

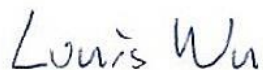


FCC RADIO TEST REPORT

FCC ID : UZ7TC58A1
Equipment : Touch Computer
Brand Name : Zebra
Model Name : TC58A1
Applicant : Zebra Technologies Corporation
1 Zebra Plaza, Holtsville, NY 11742
Manufacturer : Zebra Technologies Corporation
1 Zebra Plaza, Holtsville, NY 11742
Standard : FCC Part 15 Subpart E §15.407

The product was received on Feb. 21, 2022 and testing was performed from Mar. 02, 2022 to Jun. 07, 2022. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval from Sporton International Inc. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.



Approved by: Louis Wu

Sporton International Inc. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)



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History of this test report

Report No.	Version	Description	Issue Date
FR222202E	01	Initial issue of report	Jun. 17, 2022

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.403(i)	26dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
3.2	15.407(a)	Maximum Conducted Output Power	Pass	-
3.3	15.407(a)	Power Spectral Density	Pass	-
3.4	15.407(b)	Unwanted Emissions	Pass	1.04 dB under the limit at 5459.680 MHz
3.5	15.207	AC Conducted Emission	Pass	17.51 dB under the limit at 0.258 MHz
3.6	15.203 15.407(a)	Antenna Requirement	Pass	-

Declaration of Conformity:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.
2. The measurement uncertainty please refer to this report "Uncertainty of Evaluation".

Comments and Explanations:

The product specifications of the EUT presented in the report are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Wei Chen

Report Producer: Vivian Hsu



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Touch Computer
Brand Name	Zebra
Model Name	TC58A1
FCC ID	UZ7TC58A1
Sample 1	Lowell + Premium config
Sample 2	SE4720 + Base config
Sample 3	Lowell + Base config
EUT supports Radios application	GSM/EGPRS/WCDMA/HSPA/LTE/5G NR/NFC/GNSS WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80/VHT160 WLAN 11ax HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE
HW Version	EV3
SW Version	athena_A11_userdebug_GMS_RelKey_2022-02-22-2145_p roduct_SE
MFD	19FEB22
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer.

Specification of Accessories				
Adapter	Brand Name	Zebra	Part Number	PWR-WUA5V12W0US
Battery 1X	Brand Name	Zebra	Part Number	BT-000442-0020
Battery 1.5X	Brand Name	Zebra	Part Number	BT-000442-0820
USB TYPE A to TYPE C cable	Brand Name	Zebra	Part Number	CBL-TC5X-USBC2A-01
USB TYPE C to 3.5mm audio connector	Brand Name	Zebra	Part Number	ADP-USBC-35MM1-01
3.5mm Earphone	Brand Name	Zebra	Part Number	HDST-35MM-PTVP-01
USB TYPE C Earphone	Brand Name	Zebra	Part Number	HPST-USBC-PTT1-01
Headset Jumper	Brand Name	Zebra	Part Number	CBL-TC51-HDST35-01
Trigger Handle	Brand Name	Zebra	Part Number	TRG-NGTC5-ELEC-01
Soft Holster	Brand Name	Zebra	Part Number	SG-NGTC5TC7-HLSTR-01
TC53/TC58 RUGGED BOOT	Brand Name	Zebra	Part Number	SG-NGTC5EXO1-01

1.2 Product Specification of Equipment Under Test

Product Specification is subject to this standard	
Tx/Rx Frequency Range	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5720 MHz
Maximum Output Power to Antenna <CDD Mode>	<5180 MHz ~ 5240 MHz> MIMO <Ant. 9+8> 802.11a: 18.72 dBm / 0.0745 W 802.11n HT20: 18.47 dBm / 0.0703 W 802.11n HT40: 18.76 dBm / 0.0752 W 802.11ac VHT20: 18.47 dBm / 0.0703 W 802.11ac VHT40: 18.76 dBm / 0.0752 W 802.11ac VHT80: 16.61 dBm / 0.0458 W 802.11ac VHT160: 14.91 dBm / 0.0310 W 802.11ax HE20: 18.57 dBm / 0.0719 W 802.11ax HE40: 18.17 dBm / 0.0656 W 802.11ax HE80: 16.71 dBm / 0.0469 W 802.11ax HE160: 15.01 dBm / 0.0317 W <5260 MHz ~ 5320 MHz> MIMO <Ant. 9+8> 802.11a: 21.21 dBm / 0.1321 W 802.11n HT20: 20.71 dBm / 0.1178 W 802.11n HT40: 20.61 dBm / 0.1151 W 802.11ac VHT20: 20.71 dBm / 0.1179 W 802.11ac VHT40: 20.61 dBm / 0.1151 W 802.11ac VHT80: 16.26 dBm / 0.0423 W 802.11ax HE20: 20.81 dBm / 0.1205 W 802.11ax HE40: 20.71 dBm / 0.1178 W 802.11ax HE80: 16.36 dBm / 0.0433 W <5500 MHz ~ 5720 MHz> MIMO <Ant. 9+8> 802.11a: 21.31 dBm / 0.1352 W 802.11n HT20: 21.01 dBm / 0.1262 W 802.11n HT40: 20.67 dBm / 0.1167 W 802.11ac VHT20: 21.01 dBm / 0.1262 W 802.11ac VHT40: 20.67 dBm / 0.1167 W 802.11ac VHT80: 20.51 dBm / 0.1125 W 802.11ac VHT160: 16.87 dBm / 0.0486 W 802.11ax HE20: 21.11 dBm / 0.1291 W 802.11ax HE40: 20.77 dBm / 0.1194 W 802.11ax HE80: 20.61 dBm / 0.1151 W 802.11ax HE160: 16.97 dBm / 0.0498 W

Product Specification is subject to this standard	
Maximum Output Power to Antenna <TXBF Mode>	<5180 MHz ~ 5240 MHz> MIMO <Ant. 9+8> 802.11ax HE20: 17.81 dBm / 0.0604 W 802.11ax HE40: 17.91 dBm / 0.0618 W 802.11ax HE80: 16.11 dBm / 0.0408 W 802.11ax HE160: 14.61 dBm / 0.0289 W <5260 MHz ~ 5320 MHz> MIMO <Ant. 9+8> 802.11ax HE20: 20.01 dBm / 0.1002 W 802.11ax HE40: 19.01 dBm / 0.0796 W 802.11ax HE80: 16.06 dBm / 0.0404 W <5500 MHz ~ 5720 MHz> MIMO <Ant. 9+8> 802.11ax HE20: 20.11 dBm / 0.1026 W 802.11ax HE40: 20.51 dBm / 0.1125 W 802.11ax HE80: 20.17 dBm / 0.1040 W 802.11ax HE160: 13.56 dBm / 0.0227 W
99% Occupied Bandwidth <CDD Mode>	MIMO <Ant. 9> 802.11a: 28.62 MHz 802.11ax HE20: 19.63 MHz 802.11ax HE40: 38.66 MHz 802.11ax HE80: 77.44 MHz 802.11ax HE160: 156.32 MHz MIMO <Ant. 8> 802.11a: 24.38 MHz 802.11ax HE20: 19.48 MHz 802.11ax HE40: 38.66 MHz 802.11ax HE80: 77.56 MHz 802.11ax HE160: 156.08 MHz
99% Occupied Bandwidth <TXBF Mode>	MIMO <Ant. 9> 802.11ax HE20: 19.28 MHz 802.11ax HE40: 39.36 MHz 802.11ax HE80: 77.80 MHz 802.11ax HE160: 156.32 MHz MIMO <Ant. 8> 802.11ax HE20: 19.38 MHz 802.11ax HE40: 38.86 MHz 802.11ax HE80: 77.80 MHz 802.11ax HE160: 156.32 MHz

Product Specification is subject to this standard			
Antenna Type	Ant. 9 : PIFA Antenna Ant. 8 : PIFA Antenna		
Antenna Gain	TX Beamforming Gain (Y) : 0 dBi <5180 MHz ~ 5240 MHz> Ant. 9 : 3.10 dBi Ant. 8 : 1.80 dBi <5260 MHz ~ 5320 MHz> Ant. 9 : 3.70 dBi Ant. 8 : 1.90 dBi <5500 MHz ~ 5720 MHz> Ant. 9 : 3.70 dBi Ant. 8 : 2.40 dBi		
Type of Modulation	802.11a/n: OFDM (BPSK/QPSK/16QAM/64QAM) 802.11ac: OFDM (BPSK/QPSK/16QAM/64QAM/256QAM) 802.11ax: OFDMA (BPSK/QPSK/16QAM/64QAM/256QAM/1024QAM)		
Antenna Function Description		Ant. 9	Ant. 8
	802.11 a/n/ac/ax MIMO	V	V
	802.11 ax TXBF	V	V

Remark:

1. MIMO Ant. 9+8 is a calculated result from sum of the power MIMO Ant. 9 and MIMO Ant. 8.
2. The EUT's information above is declared by manufacturer. Please refer to Comments and Explanations in report summary.

1.3 Modification of EUT

No modifications made to the EUT during the testing.

1.4 Testing Location

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	Sporton Site No. CO05-HY, 03CH07-HY, TH02-HY

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC designation No.: TW1190

1.5 Applicable Standards

According to the specifications declared by the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC Part 15 Subpart E
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01.
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ ANSI C63.10-2013

Remark:

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.
3. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and find X plane as worst plane.
- b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5150-5250 MHz Band 1 (U-NII-1)	36	5180	44	5220
	38*	5190	46*	5230
	40	5200	48	5240
	42#	5210		
Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5250-5350 MHz Band 2 (U-NII-2A)	52	5260	60	5300
	54*	5270	62*	5310
	56	5280	64	5320
	58#	5290		
Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5470-5725 MHz Band 3 (U-NII-2C)	100	5500	112	5560
	102*	5510	116	5580
	104	5520	132	5660
	106#	5530	134*	5670
	108	5540	136	5680
	110*	5550	140	5700
Frequency Band	Channel		Freq. (MHz)	
5150-5350 MHz	50@		5250	
5470-5725 MHz	114@		5570	

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
TDWR Channel	118*	5590	124	5620
	120	5600	126*	5630
	122 [#]	5610	128	5640

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
Straddle Channel	138 [#]	5690	144	5720
	142*	5710		

Note:

1. The above Frequency and Channel with "*" are 802.11n HT40 and 802.11ac VHT40 and 802.11ax HE40.
2. The above Frequency and Channel with "[#]" are 802.11ac VHT80 and 802.11ax HE80.
3. The above Frequency and Channel with "@ " are 802.11ac VHT160 and 802.11ax HE160.

2.2 Test Mode

The 802.11ax mode is investigated among different tones, full resource units (RU), partial resource units. The partial RU has no higher power than full RU's, thus the full RU is chosen as main test configuration.

The CDD mode is chosen as worst case configuration for all test cases due to higher power than SISO mode.

The 802.11n/ac mode has no higher power and PSD than 802.11ax mode, thus the 802.11ax mode is chosen as main test configuration, and the 802.11n/ac mode is verified the power.

The final test modes consider the modulation and the worst data rates as shown in the table below.

<CDD Mode>

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20 (Covered by HE20)	MCS0
802.11n HT40 (Covered by HE40)	MCS0
802.11ac VHT20 (Covered by HE20)	MCS0
802.11ac VHT40 (Covered by HE40)	MCS0
802.11ac VHT80 (Covered by HE80)	MCS0
802.11ac VHT160 (Covered by HE160)	MCS0
802.11ax HE20	MCS0
802.11ax HE40	MCS0
802.11ax HE80	MCS0
802.11ax HE160	MCS0

<TXBF Mode>

Modulation	Data Rate
802.11ax HE20	MCS0
802.11ax HE40	MCS0
802.11ax HE80	MCS0
802.11ax HE160	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : WCDMA Band V Link + WLAN (5GHz) Link + Bluetooth Link + NFC On + USB TYPE A to TYPE C cable (Charging with Adapter) + Battery 1X for Sample 2
Remark: For Radiated Test Cases, the tests were performed with Battery 1X and Sample 2.	

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11a	802.11a	802.11a
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle		-	-	144

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11ax HE20	802.11ax HE20	802.11ax HE20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle		-	-	144

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11ax HE40	802.11ax HE40	802.11ax HE40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134
Straddle		-	-	142

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11ax HE80	802.11ax HE80	802.11ax HE80
L	Low	-	-	106
M	Middle	42	58	-
H	High	-	-	122
Straddle		-	-	138



BW160	5150-5350 MHz	5470-5725MHz
	802.11ax HE160	802.11ax HE160
Ch. #	50	114

Remark: For radiation spurious emission, the modulation and the data rate picked for testing are determined by the Max. RF conducted power.

MIMO <Ant. 9+8>

<CDD Mode>

802.11a RF Output Power (dBm)										
Power vs. Channel			Power vs Data Rate							
Channel	Frequency (MHz)	Data Rate (bps)	Channel	Data Rate (bps)						
		6M		9M	12M	18M	24M	36M	48M	54M
Duty Cycle (%)										
CH 036	5180	17.81	CH 048	18.62	18.62	18.62	18.62	18.62	18.62	18.62
CH 044	5220	18.52								
CH 048	5240	18.72								
CH 052	5260	21.21	CH 052	21.11	21.11	21.11	21.11	21.11	21.11	21.11
CH 060	5300	19.76								
CH 064	5320	19.26								
CH 100	5500	20.11	CH 116	21.21	21.21	21.21	21.21	21.21	21.21	21.21
CH 116	5580	21.31								
CH 140	5700	18.81								
CH 144*	5720	21.01								

Note: The above Frequency and Channel in "*" were straddle Channel.



802.11ax HE20 RF Output Power (dBm)															
Power vs. Channel				Power vs Data Rate											
Channel	Frequency (MHz)	RU Config.	MCS Index	Channel	MCS Index										
			MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
Duty Cycle (%)															
CH 036	5180	Full	18.54	CH 048	18.47	18.47	18.37	18.37	18.47	18.47	18.47	18.37	18.37	18.47	
CH 036	5180	26/0	6.97												
CH 036	5180	52/37	11.41												
CH 036	5180	106/53	14.47												
CH 044	5220	Full	18.42												
CH 044	5220	26/4	9.83												
CH 044	5220	52/39	11.08												
CH 044	5220	106/53	15.08												
CH 048	5240	Full	18.57												
CH 048	5240	26/8	7.36												
CH 048	5240	52/40	11.40												
CH 048	5240	106/54	14.44												
CH 052	5260	Full	20.76	CH 060	20.71	20.71	20.61	20.61	20.71	20.71	20.71	20.61	20.61	20.71	20.71
CH 052	5260	26/0	10.96												
CH 052	5260	52/37	13.91												
CH 052	5260	106/53	17.11												
CH 060	5300	Full	20.81												
CH 060	5300	26/4	12.41												
CH 060	5300	52/39	14.11												
CH 060	5300	106/54	16.86												
CH 064	5320	Full	19.41												
CH 064	5320	26/8	9.86												
CH 064	5320	52/40	12.91												
CH 064	5320	106/54	15.77												



802.11ax HE20 RF Output Power (dBm)															
Power vs. Channel				Power vs Data Rate											
Channel	Frequency (MHz)	RU Config.	MCS Index	Channel	MCS Index										
			MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
Duty Cycle (%)				CH 100	21.01	21.01	20.91	20.91	21.01	21.01	21.01	20.91	20.91	21.01	21.01
CH 100	5500	Full	21.11												
CH 100	5500	26/0	11.16												
CH 100	5500	52/37	13.96												
CH 100	5500	106/53	17.11												
CH 116	5580	Full	20.76												
CH 116	5580	26/4	11.86												
CH 116	5580	52/38	14.01												
CH 116	5580	106/53	16.97												
CH 140	5700	Full	18.76												
CH 140	5700	26/8	9.41												
CH 140	5700	52/40	12.16												
CH 140	5700	106/54	15.12												
CH 144*	5720	Full	20.61												
CH 144*	5720	26/8	10.96												
CH 144*	5720	52/40	13.56												
CH 144*	5720	106/54	16.66												

Note: The above Frequency and Channel in "*" were straddle Channel.



802.11ax HE40 RF Output Power (dBm)															
Power vs. Channel				Power vs Data Rate											
Channel	Frequency (MHz)	RU Config.	MCS Index	Channel	MCS Index										
			MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
Duty Cycle (%)															
CH 038	5190	Full	16.81	CH 046	18.07	18.07	18.07	17.77	17.77	17.77	17.77	17.77	17.87	17.87	17.87
CH 038	5190	242/61	13.76												
CH 046	5230	Full	18.17												
CH 046	5230	242/62	14.88												
CH 054	5270	Full	20.71	CH 054	20.61	20.61	20.61	20.31	20.31	20.31	20.31	20.31	20.41	20.41	20.41
CH 054	5270	242/61	17.26												
CH 062	5310	Full	16.86												
CH 062	5310	242/62	13.81												
CH 102	5510	Full	19.01	CH 110	20.67	20.67	20.67	20.37	20.37	20.37	20.37	20.37	20.47	20.47	20.47
CH 102	5510	242/61	15.86												
CH 110	5550	Full	20.77												
CH 110	5550	242/61	17.67												
CH 134	5670	Full	20.56												
CH 134	5670	242/62	15.41												
CH 142*	5710	Full	20.61												
CH 142*	5710	242/62	17.21												

Note: The above Frequency and Channel in "*" were straddle Channel.



802.11ax HE80 RF Output Power (dBm)															
Power vs. Channel				Power vs Data Rate											
Channel	Frequency (MHz)	RU Config.	MCS Index	Channel	MCS Index										
			MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
	Duty Cycle (%)														
CH 042	5210	Full	16.71	CH 042	16.61	16.61	16.61	16.61	16.61	16.61	16.61	16.61	16.61	16.61	16.61
CH 042	5210	484/65	14.06												
CH 058	5290	Full	16.36	CH 058	16.26	16.26	16.26	16.26	16.26	16.26	16.26	16.26	16.26	16.26	16.26
CH 058	5290	484/66	13.16												
CH 106	5530	Full	17.31	CH 122	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51
CH 106	5530	484/65	14.11												
CH 122	5610	Full	20.61												
CH 122	5610	484/66	15.76												
CH 138*	5690	Full	19.76												
CH 138*	5690	484/66	16.66												

Note: The above Frequency and Channel in "*" were straddle Channel.

802.11ax HE160 RF Output Power (dBm)															
Power vs. Channel				Power vs Data Rate											
Channel	Frequency (MHz)	RU Config.	MCS Index	Channel	MCS Index										
			MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
Duty Cycle (%)															
CH 050	5250	Full	15.01	CH 050											
CH 050	5250	996/67	12.06		14.91	14.91	14.91	14.71	14.71	14.71	14.61	14.61	14.61	14.71	14.71
CH 050	5250	996/S67	12.01												
CH 114	5570	Full	16.97	CH 114											
CH 114	5570	996/67	14.62		16.87	16.87	16.87	16.67	16.67	16.67	16.57	16.57	16.57	16.67	16.67
CH 114	5570	996/S67	14.26												

Note: The above Frequency and Channel in "*" were straddle Channel.



<TXBF Mode>

802.11ax HE20 RF Output Power (dBm)															
Power vs. Channel				Power vs Data Rate											
Channel	Frequency (MHz)	RU Config.	MCS Index	Channel	MCS Index										
			MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
Duty Cycle (%)															
CH 036	5180	Full	17.81	CH 036											
CH 044	5220	Full	17.76		17.71	17.61	17.61	17.51	17.51	17.51	17.61	17.61	17.61	17.71	17.71
CH 048	5240	Full	17.76												
CH 052	5260	Full	20.01	CH 052											
CH 060	5300	Full	19.02		19.91	19.91	19.81	19.71	19.71	19.81	19.81	19.81	19.91	19.91	19.91
CH 064	5320	Full	18.91												
CH 100	5500	Full	20.11	CH 100											
CH 116	5580	Full	20.03		20.01	20.01	20.01	19.91	19.81	19.81	19.91	20.01	19.91	19.91	20.01
CH 140	5700	Full	17.81												
CH 144*	5720	Full	20.01												

Note: The above Frequency and Channel in "*" were straddle Channel.

802.11ax HE40 RF Output Power (dBm)															
Power vs. Channel				Power vs Data Rate											
Channel	Frequency	RU Config.	MCS Index	Channel	MCS Index										
	(MHz)		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
					Duty Cycle (%)										
CH 038	5190	Full	16.66	CH 046	17.81	17.71	17.61	17.51	17.61	17.61	17.71	17.61	17.71	17.81	17.81
CH 046	5230	Full	17.91												
CH 054	5270	Full	19.01	CH 054	18.91	18.91	18.81	18.81	18.71	18.71	18.71	18.81	18.81	18.81	18.91
CH 062	5310	Full	16.32												
CH 102	5510	Full	16.76	CH 142*	20.41	20.31	20.21	20.21	20.21	20.31	20.31	20.31	20.31	20.41	20.31
CH 110	5550	Full	20.11												
CH 134	5670	Full	20.16												
CH 142*	5710	Full	20.51												

Note: The above Frequency and Channel in "*" were straddle Channel.

802.11ax HE80 RF Output Power (dBm)															
Power vs. Channel				Power vs Data Rate											
Channel	Frequency (MHz)	RU Config.	MCS Index	Channel	MCS Index										
			MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
Duty Cycle (%)															
CH 042	5210	Full	16.11	CH 042	16.01	16.01	16.01	15.91	15.91	15.91	15.81	15.81	15.91	15.91	16.01
CH 058	5290	Full	16.06	CH 058	15.96	15.96	15.96	15.86	15.86	15.86	15.76	15.76	15.86	15.86	15.96
CH 106	5530	Full	16.51	CH 122	20.07	20.07	20.07	19.97	19.97	19.97	19.87	19.87	19.97	19.97	20.07
CH 122	5610	Full	20.17												
CH 138*	5690	Full	19.71												

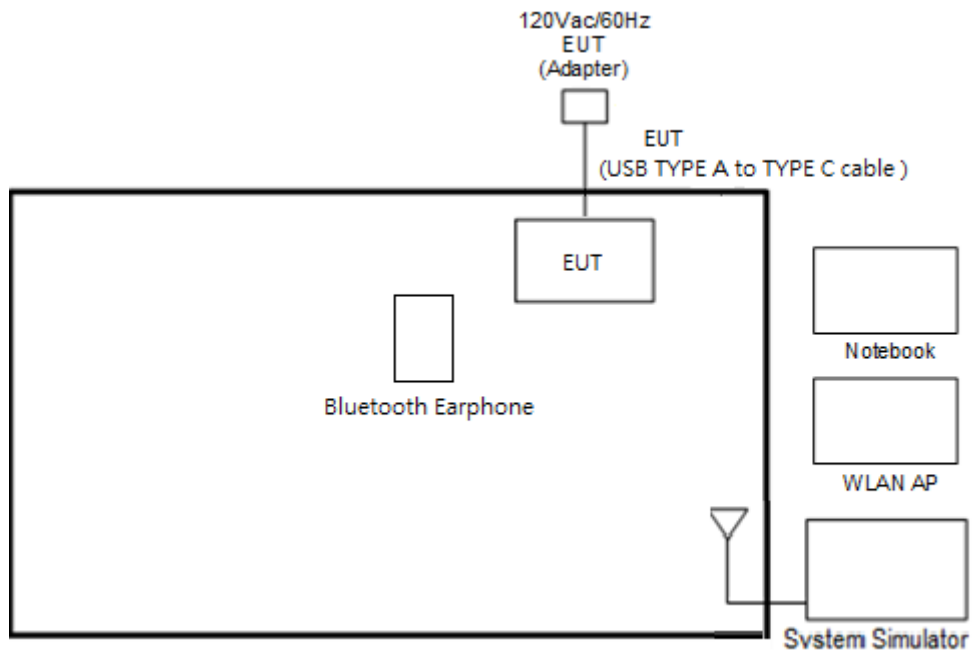
Note: The above Frequency and Channel in "*" were straddle Channel.

802.11ax HE160 RF Output Power (dBm)															
Power vs. Channel				Power vs Data Rate											
Channel	Frequency (MHz)	RU Config.	MCS Index	Channel	MCS Index										
			MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
	Duty Cycle (%)														
CH 050	5250	Full	14.61	CH 050	14.51	14.51	14.41	14.51	14.41	14.31	14.31	14.41	14.51	14.41	14.51
CH 114	5570	Full	13.56	CH 114	13.46	13.46	13.36	13.46	13.36	13.26	13.26	13.36	13.46	13.36	13.46

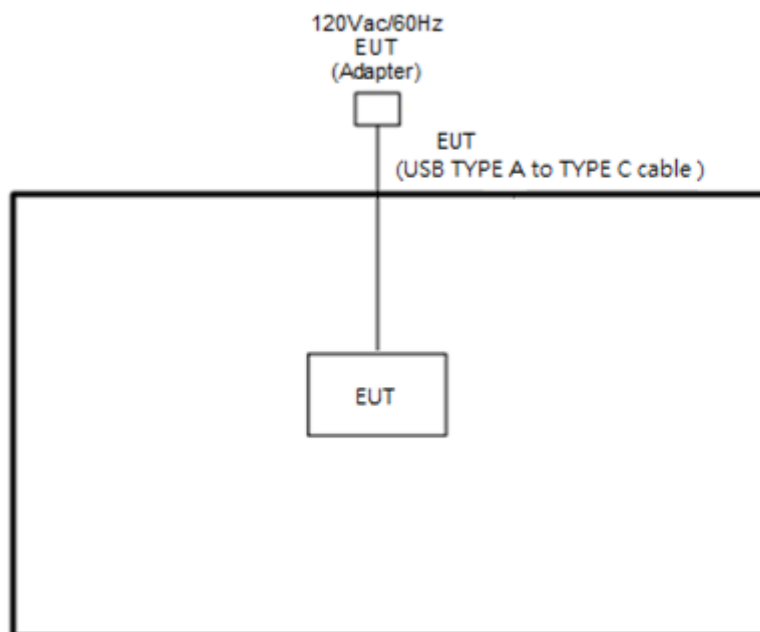
Note: The above Frequency and Channel in "*" were straddle Channel.

2.3 Connection Diagram of Test System

<AC Conducted Emission Mode>



<WLAN Tx Mode>



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8m
2.	Bluetooth Earphone	Sony Ericsson	MW600	PY700A2029	N/A	N/A
3.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8m
4.	Notebook	Dell	Latitude 3400	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
5.	Notebook	Dell	P79G	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
6.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A
7.	11ax Wireless Router	ASUS	RT-AX88U	N/A	N/A	N/A

2.5 EUT Operation Test Setup

The RF test items, utility “QRCT v4.0 version 4.0.00175.0” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

For TXBF mode, the modulation modes and data rates manipulated by the command lines in the engineering program made the EUT link to another EUT by power under the normal operation. The “Magic iPerf Ver.1.0” software tool was used to enable the EUT to transmit signals continuously.

2.6 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator 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.

Example :

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.2 dB and 10 dB attenuator.

$$\begin{aligned}
 \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)}. \\
 &= 4.2 + 10 = 14.2 \text{ (dB)}
 \end{aligned}$$

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

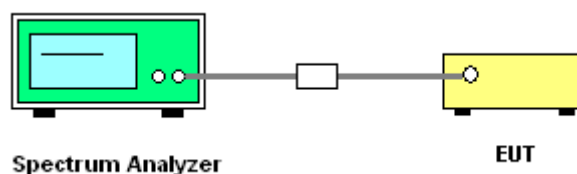
3.1.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1-5% of the emission bandwidth and set the Video bandwidth (VBW) $\geq 3 * RBW$.
8. Measure and record the results in the test report.

3.1.4 Test Setup





3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Test Engineer :	Junyu Jhou and Hank Hsu	Temperature :	20.1~23.3℃
		Relative Humidity :	51.3~65.6%

<CDD Mode>

Band I MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		-	Note
					Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8		
11a	6Mbps	2	36	5180	16.98	16.48	30.70	19.50	-		22.17		-	-
11a	6Mbps	2	44	5220	28.62	19.68	49.90	36.34	-		22.94			
11a	6Mbps	2	48	5240	21.63	18.73	40.31	35.99	-		22.73			

Band II MIMO															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		Note
					Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	
11a	6Mbps	2	52	5260	22.13	24.38	41.28	45.35	23.98		30.00		23.98		
11a	6Mbps	2	60	5300	16.73	16.63	26.10	25.95	23.21		29.21		23.98		
11a	6Mbps	2	64	5320	16.48	16.53	19.75	23.65	23.17		29.17		23.96		



Band III MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
					Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8
11a	6Mbps	2	100	5500	16.68	16.58	25.45	25.75	23.20		29.20		23.98		----	----
11a	6Mbps	2	116	5580	19.68	21.63	36.08	40.36	23.94		29.94		23.98		----	----
11a	6Mbps	2	140	5700	16.48	16.43	19.70	19.80	23.16		29.16		23.94		----	----

Band III straddle channel MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
					Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8
11a	6Mbps	2	144	5720	13.74	14.89	17.98	24.24	22.38		28.38		23.55		3.15	3.15

Band I MIMO															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		-	Note
						Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8		
HE20	MCS0	2	36	5180	Full	19.63	19.23	35.11	31.37	-		22.84		-	
HE20	MCS0	2	44	5220	Full	19.58	19.48	37.38	37.79	-		22.90			
HE20	MCS0	2	48	5240	Full	19.33	19.38	38.20	33.36	-		22.86			
HE40	MCS0	2	38	5190	Full	37.96	38.06	40.23	40.32	-		23.01			
HE40	MCS0	2	46	5230	Full	38.66	38.66	71.44	61.44	-		23.01			
HE80	MCS0	2	42	5210	Full	77.32	77.20	82.88	82.40	-		23.01			
HE160	MCS0	2	50	5250	Full	156.08	156.08	166.40	167.04	-		23.01			

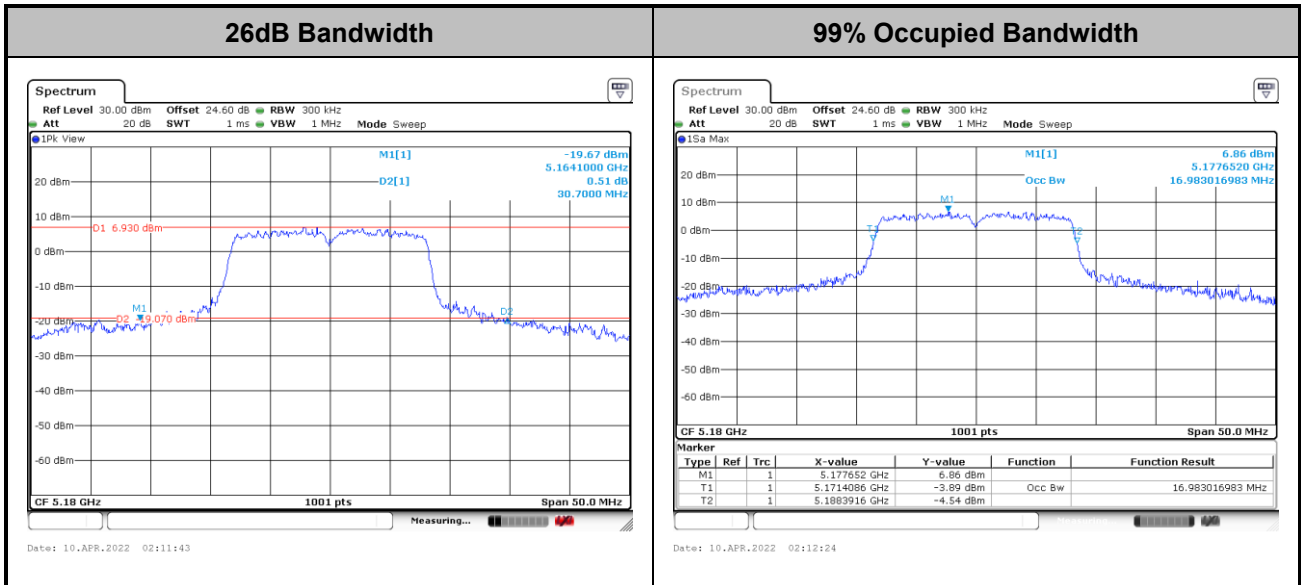
Band II MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		Note
						Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	
HE20	MCS0	2	52	5260	Full	19.23	19.28	39.15	38.46	23.84		29.84		23.98		-
HE20	MCS0	2	60	5300	Full	19.23	19.28	35.68	35.88	23.84		29.84		23.98		
HE20	MCS0	2	64	5320	Full	18.98	18.98	21.70	25.30	23.78		29.78		23.98		
HE40	MCS0	2	54	5270	Full	38.36	38.56	52.44	50.72	23.98		30.00		23.98		
HE40	MCS0	2	62	5310	Full	38.06	37.96	40.68	40.32	23.98		30.00		23.98		
HE80	MCS0	2	58	5290	Full	77.20	77.32	82.72	82.72	23.98		30.00		23.98		

Band III MIMO																	
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
						Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8
HE20	MCS0	2	100	5500	Full	19.23	19.18	31.87	32.43	23.83		29.83		23.98		----	----
HE20	MCS0	2	116	5580	Full	19.18	19.18	35.47	30.90	23.83		29.83		23.98		----	----
HE20	MCS0	2	140	5700	Full	18.98	18.93	21.80	21.55	23.77		29.77		23.98		----	----
HE40	MCS0	2	102	5510	Full	37.86	37.86	40.86	40.41	23.98		30.00		23.98		----	----
HE40	MCS0	2	110	5550	Full	38.26	38.46	51.53	51.72	23.98		30.00		23.98		----	----
HE40	MCS0	2	134	5670	Full	38.16	38.16	40.81	44.45	23.98		30.00		23.98		----	----
HE80	MCS0	2	106	5530	Full	77.32	77.20	83.36	82.40	23.98		30.00		23.98		----	----
HE80	MCS0	2	122	5610	Full	77.44	77.56	114.30	114.62	23.98		30.00		23.98		----	----
HE160	MCS0	2	114	5570	Full	156.32	155.84	167.68	165.76	23.98		30.00		23.98		----	----

Band III straddle channel MIMO																	
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
						Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8
HE20	MCS0	2	144	5720	Full	14.69	14.64	19.60	20.32	22.66		28.66		23.92		4.35	4.2498
HE40	MCS0	2	142	5710	Full	34.08	34.28	35.27	41.45	23.98		30.00		23.98		3.9	3.99
HE80	MCS0	2	138	5690	Full	73.72	73.72	76.44	76.76	23.98		30.00		23.98		3.56	4.04

