



Radio Test Report

Report No.:STS2605184W01

Issued for

Shenzhen Ai-Thinker Technology Co., Ltd

410,Block C, Huafeng Smart Innovation Port,Gushu 2nd
Road,Gushu Community,Xixiang Street,Baoan
District,Shenzhen,China

Product Name: Radar Module

Brand Name:  

Model Name: Rd-03D_V2

Series Model(s): N/A

FCC ID: 2ATPO-RA03D

Test Standards: FCC Part15.249

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Shenzhen STS Test Services Co., Ltd.

**TEST REPORT**

Applicant's Name.....: Shenzhen Ai-Thinker Technology Co., Ltd
410,Block C, Huafeng Smart Innovation Port,Gushu 2nd
Address.....: Road,Gushu Community,Xixiang Street,Baoan
District,Shenzhen,China
Manufacturer's Name.....: Shenzhen Ai-Thinker Technology Co., Ltd
410,Block C, Huafeng Smart Innovation Port,Gushu 2nd
Address.....: Road,Gushu Community,Xixiang Street,Baoan
District,Shenzhen,China

Product Description

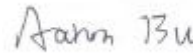
Product Name.....: Radar Module
Brand Name:  
Model Name.....: Rd-03D_V2
Series Model(s).....: N/A
Standards.....: FCC Part 15.249
Test Procedure.....: ANSI C63.10-2020+Cor 1-2023

This device described above has been tested by STS, the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Shenzhen STS Test Services Co., Ltd.

Date of Test.....:
Date of receipt of test item.....: 28 May. 2026
Date of performance of tests...: 29 May. 2026 ~ 10 June 2026
Date of Issue.....: 10 June 2026
Test Result.....: **Pass**

Testing Engineer :



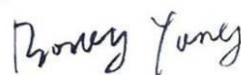
(Aaron Bu)

Technical Manager :



(Skylar Li)

Authorized Signatory :



(Bovey Yang)





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**Revision History**

Rev.	Issue Date	Report No.	Effect Page	Contents
00	10 June 2026	STS2605184W01	ALL	Initial Issue



1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part 15.249 , Subpart C			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	Pass	--
15.203	Antenna Requirement	Pass	--
15.249	Radiated Spurious Emission	Pass	--
15.249	Radiated Band Edge Emission	Pass	--
15.249	Field Strength of fundamental	Pass	--
15.215(c)	20dB&99% Bandwidth	Pass	--

NOTE:

- (1) 'N/A' denotes test is not applicable in this Test Report.
- (2) All tests are according to ANSI C63.10-2020+Cor 1-2023.



1.1 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD

Add. :101, Building B, Zhuoke Science Park, No.190 Chongqing Road, ZhanChengShequ, Fuhai Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration Number: 625569

IC test Firm Registration Number: 12108A

A2LA Certificate No.: 4338.01

1.2 MEASUREMENT UNCERTAINTY

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

No.	Item	Uncertainty
1	RF output power, conducted	$\pm 0.751\text{dB}$
2	Unwanted Emissions, conducted	$\pm 2.888\text{dB}$
3	All emissions, radiated 9K-30MHz	$\pm 2.48\text{dB}$
4	All emissions, radiated 30M-1GHz	$\pm 2.52\text{dB}$
5	All emissions, radiated 1G-18GHz	$\pm 3.48\text{dB}$
6	All emissions, radiated >18GHz	$\pm 4.18\text{dB}$
7	Conducted Emission (9KHz-150KHz)	$\pm 2.48\text{dB}$
8	Conducted Emission (150KHz-30MHz)	$\pm 2.52\text{dB}$
9	Occupied Channel Bandwidth	$\pm 3.6\%$
10	Power Spectral Density, conducted	$\pm 1.214\text{dB}$
11	Duty Cycle	$\pm 3.2\%$



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Product Name	Radar Module	
Brand Name	 	
Model Name	Rd-03D_V2	
Series Model(s)	N/A	
Model Difference	N/A	
Product Description	Operation Frequency:	24-24.25GHz
	Modulation Type:	FMCW
	Antenna Designation:	On-board antenna
	Antenna Gain(dBi):	6
Power Rating	Input: DC 5V	
Adapter	N/A	
Battery	N/A	
Hardware version number	V1.0	
Software version number	V1.0	
Connecting I/O Port(s)	Please refer to the Note 1.	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User Manual.
2. The antenna information refer the manufacturer provide report, applicable only to the tested sample identified in the report. Due to the incorrect antenna information, a series of problems such as the accuracy of the test results will be borne by the customer.

3.	Channel	Frequency (GHz)
	00	24-24.25



2.2 DESCRIPTION OF THE TEST MODES

For conducted test items and radiated spurious emissions

Each of these EUT operation mode(s) or test configuration mode(s) mentioned below was evaluated respectively.

Pretest Mode	Description	Data/Modulation
Mode 1	TX	FMCW
Mode 2	Charging	FMCW

Note:

(1) All above mode have been measurement, only worst data was reported.

2.3 TEST SOFTWARE AND POWER LEVEL

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level.

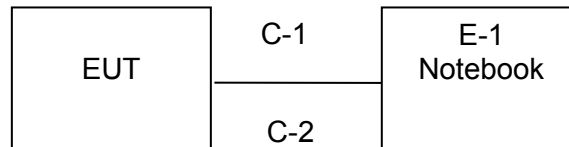
RF Function	Mode Or Modulation type	ANT Gain(dBi)	Power Class	Software For Testing
Other SRD	FMCW	6	Default	The EUT has signal transmission when it is powered on



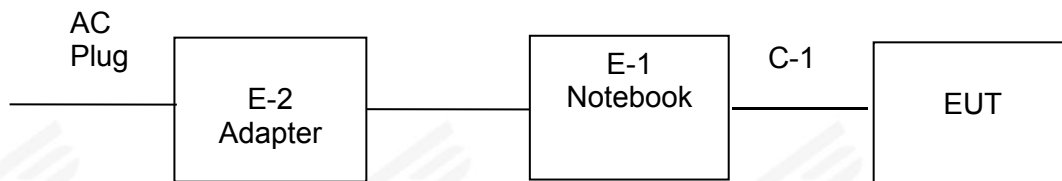
2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

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

Radiated Spurious Emission Test



AC Conducted Emission Test





2.5 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Note
E-1	Notebook	DELL	Inspiron 3501	N/A
E-2	Adapter	DELL	Inspiron 3501	N/A
C-1	Serial port board	XES	WTYZK	N/A
C-2	USB Cable	MI	RYEW3A	N/A

Item	Equipment	Mfr/Brand	Length	Note
C-2	Shielded	NO	150cm	N/A

Note:

- (1) For detachable type I/O cable should be specified the length in cm in 『Length』 column.



2.6 EQUIPMENTS LIST FOR ALL TEST ITEMS

RF Radiation Test Equipment					
Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
966 chamber	CHENYU	966 Room	966	2025.08.13	2028.08.12
Temperature & Humidity	TORIE	TP502V4-P	6700000124280	2025.10.13	2026.10.12
Pre-Amplifier(0.1M-3GHz)	EM	EM330	60665	2026.02.04	2027.02.03
Pre-Amplifier(1G-18GHz)	SKET	LNPA-01018G-45	SK2018080901	2025.09.25	2026.09.24
Pre-Amplifier(18G-40GHz)	SKET	LNPA_1840-50	SK2018101801	2026.02.04	2027.02.03
Active loop Antenna(9KHz-30MHz)	ZHINAN	ZN30900C	16035	2026.02.04	2027.02.03
Bilog Antenna(30-1000MHz)	TESEQ	CBL6111D	34678	2025.09.27	2026.09.26
Horn Antenna(1G-18GHz)	SCHWARZBECK	BBHA 9120D	2014	2025.09.27	2026.09.26
HornAntenna(18G-40GHz)	A-INFOMW	LB-180400-KF	J211020657	2025.09.27	2026.09.26
Horn Antenna(40G-60GHz)	A-INFO	LB-19-25-A	2020039000053	2024.07.10	2026.07.09
Horn Antenna(50G-75GHz)	A-INFO	LB-15-25-A	2020028000183	2024.07.10	2026.07.09
Horn Antenna(50G-75GHz)	A-INFO	LB-15-25-A	2020028000183	2024.07.10	2026.07.09
Horn Antenna(75G-110GHz)	A-INFO	LB-10-25-A	2020017000101	2024.07.10	2026.07.09
Mixer(40-60GHz)	AT-Microwave	AT-SAX8-4060	U4NO01	2024.11.21	2026.11.20
Mixer(50-75GHz)	AT-Microwave	AT-SAXB-5075	V4NO01	2024.11.21	2026.11.20
Mixer(75-110GHz)	AT-Microwave	AT-SAX8-75110	S5JA01	2024.11.21	2026.11.20
Signal Analyzer	Keysight	N9020A	MY52440124	2026.02.04	2027.02.03
Turn Table	MF	SC100_1	60531	N/A	N/A
AC Power Source	APC	KDF-11010G	F214050035	N/A	N/A
RF Coaxial Cable	LEITAI M-WAVE	CA360	DC-18G	2025.09.26	2026.09.25
RF Coaxial Cable	LEITAI M-WAVE	CA3507	DC-40G	2025.09.26	2026.09.25
DC power supply	HONGSHENG FENG	DPS-305AF	17064939	2025.09.22	2026.09.21
AC Conduction Test Equipment					
Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Test Receiver	R&S	ESCI	101427	2025.09.25	2026.09.24
Limiter	CYBERTEK	EM5010	N/A	2025.09.25	2026.09.24
LISN	R&S	ENV216	101242	2025.09.25	2026.09.24
LISN	EMCO	3810/2NM	23625	2025.09.25	2026.09.24
CE Cable	EASTSHEEP	C01	10057	2025.09.25	2026.09.24
Temperature & Humidity	TORIE	TP502V4-P	6700000422137	2025.08.26	2026.08.25
Test SW	EZ-EMC	Ver.STSLAB-03A1 CE			



3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION LIMITS

The radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table.

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

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of “ * ” marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

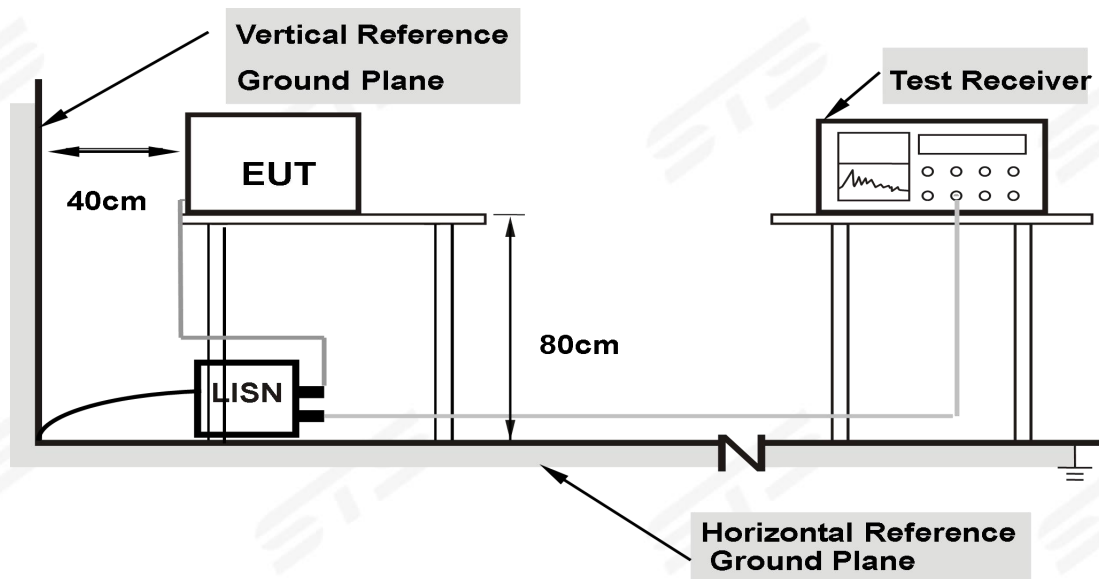
The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

3.1.2 TEST PROCEDURE

- The EUT is 0.8 m from the horizontal ground plane and 0.4 m from the vertical ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments are powered from additional LISN(s). The LISN provides 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- LISN is at least 80 cm from the nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 TEST SETUP



Note: 1. Support units were connected to second LISN.

