

TEST REPORT

Applicant: Sinco Intelligent Technology Co., Ltd.

Address of Applicant: Room 805-807, No. 17, Wenheng Street, Sanzao Town, Jinwan District, Zhuhai City, China

Manufacturer: Sinco Intelligent Technology Co., Ltd.

Address of Manufacturer: Room 805-807, No. 17, Wenheng Street, Sanzao Town, Jinwan District, Zhuhai City, China

Equipment Under Test (EUT)

Product Name: 5.8GHz Wireless Audio Transmission System

Main Model : SWS11

Serial Model : WP-11, WF-08, SL-WG100, ZW-60, WJ25, WS-300

Trade mark : M-VAVE, SL TECH, EROK, CASON, Zachary, NEW BEE, Pogolab

FCC ID: 2ARCP-SWS11

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.249

Date of sample receipt: November 07, 2025

Date of Test: November 07, 2025~January 08, 2026

Date of report issued: January 08, 2026

Test Result : PASS *

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

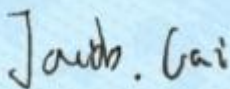
Authorized Signature:



2 Version

Version No.	Date	Description
00	January 08, 2026	Original

Tested By:

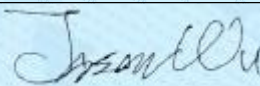


Date:

January 08, 2026

Test Engineer

Prepared By:



Date:

January 08, 2026

Project Engineer

Check By:



Date:

January 08, 2026

Reviewer

3 Contents

	Page
1 COVER PAGE.....	1
2 VERSION	2
3 CONTENTS	3
4 TEST SUMMARY	4
4.1 MEASUREMENT UNCERTAINTY	4
5 GENERAL INFORMATION	5
5.1 GENERAL DESCRIPTION OF EUT	5
5.2 TEST MODE	8
5.3 DESCRIPTION OF SUPPORT UNITS	8
5.4 DEVIATION FROM STANDARDS	8
5.5 ABNORMALITIES FROM STANDARD CONDITIONS	8
5.6 TEST FACILITY	8
5.7 TEST LOCATION	8
5.8 ADDITIONAL INSTRUCTIONS	8
6 TEST INSTRUMENTS LIST	9
7 TEST RESULTS AND MEASUREMENT DATA	11
7.1 ANTENNA REQUIREMENT	11
7.2 CONDUCTED EMISSIONS	12
7.3 RADIATED EMISSION METHOD	15
7.3.1 Field Strength of The Fundamental Signal	17
7.3.2 Spurious emissions	18
7.3.3 Bandedge emissions	23
7.4 20dB OCCUPY BANDWIDTH	27
8 TEST SETUP PHOTO	30
9 EUT CONSTRUCTIONAL DETAILS	30

4 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203	Pass
AC Power Line Conducted Emission	15.207	Pass
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. Pass: The EUT complies with the essential requirements in the standard.
2. N/A: Not applicable.
3. Test according to ANSI C63.10:2020

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:	5.8GHz Wireless Audio Transmission System
Main Model :	SWS11
Test Model :	SWS11
Trade mark	M-VAVE, SL TECH, EROK, CASON, Zachary, NEW BEE, Pogolab
Remark: All above models are identical in the same PCB layout, interior structure and electrical circuits. The only difference is model name for commercial purpose.	
Serial Model :	WP-11, WF-08, SL-WG100, ZW-60, WJ25, WS-300
Test sample(s) ID:	GTSL2025110468-1
Sample(s) Status	Engineered sample
Operation Frequency:	5735.5-5848.5MHZ
Channel Numbers:	114
Channel Separation:	1M
Modulation Type:	GFSK
Antenna Type:	3.8dbi
Antenna gain:	Ceramic Antenna
Power supply:	DC 3.7V by battery or DC 5V by adapter

Remark:

1. Antenna gain information provided by the customer
2. The relevant information of the sample is provided by the entrusting company, and the laboratory is not responsible for its authenticity.

Operation Frequency each of channel

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	5735.5	38	5772.5	75	5809.5	112	5846.5
2	5736.5	39	5773.5	76	5810.5	113	5847.5
3	5737.5	40	5774.5	77	5811.5	114	5848.5
4	5738.5	41	5775.5	78	5812.5		
5	5739.5	42	5776.5	79	5813.5		
6	5740.5	43	5777.5	80	5814.5		
7	5741.5	44	5778.5	81	5815.5		
8	5742.5	45	5779.5	82	5816.5		
9	5743.5	46	5780.5	83	5817.5		
10	5744.5	47	5781.5	84	5818.5		
11	5745.5	48	5782.5	85	5819.5		
12	5746.5	49	5783.5	86	5820.5		
13	5747.5	50	5784.5	87	5821.5		
14	5748.5	51	5785.5	88	5822.5		
15	5749.5	52	5786.5	89	5823.5		
16	5750.5	53	5787.5	90	5824.5		
17	5751.5	54	5788.5	91	5825.5		
18	5752.5	55	5789.5	92	5826.5		
19	5753.5	56	5790.5	93	5827.5		
20	5754.5	57	5791.5	94	5828.5		
21	5755.5	58	5792.5	95	5829.5		
22	5756.5	59	5793.5	96	5830.5		
23	5757.5	60	5794.5	97	5831.5		
24	5758.5	61	5795.5	98	5832.5		
25	5759.5	62	5796.5	99	5833.5		
26	5760.5	63	5797.5	100	5834.5		
27	5761.5	64	5798.5	101	5835.5		
28	5762.5	65	5799.5	102	5836.5		
29	5763.5	66	5800.5	103	5837.5		
30	5764.5	67	5801.5	104	5838.5		
31	5765.5	68	5802.5	105	5839.5		
32	5766.5	69	5803.5	106	5840.5		
33	5767.5	70	5804.5	107	5841.5		
34	5768.5	71	5805.5	108	5842.5		
35	5769.5	72	5806.5	109	5843.5		
36	5770.5	73	5807.5	110	5844.5		
37	5771.5	74	5808.5	111	5845.5		

The test frequencies are below:

Channel	Frequency(MHz)
The lowest channel	5735.5
The middle channel	5791.5
The Highest channel	5848.5

5.2 Test mode

Transmitting mode	Keep the EUT in continuously transmitting mode.
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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)	N/A	N/A	N/A

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. 01, 2025	Jun. 30, 2026
7	Loop Antenna	ZHINAN	ZN30900A	GTS534	Nov.16, 2025	Nov.15, 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 (15GH-40GHz)	SCHWARZBECK	01296	GTS691	Apr. 11, 2025	Apr. 10, 2026
11	FSV-Signal Analyzer (10Hz-40GHz)	Keysight	FSV-40-N	GTS666	Mar. 11, 2025	Mar. 10, 2026
12	Amplifier	/	LNA-1000-30S	GTS650	Apr. 11, 2025	Apr. 10, 2026
13	CDNE M2+M3-16A	HCT	30MHz-300MHz	GTS692	Nov. 13, 2025	Nov. 12, 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

Conducted Emission						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Shielding Room	ZhongYu Electron	7.3(L)x3.1(W)x2.9(H)	GTS252	Jul. 12, 2022	Jul. 11, 2027
2	EMI Test Receiver	R&S	ESCI 7	GTS552	Apr. 12, 2025	Apr. 11, 2026
3	LISN	ROHDE & SCHWARZ	ENV216	GTS226	Apr. 11, 2025	Apr. 10, 2026
4	Coaxial Cable	GTS	N/A	GTS227	N/A	N/A
5	Thermo meter	JINCHUANG	GSP-8A	GTS642	Apr. 15, 2025	Apr. 14, 2026
6	Absorbing clamp	Elektronik-Feinmechanik	MDS21	GTS229	Apr. 12, 2025	Apr. 11, 2026
7	ISN	SCHWARZBECK	NTFM 8158	GTS565	Apr. 11, 2025	Apr. 10, 2026
8	High voltage probe	SCHWARZBECK	TK9420	GTS537	Apr. 11, 2025	Apr. 10, 2026
9	Antenna end assembly	Weinschel	1870A	GTS560	Apr. 11, 2025	Apr. 10, 2026
10	EMI Test Software	AUDIX	E3-6.100622	GTS726	N/A	N/A
11	Current probe	CYBERTEK	EM5011	GTS698	Jan. 13, 2025	Jan. 12, 2026

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	USB RF Power Sensor	DARE	RPR3006W	GTS569	Apr. 11, 2025	Apr. 10, 2026
7	RF Switch Box	Shongyi	RFSW3003328	GTS571	Apr. 11, 2025	Apr. 10, 2026
8	Programmable Constant Temp & Humi Test Chamber	WEWON	WHTH-150L-40-880	GTS572	Apr. 11, 2025	Apr. 10, 2026
9	Thermo meter	JINCHUANG	GSP-8A	GTS641	Apr. 11, 2025	Apr. 10, 2026
					Apr. 15, 2025	Apr. 14, 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 Ceramic antenna, reference to the appendix II for details.	

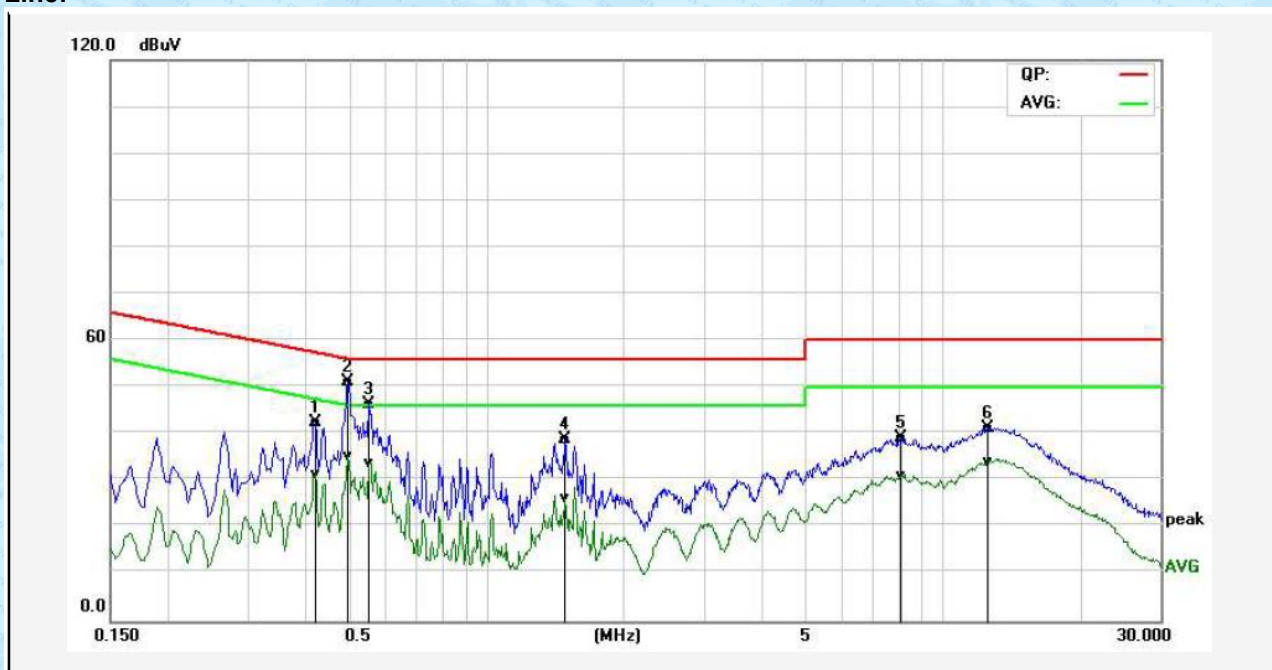
7.2 Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.207						
Test Method:	ANSI C63.10:2020						
Test Frequency Range:	150KHz to 30MHz						
Class / Severity:	Class B						
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto						
Limit:	Frequency range (MHz)		Limit (dBuV)				
			Quasi-peak		Average		
	0.15-0.5		66 to 56*		56 to 46*		
	0.5-5		56		46		
	5-30		60		50		
* Decreases with the logarithm of the frequency.							
Test setup:	Reference Plane 40cm LISN AUX Equipment 40cm E.U.T Test table/Insulation plane 80cm LISN Filter AC power EMI Receiver Remark E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m						
Test procedure:	1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement.						
Test Instruments:	Refer to section 6.0 for details						
Test mode:	Refer to section 5.2 for details						
Test environment:	Temp.:	25 °C	Humid.:	50%	Press.:	1 010mbar	
Test voltage:	AC 120V, 60Hz						
Test results:	Pass						

Remark: Both high and low voltages have been tested to show only the worst low voltage test data.

