



CERTIFICATION TEST REPORT

Report Number. : 4790406775-E4V2

Applicant : SAMSUNG ELECTRONICS CO., LTD.
129 SAMSUNG-RO, YEONGTONG-GU, SUWON-SI,
GYEONGGI-DO, 16677, KOREA

Model : SM-T630

FCC ID : A3LSMT630

EUT Description : BT/BLE, DTS/UNII a/b/g/n/ac/ax and NFC.

Test Standard(s) : FCC 47 CFR PART 15 SUBPART E

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: SAMSUNG ELECTRONICS CO., LTD.
EUT DESCRIPTION: BT/BLE, DTS/UNII a/b/g/n/ac/ax and NFC
MODEL NUMBER: SM-T630
SERIAL NUMBER: R32T5003C8X, R32T50052FD (CONDUCTED, Original);
R32T5002Q3X, R32T5002ZQH, R32T5003G0W,
R32T5004ZHZ (RADIATED, Original);
R32T6005G6X (RADIATED, Spot-check);
DATE TESTED: 2022-06-06 ~ 2022-07-26(Original);
2022-07-06 ~ 2022-07-21 (Spot-check);

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart E	Complies

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.

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1.1. INTRODUCTION OF TEST DATA DEVIATION

This report referenced from the FCC ID: A3LSMT636B NII WLAN(FCC CFR 47 Part 15C). And the applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID.

1.2. DIFFERENCE

Except for removing WWAN RF components, The SM-T630 model shares the same enclosure and circuit board as SM-T636B. The WLAN antennas and surrounding circuitry and layout are identical between these two units.

After confirming through preliminary radiated emissions that the performance of the SM-T630 remains representative of SM-T636B. The test data of SM-T636B being submitted for this application to cover WLAN features.

1.3. SPOT CHECK VERIFICATION DATA

(Worst case of the radiated band-edge and radiated spurious emissions)

Band	Test Item	Mode	Frequency	Test Limit	Original model	Spot check model	Deviation	Remark
					SM-T636B Results	SM-T630 Results		
					FCC ID : A3LSMT636B	FCC ID : A3LSMT630		
NII WLAN (5GHz)	BANDEDGE	802.11n_HT40_5190_MIMO	5190 MHz	54.0 dBuV/m	50.60 dBuV/m	50.71 dBuV/m	0.11 dB	
	RSE	802.11a_5180_MIMO	10360 MHz	68.2 dBuV/m	60.37 dBuV/m	62.39 dBuV/m	2.02 dB	
	BANDEDGE	802.11n_HT40_5310_MIMO	5310 MHz	54.0 dBuV/m	50.29 dBuV/m	51.47 dBuV/m	1.18 dB	
	RSE	802.11a_5320_MIMO	10640 MHz	54.0 dBuV/m	47.12 dBuV/m	46.76 dBuV/m	-0.36 dB	
	BANDEDGE	802.11a_5700_MIMO	5700 MHz	68.2 dBuV/m	62.98 dBuV/m	65.99 dBuV/m	3.01 dB	
	RSE	802.11a_5500_MIMO	11000 MHz	54.0 dBuV/m	42.19 dBuV/m	42.18 dBuV/m	-0.01 dB	
	BANDEDGE	802.11a_5825_MIMO	5825 MHz	-27 dBm	-34.64 dBm	-34.97 dBm	-0.33 dB	
	RSE	802.11a_5825_MIMO	7766 MHz	68.2 dBuV/m	56.47 dBuV/m	56.41 dBuV/m	-0.06 dB	
NII WLAN_ax (5GHz)	BANDEDGE	802.11ax_HE80_5210_SU_MIMO	5210 MHz	54.0 dBuV/m	51.68 dBuV/m	50.68 dBuV/m	-1.00 dB	
	RSE	802.11ax_HE20_5180_26T_RU4_MIMO	6906 MHz	68.2 dBuV/m	59.01 dBuV/m	58.88 dBuV/m	-0.13 dB	
	BANDEDGE	802.11ax_HE40_5310_SU_MIMO	5310 MHz	54.0 dBuV/m	51.30 dBuV/m	51.29 dBuV/m	-0.01 dB	
	RSE	802.11ax_HE20_5300_26T_RU4_MIMO	7066 MHz	68.2 dBuV/m	57.91 dBuV/m	58.32 dBuV/m	0.41 dB	
	BANDEDGE	802.11ax_HE80_5530_SU_MIMO	5530 MHz	68.2 dBuV/m	62.27 dBuV/m	65.06 dBuV/m	2.79 dB	
	RSE	802.11ax_HE20_5700_26T_RU4_MIMO	6840 MHz	68.2 dBuV/m	49.02 dBuV/m	47.60 dBuV/m	-1.42 dB	
	BANDEDGE	802.11ax_HE20_5825_SU_MIMO	5825 MHz	-27 dBm	-34.35 dBm	-35.13 dBm	-0.78 dB	
	RSE	802.11ax_HE20_5785_26T_RU4_MIMO	6942 MHz	68.2 dBuV/m	48.65 dBuV/m	47.83 dBuV/m	-0.82 dB	

Band	Test Item	Test result	Limit	Result
NII WLAN (2A, 2C)	Channel Closing time	1.875 ms	60.000 ms	Complies
	Channel Move time	0.724 s	10.000 s	Complies

Comparison of two models, upper deviation is within 3 dB range and all test results are under FCC Technical Limits.

Note. Slave device follows the operation of the master device. Since channel move & closing time is dependent on the operation of the Master device and has nothing to do with the slave, spot-check was performed only with pass/fail without indicating time deviation.

1.4. REFERENCE DETAIL

Reference application that contains the reused reference data in the individual test reports:

Equipment Class	Reference FCC ID (Parent)	Application Type	Reference Test report number	Exhibit Type	Spot-Check Test Report Number
DTS	A3LSMT636B	Original Grant	4790406759-E3 (802.11b/g/n/ax)	Test Report	4790406775-E1 (802.11b/g/n/ax)
DTS	A3LSMT636B	Original Grant	4790406759-E4 (BLE)	Test Report	4790406775-E2 (BLE)
DSS	A3LSMT636B	Original Grant	4790406759-E5 (Bluetooth)	Test Report	4790406775-E3 (Bluetooth)
NII	A3LSMT636B	Original Grant	4790406759-E6 (802.11a/n/ac/ax)	Test Report	4790406775-E4 (802.11a/n/ac/ax)
DXX	A3LSMT636B	Original Grant	4790406759-E7 (NFC)	Test Report	4790406775-E5 (NFC)

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 789033 D02 General UNII Test Procedures New Rules v02r01
4. KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02
5. KDB 905462 D03 UNII Clients Without Radar Detection New Rules v01r02
6. KDB 662911 D01 v02r01
7. KDB 291071 DR01-44460(Sept 21, 2021)
8. ANSI C63.10-2013.
9. KDB 484596 D01 Referencing Test Data v01

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 checked="" type="checkbox"/>	Chamber 1(3m semi-anechoic chamber)
<input checked="" type="checkbox"/>	Chamber 2(3m semi-anechoic chamber)
<input checked="" type="checkbox"/>	Chamber 3(3m semi-anechoic chamber)
<input type="checkbox"/>	Chamber 4(3m Full-anechoic chamber)
<input type="checkbox"/>	Chamber 5(3m Full-anechoic chamber)

UL Korea, Ltd. is accredited by IAS, Laboratory Code TL-637. The full scope of accreditation can be viewed at <https://www.iasonline.org/wp-content/uploads/2017/05/TL-637-cert-New.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	3.02 dB
Radiated Disturbance, 30 MHz to 1 GHz	4.05 dB
Radiated Disturbance, 1 GHz to 18 GHz	5.78 dB
Radiated Disturbance, 18 GHz to 40 GHz	5.58 dB

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

4.4. DECISION RULE

Decision rule for statement(s) of conformity is based on Procedure 2, Clause 4.4.3 in IEC Guide 115:2021.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a BT/BLE, DTS/UNII a/b/g/n/ac/ax and NFC.
 This test report addresses the NII (WLAN) operational mode.

WiFi operating mode

Frequency range	Mode	ANT1	ANT2
5GHz (5180 MHz ~ 5825 MHz)	802.11a MIMO	TX/RX	TX/RX
	802.11n MIMO	TX/RX	TX/RX
	802.11ac MIMO	TX/RX	TX/RX
	802.11ax MIMO	TX/RX	TX/RX

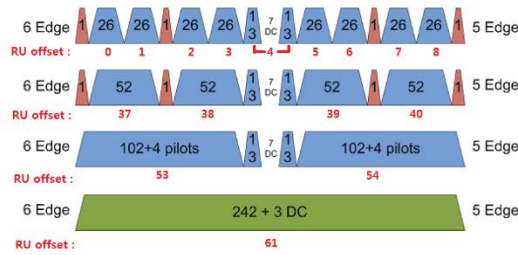
Simultaneous TX Condition

Simultaneous Tx Condition - RSDB

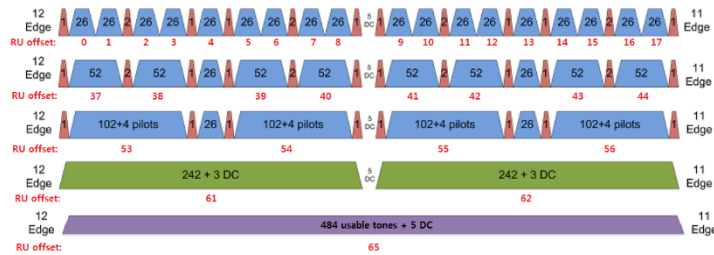
Mode	# of TX	5GHz WLAN		2.4GHz WLAN		Test Case
		ANT1	ANT2	ANT1	ANT2	
2.4GHz MIMO + 5GHz MIMO	4	0	0	0	0	0

802.11ax RU allocations

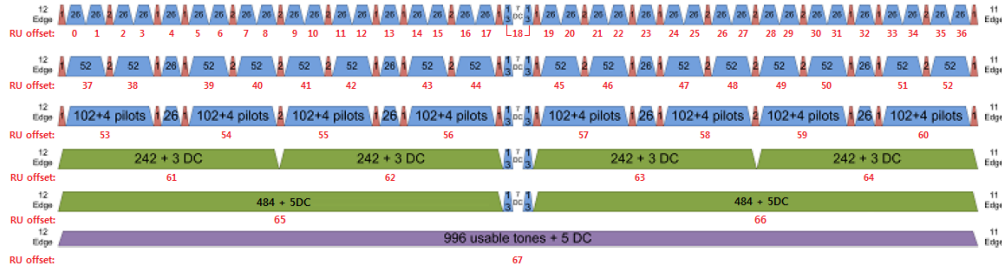
**- HE 20 Mode -
20 MHz**



**- HE 40 Mode -
40 MHz**



- HE 80(996T) & 160 Mode(996T + 996T) -



Test RU offset for tones in each modes

Mode	Tones	RU offset
HE20	26T	0
		4
		8
	52T	37
		38
		40
	106T	53
	54	
242T / SU ^{Note}	61 / -	
HE40	26T	0
		9
		17
	52T	37
		41
		44
	106T	53
	54	
	56	
242T	61	
	62	
484T / SU ^{Note}	63 / -	
HE80	26T	0
		18
		36
	52T	37
		45
		52
	106T	53
	57	
	60	
242T	61	
	62	
	64	
484T	65	
	66	
996T / SU ^{Note}	67 / -	

Note: Full RU(Resource Unit) mode and SU(Single Unit) mode have no difference in physical waveform. This report has been reported the SU mode with highest output power in MIMO.

Mode	Position	Tones	RU offset
HE160	Lower 80 MHz	26T	0
			18
	36		
	0		
	Upper 80 MHz		18
			36
	Lower 80 MHz	52T	37
			45
	52		
	Upper 80 MHz		37
			45
	52		
	Lower 80 MHz	106T	53
			57
	60		
	Upper 80 MHz		53
57			
60			
Lower 80 MHz	242T	61	
		62	
64			
Upper 80 MHz		61	
		62	
64			
Lower 80 MHz	484T	65	
		66	
Upper 80 MHz		65	
		66	
66			
Lower 80 MHz		996T	67
	67		
-	SU ^{Note}	-	

Note: Full RU(Resource Unit) 996T + 996T mode and SU(Single Unit) mode have no difference in physical waveform. This report has been reported the SU mode with highest output power in MIMO.

Band portion of RU allocation about straddle channels

Mode	Channel	Tones	RU offset	Portion
HE20	Straddle 5720 MHz	26T	6	UNII 2C & UNII 3
		242T / SU	61 / -	
HE40	Straddle 5710 MHz	26T	15	UNII 2C & UNII 3
		484T / SU	65 / -	
HE80	Straddle 5690 MHz	26T	34	UNII 2C & UNII 3
		996T / SU	67 / -	

Note: In case of RU straddle channel, test was performed overlapping RU position.

MAXIMUM OUTPUT POWER

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

Band	Frequency Range [MHz]	Mode	Output Power [dBm]	Output Power [mW]
UNII-1	5180 - 5240	802.11a MIMO	20.41	109.90
		802.11n(HT20) MIMO	19.13	81.85
		802.11ax(HE20) MIMO	19.69	93.11
	5190 - 5230	802.11n(HT40) MIMO	19.13	81.85
		802.11ax(HE40) MIMO	19.36	86.30
	5210	802.11ac(VHT80) MIMO	16.53	44.98
802.11ax(HE80) MIMO		17.58	57.28	
UNII-2A	5260 - 5320	802.11a MIMO	20.43	110.41
		802.11n(HT20) MIMO	19.15	82.22
		802.11ax(HE20) MIMO	19.67	92.68
	5190 - 5230	802.11n(HT40) MIMO	19.19	82.99
		802.11ax(HE40) MIMO	19.51	89.33
	5270 - 5310	802.11ac(VHT80) MIMO	16.63	46.03
802.11ax(HE80) MIMO		18.07	64.12	
UNII-2C	5500 - 5720	802.11a MIMO	20.67	116.68
		802.11n(HT20) MIMO	19.47	88.51
		802.11ax(HE20) MIMO	19.56	90.36
	5510 - 5710	802.11n(HT40) MIMO	19.54	89.95
		802.11ax(HE40) MIMO	19.78	95.06
	5530 - 5690	802.11ac(VHT80) MIMO	16.52	44.87
802.11ax(HE80) MIMO		18.79	75.68	
UNII-3	5745 - 5825	802.11a MIMO	20.47	111.43
		802.11n(HT20) MIMO	19.29	84.92
		802.11ax(HE20) MIMO	19.44	87.90
	5755 - 5795	802.11n(HT40) MIMO	19.37	86.50
		802.11ax(HE40) MIMO	19.45	88.10
	5775	802.11ac(VHT80) MIMO	15.99	39.72
802.11ax(HE80) MIMO		18.11	64.71	

5.2. DESCRIPTION OF AVAILABLE ANTENNAS

An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

**The internal antenna was Permanently attached.
 Therefore this E.U.T Complies with the requirement of §15.203.**

The radio utilizes a internal antenna, with a maximum gain of:

Frequency Band [MHz]	ANT1 Gain [dBi]	ANT2 Gain [dBi]	Correlated Chains Directional Gain [dBi]
UNII 1 (5150 - 5250)	-8.4	-2.8	-2.1
UNII 2A (5250 - 5350)	-5.0	-2.9	-0.9
UNII 2C (5470 - 5725)	-4.1	-2.6	-0.3
UNII 3 (5725 - 5850)	-9.3	-2.9	-2.5

Directional gain for the MIMO operations is determined using KDB 662911 D01 Multiple Transmitter Output section F (2)(d)(1) for *Unequal antenna gains, with equal transmit powers*. The gain is calculated using the formula for correlated transmissions across the two transmit antennas. Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}]$ dBi.

Sample calculation for this device with $N_{ANT} = 2$
 Directional gain = $10 \log[(10^{-5.10/20} + 10^{-7.00/20})^2 / 2] = -2.99$ dBi

5.3. List of test reduction and modes covering other modes:

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

Authorized Frequency Band			
Mode	Antenna Stream	Mode	Covered by
802.11a	MIMO	802.11a 2TX	
802.11n HT20		802.11n HT20 2TX	
802.11ac VHT20		802.11ac VHT20 2TX	802.11n HT20 2TX
802.11ax HE20(SU)		802.11ax HE20 RU(242T) 2TX	802.11ax HE20 SU 2TX
802.11n HT40		802.11n HT40 2TX	
802.11ac VHT40		802.11ac VHT40 2TX	802.11n HT40 2TX
802.11ax HE40(SU)		802.11ax HE40 RU(484T) 2TX	802.11ax HE40 SU 2TX
802.11ac VHT80		802.11ac VHT80 2TX	
802.11ax HE80(SU)		802.11ax HE80 RU(996T) 2TX	802.11ax HE80 SU 2TX
802.11ac VHT160		802.11ac VHT160 2TX	
802.11ax HE160(SU)		802.11ax HE160 RU(996T*2) 2TX	802.11ax HE160 SU 2TX

5.4. 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.