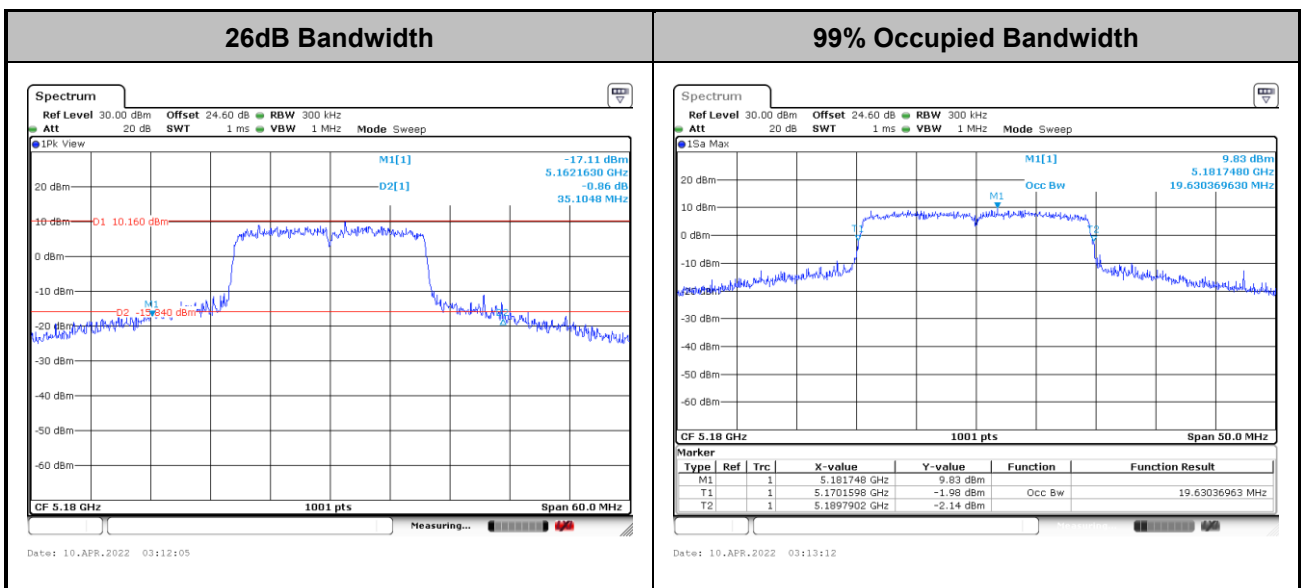


<802.11a>



Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

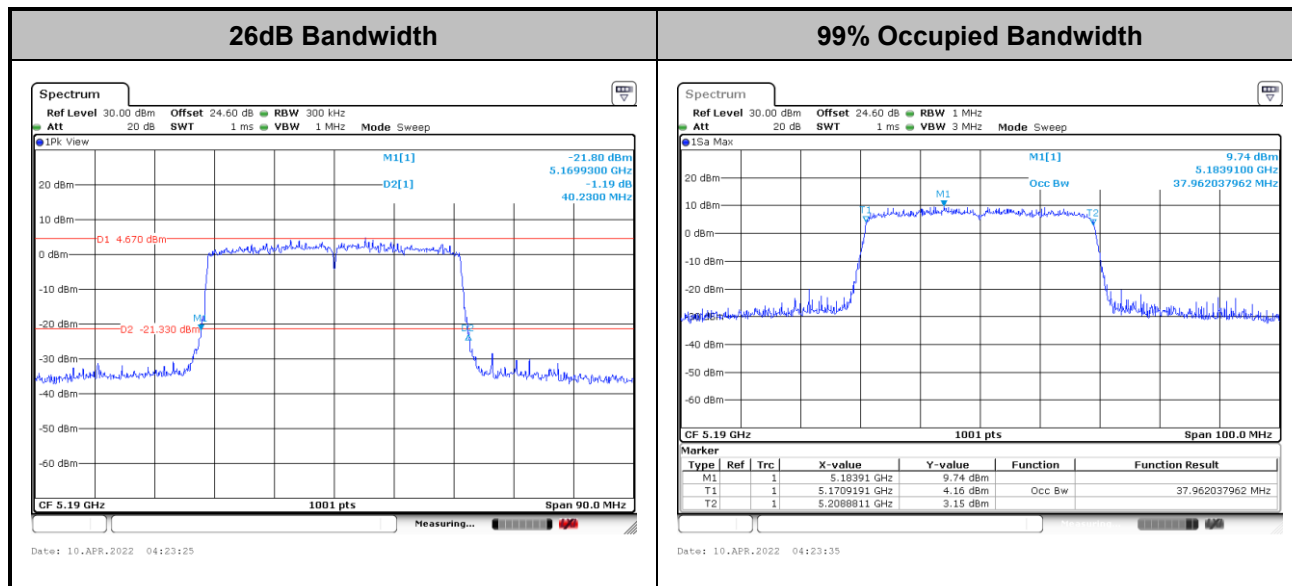
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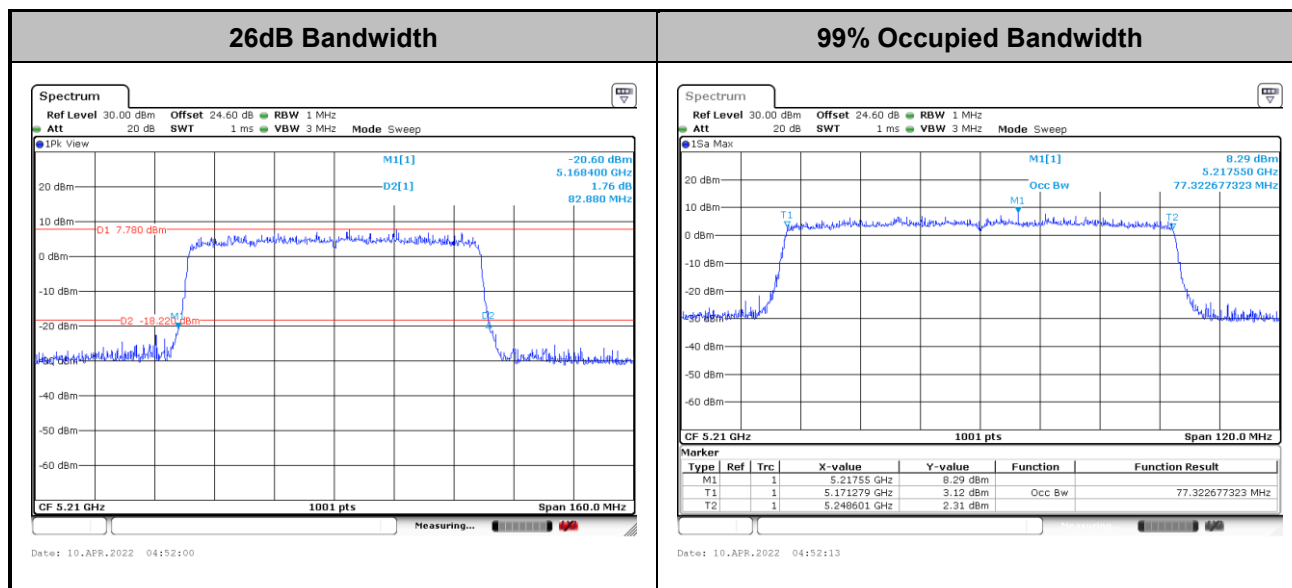
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



<802.11ax HE40>

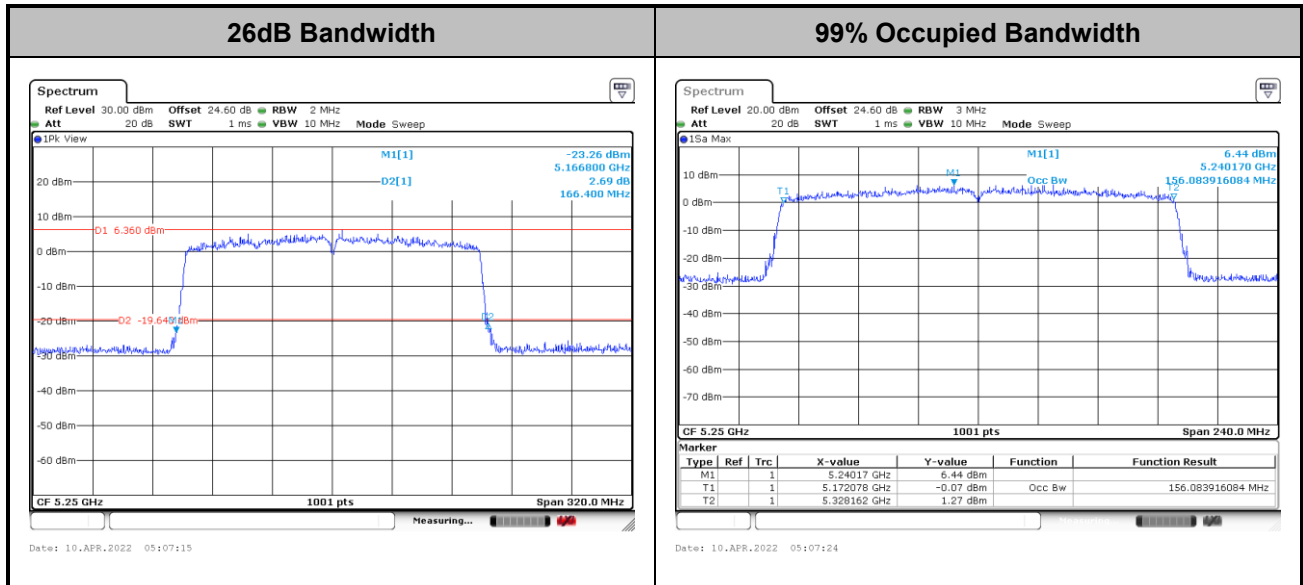


<802.11ax HE80>





<802.11ax HE160>



Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



<TXBF Mode>

Band I MIMO															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		-	Note
						Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8		
HE20	MCS0	2	36	5180	Full	18.98	18.98	21.95	21.30	-		22.78		-	-
HE20	MCS0	2	44	5220	Full	18.98	19.03	21.70	28.10	-		22.78			
HE20	MCS0	2	48	5240	Full	19.28	19.38	36.35	37.70	-		22.85			
HE40	MCS0	2	38	5190	Full	37.96	37.96	41.04	40.23	-		23.01			
HE40	MCS0	2	46	5230	Full	38.16	38.36	81.01	80.32	-		23.01			
HE80	MCS0	2	42	5210	Full	77.32	77.20	84.80	92.16	-		23.01			
HE160	MCS0	2	50	5250	Full	156.32	156.08	171.20	165.12	-		23.01			

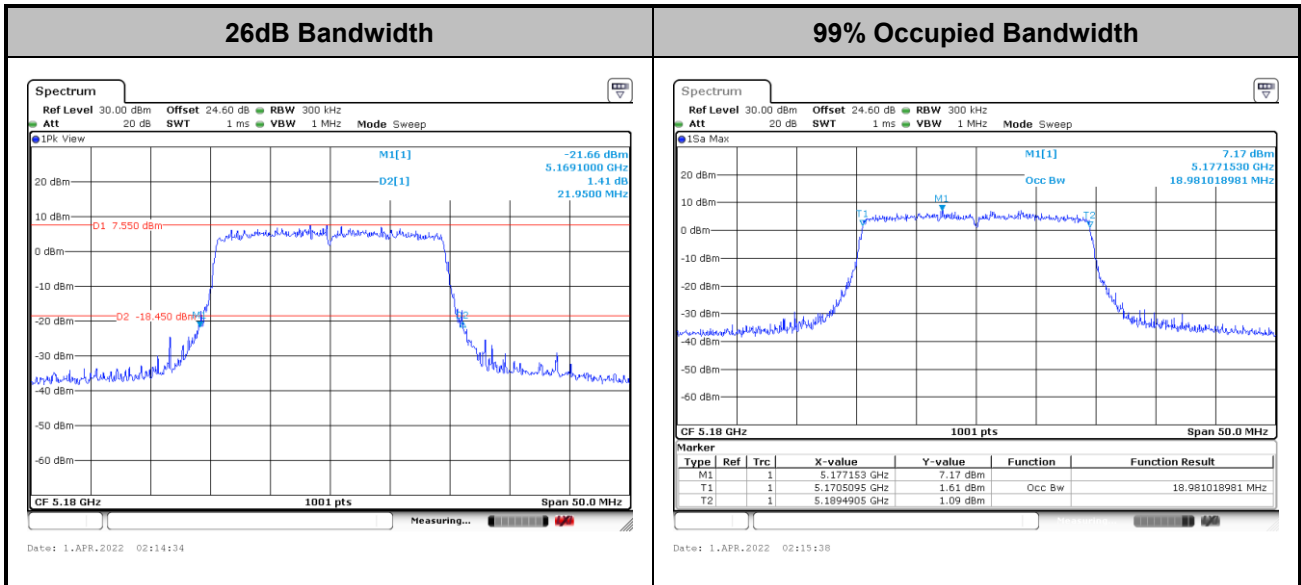
Band II MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		Notes
						Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	
HE20	MCS0	2	52	5260	Full	19.18	19.38	24.20	41.35	23.83		29.83		23.98		-
HE20	MCS0	2	60	5300	Full	19.13	19.23	22.45	24.10	23.82		29.82		23.98		-
HE20	MCS0	2	64	5320	Full	19.18	19.18	23.85	28.80	23.83		29.83		23.98		-
HE40	MCS0	2	54	5270	Full	38.36	38.36	42.84	39.87	23.98		30.00		23.98		-
HE40	MCS0	2	62	5310	Full	38.06	37.96	40.50	40.23	23.98		30.00		23.98		-
HE80	MCS0	2	58	5290	Full	77.32	77.32	84.96	82.72	23.98		30.00		23.98		-

Band III MIMO																	
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
						Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8
HE20	MCS0	2	100	5500	Full	19.03	18.98	21.60	21.80	23.78		29.78		23.98		----	----
HE20	MCS0	2	116	5580	Full	18.98	18.98	21.70	22.00	23.78		29.78		23.98		----	----
HE20	MCS0	2	140	5700	Full	18.93	18.93	21.55	21.05	23.77		29.77		23.98		----	----
HE40	MCS0	2	102	5510	Full	38.26	37.96	41.49	40.68	23.98		30.00		23.98		----	----
HE40	MCS0	2	110	5550	Full	38.16	38.16	69.80	58.44	23.98		30.00		23.98		----	----
HE40	MCS0	2	134	5670	Full	39.36	38.86	73.26	73.89	23.98		30.00		23.98		----	----
HE80	MCS0	2	106	5530	Full	77.80	77.80	83.36	81.92	23.98		30.00		23.98		----	----
HE80	MCS0	2	122	5610	Full	77.32	77.68	106.85	99.33	23.98		30.00		23.98		----	----
HE160	MCS0	2	114	5570	Full	156.32	156.32	168.64	166.40	23.98		30.00		23.98		----	----

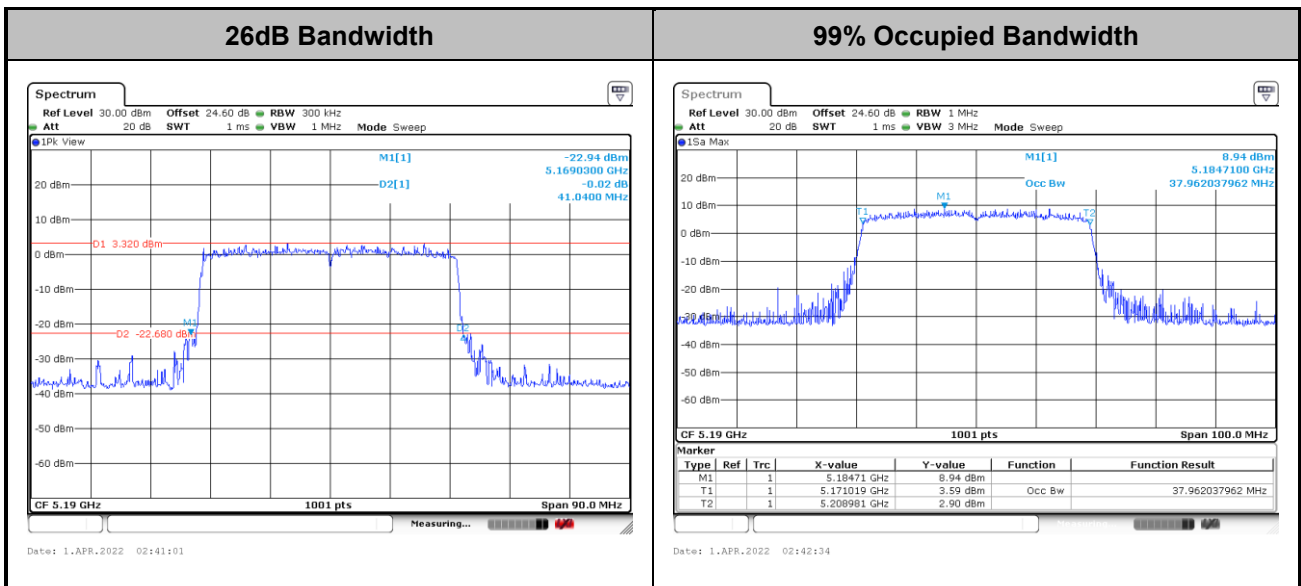
Band III straddle channel MIMO																	
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
						Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8	Ant 9	Ant 8
HE20	MCS0	2	144	5720	Full	14.49	14.49	15.70	15.55	22.61		28.61		22.92		4.3	4.25
HE40	MCS0	2	142	5710	Full	35.08	34.68	47.24	48.29	23.98		30.00		23.98		2.64	2.64
HE80	MCS0	2	138	5690	Full	73.60	73.60	88.92	76.12	23.98		30.00		23.98		2.76	4.2



<802.11ax HE20>

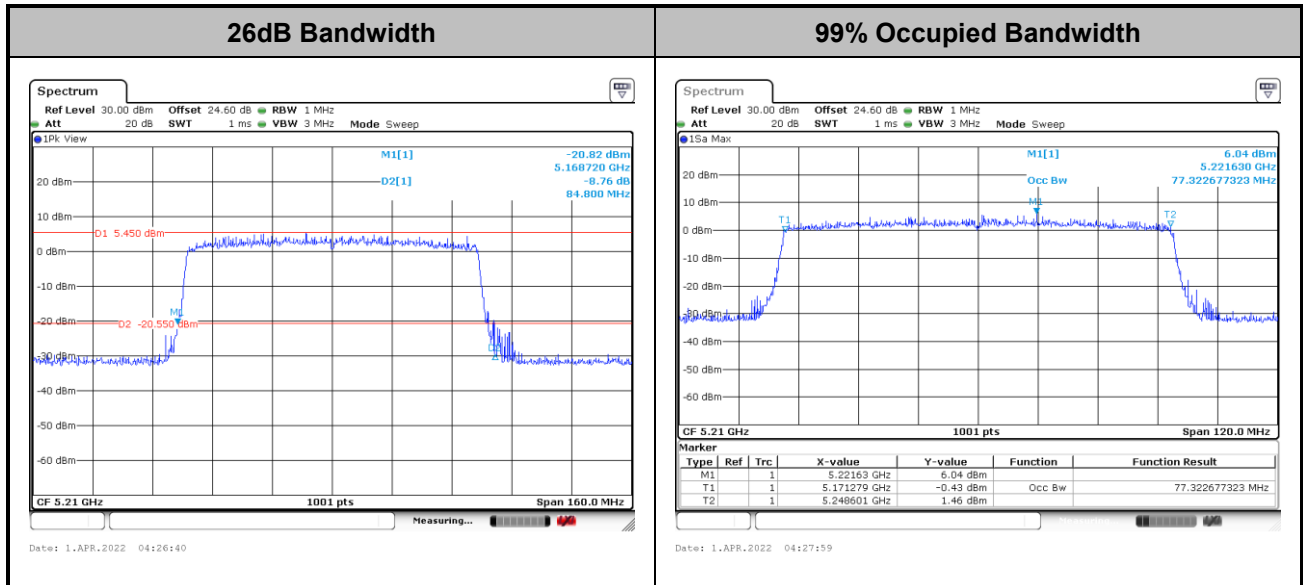


<802.11ax HE40>



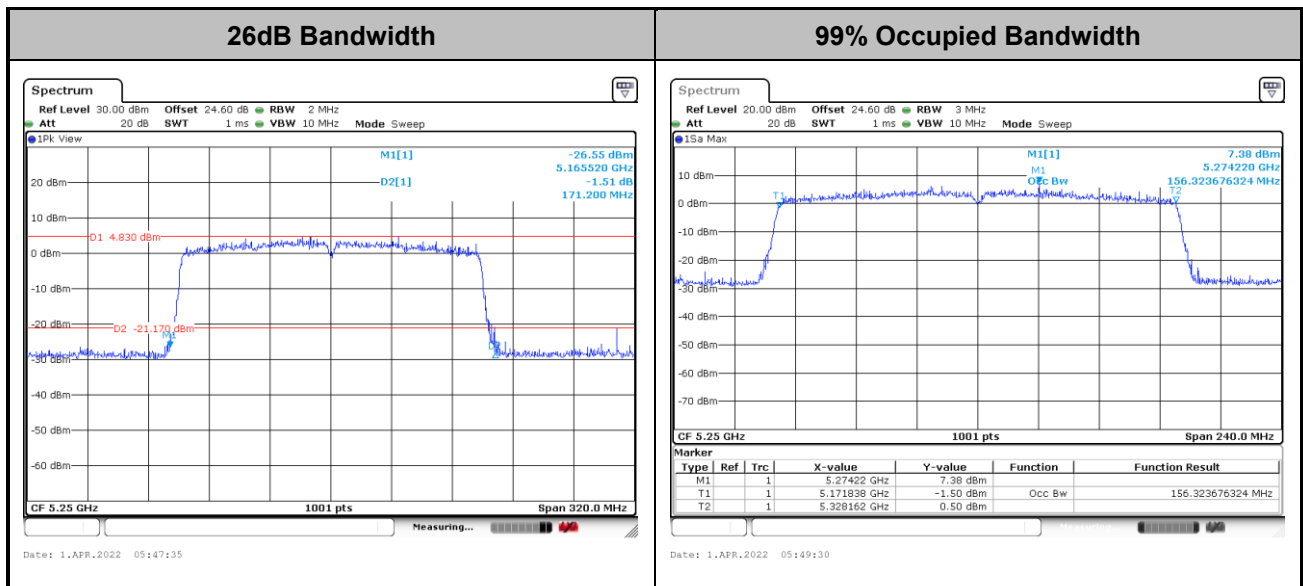


<802.11ax HE80>



Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11ax HE160>



Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

■ For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW. For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

For the 5.25–5.725 GHz bands:

■ The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz.

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Note that U-NII-2 band, devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

3.2.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.2.3 Test Procedures

<CDD Modes>

The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM-G (Measurement using a gated RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit at its maximum power control level.
3. Measure the average power of the transmitter.
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.
5. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01

<TXBF Modes>

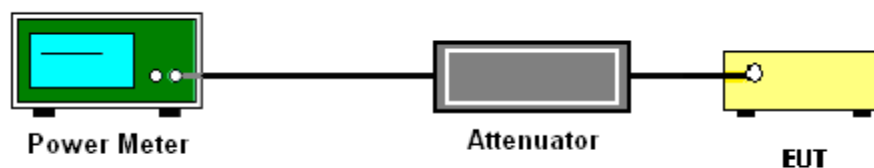
The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM-G (Measurement using a gated RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit at its maximum power control level.
3. Measure the average power of the transmitter
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.
5. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

3.2.4 Test Setup





3.2.5 Test Result of Maximum Conducted Output Power

Test Engineer :	Junyu Jhou and Hank Hsu	Temperature :	20.1~23.3℃
		Relative Humidity :	51.3~65.6%

<CDD Mode>

FCC Band I MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8	
11a	6Mbps	2	36	5180	15.00	14.60	17.81	24.00		3.10		Pass
11a	6Mbps	2	44	5220	15.20	15.80	18.52	24.00		3.10		Pass
11a	6Mbps	2	48	5240	15.40	16.00	18.72	24.00		3.10		Pass
HT20	MCS0	2	36	5180	14.90	15.90	18.44	24.00		3.10		Pass
HT20	MCS0	2	44	5220	15.00	15.60	18.32	24.00		3.10		Pass
HT20	MCS0	2	48	5240	15.10	15.80	18.47	24.00		3.10		Pass
HT40	MCS0	2	38	5190	13.90	13.50	16.71	24.00		3.10		Pass
HT40	MCS0	2	46	5230	15.90	15.60	18.76	24.00		3.10		Pass
VHT20	MCS0	2	36	5180	14.90	15.90	18.44	24.00		3.10		Pass
VHT20	MCS0	2	44	5220	15.00	15.60	18.32	24.00		3.10		Pass
VHT20	MCS0	2	48	5240	15.10	15.80	18.47	24.00		3.10		Pass
VHT40	MCS0	2	38	5190	13.90	13.50	16.71	24.00		3.10		Pass
VHT40	MCS0	2	46	5230	15.90	15.60	18.76	24.00		3.10		Pass
VHT80	MCS0	2	42	5210	13.70	13.50	16.61	24.00		3.10		Pass
VHT160	MCS0	2	50	5250	12.00	11.80	14.91	24.00		3.10		Pass



FCC Band II MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8		
11a	6Mbps	2	52	5260	18.30	18.10	21.21	23.98		3.70		30	Pass
11a	6Mbps	2	60	5300	16.90	16.60	19.76	23.98		3.70		30	Pass
11a	6Mbps	2	64	5320	16.40	16.10	19.26	23.96		3.70		30	Pass
HT20	MCS0	2	52	5260	17.80	17.50	20.66	23.98		3.70		30	Pass
HT20	MCS0	2	60	5300	17.90	17.50	20.71	23.98		3.70		30	Pass
HT20	MCS0	2	64	5320	16.30	16.30	19.31	23.98		3.70		30	Pass
HT40	MCS0	2	54	5270	17.70	17.50	20.61	23.98		3.70		30	Pass
HT40	MCS0	2	62	5310	13.70	13.80	16.76	23.98		3.70		30	Pass
VHT20	MCS0	2	52	5260	17.80	17.50	20.66	23.98		3.70		30	Pass
VHT20	MCS0	2	60	5300	17.90	17.50	20.71	23.98		3.70		30	Pass
VHT20	MCS0	2	64	5320	16.30	16.30	19.31	23.98		3.70		30	Pass
VHT40	MCS0	2	54	5270	17.70	17.50	20.61	23.98		3.70		30	Pass
VHT40	MCS0	2	62	5310	13.70	13.80	16.76	23.98		3.70		30	Pass
VHT80	MCS0	2	58	5290	13.40	13.10	16.26	23.98		3.70		30	Pass



FCC Band III MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8		
11a	6Mbps	2	100	5500	17.30	16.90	20.11	23.98		3.70		30	Pass
11a	6Mbps	2	116	5580	18.50	18.10	21.31	23.98		3.70		30	Pass
11a	6Mbps	2	140	5700	16.00	15.60	18.81	23.94		3.70		30	Pass
HT20	MCS0	2	100	5500	18.10	17.90	21.01	23.98		3.70		30	Pass
HT20	MCS0	2	116	5580	17.80	17.50	20.66	23.98		3.70		30	Pass
HT20	MCS0	2	140	5700	15.80	15.50	18.66	23.98		3.70		30	Pass
HT40	MCS0	2	102	5510	16.00	15.80	18.91	23.98		3.70		30	Pass
HT40	MCS0	2	110	5550	17.90	17.40	20.67	23.98		3.70		30	Pass
HT40	MCS0	2	134	5670	17.40	17.50	20.46	23.98		3.70		30	Pass
VHT20	MCS0	2	100	5500	18.10	17.90	21.01	23.98		3.70		30	Pass
VHT20	MCS0	2	116	5580	17.80	17.50	20.66	23.98		3.70		30	Pass
VHT20	MCS0	2	140	5700	15.80	15.50	18.66	23.98		3.70		30	Pass
VHT40	MCS0	2	102	5510	16.00	15.80	18.91	23.98		3.70		30	Pass
VHT40	MCS0	2	110	5550	17.90	17.40	20.67	23.98		3.70		30	Pass
VHT40	MCS0	2	134	5670	17.40	17.50	20.46	23.98		3.70		30	Pass
VHT80	MCS0	2	106	5530	14.30	14.10	17.21	23.98		3.70		30	Pass
VHT80	MCS0	2	122	5610	17.70	17.30	20.51	23.98		3.70		30	Pass
VHT160	MCS0	2	114	5570	14.10	13.60	16.87	23.98		3.70		30	Pass



FCC Band III straddle channel MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8		
11a	6Mbps	2	144	5720	18.10	17.90	21.01	23.55		3.70		30	Pass
HT20	MCS0	2	144	5720	17.60	17.40	20.51	23.98		3.70		30	Pass
HT40	MCS0	2	142	5710	17.60	17.40	20.51	23.98		3.70		30	Pass
VHT20	MCS0	2	144	5720	17.60	17.40	20.51	23.98		3.70		30	Pass
VHT40	MCS0	2	142	5710	17.60	17.40	20.51	23.98		3.70		30	Pass
VHT80	MCS0	2	138	5690	16.70	16.60	19.66	23.98		3.70		30	Pass



FCC Band I MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		- Pass/Fail
						Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8	
HE20	MCS0	2	36	5180	Full	15.00	16.00	18.54	24.00		3.10		Pass
HE20	MCS0	2	36	5180	26/0	3.70	4.20	6.97	24.00		3.10		Pass
HE20	MCS0	2	36	5180	52/37	7.70	9.00	11.41	24.00		3.10		Pass
HE20	MCS0	2	36	5180	106/53	10.70	12.10	14.47	24.00		3.10		Pass
HE20	MCS0	2	44	5220	Full	15.10	15.70	18.42	24.00		3.10		Pass
HE20	MCS0	2	44	5220	26/4	6.40	7.20	9.83	24.00		3.10		Pass
HE20	MCS0	2	44	5220	52/39	7.60	8.50	11.08	24.00		3.10		Pass
HE20	MCS0	2	44	5220	106/53	11.60	12.50	15.08	24.00		3.10		Pass
HE20	MCS0	2	48	5240	Full	15.20	15.90	18.57	24.00		3.10		Pass
HE20	MCS0	2	48	5240	26/8	4.20	4.50	7.36	24.00		3.10		Pass
HE20	MCS0	2	48	5240	52/40	7.80	8.90	11.40	24.00		3.10		Pass
HE20	MCS0	2	48	5240	106/54	10.90	11.90	14.44	24.00		3.10		Pass
HE40	MCS0	2	38	5190	Full	14.00	13.60	16.81	24.00		3.10		Pass
HE40	MCS0	2	38	5190	242/61	10.90	10.60	13.76	24.00		3.10		Pass
HE40	MCS0	2	46	5230	Full	14.80	15.50	18.17	24.00		3.10		Pass
HE40	MCS0	2	46	5230	242/62	11.40	12.30	14.88	24.00		3.10		Pass
HE80	MCS0	2	42	5210	Full	13.80	13.60	16.71	24.00		3.10		Pass
HE80	MCS0	2	42	5210	484/65	11.10	11.00	14.06	24.00		3.10		Pass
HE160	MCS0	2	50	5250	Full	12.10	11.90	15.01	24.00		3.10		Pass
HE160	MCS0	2	50	5250	996/67	9.20	8.90	12.06	24.00		3.10	-	Pass



FCC Band II MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8		
HE20	MCS0	2	52	5260	Full	17.90	17.60	20.76	23.98		3.70		30	Pass
HE20	MCS0	2	52	5260	26/0	7.90	8.00	10.96	23.98		3.70		30	Pass
HE20	MCS0	2	52	5260	52/37	11.00	10.80	13.91	23.98		3.70		30	Pass
HE20	MCS0	2	52	5260	106/53	14.10	14.10	17.11	23.98		3.70		30	Pass
HE20	MCS0	2	60	5300	Full	18.00	17.60	20.81	23.98		3.70		30	Pass
HE20	MCS0	2	60	5300	26/4	9.40	9.40	12.41	23.98		3.70		30	Pass
HE20	MCS0	2	60	5300	52/39	11.10	11.10	14.11	23.98		3.70		30	Pass
HE20	MCS0	2	60	5300	106/54	13.80	13.90	16.86	23.98		3.70		30	Pass
HE20	MCS0	2	64	5320	Full	16.40	16.40	19.41	23.98		3.70		30	Pass
HE20	MCS0	2	64	5320	26/8	6.70	7.00	9.86	23.98		3.70		30	Pass
HE20	MCS0	2	64	5320	52/40	9.70	10.10	12.91	23.98		3.70		30	Pass
HE20	MCS0	2	64	5320	106/54	12.50	13.00	15.77	23.98		3.70		30	Pass
HE40	MCS0	2	54	5270	Full	17.80	17.60	20.71	23.98		3.70		30	Pass
HE40	MCS0	2	54	5270	242/61	14.20	14.30	17.26	23.98		3.70		30	Pass
HE40	MCS0	2	62	5310	Full	13.80	13.90	16.86	23.98		3.70		30	Pass
HE40	MCS0	2	62	5310	242/62	10.60	11.00	13.81	23.98		3.70		30	Pass
HE80	MCS0	2	58	5290	Full	13.50	13.20	16.36	23.98		3.70		30	Pass
HE80	MCS0	2	58	5290	484/66	10.20	10.10	13.16	23.98		3.70		30	Pass
HE160	MCS0	2	50	5250	996/S67	9.20	8.80	12.01	23.98		3.70		30	Pass



FCC Band III MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8		
HE20	MCS0	2	100	5500	Full	18.20	18.00	21.11	23.98		3.70		30	Pass
HE20	MCS0	2	100	5500	26/0	8.20	8.10	11.16	23.98		3.70		30	Pass
HE20	MCS0	2	100	5500	52/37	10.90	11.00	13.96	23.98		3.70		30	Pass
HE20	MCS0	2	100	5500	106/53	14.30	13.90	17.11	23.98		3.70		30	Pass
HE20	MCS0	2	116	5580	Full	17.90	17.60	20.76	23.98		3.70		30	Pass
HE20	MCS0	2	116	5580	26/4	8.90	8.80	11.86	23.98		3.70		30	Pass
HE20	MCS0	2	116	5580	52/38	11.20	10.80	14.01	23.98		3.70		30	Pass
HE20	MCS0	2	116	5580	106/53	14.20	13.70	16.97	23.98		3.70		30	Pass
HE20	MCS0	2	140	5700	Full	15.90	15.60	18.76	23.98		3.70		30	Pass
HE20	MCS0	2	140	5700	26/8	6.60	6.20	9.41	23.98		3.70		30	Pass
HE20	MCS0	2	140	5700	52/40	9.20	9.10	12.16	23.98		3.70		30	Pass
HE20	MCS0	2	140	5700	106/54	12.40	11.80	15.12	23.98		3.70		30	Pass
HE40	MCS0	2	102	5510	Full	16.10	15.90	19.01	23.98		3.70		30	Pass
HE40	MCS0	2	102	5510	242/61	12.80	12.90	15.86	23.98		3.70		30	Pass
HE40	MCS0	2	110	5550	Full	18.00	17.50	20.77	23.98		3.70		30	Pass
HE40	MCS0	2	110	5550	242/61	14.90	14.40	17.67	23.98		3.70		30	Pass
HE40	MCS0	2	134	5670	Full	17.50	17.60	20.56	23.98		3.70		30	Pass
HE40	MCS0	2	134	5670	242/62	12.40	12.40	15.41	23.98		3.70		30	Pass
HE80	MCS0	2	106	5530	Full	14.40	14.20	17.31	23.98		3.70		30	Pass
HE80	MCS0	2	106	5530	484/65	11.10	11.10	14.11	23.98		3.70		30	Pass
HE80	MCS0	2	122	5610	Full	17.80	17.40	20.61	23.98		3.70		30	Pass
HE80	MCS0	2	122	5610	484/66	12.90	12.60	15.76	23.98		3.70		30	Pass
HE160	MCS0	2	114	5570	Full	14.20	13.70	16.97	23.98		3.70		30	Pass
HE160	MCS0	2	114	5570	996/67	11.90	11.30	14.62	23.98		3.70		30	Pass
HE160	MCS0	2	114	5570	996/S67	11.30	11.20	14.26	23.98		3.70		30	Pass



FCC Band III straddle channel MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8		
HE20	MCS0	2	144	5720	Full	17.70	17.50	20.61	23.92		3.70		30	Pass
HE20	MCS0	2	144	5720	26/8	8.10	7.80	10.96	23.92		3.70		30	Pass
HE20	MCS0	2	144	5720	52/40	10.50	10.60	13.56	23.92		3.70		30	Pass
HE20	MCS0	2	144	5720	106/54	13.70	13.60	16.66	23.92		3.70		30	Pass
HE40	MCS0	2	142	5710	Full	17.70	17.50	20.61	23.98		3.70		30	Pass
HE40	MCS0	2	142	5710	242/62	14.30	14.10	17.21	23.98		3.70		30	Pass
HE80	MCS0	2	138	5690	Full	16.80	16.70	19.76	23.98		3.70		30	Pass
HE80	MCS0	2	138	5690	484/66	13.80	13.50	16.66	23.98		3.70		30	Pass



<TXBF Mode>

FCC Band I MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
						Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8	
HE20	MCS0	2	36	5180	Full	15.00	14.60	17.81	24.00		5.48		Pass
HE20	MCS0	2	44	5220	Full	14.80	14.70	17.76	24.00		5.48		Pass
HE20	MCS0	2	48	5240	Full	14.80	14.70	17.76	24.00		5.48		Pass
HE40	MCS0	2	38	5190	Full	13.80	13.50	16.66	24.00		5.48		Pass
HE40	MCS0	2	46	5230	Full	14.70	15.10	17.91	24.00		5.48		Pass
HE80	MCS0	2	42	5210	Full	13.00	13.20	16.11	24.00		5.48		Pass
HE160	MCS0	2	50	5250	Full	11.60	11.60	14.61	24.00		5.48		Pass

FCC Band II MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8		
HE20	MCS0	2	52	5260	Full	17.00	17.00	20.01	23.98		5.86		30	Pass
HE20	MCS0	2	60	5300	Full	16.30	15.70	19.02	23.98		5.86		30	Pass
HE20	MCS0	2	64	5320	Full	16.10	15.70	18.91	23.98		5.86		30	Pass
HE40	MCS0	2	54	5270	Full	16.00	16.00	19.01	23.98		5.86		30	Pass
HE40	MCS0	2	62	5310	Full	13.60	13.00	16.32	23.98		5.86		30	Pass
HE80	MCS0	2	58	5290	Full	13.00	13.10	16.06	23.98		5.86		30	Pass



FCC Band III MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8		
HE20	MCS0	2	100	5500	Full	17.20	17.00	20.11	23.89		6.08		30	Pass
HE20	MCS0	2	116	5580	Full	17.40	16.60	20.03	23.89		6.08		30	Pass
HE20	MCS0	2	140	5700	Full	14.70	14.90	17.81	23.89		6.08		30	Pass
HE40	MCS0	2	102	5510	Full	13.70	13.80	16.76	23.89		6.08		30	Pass
HE40	MCS0	2	110	5550	Full	17.10	17.10	20.11	23.89		6.08		30	Pass
HE40	MCS0	2	134	5670	Full	17.10	17.20	20.16	23.89		6.08		30	Pass
HE80	MCS0	2	106	5530	Full	13.50	13.50	16.51	23.89		6.08		30	Pass
HE80	MCS0	2	122	5610	Full	17.40	16.90	20.17	23.89		6.08		30	Pass
HE160	MCS0	2	114	5570	Full	10.70	10.40	13.56	23.89		6.08		30	Pass

FCC Band III straddle channel MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8		
HE20	MCS0	2	144	5720	Full	17.00	17.00	20.01	22.83		6.08		30	Pass
HE40	MCS0	2	142	5710	Full	17.60	17.40	20.51	23.89		6.08		30	Pass
HE80	MCS0	2	138	5690	Full	16.70	16.70	19.71	23.89		6.08		30	Pass



3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1.0 MHz band. For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1.0 MHz band.