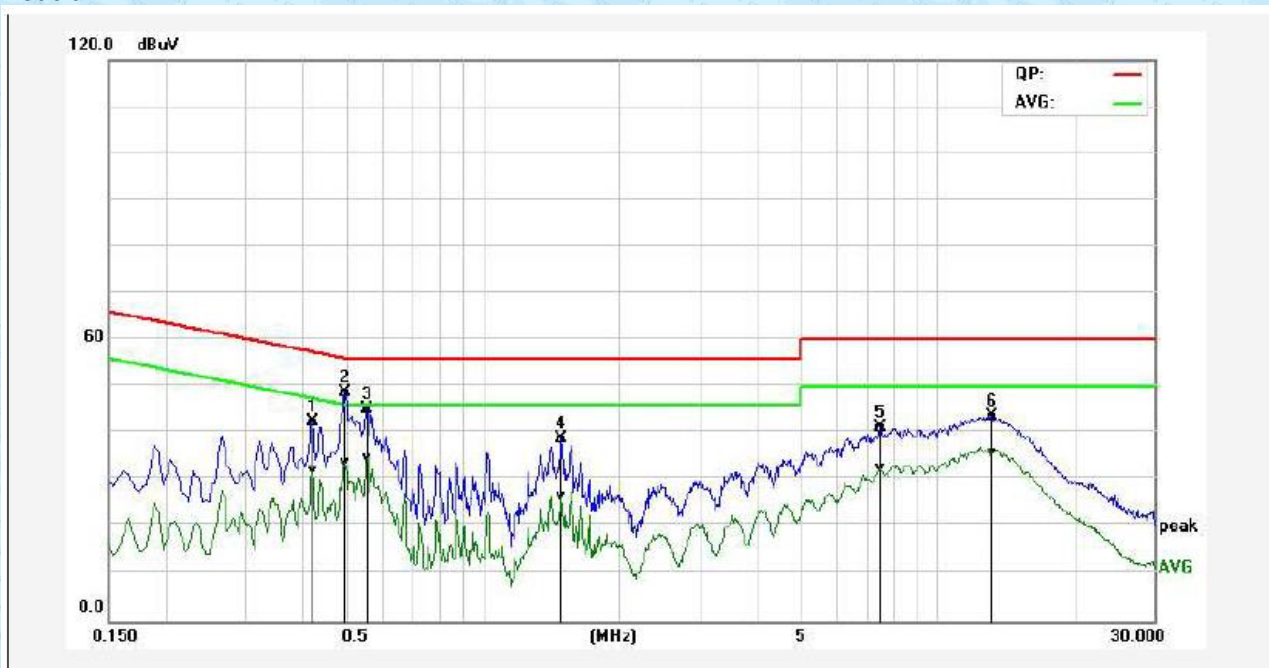
Measurement data:

Line:



No.	Frequency (MHz)	QuasiPeak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	QuasiPeak result (dBuV)	Average result (dBuV)	QuasiPeak limit (dBuV)	Average limit (dBuV)	QuasiPeak margin (dB)	Average margin (dB)	Remark
1P	0.4220	31.56	20.62	10.86	42.42	31.48	57.41	47.41	-14.99	-15.93	Pass
2*	0.4980	40.30	24.31	10.87	51.17	35.18	56.03	46.03	-4.86	-10.85	Pass
3P	0.5540	35.40	22.77	10.87	46.27	33.64	56.00	46.00	-9.73	-12.36	Pass
4P	1.4900	27.82	15.13	11.09	38.91	26.22	56.00	46.00	-17.09	-19.78	Pass
5P	8.0980	26.43	18.27	12.67	39.10	30.94	60.00	50.00	-20.90	-19.06	Pass
6P	12.5620	26.36	19.20	14.92	41.28	34.12	60.00	50.00	-18.72	-15.88	Pass

Neutral:

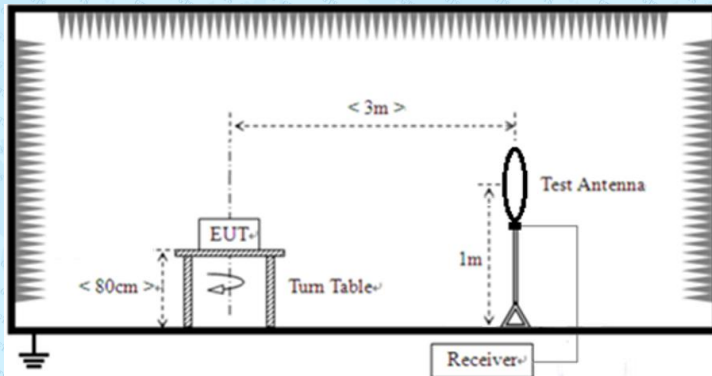


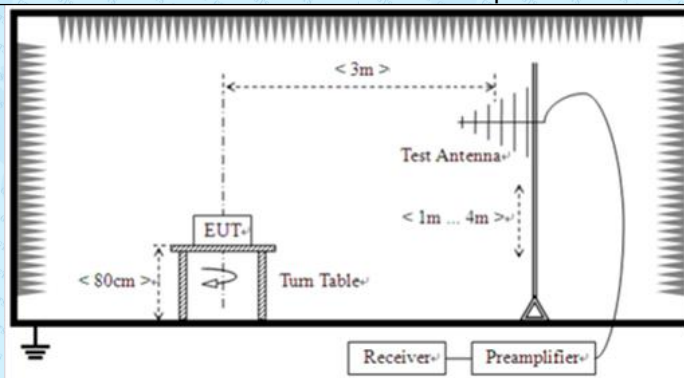
No.	Frequency (MHz)	QuasiPeak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	QuasiPeak result (dBuV)	Average result (dBuV)	QuasiPeak limit (dBuV)	Average limit (dBuV)	QuasiPeak margin (dB)	Average margin (dB)	Remark
1P	0.4220	31.62	21.15	10.86	42.48	32.01	57.41	47.41	-14.93	-15.40	Pass
2*	0.4980	37.98	22.73	10.87	48.85	33.60	56.03	46.03	-7.18	-12.43	Pass
3P	0.5580	34.39	23.74	10.87	45.26	34.61	56.00	46.00	-10.74	-11.39	Pass
4P	1.4900	27.85	15.45	11.09	38.94	26.54	56.00	46.00	-17.06	-19.46	Pass
5P	7.4940	28.77	20.12	12.45	41.22	32.57	60.00	50.00	-18.78	-17.43	Pass
6P	13.1500	28.26	20.72	15.26	43.52	35.98	60.00	50.00	-16.48	-14.02	Pass

Notes:

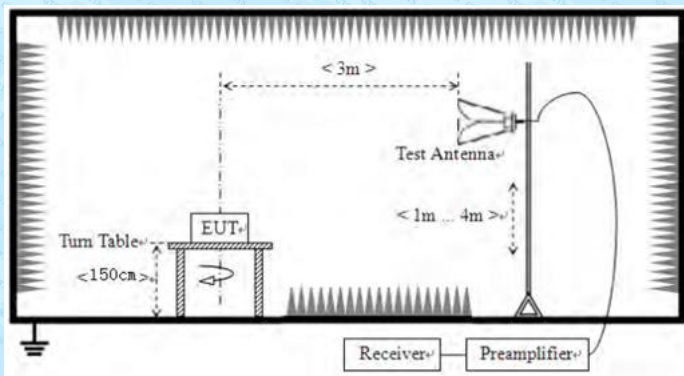
1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level = Receiver Read level + LISN Factor + Cable Loss

7.3 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:	<table><tr><th>Frequency</th><th>Detector</th><th>RBW</th><th>VBW</th><th>Remark</th></tr><tr><td>9kHz-150kHz</td><td>Quasi-peak</td><td>200Hz</td><td>300Hz</td><td>Quasi-peak Value</td></tr><tr><td>150kHz-30MHz</td><td>Quasi-peak</td><td>9kHz</td><td>10kHz</td><td>Quasi-peak Value</td></tr><tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>120KHz</td><td>300KHz</td><td>Quasi-peak Value</td></tr><tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak Value</td></tr><tr><td>Peak</td><td>1MHz</td><td>10Hz</td><td>Average Value</td></tr></table> Note: For Duty cycle $\geq 98\%$, average detector set as above, For Duty cycle $< 98\%$, average detector set as below: $VBW \geq 1 / T$				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
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 to 1GHz																																



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 3.7V

Test results:

Pass

Measurement data:

7.3.1 Field Strength of The Fundamental Signal

Test frequency (MHz)	Fundamental Frequency (MHz)	Field strength of fundamental level (dB μ V/m)		Limit (dB μ V)		Result	Antenna Pole (H/V)
		AVG	Peak	AVG	Peak		
5735.5	5735.556	76.13	96.45	94	114	Pass	H
	5735.563	76.15	96.45	94	114	Pass	V
5791.5	5791.546	75.26	95.68	94	114	Pass	H
	5791.532	75.22	95.68	94	114	Pass	V
5848.5	5848.523	75.16	95.24	94	114	Pass	H
	5848.515	75.11	95.15	94	114	Pass	V

N/A

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

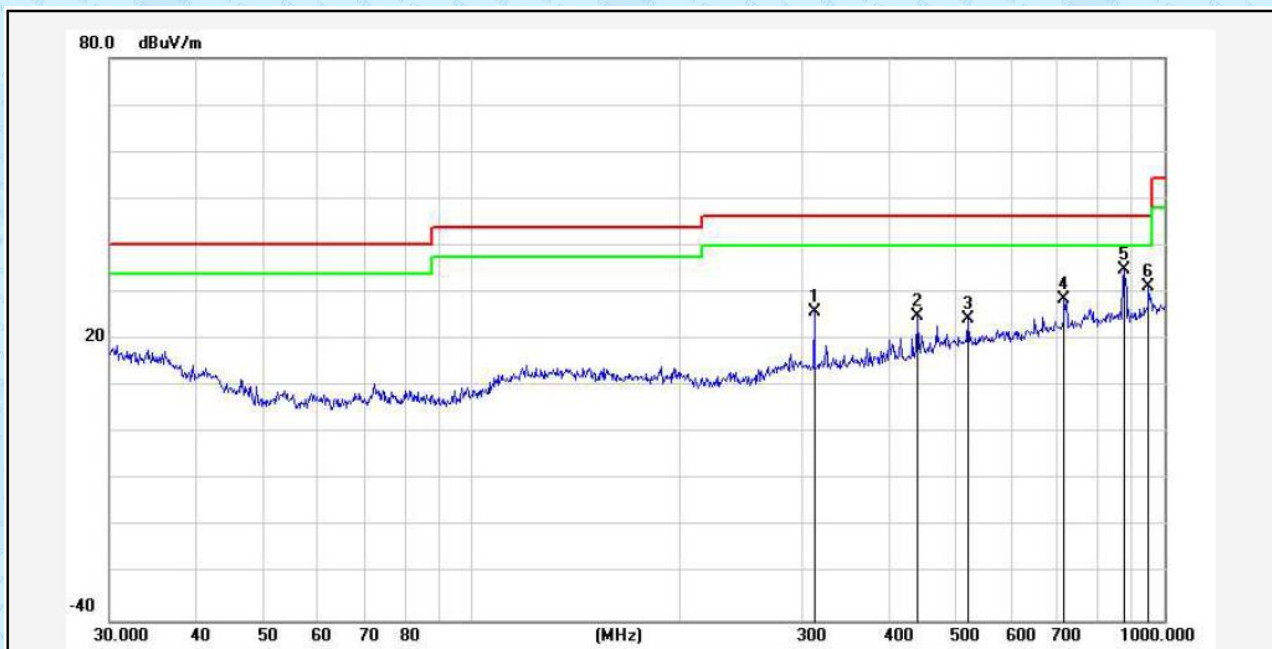
7.3.2 Spurious emissions

■ 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.

