



427 West 12800 South
Draper, UT 84020

Test Report Certification

FCC ID	SWX-U6P
ISED ID	6545A-U6P
Equipment Under Test	U6+
Test Report Serial Number	TR7619_02
Date of Test(s)	August 17-23; November 2 and 8, 2022
Report Issue Date	November 14, 2022

Test Specification	Applicant
47 CFR FCC Part 15, Subpart E RSS-GEN Issue 5	Ubiquiti Inc. 685 Third Avenue New York, NY 10017 U.S.A.



NVLAP LAB CODE 600241-0

Certification of Engineering Report

This report has been prepared by Unified Compliance Laboratory (UCL) to document compliance of the device described below with the requirement of Federal Communication Commissions (FCC) Part 15, Subpart E. This report may be reproduced in full. Partial reproduction of this report may only be made with the written consent of the laboratory. The results in this report apply only to the sample tested.

Applicant	Ubiquiti Inc.
Manufacturer	Ubiquiti Inc.
Brand Name	UniFi
Model Number	U6+
FCC ID	SWX-U6P
ISED ID	6545A-U6P

On this 14th day of November 2022, I individually and for Unified Compliance Laboratory certify that the statements made in this engineering report are true, complete and correct to the best of my knowledge and are made in good faith.

Although NVLAP has accredited the Unified Compliance Laboratory testing facilities, this report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. federal government.

Unified Compliance Laboratory



Written By: Clay Allred



Reviewed By: Joe Jackson

Revision History		
Revision	Description	Date
01	Original Report Release	November 12, 2022
02	Provided more detail on antenna gain for DFS testing	November 14, 2022

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1 Client Information

1.1 Applicant

Company	Ubiquiti Inc. 685 Third Avenue New York, NY 10017 U.S.A.
Contact Name	Alex Macon
Title	Compliance

1.2 Manufacturer

Company	Ubiquiti Inc. 685 Third Avenue New York, NY 10017 U.S.A.
Contact Name	Alex Macon
Title	Compliance

2 Equipment Under Test (EUT)

2.1 Identification of EUT

Brand Name	UniFi
Model Number	U6+
Serial Number	0418D6A29714
Dimensions (cm)	16 x 16 x 3.26

2.2 Description of EUT

The U6+ is a Wi-Fi 6 access point designed for wide-ranging wireless coverage while maintaining overall network capacity. It delivers an aggregate radio rate of up to 1.5 Gbps with 5 GHz (3x3 MU-MIMO and OFDMA) and 2.4 GHz (2x2 MIMO) radios. U6-Pro uses a sophisticated antenna design with sideways amplification to offer excellent range when mounted horizontally. U6+ combines its purpose-built antenna with powerful Wi-Fi 6 features like OFDMA, beamforming, and BSS coloring for reliable long-range wireless performance.

Band	Modulation Bandwidth	Frequency (MHz)
UNII-2A	20 MHz	5260, 5265, 5270, 5275, 5280, 5285, 5290, 5295, 5300, 5305, 5310, 5315, 5320
	40 MHz	5270, 5275, 5280, 5285, 5290, 5295, 5300, 5305, 5310
	80 MHz	5290
	160 MHz	5250
UNII-2C	20 MHz	5500, 5505, 5510, 5515, 5520, 5525, 5530, 5535, 5540, 5545, 5550, 5555, 5560, 5565, 5570, 5575, 5580, 5585, 5590, 5595, 5600*, 5605*, 5610*, 5615*, 5620*, 5625*, 5630*, 5635*, 5640*, 5645*, 5650, 5655, 5660, 5665, 5670, 5675, 5680, 5685, 5690, 5695, 5700, 5705, 5710, 5715, 5720
	40 MHz	5510, 5515, 5520, 5525, 5530, 5535, 5540, 5545, 5550, 5555, 5560, 5565, 5570, 5575, 5580, 5585, 5590, 5595, 5600*, 5605*, 5610*, 5615*, 5620*, 5625*, 5630*, 5635*, 5640*, 5645*, 5650, 5655, 5660, 5665, 5670, 5675, 5680, 5685, 5690, 5695, 5700, 5705, 5710
	80 MHz	5530, 5535, 5540, 5545, 5550, 5555, 5560, 5565, 5570, 5575, 5580, 5585, 5590, 5595, 5600*, 5605*, 5610*, 5615*, 5620*, 5625*, 5630*, 5635*, 5640*, 5645*, 5650, 5655, 5660, 5665, 5670, 5675, 5680, 5685, 5690
	160 MHz	5570
* Frequency not applicable in Canada		

Table 1: UNII-2A and UNII-2C Channel Settings

This report covers the circuitry of the device subject to FCC Part 15, Subpart E. The circuitry of the device subject to FCC Part 15 Subpart B was found to be compliant and is covered under a separate Unified Compliance Laboratory test report.

2.3 EUT and Support Equipment

The EUT and support equipment used during the test are listed below.

Brand Name Model Number Serial Number	Description	Name of Interface Ports / Interface Cables
BN: UniFi MN: U6+ SN: N/A	Wireless Access Point	See Section 2.4
BN: Ubiquiti, Inc. MN: U-POE-at SN: N/A	PoE Injector Power Supply	Shielded or Un-shielded Cat 5e cable (Note 2)
BN: Dell MN: XPS 13 SN: N/A	Laptop Computer	Shielded or Un-shielded Cat 5e cable (Note 2)

Notes: (1) EUT

(2) Interface port connected to EUT (See Section 2.4)

The support equipment listed above was not modified in order to achieve compliance with this standard.

2.4 Interface Ports on EUT

Name of Ports	No. of Ports Fitted to EUT	Cable Description/Length
PoE	1	Shielded or Un-Shielded Cat 5e Cable/> 3 Meters

2.5 Operating Environment

Power Supply	48 Volts PoE
AC Mains Frequency	60 Hz
Temperature	22-24 °C
Humidity	32 - 43 %
Barometric Pressure	1009 mBar

2.6 Operating Modes

The U6+ was tested using test software in order to enable a constant transmission. The measurements within this report are corrected to reference a 100% duty cycle. All emission modes of 802.11 ax, a, ac and n were investigated.

2.7 EUT Exercise Software

EUT firmware 6.4.11 was used to operate the transmitter using a constant transmit mode.

