

ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT



EUT Description: Mini
Applicant: Quanta Computer Inc.
No. 188, Wenhua 2nd Road, Guishan District, Taoyuan City
33377, Taiwan
Manufacturer: Quanta Computer Inc.
No. 188, Wenhua 2nd Road, Guishan District, Taoyuan City
33377, Taiwan
Brand Name: Clover
Model No./ISED HVIN: C306
ISED PMN: C306
Report Number: TERF2606002123E2
FCC ID HFS-C306
IC: 1787B-C306
Date of EUT Received: June 17, 2026
Date of Test: July 8, 2026 ~ July 30, 2026
Issue Date: August 10, 2026

Aken Huang

Approved By

Aken Huang

We hereby certify that:

The above equipment was tested by SGS Taiwan Ltd. Central RF Lab. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 and the energy emitted by the sample EUT comply with FCC rule part §15.407, ISSED RSS-247. The results of this report relate only to the sample identified in this report.

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Revision History

Report Number	Revision	Description	Issue Date	Revised By	Remark
TERF2606002123E2	00	Original	August 10, 2026	Karen Huang	

Note:

- 1、The remark "*" indicates modification of the report upon requests from certification body.

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1 GENERAL INFORMATION

1.1 Equipment Under Test (EUT)

EUT Description	Mini
Brand Name	Clover
Model No. /ISED HVIN	C306
Firmware Version	N/A
Power Supply	12 Vdc
Test Software (Name/Version)	Qualcomm Radio Control Toolkit /v4.1

1.2 RF Specification

Modulation type:	64QAM, 16QAM, QPSK, BPSK for OFDM in 802.11a, 11n
	256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM in 802.11ac
	1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDMA in 802.11ax
Transition Rate:	802.11 a: 6 - 54 Mbps
	802.11 n_HT20: up to 144.4 Mbps
	802.11 n_HT40: up to 300 Mbps
	802.11 ac_VHT20: up to 173.4 Mbps
	802.11 ac_VHT40: up to 400 Mbps
	802.11 ac_VHT80: up to 866.6 Mbps
	802.11 ac_VHT160: up to 1733.4 Mbps
	802.11 ax_HE20: up to 286.8 Mbps
	802.11 ax_HE40: up to 573.6 Mbps
	802.11 ax_HE80: up to 1201 Mbps
	802.11 ax_HE160: up to 2402 Mbps

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1.3 Antenna Designation

Ant. Type	Brand	Model No.	Freq (MHz) / Peak Gain (dBi)
PIFA	AWAN	DQ60ALP6Y02	5150~5250: 4.22 5250~5350: 4.22 5470~5725: 3.12 5725~5850: 4.45
PIFA	AWAN	DQ60ALP6Y01	5150~5250: 2.97 5250~5350: 2.97 5470~5725: 3.68 5725~5850: 4.56

Antenna	5150~5250 MHz	5250~5350 MHz	5470~5725 MHz	5725~5850 MHz
Ch0(A) Antenna (dBi)	4.22	4.22	3.12	4.45
Ch1(B) Antenna (dBi)	2.97	2.97	3.68	4.56
Directional Gain				
Uncorrelated (dBi)	3.64	3.64	3.41	4.51
Correlated (dBi)	6.63	6.63	6.41	7.52

Note:

- 1 Pre-scanned was done on the above antennas, measurements were demonstrated by using the antenna with the highest gain as the worst case scenarios.
- 2 The antenna information is provided by the applicant. The laboratory does not verify the accuracy of this information, and all test results related to antenna characteristics are based solely on the data supplied. Responsibility for the authenticity and accuracy of these specifications rests entirely with the party who provided the information.
- 3 The antenna complies with part 15.203 requirement and no consideration of replacement. Please see EUT photo for details.
- 4 The directional gain is calculated according to section F. 2). e). (ii) of FCC KDB 662911 D01.

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1.4 FCC Rated Power

Wi-Fi	Frequency Range	Channels	EIRP/Avg	Rated Power(EIRP/Avg) (dBm) (Worst Case)
802.11a 802.11n_HT20 802.11ac_VHT20 802.11ax_HE20	5180~5240	4	Avg	13.49 dBm
	5260~5320	4	Avg	17.49 dBm
	5500~5720	12	Avg	17.49 dBm
	5745~5825	5	Avg	17.49 dBm
802.11n_HT40 802.11ac_VHT40 802.11ax_HE40	5190~5230	2	Avg	16.43 dBm
	5270~5310	2	Avg	17.49 dBm
	5510~5710	6	Avg	17.49 dBm
	5755~5795	2	Avg	17.49 dBm
802.11ac_VHT80 802.11ax_HE80	5210	1	Avg	15.45 dBm
	5290	1	Avg	15.39 dBm
	5530~5690	3	Avg	15.48 dBm
	5775	1	Avg	15.48 dBm
802.11ac_VHT160 802.11ax_HE160	5250	1	Avg	13.70 dBm
	5570	1	Avg	15.49 dBm

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1.5 ISED Rated Power

Wi-Fi	Frequency Range	Channels	EIRP/Avg	Rated Power(EIRP/Avg) (dBm) (Worst Case)
802.11a 802.11n_HT20 802.11ac_VHT20 802.11ax_HE20	5180~5240	4	EIRP	17.13 dBm
	5260~5320	4	Avg	17.49 dBm
	5500~5720	12	Avg	17.49 dBm
	5745~5825	5	Avg	17.49 dBm
802.11n_HT40 802.11ac_VHT40 802.11ax_HE40	5190~5230	2	EIRP	20.07 dBm
	5270~5310	2	Avg	17.49 dBm
	5510~5710	6	Avg	17.49 dBm
	5755~5795	2	Avg	17.49 dBm
802.11ac_VHT80 802.11ax_HE80	5210	1	EIRP	19.09 dBm
	5290	1	Avg	15.39 dBm
	5530~5690	3	Avg	15.48 dBm
	5775	1	Avg	15.48 dBm
802.11ac_VHT160 802.11ax_HE160	5250	1	EIRP	17.34 dBm
	5570	1	Avg	15.49 dBm

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1.6 Operating Frequencies

Bandwidth: 20MHz							
CH	Freq.	CH	Freq.	CH	Freq.	CH	Freq.
36	5180 MHz	40	5200 MHz	44	5220 MHz	48	5240 MHz
52	5260 MHz	56	5280 MHz	60	5300 MHz	64	5320 MHz
100	5500 MHz	104	5520 MHz	108	5540 MHz	112	5560 MHz
116	5580 MHz	120	5600 MHz	124	5620 MHz	128	5640 MHz
132	5660 MHz	136	5680 MHz	140	5700 MHz	144	5720 MHz
149	5745 MHz	153	5765 MHz	157	5785 MHz	161	5805 MHz
165	5825 MHz	-	-	-	-	-	-
Bandwidth: 40MHz							
CH	Freq.	CH	Freq.	CH	Freq.	CH	Freq.
38	5190 MHz	46	5230 MHz	54	5270 MHz	62	5310 MHz
102	5510 MHz	110	5550 MHz	118	5590 MHz	126	5630 MHz
134	5670 MHz	142	5710 MHz	151	5755 MHz	159	5795 MHz
Bandwidth: 80MHz							
CH	Freq.	CH	Freq.	CH	Freq.	CH	Freq.
42	5210 MHz	58	5290 MHz	106	5530 MHz	122	5610 MHz
138	5690 MHz	155	5775 MHz	-	-	-	-
Bandwidth: 160MHz							
CH	Freq.	CH	Freq.	CH	Freq.	CH	Freq.
50	5250 MHz	114	5570 MHz	-	-	-	-

1.7 EUT Availability and The Worst Test Modes

1. Test program used to control the EUT for staying in continuous transmitting and receiving mode is programmed.
2. The field strength of radiation emission was measured as the EUT positioned in different orthogonal planes (E1/E2/H) based on actual usage of the EUT to pre-scan the emissions for determining the worst case scenario.
3. Investigation has been done on all the possible configurations for searching the worst case. The given UE is pre-scanned among modes below.

Modulation		Transmission Chain								Single Transmission Spatial		Multiple Transmission Spatial	
V	802.11 a	V	Ch0	V	Ch1		Ch2		Ch3		1TX	V	2TX
V	802.11 n	V	Ch0	V	Ch1		Ch2		Ch3		1TX	V	2TX
V	802.11 ac	V	Ch0	V	Ch1		Ch2		Ch3		1TX	V	2TX
V	802.11 ax	V	Ch0	V	Ch1		Ch2		Ch3		1TX	V	2TX

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4. Therefore, below summary is the modes of test configuration that yield the highest reading and generate the highest emission chosen to carry out the relevantly mandatory test items.