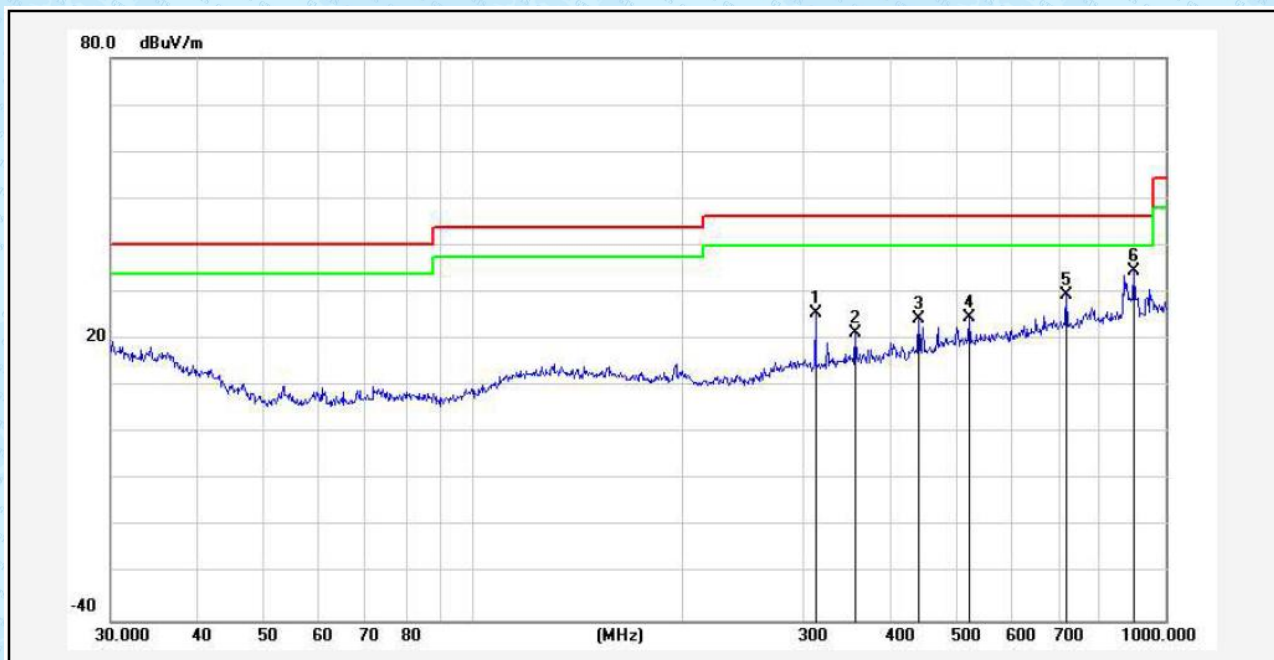
■ Below 1GHz

Pre-scan all test modes, found worst case at 5735.5MHz, and so only show the test result of it Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (deg.)	Height (cm)	Remark
1	312.1794	37.82	-11.84	25.98	46.00	-20.02			QP
2	440.1963	34.26	-9.37	24.89	46.00	-21.11			QP
3	520.8882	31.36	-7.01	24.35	46.00	-21.65			QP
4	716.6820	32.52	-4.08	28.44	46.00	-17.56			QP
5*	875.2470	36.17	-1.38	34.79	46.00	-11.21			QP
6	948.7610	31.68	-0.47	31.21	46.00	-14.79			QP

Vertical



No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (deg.)	Height (cm)	Remark
1	312.1794	37.49	-11.84	25.65	46.00	-20.35			QP
2	356.6758	32.56	-11.14	21.42	46.00	-24.58			QP
3	440.1963	33.84	-9.37	24.47	46.00	-21.53			QP
4	520.8882	31.69	-7.01	24.68	46.00	-21.32			QP
5	719.1995	33.47	-4.02	29.45	46.00	-16.55			QP
6*	900.1474	35.69	-1.09	34.60	46.00	-11.40			QP

■ Above 1GHz

Test channel:	Lowest	Polarization:	Horizontal
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Frequency (MHz)	Reading Result (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
5735.5	102.29	-5.84	96.45	114	-17.55	PK
5735.5	80.05	-5.84	74.21	94	-19.79	AV
11471	63.23	-3.64	59.59	74	-14.41	PK
11471	48.11	-3.64	44.47	54	-9.53	AV
17206.5	56.21	-0.95	55.26	74	-18.74	PK
17206.5	47.00	-0.95	46.05	54	-7.95	AV
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier. Margin = Absolute Level – Limit						

Test channel:	Lowest	Polarization:	Vertical
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Frequency (MHz)	Reading Result (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
5735.5	102.29	-5.84	96.45	114	-17.55	PK
5735.5	80.09	-5.84	74.25	94	-19.75	AV
11471	63.21	-3.64	59.57	74	-14.43	PK
11471	48.10	-3.64	44.46	54	-9.54	AV
17206.5	56.16	-0.95	55.21	74	-18.79	PK
17206.5	46.56	-0.95	45.61	54	-8.39	AV
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier. Margin = Absolute Level – Limit						

Test channel:	Middle	Polarization:	Horizontal
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Frequency	Reading Result	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
5791.5	100.52	-5.84	94.68	114	-19.32	PK
5791.5	80.01	-5.84	74.17	94	-19.83	AV
11583	64.01	-3.64	60.37	74	-13.63	PK
11583	48.15	-3.64	44.51	54	-9.49	AV
17374.5	56.23	-0.95	55.28	74	-18.72	PK
17374.5	47.02	-0.95	46.07	54	-7.93	AV
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier. Margin = Absolute Level – Limit						

