TEST REPORT

Product Name:	Multimedia all in one interactive display
FCC ID:	2AV8KDT-I75XX
Trademark:	N/A
Model Number:	DT-I75XX, DT-I32XX, DT-I43XX, DT-I49X, DT-I55XX, DT-I65XX, DT-I85XX, DT-I86XX, DT-I98XX, DT-I100XX, DT-O32XX, DT-O43XX, DT-O49X, DT-O55XX, DT-O65XX, DT-O75XX, DT-O85XX, DT-O86XX, DT-O98XX, DT-O100XX, DT-TV32XX, DT-TV43XX, DT-TV49XX, DT-TV55XX, DT-TV65XX, DT-TV75XX, DT-TV85XX, DT-TV86XX, DT-TV98XX, DT-TV100XX, DT-C32XX, DT-C43XX, DT-C49XX, DT-C55XX, DT-C65XX, DT-C75XX, DT-C85XX, DT-C86XX, DT-C98XX, DT-C100XX
Prepared For:	Shenzhen Devops Technology Co., Ltd.
Address:	802, Tower H, ChuangxinYungu, No.48 Paotai Rd, Gongming Street, Shenzhen, China
Manufacturer:	Shenzhen Devops Technology Co., Ltd.
Address:	802, Tower H, ChuangxinYungu, No.48 Paotai Rd, Gongming Street, Shenzhen, China
Prepared By:	Shenzhen CTB Testing Technology Co., Ltd.
Address:	Floor 1&2, Building A, No. 26 of Xinhe Road, Xinqiao Community, Xinqiao Street, Baoan District, Shenzhen, Guangdong China
Sample Received Date:	May 13, 2020
Sample tested Date:	May 13, 2020 to May 18, 2020
Issue Date:	May 18, 2020
Report No.:	CTB200521017RFX
Test Standards	47 CFR Part 15 Subpart E
Test Results	PASS
Remark:	This is WIFI-5GHz band radio test report.

Compiled by:	Reviewed by:	Approved by:
Victory	Rita Xiao	Sherwin Qian
Victory	Rita Xiao	Sherwin Qian/ Director

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 CTB Testing 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.

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(Note: N/A means not applicable)

1. VERSION

Report No.	Issue Date	Description	Approved
CTB200521017RFX	May 18, 2020	Original	Valid

2. TEST SUMMARY

The Product has been tested according to the following specifications:

Test Item	Test Requirement	Test method	Result
AC Power Line Conducted Emission	47 CFR Part 15 Subpart E Section 15.407 (b)(6)	ANSI C63.10-2013	PASS
Radiated Spurious emissions	47 CFR Part 15 Subpart E Section 15.205/15.407(b)	KDB789033	PASS
Band edge	47 CFR Part 15 Subpart E Section 15.205/15.407(b)	KDB789033	PASS
Conducted Peak Output Power	47 CFR Part 15 Subpart E Section 15.407 (a)	KDB789033	PASS
Emission Bandwidth & Occupied Bandwidth	47 CFR Part 15 Subpart E Section 15.407 (a)(e)	KDB789033	PASS
Power Spectral Density	47 CFR Part 15 Subpart E Section 15.407 (a)	KDB789033	PASS
Frequency stability	47 CFR Part 15 Subpart E Section 15.407 (g)	KDB789033	PASS
Operation in the absence of information to the transmit	47 CFR Part 15 Subpart E Section 15.407 (c)	47 CFR Part 15 Subpart E	PASS
Antenna Requirement	47 CFR Part 15 Subpart E Section 15.203	ANSI C63.10-2013	PASS

Remark:
Test according to ANSI C63.4-2014 & ANSI C63.10-2013.

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. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

No.	Item	Uncertainty
1	Occupancy bandwidth	U=±54.3Hz
2	Adjacent channel power	U=±1.3dB
3	Conducted Adjacent channel power	U=±1.38dB
4	Conducted output power Above 1G	U=±1.0dB
5	Conducted output power below 1G	U=±0.9dB
6	Power Spectral Density , Conduction	U=±1.0dB
7	Conduction spurious emissions	U=±2.8dB
8	Out of band emission	U=±54Hz
9	3m camber Radiated spurious emission(30MHz-1GHz)	U=±4.3dB
10	3m chamber Radiated spurious emission(1GHz-18GHz)	U=±4.5dB
11	humidity uncertainty	U=±5.3%
12	Temperature uncertainty	U=±0.59℃
13	Supply volyages	U=±3%
14	Time	U=±5%

4. PRODUCT INFORMATION AND TEST SETUP

4.1 Product Information

Model(s):	DT-I75XX, DT-I32XX, DT-I43XX, DT-I49X, DT-I55XX, DT-I65XX, DT-I85XX, DT-I86XX, DT-I98XX, DT-I100XX, DT-O32XX, DT-O43XX, DT-O49X, DT-O55XX, DT-O65XX, DT-O75XX, DT-O85XX, DT-O86XX, DT-O98XX, DT-O100XX, DT-TV32XX, DT-TV43XX, DT-TV49XX, DT-TV55XX, DT-TV65XX, DT-TV75XX, DT-TV85XX, DT-TV86XX, DT-TV98XX, DT-TV100XX, DT-C32XX, DT-C43XX, DT-C49XX, DT-C55XX, DT-C65XX, DT-C75XX, DT-C85XX, DT-C86XX, DT-C98XX, DT-C100XX
Model Description:	All model's the function, software and electric circuit are the same, only with a product model named different. Test sample model: DT-I75XX
Wi-Fi Specification:	IEEE 802.11a/b/g/n/ac
Hardware Version:	V1.0
Software Version:	V1.0
Operation Frequency:	IEEE 802.11a/n/ac(20M): 5150MHz ~5250MHz/ 4 channel IEEE 802.11n/ac(40M): 5150MHz ~5250MHz/ 2 channel IEEE 802.11ac(80M): 5150MHz ~5250MHz/ 1 channel IEEE 802.11a/n/ac(20M): 5250MHz ~5350 MHz/ 4 channel IEEE802.11n/ac(40M): 5250MHz ~5350 MHz/ 2 channel IEEE802.11ac(80M): 5250MHz ~5350 MHz/ 1 channel IEEE 802.11a/n/ac(20M): 5470MHz ~5725 MHz/ 11 channel IEEE802.11n/ac(40M): 5470MHz ~5725 MHz/ 5 channel IEEE802.11ac(80M): 5470MHz ~5725 MHz/ 3 channel IEEE 802.11a/n/ac(20M): 5725MHz ~5850MHz/ 5 channel IEEE 802.11n/ac(40M): 5725MHz ~5850MHz/ 2 channel IEEE 802.11ac(80M): 5725MHz ~5850MHz/ 1 channel
Max. RF output power:	WiFi (5G): 14.801dBm
Type of Modulation:	WiFi: DSSS, OFDM
Antenna installation:	WiFi(5G): External antenna
Antenna Gain:	WiFi (5 G) : 5dBi
Ratings:	AC 100-240V
Adapter:	AC 100-240V

4.2 Test Setup Configuration

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

4.3 Support Equipment

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
1	Laptop	DELL	Inspiron5570	JR4G1A00DPC	AE
2	AC Adaptor	DELL	HA45NM140	CN-00285K-CH200-88V-OEYC	AE

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

For 802.11a/n/ac(20M) Operation in the 5150MHz ~5250 MHz band			
Channel	Frequency	Channel	Frequency
36	5180MHz	44	5220MHz
40	5200MHz	48	5240MHz
For 802.11a/n/ac(20M) Operation in the 5250MHz ~5350 MHz band			
Channel	Frequency	Channel	Frequency
52	5260MHz	60	5300MHz
56	5280MHz	64	5320MHz
For 802.11a/n/ac(20M) Operation in the 5470MHz ~5725 MHz band			
Channel	Frequency	Channel	Frequency
100	5500MHz	124	5620 MHz
104	5520MHz	128	5640 MHz
108	5540MHz	132	5660 MHz
112	5560MHz	136	5680MHz
116	5580MHz	140	5700MHz
120	5600 MHz		
For 802.11a/n/ac(20M) Operation in the 5725MHz ~5850 MHz band			
Channel	Frequency	Channel	Frequency
149	5745MHz	161	5805MHz
153	5765MHz	165	5825MHz
157	5785MHz	NA	NA

For 802.11n/ac(40M) Operation in the 5150MHz ~5250 MHz band			
Channel	Frequency	Channel	Frequency
38	5190MHz	46	5230MHz
For 802.11n/ac(40M) Operation in the 5250MHz ~5350 MHz band			
Channel	Frequency	Channel	Frequency
54	5270MHz	62	5310MHz
For 802.11n/ac(40M) Operation in the 5470MHz ~5725 MHz band			
Channel	Frequency	Channel	Frequency
102	5510MHz	126	5630MHz
110	5550MHz	134	5670MHz
118	5590MHz		
For 802.11n/ac(40M) Operation in the 5725MHz ~5850 MHz band			
Channel	Frequency	Channel	Frequency
151	5755MHz	159	5795MHz

For 802.11ac(80M) Operation in the 5150MHz ~5250 MHz band			
Channel	Frequency	Channel	Frequency
42	5210MHz	NA	NA
For 802.11ac(80M) Operation in the 5250MHz ~5350 MHz band			
Channel	Frequency	Channel	Frequency
58	5290MHz	NA	NA
For 802.11ac(80M) Operation in the 5470MHz ~5725 MHz band			
Channel	Frequency	Channel	Frequency
106	5530MHz	138	5690MHz
122	5610 MHz		
For 802.11ac(80M) Operation in the 5725MHz ~5850 MHz band			
Channel	Frequency	NA	NA
155	5775MHz	NA	NA

4.5 Test Mode

All test mode(s) and condition(s) mentioned were considered and evaluated respectively by performing full tests, the worst data were recorded and reported.

Test Mode	Tx/Rx	RF Channel		
		Low(L)	Middle(M)	High(H)
802.11a/n/ac(20M)	5150MHz ~5250 MHz	Channel 36	Channel 40	Channel 48
		5180MHz	5200MHz	5240MHz
802.11n/ac(40M)	5150MHz ~5250 MHz	Channel 38	N/A	Channel 46
		5190MHz	N/A	5230MHz
802.11ac(80M)	5150MHz ~5250 MHz	N/A	Channel 42	N/A
		N/A	5210MHz	N/A
802.11a/n/ac(20M)	5250MHz ~5350 MHz	Channel 52	Channel 56	Channel 64
		5260MHz	5280MHz	5320MHz
802.11n/ac(40M)	5250MHz ~5350 MHz	Channel54	N/A	Channel62
		5270MHz	N/A	5310MHz
802.11ac(80M)	5250MHz ~5350 MHz	N/A	Channel 58	N/A
		N/A	5290MHz	N/A
802.11a/n/ac(20M)	5470MHz ~5725 MHz	Channel 100	Channel116	Channel140
		5500MHz	5580MHz	5700MHz
802.11n/ac(40M)	5470MHz ~5725 MHz	Channel 102	Channel118	Channel 134
		5510MHz	5590MHz	5670MHz
802.11ac(80M)	5470MHz ~5725 MHz	Channel 106	N/A	Channel 138
		5530MHz	N/A	5690MHz
802.11a/n/ac(20M)	5725MHz ~5850 MHz	Channel 149	Channel 157	Channel 165
		5745MHz	5785MHz	5825MHz
802.11n/ac(40M)	5725MHz ~5850 MHz	Channel 151	N/A	Channel 159
		5755MHz	N/A	5795MHz
802.11ac(80M)	5725MHz ~5850 MHz	N/A	Channel 155	N/A
		N/A	5775MHz	N/A

4.6 Test Environment

Humidity(%):	55
Atmospheric Pressure(kPa):	101.1
Normal Voltage(AC):NV	100-240V
Normal Temperature(℃):NT	25
Low Temperature(℃):LT	0
High Temperature(℃):HT	40

5. TEST FACILITY AND TEST INSTRUMENT USED

5.1 Test Facility

All measurement facilities used to collect the measurement data are located at Floor 1&2, Building A, No. 26 of Xinhe Road, Xinqiao Community, Xinqiao Street, Baoan District, Shenzhen, Guangdong China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.

5.2 Test Instrument Used

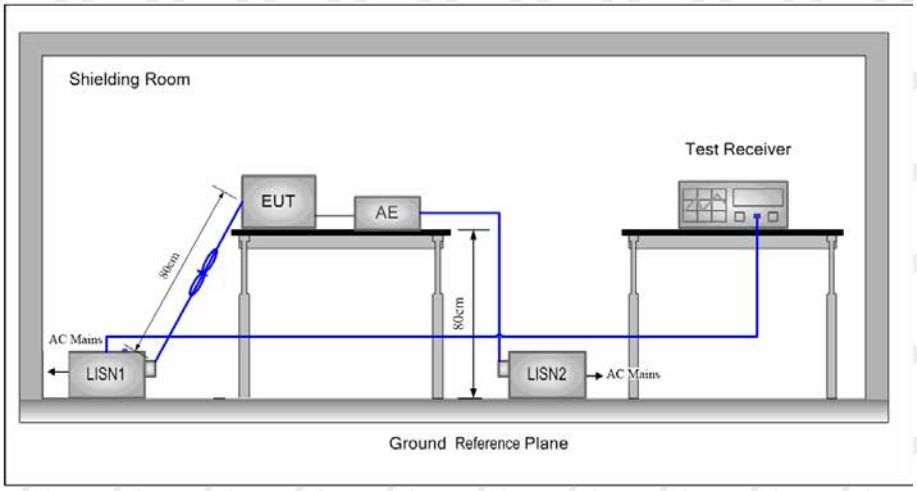
Item	Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	Spectrum Analyzer	Agilent	N9020A	MY52090073	Oct. 17, 2019	Oct. 16, 2020
2	Power Sensor	Agilent	U2021XA	MY56120032	Nov. 02, 2019	Nov. 01, 2020
3	Power Sensor	Agilent	U2021XA	MY56120034	Nov. 02, 2019	Nov. 01, 2020
4	Communication test set	R&S	CMW500	118735	Nov. 02, 2019	Nov. 01, 2020
5	Spectrum Analyzer	R&S	FSP40	100550	Nov. 02, 2019	Nov. 01, 2020
6	Signal Generator	Agilent	N5181A	MY49060920	Nov. 03, 2019	Nov. 02, 2020
7	Signal Generator	Agilent	N5182A	MY47420195	Nov. 03, 2019	Nov. 02, 2020
8	Communication test set	R&S	CMU200	119978	Nov. 02, 2019	Nov. 01, 2020
9	band rejection filter	Shenxiang	MSF2400-2483.5MS-1154	20181015001	Nov. 02, 2019	Nov. 01, 2020
10	band rejection filter	Shenxiang	MSF5150-5850MS-1155	20181015001	Nov. 02, 2019	Nov. 01, 2020
11	band rejection filter	Xingbo	XBLBQ-DZA120	190821-1-1	Nov. 02, 2019	Nov. 01, 2020
12	BT&WI-FI Automatic test software	Micowave	MTS8310	Ver. 2.0.0.0	\	\
13	Rohde & Schwarz SFU Broadcast Test System	R&S	SFU	101017	Nov. 02, 2019	Nov. 01, 2020
14	Temperature humidity chamber	Hongjing	TH-80CH	DG-15174	Nov. 02, 2019	Nov. 01, 2020
15	234G Automatic test software	Micowave	MTS8200	Ver. 2.0.0.0	\	\
16	966 chamber	C.R.T.	966 Room	966	Nov. 10, 2019	Nov. 09, 2020
17	Receiver	R&S	ESPI	100362	Nov. 02, 2019	Nov. 01, 2020

18	Amplifier	HP	8447E	2945A02747	Nov. 03, 2019	Nov. 02, 2020
19	Amplifier	Agilent	8449B	3008A01838	Nov. 03, 2019	Nov. 02, 2020
20	TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	869	Nov. 02, 2019	Nov. 01, 2020
21	Horn Antenna	Schwarzbeck	BBHA9120D	1911	Nov. 02, 2019	Nov. 01, 2020
22	Software	Fala	EZ-EMC	FA-03A2 RE	\	\
23	3-Loop Antenna	Daze	ZN30401	17014	Nov. 02, 2019	Nov. 01, 2020
24	loop antenna	ZHINAN	ZN30900A	/	Nov. 02, 2019	Nov. 01, 2020
25	Horn antenna	A/H/System	SAS-574	588	Nov. 02, 2019	Nov. 01, 2020
26	Amplifier	AEROFLEX	/	S/N/ 097	Nov. 02, 2019	Nov. 01, 2020

	Conducted emissions Test					
27	**Equipment**	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
28	AMN	ROHDE&SCHWARZ	ESH3-Z5	831551852	Nov. 02, 2019	Nov. 01, 2020
29	Pulse limiter	ROHDE&SCHWARZ	ESH3Z2	357881052	Nov. 02, 2019	Nov. 01, 2020
30	EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCS30	834115/006	Nov. 02, 2019	Nov. 01, 2020
31	Coaxial cable	ZDECL	Z302S	18091904	Nov. 02, 2019	Nov. 01, 2020
32	ISN	TESEQ	NTFM8158	NTFM8158#183	Nov. 02, 2019	Nov. 01, 2020
33	EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCI	10428	Nov. 02, 2019	Nov. 01, 2020
34	Software	Fala	EZ-EMC	EMC-CON 3A1.1	\	\

6. AC POWER LINE CONDUCTED EMISSION

6.1 Block Diagram Of Test Setup



6.2 Limit

Frequency (MHz)	Maximum RF Line Voltage (dBμV)			
	CLASS A		CLASS B	
	Q.P.	Ave.	Q.P.	Ave.
0.15 - 0.50	79	66	66-56*	56-46*
0.50 - 5.00	73	60	56	46
5.00 - 30.0	73	60	60	50

* Decreasing linearly with the logarithm of the frequency

6.3 Test procedure

1) The mains terminal disturbance voltage test was conducted in a shielded room.

2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.

3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,

4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0,4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0,8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was

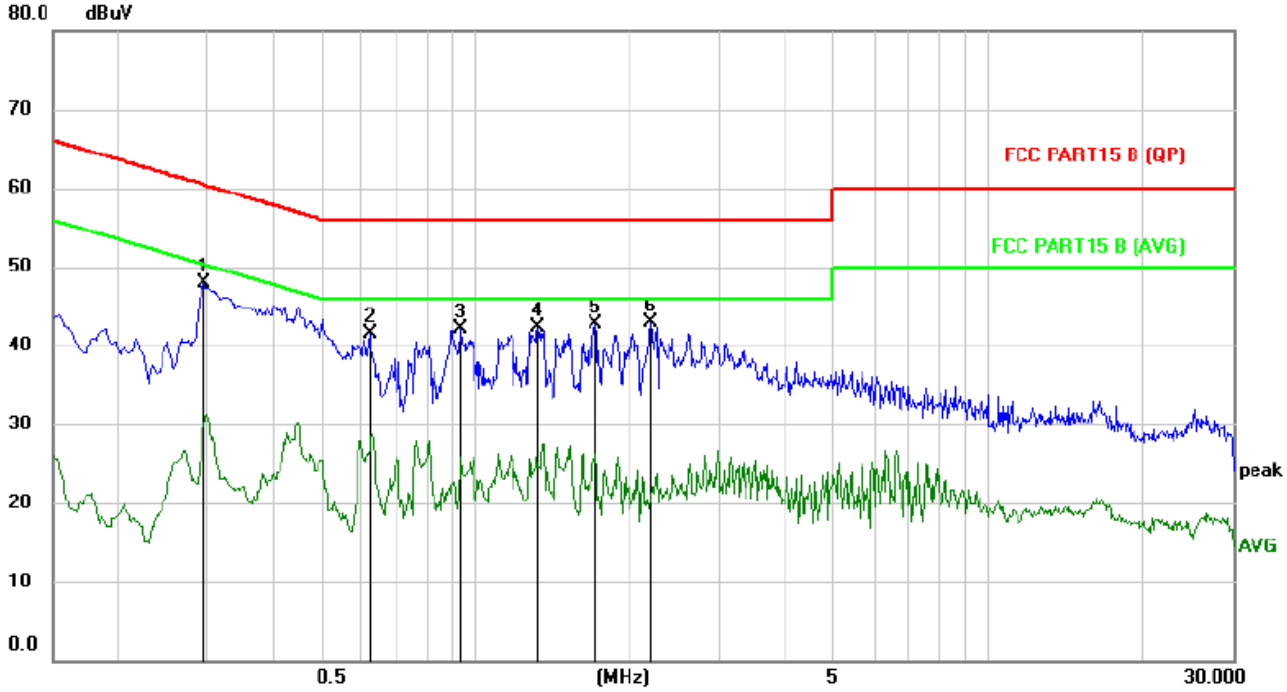
between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0,8 m from the LISN 2.