For the 5.25–5.725 GHz bands:

The maximum power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.3.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.



3.3.3 Test Procedures

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

Section F) Maximum power spectral density.

<CDD Modes>

Method SA-2

(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

- Measure the duty cycle.
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW $\geq$ 3 MHz.
- Number of points in sweep $\geq$ 2 Span / RBW.
- Sweep time = auto.
- Detector = RMS
- Trace average at least 100 traces in power averaging mode.
- 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. For example, add $10 \log(1/0.25) = 6$ dB if the duty cycle is 25 percent.

<TXBF Modes>

Method SA-3

(power averaging (rms) detection with max hold):

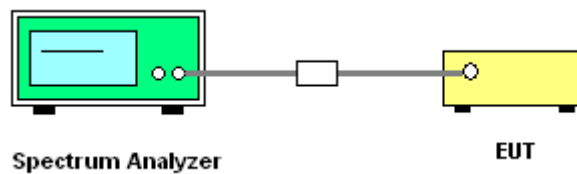
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 300 kHz.
- Set VBW $\geq$ 1 MHz.
- Number of points in sweep $\geq$ 2 Span / RBW.
- Sweep time $\leq$ (number of points in sweep) $\times$ T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
- Detector = power averaging (rms).
- Trace mode = max hold.
- Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.

1. The RF output of EUT is connected to the spectrum analyzer by a low loss cable.
2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.
3. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

Method (a): Measure and sum the spectra across the outputs.

The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points; the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 to obtain the value for the first frequency bin of the summed spectrum.

3.3.4 Test Setup





3.3.5 Test Result of Power Spectral Density

Test Engineer :	Junyu Jhou and Hank Hsu	Temperature :	20.1~23.3℃
		Relative Humidity :	51.3~65.6%

<CDD Mode>

FCC Band I MIMO																	
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density with Duty Factor (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail			
					Ant 9	Ant 8	Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8				
11a	6Mbps	2	36	5180	0.04	0.04				6.41		11.00		5.48			Pass
11a	6Mbps	2	44	5220	0.04	0.04				6.39		11.00		5.48			Pass
11a	6Mbps	2	48	5240	0.04	0.04				7.03		11.00		5.48			Pass

Band II MIMO															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density with Duty Factor (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail	
					Ant 9	Ant 8	Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8		
11a	6Mbps	2	52	5260	0.04	0.04			9.30	11.00		5.86		-	Pass
11a	6Mbps	2	60	5300	0.04	0.04			8.12	11.00		5.86			Pass
11a	6Mbps	2	64	5320	0.04	0.04			7.63	11.00		5.86			Pass

Band III MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density with Duty Factor (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 9	Ant 8	Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8	
11a	6Mbps	2	100	5500	0.04	0.04	-		8.24	10.92	6.08		Pass	
11a	6Mbps	2	116	5580	0.04	0.04			9.30	10.92	6.08		Pass	
11a	6Mbps	2	140	5700	0.04	0.04			6.97	10.92	6.08		Pass	

Band III straddle channel MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 9	Ant 8	Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8	
11a	6Mbps	2	144	5720	0.04	0.04	-		9.09	10.92		6.08		- Pass



FCC Band I MIMO															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Average Power Density with Duty Factor (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
						Ant 9	Ant 8	Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8	
HE20	MCS0	2	36	5180	Full	0.32	0.28			6.00	11.00	5.48			Pass
HE20	MCS0	2	36	5180	26/0	0.32	0.28			4.30	11.00	5.48			Pass
HE20	MCS0	2	36	5180	52/37	0.32	0.28			5.64	11.00	5.48			Pass
HE20	MCS0	2	36	5180	106/53	0.32	0.28			5.68	11.00	5.48			Pass
HE20	MCS0	2	44	5220	Full	0.32	0.28			5.78	11.00	5.48			Pass
HE20	MCS0	2	44	5220	26/4	0.32	0.28			5.72	11.00	5.48			Pass
HE20	MCS0	2	44	5220	52/39	0.32	0.28			5.35	11.00	5.48			Pass
HE20	MCS0	2	44	5220	106/53	0.32	0.28			5.73	11.00	5.48			Pass
HE20	MCS0	2	48	5240	Full	0.32	0.28			6.41	11.00	5.48			Pass
HE20	MCS0	2	48	5240	26/8	0.32	0.28			5.13	11.00	5.48			Pass
HE20	MCS0	2	48	5240	52/40	0.32	0.28			5.99	11.00	5.48			Pass
HE20	MCS0	2	48	5240	106/54	0.32	0.28			5.93	11.00	5.48			Pass
HE40	MCS0	2	38	5190	Full	0.33	0.32			1.87	11.00	5.48			Pass
HE40	MCS0	2	38	5190	242/61	0.33	0.32			1.49	11.00	5.48			Pass
HE40	MCS0	2	46	5230	Full	0.33	0.32			3.16	11.00	5.48			Pass
HE40	MCS0	2	46	5230	242/62	0.33	0.32			2.82	11.00	5.48			Pass
HE80	MCS0	2	42	5210	Full	0.35	0.36			-1.32	11.00	5.48			Pass
HE80	MCS0	2	42	5210	484/65	0.35	0.36			-1.53	11.00	5.48			Pass
HE160	MCS0	2	50	5250	Full	0.64	0.58			-5.90	11.00	5.48			Pass
HE160	MCS0	2	50	5250	996/67	0.64	0.58			-6.31	11.00	5.48			Pass

Band II MIMO															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Average Power Density with Duty Factor (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
						Ant 9	Ant 8	Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8	
HE20	MCS0	2	52	5260	Full	0.32	0.28	-		8.34	11.00		5.86		Pass
HE20	MCS0	2	52	5260	26/0	0.32	0.28			7.97	11.00		5.86		Pass
HE20	MCS0	2	52	5260	52/37	0.32	0.28			8.12	11.00		5.86		Pass
HE20	MCS0	2	52	5260	106/53	0.32	0.28			8.31	11.00		5.86		Pass
HE20	MCS0	2	60	5300	Full	0.32	0.28			8.29	11.00		5.86		Pass
HE20	MCS0	2	60	5300	26/4	0.32	0.28			8.23	11.00		5.86		Pass
HE20	MCS0	2	60	5300	52/39	0.32	0.28			8.28	11.00		5.86		Pass
HE20	MCS0	2	60	5300	106/54	0.32	0.28			8.03	11.00		5.86		Pass
HE20	MCS0	2	64	5320	Full	0.32	0.28			7.11	11.00		5.86		Pass
HE20	MCS0	2	64	5320	26/8	0.32	0.28			6.84	11.00		5.86		Pass
HE20	MCS0	2	64	5320	52/40	0.32	0.28			7.10	11.00		5.86		Pass
HE20	MCS0	2	64	5320	106/54	0.32	0.28			6.99	11.00		5.86		Pass
HE40	MCS0	2	54	5270	Full	0.33	0.32			5.59	11.00		5.86		Pass
HE40	MCS0	2	54	5270	242/61	0.33	0.32			5.16	11.00		5.86		Pass
HE40	MCS0	2	62	5310	Full	0.33	0.32			1.62	11.00		5.86		Pass
HE40	MCS0	2	62	5310	242/62	0.33	0.32			1.60	11.00		5.86		Pass
HE80	MCS0	2	58	5290	Full	0.35	0.36			-1.66	11.00		5.86		Pass
HE80	MCS0	2	58	5290	484/66	0.35	0.36			-2.16	11.00		5.86		Pass
HE160	MCS0	2	50	5250	996/S67	0.64	0.58			-6.16	11.00		5.86		Pass



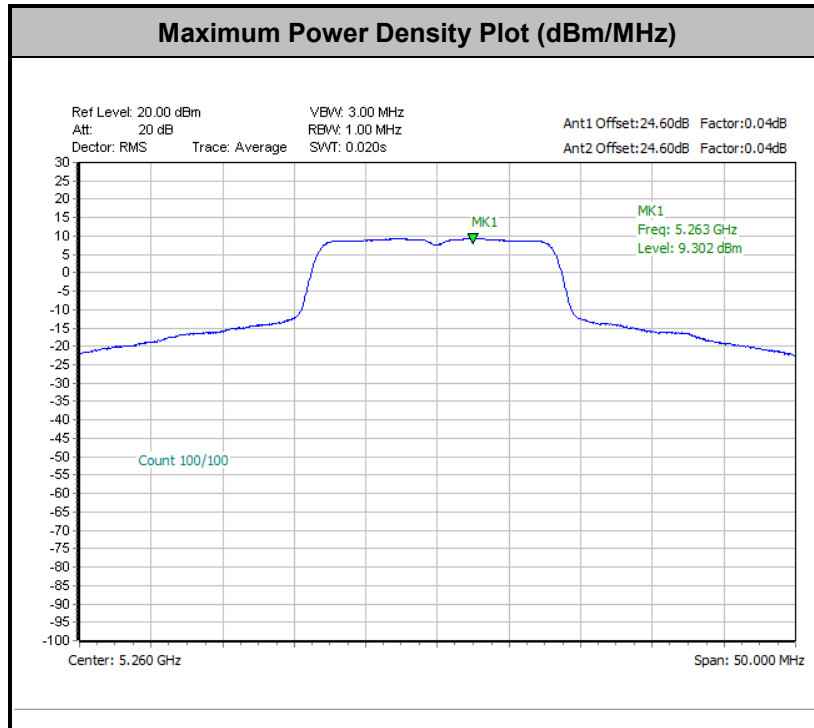
Band III MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Average Power Density with Duty Factor (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		-	Pass /Fail
						Ant 9	Ant 8	Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8		
HE20	MCS0	2	100	5500	Full	0.32	0.28			8.40	10.92	6.08			Pass	
HE20	MCS0	2	100	5500	26/0	0.32	0.28			8.02	10.92	6.08			Pass	
HE20	MCS0	2	100	5500	52/37	0.32	0.28			8.08	10.92	6.08			Pass	
HE20	MCS0	2	100	5500	106/53	0.32	0.28			8.24	10.92	6.08			Pass	
HE20	MCS0	2	116	5580	Full	0.32	0.28			8.31	10.92	6.08			Pass	
HE20	MCS0	2	116	5580	26/4	0.32	0.28			7.82	10.92	6.08			Pass	
HE20	MCS0	2	116	5580	52/38	0.32	0.28			8.16	10.92	6.08			Pass	
HE20	MCS0	2	116	5580	106/53	0.32	0.28			8.12	10.92	6.08			Pass	
HE20	MCS0	2	140	5700	Full	0.32	0.28			6.51	10.92	6.08			Pass	
HE20	MCS0	2	140	5700	26/8	0.32	0.28			6.48	10.92	6.08			Pass	
HE20	MCS0	2	140	5700	52/40	0.32	0.28			6.33	10.92	6.08			Pass	
HE20	MCS0	2	140	5700	106/54	0.32	0.28			6.42	10.92	6.08			Pass	
HE40	MCS0	2	102	5510	Full	0.33	0.32	-		3.92	10.92	6.08	-		Pass	
HE40	MCS0	2	102	5510	242/61	0.33	0.32			3.36	10.92	6.08			Pass	
HE40	MCS0	2	110	5550	Full	0.33	0.32			5.43	10.92	6.08			Pass	
HE40	MCS0	2	110	5550	242/61	0.33	0.32			5.21	10.92	6.08			Pass	
HE40	MCS0	2	134	5670	Full	0.33	0.32			5.42	10.92	6.08			Pass	
HE40	MCS0	2	134	5670	242/62	0.33	0.32			3.24	10.92	6.08			Pass	
HE80	MCS0	2	106	5530	Full	0.35	0.36			-0.79	10.92	6.08			Pass	
HE80	MCS0	2	106	5530	484/65	0.35	0.36			-1.29	10.92	6.08			Pass	
HE80	MCS0	2	122	5610	Full	0.35	0.36			2.34	10.92	6.08			Pass	
HE80	MCS0	2	122	5610	484/66	0.35	0.36			0.72	10.92	6.08			Pass	
HE160	MCS0	2	114	5570	Full	0.64	0.58			-3.64	10.92	6.08			Pass	
HE160	MCS0	2	114	5570	996/67	0.64	0.58			-3.77	10.92	6.08			Pass	
HE160	MCS0	2	114	5570	996/S67	0.00	0.00		-3.78	10.92	6.08			Pass		



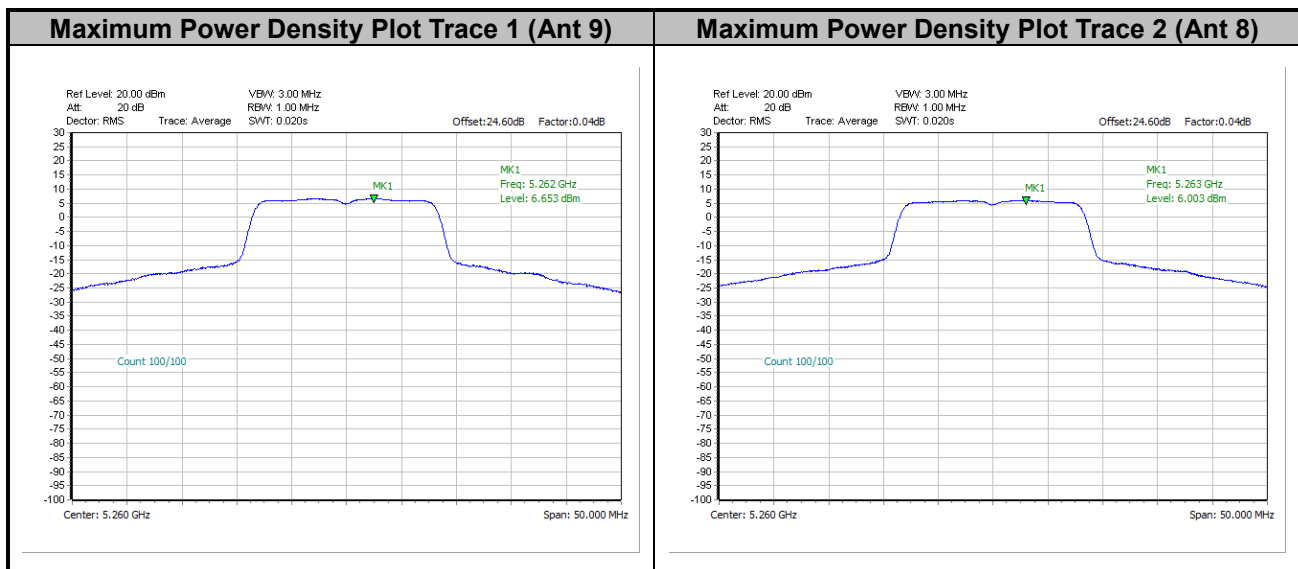
Band III straddle channel MIMO															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
						Ant 9	Ant 8	Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8	
HE20	MCS0	2	144	5720	Full	0.32	0.28	-		8.19	10.92	6.08		Pass	
HE20	MCS0	2	144	5720	26/8	0.33	0.32			8.09	10.92	6.08		Pass	
HE20	MCS0	2	144	5720	52/40	0.33	0.32			7.93	10.92	6.08		Pass	
HE20	MCS0	2	144	5720	106/54	0.33	0.32			8.01	10.92	6.08		Pass	
HE40	MCS0	2	142	5710	Full	0.33	0.32			5.28	10.92	6.08		Pass	
HE40	MCS0	2	142	5710	242/62	0.33	0.32			4.87	10.92	6.08		Pass	
HE80	MCS0	2	138	5690	Full	0.35	0.36			1.62	10.92	6.08		Pass	
HE80	MCS0	2	138	5690	484/66	0.35	0.36			1.30	10.92	6.08		Pass	



<802.11a>

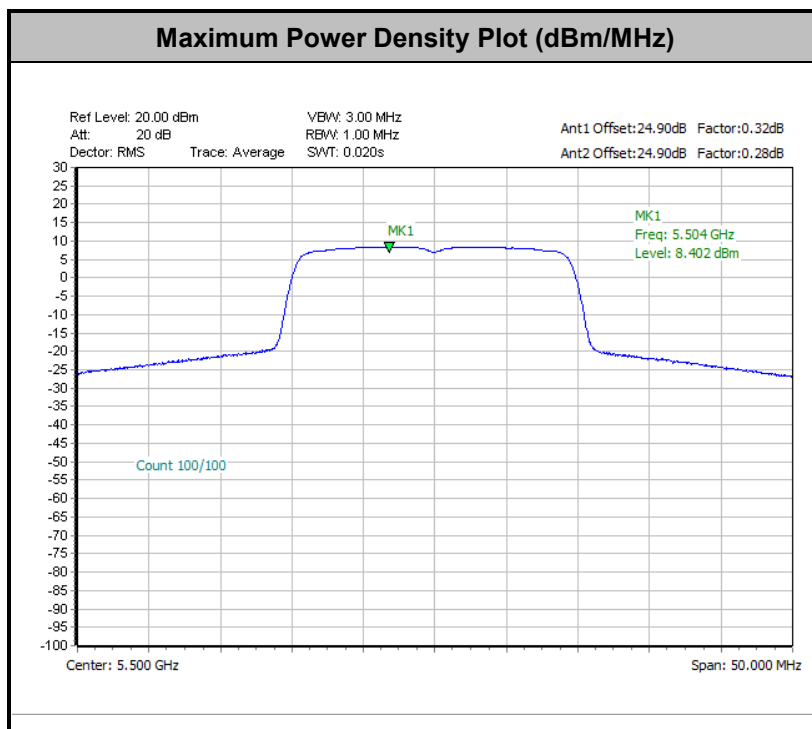


Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

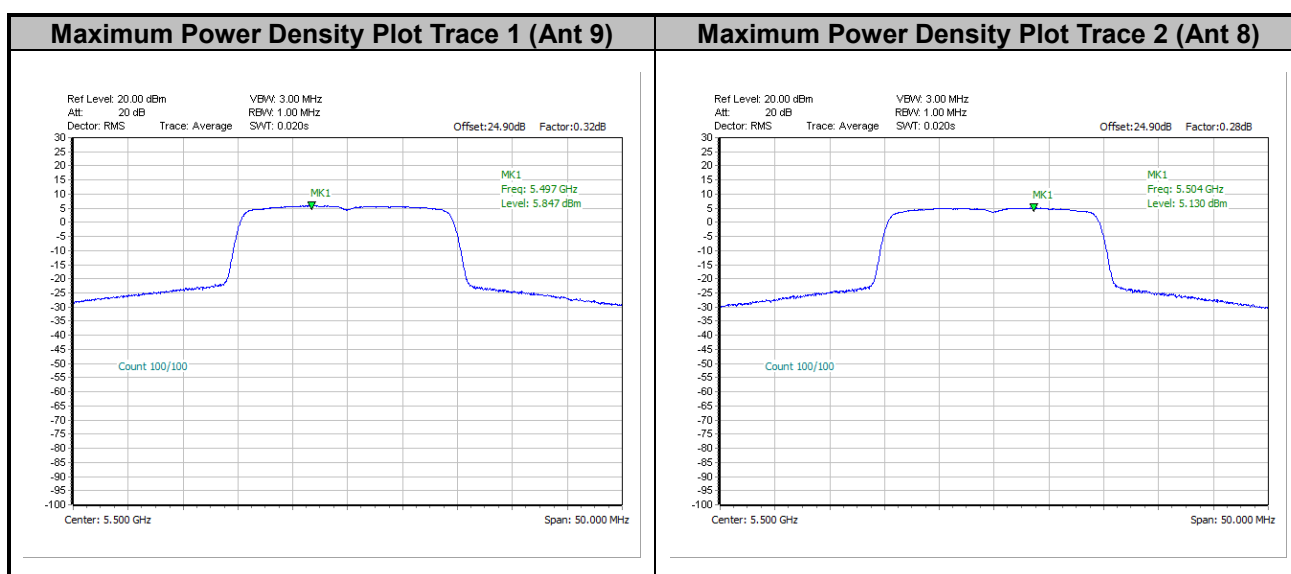




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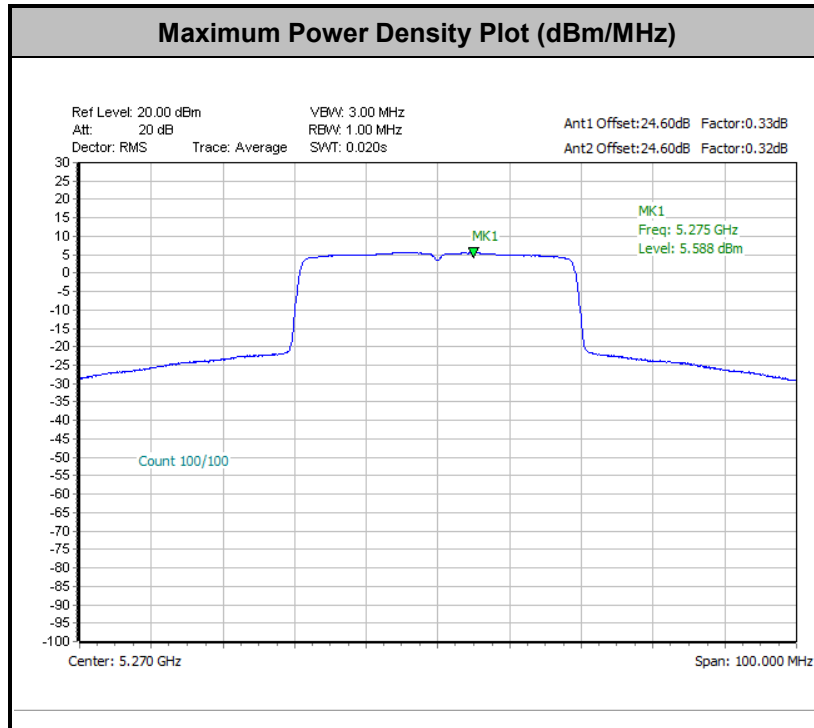


Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

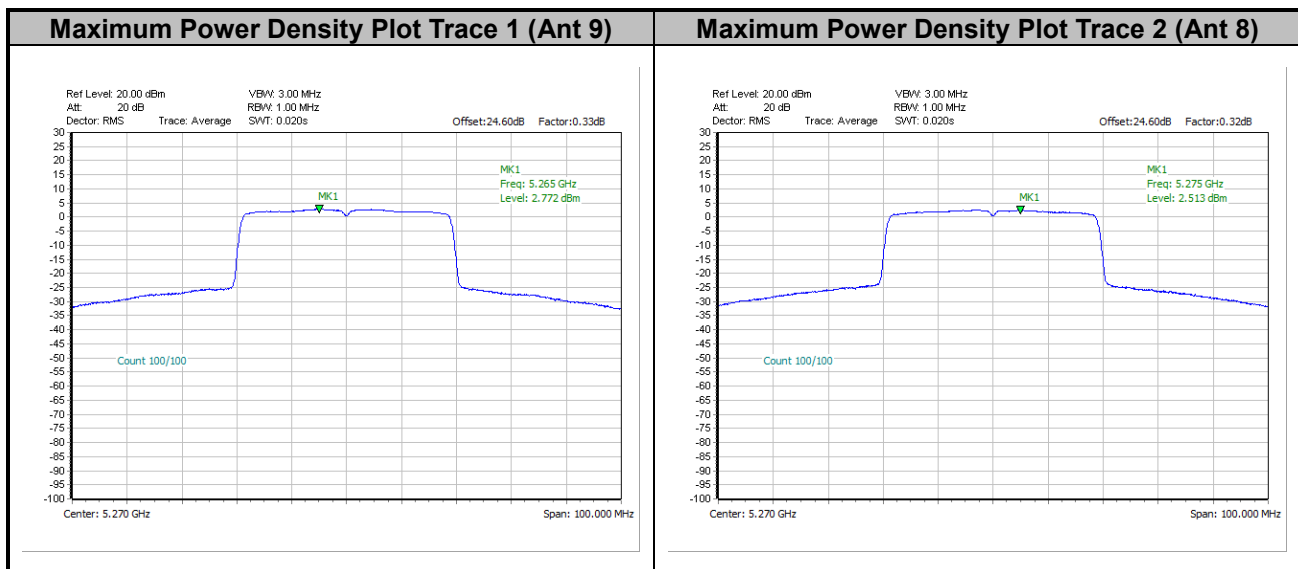




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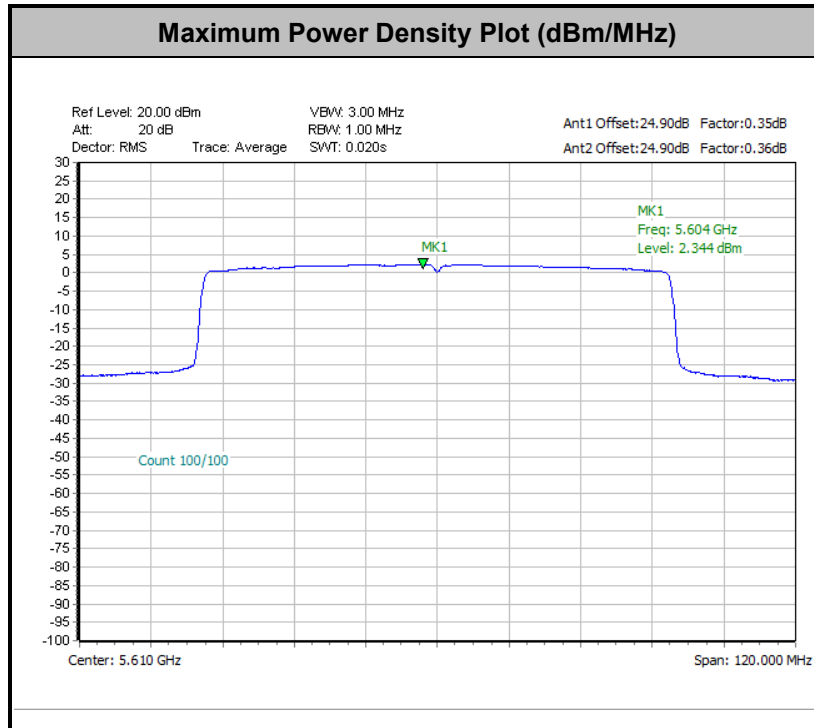


Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

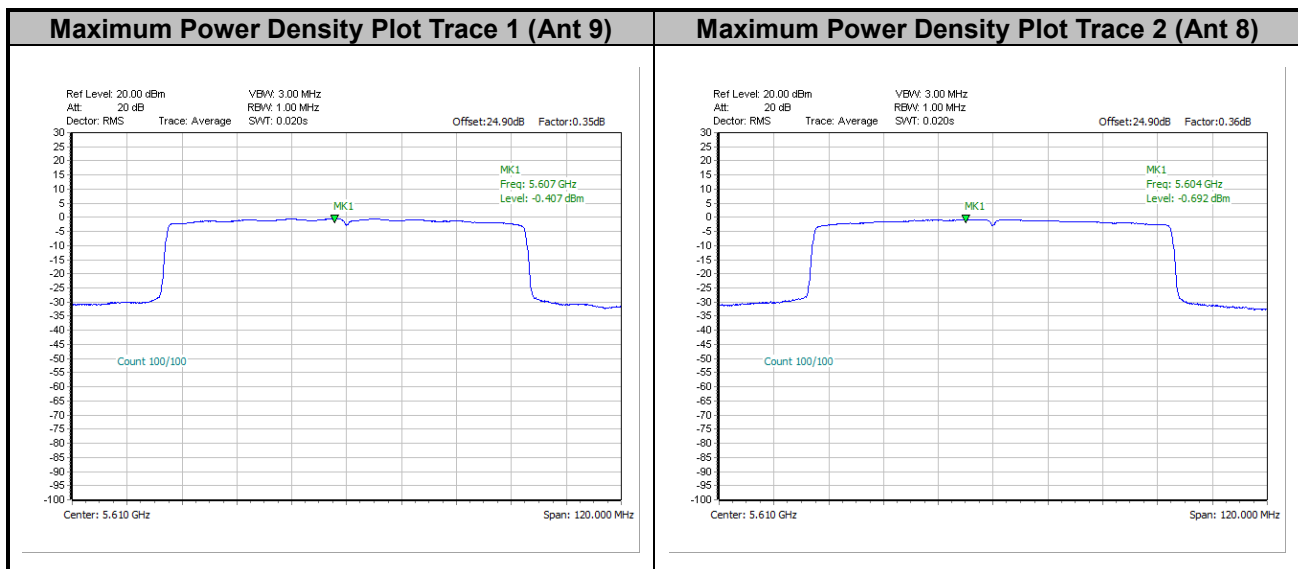




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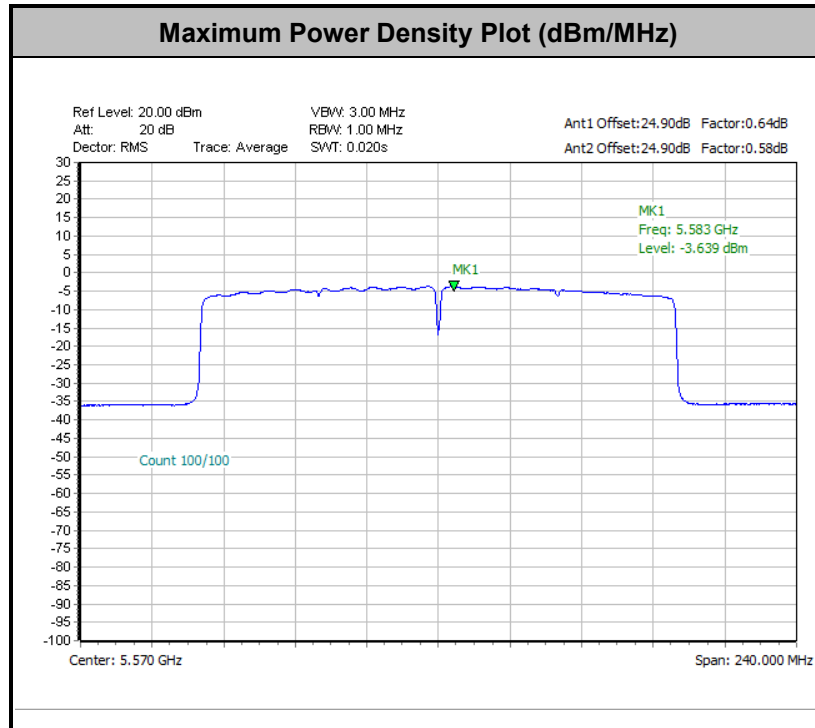


Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

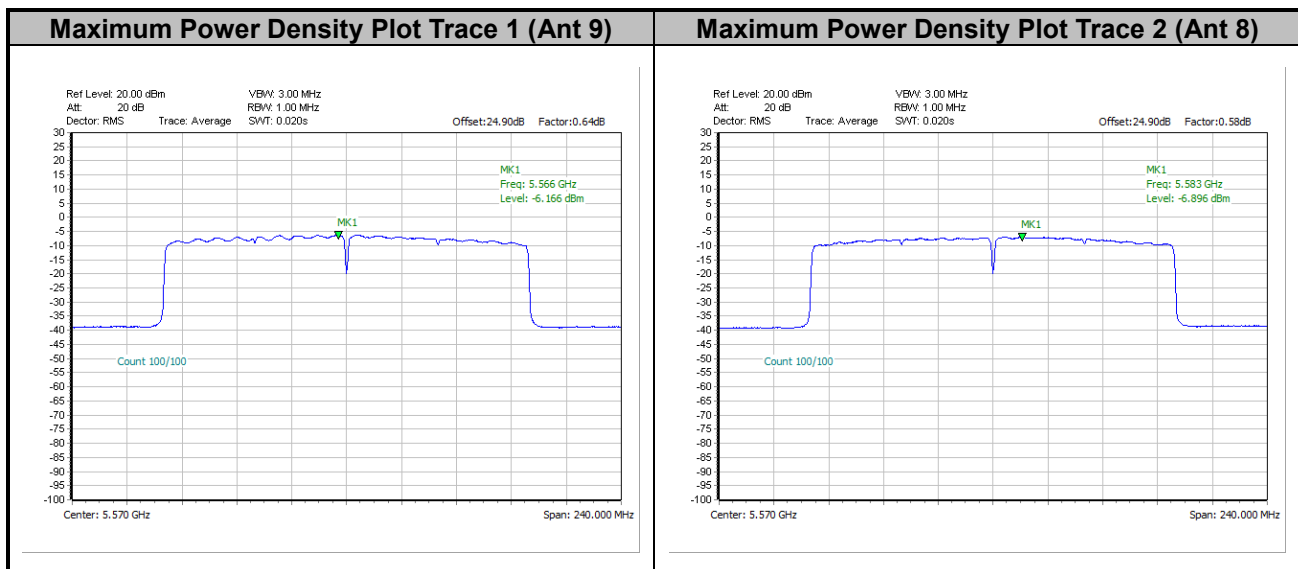




<802.11ax HE160>



Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.





