Prüfbericht-Nr.: *Test report no.:*	CN22VSHI(P15E-WiFi) 001	**Auftrags-Nr.:** *Order no.*:	238539141	Seite 1 von 108 *Page 1 of 108*
Kunden-Referenz-Nr.: *Client reference no.:*	N/A	**Auftragsdatum:** *Order date:*	2022-01-26	
Auftraggeber: *Client:*	EnGenius Technologies 1580 Scenic Avenue, Costa Mesa, CA 92626			
Prüfgegenstand: *Test item:*	802.11ax Indoor Ceiling Mount Access Point ; 802.11ax Cloud Managed Access Point			
Bezeichnung / Typ-Nr.: *Identification / Type no.:*	EWS357AP v3 ; ECW220 v2 ; ECW220S			
Auftrags-Inhalt: *Order content*:	FCC Part 15E Test report (WiFi 5GHz)			
Prüfgrundlage: *Test specification:*	FCC 47CFR Part 15: Subpart E Section 15.407			

Wareneingangsdatum: *Date of sample receipt:*	2022-01-27
Prüfmuster-Nr.: *Test sample no:*	A003207329-001, 005, 008 A003207329-003
Prüfzeitraum: *Testing period:*	2022-02-17 - 2022-06-17
Ort der Prüfung: *Place of testing:*	EMC/RF Taipei Testing Site
Prüflaboratorium: *Testing laboratory:*	Taipei Testing Laboratories
Prüfergebnis*: *Test result*:*	Pass

zusammengestellt von: *compiled by:*		**genehmigt von:** authorized by:	
Datum: *Date:* 2022-06-22	Ethan Shao	**Ausstellungsdatum:** *Issue date:* 2022-06-22	Ryan Chen
Stellung / *Position:*	Assistant Project Engineer	**Stellung** / *Position:*	Senior Project Manager

Sonstiges / *Other:*

Zustand des Prüfgegenstandes bei Anlieferung: Prüfmuster vollständig und unbeschädigt
Condition of the test item at delivery: *Test item complete and undamaged*

* Legende:	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhaft
	P(ass) = entspricht o.g. Prüfgrundlage(n)		F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
** Legend:*	*1 = very good*	*2 = good*	*3 = satisfactory*	*4 = sufficient*	*5 = poor*
	P(ass) = passed a.m. test specification(s)		*F(ail) = failed a.m. test specification(s)*	*N/A = not applicable*	*N/T = not tested*

TEST SUMMARY

Report Section	FCC Clause	Test Item	Result
5.1.1	15.407(a) & 15.203	Antenna Requirement	Pass
5.1.2	15.407(a)	Maximum Conducted Output Power	Pass
5.1.3	15.407(h)(1)	Transmit Power Control (TPC)	Pass
5.1.4	15.407(a)	26 dB Bandwidth	Pass
5.1.4	2.1049	99% Occupied Bandwidth	Pass
5.1.5	15.407(e)	6 dB Bandwidth (U-NII-3 Band only)	Pass
5.1.6	15.407(g)	Frequency Stability	Pass
5.1.7	15.407(a)	Power Spectral Density	Pass
5.1.8	15.407(b) & 15.205 & 15.209	Radiated Spurious Emissions and Band Edges	Pass
5.1.9	15.407(h) & KDB 905462 D02	Dynamic Frequency Selection	Pass
5.2.1	15.207	Mains Conducted Emission	Pass

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

Contents

HISTORY OF THIS TEST REPORT

Report No.	Description	Date Issued
CN22VSHI(P15E-WiFi) 001	Original Release	2022-06-22

1. General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:
Appendix A - Test Result of Conducted_1T1R
Appendix B - Test Result of Conducted_2T2R
Appendix C - Test Result of Radiated Emissions & Mains Conducted Emission_Adapter 1T1R
Appendix D - Test Result of Radiated Emissions & Mains Conducted Emission_Adapter 2T2R
Appendix E - Test Result of Radiated Emissions & Mains Conducted Emission_POE 1T1R
Appendix F - Test Result of Radiated Emissions & Mains Conducted Emission_POE 2T2R
Appendix SP - Photographs of Test Setup
Appendix EP - Photographs of EUT

Applied Standard and Test Levels

Radio
FCC 47CFR Part 15: Subpart E Section 15.407
FCC 47CFR Part 2: Subpart J Section 2.1049
ANSI C63.10:2013
KDB 789033 D02 General UNII Test Procedures New Rules v02r01
KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02
KDB 662911 D01 Multiple Transmitter Output v02r01

1.2 Decision Rule of Conformity

The decision rule of conformity of this test report is following the requirements of the requested standard in the quotation, and agreed among testing laboratory and manufacturer (applicant) to exclude the consideration of Measurement Uncertainty, unless it is required by the specific standard.

2. Test Sites

2.1 Test Laboratory

Taipei Testing Laboratories

11F. No.758, Sec. 4, Bade Rd., Songshan Dist.
Taipei City 105
Taiwan (R.O.C.)

2.2 Test Facility

Taipei Testing Laboratories

No.458-18, Sec. 2, Fenliao Rd., Linkou Dist.,
New Taipei City 244
Taiwan (R.O.C.)
FCC Registration No.: 226631
ISED Registration No.: 25563

2.3 Traceability

All measurement equipment calibrations are traceable to NML(Taiwan)/NIST(USA) or where calibration is performed outside Taiwan, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically in a suitably accredited Calibration Lab. Additionally all equipment is verified for proper performance on a regular basics using in house standards or comparisons.

2.5 Measurement Uncertainty

All measurement uncertainty values are shown with a coverage factor of k=2 to indicate a 95% level of confidence.

Emission Measurement Uncertainty

Parameter	Uncertainty
Radiated Emission (9 kHz ~ 30 MHz)	± 1.15 dB
Radiated Emission (30 MHz ~ 200 MHz)	± 1.30 dB
Radiated Emission (200 MHz ~ 1 GHz)	± 1.30 dB
Radiated Emission (1 GHz ~ 18 GHz)	± 1.54 dB
Radiated Emission (18 GHz ~ 40 GHz)	± 2.52 dB
Mains Conducted Emission	± 1.65 dB

3. General Product Information

3.1 Product Function and Intended Use

The EUT is a 802.11ax Indoor Ceiling Mount Access Point ; 802.11ax Cloud Managed Access Point.
It contains a WLAN compatible module enabling the user to communicate data through a Wireless interface.
This equipment has two radio modules, one module is 2.4GHz + 5GHz with 2T2R and the other one is scanning radio; the scanning radio has two configurations of 1T1R and RX only. For the scanning radio in this application we just apply the RX only mode for FCC ID: A8J-EWS357APV3; and we also put the 1T1R test data in the report for reference only.
For details refer to the User Guide, Data Sheet and Circuit Diagram.

3.2 System Details and Ratings

Basic Information of EUT

Item	EUT information
Kind of Equipment/Test Item	802.11ax Indoor Ceiling Mount Access Point ; 802.11ax Cloud Managed Access Point
Type Identification	EWS357AP v3 ; ECW220 v2 ; ECW220S
FCC ID	A8J-EWS357APV3

Note:

1. All models are listed as below.

Model Type	Type Identification	Difference
Main	EWS357AP v3	All models are electrically identical, different model names are for marketing purpose.
Series	ECW220 V2	
	ECW220S	

Technical Specification of EUT

Item	EUT information		
Operating Frequency	Band 2: 5260 MHz ~ 5320 MHz Band 3: 5500 MHz ~ 5700 MHz		
Channel Number	Band 2: 4 for 802.11a, 802.11n HT20, 802.11ac VHT20, 802.11ax HE20 2 for 802.11n HT40, 802.11ac VHT40, 802.11ax HE40 1 for 802.11ac VHT80, 802.11ax HE80 Band 3: 11for 802.11a, 802.11n HT20, 802.11ac VHT20, 802.11ax HE20 5 for 802.11n HT40, 802.11ac VHT40, 802.11ax HE40 2 for 802.11ac VHT80, 802.11ax HE80		
Data Rate	802.11a: 54.0 / 48.0 / 36.0 / 24.0 / 18.0 / 12.0 / 9.0 / 6.0 Mbps 802.11n: up to MCS7 802.11ac: up to MCS9 802.11ax: up to MCS11		
Operation Voltage	Adapter: Input: 100~240Vac; Output: 12Vdc POE: Input: 100~240Vac; Output: 54 Vdc		
Modulation	802.11a, 802.11n HT20, 802.11n HT40: OFDM-BPSK, QPSK, 16QAM, 64QAM 802.11ac VHT20, 802.11ac VHT40, 802.11ac VHT80: OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM 802.11ax HE20, 802.11ax HE40, 802.11ax HE80 OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM		
Maximum Output Power (mW)	Scanning Mode		5260 ~ 5320 MHz: 29.65 5500 ~ 5700 MHz: 28.91
	Traffic Mode	CDD	5260 ~ 5320 MHz: 215.13 5500 ~ 5700 MHz: 212.12
		Beamforming	5260 ~ 5320 MHz: 107.57 5500 ~ 5700 MHz: 106.07
TPC Function	Supported		
Antenna Information	Refer to 5.1.1		
Accessory Device	Refer to 4.4		

3.3 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.4 Submitted Documents

- Circuit Diagram
- Instruction Manual
- Rating Label
- Technical Description

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

The test modes were adapted accordingly in reference to the instructions for use.
During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output expected by the customer and is going to be fixed on the firmware of the final end product.

Table for Parameters of Test Software Setting

Scanning Mode											
802.11a		802.11n HT20		802.11n HT40		802.11ac VHT20		802.11ac VHT40		802.11ac VHT80	
Channel	Power Setting	Channel	Power Setting	Channel	Power Setting	Channel	Power Setting	Channel	Power Setting	Channel	Power Setting
52	14.5	52	14.5	54	14	52	14.5	54	14	58	8.5
60	14	60	14	62	12	60	14	62	12	106	10
64	14.5	64	14.5	102	13	64	14.5	102	13	122	11.5
100	14	100	14	110	14	100	14	110	14		
116	14	116	14	134	14	116	14	134	14		
140	14	140	14			140	14				

Traffic Mode									
802.11a		802.11n HT20		802.11n HT40		802.11ac VHT20		802.11ac VHT40	
Channel	Power Setting	Channel	Power Setting	Channel	Power Setting	Channel	Power Setting	Channel	Power Setting
52	16.5	52	17	54	20	52	17	54	20
60	16.5	60	17	62	19	60	17	62	19
64	16.5	64	17	102	19	64	17	102	19
100	16.5	100	17	110	20	100	17	110	20
116	16.5	116	17	134	19	116	17	134	19
140	16.5	140	17			140	17		
802.11ac VHT80		802.11ax HE20		802.11ax HE40		802.11ax HE80			
Channel	Power Setting	Channel	Power Setting	Channel	Power Setting	Channel	Power Setting		
58	18.5	52	17	54	20	58	18.5		
106	18.5	60	17	62	19	106	18.5		
122	20	64	17	102	19	122	20		
		100	17	110	20				
		116	17	134	19				
		140	17						

4.2 Carrier Frequency and Channel

Band	Channel	Frequency (MHz)	802.11a 802.11n HT20 802.11ac VHT20 802.11ax HE20	802.11n HT40 802.11ac VHT40 802.11ax HE40	802.11ac VHT80 802.11ax HE80
U-NII-2A (Band 2)	52	5260	V		
	54	5270		V	
	56	5280	V		
	58	5290			V
	60	5300	V		
	62	5310		V	
	64	5320	V		
U-NII-2C (Band 3)	100	5500	V		
	102	5510		V	
	104	5520	V		
	106	5530			V
	108	5540	V		
	110	5550		V	
	112	5560	V		
	116	5580	V		
	118	5590		V	
	120	5600	V		
	122	5610			V
	124	5620	V		
	126	5630		V	
	128	5640	V		
	132	5660	V		
	134	5670		V	
	136	5680	V		
	140	5700	V		

4.3 Test Operation and Test Software

Setup for testing: Test samples are provided with a USB interface which makes it possible to control them through a test software installed on a notebook computer.
This software was running on the laptop computer connected to the EUT. It was used to enable the operation modes listed as below.

Test Software	QSPR

The samples were used as follows:
A003207329-001, 005, 008 for radiated test
A003207329-003 for conducted test
Full test was applied on all test modes, but only worst case was shown.

The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and receivers.

Modulation Mode	Tx Function
802.11a	2TX (MIMO)
802.11n HT20	2TX (MIMO)
802.11n HT40	2TX (MIMO)
802.11ac VHT20	2TX (MIMO)
802.11ac VHT40	2TX (MIMO)
802.11ac VHT80	2TX (MIMO)
802.11ax HE20	2TX (MIMO)
802.11ax HE40	2TX (MIMO)
802.11ax HE80	2TX (MIMO)

* The modulation and bandwidth are similar for 802.11n mode HT20/HT40, 802.11ac mode VHT20/40/80 and 802.11ax mode HE20/40/80, therefore investigated worse case as representative mode in test report.
** For Beamforming mode, only output power is evaluated and presented in this report.

EUT Configure Mode	Applicable To				Description
	Antenna Port Conducted Measurement	Radiated Spurious Emissions above 1 GHz	Radiated Spurious Emissions below 1 GHz	Mains Conducted Emission	
-	√	√	√	√	-

Note:
1. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when position on Z-plane.
2. "-" means no effect.
3. POE Mode had been verified the worst case of Radiated Spurious Emissions and Mains Conducted Emission tests.

Antenna Port Conducted Measurement

☒ Pre-Scan full test was applied on all test modes, but only worst case was shown.

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Frequency (MHz)	Available Channel	Tested Channel	Date Rate (Mbps)
CDD	802.11a	5260-5320	52 to 64	52, 60, 64	6.0
		5500-5700	100 to 140	100, 116, 140	
	802.11n HT20	5260-5320	52 to 64	52, 60, 64	MCS0
		5500-5700	100 to 140	100, 116, 140	
	802.11n HT40	5260-5320	54 to 62	54, 62	
		5500-5700	102 to 134	102, 110, 134	
	802.11ac VHT20	5260-5320	52 to 64	52, 60, 64	NSS1 MCS0
		5500-5700	100 to 140	100, 116, 140	
	802.11ac VHT40	5260-5320	54 to 62	54, 62	
		5500-5700	102 to 134	102, 110, 134	
	802.11ac VHT80	5260-5320	52 to 64	58	
		5500-5700	100 to 140	106, 122	
	802.11ax HE20	5260-5320	52 to 64	52, 60, 64	
		5500-5700	100 to 140	100, 116, 140	
	802.11ax HE40	5260-5320	54 to 62	54, 62	
		5500-5700	102 to 134	102, 110, 134	
	802.11ax HE80	5260-5320	52 to 64	58	
		5500-5700	100 to 140	106, 122	

EUT Configure Mode	Mode	Frequency (MHz)	Available Channel	Tested Channel	Date Rate (Mbps)
BFM	802.11a	5260-5320	52 to 64	52, 60, 64	6.0
		5500-5700	100 to 140	100, 116, 140	
	802.11n HT20	5260-5320	52 to 64	52, 60, 64	MCS0
		5500-5700	100 to 140	100, 116, 140	
	802.11n HT40	5260-5320	54 to 62	54, 62	
		5500-5700	102 to 134	102, 110, 134	
	802.11ac VHT20	5260-5320	52 to 64	52, 60, 64	NSS1 MCS0
		5500-5700	100 to 140	100, 116, 140	
	802.11ac VHT40	5260-5320	54 to 62	54, 62	
		5500-5700	102 to 134	102, 110, 134	
	802.11ac VHT80	5260-5320	52 to 64	58	
		5500-5700	100 to 140	106, 122	
	802.11ax HE20	5260-5320	52 to 64	52, 60, 64	
		5500-5700	100 to 140	100, 116, 140	
	802.11ax HE40	5260-5320	54 to 62	54, 62	
		5500-5700	102 to 134	102, 110, 134	
	802.11ax HE80	5260-5320	52 to 64	58	
		5500-5700	100 to 140	106, 122	

Radiated Spurious Emissions (Above 1 GHz)

☒ Pre-Scan full test was applied on all test modes, but only worst case was shown.
☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Frequency (MHz)	Available Channel	Tested Channel	Date Rate (Mbps)
	802.11a	5260-5320	52 to 64	52, 60, 64	6.0
		5500-5700	100 to 140	100, 116, 140	
	802.11n HT20	5260-5320	52 to 64	52, 60, 64	MCS0
		5500-5700	100 to 140	100, 116, 140	
	802.11n HT40	5270-5310	54 to 62	54, 62	
		5510-5670	102 to 134	102, 110, 134	
	802.11ac VHT20	5260-5320	52 to 64	52, 60, 64	NSS1 MCS0
		5500-5700	100 to 140	100, 116, 140	
	802.11ac VHT40	5270-5310	54 to 62	54, 62	
		5510-5670	102 to 134	102, 110, 134	
	802.11ac VHT80	5250-5350	52 to 64	58	
		00-5700	100 to 140	106, 122	
	802.11ax HE20	5260-5320	52 to 64	52, 60, 64	
		5500-5700	100 to 140	100, 116, 140	
	802.11ax HE40	5260-5320	54 to 62	54, 62	
		5500-5700	102 to 134	102, 110, 134	
	802.11ax HE80	5260-5320	52 to 64	58	
		5500-5700	100 to 140	106, 122	

Radiated Spurious Emissions (Below 1 GHz)

☒ Pre-Scan full test was applied on all test modes, but only worst case was shown.
☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Frequency (MHz)	Available Channel	Tested Channel	Date Rate (Mbps)
Adapter	802.11a	5260-5320	52 to 64	60	6.0
	802.11ax HE20	5500-5700	100 to 140	140	NSS1 MCS0
	802.11ax HE40	5180-5240	36 to 48	38	
		5500-5700	100 to 140	134	
	802.11ac VHT40	5260-5320	54 to 62	54	
		5500-5700	102 to 134	110	
POE	802.11a	5260-5320	52 to 64	60	6.0
	802.11ax HE20	5500-5700	100 to 140	140	NSS1 MCS0
	802.11ac VHT40	5260-5320	54 to 62	54	
		5500-5700	102 to 134	110	

Mains Conducted Emission Test

☒ Pre-Scan full test was applied on all test modes, but only worst case was shown.
☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Frequency (MHz)	Available Channel	Tested Channel	Date Rate (Mbps)
Scanning	802.11n HT40	5270-5310	54 to 62	54	MCS0
Traffic	802.11ax HE20	5500-5700	100 to 140	140	NSS1 MCS0

Test Condition

Test Item		Ambient Temperature	Relative Humidity	Tested by
Conducted Measurement		18-23 °C	59-66 %	Stanislas Charles
				Barry Xiao
Radiated Spurious Emissions above 1 GHz	Scanning Mode	20.3 °C	56 %	Hunter Wang
	Traffic Mode	23.4-25.6 °C	52-59 %	Ivan Chiang
Radiated Spurious Emissions below 1 GHz	Scanning Mode	20.3 °C	56 %	Ivan Chiang
	Traffic Mode	23.4-25.6 °C	52-59 %	Ivan Chiang
Mains Conducted Emission		20.3 °C	56 %	Hunter Wang

4.4 Special Accessories and Auxiliary Equipment

The product has been tested together with the following additional accessories:

Accessory of EUT

None.