2.8 Block Diagram of Test Configuration

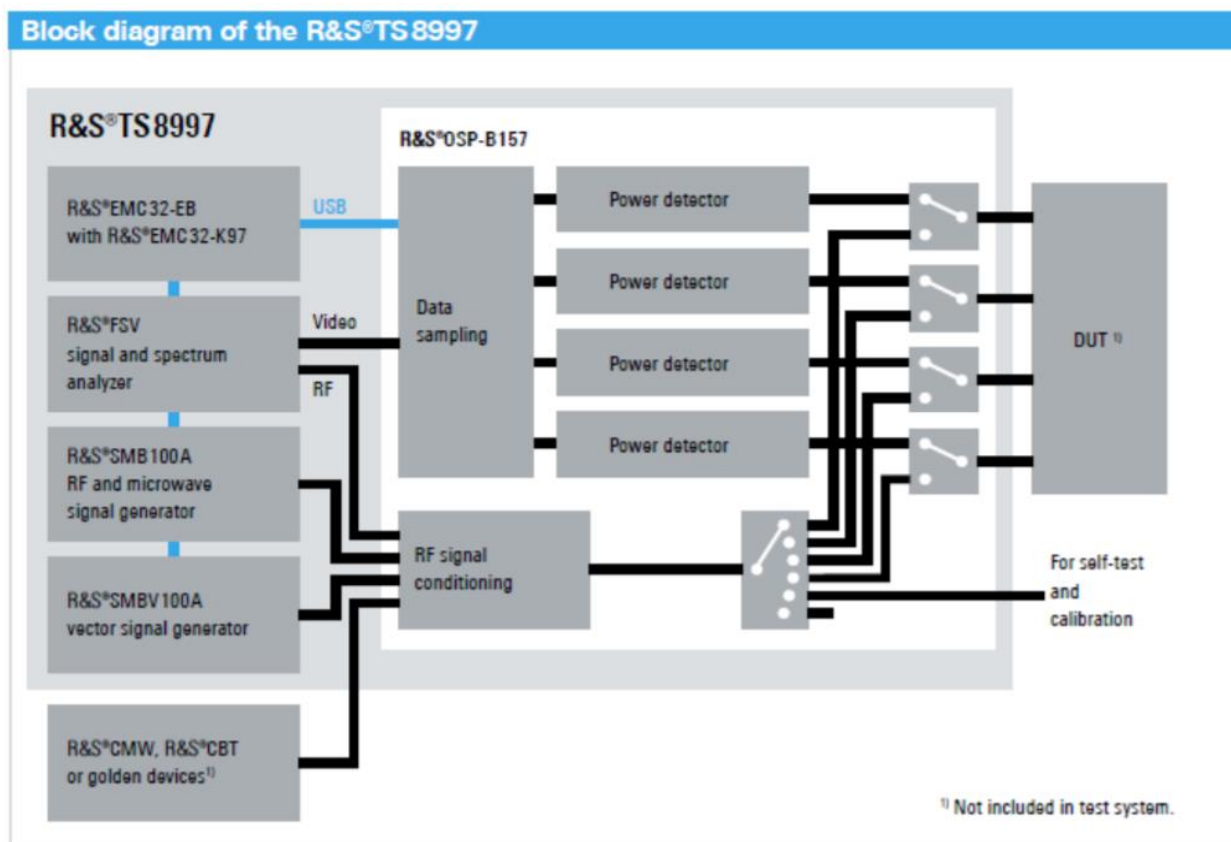


Diagram 1: Test Configuration Block Diagram

2.9 Modification Incorporated/Special Accessories on EUT

The following modifications were made to the EUT by the Client during testing to comply with the specification. This report is not complete without an accompanying signed attestation, that the product will have all of the documented modification incorporated into the product when manufactured and place on the market.

2.10 Deviation, Opinions Additional Information or Interpretations from Test Standard

There were no deviations, opinions, additional information or interpretations from the test specification.

3 Test Specification, Method and Procedures

3.1 Test Specification

Title	47 CFR FCC Part 15, Subpart E, Section 15.407 Limits and methods of measurement of radio interference characteristics of Unlicensed National Information Infrastructure Devices RSS-Gen, issue 5, General Requirements for Compliance of Radio Apparatus replaces RSS-Gen, issue 4 RSS-247, Issue 2, Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and License-Exempt Local Area Network (LE-LAN) Devices
Purpose of Test	The tests were performed to demonstrate initial compliance

3.2 Methods & Procedures

3.2.1 47 CFR FCC Part 15 Section 15.407 / RSS-GEN / RSS-247

See test standard for details.

3.3 FCC Part 15, Subpart E / RSS-GEN / RSS-247

3.3.1 Summary of Tests

FCC Section	ISED Section	Environmental Phenomena	Frequency Range (MHZ)	Result
15.407(a)	N/A	Antenna requirements	Structural Requirement	Compliant
15.407(b)	RSS-Gen	Conducted Disturbance at Mains Port	0.15 to 30	Compliant
15.407(a)	RSS-247 §6.2.2, §6.2.3	Bandwidth Requirement	5260 to 5570	Compliant
15.407(a)	RSS-247 §6.2.2, §6.2.3	Peak Output Power	5260 to 5570	Compliant
15.407(b)	RSS-247 §6.2.2, §6.2.3	Antenna Conducted Spurious Emissions	0.009 to 40000	Compliant
15.407(b)	RSS-247 §6.2.2, §6.2.3	Radiated Spurious Emissions	0.009 to 40000	Compliant
15.407(a)	RSS-247 §6.2.2, §6.2.3	Peak Power Spectral Density	5260 to 5570	Compliant

15.407(h)	RSS-247 §6.3	DFS Requirements	5260 to 5570	Compliant
The testing was performed according to the procedures in ANSI C63.10-2013, KDB 558074 and 47 CFR Part 15. Where applicable, KDB 662911 was followed to sum required measurements.				

3.4 Results

In the configuration tested, the EUT complied with the requirements of the specification.

3.5 Test Location

Testing was performed at the Unified Compliance Laboratory 10-meter chamber located at 427 West 12800 South, Draper, UT 84020. Unified Compliance Laboratory is accredited by National Voluntary Laboratory Accreditation Program (NVLAP); NVLAP Code 600241-0 which is effective until 30 June 2023. This site has also been registered with Innovations, Science and Economic Development (ISED) department as was accepted under Appendix B, Phase 1 procedures of the APEC Tel MRA for Canadian recognition. ISED No.: 25346, effective until 30 June 2023. Unified Compliance Laboratory has been assigned Conformity Assessment Number US0223 by ISED and MRA US5037.

