



FCC CFR47 PART 15 SUBPART C

DTS Wireless LAN

CERTIFICATION TEST REPORT

FOR

WCDMA/LTE Tablet + BT/BLE and DTS/UNII a/b/g/n/ac

MODEL NUMBER : SM-W737N0

FCC ID: A3LSMW737N0

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ACCREDITED*

Testing
Laboratory

TL-637

Revision History

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
V1	08/30/18	Initial issue	Junwhan Lee
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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: SAMSUNG ELECTRONICS CO., LTD.
EUT DESCRIPTION: WCDMA/LTE Tablet + BT/BLE and DTS/UNII a/b/g/n/ac
MODEL NUMBER: SM-W737N0
SERIAL NUMBER: BBMGR34K500613H (RADIATED);
BBMGR34K50061VZ (CONDUCTED)
DATE TESTED: JUL 10, 2018 - AUG 30, 2018

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C	Pass

UL Korea, Ltd. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Korea, Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Korea, Ltd. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Korea, Ltd. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by IAS, any agency of the Federal Government, or any agency of any government.

Approved & Released For
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Suwon Lab Engineer
UL Korea, Ltd.

Tested By:



Junwhan Lee
Suwon Lab Engineer
UL Korea, Ltd.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with following methods.

1. FCC CFR 47 Part 2.
2. FCC CFR 47 Part 15.
3. KDB 558074 D01 15.247 Meas Guidance v05.
4. ANSI C63.10-2013.
5. KDB 662911 D01 v02r01

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea. Line conducted emissions are measured only at the 218 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

218 Maeyeong-ro	
<input type="checkbox"/>	Chamber 1
<input checked="" type="checkbox"/>	Chamber 2
<input type="checkbox"/>	Chamber 3

UL Korea, Ltd. is accredited by IAS, Laboratory Code TL-637. The full scope of accreditation can be viewed at <http://www.iasonline.org/PDF/TL/TL-637.pdf>.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

$$\begin{aligned} \text{Field Strength (dBuV/m)} &= \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \\ &\text{Cable Loss (dB)} - \text{Preamp Gain (dB)} \\ 36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} &= 28.9 \text{ dBuV/m} \end{aligned}$$

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	2.32 dB
Radiated Disturbance, Below 1GHz	3.86 dB
Radiated Disturbance, Above 1 GHz	5.97 dB

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a WCDMA/LTE Tablet + BT/BLE and DTS/UNII a/b/g/n/ac.
 This test report addresses the DTS (WLAN) operational mode.

WiFi MIMO Condition

Frequency	Mode	Antenna 1	Antenna 2
2.4 GHz	802.11b	TX / RX	TX / RX
	802.11g	TX / RX	TX / RX
	802.11g MIMO	TX / RX	TX / RX
	802.11n	TX / RX	TX / RX
	802.11n MIMO	TX / RX	TX / RX
5 GHz	802.11a	TX / RX	TX / RX
	802.11a MIMO	TX / RX	TX / RX
	802.11n	TX / RX	TX / RX
	802.11n MIMO	TX / RX	TX / RX
	802.11ac	TX / RX	TX / RX
	802.11ac MIMO	TX / RX	TX / RX

Simultaneous TX Condition

Frequency	Supported
2.4 GHz Antenna 1 + 5 GHz Antenna 2	Yes
2.4 GHz Antenna 2 + 5 GHz Antenna 1	No
2.4 GHz Antenna 1 + 5 GHz Antenna 1	No
2.4 GHz Antenna 2 + 5 GHz Antenna 2	No

Spurious Emissions for Simultaneous Transmission were reported on UNII Test Report section 11.5. (Test Report number : 4788556585-E4)

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum total conducted average output power as follows:

Frequency Range [MHz]	Mode	Output Power [dBm]		Output Power [mW]	
		Antenna1	Antenna2	Antenna1	Antenna2
2412 - 2472	802.11b	15.72	15.26	37.33	33.57
	802.11g MIMO	17.30		53.70	
	802.11n20 MIMO	17.10		51.29	

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes internal antenna, with a antenna1's maximum gain of -0.5 dBi and antenna2's maximum gain of -0.4 dBi .

5.4. LIST OF TEST REDUCTION AND MODES

The output power on covered modes is equal to or less than one referenced.

Frequency Range (MHz)	Mode	Covered by
2412 - 2472	802.11b Legacy 1TX	802.11b Legacy 1TX
	802.11g 1TX	802.11g CDD 2TX
	802.11g CDD 2TX	802.11g CDD 2TX
	802.11n HT20 1TX	802.11n HT20 CDD 2TX
	802.11n HT20 SDM/CDD 2TX	802.11n HT20 CDD 2TX

5.5. WORST-CASE CONFIGURATION AND MODE

Radiated emission below 1GHz and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

Radiated emission above 1GHz was performed with the EUT set to transmit low/mid/high channels.

For ANT1 and MIMO(802.11g mode), the fundamental of the EUT was investigated in three orthogonal orientations X, Y and Z it was determined that X orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in X orientation.

For ANT2 and MIMO(802.11n mode), the fundamental of the EUT was investigated in three orthogonal orientations X, Y and Z it was determined that Z orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in Z orientation.

The fundamental level of the EUT was investigated on the condition of equipped with keyboard configuration also, but stand-alone configuration is more worse. So only below 1GHz and AC line conducted test were performed on the condition of equipped with keyboard configuration.

Based on the baseline scan, the worst-case data rates were:

802.11b mode: 1 Mbps (Legacy 1TX)
802.11g mode: 6 Mbps (2TX CDD)
802.11n HT20 mode: MCS0 (2TX CDD)

5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Charger	SAMSUNG	EP-TA300	R37K3AD0AC3SE3	N/A
Data Cable	SAMSUNG	EP-DW720CWE	N/A	N/A
Earphone	SAMSUNG	EO-EG920BW	N/A	N/A
Keyboard	SAMSUNG	EJ-CW730	N/A	N/A

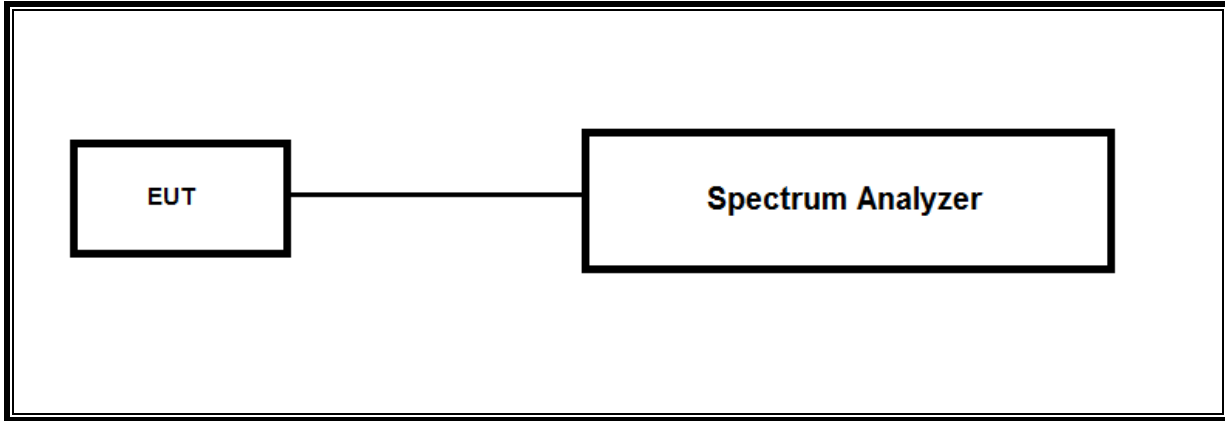
I/O CABLES

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	DC Power	1	C Type	Shielded	1.1m	N/A
2	Audio	2	Mini-Jack	Unshielded	1.2m	N/A