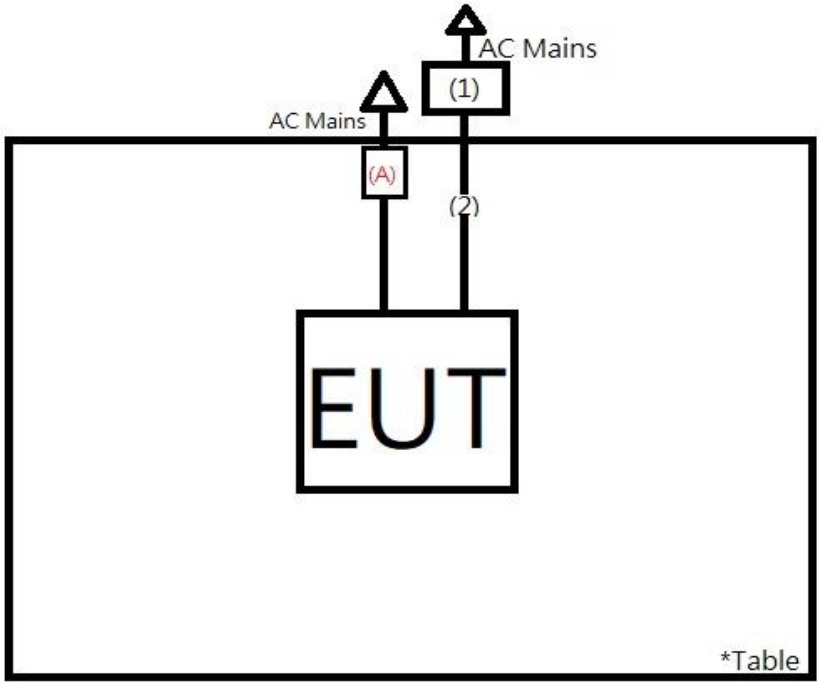
Support Unit

No.	Description	Brand	Model	S/N	Remark
Radiated Test for Adapter Mode					
A	AC Adapter	Powertron Electronics Corp.	PA1024-120HUB200	-	I/P: 100-240 Vac, 50/60 Hz, 0.6 A O/P: 12 Vdc, 2.0 A 150 cm non-shielded cable with core
1	Notebook	HP	15s-du0007TX	CND93662VF	-
2	LAN Cable	TUV	TUV-010	-	300 cm non-shielded cable w/o core
Radiated Test for POE Mode					
A	PoE Adapter	SENAO	EPA5006GP	-	I/P: 100-240 Vac, 50/60 Hz, 0.8 A O/P: 54 Vdc, 0.6 A 175 cm non-shielded cable w/o core
1	LAN Cable	TUV-JP	TUV-JP-002	-	1000 cm non-shielded cable w/o core
2	LAN Cable	TUV-JP	TUV-JP-001	-	300 cm non-shielded cable w/o core
3	Notebook	HP	15s-du0007TX	CND93662VF	-
Mains Conducted Test for Adapter Mode					
A	AC Adapter	Powertron Electronics Corp.	PA1024-120HUB200	-	I/P: 100-240 Vac, 50/60 Hz, 0.6 A O/P: 12 Vdc, 2.0 A 150 cm non-shielded cable with core
1	LAN Cable	TUV	TUV-JP-002	-	150 m non-shielded cable w/o core
2	Notebook	Lenovo	81BL	MP1DCD6Y	-

Mains Conducted Test for POE Mode					
A	PoE Adapter	SENAO	EPA5006GP	-	I/P: 100-240 Vac, 50/60 Hz, 0.8 A O/P: 54 Vdc, 0.6 A 175 cm non-shielded cable w/o core
1	LAN Cable	TUV	TUV-001	-	120 cm non-shielded cable w/o core
2	LAN Cable	TUV	TUV-002	-	150 cm non-shielded cable w/o core
3	Notebook	Lenovo	81BL	MP1DCD6Y	-
Conducted Test					
-	Notebook	LENOVO	TP00094A	PF-1GT015	-

4.5 Test Setup Diagram

<Radiated Spurious Emissions, Adapter Mode>



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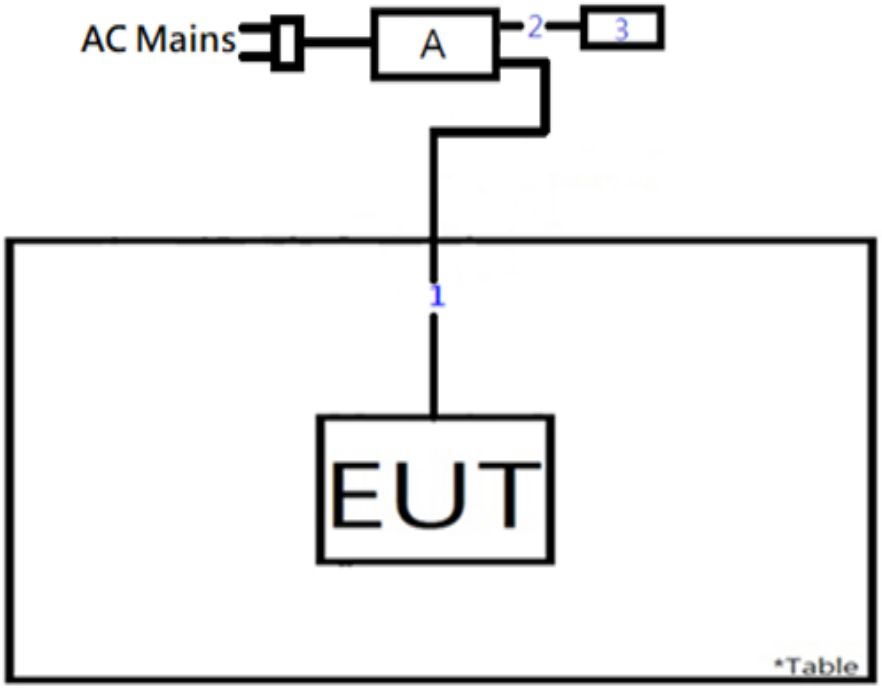

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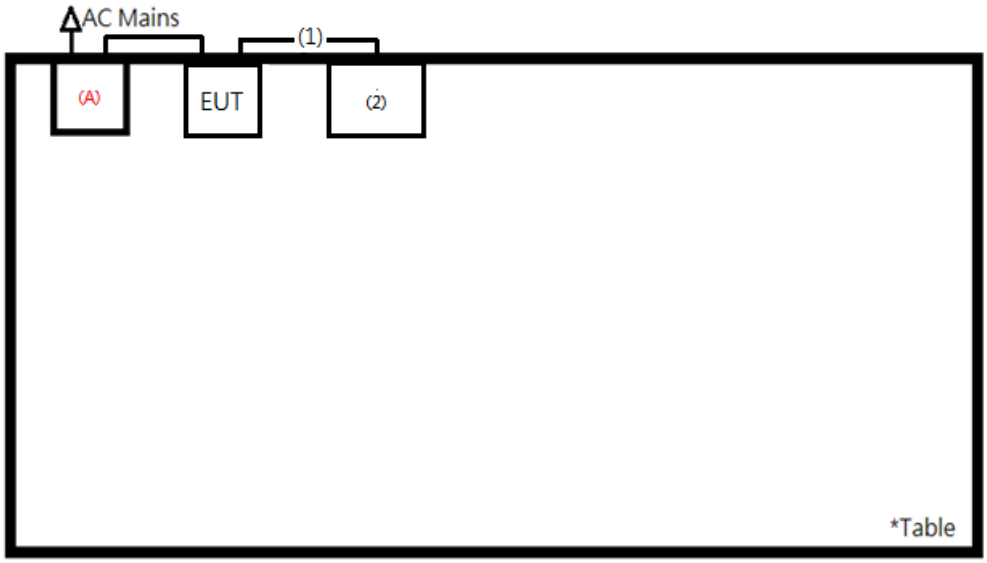
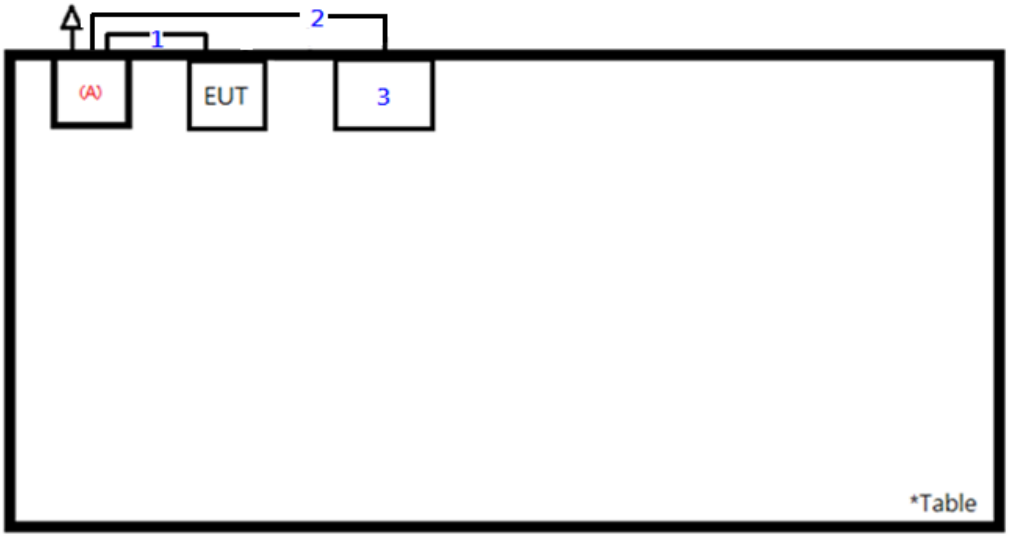


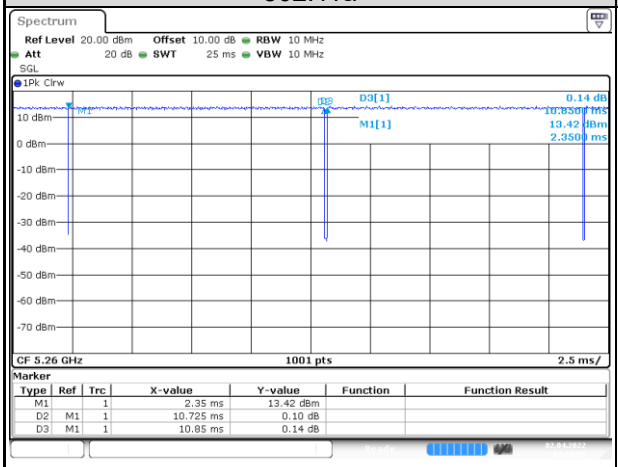
<Mains Conducted Emission, POE Mode>



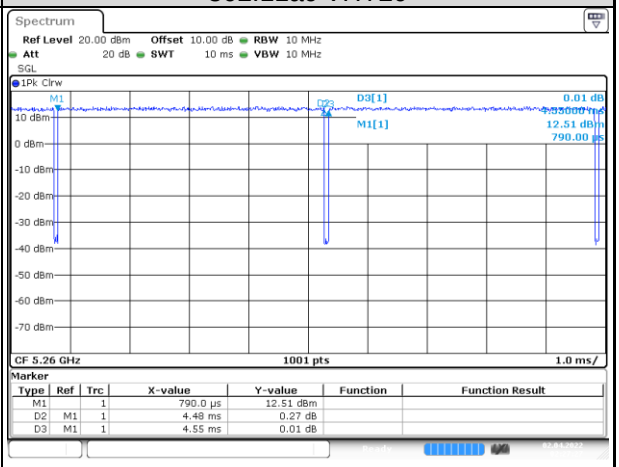
4.6 Duty Cycle of Test Signal

Scanning Mode				
Mode	On + Off Time (ms)	On Time (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11a	10.85	10.73	98.85	0.05
802.11ac VHT20	4.55	4.48	98.46	0.07
802.11ac VHT40	4.92	4.78	97.07	0.13
802.11ac VHT80	2.38	2.24	94.19	0.26

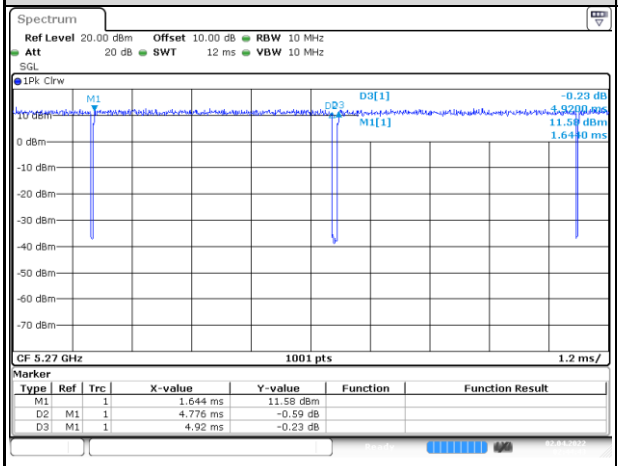
802.11a



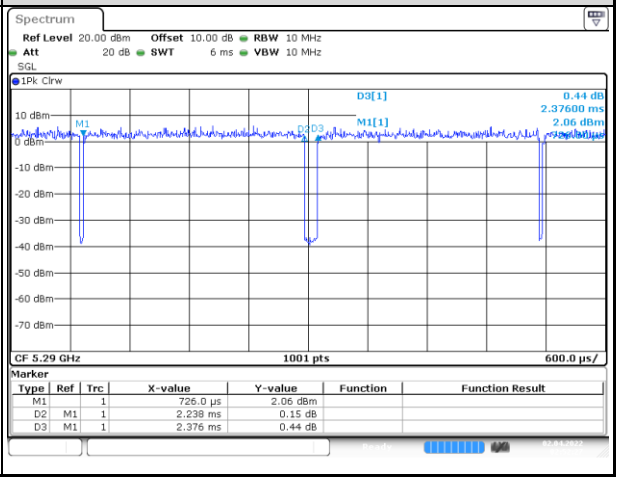
802.11ac VHT20



802.11ac VHT40

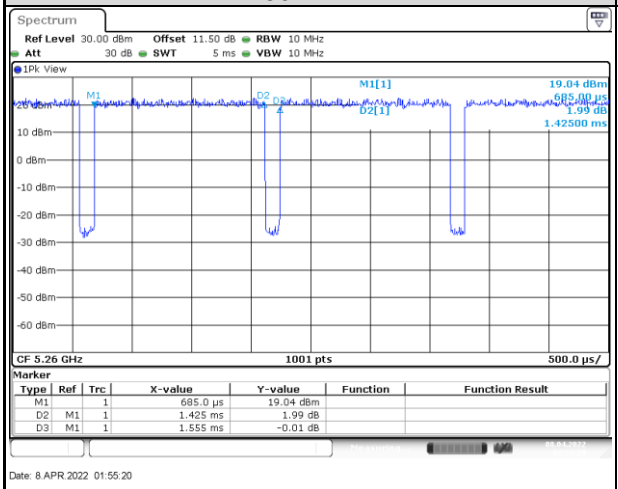


802.11ac VHT80

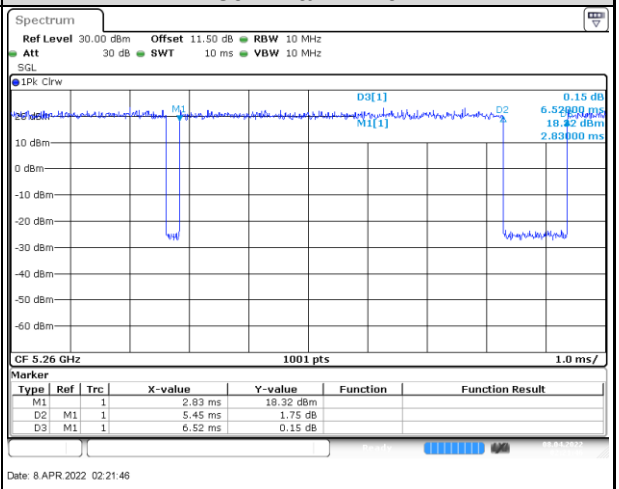


Traffic Mode				
Mode	On + Off Time (ms)	On Time (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11a	1.56	1.43	91.64	0.38
802.11ax HE20	6.52	5.45	83.59	0.78
802.11ax HE40	6.48	5.44	83.95	0.76
802.11ax HE80	6.34	5.46	86.12	0.65

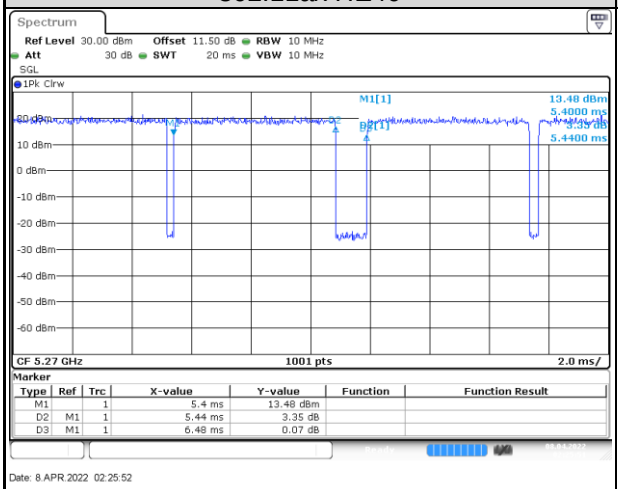
802.11a



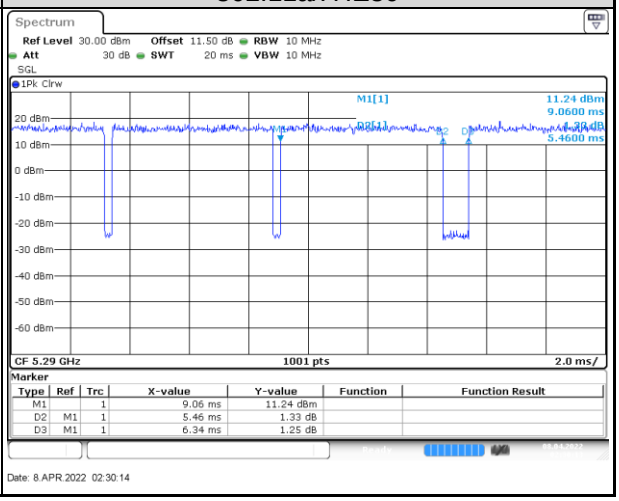
802.11ax HE20



802.11ax HE40



802.11ax HE80



5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

Requirement Use of approved antennas only

According to the manufacturer declaration, the EUT's antenna specifications are described as below. The antenna is used with no possibility of replacement with a non-approved antenna by the end-user. Therefore, the EUT is considered to comply with this provision.

ANT No.	Antenna Type	Gain (dBi)	
		Traffic Mode	
		5260~5320 MHz	5500~5700 MHz
1	PIFA	4.85	4.85
2	PIFA	4.52	4.52
Max Peak Gain		4.85	4.85
CDD Mode	Power Directional Gain =	4.85	4.85
	PSD Directional Gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}]$ =	7.70	7.70
Beamforming Mode	Power Directional Gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}]$ =	7.70	7.70
	PSD Directional Gain = $10\log[(10^{G1/20} + 10^{G2/20} + \ldots. + 10^{GN/20})^2 / N_{ANT}]$ =	7.70	7.70
-	-	Scanning Mode	
-	-	5.90	5.90

Refer to EUT photo for details.

5.1.2 Maximum Conducted Output Power

Limit

Operation Band	EUT Category	Limit
U-NII-1	Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p ≦ 125 mW (21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
	Fixed point-to-point Access Point	1 Watt (30 dBm)
	Indoor Access Point	1 Watt (30 dBm)
	Mobile and Portable client device	250 mW (24 dBm)
U-NII-2A	---	250 mW (24 dBm) or 11 dBm + 10 log B*
U-NII-2C	---	250 mW (24 dBm) or 11 dBm + 10 log B*
U-NII-3	---	1 Watt (30 dBm)

Note: B* is the 26 dB emission bandwidth in megahertz

Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices,

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

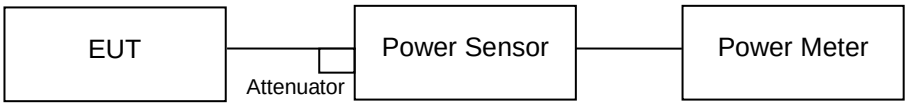
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT};

Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less for 20 MHz channel widths with $N_{ANT} \geq 5$.

For power measurements on all other devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB.