- Worst condition: MIMO mode / X axis

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

802.11a mode: 6 Mbps 2Tx	802.11n HT20 mode: MCS0 2Tx	802.11ax HE20 mode: MCS0 2Tx
	802.11n HT40 mode: MCS0 2Tx	802.11ax HE40 mode: MCS0 2Tx
	802.11ac VHT80 mode: MCS0 2Tx	802.11ax HE80 mode: MCS0 2Tx

Radiation test for 802.11a / n HT20 & HT40 / ac VHT80 / ax HE20 & HE40 & HE80 were evaluated at MIMO mode.

Note : All radiated and power line conducted tests were performed connected with charger for evaluation of worst case mode.

Worst-case selection criteria for 802.11ax test items :

- For the 6dB Bandwidth, it was tested at the RU allocation with lowest tones number for each bandwidth.

Note : All radiated and power line conducted tests were performed connected with charger for evaluation of worst case mode.

Test case configuration for 802.11a, 802.11n HT20 & 40, 802.11ac VHT20 & 40 & 80, 802.11ax HE20 & 40 & 80(SU) modes :

Mode	Band	SISO Target[dBm]				MIMO Target[dBm]			
		802.11a	802.11n	802.11ac	802.11ax (SU)	802.11a	802.11n	802.11ac	802.11ax (SU)
5GHz (20 MHz)	UNII-1	17	16	16	16	20	19	19	19
	UNII-2A	17	16	16	16	20	19	19	19
	UNII-2C	17	16	16	16	20	19	19	19
	UNII-3	17	16	16	16	20	19	19	19
5GHz (40 MHz)	UNII-1		16 Ch38: 15	14	16		19 Ch38: 18	17	19
	UNII-2A		16 Ch62: 15	14	16 Ch62: 15		19 Ch62: 18	17	19 Ch62: 18
	UNII-2C		16	14	16		19	17	19
	UNII-3		16	14	16		19	17	19
5GHz (80 MHz)	UNII-1			13	14			16	17
	UNII-2A			13	15			16	18
	UNII-2C			13	15			16	18
	UNII-3			13	15			16	18

Band-Edge & Spurious Emission
 Band-Edge & Spurious Emission Spot-Check

Note. Compared to the 802.11a mode, target power is the same or lower and the density is low, so only the spot-check test was performed in the 802.11n & 802.11ac & 802.11ax mode. Spot check test was performed in the worst tested band of 802.11a mode.

Test case configuration for 802.11ax HE20 & 40 & 80(RU) modes :

Band	Mode	Freq.	Tone	RU offset	Test Case			Band	Mode	Freq.	Tone	RU offset	Test Case		
					ANT1	ANT2	MIMO						ANT1	ANT2	MIMO
UNII-1	HE20	5180	26 T	0				UNII-2C	HE20	5500	26 T	0			
				4			O								
				8											
		0													
		4													
		8													
	5200	26 T	0												
			4												
			8												
	5240	26 T	0												
			4												
			8												
			0												
			4			O									
			8												
UNII-1	HE40	5190	26 T	0				UNII-3	HE20	5745	26 T	0			
				9			O								
				17											
	5230	26 T		0											
				9											
				17											
	HE80	5210		0			O								
				18											
				36											
UNII-2A	HE20	5260	26 T	0						5785	26 T	0			
				4											
				8											
		0				O									
		4													
		8													
	5300	26 T		0											
				4											
				8											
5320	26 T	0													
		4													
		8													

- Note1. Radiated spurious test was performed on the lower tone(26T) with worst average power.
- Note2. Since the target of 26 tones are all the same, spurious test was performed once in each UNII band.
- Note3. Spot-check test was performed in HE40, HE80 modes.

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Charger	SAMSUNG	EP-TA200	R37N6K421B2SE3	N/A
Data Cable	SAMSUNG	EP-DT725BWE	GH39-02020A	N/A
Charger	SAMSUNG	EP-TA800	R37N3MAH988DK3	N/A
Data Cable	SAMSUNG	EP-DN980	GH39-02115A	N/A
Earphone	SAMSUNG	GH59-15055A	EHS64AVFWE	N/A

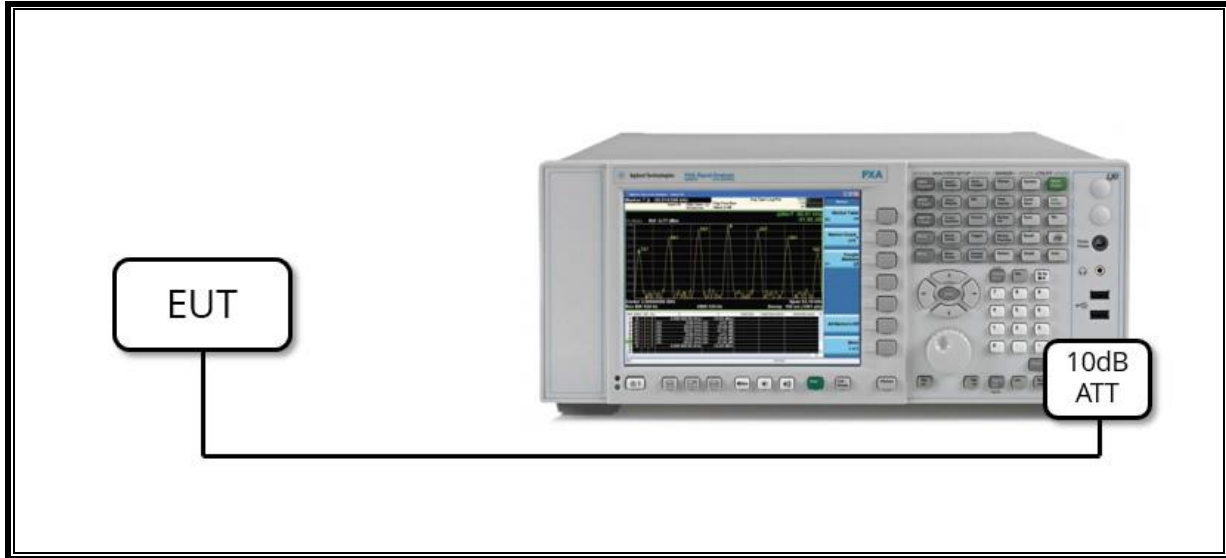
I/O CABLE

I/O Cable List						
Cable No.	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	DC Power	1	A to C Type	Shielded	1.0 m	N/A
2	DC Power	1	C to C Type	Shielded	1.0 m	N/A
3	Audio	2	Mini-Jack	Unshielded	0.7 m	N/A

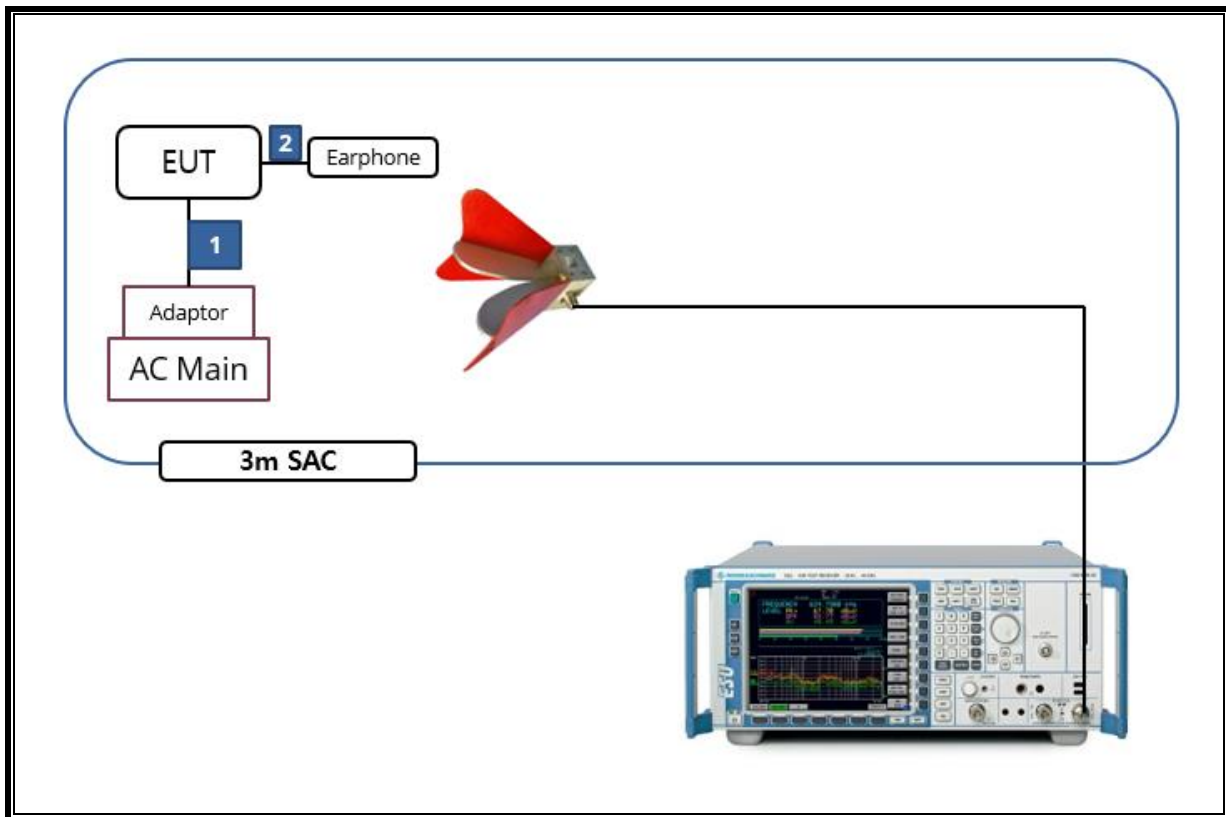
TEST SETUP

The EUT is a stand-alone unit during the tests.
 Test software exercised the EUT to enable NII 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	Cal Due
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	750	2022-08-19
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	749	2022-08-13
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	845	2022-08-13
Antenna, Horn, 18 GHz	ETS	3115	00167211	2022-07-27
Antenna, Horn, 18 GHz	ETS	3115	00161451	2022-08-15
Antenna, Horn, 18 GHz	ETS	3117	00168724	2022-07-27
Antenna, Horn, 18 GHz	ETS	3117	00168717	2022-08-15
Antenna, Horn, 18 GHz	ETS	3117	00218957	2023-01-15
Antenna, Horn, 40 GHz	ETS	3116C	00166155	2023-01-15
Antenna, Horn, 40 GHz	ETS	3116C	00168645	2023-10-13
Preamplifier	ETS	3116C-PA	00168841	2022-08-04
Preamplifier, 1000 MHz	Sonoma	310N	341282	2022-08-02
Preamplifier, 1000 MHz	Sonoma	310N	351741	2022-08-02
Preamplifier, 1000 MHz	Sonoma	310N	370599	2022-08-02
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1876511	2022-08-02
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1896138	2022-08-02
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	2029168	2022-08-02
Spectrum Analyzer, 44 GHz	Agilent / HP	N9030A	MY54170614	2022-08-04
Spectrum Analyzer, 44 GHz	Agilent / HP	N9030A	MY54490312	2022-08-04
Spectrum Analyzer, 44 GHz	KEYSIGHT	N9030B	MY60070693	2023-01-18
Spectrum Analyzer, 44 GHz	KEYSIGHT	N9040B	MY60080268	2023-01-19
Average Power Sensor	Agilent / HP	U2000	MY54270007	2022-08-04
Average Power Sensor	Agilent / HP	U2000	MY54260010	2022-08-04
Attenuator	PASTERNAK	PE7087-10	A001	2022-08-03
Attenuator	PASTERNAK	PE7087-10	A008	2022-08-03
Attenuator	PASTERNAK	PE7004-10	2	2022-08-02
Attenuator	PASTERNAK	PE7087-10	A009	2022-08-03
EMI Test Receive, 40 GHz	R&S	ESU40	100439	2022-08-02
EMI Test Receive, 40 GHz	R&S	ESU40	100457	2022-08-02
EMI Test Receive, 3 GHz	R&S	ESR3	101832	2022-08-02
Notch Filter	Micro-Tronics	BRM50702-02	G037	2022-08-03
Notch Filter	Micro-Tronics	BRM50716-2	006	2022-08-02
Low Pass Filter 5GHz	Micro-Tronics	LPS17541	009	2022-08-02
Low Pass Filter 5GHz	Micro-Tronics	LPS17541	015	2022-08-02
Low Pass Filter 5GHz	Micro-Tronics	LPS17541	019	2022-08-02
High Pass Filter 3GHz	Micro-Tronics	HPM17543	010	2022-08-02
High Pass Filter 3GHz	Micro-Tronics	HPM17543	015	2022-08-02
High Pass Filter 3GHz	Micro-Tronics	HPM17543	020	2022-08-02
High Pass Filter 6GHz	Micro-Tronics	HPS17542	009	2022-08-02
High Pass Filter 6GHz	Micro-Tronics	HPS17542	016	2022-08-02
High Pass Filter 6GHz	Micro-Tronics	HPS17542	020	2022-08-02
LISN	R&S	ENV-216	101837	2022-08-05
Antenna, Loop, 9kHz-30MHz	R&S	HFH2-Z2	100418	2023-10-06
Termination	WEINSCHTEL	M1406A	T09	2022-08-03
Attenuator	WEINSCHTEL	WA76-30-21	A015	2022-08-03
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. SUMMARY TABLE

FCC Part Section	Test Description	Test Limit	Test Condition	Test Result
15.407(e)	6dB Band width (5.8GHz)	> 500kHz	Conducted	Complies
15.407 (a)(1)(iv)	TX Cond. Power (5.150-5.250)	< 24dBm		Complies
15.407 (a)(2)	TX Cond. Power (5.250-5.350 & 5.470-5.725)	< 24dBm or 11+10Log(26dB BW)		Complies
15.407 (a)(3)(i)	TX Cond. Power (5.725-5.850)	< 30dBm		Complies
15.407 (a)(1)(iv) & (a)(2)	PSD (5.150-5.250 5.250-5.350 & 5.470-5.725)	< 11dBm/MHz		Complies
15.407 (a)(3)	PSD (5.725-5.850)	< 30dBm/500kHz		Complies
15.207 (a)	AC Power Line conducted emissions	Section 13	Radiated	Complies
15.407 (b) & 15.209	Radiated Spurious Emission	< 74dBuV/m PK < 54dBuV/m AV		Complies
15.407 (h)(2)	Dynamic Frequency Selection	N/A	Condcuted	Complies ^{Note}

Note. This EUT does not support channel puncturing.

8. MEASUREMENT METHODS

On-Time and Duty Cycle : KDB 789033 D02 v02r01, Section II.B.

6dB Emission BW : KDB 789033 D02 v02r01, Section II.C.2.

26dB Emission BW : KDB 789033 D02 v02r01, Section II.C.1.

99% Occupied BW : KDB 789033 D02 v02r01, Section II.D.

Conducted Output Power : KDB 789033 D02 v02r01, Section II.E.3.b(Method PM-G)

Conducted Output Power for Straddle Channel (ch144/142/138 for 20/40/80MHz BW):

KDB 789033 D02 v02r01, Section II.E.2.b(Method SA-1)

Power Spectral Density : KDB 789033 D02 v02r01, Section II.F.

Unwanted emissions in restricted bands : KDB 789033 D02 v02r01, Section II.G.3 – II.G.6.

Unwanted emissions in non-restricted bands : KDB 789033 D02 v02r01, Section II.G.3 – II.G.6.

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

9. REFERENCE MEASUREMENTS RESULTS

9.1. ON TIME AND DUTY CYCLE RESULTS

Mode	On Time [ms]	Period [ms]	Duty Cycle X [Linear]	Duty Cycle X [%]	Duty Cycle Correction Factor[dB]
802.11a MIMO	2.828	2.926	0.967	96.651	0.15
802.11n(HT20) MIMO	5.030	5.130	0.981	98.051	-
802.11n(HT40) MIMO	5.346	5.445	0.982	98.182	-
802.11ac(VHT80) MIMO	1.679	1.776	0.945	94.538	0.24

Mode	ANT.	Tone	On Time [ms]	Period [ms]	Duty Cycle X [Linear]	Duty Cycle X [%]	Duty Cycle Correction Factor[dB]
802.11ax HE20	MIMO	26T	2.596	2.616	0.992	99.235	-
		52T	2.592	2.612	0.992	99.234	-
		106T	2.434	2.452	0.993	99.266	-
		SU	5.446	5.460	0.997	99.744	-
802.11ax HE40	MIMO	26T	2.556	2.604	0.982	98.157	-
		52T	2.556	2.607	0.980	98.044	-
		106T	2.417	2.462	0.982	98.172	-
		242T	2.384	2.408	0.990	99.003	-
		SU	5.424	5.466	0.992	99.232	-
802.11ax HE80	MIMO	26T	2.565	2.613	0.982	98.163	-
		52T	2.559	2.607	0.982	98.159	-
		106T	2.408	2.456	0.980	98.046	-
		242T	2.360	2.404	0.982	98.170	-
		484T	2.382	2.404	0.991	99.085	-
		SU	5.408	5.462	0.990	99.011	-

Note. If the duty cycle is over 98%, compensation is not included in average measurement.

