



Radio Test Report

Report No.:STS2505072W02

Issued for

GODOX PHOTO EQUIPMENT CO.,LTD

1st to 4th Floor, Building 2/1st to 4th Floor, Building 4,
Yaochuan Industrial Zone, Tangwei Community, Fuhai Street,
Baoan District, Shenzhen, 518103 China

Product Name: iFlash Camera Flash

Brand Name: 

Model Name: iT30Pro S

Series Model(s): iT30Pro N, iT30Pro O,
iT30Pro F, iT30Pro C

FCC ID: 2ABYN148

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: GODOX PHOTO EQUIPMENT CO.,LTD
1st to 4th Floor, Building 2/1st to 4th Floor, Building 4, Yaochuan
Address: Industrial Zone, Tangwei Community, Fuhai Street, Baoan District,
Shenzhen, 518103 China
Manufacturer's Name: GODOX Photo Equipment Co.,Ltd.
4th Floor of Building 1, 1st to 4 th Floor of Building 2, 4th Floor of
Address: Building 3,1st to 4th Floor of Building 4, Yaochuan Industrial Zone,
Tangwei Community, Fuhai Street, Bao'an District, Shenzhen
518103, China

Product Description

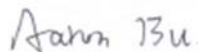
Product Name: iFlash Camera Flash
Brand Name: 
Model Name: iT30Pro S
Series Model(s): iT30Pro N, iT30Pro O, iT30Pro F, iT30Pro C
Standards: FCC Part 15.249
Test Procedure: ANSI C63.10-2020

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: 13 May 2025
Date of performance of tests ...: 13 May 2025~27 June 2025
Date of Issue: 27 June 2025
Test Result.....: **Pass**

Testing Engineer :



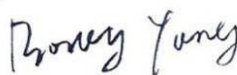
(Aaron Bu)

Technical Manager :



(Skylar Li)

Authorized Signatory :



(Bovey Yang)





Table of Contents	Page
1. SUMMARY OF TEST RESULTS	5
1.1 TEST FACTORY	6
1.2 MEASUREMENT UNCERTAINTY	6
2. GENERAL INFORMATION	7
2.1 GENERAL DESCRIPTION OF THE EUT	7
2.2 DESCRIPTION OF THE TEST MODES	8
2.3 TEST SOFTWARE AND POWER LEVEL	8
2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	9
2.5 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS	9
2.6 EQUIPMENTS LIST FOR ALL TEST ITEMS	10
3. EMC EMISSION TEST	11
3.1 CONDUCTED EMISSION MEASUREMENT	11
3.2 RADIATED EMISSION MEASUREMENT	15
4. BANDWIDTH TEST	39
4.1 TEST PROCEDURE	39
4.2 TEST SETUP	39
4.3 EUT OPERATION CONDITIONS	39
4.4 TEST RESULTS	40
5. ANTENNA REQUIREMENT	42
5.1 STANDARD REQUIREMENT	42
5.2 EUT ANTENNA	42
APPENDIX- PHOTOS OF TEST SETUP	43

**Revision History**

Rev.	Issue Date	Report No.	Effect Page	Contents
00	27 June 2025	STS2505072W02	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 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.



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	$\pm 0.755\text{dB}$
2	Unwanted Emissions, conducted	$\pm 2.874\text{dB}$
3	All emissions, radiated 9K-30MHz	$\pm 3.80\text{dB}$
4	All emissions, radiated 30M-1GHz	$\pm 4.18\text{dB}$
5	All emissions, radiated 1G-6GHz	$\pm 4.90\text{dB}$
6	All emissions, radiated >6G	$\pm 5.24\text{dB}$
7	Conducted Emission (9KHz-150KHz)	$\pm 2.19\text{dB}$
8	Conducted Emission (150KHz-30MHz)	$\pm 2.53\text{dB}$
9	Occupied Channel Bandwidth	$\pm 3.5\%$
10	Power Spectral Density, conducted	$\pm 1.245\text{dB}$
11	Duty Cycle	$\pm 3.2\%$



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Product Name	iFlash Camera Flash	
Brand Name	Godox	
Model Name	iT30Pro S	
Series Model(s)	iT30Pro N, iT30Pro O, iT30Pro F, iT30Pro C	
Model Difference	The bottom hot shoe is different	
Product Description	The EUT is a iFlash Camera Flash	
	Operation Frequency:	2412.99MHz-2464.49MHz
	Modulation Type:	MSK
	Antenna Designation:	Chip
	Antenna Gain(Peak):	5.46dBi
Based on the application, features, or specification exhibited in User Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User Manual.		
Power Rating	Input: DC5V 2A Li-ion battery: 7.4V 900mAh	
Adapter	N/A	
Battery	Rated Voltage: 7.4 V Capacity: 900 mAh	
Hardware version number	20241011E03	
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.

Channel	Frequency (GHz)	Channel	Frequency (GHz)	Channel	Frequency (GHz)
1	2.412999634	12	2.431000000	23	2.449499847
2	2.414499664	13	2.432999908	24	2.450999878
3	2.415999695	14	2.434499939	25	2.452999786
4	2.418000000	15	2.435999969	26	2.454499817
5	2.419499634	16	2.437999878	27	2.455999847
6	2.420999664	17	2.439499908	28	2.457999756
7	2.422999969	18	2.440999939	29	2.459499786
8	2.424500000	19	2.442999847	30	2.460999817
9	2.425999634	20	2.444499878	31	2.462999725
10	2.427999939	21	2.445999908	32	2.464499756
11	2.429499969	22	2.447999817		



3.

Test channel List		
Test Channel	EUT Channel	Test Frequency (MHz)
lowest	CH01	2.412999634
middle	CH16	2.437999878
highest	CH32	2.464499756

Note: The antenna information refer the manufacturer provide report, applicable only to the tested sample identified in the report.

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/CH01	MSK
Mode 2	TX/CH16	MSK
Mode 3	TX/CH32	MSK

Note:

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

For AC Conducted Emission

Test Case	
AC Conducted Emission	Mode 4 : Keeping TX

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	Type	Mode Or Modulation type	ANT Gain(dBi)	Power Class	Software For Testing
SRD	2.4G	MSK	5.46	Default	The EUT has signal transmission when it is powered on



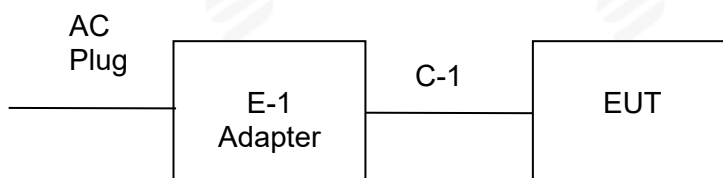
2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

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



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	Adapter	ZTC	NB-A515A	N/A
C-1	USB Cable	ZTC	NB-A515A	N/A

Item	Shielded Type	Ferrite Core	Length	Note

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
Temperature & Humidity	SW-108	SuWei	N/A	2025.02.24	2026.02.23
Pre-Amplifier(0.1 M-3GHz)	EM	EM330	060665	2025.02.22	2026.02.21
Pre-Amplifier(1G-18GHz)	SKET	LNPA-01018G-45	SK2018080901	2024.09.23	2025.09.22
Pre-Amplifier(18G-40GHz)	SKET	LNPA_1840-50	SK2018101801	2025.02.22	2026.02.21
Active loop Antenna	ZHINAN	ZN30900C	16035	2025.02.25	2026.02.24
Bilog Antenna	TESEQ	CBL6111D	34678	2024.09.30	2025.09.29
Horn Antenna	SCHWARZBEC K	BBHA 9120D	02014	2023.09.24	2025.09.23
Horn Antenna	A-INFOMW	LB-180400-KF	J211020657	2023.10.10	2025.10.09
Positioning Controller	MF	MF-7802	MF-780208587	N/A	N/A
Signal Analyzer	R&S	FSV 40-N	101823	2024.09.23	2025.09.22
Switch Control Box	N/A	N/A	N/A	N/A	N/A
Filter Box	BALUN Technology	SU319E	BL-SZ1530051	N/A	N/A
Antenna Mast	MF	MFA-440H	N/A	N/A	N/A
Turn Table	MF	SC100 1	60531	N/A	N/A
AC Power Source	APC	KDF-11010G	F214050035	N/A	N/A
DC power supply	HONGSHENG F ENG	DPS-305AF	17064939	2024.09.23	2025.09.22
Test SW	EZ-EMC	Ver.STSLAB-03A1 RE			
Conduction Test Equipment					
Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Test Receiver	R&S	ESCI	101427	2024.09.24	2025.09.23
Limtter	CYBERTEK	EM5010	N/A	2024.09.24	2025.09.23
LISN	R&S	ENV216	101242	2024.09.24	2025.09.23
LISN	EMCO	3810/2NM	23625	2024.09.24	2025.09.23
Temperature & Humidity	SW-108	SuWei	N/A	2025.02.24	2026.02.23
Test SW	EZ-EMC	Ver.STSLAB-03A1 CE			
RF Connected Test					
Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Signal Analyzer	Agilent	N9020A	MY51510623	2025.02.22	2026.02.21
Temperature & Humidity	SW-108	SuWei	N/A	2025.02.24	2026.02.23



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.

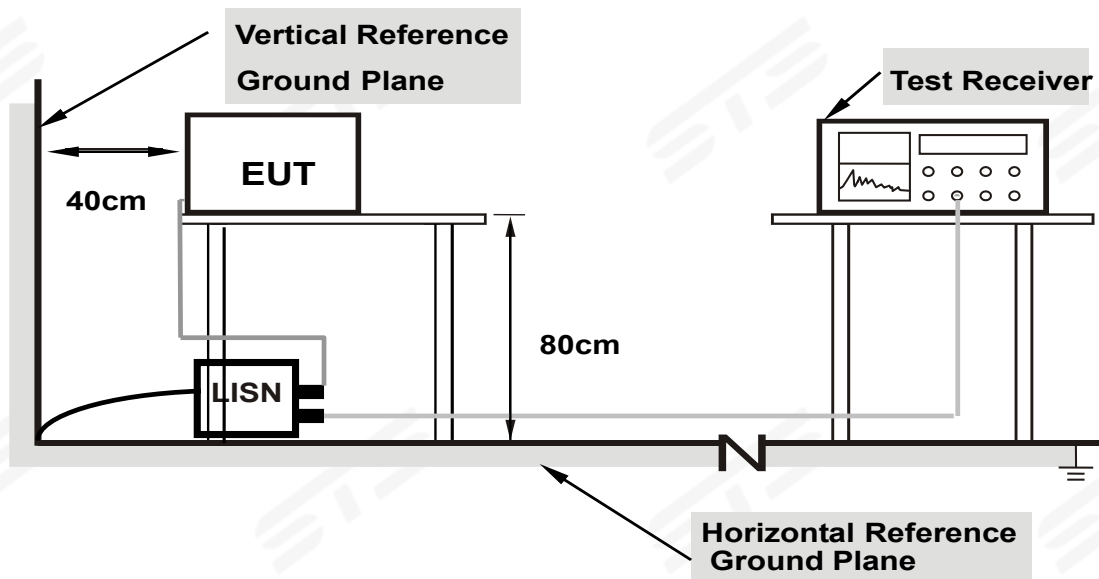
The following table is the setting of the receiver

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.



