

TEST REPORT

Applicant: HANSHOW PTE.LTD.
Address of Applicant: 138 ROBINSON ROAD #02-33 OXLEY TOWER
SINGAPORE(068906)
Manufacturer: HANSHOW PTE.LTD.
Address of Manufacturer: 138 ROBINSON ROAD #02-33 OXLEY TOWER
SINGAPORE(068906)
Equipment Under Test (EUT)
Product Name: electronic shelf label
Model No.: Nebular Plus-346Q-N
FCC ID: 2BPF3-NP-346Q
Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.249
Date of sample receipt: March 06, 2026
Date of Test: March 06-18, 2026
Date of report issued: March 18, 2026
Test Result : PASS *

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

Authorized Signature:

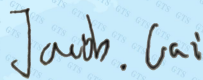


Laboratory Manager

This results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

2 Version

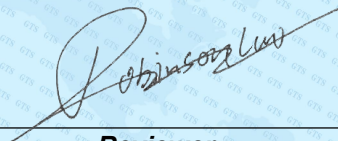
Version No.	Date	Description
00	March 18, 2026	Original

Tested By:**Date:**

March 18, 2026

Test Engineer**Prepared By:****Date:**

March 18, 2026

Project Engineer**Check By:****Date:**

March 18, 2026

Reviewer

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4 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203	Pass
AC Power Line Conducted Emission	15.207	N/A
Field strength of the fundamental signal	15.249 (a)	Pass
Spurious emissions	15.249 (a) (d)/15.209	Pass
Band edge	15.249 (d)/15.205	Pass
20dB Occupied Bandwidth	15.215 (c)	Pass

Remarks:

1. Test according to ANSI C63.10:2020.
2. Pass: The EUT complies with the essential requirements in the standard.
3. N/A: not applicable

4.1 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	$\pm 7.25 \times 10^{-8}$
2	Duty cycle	$\pm 0.37\%$
3	Occupied Bandwidth	$\pm 3\%$
4	RF conducted power	$\pm 0.75\text{dB}$
5	RF power density	$\pm 3\text{dB}$
6	Conducted Spurious emissions	$\pm 2.58\text{dB}$
7	AC Power Line Conducted Emission	$\pm 3.44\text{dB}$ (0.15MHz ~ 30MHz)
8	Radiated Spurious emission test	$\pm 3.1\text{dB}$ (9kHz-30MHz)
		$\pm 3.8039\text{dB}$ (30MHz-200MHz)
		$\pm 3.9679\text{dB}$ (200MHz-1GHz)
		$\pm 4.29\text{dB}$ (1GHz-18GHz)
		$\pm 3.30\text{dB}$ (18GHz-40GHz)
9	Temperature test	$\pm 1^\circ\text{C}$
10	Humidity test	$\pm 3\%$
11	Time	$\pm 3\%$

5 General Information

5.1 General Description of EUT

Product Name:	electronic shelf label
Model No.:	Nebular Plus-346Q-N
Test sample(s) ID:	GTS2026030060-1
Sample(s) Status	Engineered sample
Operation Frequency:	2402MHz~2480MHz
Channel Numbers:	157
Modulation Type:	GFSK
Antenna Type:	PCB Antenna
Antenna gain:	-1.21dBi(declare by applicant)
Power supply:	DC 3.0V(Size“CR2450” Lithium Battery)*2 parallel

Disclaimer statement:

1. Antenna gain information provided by the customer, and the laboratory is not responsible for its authenticity.
2. The information in this section is provided by the applicant or manufacturer, GTS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

The test frequencies are below:

Channel	Frequency
The lowest channel	2402MHz
The middle channel	2441MHz
The Highest channel	2480MHz

Operation Frequency each of channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
4	2402.0	44	2422.0	84	2442.0	124	2462.0
5	2402.5	45	2422.5	85	2442.5	125	2462.5
6	2403.0	46	2423.0	86	2443.0	126	2463.0
7	2403.5	47	2423.5	87	2443.5	127	2463.5
8	2404.0	48	2424.0	88	2444.0	128	2464.0
9	2404.5	49	2424.5	89	2444.5	129	2464.5
10	2405.0	50	2425.0	90	2445.0	130	2465.0
11	2405.5	51	2425.5	91	2445.5	131	2465.5
12	2406.0	52	2426.0	92	2446.0	132	2466.0
13	2406.5	53	2426.5	93	2446.5	133	2466.5
14	2407.0	54	2427.0	94	2447.0	134	2467.0
15	2407.5	55	2427.5	95	2447.5	135	2467.5
16	2408.0	56	2428.0	96	2448.0	136	2468.0
17	2408.5	57	2428.5	97	2448.5	137	2468.5
18	2409.0	58	2429.0	98	2449.0	138	2469.0
19	2409.5	59	2429.5	99	2449.5	139	2469.5
20	2410.0	60	2430.0	100	2450.0	140	2470.0
21	2410.5	61	2430.5	101	2450.5	141	2470.5
22	2411.0	62	2431.0	102	2451.0	142	2471.0
23	2411.5	63	2431.5	103	2451.5	143	2471.5
24	2412.0	64	2432.0	104	2452.0	144	2472.0
25	2412.5	65	2432.5	105	2452.5	145	2472.5
26	2413.0	66	2433.0	106	2453.0	146	2473.0
27	2413.5	67	2433.5	107	2453.5	147	2473.5
28	2414.0	68	2434.0	108	2454.0	148	2474.0
29	2414.5	69	2434.5	109	2454.5	149	2474.5
30	2415.0	70	2435.0	110	2455.0	150	2475.0
31	2415.5	71	2435.5	111	2455.5	151	2475.5
32	2416.0	72	2436.0	112	2456.0	152	2476.0
33	2416.5	73	2436.5	113	2456.5	153	2476.5
34	2417.0	74	2437.0	114	2457.0	154	2477.0
35	2417.5	75	2437.5	115	2457.5	155	2477.5
36	2418.0	76	2438.0	116	2458.0	156	2478.0
37	2418.5	77	2438.5	117	2458.5	157	2478.5
38	2419.0	78	2439.0	118	2459.0	158	2479.0
39	2419.5	79	2439.5	119	2459.5	159	2479.5
40	2420.0	80	2440.0	120	2460.0	160	2480.0
41	2420.5	81	2440.5	121	2460.5		
42	2421.0	82	2441.0	122	2461.0		
43	2421.5	83	2441.5	123	2461.5		

5.2 Test mode

Transmitting mode	Keep the EUT in continuously transmitting mode.
Remark: New battery is used during all test.	

Per-test mode.

We have verified the construction and function in typical operation, The EUT was placed on three different polar directions; i.e. X axis, Y axis, Z axis. which was shown in this test report (Only show the worst case:Y axis) and defined as follows:

Axis	X	Y	Z
Field Strength(dBuV/m)	83.96	84.70	84.38

5.3 Description of Support Units

None.

