



Radio Test Report

Report No.: STS2603387W06

Issued for

Imagineear Ltd

The Blomfield Rooms, Fulham Palace, Bishop's Avenue,
London SW6 6EA United Kingdom

Product Name: Nostro

Brand Name: NA

Model Name: Nostro

Series Model(s): NA

FCC ID: 2ASPC-NOSTRO

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: Imagineear Ltd
Address.....: The Blomfield Rooms, Fulham Palace, Bishop's Avenu, London SW6 6EA United Kingdom
Manufacturer's Name: Chempros Limited
Address.....: Unit 2312,Eastern Tower,Coastal Era Building,Nanshan,Shenzhen, CHINA,518051

Product Description

Product Name: Nostro
Brand Name: NA
Model Name.....: Nostro
Series Model(s): NA
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.....: 2026-03-17
Date of performance of tests ...: 2026-03-17 to 2026-05-29
Date of Issue: 2026-05-29
Test Result: **Pass**

Testing Engineer :

Aaron Bu

(Aaron Bu)

Technical Manager :

Skylar Li

(Skylar Li)

Authorized Signatory :

Bovey Yang

(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	9
2.3 TEST SOFTWARE AND POWER LEVEL	9
2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	10
2.5 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS	11
2.6 EQUIPMENTS LIST	12
3. EMC EMISSION TEST	13
3.1 CONDUCTED EMISSION MEASUREMENT	13
3.2 RADIATED EMISSION MEASUREMENT	17
4. BANDWIDTH TEST	32
4.1 TEST PROCEDURE	32
4.2 TEST SETUP	32
4.3 EUT OPERATION CONDITIONS	32
4.4 TEST RESULTS	33
5. ANTENNA REQUIREMENT	35
5.1 STANDARD REQUIREMENT	35
5.2 EUT ANTENNA	35
APPENDIX- PHOTOS OF TEST SETUP	36

**Revision History**

Rev.	Issue Date	Report No.	Effect Page	Contents
00	2026-05-29	STS2603387W06	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	$\pm 0.751\text{dB}$
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	Nostro								
Brand Name	NA								
Model Name	Nostro								
Series Model(s)	NA								
Model Difference	Nostro								
Product Description	The EUT is a Nostro <table><tr><td>Operation Frequency:</td><td>2402MHz-2480MHz</td></tr><tr><td>Modulation Type:</td><td>FSK</td></tr><tr><td>Antenna Designation:</td><td>Internal antenna</td></tr><tr><td>Antenna Gain(Peak):</td><td>-1.79dBi</td></tr></table> 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.	Operation Frequency:	2402MHz-2480MHz	Modulation Type:	FSK	Antenna Designation:	Internal antenna	Antenna Gain(Peak):	-1.79dBi
Operation Frequency:	2402MHz-2480MHz								
Modulation Type:	FSK								
Antenna Designation:	Internal antenna								
Antenna Gain(Peak):	-1.79dBi								
Power Rating	Input: DC 5V,1A								
Battery	DC 3.7V,5700mAh								
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 details in this report are based on the manufacturer provided antenna specification documents and apply only to the tested sample identified herein. Any discrepancies in the antenna information may affect the accuracy of the test results, and the customer assumes responsibility for any related issues.



3.

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



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	CH00	FSK
Mode 2	CH38	FSK
Mode 3	CH78	FSK
Mode 4	Transmitting (Radiated emission& Conducted Emission)	

Note:

- (1) The measurements are performed at the highest, middle, lowest available channels.
- (2) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.
- (3) We have be tested for all avaiable U.S. voltage and frequencies(For 120V,50/60Hz and 240V, 50/60Hz) for which the device is capable of operation.

2.3 TEST SOFTWARE AND POWER LEVEL

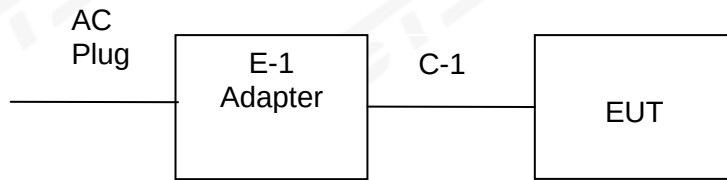
During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level.

RF Function	Type	Mode Or Modulation type	ANT Gain(dBi)	Power Class	Software For Testing
BLE	2402-2480	FSK	-1.01	0	FSK Sender

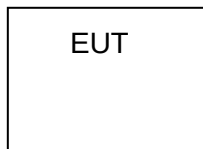


2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Conducted Emission Test



Radiated Spurious 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.

No.	Device Type	Brand	Model	Note
E-1	Adapter	N/A	N/A	N/A

Item	Shielded Type	Ferrite Core	Length	Note
C-1	Unshielded	NO	50cm	N/A

Note:

- (1) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- (2) “YES” is means “with core”; “NO” is means “without core”.



2.6 EQUIPMENTS LIST

RF Radiation Test Equipment

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
Temperature & Humidity	SW-108	SuWei	N/A	2026.02.04	2027.02.03
Pre-Amplifier(0.1 M-3GHz)	EM	EM330	060665	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	ZHINAN	ZN30900C	16035	2025.02.25	2027.02.24
Bilog Antenna	TESEQ	CBL6111D	34678	2025.09.27	2027.09.26
Horn Antenna	SCHWARZBECK	BBHA 9120D	02014	2025.09.27	2027.09.26
Horn Antenna	A-INFOMW	LB-180400-KF	J211020657	2025.09.27	2027.09.26
Positioning Controller	MF	MF-7802	MF-780208587	N/A	N/A
Signal Analyzer	R&S	FSV 40-N	101823	2025.09.26	2026.09.25
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	HONGSHENGFENG	DPS-305AF	17064939	2025.09.22	2026.09.21
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	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
Temperature & Humidity	SW-108	SuWei	N/A	2026.02.04	2027.02.03
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	2026.02.04	2027.02.03
Pulse Power Sensor	Anritsu	MA2411B	917389	2025.09.23	2026.09.22
Power Meter	Anritsu	ML2480	1005127	2025.09.23	2026.09.22
Switch control box	MW	MW100-RFCB	N/A	N/A	N/A
Temperature& Humidity test chamber	Safety test	AG80L	171200018	2026.02.04	2027.02.03
Temperature & Humidity	SW-108	SuWei	N/A	2026.02.04	2027.02.03
Test SW	MW	MTS 8310_2.0.0.0			



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.