<TXBF Mode>

FCC Band I MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
						Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8	
HE20	MCS0	2	36	5180	Full	-		6.50	11.00		5.48		Pass
HE20	MCS0	2	44	5220	Full			7.29	11.00		5.48		Pass
HE20	MCS0	2	48	5240	Full			7.57	11.00		5.48		Pass
HE40	MCS0	2	38	5190	Full			2.83	11.00		5.48		Pass
HE40	MCS0	2	46	5230	Full			4.23	11.00		5.48		Pass
HE80	MCS0	2	42	5210	Full			-1.66	11.00		5.48		Pass
HE160	MCS0	2	50	5250	Full			-5.28	11.00		5.48		Pass

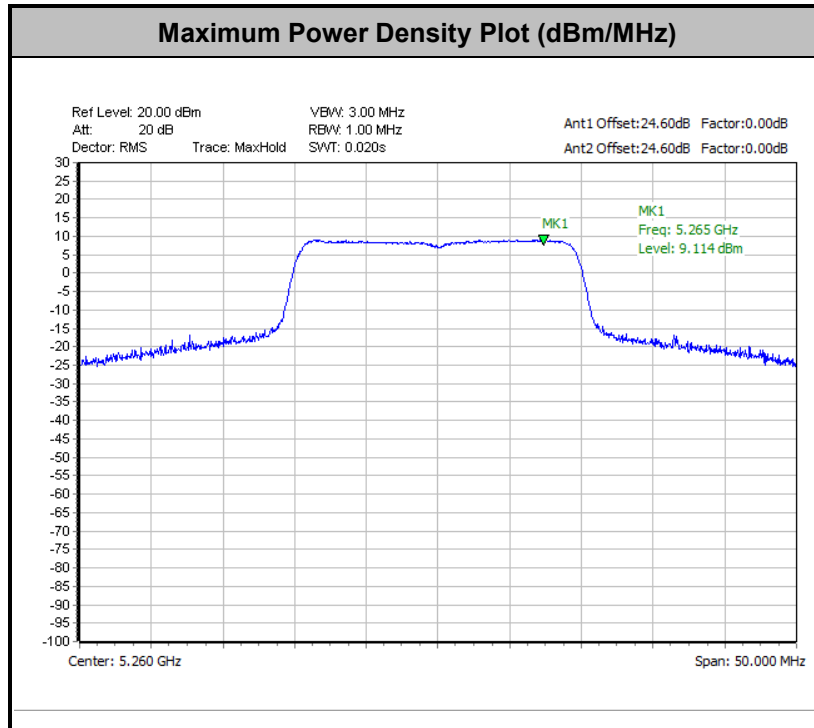
Band II MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
						Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8	
HE20	MCS0	2	52	5260	Full	-		9.11	11.00		5.86		Pass
HE20	MCS0	2	60	5300	Full			7.66	11.00		5.86		Pass
HE20	MCS0	2	64	5320	Full			7.87	11.00		5.86		Pass
HE40	MCS0	2	54	5270	Full			6.80	11.00		5.86		Pass
HE40	MCS0	2	62	5310	Full			2.11	11.00		5.86		Pass
HE80	MCS0	2	58	5290	Full			-0.98	11.00		5.86		Pass

Band III MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
						Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8	
HE20	MCS0	2	100	5500	Full	-		9.01	10.92		6.08		Pass
HE20	MCS0	2	116	5580	Full			8.58	10.92		6.08		Pass
HE20	MCS0	2	140	5700	Full			6.60	10.92		6.08		Pass
HE40	MCS0	2	102	5510	Full			2.78	10.92		6.08		Pass
HE40	MCS0	2	110	5550	Full			5.52	10.92		6.08		Pass
HE40	MCS0	2	134	5670	Full			5.71	10.92		6.08		Pass
HE80	MCS0	2	106	5530	Full			3.74	10.92		6.08		Pass
HE80	MCS0	2	122	5610	Full			2.72	10.92		6.08		Pass
HE160	MCS0	2	114	5570	Full			-5.96	10.92		6.08		Pass

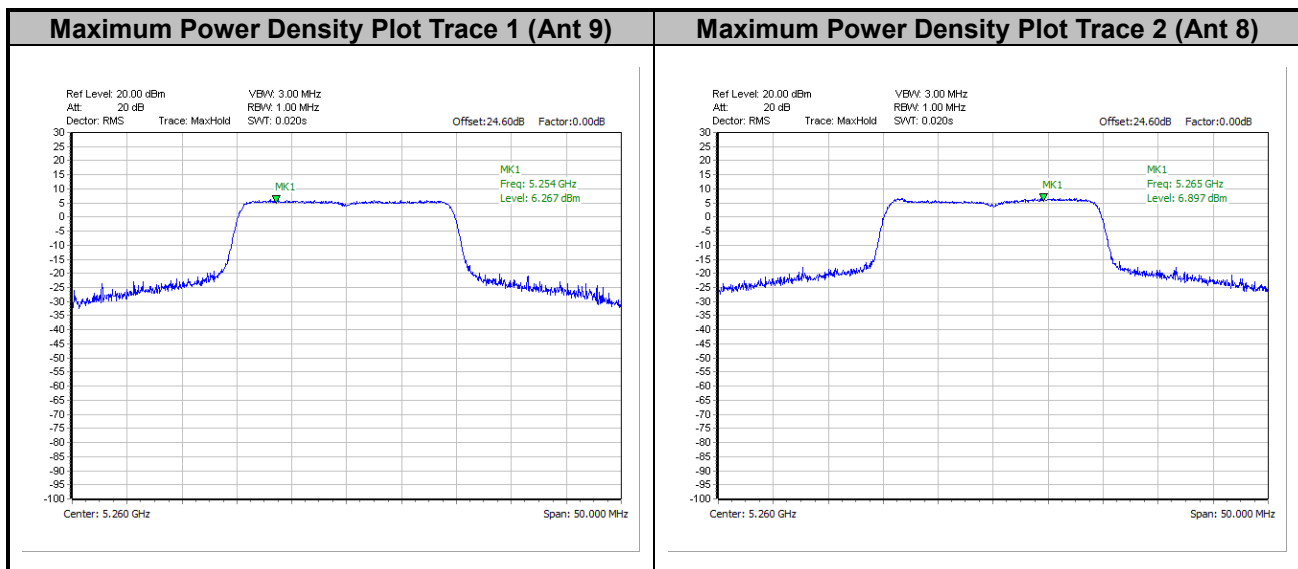
Band III straddle channel MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		- Pass /Fail	
						Ant 9	Ant 8	SUM	Ant 9	Ant 8	Ant 9	Ant 8		
HE20	MCS0	2	144	5720	Full	-		8.57	10.92		6.08		- Pass	
HE40	MCS0	2	142	5710	Full			9.14	10.92		6.08			Pass
HE80	MCS0	2	138	5690	Full			4.78	10.92		6.08			Pass



<802.11ax HE20>

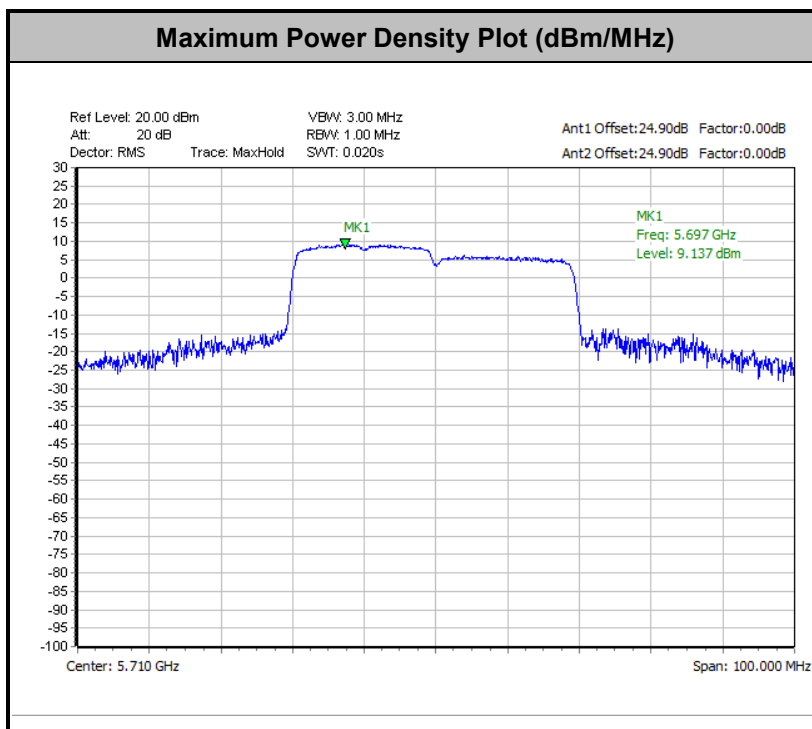


Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

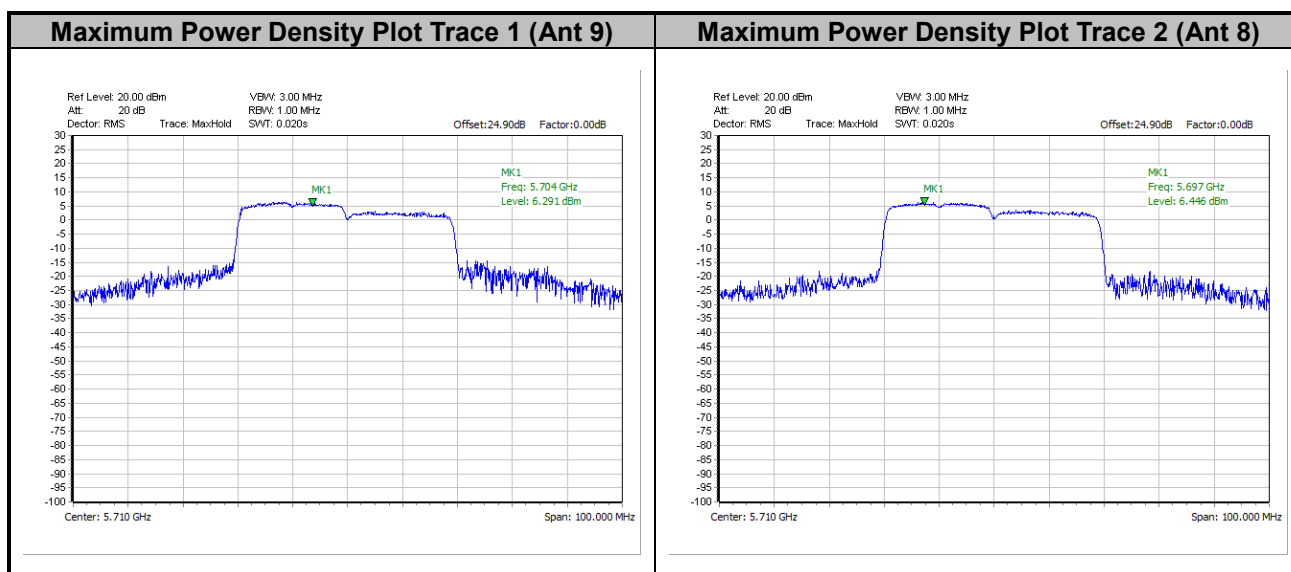




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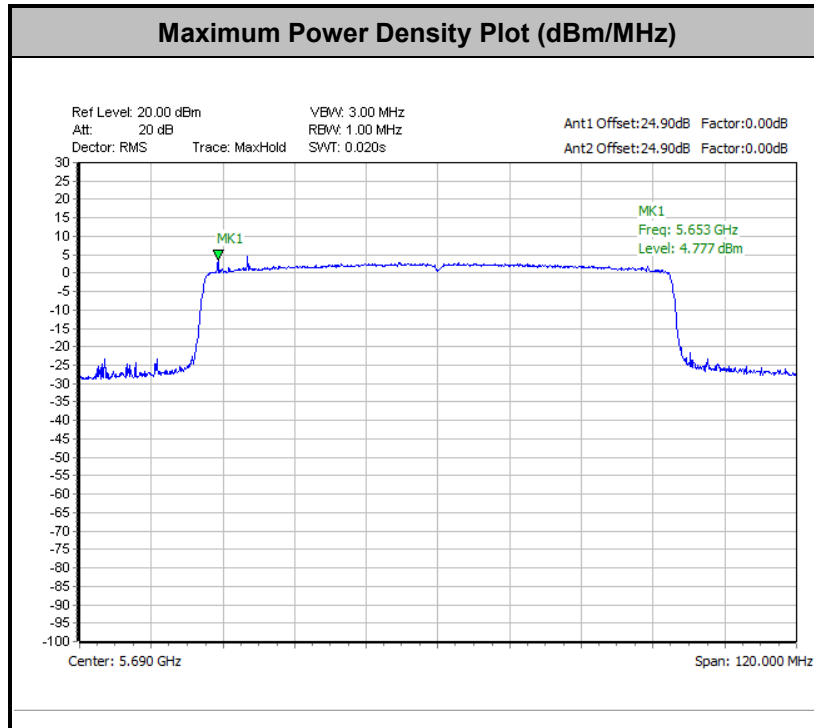


Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

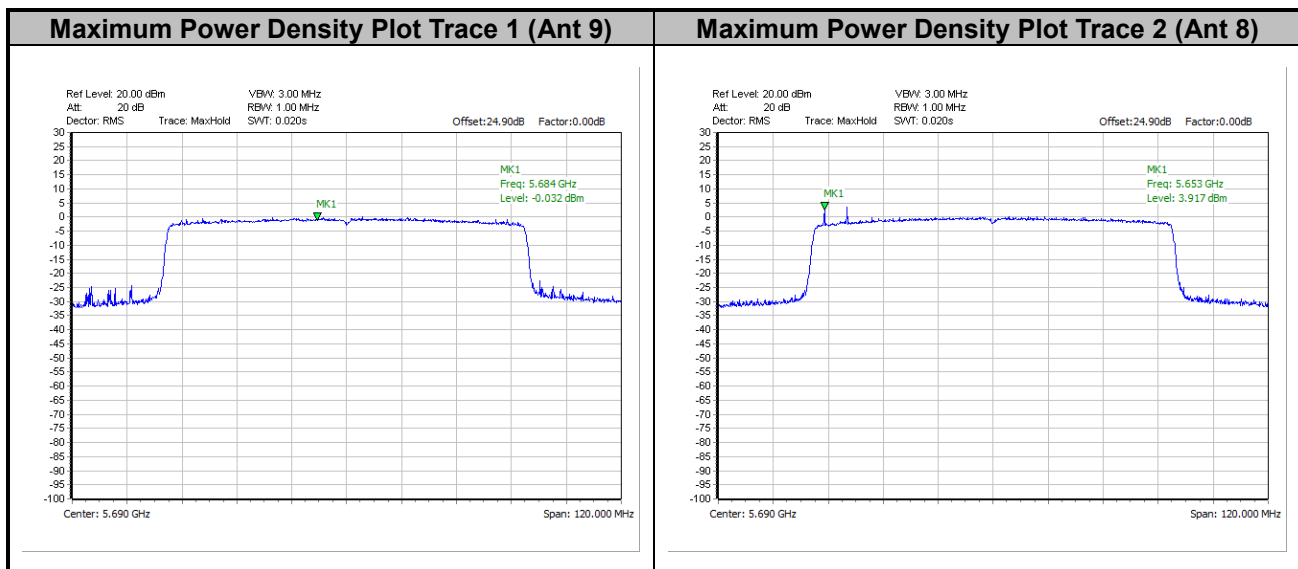


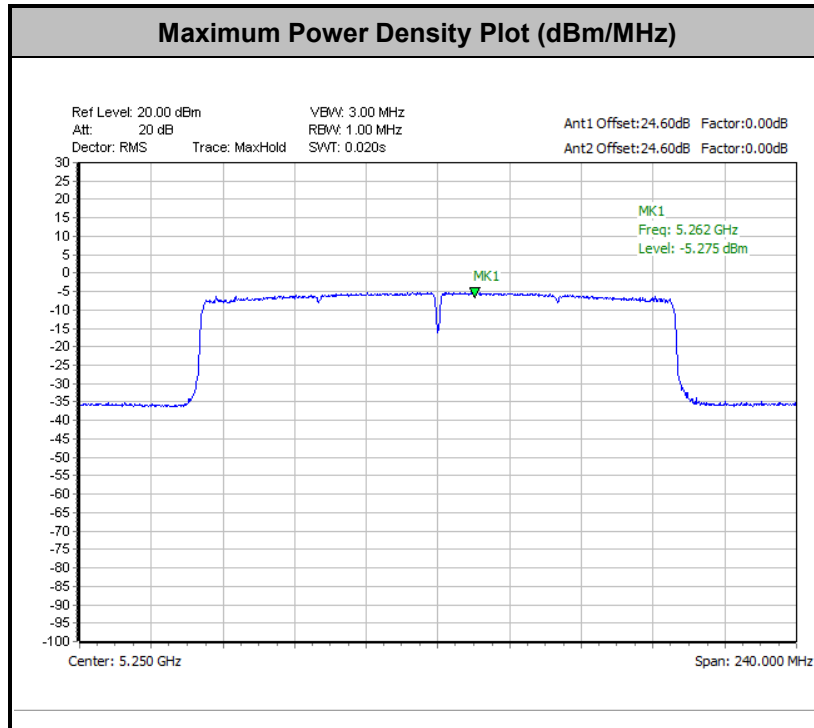


<802.11ax HE80>

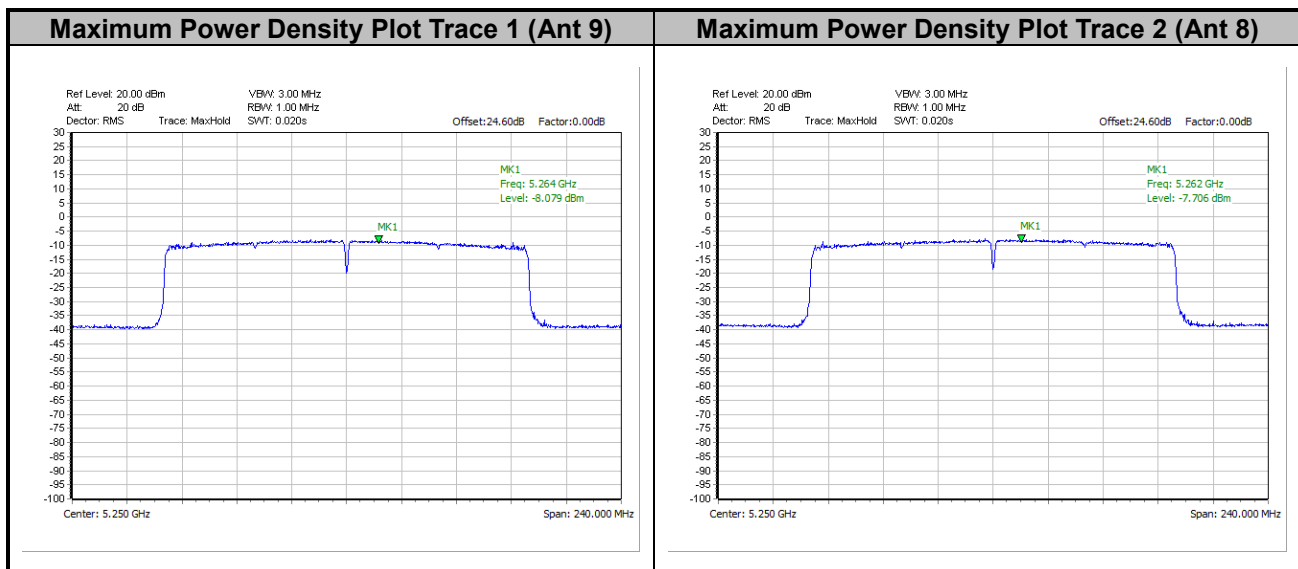


Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.



**<802.11ax HE160>**

Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.



3.4 Unwanted Emissions Measurement

This section is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement.

3.4.1 Limit of Unwanted Emissions

- (1) For transmitters operating in the 5150-5250 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27dBm/MHz.

For transmitters operating in the 5250-5350 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5250-5350 MHz band that generate emissions in the 5150-5250 MHz band must meet all applicable technical requirements for operation in the 5150-5250 MHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5150-5250 MHz band.

For transmitters operating in the 5470-5600 MHz and 5650-5725MHz band: all emissions outside of the 5470-5600 MHz and 5650-5725MHz band shall not exceed an EIRP of -27 dBm/MHz.

- (2) Unwanted spurious emissions falls in restricted bands shall comply with the general field strength limits as below table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

Note: The following formula is used to convert the EIRP to field strength.

$$E = \frac{1000000\sqrt{30P}}{3} \text{ } \mu\text{V/m, where P is the eirp (Watts)}$$

EIRP (dBm)	Field Strength at 3m (dBμV/m)
- 27	68.3

(3) KDB789033 D02 v02r01 G)2)c)

(i) Sections 15.407(b)(1-3) specifies the unwanted emissions limit for the U-NII-1 and U-NII-2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz.

(ii) Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are based on the use of a peak detector.

3.4.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.

(1) Procedure for Unwanted Emissions Measurements Below 1000 MHz

- RBW = 120 kHz
- VBW = 300 kHz
- Detector = Peak
- Trace mode = max hold

(2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz

- RBW = 1 MHz
- VBW $\geq$ 3 MHz
- Detector = Peak
- Sweep time = auto
- Trace mode = max hold

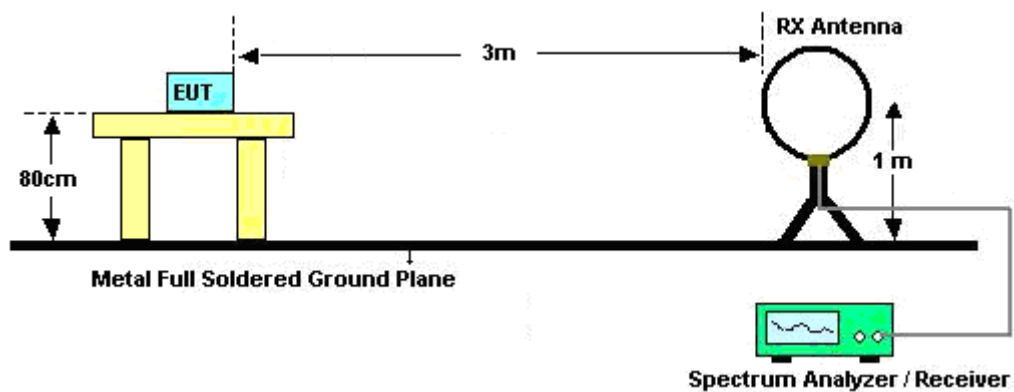
(3) Procedures for Average Unwanted Emissions Measurements Above 1000 MHz

- RBW = 1 MHz
- VBW = 10 Hz, when duty cycle is no less than 98 percent.
- VBW $\geq$ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

2. The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
3. The EUT is set 3 meters away from the receiving antenna which is mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT is arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit line, the position is marked as “-”.
7. Radiated testing above 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading for scanning all frequencies. When there is no suspected emission found and the harmonic emission level is with at least 6 dB margin against average limit line, the position is marked as “-”.

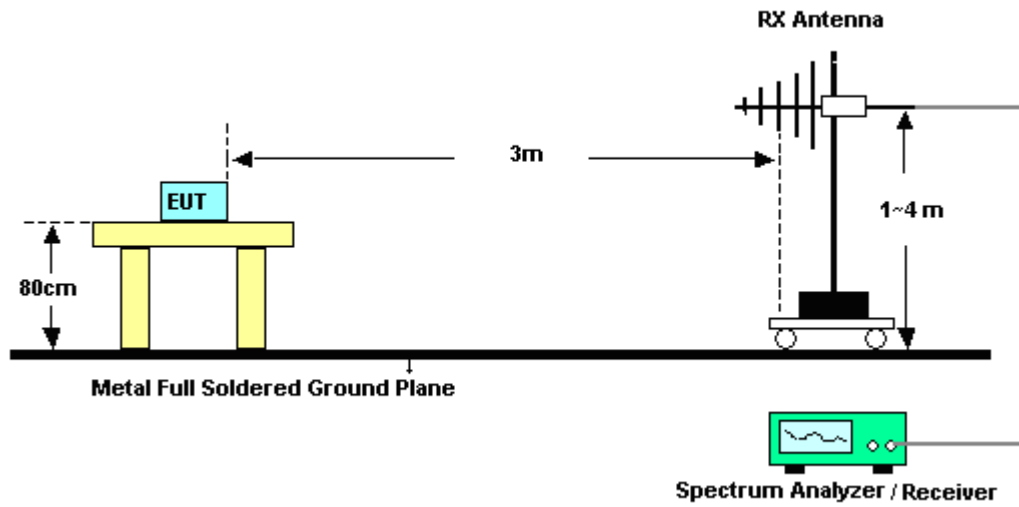
3.4.4 Test Setup

For radiated emissions below 30MHz

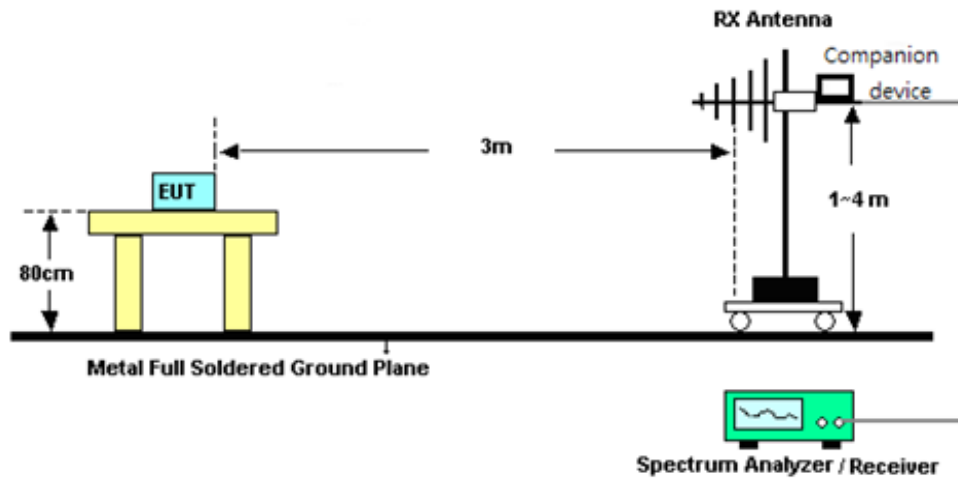


For radiated emissions from 30MHz to 1GHz

<CDD Mode>

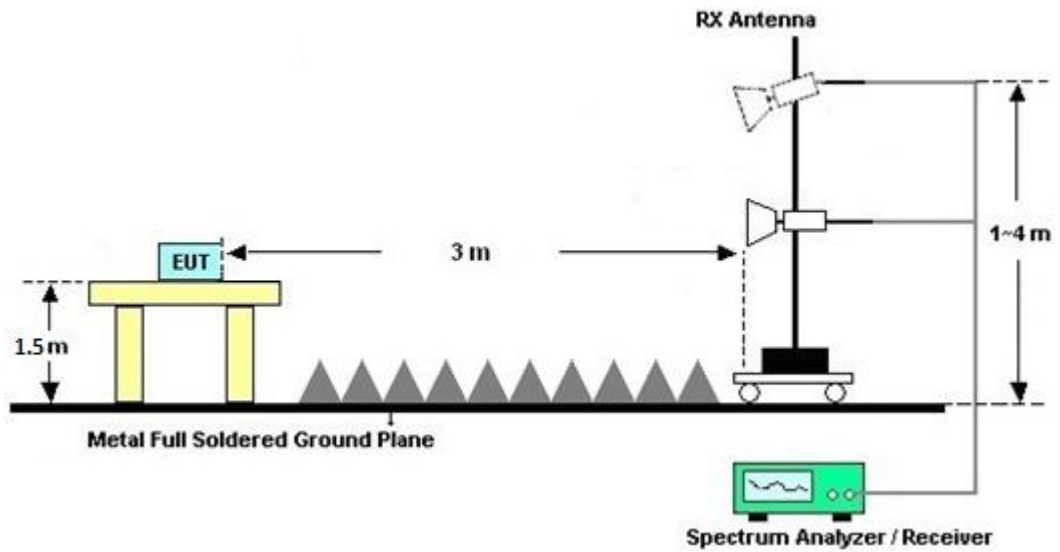


<TXBF Modes>

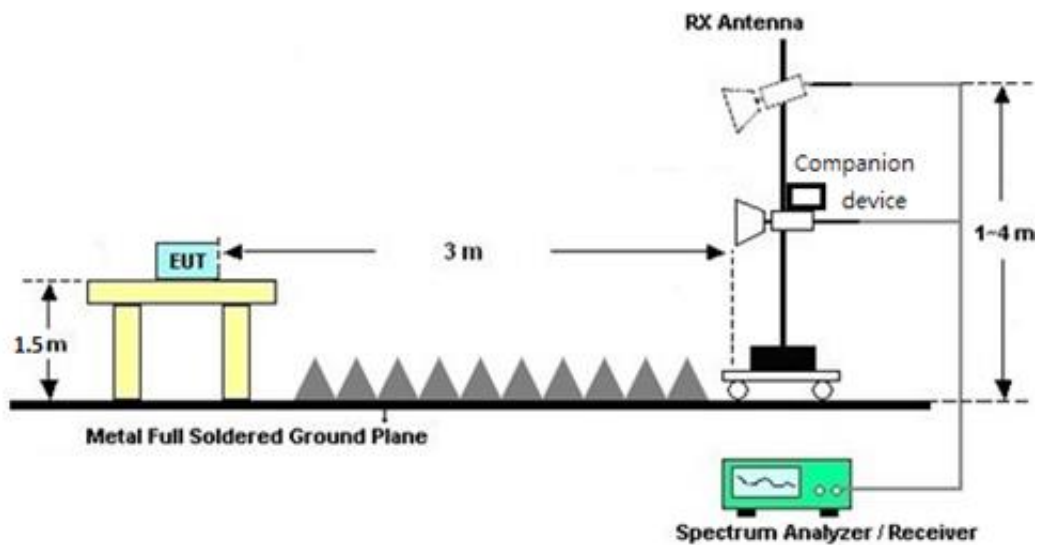


For radiated test from 1GHz to 18GHz

<CDD Mode>

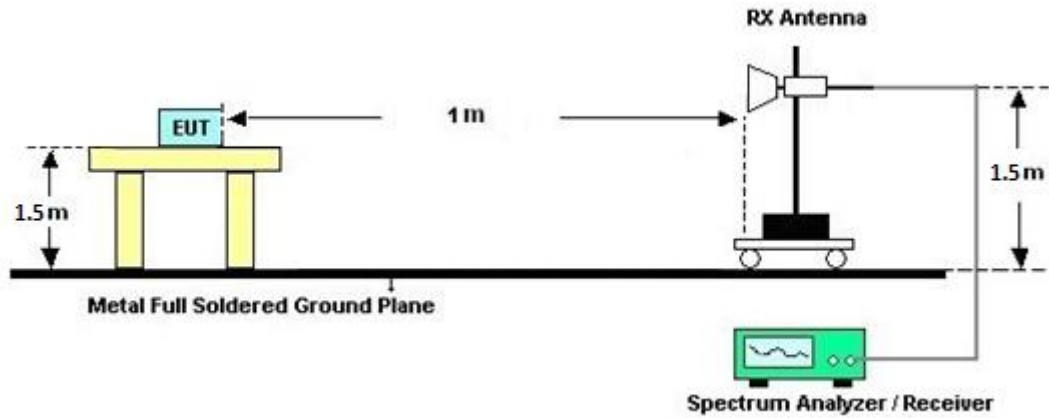


<TXBF Modes>

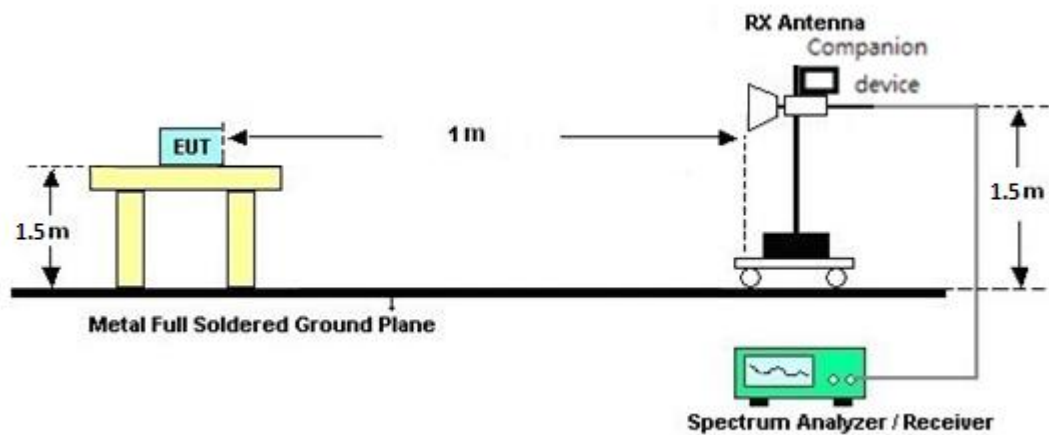


For radiated test above 18GHz

<CDD Mode>



<TXBF Modes>



**3.4.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)**

The low frequency, which starts from 9 kHz to 30 MHz, is pre-scanned and the result which is 20 dB lower than the limit line is not reported.

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

3.4.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix B and C.

3.4.7 Duty Cycle

Please refer to Appendix D.

3.4.8 Test Result of Radiated Spurious Emissions (30MHz ~ 10th Harmonic)

Please refer to Appendix B and C.

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

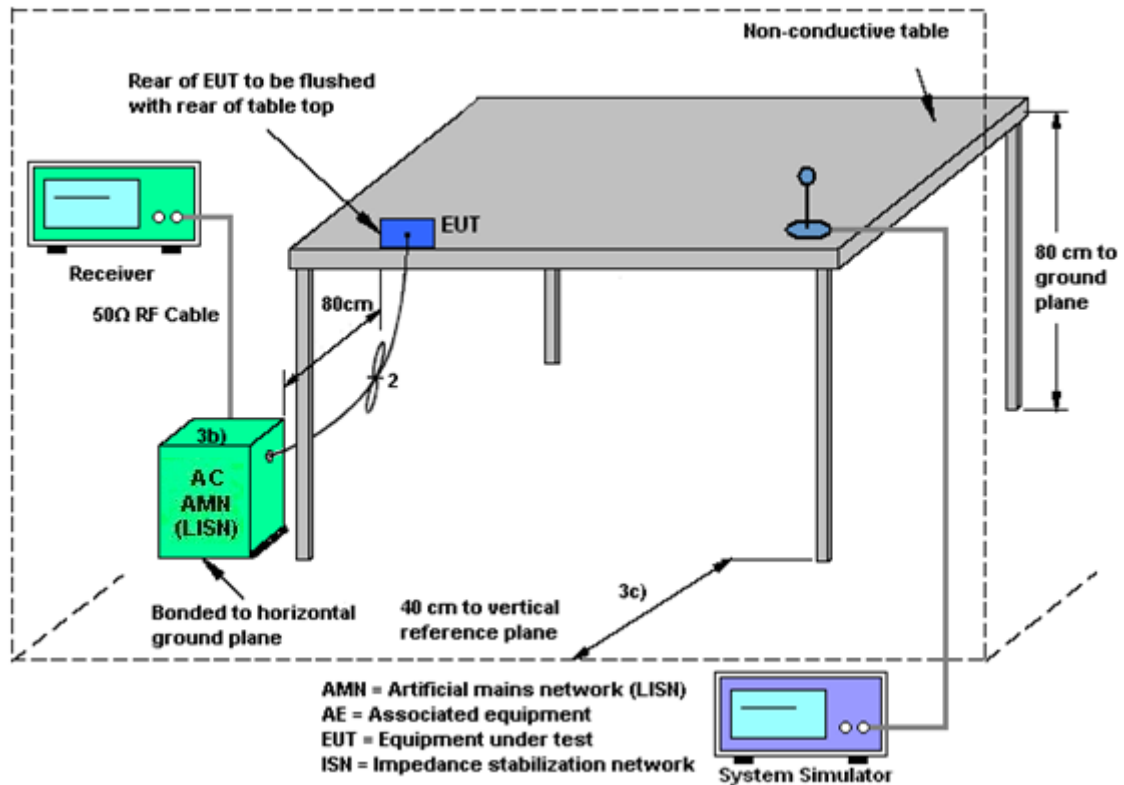
3.5.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.5.3 Test Procedures

1. The EUT is placed 0.4 meter away from the conducting wall of the shielding room, and is kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN shall be used.
6. Both Line and Neutral shall be tested in order to find out the maximum conducted emission.
7. The frequency range from 150 kHz to 30 MHz is scanned.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

3.5.4 Test Setup



3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix A.

3.6 Antenna Requirements

3.6.1 Standard Applicable

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.6.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.6.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

For power spectral density (PSD) measurements on all devices,

Array Gain = $10 \log(N_{ANT}/N_{SS}=1)$ dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$.

Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain;

The EUT supports CDD mode.

For power, the directional gain G_{ANT} is set equal to the antenna having the highest gain, i.e., F)2)f)i).

For PSD, the directional gain calculation is following F)2)f)ii) of KDB 662911 D01 v02r01.

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

The directional gain "DG" is calculated as following table.

<CDD Modes>						
			DG	DG	Power	PSD
			for	for	Limit	Limit
	Ant. 9	Ant. 8	Power	PSD	Reduction	Reduction
	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
Band I	3.10	1.80	3.10	5.48	0.00	0.00
Band II	3.70	1.90	3.70	5.86	0.00	0.00
Band III	3.70	2.40	3.70	6.08	0.00	0.08

Power limit reduction = Composite gain – 6dBi, (min = 0)

PSD limit reduction = Composite gain + PSD Array gain – 6dBi, (min = 0)

TXBF modes

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

where

Each antenna is driven by no more than one spatial stream;

N_{SS} = the number of independent spatial streams of data;

N_{ANT} = the total number of antennas

$g_{j,k} = 10^{G_k / 20}$ if the k th antenna is being fed by spatial stream j , or zero if it is not;
 G_k is the gain in dBi of the k th antenna.

The EUT supports beamforming for 802.11ac modes.

The directional gain calculation is following F)2)e)ii) of KDB 662911 D01 v02r01.

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

The directional gain "DG" is calculated as following table.