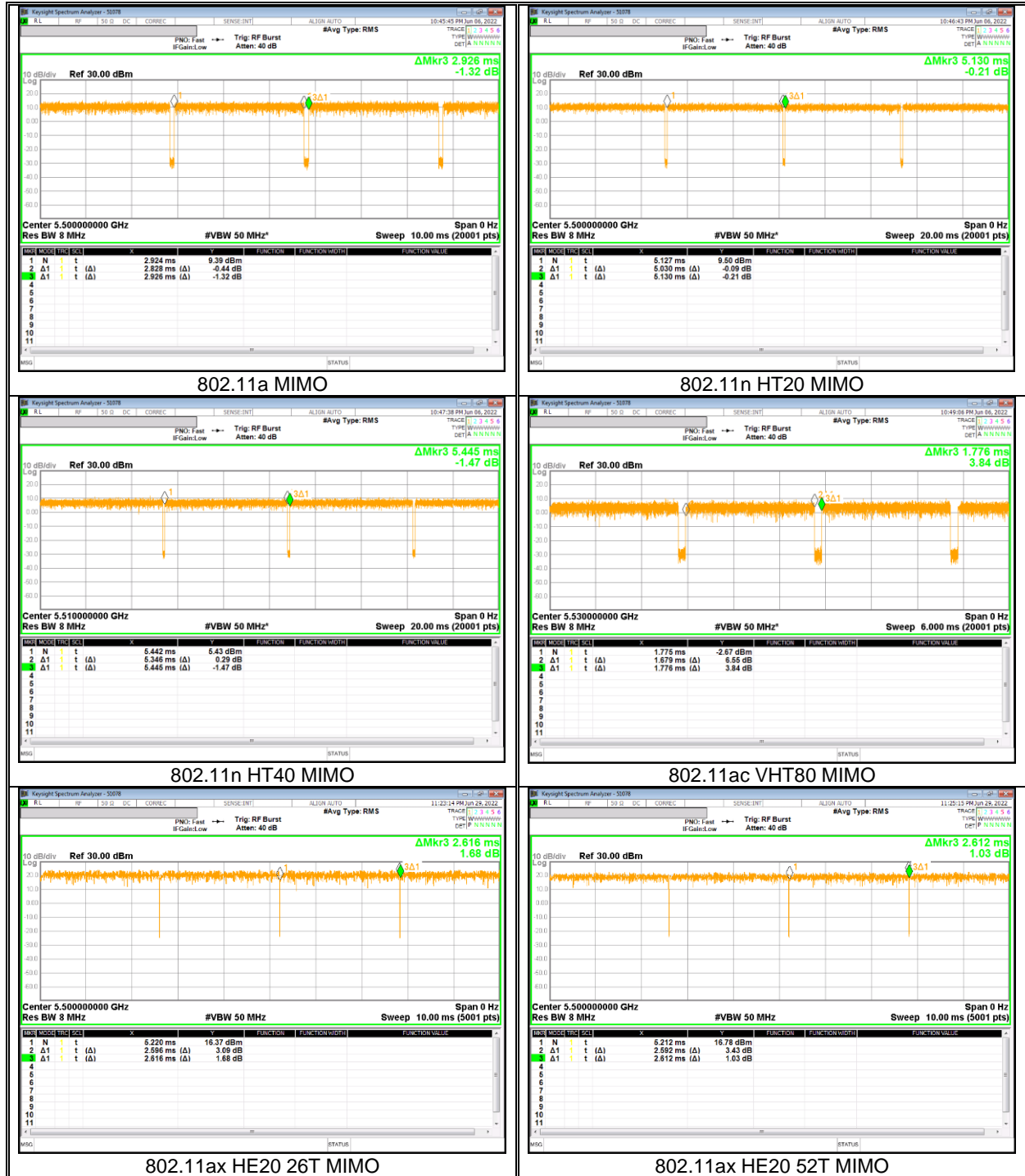
LIMITS

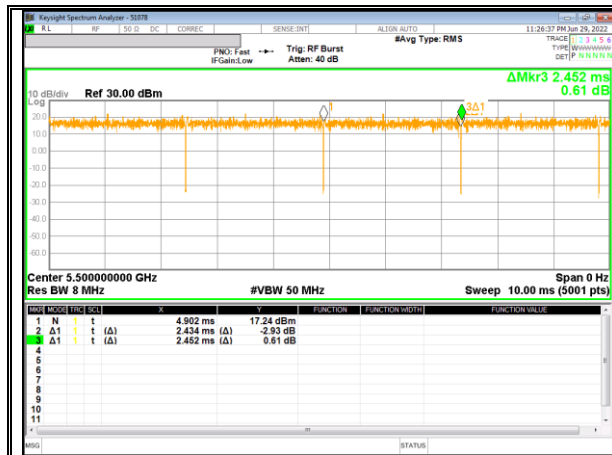
None; for reporting purposes only.

PROCEDURE

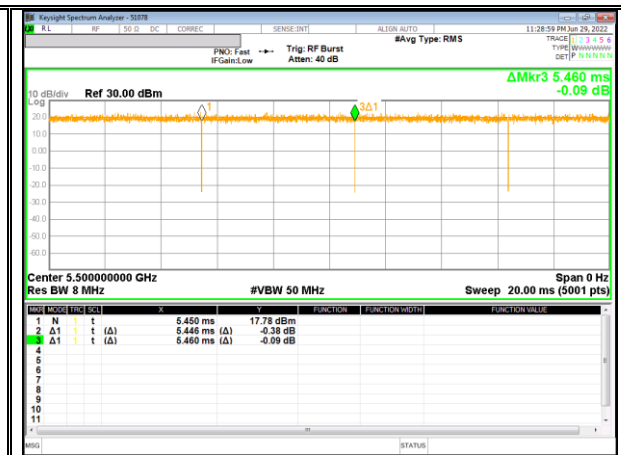
KDB 789033 D02 v02r01 Zero-Span Spectrum Analyzer Method.

9.2. DUTY CYCLE PLOTS

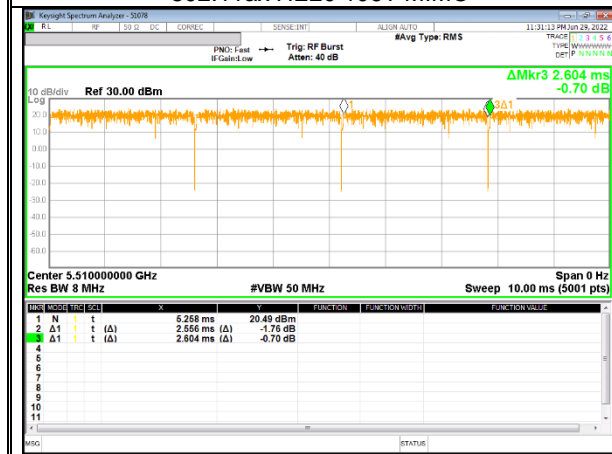




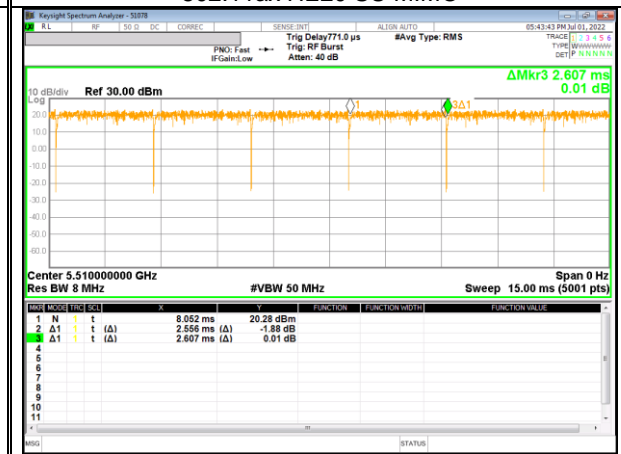
802.11ax HE20 106T MIMO



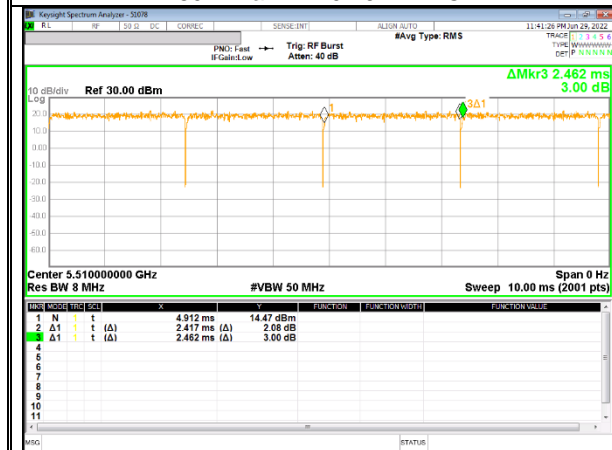
802.11ax HE20 SU MIMO



802.11ax HE40 26T MIMO



802.11ax HE40 52T MIMO



802.11ax HE40 106T MIMO



802.11ax HE40 242T MIMO





9.3. 26 dB BANDWIDTH

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Reference to 789033 D02 General UNII Test Procedures New Rules v02r01: The transmitter output is connected to a spectrum analyzer with the RBW set to approximately 1% of EBW, the VBW > RBW, peak detector and max hold.

- 26 dB Bandwidth

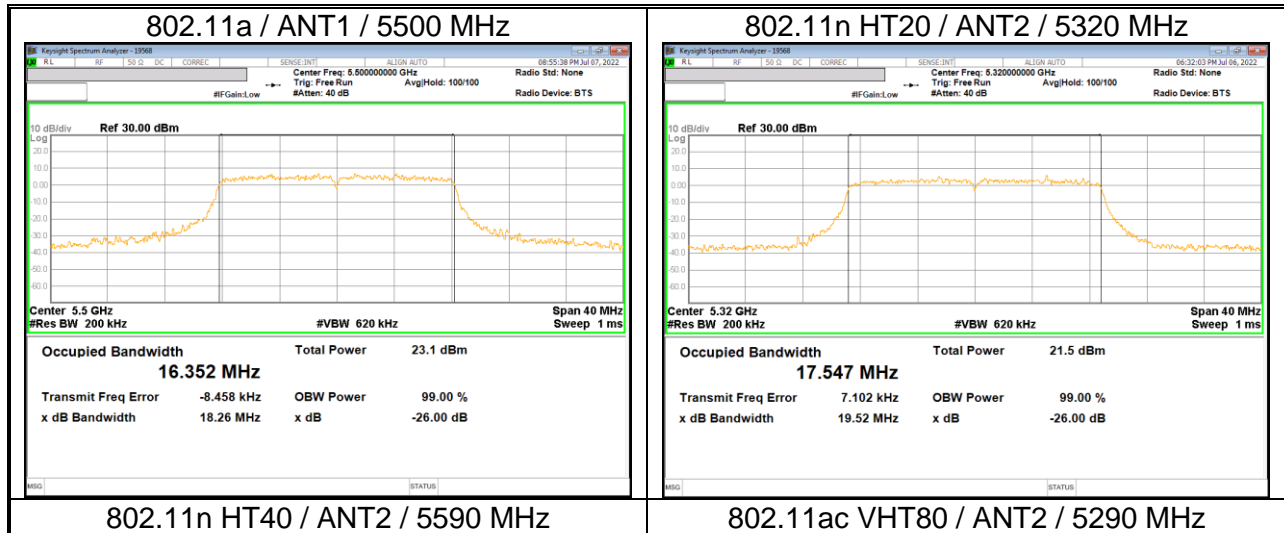
RBW set to approximately 1% of EBW, the VBW > RBW, peak detector and max hold.

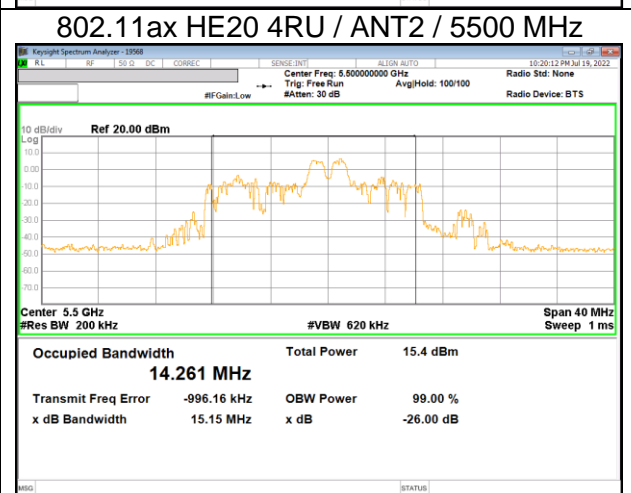
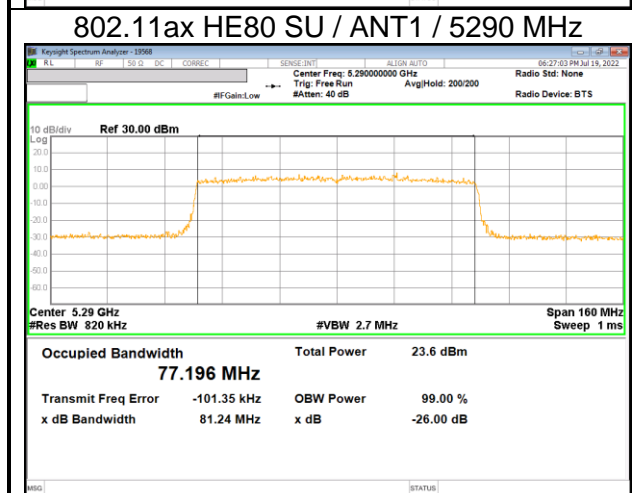
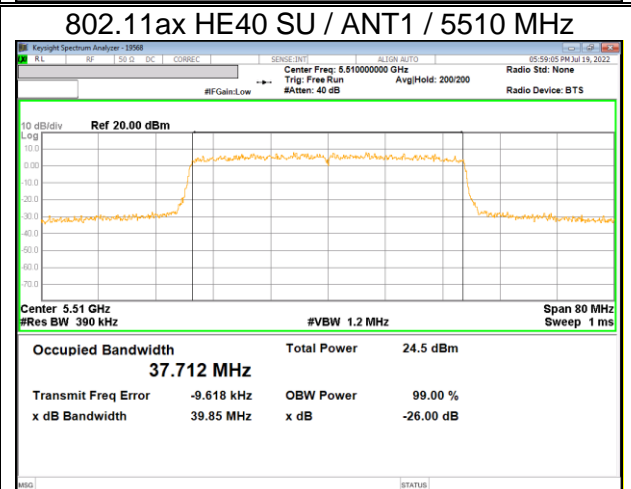
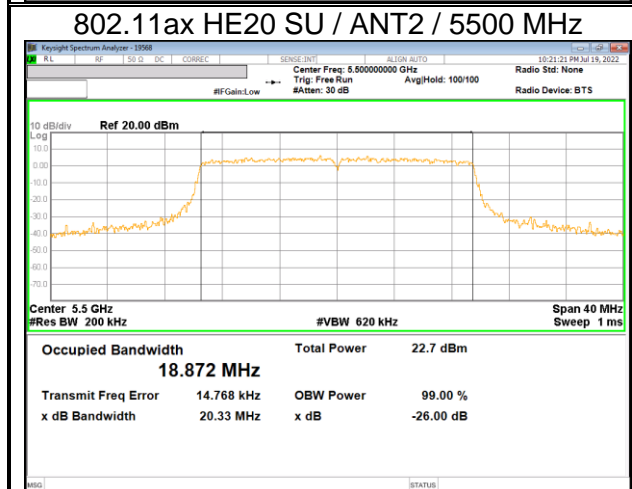
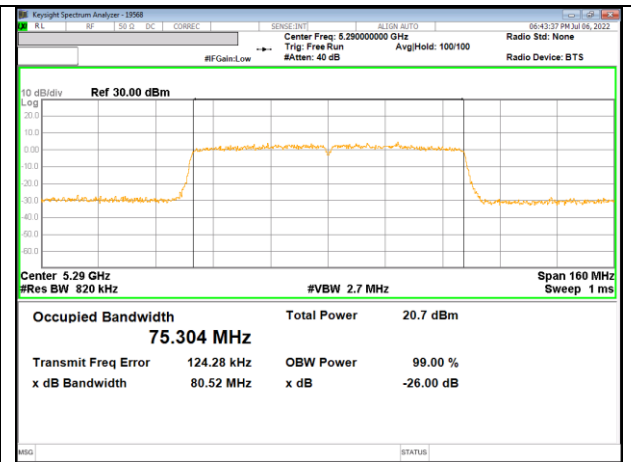
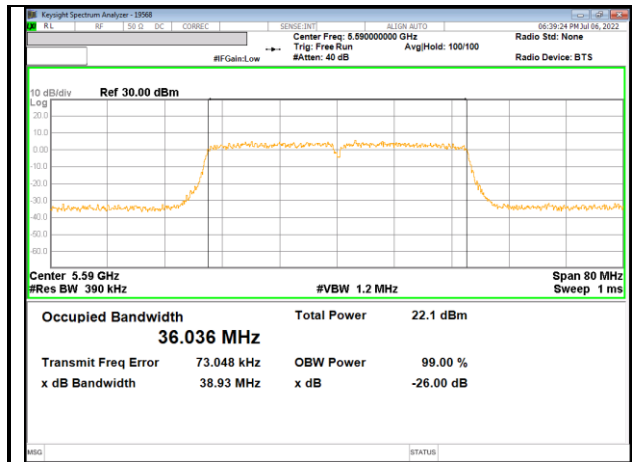
RESULTS