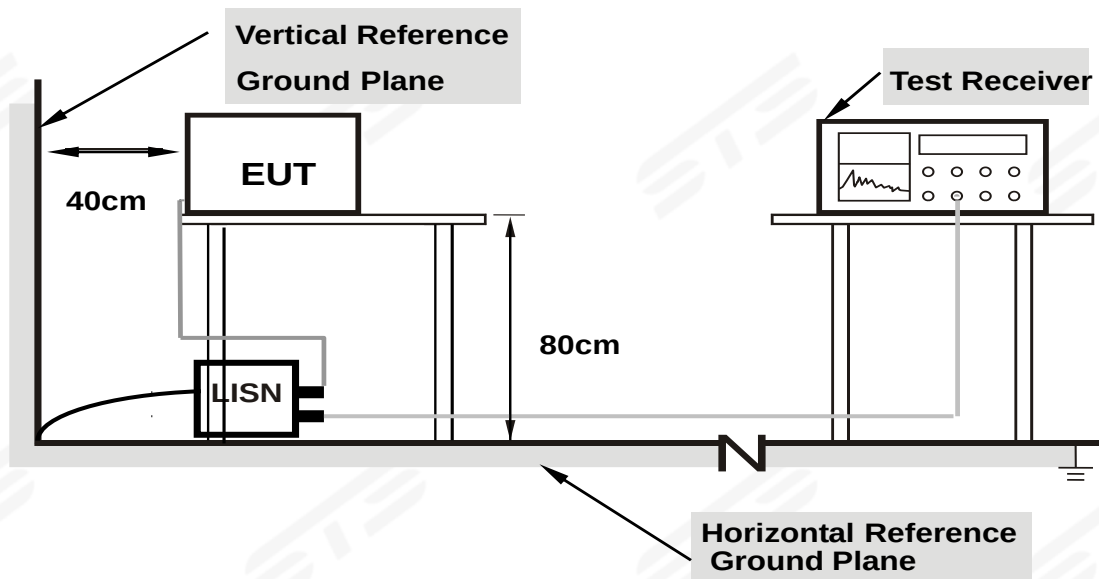
The following table is the setting of the receiver

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.

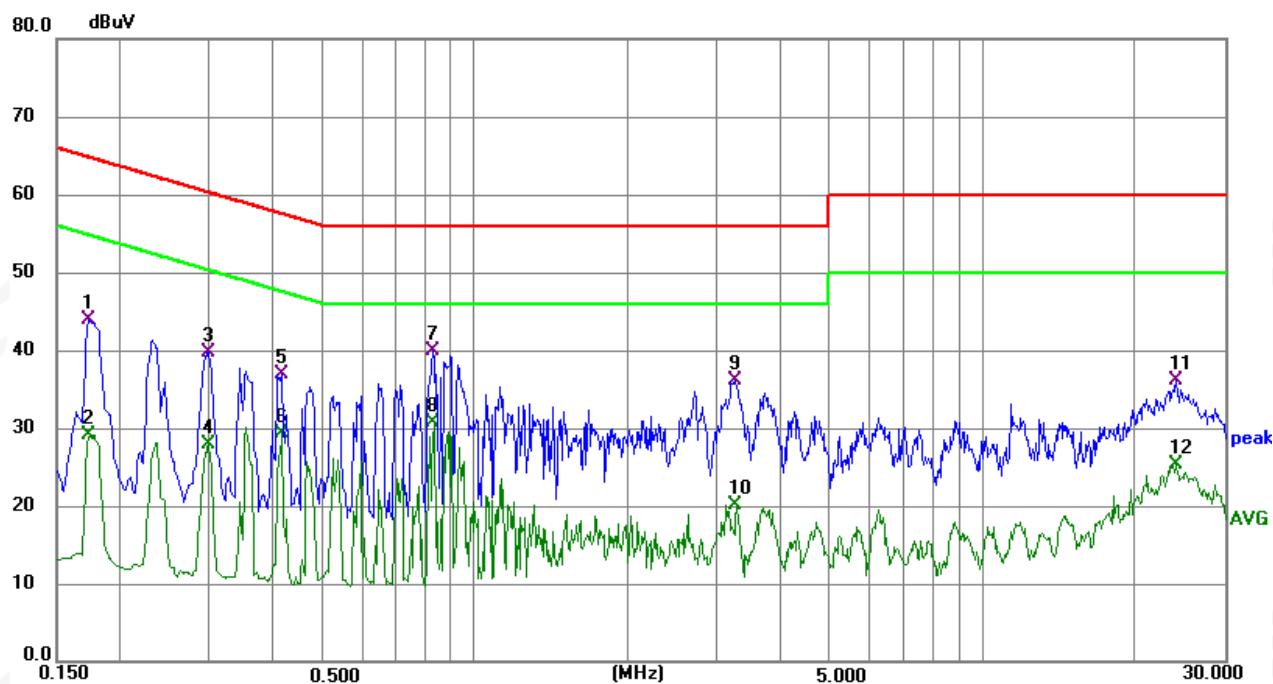
3.1.4 EUT OPERATING CONDITIONS

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:	54 %
Test Voltage:	AC 120V/60Hz	Phase:	L
Test Mode :	Mode 4		



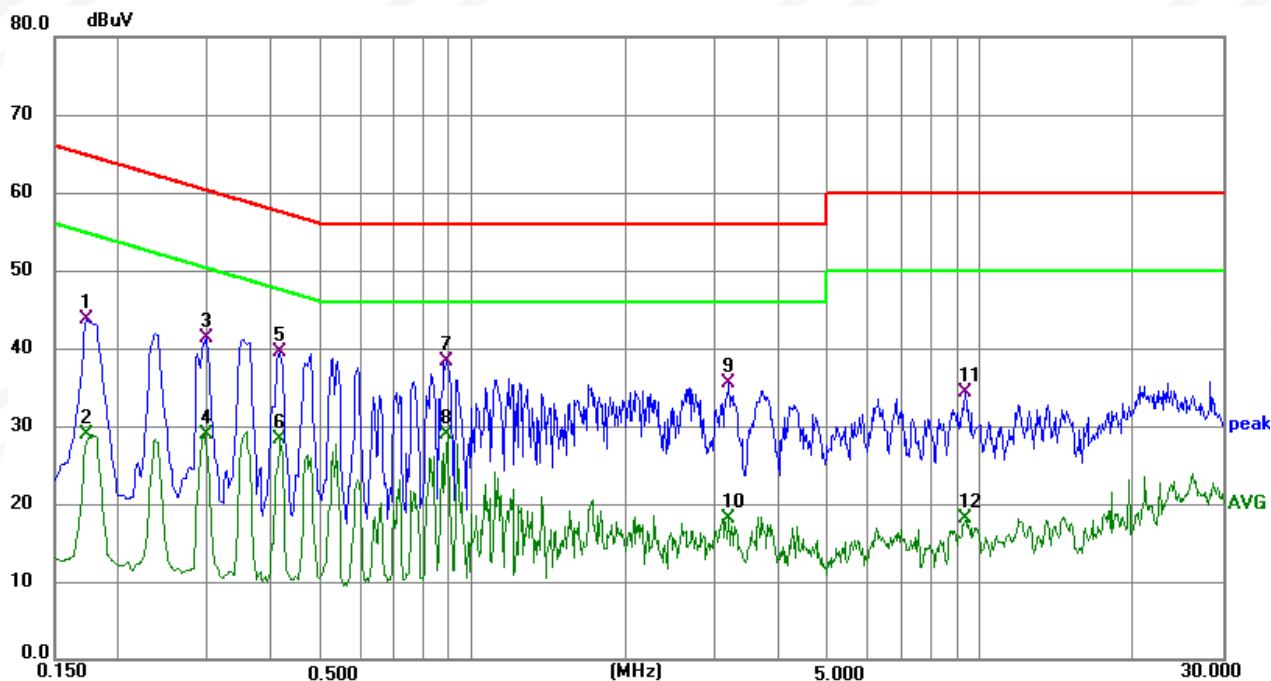
Remark:

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

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1725	33.22	10.71	43.93	64.84	-20.91	QP
2	0.1725	18.36	10.71	29.07	54.84	-25.77	AVG
3	0.2985	29.06	10.71	39.77	60.28	-20.51	QP
4	0.2985	17.28	10.71	27.99	50.28	-22.29	AVG
5	0.4155	26.20	10.73	36.93	57.54	-20.61	QP
6	0.4155	18.52	10.73	29.25	47.54	-18.29	AVG
7	0.8295	29.13	10.77	39.90	56.00	-16.10	QP
8 *	0.8295	19.95	10.77	30.72	46.00	-15.28	AVG
9	3.2415	24.40	11.70	36.10	56.00	-19.90	QP
10	3.2415	8.43	11.70	20.13	46.00	-25.87	AVG
11	24.0360	19.05	16.98	36.03	60.00	-23.97	QP
12	24.0360	8.24	16.98	25.22	50.00	-24.78	AVG



Temperature:	26 °C	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Phase:	N
Test Mode :	Mode 4		



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)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1725	32.94	10.71	43.65	64.84	-21.19	QP
2	0.1725	18.21	10.71	28.92	54.84	-25.92	AVG
3	0.2985	30.57	10.71	41.28	60.28	-19.00	QP
4	0.2985	18.16	10.71	28.87	50.28	-21.41	AVG
5	0.4155	28.80	10.73	39.53	57.54	-18.01	QP
6	0.4155	17.50	10.73	28.23	47.54	-19.31	AVG
7	0.8880	27.46	10.88	38.34	56.00	-17.66	QP
8 *	0.8880	18.00	10.88	28.88	46.00	-17.12	AVG
9	3.2055	23.80	11.63	35.43	56.00	-20.57	QP
10	3.2055	6.39	11.63	18.02	46.00	-27.98	AVG
11	9.3255	20.87	13.51	34.38	60.00	-25.62	QP
12	9.3255	4.60	13.51	18.11	50.00	-31.89	AVG



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(μ V)/m (Peak) 54.0 dB(μ V)/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

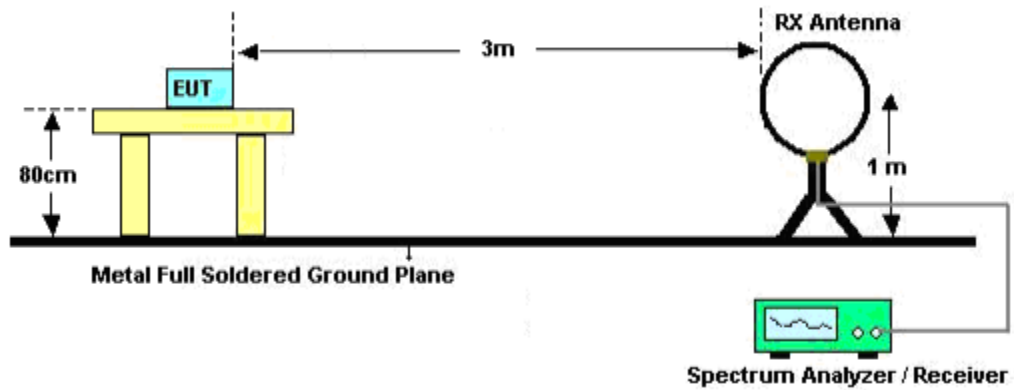
- a. The measuring distance of 3m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation (Below 1GHz)
- b. The measuring distance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

