CERTIFICATION TEST REPORT

Report Number. : 4790089626-E7V3

Applicant	:	SAMSUNG ELECTRONICS CO., LTD. 129 SAMSUNG-RO, YEONGTONG-GU, SUWON-SI, GYEONGGI-DO, 16677, KOREA
Model	:	SM-S906B/DS
FCC ID	:	A3LSMS906B
EUT Description	:	GSM/WCDMA/LTE/5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax, NFC, WPT and UWB
Test Standard(s)	:	FCC 47 CFR PART 15 SUBPART E 6 GHz LOW POWER INDOOR CLIENT (6XD)

Date Of Issue:
2021-12-09

Prepared by:
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Suwon Test Site: UL Korea, Ltd. Suwon Laboratory
218 Maeyeong-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16675, Korea
TEL: (031) 337-9902
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IAS ACCREDITED
Testing Laboratory
TL-637

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	2021-11-09	Initial issue	SunGeun Lee
V2	2021-12-08	Updated to address TCB's question	SunGeun Lee
V3	2021-12-09	Updated to address TCB's question	SunGeun Lee

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME:	SAMSUNG ELECTRONICS CO., LTD.
EUT DESCRIPTION:	GSM/WCDMA/LTE/5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax, NFC WPT and UWB
MODEL NUMBER:	SM-S906B/DS
SERIAL NUMBER:	R3CR80TBT6V, R3CR80TBVCN (CONDUCTED); R3CR80TBVVV, R3CR70QKDGF (RADIATED);
DATE TESTED:	2021-09-27 ~ 2021-10-29;

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.

Approved & Released For
UL Korea, Ltd. By:

Junwhan Lee
Suwon Lab Engineer
UL Korea, Ltd.

Tested By:

SunGeun 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 789033 D02 General UNII Test Procedures New Rules v02r01
4. KDB 987594 D02 U-NII 6 GHz EMC Measurement v01v01
5. KDB 662911 D01 v02r01
6. ANSI C63.10-2013.

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
☒ Chamber 1
☒ Chamber 2
☒ Chamber 3

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:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

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 115:2007.

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5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a GSM/WCDMA/LTE/5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax, NFC, WPT, and UWB.
This test report addresses the NII (WLAN) operational mode.

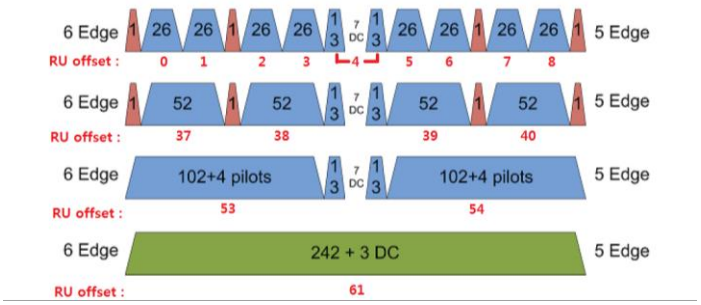
WiFi operating mode

Frequency rage	Mode	ANT1	ANT2
6GHz (5955 MHz ~ 7115 MHz)	802.11a SISO	TX/RX	TX/RX
	802.11a MIMO	TX/RX	TX/RX
	802.11ax SISO	TX/RX	TX/RX
	802.11ax MIMO	TX/RX	TX/RX

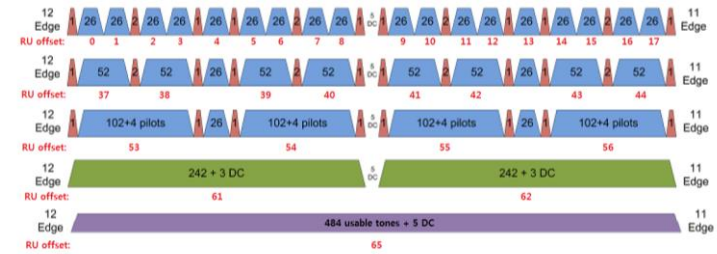
Simultaneous TX Condition

Please refer to the report '4790089626-E6 FCC Report UNII(a,n,ac,ax) WLAN'
6E Tx power is lower than 5GHz. Therefore, 5GHz set for final test.

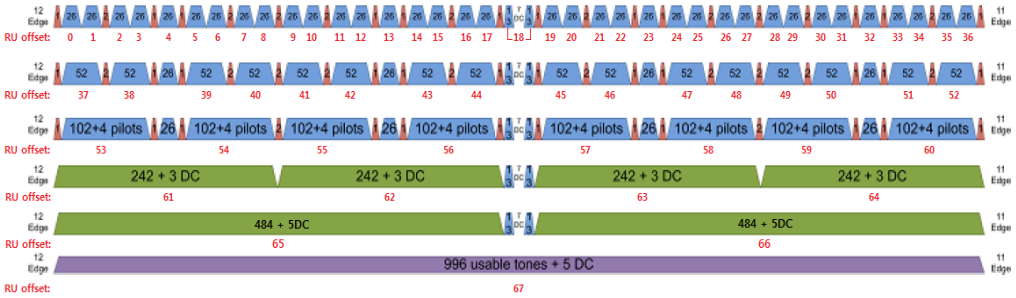
802.11ax RU allocations



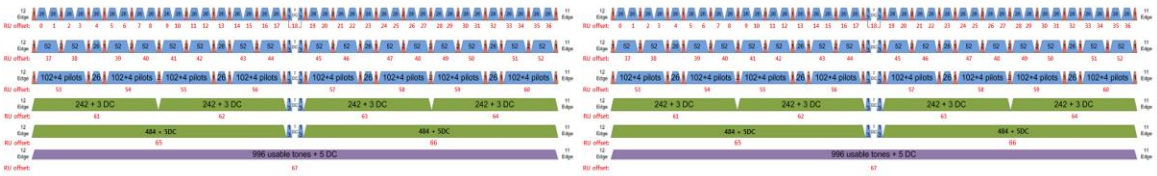
- HE 20 Mode -



- HE 40 Mode -



- HE 80 Mode -



- HE 160 Mode -

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 1	61 / -
HE40	26T	0
		9
		17
	52T	37
		41
		44
	106T	53
		54
		56
	242T	61
		62
	484T / SU Note 1	63 / -
HE80 / HE160 Note2	26T	0
		18
		36
	52T	37
		45
		52
	106T	53
		57
		60
	242T	61
		62
		64
	484T	65
		66
	996T / SU Note1	67 / -

Note 1: Full RU(Resource Unit) 242T 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.
Note 2: HE160 = HE80(Lower) + HE80(Upper)

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-5	5955 – 6415	802.11a MIMO	9.07	8.07
		802.11ax(HE20) MIMO	9.72	9.38
		802.11ax(HE40) MIMO	11.71	14.83
		802.11ax(HE80) MIMO	12.99	19.91
		802.11ax(HE160) MIMO	12.45	17.58
UNII-6	6435 – 6515	802.11a MIMO	9.65	9.23
		802.11ax(HE20) MIMO	9.84	9.64
		802.11ax(HE40) MIMO	12.04	16.00
		802.11ax(HE80) MIMO	12.45	17.58
		802.11ax(HE160) MIMO	12.60	18.20
UNII-7	6535 – 6875	802.11a MIMO	9.64	9.20
		802.11ax(HE20) MIMO	9.98	9.95
		802.11ax(HE40) MIMO	11.29	13.46
		802.11ax(HE80) MIMO	12.51	17.82
		802.11ax(HE160) MIMO	11.92	15.56
UNII-8	6895 - 7115	802.11a MIMO	10.35	10.84
		802.11ax(HE20) MIMO	10.23	10.54
		802.11ax(HE40) MIMO	11.52	14.19
		802.11ax(HE80) MIMO	12.20	16.60
		802.11ax(HE160) MIMO	12.56	18.03

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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 5 5925 – 6425	-3.50	-7.10	-2.10
UNII 6 6425 – 6525	-3.50	-6.90	-2.02
UNII 7 6525 – 6875	-4.00	-5.60	-1.75
UNII 8 6875 - 7125	-4.80	-5.70	-2.23

"LDS" and "Metal" as indicated in antenna specification are written as ANT 1 and ANT 2 in this report.
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 = $10 \log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}]$ dBi.
Sample calculation for this device with $N_{ANT} = 2$
Directional gain = $10 \log[(10^{-3.5/20} + 10^{-7.1/20})^2 / 2] = -2.1$ dBi

5.3. 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 case condition

ANT1	ANT2	ANT ALL
Axis	Axis	Axis
Z	Z	Z

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

802.11a mode: 6 Mbps 2Tx	802.11ax HE20 mode: MCS0 2Tx
	802.11ax HE40 mode: MCS0 2Tx
	802.11ax HE80 mode: MCS0 2Tx

Radiation test for 802.11a & 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 26dB Bandwidth, it was tested at the SU Mode for each bandwidth. (Worst case)

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

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

Mode	Band	SISO Target[dBm]		MIMO Target[dBm]	
		802.11a	802.11ax (SU)	802.11a	802.11ax (SU)
5GHz (20 MHz)	UNII-5			10	10
	UNII-6			10	10
	UNII-7			10	10
	UNII-8			10	10
5GHz (40 MHz)	UNII-5				12
	UNII-6				12
	UNII-7				12
	UNII-8				12
5GHz (80 MHz)	UNII-5				12
	UNII-6				12
	UNII-7				12
	UNII-8				12
5GHz (160 MHz)	UNII-5				12
	UNII-6				12
	UNII-7				12
	UNII-8				12

Band-Edge & Spurious Emission
Spurious Emission
Spurious Emission Spot check

Note. SISO mode is not supported.

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

Band	Mode	Freq.	Tone	RU offset	Test Case		
					ANT1	ANT2	MIMO
UNII-5	HE20	5955	26 T	0	-	-	-
				4	-	-	-
				8	-	-	O
		6175		0			
				4			
				8			
		6415		0			
				4			
				8			
UNII-6	HE20	6435	26 T	0			
				4			
				8			
		6475		0	-	-	-
				4	-	-	O
				8	-	-	-
		6515		0			
				4			
				8			
	HE40	6445		0	-	-	O
				9	-	-	-
				17	-	-	-
		6525		0			
				9			
				17			
	HE80	6465		0	-	-	-
				18	-	-	-
				36	-	-	O
	HE160	6505		0L	-	-	-
				0U	-	-	O
				36U	-	-	-
UNII-7	HE20	6535	26 T	0			
				4			
				8			
		6695		0	-	-	-
				4	-	-	O
				8	-	-	-
		6875		0			
				4			
				8			
UNII-8	HE20	6895	26 T	0			
				4			
				8			
		6995		0			
				4			
				8			
		7115		0	-	-	-
				4	-	-	O
				8	-	-	-

Note1. Radiated spurious test was performed on 26T with worst power density.
Note2. Spot-check test was performed in HE40, HE80, HE160 modes. Because lower than power density of HE20.

5.4. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
Charger	SAMSUNG	EP-TA800	R37N9BV0382HM3	N/A
Data Cable	SAMSUNG	EP-DN980BBE	N/A	N/A

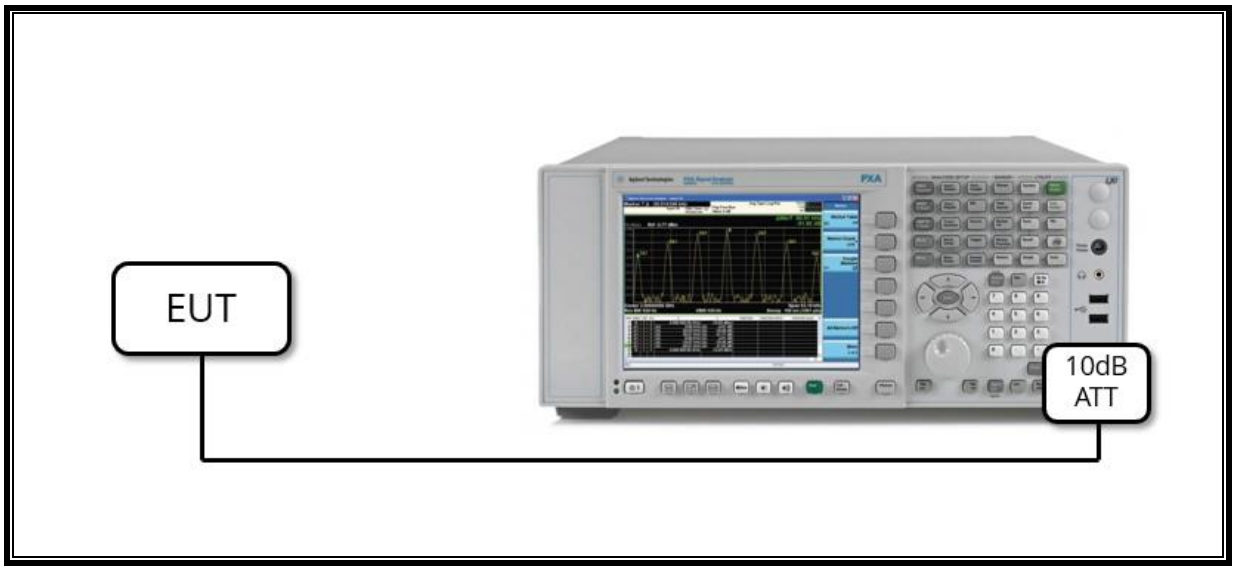
I/O CABLE

I/O Cable List						
Cable No.	**Port**	**# of identical ports**	**Connector Type**	**Cable Type**	**Cable Length (m)**	**Remarks**
1	DC Power	1	C Type	Shielded	1.0 m	N/A

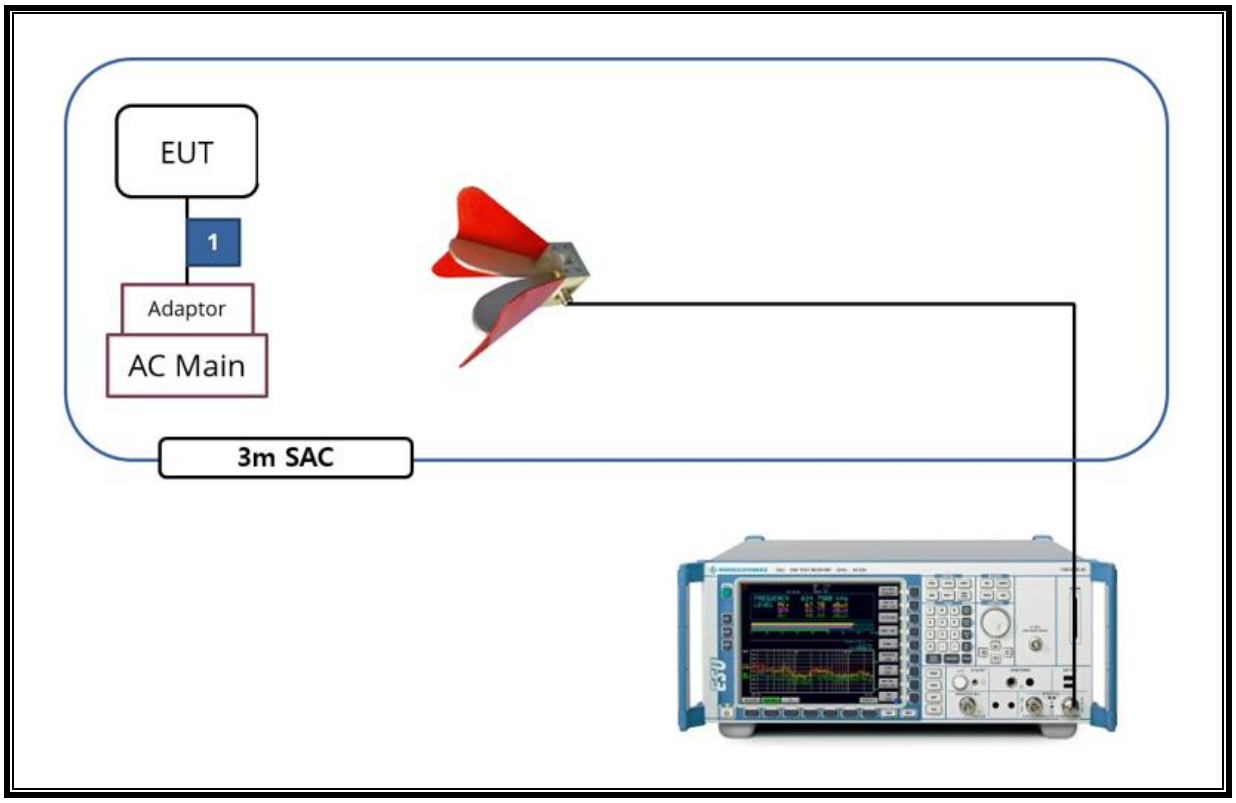
TEST SETUP

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
Average Power Sensor	Agilent / HP	U2000	MY54270007	2022/08/04
Average Power Sensor	Agilent / HP	U2000	MY54260010	2022/08/04
Attenuator	PASTERNACK	PE7087-10	A001	2022/08/03
Attenuator	PASTERNACK	PE7087-10	A008	2022/08/03
Attenuator	PASTERNACK	PE7004-10	2	2022/08/02
Attenuator	PASTERNACK	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
Termination	WEINSCHEL	M1406A	T09	2022/08/03
Attenuator	WEINSCHEL	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(a)(10)	26dB Bandwidth	The maximum transmitter channel bandwidth for U-NII device in the 5.925 – 7.125 GHz band is 320 MHz	Condcuted	PASS
2.1046 15.407(a)(1)	TX Cond. Power	N/A		PASS
15.407(a)(8)	Maximum Power Spectral Density	< -1dBm/MHz e.i.r.p		PASS
15.407(a)(8)	Maximum Radiated Output Power	< 24 dBm over the frequency band of operation		PASS
15.407(b)(7)	In-band Emissions	EUT must meet the limits detailed in 15.407(b)(7)		PASS
15.407(d)(6)	Contention Based Protocol	EUT must detect AWGN signal with 90% (or better) certainty		PASS
15.407(b)(9)	AC Power Line conducted emissions	< FCC 15.207 lmits		PASS
15.407(b)(6)	Undesirable Emissions	< -27 dBm/MHz e.i.r.p outside of the 5.925 – 7.125 GHz Band	Radiated	PASS
15.205 15.209	General Field Strength Limits (Restricted Bands and Radiated Emission Limits)	Emissions in restricted bands must meet the radiated limits detailed in 15.209		PASS

8. MEASUREMENT METHODS

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

26dB Emission BW : KDB 789033 D02 v02r01, Section II.C / KDB 987594 D02

99% Occupied BW : KDB 789033 D02 v02r01, Section II.D / KDB 987594 D02

Conducted Output Power : KDB 789033 D02 v02r01, Section II.E.3.b(Method PM-G) / KDB 987594 D02

Power Spectral Density : KDB 789033 D02 v02r01, Section II.F / KDB 987594 D02

In-Band Emissions : KDB 987594 D02

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.