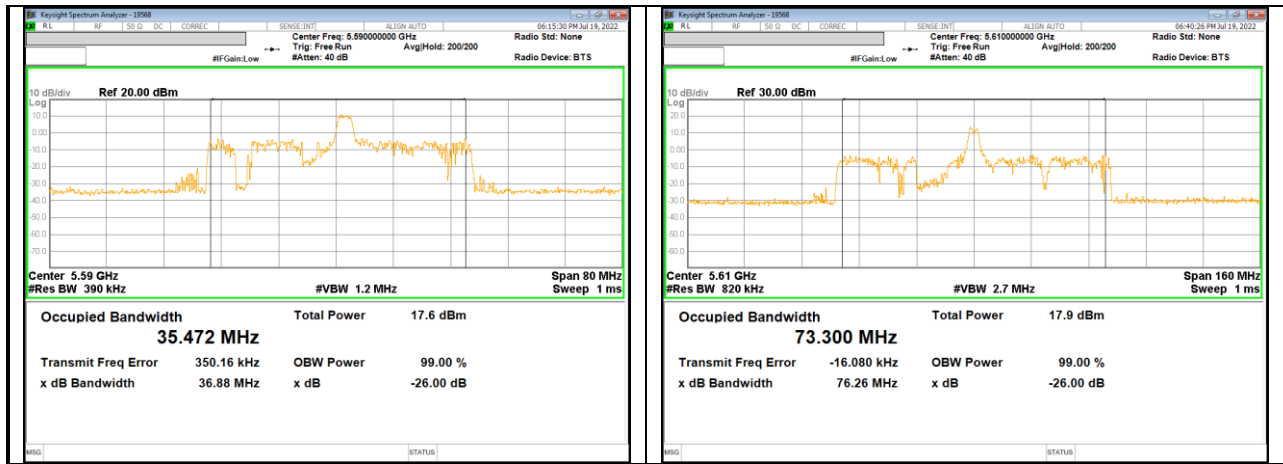
- Please refer to the next page

WORST CASE TEST PLOTS

- 26 dB Bandwidth







9.3.1. 802.11a

Band	Channel	Center Freq. [MHz]	26 dB BW [MHz]		Worst	99% BW [MHz]	
			ANT1	ANT2		ANT1	ANT2
UNII-1 ^{Note}	36	5180	18.59	19.11	18.46	16.34	16.38
	40	5200	18.79	18.46		16.36	16.38
	48	5240	18.74	18.70		16.36	16.37
UNII-2A ^{Note}	52	5260	18.65	18.44	18.44	16.35	16.35
	60	5300	18.72	18.55		16.36	16.36
	64	5320	18.69	18.46		16.34	16.36
UNII-2C	100	5500	18.26	18.50	18.26		
	116	5580	18.64	18.55			
	140	5700	18.62	18.54			

Note. As a result of 99% bandwidth test, the bandwidth of UNII-1 does not interfere with UNII-2A.

9.3.2. 802.11n HT20

Band	Channel	Center Freq. [MHz]	26 dB BW [MHz]		Worst	99% BW [MHz]	
			ANT1	ANT2		ANT1	ANT2
UNII-1 ^{Note}	36	5180	19.72	19.92	19.72	17.57	17.56
	40	5200	19.83	19.77		17.56	17.57
	48	5240	19.92	19.87		17.55	17.55
UNII-2A ^{Note}	52	5260	19.69	19.70	19.52	17.55	17.54
	60	5300	19.82	19.81		17.56	17.55
	64	5320	19.57	19.52		17.56	17.55
UNII-2C	100	5500	19.90	19.61	19.57		
	116	5580	19.86	19.57			
	140	5700	19.67	19.67			

Note. As a result of 99% bandwidth test, the bandwidth of UNII-1 does not interfere with UNII-2A.

9.3.3. 802.11n HT40

Band	Channel	Center Freq. [MHz]	26 dB BW [MHz]		Worst	99% BW [MHz]	
			ANT1	ANT2		ANT1	ANT2
UNII-1 ^{Note}	38	5190	39.31	39.10	39.10	36.00	35.91
	46	5230	39.34	39.16		36.00	36.01
UNII-2A ^{Note}	54	5270	39.67	39.16	39.16	36.03	36.00
	62	5310	39.29	39.20		36.00	36.03
UNII-2C	102	5510	39.37	39.38	38.93		
	118	5590	39.66	38.93			
	134	5670	39.45	39.07			

Note. As a result of 99% bandwidth test, the bandwidth of UNII-1 does not interfere with UNII-2A.

9.3.4. 802.11ac VHT80

Band	Channel	Center Freq. [MHz]	26 dB BW [MHz]		Worst	99% BW [MHz]	
			ANT1	ANT2		ANT1	ANT2
UNII-1 ^{Note}	42	5210	81.46	80.66	80.66	75.43	75.36
UNII-2A ^{Note}	58	5290	81.77	80.52	80.52	75.48	75.30
UNII-2C	106	5530	81.95	80.75	80.66		
	122	5610	82.07	80.66			

Note. As a result of 99% bandwidth test, the bandwidth of UNII-1 does not interfere with UNII-2A.

9.3.5. 802.11ax HE20 (SU)

Band	Channel	Center Freq. [MHz]	26 dB BW [MHz]		Worst	99% BW [MHz](^{Note})	
			ANT1	ANT2		ANT1	ANT2
UNII-1 ^{Note}	36	5180	21.10	20.52	20.52	18.94	18.90
	40	5200	20.74	20.59		18.91	18.92
	48	5240	20.83	20.58		18.88	18.91
UNII-2A ^{Note}	52	5260	20.65	20.56	20.42	18.89	18.87
	60	5300	20.87	20.42		18.92	18.89
	64	5320	20.77	20.56		18.90	18.91
UNII-2C	100	5500	20.86	20.33	20.33		
	116	5580	20.72	20.40			
	140	5700	20.71	20.80			

Note. As a result of 99% bandwidth test, the bandwidth of UNII-1 does not interfere with UNII-2A.

9.3.6. 802.11ax HE40 (SU)

Band	Channel	Center Freq. [MHz]	26 dB BW [MHz]		Worst	99% BW [MHz](^{Note})	
			ANT1	ANT2		ANT1	ANT2
UNII-1 ^{Note}	38	5190	40.43	40.34	39.91	37.75	37.71
	46	5230	40.33	39.91		37.66	37.71
UNII-2A ^{Note}	54	5270	40.13	39.89	39.89	37.76	37.61
	62	5310	40.32	40.25		37.75	37.67
UNII-2C	102	5510	39.85	40.14	39.85		
	118	5590	40.15	40.18			
	134	5670	40.19	39.95			

Note. As a result of 99% bandwidth test, the bandwidth of UNII-1 does not interfere with UNII-2A.

9.3.7. 802.11ax HE80 (SU)

Band	Channel	Center Freq. [MHz]	26 dB BW [MHz]		Worst	99% BW [MHz](Note)	
			ANT1	ANT2		ANT1	ANT2
UNII-1 ^{Note}	42	5210	81.89	81.89	81.89	77.15	77.21
UNII-2A ^{Note}	58	5290	81.24	81.68	81.24	77.20	77.09
UNII-2C	106	5530	81.63	81.66	81.48		
	122	5610	81.48	81.69			

Note. As a result of 99% bandwidth test, the bandwidth of UNII-1 does not interfere with UNII-2A.

9.3.8. STRADDLE CHANNEL

Mode	Channel	Center Freq. [MHz]	26 dB BW [MHz]			
			ANT1		ANT2	
			UNII-2C	UNII-3	UNII-2C	UNII-3
802.11a	Straddle	5720	15.30	4.24	14.80	4.50
802.11n HT20	Straddle	5720	15.30	4.90	15.00	5.00
802.11n HT40	Straddle	5710	35.12	4.84	34.80	4.84
802.11ac VHT80	Straddle	5690	76.20	6.04	75.96	5.80
802.11ax HE20(SU)	Straddle	5720	15.25	5.55	15.38	5.18
802.11ax HE40(SU)	Straddle	5710	34.94	4.79	35.05	5.08
802.11ax HE80(SU)	Straddle	5690	76.20	5.78	75.57	5.44

9.3.9. 802.11ax HE20(RU)

Band Mode	Center Freq. [MHz]	Tones	RU offset	26 dB BW [MHz]		99% BW [MHz]	
				ANT1	ANT2	ANT1	ANT2
UNII-1 ^{Note}	5180	26T	0	19.95	20.00	18.41	18.15
			4	17.36	15.77	16.60	14.98
			8	19.26	19.84	17.59	17.96
	5200		0	19.75	18.73	18.28	17.31
			4	18.15	18.12	17.15	17.20
			8	19.91	19.57	18.36	18.39
	5240		0	20.16	20.02	18.39	18.35
			4	18.04	17.98	17.06	17.11
			8	20.19	19.32	18.35	17.67
UNII-2A ^{Note}	5260	26T	0	19.73	19.73	18.04	18.23
			4	18.79	18.04	16.52	16.81
			8	19.81	19.69	18.18	17.35
	5300		0	19.91	20.08	18.44	17.02
			4	18.69	18.12	17.13	15.96
			8	20.26	19.18	18.29	17.90
	5320		0	20.45	19.92	18.21	18.36
			4	17.47	17.76	16.55	16.65
			8	20.03	18.09	18.06	17.01
UNII-2C	5500	26T	0	20.06	20.00		
			4	18.34	15.15		
			8	20.21	19.84		
	5580		0	20.44	19.46		
			4	17.36	16.70		
			8	20.15	18.89		
	5700		0	19.75	18.32		
			4	18.33	18.26		
			8	19.88	19.21		

Note. As a result of 99% bandwidth test, the bandwidth of UNII-1 does not interfere with UNII-2A.

9.3.10. 802.11ax HE40(RU)

Band	Center Freq. [MHz]	Tones	RU offset	26 dB BW [MHz]		99% BW [MHz]	
				ANT1	ANT2	ANT1	ANT2
UNII-1 ^{Note}	5190	26T	0	40.50	38.74	37.44	37.06
			9	37.36	37.79	35.91	35.80
			17	39.90	39.75	37.87	37.88
	5230		0	40.02	39.72	38.05	37.63
			9	37.97	37.55	36.17	35.49
			17	39.92	39.75	37.75	37.65
UNII-2A ^{Note}	5270	26T	0	38.93	37.12	35.51	35.24
			9	38.13	37.91	36.29	35.11
			17	40.10	39.90	37.84	37.56
	5310		0	39.58	39.54	37.17	37.56
			9	37.40	37.69	35.55	35.96
			17	39.69	39.24	37.81	37.28
UNII-2C	5510	26T	0	40.77	36.99		
			9	38.02	37.20		
			17	39.78	39.62		
	5590		0	40.19	39.01		
			9	36.88	37.86		
			17	39.56	39.78		
	5670		0	40.46	39.61		
			9	38.15	37.61		
			17	39.50	39.38		

Note. As a result of 99% bandwidth test, the bandwidth of UNII-1 does not interfere with UNII-2A.

9.3.11. 802.11ax HE80(RU)

Band	Center Freq. [MHz]	Tones	RU offset	26 dB BW [MHz]		99% BW [MHz]	
				ANT1	ANT2	ANT1	ANT2
UNII-1 ^{Note}	5210	26T	0	81.10	80.42	78.56	78.27
			18	78.04	77.98	75.12	75.25
			36	81.65	80.39	78.74	77.90
UNII-2A ^{Note}	5290	26T	0	83.46	80.80	79.15	78.55
			18	78.00	77.79	75.12	74.67
			36	80.66	79.55	78.59	75.61
UNII-2C	5530	26T	0	81.58	81.68		
			18	78.29	77.74		
			36	81.18	80.37		
	5610		0	81.88	80.37		
			18	76.26	78.14		
			36	81.55	76.79		

Note. As a result of 99% bandwidth test, the bandwidth of UNII-1 does not interfere with UNII-2A.

9.3.12. 802.11ax STRADDLE CHANNEL(RU)

Band	Mode	Center Freq. [MHz]	Tones	RU offset	26 dB BW [MHz]			
					ANT1		ANT2	
					UNII-2C	UNII-3	UNII-2C	UNII-3
Straddle Channel	HE20	5720	26T	6	14.25	3.18	12.51	4.01
	HE40	5710		15	34.02	2.88	33.36	3.90
	HE80	5690		34	72.74	3.41	73.92	3.56

10. ANTENNA PORT TEST RESULTS

10.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407

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

TEST PROCEDURE

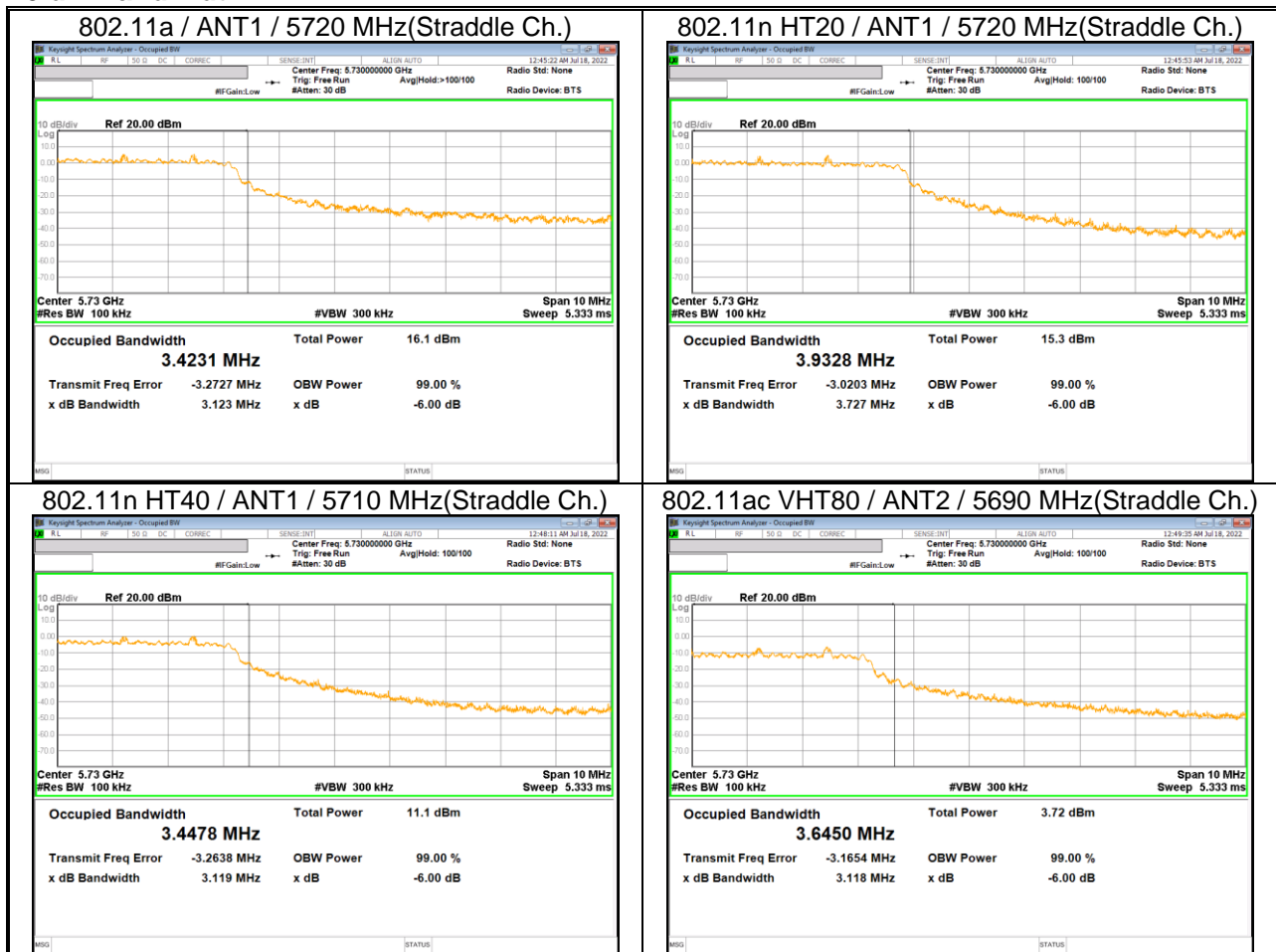
Reference to 789033 D02 General UNII Test Procedures New Rules v02r01: The transmitter output is connected to a spectrum analyzer with the RBW set to 100kHz, the VBW $\geq 3 \times$ RBW, peak detector and max hold.