Kind of Test Site Shielded room

Test Setup



Test Instruments and Test Date

Scanning Mode:

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date	Test Date	
						From	Until
Power Meter	Anritsu	ML2495A	1901008	2022/3/15	2023/3/14	2022/3/22	2022/6/16
Power Sensor	Anritsu	MA2411B	1725269	2022/3/15	2023/3/14	2022/3/22	2022/6/16

Traffic Mode:

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date	Test Date	
						From	Until
Power Meter	Anritsu	ML2495A	1901008	2021/3/24	2022/3/23	2022/2/17	2022/2/18
Power Sensor	Anritsu	MA2411B	1725269	2021/3/24	2022/3/23	2022/2/17	2022/2/18

Test Procedures

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst and set the detector to AVERAGE. Duty factor is not added to measured value.

Test Result, Scanning Mode (1T1R)

<802.11a>

Channel	Channel Frequency (MHz)	Average Output Power		Limit
		(dBm)	(mW)	(dBm)
52	5260	14.72	29.65	24.00
60	5300	13.92	24.66	24.00
64	5320	13.93	24.72	24.00
100	5500	14.61	28.91	24.00
116	5580	13.59	22.86	24.00
140	5700	14.26	26.67	24.00

Note:
For U-NII-2A, U-NII-2C Band:
1. 11 dBm + 10log (38.16) = 26.82 dBm > 24 dBm.
2. 11 dBm + 10log (38.82) = 26.89 dBm > 24 dBm.
3. 11 dBm + 10log (35.96) = 26.56 dBm > 24 dBm.
4. 11 dBm + 10log (25.34) = 25.04 dBm > 24 dBm.
5. 11 dBm + 10log (27.25) = 25.35 dBm > 24 dBm.
6. 11 dBm + 10log (35.76) = 26.53 dBm > 24 dBm.

<802.11n HT20>

Channel	Channel Frequency (MHz)	Average Output Power		Limit
		(dBm)	(mW)	(dBm)
52	5260	14.59	28.77	24.00
60	5300	13.81	24.04	24.00
64	5320	13.84	24.21	24.00
100	5500	14.50	28.18	24.00
116	5580	13.41	21.93	24.00
140	5700	14.17	26.12	24.00

<802.11n HT40>

Channel	Channel Frequency (MHz)	Average Output Power		Limit
		(dBm)	(mW)	(dBm)
54	5270	13.97	24.95	24.00
62	5310	11.73	14.89	24.00
102	5510	12.89	19.45	24.00
110	5550	13.37	21.73	24.00
134	5670	13.96	24.89	24.00

<802.11ac VHT20>

Channel	Channel Frequency (MHz)	Average Output Power		Limit
		(dBm)	(mW)	(dBm)
52	5260	14.67	29.31	24.00
60	5300	13.87	24.38	24.00
64	5320	13.92	24.66	24.00
100	5500	14.58	28.71	24.00
116	5580	13.49	22.34	24.00
140	5700	14.22	26.42	24.00

Note:
For U-NII-2A, U-NII-2C Band:
1. 11 dBm + 10log (35.76) = 26.53 dBm > 24 dBm.
2. 11 dBm + 10log (36.80) = 26.66 dBm > 24 dBm.
3. 11 dBm + 10log (37.98) = 26.80 dBm > 24 dBm.
4. 11 dBm + 10log (38.24) = 26.83 dBm > 24 dBm.
5. 11 dBm + 10log (26.33) = 25.21 dBm > 24 dBm.
6. 11 dBm + 10log (26.05) = 25.16 dBm > 24 dBm.

<802.11ac VHT40>

Channel	Channel Frequency (MHz)	Average Output Power		Limit
		(dBm)	(mW)	(dBm)
54	5270	14.06	25.47	24.00
62	5310	11.79	15.10	24.00
102	5510	12.97	19.82	24.00
110	5550	13.46	22.18	24.00
134	5670	14.01	25.18	24.00

Note:
For U-NII-2A, U-NII-2C Band:
1. 11 dBm + 10log (53.63) = 28.29 dBm > 24 dBm.
2. 11 dBm + 10log (54.35) = 28.35 dBm > 24 dBm.
3. 11 dBm + 10log (55.39) = 28.43 dBm > 24 dBm.
4. 11 dBm + 10log (51.67) = 28.13 dBm > 24 dBm.
5. 11 dBm + 10log (54.03) = 28.33 dBm > 24 dBm.

<802.11ac VHT80>

Channel	Channel Frequency (MHz)	Average Output Power		Limit
		(dBm)	(mW)	(dBm)
58	5290	8.59	7.23	24.00
106	5530	9.72	9.38	24.00
122	5610	12.04	16.00	24.00

Note:
For U-NII-2A, U-NII-2C Band:
1. 11 dBm + 10log (97.34) = 30.88 dBm > 24 dBm.
2. 11 dBm + 10log (93.19) = 30.69 dBm > 24 dBm.
3. 11 dBm + 10log (90.79) = 30.58 dBm > 24 dBm.

Test Result, Traffic Mode(2T2R) with CDD Mode

<802.11a>

Channel	Channel Frequency (MHz)	Average Output Power (dBm)		Total Power		Limit
		Chain 0	Chain 1	(dBm)	(mW)	(dBm)
52	5260	16.69	17.02	19.87	97.02	24.00
60	5300	16.97	17.14	20.07	101.53	24.00
64	5320	16.78	16.84	19.82	95.95	23.84
100	5500	16.85	16.97	19.92	98.19	23.89
116	5580	16.65	16.84	19.76	94.54	23.84
140	5700	16.42	16.78	19.61	91.50	23.86

Note:
For U-NII-2A, U-NII-2C Band:
1. 11 dBm + 10log (20.10) = 24.03 dBm > 24 dBm.
2. 11 dBm + 10log (20.56) = 24.13 dBm > 24 dBm.
3. 11 dBm + 10log (20.39) = 24.10 dBm > 24 dBm.
4. 11 dBm + 10log (20.58) = 24.13 dBm > 24 dBm.
5. 11 dBm + 10log (20.50) = 24.12 dBm > 24 dBm.
6. 11 dBm + 10log (20.50) = 24.12 dBm > 24 dBm.

<802.11n HT20>

Channel	Channel Frequency (MHz)	Average Output Power (dBm)		Total Power		Limit
		Chain 0	Chain 1	(dBm)	(mW)	(dBm)
52	5260	16.66	16.82	19.75	94.43	24.00
60	5300	16.75	17.11	19.94	98.72	24.00
64	5320	16.62	16.78	19.71	93.56	24.00
100	5500	16.73	16.88	19.82	95.85	24.00
116	5580	16.55	16.79	19.68	92.94	24.00
140	5700	16.42	16.81	19.63	91.83	24.00

<802.11n HT40>

Channel	Channel Frequency (MHz)	Average Output Power (dBm)		Total Power		Limit
		Chain 0	Chain 1	(dBm)	(mW)	(dBm)
54	5270	20.05	20.30	23.19	208.31	24.00
62	5310	19.11	19.36	22.25	167.77	24.00
102	5510	19.09	19.25	22.18	165.24	24.00
110	5550	20.07	20.18	23.14	205.86	24.00
134	5670	19.02	19.43	22.24	167.50	24.00

<802.11ac VHT20>

Channel	Channel Frequency (MHz)	Average Output Power (dBm)		Total Power		Limit
		Chain 0	Chain 1	(dBm)	(mW)	(dBm)
52	5260	16.59	16.78	19.70	93.25	24.00
60	5300	16.68	17.04	19.87	97.14	24.00
64	5320	16.54	16.71	19.64	91.96	24.00
100	5500	16.67	16.80	19.75	94.31	24.00
116	5580	16.48	16.62	19.56	90.38	24.00
140	5700	16.38	16.74	19.57	90.66	24.00

<802.11ac VHT40>

Channel	Channel Frequency (MHz)	Average Output Power (dBm)		Total Power		Limit
		Chain 0	Chain 1	(dBm)	(mW)	(dBm)
54	5270	19.96	20.15	23.07	202.60	24.00
62	5310	19.02	19.24	22.14	163.75	24.00
102	5510	18.98	19.13	22.07	160.91	24.00
110	5550	19.96	20.05	23.02	200.24	24.00
134	5670	18.89	19.35	22.14	163.55	24.00

<802.11ac VHT80>

Channel	Channel Frequency (MHz)	Average Output Power (dBm)		Total Power		Limit
		Chain 0	Chain 1	(dBm)	(mW)	(dBm)
58	5290	18.68	18.93	21.82	151.95	24.00
106	5530	18.59	18.71	21.66	146.58	24.00
122	5610	19.66	20.06	22.87	193.86	24.00

<802.11ax HE20>

Channel	Channel Frequency (MHz)	Average Output Power (dBm)		Total Power		Limit
		Chain 0	Chain 1	(dBm)	(mW)	(dBm)
52	5260	16.73	16.99	19.87	97.10	24.00
60	5300	16.91	17.25	20.09	102.18	24.00
64	5320	16.73	16.90	19.83	96.08	24.00
100	5500	16.91	17.02	19.98	99.44	24.00
116	5580	16.70	16.91	19.82	95.86	24.00
140	5700	16.55	16.94	19.76	94.62	24.00

Note:
For U-NII-2A, U-NII-2C Band:
1. 11 dBm + 10log (21.06) = 24.23 dBm > 24 dBm.
2. 11 dBm + 10log (21.26) = 24.28 dBm > 24 dBm.
3. 11 dBm + 10log (21.68) = 24.36 dBm > 24 dBm.
4. 11 dBm + 10log (21.50) = 24.32 dBm > 24 dBm.
5. 11 dBm + 10log (21.26) = 24.28 dBm > 24 dBm.
6. 11 dBm + 10log (21.38) = 24.30 dBm > 24 dBm.

<802.11ax HE40>

Channel	Channel Frequency (MHz)	Average Output Power (dBm)		Total Power		Limit
		Chain 0	Chain 1	(dBm)	(mW)	(dBm)
54	5270	20.19	20.44	23.33	215.13	24.00
62	5310	19.26	19.50	22.39	173.46	24.00
102	5510	19.22	19.38	22.31	170.26	24.00
110	5550	20.19	20.32	23.27	212.12	24.00
134	5670	19.13	19.51	22.33	171.18	24.00

Note:
For U-NII-2A, U-NII-2C Band:
1. 11 dBm + 10log (40.44) = 27.07 dBm > 24 dBm.
2. 11 dBm + 10log (39.88) = 27.01 dBm > 24 dBm.
3. 11 dBm + 10log (40.12) = 27.03 dBm > 24 dBm.
4. 11 dBm + 10log (39.88) = 27.01 dBm > 24 dBm.
5. 11 dBm + 10log (39.72) = 26.99 dBm > 24 dBm.

<802.11ax HE80>

Channel	Channel Frequency (MHz)	Average Output Power (dBm)		Total Power		Limit
		Chain 0	Chain 1	(dBm)	(mW)	(dBm)
58	5290	18.83	19.08	21.97	157.29	24.00
106	5530	18.70	18.84	21.78	150.69	24.00
122	5610	19.84	20.22	23.04	201.58	24.00

Note:
For U-NII-2A, U-NII-2C Band:
1. 11 dBm + 10log (81.84) = 30.13 dBm > 24 dBm.
2. 11 dBm + 10log (81.20) = 30.10 dBm > 24 dBm.
3. 11 dBm + 10log (81.84) = 30.13 dBm > 24 dBm.

Test Result, Traffic Mode(2T2R) with Beamforming

<802.11n HT20>

Channel	Channel Frequency (MHz)	Average Output Power (dBm)		Total Power		Limit (dBm)
		Chain 0	Chain 1	(dBm)	(mW)	(dBm)
52	5260	13.65	13.81	16.74	47.22	22.30
60	5300	13.74	14.10	16.93	49.36	22.30
64	5320	13.61	13.77	16.70	46.78	22.30
100	5500	13.72	13.87	16.81	47.93	22.30
116	5580	13.54	13.78	16.67	46.47	22.30
140	5700	13.41	13.80	16.62	45.92	22.30

<802.11n HT40>

Channel	Channel Frequency (MHz)	Average Output Power (dBm)		Total Power		Limit
		Chain 0	Chain 1	(dBm)	(mW)	(dBm)
54	5270	17.04	17.29	20.18	104.16	22.30
62	5310	16.10	16.35	19.24	83.89	22.30
102	5510	16.08	16.24	19.17	82.62	22.30
110	5550	17.06	17.17	20.13	102.94	22.30
134	5670	16.01	16.42	19.23	83.76	22.30

<802.11ac VHT20>

Channel	Channel Frequency (MHz)	Average Output Power (dBm)		Total Power		Limit
		Chain 0	Chain 1	(dBm)	(mW)	(dBm)
52	5260	13.58	13.77	16.69	46.63	22.30
60	5300	13.67	14.03	16.86	48.57	22.30
64	5320	13.53	13.70	16.63	45.98	22.30
100	5500	13.66	13.79	16.74	47.16	22.30
116	5580	13.47	13.61	16.55	45.19	22.30
140	5700	13.37	13.73	16.56	45.33	22.30

<802.11ac VHT40>

Channel	Channel Frequency (MHz)	Average Output Power (dBm)		Total Power		Limit
		Chain 0	Chain 1	(dBm)	(mW)	(dBm)
54	5270	16.95	17.14	20.06	101.31	22.30
62	5310	16.01	16.23	19.13	81.88	22.30
102	5510	15.97	16.12	19.06	80.46	22.30
110	5550	16.95	17.04	20.01	100.13	22.30
134	5670	15.88	16.34	19.13	81.78	22.30

<802.11ac VHT80>

Channel	Channel Frequency (MHz)	Average Output Power (dBm)		Total Power		Limit
		Chain 0	Chain 1	(dBm)	(mW)	(dBm)
58	5290	15.67	15.92	18.81	75.98	22.30
106	5530	15.58	15.70	18.65	73.29	22.30
122	5610	16.65	17.05	19.86	96.94	22.30

<802.11ax HE20>

Channel	Channel Frequency (MHz)	Average Output Power (dBm)		Total Power		Limit
		Chain 0	Chain 1	(dBm)	(mW)	(dBm)
52	5260	13.72	13.98	16.86	48.55	22.30
60	5300	13.90	14.24	17.08	51.09	22.30
64	5320	13.72	13.89	16.82	48.04	22.30
100	5500	13.90	14.01	16.97	49.72	22.30
116	5580	13.69	13.90	16.81	47.94	22.30
140	5700	13.54	13.93	16.75	47.31	22.30

<802.11ax HE40>

Channel	Channel Frequency (MHz)	Average Output Power (dBm)		Total Power		Limit
		Chain 0	Chain 1	(dBm)	(mW)	(dBm)
54	5270	17.18	17.43	20.32	107.57	22.30
62	5310	16.25	16.49	19.38	86.74	22.30
102	5510	16.21	16.37	19.30	85.13	22.30
110	5550	17.18	17.31	20.26	106.07	22.30
134	5670	16.12	16.50	19.32	85.59	22.30

<802.11ax HE80>

Channel	Channel Frequency (MHz)	Average Output Power (dBm)		Total Power		Limit
		Chain 0	Chain 1	(dBm)	(mW)	(dBm)
58	5290	15.82	16.07	18.96	78.65	22.30
106	5530	15.69	15.83	18.77	75.35	22.30
122	5610	16.83	17.21	20.03	100.80	22.30

5.1.3 Transmit Power Control (TPC)

Requirement U-NII devices operating in the 5.25-5.35 GHz band and the 5.47-5.725 GHz band shall emply a TPC mechanism. The U-NII device is required to have capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p of less than 500 mW.

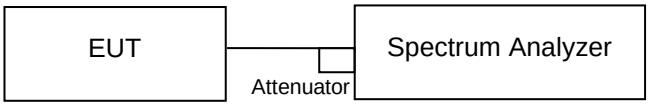
Maximum EIRP of this device is 657.66mW which greater than 500mW.

TPC	E.I.R.P	15.407(h)(1)
V	> 500mW	The TPC mechanism is required for system with an E.I.R.P. of above 500mW
	< 500mW	-

5.1.4 26 dB Bandwidth and 99% Occupied Bandwidth

Kind of Test Site Shielded room

Test Setup



Test Instruments

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date	Test Date	
						From	Until
Spectrum Analyzer	R&S	FSV40	101512	2022/2/24	2023/2/23	2022/2/17	2022/6/16
Spectrum Analyzer	R&S	FSV40	100921	2021/5/10	2022/5/9	2022/2/17	2022/6/16
Thermal Chamber	Giant Force	GHT-150-40-CP-SD	MAA1902-010	2022/3/2	2023/3/1	2022/2/17	2022/6/16
Thermal Chamber	Giant Force	GHT-150-40-CP-SD	MAA1902-010	2021/3/4	2022/3/3	2022/2/17	2022/6/16

Test Procedure

a. Set RBW = approximately 1% of the emission bandwidth.
b. Set the VBW > RBW.
c. Detector = Peak.
d. Trace mode = max hold.
e. 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%.
f. For 99% Bandwidth Measurement, the transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth and set the detector to PEAK. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean power of a given emission.

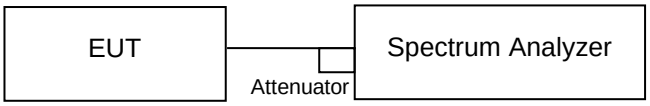
Test Results

Please refer to Appendix A for Scanning Mode and Appendix B for Traffic Mode.

5.1.5 6 dB Bandwidth (5725-5850MHz)

Kind of Test Site Shielded room

Test Setup



Test Instruments

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date	Test Date	
						From	Until
Spectrum Analyzer	R&S	FSV40	101512	2022/2/24	2023/2/23	2022/2/17	2022/6/16
Spectrum Analyzer	R&S	FSV40	100921	2021/5/10	2022/5/9	2022/2/17	2022/6/16
Thermal Chamber	Giant Force	GHT-150-40-CP-SD	MAA1902-010	2022/3/2	2023/3/1	2022/2/17	2022/6/16
Thermal Chamber	Giant Force	GHT-150-40-CP-SD	MAA1902-010	2021/3/4	2022/3/3	2022/2/17	2022/6/16

Test Procedure

MEASUREMENT PROCEDURE REF

a. Set resolution bandwidth (RBW) = 100 kHz
b. Set the video bandwidth (VBW) ≥ 3 x RBW, Detector = Peak.
c. Trace mode = max hold.
d. Sweep = auto couple.
e. Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

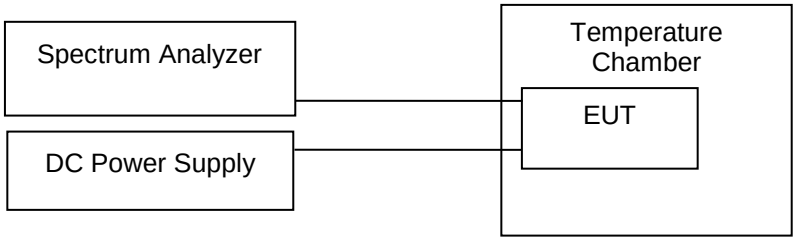
Test Results

Please refer to Appendix A for Scanning Mode and Appendix B for Traffic Mode.

