

TEST REPORT

Report No.: BCTC2607310566-2E

Applicant: Shenzhen Sunell Technology Corporation

Product Name: Face Recognition Terminal

Test Model: SN-M3207U-B

Tested Date: 2026-07-08 to 2026-08-13

Issued Date: 2026-09-17



Shenzhen BCTC Technology Co., Ltd.



FCC ID: 2BSAY-SN-M3207U-B

Product Name: Face Recognition Terminal

Trademark: N/A

Model/Type Reference: SN-M3207U-B, SN-M3204V-B

Prepared For: Shenzhen Sunell Technology Corporation

Address: 22-23F, Bldg. 2, Nanshan I Park Chongwen, 3370 Liuxian Avenue, Nanshan District, Shenzhen, China, 518052

Manufacturer: Shenzhen Sunell Technology Corporation

Address: 22-23F, Bldg. 2, Nanshan I Park Chongwen, 3370 Liuxian Avenue, Nanshan District, Shenzhen, China, 518052

Prepared By: Shenzhen BCTC Technology Co., Ltd.

Address: Room 101M, Unit 1, Building1, Pengyuan, No.18, Lilang Road, Shanglilang, Nanwan Subdistrict, Longgang District, Shenzhen, Guangdong, China.

Sample Received Date: 2026-07-08

Sample Tested Date: 2026-07-08 to 2026-08-13

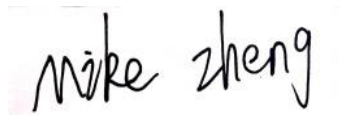
Report No.: BCTC2607310566-2E

Test Standards: 47 CFR Part 15 Subpart E (clause 15.407)
ANSI C63.10:2020

Test Results: PASS

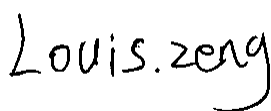
Remark: This is WIFI 5 GHz band radio test report.

Prepared by :



Mike Zheng

Reviewer by :



Louis Zeng

Approved by:



Sewen Guo

The test report is effective only with both signature and specialized stamp. This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen BCTC Technology Co., Ltd, this report can't be reproduced except in full. The tested sample(s) and the sample information are provided by the client.

Table Of Content

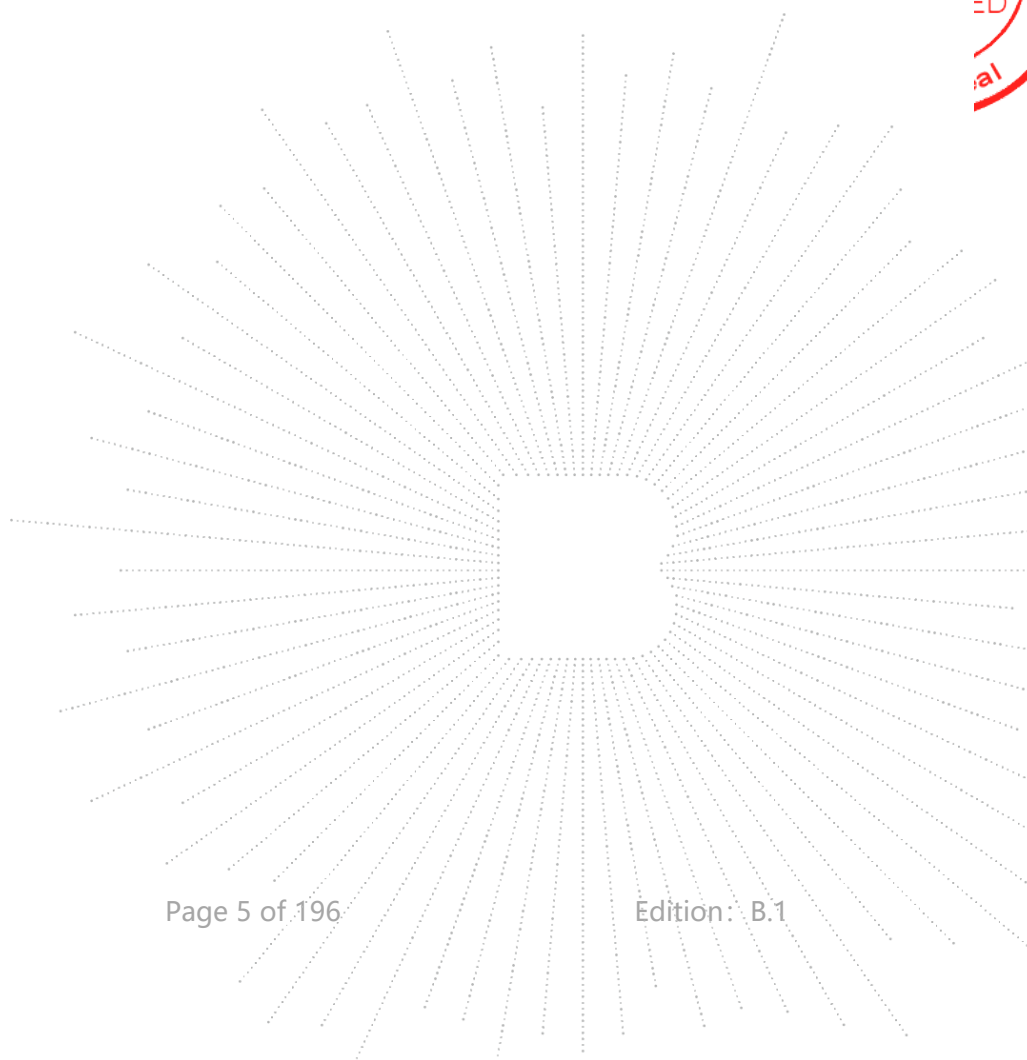
Test Report Declaration	Page
1. Version	5
2. Test Summary	6
3. Measurement Uncertainty	7
4. Product Information And Test Setup	8
4.1 Product Information.....	8
4.2 Test Setup Configuration	9
4.3 Support Equipment	9
4.4 Channel List	10
4.5 Test Mode	11
4.6 Table Of Parameters Of Text Software Setting.....	11
5. Test Facility And Test Instrument Used.....	12
5.1 Test Facility.....	12
5.2 Test Instrument Used.....	12
6. Conducted Emissions.....	14
6.1 Block Diagram Of Test Setup.....	14
6.2 Limit	14
6.3 Test procedure	14
6.4 EUT operating Conditions	14
6.5 Test Result.....	15
7. Radiated Emissions.....	17
7.1 Block Diagram Of Test Setup.....	17
7.2 Limit	18
7.3 Test Procedure	19
7.4 EUT Operating Conditions	20
7.5 Test Result.....	20
8. Power Spectral Density Test	41
8.1 Block Diagram Of Test Setup.....	41
8.2 Limit	41
8.3 Test Procedure	42
8.4 EUT Operating Conditions	42
8.5 Test Result.....	43
9. 26dB & 6dB & 99% Emission Bandwidth	64
9.1 Block Diagram Of Test Setup.....	64
9.2 Limit	64
9.3 Test Procedure	65
9.4 EUT Operating Conditions	65
9.5 Test Result.....	66
10. Maximum Conducted Output Power.....	104
10.1 Block Diagram Of Test Setup.....	104
10.2 Limit	104
10.3 Test Procedure	104
10.4 EUT Operating Conditions	105
10.5 Test Result.....	106
11. Out Of Band Emissions	127

11.1	Block Diagram Of Test Setup.....	127
11.2	Limit	127
11.3	Test Procedure	127
11.4	EUT Operating Conditions	128
11.5	Test Result.....	129
12.	Spurious RF Conducted Emissions.....	141
12.1	Block Diagram Of Test Setup.....	141
12.2	Limit	141
12.3	Test Procedure	141
12.4	Test Result.....	141
13.	Frequency Stability Measurement.....	159
13.1	Block Diagram Of Test Setup.....	159
13.2	Limit	159
13.3	Test Procedure	159
13.4	Test Result.....	160
14.	Duty Cycle Of Test Signal	172
14.1	Standard Requirement.....	172
14.2	Formula.....	172
14.3	Test Procedure	172
14.4	Test Result.....	172
15.	Antenna Requirement	193
15.1	Limit	193
15.2	Test Result.....	193
16.	EUT Test Setup Photographs.....	194

(Note: N/A Means Not Applicable)

1. Version

Report No.	Issue Date	Description	Approved
BCTC2607310566-2E	2026-09-17	Original	Valid



2. Test Summary

The Product has been tested according to the following specifications:

No.	Test Parameter	Clause No.	Results
1	Spurious Radiated Emissions	15.209(a) 15.407 (b)	PASS*
2	Conducted Emission	15.207	PASS*
3	26 dB and 99% Emission Bandwidth	15.407 a 15.1049	PASS*
4	Minimum 6 dB bandwidth	15.407(e)	PASS*
5	Maximum Conducted Output Power	15.407 a	PASS*
6	Band Edge	15.407 b	PASS*
7	Power Spectral Density	15.407 a	PASS*
8	Spurious Emissions at Antenna Terminals	15.407 b	PASS*
9	Antenna Requirement	15.203	PASS

NOTE1: N/A (Not Applicable)

NOTE2: According to FCC OET KDB 558074, the report use radiated measurements in the restricted frequency bands. In addition, the radiated test is also performed to ensure the emissions emanating from the device cabinet also comply with the applicable limits.

Note 3: "*" indicates that the test results are determined base on CFR 47 FCC Part 15 Subpart C (clause 15.407). And the test results are took into account measurement uncertainty(see section 3 for measurement uncertainty information)

BCTC CO., LTD

3. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2:2011/AMD2:2018. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

No.	Item	Uncertainty
1	3m chamber Radiated spurious emission(9kHz-30MHz)	U=3.7dB
2	3m chamber Radiated spurious emission(30MHz-1GHz)	U=4.8dB
3	3m chamber Radiated spurious emission(1GHz-18GHz)	U=5.5dB
4	3m chamber Radiated spurious emission(18GHz-40GHz)	U=5.0dB
5	Conducted Emission(150kHz-30MHz)	U=3.0dB
6	Power Spectral Density	U=3.46dB
7	Peak Power	U=0.31dB
8	Occupied Bandwidth/Frequency Range	U=3.46%
9	Conducted output power uncertainty	U=0.55dB
10	Frequency Error	U= 53.50 Hz
11	Frequency Drift	U=0.64 KHz
12	Temperature	U= 0.59 °C
13	Humidity	U= 5.3 %

4. Product Information And Test Setup

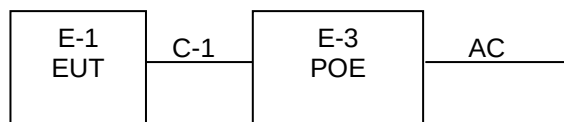
4.1 Product Information

Model/Type reference:	SN-M3207U-B, SN-M3204V-B	
Model differences:	The units we produce in the following models are the same in terms of electrical, mechanical, and physical structure; the only differences are the model name and color. In the end, we have the SN-M3207U-B as the test model.	
Device type:	Client	
TPC Function:	☐ Applicable	☒ Not Applicable
Hardware Version:	N/A	
Software Version:	N/A	
IEEE 802.11 WLAN Mode Supported:	802.11a/n (20MHz channel bandwidth) 802.11n (40MHz channel bandwidth)	
Operation Frequency:	5180-5240MHz for 802.11a/n(HT20); 5190-5230MHz for 802.11n(HT40); 5260-5320MHz for 802.11a/n(HT20); 5270-5310MHz for 802.11n (HT40); 5500-5700MHz for 802.11a/n(HT20); 5510-5670MHz for 802.11n (HT40); 5745-5825 MHz for 802.11a/n(HT20); 5755-5795 MHz for 802.11n(HT40);	
Type of Modulation:	☒ OFDM with BPSK/QPSK/16QAM/64QAM for 802.11a/n	
Antenna installation:	Internal antenna	
Antenna Gain:	2.77dBi	
	Remark: ☒ The antenna gain of the product comes from the antenna report provided by the customer, and the test data is affected by the customer information. The laboratory assumes no responsibility for its authenticity.	
Remark:	This prototype comes with two power options: one is DC12V power, and the other is POE power. We tested both power options.	
Ratings:	INPUT:DC 12V or POE 50-57V	

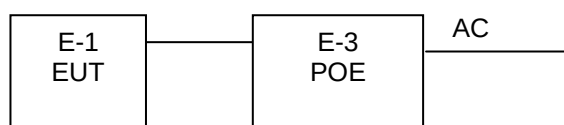
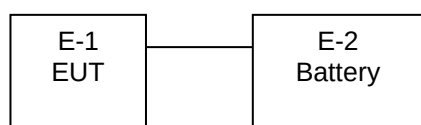
4.2 Test Setup Configuration

See test photographs attached in *EUT TEST SETUP PHOTOGRAPHS* for the actual connections between Product and support equipment.

Conducted Emission



Radiated Spurious Emission



4.3 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
E-1	Face Recognition Terminal	N/A	SN-M3207U-B	N/A	EUT
E-2	Battery	N/A	N/A	N/A	Auxiliary
E-3	POE	N/A	DGS-1210-10P	N/A	Auxiliary

Item	Shielded Type	Ferrite Core	Length	Note
N/A	N/A	N/A	N/A	N/A

Notes:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

4.4 Channel List

(U-NII-1) 5180MHz-5240MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency
20MHz	36	5180	40	5200
	44	5220	48	5240
40MHz	38	5190	46	5230
(U-NII-2A) 5260MHz-5320MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency
20MHz	52	5260	56	5280
	60	5300	64	5320
40MHz	54	5270	62	5310
(U-NII-2C) 5500MHz-5700MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency
20MHz	100	5500	105	5520
	108	5540	112	5560
	116	5580	132	5660
	136	5680	140	5700
40MHz	102	5510	110	5550
	134	5670	142	5710
(U-NII-3) 5745MHz-5825MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency
20MHz	149	5745	153	5765
	157	5785	161	5805
	165	5825		
40MHz	151	5775	159	5795

4.5 Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	802.11a / n 20 CH36/ CH40/ CH 48 802.11a / n 20 CH52/ CH56/ CH 64 802.11a / n 20 CH100/ CH116/ CH 140 802.11a / n 20 CH149/ CH157/ CH 165
Mode 2	802.11n 40 CH38/ CH 46 802.11n 40 CH54/ CH 62 802.11n 40 CH102/ CH 110/CH134 802.11n 40 CH 151 / CH 159
Mode 3	Link

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. The battery is fully-charged during the radiated and RF conducted test.

4.6 Table Of Parameters Of Text Software Setting

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

RF Function	Mode Or Modulation type	Power Class	Software For Testing
WIFI 5G	802.11a	15	Secure CRT V7.1.1
	802.11n20	14	
	802.11n40	12	

5. Test Facility And Test Instrument Used

5.1 Test Facility

All measurement facilities used to collect the measurement data are located at Shenzhen BCTC Technology Co., Ltd.

Address: Room 101M, Unit 1, Building1, Pengyuan, No.18, Lilang Road, Shanglilang, Nanwan Subdistrict, Longgang District, Shenzhen, Guangdong, China.

The site and apparatus are constructed in conformance with the requirements of ANSI C63.4a-2017 and CISPR 16-1-1:2019 other equivalent standards.

FCC Test Firm Registration Number: 754702

ANAB certificate registration number is: CN3479

5.2 Test Instrument Used

Conducted emissions Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Receiver	R&S	ESCI	101421	2025.08.30	2026.08.29
AMN	SCHWHRZBECK	NSLK8128	05152	2026.01.22	2027.01.21
AMN	SCHWHRZBECK	NSLK8127	8127739	2025.09.16	2026.09.15
Pulse Limiter	SCHWHRZBECK	VTSD 9561-F-N	00547	2025.08.30	2026.08.29
Temperature & Humidity	Wetest	HTC-1	/	2025.09.01	2026.08.31
Software	EZ-EMC	Ver.EMC-CON 3LP5Q-A1	/	/	/

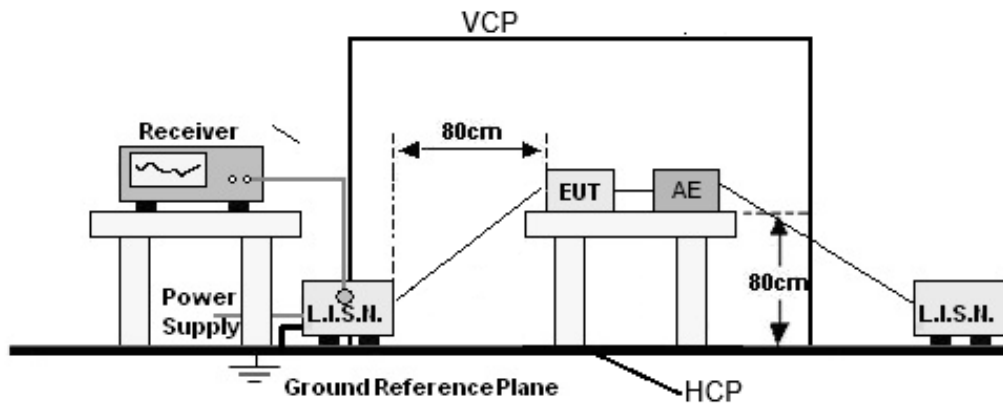
Radiated Emissions Test (966 Chamber)					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
966 chamber	ChengYu	966 Room	966	2023.09.25	2026.09.24
Loop Antenna	Schwarzbeck	FMZB1519B	00014	2026.01.05	2027.01.04
Broadband antenna	SCHWHRZBECK	VULB9168	01620	2025.08.29	2026.08.28
Horn antenna (1 GHz -18GHz)	SCHWARZBECK	BBHA 9120 D	2792	2025.08.29	2026.08.28
Horn antenna (18 GHz -40GHz)	SCHWARZBECK	BBHA9170	00822	2025.12.29	2026.12.28
Receiver	R&S	ESR	1316	2025.08.30	2026.08.29
Spectrum Analyzer	R&S	FSV40	101328	2026.01.22	2027.01.21
Amplifier	SCHWHRZBECK	BBV9744	568	2025.08.30	2026.08.29
Amplifier	EMC INSTRUMENT	EMC0518A45 SEE	EMT-SZ2233	2025.08.30	2026.08.29

	S CORPORATIO N				
Amplifier (18GHz-40GHz)	MITEQ	TTLP5Q-A18 40-35-HG	2034381	2026.05.09	2027.05.08
Band 5.1G-5.3G Filter	COM-MW	ZBSF6-C2400 -2483.5-1116	2220981	2025.08.30	2026.08.29
Band 5.4G-5.7G Filter	COM-MW	ZBSF6-C5475 -5725-1118	2220982	2025.08.30	2026.08.29
Band 5.7G-5.8G Filter	COM-MW	ZBSF6-C5725 -5850-1082	2220979	2025.08.30	2026.08.29
RF cable 3# (9kHz-6GHz)	Yunyi	10M	/	2025.08.30	2026.08.29
RF cable 9# (9kHz-1GHz)	Yunyi	2M	/	2025.10.28	2026.10.27
RF cable 5# (1GHz -18GHz)	SKET	9M	18038626	2025.08.30	2026.08.29
RF cable 6# (1GHz -18GHz)	SKET	5M	#10	2025.09.05	2026.09.04
RF cable 10# (18GHz-40GHz)	/	2M	2M	2026.05.09	2027.05.08
RF cable 11# (18GHz-40GHz)	/	2.5M	2.5M	2026.05.09	2027.05.08
Temperature & Humidity	Wetest	HTC-1	/	2025.09.05	2026.09.04
Communication test set	R&S	CMW500	157483	2025.08.30	2026.08.29
Software	EZ-EMC	Ver.FA-03A2	/	/	/

RF Conducted Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Spectrum Analyzer	Keysight	N9020A	MY51287403	2025.08.30	2026.08.29
Signal Generator	Keysight	N5182A	MY50144088	2025.08.30	2026.08.29
Power Sensor	Keysight	U2001	MY51250006	2025.10.28	2026.10.27
Temperature & Humidity	Wetest	HTC-1	/	2025.09.01	2026.08.31
Communication test set	R&S	CMW500	157483	2025.08.30	2026.08.29
Radio frequency control box	MWRFTest	MW100-RFCB	\	\	\
Software	MWRFTest	MTS 8310	V 3.0.0.0	\	\
D.C. Power Supply	Elektro-Automati k GmbH & Co.KG	D-41747 Viersen	6230316	2025.09.30	2026.08.29
Temperature and humidity test chamber	Auchno	OJN-9606-408 L	19120183	2025.07.09	2026.07.08
				2026.07.07	2027.07.06

6. Conducted Emissions

6.1 Block Diagram Of Test Setup



6.2 Limit

Frequency (MHz)	Limit (dBuV)	
	Quas-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

Notes:

- *Decreasing linearly with logarithm of frequency.
- The lower limit shall apply at the transition frequencies.

6.3 Test procedure

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

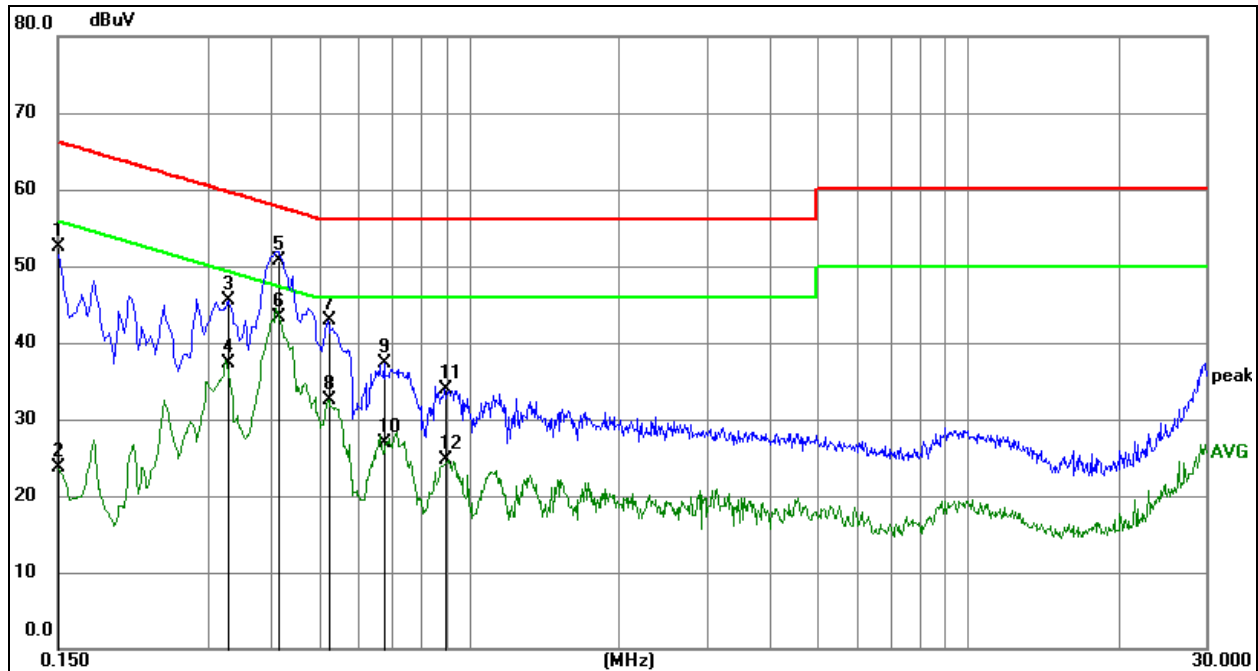
- The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
- The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak and AVG detector in Max Hold mode. Run the receiver's pre-scan to record the maximum disturbance generated from Product in all power lines in the full band.
- For each frequency whose maximum record was higher or close to limit, measure its QP and AVG values and record.