5.4 Deviation from Standards

None.

5.5 Abnormalities from Standard Conditions

None.

5.6 Test Facility

The test facility is recognized, certified, or accredited by the following organizations: ● FCC—Registration No.: 381383 Designation Number: CN5029 Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files. ● ISED—Registration No.: 9079A CAB identifier: CN0091 The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of ISED for radio equipment testing ● NVLAP (LAB CODE:600179-0) Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP).
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5.7 Test Location

All tests were performed at:
Global United Technology Services Co., Ltd. Address: No. 123- 128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102 Tel: 0755-27798480 Fax: 0755-27798960

5.8 Additional Instructions

Test Software	Special test command provided by manufacturer
Power level setup	Default

6 Test Instruments list

Radiated Emission:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	Apr. 11, 2025	Apr. 10, 2026
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	Apr. 12, 2025	Apr. 11, 2026
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9168	GTS640	Apr. 12, 2025	Apr. 11, 2026
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	Apr. 11, 2025	Apr. 10, 2026
6	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	Jul. 11, 2025	Jul 10, 2026
7	Loop Antenna	ZHINAN	ZN30900A	GTS534	Nov.22, 2025	Nov.21, 2026
8	Broadband Preamplifier	SCHWARZBECK	BBV9718	GTS535	Apr. 11, 2025	Apr. 10, 2026
9	Amplifier(1GHz-26.5GHz)	HP	8449B	GTS601	Apr. 11, 2025	Apr. 10, 2026
10	Horn Antenna (18GH-40GHz)	Schwarzbeck	BBHA 9170	GTS691	Apr. 11, 2025	Apr. 10, 2026
11	FSV-Signal Analyzer (10Hz-40GHz)	Keysight	FSV-40-N	GTS666	Mar. 10, 2026	Mar. 09, 2027
12	Amplifier	/	LNA-1000-30S	GTS650	Apr. 11, 2025	Apr. 10, 2026
13	CDNE M2+M3-16A	HCT	30MHz-300MHz	GTS692	Nov. 24, 2025	Nov. 23, 2026
14	Wideband Amplifier	/	WDA-01004000-15P35	GTS602	Apr. 11, 2025	Apr. 10, 2026
15	Thermo meter	JINCHUANG	GSP-8A	GTS643	Apr. 15, 2025	Apr. 14, 2026
16	RE cable 1	GTS	N/A	GTS675	Jul. 11, 2025	Jul. 10, 2026
17	RE cable 2	GTS	N/A	GTS676	Jul. 11, 2025	Jul. 10, 2026
18	RE cable 3	GTS	N/A	GTS677	Jul. 11, 2025	Jul. 10, 2026
19	RE cable 4	GTS	N/A	GTS678	Jul. 11, 2025	Jul. 10, 2026
20	RE cable 5	GTS	N/A	GTS679	Jul. 11, 2025	Jul. 10, 2026
21	RE cable 6	GTS	N/A	GTS680	Jul. 11, 2025	Jul. 10, 2026
22	RE cable 7	GTS	N/A	GTS681	Jul. 11, 2025	Jul. 10, 2026
23	RE cable 8	GTS	N/A	GTS682	Jul. 11, 2025	Jul. 10, 2026
24	EMI Test Software	AUDIX	E3-6.100614a	GTS725	N/A	N/A

RF Conducted Test:

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	MXA Signal Analyzer	Agilent	N9020A	GTS566	Apr. 11, 2025	Apr. 10, 2026
2	EMI Test Receiver	R&S	ESCI 7	GTS552	Apr. 12, 2025	Apr. 11, 2026
3	PSA Series Spectrum Analyzer	Agilent	E4440A	GTS536	Apr. 11, 2025	Apr. 10, 2026
4	MXG vector Signal Generator	Agilent	N5182A	GTS567	Apr. 11, 2025	Apr. 10, 2026
5	ESG Analog Signal Generator	Agilent	E4428C	GTS568	Apr. 11, 2025	Apr. 10, 2026
6	Wideband Power Meter	Keysight	N1924A	GTS673	Apr. 11, 2025	Apr. 10, 2026
7	USB RF Power Sensor	DARE	RPR3006W	GTS569	Apr. 11, 2025	Apr. 10, 2026
8	RF Switch Box	Shongyi	RFSW3003328	GTS571	Apr. 11, 2025	Apr. 10, 2026
9	Programmable Constant Temp & Humi Test Chamber	WEWON	WHTH-150L-40-880	GTS572	Apr. 11, 2025	Apr. 10, 2026
10	Thermo meter	JINCHUANG	GSP-8A	GTS641	Apr. 15, 2025	Apr. 14, 2026
11	EXA Signal Analyzer	Keysight	N9010B	MY60241168	Nov. 01, 2025	Oct. 31, 2026

General used equipment:

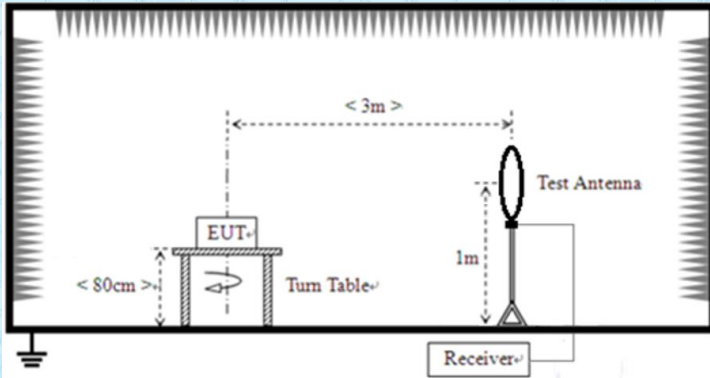
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Barometer	KUMAO	SF132	GTS647	Jul. 16, 2025	Jul. 15, 2026

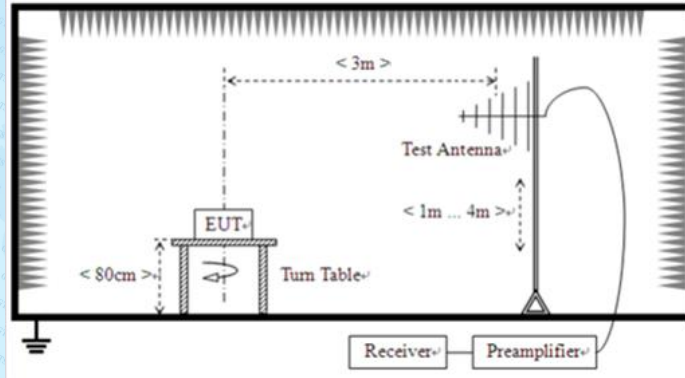
7 Test results and Measurement Data

7.1 Antenna requirement

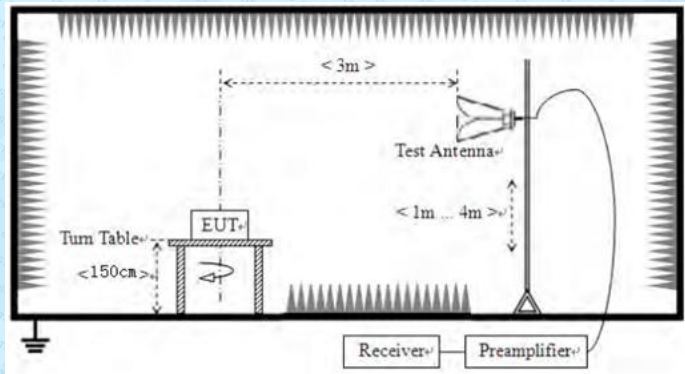
Standard requirement:	FCC Part15 C Section 15.203
15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.	
EUT Antenna: The antenna is PCB antenna, reference to the appendix II for details.	

