



TEST REPORT

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1. Client

- Name : Samsung Electronics Co., Ltd.
- Address : 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea
- Date of Receipt : 2025-02-10

2. Use of Report : Certification

3. Name of Product / Model : Tablet PC / SM-X350

4. Manufacturer / Country of Origin : Samsung Electronics Co., Ltd. / Vietnam

5. FCC ID : A3LSMX350

6. Date of Test : 2025-02-19 to 2025-03-07

7. Location of Test : ☒ Permanent Testing Lab ☐ On Site Testing
 (Address: 65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea)

8. Test method used : FCC Part 15 Subpart E, 15.407

9. Test Result : Refer to the test result in the test report

Affirmation	Tested by Name : Kwonse Kim (Signature)	Technical Manager Name : Harim Lee (Signature)
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2025-03-24

Eurofins KCTL Co.,Ltd.

As a test result of the sample which was submitted from the client, this report does not guarantee the whole product quality. This test report should not be used and copied without a written agreement by Eurofins KCTL Co.,Ltd.

REPORT REVISION HISTORY

Date	Revision	Page No
2025-03-18	Originally issued	-
2025-03-24	Revised the note	13

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Note. The report No. KR25-SRF0034 is superseded by the report No. KR25-SRF0034-A.

General remarks for test reports

Statement concerning the uncertainty of the measurement systems used for the tests

(may be required by the product standard or client)

☐ Internal procedure used for type testing through which traceability of the measuring uncertainty has been established:

Procedure number, issue date and title:

Calculations leading to the reported values are on file with the testing laboratory that conducted the testing.

☒ Statement not required by the standard or client used for type testing

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1. General information

Client : Samsung Electronics Co., Ltd.
 Address : 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea
 Manufacturer : Samsung Electronics Co., Ltd.
 Address : 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea
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 Laboratory : Eurofins KCTL Co.,Ltd.
 Address : 65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea
 Accreditations : FCC Site Designation No: KR0040, FCC Site Registration No: 687132
 VCCI Registration No. : R-20080, G-20078, C-20059, T-20056
 CAB Identifier: KR0040
 ISED Number: 8035A
 KOLAS No.: KT231

2. Device information

Equipment under test : Tablet PC
 Model : SM-X350
 Modulation technique : WIFI (802.11ax) : OFDMA
 Number of channels :
 UNII 1 : 4 ch (20 MHz), 2 ch (40 MHz), 1 ch (80 MHz), 1 ch (160 MHz)
 UNII 2A : 4 ch (20 MHz), 2 ch (40 MHz), 1 ch (80 MHz)
 UNII 2C : 12 ch (20 MHz), 6 ch (40 MHz), 3 ch (80 MHz), 1 ch (160 MHz)
 UNII 3 : 5 ch (20 MHz), 2 ch (40 MHz), 1 ch (80 MHz), 1 ch (160 MHz)
 UNII 4 : 3 ch (20 MHz), 2 ch (40 MHz), 1 ch (80 MHz), 1 ch (160 MHz)
 Power source : DC 3.85 V
 Antenna specification :
 Antenna 1 : LDS Antenna
 Antenna 2 : LDS Antenna
 Antenna gain :
 Antenna 1 :
 UNII 1 : -4.50 dBi
 UNII 2A : -4.20 dBi
 UNII 2C : -4.20 dBi
 UNII 3 : -4.40 dBi
 UNII 4 : -4.40 dBi
 Antenna 2 :
 UNII 1 : -4.70 dBi
 UNII 2A : -4.60 dBi
 UNII 2C : -4.80 dBi
 UNII 3 : -4.90 dBi
 UNII 4 : -4.50 dBi
 Frequency range :
 UNII 1 : 5 180 MHz ~ 5 240 MHz (802.11ax_HE20)
 UNII 1 : 5 190 MHz ~ 5 230 MHz (802.11ax_HE40)
 UNII 1 : 5 210 MHz (802.11ax_HE80)
 UNII 1&2A : 5 250 MHz (802.11ax_HE160)
 UNII 2A : 5 260 MHz ~ 5 320 MHz (802.11ax_HE20)
 UNII 2A : 5 270 MHz ~ 5 310 MHz (802.11ax_HE40)
 UNII 2A : 5 290 MHz (802.11ax_HE80)
 UNII 2C : 5 500 MHz ~ 5 720 MHz (802.11ax_HE20)
 UNII 2C : 5 510 MHz ~ 5 710 MHz (802.11ax_HE40)
 UNII 2C : 5 530 MHz ~ 5 690 MHz (802.11ax_HE80)
 UNII 2C : 5 570 MHz (802.11ax_HE160)
 UNII 3 : 5 745 MHz ~ 5 825 MHz (802.11ax_HE20)
 UNII 3 : 5 755 MHz ~ 5 795 MHz (802.11ax_HE40)
 UNII 3 : 5 775 MHz (802.11ax_HE80)
 UNII 4 : 5 845 MHz ~ 5 885 MHz (802.11ax_HE20)
 UNII 4 : 5 835 MHz ~ 5 875 MHz (802.11ax_HE40)
 UNII 4 : 5 855 MHz (802.11ax_HE80)
 UNII 3&4 : 5 815 MHz (802.11ax_HE160)
 Software version : X350.001
 Hardware version : REV1.0
 Test device serial No. :
 Conducted : R32XC01B74W
 Radiated : R32XC01BJCK, R32XC01BDGK
 Operation temperature : 0 °C ~ 35 °C

2.1. Frequency/channel operations

This device contains the following capabilities:
WLAN (11ax)

UNII 1

Ch.	Frequency (MHz)
36	5 180
40	5 200
48	5 240

UNII 2A

Ch.	Frequency (MHz)
52	5 260
56	5 280
64	5 320

UNII 2C

Ch.	Frequency (MHz)
100	5 500
120	5 600
140	5 700
144	5 720

UNII 3

Ch.	Frequency (MHz)
149	5 745
157	5 785
165	5 825

UNII 4

Ch.	Frequency (MHz)
169	5 845
173	5 865
177	5 885

Table 2.1.1. 802.11ax HE20 mode

UNII 1

Ch.	Frequency (MHz)
38	5 190
46	5 230

UNII 2A

Ch.	Frequency (MHz)
54	5 270
62	5 310

UNII 2C

Ch.	Frequency (MHz)
102	5 510
118	5 590
134	5 670
142	5 710

UNII 3

Ch.	Frequency (MHz)
151	5 755
159	5 795

UNII 4

Ch.	Frequency (MHz)
167	5 835
175	5 875

Table 2.1.2. 802.11ax HE40 mode

UNII 1

Ch.	Frequency (MHz)
42	5 210

UNII 2A

Ch.	Frequency (MHz)
58	5 290

UNII 2C

Ch.	Frequency (MHz)
106	5 530
122	5 610
138	5 690

UNII 3

Ch.	Frequency (MHz)
155	5 775

UNII 4

Ch.	Frequency (MHz)
171	5 855

Table 2.1.3. 802.11ax HE80 mode

UNII 1&2A

Ch.	Frequency (MHz)
50	5 250

UNII 2C

Ch.	Frequency (MHz)
114	5 570

UNII 3&4

Ch.	Frequency (MHz)
163	5 815

Table 2.1.4. 802.11ax HE160 mode

2.2. Simultaneous Tx Condition

The device supports simultaneous transmission operation, which allows for two channels to operate independent of one another in the Bluetooth, 2.4 GHz, 5 GHz, or 6 GHz bands simultaneously on each antenna.

Simultaneous Tx condition – not RSDB

Mode	# of TX	WLAN 2.4 GHz		WLAN 5, 6 GHz		Bluetooth		Report
		ANT 1	ANT 2	ANT 1	ANT 2	ANT 1	ANT 2	
WLAN + Bluetooth	2	-	O	-	-	O	-	-
WLAN + Bluetooth	3	-	-	O	O	O	-	√
WLAN + Bluetooth	3	-	-	O	O	-	O	√

Notes.

1. Simultaneous condition was performed as a worst case which is configured as a combination of lowest margin for each mode during radiated spurious emission.
2. For simultaneous spurious emission test result, please refer to 15.407_6E ax test report.

2.3 Test RU offset for tones in each mode

BW (MHz)	Tones (T)	RU offset	Test RU offset		
			Low	Mid	High
20	26	0 ~ 8	0	4	8
	52	37 ~ 40	37	38	40
	106	53 ~ 54	53	-	54
	242	61 / SU	-	61 / -	-
40	26	0 ~ 17	0	9	17
	52	37 ~ 44	37	41	44
	106	53 ~ 56	53	54	56
	242	61 ~ 62	61	-	62
	484	65 / SU	-	65 / -	-
80	26	0 ~ 36	0	18	36
	52	37 ~ 52	37	45	52
	106	53 ~ 60	53	57	60
	242	61 ~ 64	61	62	64
	484	65 ~ 66	65	-	66
	996	67 / SU	-	67 / -	-
160 ^{Note}	26	0 ~ 36	0L	0U	36U
	52	37 ~ 52	37L	37U	52U
	106	53 ~ 60	53L	53U	60U
	242	61 ~ 64	61L	61U	64U
	484	65 ~ 66	65L	66L	66U
	996	67	67L	-	67U
	2x996	68 / SU	-	68 / -	-

Notes.

1. HE160 = HE80(L) + HE80(H)
2. Measurement RU offset for HE80 (L) and HE80 (U) was investigated then worst RU offset of testing offset (L/M/H) was reported as a worst case.

2.4. Band portion of RU allocation about straddle channels

Mode	Channel	Tone number in RU	RU offset	Portion
HE20	Straddle 5 720 MHz	26T	0	UNII-2C
			4	UNII-2C
			8	UNII-3
		52T	37	UNII-2C
			38	UNII-2C
			40	UNII-3
		106T	53	UNII-2C
			54	UNII-2C & UNII-3
		242T / SU	61 / -	UNII-2C & UNII-3
HE40	Straddle 5 710 MHz	26T	0	UNII-2C
			9	UNII-2C
			17	UNII-3
		52T	37	UNII-2C
			41	UNII-2C
			44	UNII-3
		106T	53	UNII-2C
			54	UNII-2C
			56	UNII-2C & UNII-3
		242T	61	UNII-2C
			62	UNII-2C & UNII-3
		484T / SU	65 / -	UNII-2C & UNII-3
HE80	Straddle 5 690 MHz	26T	0	UNII-2C
			18	UNII-2C
			36	UNII-3
		52T	37	UNII-2C
			45	UNII-2C
			52	UNII-3
		106T	53	UNII-2C
			57	UNII-2C
			60	UNII-2C & UNII-3
		242T	61	UNII-2C
			62	UNII-2C
			64	UNII-2C & UNII-3
		484T	65	UNII-2C
			66	UNII-2C & UNII-3
		996T / SU	67 / -	UNII-2C & UNII-3

2.5. Duty Cycle Factor

MIMO

Test mode		ANT	Tone	Period (ms)	T _{on} time (ms)	Duty cycle		Duty cycle factor (dB)
						(Linear)	(%)	
802.11ax	HE20	MIMO	26T	2.613	2.594	0.992 7	99.27	0.03
			52T	2.609	2.590	0.992 7	99.27	0.03
			106T	1.453	1.435	0.987 6	98.76	0.05
			242T	0.694	0.676	0.974 1	97.41	0.11
			SU	5.474	5.452	0.996 0	99.60	0.02
	HE40		26T	2.604	2.579	0.990 4	99.04	0.04
			52T	2.609	2.576	0.987 4	98.74	0.06
			106T	1.453	1.435	0.987 6	98.76	0.05
			242T	0.692	0.675	0.975 4	97.54	0.11
			484T	0.405	0.388	0.958 0	95.80	0.19
	SU		5.466	5.448	0.996 7	99.67	0.01	
	HE80		26T	2.611	2.577	0.987 0	98.70	0.06
			52T	2.602	2.568	0.986 9	98.69	0.06
			106T	1.444	1.419	0.982 7	98.27	0.08
			242T	0.692	0.674	0.974 0	97.40	0.11
			484T	0.403	0.387	0.960 3	96.03	0.18
			996T	0.404	0.387	0.957 9	95.79	0.19
			SU	5.475	5.448	0.995 1	99.51	0.02
	HE160		26T	2.611	2.577	0.987 0	98.70	0.06
			52T	2.608	2.559	0.981 2	98.12	0.08
			106T	1.439	1.405	0.976 4	97.64	0.10
			242T	0.692	0.675	0.975 4	97.54	0.11
			484T	0.403	0.387	0.960 3	96.03	0.18
			996T	0.404	0.387	0.957 9	95.79	0.19
			2x996T	5.486	5.451	0.993 6	99.36	0.03
			SU	5.470	5.451	0.996 5	99.65	0.02

Notes.

1. Duty cycle (Linear) = T_{on} time / Period
2. DCF(Duty cycle factor) = 10log(1/duty cycle)
3. DCF is not compensated to average result if duty cycle is more than 98%
4. Please refer to Appendix A for plots

3. Antenna requirement

Requirement of FCC part section 15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. 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 transmitter has permanently attached LDS Antenna (Internal antenna) on board.
- The E.U.T Complies with the requirement of §15.203, §15.407.

3.1 Antenna information

Mode	SISO		CDD	SDM
	ANT1	ANT2	ANT1 + 2	ANT1 + 2
802.11ax HE20	X	X	√	√
802.11ax HE40	X	X	√	√
802.11ax HE80	X	X	√	√
802.11ax HE160	X	X	√	√

√ = Support, X = Not support

3.2 Directional Gain Calculations

According to clause F), 2), d), (i) and (ii) of KDB 662911 D01 Multiple Transmitter Output, Directional gain may be calculated by using the formulas as below.

Directional Antenna Gain

Band	ANT1 Gain (dBi)	ANT2 Gain (dBi)	Power Directional Gain (dBi)
UNII 1	-4.50	-4.70	-1.59
UNII 2A	-4.20	-4.60	-1.39
UNII 2C	-4.20	-4.80	-1.48
UNII 3	-4.40	-4.90	-1.64
UNII 4	-4.40	-4.50	-1.44

Correlated_CDD

Band	ANT1 Gain (dBi)	ANT2 Gain (dBi)	Power Directional Gain (dBi)
UNII 1	-4.50	-4.70	-4.60
UNII 2A	-4.20	-4.60	-4.40
UNII 2C	-4.20	-4.80	-4.49
UNII 3	-4.40	-4.90	-4.64
UNII 4	-4.40	-4.50	-4.45

Uncorrelated_SDM

Note.

1. Correlated_CDD

Unequal antenna gains, with equal transmit powers. For antenna gains given by $G_1, G_2, \dots, G_N$ dBi
 Directional gain = $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$ dBi

Sample calculation

In case of UNII 1, directional gain = $10 \log[(10^{-4.50/20} + 10^{-4.70/20})^2 / 2] = -1.59$ dBi

2. Uncorrelated_SDM

Unequal antenna gains, with equal transmit powers. For antenna gains given by $G_1, G_2, \dots, G_N$ dBi
 Directional gain = $10 \log[10^{G_1/10} + 10^{G_2/10} + \dots + 10^{G_N/10}] / N_{ANT}]$ dBi

Sample calculation

In case of UNII 1, directional gain = $10 \log[(10^{-4.50/10} + 10^{-4.70/10}) / 2] = -4.60$ dBi

4. Introduction

This report referenced from the FCC ID: A3LSMX356B

Based on their similarity, the FCC Part 15E (equipment class: NII) reuse the original model's result and do spot-check, following the FCC KDB 484596 D01 v02r03.

And the applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID.

4.1 Difference

The FCC ID: A3LSMX350 share the same enclosure and circuit board as FCC ID: A3LSMX356B. The WIFI/BT/BLE antenna and surrounding circuitry and layout are identical between these two units.

As for all bands, they have been verified and the parent model test results under FCC ID : A3LSMX356B shall remain representative of FCC ID: A3LSMX350.

Note. The difference between the parent and variant is that the RF circuit for GSM/WCDMA/LTE/NR bands in the parent model SM-X356B is removed from the variant model SM-X350.

4.2 Deviation Criteria

The spot-check measurements, while being always compliant with the applicable rule part(s) for the test under consideration, may show a deviation d_{dB} from the reference data no larger than 3 dB.

- $d_{dB} = |V_{dB} - R_{dB}| \leq 3 \text{ dB}$

V_{dB} : The variant spot check level in dB

R_{dB} : The reference model level in dB

Spot check may be considered acceptable when the deviation d_{dB} from the reference data satisfies the following condition:

- $d_{dB} = |V_{dB} - R_{dB}| \leq (3 + M_{dB} / 20) \text{ dB}$, for $0 \leq M_{dB} \leq 60 \text{ dB}$
- $d_{dB} = |V_{dB} - R_{dB}| = 6 \text{ dB}$, for $M_{dB} > 60 \text{ dB}$

C_{dB} : the compliance threshold in dB

4.3 Spot check verification data

Band	Rule Part	Test mode	Test mode	Test Frequency (MHz)	Reference model	Variant model	Deviation	Deviation limit	Remark
					SM-X356B	SM-X350	(dB)	(dB)	
UNII-1	15.407(a)	Output power	11ax20_SU MIMO	5 200	19.91 dBm	19.86 dBm	-0.05	±3	-
		Power density	11ax20_SU MIMO	5 200	9.68 dBm/MHz	9.40 dBm/MHz	-0.28	±3	-
	15.407(b), 15.205(a), 15.209(a)	Band-edge	11ax40_484T65 MIMO	5 190	51.09 dBuV/m	48.56 dBuV/m	-2.53	±3	-
		Spurious	11ax20_SU MIMO	5 180	60.03 dBuV/m	58.83 dBuV/m	-1.20	±3	-
UNII-2A	15.407(a)	Output power	11ax20_SU MIMO	5 260	19.52 dBm	19.43 dBm	-0.09	±3	-
		Power density	11ax20_SU MIMO	5 260	9.37 dBm/MHz	8.97 dBm/MHz	-0.40	±3	-
	15.407(b), 15.205(a), 15.209(a)	Band-edge	11ax40_484T65 MIMO	5 310	49.82 dBuV/m	47.74 dBuV/m	-2.08	±3	-
		Spurious	11ax40_484T65 MIMO	5 270	41.66 dBuV/m	40.72 dBuV/m	-0.94	±3	-
UNII-2C	15.407(a)	Output power	11ax20_SU MIMO	5 600	19.61 dBm	19.28 dBm	-0.33	±3	-
		Power density	11ax20_SU MIMO	5 500	9.44 dBm/MHz	8.44 dBm/MHz	-0.60	±3	-
	15.407(b), 15.205(a), 15.209(a)	Band-edge	11ax20_106T54 MIMO	5 700	64.58 dBuV/m	63.98 dBuV/m	-0.60	±3	-
		Spurious	11ax80_SU MIMO	5 690	53.32 dBuV/m	51.59 dBuV/m	-1.73	±3	-
UNII-3	15.407(a)	Output power	11ax20_SU MIMO	5 785	19.95 dBm	19.12 dBm	-0.83	±3	-
		Power density	11ax20_SU MIMO	5 745	6.93 dBm/500kHz	6.49 dBm/500kHz	-0.44	±3	-
	15.407(b), 15.205(a), 15.209(a)	Band-edge	11ax80_996T67 MIMO	5 775	71.96 dBuV/m	69.47 dBuV/m	-2.49	±3	-
		Spurious	11ax20_SU MIMO	5 825	52.33 dBuV/m	50.04 dBuV/m	-2.29	±3	-
UNII-4	15.407(a)	Output power	11ax20_SU MIMO	5 865	18.24 dBm	17.98 dBm	-0.26	±3	-
		Power density	11ax20_SU MIMO	5 865	8.05 dBm/MHz	7.63 dBm/MHz	-0.42	±3	-
	15.407(b), 15.205(a), 15.209(a)	Band-edge	11ax20_SU MIMO	5 885	86.74 dBuV/m	88.09 dBuV/m	1.35	±3	-
		Spurious	11ax40_SU MIMO	5 835	57.29 dBuV/m	54.79 dBuV/m	-2.50	±3	-

Notes:

- FCC ID: A3LSMX350 have been verified the performance as for WIFI identical with the FCC ID: A3LSMX356B.
- The test procedure(s) in this report were performed in accordance as following.
 - KDB 484596 D01 v02r03

4.4 Reference Detail

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

Equipment Class	Reference FCC ID	Application Type	Reference Test report Number	Exhibit Type	Variant Test Report Number	Data Re-used
DTS	A3LSMX356B	Original	KR25-SRF0022 (802.11b/g/n)	Test report	KR25-SRF0031	All
			KR25-SRF0023 (802.11ax)	Test report	KR25-SRF0032	All
			KR25-SRF0021-A (Bluetooth LE)	Test report	KR25-SRF0030	All
DSS	A3LSMX356B	Original	KR25-SRF0020 (Bluetooth)	Test report	KR25-SRF0029	All
NII	A3LSMX356B	Original	KR25-SRF0024 (802.11a/n/ac)	Test report	KR25-SRF0033	Partial ¹⁾
			KR25-SRF0025 (802.11ax)	Test report	KR25-SRF0034	All
6CD, 6VL	A3LSMX356B	Original	KR25-SRF0028-A (802.11a/ax)	Test report	KR25-SRF0035	Partial ²⁾

Notes:

1. The DFS (Dynamic Frequency Selection) test item was additionally investigated.
2. Contention-based protocol (CBP), dual client testing, standard power access points, and Transmitter power control (TPC) test items were also investigated.

5. Summary of tests

FCC Part section(s)	Parameter	Test Condition	Test results
15.407(a)	Maximum conducted output power	Conducted	Pass
15.407(a)	Maximum power spectral density		Pass
15.407(a)	26 dB Channel Bandwidth & 99% Bandwidth		Pass
15.407(e)	6 dB Channel Bandwidth		Pass
15.207(a)	AC Conducted Emissions		Pass
15.407(b)	Spurious emission	Radiated	Pass
15.205(a) 15.209(a)	Band-edge, restricted band		Pass

Notes:

- All modes of operation and data rates were investigated. The test results shown in the following sections represent the worst case emissions.
- According to exploratory test no any obvious emission were detected from 9 kHz to 30 MHz. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30 m open field site. Therefore, sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.
- EUT was investigated in three orthogonal orientations X, Y and Z. it was determined that Y orientation was worst-case orientation. Therefore, all final radiated testing was performed with the EUT in Y orientation.
- All configurations have been performed (Stand-alone, Stand-alone with TA, With accessories).
 - Accessory type: S-pen, TA, DLC, Protective cover
 - Worst case: Stand-alone
- The test procedure(s) in this report were performed in accordance as following.
 - ANSI C63.10-2013
 - KDB 662911 D01 v02r01
 - KDB 789033 D02 v02r01
 - KDB 291074 D02 v01
- Based on the baseline scan, the worst-case data rates were:
 - 802.11ax HE20 mode: HE0
 - 802.11ax HE40 mode: HE0
 - 802.11ax HE80 mode: HE0
 - 802.11ax HE160 mode: HE0
- For AC Conducted emission and spurious emission below 1 GHz, please refer to 15.407 legacy test report.

6. Measurement uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.10-2013.

All measurement uncertainty values are shown with a coverage factor of $k=2$ to indicated a 95 % level of confidence. The measurement data shown herein meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and thus, can be compared directly to specified limits to determine compliance.

Parameter	Expanded Uncertainty ($\pm$)	
Conducted RF Power	0.9 dB	
Conducted spurious emissions	2.0 dB	
Radiated spurious emissions	Below 30 MHz	2.3 dB
	30 MHz to 1 000 MHz	2.6 dB
	1 000 MHz to 18 000 MHz	4.8 dB
	Above 18 000 MHz	4.8 dB
Conducted emissions	150 kHz to 30 MHz	2.9 dB

7. Measurement results explanation example

The offset level is set in the spectrum analyzer to compensate the RF cable loss factor between EUT conducted output port and spectrum analyzer.

With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Frequency (MHz)	Factor(dB)	Frequency (MHz)	Factor(dB)
30	10.00	9 000	12.56
50	10.04	10 000	12.72
100	10.13	11 000	12.88
200	10.25	12 000	13.05
300	10.34	13 000	13.04
400	10.42	14 000	13.21
500	10.49	15 000	13.41
600	10.55	16 000	13.49
700	10.60	17 000	13.65
800	10.65	18 000	13.66
900	10.71	19 000	13.90
1 000	10.75	20 000	13.84
2 000	11.11	21 000	14.12
3 000	11.39	22 000	14.21
4 000	11.60	23 000	14.45
5 000	11.84	24 000	14.47
6 000	11.98	25 000	14.81
7 000	12.21	26 000	14.68
8 000	12.36	26 500	14.97

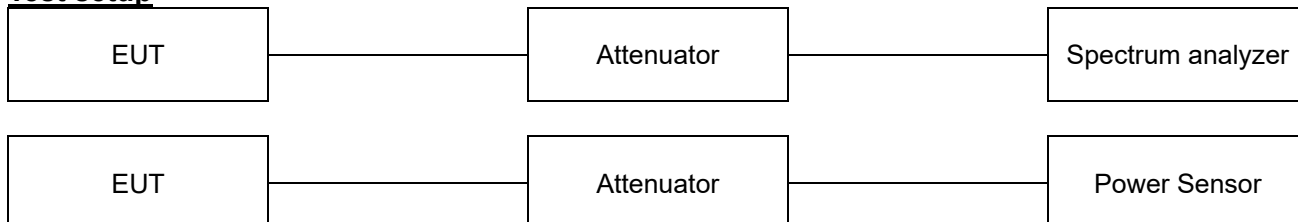
Notes:

Offset(dB) = RF cable loss(dB) + Attenuator(dB)

8. Test results

8.1. Maximum conducted output power

Test setup



Limit

According to §15.407(a),

Band	EUT category		Conducted output power limit
UNII-1		Outdoor access point	1 W (30 dBm)
		Indoor access point	
		Fixed point-to-point access point	
	√	Client device	250 mW (23.98 dBm)
UNII-2A	√		250 mW or 11 dBm + 10logB ¹⁾
UNII-2C	√		250 mW or 11 dBm + 10logB ¹⁾
UNII-3	√		1 W (30 dBm)
UNII-4	√		EIRP 30 dBm

Note:

- 1) Limit B is the 26 dB emission bandwidth.
- 2) Please refer to Appendix A for plots

Test procedure

ANSI C63.10-2013-Section 12.3.2.4 or 12.3.3.1, 14.2
 KDB 789033 D02 v02r01 - Section E.2.d) or E.3.a)
 KDB 662911 D01 v02r01 – Section E).1) and Section F)

Test settings

Used test method is Section E.2.d) and Section E.3.a)

◆ KDB 789033 D02 v02r01

Section E.2.d)

Method SA-2 (trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction):

- (i) Measure the duty cycle, x , of the transmitter output signal as described in II.B..
- (ii) Set span to encompass the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
- (iii) Set RBW = 1 MHz
- (iv) Set RBW $\geq$ 3 MHz
- (v) Number of points in sweep $\geq 2 \times \text{span} / \text{RBW}$. (This ensures that bin-to-bin spacing is $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.)
- (vi) Sweep time = auto.
- (vii) Detector = power averaging (rms), if available. Otherwise use sample detector mode.
- (viii) Do not use sweep triggering. Allow the sweep to “free run.”
- (ix) Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.
- (x) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument’s band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
- (xi) Add $10 \log (1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add $10 \log (1/0.25) = 6 \text{ dB}$ if the duty cycle is 25%.

Section E.3.a)

Method PM (Measurement using an RF average power meter):

- (i) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the conditions listed below are satisfied.
 - The EUT is configured to transmit continuously or to transmit with a constant duty cycle.
 - At all times when the EUT is transmitting, it must be transmitting at its maximum power control level.
 - The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five
- (ii) If the transmitter does not transmit continuously, measure the duty cycle, x , of the transmitter output signal as described in II
- (iii) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
- (iv) Adjust the measurement in dBm by adding $10 \log (1/x)$ where x is the duty cycle (e.g., $10 \log (1/0.25)$ if the duty cycle is 25%).

Notes: All channels except the straddle channel which RU allocation included in the straddle band were measured with a power meter.

Test results

802.11ax HE20 MIMO in the UNII 1 band Conducted Output Power

Conducted Output Power								
Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
Low	5 180	26T	0	7.61	7.76	-	10.70	23.98
			4	7.21	7.30	-	10.27	23.98
			8	7.71	7.80	-	10.77	23.98
		52T	37	10.30	9.99	-	13.16	23.98
			38	10.07	9.76	-	12.93	23.98
			40	10.35	9.95	-	13.16	23.98
		106T	53	14.96	14.64	-	17.81	23.98
			54	14.78	14.52	-	17.66	23.98
		242T	61	16.18	16.10	0.11	19.26	23.98
		SU	-	16.73	16.74	-	19.75	23.98
Mid	5 200	26T	0	7.66	7.95	-	10.82	23.98
			4	7.25	7.61	-	10.44	23.98
			8	7.67	7.97	-	10.83	23.98
		52T	37	10.31	10.24	-	13.29	23.98
			38	10.15	10.02	-	13.10	23.98
			40	10.29	10.21	-	13.26	23.98
		106T	53	14.87	14.76	-	17.83	23.98
			54	14.84	14.81	-	17.84	23.98
		242T	61	16.28	16.30	0.11	19.41	23.98
		SU	-	16.83	16.96	-	19.91	23.98
High	5 240	26T	0	7.34	7.69	-	10.53	23.98
			4	6.87	7.21	-	10.05	23.98
			8	7.28	7.66	-	10.48	23.98
		52T	37	9.78	10.11	-	12.96	23.98
			38	9.56	9.92	-	12.75	23.98
			40	9.78	10.12	-	12.96	23.98
		106T	53	14.48	14.76	-	17.63	23.98
			54	14.45	14.76	-	17.62	23.98
		242T	61	15.91	16.17	0.11	19.16	23.98
		SU	-	16.35	16.75	-	19.56	23.98

Notes:

1. $\text{Result(dBm)} = \text{Reading } 10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)}) \text{ (dBm)} + \text{D.C.F (dB)}$

802.11ax HE40 MIMO in the UNII 1 band

Conducted Output Power

Conducted Output Power								
Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
Low	5 190	26T	0	7.01	7.43	-	10.24	23.98
			9	6.95	7.12	-	10.05	23.98
			17	7.11	7.39	-	10.26	23.98
		52T	37	9.76	9.78	-	12.78	23.98
			41	9.71	9.57	-	12.65	23.98
			44	9.82	9.80	-	12.82	23.98
		106T	53	14.31	14.31	-	17.32	23.98
			54	14.24	14.12	-	17.19	23.98
			56	14.40	14.28	-	17.35	23.98
		242T	61	15.72	15.72	0.11	18.84	23.98
			62	15.77	15.72	0.11	18.87	23.98
		484T	65	15.74	15.72	0.19	18.93	23.98
		SU	-	16.05	16.09	-	19.08	23.98
High	5 230	26T	0	7.21	7.57	-	10.40	23.98
			9	6.90	7.40	-	10.17	23.98
			17	7.10	7.57	-	10.35	23.98
		52T	37	9.38	9.67	-	12.54	23.98
			41	9.09	9.54	-	12.33	23.98
			44	9.23	9.70	-	12.48	23.98
		106T	53	13.94	14.33	-	17.15	23.98
			54	13.75	14.19	-	16.99	23.98
			56	13.83	14.31	-	17.09	23.98
		242T	61	15.29	15.67	0.11	18.60	23.98
			62	15.22	15.66	0.11	18.57	23.98
		484T	65	15.25	15.66	0.19	18.66	23.98
		SU	-	15.53	16.00	-	18.78	23.98

Notes:

1. $\text{Result(dBm)} = \text{Reading } 10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)}) \text{ (dBm)} + \text{D.C.F (dB)}$

802.11ax HE80 MIMO in the UNII 1 band
Conducted Output Power

Conducta Output Power								
Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
Mid	5 210	26T	0	7.45	7.49	-	10.48	23.98
			18	7.36	7.33	-	10.36	23.98
			36	7.41	7.50	-	10.47	23.98
		52T	37	9.98	9.85	-	12.93	23.98
			45	9.93	9.71	-	12.83	23.98
			52	9.95	9.88	-	12.93	23.98
		106T	53	14.61	14.46	-	17.55	23.98
			57	14.52	14.34	-	17.44	23.98
			60	14.54	14.45	-	17.51	23.98
		242T	61	15.35	15.53	0.11	18.56	23.98
			62	15.43	15.42	0.11	18.55	23.98
			64	15.28	15.54	0.11	18.53	23.98
		484T	65	15.33	15.34	0.18	18.53	23.98
			66	15.22	15.40	0.18	18.50	23.98
		996T	67	15.27	15.37	0.19	18.52	23.98
		SU	-	15.66	15.61	-	18.65	23.98

Notes:

1. $\text{Result(dBm)} = \text{Reading } 10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)}) \text{ (dBm)} + \text{D.C.F (dB)}$

802.11ax HE160 MIMO in the UNII 1&2A band

Conducted Output Power

Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
Low	5 250	26T	0L	7.52	7.17	-	10.36	23.98
			0U	7.04	6.76	-	9.91	23.98
			36U	7.51	7.29	-	10.41	23.98
		52T	37L	10.13	9.81	-	12.98	23.98
			37U	9.59	9.31	-	12.46	23.98
			52U	9.98	9.81	-	12.91	23.98
		106T	53L	14.72	14.46	0.10	17.70	23.98
			53U	14.20	14.01	0.10	17.22	23.98
			60U	14.54	14.43	0.10	17.60	23.98
		242T	61L	14.83	14.39	0.11	17.74	23.98
			61U	14.18	13.98	0.11	17.20	23.98
			64U	14.40	14.36	0.11	17.50	23.98
		484T	65L	14.52	14.14	0.18	17.52	23.98
			65U	14.19	13.91	0.18	17.24	23.98
			66U	14.23	14.12	0.18	17.37	23.98
		996T	67L	14.29	13.97	0.19	17.33	23.98
			67U	13.90	13.95	0.19	17.13	23.98
		2X996T	68	13.75	13.62	-	16.70	23.98
		SU	-	14.88	14.86	-	17.88	23.98

Notes:

1. $\text{Result(dBm)} = \text{Reading } 10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)}) \text{ (dBm)} + \text{D.C.F (dB)}$

802.11ax HE20 MIMO in the UNII 2A band

Conducted Output Power

Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
Low	5 260	26T	0	7.32	7.56	-	10.45	23.69
			4	6.81	7.11	-	9.97	23.69
			8	7.21	7.52	-	10.38	23.69
		52T	37	9.80	9.96	-	12.89	23.69
			38	9.55	9.73	-	12.65	23.69
			40	9.72	9.93	-	12.84	23.69
		106T	53	14.50	14.53	-	17.53	23.69
			54	14.47	14.53	-	17.51	23.69
		242T	61	15.89	15.95	0.11	19.04	23.69
		SU	-	16.44	16.57	-	19.52	23.69
Mid	5 280	26T	0	7.29	7.59	-	10.45	23.69
			4	6.80	7.07	-	9.95	23.69
			8	7.24	7.51	-	10.39	23.69
		52T	37	9.79	9.94	-	12.88	23.69
			38	9.55	9.73	-	12.65	23.69
			40	9.71	9.92	-	12.83	23.69
		106T	53	14.53	14.51	-	17.53	23.69
			54	14.44	14.50	-	17.48	23.69
		242T	61	15.90	15.98	0.11	19.06	23.69
		SU	-	16.43	16.54	-	19.50	23.69
High	5 320	26T	0	7.33	7.23	-	10.29	23.69
			4	6.89	6.80	-	9.86	23.69
			8	7.32	7.18	-	10.26	23.69
		52T	37	9.76	9.86	-	12.82	23.69
			38	9.50	9.65	-	12.59	23.69
			40	9.69	9.83	-	12.77	23.69
		106T	53	14.46	14.40	-	17.44	23.69
			54	14.45	14.39	-	17.43	23.69
		242T	61	15.89	15.88	0.11	19.01	23.69
		SU	-	16.40	16.53	-	19.48	23.69