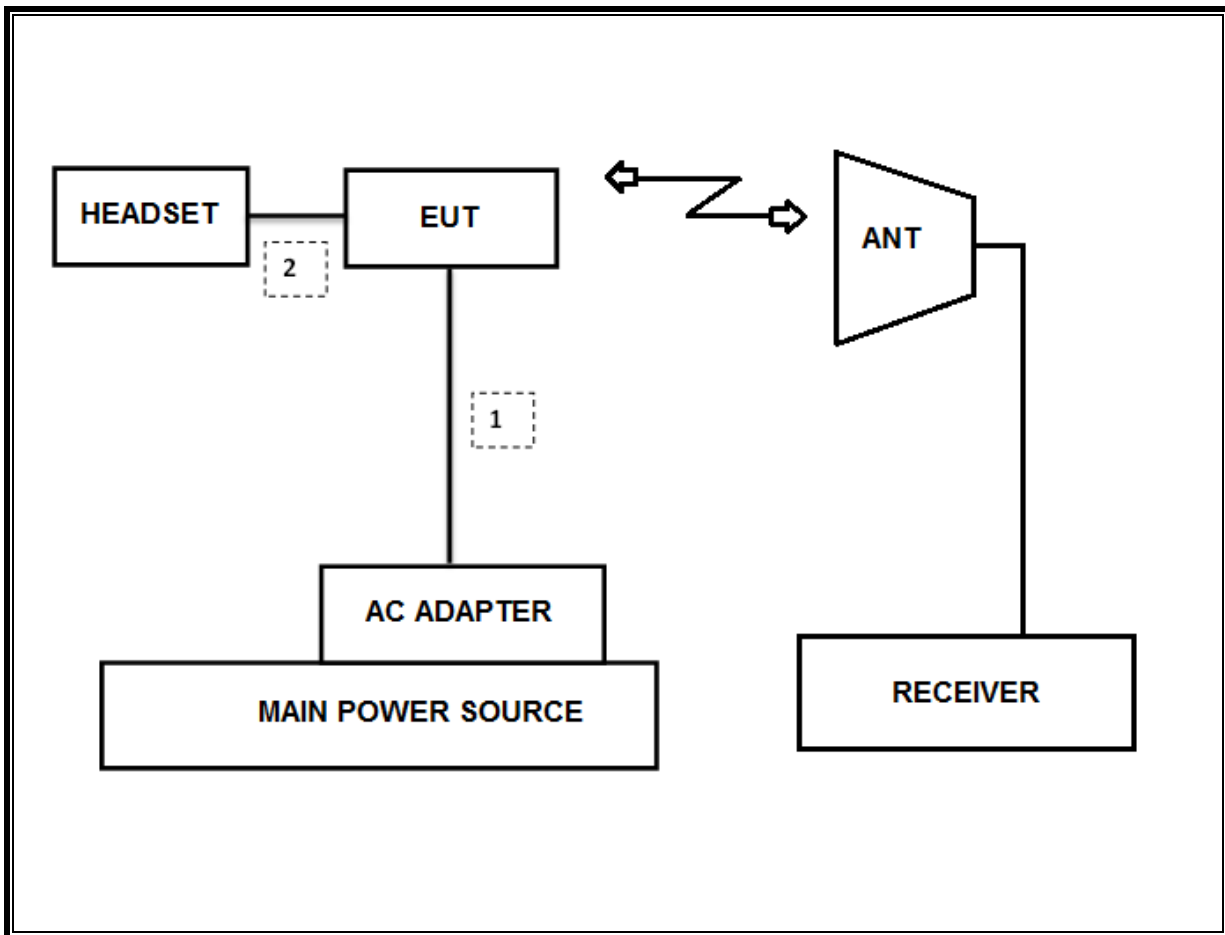
TEST SETUP

The EUT is a stand-alone unit during the tests.
 Test software exercised the EUT to enable DTS mode.

SETUP DIAGRAM FOR TESTS (CONDUCTED TEST SETUP)



SETUP DIAGRAM FOR TESTS (RADIATED TEST SETUP)



6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

Test Equipment List					
Description	Manufacturer	Model	S/N	Old Cal Due	New Cal Due
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	750	08-31-19	08-04-20
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	749	09-14-19	08-04-20
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	845	08-31-19	08-04-20
Antenna, Horn, 18 GHz	ETS	3115	00167211	10-14-18	08-04-20
Antenna, Horn, 18 GHz	ETS	3115	00161451	03-10-19	08-04-20
Antenna, Horn, 18 GHz	ETS	3117	00168724	05-31-19	08-04-20
Antenna, Horn, 18 GHz	ETS	3117	00168717	05-31-19	08-04-20
Antenna, Horn, 18 GHz	ETS	3117	00205959	11-29-18	08-04-20
Antenna, Horn, 40 GHz	ETS	3116C	00166155	12-04-19	
Antenna, Horn, 40 GHz	ETS	3116C	00168645	12-04-19	
Antenna, Horn, 40 GHz	ETS	3116C-PA	00168841	11-13-18	08-09-19
Preamplifier, 1000 MHz	Sonoma	310N	341282	08-09-18	08-07-19
Preamplifier, 1000 MHz	Sonoma	310N	351741	08-07-18	08-07-19
Preamplifier, 1000 MHz	Sonoma	310N	370599	08-10-18	08-06-19
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1876511	08-08-18	08-07-19
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1896138	08-08-18	08-07-19
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	2029169	08-11-18	08-07-19
Spectrum Analyzer, 44 GHz	Agilent / HP	N9030A	MY54170614	08-08-18	08-07-19
Spectrum Analyzer, 44 GHz	Agilent / HP	N9030A	MY54490312	08-08-18	08-06-19
Spectrum Analyzer, 43.5 GHz	R&S	FSW43	104089	08-11-18	08-06-19
Average Power Sensor	Agilent / HP	U2000	MY54270007	08-08-18	08-07-19
Attenuator	PASTERNAK	PE7087-10	A001	08-08-18	08-08-19
Attenuator	PASTERNAK	PE7087-10	A008	08-08-18	08-08-19
Attenuator	PASTERNAK	PE7004-10	2	08-10-18	08-07-19
Attenuator	PASTERNAK	PE7087-10	A009	08-08-18	08-08-19
EMI Test Receive, 40 GHz	R&S	ESU40	100439	08-08-18	08-06-19
EMI Test Receive, 40 GHz	R&S	ESU40	100457	08-08-18	08-06-19
EMI Test Receive, 44 GHz	R&S	ESW44	101590	08-09-18	08-06-19
EMI Test Receive, 3 GHz	R&S	ESR3	101832	08-07-18	08-06-19
Low Pass Filter 5GHz	Micro-Tronics	LPS17541	009	08-08-18	08-07-19
Low Pass Filter 5GHz	Micro-Tronics	LPS17541	015	08-08-18	08-07-19
Low Pass Filter 5GHz	Micro-Tronics	LPS17541	020	08-11-18	08-06-19
High Pass Filter 3GHz	Micro-Tronics	HPM17543	010	08-08-18	08-07-19
High Pass Filter 3GHz	Micro-Tronics	HPM17543	015	08-08-18	08-07-19
High Pass Filter 3GHz	Micro-Tronics	HPM17543	020	08-11-18	08-06-19
High Pass Filter 6GHz	Micro-Tronics	HPS17542	009	08-08-18	08-07-19
High Pass Filter 6GHz	Micro-Tronics	HPS17542	016	08-08-18	08-07-19
High Pass Filter 6GHz	Micro-Tronics	HPS17542	021	08-11-18	08-06-19
LISN	R&S	ENV-216	101837	08-09-18	08-09-19
UL Software					
Description	Manufacturer	Model	Version		
Radiated software	UL	UL EMC	Ver 9.5		
AC Line Conducted software	UL	UL EMC	Ver 9.5		

7. REFERENCE MEASUREMENT RESULTS

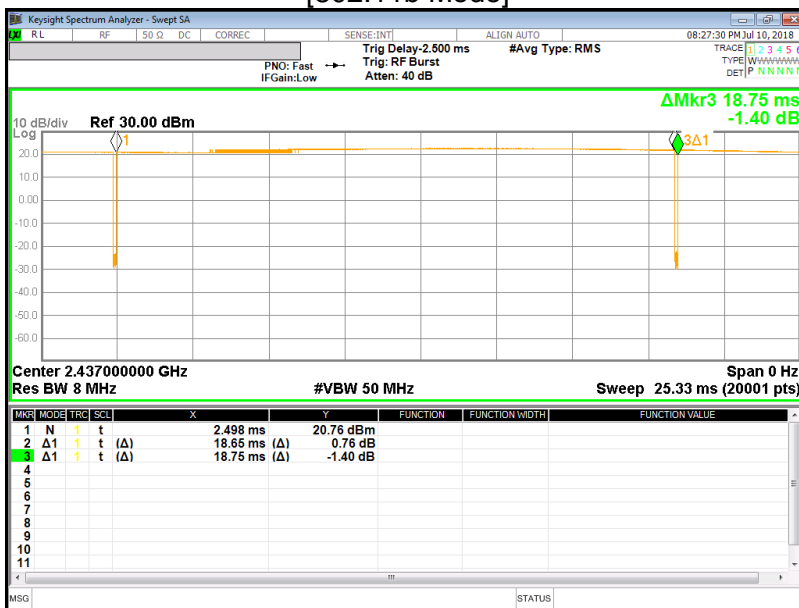
7.1. ON TIME AND DUTY CYCLE RESULTS

Mode	ON Time B [msec]	Period [msec]	Duty Cycle x [linear]	Duty Cycle [%]	Duty Cycle Correction Factor [dB]	1/T Minimum VBW [kHz]
2400MHz Bands						
802.11b	18.65	18.75	0.995	99.5%	0.00	0.010
802.11g	3.1	3.137	0.988	98.8%	0.00	0.010
802.11n HT20	2.88	2.917	0.987	98.7%	0.00	0.010