2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes support units.

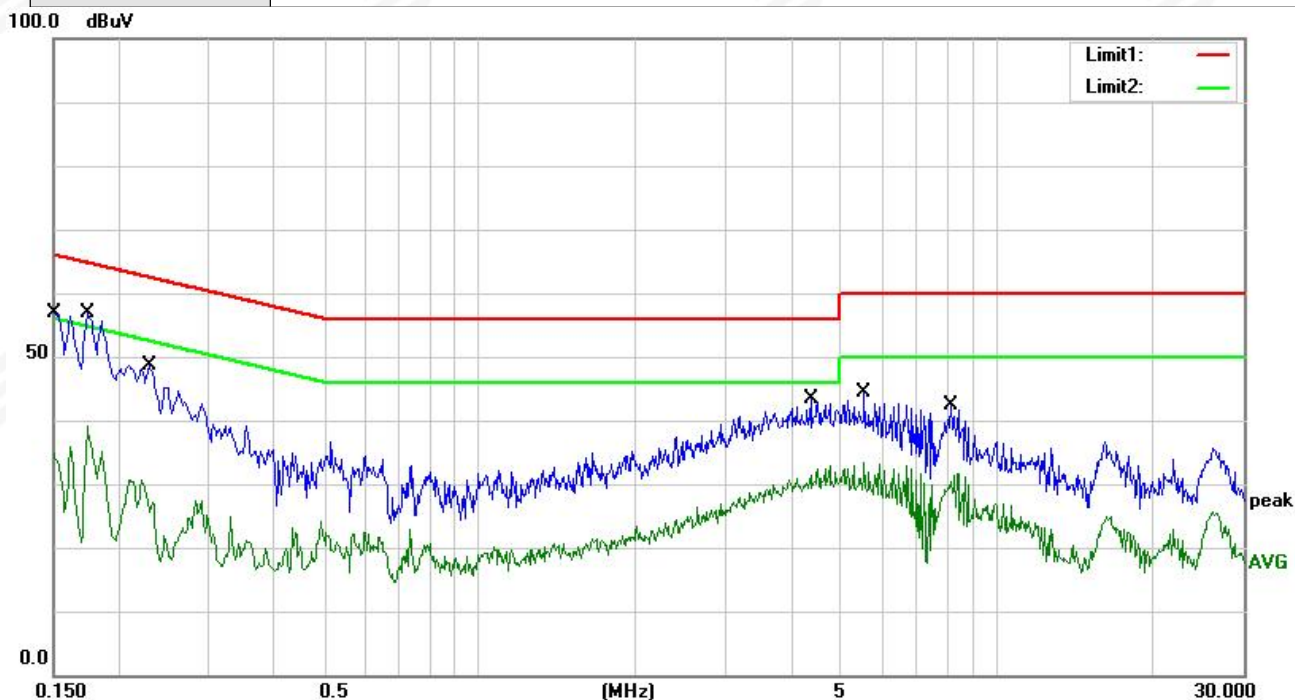
3.1.4 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.



3.1.5 TEST RESULTS

Temperature:	26°C	Relative Humidity:	62.1%
Test Voltage:	AC 120V/60Hz	Phase:	L
Test Mode:	Mode 2		



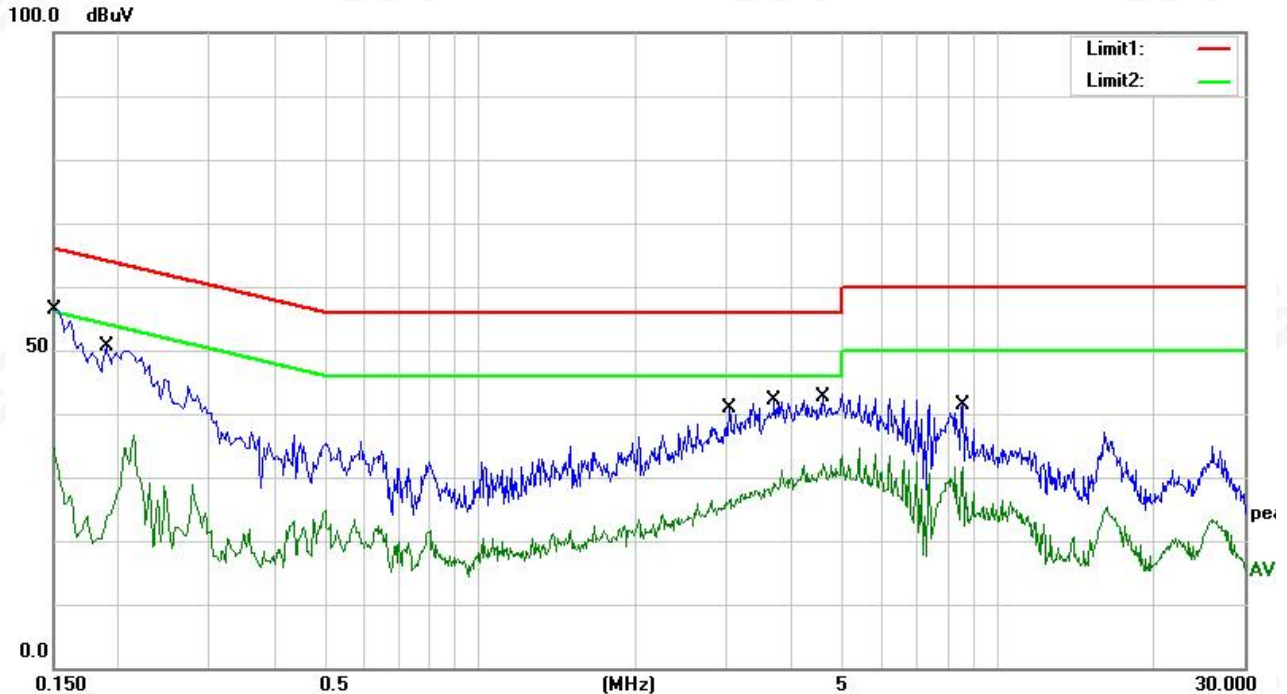
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1500	37.53	19.42	56.95	66.00	-9.05	QP
2	0.1500	15.37	19.42	34.79	56.00	-21.21	AVG
3	0.1740	37.56	19.39	56.95	64.77	-7.82	QP
4	0.1740	19.66	19.39	39.05	54.77	-15.72	AVG
5	0.2300	29.22	19.38	48.60	62.45	-13.85	QP
6	0.2300	11.30	19.38	30.68	52.45	-21.77	AVG
7	4.3660	23.98	19.47	43.45	56.00	-12.55	QP
8	4.3660	12.91	19.47	32.38	46.00	-13.62	AVG
9	5.5380	24.82	19.45	44.27	60.00	-15.73	QP
10	5.5380	14.02	19.45	33.47	50.00	-16.53	AVG
11	8.1820	22.91	19.54	42.45	60.00	-17.55	QP
12	8.1820	12.21	19.54	31.75	50.00	-18.25	AVG

Remark:

1. All readings are Quasi-Peak and Average values
2. Margin = Result (Result = Reading + Factor) - Limit
3. Factor = LISN factor + Cable loss + Limiter (10dB)



Temperature:	26°C	Relative Humidity:	62.1%
Test Voltage:	AC 120V/60Hz	Phase:	N
Test Mode:	Mode 2		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1500	37.03	19.42	56.45	66.00	-9.55	QP
2	0.1500	15.30	19.42	34.72	56.00	-21.28	AVG
3	0.1900	31.17	19.38	50.55	64.04	-13.49	QP
4	0.1900	6.54	19.38	25.92	54.04	-28.12	AVG
5	3.0260	21.41	19.46	40.87	56.00	-15.13	QP
6	3.0260	7.53	19.46	26.99	46.00	-19.01	AVG
7	3.7060	22.73	19.46	42.19	56.00	-13.81	QP
8	3.7060	11.66	19.46	31.12	46.00	-14.88	AVG
9	4.6180	23.20	19.46	42.66	56.00	-13.34	QP
10	4.6180	13.83	19.46	33.29	46.00	-12.71	AVG
11	8.5700	21.86	19.57	41.43	60.00	-18.57	QP
12	8.5700	12.16	19.57	31.73	50.00	-18.27	AVG

Remark:

1. All readings are Quasi-Peak and Average values
2. Margin = Result (Result = Reading + Factor) - Limit
3. Factor = LISN factor + Cable loss + Limiter (10dB)



3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS

In any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on Part 15.249 and the Part 15.209(a) limit in the table below has to be followed.

Standard FCC 15.209

Frequencies (MHz)	Field Strength (microrvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3
Above 1000	Other:74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	3

Standard FCC 15.249

Frequency of Emission (MHz)	Field Strength of fundamental (millivolts /meter)	Field Strength of Harmonics (microvolts/meter)
900~928	50	500
2400~2483.5	50	500
5725~5875	50	500
24000~242500	250	2500

Notes:

- (1) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.
- (2) Emission level (dBuV/m) = 20log Emission level (uV/m).

LIMITS OF RESTRICTED FREQUENCY BANDS

FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (GHz)
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
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	Above 38.6
13.36-13.41			

Spectrum Parameter	Setting
Detector	Peak/AV
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB (emission in restricted band)	>20BW
VB (emission in restricted band)	=3xRB

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~90kHz / RB 200Hz for PK & AV
	90kHz~110kHz / RB 200Hz for QP
	110kHz~490kHz / RB 200Hz for PK & AV
	490kHz~30MHz / RB 9kHz for QP
	30MHz~1000MHz / RB 120kHz for QP



3.2.2 TEST PROCEDURE

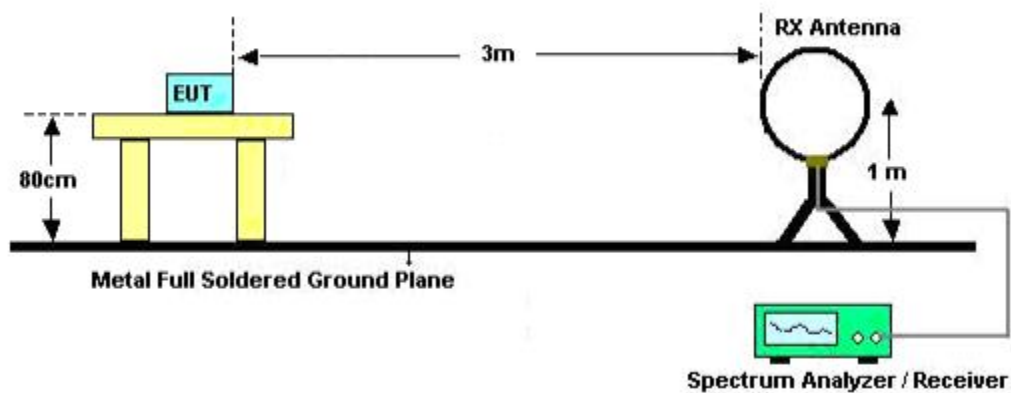
- a. The measuring distance of 3m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation (Below 1GHz)
- b. The measuring distance of 3m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation (Above 1GHz)
- c. The height of the test antenna shall vary between 1m to 4m. Both horizontal and vertical polarization of the antenna are set to make the measurement.
- d. The initial step in collecting radiated emission data is a receive peak detector mode. Pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. All readings are peak unless otherwise stated QP in column of Note. Peak denoted that the Peak reading compliance with the QP limits and then QP Mode measurement didn't perform (Below 1GHz)
- f. All readings are Peak mode value unless otherwise stated AVG in column of Note. If the Peak mode measured value compliance with the Peak limits and lower than AVG Limits, the EUT shall be deemed to meet Peak & AVG limits and then only Peak mode was measured, but AVG mode didn't perform. (Above 1GHz)
9. For the actual test configuration, please refer to the related Item –EUT Test Photos.
Note: Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

