be used as transmitting antenna. ANT 1 & 2 can be used as receiving antenna.

Note: 1. The value of the antenna gain was declared by customer.

2. 2.4GHz and 5.8GHz radio doesn't support simultaneous transmission.

5.7. THE WORSE CASE CONFIGURATIONS

The EUT was tested in the following configuration(s):

Controlled in test mode using a software application on the EUT supplied by customer. The application was used to enable a continuous transmission and to select the mode, test channels, bandwidth, data rates as required.

Test channels referring to section 5.4.

Maximum power setting referring to section 5.5.

Worst case Data Rates declared by the customer:

SRD 2.4G-1.4 MHz Mode/QPSK
SRD 2.4G-1.4 MHz CA Mode/QPSK
SRD 2.4G-3 MHz Mode/QPSK
SRD 2.4G-10 MHz Mode/QPSK
SRD 2.4G-20 MHz Mode/QPSK

The measured additional path loss was included in any path loss calculations for all RF cable used during tested.

5.8. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	Remarks
1	Laptop	Lenovo	E42-80	/
2	Adapter Power	/	QC18-US	Input: AC 100 ~ 240 V, 50/60 Hz, 0.3 A Output: DC 5 V, 3 A

I/O CABLES

Cable No	Port	Connector Type	Cable Type	Cable Length(m)	Remarks
1	USB	Type C	Unshielded	1.0	/

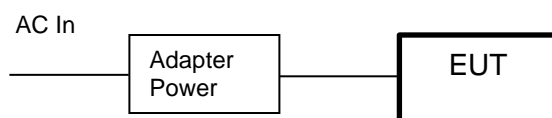
ACCESSORIES

Item	Accessory	Brand Name	Model Name	Description
/	/	/	/	/

TEST SETUP

The EUT can work in engineering mode with a software through a laptop.

SETUP DIAGRAM FOR TESTS



6. MEASURING EQUIPMENT AND SOFTWARE USED

R&S TS 8997 Test System					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
Power sensor, Power Meter	R&S	OSP120	100921	Mar.31,2023	Mar.30,2024
Vector Signal Generator	R&S	SMBV100A	261637	Oct.12, 2023	Oct.11, 2024
Signal Generator	R&S	SMB100A	178553	Oct.12, 2023	Oct.11, 2024
Signal Analyzer	R&S	FSV40	101118	Oct.12, 2023	Oct.11, 2024
Software					
Description	Manufacturer		Name	Version	
For R&S TS 8997 Test System	Rohde & Schwarz		EMC 32	10.60.10	
Tonsend RF Test System					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
Wideband Radio Communication Tester	R&S	CMW500	155523	Oct.12, 2023	Oct.11, 2024
Wireless Connectivity Tester	R&S	CMW270	1201.0002N75-102	Sep.25, 2023	Sep.24, 2024
PXA Signal Analyzer	Keysight	N9030A	MY55410512	Oct.12, 2023	Oct.11, 2024
MXG Vector Signal Generator	Keysight	N5182B	MY56200284	Oct.12, 2023	Oct.11, 2024
MXG Vector Signal Generator	Keysight	N5172B	MY56200301	Oct.12, 2023	Oct.11, 2024
DC power supply	Keysight	E3642A	MY55159130	Oct.12, 2023	Oct.11, 2024
Temperature & Humidity Chamber	SANMOOD	SG-80-CC-2	2088	Oct.12, 2023	Oct.11, 2024
Attenuator	Aglient	8495B	2814a12853	Oct.12, 2023	Oct.11, 2024
RF Control Unit	Tonscend	JS0806-2	23B80620666	April 18, 2023	April 17, 2024
Software					
Description	Manufacturer	Name		Version	
Tonsend SRD Test System	Tonsend	JS1120-3 RF Test System		V3.2.22	

Conducted Emissions					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
EMI Test Receiver	R&S	ESR3	101961	Oct.13, 2023	Oct.12, 2024
Two-Line V-Network	R&S	ENV216	101983	Oct.13, 2023	Oct.12, 2024
Artificial Mains Networks	Schwarzbeck	NSLK 8126	8126465	Oct.13, 2023	Oct.12, 2024
Software					
Description			Manufacturer	Name	Version
Test Software for Conducted Emissions			Farad	EZ-EMC	Ver. UL-3A1

Radiated Emissions					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
MXE EMI Receiver	KESIGHT	N9038A	MY56400036	Oct.12, 2023	Oct.11, 2024
Hybrid Log Periodic Antenna	TDK	HLP-3003C	130959	Aug.02, 2021	Aug.01, 2024
Preamplifier	HP	8447D	2944A09099	Oct.12, 2023	Oct.11, 2024
EMI Measurement Receiver	R&S	ESR26	101377	Oct.12, 2023	Oct.11, 2024
Horn Antenna	TDK	HRN-0118	130940	July 20, 2021	July 19, 2024
Preamplifier	TDK	PA-02-0118	TRS-305-00067	Oct.12, 2023	Oct.11, 2024
Horn Antenna	Schwarzbeck	BBHA9170	697	July 20, 2021	July 19, 2024
Preamplifier	TDK	PA-02-2	TRS-307-00003	Oct.12, 2023	Oct.11, 2024
Preamplifier	TDK	PA-02-3	TRS-308-00002	Oct.12, 2023	Oct.11, 2024
Loop antenna	Schwarzbeck	1519B	00008	Dec.14, 2021	Dec.13, 2024
Preamplifier	TDK	PA-02-001-3000	TRS-302-00050	Oct.12, 2023	Oct.11, 2024
Highpass Filter	Wainwright	WHKX10-5850-6500-1800-40SS	4	Oct.12, 2023	Oct.11, 2024
Band Reject Filter	Wainwright	WRCJV12-5695-5725-5850-5880-40SS	4	Oct.12, 2023	Oct.11, 2024
Software					
Description			Manufacturer	Name	Version
Test Software for Radiated Emissions			Farad	EZ-EMC	Ver. UL-3A1

7. ANTENNA PORT TEST RESULTS

7.1. ON TIME AND DUTY CYCLE

LIMITS

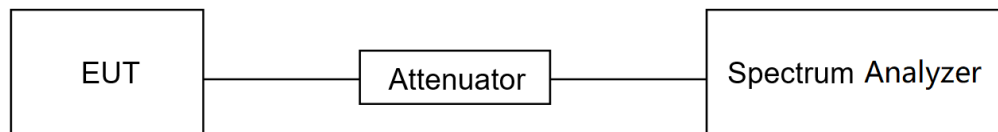
None; for reporting purposes only.

TEST PROCEDURE

Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.B.

The zero-span mode on a spectrum analyzer or EMI receiver, if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the on and off times of the transmitted signal. Set the center frequency of the instrument to the center frequency of the transmission. Set RBW \geq EBW if possible; otherwise, set RBW to the largest available value. Set VBW \geq RBW. Set detector = peak or average. The zero-span measurement method shall not be used unless both RBW and VBW are $> 50/T$, where T is defined in II.B.1.a), and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring duty cycle shall not be used if $T \leq 16.7$ microseconds.)

TEST SETUP



TEST ENVIRONMENT

Temperature	23.4 °C	Relative Humidity	64.5%
Atmosphere Pressure	101 kPa	Test Voltage	DC 5 V

TEST RESULTS

Please refer to section "Test Data" - Appendix F

7.2. 6DB EMISSION BANDWIDTH AND 99% OCCUPIED BANDWIDTH

LIMITS

CFR 47 FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
26 dB Emission Bandwidth	For reporting purposes only.	5150 ~ 5250
6 dB Emission Bandwidth	The minimum 6 dB emission bandwidth shall be 500 kHz.	5725 ~ 5850
99 % Occupied Bandwidth	For reporting purposes only.	5150 ~ 5825 (For ISSED)

TEST PROCEDURE

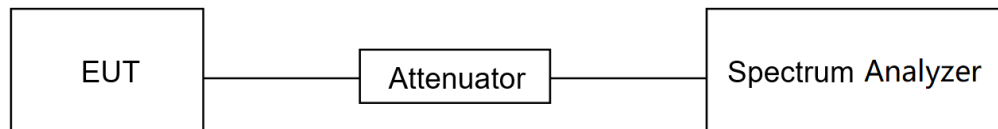
Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.C1. for 26 dB Emission Bandwidth; section II.C2. for 6 dB Emission Bandwidth; section II.D. for 99 % Occupied Bandwidth.

Connect the EUT to the spectrum analyser and use the following settings:

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	For 6 dB Emission Bandwidth: RBW=100 kHz For 99 % Occupied Bandwidth: approximately 1 % ~ 5 % of the OBW.
VBW	For 6 dB Bandwidth: $\geq 3 \times \text{RBW}$ For 99 % Bandwidth: $> 3 \times \text{RBW}$
Trace	Max hold
Sweep	Auto couple

- Use the 99 % power bandwidth function of the instrument, allow the trace to stabilize and report the measured bandwidth.
- Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6/26 dB relative to the maximum level measured in the fundamental emission.

TEST SETUP



TEST ENVIRONMENT

Temperature	23.4°C	Relative Humidity	64.5%
Atmosphere Pressure	101kPa	Test Voltage	DC 5 V

TEST RESULTS

Please refer to section "Test Data" - Appendix A&B

7.3. CONDUCTED OUTPUT POWER

LIMITS

CFR 47 FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Conducted Output Power	<input type="checkbox"/> Outdoor Access Point: 1 W (30 dBm) <input type="checkbox"/> Indoor Access Point: 1 W (30 dBm) <input type="checkbox"/> Fixed Point-To-Point Access Points: 1 W (30 dBm) <input type="checkbox"/> Client Devices: 250 mW (24 dBm)	5150 ~ 5250
	Shall not exceed 1 Watt (30 dBm).	5725 ~ 5850

Note:

The above limits are based upon the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.E.

Method SA-2 (trace averaging across ON and OFF times of the EUT transmissions, followed by duty cycle correction.):

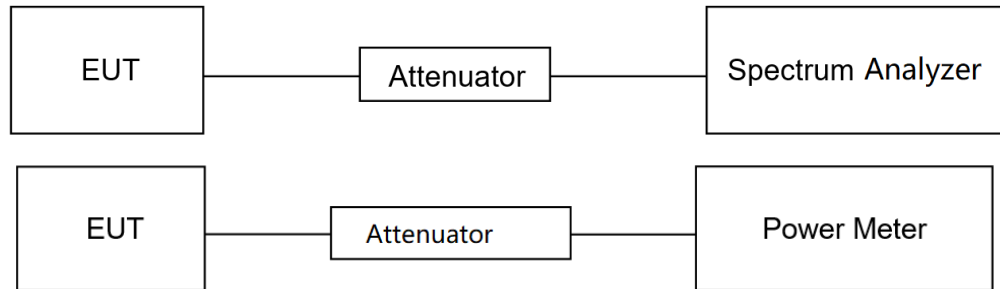
- Measure the duty cycle D of the transmitter output signal.
- Set span to encompass the entire 26 dB EBW or 99% OBW of the signal.
- Set RBW = 1 MHz.
- Set VBW \geq 3 MHz.
- Number of points in sweep \geq $[2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing \leq RBW / 2, so that narrowband signals are not lost between frequency bins.)
- Sweep time = auto.
- Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.
- Do not use sweep triggering. Allow the sweep to “free run.”
- Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed such that the average accurately represents the true average over the ON and OFF periods of the transmitter.
- Compute power by integrating the spectrum across the 26 dB EBW or 99% OBW of the signal using the instrument's band power measurement function with band limits set equal to the EBW or OBW band edges. If the instrument does not have a band power function, then sum the spectrum levels (in power units) at 1 MHz intervals extending across the 26 dB EBW or 99% OBW of the spectrum.
- Add $[10 \log (1 / D)]$, where D is the duty cycle, to the measured power to compute the average power during the actual transmission times (because the measurement represents an average over both the ON and OFF times of the transmission). For example, add $[10 \log (1 / 0.25)] = 6$ dB if the duty cycle is 25%.

Method PM (Measurement using an RF average power meter):

- Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the following conditions are satisfied:
 - The EUT is configured to transmit continuously or to transmit with a constant duty cycle.
 - At all times when the EUT is transmitting, it must be transmitting at its maximum power control level.

- c. The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.
- (ii) If the transmitter does not transmit continuously, measure the duty cycle, x , of the transmitter output signal as described in II.B.
- (iii) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
- (iv) Adjust the measurement in dBm by adding $10 \log (1/x)$ where x is the duty cycle (e.g., $10 \log (1/0.25)$ if the duty cycle is 25 %).

TEST SETUP



TEST ENVIRONMENT

Temperature	23.4 °C	Relative Humidity	64.5%
Atmosphere Pressure	101 kPa	Test Voltage	DC 5 V

TEST RESULTS

Please refer to section "Test Data" - Appendix C

7.4. POWER SPECTRAL DENSITY

LIMITS

CFR 47 FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Power Spectral Density	<input type="checkbox"/> Outdoor Access Point: 17 dBm/MHz <input type="checkbox"/> Indoor Access Point: 17 dBm/MHz <input type="checkbox"/> Fixed Point-To-Point Access Points: 17 dBm/MHz <input type="checkbox"/> Client Devices: 11 dBm/MHz	5150 ~ 5250
	30 dBm/500kHz	5725 ~ 5850

Note:

The above limits are based upon the maximum antenna gain does not exceed 6 dBi.

If transmitting antennas of directional gain greater than 6 dBi are used, maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.F.

Connect the EUT to the spectrum analyzer and use the following settings:

For U-NII-1, U-NII-2A and U-NII-2C band:

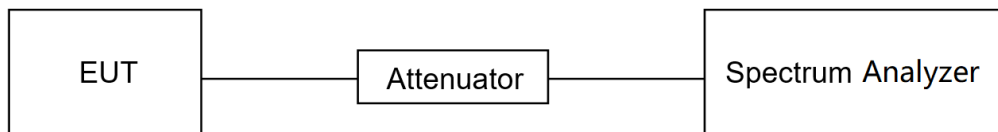
Center Frequency	The center frequency of the channel under test
Detector	RMS
RBW	1 MHz
VBW	$\geq 3 \times \text{RBW}$
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

For U-NII-3:

Center Frequency	The center frequency of the channel under test
Detector	RMS
RBW	500 kHz
VBW	$\geq 3 \times \text{RBW}$
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

Allow trace to fully stabilize and use the peak search function on the instrument to find the peak of the spectrum and record its value.

Add $10 \log(1/x)$, where x is the duty cycle, to the peak of the spectrum, the result is the Maximum PSD over 1 MHz / 500 kHz reference bandwidth.

TEST SETUP**TEST ENVIRONMENT**

Temperature	23.4 °C	Relative Humidity	64.5%
Atmosphere Pressure	101 kPa	Test Voltage	DC 5 V

TEST RESULTS

Please refer to section "Test Data" - Appendix D

7.5. FREQUENCY STABILITY

LIMITS

The frequency of the carrier signal shall be maintained within band of operation.

TEST PROCEDURE

1. The EUT was placed inside an environmental chamber as the temperature in the chamber was varied between 0 °C ~ 40 °C (declared by customer).
2. The temperature was incremented by 10 °C intervals and the unit allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded.
3. The primary supply voltage is varied from 85 % to 115 % of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

Connect the EUT to the spectrum analyzer and use the following settings:

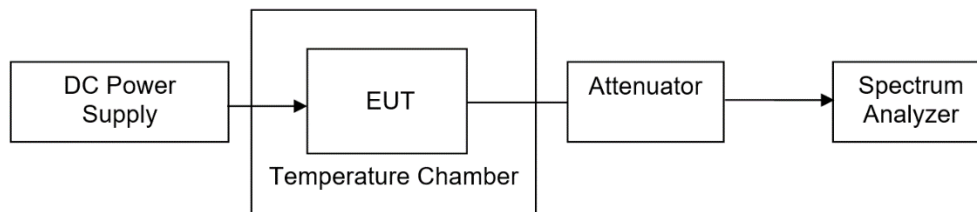
Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	10 kHz
VBW	$\geq 3 \times \text{RBW}$
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

4. While maintaining a constant temperature inside the environmental chamber, turn the EUT on and record the operating frequency at startup, and at 2 minutes, 5minutes, and 10 minutes after the EUT is energized.
5. Allow the trace to stabilize, find the peak value of the power envelope and record the frequency, then calculated the frequency drift.

TEST ENVIRONMENT

	Normal Test Conditions	Extreme Test Conditions
Relative Humidity	20 % ~ 75 %	/
Atmospheric Pressure	100 kPa ~ 102 kPa	/
Temperature	T_N (Normal Temperature): 25.1 °C	T_L (Low Temperature): 0 °C
		T_H (High Temperature): 40 °C
Supply Voltage	V_N (Normal Voltage): DC 5 V	V_L (Low Voltage): DC 4.25 V
		V_H (High Voltage): DC 5.75 V

TEST SETUP



TEST ENVIRONMENT

Temperature	23.4℃	Relative Humidity	64.5%
Atmosphere Pressure	101kPa	Test Voltage	DC 5 V

TEST RESULTS

Please refer to section "Test Data" - Appendix E

8. RADIATED TEST RESULTS

LIMITS

Refer to CFR 47 FCC §15.205, §15.209 and §15.407 (b).

Radiation Disturbance Test Limit for FCC (Class B) (9 kHz ~ 1 GHz)

Emissions radiated outside of the specified frequency bands above 30 MHz			
Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m	
		Quasi-Peak	
30 - 88	100	40	
88 - 216	150	43.5	
216 - 960	200	46	
Above 960	500	54	
Above 1000	500	Peak	Average
		74	54

FCC Emissions radiated outside of the specified frequency bands below 30 MHz		
Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30

FCC Restricted bands of operation refer to FCC §15.205 (a):

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(²)
13.36-13.41			

Note: ¹Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

²Above 38.6c

Limits of unwanted/undesirable emission out of the restricted bands refer to CFR 47 FCC §15.407 (b) and ISSED RSS-247 6.2.

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1GHz)		
Frequency Range (MHz)	EIRP Limit	Field Strength Limit (dBuV/m) at 3 m
5150~5250 MHz	PK: -27 (dBm/MHz)	PK:68.2(dBμV/m)
5725~5850 MHz	PK: -27 (dBm/MHz) *1 PK: 10 (dBm/MHz) *2 PK: 15.6 (dBm/MHz) *3 PK: 27 (dBm/MHz) *4	PK: 68.2(dBμV/m) *1 PK: 105.2 (dBμV/m) *2 PK: 110.8(dBμV/m) *3 PK: 122.2 (dBμV/m) *4
Note: *1 beyond 75 MHz or more above of the band edge. *2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above. *3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above. *4 from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.		

TEST PROCEDURE

Below 30 MHz

The setting of the spectrum analyzer

RBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
VBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
Sweep	Auto

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.4.
2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 80 cm above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1 m height antenna tower.
5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz Radiated emission limits in these three bands are based on measurements employing an average detector.
6. For measurement below 1 GHz, 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 and average detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak and average detector and reported.
7. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30m open field site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.
8. The limits in CFR 47, Part 15, Subpart C, paragraph 15.209 (a), are identical to those in RSS-GEN Section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table) using the free space impedance of 377Ω. For example, the measurement frequency X kHz resulted in a level of Y dBuV/m, which is equivalent to $Y-51.5 = Z$ dBuA/m, which has the same margin, W dB, to the corresponding RSS-GEN Table 6 limit as it has to be 15.209(a) limit.

Below 1 GHz and above 30 MHz

The setting of the spectrum analyzer

RBW	120 kHz
VBW	300 kHz
Sweep	Auto
Detector	Peak/QP
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.5.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 80 cm above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement below 1 GHz, 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 emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

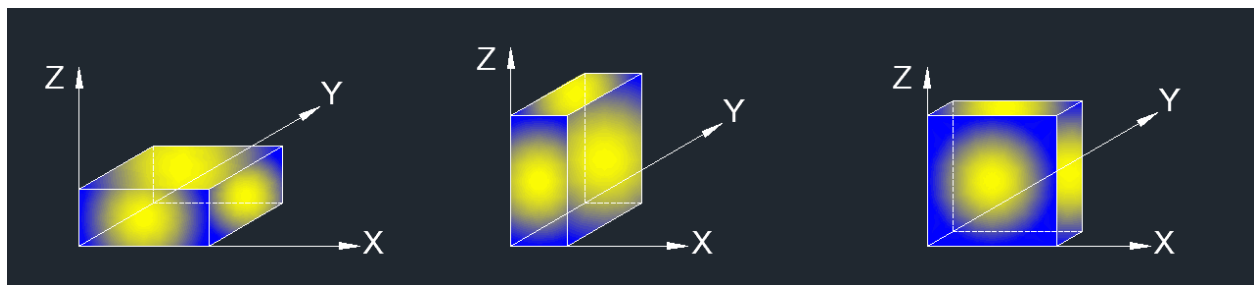
Above 1 GHz

The setting of the spectrum analyzer

RBW	1 MHz
VBW	PEAK: 3 MHz AVG: see note 6
Sweep	Auto
Detector	Peak
Trace	Max hold

1. The testing follows the guidelines in KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.G.3 ~ II.G.6.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 1.5 m above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement above 1 GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.
6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements. For the Duty Cycle please refer to clause 7.1. ON TIME AND DUTY CYCLE.

X axis, Y axis, Z axis positions:



Note 1: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

Note 2: The EUT was fully exercised with external accessories during the test. In the case of multiple accessory external ports, an external accessory shall be connected to one of each type of port.

For Restricted Bandedge:

Note:

1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. PK=Peak: Peak detector.
4. AV=Average: VBW=1/Ton, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
7. Both horizontal and vertical have been tested, only the worst data was recorded in the report.
8. All modes have been tested, but only the worst data was recorded in the report.

For Radiate Spurious emission (9 kHz ~ 30 MHz):

Note:

1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the QP limit, the QP result is deemed to comply with QP limit.
3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.
4. All modes have been tested, but only the worst data was recorded in the report.
5. $\text{dBuA/m} = \text{dBuV/m} - 20\log_{10}[120\pi] = \text{dBuV/m} - 51.5$

For Radiate Spurious Emission (30 MHz ~ 1 GHz):

Note:

1. Result Level = Read Level + Correct Factor.
2. If the peak values are less than the QP limit, the QP result is deemed to comply with QP limit.
3. All modes have been tested, but only the worst data was recorded in the report.

For Radiate Spurious Emission (1 GHz ~ 7 GHz):

1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27 dBm/MHz (68.2 dBuV/m) limit.
9. All modes have been tested, but only the worst data was recorded in the report.

For Radiate Spurious Emission (7 GHz ~ 18 GHz):

Note:

1. Peak Result = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. Peak: Peak detector.
4. AVG: $VBW=1/T_{on}$, where: T_{on} is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27 dBm/MHz (68.2 dBuV/m) limit.
9. All modes have been tested, but only the worst data was recorded in the report.

For Radiate Spurious emission (18 GHz ~ 26 GHz):

Note:

1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. Peak: Peak detector.
4. All modes have been tested, but only the worst data was recorded in the report.

For Radiate Spurious emission (26 GHz ~ 40 GHz):

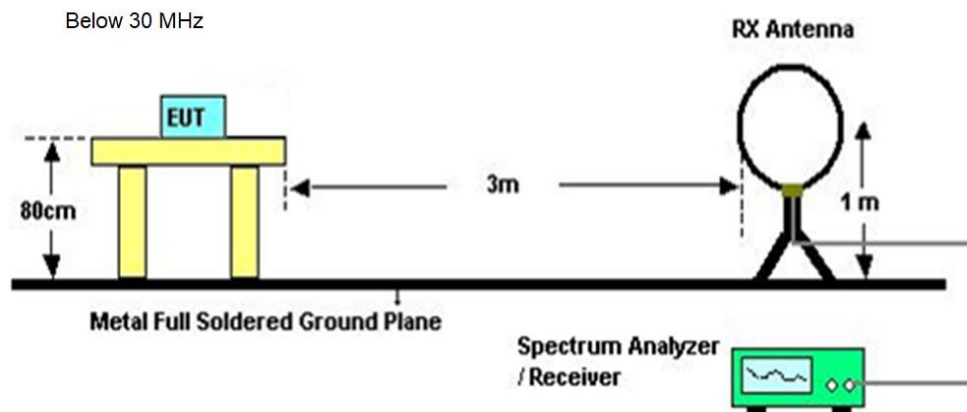
Note:

1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. Peak: Peak detector.
4. All modes have been tested, but only the worst data was recorded in the report.

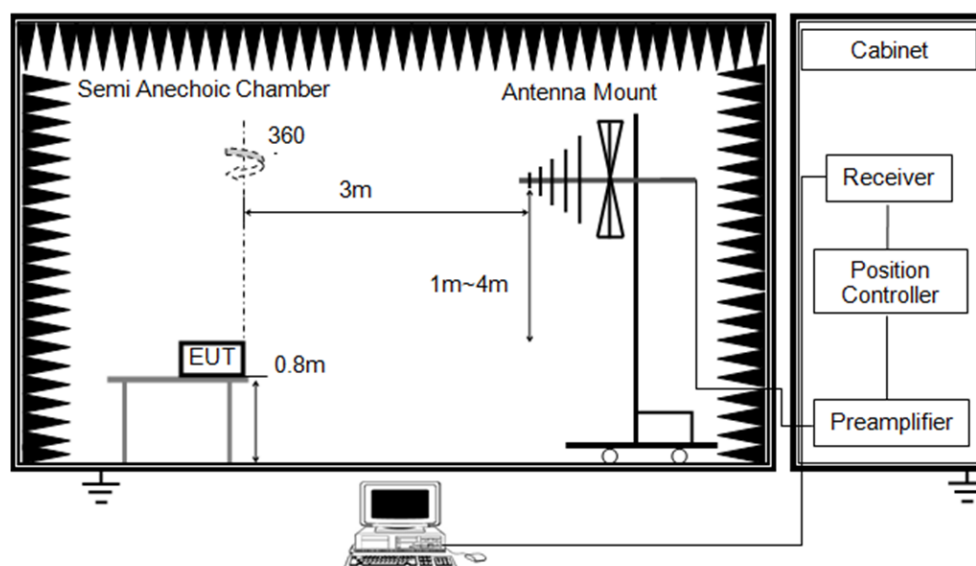
For Radiate Spurious emission:

Pre-scan had been done for the antenna manipulated through typical positions and lengths, only the worst data was recorded in the report.

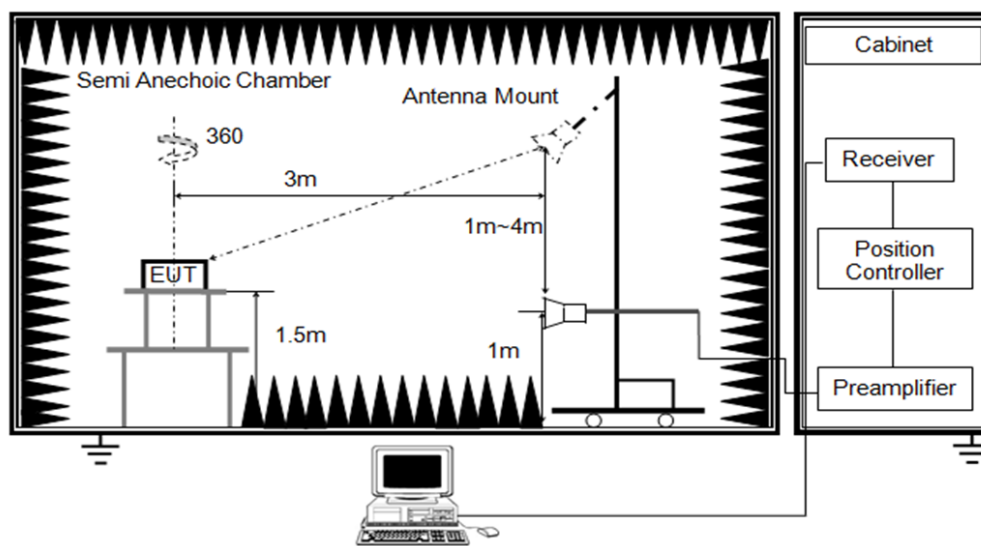
TEST SETUP



Below 1 GHz and above 30 MHz



Above 1 GHz



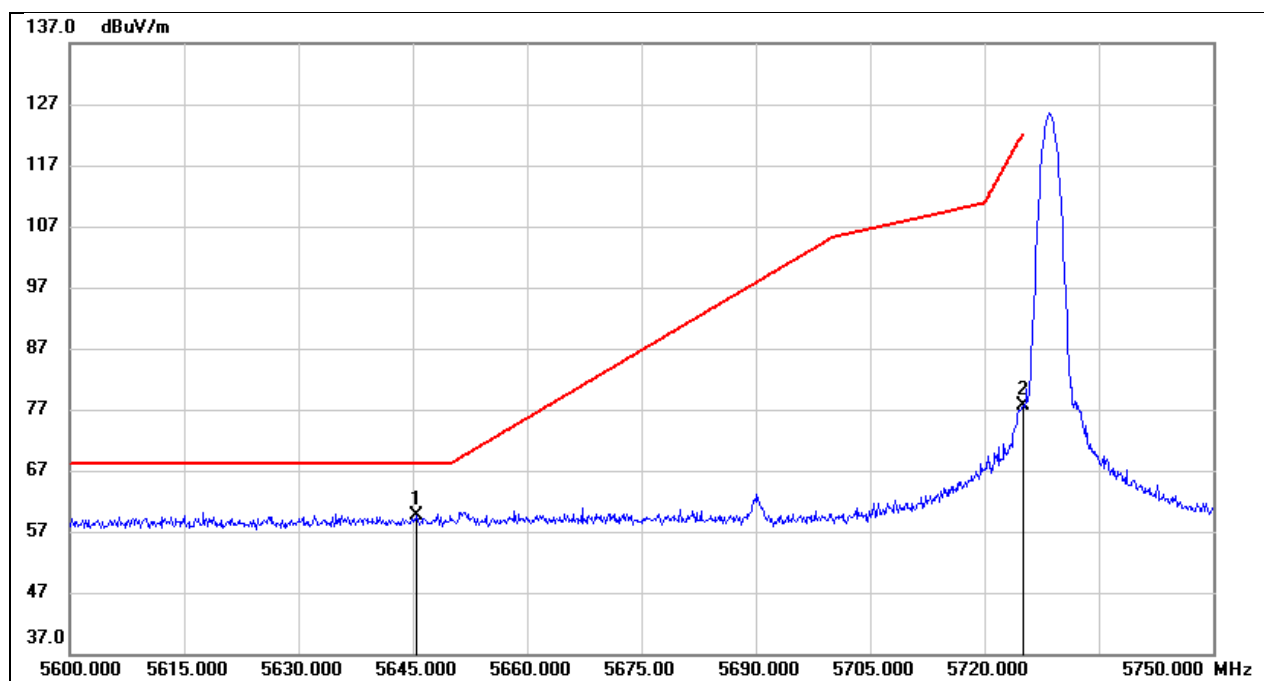
TEST ENVIRONMENT

Temperature	25.8 °C	Relative Humidity	56%
Atmosphere Pressure	101 kPa	Test Voltage	DC 5 V

TEST RESULTS

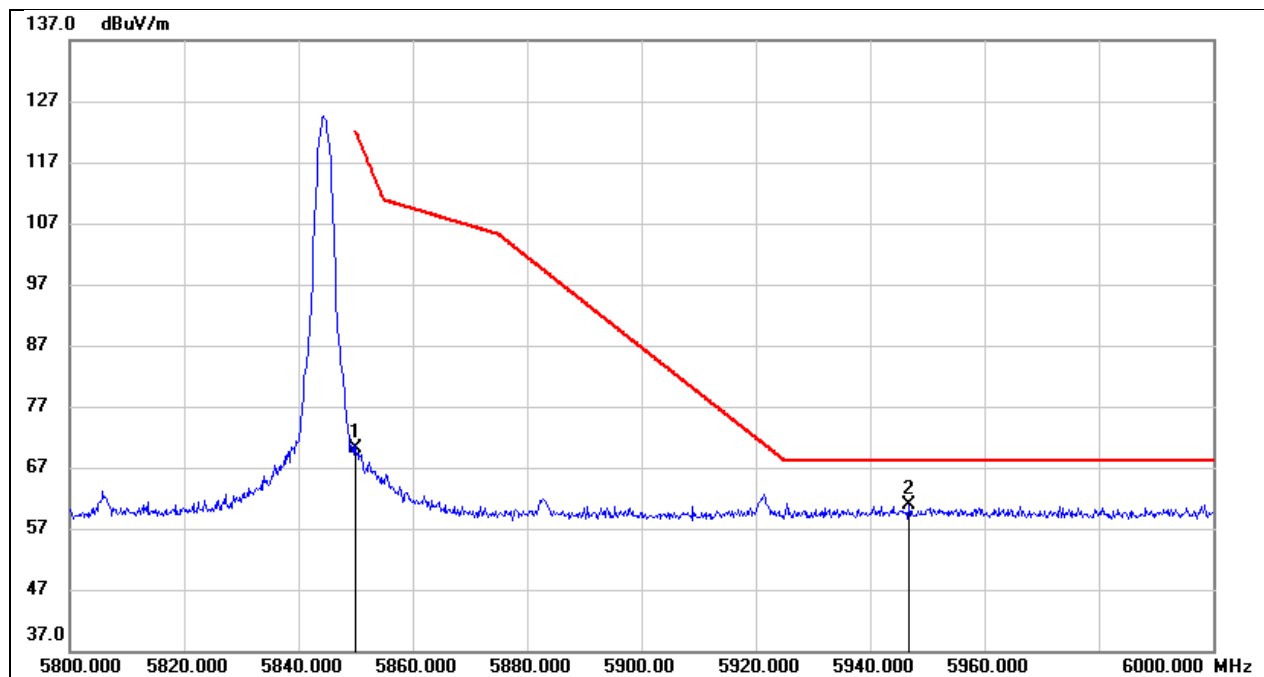
8.1. RESTRICTED BANDEDGE

Test Mode:	SRD 1.4MHz PK	Frequency(MHz):	5728.5
Polarity:	Vertical	Test Voltage:	DC 5 V



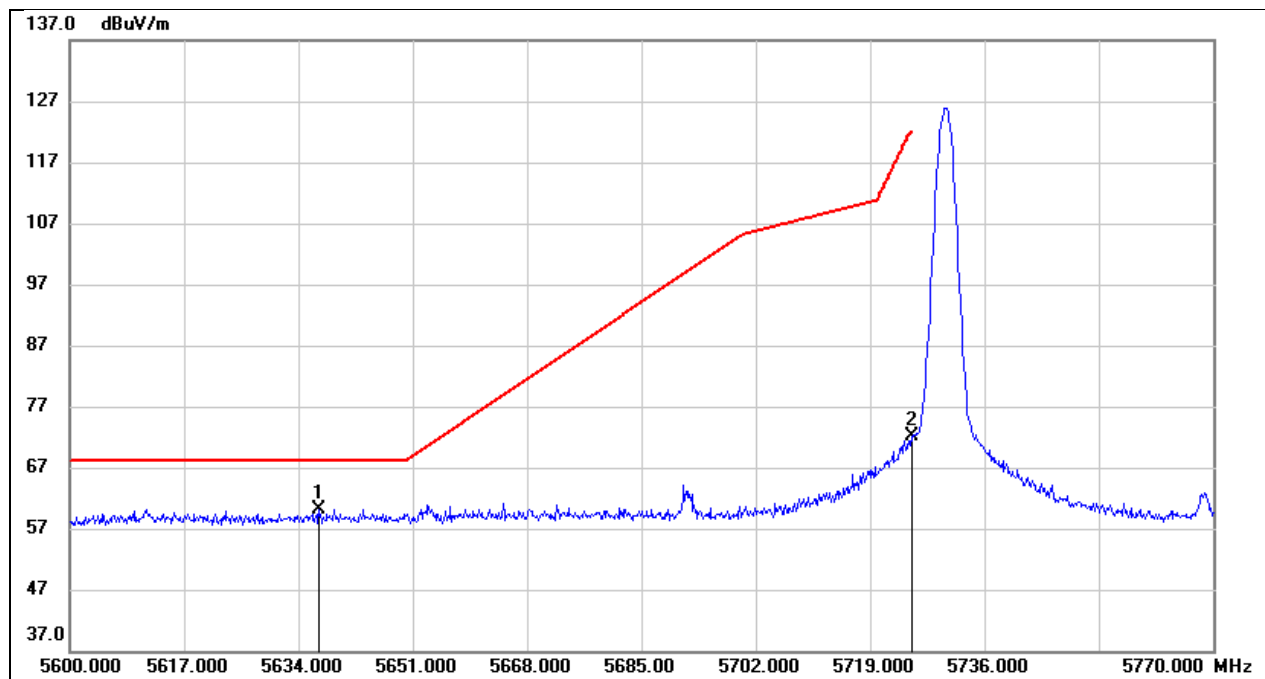
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5645.450	18.66	41.05	59.71	68.20	-8.49	peak
2	5725.000	36.44	41.27	77.71	122.20	-44.49	peak

