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FCC TEST REPORT

Report No:STS1905146W06

Issued for

CHINA NATIONAL HUACHEN ENERGY GROUP CO.,LTD.

3/F,Sangpu Building,No.10 Dayangfang, Beiyuan Road,
Chaoyang Dist, Beijing, 100012, China

Product Name:	Tablet
Brand Name:	Blueing
Model Name:	RK8863H
Series Model:	N/A
FCC ID:	2AS9KRK8863H
Test Standard:	FCC Part 15.407

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TEST RESULT CERTIFICATION

Applicant's Name..... : CHINA NATIONAL HUACHEN ENERGY GROUP CO.,LTD.

Address : 3/F,Sangpu Building,No.10 Dayangfang, Beiyuan Road,
Chaoyang Dist, Beijing, 100012, China

Manufacture's Name..... : CHINA NATIONAL HUACHEN ENERGY GROUP CO.,LTD.

Address : 3/F,Sangpu Building,No.10 Dayangfang, Beiyuan Road,
Chaoyang Dist, Beijing, 100012, China

Product Description

Product Name..... : Tablet

Brand Name : Blueing

Model Name : RK8863H

Series Model..... : N/A

Test Standards..... : FCC Part15.407

Test Procedure..... ANSI C63.10-2013

This device described above has been tested by STS, the test results show that the equipment under test (EUT) is in compliance with the FCC&IC requirements. And it is applicable only to the tested sample identified in the report.

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Date of Test..... :

Date (s) of performance of tests..... : 09 May 2019 ~ 14 May 2019

Date of Issue..... : 14 May 2019

Test Result..... : **Pass**

Testing Engineer :

(Chris Chen)

Technical Manager :

(Sunday Hu)

Authorized Signatory :

(Vita Li)





Table of Contents	Page
1 . SUMMARY OF TEST RESULTS	6
1.1 TEST FACTORY	7
1.2 MEASUREMENT UNCERTAINTY	7
2 . GENERAL INFORMATION	8
2.1 GENERAL DESCRIPTION OF THE EUT	8
2.2 DESCRIPTION OF THE TEST MODES	10
2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	11
2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)	11
2.5 EQUIPMENTS LIST	12
3 . EMC EMISSION TEST	13
3.1 CONDUCTED EMISSION MEASUREMENT	13
3.2 RADIATED EMISSION AND (BANDEGE) MEASUREMENT	17
4. CONDUCTED SPURIOUS EMISSIONS AND BANDEGE	26
4.1 LIMIT	26
4.2 TEST PROCEDURE	26
4.3 DEVIATION FROM STANDARD	26
4.4 TEST SETUP	27
4.5 EUT OPERATION CONDITIONS	27
4.6 TEST RESULTS	28
5. POWER SPECTRAL DENSITY TEST	36
5.1 LIMIT	36
5.2 TEST PROCEDURE	36
5.3 DEVIATION FROM STANDARD	37
5.4 TEST SETUP	37
5.5 EUT OPERATION CONDITIONS	37
5.6 TEST RESULTS	37
6. BANDWIDTH MEASUREMENT	43
6.1 EMISSION BANDWIDTH (EBW) 26 BANDWID PROCEDURES / LIMIT	43
6.2 OCCUPIED BANDWIDTH (99%) TEST APPLIED PROCEDURES / LIMIT	44
6.3 MINIMUM EMISSION BANDWIDTH(6 DB) PROCEDURES / LIMIT	51
7. MAXIMUM CONDUCTED OUTPUT POWER	58
7.1 LIMIT	58
7.2 TEST PROCEDURE	58
7.3 DEVIATION FROM STANDARD	58



Table of Contents	Page
7.4 TEST SETUP	58
7.5 TEST RESULTS	59
8. AUTOMATICALLY DISCONTINUE TRANSMISSION	60
8.1 LIMIT OF AUTOMATICALLY DISCONTINUE TRANSMISSION	60
8.2 TEST RESULT OF AUTOMATICALLY DISCONTINUE TRANSMISSION	60
9. ANTENNA REQUIREMENT	61
9.1 STANDARD REQUIREMENT	61
9.2 EUT ANTENNA	61
APPENDIX - PHOTOS OF TEST SETUP	62



**Revision History**

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	14 May 2019	STS1905146W06	ALL	Initial Issue





1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

§ 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 (2) (26 dB) / § 15.407 (e) (6 dB) / § 15.407 (a) (99%)	26dB/6dB & 99% Bandwidth	PASS
15.407(a) (1).(2).(3).(4).(5)	Maximum Conducted Output Power	PASS
15.407(b)	Peak Excursion Ratio	PASS
15.407(b) & 15.209	Radiated Emission And (bandedge Emissions) Measurement	PASS
15.407(b)7	Conducted Emission And (bandedge Emissions) Measurement	PASS
15.407(a) (1).(2).(3).(4).(5)	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 C63.10-2013



1.1 TEST FACTORY

Shenzhen STS Test Services Co., Ltd.

Add. : 1/F., Building B, Zhuoke Science Park, No.190, Chongqing Road,
Fuyong Street, Bao'an District, Shenzhen, Guangdong, China

FCC test Firm Registration Number: 625569

A2LA Certificate No.: 4338.01;

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded 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	RF output power, conducted	$\pm 0.71\text{dB}$
2	Unwanted Emissions, conducted	$\pm 0.63\text{dB}$
3	All emissions, radiated 30-200MHz	$\pm 3.43\text{dB}$
4	All emissions, radiated 200MHz-1GHz	$\pm 3.57\text{dB}$
5	All emissions, radiated >1G	$\pm 4.13\text{dB}$
6	Conducted Emission (9KHz-150KHz)	$\pm 3.18\text{dB}$
7	Conducted Emission (150KHz-30MHz)	$\pm 2.70\text{dB}$



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Product Name	Tablet	
Trade Name	Blueing	
Model Name	RK8863H	
Series Model	N/A	
Model Difference	N/A	
Product Description	The EUT is a Tablet	
	Operation Frequency:	IEEE 802.11a/n(HT20): 5.745GHz-5.825GHz IEEE 802.11n(HT40): 5.755GHz-5.795GHz
	Modulation Type:	802.11a(OFDM): BPSK,QPSK,16-QAM,64-QAM 802.11n(OFDM): BPSK,QPSK,16-QAM,64-QAM
	Antenna Designation:	See Note 3
	Max.Output Power(Conducted):	5.18 dBm
	Duty Cycle:	>98%
	More details of EUT technical specification, please refer to the User's Manual.	
Test Channel	Please refer to the Note 2.	
Adapter	Input: 100-240V, 50-60Hz, 0.35A Output: DC 5V, 2A	
Battery	Rated Voltage: 3.8V Charge Limit: 4.35V Capacity: 6000mAh	
Hardware version number	R863-3368-168-V1.0	
Software version number	Rk3368-userdebug 8.1.0 OPM6.171019.030.B1 200617 test-keys	
Connecting I/O Port(s)	Please refer to the User's Manual	

Note: For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.



1. Operation Frequency of channel	
5.745GHz-5.825GHz	
Channel	Frequency
149	5745
151	5755
153	5765
157	5785
159	5795
161	5805
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

5GHz:

For 802.11a/n(HT20)	
Channel	Freq.(MHz)
100	5500
116	5580
140	5700

For 802.11 n(HT40)	
Channel	Freq.(MHz)
151	5755
159	5795

For 802.11ac (VHT80)	
Channel	Freq.(MHz)
155	5775

2.	Ant.	Brand	Model Name	Ant Type	Connector	Gain (dBi)	NOTE
	1	Blueing	RK8863H	PIFA	N/A	0 dBi	WLAN Ant.



2.2 DESCRIPTION OF THE TEST MODES

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possibly 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 CH149&CH157&CH165	6 Mbps
Mode 2	TX IEEE 802.11n HT20 CH149&CH157&CH165	MCS 0
Mode 3	TX IEEE 802.11n HT40 CH151&CH159	MCS 0

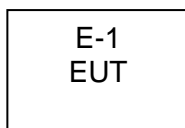
- Note: (1) The measurements are performed at the highest, middle, lowest available channels.
(2) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported
(3) We have tested for all available U.S. voltage and frequencies (For 120V, 50/60Hz and 240V, 50/60Hz) for which the device is capable of operation.

AC Conducted Emission

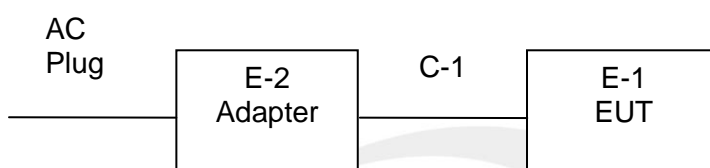
Test Case	
AC Conducted Emission	Mode 3: Keeping TX + WLAN Link

2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Radiated Spurious Emission Test



Conducted Emission Test



2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

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.

Necessary accessories

Item	Equipment	Mfr/Brand	Model/Type No.	Serial No.	Note
E-2	Adapter	MINGXIN	JZB310-050200UU	N/A	N/A
C-1	DC Cable	N/A	100cm	N/A	N/A

Support units

Item	Equipment	Mfr/Brand	Model/Type No.	Serial No.	Note
N/A	N/A	N/A	N/A	N/A	N/A

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- (3) “YES” is means “shielded” “with core”; “NO” is means “unshielded” “without core”.



2.5 EQUIPMENTS LIST

Radiation Test equipment

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
EMI Test Receiver	R&S	ESCI	101427	2018.10.13	2019.10.12
Signal Analyzer	Agilent	N9020A	MY51110105	2019.03.02	2020.03.01
Active loop Antenna	ZHINAN	ZN30900C	16035	2018.03.11	2021.03.10
Bilog Antenna	TESEQ	CBL6111D	34678	2017.11.02	2020.11.1
Horn Antenna	SCHWARZBECK	BBHA 9120D(1201)	9120D-1343	2018.10.19	2021.10.18
SHF-EHF Horn Antenna (18G-40GHz)	A-INFO	LB-180400-KF	J211020657	2018.03.11	2021.03.10
Pre-Amplifier (0.1M-3GHz)	EM	EM330	060665	2018.10.13	2019.10.12
Pre-Amplifier (1G-18GHz)	SKET	LNPA-01018G-4 5	SK2018080901	2018.10.13	2019.10.12
Temperature & Humidity	HH660	Mieo	N/A	2018.10.11	2019.10.10
turn table	EM	SC100_1	60531	N/A	N/A
Antenna mast	EM	SC100	N/A	N/A	N/A

Conduction Test equipment

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Test Receiver	R&S	ESCI	101427	2018.10.13	2019.10.12
LISN	R&S	ENV216	101242	2018.10.11	2019.10.10
LISN	EMCO	3810/2NM	23625	2018.10.11	2019.10.10
Temperature & Humidity	HH660	Mieo	N/A	2018.10.11	2019.10.10

RF Connected Test

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
USB RF power sensor	DARE	RPR3006W	15I00041SNO03	2018.10.13	2019.10.12
Signal Analyzer	Agilent	N9020A	MY49100060	2018.10.13	2019.10.12
Temperature & Humidity	HH660	Mieo	N/A	2018.10.11	2019.10.10



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

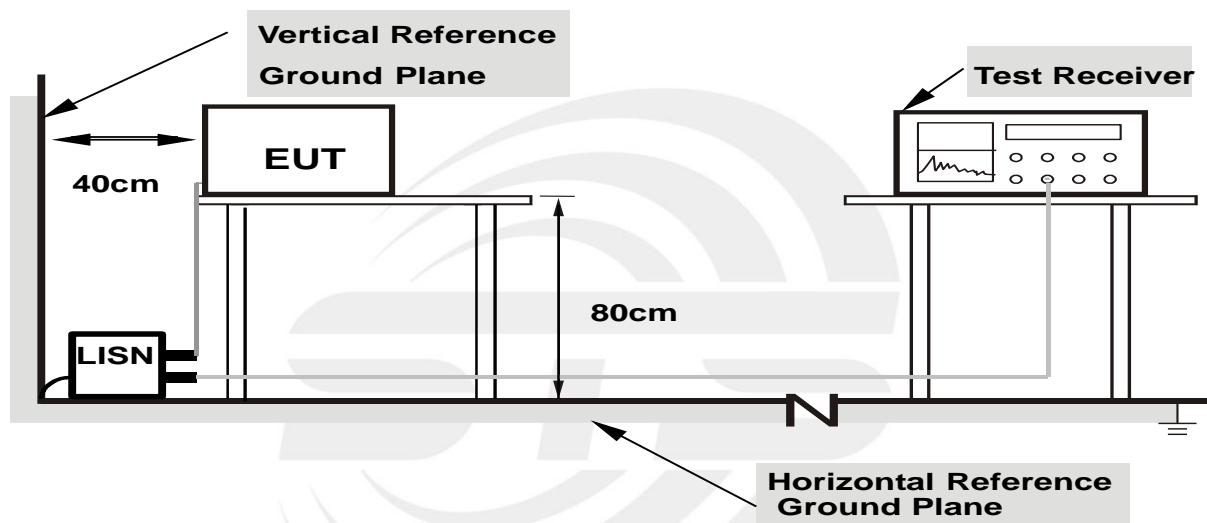
3.1.2 TEST PROCEDURE

- The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- 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.
- 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.
- LISN at least 80 cm from nearest part of EUT chassis.
- 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



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

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

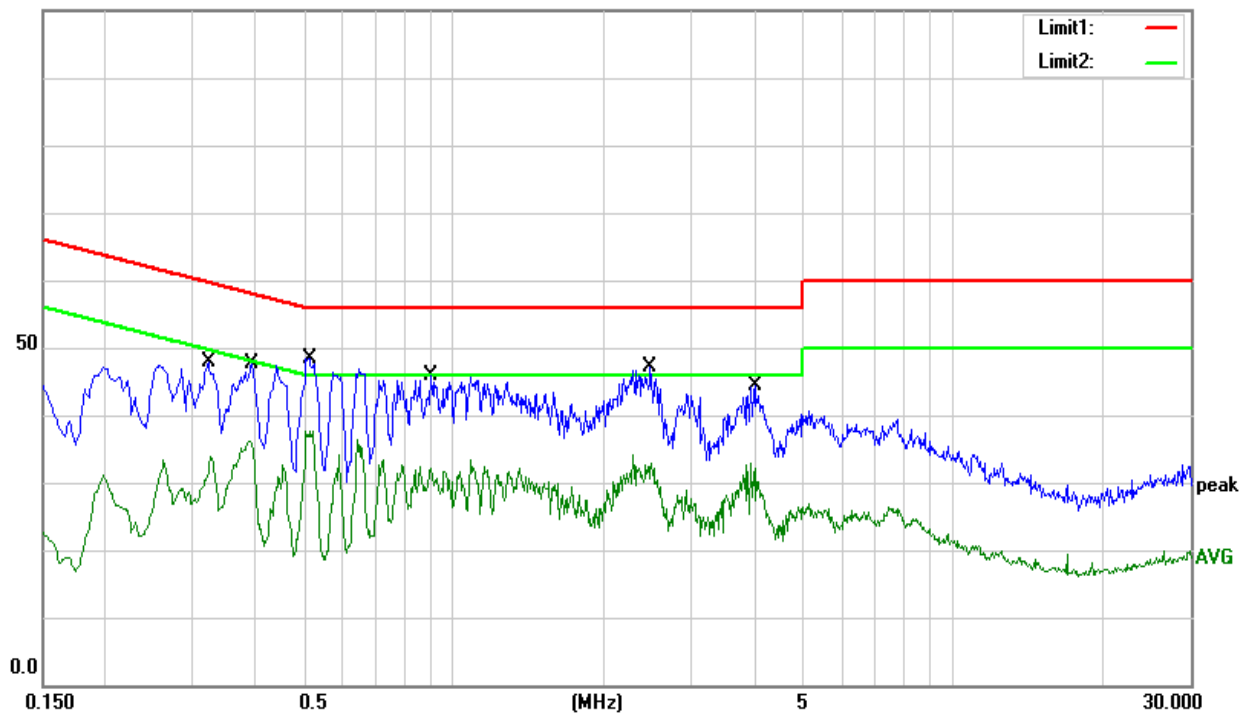
Temperature:	23.7 °C	Relative Humidity:	67%
Test Voltage:	AC 120V/60Hz	Phase:	L
Test Mode :	Mode 4		