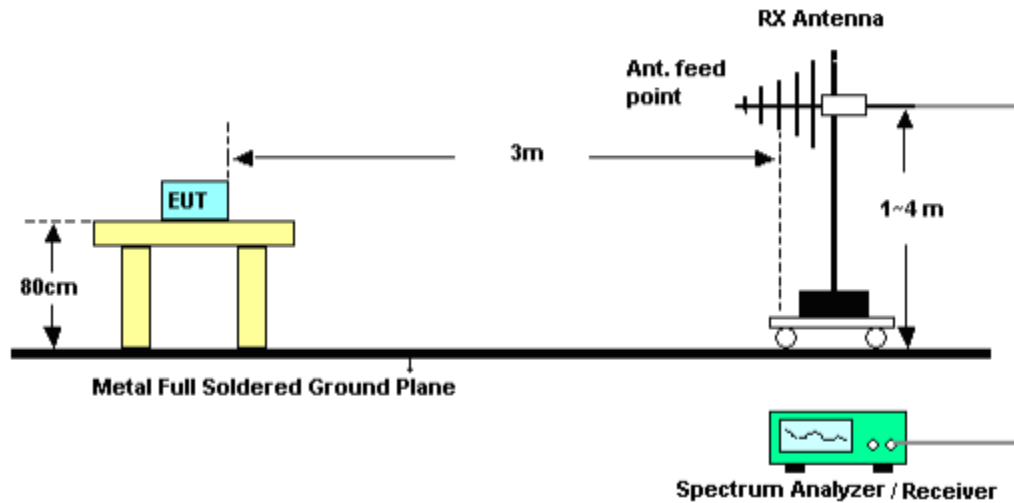
No deviation

3.2.4 TEST SETUP

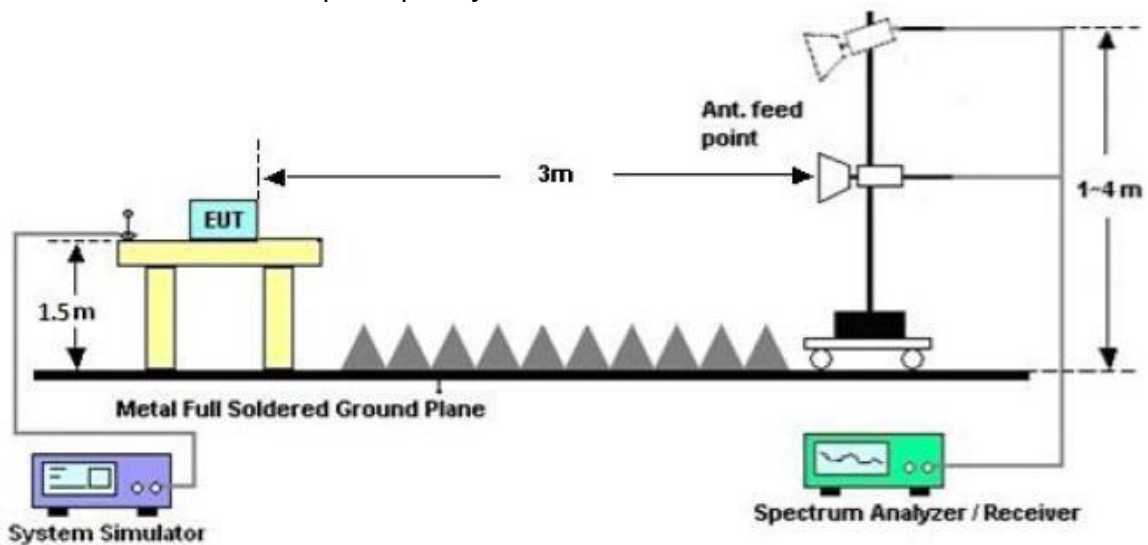
(A) Radiated Emission Test-Up Frequency Below 30MHz



(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:	26 °C	Relative Humidity:	54%
Test Voltage:	DC 3.7V	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.

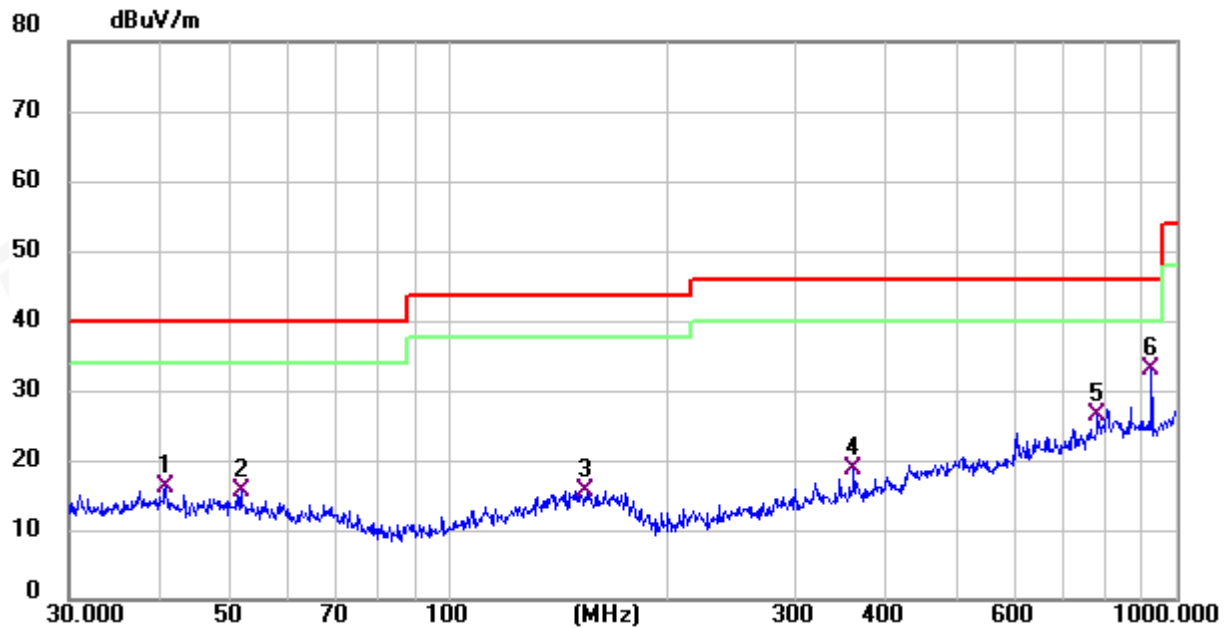
Distance extrapolation factor = $40 \log (\text{specific distance/test distance})$ (dB);

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



Between 30MHz – 1000 MHz Radiation Spurious

Temperature:	26 °C	Relative Humidity:	54%
Test Voltage:	DC 3.7V	Phase:	Horizontal
Test Mode:	Mode 4		



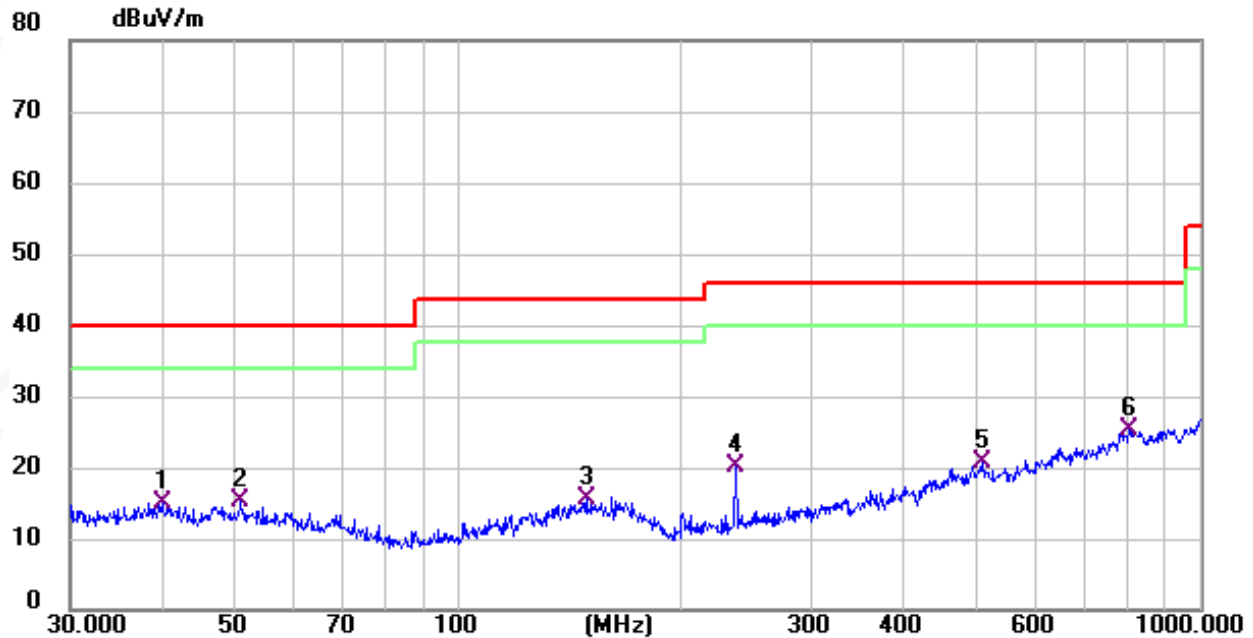
Remark:

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

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	40.7016	26.83	-10.82	16.01	40.00	-23.99	QP
2	51.8430	26.19	-10.56	15.63	40.00	-24.37	QP
3	154.8204	25.46	-9.79	15.67	43.50	-27.83	QP
4	360.4476	27.97	-9.34	18.63	46.00	-27.37	QP
5	779.6068	26.12	0.25	26.37	46.00	-19.63	QP
6 *	925.7563	32.65	0.48	33.13	46.00	-12.87	QP



Temperature:	26 °C	Relative Humidity:	54%
Test Voltage:	DC 3.7V	Phase:	Vertical
Test Mode:	Mode 4		



Remark:

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

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

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	39.9942	25.99	-10.89	15.10	40.00	-24.90	QP
2	50.7637	25.91	-10.52	15.39	40.00	-24.61	QP
3	148.9625	26.12	-10.43	15.69	43.50	-27.81	QP
4	236.6447	32.77	-12.54	20.23	46.00	-25.77	QP
5	508.2582	26.21	-5.51	20.70	46.00	-25.30	QP
6 *	801.7863	24.71	0.44	25.15	46.00	-20.85	QP



Above 1G Radiation Spurious

Frequency	Meter Reading	Amplifier	Loss	Antenna Factor	Corrected Factor	Emission Level	Limits	Margin	Detector	Detector Type
(MHz)	(dBμV)	(dB)	(dB)	(dB/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	Type	
Low channel										
3264.85	62.11	44.70	6.70	28.20	-9.80	52.31	74.00	-21.69	PK	Vertical
3264.85	49.91	44.70	6.70	28.20	-9.80	40.11	54.00	-13.89	AV	Vertical
3264.81	61.57	44.70	6.70	28.20	-9.80	51.77	74.00	-22.23	PK	Horizontal
3264.81	50.39	44.70	6.70	28.20	-9.80	40.59	54.00	-13.41	AV	Horizontal
4804.31	58.53	44.20	9.04	31.60	-3.56	54.97	74.00	-19.03	PK	Vertical
4804.31	49.37	44.20	9.04	31.60	-3.56	45.81	54.00	-8.19	AV	Vertical
4804.31	59.30	44.20	9.04	31.60	-3.56	55.74	74.00	-18.26	PK	Horizontal
4804.31	49.44	44.20	9.04	31.60	-3.56	45.88	54.00	-8.12	AV	Horizontal
5359.68	49.42	44.20	9.86	32.00	-2.34	47.07	74.00	-26.93	PK	Vertical
5359.68	40.23	44.20	9.86	32.00	-2.34	37.89	54.00	-16.11	AV	Vertical
5359.84	48.17	44.20	9.86	32.00	-2.34	45.82	74.00	-28.18	PK	Horizontal
5359.84	39.50	44.20	9.86	32.00	-2.34	37.15	54.00	-16.85	AV	Horizontal
7205.83	54.93	43.50	11.40	35.50	3.40	58.33	74.00	-15.67	PK	Vertical
7205.83	44.51	43.50	11.40	35.50	3.40	47.91	54.00	-6.09	AV	Vertical
7205.88	54.53	43.50	11.40	35.50	3.40	57.93	74.00	-16.07	PK	Horizontal
7205.88	43.54	43.50	11.40	35.50	3.40	46.94	54.00	-7.06	AV	Horizontal
Middle channel										
3263.12	62.28	44.70	6.70	28.20	-9.80	52.48	74.00	-21.52	PK	Vertical
3263.12	50.84	44.70	6.70	28.20	-9.80	41.04	54.00	-12.96	AV	Vertical
3263.10	62.02	44.70	6.70	28.20	-9.80	52.22	74.00	-21.78	PK	Horizontal
3263.10	50.28	44.70	6.70	28.20	-9.80	40.48	54.00	-13.52	AV	Horizontal
4880.06	59.42	44.20	9.04	31.60	-3.56	55.86	74.00	-18.14	PK	Vertical
4880.06	49.76	44.20	9.04	31.60	-3.56	46.20	54.00	-7.80	AV	Vertical
4880.14	59.36	44.20	9.04	31.60	-3.56	55.80	74.00	-18.20	PK	Horizontal
4880.14	49.89	44.20	9.04	31.60	-3.56	46.33	54.00	-7.67	AV	Horizontal
5357.28	48.31	44.20	9.86	32.00	-2.34	45.97	74.00	-28.03	PK	Vertical
5357.28	39.93	44.20	9.86	32.00	-2.34	37.58	54.00	-16.42	AV	Vertical
5357.39	47.91	44.20	9.86	32.00	-2.34	45.56	74.00	-28.44	PK	Horizontal
5357.13	38.13	44.20	9.86	32.00	-2.34	35.79	54.00	-18.21	AV	Horizontal
7320.85	53.90	43.50	11.40	35.50	3.40	57.30	74.00	-16.70	PK	Vertical
7320.85	44.42	43.50	11.40	35.50	3.40	47.82	54.00	-6.18	AV	Vertical
7320.51	54.96	43.50	11.40	35.50	3.40	58.36	74.00	-15.64	PK	Horizontal
7320.51	44.94	43.50	11.40	35.50	3.40	48.34	54.00	-5.66	AV	Horizontal
High channel										
3264.64	61.88	44.70	6.70	28.20	-9.80	52.08	74.00	-21.92	PK	Vertical
3264.64	50.35	44.70	6.70	28.20	-9.80	40.55	54.00	-13.45	AV	Vertical
3264.83	62.14	44.70	6.70	28.20	-9.80	52.34	74.00	-21.66	PK	Horizontal
3264.83	49.87	44.70	6.70	28.20	-9.80	40.07	54.00	-13.93	AV	Horizontal
4960.56	58.66	44.20	9.04	31.60	-3.56	55.10	74.00	-18.90	PK	Vertical
4960.56	50.10	44.20	9.04	31.60	-3.56	46.54	54.00	-7.46	AV	Vertical
4960.32	58.58	44.20	9.04	31.60	-3.56	55.02	74.00	-18.98	PK	Horizontal
4960.32	49.50	44.20	9.04	31.60	-3.56	45.94	54.00	-8.06	AV	Horizontal
5359.64	48.43	44.20	9.86	32.00	-2.34	46.08	74.00	-27.92	PK	Vertical
5359.64	39.98	44.20	9.86	32.00	-2.34	37.64	54.00	-16.36	AV	Vertical
5359.61	47.64	44.20	9.86	32.00	-2.34	45.30	74.00	-28.70	PK	Horizontal
5359.61	38.88	44.20	9.86	32.00	-2.34	36.53	54.00	-17.47	AV	Horizontal
7439.86	54.33	43.50	11.40	35.50	3.40	57.73	74.00	-16.27	PK	Vertical
7439.86	44.23	43.50	11.40	35.50	3.40	47.63	54.00	-6.37	AV	Vertical
7439.72	54.52	43.50	11.40	35.50	3.40	57.92	74.00	-16.08	PK	Horizontal
7439.72	44.88	43.50	11.40	35.50	3.40	48.28	54.00	-5.72	AV	Horizontal