6.4 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.

6.5 Test Result

Temperature:	25.8 °C	Relative Humidity:	49%
Pressure:	101KPa	Test Voltage:	POE 54V
Test Mode:	Mode 3	Polarization :	L



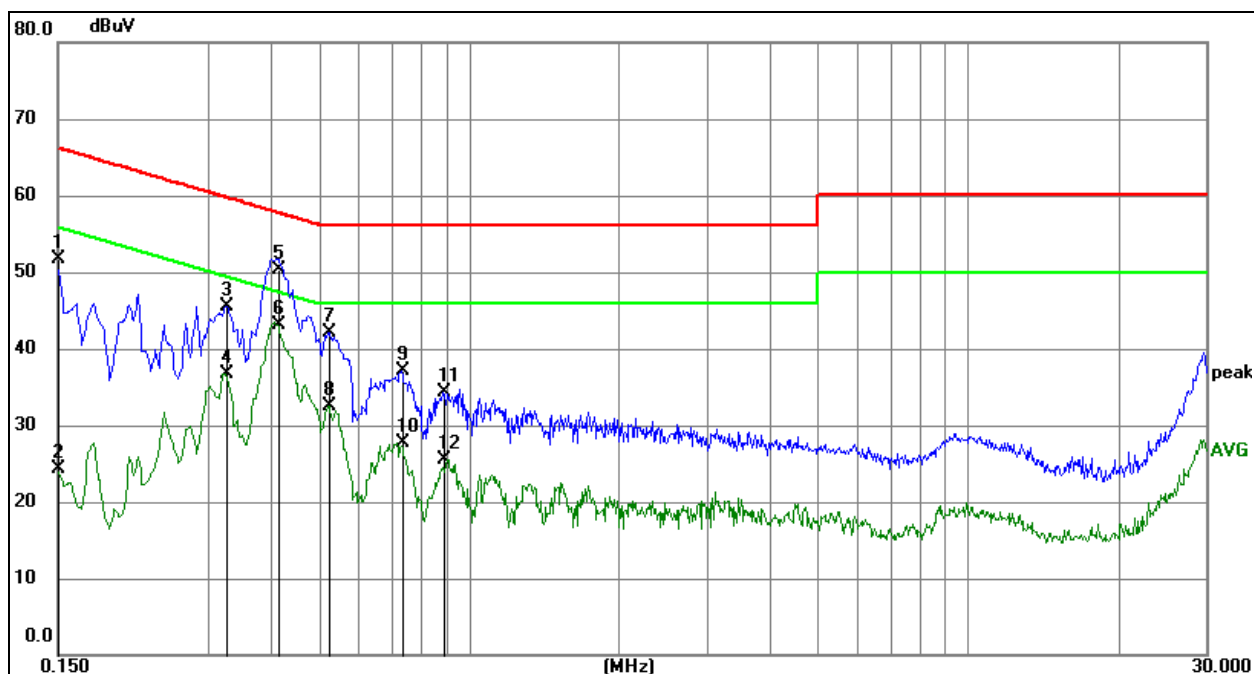
Remark:

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

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1500	42.09	10.51	52.60	66.00	-13.40	QP
2	0.1500	13.24	10.51	23.75	56.00	-32.25	AVG
3	0.3300	35.03	10.51	45.54	59.45	-13.91	QP
4	0.3300	26.74	10.51	37.25	49.45	-12.20	AVG
5	0.4155	40.28	10.52	50.80	57.54	-6.74	QP
6 *	0.4155	32.88	10.52	43.40	47.54	-4.14	AVG
7	0.5235	32.29	10.53	42.82	56.00	-13.18	QP
8	0.5235	22.06	10.53	32.59	46.00	-13.41	AVG
9	0.6765	26.78	10.53	37.31	56.00	-18.69	QP
10	0.6765	16.33	10.53	26.86	46.00	-19.14	AVG
11	0.8970	23.27	10.54	33.81	56.00	-22.19	QP
12	0.8970	14.26	10.54	24.80	46.00	-21.20	AVG

* Indicates the worst data.

Temperature:	25.8 °C	Relative Humidity:	49%
Pressure:	101KPa	Test Voltage:	POE 54V
Test Mode:	Mode 3	Polarization :	N



Remark:

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

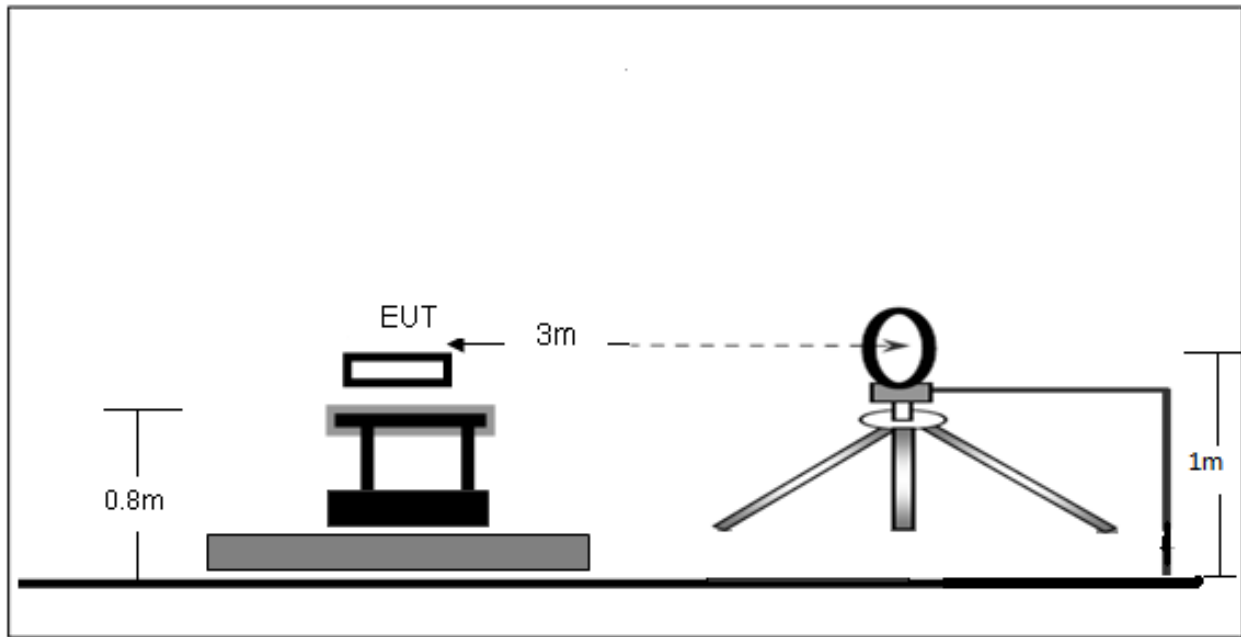
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1500	41.25	10.51	51.76	66.00	-14.24	QP
2	0.1500	13.88	10.51	24.39	56.00	-31.61	AVG
3	0.3255	35.03	10.51	45.54	59.57	-14.03	QP
4	0.3255	26.28	10.51	36.79	49.57	-12.78	AVG
5	0.4155	39.88	10.52	50.40	57.54	-7.14	QP
6 *	0.4155	32.58	10.52	43.10	47.54	-4.44	AVG
7	0.5235	31.65	10.53	42.18	56.00	-13.82	QP
8	0.5235	21.93	10.53	32.46	46.00	-13.54	AVG
9	0.7350	26.57	10.53	37.10	56.00	-18.90	QP
10	0.7350	17.25	10.53	27.78	46.00	-18.22	AVG
11	0.8880	23.70	10.54	34.24	56.00	-21.76	QP
12	0.8880	15.01	10.54	25.55	46.00	-20.45	AVG

* Indicates the worst data.

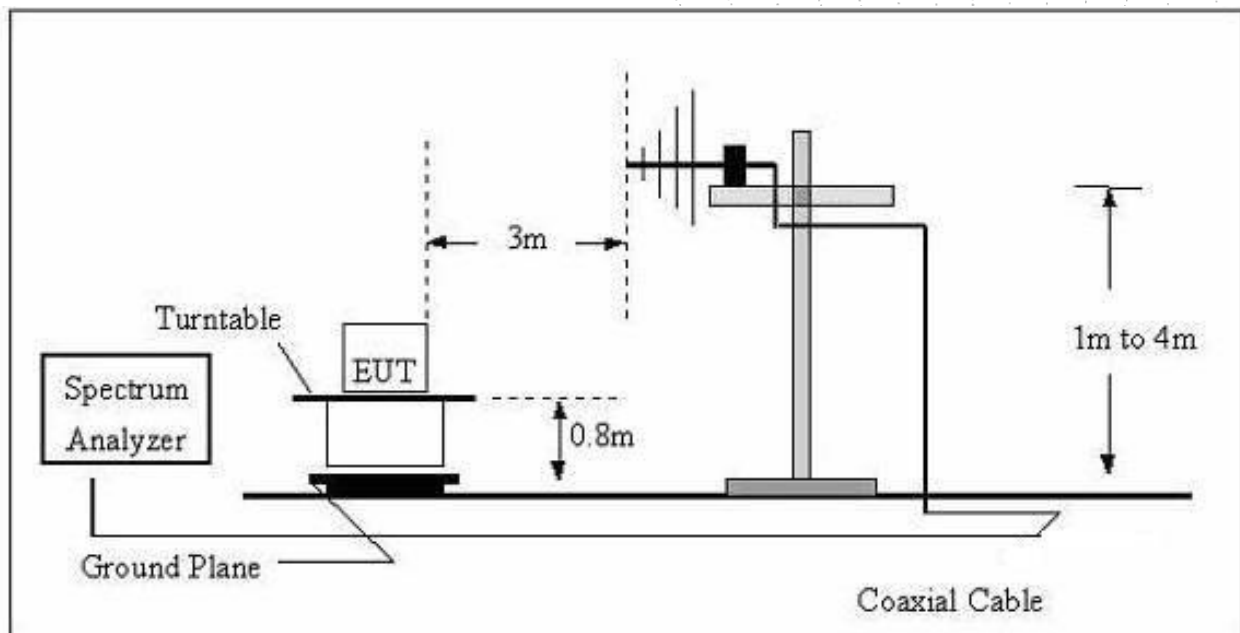
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

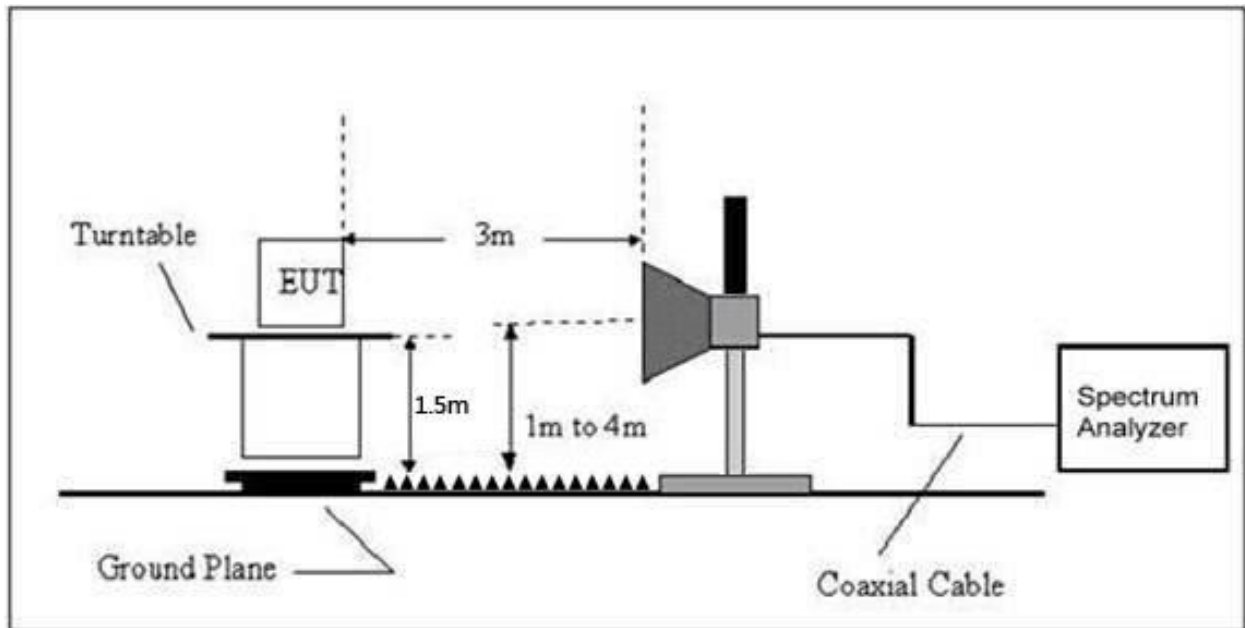
(A) Radiated Emission Test-Up Frequency Below 30MHz



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



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



7.2 Limit

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequency (MHz)	Field Strength uV/m	Distance (m)	Field Strength Limit at 3m Distance	
			uV/m	dBuV/m
0.009 ~ 0.490	$2400/F(\text{kHz})$	300	$10000 * 2400/F(\text{kHz})$	$20\log^{(2400/F(\text{kHz}))} + 80$
0.490 ~ 1.705	$24000/F(\text{kHz})$	30	$100 * 24000/F(\text{kHz})$	$20\log^{(24000/F(\text{kHz}))} + 40$
1.705 ~ 30	30	30	$100 * 30$	$20\log^{(30)} + 40$
30 ~ 88	100	3	100	$20\log^{(100)}$
88 ~ 216	150	3	150	$20\log^{(150)}$
216 ~ 960	200	3	200	$20\log^{(200)}$
Above 960	500	3	500	$20\log^{(500)}$

Limits Of Radiated Emission Measurement (Above 1000MHz)

Frequency (MHz)	Limit (dBuV/m) (at 3M)	
	Peak	Average
Above 1000	74	54

Notes:

- (1)The limit for radiated test was performed according to FCC PART 15C.
- (2)The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

7.3 Test Procedure

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10-2013. The test distance is 3m. The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 and CAN/CSA-CEI/IEC CISPR 22.

This test is required for any spurious emission that falls in a Restricted Band, as defined in Section 15.205.

It must be performed with the highest gain of each type of antenna proposed for use with the EUT.

Use the following spectrum analyzer settings:

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

- The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- The EUT was placed on the top of a rotating table 0.8 m for below 1GHz and 1.5m for above 1GHz the ground at a 3 meter. The table was rotated 360 degrees to determine the position of the highest radiation.
- The height of the equipment or of the substitution antenna shall be 0.8 m for below 1GHz and 1.5m for above 1GHz; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- 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

During the radiated emission test, the Spectrum Analyzer was set with the following configurations:

Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	QP	120 kHz	300 kHz
Above 1000	Peak	1 MHz	1 MHz
	Average	1 MHz	10 Hz

Note: for the frequency ranges below 30 MHz, a narrower RBW is used for these ranges but the measured value should add a RBW correction factor (RBWCF) where $RBWCF [dB] = 10 \cdot \lg(100 [kHz] / \text{narrower RBW} [kHz])$. , the narrower RBW is 1 kHz and RBWCF is 20 dB for the frequency 9 kHz to 150 kHz, and the narrower RBW is 10 kHz and RBWCF is 10 dB for the frequency 150 kHz to 30 MHz.

7.4 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.

7.5 Test Result

Below 30MHz

Temperature:	23.7 °C	Relative Humidity:	60%
Pressure:	101KPa	Test Voltage :	DC 12V
Test Mode:	Mode 3	Polarization:	--

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

Note:

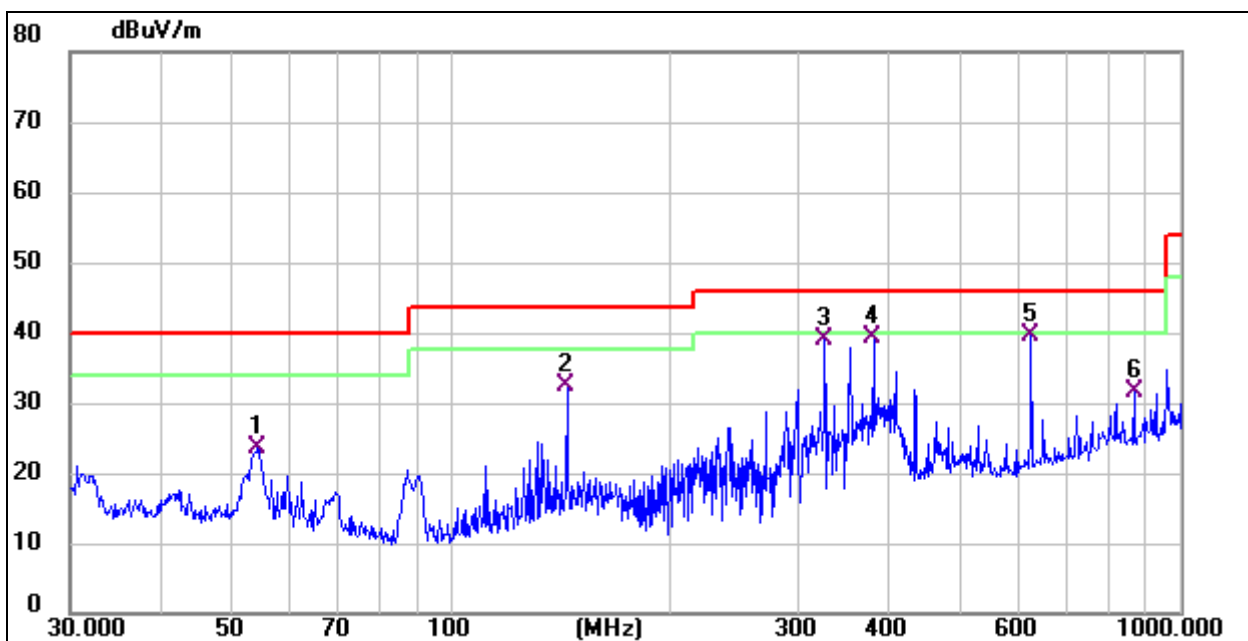
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

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

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

Between 30MHz – 1GHz

Temperature:	23.7 °C	Relative Humidity:	60%
Pressure:	101KPa	Test Voltage:	DC 12V
Test Mode:	Mode 3	Polarization :	Horizontal

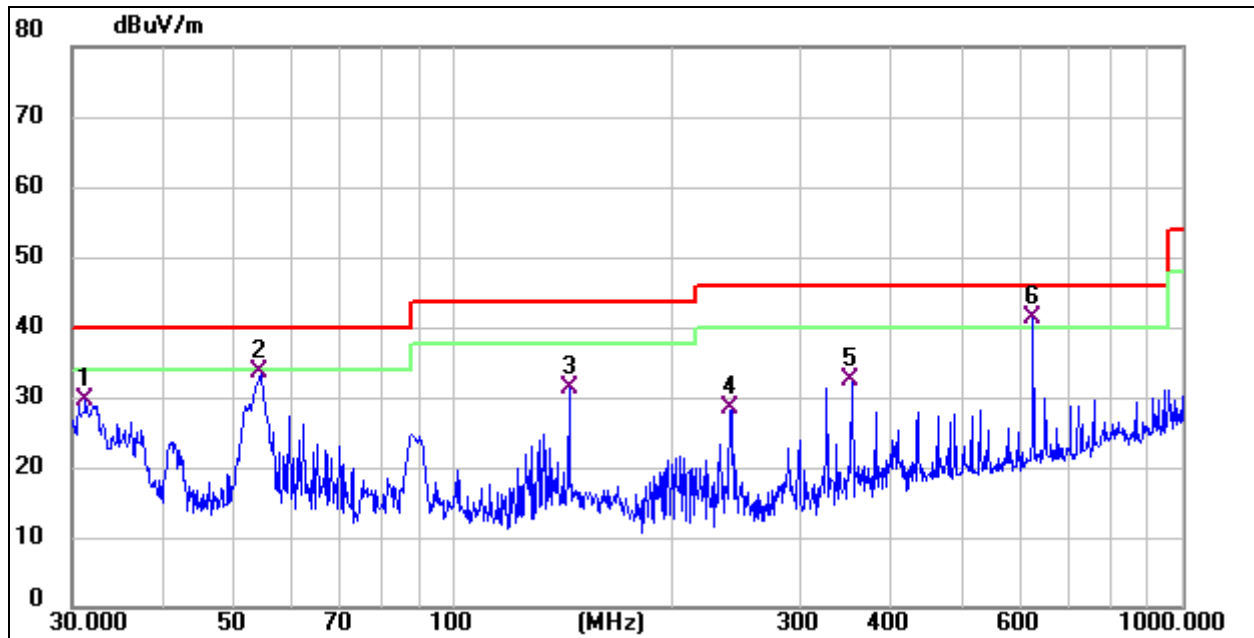


Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Margin = (Reading + Factor) – Limit

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	54.0900	34.82	-11.14	23.68	40.00	-16.32	QP
2	144.0146	43.07	-10.60	32.47	43.50	-11.03	QP
3	325.4436	49.33	-10.36	38.97	46.00	-7.03	QP
4	379.6922	48.44	-9.25	39.19	46.00	-6.81	QP
5 *	624.0560	43.68	-3.99	39.69	46.00	-6.31	QP
6	864.0656	31.95	-0.27	31.68	46.00	-14.32	QP

* Indicates the worst data.