Notes:

1. $\text{Result(dBm)} = \text{Reading } 10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)}) \text{ (dBm)} + \text{D.C.F (dB)}$

802.11ax HE40 MIMO in the UNII 2A band

Conducted Output Power

Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
Low	5 270	26T	0	7.18	7.51	-	10.36	23.98
			9	6.89	7.23	-	10.07	23.98
			17	7.06	7.47	-	10.28	23.98
		52T	37	9.33	9.54	-	12.45	23.98
			41	9.07	9.30	-	12.20	23.98
			44	9.21	9.45	-	12.34	23.98
		106T	53	14.01	14.10	-	17.07	23.98
			54	13.80	13.97	-	16.90	23.98
			56	13.88	14.07	-	16.99	23.98
		242T	61	15.85	16.00	0.11	19.05	23.98
			62	15.76	15.96	0.11	18.98	23.98
		484T	65	15.80	15.97	0.19	19.09	23.98
		SU	-	16.10	16.30	-	19.21	23.98
High	5 310	26T	0	6.69	6.61	-	9.66	23.98
			9	6.39	6.36	-	9.39	23.98
			17	6.55	6.57	-	9.57	23.98
		52T	37	9.32	9.44	-	12.39	23.98
			41	9.08	9.23	-	12.17	23.98
			44	9.18	9.43	-	12.32	23.98
		106T	53	13.95	13.98	-	16.98	23.98
			54	13.78	13.81	-	16.81	23.98
			56	13.86	13.94	-	16.91	23.98
		242T	61	15.79	15.88	0.11	18.96	23.98
			62	15.71	15.92	0.11	18.94	23.98
		484T	65	15.75	15.89	0.19	19.02	23.98
		SU	-	16.05	16.21	-	19.14	23.98

Notes:

1. Result(dBm) = Reading $10\log(10^{(ANT1/10)} + 10^{(ANT2/10)})$ (dBm) + D.C.F (dB)

802.11ax HE80 MIMO in the UNII 2A band

Conducted Output Power

Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
Mid	5 290	26T	0	7.02	6.59	-	9.82	23.98
			18	6.75	6.45	-	9.61	23.98
			36	6.80	6.51	-	9.67	23.98
		52T	37	9.66	9.17	-	12.43	23.98
			45	9.41	8.95	-	12.20	23.98
			52	9.38	9.05	-	12.23	23.98
		106T	53	14.39	13.77	-	17.10	23.98
			57	14.07	13.58	-	16.84	23.98
			60	14.12	13.70	-	16.93	23.98
		242T	61	15.34	14.69	0.11	18.15	23.98
			62	15.15	14.60	0.11	18.00	23.98
			64	15.04	14.60	0.11	17.95	23.98
		484T	65	15.13	14.52	0.18	18.03	23.98
			66	14.96	14.48	0.18	17.92	23.98
		996T	67	15.02	14.48	0.19	17.96	23.98
		SU	-	15.24	15.05	-	18.16	23.98

Notes:

1. Result(dBm) = Reading $10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)})$ (dBm) + D.C.F (dB)

802.11ax HE20 MIMO in the UNII 2C band

Conducted Output Power

Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
Low	5 500	26T	0	7.92	7.91	-	10.93	22.63
			4	7.52	7.51	-	10.53	22.63
			8	7.51	7.50	-	10.52	22.63
		52T	37	9.92	9.72	-	12.83	22.63
			38	9.74	9.56	-	12.66	22.63
			40	10.04	9.82	-	12.94	22.63
		106T	53	14.59	14.33	-	17.47	22.63
			54	14.66	14.37	-	17.53	22.63
		242T	61	16.13	15.87	0.11	19.12	22.63
		SU	-	16.57	16.60	-	19.60	22.63
Mid	5 600	26T	0	7.49	7.70	-	10.61	22.63
			4	7.06	7.30	-	10.19	22.63
			8	7.52	7.74	-	10.64	22.63
		52T	37	10.28	9.93	-	13.12	22.63
			38	10.02	9.66	-	12.85	22.63
			40	10.27	9.94	-	13.12	22.63
		106T	53	14.64	14.58	-	17.62	22.63
			54	14.62	14.58	-	17.61	22.63
		242T	61	16.09	15.98	0.11	19.16	22.63
		SU	-	16.52	16.67	-	19.61	22.63
High	5 700	26T	0	7.68	7.18	-	10.45	22.63
			4	7.31	6.83	-	10.09	22.63
			8	7.81	7.31	-	10.58	22.63
		52T	37	10.24	9.45	-	12.87	22.63
			38	10.03	9.23	-	12.66	22.63
			40	10.34	9.59	-	12.99	22.63
		106T	53	14.81	14.14	-	17.50	22.63
			54	14.89	14.22	-	17.58	22.63
		242T	61	16.14	15.63	0.11	19.01	22.63
		SU	-	16.61	16.25	-	19.44	22.63
Straddle	5 720	26T	0	7.66	7.40	-	10.54	22.63
			4	7.33	7.00	-	10.18	22.63
		52T	37	10.25	9.69	-	12.99	22.63
			38	10.07	9.53	-	12.82	22.63
		106T	53	14.79	14.34	-	17.58	22.63

Notes:

1. $\text{Result(dBm)} = \text{Reading } 10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)}) \text{ (dBm)} + \text{D.C.F (dB)}$

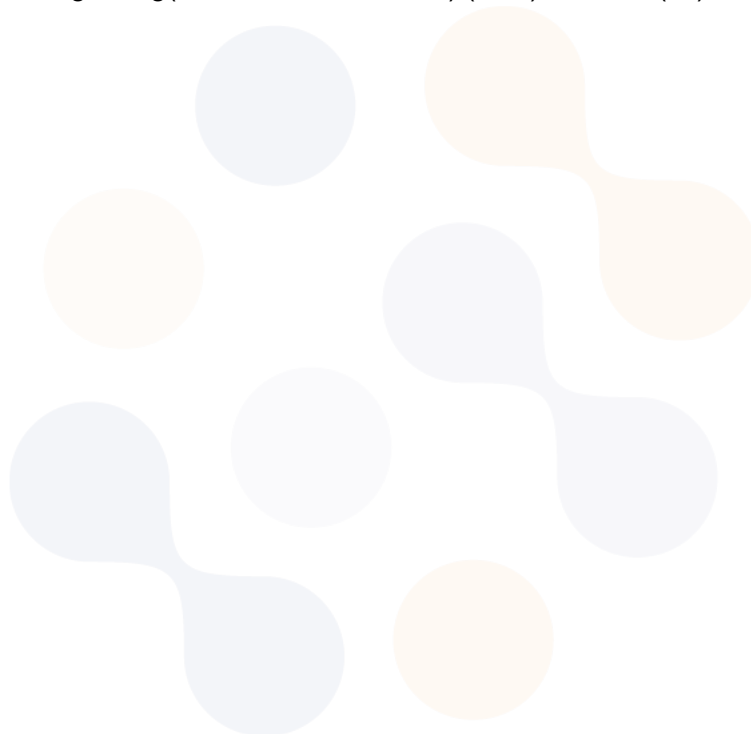
802.11ax HE40 MIMO in the UNII 2C band
Conducted Output Power

Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
Low	5 510	26T	0	7.18	7.14	-	10.17	23.98
			9	7.08	6.97	-	10.04	23.98
			17	7.44	7.12	-	10.29	23.98
		52T	37	9.37	9.21	-	12.30	23.98
			41	9.30	9.07	-	12.20	23.98
			44	9.65	9.19	-	12.44	23.98
		106T	53	14.01	13.77	-	16.90	23.98
			54	13.92	13.67	-	16.81	23.98
			56	14.28	13.74	-	17.03	23.98
		242T	61	15.84	15.78	0.11	18.93	23.98
			62	16.02	15.77	0.11	19.02	23.98
		484T	65	15.96	15.77	0.19	19.07	23.98
		SU	-	16.31	16.15	-	19.24	23.98
Mid	5 590	26T	0	7.28	7.39	-	10.35	23.98
			9	7.13	7.13	-	10.14	23.98
			17	7.35	7.39	-	10.38	23.98
		52T	37	9.69	9.48	-	12.60	23.98
			41	9.47	9.22	-	12.36	23.98
			44	9.74	9.42	-	12.59	23.98
		106T	53	14.13	14.11	-	17.13	23.98
			54	14.03	13.92	-	16.99	23.98
			56	14.17	14.04	-	17.12	23.98
		242T	61	15.86	15.94	0.11	19.02	23.98
			62	15.87	15.90	0.11	19.01	23.98
		484T	65	15.87	15.91	0.19	19.09	23.98
		SU	-	16.26	16.19	-	19.24	23.98
High	5 670	26T	0	7.33	7.07	-	10.21	23.98
			9	7.31	6.90	-	10.12	23.98
			17	7.72	7.16	-	10.46	23.98
		52T	37	9.68	9.07	-	12.40	23.98
			41	9.68	9.01	-	12.37	23.98
			44	10.03	9.23	-	12.66	23.98
		106T	53	14.06	13.75	-	16.92	23.98
			54	14.01	13.65	-	16.84	23.98
			56	14.38	13.83	-	17.12	23.98
		242T	61	15.76	15.57	0.11	18.79	23.98
			62	15.95	15.64	0.11	18.92	23.98
		484T	65	15.79	15.45	0.19	18.82	23.98
		SU	-	16.11	15.87	-	19.00	23.98

Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
Straddle	5 710	26T	0	7.10	6.61	-	9.87	23.98
			9	7.00	6.48	-	9.76	23.98
		52T	37	9.79	9.19	-	12.51	23.98
			41	9.76	9.15	-	12.48	23.98
		106T	53	14.46	13.79	-	17.15	23.98
			54	14.38	13.69	-	17.06	23.98
		242T	61	16.22	15.73	0.11	19.10	23.98

Notes:

1. $\text{Result(dBm)} = \text{Reading } 10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)}) \text{ (dBm)} + \text{D.C.F (dB)}$



802.11ax HE80 MIMO in the UNII 2C band
Conducted Output Power

Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
Low	5 530	26T	0	7.43	7.03	-	10.24	23.98
			18	7.55	6.83	-	10.22	23.98
			36	7.83	6.96	-	10.43	23.98
		52T	37	9.53	8.87	-	12.22	23.98
			45	9.66	8.74	-	12.23	23.98
			52	9.88	8.84	-	12.40	23.98
		106T	53	14.22	13.49	-	16.88	23.98
			57	14.38	13.33	-	16.90	23.98
			60	14.54	13.49	-	17.06	23.98
		242T	61	15.27	14.52	0.11	18.03	23.98
			62	15.39	14.44	0.11	18.06	23.98
			64	15.53	14.41	0.11	18.13	23.98
		484T	65	15.21	14.31	0.18	17.97	23.98
			66	15.37	14.29	0.18	18.05	23.98
		996T	67	15.24	14.31	0.19	18.00	23.98
		SU	-	15.51	14.84	-	18.20	23.98
High	5 610	26T	0	6.99	6.41	-	9.72	23.98
			18	6.98	6.30	-	9.66	23.98
			36	7.31	6.42	-	9.90	23.98
		52T	37	9.13	9.01	-	12.08	23.98
			45	9.12	8.88	-	12.01	23.98
			52	9.40	8.99	-	12.21	23.98
		106T	53	14.28	14.12	-	17.21	23.98
			57	14.25	14.02	-	17.15	23.98
			60	14.54	14.07	-	17.32	23.98
		242T	61	15.22	15.16	0.11	18.31	23.98
			62	15.20	15.01	0.11	18.23	23.98
			64	15.56	15.13	0.11	18.47	23.98
		484T	65	15.15	15.00	0.18	18.27	23.98
			66	15.34	15.03	0.18	18.38	23.98
		996T	67	15.23	14.99	0.19	18.31	23.98
		SU	-	15.43	15.58	-	18.52	23.98

Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
Straddle	5 690	26T	0	6.93	6.42	-	9.69	23.98
			18	7.21	6.51	-	9.88	23.98
		52T	37	9.67	8.92	-	12.32	23.98
			45	9.94	8.98	-	12.50	23.98
		106T	53	14.05	13.56	-	16.82	23.98
			57	14.32	13.63	-	17.00	23.98
		242T	61	14.97	14.61	0.11	17.91	23.98
			62	15.10	14.65	0.11	18.00	23.98
		484T	65	14.95	14.52	0.18	17.93	23.98

Notes:

1. $\text{Result(dBm)} = \text{Reading } 10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)}) \text{ (dBm)} + \text{D.C.F (dB)}$

802.11ax HE160 MIMO in the UNII 2C band

Conducted Output Power

Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
Mid	5 570	26T	0L	7.05	6.80	-	9.94	23.98
			0U	7.05	6.51	-	9.80	23.98
			36U	7.48	6.40	-	9.98	23.98
		52T	37L	9.56	9.68	-	12.63	23.98
			37U	9.55	9.29	-	12.43	23.98
			52U	10.05	9.23	-	12.67	23.98
		106T	53L	14.19	14.34	0.10	17.38	23.98
			53U	14.26	13.87	0.10	17.18	23.98
			60U	14.70	13.72	0.10	17.35	23.98
		242T	61L	14.21	14.32	0.11	17.39	23.98
			61U	14.26	13.86	0.11	17.18	23.98
			64U	14.50	13.64	0.11	17.21	23.98
		484T	65L	14.08	14.07	0.18	17.27	23.98
			65U	14.00	13.82	0.18	17.10	23.98
			66U	14.26	13.44	0.18	17.06	23.98
		996T	67L	13.98	13.85	0.19	17.12	23.98
			67U	14.42	13.83	0.19	17.34	23.98
		2X996T	68	14.39	14.03	-	17.22	23.98
		SU	-	14.85	14.58	-	17.73	23.98

Notes:

1. $\text{Result(dBm)} = \text{Reading } 10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)}) \text{ (dBm)} + \text{D.C.F (dB)}$

802.11ax HE20 MIMO in the UNII 3 band

Conducted Output Power

Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
Straddle	5 720	26T	8	7.91	7.97	-	10.95	30.00
		52T	40	10.29	9.37	-	12.86	30.00
Low	5 745	26T	0	7.94	7.72	-	10.84	30.00
			4	7.59	7.33	-	10.47	30.00
			8	7.98	7.79	-	10.90	30.00
		52T	37	10.14	9.27	-	12.74	30.00
			38	10.00	9.20	-	12.63	30.00
			40	10.33	9.69	-	13.03	30.00
		106T	53	14.81	14.26	-	17.55	30.00
			54	14.94	14.35	-	17.67	30.00
		242T	61	16.75	16.56	0.11	19.78	30.00
		SU	-	16.83	16.79	-	19.82	30.00
Mid	5 785	26T	0	7.92	7.80	-	10.87	30.00
			4	7.66	7.38	-	10.53	30.00
			8	7.98	7.90	-	10.95	30.00
		52T	37	10.11	9.57	-	12.86	30.00
			38	9.89	9.42	-	12.67	30.00
			40	10.30	9.67	-	13.01	30.00
		106T	53	14.65	14.36	-	17.52	30.00
			54	14.76	14.44	-	17.61	30.00
		242T	61	16.84	16.61	0.11	19.85	30.00
		SU	-	16.99	16.88	-	19.95	30.00
High	5 825	26T	0	7.98	7.94	-	10.97	30.00
			4	7.61	7.54	-	10.59	30.00
			8	7.99	7.96	-	10.99	30.00
		52T	37	10.43	10.19	-	13.32	30.00
			38	10.30	9.95	-	13.14	30.00
			40	10.45	10.28	-	13.38	30.00
		106T	53	14.59	14.39	-	17.50	30.00
			54	14.75	14.44	-	17.61	30.00
		242T	61	16.38	16.37	0.11	19.50	30.00
		SU	-	16.46	16.53	-	19.51	30.00

Notes:

1. $\text{Result(dBm)} = \text{Reading } 10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)}) \text{ (dBm)} + \text{D.C.F (dB)}$

802.11ax HE40 MIMO in the UNII 3 band

Conducted Output Power

Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
Straddle	5 710	26T	17	7.34	6.26	-	9.84	30.00
		52T	44	10.07	8.94	-	12.55	30.00
Low	5 755	26T	0	7.44	6.99	-	10.23	30.00
			9	7.43	6.87	-	10.17	30.00
			17	7.83	7.25	-	10.56	30.00
		52T	37	9.43	9.04	-	12.25	30.00
			41	9.41	8.97	-	12.21	30.00
			44	9.74	9.24	-	12.51	30.00
		106T	53	14.26	13.79	-	17.04	30.00
			54	14.25	13.71	-	17.00	30.00
			56	14.59	13.96	-	17.30	30.00
		242T	61	16.01	15.59	0.11	18.93	30.00
			62	16.21	15.65	0.11	19.06	30.00
		484T	65	15.99	15.50	0.19	18.95	30.00
		SU	-	16.22	15.95	-	19.10	30.00
High	5 795	26T	0	7.21	6.42	-	9.84	30.00
			9	7.21	6.33	-	9.80	30.00
			17	7.65	6.64	-	10.18	30.00
		52T	37	9.62	8.61	-	12.15	30.00
			41	9.66	8.52	-	12.14	30.00
			44	9.98	8.78	-	12.43	30.00
		106T	53	14.06	13.42	-	16.76	30.00
			54	14.05	13.35	-	16.72	30.00
			56	14.38	13.60	-	17.02	30.00
		242T	61	16.14	15.65	0.11	19.02	30.00
			62	16.37	15.76	0.11	19.20	30.00
		484T	65	16.15	15.58	0.19	19.07	30.00
		SU	-	16.61	16.03	-	19.34	30.00

Notes:

1. $\text{Result(dBm)} = \text{Reading } 10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)}) \text{ (dBm)} + \text{D.C.F (dB)}$

802.11ax HE80 MIMO in the UNII 3 band

Conducted Output Power

Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
Straddle	5 690	26T	36	7.28	6.73	-	10.02	30.00
		52T	52	9.77	8.72	-	12.29	30.00
Mid	5 775	26T	0	6.84	6.33	-	9.60	30.00
			18	7.10	6.36	-	9.76	30.00
			36	7.73	6.67	-	10.24	30.00
		52T	37	9.29	8.83	-	12.08	30.00
			45	9.66	8.92	-	12.32	30.00
			52	10.13	9.16	-	12.68	30.00
		106T	53	14.09	13.51	-	16.82	30.00
			57	14.46	13.66	-	17.09	30.00
			60	14.41	13.48	-	16.98	30.00
		242T	61	14.59	13.94	0.11	17.40	30.00
			62	14.72	13.99	0.11	17.49	30.00
			64	14.72	13.98	0.11	17.49	30.00
		484T	65	14.47	13.87	0.18	17.37	30.00
			66	14.92	14.08	0.18	17.71	30.00
		996T	67	15.02	14.09	0.19	17.78	30.00
		SU	-	15.09	14.47	-	17.80	30.00

Notes:

1. $\text{Result(dBm)} = \text{Reading } 10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)}) \text{ (dBm)} + \text{D.C.F (dB)}$

802.11ax HE20 MIMO in the Straddle Conducted Output Power

Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
UNII 2C	5 720	106T	54	11.35	10.85	-	14.12	22.63
		242T	61	14.92	14.60	0.11	17.88	22.63
		SU	-	15.80	15.60	-	18.71	22.63
UNII 3		106T	54	12.44	11.87	-	15.17	30.00
		242T	61	10.26	9.76	0.11	13.14	30.00
		SU	-	9.27	8.97	-	12.13	30.00

802.11ax HE40 MIMO in the Straddle Conducted Output Power

Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
UNII 2C	5 710	106T	56	11.86	11.13	-	14.52	23.98
		242T	62	15.33	14.82	0.11	18.20	23.98
		484T	65	15.79	15.28	0.19	18.74	23.98
		SU	-	16.17	15.76	-	18.98	23.98
UNII 3		106T	56	11.57	10.83	-	14.23	30.00
		242T	62	9.89	9.18	0.11	12.67	30.00
		484T	65	6.86	6.28	0.19	9.78	30.00
		SU	-	5.28	4.76	-	8.04	30.00

802.11ax HE80 MIMO in the Straddle Conducted Output Power

Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
UNII 2C	5 690	106T	60	11.78	11.03	-	14.43	23.98
		242T	64	14.43	13.84	0.11	17.27	23.98
		484T	66	14.78	14.18	0.18	17.68	23.98
		996T	67	14.83	14.32	0.19	17.78	23.98
		SU	-	15.51	15.14	-	18.34	23.98
UNII 3		106T	60	11.58	10.78	-	14.21	30.00
		242T	64	8.90	8.14	0.11	11.66	30.00
		484T	66	5.70	5.04	0.18	8.57	30.00
		996T	67	2.82	2.04	0.19	5.65	30.00
		SU	-	0.61	0.09	-	3.37	30.00

Notes:

1. $\text{Result(dBm)} = \text{Reading } 10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)}) \text{ (dBm)} + \text{D.C.F (dB)}$

802.11ax HE20 MIMO in the UNII 4 band

Conducted Output Power

Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
Low	5 845	26T	0	7.33	7.58	-	10.47	30.00
			4	6.99	7.17	-	10.09	30.00
			8	7.55	7.78	-	10.68	30.00
		52T	37	10.28	10.25	-	13.28	30.00
			38	10.13	10.05	-	13.10	30.00
			40	10.45	10.39	-	13.43	30.00
		106T	53	14.48	14.44	-	17.47	30.00
			54	14.58	14.49	-	17.55	30.00
		242T	61	16.27	16.49	0.11	19.50	30.00
		SU	-	16.34	16.65	-	19.51	30.00
Mid	5 865	26T	0	7.27	7.51	-	10.40	30.00
			4	6.92	7.14	-	10.04	30.00
			8	7.48	7.65	-	10.58	30.00
		52T	37	9.84	9.99	-	12.93	30.00
			38	9.65	9.79	-	12.73	30.00
			40	9.97	10.03	-	13.01	30.00
		106T	53	14.33	14.71	-	17.53	30.00
			54	14.48	14.78	-	17.64	30.00
		242T	61	16.49	16.61	0.11	19.67	30.00
		SU	-	16.61	16.73	-	19.68	30.00
High	5 885	26T	0	7.54	6.75	-	10.17	30.00
			4	7.11	6.34	-	9.75	30.00
			8	7.63	6.91	-	10.30	30.00
		52T	37	9.86	9.95	-	12.92	30.00
			38	9.63	9.76	-	12.71	30.00
			40	10.00	10.05	-	13.04	30.00
		106T	53	14.71	13.82	-	17.30	30.00
			54	14.76	13.93	-	17.38	30.00
		242T	61	16.97	16.05	0.11	19.65	30.00
		SU	-	16.77	16.53	-	19.66	30.00

Notes:

1. $\text{Result(dBm)} = \text{Reading } 10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)}) \text{ (dBm)} + \text{D.C.F (dB)}$

E.I.R.P.

Channel	Frequency (MHz)	Tones	RU offset	Conducted Output Power (dBm)	ANT gain (dBi)	MAX e.i.r.p (dBm)	MAX e.i.r.p Limit (dBm)
Low	5 845	26T	0	10.47	-1.44	9.03	30.00
			4	10.09		8.65	30.00
			8	10.68		9.24	30.00
		52T	37	13.28		11.84	30.00
			38	13.10		11.66	30.00
			40	13.43		11.99	30.00
		106T	53	17.47		16.03	30.00
			54	17.55		16.11	30.00
		242T	61	19.50		18.06	30.00
		SU	-	19.51		18.07	30.00
Mid	5 865	26T	0	10.40	-1.44	8.96	30.00
			4	10.04		8.60	30.00
			8	10.58		9.14	30.00
		52T	37	12.93		11.49	30.00
			38	12.73		11.29	30.00
			40	13.01		11.57	30.00
		106T	53	17.53		16.09	30.00
			54	17.64		16.20	30.00
		242T	61	19.67		18.23	30.00
		SU	-	19.68		18.24	30.00
High	5 885	26T	0	10.17	-1.44	8.73	30.00
			4	9.75		8.31	30.00
			8	10.30		8.86	30.00
		52T	37	12.92		11.48	30.00
			38	12.71		11.27	30.00
			40	13.04		11.60	30.00
		106T	53	17.30		15.86	30.00
			54	17.38		15.94	30.00
		242T	61	19.65		18.21	30.00
		SU	-	19.66		18.22	30.00

Notes:

1. E.I.R.P. Calculation: E.I.R.P. (dB m) = Conducted output power (dB m) + Antenna gain (dB i)

802.11ax HE40 MIMO in the UNII 4 band

Conducted Output Power

Conducted Output Power								
Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
Low	5 835	26T	0	7.37	7.02	-	10.21	30.00
			9	7.38	6.90	-	10.16	30.00
			17	7.73	7.21	-	10.49	30.00
		52T	37	9.60	8.79	-	12.22	30.00
			41	9.63	8.69	-	12.20	30.00
			44	9.99	8.97	-	12.52	30.00
		106T	53	14.20	13.71	-	16.97	30.00
			54	14.17	13.61	-	16.91	30.00
			56	14.50	13.85	-	17.20	30.00
		242T	61	16.11	15.38	0.11	18.88	30.00
			62	16.31	15.45	0.11	19.02	30.00
		484T	65	16.09	15.33	0.19	18.93	30.00
		SU	-	16.76	15.76	-	19.30	30.00
High	5 875	26T	0	6.97	6.59	-	9.79	30.00
			9	6.89	6.47	-	9.70	30.00
			17	7.32	6.78	-	10.07	30.00
		52T	37	9.25	9.36	-	12.32	30.00
			41	9.26	9.33	-	12.31	30.00
			44	9.55	9.58	-	12.58	30.00
		106T	53	13.86	13.54	-	16.71	30.00
			54	13.80	13.42	-	16.62	30.00
			56	14.12	13.70	-	16.93	30.00
		242T	61	16.34	16.40	0.11	19.49	30.00
			62	16.48	16.52	0.11	19.62	30.00
		484T	65	16.28	16.36	0.19	19.52	30.00
		SU	-	16.64	16.63	-	19.65	30.00

Notes:

1. $\text{Result(dBm)} = \text{Reading } 10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)}) \text{ (dBm)} + \text{D.C.F (dB)}$

E.I.R.P.

Channel	Frequency (MHz)	Tones	RU offset	Conducted Output Power (dBm)	ANT gain (dBi)	MAX e.i.r.p (dBm)	MAX e.i.r.p Limit (dBm)
Low	5 835	26T	0	10.21	-1.44	8.77	30.00
			9	10.16		8.72	30.00
			17	10.49		9.05	30.00
		52T	37	12.22		10.78	30.00
			41	12.20		10.76	30.00
			44	12.52		11.08	30.00
		106T	53	16.97		15.53	30.00
			54	16.91		15.47	30.00
			56	17.20		15.76	30.00
		242T	61	18.88		17.44	30.00
			62	19.02		17.58	30.00
		484T	65	18.93		17.49	30.00
		SU	-	19.30		17.86	30.00
High	5 875	26T	0	9.79	-1.44	8.35	30.00
			9	9.70		8.26	30.00
			17	10.07		8.63	30.00
		52T	37	12.32		10.88	30.00
			41	12.31		10.87	30.00
			44	12.58		11.14	30.00
		106T	53	16.71		15.27	30.00
			54	16.62		15.18	30.00
			56	16.93		15.49	30.00
		242T	61	19.49		18.05	30.00
			62	19.62		18.18	30.00
		484T	65	19.52		18.08	30.00
		SU	-	19.65		18.21	30.00

Notes:

1. E.I.R.P. Calculation: E.I.R.P. (dB m) = Conducted output power (dB m) + Antenna gain (dB i)

802.11ax HE80 MIMO in the UNII 4 band

Conducted Output Power

Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
Mid	5 855	26T	0	7.25	7.19	-	10.23	30.00
			18	7.52	7.23	-	10.39	30.00
			36	7.57	6.97	-	10.29	30.00
		52T	37	9.90	9.49	-	12.71	30.00
			45	9.58	8.98	-	12.30	30.00
			52	10.02	9.33	-	12.70	30.00
		106T	53	14.01	13.68	-	16.86	30.00
			57	14.34	13.81	-	17.09	30.00
			60	14.70	13.98	-	17.37	30.00
		242T	61	14.50	14.12	0.11	17.43	30.00
			62	14.63	14.14	0.11	17.51	30.00
			64	15.08	14.43	0.11	17.89	30.00
		484T	65	14.87	14.38	0.18	17.82	30.00
			66	15.24	14.59	0.18	18.12	30.00
		996T	67	14.81	14.22	0.19	17.73	30.00
		SU	-	15.52	15.03	-	18.29	30.00

E.I.R.P.

Channel	Frequency (MHz)	Tones	RU offset	Conducted Output Power (dBm)	ANT gain (dBi)	MAX e.i.r.p (dBm)	MAX e.i.r.p Limit (dBm)
Mid	5 855	26T	0	10.23	-1.44	8.79	30.00
			18	10.39		8.95	30.00
			36	10.29		8.85	30.00
		52T	37	12.71		11.27	30.00
			45	12.30		10.86	30.00
			52	12.70		11.26	30.00
		106T	53	16.86		15.42	30.00
			57	17.09		15.65	30.00
			60	17.37		15.93	30.00
		242T	61	17.43		15.99	30.00
			62	17.51		16.07	30.00
			64	17.89		16.45	30.00
		484T	65	17.82		16.38	30.00
			66	18.12		16.68	30.00
		996T	67	17.73		16.29	30.00
		SU	-	18.29		16.85	30.00

Notes:

- Result(dBm) = Reading $10\log(10^{(ANT1/10)} + 10^{(ANT2/10)})$ (dBm) + D.C.F (dB)
- E.I.R.P. Calculation: E.I.R.P. (dBm) = Conducted output power (dBm) + Antenna gain (dBi)

802.11ax HE160 MIMO in the UNII 4 band

Conducted Output Power

Channel	Frequency (MHz)	Tones	RU offset	Measured output power				Limit (dBm)
				Reading (dBm)		DCF (dB)	Result (dBm)	
				ANT1	ANT2			
Mid	5 815	26T	0L	6.85	6.25	-	9.57	30.00
			0U	7.39	6.17	-	9.83	30.00
			36U	7.78	6.68	-	10.28	30.00
		52T	37L	9.63	9.17	-	12.42	30.00
			37U	10.10	9.05	-	12.62	30.00
			52U	10.09	8.99	-	12.59	30.00
		106T	53L	14.13	13.72	0.10	17.04	30.00
			53U	14.64	13.70	0.10	17.31	30.00
			60U	14.79	13.58	0.10	17.34	30.00
		242T	61L	14.09	13.67	0.11	17.01	30.00
			61U	14.56	13.67	0.11	17.26	30.00
			64U	14.57	13.40	0.11	17.14	30.00
		484T	65L	13.86	13.38	0.18	16.82	30.00
			65U	14.04	13.30	0.18	16.88	30.00
			66U	14.13	12.98	0.18	16.78	30.00
		996T	67L	14.13	13.56	0.19	17.05	30.00
			67U	14.47	13.39	0.19	17.16	30.00
		2X996T	68	14.15	13.36	-	16.78	30.00
		SU	-	14.69	14.06	-	17.40	30.00

Notes:

1. $\text{Result(dBm)} = \text{Reading } 10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)}) \text{ (dBm)} + \text{D.C.F (dB)}$

E.I.R.P.

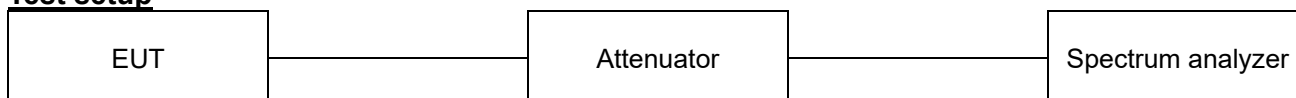
Channel	Frequency (MHz)	Tones	RU offset	Conducted Output Power (dBm)	ANT gain (dBi)	MAX e.i.r.p (dBm)	MAX e.i.r.p Limit (dBm)
Mid	5 815	26T	0L	9.57	-1.44	8.13	30.00
			0U	9.83		8.39	30.00
			36U	10.28		8.84	30.00
		52T	37L	12.42		10.98	30.00
			37U	12.62		11.18	30.00
			52U	12.59		11.15	30.00
		106T	53L	17.04		15.60	30.00
			53U	17.31		15.87	30.00
			60U	17.34		15.90	30.00
		242T	61L	17.01		15.57	30.00
			61U	17.26		15.82	30.00
			64U	17.14		15.70	30.00
		484T	65L	16.82		15.38	30.00
			65U	16.88		15.44	30.00
			66U	16.78		15.34	30.00
		996T	67L	17.05		15.61	30.00
			67U	17.16		15.72	30.00
		2X996T	68	16.78		15.34	30.00
		SU	-	17.40		15.96	30.00

Notes:

1. E.I.R.P. Calculation: E.I.R.P. (dB m) = Conducted output power (dB m) + Antenna gain (dB i)

8.2. Maximum Power Spectral Density

Test setup



Limit

According to §15.407(a),

Band	EUT category		Limit
UNII-1		Outdoor access point	17dBm/MHz
		Indoor access point	
		Fixed point-to-point access point	
	√	Client device	11 dBm /MHz
UNII-2A		√	11 dBm /MHz
UNII-2C		√	11 dBm /MHz
UNII-3		√	30 dBm /500 kHz
UNII-4		√	14 dBm /MHz (E.I.R.P.)

Test procedure

ANSI C63.10-2013 Section 12.3.2.2, 14.3.2.2

KDB 789033 D02 v02r01 - Section E and F

KDB 662911 D01 v02r01 - Section E). 2) and Section F)

Test settings

Section F

The rules requires “maximum power spectral density” measurements where the intent is to measure the maximum value of the time average of the power spectral density measured during a period of continuous transmission. Refer to III.A for additional guidance for devices that use channel aggregation.

- Create an average power spectrum for the EUT operating mode being tested by following the instructions in II.E.2. for measuring maximum conducted output power using a spectrum analyzer or EMI receiver: select the appropriate test method (SA-1, SA-2, SA-3, or alternatives to each) and apply it up to, but not including, the step labeled, “Compute power...” (This procedure is required even if the maximum conducted output power measurement was performed using a power meter, method PM.)
- Search function on the instrument to find the peak of the spectrum and record its value.
- Adjustments to the peak value of the spectrum, if applicable:
 - If Method SA-2 or SA-2 Alternative was used, add $10 \log (1/x)$, where x is the duty cycle, to the peak of the spectrum.
 - If Method SA-3 Alternative was used and the linear mode was used in II.E.2.g) (viii), add 1 dB to the final result to compensate for the difference between linear averaging and power averaging.
- The result is the Maximum PSD over 1MHz reference bandwidth
- For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the preceding procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in Section 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of RBWs

less than 1MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth(i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:

- a) Set $RBW \geq 1/T$, where T is defined in II.B.I.a).
- b) Set $VBW \geq 3 RBW$.
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10 \log (500 \text{ kHz} / RBW)$ to the measured result, whereas RBW (<500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10 \log (1\text{MHz}/RBW)$ to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note:

1. As a practical matter, it is recommended to use reduced RBW of 100 kHz for the II.F.5.c) and II.F.5.d), since RBW=100 kHz is available on nearly all spectrum analyzers.
2. Method SA-2 is used.
3. Please refer to Appendix A for plots.