7.2 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209				
Test Method:	ANSI C63.10:2020				
Test Frequency Range:	9kHz to 25GHz				
Test site:	Measurement Distance: 3m				
Receiver setup:	Frequency	Detector	RBW	VBW	Remark
	9kHz-150kHz	Quasi-peak	200Hz	300Hz	Quasi-peak Value
	150kHz-30MHz	Quasi-peak	9kHz	10kHz	Quasi-peak Value
	30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
		Peak	1MHz	10Hz	Average Value
Limit: (Field strength of the fundamental signal)	Frequency		Limit (dBuV/m @3m)		Remark
	2400MHz-2483.5MHz		94.00		Average Value
			114.00		Peak Value
Limit: (Spurious Emissions)	Frequency		Limit (uV/m)		Remark
	0.009MHz-0.490MHz		2400/F(kHz) @300m		Quasi-peak Value
	0.490MHz-1.705MHz		24000/F(kHz) @30m		Quasi-peak Value
	1.705MHz-30.0MHz		30 @30m		Quasi-peak Value
	30MHz-88MHz		100 @3m		Quasi-peak Value
	88MHz-216MHz		150 @3m		Quasi-peak Value
	216MHz-960MHz		200 @3m		Quasi-peak Value
	960MHz-1GHz		500 @3m		Quasi-peak Value
	Above 1GHz		500 @3m		Average Value
			5000 @3m		Peak Value
Limit: (band edge)	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.				
Test setup:	For radiated emissions from 9kHz to 30MHz  For radiated emissions from 30MHz to1GHz				



For radiated emissions above 1GHz



Test Procedure:

1. The EUT was placed on the top of a rotating table (0.8m for below 1GHz and 1.5 meters for above 1GHz) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Test Instruments:

Refer to section 6.0 for details

Test mode:

Refer to section 5.2 for details

Test environment:

Temp.:	25 °C	Humid.:	52%	Press.:	1012mbar
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Test voltage:

DC 3V

Test results:

Pass

Measurement data:

7.2.1 Field Strength of The Fundamental Signal

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2402.00	90.38	27.43	2.93	38.88	81.86	114.00	-32.14	Vertical
2402.00	85.67	27.43	2.93	38.88	77.15	114.00	-36.85	Horizontal
2441.00	93.17	27.55	2.96	38.98	84.70	114.00	-29.30	Vertical
2441.00	87.33	27.55	2.96	38.98	78.86	114.00	-35.14	Horizontal
2480.00	90.74	27.64	2.99	39.05	82.32	114.00	-31.68	Vertical
2480.00	83.11	27.64	2.99	39.05	74.69	114.00	-39.31	Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2402.00	76.82	27.43	2.93	38.88	68.30	94.00	-25.70	Vertical
2402.00	74.28	27.43	2.93	38.88	65.76	94.00	-28.24	Horizontal
2441.00	79.33	27.55	2.96	38.98	70.86	94.00	-23.14	Vertical
2441.00	75.55	27.55	2.96	38.98	67.08	94.00	-26.92	Horizontal
2480.00	78.48	27.64	2.99	39.05	70.06	94.00	-23.94	Vertical
2480.00	76.80	27.64	2.99	39.05	68.38	94.00	-25.62	Horizontal

Note: For fundamental frequency , RBW>20dB BW, VBW>=RBW, PK detector for PK value, RMS detector for AV value

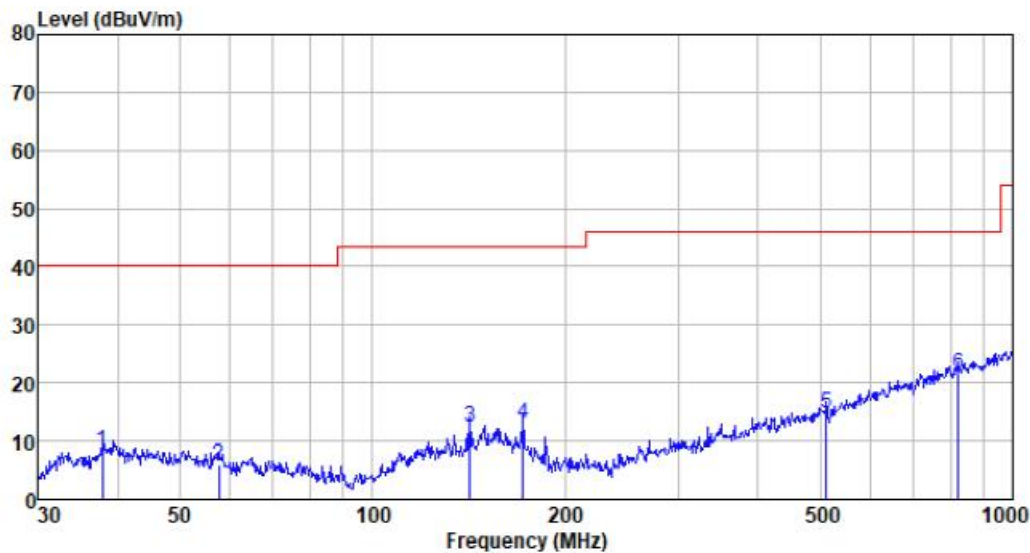
7.2.2 Spurious emissions

■ Below 30MHz

The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and according to 15.31(o), the test result no need to reported.