CONDUCTED TEST						
MODE	FREQUENCY BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)	ANTENNA PORT
802.11a	5180~5240	36 to 48	36,44,48	OFDM	6	2TX
	5260~5320	52 to 64	52,60,64			
	5500~5720	100 to 144	100,120,140,144			
	5745~5825	149 to 165	149,157,165			
802.11n_HT20	5180~5240	36 to 48	36,44,48	OFDM	MCS0	2TX
	5260~5320	52 to 64	52,60,64			
	5500~5720	100 to 144	100,120,140,144			
	5745~5825	149 to 165	149,157,165			
802.11n_HT40	5190~5230	38 to 46	38,46	OFDM	MCS0	2TX
	5270~5310	54 to 62	54,62			
	5510~5710	102 to 142	102,118,134,142			
	5755~5795	151 to 159	151,159			
802.11ac_VHT20	5180~5240	36 to 48	36,44,48	OFDM	MCS0	2TX
	5260~5320	52 to 64	52,60,64			
	5500~5720	100 to 144	100,120,140,144			
	5745~5825	149 to 165	149,157,165			
802.11ac_VHT40	5190~5230	38 to 46	38,46	OFDM	MCS0	2TX
	5270~5310	54 to 62	54,62			
	5510~5710	102 to 142	102,118,134,142			
	5755~5795	151 to 159	151,159			
802.11ac_VHT80	5210	42	42	OFDM	MCS0	2TX
	5290	58	58			
	5530~5690	106 to 138	106,122,138			
	5775	155	155			
802.11ac_VHT160	5250	50	50	OFDM	MCS0	2TX
	5570	114	114			

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CONDUCTED TEST							
MODE	FREQUENCY BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)	RU CONFIGURATION	ANTENNA PORT
802.11ax_HE20	5180~5240	36 to 48	36,44,48	OFDM	MCS0		2TX
	5260~5320	52 to 64	52,60,64				
	5500~5720	100 to 144	100,120,140,144				
	5745~5825	149 to 165	149,157,165				
802.11ax_HE40	5190~5230	38 to 46	38,46	OFDM	MCS0		2TX
	5270~5310	54 to 62	54,62				
	5510~5710	102 to 142	102,118,134,142				
	5755~5795	151 to 159	151,159				
802.11ax_HE80	5210	42	42	OFDM	MCS0		2TX
	5290	58	58				
	5530~5690	106 to 138	106,122,138				
	5775	155	155				
802.11ax_HE160	5250	50	50	OFDM	MCS0		2TX
	5570	114	114				

TRANSMIT RADIATED EMISSION TEST (BELOW 1 GHz)						
MODE	FREQUENCY BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)	ANTENNA PORT
802.11a	5180~5240	36 to 48	44	OFDM	6	2TX
	5260~5320	52 to 64	60	OFDM		
	5500~5720	100 to 144	120	OFDM		
	5745~5825	149 to 165	157	OFDM		

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TRANSMIT RADIATED EMISSION TEST (ABOVE 1 GHz)						
MODE	FREQUENCY BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)	ANTENNA PORT
802.11a	5180~5240	36 to 48	36,44,48	OFDM	6	2TX
	5260~5320	52 to 64	52,60,64	OFDM		
	5500~5720	100 to 144	100,120,140,144	OFDM		
	5745~5825	149 to 165	149,157,165	OFDM		
802.11n20	5180~5240	36 to 48	36,44,48	OFDM	MCS0	2TX
	5260~5320	52 to 64	52,60,64	OFDM		
	5500~5720	100 to 144	100,120,140,144	OFDM		
	5745~5825	149 to 165	149,157,165	OFDM		
802.11n40	5190~5230	38 to 46	38,46	OFDM	MCS0	2TX
	5270~5310	54 to 62	54,62	OFDM		
	5510~5710	102 to 142	102,118,134,142	OFDM		
	5755~5795	151 to 159	151,159	OFDM		
802.11ac80	5210	42	42	OFDM	MCS0	2TX
	5290	58	58	OFDM		
	5530~5690	106 to 138	106,122,138	OFDM		
	5775	155	155	OFDM		
802.11ac160	5250	50	50	OFDM	MCS0	2TX
	5570	114	114	OFDM		

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TRANSMIT RADIATED EMISSION TEST (ABOVE 1 GHz)							
MODE	FREQUENCY BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)	RU CONFIGURATION	ANTENNA PORT
802.11ax20	5180~5240	36 to 48	36,44,48	OFDM	MCS0	full	2TX
	5260~5320	52 to 64	52,60,64	OFDM			
	5500~5720	100 to 144	100,120,140,144	OFDM			
	5745~5825	149 to 165	149,157,165	OFDM			
802.11ax40	5190~5230	38 to 46	38,46	OFDM	MCS0	full	2TX
	5270~5310	54 to 62	54,62	OFDM			
	5510~5710	102 to 142	102,118,134,142	OFDM			
	5755~5795	151 to 159	151,159	OFDM			
802.11ax80	5210	42	42	OFDM	MCS0	full	2TX
	5290	58	58	OFDM			
	5530~5690	106 to 138	106,122,138	OFDM			
	5775	155	155	OFDM			
802.11ax160	5250	50	50	OFDM	MCS0	full	2TX
	5570	114	114	OFDM			

Note:

The field strength of radiated emission was measured as the EUT positioned in different orthogonal planes (E1/E2/H) based on actual usage of the EUT to pre-scan the emissions for determining the worst case scenario.

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2 SUMMARY OF TEST RESULTS

FCC Rules	ISED Rules	Description Of Test	Result
§15.207	RSS-Gen §8.8	AC Power Line Conducted Emission	Compliant
§15.407(e)	RSS-Gen §6.7 RSS-247 §7.3.4.2	Emission Bandwidth	Compliant
§15.407(a)	RSS-247 §7.3.1.2 RSS-247 §7.3.2.2 RSS-247 §7.3.3.2 RSS-247 §7.3.4.3	Maximum Conducted Output Power	Compliant
§15.407(a)	RSS-247 §7.3.1.2 RSS-247 §7.3.2.2 RSS-247 §7.3.3.2 RSS-247 §7.3.4.3	Power Spectral Density	Compliant
§15.205 §15.209 §15.407(b)	RSS-Gen 8.10 RSS-247 §7.3.1.3 RSS-247 §7.3.2.3&7.3.2.4 RSS-247 §7.3.3.3 RSS-247 §7.3.4.4	Undesirable Radiated Emissions	Compliant
§15.203	N/A	Antenna Requirement	Compliant

2.1 Test Methodology of Applied Standards

1. FCC Part 15, Subpart E §15.407
2. ANSI C63.10:2020
3. FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01
4. FCC KDB 662911 D01 Multiple Transmitter Output v02r01
5. ISED RSS-Gen, Issue 5, Apr. 2018
6. ISED RSS-247, Issue 4, Jul. 24, 2025
7. ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024

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2.2 Measurement Uncertainty

Test Items	Uncertainty
AC Power Line Conducted Emission	+/- 1.61 dB
Emission Bandwidth	+/- 1.38 Hz
Output Power measurement	+/- 0.97 dB
Peak Power Spectral Density Measurement	+/- 0.61 dB
Frequency Stability	+/- 1.48 Hz
Temperature	+/- 0.60 °C
Humidity	+/- 3.00 %
DC / AC Power Source	+/- 1.00 %

Radiated Spurious Emission Measurement Uncertainty		
Polarization: Vertical	+/- 1.89 dB	9kHz - 30MHz
	+/- 4.10 dB	30MHz - 1000MHz
	+/- 3.41 dB	1GHz - 18GHz
	+/- 3.89 dB	18GHz - 40GHz
Polarization: Horizontal	+/- 1.89 dB	9kHz - 30MHz
	+/- 4.10 dB	30MHz - 1000MHz
	+/- 3.41 dB	1GHz - 18GHz
	+/- 3.89 dB	18GHz - 40GHz
Radiated Spurious Emission	+/- 2.00 dB	33GHz - 50GHz
	+/- 1.59 dB	50GHz - 60GHz
	+/- 1.71 dB	60GHz - 90GHz
	+/- 1.64 dB	90GHz - 140GHz
	+/- 3.84 dB	140GHz - 220GHz

Note

1. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.
2. The conformity assessment statement in this report is based solely on the test results, measurement uncertainty is excluded.

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2.3 Test Facility

Laboratory	Test Site Address	Test Site Name	FCC Designation number / Registration Number	IC CAB identifier / Company Number
SGS Taiwan Ltd. Central RF Lab. (TAF code 3702)	No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803	SAC 1 / SAC 2 / SAC 3 Conduction 1 / Conducted 1 Conducted 2 / Conducted 3 Conducted 4 / Conducted 5 Conducted 6 / FAC 1	TW0027 / 891563	TW3702 / 4620A
SGS Taiwan Ltd. Central RF Lab. (TAF code 3702)	No.2, Keji 1st Rd, Guishan District, Taoyuan City, Taiwan 333	SAC C / SAC D / SAC G Conduction C/ Conducted A Conducted B / Conducted C Conducted D / Conducted E Conducted F / Conducted G FAC A	TW0028 / 200037	TW3702 / 4620E

Measurement	Test Site Name	Test Engineer	EUT S/N	Test Environment	Test Date
Conducted	Conducted D	Henry Chiang	C036UG62040030	23.4~24.1°C / 67~71%	2026/07/15 ~ 2026/07/30
Radiated	SAC G Chamber	Temo Chen	C036UG62020002	22.7~24.7°C / 51~69%	2026/07/21 ~ 2026/07/30
Conduction	Conduction C	Temo Chen	C036UG62020002	23.7°C / 55%	2026/07/29 ~ 2026/07/29