3.2.3 DEVIATION FROM TEST STANDARD

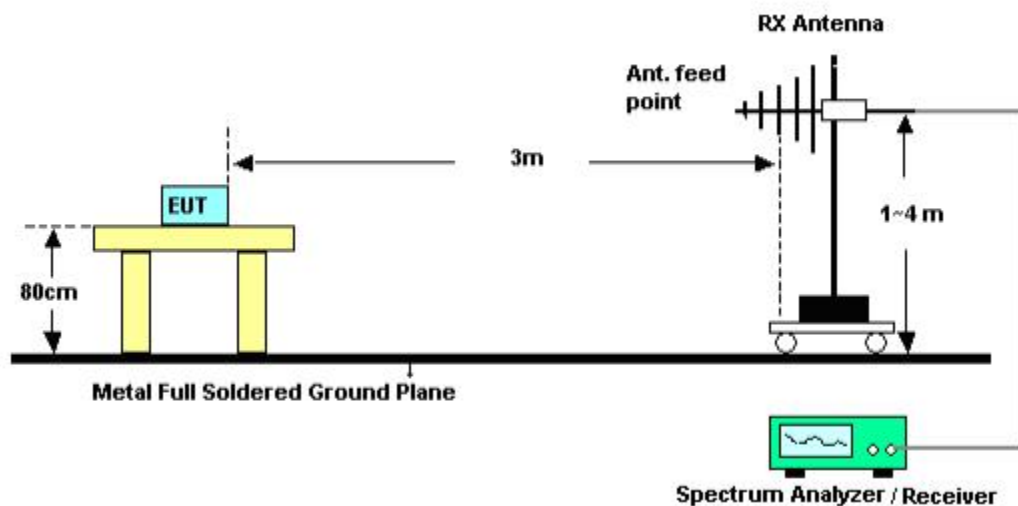
No deviation

3.2.4 TEST SETUP

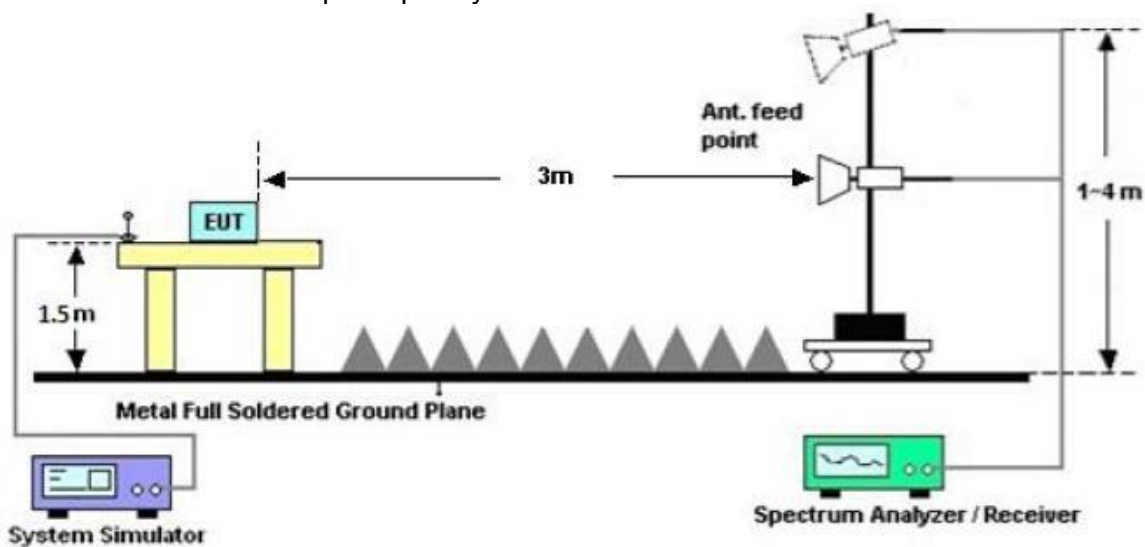
(A) Radiated Emission Test-Up Frequency Below 30MHz



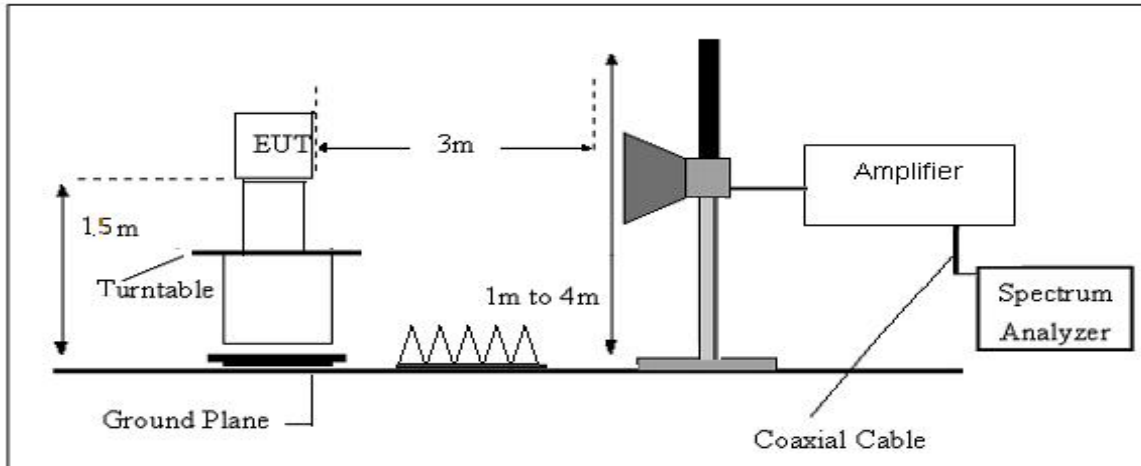
(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



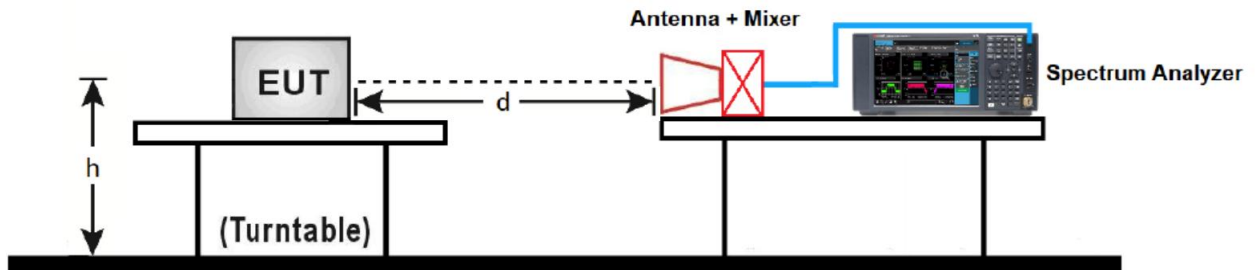
(C) Radiated Emission Test-Up Frequency 1-18GHz



(D) Radiated Emission Test-Up Frequency 18~40GHz



(E) Radiated Emission Test-Up Frequency above 40GHz





3.2.5 FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

Margin=PL-PK L or AL- AV L; Margin only shown the worst case.

Where

PR = Peak Reading

AR = Average Reading

PL = Peak Level

AL = Average Level

AF = Antenna Factor

PK L = Peak Limit

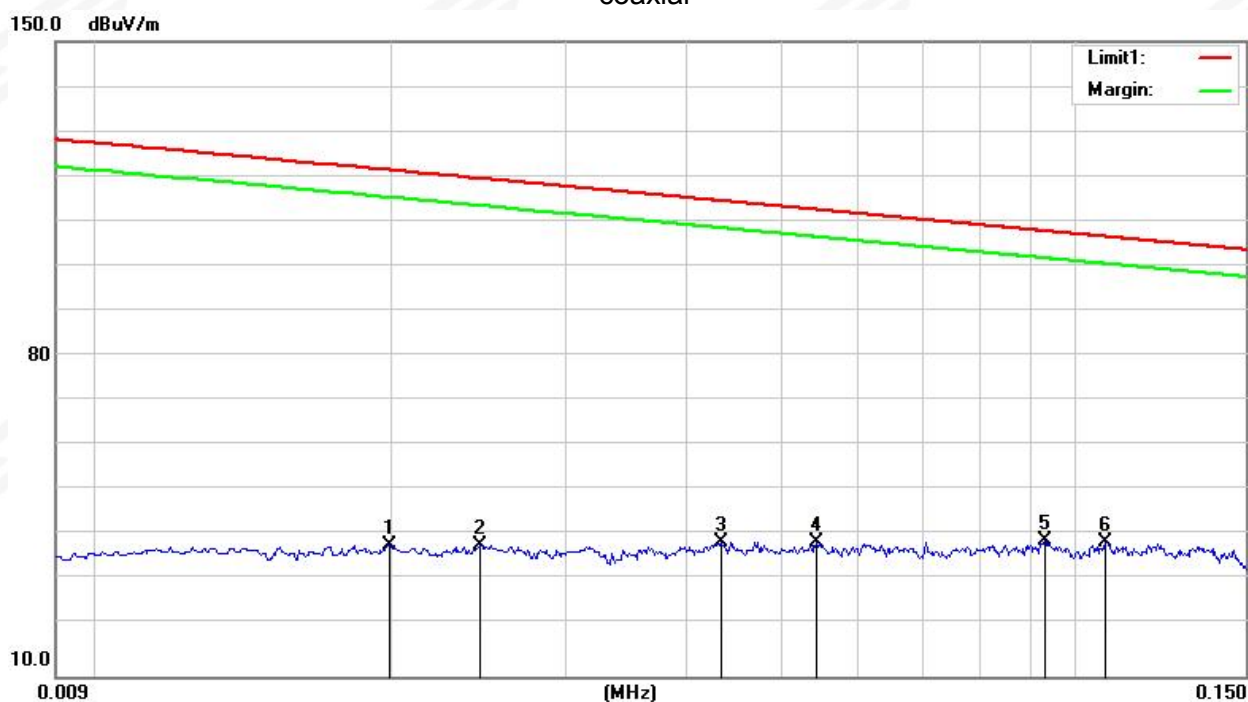
AV L = AV Limit

For example

Frequency	PR	AR	AF	PL	AL	PK L	AV L	Margin
(MHz)	(dB μ V/m)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB μ V/m)	(dB μ V/m)	(dB)
2178	40.23	30.31	9.83	50.06	40.14	74.00	54.00	-13.86



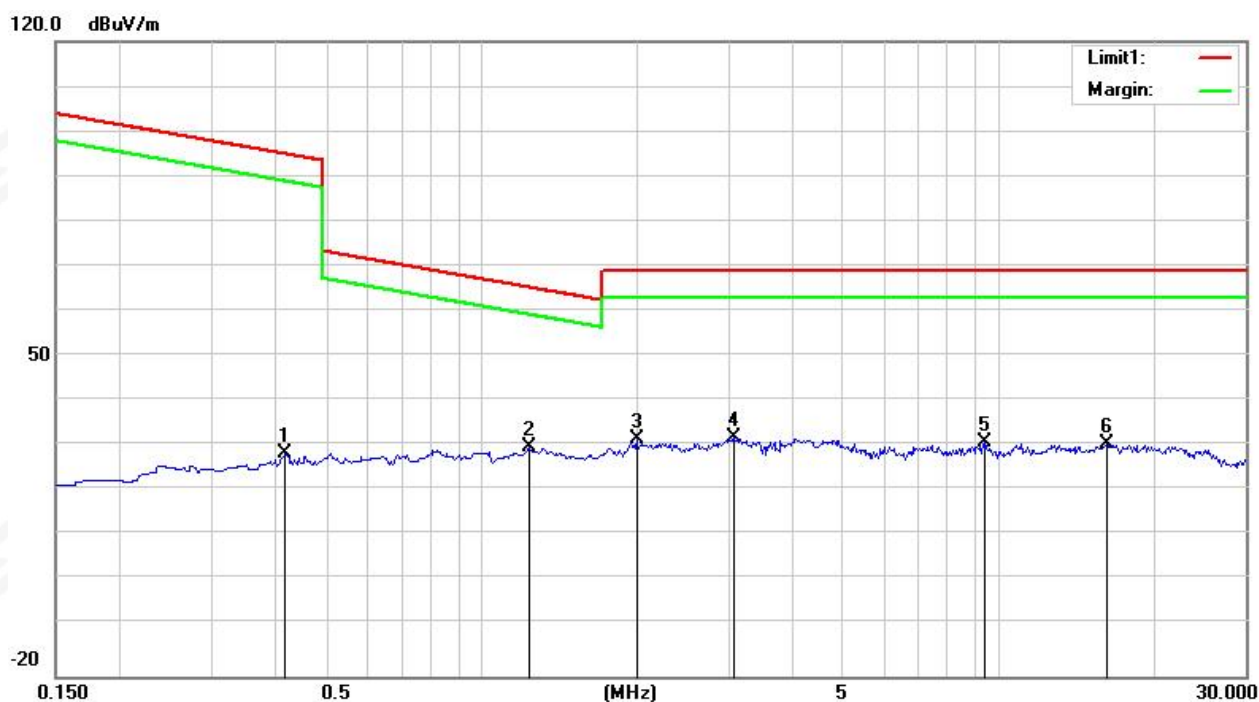
3.2.6 TEST RESULT

RSE-9KHz-150KHz
coaxial

No.	Frequency (KHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0198	18.93	20.09	39.02	121.67	-82.65	AVG
2	0.0246	18.84	20.01	38.85	119.79	-80.94	AVG
3	0.0434	20.11	19.63	39.74	114.85	-75.11	AVG
4	0.0543	20.04	19.38	39.42	112.91	-73.49	AVG
5	0.0932	22.08	17.93	40.01	108.22	-68.21	QP
6	0.1076	22.12	17.58	39.70	106.97	-67.27	QP