■ Below 1GHz

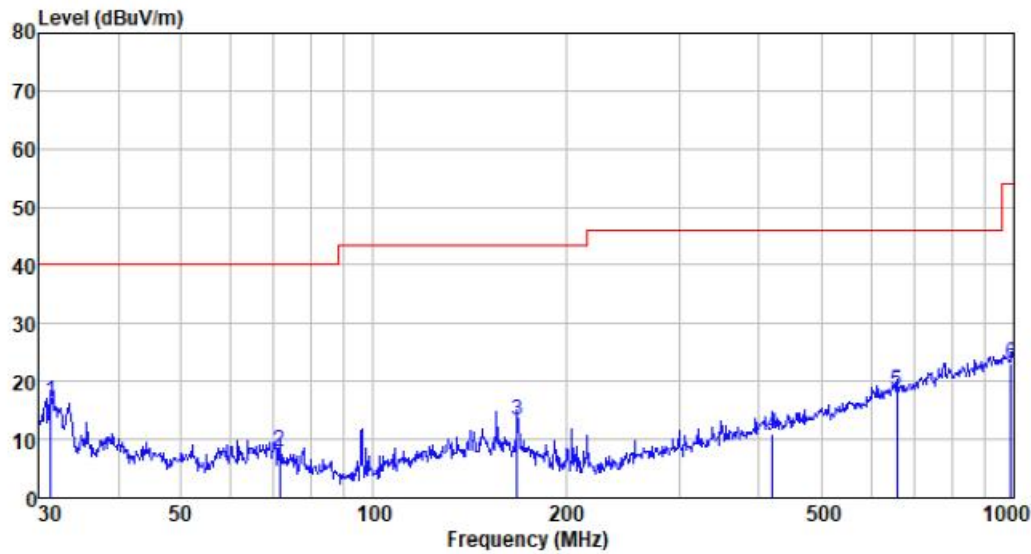
Pre-scan all test modes, found worst case at 2441MHz, and so only show the test result of it Horizontal



Remarks:

Final level (dBuV/m) = Reading level (dBuV) + Antenna factor (dB/m) + Cable loss (dB) - Preamp Factor (dB)

Vertical



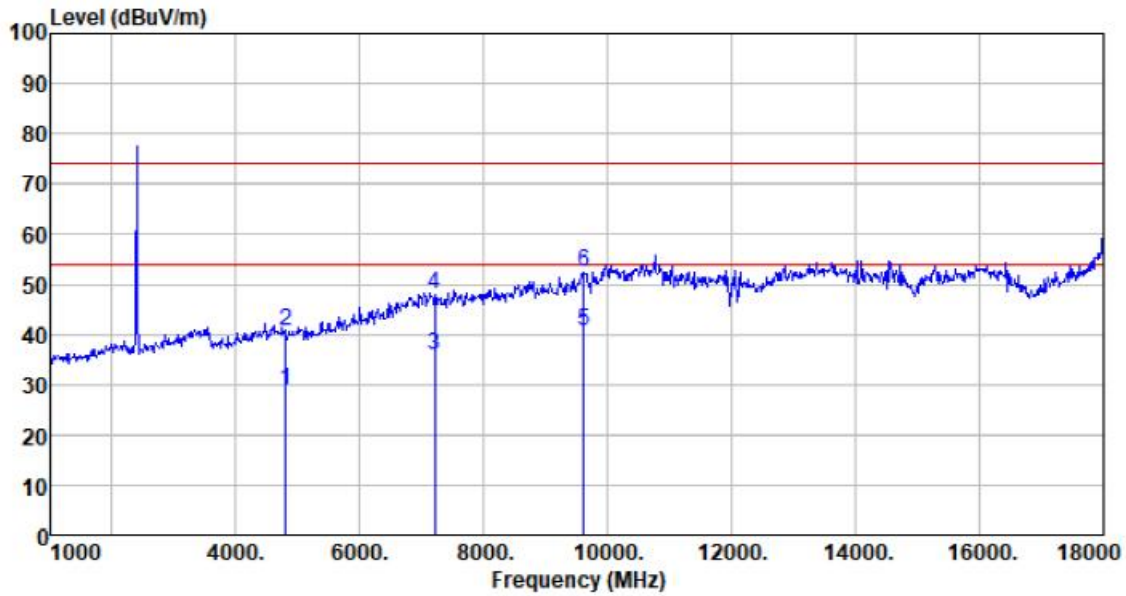
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	Final level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
31.399	36.29	12.50	1.23	33.59	16.43	40.00	-23.57	QP
71.330	29.00	10.77	1.74	33.55	7.96	40.00	-32.04	QP
167.824	30.33	13.72	2.58	33.45	13.18	43.50	-30.32	QP
420.580	24.30	15.31	4.24	33.00	10.85	46.00	-35.15	QP
656.530	25.47	20.03	5.34	32.49	18.35	46.00	-27.65	QP
989.536	23.66	23.90	6.64	31.15	23.05	54.00	-30.95	QP

Remarks:

Final level(dBuV/m) = Reading level(dBuV) + Antenna factor(dB/m) + Cable loss(dB) - Preamp Factor(dB)

■ Above 1GHz

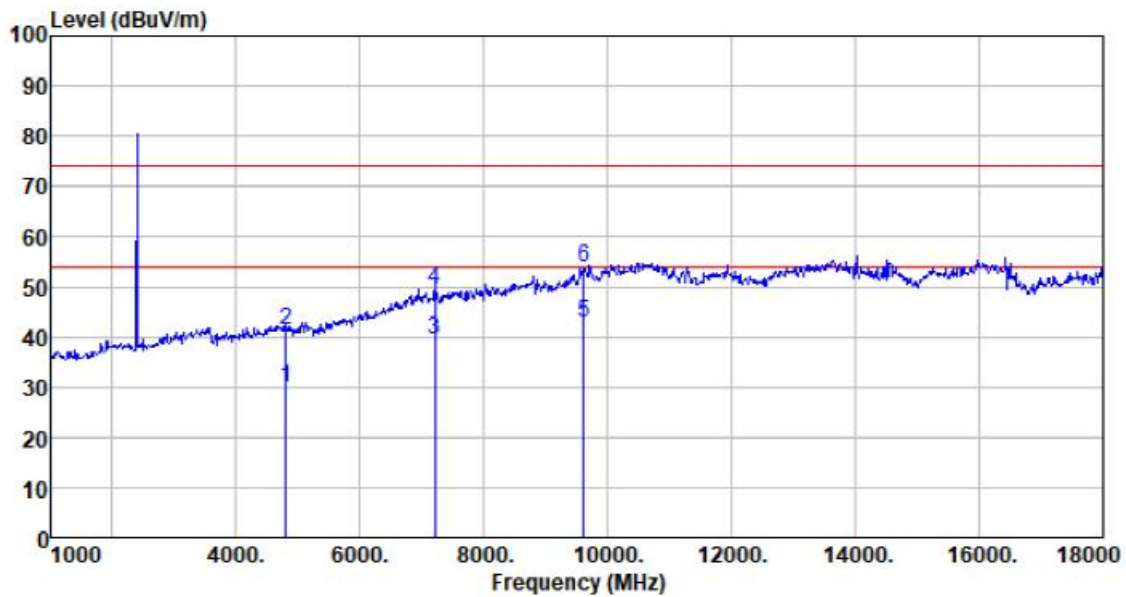
Test channel:	Lowest	polarization	Horizontal
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Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamplifier factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4804.000	29.45	32.01	6.01	38.54	28.93	54.00	-25.07	Average
4804.000	41.13	32.01	6.01	38.54	40.61	74.00	-33.39	Peak
7206.000	30.73	36.21	7.92	39.14	35.72	54.00	-18.28	Average
7206.000	42.96	36.21	7.92	39.14	47.95	74.00	-26.05	Peak
9608.000	27.59	38.20	14.87	40.22	40.44	54.00	-13.56	Average
9608.000	39.59	38.20	14.87	40.22	52.44	74.00	-21.56	Peak