5.1.6 Frequency Stability Measurement

Kind of Test Site Shielded room

Test Setup



Test Instruments

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date	Test Date	
						From	Until
Spectrum Analyzer	R&S	FSV40	101512	2022/2/24	2023/2/23	2022/2/17	2022/6/16
Spectrum Analyzer	R&S	FSV40	100921	2021/5/10	2022/5/9	2022/2/17	2022/6/16
Thermal Chamber	Giant Force	GHT-150-40-CP-SD	MAA1902-010	2022/3/2	2023/3/1	2022/2/17	2022/6/16
Thermal Chamber	Giant Force	GHT-150-40-CP-SD	MAA1902-010	2021/3/4	2022/3/3	2022/2/17	2022/6/16

Test Procedure

a. To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
b. The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10 dB lower than the measured peak value.
c. The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

Test Results for Scanning Mode

<Chain 0, U-NII-2>

Frequency (MHz)	5300			
Voltage (V)	Measurement Frequency (MHz)			Deviation(ppm)
132	5299.9945			1.038
120	5299.99392			1.147
108	5299.99508			0.928
Min / Temp℃	0	2	5	10
50	5299.96671	5299.96671	5299.967	5299.967
40	5299.97164	5299.97048	5299.97048	5299.97048
30	5299.98842	5299.99016	5299.98813	5299.98958
20	5299.99392	5299.99276	5299.99334	5299.99334
10	5300.01679	5300.01563	5300.01534	5300.01534
0	5300.03213	5300.03329	5300.03386	5300.03415
-10	5300.04834	5300.04718	5300.04747	5300.04718
-20	5300.05268	5300.05268	5300.05268	5300.05239
Max. Deviation (ppm)	9.940	9.940	9.940	9.885

<Chain 0, U-NII-2C>

Frequency (MHz)	5580			
Voltage (V)	Measurement Frequency (MHz)			Deviation(ppm)
132	5579.99566			0.778
120	5579.99363			1.142
108	5579.99566			0.778
Min / Temp℃	0	2	5	10
50	5579.96498	5579.96527	5579.96527	5579.96527
40	5579.97019	5579.97048	5579.96932	5579.97019
30	5579.99016	5579.99161	5579.99103	5579.9161
20	5579.99363	5579.99566	5579.99566	5579.99537
10	5580.01823	5580.01795	5580.01823	5580.01823
0	5580.03647	5580.03792	5580.03763	5580.03792
-10	5580.04949	5580.05065	5580.05036	5580.05094
-20	5580.05499	5580.05499	5580.0547	5580.0547
Max. Deviation (ppm)	10.616	10.616	10.560	16.197

Test Results for Traffic Mode

<Chain 0, U-NII-2>

Frequency (MHz)	5300			
Voltage (V)	Measurement Frequency (MHz)			Deviation(ppm)
132	5300.01389			2.621
120	5300.01534			2.894
108	5300.01389			2.621
Min / Temp℃	0	2	5	10
50	5299.98263	5299.98263	5299.98234	5299.98263
40	5299.98726	5299.98698	5299.98582	5299.98553
30	5299.99653	5299.99711	5299.99682	5299.99711
20	5300.01534	5300.01476	5300.01389	5300.01389
10	5300.03386	5300.03329	5300.033	5300.033
0	5300.05094	5300.05094	5300.05094	5300.05123
-10	5300.0657	5300.06512	5300.06541	5300.06541
-20	5300.0712	5300.07178	5300.07236	5300.07265
Max. Deviation (ppm)	13.434	13.543	13.653	13.708

<Chain 0, U-NII-2C>

Frequency (MHz)	5580			
Voltage (V)	Measurement Frequency (MHz)			Deviation(ppm)
132	5580.01418			2.541
120	5580.01447			2.593
108	5580.01418			2.541
Min / Temp℃	0	2	5	10
50	5579.98119	5579.98148	5579.98148	5579.98148
40	5579.98495	5579.98408	5579.98408	5579.98408
30	5579.99682	5579.99653	5579.99653	5579.99595
20	5580.01447	5580.01418	5580.01418	5580.01418
10	5580.03589	5580.03618	5580.03589	5580.03589
0	5580.05384	5580.0547	5580.0547	5580.0547
-10	5580.07004	5580.07004	5580.0686	5580.06818
-20	5580.07641	5580.07641	5580.07641	5580.0767
Max. Deviation (ppm)	14.751	14.751	14.751	14.807

5.1.7 Power Spectral Density

Limit

For the 5.15~5.25GHz Bands:
For mobile and portable client devices in the 5.15~5.25GHz band, the Maximum Power spectral density shall not exceed 11dBm/MHz. For an indoor access point operating in the band 5.15~5.25GHz, the maximum power spectral density shall not exceed 17dBm/MHz.

For the 5.25~5.35GHz Bands:

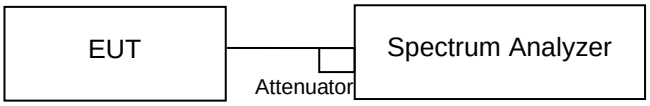
a) The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.
b) All emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. and its power shall comply with the spectral power density for operation within the band 5150-5250 MHz. The device, except devices installed in vehicles, shall be labelled or include in the user manual the following text “for indoor use only.”

For the 5.47~5.725GHz Bands:
The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

For the 5.745~5.85GHz Bands:
The maximum power spectral density shall not exceed 30dBm/500kHz.

Kind of Test Site Shielded room

Test Setup



Test Instruments

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date	Test Date	
						From	Until
Spectrum Analyzer	R&S	FSV40	101512	2022/2/24	2023/2/23	2022/2/17	2022/6/16
Spectrum Analyzer	R&S	FSV40	100921	2021/5/10	2022/5/9	2022/2/17	2022/6/16
Thermal Chamber	Giant Force	GHT-150-40-CP-SD	MAA1902-010	2022/3/2	2023/3/1	2022/2/17	2022/6/16
Thermal Chamber	Giant Force	GHT-150-40-CP-SD	MAA1902-010	2021/3/4	2022/3/3	2022/2/17	2022/6/16

Test Procedure

For U-NII-1, U-NII-2A, U-NII-2C band:

Using method SA-2

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
3. Sweep time = auto, trigger set to “free run”.
4. Trace average at least 100 traces in power averaging mode.
5. Record the max value and add 10 log (1/duty cycle)

※For U-NII-3:

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 500 kHz, Set VBW ≥ 3 RBW, Detector = RMS
3. Use the peak marker function to determine the maximum power level in any 500 kHz band segment within the fundamental EBW.
4. Sweep time = auto, trigger set to “free run”.
5. Trace average at least 100 traces in power averaging mode.
6. Record the max value and add 10 log (1/duty cycle)

For MIMO mode, calculation method follows FCC KDB 662911 Method 2) a) of power density measurement using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Test Results

Please refer to Appendix A for Scanning Mode and Appendix B for Traffic Mode.

5.1.8 Radiated Spurious Emissions

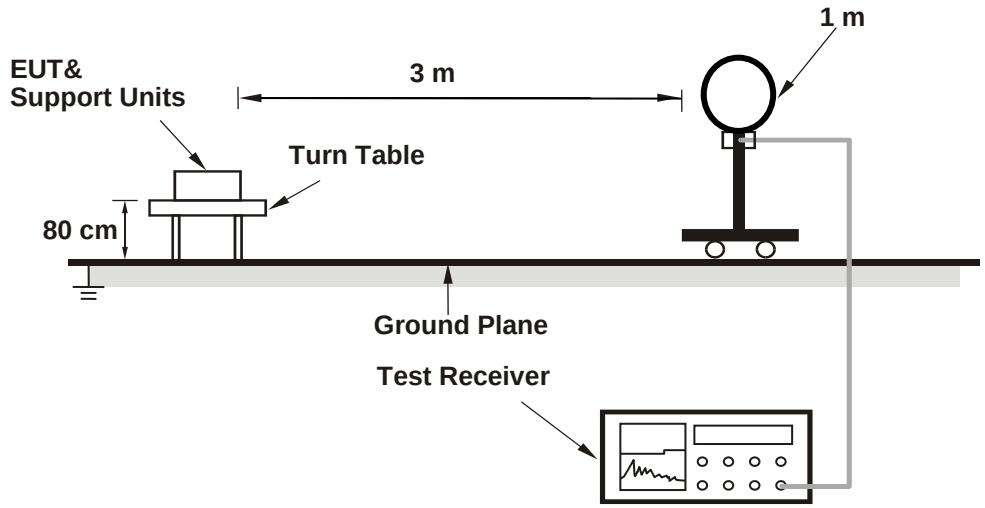
Limit

Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must comply with the radiated emission limits specified in §15.209(a).
Emissions radiated outside the restricted and authorized frequency bands must either comply with the radiated emission limits specified for the restricted bands or in §15.407(b).

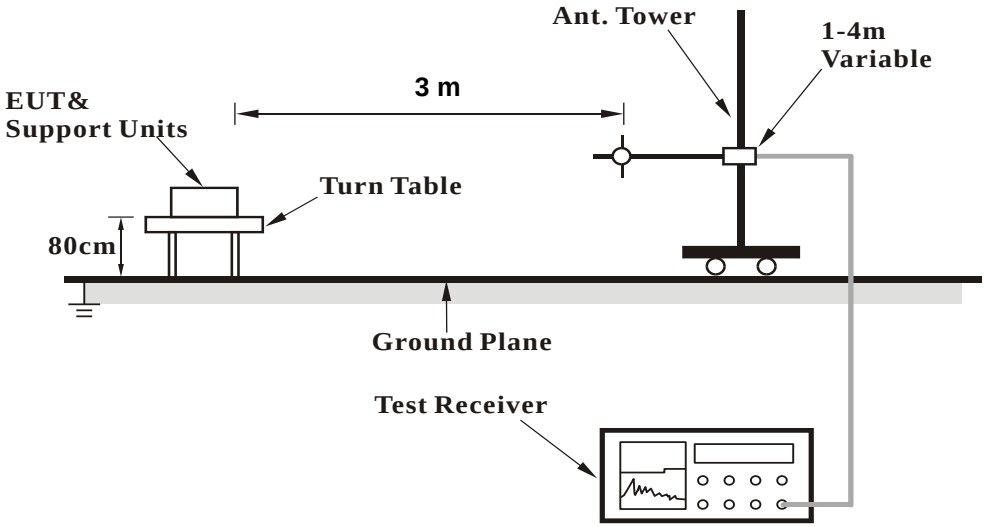
Kind of Test Site 3m Semi-Anechoic Chamber

Test Setup

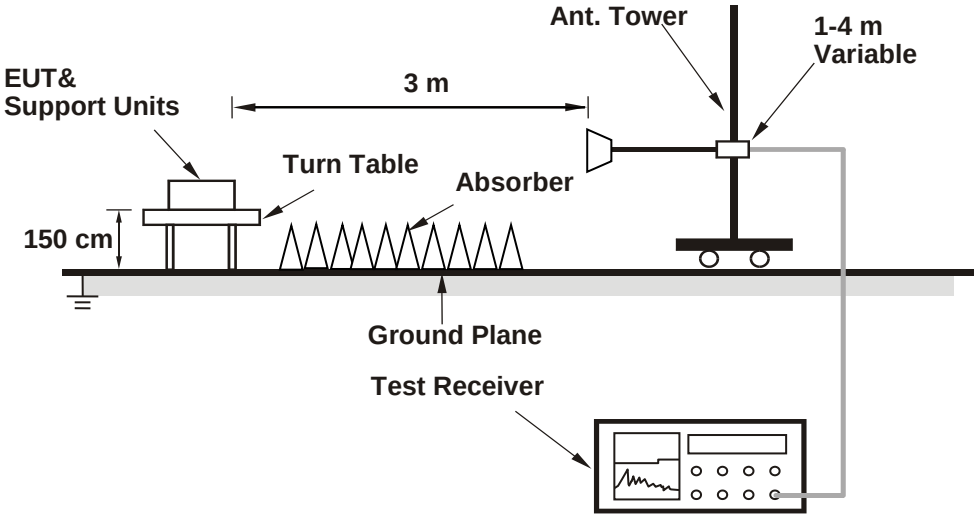
<Radiated Emissions below 30 MHz>



<Radiated Emissions 30 MHz to 1 GHz>



<Radiated Emissions above 1 GHz>



For the actual test configuration, please refer to the attached file (Test Setup Photo).

Test Instruments for Scanning Mode

Below 30MHz (Test Date: 2022/03/27)

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date
Receiver	R&S	ESR7	102108	2021/4/15	2022/4/14
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104EA	800057/4EA	2021/4/14	2022/4/13
Loop Antenna	SCHWARZBECK	FMZB 1519B	00215	2021/12/8	2022/12/7

30MHz-1GHz (Test Date: 2022/03/27)

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date
Receiver	R&S	ESR7	102108	2021/4/15	2022/4/14
Bilog Antenna	SCHWARZBECK	VULB-9168	00949	2021/5/30	2022/5/29
LF-AMP	Agilent	8447D	2727A05146	2022/2/16	2023/2/15
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104EA	800057/4EA	2021/4/14	2022/4/13
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104	802244/4	2021/4/14	2022/4/13
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104	MY37203/4	2021/4/14	2022/4/13

Above 1GHz (Test Date: 2022/03/25-27)

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV40	101513	2021/5/28	2022/5/27
Horn Antenna	ETS-Lindgren	3117	00218929	2021/11/25	2022/11/24
HF-AMP + AC source	EMCI	EMC051845SE	980635	2022/1/20	2023/1/19
HF-AMP + AC source	EMCI	EMC184045SE	980656	2022/1/20	2023/1/19
Horn Antenna	SCHWARZBECK	BBHA 9170	00887	2021/4/8	2022/4/7
Microwave Cable	HUBER+SUHNER	SUCOFLEX 102EA	800898/2EA	2021/4/16	2022/4/15
Microwave Cable	HUBER+SUHNER	SUCOFLEX 102EA	800901/2EA	2021/4/16	2022/4/15
Microwave Cable	HUBER+SUHNER	SUCOFLEX 102EA	801027/2EA	2021/4/16	2022/4/15

Test Instruments for Traffic Mode

Below 30MHz (Test Date: 2022/03/27)

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date
Receiver	R&S	ESR7	102108	2021/4/15	2022/4/14
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104EA	800057/4EA	2021/4/14	2022/4/13
Loop Antenna	SCHWARZBECK	FMZB 1519B	00215	2021/12/8	2022/12/7

30MHz-1GHz (Test Date: 2022/03/27)

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date
Receiver	R&S	ESR7	102108	2021/4/15	2022/4/14
Bilog Antenna	SCHWARZBECK	VULB-9168	00949	2021/5/30	2022/5/29
LF-AMP	Agilent	8447D	2727A05146	2022/2/16	2023/2/15
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104EA	800057/4EA	2021/4/14	2022/4/13
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104	802244/4	2021/4/14	2022/4/13
Microwave Cable	HUBER+SUHNER	SUCOFLEX 104	MY37203/4	2021/4/14	2022/4/13

Above 1GHz (Test Date: 2022/03/20-27)

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV40	101513	2021/5/28	2022/5/27
Horn Antenna	ETS-Lindgren	3117	00218929	2021/11/25	2022/11/24
HF-AMP + AC source	EMCI	EMC051845SE	980635	2022/1/20	2023/1/19
HF-AMP + AC source	EMCI	EMC184045SE	980656	2022/1/20	2023/1/19
Horn Antenna	SCHWARZBECK	BBHA 9170	00887	2021/4/8	2022/4/7
Microwave Cable	HUBER+SUHNER	SUCOFLEX 102EA	800898/2EA	2021/4/16	2022/4/15
Microwave Cable	HUBER+SUHNER	SUCOFLEX 102EA	800901/2EA	2021/4/16	2022/4/15
Microwave Cable	HUBER+SUHNER	SUCOFLEX 102EA	801027/2EA	2021/4/16	2022/4/15

Test Procedures

For Radiated Emissions below 30 MHz

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. Parallel (OPEN), perpendicular (CLOSE), and ground-parallel (GROUND) orientations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz at frequency below 30 MHz.
2. All modes of operation were investigated and the worst-case emissions are reported.

For Radiated Emissions above 30 MHz

a. The EUT was placed on the top of a rotating table 0.8 meters (for 30 MHz ~ 1 GHz) / 1.5 meters (for above 1 GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
f. The test-receiver system was set to peak and average detected function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) or Peak detection (PK) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1 GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98 %) or 10 Hz (Duty cycle ≥ 98 %) for Average detection (AV) at frequency above 1 GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.
5. The Radiated Emissions testing was performed in the X(E1), Y(H) and Z(E2) axis orientation. The worst-case Axis orientation is recorded in this test report.

Test Results

Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB)
Level (dBuV/m) = Reading (dBuV) + Factor (dB/m)

Please refer to Appendix C for Scanning Mode and Appendix D for Traffic Mode.

5.1.9 Dynamic Frequency Selection

Limit

<DFS Detection Thresholds for Master Devices and Client Devices with Radar Detection>

Maximum Transmit Power	Value (See Notes 1, 2, and 3)
EIRP ≥ 200 milliwatt	-64 dBm
EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz	-62 dBm
EIRP < 200 milliwatt that do not meet the power spectral density requirement	-64 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna. Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response. Note 3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.	

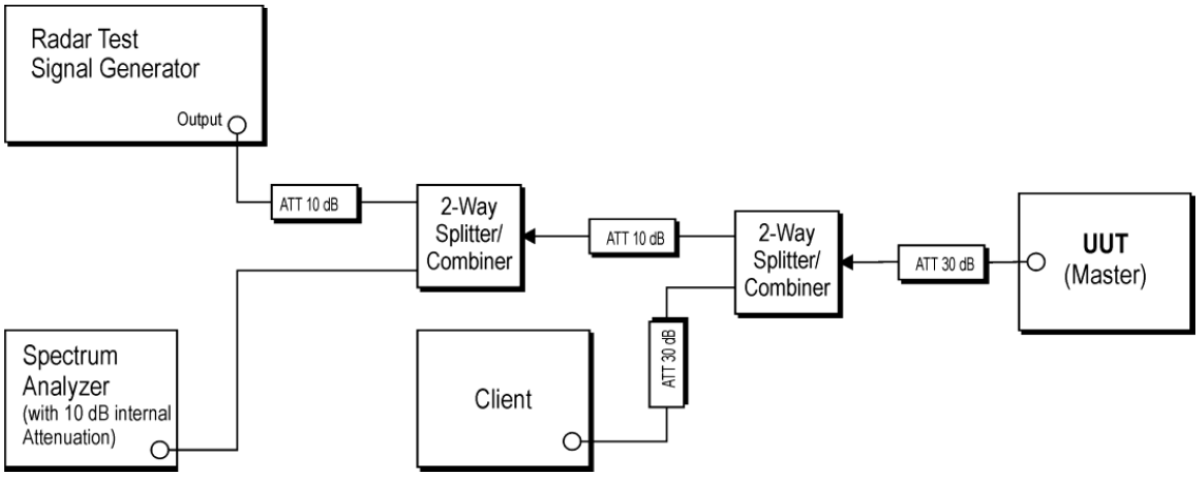
<DFS Response Requirement Values>

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1.
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.
Note 1: *Channel Move Time and the Channel Closing Transmission Time* should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. Note 2: The *Channel Closing Transmission Time* is comprised of 200 milliseconds starting at the beginning of the *Channel Move Time* plus any additional intermittent control signals required to facilitate a *Channel* move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions. Note 3: During the *U-NII Detection Bandwidth* detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.	