RSE-150KHz-30MHz

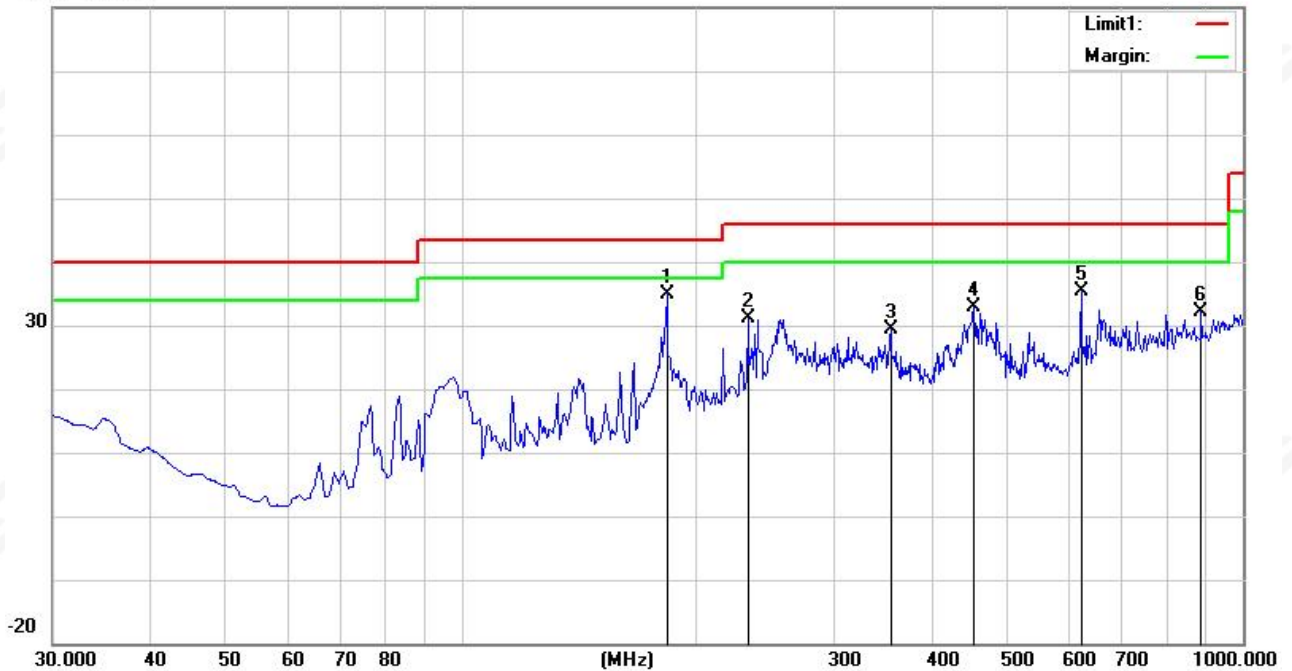


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.4187	8.94	20.17	29.11	95.17	-66.06	AVG
2	1.2357	10.18	20.25	30.43	65.77	-35.34	QP
3	2.0007	11.97	20.40	32.37	69.50	-37.13	QP
4	3.0752	12.69	20.12	32.81	69.50	-36.69	QP
5	9.4334	11.43	20.23	31.66	69.50	-37.84	QP
6	16.1794	9.54	21.58	31.12	69.50	-38.38	QP

Note: The coaxial and coplanar directions of all modes have been tested, only show the worst data in this report.

30MHz-1000MHz
Horizontal

80.0 dBuV/m

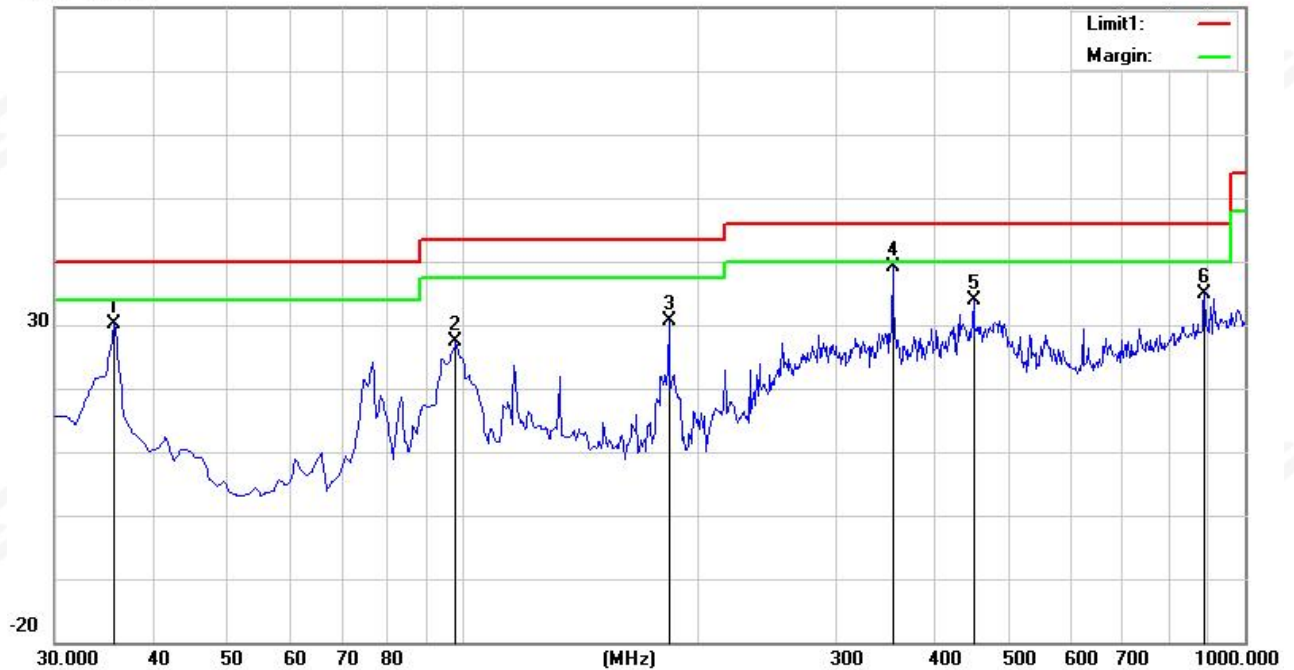


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	183.2600	55.26	-20.26	35.00	43.50	-8.50	peak
2	232.7300	50.14	-18.89	31.25	46.00	-14.75	peak
3	354.9500	42.43	-12.97	29.46	46.00	-16.54	peak
4	452.9200	42.43	-9.61	32.82	46.00	-13.18	peak
5	621.7000	40.84	-5.42	35.42	46.00	-10.58	peak
6	886.5100	32.78	-0.67	32.11	46.00	-13.89	peak