4 Test Equipment

4.1 Conducted Emissions at Mains Ports

Type of Equipment	Manufacturer	Model Number	Asset Number	Date of Last Calibration	Due Date of Calibration
EMI Receiver	AFJ	FFT3010	UCL-6754	12/8/2021	12/8/2022
LISN	AFJ	LS16C/10	UCL-6749	12/6/2021	12/6/2023
Cat6 ISN	Teseq	ISN T8-Cat6	UCL-2971	1/30/2022	1/30/2023
ISN	Teseq	ISN T800	UCL-2974	6/27/2022	6/27/2023
LISN	Com-Power	LIN-120C	UCL-2612	1/6/2022	1/6/2023
AC Power Source	Laplace Instruments	AC1000A	UCL-2857	N/A	N/A
Test Software	UCL	Revision 1	UCL-3107	N/A	N/A

Table 2: List of equipment used for Conducted Emissions Testing at Mains Port

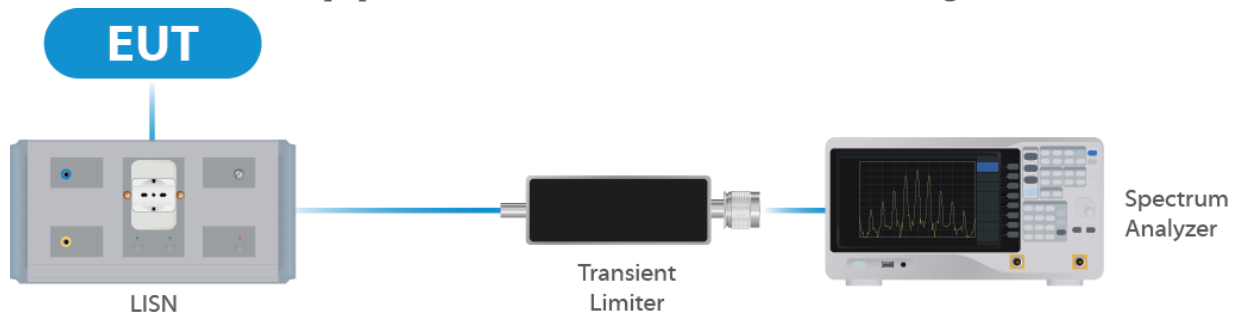


Figure 1: Conducted Emissions Test

4.2 Direct Connect at the Antenna Port Tests

Type of Equipment	Manufacturer	Model Number	Asset Number	Date of Last Calibration	Due Date of Calibration
Spectrum Analyzer	R&S	FSV40	UCL-2861	1/03/2022	1/03/2023
Signal Generator	R&S	SMB100A	UCL-2864	N/A	N/A
Vector Signal Generator	R&S	SMBV100A	UCL-2873	N/A	N/A
Switch Extension	R&S	OSP-B157WX	UCL-2867	1/03/2022	1/03/2023
Switch Extension	R&S	OSP-150W	UCL-2870	1/03/2022	1/03/2023

Table 3: List of equipment used for Direct Connect at the Antenna Port

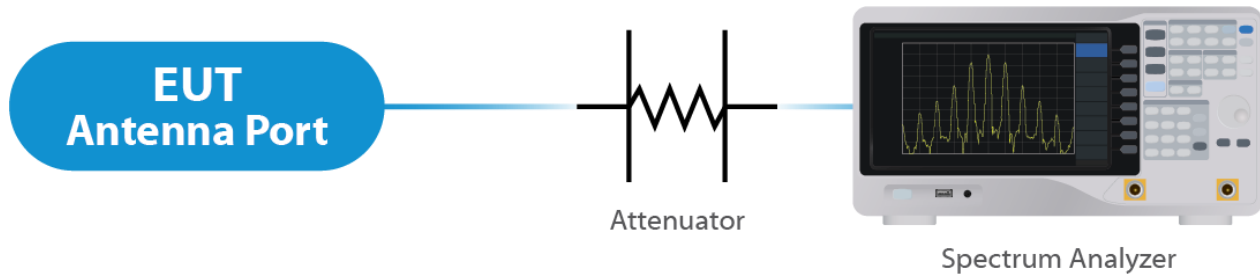


Figure 2: Direct Connect at the Antenna Port Test



Figure 3: Output Power Measurement

4.3 Radiated Emissions

Type of Equipment	Manufacturer	Model Number	Asset Number	Date of Last Calibration	Due Date of Calibration
EMI Receiver	Keysight	N9038A	UCL-2778	1/4/2022	1/4/2023
Pre-Amplifier 9 kHz – 1 GHz	Sonoma Instruments	310N	UCL-2889	10/7/2021	11/7/2022
Broadband Antenna	Scwarzbeck	VULB 9163	UCL-3062	9/13/2022	9/13/2024
Broadband Antenna	Scwarzbeck	VULB 9163	UCL-3071	6/08/2022	6/22/2024
Double Ridge Horn Antenna	Scwarzbeck	BBHA 9120D	UCL-3065	9/22/2022	9/22/2024
Log Periodic	Scwarzbeck	STLP 9129	UCL-3068	11/16/2020	11/16/2022
15 - 40 GHz Horn Antenna	Scwarzbeck	BBHA 9170	UCL-2487	6/09/2022	6/09/2024
1 – 18 GHz Amplifier	Com-Power	PAM 118A	UCL-3833	10/7/2021	11/7/2022
Test Software	UCL	Revision 1	UCL-3108	N/A	N/A

Table 4: List of equipment used for Radiated Emissions

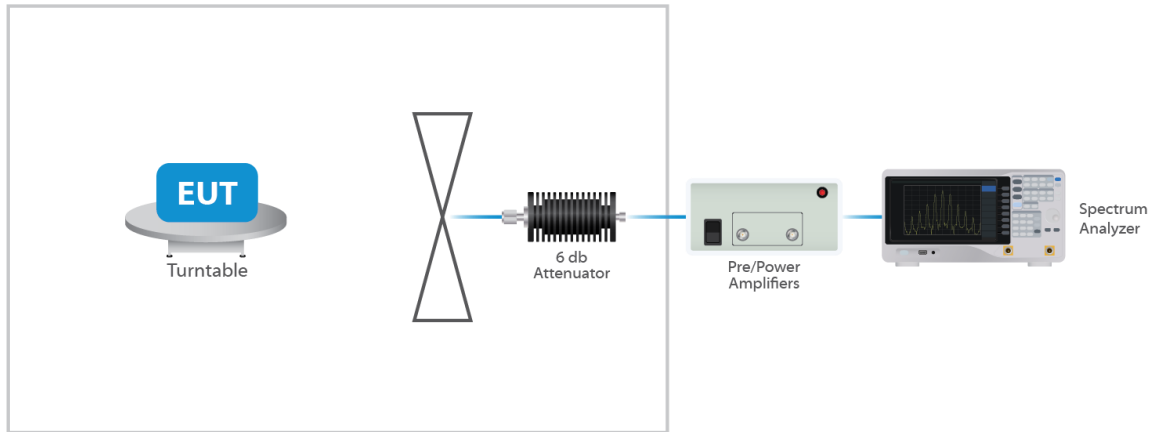


Figure 4: Radiated Emissions Test

4.4 DFS Testing

Type of Equipment	Manufacturer	Model Number	Asset Number	Date of Last Calibration	Due Date of Calibration
Vector Signal Generator	R&S	SMBV100A	UCL-2873	N/A	N/A
Spectrum Analyzer	Keysight	N9010B	UCL-7069	4/25/2022	4/25/2023