Test Mode:	SRD 1.4MHz PK	Frequency(MHz):	5844.5
Polarity:	Vertical	Test Voltage:	DC 5 V



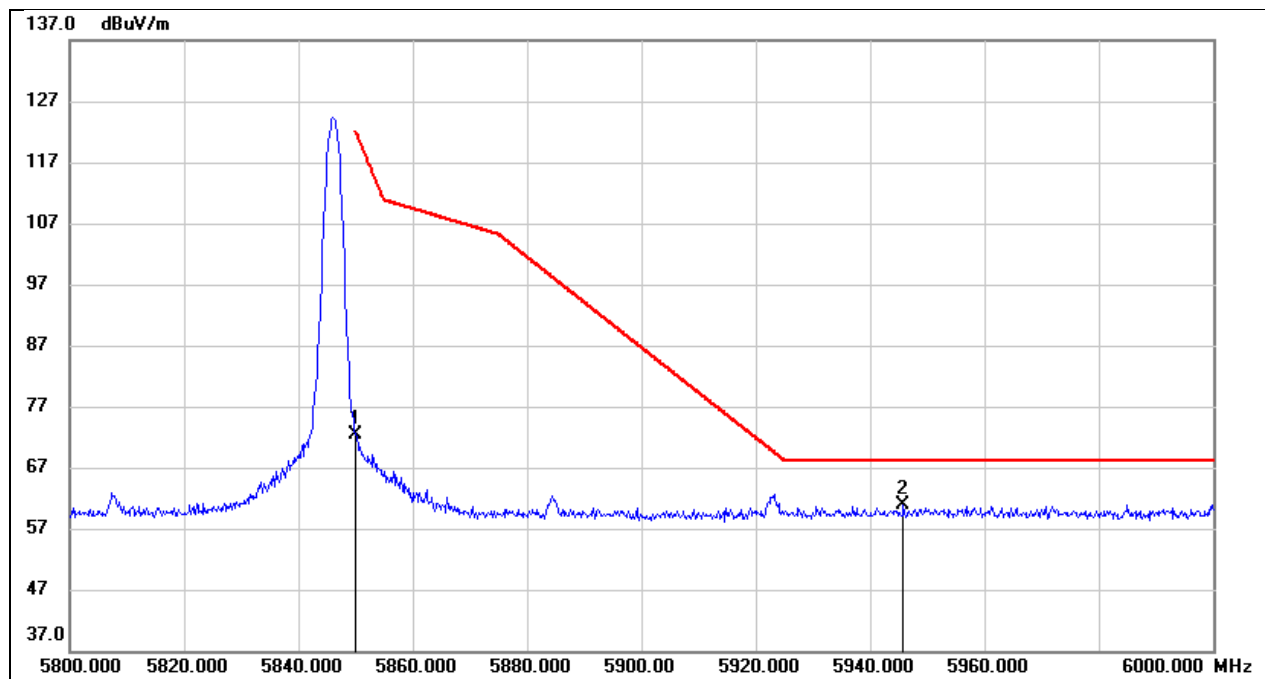
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	28.49	41.60	70.09	122.20	-52.11	peak
2	5946.800	18.94	41.86	60.80	68.20	-7.40	peak

Test Mode:	SRD 1.4MHz CA PK	Frequency(MHz):	5730.12
Polarity:	Vertical	Test Voltage:	DC 5 V



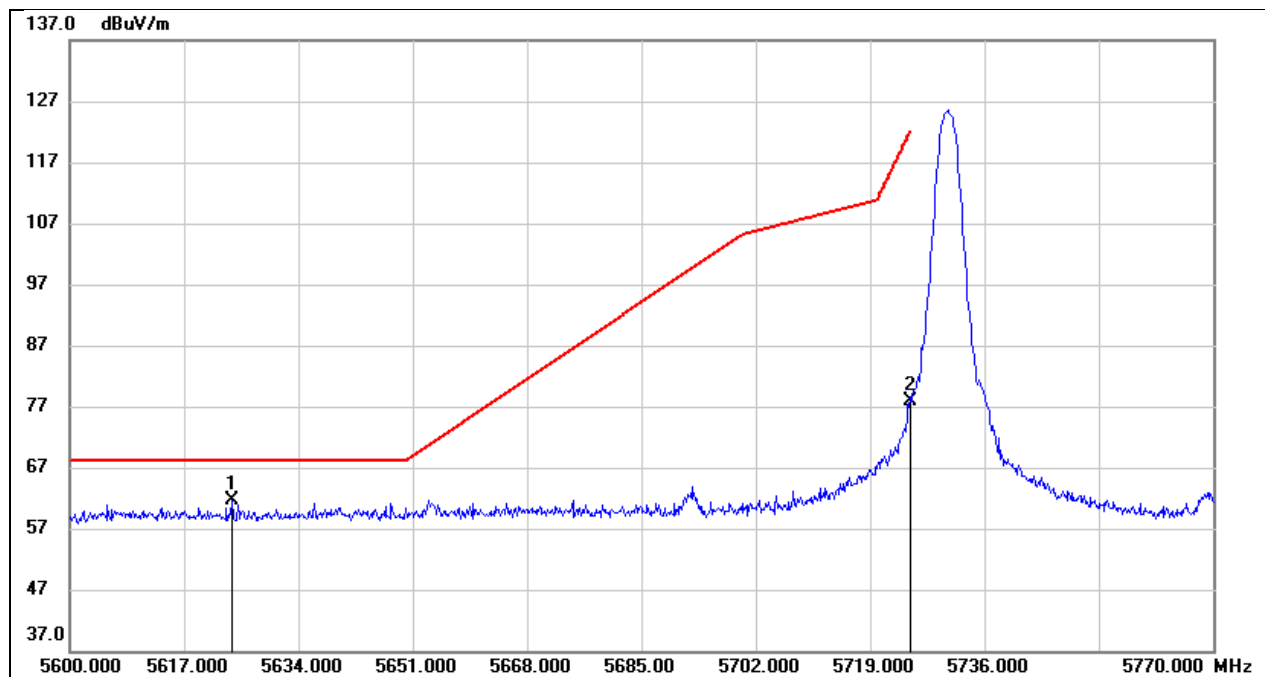
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5637.060	19.03	41.03	60.06	68.20	-8.14	peak
2	5725.000	30.94	41.27	72.21	122.20	-49.99	peak

Test Mode:	SRD 1.4MHz CA PK	Frequency(MHz):	5846.12
Polarity:	Vertical	Test Voltage:	DC 5 V



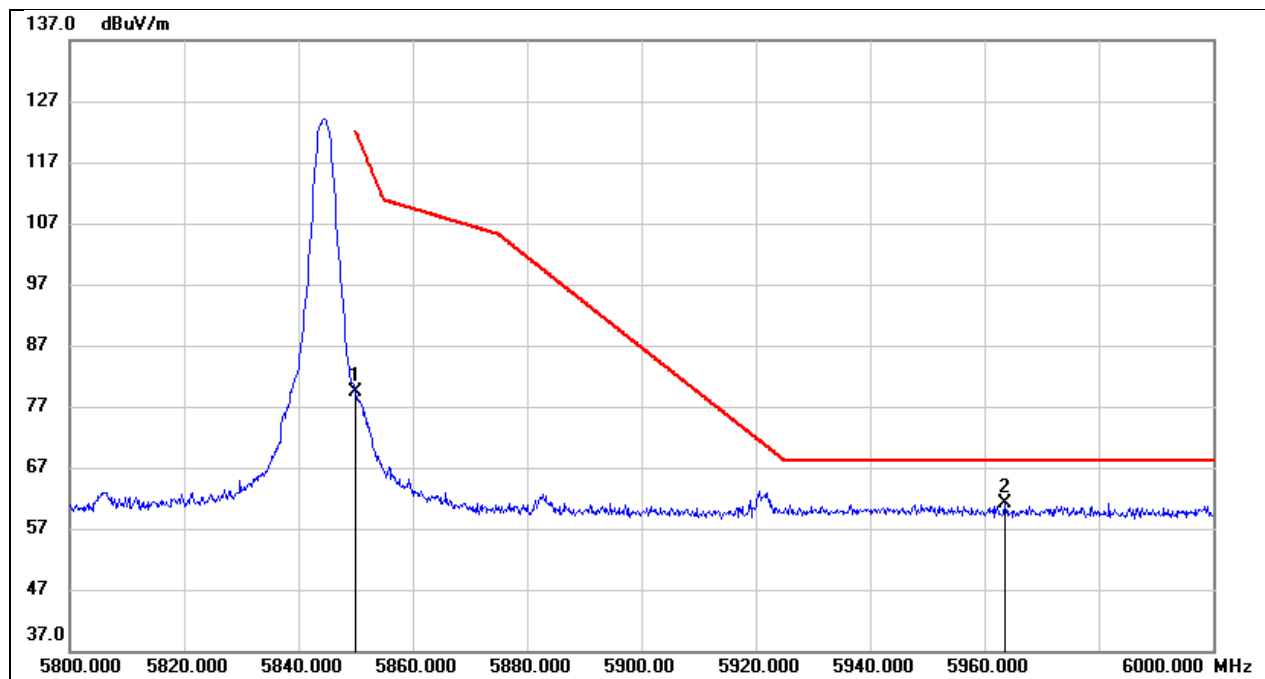
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	30.80	41.60	72.40	122.20	-49.80	peak
2	5945.800	18.90	41.86	60.76	68.20	-7.44	peak

Test Mode:	SRD 3MHz PK	Frequency(MHz):	5730.5
Polarity:	Vertical	Test Voltage:	DC 5 V



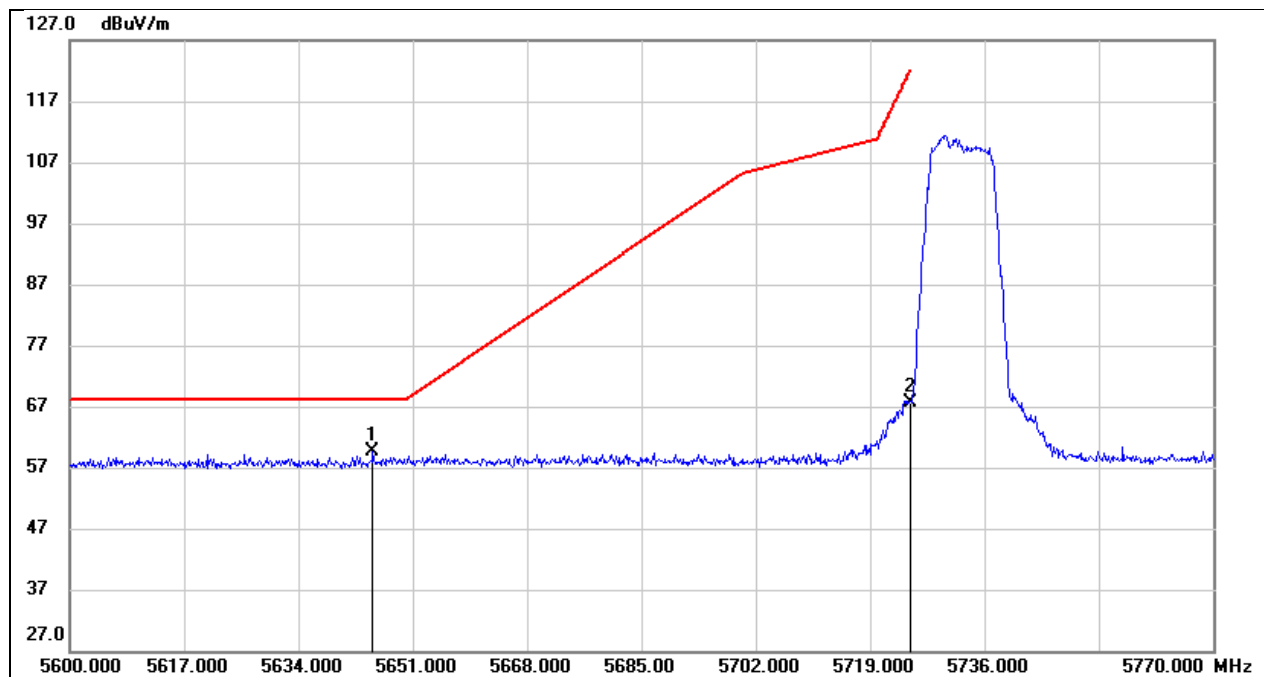
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5624.140	20.76	40.99	61.75	68.20	-6.45	peak
2	5725.000	36.60	41.27	77.87	122.20	-44.33	peak

Test Mode:	SRD 3MHz PK	Frequency(MHz):	5844.5
Polarity:	Vertical	Test Voltage:	DC 5 V



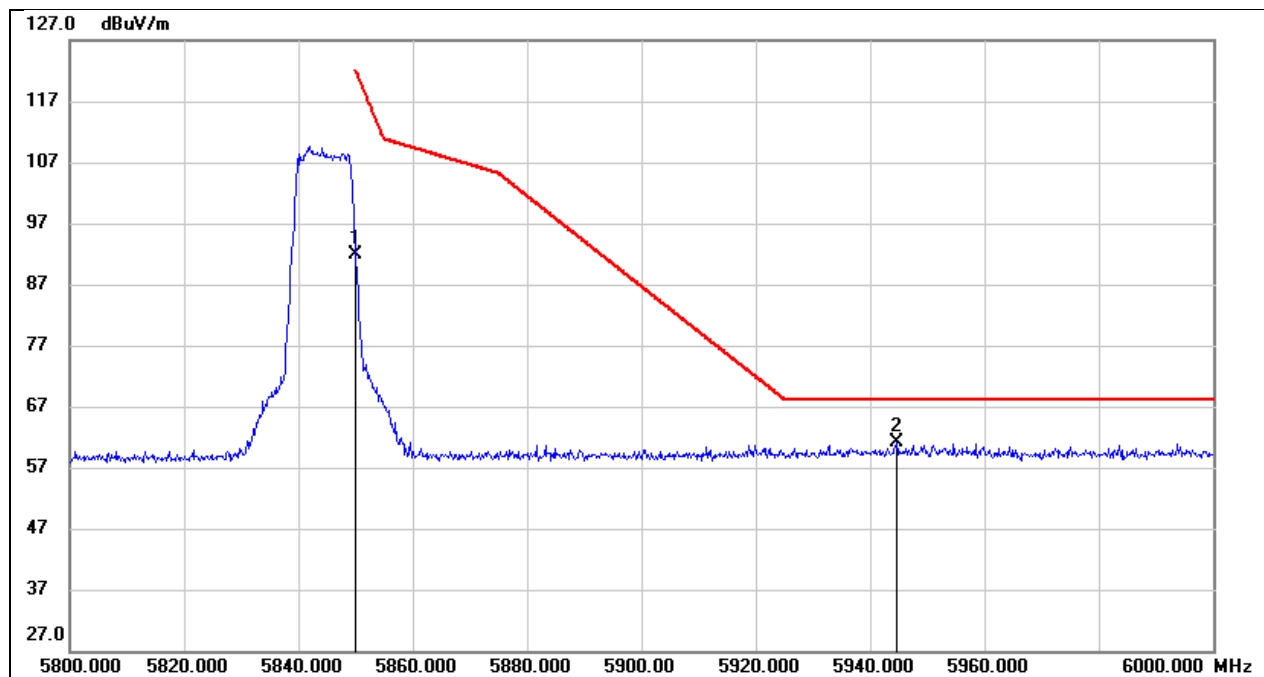
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	37.71	41.60	79.31	122.20	-42.89	peak
2	5963.600	19.23	41.90	61.13	68.20	-7.07	peak

Test Mode:	SRD 10MHz PK	Frequency(MHz):	5732.5
Polarity:	Vertical	Test Voltage:	DC 5 V



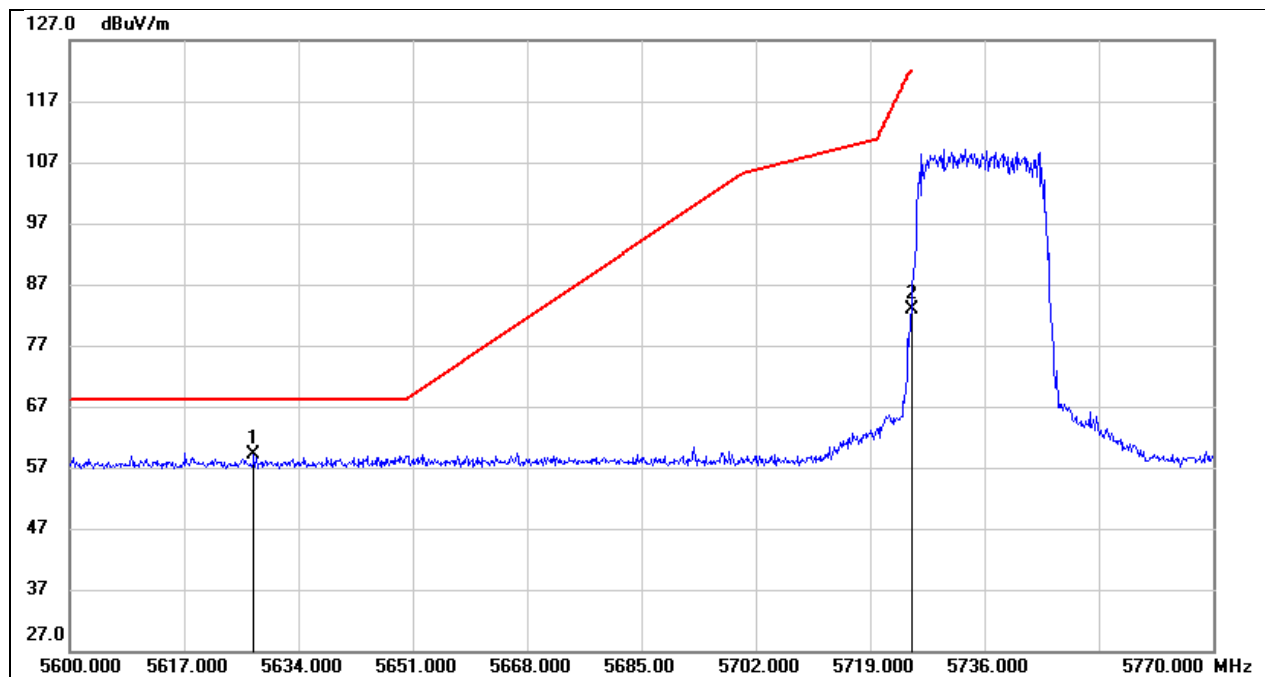
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5645.050	18.46	41.05	59.51	68.20	-8.69	peak
2	5725.000	26.27	41.27	67.54	122.20	-54.66	peak

Test Mode:	SRD 10MHz PK	Frequency(MHz):	5844.5
Polarity:	Vertical	Test Voltage:	DC 5 V



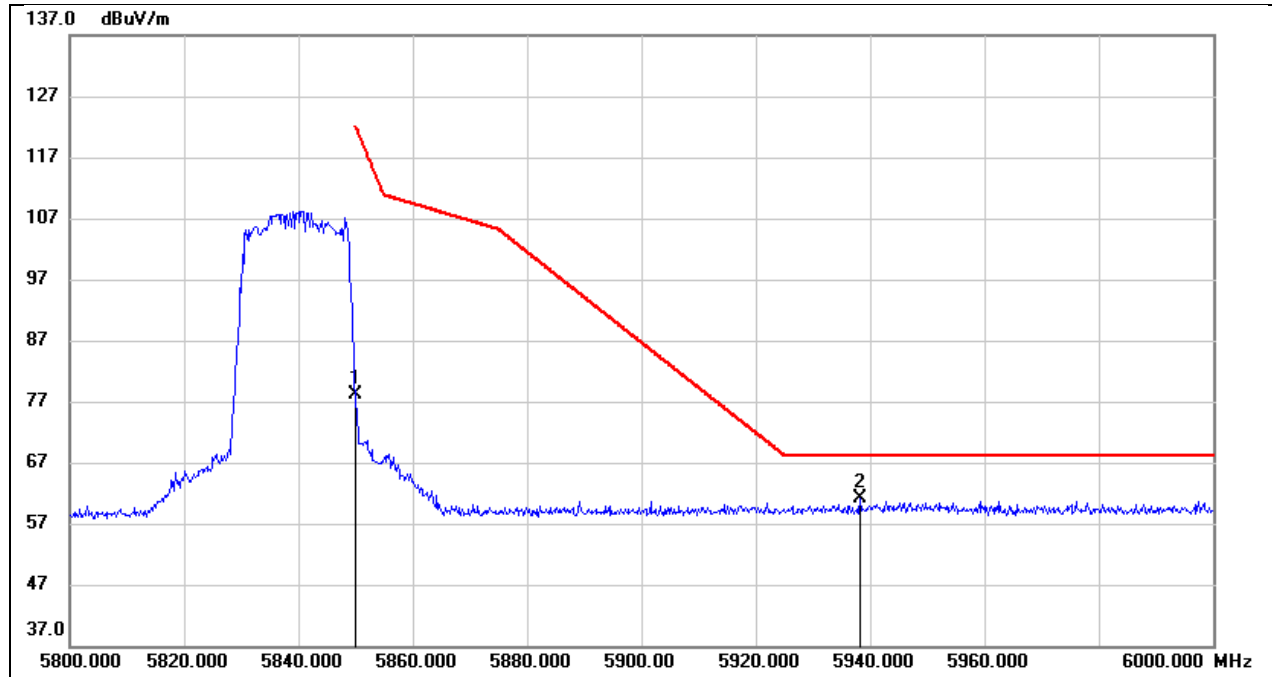
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	50.36	41.60	91.96	122.20	-30.24	peak
2	5944.600	19.23	41.85	61.08	68.20	-7.12	peak

Test Mode:	SRD 20MHz PK	Frequency(MHz):	5735.5
Polarity:	Vertical	Test Voltage:	DC 5 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5627.370	18.01	41.00	59.01	68.20	-9.19	peak
2	5725.000	41.66	41.27	82.93	122.20	-39.27	peak

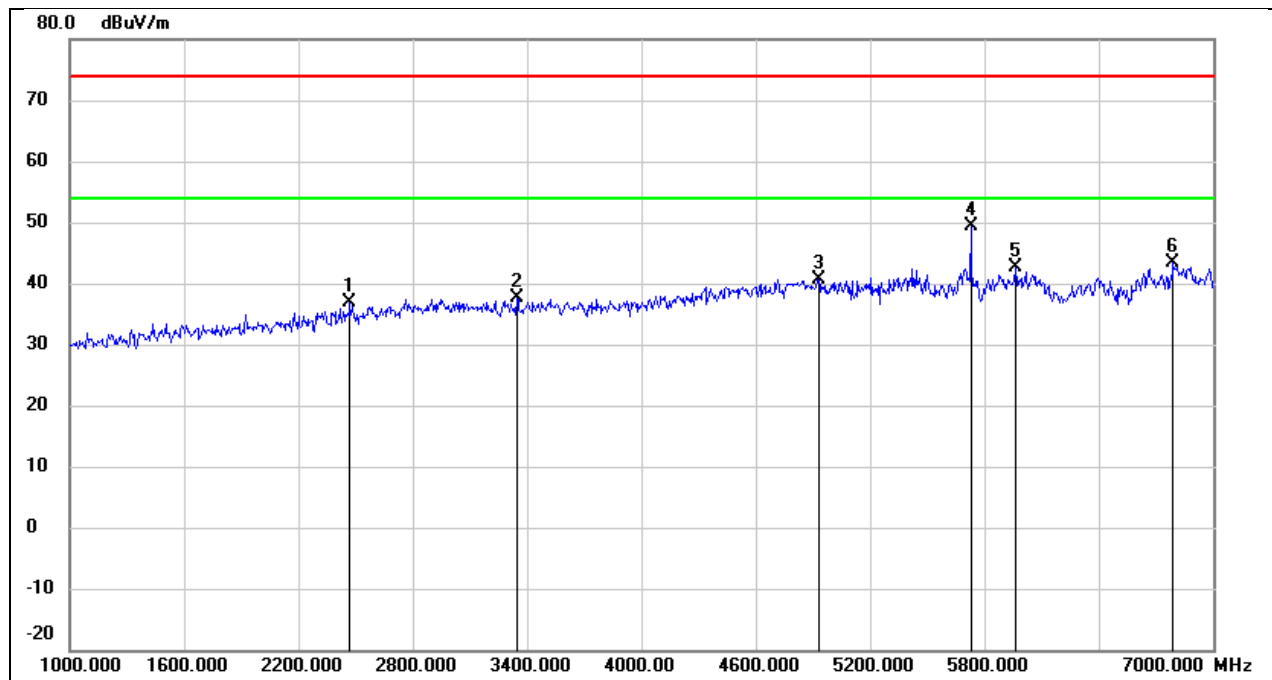
Test Mode:	SRD 20MHz PK	Frequency(MHz):	5839.5
Polarity:	Vertical	Test Voltage:	DC 5 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	36.64	41.60	78.24	122.20	-43.96	peak
2	5938.200	19.19	41.84	61.03	68.20	-7.17	peak

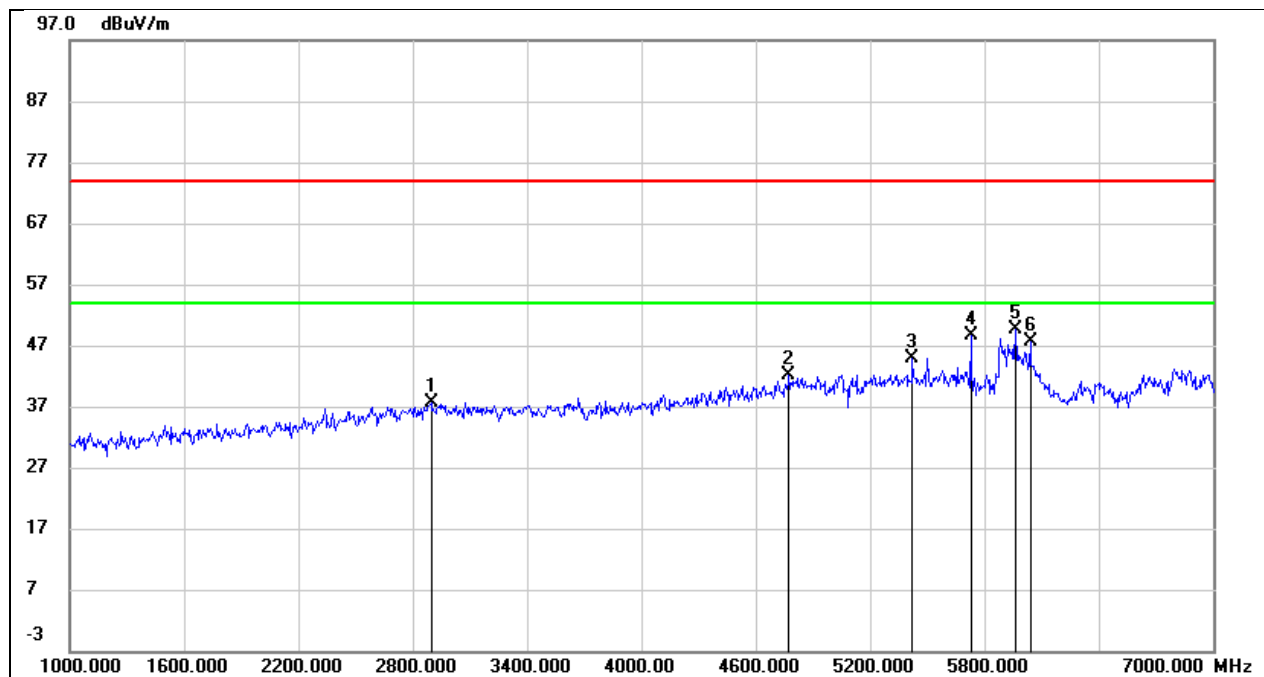
8.2. SPURIOUS EMISSIONS (1 GHZ ~ 7 GHZ)

Test Mode:	SRD 1.4MHz CA	Frequency(MHz):	5730.12
Polarity:	Horizontal	Test Voltage:	DC 5 V



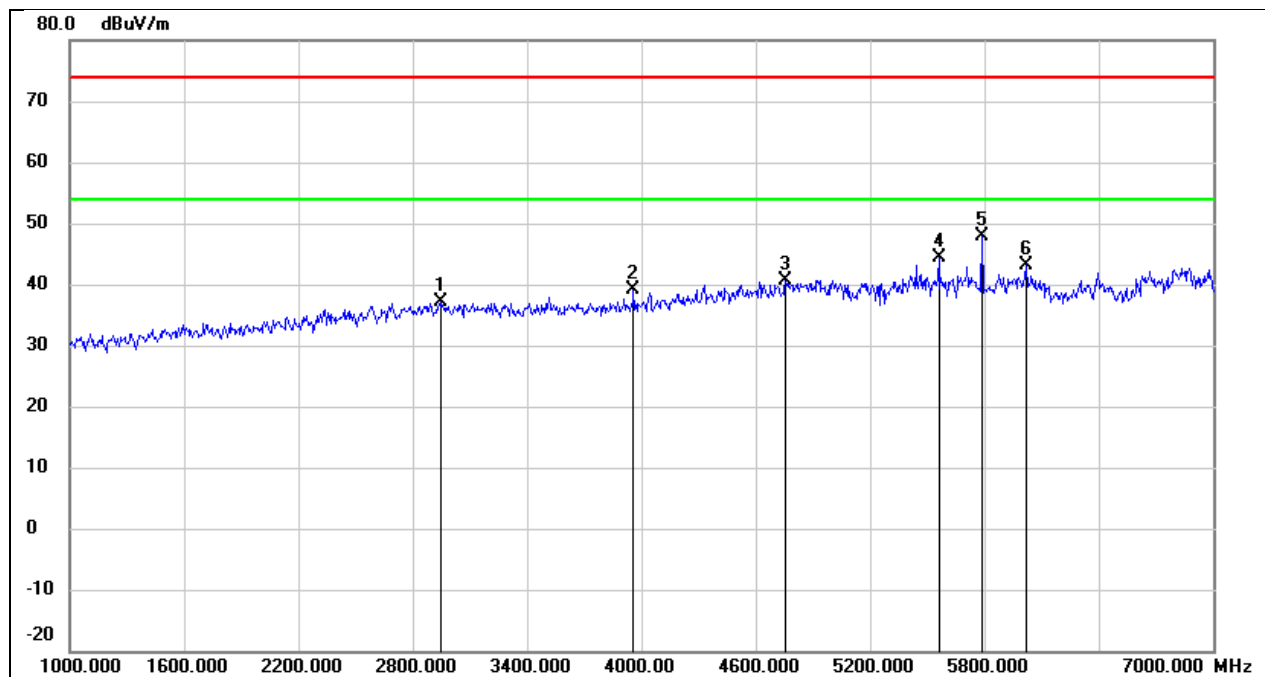
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2470.000	45.45	-8.65	36.80	74.00	-37.20	peak
2	3346.000	43.54	-5.89	37.65	74.00	-36.35	peak
3	4930.000	41.15	-0.43	40.72	74.00	-33.28	peak
4	5730.120	48.43	1.07	49.50	/	/	Fundamental
5	5962.000	40.78	1.74	42.52	74.00	-31.48	peak
6	6790.000	38.26	5.15	43.41	74.00	-30.59	peak

Test Mode:	SRD 1.4MHz CA	Frequency(MHz):	5730.12
Polarity:	Vertical	Test Voltage:	DC 5 V



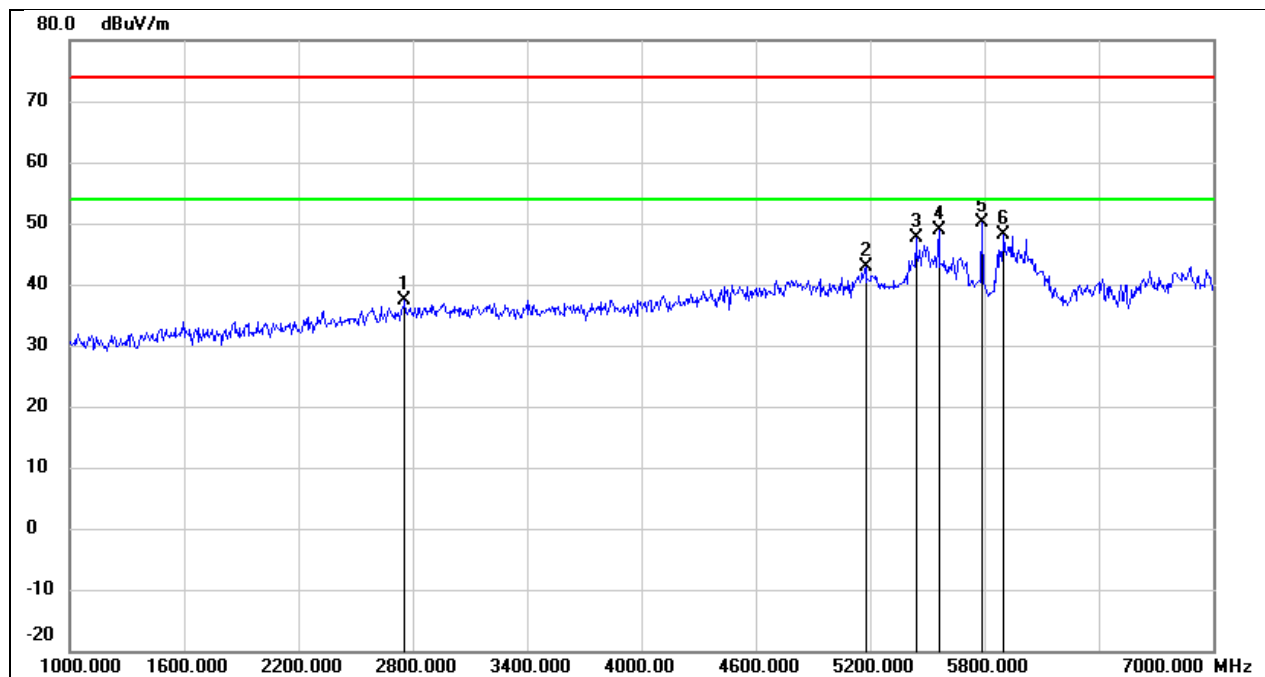
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2896.000	44.06	-6.50	37.56	74.00	-36.44	peak
2	4774.000	43.11	-1.05	42.06	74.00	-31.94	peak
3	5422.000	44.46	0.32	44.78	74.00	-29.22	peak
4	5730.120	47.53	1.07	48.60	/	/	Fundamental
5	5962.000	47.83	1.74	49.57	74.00	-24.43	peak
6	6040.000	45.58	1.99	47.57	74.00	-26.43	peak

Test Mode:	SRD 1.4MHz CA	Frequency(MHz):	5788.12
Polarity:	Horizontal	Test Voltage:	DC 5 V