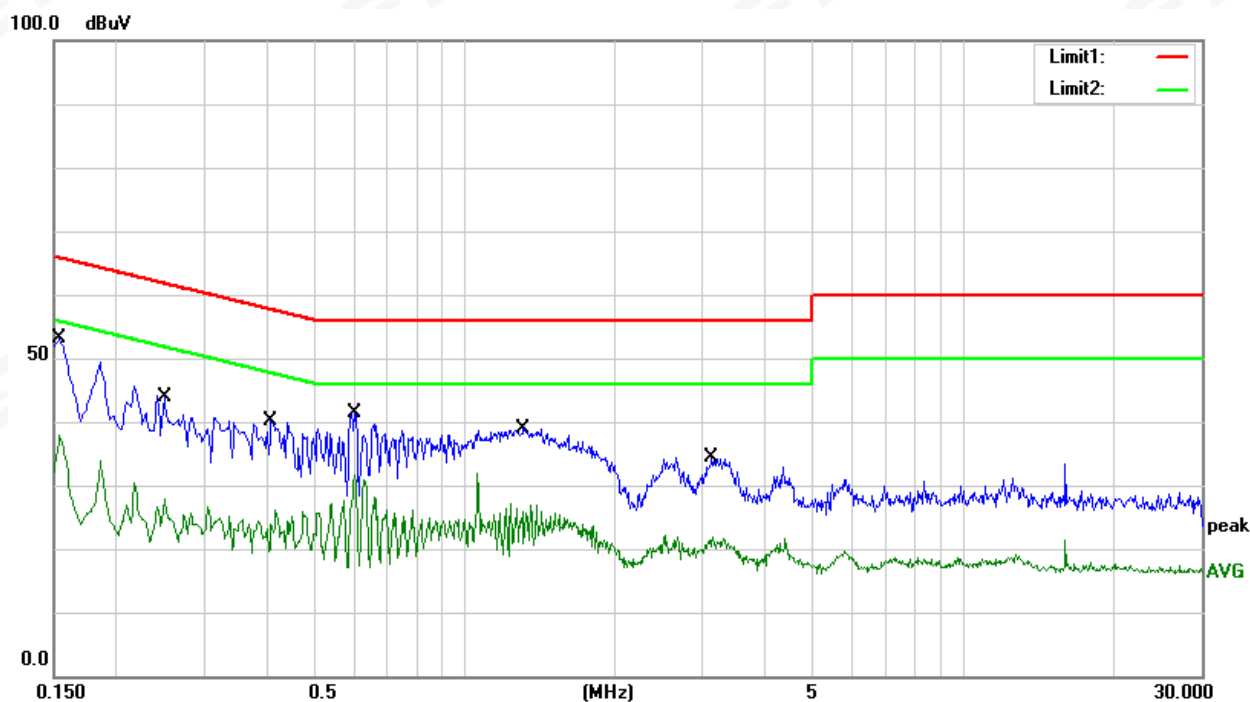
3.1.5 TEST RESULT

Temperature:	26.5°C	Relative Humidity:	54%
Test Voltage:	AC 120V/60Hz	Phase:	L
Test Mode:	Mode 4		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1540	32.70	20.33	53.03	65.78	-12.75	QP
2	0.1540	17.67	20.33	38.00	55.78	-17.78	AVG
3	0.2508	22.13	20.53	42.66	61.73	-19.07	QP
4	0.2508	9.83	20.53	30.36	51.73	-21.37	AVG
5	0.4100	19.63	20.54	40.17	57.65	-17.48	QP
6	0.4100	5.67	20.54	26.21	47.65	-21.44	AVG
7	0.6020	21.02	20.44	41.46	56.00	-14.54	QP
8	0.6020	11.17	20.44	31.61	46.00	-14.39	AVG
9	1.3100	18.58	20.30	38.88	56.00	-17.12	QP
10	1.3100	11.67	20.30	31.97	46.00	-14.03	AVG
11	3.1380	14.07	20.35	34.42	56.00	-21.58	QP
12	3.1380	1.47	20.35	21.82	46.00	-24.18	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Margin = Result (Result = Reading + Factor) – Limit



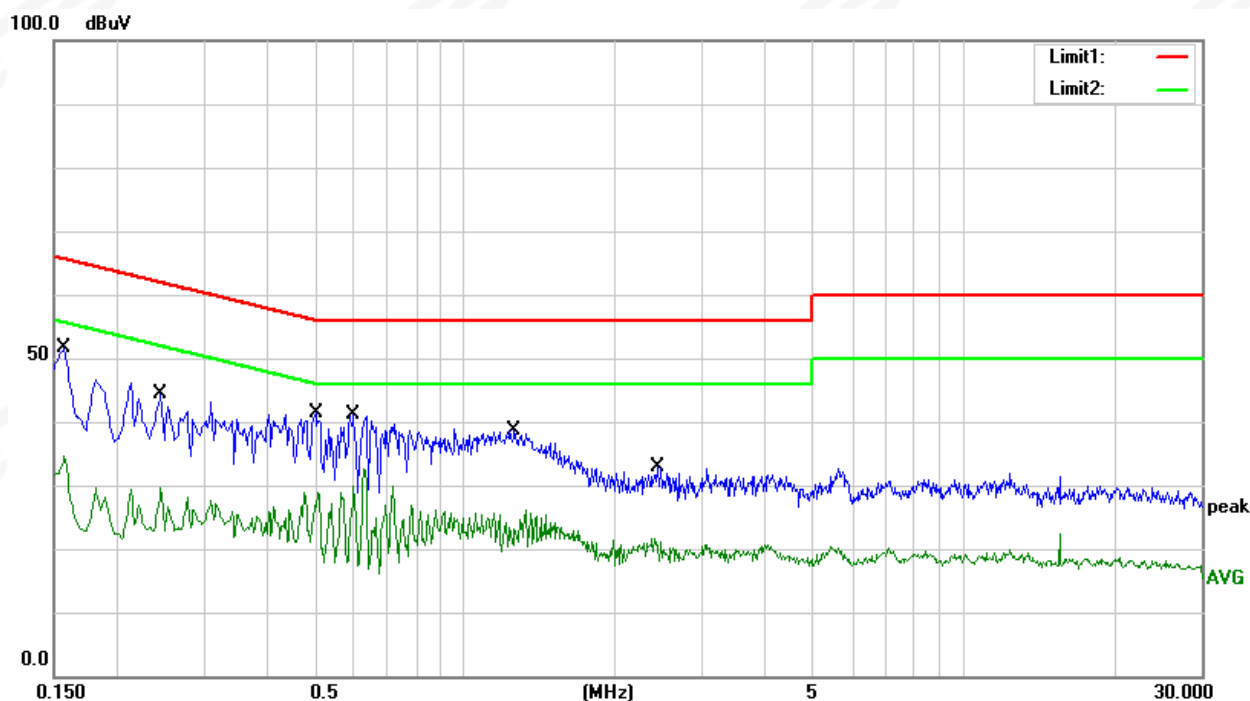


Temperature:	26.5°C	Relative Humidity:	54%
Test Voltage:	AC 120V/60Hz	Phase:	N
Test Mode:	Mode 4		

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1580	31.86	19.76	51.62	65.57	-13.95	QP
2	0.1580	14.79	19.76	34.55	55.57	-21.02	AVG
3	0.2460	24.46	20.04	44.50	61.89	-17.39	QP
4	0.2460	9.63	20.04	29.67	51.89	-22.22	AVG
5	0.5020	21.39	19.96	41.35	56.00	-14.65	QP
6	0.5020	8.94	19.96	28.90	46.00	-17.10	AVG
7	0.5980	21.33	19.90	41.23	56.00	-14.77	QP
8	0.5980	12.73	19.90	32.63	46.00	-13.37	AVG
9	1.2580	18.79	19.80	38.59	56.00	-17.41	QP
10	1.2580	6.27	19.80	26.07	46.00	-19.93	AVG
11	2.4420	12.96	19.90	32.86	56.00	-23.14	QP
12	2.4420	1.76	19.90	21.66	46.00	-24.34	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Margin = Result (Result = Reading + Factor) – Limit





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 (micorvolts/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

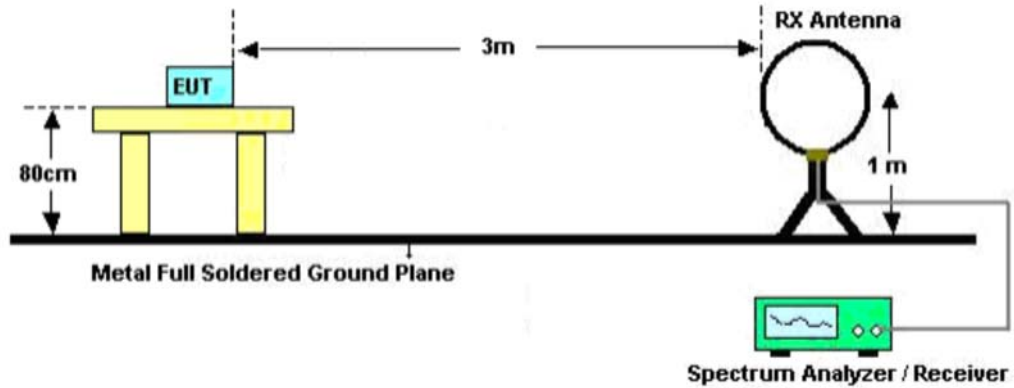
- a. The measuring distance of 3m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation (Below 1GHz)
- b. The measuring distance 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

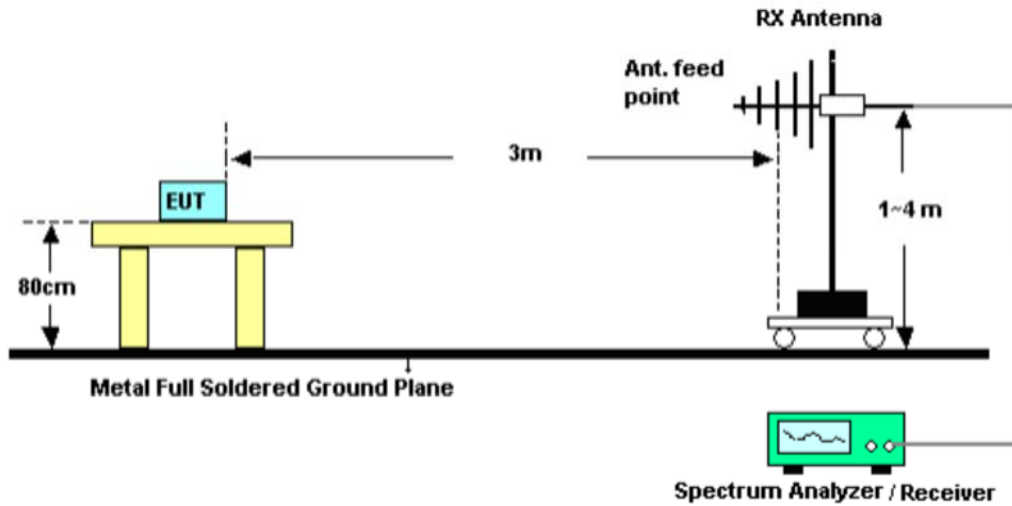
No deviation

3.2.4 TEST SETUP

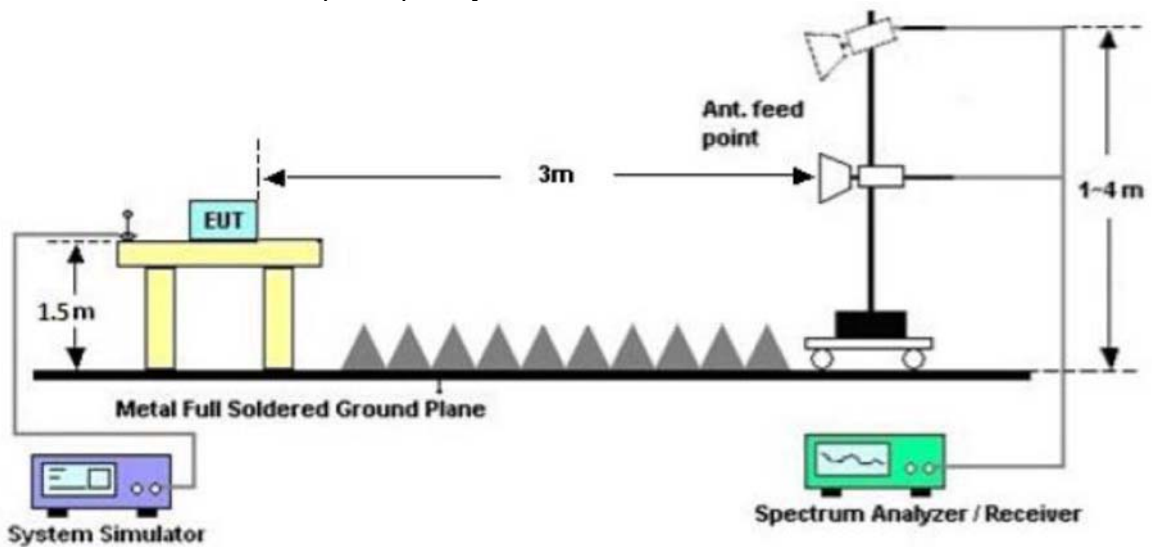
(A) Radiated Emission Test-Up Frequency Below 30MHz