4.4.1 Master Test Set Up

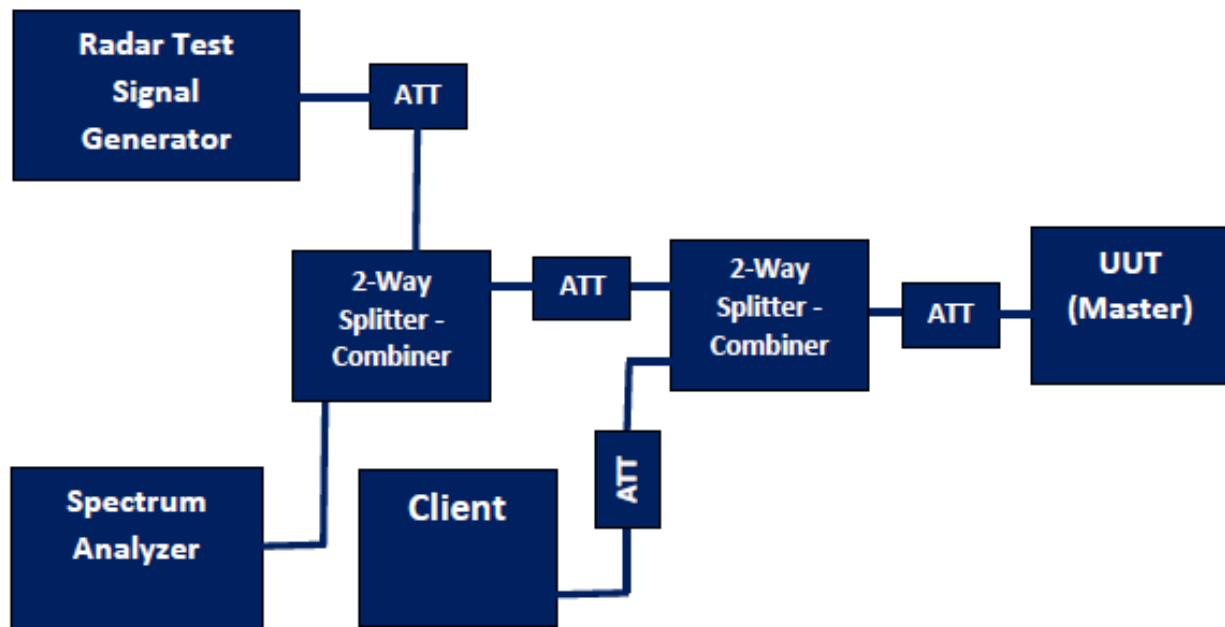


Figure 5: DFS Test Set Up - Master

4.5 Equipment Calibration

All applicable equipment is calibrated using either an independent calibration laboratory or Unified Compliance Laboratory personnel at intervals defined in ANSI C63.4:2014 following outlined calibration procedures. All measurement instrumentation is traceable to the National Institute of Standards and Technology (NIST). Supporting documentation relative to traceability is on file and is available for examination upon request.

4.6 Measurement Uncertainty

Test	Uncertainty ($\pm$ dB)	Confidence (%)
Conducted Emissions	1.44	95
Radiated Emissions (9 kHz to 30 MHz)	2.50	95
Radiated Emissions (30 MHz to 1 GHz)	4.38	95
Radiated Emissions (1 GHz to 18 GHz)	4.37	95
Radiated Emissions (18 GHz to 40 GHz)	3.93	95
Direct Connect Tests	K Factor	Value
Emissions Bandwidth	2	2.0%
Output Power	2	1.0 dB
Peak Power Spectral Density	2	1.3 dB
Band Edge	2	0.8 dB
Transmitter Spurious Emissions	2	1.8 dB

5 Test Results

5.1 §15.203 Antenna Requirements

The EUT uses an integral antenna. The Maximum gain of the antenna is 5.4 dBi. This is an 802.11 device and utilizes CDD as described in KDB 662911 D01. The antenna is not user replaceable.

For power measurements on IEEE 802.11 devices, Array Gain = 0 dB for $N_{ANT} \leq 4$;

For PSD measurements when $N_{ss}=1$: Array Gain = $10 \log(N_{ant}/N_{ss})$ dB = 6.02dB

Results

The EUT complied with the specification

5.2 §15.403(i) 26 dB Emissions Bandwidth

All chains were measured under the guidance of KDB 789033 Section II.C. and KDB 66291 D01. Please see associated annex for details on instrument settings.

5.2.1 UNII-2A

Bandwidth	Frequency (MHz)	99% Bandwidth (MHz)	Emissions 26 dB Bandwidth (MHz)
20	5260	16.7	24.3
20	5280	16.9	26.9
20	5320	17.1	26.8
20	5260	17.8	23.9
20	5280	17.9	27.1
20	5320	18.1	27.5
40	5270	37.0	58.2
40	5310	37.0	59.7
20	5260	17.9	24.0
20	5280	17.9	28.7
20	5320	18.0	33.5
40	5270	36.8	69.6
40	5310	36.8	61.2
80	5290	76.0	117.5
160	5250	157.0	204.0
20	5260	19.1	23.8
20	5280	19.1	29.0
20	5320	19.3	33.1
40	5270	38.0	66.6
40	5310	38.0	60.6
80	5290	78.0	99.0
160	5250	157.0	180.0

See TR7619_U6+_UNII-2A_ax_Attachement for complete test data. AX mode represents “worst case”.

5.2.2 UNII-2C

Bandwidth	Frequency (MHz)	99% Bandwidth (MHz)	Emissions 26 dB Bandwidth (MHz)
20	5500	17.1	30.1
20	5600	16.7	26.3
20	5720	16.8	27.2
20	5500	18.5	30.6
20	5600	18.0	28.7
20	5720	18.0	27.5
40	5510	37.0	62.7
40	5590	36.8	53.9
40	5710	36.8	49.7
20	5500	18.5	30.9
20	5600	17.9	26.7
20	5720	18.0	26.0
40	5510	37.0	65.0
40	5590	37.0	61.4
40	5710	36.5	61.1
80	5530	76.0	127.0
80	5610	75.5	10.5
80	5690	76.5	128.0
160	5570	156.0	257.0
20	5500	19.4	34.0
20	5600	19.2	26.5
20	5720	19.1	29.1
40	5510	38.0	61.4
40	5590	38.0	57.6
40	5710	38.0	67.1
80	5530	78.0	122.5
80	5610	77.5	107.0
80	5690	77.5	99.5
160	5570	157.0	191.0

See TR7619_U6+_UNII-2C_ax_Attachement for complete test data. AX mode represents “worst case”.