5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

6.4 Test Result

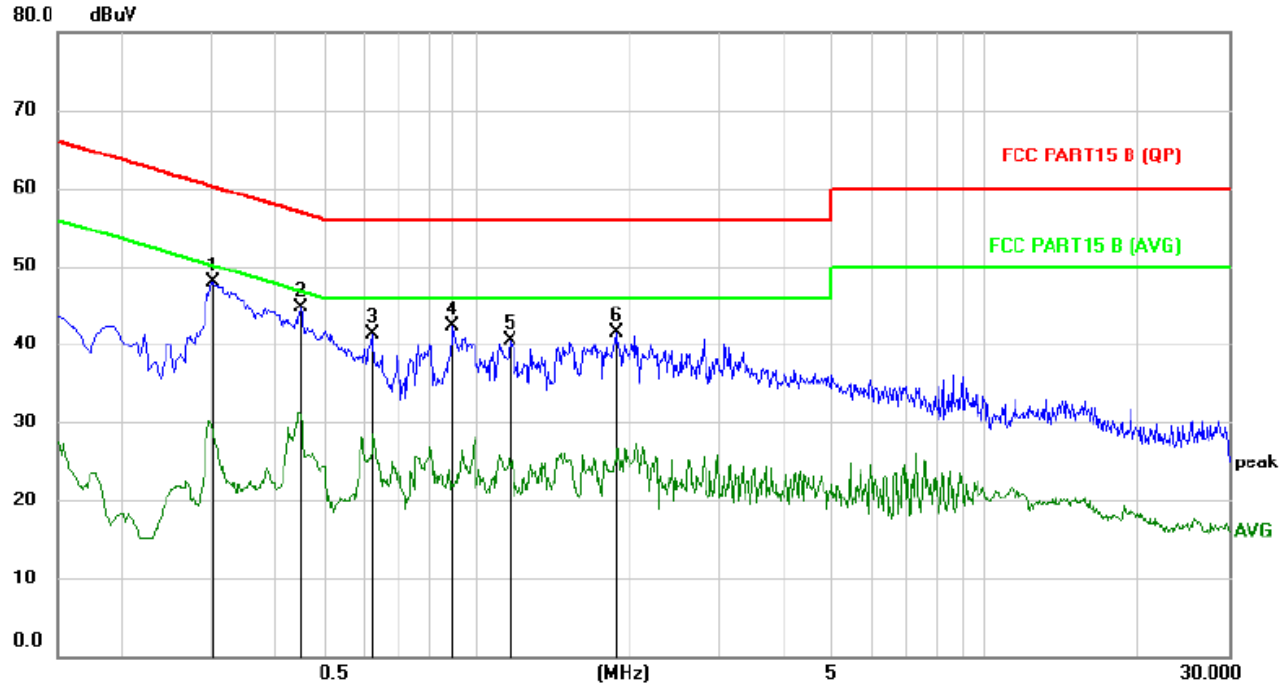
Remark: This Report only show the test plots of the ANT1 worst case.

Test Specification: Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.2938	37.71	10.17	47.88	60.42	-12.54	peak	
2		0.6219	31.45	10.07	41.52	56.00	-14.48	peak	
3		0.9300	31.85	10.20	42.05	56.00	-13.95	peak	
4		1.3180	32.15	10.23	42.38	56.00	-13.62	peak	
5		1.7137	32.57	10.23	42.80	56.00	-13.20	peak	
6		2.1979	32.58	10.24	42.82	56.00	-13.18	peak	

Test Specification: Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.3019	37.65	10.16	47.81	60.19	-12.38	peak	
2	*	0.4500	34.39	10.22	44.61	56.88	-12.27	peak	
3		0.6219	30.99	10.23	41.22	56.00	-14.78	peak	
4		0.8980	32.11	10.17	42.28	56.00	-13.72	peak	
5		1.1615	30.30	10.15	40.45	56.00	-15.55	peak	
6		1.8700	31.39	10.13	41.52	56.00	-14.48	peak	

Remark:
1. Factor = Cable loss + LISN factor, Margin = Limit – Level
2. All modes were tested at AC 120V and 240V, only the worst result of AC 120V 60Hz was reported.
3. All the test modes completed for test. Only the worst result of was reported.

7. RADIATED SPURIOUS EMISSIONS

7.1 Block Diagram Of Test Setup

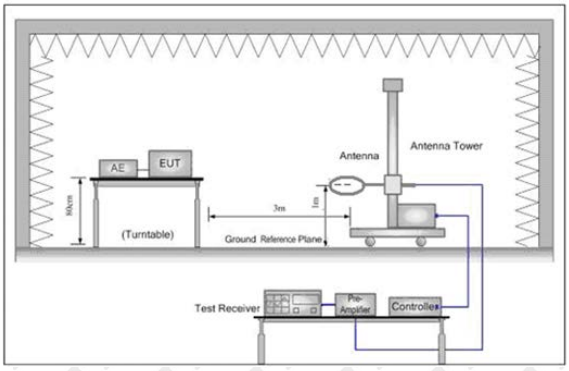


Figure 1. Below 30MHz

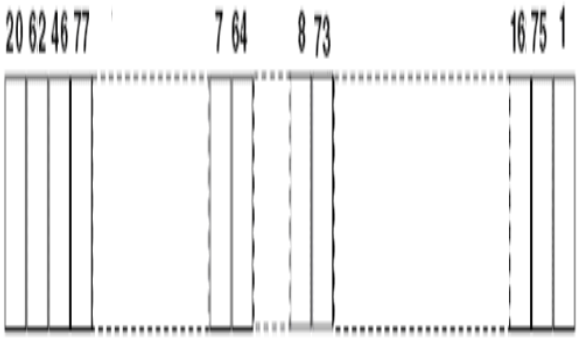


Figure 2. 30MHz to 1GHz

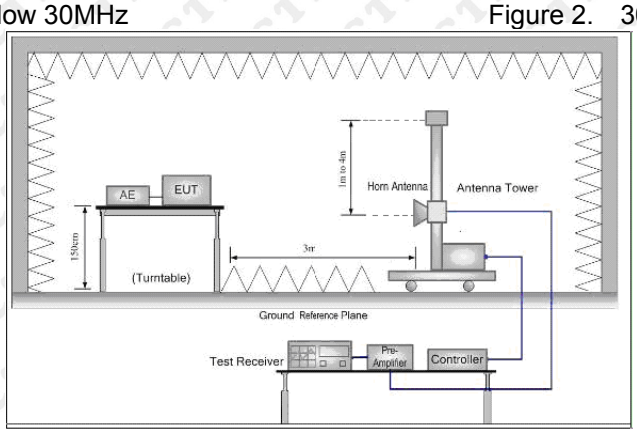


Figure 3. Above 1GHz

7.2 Limit

Spurious Emissions:

Frequency	Field strength (dBμV/m)	Remark	Measurement distance (m)
0.009MHz-0.490MHz	20log 2400/F (kHz) + 80	Quasi-peak	3
0.490MHz-1.705MHz	20log 24000/F (kHz) + 40	Quasi-peak	3
1.705MHz-30MHz	20log 30 + 40	Quasi-peak	3
30MHz-88MHz	40.0	Quasi-peak	3
88MHz-216MHz	43.5	Quasi-peak	3
216MHz-960MHz	46.0	Quasi-peak	3
960MHz-1GHz	54.0	Quasi-peak	3
Above 1GHz	54.0	Average	3

Note: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.

If radiated measurements are performed, field strength is then converted to EIRP as follows:
(i) EIRP = ((E*d)^2) / 30
where:
• E is the field strength in V/m;
• d is the measurement distance in meters;
• EIRP is the equivalent isotropically radiated power in watts.
(ii) Working in dB units, the above equation is equivalent to:
EIRP[dBm] = E[dBμV/m] + 20 log(d[meters]) - 104.77
(iii) Or, if d is 3 meters:
EIRP[dBm] = E[dBμV/m] - 95.2

7.3 Test procedure

Below 1GHz test procedure as below:
a.The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
b.The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c.The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d.For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rota table table was turned from 0 degrees to 360 degrees to find the maximum reading.
e.The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
f.If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
Above 1GHz test procedure as below:
g.Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 meter to 1.5 meter(Above 18GHz the distance is 1 meter and table is 1.5 meter).
h.Test the EUT in the lowest channel ,the middle channel ,the Highest channel
j.Repeat above procedures until all frequencies measured was complete.

Receiver set:

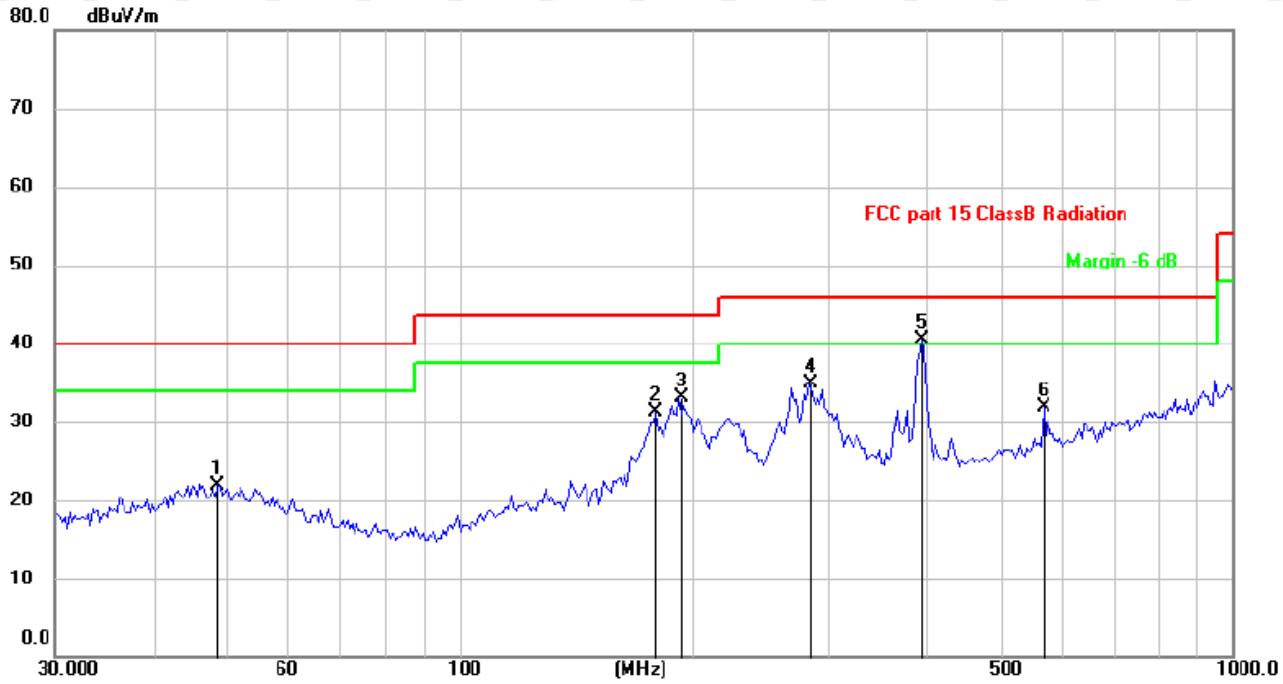
Frequency	Detector	RBW	VBW	Remark
0.009MHz-0.090MHz	Peak	10kHz	30KHz	Peak
0.009MHz-0.090MHz	Average	10kHz	30KHz	Average
0.090MHz-0.110MHz	Quasi-peak	10kHz	30KHz	Quasi-peak
0.110MHz-0.490MHz	Peak	10kHz	30KHz	Peak
0.110MHz-0.490MHz	Average	10kHz	30KHz	Average
0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
30MHz-1GHz	Quasi-peak	120 kHz	300KHz	Quasi-peak
Above 1GHz	Peak	1MHz	3MHz	Peak
	Peak	1MHz	10Hz	Average

7.4 Test Result

Remark: This Report only show the test plots of the ANT1 worst case.

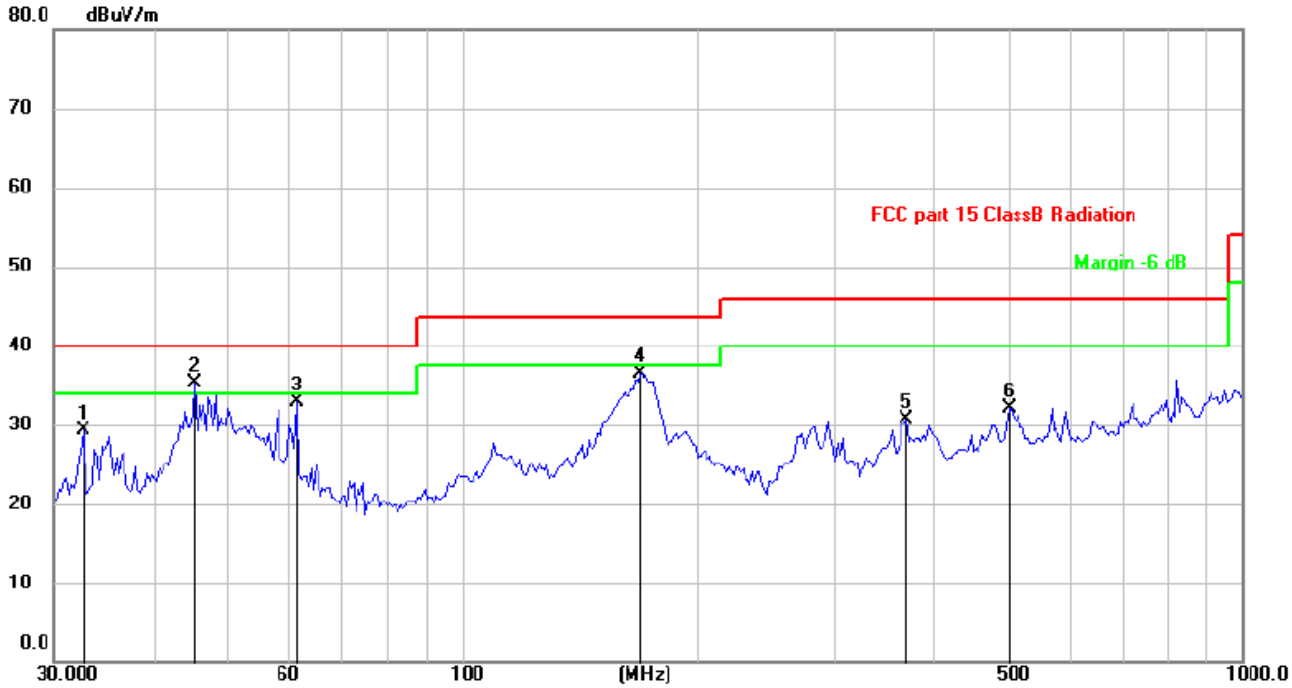
30MHz-1GHzTest Results:

Antenna polarity: H



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV/m	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		48.6719	27.85	-6.03	21.82	40.00	-18.18	peak			
2		179.3863	39.53	-8.30	31.23	43.50	-12.27	peak			
3		192.4186	42.06	-8.99	33.07	43.50	-10.43	peak			
4		282.9852	40.38	-5.41	34.97	46.00	-11.03	peak			
5	*	396.2415	42.69	-2.24	40.45	46.00	-5.55	peak			
6		570.6100	30.51	1.46	31.97	46.00	-14.03	peak			

Antenna polarity: V



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV/m	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		32.6340	36.50	-7.14	29.36	40.00	-10.64	peak			
2	*	45.3754	41.14	-5.81	35.33	40.00	-4.67	peak			
3		61.3463	39.83	-7.02	32.81	40.00	-7.19	peak			
4		169.5990	43.80	-7.26	36.54	43.50	-6.96	peak			
5		372.0045	33.92	-3.21	30.71	46.00	-15.29	peak			
6		502.9395	32.02	0.17	32.19	46.00	-13.81	peak			

Radiated Spurious Emission (Above 1GHz):
Modulation : 802.11(a) (the worst data)

Freq (MHz)	Rd_level (dBuV/m)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over (dB)	detector	Height	Degree	Antenna polarization
Channel:5180MHz									
10360.0	60.52	-7.43	53.09	74	-20.91	PK	6	1.4	H
10360.0	50.05	-7.43	42.62	54	-11.38	AV	245	1.5	H
10360.0	61.94	-2.42	59.52	74	-14.48	PK	251	1.7	V
10360.0	49.01	-2.42	46.59	54	-7.41	AV	39	1.3	V
Channel:5240MHz									
10480.0	61.74	-7.43	54.31	74	-19.69	PK	308	1.4	H
10480.0	49.05	-7.43	41.62	54	-12.38	AV	121	1.7	H
10480.0	61.97	-2.42	59.55	74	-14.45	PK	205	1.5	V
10480.0	48.49	-2.42	46.07	54	-7.93	AV	235	1.4	V
Channel:5260MHz									
10520.0	62.59	-7.43	55.16	74	-18.84	PK	308	1.4	H
10520.0	49.24	-7.43	41.81	54	-12.19	AV	121	1.7	H
10520.0	58.61	-2.42	56.19	74	-17.81	PK	205	1.5	V
10520.0	48.71	-2.42	46.29	54	-7.71	AV	235	1.4	V
Channel:5320MHz									
10640.0	60.37	-7.43	52.94	74	-21.06	PK	308	1.4	H
10640.0	50.27	-7.43	42.84	54	-11.16	AV	121	1.7	H
10640.0	61.26	-2.42	58.84	74	-15.16	PK	205	1.5	V
10640.0	47.87	-2.42	45.45	54	-8.55	AV	235	1.4	V
Channel:5500MHz									
11000.0	60.16	-7.43	52.73	74	-21.27	PK	308	1.4	H
11000.0	49.22	-7.43	41.79	54	-12.21	AV	121	1.7	H

11000.0	57.90	-2.42	55.48	74	-18.52	PK	205	1.5	V
11000.0	47.88	-2.42	45.46	54	-8.54	AV	235	1.4	V
Channel:5700MHz									
11400.0	59.89	-7.43	52.46	74	-21.54	PK	308	1.4	H
11400.0	50.18	-7.43	42.75	54	-11.25	AV	121	1.7	H
11400.0	61.60	-2.42	59.18	74	-14.82	PK	205	1.5	V
11400.0	48.41	-2.42	45.99	54	-8.01	AV	235	1.4	V
Channel:5745MHz									
11490.0	61.76	-7.43	54.33	74	-19.67	PK	308	1.4	H
11490.0	49.54	-7.43	42.11	54	-11.89	AV	121	1.7	H
11490.0	61.41	-2.42	58.99	74	-15.01	PK	205	1.5	V
11490.0	48.14	-2.42	45.72	54	-8.28	AV	235	1.4	V
Channel:5825MHz									
11650.0	59.92	-7.43	52.49	74	-21.51	PK	308	1.4	H
11650.0	49.84	-7.43	42.41	54	-11.59	AV	121	1.7	H
11650.0	59.00	-2.42	56.58	74	-17.42	PK	205	1.5	V
11650.0	47.84	-2.42	45.42	54	-8.58	AV	235	1.4	V

Modulation : 802.11(n40) (the worst data)

Freq (MHz)	Rd_level (dBuV/m)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over (dB)	detector	Height	Degree	Antenna polarization
Channel:5190MHz									
10380.0	58.94	-7.43	51.51	74	-22.49	PK	6	1.4	H
10380.0	49.81	-7.43	42.38	54	-11.62	AV	245	1.5	H
10380.0	61.91	-2.42	59.49	74	-14.51	PK	251	1.7	V
10380.0	47.32	-2.42	44.90	54	-9.10	AV	39	1.3	V
Channel:5230MHz									
10460.0	58.35	-7.43	50.92	74	-23.08	PK	308	1.4	H
10460.0	48.89	-7.43	41.46	54	-12.54	AV	121	1.7	H
10460.0	57.66	-2.42	55.24	74	-18.76	PK	205	1.5	V
10460.0	47.64	-2.42	45.22	54	-8.78	AV	235	1.4	V
Channel:5270MHz									
10540.0	62.92	-7.43	55.49	74	-18.51	PK	308	1.4	H
10540.0	49.18	-7.43	41.75	54	-12.25	AV	121	1.7	H
10540.0	59.59	-2.42	57.17	74	-16.83	PK	205	1.5	V
10540.0	47.54	-2.42	45.12	54	-8.88	AV	235	1.4	V
Channel:5310MHz									
10620.0	62.91	-7.43	55.48	74	-18.52	PK	308	1.4	H
10620.0	48.99	-7.43	41.56	54	-12.44	AV	121	1.7	H
10620.0	59.25	-2.42	56.83	74	-17.17	PK	205	1.5	V
10620.0	47.57	-2.42	45.15	54	-8.85	AV	235	1.4	V
Channel:5510MHz									
11020.0	60.83	-7.43	53.40	74	-20.60	PK	308	1.4	H
11020.0	49.28	-7.43	41.85	54	-12.15	AV	121	1.7	H
11020.0	59.30	-2.42	56.88	74	-17.12	PK	205	1.5	V

11020.0	47.90	-2.42	45.48	54	-8.52	AV	235	1.4	V
Channel:5670MHz									
11340.0	61.12	-7.43	53.69	74	-20.31	PK	308	1.4	H
11340.0	50.04	-7.43	42.61	54	-11.39	AV	121	1.7	H
11340.0	62.44	-2.42	60.02	74	-13.98	PK	205	1.5	V
11340.0	48.48	-2.42	46.06	54	-7.94	AV	235	1.4	V
Channel:5755MHz									
11510.0	59.75	-7.43	52.32	74	-21.68	PK	308	1.4	H
11510.0	50.10	-7.43	42.67	54	-11.33	AV	121	1.7	H
11510.0	60.64	-2.42	58.22	74	-15.78	PK	205	1.5	V
11510.0	48.06	-2.42	45.64	54	-8.36	AV	235	1.4	V
Channel:5795MHz									
11590.0	58.34	-7.43	50.91	74	-23.09	PK	308	1.4	H
11590.0	49.93	-7.43	42.50	54	-11.50	AV	121	1.7	H
11590.0	61.68	-2.42	59.26	74	-14.74	PK	205	1.5	V
11590.0	47.90	-2.42	45.48	54	-8.52	AV	235	1.4	V

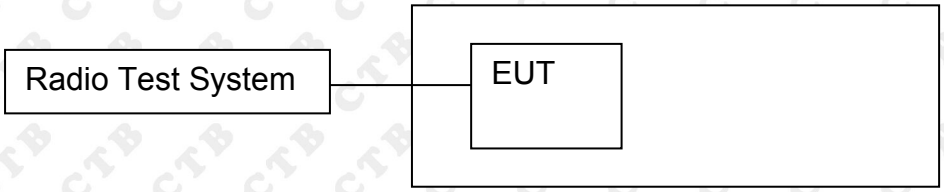
Modulation : 802.11(VH80) (the worst data)

Freq (MHz)	Rd_level (dBuV/m)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over (dB)	detector	Height	Degree	Antenna polarization
Channel:5210MHz									
10420.0	61.32	-7.43	53.89	74	-20.11	PK	6	1.4	H
10420.0	49.79	-7.43	42.36	54	-11.64	AV	245	1.5	H
10420.0	61.37	-2.42	58.95	74	-15.05	PK	251	1.7	V
10420.0	47.49	-2.42	45.07	54	-8.93	AV	39	1.3	V
Channel:5290MHz									
10580.0	59.88	-7.43	52.45	74	-21.55	PK	308	1.4	H
10580.0	49.33	-7.43	41.90	54	-12.10	AV	121	1.7	H
10580.0	59.42	-2.42	57.00	74	-17.00	PK	205	1.5	V
10580.0	49.22	-2.42	46.80	54	-7.20	AV	235	1.4	V
Channel:5530MHz									
11060.0	61.74	-7.43	54.31	74	-19.69	PK	308	1.4	H
11060.0	49.21	-7.43	41.78	54	-12.22	AV	121	1.7	H
11060.0	62.14	-2.42	59.72	74	-14.28	PK	205	1.5	V
11060.0	48.25	-2.42	45.83	54	-8.17	AV	235	1.4	V
Channel:5690MHz									
11380.0	62.18	-7.43	54.75	74	-19.25	PK	308	1.4	H
11380.0	49.85	-7.43	42.42	54	-11.58	AV	121	1.7	H
11380.0	61.07	-2.42	58.65	74	-15.35	PK	205	1.5	V
11380.0	47.91	-2.42	45.49	54	-8.51	AV	235	1.4	V
Channel:5775MHz									
11550.0	62.69	-7.43	55.26	74	-18.74	PK	308	1.4	H
11550.0	50.58	-7.43	43.15	54	-10.85	AV	121	1.7	H
11550.0	58.92	-2.42	56.50	74	-17.50	PK	205	1.5	V
11550.0	48.49	-2.42	46.07	54	-7.93	AV	235	1.4	V

Remark:
1.Factor = Antenna Factor + Cable Loss – Pre-amplifier. Emission level = Reading Result + Factor, Margin = Emission level - Limits
2.The EUT was tested in the low, high channel and the worst case position data was reported.
3.Testing is carried out with frequency rang 9kHz to the tenth harmonics, other than listed in the table above are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

8. BAND EDGE

8.1 Block Diagram Of Test Setup



8.2 Limit

(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: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of −17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of −27 dBm/MHz.
(5) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.
(6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.

