RF TEST REPORT

Product Name: WiFi Digital Calendar

Model Number: Q1562, P210, P215, P216, Q100, Q200, Q210, Q215, Q300, P200

FCC ID: 2AQMB-Q1562

Issued For	:	Shenzhen ChipTrip Technology Co, Ltd 2nd floor,No.12,Chuangke Town,Liuxian Road,Nanshan District,Shenzhen,China
Issued By	:	Shenzhen LGT Test Service Co., Ltd. Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China

Report Number:	LGT26D020RF02
Sample Received Date:	Apr. 03, 2026
Date of Test:	Apr. 03, 2026 ~ Apr. 17, 2026
Date of Issue:	Apr. 17, 2026

TEST REPORT CERTIFICATION

Applicant:	Shenzhen ChipTrip Technology Co, Ltd
Address:	2nd floor,No.12,Chuangke Town,Liuxian Road,Nanshan District,Shenzhen,China
Manufacturer:	Shenzhen ChipTrip Technology Co, Ltd
Address:	2nd floor,No.12,Chuangke Town,Liuxian Road,Nanshan District,Shenzhen,China
Product Name:	WiFi Digital Calendar
Trademark:	SCISHION
Model Number:	Q1562, P210, P215, P216, Q100, Q200, Q210, Q215, Q300, P200
Sample Status:	Normal

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC Part 15.407, Subpart E ANSI C63.10-2020	PASS

Prepared by:

Zane Shan

Zane Shan
Engineer

Approved by:

Vita Li
Technical Director

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Revision History

Rev.	Issue Date	Contents
00	Apr. 17, 2026	Initial Issue

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:
Part 15.407,KDB 789033 D02 General U-NII Test Procedures New Rules v02r01

FCC Part 15.407		
FCC standard	Test Item	Results
15.207	AC Conducted Emission	PASS
15.407 (a) /15.407 (e)	26dB/6dB &99% Bandwidth	PASS
15.407(a)	Maximum Conducted Output Power	PASS
15.407(b)/15.205/15.209	Radiated Emission And (bandedge Emissions) Measurement	PASS
15.407(a)	Power Spectral Density	PASS
15.407(c)	Automatically Discontinue Transmission	PASS
15.203/15.204	Antenna Requirement	PASS

NOTE:

(1) 'N/A' denotes test is not applicable in this Test Report.

(2) All tests are according to ANSI C63.10-2020.

(3) Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

1.1 TEST LABORATORY

Company Name:	Shenzhen LGT Test Service Co., Ltd.
Address:	Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China
Accreditation Certificate:	FCC Registration No.: 746540
	CAB ID: CN0136

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement **y** ± **U**, where expended uncertainty **U** is based on a standard uncertainty multiplied by a coverage factor of **k=2**, providing a level of confidence of approximately **95** %.

No.	Item	Uncertainty
1	Occupied Channel Bandwidth	±0.46%
2	RF Output Power, Conducted	±0.71dB
3	Power Spectral Density, Conducted	±1.57dB
4	Unwanted Emission, Conducted	±0.63dB
5	Conducted emission	±2.80dB
6	All Emissions, Radiated (0.009-30MHz)	±2.16dB
7	All Emissions, Radiated (30MHz-1GHz)	±4.61dB
8	All Emissions, Radiated (1GHz-18GHz)	±5.49dB
9	Temperature	±0.5°C
10	Humidity	±2%
11	Duty Cycle	±2.3%

Note: The measurement uncertainty is not included in the test result.

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

<table>
<tr><td>Product Name:</td><td>WiFi Digital Calendar</td></tr>
<tr><td>Test Model Number:</td><td>Q1562</td></tr>
<tr><td>Series Number:</td><td>P210, P215, P216, Q100, Q200, Q210, Q215, Q300, P200</td></tr>
<tr><td>Model Difference:</td><td>Only the model name and color are different.</td></tr>
<tr><td>Product Description:</td><td>
<table>
<tr><td>Operation Frequency:</td><td>IEEE 802.11a/n(HT20)/ ac(VHT20)/ax(HE20): 5.180GHz-5.240GHz
IEEE 802.11n(HT40)/ ac(VHT40)/ax(HE40): 5.190GHz-5.230GHz</td></tr>
<tr><td></td><td>IEEE 802.11a/n(HT20)/ ac(VHT20)/ax(HE20): 5.745GHz-5.825GHz
IEEE 802.11a/n(HT40)/ac(VHT40)/ax(HE40): 5.755GHz-5.795GHz</td></tr>
<tr><td>Modulation Type:</td><td>802.11a(OFDM): BPSK, QPSK, 16-QAM, 64-QAM
802.11n(OFDM): BPSK, QPSK, 16-QAM, 64-QAM
802.11ac (OFDM): BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM
802.11ax(OFDM, OFDMA): BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024QAM</td></tr>
<tr><td>Antenna Designation:</td><td>PIFA Antenna</td></tr>
<tr><td>Antenna Gain(dBi)</td><td>2.78</td></tr>
</table>
More details of EUT technical specification, please refer to the User Manual.
</td></tr>
<tr><td>Test Channel:</td><td>Please refer to the Note 3.</td></tr>
<tr><td>Adapter:</td><td>Input: AC 100-240V 50/60Hz 0.5A
Output: DC 5V 3A</td></tr>
<tr><td>Hardware Version:</td><td>Q1562_V01_20251209</td></tr>
<tr><td>Software Version:</td><td>android11</td></tr>
<tr><td>Connecting I/O Port(s):</td><td>Please refer to the Note 1.</td></tr>
</table>

Note

1. For a more detailed features description, please refer to the manufacturer's specifications or the User Manual.
2. The antenna information refers to the manufacturer provide report, applicable only to the tested sample identified in the report. Due to the incorrect antenna information, a series of problems such as the accuracy of the test results will be borne by the customer.
3.

Operation Frequency of channel			
5.180GHz-5.240GHz		5.745GHz-5.825GHz	
Channel	Frequency	Channel	Frequency
36	5180	149	5745
38	5190	151	5755
40	5200	153	5765
42	5210	157	5785
44	5220	159	5795
46	5230	161	5805
48	5240	165	5825

Note:
In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:
Carrier Frequency Channel

Channel List for 802.11a/n/ac/ax(20MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	--	--	--	--	149	5745
40	5200	--	--	--	--	157	5785
48	5240	--	--	--	--	165	5825

Channel List for 802.11n/ac/ax(40MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	--	--	--	--	151	5755
46	5230	--	--	--	--	159	5795
--	--	--	--	--	--	--	--

2.2 DESCRIPTION OF TEST MODES

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.

Worst Mode	Description	Data Rate
Mode 1	TX IEEE 802.11a HT20 CH36&CH40&CH48	6 Mbps
Mode 2	TX IEEE 802.11a HT20 CH149&CH157&CH165	6 Mbps
Mode 3	TX IEEE 802.11n HT20 CH36&CH40&CH48	MCS 0
Mode 4	TX IEEE 802.11ac VHT20&ax HE20 CH36&CH40&CH48	NSS1 MCS0
Mode 5	TX IEEE 802.11n HT20 CH149&CH157&CH165	MCS 0
Mode 6	TX IEEE 802.11ac VHT20&ax HE20 CH149&CH157&CH165	NSS1 MCS0
Mode 7	TX IEEE 802.11n HT40 CH38&CH46	MCS 0
Mode 8	TX IEEE 802.11ac VHT40&ax HE40 CH38&CH46	NSS1 MCS0
Mode 9	TX IEEE 802.11n HT40 CH151&CH159	MCS 0
Mode 10	TX IEEE 802.11ac VHT40&ax HE40 CH151&CH159	NSS1 MCS0

Note: (1) The measurements are performed at the highest, middle, lowest available channels.

(2) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.

(3) We have be tested for all avaiable U.S. voltage and frequencies(For 120V,50/60Hz and 240V, 50/60Hz) for which the device is capable of operation.

(4) The battery is fully-charged during the radited and RF conducted test.

(5) All bandwidth modes have been tested, and the report only shown the worst mode data.

(6)The 802.11ax mode is investigated among different tones(26/52/106/242-tone RU channel), full resource units (RU), partial resourceunits. The partial RU has no higher power than full RU's, thus the full RU is chosen as main testconfiguration.

AC Conducted Emission

Test Case	
AC Conducted Emission	Mode 11: TX Mode

2.3 TEST SOFTWARE AND POWER LEVEL

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

Test software Version	Test program: 5G WIFI U-NII-1	
CMD Command	Mode Or Modulation type	Power setting
	a	34
	n20	31
	n40	31
	ac20	31
	ac40	31
	ax20	31
	ax40	31
Test software Version	Test program: 5G WIFI U-NII-3	
CMD Command	Mode Or Modulation type	Power setting
	a	34
	n20	31
	n40	23
	ac20	31
	ac40	23
	ax20	31
	ax40	23

2.4 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Accessories Equipment

Description	Manufacturer	Model	S/N	Rating
Adapter	Shenzhen Runshengfeng Power Technology Co Ltd	RSF-DY077A-0503000US	N/A	Input: 100-240V 50/60Hz 0.5A Output: 5.0V 3A

Auxiliary Equipment

Description	Manufacturer	Model	S/N	Rating
Laptop	Lenovo	ThinkBook 14 G3 ITL	N/A	N/A

Note:

(1) For detachable type I/O cable should be specified the length in cm in『Length』column.

2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Conducted Emission					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Cal. Date**	**Cal. Until**
EMI Test Receiver	R&S	ESU8	100372	2026-03-02	2027-03-01
LISN	COM-POWER	LI-115	02032	2026-03-03	2027-03-02
LISN	SCHWARZBECK	NNLK 8122	00160	2026-03-03	2027-03-02
Transient Limiter	CYBERTEK	EM5010A	E2250100049	2026-03-03	2027-03-02
Coaxial cables (9kHz-30MHz)	Juncoax	JMR600-NMNM-2M	N.A	2026-03-03	2027-03-02
Temperature & Humidity	JINGCHUANG	BT-3	N.A	2026-03-05	2027-03-04
Testing Software	EMC-I_V1.5.0.16_SKET				

Radiated Test equipment					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Cal. Date**	**Cal. Until**
EMI Test Receiver	R&S	ESU8	100372	2026-03-02	2027-03-01
Active loop Antenna	ETS	6502	00049544	2025-03-11	2028-03-10
Spectrum Analyzer	Keysight	N9010B	MY60242508	2026-03-03	2027-03-02
Trilog Broadband Antenna (30M-1G)	SCHWARZBECK	VULB 9168	2705	2024-05-17	2027-05-16
Horn Antenna(1-18G)	SCHWARZBECK	3115	10SL0060	2025-03-10	2028-03-09
Horn Antenna(18-40G)	SCHWARZBECK	BBHA 9170	685	2023-10-23	2026-10-22
Pre-amplifier(30M-1G)	EMtrace	RP01A	02019	2026-03-02	2027-03-01
Pre-amplifier(1-26.5G)	Agilent	8449B	3008A4722	2026-03-02	2027-03-01
Pre-amplifier(18-40G)	SCHWARZBECK	BBV 9721	9721-019	2025-10-20	2026-10-19
Coaxial cables (9kHz-1GHz)	Juncoax	JMR600-NMNM-8M	N.A	2026-03-03	2027-03-02
Coaxial cables (1GHz-18GHz)	TaiHe	UCD460B-NMSM-1M9	N.A	2026-03-03	2027-03-02
Coaxial cables (18GHz-40GHz)	Junkosha Inc.	MWX241-05000KMS KMS	N.A	2026-03-03	2027-03-02
Temperature& Humidity test chamber	AISRY	LX-1000L	171200018	2025-07-30	2026-07-29
Antenna Tower	SAEMC	BK-4AT-BS-D	SK2021093008	N.A	N.A
Temperature & Humidity	JINGCHUANG	BT-3	N.A	2026-03-05	2027-03-04
Testing Software	EMC-I_V1.5.0.16_SKET				

RF Conducted Test equipment					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Cal. Date**	**Cal. Until**
Signal Analyzer	Keysight	N9020A	MY50530994	2026-03-03	2027-03-02
Power Sensor	R&S	NRP8S	104963	2026-03-02	2027-03-01
RF Automatic Test system	TST	TST PASS	293	2025-07-15	2026-07-14
MXG Vector Signal Generator	Keysight	N5182B	MY59100717	2026-03-03	2027-03-02
Temperature& Humidity test chamber	AISRY	LX-1000L	171200018	2025-07-30	2026-07-29
Attenuator	eastsheep	90db	N.A	2026-03-02	2027-03-01
Temperature & Humidity	JINGCHUANG	BT-3	N.A	2026-03-05	2027-03-04

Digital multimeter	MASTECH	MS8261	MBGBC83053	2025-07-30	2026-07-29
DC source	Keysight	E3634A	MY58036468	2026-03-05	2027-03-04
Testing Software	TST Pass_2.0.2				

3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

FREQUENCY (MHz)	Class B (dBuV)		Standard
	Quasi-peak	Average	
0.15 -0.5	66 - 56 *	56 - 46 *	CISPR
0.50 -5.0	56.00	46.00	CISPR
5.0 -30.0	60.00	50.00	CISPR

0.15 -0.5	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	56.00	46.00	FCC
5.0 -30.0	60.00	50.00	FCC

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

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

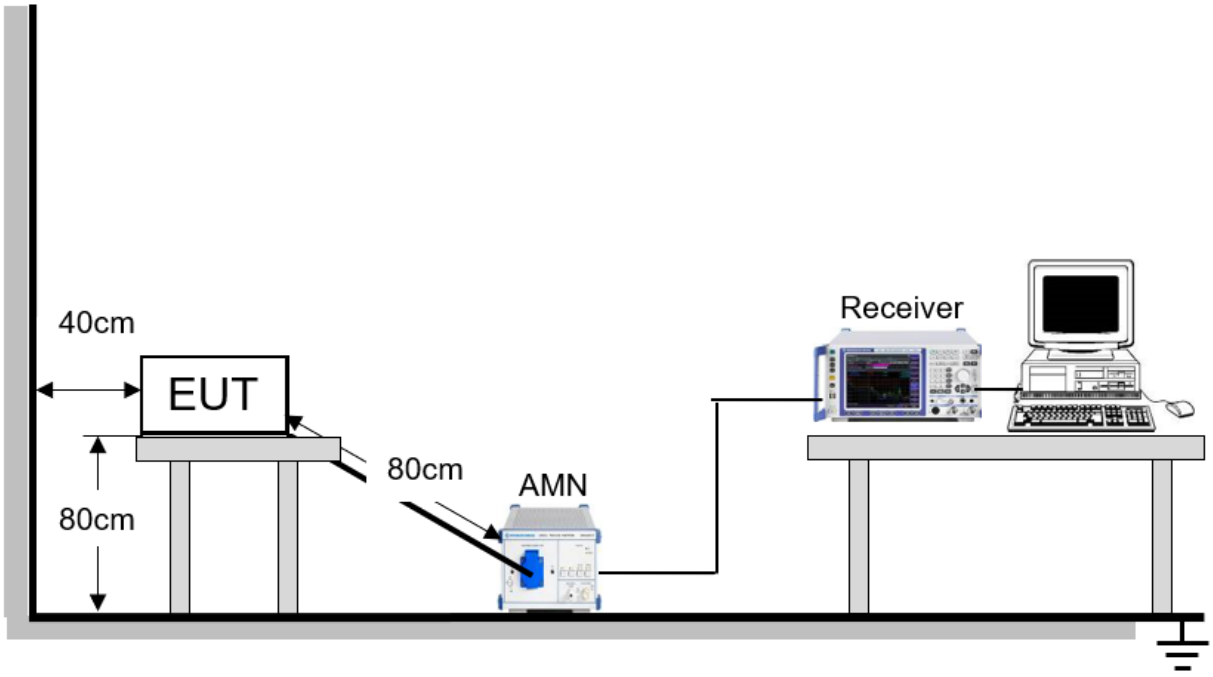
3.1.2 TEST PROCEDURE

a. The EUT is 0.8 m from the horizontal ground plane and 0.4 m from the vertical ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments are powered from additional LISN(s). The LISN provides 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
d. LISN is at least 80 cm from the nearest part of EUT chassis.
e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 DEVIATION FROM TEST STANDARD