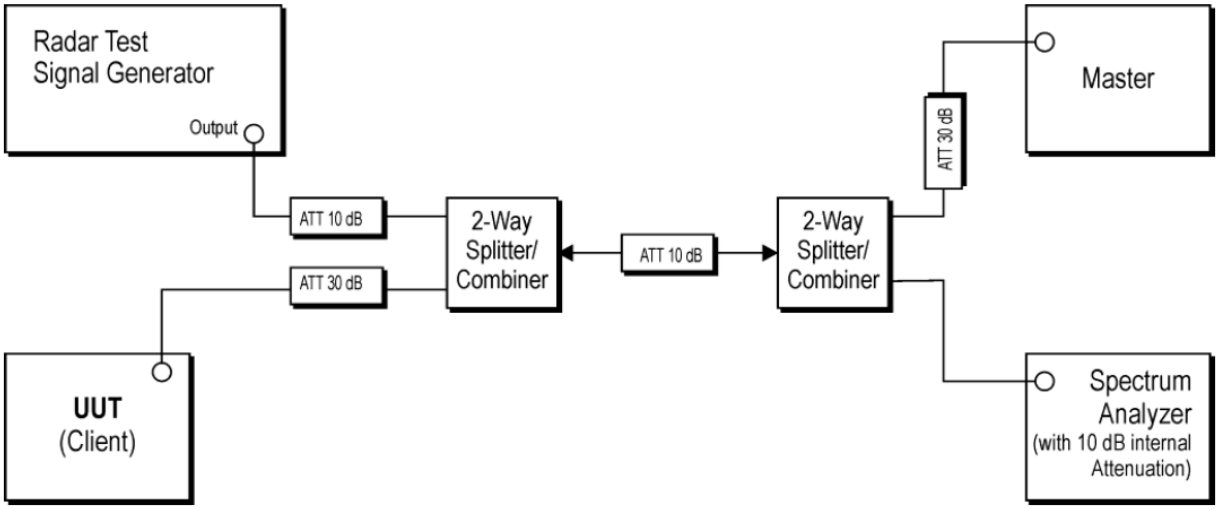
Kind of Test Site Shielded room

Test Setup

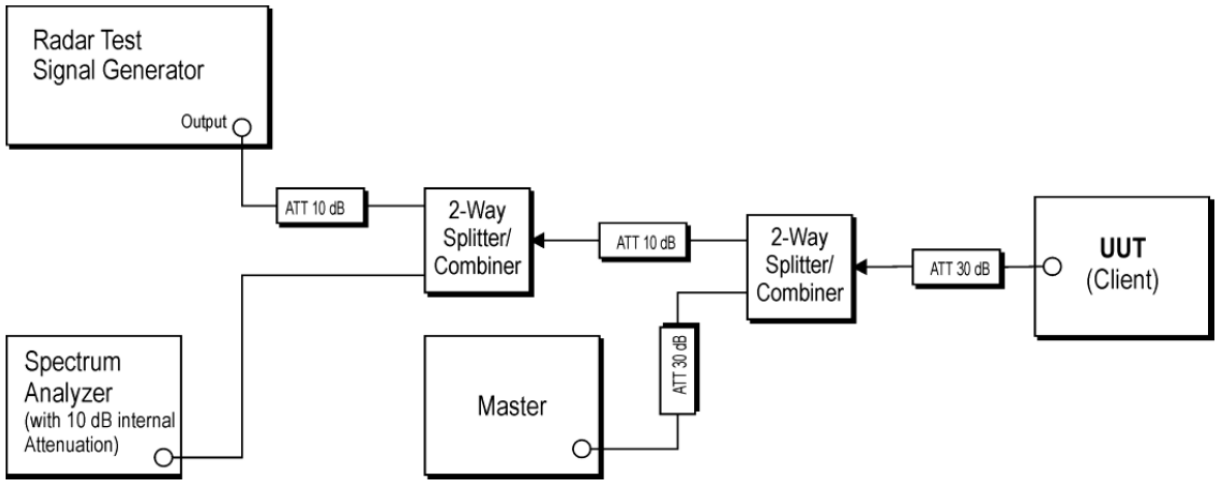
<Setup for Master with injection at the Master>



<Setup for Client with injection at the Master>



<Setup for Client with injection at the Client>



Test Instruments

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date	Test Date	
						From	Until
Spectrum Analyzer	Agilent	N9010A	MY53470241	2021/6/15	2022/6/14	2022/3/31	2022/6/11
MXG Vector Signal Generator	Agilent	N5182B	MY53050524	2022/3/9	2023/3/8	2022/3/31	2022/6/11
Horn Antenna	SCHWARZBECK	9120D	1945	2021/6/23	2022/6/22	2022/3/31	2022/6/11

Requirement

Requirement	Operational Mode	
	Master Device or Client with Radar Detection	Client Without Radar Detection
DFS Detection Threshold	Yes	Not required
Channel Closing Transmission Time	Yes	Yes
Channel Move Time	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required

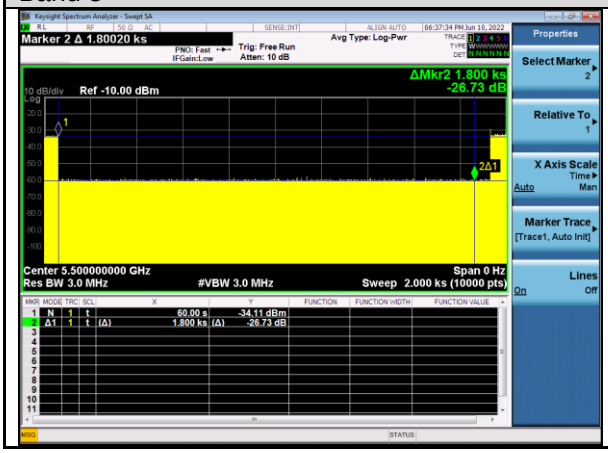
Additional requirements for devices with multiple bandwidth modes	Master Device or Client with Radar Detection	Client Without Radar Detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required
Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.		

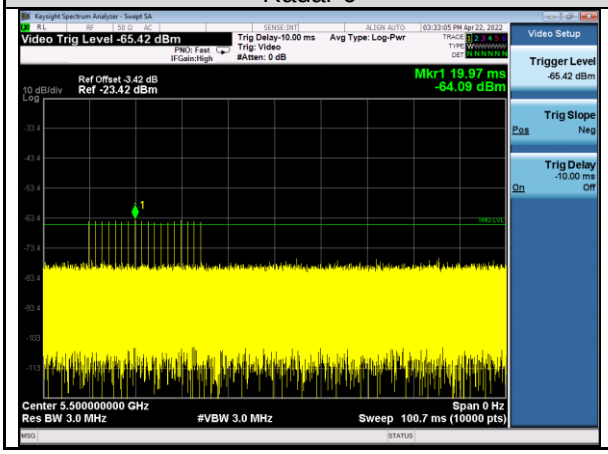
Test Results

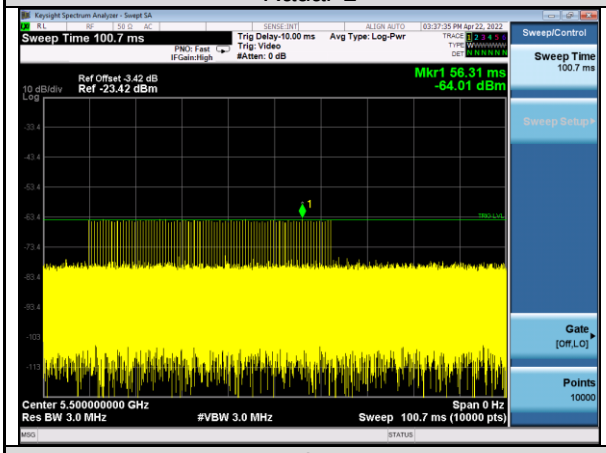
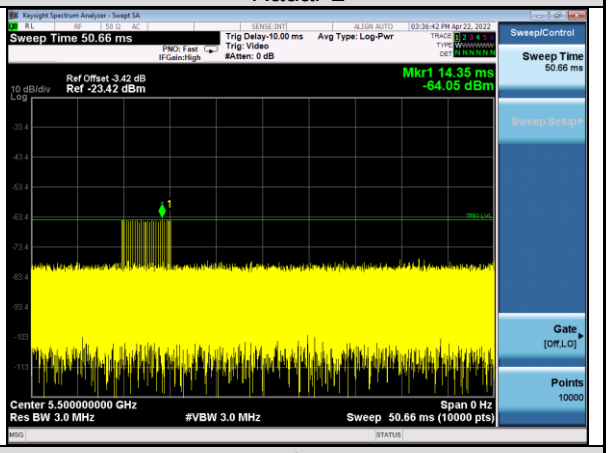
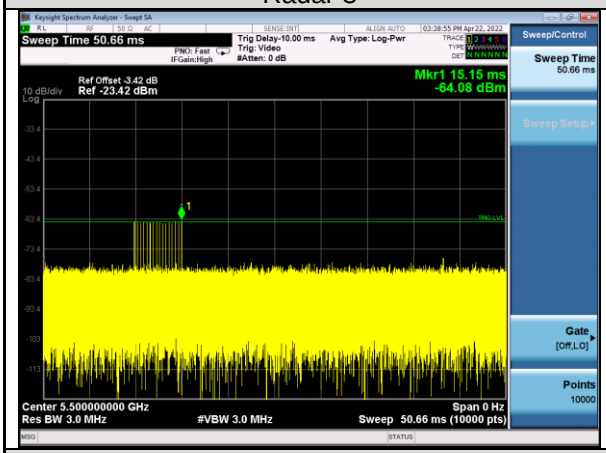
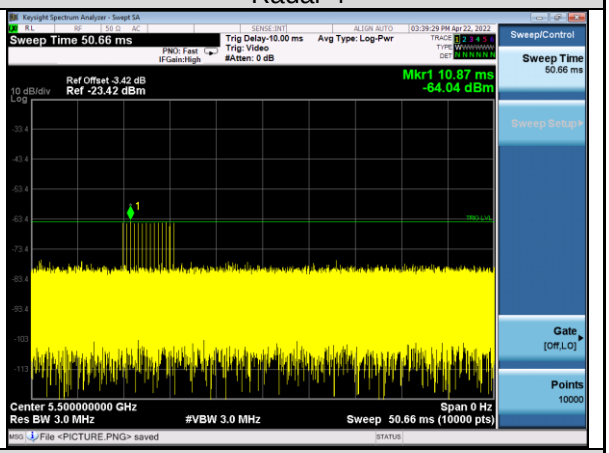
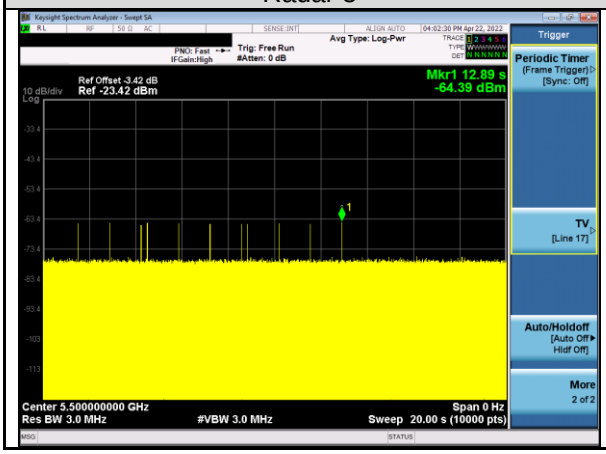
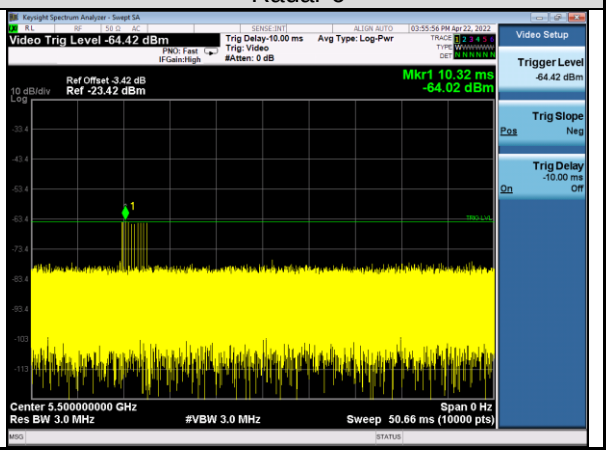
<802.11ax HE20 >

Non-occupancy period

Channel (MHz)	Limit (minute)	Result
5500	≥ 30	Pass

Non-occupancy period	
Band 3	
	

Radar Level-Band 3	
Radar 0	
	

Radar Level-Band 3	
Radar 1	Radar 2
	
Radar 3	Radar 4
	
Radar 5	Radar 6
	

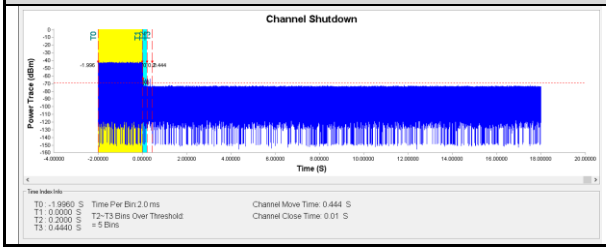
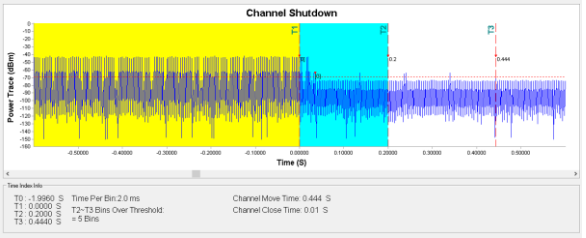
<802.11ax HE80 >

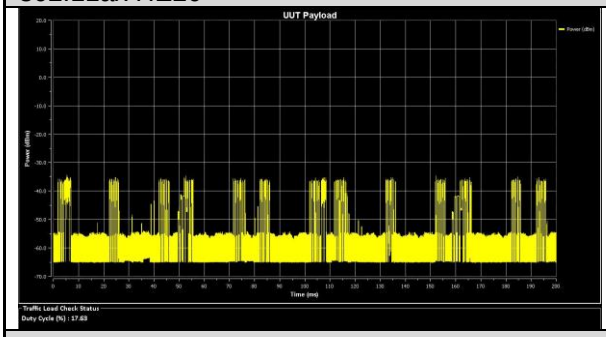
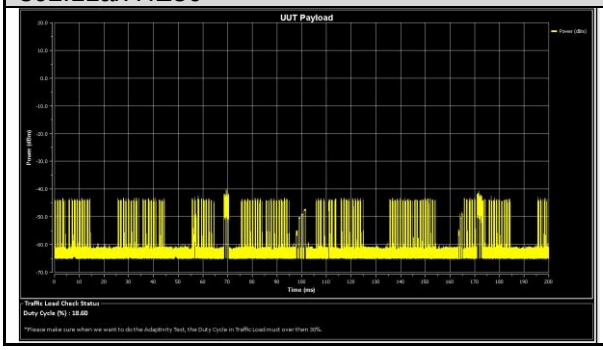
Channel Moving Time (CMT):

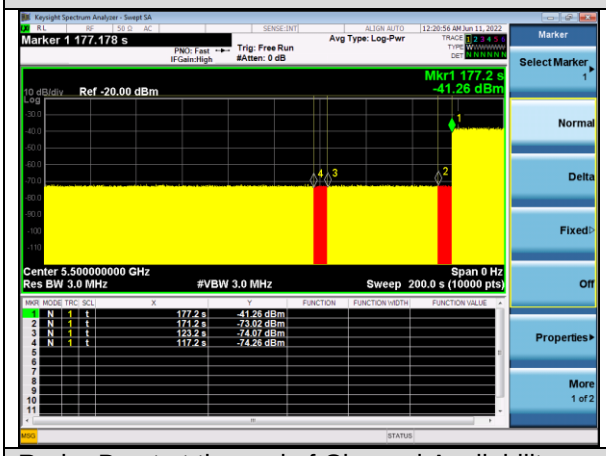
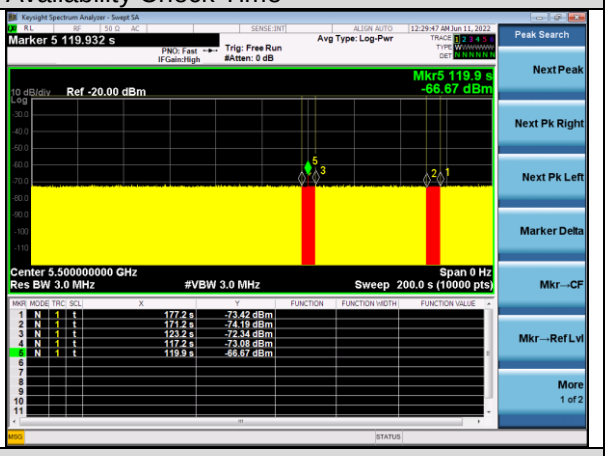
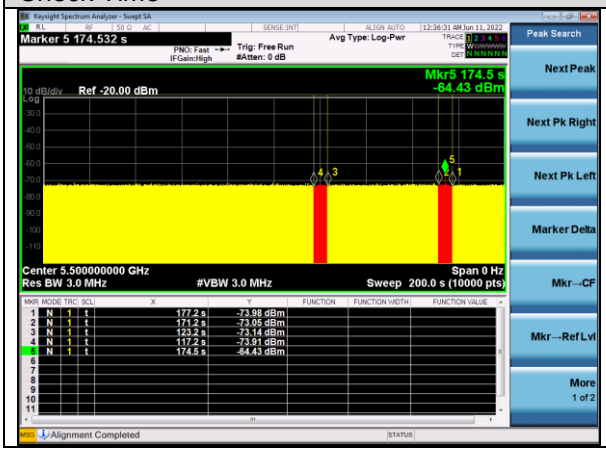
Radar Type	Channel (MHz)	Channel Move Time (s)	Limit (s)	Result
R0	5530	0.444	10	Pass

Channel Closing Transmission Time (CCTT):

Radar Type	Channel (MHz)	Channel Closing Transmission Time (s)	Limit (ms)	Result
R0	5530	0.01	< 60	Pass

5530MHz	
R0	
CCTT&CMT	500ms
	

Channel Loading	
802.11ax HE20	802.11ax HE40
	
802.11ax HE80	
	

Channel Availability Check Time	
Band 3	
Initial Channel Availability Check Time	Radar Burst at the beginning of Channel Availability Check Time
	
Radar Burst at the end of Channel Availability Check Time	
	

<U-NII Detection Bandwidth>

20 MHz Signal Bandwidth											
EUT Frequency = 5320MHz											
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, Blank= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5309	0	0	0	0	0	0	0	0	0	0	0%
5310(FL)	1	1	1	1	1	1	1	1	1	1	100%
5311	1	1	1	1	1	1	1	1	1	1	100%
5312	1	1	1	1	1	1	1	1	1	1	100%
5313	1	1	1	1	1	1	1	1	1	1	100%
5314	1	1	1	1	1	1	1	1	1	1	100%
5315	1	1	1	1	1	1	1	1	1	1	100%
5316	1	1	1	1	1	1	1	1	1	1	100%
5317	1	1	1	1	1	1	1	1	1	1	100%
5318	1	1	1	1	1	1	1	1	1	1	100%
5319	1	1	1	1	1	1	1	1	1	1	100%
5320	1	1	1	1	1	1	1	1	1	1	100%
5321	1	1	1	1	1	1	1	1	1	1	100%
5322	1	1	1	1	1	1	1	1	1	1	100%
5323	1	1	1	1	1	1	1	1	1	1	100%
5324	1	1	1	1	1	1	1	1	1	1	100%
5325	1	1	1	1	1	1	1	1	1	1	100%
5326	1	1	1	1	1	1	1	1	1	1	100%
5327	1	1	1	1	1	1	1	1	1	1	100%
5328	1	1	1	1	1	1	1	1	1	1	100%
5329	1	1	1	1	1	1	1	1	1	1	100%
5330(FH)	1	1	1	1	1	1	1	1	1	1	100%
5331	0	0	0	0	0	0	0	0	0	0	0%
Detection Bandwidth (FH - FL)			=	5330	MHz	-	5310	MHz	=	20	MHz
EUT 99% Bandwidth									=	18.93	MHz

20 MHz Signal Bandwidth											
EUT Frequency = 5500MHz											
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, Blank= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5489	0	0	0	0	0	0	0	0	0	0	0%
5490(FL)	1	1	1	1	1	1	1	1	1	1	100%
5491	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
5496	1	1	1	1	1	1	1	1	1	1	100%
5497	1	1	1	1	1	1	1	1	1	1	100%
5498	1	1	1	1	1	1	1	1	1	1	100%
5499	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	100%
5501	1	1	1	1	1	1	1	1	1	1	100%
5502	1	1	1	1	1	1	1	1	1	1	100%
5503	1	1	1	1	1	1	1	1	1	1	100%
5504	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5506	1	1	1	1	1	1	1	1	1	1	100%
5507	1	1	1	1	1	1	1	1	1	1	100%
5508	1	1	1	1	1	1	1	1	1	1	100%
5509	1	1	1	1	1	1	1	1	1	1	100%
5510(FH)	1	1	1	1	1	1	1	1	1	1	100%
5511	0	0	0	0	0	0	0	0	0	0	0%
Detection Bandwidth (FH - FL)			=	5510	MHz	-	5490	MHz	=	20	MHz
EUT 99% Bandwidth									=	19.01	MHz