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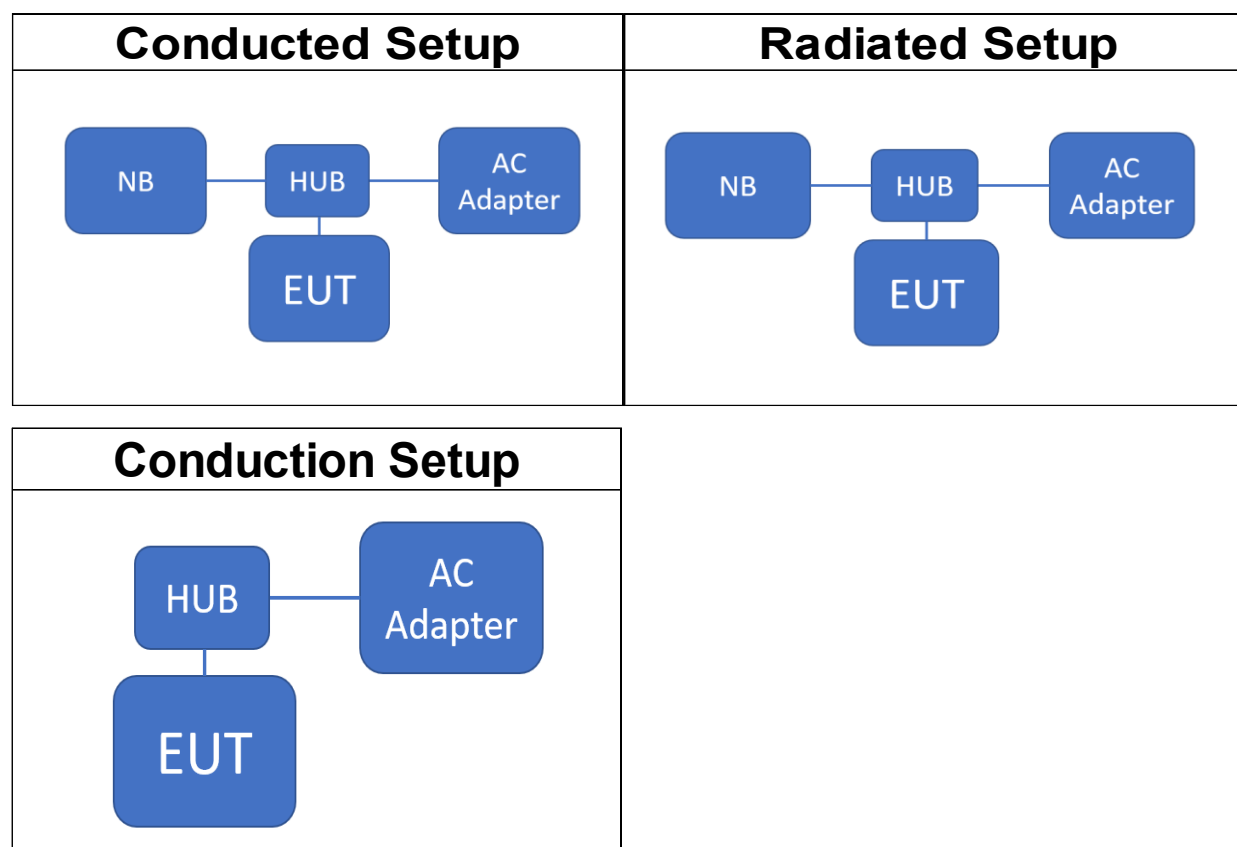
3 CONTROL UNIT(S) AND PERIPHERAL(S)

3.1 EUT Exercise

An engineering test mode (software/firmware) that applicant provided was utilized to manipulate the EUT into transmit, selection of the test channel, and modulation scheme.

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuation factor between EUT conducted port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly EUT RF output level.

3.2 Diagrams



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3.3 List

3.3.1 Conduction Setup

AC Power-Line Conducted Emission Test Site: Conduction C					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL. (mm/dd/yyyy)	CAL DUE. (mm/dd/yyyy)
HUB	clover	H306	H036WG54640059	N/A	N/A
Adapter	clover	FSP040-RHBN3	N/A	N/A	N/A

3.3.2 Conducted Setup

Conducted Emission Test Site: Conducted D					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL. (mm/dd/yyyy)	CAL DUE. (mm/dd/yyyy)
HUB	clover	H306	H036WG54640068	N/A	N/A
AC adapter	MASS POWER	S042-1B120333M3	N/A	N/A	N/A
Type-A To Type-B Cable	AWM	2725-E322903	N/A	N/A	N/A
Notebook	Lenovo	T440p	P0000665	N/A	N/A

3.3.3 Radiated Setup

Radiated Emission Test Site: SAC G					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL. (mm/dd/yyyy)	CAL DUE. (mm/dd/yyyy)
HUB	clover	H306	H036WG54640059	N/A	N/A
Adapter	clover	FSP040-RHBN3	N/A	N/A	N/A
Notebook	Lenovo	T470	P0001293	N/A	N/A

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4 TEST INSTRUMENT

4.1 Emission from AC power line

AC Power-Line Conducted Emission Test Site: Conduction C					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL. (mm/dd/yyyy)	CAL DUE. (mm/dd/yyyy)
Coaxial Cable	EC Lab	RF-HY-CAB-250	RF-HY-CAB-250-01	03/27/2026	03/26/2027
EMI Test Receiver	R&S	ESCI	101342	04/16/2026	04/15/2027
LISN	SCHWARZBECK Mess-Elektronik	NSLK8127	973	04/20/2026	04/19/2027
Pulse Limiter	EC Lab	VTSD 9561F-N	485	03/27/2026	03/26/2027
Test Software	audix	e3	E3 210616 SGS Ver.9 (C)	N.C.R	N.C.R

4.2 Conducted Measurement

Conducted Emission Test Site: Conducted D					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL. (mm/dd/yyyy)	CAL DUE. (mm/dd/yyyy)
Attenuator	Woken	WATT-218FS-10	RF16	11/13/2025	11/12/2026
Attenuator	Woken	WATT-218FS-10	RF17	11/13/2025	11/12/2026
Attenuator	Woken	WATT-218FS-10	RF21	11/13/2025	11/12/2026
DC Block	Marvelous	MVE6114	RF42	11/13/2025	11/12/2026
Power Meter	Anritsu	ML2496A	2138005	09/22/2025	09/21/2026
Power Sensor	Anritsu	MA2411B	1911395	09/22/2025	09/21/2026
Power Sensor	Anritsu	MA2411B	1911396	09/22/2025	09/21/2026
Test Software	SGS Taiwan	Radio Test Software	Ver.21	N.C.R	N.C.R
Spectrum Analyzer	KEYSIGHT	N9010B	MY59071574	07/01/2026	06/30/2027

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4.3 Radiated Measurement

Radiated Emission Test Site: SAC G					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL. (mm/dd/yyyy)	CAL DUE. (mm/dd/yyyy)
1G Low pass Filter	Woken	EWT-56-0019	RF156	11/13/2025	11/12/2026
3m Site NSA	SGS	966 chamber G	N/A	03/30/2026	03/29/2027
5150-5350 Notch Filter	Micro-Tronics	BRC50703-G015	RF197	11/13/2025	11/12/2026
5500 5700 Notch Filter	Micro-Tronics	BRC50704-G016	RF198	11/13/2025	11/12/2026
5700-5900 Notch Filter	Micro-Tronics	BRC50705-G021	RF199	11/13/2025	11/12/2026
7G High pass Filter	R&S	HPF7.0	RF159	11/13/2025	11/12/2026
Active Loop Antenna	COM-POWER	AL-130R	10160105	12/16/2025	12/15/2026
Broadband Antenna	SCHWARZBECK	VULB 9168	1206	01/08/2026	01/07/2027
Coaxial Cable	EMCI+Huber Suhner	EMCCFD400-NM- NM- 8000+EMCCFD400- NM-NM- 5000+SUCOFLEX10 0+EMC104-SM-SM- 2000+EMC104-SM- SM-8000+EMC104- SM-SM-5000	210216+210217+8 4103701/15+16010 5+210217+210220	11/13/2025	11/12/2026
Horn Antenna	RF SPIN	DRH0844	KV2E12A0844	01/23/2026	01/22/2027
Horn Antenna	RF SPIN	DRH18-E	210105A18E	04/24/2026	04/23/2027
Pre-Amplifier	EMC Instruments	EMC118A45SE	980815	11/13/2025	11/12/2026
Pre-Amplifier	EMC Instruments	EMC184045SEE	980881	11/13/2025	11/12/2026
Pre-Amplifier	EMC Instruments	EMC330N	980781	11/13/2025	11/12/2026
Spectrum Analyzer	KEYSIGHT	N9010B	MY59071574	07/01/2026	06/30/2027
Test Software	audix	e3	E3 210616 SGS Ver.9 (C)	N.C.R	N.C.R

NOTE: N.C.R refers to Not Calibrated Required.

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5 REGULATORY REQUIREMENTS

5.1 Emission Bandwidth

There is no limit bandwidth for U-NII-1, U-NII-2-A and U-NII-2-C.
The minimum of 6dB Bandwidth measurement is 0.5 MHz for U-NII-3 & UNII-4.

5.2 Maximum Output Power

5.2.1 Duty Cycle

Pre-analysis Check: While conducting average power measurement, duty cycle of each mode shall be checked to ensure its duty cycle in order to compensate for the loss due to insufficient ratio of duty cycle.

All duty cycle is pre-scanned, and result as obtained below shows only the most representative ones where duty cycle is conducted as the given transmission with given virtual operation that expresses the percentage.