Note:

1) Factor = Antenna Factor + Cable Loss – Pre-amplifier.

Emission Level = Reading + Factor.

2) The frequency emission of peak points that did not show above the forms are at least 20dB below the limit, the frequency emission is mainly from the environment noise.



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: $FS=RA+AF+CL-AG$

FS=Field Strength	CL=Cable Attenuation Factor (Cable Loss)
RA=Reading Amplitude	AG=Amplifier Gain
AF=Antenna Factor	

Test Result:

Temperature:	26 °C	Relative Humidity:	54%
Test Voltage:	DC 3.7V	Phase:	Horizontal
Test Mode:	Mode 1/Mode 2/Mode 3		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2402	110.56	-17.24	93.32	114	-20.68	Peak
2402	99.84	-17.24	82.6	94	-11.4	Average
2440	112.15	-17.3	94.85	114	-19.15	Peak
2440	101.43	-17.3	84.13	94	-9.87	Average
2480	107.55	-16.96	90.59	114	-23.41	Peak
2480	96.82	-16.96	79.86	94	-14.14	Average

Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

Temperature:	26 °C	Relative Humidity:	54%
Test Voltage:	DC 3.7V	Phase:	Vertical
Test Mode:	Mode 1/Mode 2/Mode 3		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2402	104.15	-17.24	86.91	114	-27.09	Peak
2402	92.77	-17.24	75.53	94	-18.47	Average
2440	99.86	-17.3	82.56	114	-31.44	Peak
2440	90.92	-17.3	73.62	94	-20.38	Average
2480	101.44	-16.96	84.48	114	-29.52	Peak
2480	92.37	-16.96	75.41	94	-18.59	Average

Remark:

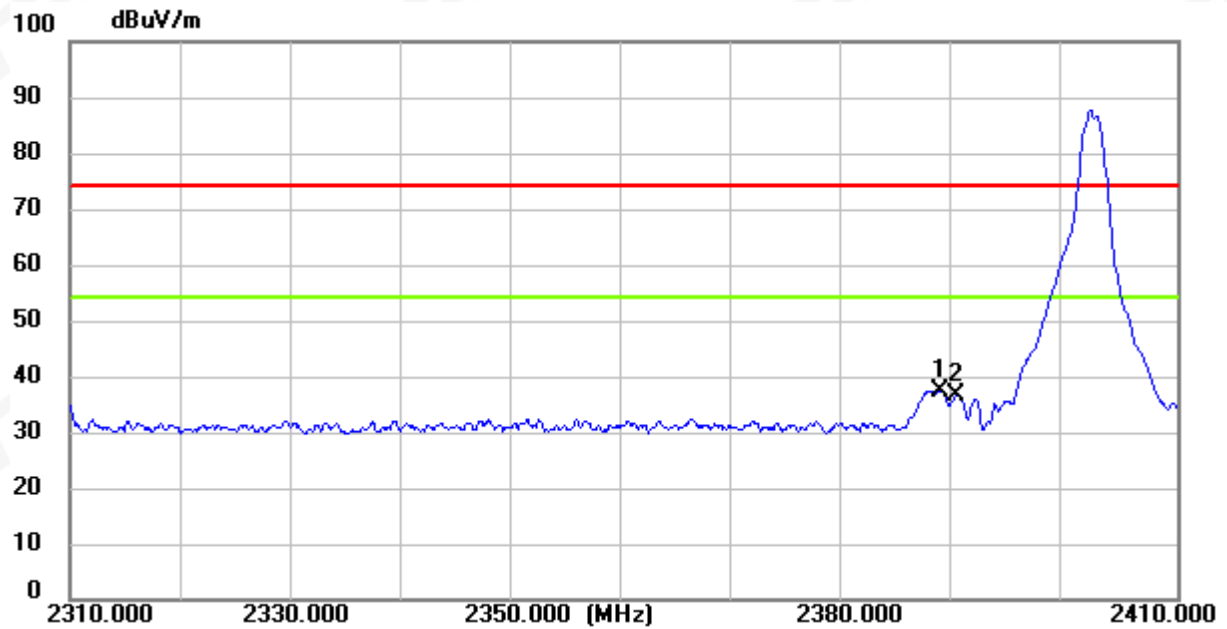
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



(Radiation Band edge)