40 MHz Signal Bandwidth											
EUT Frequency = 5310MHz											
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, Blank= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5289	0	0	0	0	0	0	0	0	0	0	0%
5290(FL)	1	1	1	1	1	1	1	1	1	1	100%
5291	1	1	1	1	1	1	1	1	1	1	100%
5292	1	1	1	1	1	1	1	1	1	1	100%
5293	1	1	1	1	1	1	1	1	1	1	100%
5294	1	1	1	1	1	1	1	1	1	1	100%
5295	1	1	1	1	1	1	1	1	1	1	100%
5296	1	1	1	1	1	1	1	1	1	1	100%
5297	1	1	1	1	1	1	1	1	1	1	100%
5298	1	1	1	1	1	1	1	1	1	1	100%
5299	1	1	1	1	1	1	1	1	1	1	100%
5300	1	1	1	1	1	1	1	1	1	1	100%
5301	1	1	1	1	1	1	1	1	1	1	100%
5302	1	1	1	1	1	1	1	1	1	1	100%
5303	1	1	1	1	1	1	1	1	1	1	100%
5304	1	1	1	1	1	1	1	1	1	1	100%
5305	1	1	1	1	1	1	1	1	1	1	100%
5306	1	1	1	1	1	1	1	1	1	1	100%
5307	1	1	1	1	1	1	1	1	1	1	100%
5308	1	1	1	1	1	1	1	1	1	1	100%
5309	1	1	1	1	1	1	1	1	1	1	100%
5310	1	1	1	1	1	1	1	1	1	1	100%
5311	1	1	1	1	1	1	1	1	1	1	100%
5312	1	1	1	1	1	1	1	1	1	1	100%
5313	1	1	1	1	1	1	1	1	1	1	100%
5314	1	1	1	1	1	1	1	1	1	1	100%
5315	1	1	1	1	1	1	1	1	1	1	100%
5316	1	1	1	1	1	1	1	1	1	1	100%
5317	1	1	1	1	1	1	1	1	1	1	100%
5318	1	1	1	1	1	1	1	1	1	1	100%
5319	1	1	1	1	1	1	1	1	1	1	100%
5320	1	1	1	1	1	1	1	1	1	1	100%
5321	1	1	1	1	1	1	1	1	1	1	100%
5322	1	1	1	1	1	1	1	1	1	1	100%
5323	1	1	1	1	1	1	1	1	1	1	100%
5324	1	1	1	1	1	1	1	1	1	1	100%
5325	1	1	1	1	1	1	1	1	1	1	100%

5326	1	1	1	1	1	1	1	1	1	1	100%
5327	1	1	1	1	1	1	1	1	1	1	100%
5328	1	1	1	1	1	1	1	1	1	1	100%
5329	1	1	1	1	1	1	1	1	1	1	100%
5330(FH)	1	1	1	1	1	1	1	1	1	1	100%
5331	0	0	0	0	0	0	0	0	0	0	0%
Detection Bandwidth 3(FH - FL)			=	5330	MHz	-	5290	MHz	=	40	MHz
EUT 99% Bandwidth									=	37.9	MHz

40 MHz Signal Bandwidth											
EUT Frequency = 5510MHz											
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, Blank= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5489	0	0	0	0	0	0	0	0	0	0	0%
5490(FL)	1	1	1	1	1	1	1	1	1	1	100%
5491	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
5496	1	1	1	1	1	1	1	1	1	1	100%
5497	1	1	1	1	1	1	1	1	1	1	100%
5498	1	1	1	1	1	1	1	1	1	1	100%
5499	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	100%
5501	1	1	1	1	1	1	1	1	1	1	100%
5502	1	1	1	1	1	1	1	1	1	1	100%
5503	1	1	1	1	1	1	1	1	1	1	100%
5504	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5506	1	1	1	1	1	1	1	1	1	1	100%
5507	1	1	1	1	1	1	1	1	1	1	100%
5508	1	1	1	1	1	1	1	1	1	1	100%
5509	1	1	1	1	1	1	1	1	1	1	100%
5510	1	1	1	1	1	1	1	1	1	1	100%
5511	1	1	1	1	1	1	1	1	1	1	100%
5512	1	1	1	1	1	1	1	1	1	1	100%
5513	1	1	1	1	1	1	1	1	1	1	100%
5514	1	1	1	1	1	1	1	1	1	1	100%
5515	1	1	1	1	1	1	1	1	1	1	100%
5516	1	1	1	1	1	1	1	1	1	1	100%
5517	1	1	1	1	1	1	1	1	1	1	100%
5518	1	1	1	1	1	1	1	1	1	1	100%
5519	1	1	1	1	1	1	1	1	1	1	100%
5520	1	1	1	1	1	1	1	1	1	1	100%
5521	1	1	1	1	1	1	1	1	1	1	100%
5522	1	1	1	1	1	1	1	1	1	1	100%
5523	1	1	1	1	1	1	1	1	1	1	100%
5524	1	1	1	1	1	1	1	1	1	1	100%
5525	1	1	1	1	1	1	1	1	1	1	100%

5526	1	1	1	1	1	1	1	1	1	1	100%
5527	1	1	1	1	1	1	1	1	1	1	100%
5528	1	1	1	1	1	1	1	1	1	1	100%
5529	1	1	1	1	1	1	1	1	1	1	100%
5530(FH)	1	1	1	1	1	1	1	1	1	1	100%
5531	0	0	0	0	0	0	0	0	0	0	0%
Detection Bandwidth (FH - FL)			=	5530	MHz	-	5490	MHz	=	40	MHz
EUT 99% Bandwidth									=	39	MHz

80 MHz Signal Bandwidth											
EUT Frequency = 5290MHz											
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, Blank= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5249	0	0	0	0	0	0	0	0	0	0	0%
5250(FL)	1	1	1	1	1	1	1	1	1	1	100%
5251	1	1	1	1	1	1	1	1	1	1	100%
5252	1	1	1	1	1	1	1	1	1	1	100%
5253	1	1	1	1	1	1	1	1	1	1	100%
5254	1	1	1	1	1	1	1	1	1	1	100%
5255	1	1	1	1	1	1	1	1	1	1	100%
5256	1	1	1	1	1	1	1	1	1	1	100%
5257	1	1	1	1	1	1	1	1	1	1	100%
5258	1	1	1	1	1	1	1	1	1	1	100%
5259	1	1	1	1	1	1	1	1	1	1	100%
5260	1	1	1	1	1	1	1	1	1	1	100%
5261	1	1	1	1	1	1	1	1	1	1	100%
5262	1	1	1	1	1	1	1	1	1	1	100%
5263	1	1	1	1	1	1	1	1	1	1	100%
5264	1	1	1	1	1	1	1	1	1	1	100%
5265	1	1	1	1	1	1	1	1	1	1	100%
5266	1	1	1	1	1	1	1	1	1	1	100%
5267	1	1	1	1	1	1	1	1	1	1	100%
5268	1	1	1	1	1	1	1	1	1	1	100%
5269	1	1	1	1	1	1	1	1	1	1	100%
5270	1	1	1	1	1	1	1	1	1	1	100%
5271	1	1	1	1	1	1	1	1	1	1	100%
5272	1	1	1	1	1	1	1	1	1	1	100%
5273	1	1	1	1	1	1	1	1	1	1	100%
5274	1	1	1	1	1	1	1	1	1	1	100%
5275	1	1	1	1	1	1	1	1	1	1	100%
5276	1	1	1	1	1	1	1	1	1	1	100%
5277	1	1	1	1	1	1	1	1	1	1	100%
5278	1	1	1	1	1	1	1	1	1	1	100%
5279	1	1	1	1	1	1	1	1	1	1	100%
5280	1	1	1	1	1	1	1	1	1	1	100%
5281	1	1	1	1	1	1	1	1	1	1	100%
5282	1	1	1	1	1	1	1	1	1	1	100%
5283	1	1	1	1	1	1	1	1	1	1	100%
5284	1	1	1	1	1	1	1	1	1	1	100%
5285	1	1	1	1	1	1	1	1	1	1	100%
5286	1	1	1	1	1	1	1	1	1	1	100%

5287	1	1	1	1	1	1	1	1	1	1	100%
5288	1	1	1	1	1	1	1	1	1	1	100%
5289	1	1	1	1	1	1	1	1	1	1	100%
5290	1	1	1	1	1	1	1	1	1	1	100%
5291	1	1	1	1	1	1	1	1	1	1	100%
5292	1	1	1	1	1	1	1	1	1	1	100%
5293	1	1	1	1	1	1	1	1	1	1	100%
5294	1	1	1	1	1	1	1	1	1	1	100%
5295	1	1	1	1	1	1	1	1	1	1	100%
5296	1	1	1	1	1	1	1	1	1	1	100%
5297	1	1	1	1	1	1	1	1	1	1	100%
5298	1	1	1	1	1	1	1	1	1	1	100%
5299	1	1	1	1	1	1	1	1	1	1	100%
5300	1	1	1	1	1	1	1	1	1	1	100%
5301	1	1	1	1	1	1	1	1	1	1	100%
5302	1	1	1	1	1	1	1	1	1	1	100%
5303	1	1	1	1	1	1	1	1	1	1	100%
5304	1	1	1	1	1	1	1	1	1	1	100%
5305	1	1	1	1	1	1	1	1	1	1	100%
5306	1	1	1	1	1	1	1	1	1	1	100%
5307	1	1	1	1	1	1	1	1	1	1	100%
5308	1	1	1	1	1	1	1	1	1	1	100%
5309	1	1	1	1	1	1	1	1	1	1	100%
5310	1	1	1	1	1	1	1	1	1	1	100%
5311	1	1	1	1	1	1	1	1	1	1	100%
5312	1	1	1	1	1	1	1	1	1	1	100%
5313	1	1	1	1	1	1	1	1	1	1	100%
5314	1	1	1	1	1	1	1	1	1	1	100%
5315	1	1	1	1	1	1	1	1	1	1	100%
5316	1	1	1	1	1	1	1	1	1	1	100%
5317	1	1	1	1	1	1	1	1	1	1	100%
5318	1	1	1	1	1	1	1	1	1	1	100%
5319	1	1	1	1	1	1	1	1	1	1	100%
5320	1	1	1	1	1	1	1	1	1	1	100%
5321	1	1	1	1	1	1	1	1	1	1	100%
5322	1	1	1	1	1	1	1	1	1	1	100%
5323	1	1	1	1	1	1	1	1	1	1	100%
5324	1	1	1	1	1	1	1	1	1	1	100%
5325	1	1	1	1	1	1	1	1	1	1	100%
5326	1	1	1	1	1	1	1	1	1	1	100%
5327	1	1	1	1	1	1	1	1	1	1	100%
5328	1	1	1	1	1	1	1	1	1	1	100%
5329	1	1	1	1	1	1	1	1	1	1	100%

5330(FH)	1	1	1	1	1	1	1	1	1	1	100%
5331	0	0	0	0	0	0	0	0	0	0	0%
Detection Bandwidth (FH - FL)			=	5330	MHz	-	5250	MHz	=	80	MHz
EUT 99% Bandwidth									=	77.04	MHz

80 MHz Signal Bandwidth											
EUT Frequency = 5530MHz											
Radar Frequency (MHz)	DFS Detection Trials (1=Detection, Blank= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5489	0	0	0	0	0	0	0	0	0	0	0%
5490(FL)	1	1	1	1	1	1	1	1	1	1	100%
5491	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
5496	1	1	1	1	1	1	1	1	1	1	100%
5497	1	1	1	1	1	1	1	1	1	1	100%
5498	1	1	1	1	1	1	1	1	1	1	100%
5499	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	100%
5501	1	1	1	1	1	1	1	1	1	1	100%
5502	1	1	1	1	1	1	1	1	1	1	100%
5503	1	1	1	1	1	1	1	1	1	1	100%
5504	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5506	1	1	1	1	1	1	1	1	1	1	100%
5507	1	1	1	1	1	1	1	1	1	1	100%
5508	1	1	1	1	1	1	1	1	1	1	100%
5509	1	1	1	1	1	1	1	1	1	1	100%
5510	1	1	1	1	1	1	1	1	1	1	100%
5511	1	1	1	1	1	1	1	1	1	1	100%
5512	1	1	1	1	1	1	1	1	1	1	100%
5513	1	1	1	1	1	1	1	1	1	1	100%
5514	1	1	1	1	1	1	1	1	1	1	100%
5515	1	1	1	1	1	1	1	1	1	1	100%
5516	1	1	1	1	1	1	1	1	1	1	100%
5517	1	1	1	1	1	1	1	1	1	1	100%
5518	1	1	1	1	1	1	1	1	1	1	100%
5519	1	1	1	1	1	1	1	1	1	1	100%
5520	1	1	1	1	1	1	1	1	1	1	100%

5521	1	1	1	1	1	1	1	1	1	1	100%
5522	1	1	1	1	1	1	1	1	1	1	100%
5523	1	1	1	1	1	1	1	1	1	1	100%
5524	1	1	1	1	1	1	1	1	1	1	100%
5525	1	1	1	1	1	1	1	1	1	1	100%
5526	1	1	1	1	1	1	1	1	1	1	100%
5527	1	1	1	1	1	1	1	1	1	1	100%
5528	1	1	1	1	1	1	1	1	1	1	100%
5529	1	1	1	1	1	1	1	1	1	1	100%
5530	1	1	1	1	1	1	1	1	1	1	100%
5531	1	1	1	1	1	1	1	1	1	1	100%
5532	1	1	1	1	1	1	1	1	1	1	100%
5533	1	1	1	1	1	1	1	1	1	1	100%
5534	1	1	1	1	1	1	1	1	1	1	100%
5535	1	1	1	1	1	1	1	1	1	1	100%
5536	1	1	1	1	1	1	1	1	1	1	100%
5537	1	1	1	1	1	1	1	1	1	1	100%
5538	1	1	1	1	1	1	1	1	1	1	100%
5539	1	1	1	1	1	1	1	1	1	1	100%
5540	1	1	1	1	1	1	1	1	1	1	100%
5541	1	1	1	1	1	1	1	1	1	1	100%
5542	1	1	1	1	1	1	1	1	1	1	100%
5543	1	1	1	1	1	1	1	1	1	1	100%
5544	1	1	1	1	1	1	1	1	1	1	100%
5545	1	1	1	1	1	1	1	1	1	1	100%
5546	1	1	1	1	1	1	1	1	1	1	100%
5547	1	1	1	1	1	1	1	1	1	1	100%
5548	1	1	1	1	1	1	1	1	1	1	100%
5549	1	1	1	1	1	1	1	1	1	1	100%
5550	1	1	1	1	1	1	1	1	1	1	100%
5551	1	1	1	1	1	1	1	1	1	1	100%
5552	1	1	1	1	1	1	1	1	1	1	100%
5553	1	1	1	1	1	1	1	1	1	1	100%
5554	1	1	1	1	1	1	1	1	1	1	100%
5555	1	1	1	1	1	1	1	1	1	1	100%
5556	1	1	1	1	1	1	1	1	1	1	100%
5557	1	1	1	1	1	1	1	1	1	1	100%
5558	1	1	1	1	1	1	1	1	1	1	100%
5559	1	1	1	1	1	1	1	1	1	1	100%
5560	1	1	1	1	1	1	1	1	1	1	100%
5561	1	1	1	1	1	1	1	1	1	1	100%
5562	1	1	1	1	1	1	1	1	1	1	100%
5563	1	1	1	1	1	1	1	1	1	1	100%

5564	1	1	1	1	1	1	1	1	1	1	100%
5565	1	1	1	1	1	1	1	1	1	1	100%
5566	1	1	1	1	1	1	1	1	1	1	100%
5567	1	1	1	1	1	1	1	1	1	1	100%
5568	1	1	1	1	1	1	1	1	1	1	100%
5569	1	1	1	1	1	1	1	1	1	1	100%
5570(FH)	1	1	1	1	1	1	1	1	1	1	100%
5571	0	0	0	0	0	0	0	0	0	0	0%
Detection Bandwidth (FH - FL)			=	5570	MHz	-	5490	MHz	=	80	MHz
EUT 99% Bandwidth									=	77.02	MHz

<Statistical Performance Check>

Modulation Mode: 802.11ax HE20 (Band 2)

Radar Type	Number of Trials	Number of Successful Detections	Probability	Limit	Result
1	30	29	97%	60%	Pass
2	30	27	90%	60%	Pass
3	30	28	93%	60%	Pass
4	30	19	63%	60%	Pass
Average			86%	80%	Pass
5	30	30	100%	80%	Pass
6	30	29	97%	70%	Pass

Type 1 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	1	938	57	53466	1
2	1	698	76	53048	1
3	1	618	86	53148	1
4	1	538	99	53262	1
5	1	878	61	53558	1
6	1	3066	18	55188	1
7	1	638	83	52954	1
8	1	918	58	53244	1
9	1	838	63	52794	1
10	1	858	62	53196	1
11	1	798	67	53466	1
12	1	718	74	53132	0
13	1	578	92	53176	1
14	1	598	89	53222	1
15	1	558	95	53010	1
16	1	2536	21	53256	1
17	1	966	55	53130	1
18	1	827	64	52928	1
19	1	2501	22	55022	1
20	1	2595	21	54495	1
21	1	1114	48	53472	1
22	1	1302	41	53382	1
23	1	3045	18	54810	1
24	1	1624	33	53592	1
25	1	2878	19	54682	1
26	1	1027	52	53404	1
27	1	2485	22	54670	1
28	1	1600	33	52800	1
29	1	1172	46	53912	1
30	1	1177	45	52965	1
Detection Percentage				Limit >60%	97%

Type 2 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	3.2	179	26	4654	1
2	1.1	207	23	4761	1
3	2.1	230	24	5520	1
4	4.8	200	29	5800	1
5	3.9	214	28	5992	1
6	2.9	222	26	5772	1
7	3.2	204	26	5304	1
8	2.5	192	25	4800	1
9	3.1	164	26	4264	1
10	1.2	156	23	3588	1
11	3.9	210	27	5670	1
12	4.6	201	29	5829	0
13	3.2	162	26	4212	1
14	2.2	197	25	4925	1
15	4.5	163	29	4727	0
16	3	203	26	5278	1
17	5	168	29	4872	1
18	2.4	217	25	5425	1
19	2.9	191	26	4966	1
20	2.3	166	25	4150	0
21	3.7	150	27	4050	1
22	2.2	176	25	4400	1
23	4.9	195	29	5655	1
24	2.9	202	26	5252	1
25	2.5	178	25	4450	1
26	1.1	206	23	4738	1
27	3.8	155	27	4185	1
28	4.7	157	29	4553	1
29	2.4	224	25	5600	1
30	4.2	159	28	4452	1
Detection Percentage				Limit >60%	90%

Type 3 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	8.2	355	17	6035	1
2	6.1	487	16	7792	1
3	7.1	344	16	5504	1
4	9.8	288	18	5184	1
5	8.9	230	18	4140	1
6	7.9	432	17	7344	1
7	8.2	207	17	3519	1
8	7.5	443	17	7531	1
9	8.1	439	17	7463	1
10	6.2	223	16	3568	1
11	8.9	208	18	3744	1
12	9.6	463	18	8334	1
13	8.2	441	17	7497	1
14	7.2	323	16	5168	1
15	9.5	297	18	5346	1
16	8	412	17	7004	1
17	10	324	18	5832	1
18	7.4	271	17	4607	1
19	7.9	349	17	5933	1
20	7.3	409	16	6544	0
21	8.7	373	18	6714	1
22	7.2	254	16	4064	1
23	9.9	274	18	4932	0
24	7.9	278	17	4726	1
25	7.5	317	17	5389	1
26	6.1	260	16	4160	1
27	8.8	211	18	3798	1
28	9.7	272	18	4896	1
29	7.4	264	17	4488	1
30	9.2	284	18	5112	1
Detection Percentage				Limit >60%	93%

Type 4 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	16	355	14	4970	1
2	11.3	487	12	5844	0
3	13.5	344	13	4472	0
4	19.4	288	16	4608	1
5	17.5	230	15	3450	1
6	15.3	432	14	6048	0
7	15.9	207	14	2898	1
8	14.3	443	13	5759	0
9	15.8	439	14	6146	0
10	11.5	223	12	2676	1
11	17.4	208	15	3120	1
12	19	463	16	7408	1
13	16	441	14	6174	0
14	13.8	323	13	4199	0
15	18.9	297	16	4752	1
16	15.5	412	14	5768	0
17	19.9	324	16	5184	0
18	14.1	271	13	3523	1
19	15.2	349	14	4886	1
20	13.8	409	13	5317	1
21	17.1	373	15	5595	0
22	13.8	254	13	3302	1
23	19.8	274	16	4384	1
24	15.3	278	14	3892	1
25	14.5	317	13	4121	1
26	11.3	260	12	3120	0
27	17.3	211	15	3165	1
28	19.2	272	16	4352	1
29	14.2	264	13	3432	1
30	18.2	284	15	4260	1
Detection Percentage				Limit >60%	63%