Test channel:	Middle	Polarization:	Vertical
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Frequency	Reading Result	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
5791.5	100.15	-5.84	94.31	114	-19.69	PK
5791.5	80.00	-5.84	74.16	94	-19.84	AV
11583	64.00	-3.64	60.36	74	-13.64	PK
11583	48.11	-3.64	44.47	54	-9.53	AV
17374.5	56.22	-0.95	55.27	74	-18.73	PK
17374.5	46.02	-0.95	45.07	54	-8.93	AV
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier. Margin = Absolute Level – Limit						

Test channel:	Highest	Polarization:	Horizontal
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Frequency	Reading Result	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
5848.5	100.60	-5.84	94.76	114	-19.24	PK
5848.5	80.00	-5.84	74.16	94	-19.84	AV
11697	63.51	-3.64	59.87	74	-14.13	PK
11697	48.12	-3.64	44.48	54	-9.52	AV
17545.5	56.22	-0.95	55.27	74	-18.73	PK
17545.5	46.02	-0.95	45.07	54	-8.93	AV
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier. Margin = Absolute Level – Limit						

Test channel:	Highest	Polarization:	Vertical
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Frequency	Reading Result	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
5848.5	100.58	-5.84	94.74	114	-19.26	PK
5848.5	80.02	-5.84	74.18	94	-19.82	AV
11697	63.50	-3.64	59.86	74	-14.14	PK
11697	48.11	-3.64	44.47	54	-9.53	AV
17545.5	56.21	-0.95	55.26	74	-18.74	PK
17545.5	46.00	-0.95	45.05	54	-8.95	AV
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier. Margin = Absolute Level – Limit						

Remarks:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
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.

7.3.3 Bandedge emissions

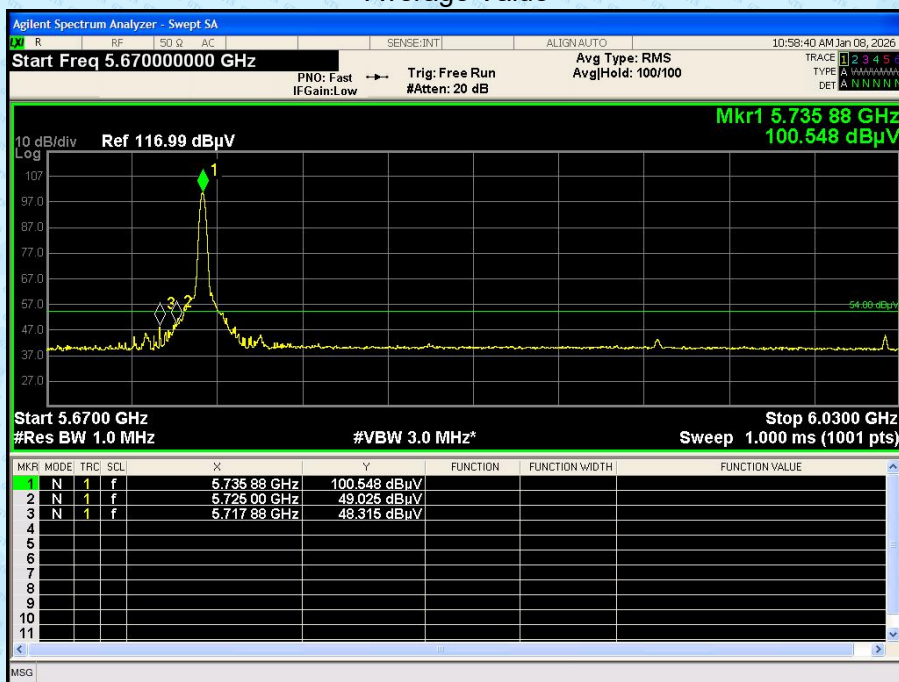
All of the restriction bands were tested, and only the data of worst case was exhibited.

Test channel:	Lowest	Polarization:	Horizontal
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Peak Value