Test results

802.11ax HE20 MIMO in the UNII 1 band

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/MHz)		DCF (dB)	Maximum PSD (dBm/MHz)	Maximum PSD Limit (dBm/MHz)
				ANT1	ANT2			
Low	5 180	26T	0	5.08	5.05	-	8.08	11.00
			4	3.63	3.47	-	6.56	11.00
			8	5.14	5.08	-	8.12	11.00
		52T	37	4.76	4.46	-	7.62	11.00
			38	4.59	4.36	-	7.49	11.00
			40	4.89	4.51	-	7.71	11.00
		106T	53	6.32	6.14	-	9.24	11.00
			54	6.43	6.09	-	9.27	11.00
		242T	61	4.44	4.22	0.11	7.45	11.00
		SU	-	6.52	6.45	-	9.50	11.00
Mid	5 200	26T	0	5.24	5.35	-	8.31	11.00
			4	3.79	3.88	-	6.85	11.00
			8	5.19	5.48	-	8.35	11.00
		52T	37	4.82	4.75	-	7.80	11.00
			38	4.67	4.66	-	7.68	11.00
			40	4.88	4.80	-	7.85	11.00
		106T	53	6.44	6.39	-	9.43	11.00
			54	6.45	6.49	-	9.48	11.00
		242T	61	4.48	4.47	0.11	7.60	11.00
		SU	-	6.60	6.74	-	9.68	11.00
High	5 240	26T	0	4.80	5.11	-	7.97	11.00
			4	3.27	3.72	-	6.51	11.00
			8	4.80	5.20	-	8.01	11.00
		52T	37	4.32	4.70	-	7.52	11.00
			38	4.12	4.50	-	7.32	11.00
			40	4.35	4.70	-	7.54	11.00
		106T	53	6.05	6.32	-	9.20	11.00
			54	6.03	6.39	-	9.22	11.00
		242T	61	4.10	4.33	0.11	7.34	11.00
		SU	-	6.15	6.51	-	9.34	11.00

Notes:

- Maximum PSD(dBm/MHz) = Reading $10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)})$ (dBm/MHz) + DCF(dB)

802.11ax HE40 MIMO in the UNII 1 band

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/MHz)		DCF (dB)	Maximum PSD (dBm/MHz)	Maximum PSD Limit (dBm/MHz)
				ANT1	ANT2			
Low	5 190	26T	0	3.98	3.84	-	6.92	11.00
			9	3.89	3.56	-	6.74	11.00
			17	4.04	3.87	-	6.97	11.00
		52T	37	3.86	3.51	-	6.70	11.00
			41	3.64	3.29	-	6.48	11.00
			44	3.77	3.43	-	6.61	11.00
		106T	53	5.45	5.06	-	8.27	11.00
			54	5.22	4.80	-	8.03	11.00
			56	5.39	5.05	-	8.23	11.00
		242T	61	3.34	3.08	0.11	6.33	11.00
			62	3.36	3.04	0.11	6.32	11.00
		484T	65	0.44	0.07	0.19	3.46	11.00
		SU	-	2.71	2.28	-	5.51	11.00
High	5 230	26T	0	4.12	4.15	-	7.15	11.00
			9	3.86	3.91	-	6.90	11.00
			17	4.03	4.04	-	7.05	11.00
		52T	37	3.41	3.49	-	6.46	11.00
			41	3.13	3.30	-	6.23	11.00
			44	3.37	3.45	-	6.42	11.00
		106T	53	5.14	5.02	-	8.09	11.00
			54	4.92	4.94	-	7.94	11.00
			56	5.03	4.99	-	8.02	11.00
		242T	61	2.91	2.97	0.11	6.06	11.00
			62	2.90	2.94	0.11	6.04	11.00
		484T	65	0.06	0.13	0.19	3.30	11.00
		SU	-	2.21	2.28	-	5.26	11.00

Notes:

- Maximum PSD(dBm/MHz) = Reading $10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)})$ (dBm/MHz) + DCF(dB)

802.11ax HE80 MIMO in the UNII 1 band

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/MHz)		DCF (dB)	Maximum PSD (dBm/MHz)	Maximum PSD Limit (dBm/MHz)
				ANT1	ANT2			
Mid	5 210	26T	0	4.57	4.72	-	7.66	11.00
			18	3.45	3.48	-	6.48	11.00
			36	4.46	4.64	-	7.56	11.00
		52T	37	4.23	4.16	-	7.21	11.00
			45	4.21	4.08	-	7.16	11.00
			52	4.15	4.24	-	7.21	11.00
		106T	53	5.87	5.68	-	8.79	11.00
			57	5.86	5.79	-	8.84	11.00
			60	5.72	5.70	-	8.72	11.00
		242T	61	3.26	3.25	0.11	6.38	11.00
			62	3.19	3.12	0.11	6.28	11.00
			64	3.07	3.22	0.11	6.27	11.00
		484T	65	0.19	0.20	0.18	3.39	11.00
			66	0.01	0.15	0.18	3.27	11.00
		996T	67	-2.80	-2.84	0.19	0.38	11.00
		SU	-	0.27	0.08	-	3.19	11.00

802.11ax HE160 MIMO in the UNII 1&2A band

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/MHz)		DCF (dB)	Maximum PSD (dBm/MHz)	Maximum PSD Limit (dBm/MHz)
				ANT1	ANT2			
Mid	5 250	26T	0L	4.98	4.80	-	7.90	11.00
			0U	4.29	4.39	-	7.35	11.00
			36U	4.65	4.74	-	7.71	11.00
		52T	37L	4.75	4.67	-	7.72	11.00
			37U	4.21	4.30	-	7.27	11.00
			52U	4.52	4.62	-	7.58	11.00
		106T	53L	6.24	6.23	0.10	9.35	11.00
			53U	5.71	5.81	0.10	8.87	11.00
			60U	5.98	6.15	0.10	9.18	11.00
		242T	61L	2.69	2.55	0.11	5.74	11.00
			61U	2.21	2.13	0.11	5.29	11.00
			64U	2.33	2.65	0.11	5.61	11.00
		484T	65L	-0.50	-0.63	0.18	2.63	11.00
			66L	-0.88	-0.94	0.18	2.28	11.00
			66U	-0.84	-0.66	0.18	2.44	11.00
		996T	67L	-3.58	-3.73	0.19	-0.45	11.00
			67U	-3.87	-3.82	0.19	-0.64	11.00
		2X996T	68	-4.39	-4.39	-	-1.38	11.00
		SU	-	-3.36	-3.35	-	-0.34	11.00

Notes:

- Maximum PSD(dBm/MHz) = Reading $10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)})$ (dBm/MHz) + DCF(dB)

802.11ax HE20 MIMO in the UNII 2A band

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/MHz)		DCF (dB)	Maximum PSD (dBm/MHz)	Maximum PSD Limit (dBm/MHz)
				ANT1	ANT2			
Low	5 260	26T	0	4.78	5.03	-	7.92	11.00
			4	3.23	3.45	-	6.35	11.00
			8	4.61	5.00	-	7.82	11.00
		52T	37	4.45	4.60	-	7.54	11.00
			38	4.14	4.36	-	7.26	11.00
			40	4.36	4.64	-	7.51	11.00
		106T	53	6.06	6.17	-	9.13	11.00
			54	5.96	6.15	-	9.07	11.00
		242T	61	4.15	4.26	0.11	7.33	11.00
		SU	-	6.31	6.41	-	9.37	11.00
Mid	5 280	26T	0	4.80	4.90	-	7.86	11.00
			4	3.32	3.52	-	6.43	11.00
			8	4.62	4.88	-	7.76	11.00
		52T	37	4.39	4.54	-	7.48	11.00
			38	4.19	4.25	-	7.23	11.00
			40	4.35	4.50	-	7.44	11.00
		106T	53	6.17	6.14	-	9.17	11.00
			54	5.99	6.16	-	9.09	11.00
		242T	61	4.11	4.12	0.11	7.24	11.00
		SU	-	6.21	6.45	-	9.34	11.00
High	5 320	26T	0	4.78	4.69	-	7.75	11.00
			4	3.24	3.23	-	6.25	11.00
			8	4.73	4.62	-	7.69	11.00
		52T	37	4.47	4.48	-	7.49	11.00
			38	4.13	4.24	-	7.20	11.00
			40	4.35	4.47	-	7.42	11.00
		106T	53	6.08	6.02	-	9.06	11.00
			54	5.94	6.05	-	9.01	11.00
		242T	61	4.10	4.07	0.11	7.21	11.00
		SU	-	6.06	6.35	-	9.22	11.00

Notes:

- Maximum PSD(dBm/MHz) = Reading $10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)})$ (dBm/MHz) + DCF(dB)

802.11ax HE40 MIMO in the UNII 2A band

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/MHz)		DCF (dB)	Maximum PSD (dBm/MHz)	Maximum PSD Limit (dBm/MHz)
				ANT1	ANT2			
Low	5 270	26T	0	4.17	3.84	-	7.02	11.00
			9	3.69	3.67	-	6.69	11.00
			17	4.36	3.83	-	7.11	11.00
		52T	37	3.92	3.27	-	6.62	11.00
			41	3.55	3.10	-	6.34	11.00
			44	3.69	3.29	-	6.50	11.00
		106T	53	5.45	4.91	-	8.20	11.00
			54	5.37	4.81	-	8.11	11.00
			56	5.35	4.96	-	8.17	11.00
		242T	61	3.92	3.21	0.11	6.70	11.00
			62	3.73	3.26	0.11	6.62	11.00
		484T	65	1.04	0.57	0.19	4.01	11.00
		SU	-	3.22	2.61	-	5.94	11.00
High	5 310	26T	0	4.09	3.26	-	6.71	11.00
			9	3.88	3.09	-	6.51	11.00
			17	4.05	3.29	-	6.70	11.00
		52T	37	3.83	3.24	-	6.56	11.00
			41	3.60	2.99	-	6.32	11.00
			44	3.75	3.13	-	6.46	11.00
		106T	53	5.51	4.80	-	8.18	11.00
			54	5.32	4.64	-	8.00	11.00
			56	5.52	4.86	-	8.21	11.00
		242T	61	3.88	3.20	0.11	6.67	11.00
			62	3.70	3.10	0.11	6.53	11.00
		484T	65	0.99	0.37	0.19	3.89	11.00
		SU	-	3.21	2.58	-	5.92	11.00

Notes:

- Maximum PSD(dBm/MHz) = Reading $10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)})$ (dBm/MHz) + DCF(dB)

802.11ax HE80 MIMO in the UNII 2A band

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/MHz)		DCF (dB)	Maximum PSD (dBm/MHz)	Maximum PSD Limit (dBm/MHz)
				ANT1	ANT2			
Mid	5 290	26T	0	4.21	4.09	-	7.16	11.00
			18	2.66	2.66	-	5.67	11.00
			36	3.97	3.85	-	6.92	11.00
		52T	37	3.93	3.81	-	6.88	11.00
			45	3.57	3.57	-	6.58	11.00
			52	3.61	3.71	-	6.67	11.00
		106T	53	5.66	5.38	-	8.53	11.00
			57	5.29	5.32	-	8.32	11.00
			60	5.23	5.39	-	8.32	11.00
		242T	61	2.99	2.74	0.11	5.99	11.00
			62	2.73	2.70	0.11	5.84	11.00
			64	2.68	2.67	0.11	5.80	11.00
		484T	65	-0.13	-0.25	0.18	3.00	11.00
			66	-0.27	-0.32	0.18	2.90	11.00
		996T	67	-3.07	-3.18	0.19	0.08	11.00
		SU	-	-0.32	-0.33	-	2.69	11.00

Notes:

- Maximum PSD(dBm/MHz) = Reading $10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)})$ (dBm/MHz) + DCF(dB)

802.11ax HE20 MIMO in the UNII 2C band

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/MHz)		DCF (dB)	Maximum PSD (dBm/MHz)	Maximum PSD Limit (dBm/MHz)
				ANT1	ANT2			
Low	5 500	26T	0	5.40	5.29	-	8.36	11.00
			4	3.94	3.87	-	6.92	11.00
			8	5.01	4.95	-	7.99	11.00
		52T	37	4.60	4.36	-	7.49	11.00
			38	4.27	4.18	-	7.24	11.00
			40	4.70	4.49	-	7.61	11.00
		106T	53	6.23	5.97	-	9.11	11.00
			54	6.25	6.09	-	9.18	11.00
		242T	61	4.31	4.04	0.11	7.30	11.00
		SU	-	6.35	6.50	-	9.44	11.00
Mid	5 600	26T	0	4.91	5.31	-	8.12	11.00
			4	3.45	3.65	-	6.56	11.00
			8	5.03	5.22	-	8.14	11.00
		52T	37	4.67	4.69	-	7.69	11.00
			38	4.40	4.33	-	7.38	11.00
			40	4.68	4.55	-	7.63	11.00
		106T	53	6.22	6.30	-	9.27	11.00
			54	6.38	6.26	-	9.33	11.00
		242T	61	4.25	4.13	0.11	7.31	11.00
		SU	-	6.23	6.39	-	9.32	11.00
High	5 700	26T	0	5.15	4.73	-	7.96	11.00
			4	3.68	3.24	-	6.48	11.00
			8	5.16	4.86	-	8.02	11.00
		52T	37	4.71	4.08	-	7.42	11.00
			38	4.45	3.82	-	7.16	11.00
			40	4.72	4.16	-	7.46	11.00
		106T	53	6.34	5.79	-	9.08	11.00
			54	6.53	5.81	-	9.20	11.00
		242T	61	4.21	3.79	0.11	7.13	11.00
		SU	-	6.26	5.96	-	9.12	11.00
Straddle	5 720	26T	0	5.02	4.45	-	7.75	11.00
			4	3.77	3.03	-	6.43	11.00
		52T	37	4.61	4.03	-	7.34	11.00
			38	4.46	3.87	-	7.19	11.00
		106T	53	6.51	5.66	-	9.12	11.00

Notes:

1. Maximum PSD(dBm/MHz) = Reading $10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)})$ (dBm/MHz) + DCF(dB)

802.11ax HE40 MIMO in the UNII 2C band

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/MHz)		DCF (dB)	Maximum PSD (dBm/MHz)	Maximum PSD Limit (dBm/MHz)
				ANT1	ANT2			
Low	5 510	26T	0	4.54	3.87	-	7.23	11.00
			9	4.55	3.64	-	7.13	11.00
			17	4.75	3.78	-	7.30	11.00
		52T	37	3.88	3.00	-	6.47	11.00
			41	3.79	2.83	-	6.35	11.00
			44	4.12	3.02	-	6.62	11.00
		106T	53	5.51	4.74	-	8.15	11.00
			54	5.53	4.61	-	8.10	11.00
			56	5.84	4.79	-	8.36	11.00
		242T	61	4.00	3.12	0.11	6.70	11.00
			62	4.41	3.08	0.11	6.92	11.00
		484T	65	1.36	0.26	0.19	4.05	11.00
		SU	-	3.46	2.49	-	6.01	11.00
Mid	5 590	26T	0	4.78	4.24	-	7.53	11.00
			9	4.64	3.99	-	7.34	11.00
			17	4.85	4.17	-	7.53	11.00
		52T	37	4.49	3.46	-	7.02	11.00
			41	4.36	3.15	-	6.81	11.00
			44	4.48	3.37	-	6.97	11.00
		106T	53	5.62	5.10	-	8.38	11.00
			54	5.53	4.83	-	8.20	11.00
			56	5.70	5.03	-	8.39	11.00
		242T	61	4.01	3.31	0.11	6.79	11.00
			62	4.16	3.19	0.11	6.82	11.00
		484T	65	1.26	0.40	0.19	4.05	11.00
		SU	-	3.32	2.65	-	6.01	11.00
High	5 670	26T	0	4.89	3.71	-	7.35	11.00
			9	4.89	3.57	-	7.29	11.00
			17	5.24	3.76	-	7.57	11.00
		52T	37	4.34	2.91	-	6.69	11.00
			41	4.25	2.84	-	6.61	11.00
			44	4.70	3.08	-	6.98	11.00
		106T	53	5.66	4.59	-	8.17	11.00
			54	5.54	4.50	-	8.06	11.00
			56	5.99	4.71	-	8.41	11.00
		242T	61	3.74	2.91	0.11	6.47	11.00
			62	4.02	3.07	0.11	6.69	11.00
		484T	65	0.79	0.32	0.19	3.76	11.00
		SU	-	3.26	2.28	-	5.81	11.00

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/MHz)		DCF (dB)	Maximum PSD (dBm/MHz)	Maximum PSD Limit (dBm/MHz)
				ANT1	ANT2			
Straddle	5 710	26T	0	4.41	3.38	-	6.94	11.00
			9	4.20	3.51	-	6.88	11.00
		52T	37	4.24	3.44	-	6.87	11.00
			41	4.24	3.28	-	6.80	11.00
		106T	53	5.83	4.97	-	8.43	11.00
			54	5.68	4.91	-	8.32	11.00
		242T	61	4.01	3.26	0.11	6.77	11.00

Notes:

1. Maximum PSD(dBm/MHz) = Reading $10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)})$ (dBm/MHz) + DCF(dB)

802.11ax HE80 MIMO in the UNII 2C band

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/MHz)		DCF (dB)	Maximum PSD (dBm/MHz)	Maximum PSD Limit (dBm/MHz)
				ANT1	ANT2			
Low	5 530	26T	0	4.52	4.69	-	7.62	11.00
			18	3.72	3.44	-	6.59	11.00
			36	4.98	4.73	-	7.87	11.00
		52T	37	3.74	3.78	-	6.77	11.00
			45	3.96	3.63	-	6.81	11.00
			52	4.18	3.76	-	6.99	11.00
		106T	53	5.40	5.43	-	8.43	11.00
			57	5.63	5.32	-	8.49	11.00
			60	5.89	5.35	-	8.64	11.00
		242T	61	2.97	2.71	0.11	5.96	11.00
			62	3.04	2.75	0.11	6.02	11.00
			64	3.27	2.81	0.11	6.17	11.00
		484T	65	-0.06	-0.26	0.18	3.03	11.00
			66	0.06	-0.34	0.18	3.05	11.00
		996T	67	-2.81	-3.11	0.19	0.24	11.00
		SU	-	-0.03	-0.29	-	2.85	11.00
High	5 610	26T	0	4.27	4.19	-	7.24	11.00
			18	2.93	3.03	-	5.99	11.00
			36	4.38	4.23	-	7.32	11.00
		52T	37	3.45	3.30	-	6.39	11.00
			45	3.40	3.28	-	6.35	11.00
			52	3.78	3.42	-	6.61	11.00
		106T	53	5.50	5.41	-	8.47	11.00
			57	5.56	5.40	-	8.49	11.00
			60	5.79	5.47	-	8.64	11.00
		242T	61	2.86	2.95	0.11	6.03	11.00
			62	2.90	2.78	0.11	5.96	11.00
			64	3.16	2.96	0.11	6.18	11.00
		484T	65	-0.09	-0.09	0.18	3.10	11.00
			66	0.02	-0.17	0.18	3.12	11.00
		996T	67	-2.81	-2.92	0.19	0.34	11.00
		SU	-	0.52	0.17	-	3.36	11.00

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/MHz)		DCF (dB)	Maximum PSD (dBm/MHz)	Maximum PSD Limit (dBm/MHz)
				ANT1	ANT2			
Straddle	5 690	26T	0	4.19	3.73	-	6.98	11.00
			18	3.45	2.76	-	6.13	11.00
		52T	37	4.19	3.38	-	6.81	11.00
			45	4.44	3.50	-	7.01	11.00
		106T	53	5.45	4.91	-	8.20	11.00
			57	5.87	5.03	-	8.48	11.00
		242T	61	2.79	2.40	0.11	5.72	11.00
			62	2.91	2.49	0.11	5.83	11.00
		484T	65	-0.14	-0.56	0.18	2.85	11.00

Notes:

1. Maximum PSD(dBm/MHz) = Reading $10\log(10^{(ANT1/10)} + 10^{(ANT2/10)})$ (dBm/MHz) + DCF(dB)

11ax HE160 MIMO in the UNII 2C band

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/MHz)		DCF (dB)	Maximum PSD (dBm/MHz)	Maximum PSD Limit (dBm/MHz)
				ANT1	ANT2			
Mid	5 570	26T	0L	4.52	4.61	-	7.58	11.00
			0U	4.72	4.22	-	7.49	11.00
			36U	5.27	4.08	-	7.73	11.00
		52T	37L	4.42	4.46	-	7.45	11.00
			37U	4.33	4.17	-	7.26	11.00
			52U	4.84	4.20	-	7.54	11.00
		106T	53L	6.07	6.21	0.10	9.25	11.00
			53U	6.12	5.75	0.10	9.05	11.00
			60U	6.48	5.67	0.10	9.20	11.00
		242T	61L	2.54	2.62	0.11	5.70	11.00
			61U	2.53	2.14	0.11	5.46	11.00
			64U	2.94	2.02	0.11	5.62	11.00
		484T	65L	-0.78	-0.57	0.18	2.52	11.00
			66L	-0.93	-0.89	0.18	2.28	11.00
			66U	-1.64	-1.28	0.18	1.73	11.00
		996T	67L	-3.85	-3.69	0.19	-0.57	11.00
			67U	-2.99	-3.70	0.19	-0.13	11.00
		2X996T	68	-3.70	-3.81	-	-0.74	11.00
		SU	-	-3.16	-3.33	-	-0.23	11.00

Notes:

- Maximum PSD(dBm/MHz) = Reading $10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)})$ (dBm/MHz) + DCF(dB)

802.11ax HE20 MIMO in the UNII 3 band

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/500kHz)		DCF (dB)	Maximum PSD (dBm/500kHz)	Maximum PSD Limit (dBm/500kHz)
				ANT1	ANT2			
Straddle	5 720	26T	8	2.51	1.80	-	5.18	30.00
		52T	40	1.91	1.15	-	4.56	30.00
Low	5 745	26T	0	2.59	2.43	-	5.52	30.00
			4	2.01	2.10	-	5.07	30.00
			8	2.73	2.65	-	5.70	30.00
		52T	37	1.32	1.37	-	4.36	30.00
			38	1.21	1.17	-	4.20	30.00
			40	1.53	1.50	-	4.53	30.00
		106T	53	3.32	3.10	-	6.22	30.00
			54	3.58	3.19	-	6.40	30.00
		242T	61	2.14	2.08	0.11	5.23	30.00
		SU	-	3.89	3.94	-	6.93	30.00
Mid	5 785	26T	0	2.40	1.97	-	5.20	30.00
			4	1.87	1.48	-	4.69	30.00
			8	2.67	2.09	-	5.40	30.00
		52T	37	1.51	0.88	-	4.22	30.00
			38	1.49	0.80	-	4.17	30.00
			40	1.84	1.07	-	4.48	30.00
		106T	53	3.09	2.71	-	5.91	30.00
			54	3.33	2.72	-	6.05	30.00
		242T	61	1.97	1.84	0.11	5.03	30.00
		SU	-	3.68	3.67	-	6.69	30.00
High	5 825	26T	0	2.36	2.25	-	5.32	30.00
			4	1.77	1.55	-	4.67	30.00
			8	2.52	2.38	-	5.46	30.00
		52T	37	1.99	1.52	-	4.77	30.00
			38	1.70	1.40	-	4.56	30.00
			40	2.10	1.60	-	4.87	30.00
		106T	53	3.04	2.71	-	5.89	30.00
			54	3.20	2.88	-	6.05	30.00
		242T	61	1.60	1.30	0.11	4.57	30.00
		SU	-	3.37	3.29	-	6.34	30.00

Notes:

- Maximum PSD(dBm/MHz) = Reading $10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)})$ (dBm/MHz) + DCF(dB)

802.11ax HE40 MIMO in the UNII 3 band

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/500kHz)		DCF (dB)	Maximum PSD (dBm/500kHz)	Maximum PSD Limit (dBm/500kHz)
				ANT1	ANT2			
Straddle	5 710	26T	17	1.93	0.92	-	4.46	30.00
		52T	44	1.81	0.65	-	4.28	30.00
Low	5 755	26T	0	1.74	1.66	-	4.71	30.00
			9	1.78	1.56	-	4.68	30.00
			17	2.29	1.94	-	5.13	30.00
		52T	37	0.93	0.70	-	3.83	30.00
			41	0.82	0.69	-	3.77	30.00
			44	1.16	1.01	-	4.10	30.00
		106T	53	2.82	2.39	-	5.62	30.00
			54	2.67	2.25	-	5.48	30.00
			56	3.05	2.73	-	5.90	30.00
		242T	61	0.91	0.73	0.11	3.94	30.00
			62	1.24	1.11	0.11	4.30	30.00
		484T	65	-1.58	-1.85	0.19	1.49	30.00
		SU	-	0.36	0.30	-	3.34	30.00
High	5 795	26T	0	1.73	1.06	-	4.42	30.00
			9	1.73	1.01	-	4.40	30.00
			17	2.08	1.25	-	4.70	30.00
		52T	37	1.06	0.44	-	3.77	30.00
			41	1.12	0.23	-	3.71	30.00
			44	1.62	0.53	-	4.12	30.00
		106T	53	2.56	2.27	-	5.43	30.00
			54	2.63	2.05	-	5.36	30.00
			56	2.87	2.36	-	5.63	30.00
		242T	61	1.10	0.91	0.11	4.13	30.00
			62	1.64	1.13	0.11	4.51	30.00
		484T	65	-1.41	-1.69	0.19	1.65	30.00
		SU	-	0.84	0.42	-	3.65	30.00

Notes:

- Maximum PSD(dBm/MHz) = Reading $10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)})$ (dBm/MHz) + DCF(dB)

802.11ax HE80 MIMO in the UNII 3 band

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/500kHz)		DCF (dB)	Maximum PSD (dBm/500kHz)	Maximum PSD Limit (dBm/500kHz)
				ANT1	ANT2			
Straddle	5 690	26T	36	2.21	1.40	-	4.83	30.00
		52T	52	1.14	0.26	-	3.73	30.00
Mid	5 775	26T	0	0.94	0.27	-	3.63	30.00
			18	0.96	0.42	-	3.71	30.00
			36	1.72	0.93	-	4.35	30.00
		52T	37	0.36	-0.16	-	3.12	30.00
			45	0.60	0.12	-	3.38	30.00
			52	1.16	0.43	-	3.82	30.00
		106T	53	2.03	1.45	-	4.76	30.00
			57	2.30	1.81	-	5.07	30.00
			60	2.53	1.64	-	5.12	30.00
		242T	61	-1.03	-1.57	0.11	1.83	30.00
			62	-0.90	-1.39	0.11	1.98	30.00
			64	-0.85	-1.53	0.11	1.94	30.00
		484T	65	-3.97	-4.30	0.18	-0.94	30.00
			66	-3.40	-4.14	0.18	-0.56	30.00
		996T	67	-5.85	-6.60	0.19	-3.01	30.00
		SU	-	-3.57	-3.86	-	-0.70	30.00

Notes:

1. Maximum PSD(dBm/MHz) = Reading $10\log(10^{(ANT1/10)} + 10^{(ANT2/10)})$ (dBm/MHz) + DCF(dB)

802.11ax HE20 MIMO in the Straddle

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD		DCF (dB)	Maximum PSD	Maximum PSD Limit
				ANT1	ANT2			
UNII 2C	5 720	106T	54	6.33	5.67	-	9.02	11.00
		242T	61	4.27	3.67	0.11	7.10	11.00
		SU	-	6.42	5.99	-	9.22	11.00
UNII 3		106T	54	3.62	2.84	-	6.26	30.00
		242T	61	1.46	0.90	0.11	4.31	30.00
		SU	-	0.78	0.34	-	3.58	30.00

802.11ax HE40 MIMO in the Straddle

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD		DCF (dB)	Maximum PSD	Maximum PSD Limit
				ANT1	ANT2			
UNII 2C	5 710	106T	56	6.02	5.11	-	8.60	11.00
		242T	62	4.39	3.43	0.11	7.06	11.00
		484T	65	1.46	0.66	0.19	4.28	11.00
		SU	-	3.34	2.78	-	6.08	11.00
UNII 3		106T	56	3.22	2.34	-	5.81	30.00
		242T	62	1.41	0.61	0.11	4.15	30.00
		484T	65	-1.48	-2.17	0.19	1.39	30.00
		SU	-	-2.94	-3.72	-	-0.30	30.00

802.11ax HE80 MIMO in the Straddle

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD		DCF (dB)	Maximum PSD	Maximum PSD Limit
				ANT1	ANT2			
UNII 2C	5 690	106T	60	6.17	5.32	-	8.78	11.00
		242T	64	3.38	2.74	0.11	6.19	11.00
		484T	66	0.25	-0.30	0.18	3.17	11.00
		996T	67	-2.74	-3.26	0.19	0.21	11.00
		SU	-	0.27	-0.16	-	3.07	11.00
UNII 3		106T	60	3.37	2.43	-	5.94	30.00
		242T	64	0.51	-0.09	0.11	3.34	30.00
		484T	66	-2.59	-3.25	0.18	0.28	30.00
		996T	67	-5.50	-6.20	0.19	-2.64	30.00
		SU	-	-7.73	-8.10	-	-4.90	30.00

Notes:

- Maximum PSD(dBm/MHz) = Reading $10\log(10^{(ANT1/10)} + 10^{(ANT2/10)})$ (dBm/MHz) + DCF(dB)
- The unit of UNII 2C is (dB m/MHz) and Unit of UNII 3 is (dB m/500 kHz)

802.11ax HE20 MIMO in the UNII 3&4 band

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/500kHz)		DCF (dB)	Maximum PSD (dBm/500kHz)	Maximum PSD Limit (dBm/500kHz)
				ANT1	ANT2			
Low	5 845	26T	0	1.87	2.06	-	4.98	14.00
			4	1.46	1.44	-	4.46	14.00
		52T	37	1.92	1.82	-	4.88	14.00
			38	1.82	1.66	-	4.75	14.00
		106T	53	3.13	3.07	-	6.11	14.00
			54*	3.17	2.89	-	6.04	14.00
		242T	61*	1.68	1.55	0.11	4.74	14.00
		SU	-*	3.32	3.48	-	6.41	14.00

802.11ax HE20 MIMO in the UNII 4 band

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/MHz)		DCF (dB)	Maximum PSD (dBm/MHz)	ANT Gain (dBi)	E.I.R.P. PSD (dBm/MHz)	E.I.R.P. PSD Limit (dBm/MHz)
				ANT1	ANT2					
Low	5 845	26T	8	5.09	4.94	-	8.03	-1.44	6.59	14.00
		52T	40	5.14	4.79	-	7.98		6.54	14.00
		106T	54*	6.34	6.02	-	9.19		7.75	14.00
		242T	61*	4.73	4.44	0.11	7.71		6.27	14.00
		SU	-*	3.61	3.66	-	6.65		5.21	14.00
Mid	5 865	26T	0	4.73	4.63	-	7.69		6.25	14.00
			4	3.27	3.12	-	6.21		4.77	14.00
			8	4.91	4.67	-	7.80		6.36	14.00
		52T	37	5.10	4.89	-	8.01		6.57	14.00
			38	4.87	4.64	-	7.77		6.33	14.00
			40	5.23	4.79	-	8.03		6.59	14.00
		106T	53	5.74	5.96	-	8.86		7.42	14.00
			54	5.82	5.91	-	8.88		7.44	14.00
		242T	61	4.78	5.07	0.11	8.05		6.61	14.00
		SU	-	6.27	6.68	-	9.49		8.05	14.00
High	5 885	26T	0	4.60	4.16	-	7.40		5.96	14.00
			4	3.20	2.71	-	5.97		4.53	14.00
			8	4.96	4.26	-	7.63		6.19	14.00
		52T	37	5.03	4.17	-	7.63		6.19	14.00
			38	4.99	4.06	-	7.56		6.12	14.00
			40	5.22	4.21	-	7.75		6.32	14.00
		106T	53	5.68	5.21	-	8.46		7.02	14.00
			54	5.88	5.36	-	8.64		7.20	14.00
		242T	61	4.26	3.88	0.11	7.19		5.75	14.00
		SU	-	5.84	5.59	-	8.73		7.29	14.00

Notes:

- Maximum PSD(dBm/MHz) = Reading $10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)})$ (dBm/MHz) + DCF(dB)
- E.I.R.P. Calculation: E.I.R.P. (dBm/MHz) = Maximum PSD (dBm/MHz) + Antenna gain(dBi)
- * RU Allocation included in the straddle band.

802.11ax HE40 MIMO in the UNII 3&4 band

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/500kHz)		DCF (dB)	Maximum PSD (dBm/500kHz)	Maximum PSD Limit (dBm/500kHz)
				ANT1	ANT2			
Low	5 835	26T	0	1.02	1.80	-	4.44	14.00
			9	1.01	1.53	-	4.29	14.00
		52T	37	0.17	0.59	-	3.40	14.00
			41	0.30	0.44	-	3.38	14.00
			44*	-2.08	-2.30	-	0.82	14.00
		106T	53	1.82	2.26	-	5.06	14.00
			54	1.80	2.05	-	4.94	14.00
			56*	2.11	2.25	-	5.19	14.00
		242T	61	0.18	0.34	0.11	3.38	14.00
			62*	0.63	0.41	0.11	3.64	14.00
		484T	65*	-2.29	-2.40	0.19	0.86	14.00
		SU	-*	-0.43	-0.07	-	2.76	14.00

802.11ax HE40 MIMO in the UNII 4 band

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/MHz)		DCF (dB)	Maximum PSD (dBm/MHz)	ANT Gain (dBi)	E.I.R.P PSD (dBm/MHz)	E.I.R.P PSD Limit (dBm/MHz)
				ANT1	ANT2					
Low	5 835	26T	17	4.38	4.83	-	7.62	-1.44	6.18	14.00
		52T	44*	3.70	3.52	-	6.62		5.18	14.00
		106T	56*	5.18	5.24	-	8.22		6.78	14.00
		242T	62*	3.52	3.44	0.11	6.60		5.16	14.00
		484T	65*	0.62	0.48	0.19	3.75		2.31	14.00
		SU	-*	-0.86	-0.64	-	2.26		0.82	14.00
High	5 875	26T	0	3.42	3.86	-	6.66		5.22	14.00
			9	3.43	3.59	-	6.52		5.08	14.00
			17	3.76	3.92	-	6.85		5.41	14.00
		52T	37	2.81	3.65	-	6.26		4.82	14.00
			41	2.80	3.51	-	6.18		4.74	14.00
			44	3.17	4.01	-	6.62		5.18	14.00
		106T	53	4.41	4.54	-	7.49		6.05	14.00
			54	4.26	4.54	-	7.41		5.97	14.00
			56	4.63	4.65	-	7.65		6.21	14.00
		242T	61	3.37	4.00	0.11	6.82		5.38	14.00
			62	3.62	4.09	0.11	6.98		5.54	14.00
		484T	65	0.68	1.20	0.19	4.15		2.71	14.00
		SU	-	2.91	3.43	-	6.19		4.75	14.00

Notes:

- Maximum PSD(dBm/MHz) = Reading $10\log(10^{(ANT1/10)} + 10^{(ANT2/10)})$ (dBm/MHz) + DCF(dB)
- E.I.R.P. Calculation: E.I.R.P. (dBm/MHz) = Maximum PSD (dBm/MHz) + Antenna gain(dBi)
- * RU Allocation included in the straddle band.