Type 5 Radar Statistical Performance

Trial Number	Number of Bursts	Burst Period (s)	Waveform Length (s)	Center Frequency (GHz)	1=Detection Blank=No Detection
1	15	0.8	12	5.32	1
2	8	1.5	12	5.32	1
3	11	1.0909091	12	5.32	1
4	20	0.6	12	5.32	1
5	17	0.7058824	12	5.32	1
6	14	0.8571429	12	5.32	1
7	15	0.8	12	5.32	1
8	12	1	12	5.32	1
9	14	0.8571429	12	5.32	1
10	8	1.5	12	5.32	1
11	17	0.7058824	12	5.317	1
12	19	0.6315789	12	5.318	1
13	15	0.8	12	5.315	1
14	12	1	12	5.314	1
15	19	0.6315789	12	5.317	1
16	14	0.8571429	12	5.315	1
17	20	0.6	12	5.318	1
18	12	1	12	5.314	1
19	14	0.8571429	12	5.315	1
20	12	1	12	5.314	1
21	16	0.75	12	5.324	1
22	12	1	12	5.326	1
23	20	0.6	12	5.322	1
24	14	0.8571429	12	5.325	1
25	13	0.9230769	12	5.325	1
26	8	1.5	12	5.328	1
27	17	0.7058824	12	5.323	1
28	19	0.6315789	12	5.322	1
29	12	1	12	5.326	1
30	18	0.6666667	12	5.323	1
Detection Percentage				Limit >80%	100%

Type 6 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	1	333.335	9	0.3333	1
2	1	333.335	9	0.3333	1
3	1	333.335	9	0.3333	1
4	1	333.335	9	0.3333	1
5	1	333.335	9	0.3333	0
6	1	333.335	9	0.3333	1
7	1	333.335	9	0.3333	1
8	1	333.335	9	0.3333	1
9	1	333.335	9	0.3333	1
10	1	333.335	9	0.3333	1
11	1	333.335	9	0.3333	1
12	1	333.335	9	0.3333	1
13	1	333.335	9	0.3333	1
14	1	333.335	9	0.3333	1
15	1	333.335	9	0.3333	1
16	1	333.335	9	0.3333	1
17	1	333.335	9	0.3333	1
18	1	333.335	9	0.3333	1
19	1	333.335	9	0.3333	1
20	1	333.335	9	0.3333	1
21	1	333.335	9	0.3333	1
22	1	333.335	9	0.3333	1
23	1	333.335	9	0.3333	1
24	1	333.335	9	0.3333	1
25	1	333.335	9	0.3333	1
26	1	333.335	9	0.3333	1
27	1	333.335	9	0.3333	1
28	1	333.335	9	0.3333	1
29	1	333.335	9	0.3333	1
30	1	333.335	9	0.3333	1
Detection Percentage				Limit >70%	97%

Modulation Mode: 802.11ax HE20 (Band 3)

Radar Type	Number of Trials	Number of Successful Detections	Probability	Limit	Result
1	30	29	97%	60%	Pass
2	30	27	90%	60%	Pass
3	30	24	80%	60%	Pass
4	30	24	80%	60%	Pass
Average			87%	80%	Pass
5	30	29	97%	80%	Pass
6	30	30	100%	70%	Pass

Type 1 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	1	938	57	53466	1
2	1	698	76	53048	1
3	1	618	86	53148	1
4	1	538	99	53262	1
5	1	878	61	53558	1
6	1	3066	18	55188	1
7	1	638	83	52954	1
8	1	918	58	53244	1
9	1	838	63	52794	1
10	1	858	62	53196	1
11	1	798	67	53466	0
12	1	718	74	53132	1
13	1	578	92	53176	1
14	1	598	89	53222	1
15	1	558	95	53010	1
16	1	2536	21	53256	1
17	1	966	55	53130	1
18	1	827	64	52928	1
19	1	2501	22	55022	1
20	1	2595	21	54495	1
21	1	1114	48	53472	1
22	1	1302	41	53382	1
23	1	3045	18	54810	1
24	1	1624	33	53592	1
25	1	2878	19	54682	1
26	1	1027	52	53404	1
27	1	2485	22	54670	1
28	1	1600	33	52800	1
29	1	1172	46	53912	1
30	1	1177	45	52965	1
Detection Percentage				Limit >60%	97%

Type 2 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	3.2	179	26	4654	1
2	1.1	207	23	4761	1
3	2.1	230	24	5520	1
4	4.8	200	29	5800	1
5	3.9	214	28	5992	1
6	2.9	222	26	5772	0
7	3.2	204	26	5304	1
8	2.5	192	25	4800	1
9	3.1	164	26	4264	1
10	1.2	156	23	3588	1
11	3.9	210	27	5670	1
12	4.6	201	29	5829	1
13	3.2	162	26	4212	1
14	2.2	197	25	4925	1
15	4.5	163	29	4727	1
16	3	203	26	5278	1
17	5	168	29	4872	0
18	2.4	217	25	5425	1
19	2.9	191	26	4966	1
20	2.3	166	25	4150	1
21	3.7	150	27	4050	1
22	2.2	176	25	4400	1
23	4.9	195	29	5655	1
24	2.9	202	26	5252	1
25	2.5	178	25	4450	1
26	1.1	206	23	4738	0
27	3.8	155	27	4185	1
28	4.7	157	29	4553	1
29	2.4	224	25	5600	1
30	4.2	159	28	4452	1
Detection Percentage				Limit >60%	90%

Type 3 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	8.2	355	17	6035	1
2	6.1	487	16	7792	1
3	7.1	344	16	5504	0
4	9.8	288	18	5184	1
5	8.9	230	18	4140	1
6	7.9	432	17	7344	0
7	8.2	207	17	3519	1
8	7.5	443	17	7531	1
9	8.1	439	17	7463	1
10	6.2	223	16	3568	1
11	8.9	208	18	3744	1
12	9.6	463	18	8334	1
13	8.2	441	17	7497	1
14	7.2	323	16	5168	1
15	9.5	297	18	5346	1
16	8	412	17	7004	1
17	10	324	18	5832	0
18	7.4	271	17	4607	1
19	7.9	349	17	5933	1
20	7.3	409	16	6544	1
21	8.7	373	18	6714	0
22	7.2	254	16	4064	1
23	9.9	274	18	4932	1
24	7.9	278	17	4726	1
25	7.5	317	17	5389	1
26	6.1	260	16	4160	0
27	8.8	211	18	3798	1
28	9.7	272	18	4896	1
29	7.4	264	17	4488	0
30	9.2	284	18	5112	1
Detection Percentage				Limit >60%	80%

Type 4 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length(us)	1=Detection Blank=No Detection
1	16	355	14	4970	1
2	11.3	487	12	5844	1
3	13.5	344	13	4472	1
4	19.4	288	16	4608	1
5	17.5	230	15	3450	0
6	15.3	432	14	6048	0
7	15.9	207	14	2898	1
8	14.3	443	13	5759	1
9	15.8	439	14	6146	0
10	11.5	223	12	2676	1
11	17.4	208	15	3120	1
12	19	463	16	7408	1
13	16	441	14	6174	1
14	13.8	323	13	4199	1
15	18.9	297	16	4752	1
16	15.5	412	14	5768	1
17	19.9	324	16	5184	1
18	14.1	271	13	3523	1
19	15.2	349	14	4886	1
20	13.8	409	13	5317	0
21	17.1	373	15	5595	1
22	13.8	254	13	3302	1
23	19.8	274	16	4384	1
24	15.3	278	14	3892	1
25	14.5	317	13	4121	0
26	11.3	260	12	3120	0
27	17.3	211	15	3165	1
28	19.2	272	16	4352	1
29	14.2	264	13	3432	1
30	18.2	284	15	4260	1
Detection Percentage				Limit >60%	80%

Type 5 Radar Statistical Performance

Trial Number	Number of Bursts	Burst Period(s)	Waveform Length(s)	Center Frequency (GHz)	1=Detection Blank=No Detection
1	15	0.8	12	5.5	1
2	8	1.5	12	5.5	1
3	11	1.090909091	12	5.5	1
4	20	0.6	12	5.5	1
5	17	0.705882353	12	5.5	1
6	14	0.857142857	12	5.5	1
7	15	0.8	12	5.5	1
8	12	1	12	5.5	1
9	14	0.857142857	12	5.5	1
10	8	1.5	12	5.5	1
11	17	0.705882353	12	5.5048	1
12	19	0.631578947	12	5.508	1
13	15	0.8	12	5.5028	1
14	12	1	12	5.5052	1
15	19	0.631578947	12	5.5072	1
16	14	0.857142857	12	5.5052	1
17	20	0.6	12	5.5068	0
18	12	1	12	5.5064	1
19	14	0.857142857	12	5.5024	1
20	12	1	12	5.5068	1
21	16	0.75	12	5.4952	1
22	12	1	12	5.4944	1
23	20	0.6	12	5.4948	1
24	14	0.857142857	12	5.498	1
25	13	0.923076923	12	5.4924	1
26	8	1.5	12	5.496	1
27	17	0.705882353	12	5.494	1
28	19	0.631578947	12	5.4936	1
29	12	1	12	5.498	1
30	18	0.666666667	12	5.494	1
Detection Percentage				Limit >80%	97%

Type 6 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length(us)	1=Detection Blank=No Detection
1	1	333.335	9	0.3333	1
2	1	333.335	9	0.3333	1
3	1	333.335	9	0.3333	1
4	1	333.335	9	0.3333	1
5	1	333.335	9	0.3333	1
6	1	333.335	9	0.3333	1
7	1	333.335	9	0.3333	1
8	1	333.335	9	0.3333	1
9	1	333.335	9	0.3333	1
10	1	333.335	9	0.3333	1
11	1	333.335	9	0.3333	1
12	1	333.335	9	0.3333	1
13	1	333.335	9	0.3333	1
14	1	333.335	9	0.3333	1
15	1	333.335	9	0.3333	1
16	1	333.335	9	0.3333	1
17	1	333.335	9	0.3333	1
18	1	333.335	9	0.3333	1
19	1	333.335	9	0.3333	1
20	1	333.335	9	0.3333	1
21	1	333.335	9	0.3333	1
22	1	333.335	9	0.3333	1
23	1	333.335	9	0.3333	1
24	1	333.335	9	0.3333	1
25	1	333.335	9	0.3333	1
26	1	333.335	9	0.3333	1
27	1	333.335	9	0.3333	1
28	1	333.335	9	0.3333	1
29	1	333.335	9	0.3333	1
30	1	333.335	9	0.3333	1
Detection Percentage				Limit >70%	100%

Modulation Mode: 802.11ax HE40 (Band 2)

Radar Type	Number of Trials	Number of Successful Detections	Probability	Limit	Result
1	30	28	93%	60%	Pass
2	30	28	93%	60%	Pass
3	30	25	83%	60%	Pass
4	30	26	87%	60%	Pass
Average			89%	80%	Pass
5	30	30	100%	80%	Pass
6	30	30	100%	70%	Pass

Type 1 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	1	938	57	53466	1
2	1	698	76	53048	1
3	1	618	86	53148	1
4	1	538	99	53262	1
5	1	878	61	53558	0
6	1	3066	18	55188	1
7	1	638	83	52954	1
8	1	918	58	53244	1
9	1	838	63	52794	1
10	1	858	62	53196	1
11	1	798	67	53466	1
12	1	718	74	53132	0
13	1	578	92	53176	1
14	1	598	89	53222	1
15	1	558	95	53010	1
16	1	2536	21	53256	1
17	1	966	55	53130	1
18	1	827	64	52928	1
19	1	2501	22	55022	1
20	1	2595	21	54495	1
21	1	1114	48	53472	1
22	1	1302	41	53382	1
23	1	3045	18	54810	1
24	1	1624	33	53592	1
25	1	2878	19	54682	1
26	1	1027	52	53404	1
27	1	2485	22	54670	1
28	1	1600	33	52800	1
29	1	1172	46	53912	1
30	1	1177	45	52965	1
Detection Percentage				Limit >60%	93%

Type 2 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	3.2	179	26	4654	1
2	1.1	207	23	4761	1
3	2.1	230	24	5520	1
4	4.8	200	29	5800	1
5	3.9	214	28	5992	1
6	2.9	222	26	5772	1
7	3.2	204	26	5304	1
8	2.5	192	25	4800	1
9	3.1	164	26	4264	1
10	1.2	156	23	3588	0
11	3.9	210	27	5670	1
12	4.6	201	29	5829	1
13	3.2	162	26	4212	1
14	2.2	197	25	4925	1
15	4.5	163	29	4727	0
16	3	203	26	5278	1
17	5	168	29	4872	1
18	2.4	217	25	5425	1
19	2.9	191	26	4966	1
20	2.3	166	25	4150	1
21	3.7	150	27	4050	1
22	2.2	176	25	4400	1
23	4.9	195	29	5655	1
24	2.9	202	26	5252	1
25	2.5	178	25	4450	1
26	1.1	206	23	4738	1
27	3.8	155	27	4185	1
28	4.7	157	29	4553	1
29	2.4	224	25	5600	1
30	4.2	159	28	4452	1
Detection Percentage				Limit >60%	93%

Type 3 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	8.2	355	17	6035	0
2	6.1	487	16	7792	1
3	7.1	344	16	5504	1
4	9.8	288	18	5184	1
5	8.9	230	18	4140	0
6	7.9	432	17	7344	1
7	8.2	207	17	3519	1
8	7.5	443	17	7531	1
9	8.1	439	17	7463	1
10	6.2	223	16	3568	1
11	8.9	208	18	3744	1
12	9.6	463	18	8334	0
13	8.2	441	17	7497	1
14	7.2	323	16	5168	1
15	9.5	297	18	5346	0
16	8	412	17	7004	0
17	10	324	18	5832	1
18	7.4	271	17	4607	1
19	7.9	349	17	5933	1
20	7.3	409	16	6544	1
21	8.7	373	18	6714	1
22	7.2	254	16	4064	1
23	9.9	274	18	4932	1
24	7.9	278	17	4726	1
25	7.5	317	17	5389	1
26	6.1	260	16	4160	1
27	8.8	211	18	3798	1
28	9.7	272	18	4896	1
29	7.4	264	17	4488	1
30	9.2	284	18	5112	1
Detection Percentage				Limit >60%	83%

Type 4 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	16	355	14	4970	1
2	11.3	487	12	5844	1
3	13.5	344	13	4472	0
4	19.4	288	16	4608	1
5	17.5	230	15	3450	1
6	15.3	432	14	6048	1
7	15.9	207	14	2898	0
8	14.3	443	13	5759	1
9	15.8	439	14	6146	1
10	11.5	223	12	2676	1
11	17.4	208	15	3120	1
12	19	463	16	7408	1
13	16	441	14	6174	1
14	13.8	323	13	4199	1
15	18.9	297	16	4752	1
16	15.5	412	14	5768	1
17	19.9	324	16	5184	1
18	14.1	271	13	3523	1
19	15.2	349	14	4886	1
20	13.8	409	13	5317	1
21	17.1	373	15	5595	0
22	13.8	254	13	3302	1
23	19.8	274	16	4384	1
24	15.3	278	14	3892	1
25	14.5	317	13	4121	1
26	11.3	260	12	3120	0
27	17.3	211	15	3165	1
28	19.2	272	16	4352	1
29	14.2	264	13	3432	1
30	18.2	284	15	4260	1
Detection Percentage				Limit >60%	87%

Type 5 Radar Statistical Performance

Trial Number	Number of Bursts	Burst Period (s)	Waveform Length (s)	Center Frequency (GHz)	1=Detection Blank=No Detection
1	15	0.8	12	5.31	1
2	8	1.5	12	5.31	1
3	11	1.090909	12	5.31	1
4	20	0.6	12	5.31	1
5	17	0.705882	12	5.31	1
6	14	0.857143	12	5.31	1
7	15	0.8	12	5.31	1
8	12	1	12	5.31	1
9	14	0.857143	12	5.31	1
10	8	1.5	12	5.31	1
11	17	0.705882	12	5.297	1
12	19	0.631579	12	5.298	1
13	15	0.8	12	5.296	1
14	12	1	12	5.295	1
15	19	0.631579	12	5.298	1
16	14	0.857143	12	5.296	1
17	20	0.6	12	5.299	1
18	12	1	12	5.295	1
19	14	0.857143	12	5.296	1
20	12	1	12	5.295	1
21	16	0.75	12	5.323	1
22	12	1	12	5.326	1
23	20	0.6	12	5.321	1
24	14	0.857143	12	5.324	1
25	13	0.923077	12	5.325	1
26	8	1.5	12	5.327	1
27	17	0.705882	12	5.323	1
28	19	0.631579	12	5.322	1
29	12	1	12	5.325	1
30	18	0.666667	12	5.322	1
Detection Percentage				Limit >80%	100%

Type 6 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	1	333.335	9	0.3333	1
2	1	333.335	9	0.3333	1
3	1	333.335	9	0.3333	1
4	1	333.335	9	0.3333	1
5	1	333.335	9	0.3333	1
6	1	333.335	9	0.3333	1
7	1	333.335	9	0.3333	1
8	1	333.335	9	0.3333	1
9	1	333.335	9	0.3333	1
10	1	333.335	9	0.3333	1
11	1	333.335	9	0.3333	1
12	1	333.335	9	0.3333	1
13	1	333.335	9	0.3333	1
14	1	333.335	9	0.3333	1
15	1	333.335	9	0.3333	1
16	1	333.335	9	0.3333	1
17	1	333.335	9	0.3333	1
18	1	333.335	9	0.3333	1
19	1	333.335	9	0.3333	1
20	1	333.335	9	0.3333	1
21	1	333.335	9	0.3333	1
22	1	333.335	9	0.3333	1
23	1	333.335	9	0.3333	1
24	1	333.335	9	0.3333	1
25	1	333.335	9	0.3333	1
26	1	333.335	9	0.3333	1
27	1	333.335	9	0.3333	1
28	1	333.335	9	0.3333	1
29	1	333.335	9	0.3333	1
30	1	333.335	9	0.3333	1
Detection Percentage				Limit >70%	100%

Modulation Mode: 802.11ax HE40 (Band 3)

Radar Type	Number of Trials	Number of Successful Detections	Probability	Limit	Result
1	30	28	93%	60%	Pass
2	30	29	97%	60%	Pass
3	30	29	97%	60%	Pass
4	30	26	87%	60%	Pass
Average			93%	80%	Pass
5	30	30	100%	80%	Pass
6	30	30	100%	70%	Pass

Type 1 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	1	938	57	53466	1
2	1	698	76	53048	1
3	1	618	86	53148	1
4	1	538	99	53262	1
5	1	878	61	53558	1
6	1	3066	18	55188	1
7	1	638	83	52954	1
8	1	918	58	53244	1
9	1	838	63	52794	1
10	1	858	62	53196	1
11	1	798	67	53466	1
12	1	718	74	53132	0
13	1	578	92	53176	1
14	1	598	89	53222	1
15	1	558	95	53010	1
16	1	2536	21	53256	1
17	1	966	55	53130	1
18	1	827	64	52928	1
19	1	2501	22	55022	1
20	1	2595	21	54495	1
21	1	1114	48	53472	1
22	1	1302	41	53382	1
23	1	3045	18	54810	1
24	1	1624	33	53592	1
25	1	2878	19	54682	1
26	1	1027	52	53404	1
27	1	2485	22	54670	1
28	1	1600	33	52800	1
29	1	1172	46	53912	0
30	1	1177	45	52965	1
Detection Percentage				Limit >60%	93%