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
0.3220	27.27	20.71	47.98	59.66	-11.68	QP
0.3220	13.25	20.71	33.96	49.66	-15.70	AVG
0.3940	27.08	20.54	47.62	57.98	-10.36	QP
0.3940	15.64	20.54	36.18	47.98	-11.80	AVG
0.5140	28.07	20.42	48.49	56.00	-7.51	QP
0.5140	17.28	20.42	37.70	46.00	-8.30	AVG
0.9020	25.59	20.20	45.79	56.00	-10.21	QP
0.9020	13.07	20.20	33.27	46.00	-12.73	AVG
2.4860	26.97	20.11	47.08	56.00	-8.92	QP
2.4860	11.96	20.11	32.07	46.00	-13.93	AVG
4.0100	24.31	20.06	44.37	56.00	-11.63	QP
4.0100	10.08	20.06	30.14	46.00	-15.86	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Margin = Result (Result = Reading + Factor) – Limit

100.0 dBuV





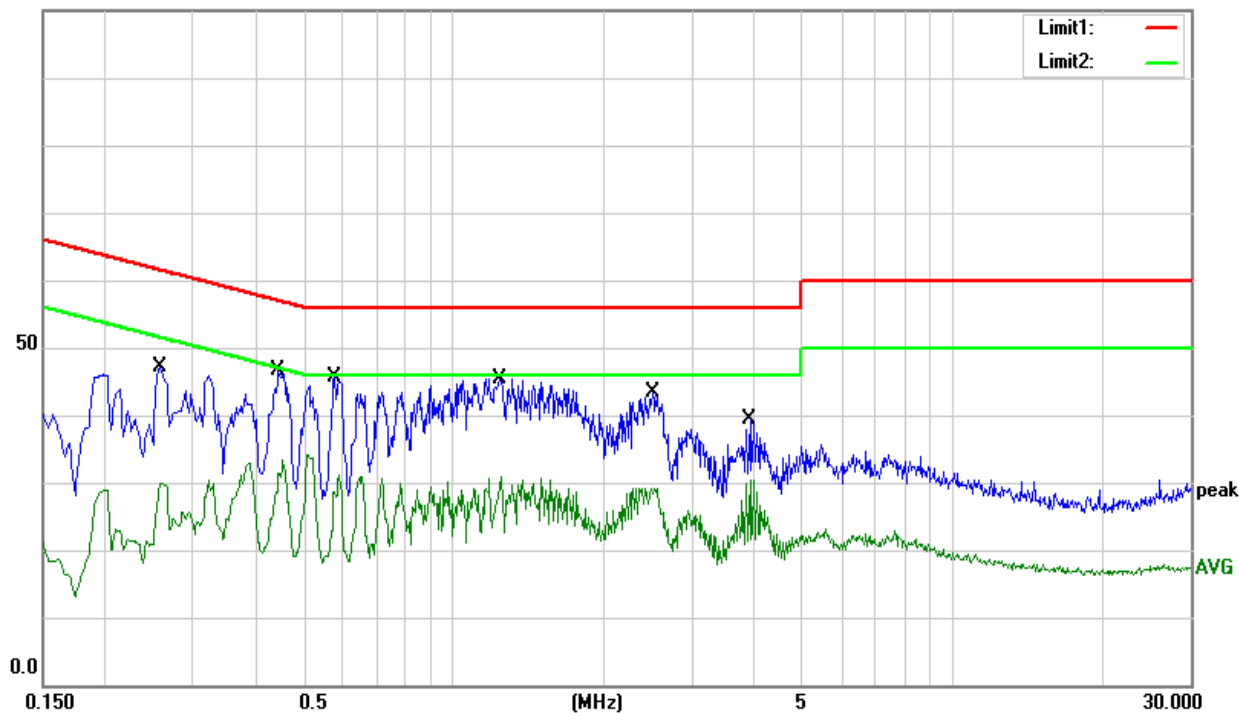
Temperature:	23.7 °C	Relative Humidity:	67%
Test Voltage:	AC 120V/60Hz	Phase:	N
Test Mode	Mode 4		

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
0.2580	26.45	20.58	47.03	61.50	-14.47	QP
0.2580	9.74	20.58	30.32	51.50	-21.18	AVG
0.4460	26.13	20.48	46.61	56.95	-10.34	QP
0.4460	12.90	20.48	33.38	46.95	-13.57	AVG
0.5780	25.26	20.37	45.63	56.00	-10.37	QP
0.5780	10.67	20.37	31.04	46.00	-14.96	AVG
1.2420	25.26	20.16	45.42	56.00	-10.58	QP
1.2420	10.64	20.16	30.80	46.00	-15.20	AVG
2.5020	23.35	20.12	43.47	56.00	-12.53	QP
2.5020	9.06	20.12	29.18	46.00	-16.82	AVG
3.9260	19.22	20.06	39.28	56.00	-16.72	QP
3.9260	10.40	20.06	30.46	46.00	-15.54	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Margin = Result (Result = Reading + Factor) - Limit

100.0 dBuV





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 (a); limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (microvolt/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	68.2	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).

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

- The measuring distance of at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- The EUT was placed on the top of a rotating table 0.8 meters(above 1GHz is 1.5 m) above the ground at a 3 meter anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- 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 polarizations of the antenna are set to make the measurement
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

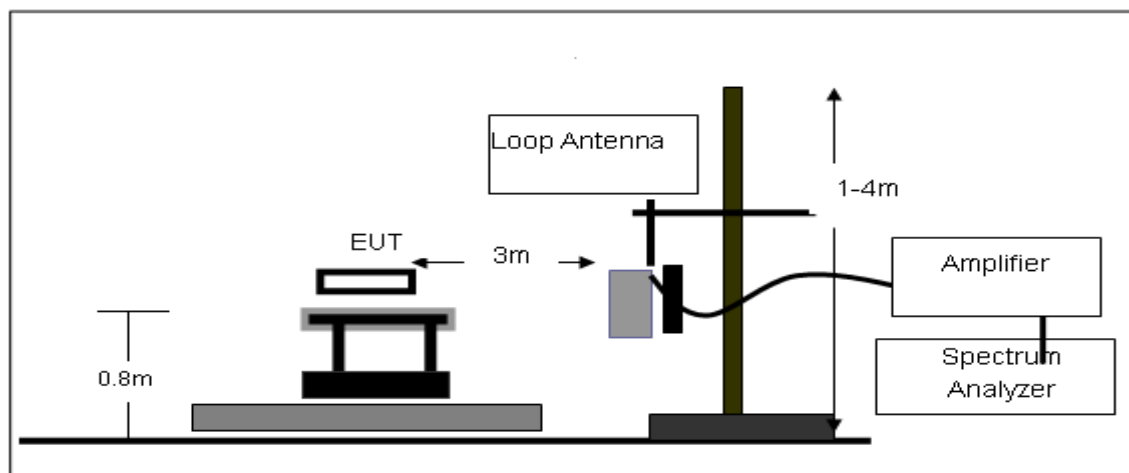
Both horizontal and vertical antenna polarities were tested and performed test to three orthogonal axis. The worst case emissions were reported

3.2.3 DEVIATION FROM TEST STANDARD

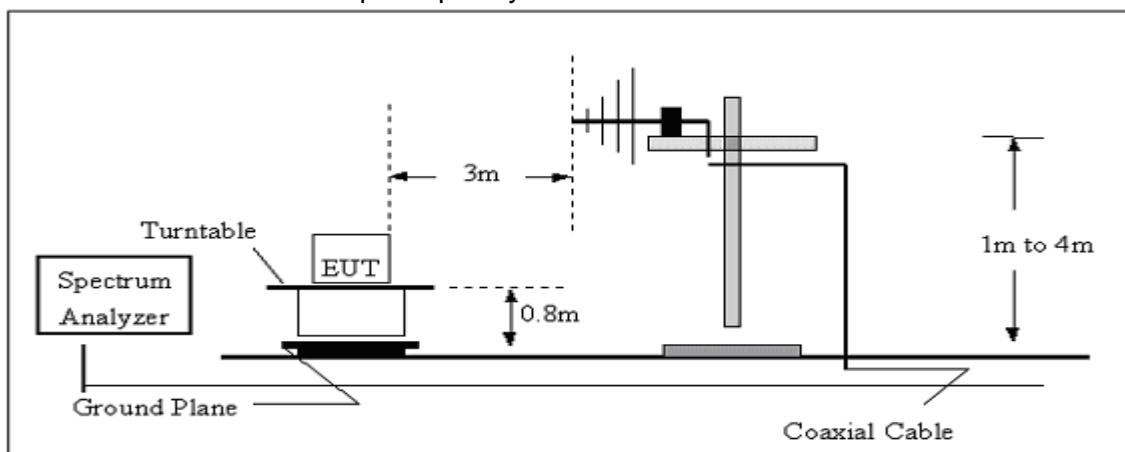
No deviation

3.2.4 TEST SETUP

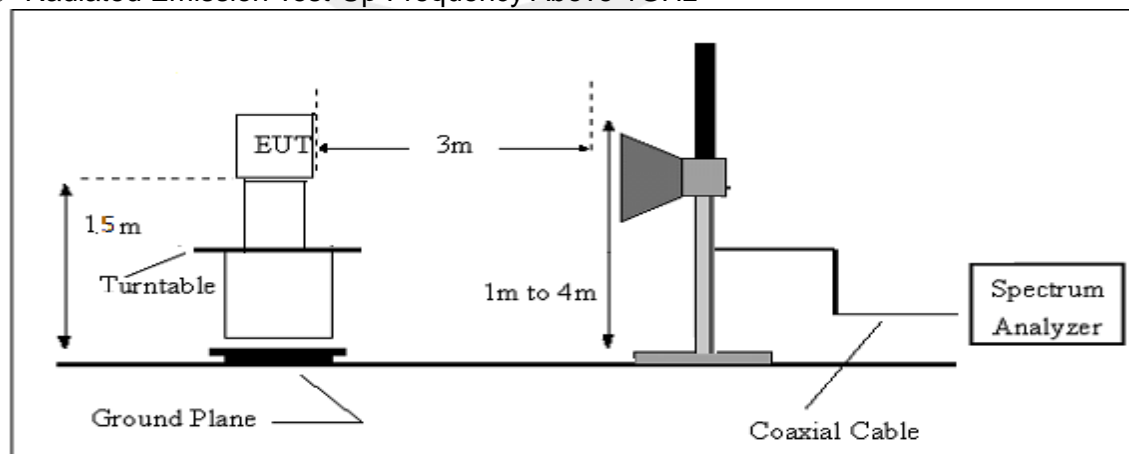
(A) Radiated Emission Test-Up Frequency Below 30MHz



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



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



3.2.5 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.



3.2.6 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

$$\text{Factor} = \text{AF} + \text{CL} - \text{AG}$$

3.2.7 TEST RESULTS (Between 9KHz – 30 MHz)

Temperature:	20.5 °C	Relative Humidity:	64%
Test Voltage :	DC 3.8V	Polarization :	--
Test Mode :	TX Mode		

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

Note:

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

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

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



3.2.8 TEST RESULTS (Between 30MHz – 1GHz)

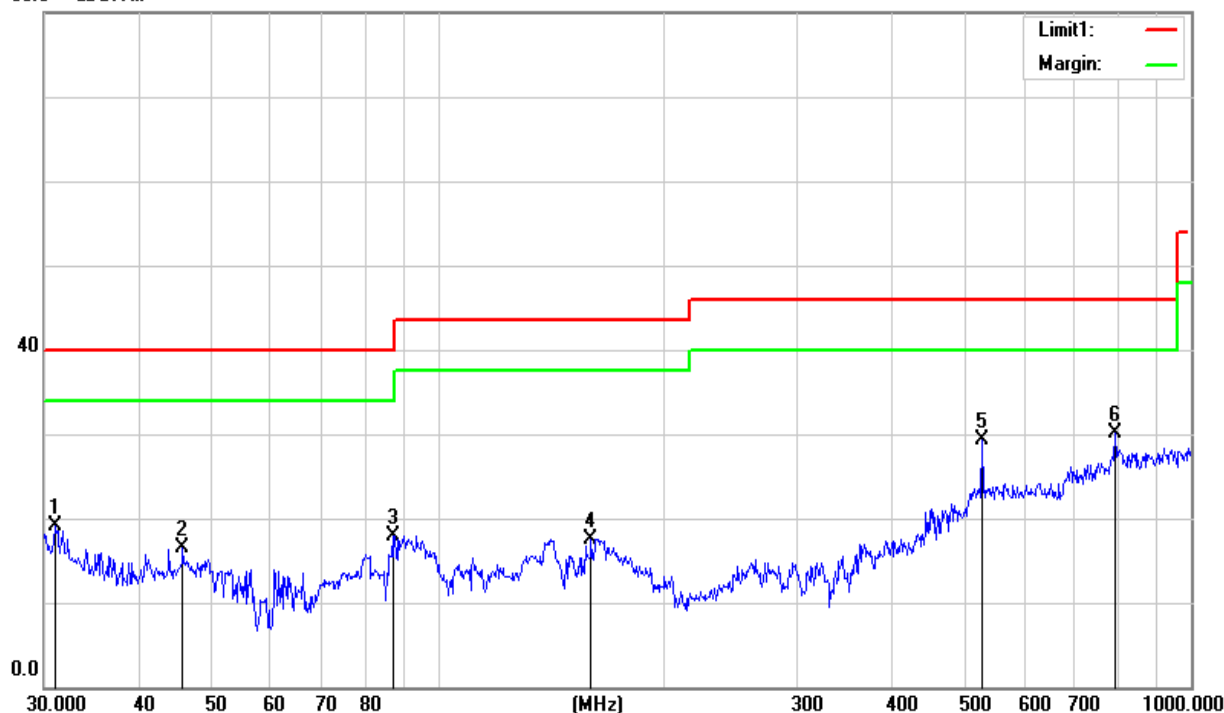
Temperature	20.5 °C	Relative Humidity:	64%
Test Voltage	DC 3.8V	Polarization	Horizontal
Test Mode	Mode 1-3(Mode 1 worst mode)		

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
31.0701	30.76	-11.74	19.02	40.00	-20.98	QP
45.8551	35.87	-19.34	16.53	40.00	-23.47	QP
87.1115	38.85	-20.91	17.94	40.00	-22.06	QP
159.7844	36.07	-18.49	17.58	43.50	-25.92	QP
528.2458	37.38	-8.09	29.29	46.00	-16.71	QP
793.3960	33.52	-3.34	30.18	46.00	-15.82	QP

Remark:

1. Margin = Result (Result = Reading + Factor) – Limit

80.0 dBuV/m





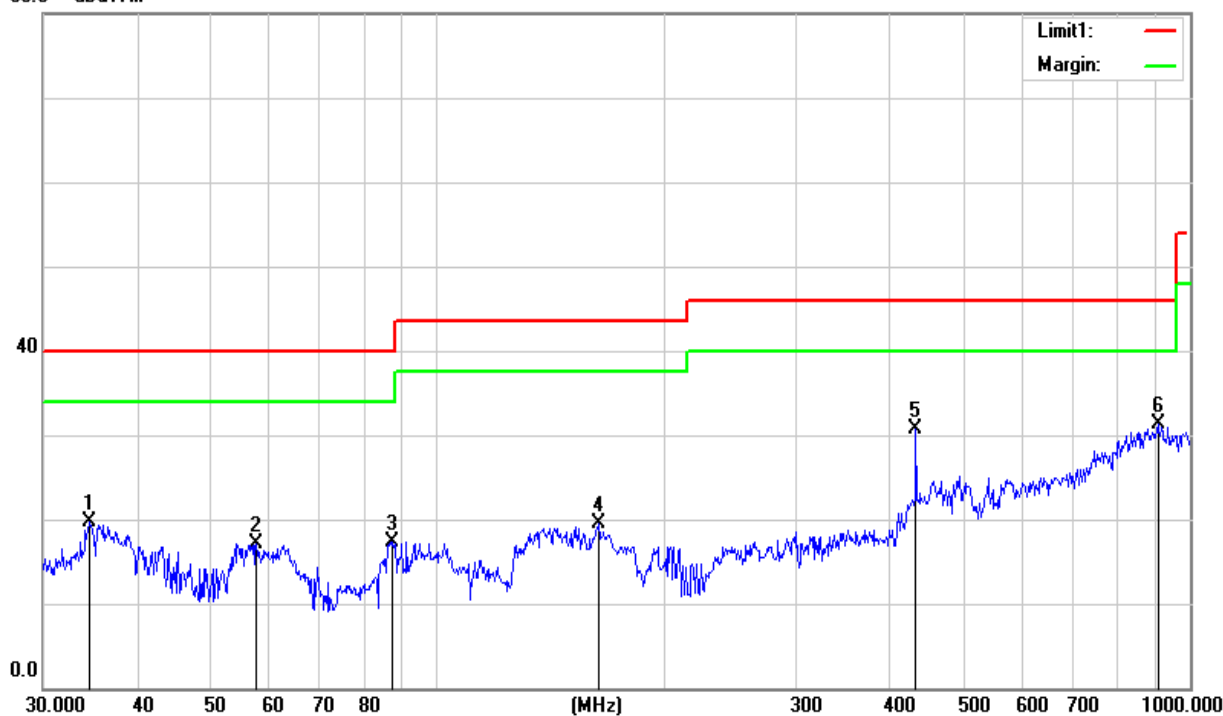
Temperature	20.5 °C	Relative Humidity:	64%
Test Voltage	DC 3.8V	Polarization	Vertical
Test Mode	Mode 1-3(Mode 1 worst mode)		