802.11ax HE80 MIMO in the UNII 3&4 band

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/500kHz)		DCF (dB)	Maximum PSD (dBm/500kHz)	Maximum PSD Limit (dBm/500kHz)
				ANT1	ANT2			
Low	5 855	26T	0	0.75	1.21	-	4.00	14.00
		52T	37	0.43	0.68	-	3.57	14.00
		106T	53	1.38	1.74	-	4.57	14.00
		242T	61	-1.66	-1.45	0.11	1.57	14.00
			62*	-1.42	-1.40	0.11	1.71	14.00
		484T	65*	-4.15	-3.82	0.18	-0.79	14.00
		996T	67*	-6.91	-6.87	0.19	-3.69	14.00
		SU	-*	-4.20	-4.24	-	-1.21	14.00

802.11ax HE80 MIMO in the UNII-4 band

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/MHz)		DCF (dB)	Maximum PSD (dBm/MHz)	ANT Gain (dBi)	E.I.R.P. PSD (dBm/MHz)	E.I.R.P. PSD Limit (dBm/MHz)
				ANT1	ANT2					
Mid	5 855	26T	18	2.80	3.06	-	5.94	-1.44	4.50	14.00
			36	3.91	3.81	-	6.87		5.43	14.00
		52T	45	3.01	2.89	-	5.96		4.52	14.00
			52	3.49	3.09	-	6.30		4.87	14.00
		106T	57	4.77	4.63	-	7.71		6.27	14.00
			60	5.11	4.91	-	8.02		6.58	14.00
		242T	62*	1.37	1.38	0.11	4.50		3.06	14.00
			64	1.98	1.73	0.11	4.98		3.54	14.00
		484T	65*	-1.33	-1.35	0.18	1.85		0.41	14.00
			66	-0.76	-1.03	0.18	2.30		0.86	14.00
		996T	67*	-3.59	-3.95	0.19	-0.57		-2.01	14.00
		SU	-*	-0.63	-0.60	-	2.40		0.96	14.00

Notes:

- Maximum PSD(dBm/MHz) = Reading $10\log(10^{(\text{ANT1}/10)} + 10^{(\text{ANT2}/10)})$ (dBm/MHz) + DCF(dB)
- E.I.R.P. Calculation: E.I.R.P. (dBm/MHz) = Maximum PSD (dBm/MHz) + Antenna gain(dBi)
- * RU Allocation included in the straddle band.

802.11ax HE160 MIMO in the UNII 3&4 band

Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/500kHz)		DCF (dB)	Maximum PSD (dBm/500kHz)	Maximum PSD Limit (dBm/500kHz)
				ANT1	ANT2			
Low	5 815	26T	0L	0.10	0.24	-	3.18	14.00
			0U	0.61	0.22	-	3.43	14.00
		52T	37L	-0.11	0.11	-	3.01	14.00
			37U	0.49	-0.04	-	3.24	14.00
		106T	53L	1.30	1.42	0.10	4.47	14.00
			53U	1.89	1.50	0.10	4.81	14.00
		242T	61L	-2.24	-2.03	0.11	0.99	14.00
			61U	-1.67	-1.99	0.11	1.29	14.00
		484T	65L	-5.43	-5.15	0.18	-2.10	14.00
			66L*	-5.07	-5.26	0.18	-1.97	14.00
		996T	67L	-7.75	-7.69	0.19	-4.52	14.00
			67U*	-7.66	-8.17	0.19	-4.71	14.00
		2X996T	68*	-7.95	-8.09	-	-5.01	14.00
		SU	-*	-7.40	-7.59	-	-4.48	14.00

802.11ax HE160 MIMO in the UNII 4 band

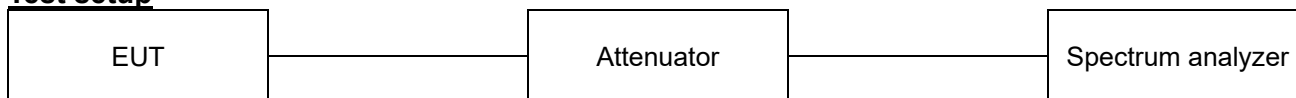
Channel	Frequency (MHz)	Tones	RU offset	Measured PSD (dBm/MHz)		DCF (dB)	Maximum PSD (dBm/MHz)	ANT Gain (dBi)	E.I.R.P PSD (dBm/MHz)	E.I.R.P PSD Limit (dBm/MHz)
				ANT1	ANT2					
Mid	5 815	26T	36U	4.37	3.23	-	6.85	-1.44	5.41	14.00
		52T	52U	3.39	2.79	-	6.11		4.67	14.00
		106T	60U	5.21	4.33	0.10	7.90		6.46	14.00
		242T	64U	1.46	0.60	0.11	4.17		2.73	14.00
		484T	66L*	-15.84	-16.51	0.18	-12.97		-14.41	14.00
			66U	-1.73	-2.63	0.18	1.03		-0.41	14.00
		996T	67U*	-3.87	-4.84	0.19	-1.13		-2.57	14.00
		2X996T	68*	-7.86	-8.45	-	-5.13		-6.57	14.00
		SU	-*	-7.41	-7.90	-	-4.64		-6.08	14.00

Notes:

- Maximum PSD(dBm/MHz) = Reading $10\log(10^{(ANT1/10)} + 10^{(ANT2/10)})$ (dBm/MHz) + DCF(dB)
- E.I.R.P. Calculation: E.I.R.P. (dBm/MHz) = Maximum PSD (dBm/MHz) + Antenna gain(dBi)
- * RU Allocation included in the straddle band.

8.3. 26 dB Bandwidth & 99% Bandwidth

Test setup



Limit

N/A

Test procedure

ANSI C63.10-2013 Section 12.4

KDB 789033 D02 v02r01 - Section C.1 (26dB bandwidth)

KDB 789033 D02 v02r01 - Section D (99% bandwidth)

Test settings

1. 26 dB Bandwidth

- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = Peak.
- Trace mode = max hold.
- Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

2. 99% Occupied Bandwidth

- Set center frequency to the nominal EUT channel center frequency.
- Set span = 1.5 times to 5.0 times the OBW.
- Set RBW = 1% to 5% of the OBW
- Set VBW $\geq 3 \times$ RBW
- Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- Use the 99% power bandwidth function of the instrument (if available).
- If the instrument does not have a 99% power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

Note:

- Please refer to Appendix A for plots

Test results

MIMO

Band	Mode	Frequency (MHz)	Tones	RU offset	26 dB bandwidth (MHz)		99% bandwidth (MHz)	
					ANT1	ANT2	ANT1	ANT2
UNII 1	HE20	5 180	26T	0	20.93	20.28	18.73	18.48
				4	19.03	18.63	17.33	17.23
				8	20.63	20.33	18.58	18.43
			52T	37	21.28	20.43	18.38	18.33
				38	19.78	18.88	17.33	17.18
				40	21.13	20.23	18.48	18.28
			106T	53	21.68	20.98	18.33	18.28
				54	21.58	20.78	18.33	18.38
			242T	61	22.13	22.43	19.13	19.23
			SU	-	21.03	20.83	18.88	18.88
		5 200	26T	0	20.83	20.23	18.73	18.48
				4	19.08	18.63	17.33	17.18
				8	20.83	20.03	18.63	18.43
			52T	37	21.18	20.53	18.38	18.33
				38	19.63	18.83	17.38	17.18
				40	20.98	20.28	18.48	18.23
			106T	53	21.68	21.33	18.33	18.28
				54	21.53	20.73	18.38	18.38
			242T	61	22.28	22.08	19.08	19.18
			SU	-	20.83	20.88	18.88	18.88
		5 240	26T	0	20.98	20.38	18.73	18.48
				4	18.93	18.63	17.38	17.18
				8	20.58	20.13	18.58	18.48
			52T	37	21.23	20.48	18.38	18.33
				38	19.68	18.93	17.38	17.18
				40	21.03	20.28	18.48	18.28
			106T	53	21.63	21.33	18.33	18.28
				54	21.63	20.83	18.38	18.38
			242T	61	22.38	22.18	19.13	19.13
			SU	-	21.13	20.83	18.88	18.88

Band	Mode	Frequency (MHz)	Tones	RU offset	26 dB bandwidth (MHz)		99% bandwidth (MHz)	
					ANT1	ANT2	ANT1	ANT2
UNII 1	HE40	5 190	26T	0	41.06	40.06	38.26	37.96
				9	38.66	38.36	36.66	36.26
				17	40.76	40.66	38.26	38.16
			52T	37	40.96	41.06	37.76	37.86
				41	39.06	38.56	36.56	36.46
				44	41.56	40.76	37.96	37.96
			106T	53	41.76	41.46	37.66	37.56
				54	39.46	39.06	36.66	36.56
				56	42.26	41.56	37.96	37.66
			242T	61	42.36	41.26	37.56	37.46
				62	41.56	41.76	37.66	37.66
			484T	65	42.86	43.26	38.06	38.06
			SU	-	40.56	40.46	37.56	37.56
		5 230	26T	0	40.86	40.26	38.46	37.86
				9	38.46	38.36	36.66	36.26
				17	40.96	40.56	38.36	38.16
			52T	37	40.86	41.26	37.86	37.86
				41	38.96	38.56	36.66	36.26
				44	41.06	40.86	37.86	38.06
			106T	53	41.76	41.46	37.66	37.56
				54	39.46	39.06	36.66	36.56
				56	41.76	41.66	37.96	37.66
			242T	61	42.26	41.76	37.66	37.46
				62	41.66	41.86	37.66	37.56
			484T	65	43.16	43.26	38.06	38.06
			SU	-	40.56	40.16	37.56	37.56

Band	Mode	Frequency (MHz)	Tones	RU offset	26 dB bandwidth (MHz)		99% bandwidth (MHz)	
					ANT1	ANT2	ANT1	ANT2
UNII 1	HE80	5 210	26T	0	83.56	81.88	79.00	78.64
				18	79.24	78.40	75.52	74.93
				36	82.48	82.36	78.52	78.40
			52T	37	84.16	83.08	78.28	78.64
				45	79.84	78.64	75.40	74.93
				52	82.96	83.32	78.16	78.16
			106T	53	84.28	83.08	77.92	78.04
				57	80.56	79.36	75.40	74.93
				60	84.88	84.16	78.16	77.68
			242T	61	84.76	83.92	77.32	77.32
				62	82.48	80.44	75.88	75.52
				64	85.36	84.76	77.56	77.32
			484T	65	87.39	83.68	77.08	76.96
				66	85.48	86.31	77.08	77.20
			966T	67	88.11	90.27	77.80	77.92
			SU	-	81.76	82.12	76.84	76.72

Band	Mode	Frequency (MHz)	Tones	RU offset	26 dB bandwidth (MHz)		99% bandwidth (MHz)	
					ANT1	ANT2	ANT1	ANT2
UNII 1&2A	HE160	5 250	26T	0L	165.59	163.68	159.84	158.88
				0U	159.84	159.20	153.77	153.77
				36U	164.64	164.96	159.52	158.88
			52T	37L	165.28	164.96	158.56	158.88
				37U	159.84	159.52	153.77	153.77
				52U	164.32	164.32	158.88	158.56
			106T	53L	166.87	166.23	157.92	158.56
				53U	160.80	160.16	154.09	153.77
				60U	166.87	164.64	158.56	158.24
			242T	61L	165.91	165.91	156.64	157.28
				61U	162.40	161.44	154.73	154.09
				64U	167.51	167.83	157.28	157.60
			484T	65L	169.11	167.19	157.28	156.96
				66L	164.64	162.72	155.04	154.73
				66U	166.87	168.47	156.96	157.60
			966T	67L	171.99	168.79	156.64	156.64
				67U	169.11	169.43	156.64	156.96
			2X996T	-	164.64	164.32	155.04	155.68
			SU	-	166.23	164.96	155.36	155.36

Band	Mode	Frequency (MHz)	Tones	RU offset	26 dB bandwidth (MHz)	
					ANT1	ANT2
UNII 2A	HE20	5 260	26T	0	20.83	20.28
				4	19.08	18.58
				8	20.63	20.18
			52T	37	21.18	20.83
				38	19.63	18.88
				40	21.03	20.23
			106T	53	21.63	21.13
				54	21.63	20.78
			242T	61	22.28	22.18
			SU	-	20.98	20.98
		5 280	26T	0	20.83	20.63
				4	19.08	18.63
				8	20.68	20.18
			52T	37	21.18	20.53
				38	19.78	18.78
				40	21.08	20.33
			106T	53	21.68	21.23
				54	21.63	20.53
			242T	61	22.13	22.13
			SU	-	21.08	21.03
		5 320	26T	0	20.88	20.33
				4	18.98	18.63
				8	20.68	20.18
			52T	37	21.28	20.48
				38	19.73	18.88
				40	21.13	20.33
			106T	53	21.63	21.13
				54	21.58	20.73
			242T	61	22.08	22.18
			SU	-	21.28	21.03

Band	Mode	Frequency (MHz)	Tones	RU offset	26 dB bandwidth (MHz)	
					ANT1	ANT2
UNII 2A	HE40	5 270	26T	0	41.06	40.16
				9	38.76	38.36
				17	40.76	40.46
			52T	37	40.76	40.96
				41	38.86	38.56
				44	40.86	40.76
			106T	53	41.66	41.46
				54	39.46	39.06
				56	42.16	41.26
			242T	61	42.26	41.66
				62	41.66	41.76
			484T	65	43.16	43.26
			SU	-	40.56	40.46
		5 310	26T	0	41.16	40.26
				9	38.56	38.36
				17	40.96	40.66
			52T	37	40.86	41.06
				41	39.06	38.56
				44	40.76	40.86
			106T	53	41.66	41.56
				54	39.46	39.06
				56	42.36	41.36
			242T	61	42.96	41.56
				62	41.56	41.36
			484T	65	43.16	43.26
			SU	-	40.66	40.36

Band	Mode	Frequency (MHz)	Tones	RU offset	26 dB bandwidth (MHz)	
					ANT1	ANT2
UNII 2A	HE80	5 290	26T	0	83.32	81.64
				18	79.24	78.40
				36	82.72	82.36
			52T	37	82.24	82.84
				45	79.72	78.76
				52	83.32	82.72
			106T	53	84.16	83.44
				57	80.56	79.12
				60	84.16	84.16
			242T	61	85.00	85.24
				62	82.72	80.56
				64	85.36	84.88
			484T	65	87.51	84.52
				66	85.59	86.67
			996T	67	89.31	88.11
			SU	-	81.76	81.40

Band	Mode	Frequency (MHz)	Tones	RU offset	26 dB bandwidth (MHz)	
					ANT1	ANT2
UNII 2C	HE20	5 500	26T	0	20.88	20.68
				4	19.08	18.68
				8	20.93	20.23
			52T	37	21.08	20.48
				38	19.68	18.88
				40	20.98	20.28
			106T	53	21.68	21.18
				54	21.73	20.88
			242T	61	22.33	22.13
			SU	-	21.13	21.33
		5 600	26T	0	20.98	20.33
				4	19.08	18.68
				8	20.73	20.23
			52T	37	21.23	20.43
				38	19.68	18.78
				40	21.03	20.18
			106T	53	21.68	21.18
				54	21.38	20.93
			242T	61	22.28	22.18
			SU	-	21.23	21.08
		5 700	26T	0	20.98	20.38
				4	19.13	18.63
				8	20.63	20.28
			52T	37	21.23	20.43
				38	19.68	18.83
				40	21.13	20.33
			106T	53	21.68	21.23
				54	21.43	20.88
			242T	61	22.33	22.13
			SU	-	21.03	20.93

Band	Mode	Frequency (MHz)	Tones	RU offset	26 dB bandwidth (MHz)	
					ANT1	ANT2
UNII 2C	HE20	Straddle 5 720	26T	0	20.48	20.33
				4	19.08	18.68
			52T	37	21.23	20.38
				38	19.83	18.83
			106T	53	21.73	21.23
				54*	15.14	14.54
			242T	61*	16.09	16.19
			SU	-*	15.64	15.39

* RU Allocation included in the straddle band

Band	Mode	Frequency (MHz)	Tones	RU offset	26 dB bandwidth (MHz)	
					ANT1	ANT2
UNII 2C	HE40	5 510	26T	0	41.56	40.26
				9	38.56	38.36
				17	40.76	40.66
			52T	37	40.86	41.16
				41	38.96	38.56
				44	41.66	40.76
			106T	53	41.66	41.46
				54	39.56	39.06
				56	42.06	41.46
			242T	61	42.06	41.66
				62	41.66	41.76
			484T	65	43.16	43.86
			SU	-	40.36	40.16
		5 590	26T	0	40.96	40.06
				9	38.76	38.36
				17	40.56	40.46
			52T	37	40.96	41.16
				41	38.86	38.56
				44	40.76	41.26
			106T	53	41.46	41.46
				54	39.36	39.06
				56	42.16	41.36
			242T	61	42.26	41.96
				62	41.66	41.36
			484T	65	43.06	43.96
			SU	-	40.46	40.46

Band	Mode	Frequency (MHz)	Tones	RU offset	26 dB bandwidth (MHz)	
					ANT1	ANT2
UNII 2C	HE40	5 670	26T	0	40.86	40.16
				9	38.76	38.36
				17	41.16	40.66
			52T	37	40.96	41.16
				41	39.06	38.56
				44	40.66	40.96
			106T	53	41.66	41.56
				54	39.46	39.06
				56	42.06	41.46
			242T	61	42.26	41.76
				62	41.46	42.06
			484T	65	43.06	43.76
			SU	-	40.46	40.36
		Straddle 5 710	26T	0	41.76	40.46
				9	38.46	38.26
			52T	37	40.86	41.36
				41	38.96	38.56
			106T	53	41.66	41.56
				54	39.56	38.86
				56*	34.68	34.48
			242T	61	42.66	42.16
				62*	35.28	35.18
			484T	65*	36.18	36.68
			SU	-*	35.28	35.18

* RU Allocation included in the straddle band

Band	Mode	Frequency (MHz)	Tones	RU offset	26 dB bandwidth (MHz)	
					ANT1	ANT2
UNII 2C	HE80	5 530	26T	0	83.08	81.76
				18	79.12	78.40
				36	83.20	82.12
			52T	37	82.48	82.84
				45	79.60	78.40
				52	82.96	82.72
			106T	53	84.52	84.28
				57	80.32	79.36
				60	85.00	84.16
			242T	61	85.12	83.92
				62	82.60	80.20
				64	85.24	84.88
			484T	65	87.75	84.64
				66	85.48	85.12
			996T	67	89.19	89.19
			SU	-	81.88	82.00
		5 610	26T	0	83.20	81.64
				18	79.60	78.40
				36	83.08	82.36
			52T	37	82.48	82.84
				45	79.36	78.76
				52	82.60	82.48
			106T	53	84.40	83.44
				57	80.68	79.24
				60	84.88	84.16
			242T	61	87.51	84.28
				62	82.84	80.56
				64	85.24	84.88
			484T	65	88.11	84.04
				66	85.00	86.55
			996T	67	89.19	90.03
			SU	-	81.88	82.00

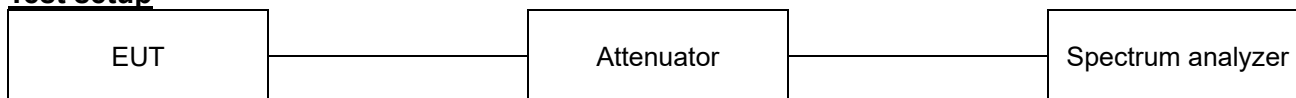
Band	Mode	Frequency (MHz)	Tones	RU offset	26 dB bandwidth (MHz)	
					ANT1	ANT2
UNII 2C	HE80	Straddle 5 690	26T	0	83.56	82.00
				18	79.24	78.52
			52T	37	82.36	82.96
				45	79.72	78.52
			106T	53	84.64	84.40
				57	80.68	79.24
				60*	74.68	74.68
			242T	61	84.88	84.76
				62	82.72	80.44
				64*	75.64	75.16
			484T	65	87.99	84.16
				66*	76.00	75.28
			966T	67*	79.36	80.20
			SU	-*	76.24	75.76

* RU Allocation included in the straddle band

Band	Mode	Frequency (MHz)	Tones	RU offset	26 dB bandwidth (MHz)	
					ANT1	ANT2
UNII 2C	HE160	5 570	26T	0L	165.59	164.32
				0U	159.84	159.20
				36U	163.68	164.96
			52T	37L	164.96	164.64
				37U	159.52	159.52
				52U	164.96	164.64
			106T	53L	167.83	166.23
				53U	160.80	160.16
				60U	166.55	165.28
			242T	61L	166.87	165.91
				61U	162.72	161.44
				64U	166.87	167.19
			484T	65L	170.39	167.19
				66L	164.96	162.08
				66U	166.23	168.79
			996T	67L	175.50	168.47
				67U	168.15	169.11
			2X996T	-	165.91	164.96
			SU	-	166.87	164.32

8.4. 6 dB Bandwidth

Test setup



Limit

According to §15.407(e),

Within the 5.725-5.850 GHz and 5.850-5.895 GHz bands, the minimum 6 dB bandwidth of U-NII devices shall be at least 500kHz.

Test procedure

ANSI C63.10-2013 Section 6.9.2

KDB 789033 D02 v02r01 - Section C.2

KDB 291074 D02 v01 – 2.11

Test settings

Minimum Emission Bandwidth for the band 5.725–5.85 GHz and 5.850–5.895 GHz.

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 kHz for the band 5.725–5.85 GHz and 5.850-5.895 GHz band. The following procedure shall be used for measuring this Bandwidth:

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

Note:

1. For the 6dB Bandwidth, it was tested at the RU allocation with lowest tones number for each bandwidth
2. * RU Allocation included in the straddle band
3. Please refer to Appendix A for plots

Test results

MIMO

Band	Mode	Frequency (MHz)	Tones	RU offset	6 dB bandwidth (MHz)	
					ANT1	ANT2
UNII 3	HE20	Straddle 5 720	26T	8	2.20	2.15
			52T	40	17.08	14.64
			106T	54*	4.59	4.59
			242T	61*	4.59	4.54
			SU	_*	4.04	3.54
		5 745	26T	8	2.15	2.15
		5 785	26T	0	2.15	2.15
		5 825	26T	0	2.20	2.15
		Minimum Bandwidth			2.15	2.15
		Minimum Limit (MHz)			0.5	

Band	Mode	Frequency (MHz)	Tones	RU offset	6 dB bandwidth (MHz)	
					ANT1	ANT2
UNII 3	HE40	Straddle 5 710	26T	17	2.20	2.20
			52T	44	4.40	4.30
			106T	56*	4.08	4.08
			242T	62*	4.28	4.18
			484T	65*	4.18	4.18
			SU	_*	3.78	3.58
		5 755	26T	9	2.20	2.30
		5 795	26T	9	2.20	2.20
		Minimum Bandwidth			2.20	2.20
		Minimum Limit (MHz)			0.5	

Band	Mode	Frequency (MHz)	Tones	RU offset	6 dB bandwidth (MHz)	
					ANT1	ANT2
UNII 3	HE80	Straddle 5 690	26T	36	2.28	2.28
			52T	52	4.44	4.32
			106T	60*	4.08	4.08
			242T	64*	4.20	4.20
			484T	66*	4.20	4.20
			996T	67*	4.20	3.96
			SU	-*	2.64	2.64
		5 775	26T	36	2.28	2.28
		Minimum Bandwidth				2.28
Minimum Limit (MHz)				0.5		

Band	Mode	Frequency (MHz)	Tones	RU offset	6 dB bandwidth (MHz)	
					ANT1	ANT2
UNII 4	HE20	5 845	26T	0	2.20	2.20
		5 865	26T	8	2.20	2.15
		5 885	26T	0	2.30	2.20
		Minimum Bandwidth			2.20	2.15
Minimum Limit (MHz)					0.5	

Band	Mode	Frequency (MHz)	Tones	RU offset	6 dB bandwidth (MHz)	
					ANT1	ANT2
UNII 4	HE40	5 835	26T	9	2.30	2.30
		5 875	26T	17	2.30	2.30
		Minimum Bandwidth			2.30	2.30
Minimum Limit (MHz)					0.5	

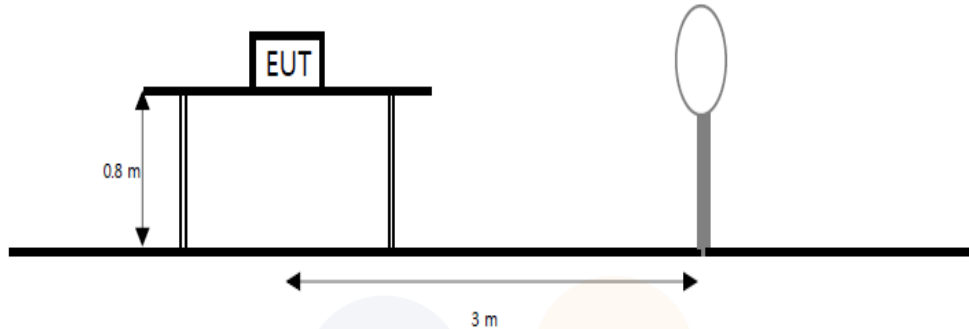
Band	Mode	Frequency (MHz)	Tones	RU offset	6 dB bandwidth (MHz)	
					ANT1	ANT2
UNII 4	HE80	5 855	26T	0	2.64	2.64
		Minimum Bandwidth			2.64	2.64
Minimum Limit (MHz)					0.5	

Band	Mode	Frequency (MHz)	Tones	RU offset	6 dB bandwidth (MHz)	
					ANT1	ANT2
UNII 4	HE160	5 815	26T	36U	3.84	4.48
		Minimum Bandwidth			3.84	4.48
Minimum Limit (MHz)					0.5	

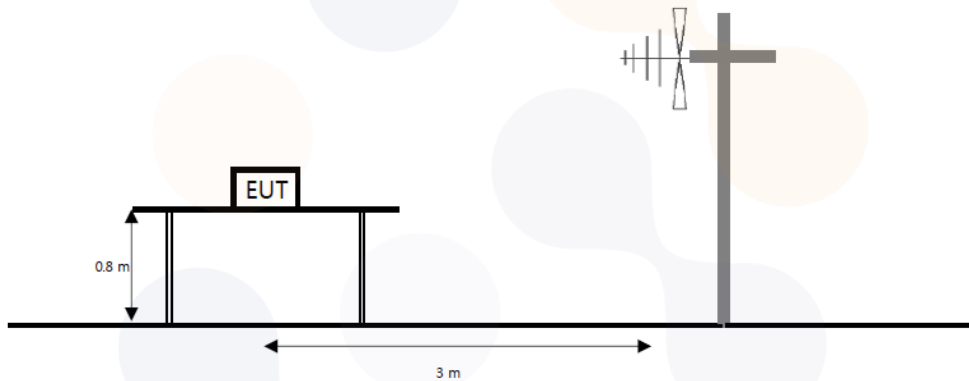
8.5. Spurious Emission, Band Edge and Restricted bands

Test setup

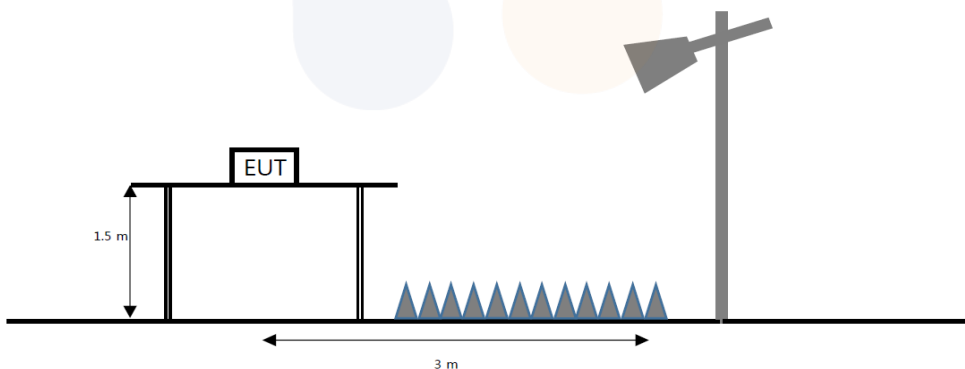
The diagram below shows the test setup that is utilized to make the measurements for emission from 9 kHz to 30 MHz Emissions



The diagram below shows the test setup that is utilized to make the measurements for emission from 30 MHz to 1 GHz emissions.



The diagram below shows the test setup that is utilized to make the measurements for emission from 1 GHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz emissions, whichever is lower.



Limit

According to section 15.209(a),

Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field strength ($\mu\text{V/m}$)	Measurement distance (m)
0.009 - 0.490	2 400/F(kHz)	300
0.490 - 1.705	24 000/F(kHz)	30
1.705 - 30	30	30
30 - 88	100**	3
88 - 216	150**	3
216 - 960	200**	3
Above 960	500	3

**Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54–72 MHz, 76–88 MHz, 174–216 MHz or 470–806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., Section 15.231 and 15.241.

According to section 15.205(a) and (b),

Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.009 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
0.495 - 0.505	16.694 75 - 16.695 25	608 - 614	5.35 - 5.46
2.173 5 - 2.190 5	16.804 25 - 16.804 75	960 - 1 240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1 300 - 1 427	8.025 - 8.5
4.177 25 - 4.177 75	37.5 - 38.25	1 435 - 1 626.5	9.0 - 9.2
4.207 25 - 4.207 75	73 - 74.6	1 645.5 - 1 646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1 660 - 1 710	10.6 - 12.7
6.267 75 - 6.268 25	108 - 121.94	1 718.8 - 1 722.2	13.25 - 13.4
6.311 75 - 6.312 25	123 - 138	2 200 - 2 300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2 310 - 2 390	15.35 - 16.2
8.362 - 8.366	156.524 75 - 156.525	2 483.5 - 2 500	17.7 - 21.4
8.376 25 - 8.386 75	25	2 690 - 2 900	22.01 - 23.12
8.414 25 - 8.414 75	156.7 - 156.9	3 260 - 3 267	23.6 - 24.0
12.29 - 12.293	162.012 5 - 167.17	3 332 - 3 339	31.2 - 31.8
12.519 75 - 12.520 25	167.72 - 173.2	3 345.8 - 3 358	36.43 - 36.5
12.576 75 - 12.577 25	240 - 285	3 600 - 4 400	Above 38.6
13.36 - 13.41	322 - 335.4		

The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in section 15.209. At frequencies equal to or less than 1 000 MHz, compliance with the limits in section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1 000 MHz, compliance with the emission limits in section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in section 15.35 apply to these measurements.

According to section 15.407(b),

Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz

For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

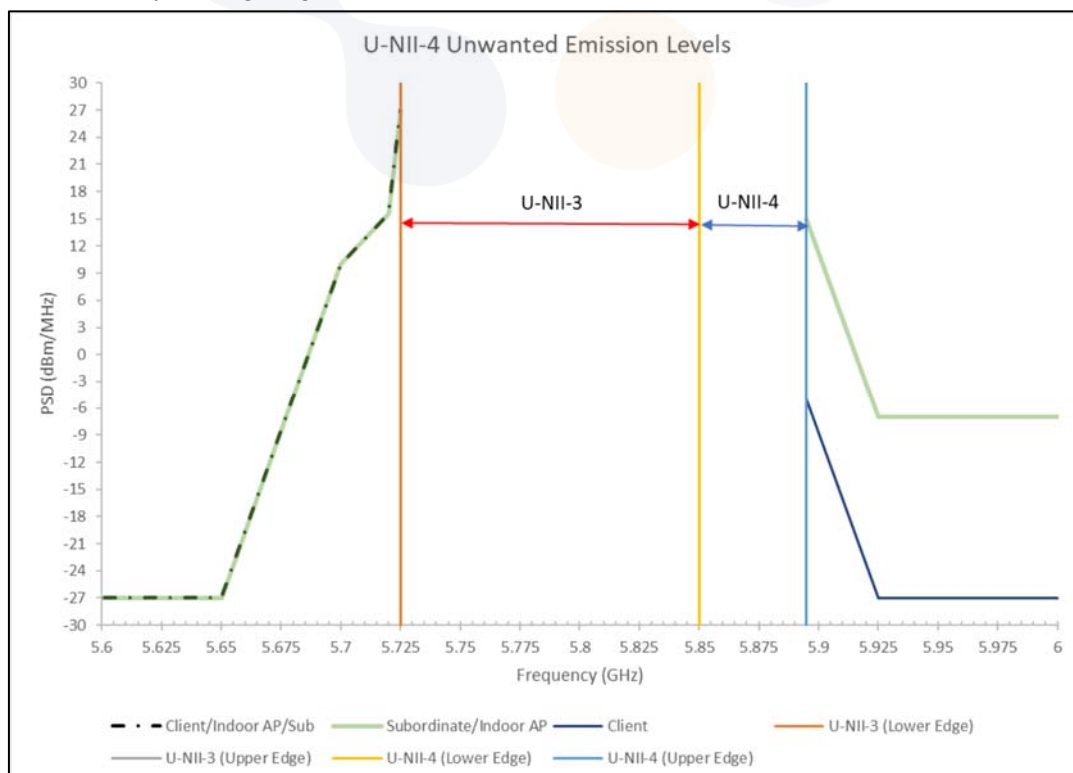
For transmitters operating solely in the 5.850-5.895 GHz band or operating on a channel that spans across 5.725-5.895 GHz:

[RMS detector]

For a client device, all emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of -5 dBm/MHz and shall decrease linearly to an e.i.r.p. of -27 dBm/MHz at or above 5.925 GHz.

[Peak detector]

For a client device or indoor access point or subordinate device, all emissions below 5.725 GHz shall not exceed an e.i.r.p. of -27 dBm/MHz at 5.65 GHz increasing linearly to 10 dBm/MHz at 5.7 GHz, and from 5.7 GHz increasing linearly to a level of 15.6 dBm/MHz at 5.72 GHz, and from 5.72 GHz increasing linearly to a level of 27 dBm/MHz at 5.725 GHz.