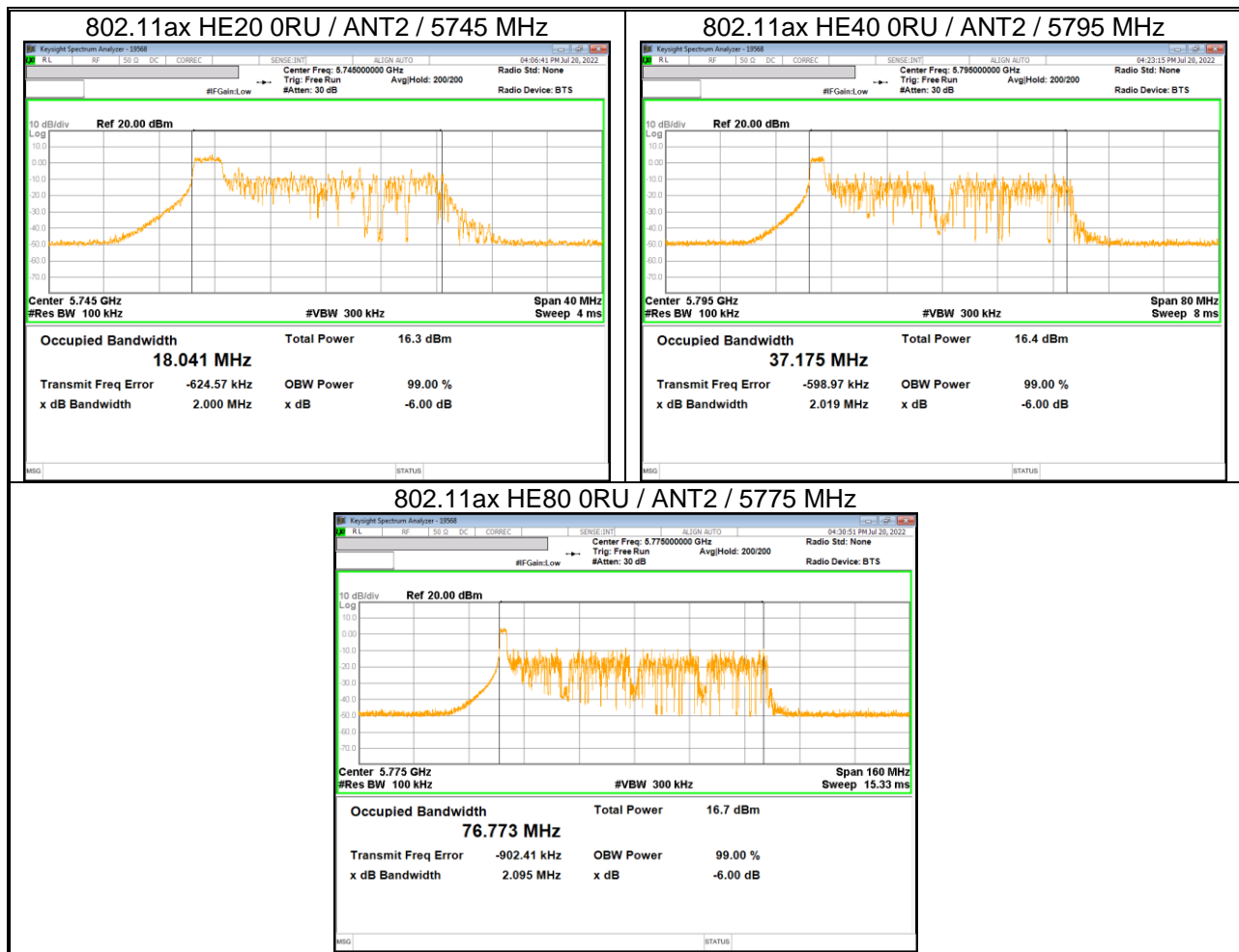
RESULTS

- Please refer to the next page

WORST CASE TEST PLOTS

- 6 dB Bandwidth





10.1.1. UNII-3 BAND

Mode	Channel	Center Freq. [MHz]	6 dB BW [MHz]		Worst	Minimum Limit [MHz]
			ANT1	ANT2		
802.11a	144*	5720	3.12	3.13	3.12	0.5
	149	5745	16.30	16.31		
	157	5785	16.29	16.32		
	165	5825	16.29	16.31		
802.11n HT20	144*	5720	3.73	3.75	3.73	
	149	5745	17.27	17.04		
	157	5785	16.91	17.18		
	165	5825	16.91	16.95		
802.11n HT40	142*	5710	3.12	3.12	3.12	
	151	5755	35.10	35.13		
	159	5795	35.41	35.11		
802.11ac VHT80	138*	5690	3.13	3.12	3.12	
	155	5775	75.09	75.07		

* Straddle Channel

10.1.2. UNII-3 BAND(RU)

Mode	Channel	Center Freq. [MHz]	Tones	RU offset	6 dB BW [MHz]		Minimum Limit [MHz]
					ANT1	ANT2	
HE20	144	5720	26T	6	2.48	2.44	0.5
	149	5745		0	2.11	2.00	
	157	5785			2.10	2.08	
	165	5825			2.11	2.05	
Minimum 6dB Bandwidth					2.00		
HE40	142	5710	26T	15	3.73	3.45	
	151	5755		0	2.17	2.07	
	159	5795			2.12	2.02	
	Minimum 6dB Bandwidth					2.02	
HE80	138	5690	26T	34	3.11	3.43	
	155	5775		0	2.19	2.10	
	Minimum 6dB Bandwidth					2.10	

* Straddle Channel

10.2. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a)(1)(iv), (a)(2), (a)(3)(i), (a)(3)(iii)

FCC

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

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

For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

KDB 789033 Method PM is used for output power.

KDB 789033 Method SA-2 is used for PSD. RBW set to 1MHz(500kHz for the band 5.725-5.85 GHz, the VBW >= 3 x RBW, RMS detector and trace averaging).

Straddle Channel(UNII-2C&3)

KDB 789033 Method SA-2 is used for only power of straddle Ch. and PSD. RBW set to 1MHz(500kHz for the band 5.725-5.85 GHz, the VBW >= 3 x RBW, RMS detector and trace averaging). Band power function used for power and peak marker value of the spectrum is used for PSD.

DIRECTIONAL ANTENNA GAIN

For OUTPUT POWER and PSD: The TX chains are correlated and the antenna gains are unequal among the chains. The directional gain is:

Frequency Band [MHz]	ANT1 Gain [dBi]	ANT2 Gain [dBi]	Correlated Chains Directional Gain [dBi]
UNII 1 5150 - 5250	-8.4	-2.8	-2.1
UNII 2A 5250 - 5350	-5.0	-2.9	-0.9
UNII 2C 5470 - 5725	-4.1	-2.6	-0.3
UNII 3 5725 - 5850	-9.3	-2.9	-2.5

10.2.1. 802.11a MODE

Output Power Results

Band	Channel	Center Freq. [MHz]	Average Power [dBm]		Direct. Gain [dBi]	Corr'd Power [dBm]	Limit [dBm]
			ANT1	ANT2			
UNII-1	36	5180	17.00	17.77		20.41	23.98
	40	5200	16.99	17.40		20.21	
	48	5240	17.12	17.45		20.30	
UNII-2A	52	5260	17.35	17.41		20.39	23.66
	60	5300	17.31	17.52		20.43	
	64	5320	17.42	17.31		20.38	
UNII-2C	100	5500	17.57	17.52		20.56	23.62
	116	5580	17.75	17.57		20.67	
	140	5700	17.64	17.40		20.53	
UNII-3	149	5745	17.05	17.84		20.47	30.00
	157	5785	16.65	17.49		20.10	
	165	5825	16.92	17.61		20.29	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
 Corr'd Power = Ant1 Average Power + Ant2 Average Power

PSD Results

Band	Channel	Center Freq. [MHz]	Meas PSD [dBm/MHz]		DCCF.	Direct. Gain [dBi]	Corr'd PSD [dBm]	Limit [dBm/MHz]
			ANT1	ANT2				
UNII-1	36	5180	6.93	6.33	0.15		9.80	11.00
	40	5200	6.96	6.38	0.15		9.84	
	48	5240	7.00	6.35	0.15		9.84	
UNII-2A	52	5260	6.80	5.82	0.15		9.50	11.00
	60	5300	6.79	5.60	0.15		9.39	
	64	5320	6.84	6.02	0.15		9.61	
UNII-2C	100	5500	6.56	5.77	0.15		9.35	11.00
	116	5580	6.07	5.65	0.15		9.03	
	140	5700	6.71	5.81	0.15		9.44	
UNII-3	149	5745	4.06	4.32	0.15		7.35	30.00/500kHz
	157	5785	3.56	3.95	0.15		6.92	
	165	5825	3.58	4.13	0.15		7.02	

* Calculation of PSD: Corr'd PSD = Ant1 PSD + Ant2 PSD + Duty CF [dB]

10.2.2. 802.11n HT20 MODE

Output Power Results

Band	Channel	Center Freq. [MHz]	Average Power [dBm]		Direct. Gain [dBi]	Corr'd Power [dBm]	Limit [dBm]
			ANT1	ANT2			
UNII-1	36	5180	15.77	16.45		19.13	23.98
	40	5200	15.80	16.21		19.02	
	48	5240	15.91	16.16		19.05	
UNII-2A	52	5260	16.09	16.18		19.15	23.90
	60	5300	16.08	16.14		19.12	
	64	5320	16.15	16.07		19.12	
UNII-2C	100	5500	16.32	16.41		19.38	23.92
	116	5580	16.50	16.42		19.47	
	140	5700	16.37	16.20		19.30	
UNII-3	149	5745	15.80	16.71		19.29	30.00
	157	5785	15.50	16.25		18.90	
	165	5825	15.70	16.38		19.06	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
 Corr'd Power = Ant1 Average Power + Ant2 Average Power

PSD Results

Band	Channel	Center Freq. [MHz]	Meas PSD [dBm/MHz]		DCCF.	Direct. Gain [dBi]	Corr'd PSD [dBm]	Limit [dBm/MHz]
			ANT1	ANT2				
UNII-1	36	5180	5.79	5.17	0.00		8.50	11.00
	40	5200	5.55	4.78	0.00		8.19	
	48	5240	5.54	4.86	0.00		8.22	
UNII-2A	52	5260	5.81	5.12	0.00		8.49	11.00
	60	5300	5.75	5.11	0.00		8.45	
	64	5320	5.38	4.80	0.00		8.11	
UNII-2C	100	5500	5.07	4.93	0.00		8.01	11.00
	116	5580	5.07	5.09	0.00		8.09	
	140	5700	6.12	4.78	0.00		8.51	
UNII-3	149	5745	2.63	2.95	0.00		5.80	30.00/500kHz
	157	5785	2.73	3.35	0.00		6.06	
	165	5825	2.80	3.13	0.00		5.98	

* Calculation of PSD: Corr'd PSD = Ant1 PSD + Ant2 PSD + Duty CF [dB]

10.2.3. 802.11n HT40 MODE

Output Power Results

Band	Channel	Center Freq. [MHz]	Average Power [dBm]		Direct. Gain [dBi]	Corr'd Power [dBm]	Limit [dBm]
			ANT1	ANT2			
UNII-1	38	5190	15.14	15.57		18.37	23.98
	46	5230	15.94	16.29		19.13	
UNII-2A	54	5270	16.20	16.16		19.19	23.98
	62	5310	15.36	15.35		18.37	
UNII-2C	102	5510	16.43	16.44		19.45	23.98
	118	5590	16.64	16.42		19.54	
	134	5670	16.70	16.18		19.46	
UNII-3	151	5755	15.94	16.75		19.37	30.00
	159	5795	15.63	16.26		18.97	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
 Corr'd Power = Ant1 Average Power + Ant2 Average Power

PSD Results

Band	Channel	Center Freq. [MHz]	Meas PSD [dBm/MHz]		DCCF.	Direct. Gain [dBi]	Corr'd PSD [dBm]	Limit [dBm/MHz]
			ANT1	ANT2				
UNII-1	38	5190	2.76	2.34	0.00		5.56	11.00
	46	5230	2.58	2.07	0.00		5.34	
UNII-2A	54	5270	2.96	2.18	0.00		5.60	11.00
	62	5310	2.81	2.05	0.00		5.45	
UNII-2C	102	5510	2.05	1.75	0.00		4.91	11.00
	118	5590	2.15	1.87	0.00		5.02	
	134	5670	2.66	2.02	0.00		5.36	
UNII-3	151	5755	0.21	0.19	0.00		3.21	30.00 _{/500kHz}
	159	5795	-0.39	0.40	0.00		3.04	

* Calculation of PSD: Corr'd PSD = Ant1 PSD + Ant2 PSD + Duty CF [dB]

10.2.4. 802.11ac VHT80 MODE

Output Power Results

Band	Channel	Center Freq. [MHz]	Average Power [dBm]		Direct. Gain [dBi]	Corr'd Power [dBm]	Limit [dBm]
			ANT1	ANT2			
UNII-1	42	5210	13.33	13.70		16.53	23.98
UNII-2A	58	5290	13.66	13.57		16.63	23.98
UNII-2C	106	5530	13.50	13.51		16.52	23.98
	122	5610	13.26	12.75		16.02	
UNII-3	155	5775	12.62	13.32		15.99	30.00

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
 Corr'd Power = Ant1 Average Power + Ant2 Average Power

PSD Results

Band	Channel	Center Freq. [MHz]	Meas PSD [dBm/MHz]		DCCF.	Direct. Gain [dBi]	Corr'd PSD [dBm]	Limit [dBm/MHz]
			ANT1	ANT2				
UNII-1	42	5210	-4.05	-4.30	0.24		-0.92	11.00
UNII-2A	58	5290	-3.57	-4.29	0.24		-0.66	11.00
UNII-2C	106	5530	-4.27	-4.60	0.24		-1.18	11.00
	122	5610	-3.96	-4.54	0.24		-0.99	
UNII-3	155	5775	-6.63	-6.36	0.24		-3.24	30.00/500kHz

* Calculation of PSD: Corr'd PSD = Ant1 PSD + Ant2 PSD + Duty CF [dB]

10.2.5. STRADDLE CHANNEL

Output Power Results

Mode	Band	Center Freq. [MHz]	Meas Power [dBm]		DCCF.	Corr'd Power [dBm]	Limit [dBm]
			ANT1	ANT2			
802.11a	UNII-2C	5720	16.64	16.70	0.15	19.83	22.70
	UNII-3		10.02	9.98	0.15	13.16	30.00
802.11n HT20	UNII-2C	5720	15.44	15.41	0.00	18.43	22.76
	UNII-3		9.34	9.38	0.00	12.37	30.00
802.11n HT40	UNII-2C	5710	15.52	15.63	0.00	18.59	23.98
	UNII-3		4.38	4.50	0.00	7.45	30.00
802.11ac VHT80	UNII-2C	5690	13.01	12.48	0.24	16.00	23.98
	UNII-3		-1.72	-2.36	0.24	1.22	30.00

* Calculation of Output Power : Corr'd Power = Ant1 meas. Power + Ant2 meas. Power + Duty CF [dB]

PSD Results

Mode	Band	Center Freq. [MHz]	Meas PSD [dBm/MHz]		DCCF.	Corr'd PSD [dBm]	Limit [dBm/MHz]
			ANT1	ANT2			
802.11a	UNII-2C	5720	6.57	6.94	0.15	9.92	11.00
	UNII-3		3.25	3.52	0.15	6.55	30.00/500kHz
802.11n HT20	UNII-2C	5720	5.18	6.03	0.00	8.63	11.00
	UNII-3		1.75	2.45	0.00	5.12	30.00/500kHz
802.11n HT40	UNII-2C	5710	2.86	2.94	0.00	5.91	11.00
	UNII-3		-1.46	-1.85	0.00	1.36	30.00/500kHz
802.11ac VHT80	UNII-2C	5690	-3.64	-4.40	0.24	-0.75	11.00
	UNII-3		-8.62	-9.40	0.24	-5.74	30.00/500kHz

* Calculation of PSD: Corr'd PSD = Ant1 PSD + Ant2 PSD + Duty CF [dB]

10.2.6. 802.11ax HE20 MODE

Output Power Results

Band	Channel	Center Freq. [MHz]	Tones	RU offset	Average Power [dBm]		Corr'd Power [dBm]	Limit [dBm]
					ANT1	ANT2		
UNII-1	36	5180	26T	0	8.34	8.40	11.38	23.98
				4	8.44	8.41	11.44	
				8	8.39	8.44	11.43	
			52T	37	10.32	10.35	13.35	
				38	10.41	10.46	13.45	
				40	10.38	10.43	13.42	
			106T	53	12.47	12.77	15.63	
				54	12.50	12.86	15.69	
			SU	-	16.72	16.63	19.69	
	40	5200	26T	0	8.25	8.08	11.18	
				4	8.31	8.18	11.26	
				8	8.32	8.21	11.28	
			52T	37	10.29	10.14	13.23	
				38	10.40	10.32	13.37	
				40	10.35	10.28	13.33	
			106T	53	12.48	12.58	15.54	
				54	12.51	12.69	15.61	
			SU	-	16.52	16.38	19.46	
	48	5240	26T	0	8.38	8.18	11.29	
				4	8.44	8.28	11.37	
				8	8.46	8.30	11.39	
			52T	37	10.47	10.16	13.33	
				38	10.52	10.30	13.42	
				40	10.47	10.32	13.41	
106T			53	12.69	12.62	15.67		
			54	12.73	12.71	15.73		
SU			-	16.59	16.34	19.48		

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
 Corr'd Power = Ant1 Average Power + Ant2 Average Power