No deviation

3.1.4 TEST SETUP



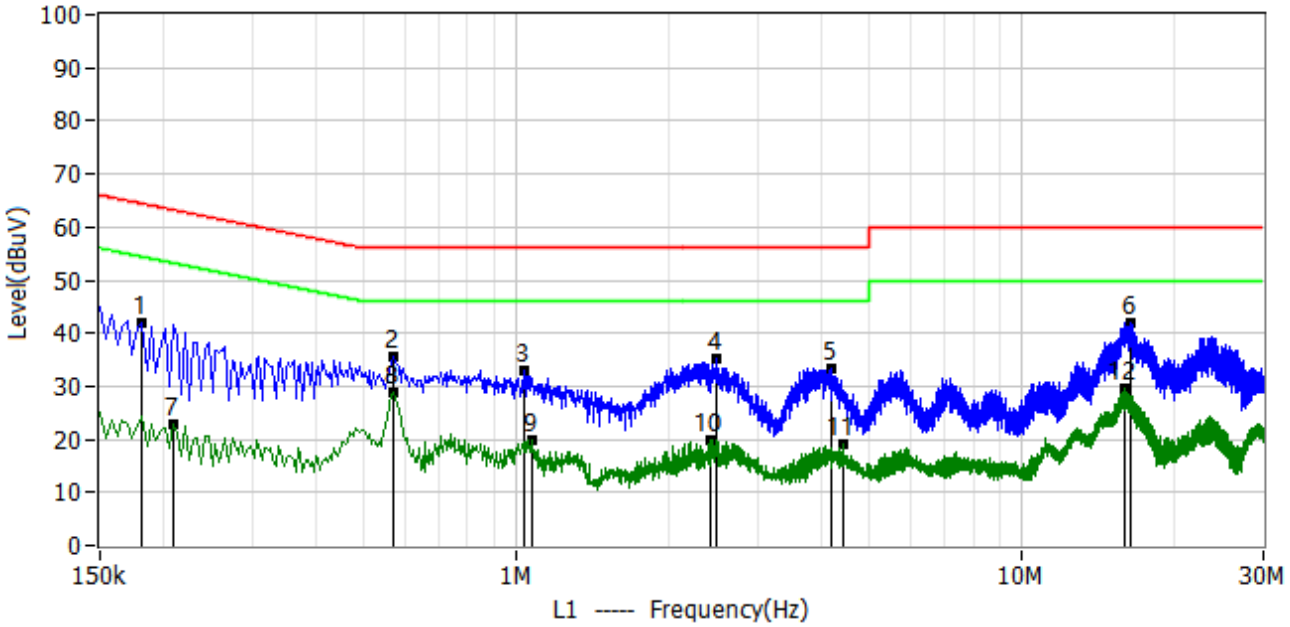
3.1.5 EUT OPERATING CONDITIONS

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

3.1.6 TEST RESULTS

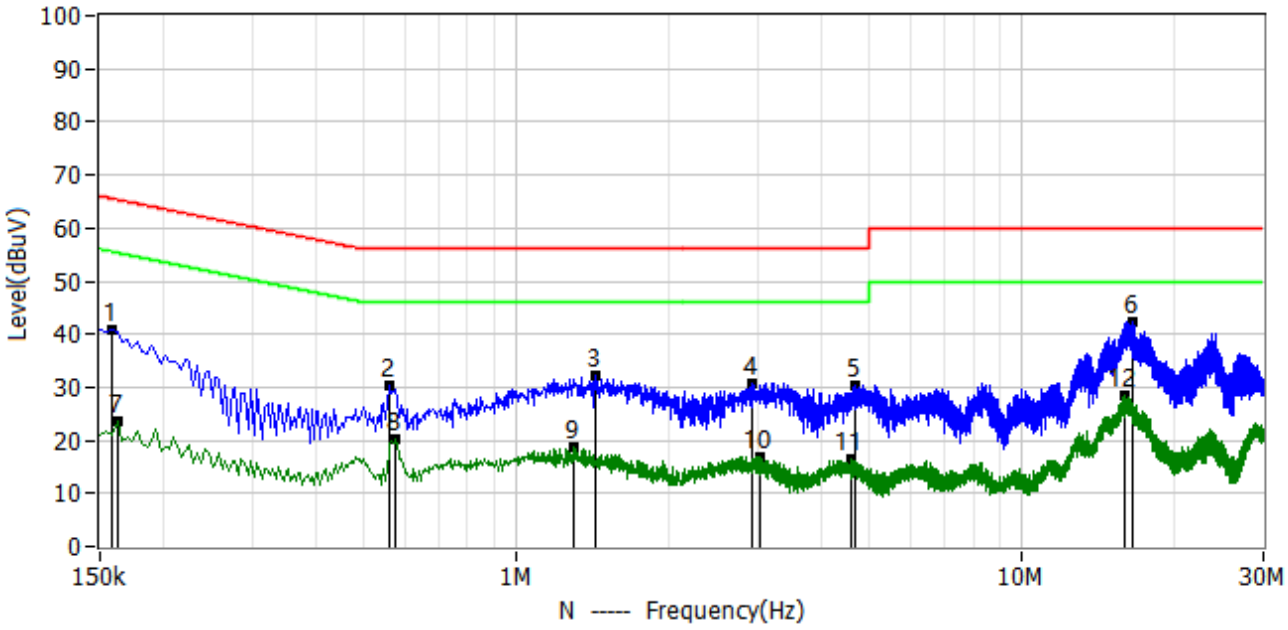
Note: Level = Reading + Factor
Margin = Level – Limit

Project: LGT26D020	Test Engineer: LiuH
EUT: WiFi Digital Calendar	Temperature: 24.8℃
M/N: Q1562	Humidity: 56%RH
Test Voltage: AC 120V/60Hz	Test Data: 2026-04-09
Test Mode: TX 802.11a 5180	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Detector	Polar
1*	0.182	31.36	10.67	42.03	64.39	-22.37	QP	L1
2*	0.570	24.80	10.94	35.74	56.00	-20.26	QP	L1
3*	1.038	22.15	10.86	33.01	56.00	-22.99	QP	L1
4*	2.490	24.08	11.16	35.24	56.00	-20.76	QP	L1
5*	4.186	22.25	11.25	33.50	56.00	-22.50	QP	L1
6*	16.410	30.09	11.75	41.84	60.00	-18.16	QP	L1
7*	0.210	12.14	10.74	22.88	53.21	-30.32	AV	L1
8*	0.570	17.88	10.94	28.82	46.00	-17.18	AV	L1
9*	1.074	8.97	10.90	19.87	46.00	-26.13	AV	L1
10*	2.422	8.82	11.15	19.97	46.00	-26.03	AV	L1
11*	4.446	7.73	11.28	19.01	46.00	-26.99	AV	L1
12*	15.906	17.88	11.74	29.62	50.00	-20.38	AV	L1

Project: LGT26D020	Test Engineer: LiuH
EUT: WiFi Digital Calendar	Temperature: 24.8℃
M/N: Q1562	Humidity: 56%RH
Test Voltage: AC 120V/60Hz	Test Data: 2026-04-09
Test Mode: TX 802.11a 5180	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Detector	Polar
1*	0.158	30.30	10.68	40.98	65.57	-24.59	QP	N
2*	0.562	19.61	10.85	30.46	56.00	-25.54	QP	N
3*	1.438	20.98	11.06	32.04	56.00	-23.96	QP	N
4*	2.918	19.58	11.23	30.81	56.00	-25.19	QP	N
5*	4.682	19.20	11.30	30.50	56.00	-25.50	QP	N
6*	16.490	30.68	11.69	42.37	60.00	-17.63	QP	N
7*	0.162	13.07	10.66	23.73	55.36	-31.63	AV	N
8*	0.578	9.44	10.86	20.30	46.00	-25.70	AV	N
9*	1.294	7.72	10.98	18.70	46.00	-27.30	AV	N
10*	3.030	5.74	11.24	16.98	46.00	-29.02	AV	N
11*	4.598	5.20	11.30	16.50	46.00	-29.50	AV	N
12*	15.926	16.88	11.68	28.56	50.00	-21.44	AV	N

3.2 RADIATED EMISSION AND (BANDEDGE) MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

In case the emission fall within the restricted band specified on 15.407(b)7&15.205/209(a), then the limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	Class B (dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	74	54

Notes:

(1) The limit for radiated test was performed according to FCC PART 15E.

(2) The tighter limit applies at the band edges.

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

LIMITS OF RESTRICTED FREQUENCY BANDS

FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (GHz)
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	Above 38.6
13.36-13.41			

Note: In case the emission radiated emission above 1000MHz fall within the restricted band the restricted frequency bands, the peak limit is 74 dBuV/m.

LIMITS OF EMISSIONS OUTSIDE OF THE FREQUENCY BANDS

Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band:

(i) All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Note: dBuV/m(at 3M) = EIRP(dBm) + 95.2.

Peak Limit = -27dBm/MHz + 95.2 = 68.2 dBuV/m.

Spectrum Parameter	**Setting**
Attenuation	Auto
Detector	Peak
Start Frequency	1000 MHz(Peak/AV)
Stop Frequency	10th carrier harmonic (Peak/AV)
RB / VB (emission in restricted band)	1 MHz / 1 MHz, AV=1 MHz /3 MHz

For Band edge

Spectrum Parameter	Setting
Detector	Peak
RB / VB (emission in restricted band)	1 MHz / 1 MHz, AV=1 MHz /3 MHz

Receiver Parameter	**Setting**
Attenuation	Auto
Start ~ Stop Frequency	9kHz~90kHz / RB 200Hz for PK & AV
Start ~ Stop Frequency	90kHz~110kHz / RB 200Hz for QP
Start ~ Stop Frequency	110kHz~490kHz / RB 200Hz for PK & AV
Start ~ Stop Frequency	490kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

3.2.2 TEST PROCEDURE

a. The measuring distance at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz, and above 1GHz.
b. The EUT was placed on the top of a rotating table 0.8 m (above 1GHz is 1.5 m) above the ground at a 3 m anechoic chamber test site. The table was rotated 360 degree to determine the position of the highest radiation.
c. The height of the equipment shall be 0.8 m (above 1GHz is 1.5 m); the height of the test antenna shall vary between 1 m to 4 m. Horizontal and vertical polarization of the antenna are set to make the measurement.
d. 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 QuasiPeak detector mode will be re-measured.
e. If the Peak Mode measured value is compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and no additional QP Mode measurement was performed.
f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

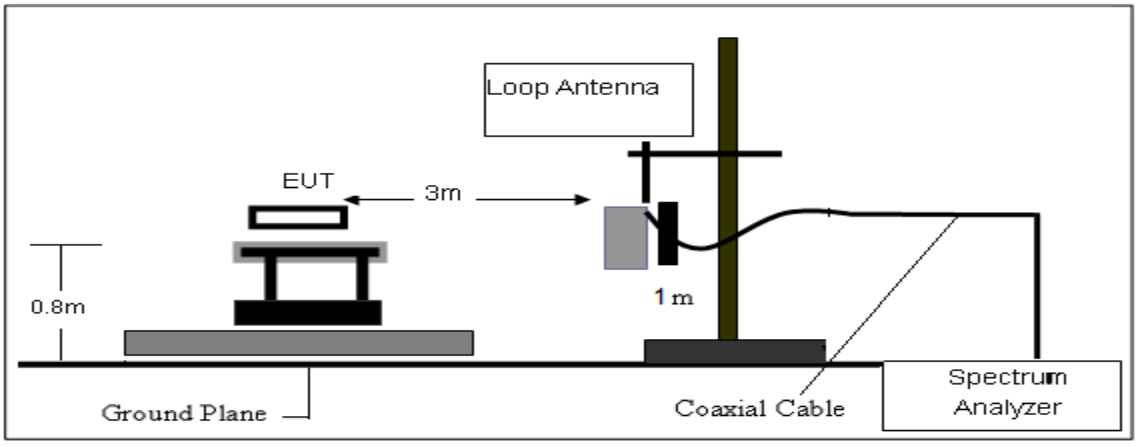
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