2402MHz

Horizontal

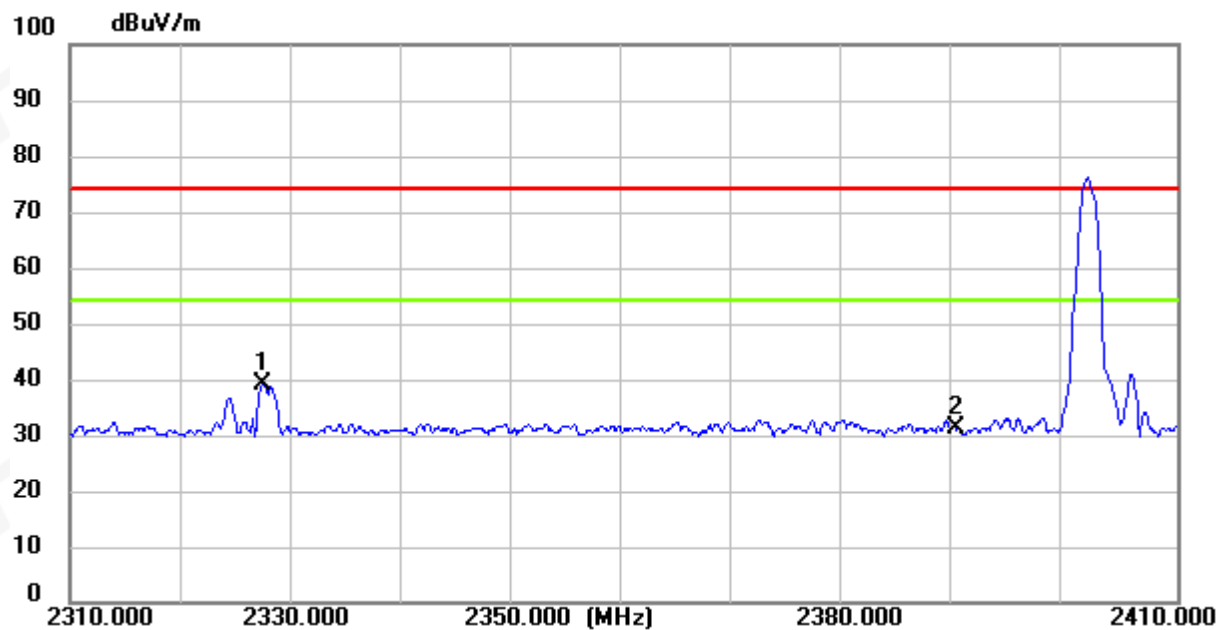


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	2388.6000	54.75	-17.27	37.48	74.00	-36.52	peak
2	2390.0000	53.75	-17.27	36.48	74.00	-37.52	peak



2402MHz

Vertical

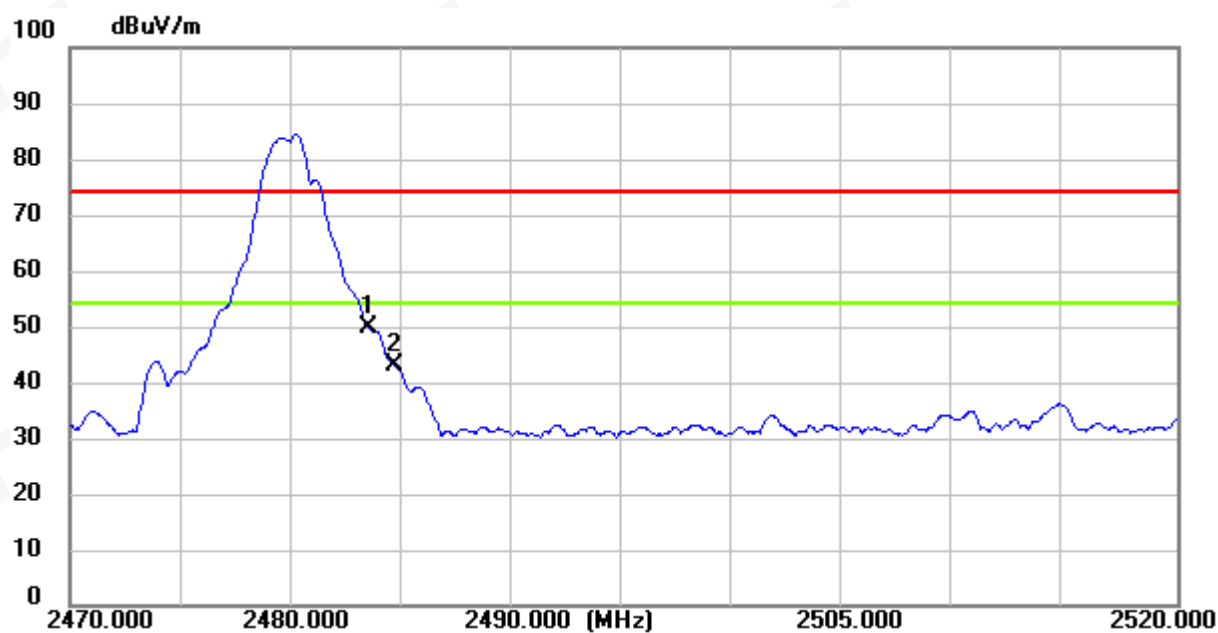


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	2327.4000	56.50	-17.40	39.10	74.00	-34.90	peak
2	2390.0000	48.40	-17.27	31.13	74.00	-42.87	peak



2480MHz

Horizontal

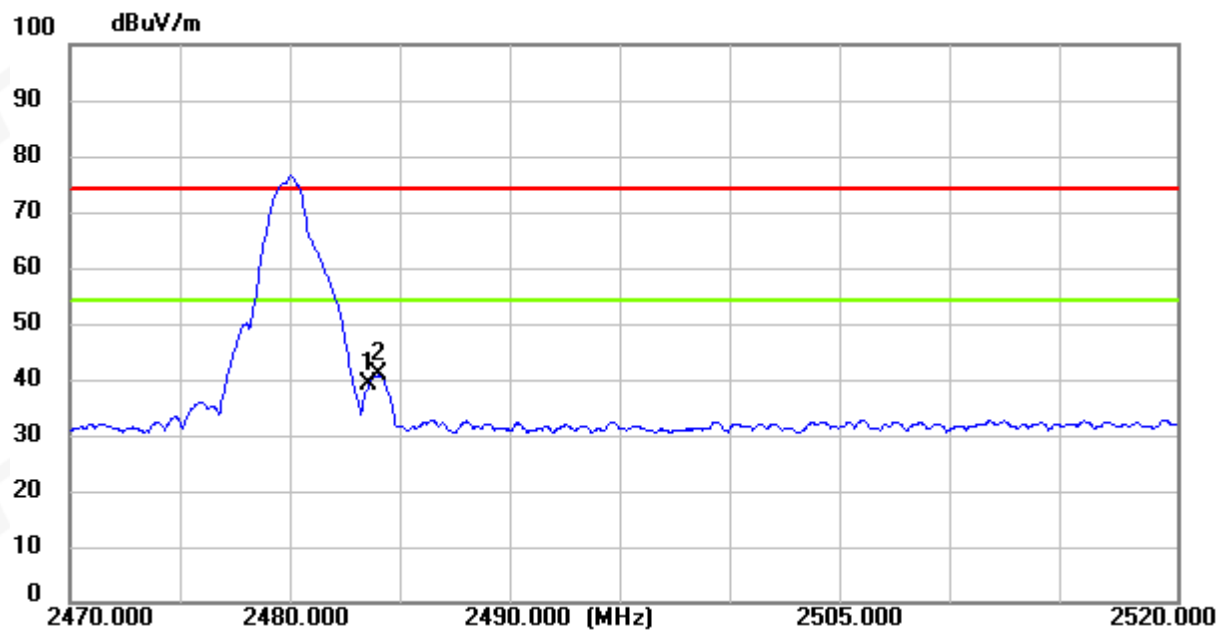


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	2483.5000	66.60	-16.91	49.69	74.00	-24.31	peak
2	2484.6500	60.06	-16.89	43.17	74.00	-30.83	peak