Remarks: level = Reading level + Antenna factor + Cable loss - Preamplifier Factor

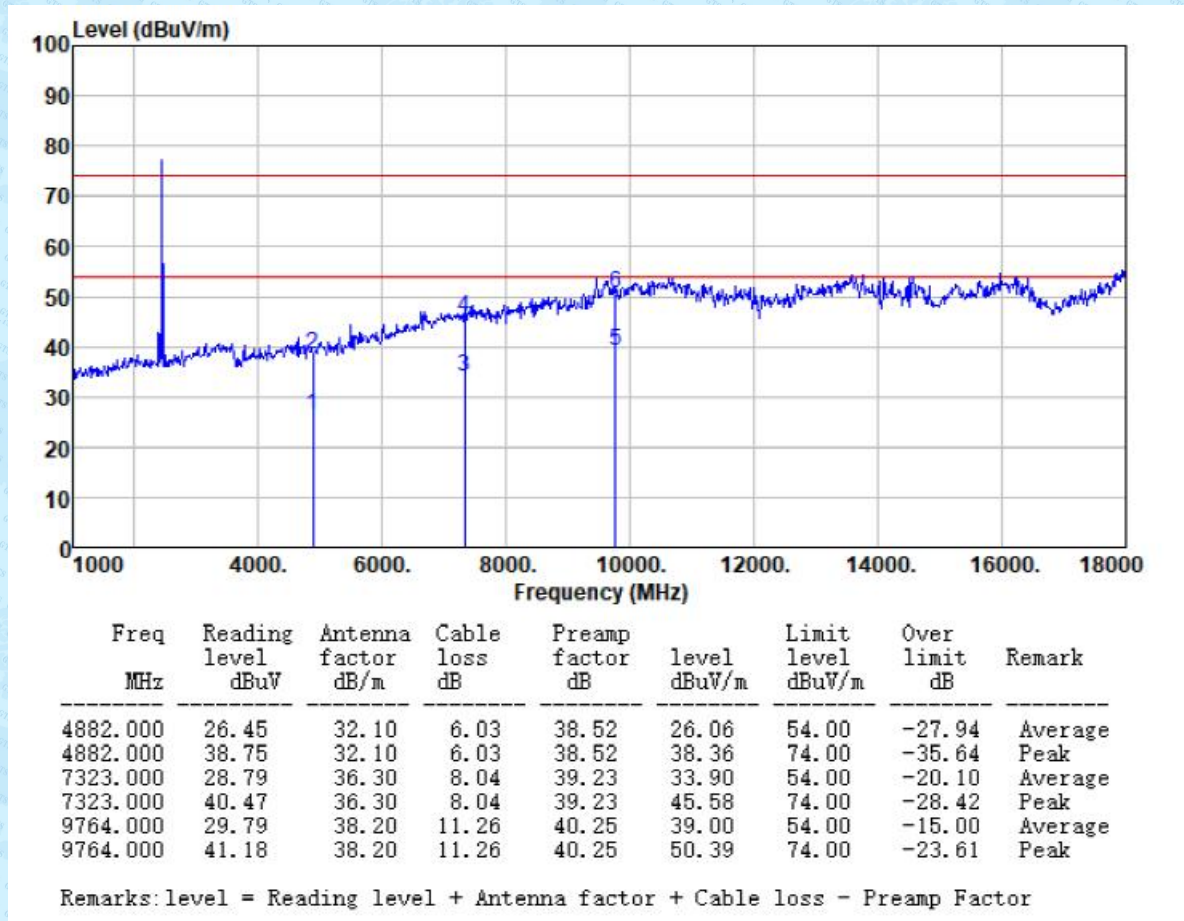
Test channel:	Lowest	polarization	Vertical
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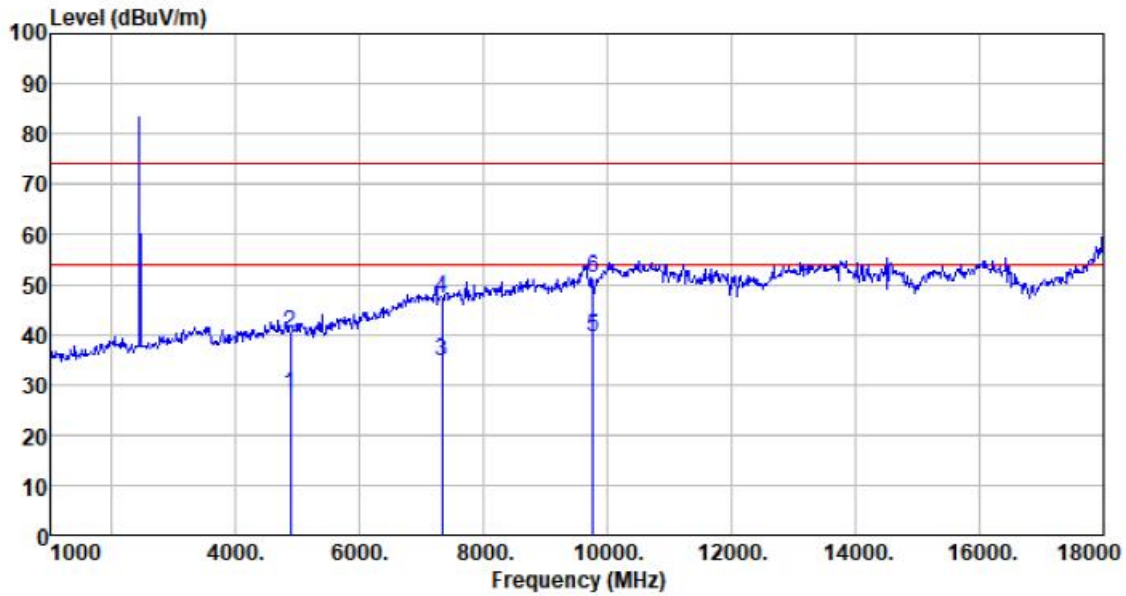
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4804.000	30.46	32.01	6.01	38.54	29.94	54.00	-24.06	Average
4804.000	41.80	32.01	6.01	38.54	41.28	74.00	-32.72	Peak
7206.000	34.44	36.21	7.92	39.14	39.43	54.00	-14.57	Average
7206.000	44.42	36.21	7.92	39.14	49.41	74.00	-24.59	Peak
9608.000	29.80	38.20	14.87	40.22	42.65	54.00	-11.35	Average
9608.000	40.88	38.20	14.87	40.22	53.73	74.00	-20.27	Peak