3.2.2 DEVIATION FROM TEST STANDARD

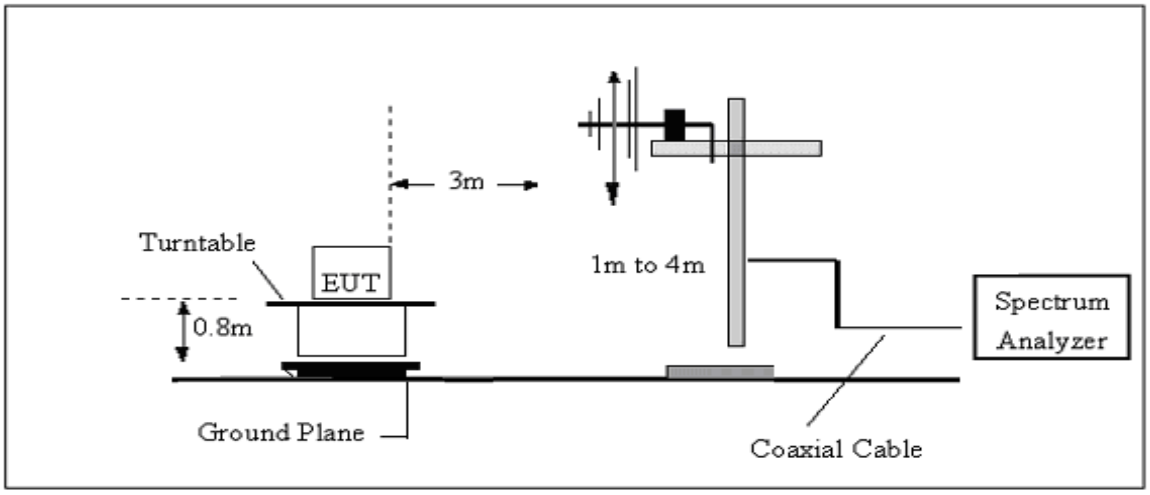
No deviation

3.2.3 TEST SETUP

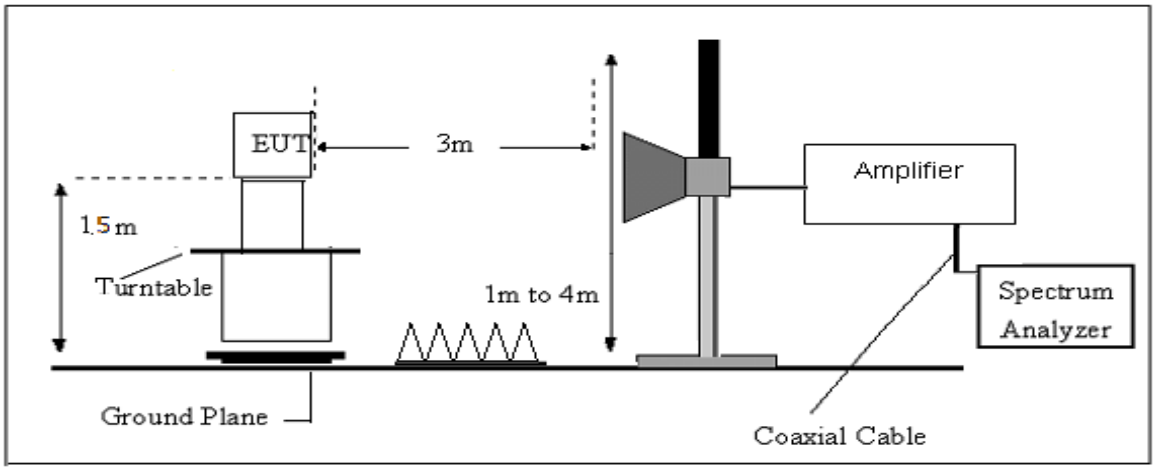
(A) Radiated Emission Test-Up Frequency Below 30MHz



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



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



3.2.4 EUT OPERATING CONDITIONS

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

3.2.5 FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:
FS = RA + AF + CL - AG
Where
FS = Field Strength
CL = Cable Attenuation Factor (Cable Loss)
RA = Reading Amplitude
AG = Amplifier Gain
AF = Antenna Factor
For example

Frequency	FS	RA	AF	CL	AG	Factor
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dB)	(dB)	(dB)
300	40	58.1	12.2	1.6	31.9	-18.1

Factor=AF+CL-AG

3.2.6 TEST RESULTS

Results of Radiated Emissions (9 KHz~30MHz)

No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Remark
1*	-	-	-	-	-	-	-	See Note

Note:

The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and the permissible value has no need to be reported.

Distance extrapolation factor = 40 log (specific distance / test distance) (dB);

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

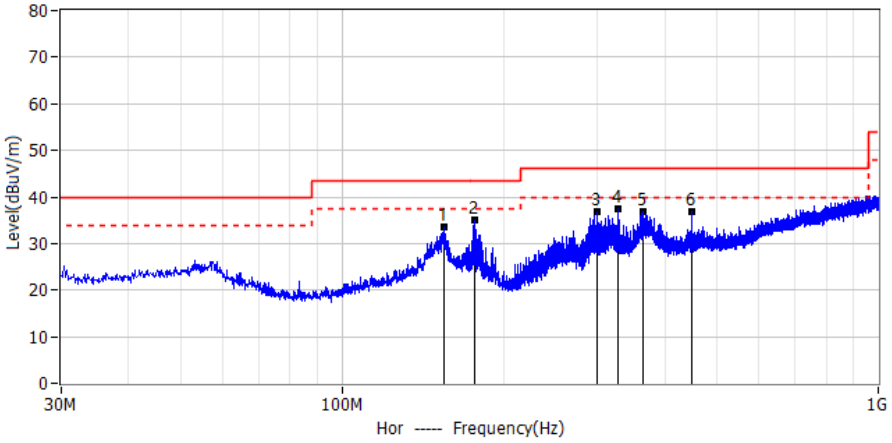
Results of Radiated Emissions (30MHz~1000MHz)

Note:1. All mode has been tested, only shown the worst case data.

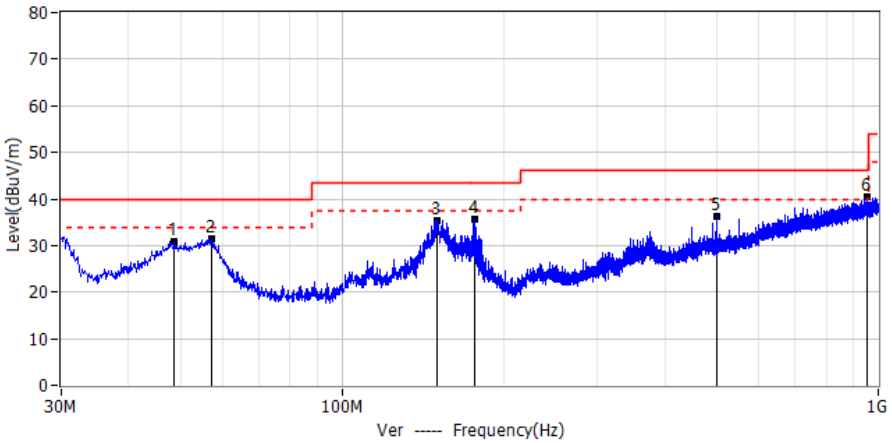
2. Level = Reading + Factor

Margin = Level – Limit

Project: LGT26D020	Test Engineer: zhangchengxiang
EUT: WiFi Digital Calendar	Temperature: 25.7℃
M/N: Q1562	Humidity: 55%RH
Test Voltage: AC 120V/60Hz	Test Data: 2026-04-14
Test Mode: TX 802.11a 5180	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	155.494	11.62	21.93	33.55	43.50	-9.95	QP	Hor
2*	176.834	15.04	19.91	34.95	43.50	-8.55	QP	Hor
3*	299.903	14.95	22.02	36.97	46.00	-9.03	QP	Hor
4*	328.033	14.48	22.95	37.43	46.00	-8.57	QP	Hor
5*	365.135	12.82	24.05	36.87	46.00	-9.13	QP	Hor
6*	450.010	10.06	26.85	36.91	46.00	-9.09	QP	Hor



No.	Frequency MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	48.673	10.08	20.87	30.95	40.00	-9.05	QP	Ver
2*	57.039	11.10	20.29	31.39	40.00	-8.61	QP	Ver
3*	150.523	13.43	21.85	35.28	43.50	-8.22	QP	Ver
4*	176.834	15.81	19.91	35.72	43.50	-7.78	QP	Ver
5*	499.965	9.07	27.28	36.35	46.00	-9.65	QP	Ver
6*	955.138	5.34	35.11	40.45	46.00	-5.55	QP	Ver

Results of Radiated Emissions (Above 1000MHz)

Note:1. All mode has been tested, only shown the worst case data.

UNII-1(5.15-5.25) GHz							
Frequency (MHz)	Reading (dBμV)	Corrected Factor (dB)	Result (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector	Polarity
Low Channel (802.11n20/ 5180 MHz)							
3984.18	52.66	-6.89	45.77	74.00	-28.23	PK	Vertical
3984.18	42.77	-6.89	35.88	54.00	-18.12	AV	Vertical
3998.04	53.04	-6.89	46.15	74.00	-27.85	PK	Horizontal
3998.04	42.04	-6.89	35.15	54.00	-18.85	AV	Horizontal
8915.49	53.16	-3.80	49.36	68.20	-18.84	PK	Vertical
8915.49	43.87	-3.80	40.07	54.00	-13.93	AV	Vertical
8913.72	53.67	-3.80	49.87	68.20	-18.33	PK	Horizontal
8913.72	43.37	-3.80	39.57	54.00	-14.43	AV	Horizontal
10360.29	56.36	-2.92	53.44	68.20	-14.76	PK	Vertical
10360.29	45.09	-2.92	42.17	54.00	-11.83	AV	Vertical
10360.32	55.16	-2.92	52.24	68.20	-15.96	PK	Horizontal
10360.32	45.48	-2.92	42.56	54.00	-11.44	AV	Horizontal
13288.33	54.90	-0.67	54.23	74.00	-19.77	PK	Vertical
13288.33	44.11	-0.67	43.44	54.00	-10.56	AV	Vertical
13292.05	54.56	-0.67	53.89	74.00	-20.11	PK	Horizontal
13292.05	44.94	-0.67	44.27	54.00	-9.73	AV	Horizontal
Mid Channel (802.11n20/ 5200 MHz)							
3999.29	52.74	-6.89	45.85	74.00	-28.15	PK	Vertical
3999.29	42.35	-6.89	35.46	54.00	-18.54	AV	Vertical
3997.75	53.15	-6.89	46.26	74.00	-27.74	PK	Horizontal
3997.75	42.54	-6.89	35.65	54.00	-18.35	AV	Horizontal
7235.33	53.62	-3.80	49.82	68.20	-18.38	PK	Vertical
7235.33	44.46	-3.80	40.66	54.00	-13.34	AV	Vertical
7225.43	54.29	-3.80	50.49	68.20	-17.71	PK	Horizontal
7225.43	43.39	-3.80	39.59	54.00	-14.41	AV	Horizontal
10400.16	56.29	-2.92	53.37	68.20	-14.83	PK	Vertical
10400.16	44.16	-2.92	41.24	54.00	-12.76	AV	Vertical
10400.15	55.07	-2.92	52.15	68.20	-16.05	PK	Horizontal
10400.15	44.59	-2.92	41.67	54.00	-12.33	AV	Horizontal
13291.05	54.91	-0.67	54.24	74.00	-19.76	PK	Vertical
13291.05	43.98	-0.67	43.31	54.00	-10.69	AV	Vertical
13292.78	54.91	-0.67	54.24	74.00	-19.76	PK	Horizontal
13292.78	43.70	-0.67	43.03	54.00	-10.97	AV	Horizontal
High Channel (802.11n20/ 5240 MHz)							
3980.38	52.53	-6.89	45.64	74.00	-28.36	PK	Vertical
3980.38	43.44	-6.89	36.55	54.00	-17.45	AV	Vertical
3984.53	52.39	-6.89	45.50	74.00	-28.50	PK	Horizontal
3984.53	42.25	-6.89	35.36	54.00	-18.64	AV	Horizontal
7233.86	54.24	-3.80	50.44	68.20	-17.76	PK	Vertical
7233.86	43.78	-3.80	39.98	54.00	-14.02	AV	Vertical
7229.53	53.13	-3.80	49.33	68.20	-18.87	PK	Horizontal
7229.53	44.17	-3.80	40.37	54.00	-13.63	AV	Horizontal
10480.12	55.79	-2.92	52.87	68.20	-15.33	PK	Vertical
10480.12	45.04	-2.92	42.12	54.00	-11.88	AV	Vertical
10480.04	55.82	-2.92	52.90	68.20	-15.30	PK	Horizontal
10480.04	45.12	-2.92	42.20	54.00	-11.80	AV	Horizontal
13280.84	54.75	-0.67	54.08	74.00	-19.92	PK	Vertical
13280.84	43.92	-0.67	43.25	54.00	-10.75	AV	Vertical
13292.81	54.23	-0.67	53.56	74.00	-20.44	PK	Horizontal
13292.81	43.68	-0.67	43.01	54.00	-10.99	AV	Horizontal

UNII-3(5.725-5.85) GHz							
Frequency (MHz)	Reading (dBμV)	Corrected Factor (dB)	Result (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector	Polarity
Low Channel (802.11a/ 5745 MHz)							
3983.84	52.95	-6.89	46.06	74.00	-27.94	PK	Vertical
3983.84	42.45	-6.89	35.56	54.00	-18.44	AV	Vertical
3997.62	53.02	-6.89	46.13	74.00	-27.87	PK	Horizontal
3997.62	42.85	-6.89	35.96	54.00	-18.04	AV	Horizontal
8906.74	53.38	-3.80	49.58	68.20	-18.62	PK	Vertical
8906.74	44.40	-3.80	40.60	54.00	-13.40	AV	Vertical
8907.23	53.18	-3.80	49.38	68.20	-18.82	PK	Horizontal
8907.23	43.19	-3.80	39.39	54.00	-14.61	AV	Horizontal
11484.48	55.60	-2.92	52.68	74.00	-21.32	PK	Vertical
11484.48	44.80	-2.92	41.88	54.00	-12.12	AV	Vertical
11474.90	55.05	-2.92	52.13	74.00	-21.87	PK	Horizontal
11474.90	44.35	-2.92	41.43	54.00	-12.57	AV	Horizontal
13285.16	54.14	-0.35	53.79	74.00	-20.21	PK	Vertical
13285.16	44.21	-0.35	43.86	54.00	-10.14	AV	Vertical
13280.99	54.29	-0.35	53.94	74.00	-20.06	PK	Horizontal
13280.99	44.25	-0.35	43.90	54.00	-10.10	AV	Horizontal
Mid Channel (802.11n20/ 5785 MHz)							
3984.29	52.97	-6.89	46.08	74.00	-27.92	PK	Vertical
3984.29	42.65	-6.89	35.76	54.00	-18.24	AV	Vertical
3990.39	52.89	-6.89	46.00	74.00	-28.00	PK	Horizontal
3990.39	42.97	-6.89	36.08	54.00	-17.92	AV	Horizontal
8913.73	54.34	-3.80	50.54	68.20	-17.66	PK	Vertical
8913.73	44.33	-3.80	40.53	54.00	-13.47	AV	Vertical
8913.82	53.34	-3.80	49.54	68.20	-18.66	PK	Horizontal
8913.82	43.17	-3.80	39.37	54.00	-14.63	AV	Horizontal
11557.72	55.84	-2.92	52.92	74.00	-21.08	PK	Vertical
11557.72	45.07	-2.92	42.15	54.00	-11.85	AV	Vertical
11561.09	56.04	-2.92	53.12	74.00	-20.88	PK	Horizontal
11561.09	45.20	-2.92	42.28	54.00	-11.72	AV	Horizontal
13290.60	54.40	-0.35	54.05	74.00	-19.95	PK	Vertical
13290.60	44.51	-0.35	44.16	54.00	-9.84	AV	Vertical
13284.80	54.19	-0.35	53.84	74.00	-20.16	PK	Horizontal
13284.80	44.15	-0.35	43.80	54.00	-10.20	AV	Horizontal
High Channel (802.11n20/ 5825 MHz)							
3982.11	52.06	-6.89	45.17	74.00	-28.83	PK	Vertical
3982.11	42.51	-6.89	35.62	54.00	-18.38	AV	Vertical
3998.22	52.47	-6.89	45.58	74.00	-28.42	PK	Horizontal
3998.22	43.33	-6.89	36.44	54.00	-17.56	AV	Horizontal
8924.84	53.95	-3.80	50.15	68.20	-18.05	PK	Vertical
8924.84	44.38	-3.80	40.58	54.00	-13.42	AV	Vertical
8917.33	53.77	-3.80	49.97	68.20	-18.23	PK	Horizontal
8917.33	44.11	-3.80	40.31	54.00	-13.69	AV	Horizontal
11649.65	55.85	-2.92	52.93	74.00	-21.07	PK	Vertical
11649.65	44.83	-2.92	41.91	54.00	-12.09	AV	Vertical
11650.03	55.91	-2.92	52.99	74.00	-21.01	PK	Horizontal
11650.03	44.62	-2.92	41.70	54.00	-12.30	AV	Horizontal
13299.61	54.45	-0.35	54.10	74.00	-19.90	PK	Vertical
13299.61	44.39	-0.35	44.04	54.00	-9.96	AV	Vertical
13289.13	54.85	-0.35	54.50	74.00	-19.50	PK	Horizontal
13289.13	44.13	-0.35	43.78	54.00	-10.22	AV	Horizontal

Remark:
In frequency ranges 18~40GHz no any other harmonic emissions detected which are tested to compliance with the limit. No recording in the test report. No any other emissions level which are attenuated less than 20dB below the limit. No recording in the test report.