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
34.6385	33.21	-13.57	19.64	40.00	-20.36	QP
57.5938	40.81	-23.65	17.16	40.00	-22.84	QP
87.4175	38.23	-20.84	17.39	40.00	-22.61	QP
164.3300	38.27	-18.86	19.41	43.50	-24.09	QP
432.5457	41.55	-10.89	30.66	46.00	-15.34	QP
906.4823	33.39	-2.05	31.34	46.00	-14.66	QP

Remark:

1. Margin = Result (Result = Reading + Factor) - Limit

80.0 dBuV/m



**3.2.9 TEST RESULTS (Above 1000 MHz)****Band IV(5.725-5.850) GHz**

Band IV(5.725-5.85) GHz										
Frequency (MHz)	Reading (dBuV)	Amplifier (dB)	Loss (dB)	Antenna Factor (dB/m)	Corrected Factor (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
Low Channel (802.11 a/ 5745 MHz)										
3247.49	45.24	44.70	6.70	28.20	-9.80	35.44	68.20	-32.76	PK	Vertical
3247.49	41.40	44.70	6.70	28.20	-9.80	31.60	54.00	-22.40	AV	Vertical
3263.50	44.30	44.70	6.70	28.20	-9.80	34.50	68.20	-33.70	PK	Horizontal
3263.50	40.82	44.70	6.70	28.20	-9.80	31.02	54.00	-22.98	AV	Horizontal
3998.00	39.02	44.20	7.90	29.70	-6.60	32.42	68.20	-35.78	PK	Vertical
3998.00	36.21	44.20	7.90	29.70	-6.60	29.61	54.00	-24.39	AV	Vertical
3983.23	39.41	44.20	7.90	29.70	-6.60	32.81	68.20	-35.39	PK	Horizontal
3983.23	35.98	44.20	7.90	29.70	-6.60	29.38	54.00	-24.62	AV	Horizontal
7216.65	36.49	43.50	11.40	35.50	3.40	39.89	68.20	-28.31	PK	Vertical
7216.65	33.59	43.50	11.40	35.50	3.40	36.99	54.00	-17.01	AV	Vertical
7226.55	37.63	43.50	11.40	35.50	3.40	41.03	68.20	-27.17	PK	Horizontal
7226.55	34.31	43.50	11.40	35.50	3.40	37.71	54.00	-16.29	AV	Horizontal
10517.97	39.56	44.50	13.90	38.80	8.20	47.76	68.20	-20.44	PK	Vertical
10517.97	36.23	44.50	13.90	38.80	8.20	44.43	54.00	-9.57	AV	Vertical
10518.54	39.47	44.50	13.90	38.80	8.20	47.67	68.20	-20.53	PK	Horizontal
10518.54	36.69	44.50	13.90	38.80	8.20	44.89	54.00	-9.11	AV	Horizontal
11490.34	33.98	43.60	14.30	39.50	10.20	44.18	68.20	-24.02	PK	Vertical
11490.34	29.91	43.60	14.30	39.50	10.20	40.11	54.00	-13.89	AV	Vertical
11490.33	32.90	43.60	14.30	39.50	10.20	43.10	68.20	-25.10	PK	Horizontal
11490.33	30.86	43.60	14.30	39.50	10.20	41.06	54.00	-12.94	AV	Horizontal
13284.10	32.02	42.60	15.90	38.90	12.20	44.22	68.20	-23.98	PK	Vertical
13284.10	28.96	42.60	15.90	38.90	12.20	41.16	54.00	-12.84	AV	Vertical
13299.83	32.78	42.60	15.90	38.90	12.20	44.98	68.20	-23.22	PK	Horizontal
13299.83	28.58	42.60	15.90	38.90	12.20	40.78	54.00	-13.22	AV	Horizontal



Mid Channel (802.11 a/ 5785 MHz)										
3252.09	43.97	44.70	6.70	28.20	-9.80	34.17	68.20	-34.03	PK	Vertical
3252.09	41.72	44.70	6.70	28.20	-9.80	31.92	54.00	-22.08	AV	Vertical
3261.60	43.99	44.70	6.70	28.20	-9.80	34.19	68.20	-34.01	PK	Horizontal
3261.60	41.53	44.70	6.70	28.20	-9.80	31.73	54.00	-22.27	AV	Horizontal
3995.73	39.03	44.20	7.90	29.70	-6.60	32.43	68.20	-35.77	PK	Vertical
3995.73	36.76	44.20	7.90	29.70	-6.60	30.16	54.00	-23.84	AV	Vertical
3993.26	39.51	44.20	7.90	29.70	-6.60	32.91	68.20	-35.29	PK	Horizontal
3993.26	36.23	44.20	7.90	29.70	-6.60	29.63	54.00	-24.37	AV	Horizontal
7224.48	36.74	43.50	11.40	35.50	3.40	40.14	68.20	-28.06	PK	Vertical
7224.48	34.20	43.50	11.40	35.50	3.40	37.60	54.00	-16.40	AV	Vertical
7224.95	36.56	43.50	11.40	35.50	3.40	39.96	68.20	-28.24	PK	Horizontal
7224.95	34.78	43.50	11.40	35.50	3.40	38.18	54.00	-15.82	AV	Horizontal
10583.82	39.75	44.50	13.80	38.80	8.10	47.85	68.20	-20.35	PK	Vertical
10583.82	36.49	44.50	13.80	38.80	8.10	44.59	54.00	-9.41	AV	Vertical
10586.53	38.99	44.50	13.80	38.80	8.10	47.09	68.20	-21.11	PK	Horizontal
10586.53	36.19	44.50	13.80	38.80	8.10	44.29	54.00	-9.71	AV	Horizontal
11570.27	33.84	43.60	14.30	39.50	10.20	44.04	68.20	-24.16	PK	Vertical
11570.27	30.23	43.60	14.30	39.50	10.20	40.43	54.00	-13.57	AV	Vertical
11570.23	33.74	43.60	14.30	39.50	10.20	43.94	68.20	-24.26	PK	Horizontal
11570.23	30.69	43.60	14.30	39.50	10.20	40.89	54.00	-13.11	AV	Horizontal
13284.27	31.62	42.60	15.90	38.90	12.20	43.82	68.20	-24.38	PK	Vertical
13284.27	29.93	42.60	15.90	38.90	12.20	42.13	54.00	-11.87	AV	Vertical
13288.81	32.48	42.60	15.90	38.90	12.20	44.68	68.20	-23.52	PK	Horizontal
13288.81	28.91	42.60	15.90	38.90	12.20	41.11	54.00	-12.89	AV	Horizontal



Mid Channel (802.11 a/ 5825 MHz)										
3257.19	44.54	44.70	6.70	28.20	-9.80	34.74	68.20	-33.46	PK	Vertical
3257.19	41.82	44.70	6.70	28.20	-9.80	32.02	54.00	-21.98	AV	Vertical
3261.45	44.16	44.70	6.70	28.20	-9.80	34.36	68.20	-33.84	PK	Horizontal
3261.45	41.58	44.70	6.70	28.20	-9.80	31.78	54.00	-22.22	AV	Horizontal
3982.36	39.22	44.20	7.90	29.70	-6.60	32.62	68.20	-35.58	PK	Vertical
3982.36	35.88	44.20	7.90	29.70	-6.60	29.28	54.00	-24.72	AV	Vertical
3987.09	40.11	44.20	7.90	29.70	-6.60	33.51	68.20	-34.69	PK	Horizontal
3987.09	36.79	44.20	7.90	29.70	-6.60	30.19	54.00	-23.81	AV	Horizontal
7221.31	37.72	43.50	11.40	35.50	3.40	41.12	68.20	-27.08	PK	Vertical
7221.31	33.94	43.50	11.40	35.50	3.40	37.34	54.00	-16.66	AV	Vertical
7221.90	36.96	43.50	11.40	35.50	3.40	40.36	68.20	-27.84	PK	Horizontal
7221.90	34.92	43.50	11.40	35.50	3.40	38.32	54.00	-15.68	AV	Horizontal
10623.87	39.26	44.50	13.80	38.80	8.10	47.36	68.20	-20.84	PK	Vertical
10623.87	36.89	44.50	13.80	38.80	8.10	44.99	54.00	-9.01	AV	Vertical
10640.33	39.10	44.50	13.80	38.80	8.10	47.20	68.20	-21.00	PK	Horizontal
10640.33	36.65	44.50	13.80	38.80	8.10	44.75	54.00	-9.25	AV	Horizontal
11649.94	32.94	43.60	14.30	39.50	10.20	43.14	68.20	-25.06	PK	Vertical
11649.94	31.14	43.60	14.30	39.50	10.20	41.34	54.00	-12.66	AV	Vertical
11650.16	34.10	43.60	14.30	39.50	10.20	44.30	68.20	-23.90	PK	Horizontal
11650.16	30.91	43.60	14.30	39.50	10.20	41.11	54.00	-12.89	AV	Horizontal
13296.22	31.82	42.70	18.00	37.10	12.40	44.22	68.20	-23.98	PK	Vertical
13296.22	28.90	42.70	18.00	37.10	12.40	41.30	54.00	-12.70	AV	Vertical
13287.25	32.30	42.70	18.00	37.10	12.40	44.70	68.20	-23.50	PK	Horizontal
13287.25	28.75	42.70	18.00	37.10	12.40	41.15	54.00	-12.85	AV	Horizontal

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Scan with 802.11a, 802.11n (HT-20), 802.11n (HT-40), the worst case is 802.11a.
3. The frequency emission of peak points that did not show above the forms are at least 20dB below the limit, the frequency emission is mainly from the environment noise.

3.2.10 Band Edge**Band IV 5725-5850 MHz**

Note: The main frequency is too far away from the restrict band and does not require testing.



4. CONDUCTED SPURIOUS EMISSIONS AND BANDEDGE

4.1 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:
 - (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.

4.2 TEST PROCEDURE

Spectrum Parameter	Setting
Detector	Peak
Start/Stop Frequency	30 MHz to 10th carrier harmonic
RB / VB (emission in restricted band)	1000 KHz/3000 KHz
Trace-Mode:	Max hold

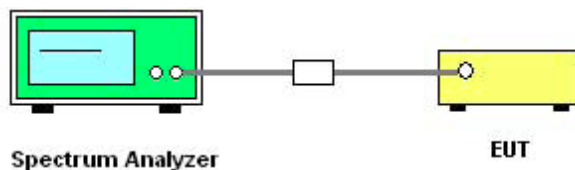
For Band edge

Spectrum Parameter	Setting
Detector	Peak
Start/Stop Frequency	Lower Band Edge: 5700 to 5725 MHz Upper Band Edge: 5850 to 5870 MHz
RB / VB (emission in restricted band)	1000 KHz/3000 KHz
Trace-Mode:	Max hold

4.3 DEVIATION FROM STANDARD

No deviation.

4.4 TEST SETUP



The EUT which is powered by the Battery, is coupled to the Spectrum Analyzer; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading.

Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 1000 kHz. In order to make an accurate measurement, set the span greater than RBW.

4.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.





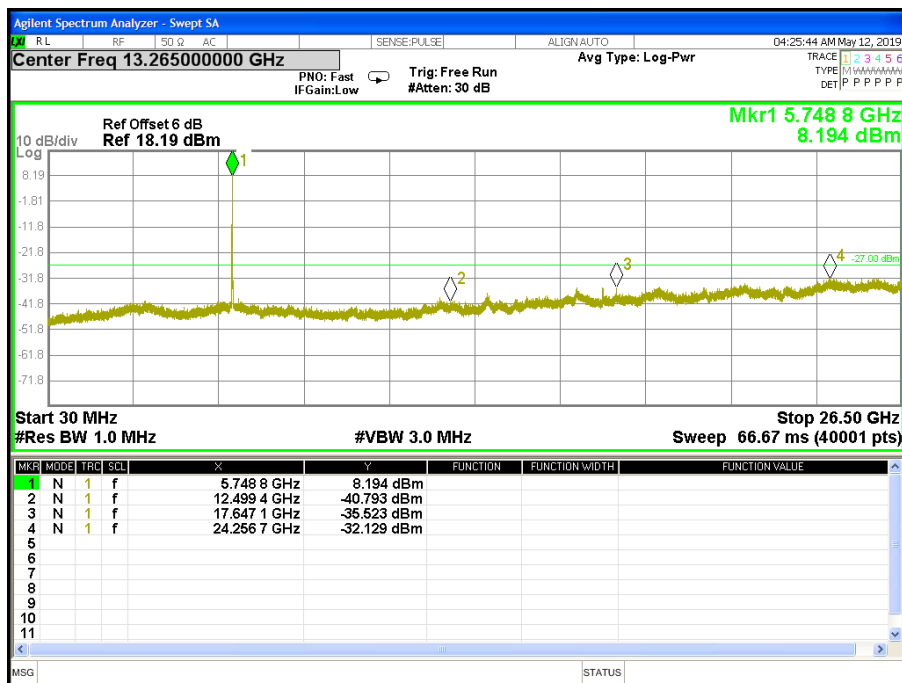
4.6 TEST RESULTS

Note:

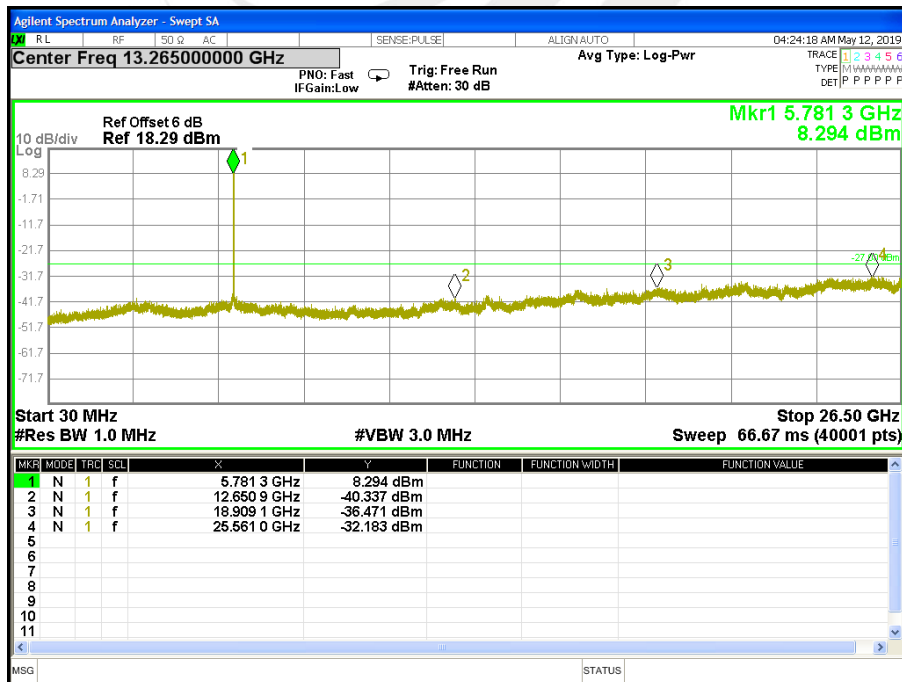
1. The test results contain power + antenna Gain
2. Only floor noise for frequency above 26.5GHz.