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e-CRF Title 47 §15.407					
Select	EUT CATEGORY	Conducted Output Power	EIRP	TPC	Antenna Directional Gain Requirements
U-NII-1 (5150~5250 MHz)					
	Fixed point-to-point	1 Watt(30dBm)	Not required	Not required	23dBi
	Outdoor AP	1 Watt(30dBm)	Elevation angle above 30 degrees 125mW (21dBm)	Not required	6dBi
	Indoor AP	1 Watt(30dBm)	Not required	Not required	6dBi
V	Other	250mW(23.98dBm)	Not required	Not required	6dBi
U-NII-2A (5250~5350 MHz)					
V	All	250mW(23.98dBm) or 11dBm+10 log B	Not required	When EIRP >500mW At least 6dB below EIRP 1W (30dBm)	6dBi
U-NII-2C (5470~5725 MHz)					
V	All	250mW(23.98dBm) or 11dBm+10 log B	Not required	When EIRP >500mW At least 6dB below EIRP 1W (30dBm)	6dBi
U-NII-3 (5725~5850 MHz)					
V	Other	1 Watt(30dBm)	Not required	Not required	6dBi
	Fixed point-to-point	1 Watt(30dBm)	Not required	Not required	Not required
1. If transmitting antennas of directional gain greater than the antenna requirements column, the Maximum transmit power shall be reduced by the amount in dB that the direction-al gain of the antenna. 2. For the 10 log B, B is the 26 dB emission bandwidth.					

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RSS-247				
Select	EUT CATEGORY	Conducted Output Power	EIRP	TPC
U-NII-1 (5150~5250 MHz)				
	OEM devices installed in vehicles	N/A	30 mW or $1.76 + 10 \log_{10}(B)$ dBm	EIRP >15mW, at least 3dB below 30mW EIRP
V	Other device	N/A	200 mW or $10 + 10 \log_{10}(B)$ dBm	N/A
U-NII-2A (5250~5350 MHz)				
	OEM devices installed in vehicles	N/A	30 mW or $1.76 + 10 \log_{10}(B)$ dBm	EIRP >15mW, at least 3dB below 30mW EIRP
	Outdoor Fixed with EIRP>200mW	N/A	-13 dBW/MHz for $0^\circ \leq \theta < 8^\circ$ -13 -0.716 (θ -8) dBW/MHz for $8^\circ \leq \theta < 40^\circ$ -35.9 -1.22 (θ -40) dBW/MHz for $40^\circ \leq \theta \leq 45^\circ$ -42 dBW/MHz for $\theta > 45^\circ$	EIRP >500mW, at least 6dB below 1W EIRP
V	Other device	250 mW or $11 + 10 \log_{10}(B)$ dBm	1.0 W or $17 + 10 \log_{10}(B)$ dBm	EIRP >500mW, at least 6dB below 1W EIRP
U-NII-2C (5470~5725 MHz)				
V	All	250 mW or $11 + 10 \log_{10}(B)$ dBm	1.0 W or $17 + 10 \log_{10}(B)$ dBm	EIRP >500mW, at least 6dB below 1W EIRP
U-NII-3 (5725~5850 MHz)				
V	All	1 W	N/A	N/A
1. For equipment operating in the band 5725-5850 MHz, If transmitting antennas of directional gain greater than 6 dBi are used, the Maximum transmit power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, FFTP devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter maximum conducted output power and the power spectral den-sity. FFTP operations exclude the use of PTMP systems, omnidirectional applications and multiple collocated trans-mitters transmitting the same information. However, remote stations of PTMP systems shall be permitted to operate at e.i.r.p. greater than 4 W under the same conditions as for FFTP systems. 2. For the $10 \log B$, B is the occupied bandwidth.				

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5.3 Maximum Power Spectral Density

e-CRF Title 47 §15.407			
Select	EUT CATEGORY	Power Spectral Density	Antenna Directional Gain Requirements
U-NII-1 (5150~5250 MHz)			
	Fixed point-to-point	17dBm / MHz	23dBi
	Outdoor AP	17dBm / MHz	6dBi
	Indoor AP	17dBm / MHz	6dBi
V	Client device	11dBm / MHz	6dBi
U-NII-2A (5250~5350 MHz)			
V	All	11dBm / MHz	6dBi
U-NII-2C (5470~5725 MHz)			
V	All	11dBm / MHz	6dBi
U-NII-3 (5725~5850 MHz)			
V	All	30dBm / 500kHz	6dBi
1. If transmitting antennas of directional gain greater than the antenna requirements column, the Maximum transmit power shall be reduced by the amount in dB that the direction-al gain of the antenna.			

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RSS-247			
Select	EUT CATEGORY	EIRP Density	Power Density
U-NII-1 (5150~5250 MHz)			
	OEM devices installed in vehicles	N/A	N/A
V	Other device	10 dBm/MHz	N/A
U-NII-2A (5250~5350 MHz)			
	OEM devices installed in vehicles	N/A	N/A
	Other device	N/A	11 dBm/MHz
U-NII-2C (5470~5725 MHz)			
V	All	N/A	11 dBm/MHz
U-NII-3 (5725~5850 MHz)			
V	All	N/A	30 dBm/500kHz
1. For equipment operating in the band 5725-5850 MHz, If transmitting antennas of directional gain greater than 6 dBi are used, the Maximum transmit power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, FFTP devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter maximum conducted output power and the power spectral den-sity. FFTP operations exclude the use of PTMP systems, omnidirectional applications and multiple collocated trans-mitters transmitting the same information. However, remote stations of PTMP systems shall be permitted to operate at e.i.r.p. greater than 4 W under the same conditions as for FFTP systems.			

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5.4 Unwanted Emissions

5.4.1 5150~5850 MHz

Standards	Operation Freq. (MHz)	Freq.(MHz)	EIRP Limits (dBm/MHz)	Field Strength @ 3m(dBμV/m)
15.407(b)(1) RSS-247 §7.3.1.3	5150~5250	$f \leq 5150$ $f \geq 5350$	PK: -27	PK: 68.2
15.407(b)(2) RSS-247 §7.3.2.3 RSS-247 §7.3.2.4	5250~5350			
15.407(b)(3) RSS-247 §7.3.3.3	5475~5725	$f \leq 5470$ $f \geq 5725$	PK: -27	PK: 68.2
15.407(b)(4)(i) RSS-247 §7.3.4.4	5725~5850	at 75 MHz or more above or below the band edge	PK:-27	PK: 68.2
		increasing linearly from 75~25MHz above or below the band edge	PK:-27~10	PK: 68.2~105.2
		increasing linearly from 25~5MHz above or below the band edge	PK:10~15.6	PK: 105.2~110.8
		increasing linearly from 5~0 MHz above or below the band edge	PK: 15.6~27	PK:110.8~122.2

EIRP = $(E^2 \cdot d) / 30$, where E is the field strength in V/m, d is the measurement distance (3m), EIRP is the equivalent isotopically radiated power in Watts.

5.4.2 Spurious Emission

Unwanted spurious emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table:

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

Note: The lower limit shall apply at the transition frequencies.

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5.5 AC Power Line Conducted Emission

Frequency range MHz	Limits (dB μ V)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

Note

1. The lower limit shall apply at the transition frequencies
2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz

5.6 Antenna Requirements

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of § 15.211, 15.213, 15.217, 15.219, 15.221, or § 15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

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6 TEST CONFIGURATION

6.1 Emission Bandwidth



1. Place the EUT on the table and set it in transmitting mode.
2. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules.
3. Remove antenna and connect EUT port to spectrum analyzer with low-loss RF cable.
4. 26dB Band width Measurement:
Set the spectrum analyzer as
RBW=1% to 5% of emission BW,
VBW > RBW
Sweep = Auto,
Detector = Peak,
Trace Mode = Max Hold,
Manually adjust RBW until RBW/EBW ratio is in the range of 1% to 5% (per pre-sequence EBW result).
Use the X dB bandwidth mode function of the spectrum analyzer and set to 26dB.
5. Minimum Emission Bandwidth for the band 5.725-5.850GHz
Set the spectrum analyzer as
RBW = 100 kHz,
VBW ≥ 3*RBW,
Detector = Peak,
Span = large enough to capture all products of the modulation process,
Sweep = Auto,
Use the X dB bandwidth mode function of the spectrum analyzer and set to 6dB.
6. For 99% Bandwidth:
Set the spectrum analyzer as
RBW = 1% to 5% of the 99%,
VBW ≥ 3*RBW,
Span = 1.5 times to 5.0 times the OBW,
Detector = Peak,
Sweep = Auto,
Turn on the 99% bandwidth function, max reading.
7. Repeat above procedures until all frequency of interest measured was complete.
8. For 26dB BW and OBW of straddle channels, the results were calculated as below.
straddle channel emission BW in U-NII 2C = (emission BW/2) + (5725-straddle channel)
straddle channel emission bandwidth in U-NII 3 = emission BW- emission BW_U-NII 2C

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6.2 Maximum Output Power

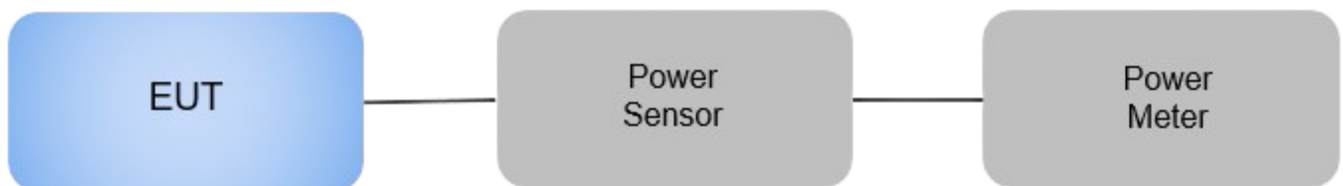
6.2.1 Duty Cycle



Set the spectrum analyzer as

Span = Zero,
RBW = 8 MHz,
VBW = 8 MHz,
Detector = Peak,

6.2.2 Maximum Output Power



1. Place the EUT on the table and set it in transmitting mode.
2. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules.
3. Remove antenna and connect EUT port to power meter via low-loss RF cable.
4. Method PM (Measurement using an RF average power meter):
 - a. Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the following conditions are satisfied:
 - b. The EUT is configured to transmit continuously or to transmit with a constant duty cycle.
 - c. At all times when the EUT is transmitting, it must be transmitting at its maximum power control level.
 - d. The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.
 - e. If the transmitter does not transmit continuously, measure the duty cycle, x , of the transmitter output signal.
 - f. Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
 - g. Adjust the measurement in dBm by adding $10 \log (1/x)$ where x is the duty cycle (e.g., $10 \log (1/0.25)$ if the duty cycle is 25%).