			DG	DG	Power	PSD
			for	for	Limit	Limit
	Ant 9	Ant 8	Power	PSD	Reduction	Reduction
	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
Band I	3.10	1.80	5.48	5.48	0.00	0.00
Band II	3.70	1.90	5.86	5.86	0.00	0.00
Band III	3.70	2.40	6.08	6.08	0.08	0.08

$Power\ Limit\ Reduction = DG(Power) - 6dBi, (min = 0)$

$PSD\ Limit\ Reduction = DG(PSD) - 6dBi, (min = 0)$



4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	35419 & 03	30MHz~1GHz	Apr. 28, 2021	Mar. 04, 2022~ Mar. 31, 2022	Apr. 27, 2022	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 03, 2021	Mar. 04, 2022~ Mar. 31, 2022	Dec. 02, 2022	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Jan. 07, 2022	Mar. 04, 2022~ Mar. 31, 2022	Jan. 06, 2023	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590075	1GHz~18GHz	Apr. 22, 2021	Mar. 04, 2022~ Mar. 31, 2022	Apr. 21, 2022	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	Oct. 04, 2021	Mar. 04, 2022~ Mar. 31, 2022	Oct. 03, 2022	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Oct. 04, 2021	Mar. 04, 2022~ Mar. 31, 2022	Oct. 03, 2022	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	0600789	18-40GHz	Jul. 23, 2021	Mar. 04, 2022~ Mar. 31, 2022	Jul. 22, 2022	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Jul. 22, 2021	Mar. 04, 2022~ Mar. 31, 2022	Jul. 21, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY15682/4	30MHz to 18GHz	Feb. 23, 2022	Mar. 04, 2022~ Mar. 31, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4	9kHz to 18GHz	Feb. 23, 2022	Mar. 04, 2022~ Mar. 31, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4	9kHz to 18GHz	Feb. 23, 2022	Mar. 04, 2022~ Mar. 31, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126	532078/126E	30MHz~18GHz	Sep. 17, 2021	Mar. 04, 2022~ Mar. 31, 2022	Sep. 16, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2	18GHz~40GHz	Feb. 23, 2022	Mar. 04, 2022~ Mar. 31, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801606/2	9KHz ~ 40GHz	Apr. 03, 2021	Mar. 04, 2022~ Mar. 31, 2022	Apr. 02, 2022	Radiation (03CH07-HY)
Controller	EMEC	EM1000	N/A	Control Ant Mast	N/A	Mar. 04, 2022~ Mar. 31, 2022	N/A	Radiation (03CH07-HY)
Controller	MF	MF-7802	N/A	Control Turn table	N/A	Mar. 04, 2022~ Mar. 31, 2022	N/A	Radiation (03CH07-HY)
Antenna Mast	EMEC	AM-BS-4500E	N/A	Boresight mast 1M~4M	N/A	Mar. 04, 2022~ Mar. 31, 2022	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Mar. 04, 2022~ Mar. 31, 2022	N/A	Radiation (03CH07-HY)
Software	Audix	E3	N/A	N/A	N/A	Mar. 04, 2022~ Mar. 31, 2022	N/A	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz~40GHz	Nov. 30, 2021	Mar. 04, 2022~ Mar. 31, 2022	Nov. 29, 2022	Radiation (03CH07-HY)
USB Data Logger	TECPEL	TR-32	HE17XD1148	N/A	Oct. 25, 2021	Mar. 04, 2022~ Mar. 31, 2022	Oct. 24, 2022	Radiation (03CH07-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	TECEPIL	DTM-303A	TP201996	N/A	Nov. 16, 2021	Mar. 02, 2022~ Jun. 07, 2022	Nov. 15, 2022	Conducted (TH02-HY)
Power Sensor	DARE	RPR3006W	16I00054SNO 12 (NO:113)	10MHz~6GHz	Dec. 16, 2021	Mar. 02, 2022~ Jun. 07, 2022	Dec. 15, 2022	Conducted (TH02-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz~40GHz	Aug. 30, 2021	Mar. 02, 2022~ Jun. 07, 2022	Aug. 29, 2022	Conducted (TH02-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Apr. 12, 2022	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Dec. 01, 2021	Apr. 12, 2022	Nov. 30, 2022	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 17, 2021	Apr. 12, 2022	Nov. 16, 2022	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 03, 2021	Apr. 12, 2022	Dec. 02, 2022	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32	N/A	N/A	N/A	Apr. 12, 2022	N/A	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	00691	N/A	Jul. 28, 2021	Apr. 12, 2022	Jul. 27, 2022	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 30, 2021	Apr. 12, 2022	Dec. 29, 2022	Conduction (CO05-HY)



5 Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.1 dB
--	--------

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.1 dB
--	--------

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.8 dB
--	--------

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.0 dB
--	--------



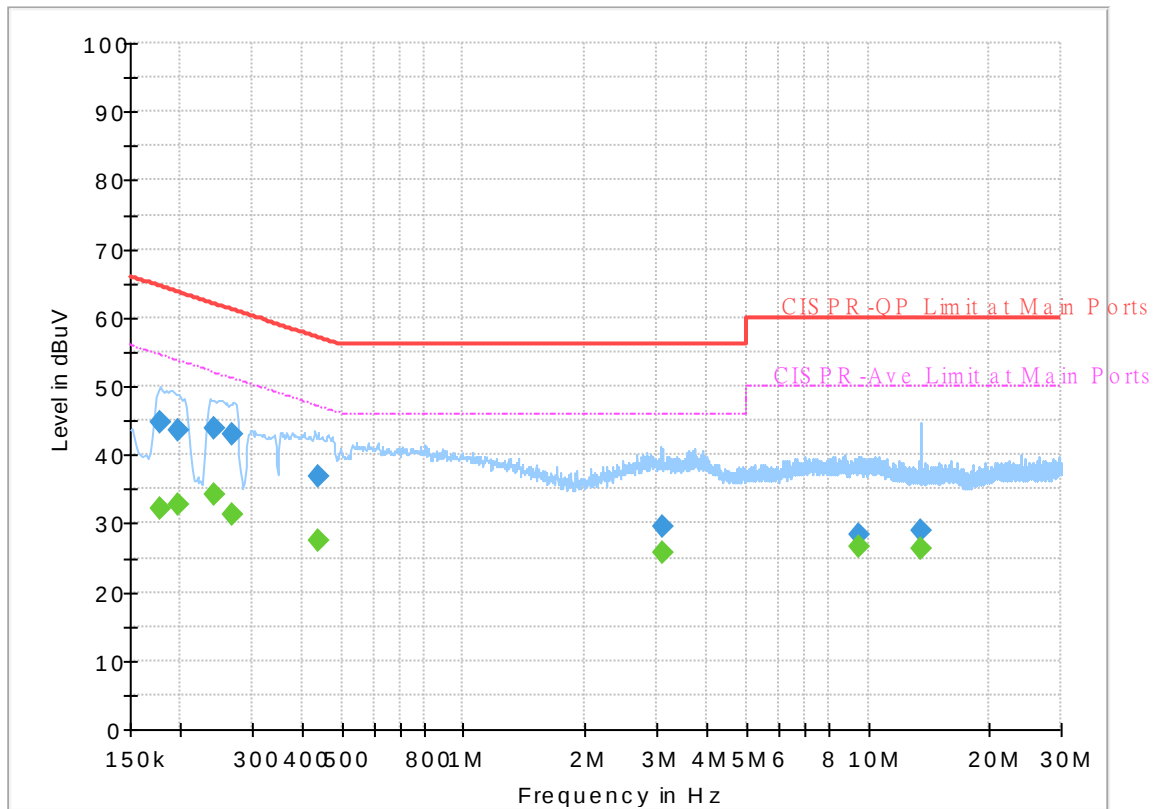
Appendix A. AC Conducted Emission Test Results

Test Engineer :	Calvin Wang	Temperature :	23~26℃
		Relative Humidity :	40~50%

EUT Information

Report NO : 222202
Test Mode : Mode 1
Test Voltage : 120Vac/60Hz
Phase : Line

Full Spectrum



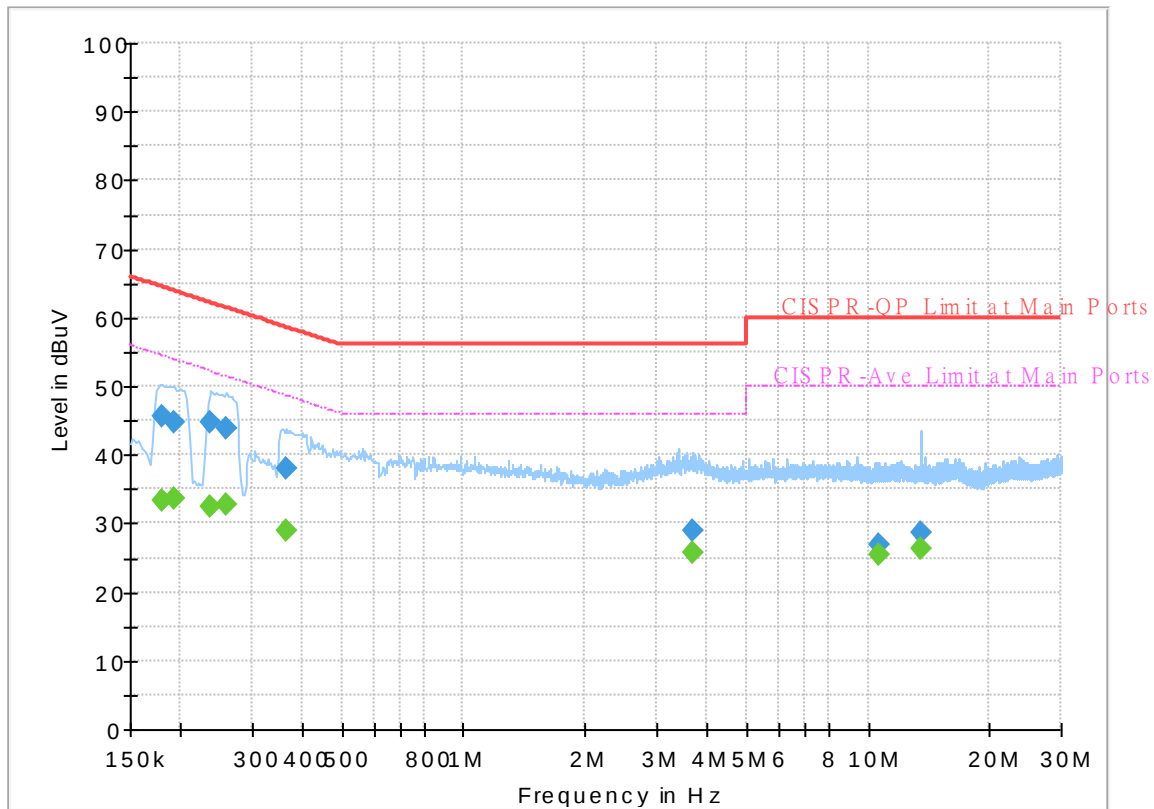
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.177000	---	32.10	54.63	22.53	L1	OFF	19.6
0.177000	44.65	---	64.63	19.98	L1	OFF	19.6
0.197250	---	32.66	53.73	21.07	L1	OFF	19.6
0.197250	43.49	---	63.73	20.24	L1	OFF	19.6
0.242250	---	34.15	52.02	17.87	L1	OFF	19.6
0.242250	44.00	---	62.02	18.02	L1	OFF	19.6
0.269250	---	31.27	51.14	19.87	L1	OFF	19.6
0.269250	43.02	---	61.14	18.12	L1	OFF	19.6
0.438000	---	27.52	47.10	19.58	L1	OFF	19.6
0.438000	36.75	---	57.10	20.35	L1	OFF	19.6
3.108750	---	25.87	46.00	20.13	L1	OFF	19.7
3.108750	29.60	---	56.00	26.40	L1	OFF	19.7
9.471750	---	26.52	50.00	23.48	L1	OFF	20.0
9.471750	28.42	---	60.00	31.58	L1	OFF	20.0
13.560000	---	26.39	50.00	23.61	L1	OFF	20.2
13.560000	29.01	---	60.00	30.99	L1	OFF	20.2

EUT Information

Report NO : 222202
Test Mode : Mode 1
Test Voltage : 120Vac/60Hz
Phase : Neutral

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.179250	---	33.29	54.52	21.23	N	OFF	19.6
0.179250	45.67	---	64.52	18.85	N	OFF	19.6
0.192750	---	33.56	53.92	20.36	N	OFF	19.6
0.192750	44.74	---	63.92	19.18	N	OFF	19.6
0.237750	---	32.48	52.17	19.69	N	OFF	19.6
0.237750	44.64	---	62.17	17.53	N	OFF	19.6
0.258000	---	32.72	51.50	18.78	N	OFF	19.6
0.258000	43.99	---	61.50	17.51	N	OFF	19.6
0.363750	---	29.07	48.64	19.57	N	OFF	19.6
0.363750	38.09	---	58.64	20.55	N	OFF	19.6
3.673500	---	25.74	46.00	20.26	N	OFF	19.8
3.673500	28.86	---	56.00	27.14	N	OFF	19.8
10.592250	---	25.48	50.00	24.52	N	OFF	20.1
10.592250	26.99	---	60.00	33.01	N	OFF	20.1
13.560000	---	26.45	50.00	23.55	N	OFF	20.2
13.560000	28.60	---	60.00	31.40	N	OFF	20.2



Appendix B. Radiated Spurious Emission

Test Engineer :	Jesse Wang, Stan Hsieh and Ken Wu	Temperature :	20.1~26.2°C
		Relative Humidity :	52.5~61.6%

<CDD Mode>

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
9+8		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5147.16	62.74	-11.26	74	52.08	34.1	11.84	35.28	112	16	P	H
		5150	48.39	-5.61	54	37.73	34.1	11.84	35.28	112	16	A	H
	*	5180	107.23	-	-	96.4	34.22	11.88	35.27	112	16	P	H
	*	5180	100.08	-	-	89.25	34.22	11.88	35.27	112	16	A	H
													H
		5147.42	61.94	-12.06	74	51.28	34.1	11.84	35.28	100	164	P	V
		5147.16	46.09	-7.91	54	35.43	34.1	11.84	35.28	100	164	A	V
	*	5180	106.86	-	-	96.03	34.22	11.88	35.27	100	164	P	V
	*	5180	99.63	-	-	88.8	34.22	11.88	35.27	100	164	A	V
													V
802.11a CH 44 5220MHz		5147.42	49.61	-24.39	74	38.95	34.1	11.84	35.28	100	25	P	H
		5148.2	42.14	-11.86	54	31.48	34.1	11.84	35.28	100	25	A	H
	*	5220	110.68	-	-	99.64	34.38	11.91	35.25	100	25	P	H
	*	5220	103.14	-	-	92.1	34.38	11.91	35.25	100	25	A	H
		5433.4	48.48	-25.52	74	36.87	34.7	12.05	35.14	100	25	P	H
		5373.48	40.16	-13.84	54	28.68	34.65	12	35.17	100	25	A	H
		5130.26	48.83	-25.17	74	38.2	34.1	11.82	35.29	100	162	P	V
		5069.16	40.41	-13.59	54	29.93	34.04	11.75	35.31	100	162	A	V
	*	5220	109.79	-	-	98.75	34.38	11.91	35.25	100	162	P	V
	*	5220	102.44	-	-	91.4	34.38	11.91	35.25	100	162	A	V
		5383.84	48.13	-25.87	74	36.63	34.67	12	35.17	100	162	P	V
		5459.72	39.41	-14.59	54	27.76	34.7	12.08	35.13	100	162	A	V



802.11a CH 48 5240MHz		5135.98	50.24	-23.76	74	39.6	34.1	11.83	35.29	104	13	P	H
		5150	41.05	-12.95	54	30.39	34.1	11.84	35.28	104	13	A	H
	*	5240	111.02	-	-	99.88	34.46	11.92	35.24	104	13	P	H
	*	5240	103.94	-	-	92.8	34.46	11.92	35.24	104	13	A	H
		5439.28	48.02	-25.98	74	36.4	34.7	12.06	35.14	104	13	P	H
		5393.64	39.76	-14.24	54	28.23	34.69	12.01	35.17	104	13	A	H
		5143.78	52.45	-21.55	74	41.79	34.1	11.84	35.28	100	183	P	V
		5149.24	41.81	-12.19	54	31.15	34.1	11.84	35.28	100	183	A	V
	*	5240	110.16	-	-	99.02	34.46	11.92	35.24	100	183	P	V
	*	5240	102.74	-	-	91.6	34.46	11.92	35.24	100	183	A	V
		5354.44	48.07	-25.93	74	36.66	34.61	11.98	35.18	100	183	P	V
		5350	39.67	-14.33	54	28.27	34.6	11.98	35.18	100	183	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**Band 1 5150~5250MHz****WIFI 802.11a (Harmonic @ 3m)**

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10360	43.53	-24.67	68.2	47.1	37.32	18.42	59.31	-	-	P	H
		15540	45.72	-28.28	74	40.16	40.2	22.59	57.23	-	-	P	H
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		10360	45.31	-22.89	68.2	48.88	37.32	18.42	59.31	-	-	P	V
		15540	46.19	-27.81	74	40.63	40.2	22.59	57.23	-	-	P	V
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WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 44 5220MHz		10440	44.95	-23.25	68.2	48.16	37.52	18.48	59.21	-	-	P	H
		15660	46.82	-27.18	74	40.95	40.32	22.67	57.12	-	-	P	H
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		10440	44.64	-23.56	68.2	47.85	37.52	18.48	59.21	-	-	P	V
		15660	46.11	-27.89	74	40.24	40.32	22.67	57.12	-	-	P	V
													V
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													V
													V

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 48 5240MHz		10480	44.39	-23.81	68.2	47.4	37.64	18.51	59.16	-	-	P	H	
		15720	47.78	-26.22	74	41.69	40.46	22.7	57.07	-	-	P	H	
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			10480	44.6	-23.6	68.2	47.61	37.64	18.51	59.16	-	-	P	V
			15720	48.01	-25.99	74	41.92	40.46	22.7	57.07	-	-	P	V
														V
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														V
Remark	1. No other spurious found.													
	2. All results are PASS against Peak and Average limit line.													
	3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.													



Band 1 5150~5250MHz

WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 36 5180MHz		5145.86	60.6	-13.4	74	49.94	34.1	11.84	35.28	100	11	P	H
		5148.72	51.64	-2.36	54	40.98	34.1	11.84	35.28	100	11	A	H
	*	5180	111.18	-	-	100.35	34.22	11.88	35.27	100	11	P	H
	*	5180	101.93	-	-	91.1	34.22	11.88	35.27	100	11	A	H
													H
													H
		5143.78	56.92	-17.08	74	46.26	34.1	11.84	35.28	100	161	P	V
		5145.08	48.47	-5.53	54	37.81	34.1	11.84	35.28	100	161	A	V
	*	5180	110.41	-	-	99.58	34.22	11.88	35.27	100	161	P	V
	*	5180	101.09	-	-	90.26	34.22	11.88	35.27	100	161	A	V
													V
													V
802.11ax HE20 Full CH 44 5220MHz		5144.04	50.43	-23.57	74	39.77	34.1	11.84	35.28	100	12	P	H
		5148.46	41.39	-12.61	54	30.73	34.1	11.84	35.28	100	12	A	H
	*	5220	112.74	-	-	101.7	34.38	11.91	35.25	100	12	P	H
	*	5220	102.94	-	-	91.9	34.38	11.91	35.25	100	12	A	H
		5415.76	49.03	-24.97	74	37.46	34.7	12.03	35.16	100	12	P	H
		5373.48	40.6	-13.4	54	29.12	34.65	12	35.17	100	12	A	H
		5063.44	50.37	-23.63	74	39.93	34.03	11.74	35.33	100	161	P	V
		5072.54	41.03	-12.97	54	30.54	34.05	11.75	35.31	100	161	A	V
	*	5220	109.41	-	-	98.37	34.38	11.91	35.25	100	161	P	V
	*	5220	100.51	-	-	89.47	34.38	11.91	35.25	100	161	A	V
		5452.44	48.53	-25.47	74	36.89	34.7	12.07	35.13	100	161	P	V
		5460	39.75	-14.25	54	28.1	34.7	12.08	35.13	100	161	A	V



802.11ax HE20 Full CH 48 5240MHz		5095.16	50.92	-23.08	74	40.35	34.09	11.78	35.3	100	14	P	H
		5086.32	41.34	-12.66	54	30.81	34.07	11.77	35.31	100	14	A	H
	*	5240	112.84	-	-	101.7	34.46	11.92	35.24	100	14	P	H
	*	5240	103.17	-	-	92.03	34.46	11.92	35.24	100	14	A	H
		5350.24	49.08	-24.92	74	37.68	34.6	11.98	35.18	100	14	P	H
		5393.64	40.78	-13.22	54	29.25	34.69	12.01	35.17	100	14	A	H
		5145.08	49.04	-24.96	74	38.38	34.1	11.84	35.28	100	151	P	V
		5091	40.58	-13.42	54	30.04	34.08	11.77	35.31	100	151	A	V
	*	5240	111.4	-	-	100.26	34.46	11.92	35.24	100	151	P	V
	*	5240	101.84	-	-	90.7	34.46	11.92	35.24	100	151	A	V
		5351.36	48.18	-25.82	74	36.78	34.6	11.98	35.18	100	151	P	V
		5458.32	39.71	-14.29	54	28.06	34.7	12.08	35.13	100	151	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

[illegible]

[illegible]

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 48 5240MHz		10480	44.86	-23.34	68.2	47.87	37.64	18.51	59.16	-	-	P	H
		15720	47.44	-26.56	74	41.35	40.46	22.7	57.07	-	-	P	H
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802.11ax HE20 Full CH 48 5240MHz		10480	45.41	-22.79	68.2	48.42	37.64	18.51	59.16	-	-	P	V
		15720	47.52	-26.48	74	41.43	40.46	22.7	57.07	-	-	P	V
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Band 1 5150~5250MHz

WIFI 802.11ax HE20 Partial 106 (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 106/53 CH 36 5180MHz		5124.8	49.62	-24.38	74	39	34.1	11.81	35.29	102	9	P	H
		5145.86	43.68	-10.32	54	33.02	34.1	11.84	35.28	102	9	A	H
	*	5180	107.24	-	-	96.41	34.22	11.88	35.27	102	9	P	H
	*	5180	99.64	-	-	88.81	34.22	11.88	35.27	102	9	A	H
													H
													H
		5146.64	51.8	-22.2	74	41.14	34.1	11.84	35.28	101	154	P	V
		5144.82	40.17	-13.83	54	29.51	34.1	11.84	35.28	101	154	A	V
	*	5180	106.73	-	-	95.9	34.22	11.88	35.27	101	154	P	V
	*	5180	99.03	-	-	88.2	34.22	11.88	35.27	101	154	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 38 5190MHz		5150	58.39	-15.61	74	47.73	34.1	11.84	35.28	100	15	P	H
		5150	49.99	-4.01	54	39.33	34.1	11.84	35.28	100	15	A	H
	*	5190	104.9	-	-	94.02	34.26	11.89	35.27	100	15	P	H
	*	5190	96.08	-	-	85.2	34.26	11.89	35.27	100	15	A	H
		5451.6	47.38	-26.62	74	35.74	34.7	12.07	35.13	100	15	P	H
		5438.44	39.75	-14.25	54	28.14	34.7	12.05	35.14	100	15	A	H
		5144.82	53.46	-20.54	74	42.8	34.1	11.84	35.28	100	160	P	V
		5145.6	45.96	-8.04	54	35.3	34.1	11.84	35.28	100	160	A	V
	*	5190	103.1	-	-	92.22	34.26	11.89	35.27	100	160	P	V
	*	5190	95.38	-	-	84.5	34.26	11.89	35.27	100	160	A	V
		5441.8	49.13	-24.87	74	37.51	34.7	12.06	35.14	100	160	P	V
		5452.72	39.66	-14.34	54	28.02	34.7	12.07	35.13	100	160	A	V
802.11ax HE40 Full CH 46 5230MHz		5145.08	57.2	-16.8	74	46.54	34.1	11.84	35.28	100	25	P	H
		5150	48.64	-5.36	54	37.98	34.1	11.84	35.28	100	25	A	H
	*	5230	109.49	-	-	98.39	34.42	11.92	35.24	100	25	P	H
	*	5230	100.2	-	-	89.1	34.42	11.92	35.24	100	25	A	H
		5358.36	51.7	-22.3	74	40.27	34.62	11.99	35.18	100	25	P	H
		5383.56	45.13	-8.87	54	33.63	34.67	12	35.17	100	25	A	H
		5145.34	53.57	-20.43	74	42.91	34.1	11.84	35.28	100	162	P	V
		5144.82	44.88	-9.12	54	34.22	34.1	11.84	35.28	100	162	A	V
	*	5230	106.09	-	-	94.99	34.42	11.92	35.24	100	162	P	V
	*	5230	97.93	-	-	86.83	34.42	11.92	35.24	100	162	A	V
		5350.8	48.51	-25.49	74	37.11	34.6	11.98	35.18	100	162	P	V
		5383.56	40.37	-13.63	54	28.87	34.67	12	35.17	100	162	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ax HE40 Full (Harmonic @ 3m)

[illegible]

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 46 5230MHz		10460	44.53	-23.67	68.2	47.64	37.58	18.5	59.19	-	-	P	H
		15690	47.74	-26.26	74	41.77	40.38	22.69	57.1	-	-	P	H
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Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												



Band 1 5150~5250MHz

WIFI 802.11ax HE40 Partial 242 (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Partial 242/61 CH 38 5190MHz		5121.42	59.64	-14.36	74	49.02	34.1	11.81	35.29	100	17	P	H
		5149.24	41.99	-12.01	54	31.33	34.1	11.84	35.28	100	17	A	H
	*	5190	104.14	-	-	93.26	34.26	11.89	35.27	100	17	P	H
	*	5190	95.43	-	-	84.55	34.26	11.89	35.27	100	17	A	H
		5384.96	47.81	-26.19	74	36.31	34.67	12	35.17	100	17	P	H
		5460	39.47	-14.53	54	27.82	34.7	12.08	35.13	100	17	A	H
		5068.38	50.67	-23.33	74	40.19	34.04	11.75	35.31	100	154	P	V
		5142.74	40.72	-13.28	54	30.08	34.1	11.83	35.29	100	154	A	V
	*	5190	102.06	-	-	91.18	34.26	11.89	35.27	100	154	P	V
	*	5190	94.24	-	-	83.36	34.26	11.89	35.27	100	154	A	V
		5382.72	47.8	-26.2	74	36.3	34.67	12	35.17	100	154	P	V
		5457.76	39.4	-14.6	54	27.75	34.7	12.08	35.13	100	154	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 42 5210MHz		5147.16	62.13	-11.87	74	51.47	34.1	11.84	35.28	100	17	P	H
		5149.5	52.41	-1.59	54	41.75	34.1	11.84	35.28	100	17	A	H
	*	5210	101.9	-	-	90.9	34.34	11.91	35.25	100	17	P	H
	*	5210	93.79	-	-	82.79	34.34	11.91	35.25	100	17	A	H
		5406.24	48.99	-25.01	74	37.43	34.7	12.02	35.16	100	17	P	H
		5363.68	40.66	-13.34	54	29.22	34.63	11.99	35.18	100	17	A	H
		5135.98	56.78	-17.22	74	46.14	34.1	11.83	35.29	100	162	P	V
		5145.6	49.47	-4.53	54	38.81	34.1	11.84	35.28	100	162	A	V
	*	5210	101.85	-	-	90.85	34.34	11.91	35.25	100	162	P	V
	*	5210	92.79	-	-	81.79	34.34	11.91	35.25	100	162	A	V
		5417.72	48.65	-25.35	74	37.08	34.7	12.03	35.16	100	162	P	V
		5460	39.84	-14.16	54	28.19	34.7	12.08	35.13	100	162	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ax HE80 Full (Harmonic @ 3m)

[illegible]

**Band 1 5150~5250MHz****WIFI 802.11ax HE80 Partial 484 (Band Edge @ 3m)**

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Partial 484/65 CH 42 5210MHz		5085.28	56.78	-17.22	74	46.25	34.07	11.77	35.31	110	17	P	H
		5149.24	44.11	-9.89	54	33.45	34.1	11.84	35.28	110	17	A	H
	*	5210	101.32	-	-	90.32	34.34	11.91	35.25	110	17	P	H
	*	5210	93.06	-	-	82.06	34.34	11.91	35.25	110	17	A	H
		5360.32	56.06	-17.94	74	44.63	34.62	11.99	35.18	110	17	P	H
		5363.68	39.97	-14.03	54	28.53	34.63	11.99	35.18	110	17	A	H
		5137.28	58.43	-15.57	74	47.79	34.1	11.83	35.29	100	157	P	V
		5144.04	41.9	-12.1	54	31.24	34.1	11.84	35.28	100	157	A	V
	*	5210	99.63	-	-	88.63	34.34	11.91	35.25	100	157	P	V
	*	5210	91.6	-	-	80.6	34.34	11.91	35.25	100	157	A	V
		5363.12	53.05	-20.95	74	41.61	34.63	11.99	35.18	100	157	P	V
		5458.6	39.46	-14.54	54	27.81	34.7	12.08	35.13	100	157	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**Band 1 5150~5250MHz****WIFI 802.11ax HE160 Partial 996 (Band Edge @ 3m)**

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Partial 996/67 CH 50 5250MHz		5146.3	58.42	-15.58	74	47.76	34.1	11.84	35.28	100	16	P	H
		5128.1	42.09	-11.91	54	31.46	34.1	11.82	35.29	100	16	A	H
	*	5250	97.8	-	-	86.6	34.5	11.93	35.23	100	16	P	H
	*	5250	89.3	-	-	78.1	34.5	11.93	35.23	100	16	A	H
		5387.04	64.41	-9.59	74	52.91	34.67	12	35.17	100	16	P	H
		5396.16	43	-11	54	31.47	34.69	12.01	35.17	100	16	A	H
		5122.15	57.47	-16.53	74	46.85	34.1	11.81	35.29	100	153	P	V
		5122.85	40.52	-13.48	54	29.9	34.1	11.81	35.29	100	153	A	V
	*	5250	95.3	-	-	84.1	34.5	11.93	35.23	100	153	P	V
	*	5250	87.4	-	-	76.2	34.5	11.93	35.23	100	153	A	V
		5373.12	53.18	-20.82	74	41.71	34.65	12	35.18	100	153	P	V
		5392.32	40.41	-13.59	54	28.89	34.68	12.01	35.17	100	153	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		5138.25	51.64	-22.36	74	41	34.1	11.83	35.29	100	26	P	H
		5150	43.14	-10.86	54	32.48	34.1	11.84	35.28	100	26	A	H
	*	5260	111.52	-	-	100.3	34.52	11.93	35.23	100	26	P	H
	*	5260	104.32	-	-	93.1	34.52	11.93	35.23	100	26	A	H
		5352.96	58.26	-15.74	74	46.85	34.61	11.98	35.18	100	26	P	H
		5350.08	48.99	-5.01	54	37.59	34.6	11.98	35.18	100	26	A	H
		5145.25	51.93	-22.07	74	41.27	34.1	11.84	35.28	100	170	P	V
		5149.8	41.87	-12.13	54	31.21	34.1	11.84	35.28	100	170	A	V
	*	5260	109.66	-	-	98.44	34.52	11.93	35.23	100	170	P	V
	*	5260	102.52	-	-	91.3	34.52	11.93	35.23	100	170	A	V
		5350.08	55.42	-18.58	74	44.02	34.6	11.98	35.18	100	170	P	V
		5350.08	44.72	-9.28	54	33.32	34.6	11.98	35.18	100	170	A	V
802.11a CH 60 5300MHz		5140	50.63	-23.37	74	39.99	34.1	11.83	35.29	100	27	P	H
		5145.95	40.25	-13.75	54	29.59	34.1	11.84	35.28	100	27	A	H
	*	5300	110.68	-	-	99.33	34.6	11.95	35.2	100	27	P	H
	*	5300	103.46	-	-	92.11	34.6	11.95	35.2	100	27	A	H
		5352.96	63.69	-10.31	74	52.28	34.61	11.98	35.18	100	27	P	H
		5350.08	50.07	-3.93	54	38.67	34.6	11.98	35.18	100	27	A	H
		5094.15	49.43	-24.57	74	38.86	34.09	11.78	35.3	100	152	P	V
		5143.85	40.15	-13.85	54	29.49	34.1	11.84	35.28	100	152	A	V
	*	5300	109.3	-	-	97.95	34.6	11.95	35.2	100	152	P	V
	*	5300	101.45	-	-	90.1	34.6	11.95	35.2	100	152	A	V
		5355.6	53.19	-20.81	74	41.77	34.61	11.99	35.18	100	152	P	V
		5351.52	43.3	-10.7	54	31.9	34.6	11.98	35.18	100	152	A	V



802.11a CH 64 5320MHz	*	5320	110.12	-	-	98.75	34.6	11.97	35.2	108	27	P	H
	*	5320	103.03	-	-	91.66	34.6	11.97	35.2	108	27	A	H
		5350.72	62.97	-11.03	74	51.57	34.6	11.98	35.18	108	27	P	H
		5350.08	52.53	-1.47	54	41.13	34.6	11.98	35.18	108	27	A	H
													H
													H
	*	5320	105.68	-	-	94.31	34.6	11.97	35.2	107	168	P	V
		5320	100.8	-	-	89.43	34.6	11.97	35.2	107	168	A	V
		5350.88	55.83	-18.17	74	44.43	34.6	11.98	35.18	107	168	P	V
		5351.84	46.31	-7.69	54	34.91	34.6	11.98	35.18	107	168	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**Band 2 5250~5350MHz****WIFI 802.11a (Harmonic @ 3m)**

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		10520	44.64	-23.56	68.2	47.54	37.66	18.56	59.12	-	-	P	H
		15780	46.66	-27.34	74	40.31	40.64	22.73	57.02	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		10520	44.11	-24.09	68.2	47.01	37.66	18.56	59.12	-	-	P	V
		15780	47.09	-26.91	74	40.74	40.64	22.73	57.02	-	-	P	V
													V
													V
													V
													V
													V
													V
													V



WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
i802.11a CH 60 5300MHz		10600	43.96	-30.04	74	46.86	37.5	18.62	59.02	-	-	P	H
		15900	48.09	-25.91	74	41.3	40.9	22.81	56.92	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		10600	44.93	-29.07	74	47.83	37.5	18.62	59.02	-	-	P	V
		15900	47.48	-26.52	74	40.69	40.9	22.81	56.92	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V



WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 64 5320MHz		10640	44.57	-29.43	74	47.4	37.5	18.65	58.98	-	-	P	H
		15960	45.71	-28.29	74	38.76	40.96	22.85	56.86	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		10640	46.04	-27.96	74	48.87	37.5	18.65	58.98	-	-	P	V
		15960	45.47	-28.53	74	38.52	40.96	22.85	56.86	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found.												
	2. All results are PASS against Peak and Average limit line.												
	3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												



Band 2 5250~5350MHz

WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 52 5260MHz		5100.45	49.15	-24.85	74	38.56	34.1	11.79	35.3	100	16	P	H
		5105.7	41.23	-12.77	54	30.64	34.1	11.79	35.3	100	16	A	H
	*	5260	111.77	-	-	100.55	34.52	11.93	35.23	100	16	P	H
	*	5260	103.72	-	-	92.5	34.52	11.93	35.23	100	16	A	H
		5443.92	48.42	-25.58	74	36.8	34.7	12.06	35.14	100	16	P	H
		5352	40.21	-13.79	54	28.81	34.6	11.98	35.18	100	16	A	H
		5112	49.04	-24.96	74	38.44	34.1	11.8	35.3	100	169	P	V
		5103.25	41.29	-12.71	54	30.7	34.1	11.79	35.3	100	169	A	V
	*	5260	110.22	-	-	99	34.52	11.93	35.23	100	169	P	V
	*	5260	101.62	-	-	90.4	34.52	11.93	35.23	100	169	A	V
		5364	48.37	-25.63	74	36.93	34.63	11.99	35.18	100	169	P	V
		5455.92	39.85	-14.15	54	28.21	34.7	12.07	35.13	100	169	A	V
802.11ax HE20 Full CH 60 5300MHz		5109.9	48.35	-25.65	74	37.75	34.1	11.8	35.3	100	29	P	H
		5145.95	40.86	-13.14	54	30.2	34.1	11.84	35.28	100	29	A	H
	*	5300	111.45	-	-	100.1	34.6	11.95	35.2	100	29	P	H
	*	5300	103.63	-	-	92.28	34.6	11.95	35.2	100	29	A	H
		5352.72	53.38	-20.62	74	41.97	34.61	11.98	35.18	100	29	P	H
		5350.08	44.67	-9.33	54	33.27	34.6	11.98	35.18	100	29	A	H
		5117.6	49.28	-24.72	74	38.67	34.1	11.81	35.3	100	163	P	V
		5098.35	42.66	-11.34	54	32.08	34.1	11.78	35.3	100	163	A	V
	*	5300	109.65	-	-	98.3	34.6	11.95	35.2	100	163	P	V
	*	5300	102.05	-	-	90.7	34.6	11.95	35.2	100	163	A	V
		5352	50.89	-23.11	74	39.49	34.6	11.98	35.18	100	163	P	V
		5353.2	41.32	-12.68	54	29.91	34.61	11.98	35.18	100	163	A	V



802.11ax HE20 Full CH 64 5320MHz	*	5320	111.21	-	-	99.84	34.6	11.97	35.2	100	26	P	H
	*	5320	102.16	-	-	90.79	34.6	11.97	35.2	100	26	A	H
		5350.72	63.45	-10.55	74	52.05	34.6	11.98	35.18	100	26	P	H
		5350.56	52.81	-1.19	54	41.41	34.6	11.98	35.18	100	26	A	H
													H
													H
	*	5320	109.35	-	-	97.98	34.6	11.97	35.2	100	163	P	V
	*	5320	99.76	-	-	88.39	34.6	11.97	35.2	100	163	A	V
		5351.2	56.43	-17.57	74	45.03	34.6	11.98	35.18	100	163	P	V
		5352.64	47.72	-6.28	54	36.31	34.61	11.98	35.18	100	163	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

[illegible]

[illegible]

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 64 5320MHz		10640	45.16	-28.84	74	47.99	37.5	18.65	58.98	-	-	P	H
		15960	45.34	-28.66	74	38.39	40.96	22.85	56.86	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
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													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
Remark	1. No other spurious found.												
	2. All results are PASS against Peak and Average limit line.												
	3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												