Test procedure

ANSI C63.10-2013 Section 12.7.7.2, 12.7.5, 12.7.6

KDB 789033 D02 v02r01 – Section G

KDB 291074 D02 v01 – 2.10.2

Test settings

Peak field strength measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = as specified in table
3. VBW $\geq$ (3 $\times$ RBW)
4. Detector = peak
5. Sweep time = auto
6. Trace mode = max hold
7. Allow sweeps to continue until the trace stabilizes

Table. RBW as a function of frequency

Frequency	RBW
9 kHz to 150 kHz	200 Hz to 300 Hz
0.15 MHz to 30 MHz	9 kHz to 10 kHz
30 MHz to 1 000 MHz	100 kHz to 120 kHz
> 1 000 MHz	1 MHz

Average field strength measurements

Trace averaging with continuous EUT transmission at full power

If the EUT can be configured or modified to transmit continuously ($D \geq 98\%$), then the average emission levels shall be measured using the following method (with EUT transmitting continuously):

1. RBW = 1 MHz (unless otherwise specified).
2. VBW $\geq$ (3 $\times$ RBW).
3. Detector = RMS (power averaging), if $[\text{span} / (\# \text{ of points in sweep})] \leq (\text{RBW} / 2)$. Satisfying this condition may require increasing the number of points in the sweep or reducing the span. If this condition cannot be satisfied, then the detector mode shall be set to peak.
4. Averaging type = power (i.e., rms):
 - 1) As an alternative, the detector and averaging type may be set for linear voltage averaging.
 - 2) Some instruments require linear display mode to use linear voltage averaging. Log or dB averaging shall not be used.
5. Sweep time = auto.
6. Perform a trace average of at least 100 traces.

Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction

If continuous transmission of the EUT ($D \geq 98\%$) cannot be achieved and the duty cycle is constant (duty cycle variations are less than $\pm 2\%$), then the following procedure shall be used:

1. The EUT shall be configured to operate at the maximum achievable duty cycle.
2. Measure the duty cycle D of the transmitter output signal as described in 11.6.
3. $RBW = 1 \text{ MHz}$ (unless otherwise specified).
4. $VBW \geq [3 \times RBW]$.
5. Detector = RMS (power averaging), if $[\text{span} / (\# \text{ of points in sweep})] \leq (RBW / 2)$. Satisfying this condition may require increasing the number of points in the sweep or reducing the span. If this condition cannot be satisfied, then the detector mode shall be set to peak.
6. Averaging type = power (i.e., rms):
 - 1) As an alternative, the detector and averaging type may be set for linear voltage averaging.
 - 2) Some instruments require linear display mode to use linear voltage averaging. Log or dB averaging shall not be used.
7. Sweep time = auto.
8. Perform a trace average of at least 100 traces.
9. A correction factor shall be added to the measurement results prior to comparing with the emission limit to compute the emission level that would have been measured had the test been performed at 100% duty cycle. The correction factor is computed as follows:
 - 1) If power averaging (rms) mode was used in step f), then the applicable correction factor is $[10 \log (1 / D)]$, where D is the duty cycle.
 - 2) If linear voltage averaging mode was used in step f), then the applicable correction factor is $[20 \log (1 / D)]$, where D is the duty cycle.
 - 3) If a specific emission is demonstrated to be continuous ($D \geq 98\%$) rather than turning ON and OFF with the transmit cycle, then no duty cycle correction is required for that emission.

Band edge measurements

Integration Method

For maximum emissions measurements, follow the procedures described in II.G.5., "Procedures for unwanted maximum Emissions Measurements above 1000 MHz. Except for the following changes:

1. Set $RBW = 100 \text{ kHz}$
2. Set $VBW \geq 3 \times RBW$
3. Perform a band-power integration across the 1 MHz bandwidth in which the band edge emission level is to be measured. CAUTION: you must ensure that the spectrum analyzer or EMI receiver is set for peak detection and max-hold for this measurement.

For average emissions measurements, follow the procedures described in II.G.6., "Procedures for average unwanted Emissions Measurements above 1000 MHz. Except for the following changes:

1. Set $RBW = 100 \text{ kHz}$
2. Set $VBW \geq 3 \times RBW$
3. Perform a band-power integration across the 1 MHz bandwidth in which the band edge emission level is to be measured.

Notes:

1. $f < 30$ MHz, extrapolation factor of 40 dB/decade of distance. $F_d = 40\log(D_m/D_s)$
 $f \geq 30$ MHz, extrapolation factor of 20 dB/decade of distance. $F_d = 20\log(D_m/D_s)$
Where:
 F_d = Distance factor in dB
 D_m = Measurement distance in meters
 D_s = Specification distance in meters
2. Factors(dB) = Antenna factor(dB/m) + Cable loss(dB) + or Amp. gain(dB) + or F_d (dB)
3. The worst-case emissions are reported however emissions whose levels were not within 20 dB of respective limits were not reported.
4. Average test would be performed if the peak result were greater than the average limit.
5. ¹⁾ means restricted band.
6. Below 30 MHz frequency range, In order to search for the worst result, all orientations about parallel, perpendicular, and ground-parallel were investigated then reported. when the emission level was higher than 20 dB of the limit, then the following statement shall be made: "No spurious emissions were detected within 20 dB of the limit."
7. Above 1 GHz the worst results between two antenna polarizations (H and V) were documented in the test report.
8. For above 1 GHz pre-scan to detect harmonic and spurious emissions, the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 kHz for peak measurements.
9. Measurement configuration for 11ax RU allocations
 - 1) For the radiated band-edge test, it was tested at 11ax RU allocations near the band edge.
 - The target power of 20 MHz RU tone is the same or higher than other bandwidth (40/80/160 MHz), Therefore, it was tested as a representative at 20 MHz bandwidth and additional full tone cases were tested for the remaining bandwidth.
 - 2) The pre-scan was performed for all modes, and then only the RU allocation with actual highest output power considering each bandwidth was reported as a representative.

Test results (Above 1 000 MHz)

UNII 1 2Tx (MIMO) Restricted Band edge (Lowest Channel)

802.11ax_HE20 SU mode_Lowest Channel (5 180 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μW/m))	(dB(μW/m))	(dB)
Peak data								
5 149.68 ¹⁾	V	49.60	33.40	-27.13	-	55.87	74.00	18.13
Average Data								
5 149.68 ¹⁾	V	37.08	33.40	-27.13	-	43.35	54.00	10.65

802.11ax_HE40 SU mode_Lowest Channel (5 190 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μW/m))	(dB(μW/m))	(dB)
Peak data								
5 149.92 ¹⁾	H	49.90	33.40	-27.13	-	56.17	74.00	17.83
Average Data								
5 149.92 ¹⁾	H	39.88	33.40	-27.13	-	46.15	54.00	7.85

802.11ax_HE80 SU mode_Middle Channel (5 210 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μW/m))	(dB(μW/m))	(dB)
Peak data								
5 149.92 ¹⁾	H	45.80	33.40	-27.13	-	52.07	74.00	21.93
5 424.74 ¹⁾	H	44.10	33.10	-27.01	-	50.19	74.00	23.81
Average Data								
5 149.92 ¹⁾	H	36.83	33.40	-27.13	-	43.10	54.00	10.90

802.11ax_HE160 SU mode_Middle Channel (5 250 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μW/m))	(dB(μW/m))	(dB)
Peak data								
5 149.54 ¹⁾	V	47.30	33.40	-27.13	-	53.57	74.00	20.43
5 356.08 ¹⁾	V	47.10	33.10	-27.02	-	53.18	74.00	20.82
Average Data								
5 149.54 ¹⁾	V	37.48	33.40	-27.13	-	43.75	54.00	10.25
5 356.08 ¹⁾	V	36.52	33.10	-27.02	-	42.60	54.00	11.40

802.11ax_HE20 RU mode (26T / RU offset 0)_Lowest Channel (5 180 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 115.73 ¹⁾	H	43.80	33.33	-27.21	-	49.92	74.00	24.08
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (52T / RU offset 37)_Lowest Channel (5 180 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 146.13 ¹⁾	H	44.10	33.39	-27.14	-	50.35	74.00	23.65
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (106T / RU offset 53)_Lowest Channel (5 180 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 149.99 ¹⁾	H	46.40	33.40	-27.13	-	52.67	74.00	21.33
Average Data								
5 149.99 ¹⁾	H	33.44	33.40	-27.13	-	39.71	54.00	14.29

802.11ax_HE20 RU mode (242T / RU offset 61)_Lowest Channel (5 180 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 148.94 ¹⁾	V	55.90	33.40	-27.13	-	62.17	74.00	11.83
Average Data								
5 148.94 ¹⁾	V	39.52	33.40	-27.13	0.11	45.90	54.00	8.10

802.11ax_HE40 RU mode (484T / RU offset 65)_Lowest Channel (5 190 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 148.24 ¹⁾	H	60.80	33.40	-27.13	-	67.07	74.00	6.93
Average Data								
5 148.24 ¹⁾	H	44.63	33.40	-27.13	0.19	51.09	54.00	2.91

802.11ax_HE80 RU mode (996T / RU offset 67)_Middle Channel (5 210 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 148.28 ¹⁾	V	59.60	33.40	-27.13	-	65.87	74.00	8.13
5 377.70 ¹⁾	H	44.40	33.10	-27.04	-	50.46	74.00	23.54
Average Data								
5 148.28 ¹⁾	V	42.06	33.40	-27.13	0.19	48.52	54.00	5.48

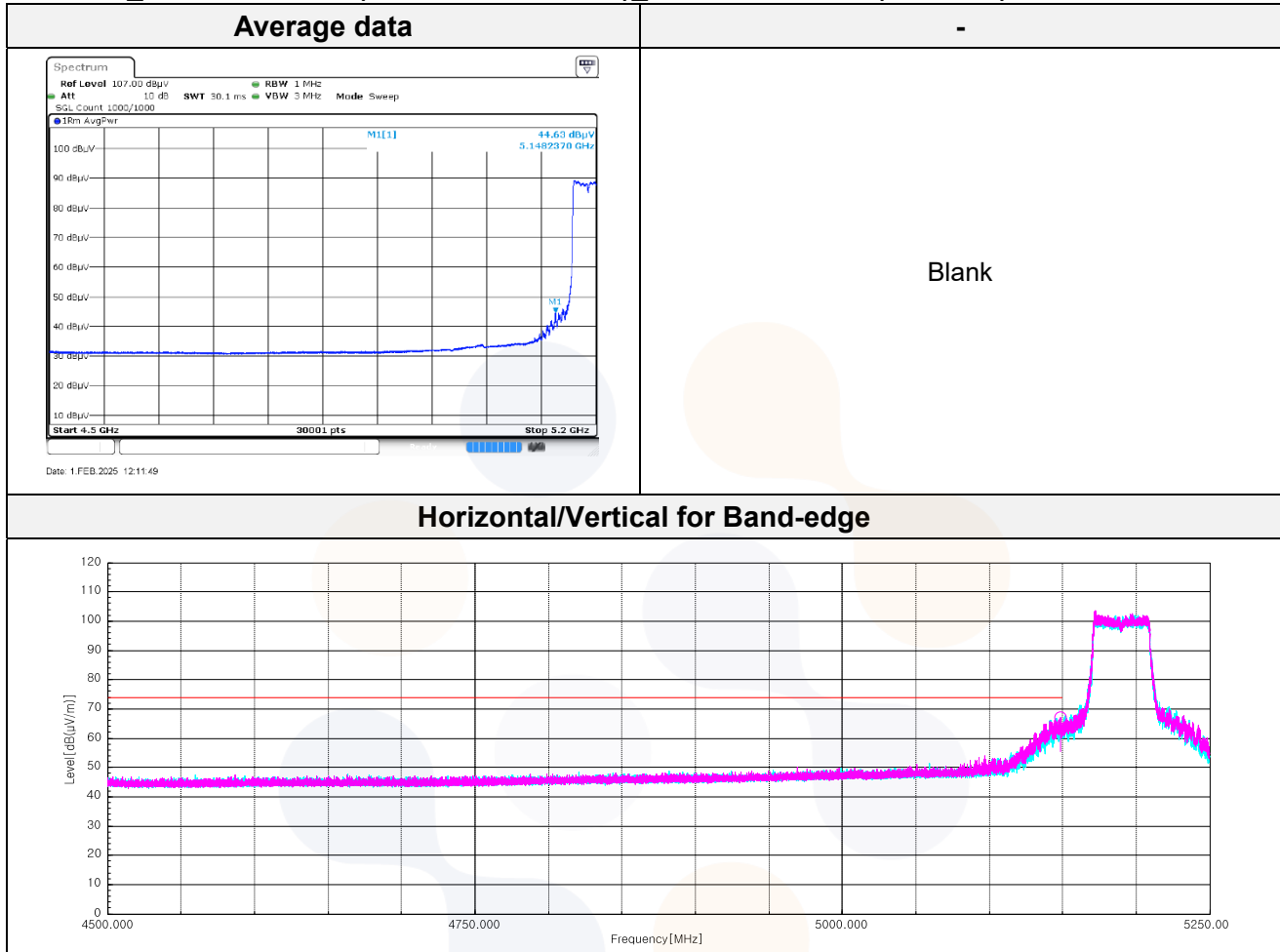
802.11ax_HE160 RU mode (2x996T / RU offset 68)_Middle Channel (5 250 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 147.26 ¹⁾	V	45.80	33.39	-27.14	-	52.05	74.00	21.95
5 353.58 ¹⁾	H	45.40	33.10	-27.02	-	51.48	74.00	22.52
Average Data								
5 147.26 ¹⁾	V	35.45	33.39	-27.14	-	41.70	54.00	12.30
5 353.58 ¹⁾	H	35.36	33.10	-27.02	-	41.44	54.00	12.56

Plot of Band edge

In order to simplify the report, attached plots were only the lowest margin condition

802.11ax_HE40 RU mode (484T / RU offset 65)_Lowest Channel (5 190 MHz)



UNII 2A 2Tx (MIMO) Restricted Band edge (Highest Channel)

802.11ax_HE20 SU mode_Highest Channel (5 320 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 351.17 ¹⁾	H	44.60	33.10	-27.02	-	50.68	74.00	23.32
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE40 SU mode_Highest Channel (5 310 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 350.04 ¹⁾	H	46.50	33.10	-27.02	-	52.58	74.00	21.42
Average Data								
5 350.04 ¹⁾	H	35.81	33.10	-27.02	-	41.89	54.00	12.11

802.11ax_HE80 SU mode_Middle Channel (5 290 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 350.37 ¹⁾	H	47.30	33.10	-27.02	-	53.38	74.00	20.62
Average Data								
5 350.37 ¹⁾	H	35.94	33.10	-27.02	-	42.02	54.00	11.98

802.11ax_HE20 RU mode (26T / RU offset 8)_Highest Channel (5 320 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 386.23 ¹⁾	V	44.30	33.10	-27.04	-	50.36	74.00	23.64
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (52T / RU offset 40)_Highest Channel (5 320 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 377.30 ¹⁾	V	44.40	33.10	-27.04	-	50.46	74.00	23.54
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (106T / RU offset 54)_Highest Channel (5 320 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 351.38 ¹⁾	H	50.20	33.10	-27.02	-	56.28	74.00	17.72
Average Data								
5 351.38 ¹⁾	H	32.70	33.10	-27.02	-	38.78	54.00	15.22

802.11ax_HE20 RU mode (242T / RU offset 61)_Highest Channel (5 320 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 350.34 ¹⁾	V	55.20	33.10	-27.02	-	61.28	74.00	12.72
Average Data								
5 350.34 ¹⁾	V	35.36	33.10	-27.02	0.11	41.55	54.00	12.45

802.11ax_HE40 RU mode (484T / RU offset 65)_Highest Channel (5 310 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 351.81 ¹⁾	H	61.70	33.10	-27.02	-	67.78	74.00	6.22
Average Data								
5 351.81 ¹⁾	H	43.55	33.10	-27.02	0.19	49.82	54.00	4.18

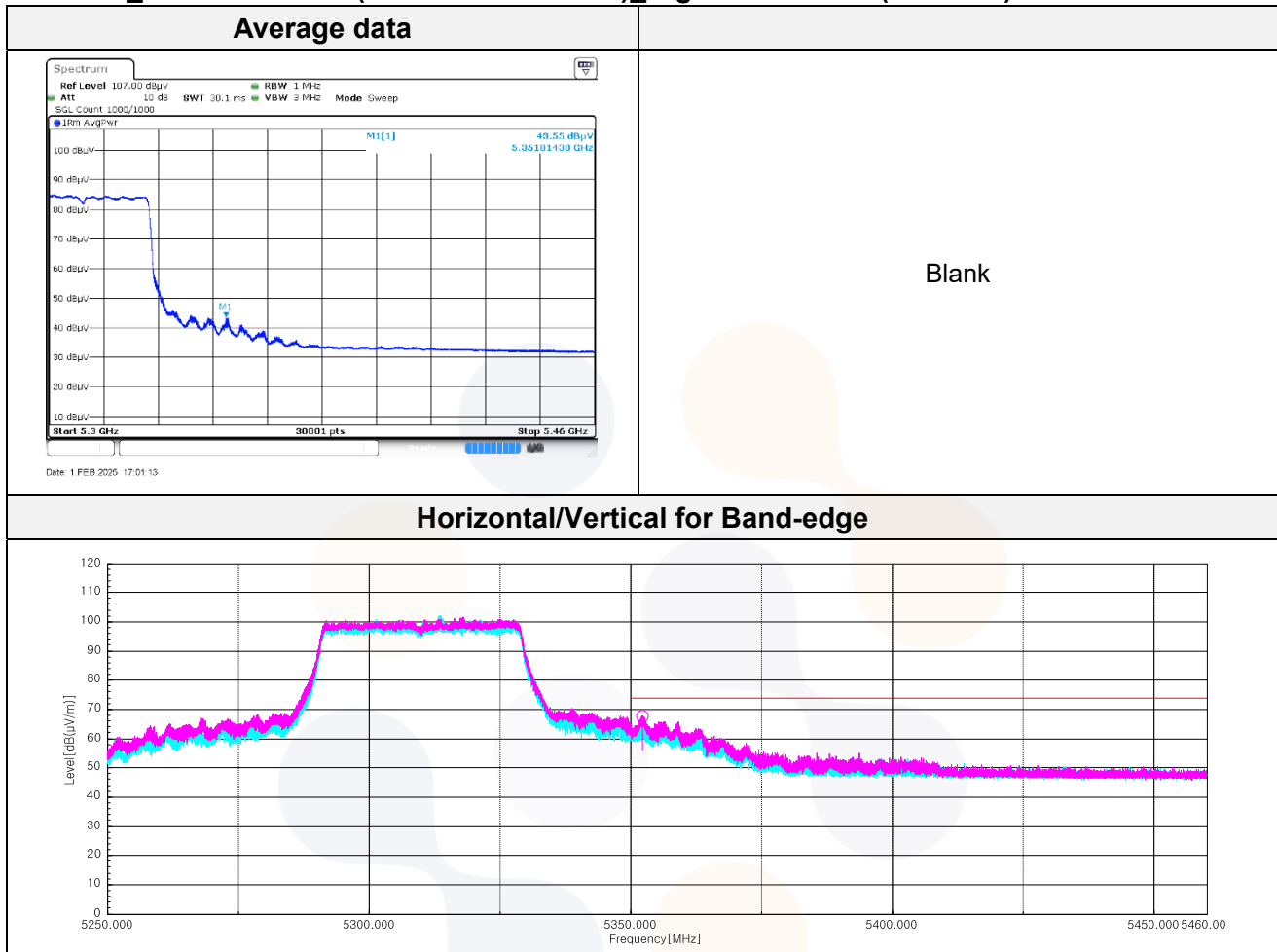
802.11ax_HE80 RU mode (996T / RU offset 67)_Middle Channel (5 290 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 371.01 ¹⁾	H	60.70	33.10	-27.03	-	66.77	74.00	7.23
Average Data								
5 371.01 ¹⁾	H	40.92	33.10	-27.03	0.19	47.18	54.00	6.82

Plot of Band edge

In order to simplify the report, attached plots were only the lowest margin condition

802.11ax_HE40 RU mode (484T / RU offset 65)_Highest Channel (5 310 MHz)



UNII 2C 2Tx (MIMO) Restricted Band edge (Lowest Channel)

802.11ax_HE20 SU mode_Lowest Channel (5 500 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 459.96 ¹⁾	H	45.90	33.10	-26.97	-	52.03	74.00	21.97
Average Data								
5 459.96 ¹⁾	H	34.47	33.10	-26.97	-	40.60	54.00	13.40

802.11ax_HE40 SU mode_Lowest Channel (5 510 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 459.99 ¹⁾	H	46.50	33.10	-26.97	-	52.63	74.00	21.37
Average Data								
5 459.99 ¹⁾	H	36.57	33.10	-26.97	-	42.70	54.00	11.30

802.11ax_HE80 SU mode_Lowest Channel (5 530 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 459.90 ¹⁾	H	46.20	33.10	-26.97	-	52.33	74.00	21.67
Average Data								
5 459.90 ¹⁾	H	36.38	33.10	-26.97	-	42.51	54.00	11.49

802.11ax_HE160 SU mode_Middle Channel (5 570 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 448.96 ¹⁾	H	48.20	33.10	-26.96	-	54.34	74.00	19.66
5 730.21	H	47.90	33.56	-26.57	-	54.89	68.20	13.31
Average Data								
5 448.96 ¹⁾	H	36.87	33.10	-26.96	-	43.01	54.00	10.99

802.11ax_HE20 RU mode (26T / RU offset 0)_Lowest Channel (5 500 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 379.02 ¹⁾	H	44.50	33.10	-27.04	-	50.56	74.00	23.44
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (52T / RU offset 37)_Lowest Channel (5 500 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 414.63 ¹⁾	V	44.80	33.10	-27.02	-	50.88	74.00	23.12
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (106T / RU offset 53)_Lowest Channel (5 500 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 458.80 ¹⁾	H	44.90	33.10	-26.97	-	51.03	74.00	22.97
Average Data								
5 458.80 ¹⁾	H	33.32	33.10	-26.97	-	39.45	54.00	14.55

802.11ax_HE20 RU mode (242T / RU offset 61)_Lowest Channel (5 500 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 459.86 ¹⁾	H	53.00	33.10	-26.97	-	59.13	74.00	14.87
Average Data								
5 459.86 ¹⁾	H	37.38	33.10	-26.97	0.11	43.62	54.00	10.38

802.11ax_HE40 RU mode (484T / RU offset 65)_Lowest Channel (5 510 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 457.77 ¹⁾	H	59.90	33.10	-26.97	-	66.03	74.00	7.97
Average Data								
5 457.77 ¹⁾	H	42.81	33.10	-26.97	0.19	49.13	54.00	4.87

802.11ax_HE80 RU mode (996T / RU offset 67)_Lowest Channel (5 530 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 459.89 ¹⁾	H	59.70	33.10	-26.97	-	65.83	74.00	8.17
Average Data								
5 459.89 ¹⁾	H	43.56	33.10	-26.97	0.19	49.88	54.00	4.12

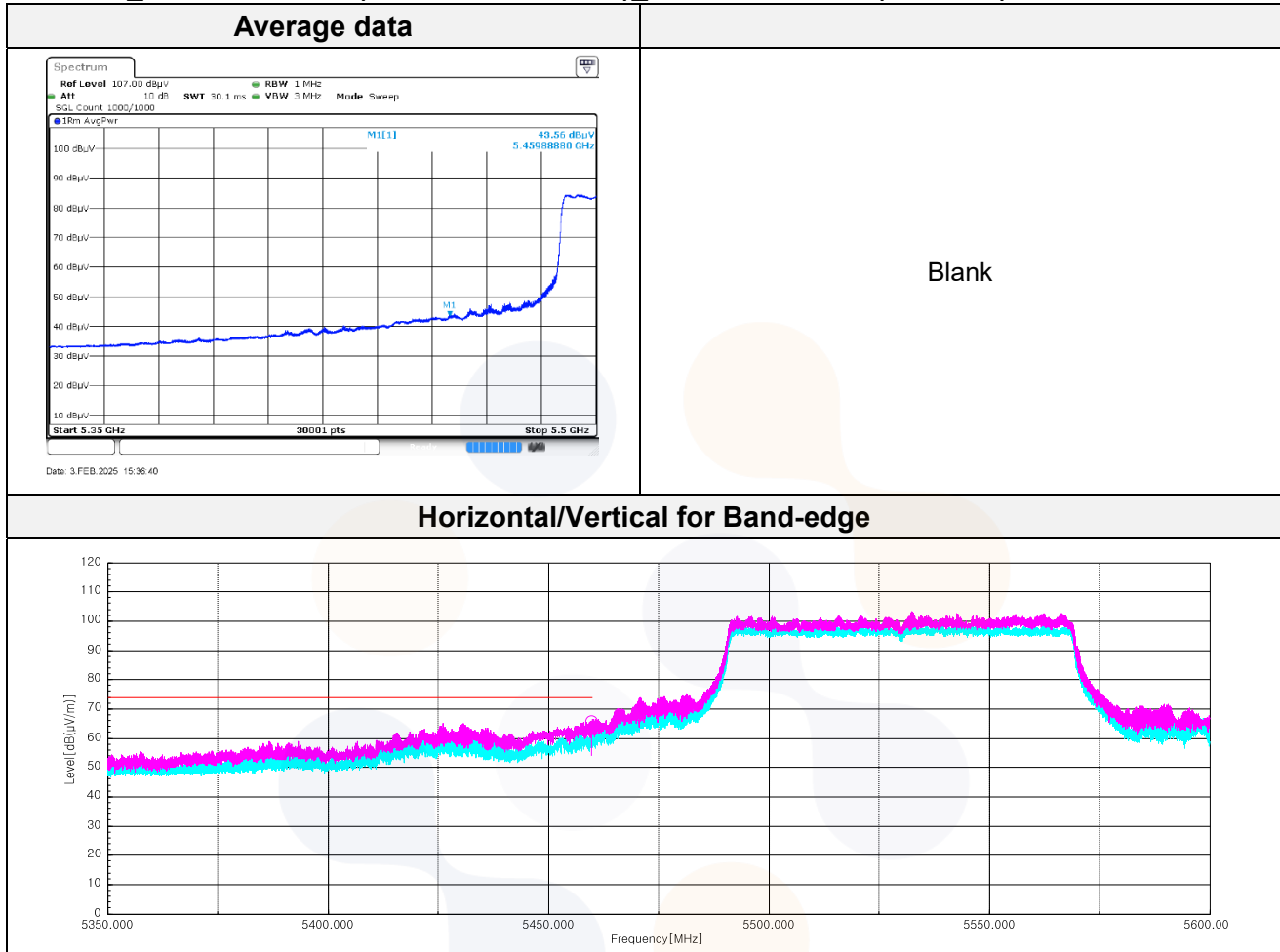
802.11ax_HE160 RU mode_(2X996T / RU offset 68)_ Middle Channel (5 570 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 453.42 ¹⁾	V	47.30	33.10	-26.96	-	53.44	74.00	20.56
5 729.79	V	47.50	33.56	-26.57	-	54.49	68.20	13.71
Average Data								
5 453.42 ¹⁾	V	35.58	33.10	-26.96	-	41.72	54.00	12.28

Plot of Band edge

In order to simplify the report, attached plots were only the lowest margin condition

802.11ax_HE80 RU mode (996T / RU offset 67)_Lowest Channel (5 530 MHz)



UNII 2C 2Tx (MIMO) Band edge (Highest Channel)

802.11ax_HE20 SU mode_Highest Channel (5 700 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 725.27	H	50.50	33.55	-26.57	-	57.48	68.20	10.72
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE40 SU mode_Highest Channel (5 670 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 735.02	V	46.60	33.57	-26.57	-	53.60	68.20	14.60
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE80 SU mode_Highest Channel (5 610 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 820.49	H	45.60	34.18	-26.43	-	53.35	68.20	14.85
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (26T / RU offset 8)_Highest Channel (5 700 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 809.89	H	46.10	34.14	-26.41	-	53.83	68.20	14.37
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (52T / RU offset 40)_Highest Channel (5 700 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 806.64	V	46.30	34.13	-26.40	-	54.03	68.20	14.17
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (106T / RU offset 54)_Highest Channel (5 700 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 725.46	H	57.60	33.55	-26.57	-	64.58	68.20	3.62
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (242T / RU offset 61)_Highest Channel (5 700 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 725.50	H	55.33	33.55	-26.57	-	62.31	68.20	5.89
5 726.50	H	54.86	33.55	-26.57	-	61.84	68.20	6.36
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE40 RU mode (484T / RU offset 65)_Highest Channel (5 670 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 727.06	H	57.50	33.55	-26.57	-	64.48	68.20	3.72
Average Data								
No spurious emissions were detected within 20 dB of the limit								

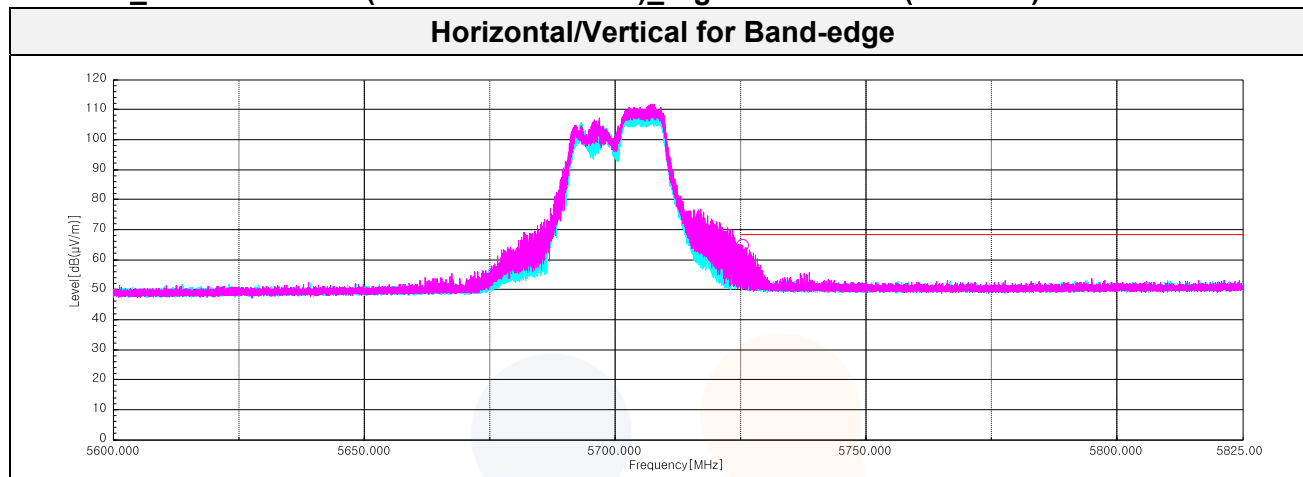
802.11ax_HE80 RU mode (996T / RU offset 67)_Highest Channel (5 610 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 728.50	H	47.70	33.56	-26.57	-	54.69	68.20	13.51
Average Data								
No spurious emissions were detected within 20 dB of the limit								

Plot of Band edge

In order to simplify the report, attached plots were only the lowest margin condition

802.11ax_HE20 RU mode (106T / RU offset 54)_Highest Channel (5 700 MHz)



UNII 3 2Tx (MIMO) Band edge (Lowest Channel)

802.11ax_HE20 SU mode_Lowest Channel (5 745 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 724.38	H	50.90	33.55	-26.58	-	57.87	120.80	62.93
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE40 SU mode_Lowest Channel (5 755 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 723.49	H	47.00	33.55	-26.58	-	53.97	118.80	64.83
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE80 SU mode_Middle Channel (5 775 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 724.19	H	46.30	33.55	-26.58	-	53.27	120.40	67.13
5 854.42	V	46.60	34.32	-26.46	-	54.46	112.10	57.64
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (26T / RU offset 0)_Lowest Channel (5 745 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 722.66	V	44.80	33.55	-26.58	-	51.77	116.90	65.13
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (52T / RU offset 37)_Lowest Channel (5 745 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 721.53	V	45.30	33.54	-26.58	-	52.26	114.30	62.04
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (106T / RU offset 53)_Lowest Channel (5 745 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 722.70	V	60.00	33.55	-26.58	-	66.97	117.00	50.03
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (242T / RU offset 61)_Lowest Channel (5 745 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 724.92	H	66.10	33.55	-26.58	-	73.07	122.00	48.93
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE40 RU mode (484T / RU offset 65)_Lowest Channel (5 755 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 722.73	H	65.90	33.55	-26.58	-	72.87	117.00	44.13
Average Data								
No spurious emissions were detected within 20 dB of the limit								

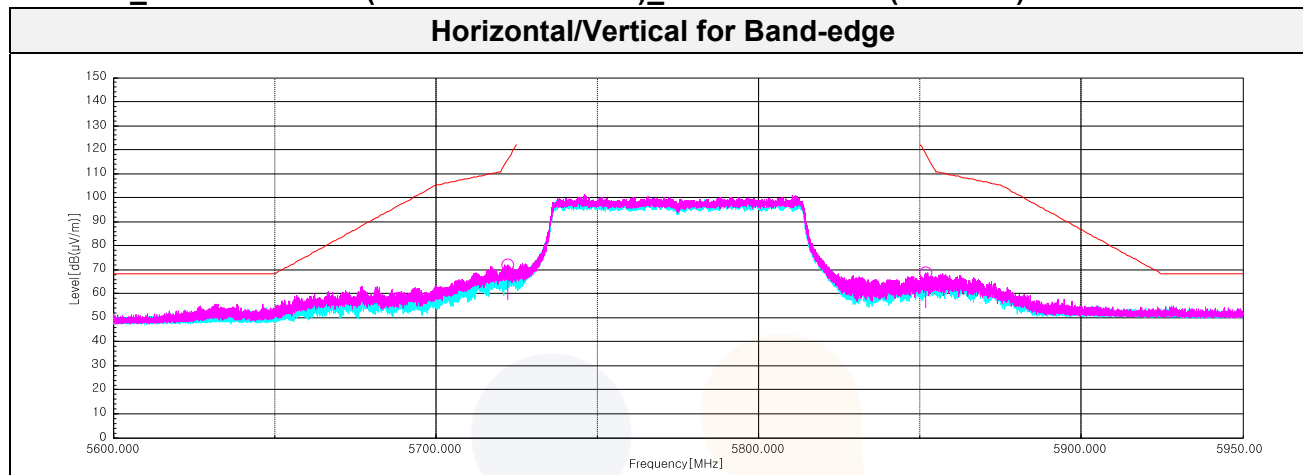
802.11ax_HE80 RU mode (996T / RU offset 67)_Middle Channel (5 775 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 722.30	H	65.00	33.54	-26.58	-	71.96	116.00	44.04
5 851.93	H	60.80	34.31	-26.48	-	68.63	117.80	49.17
Average Data								
No spurious emissions were detected within 20 dB of the limit								

Plot of Band edge

In order to simplify the report, attached plots were only the lowest margin condition

802.11ax_HE80 RU mode (996T / RU offset 67)_Middle Channel (5 775 MHz)



UNII 3 2Tx (MIMO) Band edge (Highest Channel)

802.11ax_HE20 SU mode_Highest Channel (5 825 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
5 853.82	V	44.70	34.32	-26.46	-	52.56	113.50	60.94
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE40 SU mode_Highest Channel (5 795 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
5 854.35	H	45.10	34.32	-26.46	-	52.96	112.30	59.34
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (26T / RU offset 8)_Highest Channel (5 825 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
5 852.81	V	45.10	34.31	-26.47	-	52.94	115.80	62.86
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (52T / RU offset 40)_Highest Channel (5 825 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
5 853.80	V	45.20	34.32	-26.46	-	53.06	113.50	60.44
Average Data								
No spurious emissions were detected within 20 dB of the limit								

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802.11ax_HE20 RU mode (106T / RU offset 54)_Highest Channel (5 825 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 851.77	H	56.50	34.31	-26.48	-	64.33	118.20	53.87
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (242T / RU offset 61)_Highest Channel (5 825 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 850.05	H	60.00	34.30	-26.49	-	67.81	122.10	54.29
Average Data								
No spurious emissions were detected within 20 dB of the limit								