Result

The 26 dB bandwidths are reported for information purposes. Please see Annex for all bandwidth measurements.

5.3 §15.407(a)(2) Maximum Average Output Power

All chains were measured and summed under the guidance of KDB 789033 Section II. E.2. and KDB 66291 D01. Please see associated annex for details on instrument settings.

The maximum average RF conducted output power measured for this device was 23.57 dBm or 227.51 mW. The limit is 24 dBm or 250 mW when using antennas with 6 dBi or less gain. The antenna has a maximum gain of 5.4 dBi.

5.3.1 UNII-2A

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	Measured PSD
20	5260	Mcs0	20.5	23.30	9.09
20	5280	Mcs0	20.5	23.35	9.19
20	5320	Mcs0	21.0	23.57	8.50
20	5260	Mcs0	20.5	23.19	8.64
20	5280	Mcs0	20.5	23.28	8.51
20	5320	Mcs0	20.5	23.09	8.36
40	5270	Mcs0	20.5	23.22	6.08
40	5310	Mcs0	20.5	23.23	6.04
20	5260	Mcs0	20.5	23.14	8.57
20	5280	Mcs0	20.5	23.32	8.42
20	5320	Mcs0	20.5	23.12	8.18
40	5270	Mcs0	20.5	23.19	6.14
40	5310	Mcs0	20.5	23.19	5.92
80	5290	Mcs0	20.5	23.07	2.84
160	5250	Mcs0	21.5	23.37	0.95
20	5260	Mcs0	20.5	23.36	8.25
20	5280	Mcs0	20.5	23.44	8.23
20	5320	Mcs0	20.5	23.26	8.10
40	5270	Mcs0	20.5	23.44	5.82
40	5310	Mcs0	20.5	23.39	5.67
80	5290	Mcs0	20.5	23.27	2.69
160	5250	Mcs0	21.0	23.06	0.39

See TR7619_U6+_UNII-2A_ax_Attachement for complete test data. AX mode represents “worst case”.

5.3.2 UNII-2C

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	Measured PSD
20	5500	Mcs0	21.5	23.32	9.05
20	5600	Mcs0	21	23.38	9.06
20	5720	Mcs0	21	23.57	9.17
20	5500	Mcs0	21.5	23.32	8.91
20	5600	Mcs0	21	23.35	8.93
20	5720	Mcs0	21	23.55	8.92
40	5510	Mcs0	21	23.09	6.22
40	5590	Mcs0	21	23.26	6.46
40	5710	Mcs0	21	23.32	6.22
20	5500	Mcs0	21.5	23.29	8.85
20	5600	Mcs0	21	23.34	8.89
20	5720	Mcs0	21	23.52	8.82
40	5510	Mcs0	21	23.11	6.42
40	5590	Mcs0	21	23.25	6.44
40	5710	Mcs0	21	23.28	6.09
80	5530	Mcs0	21	22.97	2.98
80	5610	Mcs0	21	23.17	2.97
80	5690	Mcs0	21	23.20	2.73
160	5570	Mcs0	22.5	23.44	0.88
20	5500	Mcs0	21.5	23.45	8.45
20	5600	Mcs0	21	23.49	8.68
20	5720	Mcs0	20.5	23.30	8.37
40	5510	Mcs0	21	23.26	5.89
40	5590	Mcs0	21	23.42	6.22
40	5710	Mcs0	21	23.50	5.91
80	5530	Mcs0	21	23.16	2.88
80	5610	Mcs0	21	23.34	3.10
80	5690	Mcs0	21	23.43	2.85
160	5570	Mcs0	22	23.16	0.45

See TR7619_U6+_UNII-2C_ax_Attachment for complete test data. AX mode represents “worst case”.

Result

In the configuration tested, the maximum average RF output power was less than 0.25 watt; therefore, the EUT complied with the requirements of the specification.

5.4 §15.407(b) Spurious Emissions

5.4.1 Conducted Spurious Emissions

The frequency range from the lowest frequency generated or used in the device to the tenth harmonic of the highest fundamental frequency was investigated to measure any antenna-conducted emissions. The graphs show the measurement data from spurious emissions noted across the frequency range when transmitting at the lowest frequency, middle frequency and upper frequency. Shown below are plots with the EUT turned to the upper and lower channels with the antenna gain of 5.4 dBi accounted for. These demonstrate compliance with the provisions of this section at the band edges.

The emissions must be below -27 dBm EIRP.

Result

Conducted spurious emissions were below -27 dBm; therefore, the EUT complies with the specification. See Annex for results.

5.4.2 Radiated Spurious Emissions in the Restricted Bands of § 15.205

The frequency range from the lowest frequency generated or used in the device to the tenth harmonic of the highest fundamental emissions was investigated to measure any radiated emissions in the restricted bands. For frequencies above 18.0 GHz. The emissions in the restricted bans must meet the limits specified in § 15.209. Conducted measurement results are included in the Annex. Radiated data with the EUT transmitting into a load is included below. All emissions between the required frequencies were investigated, the following plots represent the worst case. The “fail” is the transmitted signal exceeding the spurious limit.

Correction Factor = Antenna Factor + Cable Loss - Pre-Amplifier Gain, and is added to the Receiver reading.

5.4.3 UNII-2A

Frequency	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azmth (°)	Height (m)	Pol.	Meas. Time	RBW (Hz)	Det.	Correct (dB)
30.343 MHz	23.858	30	-6.142	335	2.013	Vertical	15	120000	QP	-11.834
55.112 MHz	20.199	30	-9.801	27	2.572	Vertical	15	120000	QP	-12.362
107.89 MHz	16.416	30	-13.584	268	2.2	Vertical	15	120000	QP	-13.522
904.83 MHz	30.429	37	-6.571	140	1.028	Vertical	15	120000	QP	0.217
915.57 MHz	30.608	37	-6.392	41	2.713	Horizontal	15	120000	QP	0.506