Band 2 5250~5350MHz
WIFI 802.11ax HE20 Partial 106 (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 106/54 CH 64 5320MHz	*	5320	109.86	-	-	98.49	34.6	11.97	35.2	105	9	P	H
	*	5320	100.76	-	-	89.39	34.6	11.97	35.2	105	9	A	H
		5351.2	65.42	-8.58	74	54.02	34.6	11.98	35.18	105	9	P	H
		5350.08	44.52	-9.48	54	33.12	34.6	11.98	35.18	105	9	A	H
													H
													H
	*	5320	108.41	-	-	97.04	34.6	11.97	35.2	100	185	P	V
	*	5320	98.74	-	-	87.37	34.6	11.97	35.2	100	185	A	V
		5357.28	59.13	-14.87	74	47.71	34.61	11.99	35.18	100	185	P	V
		5351.84	44.27	-9.73	54	32.87	34.6	11.98	35.18	100	185	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 54 5270MHz		5149.8	50.76	-23.24	74	40.1	34.1	11.84	35.28	100	17	P	H
		5134.75	41.99	-12.01	54	31.36	34.1	11.82	35.29	100	17	A	H
	*	5270	110.65	-	-	99.4	34.54	11.94	35.23	100	17	P	H
	*	5270	101.15	-	-	89.9	34.54	11.94	35.23	100	17	A	H
		5350.08	59.5	-14.5	74	48.1	34.6	11.98	35.18	100	17	P	H
		5350.32	51.71	-2.29	54	40.31	34.6	11.98	35.18	100	17	A	H
		5101.15	51.41	-22.59	74	40.82	34.1	11.79	35.3	100	169	P	V
		5101.85	41.63	-12.37	54	31.04	34.1	11.79	35.3	100	169	A	V
	*	5270	107.73	-	-	96.48	34.54	11.94	35.23	100	169	P	V
	*	5270	99.4	-	-	88.15	34.54	11.94	35.23	100	169	A	V
		5354.16	55.7	-18.3	74	44.29	34.61	11.98	35.18	100	169	P	V
		5353.92	47.28	-6.72	54	35.87	34.61	11.98	35.18	100	169	A	V
802.11ax HE40 Full CH 62 5310MHz		5094.5	49.17	-24.83	74	38.6	34.09	11.78	35.3	100	28	P	H
		5148.4	40.35	-13.65	54	29.69	34.1	11.84	35.28	100	28	A	H
	*	5310	105.86	-	-	94.5	34.6	11.96	35.2	100	28	P	H
	*	5310	97.26	-	-	85.9	34.6	11.96	35.2	100	28	A	H
		5350.8	58.63	-15.37	74	47.23	34.6	11.98	35.18	100	28	P	H
		5350.08	51.14	-2.86	54	39.74	34.6	11.98	35.18	100	28	A	H
		5107.8	48.82	-25.18	74	38.23	34.1	11.79	35.3	100	161	P	V
		5142.1	40.15	-13.85	54	29.51	34.1	11.83	35.29	100	161	A	V
	*	5310	103.79	-	-	92.43	34.6	11.96	35.2	100	161	P	V
	*	5310	95.06	-	-	83.7	34.6	11.96	35.2	100	161	A	V
		5357.28	51.87	-22.13	74	40.45	34.61	11.99	35.18	100	161	P	V
		5354.16	44.75	-9.25	54	33.34	34.61	11.98	35.18	100	161	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11ax HE40 Full (Harmonic @ 3m)

[illegible]

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 62 5310MHz		10620	45.32	-28.68	74	48.19	37.5	18.63	59	-	-	P	H
		15930	46.96	-27.04	74	40.08	40.93	22.84	56.89	-	-	P	H
													H
													H
													H
													H
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													H
802.11ax HE40 Full CH 62 5310MHz		10620	45.03	-28.97	74	47.9	37.5	18.63	59	-	-	P	V
		15930	47.64	-26.36	74	40.76	40.93	22.84	56.89	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
												V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												

**Band 2 5250~5350MHz****WIFI 802.11ax HE40 Partial 242 (Band Edge @ 3m)**

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Partial 242/62 CH 62 5310MHz		5114.1	49.31	-24.69	74	38.71	34.1	11.8	35.3	100	27	P	H
		5137.2	39.65	-14.35	54	29.01	34.1	11.83	35.29	100	27	A	H
	*	5310	106.04	-	-	94.68	34.6	11.96	35.2	100	27	P	H
	*	5310	95.66	-	-	84.3	34.6	11.96	35.2	100	27	A	H
		5354.4	59.51	-14.49	74	48.1	34.61	11.98	35.18	100	27	P	H
		5350.08	40.69	-13.31	54	29.29	34.6	11.98	35.18	100	27	A	H
		5031.15	51.11	-22.89	74	40.7	34.04	11.71	35.34	100	184	P	V
		5120.05	39.57	-14.43	54	28.95	34.1	11.81	35.29	100	184	A	V
	*	5310	103.15	-	-	91.79	34.6	11.96	35.2	100	184	P	V
	*	5310	93.66	-	-	82.3	34.6	11.96	35.2	100	184	A	V
		5359.68	50.76	-23.24	74	39.33	34.62	11.99	35.18	100	184	P	V
		5459.04	39.46	-14.54	54	27.81	34.7	12.08	35.13	100	184	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 58 5290MHz		5107.45	49.47	-24.53	74	38.88	34.1	11.79	35.3	100	28	P	H
		5149.1	40.42	-13.58	54	29.76	34.1	11.84	35.28	100	28	A	H
	*	5290	102.61	-	-	91.3	34.58	11.95	35.22	100	28	P	H
	*	5290	94.11	-	-	82.8	34.58	11.95	35.22	100	28	A	H
		5370.24	62.56	-11.44	74	51.11	34.64	11.99	35.18	100	28	P	H
		5350.08	52.64	-1.36	54	41.24	34.6	11.98	35.18	100	28	A	H
		5087.5	49.68	-24.32	74	39.15	34.07	11.77	35.31	100	163	P	V
		5102.9	43.13	-10.87	54	32.54	34.1	11.79	35.3	100	163	A	V
	*	5290	100.91	-	-	89.6	34.58	11.95	35.22	100	163	P	V
	*	5290	92.08	-	-	80.77	34.58	11.95	35.22	100	163	A	V
		5354.64	55.18	-18.82	74	43.76	34.61	11.99	35.18	100	163	P	V
		5353.92	47.51	-6.49	54	36.1	34.61	11.98	35.18	100	163	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11ax HE80 Full (Harmonic @ 3m)

[illegible]



Band 2 5250~5350MHz

WIFI 802.11ax HE80 Partial 484 (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Partial 484/66 CH 58 5290MHz		5130.9	54.93	-19.07	74	44.3	34.1	11.82	35.29	103	25	P	H
		5131.25	39.85	-14.15	54	29.22	34.1	11.82	35.29	103	25	A	H
	*	5290	101.98	-	-	90.67	34.58	11.95	35.22	103	25	P	H
	*	5290	93.2	-	-	81.89	34.58	11.95	35.22	103	25	A	H
		5364.72	66.03	-7.97	74	54.59	34.63	11.99	35.18	103	25	P	H
		5361.84	44.69	-9.31	54	33.26	34.62	11.99	35.18	103	25	A	H
		5127.05	52.58	-21.42	74	41.95	34.1	11.82	35.29	100	165	P	V
		5123.55	39.8	-14.2	54	29.18	34.1	11.81	35.29	100	165	A	V
	*	5290	99.37	-	-	88.06	34.58	11.95	35.22	100	165	P	V
	*	5290	90.71	-	-	79.4	34.58	11.95	35.22	100	165	A	V
		5356.56	61.6	-12.4	74	50.18	34.61	11.99	35.18	100	165	P	V
		5352	41.71	-12.29	54	30.31	34.6	11.98	35.18	100	165	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ax HE160 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Full CH 50 5250MHz		5112	53.22	-20.78	74	42.62	34.1	11.8	35.3	100	25	P	H
		5149.8	45.42	-8.58	54	34.76	34.1	11.84	35.28	100	25	A	H
	*	5250	98.27	-	-	87.07	34.5	11.93	35.23	100	25	P	H
	*	5250	90.1	-	-	78.9	34.5	11.93	35.23	100	25	A	H
		5368.56	59.34	-14.66	74	47.89	34.64	11.99	35.18	100	25	P	H
		5359.92	50.92	-3.08	54	39.49	34.62	11.99	35.18	100	25	A	H
		5125.65	53.3	-20.7	74	42.68	34.1	11.81	35.29	100	170	P	V
		5135.8	45.68	-8.32	54	35.04	34.1	11.83	35.29	100	170	A	V
	*	5250	94.7	-	-	83.5	34.5	11.93	35.23	100	170	P	V
	*	5250	88.3	-	-	77.1	34.5	11.93	35.23	100	170	A	V
		5383.2	55.56	-18.44	74	44.06	34.67	12	35.17	100	170	P	V
		5353.44	47.35	-6.65	54	35.94	34.61	11.98	35.18	100	170	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ax HE160 Full (Harmonic @ 3m)

[illegible]

**Band 2 5250~5350MHz****WIFI 802.11ax HE160 Partial 996 (Band Edge @ 3m)**

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Partial 996/68 CH 50 5250MHz		5125.65	63.27	-10.73	74	52.65	34.1	11.81	35.29	100	20	P	H
		5128.1	42.53	-11.47	54	31.9	34.1	11.82	35.29	100	20	A	H
	*	5250	96.99	-	-	85.79	34.5	11.93	35.23	100	20	P	H
	*	5250	89.56	-	-	78.36	34.5	11.93	35.23	100	20	A	H
		5384.16	62.62	-11.38	74	51.12	34.67	12	35.17	100	20	P	H
		5404.08	44.54	-9.46	54	32.99	34.7	12.01	35.16	100	20	A	H
		5119.35	56.55	-17.45	74	45.93	34.1	11.81	35.29	100	157	P	V
		5128.1	41.31	-12.69	54	30.68	34.1	11.82	35.29	100	157	A	V
	*	5250	95.06	-	-	83.86	34.5	11.93	35.23	100	157	P	V
	*	5250	87.1	-	-	75.9	34.5	11.93	35.23	100	157	A	V
		5401.68	59.8	-14.2	74	48.25	34.7	12.01	35.16	100	157	P	V
		5355.12	40.74	-13.26	54	29.32	34.61	11.99	35.18	100	157	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		5455.92	62.42	-11.58	74	50.78	34.7	12.07	35.13	100	25	P	H
		5469.52	66.61	-1.59	68.2	54.95	34.7	12.09	35.13	100	25	P	H
		5460	49.64	-4.36	54	37.99	34.7	12.08	35.13	100	25	A	H
	*	5500	109.61	-	-	97.91	34.7	12.12	35.12	100	25	P	H
	*	5500	102.51	-	-	90.81	34.7	12.12	35.12	100	25	A	H
													H
		5459.6	60.27	-13.73	74	48.62	34.7	12.08	35.13	111	171	P	V
		5466.32	64.34	-3.86	68.2	52.68	34.7	12.09	35.13	111	171	P	V
		5460	48.27	-5.73	54	36.62	34.7	12.08	35.13	111	171	A	V
	*	5500	108.31	-	-	96.61	34.7	12.12	35.12	111	171	P	V
	*	5500	101.04	-	-	89.34	34.7	12.12	35.12	111	171	A	V
													V
802.11a CH 116 5580MHz		5456.08	51.65	-22.35	74	40.01	34.7	12.07	35.13	100	28	P	H
		5469.28	51.72	-16.48	68.2	40.06	34.7	12.09	35.13	100	28	P	H
		5459.68	41.72	-12.28	54	30.07	34.7	12.08	35.13	100	28	A	H
	*	5580	110.98	-	-	99.2	34.7	12.22	35.14	100	28	P	H
	*	5580	103.88	-	-	92.1	34.7	12.22	35.14	100	28	A	H
		5725.31	49.53	-18.67	68.2	37.34	35.05	12.3	35.16	100	28	P	H
		5449.6	48.47	-25.53	74	36.84	34.7	12.07	35.14	105	182	P	V
		5468.56	47.8	-20.4	68.2	36.14	34.7	12.09	35.13	105	182	P	V
		5433.04	40.26	-13.74	54	28.65	34.7	12.05	35.14	105	182	A	V
	*	5580	108.98	-	-	97.2	34.7	12.22	35.14	105	182	P	V
	*	5580	101.98	-	-	90.2	34.7	12.22	35.14	105	182	A	V
		5740.43	49.87	-18.33	68.2	37.6	35.14	12.3	35.17	105	182	P	V



802.11a CH 140 5700MHz	*	5700	107	-	-	94.98	34.9	12.28	35.16	100	68	P	H
	*	5700	101.73	-	-	89.71	34.9	12.28	35.16	100	68	A	H
		5727.88	65.3	-2.9	68.2	53.09	35.07	12.3	35.16	100	68	P	H
													H
													H
													H
	*	5700	106.69	-	-	94.67	34.9	12.28	35.16	105	171	P	V
	*	5700	99.43	-	-	87.41	34.9	12.28	35.16	105	171	A	V
		5727.48	56.66	-11.54	68.2	44.46	35.06	12.3	35.16	105	171	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**Band 3 - 5470~5725MHz**
WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		11000	46.32	-27.68	74	47.95	38	18.93	58.56	-	-	P	H
		16500	48.99	-19.21	68.2	40.24	42.1	23.29	56.64	-	-	P	H
													H
													H
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													H
													H
													H
													H
													H
													H
													H
		11000	44.87	-29.13	74	46.5	38	18.93	58.56	-	-	P	V
		16500	48.56	-19.64	68.2	39.81	42.1	23.29	56.64	-	-	P	V
													V
													V
													V
													V
													V
													V
													V

[illegible]

[illegible]



Band 3 - 5470~5725MHz
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 100 5500MHz		5459.92	59.63	-14.37	74	47.98	34.7	12.08	35.13	100	27	P	H
		5469.52	61.79	-6.41	68.2	50.13	34.7	12.09	35.13	100	27	P	H
		5460	48.56	-5.44	54	36.91	34.7	12.08	35.13	100	27	A	H
	*	5500	112.04	-	-	100.34	34.7	12.12	35.12	100	27	P	H
	*	5500	103.54	-	-	91.84	34.7	12.12	35.12	100	27	A	H
		5459.76	52.25	-21.75	74	40.6	34.7	12.08	35.13	100	241	P	V
		5462.8	61.39	-6.81	68.2	49.74	34.7	12.08	35.13	100	241	P	V
		5460	45.56	-8.44	54	33.91	34.7	12.08	35.13	100	241	A	V
	*	5500	108.61	-	-	96.91	34.7	12.12	35.12	100	241	P	V
	*	5500	100.58	-	-	88.88	34.7	12.12	35.12	100	241	A	V
													V
													V
802.11ax HE20 Full CH 116 5580MHz		5428.48	50.12	-23.88	74	38.52	34.7	12.04	35.14	100	28	P	H
		5463.52	47.18	-21.02	68.2	35.53	34.7	12.08	35.13	100	28	P	H
		5429.2	41.56	-12.44	54	29.96	34.7	12.04	35.14	100	28	A	H
	*	5580	112.73	-	-	100.95	34.7	12.22	35.14	100	28	P	H
	*	5580	103.94	-	-	92.16	34.7	12.22	35.14	100	28	A	H
		5734.76	48.44	-19.76	68.2	36.2	35.11	12.3	35.17	100	28	P	H
		5452.48	48.65	-25.35	74	37.01	34.7	12.07	35.13	104	188	P	V
		5460.4	47.46	-20.74	68.2	35.81	34.7	12.08	35.13	104	188	P	V
		5429.68	40.41	-13.59	54	28.81	34.7	12.04	35.14	104	188	A	V
	*	5580	109.53	-	-	97.75	34.7	12.22	35.14	104	188	P	V
	*	5580	101.6	-	-	89.82	34.7	12.22	35.14	104	188	A	V
		5731.61	48.7	-19.5	68.2	36.48	35.09	12.3	35.17	104	188	P	V



802.11ax HE20 Full CH 140 5700MHz	*	5700	110.13	-	-	98.11	34.9	12.28	35.16	100	92	P	H
	*	5700	101.6	-	-	89.58	34.9	12.28	35.16	100	92	A	H
		5725.88	63.88	-4.32	68.2	51.68	35.06	12.3	35.16	100	92	P	H
													H
													H
													H
	*	5700	108.01	-	-	95.99	34.9	12.28	35.16	100	232	P	V
	*	5700	99.57	-	-	87.55	34.9	12.28	35.16	100	232	A	V
		5725.72	60.8	-7.4	68.2	48.61	35.05	12.3	35.16	100	232	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 5470~5725MHz

WIFI 802.11ax HE20 (Harmonic @ 3m)

[illegible]

[illegible]

[illegible]



Band 3 5470~5725MHz

WIFI 802.11ax HE20 Partial 106 (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 106/53 CH 100 5500MHz		5459.44	64.28	-9.72	74	52.63	34.7	12.08	35.13	108	28	P	H
		5464.56	62.3	-5.9	68.2	50.65	34.7	12.08	35.13	108	28	P	H
		5460	49.01	-4.99	54	37.36	34.7	12.08	35.13	108	28	A	H
	*	5500	108.9	-	-	97.2	34.7	12.12	35.12	108	28	P	H
	*	5500	101.1	-	-	89.4	34.7	12.12	35.12	108	28	A	H
													H
		5454.32	55.49	-18.51	74	43.85	34.7	12.07	35.13	115	185	P	V
		5468.88	64.28	-3.92	68.2	52.62	34.7	12.09	35.13	115	185	P	V
		5460.08	40.43	-109.57	150	28.78	34.7	12.08	35.13	115	185	A	V
	*	5500	106.89	-	-	95.19	34.7	12.12	35.12	115	185	P	V
	*	5500	99.31	-	-	87.61	34.7	12.12	35.12	115	185	A	V
													V
802.11ax HE20 Partial 106/54 CH 140 5700MHz	*	5700	109.53	-	-	97.51	34.9	12.28	35.16	100	65	P	H
	*	5700	100.33	-	-	88.31	34.9	12.28	35.16	100	65	A	H
		5747	58.43	-9.77	68.2	46.11	35.18	12.31	35.17	100	65	P	H
													H
													H
													H
	*	5700	106.63	-	-	94.61	34.9	12.28	35.16	100	210	P	V
	*	5700	98.53	-	-	86.51	34.9	12.28	35.16	100	210	A	V
		5734.04	60.23	-7.97	68.2	48	35.1	12.3	35.17	100	210	P	V
													V
Remark													V
													V
													V
1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Band 3 5470~5725MHz

WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 102 5510MHz		5450.32	60.7	-13.3	74	49.06	34.7	12.07	35.13	100	27	P	H
		5469.76	67.03	-1.17	68.2	55.37	34.7	12.09	35.13	100	27	P	H
		5459.92	52.63	-1.37	54	40.98	34.7	12.08	35.13	100	27	A	H
	*	5510	106.84	-	-	95.12	34.7	12.14	35.12	100	27	P	H
	*	5510	98.88	-	-	87.16	34.7	12.14	35.12	100	27	A	H
		5759.96	50.66	-17.54	68.2	38.32	35.2	12.31	35.17	100	27	P	H
		5457.76	54.27	-19.73	74	42.62	34.7	12.08	35.13	100	240	P	V
		5469.52	63.13	-5.07	68.2	51.47	34.7	12.09	35.13	100	240	P	V
		5459.92	48.83	-5.17	54	37.18	34.7	12.08	35.13	100	240	A	V
	*	5510	103.44	-	-	91.72	34.7	12.14	35.12	100	240	P	V
	*	5510	96.22	-	-	84.5	34.7	12.14	35.12	100	240	A	V
		5735.075	49.32	-18.88	68.2	37.08	35.11	12.3	35.17	100	240	P	V
802.11ax HE40 Full CH 110 5550MHz		5459.2	55.13	-18.87	74	43.48	34.7	12.08	35.13	100	28	P	H
		5467.84	58.98	-9.22	68.2	47.32	34.7	12.09	35.13	100	28	P	H
		5459.92	47.23	-6.77	54	35.58	34.7	12.08	35.13	100	28	A	H
	*	5550	109	-	-	97.25	34.7	12.18	35.13	100	28	P	H
	*	5550	101.68	-	-	89.93	34.7	12.18	35.13	100	28	A	H
		5759.96	53.38	-14.82	68.2	41.04	35.2	12.31	35.17	100	28	P	H
		5459.92	50.22	-23.78	74	38.57	34.7	12.08	35.13	100	246	P	V
		5469.52	55.68	-12.52	68.2	44.02	34.7	12.09	35.13	100	246	P	V
		5459.92	43.9	-10.1	54	32.25	34.7	12.08	35.13	100	246	A	V
	*	5550	105.41	-	-	93.66	34.7	12.18	35.13	100	246	P	V
	*	5550	97.99	-	-	86.24	34.7	12.18	35.13	100	246	A	V
		5737.91	50.08	-18.12	68.2	37.82	35.13	12.3	35.17	100	246	P	V



802.11ax HE40 Full CH 134 5670MHz		5375.55	48.68	-25.32	74	37.2	34.65	12	35.17	100	28	P	H
		5463.4	48.46	-19.74	68.2	36.81	34.7	12.08	35.13	100	28	P	H
		5458.5	40.39	-13.61	54	28.74	34.7	12.08	35.13	100	28	A	H
	*	5670	109.06	-	-	97.16	34.78	12.27	35.15	100	28	P	H
	*	5670	101.11	-	-	89.21	34.78	12.27	35.15	100	28	A	H
		5725	65.76	-2.44	68.2	53.57	35.05	12.3	35.16	100	28	P	H
		5441.7	48.83	-25.17	74	37.21	34.7	12.06	35.14	100	202	P	V
		5470	47.33	-20.87	68.2	35.67	34.7	12.09	35.13	100	202	P	V
		5456.4	39.78	-14.22	54	28.14	34.7	12.07	35.13	100	202	A	V
	*	5670	105.94	-	-	94.04	34.78	12.27	35.15	100	202	P	V
	*	5670	97.88	-	-	85.98	34.78	12.27	35.15	100	202	A	V
		5725	62.19	-6.01	68.2	50	35.05	12.3	35.16	100	202	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 5470~5725MHz

WIFI 802.11ax HE40 Full (Harmonic @ 3m)

[illegible]

[illegible]

[illegible]



Band 3 5470~5725MHz

WIFI 802.11ax HE40 Partial 242 (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Partial 242/61 CH 102 5510MHz		5437.36	62.44	-11.56	74	50.83	34.7	12.05	35.14	106	63	P	H
		5461.12	55.69	-12.51	68.2	44.04	34.7	12.08	35.13	106	63	P	H
		5453.92	46.83	-7.17	54	35.19	34.7	12.07	35.13	106	63	A	H
	*	5510	105.24	-	-	93.52	34.7	12.14	35.12	106	63	P	H
	*	5510	96.81	-	-	85.09	34.7	12.14	35.12	106	63	A	H
		5760.59	50.72	-17.48	68.2	38.38	35.2	12.31	35.17	106	63	P	H
		5444.8	56	-18	74	44.38	34.7	12.06	35.14	117	184	P	V
		5469.28	55.97	-12.23	68.2	44.31	34.7	12.09	35.13	117	184	P	V
		5452.24	45.52	-8.48	54	33.88	34.7	12.07	35.13	117	184	A	V
	*	5510	102.41	-	-	90.69	34.7	12.14	35.12	117	184	P	V
	*	5510	94.75	-	-	83.03	34.7	12.14	35.12	117	184	A	V
		5744.84	48.82	-19.38	68.2	36.51	35.17	12.31	35.17	117	184	P	V
802.11ax HE40 Partial 242/62 CH 134 5670MHz		5453.6	49.21	-24.79	74	37.57	34.7	12.07	35.13	100	65	P	H
		5465.15	47.8	-20.4	68.2	36.15	34.7	12.08	35.13	100	65	P	H
		5459.55	39.48	-14.52	54	27.83	34.7	12.08	35.13	100	65	A	H
	*	5670	105.97	-	-	94.07	34.78	12.27	35.15	100	65	P	H
	*	5670	97.7	-	-	85.8	34.78	12.27	35.15	100	65	A	H
		5731.4	62.43	-5.77	68.2	50.21	35.09	12.3	35.17	100	65	P	H
		5417.9	48.75	-25.25	74	37.18	34.7	12.03	35.16	104	210	P	V
		5467.6	48.38	-19.82	68.2	36.72	34.7	12.09	35.13	104	210	P	V
		5459.9	39.43	-14.57	54	27.78	34.7	12.08	35.13	104	210	A	V
	*	5670	103.56	-	-	91.66	34.78	12.27	35.15	104	210	P	V
	*	5670	95.5	-	-	83.6	34.78	12.27	35.15	104	210	A	V
		5741.9	50.39	-17.81	68.2	38.11	35.15	12.3	35.17	104	210	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz

WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 106 5530MHz		5453.68	60.13	-13.87	74	48.49	34.7	12.07	35.13	100	17	P	H
		5467.12	62.72	-5.48	68.2	51.06	34.7	12.09	35.13	100	17	P	H
		5459.92	52.49	-1.51	54	40.84	34.7	12.08	35.13	100	17	A	H
	*	5530	101.63	-	-	89.9	34.7	12.16	35.13	100	17	P	H
	*	5530	93.95	-	-	82.22	34.7	12.16	35.13	100	17	A	H
		5760.275	50.86	-17.34	68.2	38.52	35.2	12.31	35.17	100	17	P	H
		5459.92	56.63	-17.37	74	44.98	34.7	12.08	35.13	400	91	P	V
		5468.8	60.04	-8.16	68.2	48.38	34.7	12.09	35.13	400	91	P	V
		5459.68	50.03	-3.97	54	38.38	34.7	12.08	35.13	400	91	A	V
	*	5530	98.11	-	-	86.38	34.7	12.16	35.13	400	91	P	V
	*	5530	90.61	-	-	78.88	34.7	12.16	35.13	400	91	A	V
		5760.275	49.82	-18.38	68.2	37.48	35.2	12.31	35.17	400	91	P	V
802.11ax HE80 Full CH 122 5610MHz		5453.95	57.26	-16.74	74	45.62	34.7	12.07	35.13	100	30	P	H
		5468.65	57.89	-10.31	68.2	46.23	34.7	12.09	35.13	100	30	P	H
		5459.9	49.87	-4.13	54	38.22	34.7	12.08	35.13	100	30	A	H
	*	5610	107.43	-	-	95.63	34.7	12.24	35.14	100	30	P	H
	*	5610	98.91	-	-	87.11	34.7	12.24	35.14	100	30	A	H
		5729.125	62.49	-5.71	68.2	50.28	35.07	12.3	35.16	100	30	P	H
		5451.15	53.69	-20.31	74	42.05	34.7	12.07	35.13	400	82	P	V
		5462.7	55.71	-12.49	68.2	44.06	34.7	12.08	35.13	400	82	P	V
		5459.9	46.98	-7.02	54	35.33	34.7	12.08	35.13	400	82	A	V
	*	5610	104.44	-	-	92.64	34.7	12.24	35.14	400	82	P	V
	*	5610	96.9	-	-	85.1	34.7	12.24	35.14	400	82	A	V
		5733.675	59.96	-8.24	68.2	47.73	35.1	12.3	35.17	400	82	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 5470~5725MHz

WIFI 802.11ax HE80 Full (Harmonic @ 3m)

[illegible]

[illegible]



Band 3 5470~5725MHz

WIFI 802.11ax HE80 Partial 484 (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Partial 484/65 CH 106 5530MHz		5421.76	59.02	-14.98	74	47.44	34.7	12.04	35.16	104	18	P	H
		5462.8	59.71	-8.49	68.2	48.06	34.7	12.08	35.13	104	18	P	H
		5459.68	41.51	-12.49	54	29.86	34.7	12.08	35.13	104	18	A	H
	*	5530	100.34	-	-	88.61	34.7	12.16	35.13	104	18	P	H
	*	5530	92.89	-	-	81.16	34.7	12.16	35.13	104	18	A	H
		5754.605	51.13	-17.07	68.2	38.79	35.2	12.31	35.17	104	18	P	H
		5444.8	57.41	-16.59	74	45.79	34.7	12.06	35.14	100	182	P	V
		5466.4	49.53	-18.67	68.2	37.87	34.7	12.09	35.13	100	182	P	V
		5455.6	40.57	-13.43	54	28.93	34.7	12.07	35.13	100	182	A	V
	*	5530	97.34	-	-	85.61	34.7	12.16	35.13	100	182	P	V
	*	5530	90.63	-	-	78.9	34.7	12.16	35.13	100	182	A	V
		5751.455	50.09	-18.11	68.2	37.75	35.2	12.31	35.17	100	182	P	V
802.11ax HE80 Partial 484/66 CH 122 5610MHz		5393.4	57.28	-16.72	74	45.75	34.69	12.01	35.17	100	60	P	H
		5468.65	54.46	-13.74	68.2	42.8	34.7	12.09	35.13	100	60	P	H
		5433.3	44.57	-9.43	54	32.96	34.7	12.05	35.14	100	60	A	H
	*	5610	103.1	-	-	91.3	34.7	12.24	35.14	100	60	P	H
	*	5610	94.93	-	-	83.13	34.7	12.24	35.14	100	60	A	H
		5728.6	66.88	-1.32	68.2	54.67	35.07	12.3	35.16	100	60	P	H
		5376.95	56.87	-17.13	74	45.39	34.65	12	35.17	107	185	P	V
		5465.15	60.03	-8.17	68.2	48.38	34.7	12.08	35.13	107	185	P	V
		5456.4	41	-13	54	29.36	34.7	12.07	35.13	107	185	A	V
	*	5610	101.75	-	-	89.95	34.7	12.24	35.14	107	185	P	V
	*	5610	93.6	-	-	81.8	34.7	12.24	35.14	107	185	A	V
		5731.575	60.07	-8.13	68.2	47.85	35.09	12.3	35.17	107	185	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz

WIFI 802.11ax HE160 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Full CH 114 5570MHz		5452.24	62.26	-11.74	74	50.62	34.7	12.07	35.13	100	19	P	H
		5465.2	60.73	-7.47	68.2	49.08	34.7	12.08	35.13	100	19	P	H
		5459.92	52.68	-1.32	54	41.03	34.7	12.08	35.13	100	19	A	H
	*	5570	98.76	-	-	86.98	34.7	12.21	35.13	100	19	P	H
	*	5570	90.74	-	-	78.96	34.7	12.21	35.13	100	19	A	H
		5738.225	58.84	-9.36	68.2	46.58	35.13	12.3	35.17	100	19	P	H
		5454.4	57.95	-16.05	74	46.31	34.7	12.07	35.13	400	84	P	V
		5462.08	58.46	-9.74	68.2	46.81	34.7	12.08	35.13	400	84	P	V
		5453.92	50.45	-3.55	54	38.81	34.7	12.07	35.13	400	84	A	V
	*	5570	98.13	-	-	86.35	34.7	12.21	35.13	400	84	P	V
	*	5570	89.45	-	-	77.67	34.7	12.21	35.13	400	84	A	V
		5742.32	58.65	-9.55	68.2	46.37	35.15	12.3	35.17	400	84	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

[illegible]



Band 3 5470~5725MHz

WIFI 802.11ax HE160 Partial 996 (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Partial 996/67 CH 114 5570MHz		5434	64.21	-9.79	74	52.6	34.7	12.05	35.14	100	63	P	H
		5464	64.09	-4.11	68.2	52.44	34.7	12.08	35.13	100	63	P	H
		5436.88	47.57	-6.43	54	35.96	34.7	12.05	35.14	100	63	A	H
	*	5570	97.81	-	-	86.03	34.7	12.21	35.13	100	63	P	H
	*	5570	91.43	-	-	79.65	34.7	12.21	35.13	100	63	A	H
		5735.39	65.37	-2.83	68.2	53.13	35.11	12.3	35.17	100	63	P	H
		5441.44	66.63	-7.37	74	55.01	34.7	12.06	35.14	100	241	P	V
		5466.4	63.52	-4.68	68.2	51.86	34.7	12.09	35.13	100	241	P	V
		5459.92	45.26	-8.74	54	33.61	34.7	12.08	35.13	100	241	A	V
	*	5570	96.15	-	-	84.37	34.7	12.21	35.13	100	241	P	V
	*	5570	89.87	-	-	78.09	34.7	12.21	35.13	100	241	A	V
		5761.535	56.91	-11.29	68.2	44.57	35.2	12.31	35.17	100	241	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
9+8		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 144 5720MHz		5359.75	49.17	-24.83	74	37.74	34.62	11.99	35.18	100	90	P	H
		5466.22	48.56	-19.64	68.2	36.9	34.7	12.09	35.13	100	90	P	H
		5412.4	39.4	-14.6	54	27.84	34.7	12.02	35.16	100	90	A	H
	*	5720	112.3	-	-	100.15	35.02	12.29	35.16	100	90	P	H
	*	5720	104.9	-	-	92.75	35.02	12.29	35.16	100	90	A	H
		5850.5	53.78	-14.42	68.2	41.36	35.2	12.4	35.18	100	90	P	H
		5357.02	48.68	-25.32	74	37.26	34.61	11.99	35.18	103	205	P	V
		5469.34	47.51	-20.69	68.2	35.85	34.7	12.09	35.13	103	205	P	V
		5455.3	39.36	-14.64	54	27.72	34.7	12.07	35.13	103	205	A	V
	*	5720	110.35	-	-	98.2	35.02	12.29	35.16	103	205	P	V
	*	5720	103.03	-	-	90.88	35.02	12.29	35.16	103	205	A	V
		5894	50.77	-17.43	68.2	38.29	35.2	12.47	35.19	103	205	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel
WIFI 802.11a (Harmonic @ 3m)

[illegible]



Band 3 - Straddle Channel
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 144 5720MHz		5381.98	49.62	-24.38	74	38.13	34.66	12	35.17	100	90	P	H
		5461.54	49.18	-19.02	68.2	37.53	34.7	12.08	35.13	100	90	P	H
		5459.2	39.68	-14.32	54	28.03	34.7	12.08	35.13	100	90	A	H
	*	5720	112.37	-	-	100.22	35.02	12.29	35.16	100	90	P	H
	*	5720	104.21	-	-	92.06	35.02	12.29	35.16	100	90	A	H
		5856.25	51.24	-16.96	68.2	38.81	35.2	12.41	35.18	100	90	P	H
		5438.53	48.94	-25.06	74	37.33	34.7	12.05	35.14	100	204	P	V
		5467.78	47.46	-20.74	68.2	35.8	34.7	12.09	35.13	100	204	P	V
		5447.89	39.68	-14.32	54	28.05	34.7	12.07	35.14	100	204	A	V
	*	5720	111.14	-	-	98.99	35.02	12.29	35.16	100	204	P	V
	*	5720	102.46	-	-	90.31	35.02	12.29	35.16	100	204	A	V
		5852	50.17	-18.03	68.2	37.74	35.2	12.41	35.18	100	204	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel
WIFI 802.11ax HE20 Full (Harmonic @ 3m)

[illegible]



Band 3 - Straddle Channel
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 142 5710MHz		5394.07	49.1	-24.9	74	37.57	34.69	12.01	35.17	100	91	P	H
		5462.71	48.05	-20.15	68.2	36.4	34.7	12.08	35.13	100	91	P	H
		5454.52	40.32	-13.68	54	28.68	34.7	12.07	35.13	100	91	A	H
	*	5710	109.37	-	-	97.28	34.96	12.29	35.16	100	91	P	H
	*	5710	101.24	-	-	89.15	34.96	12.29	35.16	100	91	A	H
		5879.75	61.37	-6.83	68.2	48.91	35.2	12.45	35.19	100	91	P	H
		5369.89	48.97	-25.03	74	37.52	34.64	11.99	35.18	100	204	P	V
		5461.54	47.94	-20.26	68.2	36.29	34.7	12.08	35.13	100	204	P	V
		5459.98	39.73	-14.27	54	28.08	34.7	12.08	35.13	100	204	A	V
	*	5710	107.3	-	-	95.21	34.96	12.29	35.16	100	204	P	V
	*	5710	99.71	-	-	87.62	34.96	12.29	35.16	100	204	A	V
		5866.25	55.71	-12.49	68.2	43.27	35.2	12.43	35.19	100	204	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 142 5710MHz		11420	46.24	-27.76	74	46.48	38.18	19.27	57.69	-	-	P	H
		17130	49.31	-18.89	68.2	40.53	41.57	23.81	56.6	-	-	P	H
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		11420	45.95	-28.05	74	46.19	38.18	19.27	57.69	-	-	P	V
		17130	48.83	-19.37	68.2	40.05	41.57	23.81	56.6	-	-	P	V
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Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												



Band 3 Straddle Channel
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 138 5690MHz		5458.42	57.45	-16.55	74	45.8	34.7	12.08	35.13	100	90	P	H
		5467.78	58.87	-9.33	68.2	47.21	34.7	12.09	35.13	100	90	P	H
		5448.67	48.34	-5.66	54	36.71	34.7	12.07	35.14	100	90	A	H
	*	5690	105.32	-	-	93.34	34.86	12.28	35.16	100	90	P	H
	*	5690	97.48	-	-	85.5	34.86	12.28	35.16	100	90	A	H
		5850.7	63.93	-4.27	68.2	51.51	35.2	12.4	35.18	100	90	P	H
		5459.2	52.38	-21.62	74	40.73	34.7	12.08	35.13	100	206	P	V
		5468.95	50.96	-17.24	68.2	39.3	34.7	12.09	35.13	100	206	P	V
		5459.98	42.82	-11.18	54	31.17	34.7	12.08	35.13	100	206	A	V
	*	5690	102.83	-	-	90.85	34.86	12.28	35.16	100	206	P	V
	*	5690	95.58	-	-	83.6	34.86	12.28	35.16	100	206	A	V
		5859.7	55.9	-12.3	68.2	43.47	35.2	12.42	35.19	100	206	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel
WIFI 802.11ax HE80 Full (Harmonic @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 138 5690MHz		11380	45.32	-28.68	74	45.67	38.18	19.24	57.77	-	-	P	H
		17070	49.4	-18.8	68.2	40.67	41.63	23.75	56.65	-	-	P	H
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802.11ax HE80 Full CH 138 5690MHz		11380	45.8	-28.2	74	46.15	38.18	19.24	57.77	-	-	P	V
		17070	48.77	-19.43	68.2	40.04	41.63	23.75	56.65	-	-	P	V
													V
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Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												

Emission below 1GHz

WIFI 802.11ax HE40 Full (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
9+8		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE40 Full LF		30	22.3	-17.7	40	26.87	24.57	0.97	30.11	-	-	P	H
		92.64	26.43	-17.07	43.5	39.84	15.07	1.53	30.01	-	-	P	H
		157.98	23.53	-19.97	43.5	34.75	16.61	2.03	29.86	-	-	P	H
		470.8	31.48	-14.52	46	34.24	23.43	3.6	29.79	-	-	P	H
		860	32.18	-13.82	46	27.44	28.83	4.92	29.01	-	-	P	H
		949.6	33.43	-12.57	46	26.61	30.29	5.18	28.65	-	-	P	H
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													H
													H
													H
		30	31.07	-8.93	40	35.64	24.57	0.97	30.11	-	-	P	V
		51.33	28.01	-11.99	40	43.3	13.68	1.06	30.03	-	-	P	V
		85.89	24.81	-15.19	40	39.28	14.1	1.47	30.04	-	-	P	V
		470.8	30.51	-15.49	46	33.27	23.43	3.6	29.79	-	-	P	V
		881.7	32.66	-13.34	46	27.87	28.69	5	28.9	-	-	P	V
		955.2	33.34	-12.66	46	26.22	30.55	5.2	28.63	-	-	P	V
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												V	
Remark	1. No other spurious found.												
	2. All results are PASS against limit line.												
	3. The emission position marked as “-” means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only.												