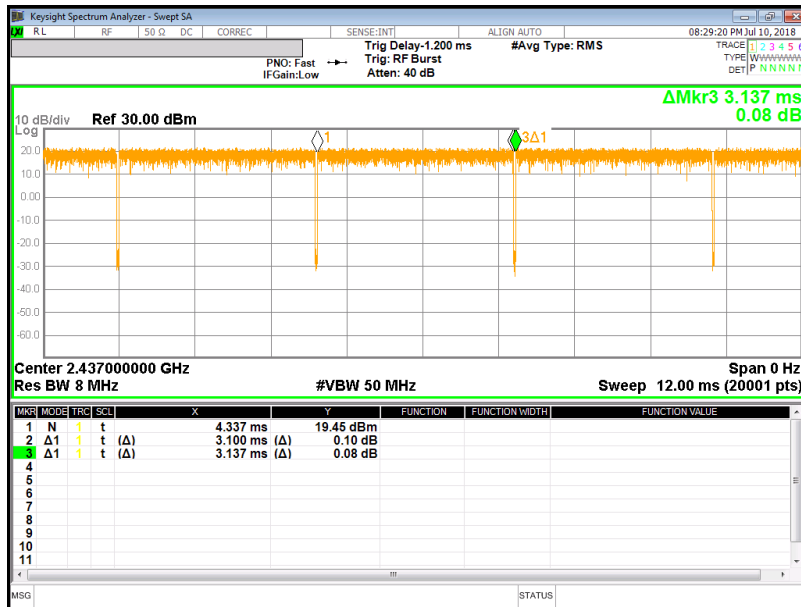
LIMITS

None; for reporting purposes only.

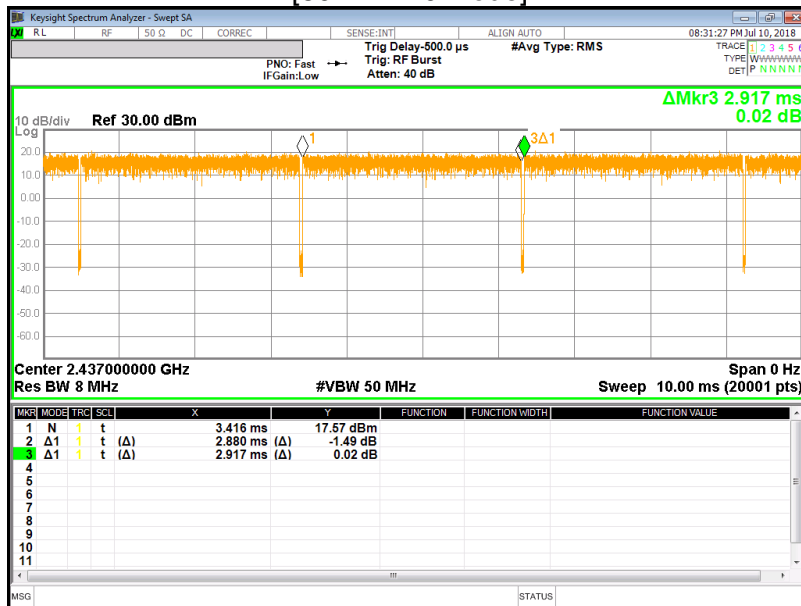
[802.11b Mode]



[802.11g Mode]



[802.11n20 Mode]



7.2. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

7.2.1. 802.11b MODE IN THE 2.4 GHz BAND

Channel	Frequency [MHz]	99% Bandwidth [MHz]	
		Antenna 1	Antenna 2
1	2412	13.795	13.705
6	2437	13.847	13.768
11	2462	13.761	13.635
12	2467	13.789	13.805
13	2472	13.678	13.910