8.3 Test procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW of spectrum analyzer to 1 MHz with a convenient frequency span.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

8.4 Test Result

Remark: This Report only show the test plots of the ANT1 worst case.

Test Mode	Channel(MHz)	Max.Level [dBm]	Verdict
802.11a	5180	-49.56	PASS
	5240	-50.93	PASS
	5260	-52.07	PASS
	5320	-48.35	PASS
	5500	-49.4	PASS
	5700	-48.02	PASS
	5745	-43.1	PASS
	5825	-48.215	PASS

Test Mode	Channel(MHz)	Max.Level [dBm]	Verdict
802.11n20	5180	-49.15	PASS
	5240	-51.21	PASS
	5260	-52.64	PASS
	5320	-49.51	PASS
	5500	-47.62	PASS
	5700	-49.11	PASS
	5745	-42.22	PASS
	5825	-44.485	PASS

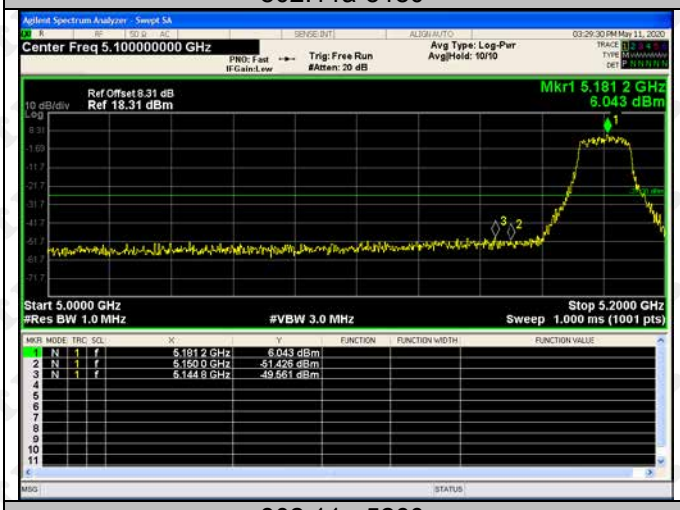
Test Mode	Channel(MHz)	Max.Level [dBm]	Verdict
802.11n40	5190	-49.59	PASS
	5230	-51.69	PASS
	5270	-51.14	PASS
	5310	-48.2	PASS
	5510	-48.1	PASS
	5670	-48.96	PASS
	5755	-46.87	PASS
	5795	-47.708	PASS

Test Mode	Channel(MHz)	Max.Level [dBm]	Verdict
802.11 ac(VH20)	5180	-49.82	PASS
	5240	-51.52	PASS
	5260	-52.05	PASS
	5320	-49.62	PASS
	5500	-47.66	PASS
	5700	-48.37	PASS
	5745	-45.73	PASS
	5825	-46.292	PASS
Test Mode	**Channel(MHz)**	**Max.Level [dBm]**	**Verdict**
802.11 ac(VH40)	5190	-50.11	PASS
	5230	-51.94	PASS
	5270	-52.7	PASS
	5310	-48.31	PASS
	5510	-48.77	PASS
	5670	-47.42	PASS
	5755	-44.53	PASS
	5795	-47.808	PASS

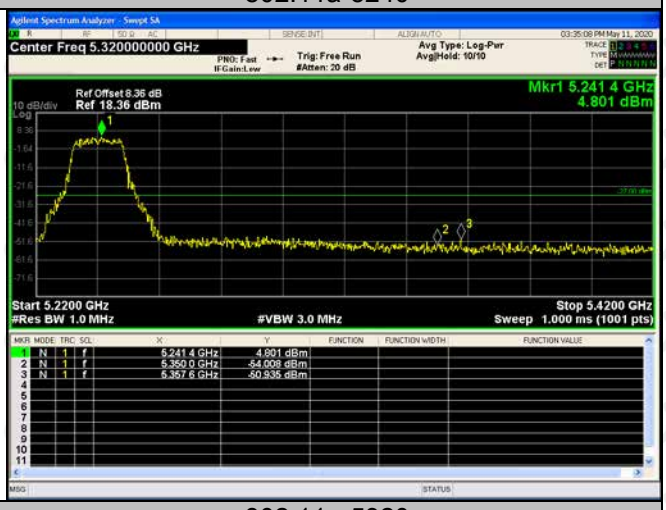
Test Mode	Channel(MHz)	Max.Level [dBm]	Verdict
802.11 ac(VH80)	5210(right)	-51.83	PASS
	5210(left)	-50.46	PASS
	5290(right)	-47.52	PASS
	5290(left)	-44.557	PASS
	5530(right)	-51.17	PASS
	5530(left)	-50.33	PASS
	5775(right)	-43.32	PASS
	5775(left)	-30.267	PASS

Test Graph

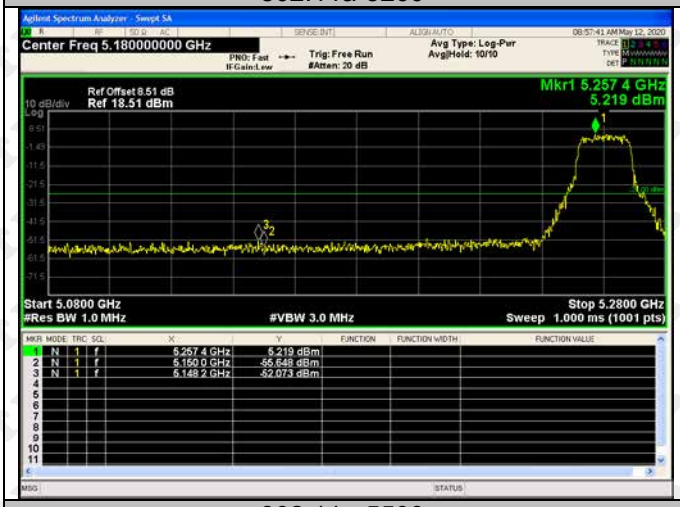
802.11a-5180



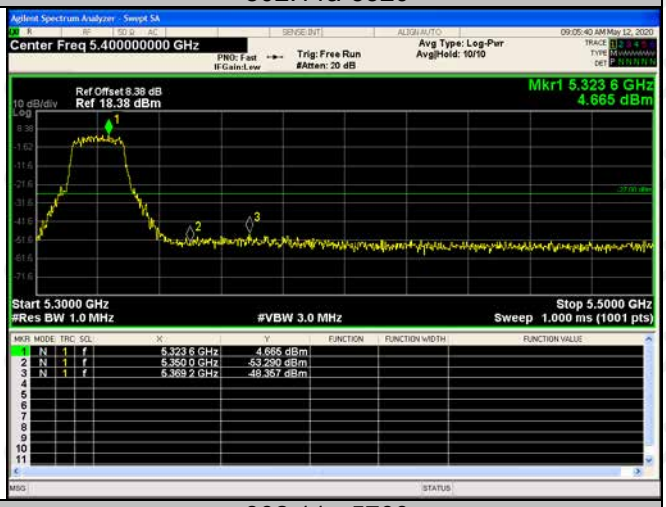
802.11a-5240



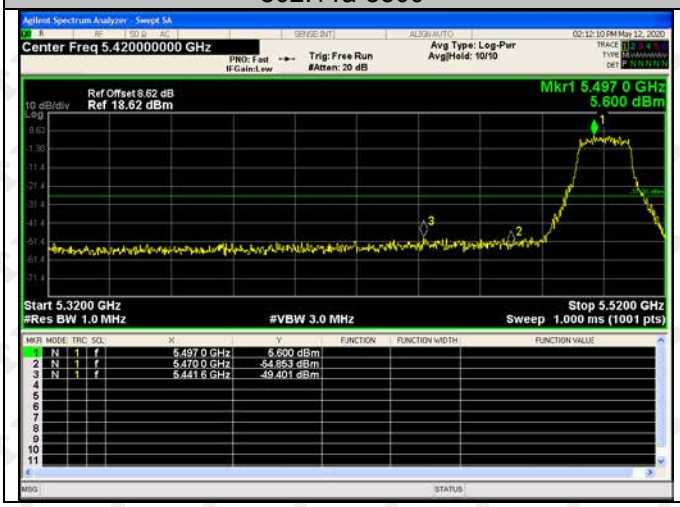
802.11a-5260



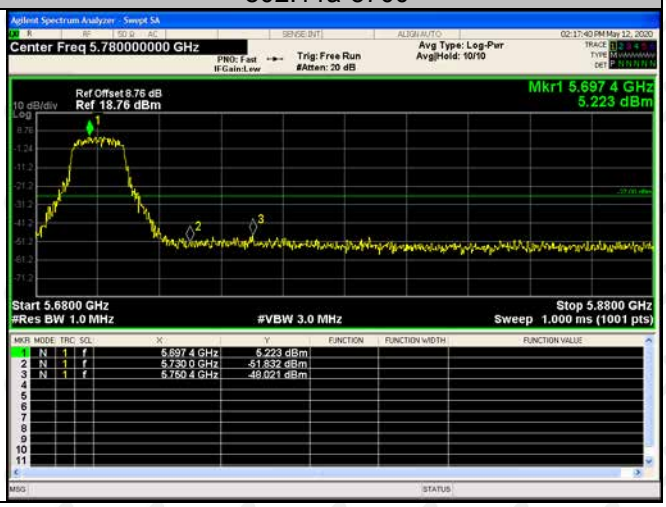
802.11a-5320



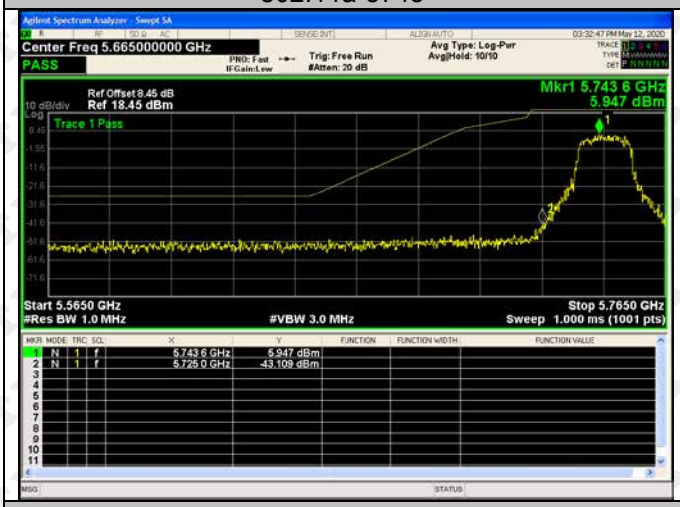
802.11a-5500



802.11a-5700

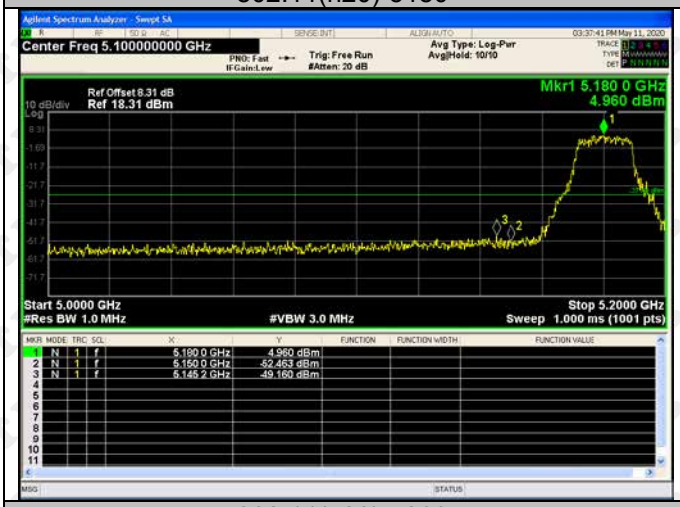


802.11a-5745

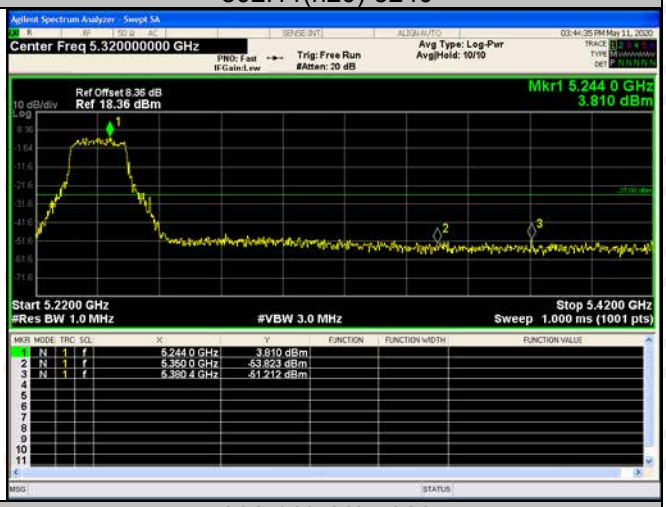


802.11a-5825

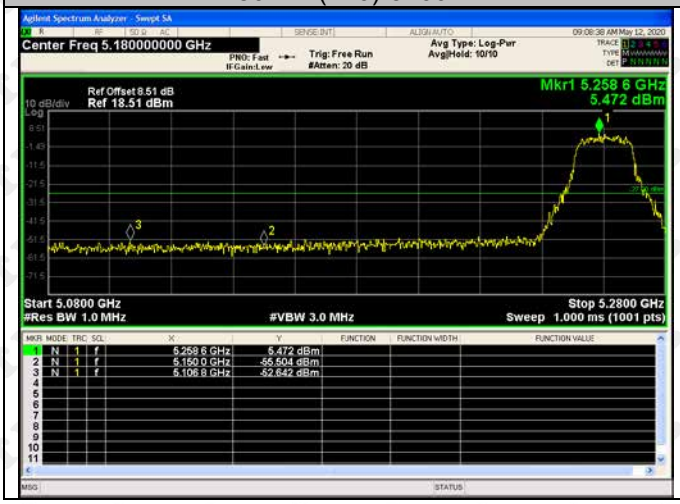
802.11(n20)-5180



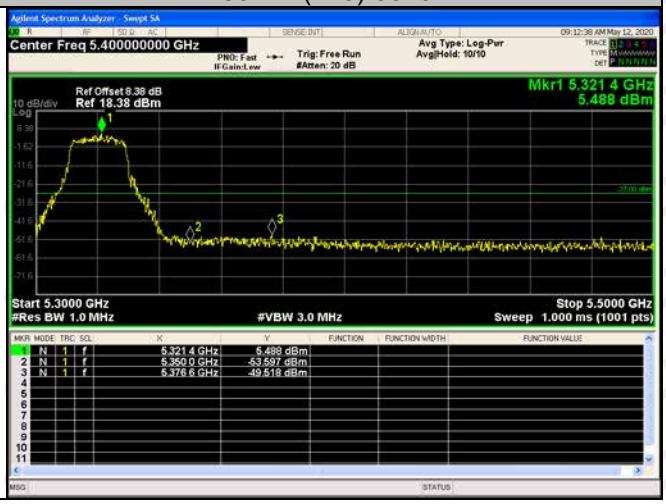
802.11(n20)-5240



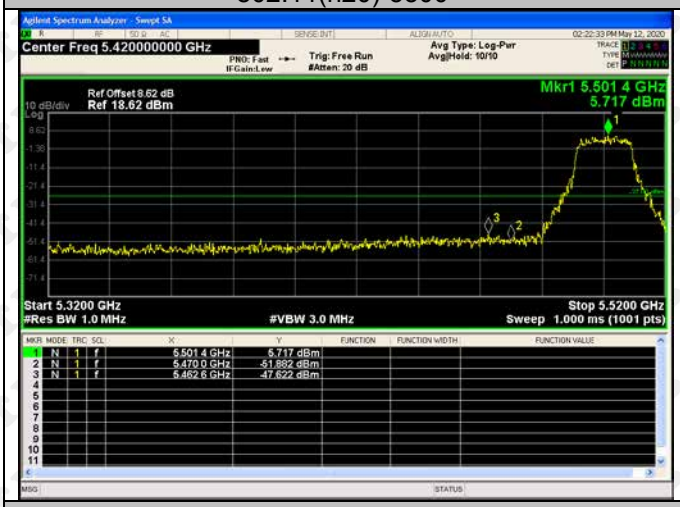
802.11(n20)-5260



802.11(n20)-5320



802.11(n20)-5500



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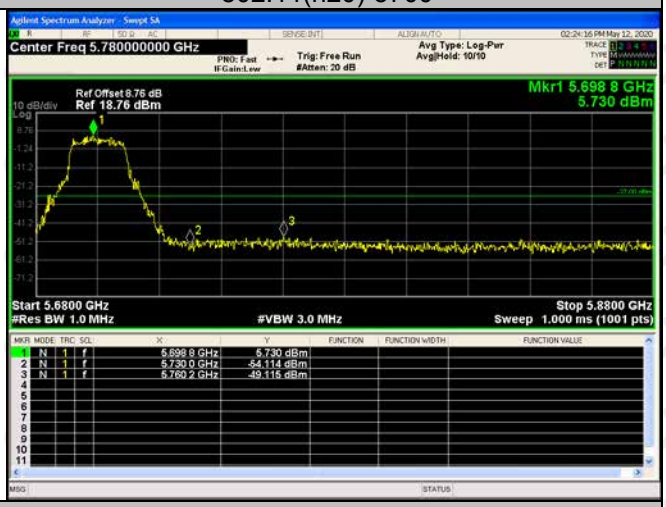

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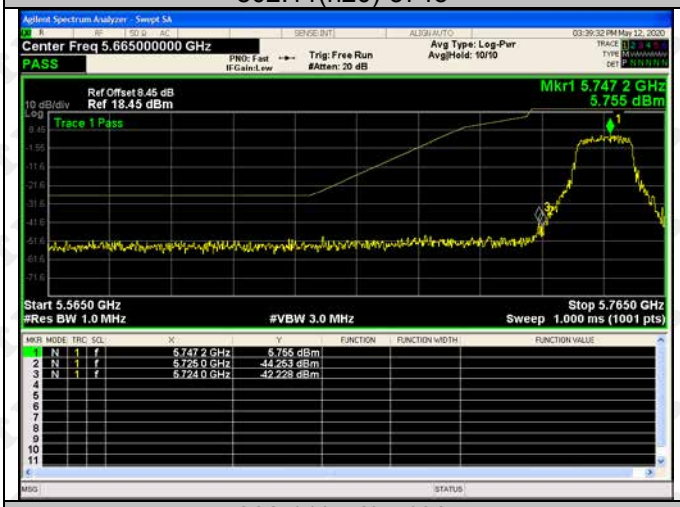