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Note:

For U-NII1, 2A, 2C and 3 Bands, when the antenna gain is greater than 6 dBi, the power limit attenuated accordingly.

When testing for multiple output ports in simultaneous transmission mode, the measured values of each individual output port are tested separately and then linearly summed.

The directional gain is calculated using the formula

$$DirectionalGain = 10 \times \log_{10} \left(\frac{(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_n/20})^2}{N_{ant}} \right)$$

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6.3 Maximum Power Spectral Density



1. Place the EUT on the table and set it in transmitting mode.
2. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules.
3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to Spectrum.
4. For U-NII1, U-NII-2A, U-NII-2C Band:
Set the spectrum analyzer as follows:
RBW = 1 MHz
VBW = 3 MHz
Span = wide enough to capture the entire bandwidth
Sweep time = Auto (1001 pts)
Detector = power averaging (rms); if unavailable, use sample detector mode
Trace Mode = video averaging (100 sweeps)
Use SA-2 method with integration based on 26 dB EBW bandwidth (procedure x omitted)
5. For U-NII-3 Band:
Set the spectrum analyzer as follows:
RBW = 300 kHz
VBW = 1 MHz
Span = wide enough to capture the entire bandwidth
Sweep time = Auto
Detector = RMS or Sample
Trace Mode = video averaging (100 sweeps)
In addition, since the measurement bandwidth of Maximum PSD is specified as 500 kHz, add $10 \log(500 \text{ kHz} / \text{RBW})$ to the measured result.
6. Use the cursor on spectrum to peak search the highest level of trace
(1) Duty cycle $\geq 98\%$: Record the max. reading.
(2) Duty cycle $< 98\%$: Record the max. reading and add $10 \log(1/\text{duty cycle})$.
7. Repeat above procedures until all default test channel (low, middle, and high) was complete.

Note:

For U-NII1, 2A, 2C and 3 Bands, when the antenna gain is greater than 6 dBi, the power spectral density limit attenuated accordingly.

When testing for multiple output ports in simultaneous transmission mode, the measured values of each individual output port are tested separately and then linearly summed.

The directional gain is calculated using the formula

$$\text{Directional Gain} = 10 \times \log_{10} \left(\frac{(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_n/20})^2}{N_{ant}} \right)$$

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6.4 Unwanted Emissions

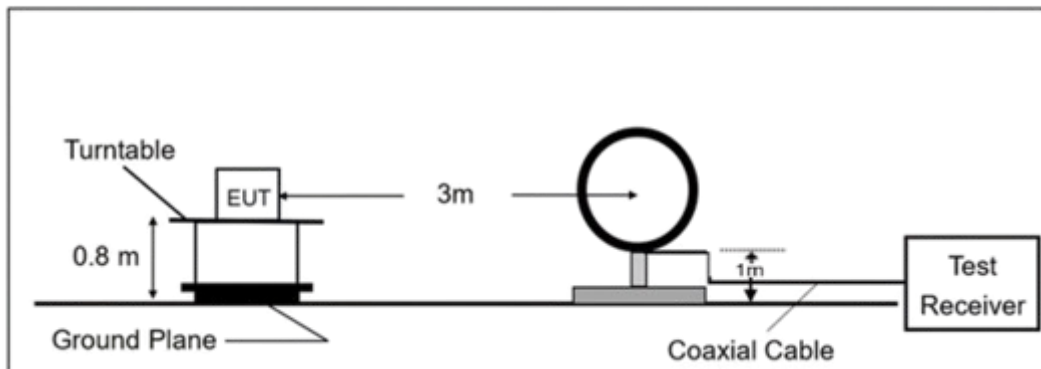
6.4.1 Radiated Emission Test Sites

For Measurements From 9 kHz To 30 MHz

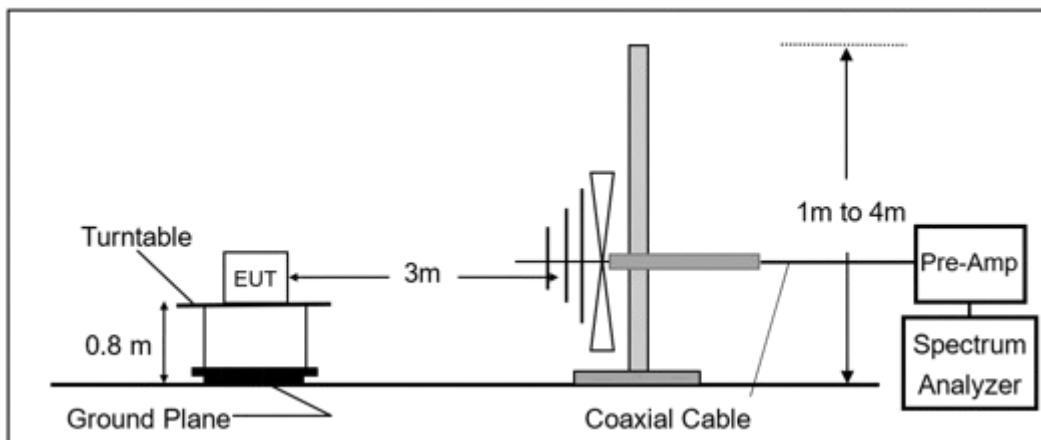
Radiated emission below 30MHz is measured in a 9m*6m*6m semi-anechoic chamber, the measurements correspond to those obtained at an open-field test site.

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

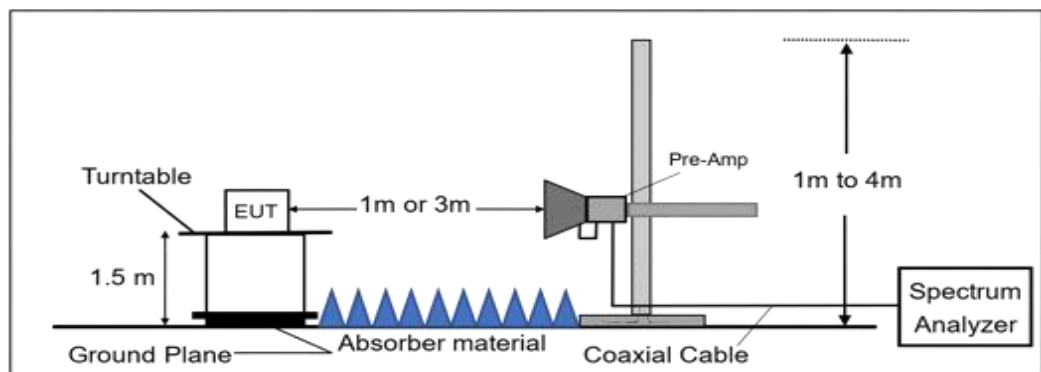
Radiated Emission Test Set-Up, Frequency Below 30MHz.



Radiated Emission Test Set-Up, Frequency From 30MHz to 1000MHz.



Radiated Emission Test Set-Up, Frequency Above 1GHz.



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6.4.2 Measurement Procedure

1. The testing follows FCC KDB 789033 D02.
2. The EUT was placed on a turn table with 0.8m for frequency < 1GHz and 1.5m for frequency > 1GHz above ground plane.
3. The turn table shall rotate 360 degrees to determine the position of maximum emission level.
4. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emissions.
5. For measurements below 30MHz, set the spectrum analyzer as
 - ☒ For Peak measurement
RBW=10 kHz
VBW=30 kHz
Detector = peak
Trace mode = max-hold
 - ☒ For Quasi-peak measurement in receiver mode
RBW=10 kHz
Detector = Quasi-Peak
Peak detection is used unless otherwise noted as quasi-peak.
6. For measurements in 30MHz to 1GHz, set the spectrum analyzer as
 - ☒ For Peak measurement
RBW=100 kHz
VBW=300 kHz
Detector = peak
Trace mode = max-hold
 - ☒ For Quasi-peak measurement in receiver mode
RBW=120 kHz
Detector = Quasi-Peak
Peak detection is used unless otherwise noted as quasi-peak.
7. For measurements above 1GHz, set the spectrum analyzer as
 - ☒ For Peak measurement:
RBW=1 MHz
VBW=3 MHz
Detector = peak
Trace mode = max-hold
 - ☒ For Average measurement:
 - ☒ Duty cycle ≥ 98%:
RBW=1 MHz
VBW=3 MHz
Detector = Power averaging (rms)
trace average was performed over at least 100 traces
 - ☐ Duty cycle ≥ 98%:
RBW=1 MHz
VBW=10 Hz
Detector = peak
Trace mode = max-hold
 - ☒ Duty cycle < 98%

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RBW=1 MHz

VBW $\geq$ 1/T

Detector = peak

Trace mode = max-hold

☐ Duty cycle < 98%

RBW=1 MHz

VBW $\geq$ 3 MHz

Detector = Power averaging (rms)

trace average was performed over at least 100 traces

add Duty cycle factor(dB).