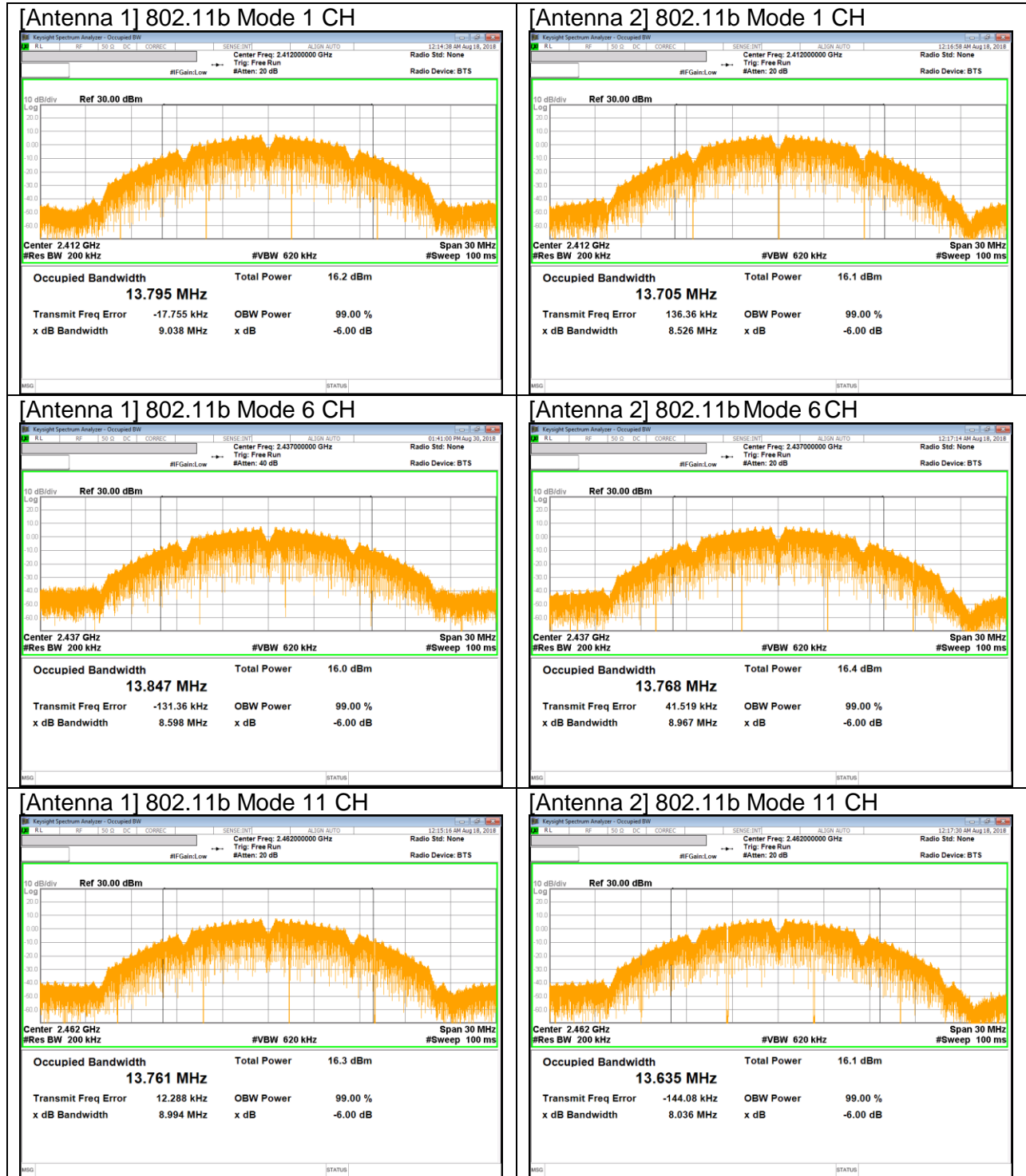
7.2.2. 802.11g MODE IN THE 2.4 GHz BAND

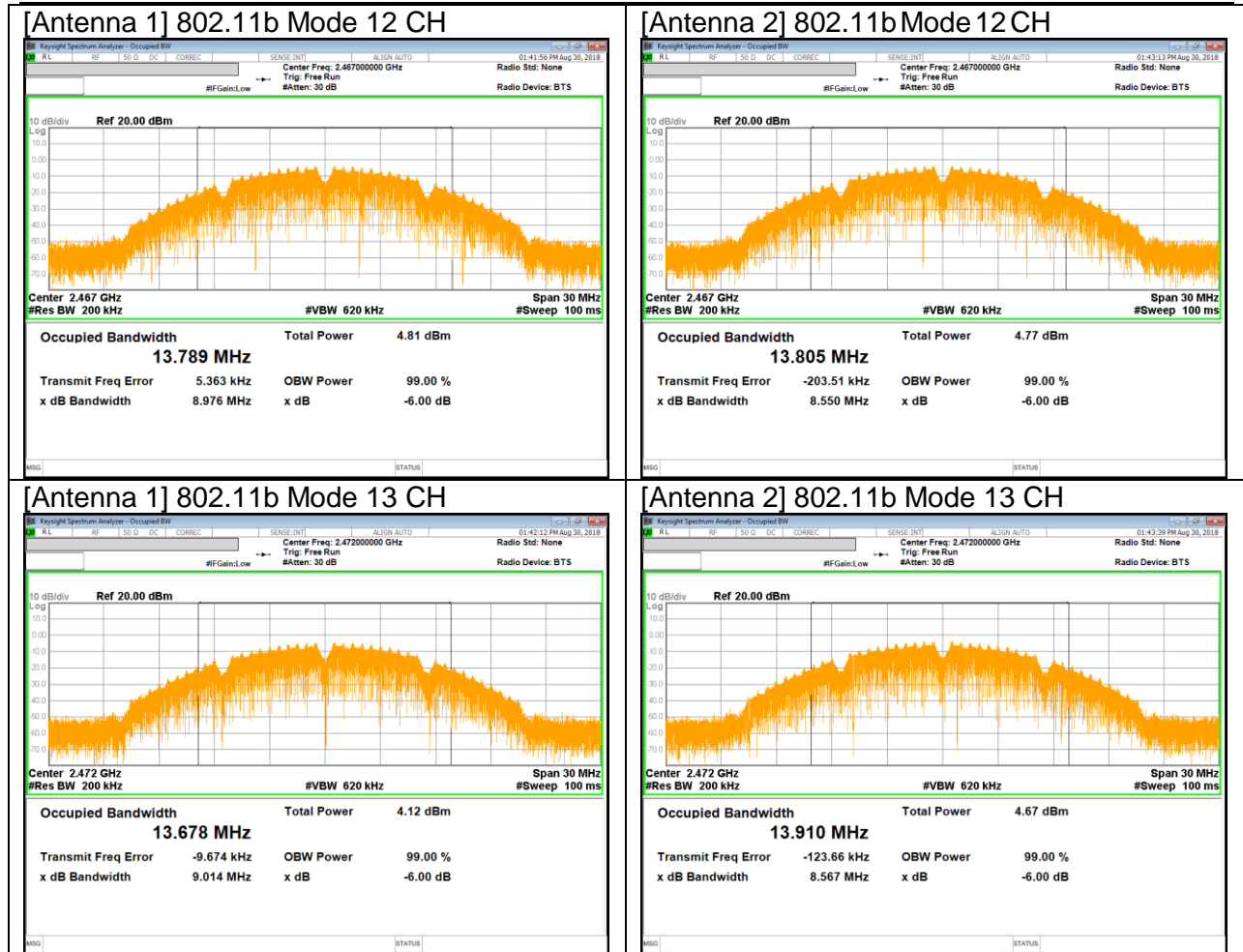
Channel	Frequency [MHz]	99% Bandwidth [MHz]	
		Antenna 1	Antenna 2
1	2412	16.338	16.313
6	2437	16.333	16.343
11	2462	16.346	16.318
12	2467	16.346	16.354
13	2472	16.318	16.374

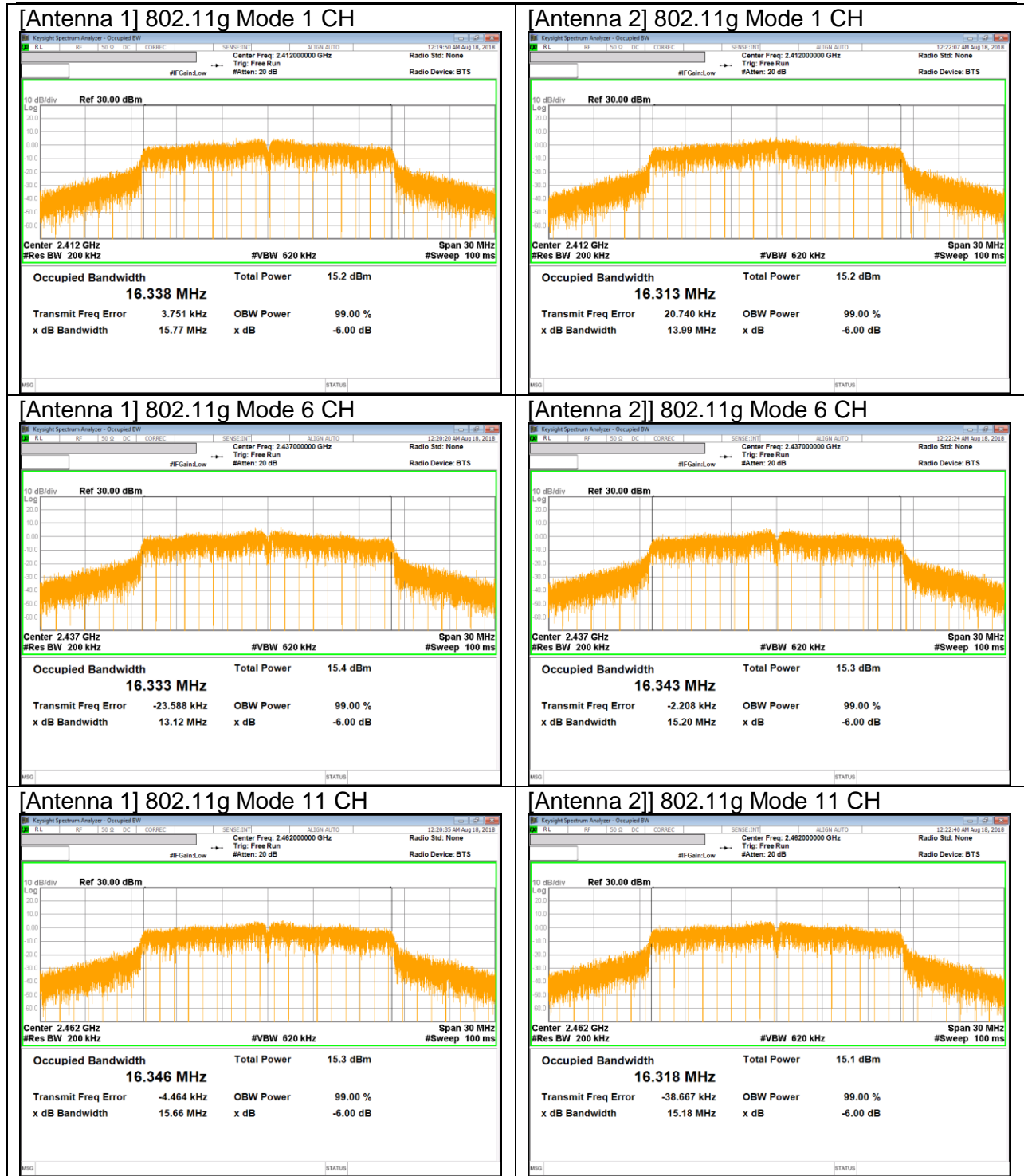
7.2.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND

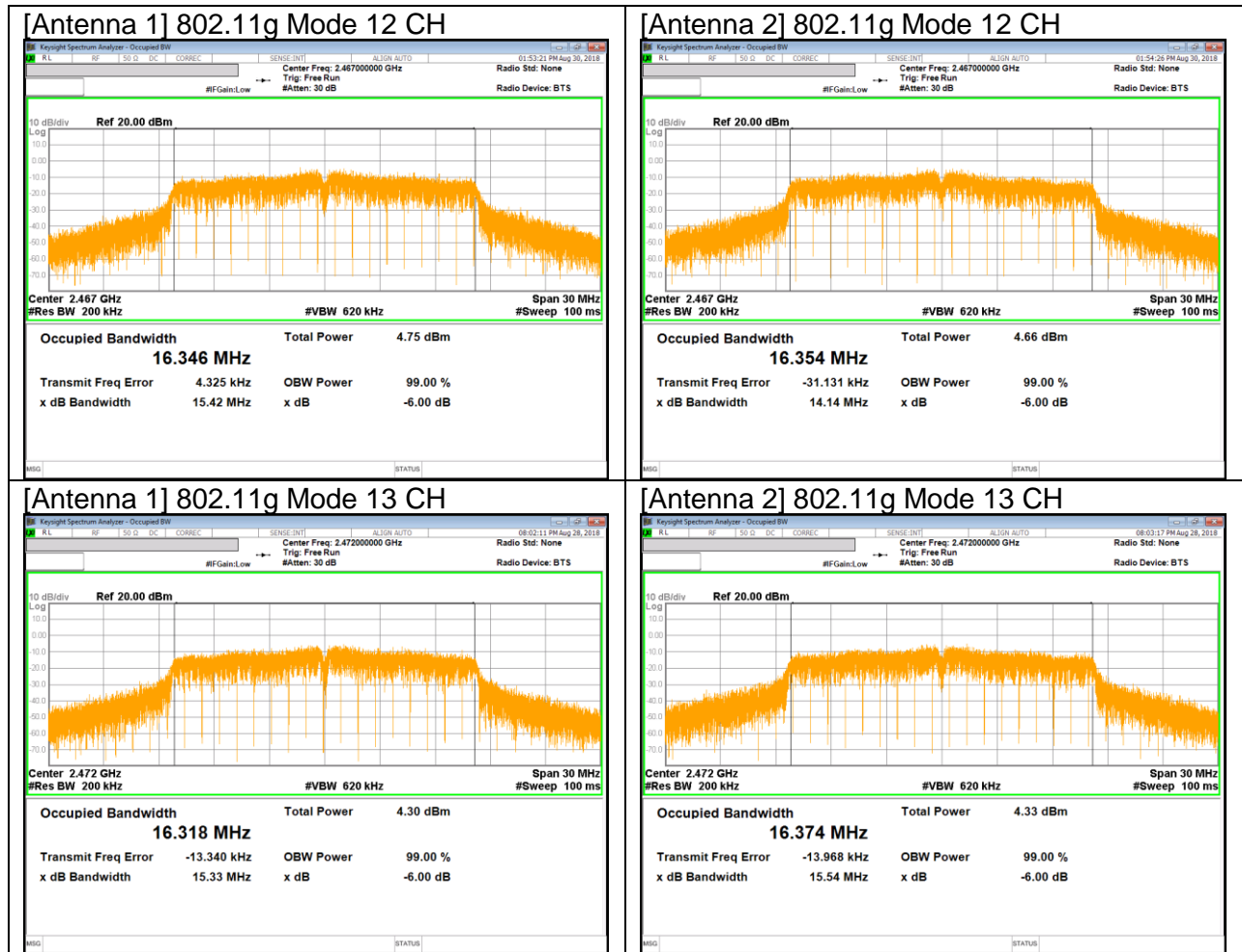
Channel	Frequency [MHz]	99% Bandwidth [MHz]	
		Antenna 1	Antenna 2
1	2412	17.580	17.573
6	2437	17.587	17.578
11	2462	17.587	17.579
12	2467	17.562	17.582
13	2472	17.549	17.616