Temperature:	23.7 °C	Relative Humidity:	60%
Pressure:	101KPa	Test Voltage:	DC 12V
Test Mode:	Mode 3	Polarization :	Vertical



Remark:

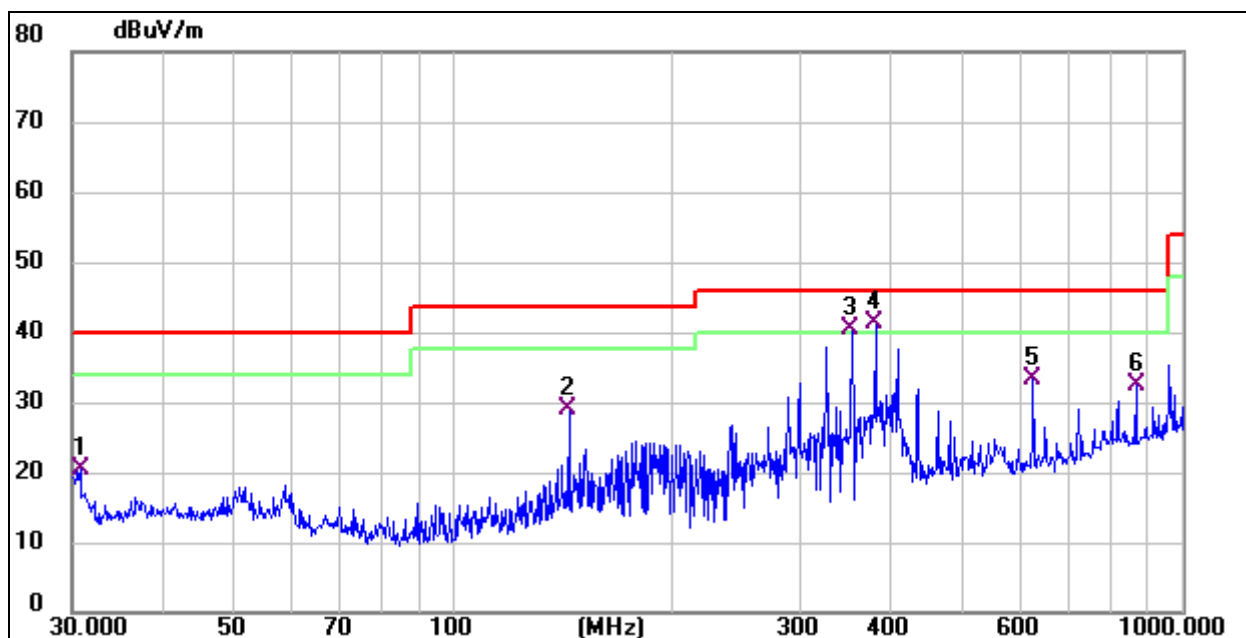
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

Margin = (Reading + Factor) – Limit

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	31.2454	41.18	-11.52	29.66	40.00	-10.34	QP
2	54.2673	44.55	-11.09	33.46	40.00	-6.54	QP
3	143.9977	41.83	-10.60	31.23	43.50	-12.27	QP
4	240.0154	40.80	-12.30	28.50	46.00	-17.50	QP
5	352.5723	42.46	-9.98	32.48	46.00	-13.52	QP
6 *	624.0560	45.16	-3.99	41.17	46.00	-4.83	QP

* Indicates the worst data.

Temperature:	23.7 °C	Relative Humidity:	60%
Pressure:	101KPa	Test Voltage :	POE 54V
Test Mode:	Mode 13	Polarization :	Horizontal



Remark:

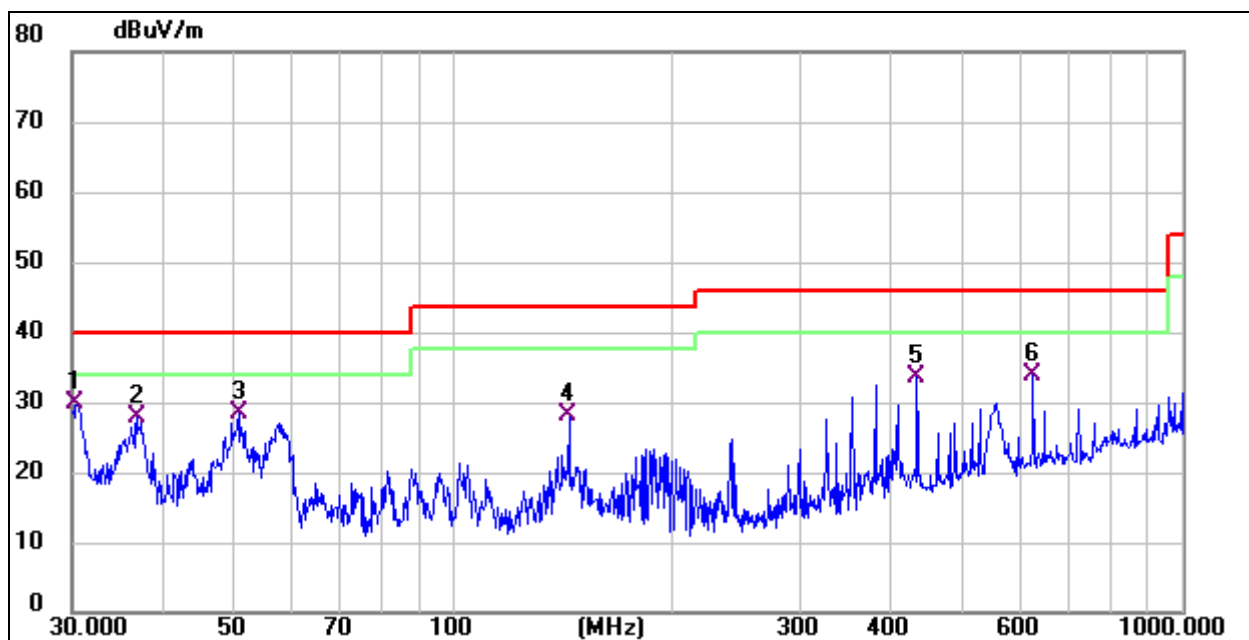
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

Margin = (Reading + Factor) – Limit

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	30.8787	31.90	-11.48	20.42	40.00	-19.58	QP
2	144.0146	39.56	-10.60	28.96	43.50	-14.54	QP
3 !	352.5723	50.29	-9.98	40.31	46.00	-5.69	QP
4 *	379.6922	50.55	-9.25	41.30	46.00	-4.70	QP
5	624.0560	37.25	-3.99	33.26	46.00	-12.74	QP
6	864.0656	32.63	-0.27	32.36	46.00	-13.64	QP

* Indicates the worst data.

Temperature:	23.7 °C	Relative Humidity:	60%
Pressure:	101KPa	Test Voltage :	POE 54V
Test Mode:	Mode 13	Polarization :	Vertical



Remark:

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

Margin = (Reading + Factor) – Limit

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	30.4131	41.42	-11.54	29.88	40.00	-10.12	QP
2	36.6417	39.04	-11.23	27.81	40.00	-12.19	QP
3	50.5860	39.04	-10.61	28.43	40.00	-11.57	QP
4	144.0146	38.76	-10.60	28.16	43.50	-15.34	QP
5	431.9899	40.77	-7.32	33.45	46.00	-12.55	QP
6	624.0560	37.87	-3.99	33.88	46.00	-12.12	QP

* Indicates the worst data.

Test Mode:	TX(5.1G) - 802.11a
------------	--------------------

Polar	Fre- quency	Reading Level	Correct Factor	Measure- ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.16	74.79	-10.51	64.28	68.20	-3.92	PK
Vertical	4434.16	59.77	-10.51	49.26	54.00	-4.74	AV
Vertical	10360.19	63.82	-0.72	63.10	68.20	-5.10	PK
Vertical	10360.19	49.83	-0.72	49.11	54.00	-4.89	AV
Vertical	15540.03	62.62	2.59	65.21	74.00	-8.79	PK
Vertical	15540.03	49.60	2.59	52.19	54.00	-1.81	AV
Horizontal	4434.20	70.59	-10.51	60.08	68.20	-8.12	PK
Horizontal	4434.20	59.10	-10.51	48.59	54.00	-5.41	AV
Horizontal	10360.10	61.30	-0.72	60.58	68.20	-7.62	PK
Horizontal	10360.10	49.41	-0.72	48.69	54.00	-5.31	AV
Horizontal	15540.13	60.79	2.59	63.38	74.00	-10.62	PK
Horizontal	15540.13	49.18	2.59	51.77	54.00	-2.23	AV
middle Channel (5200 MHz)-Above 1G							
Vertical	4592.20	70.61	-10.20	60.41	74.00	-13.59	PK
Vertical	4592.20	59.13	-10.20	48.93	54.00	-5.07	AV
Vertical	10400.20	64.10	-0.67	63.43	68.20	-4.77	PK
Vertical	10400.20	49.77	-0.67	49.10	54.00	-4.90	AV
Vertical	15600.08	64.17	2.67	66.84	74.00	-7.16	PK
Vertical	15600.08	49.70	2.67	52.37	54.00	-1.63	AV
Horizontal	4592.10	74.98	-10.20	64.78	74.00	-9.22	PK
Horizontal	4592.10	59.96	-10.20	49.76	54.00	-4.24	AV
Horizontal	10400.17	63.68	-0.67	63.01	68.20	-5.19	PK
Horizontal	10400.17	49.74	-0.67	49.07	54.00	-4.93	AV
Horizontal	15600.01	62.03	2.67	64.70	74.00	-9.30	PK
Horizontal	15600.01	49.30	2.67	51.97	54.00	-2.03	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.11	74.22	-9.45	64.77	74.00	-9.23	PK
Vertical	4739.11	59.39	-9.45	49.94	54.00	-4.06	AV
Vertical	10480.19	63.94	-0.64	63.30	68.20	-4.90	PK
Vertical	10480.19	49.68	-0.64	49.04	54.00	-4.96	AV
Vertical	15720.10	64.02	2.33	66.35	74.00	-7.65	PK
Vertical	15720.10	49.92	2.33	52.25	54.00	-1.75	AV
Horizontal	4739.09	70.05	-9.45	60.60	74.00	-13.40	PK
Horizontal	4739.09	59.76	-9.45	50.31	54.00	-3.69	AV
Horizontal	10480.08	62.08	-0.64	61.44	68.20	-6.76	PK
Horizontal	10480.08	49.95	-0.64	49.31	54.00	-4.69	AV
Horizontal	15720.20	61.87	2.33	64.20	74.00	-9.80	PK
Horizontal	15720.20	49.87	2.33	52.20	54.00	-1.80	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Correct Factor =Antenna Factor + Cable Loss - Preamp Factor

Over = Reading Level + Correct Factor – Limits

Test Mode:	TX(5.1G) - 802.11n-HT20
------------	-------------------------

Polar	Fre- quency	Reading Level	Correct Factor	Measure- ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.13	73.58	-10.51	63.07	68.20	-5.13	PK
Vertical	4434.13	59.99	-10.51	49.48	54.00	-4.52	AV
Vertical	10360.13	62.26	-0.72	61.54	68.20	-6.66	PK
Vertical	10360.13	49.08	-0.72	48.36	54.00	-5.64	AV
Vertical	15540.02	60.75	2.59	63.34	74.00	-10.66	PK
Vertical	15540.02	49.45	2.59	52.04	54.00	-1.96	AV
Horizontal	4434.12	70.34	-10.51	59.83	68.20	-8.37	PK
Horizontal	4434.12	59.59	-10.51	49.08	54.00	-4.92	AV
Horizontal	10360.19	63.84	-0.72	63.12	68.20	-5.08	PK
Horizontal	10360.19	49.98	-0.72	49.26	54.00	-4.74	AV
Horizontal	15540.18	60.95	2.59	63.54	74.00	-10.46	PK
Horizontal	15540.18	49.42	2.59	52.01	54.00	-1.99	AV
middle Channel (5200 MHz)-Above 1G							
Vertical	4592.14	72.52	-10.20	62.32	74.00	-11.68	PK
Vertical	4592.14	59.31	-10.20	49.11	54.00	-4.89	AV
Vertical	10400.12	64.29	-0.67	63.62	68.20	-4.58	PK
Vertical	10400.12	49.45	-0.67	48.78	54.00	-5.22	AV
Vertical	15600.04	61.55	2.67	64.22	74.00	-9.78	PK
Vertical	15600.04	49.12	2.67	51.79	54.00	-2.21	AV
Horizontal	4592.12	70.89	-10.20	60.69	74.00	-13.31	PK
Horizontal	4592.12	59.89	-10.20	49.69	54.00	-4.31	AV
Horizontal	10400.17	63.85	-0.67	63.18	68.20	-5.02	PK
Horizontal	10400.17	49.13	-0.67	48.46	54.00	-5.54	AV
Horizontal	15600.19	61.43	2.67	64.10	74.00	-9.90	PK
Horizontal	15600.19	49.70	2.67	52.37	54.00	-1.63	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.20	74.86	-9.45	65.41	74.00	-8.59	PK
Vertical	4739.20	59.42	-9.45	49.97	54.00	-4.03	AV
Vertical	10480.11	61.69	-0.64	61.05	68.20	-7.15	PK
Vertical	10480.11	49.67	-0.64	49.03	54.00	-4.97	AV
Vertical	15720.03	63.31	2.33	65.64	74.00	-8.36	PK
Vertical	15720.03	49.96	2.33	52.29	54.00	-1.71	AV
Horizontal	4739.15	73.49	-9.45	64.04	74.00	-9.96	PK
Horizontal	4739.15	59.59	-9.45	50.14	54.00	-3.86	AV
Horizontal	10480.03	64.88	-0.64	64.24	68.20	-3.96	PK
Horizontal	10480.03	49.85	-0.64	49.21	54.00	-4.79	AV
Horizontal	15720.01	64.90	2.33	67.23	74.00	-6.77	PK
Horizontal	15720.01	49.76	2.33	52.09	54.00	-1.91	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Correct Factor = Antenna Factor + Cable Loss - Preamp Factor

Over = Reading Level + Correct Factor – Limits

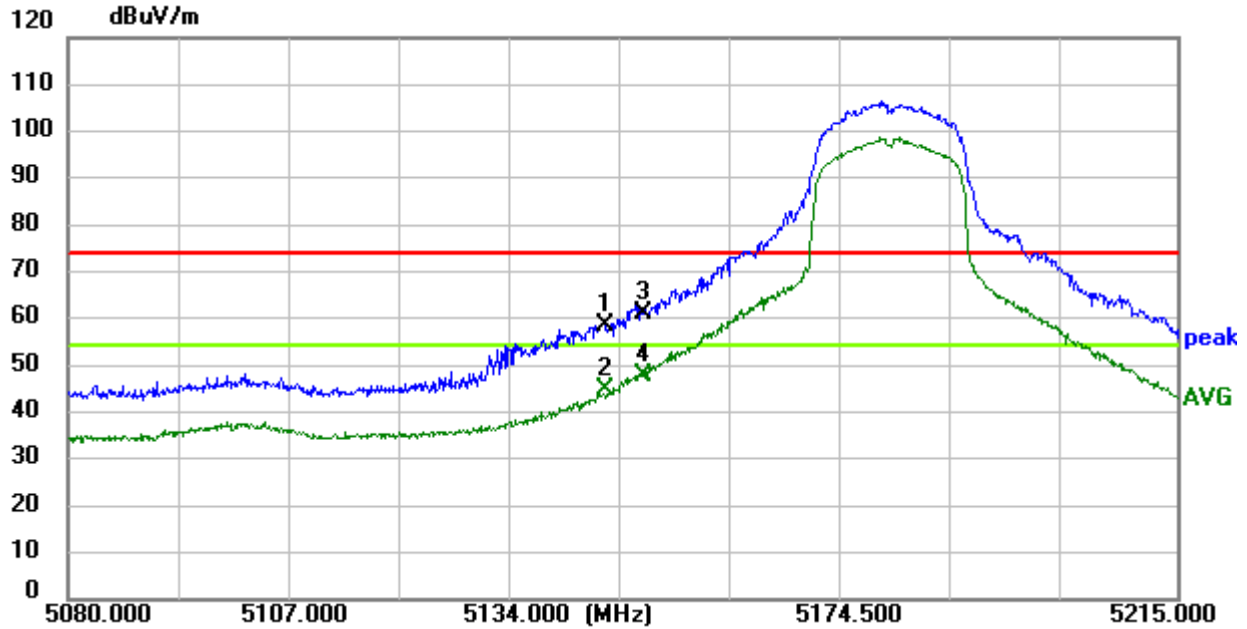
Test Mode:	TX(5.1G) - 802.11n-HT40
------------	-------------------------

Polar (H/V)	Fre- quency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Measure- ment (dBuV/m)	Limits (dBuV/m)	Over (dB)	Detector Type
Low Channel (5190 MHz)-Above 1G							
Vertical	4434.11	74.78	-10.52	64.26	68.20	-3.94	PK
Vertical	4434.11	59.29	-10.52	48.77	54.00	-5.23	AV
Vertical	10380.19	62.05	-0.70	61.35	68.20	-6.85	PK
Vertical	10380.19	49.81	-0.70	49.11	54.00	-4.89	AV
Vertical	15570.11	63.90	2.39	66.29	74.00	-7.71	PK
Vertical	15570.11	49.63	2.39	52.02	54.00	-1.98	AV
Horizontal	4434.17	73.90	-10.52	63.38	74.00	-10.62	PK
Horizontal	4434.17	59.29	-10.52	48.77	54.00	-5.23	AV
Horizontal	10380.03	60.70	-0.70	60.00	68.20	-8.20	PK
Horizontal	10380.03	49.51	-0.70	48.81	54.00	-5.19	AV
Horizontal	15570.18	64.02	2.39	66.41	74.00	-7.59	PK
Horizontal	15570.18	49.15	2.39	51.54	54.00	-2.46	AV
High Channel (5230 MHz)-Above 1G							
Vertical	4739.06	74.67	-9.45	65.22	68.20	-2.98	PK
Vertical	4739.06	59.26	-9.45	49.81	54.00	-4.19	AV
Vertical	10460.14	63.38	-0.65	62.73	68.20	-5.47	PK
Vertical	10460.14	49.91	-0.65	49.26	54.00	-4.74	AV
Vertical	15690.14	62.59	2.33	64.92	74.00	-9.08	PK
Vertical	15690.14	49.62	2.33	51.95	54.00	-2.05	AV
Horizontal	4739.03	70.89	-9.45	61.44	68.20	-6.76	PK
Horizontal	4739.03	59.53	-9.45	50.08	54.00	-3.92	AV
Horizontal	10460.17	60.78	-0.65	60.13	68.20	-8.07	PK
Horizontal	10460.17	49.51	-0.65	48.86	54.00	-5.14	AV
Horizontal	15690.05	62.38	2.33	64.71	74.00	-9.29	PK
Horizontal	15690.05	49.74	2.33	52.07	54.00	-1.93	AV

Note: PK value is lower than the Average value limit, So average didn't record.
The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.
Emission level (dBuV/m) = 20 log Emission level (uV/m).
Correct Factor =Antenna Factor + Cable Loss - Preamp Factor
Over = Reading Level + Correct Factor - Limits

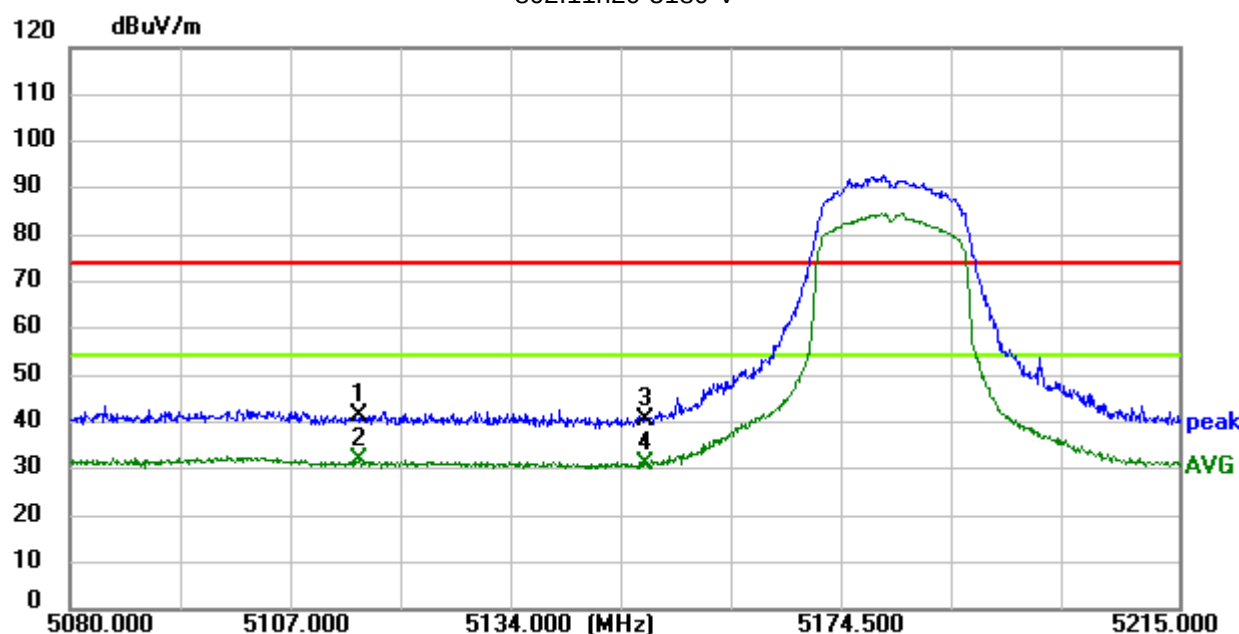
- ☒ Undesirable radiated Undesirable radiated Spurious Emission in Band Edge
- All modes have been tested, only show the worst case