Band	Channel	Center Freq. [MHz]	Tones	RU offset	Average Power [dBm]		Corr'd Power [dBm]	Limit [dBm]
					ANT1	ANT2		
UNII-2A	52	5260	26T	0	8.73	8.26	11.51	23.42
				4	8.80	8.37	11.60	
				8	8.81	8.38	11.61	
			52T	37	10.89	10.30	13.62	
				38	10.95	10.41	13.70	
				40	10.89	10.38	13.65	
			106T	53	12.49	12.09	15.30	
				54	12.50	12.16	15.34	
			SU	-	16.87	16.44	19.67	
	60	5300	26T	0	8.74	8.36	11.56	
				4	8.82	8.42	11.63	
				8	8.80	8.42	11.62	
			52T	37	10.83	10.28	13.57	
				38	10.91	10.40	13.67	
				40	10.86	10.36	13.63	
			106T	53	12.55	12.05	15.32	
				54	12.53	12.16	15.36	
			SU	-	16.48	16.26	19.38	
	64	5320	26T	0	8.54	8.11	11.34	
				4	8.61	8.17	11.41	
				8	8.63	8.20	11.43	
			52T	37	10.63	10.37	13.51	
				38	10.71	10.47	13.60	
				40	10.61	10.42	13.53	
106T			53	12.81	12.55	15.69		
			54	12.85	12.62	15.75		
SU			-	16.66	16.18	19.44		

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
 Corr'd Power = Ant1 Average Power + Ant2 Average Power

Band	Channel	Center Freq. [MHz]	Tones	RU offset	Average Power [dBm]		Corr'd Power [dBm]	Limit [dBm]
					ANT1	ANT2		
UNII-2C	100	5500	26T	0	8.40	8.25	11.34	22.80
				4	8.43	8.32	11.39	
				8	8.35	8.26	11.32	
			52T	37	10.35	10.22	13.30	
				38	10.43	10.30	13.38	
				40	10.37	10.21	13.30	
			106T	53	12.72	12.36	15.55	
				54	12.76	12.38	15.58	
			SU	-	16.47	16.44	19.47	
	116	5580	26T	0	8.77	8.27	11.54	
				4	8.77	8.32	11.56	
				8	8.77	8.27	11.54	
			52T	37	10.75	10.41	13.59	
				38	10.83	10.49	13.67	
				40	10.73	10.42	13.59	
			106T	53	12.46	12.01	15.25	
				54	12.47	12.02	15.26	
			SU	-	16.82	16.26	19.56	
	140	5700	26T	0	8.88	8.16	11.55	
				4	8.88	8.24	11.58	
				8	8.90	8.19	11.57	
			52T	37	10.42	9.59	13.04	
				38	10.50	9.71	13.13	
				40	10.53	9.63	13.11	
			106T	53	12.51	11.99	15.27	
				54	12.55	12.02	15.30	
			SU	-	16.52	15.73	19.15	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
 Corr'd Power = Ant1 Average Power + Ant2 Average Power

Band	Channel	Center Freq. [MHz]	Tones	RU offset	Average Power [dBm]		Corr'd Power [dBm]	Limit [dBm]
					ANT1	ANT2		
UNII-3	149	5745	26T	0	8.27	8.34	11.32	30.00
				4	8.33	8.42	11.39	
				8	8.32	8.41	11.38	
			52T	37	10.29	10.53	13.42	
				38	10.37	10.63	13.51	
				40	10.31	10.58	13.46	
			106T	53	12.04	12.67	15.38	
				54	12.08	12.72	15.42	
			SU	-	16.36	16.50	19.44	
	157	5785	26T	0	8.43	8.54	11.50	
				4	8.50	8.65	11.59	
				8	8.48	8.61	11.56	
			52T	37	10.47	10.64	13.57	
				38	10.56	10.75	13.67	
				40	10.50	10.70	13.61	
			106T	53	12.19	12.54	15.38	
				54	12.21	12.54	15.39	
			SU	-	16.02	16.15	19.10	
	165	5825	26T	0	8.04	8.14	11.10	
				4	8.05	8.26	11.17	
				8	8.05	8.25	11.16	
			52T	37	10.03	10.18	13.12	
				38	10.13	10.29	13.22	
				40	10.08	10.26	13.18	
			106T	53	12.01	12.41	15.22	
				54	12.08	12.47	15.29	
			SU	-	16.14	16.23	19.20	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
 Corr'd Power = Ant1 Average Power + Ant2 Average Power

PSD Results

Band	Channel	Center Freq. [MHz]	Tones	RU offset	Meas PSD [dBm/MHz]		Corr'd PSD [dBm/MHz]	PSD Limit [dBm/MHz]
					ANT1	ANT2		
UNII-1	36	5180	26T	0	5.85	5.72	8.80	11.00
				4	5.10	4.65	7.89	
				8	6.08	5.98	9.04	
			SU	-	5.24	5.37	8.32	
	40	5200	26T	0	6.06	5.61	8.85	
				4	4.97	4.92	7.95	
				8	6.06	5.71	8.90	
			SU	-	5.13	4.94	8.05	
	48	5240	26T	0	6.08	5.78	8.94	
				4	5.27	4.56	7.94	
				8	6.14	5.68	8.93	
			SU	-	5.29	4.99	8.15	
UNII-2A	52	5260	26T	0	6.40	5.74	9.09	11.00
				4	5.51	4.48	8.03	
				8	6.46	5.61	9.06	
			SU	-	5.62	4.88	8.28	
	60	5300	26T	0	6.59	5.27	8.99	
				4	5.35	4.60	8.00	
				8	6.53	5.65	9.12	
			SU	-	5.71	4.98	8.37	
	64	5320	26T	0	6.70	5.26	9.05	
				4	5.55	4.28	7.97	
				8	6.70	5.71	9.24	
			SU	-	5.82	4.67	8.30	
UNII-2C	100	5500	26T	0	6.02	4.84	8.48	11.00
				4	4.92	4.07	7.53	
				8	6.19	5.13	8.70	
			SU	-	5.30	4.30	7.84	
	116	5580	26T	0	7.13	5.51	9.40	
				4	6.15	4.61	8.46	
				8	7.28	5.54	9.51	
			SU	-	6.27	4.70	8.57	
	140	5700	26T	0	6.75	5.87	9.34	
				4	5.69	4.88	8.31	
				8	6.63	6.00	9.33	
			SU	-	5.47	4.59	8.06	

* Calculation of PSD: Corr'd PSD = Ant1 PSD + Ant2 PSD + Duty CF [dB]

Band	Channel	Center Freq. [MHz]	Tones	RU offset	Meas PSD [dBm]		Corr'd PSD [dBm]	PSD Limit [dBm]
					ANT1	ANT2		
UNII-3	149	5745	26T	0	3.17	3.99	6.61	30.00 /500kHz
				4	3.28	3.62	6.47	
				8	3.38	3.95	6.68	
			SU	-	2.49	3.15	5.84	
	157	5785	26T	0	3.51	4.18	6.87	
				4	3.58	3.85	6.73	
				8	3.50	4.08	6.81	
			SU	-	2.12	2.72	5.44	
	165	5825	26T	0	3.36	3.72	6.55	
				4	3.09	3.53	6.33	
				8	3.39	3.82	6.62	
			SU	-	2.54	2.84	5.70	

* Calculation of PSD: Corr'd PSD = Ant1 PSD + Ant2 PSD + Duty CF [dB]

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Output Power Results

Band	Channel	Center Freq. [MHz]	Tones	RU offset	Average Power [dBm]		Corr'd Power [dBm]	Limit [dBm]
					ANT1	ANT2		
UNII-1	38	5190	26T	0	8.47	8.59	11.54	23.98
				9	8.51	8.63	11.58	
				17	8.10	8.26	11.19	
			52T	37	9.16	9.40	12.29	
				41	9.08	9.30	12.20	
				44	8.27	8.47	11.38	
			106T	53	11.40	11.56	14.49	
				54	11.15	11.29	14.23	
				56	10.93	11.16	14.06	
			242T	61	13.04	13.52	16.30	
				62	13.00	13.58	16.31	
			SU	-	14.80	15.42	18.13	
	46	5230	26T	0	8.44	8.55	11.51	
				9	8.37	8.51	11.45	
				17	8.52	8.75	11.65	
			52T	37	9.13	9.24	12.20	
				41	9.50	9.72	12.62	
				44	9.19	9.43	12.32	
			106T	53	11.31	11.42	14.38	
				54	10.05	11.21	13.68	
				56	10.84	11.10	13.98	
			242T	61	13.56	13.64	16.61	
				62	13.52	13.69	16.62	
			SU	-	16.31	16.38	19.36	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
 Corr'd Power = Ant1 Average Power + Ant2 Average Power

Band	Channel	Center Freq. [MHz]	Tones	RU offset	Average Power [dBm]		Corr'd Power [dBm]	Limit [dBm]
					ANT1	ANT2		
UNII-2A	54	5270	26T	0	8.39	7.93	11.18	23.98
				9	8.85	8.47	11.67	
				17	8.48	8.10	11.30	
			52T	37	9.66	9.19	12.44	
				41	9.51	9.13	12.33	
				44	9.72	9.37	12.56	
			106T	53	11.78	11.38	14.59	
				54	11.60	11.09	14.36	
				56	11.36	10.96	14.17	
			242T	61	13.61	13.30	16.47	
				62	13.54	13.35	16.46	
			SU	-	16.70	16.30	19.51	
	62	5310	26T	0	8.44	8.00	11.24	
				9	8.85	8.51	11.69	
				17	8.42	8.14	11.29	
			52T	37	9.62	9.26	12.45	
				41	9.46	9.10	12.29	
				44	9.11	8.79	11.96	
			106T	53	11.37	10.80	14.10	
				54	11.61	11.08	14.36	
				56	11.39	10.91	14.17	
			242T	61	13.63	13.33	16.49	
				62	13.62	13.34	16.49	
			SU	-	15.16	15.26	18.22	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
 Corr'd Power = Ant1 Average Power + Ant2 Average Power

Band	Channel	Center Freq. [MHz]	Tones	RU offset	Average Power [dBm]		Corr'd Power [dBm]	Limit [dBm]
					ANT1	ANT2		
UNII-2C	102	5510	26T	0	8.58	8.34	11.47	23.98
				9	8.48	8.35	11.43	
				17	8.56	8.33	11.46	
			52T	37	9.65	9.58	12.63	
				41	9.61	9.41	12.52	
				44	9.24	9.01	12.14	
			106T	53	11.46	11.07	14.28	
				54	11.70	11.35	14.54	
				56	11.45	11.09	14.28	
	242T	61	13.67	13.56	16.63			
		62	13.64	13.50	16.58			
	SU	-	16.84	16.69	19.78			
	118	5590	26T	0	8.43	8.24	11.35	
				9	8.83	8.63	11.74	
				17	8.40	8.22	11.32	
			52T	37	9.56	9.45	12.52	
				41	9.88	9.81	12.86	
				44	9.48	9.46	12.48	
			106T	53	11.24	11.00	14.13	
				54	11.46	11.23	14.36	
				56	11.17	10.98	14.09	
	242T	61	13.53	13.28	16.42			
		62	13.50	13.24	16.38			
	SU	-	16.70	16.48	19.60			
	134	5670	26T	0	8.41	7.76	11.11	
				9	8.81	8.23	11.54	
				17	8.40	7.82	11.13	
52T			37	9.52	8.96	12.26		
			41	9.88	9.38	12.65		
			44	9.52	9.03	12.29		
106T			53	11.86	11.11	14.51		
			54	11.47	10.78	14.15		
			56	11.23	10.56	13.92		
242T	61	13.78	13.76	16.78				
	62	13.82	13.79	16.82				
SU	-	16.71	16.07	19.41				

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
 Corr'd Power = Ant1 Average Power + Ant2 Average Power

Band	Channel	Center Freq. [MHz]	Tones	RU offset	Average Power [dBm]		Corr'd Power [dBm]	Limit [dBm]
					ANT1	ANT2		
UNII-3	151	5755	26T	0	8.39	8.42	11.42	30.00
				9	8.37	8.36	11.38	
				17	8.48	8.51	11.51	
			52T	37	9.53	9.75	12.65	
				41	9.39	9.61	12.51	
				44	9.07	9.29	12.19	
			106T	53	11.35	11.40	14.39	
				54	11.63	11.69	14.67	
				56	11.43	11.49	14.47	
			242T	61	13.09	13.67	16.40	
				62	13.14	13.71	16.44	
			SU	-	16.23	16.42	19.34	
	159	5795	26T	0	8.00	8.24	11.13	
				9	8.53	8.76	11.66	
				17	8.14	8.39	11.28	
			52T	37	9.13	9.38	12.27	
				41	9.54	9.83	12.70	
				44	9.18	9.51	12.36	
			106T	53	11.04	11.32	14.19	
				54	11.26	11.56	14.42	
				56	11.09	11.43	14.27	
			242T	61	13.19	13.39	16.30	
				62	13.24	13.48	16.37	
			SU	-	16.33	16.55	19.45	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
 Corr'd Power = Ant1 Average Power + Ant2 Average Power

PSD Results

Band	Channel	Center Freq. [MHz]	Tones	RU offset	Meas PSD [dBm/MHz]		Corr'd PSD [dBm/MHz]	PSD Limit [dBm/MHz]
					ANT1	ANT2		
UNII-1	38	5190	26T	0	6.29	6.15	9.23	11.00
				9	6.32	6.16	9.25	
				17	5.59	5.63	8.62	
	SU	-	2.42	2.42	5.43			
	46	5230	26T	0	6.51	5.89	9.22	
				9	6.16	5.81	9.00	
17				6.57	6.18	9.39		
SU	-	2.13	2.27	5.21				
UNII-2A	54	5270	26T	0	6.22	5.22	8.76	11.00
				9	6.58	5.82	9.23	
				17	6.37	5.27	8.86	
	SU	-	2.93	2.12	5.55			
	62	5310	26T	0	6.08	5.19	8.67	
				9	6.53	5.47	9.04	
17				6.17	5.19	8.72		
SU	-	2.11	1.78	4.95				
UNII-2C	102	5510	26T	0	6.35	5.03	8.75	11.00
				9	6.40	4.86	8.71	
				17	6.28	5.10	8.74	
	SU	-	3.10	1.77	5.49			
	118	5590	26T	0	7.01	4.60	8.98	
				9	7.28	5.10	9.33	
				17	6.68	5.06	8.96	
	SU	-	3.66	1.69	5.80			
	134	5670	26T	0	6.66	5.15	8.98	
9				7.00	5.70	9.41		
17				6.85	5.53	9.25		
SU	-	3.35	2.01	5.74				

* Calculation of PSD: Corr'd PSD = Ant1 PSD + Ant2 PSD + Duty CF [dB]

Band	Channel	Center Freq. [MHz]	Tones	RU offset	Meas PSD [dBm]		Corr'd PSD [dBm]	PSD Limit [dBm]
					ANT1	ANT2		
UNII-3	151	5755	26T	0	3.45	4.13	6.81	30.00 /500kHz
				9	3.49	3.88	6.70	
				17	3.29	4.34	6.86	
	SU	-	-0.26	0.08	2.93			
	159	5795	26T	0	3.23	3.66	6.46	
				9	3.64	4.17	6.92	
17				3.82	3.82	6.83		
SU	-	-0.25	0.19	2.99				

* Calculation of PSD: Corr'd PSD = Ant1 PSD + Ant2 PSD + Duty CF [dB]

10.2.8. 802.11ax HE80 MODE

Output Power Results

Band	Channel	Center Freq. [MHz]	Tones	RU offset	Average Power [dBm]		Corr'd Power [dBm]	Limit [dBm]
					ANT1	ANT2		
UNII-1	42	5210	26T	0	8.74	8.24	11.51	23.98
				18	8.58	8.22	11.41	
				36	8.35	8.14	11.26	
			52T	37	9.83	9.37	12.62	
				45	9.60	9.34	12.48	
				52	9.35	9.26	12.32	
			106T	53	10.93	10.35	13.66	
				57	10.62	10.25	13.45	
				60	10.41	10.16	13.30	
			242T	61	11.51	11.05	14.30	
				62	11.66	11.28	14.48	
				64	11.59	11.40	14.51	
			484T	65	11.54	11.17	14.37	
				66	11.60	11.39	14.51	
			SU	-	14.41	14.73	17.58	
UNII-2A	58	5290	26T	0	8.84	7.72	11.33	23.98
				18	8.60	7.71	11.19	
				36	8.33	7.54	10.96	
			52T	37	9.97	8.81	12.44	
				45	9.69	8.83	12.29	
				52	9.44	8.67	12.08	
			106T	53	10.56	9.38	13.02	
				57	10.81	9.84	13.36	
				60	10.60	9.74	13.20	
			242T	61	11.72	10.47	14.15	
				62	11.87	10.72	14.34	
				64	11.76	10.78	14.31	
			484T	65	11.74	10.58	14.21	
				66	11.78	10.79	14.32	
			SU	-	15.34	14.77	18.07	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
 Corr'd Power = Ant1 Average Power + Ant2 Average Power