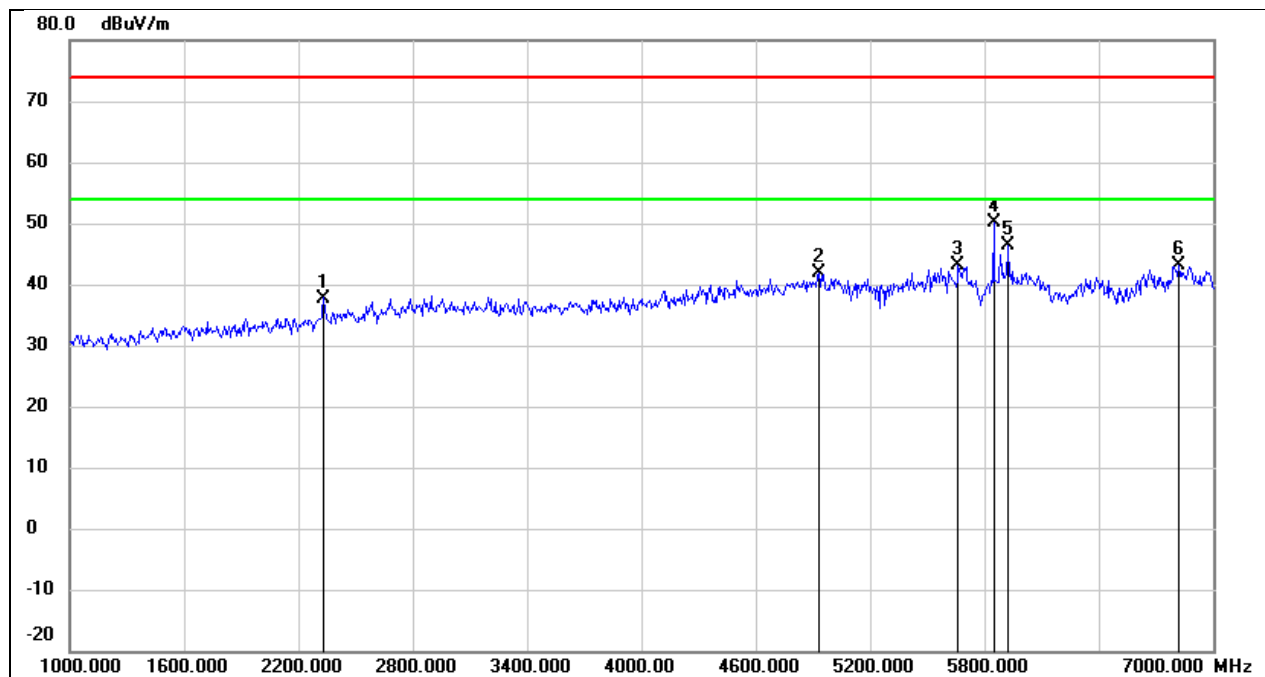
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2944.000	43.27	-6.26	37.01	74.00	-36.99	peak
2	3958.000	43.61	-4.59	39.02	74.00	-34.98	peak
3	4756.000	41.86	-1.12	40.74	74.00	-33.26	peak
4	5560.000	43.89	0.60	44.49	74.00	-29.51	peak
5	5788.120	46.60	1.25	47.85	/	/	Fundamental
6	6022.000	41.09	1.93	43.02	74.00	-30.98	peak

Test Mode:	SRD 1.4MHz CA	Frequency(MHz):	5788.12
Polarity:	Vertical	Test Voltage:	DC 5 V



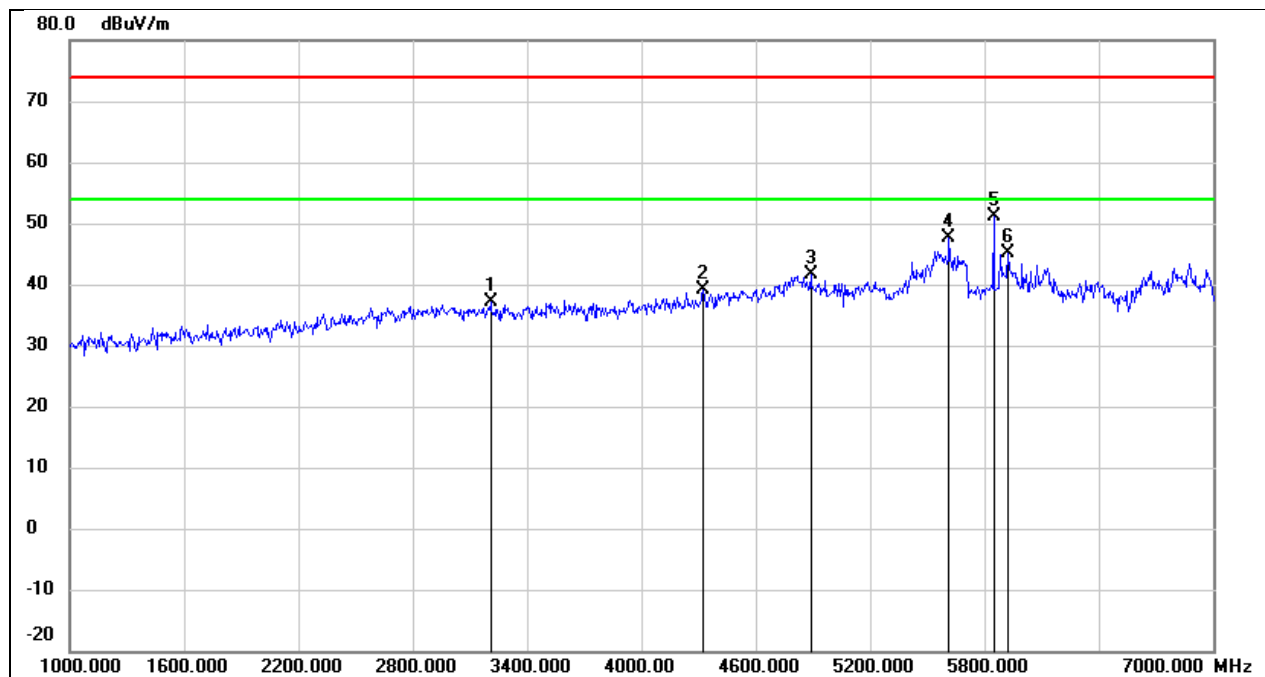
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2758.000	44.63	-7.20	37.43	74.00	-36.57	peak
2	5176.000	42.90	0.05	42.95	74.00	-31.05	peak
3	5440.000	47.16	0.35	47.51	74.00	-26.49	peak
4	5560.000	48.27	0.60	48.87	74.00	-25.13	peak
5	5788.120	48.84	1.25	50.09	/	/	Fundamental
6	5902.000	46.67	1.57	48.24	74.00	-25.76	peak

Test Mode:	SRD 1.4MHz CA	Frequency(MHz):	5846.12
Polarity:	Horizontal	Test Voltage:	DC 5 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2332.000	47.11	-9.36	37.75	74.00	-36.25	peak
2	4930.000	42.36	-0.43	41.93	74.00	-32.07	peak
3	5662.000	42.23	0.89	43.12	74.00	-30.88	peak
4	5846.120	48.61	1.41	50.02	/	/	Fundamental
5	5926.000	44.78	1.64	46.42	74.00	-27.58	peak
6	6820.000	37.76	5.31	43.07	74.00	-30.93	peak

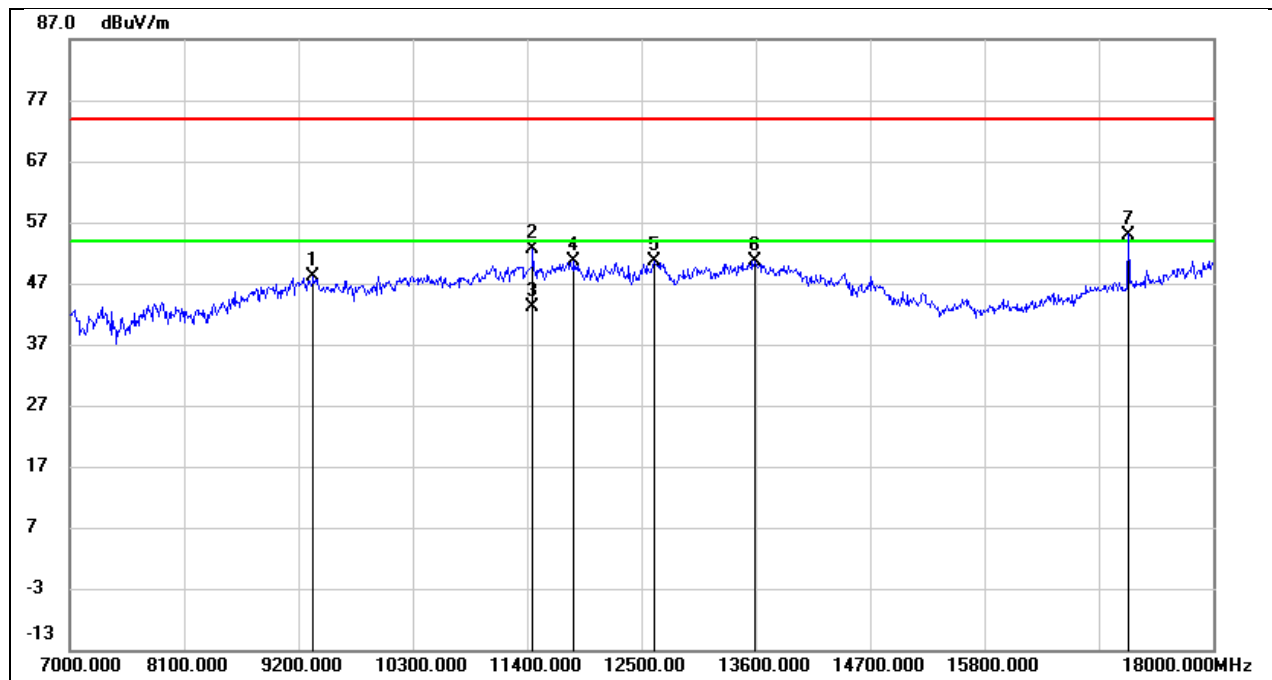
Test Mode:	SRD 1.4MHz CA	Frequency(MHz):	5846.12
Polarity:	Vertical	Test Voltage:	DC 5 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	3208.000	42.96	-5.93	37.03	74.00	-36.97	peak
2	4324.000	42.12	-2.96	39.16	74.00	-34.84	peak
3	4888.000	42.34	-0.60	41.74	74.00	-32.26	peak
4	5614.000	46.92	0.74	47.66	74.00	-26.34	peak
5	5846.120	49.66	1.41	51.07	/	/	Fundamental
6	5926.000	43.52	1.64	45.16	74.00	-28.84	peak

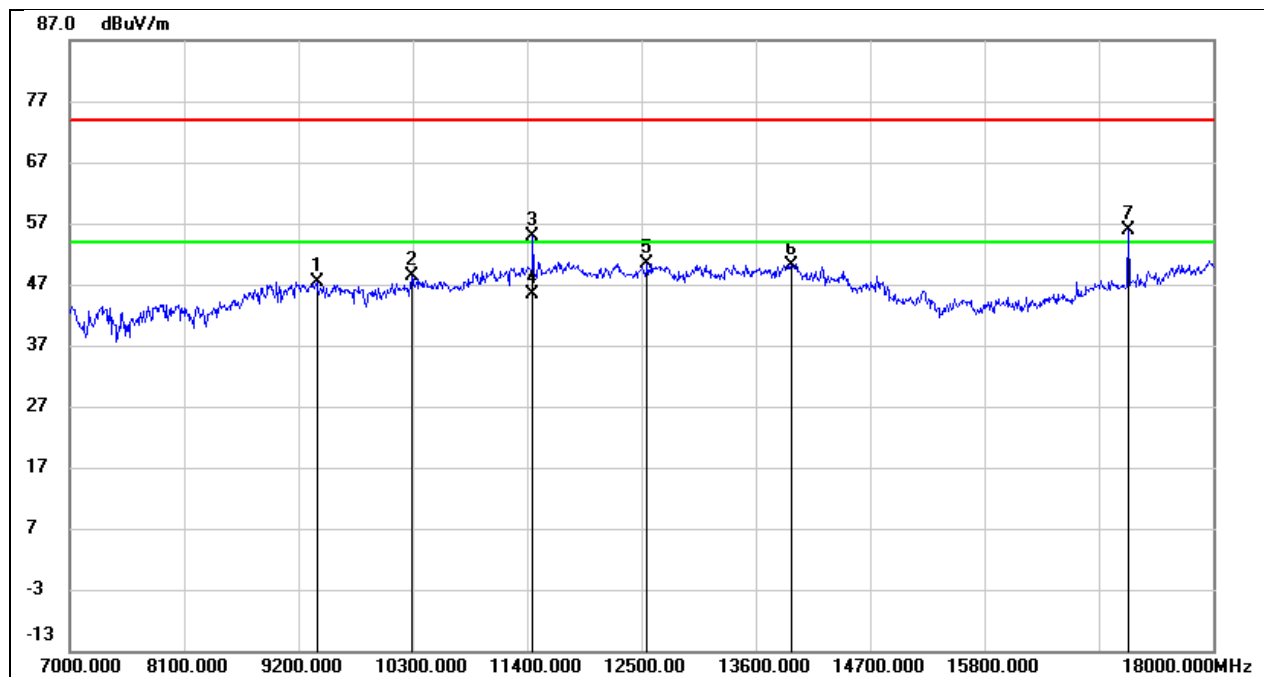
8.3. SPURIOUS EMISSIONS (7 GHZ ~ 18 GHZ)

Test Mode:	SRD 1.4MHz	Frequency(MHz):	5728.5
Polarity:	Horizontal	Test Voltage:	DC 5 V



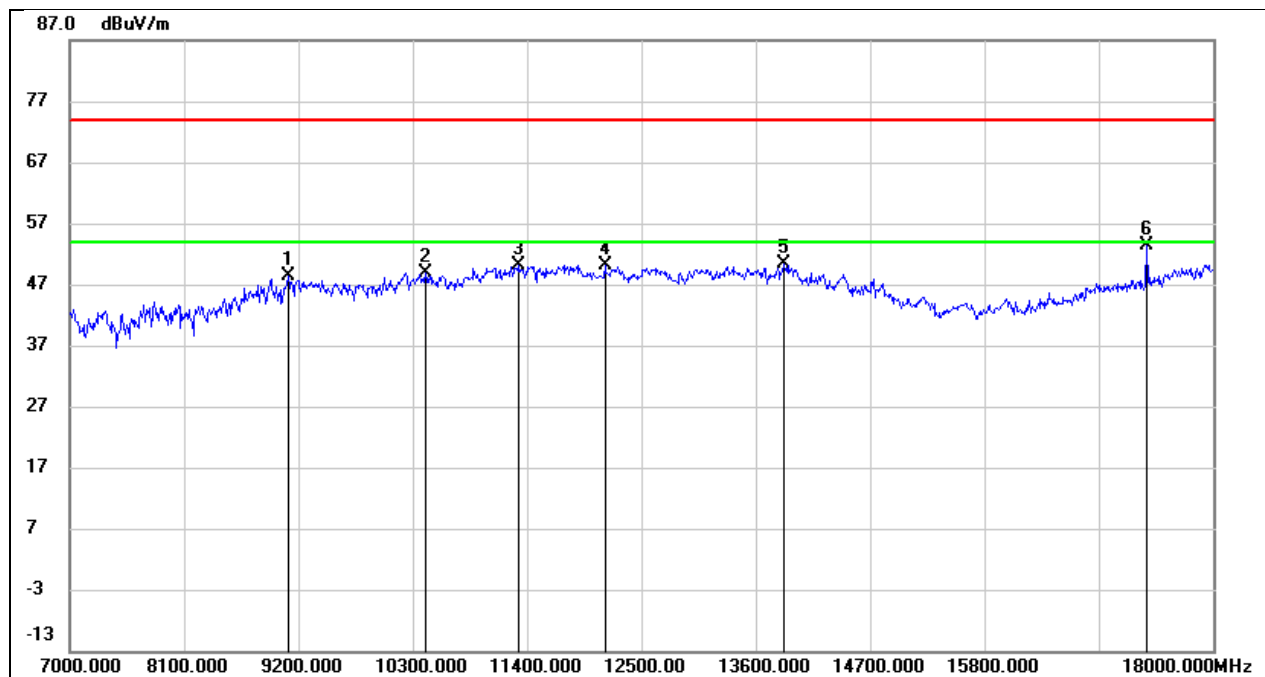
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9343.000	37.64	10.55	48.19	74.00	-25.81	peak
2	11455.000	35.96	16.58	52.54	74.00	-21.46	peak
3	11455.000	26.55	16.58	43.13	54.00	-10.87	AVG
4	11851.000	33.09	17.43	50.52	74.00	-23.48	peak
5	12621.000	32.74	17.98	50.72	74.00	-23.28	peak
6	13589.000	29.80	20.86	50.66	74.00	-23.34	peak
7	17186.000	33.61	21.39	55.00	74.00	-19.00	peak

Test Mode:	SRD 1.4MHz	Frequency(MHz):	5728.5
Polarity:	Vertical	Test Voltage:	DC 5 V



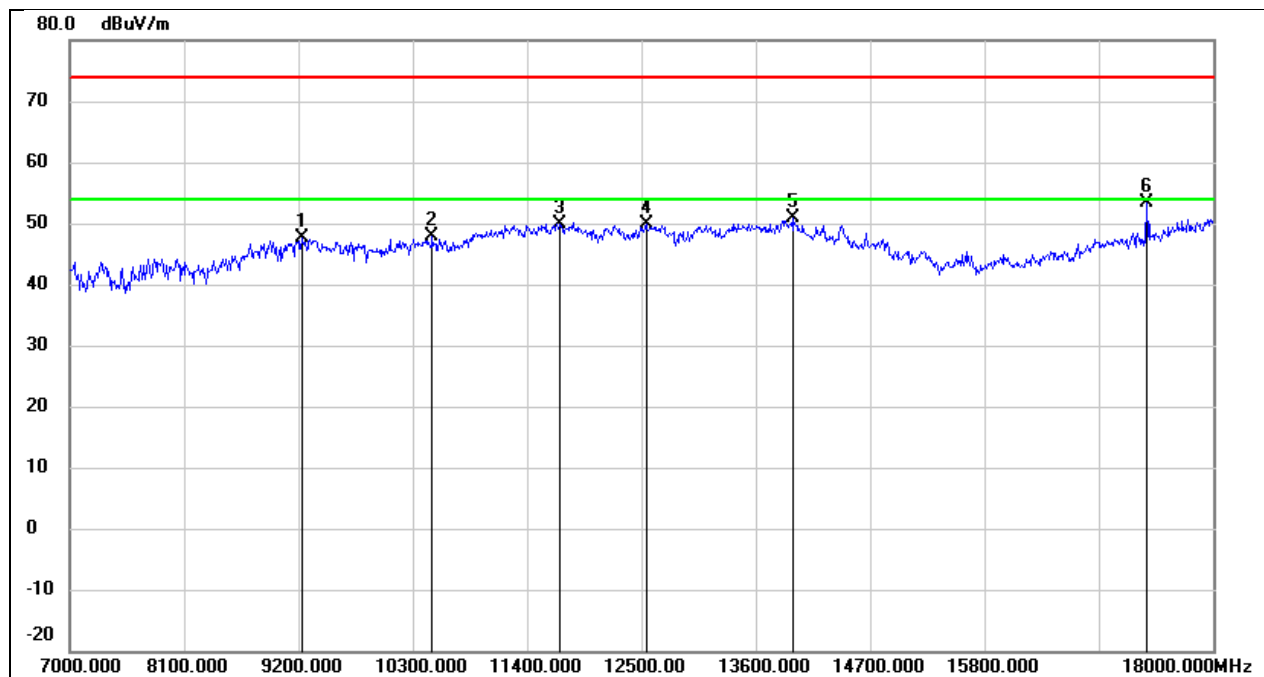
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9376.000	36.89	10.58	47.47	74.00	-26.53	peak
2	10289.000	35.88	12.38	48.26	74.00	-25.74	peak
3	11455.000	38.30	16.58	54.88	74.00	-19.12	peak
4	11455.000	28.70	16.58	45.28	54.00	-8.72	AVG
5	12555.000	32.57	17.90	50.47	74.00	-23.53	peak
6	13941.000	28.47	21.73	50.20	74.00	-23.80	peak
7	17186.000	34.45	21.39	55.84	74.00	-18.16	peak

Test Mode:	SRD 1.4MHz	Frequency(MHz):	5786.5
Polarity:	Horizontal	Test Voltage:	DC 5 V



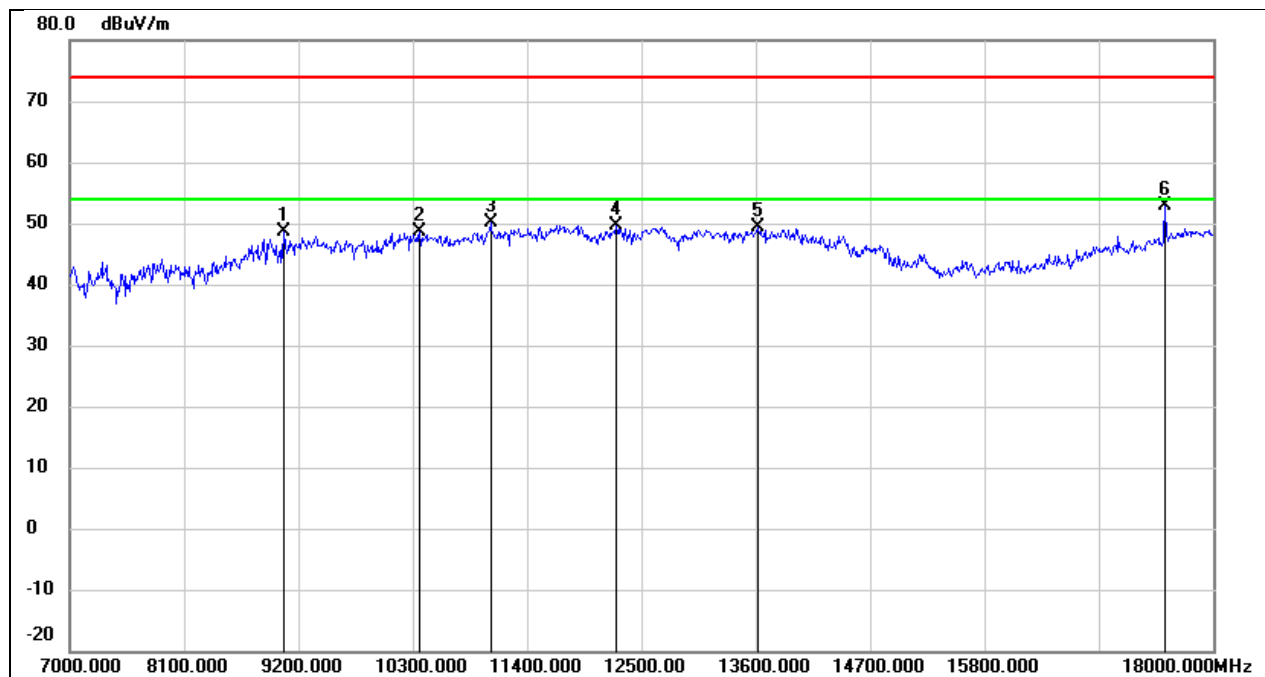
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9101.000	37.94	10.40	48.34	74.00	-25.66	peak
2	10421.000	36.24	12.66	48.90	74.00	-25.10	peak
3	11323.000	33.97	16.05	50.02	74.00	-23.98	peak
4	12148.000	32.37	17.74	50.11	74.00	-23.89	peak
5	13864.000	28.76	21.53	50.29	74.00	-23.71	peak
6	17362.000	31.30	22.12	53.42	74.00	-20.58	peak

Test Mode:	SRD 1.4MHz	Frequency(MHz):	5786.5
Polarity:	Vertical	Test Voltage:	DC 5 V



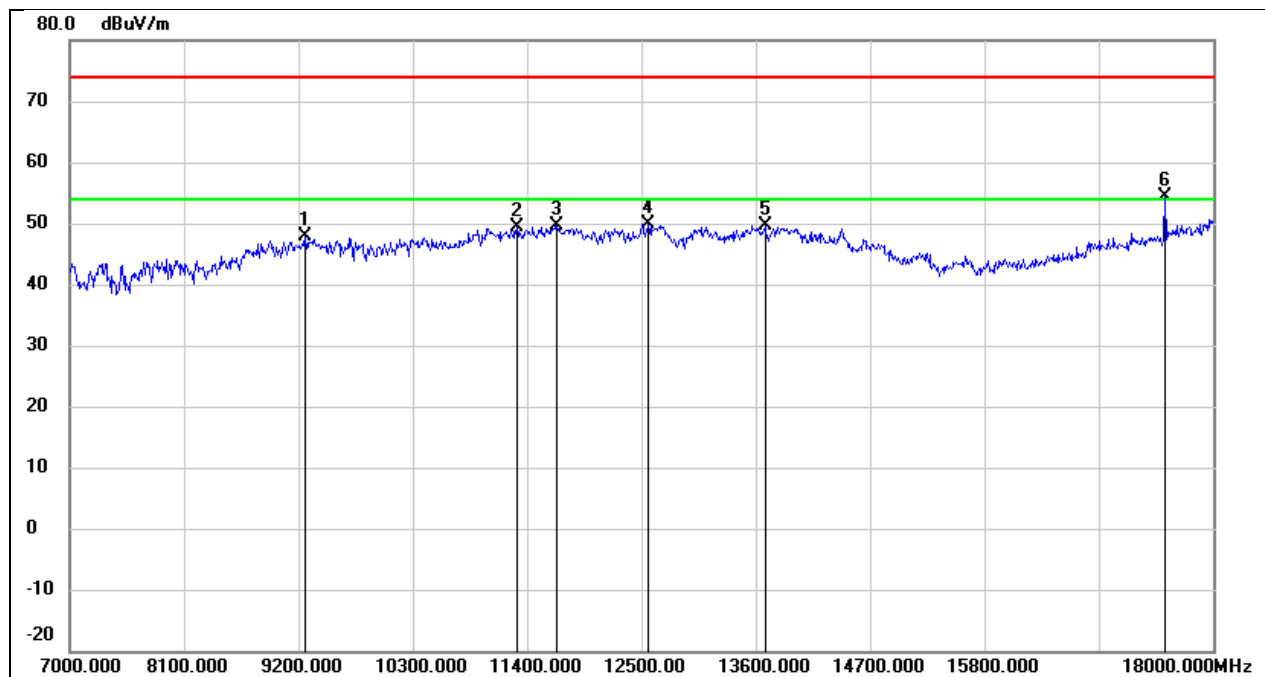
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9233.000	37.03	10.48	47.51	74.00	-26.49	peak
2	10487.000	35.18	12.79	47.97	74.00	-26.03	peak
3	11708.000	32.83	17.16	49.99	74.00	-24.01	peak
4	12544.000	31.90	17.88	49.78	74.00	-24.22	peak
5	13963.000	29.01	21.78	50.79	74.00	-23.21	peak
6	17362.000	31.28	22.12	53.40	74.00	-20.60	peak

Test Mode:	SRD 1.4MHz	Frequency(MHz):	5844.5
Polarity:	Horizontal	Test Voltage:	DC 5 V



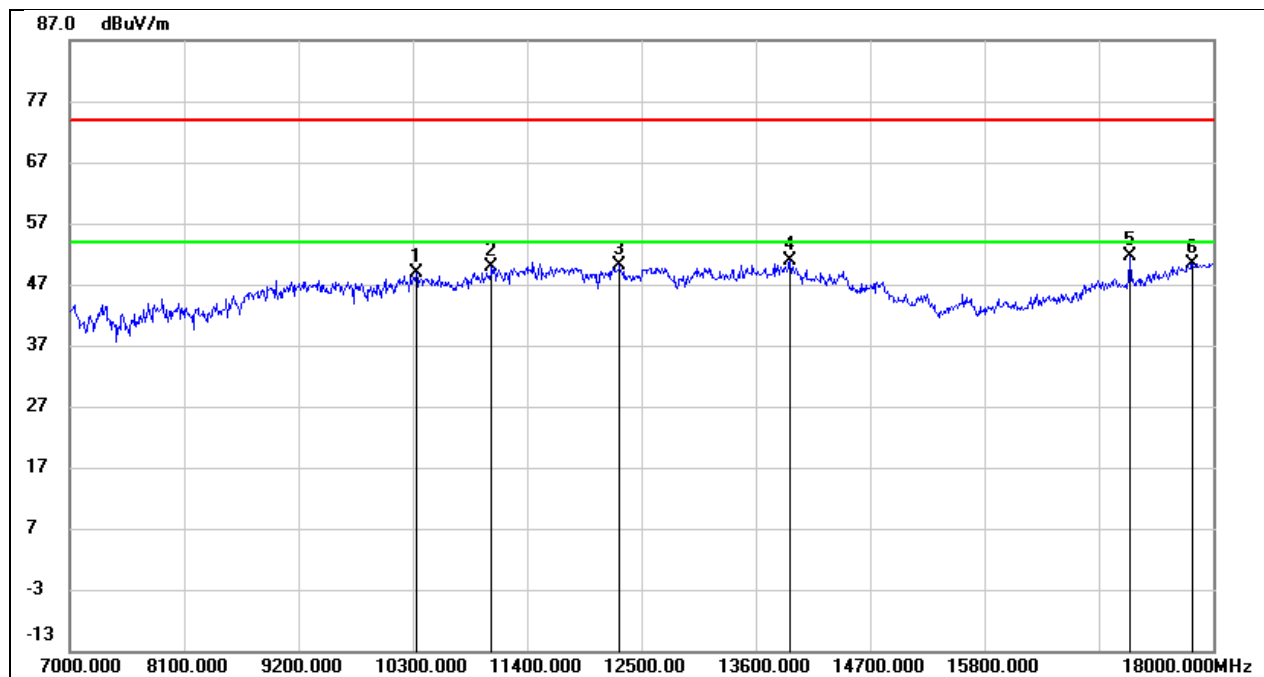
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9057.000	38.33	10.38	48.71	74.00	-25.29	peak
2	10366.000	35.99	12.54	48.53	74.00	-25.47	peak
3	11048.000	35.16	14.91	50.07	74.00	-23.93	peak
4	12258.000	31.77	17.77	49.54	74.00	-24.46	peak
5	13622.000	28.35	20.95	49.30	74.00	-24.70	peak
6	17538.000	29.91	22.97	52.88	74.00	-21.12	peak

Test Mode:	SRD 1.4MHz	Frequency(MHz):	5844.5
Polarity:	Vertical	Test Voltage:	DC 5 V



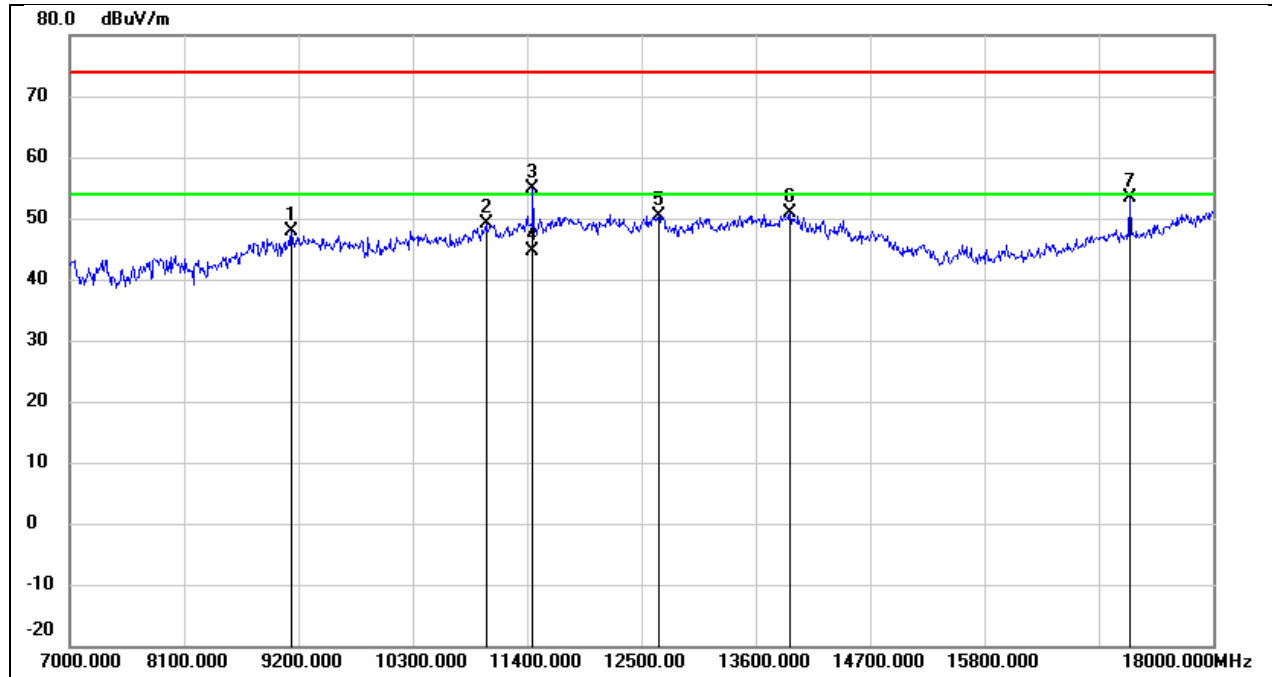
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9266.000	37.33	10.51	47.84	74.00	-26.16	peak
2	11301.000	33.31	15.95	49.26	74.00	-24.74	peak
3	11686.000	32.62	17.12	49.74	74.00	-24.26	peak
4	12566.000	31.93	17.91	49.84	74.00	-24.16	peak
5	13688.000	28.45	21.10	49.55	74.00	-24.45	peak
6	17538.000	31.37	22.97	54.34	74.00	-19.66	peak

Test Mode:	SRD 1.4MHz CA	Frequency(MHz):	5730.12
Polarity:	Horizontal	Test Voltage:	DC 5 V



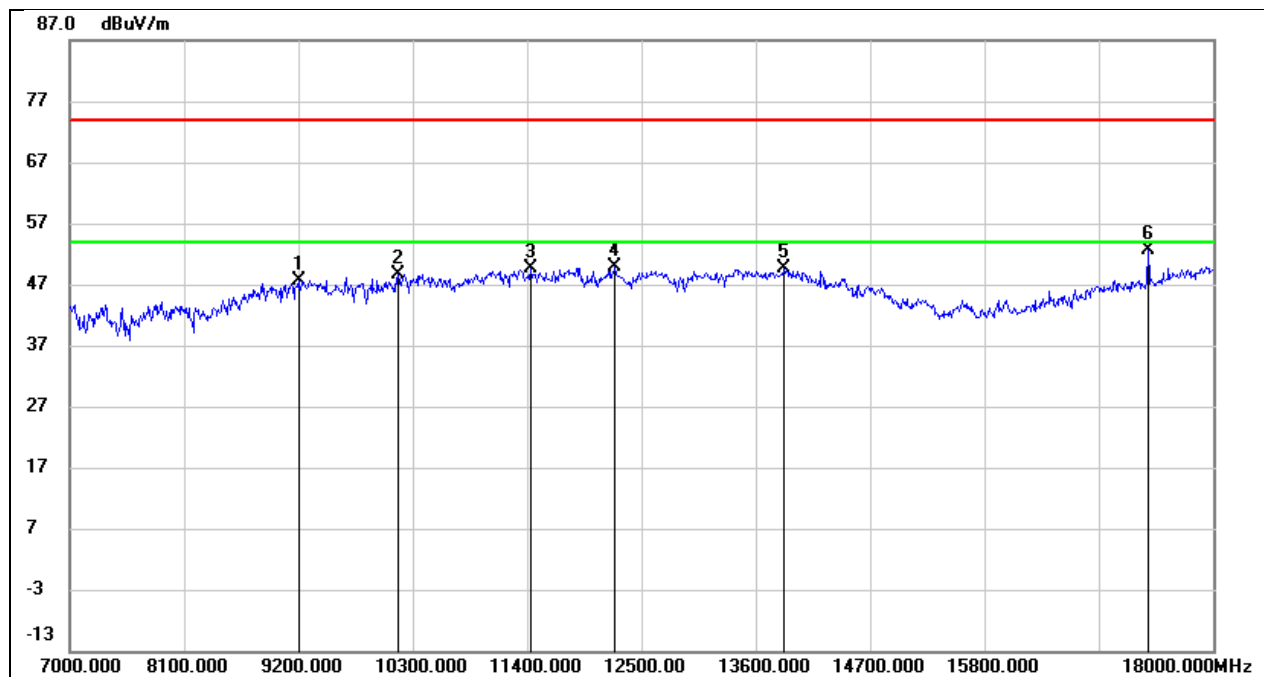
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10333.000	36.47	12.47	48.94	74.00	-25.06	peak
2	11059.000	34.95	14.96	49.91	74.00	-24.09	peak
3	12291.000	32.23	17.78	50.01	74.00	-23.99	peak
4	13930.000	29.06	21.71	50.77	74.00	-23.23	peak
5	17197.000	30.26	21.43	51.69	74.00	-22.31	peak
6	17802.000	25.70	24.76	50.46	74.00	-23.54	peak

Test Mode:	SRD 1.4MHz CA	Frequency(MHz):	5730.12
Polarity:	Vertical	Test Voltage:	DC 5 V