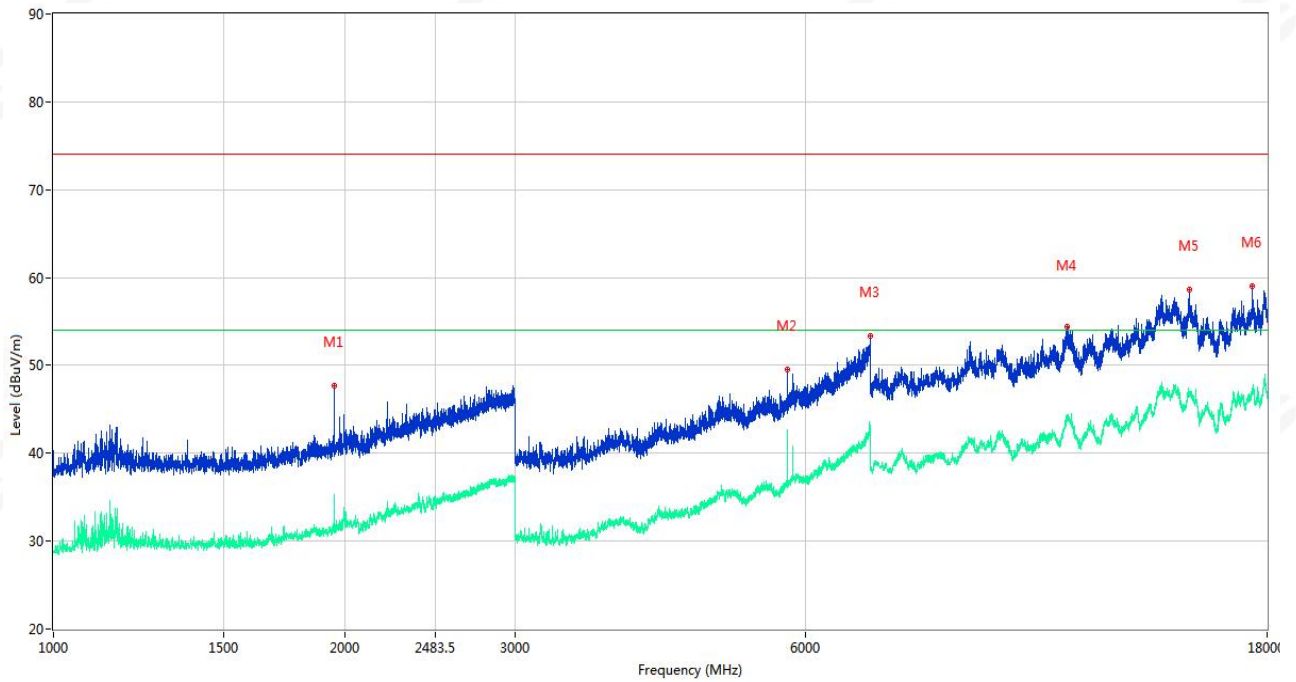


Vertical

80.0 dBuV/m



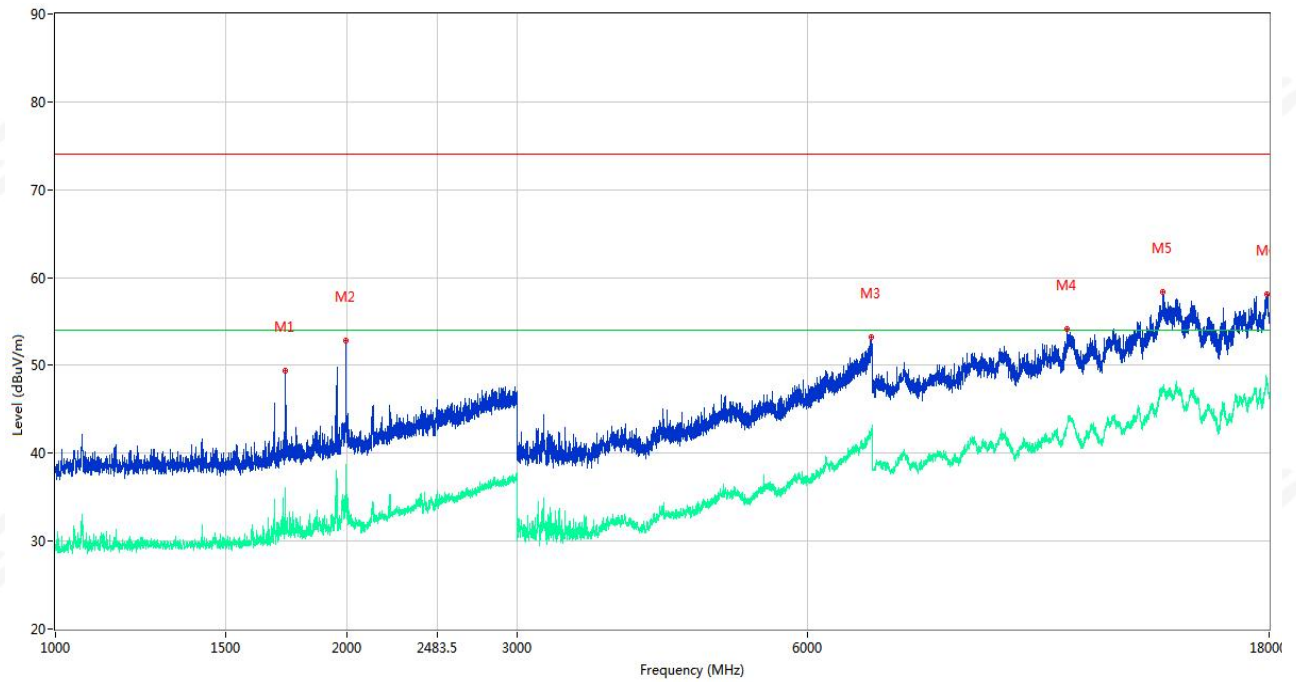
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	35.8200	46.05	-15.91	30.14	40.00	-9.86	peak
2	97.9000	47.80	-20.46	27.34	43.50	-16.16	peak
3	183.2600	50.89	-20.26	30.63	43.50	-12.87	peak
4	354.9500	51.99	-12.97	39.02	46.00	-6.98	peak
5	450.9800	43.61	-9.65	33.96	46.00	-12.04	peak
6	888.4500	35.68	-0.68	35.00	46.00	-11.00	peak

1GHz - 18GHz
Horizontal

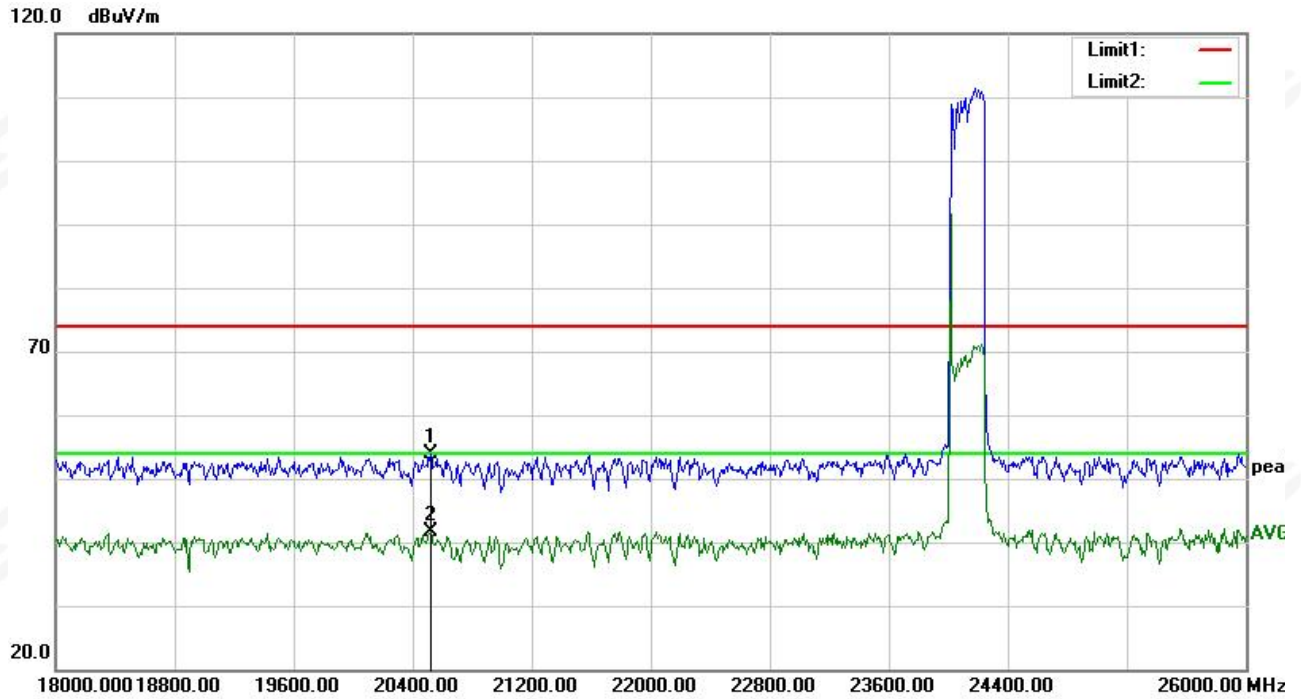
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Antenna	Verdict
1	1952.000	47.65	0.01	74.0	-26.35	Peak	111.10	Horizontal	Pass
1**	1952.000	35.24	0.01	54.0	-18.76	AV	111.10	Horizontal	Pass
2	5742.000	49.58	-4.38	74.0	-24.42	Peak	29.60	Horizontal	Pass
2**	5742.000	41.63	-4.38	54.0	-12.37	AV	29.60	Horizontal	Pass
3	6999.000	53.34	1.31	74.0	-20.66	Peak	360.00	Horizontal	Pass
3**	6999.000	42.63	1.31	54.0	-11.37	AV	360.00	Horizontal	Pass
4	11180.000	54.36	2.51	74.0	-19.64	Peak	357.70	Horizontal	Pass
4**	11180.000	44.39	2.51	54.0	-9.61	AV	357.70	Horizontal	Pass
5	14966.750	58.67	5.44	74.0	-15.33	Peak	352.00	Horizontal	Pass
5**	14966.750	46.65	5.44	54.0	-7.35	AV	352.00	Horizontal	Pass
6	17386.750	59.06	6.87	74.0	-14.94	Peak	21.90	Horizontal	Pass
6**	17386.750	47.05	6.87	54.0	-6.95	AV	21.90	Horizontal	Pass



Vertical



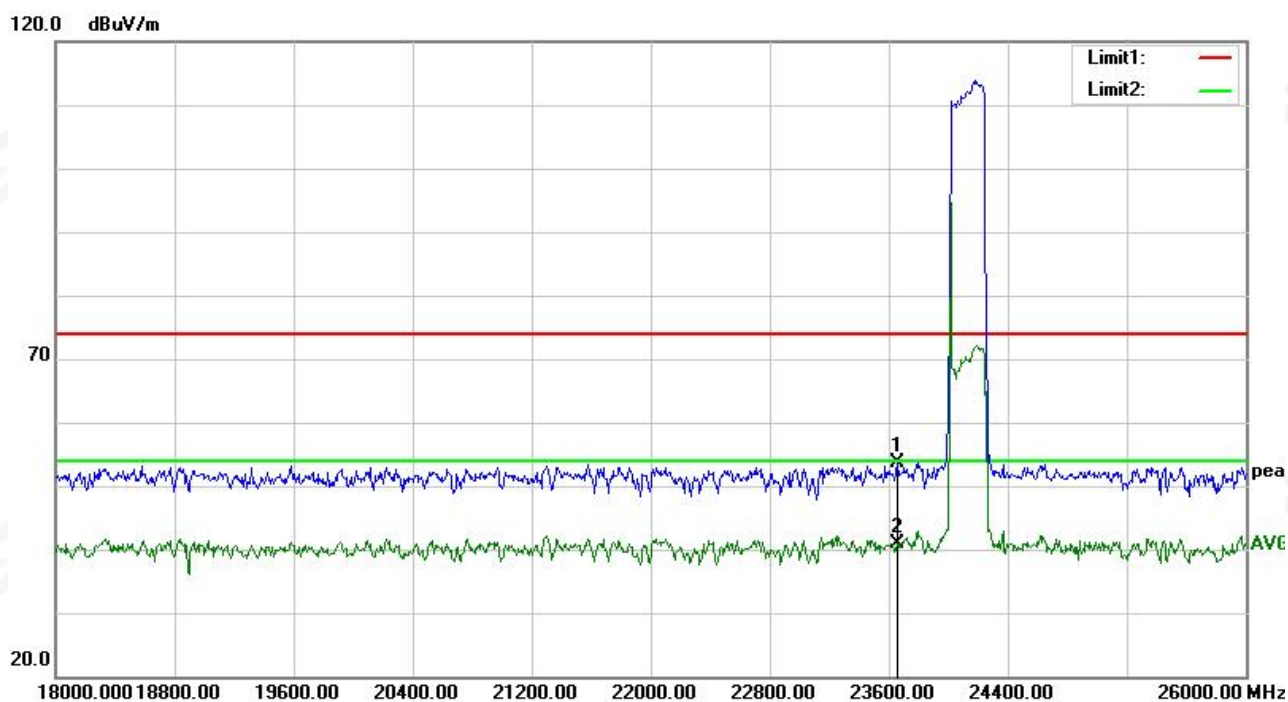
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Antenna	Verdict
1	1727.500	49.37	-0.73	74.0	-24.63	Peak	209.30	Vertical	Pass
1**	1727.500	36.07	-0.73	54.0	-17.93	AV	209.30	Vertical	Pass
2	1997.000	52.86	0.37	74.0	-21.14	Peak	209.30	Vertical	Pass
2**	1997.000	38.07	0.37	54.0	-15.93	AV	209.30	Vertical	Pass
3	6986.000	53.26	1.21	74.0	-20.74	Peak	50.60	Vertical	Pass
3**	6986.000	42.50	1.21	54.0	-11.50	AV	50.60	Vertical	Pass
4	11119.500	54.15	2.19	74.0	-19.85	Peak	85.00	Vertical	Pass
4**	11119.500	43.28	2.19	54.0	-10.72	AV	85.00	Vertical	Pass
5	13985.000	58.34	8.26	74.0	-15.66	Peak	1.30	Vertical	Pass
5**	13985.000	47.61	8.26	54.0	-6.39	AV	1.30	Vertical	Pass
6	17906.500	58.06	7.19	74.0	-15.94	Peak	24.80	Vertical	Pass
6**	17906.500	48.10	7.19	54.0	-5.90	AV	24.80	Vertical	Pass

18GHz -26GHz
Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	20520.000	51.73	2.24	53.97	74.00	-20.03	peak
2	20520.000	39.29	2.24	41.53	54.00	-12.47	AVG