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



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





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)	(dBμV/m)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV/m)	(dBμV/m)	(dBμV/m)	(dB)
2178	40.23	30.31	9.83	50.06	40.14	74.00	54.00	-13.86



3.2.6 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

Below 30 MHz

Temperature:	23.4°C	Relative Humidity:	60%
Test Voltage:	DC 7.4V	Polarization:	---
Test Mode:	TX Mode		

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	PASS
--	--	--	--	PASS

Note:

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

Distance extrapolation factor = $40 \log (\text{specific distance/test distance})$ (dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.

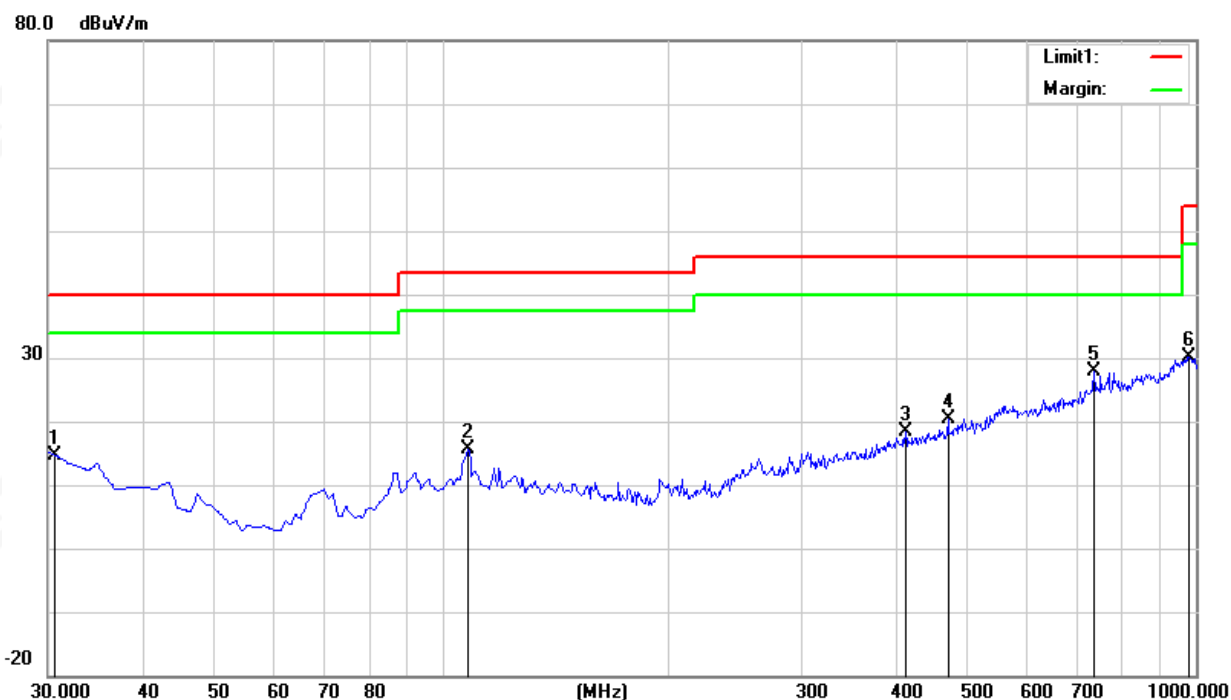
Between 30MHz – 1000 MHz Radiation Spurious
iT30Pro S

Temperature:	23.4°C	Relative Humidity:	60%
Test Voltage:	DC 7.4V	Phase:	Horizontal
Test Mode:	Mode 1/2/3 (Mode 1 worst mode)		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	30.6380	27.86	-13.18	14.68	40.00	-25.32	peak
2	108.5700	34.91	-19.22	15.69	43.50	-27.81	peak
3	412.1800	28.84	-10.46	18.38	46.00	-27.62	peak
4	470.3800	29.40	-8.99	20.41	46.00	-25.59	peak
5	733.2500	30.23	-2.35	27.88	46.00	-18.12	peak
6	982.5400	27.58	2.52	30.10	54.00	-23.90	peak

Remark:

1. Margin = Result (Result = Reading + Factor) – Limit
2. Factor = Antenna factor + Cable attenuation factor (cable loss) – Amplifier gain





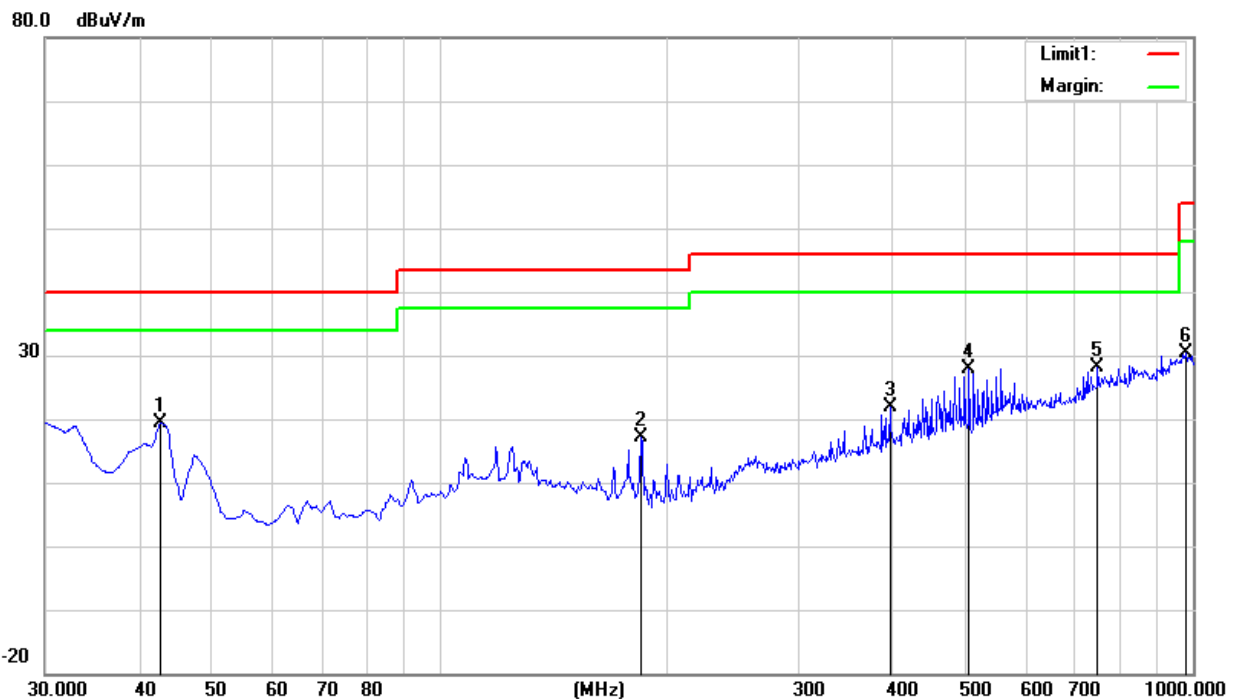
Temperature:	23.4°C	Relative Humidity:	60%
Test Voltage:	DC 7.4V	Phase:	Vertical
Test Mode:	Mode 1/2/3 (Mode 1 worst mode)		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	42.6100	38.83	-19.44	19.39	40.00	-20.61	peak
2	185.2000	37.63	-20.42	17.21	43.50	-26.29	peak
3	397.6300	33.00	-11.24	21.76	46.00	-24.24	peak
4	506.2700	35.85	-7.97	27.88	46.00	-18.12	peak
5	747.8000	30.29	-2.15	28.14	46.00	-17.86	peak
6	979.6300	27.64	2.65	30.29	54.00	-23.71	peak

Remark:

3. Margin = Result (Result = Reading + Factor) – Limit

4. Factor = Antenna factor + Cable attenuation factor (cable loss) – Amplifier gain





iT30Pro S

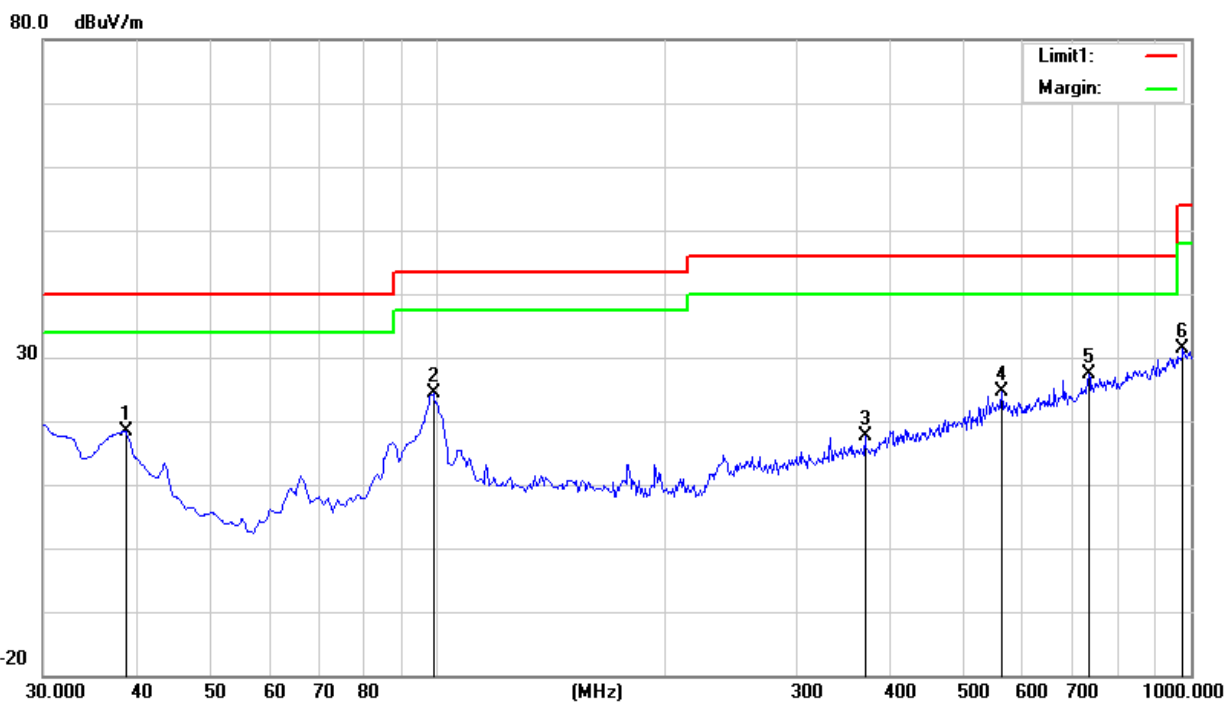
Temperature:	23.4°C	Relative Humidity:	60%
Test Voltage:	DC 7.4V	Phase:	Horizontal
Test Mode:	Mode 1/2/3 (Mode 1 worst mode)		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	38.7300	35.68	-17.36	18.32	40.00	-21.68	peak
2	98.8700	44.61	-20.31	24.30	43.50	-19.20	peak
3	370.4700	30.20	-12.48	17.72	46.00	-28.28	peak
4	561.5600	30.15	-5.51	24.64	46.00	-21.36	peak
5	733.2500	29.73	-2.35	27.38	46.00	-18.62	peak
6	978.6600	28.79	2.58	31.37	54.00	-22.63	peak