Remarks: level = Reading level + Antenna factor + Cable loss - Preamp Factor

Test channel:	Middle	polarization	Horizontal
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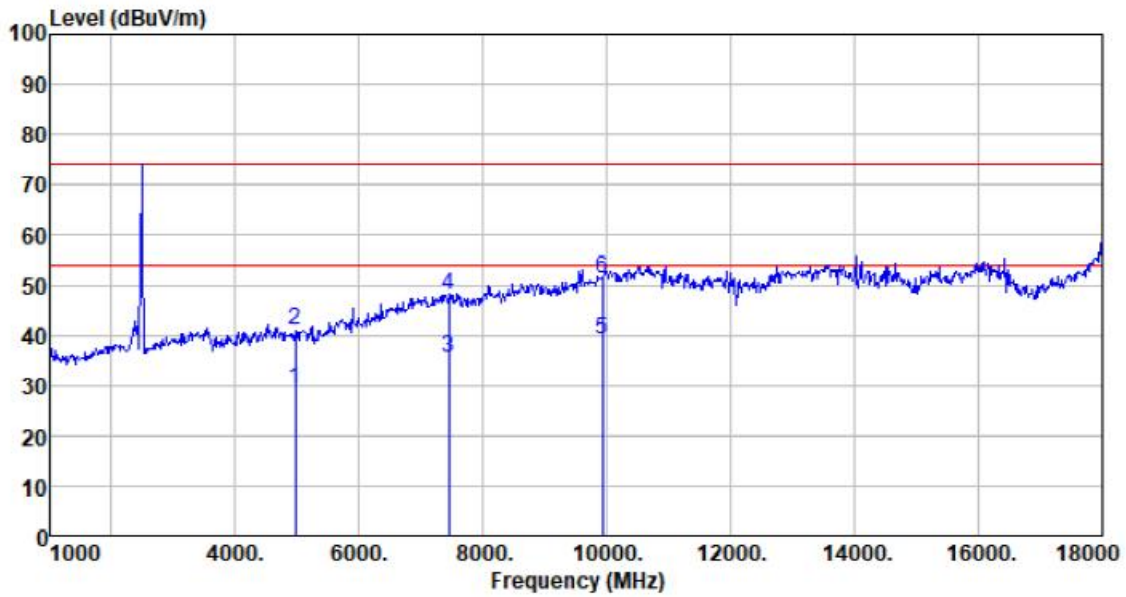
Test channel:	Middle	polarization	Vertical
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Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4882.000	28.38	32.10	6.03	38.52	27.99	54.00	-26.01	Average
4882.000	40.73	32.10	6.03	38.52	40.34	74.00	-33.66	Peak
7323.000	29.49	36.30	8.04	39.23	34.60	54.00	-19.40	Average
7323.000	41.99	36.30	8.04	39.23	47.10	74.00	-26.90	Peak
9764.000	30.16	38.20	11.26	40.25	39.37	54.00	-14.63	Average
9764.000	42.16	38.20	11.26	40.25	51.37	74.00	-22.63	Peak

Remarks: level = Reading level + Antenna factor + Cable loss - Preamp Factor

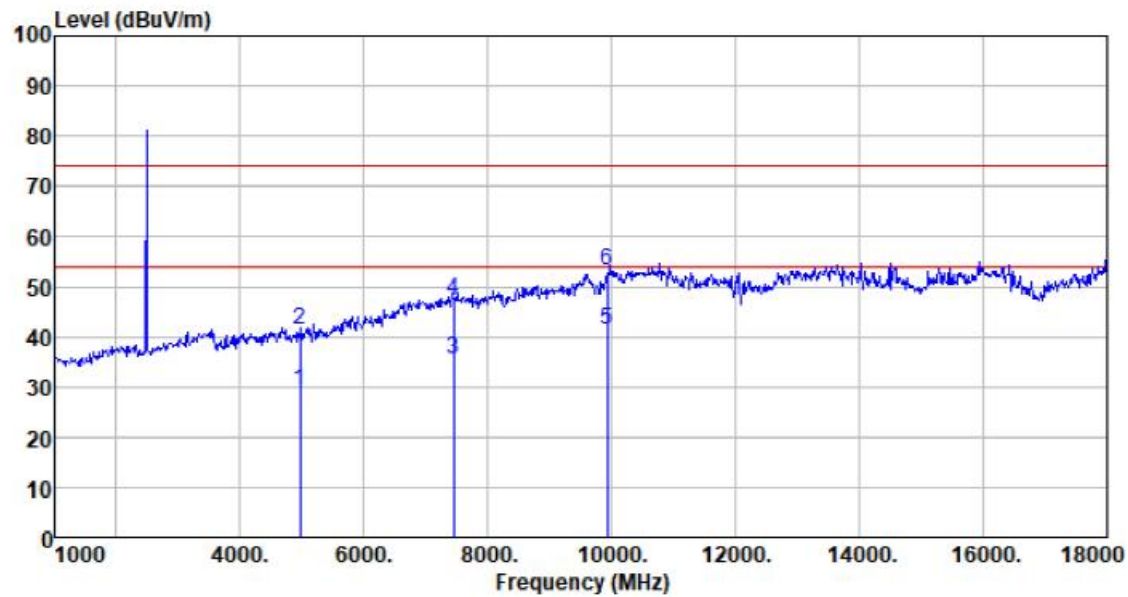
Test channel:	Highest	polarization	Horizontal
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Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4960.000	29.51	32.20	6.05	38.51	29.25	54.00	-24.75	Average
4960.000	41.26	32.20	6.05	38.51	41.00	74.00	-33.00	Peak
7440.000	30.35	36.30	8.16	39.31	35.50	54.00	-18.50	Average
7440.000	42.85	36.30	8.16	39.31	48.00	74.00	-26.00	Peak
9920.000	30.52	38.24	10.76	40.28	39.24	54.00	-14.76	Average
9920.000	42.42	38.24	10.76	40.28	51.14	74.00	-22.86	Peak

Remarks: level = Reading level + Antenna factor + Cable loss - Preamp Factor

Test channel:	Highest	polarization	Vertical
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Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4960.000	29.54	32.20	6.05	38.51	29.28	54.00	-24.72	Average
4960.000	41.44	32.20	6.05	38.51	41.18	74.00	-32.82	Peak
7440.000	30.35	36.30	8.16	39.31	35.50	54.00	-18.50	Average
7440.000	42.16	36.30	8.16	39.31	47.31	74.00	-26.69	Peak
9920.000	32.55	38.24	10.76	40.28	41.27	54.00	-12.73	Average
9920.000	44.57	38.24	10.76	40.28	53.29	74.00	-20.71	Peak