802.11n20-5180-H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5145.2454	67.29	-8.68	58.61	74.00	-15.39	peak
2	5145.2454	53.40	-8.68	44.72	54.00	-9.28	AVG
3	5150.0000	69.75	-8.69	61.06	74.00	-12.94	peak
4 *	5150.0000	56.57	-8.69	47.88	54.00	-6.12	AVG

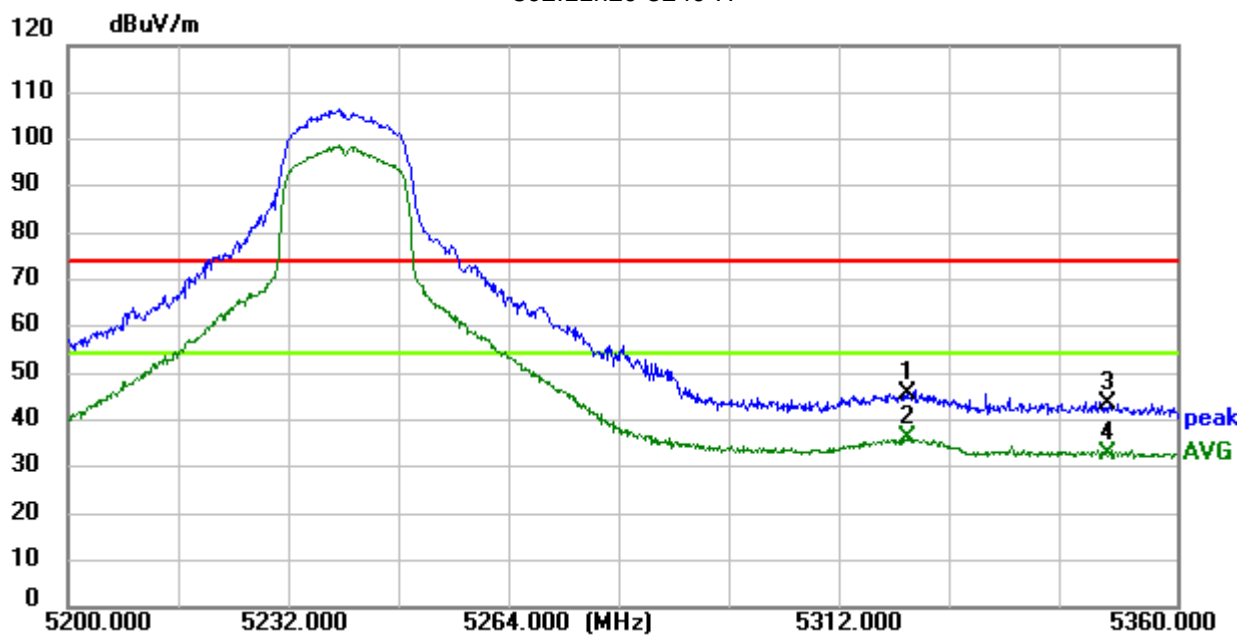
802.11n20-5180-V



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5115.2214	50.12	-8.62	41.50	74.00	-32.50	peak
2 *	5115.2214	40.44	-8.62	31.82	54.00	-22.18	AVG
3	5150.0000	48.98	-8.69	40.29	74.00	-33.71	peak
4	5150.0000	39.63	-8.69	30.94	54.00	-23.06	AVG

NOLO
ED
al

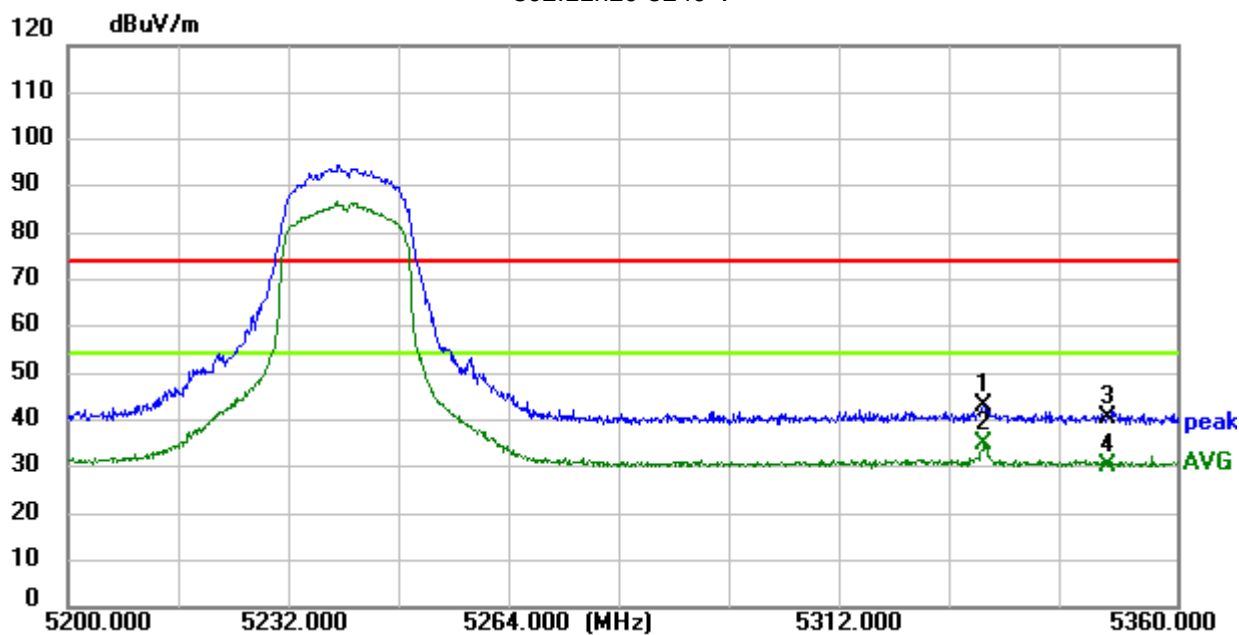
802.11n20-5240-H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5320.9760	54.35	-8.76	45.59	74.00	-28.41	peak
2 *	5320.9760	44.78	-8.76	36.02	54.00	-17.98	AVG
3	5350.0000	52.08	-8.76	43.32	74.00	-30.68	peak
4	5350.0000	41.42	-8.76	32.66	54.00	-21.34	AVG



802.11n20-5240-V



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5332.0160	51.80	-8.77	43.03	74.00	-30.97	peak
2 *	5332.0160	43.50	-8.77	34.73	54.00	-19.27	AVG
3	5350.0000	49.12	-8.76	40.36	74.00	-33.64	peak
4	5350.0000	38.78	-8.76	30.02	54.00	-23.98	AVG

Remark:

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

2. All modes have been measurement, only worst mode was reported.

SHENZHEN

Test Mode:	TX(5.3G) - 802.11a
------------	--------------------

Polar	Fre- quency	Reading Level	Correct Factor	Measure- ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5260 MHz)-Above 1G							
Vertical	4434.095	72.76	-10.51	62.25	68.2	-5.95	PK
Vertical	4434.095	59.05	-10.51	48.54	54	-5.46	AV
Vertical	10520.081	61.46	-0.52	60.94	68.2	-7.26	PK
Vertical	10520.081	49.62	-0.52	49.10	54	-4.90	AV
Vertical	15780.113	60.82	2.40	63.22	74	-10.78	PK
Vertical	15780.113	49.48	2.40	51.88	54	-2.12	AV
Horizontal	4434.106	72.23	-10.51	61.72	68.2	-6.48	PK
Horizontal	4434.106	59.57	-10.51	49.06	54	-4.94	AV
Horizontal	10520.059	61.31	-0.52	60.79	68.2	-7.41	PK
Horizontal	10520.059	49.03	-0.52	48.51	54	-5.49	AV
Horizontal	15780.170	62.37	2.40	64.77	74	-9.23	PK
Horizontal	15780.170	49.31	2.40	51.71	54	-2.29	AV
middle Channel (5280 MHz)-Above 1G							
Vertical	4592.069	73.29	-10.20	63.09	74	-10.91	PK
Vertical	4592.069	59.63	-10.20	49.43	54	-4.57	AV
Vertical	10560.034	62.48	-0.31	62.17	68.2	-6.03	PK
Vertical	10560.034	49.06	-0.31	48.75	54	-5.25	AV
Vertical	15840.193	61.65	2.16	63.81	74	-10.19	PK
Vertical	15840.193	49.01	2.16	51.17	54	-2.83	AV
Horizontal	4592.054	72.77	-10.20	62.57	74	-11.43	PK
Horizontal	4592.054	59.57	-10.20	49.37	54	-4.63	AV
Horizontal	10560.170	60.82	-0.31	60.51	68.2	-7.69	PK
Horizontal	10560.170	49.10	-0.31	48.79	54	-5.21	AV
Horizontal	15840.158	63.60	2.16	65.76	74	-8.24	PK
Horizontal	15840.158	49.89	2.16	52.05	54	-1.95	AV
High Channel (5320 MHz)-Above 1G							
Vertical	4739.152	70.85	-9.45	61.40	74	-12.60	PK
Vertical	4739.152	59.74	-9.45	50.29	54	-3.71	AV
Vertical	10640.038	62.18	0.00	62.18	68.2	-6.02	PK
Vertical	10640.038	49.82	0.00	49.82	54	-4.18	AV
Vertical	15960.107	60.36	2.02	62.38	74	-11.62	PK
Vertical	15960.107	49.01	2.02	51.03	54	-2.97	AV
Horizontal	4739.111	73.64	-9.45	64.19	74	-9.81	PK
Horizontal	4739.111	59.01	-9.45	49.56	54	-4.44	AV
Horizontal	10640.111	63.51	0.00	63.51	68.2	-4.69	PK
Horizontal	10640.111	49.91	0.00	49.91	54	-4.09	AV
Horizontal	15960.043	60.59	2.02	62.61	74	-11.39	PK
Horizontal	15960.043	49.05	2.02	51.07	54	-2.93	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Correct Factor = Antenna Factor + Cable Loss - Preamp Factor

Over = Reading Level + Correct Factor – Limits

Test Mode:	TX(5.3G) - 802.11n-HT20
------------	-------------------------

Polar	Fre- quency	Reading Level	Correct Factor	Measure- ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5260 MHz)-Above 1G							
Vertical	4434.118	70.44	-10.51	59.93	68.2	-8.27	PK
Vertical	4434.118	59.89	-10.51	49.38	54	-4.62	AV
Vertical	10520.115	63.52	-0.52	63.00	68.2	-5.20	PK
Vertical	10520.115	49.11	-0.52	48.59	54	-5.41	AV
Vertical	15780.163	63.67	2.40	66.07	74	-7.93	PK
Vertical	15780.163	49.70	2.40	52.10	54	-1.90	AV
Horizontal	4434.005	73.37	-10.51	62.86	68.2	-5.34	PK
Horizontal	4434.005	59.04	-10.51	48.53	54	-5.47	AV
Horizontal	10520.145	63.06	-0.52	62.54	68.2	-5.66	PK
Horizontal	10520.145	49.98	-0.52	49.46	54	-4.54	AV
Horizontal	15780.111	63.41	2.40	65.81	74	-8.19	PK
Horizontal	15780.111	49.42	2.40	51.82	54	-2.18	AV
middle Channel (5280 MHz)-Above 1G							
Vertical	4592.138	73.76	-10.20	63.56	74	-10.44	PK
Vertical	4592.138	59.09	-10.20	48.89	54	-5.11	AV
Vertical	10560.053	61.47	-0.31	61.16	68.2	-7.04	PK
Vertical	10560.053	49.06	-0.31	48.75	54	-5.25	AV
Vertical	15840.116	60.45	2.16	62.61	74	-11.39	PK
Vertical	15840.116	49.28	2.16	51.44	54	-2.56	AV
Horizontal	4592.031	72.14	-10.20	61.94	74	-12.06	PK
Horizontal	4592.031	60.00	-10.20	49.80	54	-4.20	AV
Horizontal	10560.170	63.79	-0.31	63.48	68.2	-4.72	PK
Horizontal	10560.170	49.23	-0.31	48.92	54	-5.08	AV
Horizontal	15840.198	64.70	2.16	66.86	74	-7.14	PK
Horizontal	15840.198	49.52	2.16	51.68	54	-2.32	AV
High Channel (5320 MHz)-Above 1G							
Vertical	4739.095	70.74	-9.45	61.29	74	-12.71	PK
Vertical	4739.095	59.01	-9.45	49.56	54	-4.44	AV
Vertical	10640.084	60.32	0.00	60.32	68.2	-7.88	PK
Vertical	10640.084	49.95	0.00	49.95	54	-4.05	AV
Vertical	15960.175	62.95	2.02	64.97	74	-9.03	PK
Vertical	15960.175	49.53	2.02	51.55	54	-2.45	AV
Horizontal	4739.145	70.27	-9.45	60.82	74	-13.18	PK
Horizontal	4739.145	59.59	-9.45	50.14	54	-3.86	AV
Horizontal	10640.079	60.01	0.00	60.01	68.2	-8.19	PK
Horizontal	10640.079	49.41	0.00	49.41	54	-4.59	AV
Horizontal	15960.007	64.25	2.02	66.27	74	-7.73	PK
Horizontal	15960.007	49.68	2.02	51.70	54	-2.30	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Correct Factor = Antenna Factor + Cable Loss - Preamp Factor

Over = Reading Level + Correct Factor - Limits

Test Mode:	TX(5.3G) - 802.11n-HT40
------------	-------------------------

Polar (H/V)	Fre- quency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Measure- ment (dBuV/m)	Limits (dBuV/m)	Over (dB)	Detector Type
Low Channel (5270 MHz)-Above 1G							
Vertical	4434.058	71.65	-10.51	61.14	68.2	-7.06	PK
Vertical	4434.058	59.02	-10.51	48.51	54	-5.49	AV
Vertical	10540.141	61.17	-0.41	60.76	68.2	-7.44	PK
Vertical	10540.141	49.39	-0.41	48.98	54	-5.02	AV
Vertical	15810.127	64.75	2.36	67.11	74	-6.89	PK
Vertical	15810.127	49.84	2.36	52.20	54	-1.80	AV
Horizontal	4434.070	73.78	-10.51	63.27	74	-10.73	PK
Horizontal	4434.070	59.98	-10.51	49.47	54	-4.53	AV
Horizontal	10540.148	60.38	-0.41	59.97	68.2	-8.23	PK
Horizontal	10540.148	49.57	-0.41	49.16	54	-4.84	AV
Horizontal	15810.047	62.79	2.36	65.15	74	-8.85	PK
Horizontal	15810.047	49.97	2.36	52.33	54	-1.67	AV
High Channel (5310 MHz)-Above 1G							
Vertical	4739.034	71.64	-9.45	62.19	68.2	-6.01	PK
Vertical	4739.034	59.29	-9.45	49.84	54	-4.16	AV
Vertical	10620.128	62.39	-0.04	62.35	68.2	-5.85	PK
Vertical	10620.128	49.87	-0.04	49.83	54	-4.17	AV
Vertical	15930.009	61.86	1.88	63.74	74	-10.26	PK
Vertical	15930.009	49.02	1.88	50.90	54	-3.10	AV
Horizontal	4739.105	72.93	-9.45	63.48	68.2	-4.72	PK
Horizontal	4739.105	59.79	-9.45	50.34	54	-3.66	AV
Horizontal	10620.042	60.87	-0.04	60.83	68.2	-7.37	PK
Horizontal	10620.042	49.03	-0.04	48.99	54	-5.01	AV
Horizontal	15930.140	60.13	1.88	62.01	74	-11.99	PK
Horizontal	15930.140	49.35	1.88	51.23	54	-2.77	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Correct Factor =Antenna Factor + Cable Loss - Preamp Factor

Over = Reading Level + Correct Factor - Limits

Test Mode:	TX(5.6G) - 802.11a
------------	--------------------

Polar	Fre- quency	Reading Level	Correct Factor	Measure- ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5500 MHz)-Above 1G							
Vertical	4434.011	73.72	-10.51	63.21	68.2	-4.99	PK
Vertical	4434.011	59.16	-10.51	48.65	54	-5.35	AV
Vertical	11000.161	60.72	-0.45	60.27	68.2	-7.93	PK
Vertical	11000.161	49.57	-0.45	49.12	54	-4.88	AV
Vertical	16500.102	60.31	2.94	63.25	74	-10.75	PK
Vertical	16500.102	49.65	2.94	52.59	54	-1.41	AV
Horizontal	4434.182	74.13	-10.51	63.62	68.2	-4.58	PK
Horizontal	4434.182	59.54	-10.51	49.03	54	-4.97	AV
Horizontal	11000.048	61.58	-0.45	61.13	68.2	-7.07	PK
Horizontal	11000.048	49.71	-0.45	49.26	54	-4.74	AV
Horizontal	16500.032	62.70	2.94	65.64	74	-8.36	PK
Horizontal	16500.032	49.85	2.94	52.79	54	-1.21	AV
middle Channel (5580 MHz)-Above 1G							
Vertical	4592.000	73.79	-10.20	63.59	74	-10.41	PK
Vertical	4592.000	59.77	-10.20	49.57	54	-4.43	AV
Vertical	11160.197	63.33	-0.65	62.68	68.2	-5.52	PK
Vertical	11160.197	49.57	-0.65	48.92	54	-5.08	AV
Vertical	16740.007	64.75	3.63	68.38	74	-5.62	PK
Vertical	16740.007	49.02	3.63	52.65	54	-1.35	AV
Horizontal	4592.103	74.59	-10.20	64.39	74	-9.61	PK
Horizontal	4592.103	59.63	-10.20	49.43	54	-4.57	AV
Horizontal	11160.118	60.35	-0.65	59.70	68.2	-8.50	PK
Horizontal	11160.118	49.87	-0.65	49.22	54	-4.78	AV
Horizontal	16740.132	62.38	3.63	66.01	74	-7.99	PK
Horizontal	16740.132	49.01	3.63	52.64	54	-1.36	AV
High Channel (5700 MHz)-Above 1G							
Vertical	4739.169	71.13	-9.45	61.68	74	-12.32	PK
Vertical	4739.169	59.73	-9.45	50.28	54	-3.72	AV
Vertical	11400.172	60.57	0.46	61.03	68.2	-7.17	PK
Vertical	11400.172	49.55	0.46	50.01	54	-3.99	AV
Vertical	17100.102	63.35	4.85	68.20	74	-5.80	PK
Vertical	17100.102	47.97	4.85	52.82	54	-1.18	AV
Horizontal	4739.095	71.09	-9.45	61.64	74	-12.36	PK
Horizontal	4739.095	59.12	-9.45	49.67	54	-4.33	AV
Horizontal	11400.102	62.38	0.46	62.84	68.2	-5.36	PK
Horizontal	11400.102	49.07	0.46	49.53	54	-4.47	AV
Horizontal	17100.145	62.98	4.85	67.83	74	-6.17	PK
Horizontal	17100.145	45.72	4.85	50.57	54	-3.43	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Correct Factor = Antenna Factor + Cable Loss - Preamp Factor

Over = Reading Level + Correct Factor - Limits

Test Mode:	TX(5.6G) - 802.11n-HT20
------------	-------------------------

Polar	Fre- quency	Reading Level	Correct Factor	Measure- ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5500 MHz)-Above 1G							
Vertical	4434.126	65.09	-0.51	64.58	68.2	-3.62	PK
Vertical	4434.126	49.75	-0.51	49.24	54	-4.76	AV
Vertical	11000.045	64.44	-0.45	63.99	68.2	-4.21	PK
Vertical	11000.045	49.91	-0.45	49.46	54	-4.54	AV
Vertical	16500.041	63.67	2.94	66.61	74	-7.39	PK
Vertical	16500.041	49.06	2.94	52.00	54	-2.00	AV
Horizontal	4434.034	63.58	-0.51	63.07	68.2	-5.13	PK
Horizontal	4434.034	49.68	-0.51	49.17	54	-4.83	AV
Horizontal	11000.147	63.83	-0.45	63.38	68.2	-4.82	PK
Horizontal	11000.147	49.47	-0.45	49.02	54	-4.98	AV
Horizontal	16500.176	62.75	2.94	65.69	74	-8.31	PK
Horizontal	16500.176	49.40	2.94	52.34	54	-1.66	AV
middle Channel (5580 MHz)-Above 1G							
Vertical	4592.162	72.59	-10.20	62.39	74	-11.61	PK
Vertical	4592.162	59.17	-10.20	48.97	54	-5.03	AV
Vertical	11160.178	63.70	-0.65	63.05	68.2	-5.15	PK
Vertical	11160.178	49.32	-0.65	48.67	54	-5.33	AV
Vertical	16740.035	62.98	3.63	66.61	74	-7.39	PK
Vertical	16740.035	49.46	3.63	53.09	54	-0.91	AV
Horizontal	4592.126	71.21	-10.20	61.01	74	-12.99	PK
Horizontal	4592.126	59.76	-10.20	49.56	54	-4.44	AV
Horizontal	11160.174	64.96	-0.65	64.31	68.2	-3.89	PK
Horizontal	11160.174	49.85	-0.65	49.20	54	-4.80	AV
Horizontal	16740.107	60.41	3.63	64.04	74	-9.96	PK
Horizontal	16740.107	49.33	3.63	52.96	54	-1.04	AV
High Channel (5700 MHz)-Above 1G							
Vertical	4739.008	74.03	-9.45	64.58	74	-9.42	PK
Vertical	4739.008	59.89	-9.45	50.44	54	-3.56	AV
Vertical	11400.137	64.40	0.46	64.86	68.2	-3.34	PK
Vertical	11400.137	49.29	0.46	49.75	54	-4.25	AV
Vertical	17100.195	63.32	4.85	68.17	74	-5.83	PK
Vertical	17100.195	45.22	4.85	50.29	54	-3.71	AV
Horizontal	4739.048	74.89	-9.45	65.44	74	-8.56	PK
Horizontal	4739.048	59.78	-9.45	50.33	54	-3.67	AV
Horizontal	11400.111	61.55	0.46	62.01	68.2	-6.19	PK
Horizontal	11400.111	49.25	0.46	49.71	54	-4.29	AV
Horizontal	17100.078	60.41	4.85	65.26	74	-8.74	PK
Horizontal	17100.078	46.85	4.85	51.70	54	-2.30	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Correct Factor =Antenna Factor + Cable Loss - Preamp Factor