Remark:

5. Margin = Result (Result =Reading + Factor)-Limit

6. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain





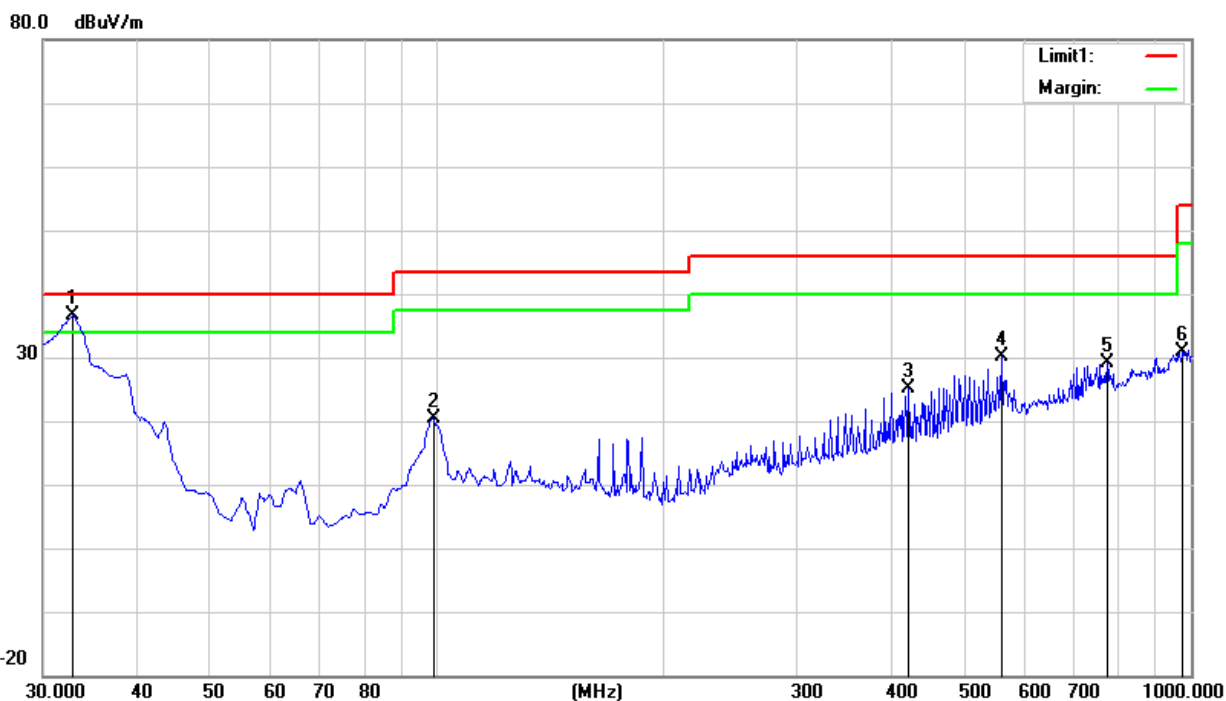
Temperature:	23.4°C	Relative Humidity:	60%
Test Voltage:	DC 7.4V	Phase:	Vertical
Test Mode:	Mode 1/2/3 (Mode 1 worst mode)		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	32.9100	51.06	-14.33	36.73	40.00	-3.27	peak
2	98.8700	40.81	-20.31	20.50	43.50	-23.00	peak
3	422.8500	35.33	-10.11	25.22	46.00	-20.78	peak
4	561.5600	35.67	-5.51	30.16	46.00	-15.84	peak
5	774.9600	31.46	-2.28	29.18	46.00	-16.82	peak
6	976.7200	28.48	2.45	30.93	54.00	-23.07	peak

Remark:

7. Margin = Result (Result = Reading + Factor) - Limit

8. Factor = Antenna factor + Cable attenuation factor (cable loss) - Amplifier gain





iT30Pro F

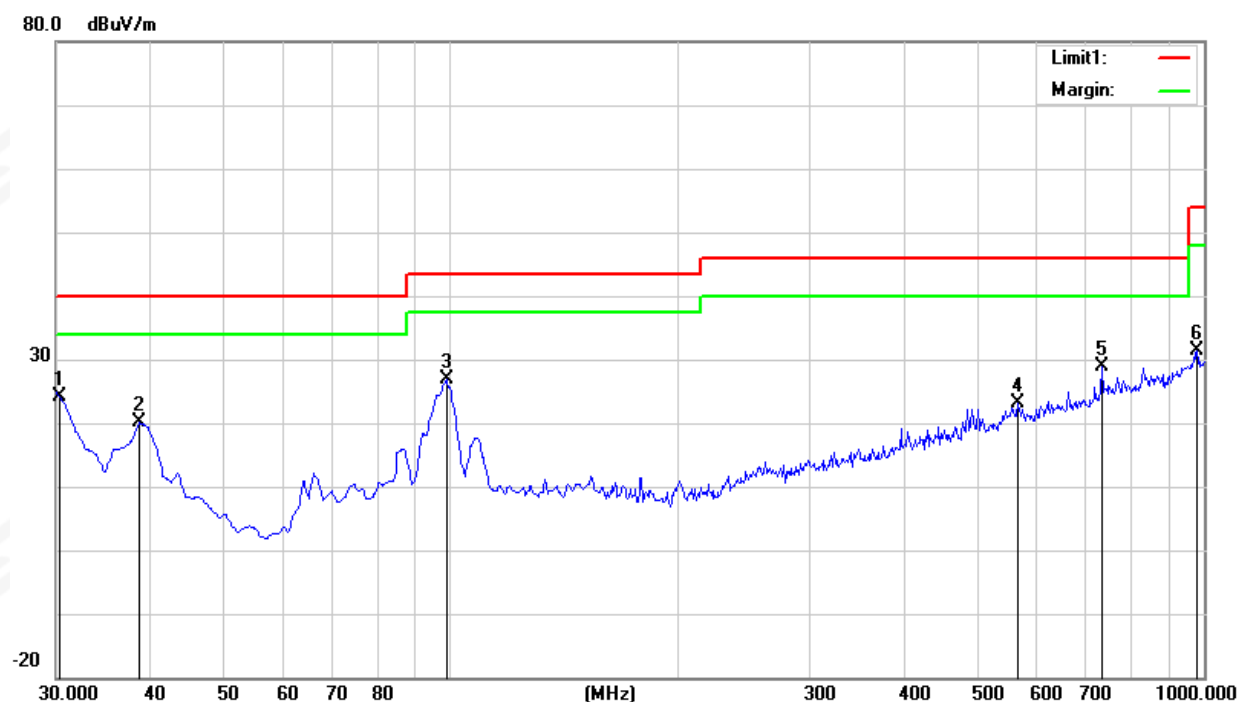
Temperature:	23.4°C	Relative Humidity:	60%
Test Voltage:	DC 7.4V	Phase:	Horizontal
Test Mode:	Mode 1/2/3 (Mode 1 worst mode)		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	30.3173	37.22	-13.01	24.21	40.00	-15.79	peak
2	38.7300	37.47	-17.36	20.11	40.00	-19.89	peak
3	98.8700	47.29	-20.31	26.98	43.50	-16.52	peak
4	567.3800	28.73	-5.57	23.16	46.00	-22.84	peak
5	733.2500	31.23	-2.35	28.88	46.00	-17.12	peak
6	979.6300	28.68	2.65	31.33	54.00	-22.67	peak

Remark:

9. Margin = Result (Result =Reading + Factor)-Limit

10. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain





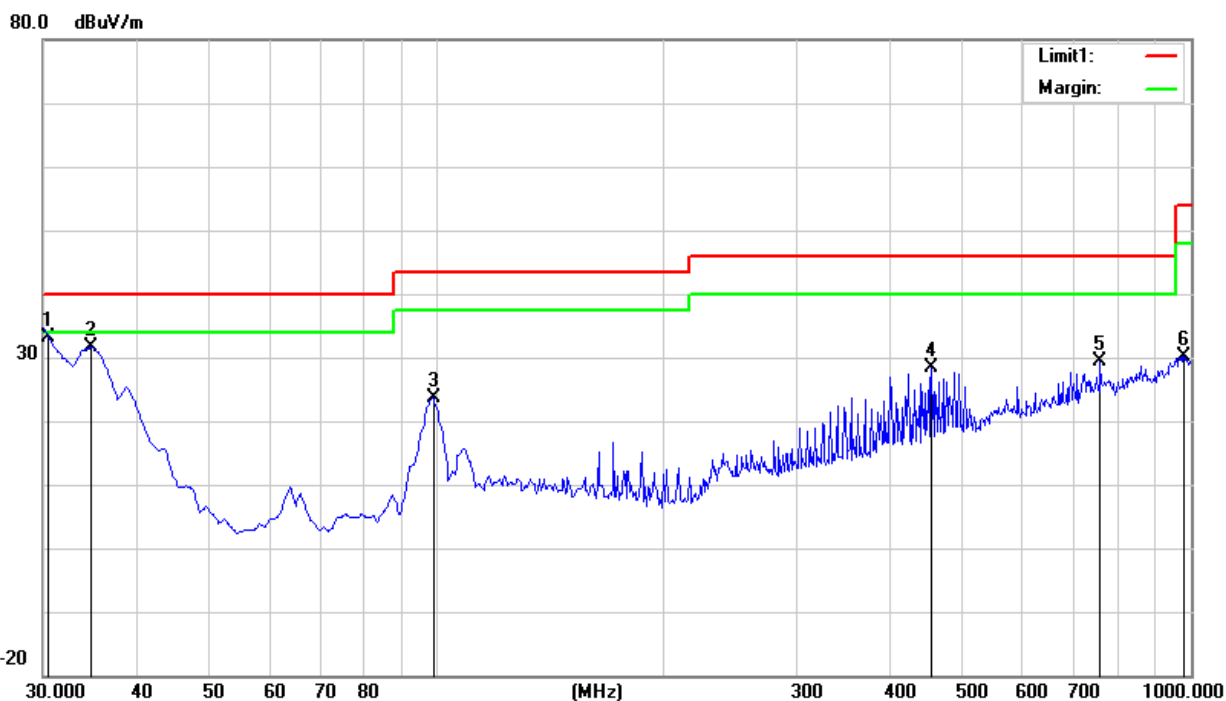
Temperature:	23.4°C	Relative Humidity:	60%
Test Voltage:	DC 7.4V	Phase:	Vertical
Test Mode:	Mode 1/2/3 (Mode 1 worst mode)		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	30.5306	46.37	-13.12	33.25	40.00	-6.75	peak
2	34.8500	46.96	-15.34	31.62	40.00	-8.38	peak
3	98.8700	44.05	-20.31	23.74	43.50	-19.76	peak
4	452.9200	38.11	-9.61	28.50	46.00	-17.50	peak
5	759.4400	31.49	-2.16	29.33	46.00	-16.67	peak
6	979.6300	27.60	2.65	30.25	54.00	-23.75	peak