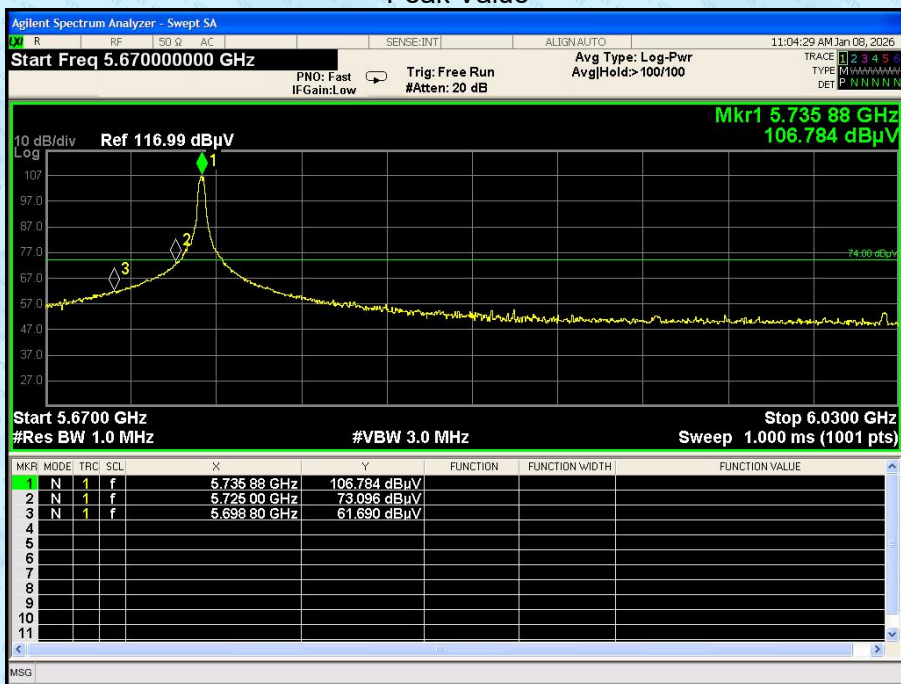


Average Value

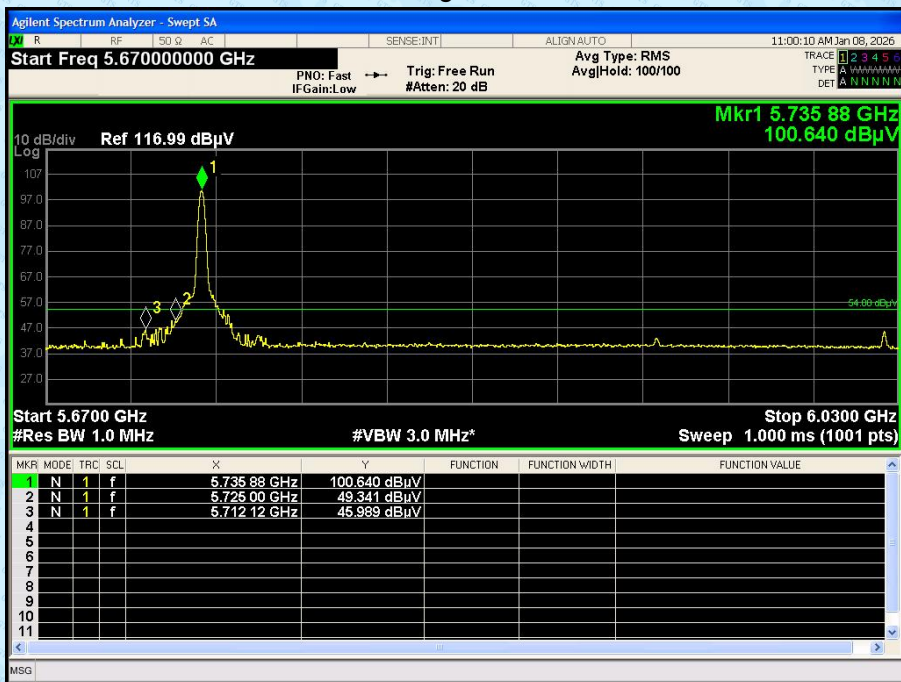


Test channel:	Lowest	Polarization:	Vertical
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Peak Value

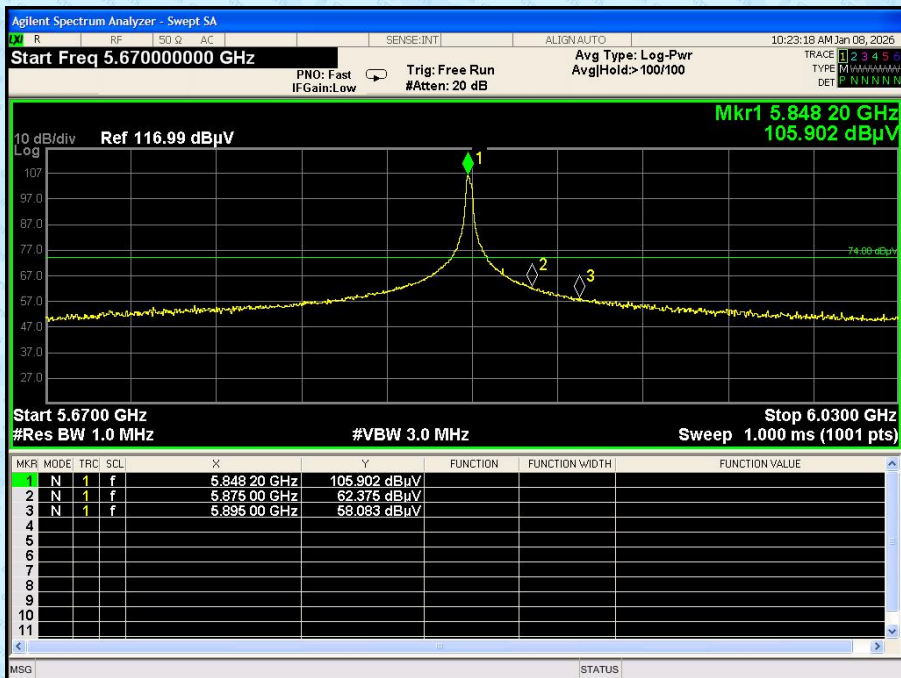


Average Value

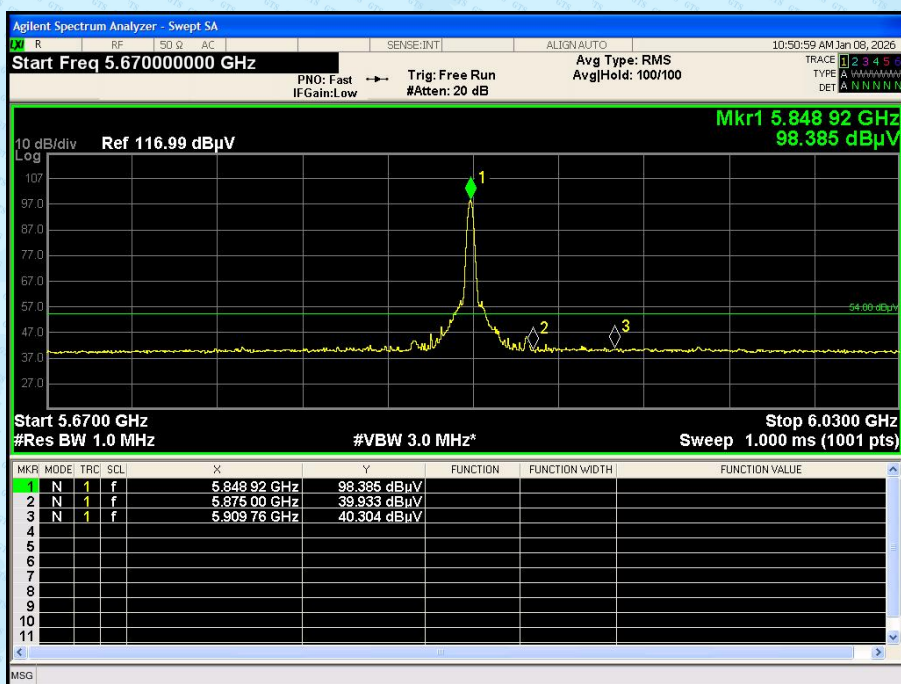


Test channel:	Highest	Polarization:	Horizontal
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Peak Value