Band IV (5.725-5.85GHz) 802.11a

TX Spurious Emissions 802.11a Mode CH 149

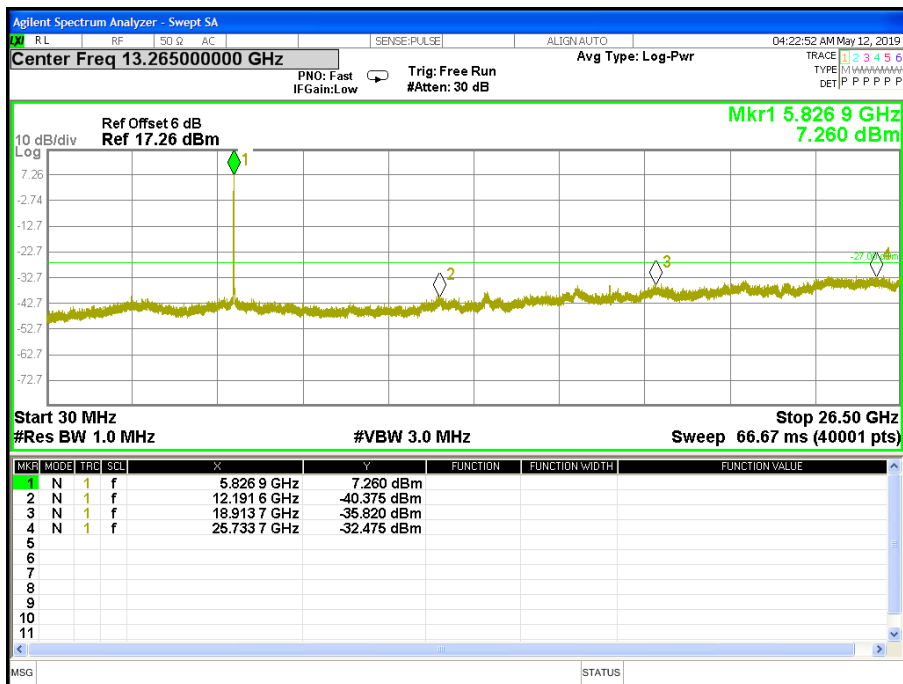


TX Spurious Emissions 802.11a Mode CH 157





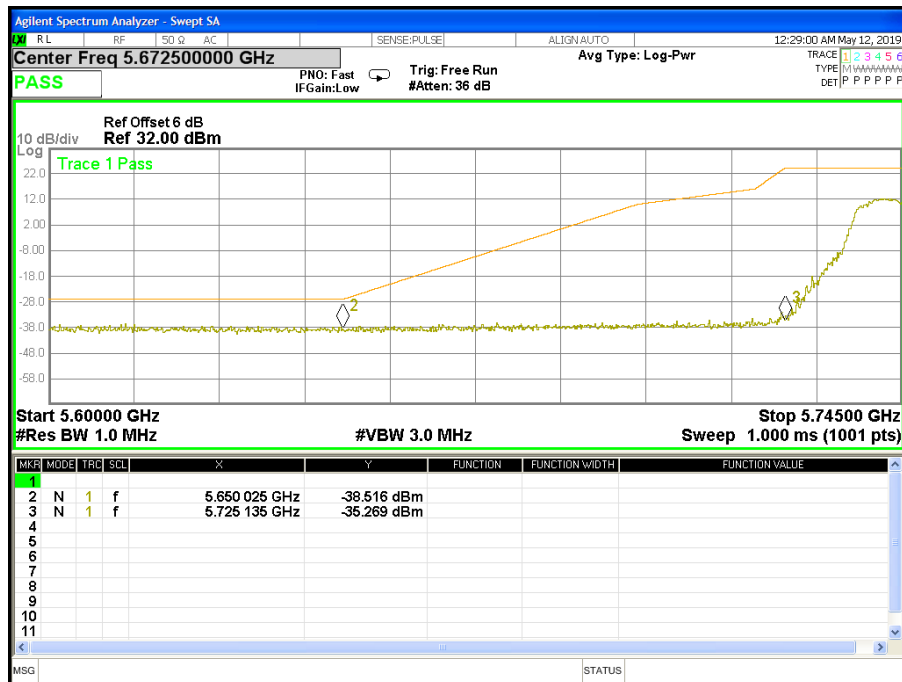
TX Spurious Emissions 802.11a Mode CH 165



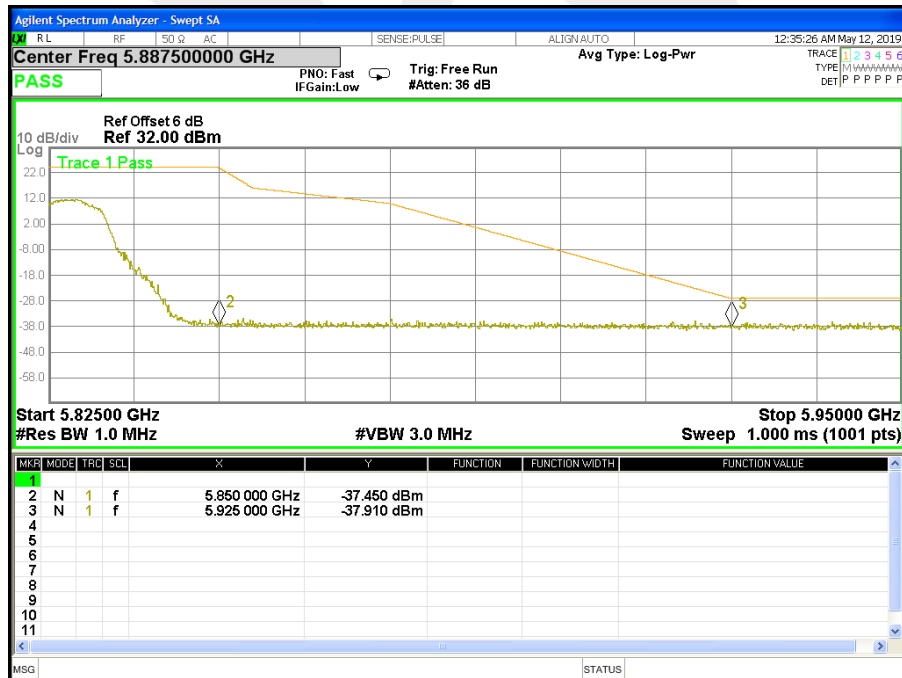


Band edge

TX Band edge 802.11a Mode CH 149



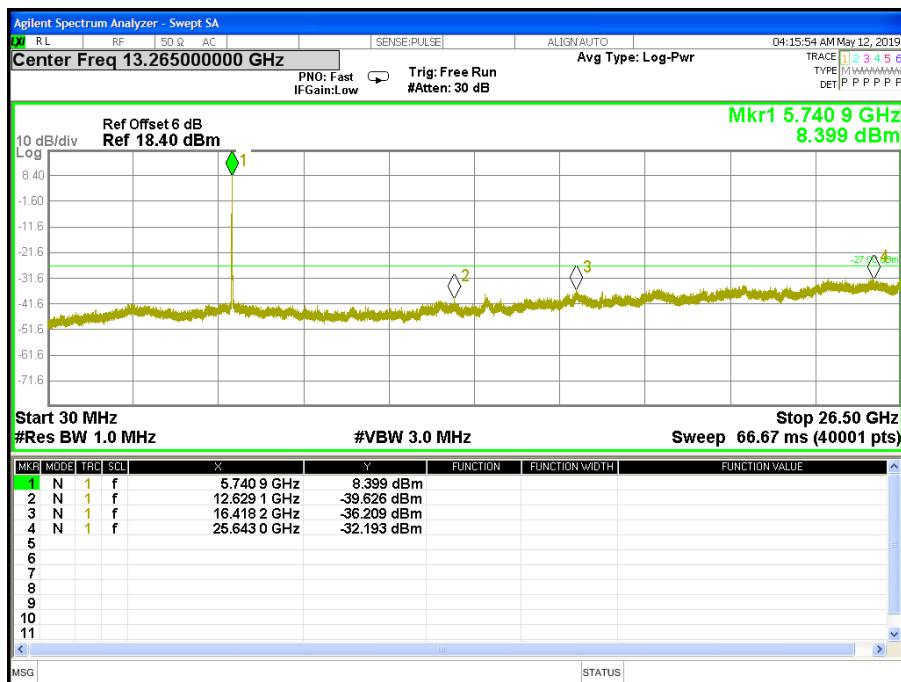
TX Band edge 802.11a Mode CH 165



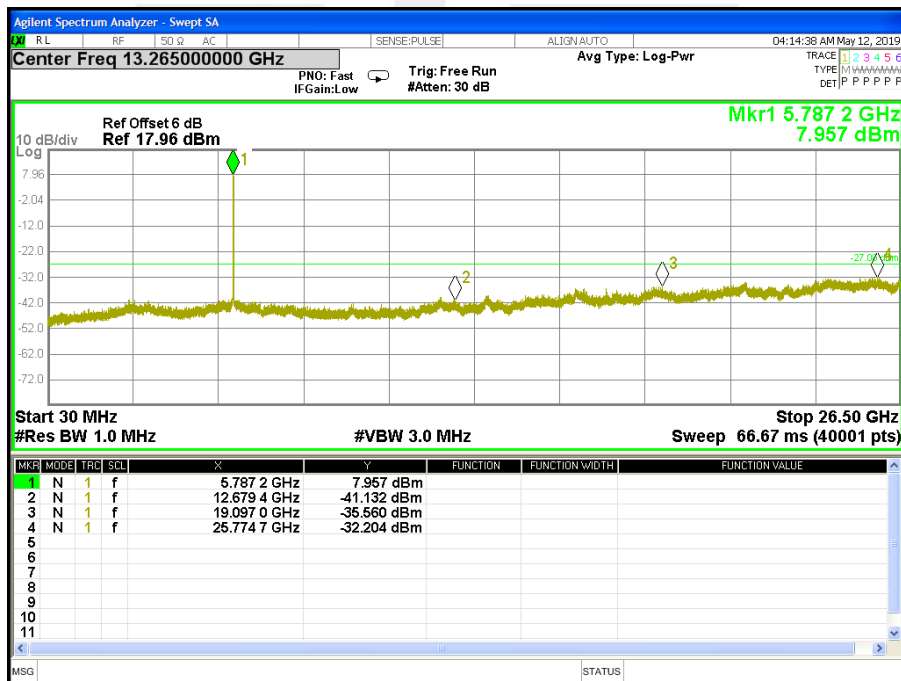


Band IV (5.725-5.85GHz) 802.11n(HT20)

TX Spurious Emissions 802.11n(HT20) Mode CH 149

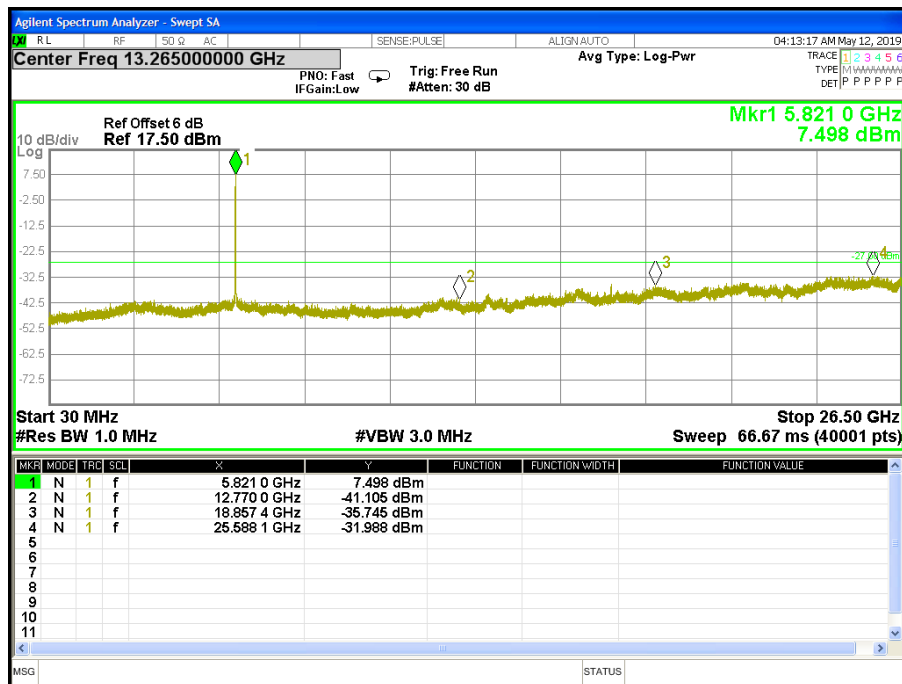


TX Spurious Emissions 802.11n(HT20) Mode CH 157





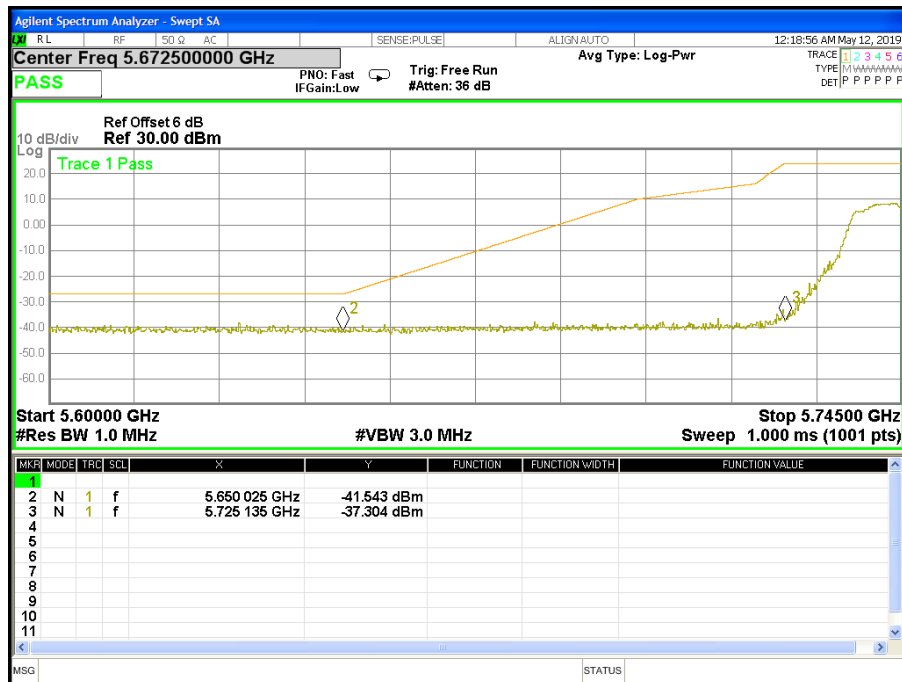
TX Spurious Emissions 802.11n(HT20) Mode CH 165