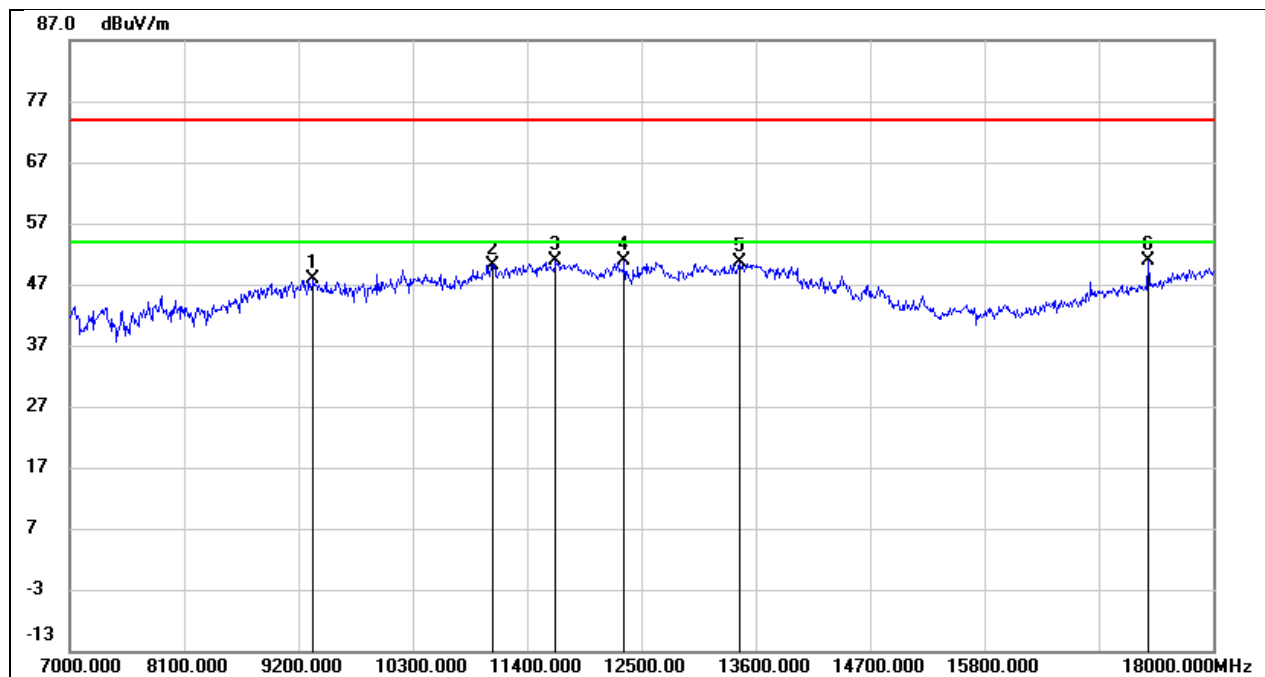
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9134.000	37.35	10.41	47.76	74.00	-26.24	peak
2	11004.000	34.50	14.74	49.24	74.00	-24.76	peak
3	11455.000	38.37	16.58	54.95	74.00	-19.05	peak
4	11455.000	27.99	16.58	44.57	54.00	-9.43	AVG
5	12665.000	32.46	18.04	50.50	74.00	-23.50	peak
6	13930.000	29.11	21.71	50.82	74.00	-23.18	peak
7	17197.000	31.99	21.43	53.42	74.00	-20.58	peak

Test Mode:	SRD 1.4MHz CA	Frequency(MHz):	5788.12
Polarity:	Horizontal	Test Voltage:	DC 5 V



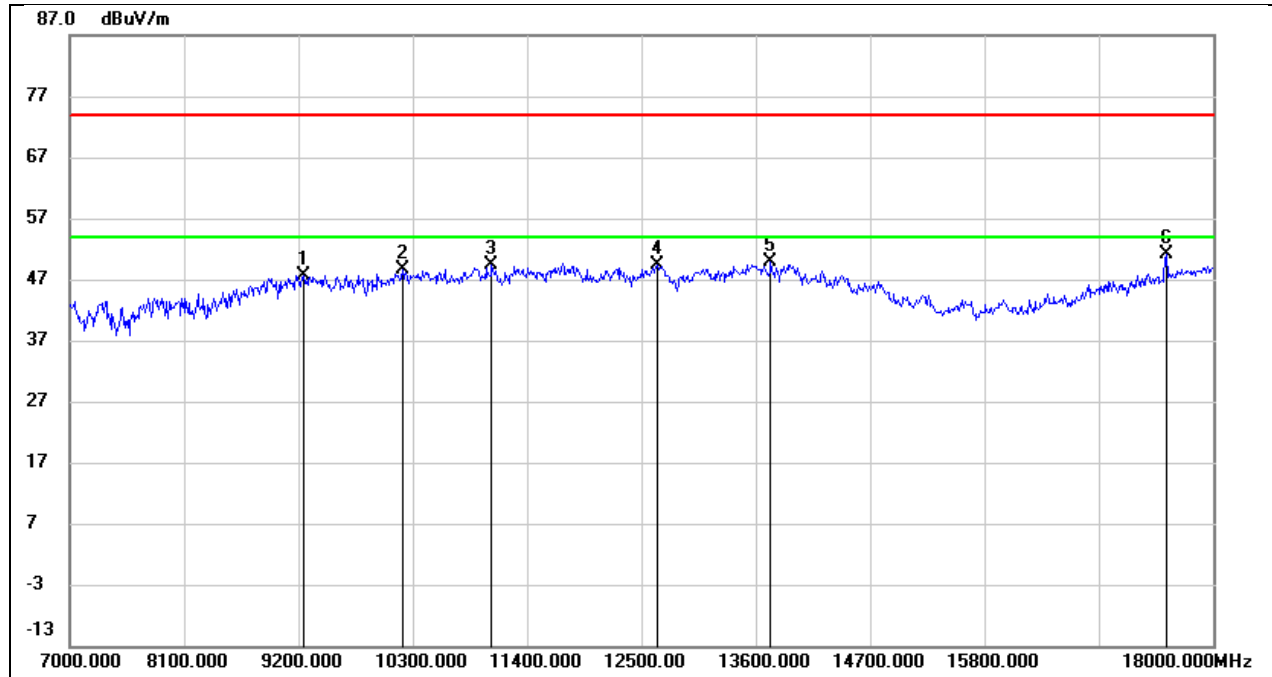
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9200.000	37.11	10.46	47.57	74.00	-26.43	peak
2	10157.000	36.62	12.10	48.72	74.00	-25.28	peak
3	11433.000	33.21	16.50	49.71	74.00	-24.29	peak
4	12247.000	32.07	17.77	49.84	74.00	-24.16	peak
5	13875.000	27.97	21.57	49.54	74.00	-24.46	peak
6	17373.000	30.51	22.16	52.67	74.00	-21.33	peak

Test Mode:	SRD 1.4MHz CA	Frequency(MHz):	5788.12
Polarity:	Vertical	Test Voltage:	DC 5 V



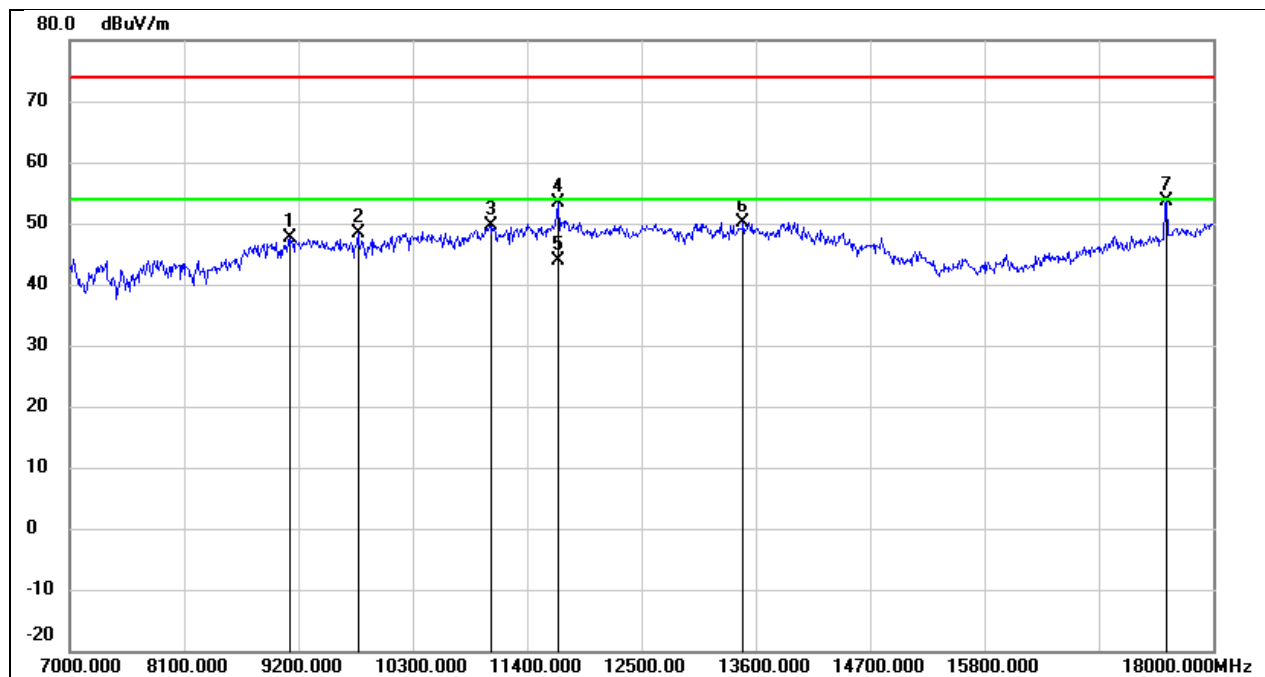
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9343.000	37.34	10.55	47.89	74.00	-26.11	peak
2	11070.000	35.15	15.01	50.16	74.00	-23.84	peak
3	11675.000	33.83	17.10	50.93	74.00	-23.07	peak
4	12335.000	33.16	17.79	50.95	74.00	-23.05	peak
5	13446.000	30.27	20.41	50.68	74.00	-23.32	peak
6	17373.000	28.61	22.16	50.77	74.00	-23.23	peak

Test Mode:	SRD 1.4MHz CA	Frequency(MHz):	5846.12
Polarity:	Horizontal	Test Voltage:	DC 5 V



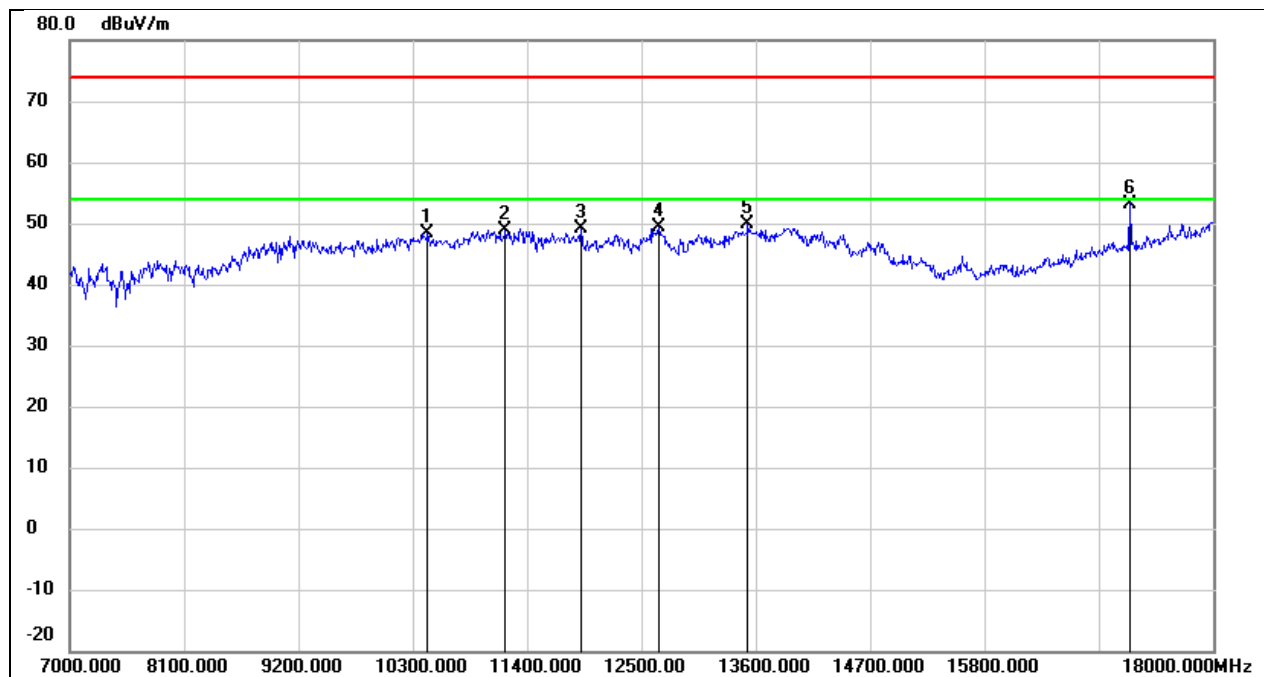
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9255.000	37.15	10.50	47.65	74.00	-26.35	peak
2	10201.000	36.51	12.19	48.70	74.00	-25.30	peak
3	11059.000	34.37	14.96	49.33	74.00	-24.67	peak
4	12654.000	31.27	18.01	49.28	74.00	-24.72	peak
5	13743.000	28.62	21.24	49.86	74.00	-24.14	peak
6	17549.000	28.08	23.04	51.12	74.00	-22.88	peak

Test Mode:	SRD 1.4MHz CA	Frequency(MHz):	5846.12
Polarity:	Vertical	Test Voltage:	DC 5 V



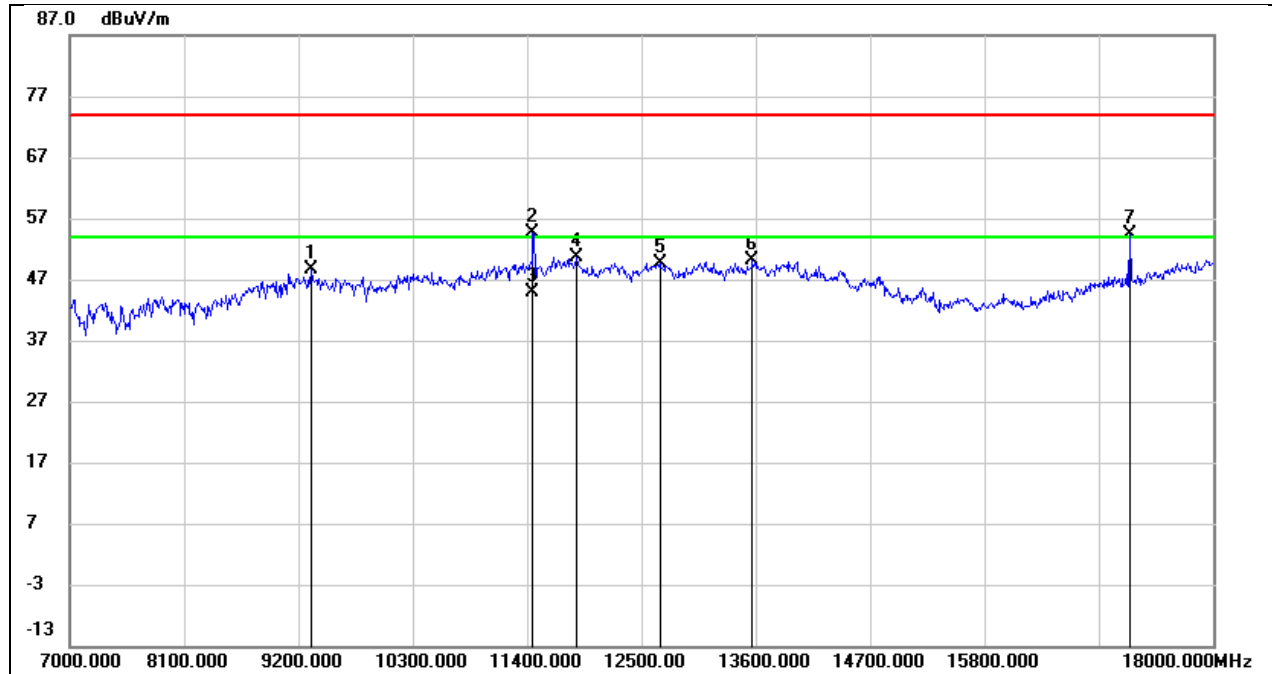
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9112.000	37.10	10.41	47.51	74.00	-26.49	peak
2	9772.000	37.13	11.26	48.39	74.00	-25.61	peak
3	11048.000	34.69	14.91	49.60	74.00	-24.40	peak
4	11697.000	36.35	17.13	53.48	74.00	-20.52	peak
5	11697.000	26.69	17.13	43.82	54.00	-10.18	AVG
6	13479.000	29.62	20.55	50.17	74.00	-23.83	peak
7	17549.000	30.61	23.04	53.65	74.00	-20.35	peak

Test Mode:	SRD 3MHz	Frequency(MHz):	5730.5
Polarity:	Horizontal	Test Voltage:	DC 5 V



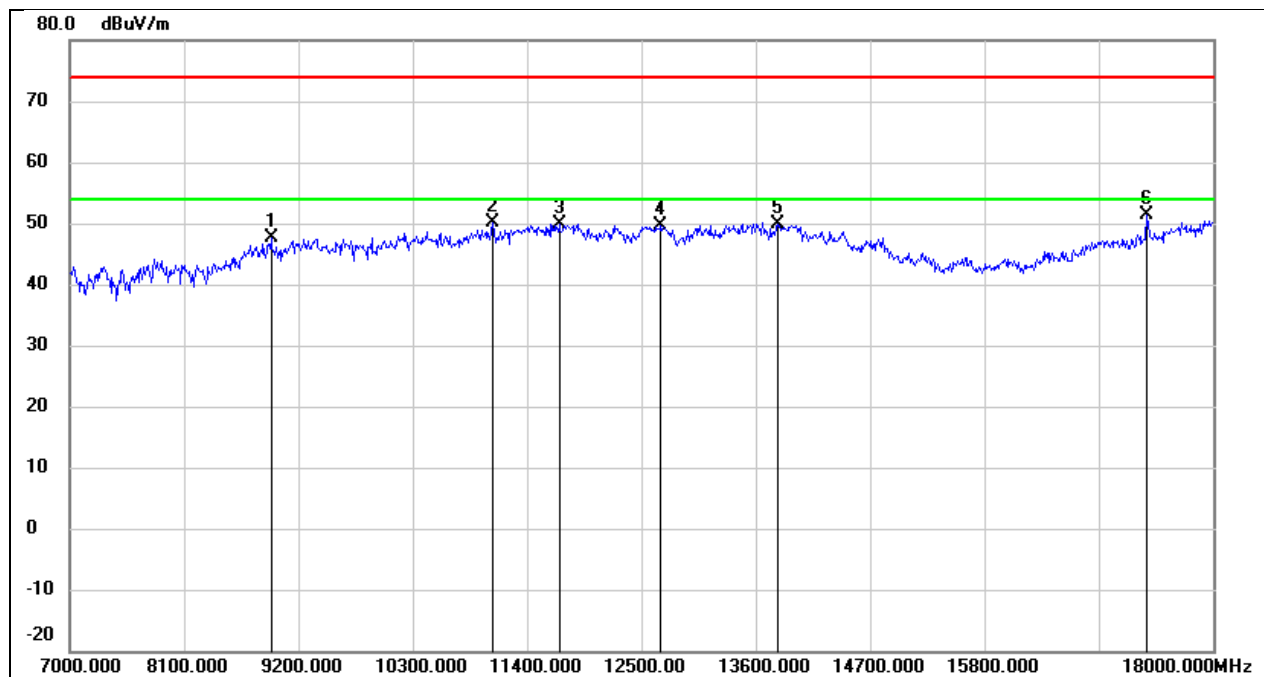
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10443.000	35.70	12.70	48.40	74.00	-25.60	peak
2	11191.000	33.33	15.50	48.83	74.00	-25.17	peak
3	11917.000	31.49	17.54	49.03	74.00	-24.97	peak
4	12665.000	31.33	18.04	49.37	74.00	-24.63	peak
5	13523.000	29.29	20.70	49.99	74.00	-24.01	peak
6	17197.000	31.82	21.43	53.25	74.00	-20.75	peak

Test Mode:	SRD 3MHz	Frequency(MHz):	5730.5
Polarity:	Vertical	Test Voltage:	DC 5 V



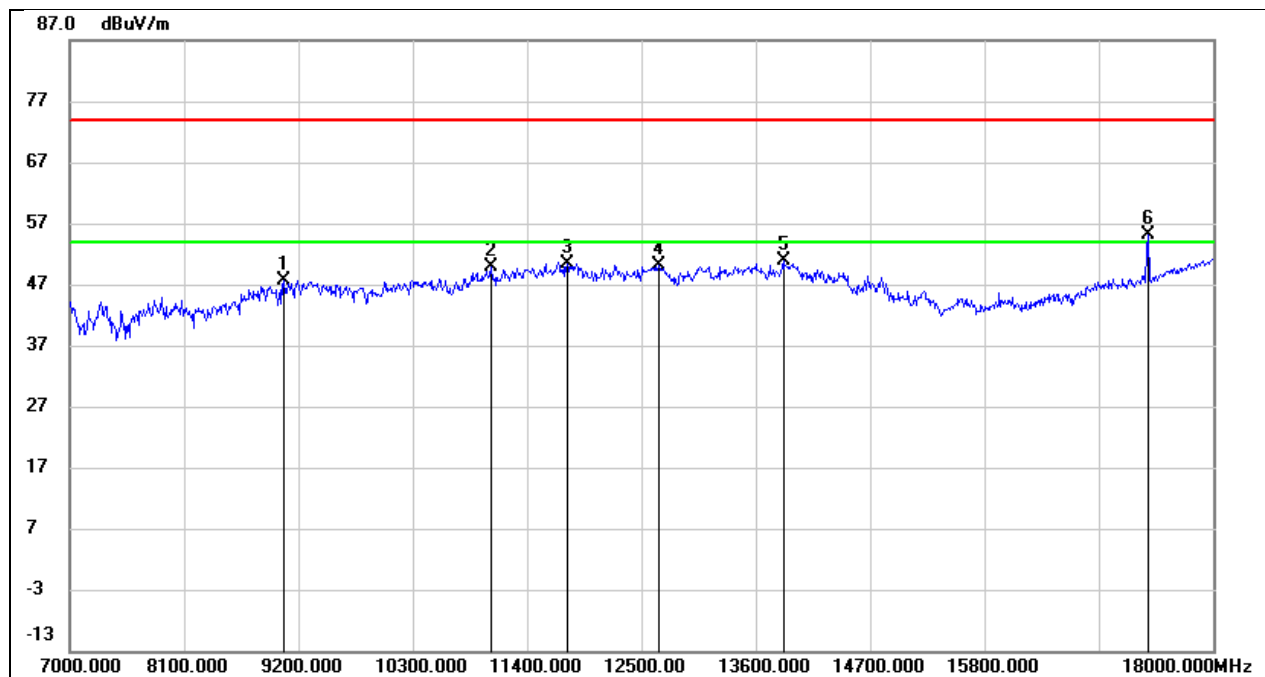
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9321.000	38.03	10.53	48.56	74.00	-25.44	peak
2	11455.000	38.02	16.58	54.60	74.00	-19.40	peak
3	11455.000	28.28	16.58	44.86	54.00	-9.14	AVG
4	11873.000	33.18	17.46	50.64	74.00	-23.36	peak
5	12676.000	31.55	18.05	49.60	74.00	-24.40	peak
6	13567.000	29.43	20.80	50.23	74.00	-23.77	peak
7	17197.000	32.98	21.43	54.41	74.00	-19.59	peak

Test Mode:	SRD 3MHz	Frequency(MHz):	5787.5
Polarity:	Horizontal	Test Voltage:	DC 5 V



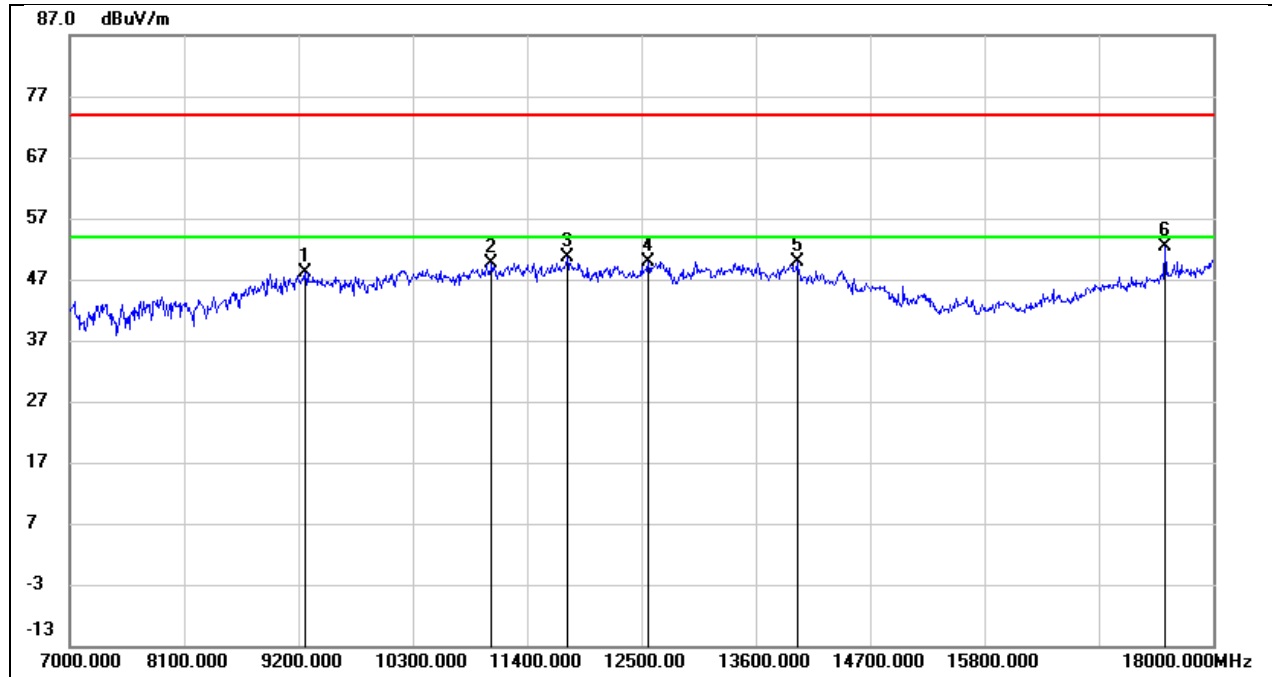
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8936.000	37.85	9.90	47.75	74.00	-26.25	peak
2	11070.000	35.04	15.01	50.05	74.00	-23.95	peak
3	11708.000	32.81	17.16	49.97	74.00	-24.03	peak
4	12687.000	31.69	18.05	49.74	74.00	-24.26	peak
5	13809.000	28.56	21.41	49.97	74.00	-24.03	peak
6	17362.000	29.20	22.12	51.32	74.00	-22.68	peak

Test Mode:	SRD 3MHz	Frequency(MHz):	5787.5
Polarity:	Vertical	Test Voltage:	DC 5 V



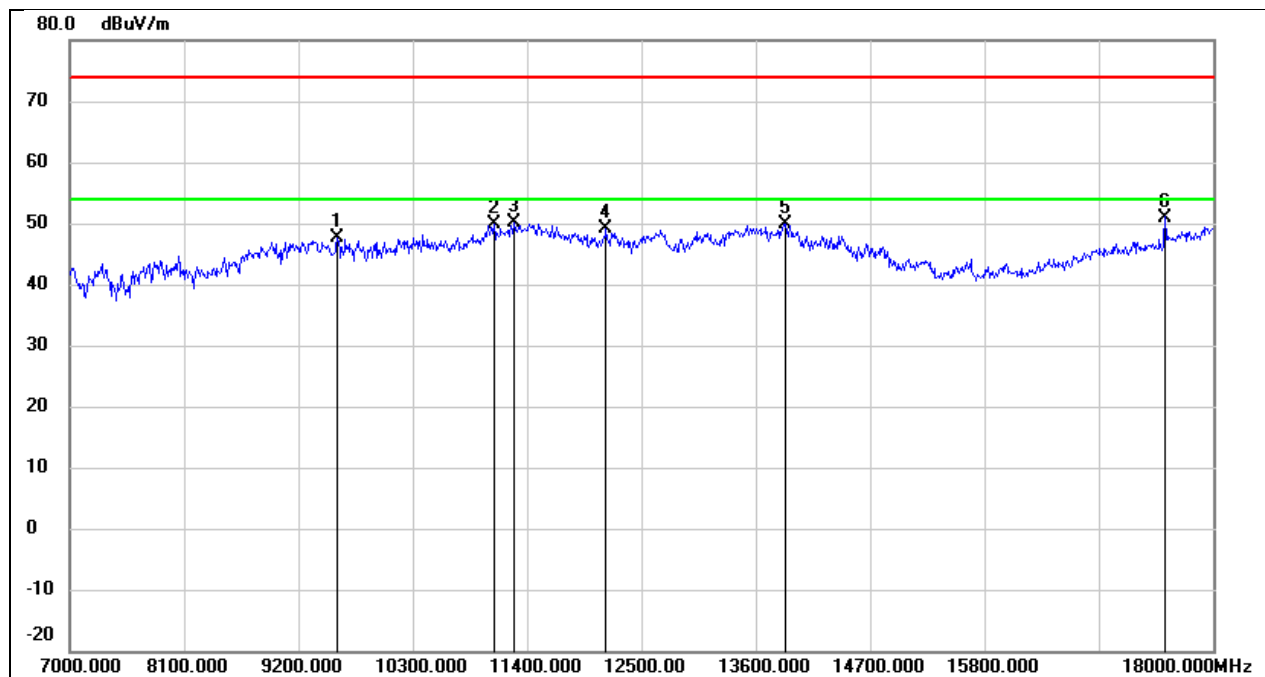
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9057.000	37.28	10.38	47.66	74.00	-26.34	peak
2	11048.000	34.90	14.91	49.81	74.00	-24.19	peak
3	11785.000	33.18	17.30	50.48	74.00	-23.52	peak
4	12665.000	32.05	18.04	50.09	74.00	-23.91	peak
5	13864.000	29.23	21.53	50.76	74.00	-23.24	peak
6	17373.000	32.86	22.16	55.02	74.00	-18.98	peak

Test Mode:	SRD 3MHz	Frequency(MHz):	5844.5
Polarity:	Horizontal	Test Voltage:	DC 5 V



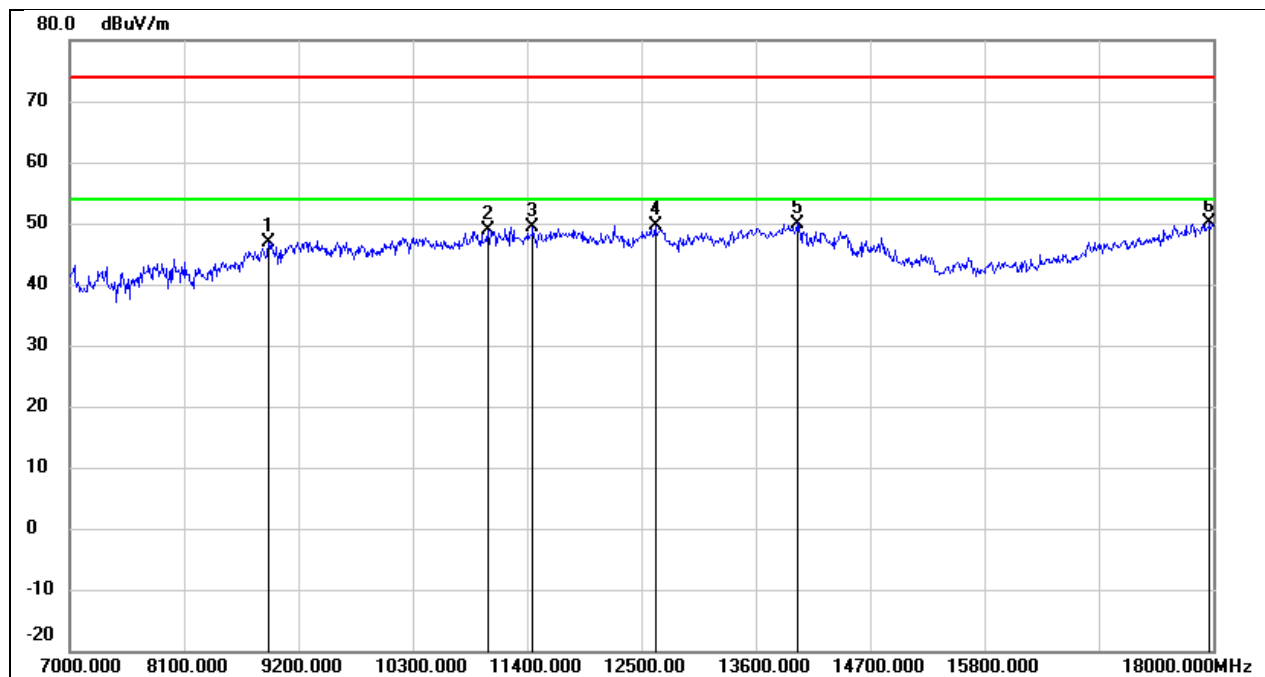
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9266.000	37.73	10.51	48.24	74.00	-25.76	peak
2	11059.000	34.56	14.96	49.52	74.00	-24.48	peak
3	11785.000	33.24	17.30	50.54	74.00	-23.46	peak
4	12566.000	32.04	17.91	49.95	74.00	-24.05	peak
5	13996.000	27.91	21.87	49.78	74.00	-24.22	peak
6	17538.000	29.52	22.97	52.49	74.00	-21.51	peak

Test Mode:	SRD 3MHz	Frequency(MHz):	5844.5
Polarity:	Vertical	Test Voltage:	DC 5 V



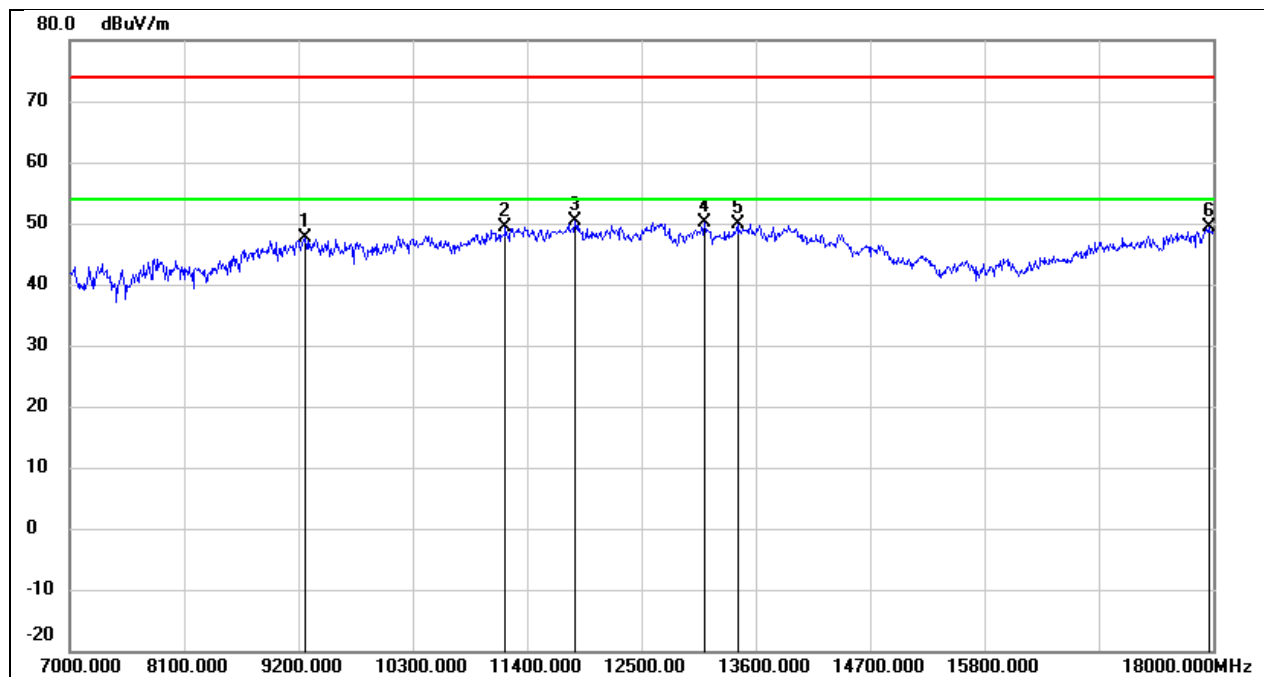
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9574.000	36.80	10.81	47.61	74.00	-26.39	peak
2	11081.000	34.90	15.05	49.95	74.00	-24.05	peak
3	11279.000	34.22	15.86	50.08	74.00	-23.92	peak
4	12159.000	31.42	17.73	49.15	74.00	-24.85	peak
5	13886.000	28.37	21.60	49.97	74.00	-24.03	peak
6	17538.000	28.03	22.97	51.00	74.00	-23.00	peak