3.2.7 TEST RESULTS(Band edge Requirements)

Note:1. All mode has been tested, only shown the worst case data.

UNII-1A(5.15-5.25) GHz							
Frequency (MHz)	Reading (dBμV)	Corrected Factor (dB）	Result (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector	Polarity
802.11n BW20MHz							
5150	56.14	-7.51	48.63	74	-25.37	PK	Vertical
5150	44.44	-7.51	36.93	54	-17.07	AV	Vertical
5150	55.29	-7.51	47.78	74	-26.22	PK	Horizontal
5150	45.26	-7.51	37.75	54	-16.25	AV	Horizontal
5350	54.12	-8.19	45.93	74	-28.07	PK	Vertical
5350	44.61	-8.19	36.42	54	-17.58	AV	Vertical
5350	54.62	-8.19	46.43	74	-27.57	PK	Horizontal
5350	43.51	-8.19	35.32	54	-18.68	AV	Horizontal
802.11n BW40MHz							
5150	55.43	-7.51	47.92	74	-26.08	Peak	Vertical
5150	44.73	-7.51	37.22	54	-16.78	AVG	Vertical
5150	56.41	-7.51	48.90	74	-25.10	Peak	Horizontal
5150	44.80	-7.51	37.29	54	-16.71	AVG	Horizontal
5350	54.86	-8.19	46.67	74	-27.33	Peak	Vertical
5350	44.98	-8.19	36.79	54	-17.21	AVG	Vertical
5350	55.16	-8.19	46.97	74	-27.03	Peak	Horizontal
5350	44.51	-8.19	36.32	54	-17.68	AVG	Horizontal

UNII-3(5.725-5.85 GHz)							
Frequency (MHz)	Reading (dBμV)	Corrected Factor (dB）	Result (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector	Polarity
802.11n BW20MHz							
5460	54.27	-8.27	46.00	74	-28.00	PK	Vertical
5460	42.98	-8.27	34.71	54	-19.29	AV	Vertical
5460	54.27	-8.27	46.00	74	-28.00	PK	Horizontal
5460	43.00	-8.27	34.73	54	-19.27	AV	Horizontal
7250	54.83	-6.33	48.50	74	-25.50	PK	Vertical
7250	44.19	-6.33	37.86	54	-16.14	AV	Vertical
7250	55.17	-6.33	48.84	74	-25.16	PK	Horizontal
7250	44.11	-6.33	37.78	54	-16.22	AV	Horizontal
802.11n BW40MHz							
5460	53.85	-8.27	45.58	74	-28.42	PK	Vertical
5460	42.74	-8.27	34.47	54	-19.53	AV	Vertical
5460	54.25	-8.27	45.98	74	-28.02	PK	Horizontal
5460	42.85	-8.27	34.58	54	-19.42	AV	Horizontal
7250	54.45	-6.33	48.12	74	-25.88	PK	Vertical
7250	44.27	-6.33	37.94	54	-16.06	AV	Vertical
7250	55.31	-6.33	48.98	74	-25.02	PK	Horizontal
7250	44.28	-6.33	37.95	54	-16.05	AV	Horizontal

4. POWER SPECTRAL DENSITY TEST

4.1 LIMIT

1. For mobile and portable 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.
2. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, 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 5.725-5.850 GHz, the peak power spectral density shall not exceed 30 dBm in any 500KHz band. If transmitting antenna directional gain is greater than 6 dBi, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

4.2 TEST PROCEDURE

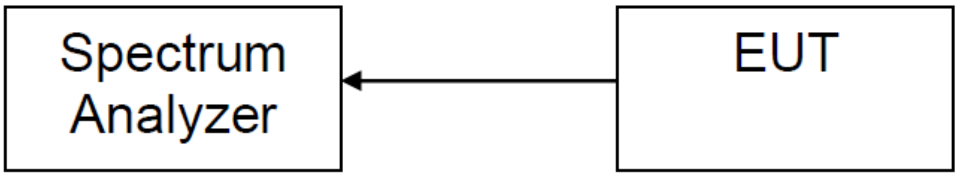
1. The setting follows Method SA-1 of FCC KDB 789033 D02 General U-NII Test Procedures New Rules v02r01.

For devices operating in the band, 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 ≥ 1/*T*, where *T* is defined in section II.B.I.a).
b) Set VBW ≥ 3 RBW.
c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10 log (500kHz/RBW) to the measured result, whereas RBW (< 500 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 (1MHz/RBW) to the measured result, whereas RBW (< 1 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 KHZ is available on nearly all spectrum analyzers.

4.3 DEVIATION FROM STANDARD

No deviation.

4.4 TEST SETUP



4.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.1 Unless otherwise a special operating condition is specified in the follows during the testing.

4.6 TEST RESULTS

For the measurement records, refer to the appendix I.

5. BANDWIDTH MEASUREMENT

5.1 EMISSION BANDWIDTH (EBW) 26 BANDWID PROCEDURES / LIMIT

The following procedure shall be used for measuring 26 bandwidth.

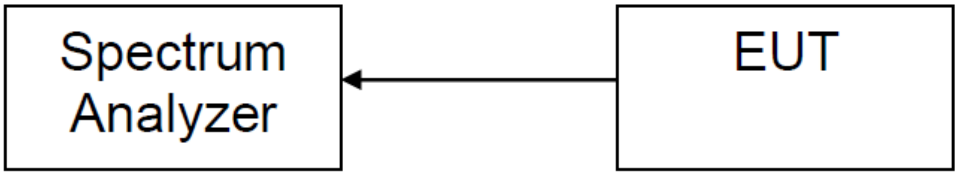
5.1.1 TEST PROCEDURE

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > =RBW.
4. Detector = Peak.
5. Trace mode = max hold.
6. 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 analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP



5.1.4 EUT OPERATION CONDITIONS

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

5.1.5 TEST RESULTS

For the measurement records, refer to the appendix I.

5.2 OCCUPIED BANDWIDTH (99%) TEST APPLIED PROCEDURES / LIMIT

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

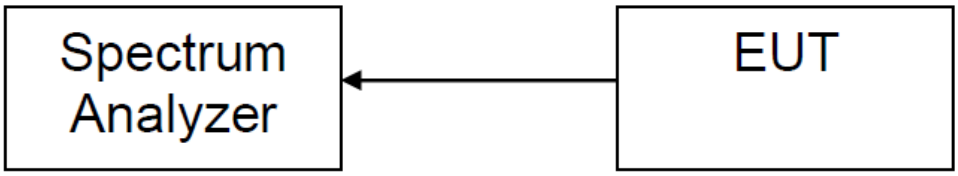
5.2.1 TEST PROCEDURE

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures v02r01.
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 ≥ 3 · 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.

5.2.2 DEVIATION FROM STANDARD

No deviation.

5.2.3 TEST SETUP



5.2.4 EUT OPERATION CONDITIONS

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

5.2.5 TEST RESULTS

For the measurement records, refer to the appendix I.

5.3 MINIMUM EMISSION BANDWIDTH(6 DB) PROCEDURES / LIMIT

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.725-5.85 GHz. The following procedure shall be used for measuring this bandwidth.

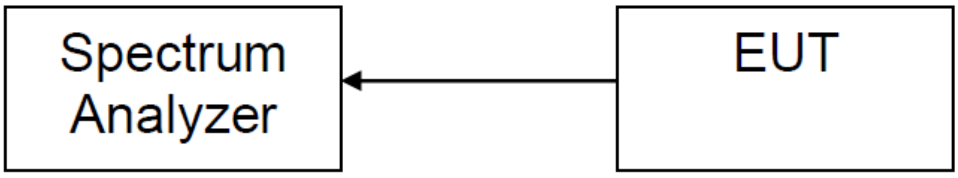
5.3.1 TEST PROCEDURE

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures v02r01.
a) Set RBW = 100 kHz.
b) Set the video bandwidth (VBW) ≥ 3 × RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
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.

5.3.2 DEVIATION FROM STANDARD

No deviation.

5.3.3 TEST SETUP



5.3.4 EUT OPERATION CONDITIONS

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

5.3.5 TEST RESULTS

For the measurement records, refer to the appendix I.

6. MAXIMUM CONDUCTED OUTPUT POWER

6.1 LIMIT

For mobile and portable 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. 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 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz,If transmitting antennas of directional gain greater than 6 dBi are used.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. If transmitting antennas of directional gain greater than 6 dBi are used.

FCC Part15 (15.407) , Subpart E				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.407(a) (1) (iv)	Output Power	0.25 watt	5150-5250	PASS
		The lesser of 250 mW or 11 dBm + 10 log (26 dB emission bandwidth)	5250-5350 5470-5725	
15.407(a) (3)		1 watt	5725-5825	

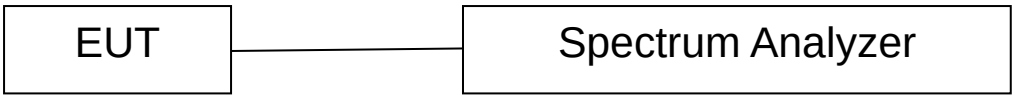
6.2 TEST PROCEDURE

Refer to C63.10-2020 Section 12.4.2.4.
Method SA-2 uses trace averaging across ON and OFF times of the EUT transmissions, followed by duty cycle correction. The procedure for this method is as follows:
a) Measure the duty cycle D of the transmitter output signal as described in 12.2.
b) Set span to encompass the entire 99% OBW of the signal.
c) Set RBW = 1 MHz.
d) Set VBW ≥ 3 MHz.
e) Number of points in sweep ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)
f) Sweep time = auto.
g) Detector = Power averaging (rms), if available. Otherwise, use sample detector mode.
h) Do not use sweep triggering. Allow the sweep to “free run.”
i) Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed such that the average accurately represents the true average over the ON and OFF periods of the transmitter.
j) Compute power by integrating the spectrum across the 99% OBW of the signal using the instrument’s band-power measurement function with band limits set equal to the EBW or OBW band-edges. If the instrument does not have a band-power function, then sum the spectrum levels (in power units) at 1 MHz intervals extending across the 99% OBW of the spectrum.
k) Add [10 log (1 / D)], where D is the duty cycle, to the measured power to compute the average power during the actual transmission times (because the measurement represents an average over both the ON and OFF times of the transmission). For example, add [10 log (1 / 0.25)] = 6 dB if the duty cycle is 25%.

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 5 Unless otherwise a special operating condition is specified in the follows during the testing.

6.6 TEST RESULTS

For the measurement records, refer to the appendix I.

7. CONDUCTED BANDEDGE

7.1 LIMIT

Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:
(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
(4) For transmitters operating in the 5.725-5.85 GHz band:
a) 27 dBm/MHz at frequencies from the band edges decreasing linearly to 15.6 dBm/MHz at 5 MHz above or below the band edges;
b) 15.6 dBm/MHz at 5 MHz above or below the band edges decreasing linearly to 10 dBm/MHz at 25 MHz above or below the band edges;
c) 10 dBm/MHz at 25 MHz above or below the band edges decreasing linearly to -27 dBm/MHz at 75 MHz above or below the band edges; and
d) -27 dBm/MHz at frequencies more than 75 MHz above or below the band edges.

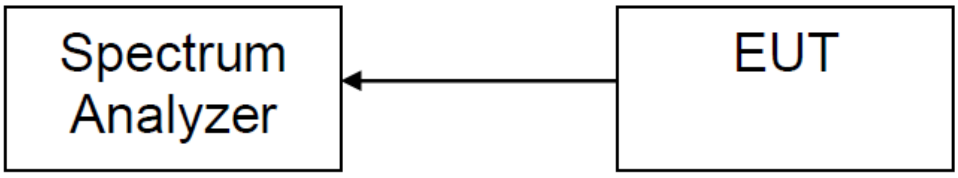
7.2 TEST PROCEDURE

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak
RB / VB (emission in restricted band)	1 MHz / 3 MHz
Offset	Ant Gain+Test system loss

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP



7.5 EUT OPERATION CONDITIONS

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

7.6 TEST RESULTS

For the measurement records, refer to the appendix I.

8. AUTOMATICALLY DISCONTINUE TRANSMISSION

8.1 LIMIT OF AUTOMATICALLY DISCONTINUE TRANSMISSION

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

8.2 TEST RESULT OF AUTOMATICALLY DISCONTINUE TRANSMISSION

During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission

9. ANTENNA REQUIREMENT

9.1 STANDARD REQUIREMENT

Part 15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

9.2 EUT ANTENNA

The EUT antenna is PIFA Antenna. It comply with the standard requirement.