Type 2 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	3.2	179	26	4654	1
2	1.1	207	23	4761	1
3	2.1	230	24	5520	1
4	4.8	200	29	5800	1
5	3.9	214	28	5992	1
6	2.9	222	26	5772	1
7	3.2	204	26	5304	1
8	2.5	192	25	4800	1
9	3.1	164	26	4264	1
10	1.2	156	23	3588	1
11	3.9	210	27	5670	1
12	4.6	201	29	5829	1
13	3.2	162	26	4212	1
14	2.2	197	25	4925	1
15	4.5	163	29	4727	1
16	3	203	26	5278	1
17	5	168	29	4872	1
18	2.4	217	25	5425	1
19	2.9	191	26	4966	1
20	2.3	166	25	4150	1
21	3.7	150	27	4050	1
22	2.2	176	25	4400	0
23	4.9	195	29	5655	1
24	2.9	202	26	5252	1
25	2.5	178	25	4450	1
26	1.1	206	23	4738	1
27	3.8	155	27	4185	1
28	4.7	157	29	4553	1
29	2.4	224	25	5600	1
30	4.2	159	28	4452	1
Detection Percentage				Limit >60%	97%

Type 3 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	8.2	355	17	6035	1
2	6.1	487	16	7792	1
3	7.1	344	16	5504	1
4	9.8	288	18	5184	1
5	8.9	230	18	4140	1
6	7.9	432	17	7344	1
7	8.2	207	17	3519	1
8	7.5	443	17	7531	1
9	8.1	439	17	7463	0
10	6.2	223	16	3568	1
11	8.9	208	18	3744	1
12	9.6	463	18	8334	1
13	8.2	441	17	7497	1
14	7.2	323	16	5168	1
15	9.5	297	18	5346	1
16	8	412	17	7004	1
17	10	324	18	5832	1
18	7.4	271	17	4607	1
19	7.9	349	17	5933	1
20	7.3	409	16	6544	1
21	8.7	373	18	6714	1
22	7.2	254	16	4064	1
23	9.9	274	18	4932	1
24	7.9	278	17	4726	1
25	7.5	317	17	5389	1
26	6.1	260	16	4160	1
27	8.8	211	18	3798	1
28	9.7	272	18	4896	1
29	7.4	264	17	4488	1
30	9.2	284	18	5112	1
Detection Percentage				Limit >60%	97%

Type 4 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	16	355	14	4970	1
2	11.3	487	12	5844	1
3	13.5	344	13	4472	1
4	19.4	288	16	4608	0
5	17.5	230	15	3450	1
6	15.3	432	14	6048	1
7	15.9	207	14	2898	0
8	14.3	443	13	5759	1
9	15.8	439	14	6146	0
10	11.5	223	12	2676	1
11	17.4	208	15	3120	1
12	19	463	16	7408	1
13	16	441	14	6174	1
14	13.8	323	13	4199	1
15	18.9	297	16	4752	1
16	15.5	412	14	5768	1
17	19.9	324	16	5184	1
18	14.1	271	13	3523	1
19	15.2	349	14	4886	1
20	13.8	409	13	5317	1
21	17.1	373	15	5595	1
22	13.8	254	13	3302	1
23	19.8	274	16	4384	1
24	15.3	278	14	3892	1
25	14.5	317	13	4121	1
26	11.3	260	12	3120	1
27	17.3	211	15	3165	1
28	19.2	272	16	4352	0
29	14.2	264	13	3432	1
30	18.2	284	15	4260	1
Detection Percentage				Limit >60%	87%

Type 5 Radar Statistical Performance

Trial Number	Number of Bursts	Burst Period(s)	Waveform Length(s)	Center Frequency (GHz)	1=Detection Blank=No Detection
1	15	0.8	12	5.51	1
2	8	1.5	12	5.51	1
3	11	1.090909	12	5.51	1
4	20	0.6	12	5.51	1
5	17	0.705882	12	5.51	1
6	14	0.857143	12	5.51	1
7	15	0.8	12	5.51	1
8	12	1	12	5.51	1
9	14	0.857143	12	5.51	1
10	8	1.5	12	5.51	1
11	17	0.705882	12	5.497	1
12	19	0.631579	12	5.499	1
13	15	0.8	12	5.496	1
14	12	1	12	5.495	1
15	19	0.631579	12	5.498	1
16	14	0.857143	12	5.496	1
17	20	0.6	12	5.499	1
18	12	1	12	5.495	1
19	14	0.857143	12	5.496	1
20	12	1	12	5.495	1
21	16	0.75	12	5.523	1
22	12	1	12	5.525	1
23	20	0.6	12	5.521	1
24	14	0.857143	12	5.524	1
25	13	0.923077	12	5.525	1
26	8	1.5	12	5.527	1
27	17	0.705882	12	5.523	1
28	19	0.631579	12	5.521	1
29	12	1	12	5.525	1
30	18	0.666667	12	5.522	1
Detection Percentage				Limit >80%	100%

Type 6 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	1	333.335	9	0.3333	1
2	1	333.335	9	0.3333	1
3	1	333.335	9	0.3333	1
4	1	333.335	9	0.3333	1
5	1	333.335	9	0.3333	1
6	1	333.335	9	0.3333	1
7	1	333.335	9	0.3333	1
8	1	333.335	9	0.3333	1
9	1	333.335	9	0.3333	1
10	1	333.335	9	0.3333	1
11	1	333.335	9	0.3333	1
12	1	333.335	9	0.3333	1
13	1	333.335	9	0.3333	1
14	1	333.335	9	0.3333	1
15	1	333.335	9	0.3333	1
16	1	333.335	9	0.3333	1
17	1	333.335	9	0.3333	1
18	1	333.335	9	0.3333	1
19	1	333.335	9	0.3333	1
20	1	333.335	9	0.3333	1
21	1	333.335	9	0.3333	1
22	1	333.335	9	0.3333	1
23	1	333.335	9	0.3333	1
24	1	333.335	9	0.3333	1
25	1	333.335	9	0.3333	1
26	1	333.335	9	0.3333	1
27	1	333.335	9	0.3333	1
28	1	333.335	9	0.3333	1
29	1	333.335	9	0.3333	1
30	1	333.335	9	0.3333	1
Detection Percentage				Limit >70%	100%

Modulation Mode: 802.11ax HE80 (Band 2)

Radar Type	Number of Trials	Number of Successful Detections	Probability	Limit	Result
1	30	29	97%	60%	Pass
2	30	28	93%	60%	Pass
3	30	23	77%	60%	Pass
4	30	21	70%	60%	Pass
Average			84%	80%	Pass
5	30	25	83%	80%	Pass
6	30	30	100%	70%	Pass

Modulation Mode: 802.11ax HE80 (Band 3)

Radar Type	Number of Trials	Number of Successful Detections	Probability	Limit	Result
1	30	29	97%	60%	Pass
2	30	28	93%	60%	Pass
3	30	23	77%	60%	Pass
4	30	21	70%	60%	Pass
Average			84%	80%	Pass
5	30	25	83%	80%	Pass
6	30	30	100%	70%	Pass

Type 1 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	1	938	57	53466	1
2	1	698	76	53048	1
3	1	618	86	53148	1
4	1	538	99	53262	1
5	1	878	61	53558	1
6	1	3066	18	55188	1
7	1	638	83	52954	1
8	1	918	58	53244	1
9	1	838	63	52794	1
10	1	858	62	53196	1
11	1	798	67	53466	0
12	1	718	74	53132	1
13	1	578	92	53176	1
14	1	598	89	53222	1
15	1	558	95	53010	1
16	1	2536	21	53256	1
17	1	966	55	53130	1
18	1	827	64	52928	1
19	1	2501	22	55022	1
20	1	2595	21	54495	1
21	1	1114	48	53472	1
22	1	1302	41	53382	1
23	1	3045	18	54810	1
24	1	1624	33	53592	1
25	1	2878	19	54682	1
26	1	1027	52	53404	1
27	1	2485	22	54670	1
28	1	1600	33	52800	1
29	1	1172	46	53912	1
30	1	1177	45	52965	1
Detection Percentage				Limit >60%	97%

Type 2 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	3.2	179	26	4654	1
2	1.1	207	23	4761	1
3	2.1	230	24	5520	1
4	4.8	200	29	5800	1
5	3.9	214	28	5992	0
6	2.9	222	26	5772	1
7	3.2	204	26	5304	1
8	2.5	192	25	4800	1
9	3.1	164	26	4264	1
10	1.2	156	23	3588	1
11	3.9	210	27	5670	1
12	4.6	201	29	5829	1
13	3.2	162	26	4212	1
14	2.2	197	25	4925	1
15	4.5	163	29	4727	1
16	3	203	26	5278	1
17	5	168	29	4872	1
18	2.4	217	25	5425	1
19	2.9	191	26	4966	0
20	2.3	166	25	4150	1
21	3.7	150	27	4050	1
22	2.2	176	25	4400	1
23	4.9	195	29	5655	1
24	2.9	202	26	5252	1
25	2.5	178	25	4450	1
26	1.1	206	23	4738	1
27	3.8	155	27	4185	1
28	4.7	157	29	4553	1
29	2.4	224	25	5600	1
30	4.2	159	28	4452	1
Detection Percentage				Limit >60%	93%

Type 3 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	8.2	355	17	6035	0
2	6.1	487	16	7792	0
3	7.1	344	16	5504	1
4	9.8	288	18	5184	0
5	8.9	230	18	4140	1
6	7.9	432	17	7344	0
7	8.2	207	17	3519	1
8	7.5	443	17	7531	1
9	8.1	439	17	7463	1
10	6.2	223	16	3568	0
11	8.9	208	18	3744	1
12	9.6	463	18	8334	1
13	8.2	441	17	7497	0
14	7.2	323	16	5168	1
15	9.5	297	18	5346	1
16	8	412	17	7004	0
17	10	324	18	5832	1
18	7.4	271	17	4607	1
19	7.9	349	17	5933	1
20	7.3	409	16	6544	1
21	8.7	373	18	6714	1
22	7.2	254	16	4064	1
23	9.9	274	18	4932	1
24	7.9	278	17	4726	1
25	7.5	317	17	5389	1
26	6.1	260	16	4160	1
27	8.8	211	18	3798	1
28	9.7	272	18	4896	1
29	7.4	264	17	4488	1
30	9.2	284	18	5112	1
Detection Percentage				Limit >60%	77%

Type 4 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	16	355	14	4970	0
2	11.3	487	12	5844	0
3	13.5	344	13	4472	1
4	19.4	288	16	4608	1
5	17.5	230	15	3450	0
6	15.3	432	14	6048	1
7	15.9	207	14	2898	1
8	14.3	443	13	5759	1
9	15.8	439	14	6146	0
10	11.5	223	12	2676	1
11	17.4	208	15	3120	1
12	19	463	16	7408	1
13	16	441	14	6174	0
14	13.8	323	13	4199	1
15	18.9	297	16	4752	1
16	15.5	412	14	5768	0
17	19.9	324	16	5184	1
18	14.1	271	13	3523	1
19	15.2	349	14	4886	1
20	13.8	409	13	5317	1
21	17.1	373	15	5595	1
22	13.8	254	13	3302	0
23	19.8	274	16	4384	1
24	15.3	278	14	3892	0
25	14.5	317	13	4121	0
26	11.3	260	12	3120	1
27	17.3	211	15	3165	1
28	19.2	272	16	4352	1
29	14.2	264	13	3432	1
30	18.2	284	15	4260	1
Detection Percentage				Limit >60%	70%

Type 5 Radar Statistical Performance

Trial Number	Number of Bursts	Burst Period (s)	Waveform Length (s)	Center Frequency (GHz)	1=Detection Blank=No Detection
1	15	0.8	12	5.53	1
2	8	1.5	12	5.53	1
3	11	1.0909091	12	5.53	1
4	20	0.6	12	5.53	1
5	17	0.7058824	12	5.53	1
6	14	0.8571429	12	5.53	1
7	15	0.8	12	5.53	1
8	12	1	12	5.53	1
9	14	0.8571429	12	5.53	1
10	8	1.5	12	5.53	1
11	17	0.7058824	12	5.498	0
12	19	0.6315789	12	5.499	0
13	15	0.8	12	5.496	1
14	12	1	12	5.495	1
15	19	0.6315789	12	5.498	0
16	14	0.8571429	12	5.496	1
17	20	0.6	12	5.499	0
18	12	1	12	5.495	1
19	14	0.8571429	12	5.496	0
20	12	1	12	5.495	1
21	16	0.75	12	5.563	1
22	12	1	12	5.565	1
23	20	0.6	12	5.561	1
24	14	0.8571429	12	5.564	1
25	13	0.9230769	12	5.564	1
26	8	1.5	12	5.567	1
27	17	0.7058824	12	5.562	1
28	19	0.6315789	12	5.561	1
29	12	1	12	5.565	1
30	18	0.6666667	12	5.562	1
Detection Percentage				Limit >80%	83%

Type 6 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	1	333.335	9	0.3333	1
2	1	333.335	9	0.3333	1
3	1	333.335	9	0.3333	1
4	1	333.335	9	0.3333	1
5	1	333.335	9	0.3333	1
6	1	333.335	9	0.3333	1
7	1	333.335	9	0.3333	1
8	1	333.335	9	0.3333	1
9	1	333.335	9	0.3333	1
10	1	333.335	9	0.3333	1
11	1	333.335	9	0.3333	1
12	1	333.335	9	0.3333	1
13	1	333.335	9	0.3333	1
14	1	333.335	9	0.3333	1
15	1	333.335	9	0.3333	1
16	1	333.335	9	0.3333	1
17	1	333.335	9	0.3333	1
18	1	333.335	9	0.3333	1
19	1	333.335	9	0.3333	1
20	1	333.335	9	0.3333	1
21	1	333.335	9	0.3333	1
22	1	333.335	9	0.3333	1
23	1	333.335	9	0.3333	1
24	1	333.335	9	0.3333	1
25	1	333.335	9	0.3333	1
26	1	333.335	9	0.3333	1
27	1	333.335	9	0.3333	1
28	1	333.335	9	0.3333	1
29	1	333.335	9	0.3333	1
30	1	333.335	9	0.3333	1
Detection Percentage				Limit >70%	100%

Modulation Mode: TDWR 802.11ax HE20 (Band 3)

Radar Type	Number of Trials	Number of Successful Detections	Probability	Limit	Result
1	30	29	97%	60%	Pass

Type 1 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	1	938	57	53466	1
2	1	698	76	53048	1
3	1	618	86	53148	1
4	1	538	99	53262	1
5	1	878	61	53558	1
6	1	3066	18	55188	1
7	1	638	83	52954	1
8	1	918	58	53244	1
9	1	838	63	52794	1
10	1	858	62	53196	1
11	1	798	67	53466	1
12	1	718	74	53132	0
13	1	578	92	53176	1
14	1	598	89	53222	1
15	1	558	95	53010	1
16	1	2536	21	53256	1
17	1	966	55	53130	1
18	1	827	64	52928	1
19	1	2501	22	55022	1
20	1	2595	21	54495	1
21	1	1114	48	53472	1
22	1	1302	41	53382	1
23	1	3045	18	54810	1
24	1	1624	33	53592	1
25	1	2878	19	54682	1
26	1	1027	52	53404	1
27	1	2485	22	54670	1
28	1	1600	33	52800	1
29	1	1172	46	53912	1
30	1	1177	45	52965	1
Detection Percentage				Limit >60%	97%

Modulation Mode: TDWR 802.11ax HE40 (Band 3)

Radar Type	Number of Trials	Number of Successful Detections	Probability	Limit	Result
1	30	29	97%	60%	Pass

Type 1 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	1	938	57	53466	1
2	1	698	76	53048	1
3	1	618	86	53148	1
4	1	538	99	53262	1
5	1	878	61	53558	1
6	1	3066	18	55188	1
7	1	638	83	52954	1
8	1	918	58	53244	1
9	1	838	63	52794	1
10	1	858	62	53196	1
11	1	798	67	53466	1
12	1	718	74	53132	0
13	1	578	92	53176	1
14	1	598	89	53222	1
15	1	558	95	53010	1
16	1	2536	21	53256	1
17	1	966	55	53130	1
18	1	827	64	52928	1
19	1	2501	22	55022	1
20	1	2595	21	54495	1
21	1	1114	48	53472	1
22	1	1302	41	53382	1
23	1	3045	18	54810	1
24	1	1624	33	53592	1
25	1	2878	19	54682	1
26	1	1027	52	53404	1
27	1	2485	22	54670	1
28	1	1600	33	52800	1
29	1	1172	46	53912	1
30	1	1177	45	52965	1
Detection Percentage				Limit >60%	97%

Modulation Mode: TDWR 802.11ax HE80 (Band 3)

Radar Type	Number of Trials	Number of Successful Detections	Probability	Limit	Result
1	30	25	83%	60%	Pass

Type 1 Radar Statistical Performance

Trial Number	Pulse Width (us)	PRI (us)	Number of Pulses	Waveform Length (us)	1=Detection Blank=No Detection
1	1	938	57	53466	1
2	1	698	76	53048	1
3	1	618	86	53148	1
4	1	538	99	53262	1
5	1	878	61	53558	0
6	1	3066	18	55188	1
7	1	638	83	52954	1
8	1	918	58	53244	1
9	1	838	63	52794	1
10	1	858	62	53196	1
11	1	798	67	53466	0
12	1	718	74	53132	0
13	1	578	92	53176	1
14	1	598	89	53222	1
15	1	558	95	53010	1
16	1	2536	21	53256	1
17	1	966	55	53130	1
18	1	827	64	52928	1
19	1	2501	22	55022	1
20	1	2595	21	54495	1
21	1	1114	48	53472	1
22	1	1302	41	53382	1
23	1	3045	18	54810	1
24	1	1624	33	53592	1
25	1	2878	19	54682	1
26	1	1027	52	53404	1
27	1	2485	22	54670	1
28	1	1600	33	52800	1
29	1	1172	46	53912	0
30	1	1177	45	52965	0
Detection Percentage				Limit >60%	83%

5.2 Mains Emission

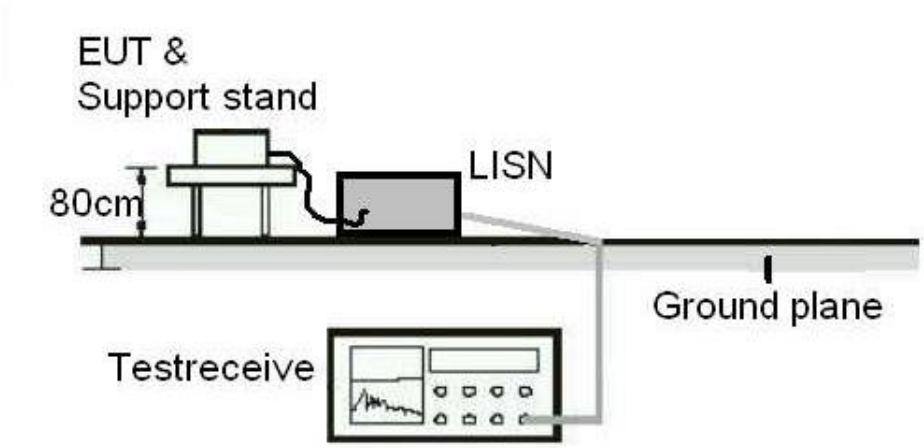
5.2.1 Mains Conducted Emission

Limit

Mains Conducted emissions as defined in §15.207 must comply with the mains conducted emission limits.

Kind of Test Site Shielded room

Test Setup



Test Instruments

Test Date: 2022/3/28 ~ 2022/3/29

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date
RF Cable	N/A	N/A	EMC-003	2022/3/14	2023/3/13
Two-Line V-Network	Rohde & Schwarz	ENV216	101938	2021/9/23	2022/9/22
EMI Test Receiver	R&S	ESCI	1816063	2021/11/15	2022/11/14

Test Procedures

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/50 uH of coupling impedance for the measuring instrument.
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

Note: The resolution bandwidth and video bandwidth of test receiver is 9 kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15 MHz – 30 MHz.

Test Results

Please refer to Appendix C for scanning mode and Appendix D for traffic mode.