Remarks: level = Reading level + Antenna factor + Cable loss - Preamp Factor

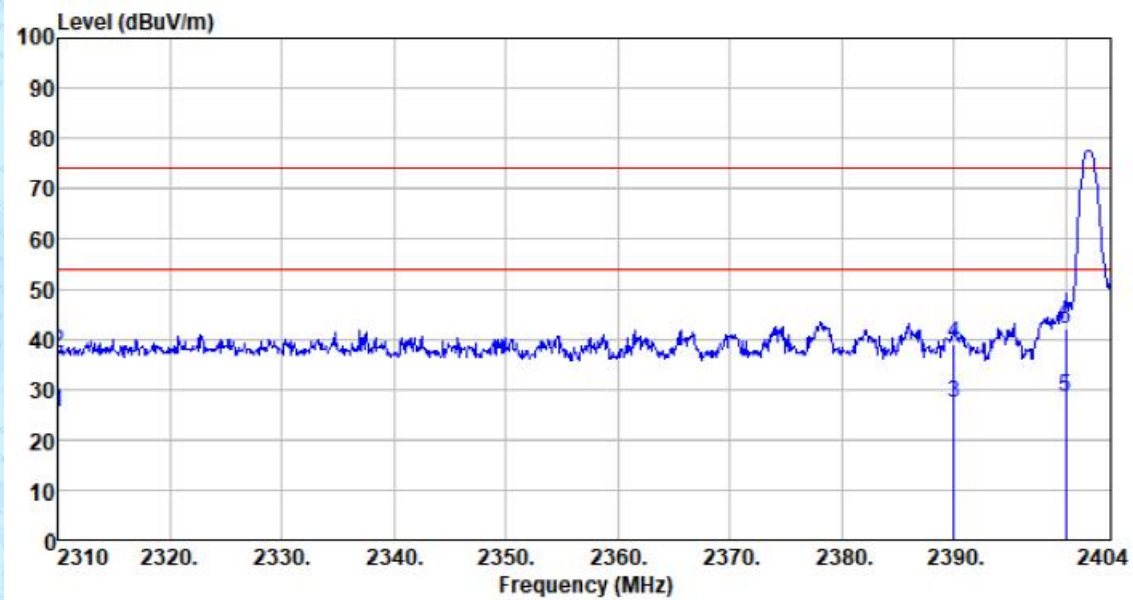
Remarks:

1. Final Level(dBuV/m)=Reading level(dBuV)+Antenna Factor(dB/m)+Cable Loss(dB)-Preamp Factor(dB)
2. The emission levels of other frequencies are very lower than the limit and not show in test report.
3. For above 18GHz, no emission found.
4. If the average limit is met when using a Peak detector, the EUT shall be deemed to meet both peak and average limits. And measurement with the average detector is unnecessary.

7.2.3 Bandedge emissions

All of the restriction bands were tested, and only the data of worst case was exhibited.

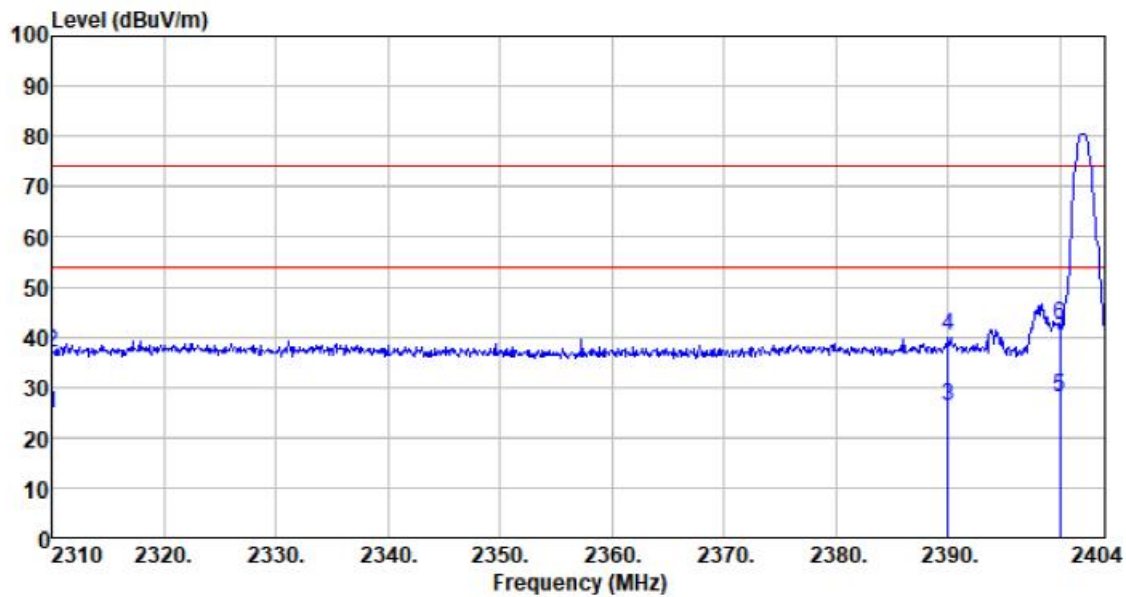
Test channel:	Lowest	polarization	Horizontal
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Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2310.000	33.37	27.00	4.13	39.14	25.36	54.00	-28.64	Average
2310.000	45.18	27.00	4.13	39.14	37.17	74.00	-36.83	Peak
2390.000	35.49	27.08	4.17	39.34	27.40	54.00	-26.60	Average
2390.000	47.12	27.08	4.17	39.34	39.03	74.00	-34.97	Peak
2400.000	36.39	27.10	4.18	39.36	28.31	54.00	-25.69	Average
2400.000	50.01	27.10	4.18	39.36	41.93	74.00	-32.07	Peak