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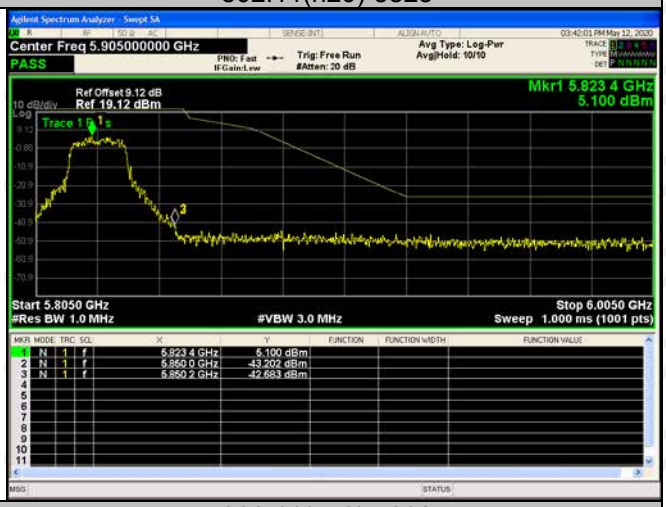

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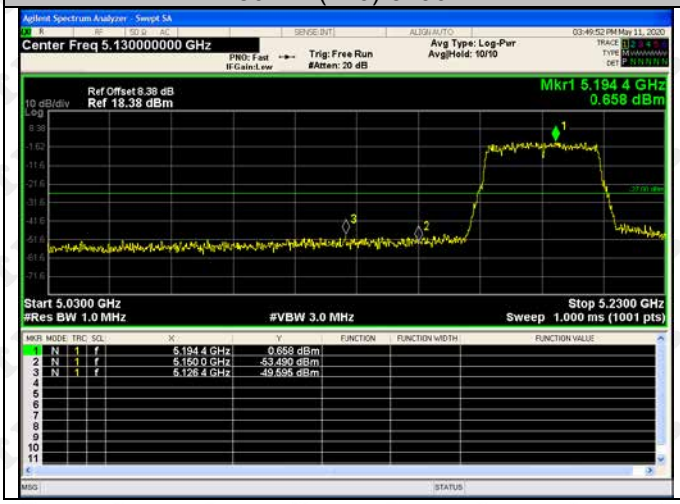

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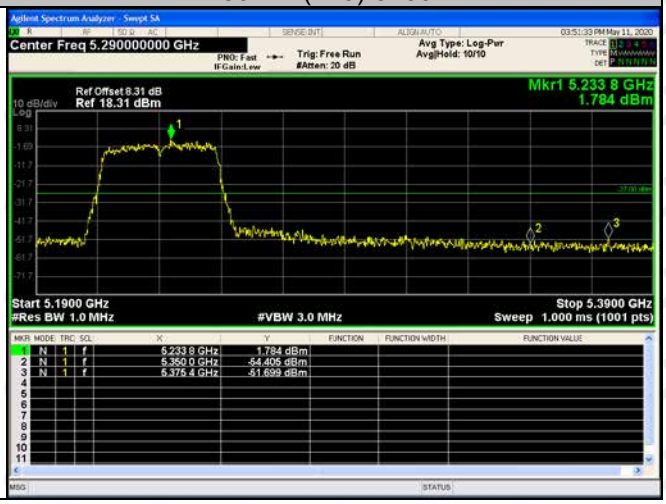

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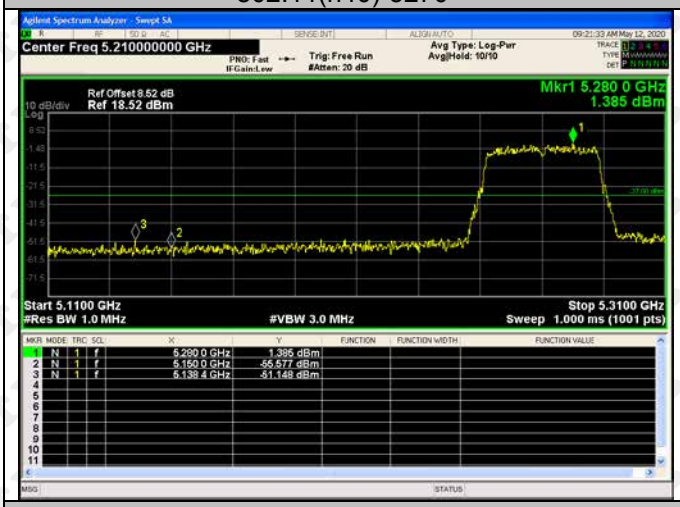

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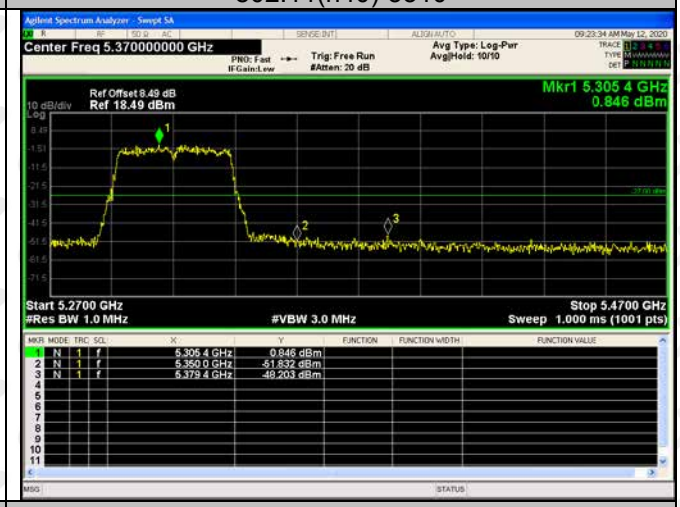

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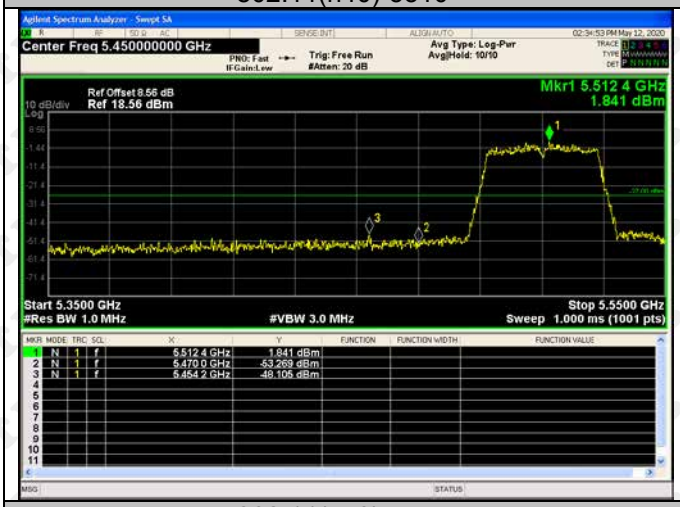

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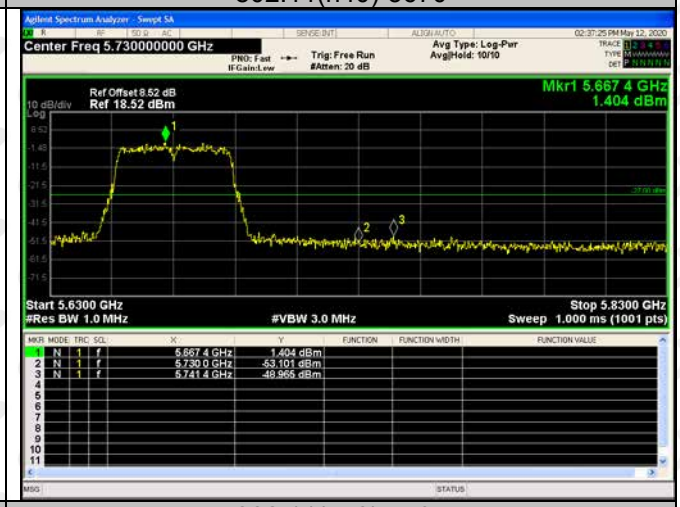

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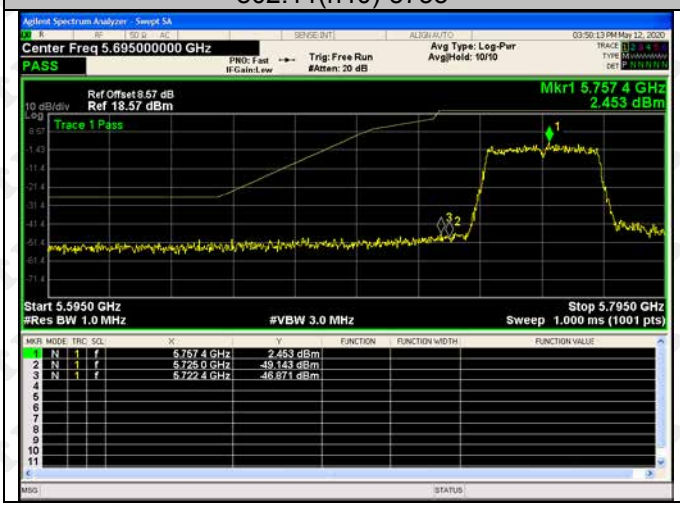

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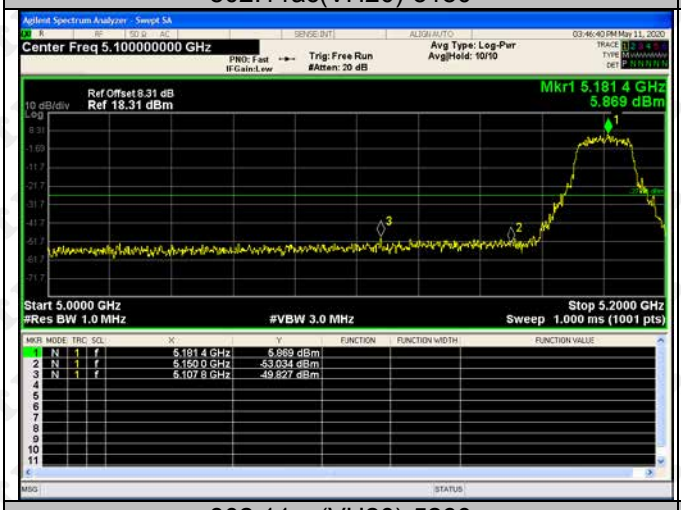

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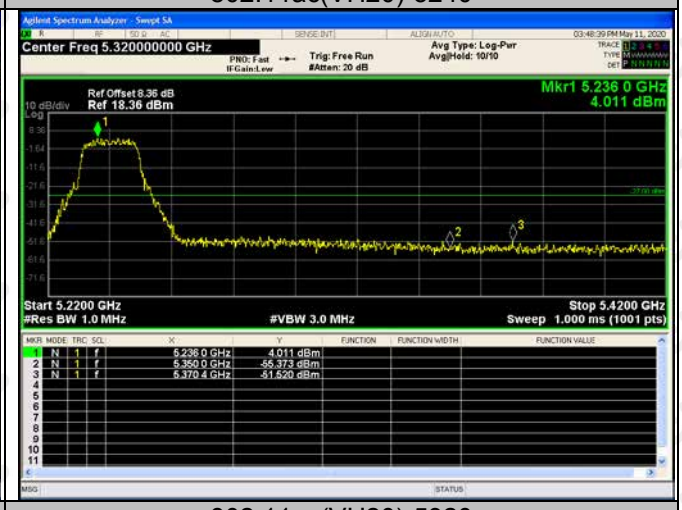

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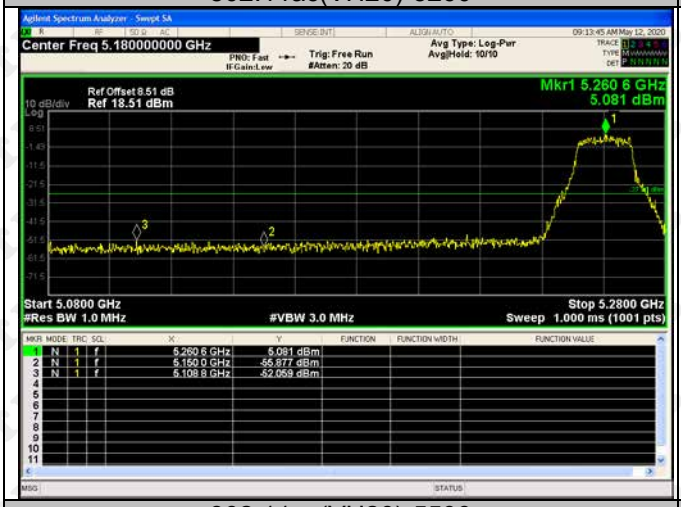

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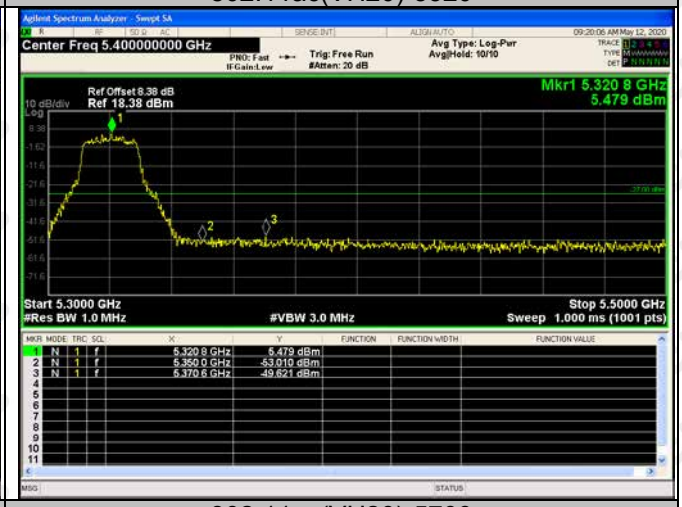

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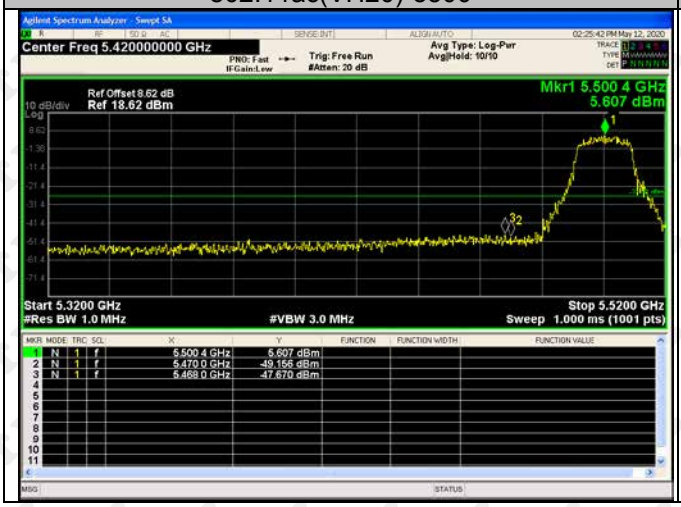

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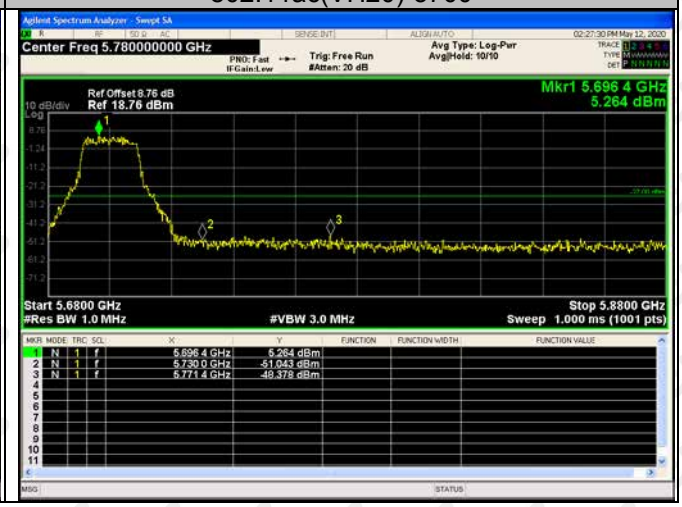

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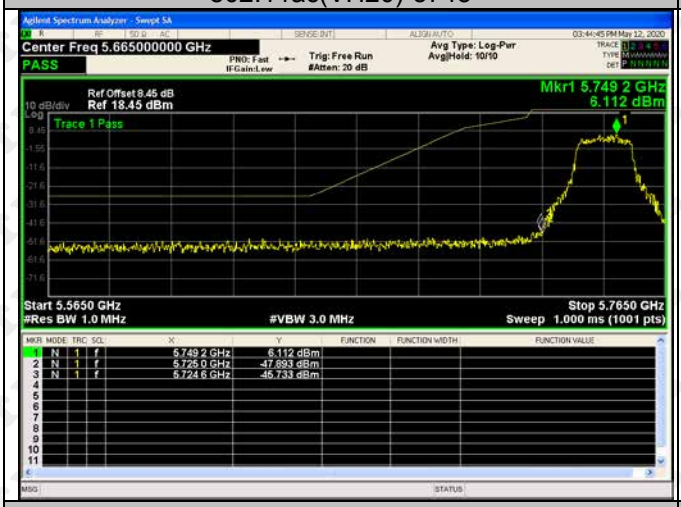

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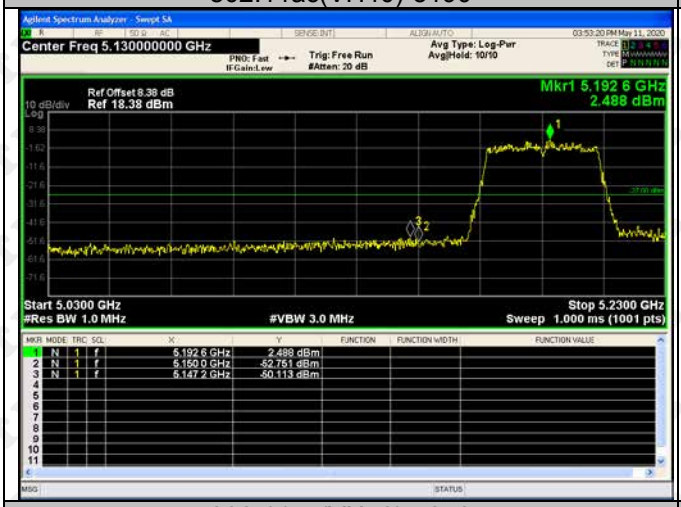

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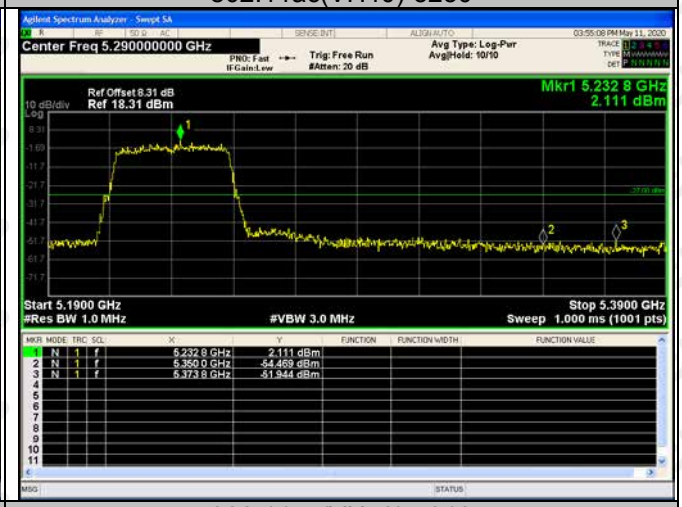

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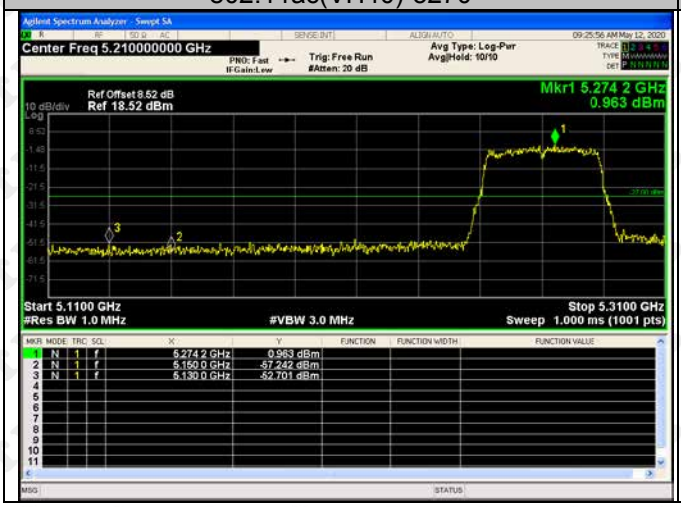

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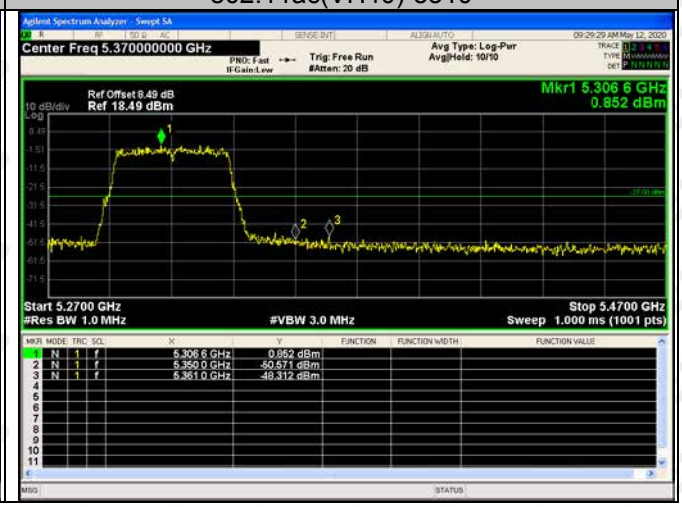