APPENDIX I - TEST RESULTS

1. DUTY CYCLE

1.1 Test Result

1.1.1 Ant1

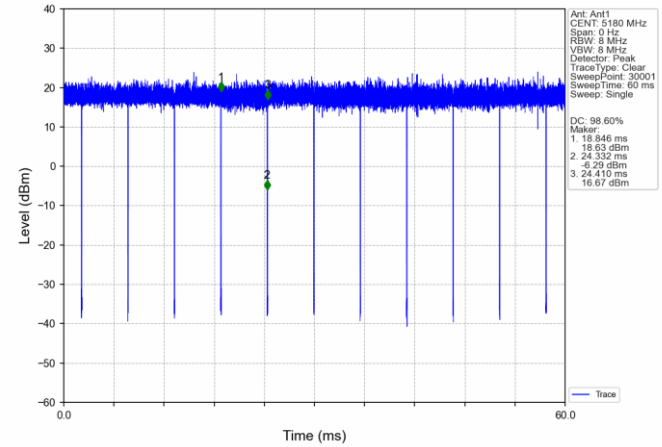
Ant1									
Mode	TX Type	Frequency (MHz)	RU	RU Pos	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	/	/	5.486	5.564	98.60	0.06	0.18
		5200	/	/	5.488	5.566	98.60	0.06	0.18
		5240	/	/	5.486	5.564	98.60	0.06	0.18
		5745	/	/	5.490	5.564	98.67	0.06	0.32
		5785	/	/	5.488	5.566	98.60	0.06	0.18
		5825	/	/	5.486	5.564	98.60	0.06	0.32
802.11n (HT20)	SISO	5180	/	/	5.376	5.452	98.61	0.06	0.30
		5200	/	/	5.374	5.452	98.57	0.06	0.18
		5240	/	/	5.374	5.453	98.55	0.06	0.20
		5745	/	/	5.376	5.454	98.57	0.06	0.18
		5785	/	/	5.376	5.452	98.61	0.06	0.17
		5825	/	/	5.376	5.454	98.57	0.06	0.36
802.11n (HT40)	SISO	5190	/	/	3.023	3.101	97.48	0.11	0.30
		5230	/	/	3.023	3.101	97.48	0.11	0.30
		5755	/	/	3.023	3.100	97.52	0.11	0.57
		5795	/	/	3.023	3.101	97.48	0.11	0.30
802.11ac (VHT20)	SISO	5180	/	/	5.383	5.460	98.59	0.06	0.14
		5200	/	/	5.384	5.462	98.57	0.06	0.18
		5240	/	/	5.384	5.462	98.57	0.06	0.20
		5745	/	/	5.384	5.462	98.57	0.06	0.18
		5785	/	/	5.384	5.462	98.57	0.06	0.34
		5825	/	/	5.383	5.462	98.55	0.06	0.34
802.11ac (VHT40)	SISO	5190	/	/	5.163	5.240	98.53	0.06	0.17
		5230	/	/	5.163	5.241	98.51	0.07	0.21
		5755	/	/	5.163	5.242	98.49	0.07	0.35
		5795	/	/	5.163	5.241	98.51	0.07	0.21
802.11ax (HEW20)	SISO	5180	SU	/	4.645	4.726	98.29	0.08	0.20
		5200	SU	/	4.643	4.725	98.26	0.08	0.20
		5240	SU	/	4.643	4.725	98.26	0.08	0.42
		5745	SU	/	4.643	4.725	98.26	0.08	0.21
		5785	SU	/	4.643	4.725	98.26	0.08	0.42
		5825	SU	/	4.643	4.725	98.26	0.08	0.24

802.11ax (HEW40)	SISO	5190	SU	/	4.633	4.715	98.26	0.08	0.38
		5230	SU	/	4.635	4.716	98.28	0.08	0.21
		5755	SU	/	4.633	4.715	98.26	0.08	0.21
		5795	SU	/	4.638	4.717	98.33	0.07	0.38

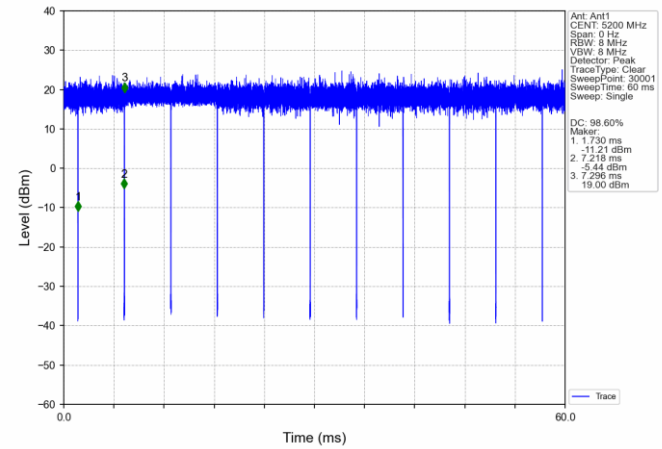
1.2 Test Graph

1.2.1 Ant1

802.11a_LCH_5180MHz_Ant1_NTNV



802.11a_MCH_5200MHz_Ant1_NTNV



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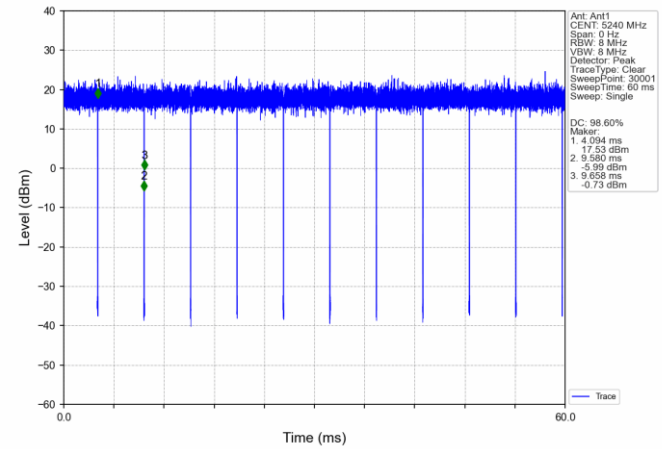

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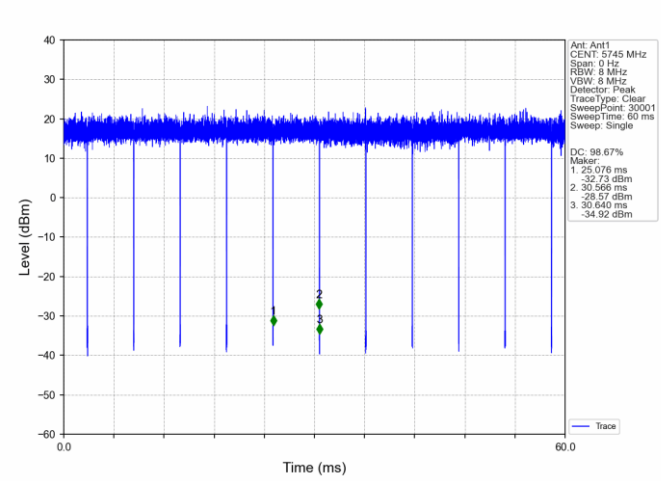

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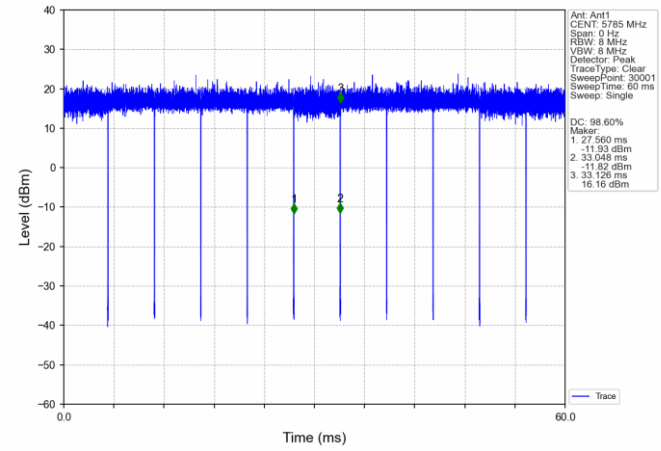

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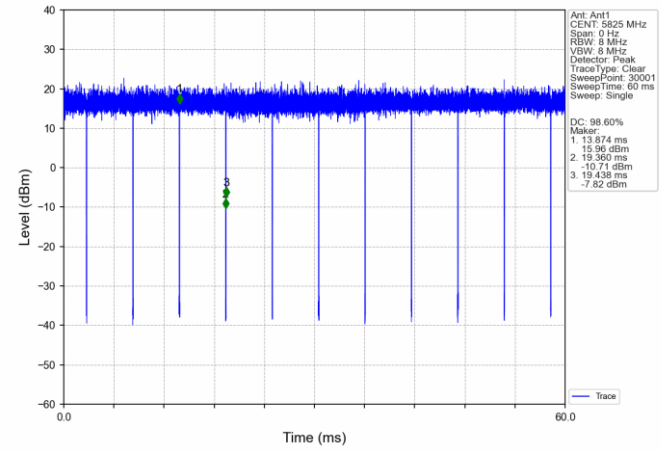

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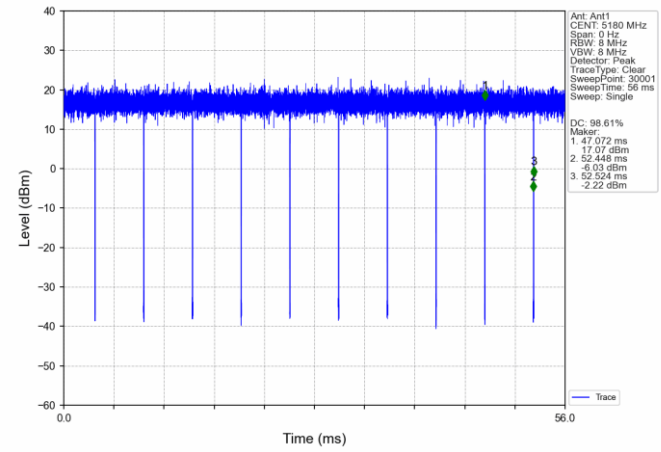

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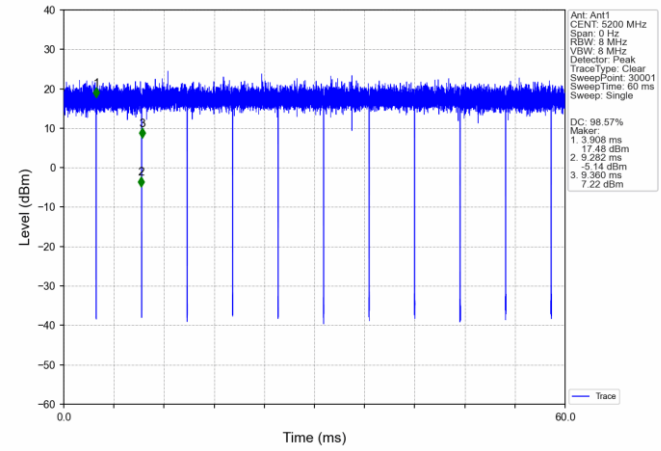

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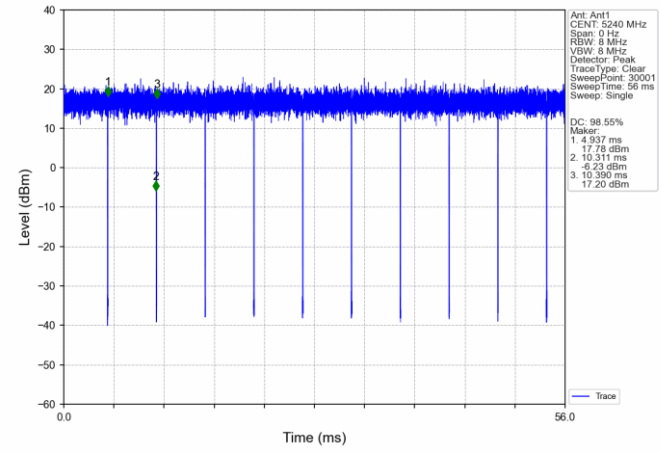

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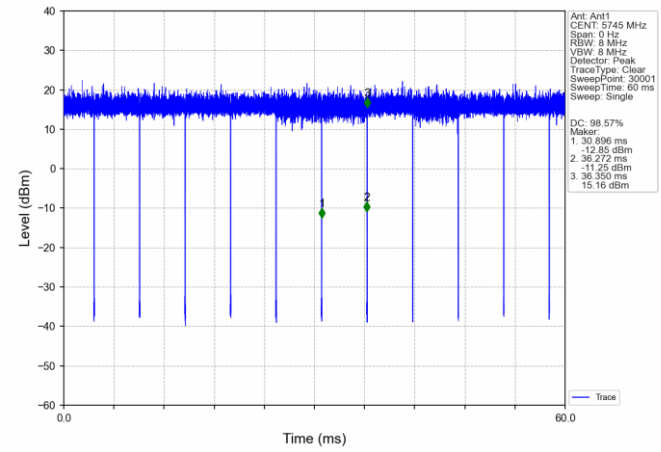
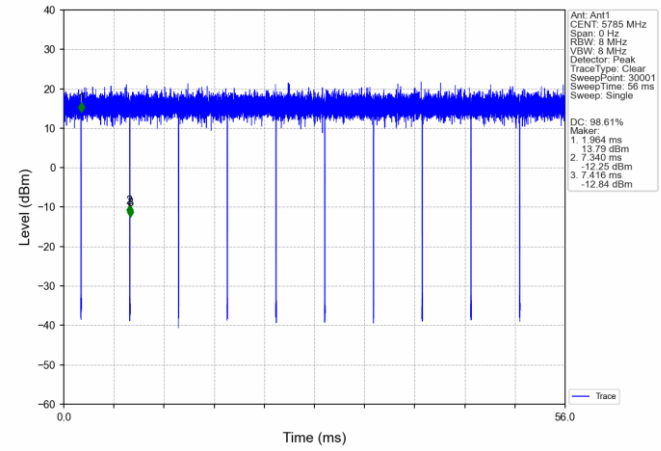


802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



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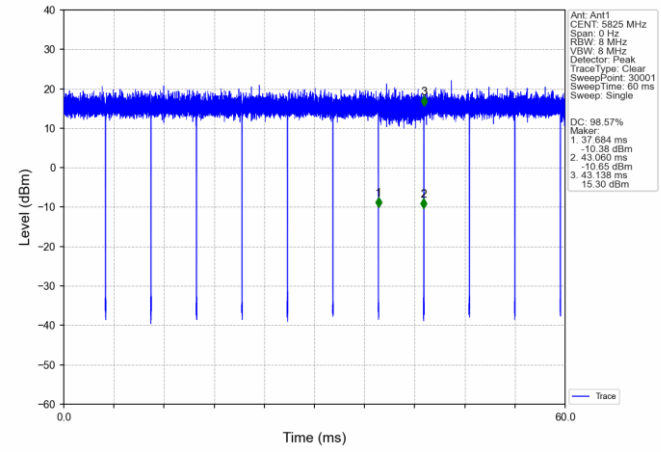

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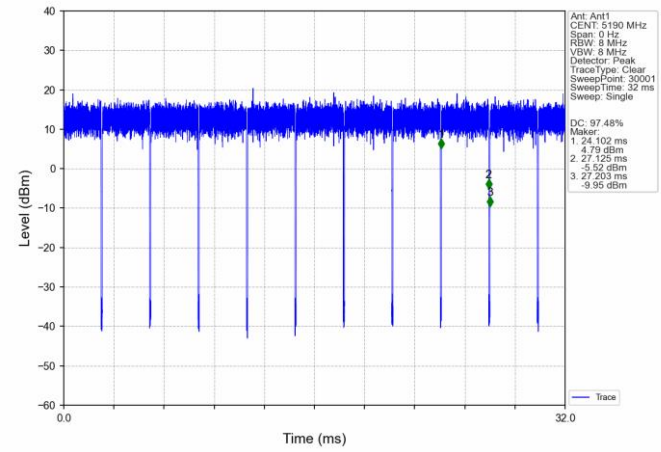