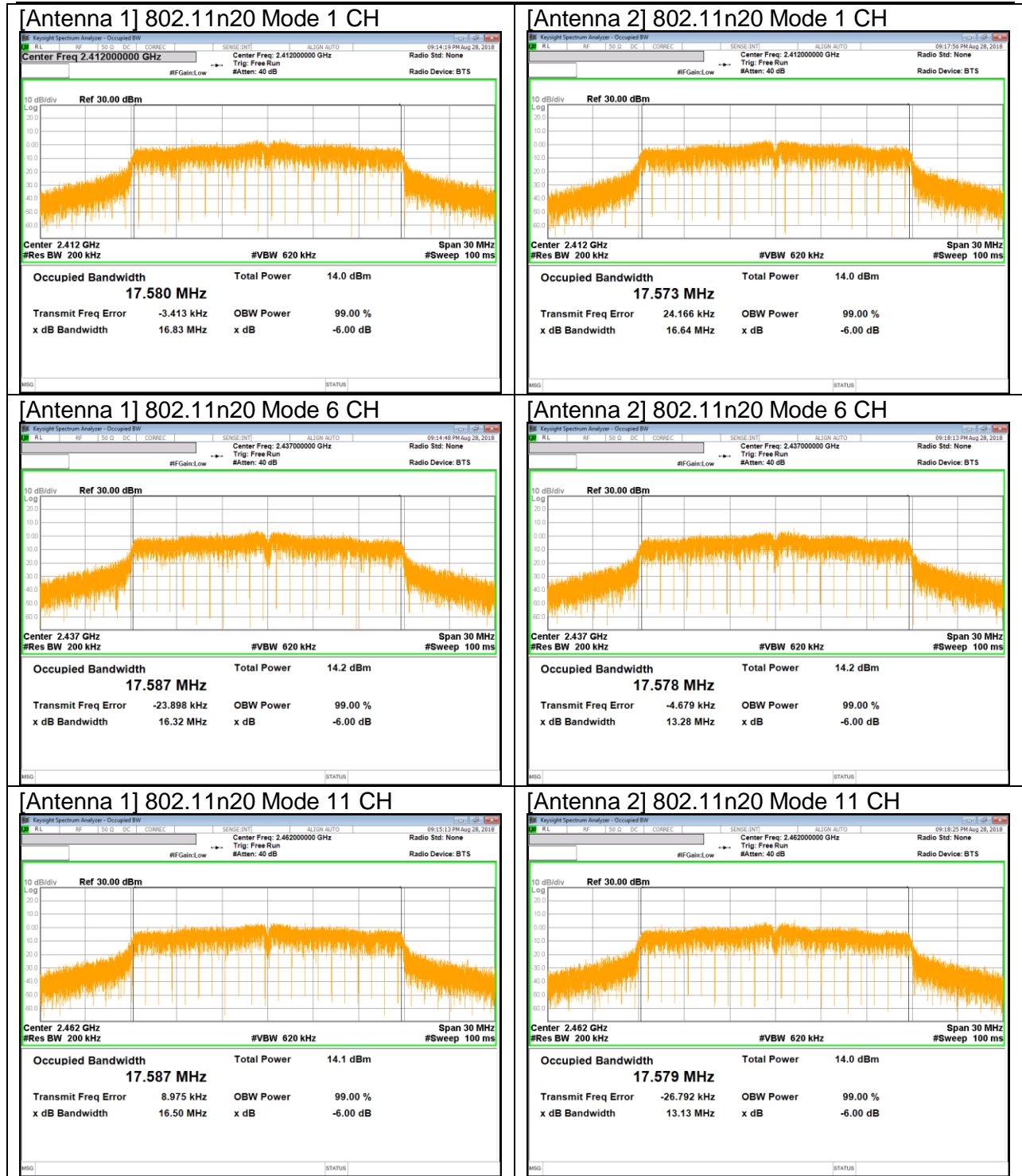
7.2.4. 99% BANDWIDTH PLOTS

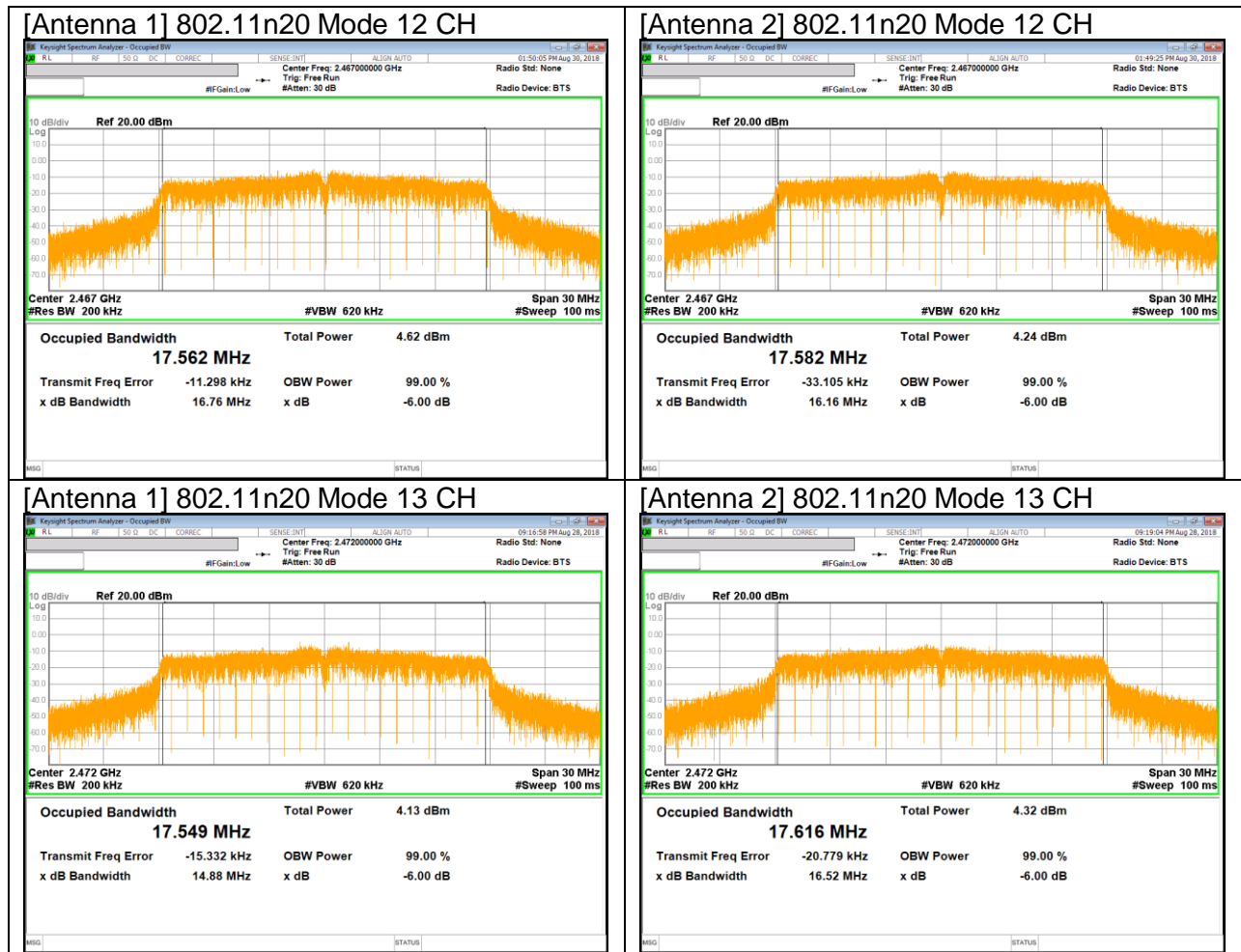












8. MEASUREMENT METHODS

6 dB BW : KDB 558074 D01 v05, Section 8.2.

OUTPUT POWER : KDB 558074 D01 v05, Section 8.3.2.3.

POWER SPECTRAL DENSITY : KDB 558074 D01 v05, Section 8.4.

Out-of-band EMISSIONS (Conducted) : KDB 558074 D01 v05, Section 8.5, 8.7.

Out-of-band EMISSIONS IN NON-RESTRICTED BANDS: KDB 558074 D01 v05, Section 8.5.

Out-of-band EMISSIONS IN RESTRICTED BANDS : KDB 558074 D01 v05, Section 8.6.

AC Power Line Conducted Emission : ANSI C63.10-2013, Section 6.2.

9. SUMMARY TABLE

FCC Part Section	Test Description	Test Limit	Test Condition	Test Result
15.247 (a)(2)	Occupied Band width (6dB)	>500KHz	Conducted	Pass
2.1051, 15.247 (d)	Band Edge / Conducted Spurious Emission	-30dBc		Pass
15.247 (b)(3)	TX conducted output power	<30dBm		Pass
15.247 (e)	PSD	<8dBm		Pass
15.207 (a)	AC Power Line conducted emissions	Section 10	Power Line conducted	Pass
15.205, 15.209	Radiated Spurious Emission	< 54dBuV/m	Radiated	Pass

10. ANTENNA PORT TEST RESULTS

10.1. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

The minimum 6 dB bandwidth shall be at least 500 kHz.

TEST PROCEDURE

Reference to KDB 558074 D01 15.247 Meas Guidance v05: The transmitter output is connected to a spectrum analyzer with the RBW set to 100KHz, the VBW $\geq 3 \times$ RBW, peak detector and max hold.

RESULTS

10.1.1. 802.11b MODE IN THE 2.4 GHz BAND

Channel	Frequency [MHz]	6 dB Bandwidth [MHz]		Minimum Limit [MHz]
		ANTENNA 1	ANTENNA 2	
1	2412	8.078	8.079	0.5
6	2437	8.075	8.077	0.5
11	2462	8.079	8.071	0.5
12	2467	8.079	8.076	0.5
13	2472	8.078	8.080	0.5
Worst		8.071		

10.1.2. 802.11g MODE IN THE 2.4 GHz BAND

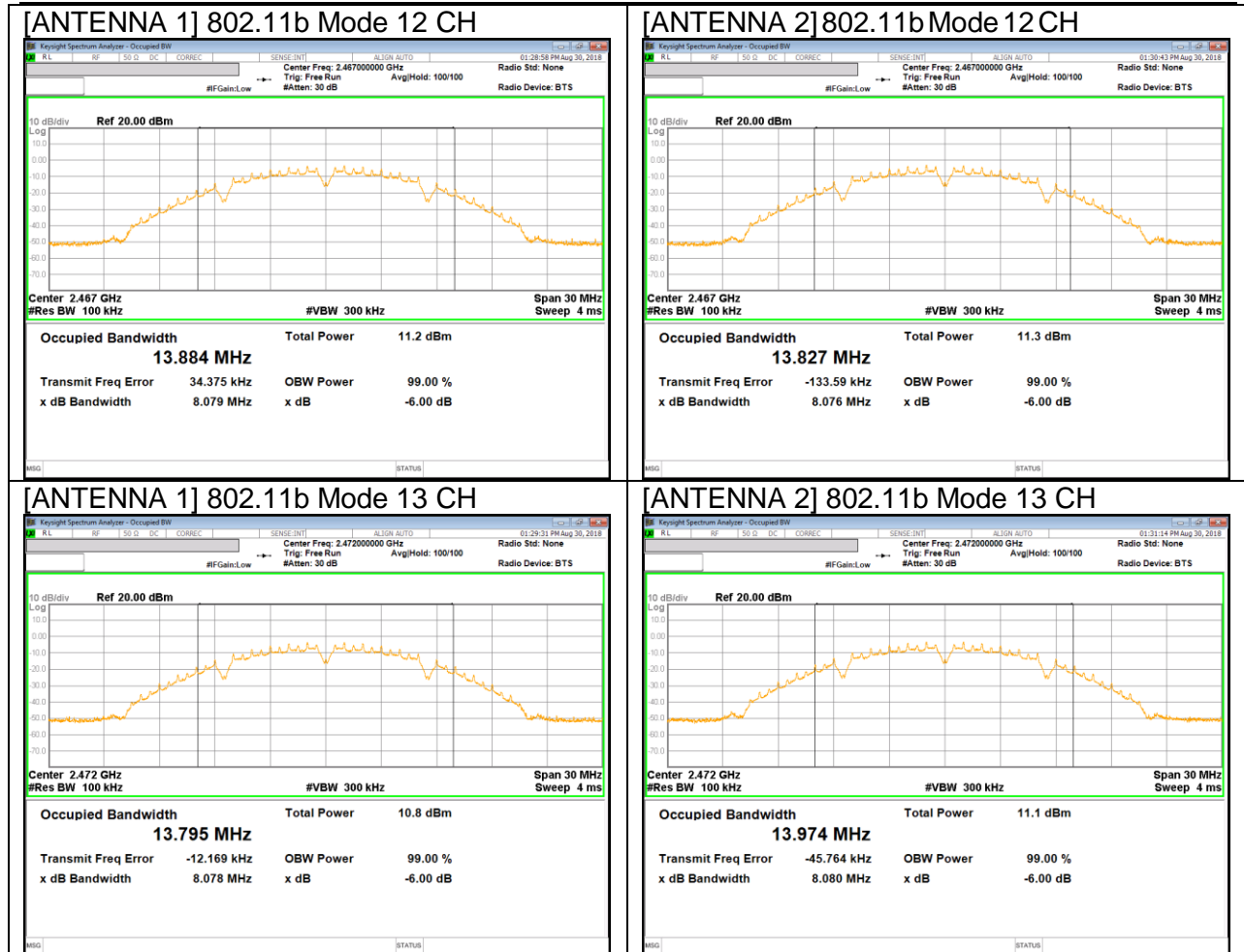
Channel	Frequency [MHz]	6 dB Bandwidth [MHz]		Minimum Limit [MHz]
		ANTENNA 1	ANTENNA 2	
1	2412	15.07	15.04	0.5
6	2437	15.06	15.02	0.5
11	2462	15.06	13.80	0.5
12	2467	15.05	15.06	0.5
13	2472	15.06	15.01	0.5
Worst		13.80		