8. When measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made “while keeping the antenna in the ‘cone of radiation’ from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response.” is still within the 3dB illumination BW of the measurement antenna.
9. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
10. Each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
11. Repeat above procedures until all frequency measured were complete.

Note: The emissions from 9 kHz to 30MHz was pre-scanned as 20dB lower than the limits, and hence not reported.

Pre-scan was conducted at 5.47 GHz and 5.85 GHz for band-edge measurements of straddle channels 138, 142, and 144. Since the results were 20 dB below the limit, they were not reported.

6.4.3 Field Strength Calculation

The field strength is calculated by adding the antenna factor and cable loss, then subtracting the amplifier gain and any applicable duty cycle correction factor from the measured reading. The basic equation and an example calculation are as follows:

$$FS = RA + AF + CL - AG$$

Where:

FS = Field Strength (dB μ V/m)

RA = Reading Amplitude (dB μ V)

AF = Antenna Factor (dB/m)

CL = Cable Loss (dB)

AG = Amplifier Gain (dB)

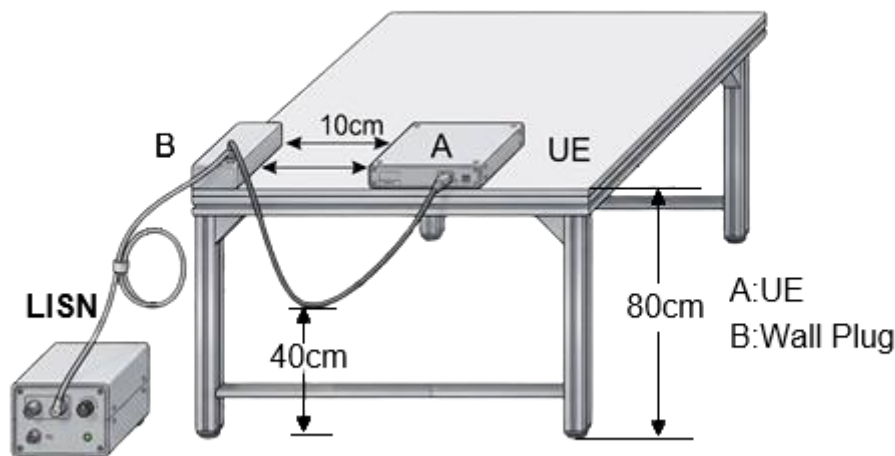
The emission limit is expressed in dB μ V/m, which corresponds to the logarithmic conversion of $20 \times \log_{10} (\mu\text{V/m})$.

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6.5 AC Power Line Conducted Emission



1. The conducted emission tests were performed at the designated test site using a setup in accordance with ANSI_C63.10
2. The EUT was placed on a non-conductive table that is 0.8 meters above the ground plane. Conducted emissions were measured in the frequency range from 0.15 MHz to 30 MHz using CISPR Quasi-Peak and Average detector modes. The two LISNs provided 50 μ H / 50 ohm coupling impedance for the measuring instrument. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
3. The AC/DC power adaptor of the EUT was connected to the LISN. The EUT was positioned flush with the rear edge of the table, with a minimum 0.4-meter distance from the shielding wall.
4. The LISNs were connected to the power source and configured according to the test requirements.
5. The maximum emission levels were investigated for each mode of operation. The six highest emissions were further maximized to ensure compliance.
6. The above procedures were repeated for all power supply configurations of the EUT.

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7 TEST RESULTS

7.1 Emission Bandwidth

7.1.1 xdB Occupied Bandwidth

802.11a_Ch0

Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)	Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5180	19.37	12.870	5180	18.84	12.750
5220	18.25	12.610	5220	18.40	12.650
5240	18.55	12.680	5240	18.93	12.770
5260	25.04	13.990	5260	18.67	12.710
5300	20.01	13.010	5300	18.59	12.690
5320	18.34	12.630	5320	18.70	12.720
5500	30.00	14.770	5500	18.83	12.750
5600	18.51	12.670	5600	18.93	12.770
5700	30.00	14.770	5700	18.41	12.650
5720	20.65	13.150	5720	14.27	11.540

802.11a_Ch1

802.11a_Ch0

Freq. (MHz)	6dB BW (MHz)	10 Log (B) (dB)	Freq. (MHz)	6dB BW (MHz)	10 Log (B) (dB)
5720	2.84	4.530	5720	1.34	1.270
5745	15.97	12.030	5745	14.46	11.600
5785	14.67	11.660	5785	14.49	11.610
5825	13.84	11.410	5825	16.06	12.060

802.11a_Ch1

802.11a_Ch0

Freq. (MHz)	Measured Freq. (MHz)	Limit (MHz)
5240	5248.23	< 5250
5745	5736.80	> 5725

802.11a_Ch1

Freq. (MHz)	Measured Freq. (MHz)	Limit (MHz)
5240	5248.24635	< 5250
5745	5736.86331	> 5725

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802.11n_HT20_Ch0

Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)	Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5180	19.97	13.000	5180	19.51	12.900
5220	19.71	12.950	5220	19.44	12.890
5240	19.95	13.000	5240	19.83	12.970
5260	27.91	14.460	5260	30.00	14.770
5300	20.95	13.210	5300	19.85	12.980
5320	19.82	12.970	5320	20.38	13.090
5500	30.00	14.770	5500	19.91	12.990
5600	19.79	12.960	5600	19.55	12.910
5700	30.00	14.770	5700	19.87	12.980
5720	20.39	13.090	5720	14.79	11.700

802.11n_HT20_Ch1

802.11n_HT20_Ch0

Freq. (MHz)	6dB BW (MHz)	10 Log (B) (dB)	Freq. (MHz)	6dB BW (MHz)	10 Log (B) (dB)
5720	2.27	3.560	5720	3.54	5.490
5745	16.21	12.100	5745	17.29	12.380
5785	11.67	10.670	5785	15.34	11.860
5825	15.05	11.780	5825	13.86	11.420

802.11n_HT20_Ch1

802.11n_HT20_Ch0

Freq. (MHz)	Measured Freq. (MHz)	Limit (MHz)
5240	5248.84	< 5250
5745	5736.22	> 5725

802.11n_HT20_Ch1

Freq. (MHz)	Measured Freq. (MHz)	Limit (MHz)
5240	5248.83411	< 5250
5745	5736.26457	> 5725

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802.11n_HT40_Ch0

Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5190	39.39	15.950
5230	39.33	15.950
5270	55.76	17.460
5310	39.22	15.940
5510	57.51	17.600
5590	39.05	15.920
5670	39.80	16.000
5710	45.13	16.540

802.11n_HT40_Ch1

Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5190	39.39	15.950
5230	39.50	15.970
5270	38.89	15.900
5310	39.11	15.920
5510	39.06	15.920
5590	38.88	15.900
5670	39.07	15.920
5710	34.46	15.370

802.11n_HT40_Ch0

Freq. (MHz)	6dB BW (MHz)	10 Log (B) (dB)
5710	0.46	-3.370
5755	30.71	14.870
5795	35.51	15.500

802.11n_HT40_Ch1

Freq. (MHz)	6dB BW (MHz)	10 Log (B) (dB)
5710	2.23	3.480
5755	32.54	15.120
5795	31.45	14.980

802.11n_HT40_Ch0

Freq. (MHz)	Measured Freq. (MHz)	Limit (MHz)
5230	5248.02	< 5250
5755	5737.18	> 5725

802.11n_HT40_Ch1

Freq. (MHz)	Measured Freq. (MHz)	Limit (MHz)
5230	5247.98236	< 5250
5755	5737.04628	> 5725

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802.11ac_VHT80_Ch0

Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5210	80.44	19.050
5290	80.57	19.060
5530	80.40	19.050
5610	80.66	19.070
5690	81.36	19.100

802.11ac_VHT80_Ch1

Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5210	80.56	19.060
5290	80.54	19.060
5530	80.99	19.080
5610	80.43	19.050
5690	75.09	18.760

802.11ac_VHT80_Ch0

Freq. (MHz)	6dB BW (MHz)	10 Log (B) (dB)
5690	2.50	3.980
5775	61.30	17.870

802.11ac_VHT80_Ch1

Freq. (MHz)	6dB BW (MHz)	10 Log (B) (dB)
5690	1.36	1.340
5775	68.89	18.380

802.11ac_VHT80_Ch0

Freq. (MHz)	Measured Freq. (MHz)	Limit (MHz)
5210	5247.55	< 5250
5775	5737.41	> 5725

802.11ac_VHT80_Ch1

Freq. (MHz)	Measured Freq. (MHz)	Limit (MHz)
5210	5247.65934	< 5250
5775	5737.55749	> 5725