Radiated Emissions within 30MHz - 1GHz

Frequency	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azmth (°)	Height (m)	Pol.	Meas. Time	RBW (Hz)	Det.	Correct (dB)
10.653 GHz	53.415	74	-20.585	205	1.5	Vertical	5	1000000	PK	2.197
15.951 GHz	55.065	74	-18.935	260	4	Vertical	5	1000000	PK	4.549
16.874 GHz	53.518	74	-20.482	87	3.307	Vertical	5	1000000	PK	9.736
10.653 GHz	38.105	54	-15.895	205	1.5	Vertical	5	1000000	AV	2.197
15.951 GHz	40.735	54	-13.265	260	4	Vertical	5	1000000	AV	4.549
16.874 GHz	39.441	54	-14.559	87	3.307	Vertical	5	1000000	AV	9.736
10.641 GHz	56.352	74	-17.648	206	3.798	Horizontal	5	1000000	PK	2.255
15.961 GHz	53.702	74	-20.298	161	3.311	Horizontal	5	1000000	PK	4.005
16.668 GHz	52.263	74	-21.737	298	1.834	Horizontal	5	1000000	PK	8.855
10.641 GHz	41.11	54	-12.89	206	3.798	Horizontal	5	1000000	AV	2.255
15.961 GHz	39.418	54	-14.582	161	3.311	Horizontal	5	1000000	AV	4.005
16.668 GHz	38.844	54	-15.156	298	1.834	Horizontal	5	1000000	AV	8.855
10.523 GHz	56.518	74	-17.482	219	1.643	Vertical	5	1000000	PK	2.145
12.205 GHz	49.666	74	-24.334	359	4	Vertical	5	1000000	PK	5.016
14.682 GHz	49.604	74	-24.396	289	3.307	Vertical	5	1000000	PK	5.735
10.523 GHz	42.237	54	-11.763	219	1.643	Vertical	5	1000000	AV	2.145
12.205 GHz	36.221	54	-17.779	359	4	Vertical	5	1000000	AV	5.016
14.682 GHz	36.967	54	-17.033	289	3.307	Vertical	5	1000000	AV	5.735
10.526 GHz	56.353	74	-17.647	206	3.307	Horizontal	5	1000000	PK	2.202
15.787 GHz	53.774	74	-20.226	181	3.307	Horizontal	5	1000000	PK	4.537
16.879 GHz	54.385	74	-19.615	39	3.798	Horizontal	5	1000000	PK	9.835
10.526 GHz	42.268	54	-11.732	206	3.307	Horizontal	5	1000000	AV	2.202
15.787 GHz	39.61	54	-14.39	181	3.307	Horizontal	5	1000000	AV	4.537
16.879 GHz	40.207	54	-13.793	39	3.798	Horizontal	5	1000000	AV	9.835
10.563 GHz	52.848	74	-21.152	228	3.311	Vertical	5	1000000	PK	1.946
15.012 GHz	51.703	74	-22.297	5	1.5	Vertical	5	1000000	PK	7.617
15.837 GHz	56.224	74	-17.776	250	3.656	Vertical	5	1000000	PK	4.467
10.563 GHz	38.871	54	-15.129	228	3.311	Vertical	5	1000000	AV	1.946
15.012 GHz	38.886	54	-15.114	5	1.5	Vertical	5	1000000	AV	7.617
15.837 GHz	41.938	54	-12.062	250	3.656	Vertical	5	1000000	AV	4.467
10.563 GHz	55.944	74	-18.056	207	1.5	Horizontal	5	1000000	PK	1.946
15.837 GHz	54.241	74	-19.759	206	1.643	Horizontal	5	1000000	PK	4.467
16.914 GHz	50.551	74	-23.449	196	3.149	Horizontal	5	1000000	PK	8.908
10.563 GHz	41.031	54	-12.969	207	1.5	Horizontal	5	1000000	AV	1.946
15.837 GHz	40.06	54	-13.94	206	1.643	Horizontal	5	1000000	AV	4.467
16.914 GHz	38.444	54	-15.556	196	3.149	Horizontal	5	1000000	AV	8.908

1 GHz – 17 GHz

Frequency	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azmth (°)	Pol.	Meas. Time (s)	RBW (Hz)	Det.	Correct (dB)
33.624 GHz	55.107	74	-18.893	338	Vertical	5	1000000	PK	5.761
35.272 GHz	57.203	74	-16.797	328	Vertical	5	1000000	PK	7.217
37.337 GHz	60.261	74	-13.739	81	Vertical	5	1000000	PK	11.055
39.119 GHz	59.238	74	-14.762	65	Vertical	5	1000000	PK	9.028

Frequency	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azmth (°)	Pol.	Meas. Time (s)	RBW (Hz)	Det.	Correct (dB)
33.624 GHz	41.575	54	-12.425	338	Vertical	5	1000000	AV	5.761
35.272 GHz	43.433	54	-10.567	328	Vertical	5	1000000	AV	7.217
37.337 GHz	47.085	54	-6.915	81	Vertical	5	1000000	AV	11.055
39.119 GHz	46.344	54	-7.656	65	Vertical	5	1000000	AV	9.028
21.278 GHz	54.928	74	-19.072	242	Horizontal	5	1000000	PK	-1.911
35.36 GHz	56.572	74	-17.428	197	Horizontal	5	1000000	PK	6.953
37.319 GHz	59.969	74	-14.031	2	Horizontal	5	1000000	PK	10.838
39.72 GHz	58.404	74	-15.596	113	Horizontal	5	1000000	PK	8.368
21.278 GHz	40.424	54	-13.576	242	Horizontal	5	1000000	AV	-1.911
35.36 GHz	43.416	54	-10.584	197	Horizontal	5	1000000	AV	6.953
37.319 GHz	46.859	54	-7.141	2	Horizontal	5	1000000	AV	10.838
39.72 GHz	44.947	54	-9.053	113	Horizontal	5	1000000	AV	8.368
21.04 GHz	56.166	74	-17.834	199	Vertical	5	1000000	PK	-1.904
37.336 GHz	60.409	74	-13.591	308	Vertical	5	1000000	PK	11.044
38.979 GHz	59.138	74	-14.862	2	Vertical	5	1000000	PK	9.327
21.04 GHz	43.387	54	-10.613	199	Vertical	5	1000000	AV	-1.904
37.336 GHz	47.399	54	-6.601	308	Vertical	5	1000000	AV	11.044
38.979 GHz	46.162	54	-7.838	2	Vertical	5	1000000	AV	9.327
21.039 GHz	57.88	74	-16.12	244	Horizontal	5	1000000	PK	-1.907
37.362 GHz	60.923	74	-13.077	265	Horizontal	5	1000000	PK	11.207
39.543 GHz	57.633	74	-16.367	75	Horizontal	5	1000000	PK	8.725
21.039 GHz	42.803	54	-11.197	244	Horizontal	5	1000000	AV	-1.907
37.362 GHz	47.61	54	-6.39	265	Horizontal	5	1000000	AV	11.207
39.543 GHz	45.085	54	-8.915	75	Horizontal	5	1000000	AV	8.725
21.119 GHz	55.749	74	-18.251	197	Vertical	5	1000000	PK	-1.858
37.348 GHz	60.474	74	-13.526	96	Vertical	5	1000000	PK	11.154
38.236 GHz	59.012	74	-14.988	161	Vertical	5	1000000	PK	8.267
39.118 GHz	59.209	74	-14.791	160	Vertical	5	1000000	PK	9.03
21.119 GHz	41.247	54	-12.753	197	Vertical	5	1000000	AV	-1.858
37.348 GHz	47.295	54	-6.705	96	Vertical	5	1000000	AV	11.154
38.236 GHz	45.943	54	-8.057	161	Vertical	5	1000000	AV	8.267
39.118 GHz	46.422	54	-7.578	160	Vertical	5	1000000	AV	9.03
21.12 GHz	57.335	74	-16.665	247	Horizontal	5	1000000	PK	-1.862
35.269 GHz	56.561	74	-17.439	80	Horizontal	5	1000000	PK	7.214
37.401 GHz	60.911	74	-13.089	151	Horizontal	5	1000000	PK	11.363
39.892 GHz	58.949	74	-15.051	211	Horizontal	5	1000000	PK	8.484
21.12 GHz	44.594	54	-9.406	247	Horizontal	5	1000000	AV	-1.862
35.269 GHz	43.398	54	-10.602	80	Horizontal	5	1000000	AV	7.214
37.401 GHz	47.599	54	-6.401	151	Horizontal	5	1000000	AV	11.363
39.892 GHz	45.374	54	-8.626	211	Horizontal	5	1000000	AV	8.484