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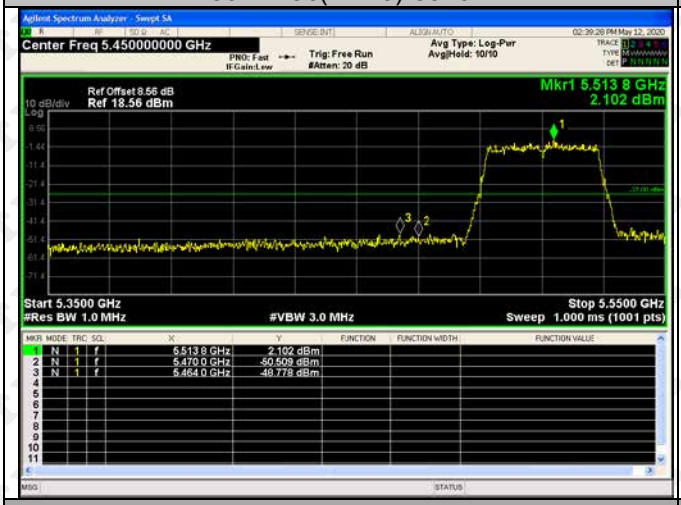

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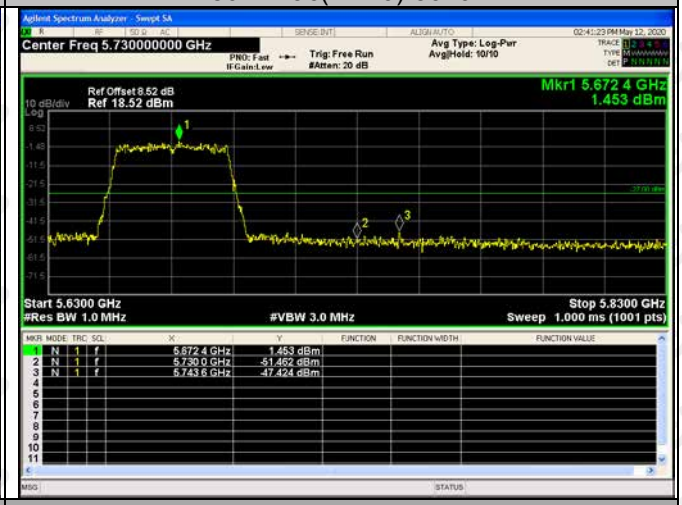

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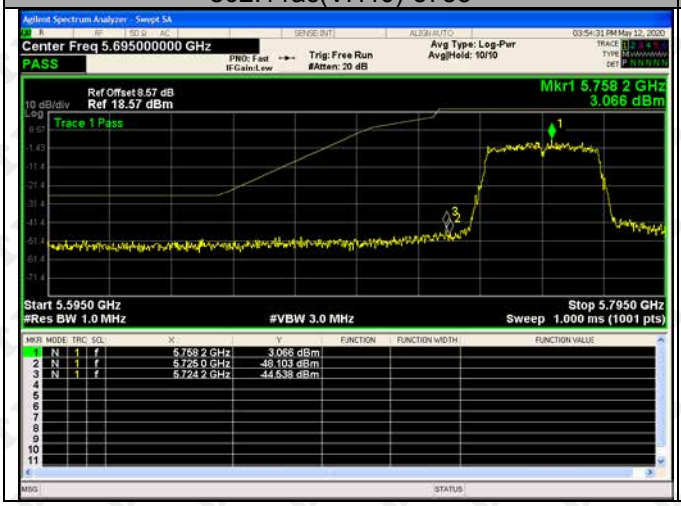

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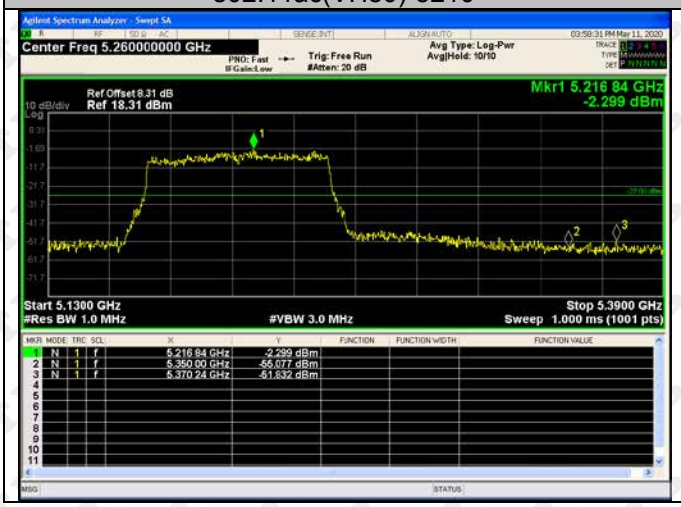

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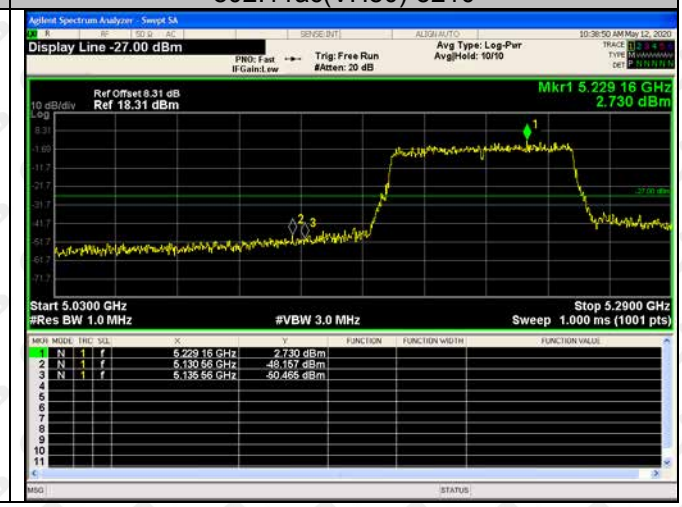

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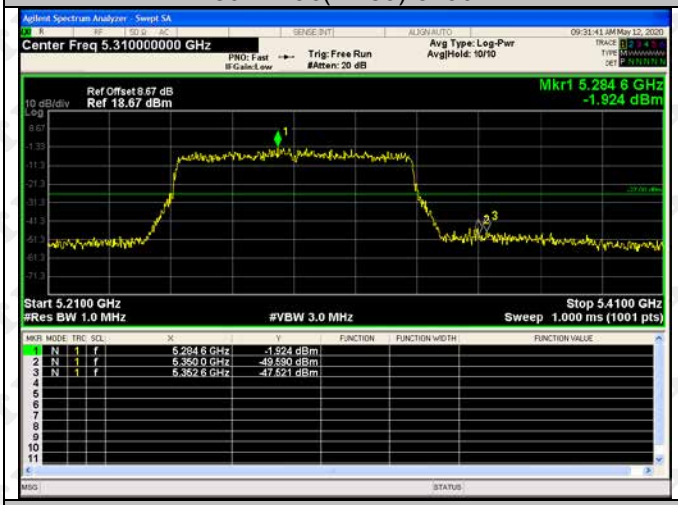

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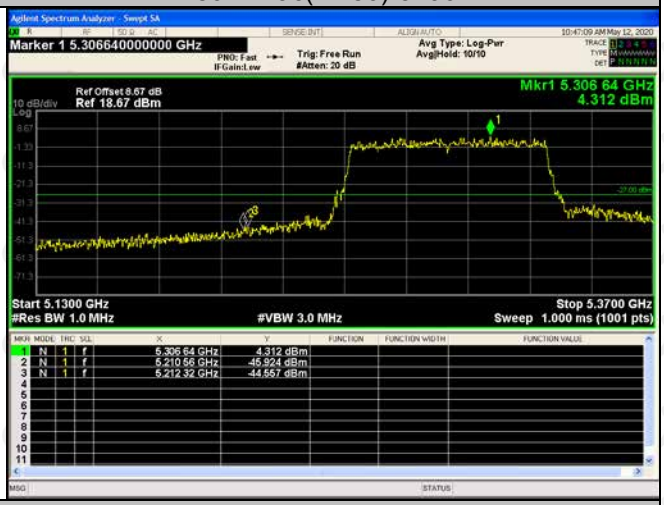

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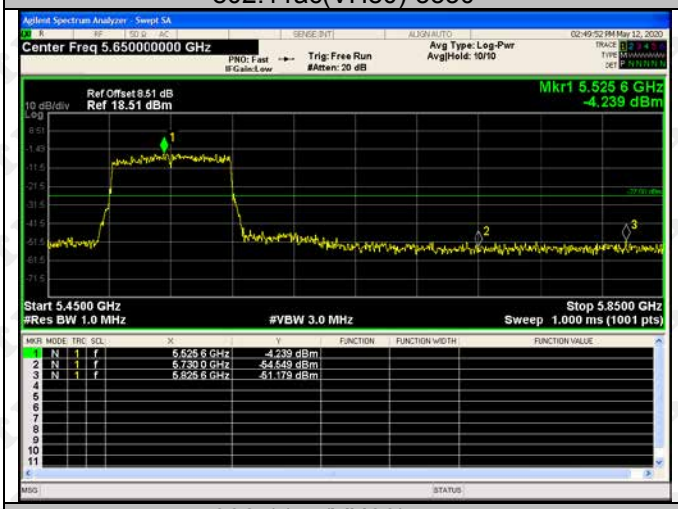

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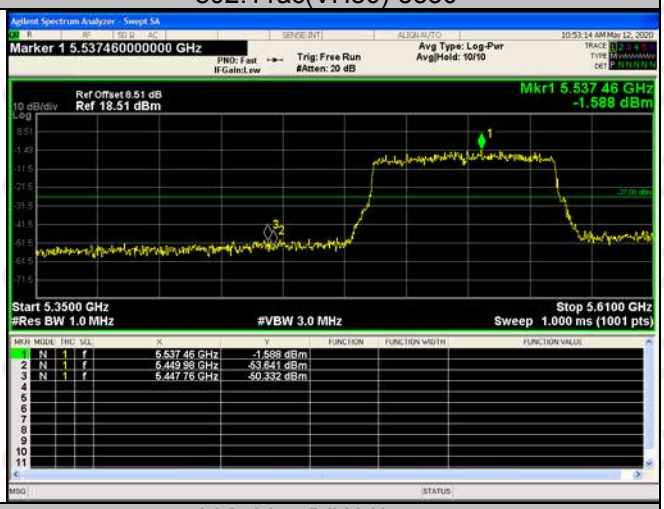

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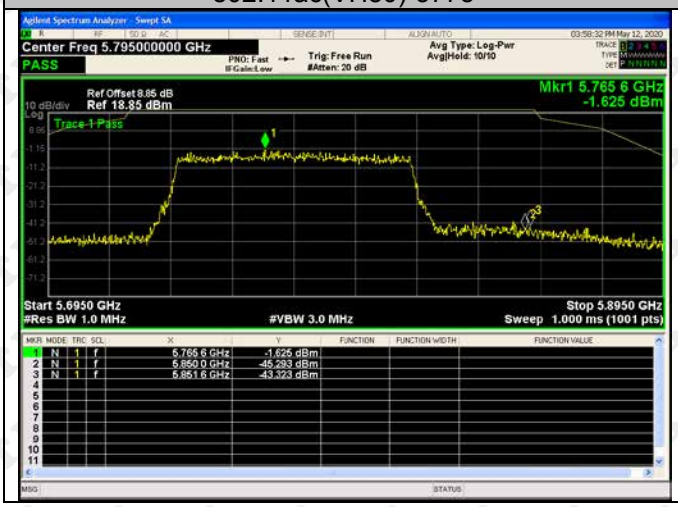
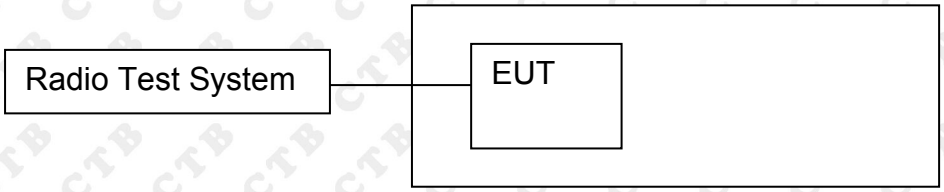


802.11ac(VH80)-5775

9. CONDUCTED PEAK OUTPUT POWER

9.1 Block Diagram Of Test Setup



9.2 Limit

(1) 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 conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, 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 conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition,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 conducted output power over the frequency band of operation shall not exceed 1 W. In addition, 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 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. 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 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.
(4) The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.
(5) The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a

bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

(h) Transmit Power Control (TPC) and Dynamic Frequency Selection (DFS).
(1) Transmit power control (TPC). U-NII devices operating in the 5.25-5.35 GHz band and the 5.47-5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

9.3 Test procedure

According to KDB789033 D02v02r01 sectionE, the following is the measurement procedure.

(i) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.

(ii) Set RBW = 1 MHz.

(iii) Set VBW ≥ 3 MHz.

(iv) Number of points in sweep ≥ 2 × span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)

(v) Sweep time = auto.

(vi) Detector = power averaging (rms), if available. Otherwise, use sample detector mode.

(vii) If transmit duty cycle < 98%, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle ≥ 98%, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to “free run.”

(viii) Trace average at least 100 traces in power averaging (rms) mode.

(ix) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument’s band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

9.4 Test Result

ANT 1

5150-5250MHz

Test mode	Test Channel (MHz)	Output Power dBm	Output Power mW	Limit mW
802.11a	5180	13.654	23.195	250
	5200	13.766	23.801	250
	5240	13.301	21.385	250
802.11n(HT20)	5180	13.766	23.801	250
	5200	13.592	22.867	250
	5240	13.286	21.311	250
802.11n(HT40)	5190	12.88	19.409	250
	5230	12.746	18.819	250
802.11ac(VH20)	5180	13.807	24.027	250
	5200	13.557	22.683	250
	5240	13.249	21.130	250
802.11ac(VH40)	5190	12.921	19.593	250
	5230	12.783	18.980	250
802.11ac(VH80)	5210	11.254	13.348	250

5250-5350 MHz

Test mode	Test Channel (MHz)	Output Power dBm	Output Power mW	Limit mW
802.11a	5260	14.279	26.786	250
	5280	14.434	27.759	250
	5320	14.101	25.710	250
802.11n(HT20)	5260	13.563	22.714	250
	5280	13.675	23.308	250
	5320	13.953	24.848	250
802.11n(HT40)	5270	12.572	18.080	250
	5310	12.68	18.535	250
802.11ac(VH20)	5260	13.49	22.336	250
	5280	13.726	23.583	250
	5320	13.91	24.604	250
802.11ac(VH40)	5270	12.63	18.323	250
	5310	12.652	18.416	250
802.11ac(VH80)	5290	12.084	16.158	250

5470-5725 MHz

Test mode	Test Channel (MHz)	Output Power dBm	Output Power mW	Limit mW
802.11a	5500	13.9	24.547	250
	5580	14.027	25.276	250
	5700	14.063	25.486	250
802.11n(HT20)	5500	13.991	25.067	250
	5580	14.095	25.674	250
	5700	14.273	26.749	250
802.11n(HT40)	5510	12.596	18.180	250
	5670	12.71	18.664	250
802.11ac(VH20)	5500	11.665	14.672	250
	5580	14.043	25.369	250
	5700	14.223	26.442	250
802.11ac(VH40)	5510	14.156	26.038	250
	5670	12.562	18.038	250
802.11ac(VH80)	5530	12.607	18.226	250

5725-5850MHz

Test mode	Test Channel (MHz)	Output Power dBm	Output Power mW	Limit mW
802.11a	5745	14.667	29.289	1000
	5785	14.516	28.288	1000
	5825	14.684	29.404	1000
802.11n(HT20)	5745	14.729	29.655	1000
	5785	14.728	30.054	1000
	5825	14.735	29.607	1000
802.11n(HT40)	5755	13.785	23.774	1000
	5795	14.015	25.252	1000
802.11ac(VH20)	5745	14.721	18.819	1000
	5785	14.779	29.710	1000
	5825	14.714	29.703	1000
802.11ac(VH40)	5755	13.761	29.751	1000
	5795	14.023	23.906	1000
802.11ac(VH80)	5775	12.746	25.206	1000

ANT 2

5150-5250MHz

Test mode	Test Channel (MHz)	Output Power dBm	Output Power mW	Limit mW
802.11a	5180	13.786	23.911	250
	5200	13.805	24.016	250
	5240	13.349	21.622	250
802.11n(HT20)	5180	13.816	24.077	250
	5200	13.71	23.496	250
	5240	13.248	21.125	250
802.11n(HT40)	5190	12.907	19.530	250
	5230	12.81	19.099	250
802.11ac(VH20)	5180	11.216	13.231	250
	5200	13.787	23.917	250
	5240	13.676	23.313	250
802.11ac(VH40)	5190	13.247	21.120	250
	5230	12.948	19.715	250
802.11ac(VH80)	5210	12.8	19.055	250

5250-5350 MHz

Test mode	Test Channel (MHz)	Output Power dBm	Output Power mW	Limit mW
802.11a	5260	14.575	28.675	250
	5280	14.664	29.268	250
	5320	14.064	25.492	250
802.11n(HT20)	5260	13.577	22.788	250
	5280	13.812	24.055	250
	5320	14.022	25.246	250
802.11n(HT40)	5270	12.605	18.218	250
	5310	12.765	18.902	250
802.11ac(VH20)	5260	12.214	16.649	250
	5280	13.657	23.211	250
	5320	13.719	23.545	250
802.11ac(VH40)	5270	13.967	24.929	250
	5310	12.629	18.319	250
802.11ac(VH80)	5290	12.752	18.845	250

5470-5725 MHz

Test mode	Test Channel (MHz)	Output Power dBm	Output Power mW	Limit mW
802.11a	5500	13.928	24.706	250
	5580	14.248	26.595	250
	5700	14.34	27.164	250
802.11n(HT20)	5500	14.083	25.604	250
	5580	14.116	25.799	250
	5700	14.59	28.774	250
802.11n(HT40)	5510	12.754	18.854	250
	5670	13.057	20.216	250
802.11ac(VH20)	5500	11.999	15.845	250
	5580	14.203	26.321	250
	5700	14.151	26.008	250
802.11ac(VH40)	5510	14.477	28.035	250
	5670	12.752	18.845	250
802.11ac(VH80)	5530	13.106	20.446	250

5725-5850MHz

Test mode	Test Channel (MHz)	Output Power dBm	Output Power mW	Limit mW
802.11a	5745	14.597	28.820	1000
	5785	14.554	28.536	1000
	5825	14.725	29.682	1000
802.11n(HT20)	5745	14.65	29.174	1000
	5785	14.742	29.799	1000
	5825	14.769	29.985	1000
802.11n(HT40)	5755	13.835	24.182	1000
	5795	14.031	25.299	1000
802.11ac(VH20)	5745	12.69	18.578	1000
	5785	14.722	29.662	1000
	5825	14.799	30.193	1000
802.11ac(VH40)	5755	14.801	30.206	1000
	5795	13.797	23.972	1000
802.11ac(VH80)	5775	14.118	25.811	1000

MIMO:ANT 1+ANT 2
5150-5250MHz

Test mode	Test Channel (MHz)	Output Power dBm	Output Power mW	Limit mW
802.11a	5180	16.731	47.109	250
	5200	16.796	47.819	250
	5240	16.335	43.003	250
802.11n(HT20)	5180	16.801	47.874	250
	5200	16.662	46.366	250
	5240	16.277	42.433	250
802.11n(HT40)	5190	15.904	38.940	250
	5230	15.788	37.914	250
802.11ac(VH20)	5180	15.712	37.256	250
	5200	16.684	46.602	250
	5240	16.478	44.443	250
802.11ac(VH40)	5190	16.097	40.710	250
	5230	15.877	38.699	250
802.11ac(VH80)	5210	15.106	32.404	250

5250-5350 MHz

Test mode	Test Channel (MHz)	Output Power dBm	Output Power mW	Limit mW
802.11a	5260	17.440	55.463	250
	5280	17.561	57.030	250
	5320	17.093	51.204	250
802.11n(HT20)	5260	16.580	45.499	250
	5280	16.754	47.359	250
	5320	16.998	50.096	250
802.11n(HT40)	5270	15.599	36.299	250
	5310	15.733	37.437	250
802.11ac(VH20)	5260	15.909	38.985	250
	5280	16.702	46.795	250
	5320	16.826	48.150	250
802.11ac(VH40)	5270	16.360	43.251	250
	5310	15.651	36.737	250
802.11ac(VH80)	5290	15.441	35.003	250

5470-5725 MHz

Test mode	Test Channel (MHz)	Output Power dBm	Output Power mW	Limit mW
802.11a	5500	16.924	49.253	250
	5580	17.149	51.871	250
	5700	17.214	52.650	250
802.11n(HT20)	5500	17.048	50.670	250
	5580	17.116	51.473	250
	5700	17.445	55.523	250
802.11n(HT40)	5510	15.686	37.034	250
	5670	15.897	38.880	250
802.11ac(VH20)	5500	14.846	30.518	250
	5580	17.134	51.690	250
	5700	17.197	52.450	250
802.11ac(VH40)	5510	17.330	54.073	250
	5670	15.668	36.884	250
802.11ac(VH80)	5530	15.874	38.672	250