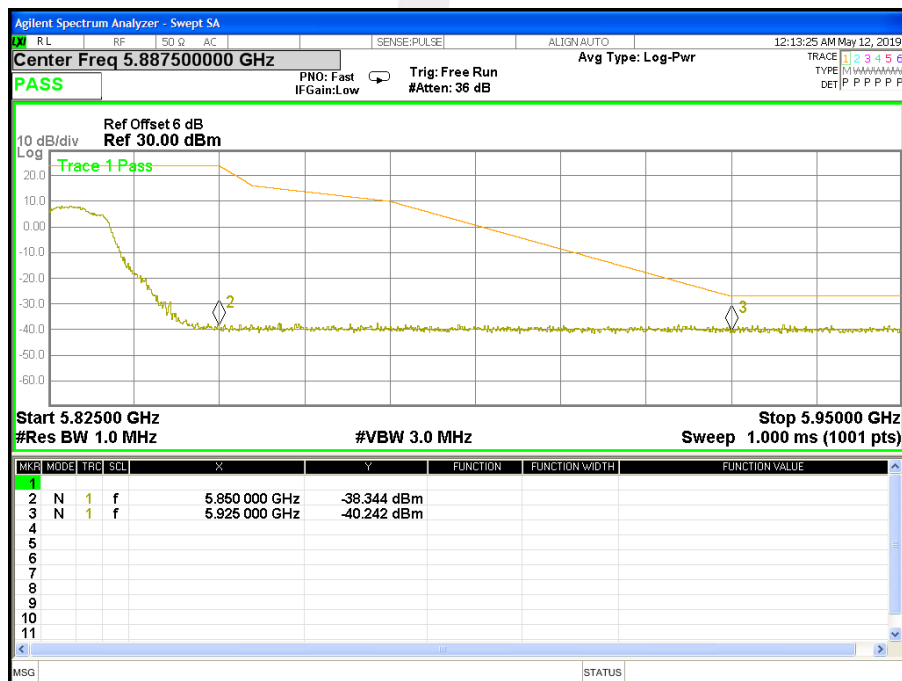


Band edge

TX Band edge 802.11n(HT20) Mode CH 149



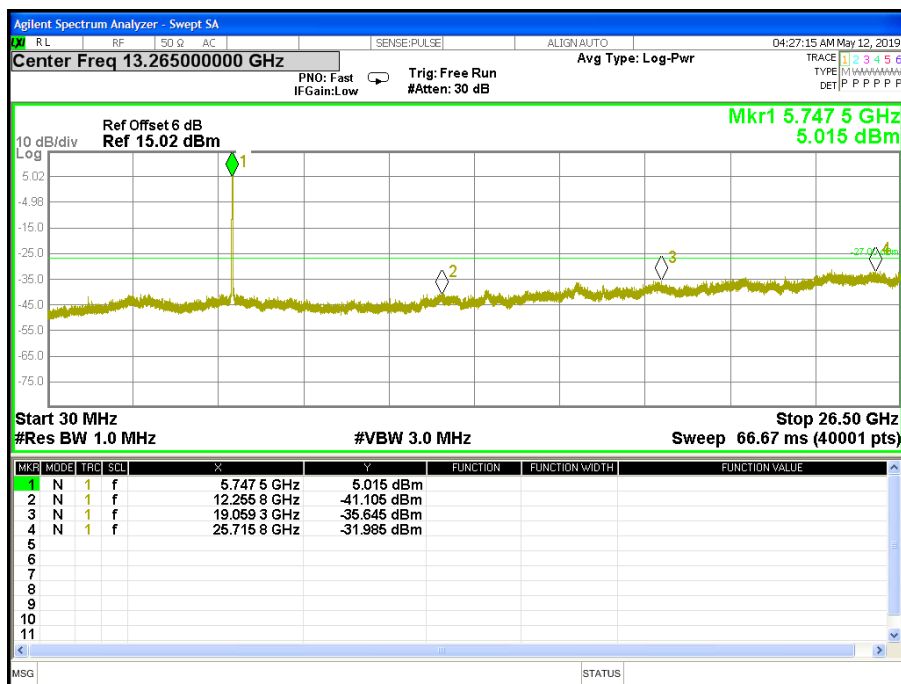
TX Band edge 802.11n(HT20) Mode CH 165



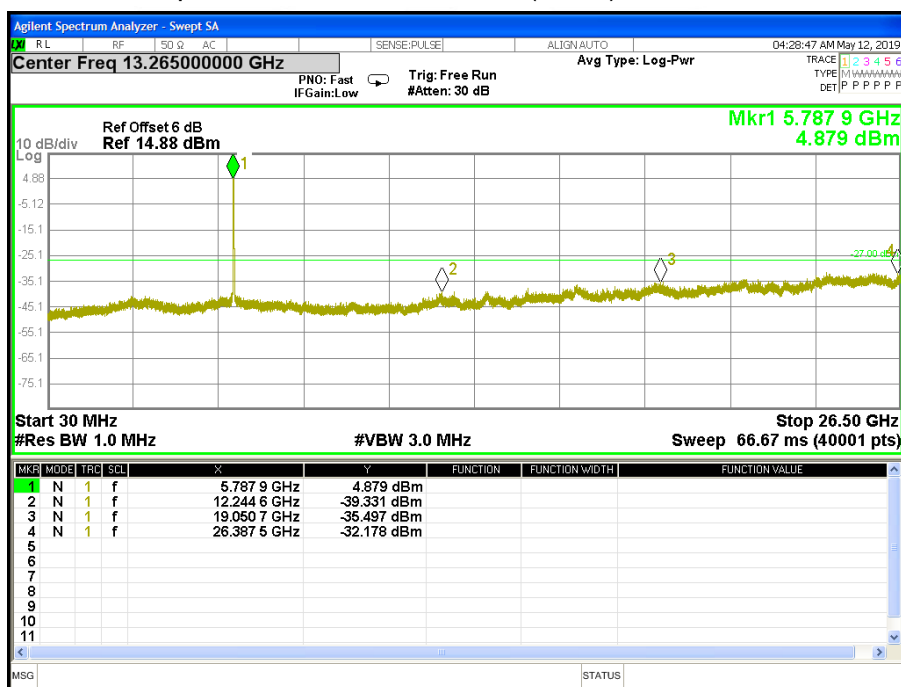


Band IV (5.725-5.85GHz) 802.11n(HT40)

TX Spurious Emissions 802.11n(HT40) Mode CH 151



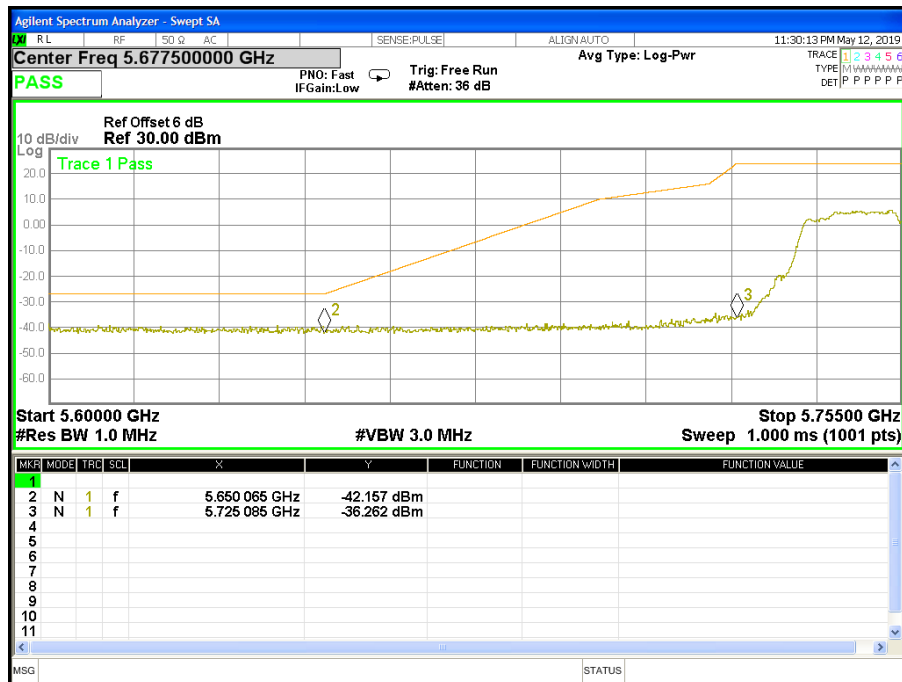
TX Spurious Emissions 802.11n(HT40) Mode CH 159



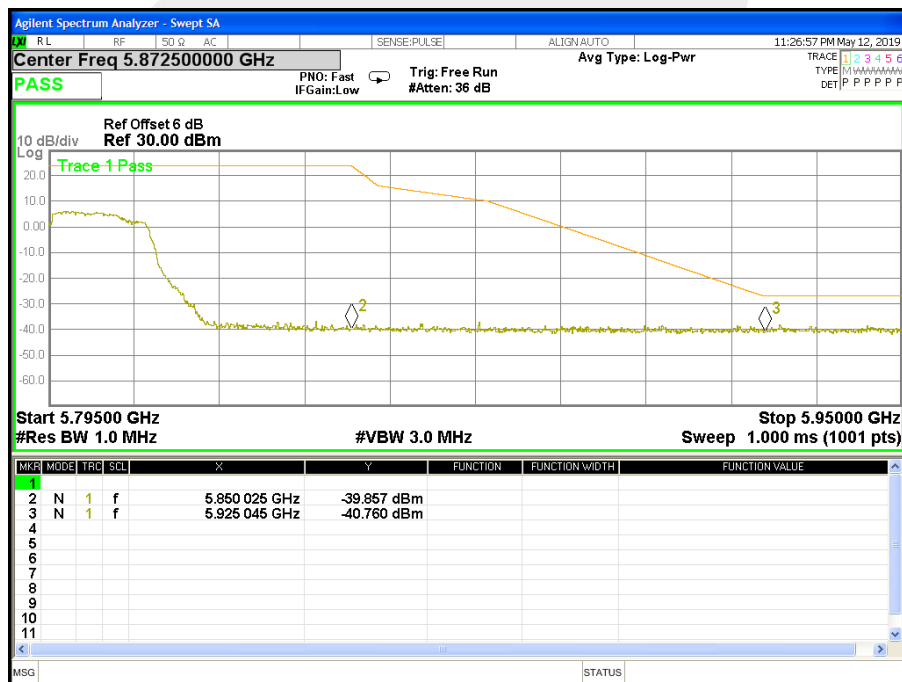


Band edge

TX Band edge 802.11n(HT40) Mode CH 151



TX Band edge 802.11n(HT40) Mode CH 159





5. POWER SPECTRAL DENSITY TEST

5.1 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 maximum 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 maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

5.2 TEST PROCEDURE

1. The setting follows Method SA-1 of FCC KDB D02 General UNII Test Procedures New Rules v01r03.

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 $RBW \geq 1/T$, where T is defined in section II.B.I.a).
- b) Set $VBW \geq 3$ RBW.
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10 \log (500\text{kHz}/RBW)$ to the measured result, whereas RBW (< 500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10 \log (1\text{MHz}/RBW)$ to the measured result, whereas RBW (< 1 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.



5.3 DEVIATION FROM STANDARD

No deviation.

5.4 TEST SETUP



5.5 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.

5.6 TEST RESULTS

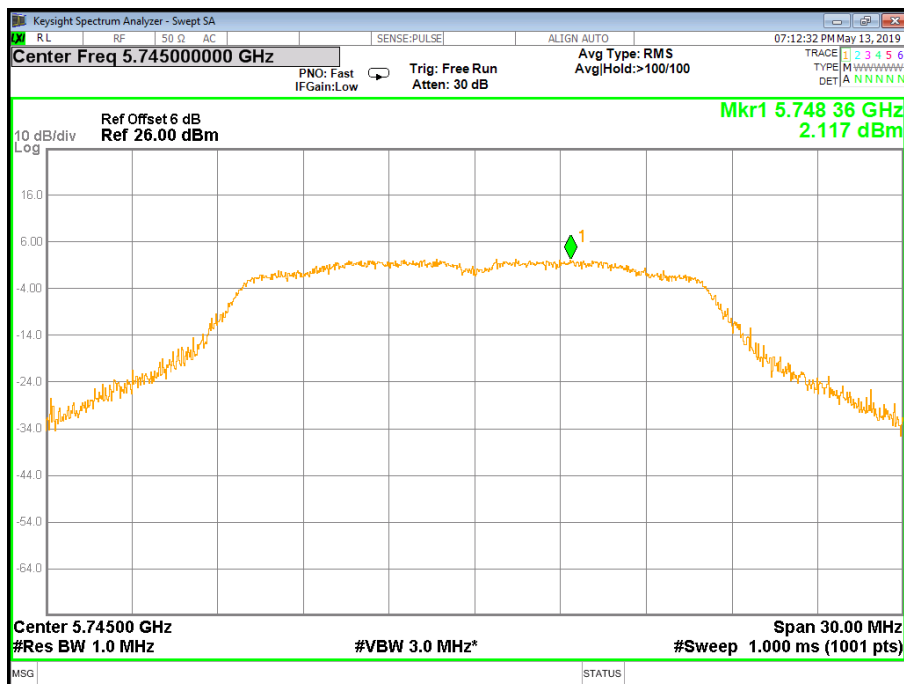
Band IV (5.725-5.850GHz)

5725-5850MHz			
Frequency	Power Density Total(dBm)	Limit	Result
802.11a			
5745	2.117	30	PASS
5785	2.249	30	PASS
5825	2.831	30	PASS
802.11n20			
5745	1.925	30	PASS
5785	2.009	30	PASS
5825	1.225	30	PASS
802.11n40			
5755	-1.292	30	PASS
5795	-2.016	30	PASS

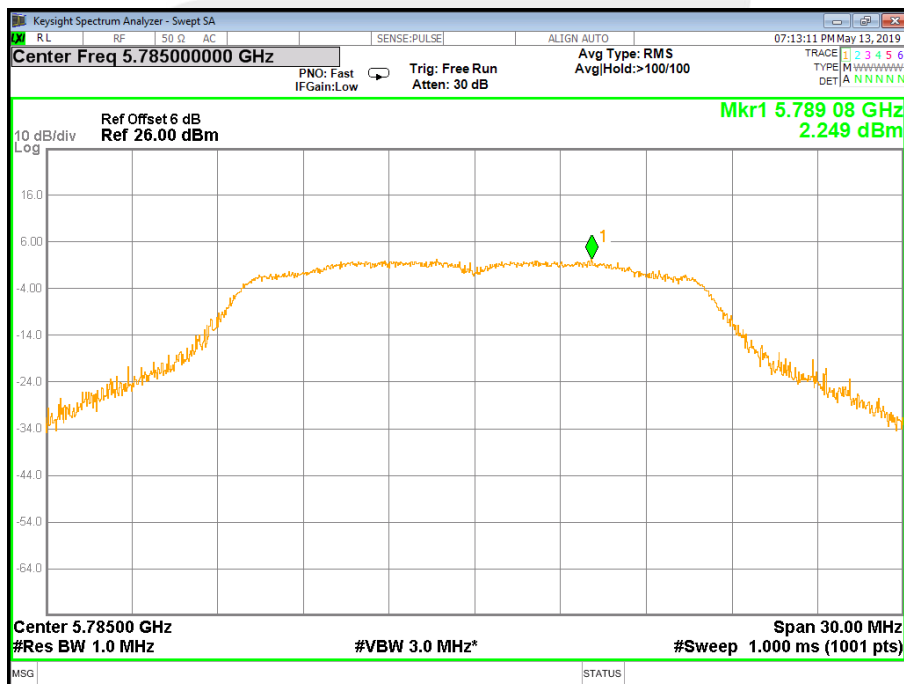


Band IV (5.725-5.850GHz) 802.11a

PSD 802.11a Channel 149

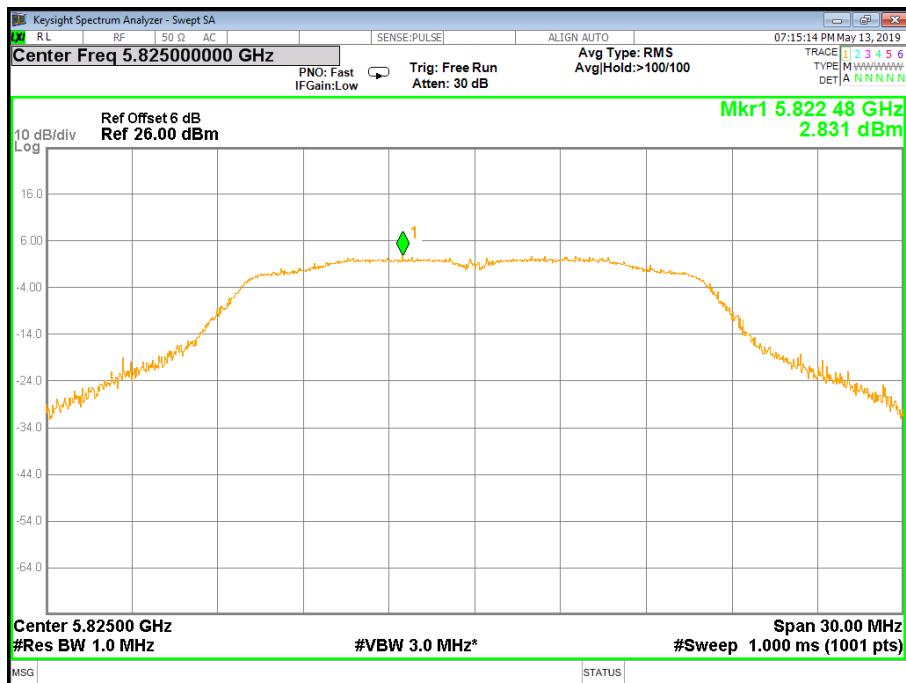


PSD 802.11a Channel 157





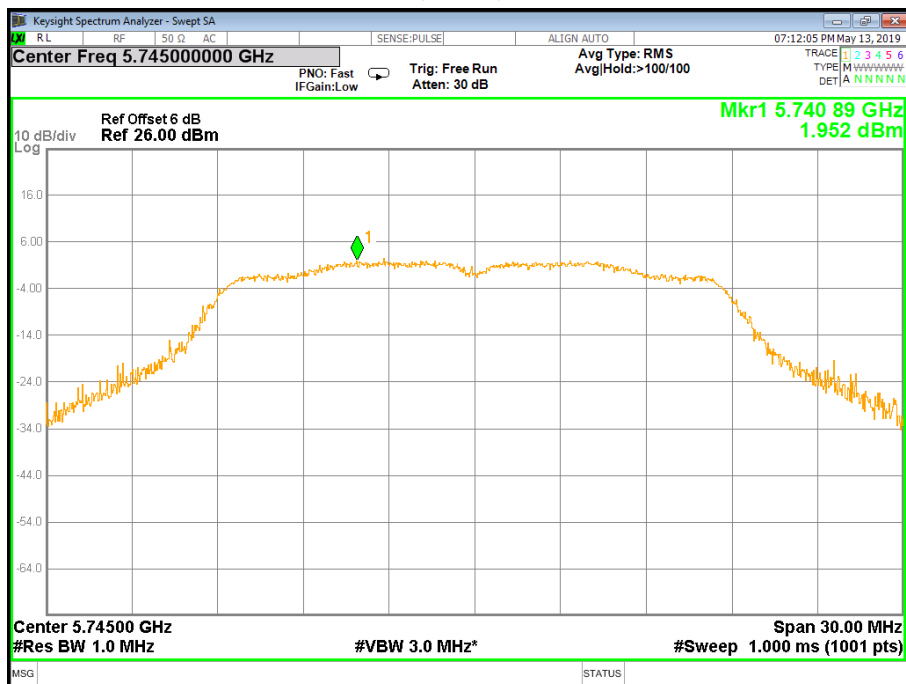
PSD 802.11a Channel 165



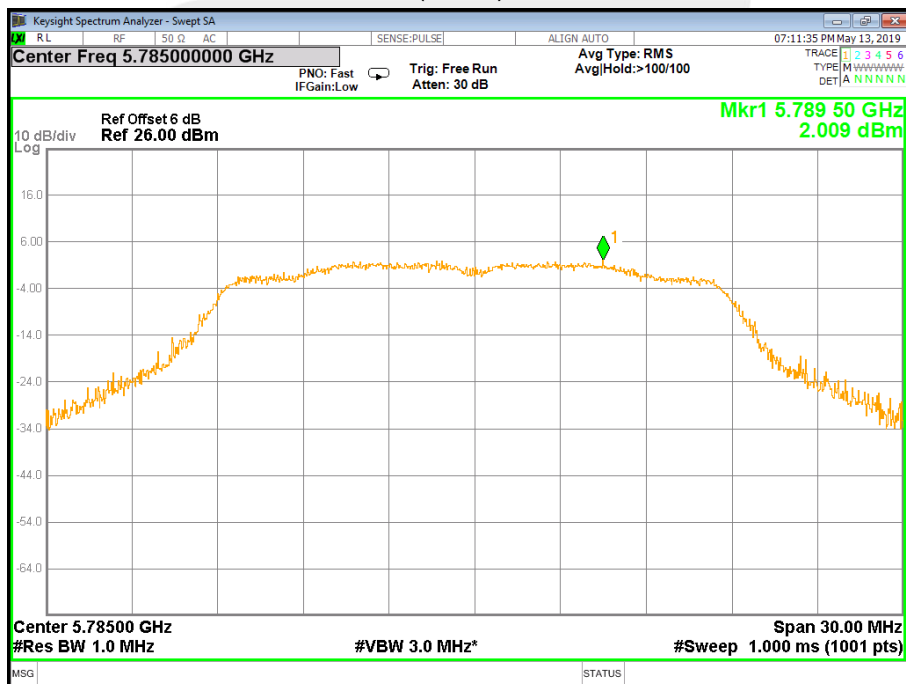


Band IV (5.725-5.850GHz) 802.11n(HT20)