16 GHz – 40 GHz

5.4.4 UNII-2C

Frequency	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azmth (°)	Height (m)	Pol.	Meas. Time	RBW (Hz)	Det.	Correct (dB)
30.343 MHz	23.858	30	-6.142	335	2.013	Vertical	15	120000	QP	-11.834
55.112 MHz	20.199	30	-9.801	27	2.572	Vertical	15	120000	QP	-12.362
107.89 MHz	16.416	30	-13.584	268	2.2	Vertical	15	120000	QP	-13.522
904.83 MHz	30.429	37	-6.571	140	1.028	Vertical	15	120000	QP	0.217
915.57 MHz	30.608	37	-6.392	41	2.713	Horizontal	15	120000	QP	0.506

Radiated Emissions within 30MHz - 1GHz

Frequency	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azmth (°)	Height (m)	Pol.	Meas. Time	RBW (Hz)	Det.	Correct(dB)
11.443 GHz	50.598	74	-23.402	208	1.834	Vertical	5	1000000	PK	2.482
15.022 GHz	52.778	74	-21.222	335	3.153	Vertical	5	1000000	PK	8.007
16.759 GHz	52.459	74	-21.541	83	1.5	Vertical	5	1000000	PK	9.058
11.443 GHz	36.963	54	-17.037	208	1.834	Vertical	5	1000000	AV	2.482
15.022 GHz	38.918	54	-15.082	335	3.153	Vertical	5	1000000	AV	8.007
16.759 GHz	39.565	54	-14.435	83	1.5	Vertical	5	1000000	AV	9.058
11.438 GHz	59.565	74	-14.435	190	1.643	Horizontal	5	1000000	PK	2.302
15.025 GHz	52.12	74	-21.88	282	2.65	Horizontal	5	1000000	PK	8.131
16.97 GHz	52.281	74	-21.719	242	1.638	Horizontal	5	1000000	PK	9.055
11.438 GHz	45.848	54	-8.152	190	1.643	Horizontal	5	1000000	AV	2.302
15.025 GHz	38.953	54	-15.047	282	2.65	Horizontal	5	1000000	AV	8.131
16.97 GHz	39.088	54	-14.912	242	1.638	Horizontal	5	1000000	AV	9.055
11.006 GHz	53.606	74	-20.394	198	3.311	Vertical	5	1000000	PK	1.72
15.212 GHz	50.722	74	-23.278	164	2.329	Vertical	5	1000000	PK	7.043
16.502 GHz	51.482	74	-22.518	192	2.645	Vertical	5	1000000	PK	6.232
11.006 GHz	39.233	54	-14.767	198	3.311	Vertical	5	1000000	AV	1.72
15.212 GHz	38.415	54	-15.585	164	2.329	Vertical	5	1000000	AV	7.043
16.502 GHz	38.585	54	-15.415	192	2.645	Vertical	5	1000000	AV	6.232
11.003 GHz	55.721	74	-18.279	253	2.65	Horizontal	5	1000000	PK	1.68
15.026 GHz	52.38	74	-21.62	289	2.146	Horizontal	5	1000000	PK	8.074
16.5 GHz	55.746	74	-18.254	221	2.142	Horizontal	5	1000000	PK	6.266
11.003 GHz	41.153	54	-12.847	253	2.65	Horizontal	5	1000000	AV	1.68
15.026 GHz	38.98	54	-15.02	289	2.146	Horizontal	5	1000000	AV	8.074
16.5 GHz	41.744	54	-12.256	221	2.142	Horizontal	5	1000000	AV	6.266
11.196 GHz	52.585	74	-21.415	219	1.833	Vertical	5	1000000	PK	1.793
15.026 GHz	52.247	74	-21.753	6	1.643	Vertical	5	1000000	PK	8.074
16.81 GHz	55.576	74	-18.424	242	2.146	Vertical	5	1000000	PK	8.845
11.196 GHz	39.171	54	-14.829	219	1.833	Vertical	5	1000000	AV	1.793
15.026 GHz	39.407	54	-14.593	6	1.643	Vertical	5	1000000	AV	8.074
16.81 GHz	40.398	54	-13.602	242	2.146	Vertical	5	1000000	AV	8.845
11.196 GHz	62.483	74	-11.517	189	1.638	Horizontal	5	1000000	PK	1.793
15.028 GHz	53.216	74	-20.784	130	1.643	Horizontal	5	1000000	PK	7.961
16.802 GHz	62.344	74	-11.656	180	1.638	Horizontal	5	1000000	PK	8.961
11.196 GHz	48.086	54	-5.914	189	1.638	Horizontal	5	1000000	AV	1.793
15.028 GHz	39.673	54	-14.327	130	1.643	Horizontal	5	1000000	AV	7.961

Frequency	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azmth (°)	Height (m)	Pol.	Meas. Time	RBW (Hz)	Det.	Correct(dB)
16.802 GHz	47.665	54	-6.335	180	1.638	Horizontal	5	1000000	AV	8.961