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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	2.727	2.827	0.965	96.463	0.16

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	5.151	5.252	0.98	98.08	0.00
		52T	4.953	5.053	0.98	98.02	0.00
		106T	2.372	2.472	0.96	95.95	0.18
		SU	1.014	1.114	0.91	91.02	0.41
802.11ax HE40	MIMO	26T	5.150	5.251	0.98	98.08	0.00
		52T	4.954	5.054	0.98	98.02	0.00
		106T	2.372	2.473	0.96	95.92	0.18
		242T	1.075	1.177	0.91	91.33	0.39
		SU	1.005	1.105	0.91	90.95	0.41
802.11ax HE80	MIMO	26T	5.150	5.253	0.98	98.04	0.00
		52T	4.953	5.055	0.98	97.98	0.09
		106T	2.372	2.473	0.96	95.92	0.18
		242T	1.076	1.177	0.91	91.42	0.39
		484T	1.065	1.166	0.91	91.34	0.39
		SU	1.401	1.501	0.93	93.34	0.30
802.11ax HE160	MIMO	26T	5.151	5.251	0.98	98.10	0.00
		52T	4.953	5.054	0.98	98.00	0.00
		106T	2.371	2.473	0.96	95.88	0.18
		242T	1.076	1.177	0.91	91.42	0.39
		484T	1.066	1.167	0.91	91.35	0.39
		996T	1.018	1.120	0.91	90.89	0.41
		SU	1.224	1.324	0.92	92.45	0.34

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

LIMITS

None; for reporting purposes only.

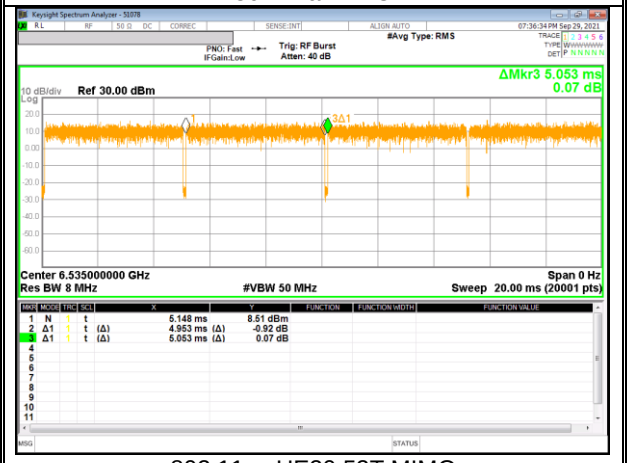
PROCEDURE

KDB 789033 D02 v02r01 Zero-Span Spectrum Analyzer Method.