Remark:

11. Margin = Result (Result = Reading + Factor) – Limit

12. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain





iT30Pro N

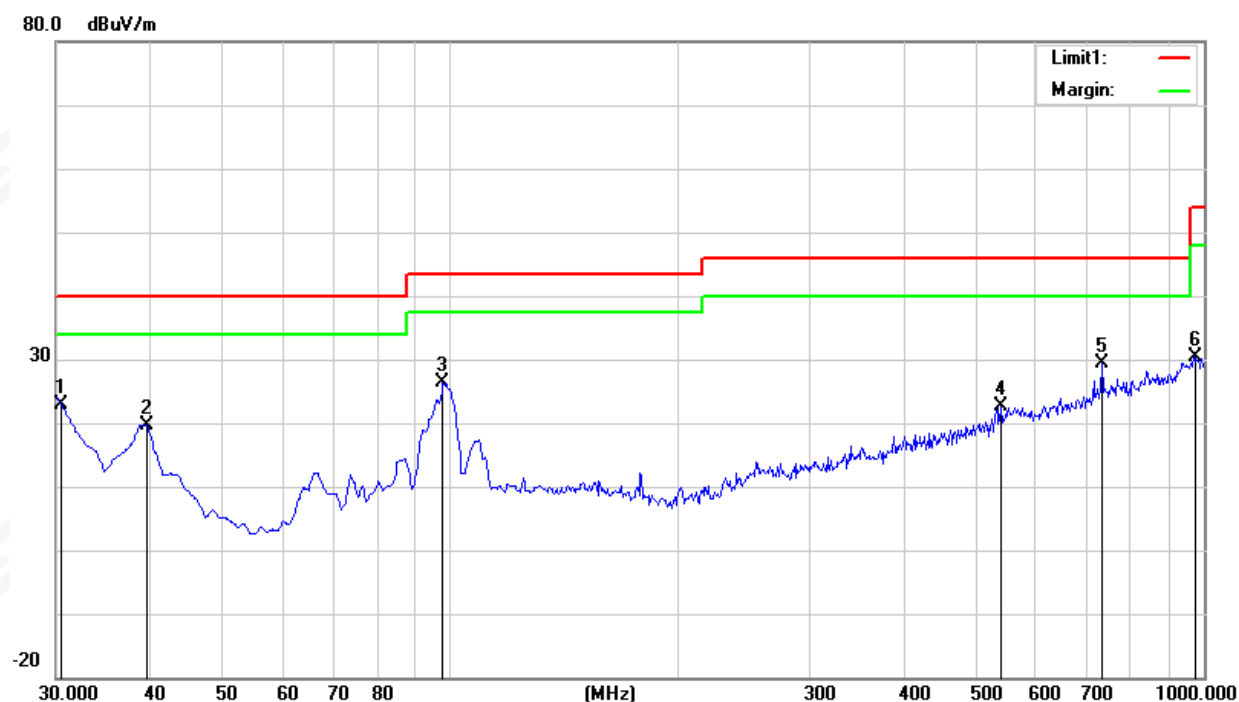
Temperature:	23.4°C	Relative Humidity:	60%
Test Voltage:	DC 7.4V	Phase:	Horizontal
Test Mode:	Mode 1/2/3 (Mode 1 worst mode)		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	30.5306	35.94	-13.12	22.82	40.00	-17.18	peak
2	39.7000	37.43	-17.88	19.55	40.00	-20.45	peak
3	97.9000	46.72	-20.46	26.26	43.50	-17.24	peak
4	539.2500	29.43	-6.90	22.53	46.00	-23.47	peak
5	733.2500	31.70	-2.35	29.35	46.00	-16.65	peak
6	978.6600	27.82	2.58	30.40	54.00	-23.60	peak

Remark:

13. Margin = Result (Result =Reading + Factor)-Limit

14. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain





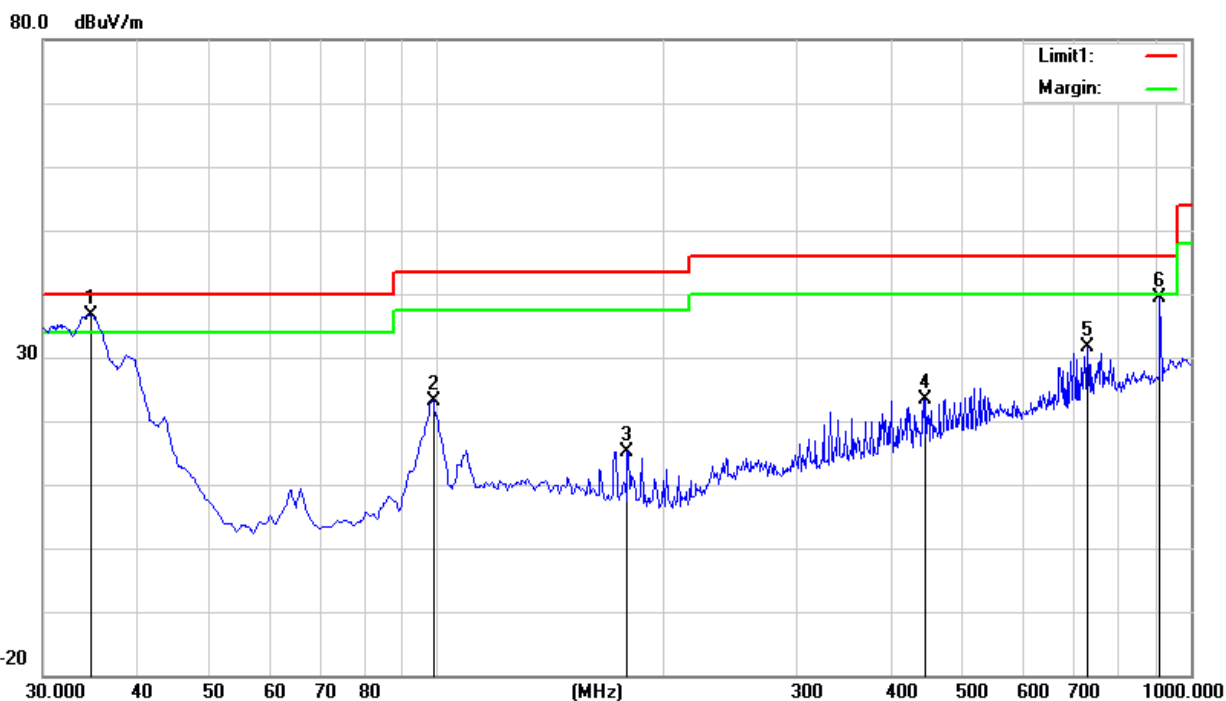
Temperature:	23.4°C	Relative Humidity:	60%
Test Voltage:	DC 7.4V	Phase:	Vertical
Test Mode:	Mode 1/2/3 (Mode 1 worst mode)		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	34.8500	52.04	-15.34	36.70	40.00	-3.30	peak
2	98.8700	43.54	-20.31	23.23	43.50	-20.27	peak
3	179.3800	35.24	-20.02	15.22	43.50	-28.28	peak
4	446.1300	33.30	-9.83	23.47	46.00	-22.53	peak
5	731.3100	34.09	-2.42	31.67	46.00	-14.33	peak
6	912.7000	39.50	-0.14	39.36	46.00	-6.64	peak

Remark:

15. Margin = Result (Result = Reading + Factor) – Limit

16. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain





iT30Pro O

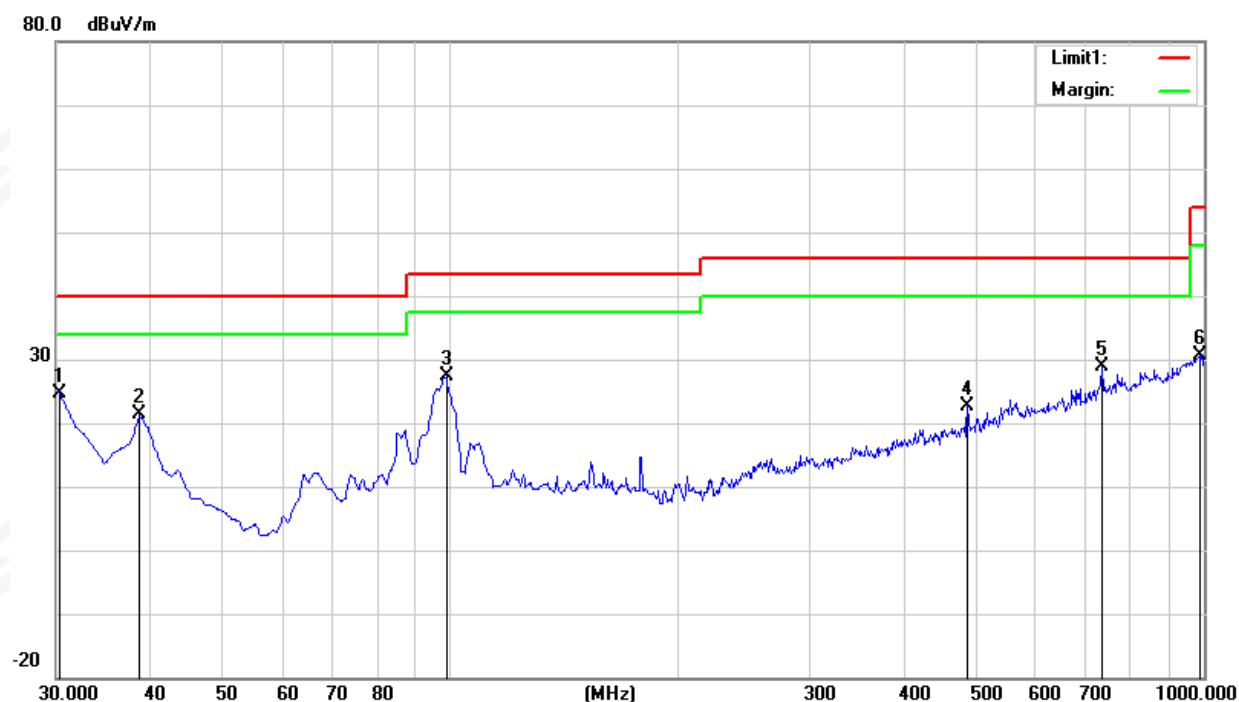
Temperature:	23.4°C	Relative Humidity:	60%
Test Voltage:	DC 7.4V	Phase:	Horizontal
Test Mode:	Mode 1/2/3 (Mode 1 worst mode)		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	30.3173	37.72	-13.01	24.71	40.00	-15.29	peak
2	38.7300	38.64	-17.36	21.28	40.00	-18.72	peak
3	98.8700	47.70	-20.31	27.39	43.50	-16.11	peak
4	485.9000	31.15	-8.40	22.75	46.00	-23.25	peak
5	733.2500	31.12	-2.35	28.77	46.00	-17.23	peak
6	989.3300	28.60	2.09	30.69	54.00	-23.31	peak

Remark:

17. Margin = Result (Result =Reading + Factor)-Limit

18. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain





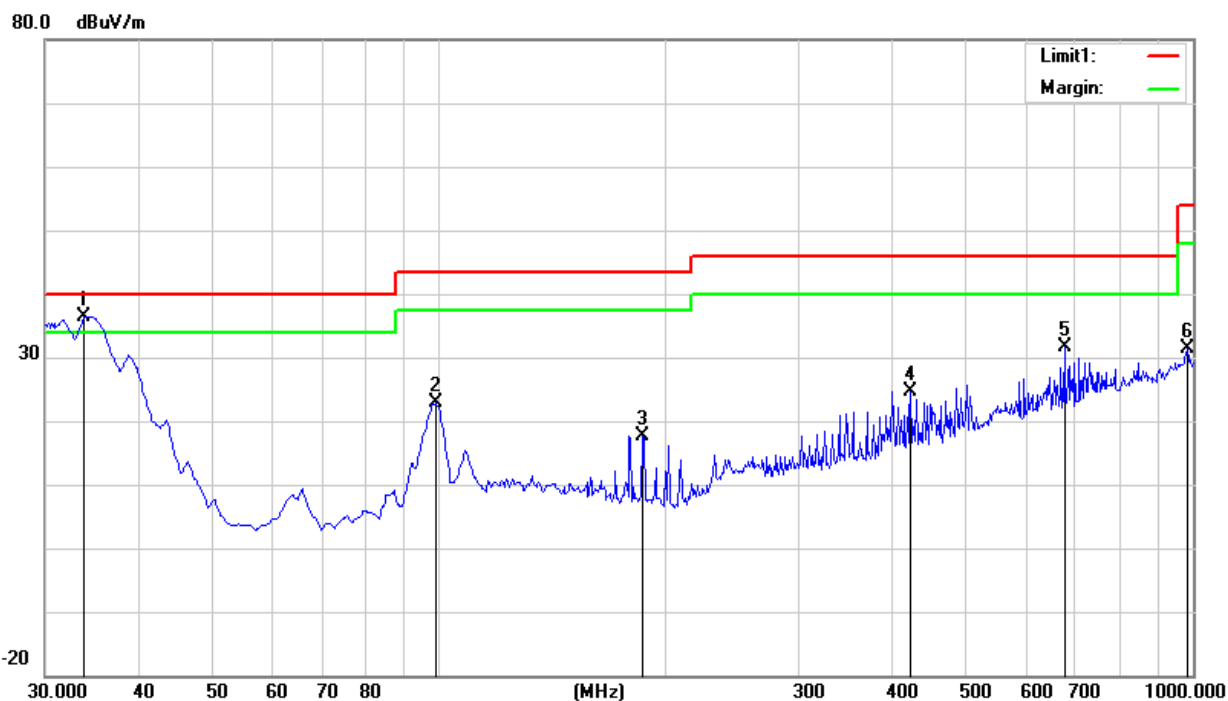
Temperature:	23.4°C	Relative Humidity:	60%
Test Voltage:	DC 7.4V	Phase:	Vertical
Test Mode:	Mode 1/2/3 (Mode 1 worst mode)		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	33.8800	51.26	-14.80	36.46	40.00	-3.54	peak
2	98.8700	43.11	-20.31	22.80	43.50	-20.70	peak
3	186.1700	38.20	-20.53	17.67	43.50	-25.83	peak
4	422.8500	34.80	-10.11	24.69	46.00	-21.31	peak
5	676.9900	35.94	-4.37	31.57	46.00	-14.43	peak
6	985.4500	29.17	2.33	31.50	54.00	-22.50	peak

Remark:

19. Margin = Result (Result = Reading + Factor) – Limit

20. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain





Above 1G Radiation Spurious

CH01

Frequency	Meter Reading	Detector	Amplifier	Loss	Antenna Factor	Orrected Factor	Corrected Amplitude	Limit	Margin	RX Antenna Polar
(MHz)	(dBμV/m)	(PK/QP/AV)	(dB)	(dB)	(dB/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(H/V)
4826.13	62.87	PK	50.33	8.84	31.22	-10.27	52.60	74	-21.40	H
4826.13	62.09	PK	50.33	8.84	31.22	-10.27	51.82	74	-22.18	V
7238.96	59.24	PK	55.48	9.31	34.05	-12.12	47.12	74	-26.88	H
7238.96	59.06	PK	55.48	9.31	34.05	-12.12	46.94	74	-27.06	V
9652.21	47.54	PK	59.13	9.89	36.99	-12.25	35.29	74	-38.71	H
9652.21	46.70	PK	59.13	9.89	36.99	-12.25	34.45	74	-39.55	V

CH16

Frequency	Meter Reading	Detector	Amplifier	Loss	Antenna Factor	Orrected Factor	Corrected Amplitude	Limit	Margin	RX Antenna Polar
(MHz)	(dBμV/m)	(PK/QP/AV)	(dB)	(dB)	(dB/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(H/V)
4875.87	63.27	PK	50.33	8.84	31.22	-10.27	53.00	74	-21.00	H
4875.87	61.85	PK	50.33	8.84	31.22	-10.27	51.58	74	-22.42	V
7314.06	60.46	PK	55.48	9.31	34.05	-12.12	48.34	74	-25.66	H
7314.06	60.13	PK	55.48	9.31	34.05	-12.12	48.01	74	-25.99	V
9752.01	48.68	PK	59.13	9.89	36.99	-12.25	36.43	74	-37.57	H
9752.01	48.22	PK	59.13	9.89	36.99	-12.25	35.97	74	-38.03	V

CH32

Frequency	Meter Reading	Detector	Amplifier	Loss	Antenna Factor	Orrected Factor	Corrected Amplitude	Limit	Margin	RX Antenna Polar
(MHz)	(dBμV/m)	(PK/QP/AV)	(dB)	(dB)	(dB/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	(H/V)
4929.09	63.43	PK	50.33	8.84	31.22	-10.27	53.16	74	-20.84	H
4929.09	61.74	PK	50.33	8.84	31.22	-10.27	51.47	74	-22.53	V
7393.55	60.61	PK	55.48	9.31	34.05	-12.12	48.49	74	-25.51	H
7393.55	60.01	PK	55.48	9.31	34.05	-12.12	47.89	74	-26.11	V
9858.17	48.70	PK	59.13	9.89	36.99	-12.25	36.45	74	-37.55	H
9858.17	48.26	PK	59.13	9.89	36.99	-12.25	36.01	74	-37.99	V

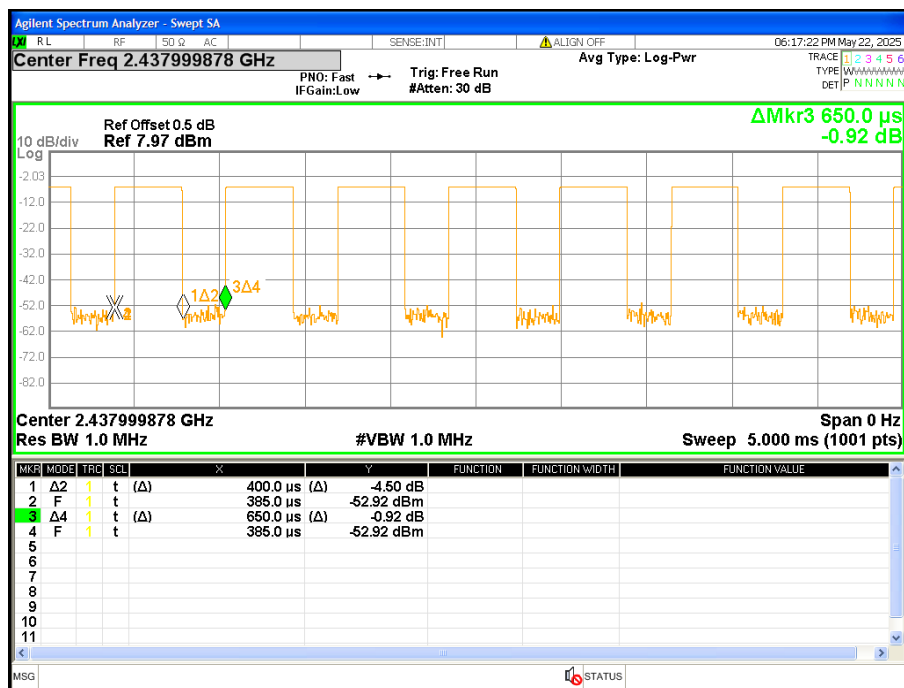
Note: The peak value is less than the AV limit, so AV data does not need to be tested.



Duty cycle

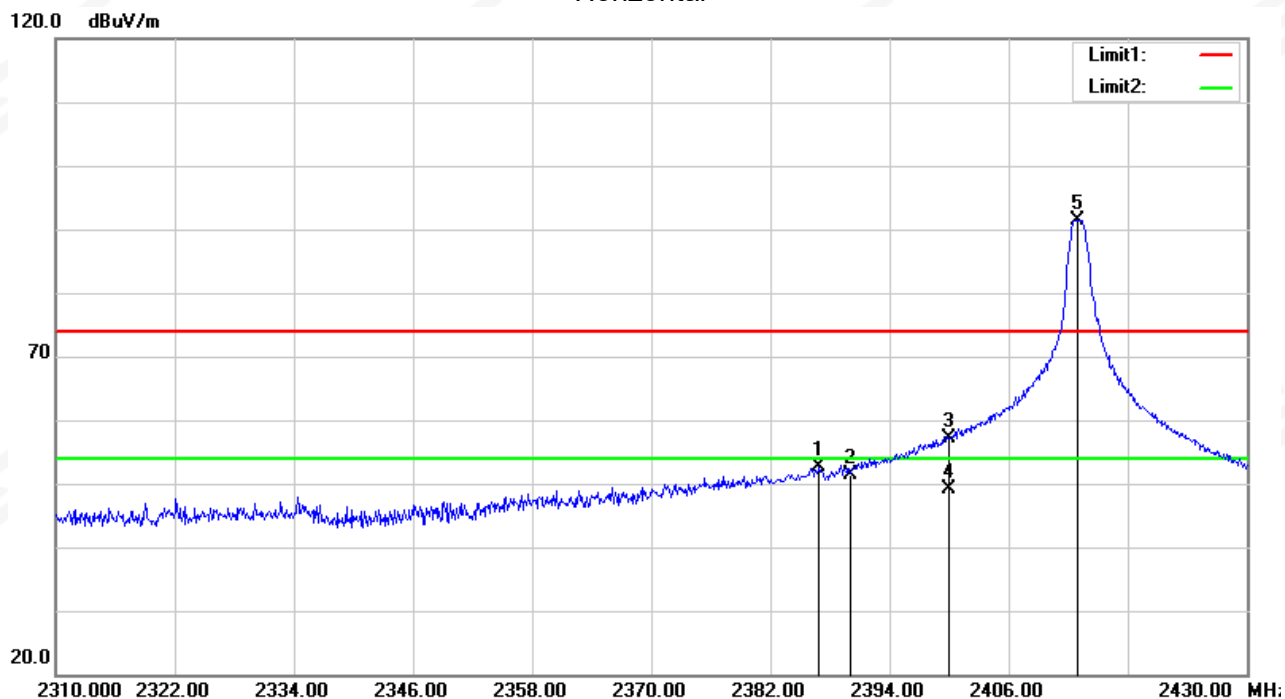
Ton (ms)	Tp (ms)	Duty cycle(%)	Duty Factor
0.4	0.65	61.54%	4.22

Note: Duty Factor= $20 \cdot \log_{10}(1/(T_{on}/T_p))$





(Radiation Band edge)