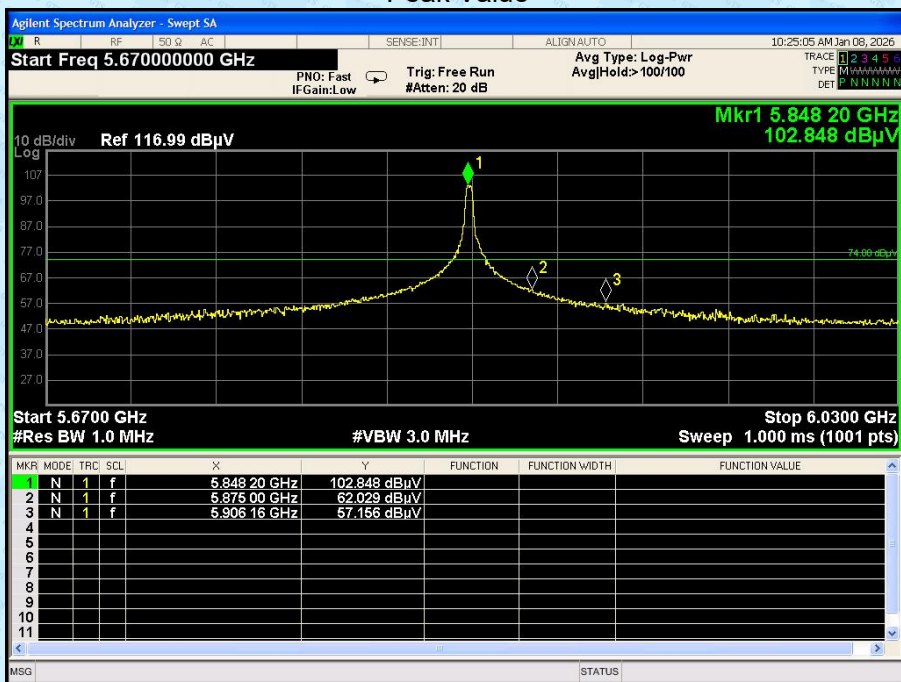


Average Value

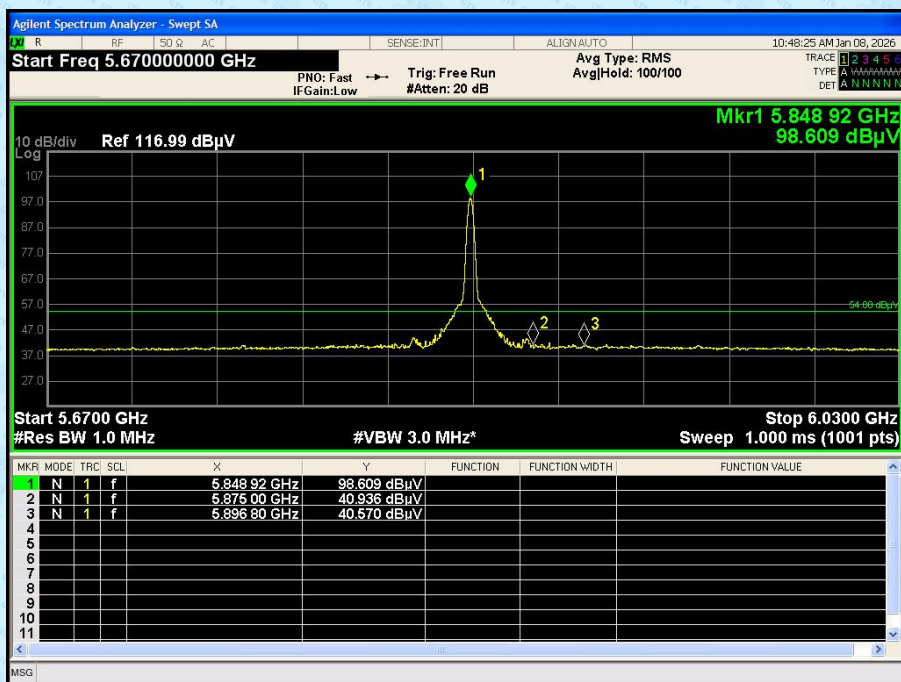


Test channel:	Highest	Polarization:	Vertical
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Peak Value



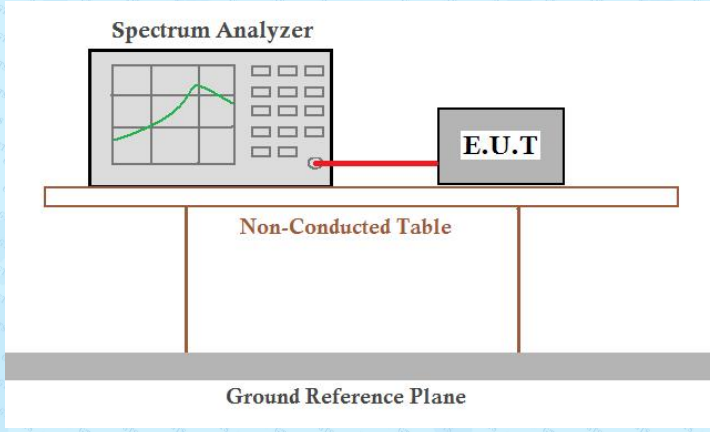
Average Value



Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. For above 18GHz, no emission found

7.4 20dB Occupy Bandwidth

Test Requirement:	FCC Part15 C Section 15.249/15.215
Test Method:	ANSI C63.10:2020
Limit:	N/A
Test setup:	
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	2.238	Pass
Middle	2.257	Pass
Highest	2.284	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-----