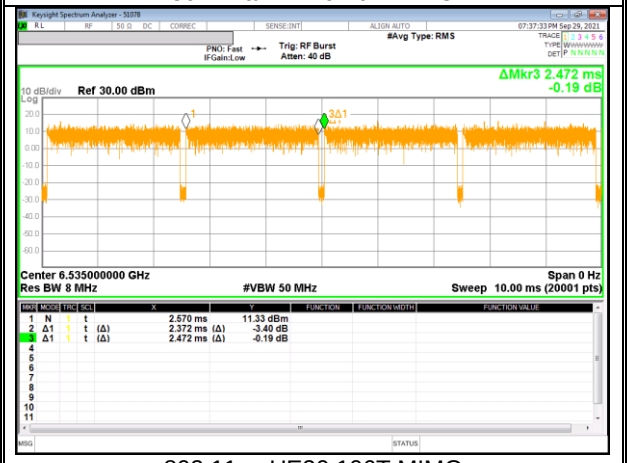
9.2. DUTY CYCLE PLOTS

802.11a MIMO

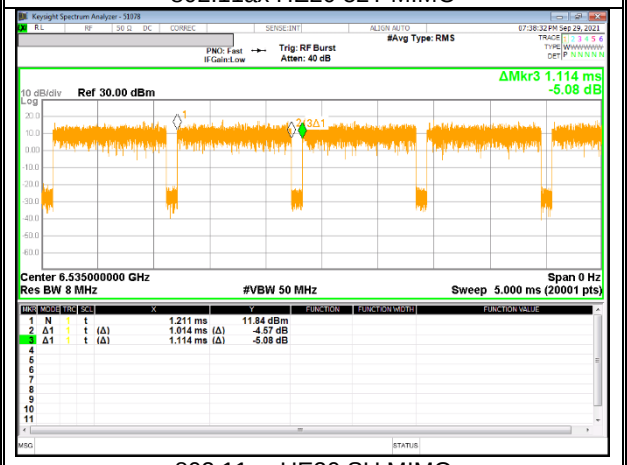
802.11ax HE20 26T MIMO



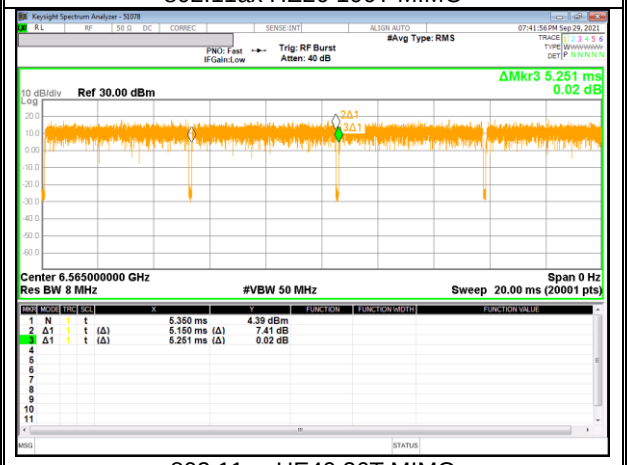
802.11ax HE20 52T MIMO



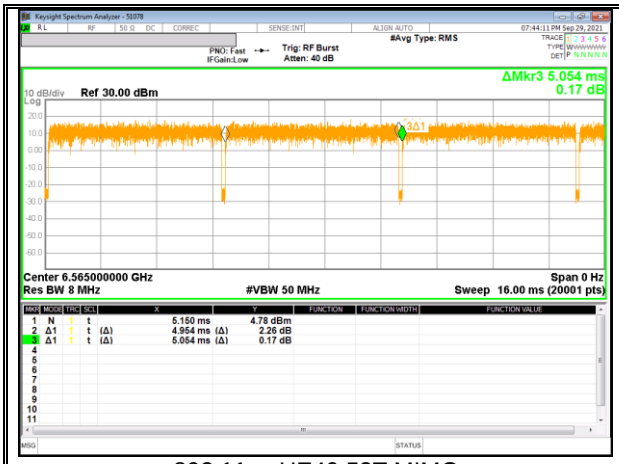
802.11ax HE20 106T MIMO



802.11ax HE20 SU MIMO

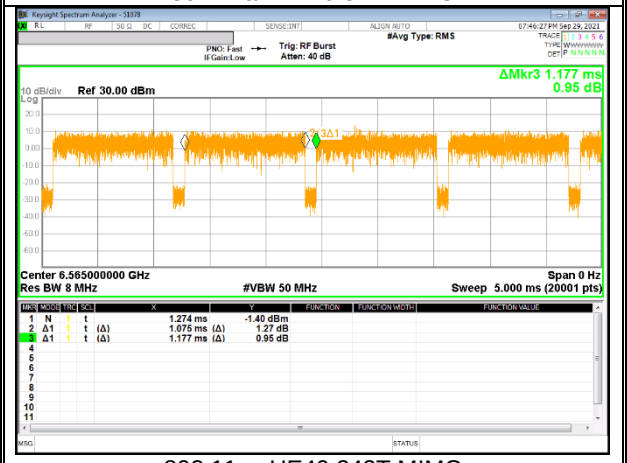


802.11ax HE40 26T MIMO

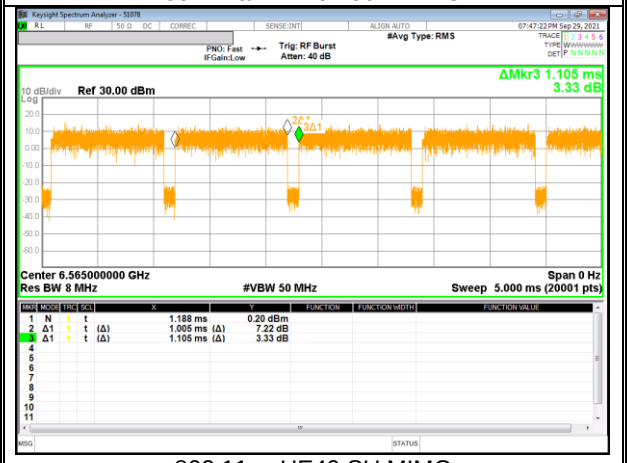


802.11ax HE40 52T MIMO

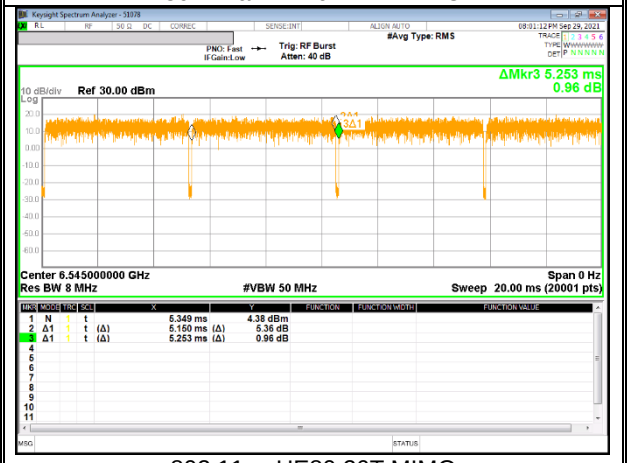
802.11ax HE40 106T MIMO



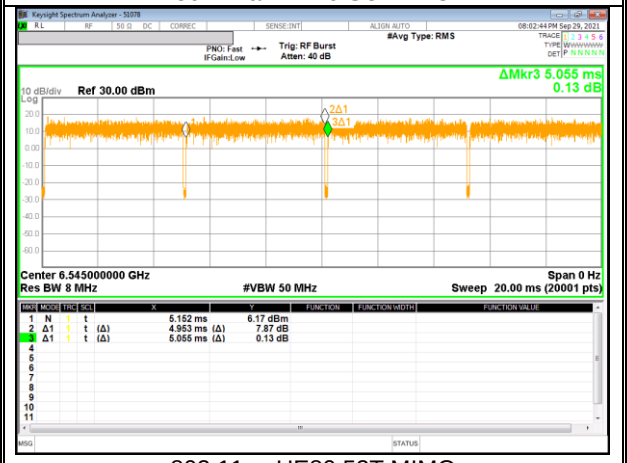
802.11ax HE40 242T MIMO



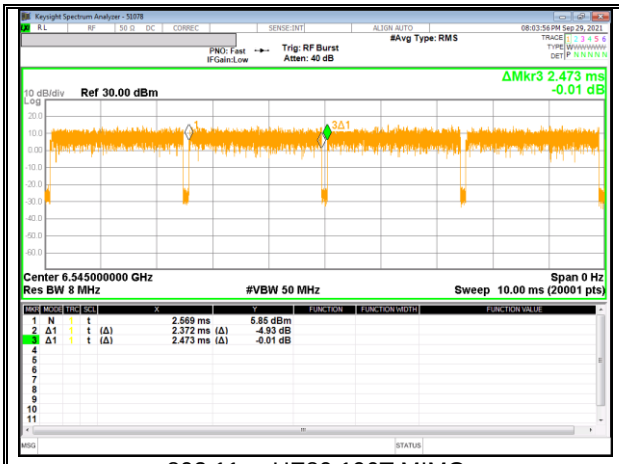
802.11ax HE40 SU MIMO



802.11ax HE80 26T MIMO

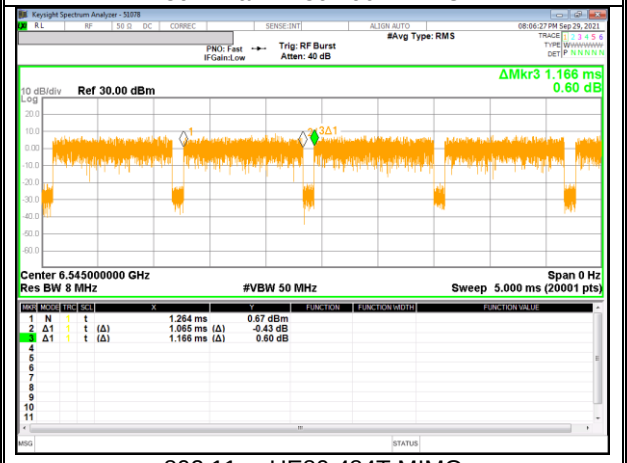


802.11ax HE80 52T MIMO

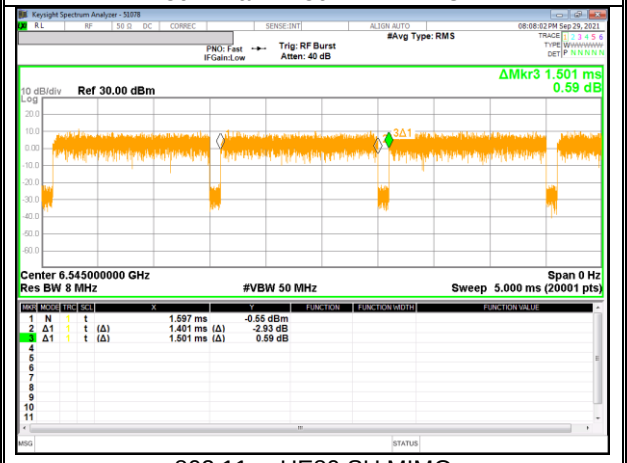


802.11ax HE80 106T MIMO

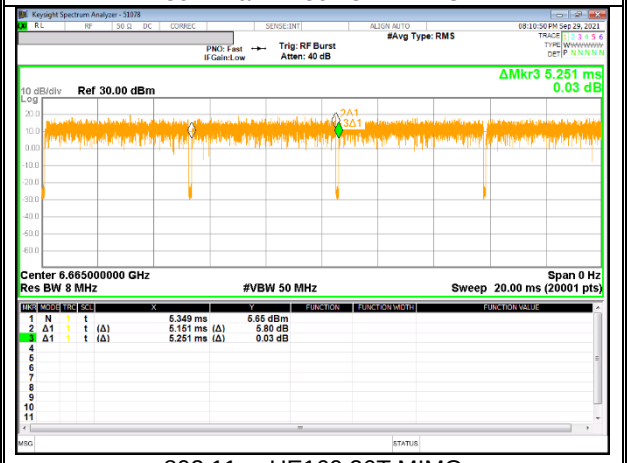
802.11ax HE80 242T MIMO



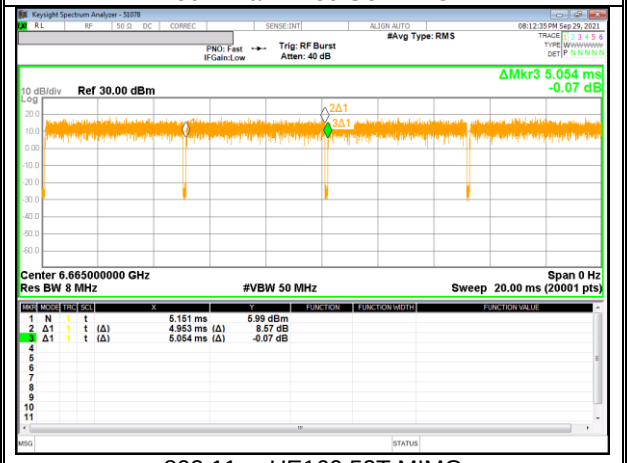
802.11ax HE80 484T MIMO



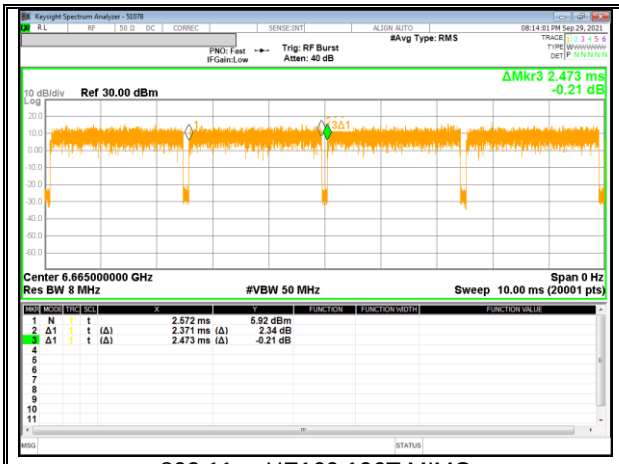
802.11ax HE80 SU MIMO



802.11ax HE160 26T MIMO

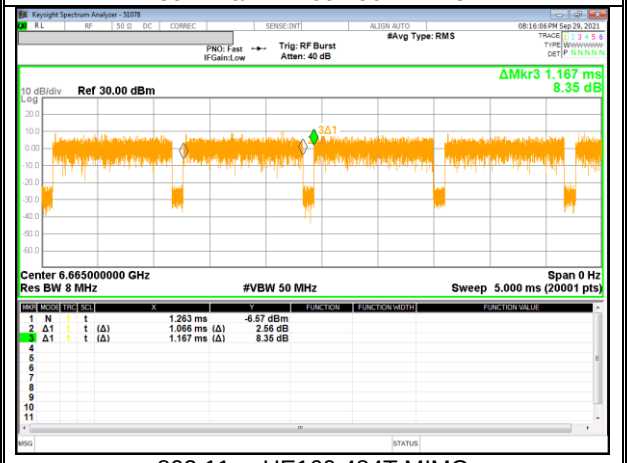


802.11ax HE160 52T MIMO



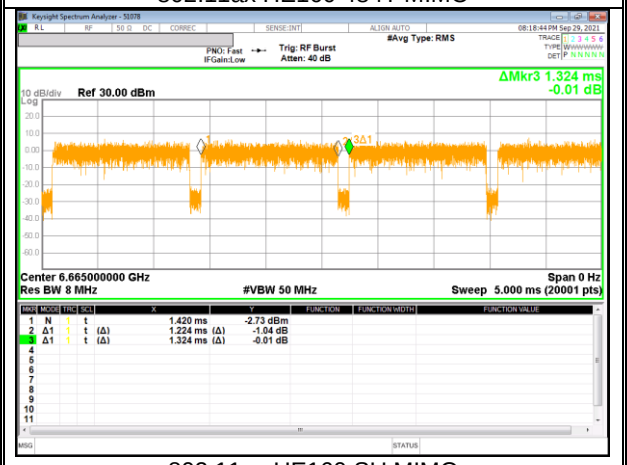
802.11ax HE160 106T MIMO

802.11ax HE160 242T MIMO



802.11ax HE160 484T MIMO

802.11ax HE160 996T MIMO



802.11ax HE160 SU MIMO

9.3. 26 dB BANDWIDTH

LIMITS

FCC §15.407 (a) (10)
The maximum transmitter channel bandwidth for U-NII devices in the 5.925-7.125 GHz band is 320 megahertz.

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.

RESULTS

- Please refer to the next page

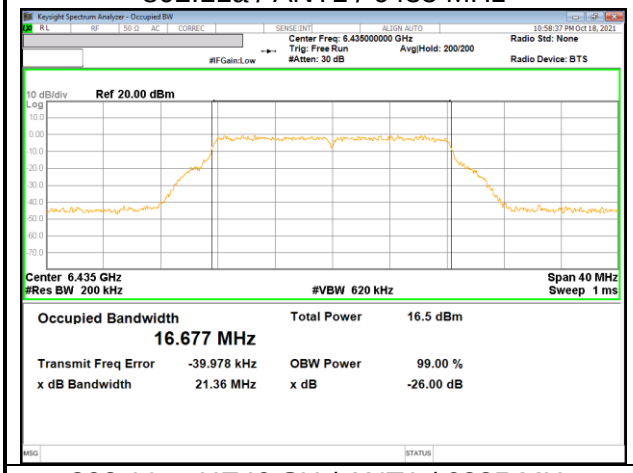
Note. As a result of 99% bandwidth test, the bandwidth not interfere each band.

WORST CASE TEST PLOTS

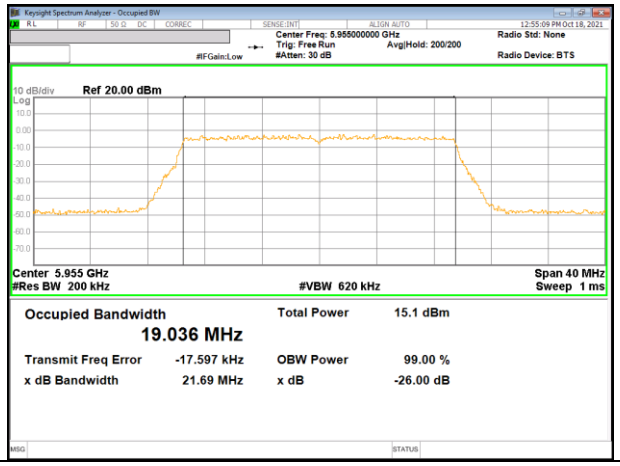
- Please refer to the next page

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_15E(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

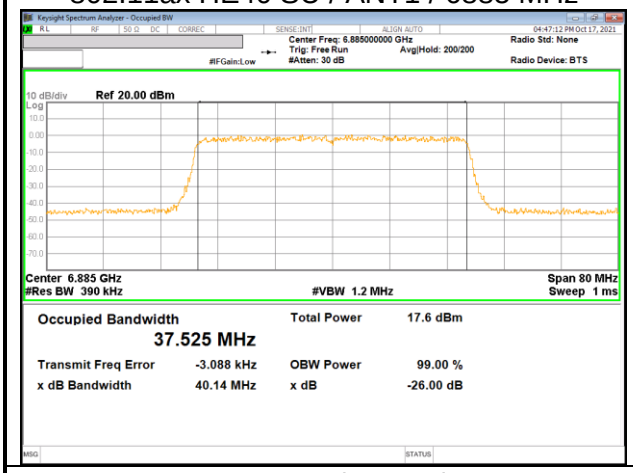
802.11a / ANT1 / 6435 MHz



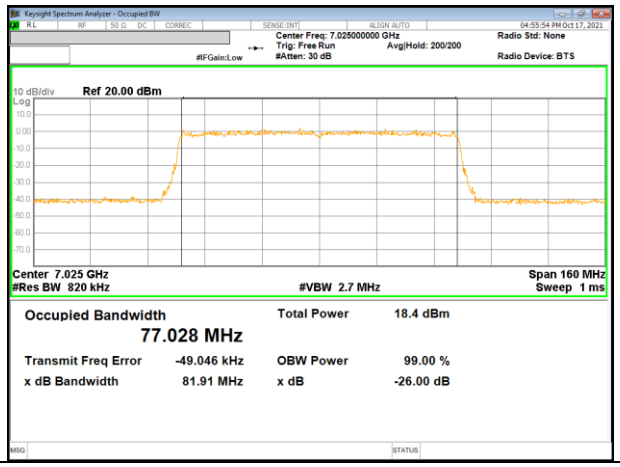
802.11ax HE20 SU / ANT2 / 5955 MHz



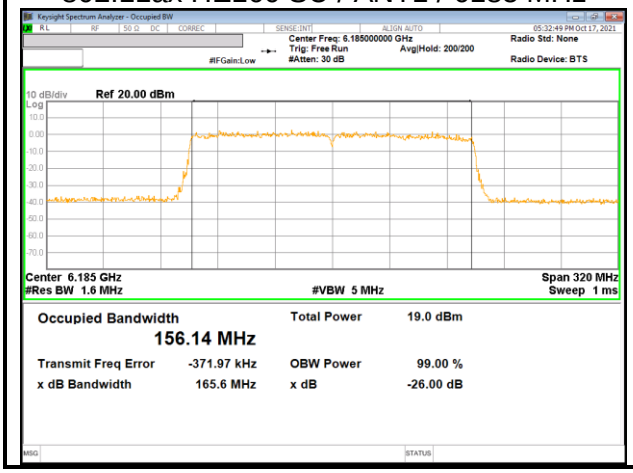
802.11ax HE40 SU / ANT1 / 6885 MHz



802.11ax HE80 SU / ANT1 / 7025 MHz



802.11ax HE160 SU / ANT1 / 6185 MHz



9.3.1. 802.11a

Band	Channel	Center Freq. [MHz]	26 dB BW [MHz]		Worst	99% BW [MHz]	
			ANT1	ANT2		ANT1	ANT2
UNII-5	1	5955	20.72	20.90	21.22	16.609	16.576
	45	6175	21.15	21.22		16.703	16.663
	93	6415	21.16	20.97		16.659	16.664
UNII-6	97	6435	**21.36**	21.08	**21.36**	16.677	16.643
	105	6475	21.15	20.98		16.684	16.664
	113	6515	21.14	20.90		16.700	16.648
UNII-7	117	6535	21.15	21.06	21.29	16.677	16.664
	149	6695	21.09	21.21		16.703	16.657
	185	6875	21.29	20.96		16.702	16.618
UNII-8	189	6895	21.05	21.08	21.08	16.695	16.630
	209	6995	21.03	21.04		16.672	16.666
	233	7115	20.94	21.06		16.728	16.622

9.3.2. 802.11ax HE20

Band	Channel	Center Freq. [MHz]	26 dB BW [MHz]		Worst	99% BW [MHz]	
			ANT1	ANT2		ANT1	ANT2
UNII-5	1	5955	21.54	**21.69**	**21.69**	19.041	19.036
	45	6175	21.40	21.21		19.084	19.008
	93	6415	21.16	21.14		19.016	19.021
UNII-6	97	6435	21.45	21.38	21.45	19.032	19.082
	105	6475	21.42	21.42		19.036	19.010
	113	6515	21.36	21.38		18.998	19.055
UNII-7	117	6535	21.60	21.32	21.60	19.056	19.024
	149	6695	21.63	21.30		19.010	19.061
	185	6875	21.43	21.36		19.114	19.074
UNII-8	189	6895	21.57	21.64	21.64	19.029	19.046
	209	6995	21.34	21.32		19.026	19.018
	233	7115	21.35	21.40		19.044	19.042

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9.3.3. 802.11ax HE40

Band	Channel	Center Freq. [MHz]	26 dB BW [MHz]		Worst	99% BW [MHz]	
			ANT1	ANT2		ANT1	ANT2
UNII-5	3	5965	39.82	40.05	40.05	37.572	37.591
	43	6165	39.87	39.49		37.525	37.521
	91	6405	39.63	39.60		37.608	37.584
UNII-6	99	6445	39.81	39.60	39.81	37.591	37.569
	115	6525	39.81	39.76		37.449	37.632
UNII-7	123	6565	40.01	39.72	40.01	37.554	37.657
	147	6685	39.91	40.00		37.628	37.476
	179	6845	39.99	39.58		37.526	37.512
UNII-8	187	6885	**40.14**	39.98	**40.14**	37.525	37.592
	203	6965	39.79	39.48		37.534	37.590
	227	7085	39.83	39.63		37.546	37.457

9.3.4. 802.11ax HE80

Band	Channel	Center Freq. [MHz]	26 dB BW [MHz]		Worst	99% BW [MHz]	
			ANT1	ANT2		ANT1	ANT2
UNII-5	7	5985	80.60	81.23	81.28	77.069	76.945
	39	6145	81.21	81.03		77.047	77.025
	87	6385	81.28	80.77		77.018	77.122
UNII-6	103	6465	80.68	81.12	81.12	77.095	76.972
UNII-7	119	6545	81.13	80.93	81.37	76.975	77.002
	151	6705	80.80	81.13		77.054	77.002
	183	6865	81.37	80.81		77.112	76.911
UNII-8	199	6945	80.82	80.86	**81.91**	76.949	77.011
	215	7025	**81.91**	81.28		77.028	76.792

9.3.5. 802.11ax HE160

Band	Channel	Center Freq. [MHz]	26 dB BW [MHz]		Worst	99% BW [MHz]	
			ANT1	ANT2		ANT1	ANT2
UNII-5	15	6025	164.10	164.00	**165.60**	156.250	156.160
	47	6185	**165.60**	164.30		156.140	156.100
	79	6345	164.00	164.30		156.160	156.000
UNII-6	111	6505	165.10	164.10	165.10	156.180	156.230
UNII-7	143	6665	163.50	164.10	165.00	156.240	156.150
	175	6825	165.00	163.80		156.050	156.020
UNII-8	207	6985	164.30	164.80	164.80	156.180	156.230

10. ANTENNA PORT TEST RESULTS

10.1. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (8)

For client devices operating under the control of an indoor access point in the 5.925-7.125 GHz bands, the maximum power spectral density must not exceed −1 dBm e.i.r.p. in any 1megahertz band, and the maximum e.i.r.p. over the frequency band of operation must not exceed 24 dBm.

TEST PROCEDURE

KDB 789033 Method PM is used for output power.

KDB 789033 Method SA-2 is used for only power of straddle Ch. and PPSD. RBW set to 1MHz, 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 5 5925 – 6425	-3.50	-7.10	-2.10
UNII 6 6425 – 6525	-3.50	-6.90	-2.02
UNII 7 6525 – 6875	-4.00	-5.60	-1.75
UNII 8 6875 - 7125	-4.80	-5.70	-2.23

10.1.1. 802.11a MODE

Output Power Results

Band	Channel	Freq. [MHz]	Average Power [dBm]			Direct. Gain [dBi]	Corr'd e.i.r.p [dBm]	Max e.i.r.p Limit [dBm]
			ANT1	ANT2	MIMO			
UNII-5	1	5955	5.81	6.25	9.05	-2.10	6.95	24.00
	45	6175	6.25	5.85	9.06	-2.10	6.96	
	93	6415	6.02	6.09	9.07	-2.10	6.97	
UNII-6	97	6435	6.53	6.32	9.44	-2.02	7.42	
	105	6475	6.85	6.41	9.65	-2.02	7.63	
	113	6515	6.81	6.04	9.45	-2.02	7.43	
UNII-7	117	6535	6.61	6.45	9.54	-1.75	7.79	
	149	6695	6.90	5.71	9.36	-1.75	7.61	
	185	6875	6.92	6.31	9.64	-1.75	7.89	
UNII-8	189	6895	7.65	6.45	10.10	-2.23	7.87	
	209	6995	7.61	7.05	10.35	-2.23	8.12	
	233	7115	6.87	6.88	9.89	-2.23	7.66	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
Corr'd e.i.r.p = Ant1 Average Power + Ant2 Average Power + Directional Gain

PSD Results

Band	Channel	Freq. [MHz]	Meas PSD [dBm/MHz]			DCCF	Direct. Gain [dBi]	Corr'd PSD e.i.r.p [dBm]	PSD e.i.r.p Limit [dBm/MHz]
			ANT1	ANT2	MIMO				
UNII-5	1	5955	-4.473	-3.969	-1.203	0.16	-2.10	-3.143	-1.00
	45	6175	-3.500	-4.714	-1.054	0.16	-2.10	-2.994	
	93	6415	-3.786	-3.961	-0.862	0.16	-2.10	-2.802	
UNII-6	97	6435	-3.980	-4.156	-1.057	0.16	-2.02	-2.917	
	105	6475	-3.892	-4.588	-1.216	0.16	-2.02	-3.076	
	113	6515	-3.889	-4.125	-0.995	0.16	-2.02	-2.855	
UNII-7	117	6535	-3.988	-4.699	-1.319	0.16	-1.75	-2.909	
	149	6695	-3.733	-4.629	-1.148	0.16	-1.75	-2.738	
	185	6875	-3.534	-4.982	-1.188	0.16	-1.75	-2.778	
UNII-8	**189**	**6895**	**-2.477**	**-3.577**	**0.018**	**0.16**	**-2.23**	**-2.052**	
	209	6995	-2.780	-3.968	-0.323	0.16	-2.23	-2.393	
	233	7115	-3.467	-4.104	-0.764	0.16	-2.23	-2.834	

Corr'd PSD e.i.r.p = ANT1 Meas PSD + Ant2 Meas PSD + DCCF + Directional Gain

UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_15E(04)
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433