CH01
Horizontal

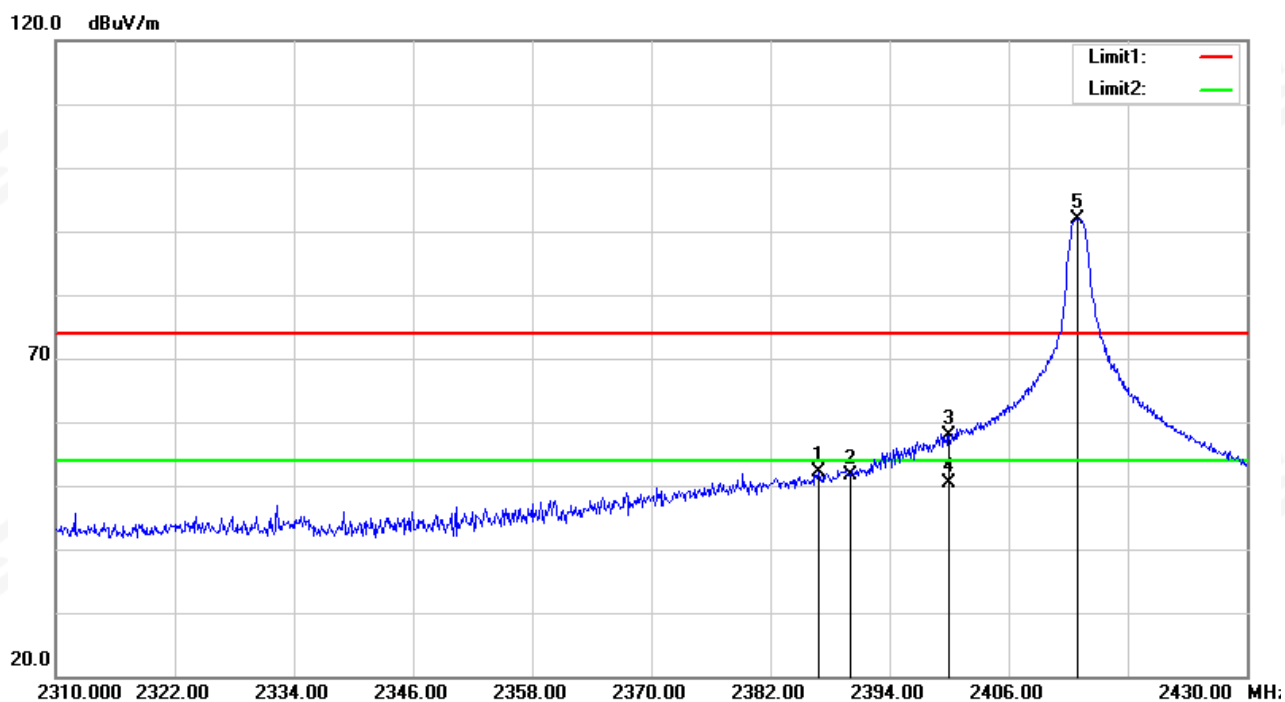
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2386.920	48.31	4.30	52.61	74.00	-21.39	peak
2	2390.000	47.16	4.34	51.50	74.00	-22.50	peak
3	2400.000	52.60	4.49	57.09	74.00	-16.91	peak
4	2400.000	44.64	4.49	49.13	54.00	-4.87	AVG

Fundamental Frequency

No.	Frequency	Reading	Correct	Duty cycle	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
5	2413.000	86.98	4.49	-	91.47	114	-22.53	peak
5	2413.000	86.98	4.49	4.22	87.25	94	-6.75	AVG



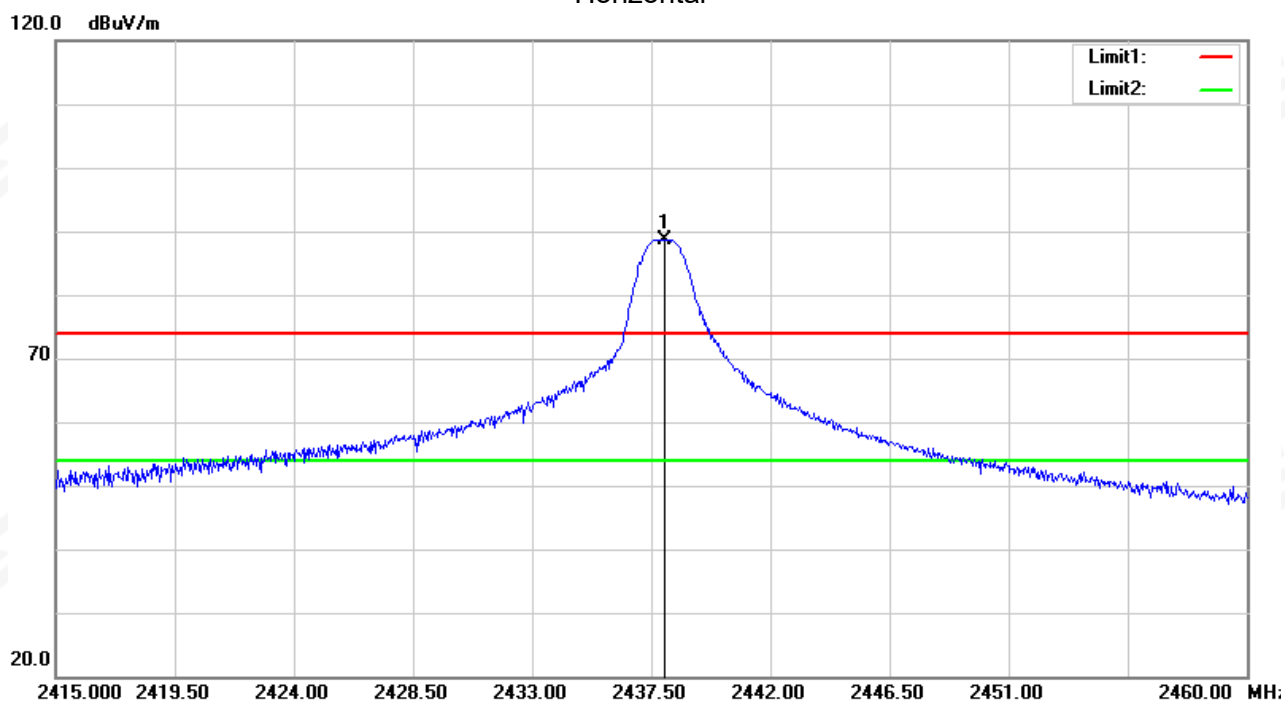
Vertical



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2386.800	47.73	4.30	52.03	74.00	-21.97	peak
2	2390.000	47.39	4.34	51.73	74.00	-22.27	peak
3	2400.000	53.29	4.49	57.78	74.00	-16.22	peak
4	2400.000	45.83	4.49	50.32	54.00	-3.68	AVG

Fundamental Frequency

No.	Frequency	Reading	Correct	Duty cycle	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor (dB/m)	Factor (dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
5	2413.000	87.37	4.49	-	91.86	114	-22.14	peak
5	2413.000	87.37	4.49	4.22	87.64	94	-6.36	AVG

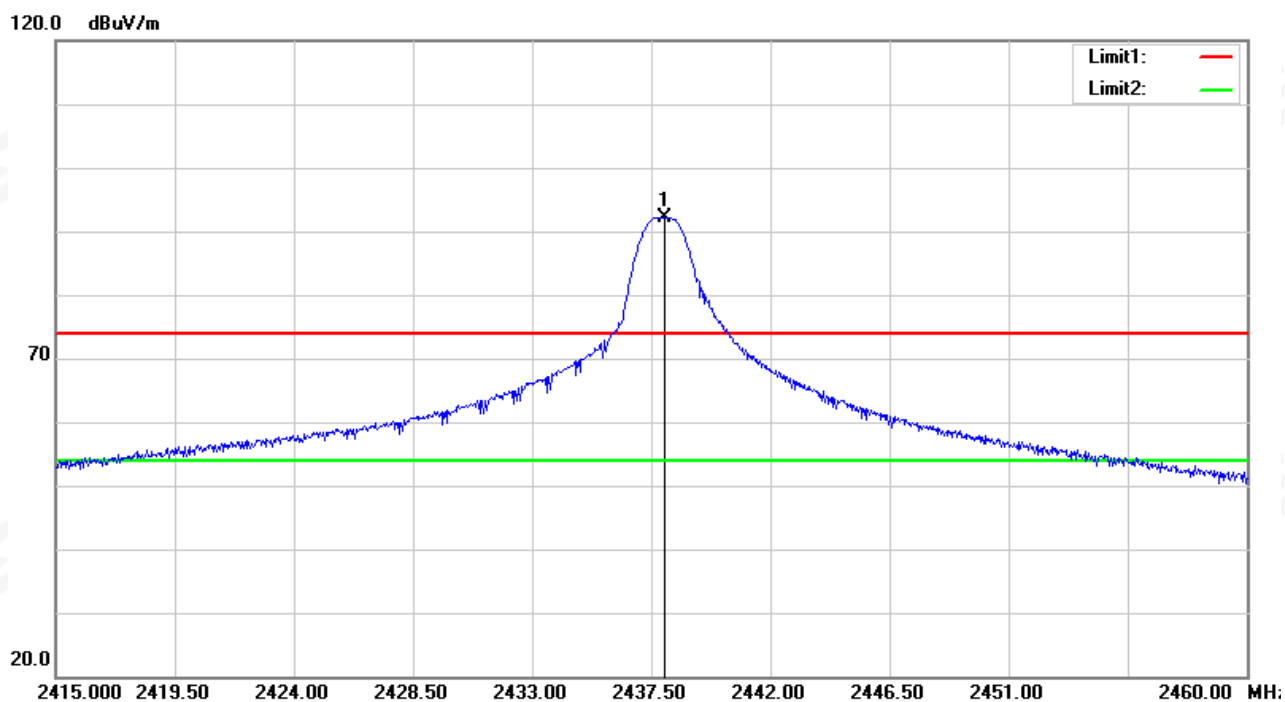
CH16
Horizontal

Fundamental Frequency

No.	Frequency	Reading	Correct	Duty cycle	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2438.000	84.12	4.51	-	88.63	114	-25.37	peak
1	2438.000	84.12	4.51	4.22	84.41	94	-9.59	AVG

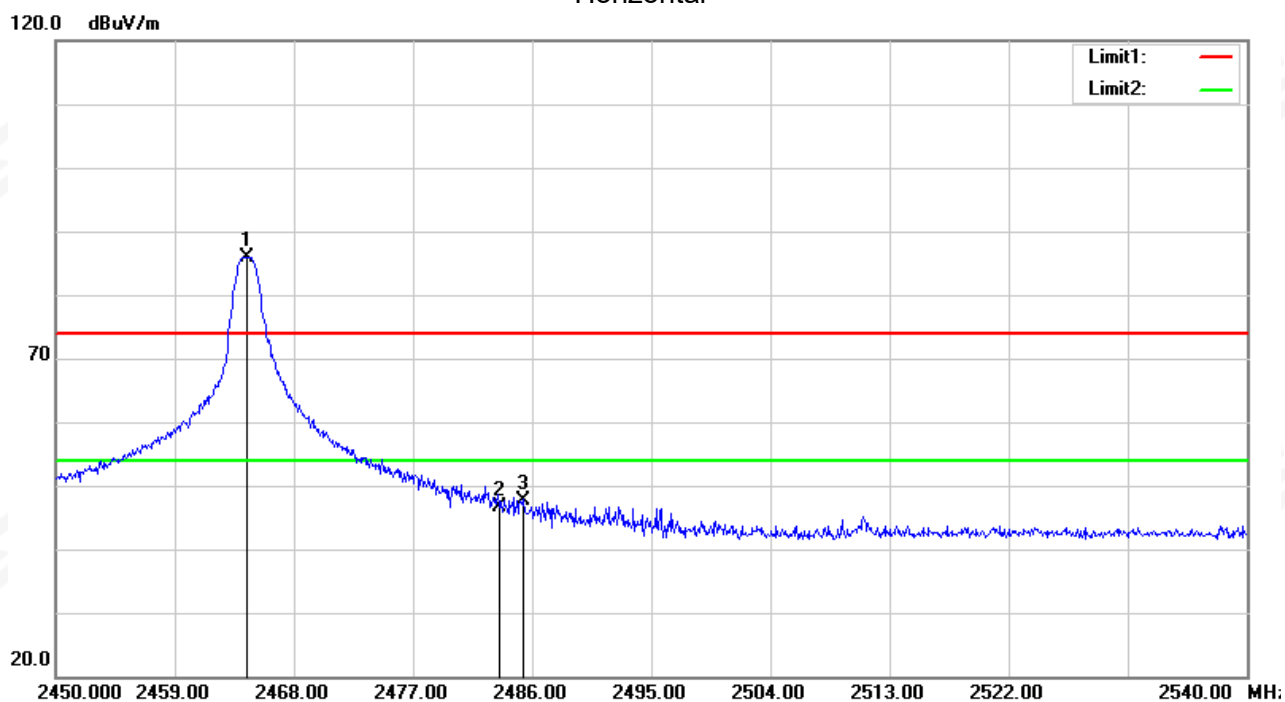


Vertical



Fundamental Frequency

No.	Frequency	Reading	Correct	Duty cycle	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor (dB/m)	Factor (dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2438.000	87.61	4.51	-	92.12	114	-21.88	peak
1	2438.000	87.61	4.51	4.22	87.9	94	-6.1	AVG