PSD 802.11n(HT20) Channel 149

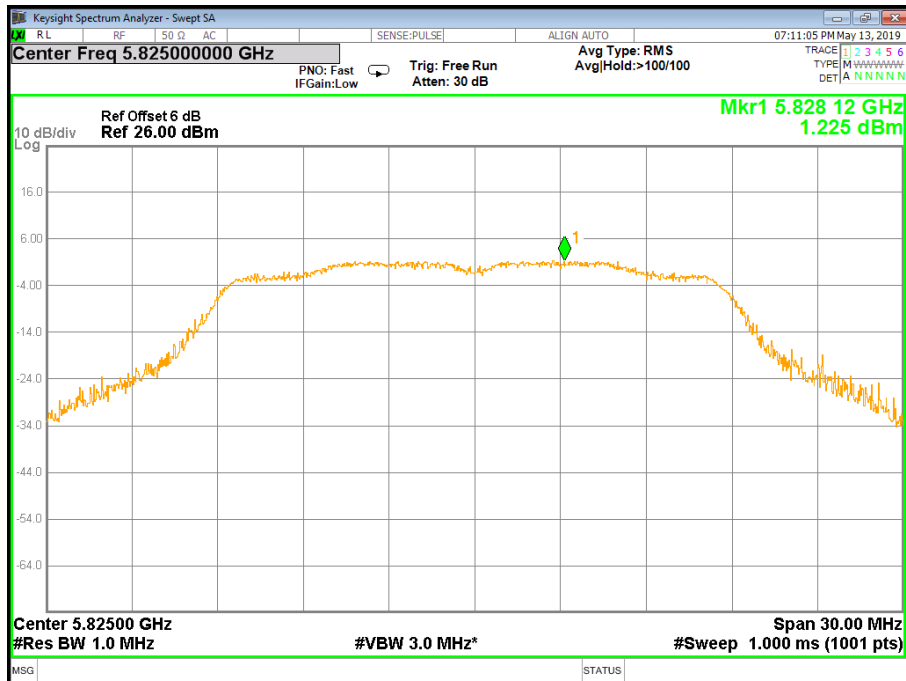


PSD 802.11n(HT20) Channel 157





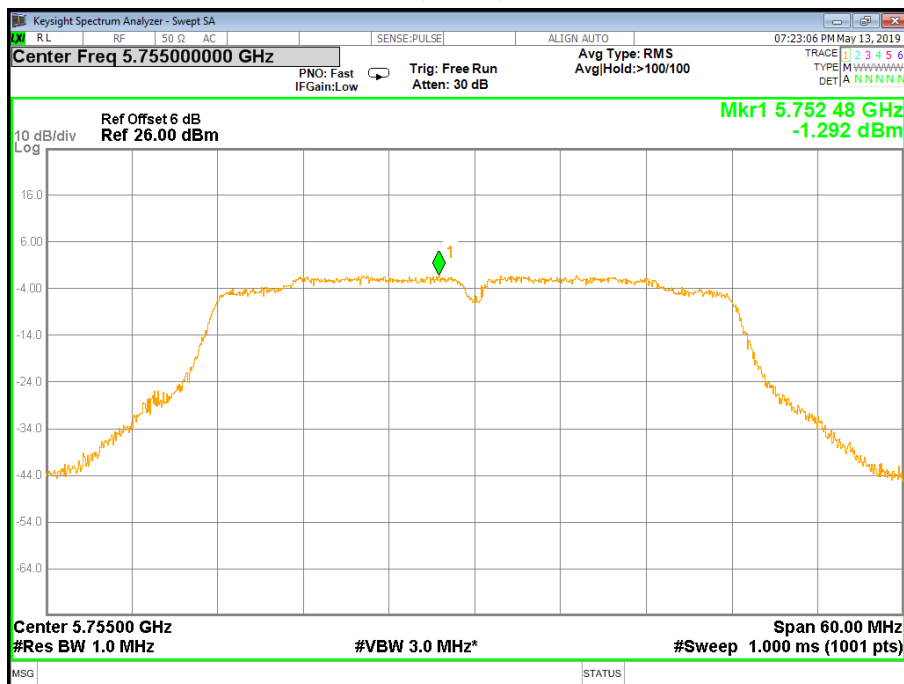
PSD 802.11n(HT20) Channel 165



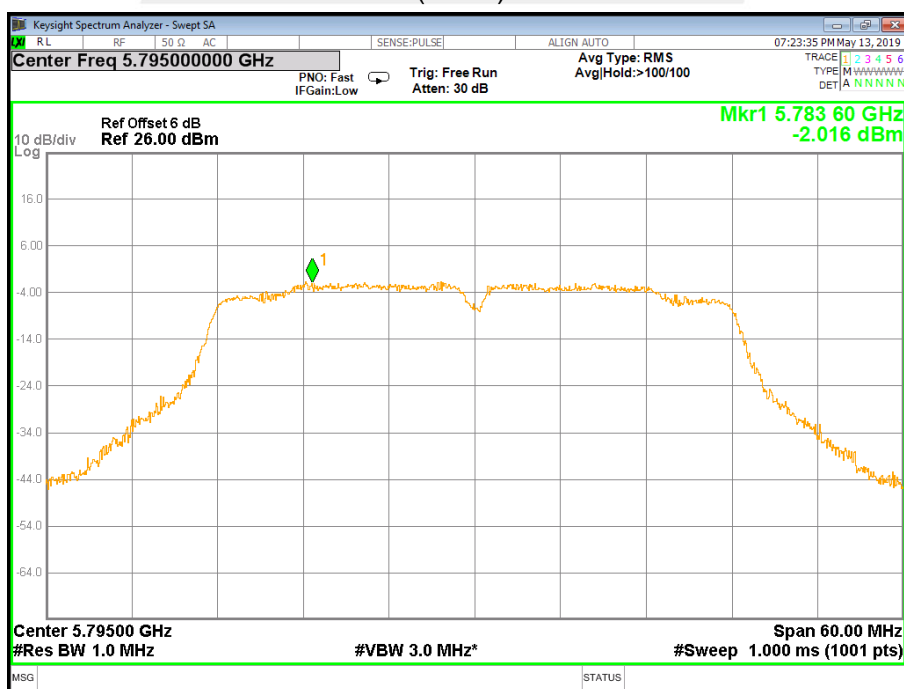


Band IV (5.725-5.850GHz) 802.11n(HT40)

PSD 802.11n(HT40) Channel 151



PSD 802.11n(HT40) Channel 159





6. BANDWIDTH MEASUREMENT

6.1 EMISSION BANDWIDTH (EBW) 26 BANDWID PROCEDURES / LIMIT

See list of measuring instruments of this test report.

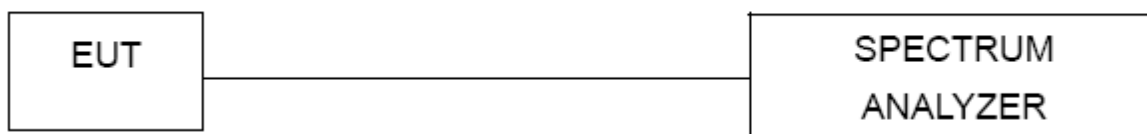
6.1.1 TEST PROCEDURE

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 \geq 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%.

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP



6.1.4 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.

6.1.5 TEST RESULTS

Frequency (MHz)	802.11a 26dB Bandwidth(MHz)	Pass/Fail
5745	23.43	Pass
5785	22.83	Pass
5825	22.25	Pass

Frequency (MHz)	802.11n(HT20) 26dB Bandwidth(MHz)	Pass/Fail
5745	23.47	Pass
5785	22.60	Pass
5825	22.77	Pass

Frequency (MHz)	802.11n(HT40) 26dB Bandwidth(MHz)	Pass/Fail
5755	42.28	Pass
5795	43.76	Pass

Note: The test plot please see next section.



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

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

6.2.1 TEST PROCEDURE

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

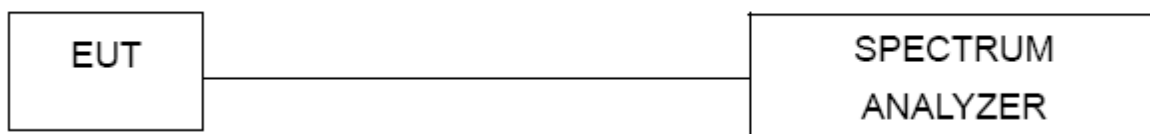
The following procedure shall be used for measuring (99 %) power bandwidth:

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

6.2.2 DEVIATION FROM STANDARD

No deviation.

6.2.3 TEST SETUP



6.2.4 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.



6.2.5 TEST RESULTS

Band IV (5.725-5.850GHz)99% Bandwidth

Frequency (MHz)	802.11a 99% Bandwidth(MHz)	Pass/Fail
5745	16.473	Pass
5785	16.459	Pass
5825	16.461	Pass

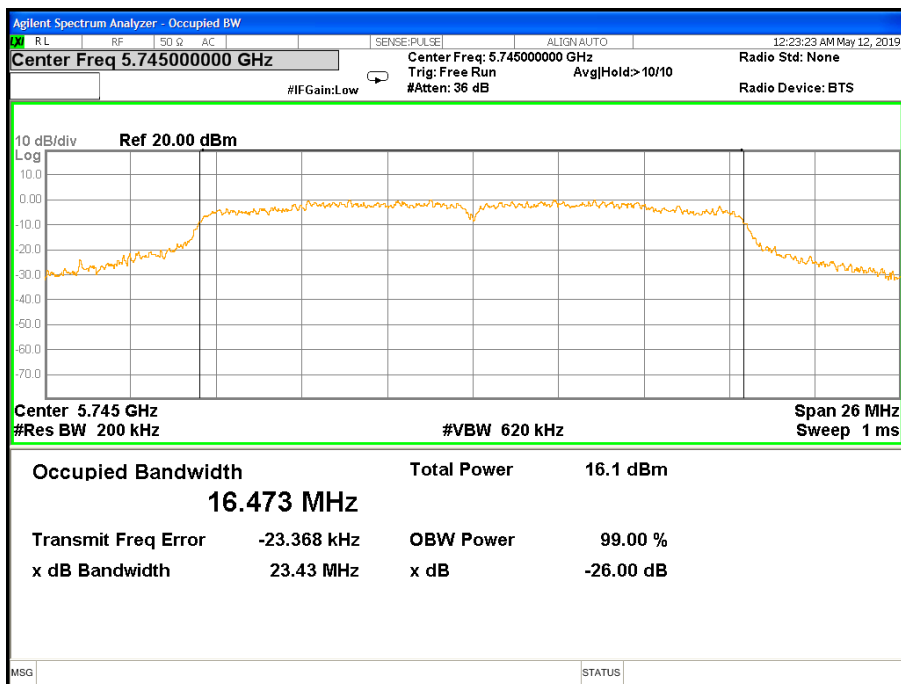
Frequency (MHz)	802.11n(HT20) 99% Bandwidth(MHz)	Pass/Fail
5745	17.630	Pass
5785	17.599	Pass
5825	17.613	Pass

Frequency (MHz)	802.11n(HT40) 99% Bandwidth(MHz)	Pass/Fail
5755	36.080	Pass
5795	36.087	Pass