802.11ac_VHT160_Ch0

Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5250	162.5	22.110
5570	162.5	22.110

802.11ac_VHT160_Ch1

Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5250	163.1	22.120
5570	162.4	22.110

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802.11ax_HE20_Ch0

Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5180	20.79	13.180
5220	20.36	13.090
5240	21.02	13.230
5260	28.75	14.590
5300	22.02	13.430
5320	20.71	13.160
5500	29.89	14.760
5600	20.49	13.120
5700	30.00	14.770
5720	20.66	13.150

802.11ax_HE20_Ch1

Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5180	20.66	13.150
5220	20.58	13.130
5240	20.66	13.150
5260	20.63	13.140
5300	20.46	13.110
5320	20.66	13.150
5500	20.22	13.060
5600	20.63	13.140
5700	20.50	13.120
5720	15.15	11.800

802.11ax_HE20_Ch0

Freq. (MHz)	6dB BW (MHz)	10 Log (B) (dB)
5720	0.99	-0.040
5745	11.38	10.560
5785	18.81	12.740
5825	16.83	12.260

802.11ax_HE20_Ch1

Freq. (MHz)	6dB BW (MHz)	10 Log (B) (dB)
5720	4.21	6.240
5745	17.69	12.480
5785	18.35	12.640
5825	18.05	12.560

802.11ax_HE20_Ch0

Freq. (MHz)	Measured Freq. (MHz)	Limit (MHz)
5240	5249.53	< 5250
5745	5735.59	> 5725

802.11ax_HE20_Ch1

Freq. (MHz)	Measured Freq. (MHz)	Limit (MHz)
5240	5249.53274	< 5250
5745	5735.60544	> 5725

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802.11ax_HE40_Ch0

Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5190	39.84	16.000
5230	40.15	16.040
5270	56.05	17.490
5310	39.84	16.000
5510	47.49	16.770
5590	39.84	16.000
5670	40.00	16.020
5710	45.43	16.570

802.11ax_HE40_Ch1

Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5190	40.01	16.020
5230	39.70	15.990
5270	39.96	16.020
5310	39.81	16.000
5510	40.00	16.020
5590	39.69	15.990
5670	39.92	16.010
5710	35.03	15.440

802.11ax_HE40_Ch0

Freq. (MHz)	6dB BW (MHz)	10 Log (B) (dB)
5710	2.99	4.760
5755	35.50	15.500
5795	31.25	14.950

802.11ax_HE40_Ch1

Freq. (MHz)	6dB BW (MHz)	10 Log (B) (dB)
5710	2.14	3.300
5755	32.97	15.180
5795	29.05	14.630

802.11ax_HE40_Ch0

Freq. (MHz)	Measured Freq. (MHz)	Limit (MHz)
5230	5248.85	< 5250
5755	5736.36	> 5725

802.11ax_HE40_Ch1

Freq. (MHz)	Measured Freq. (MHz)	Limit (MHz)
5230	5248.91086	< 5250
5755	5736.24764	> 5725

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802.11ax_HE80_Ch0

Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5210	80.73	19.070
5290	80.67	19.070
5530	80.68	19.070
5610	81.17	19.090
5690	76.01	18.810

802.11ax_HE80_Ch1

Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5210	81.08	19.090
5290	80.90	19.080
5530	81.27	19.100
5610	81.19	19.100
5690	75.50	18.780

802.11ax_HE80_Ch0

Freq. (MHz)	6dB BW (MHz)	10 Log (B) (dB)
5690	0.60	-2.220
5775	48.94	16.900

802.11ax_HE80_Ch1

Freq. (MHz)	6dB BW (MHz)	10 Log (B) (dB)
5690	1.27	1.040
5775	62.60	17.970

802.11ax_HE80_Ch0

Freq. (MHz)	Measured Freq. (MHz)	Limit (MHz)
5210	5248.43	< 5250
5775	5736.62	> 5725

802.11ax_HE80_Ch1

Freq. (MHz)	Measured Freq. (MHz)	Limit (MHz)
5210	5248.54178	< 5250
5775	5736.69153	> 5725

802.11ax_HE160_Ch0

Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5250	163.8	22.140
5570	163.8	22.140

802.11ax_HE160_Ch1

Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5250	163.4	22.130
5570	164.2	22.150

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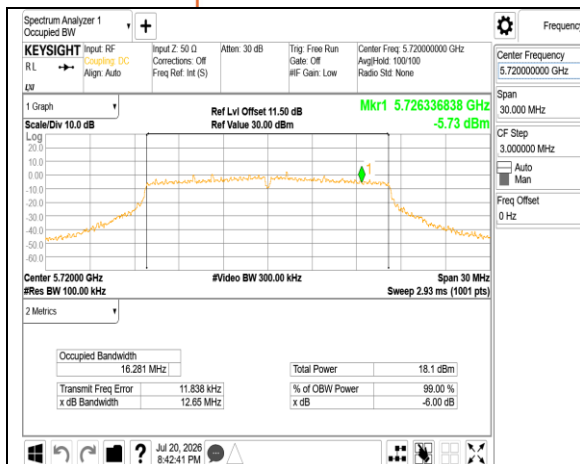
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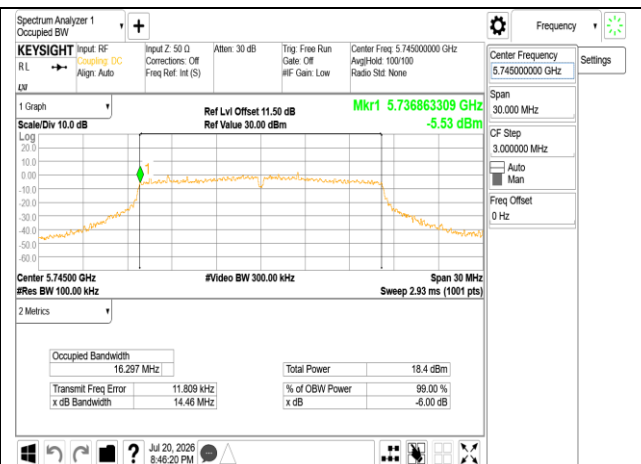
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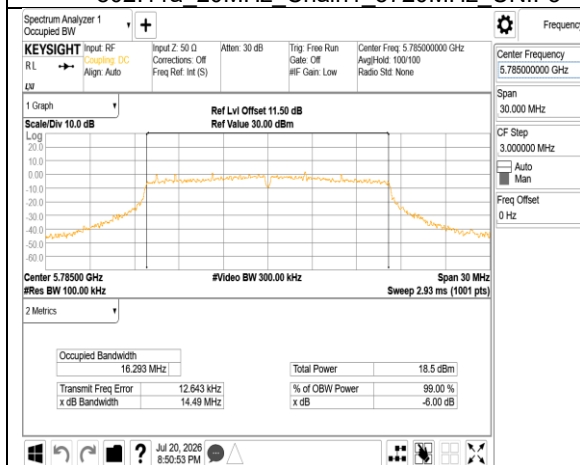
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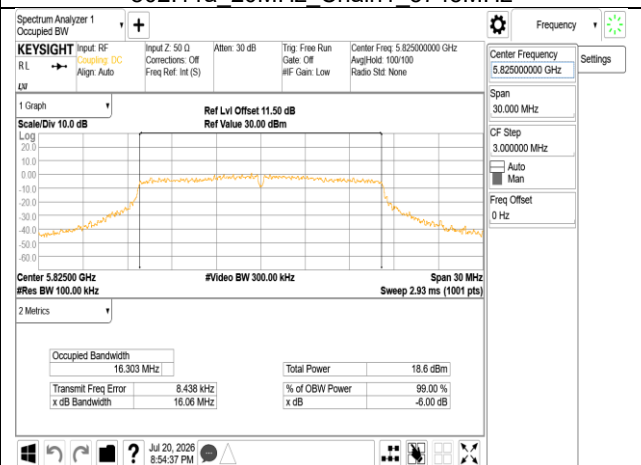
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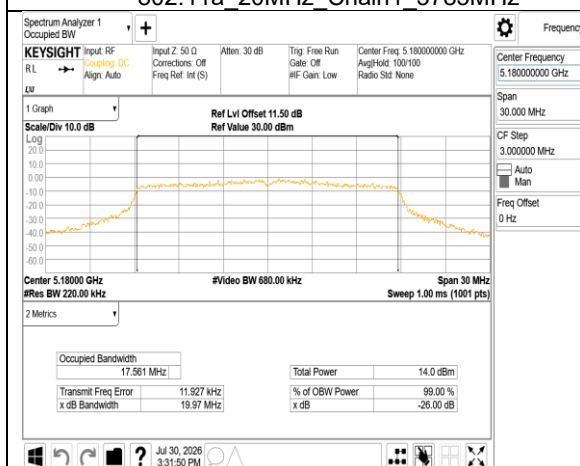
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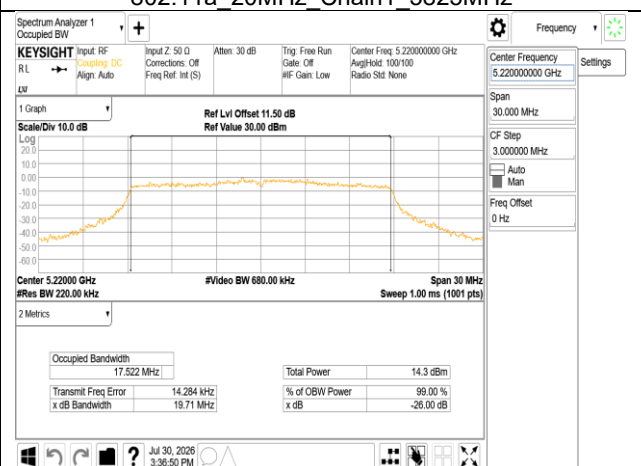
802.11a_20MHz_Chain1_5785MHz