<TXBF Mode>

Band 1 - 5150~5250MHz

WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
9+8		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE20 Full CH 36 5180MHz		5147.68	68.71	-5.29	74	58.05	34.1	11.84	35.28	100	17	P	H
		5149.5	48.77	-5.23	54	38.11	34.1	11.84	35.28	100	17	A	H
	*	5180	108.91	-	-	98.08	34.22	11.88	35.27	100	17	P	H
	*	5180	99.79	-	-	88.96	34.22	11.88	35.27	100	17	A	H
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													H
		5148.72	60.29	-13.71	74	49.63	34.1	11.84	35.28	100	169	P	V
		5150	49.17	-4.83	54	38.51	34.1	11.84	35.28	100	169	A	V
	*	5180	106.9	-	-	96.07	34.22	11.88	35.27	100	169	P	V
	*	5180	97.23	-	-	86.4	34.22	11.88	35.27	100	169	A	V
802.11ax HE20 Full CH 44 5220MHz													V
													V
		5150	56.01	-17.99	74	45.35	34.1	11.84	35.28	100	16	P	H
		5149.5	45.56	-8.44	54	34.9	34.1	11.84	35.28	100	16	A	H
	*	5220	111.69	-	-	100.65	34.38	11.91	35.25	100	16	P	H
	*	5220	101.71	-	-	90.67	34.38	11.91	35.25	100	16	A	H
		5363.68	48.86	-25.14	74	37.42	34.63	11.99	35.18	100	16	P	H
		5352.48	40.1	-13.9	54	28.7	34.6	11.98	35.18	100	16	A	H
		5148.72	53.57	-20.43	74	42.91	34.1	11.84	35.28	100	162	P	V
		5149.76	44.67	-9.33	54	34.01	34.1	11.84	35.28	100	162	A	V
	*	5220	107.21	-	-	96.17	34.38	11.91	35.25	100	162	P	V
	*	5220	99.99	-	-	88.95	34.38	11.91	35.25	100	162	A	V
		5361.44	47.98	-26.02	74	36.55	34.62	11.99	35.18	100	162	P	V
		5456.08	40.01	-13.99	54	28.37	34.7	12.07	35.13	100	162	A	V



802.11ax HE20 Full CH 48 5240MHz		5149.24	50.95	-23.05	74	40.29	34.1	11.84	35.28	100	17	P	H
		5148.98	42.01	-11.99	54	31.35	34.1	11.84	35.28	100	17	A	H
	*	5240	111.06	-	-	99.92	34.46	11.92	35.24	100	17	P	H
	*	5240	101.45	-	-	90.31	34.46	11.92	35.24	100	17	A	H
		5351.92	48.83	-25.17	74	37.43	34.6	11.98	35.18	100	17	P	H
		5350.52	40.65	-13.35	54	29.25	34.6	11.98	35.18	100	17	A	H
		5145.86	51.09	-22.91	74	40.43	34.1	11.84	35.28	100	138	P	V
		5149.24	42.85	-11.15	54	32.19	34.1	11.84	35.28	100	138	A	V
	*	5240	108.22	-	-	97.08	34.46	11.92	35.24	100	138	P	V
	*	5240	99.19	-	-	88.05	34.46	11.92	35.24	100	138	A	V
		5356.12	48.82	-25.18	74	37.4	34.61	11.99	35.18	100	138	P	V
		5352.76	40.05	-13.95	54	28.64	34.61	11.98	35.18	100	138	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

[illegible]



WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 44 5220MHz		10440	44.17	-24.03	68.2	47.38	37.52	18.48	59.21	-	-	P	H
		15660	46.51	-27.49	74	40.64	40.32	22.67	57.12	-	-	P	H
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		10440	45.03	-23.17	68.2	48.24	37.52	18.48	59.21	-	-	P	V
		15660	45.55	-28.45	74	39.68	40.32	22.67	57.12	-	-	P	V
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WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 48 5240MHz		10480	44.45	-23.75	68.2	47.46	37.64	18.51	59.16	-	-	P	H
		15720	46.74	-27.26	74	40.65	40.46	22.7	57.07	-	-	P	H
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802.11ax HE20 Full CH 48 5240MHz		10480	45.82	-22.38	68.2	48.83	37.64	18.51	59.16	-	-	P	V
		15720	47.12	-26.88	74	41.03	40.46	22.7	57.07	-	-	P	V
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Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												



Band 1 5150~5250MHz

WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 38 5190MHz		5142.22	60.53	-13.47	74	49.89	34.1	11.83	35.29	100	15	P	H
		5146.64	52.37	-1.63	54	41.71	34.1	11.84	35.28	100	15	A	H
	*	5190	104.72	-	-	93.84	34.26	11.89	35.27	100	15	P	H
	*	5190	97.61	-	-	86.73	34.26	11.89	35.27	100	15	A	H
		5430.88	48.38	-25.62	74	36.77	34.7	12.05	35.14	100	15	P	H
		5363.4	39.62	-14.38	54	28.18	34.63	11.99	35.18	100	15	A	H
		5125.58	55.82	-18.18	74	45.2	34.1	11.81	35.29	100	168	P	V
		5140.66	48.29	-5.71	54	37.65	34.1	11.83	35.29	100	168	A	V
	*	5190	101.65	-	-	90.77	34.26	11.89	35.27	100	168	P	V
	*	5190	92.11	-	-	81.23	34.26	11.89	35.27	100	168	A	V
		5384.4	50.46	-23.54	74	38.96	34.67	12	35.17	100	168	P	V
		5448.8	39.5	-14.5	54	27.87	34.7	12.07	35.14	100	168	A	V
802.11ax HE40 Full CH 46 5230MHz		5148.2	63.6	-10.4	74	52.94	34.1	11.84	35.28	100	15	P	H
		5150	52.34	-1.66	54	41.68	34.1	11.84	35.28	100	15	A	H
	*	5230	107.42	-	-	96.32	34.42	11.92	35.24	100	15	P	H
	*	5230	98.73	-	-	87.63	34.42	11.92	35.24	100	15	A	H
		5351.08	59.62	-14.38	74	48.22	34.6	11.98	35.18	100	15	P	H
		5350.24	48.74	-5.26	54	37.34	34.6	11.98	35.18	100	15	A	H
		5137.02	58	-16	74	47.36	34.1	11.83	35.29	100	167	P	V
		5145.6	48.15	-5.85	54	37.49	34.1	11.84	35.28	100	167	A	V
	*	5230	104.23	-	-	93.13	34.42	11.92	35.24	100	167	P	V
	*	5230	95.38	-	-	84.28	34.42	11.92	35.24	100	167	A	V
		5379.08	53.28	-20.72	74	41.79	34.66	12	35.17	100	167	P	V
		5350.24	44.43	-9.57	54	33.03	34.6	11.98	35.18	100	167	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ax HE40 Full (Harmonic @ 3m)

[illegible]

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 46 5230MHz		10460	44.71	-23.49	68.2	47.82	37.58	18.5	59.19	-	-	P	H
		15690	45.84	-28.16	74	39.87	40.38	22.69	57.1	-	-	P	H
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Band 1 5150~5250MHz

WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 42 5210MHz		5138.06	62.99	-11.01	74	52.35	34.1	11.83	35.29	100	16	P	H
		5148.98	48.85	-5.15	54	38.19	34.1	11.84	35.28	100	16	A	H
	*	5210	100.51	-	-	89.51	34.34	11.91	35.25	100	16	P	H
	*	5210	90.69	-	-	79.69	34.34	11.91	35.25	100	16	A	H
		5370.12	61.03	-12.97	74	49.58	34.64	11.99	35.18	100	16	P	H
		5353.04	43.87	-10.13	54	32.46	34.61	11.98	35.18	100	16	A	H
		5144.56	60.99	-13.01	74	50.33	34.1	11.84	35.28	100	139	P	V
		5142.74	48.3	-5.7	54	37.66	34.1	11.83	35.29	100	139	A	V
	*	5210	97.99	-	-	86.99	34.34	11.91	35.25	100	139	P	V
	*	5210	89.03	-	-	78.03	34.34	11.91	35.25	100	139	A	V
		5352.48	50.93	-23.07	74	39.53	34.6	11.98	35.18	100	139	P	V
		5350.8	42.32	-11.68	54	30.92	34.6	11.98	35.18	100	139	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ax HE80 Full (Harmonic @ 3m)

[illegible]



Band 2 - 5250~5350MHz

WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 52 5260MHz		5148.05	54.59	-19.41	74	43.93	34.1	11.84	35.28	100	19	P	H
		5143.5	42.38	-11.62	54	31.73	34.1	11.84	35.29	100	19	A	H
	*	5260	111.32	-	-	100.1	34.52	11.93	35.23	100	19	P	H
	*	5260	102.41	-	-	91.19	34.52	11.93	35.23	100	19	A	H
		5355.84	62.56	-11.44	74	51.14	34.61	11.99	35.18	100	19	P	H
		5350.56	48.08	-5.92	54	36.68	34.6	11.98	35.18	100	19	A	H
		5148.4	50.87	-23.13	74	40.21	34.1	11.84	35.28	100	167	P	V
		5111.3	41.21	-12.79	54	30.61	34.1	11.8	35.3	100	167	A	V
	*	5260	107.42	-	-	96.2	34.52	11.93	35.23	100	167	P	V
	*	5260	98.92	-	-	87.7	34.52	11.93	35.23	100	167	A	V
		5353.44	56.75	-17.25	74	45.34	34.61	11.98	35.18	100	167	P	V
		5353.92	43.49	-10.51	54	32.08	34.61	11.98	35.18	100	167	A	V
802.11ax HE20 Full CH 60 5300MHz		5066.5	49.79	-24.21	74	39.34	34.03	11.75	35.33	100	17	P	H
		5145.95	41.28	-12.72	54	30.62	34.1	11.84	35.28	100	17	A	H
	*	5300	110.38	-	-	99.03	34.6	11.95	35.2	100	17	P	H
	*	5300	101.25	-	-	89.9	34.6	11.95	35.2	100	17	A	H
		5352.96	54.23	-19.77	74	42.82	34.61	11.98	35.18	100	17	P	H
		5350.56	44.12	-9.88	54	32.72	34.6	11.98	35.18	100	17	A	H
		5061.25	49.67	-24.33	74	39.24	34.02	11.74	35.33	100	166	P	V
		5143.5	40.66	-13.34	54	30.01	34.1	11.84	35.29	100	166	A	V
	*	5300	106.65	-	-	95.3	34.6	11.95	35.2	100	166	P	V
	*	5300	97.85	-	-	86.5	34.6	11.95	35.2	100	166	A	V
		5351.04	51.94	-22.06	74	40.54	34.6	11.98	35.18	100	166	P	V
		5350.8	42.58	-11.42	54	31.18	34.6	11.98	35.18	100	166	A	V



802.11ax HE20 Full CH 64 5320MHz	*	5320	111.11	-	-	99.74	34.6	11.97	35.2	100	20	P	H
	*	5320	101.42	-	-	90.05	34.6	11.97	35.2	100	20	A	H
		5354.4	63.34	-10.66	74	51.93	34.61	11.98	35.18	100	20	P	H
		5350.4	51.44	-2.56	54	40.04	34.6	11.98	35.18	100	20	A	H
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	*	5320	106.26	-	-	94.89	34.6	11.97	35.2	100	139	P	V
	*	5320	97.46	-	-	86.09	34.6	11.97	35.2	100	139	A	V
		5354.56	65.11	-8.89	74	53.69	34.61	11.99	35.18	100	139	P	V
		5350.08	51.33	-2.67	54	39.93	34.6	11.98	35.18	100	139	A	V
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Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

[illegible]



WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 60 5300MHz		10600	43.5	-30.5	74	46.4	37.5	18.62	59.02	-	-	P	H
		15900	47.93	-26.07	74	41.14	40.9	22.81	56.92	-	-	P	H
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		10600	43.94	-30.06	74	46.84	37.5	18.62	59.02	-	-	P	V
		15900	47.63	-26.37	74	40.84	40.9	22.81	56.92	-	-	P	V
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WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 64 5320MHz		10640	43.85	-30.15	74	46.68	37.5	18.65	58.98	-	-	P	H
		15960	45.75	-28.25	74	38.8	40.96	22.85	56.86	-	-	P	H
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802.11ax HE20 Full CH 64 5320MHz		10640	44.65	-29.35	74	47.48	37.5	18.65	58.98	-	-	P	V
		15960	45.91	-28.09	74	38.96	40.96	22.85	56.86	-	-	P	V
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Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												



Band 2 5250~5350MHz

WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 54 5270MHz		5128.1	51.3	-22.7	74	40.67	34.1	11.82	35.29	115	15	P	H
		5149.1	48.98	-5.02	54	38.32	34.1	11.84	35.28	115	15	A	H
	*	5270	106.77	-	-	95.52	34.54	11.94	35.23	115	15	P	H
	*	5270	98.87	-	-	87.62	34.54	11.94	35.23	115	15	A	H
		5359.2	57.24	-16.76	74	45.81	34.62	11.99	35.18	115	15	P	H
		5354.64	52.53	-1.47	54	41.11	34.61	11.99	35.18	115	15	A	H
		5142.8	55.26	-18.74	74	44.62	34.1	11.83	35.29	100	139	P	V
		5135.45	47.16	-6.84	54	36.52	34.1	11.83	35.29	100	139	A	V
	*	5270	105.05	-	-	93.8	34.54	11.94	35.23	100	139	P	V
	*	5270	95.45	-	-	84.2	34.54	11.94	35.23	100	139	A	V
		5359.92	59.24	-14.76	74	47.81	34.62	11.99	35.18	100	139	P	V
		5361.84	50.4	-3.6	54	38.97	34.62	11.99	35.18	100	139	A	V
802.11ax HE40 Full CH 62 5310MHz		5080.85	48.83	-25.17	74	38.32	34.06	11.76	35.31	100	20	P	H
		5123.9	40.73	-13.27	54	30.11	34.1	11.81	35.29	100	20	A	H
	*	5310	106.38	-	-	95.02	34.6	11.96	35.2	100	20	P	H
		5356.32	55.47	-18.53	74	44.05	34.61	11.99	35.18	100	20	P	H
		5376.48	50.05	-3.95	54	38.57	34.65	12	35.17	100	20	A	H
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		5103.6	49.06	-24.94	74	38.47	34.1	11.79	35.3	100	166	P	V
		5145.95	40.32	-13.68	54	29.66	34.1	11.84	35.28	100	166	A	V
	*	5310	100.91	-	-	89.55	34.6	11.96	35.2	100	166	P	V
	*	5310	92.96	-	-	81.6	34.6	11.96	35.2	100	166	A	V
		5360.64	50.93	-23.07	74	39.5	34.62	11.99	35.18	100	166	P	V
		5351.28	48.91	-5.09	54	37.51	34.6	11.98	35.18	100	166	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

[illegible]

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 62 5310MHz		10620	43.44	-30.56	74	46.31	37.5	18.63	59	-	-	P	H
		15930	47.17	-26.83	74	40.29	40.93	22.84	56.89	-	-	P	H
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802.11ax HE40 Full CH 62 5310MHz		10620	43.77	-30.23	74	46.64	37.5	18.63	59	-	-	P	V
		15930	47.15	-26.85	74	40.27	40.93	22.84	56.89	-	-	P	V
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Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												


Band 2 5250~5350MHz
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 58 5290MHz		5149.1	49.52	-24.48	74	38.86	34.1	11.84	35.28	119	17	P	H
		5149.1	47.7	-6.3	54	37.04	34.1	11.84	35.28	119	17	A	H
	*	5290	104.17	-	-	92.86	34.58	11.95	35.22	119	17	P	H
	*	5290	94.41	-	-	83.1	34.58	11.95	35.22	119	17	A	H
		5351.28	60.7	-13.3	74	49.3	34.6	11.98	35.18	119	17	P	H
		5350.8	52.27	-1.73	54	40.87	34.6	11.98	35.18	119	17	A	H
		5145.6	51.95	-22.05	74	41.29	34.1	11.84	35.28	100	138	P	V
		5145.6	42.83	-11.17	54	32.17	34.1	11.84	35.28	100	138	A	V
	*	5290	100.59	-	-	89.28	34.58	11.95	35.22	100	138	P	V
	*	5290	90.58	-	-	79.27	34.58	11.95	35.22	100	138	A	V
		5358.24	60.79	-13.21	74	49.36	34.62	11.99	35.18	100	138	P	V
		5353.92	49.54	-4.46	54	38.13	34.61	11.98	35.18	100	138	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11ax HE80 Full (Harmonic @ 3m)

[illegible]



Band 2 5250~5350MHz

WIFI 802.11ax HE160 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Full CH 50 5250MHz		5095.42	59.68	-14.32	74	49.11	34.09	11.78	35.3	100	17	P	H
		5117.78	51.11	-2.89	54	40.5	34.1	11.81	35.3	100	17	A	H
	*	5250	99.56	-	-	88.36	34.5	11.93	35.23	100	17	P	H
	*	5250	89.31	-	-	78.11	34.5	11.93	35.23	100	17	A	H
		5371.52	56.93	-17.07	74	45.48	34.64	11.99	35.18	100	17	P	H
		5399.52	50.83	-3.17	54	39.28	34.7	12.01	35.16	100	17	A	H
		5111.54	57.68	-16.32	74	47.08	34.1	11.8	35.3	100	150	P	V
		5117.52	50.39	-3.61	54	39.78	34.1	11.81	35.3	100	150	A	V
	*	5250	95.1	-	-	83.9	34.5	11.93	35.23	100	150	P	V
	*	5250	86.4	-	-	75.2	34.5	11.93	35.23	100	150	A	V
		5406.52	61.85	-12.15	74	50.29	34.7	12.02	35.16	100	150	P	V
		5392.24	49.36	-4.64	54	37.84	34.68	12.01	35.17	100	150	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ax HE160 Full (Harmonic @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Full CH 50 5250MHz		10500	44.71	-23.49	68.2	47.61	37.7	18.54	59.14	-	-	P	H
		15750	46.34	-27.66	74	40.11	40.55	22.72	57.04	-	-	P	H
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		10500	43.69	-24.51	68.2	46.59	37.7	18.54	59.14	-	-	P	V
		15750	46.92	-27.08	74	40.69	40.55	22.72	57.04	-	-	P	V
													V
													V
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Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												



Band 3 - 5470~5725MHz

WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 100 5500MHz		5455.44	59.76	-14.24	74	48.12	34.7	12.07	35.13	100	27	P	H
		5468.08	65.01	-3.19	68.2	53.35	34.7	12.09	35.13	100	27	P	H
		5460	51.21	-2.79	54	39.56	34.7	12.08	35.13	100	27	A	H
	*	5500	110.34	-	-	98.64	34.7	12.12	35.12	100	27	P	H
	*	5500	102.34	-	-	90.64	34.7	12.12	35.12	100	27	A	H
		5459.92	54.01	-19.99	74	42.36	34.7	12.08	35.13	100	91	P	V
		5466	57.47	-10.73	68.2	45.81	34.7	12.09	35.13	100	91	P	V
		5459.92	45.66	-8.34	54	34.01	34.7	12.08	35.13	100	91	A	V
	*	5500	103.81	-	-	92.11	34.7	12.12	35.12	100	91	P	V
	*	5500	95.33	-	-	83.63	34.7	12.12	35.12	100	91	A	V
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802.11ax HE20 Full CH 116 5580MHz		5429.92	49.28	-24.72	74	37.68	34.7	12.04	35.14	100	36	P	H
		5462.32	48.03	-20.17	68.2	36.38	34.7	12.08	35.13	100	36	P	H
		5434.48	41.65	-12.35	54	30.04	34.7	12.05	35.14	100	36	A	H
	*	5580	110.97	-	-	99.19	34.7	12.22	35.14	100	36	P	H
	*	5580	102.51	-	-	90.73	34.7	12.22	35.14	100	36	A	H
		5743.58	49.04	-19.16	68.2	36.75	35.16	12.3	35.17	100	36	P	H
		5400.64	49.33	-24.67	74	37.78	34.7	12.01	35.16	100	182	P	V
		5463.04	50.75	-17.45	68.2	39.1	34.7	12.08	35.13	100	182	P	V
		5454.64	41.02	-12.98	54	29.38	34.7	12.07	35.13	100	182	A	V
	*	5580	107.22	-	-	95.44	34.7	12.22	35.14	100	182	P	V
	*	5580	98.78	-	-	87	34.7	12.22	35.14	100	182	A	V
		5759.645	49.96	-18.24	68.2	37.62	35.2	12.31	35.17	100	182	P	V



802.11ax HE20 Full CH 140 5700MHz	*	5700	107.41	-	-	95.39	34.9	12.28	35.16	112	34	P	H
	*	5700	99.25	-	-	87.23	34.9	12.28	35.16	112	34	A	H
		5729.16	64.93	-3.27	68.2	52.72	35.07	12.3	35.16	112	34	P	H
													H
													H
													H
	*	5700	105.82	-	-	93.8	34.9	12.28	35.16	112	175	P	V
	*	5700	96.94	-	-	84.92	34.9	12.28	35.16	112	175	A	V
		5725.32	56.37	-11.83	68.2	44.18	35.05	12.3	35.16	112	175	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**Band 3 5470~5725MHz****WIFI 802.11ax HE20 (Harmonic @ 3m)**

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 100 5500MHz		11000	45.02	-28.98	74	46.65	38	18.93	58.56	-	-	P	H
		16500	48.32	-19.88	68.2	39.57	42.1	23.29	56.64	-	-	P	H
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													H
													H
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													H
													H
													H
													H
													H
		11000	44.68	-29.32	74	46.31	38	18.93	58.56	-	-	P	V
		16500	48.17	-20.03	68.2	39.42	42.1	23.29	56.64	-	-	P	V
													V
													V
													V
													V
													V
													V

[illegible]



Band 3 5470~5725MHz

WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 102 5510MHz		5435.92	54.48	-19.52	74	42.87	34.7	12.05	35.14	100	35	P	H
		5462.08	61.45	-6.75	68.2	49.8	34.7	12.08	35.13	100	35	P	H
		5438.32	48.62	-5.38	54	37.01	34.7	12.05	35.14	100	35	A	H
	*	5510	104	-	-	92.28	34.7	12.14	35.12	100	35	P	H
	*	5510	95.41	-	-	83.69	34.7	12.14	35.12	100	35	A	H
		5760.275	49.48	-18.72	68.2	37.14	35.2	12.31	35.17	100	35	P	H
		5435.2	50.48	-23.52	74	38.87	34.7	12.05	35.14	105	182	P	V
		5466.64	50.57	-17.63	68.2	38.91	34.7	12.09	35.13	105	182	P	V
		5456.32	47.03	-6.97	54	35.39	34.7	12.07	35.13	105	182	A	V
	*	5510	99.97	-	-	88.25	34.7	12.14	35.12	105	182	P	V
	*	5510	91.66	-	-	79.94	34.7	12.14	35.12	105	182	A	V
		5759.645	52.55	-15.65	68.2	40.21	35.2	12.31	35.17	105	182	P	V
802.11ax HE40 Full CH 110 5550MHz		5452.96	62.89	-11.11	74	51.25	34.7	12.07	35.13	100	34	P	H
		5461.12	62.65	-5.55	68.2	51	34.7	12.08	35.13	100	34	P	H
		5459.68	52.96	-1.04	54	41.31	34.7	12.08	35.13	100	34	A	H
	*	5550	108.28	-	-	96.53	34.7	12.18	35.13	100	34	P	H
	*	5550	99.36	-	-	87.61	34.7	12.18	35.13	100	34	A	H
		5737.28	53.79	-14.41	68.2	41.54	35.12	12.3	35.17	100	34	P	H
		5455.84	56.14	-17.86	74	44.5	34.7	12.07	35.13	100	183	P	V
		5469.04	58.27	-9.93	68.2	46.61	34.7	12.09	35.13	100	183	P	V
		5459.68	45.98	-8.02	54	34.33	34.7	12.08	35.13	100	183	A	V
	*	5550	102.8	-	-	91.05	34.7	12.18	35.13	100	183	P	V
	*	5550	95.03	-	-	83.28	34.7	12.18	35.13	100	183	A	V
		5760.275	51.18	-17.02	68.2	38.84	35.2	12.31	35.17	100	183	P	V



802.11ax HE40 Full CH 134 5670MHz		5455	50.86	-23.14	74	39.22	34.7	12.07	35.13	100	64	P	H
		5462.35	48.99	-19.21	68.2	37.34	34.7	12.08	35.13	100	64	P	H
		5458.5	40.99	-13.01	54	29.34	34.7	12.08	35.13	100	64	A	H
	*	5670	108.08	-	-	96.18	34.78	12.27	35.15	100	64	P	H
	*	5670	99.67	-	-	87.77	34.78	12.27	35.15	100	64	A	H
		5729.825	64.91	-3.29	68.2	52.69	35.08	12.3	35.16	100	64	P	H
		5421.75	49.32	-24.68	74	37.74	34.7	12.04	35.16	100	177	P	V
		5464.1	48.27	-19.93	68.2	36.62	34.7	12.08	35.13	100	177	P	V
		5457.8	39.84	-14.16	54	28.19	34.7	12.08	35.13	100	177	A	V
	*	5670	104.45	-	-	92.55	34.78	12.27	35.15	100	177	P	V
	*	5670	95.6	-	-	83.7	34.78	12.27	35.15	100	177	A	V
		5726.15	59.29	-8.91	68.2	47.09	35.06	12.3	35.16	100	177	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

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Report No. : FR222202E

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Band 3 5470~5725MHz

WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 106 5530MHz		5451.28	63.49	-10.51	74	51.85	34.7	12.07	35.13	100	26	P	H
		5465.92	64.41	-3.79	68.2	52.75	34.7	12.09	35.13	100	26	P	H
		5459.92	46.69	-7.31	54	35.04	34.7	12.08	35.13	100	26	A	H
	*	5530	101.93	-	-	90.2	34.7	12.16	35.13	100	26	P	H
	*	5530	92.76	-	-	81.03	34.7	12.16	35.13	100	26	A	H
		5728.775	50.01	-18.19	68.2	37.8	35.07	12.3	35.16	100	26	P	H
		5444.56	52.69	-21.31	74	41.07	34.7	12.06	35.14	100	243	P	V
		5467.36	53.9	-14.3	68.2	42.24	34.7	12.09	35.13	100	243	P	V
		5454.4	44.82	-9.18	54	33.18	34.7	12.07	35.13	100	243	A	V
	*	5530	97.83	-	-	86.1	34.7	12.16	35.13	100	243	P	V
	*	5530	88.93	-	-	77.2	34.7	12.16	35.13	100	243	A	V
		5759.645	49.89	-18.31	68.2	37.55	35.2	12.31	35.17	100	243	P	V
802.11ax HE80 Full CH 122 5610MHz		5442.75	59.06	-14.94	74	47.44	34.7	12.06	35.14	100	27	P	H
		5467.6	60.69	-7.51	68.2	49.03	34.7	12.09	35.13	100	27	P	H
		5458.85	51.4	-2.6	54	39.75	34.7	12.08	35.13	100	27	A	H
	*	5610	104.83	-	-	93.03	34.7	12.24	35.14	100	27	P	H
	*	5610	96.6	-	-	84.8	34.7	12.24	35.14	100	27	A	H
		5731.4	65.91	-2.29	68.2	53.69	35.09	12.3	35.17	100	27	P	H
		5455.35	57.21	-16.79	74	45.57	34.7	12.07	35.13	100	180	P	V
		5462.7	56.72	-11.48	68.2	45.07	34.7	12.08	35.13	100	180	P	V
		5459.9	46.35	-7.65	54	34.7	34.7	12.08	35.13	100	180	A	V
	*	5610	101.39	-	-	89.59	34.7	12.24	35.14	100	180	P	V
	*	5610	93.2	-	-	81.4	34.7	12.24	35.14	100	180	A	V
		5725.1	61.28	-6.92	68.2	49.09	35.05	12.3	35.16	100	180	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**Band 3 5470~5725MHz****WIFI 802.11ax HE80 Full (Harmonic @ 3m)**

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 106 5530MHz		11060	44.89	-29.11	74	46.47	37.88	18.98	58.44	-	-	P	H
		16590	48.2	-20	68.2	39.75	41.74	23.36	56.65	-	-	P	H
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													H
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		11060	45.64	-28.36	74	47.22	37.88	18.98	58.44	-	-	P	V
		16590	49.02	-19.18	68.2	40.57	41.74	23.36	56.65	-	-	P	V
													V
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[illegible]



Band 3 5470~5725MHz

WIFI 802.11ax HE160 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Full CH 114 5570MHz		5453.95	53.48	-20.52	74	41.84	34.7	12.07	35.13	100	28	P	H
		5467.95	53.11	-15.09	68.2	41.45	34.7	12.09	35.13	100	28	P	H
		5434.7	49.29	-4.71	54	37.68	34.7	12.05	35.14	100	28	A	H
	*	5570	97.05	-	-	85.27	34.7	12.21	35.13	100	28	P	H
	*	5570	88.37	-	-	76.59	34.7	12.21	35.13	100	28	A	H
		5759.925	54.64	-13.56	68.2	42.3	35.2	12.31	35.17	100	28	P	H
		5430.5	50.78	-23.22	74	39.17	34.7	12.05	35.14	100	236	P	V
		5467.6	49.79	-18.41	68.2	38.13	34.7	12.09	35.13	100	236	P	V
		5434.7	46.85	-7.15	54	35.24	34.7	12.05	35.14	100	236	A	V
	*	5570	93.87	-	-	82.09	34.7	12.21	35.13	100	236	P	V
	*	5570	85.07	-	-	73.29	34.7	12.21	35.13	100	236	A	V
		5759.925	51.62	-16.58	68.2	39.28	35.2	12.31	35.17	100	236	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

[illegible]



Band 3 - Straddle Channel

WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
9+8		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE20 Full CH 144 5720MHz		5379.25	48.6	-25.4	74	37.11	34.66	12	35.17	100	65	P	H
		5463.1	48.24	-19.96	68.2	36.59	34.7	12.08	35.13	100	65	P	H
		5406.55	39.97	-14.03	54	28.41	34.7	12.02	35.16	100	65	A	H
	*	5720	112.66	-	-	100.51	35.02	12.29	35.16	100	65	P	H
	*	5720	103.65	-	-	91.5	35.02	12.29	35.16	100	65	A	H
		5858.25	58.52	-9.68	68.2	46.1	35.2	12.41	35.19	100	65	P	H
		5435.41	48.95	-25.05	74	37.34	34.7	12.05	35.14	400	86	P	V
		5468.17	47.76	-20.44	68.2	36.1	34.7	12.09	35.13	400	86	P	V
		5459.59	40.15	-13.85	54	28.5	34.7	12.08	35.13	400	86	A	V
	*	5720	107.58	-	-	95.43	35.02	12.29	35.16	400	86	P	V
	*	5720	99.3	-	-	87.15	35.02	12.29	35.16	400	86	A	V
		5866.25	53.88	-14.32	68.2	41.44	35.2	12.43	35.19	400	86	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 144 5720MHz		11440	44.92	-29.08	74	45.12	38.16	19.28	57.64	-	-	P	H
		17160	48.67	-19.53	68.2	39.87	41.54	23.83	56.57	-	-	P	H
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		11440	45.57	-28.43	74	45.77	38.16	19.28	57.64	-	-	P	V
		17160	49.21	-18.99	68.2	40.41	41.54	23.83	56.57	-	-	P	V
													V
													V
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													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												



Band 3 - Straddle Channel
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 142 5710MHz		5448.28	48.45	-25.55	74	36.82	34.7	12.07	35.14	100	65	P	H
		5467.39	49.1	-19.1	68.2	37.44	34.7	12.09	35.13	100	65	P	H
		5452.57	40.34	-13.66	54	28.7	34.7	12.07	35.13	100	65	A	H
	*	5710	109.37	-	-	97.28	34.96	12.29	35.16	100	65	P	H
	*	5710	100.96	-	-	88.87	34.96	12.29	35.16	100	65	A	H
		5857.25	56.75	-11.45	68.2	44.32	35.2	12.41	35.18	100	65	P	H
		5405.77	48.41	-25.59	74	36.85	34.7	12.02	35.16	383	89	P	V
		5461.15	47.5	-20.7	68.2	35.85	34.7	12.08	35.13	383	89	P	V
		5458.81	39.76	-14.24	54	28.11	34.7	12.08	35.13	383	89	A	V
	*	5710	105.76	-	-	93.67	34.96	12.29	35.16	383	89	P	V
	*	5710	97.1	-	-	85.01	34.96	12.29	35.16	383	89	A	V
		5859	54.75	-13.45	68.2	42.32	35.2	12.42	35.19	383	89	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel
WIFI 802.11ax HE40 Full (Harmonic @ 3m)



Band 3 Straddle Channel
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 138 5690MHz		5455.69	60.35	-13.65	74	48.71	34.7	12.07	35.13	100	65	P	H
		5465.44	59.28	-8.92	68.2	47.62	34.7	12.09	35.13	100	65	P	H
		5456.86	47.58	-6.42	54	35.93	34.7	12.08	35.13	100	65	A	H
	*	5690	105.97	-	-	93.99	34.86	12.28	35.16	100	65	P	H
	*	5690	97.52	-	-	85.54	34.86	12.28	35.16	100	65	A	H
		5864.5	64.63	-3.57	68.2	52.2	35.2	12.42	35.19	100	65	P	H
		5426.05	49.8	-24.2	74	38.2	34.7	12.04	35.14	388	89	P	V
		5466.61	46.91	-21.29	68.2	35.25	34.7	12.09	35.13	388	89	P	V
		5449.06	39.83	-14.17	54	28.2	34.7	12.07	35.14	388	89	A	V
	*	5690	102.02	-	-	90.04	34.86	12.28	35.16	388	89	P	V
	*	5690	94.26	-	-	82.28	34.86	12.28	35.16	388	89	A	V
		5937.1	52.4	-15.8	68.2	39.94	35.13	12.53	35.2	388	89	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11ax HE80 Full (Harmonic @ 3m)

WIFI Ant. 9+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 138 5690MHz		11380	44.53	-29.47	74	44.88	38.18	19.24	57.77	-	-	P	H
		17070	48.14	-20.06	68.2	39.41	41.63	23.75	56.65	-	-	P	H
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													H
													H
		11380	44.47	-29.53	74	44.82	38.18	19.24	57.77	-	-	P	V
		17070	48.75	-19.45	68.2	40.02	41.63	23.75	56.65	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
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													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												

Emission below 1GHz

WIFI 802.11ax HE40 Full (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
9+8		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE40 Full LF		30.54	22.07	-17.93	40	27.05	24.17	0.96	30.11	-	-	P	H
		91.29	28.51	-14.99	43.5	42.22	14.79	1.52	30.02	-	-	P	H
		157.17	23.97	-19.53	43.5	35.14	16.66	2.03	29.86	-	-	P	H
		857.2	32.02	-13.98	46	27.31	28.82	4.91	29.02	-	-	P	H
		939.8	32.57	-13.43	46	26.36	29.73	5.16	28.68	-	-	P	H
		959.4	33.74	-12.26	46	26.35	30.8	5.21	28.62	-	-	P	H
													H
													H
													H
													H
													H
													H
		30	29.5	-10.5	40	34.07	24.57	0.97	30.11	-	-	P	V
		50.79	27.98	-12.02	40	43.01	13.95	1.05	30.03	-	-	P	V
		91.29	26.63	-16.87	43.5	40.34	14.79	1.52	30.02	-	-	P	V
		470.8	29.93	-16.07	46	32.69	23.43	3.6	29.79	-	-	P	V
		886.6	32.26	-13.74	46	27.47	28.66	5.01	28.88	-	-	P	V
		959.4	34.58	-11.42	46	27.19	30.8	5.21	28.62	-	-	P	V
													V
													V
												V	
												V	
												V	
												V	
Remark	1. No other spurious found. 2. All results are PASS against limit line. 3. The emission position marked as “-” means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only.												