Test Mode:	SRD 10MHz	Frequency(MHz):	5732.5
Polarity:	Horizontal	Test Voltage:	DC 5 V



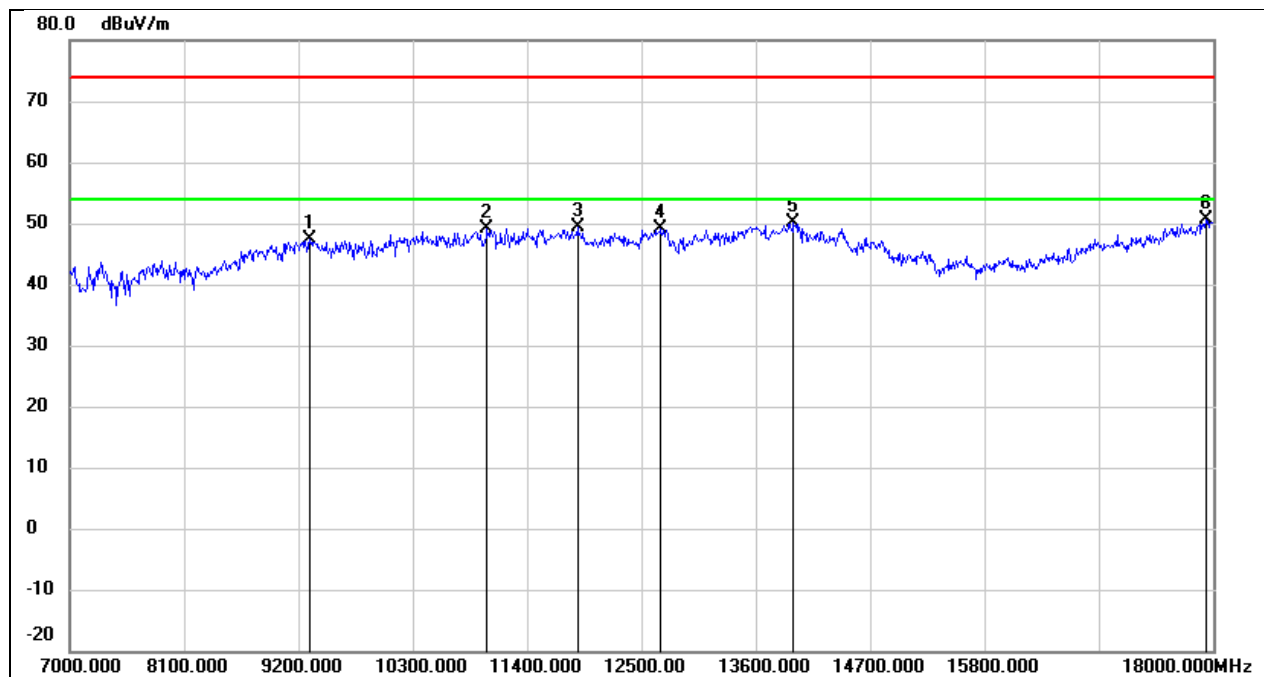
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8914.000	37.17	9.75	46.92	74.00	-27.08	peak
2	11026.000	34.09	14.82	48.91	74.00	-25.09	peak
3	11455.000	32.86	16.58	49.44	74.00	-24.56	peak
4	12632.000	31.58	17.99	49.57	74.00	-24.43	peak
5	13996.000	28.13	21.87	50.00	74.00	-24.00	peak
6	17967.000	24.23	25.89	50.12	74.00	-23.88	peak

Test Mode:	SRD 10MHz	Frequency(MHz):	5732.5
Polarity:	Vertical	Test Voltage:	DC 5 V



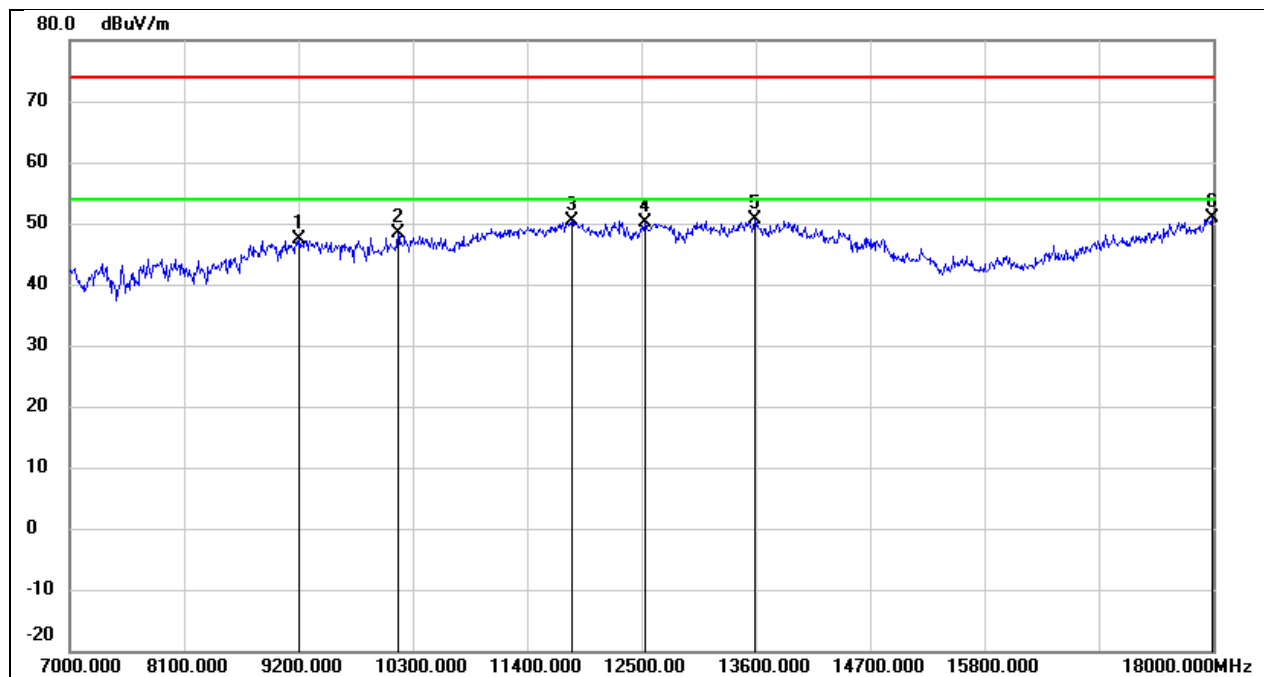
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9266.000	37.01	10.51	47.52	74.00	-26.48	peak
2	11191.000	33.84	15.50	49.34	74.00	-24.66	peak
3	11862.000	32.89	17.45	50.34	74.00	-23.66	peak
4	13105.000	31.16	18.91	50.07	74.00	-23.93	peak
5	13424.000	29.61	20.30	49.91	74.00	-24.09	peak
6	17956.000	23.56	25.82	49.38	74.00	-24.62	peak

Test Mode:	SRD 10MHz	Frequency(MHz):	5787.5
Polarity:	Horizontal	Test Voltage:	DC 5 V



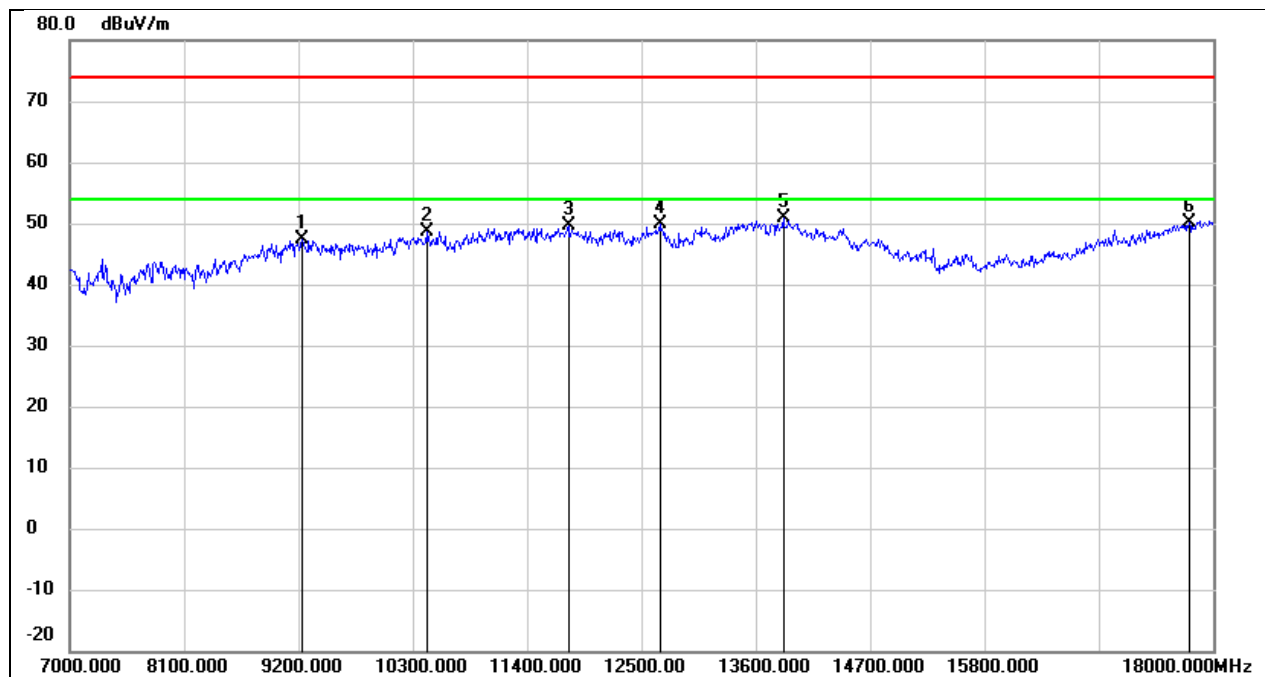
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9310.000	36.80	10.54	47.34	74.00	-26.66	peak
2	11015.000	34.30	14.79	49.09	74.00	-24.91	peak
3	11884.000	31.83	17.48	49.31	74.00	-24.69	peak
4	12687.000	31.17	18.05	49.22	74.00	-24.78	peak
5	13963.000	28.30	21.78	50.08	74.00	-23.92	peak
6	17934.000	25.04	25.67	50.71	74.00	-23.29	peak

Test Mode:	SRD 10MHz	Frequency(MHz):	5787.5
Polarity:	Vertical	Test Voltage:	DC 5 V



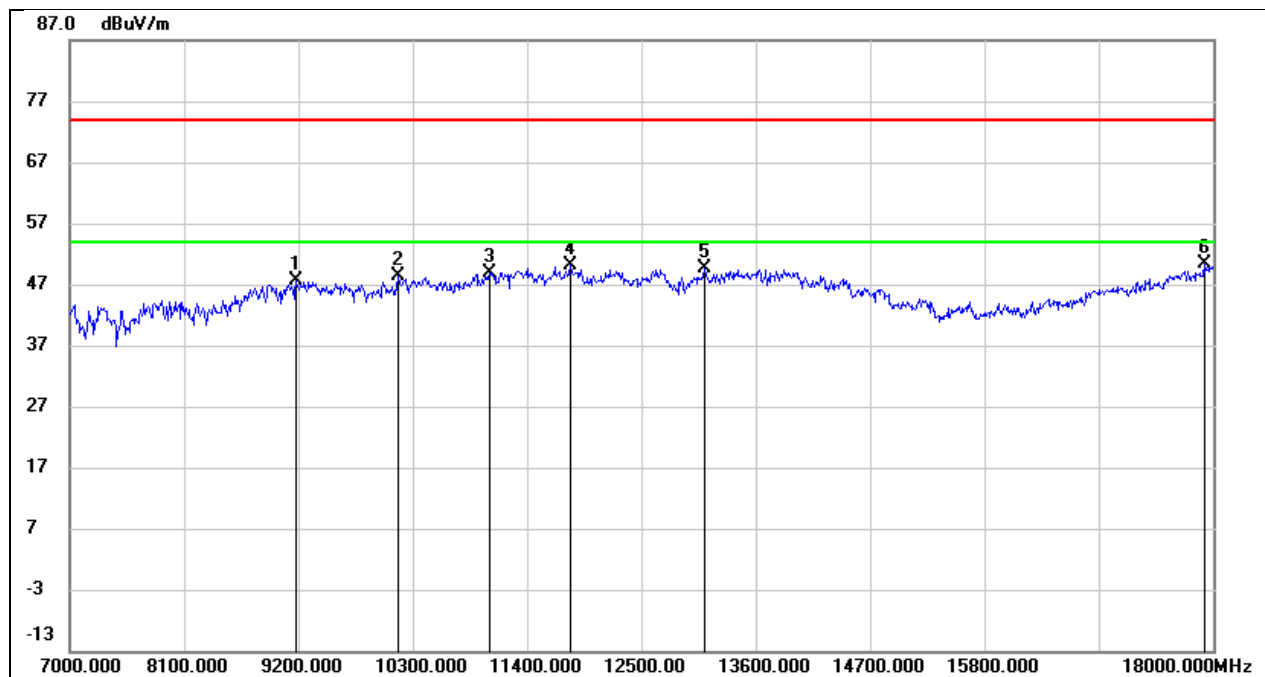
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9211.000	36.82	10.47	47.29	74.00	-26.71	peak
2	10157.000	36.17	12.10	48.27	74.00	-25.73	peak
3	11829.000	33.11	17.38	50.49	74.00	-23.51	peak
4	12533.000	32.31	17.87	50.18	74.00	-23.82	peak
5	13589.000	29.78	20.86	50.64	74.00	-23.36	peak
6	17989.000	24.83	26.04	50.87	74.00	-23.13	peak

Test Mode:	SRD 10MHz	Frequency(MHz):	5844.5
Polarity:	Horizontal	Test Voltage:	DC 5 V



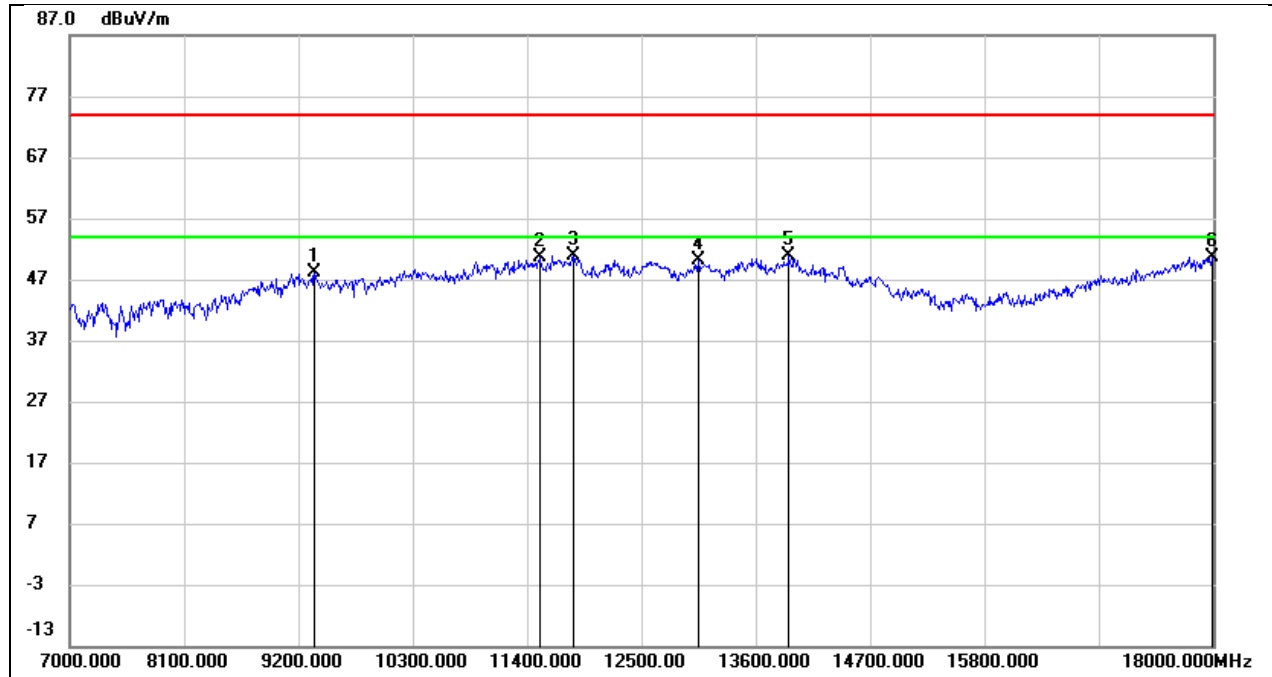
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9233.000	36.99	10.48	47.47	74.00	-26.53	peak
2	10432.000	35.94	12.67	48.61	74.00	-25.39	peak
3	11796.000	32.32	17.32	49.64	74.00	-24.36	peak
4	12676.000	31.76	18.05	49.81	74.00	-24.19	peak
5	13864.000	29.24	21.53	50.77	74.00	-23.23	peak
6	17769.000	25.68	24.53	50.21	74.00	-23.79	peak

Test Mode:	SRD 10MHz	Frequency(MHz):	5844.5
Polarity:	Vertical	Test Voltage:	DC 5 V



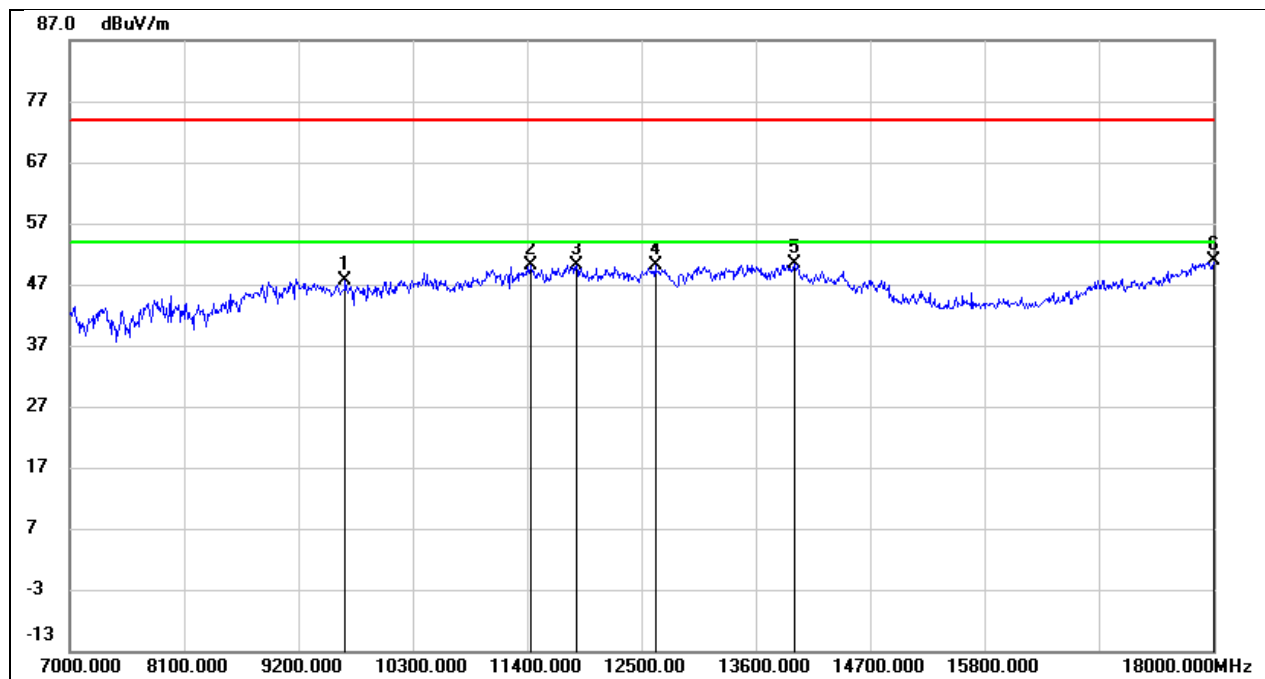
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9178.000	37.28	10.45	47.73	74.00	-26.27	peak
2	10157.000	36.18	12.10	48.28	74.00	-25.72	peak
3	11037.000	33.98	14.87	48.85	74.00	-25.15	peak
4	11818.000	32.72	17.36	50.08	74.00	-23.92	peak
5	13105.000	30.62	18.91	49.53	74.00	-24.47	peak
6	17912.000	24.77	25.52	50.29	74.00	-23.71	peak

Test Mode:	SRD 20MHz	Frequency(MHz):	5735.5
Polarity:	Horizontal	Test Voltage:	DC 5 V



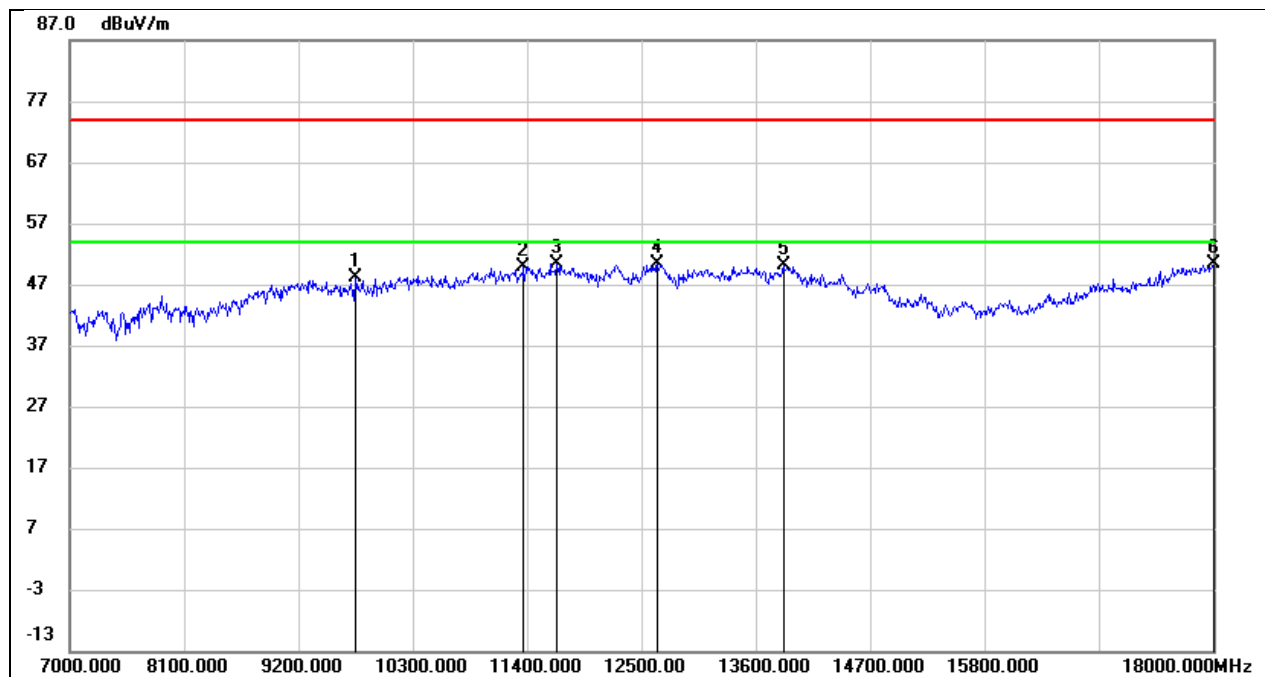
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9354.000	37.62	10.56	48.18	74.00	-25.82	peak
2	11521.000	33.89	16.82	50.71	74.00	-23.29	peak
3	11840.000	33.38	17.40	50.78	74.00	-23.22	peak
4	13050.000	31.42	18.66	50.08	74.00	-23.92	peak
5	13919.000	29.28	21.68	50.96	74.00	-23.04	peak
6	17989.000	24.58	26.04	50.62	74.00	-23.38	peak

Test Mode:	SRD 20MHz	Frequency(MHz):	5735.5
Polarity:	Vertical	Test Voltage:	DC 5 V



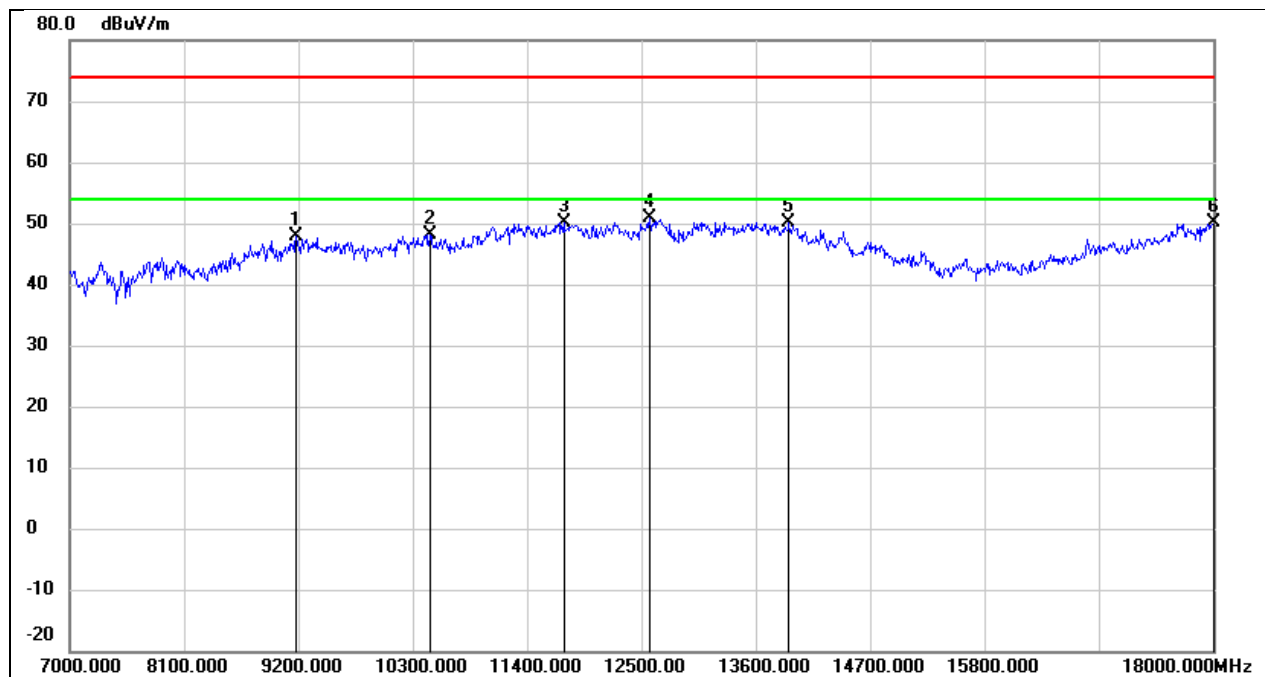
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9651.000	36.74	10.99	47.73	74.00	-26.27	peak
2	11433.000	33.60	16.50	50.10	74.00	-23.90	peak
3	11873.000	32.65	17.46	50.11	74.00	-23.89	peak
4	12632.000	32.21	17.99	50.20	74.00	-23.80	peak
5	13974.000	28.49	21.82	50.31	74.00	-23.69	peak
6	18000.000	24.79	26.12	50.91	74.00	-23.09	peak

Test Mode:	SRD 20MHz	Frequency(MHz):	5787.5
Polarity:	Horizontal	Test Voltage:	DC 5 V



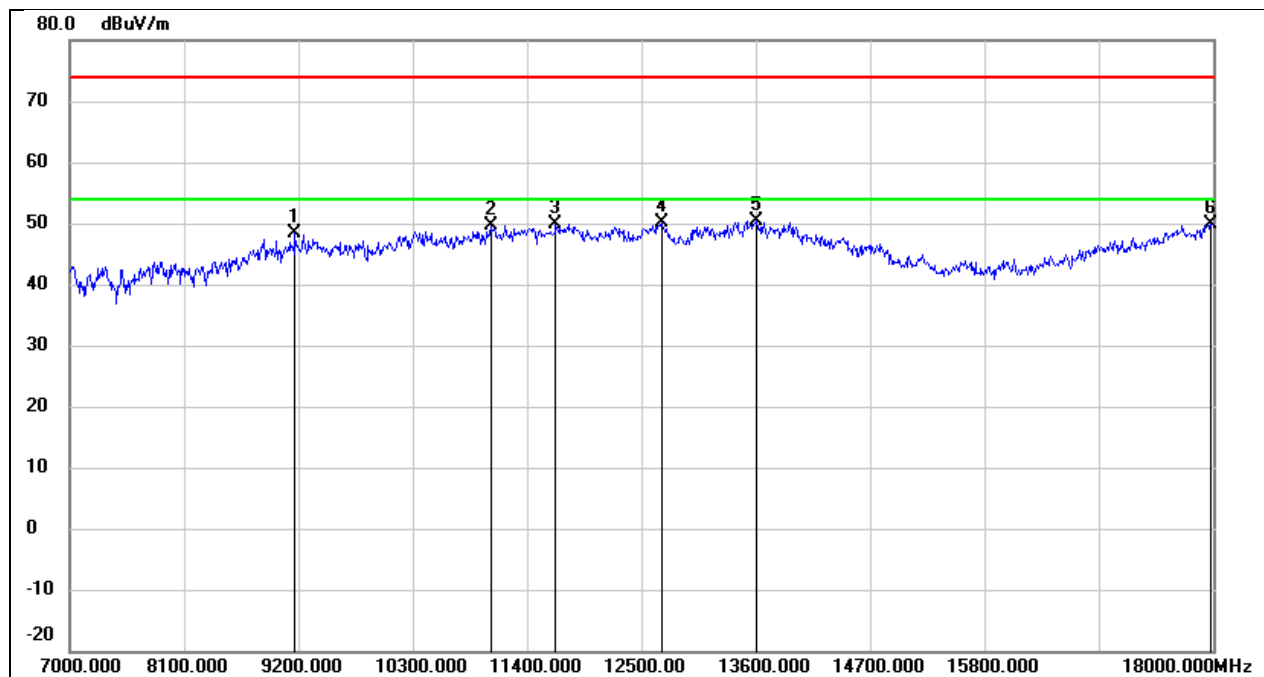
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9750.000	36.82	11.21	48.03	74.00	-25.97	peak
2	11367.000	33.71	16.22	49.93	74.00	-24.07	peak
3	11686.000	33.31	17.12	50.43	74.00	-23.57	peak
4	12654.000	32.41	18.01	50.42	74.00	-23.58	peak
5	13864.000	28.65	21.53	50.18	74.00	-23.82	peak
6	18000.000	24.19	26.12	50.31	74.00	-23.69	peak

Test Mode:	SRD 20MHz	Frequency(MHz):	5787.5
Polarity:	Vertical	Test Voltage:	DC 5 V



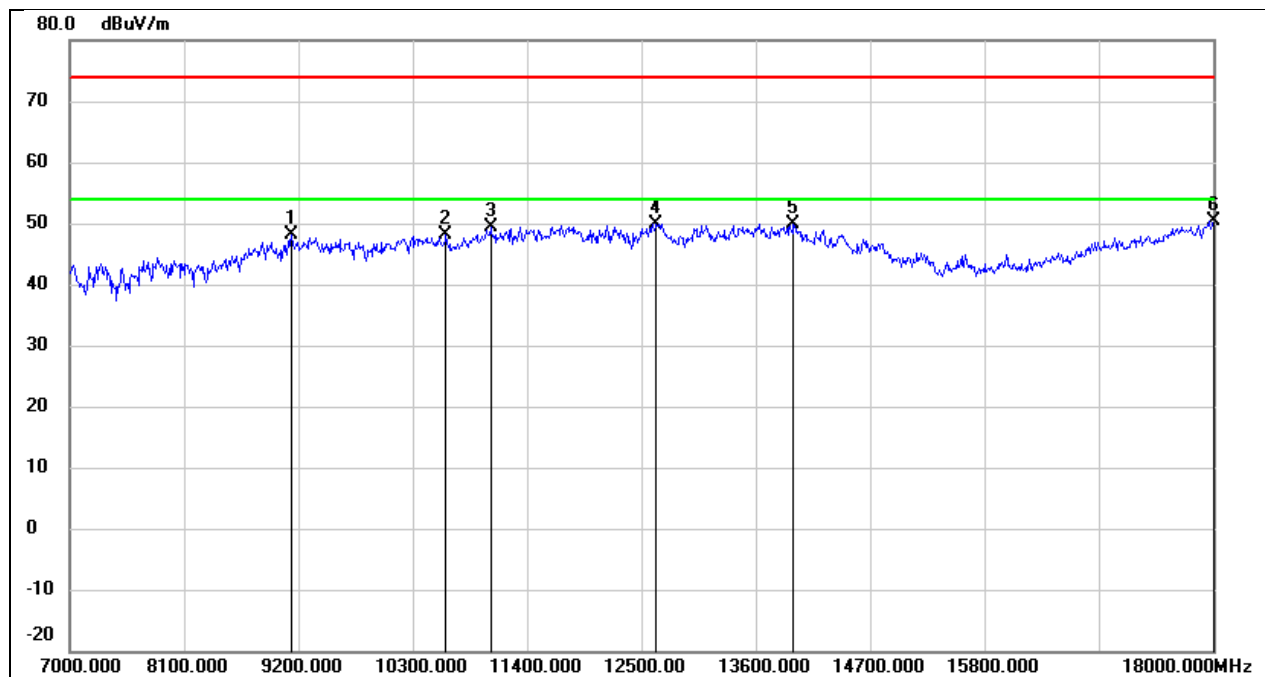
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9178.000	37.50	10.45	47.95	74.00	-26.05	peak
2	10465.000	35.50	12.75	48.25	74.00	-25.75	peak
3	11752.000	32.93	17.24	50.17	74.00	-23.83	peak
4	12577.000	32.83	17.93	50.76	74.00	-23.24	peak
5	13919.000	28.49	21.68	50.17	74.00	-23.83	peak
6	18000.000	24.11	26.12	50.23	74.00	-23.77	peak

Test Mode:	SRD 20MHz	Frequency(MHz):	5839.5
Polarity:	Horizontal	Test Voltage:	DC 5 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9167.000	37.96	10.45	48.41	74.00	-25.59	peak
2	11048.000	34.83	14.91	49.74	74.00	-24.26	peak
3	11675.000	32.89	17.10	49.99	74.00	-24.01	peak
4	12698.000	31.93	18.08	50.01	74.00	-23.99	peak
5	13600.000	29.61	20.89	50.50	74.00	-23.50	peak
6	17978.000	23.98	25.97	49.95	74.00	-24.05	peak

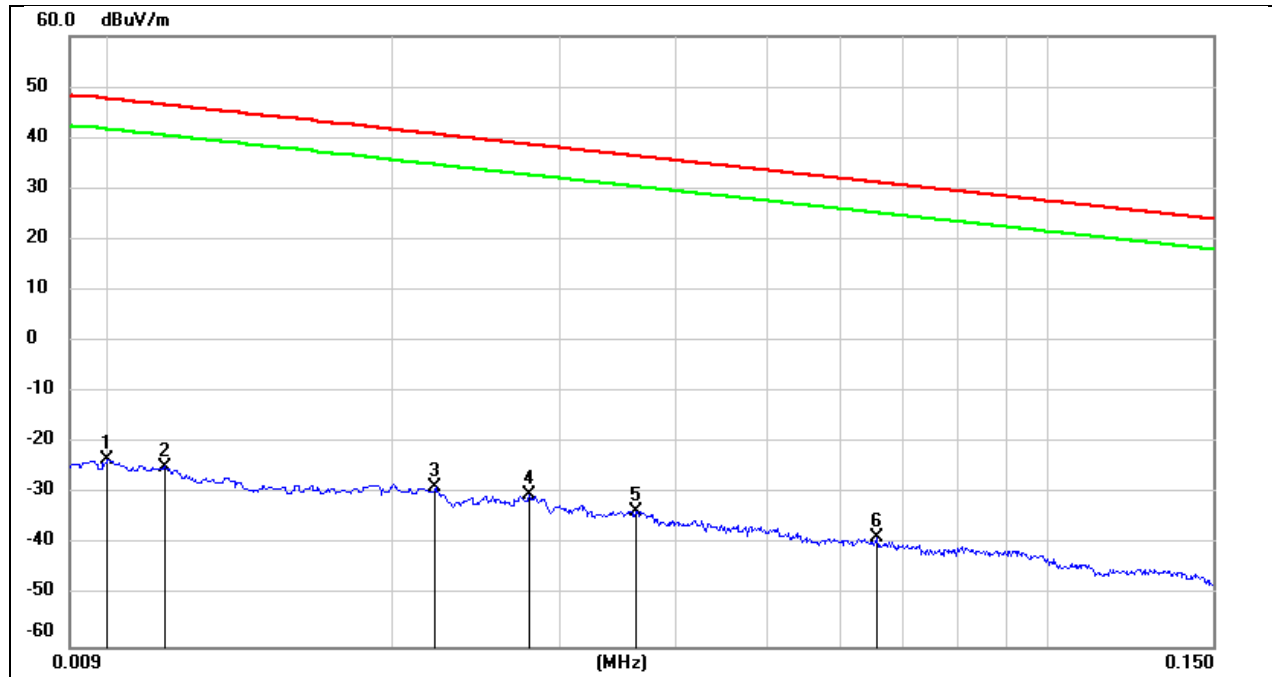
Test Mode:	SRD 20MHz	Frequency(MHz):	5839.5
Polarity:	Vertical	Test Voltage:	DC 5 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9134.000	37.63	10.41	48.04	74.00	-25.96	peak
2	10619.000	34.94	13.28	48.22	74.00	-25.78	peak
3	11048.000	34.38	14.91	49.29	74.00	-24.71	peak
4	12643.000	31.96	18.01	49.97	74.00	-24.03	peak
5	13963.000	28.21	21.78	49.99	74.00	-24.01	peak
6	18000.000	24.26	26.12	50.38	74.00	-23.62	peak