Remarks: level = Reading level + Antenna factor + Cable loss - Preamp Factor

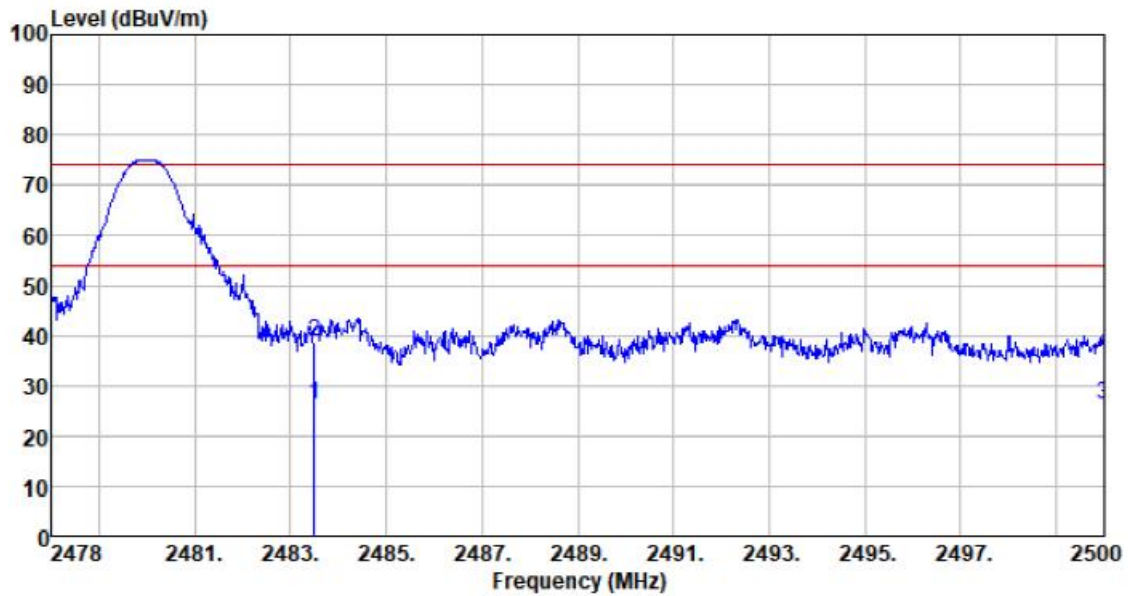
Test channel:	Lowest	polarization	Vertical
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Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2310.000	32.62	27.00	4.13	39.14	24.61	54.00	-29.39	Average
2310.000	44.91	27.00	4.13	39.14	36.90	74.00	-37.10	Peak
2390.000	34.23	27.08	4.17	39.34	26.14	54.00	-27.86	Average
2390.000	48.18	27.08	4.17	39.34	40.09	74.00	-33.91	Peak
2400.000	36.26	27.10	4.18	39.36	28.18	54.00	-25.82	Average
2400.000	50.65	27.10	4.18	39.36	42.57	74.00	-31.43	Peak

Remarks: level = Reading level + Antenna factor + Cable loss - Preamp Factor

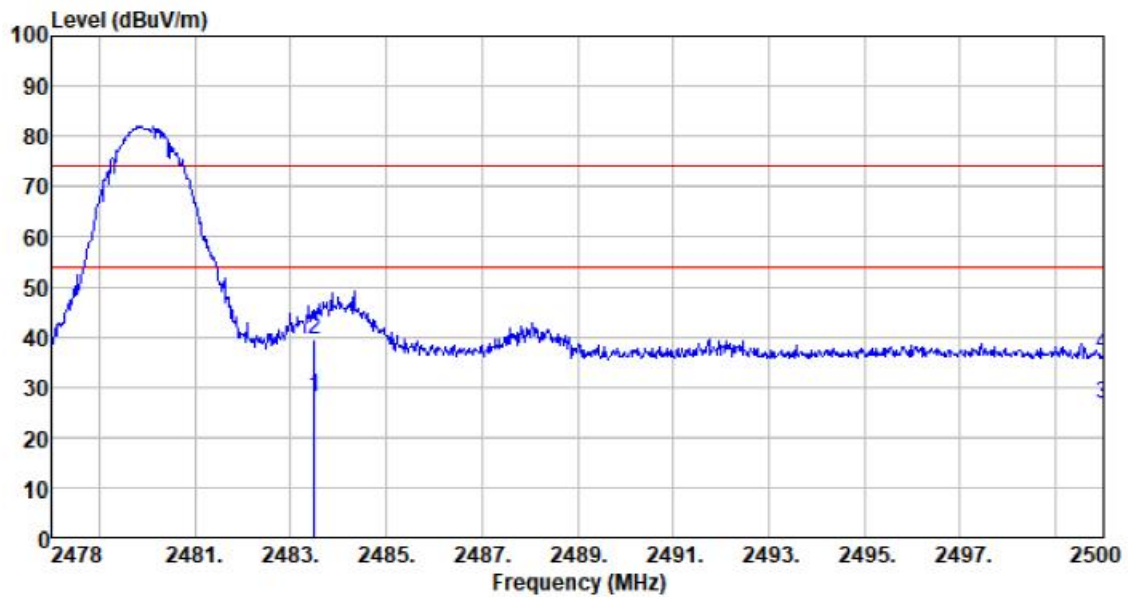
Test channel:	Highest	polarization	Horizontal
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Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2483.500	34.32	27.27	4.08	39.56	26.11	54.00	-27.89	Average
2483.500	46.95	27.27	4.08	39.56	38.74	74.00	-35.26	Peak
2500.000	34.28	27.30	4.06	39.60	26.04	54.00	-27.96	Average
2500.000	44.26	27.30	4.06	39.60	36.02	74.00	-37.98	Peak

Remarks: level = Reading level + Antenna factor + Cable loss - Preamp Factor

Test channel:	Highest	polarization	Vertical
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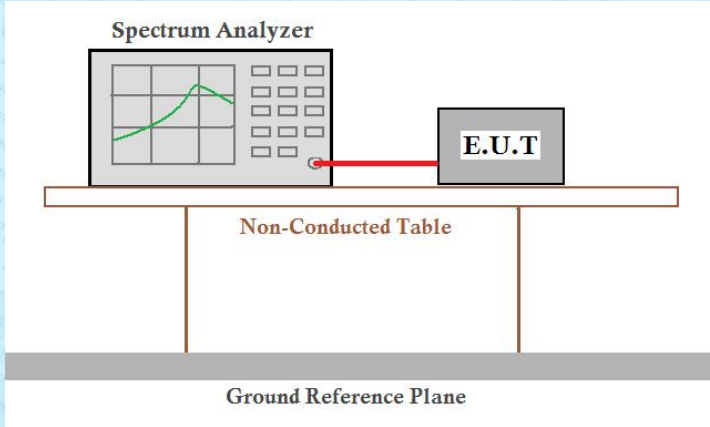
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2483.500	36.13	27.27	4.08	39.56	27.92	54.00	-26.08	Average
2483.500	47.64	27.27	4.08	39.56	39.43	74.00	-34.57	Peak
2500.000	34.63	27.30	4.06	39.60	26.39	54.00	-27.61	Average
2500.000	44.63	27.30	4.06	39.60	36.39	74.00	-37.61	Peak

Remarks: level = Reading level + Antenna factor + Cable loss - Preamp Factor

Remark:

- Final Level(dBuV/m)=Reading level(dBuV)+Antenna Factor(dB/m)+Cable Loss(dB)-Preamp Factor(dB)
- For above 18GHz, no emission found

7.3 20dB Occupy Bandwidth

Test Requirement:	FCC Part15 C Section 15.249/15.215
Test Method:	ANSI C63.10:2020
Limit:	Operation Frequency range 2400MHz~2483.5MHz
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T (Equipment Under Test) via a red cable. The setup is on a Non-Conducted Table, which is placed on a Ground Reference Plane.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Measurement Data

Test channel	20dB bandwidth(MHz)	Result
Lowest	1.012	Pass
Middle	1.013	Pass
Highest	1.015	Pass

Test plot as follows:



Lowest channel



Middle channel



Highest channel

8 Test Setup Photo

Reference to the **appendix I** for details.

9 EUT Constructional Details

Reference to the **appendix II** for details.

-----End-----