10.1.2. 802.11ax HE20 MODE

Output Power Results

Band	Channel	Freq. [MHz]	Tones	RU offset	Average Power [dBm]			Direct. Gain [dBi]	Corr'd e.i.r.p [dBm]	Max e.i.r.p Limit [dBm]
					ANT1	ANT2	MIMO			
UNII-5	1	5955	26T	0	-2.40	-1.49	1.09	-2.10	-1.01	24.00
				4	-2.55	-1.76	0.87	-2.10	-1.23	
				8	-1.61	-1.45	1.48	-2.10	-0.62	
			52T	37	0.10	0.47	3.30	-2.10	1.20	
				38	0.36	1.37	3.90	-2.10	1.80	
				40	0.94	1.52	4.25	-2.10	2.15	
			106T	53	3.45	3.68	6.58	-2.10	4.48	
				54	3.70	4.41	7.08	-2.10	4.98	
			SU	-	6.32	7.06	9.72	-2.10	7.62	
	45	6175	26T	0	-2.28	-2.34	0.70	-2.10	-1.40	
				4	-1.68	-1.53	1.41	-2.10	-0.69	
				8	-1.85	-2.44	0.88	-2.10	-1.22	
			52T	37	1.41	0.77	4.11	-2.10	2.01	
				38	0.55	0.75	3.66	-2.10	1.56	
				40	0.75	0.76	3.77	-2.10	1.67	
			106T	53	4.02	3.68	6.86	-2.10	4.76	
				54	3.81	3.65	6.74	-2.10	4.64	
			SU	-	6.75	6.22	9.50	-2.10	7.40	
	93	6415	26T	0	-2.71	-1.79	0.78	-2.10	-1.32	
				4	-2.33	-1.69	1.01	-2.10	-1.09	
				8	-2.08	-1.86	1.04	-2.10	-1.06	
			52T	37	0.28	0.61	3.46	-2.10	1.36	
				38	0.35	1.22	3.82	-2.10	1.72	
				40	0.41	1.54	4.02	-2.10	1.92	
			106T	53	3.22	3.61	6.43	-2.10	4.33	
				54	3.71	4.01	6.87	-2.10	4.77	
			SU	-	6.55	6.75	9.66	-2.10	7.56	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
Corr'd e.i.r.p = Ant1 Average Power + Ant2 Average Power + Directional Gain

Band	Channel	Freq. [MHz]	Tones	RU offset	Average Power [dBm]			Direct. Gain [dBi]	Corr'd e.i.r.p [dBm]	Max e.i.r.p Limit [dBm]
					ANT1	ANT2	MIMO			
UNII-6	97	6435	26T	0	-2.31	-2.12	0.80	-2.02	-1.22	24.00
				4	-1.79	-1.55	1.34	-2.02	-0.68	
				8	-2.15	-2.73	0.58	-2.02	-1.44	
			52T	37	0.95	0.65	3.81	-2.02	1.79	
				38	0.96	1.45	4.22	-2.02	2.20	
				40	1.43	1.45	4.45	-2.02	2.43	
			106T	53	3.97	3.89	6.94	-2.02	4.92	
				54	4.15	3.87	7.02	-2.02	5.00	
			SU	-	6.93	6.73	9.84	-2.02	7.82	
	105	6475	26T	0	-2.00	-1.63	1.20	-2.02	-0.82	
				4	-1.57	-1.56	1.45	-2.02	-0.57	
				8	-2.04	-2.64	0.68	-2.02	-1.34	
			52T	37	1.42	1.11	4.28	-2.02	2.26	
				38	1.35	1.51	4.44	-2.02	2.42	
				40	1.65	1.57	4.62	-2.02	2.60	
			106T	53	4.37	3.88	7.14	-2.02	5.12	
				54	4.62	4.22	7.43	-2.02	5.41	
			SU	-	6.66	6.26	9.47	-2.02	7.45	
	113	6515	26T	0	-1.83	-2.32	0.94	-2.02	-1.08	
				4	-1.49	-1.95	1.30	-2.02	-0.72	
				8	-1.73	-2.98	0.70	-2.02	-1.32	
			52T	37	1.61	0.45	4.08	-2.02	2.06	
				38	1.61	1.21	4.42	-2.02	2.40	
				40	1.88	1.22	4.57	-2.02	2.55	
			106T	53	4.46	3.77	7.14	-2.02	5.12	
				54	4.85	4.01	7.46	-2.02	5.44	
			SU	-	6.56	6.11	9.35	-2.02	7.33	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
Corr'd e.i.r.p = Ant1 Average Power + Ant2 Average Power + Directional Gain

Band	Channel	Freq. [MHz]	Tones	RU offset	Average Power [dBm]			Direct. Gain [dBi]	Corr'd e.i.r.p [dBm]	Max e.i.r.p Limit [dBm]
					ANT1	ANT2	MIMO			
UNII-7	117	6535	26T	0	-1.99	-2.09	0.97	-1.75	-0.78	24.00
				4	-1.75	-1.72	1.28	-1.75	-0.47	
				8	-2.10	-2.38	0.77	-1.75	-0.98	
			52T	37	1.40	0.41	3.94	-1.75	2.19	
				38	1.58	1.55	4.58	-1.75	2.83	
				40	1.10	0.35	3.75	-1.75	2.00	
			106T	53	4.68	4.02	7.37	-1.75	5.62	
				54	4.65	4.11	7.40	-1.75	5.65	
			SU	-	6.48	5.81	9.17	-1.75	7.42	
	149	6695	26T	0	-2.04	-2.59	0.70	-1.75	-1.05	
				4	-1.22	-1.75	1.53	-1.75	-0.22	
				8	-1.70	-2.85	0.77	-1.75	-0.98	
			52T	37	1.16	0.25	3.74	-1.75	1.99	
				38	1.52	0.92	4.24	-1.75	2.49	
				40	1.35	0.55	3.98	-1.75	2.23	
			106T	53	4.75	3.50	7.18	-1.75	5.43	
				54	4.75	3.80	7.31	-1.75	5.56	
			SU	-	7.52	6.33	9.98	-1.75	8.23	
	185	6875	26T	0	-1.92	-2.11	1.00	-1.75	-0.75	
				4	-1.50	-1.92	1.31	-1.75	-0.44	
				8	-1.89	-2.75	0.71	-1.75	-1.04	
			52T	37	1.02	1.55	4.30	-1.75	2.55	
				38	1.44	1.31	4.39	-1.75	2.64	
				40	0.95	0.52	3.75	-1.75	2.00	
			106T	53	4.17	3.40	6.81	-1.75	5.06	
				54	4.75	4.15	7.47	-1.75	5.72	
			SU	-	6.66	5.76	9.24	-1.75	7.49	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
Corr'd e.i.r.p = Ant1 Average Power + Ant2 Average Power + Directional Gain

Band	Channel	Freq. [MHz]	Tones	RU offset	Average Power [dBm]			Direct. Gain [dBi]	Corr'd e.i.r.p [dBm]	Max e.i.r.p Limit [dBm]
					ANT1	ANT2	MIMO			
UNII-8	189	6895	26T	0	-1.59	-1.93	1.25	-2.23	-0.98	24.00
				4	-1.45	-1.89	1.35	-2.23	-0.88	
				8	-1.59	-2.55	0.97	-2.23	-1.26	
			52T	37	1.61	0.81	4.24	-2.23	2.01	
				38	1.57	1.34	4.47	-2.23	2.24	
				40	1.15	0.51	3.85	-2.23	1.62	
			106T	53	3.87	3.01	6.47	-2.23	4.24	
				54	3.81	3.21	6.53	-2.23	4.30	
			SU	-	7.75	6.61	10.23	-2.23	8.00	
	209	6995	26T	0	-2.35	-2.54	0.57	-2.23	-1.66	
				4	-1.85	-2.19	0.99	-2.23	-1.24	
				8	-2.18	-2.97	0.45	-2.23	-1.78	
			52T	37	1.22	0.71	3.98	-2.23	1.75	
				38	0.81	0.63	3.73	-2.23	1.50	
				40	1.37	1.11	4.25	-2.23	2.02	
			106T	53	4.16	3.85	7.02	-2.23	4.79	
				54	4.21	3.82	7.03	-2.23	4.80	
			SU	-	7.25	6.51	9.91	-2.23	7.68	
	233	7115	26T	0	-2.14	-1.56	1.17	-2.23	-1.06	
				4	-1.75	-1.31	1.49	-2.23	-0.74	
				8	-1.99	-2.33	0.85	-2.23	-1.38	
			52T	37	0.31	0.55	3.44	-2.23	1.21	
				38	0.25	0.71	3.50	-2.23	1.27	
				40	0.55	0.88	3.73	-2.23	1.50	
			106T	53	1.70	1.71	4.72	-2.23	2.49	
				54	2.08	2.15	5.13	-2.23	2.90	
			SU	-	2.00	1.52	4.78	-2.23	2.55	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
Corr'd e.i.r.p = Ant1 Average Power + Ant2 Average Power + Directional Gain

PSD Results

Band	Channel	Freq. [MHz]	Tones	RU offset	Meas PSD [dBm/MHz]			DCCF	Direct. Gain [dBi]	Corr'd PSD e.i.r.p [dBm]	PSD e.i.r.p Limit [dBm/MHz]
					ANT1	ANT2	MIMO				
UNII-5	1	5955	26T	0	-4.552	-3.866	-1.185	-	-2.10	-3.285	-1.00
				4	-5.420	-4.020	-1.654	-	-2.10	-3.754	
				8	-3.484	-3.423	-0.443	-	-2.10	-2.543	
			SU	-	-4.981	-4.653	-1.804	0.41	-2.10	-3.494	
	45	6175	26T	0	-3.184	-3.477	-0.318	-	-2.10	-2.418	
				4	-3.616	-4.451	-1.003	-	-2.10	-3.103	
				8	-3.652	-4.469	-1.031	-	-2.10	-3.131	
			SU	-	-9.328	-4.545	-3.299	0.41	-2.10	-4.989	
	93	6415	26T	0	-4.208	-3.697	-0.935	-	-2.10	-3.035	
				4	-4.949	-4.811	-1.869	-	-2.10	-3.969	
				8	-3.584	-3.722	-0.642	-	-2.10	-2.742	
			SU	-	-4.160	-3.932	-1.034	0.41	-2.10	-2.724	
UNII-6	97	6435	26T	0	-3.871	-3.308	-0.570	-	-2.02	-2.590	
				4	-4.320	-4.501	-1.399	-	-2.02	-3.419	
				8	-3.711	-4.443	-1.051	-	-2.02	-3.071	
			SU	-	-4.186	-4.556	-1.357	0.41	-2.02	-2.967	
	105	6475	26T	0	-3.920	-3.553	-0.722	-	-2.02	-2.742	
				4	-3.825	-4.258	-1.026	-	-2.02	-3.046	
				8	-3.744	-4.591	-1.137	-	-2.02	-3.157	
			SU	-	-4.331	-4.688	-1.496	0.41	-2.02	-3.106	
	113	6515	26T	0	-3.117	-3.733	-0.404	-	-2.02	-2.424	
				4	-4.059	-4.544	-1.284	-	-2.02	-3.304	
				8	-3.385	-3.814	-0.584	-	-2.02	-2.604	
			SU	-	-4.145	-4.919	-1.504	0.41	-2.02	-3.114	
UNII-7	117	6535	26T	0	-3.325	-3.544	-0.423	-	-1.75	-2.173	
				4	-4.091	-4.488	-1.275	-	-1.75	-3.025	
				8	-3.413	-4.063	-0.716	-	-1.75	-2.466	
			SU	-	-4.232	-4.264	-1.238	0.41	-1.75	-2.578	
	149	6695	26T	0	-3.400	-3.884	-0.625	-	-1.75	-2.375	
				4	-4.006	-4.490	-1.231	-	-1.75	-2.981	
				8	-3.369	-4.681	-0.965	-	-1.75	-2.715	
			SU	-	-3.856	-4.742	-1.266	0.41	-1.75	-2.606	
	185	**6875**	**26T**	0	-3.546	-3.817	-0.669	-	-1.75	-2.419	
				4	-4.016	-4.890	-1.421	-	-1.75	-3.171	
				8	**-2.793**	**-3.729**	**-0.226**	**-**	**-1.75**	**-1.976**	
			SU	-	-3.849	-5.490	-1.582	0.41	-1.75	-2.922	
UNII-8	189	6895	26T	0	-3.371	-3.979	-0.654	-	-2.23	-2.884	
				4	-3.879	-4.757	-1.286	-	-2.23	-3.516	
				8	-3.020	-4.442	-0.663	-	-2.23	-2.893	
			SU	-	-3.238	-4.567	-0.842	0.41	-2.23	-2.662	
	209	6995	26T	0	-3.461	-3.887	-0.658	-	-2.23	-2.888	
				4	-4.283	-5.114	-1.668	-	-2.23	-3.898	
				8	-3.594	-4.514	-1.019	-	-2.23	-3.249	
			SU	-	-3.520	-4.196	-0.835	0.41	-2.23	-2.655	
	233	7115	26T	0	-3.617	-3.313	-0.452	-	-2.23	-2.682	
				4	-4.007	-4.673	-1.317	-	-2.23	-3.547	
				8	-3.614	-3.524	-0.558	-	-2.23	-2.788	
			SU	-	-9.666	-10.028	-6.833	0.41	-2.23	-8.653	

* Corr'd PSD e.i.r.p = ANT1 Meas PSD + Ant2 Meas PSD + DCCF + Directional Gain

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10.1.3. 802.11ax HE40 MODE

Output Power Results

Band	Channel	Freq. [MHz]	Tones	RU offset	Average Power [dBm]			Direct. Gain [dBi]	Corr'd e.i.r.p [dBm]	Max e.i.r.p Limit [dBm]
					ANT1	ANT2	MIMO			
UNII-5	3	5965	26T	0	-1.79	-1.45	1.39	-2.10	-0.71	24.00
				9	-1.75	-1.55	1.36	-2.10	-0.74	
				17	-1.88	-1.44	1.36	-2.10	-0.74	
			52T	37	0.51	0.61	3.57	-2.10	1.47	
				41	0.51	0.71	3.62	-2.10	1.52	
				44	0.78	0.65	3.73	-2.10	1.63	
			106T	53	3.62	4.07	6.86	-2.10	4.76	
				54	3.94	4.38	7.18	-2.10	5.08	
				56	3.61	4.51	7.09	-2.10	4.99	
			242T	61	6.02	6.44	9.25	-2.10	7.15	
				62	6.03	6.71	9.39	-2.10	7.29	
			SU	-	8.10	8.67	11.40	-2.10	9.30	
	43	6165	26T	0	-1.85	-1.92	1.13	-2.10	-0.97	
				9	-1.74	-2.11	1.09	-2.10	-1.01	
				17	-1.78	-2.02	1.11	-2.10	-0.99	
			52T	37	0.74	0.71	3.74	-2.10	1.64	
				41	1.34	1.11	4.24	-2.10	2.14	
				44	1.50	0.79	4.17	-2.10	2.07	
			106T	53	3.44	3.57	6.52	-2.10	4.42	
				54	3.55	3.41	6.49	-2.10	4.39	
				56	3.44	3.48	6.47	-2.10	4.37	
			242T	61	6.70	6.67	9.70	-2.10	7.60	
				62	7.18	7.34	10.27	-2.10	8.17	
			SU	-	7.91	8.44	11.19	-2.10	9.09	
	91	6405	26T	0	-2.48	-2.28	0.63	-2.10	-1.47	
				9	-1.79	-1.39	1.42	-2.10	-0.68	
				17	-2.31	-1.69	1.02	-2.10	-1.08	
			52T	37	0.57	0.97	3.78	-2.10	1.68	
				41	0.81	1.55	4.21	-2.10	2.11	
				44	1.12	1.46	4.30	-2.10	2.20	
			106T	53	3.35	3.61	6.49	-2.10	4.39	
				54	3.41	4.50	7.00	-2.10	4.90	
				56	3.35	4.15	6.78	-2.10	4.68	
			242T	61	6.46	6.68	9.58	-2.10	7.48	
				62	6.40	7.06	9.75	-2.10	7.65	
			SU	-	8.31	9.05	11.71	-2.10	9.61	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
Corr'd e.i.r.p = Ant1 Average Power + Ant2 Average Power + Directional Gain

Band	Channel	Freq. [MHz]	Tones	RU offset	Average Power [dBm]			Direct. Gain [dBi]	Corr'd e.i.r.p [dBm]	Max e.i.r.p Limit [dBm]
					ANT1	ANT2	MIMO			
UNII-6	99	6445	26T	0	-1.39	-1.35	1.64	-2.02	-0.38	24.00
				9	-1.58	-1.37	1.54	-2.02	-0.48	
				17	-2.09	-1.88	1.03	-2.02	-0.99	
			52T	37	1.20	1.47	4.35	-2.02	2.33	
				41	1.41	1.40	4.42	-2.02	2.40	
				44	1.61	1.35	4.49	-2.02	2.47	
			106T	53	3.85	3.78	6.83	-2.02	4.81	
				54	4.21	4.27	7.25	-2.02	5.23	
				56	3.62	4.28	6.97	-2.02	4.95	
			242T	61	6.01	6.11	9.07	-2.02	7.05	
				62	6.20	6.94	9.60	-2.02	7.58	
			SU	-	9.03	8.48	11.77	-2.02	9.75	
	115	6525	26T	0	-0.19	-2.29	1.90	-2.02	-0.12	
				9	-1.25	-1.96	1.42	-2.02	-0.60	
				17	-1.34	-1.80	1.45	-2.02	-0.57	
			52T	37	1.61	0.75	4.21	-2.02	2.19	
				41	1.75	1.28	4.53	-2.02	2.51	
				44	1.14	0.20	3.71	-2.02	1.69	
			106T	53	4.51	3.49	7.04	-2.02	5.02	
				54	4.51	3.91	7.23	-2.02	5.21	
				56	4.25	3.72	7.00	-2.02	4.98	
			242T	61	6.40	5.92	9.18	-2.02	7.16	
				62	6.81	6.53	9.68	-2.02	7.66	
			SU	-	9.62	8.35	12.04	-2.02	10.02	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
Corr'd e.i.r.p = Ant1 Average Power + Ant2 Average Power + Directional Gain