Over = Reading Level + Correct Factor - Limits

Test Mode:	TX(5.6G) - 802.11n-HT40
------------	-------------------------

Polar	Fre- quency	Reading Level	Correct Factor	Measure- ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5510 MHz)-Above 1G							
Vertical	4434.050	64.41	-10.51	53.90	68.2	-14.30	PK
Vertical	4434.050	43.53	-10.51	33.02	54	-20.98	AV
Vertical	11020.007	61.35	-0.47	60.88	68.2	-7.32	PK
Vertical	11020.007	43.10	-0.47	42.63	54	-11.37	AV
Vertical	16530.183	62.43	3.05	65.48	74	-8.52	PK
Vertical	16530.183	43.05	3.05	46.10	54	-7.90	AV
Horizontal	4434.182	61.64	-10.51	51.13	74	-22.87	PK
Horizontal	4434.182	43.13	-10.51	32.62	54	-21.38	AV
Horizontal	11020.182	50.89	-0.47	50.42	68.2	-17.78	PK
Horizontal	11020.182	40.72	-0.47	40.25	54	-13.75	AV
Horizontal	16530.039	50.83	3.05	53.88	74	-20.12	PK
Horizontal	16530.039	44.60	3.05	47.65	54	-6.35	AV
middle Channel (5550 MHz)-Above 1G							
Vertical	4592.035	62.17	-10.20	51.97	74	-22.03	PK
Vertical	4592.035	43.84	-10.20	33.64	54	-20.36	AV
Vertical	11100.104	62.72	-0.57	62.15	68.2	-6.05	PK
Vertical	11100.104	43.99	-0.57	43.42	54	-10.58	AV
Vertical	16650.098	64.16	3.58	67.74	74	-6.26	PK
Vertical	16650.098	43.77	3.58	47.35	54	-6.65	AV
Horizontal	4592.037	61.68	-10.20	51.48	74	-22.52	PK
Horizontal	4592.037	43.40	-10.20	33.20	54	-20.80	AV
Horizontal	11100.073	52.95	-0.57	52.38	68.2	-15.82	PK
Horizontal	11100.073	42.49	-0.57	41.92	54	-12.08	AV
Horizontal	16650.085	51.38	3.58	54.96	74	-19.04	PK
Horizontal	16650.085	40.52	3.58	44.10	54	-9.90	AV
High Channel (5670 MHz)-Above 1G							
Vertical	4739.162	60.97	-9.45	51.52	68.2	-16.68	PK
Vertical	4739.162	43.29	-9.45	33.84	54	-20.16	AV
Vertical	11340.069	64.37	-0.13	64.24	68.2	-3.96	PK
Vertical	11340.069	43.86	-0.13	43.73	54	-10.27	AV
Vertical	17010.159	63.15	3.91	67.06	74	-6.94	PK
Vertical	17010.159	43.70	3.91	47.61	54	-6.39	AV
Horizontal	4739.039	61.72	-9.45	52.27	68.2	-15.93	PK
Horizontal	4739.039	43.21	-9.45	33.76	54	-20.24	AV
Horizontal	11340.131	53.51	-0.13	53.38	68.2	-14.82	PK
Horizontal	11340.131	43.20	-0.13	43.07	54	-10.93	AV
Horizontal	17010.045	54.09	3.91	58.00	74	-16.00	PK
Horizontal	17010.045	42.12	3.91	46.03	54	-7.97	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Correct Factor =Antenna Factor + Cable Loss - Preamp Factor

Over = Reading Level + Correct Factor – Limits

Test Mode:	TX(5.8G) - 802.11a
------------	--------------------

Polar	Fre- quency	Reading Level	Correct Factor	Measure- ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.135	70.55	-10.36	60.19	74	-13.81	PK
Vertical	4679.135	59.89	-10.36	49.53	54	-4.47	AV
Vertical	11490.152	62.38	-0.19	62.19	68.2	-6.01	PK
Vertical	11490.152	49.82	-0.19	49.63	54	-4.37	AV
Vertical	17235.062	59.76	4.28	64.04	68.2	-4.16	PK
Vertical	17235.062	44.74	4.28	49.02	54	-4.98	AV
Horizontal	4679.097	74.43	-10.36	64.07	74	-9.93	PK
Horizontal	4679.097	59.35	-10.36	48.99	54	-5.01	AV
Horizontal	11490.003	64.10	-0.19	63.91	68.2	-4.29	PK
Horizontal	11490.003	49.17	-0.19	48.98	54	-5.02	AV
Horizontal	17235.177	57.83	4.28	62.11	68.2	-6.09	PK
Horizontal	17235.177	44.76	4.28	49.04	54	-4.96	AV
middle Channel (5785 MHz)-Above 1G							
Vertical	4592.092	70.40	-10.20	60.20	74	-13.80	PK
Vertical	4592.092	59.78	-10.20	49.58	54	-4.42	AV
Vertical	11570.053	61.50	-0.21	61.29	68.2	-6.91	PK
Vertical	11570.053	49.10	-0.21	48.89	54	-5.11	AV
Vertical	17355.195	56.03	4.68	60.71	68.2	-7.49	PK
Vertical	17355.195	44.07	4.68	48.75	54	-5.25	AV
Horizontal	4592.109	70.50	-10.20	60.30	74	-13.70	PK
Horizontal	4592.109	59.66	-10.20	49.46	54	-4.54	AV
Horizontal	11570.114	64.92	-0.21	64.71	68.2	-3.49	PK
Horizontal	11570.114	49.24	-0.21	49.03	54	-4.97	AV
Horizontal	17355.151	55.01	4.68	59.69	68.2	-8.51	PK
Horizontal	17355.151	44.47	4.68	49.15	54	-4.85	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.057	71.79	-7.08	64.71	68.2	-3.49	PK
Vertical	6039.057	59.96	-7.08	52.88	54	-1.12	AV
Vertical	11650.061	64.48	-0.50	63.98	74	-10.02	PK
Vertical	11650.061	49.84	-0.50	49.34	54	-4.66	AV
Vertical	17475.121	56.81	4.77	61.58	68.2	-6.62	PK
Vertical	17475.121	44.57	4.77	49.34	54	-4.66	AV
Horizontal	6039.165	72.29	-7.08	65.21	68.2	-2.99	PK
Horizontal	6039.165	59.19	-7.08	52.11	54	-1.89	AV
Horizontal	11650.186	62.43	-0.50	61.93	74	-12.07	PK
Horizontal	11650.186	49.28	-0.50	48.78	54	-5.22	AV
Horizontal	17475.148	56.21	4.77	60.98	68.2	-7.22	PK
Horizontal	17475.148	44.29	4.77	49.06	54	-4.94	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Correct Factor =Antenna Factor + Cable Loss - Preamp Factor

Over = Reading Level + Correct Factor - Limits

Test Mode:	TX(5.8G) - 802.11n-HT20
------------	-------------------------

Polar	Fre- quency	Reading Level	Correct Factor	Measure- ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.050	71.32	-10.36	60.96	74	-13.04	PK
Vertical	4679.050	59.75	-10.36	49.39	54	-4.61	AV
Vertical	11490.123	64.14	-0.19	63.95	68.2	-4.25	PK
Vertical	11490.123	49.66	-0.19	49.47	54	-4.53	AV
Vertical	17235.064	56.48	4.28	60.76	68.2	-7.44	PK
Vertical	17235.064	44.24	4.28	48.52	54	-5.48	AV
Horizontal	4679.116	72.65	-10.36	62.29	74	-11.71	PK
Horizontal	4679.116	59.57	-10.36	49.21	54	-4.79	AV
Horizontal	11490.059	61.81	-0.19	61.62	68.2	-6.58	PK
Horizontal	11490.059	49.50	-0.19	49.31	54	-4.69	AV
Horizontal	17235.083	57.73	4.28	62.01	68.2	-6.19	PK
Horizontal	17235.083	44.29	4.28	48.57	54	-5.43	AV
middle Channel (5785 MHz)-Above 1G							
Vertical	4592.144	71.38	-10.20	61.18	74	-12.82	PK
Vertical	4592.144	59.20	-10.20	49.00	54	-5.00	AV
Vertical	11570.193	61.67	-0.21	61.46	68.2	-6.74	PK
Vertical	11570.193	49.58	-0.21	49.37	54	-4.63	AV
Vertical	17355.000	55.19	4.68	59.87	68.2	-8.33	PK
Vertical	17355.000	44.55	4.68	49.23	54	-4.77	AV
Horizontal	4592.129	71.02	-10.20	60.82	74	-13.18	PK
Horizontal	4592.129	59.24	-10.20	49.04	54	-4.96	AV
Horizontal	11570.083	62.39	-0.21	62.18	68.2	-6.02	PK
Horizontal	11570.083	49.61	-0.21	49.40	54	-4.60	AV
Horizontal	17355.134	58.65	4.68	63.33	68.2	-4.87	PK
Horizontal	17355.134	44.80	4.68	49.48	54	-4.52	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.040	73.52	-7.08	66.44	68.2	-1.76	PK
Vertical	6039.040	59.71	-7.08	52.63	54	-1.37	AV
Vertical	11650.012	63.30	-0.50	62.80	74	-11.20	PK
Vertical	11650.012	49.13	-0.50	48.63	54	-5.37	AV
Vertical	17475.045	59.44	4.77	64.21	68.2	-3.99	PK
Vertical	17475.045	45.00	4.77	49.77	54	-4.23	AV
Horizontal	6039.148	70.17	-7.08	63.09	68.2	-5.11	PK
Horizontal	6039.148	59.53	-7.08	52.45	54	-1.55	AV
Horizontal	11650.171	64.65	-0.50	64.15	74	-9.85	PK
Horizontal	11650.171	49.43	-0.50	48.93	54	-5.07	AV
Horizontal	17475.008	57.20	4.77	61.97	68.2	-6.23	PK
Horizontal	17475.008	44.44	4.77	49.21	54	-4.79	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Correct Factor =Antenna Factor + Cable Loss - Preamp Factor

Over = Reading Level + Correct Factor – Limits

Test Mode:	TX(5.8G) - 802.11n-HT40
------------	-------------------------

Polar	Fre- quency	Reading Level	Correct Factor	Measure- ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G							
Vertical	4679.148	73.35	-10.36	62.99	74	-11.01	PK
Vertical	4679.148	59.36	-10.36	49.00	54	-5.00	AV
Vertical	11510.188	63.97	-0.26	63.71	74	-10.29	PK
Vertical	11510.188	49.41	-0.26	49.15	54	-4.85	AV
Vertical	17265.020	59.34	4.35	63.69	68.2	-4.51	PK
Vertical	17265.020	44.39	4.35	48.74	54	-5.26	AV
Horizontal	4679.104	71.36	-10.36	61.00	74	-13.00	PK
Horizontal	4679.104	59.24	-10.36	48.88	54	-5.12	AV
Horizontal	11510.153	64.23	-0.26	63.97	74	-10.03	PK
Horizontal	11510.153	49.77	-0.26	49.51	54	-4.49	AV
Horizontal	17265.196	58.20	4.35	62.55	68.2	-5.65	PK
Horizontal	17265.196	44.88	4.35	49.23	54	-4.77	AV
High Channel (5795 MHz)-Above 1G							
Vertical	6039.006	72.60	-7.08	65.52	68.2	-2.68	PK
Vertical	6039.006	59.26	-7.08	52.18	54	-1.82	AV
Vertical	11590.003	62.55	-0.20	62.35	74	-11.65	PK
Vertical	11590.003	49.80	-0.20	49.60	54	-4.40	AV
Vertical	17385.068	56.59	4.81	61.40	68.2	-6.80	PK
Vertical	17385.068	44.04	4.81	48.85	54	-5.15	AV
Horizontal	6039.102	71.37	-7.08	64.29	68.2	-3.91	PK
Horizontal	6039.102	59.54	-7.08	52.46	54	-1.54	AV
Horizontal	11590.141	60.09	-0.20	59.89	74	-14.11	PK
Horizontal	11590.141	49.41	-0.20	49.21	54	-4.79	AV
Horizontal	17385.035	59.99	4.81	64.80	68.2	-3.40	PK
Horizontal	17385.035	44.72	4.81	49.53	54	-4.47	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Correct Factor =Antenna Factor + Cable Loss - Preamp Factor

Over = Reading Level + Correct Factor – Limits

8. Power Spectral Density Test

8.1 Block Diagram Of Test Setup



8.2 Limit

For the band 5.15-5.25 GHz,

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands,

The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the

maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz

For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

8.3 Test Procedure

For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5).

For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, "provided that the measured power is integrated over the full reference bandwidth" to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 KHz bandwidth, the following adjustments to the procedures apply:

- a) Set $RBW \geq 1/T$, where T is defined in section II.B.I.a).
- b) Set $VBW \geq 3 RBW$.
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10\log(500\text{kHz}/RBW)$ to the measured result, whereas $RBW (< 500 \text{ KHz})$ is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10\log(1\text{MHz}/RBW)$ to the measured result, whereas $RBW (< 1 \text{ MHz})$ is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 KHz for the sections 5.c) and 5.d) above, since $RBW=100 \text{ KHz}$ is available on nearly all spectrum analyzers.

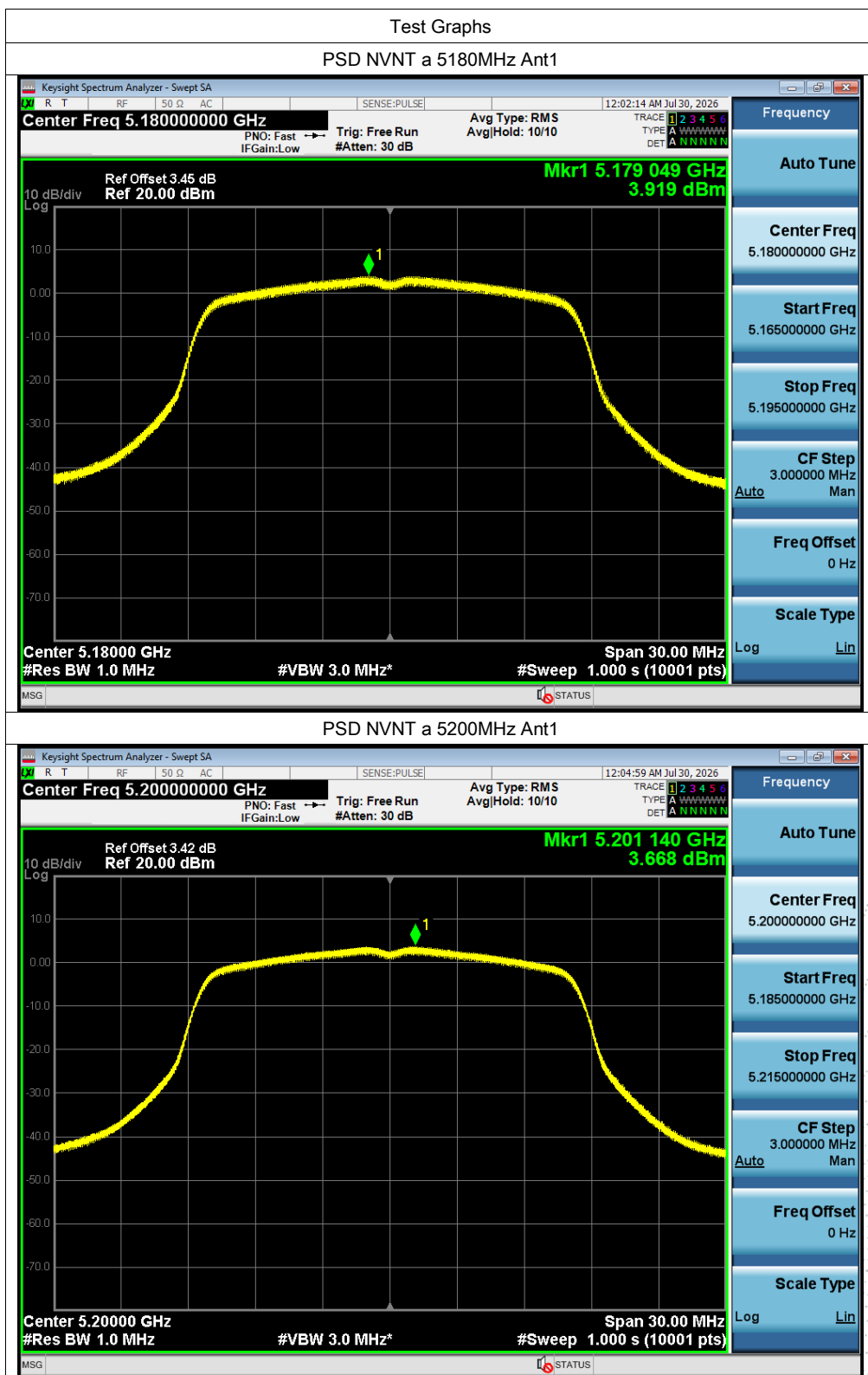
8.4 EUT Operating Conditions

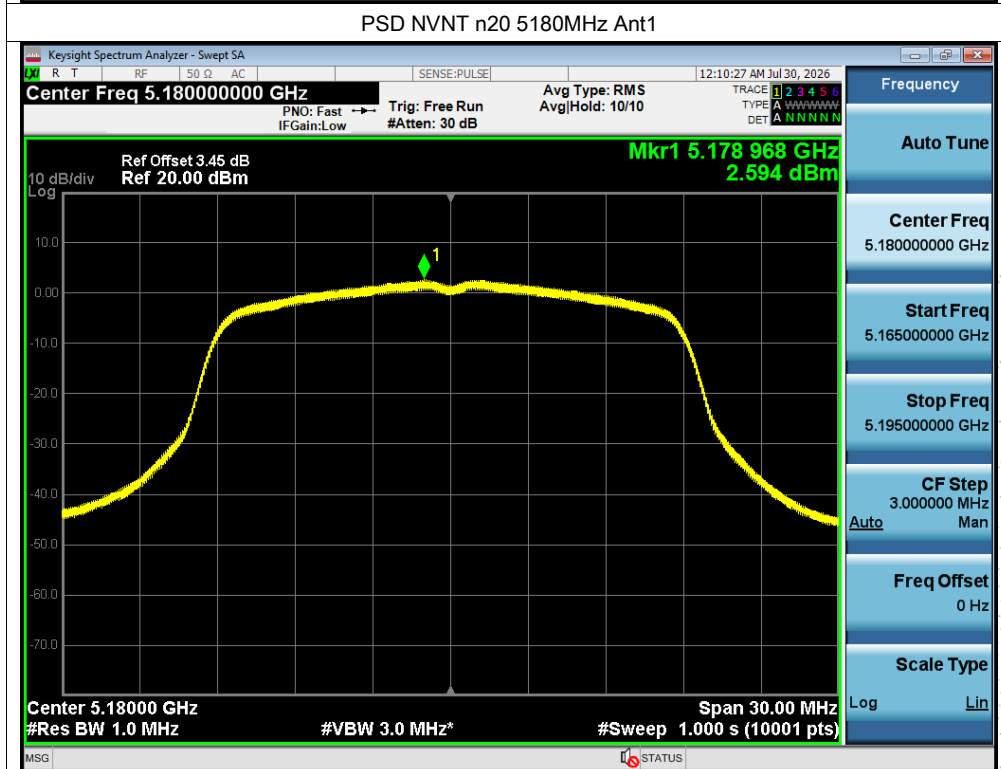
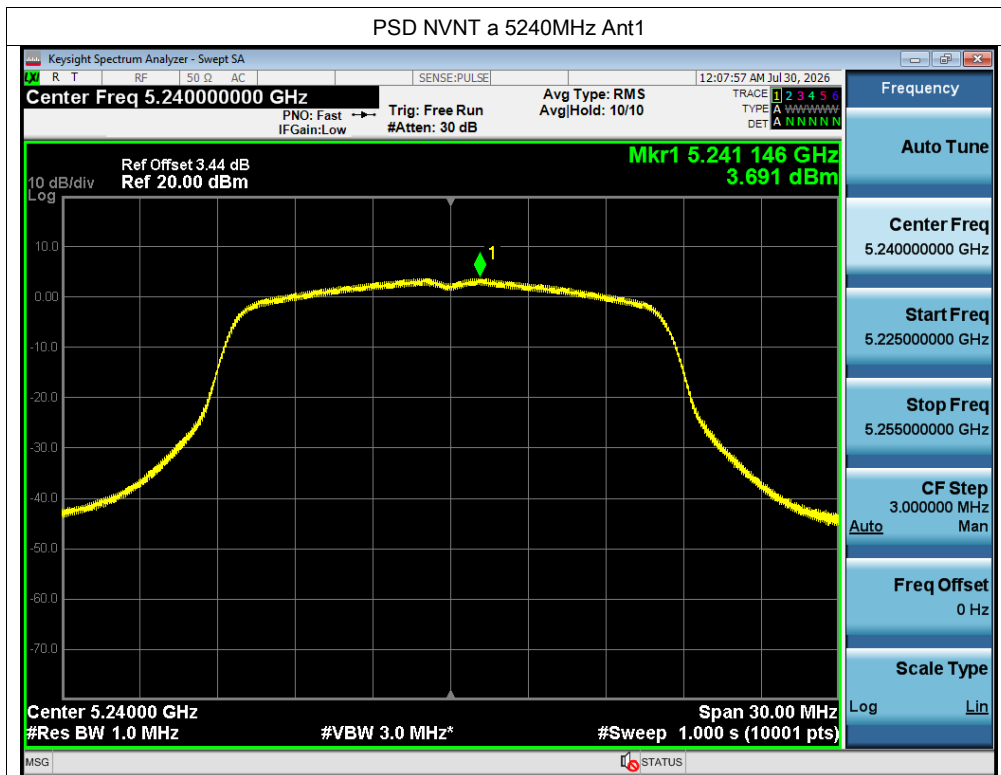
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