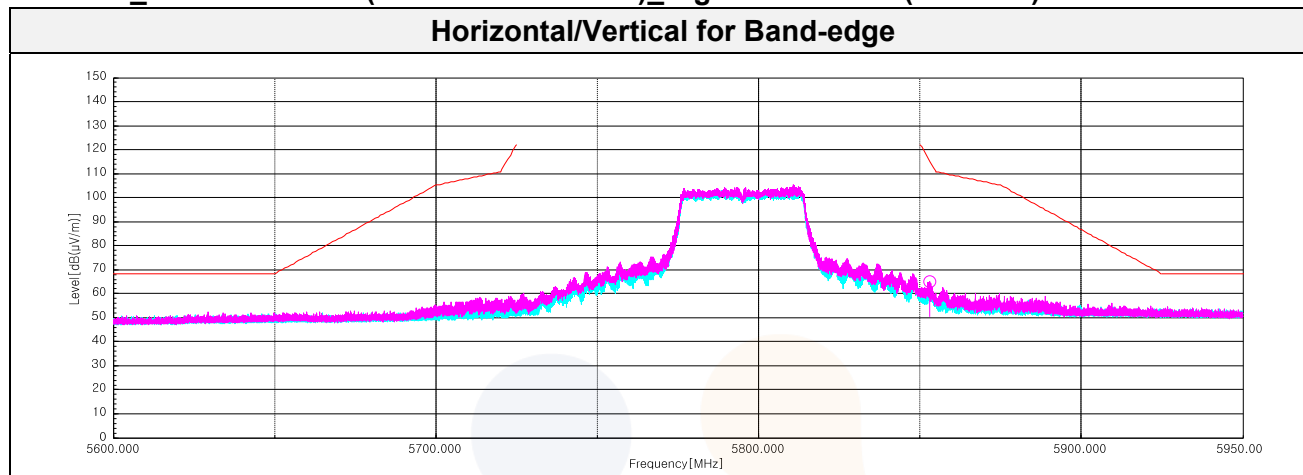
802.11ax_HE40 RU mode (484T / RU offset 65)_Highest Channel (5 795 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 853.13	H	57.40	34.31	-26.47	-	65.24	115.10	49.86
Average Data								
No spurious emissions were detected within 20 dB of the limit								

Plot of Band edge

In order to simplify the report, attached plots were only the lowest margin condition

802.11ax_HE40 RU mode (484T / RU offset 65)_Highest Channel (5 795 MHz)



UNII 4 2Tx (MIMO) Restricted Band edge (Lowest Channel)

802.11ax_HE20 SU mode_Lowest Channel (5 845 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
5 901.68	H	46.80	34.40	-26.12	-	55.08	105.30	50.22
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE40 SU mode_Lowest Channel (5 835 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
5 911.80	V	46.50	34.42	-26.14	-	54.78	97.90	43.12
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE80 SU mode_Middle Channel (5 855 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
5 721.59	V	45.40	33.54	-26.58	-	52.36	114.40	62.04
5 895.07	H	76.10	34.48	-26.16	-	84.42	110.20	25.78
5 929.48	H	49.00	34.46	-26.17	-	57.29	88.20	30.91
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE160 SU mode_Middle Channel (5 815 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
5 724.44	H	49.10	33.55	-26.58	-	56.07	120.90	64.83
5 895.49	H	74.50	34.48	-26.15	-	82.83	109.80	26.97
5 963.61	H	51.20	34.40	-26.18	-	59.42	88.20	28.78
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (26T / RU offset 0)_Lowest Channel (5 845 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 911.75	H	46.20	34.42	-26.14	-	54.48	97.90	43.42
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (52T / RU offset 37)_Lowest Channel (5 845 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 920.20	V	46.30	34.44	-26.15	-	54.59	91.70	37.11
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (106T / RU offset 53)_Lowest Channel (5 845 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 904.99	V	46.60	34.41	-26.13	-	54.88	102.90	48.02
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (242T / RU offset 61)_Lowset Channel (5 845 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 903.41	H	46.70	34.41	-26.13	-	54.98	104.00	49.02
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE40 RU mode (484T / RU offset 65)_Lowest Channel (5 835 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 897.45	H	55.80	34.49	-26.14	-	64.15	108.40	44.25
5 926.67	H	49.30	34.45	-26.16	-	57.59	88.20	30.61
Average Data								
No spurious emissions were detected within 20 dB of the limit								

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802.11ax_HE80 RU mode (996T / RU offset 67)_Middle Channel (5 855 Mhz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(Mhz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
5 724.73	H	49.20	33.55	-26.58	-	56.17	121.60	65.43
5 895.00	H	80.50	34.48	-26.16	-	88.82	110.20	21.38
5 927.74	H	61.60	34.46	-26.16	-	69.90	88.20	18.30
Average Data								
5 895.00	H	68.08	34.48	-26.16	0.19	76.59	90.20	13.61
5 927.74	H	41.99	34.46	-26.16	0.19	50.48	68.20	17.72

802.11ax_HE160 RU mode (2x996T / RU offset 68)_Middle Channel (5 815 Mhz)

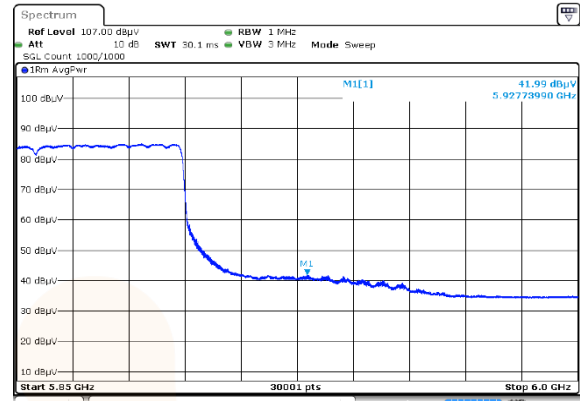
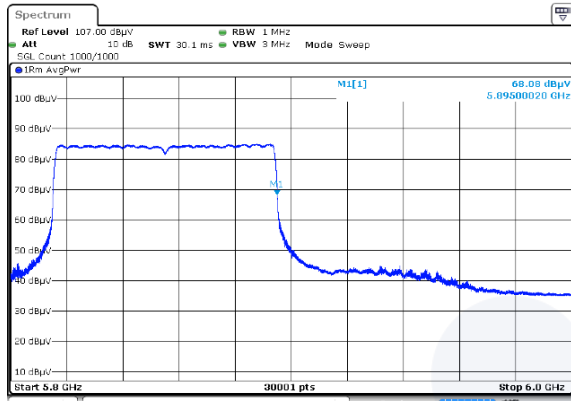
Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(Mhz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
5 724.53	H	49.10	33.55	-26.58	-	56.07	121.10	65.03
5 895.19	H	73.00	34.48	-26.16	-	81.32	110.10	28.78
5 963.08	H	50.10	34.40	-26.18	-	58.32	88.20	29.88
Average Data								
No spurious emissions were detected within 20 dB of the limit								

Plot of Band edge

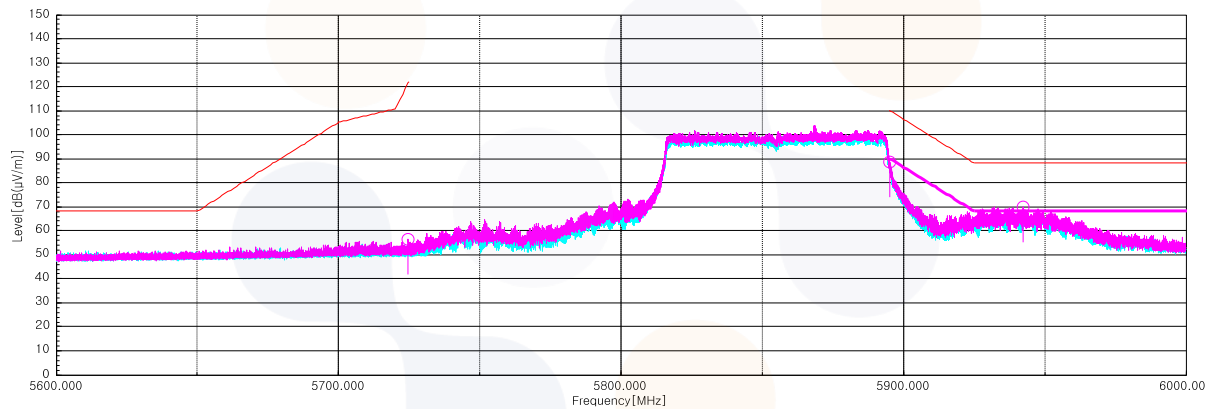
In order to simplify the report, attached plots were only the lowest margin condition

802.11ax_HE80 RU mode (996T / RU offset 67)_Middle Channel (5 855 MHz)

Average data



Horizontal/Vertical for Band-edge



UNII 4 2Tx (MIMO) Restricted Band edge (Highest Channel)

802.11ax_HE20 SU mode_Highest Channel (5 885 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 895.00	H	86.70	34.48	-26.16	-	95.02	110.20	15.18
Average Data								
5 895.00	H	78.42	34.48	-26.16	-	86.74	90.20	3.46

802.11ax_HE40 SU mode_Highest Channel (5 875 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 895.00	H	80.80	34.48	-26.16	-	89.12	110.20	21.08
Average Data								
5 895.00	H	68.23	34.48	-26.16	-	76.55	90.20	13.65

802.11ax_HE20 RU mode (26T / RU offset 8)_Highest Channel (5 885 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 895.50	H	74.43	34.48	-26.15	-	82.76	110.20	27.44
5 896.50	H	67.21	34.49	-26.15	-	75.55	109.10	33.55
Average Data								
5 895.50	H	61.92	34.48	-26.15	-	70.25	90.20	19.95
5 896.50	H	54.63	34.49	-26.15	-	62.97	89.10	26.13

802.11ax_HE20 RU mode (52T / RU offset 40)_Highest Channel (5 885 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 895.50	H	74.15	34.48	-26.15	-	82.48	110.20	27.72
5 896.50	H	66.89	34.49	-26.15	-	75.23	109.10	33.87
Average Data								
5 895.50	H	62.00	34.48	-26.15	-	70.33	90.20	19.87
5 896.50	H	54.98	34.49	-26.15	-	63.32	89.10	25.78

802.11ax_HE20 RU mode (106T / RU offset 54)_Highest Channel (5 885 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 895.50	H	75.75	34.48	-26.15	-	84.08	110.20	26.12
5 896.50	H	68.49	34.49	-26.15	-	76.83	109.10	32.27
Average Data								
5 895.50	H	64.45	34.48	-26.15	-	72.78	90.20	17.42
5 896.50	H	57.10	34.49	-26.15	-	65.44	89.10	23.66

802.11ax_HE20 RU mode (242T / RU offset 61)_Highest Channel (5 885 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 895.50	H	73.01	34.48	-26.15	-	81.34	110.20	28.86
5 896.50	H	69.41	34.49	-26.15	-	77.75	109.10	31.35
Average Data								
5 895.50	H	62.17	34.48	-26.15	0.11	70.61	90.20	19.59
5 896.50	H	56.13	34.49	-26.15	0.11	64.58	89.10	24.52

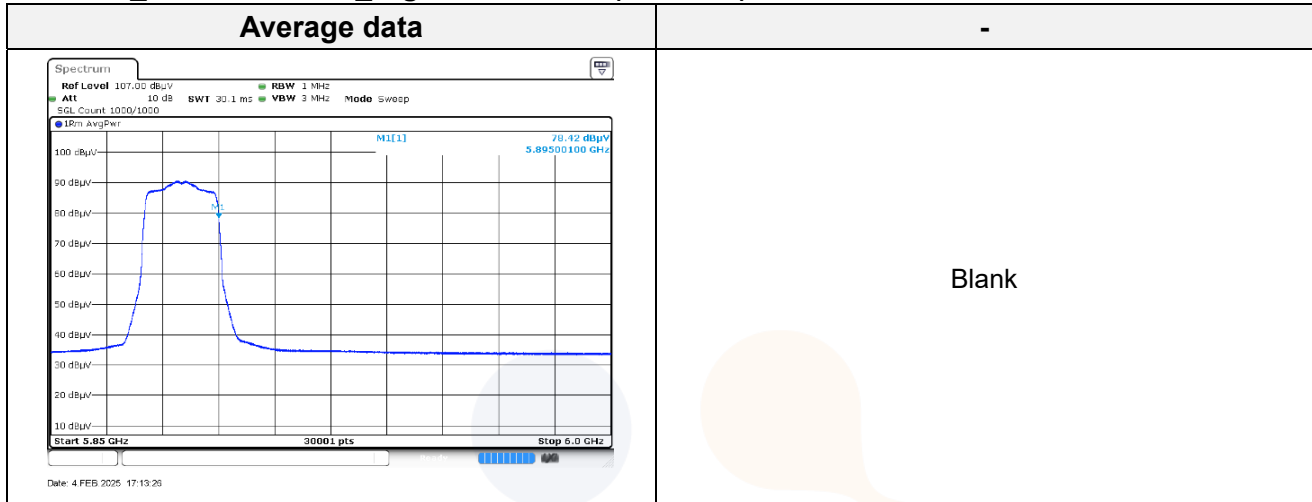
802.11ax_HE40 RU mode (484T / RU offset 65)_Highest Channel (5 875 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 895.01	H	82.00	34.48	-26.16	-	90.32	110.20	19.88
5 927.73	H	62.50	34.46	-26.16	-	70.80	88.20	17.40
Average Data								
5 895.01	H	69.91	34.48	-26.16	0.19	78.42	90.20	11.78
5 927.73	H	45.64	34.46	-26.16	0.19	54.13	68.20	14.07

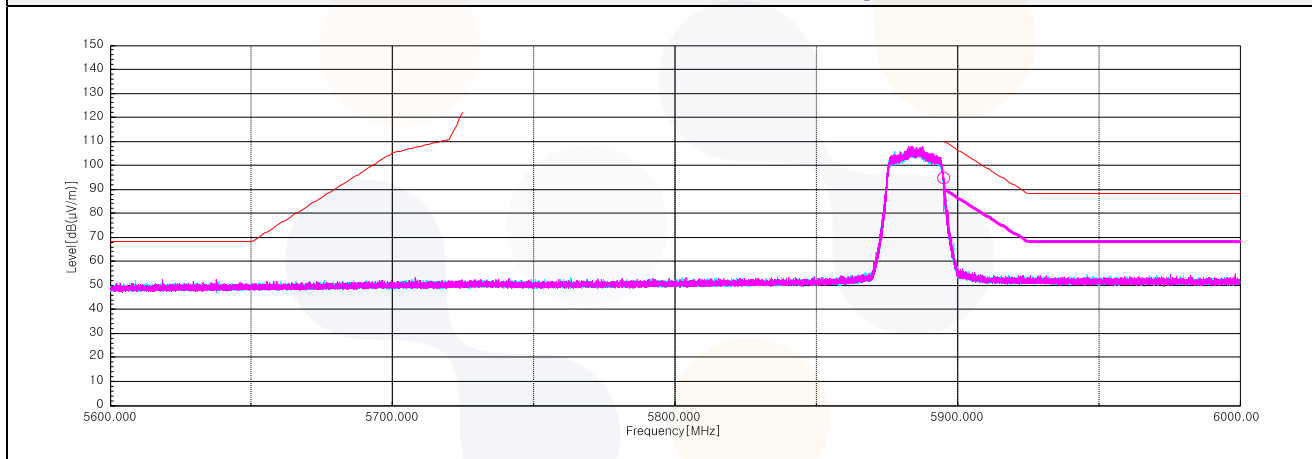
Plot of Band edge

In order to simplify the report, attached plots were only the lowest margin condition

802.11ax_HE20 SU mode_Highest Channel (5 885 MHz)



Horizontal/Vertical for Band-edge



UNII 1 2Tx (MIMO) Harmonics and Spurious Emissions

802.11ax_HE20 SU mode_Lowest Channel (5 180 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
7 769.98	V	64.40	36.68	-41.05	-	60.03	68.20	8.17
10 255.52	V	54.80	38.70	-42.41	-	51.09	68.20	17.11
15 512.17 ¹⁾	V	52.80	38.28	-40.18	-	50.90	74.00	23.10
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 SU mode_Middle Channel (5 200 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
7 799.88	V	63.50	36.80	-41.00	-	59.30	68.20	8.90
10 411.15	V	54.70	38.60	-41.98	-	51.32	68.20	16.88
15 669.01 ¹⁾	H	53.10	38.10	-39.78	-	51.42	74.00	22.58
Average Data								
15 669.01 ¹⁾	H	42.30	38.10	-39.78	-	40.62	54.00	13.38

802.11ax_HE20 SU mode_Highest Channel (5 240 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
7 860.07	V	61.00	36.92	-41.05	-	56.87	68.20	11.33
10 477.85	H	54.90	38.60	-42.00	-	51.50	68.20	16.70
15 777.91 ¹⁾	V	53.00	38.10	-39.26	-	51.84	74.00	22.16
Average Data								
15 777.91 ¹⁾	V	42.38	38.10	-39.26	-	41.22	54.00	12.78

802.11ax_HE40 SU mode_Lowest Channel (5 190 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μW/m))	(dB(μW/m))	(dB)
Peak data								
7 784.93	V	63.50	36.74	-41.02	-	59.22	68.20	8.98
10 399.65	H	54.90	38.50	-42.00	-	51.40	68.20	16.80
15 513.70 ¹⁾	V	52.90	38.27	-40.19	-	50.98	74.00	23.02
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE40 SU mode_Highest Channel (5 230 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μW/m))	(dB(μW/m))	(dB)
Peak data								
7 844.73	V	61.90	36.98	-41.08	-	57.80	68.20	10.40
10 544.55	H	54.80	38.79	-42.18	-	51.41	68.20	16.79
15 776.31 ¹⁾	V	53.00	38.10	-39.26	-	51.84	74.00	22.16
Average Data								
15 776.31 ¹⁾	V	42.44	38.10	-39.26	-	41.28	54.00	12.72

802.11ax_HE80 SU mode_Middle Channel (5 210 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μW/m))	(dB(μW/m))	(dB)
Peak data								
7 814.83	V	63.10	36.86	-41.03	-	58.93	68.20	9.27
10 444.50	V	54.80	38.60	-41.90	-	51.50	68.20	16.70
15 796.70 ¹⁾	H	52.60	38.10	-39.18	-	51.52	74.00	22.48
Average Data								
15 796.70 ¹⁾	H	42.59	38.10	-39.18	-	41.51	54.00	12.49

802.11ax_HE160 SU mode_Middle Channel (5 250 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μW/m))	(dB(μW/m))	(dB)
Peak data								
7 875.02	V	60.50	36.95	-40.99	-	56.46	68.20	11.74
10 457.15	H	54.80	38.60	-41.92	-	51.48	68.20	16.72
15 533.27 ¹⁾	H	53.30	38.23	-40.19	-	51.34	74.00	22.66
Average Data								
15 533.27 ¹⁾	H	42.78	38.23	-40.19	-	40.82	54.00	13.18

802.11ax_HE20 RU mode (242T / RU offset 61)_Middle Channel (5 200 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μW/m))	(dB(μW/m))	(dB)
Peak data								
7 799.88	V	63.20	36.80	-41.00	-	59.00	68.20	9.20
10 563.33	V	54.80	38.83	-42.24	-	51.39	68.20	16.81
15 690.69 ¹⁾	V	53.10	38.10	-39.74	-	51.46	74.00	22.54
Average Data								
15 690.69 ¹⁾	V	42.55	38.10	-39.74	0.11	41.02	54.00	12.98

802.11ax_HE40 RU mode (484T / RU offset 65)_Lowest Channel (5 190 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μW/m))	(dB(μW/m))	(dB)
Peak data								
7 784.93	V	63.30	36.74	-41.02	-	59.02	68.20	9.18
10 303.43	V	54.80	38.70	-42.50	-	51.00	68.20	17.20
15 376.36 ¹⁾	V	53.20	38.59	-40.26	-	51.53	74.00	22.47
Average Data								
15 376.36 ¹⁾	V	42.94	38.59	-40.26	0.19	41.46	54.00	12.54

802.11ax_HE80 RU mode (242T / RU offset 61)_Middle Channel (5 210 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μW/m))	(dB(μW/m))	(dB)
Peak data								
7 814.83	V	62.50	36.86	-41.03	-	58.33	68.20	9.87
10 495.48	H	54.20	38.60	-42.07	-	50.73	68.20	17.47
15 557.55 ¹⁾	H	53.50	38.18	-40.19	-	51.49	74.00	22.51
Average Data								
15 557.55 ¹⁾	H	42.75	38.18	-40.19	0.11	40.85	54.00	13.15

802.11ax_HE160 RU mode (242T / RU offset 61L)_Middle Channel (5 250 MHz)

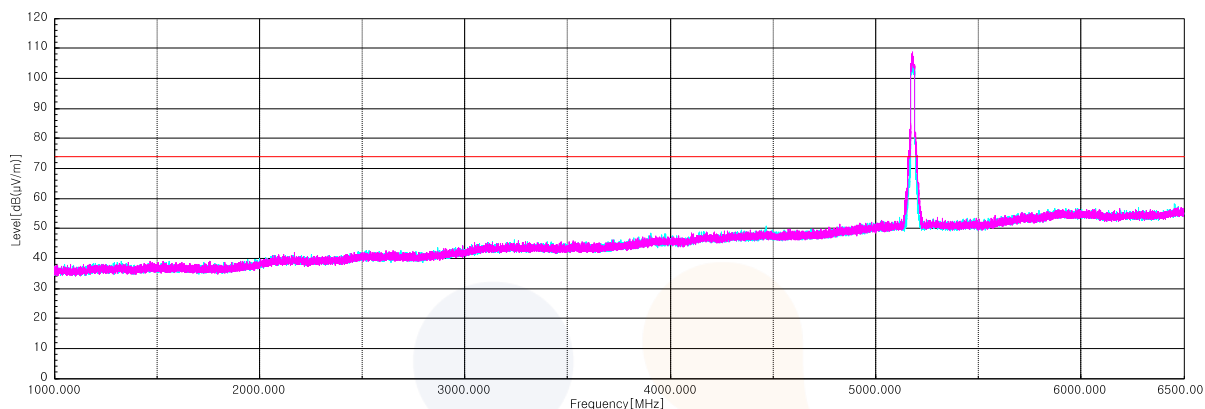
Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μW/m))	(dB(μW/m))	(dB)
Peak data								
7 875.02	V	60.10	36.95	-40.99	-	56.06	68.20	12.14
10 556.05	V	54.50	38.81	-42.21	-	51.10	68.20	17.10
15 672.78 ¹⁾	V	52.60	38.10	-39.77	-	50.93	74.00	23.07
Average Data								
No spurious emissions were detected within 20 dB of the limit								

Plot of Harmonics and Spurious Emissions

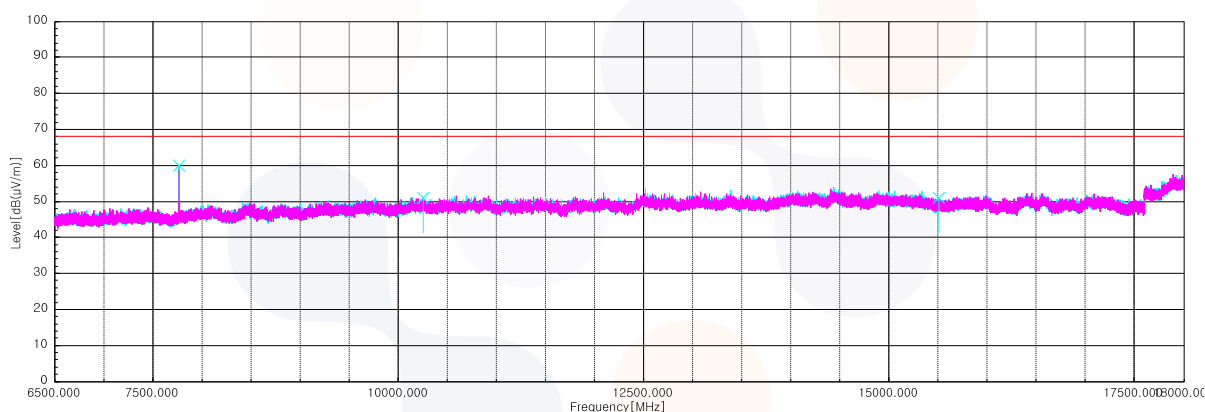
In order to simplify the report, attached plots were only the lowest margin condition

802.11ax_HE20 SU mode_Lowest Channel (5 180 MHz)

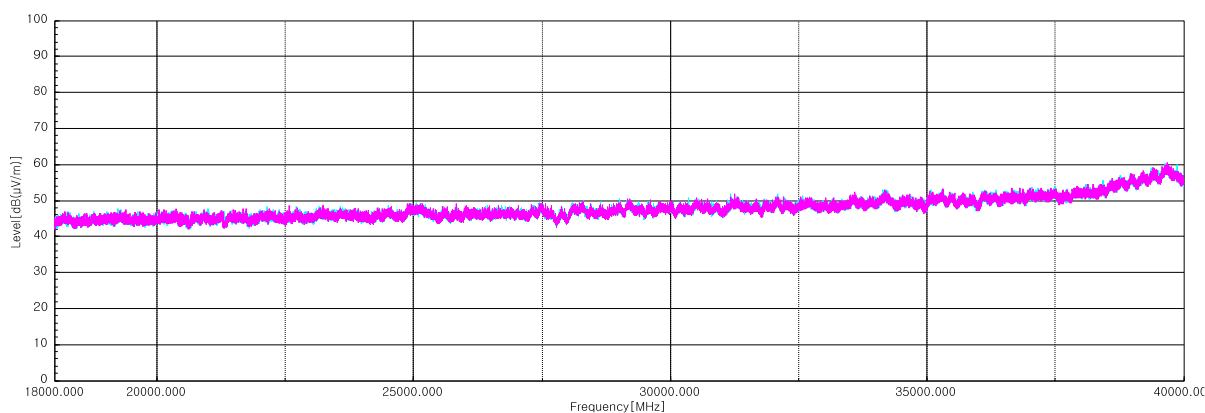
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



UNII 2A 2Tx (MIMO) Harmonics and Spurious Emissions

802.11ax_HE20 SU mode_Lowest Channel (5 260 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
10 690.94 ¹⁾	H	55.00	38.90	-42.34	-	51.56	74.00	22.44
15 648.56 ¹⁾	V	53.30	38.00	-39.82	-	51.48	74.00	22.52
Average Data								
10 690.94 ¹⁾	H	43.89	38.90	-42.34	-	40.45	54.00	13.55
15 648.56 ¹⁾	V	42.58	38.00	-39.82	-	40.76	54.00	13.24

802.11ax_HE20 SU mode_Middle Channel (5 280 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
10 546.85	H	54.00	38.79	-42.18	-	50.61	68.20	17.59
15 691.49 ¹⁾	H	53.70	38.10	-39.74	-	52.06	74.00	21.94
Average Data								
15 691.49 ¹⁾	H	42.64	38.10	-39.74	-	41.00	54.00	13.00

802.11ax_HE20 SU mode_Highest Channel (5 320 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
10 858.50 ¹⁾	V	53.30	38.88	-41.44	-	50.74	74.00	23.26
15 840.69 ¹⁾	H	52.70	38.10	-39.32	-	51.48	74.00	22.52
Average Data								
15 840.69 ¹⁾	H	42.55	38.10	-39.32	-	41.33	54.00	12.67

802.11ax_HE40 SU mode_Lowest Channel (5 270 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
10 583.65	V	54.70	38.87	-42.30	-	51.27	68.20	16.93
15 820.67 ¹⁾	H	52.80	38.10	-39.24	-	51.66	74.00	22.34
Average Data								
15 820.67 ¹⁾	H	42.39	38.10	-39.24	-	41.25	54.00	12.75

802.11ax_HE40 SU mode_Highest Channel (5 310 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
10 538.80	H	54.20	38.78	-42.17	-	50.81	68.20	17.39
15 694.40 ¹⁾	H	53.40	38.10	-39.74	-	51.76	74.00	22.24
Average Data								
15 694.40 ¹⁾	H	42.51	38.10	-39.74	-	40.87	54.00	13.13

802.11ax_HE80 SU mode_Middle Channel (5 290 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
10 479.00	H	54.70	38.60	-42.01	-	51.29	68.20	16.91
15 839.27 ¹⁾	V	52.90	38.10	-39.31	-	51.69	74.00	22.31
Average Data								
15 839.27 ¹⁾	V	42.39	38.10	-39.31	-	41.18	54.00	12.82

802.11ax_HE20 RU mode (242T / RU offset 61)_Middle Channel (5 280 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
10 550.68	H	54.20	38.80	-42.19	-	50.81	68.20	17.39
15 820.42 ¹⁾	V	53.40	38.10	-39.24	-	52.26	74.00	21.74
Average Data								
15 820.42 ¹⁾	V	42.41	38.10	-39.24	0.11	41.38	54.00	12.62

802.11ax_HE40 RU mode (484T / RU offset 65)_Lowest Channel (5 270 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
10 540.33	V	54.80	38.78	-42.17	-	51.41	68.20	16.79
15 959.54 ¹⁾	V	52.30	38.20	-39.17	-	51.33	74.00	22.67
Average Data								
15 959.54 ¹⁾	V	42.44	38.20	-39.17	0.19	41.66	54.00	12.34

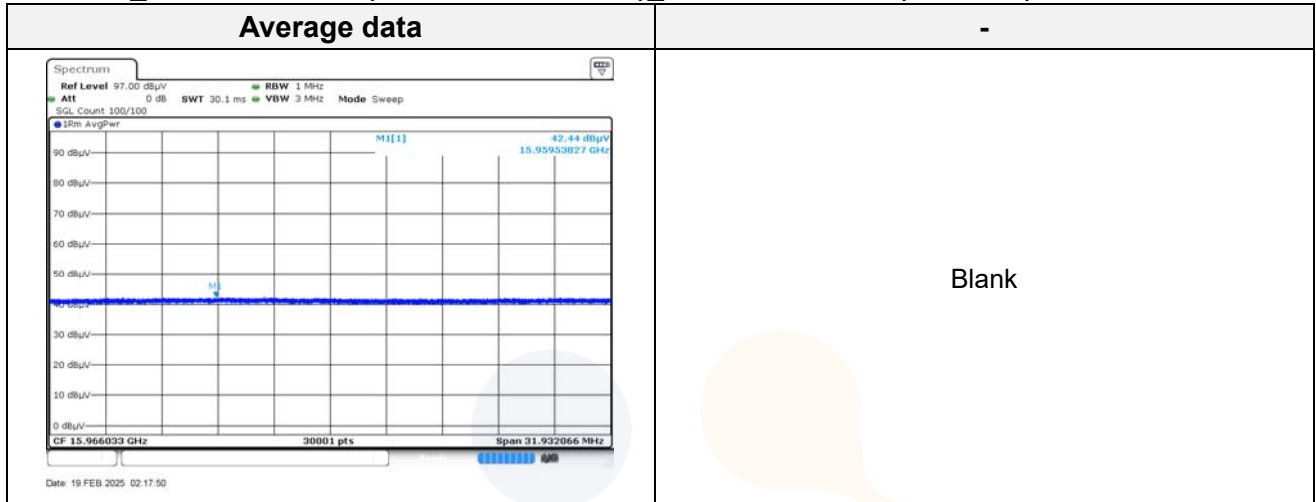
802.11ax_HE80 RU mode (242T / RU offset 61)_Middle Channel (5 290 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
10 443.35	H	55.00	38.60	-41.90	-	51.70	68.20	16.50
15 824.97 ¹⁾	H	52.80	38.10	-39.26	-	51.64	74.00	22.36
Average Data								
15 824.97 ¹⁾	H	42.30	38.10	-39.26	0.11	41.25	54.00	12.75

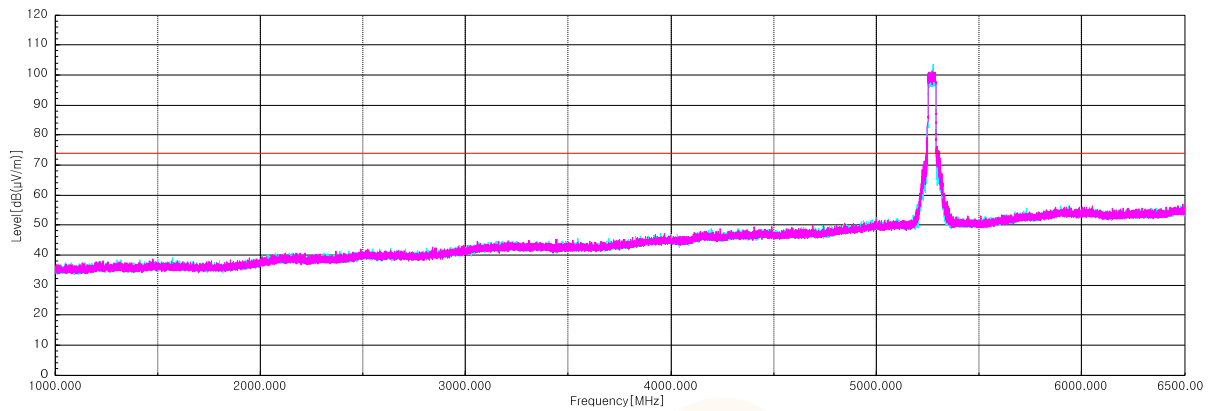
Plot of Harmonics and Spurious Emissions

In order to simplify the report, attached plots were only the lowest margin condition

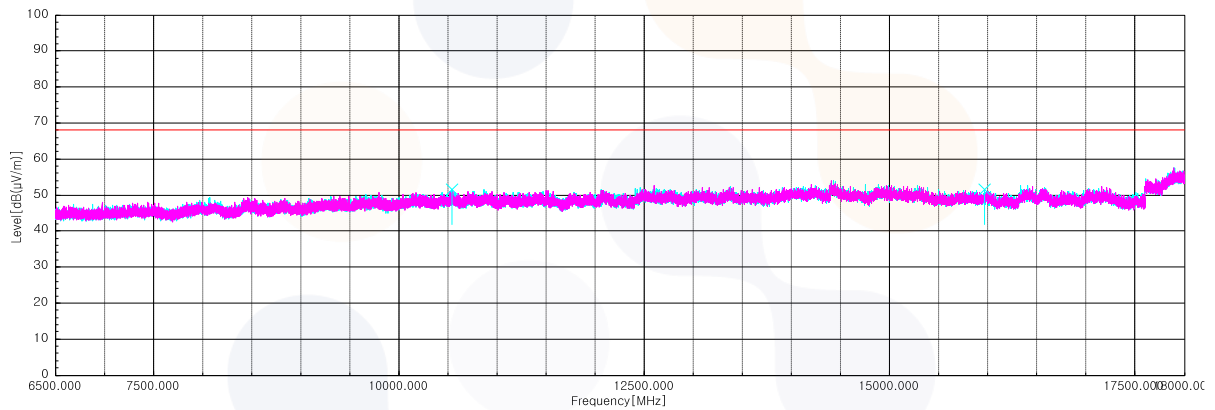
802.11ax_HE40 RU mode (484T / RU offset 65)_Lowest Channel (5 270 MHz)