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Band	Channel	Freq. [MHz]	Tones	RU offset	Average Power [dBm]			Direct. Gain [dBi]	Corr'd e.i.r.p [dBm]	Max e.i.r.p Limit [dBm]
					ANT1	ANT2	MIMO			
UNII-7	123	6565	26T	0	-2.15	-2.63	0.63	-1.75	-1.12	24.00
				9	-1.52	-2.19	1.17	-1.75	-0.58	
				17	-1.78	-2.02	1.11	-1.75	-0.64	
			52T	37	1.11	0.35	3.76	-1.75	2.01	
				41	1.34	0.48	3.94	-1.75	2.19	
				44	1.72	0.23	4.05	-1.75	2.30	
			106T	53	4.77	3.82	7.33	-1.75	5.58	
				54	4.15	3.41	6.81	-1.75	5.06	
				56	3.81	3.37	6.61	-1.75	4.86	
			242T	61	7.09	6.38	9.76	-1.75	8.01	
				62	7.15	6.91	10.04	-1.75	8.29	
			SU	-	8.65	7.75	11.23	-1.75	9.48	
	147	6685	26T	0	-1.79	-2.82	0.74	-1.75	-1.01	
				9	-1.35	-2.42	1.16	-1.75	-0.59	
				17	-1.73	-2.43	0.94	-1.75	-0.81	
			52T	37	0.90	0.07	3.52	-1.75	1.77	
				41	1.45	0.57	4.04	-1.75	2.29	
				44	1.85	0.42	4.20	-1.75	2.45	
			106T	53	4.75	3.66	7.25	-1.75	5.50	
				54	4.02	3.28	6.68	-1.75	4.93	
				56	3.78	3.42	6.61	-1.75	4.86	
			242T	61	7.11	6.00	9.60	-1.75	7.85	
				62	6.99	6.56	9.79	-1.75	8.04	
			SU	-	8.90	7.56	0.92	-1.75	-0.83	
	179	6845	26T	0	-1.81	-2.39	1.64	-1.75	-0.11	
				9	-0.99	-1.78	1.32	-1.75	-0.43	
				17	-1.47	-1.93	4.31	-1.75	2.56	
			52T	37	1.57	1.02	3.44	-1.75	1.69	
				41	0.75	0.09	3.66	-1.75	1.91	
				44	1.20	0.02	6.95	-1.75	5.20	
			106T	53	4.21	3.65	7.30	-1.75	5.55	
				54	4.58	3.98	6.83	-1.75	5.08	
				56	4.01	3.63	10.05	-1.75	8.30	
			242T	61	7.41	6.64	10.23	-1.75	8.48	
				62	7.33	7.11	0.92	-1.75	-0.83	
			SU	-	8.45	7.70	11.10	-1.75	9.35	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
Corr'd e.i.r.p = Ant1 Average Power + Ant2 Average Power + Directional Gain

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Band	Channel	Freq. [MHz]	Tones	RU offset	Average Power [dBm]			Direct. Gain [dBi]	Corr'd e.i.r.p [dBm]	Max e.i.r.p Limit [dBm]
					ANT1	ANT2	MIMO			
UNII-8	187	6885	26T	0	-1.55	-2.69	0.93	-2.23	-1.30	24.00
				9	-1.34	-1.85	1.42	-2.23	-0.81	
				17	-1.49	-1.92	1.31	-2.23	-0.92	
			52T	37	1.25	0.52	3.91	-2.23	1.68	
				41	1.48	1.11	4.31	-2.23	2.08	
				44	0.75	-0.19	3.32	-2.23	1.09	
			106T	53	3.84	3.21	6.55	-2.23	4.32	
				54	4.32	3.81	7.08	-2.23	4.85	
				56	3.77	3.89	6.84	-2.23	4.61	
			242T	61	7.34	6.22	9.83	-2.23	7.60	
				62	7.33	7.18	10.27	-2.23	8.04	
			SU	-	8.60	7.60	11.14	-2.23	8.91	
	203	6965	26T	0	-1.59	-1.53	1.45	-2.23	-0.78	
				9	-1.63	-1.29	1.55	-2.23	-0.68	
				17	-2.79	-2.31	0.47	-2.23	-1.76	
			52T	37	1.42	1.61	4.53	-2.23	2.30	
				41	0.25	1.02	3.66	-2.23	1.43	
				44	0.91	0.84	3.89	-2.23	1.66	
			106T	53	4.25	4.08	7.18	-2.23	4.95	
				54	4.65	4.64	7.66	-2.23	5.43	
				56	3.62	4.56	7.13	-2.23	4.90	
			242T	61	7.55	7.38	10.48	-2.23	8.25	
				62	6.87	7.40	10.15	-2.23	7.92	
			SU	-	8.50	8.52	11.52	-2.23	9.29	
	227	7085	26T	0	-2.59	-1.59	0.95	-2.23	-1.28	
				9	-2.11	-1.15	1.41	-2.23	-0.82	
				17	-2.38	-1.28	1.22	-2.23	-1.01	
			52T	37	0.15	1.45	3.86	-2.23	1.63	
				41	-0.52	0.70	3.14	-2.23	0.91	
				44	-0.19	0.57	3.22	-2.23	0.99	
			106T	53	3.21	4.24	6.77	-2.23	4.54	
				54	3.71	4.65	7.22	-2.23	4.99	
				56	3.22	4.38	6.85	-2.23	4.62	
			242T	61	6.55	7.48	10.05	-2.23	7.82	
				62	5.80	7.24	9.59	-2.23	7.36	
			SU	-	7.92	8.51	11.24	-2.23	9.01	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
Corr'd e.i.r.p = Ant1 Average Power + Ant2 Average Power + Directional Gain

PSD Results

Band	Channel	Freq. [MHz]	Tones	RU offset	Meas PSD [dBm/MHz]			DCCF	Direct. Gain [dBi]	Corr'd PSD e.i.r.p [dBm]	PSD e.i.r.p Limit [dBm/MHz]
					ANT1	ANT2	MIMO				
UNII-5	3	5965	26T	0	-3.641	-3.349	-0.482	-	-2.10	-2.582	-1.00
				9	-3.396	-3.431	-0.403	-	-2.10	-2.503	
				17	-3.258	-3.123	-0.180	-	-2.10	-2.280	
			SU	-	-5.841	-4.991	-2.385	0.41	-2.10	-4.075	
	43	6165	26T	0	-3.240	-2.929	-0.071	-	-2.10	-2.171	
				9	-3.140	-4.011	-0.543	-	-2.10	-2.643	
				17	-3.664	-3.683	-0.663	-	-2.10	-2.763	
			SU	-	-5.533	-5.486	-2.499	0.41	-2.10	-4.189	
	91	6405	26T	0	-3.702	-3.492	-0.585	-	-2.10	-2.685	
				9	-3.471	-3.427	-0.439	-	-2.10	-2.539	
				17	-3.483	-3.593	-0.527	-	-2.10	-2.627	
			SU	-	-5.704	-4.784	-2.209	0.41	-2.10	-3.899	
UNII-6	99	6445	26T	0	-3.330	-3.183	-0.246	-	-2.02	-2.266	
				9	-3.413	-3.376	-0.384	-	-2.02	-2.404	
				17	-3.600	-3.378	-0.477	-	-2.02	-2.497	
			SU	-	-4.969	-5.883	-2.392	0.41	-2.02	-4.002	
	115	6525	26T	0	-3.425	-4.060	-0.721	-	-2.02	-2.741	
				9	-3.210	-3.554	-0.368	-	-2.02	-2.388	
				17	-3.253	-3.569	-0.398	-	-2.02	-2.418	
			SU	-	-4.333	-5.812	-2.000	0.41	-2.02	-3.610	
UNII-7	123	6565	26T	0	-3.481	-3.764	-0.610	-	-1.75	-2.360	
				9	-3.479	-3.899	-0.674	-	-1.75	-2.424	
				17	-3.517	-3.754	-0.624	-	-1.75	-2.374	
			SU	-	-4.892	-6.079	-2.435	0.41	-1.75	-3.775	
	147	**6685**	**26T**	**0**	**-2.829**	**-3.174**	**0.012**	**-**	**-1.75**	**-1.738**	
				9	-2.663	-3.431	-0.020	-	-1.75	-1.770	
				17	-2.730	-3.529	-0.101	-	-1.75	-1.851	
			SU	-	-5.169	-6.028	-2.567	0.41	-1.75	-3.907	
	179	6845	26T	0	-2.828	-3.941	-0.339	-	-1.75	-2.089	
				9	-3.284	-3.779	-0.514	-	-1.75	-2.264	
				17	-2.925	-3.548	-0.215	-	-1.75	-1.965	
			SU	-	-5.083	-6.343	-2.657	0.41	-1.75	-3.997	
UNII-8	187	6885	26T	0	-3.175	-3.843	-0.486	-	-2.23	-2.716	
				9	-2.973	-4.281	-0.568	-	-2.23	-2.798	
				17	-2.833	-3.827	-0.291	-	-2.23	-2.521	
			SU	-	-5.279	-6.268	-2.735	0.41	-2.23	-4.555	
	203	6965	26T	0	-2.956	-3.026	0.019	-	-2.23	-2.211	
				9	-3.188	-2.884	-0.023	-	-2.23	-2.253	
				17	-2.880	-3.099	0.022	-	-2.23	-2.208	
			SU	-	-5.009	-5.586	-2.278	0.41	-2.23	-4.098	
	227	7085	26T	0	-3.282	-3.478	-0.369	-	-2.23	-2.599	
				9	-3.391	-3.262	-0.316	-	-2.23	-2.546	
				17	-3.728	-3.354	-0.527	-	-2.23	-2.757	
			SU	-	-6.103	-5.079	-2.551	0.41	-2.23	-4.371	

* Corr'd PSD e.i.r.p = ANT1 Meas PSD + Ant2 Meas PSD + DCCF + Directional Gain

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10.1.4. 802.11ax HE80 MODE

Output Power Results

Band	Channel	Freq. [MHz]	Tones	RU offset	Average Power [dBm]			Direct. Gain [dBi]	Corr'd e.i.r.p [dBm]	Max e.i.r.p Limit [dBm]
					ANT1	ANT2	MIMO			
UNII-5	7	5985	26T	0	-2.35	-2.29	0.69	-2.10	-1.41	24.00
				18	-2.73	-1.37	1.01	-2.10	-1.09	
				36	-2.91	-1.71	0.74	-2.10	-1.36	
			52T	37	0.82	1.45	4.16	-2.10	2.06	
				45	0.62	1.04	3.85	-2.10	1.75	
				52	0.47	1.51	4.03	-2.10	1.93	
			106T	53	2.78	3.35	6.08	-2.10	3.98	
				57	3.31	4.07	6.72	-2.10	4.62	
				60	3.37	4.10	6.76	-2.10	4.66	
			242T	61	6.43	7.04	9.76	-2.10	7.66	
				62	5.97	7.15	9.61	-2.10	7.51	
				64	6.38	7.54	10.01	-2.10	7.91	
			484T	65	7.85	9.07	11.51	-2.10	9.41	
				66	7.61	8.95	11.34	-2.10	9.24	
			SU	-	9.93	10.02	12.99	-2.10	10.89	
	39	6145	26T	0	-2.23	-2.01	0.89	-2.10	-1.21	
				18	-3.01	-1.93	0.57	-2.10	-1.53	
				36	-3.12	-2.52	0.20	-2.10	-1.90	
			52T	37	0.93	1.71	4.35	-2.10	2.25	
				45	1.12	1.51	4.33	-2.10	2.23	
				52	0.89	1.60	4.27	-2.10	2.17	
			106T	53	3.29	3.76	6.54	-2.10	4.44	
				57	3.59	4.13	6.88	-2.10	4.78	
				60	3.51	4.38	6.98	-2.10	4.88	
			242T	61	6.46	7.34	9.93	-2.10	7.83	
				62	6.38	7.25	9.85	-2.10	7.75	
				64	6.51	7.01	9.78	-2.10	7.68	
			484T	65	8.11	9.21	11.71	-2.10	9.61	
				66	8.64	9.71	12.22	-2.10	10.12	
			SU	-	8.12	8.07	11.11	-2.10	9.01	
	87	6385	26T	0	-3.06	-2.61	0.18	-2.10	-1.92	
				18	-3.13	-1.84	0.57	-2.10	-1.53	
				36	-3.31	-2.28	0.25	-2.10	-1.85	
			52T	37	-0.25	0.43	3.11	-2.10	1.01	
				45	1.02	1.57	4.31	-2.10	2.21	
				52	0.93	1.71	4.35	-2.10	2.25	
			106T	53	3.28	4.08	6.71	-2.10	4.61	
				57	3.68	4.21	6.96	-2.10	4.86	
				60	3.58	4.09	6.85	-2.10	4.75	
			242T	61	6.37	7.35	9.90	-2.10	7.80	
				62	5.95	7.14	9.60	-2.10	7.50	
				64	6.32	6.80	9.58	-2.10	7.48	
			484T	65	8.10	9.64	11.95	-2.10	9.85	
				66	8.10	9.22	11.71	-2.10	9.61	
			SU	-	7.52	8.16	10.86	-2.10	8.76	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
Corr'd e.i.r.p = Ant1 Average Power + Ant2 Average Power + Directional Gain

Band	Channel	Freq. [MHz]	Tones	RU offset	Average Power [dBm]			Direct. Gain [dBi]	Corr'd e.i.r.p [dBm]	Max e.i.r.p Limit [dBm]
					ANT1	ANT2	MIMO			
UNII-6	103	6465	26T	0	-2.97	-3.34	-0.14	-2.02	-2.16	24.00
				18	-2.78	-2.71	0.27	-2.02	-1.75	
				36	-2.35	-2.14	0.77	-2.02	-1.25	
			52T	37	-0.20	-0.30	2.76	-2.02	0.74	
				45	1.08	0.25	3.70	-2.02	1.68	
				52	0.67	0.57	3.63	-2.02	1.61	
			106T	53	2.85	2.72	5.80	-2.02	3.78	
				57	3.76	3.52	6.65	-2.02	4.63	
				60	3.26	3.12	6.20	-2.02	4.18	
			242T	61	6.02	5.94	8.99	-2.02	6.97	
				62	6.01	5.90	8.97	-2.02	6.95	
				64	6.39	6.07	9.24	-2.02	7.22	
			484T	65	9.41	9.11	12.27	-2.02	10.25	
				66	9.70	9.16	12.45	-2.02	10.43	
			SU	-	8.23	8.42	11.34	-2.02	9.32	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
Corr'd e.i.r.p = Ant1 Average Power + Ant2 Average Power + Directional Gain

Band	Channel	Freq. [MHz]	Tones	RU offset	Average Power [dBm]			Direct. Gain [dBi]	Corr'd e.i.r.p [dBm]	Max e.i.r.p Limit [dBm]
					ANT1	ANT2	MIMO			
UNII-7	119	6545	26T	0	-2.30	-3.02	0.37	-1.75	-1.38	24.00
				18	-1.92	-2.34	0.89	-1.75	-0.86	
				36	-2.61	-2.08	0.67	-1.75	-1.08	
			52T	37	1.05	0.93	4.00	-1.75	2.25	
				45	1.89	1.08	4.51	-1.75	2.76	
				52	1.32	1.74	4.55	-1.75	2.80	
			106T	53	3.52	3.43	6.49	-1.75	4.74	
				57	4.52	3.79	7.18	-1.75	5.43	
				60	4.15	3.98	7.08	-1.75	5.33	
			242T	61	7.28	7.48	10.39	-1.75	8.64	
				62	6.81	6.26	9.55	-1.75	7.80	
				64	7.22	7.15	10.20	-1.75	8.45	
			484T	65	8.25	8.06	11.17	-1.75	9.42	
				66	8.34	8.16	11.26	-1.75	9.51	
			SU	-	8.83	7.86	11.38	-1.75	9.63	
	151	6705	26T	0	-1.75	-3.17	0.61	-1.75	-1.14	
				18	-1.35	-2.81	0.99	-1.75	-0.76	
				36	-1.87	-2.80	0.70	-1.75	-1.05	
			52T	37	1.87	0.88	4.41	-1.75	2.66	
				45	2.32	0.67	4.58	-1.75	2.83	
				52	1.60	0.66	4.17	-1.75	2.42	
			106T	53	3.73	2.92	6.35	-1.75	4.60	
				57	4.09	2.73	6.47	-1.75	4.72	
				60	3.97	3.31	6.66	-1.75	4.91	
			242T	61	7.24	6.67	9.97	-1.75	8.22	
				62	7.16	5.85	9.56	-1.75	7.81	
				64	6.90	6.17	9.56	-1.75	7.81	
			484T	65	8.91	7.71	11.36	-1.75	9.61	
				66	8.71	7.40	11.11	-1.75	9.36	
			SU	-	9.41	7.50	11.57	-1.75	9.82	
	183	6865	26T	0	-1.98	-2.51	0.77	-1.75	-0.98	
				18	-2.24	-2.45	0.67	-1.75	-1.08	
				36	-2.06	-2.14	0.91	-1.75	-0.84	
			52T	37	0.52	0.12	3.33	-1.75	1.58	
				45	1.38	0.86	4.14	-1.75	2.39	
				52	1.35	1.42	4.40	-1.75	2.65	
			106T	53	4.56	4.49	7.54	-1.75	5.79	
				57	4.55	4.58	7.58	-1.75	5.83	
				60	4.02	3.53	6.79	-1.75	5.04	
			242T	61	6.40	6.07	9.25	-1.75	7.50	
				62	6.38	5.96	9.19	-1.75	7.44	
				64	6.65	6.44	9.56	-1.75	7.81	
			484T	65	8.06	7.52	10.81	-1.75	9.06	
				66	8.05	7.51	10.80	-1.75	9.05	
			SU	-	9.50	9.50	12.51	-1.75	10.76	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
Corr'd e.i.r.p = Ant1 Average Power + Ant2 Average Power + Directional Gain