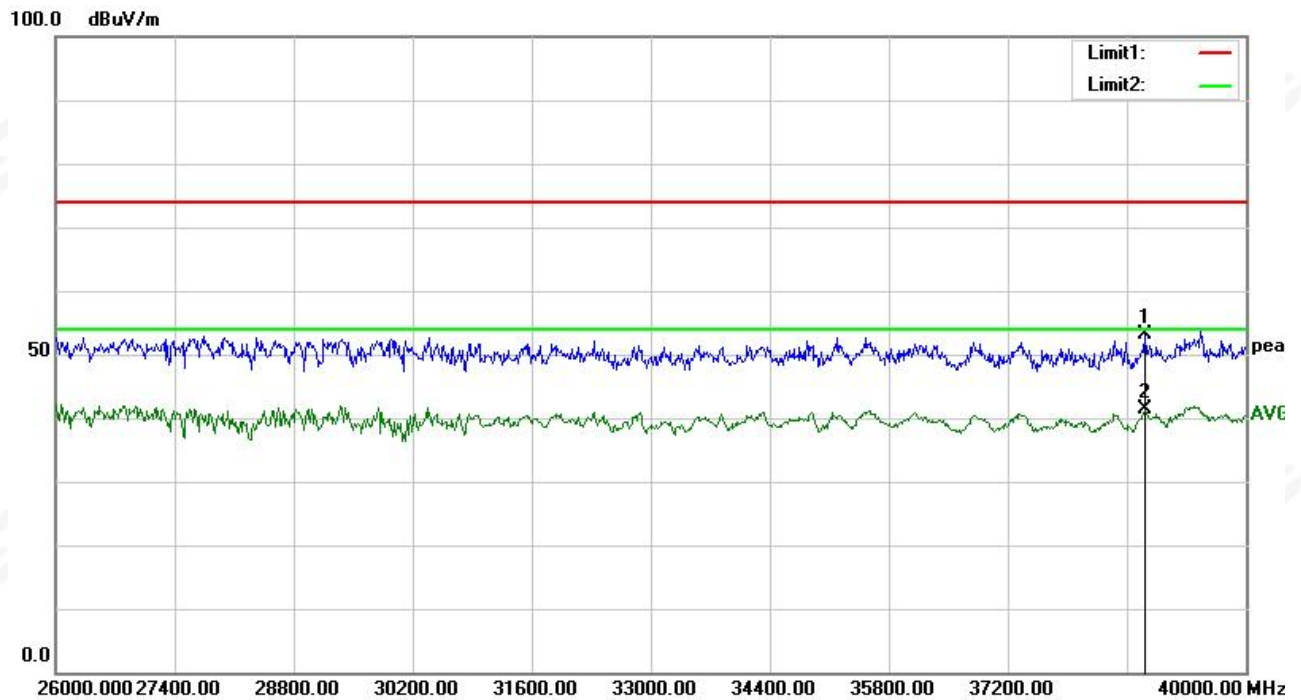
Vertical



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	23656.000	49.34	4.29	53.63	74.00	-20.37	peak
2	23656.000	36.57	4.29	40.86	54.00	-13.14	AVG



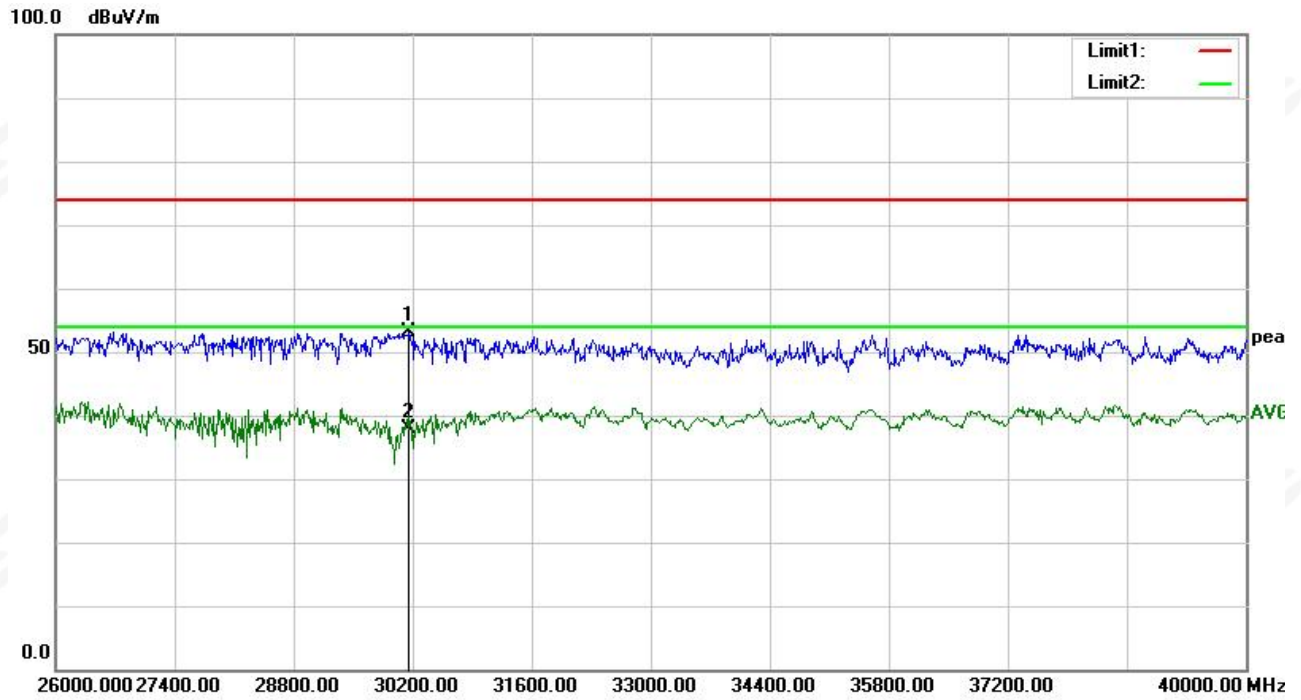
26GHz -40GHz
Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	38810.000	46.38	6.73	53.11	74.00	-20.89	peak
2	38810.000	34.75	6.73	41.48	54.00	-12.52	AVG



Vertical

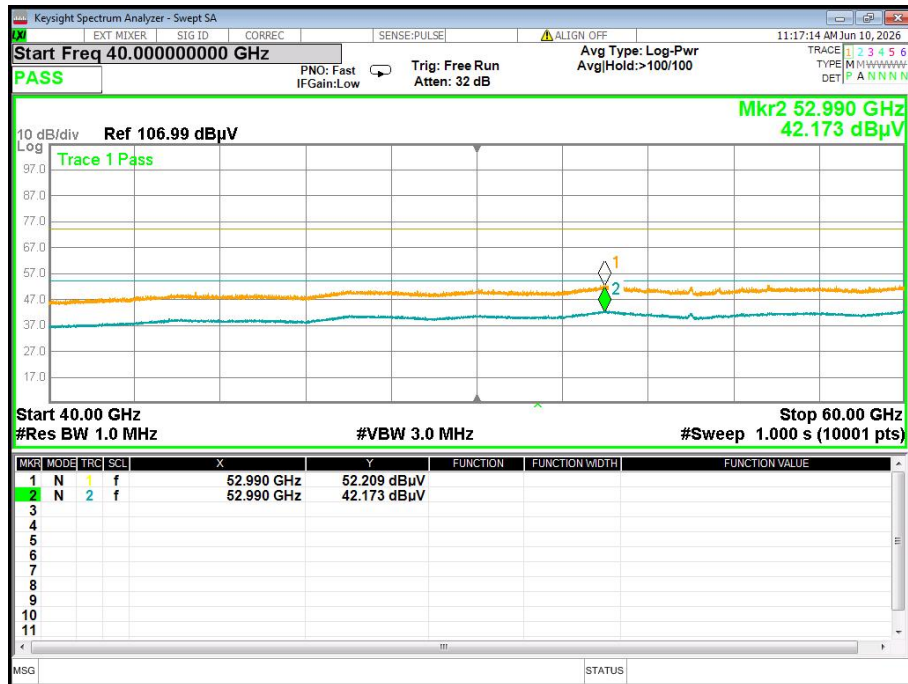


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	30158.000	44.17	9.01	53.18	74.00	-20.82	peak
2	30158.000	28.91	9.01	37.92	54.00	-16.08	AVG

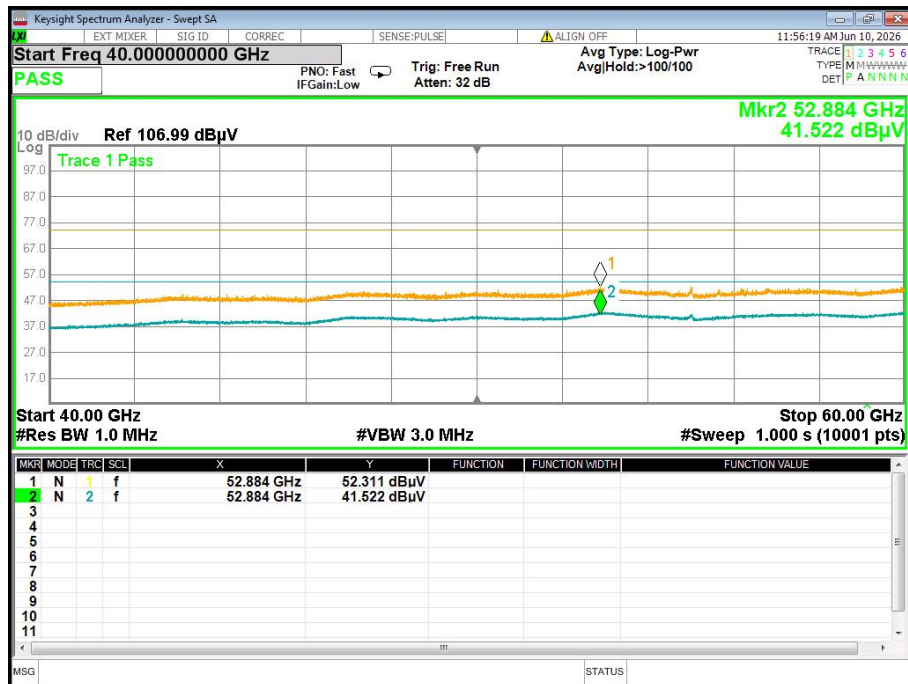


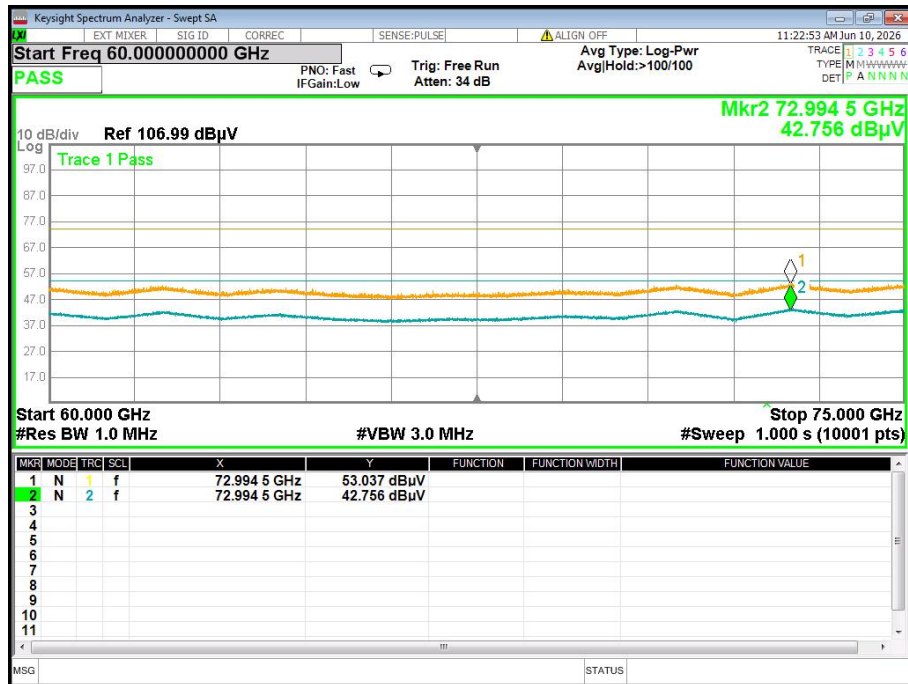
Above 40GHz

Frequency	Result	Limit	Margin	Remark	Pol.
(GHz)	(dBuV/m)	(dBuV/m)	(dB)		
52.9900	52.21	74.00	-21.79	peak	H
52.9900	42.17	54.00	-11.83	AVG	V
52.8840	52.31	74.00	-21.69	peak	H
52.8840	41.52	54.00	-12.48	AVG	V
72.9945	53.04	74.00	-20.96	peak	H
72.9945	42.76	54.00	-11.24	AVG	V
73.0875	52.24	74.00	-21.77	peak	H
73.0875	42.57	54.00	-11.44	AVG	V
77.1105	53.82	74.00	-20.18	peak	H
77.1105	43.90	54.00	-10.10	AVG	V
76.9530	53.16	74.00	-20.84	peak	H
76.9530	43.98	54.00	-10.02	AVG	V