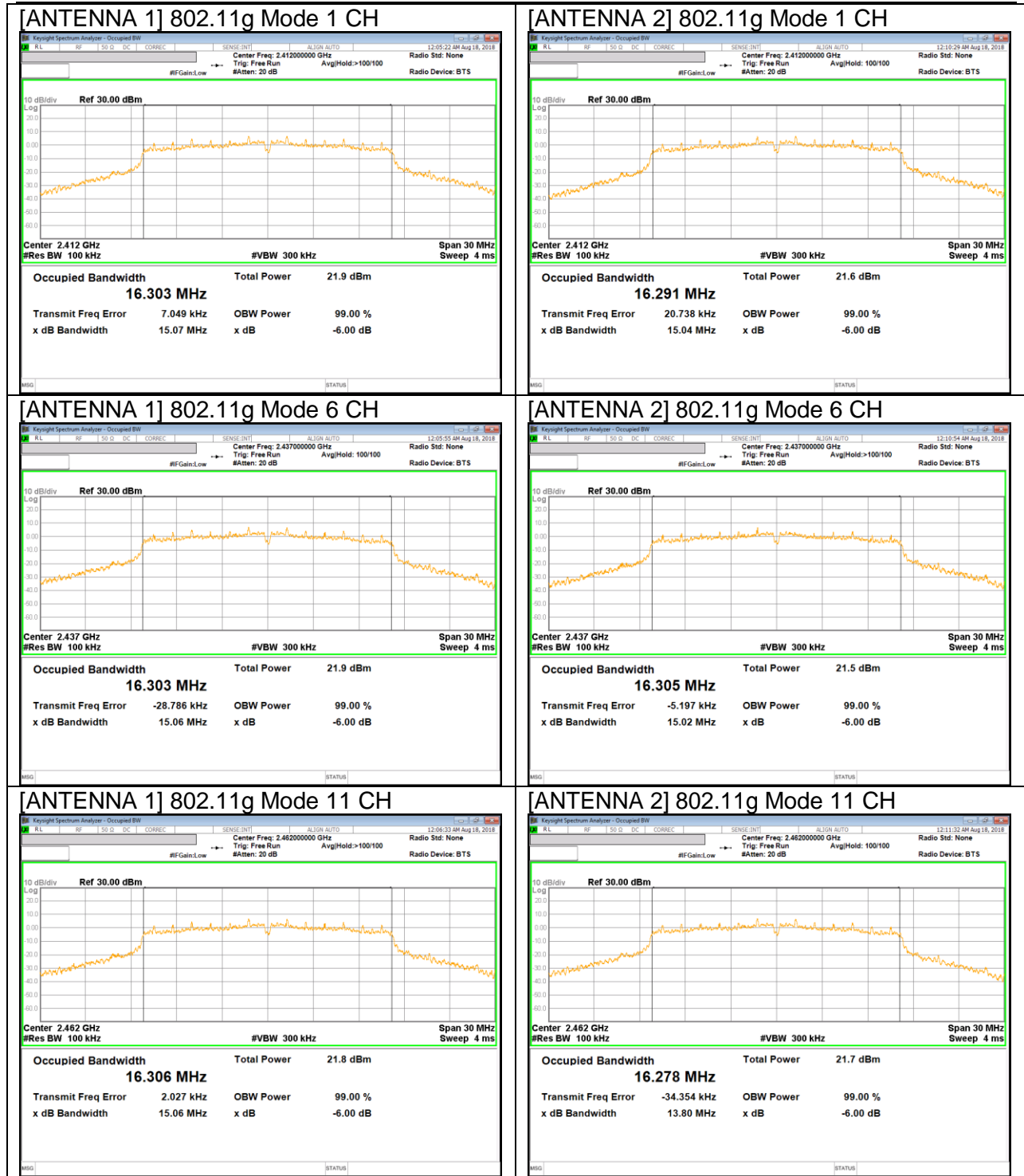
10.1.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND

Channel	Frequency [MHz]	6 dB Bandwidth [MHz]		Minimum Limit [MHz]
		ANTENNA 1	ANTENNA 2	
1	2412	14.97	15.05	0.5
6	2437	15.05	15.05	0.5
11	2462	15.03	15.04	0.5
12	2467	15.05	15.06	0.5
13	2472	15.05	15.02	0.5
Worst		14.97		

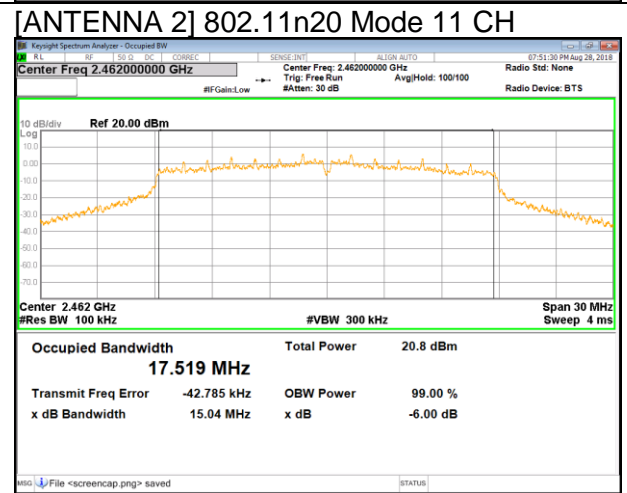
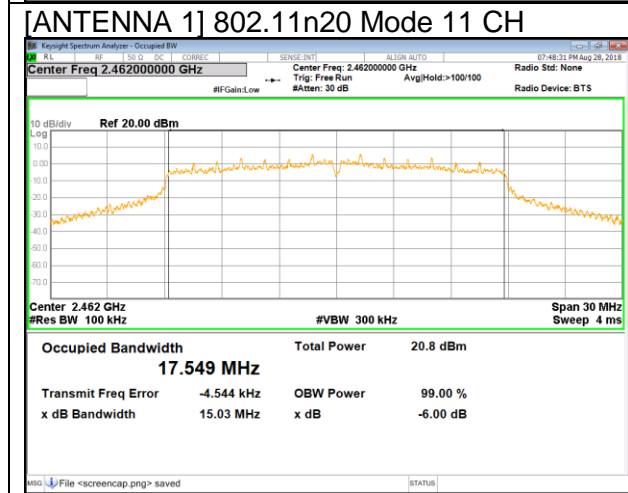
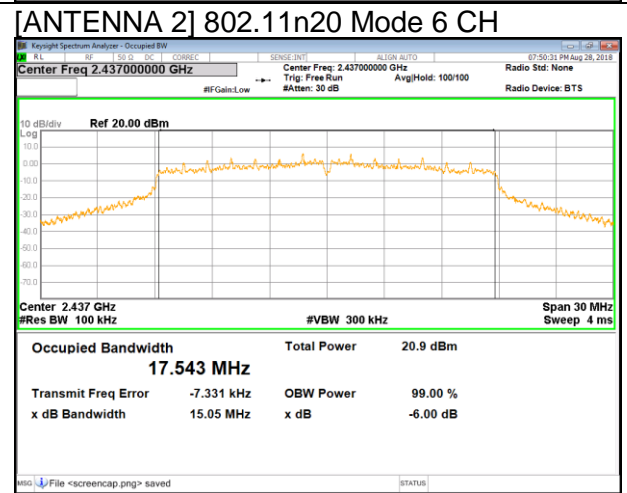
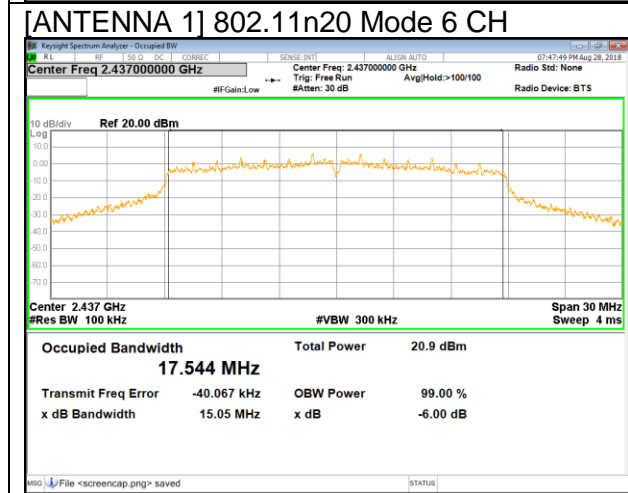
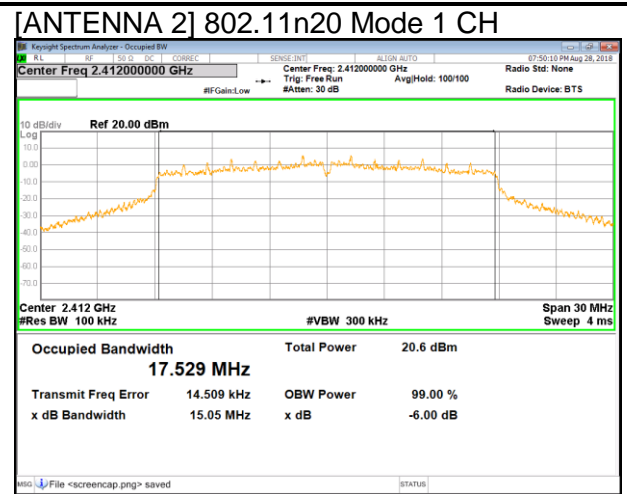
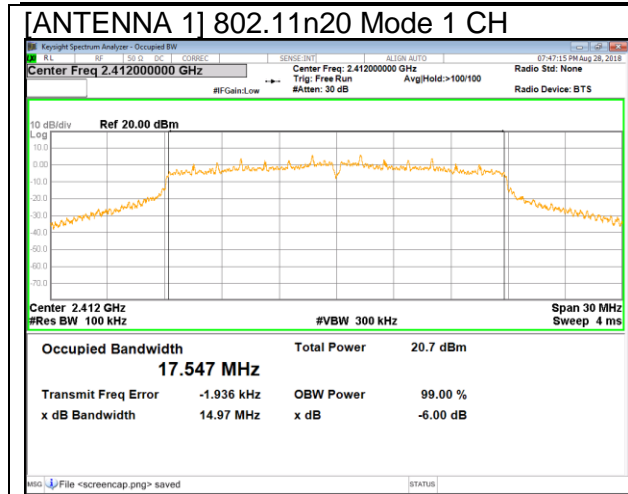
10.1.4. 6 dB BANDWIDTH PLOTS