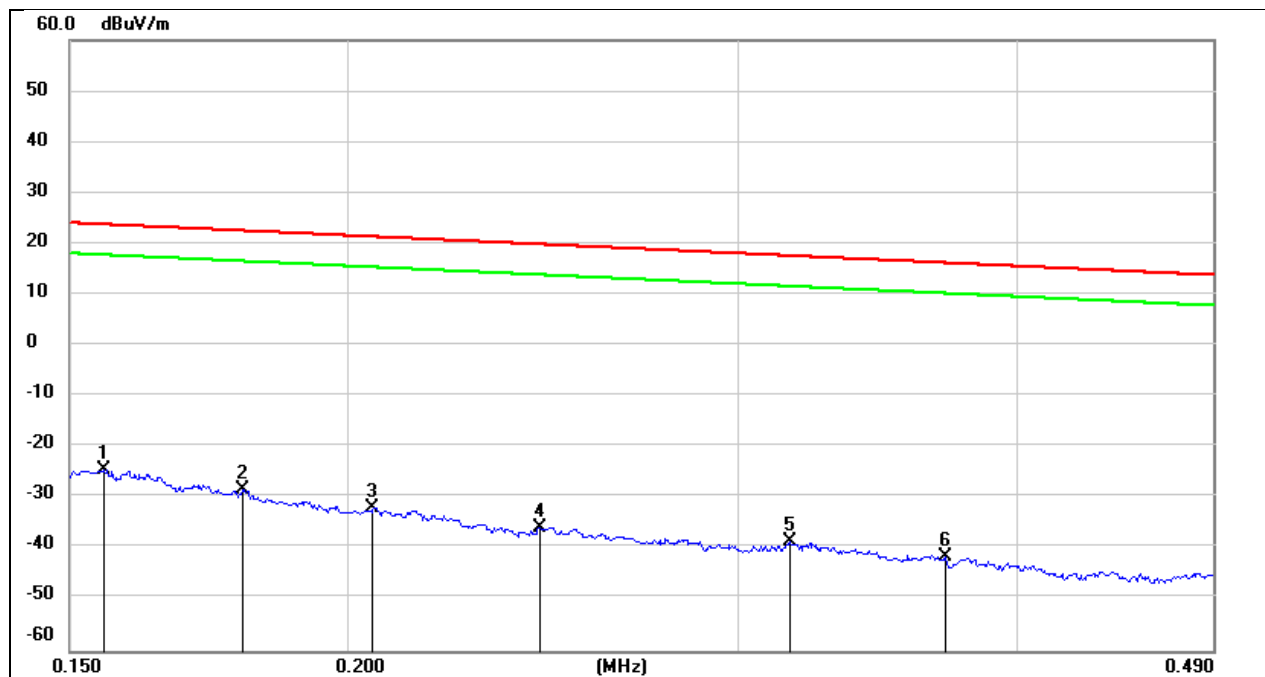
8.4. SPURIOUS EMISSIONS (9 KHZ ~ 30 MHZ)

Test Mode:	SRD 1.4 MHz CA	Channel:	5730.12 MHz
Polarity:	Loop Antenna Face On To The EUT	Test Voltage:	DC 5 V



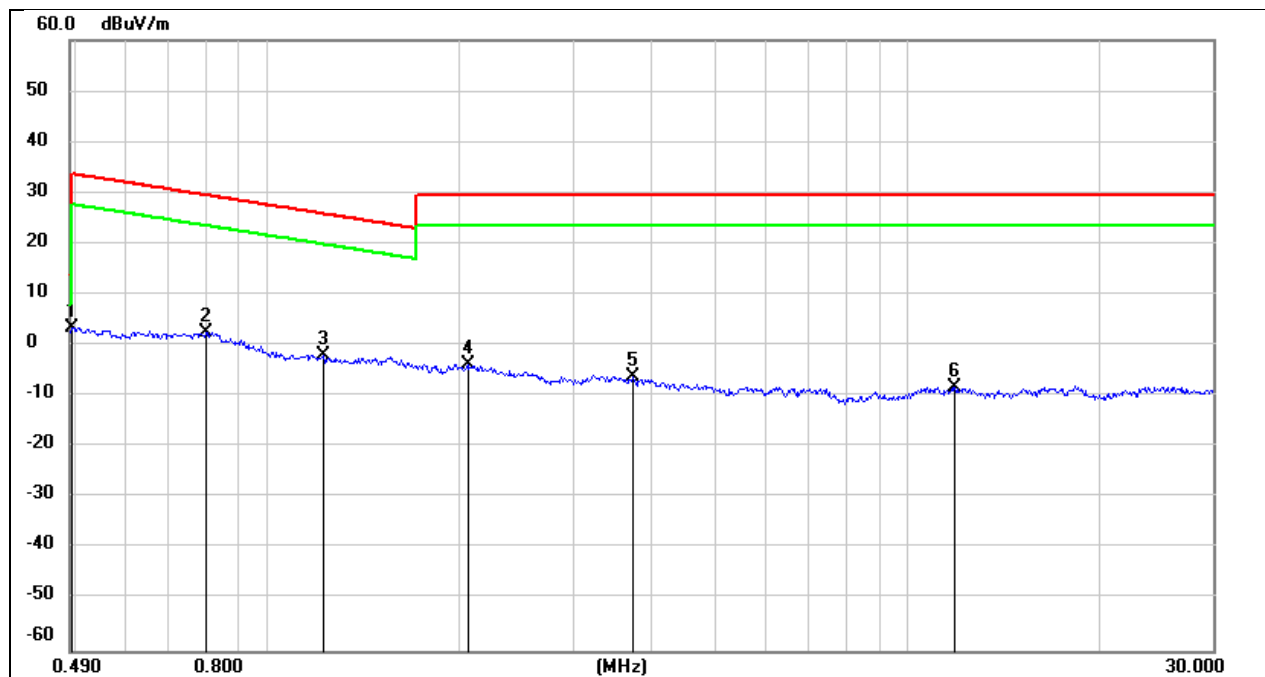
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Result (dBuA/m)	Limit (dBuV/m)	Limit (dBuA/m)	Margin (dB)	Remark
1	0.01	78.22	-101.4	-23.18	-74.68	47.6	-3.9	-70.78	peak
2	0.0114	76.5	-101.4	-24.9	-76.40	46.46	-5.04	-71.36	peak
3	0.0221	72.63	-101.35	-28.72	-80.22	40.71	-10.79	-69.43	peak
4	0.0279	71.17	-101.38	-30.21	-81.71	38.69	-12.81	-68.90	peak
5	0.0362	68.01	-101.42	-33.41	-84.91	36.43	-15.07	-69.84	peak
6	0.0656	62.86	-101.55	-38.69	-90.19	31.26	-20.24	-69.95	peak

Test Mode:	SRD 1.4 MHz CA	Channel:	5730.12 MHz
Polarity:	Loop Antenna Face On To The EUT	Test Voltage:	DC 5 V



No.	Frequency	Reading	Correct	Result	Result	Limit	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuA/m)	(dBuV/m)	(dBuA/m)	(dB)	
1	0.1554	77.27	-101.65	-24.38	-75.88	23.77	-27.73	-48.15	peak
2	0.1794	73.27	-101.68	-28.41	-79.91	22.53	-28.97	-50.94	peak
3	0.2053	69.79	-101.73	-31.94	-83.44	21.35	-30.15	-53.29	peak
4	0.2442	66.03	-101.79	-35.76	-87.26	19.85	-31.65	-55.61	peak
5	0.3163	63.2	-101.87	-38.67	-90.17	17.6	-33.9	-56.27	peak
6	0.3714	60.28	-101.93	-41.65	-93.15	16.2	-35.3	-57.85	peak

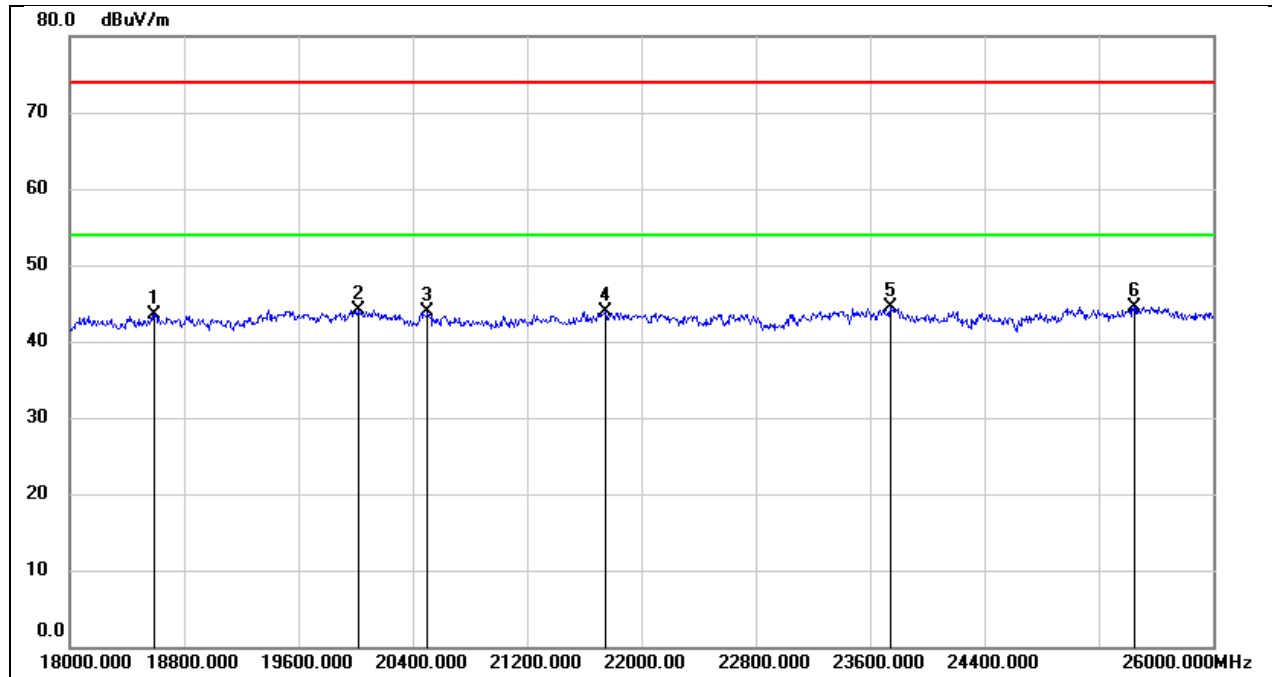
Test Mode:	SRD 1.4 MHz CA	Channel:	5730.12 MHz
Polarity:	Loop Antenna Face On To The EUT	Test Voltage:	DC 5 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Result (dBuA/m)	Limit (dBuV/m)	Limit (dBuA/m)	Margin (dB)	Remark
1	0.4939	65.64	-62.06	3.58	-47.92	33.73	-17.77	-30.15	peak
2	0.7993	64.72	-62.15	2.57	-48.93	29.55	-21.95	-26.98	peak
3	1.2214	60.12	-62.16	-2.04	-53.54	25.87	-25.63	-27.91	peak
4	2.0539	58.2	-61.81	-3.61	-55.11	29.54	-21.96	-33.15	peak
5	3.71	55.2	-61.41	-6.21	-57.71	29.54	-21.96	-35.75	peak
6	11.8513	52.56	-60.88	-8.32	-59.82	29.54	-21.96	-37.86	peak

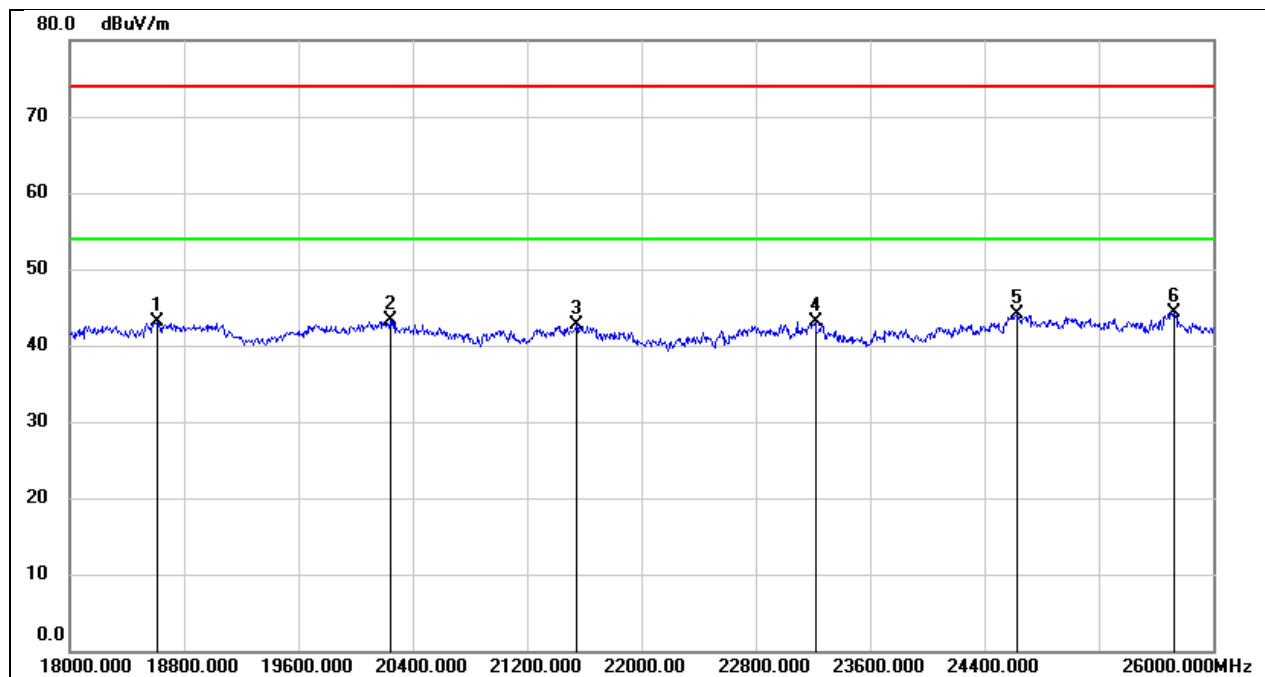
8.5. SPURIOUS EMISSIONS (18 GHZ ~ 26 GHZ)

Test Mode:	SRD 1.4 MHz CA	Channel:	5730.12 MHz
Polarity:	Horizontal	Test Voltage:	DC 5 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18592.000	48.75	-5.31	43.44	74.00	-30.56	peak
2	20016.000	49.56	-5.47	44.09	74.00	-29.91	peak
3	20504.000	49.21	-5.35	43.86	74.00	-30.14	peak
4	21752.000	48.30	-4.32	43.98	74.00	-30.02	peak
5	23744.000	47.65	-3.20	44.45	74.00	-29.55	peak
6	25448.000	46.33	-1.76	44.57	74.00	-29.43	peak

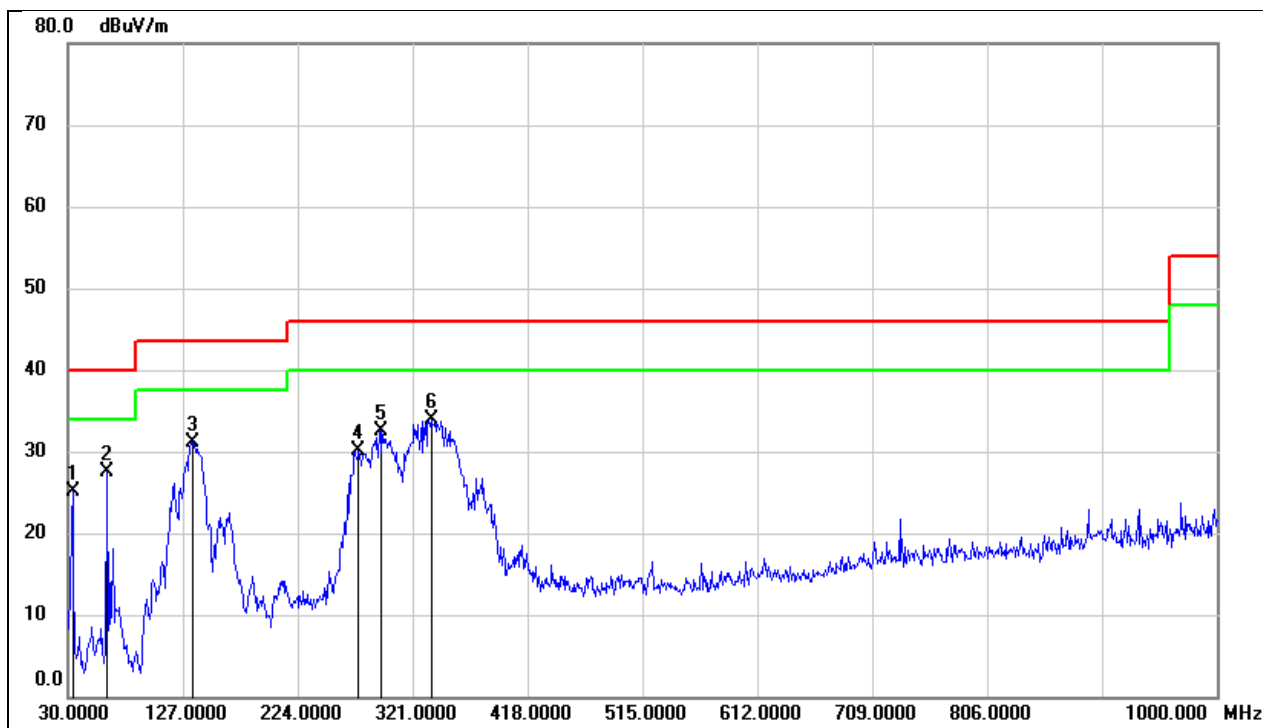
Test Mode:	SRD 1.4 MHz CA	Channel:	5730.12 MHz
Polarity:	Vertical	Test Voltage:	DC 5 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18616.000	48.39	-5.34	43.05	74.00	-30.95	peak
2	20240.000	48.82	-5.61	43.21	74.00	-30.79	peak
3	21544.000	47.26	-4.63	42.63	74.00	-31.37	peak
4	23216.000	46.51	-3.38	43.13	74.00	-30.87	peak
5	24624.000	46.49	-2.33	44.16	74.00	-29.84	peak
6	25728.000	45.11	-0.72	44.39	74.00	-29.61	peak

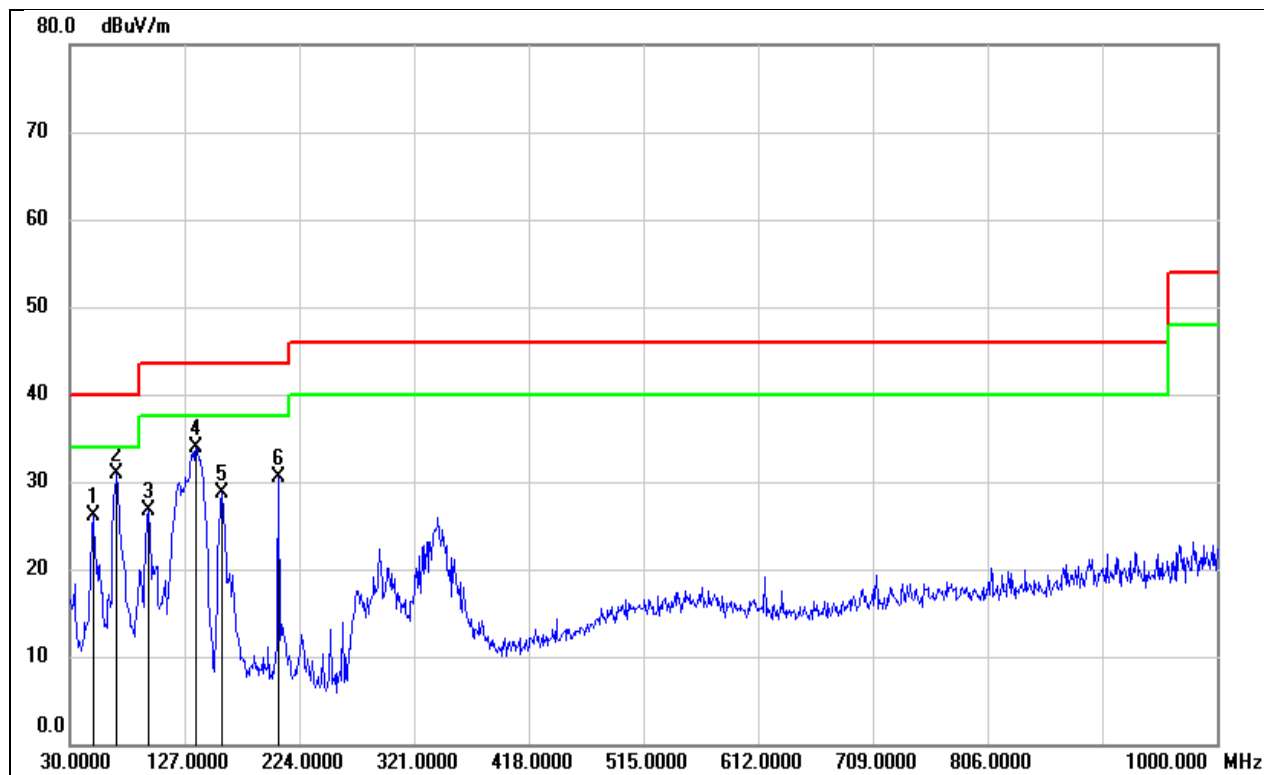
8.6. SPURIOUS EMISSIONS (30 MHz ~ 1 GHz)

Test Mode:	SRD 1.4 MHz CA	Channel:	5730.12 MHz
Polarity:	Horizontal	Test Voltage:	DC 5 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	33.8800	43.45	-18.37	25.08	40.00	-14.92	QP
2	62.9800	47.48	-19.92	27.56	40.00	-12.44	QP
3	135.7300	49.72	-18.60	31.12	43.50	-12.38	QP
4	275.4100	46.75	-16.55	30.20	46.00	-15.80	QP
5	293.8400	47.83	-15.25	32.58	46.00	-13.42	QP
6	336.5200	47.03	-13.13	33.90	46.00	-12.10	QP

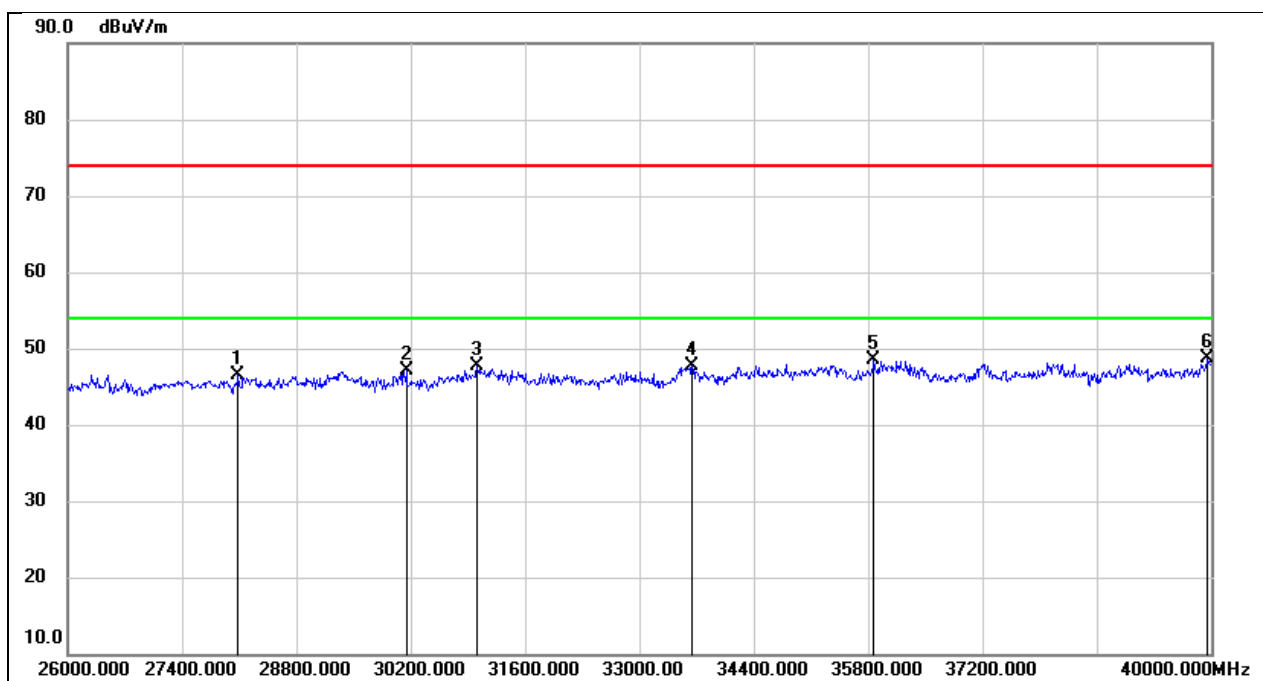
Test Mode:	SRD 1.4 MHz CA	Channel:	5730.12 MHz
Polarity:	Vertical	Test Voltage:	DC 5 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	49.4000	46.05	-20.04	26.01	40.00	-13.99	QP
2	69.7699	51.27	-20.28	30.99	40.00	-9.01	QP
3	95.9600	48.00	-21.22	26.78	43.50	-16.72	QP
4	136.7000	52.45	-18.54	33.91	43.50	-9.59	QP
5	158.0399	45.80	-17.17	28.63	43.50	-14.87	QP
6	206.5399	46.70	-16.14	30.56	43.50	-12.94	QP

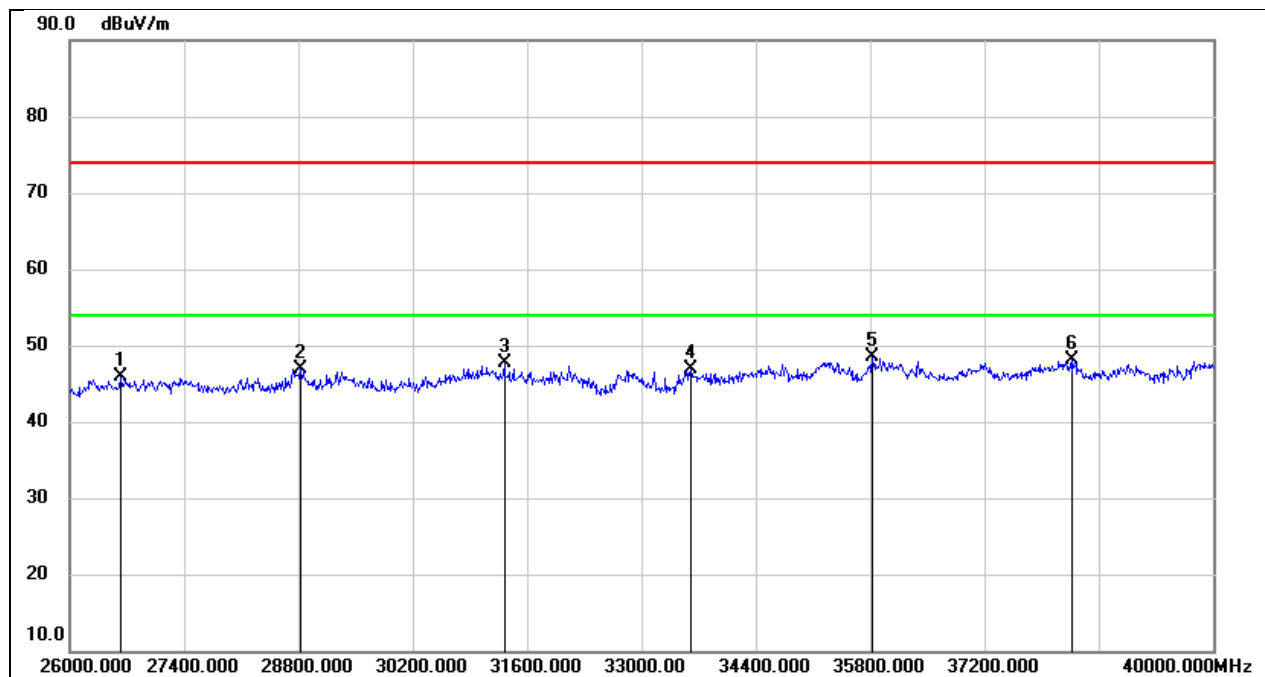
8.7. SPURIOUS EMISSIONS (26 GHZ ~ 40 GHZ)

Test Mode:	SRD 1.4 MHz CA	Channel:	5730.12 MHz
Polarity:	Horizontal	Test Voltage:	DC 5 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	28086.000	49.91	-3.49	46.42	74.00	-27.58	peak
2	30144.000	48.46	-1.30	47.16	74.00	-26.84	peak
3	31012.000	48.33	-0.71	47.62	74.00	-26.38	peak
4	33644.000	47.31	0.42	47.73	74.00	-26.27	peak
5	35870.000	44.83	3.75	48.58	74.00	-25.42	peak
6	39958.000	43.58	5.12	48.70	74.00	-25.30	peak

Test Mode:	SRD 1.4 MHz CA	Channel:	5730.12 MHz
Polarity:	Vertical	Test Voltage:	DC 5 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	26616.000	50.76	-4.82	45.94	74.00	-28.06	peak
2	28828.000	47.63	-0.79	46.84	74.00	-27.16	peak
3	31320.000	48.61	-0.93	47.68	74.00	-26.32	peak
4	33602.000	46.51	0.46	46.97	74.00	-27.03	peak
5	35828.000	44.75	3.67	48.42	74.00	-25.58	peak
6	38278.000	44.32	3.82	48.14	74.00	-25.86	peak

9. AC POWER LINE CONDUCTED EMISSION

LIMITS

Please refer to CFR 47 FCC §15.207 (a)

FREQUENCY (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

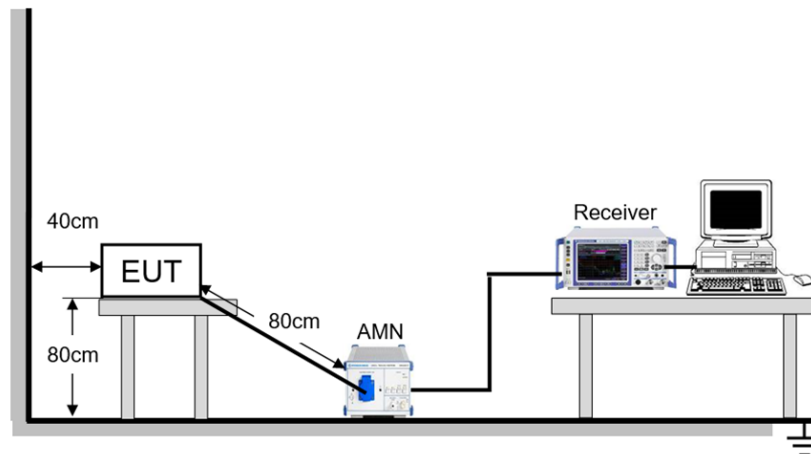
TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 6.2.

The EUT is put on a table of non-conducting material that is 80 cm high. The vertical conducting wall of shielding is located 40 cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2013. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9 kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

TEST SETUP

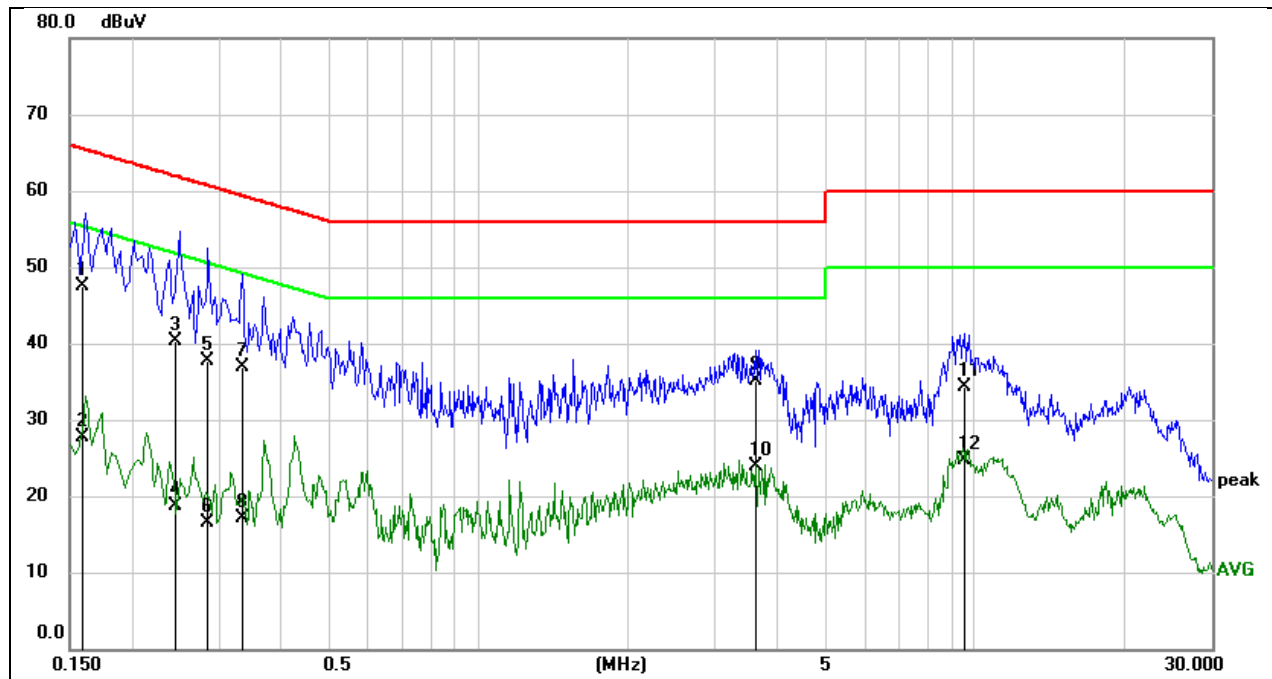


TEST ENVIRONMENT

Temperature	20.5°C	Relative Humidity	59%
Atmosphere Pressure	101kPa	Test Voltage	DC 5 V

TEST RESULTS

Test Mode:	SRD 1.4 MHz CA	Channel:	5730.12 MHz
Line	L1	Test Voltage	AC 120 V, 60 Hz

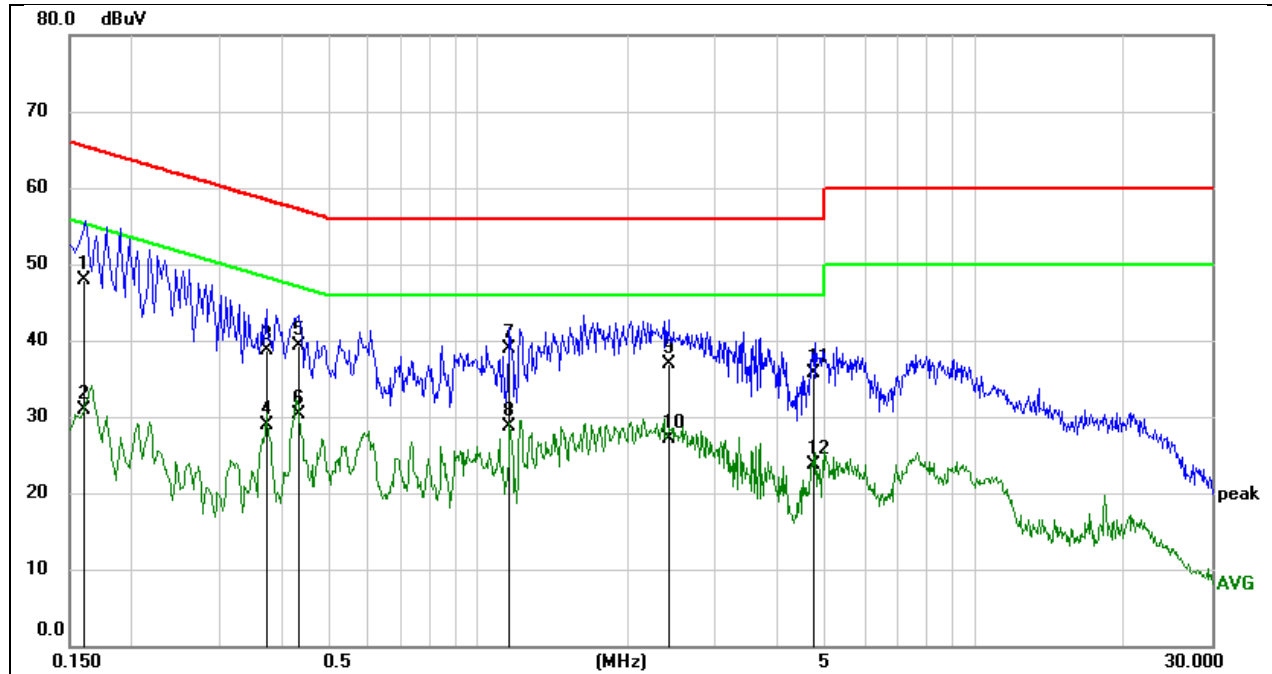


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1587	37.85	9.59	47.44	65.53	-18.09	QP
2	0.1587	18.02	9.59	27.61	55.53	-27.92	AVG
3	0.2458	30.69	9.59	40.28	61.90	-21.62	QP
4	0.2458	9.18	9.59	18.77	51.90	-33.13	AVG
5	0.2858	28.19	9.59	37.78	60.65	-22.87	QP
6	0.2858	6.98	9.59	16.57	50.65	-34.08	AVG
7	0.3331	27.39	9.59	36.98	59.37	-22.39	QP
8	0.3331	7.60	9.59	17.19	49.37	-32.18	AVG
9	3.6198	25.45	9.69	35.14	56.00	-20.86	QP
10	3.6198	14.15	9.69	23.84	46.00	-22.16	AVG
11	9.5315	24.64	9.72	34.36	60.00	-25.64	QP
12	9.5315	15.05	9.72	24.77	50.00	-25.23	AVG

Note:

1. Result = Reading + Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

Test Mode:	SRD 1.4 MHz CA	Channel:	5730.12 MHz
Line	L1	Test Voltage	AC 120 V/60 Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1602	38.30	9.51	47.81	65.45	-17.64	QP
2	0.1602	21.37	9.51	30.88	55.45	-24.57	AVG
3	0.3731	29.19	9.53	38.72	58.43	-19.71	QP
4	0.3731	19.45	9.53	28.98	48.43	-19.45	AVG
5	0.4335	29.80	9.52	39.32	57.19	-17.87	QP
6	0.4335	20.83	9.52	30.35	47.19	-16.84	AVG
7	1.1578	29.37	9.53	38.90	56.00	-17.10	QP
8	1.1578	19.26	9.53	28.79	46.00	-17.21	AVG
9	2.4175	27.28	9.63	36.91	56.00	-19.09	QP
10	2.4175	17.39	9.63	27.02	46.00	-18.98	AVG
11	4.7331	26.13	9.61	35.74	56.00	-20.26	QP
12	4.7331	14.19	9.61	23.80	46.00	-22.20	AVG

Note:

1. Result = Reading + Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

Note: All the modes have been tested, only the worst data was recorded in the report.