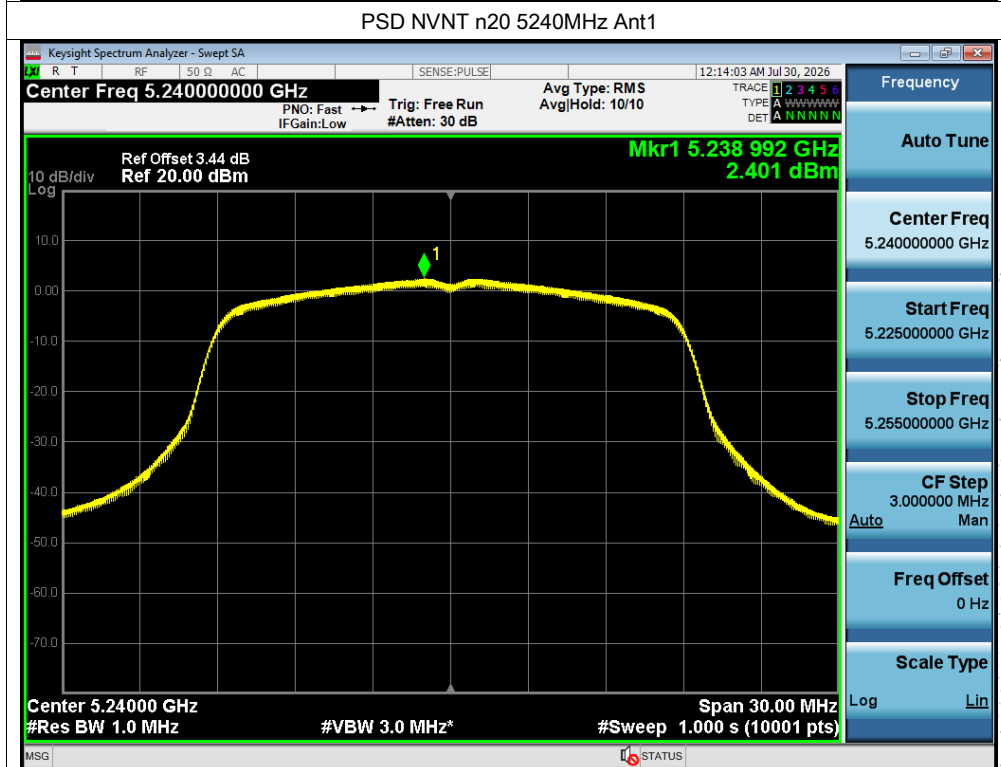
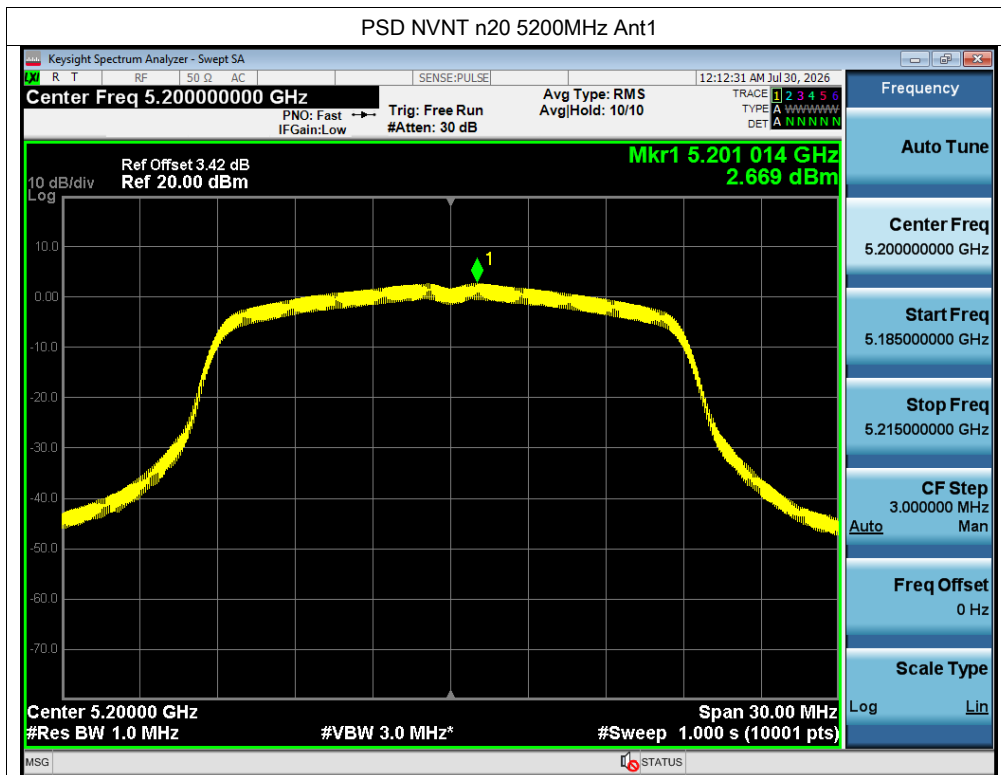
8.5 Test Result

Temperature:	23.7 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	DC 12V
Test Mode:	(5180-5240MHz)		

Test Mode	Frequency (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
a	5180	3.92	0.96	4.88	11	Pass
a	5200	3.67	0.96	4.63	11	Pass
a	5240	3.69	0.98	4.67	11	Pass
n20	5180	2.59	1.02	3.61	11	Pass
n20	5200	2.67	1.02	3.69	11	Pass
n20	5240	2.4	1.02	3.42	11	Pass
n40	5190	-1.62	0.42	-1.20	11	Pass
n40	5230	0.78	0.42	1.20	11	Pass





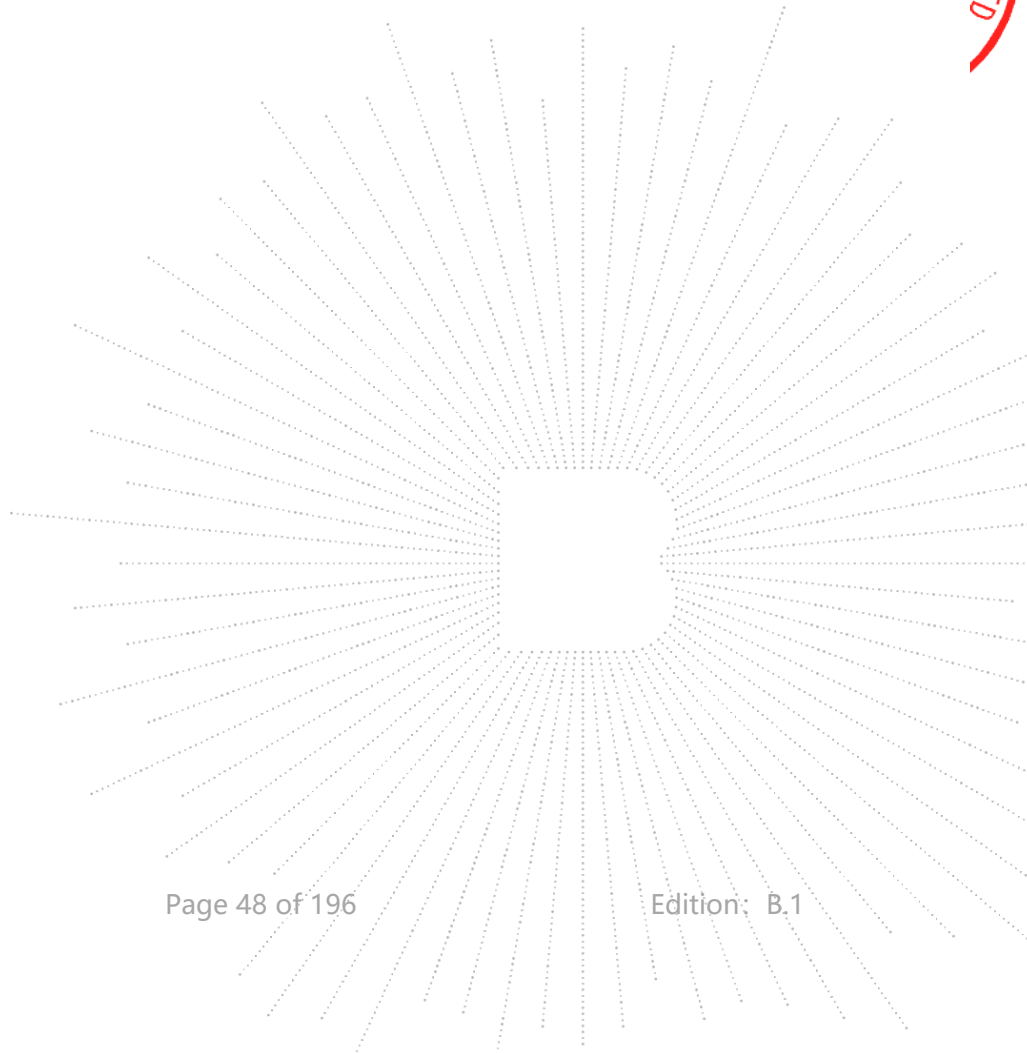


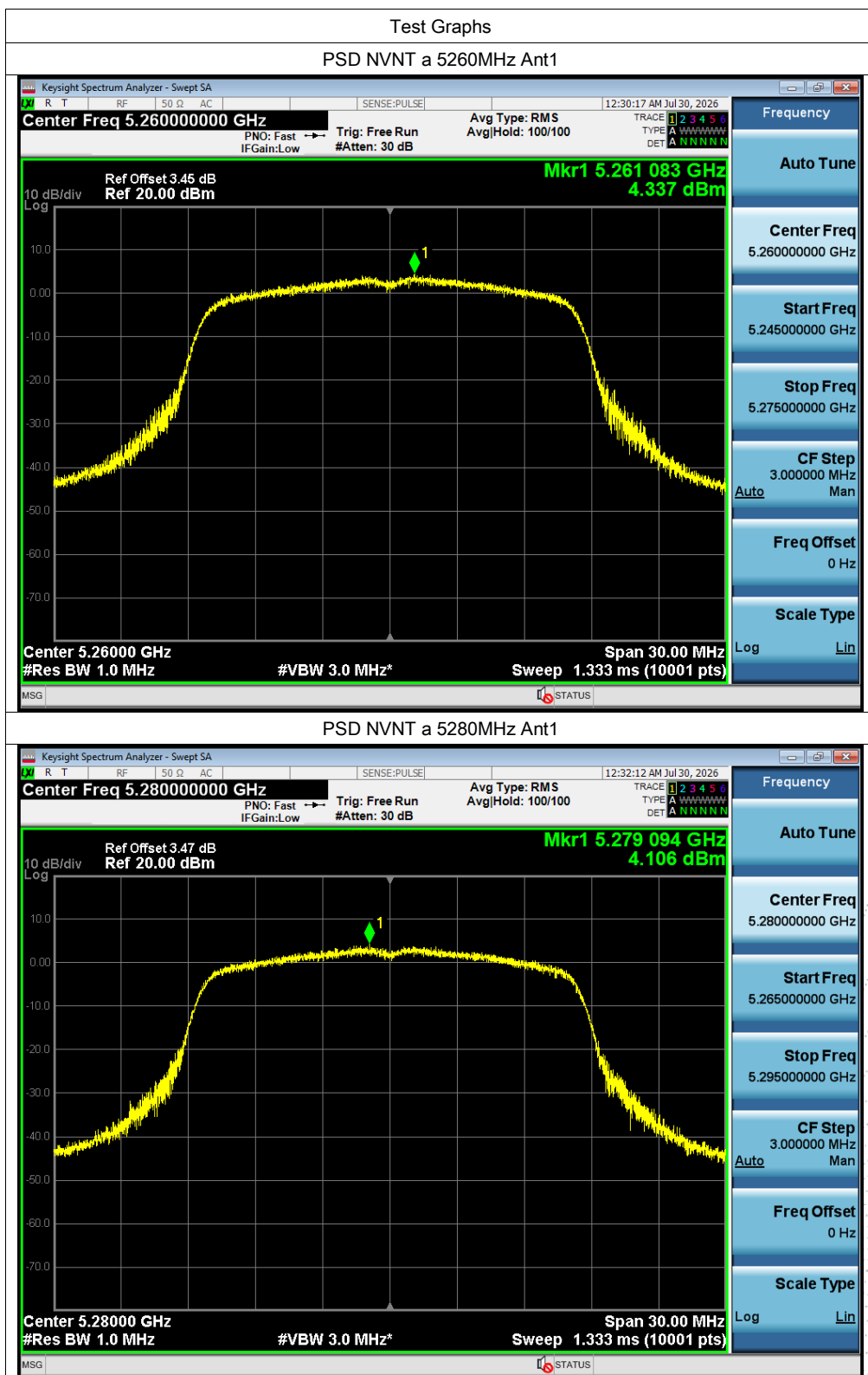


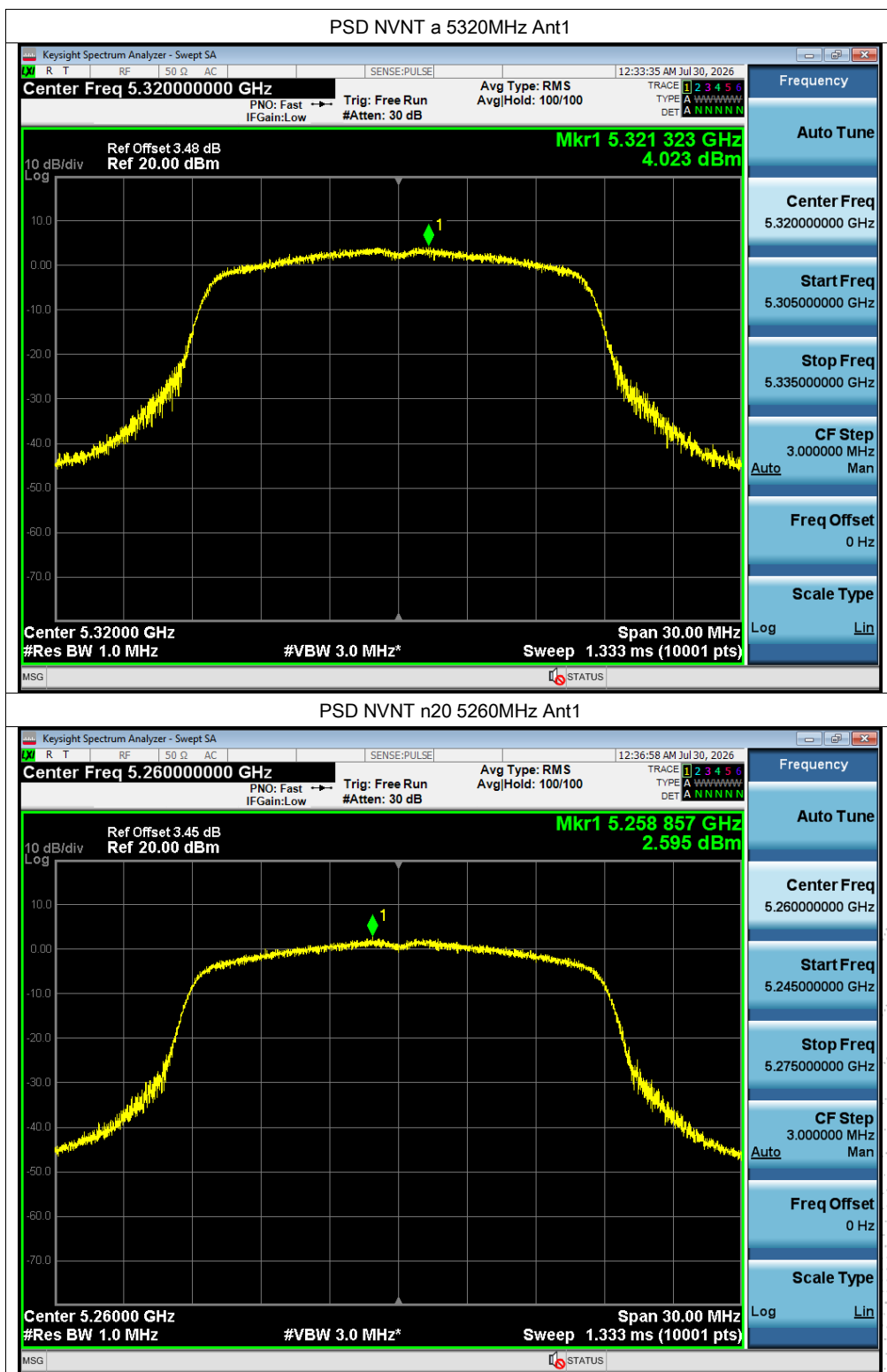
Temperature:	23.7 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	DC 12V
Test Mode:	(5260-5320MHz)		

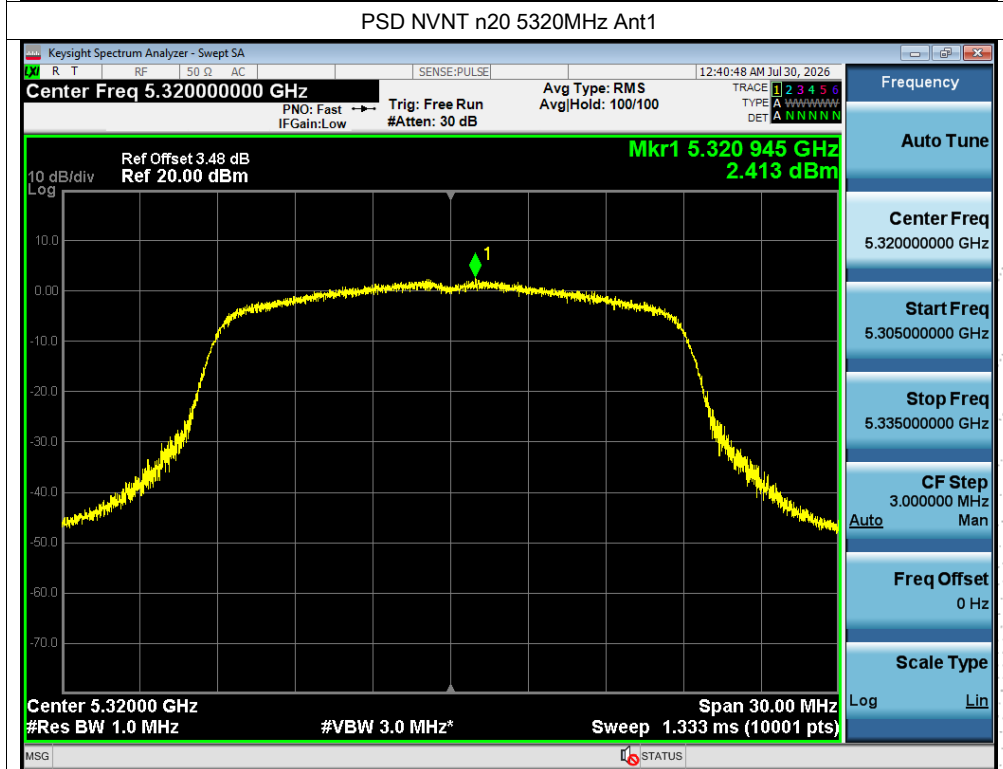
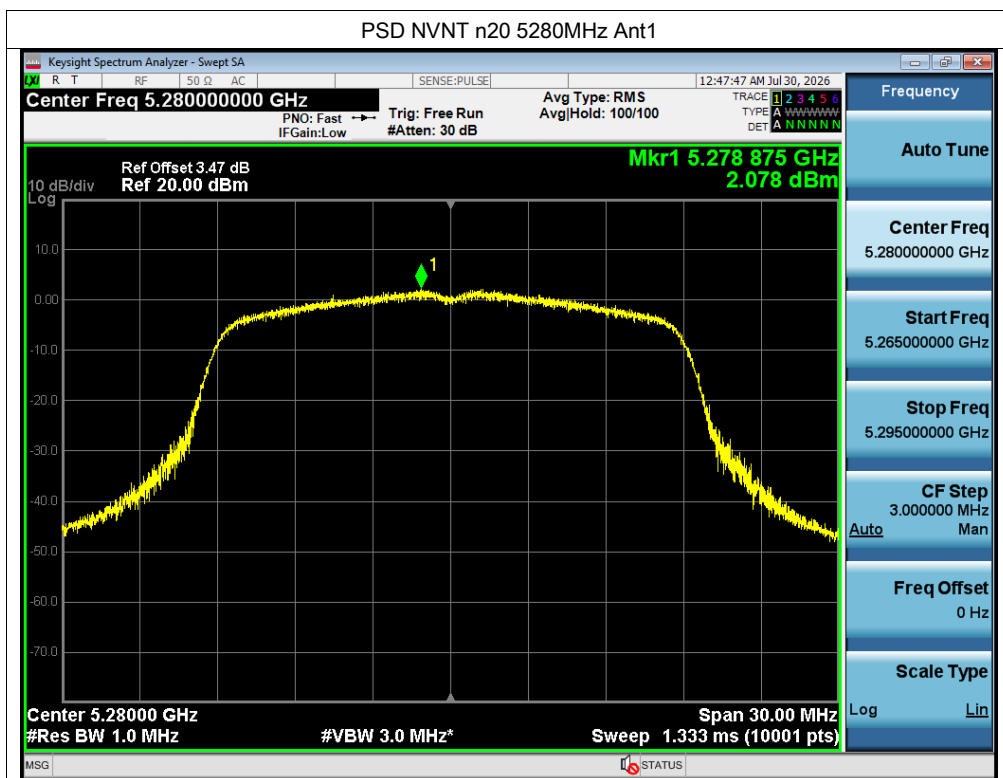
Test Mode	Frequency (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
a	5260	4.34	0.96	5.3	11	Pass
a	5280	4.11	0.96	5.07	11	Pass
a	5320	4.02	0.96	4.98	11	Pass
n20	5260	2.6	0.41	3.01	11	Pass
n20	5280	2.08	0.41	2.49	11	Pass
n20	5320	2.41	0.41	2.82	11	Pass
n40	5270	-1.44	0.42	-1.02	11	Pass
n40	5310	-1.11	0.42	-0.69	11	Pass

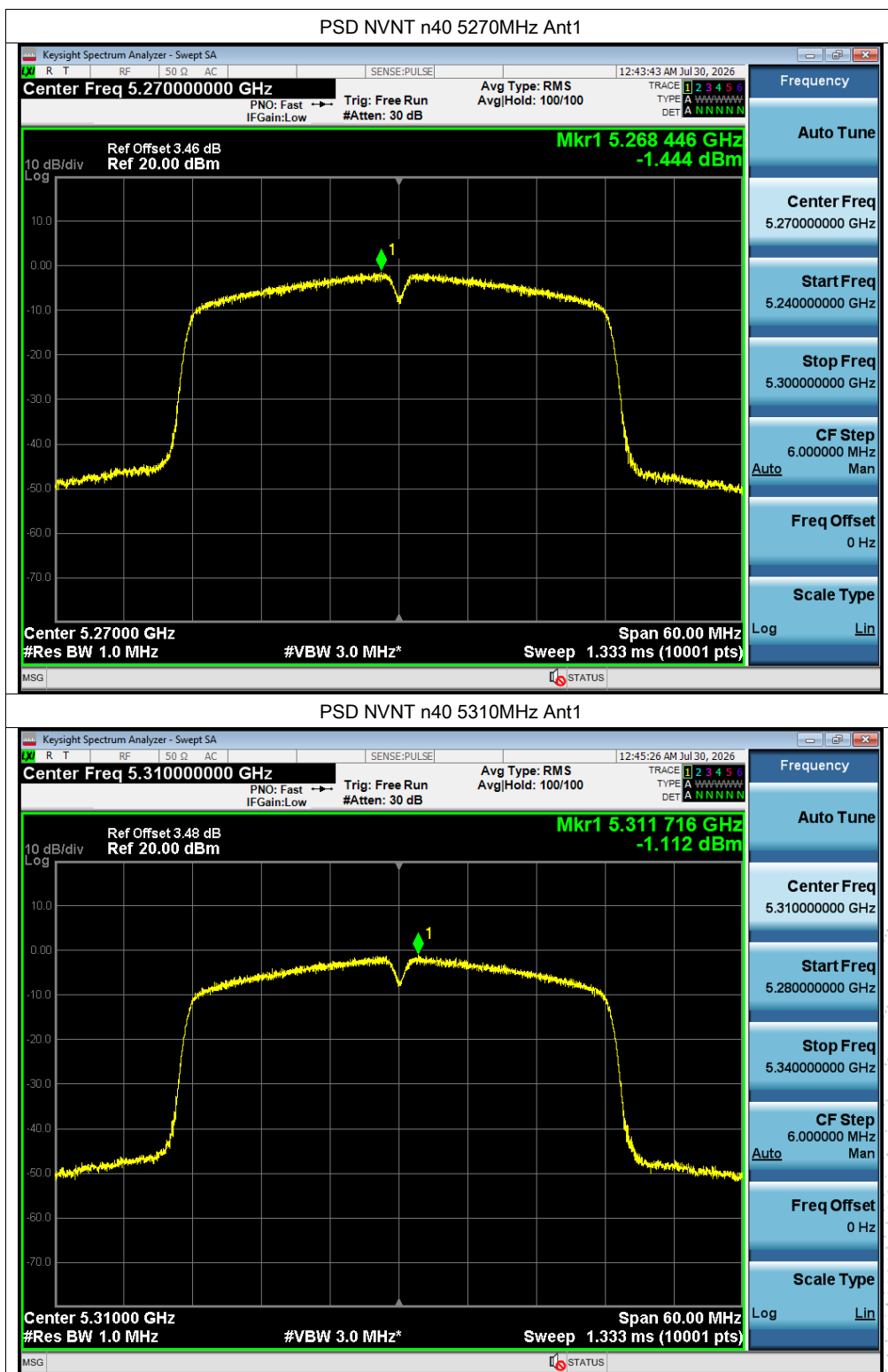
BCTC CO., LTD.