Band	Channel	Center Freq. [MHz]	Tones	RU offset	Average Power [dBm]		Corr'd Power [dBm]	Limit [dBm]
					ANT1	ANT2		
UNII-2C	106	5530	26T	0	8.36	8.05	11.22	23.98
				18	8.60	8.27	11.45	
				36	8.23	7.94	11.10	
			52T	37	9.46	9.06	12.27	
				45	9.62	9.30	12.47	
				52	9.33	8.99	12.17	
			106T	53	10.35	10.05	13.21	
				57	10.53	10.25	13.40	
				60	10.87	10.41	13.66	
			242T	61	11.60	11.10	14.37	
				62	11.68	11.22	14.47	
				64	11.49	11.02	14.27	
	484T	65	11.60	11.14	14.39			
		66	11.56	11.10	14.35			
	SU	-	15.91	15.65	18.79			
	122	5610	26T	0	8.80	7.96	11.41	
				18	8.39	7.70	11.07	
				36	8.64	7.89	11.29	
			52T	37	9.78	9.02	12.43	
				45	9.93	9.29	12.63	
				52	9.61	8.98	12.32	
			106T	53	10.84	9.93	13.42	
				57	10.96	10.13	13.58	
				60	10.72	9.90	13.34	
242T			61	11.37	10.58	14.00		
			62	11.51	10.71	14.14		
			64	11.32	10.56	13.97		
484T	65	11.41	10.64	14.05				
	66	11.35	10.62	14.01				
SU	-	15.77	15.17	18.49				

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
 Corr'd Power = Ant1 Average Power + Ant2 Average Power

Band	Channel	Center Freq. [MHz]	Tones	RU offset	Average Power [dBm]		Corr'd Power [dBm]	Limit [dBm]
					ANT1	ANT2		
UNII-3	155	5775	26T	0	8.49	8.36	11.44	30.00
				18	8.82	8.74	11.79	
				36	8.58	8.59	11.60	
			52T	37	9.49	9.50	12.51	
				45	9.77	9.89	12.84	
				52	9.57	9.72	12.66	
			106T	53	10.53	10.62	13.59	
				57	10.81	10.96	13.90	
				60	10.68	10.85	13.78	
			242T	61	11.27	11.27	14.28	
				62	11.40	11.47	14.45	
				64	11.40	11.49	14.46	
			484T	65	11.31	11.36	14.35	
				66	11.37	11.52	14.46	
			SU	-	15.03	15.17	18.11	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]

Corr'd Power = Ant1 Average Power + Ant2 Average Power

PSD Results

Band	Channel	Center Freq. [MHz]	Tones	RU offset	Meas PSD [dBm/MHz]		Corr'd PSD [dBm/MHz]	PSD Limit [dBm/MHz]
					ANT1	ANT2		
UNII-1	42	5210	26T	0	6.65	6.15	9.42	11.00
				18	5.49	4.67	8.11	
				36	5.95	5.73	8.85	
			SU	-	-1.71	-1.92	1.20	
UNII-2A	58	5290	26T	0	6.63	5.31	9.03	11.00
				18	5.34	4.30	7.86	
				36	6.11	5.23	8.70	
			SU	-	-1.70	-2.58	0.89	
UNII-2C	106	5530	26T	0	6.29	4.99	8.70	11.00
				18	5.54	4.53	8.07	
				36	6.13	5.04	8.63	
			SU	-	-0.75	-1.81	1.77	
	122	5610	26T	0	6.99	4.69	9.00	
				18	5.54	3.92	7.82	
				36	7.11	5.17	9.25	
			SU	-	-0.61	-2.44	1.58	

Band	Channel	Center Freq. [MHz]	Tones	RU offset	Meas PSD [dBm]		Corr'd PSD [dBm]	PSD Limit [dBm]
					ANT1	ANT2		
UNII-3	155	5775	26T	0	3.44	3.55	6.51	30.00 /500kHz
				18	3.56	4.31	6.96	
				36	3.64	4.09	6.88	
			SU	-	-4.72	-4.15	-1.41	

* Calculation of PSD: Corr'd PSD = Ant1 PSD + Ant2 PSD + Duty CF [dB]

10.2.9. STRADDLE CHANNEL(802.11ax)

Output Power Results(SU)

Mode	Band	Center Freq. [MHz]	Meas Power [dBm]		Corr'd Power [dBm]	Limit [dBm]
			ANT1	ANT2		
HE20	UNII-2C	5720	16.56	16.03	19.31	22.83
	UNII-3		11.02	10.49	13.77	30.00
HE40	UNII-2C	5710	16.61	16.46	19.55	23.98
	UNII-3		6.43	6.27	9.36	30.00
HE80	UNII-2C	5690	16.14	15.56	18.87	23.98
	UNII-3		2.53	1.90	5.24	30.00

* Calculation of Output Power : Corr'd Power = Ant1 meas. Power + Ant2 meas. Power + Duty CF [dB]

PSD Results(SU)

Mode	Band	Center Freq. [MHz]	Meas PSD [dBm/MHz]		DCCF.	Corr'd PSD [dBm]	Limit [dBm/MHz]
			ANT1	ANT2			
HE20	UNII-2C	5720	5.97	5.30	0.00	8.66	11.00
	UNII-3		2.52	1.97	0.00	5.26	30.00/500kHz
HE40	UNII-2C	5710	2.77	2.30	0.00	5.55	11.00
	UNII-3		-1.51	-2.35	0.00	1.10	30.00/500kHz
HE80	UNII-2C	5690	-0.60	-1.82	0.00	1.85	11.00
	UNII-3		-5.42	-6.77	0.00	-3.03	30.00/500kHz

* Calculation of PSD: Corr'd PSD = Ant1 PSD + Ant2 PSD + Duty CF [dB]

Output Power Results(RU)

Mode	Band	Center Freq. [MHz]	Meas Power [dBm]		Corr'd Power [dBm]	Limit [dBm]
			ANT1	ANT2		
HE20	UNII-2C	5720 (6RU)	8.06	6.95	10.55	21.97
	UNII-3		1.94	0.56	4.32	30.00
HE40	UNII-2C	5710 (15RU)	8.72	7.18	11.03	23.98
	UNII-3		-3.98	-6.63	-2.09	30.00
HE80	UNII-2C	5690 (34RU)	9.06	7.25	11.26	23.98
	UNII-3		-2.45	-6.90	-1.12	30.00

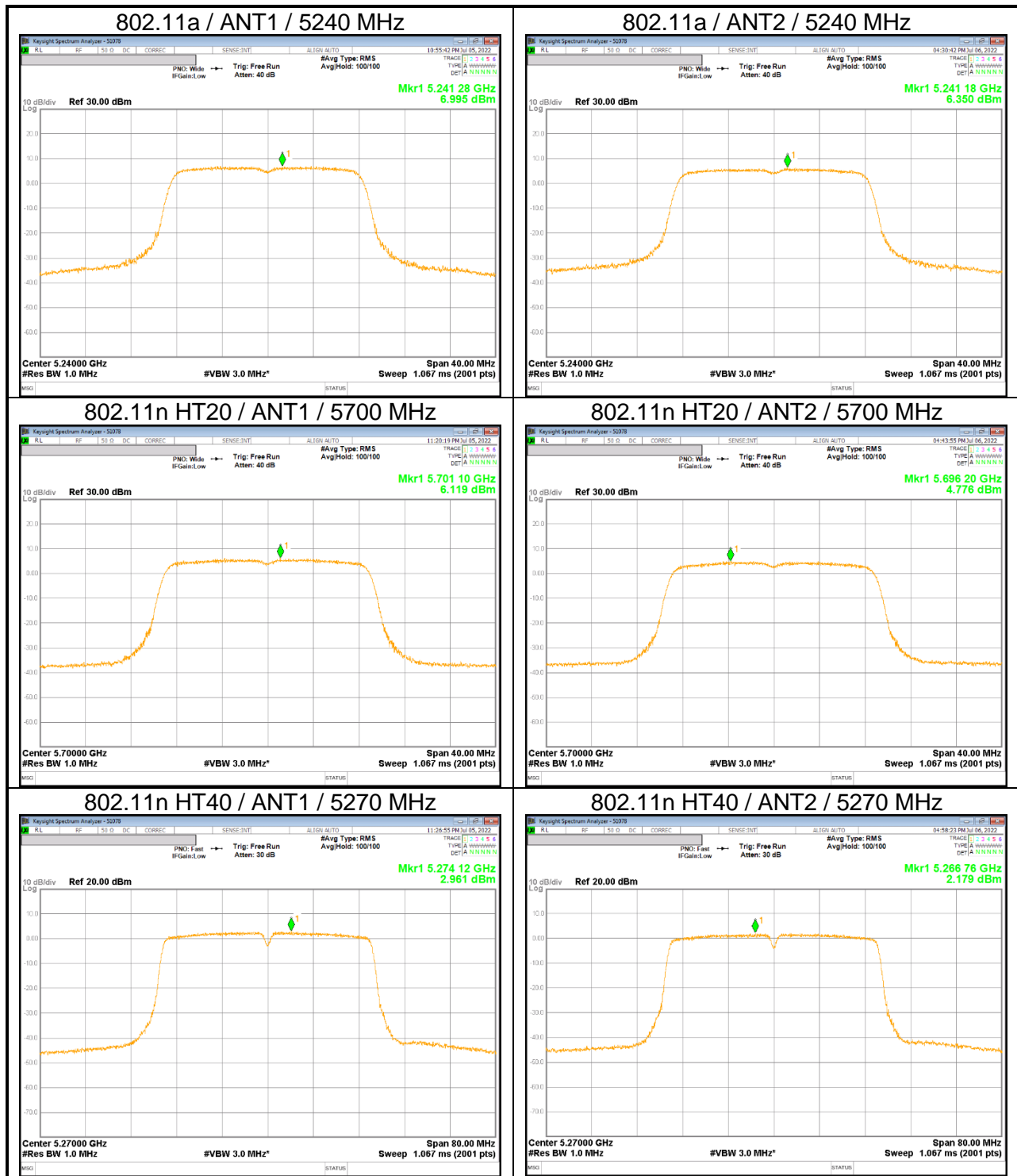
* Calculation of Output Power : Corr'd Power = Ant1 meas. Power + Ant2 meas. Power + Duty CF [dB]

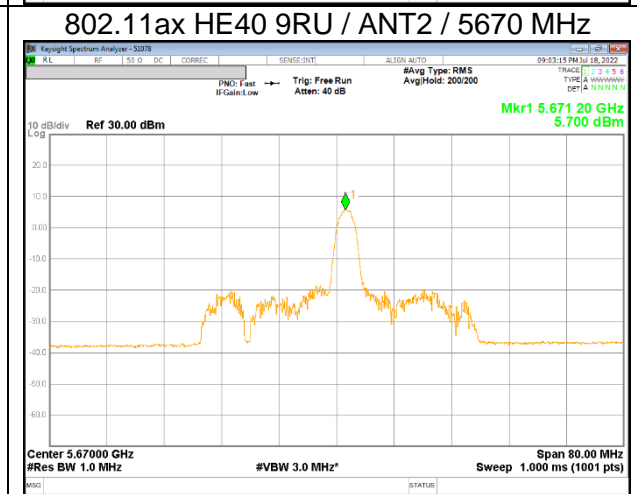
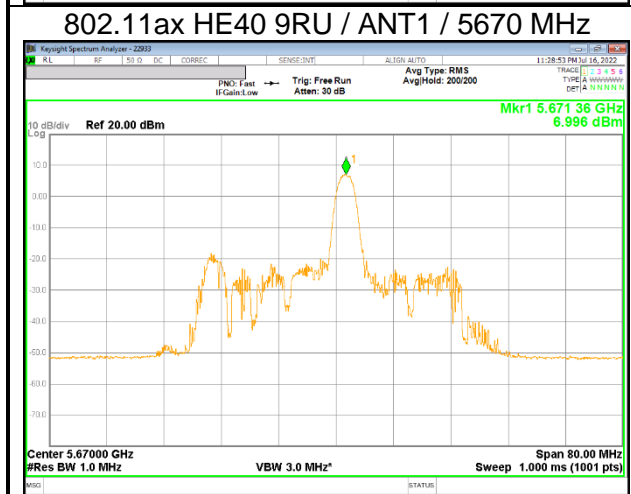
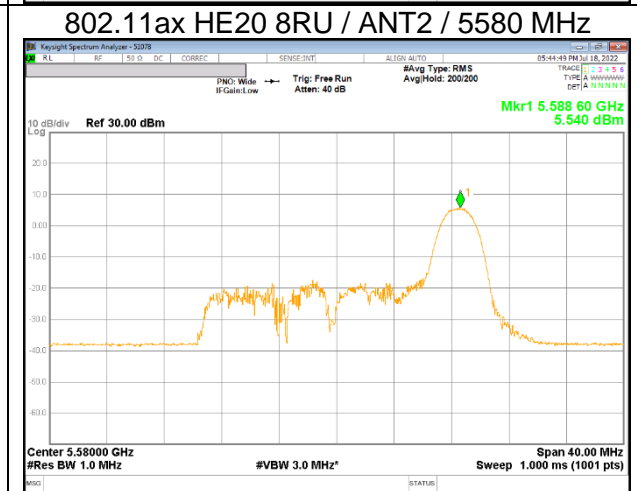
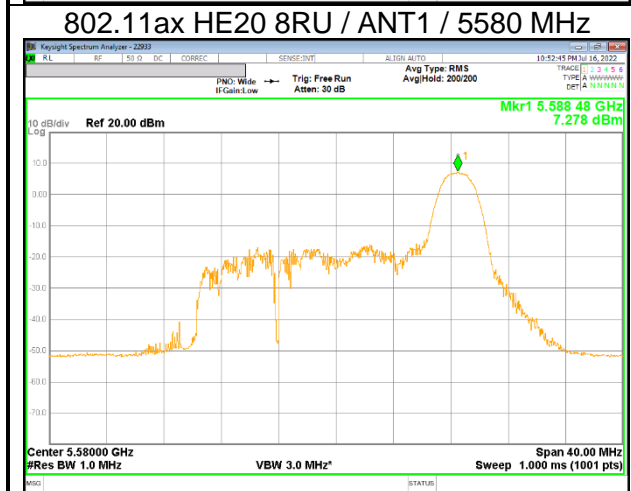
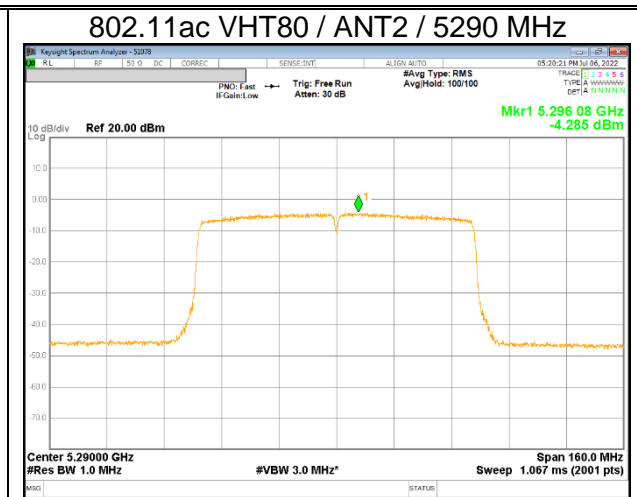
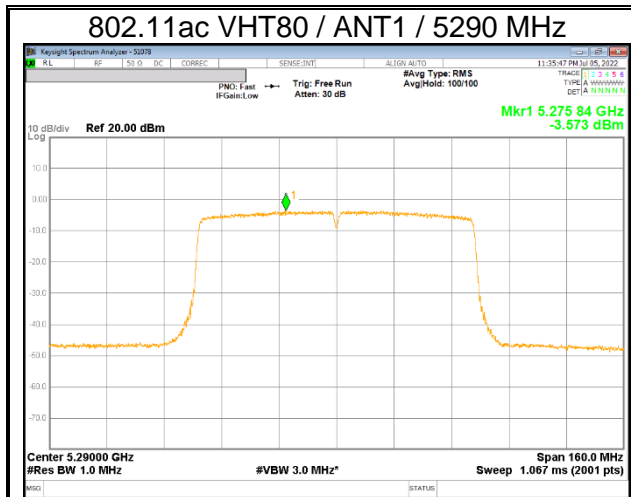
PSD Results(RU)