CH32
Horizontal

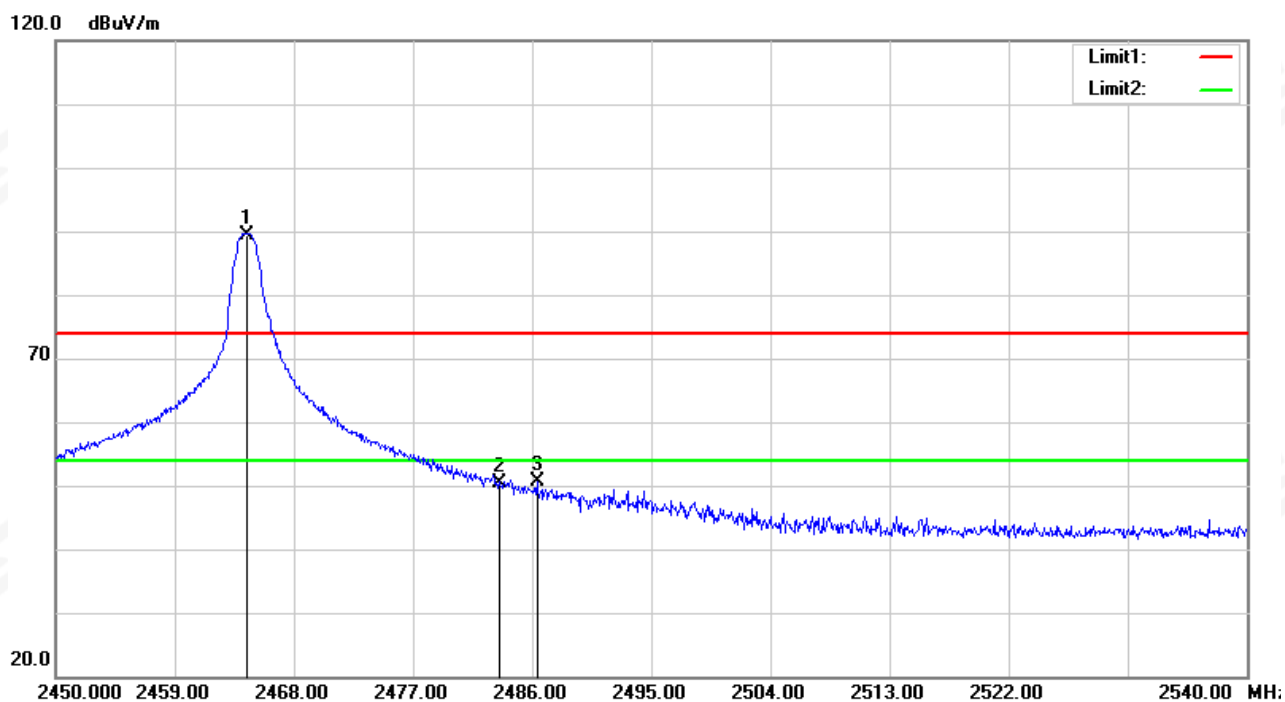
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
2	2483.500	42.07	4.60	46.67	74.00	-27.33	peak
3	2485.370	42.94	4.61	47.55	74.00	-26.45	peak

Fundamental Frequency

No.	Frequency	Reading	Correct	Duty cycle	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2464.500	81.36	4.56	-	85.92	114	-28.08	peak
1	2464.500	81.36	4.56	4.22	81.7	94	-12.3	AVG



Vertical



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
2	2483.500	45.72	4.60	50.32	74.00	-23.68	peak
3	2486.360	46.00	4.61	50.61	74.00	-23.39	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
1	2464.500	84.94	4.56	-	89.50	114	-24.5	peak
1	2464.500	84.94	4.56	4.22	85.28	94	-8.72	AVG



4. BANDWIDTH TEST

4.1 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting : RBW= 1% to 5% OBW, VBW $\geq$ RBW, Sweep time = Auto.

4.2 TEST SETUP



4.3 EUT OPERATION CONDITIONS

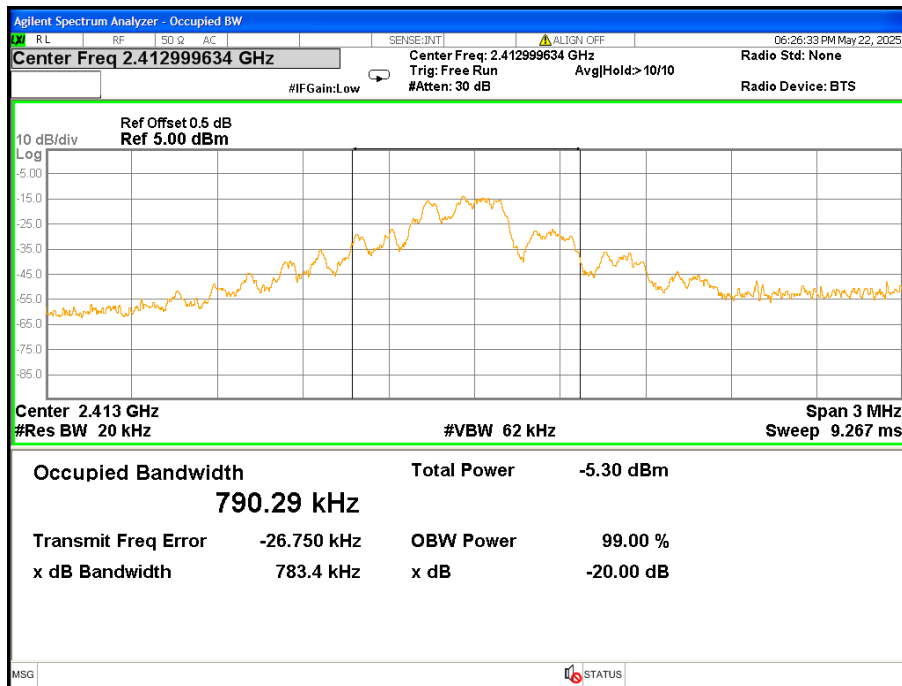
TX mode.



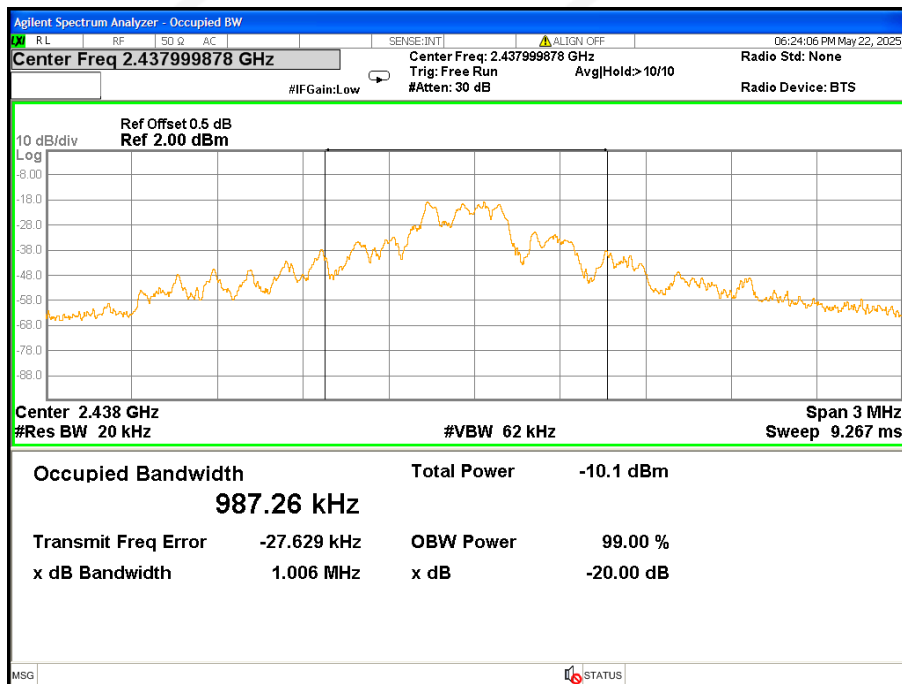
4.4 TEST RESULTS

Test Channel	Frequency(MHz)	20dB Bandwidth(KHz)
CH01	2412.999634	783.4
CH16	2437.999878	1006
CH32	2464.499756	792.7

CH01

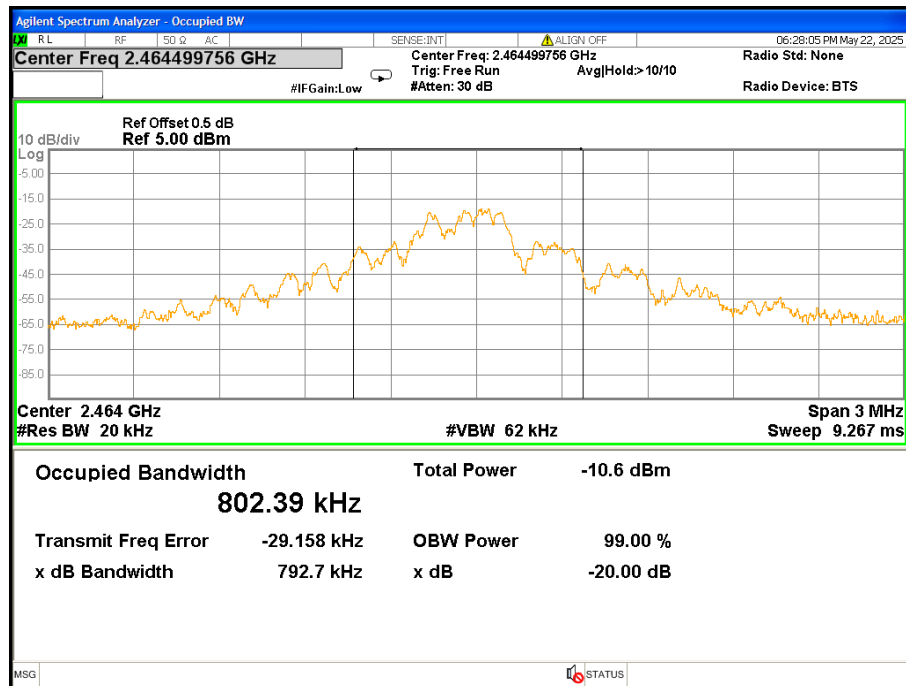


CH16





CH32





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 Chip 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※※※※※