5725-5850MHz

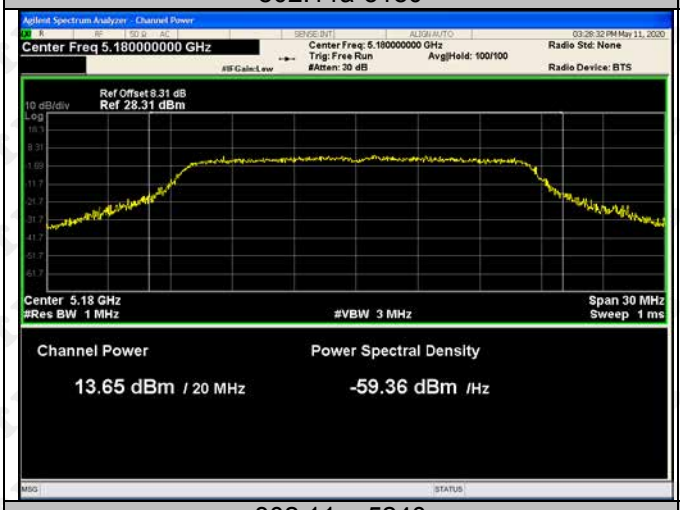
Test mode	Test Channel (MHz)	Output Power dBm	Output Power mW	Limit mW
802.11a	5745	17.642	58.103	1000
	5785	17.545	56.820	1000
	5825	17.715	59.088	1000
802.11n(HT20)	5745	17.700	58.884	1000
	5785	17.745	59.498	1000
	5825	17.762	59.731	1000
802.11n(HT40)	5755	16.820	48.084	1000
	5795	17.033	50.501	1000
802.11ac(VH20)	5745	16.833	48.228	1000
	5785	17.761	59.717	1000
	5825	17.767	59.800	1000
802.11ac(VH40)	5755	17.322	53.976	1000
	5795	16.922	49.227	1000
802.11ac(VH80)	5775	16.496	44.627	1000