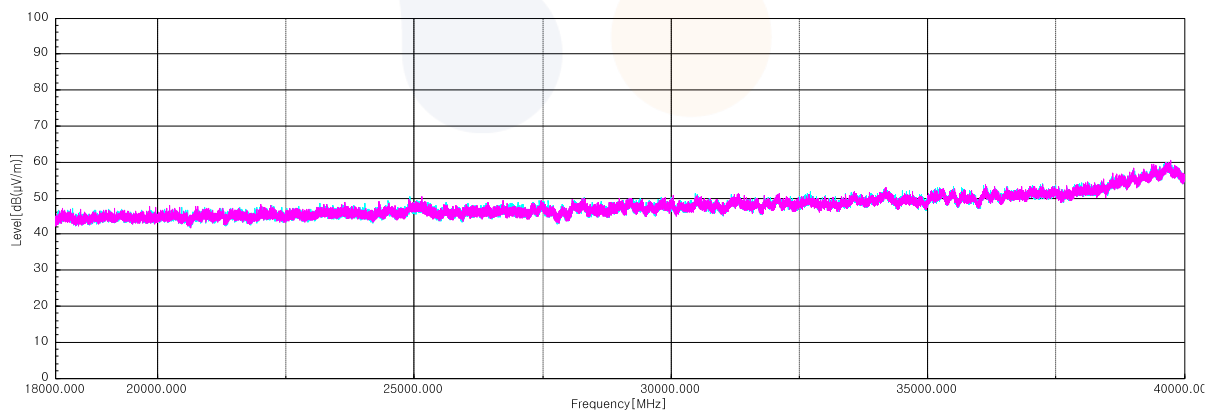
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



UNII 2C 2Tx (MIMO) Harmonics and Spurious Emissions

802.11ax_HE20 SU mode_Lowest Channel (5 500 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 095.02 ¹⁾	H	54.00	38.51	-41.66	-	50.85	74.00	23.15
16 551.77	V	52.70	38.40	-37.89	-	53.21	68.20	14.99
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 SU mode_Middle Channel (5 600 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
6 720.42	V	57.30	36.00	-40.76	-	52.54	68.20	15.66
11 224.58 ¹⁾	V	53.70	38.70	-41.62	-	50.78	74.00	23.22
16 850.77	V	51.90	38.00	-37.84	-	52.06	68.20	16.14
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 SU mode_Highest Channel (5 700 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 381.37 ¹⁾	H	53.60	38.90	-41.80	-	50.70	74.00	23.30
17 178.52	V	51.10	38.16	-36.98	-	52.28	68.20	15.92
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE40 SU mode_Lowest Channel (5 510 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 037.90 ¹⁾	V	53.70	38.62	-41.98	-	50.34	74.00	23.66
16 428.33	H	52.00	38.30	-38.23	-	52.07	68.20	16.13
Average Data								
No spurious emissions were detected within 20 dB of the limit								

Eurofins KCTL Co.,Ltd. 65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea TEL: 82-70-5008-1021 FAX: 82-505-299-8311 www.kctl.co.kr	Report No.: KR25-SRF0034-A Page (127) of (152)	
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802.11ax_HE40 SU mode_Middle Channel (5 590 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 096.17 ¹⁾	H	53.50	38.51	-41.65	-	50.36	74.00	23.64
16 749.18	V	52.10	38.30	-38.38	-	52.02	68.20	16.18
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE40 SU mode_Highest Channel (5 670 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 378.68 ¹⁾	V	53.70	38.90	-41.80	-	50.80	74.00	23.20
17 044.35	H	51.00	37.90	-37.52	-	51.38	68.20	16.82
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE80 SU mode_Lowest Channel (5 530 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 112.65 ¹⁾	H	53.30	38.73	-41.60	-	50.43	74.00	23.57
16 588.18	H	52.00	38.40	-38.05	-	52.35	68.20	15.85
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE80 SU mode_Highest Channel (5 610 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 240.68 ¹⁾	V	53.30	38.70	-41.61	-	50.39	74.00	23.61
16 864.57	V	51.70	37.97	-37.92	-	51.75	68.20	16.45
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE160 SU mode_Middle Channel (5 570 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 101.92 ¹⁾	V	53.90	38.70	-41.62	-	50.98	74.00	23.02
16 763.37	H	51.50	38.17	-38.17	-	51.50	68.20	16.70
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (242T / RU offset 61)_Middle Channel (5 600 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
6 715.82	V	54.70	36.00	-40.75	-	49.95	68.20	18.25
11 195.83 ¹⁾	V	53.10	38.70	-41.62	-	50.18	74.00	23.82
16 827.77	V	50.90	38.04	-37.75	-	51.19	68.20	17.01
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE40 RU mode (484T / RU offset 65)_Lowest Channel (5 510 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 116.48 ¹⁾	H	53.60	38.73	-41.59	-	50.74	74.00	23.26
16 589.72	H	52.30	38.40	-38.05	-	52.65	68.20	15.55
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE80 RU mode (242T / RU offset 64)_Highest Channel (5 610 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 287.83 ¹⁾	V	53.60	38.88	-41.56	-	50.92	74.00	23.08
16 813.97	H	51.50	38.07	-37.69	-	51.88	68.20	16.32
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE160 RU mode (242 / RU offset 61L)_Middle Channel (5 570 MHz)

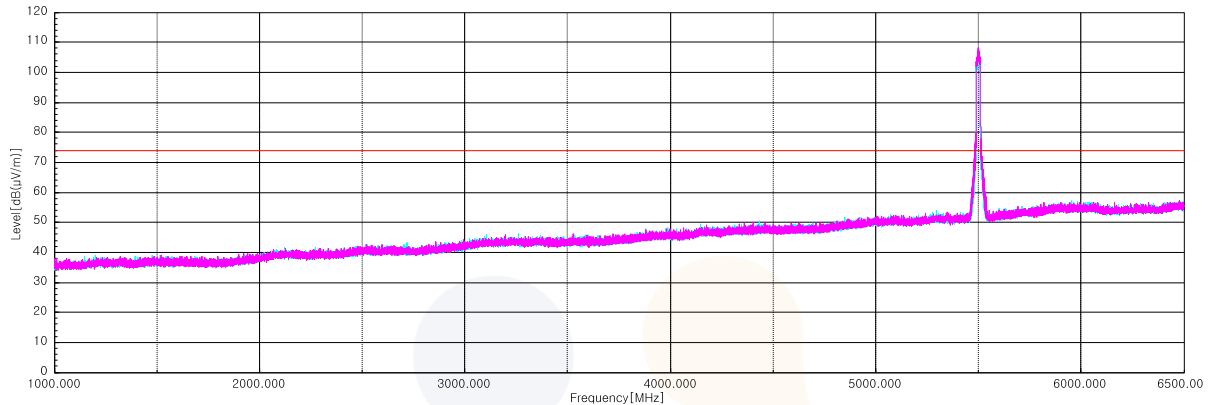
Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 095.40 ¹⁾	V	54.10	38.51	-41.65	-	50.96	74.00	23.04
16 735.77	H	51.30	38.30	-38.51	-	51.09	68.20	17.11
Average Data								
No spurious emissions were detected within 20 dB of the limit								

Plot of Harmonics and Spurious Emissions

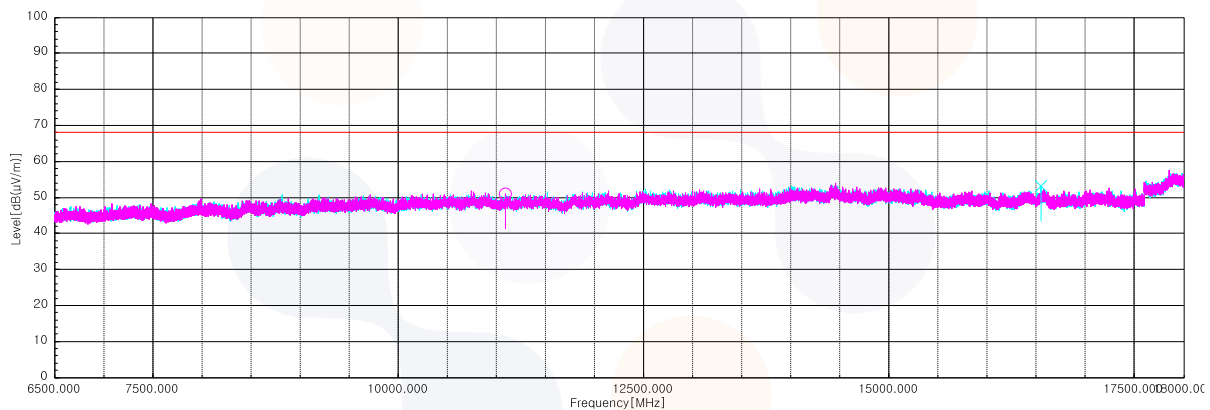
In order to simplify the report, attached plots were only the lowest margin condition

802.11ax_HE20 SU mode_Lowest Channel (5 500 MHz)

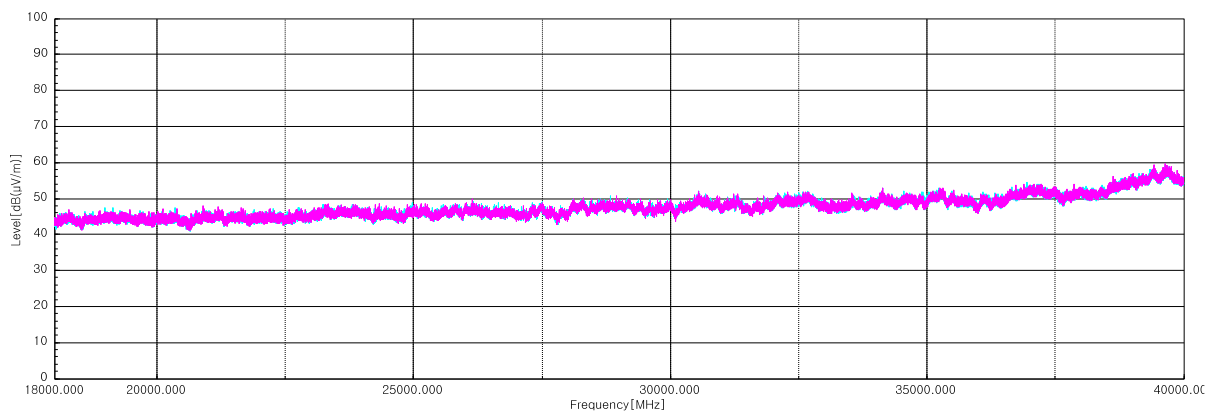
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



UNII 2C&3 Straddle Channel 2Tx (MIMO) Harmonics and Spurious Emissions

802.11ax_HE20 SU mode_Middle Channel (5 720 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 488.32 ¹⁾	V	53.60	38.72	-41.46	-	50.86	74.00	23.14
17 162.80	H	50.20	38.13	-37.14	-	51.19	68.20	17.01
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE40 SU mode_Middle Channel (5 710 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 516.30 ¹⁾	H	53.60	38.80	-41.55	-	50.85	74.00	23.15
17 176.22	H	50.50	38.15	-37.00	-	51.65	68.20	16.55
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE80 SU mode_Middle Channel (5 690 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 395.55 ¹⁾	H	53.50	38.90	-41.82	-	50.58	74.00	23.42
17 136.35	H	52.70	38.00	-37.38	-	53.32	68.20	14.88
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (242T / RU offset 61)_Middle Channel (5 720 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 510.17 ¹⁾	H	53.50	38.80	-41.51	-	50.79	74.00	23.21
17 139.03	V	51.30	38.00	-37.36	-	51.94	68.20	16.26
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE40 RU mode (242T / RU offset 62)_Middle Channel (5 710 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 407.05 ¹⁾	H	53.60	38.90	-41.79	-	50.71	74.00	23.29
16 982.63	H	51.60	37.90	-37.66	-	51.84	68.20	16.36
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE80 RU mode (242T / RU offset 64)_Middle Channel (5 690 MHz)

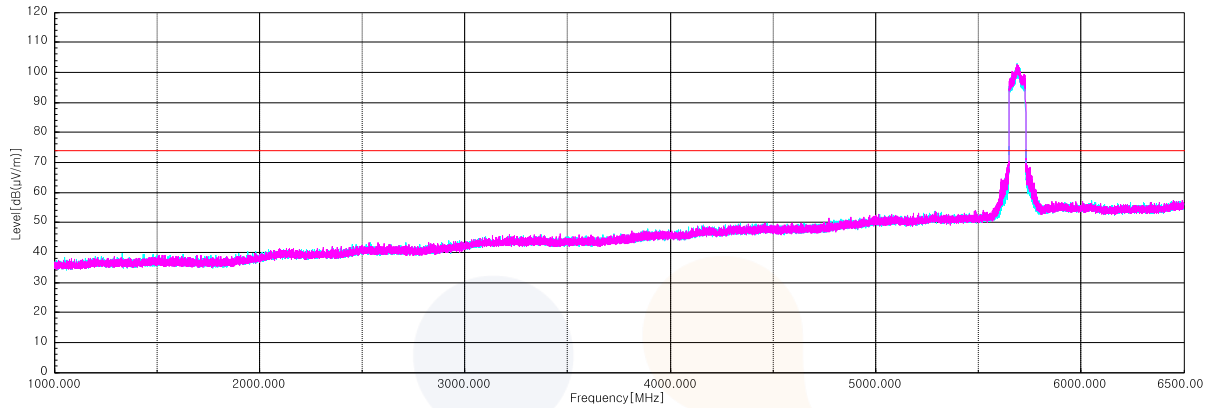
Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 348.40 ¹⁾	V	53.70	39.00	-41.74	-	50.96	74.00	23.04
17 020.20	V	51.00	37.90	-37.43	-	51.47	68.20	16.73
Average Data								
No spurious emissions were detected within 20 dB of the limit								

Plot of Harmonics and Spurious Emissions

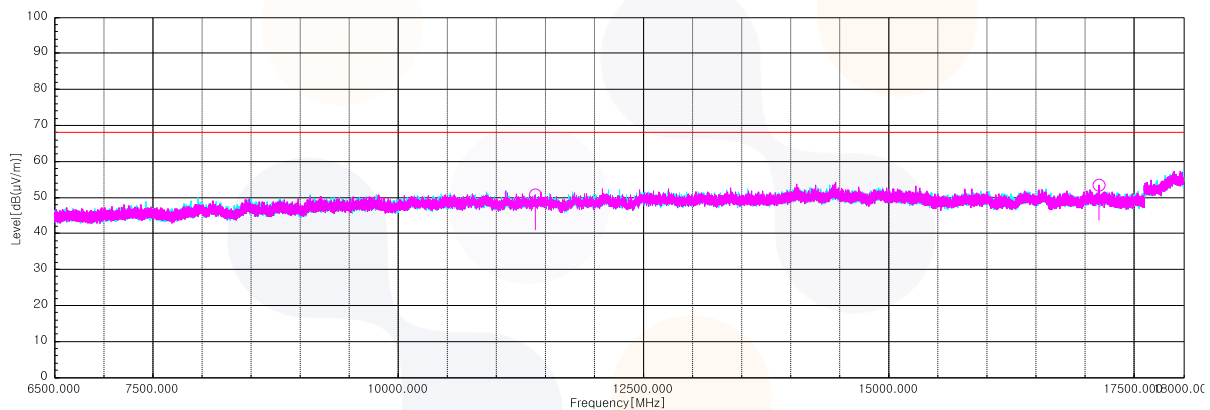
In order to simplify the report, attached plots were only the lowest margin condition

802.11ax_HE80 SU mode_Middle Channel (5 690 MHz)

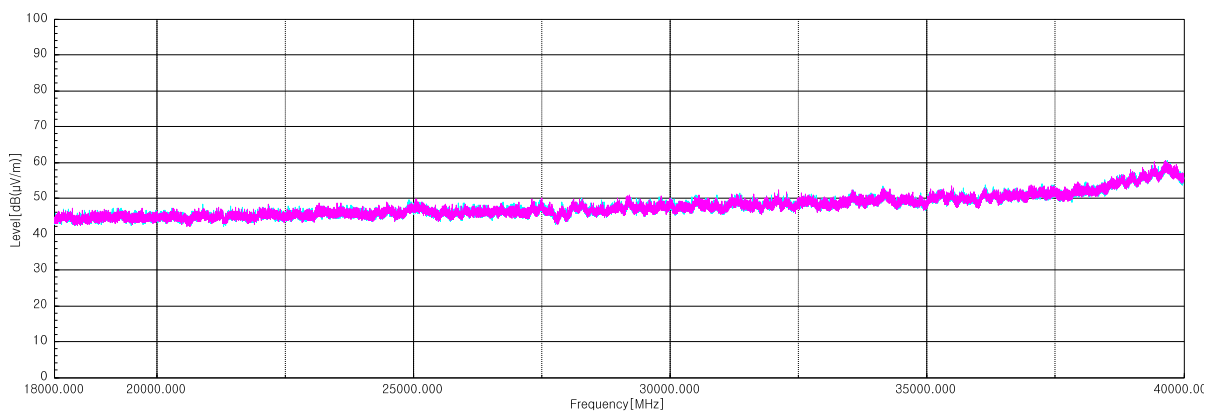
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



UNII 3 2Tx (MIMO) Harmonics and Spurious Emissions

802.11ax_HE20 SU mode_Lowest Channel (5 745 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 457.65 ¹⁾	V	53.50	38.78	-41.54	-	50.74	74.00	23.26
17 196.92	H	50.70	38.19	-36.79	-	52.10	68.20	16.10
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 SU mode_Middle Channel (5 785 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 470.30 ¹⁾	V	53.40	38.76	-41.51	-	50.65	74.00	23.35
17 376.70	V	49.50	38.91	-36.91	-	51.50	68.20	16.70
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 SU mode_Highest Channel (5 825 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 519.37 ¹⁾	H	53.40	38.80	-41.57	-	50.63	74.00	23.37
17 379.00	H	50.30	38.92	-36.89	-	52.33	68.20	15.87
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE40 SU mode_Lowest Channel (5 755 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 464.93 ¹⁾	H	53.30	38.77	-41.52	-	50.55	74.00	23.45
17 267.45	H	50.00	38.47	-36.85	-	51.62	68.20	16.58
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE40 SU mode_Highest Channel (5 795 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 574.57 ¹⁾	V	53.60	38.65	-41.67	-	50.58	74.00	23.42
17 381.30	H	49.20	38.93	-36.86	-	51.27	68.20	16.93
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE80 SU mode_Middle Channel (5 775 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 469.92 ¹⁾	V	53.50	38.76	-41.51	-	50.75	74.00	23.25
17 231.03	H	50.20	38.26	-36.81	-	51.65	68.20	16.55
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (242T / RU offset 61)_Middle Channel (5 785 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 567.67 ¹⁾	V	53.90	38.66	-41.70	-	50.86	74.00	23.14
17 285.08	V	49.40	38.54	-36.87	-	51.07	68.20	17.13
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE40 RU mode (242T / RU offset 62)_Highest Channel (5 795 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 516.68 ¹⁾	V	53.40	38.80	-41.55	-	50.65	74.00	23.35
17 348.72	V	49.30	38.79	-37.20	-	50.89	68.20	17.31
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE80 RU mode (996T / RU offset 67)_Middle Channel (5 775 MHz)

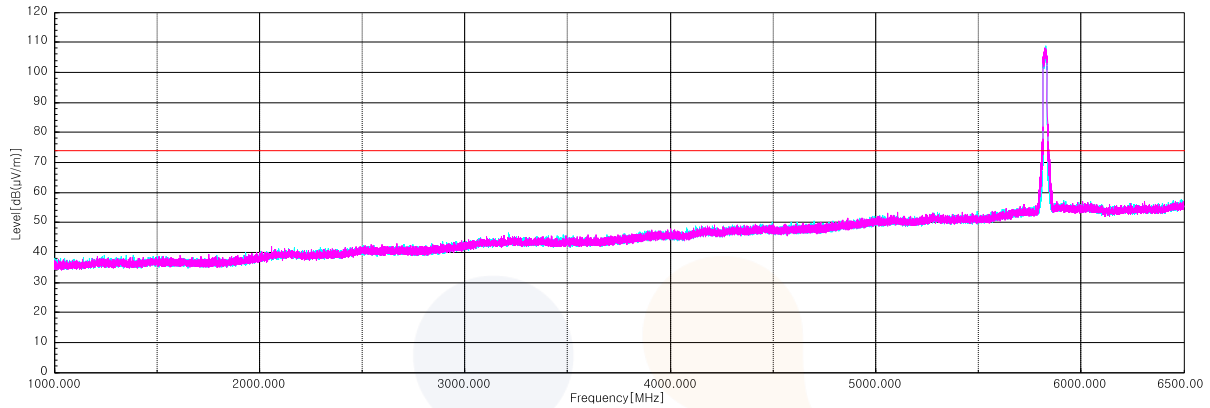
Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 456.12 ¹⁾	H	53.70	38.79	-41.54	-	50.95	74.00	23.05
17 367.12	V	49.60	38.87	-37.02	-	51.45	68.20	16.75
Average Data								
No spurious emissions were detected within 20 dB of the limit								

Plot of Harmonics and Spurious Emissions

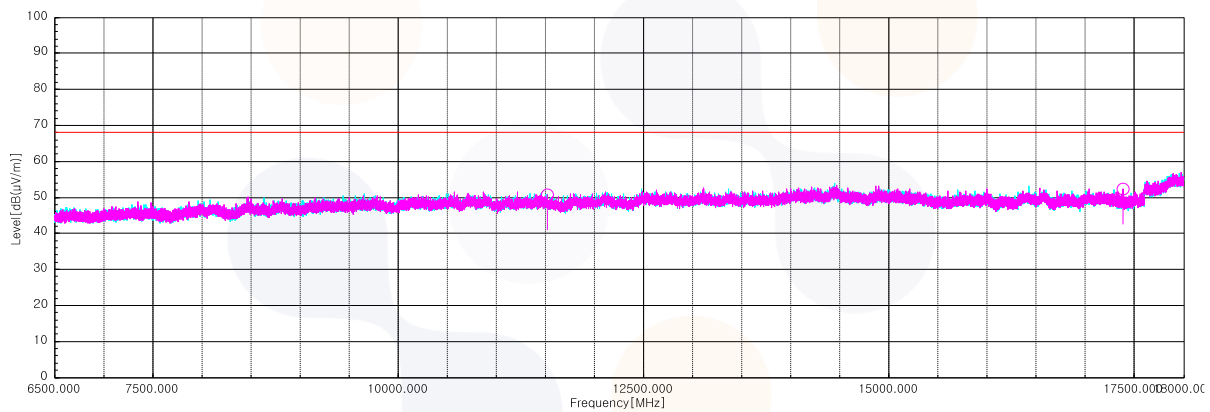
In order to simplify the report, attached plots were only the lowest margin condition

802.11ax_HE20 SU mode_Highest Channel (5 825 MHz)

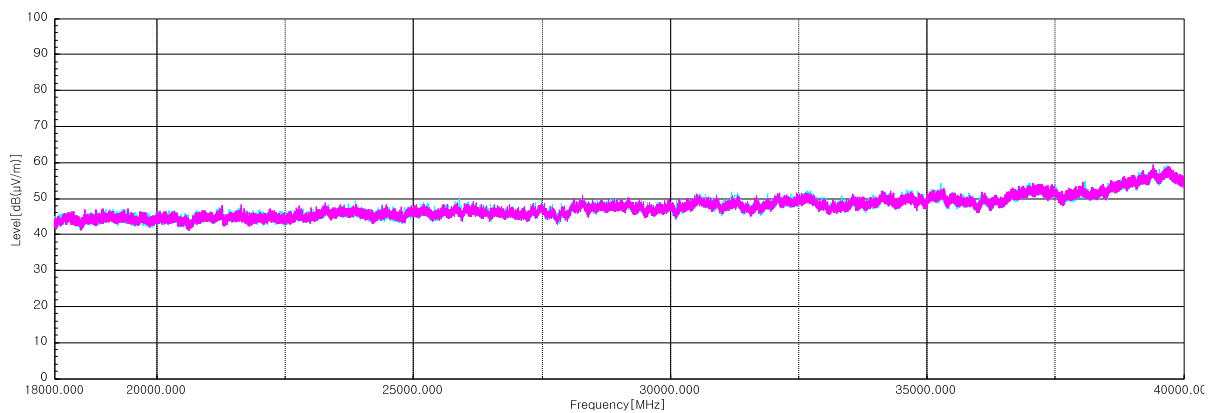
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



UNII 4 2Tx (MIMO) Harmonics and Spurious Emissions

802.11ax_HE20 SU mode_Lowest Channel (5 845 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 797.64 ¹⁾	H	54.40	38.40	-40.88	-	51.92	74.00	22.08
17 573.73	V	48.50	40.04	-36.48	-	52.06	68.20	16.14
Average Data								
11 797.64 ¹⁾	H	43.39	38.40	-40.88	-	40.91	54.00	13.09

802.11ax_HE20 SU mode_Middle Channel (5 865 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
7 819.82	V	61.40	36.88	-41.04	-	57.24	68.20	10.96
11 797.28 ¹⁾	H	53.40	38.40	-40.88	-	50.92	74.00	23.08
17 635.07	H	49.70	40.24	-35.96	-	53.98	68.20	14.22
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 SU mode_Highest Channel (5 885 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
7 846.65	V	60.90	36.99	-41.08	-	56.81	68.20	11.39
11 791.53 ¹⁾	H	53.50	38.40	-40.93	-	50.97	74.00	23.03
17 697.93	V	50.10	40.69	-35.92	-	54.87	68.20	13.33
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE40 SU mode_Lowest Channel (5 835 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
7 779.95	V	61.60	36.72	-41.03	-	57.29	68.20	10.91
11 567.28 ¹⁾	H	53.80	38.67	-41.71	-	50.76	74.00	23.24
17 553.03	V	48.20	39.92	-36.74	-	51.38	68.20	16.82
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE40 SU mode_Highest Channel (5 875 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 788.47 ¹⁾	H	53.50	38.40	-40.95	-	50.95	74.00	23.05
17 601.72	V	50.40	40.11	-36.14	-	54.37	68.20	13.83
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE80 SU mode_Middle Channel (5 855 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
7 806.78	V	60.40	36.83	-41.01	-	56.22	68.20	11.98
11 788.85 ¹⁾	H	53.50	38.40	-40.95	-	50.95	74.00	23.05
17 610.53	H	50.50	40.14	-36.09	-	54.55	68.20	13.65
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE160 SU mode_Middle Channel (5 815 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 501.73 ¹⁾	H	53.40	38.80	-41.44	-	50.76	74.00	23.24
17 444.55	H	48.00	38.99	-36.23	-	50.76	68.20	17.44
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE20 RU mode (242T / RU offset 61)_Middle Channel (5 865 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
7 820.20	H	59.70	36.88	-41.04	-	55.54	68.20	12.66
11 794.19 ¹⁾	V	54.60	38.40	-40.91	-	52.09	74.00	21.91
17 613.60	H	49.90	40.15	-36.08	-	53.97	68.20	14.23
Average Data								
11 794.19 ¹⁾	V	43.43	38.40	-40.91	0.11	41.03	54.00	12.97

802.11ax_HE40 RU mode (242T / RU offset 62)_Highest Channel (5 875 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 813.42 ¹⁾	H	54.30	38.53	-40.86	-	51.97	74.00	22.03
17 630.08	H	50.00	40.22	-35.99	-	54.23	68.20	13.97
Average Data								
11 813.42 ¹⁾	H	43.28	38.53	-40.86	0.11	41.06	54.00	12.94

802.11ax_HE80 RU mode (484T / RU offset 66)_Middle Channel (5 855 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
7 806.78	V	59.70	36.83	-41.01	-	55.52	68.20	12.68
11 803.42 ¹⁾	H	53.30	38.51	-40.86	-	50.95	74.00	23.05
17 604.40	V	50.70	40.12	-36.13	-	54.69	68.20	13.51
Average Data								
No spurious emissions were detected within 20 dB of the limit								

802.11ax_HE160 RU mode (106T / RU offset 60U)_Middle Channel (5 815 MHz)

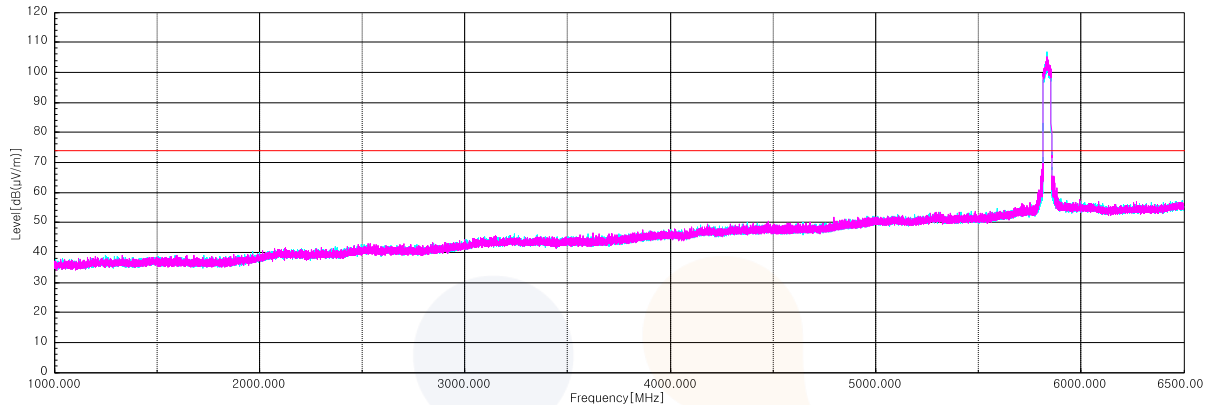
Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 792.30 ¹⁾	V	53.50	38.40	-40.92	-	50.98	74.00	23.02
17 486.72	H	47.60	39.42	-36.58	-	50.44	68.20	17.76
Average Data								
No spurious emissions were detected within 20 dB of the limit								

Plot of Harmonics and Spurious Emissions

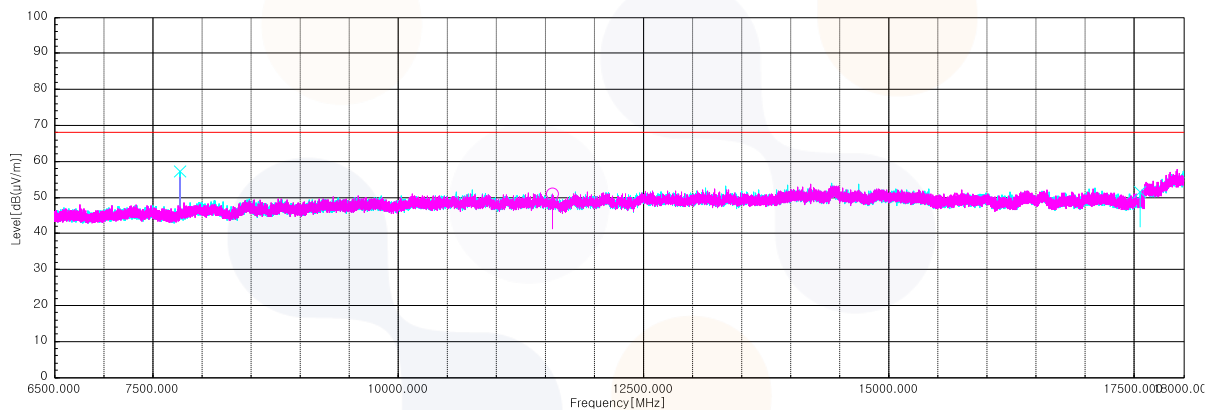
In order to simplify the report, attached plots were only the lowest margin condition

802.11ax_HE40 SU mode_Lowest Channel (5 835 MHz)

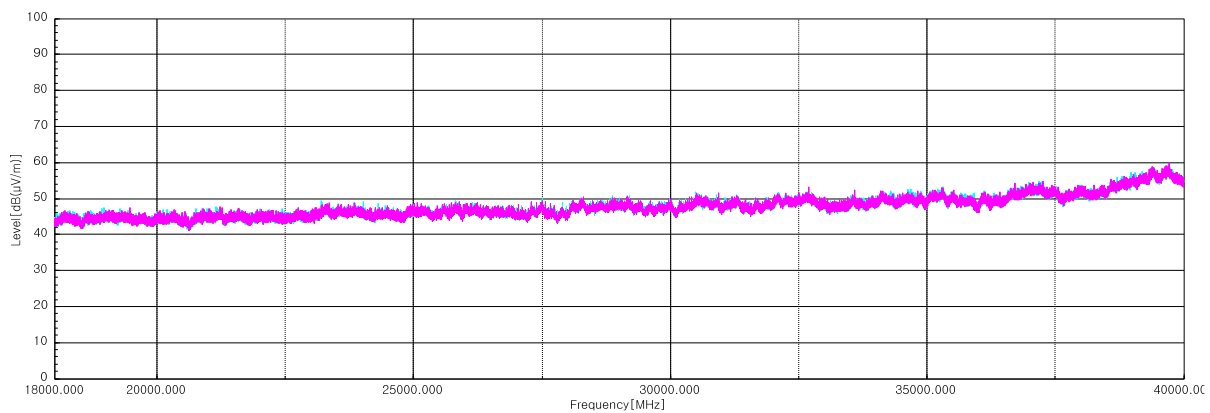
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz