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Band	Channel	Freq. [MHz]	Tones	RU offset	Average Power [dBm]			Direct. Gain [dBi]	Corr'd e.i.r.p [dBm]	Max e.i.r.p Limit [dBm]
					ANT1	ANT2	MIMO			
UNII-8	199	6945	26T	0	-1.53	-1.84	1.33	-2.23	-0.90	24.00
				18	-2.31	-2.02	0.85	-2.23	-1.38	
				36	-1.95	-1.42	1.33	-2.23	-0.90	
			52T	37	1.12	0.90	4.02	-2.23	1.79	
				45	0.95	1.13	4.05	-2.23	1.82	
				52	0.28	0.73	3.52	-2.23	1.29	
			106T	53	4.72	4.68	7.71	-2.23	5.48	
				57	4.15	4.22	7.20	-2.23	4.97	
				60	4.06	3.66	6.87	-2.23	4.64	
			242T	61	6.71	6.64	9.69	-2.23	7.46	
				62	6.38	6.01	9.21	-2.23	6.98	
				64	6.52	6.83	9.69	-2.23	7.46	
			484T	65	8.74	8.45	11.61	-2.23	9.38	
				66	8.90	8.71	11.82	-2.23	9.59	
			SU	-	9.62	8.71	12.20	-2.23	9.97	
	215	7025	26T	0	-1.67	-1.85	1.25	-2.23	-0.98	
				18	-1.89	-1.44	1.35	-2.23	-0.88	
				36	-1.97	-0.71	1.72	-2.23	-0.51	
			52T	37	1.32	1.81	4.58	-2.23	2.35	
				45	1.67	1.96	4.83	-2.23	2.60	
				52	0.43	1.51	4.01	-2.23	1.78	
			106T	53	4.32	4.64	7.49	-2.23	5.26	
				57	4.31	4.80	7.57	-2.23	5.34	
				60	4.07	4.60	7.35	-2.23	5.12	
			242T	61	5.87	6.34	9.12	-2.23	6.89	
				62	5.97	6.09	9.04	-2.23	6.81	
				64	6.02	6.38	9.21	-2.23	6.98	
			484T	65	8.31	8.71	11.52	-2.23	9.29	
				66	8.25	8.69	11.49	-2.23	9.26	
			SU	-	8.91	8.77	11.85	-2.23	9.62	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
Corr'd e.i.r.p = Ant1 Average Power + Ant2 Average Power + Directional Gain

PSD Results

Band	Channel	Freq. [MHz]	Tones	RU offset	Meas PSD [dBm/MHz]			DCCF	Direct. Gain [dBi]	Corr'd PSD e.i.r.p [dBm]	PSD e.i.r.p Limit [dBm/MHz]
					ANT1	ANT2	MIMO				
UNII-5	7	5985	26T	0	-3.674	-4.160	-0.900	0.30	-2.10	-2.700	-1.00
				18	-4.469	-4.013	-1.225	0.30	-2.10	-3.025	
				36	-3.302	-3.372	-0.327	0.30	-2.10	-2.127	
			SU	-	-7.253	-7.444	-4.337	0.30	-2.10	-6.137	
	39	6145	26T	0	-3.513	-3.391	-0.441	0.30	-2.10	-2.241	
				18	-5.032	-4.005	-1.478	0.30	-2.10	-3.278	
				36	-4.042	-3.433	-0.717	0.30	-2.10	-2.517	
			SU	-	-8.186	-8.087	-5.126	0.30	-2.10	-6.926	
	87	6385	26T	0	-4.033	-3.454	-0.724	0.30	-2.10	-2.524	
				18	-4.698	-4.154	-1.407	0.30	-2.10	-3.207	
				36	-4.042	-3.590	-0.800	0.30	-2.10	-2.600	
			SU	-	-8.719	-8.398	-5.545	0.30	-2.10	-7.345	
UNII-6	103	6465	26T	0	-3.433	-3.628	-0.519	0.30	-2.02	-2.239	
				18	-5.134	-4.767	-1.936	0.30	-2.02	-3.656	
				36	-3.795	-3.357	-0.560	0.30	-2.02	-2.280	
			SU	-	-8.578	-8.869	-5.711	0.30	-1.75	-7.161	
UNII-7	119	6545	26T	0	-3.856	-3.507	-0.668	0.30	-1.75	-2.118	
				18	-4.278	-4.248	-1.253	0.30	-1.75	-2.703	
				36	-3.826	-3.559	-0.680	0.30	-1.75	-2.130	
			SU	-	-8.099	-8.831	-5.439	0.30	-1.75	-6.889	
	151	6705	26T	0	-3.056	-3.419	-0.223	0.30	-1.75	-1.673	
				18	-4.012	-4.428	-1.205	0.30	-1.75	-2.655	
				36	-3.103	-3.458	-0.267	0.30	-1.75	-1.717	
			SU	-	-6.063	-8.969	-4.267	0.30	-1.75	-5.717	
	183	6865	26T	0	-3.239	-3.390	-0.304	0.30	-1.75	-1.754	
				18	-4.080	-4.619	-1.331	0.30	-1.75	-2.781	
				36	-3.016	-3.523	-0.252	0.30	-1.75	-1.702	
			SU	-	-6.917	-7.197	-4.044	0.30	-1.75	-5.494	
UNII-8	199	6945	26T	0	-2.489	-3.011	0.268	0.30	-2.23	-1.662	
				18	-4.262	-4.191	-1.216	0.30	-2.23	-3.146	
				36	-3.318	-2.826	-0.055	0.30	-2.23	-1.985	
			SU	-	-7.834	-7.910	-4.862	0.30	-2.23	-6.792	
	215	**7025**	**26T**	0	-2.849	-2.794	0.189	0.30	-2.23	-1.741	
				18	-3.231	-3.202	-0.206	0.30	-2.23	-2.136	
				36	**-3.128**	**-2.034**	**0.464**	**0.30**	**-2.23**	**-1.466**	
			SU	-	-7.536	-7.935	-4.721	0.30	-2.23	-6.651	

* Corr'd PSD e.i.r.p = ANT1 Meas PSD + Ant2 Meas PSD + DCCF + Directional Gain

10.1.5. 802.11ax HE160 MODE

Output Power Results

Band	Channel	Freq. [MHz]	Tones	RU offset	Average Power [dBm]			Direct. Gain [dBi]	Corr'd e.i.r.p [dBm]	Max e.i.r.p Limit [dBm]
					ANT1	ANT2	MIMO			
UNII-5	15	6025	26T	0L	-2.48	-2.45	0.55	-2.10	-1.55	24.00
				0U	-2.77	-2.09	0.59	-2.10	-1.51	
				36U	-2.43	-2.49	0.55	-2.10	-1.55	
			52T	37L	-0.74	0.02	2.67	-2.10	0.57	
				37U	0.54	1.32	3.96	-2.10	1.86	
				52U	0.17	0.65	3.43	-2.10	1.33	
			106T	53L	4.26	4.71	7.50	-2.10	5.40	
				53U	3.08	3.34	6.22	-2.10	4.12	
				60U	3.68	3.98	6.84	-2.10	4.74	
			242T	61L	6.71	7.07	9.90	-2.10	7.80	
				61U	6.11	6.32	9.23	-2.10	7.13	
				64U	7.21	7.21	10.22	-2.10	8.12	
			484T	65L	8.61	9.11	11.88	-2.10	9.78	
				66L	8.51	9.15	11.85	-2.10	9.75	
				66U	8.61	9.10	11.87	-2.10	9.77	
			996T	67L	8.51	8.63	11.58	-2.10	9.48	
				67U	8.60	8.32	11.47	-2.10	9.37	
			SU	-	8.27	8.74	11.52	-2.10	9.42	
	47	6185	26T	0L	-1.67	-1.83	1.26	-2.10	-0.84	
				0U	-1.18	-1.42	1.71	-2.10	-0.39	
				36U	-1.82	-2.38	0.92	-2.10	-1.18	
			52T	37L	1.62	2.06	4.86	-2.10	2.76	
				37U	1.07	1.65	4.38	-2.10	2.28	
				52U	1.48	1.22	4.36	-2.10	2.26	
			106T	53L	4.04	3.93	7.00	-2.10	4.90	
				53U	3.75	3.67	6.72	-2.10	4.62	
				60U	4.06	3.47	6.79	-2.10	4.69	
			242T	61L	6.64	6.48	9.57	-2.10	7.47	
				61U	7.40	7.28	10.35	-2.10	8.25	
				64U	7.40	6.94	10.19	-2.10	8.09	
			484T	65L	8.70	9.66	12.22	-2.10	10.12	
				66L	9.17	9.70	12.45	-2.10	10.35	
				66U	8.31	8.74	11.54	-2.10	9.44	
			996T	67L	8.90	8.60	11.76	-2.10	9.66	
				67U	8.60	8.31	11.47	-2.10	9.37	
			SU	-	8.93	9.05	12.00	-2.10	9.90	
	79	6345	26T	0L	-2.89	-2.18	0.49	-2.10	-1.61	
				0U	-1.92	-1.22	1.45	-2.10	-0.65	
				36U	-1.29	-1.21	1.76	-2.10	-0.34	
			52T	37L	-0.09	0.79	3.38	-2.10	1.28	
				37U	0.66	1.25	3.98	-2.10	1.88	
				52U	0.78	1.54	4.19	-2.10	2.09	
			106T	53L	4.29	4.89	7.61	-2.10	5.51	
				53U	3.93	4.42	7.19	-2.10	5.09	
				60U	3.89	4.25	7.08	-2.10	4.98	
			242T	61L	6.96	7.81	10.42	-2.10	8.32	
				61U	6.47	7.02	9.76	-2.10	7.66	
				64U	7.59	7.88	10.75	-2.10	8.65	
			484T	65L	8.31	9.48	11.94	-2.10	9.84	
				66L	7.82	9.08	11.51	-2.10	9.41	
				66U	8.01	9.35	11.74	-2.10	9.64	
			996T	67L	8.02	9.01	11.55	-2.10	9.45	
				67U	8.12	8.65	11.40	-2.10	9.30	
			SU	-	8.25	8.49	11.38	-2.10	9.28	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
Corr'd e.i.r.p = Ant1 Average Power + Ant2 Average Power + Directional Gain
* HE160 = HE80L + HE80U

Band	Channel	Freq. [MHz]	Tones	RU offset	Average Power [dBm]			Direct. Gain [dBi]	Corr'd e.i.r.p [dBm]	Max e.i.r.p Limit [dBm]
					ANT1	ANT2	MIMO			
UNII-6	111	6505	26T	0L	-1.87	-2.46	0.86	-2.02	-1.16	24.00
				0U	-1.21	-1.48	1.67	-2.02	-0.35	
				36U	-0.89	-2.20	1.51	-2.02	-0.51	
			52T	37L	1.32	1.25	4.30	-2.02	2.28	
				37U	1.85	1.38	4.63	-2.02	2.61	
				52U	1.98	1.42	4.72	-2.02	2.70	
			106T	53L	3.76	3.42	6.60	-2.02	4.58	
				53U	4.43	3.76	7.12	-2.02	5.10	
				60U	5.24	4.41	7.86	-2.02	5.84	
			242T	61L	7.49	7.22	10.37	-2.02	8.35	
				61U	7.14	6.50	9.84	-2.02	7.82	
				64U	7.51	6.86	10.21	-2.02	8.19	
			484T	65L	7.75	7.80	10.79	-2.02	8.77	
				66L	8.60	8.41	11.52	-2.02	9.50	
				66U	8.15	7.51	10.85	-2.02	8.83	
			996T	67L	8.71	8.35	11.54	-2.02	9.52	
				67U	8.71	8.25	11.50	-2.02	9.48	
			SU	-	9.35	9.82	12.60	-2.02	10.58	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
Corr'd e.i.r.p = Ant1 Average Power + Ant2 Average Power + Directional Gain
* HE160 = HE80L + HE80U

Band	Channel	Freq. [MHz]	Tones	RU offset	Average Power [dBm]			Direct. Gain [dBi]	Corr'd e.i.r.p [dBm]	Max e.i.r.p Limit [dBm]
					ANT1	ANT2	MIMO			
UNII-7	143	6665	26T	0L	-1.63	-2.58	0.93	-1.75	-0.82	24.00
				0U	-2.02	-2.71	0.66	-1.75	-1.09	
				36U	-1.42	-2.64	1.02	-1.75	-0.73	
			52T	37L	1.20	0.62	3.93	-1.75	2.18	
				37U	1.22	0.14	3.72	-1.75	1.97	
				52U	1.28	0.11	3.74	-1.75	1.99	
			106T	53L	3.82	2.78	6.34	-1.75	4.59	
				53U	3.92	2.81	6.41	-1.75	4.66	
				60U	4.21	3.01	6.66	-1.75	4.91	
			242T	61L	7.16	6.28	9.75	-1.75	8.00	
				61U	7.75	6.59	10.22	-1.75	8.47	
				64U	7.77	6.84	10.34	-1.75	8.59	
			484T	65L	9.22	8.22	11.76	-1.75	10.01	
				66L	9.15	7.75	11.52	-1.75	9.77	
				66U	9.35	7.49	11.53	-1.75	9.78	
			996T	67L	9.61	7.62	11.74	-1.75	9.99	
				67U	9.81	7.77	11.92	-1.75	10.17	
			SU	-	9.21	8.06	11.68	-1.75	9.93	
	175	6825	26T	0L	-1.82	-2.77	0.74	-1.75	-1.01	
				0U	-1.75	-2.33	0.98	-1.75	-0.77	
				36U	-1.96	-2.36	0.85	-1.75	-0.90	
			52T	37L	1.41	0.86	4.15	-1.75	2.40	
				37U	1.04	0.42	3.75	-1.75	2.00	
				52U	0.92	0.95	3.95	-1.75	2.20	
			106T	53L	4.85	3.55	7.26	-1.75	5.51	
				53U	4.62	4.30	7.47	-1.75	5.72	
				60U	3.65	4.89	7.32	-1.75	5.57	
			242T	61L	7.87	7.40	10.65	-1.75	8.90	
				61U	7.35	6.75	10.07	-1.75	8.32	
				64U	7.04	7.09	10.08	-1.75	8.33	
			484T	65L	8.61	7.62	11.15	-1.75	9.40	
				66L	8.91	8.35	11.65	-1.75	9.90	
				66U	8.70	7.51	11.16	-1.75	9.41	
			996T	67L	8.85	8.35	11.62	-1.75	9.87	
				67U	8.12	7.62	10.89	-1.75	9.14	
			SU	-	9.07	8.02	11.59	-1.75	9.84	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
Corr'd e.i.r.p = Ant1 Average Power + Ant2 Average Power + Directional Gain
* HE160 = HE80L + HE80U

Band	Channel	Freq. [MHz]	Tones	RU offset	Average Power [dBm]			Direct. Gain [dBi]	Corr'd e.i.r.p [dBm]	Max e.i.r.p Limit [dBm]
					ANT1	ANT2	MIMO			
UNII-8	207	6985	26T	0L	-1.21	-1.11	1.85	-2.23	-0.38	24.00
				0U	-2.06	-1.59	1.19	-2.23	-1.04	
				36U	-1.92	-1.66	1.22	-2.23	-1.01	
			52T	37L	0.91	1.24	4.09	-2.23	1.86	
				37U	1.12	1.47	4.31	-2.23	2.08	
				52U	0.84	1.64	4.27	-2.23	2.04	
			106T	53L	4.13	4.02	7.09	-2.23	4.86	
				53U	4.24	4.45	7.36	-2.23	5.13	
				60U	4.11	4.35	7.24	-2.23	5.01	
			242T	61L	7.15	7.06	10.12	-2.23	7.89	
				61U	6.32	6.48	9.41	-2.23	7.18	
				64U	6.68	6.85	9.78	-2.23	7.55	
			484T	65L	8.40	7.83	11.13	-2.23	8.90	
				66L	9.61	9.48	12.56	-2.23	10.33	
				66U	8.20	8.21	11.22	-2.23	8.99	
			996T	67L	9.75	8.02	11.98	-2.23	9.75	
				67U	9.01	8.02	11.55	-2.23	9.32	
			SU	-	8.92	8.56	11.75	-2.23	9.52	