Test Graph

Ant 1

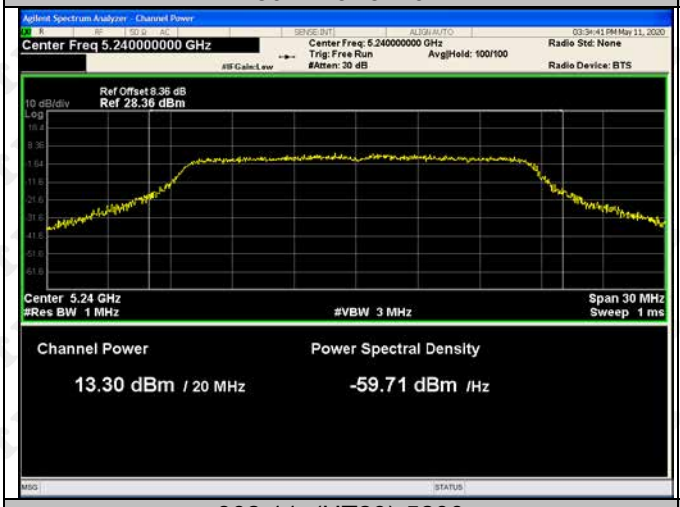
5150-5250MHz

802.11a-5180

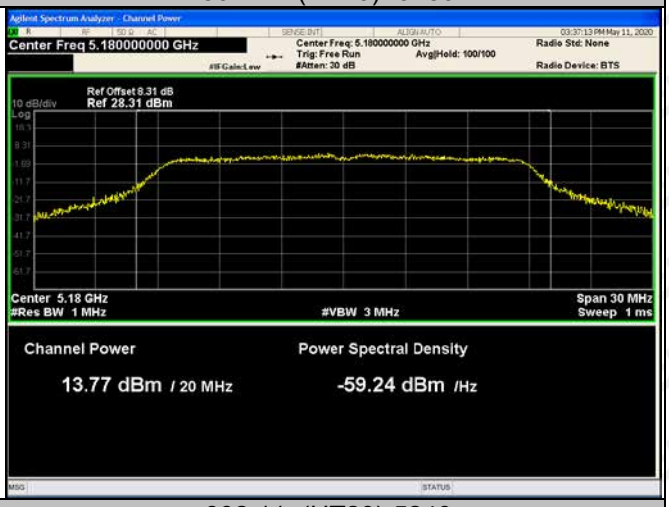


802.11a -5200

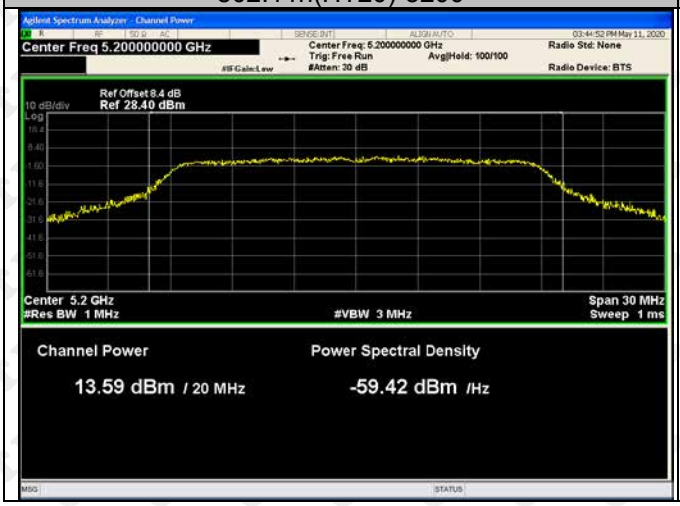
802.11a -5240



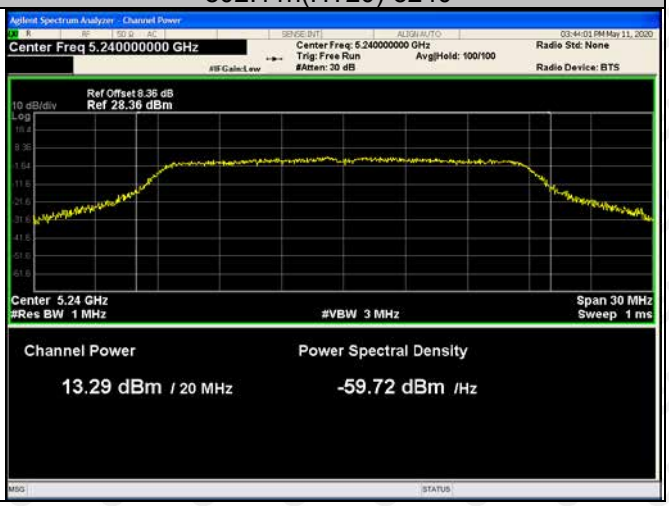
802.11n(HT20) -5180



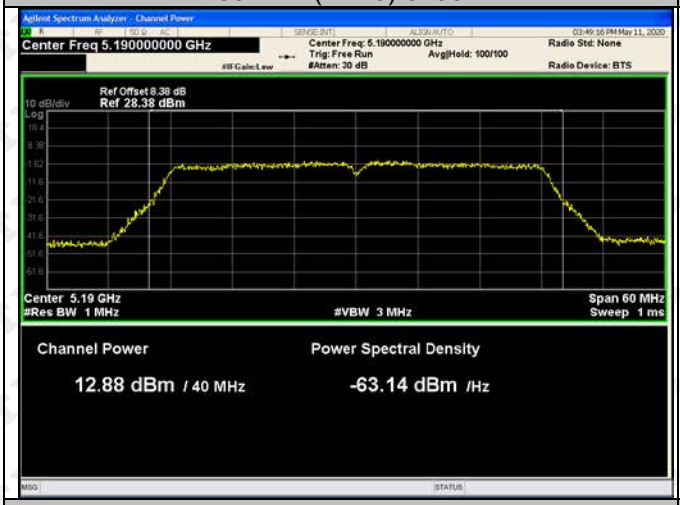
802.11n(HT20)-5200



802.11n(HT20)-5240

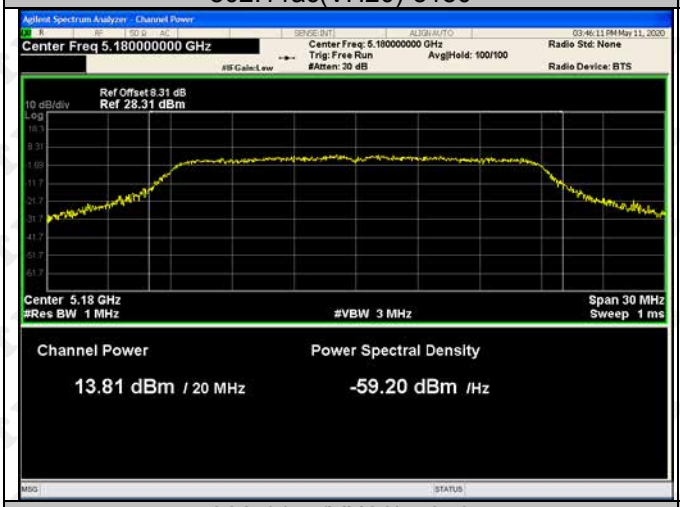


802.11n(HT40)-5190

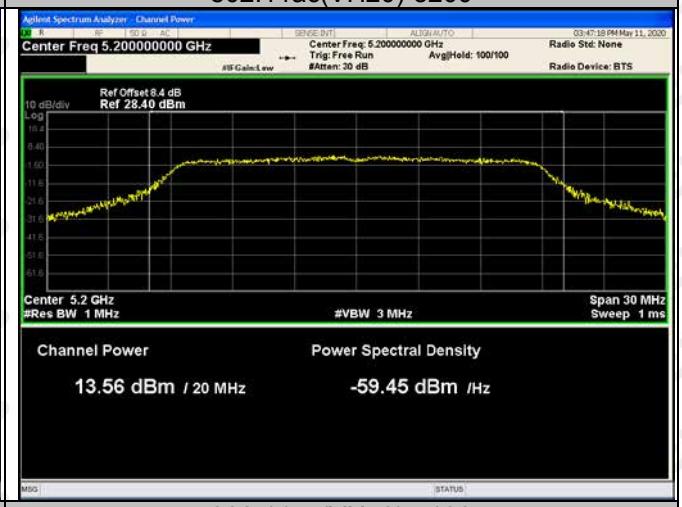


802.11n(HT40)-5230

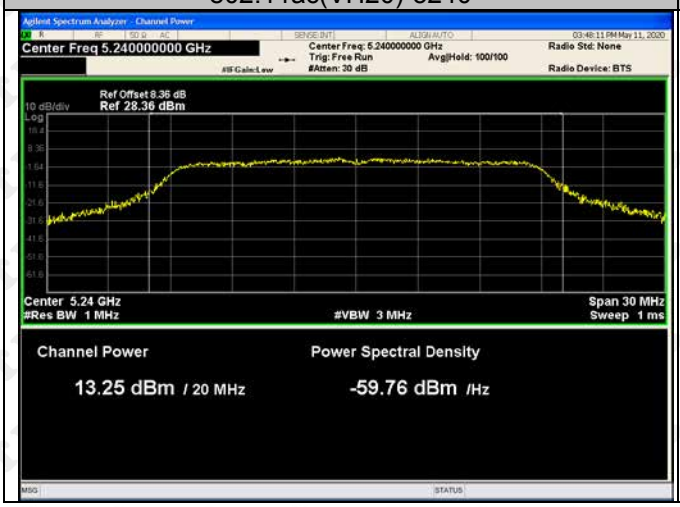
802.11ac(VH20)-5180



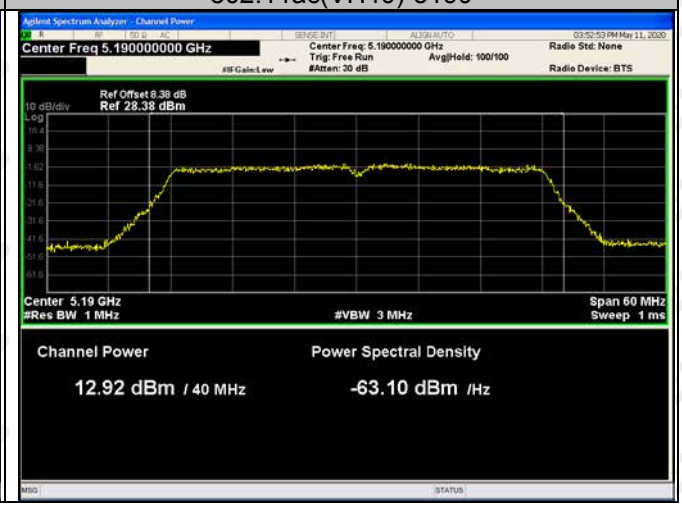
802.11ac(VH20)-5200



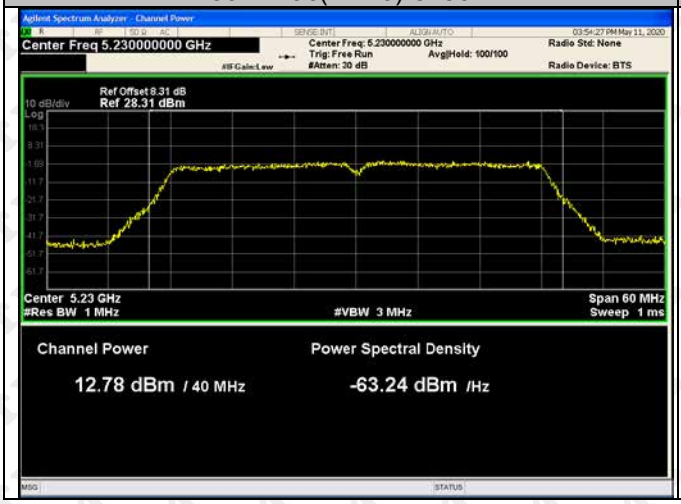
802.11ac(VH20)-5240



802.11ac(VH40)-5190



802.11ac(VH40)-5230

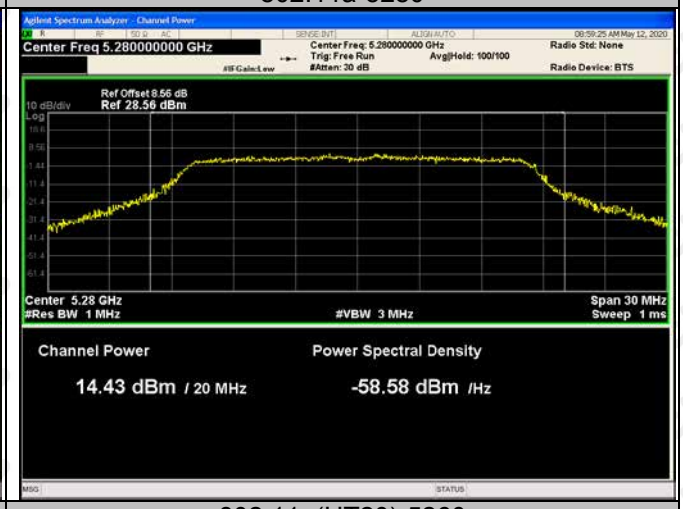


802.11ac(VH80)-5210

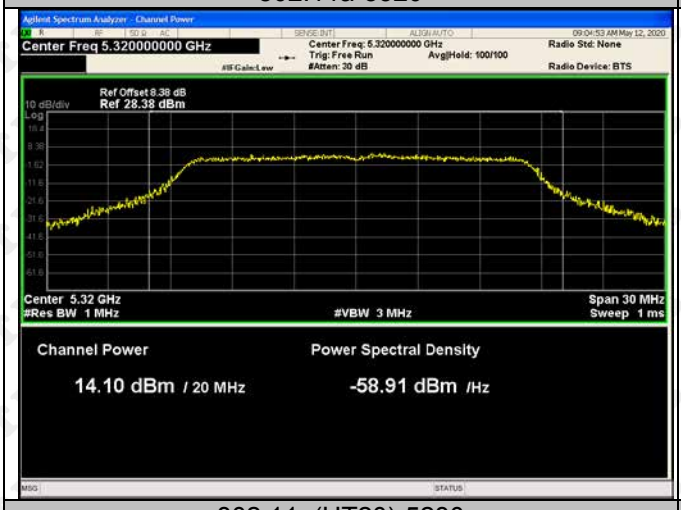
5250-5350MHz

802.11a-5260

802.11a-5280



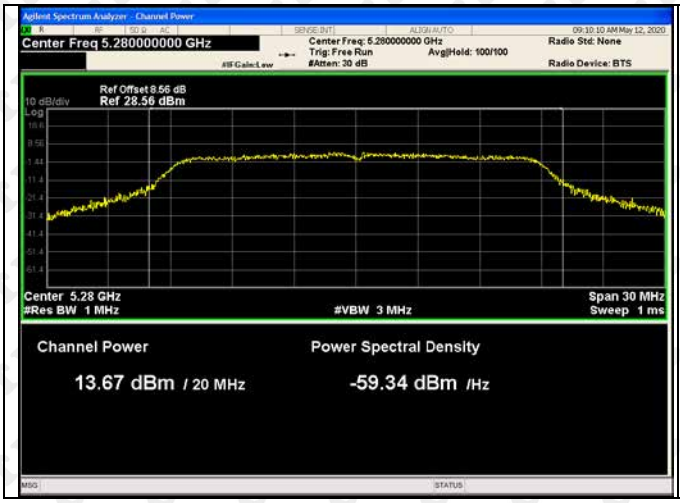
802.11a-5320

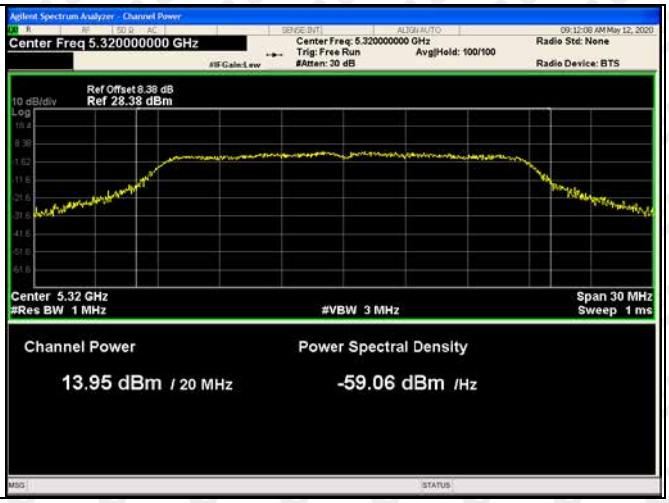


802.11n(HT20)-5260

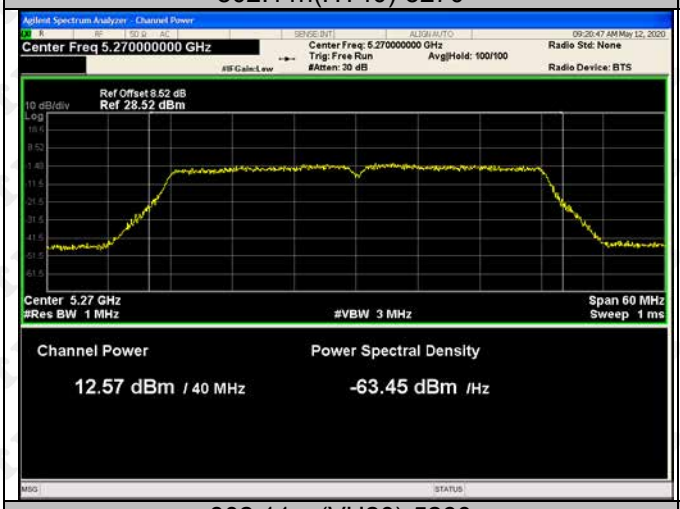
802.11n(HT20)-5280

802.11n(HT20)-5320

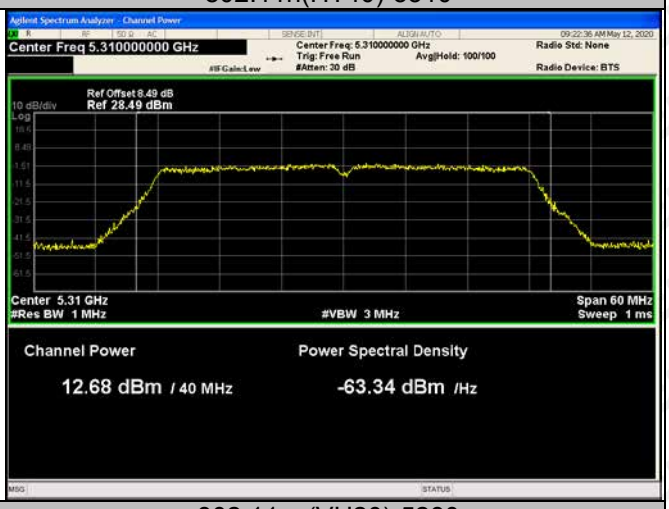




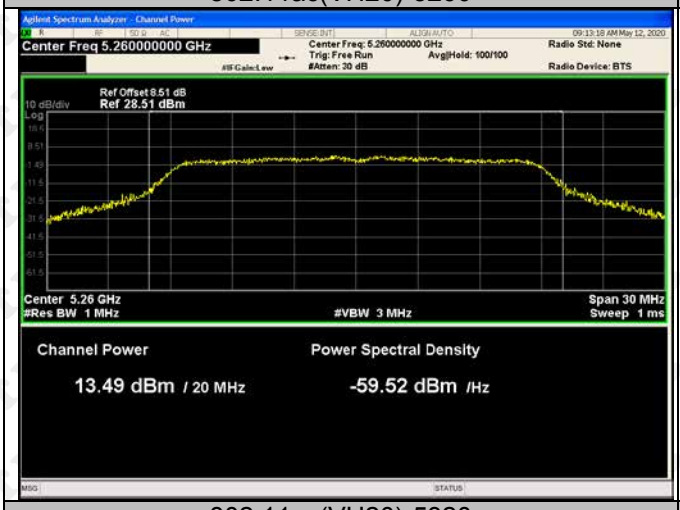
802.11n(HT40)-5270



802.11n(HT40)-5310



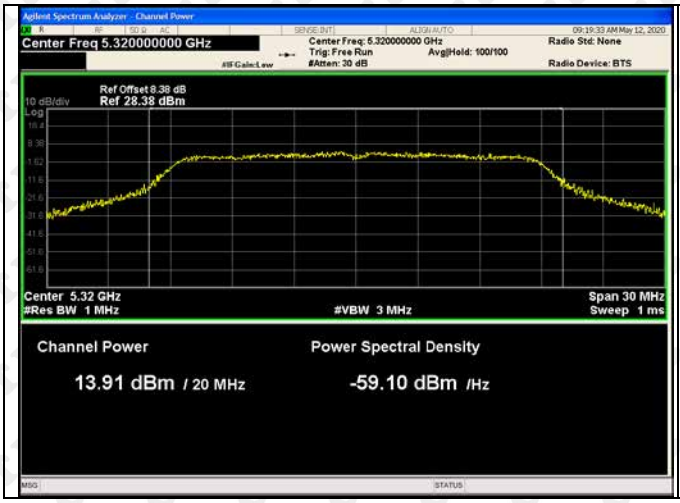
802.11ac(VH20)-5260

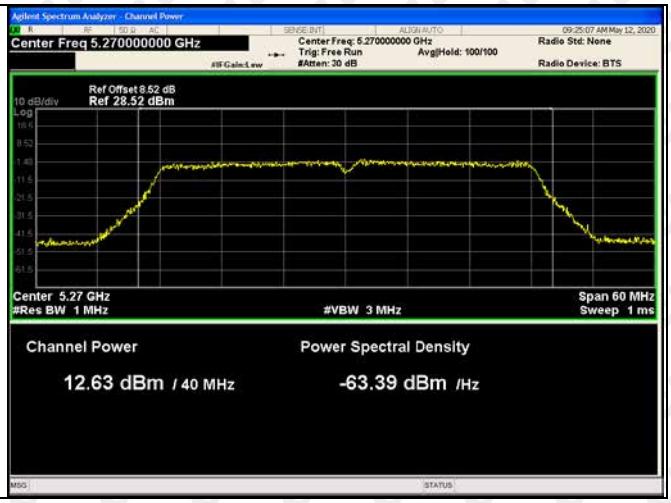


802.11ac(VH20)-5280

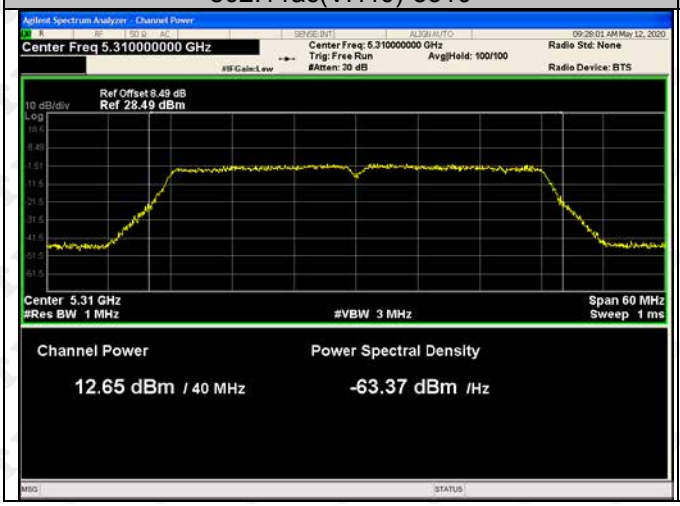
802.11ac(VH20)-5320

802.11ac(VH40)-5270

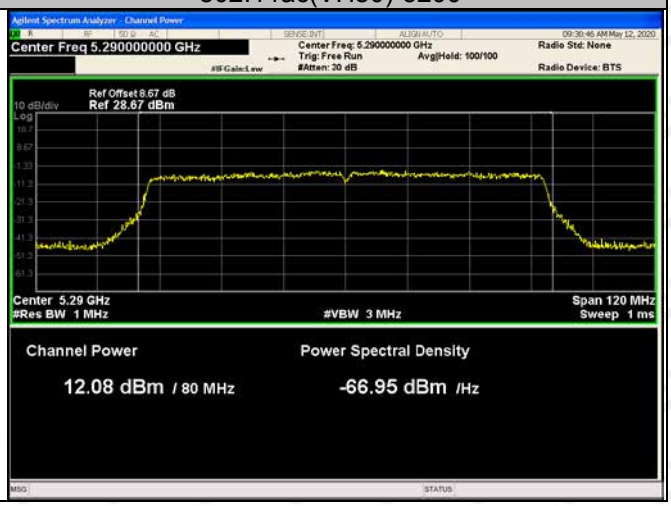




802.11ac(VH40)-5310

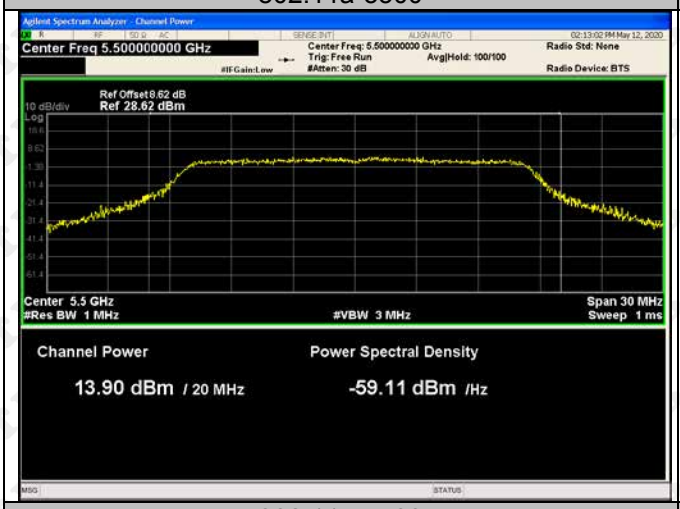


802.11ac(VH80)-5290

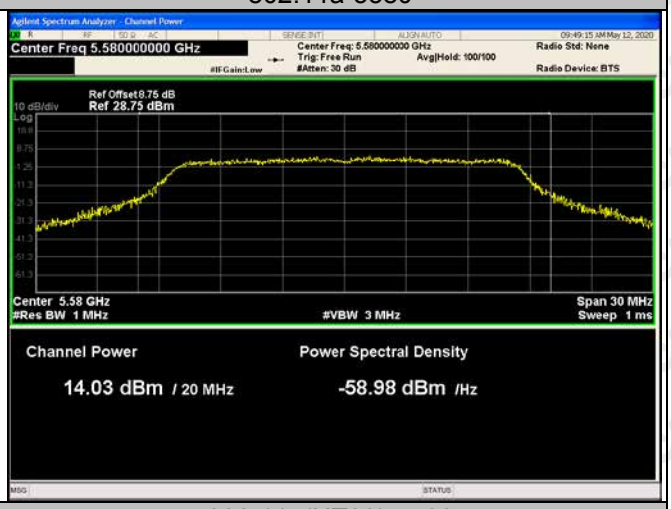


5470-5725MHz

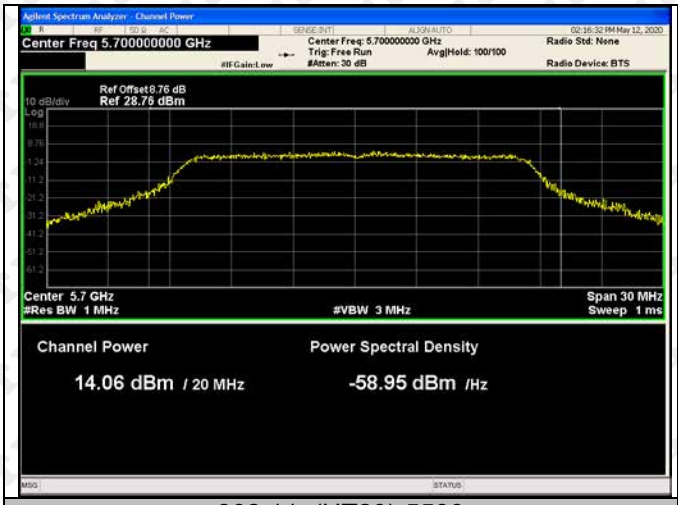
802.11a-5500



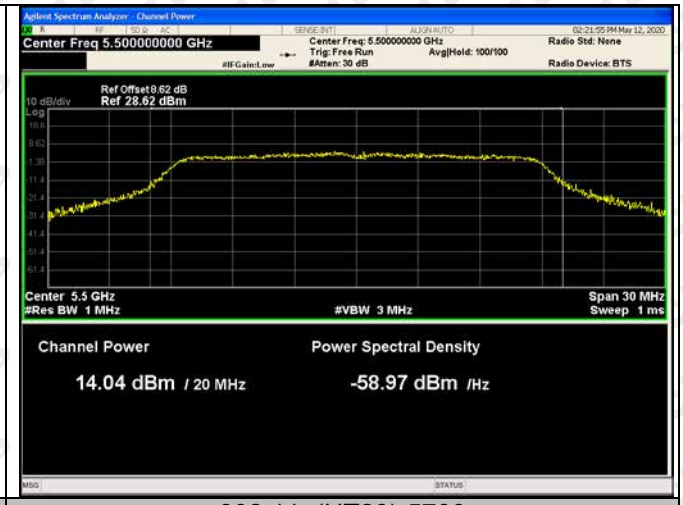
802.11a-5580



802.11a-5700 | 802.11n(HT20)-5500

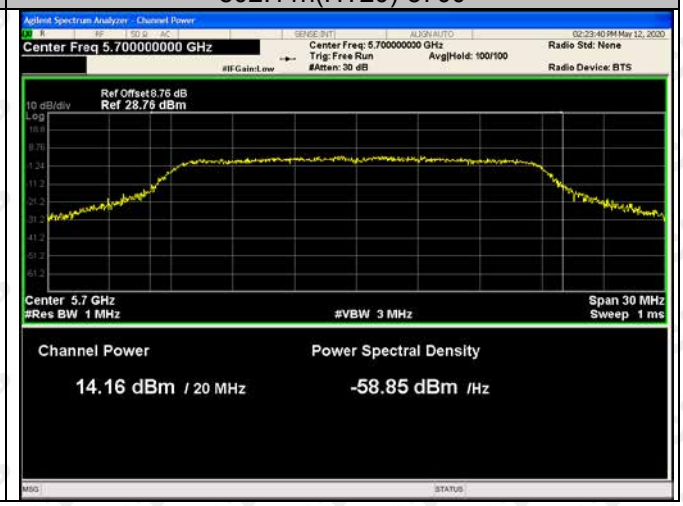


802.11n(HT20)-5580

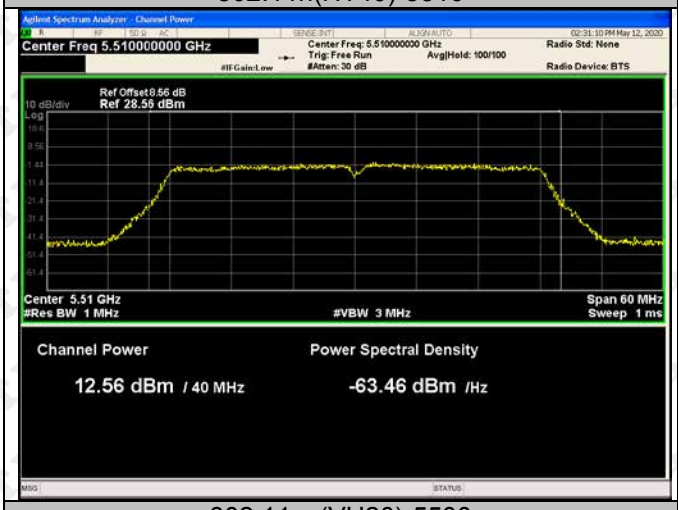


802.11n(HT20)-5700

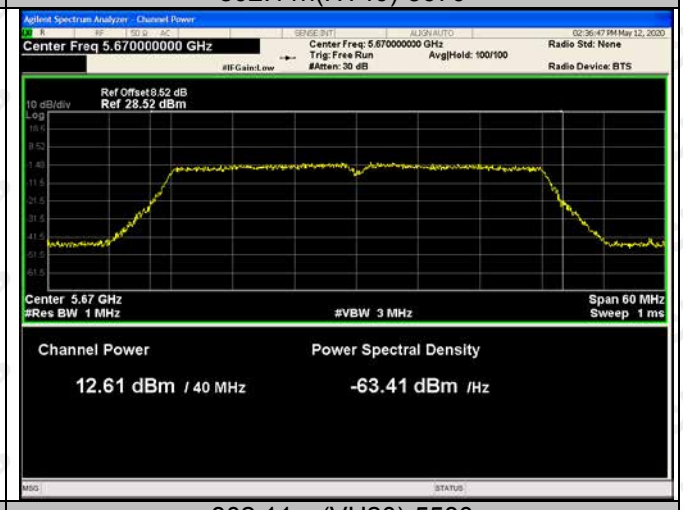
802.11n(HT40)-5510



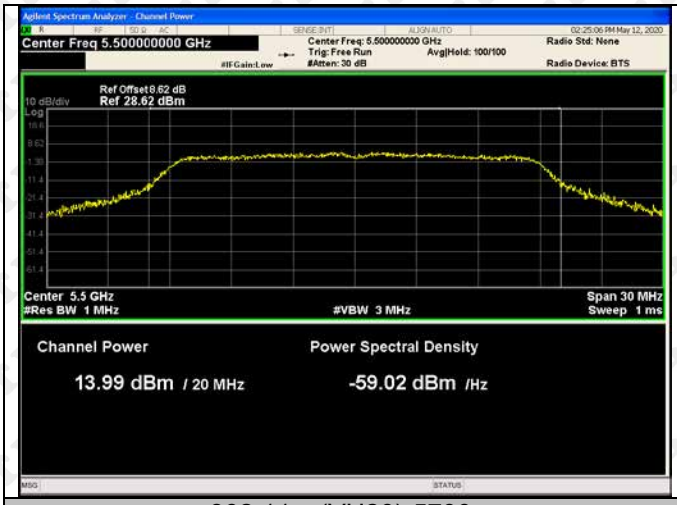
802.11n(HT40)-5670



802.11ac(VH20)-5500



802.11ac(VH20)-5580