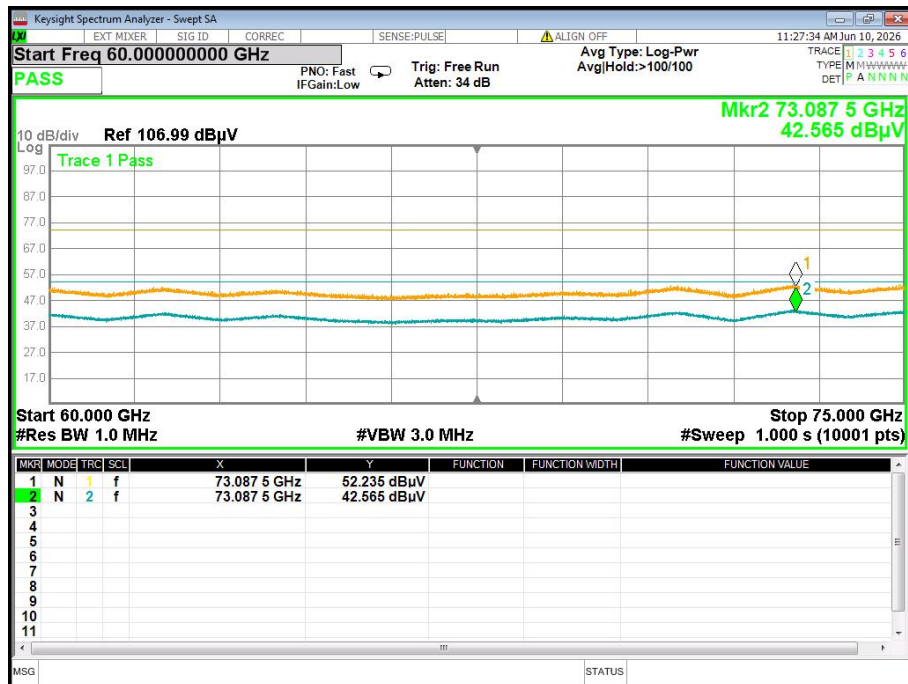
40GHz-60GHz
Horizontal

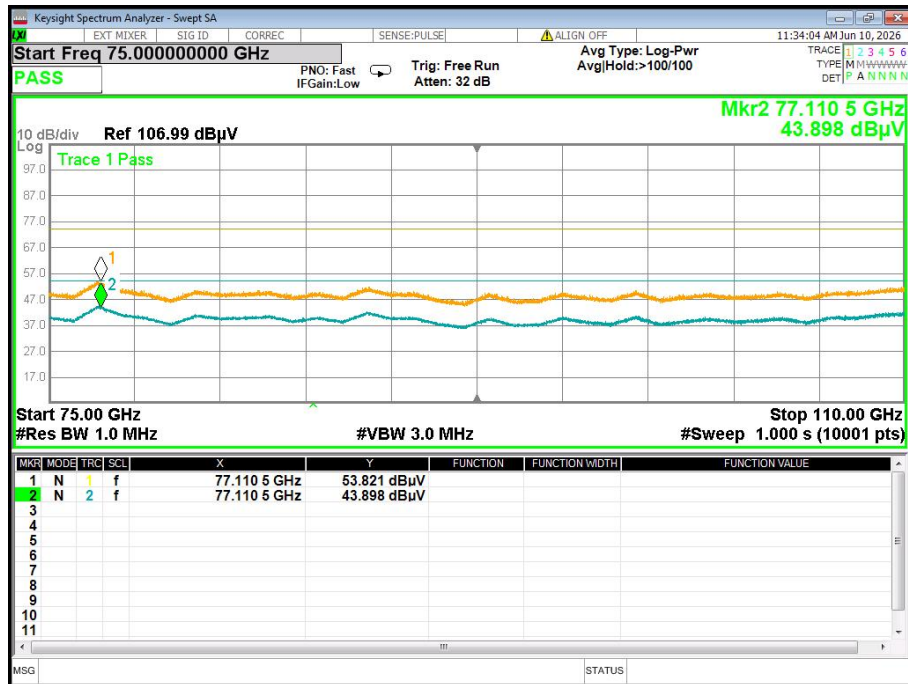
Vertical



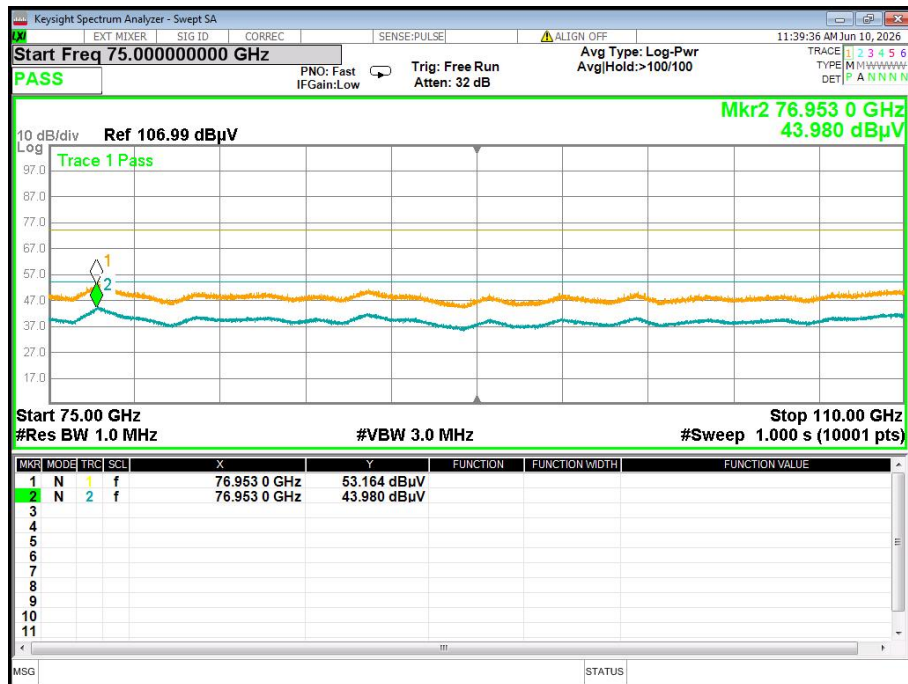
60GHz-75GHz
Horizontal

Vertical



75GHz-110GHz
Horizontal

Vertical

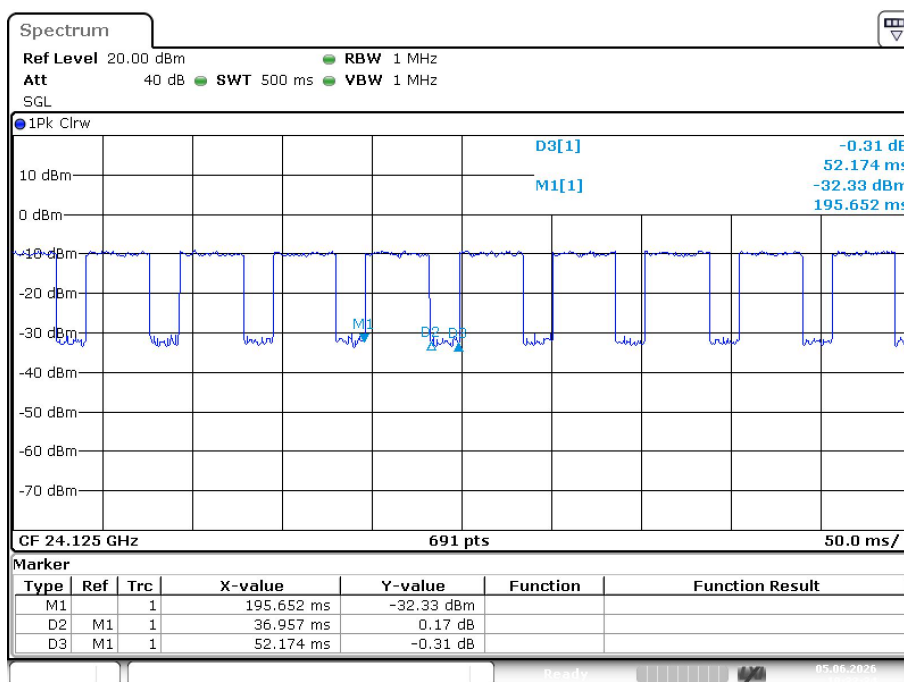




Duty cycle

Ton (ms)	Tp (ms)	Duty cycle(%)	Duty Factor (dB)
0.92736	52.174	1.78	-35

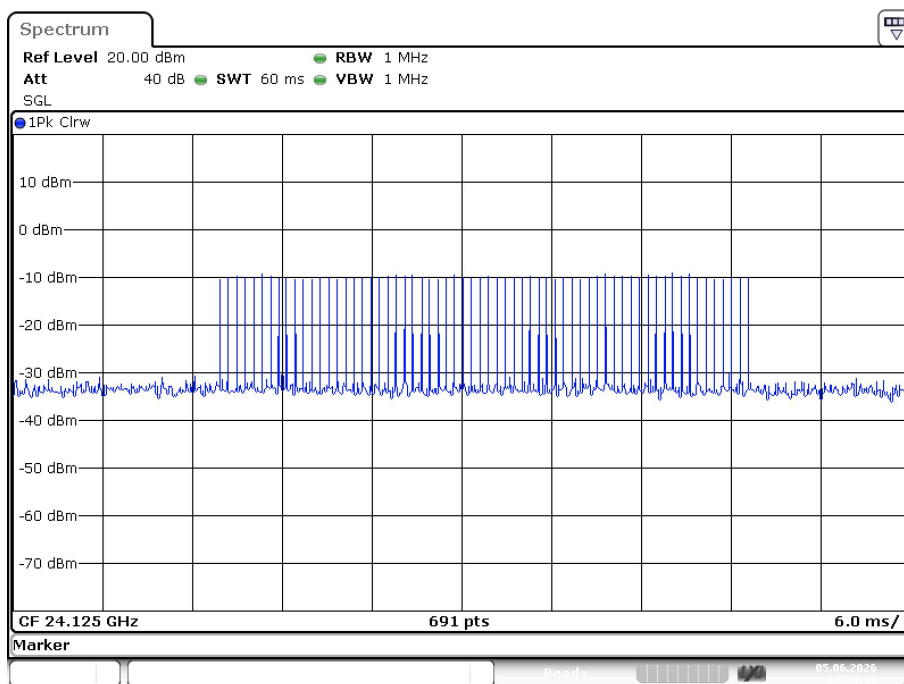
Duty Cycle-1



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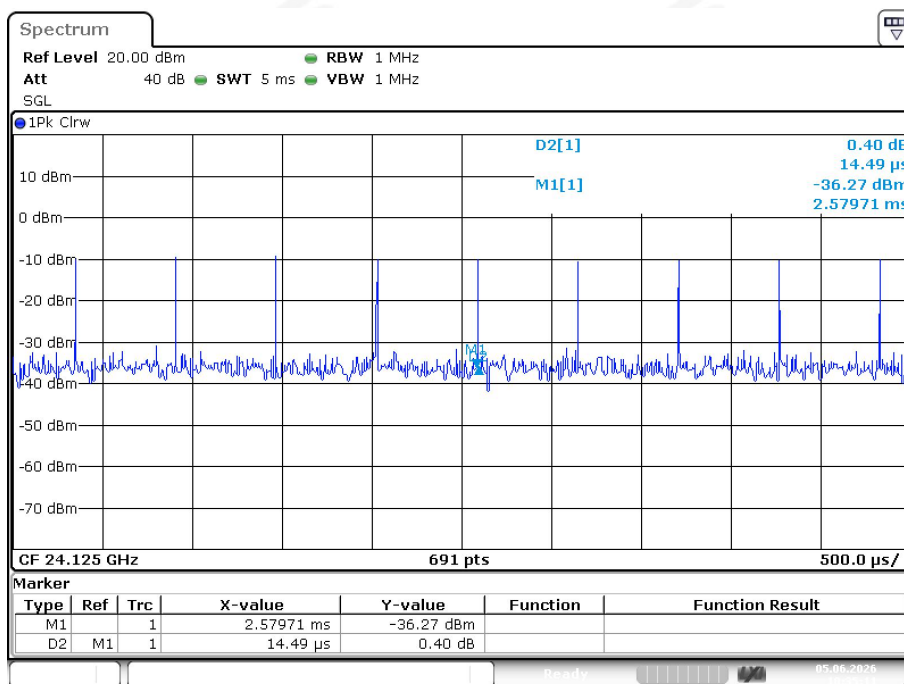


Duty Cycle-2



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Duty Cycle-3



Date: 5.JUN.2026 10:35:10

Note:

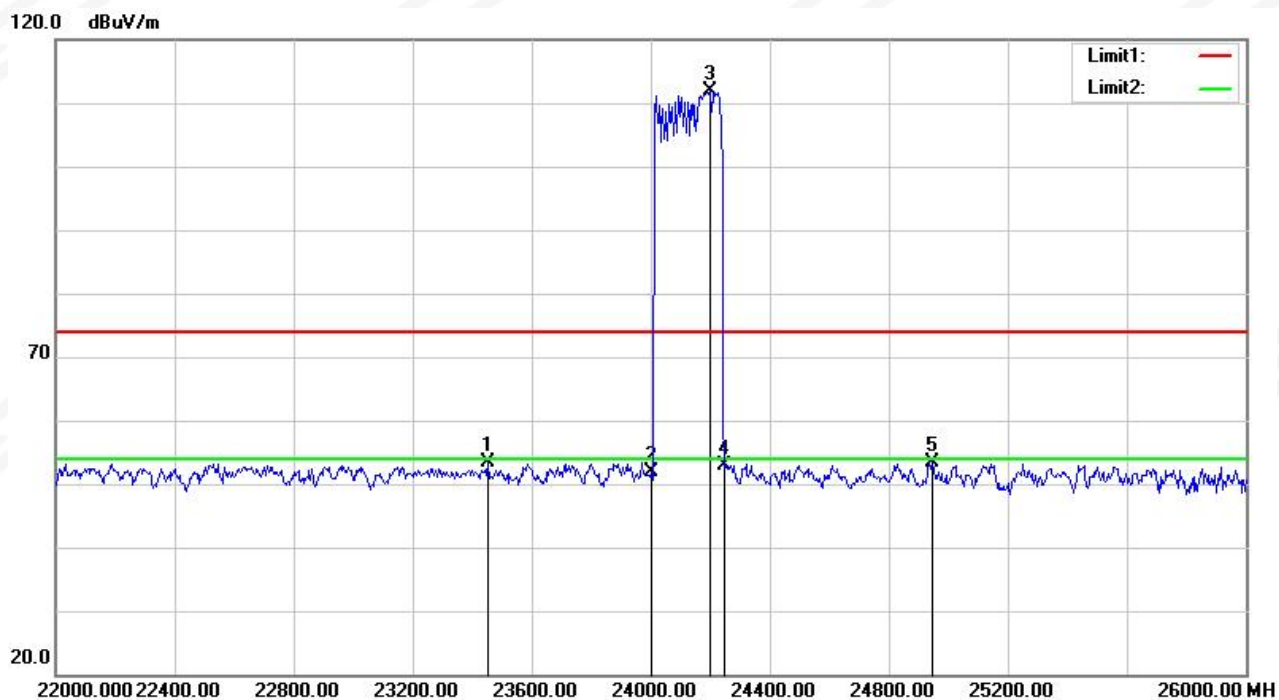
1. Number of pulse train 1 = 64, Time of single pulse train 1 = 14.49 μ s;
Total on interval in a complete pulse train= Number of pulse train 1x Time of single pulse train=64*14.49 μ s =0.92736ms
2. Duty Factor=20*LOG10(1/(Ton/Tp))



(Radiation Band edge)

24GHz

Horizontal



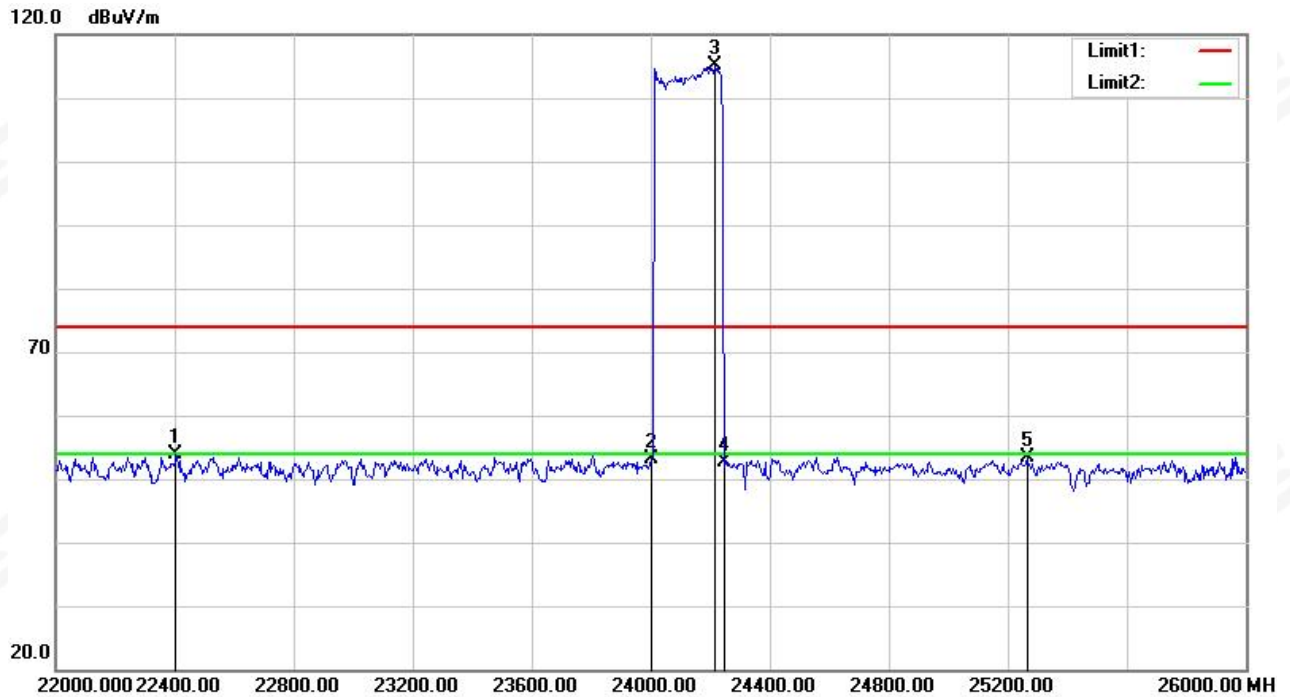
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	23452.000	49.28	4.08	53.36	74.00	-20.64	peak
2	24000.000	47.29	4.63	51.92	74.00	-22.08	peak
4	24250.000	48.31	4.67	52.98	74.00	-21.02	peak
5	24948.000	48.24	5.24	53.48	74.00	-20.52	peak

Fundamental Frequency

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Duty cycle Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
3	24200.000	107.20	4.66	-	111.86	127.96	-16.1	peak
3	24200.000	107.20	4.66	-35	76.86	107.96	-31.1	AVG



Vertical



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	22404.000	50.01	3.82	53.83	74.00	-20.17	peak
2	24000.000	48.55	4.63	53.18	74.00	-20.82	peak
4	24250.000	48.03	4.67	52.70	74.00	-21.30	peak
5	25264.000	47.93	5.48	53.41	74.00	-20.59	peak

Fundamental Frequency

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Duty cycle Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
3	24216.000	110.35	4.67	-	115.02	127.96	-12.94	peak
3	24216.000	110.35	4.67	-35	80.02	107.96	-27.94	AVG



4. BANDWIDTH TEST

4.1 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- Spectrum Setting : RBW= 1MHz VBW $\geq$ RBW, Sweep time = Auto.

4.2 TEST SETUP



4.3 EUT OPERATION CONDITIONS

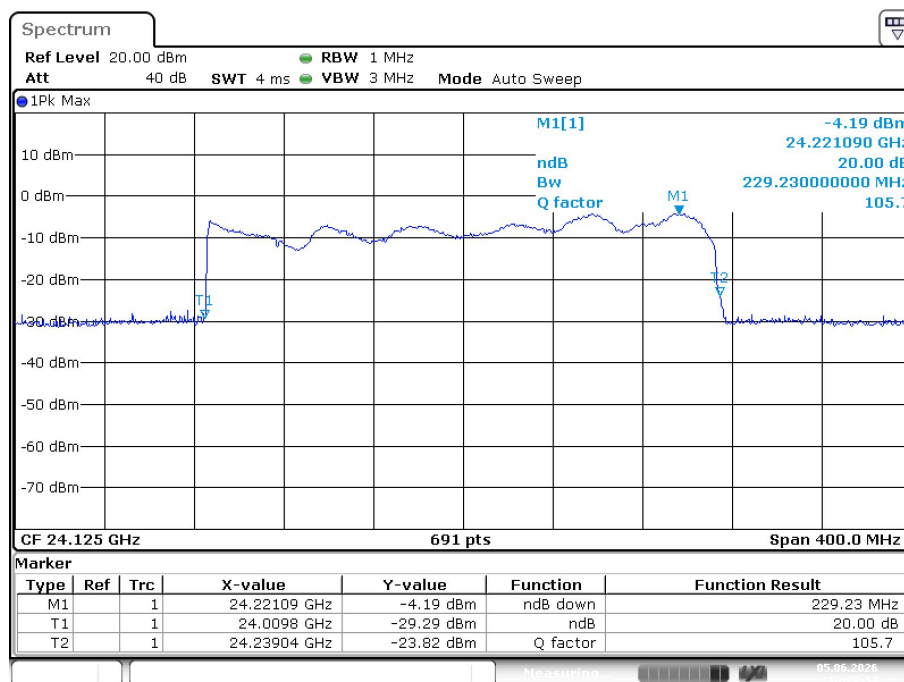
TX mode.



4.4 TEST RESULTS

Frequency (GHz)	FL(MHz)	FH(MHz)	20dB Bandwidth(MHz)
24-24.25	24009.8	24239.04	229.24

20dB Bandwidth

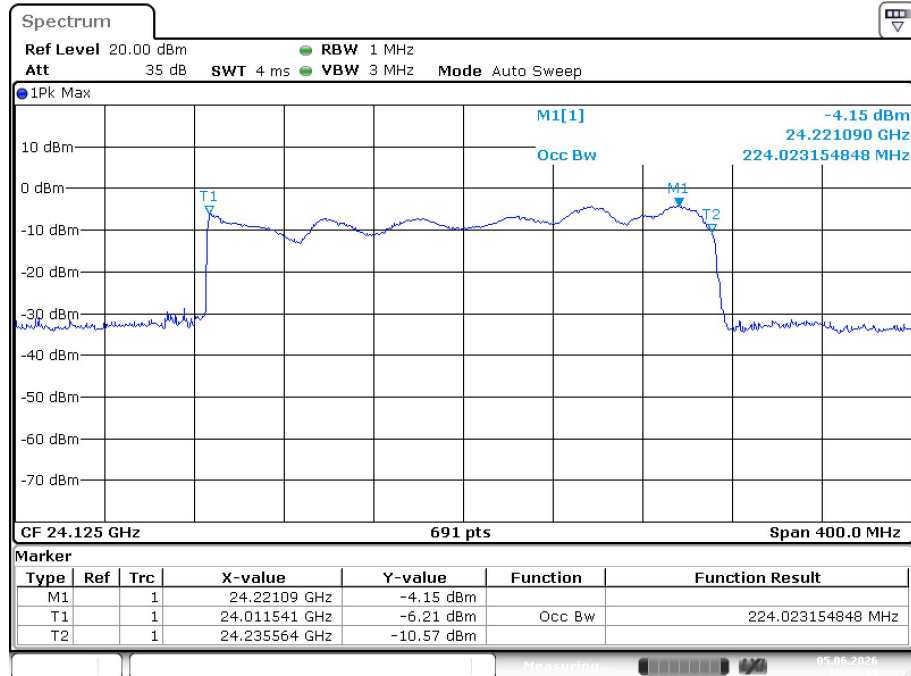


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Frequency (GHz)	FL(MHz)	FH(MHz)	99% Bandwidth(MHz)
24-24.25	24011.541	24235.564	224.023

99% Bandwidth



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5. ANTENNA REQUIREMENT

5.1 STANDARD REQUIREMENT

According to the FCC Part 15 Paragraph 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.

5.2 EUT ANTENNA

The EUT antenna is On-board Antenna. It conforms to the standard requirements.



APPENDIX- PHOTOS OF TEST SETUP

Note: See test photos in setup photo document for the actual connections between Product and support equipment.

*****END OF THE REPORT*****