* Calculation of Output Power : Average Power = Meas Power + Duty CF[dB]
Corr'd e.i.r.p = Ant1 Average Power + Ant2 Average Power + Directional Gain
* HE160 = HE80L + HE80U

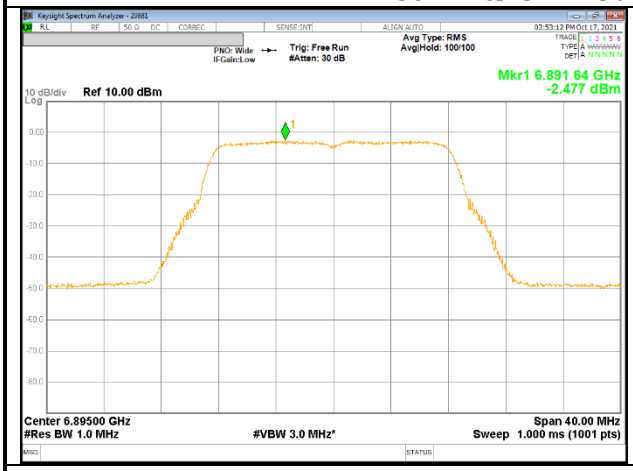
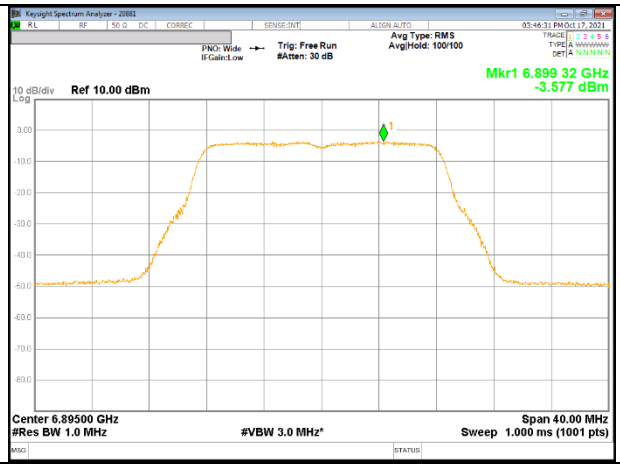
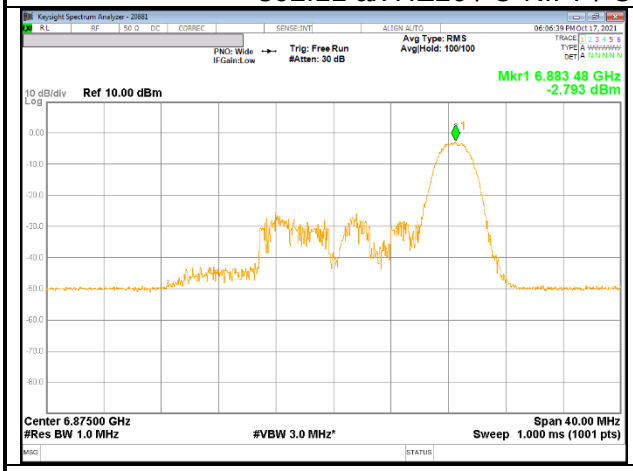
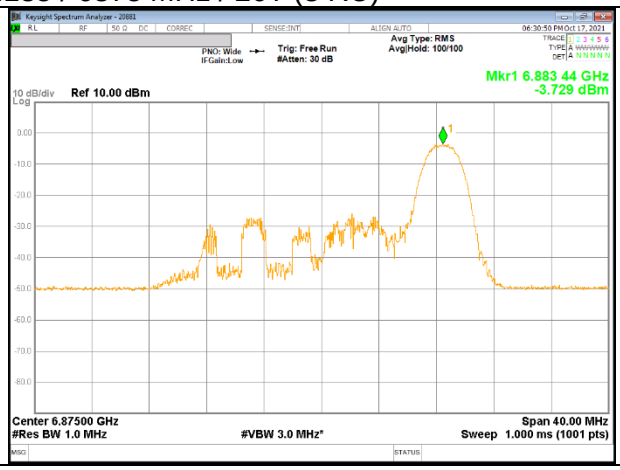
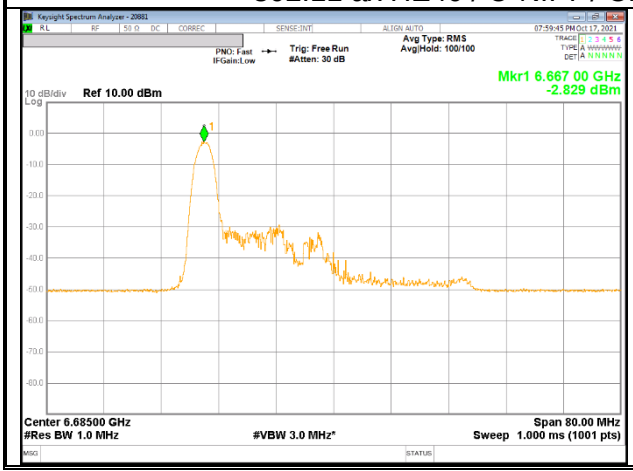
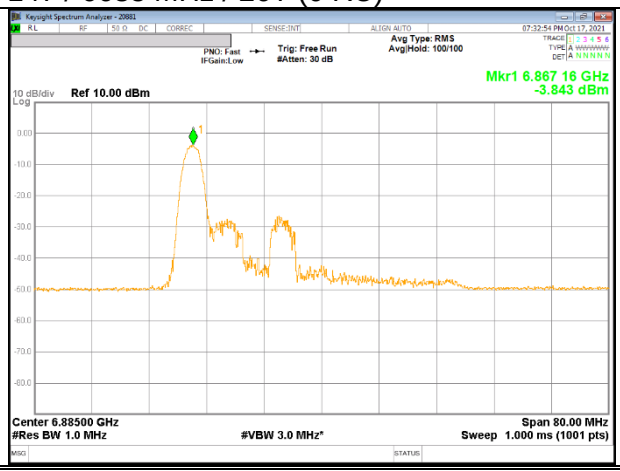
PSD Results

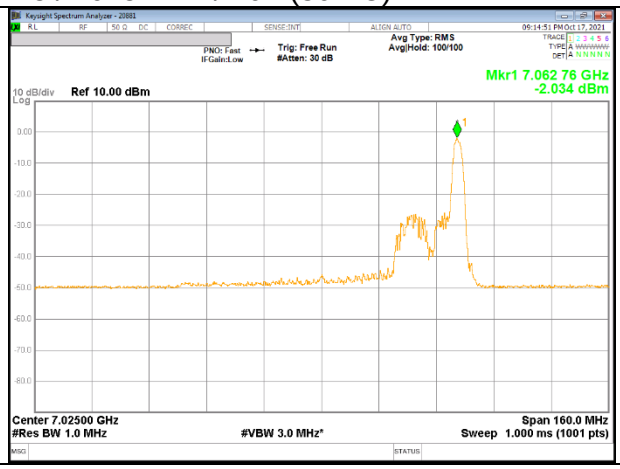
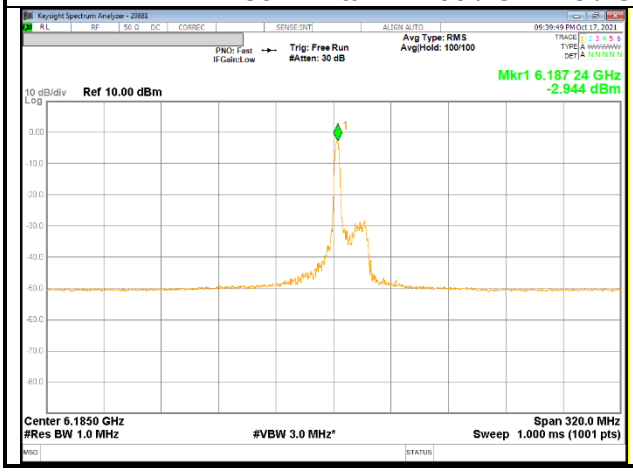
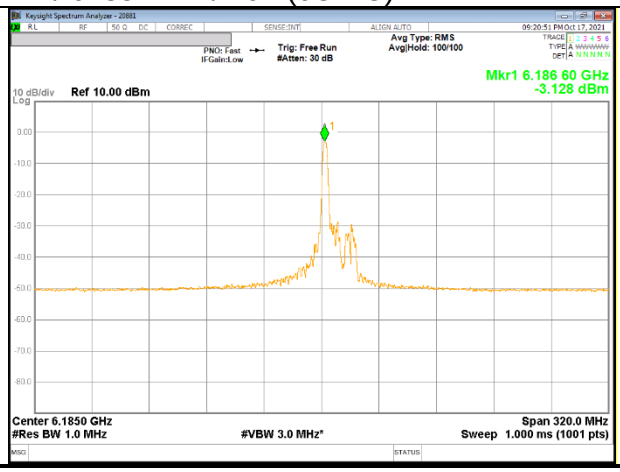
Band	Channel	Freq. [MHz]	Tones	RU offset	Meas PSD [dBm/MHz]			DCCF	Direct. Gain [dBi]	Corr'd PSD e.i.r.p [dBm]	PSD e.i.r.p Limit [dBm/MHz]
					ANT1	ANT2	MIMO				
UNII-5	15	6025	26T	0L	-3.377	-3.397	-0.377	0.34	-2.23	-2.267	-1.00
				0U	-3.464	-3.424	-0.434	0.34	-2.23	-2.324	
				36U	-3.317	-3.547	-0.420	0.34	-2.23	-2.310	
			SU	-	-10.714	-10.556	-7.624	0.34	-2.23	-9.514	
	47	**6185**	**26T**	0L	-3.269	-3.806	-0.519	0.34	-2.23	-2.409	
				0U	**-2.944**	**-3.128**	**-0.025**	**0.34**	**-2.23**	**-1.915**	
				36U	-3.439	-3.462	-0.440	0.34	-2.23	-2.330	
			SU	-	-10.141	-10.247	-7.183	0.34	-2.23	-9.073	
	79	6345	26T	0L	-3.545	-3.678	-0.601	0.34	-2.23	-2.491	
				0U	-3.257	-3.058	-0.146	0.34	-2.23	-2.036	
				36U	-3.607	-3.492	-0.539	0.34	-2.23	-2.429	
			SU	-	-10.749	-10.217	-7.465	0.34	-2.23	-9.355	
UNII-6	111	6505	26T	0L	-3.200	-4.023	-0.582	0.34	-2.23	-2.472	
				0U	-3.103	-3.298	-0.189	0.34	-2.23	-2.079	
				36U	-3.302	-3.714	-0.493	0.34	-2.23	-2.383	
			SU	-	-11.890	-10.511	-8.136	0.34	-2.23	-10.026	
UNII-7	143	6665	26T	0L	-3.221	-4.149	-0.650	0.34	-2.23	-2.540	
				0U	-3.324	-3.306	-0.305	0.34	-2.23	-2.195	
				36U	-3.070	-4.345	-0.651	0.34	-2.23	-2.541	
			SU	-	-10.640	-11.244	-7.921	0.34	-2.23	-9.811	
	175	6825	26T	0L	-3.330	-3.799	-0.548	0.34	-2.23	-2.438	
				0U	-3.161	-3.760	-0.440	0.34	-2.23	-2.330	
				36U	-3.396	-3.596	-0.485	0.34	-2.23	-2.375	
			SU	-	-10.312	-10.292	-7.292	0.34	-2.23	-9.182	
UNII-8	207	6985	26T	0L	-3.220	-3.275	-0.237	0.34	-2.23	-2.127	
				0U	-3.428	-3.179	-0.291	0.34	-2.23	-2.181	
				36U	-4.034	-2.634	-0.268	0.34	-2.23	-2.158	
			SU	-	-10.235	-10.326	-7.270	0.34	-2.23	-9.160	

* Corr'd PSD e.i.r.p = ANT1 Meas PSD + Ant2 Meas PSD + DCCF + Directional Gain
* HE160 = HE80L + HE80U

10.1.6. PPSD PLOTS (WORST CASE)

UNII-5 & 6 & 7 & 8

ANT1	ANT2
802.11a/ U-NII-8 / CH 189 / 6895 MHz	
	
802.11 ax HE20 / U-NII-7 / CH185 / 6875 MHz / 26T (8 RU)	
	
802.11 ax HE40 / U-NII-7 / CH 147 / 6685 MHz / 26T (0 RU)	
	

ANT1	ANT2
802.11 ax HE80 / U-NII-8 / CH 215 / 7025 MHz / 26T (36 RU)	
	
802.11 ax HE160 / U-NII-5 / CH 47 / 6185 MHz / 26T (0U RU)	
	

10.2. IN-BAND EMISSIONS

LIMITS

FCC §15.407 (b) (7)

For transmitters operating within the 5.925-7.125 GHz bands: Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.

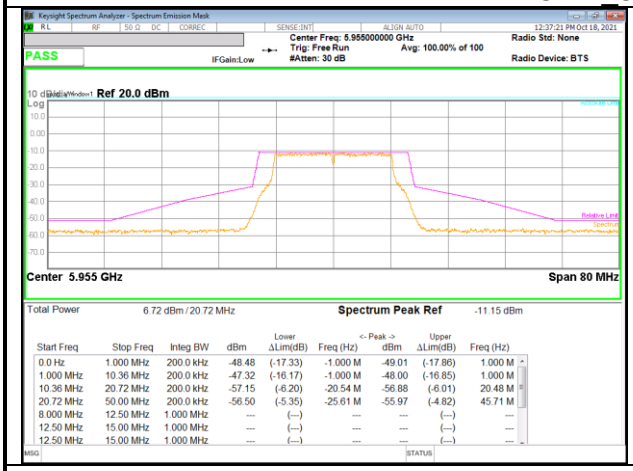
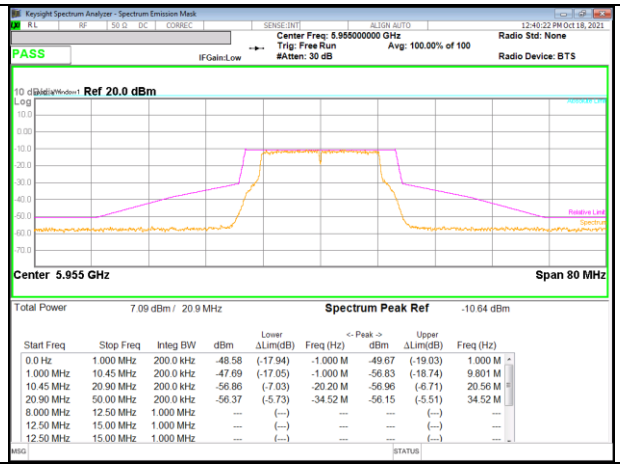
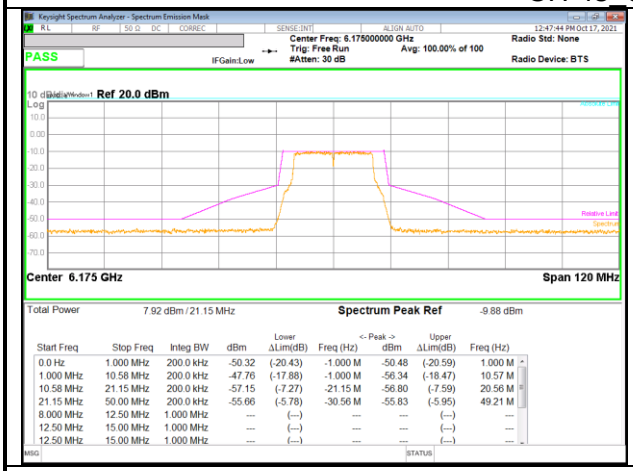
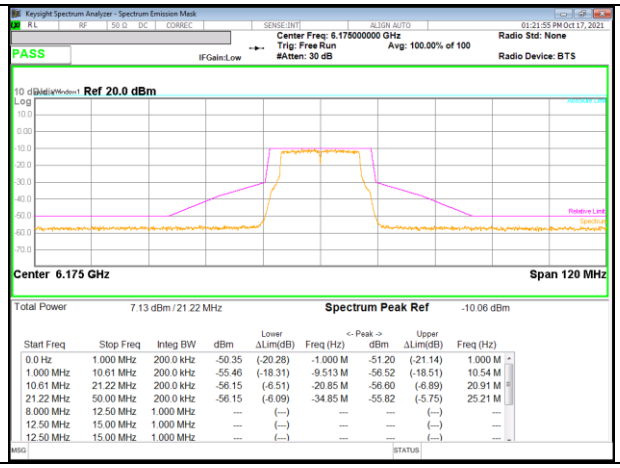
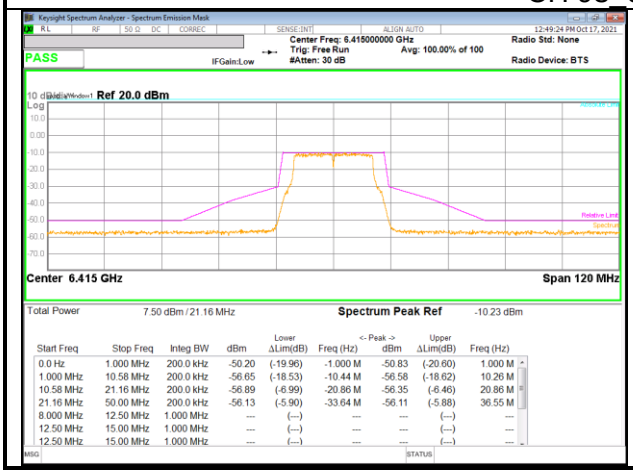
TEST PROCEDURE

KDB 987594 D02

1. Connect output of antenna port to a spectrum analyzer, with appropriate attenuation, as to not damage the instrumentation.
2. Test reference level of the measuring equipment in accordance with procedure 4.1.5.2 of ANSI C63.10-2013.
3. Measure the 26dB EBW using the test procedure 12.4.1 of ANSI C63.10-2013.
4. Measure the PSD (which will be used for emissions mask reference) using the following procedure:
   a) Set the span to encompass the entire 26 dB EBW of the signal.
   b) Set RBW = same RBW used for 26 dB EBW measurement.
   c) Set VBW $\geq$ 3 X RBW
   d) Number of points in sweep $\geq$ [2 X span / RBW].
   e) Sweep time = auto.
   f) Detector = RMS (i.e., power averaging)
   g) Trace average at least 100 traces in power averaging (rms) mode.
   h) Use the peak search function on the instrument to find the peak of the spectrum.
5. For the purposes of developing the emission mask, the channel bandwidth is defined as the 26 dB EBW.
6. Using the measuring equipment limit line function, develop the emissions mask based on the following requirements. The emissions power spectral density must be reduced below the peak power spectral density (in dB) as follows:
   a) Suppressed by 20 dB at 1 MHz outside of the channel edge. (The channel edge is defined as the 26-dB point on either side of the carrier center frequency.)
   b) Suppressed by 28 dB at one channel bandwidth from the channel center.
   c) Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.
7. Adjust the span to encompass the entire mask as necessary.
8. Clear trace.
9. Trace average at least 100 traces in power averaging (rms) mode.
10. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask.