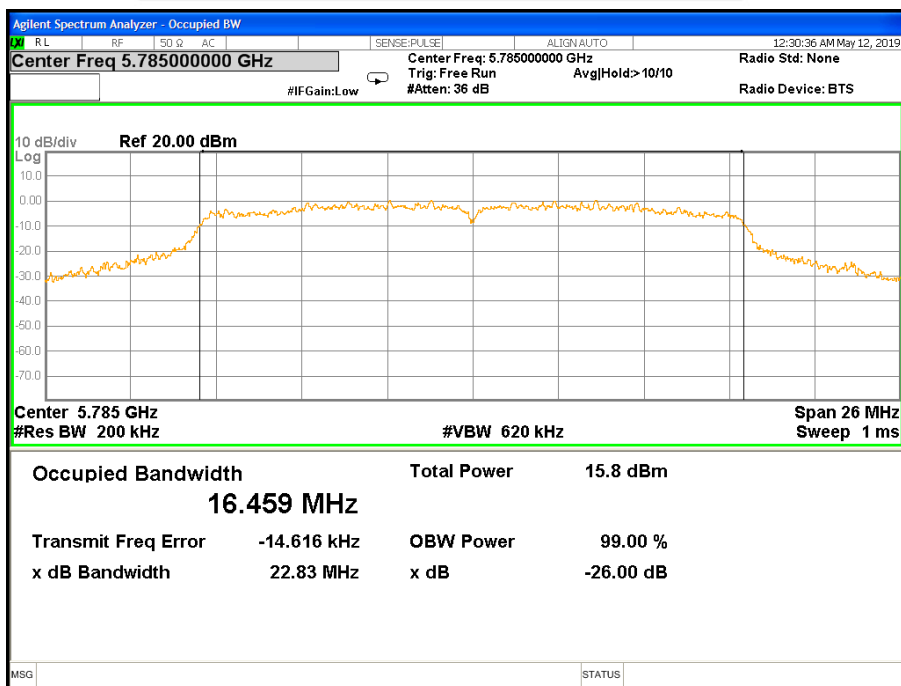


Band IV (5.725-5.850GHz) 802.11a, 26 dB &99% Bandwidth

26 dB &99% Bandwidth 802.11a Channel 149

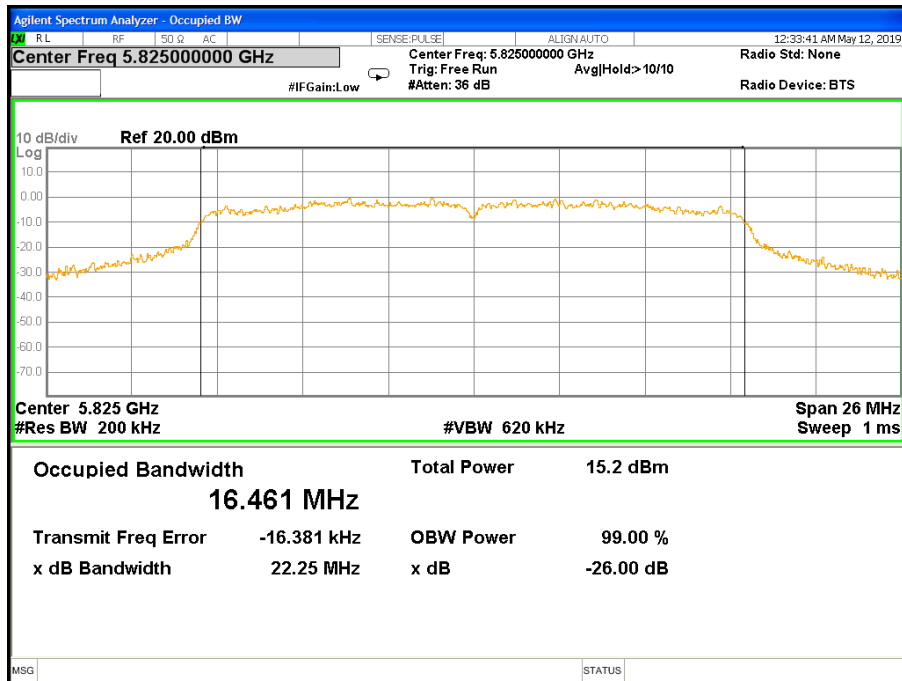


26 dB &99% Bandwidth 802.11a Channel 157





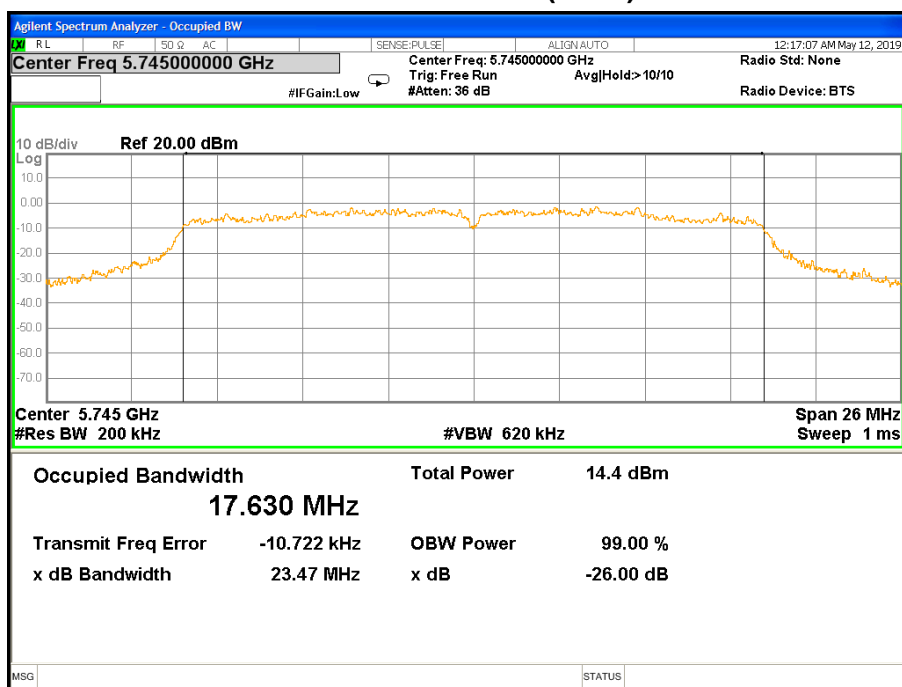
26 dB & 99% Bandwidth 802.11a Channel 165



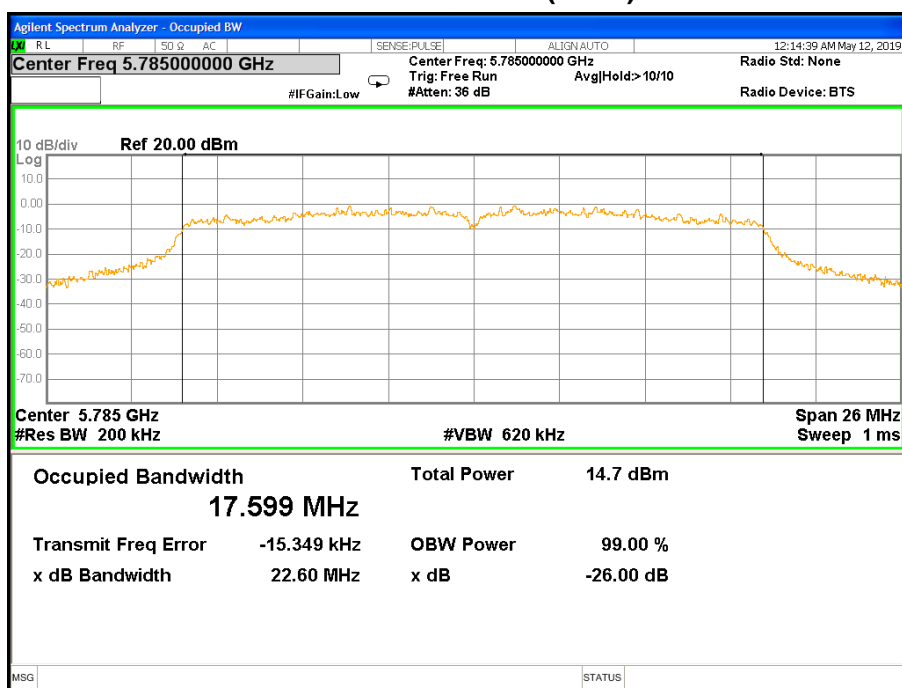


Band IV (5.725-5.850GHz) 802.11n(HT20) 26 dB &99% Bandwidth

26 dB &99% Bandwidth 802.11n(HT20) Channel 149

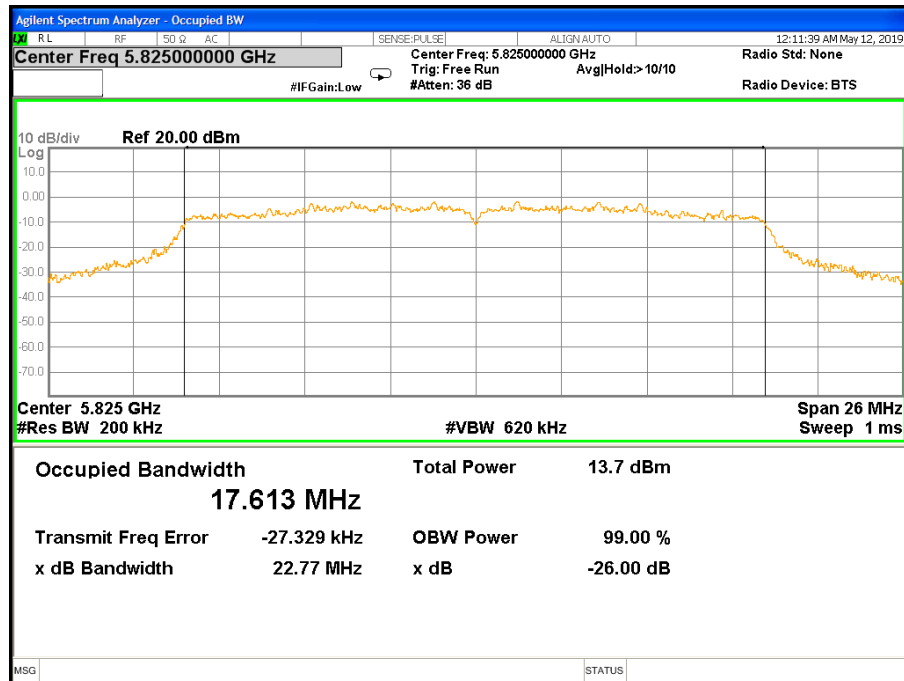


26 dB &99% Bandwidth 802.11n(HT20) Channel 157





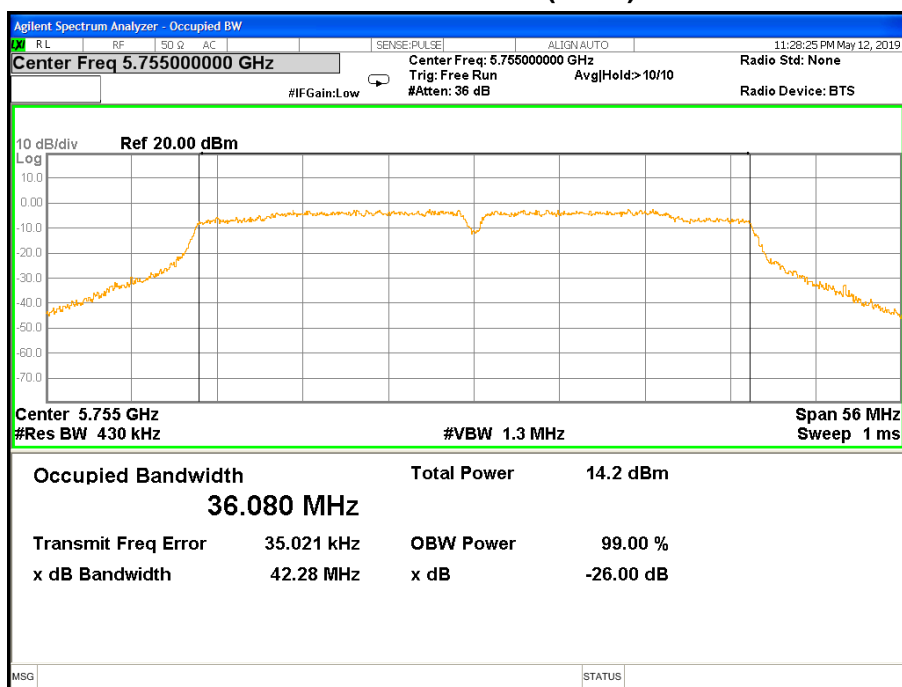
26 dB & 99% Bandwidth 802.11n(HT20) Channel 165



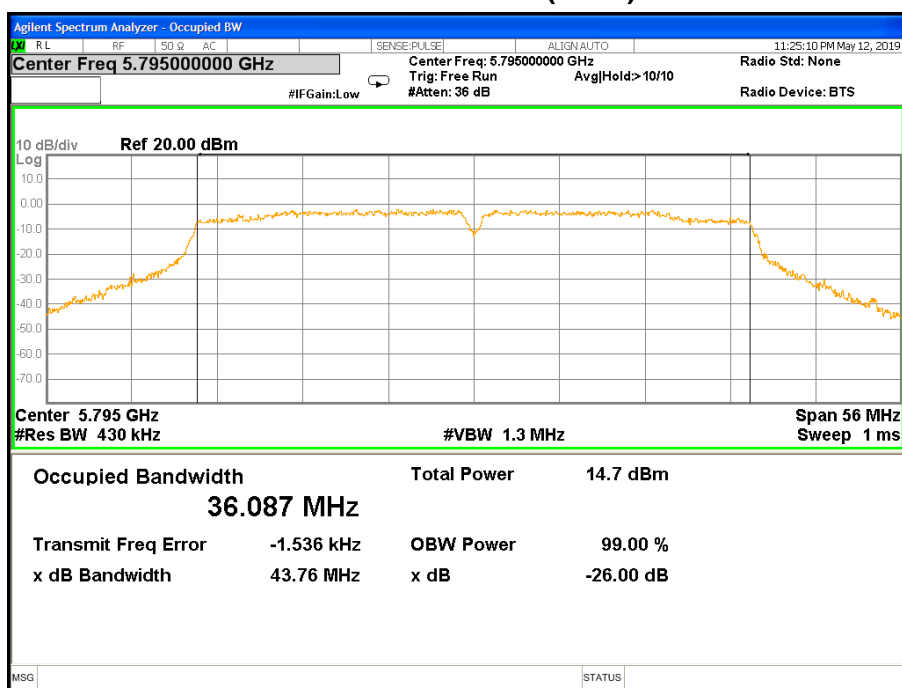


Band IV (5.725-5.850GHz) 802.11n(HT40) 26 dB &99% Bandwidth

26 dB &99% Bandwidth 802.11n(HT40) Channel 151



26 dB &99% Bandwidth 802.11n(HT40) Channel 159



6.3 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:

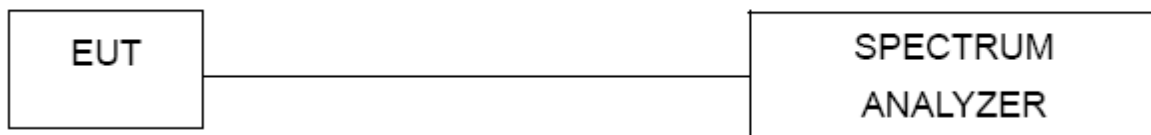
6.3.1 TEST PROCEDURE

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures v02r01.
 - a) Set RBW = 100 kHz.
 - b) Set the video bandwidth (VBW) $\geq 3 \times$ 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.

6.3.2 DEVIATION FROM STANDARD

No deviation.

6.3.3 TEST SETUP



6.3.4 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.



6.3.5 TEST RESULTS

Band IV (5.725-5.850GHz)6dB Bandwidth

Frequency (MHz)	802.11a 6dB Bandwidth(MHz)	Pass/Fail
5745	15.13	Pass
5785	15.09	Pass
5825	15.12	Pass

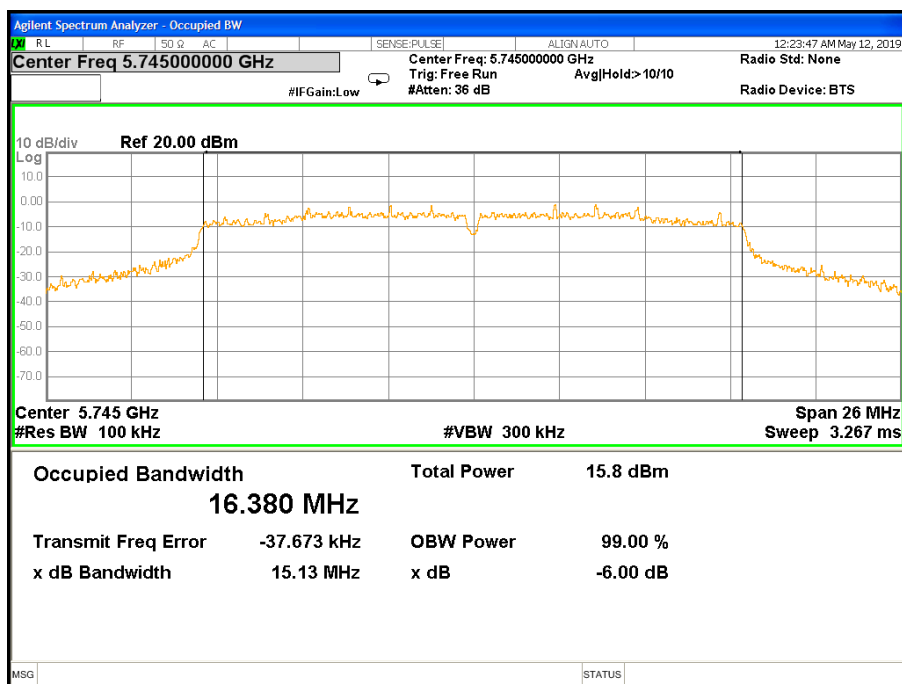
Frequency (MHz)	802.11n(HT20) 6dB Bandwidth(MHz)	Pass/Fail
5745	15.12	Pass
5785	15.12	Pass
5825	15.11	Pass

Frequency (MHz)	802.11n(HT40) 6dB Bandwidth(MHz)	Pass/Fail
5755	35.10	Pass
5795	35.11	Pass