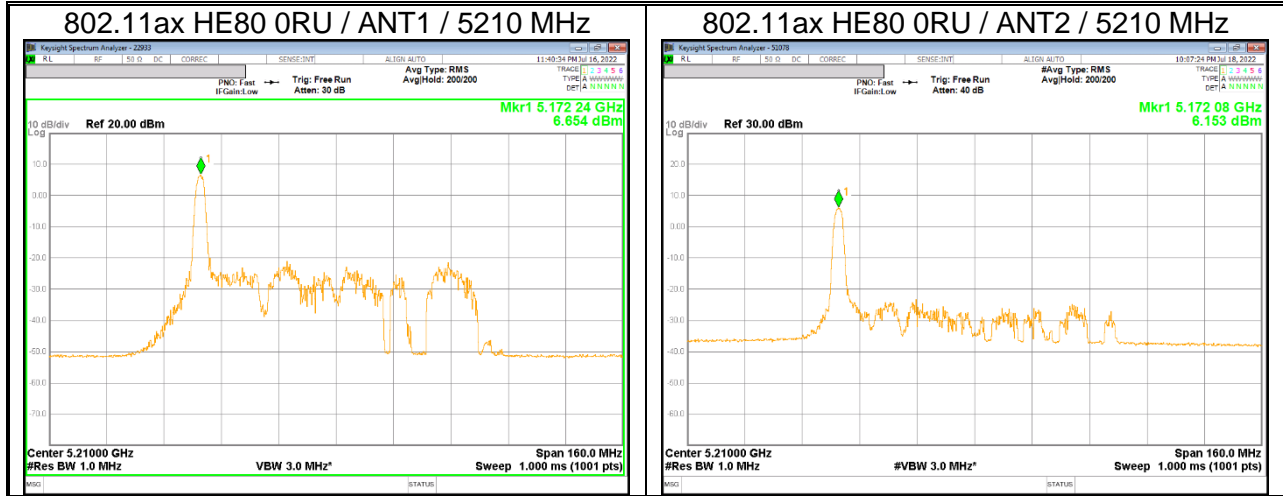
Mode	Band	Center Freq. [MHz]	Meas PSD [dBm/MHz]		DCCF.	Corr'd PSD [dBm]	Limit [dBm/MHz]
			ANT1	ANT2			
HE20	UNII-2C	5720 (6RU)	6.80	6.26	0.00	9.55	11.00
	UNII-3		3.50	3.15	0.00	6.34	30.00/500kHz
HE40	UNII-2C	5710 (15RU)	6.27	5.92	0.00	9.11	11.00
	UNII-3		-4.91	-6.15	0.00	-2.48	30.00/500kHz
HE80	UNII-2C	5690 (34RU)	7.13	6.02	0.00	9.62	11.00
	UNII-3		-4.59	-5.79	0.00	-2.14	30.00/500kHz

* Calculation of PSD: Corr'd PSD = Ant1 PSD + Ant2 PSD + Duty CF [dB]

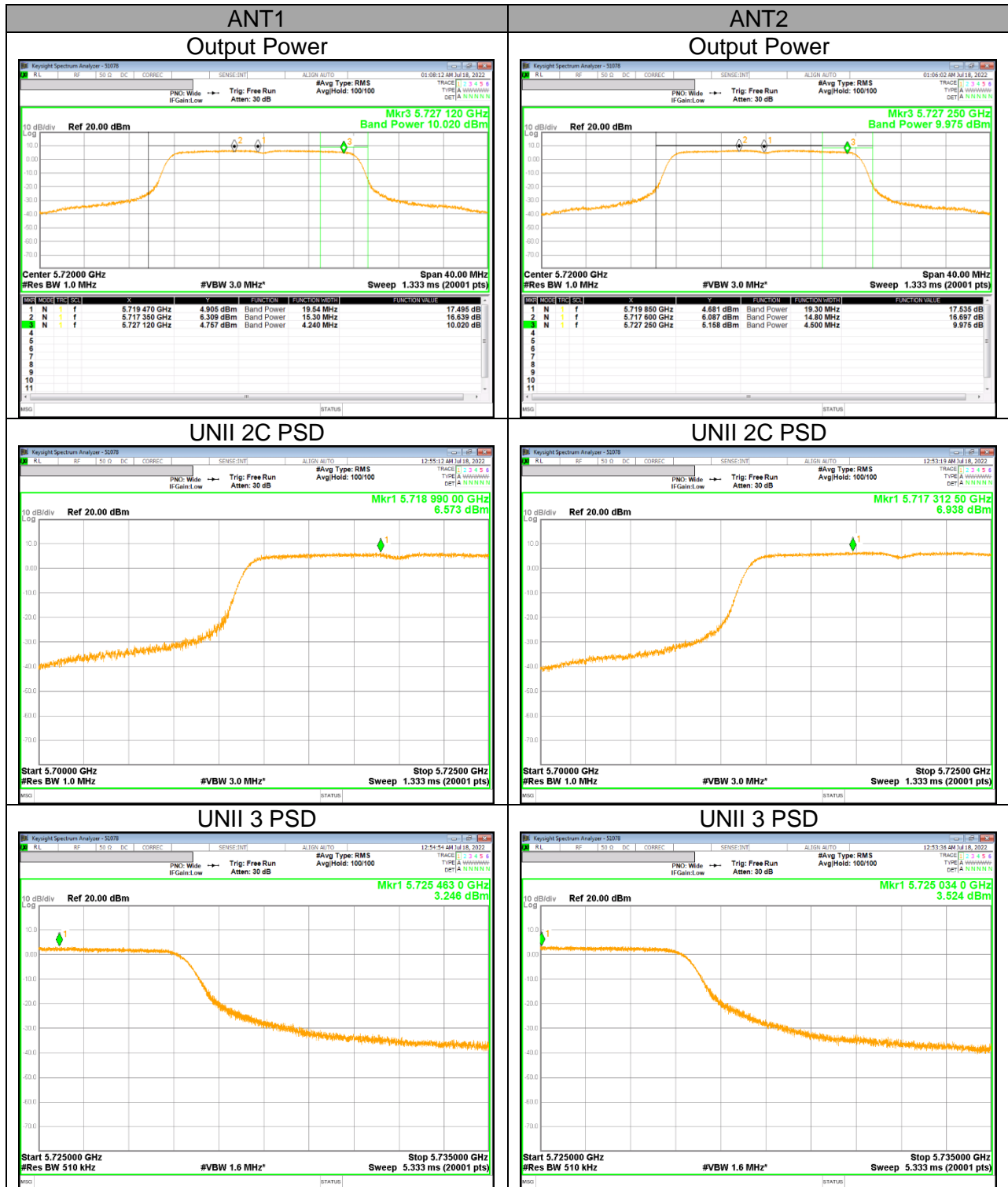
10.2.10. OUTPUT POWER AND PPSD PLOTS(WORST CASE)



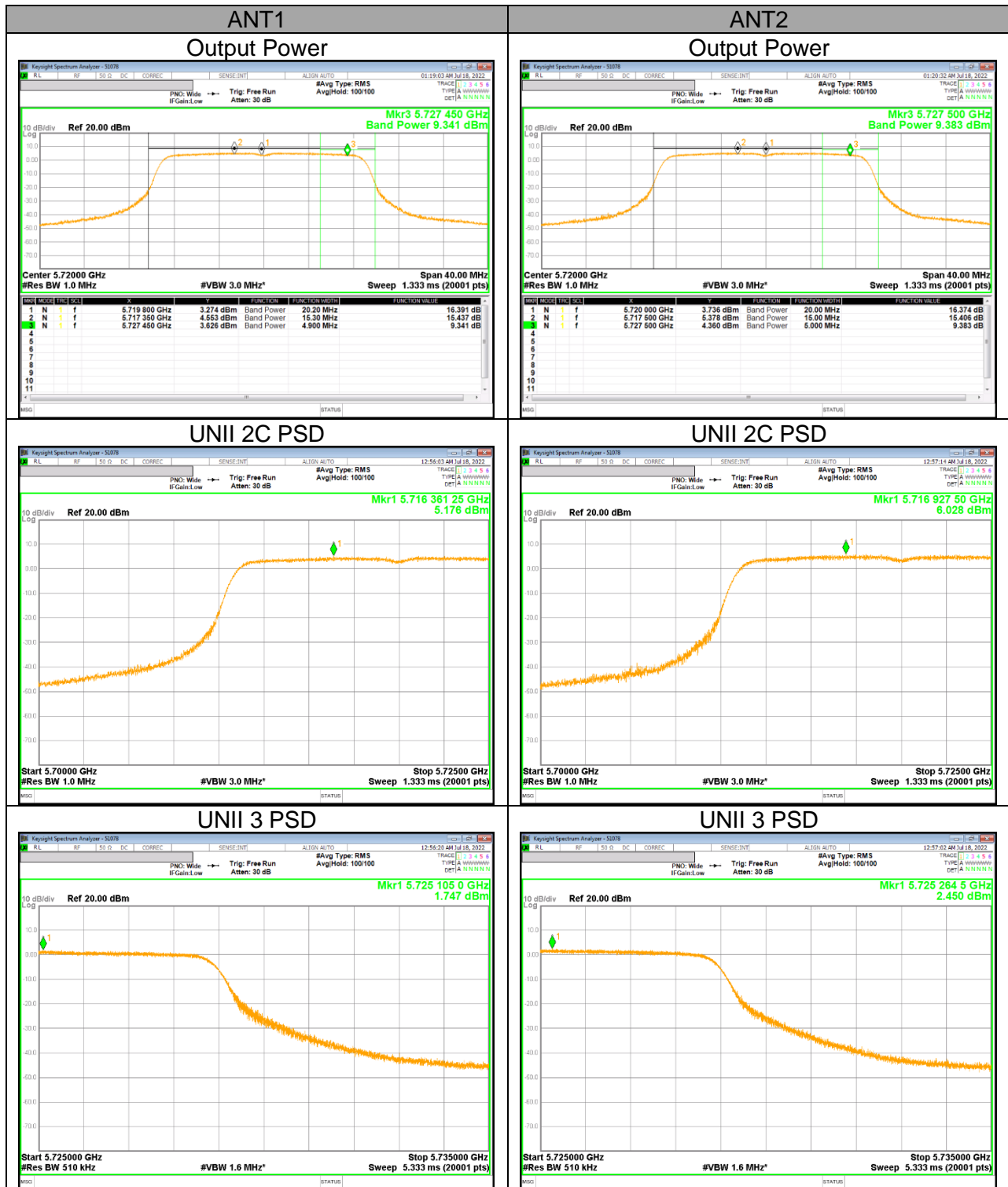




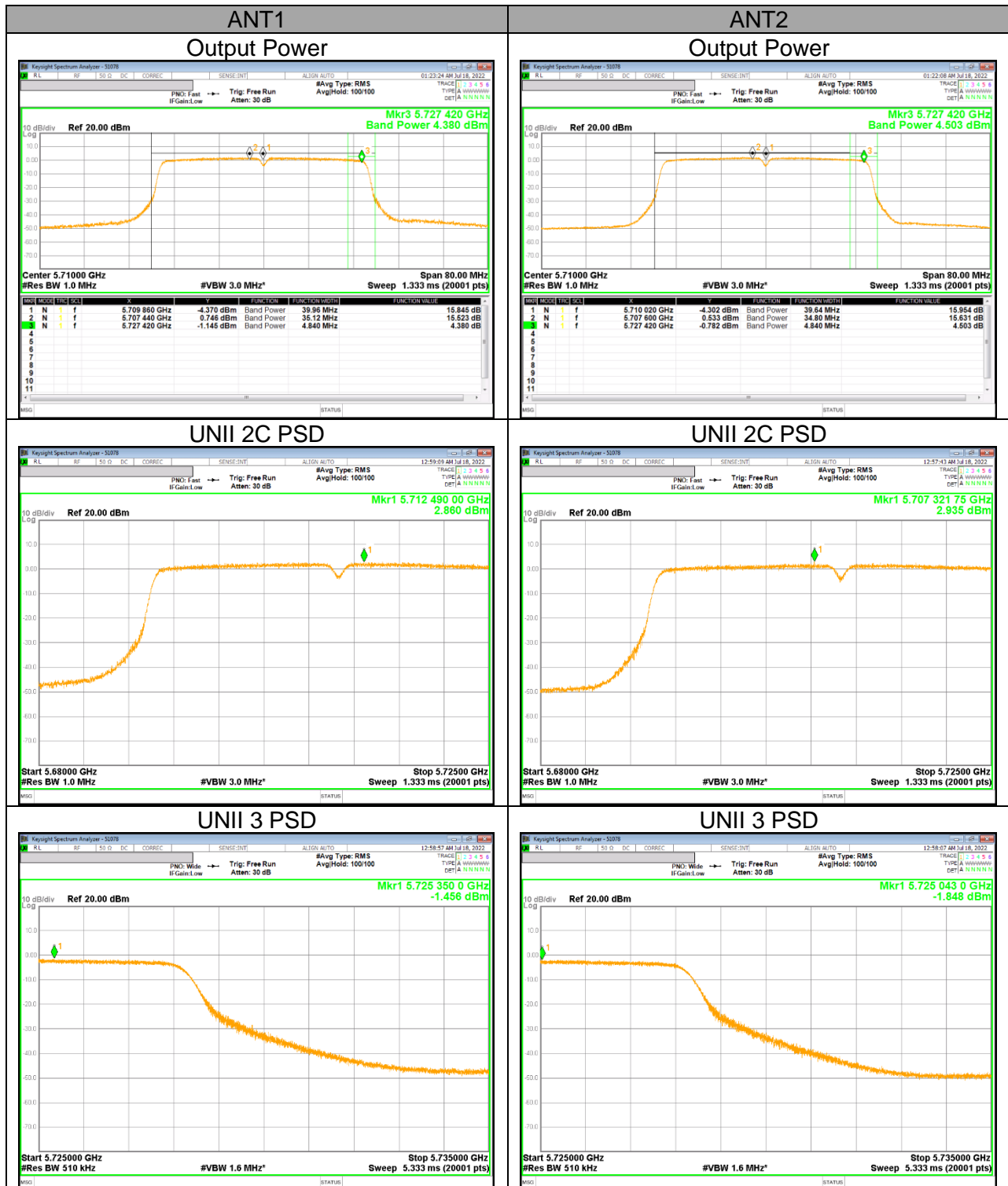
UNII Straddle Ch. IEEE 802.11a mode Output Power and PSD



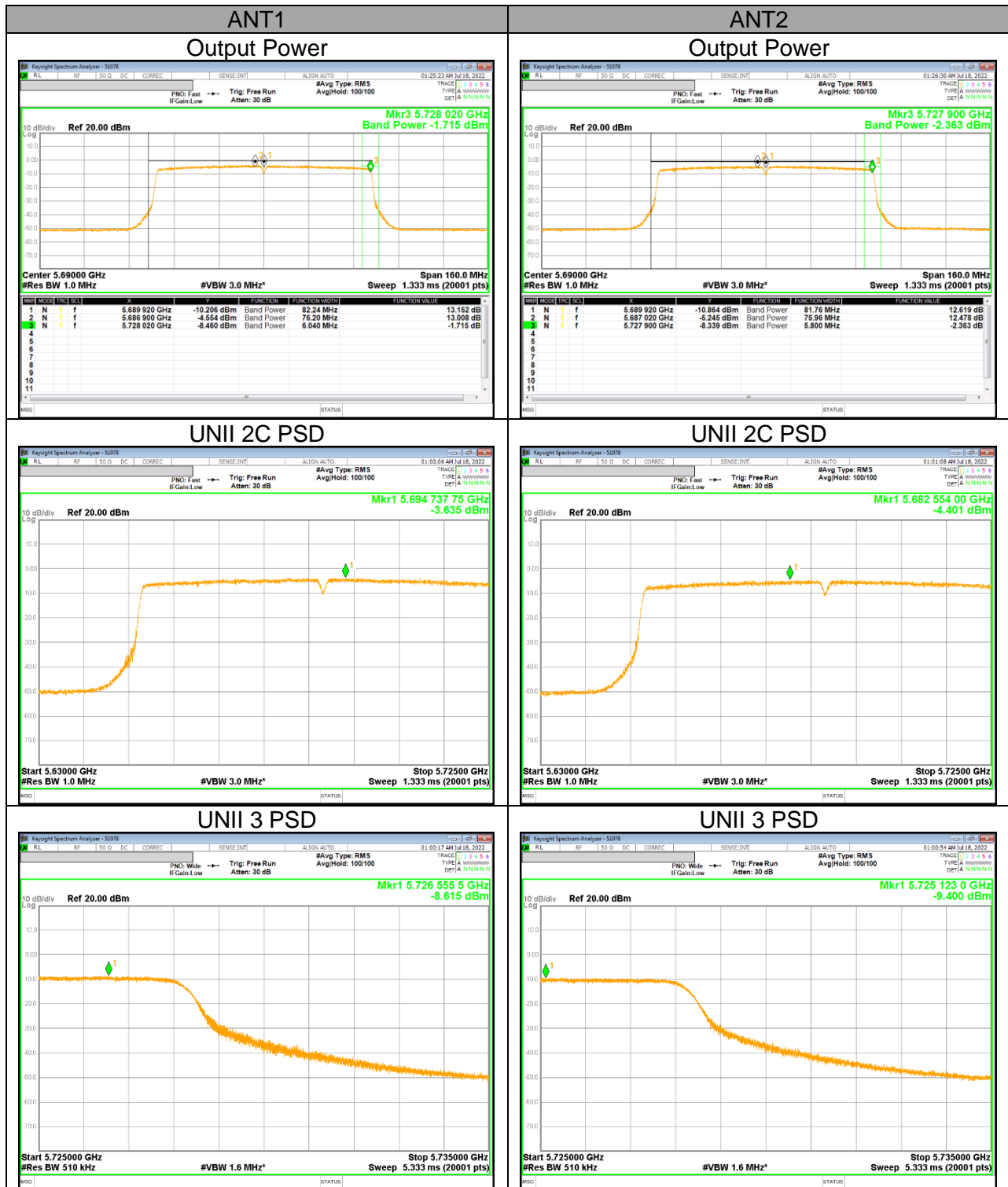
UNII Straddle Ch. IEEE 802.11n HT20 mode Output Power and PSD



UNII Straddle Ch. IEEE 802.11n HT40 mode Output Power and PSD



UNII Straddle Ch. IEEE 802.11ac VHT80 mode Output Power and PSD



UNII Straddle Ch. IEEE 802.11ax HE20(SU) mode PSD