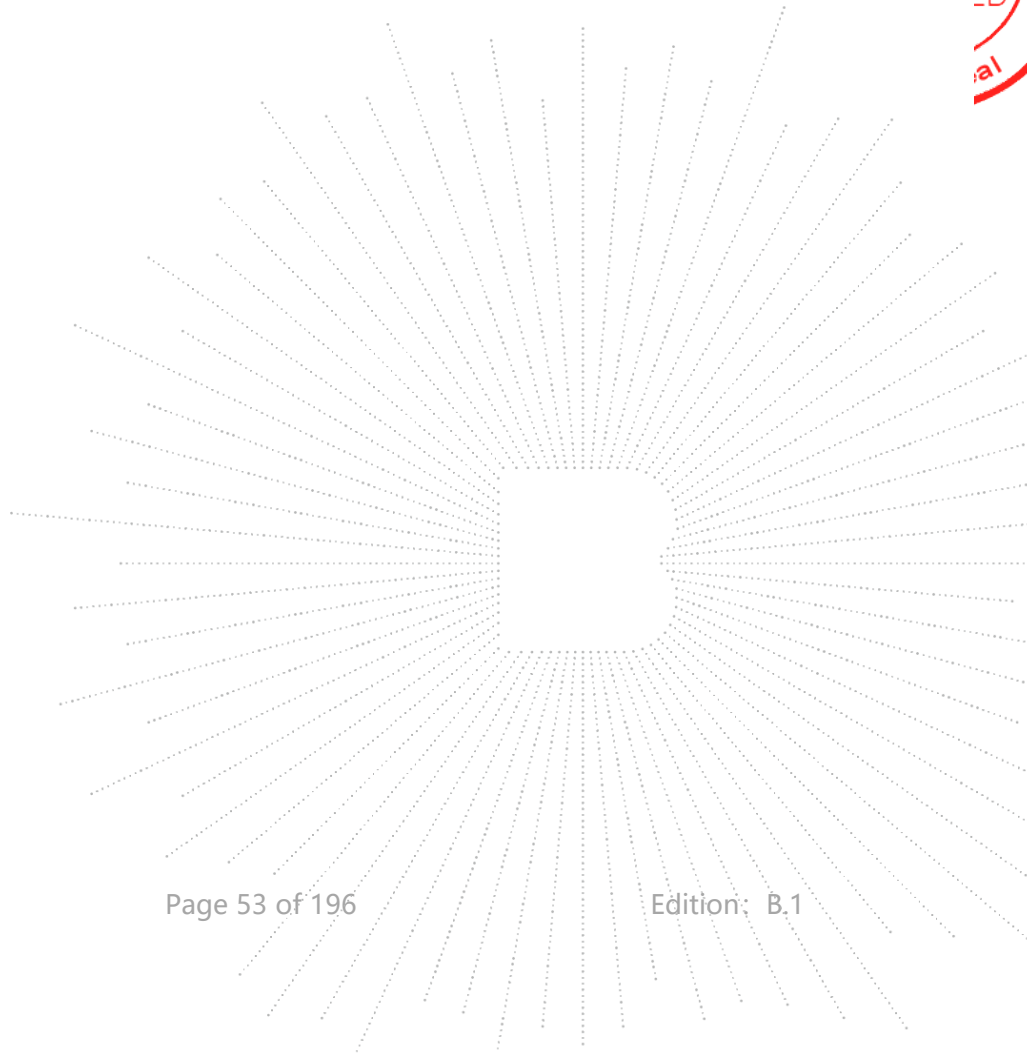


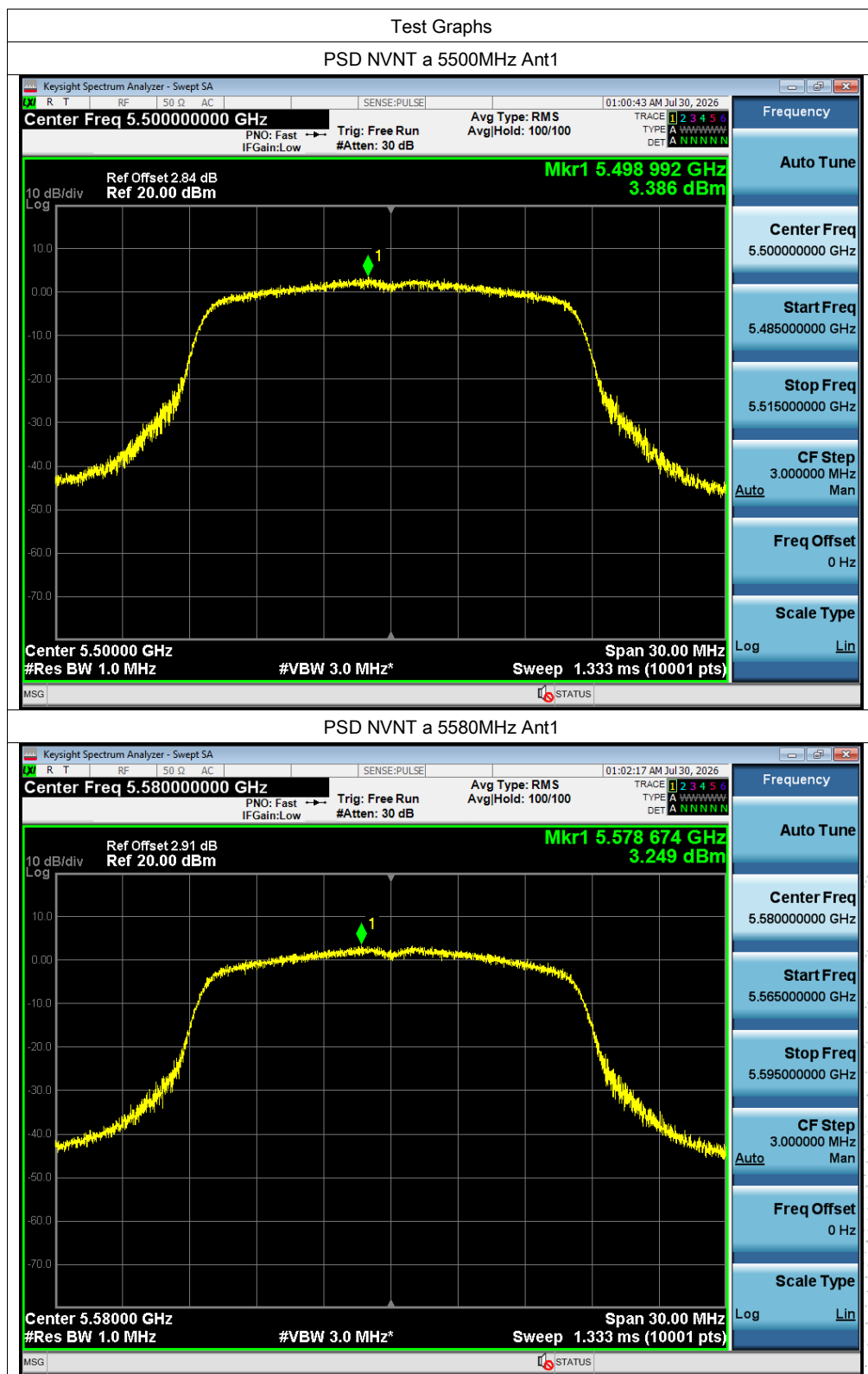




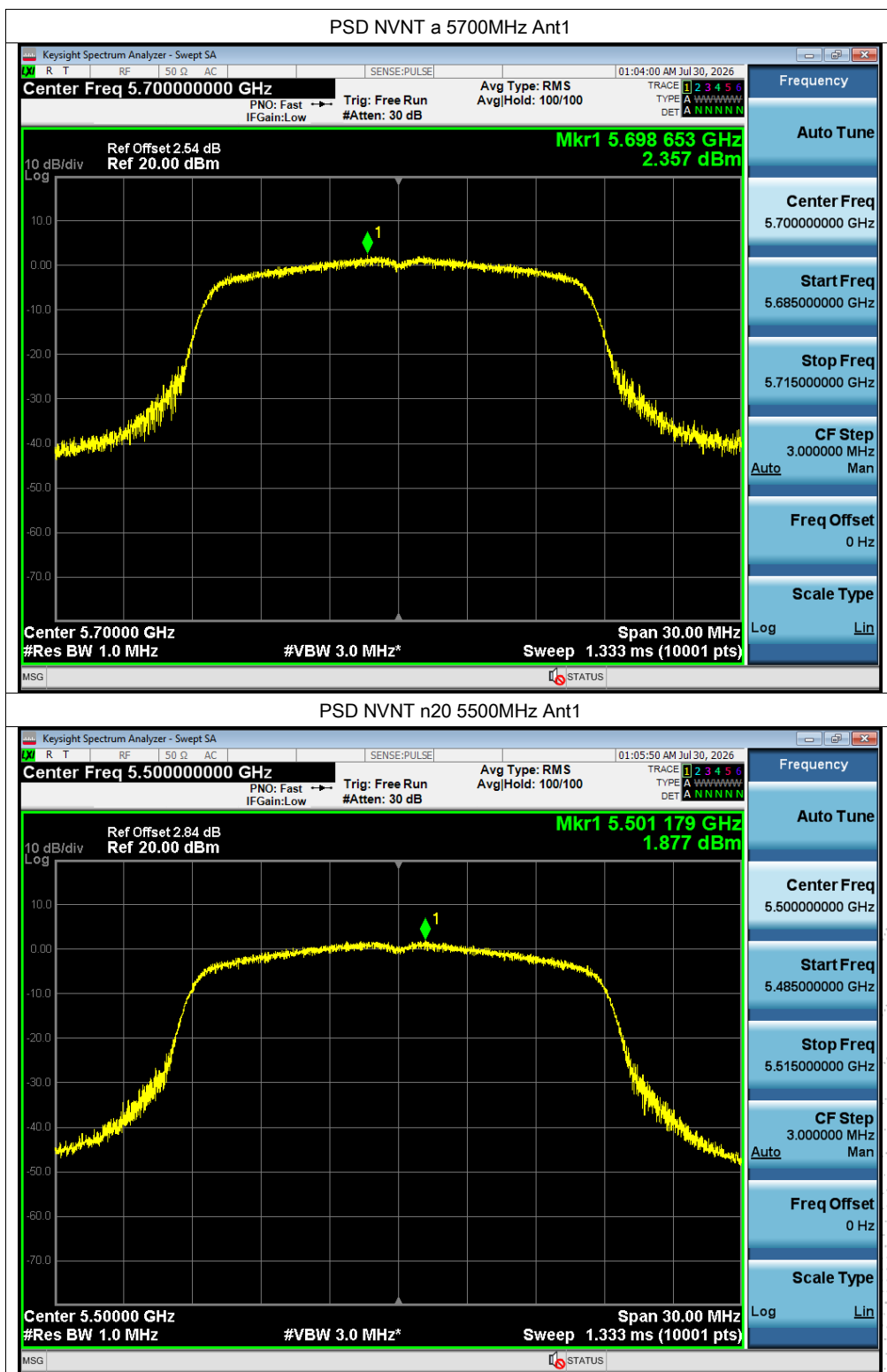
Temperature:	23.7 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	DC 12V
Test Mode:	(5500-5700MHz)		

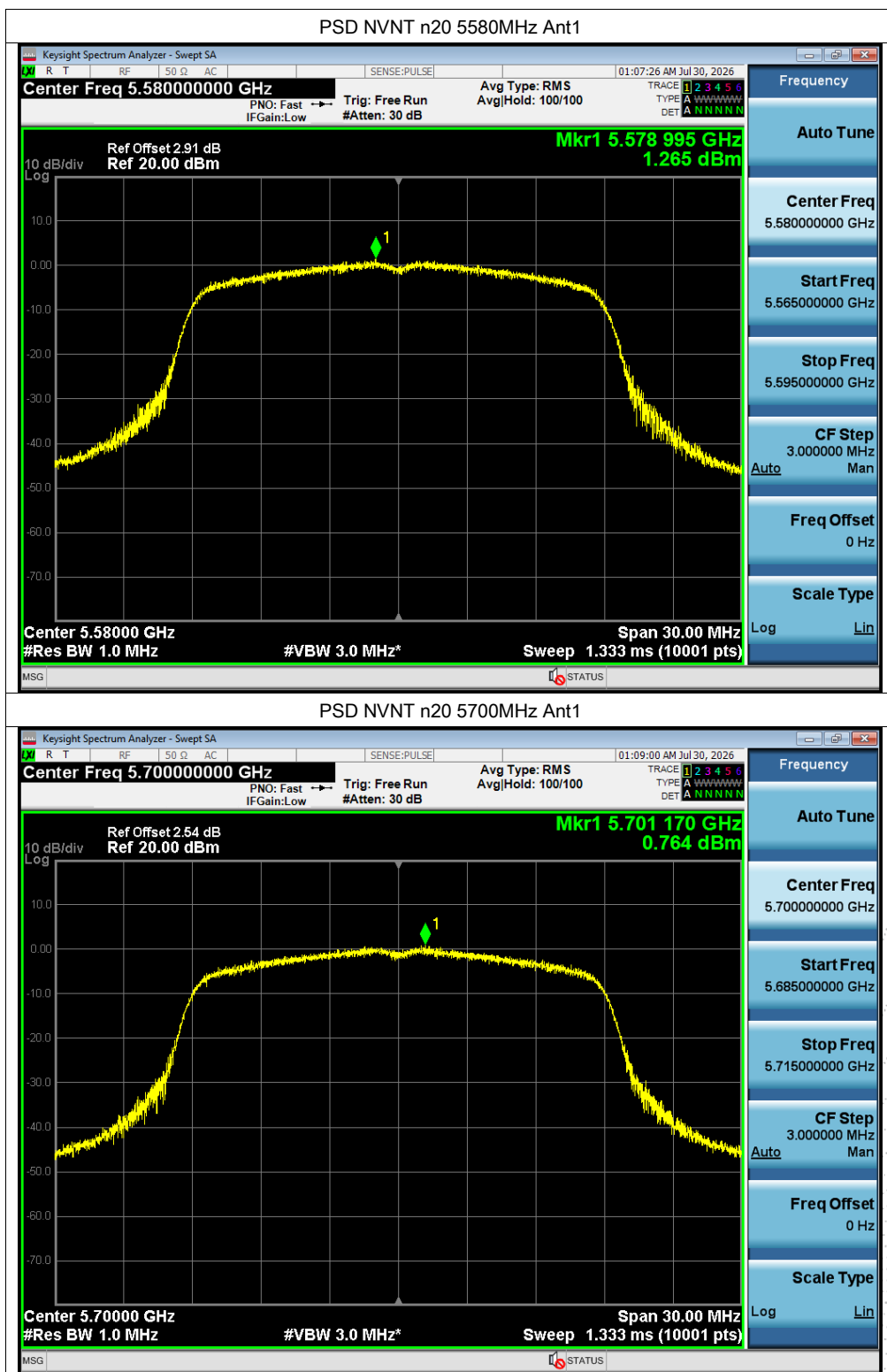
Test Mode	Frequency (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
a	5500	3.39	0.96	4.35	11	Pass
a	5580	3.25	0.96	4.21	11	Pass
a	5700	2.36	0.96	3.32	11	Pass
n20	5500	1.88	0.41	2.29	11	Pass
n20	5580	1.26	0.41	1.67	11	Pass
n20	5700	0.76	0.41	1.17	11	Pass
n40	5510	-1.68	0.42	-1.26	11	Pass
n40	5550	-2.14	0.42	-1.72	11	Pass
n40	5670	-2.58	0.42	-2.16	11	Pass