10. ANTENNA REQUIREMENT

REQUIREMENT

Please refer to FCC part 15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Please refer to FCC part 15.407(a)

For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DESCRIPTION

Pass

11. TEST DATA

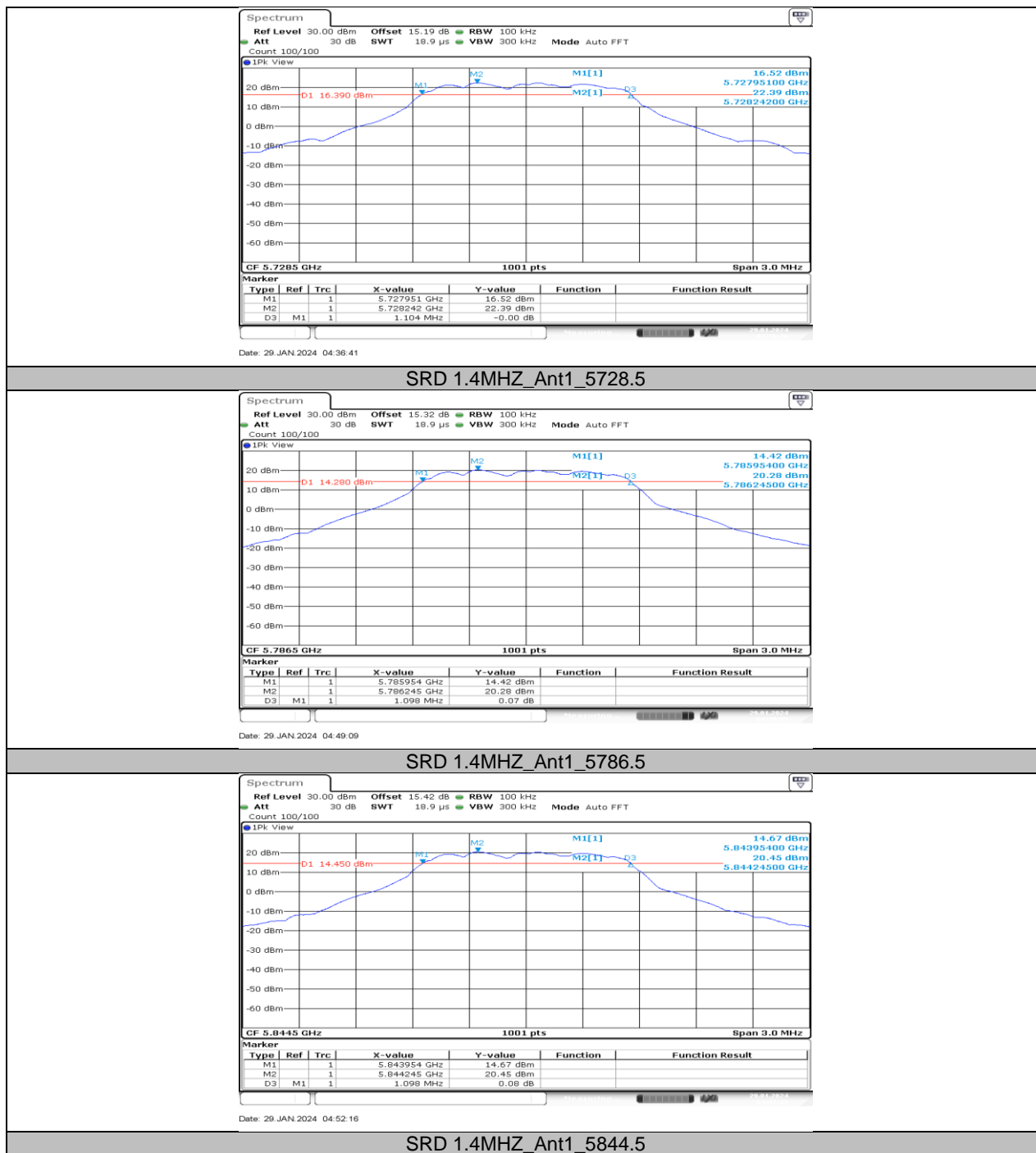
11.1. APPENDIX A: EMISSION BANDWIDTH

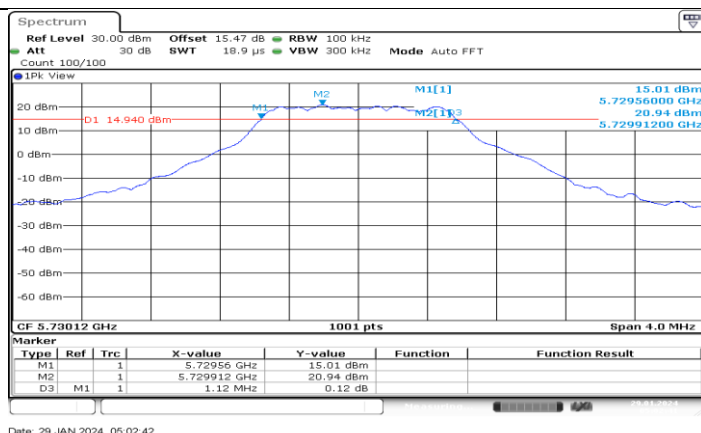
11.1.1. Test Result

Test Mode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
SRD 1.4MHZ	Ant1	5728.5	1.10	5727.95	5729.06	≥0.5	PASS
		5786.5	1.10	5785.95	5787.05	≥0.5	PASS
		5844.5	1.10	5843.95	5845.05	≥0.5	PASS
SRD 1.4MHZ CA	Ant1	5730.12	1.12	5729.56	5730.68	≥0.5	PASS
		5788.12	1.12	5787.56	5788.68	≥0.5	PASS
		5846.12	1.13	5845.56	5846.68	≥0.5	PASS
SRD 3M	Ant1	5730.5	2.20	5729.41	5731.61	≥0.5	PASS
		5787.5	2.19	5786.41	5788.60	≥0.5	PASS
		5844.5	2.19	5843.41	5845.60	≥0.5	PASS

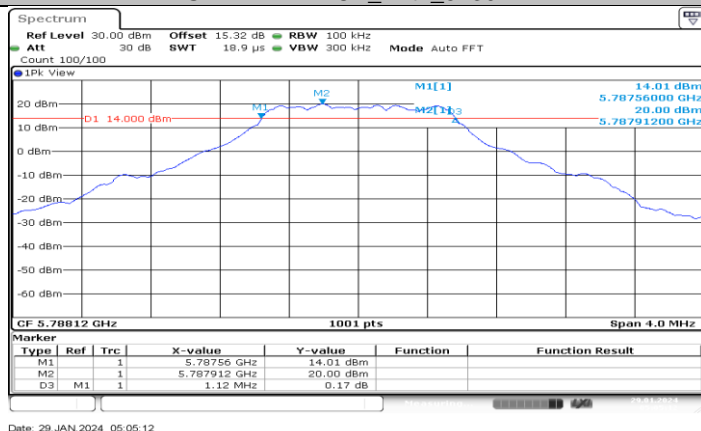
Test Mode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
SRD 10MHZ	Ant1	5732.5	9.02	5728.00	5737.02	≥0.5	PASS
		5787.5	8.96	5783.02	5791.98	≥0.5	PASS
		5844.5	8.94	5840.06	5849.00	≥0.5	PASS
SRD 20MHZ	Ant1	5735.5	18.00	5726.50	5744.50	≥0.5	PASS
		5787.5	17.80	5778.54	5796.34	≥0.5	PASS
		5839.5	17.92	5830.54	5848.46	≥0.5	PASS

11.1.2. Test Graphs

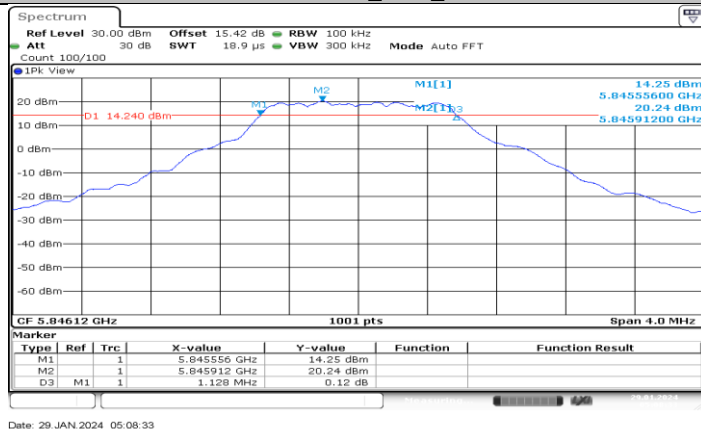




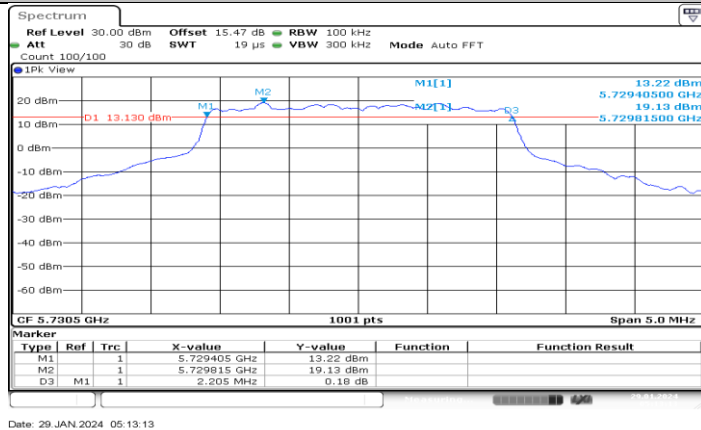
SRD 1.4MHz CA_Ant1_5730.12



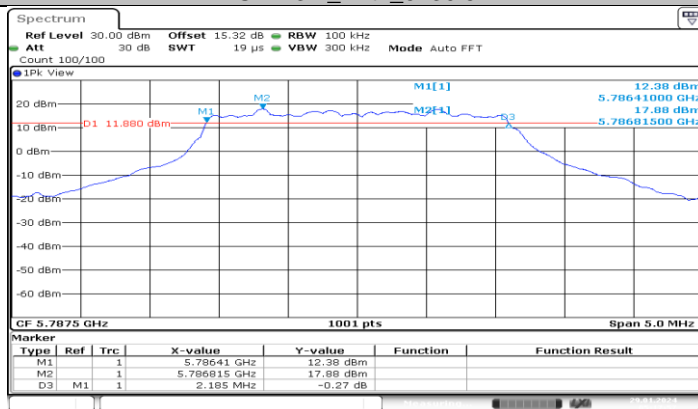
SRD 1.4MHz CA_Ant1_5788.12



SRD 1.4MHz CA_Ant1_5846.12

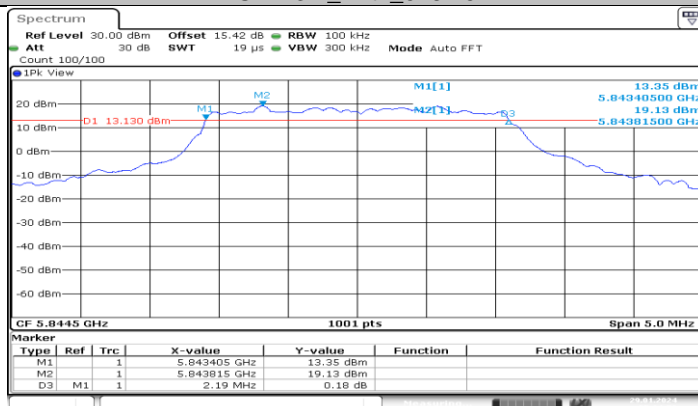


SRD 3M_Ant1_5730.5



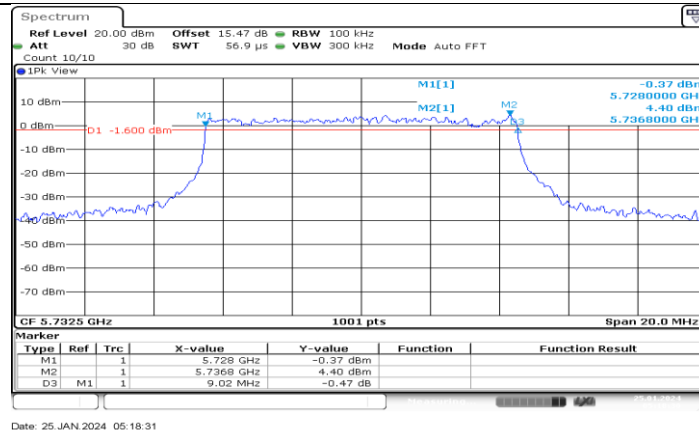
Date: 29 JAN 2024 05:17:57

SRD 3M_Ant1_5787.5

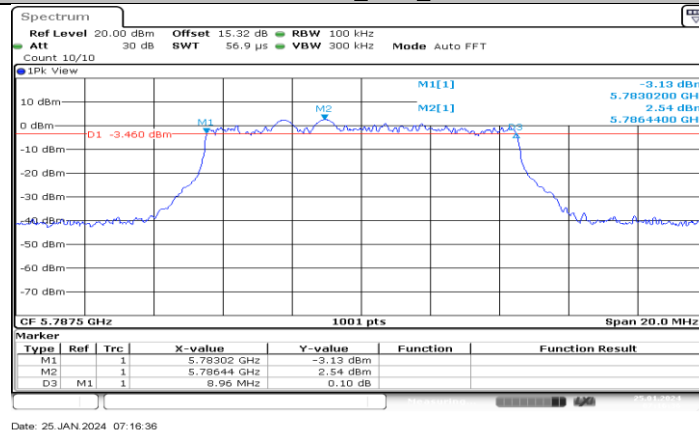


Date: 29 JAN 2024 05:24:52

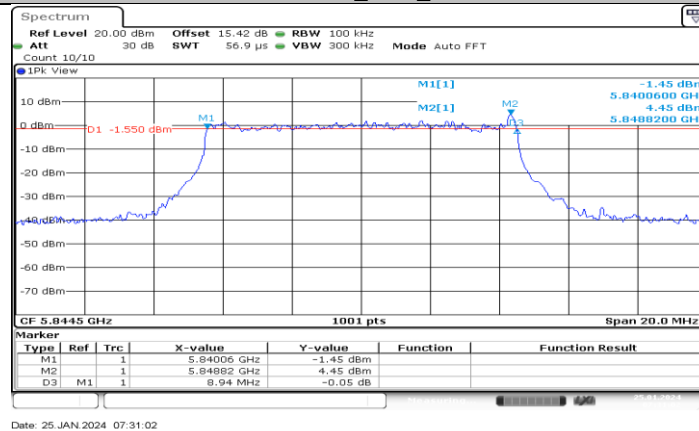
SRD 3M_Ant1_5844.5



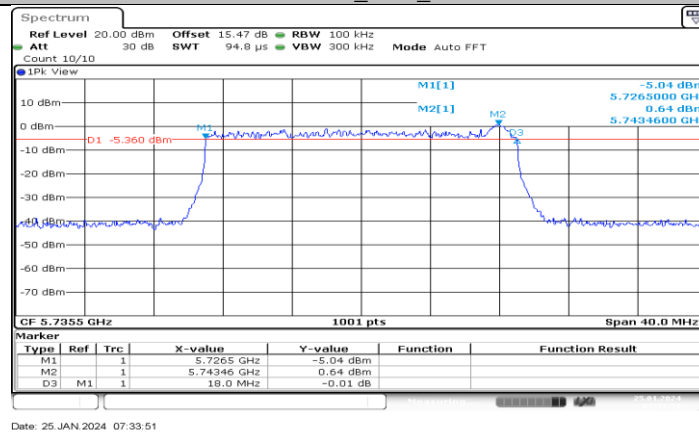
SRD 10MHz_Ant1_5732.5



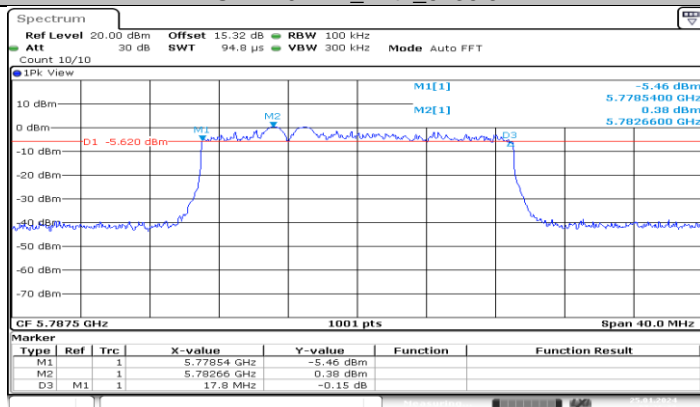
SRD 10MHz_Ant1_5787.5



SRD 10MHz_Ant1_5844.5

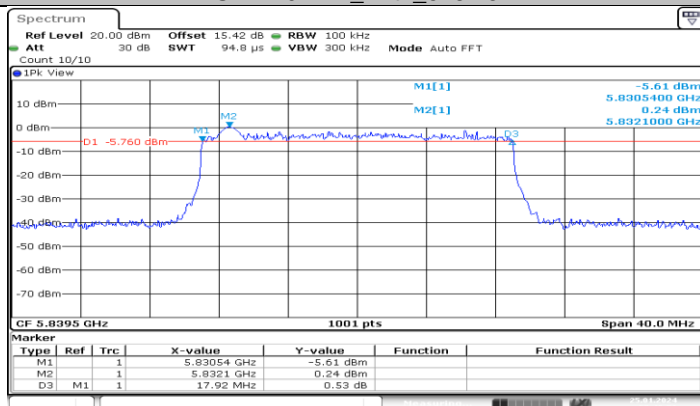


SRD 20MHZ_Ant1_5735.5



Date: 25 JAN 2024 07:36:38

SRD 20MHZ_Ant1_5787.5



Date: 25 JAN 2024 07:40:59

SRD 20MHZ_Ant1_5839.5

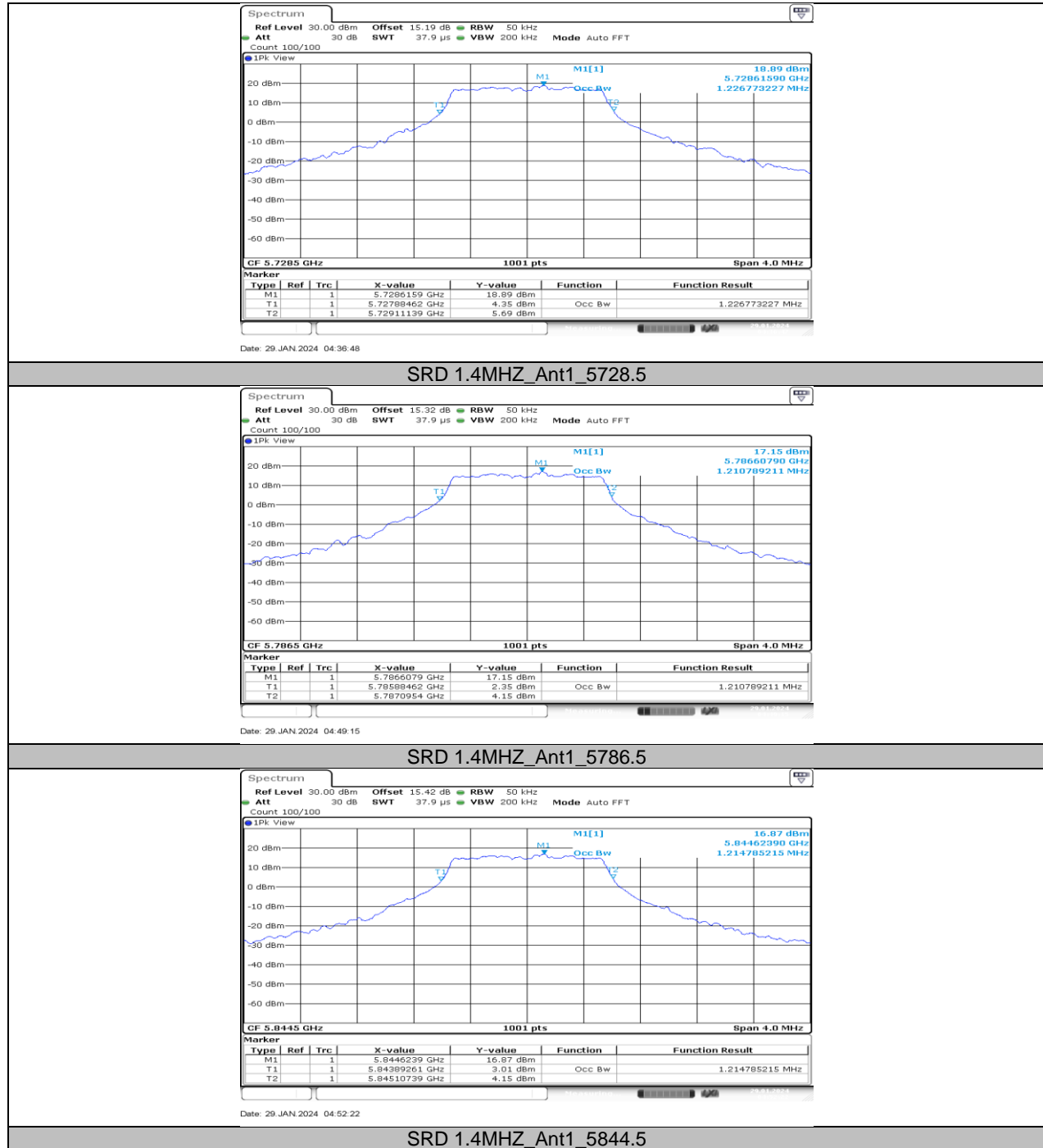
11.2. APPENDIX B: OCCUPIED CHANNEL BANDWIDTH

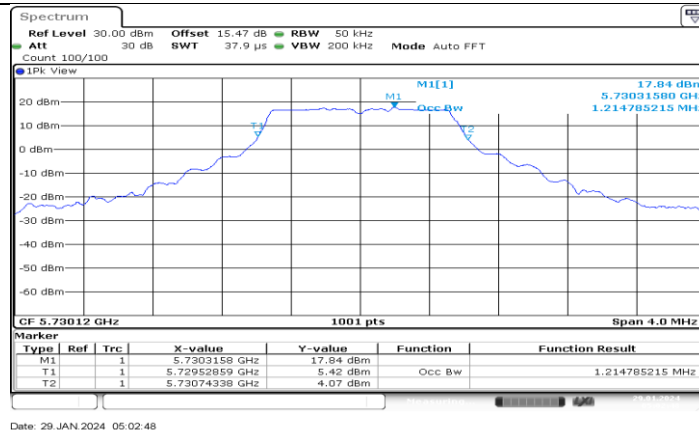
11.2.1. Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Verdict
SRD 1.4MHZ	Ant1	5728.5	1.227	5727.8846	5729.1114	PASS
		5786.5	1.211	5785.8846	5787.0954	PASS
		5844.5	1.215	5843.8926	5845.1074	PASS
SRD 1.4MHZ CA	Ant1	5730.12	1.215	5729.5286	5730.7434	PASS
		5788.12	1.239	5787.5206	5788.7594	PASS
		5846.12	1.255	5845.5126	5846.7674	PASS
SRD 3M	Ant1	5730.5	2.168	5729.4211	5731.5889	PASS
		5787.5	2.223	5786.4061	5788.6289	PASS
		5844.5	2.223	5843.4061	5845.6289	PASS

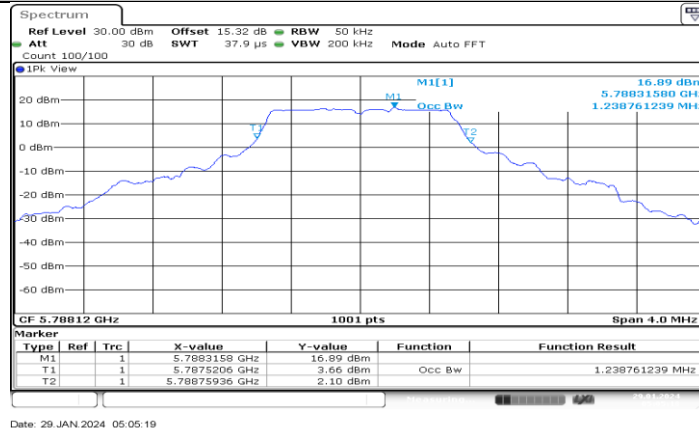
Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Verdict
SRD 10MHZ	Ant1	5732.5	9.251	5727.9246	5737.1753	PASS
		5787.5	9.171	5782.9246	5792.0954	PASS
		5844.5	9.251	5839.9246	5849.1753	PASS
SRD 20MHZ	Ant1	5735.5	18.022	5726.5889	5744.6109	PASS
		5787.5	18.062	5778.4690	5796.5310	PASS
		5839.5	17.822	5830.6289	5848.4510	PASS

11.2.2. Test Graphs

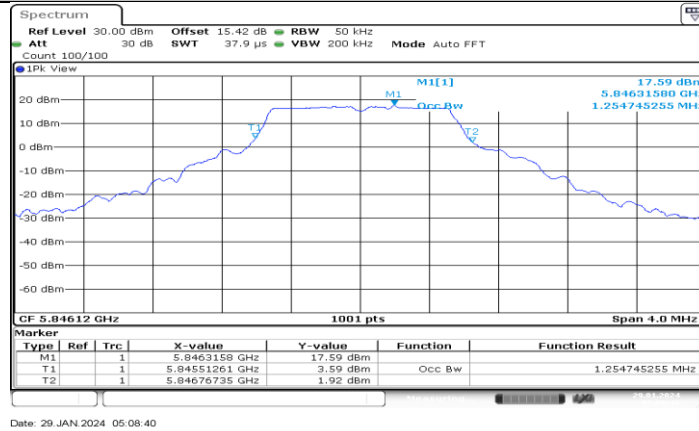




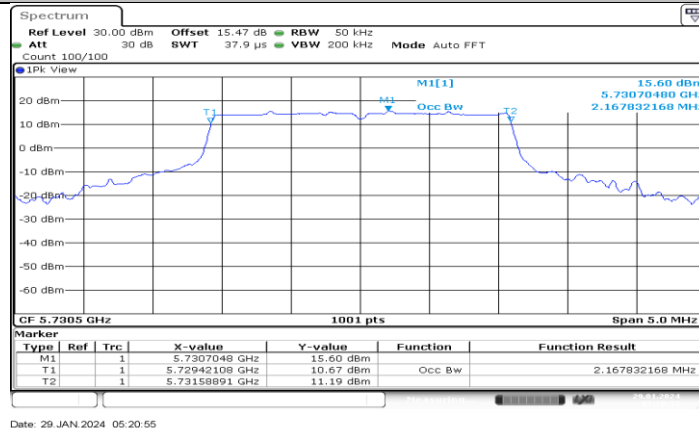
SRD 1.4MHz CA_Ant1_5730.12

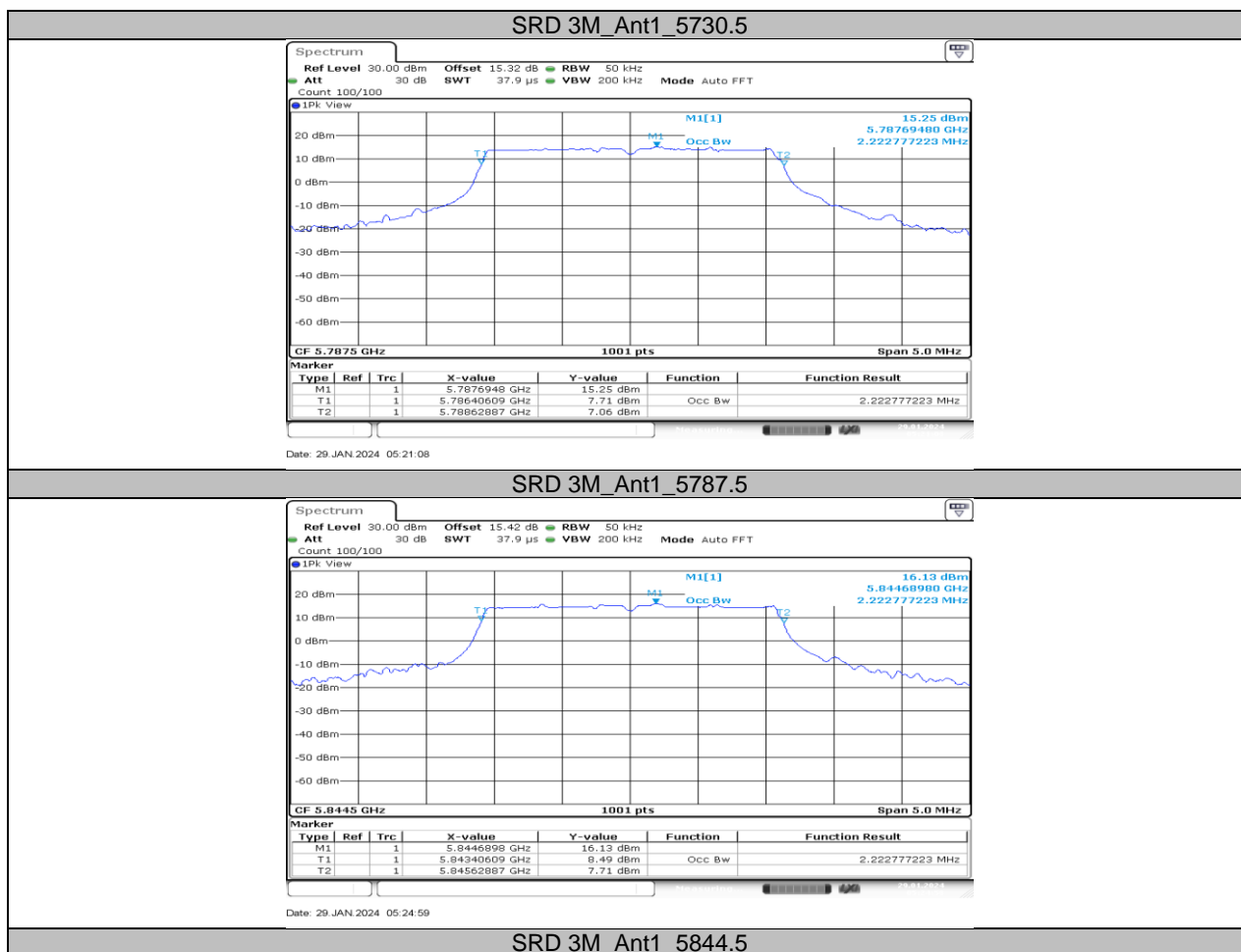


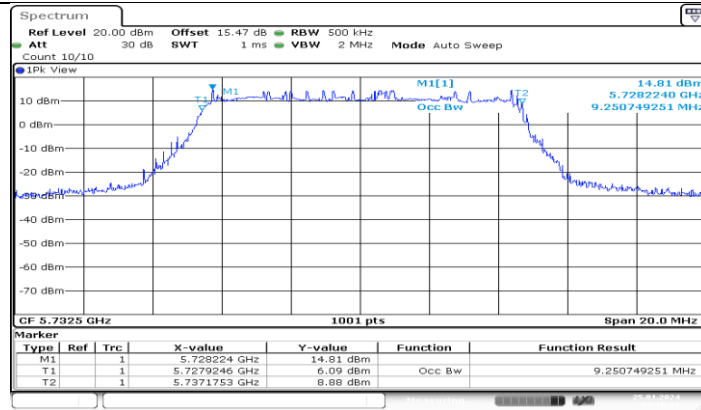
SRD 1.4MHz CA_Ant1_5788.12



SRD 1.4MHz CA_Ant1_5846.12

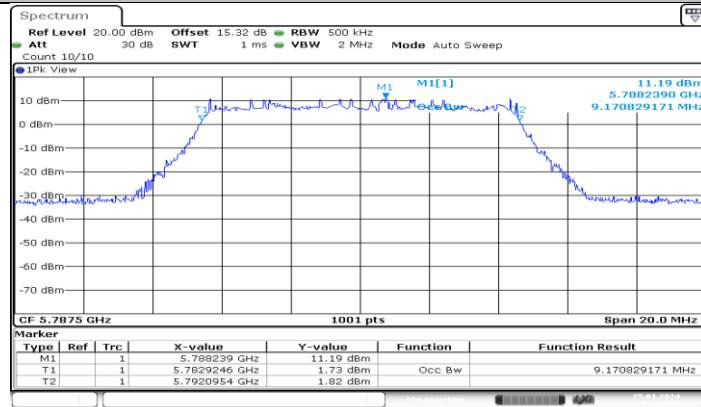






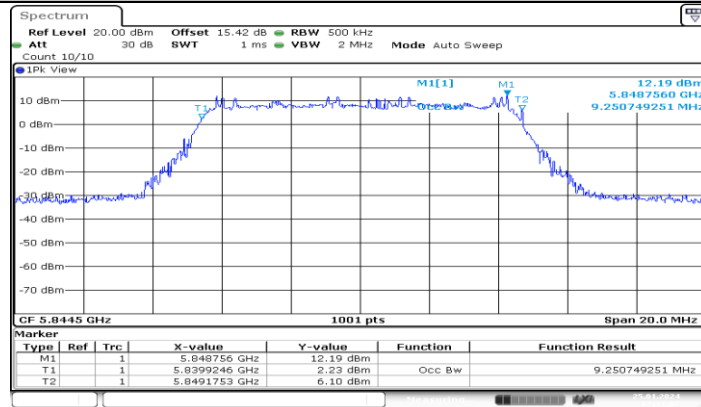
Date: 25 JAN 2024 05:18:38

SRD 10MHz_Ant1_5732.5



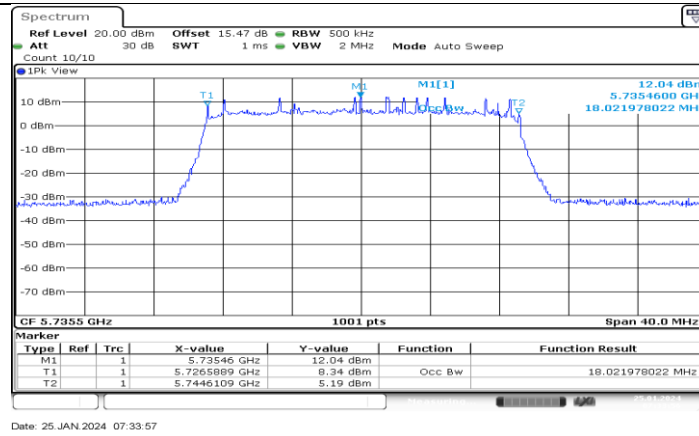
Date: 25 JAN 2024 07:16:42

SRD 10MHz_Ant1_5787.5

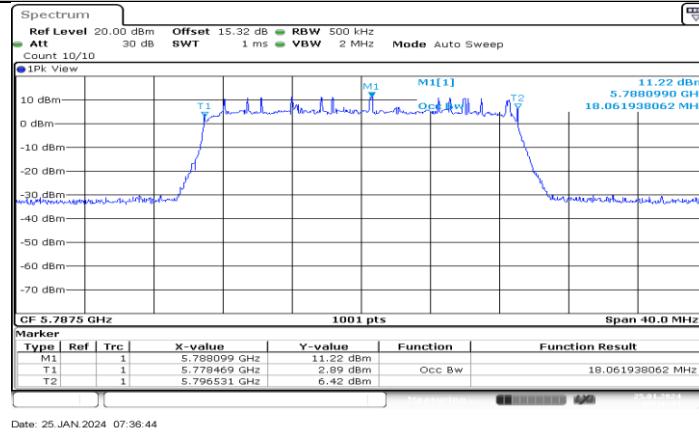


Date: 25 JAN 2024 07:31:08

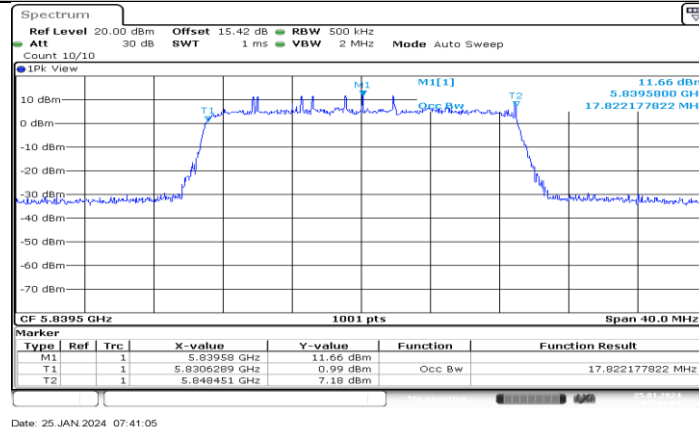
SRD 10MHz_Ant1_5844.5



SRD 20MHz_Ant1_5735.5



SRD 20MHz_Ant1_5787.5



SRD 20MHz_Ant1_5839.5

11.3. APPENDIX C: MAXIMUM CONDUCTED AVERAGE OUTPUT POWER

11.3.1. Test Result

Test Mode	Antenna	Frequency[MHz]	Result[dBm]	Limit[dBm]	Verdict
SRD 1.4MHZ	Ant1	5728.5	22.41	≤30	PASS
		5786.5	21.85	≤30	PASS
		5844.5	22.12	≤30	PASS
SRD 1.4MHZ CA	Ant1	5730.12	22.44	≤30	PASS
		5788.12	21.73	≤30	PASS
		5846.12	22.12	≤30	PASS
SRD 3M	Ant1	5730.5	21.87	≤30	PASS
		5787.5	21.55	≤30	PASS
		5844.5	22.03	≤30	PASS