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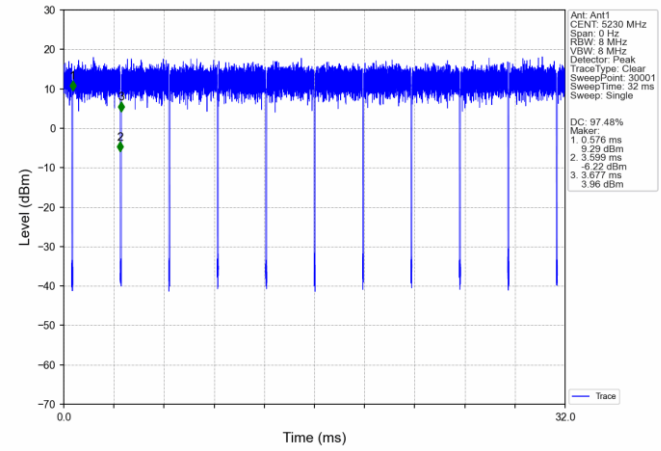

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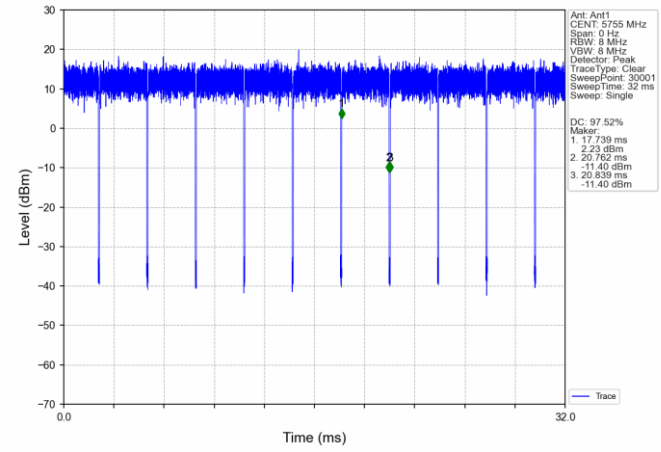

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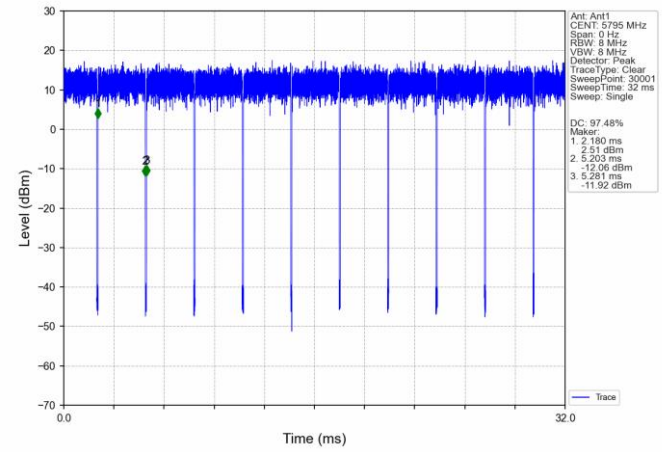

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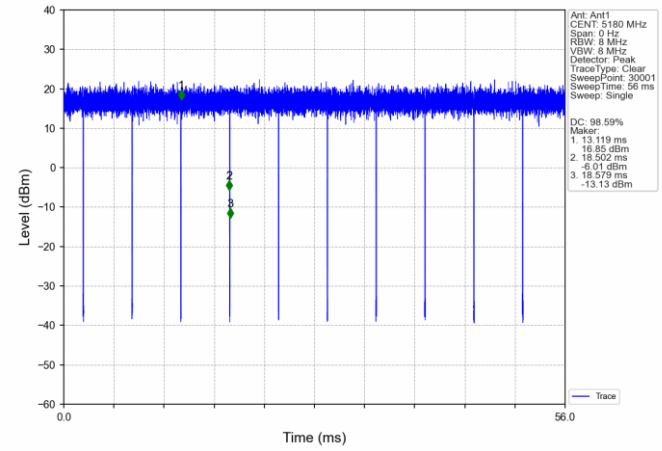

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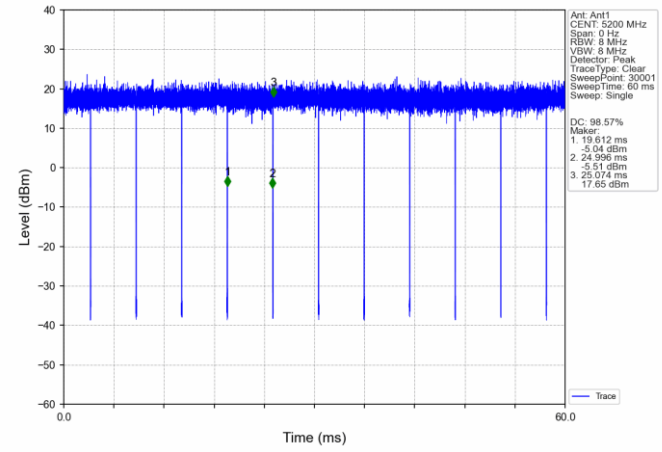

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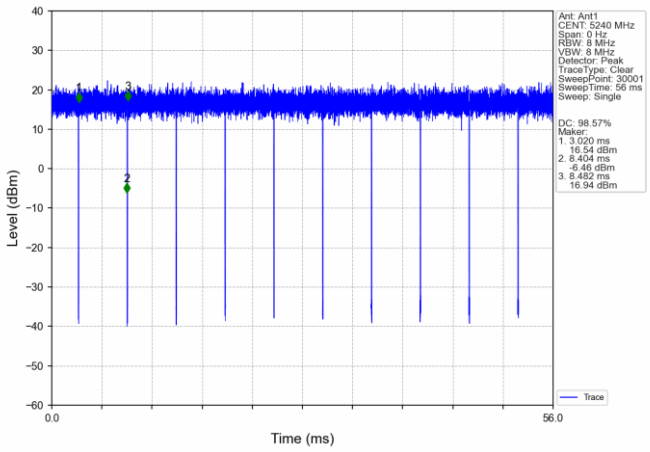

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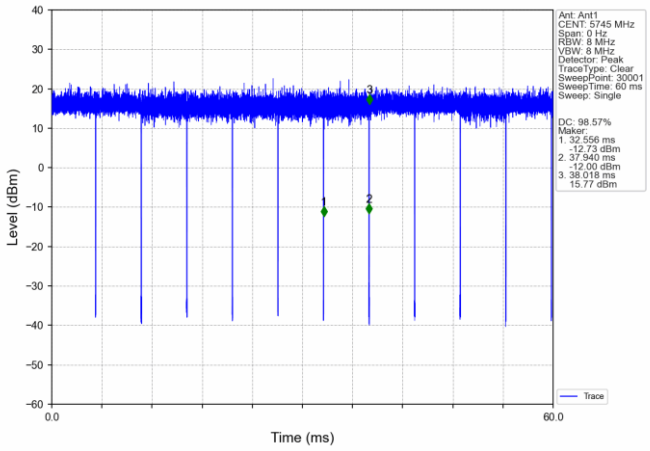
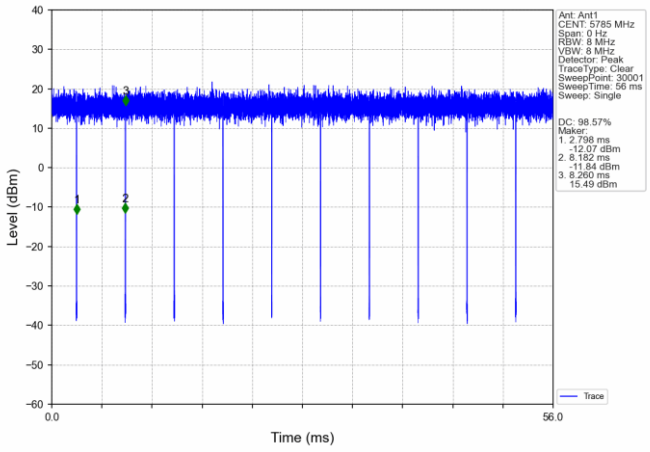
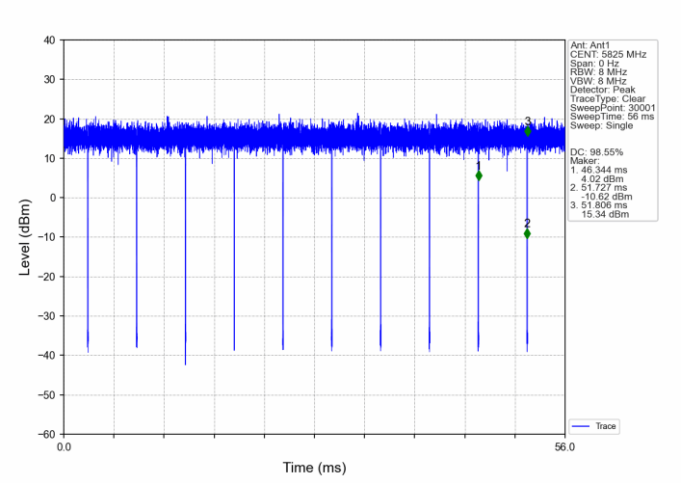


802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



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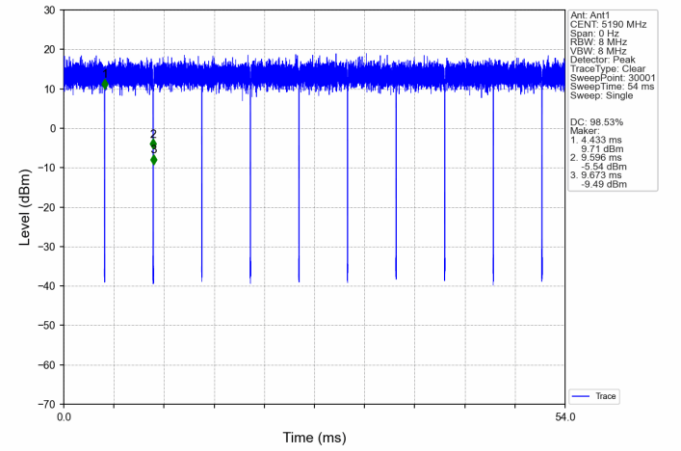

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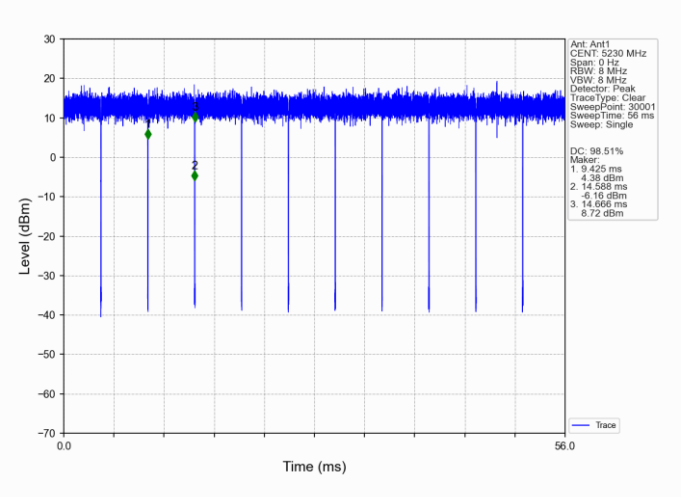

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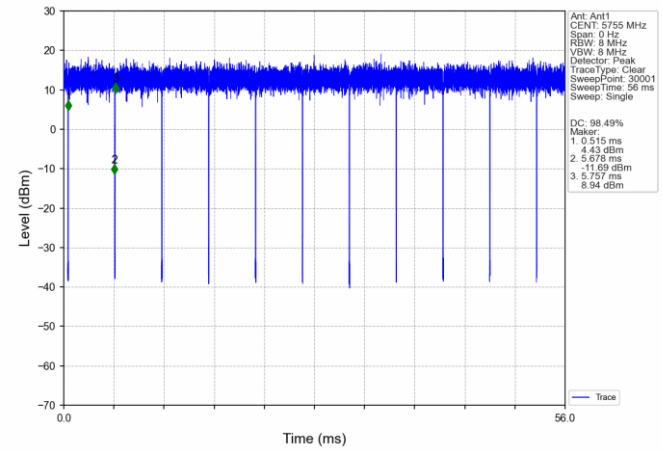

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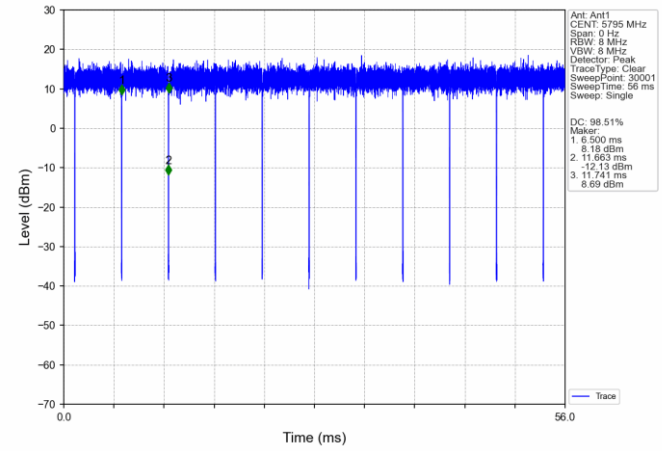
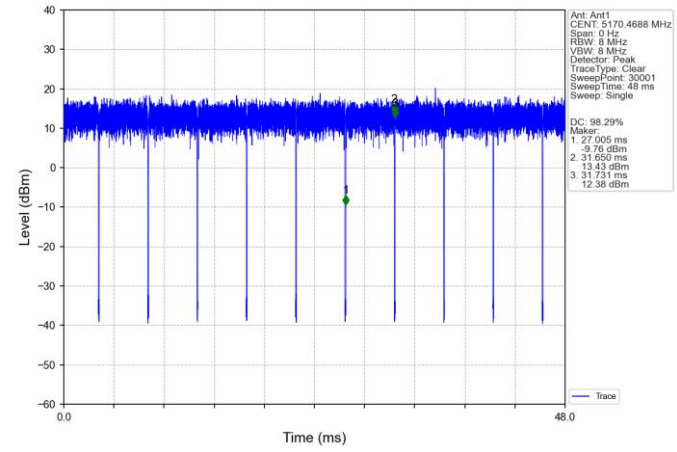
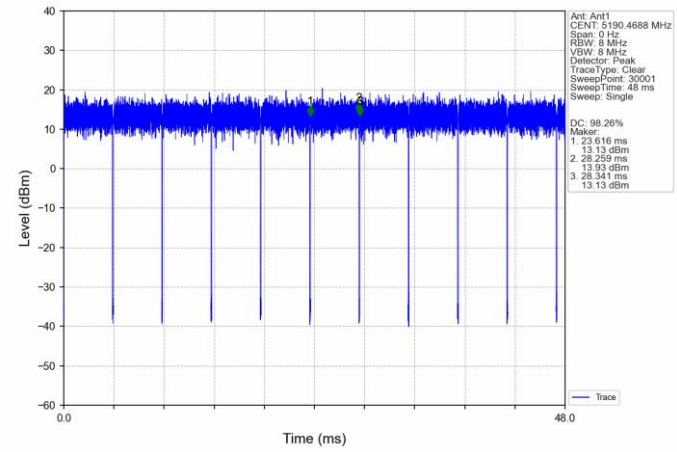