Note symbol

*	Fundamental Frequency which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is over limit line.
P/A	P eak or A verage
H/V	H orizontal or V ertical

A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
9+8		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a		5150	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 36		5150	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H
5180MHz													

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 5150MHz:

1. Level(dBμV/m)
 = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
 = 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)
 = 55.45 (dBμV/m)
2. Over Limit(dB)
 = Level(dBμV/m) – Limit Line(dBμV/m)
 = 55.45(dBμV/m) – 74(dBμV/m)
 = -18.55(dB)

For Average Limit @ 5150MHz:

1. Level(dBμV/m)
 = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
 = 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)
 = 43.54 (dBμV/m)
2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)
 = 43.54(dBμV/m) – 54(dBμV/m)
 = -10.46(dB)

Both peak and average measured complies with the limit line, so test result is “PASS”.



Appendix C. Radiated Spurious Emission Plots

Test Engineer :	Jesse Wang, Stan Hsieh and Ken Wu	Temperature :	20.1~26.2°C
		Relative Humidity :	52.5~61.6%

Note symbol

-L	Low channel location
-R	High channel location



<CDD Mode>

Band 1 - 5150~5250MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
9+8	Horizontal	Fundamental
Peak	Site : 03CH07-HY Condition : : PEAK_80_3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Site : 03CH07-HY Condition : : PEAK(FUND) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	Site : 03CH07-HY Condition : : AVG_80_3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto	Left blank

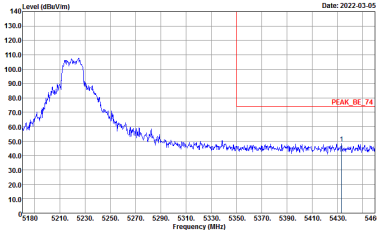
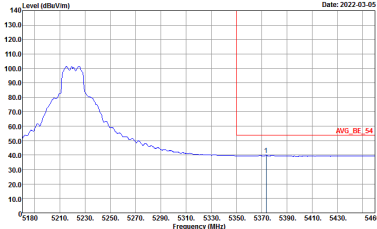


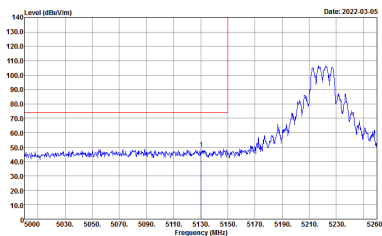
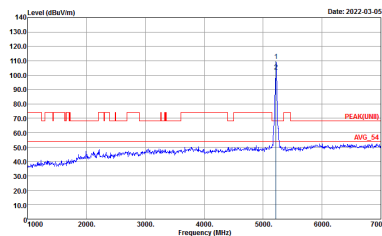
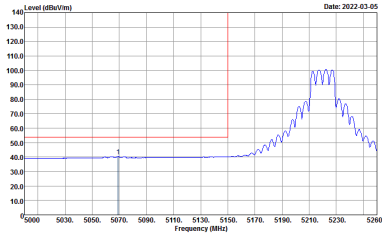
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
9+8	Vertical	Fundamental
Peak		
Avg.		Left blank



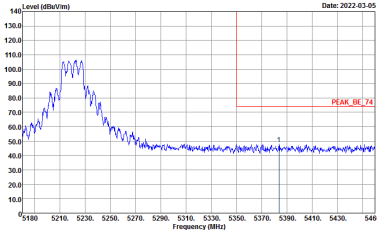
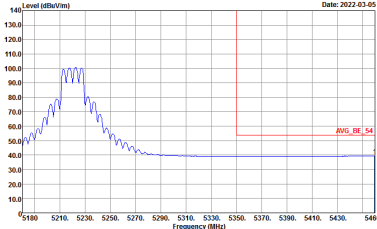
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
9+8	Horizontal	Fundamental
Peak		
Avg.		Left blank



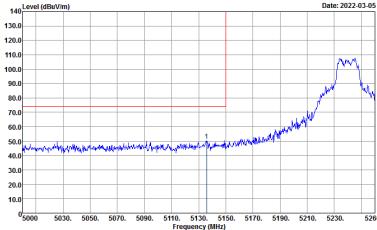
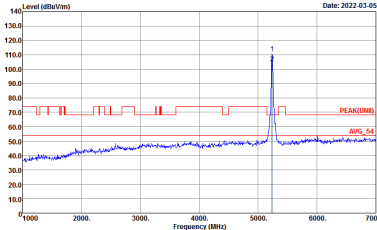
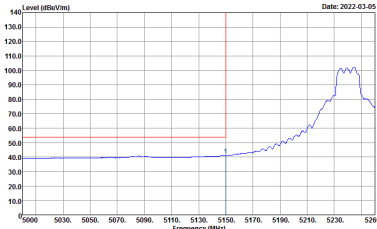
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
9+8	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : : PSIAK_RE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	Left blank
Avg.	 Site : 03CH07-HY Condition : : AVG_RE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
9+8	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_RE_74.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : PEAK(FUND) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : AVG_RE_54.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.010kHz SWT:Auto	Left blank

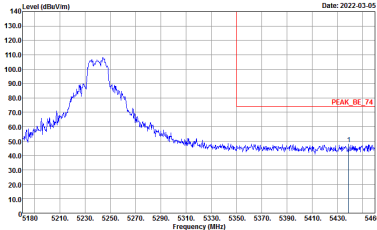
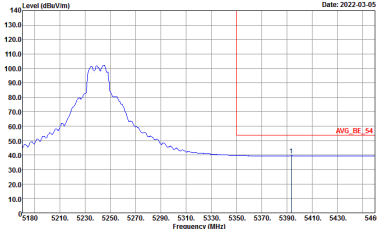


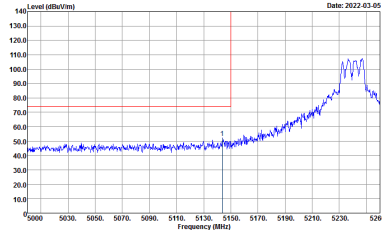
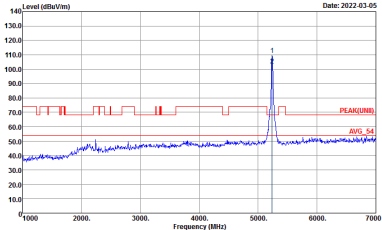
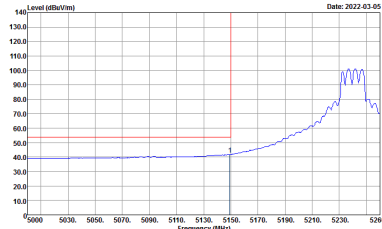
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
9+8	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : : PSIAK_RE_74.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : : AVG_RE_54.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank



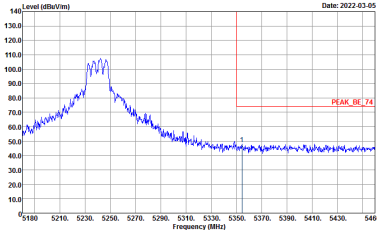
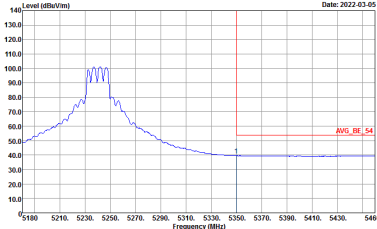
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
9+8	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_RE_74.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : PEAK(FUN) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : AVG_RE_54.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto	Left blank



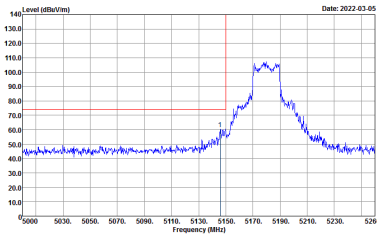
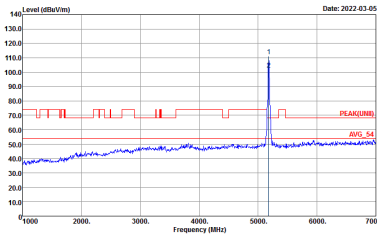
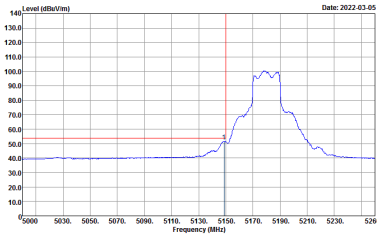
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
9+8	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : : PSK_RL_74.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : : AVG_RL_54.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto	Left blank

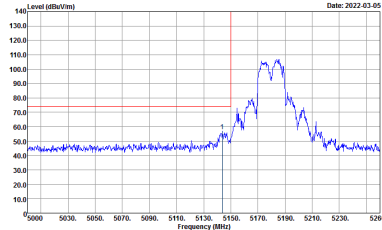
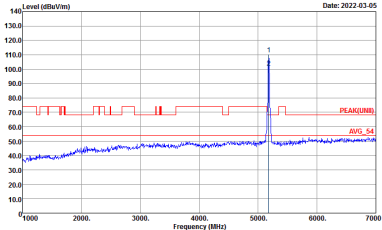
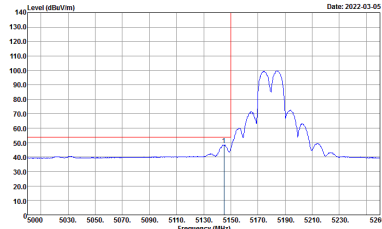
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
9+8	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PSK_802.11a 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : PSK_802.11a 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : AVG_802.11a 3m HF_ANT_00075962 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank



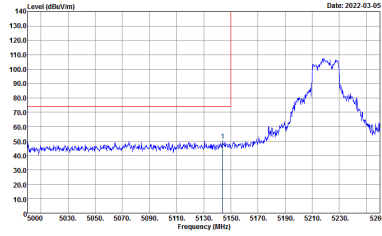
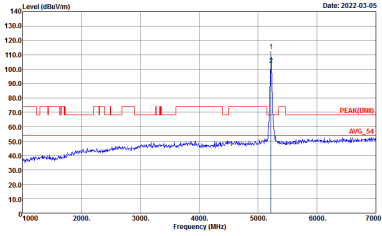
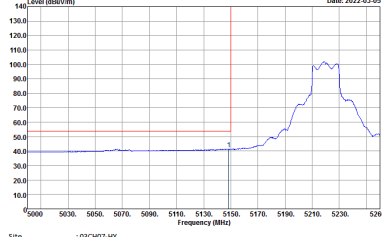
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
9+8	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : : PSIAK_RE_74.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : : AVG_RE_54.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.0100kHz SWT:Auto	Left blank

Band 1 5150~5250MHz
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

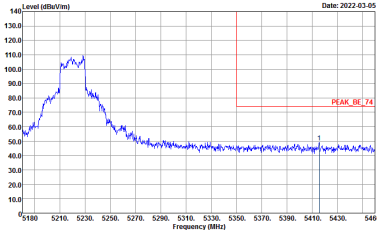
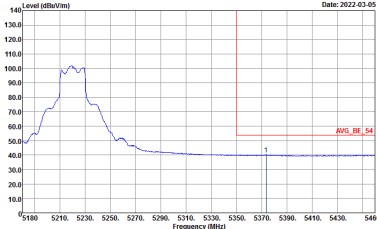
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH36 5180MHz	
9+8	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : PEAK(UNIT) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : AVG_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH36 5180MHz	
9+8	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_RE_74.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : PEAK(FUN) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : AVG_RE_54.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto	Left blank

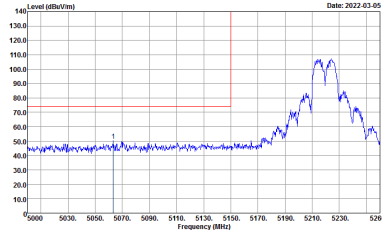
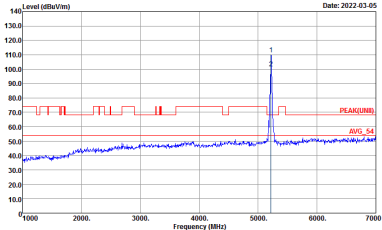
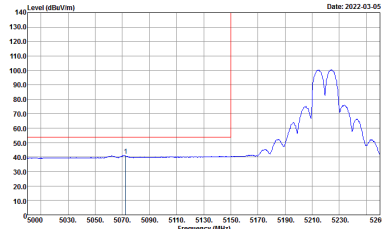


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH44 5220MHz - L	
9+8	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_RE_74.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : PEAK(FUN) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : AVG_RE_54.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto	Left blank

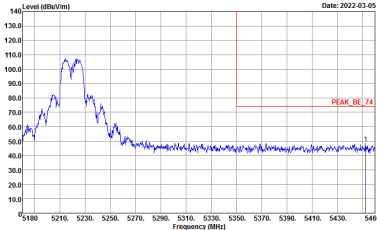
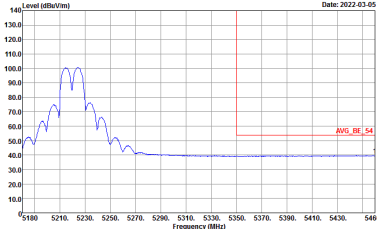


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH44 5220MHz - R	
9+8	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : : PEAK_RE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : : AVG_RE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank

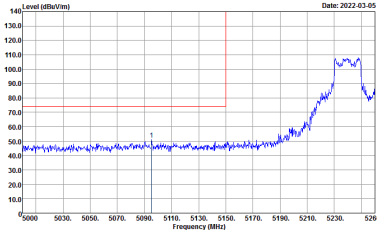
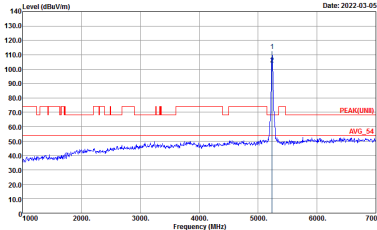
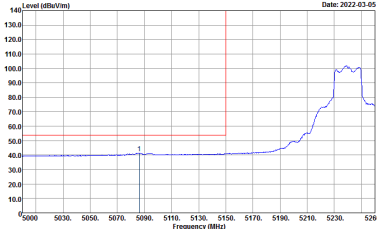


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH44 5220MHz - L	
9+8	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_RE_74.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : PEAK(FUND) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : AVG_RE_54.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto	Left blank

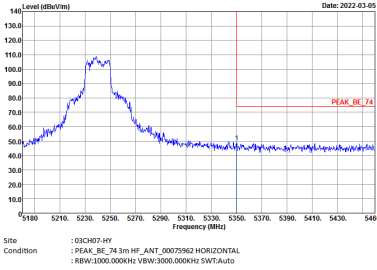
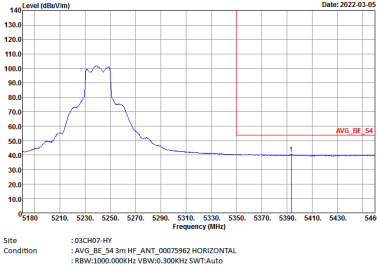


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH44 5220MHz - R	
9+8	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : : PSKAIK_RE_74.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : : AVG_RE_54.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH48 5240MHz - L	
9+8	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_RE_74.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : PEAK(FUN) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : AVG_RE_54.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto	Left blank

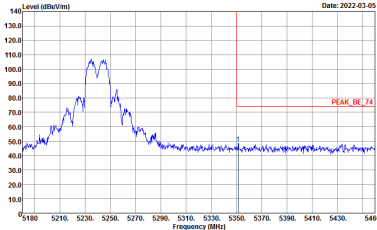
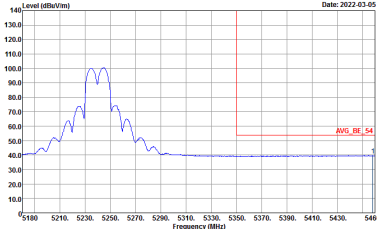


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH48 5240MHz - R	
9+8	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

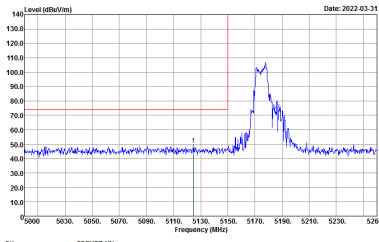
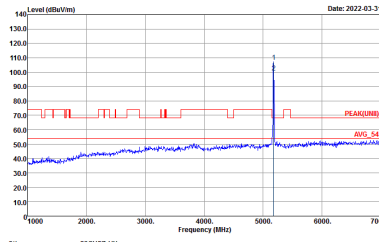
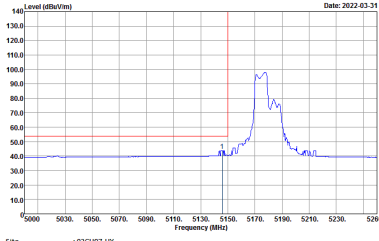


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH48 5240MHz - L	
9+8	Vertical	Fundamental
Peak		
Avg.		Left blank

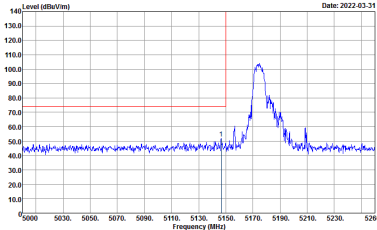
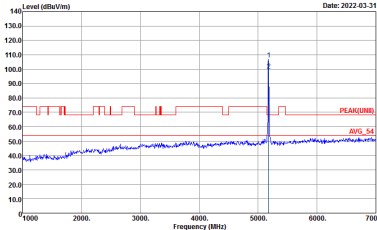
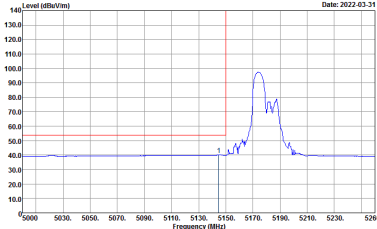


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH48 5240MHz - R	
9+8	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : : PSIAK_RE_74.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : : AVG_RE_54.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank

Band 1 5150~5250MHz
WIFI 802.11ax HE20 Partial 106 (Band Edge @ 3m)

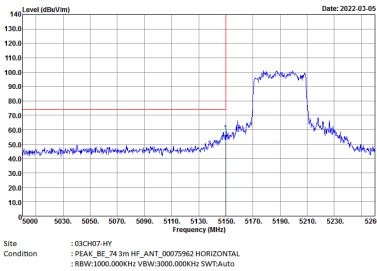
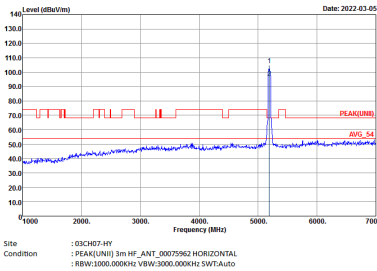
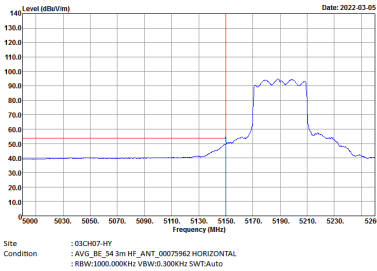
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/53 CH36 5180MHz	
9+8	Horizontal	Fundamental
Peak	 Site Condition : 03CH07-HY : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site Condition : 03CH07-HY : PEAK(UNIT) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto
Avg.	 Site Condition : 03CH07-HY : AVG_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWTAuto	Left blank



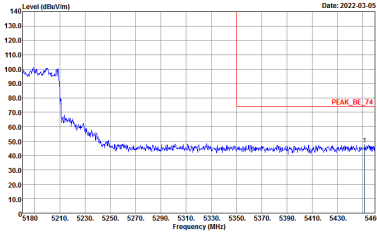
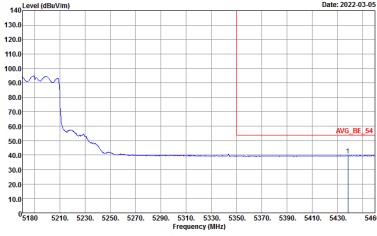
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/53 CH36 5180MHz	
9+8	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : PEAK(FUN) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto	Left blank



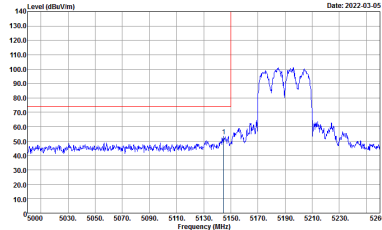
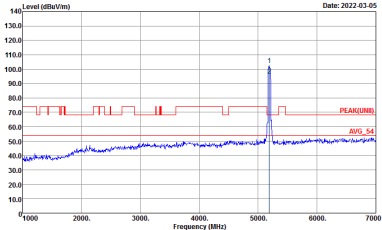
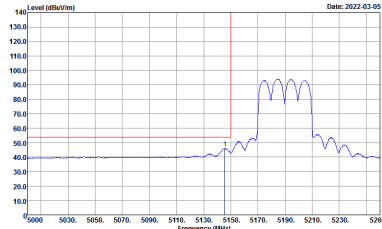
Band 1 5150~5250MHz
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH38 5190MHz - L	
9+8	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Date: 2022-03-05	 Site : 03CH07-HY Condition : PEAK(UNIT) 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Date: 2022-03-05
Avg.	 Site : 03CH07-HY Condition : AVG_BE_74 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Date: 2022-03-05	Left blank

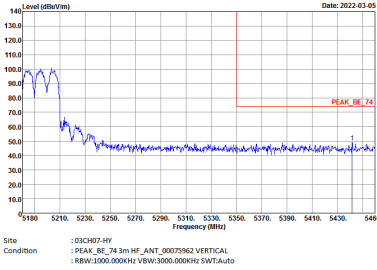
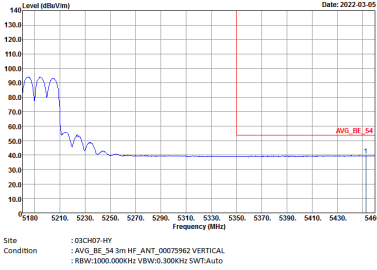


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH38 5190MHz - R	
9+8	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : : PSK, RE_74.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : : AVG, RE_54.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH38 5190MHz - L	
9+8	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_RE_74.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : PEAK(FUND) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : AVG_RE_54.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto	Left blank

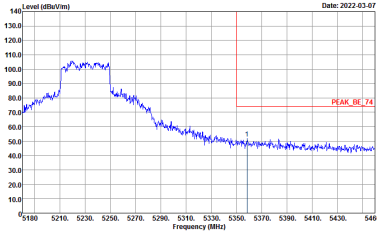
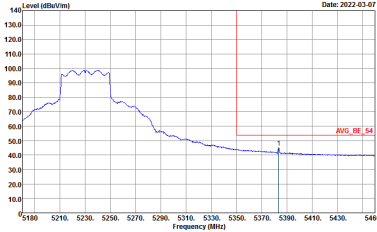


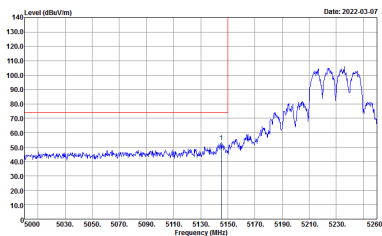
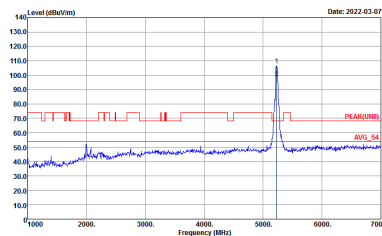
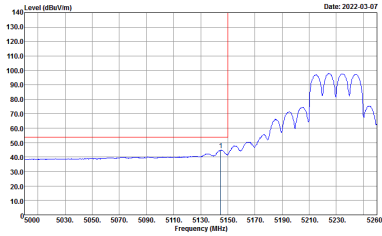
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH38 5190MHz - R	
9+8	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : : PSKAX_RE_74.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : : AVG_RE_54.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank



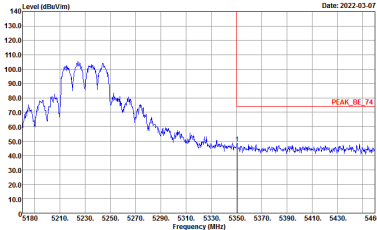
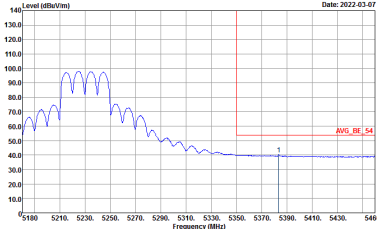
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH46 5230MHz - L	
9+8	Horizontal	Fundamental
Peak		
Avg.		Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH46 5230MHz - R	
9+8	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : : PSKAX_RE_74.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : : AVG_RE_54.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto	Left blank

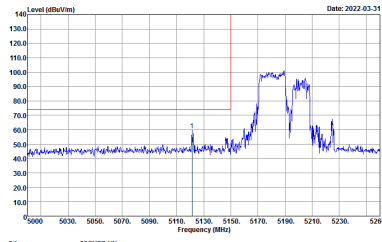
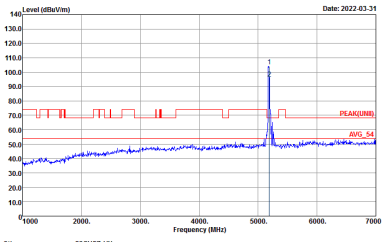
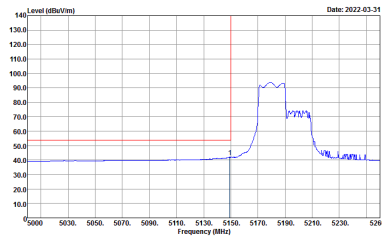
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH46 5230MHz - L	
9+8	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : PEAK(FUND) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto	Left blank



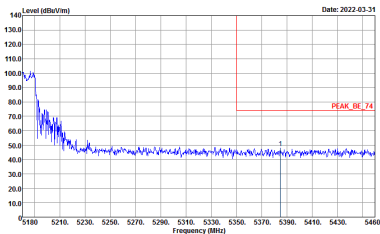
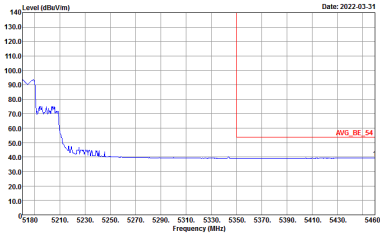
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH46 5230MHz - R	
9+8	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : : PSK, BE_74.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : : AVG, BE_54.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank



Band 1 5150~5250MHz
WIFI 802.11ax HE40 Partial 242 (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 242/61 CH38 5190MHz - L	
9+8	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : PEAK(UNI) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : AVG_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto	Left blank

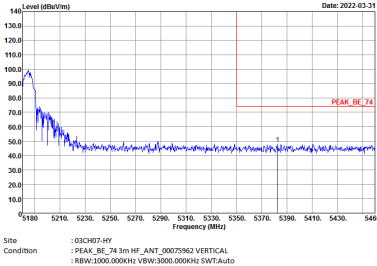
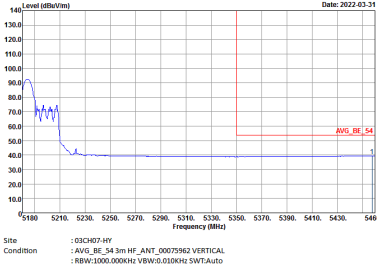


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 242/61 CH38 5190MHz - R	
9+8	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : : PSKAIK_RE_74.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	Left blank
Avg.	 Site : 03CH07-HY Condition : : AVG_RE_54.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	Left blank



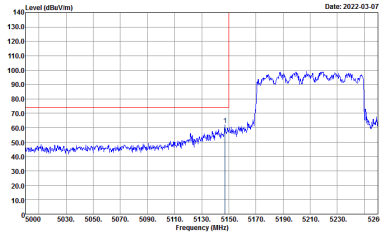
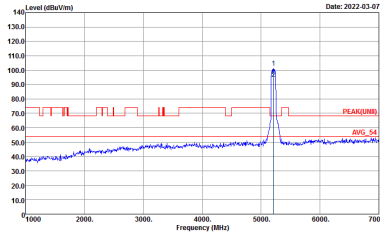
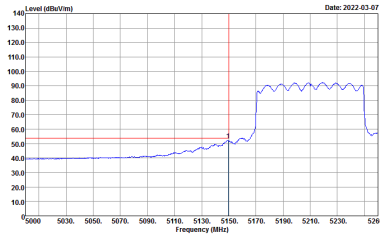
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 242/61 CH38 5190MHz - L	
9+8	Vertical	Fundamental
Peak	Site : 03CH07-HY Condition : PEAK_RE_74.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Site : 03CH07-HY Condition : PEAK(FUN) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	Site : 03CH07-HY Condition : AVG_RE_54.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank



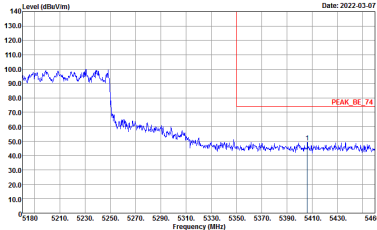
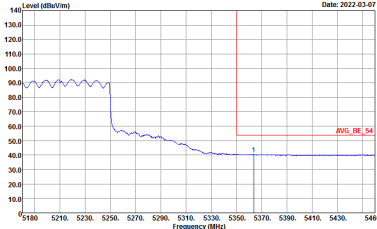
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 242/61 CH38 5190MHz - R	
9+8	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : : PSKAX_RE_74.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : : AVG_RE_54.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank

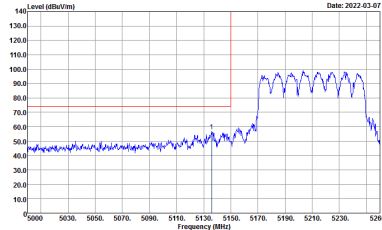
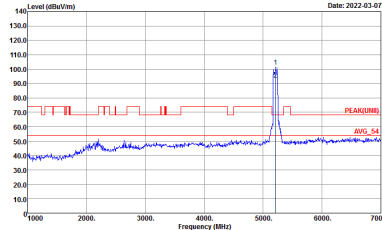
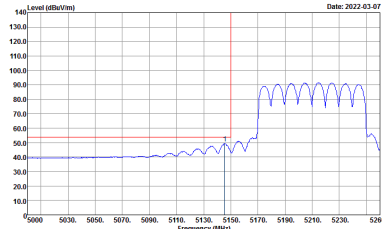


Band 1 5150~5250MHz
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH42 5210MHz - L	
9+8	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : PEAK(UNIT) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : AVG_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH42 5210MHz - R	
9+8	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : : PSK, RE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : : AVG, RE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank

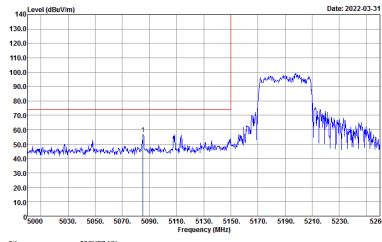
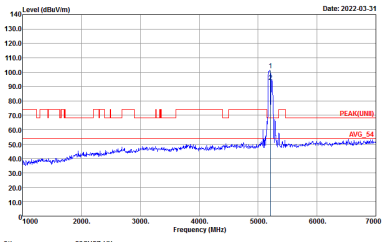
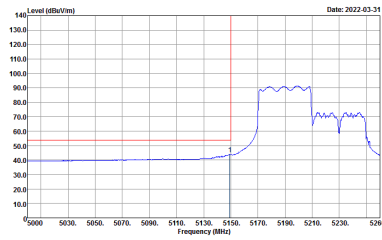
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH42 5210MHz - L	
9+8	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_RE_74.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : PEAK(FUND) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : AVG_RE_54.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto	Left blank



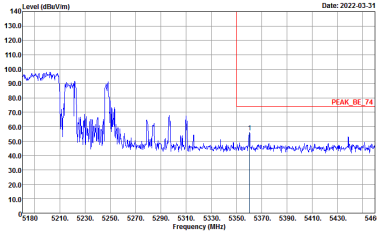
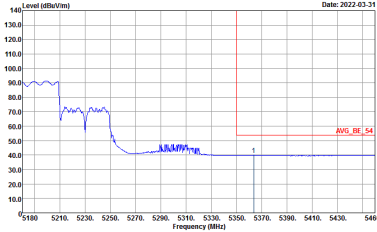
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH42 5210MHz - R	
9+8	Vertical	Fundamental
Peak	Site : 03CH07-HY Condition : PSK_802.11ax HE80 Full CH42 5210MHz - R RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	Site : 03CH07-HY Condition : AVG_802.11ax HE80 Full CH42 5210MHz - R RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank



Band 1 5150~5250MHz
WIFI 802.11ax HE80 Partial 484 (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE80 Partial 484/65 CH42 5210MHz - L	
9+8	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : PEAK(FUND) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto
Avg.	 Site : 03CH07-HY Condition : AVG_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWTAuto	Left blank

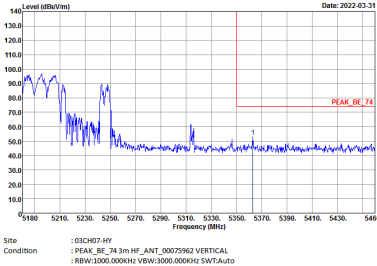
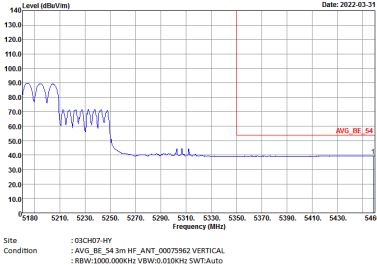


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE80 Partial 484/65 CH42 5210MHz - R	
9+8	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : : PEAK_RE_74.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : : AVG_RE_54.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank

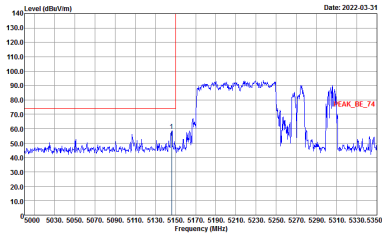
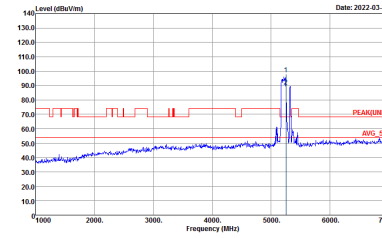
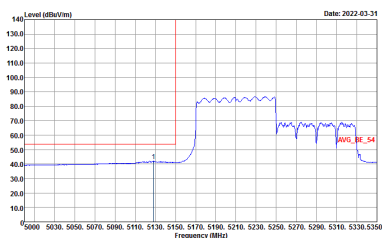


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE80 Partial 484/65 CH42 5210MHz - L	
9+8	Vertical	Fundamental
Peak		
Avg.		Left blank

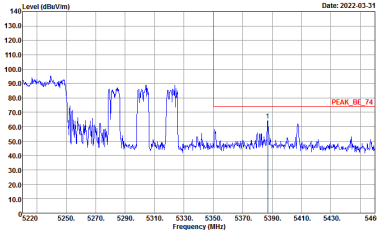
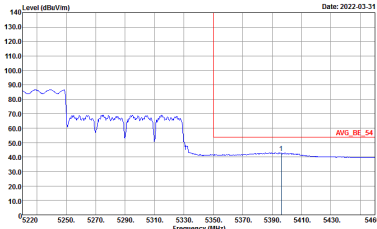


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE80 Partial 484/65 CH42 5210MHz - R	
9+8	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : : PSKAX_RE_74.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : : AVG_RE_54.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank

Band 1 5150~5250MHz
WIFI 802.11ax HE160 Partial 996 (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE160 Partial 996/67 CH50 5250MHz - L	
9+8	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : PEAK(URB) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWTAuto	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE160 Partial 996/67 CH50 5250MHz - R	
9+8	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE160 Partial 996/67 CH50 5250MHz - L	
9+8	Vertical	Fundamental
Peak		
Avg.		Left blank