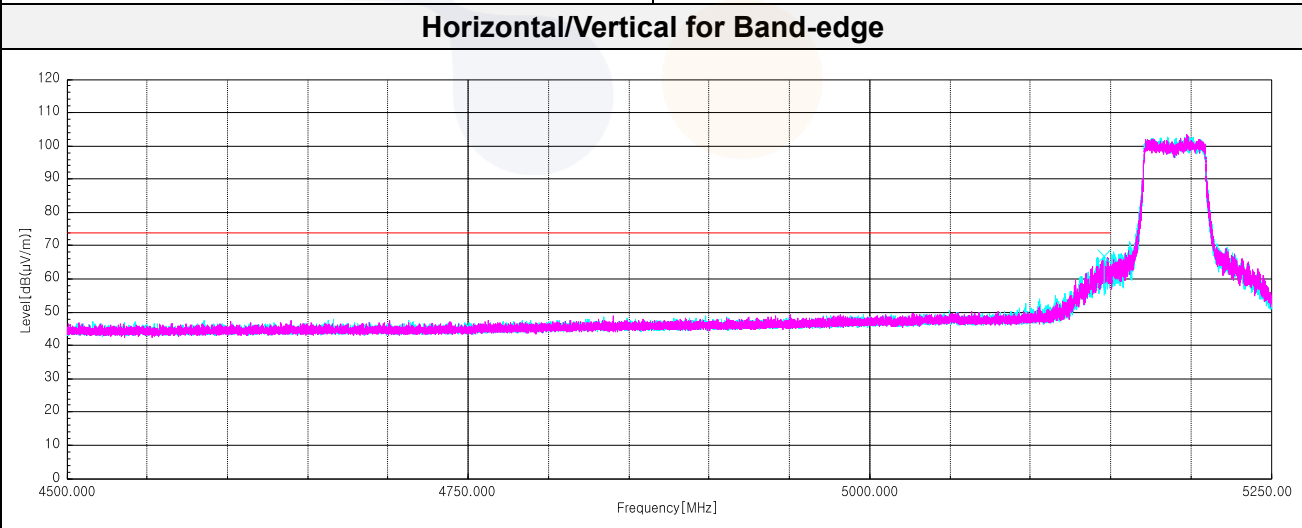
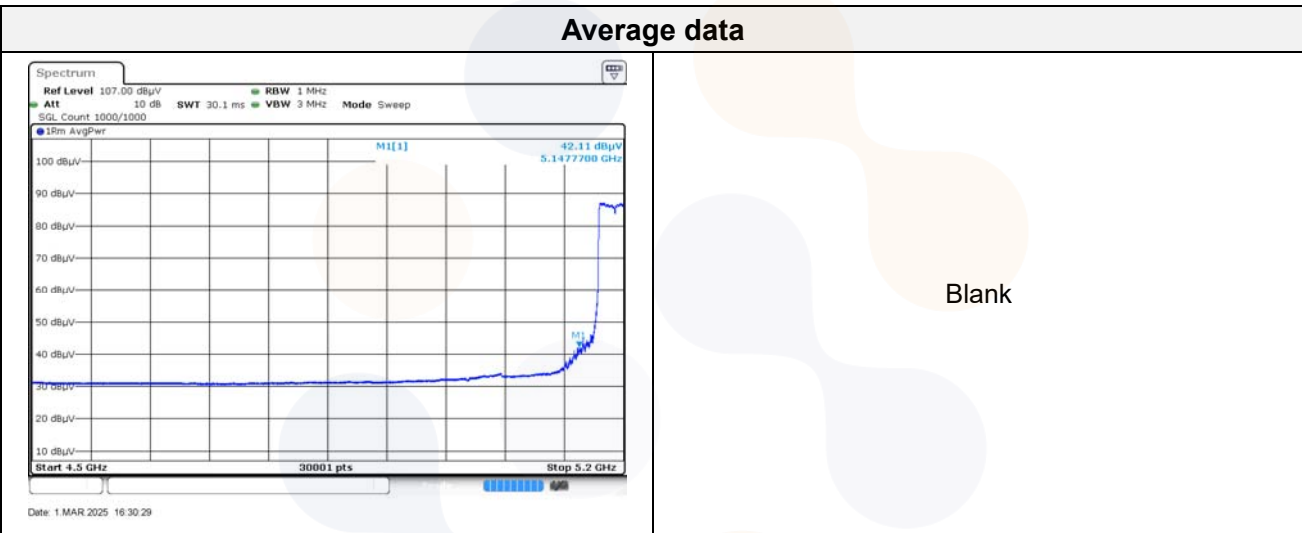


8.6. Spot check Test results

UNII 1 2Tx (MIMO) / 802.11ax_HE40 RU mode (484T / RU offset 65) / Band-edge

Lowest Channel (5 190 MHz)

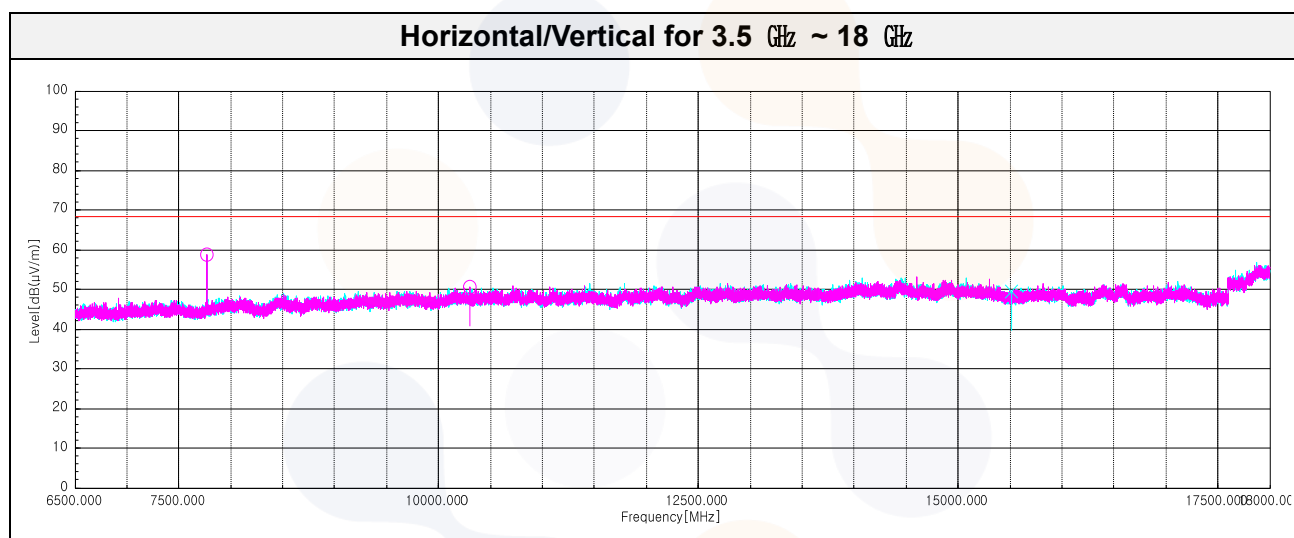
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
5 147.77 ¹⁾	V	60.60	33.40	-27.14	-	66.86	74.00	7.14
Average Data								
5 147.77 ¹⁾	V	42.11	33.40	-27.14	0.19	48.56	54.00	5.44



UNII 1 2Tx (MIMO) / 802.11ax_HT20 SU mode / Spurious

Lowest Channel (5 180 MHz)

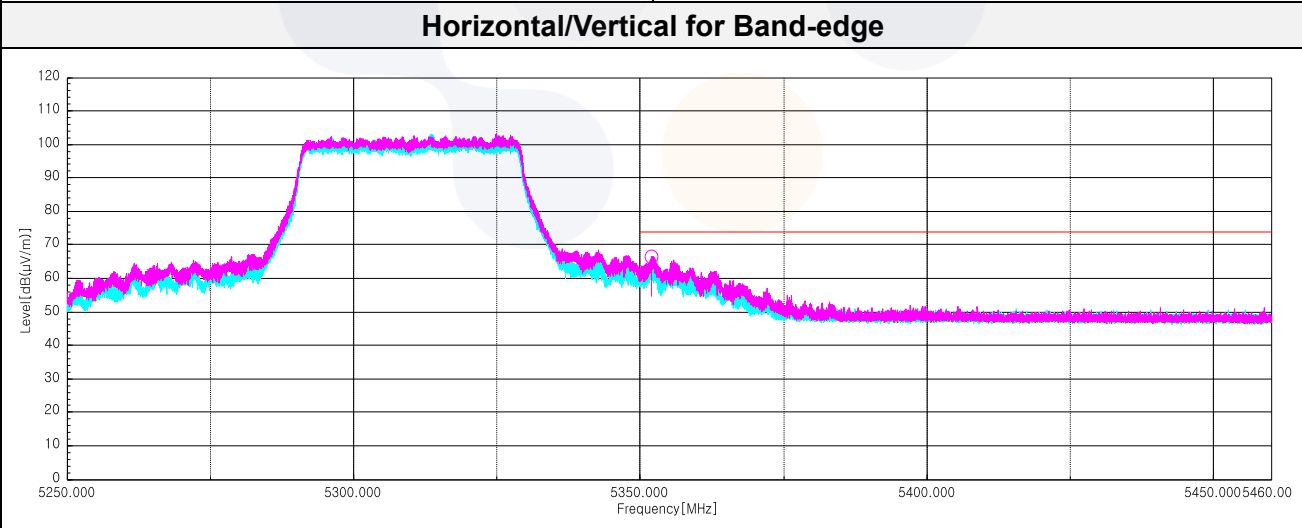
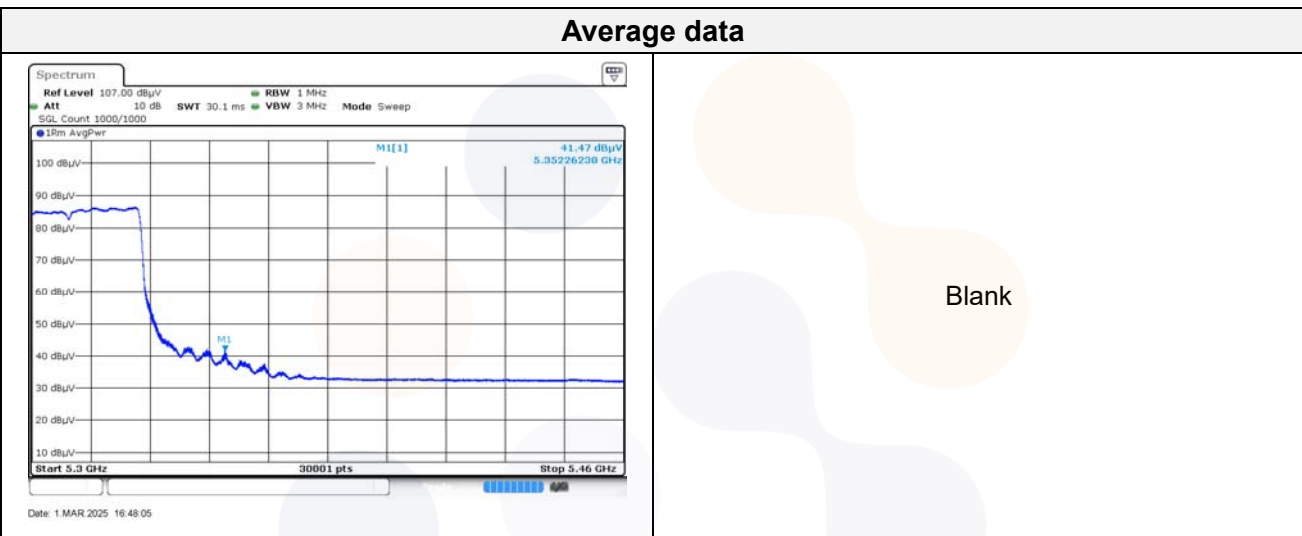
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
7 770.37	H	63.20	36.68	-41.05	-	58.83	68.20	9.37
10 303.05	H	54.30	38.70	-42.50	-	50.50	68.20	17.70
15 515.23 ¹⁾	V	51.40	38.27	-40.19	-	49.48	74.00	24.52
Average Data								
No spurious emissions were detected within 20 dB of the limit.								



UNII 2A 2Tx (MIMO) / 802.11ax_HE40 RU mode (484T / RU offset 65) / Band-edge

Highest Channel (5 310 MHz)

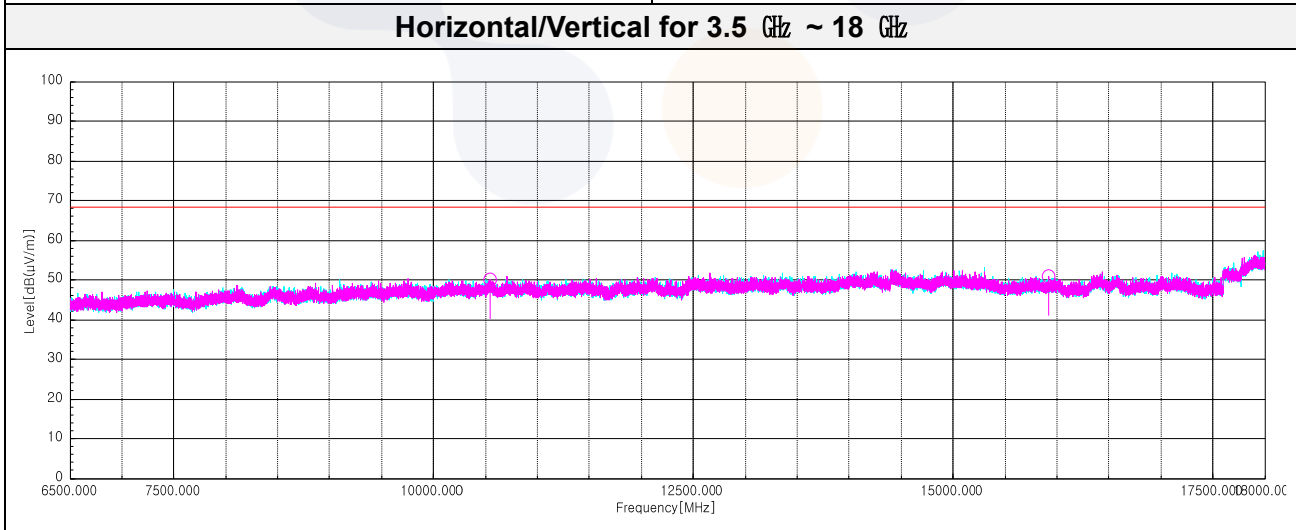
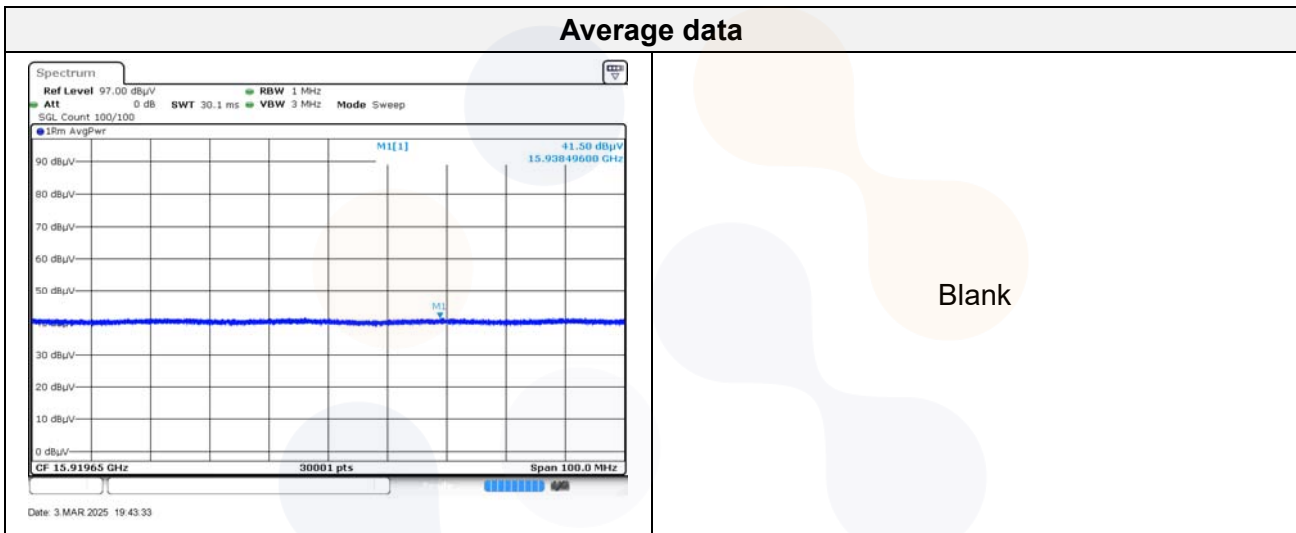
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 352.26 ¹⁾	H	60.30	33.10	-27.02	-	66.38	74.00	7.62
Average Data								
5 352.26 ¹⁾	H	41.47	33.10	-27.02	0.19	47.74	54.00	6.26



UNII 2A 2Tx (MIMO) / 802.11ax_HE40 RU mode (484T / RU offset 65) / Spurious

Lowest Channel (5 270 MHz)

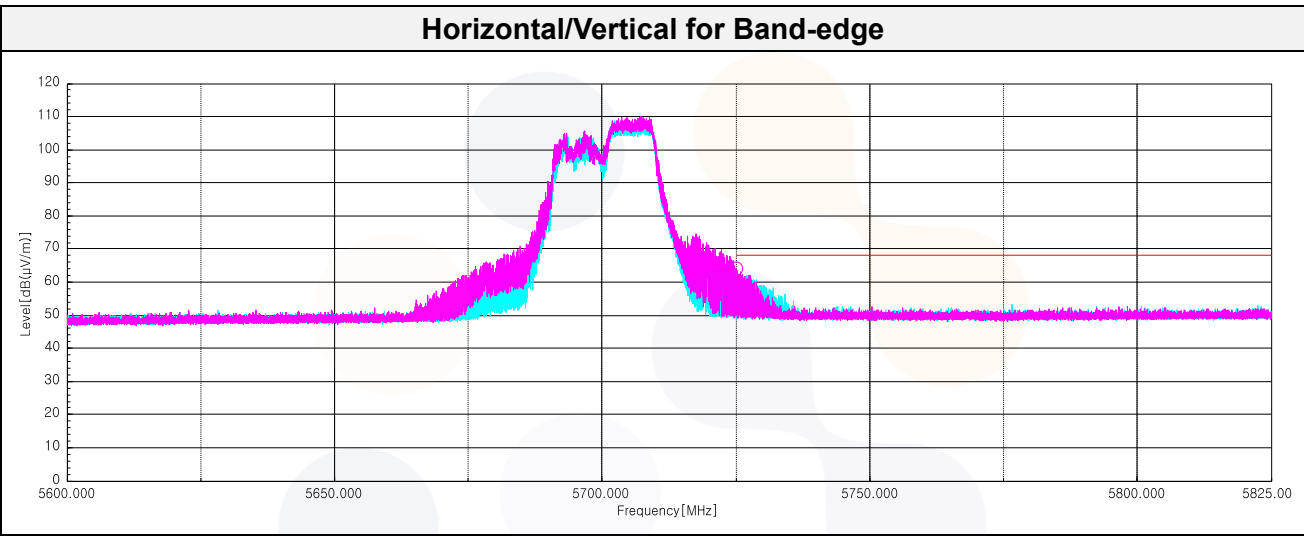
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
10 548.77	H	53.50	38.80	-42.19	-	50.11	68.20	18.09
15 938.50 ¹⁾	H	52.00	38.28	-39.25	-	51.03	74.00	22.97
Average Data								
15 938.50 ¹⁾	H	41.50	38.28	-39.25	0.19	40.72	54.00	13.28



UNII 2C 2Tx (MIMO) / 802.11ax_HE20 RU mode (106T / RU offset 54) / Band-edge

Highest Channel (5 700 MHz)

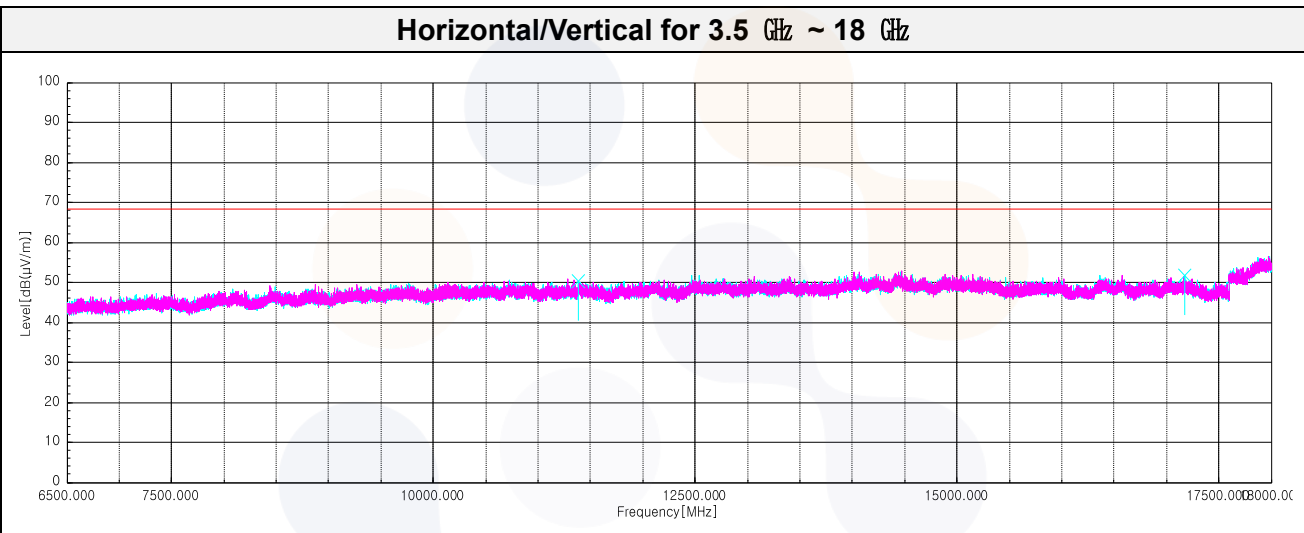
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
5 725.17	H	57.00	33.55	-26.57	-	63.98	68.20	4.22
Average Data								
No spurious emissions were detected within 20 dB of the limit.								



UNII 2C 2Tx (MIMO) / 802.11ax_HE80 SU mode / Spurious

Middle Channel (5 690 MHz)

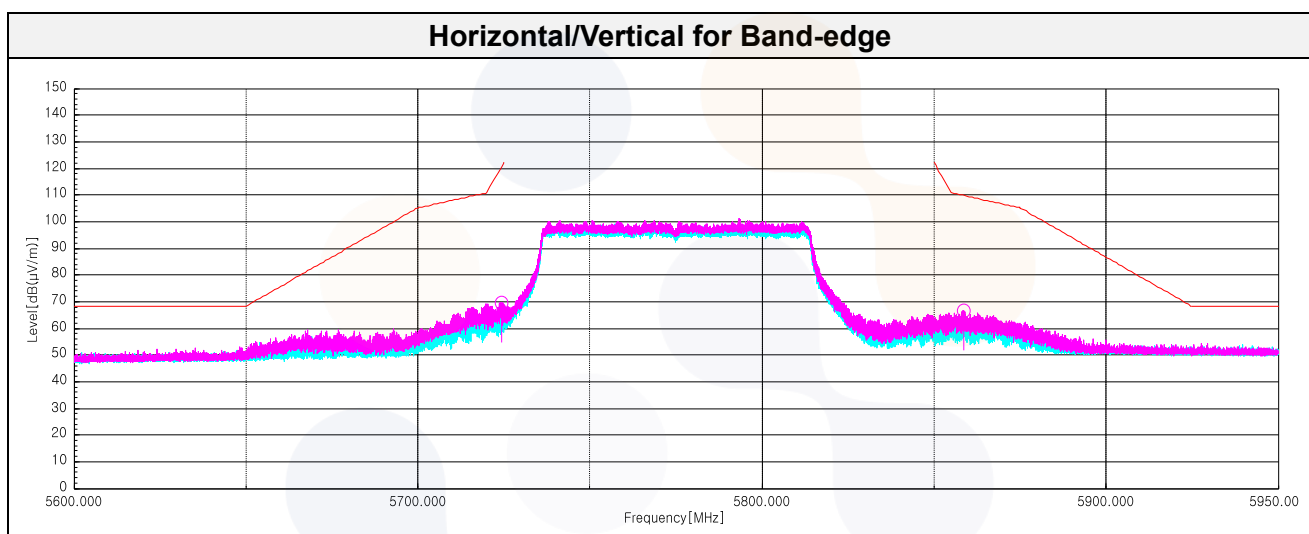
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
11 380.22 ¹⁾	V	53.10	38.90	-41.80	-	50.20	74.00	23.80
17 179.28	V	50.40	38.16	-36.97	-	51.59	68.20	16.61
Average Data								
No spurious emissions were detected within 20 dB of the limit.								



UNII 3 2Tx (MIMO) / 802.11ax_HE80 RU mode (996T / RU offset 67) / Band-edge

Middle Channel (5 775 MHz)

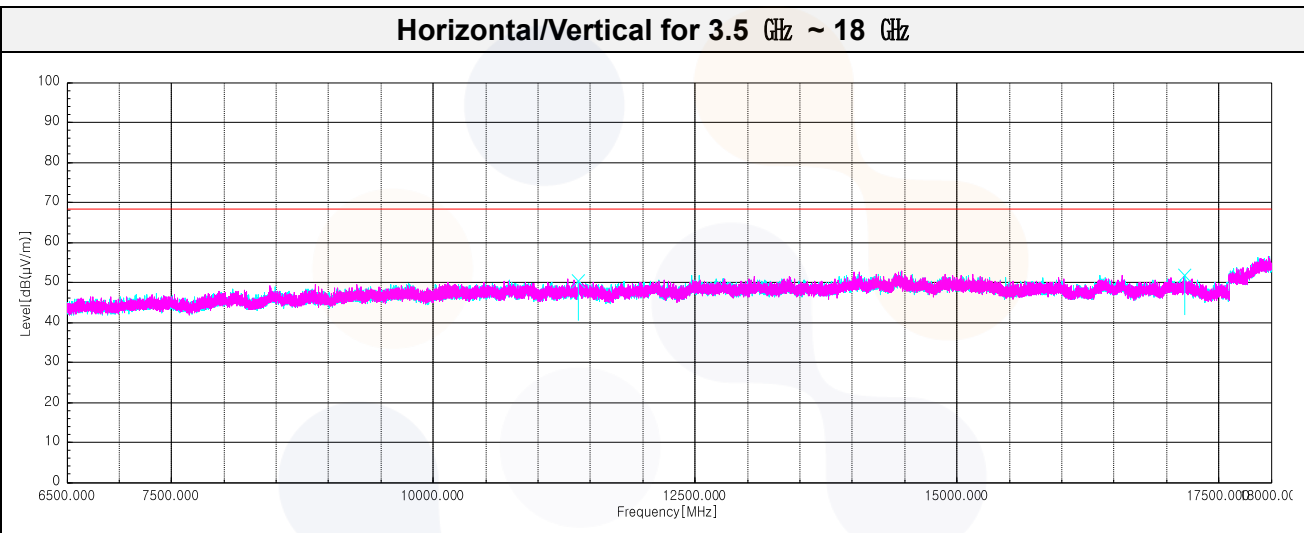
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μ V))	(dB)	(dB)	(dB)	(dB(μ V/m))	(dB(μ V/m))	(dB)
Peak data								
5 724.26	H	62.50	33.55	-26.58	-	69.47	120.50	51.03
5 858.70	H	58.80	34.33	-26.43	-	66.70	109.80	43.10
Average Data								
No spurious emissions were detected within 20 dB of the limit.								



UNII 3 2Tx (MIMO) / 802.11ax_HE20 SU mode / Spurious

Highest Channel (5 825 MHz)

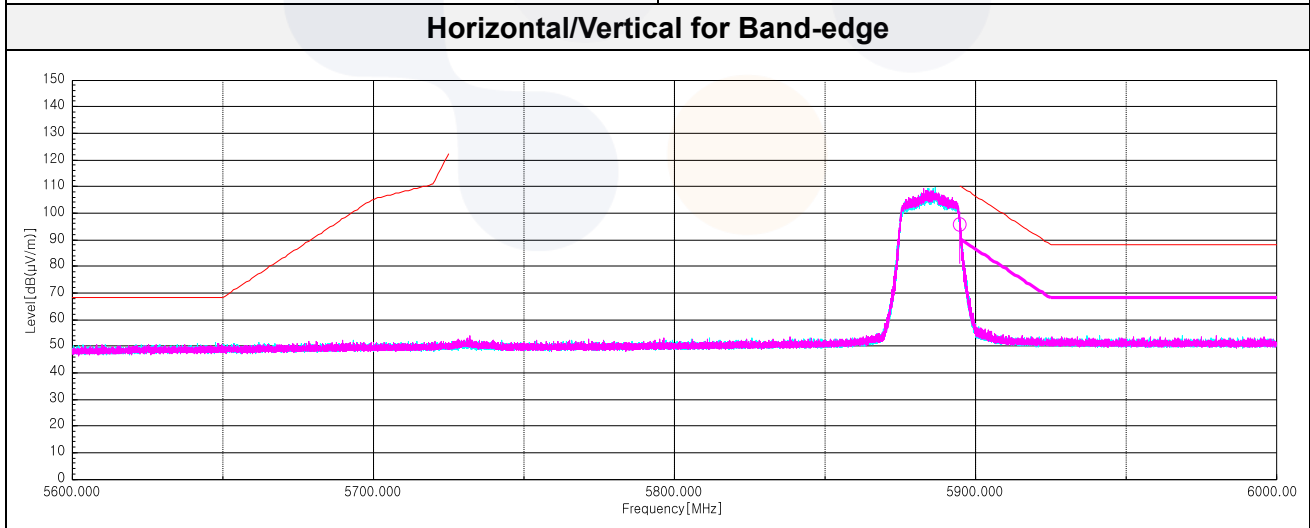
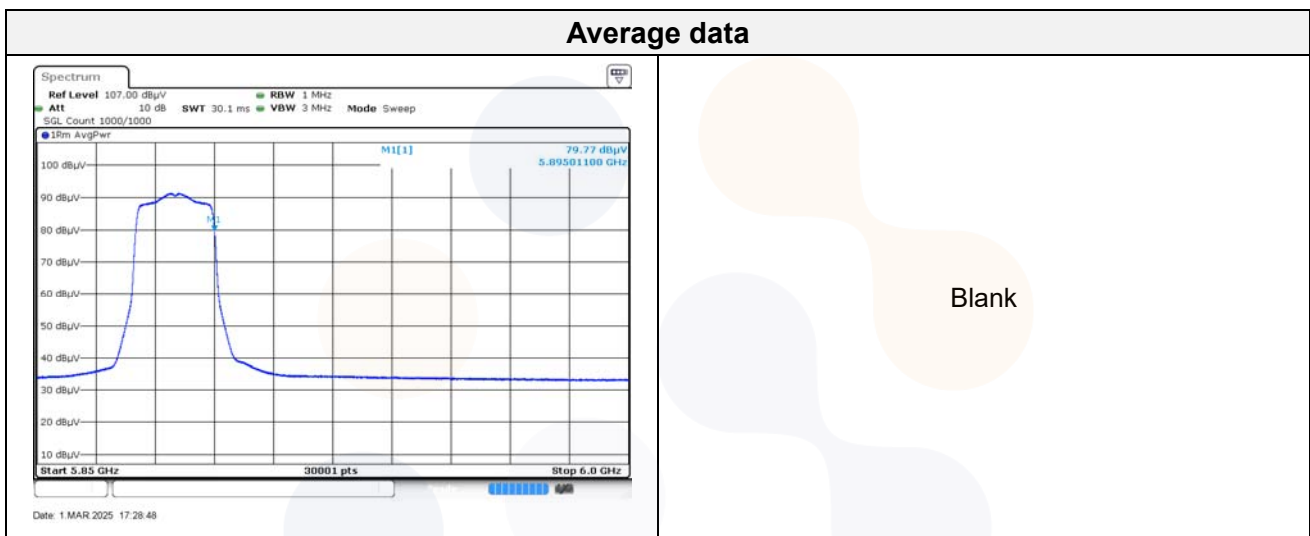
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
11 461.87 ¹⁾	V	53.60	38.78	-41.53	-	50.85	74.00	23.15
17 392.80	H	47.80	38.97	-36.73	-	50.04	68.20	18.16
Average Data								
No spurious emissions were detected within 20 dB of the limit.								



UNII 4 2Tx (MIMO) / 802.11ax_HE20 SU mode / Band-edge

Highest Channel (5 885 MHz)

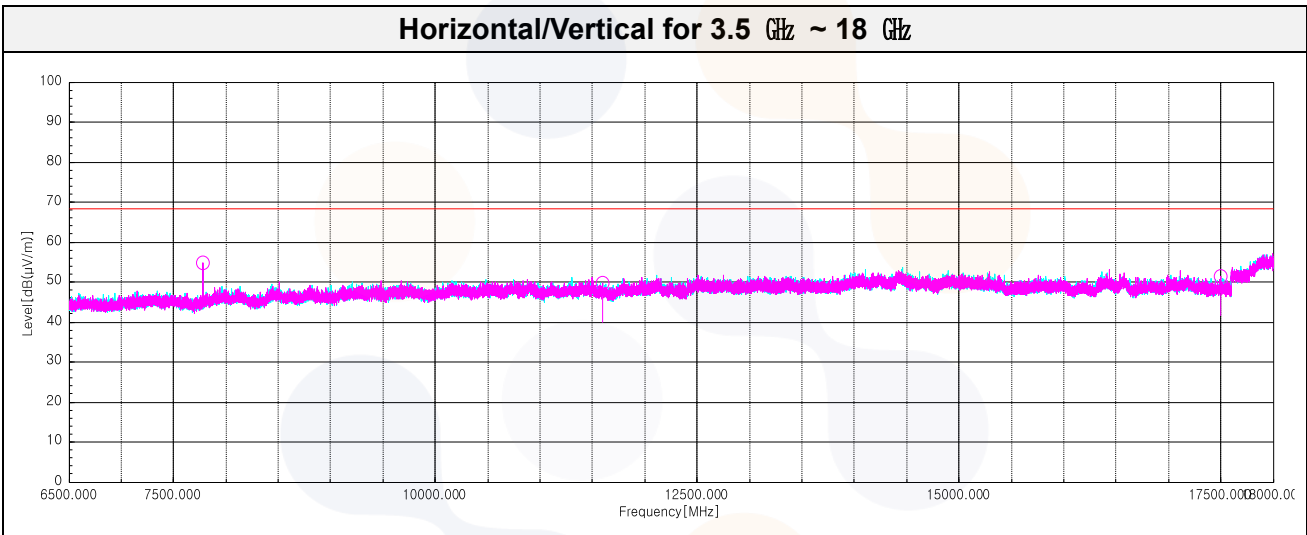
Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
5 895.01	H	87.70	34.48	-26.16	-	96.02	110.20	14.18
Average Data								
5 895.01	H	79.77	34.48	-26.16	-	88.09	90.20	2.11



UNII 4 2Tx (MIMO) / 802.11ax_HE40 SU mode / Spurious

Lowest Channel (5 835 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp. + Cable	DCCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
Peak data								
7 779.95	H	59.10	36.72	-41.03	-	54.79	68.20	13.41
11 599.48 ¹⁾	H	52.60	38.60	-41.53	-	49.67	74.00	24.33
17 497.45	H	48.50	39.48	-36.70	-	51.28	68.20	16.92
Average Data								
No spurious emissions were detected within 20 dB of the limit.								



9. Measurement equipment

Equipment Name	Manufacturer	Model No.	Serial No.	Next Cal. Date
Spectrum Analyzer	R&S	FSV30	100806	25.07.01
Spectrum Analyzer	R&S	FSV40	100988	25.05.27
Signal Generator	R&S	SMB100A	176206	26.01.17
Vector Signal Generator	R&S	SMBV100A	257566	25.07.01
Attenuator	API Inmet	40AH2W-10	16	25.04.30
Attenuator	R&S	DNF Dämpfungsglied 10 dB in N-50 Ohm	0002	25.04.24
Power Sensor	R&S	NRP-Z81	1137.9009.02-106223-bB	25.04.24
DC Power Supply	TDK-Lambda	GEN 60-55	136Z13-0001	25.10.15
DC Power Supply	POWERCOM	DCP-50100A	20220610-01	26.01.16
Amplifier	SONOMA INSTRUMENT	310N	421910	25.10.11
Bi-log Antenna	Teseq GmbH	CBL 6112D	61521	26.12.11
Loop Antenna	R&S	HFH2-Z2	100355	26.06.25
Broadband PreAmplifier	SCHWARZBECK	BBV9718D	53	26.01.16
Low Noise Amplifier	TESTEK	TK-PA18H	220123-L	25.10.11
Low Noise Amplifier	TESTEK	TK-PA1840H	220234-L	25.10.14
Horn Antenna	SCHWARZBECK	BBHA9120D	2764	25.10.24
Horn Antenna	SCHWARZBECK	BBHA9170	1266	25.10.15
High Pass Filter	Wainwright Instruments GmbH	WHKX8-5655-6500- 18000-40SS	SN7	25.10.15
High Pass Filter	Qotana	DBHF058004000A	23041800061	25.06.24

End of test report