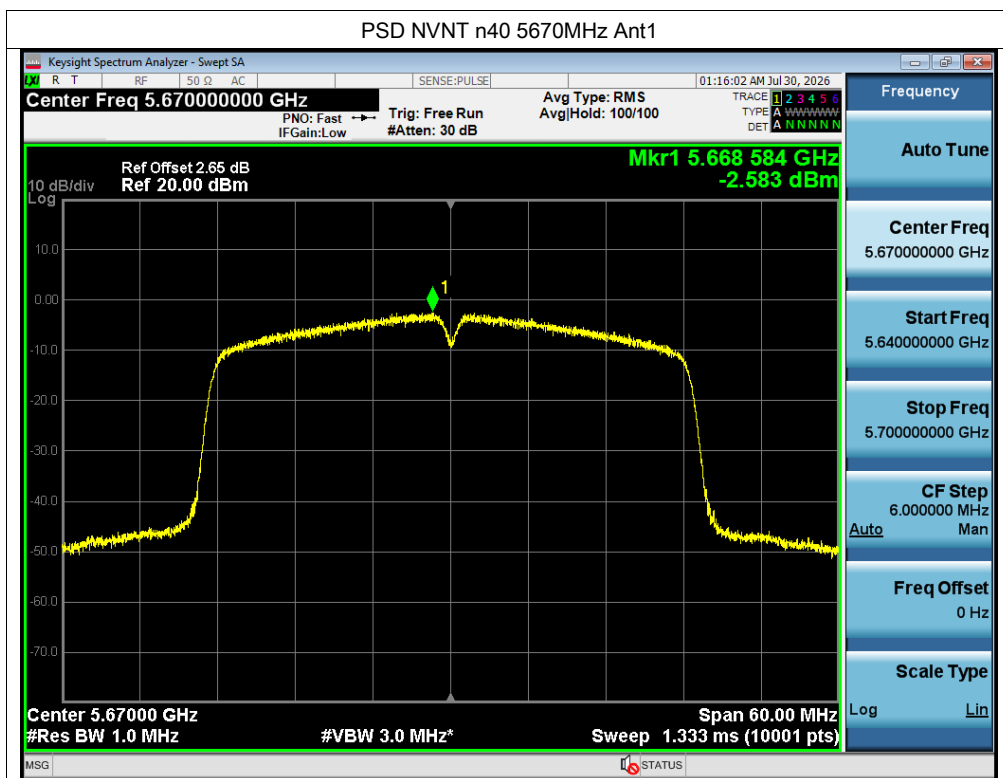


BCTC CO., LTD



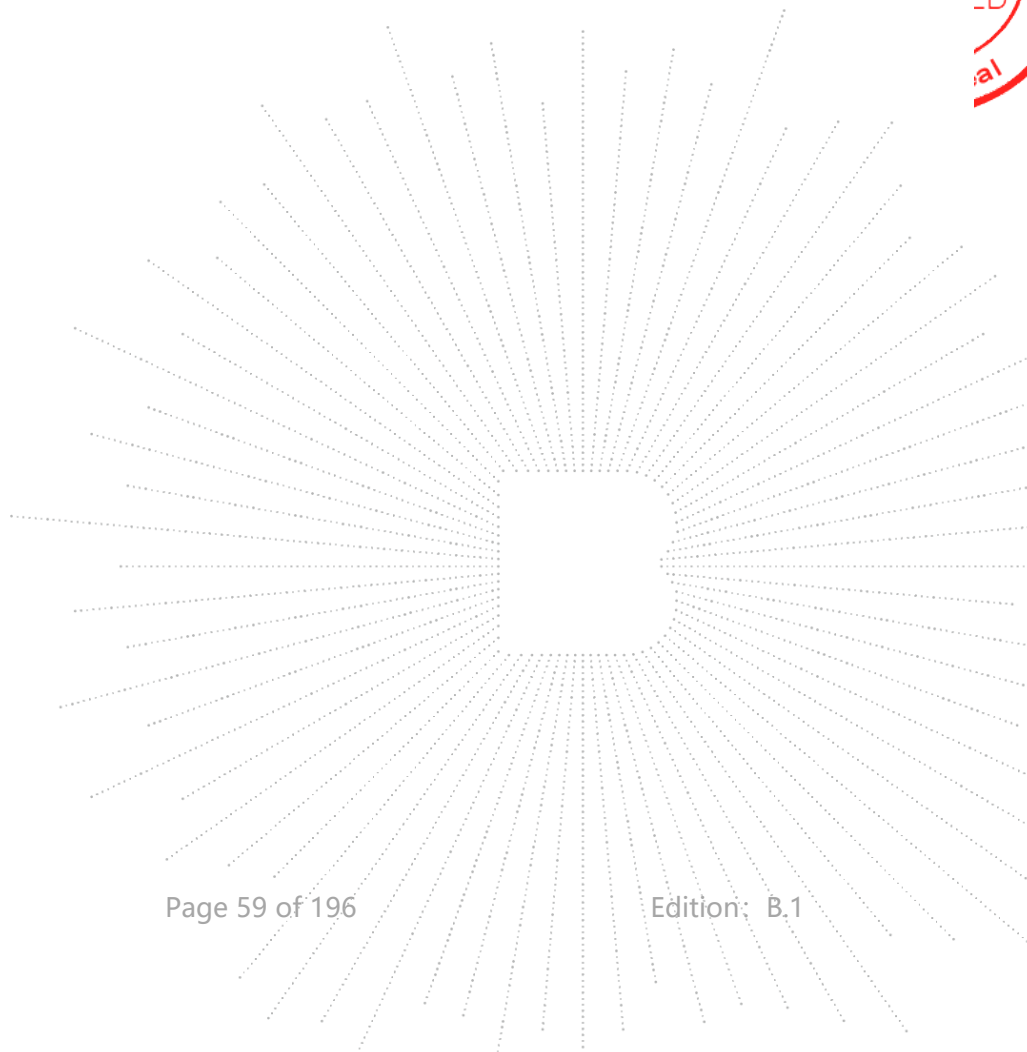


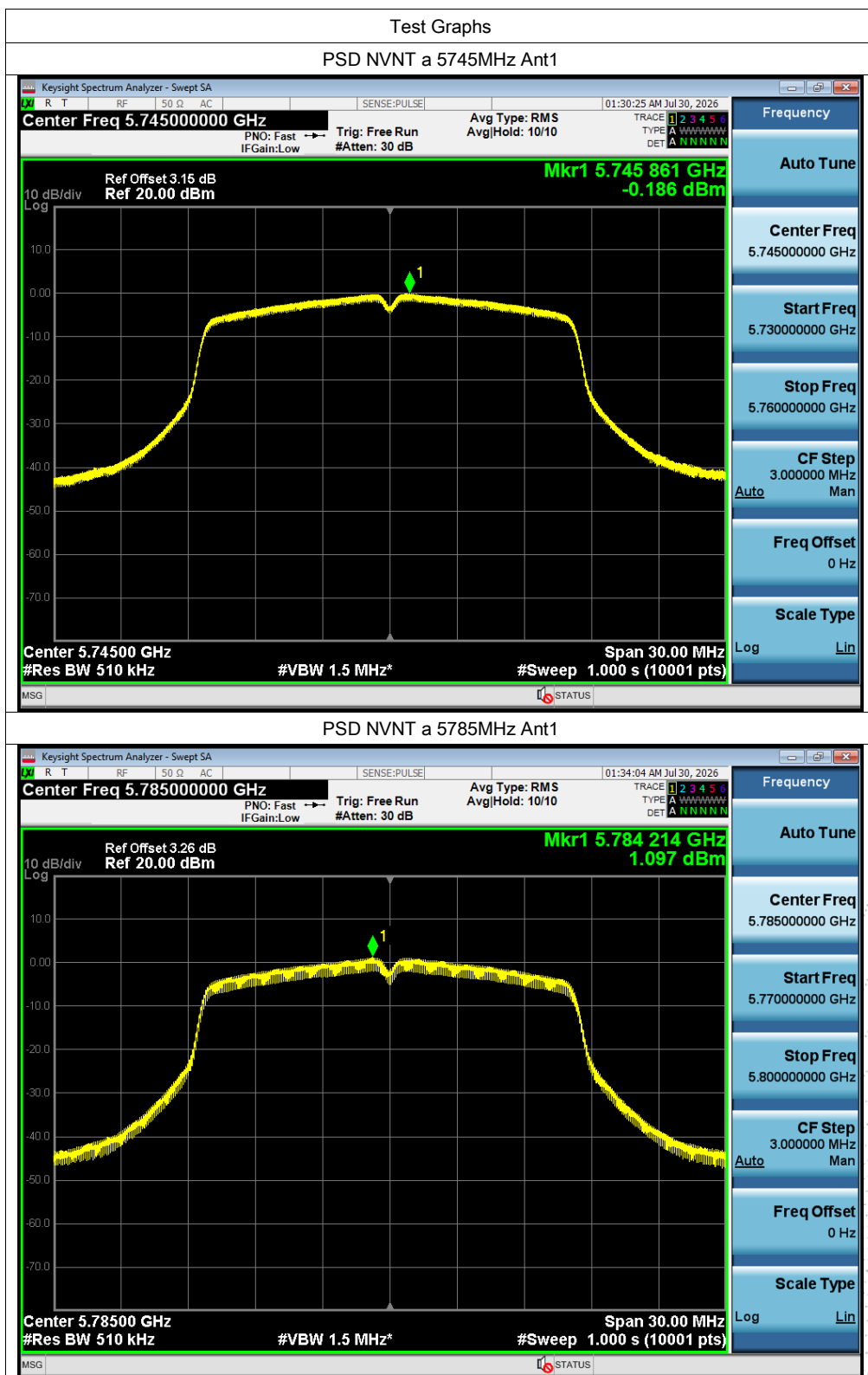




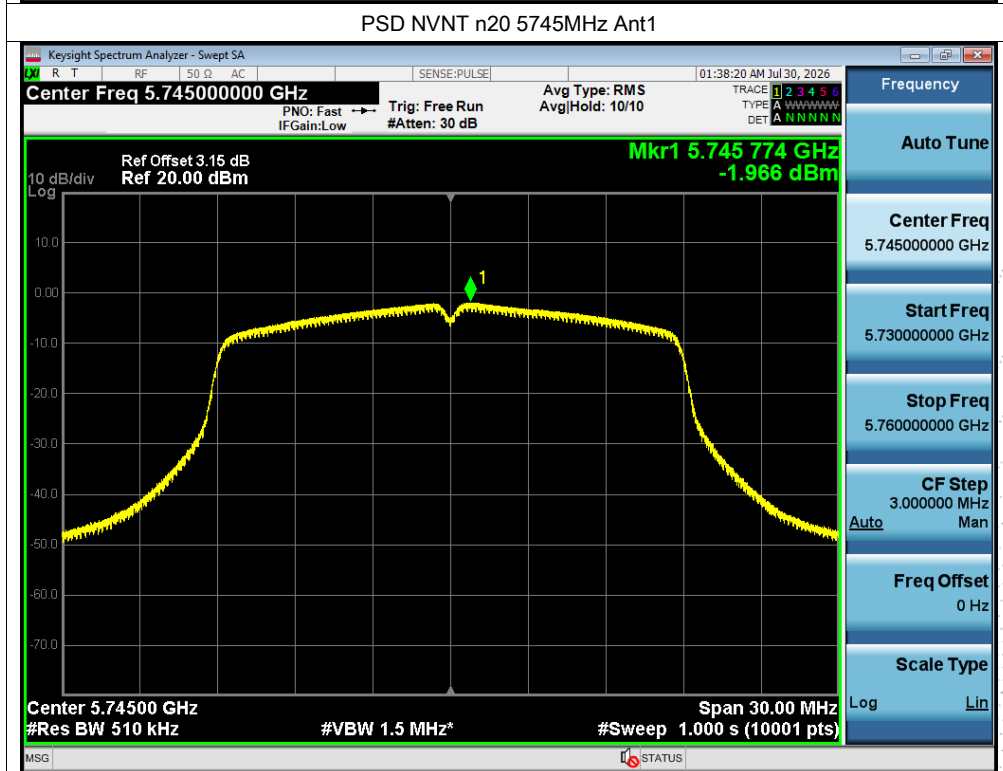
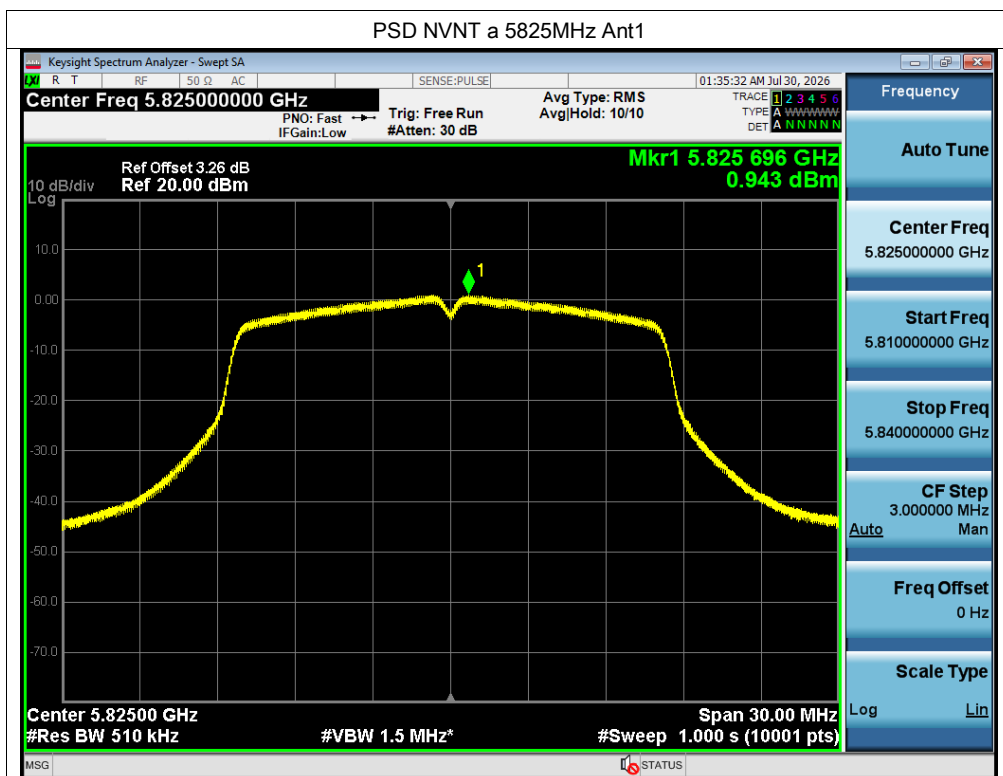
Temperature:	23.7 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	DC 12V
Test Mode:	(5745-5825MHz)		

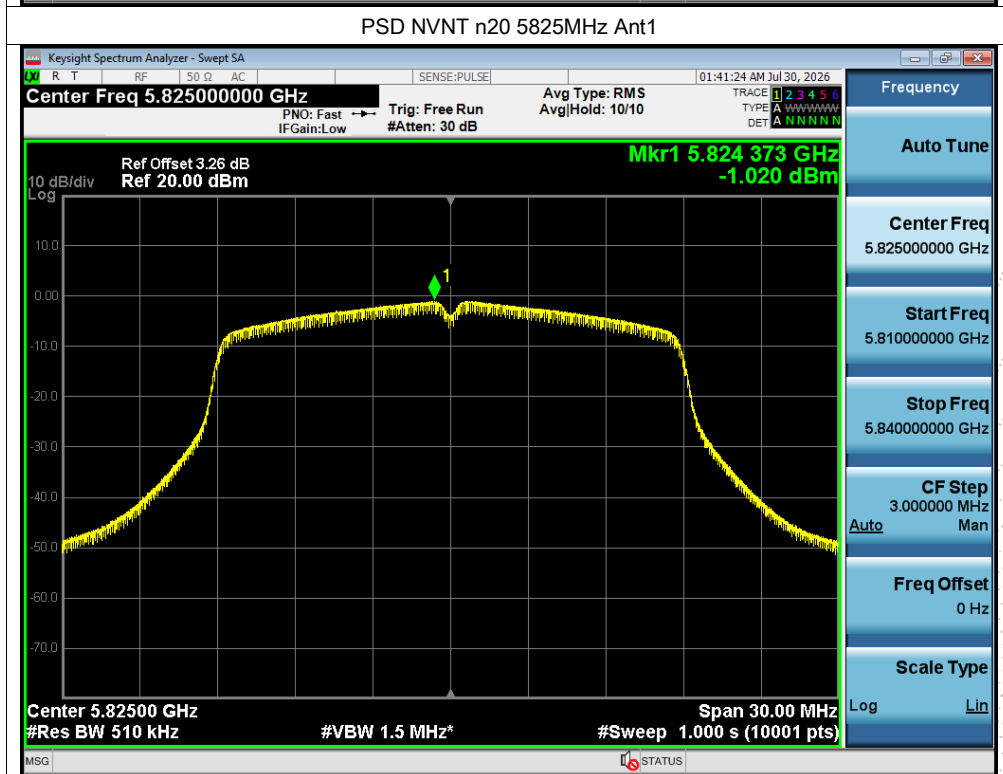
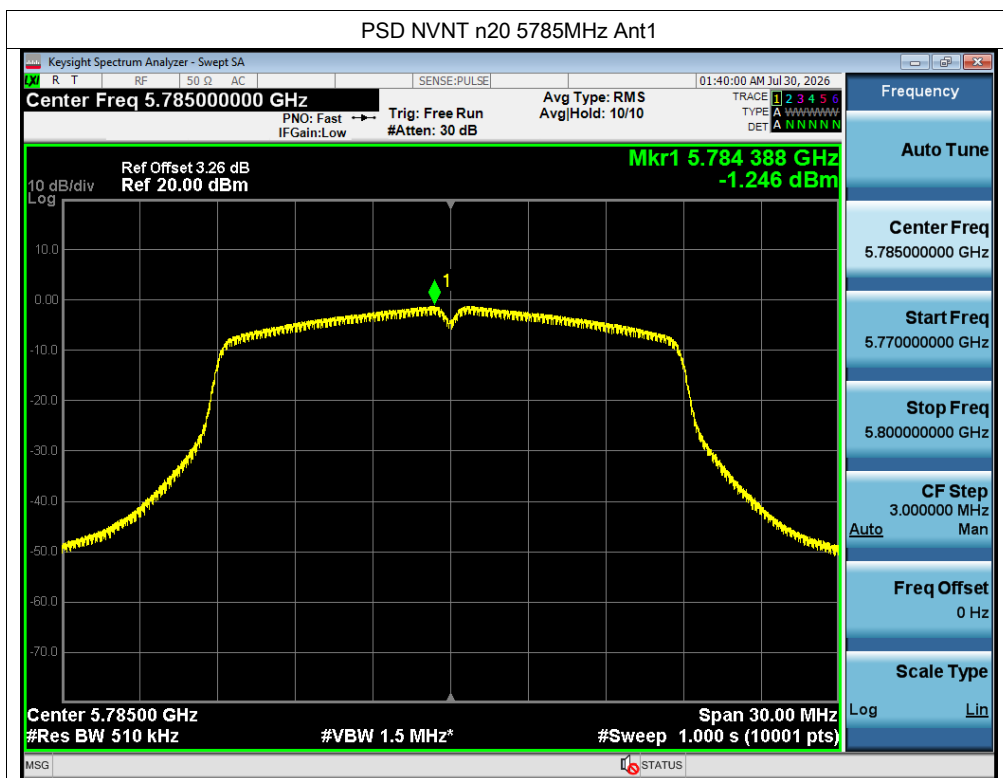
Test Mode	Frequency (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
a	5745	-0.19	0.96	0.77	30	Pass
a	5785	1.1	0.96	2.06	30	Pass
a	5825	0.94	0.98	1.92	30	Pass
n20	5745	-1.97	0.41	-1.56	30	Pass
n20	5785	-1.25	0.41	-0.84	30	Pass
n20	5825	-1.02	0.42	-0.6	30	Pass
n40	5755	-4.98	0.42	-4.56	30	Pass
n40	5795	-4.69	0.42	-4.27	30	Pass

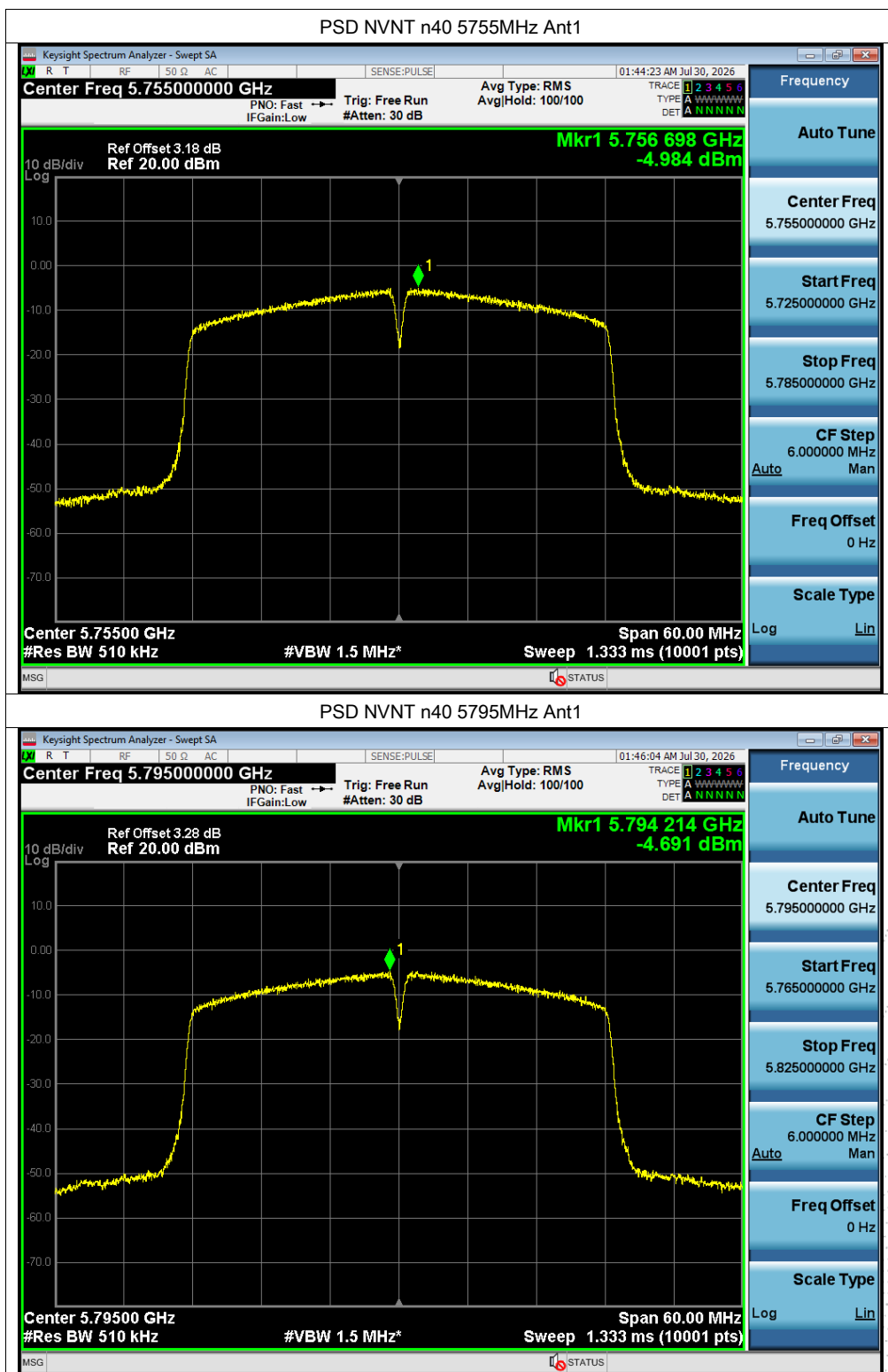




CO., LTD

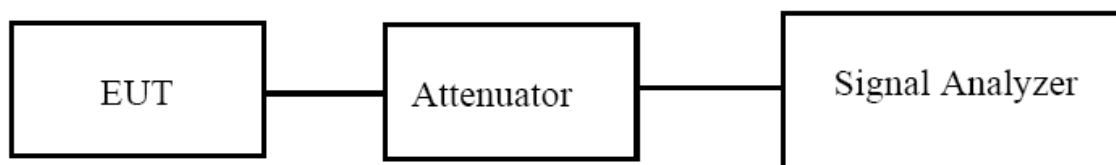






9. 26dB & 6dB & 99% Emission Bandwidth

9.1 Block Diagram Of Test Setup



9.2 Limit

(1) For the band 5.15-5.25 GHz.

(iv) For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(3) For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

9.3 Test Procedure

- a) Set RBW = approximately 1% of the emission bandwidth.
- b) Set the VBW > RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the instrument. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is in the range of 1% to 5%.

The following procedure shall be used for measuring (99 %) power bandwidth:

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW $\geq 3 \cdot$ RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

Emission bandwidth for the band 5.725 GHz to 5.85 GHz

The following procedure shall be used for measuring this bandwidth:

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- c) Detector = Peak.
- d) Trace mode = max-hold.
- e) Sweep = No faster than coupled (auto) time.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

9.4 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.

9.5 Test Result

Temperature:	23.7 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	DC 12V
Test Mode:	(5180-5240MHz)		

Condition	Mode	Frequency (MHz)	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	18.988	Pass
NVNT	a	5200	18.898	Pass
NVNT	a	5240	18.679	Pass
NVNT	n20	5180	19.996	Pass
NVNT	n20	5200	19.472	Pass
NVNT	n20	5240	20.055	Pass
NVNT	n40	5190	37.876	Pass
NVNT	n40	5230	37.849	Pass

Condition	Mode	Frequency (MHz)	99% OBW (MHz)
NVNT	a	5180	16.233
NVNT	a	5200	16.214
NVNT	a	5240	16.193
NVNT	n20	5180	17.311
NVNT	n20	5200	17.319
NVNT	n20	5240	17.304
NVNT	n40	5190	35.183
NVNT	n40	5230	35.162