Test Mode	Antenna	Frequency[MHz]	Power [dBm]	Limit [dBm]	Verdict
SRD 10MHZ	Ant1	5732.5	11.87	≤30.00	PASS
		5787.5	11.11	≤30.00	PASS
		5844.5	11.52	≤30.00	PASS
SRD 20MHZ	Ant1	5735.5	11.91	≤30.00	PASS
		5787.5	11.17	≤30.00	PASS
		5839.5	11.66	≤30.00	PASS

11.4. APPENDIX D: MAXIMUM POWER SPECTRAL DENSITY

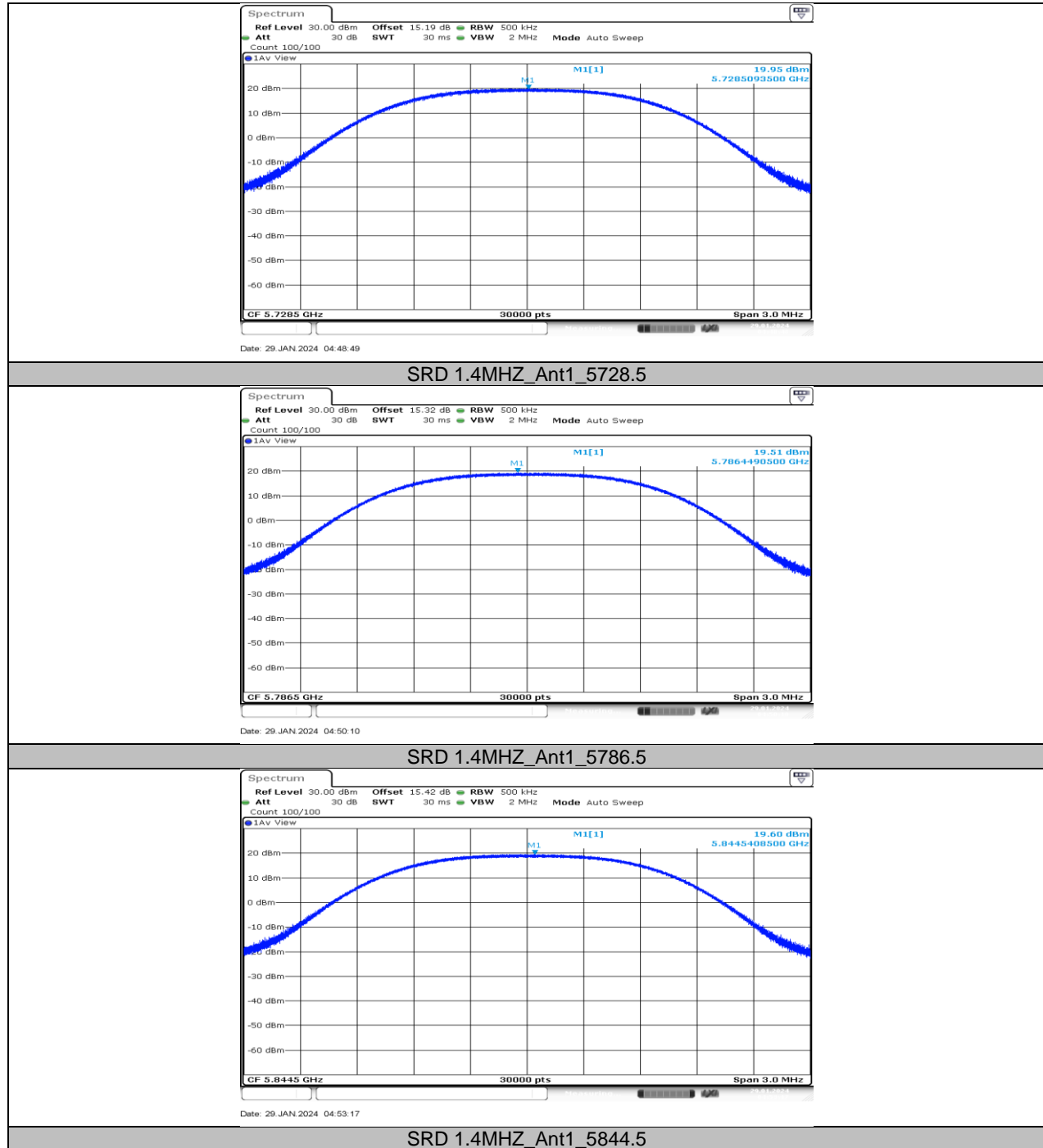
11.4.1. Test Result

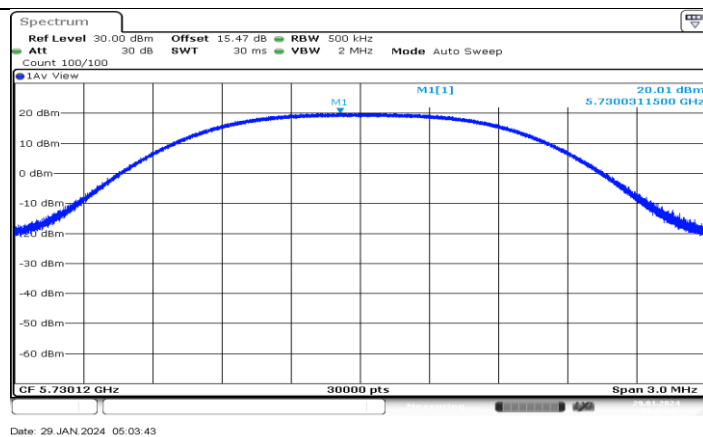
Test Mode	Antenna	Frequency[MHz]	Result[dBm/500kHz]	Limit[dBm/500kHz]	Verdict
SRD 1.4MHZ	Ant1	5728.5	19.95	≤30.00	PASS
		5786.5	19.51	≤30.00	PASS
		5844.5	19.60	≤30.00	PASS
SRD 1.4MHZ CA	Ant1	5730.12	20.01	≤30.00	PASS
		5788.12	19.24	≤30.00	PASS
		5846.12	19.61	≤30.00	PASS
SRD 3M	Ant1	5730.5	17.61	≤30.00	PASS
		5787.5	17.38	≤30.00	PASS
		5844.5	17.87	≤30.00	PASS

Test Mode	Antenna	Frequency[MHz]	Power [dBm/500kHz]	Limit [dBm/500kHz]	Verdict
SRD 10MHZ	Ant1	5732.5	0.26	≤30.00	PASS
		5787.5	-0.31	≤30.00	PASS
		5844.5	0.05	≤30.00	PASS
SRD 20MHZ	Ant1	5735.5	-2.50	≤30.00	PASS
		5787.5	-3.23	≤30.00	PASS
		5839.5	-2.88	≤30.00	PASS

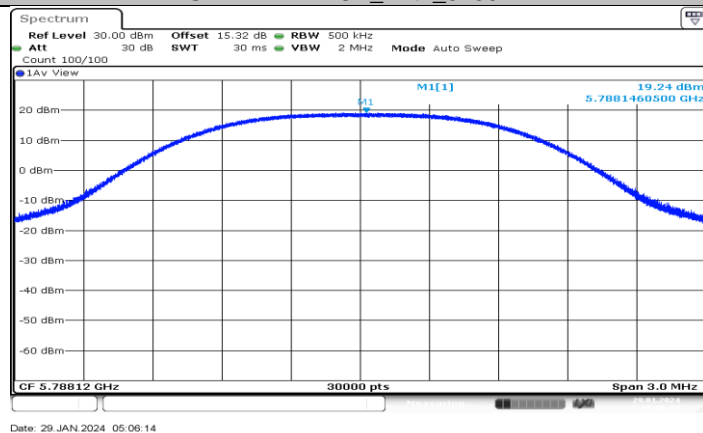
Note: The Result and Limit Unit is dBm/500 kHz in the band 5.725 ~ 5.85 GHz.

11.4.2. Test Graphs

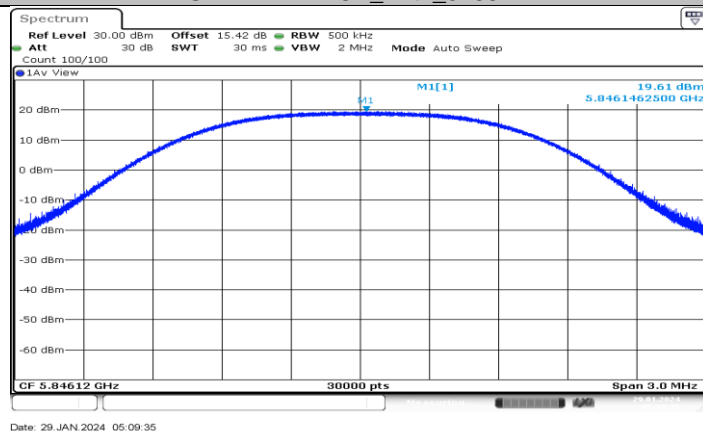




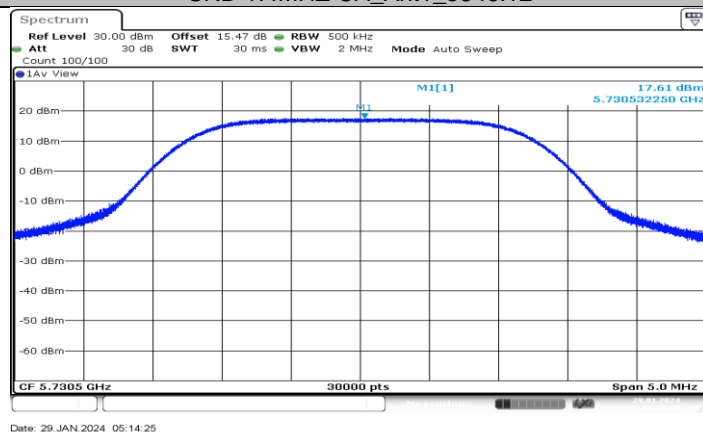
SRD 1.4MHz CA_Ant1_5730.12

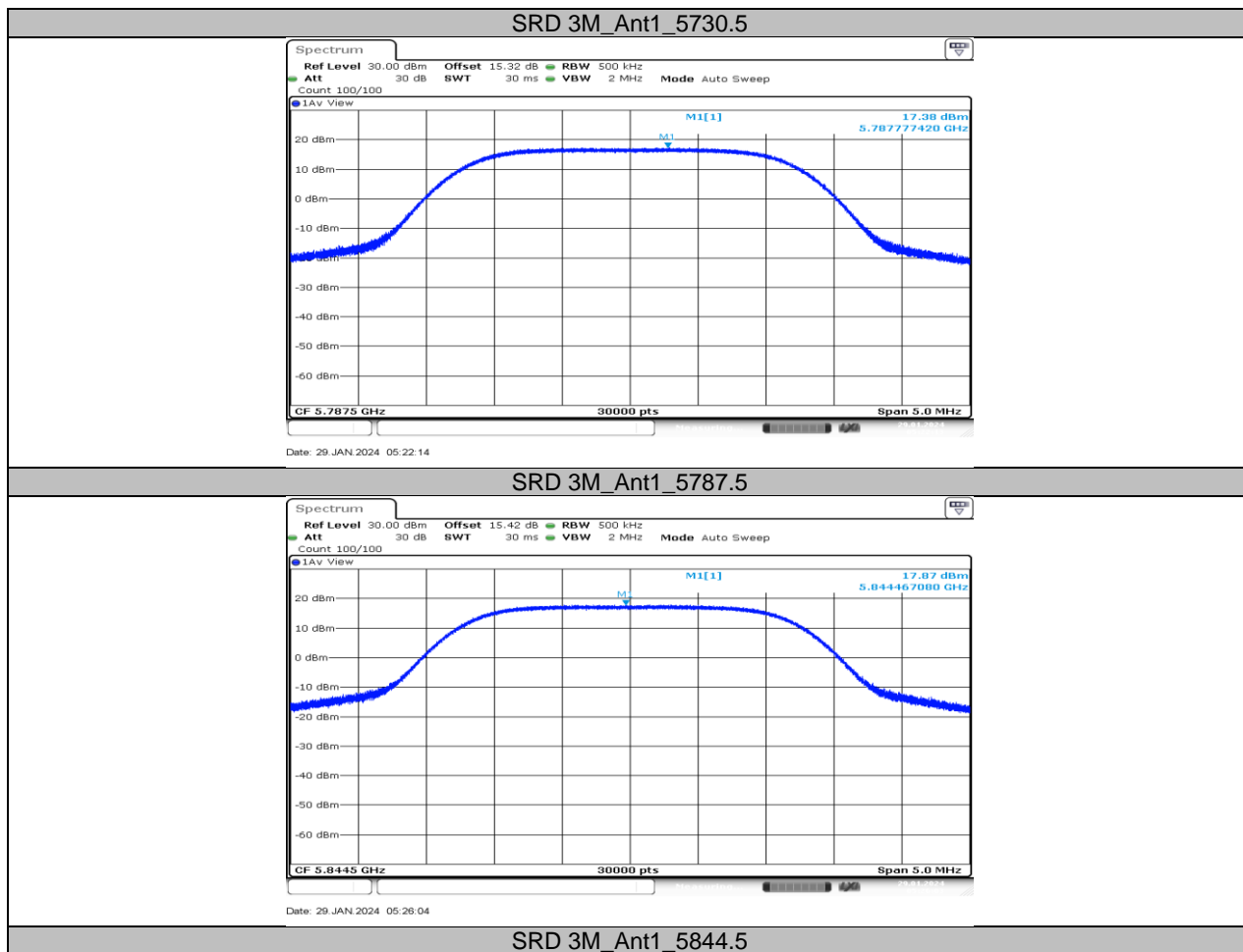


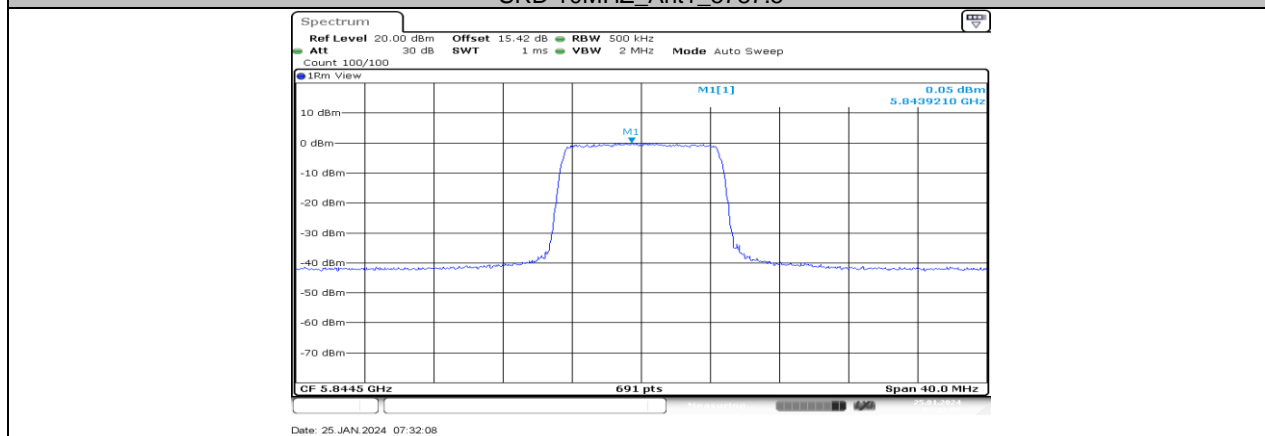
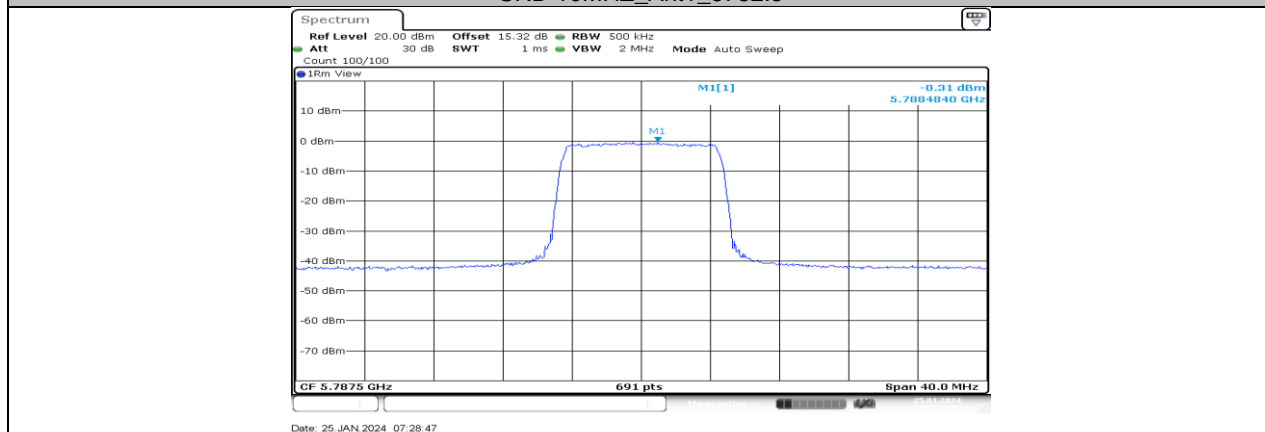
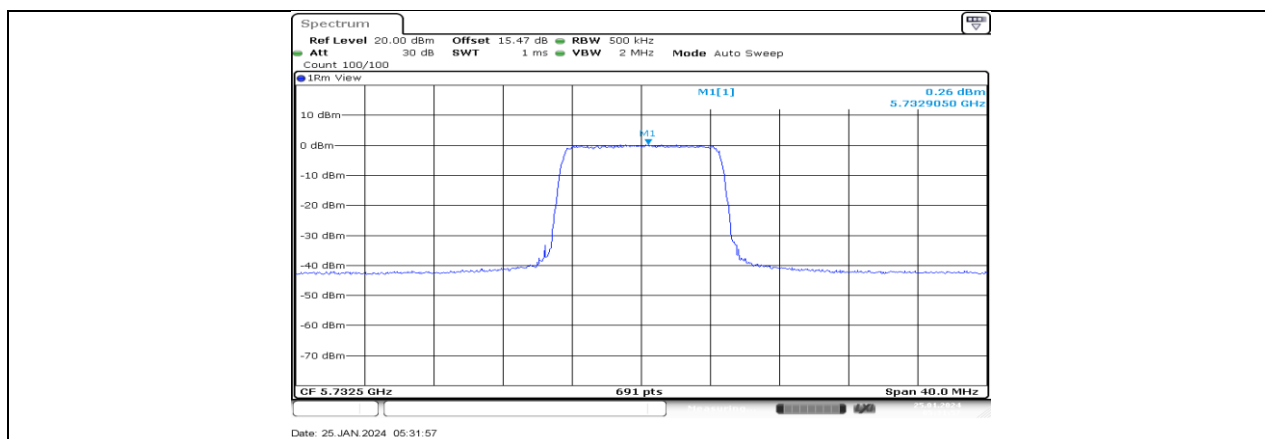
SRD 1.4MHz CA_Ant1_5788.12

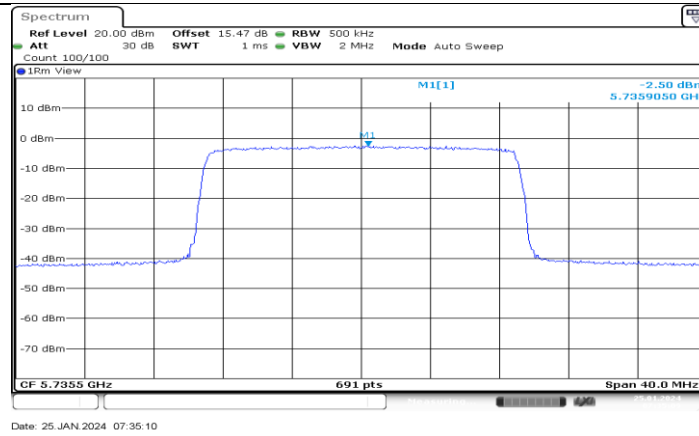


SRD 1.4MHz CA_Ant1_5846.12

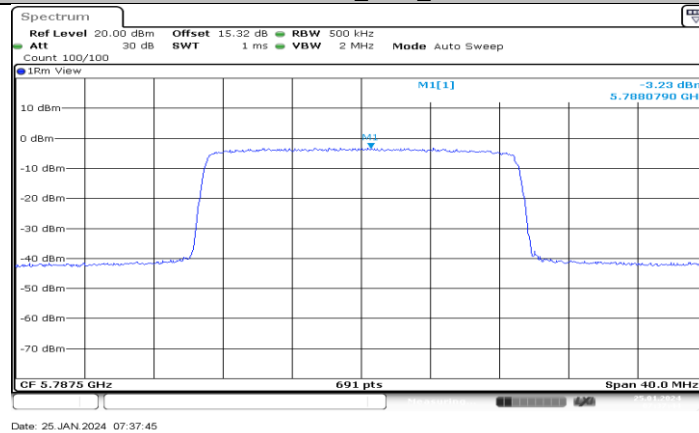




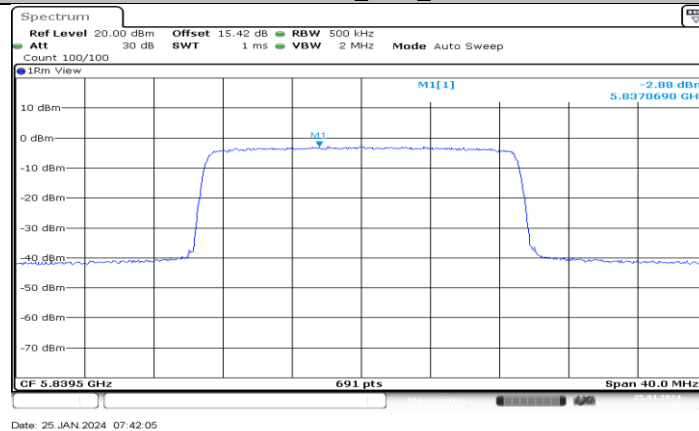




SRD 20MHz_Ant1_5735.5



SRD 20MHz_Ant1_5787.5



SRD 20MHz_Ant1_5839.5

11.5. APPENDIX E: FREQUENCY STABILITY

11.5.1. Test Result

Frequency Error vs. Voltage									
1.4 MHz CA Mode: 5788.12 MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
TN	VL	5788.1106	-1.63	5788.1178	-0.38	5788.1212	0.20	5788.1112	-1.52
TN	VN	5788.1033	-2.89	5788.1362	2.80	5788.1261	1.06	5788.1098	-1.76
TN	VH	5788.1015	-3.20	5788.0975	-3.90	5788.1202	0.03	5788.1433	4.02
Frequency Error vs. Temperature									
1.4 MHz CA Mode: 5788.12 MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
40	V _N	5788.1142	-1.01	5788.1265	1.13	5788.1071	-2.24	5788.1094	-1.83
30	V _N	5788.1380	3.11	5788.1194	-0.11	5788.1083	-2.02	5788.1075	-2.16
20	V _N	5788.1346	2.53	5788.1131	-1.20	5788.1240	0.69	5788.1384	3.19
10	V _N	5788.1040	-2.76	5788.1002	-3.43	5788.1141	-1.02	5788.1283	1.44
0	V _N	5788.1404	3.52	5788.1023	-3.07	5788.1011	-3.27	5788.1168	-0.56

Note: All the modes and antennas had been tested, but only the worst data was recorded in the report.

11.6. APPENDIX F: DUTY CYCLE

11.6.1. Test Result

Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
SRD 1.4MHZ	50.00	50.00	1.0000	100.00	0.00	0.02	0.01
SRD 1.4MHZ CA	50.00	50.00	1.0000	100.00	0.00	0.02	0.01
SRD 3M	50.00	50.00	1.0000	100.00	0.00	0.02	0.01

Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
SRD 10MHZ	30.00	30.00	1.0000	100.00	0.00	0.03	0.01
SRD 20MHZ	30.00	30.00	1.0000	100.00	0.00	0.03	0.01

Note:

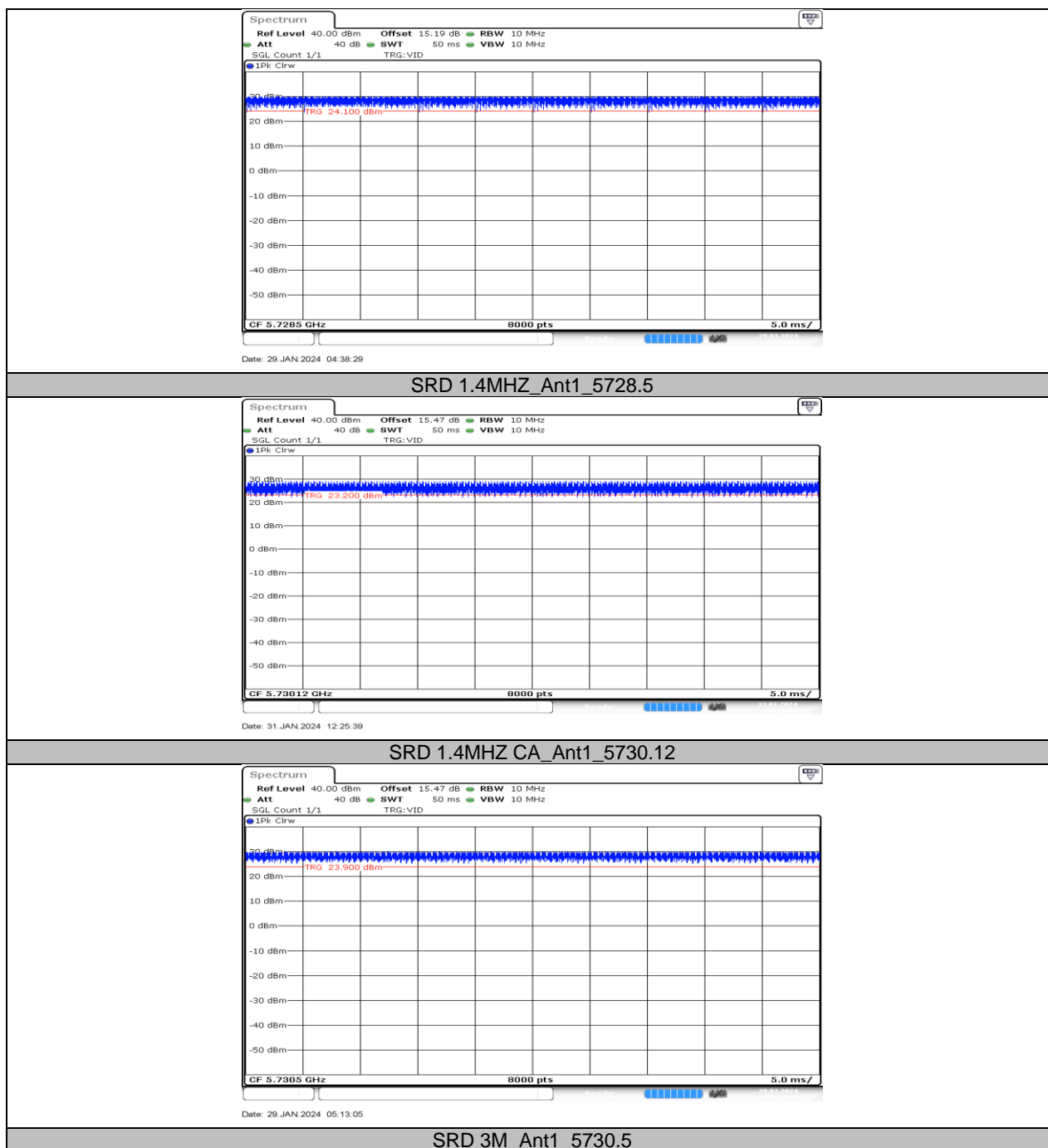
Duty Cycle Correction Factor=10log (1/x).

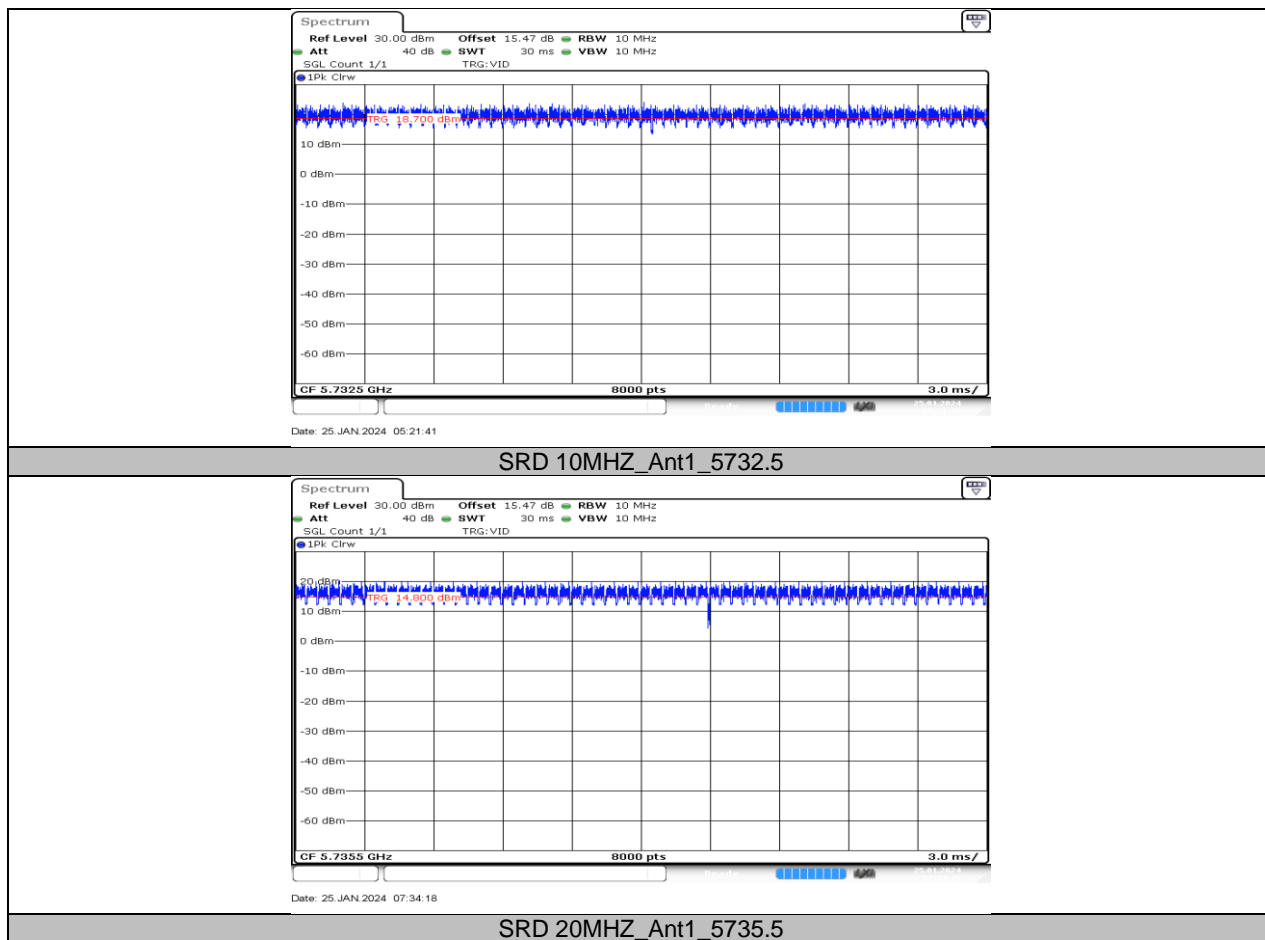
Where: x is Duty Cycle (Linear)

Where: T is On Time

If that calculated VBW is not available on the analyzer then the next higher value should be used.

11.6.2. Test Graphs





END OF REPORT