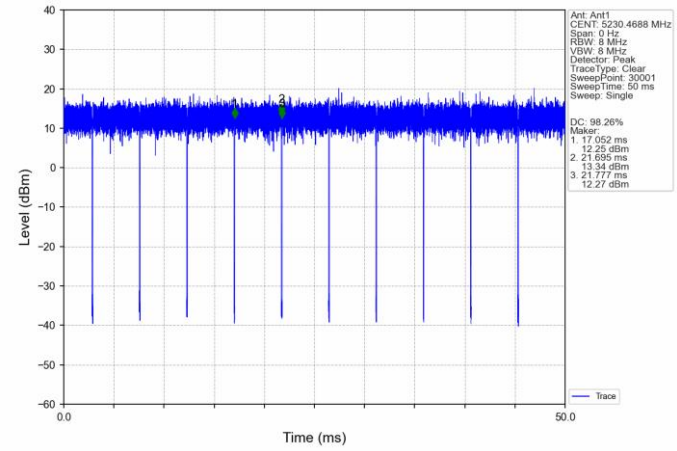
802.11ax(HEW20)_LCH_5180MHz_SU_Ant1_NTNV



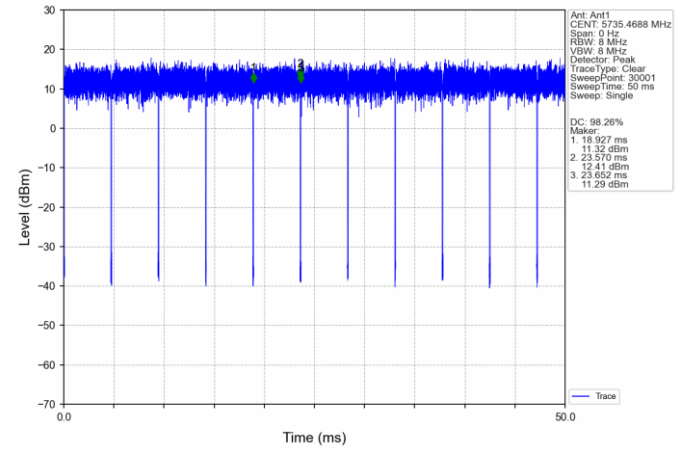
802.11ax(HEW20)_MCH_5200MHz_SU_Ant1_NTNV



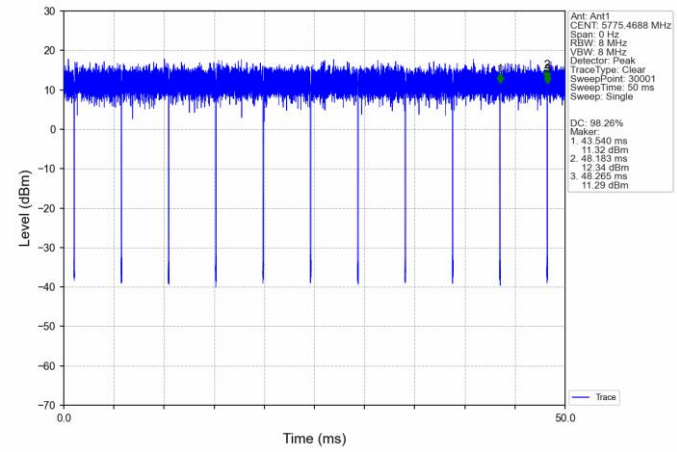
802.11ax(HEW20)_HCH_5240MHz_SU_Ant1_NTNV



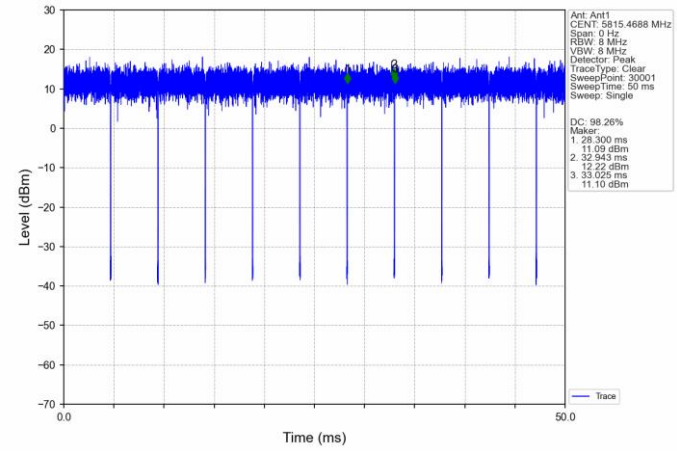
802.11ax(HEW20)_LCH_5745MHz_SU_Ant1_NTNV



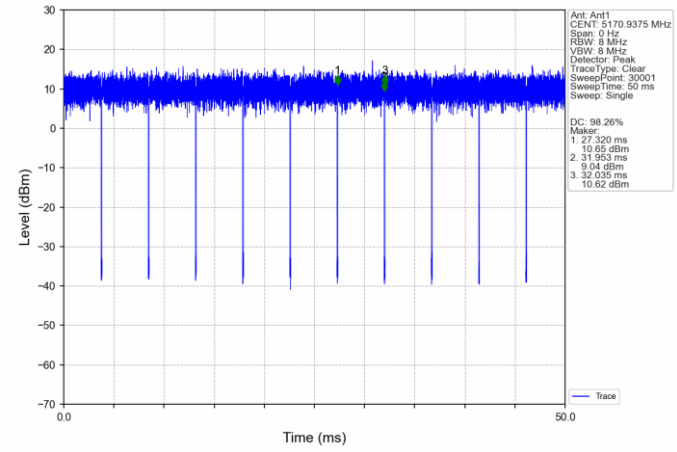
802.11ax(HEW20)_MCH_5785MHz_SU_Ant1_NTNV



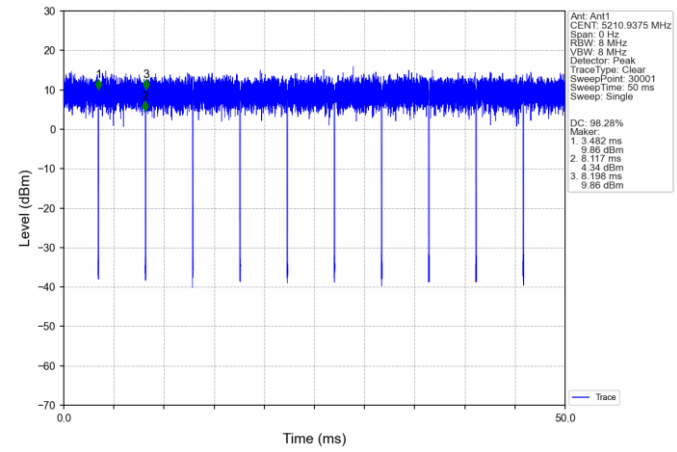
802.11ax(HEW20)_HCH_5825MHz_SU_Ant1_NTNV



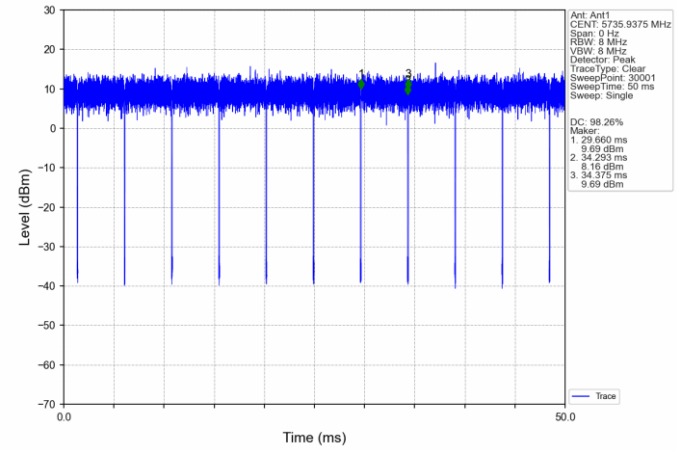
802.11ax(HEW40)_LCH_5190MHz_SU_Ant1_NTNV



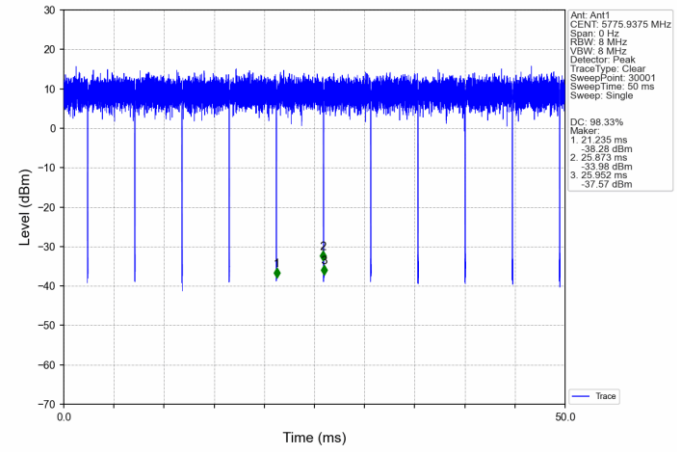
802.11ax(HEW40)_HCH_5230MHz_SU_Ant1_NTNV



802.11ax(HEW40)_LCH_5755MHz_SU_Ant1_NTNV



802.11ax(HEW40)_HCH_5795MHz_SU_Ant1_NTNV



2. BANDWIDTH

2.1 Test Result

2.1.1 OBW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	99% Occupied Bandwidth (MHz)		Verdict
						Result	Limit	
802.11a	SISO	5180	/	/	1	16.558	/	Pass
		5200	/	/	1	16.606	/	Pass
		5240	/	/	1	16.531	/	Pass
		5745	/	/	1	16.554	/	Pass
		5785	/	/	1	16.559	/	Pass
		5825	/	/	1	16.588	/	Pass
802.11n (HT20)	SISO	5180	/	/	1	17.613	/	Pass
		5200	/	/	1	17.629	/	Pass
		5240	/	/	1	17.601	/	Pass
		5745	/	/	1	17.613	/	Pass
		5785	/	/	1	17.631	/	Pass
		5825	/	/	1	17.627	/	Pass
802.11n (HT40)	SISO	5190	/	/	1	36.238	/	Pass
		5230	/	/	1	36.273	/	Pass
		5755	/	/	1	36.277	/	Pass
		5795	/	/	1	36.298	/	Pass
802.11ac (VHT20)	SISO	5180	/	/	1	17.605	/	Pass
		5200	/	/	1	17.628	/	Pass
		5240	/	/	1	17.600	/	Pass
		5745	/	/	1	17.623	/	Pass
		5785	/	/	1	17.620	/	Pass
		5825	/	/	1	17.627	/	Pass
802.11ac (VHT40)	SISO	5190	/	/	1	36.256	/	Pass
		5230	/	/	1	36.369	/	Pass
		5755	/	/	1	36.280	/	Pass
		5795	/	/	1	36.308	/	Pass
802.11ax (HEW20)	SISO	5180	SU	/	1	18.692	/	Pass
		5200	SU	/	1	18.745	/	Pass
		5240	SU	/	1	18.662	/	Pass
		5745	SU	/	1	18.725	/	Pass
		5785	SU	/	1	18.721	/	Pass
		5825	SU	/	1	18.705	/	Pass
802.11ax (HEW40)	SISO	5190	SU	/	1	37.392	/	Pass
		5230	SU	/	1	37.427	/	Pass

		5755	SU	/	1	37.464	/	Pass
		5795	SU	/	1	37.514	/	Pass

2.1.2 26dB BW

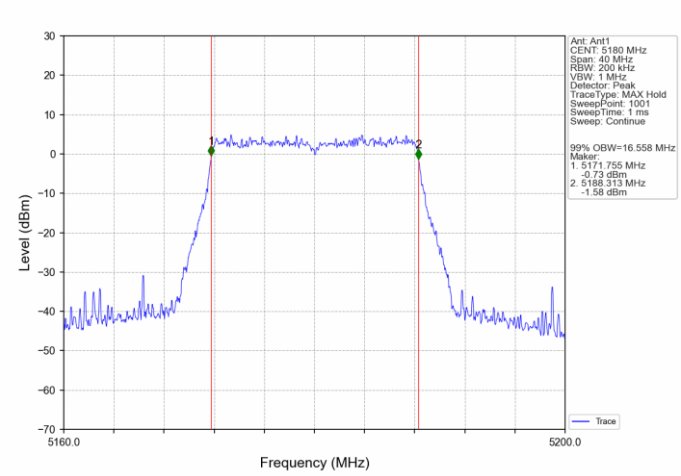
Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	26dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11a	SISO	5180	/	/	1	19.540	/	Pass
		5200	/	/	1	19.454	/	Pass
		5240	/	/	1	19.414	/	Pass
802.11n (HT20)	SISO	5180	/	/	1	19.956	/	Pass
		5200	/	/	1	19.873	/	Pass
		5240	/	/	1	19.886	/	Pass
802.11n (HT40)	SISO	5190	/	/	1	40.061	/	Pass
		5230	/	/	1	39.788	/	Pass
802.11ac (VHT20)	SISO	5180	/	/	1	19.923	/	Pass
		5200	/	/	1	19.818	/	Pass
		5240	/	/	1	19.960	/	Pass
802.11ac (VHT40)	SISO	5190	/	/	1	40.113	/	Pass
		5230	/	/	1	39.919	/	Pass
802.11ax (HEW20)	SISO	5180	SU	/	1	20.351	/	Pass
		5200	SU	/	1	20.439	/	Pass
		5240	SU	/	1	20.251	/	Pass
802.11ax (HEW40)	SISO	5190	SU	/	1	40.461	/	Pass
		5230	SU	/	1	40.381	/	Pass

2.1.3 6dB BW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	6dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11a	SISO	5745	/	/	1	16.480	>=0.5	Pass
		5785	/	/	1	16.452	>=0.5	Pass
		5825	/	/	1	16.481	>=0.5	Pass
802.11n (HT20)	SISO	5745	/	/	1	17.574	>=0.5	Pass
		5785	/	/	1	17.621	>=0.5	Pass
		5825	/	/	1	17.611	>=0.5	Pass
802.11n (HT40)	SISO	5755	/	/	1	35.812	>=0.5	Pass
		5795	/	/	1	36.305	>=0.5	Pass
802.11ac (VHT20)	SISO	5745	/	/	1	17.588	>=0.5	Pass
		5785	/	/	1	17.644	>=0.5	Pass
		5825	/	/	1	17.630	>=0.5	Pass
802.11ac (VHT40)	SISO	5755	/	/	1	36.282	>=0.5	Pass
		5795	/	/	1	36.338	>=0.5	Pass
802.11ax (HEW20)	SISO	5745	SU	/	1	18.044	>=0.5	Pass
		5785	SU	/	1	18.176	>=0.5	Pass