2480MHz

Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2483.5000	55.94	-16.91	39.03	74.00	-34.97	peak
2 *	2483.9000	57.63	-16.90	40.73	74.00	-33.27	peak



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



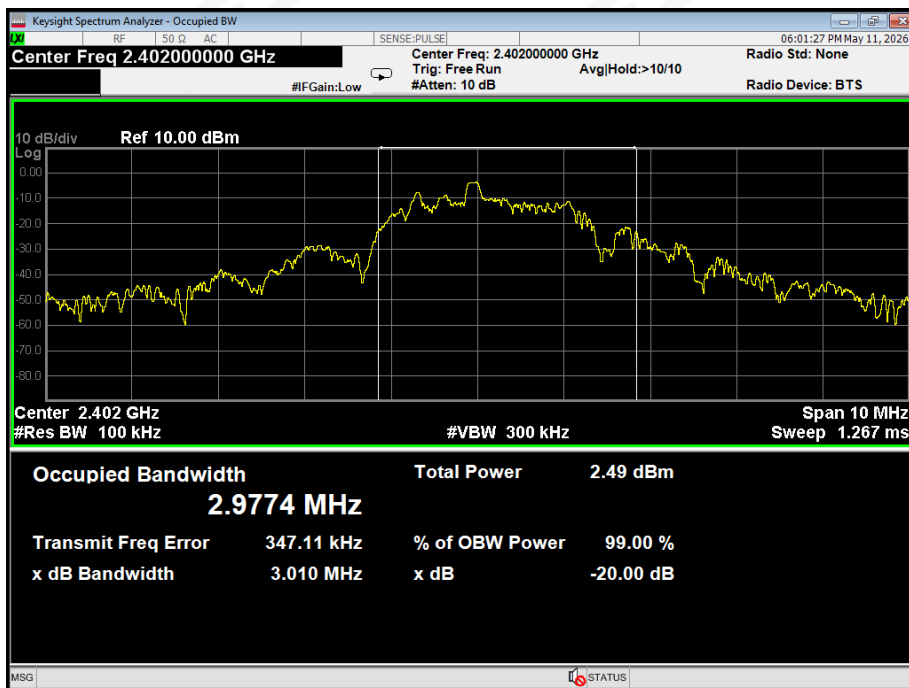
4.3 EUT OPERATION CONDITIONS

TX mode.

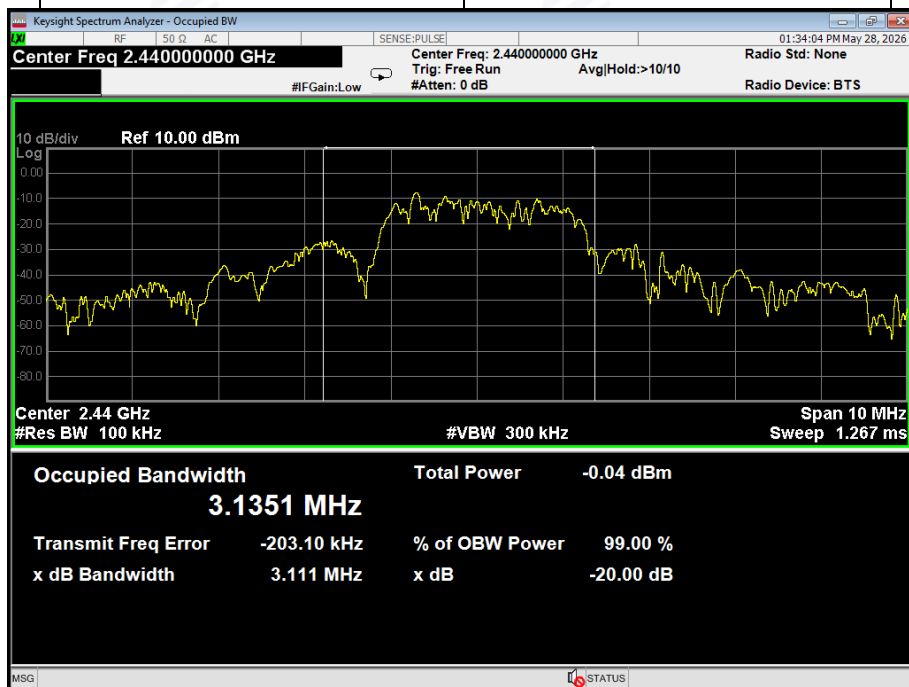


4.4 TEST RESULTS

Frequency(MHz)	20 dB Bandwidth(MHz)
2402	3.010

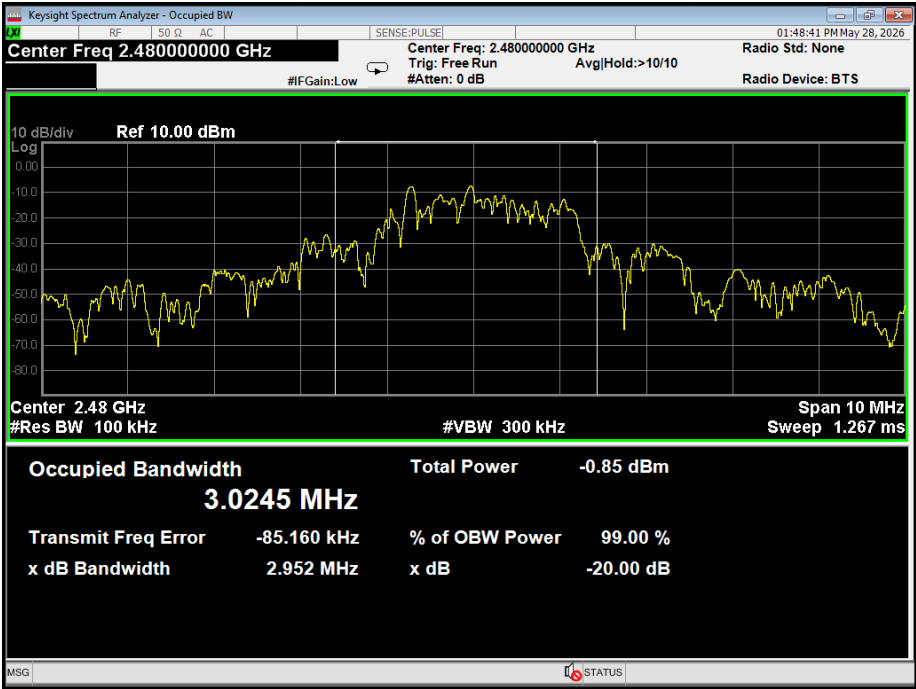


Frequency(MHz)	20 dB Bandwidth(MHz)
2440	3.111





Frequency(MHz)	20 dB Bandwidth(MHz)
2480	2.952





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 Internal antenna. It comply with the standard requirement.



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*****