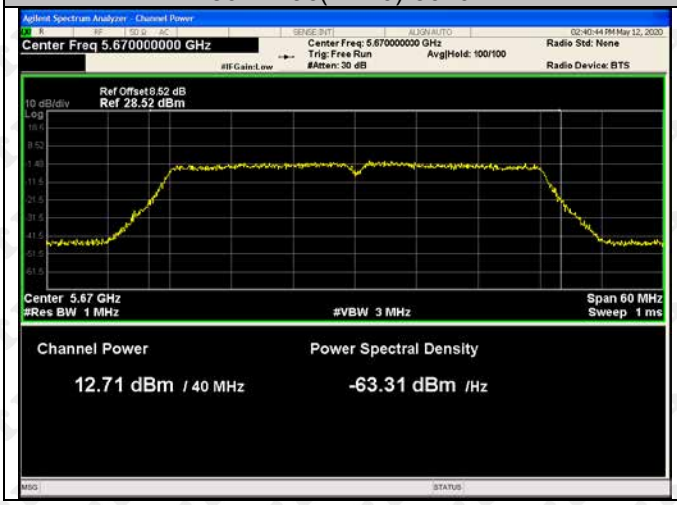


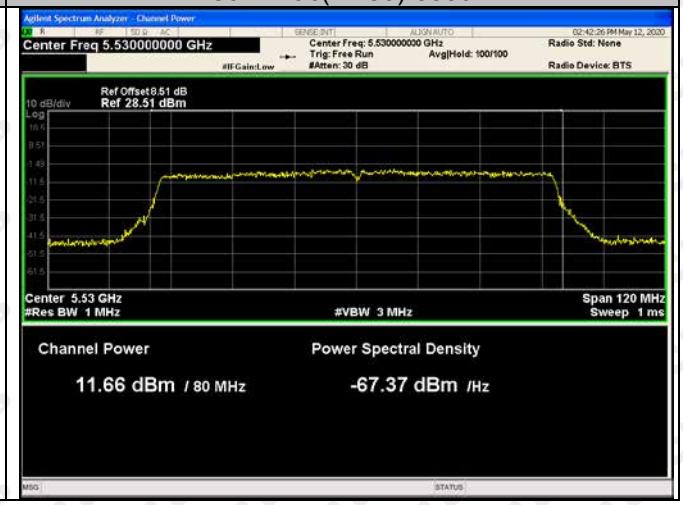
802.11ac(VH20)-5700

802.11ac(VH40)-5510

802.11ac(VH40)-5670

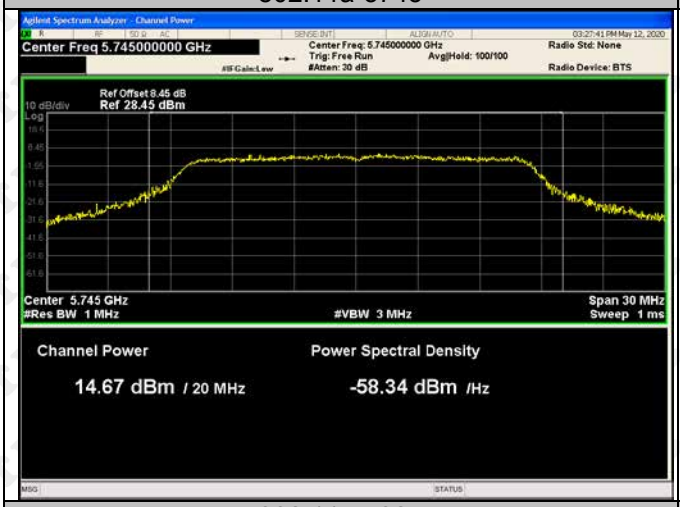
802.11ac(VH80)-5530



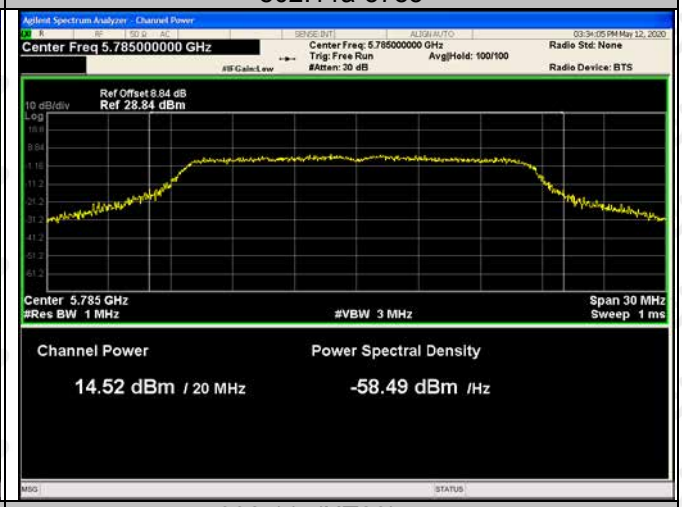


5725-5850MHz

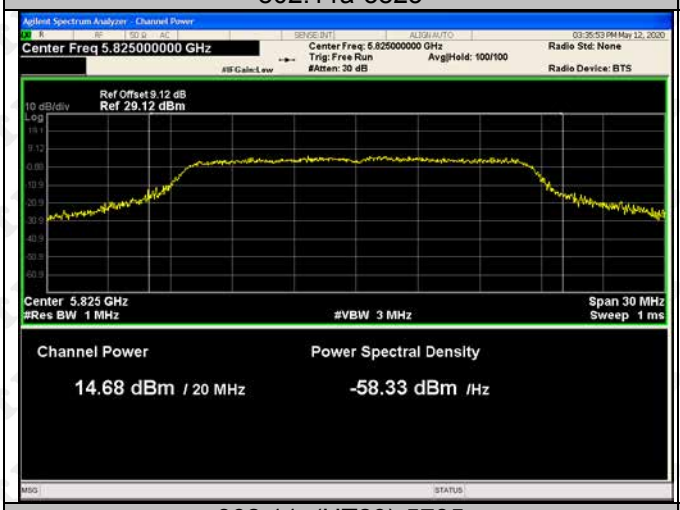
802.11a-5745



802.11a-5785

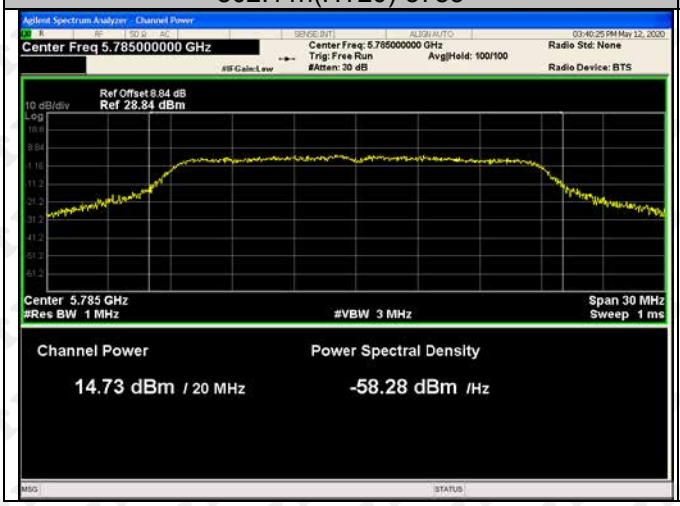


802.11a-5825

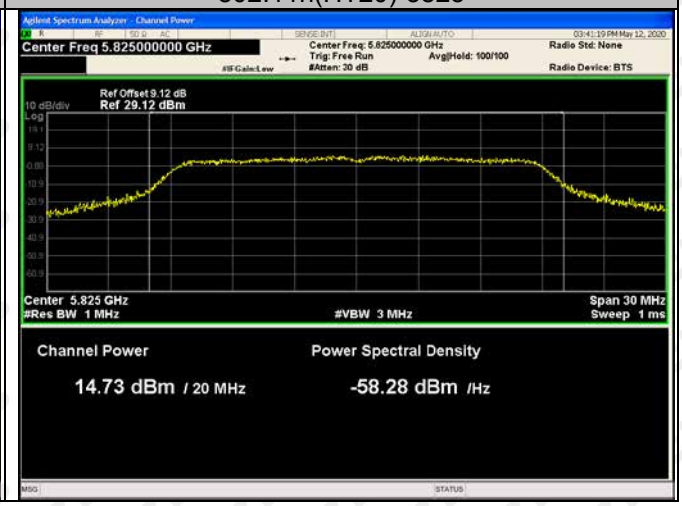


802.11n(HT20)-5745

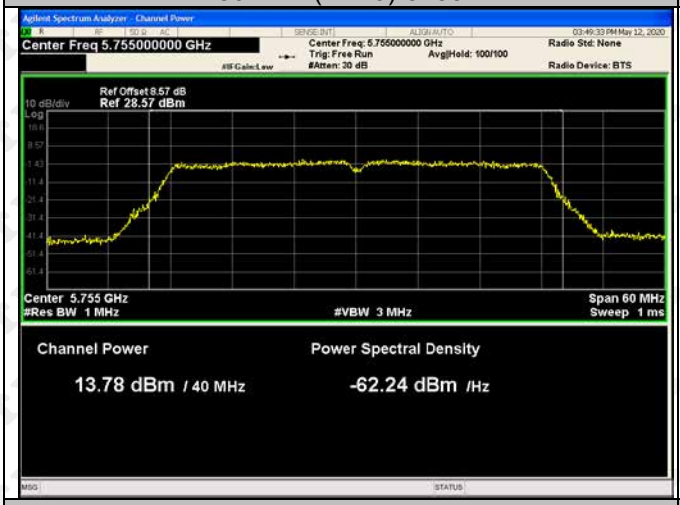
802.11n(HT20)-5785



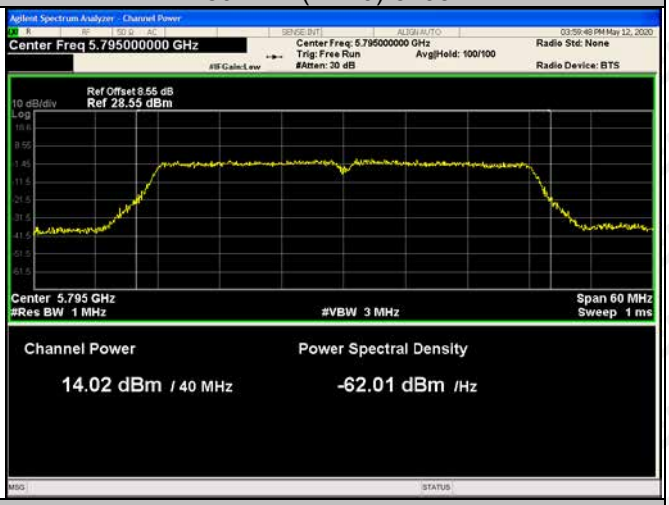
802.11n(HT20)-5825



802.11n(HT40)-5755



802.11n(HT40)-5795



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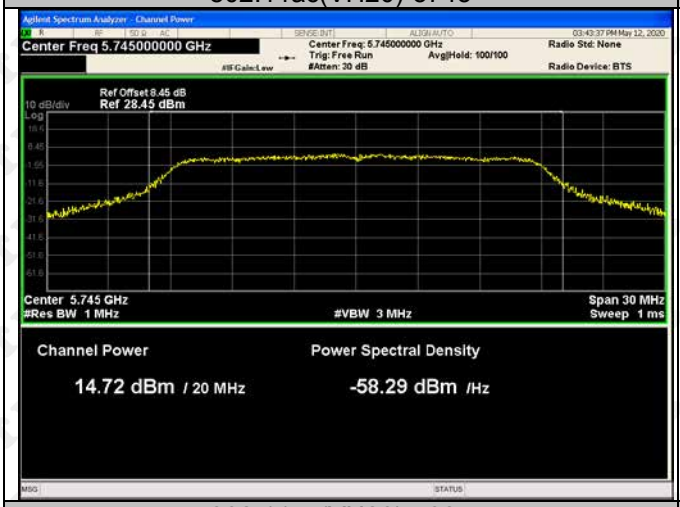

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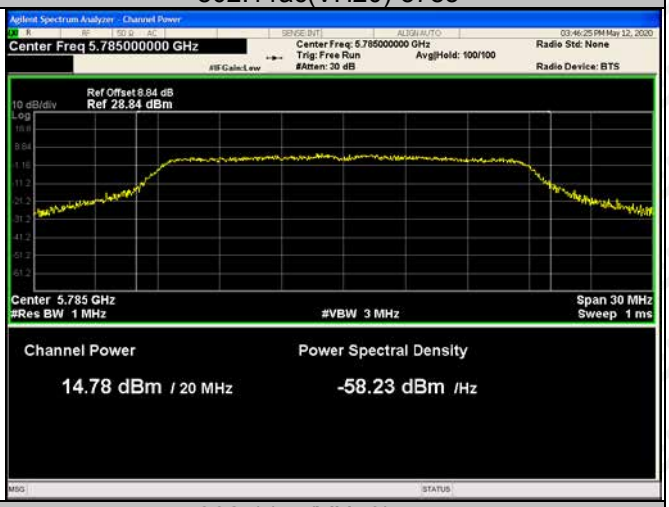

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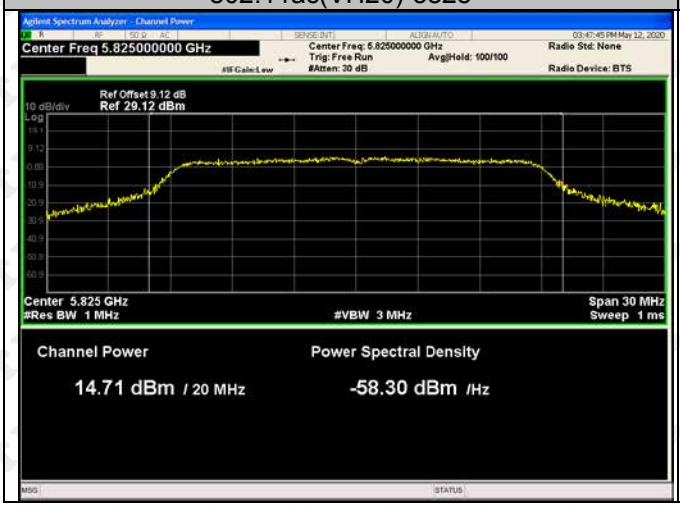

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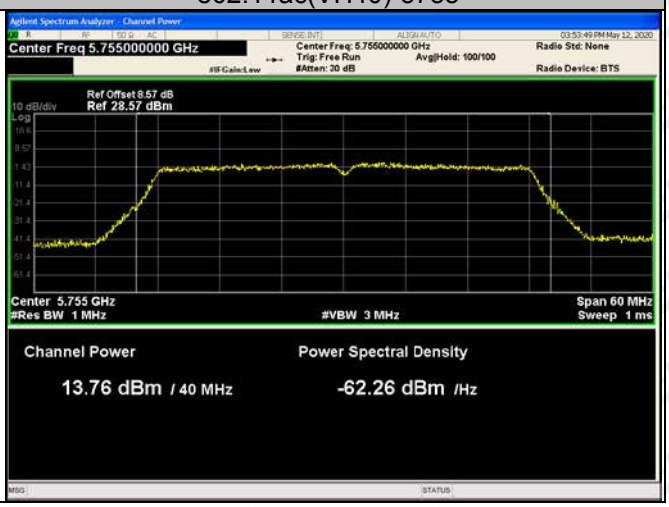

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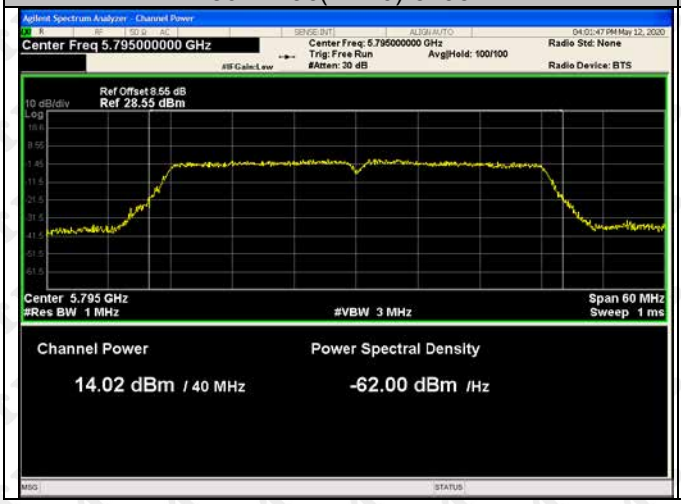
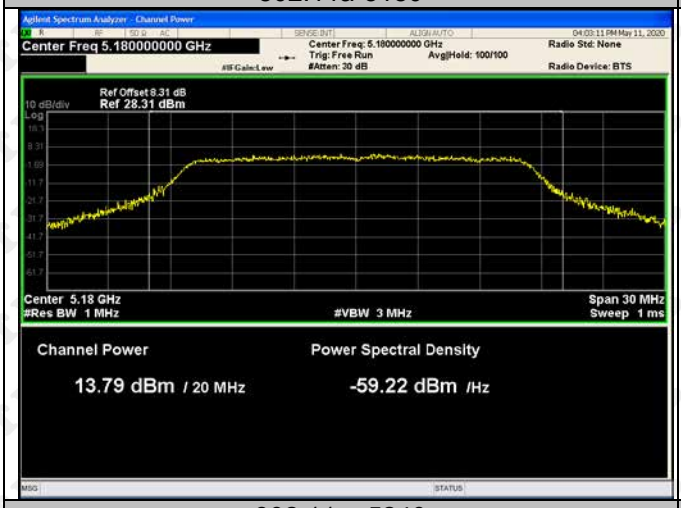


802.11ac(VH80)-5775

Ant 2
5150-5250MHz

802.11a-5180



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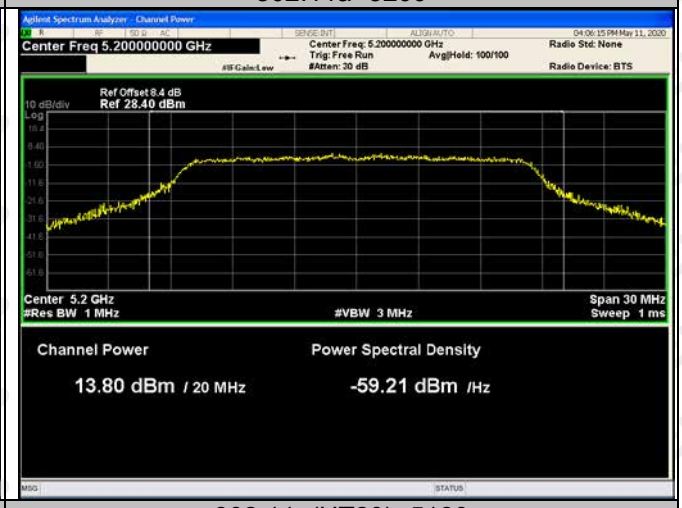

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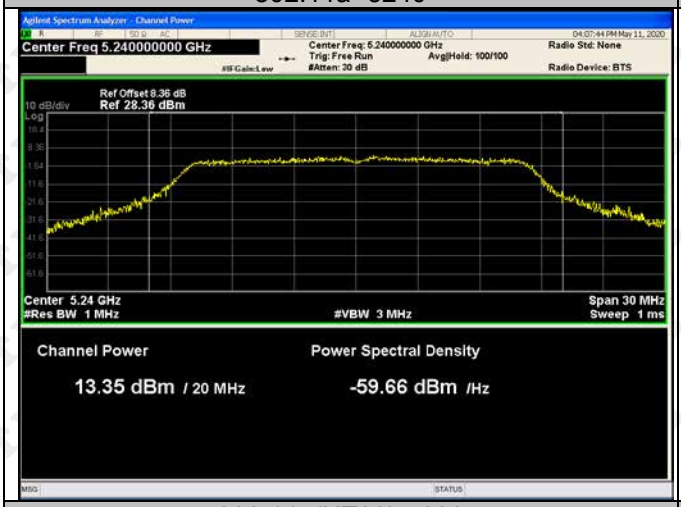
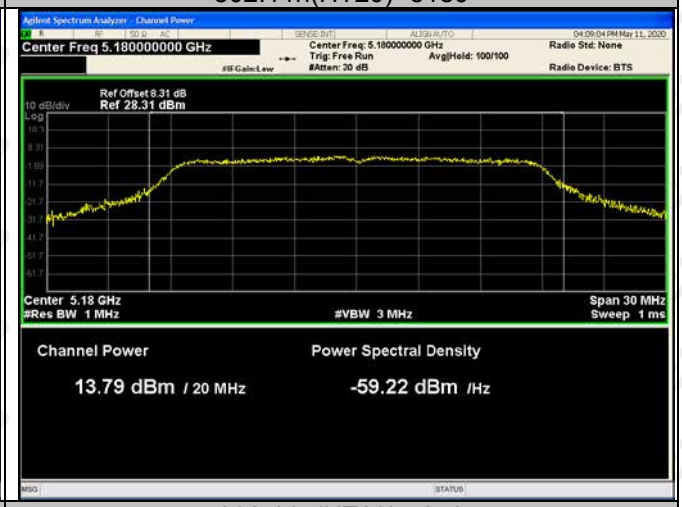


802.11n(HT20) -5180



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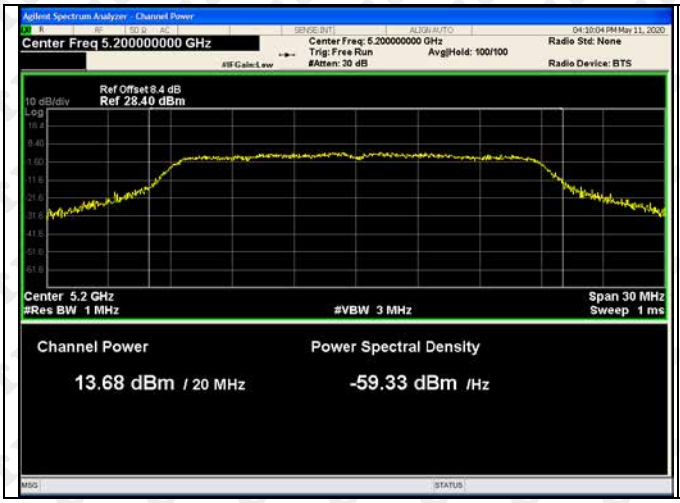

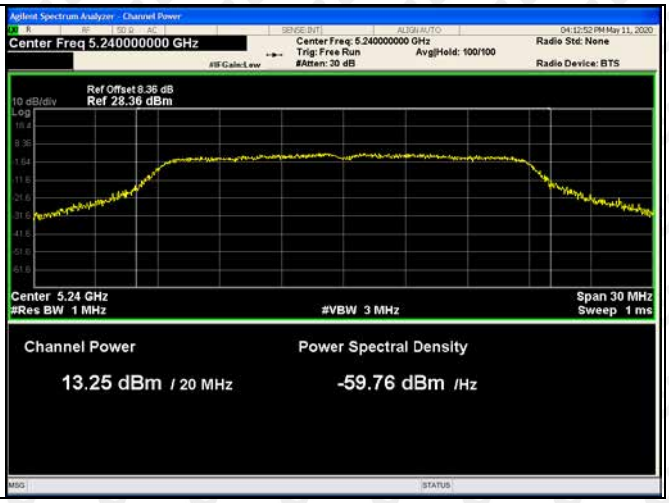

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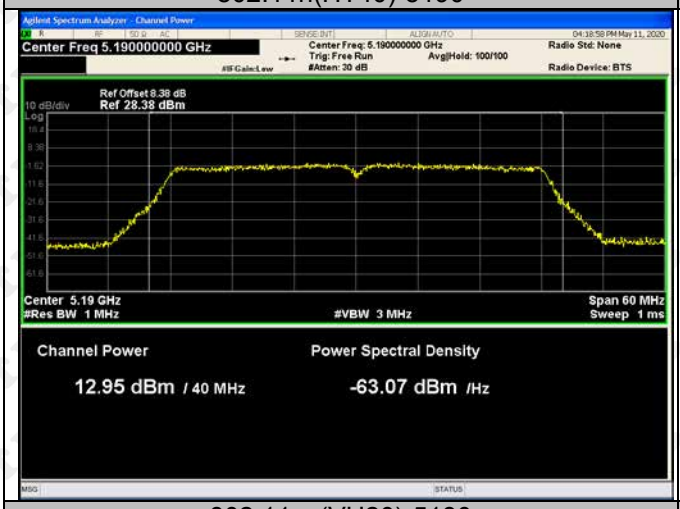

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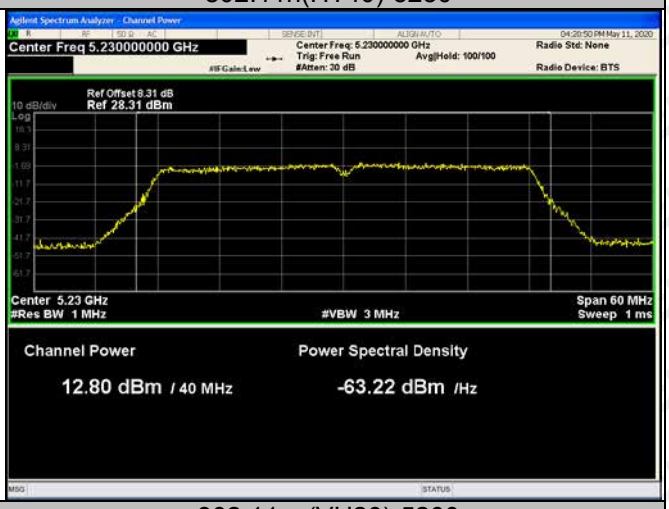

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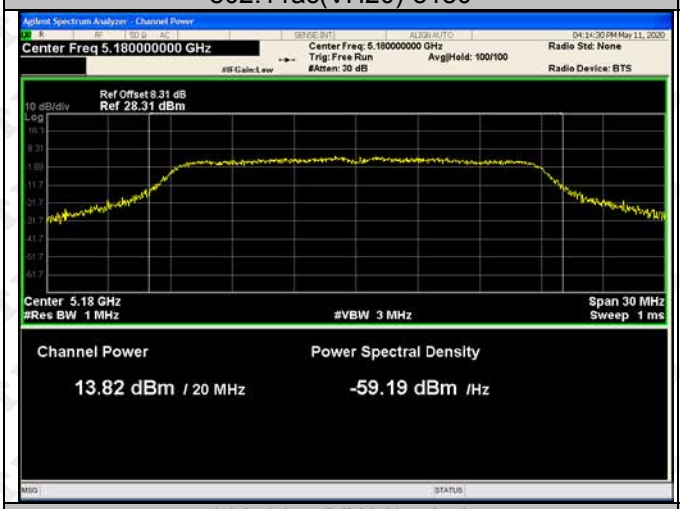

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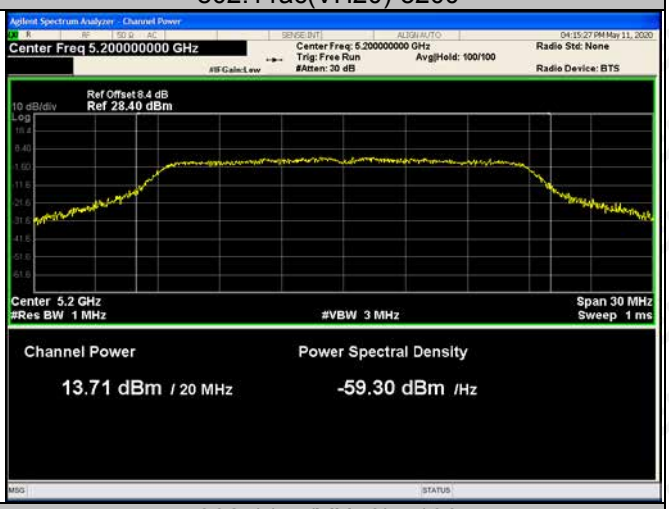

802.11ac(VH20)-5240

802.11ac(VH40)-5190