802.11a_20MHz_Chain1_5825MHz



802.11n_20MHz_Chain0_5180MHz



802.11n_20MHz_Chain0_5220MHz

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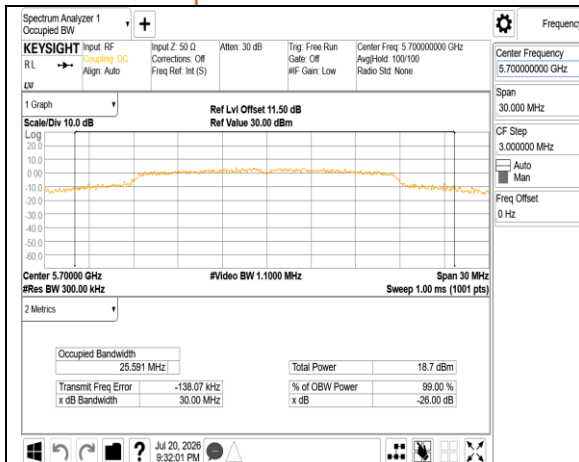
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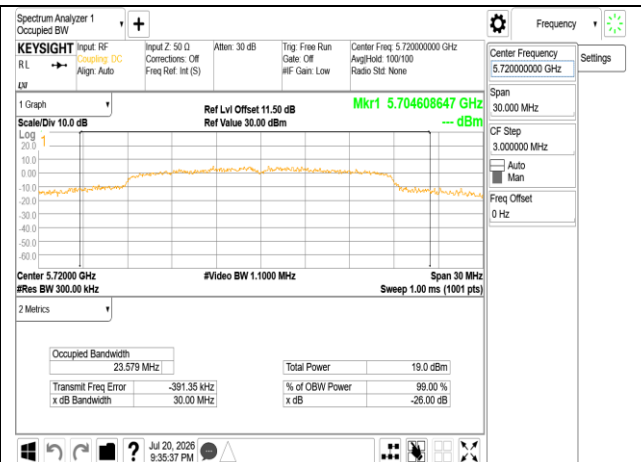
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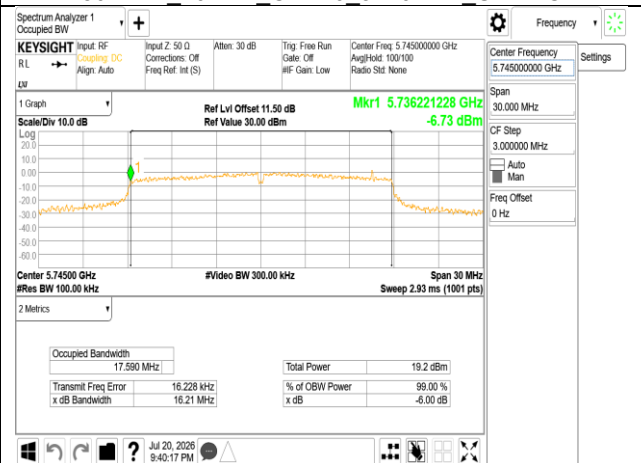
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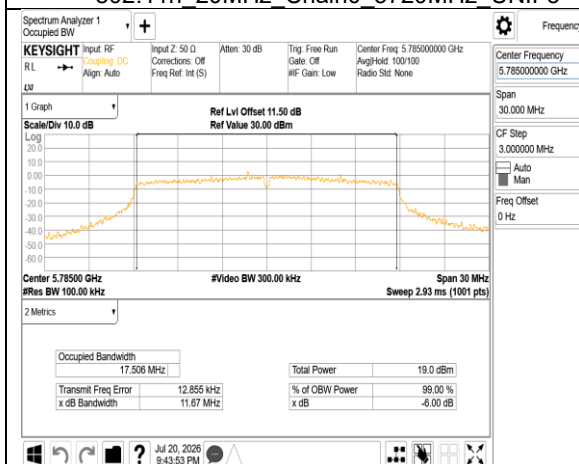
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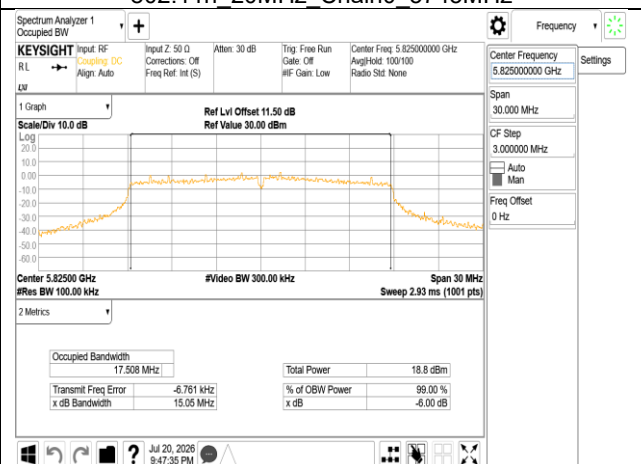
802.11n_20MHz_Chain0_5720MHz_UNII-3



802.11n_20MHz_Chain0_5745MHz



802.11n_20MHz_Chain0_5785MHz

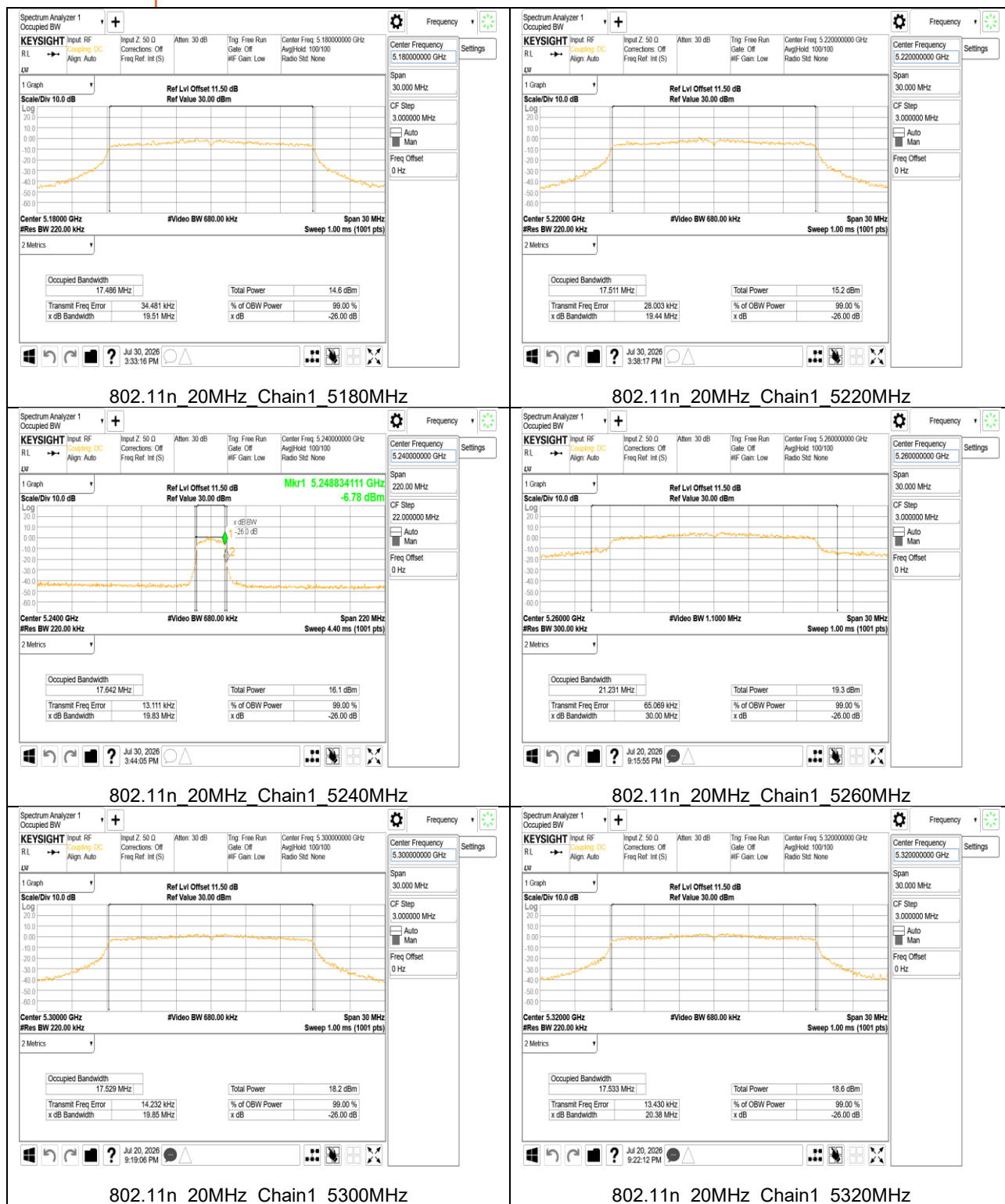


802.11n_20MHz_Chain0_5825MHz

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