10.2.1. 802.11 a MODE

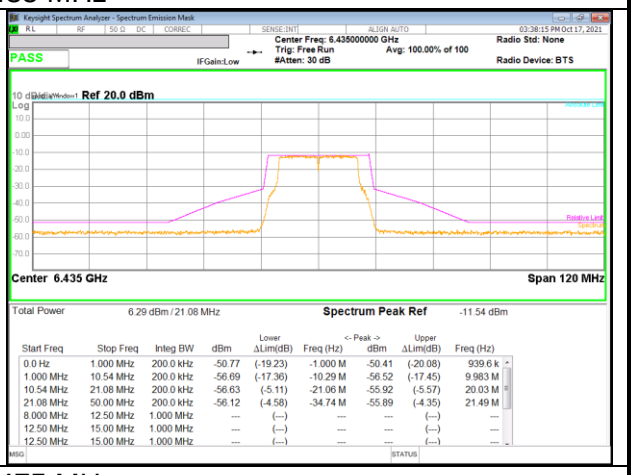
802.11 a / UNII-5

ANT1	ANT2
CH 1_5955 MHz	
	
CH 45_6175 MHz	
	
CH 93_6415 MHz	
	

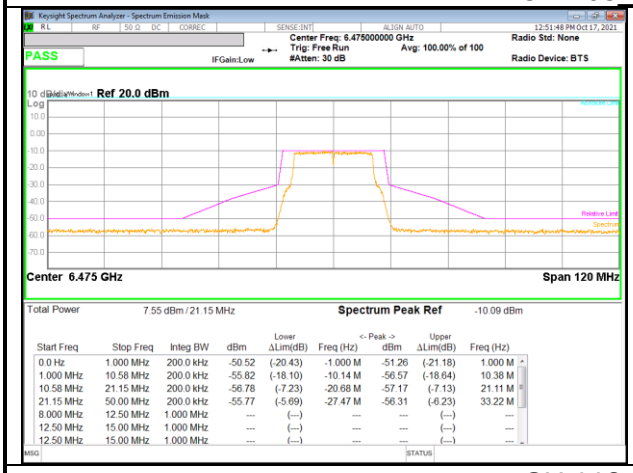
802.11 a / UNII-6

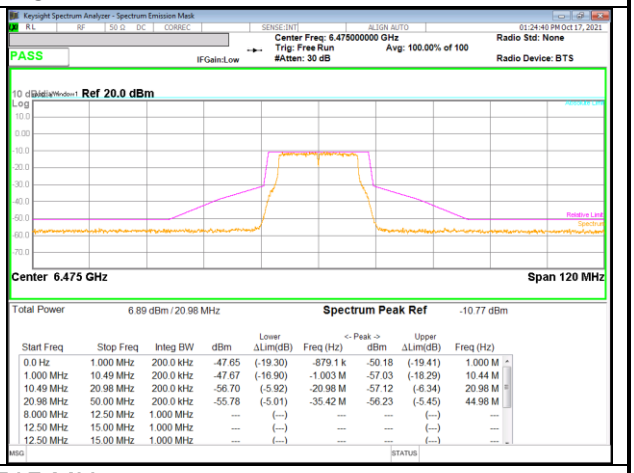
ANT1	ANT2

CH 97_6435 MHz

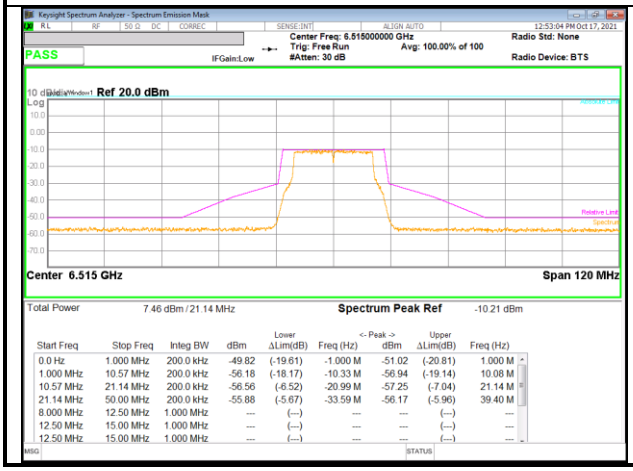


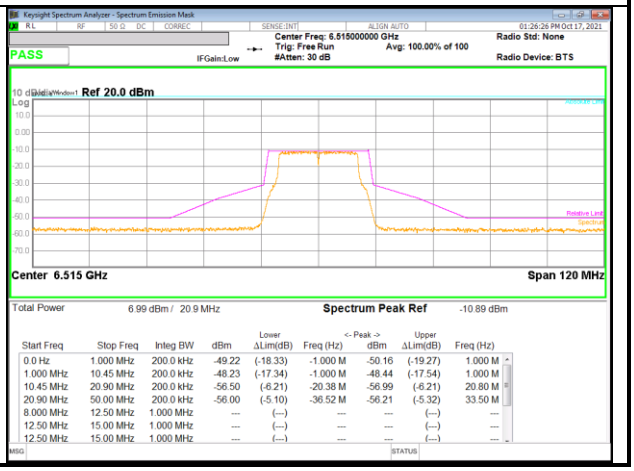
CH 105_6475 MHz





CH 113 6515 MHz

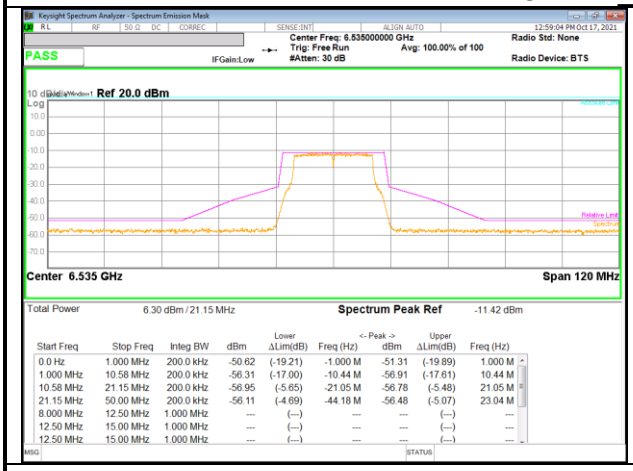


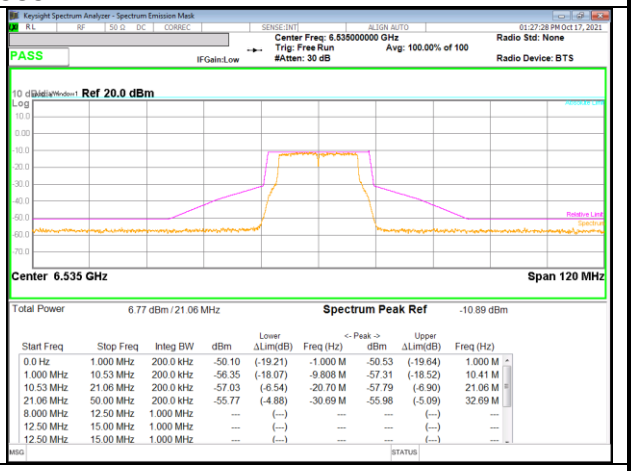


802.11 a / UNII-7

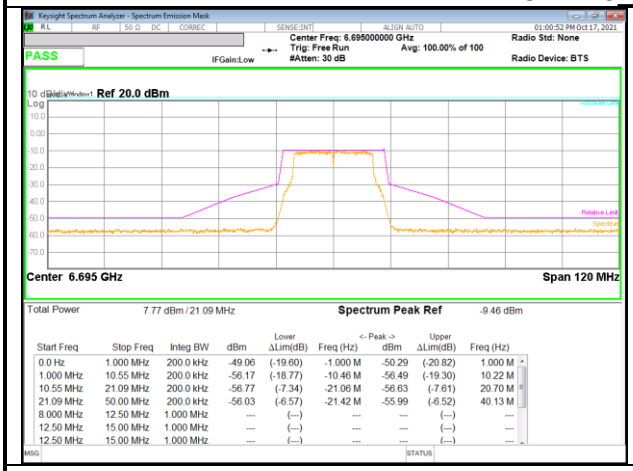
ANT1	ANT2

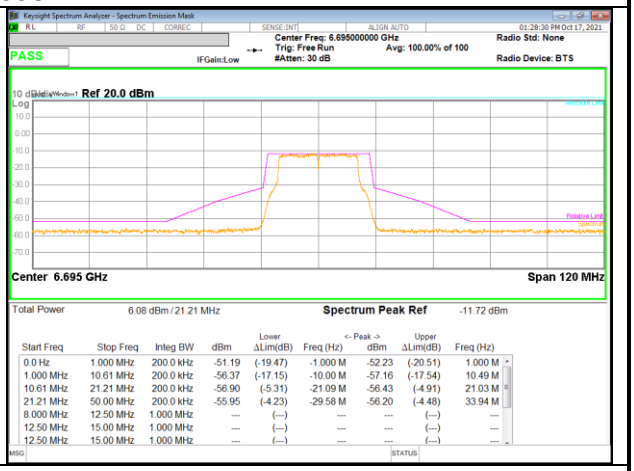
CH 117_6535 MHz



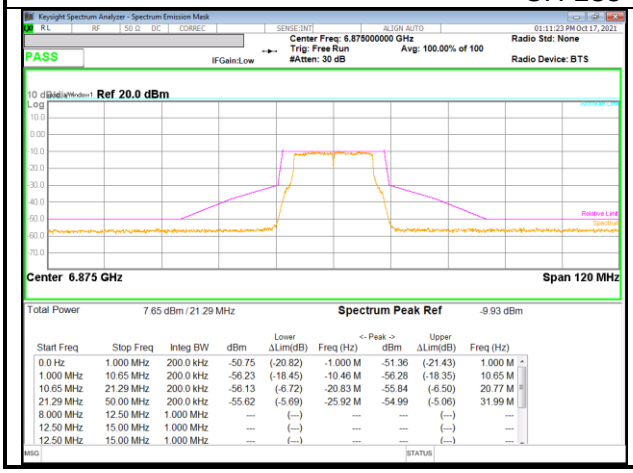


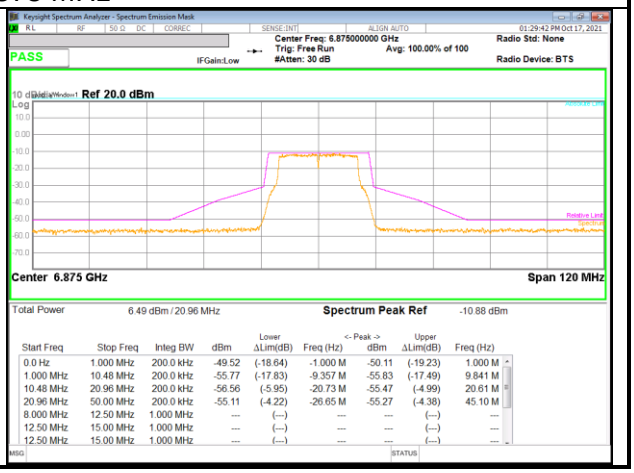
CH 149_6695 MHz





CH 185 6875 MHz

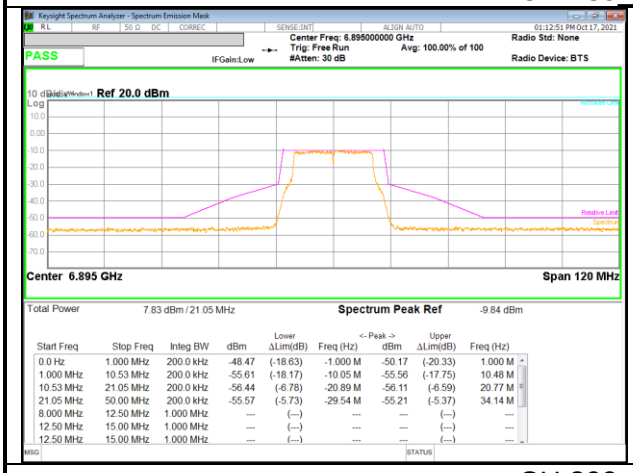


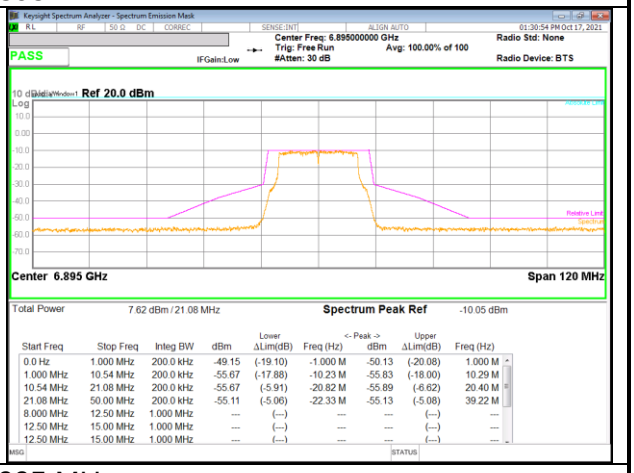


802.11 a / UNII-8

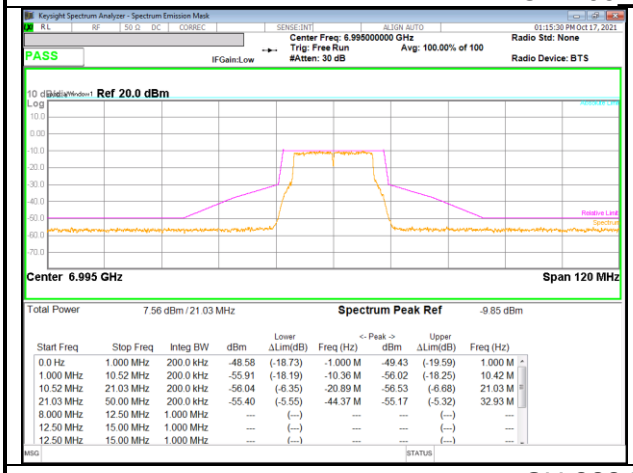
ANT1	ANT2

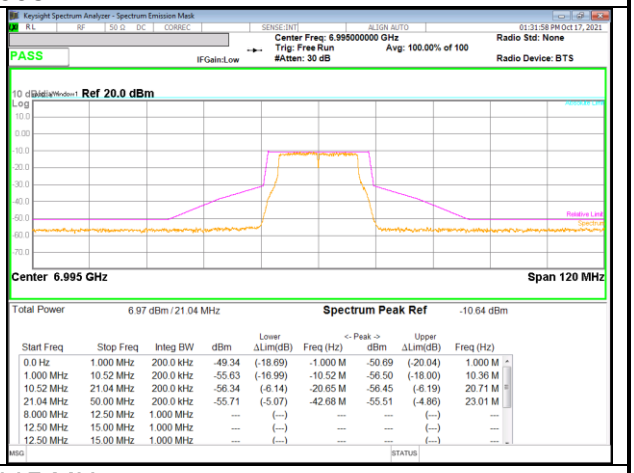
CH 189_6895 MHz





CH 209_6995 MHz





CH 233 7115 MHz