10.2. OUTPUT POWER

LIMITS

FCC §15.247

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss was entered as an offset in the power meter to allow for direct reading of power.

Output power measurement was performed utilizing the 8.3.2.3 under KDB558074 D01 15.247 Meas Guidance v05.

Duty cycle correction factor is already added to the average output power results for duty cycle factor < 98%. (802.11g, 802.11n mode)

DIRECTIONAL ANTENNA GAIN

The TX chains are correlated and the antenna gain is unequal among the chains.
The directional gain is:

2.4GHz

Antenna 1 Gain [dBi]	Antenna 2 Gain [dBi]	Correlated Chains Directional Gain [dBi]
-0.50	-0.40	2.56

- IEEE 802.11b Mode is not supported MIMO operation. So can't transmit on two antennas as the same time.

RESULTS

10.2.1. 802.11b MODE IN THE 2.4 GHz BAND

Limits

Channel	Frequency [MHz]	Directional Gain ANTENNA1 [dBi]	Directional Gain ANTENNA2 [dBi]	FCC Power Limit [dBm]	Max Power [dBm]
1	2412	-0.5	-0.4	30.00	30.00
6	2437	-0.5	-0.4	30.00	30.00
11	2462	-0.5	-0.4	30.00	30.00
12	2467	-0.5	-0.4	30.00	30.00
13	2472	-0.5	-0.4	30.00	30.00

Duty Cycle CF [dB]	0.00	Included in Calculations of Corr'd Power
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Results

Channel	Frequency [MHz]	ANTENNA1 Meas Power [dBm]	ANTENNA2 Meas Power [dBm]	Maximum Power [dBm]	Power Limit [dBm]	Margin [dB]
1	2412	15.14	15.06	15.14	30.00	-14.86
6	2437	15.72	15.26	15.72	30.00	-14.28
11	2462	15.21	15.14	15.21	30.00	-14.79
12	2467	4.67	4.60	4.67	30.00	-25.33
13	2472	4.21	4.40	4.40	30.00	-25.60
Worst				15.72	30.00	-14.71

10.2.2. 802.11g MODE IN THE 2.4 GHz BAND

Limits

Channel	Frequency [MHz]	Directional Gain [dBi]	FCC Power Limit [dBm]	Max Power EIRP Limit [dBm]
1	2412	2.56	30.00	30.00
6	2437	2.56	30.00	30.00
11	2462	2.56	30.00	30.00
12	2467	2.56	30.00	30.00
13	2472	2.56	30.00	30.00

Duty Cycle CF [dB]	0.00	Included in Calculations of Corr'd Power
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Results

Channel	Frequency [MHz]	ANTENNA1 Meas Power [dBm]	ANTENNA2 Meas Power [dBm]	Total Corr'd Power [dBm]	Power Limit [dBm]	Margin [dB]
1	2412	14.12	14.10	17.12	30.00	-12.88
6	2437	14.30	14.28	17.30	30.00	-12.70
11	2462	14.18	14.12	17.16	30.00	-12.84
12	2467	4.66	4.50	7.59	30.00	-22.41
13	2472	4.28	4.27	7.29	30.00	-22.71
Worst				17.30	30.00	-11.77

10.2.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND

Limits

Channel	Frequency [MHz]	Directional Gain [dBi]	FCC Power Limit [dBm]	Max Power EIRP Limit [dBm]
1	2412	2.56	30.00	30.00
6	2437	2.56	30.00	30.00
11	2462	2.56	30.00	30.00
12	2467	2.56	30.00	30.00
13	2472	2.56	30.00	30.00

Duty Cycle CF [dB]	0.00	Included in Calculations of Corr'd Power
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Results

Channel	Frequency [MHz]	ANTENNA1 Meas Power [dBm]	ANTENNA2 Meas Power [dBm]	Total Corr'd Power [dBm]	Power Limit [dBm]	Margin [dB]
1	2412	13.92	13.90	16.92	30.00	-13.08
6	2437	14.09	14.09	17.10	30.00	-12.90
11	2462	14.01	13.91	16.97	30.00	-13.03
12	2467	4.45	4.28	7.38	30.00	-22.62
13	2472	3.93	4.43	7.20	30.00	-22.80
Worst				17.10	30.00	

10.3. PSD

LIMITS

FCC §15.247

The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

TEST PROCEDURE

Power Spectral Density was performed utilizing the section 8.4 under KDB558074 D01 15.247 Meas Guidance v05

RESULTS

10.3.1. 802.11b MODE IN THE 2.4 GHz BAND

Channel	Frequency [MHz]	Antenna 1 [dBm]	Antenna 2 [dBm]	Max PSD [dBm]	Limit [dBm]	Margin [dB]
1	2412	-13.59	-13.78	-13.59	8.00	-21.59
6	2437	-12.91	-10.36	-10.36	8.00	-18.36
11	2462	-8.57	-10.37	-8.57	8.00	-16.57
12	2467	-21.06	-22.67	-21.06	8.00	-29.06
13	2472	-24.27	-18.74	-18.74	8.00	-26.74

Duty Cycle CF [dB]	0.00	Included in Calculations of PPSD
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10.3.2. 802.11g MODE IN THE 2.4 GHz BAND

Channel	Frequency [MHz]	Antenna 1 [dBm]	Antenna 2 [dBm]	Total PSD [dBm]	Limit [dBm]	Margin [dB]
1	2412	-16.27	-15.72	-12.98	8.00	-20.98
6	2437	-15.41	-15.93	-12.65	8.00	-20.65
11	2462	-16.05	-15.86	-12.94	8.00	-20.94
12	2467	-25.39	-25.64	-22.50	8.00	-30.50
13	2472	-25.66	-25.69	-22.67	8.00	-30.67

Duty Cycle CF [dB]	0.00	Included in Calculations of PPSD
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10.3.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND

Channel	Frequency [MHz]	Antenna 1 [dBm]	Antenna 2 [dBm]	Total PSD [dBm]	Limit [dBm]	Margin [dB]
1	2412	-16.59	-16.60	-13.59	8.00	-21.59
6	2437	-16.33	-16.26	-13.29	8.00	-21.29
11	2462	-16.39	-16.51	-13.44	8.00	-21.44
12	2467	-26.10	-26.15	-23.11	8.00	-31.11
13	2472	-26.13	-26.64	-23.37	8.00	-31.37

Duty Cycle CF [dB]	0.00	Included in Calculations of PPSD
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10.3.4. PSD PLOTS