		5825	SU	/	1	18.439	>=0.5	Pass
802.11ax (HEW40)	SISO	5755	SU	/	1	36.850	>=0.5	Pass
		5795	SU	/	1	36.715	>=0.5	Pass

2.2 Test Graph
2.2.1 OBW

802.11a_LCH_5180MHz_Ant1_NTNV

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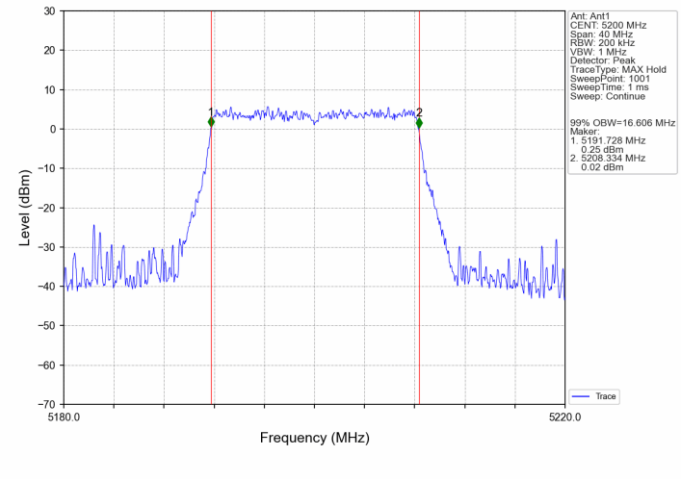
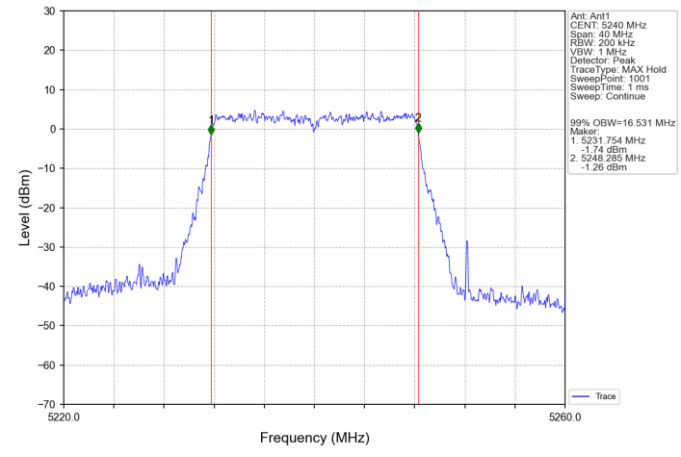
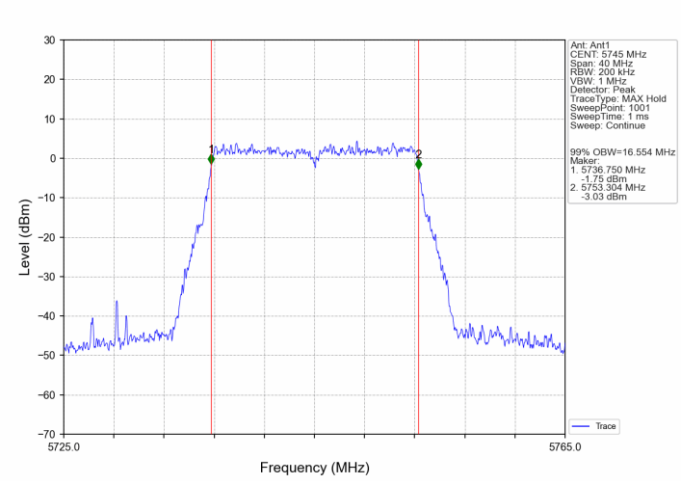
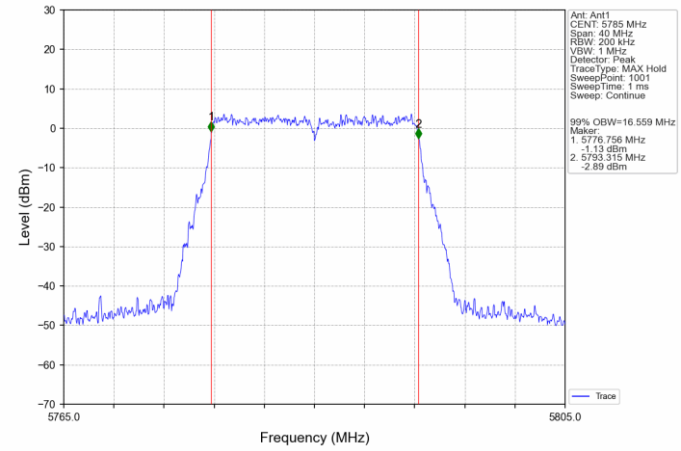

802.11a_HCH_5240MHz_Ant1_NTNV


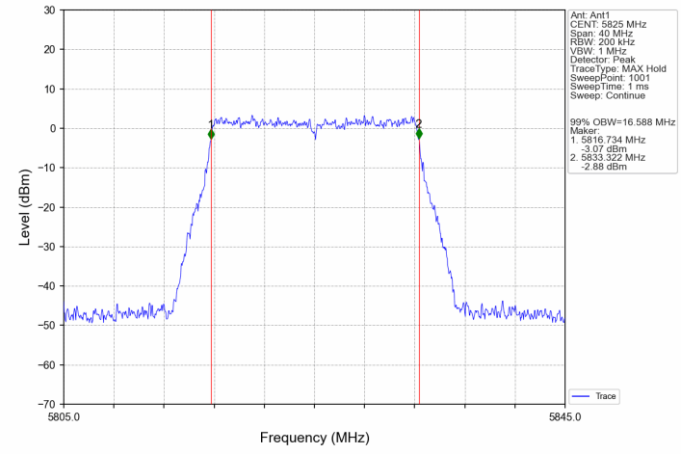
802.11a_LCH_5745MHz_Ant1_NTNV



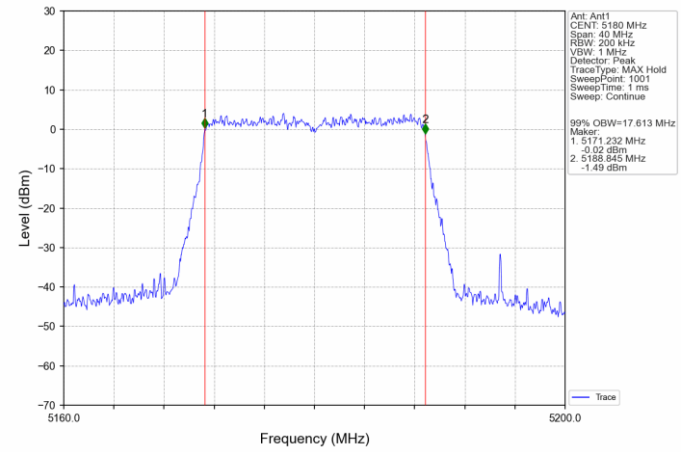
802.11a_MCH_5785MHz_Ant1_NTNV



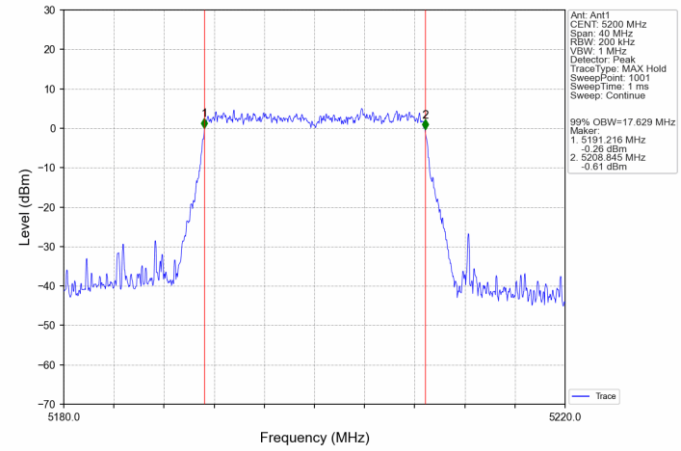
802.11a_HCH_5825MHz_Ant1_NTNV



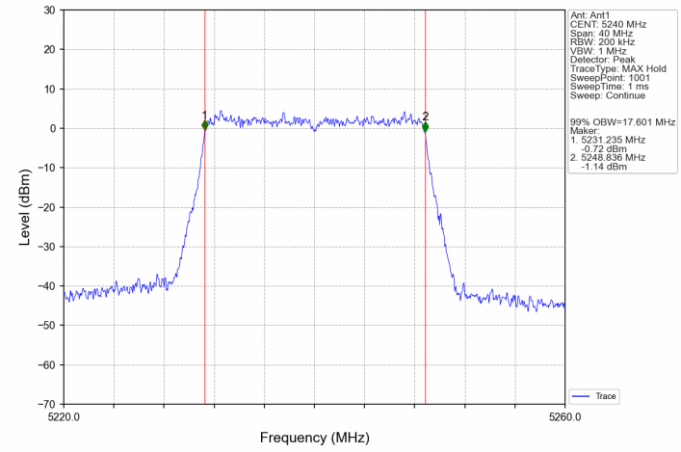
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



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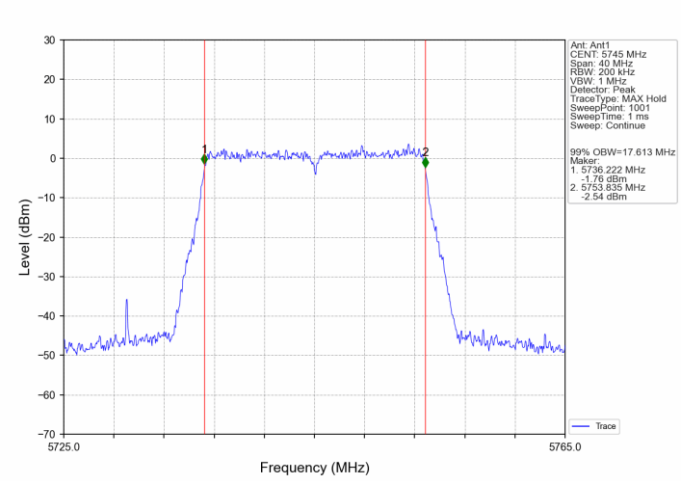
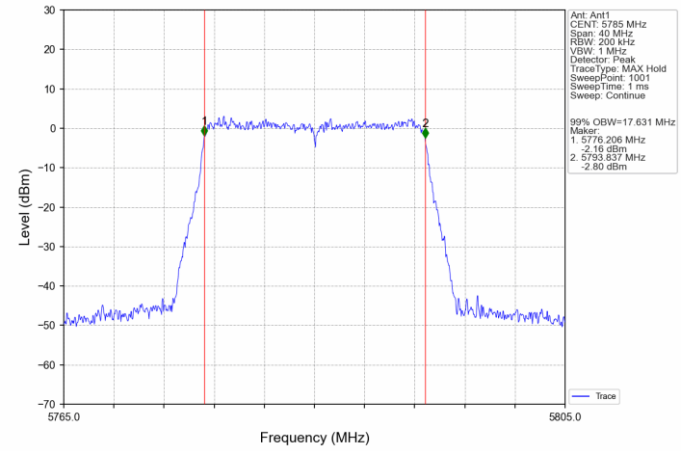
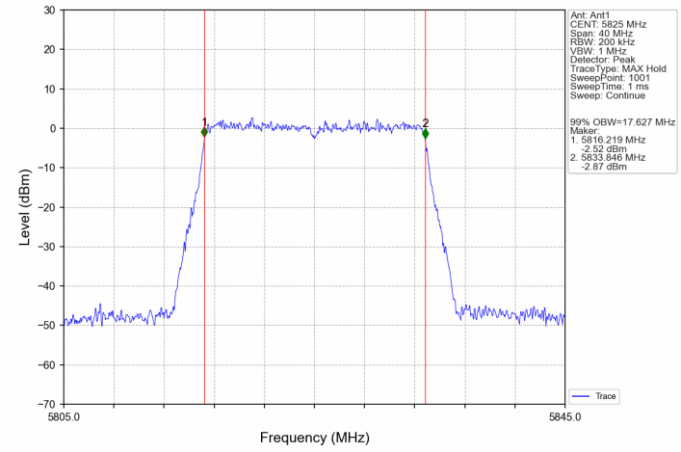
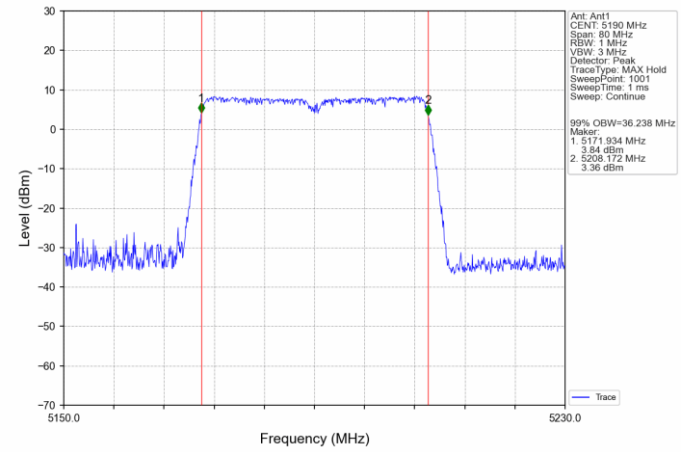
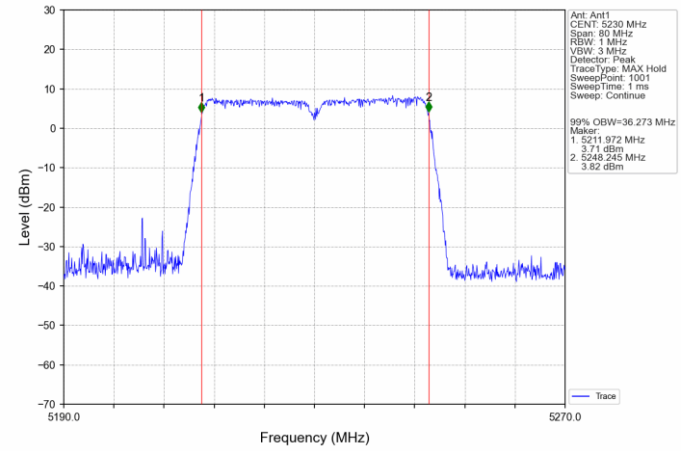

802.11n(HT20)_MCH_5785MHz_Ant1_NTNV

802.11n(HT20)_HCH_5825MHz_Ant1_NTNV


802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



802.11n(HT40)_LCH_5755MHz_Ant1_NTNV