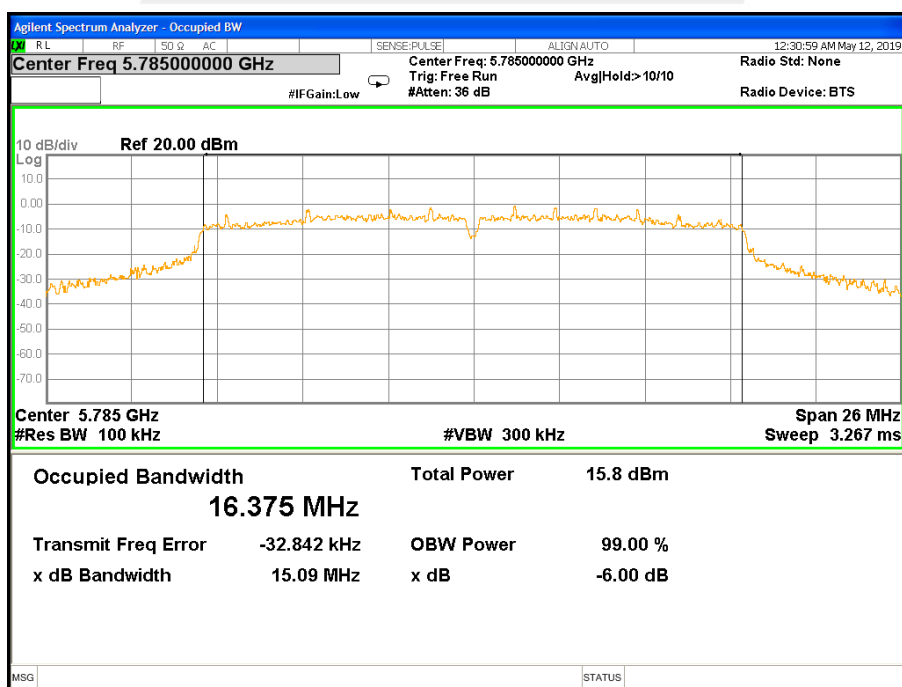


Band IV (5.725-5.850GHz) 802.11a, 6 dB Bandwidth

6 dB Bandwidth 802.11a Channel 149

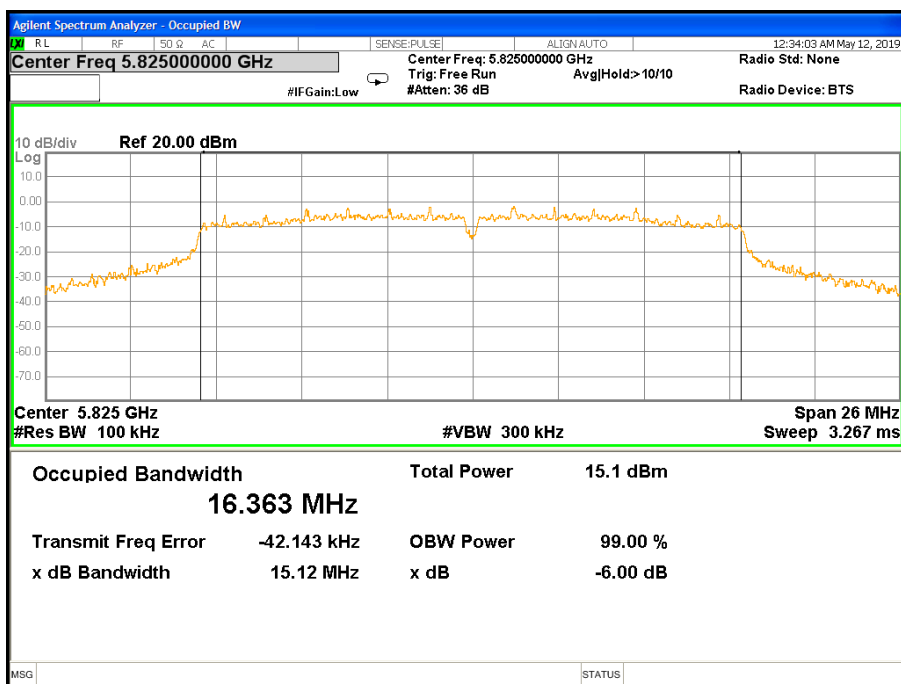


6 dB Bandwidth 802.11a Channel 157





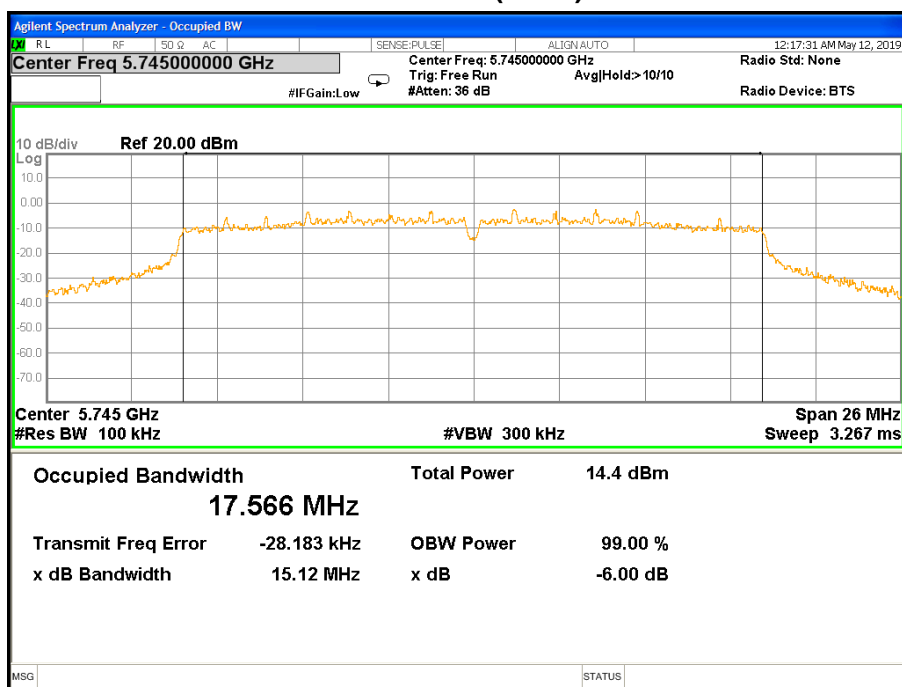
6 dB Bandwidth 802.11a Channel 165



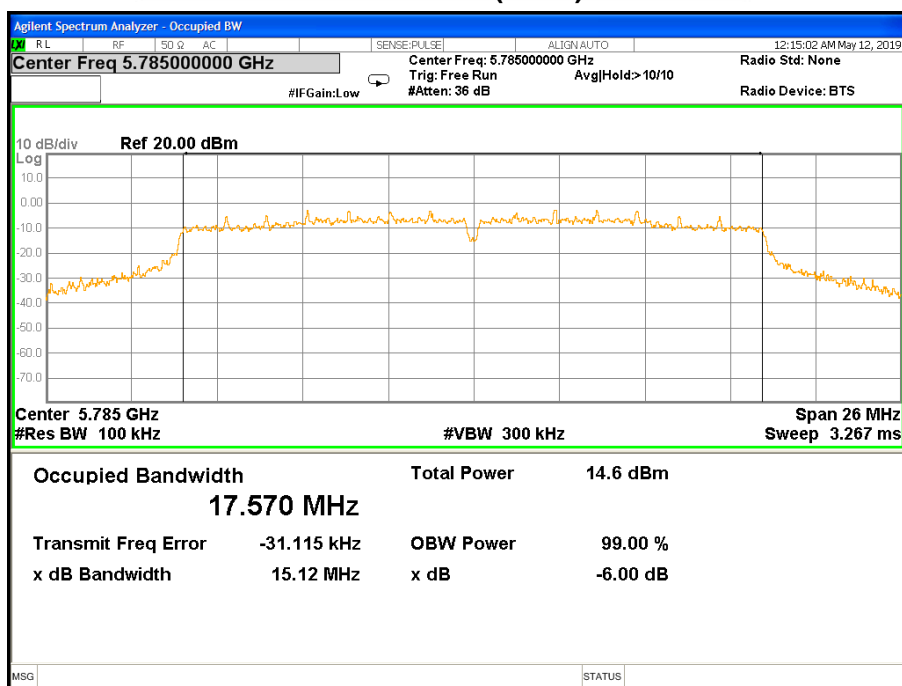


Band IV (5.725-5.850GHz) 802.11n(HT20) 6 dB Bandwidth

6 dB Bandwidth 802.11n(HT20) Channel 149

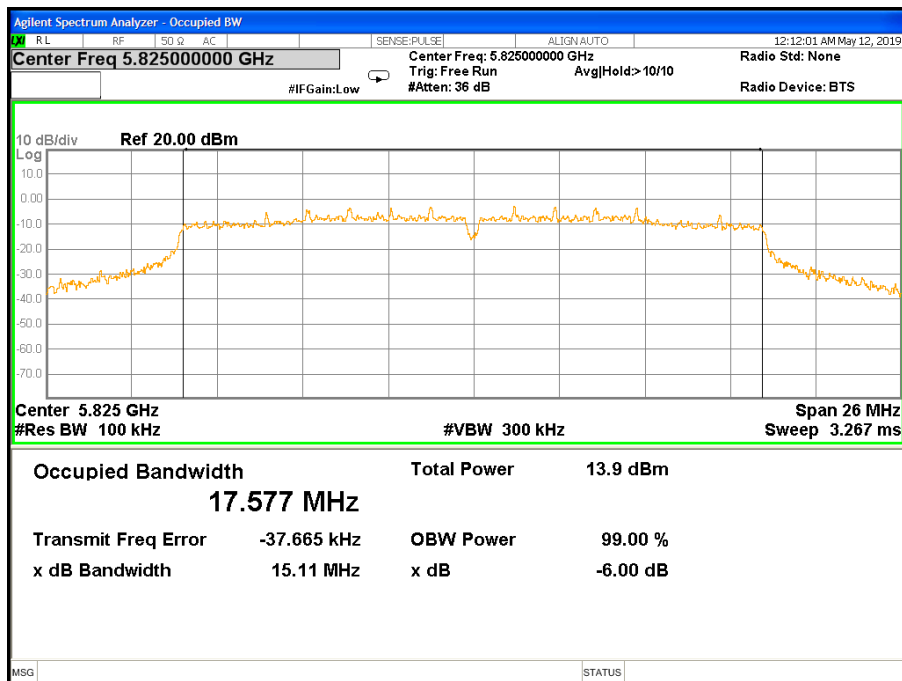


6 dB Bandwidth 802.11n(HT20) Channel 157





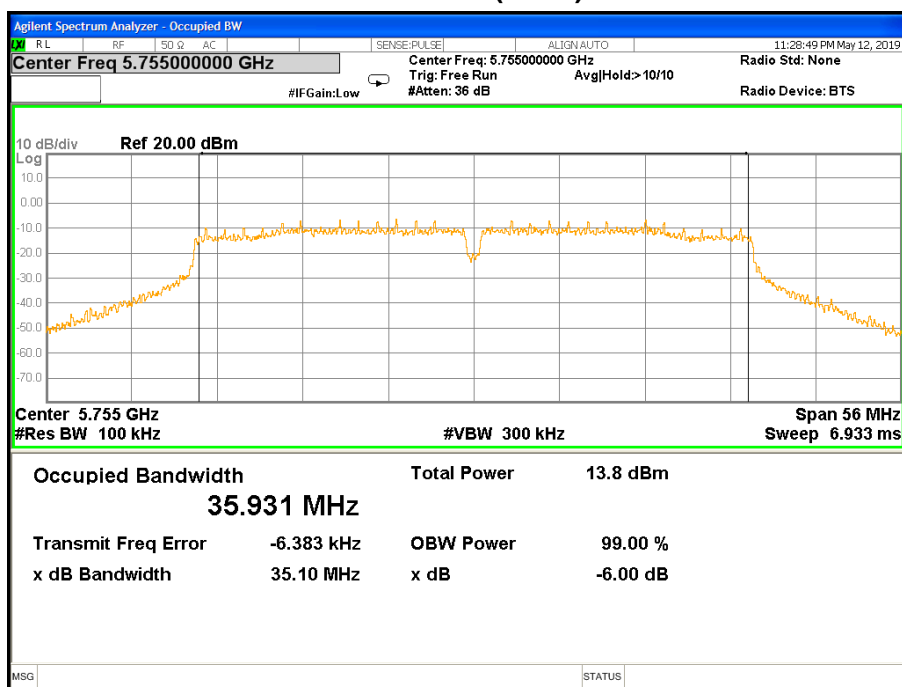
6 dB Bandwidth 802.11n(HT20) Channel 165



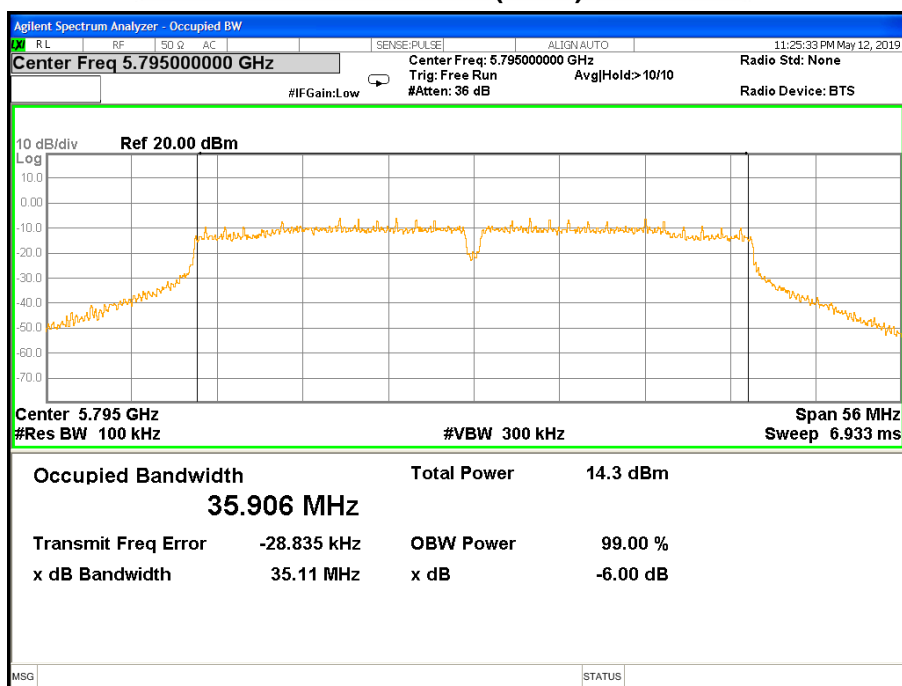


Band IV (5.725-5.850GHz) 802.11n(HT40) 6 dB Bandwidth

6 dB Bandwidth 802.11n(HT40) Channel 151



6 dB Bandwidth 802.11n(HT40) Channel 159



7. MAXIMUM CONDUCTED OUTPUT POWER

7.1 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)	Peak 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	

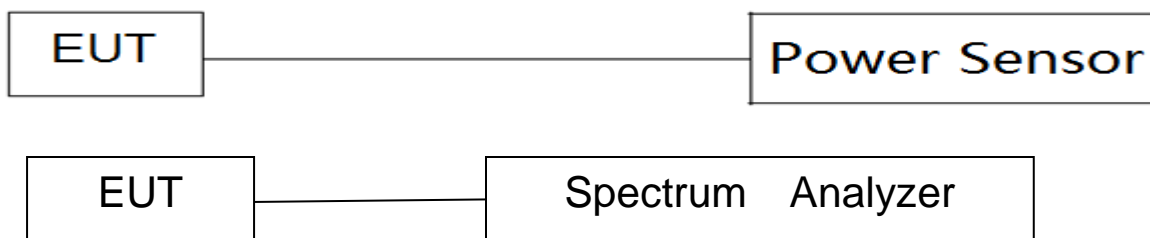
7.2 TEST PROCEDURE

The EUT was directly connected to the Power Sensor&PC

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP



7.1.4 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.



7.5 TEST RESULTS

Band IV (5.725-5.85GHz)

Band IV (5.725-5.85GHz)			
Test Channel	Frequency (MHz)	AV Power (dBm)	LIMIT (dBm)
802.11a			
149	5745	4.72	30
157	5785	4.75	30
165	5825	5.18	30
802.11n(HT20)			
149	5745	4.62	30
157	5785	4.33	30
165	5825	4.25	30
802.11n(HT40)			
151	5755	4.33	30
159	5795	4.13	30

Note:

1. For mobile and portable client devices in the 5.725-5.85 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 1 W.



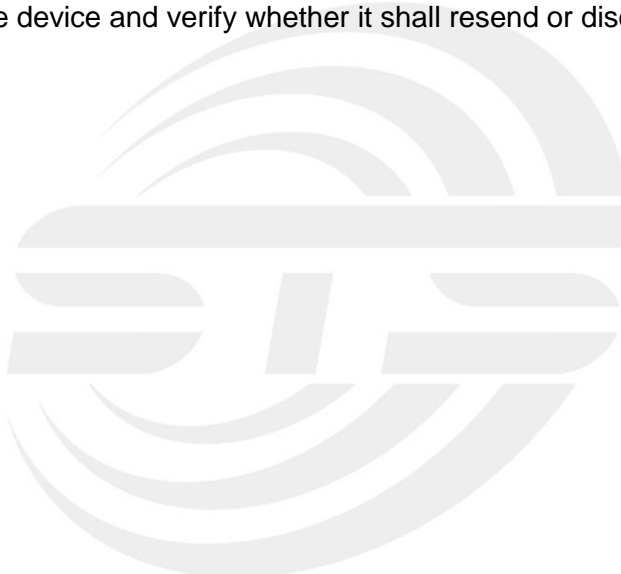
8. AUTOMATICALLY DISCONTINUE TRANSMISSION

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

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 - PHOTOS OF TEST SETUP**

Note: See test photos in setup photo document for the actual connections between Product and support equipment.

*****END OF THE REPORT*****