1 GHz – 17 GHz

Frequency	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Azmth (°)	Pol.	Meas. Time (s)	RBW (Hz)	Det.	Correct (dB)
17.165 GHz	55.512	74	-18.488	335	Vertical	5	1000000	PK	-4.996
35.683 GHz	51.914	74	-22.086	97	Vertical	5	1000000	PK	0.704
39.57 GHz	54.044	74	-19.956	273	Vertical	5	1000000	PK	3.999
17.165 GHz	41.456	54	-12.544	335	Vertical	5	1000000	AV	-4.996
35.683 GHz	35.404	54	-18.596	97	Vertical	5	1000000	AV	0.704
39.57 GHz	37.612	54	-16.388	273	Vertical	5	1000000	AV	3.999
17.163 GHz	55.292	74	-18.708	1	Horizontal	5	1000000	PK	-4.993
17.163 GHz	41.983	54	-12.017	1	Horizontal	5	1000000	AV	-4.993
16.501 GHz	55.514	74	-18.486	15	Horizontal	5	1000000	PK	-3.962
21.995 GHz	49.949	74	-24.051	27	Horizontal	5	1000000	PK	-5.325
16.501 GHz	41.799	54	-12.201	15	Horizontal	5	1000000	AV	-3.962
21.995 GHz	34.697	54	-19.303	27	Horizontal	5	1000000	AV	-5.325
16.8 GHz	56.596	74	-17.404	327	Vertical	5	1000000	PK	-4.535
33.658 GHz	51.395	74	-22.605	359	Vertical	5	1000000	PK	2.36
16.8 GHz	41.882	54	-12.118	327	Vertical	5	1000000	AV	-4.535
33.658 GHz	35.505	54	-18.495	359	Vertical	5	1000000	AV	2.36
16.803 GHz	57.042	74	-16.958	320	Horizontal	5	1000000	PK	-4.533
16.803 GHz	43.482	54	-10.518	320	Horizontal	5	1000000	AV	-4.533

16 GHz – 40 GHz

5.5 §15.407(a) Maximum Power Spectral Density

All chains were measured and summed under the guidance of KDB 789033 Section II. F. and KDB 66291 D01. Please see associated annex for details on instrument settings.

The maximum average power spectral density conducted from the intentional radiator of the antenna shall not be greater than 11 dBm in any 1 MHz band during any time interval of continuous transmission.

Results of this testing are summarized. With a 5.4 dBi antenna, the conducted limit for power spectral density is 11 dBm. As per KDB 662911, When the EUT is using spatial-multiplexing in HT to HE modes, there is not additional array gain to accommodate. When the EUT uses Nss=1 data rates, the antenna gain is 5.4 dBi + Array gain of 6.02 dB which is a total of 6.02 dBi

Results of this testing are summarized.

5.5.1 UNII-2A

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	Measured PSD
20	5260	Mcs0	20.5	23.30	9.09
20	5280	Mcs0	20.5	23.35	9.19
20	5320	Mcs0	21.0	23.57	8.50
20	5260	Mcs0	20.5	23.19	8.64
20	5280	Mcs0	20.5	23.28	8.51
20	5320	Mcs0	20.5	23.09	8.36
40	5270	Mcs0	20.5	23.22	6.08
40	5310	Mcs0	20.5	23.23	6.04
20	5260	Mcs0	20.5	23.14	8.57
20	5280	Mcs0	20.5	23.32	8.42
20	5320	Mcs0	20.5	23.12	8.18
40	5270	Mcs0	20.5	23.19	6.14
40	5310	Mcs0	20.5	23.19	5.92
80	5290	Mcs0	20.5	23.07	2.84
160	5250	Mcs0	21.5	23.37	0.95
20	5260	Mcs0	20.5	23.36	8.25
20	5280	Mcs0	20.5	23.44	8.23
20	5320	Mcs0	20.5	23.26	8.10
40	5270	Mcs0	20.5	23.44	5.82
40	5310	Mcs0	20.5	23.39	5.67
80	5290	Mcs0	20.5	23.27	2.69
160	5250	Mcs0	21.0	23.06	0.39

See TR7619_U6+_UNII-2A_ax_Attachment for complete test data. AX mode represents “worst case”.

5.5.2 UNII-2C

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	Measured PSD
20	5500	Mcs0	21.5	23.32	9.05
20	5600	Mcs0	21	23.38	9.06
20	5720	Mcs0	21	23.57	9.17
20	5500	Mcs0	21.5	23.32	8.91
20	5600	Mcs0	21	23.35	8.93
20	5720	Mcs0	21	23.55	8.92
40	5510	Mcs0	21	23.09	6.22
40	5590	Mcs0	21	23.26	6.46
40	5710	Mcs0	21	23.32	6.22
20	5500	Mcs0	21.5	23.29	8.85
20	5600	Mcs0	21	23.34	8.89
20	5720	Mcs0	21	23.52	8.82
40	5510	Mcs0	21	23.11	6.42
40	5590	Mcs0	21	23.25	6.44
40	5710	Mcs0	21	23.28	6.09
80	5530	Mcs0	21	22.97	2.98
80	5610	Mcs0	21	23.17	2.97
80	5690	Mcs0	21	23.20	2.73
160	5570	Mcs0	22.5	23.44	0.88
20	5500	Mcs0	21.5	23.45	8.45
20	5600	Mcs0	21	23.49	8.68
20	5720	Mcs0	20.5	23.30	8.37
40	5510	Mcs0	21	23.26	5.89
40	5590	Mcs0	21	23.42	6.22
40	5710	Mcs0	21	23.50	5.91
80	5530	Mcs0	21	23.16	2.88
80	5610	Mcs0	21	23.34	3.10
80	5690	Mcs0	21	23.43	2.85
160	5570	Mcs0	22	23.16	0.45

See TR7619_U6+_UNII-2C_ax_Attachement for complete test data. AX mode represents “worst case”.

Result

The maximum average power spectral density was less than the limit of 11 dBm; therefore, the EUT complies with the specification.

5.6 DFS Requirement

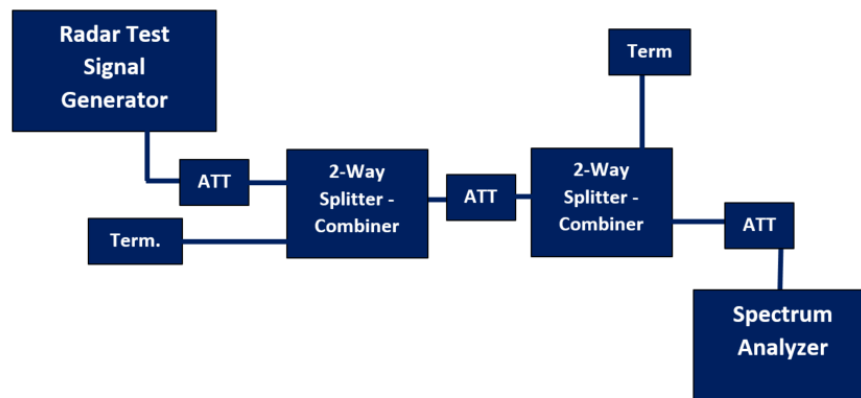
This product is a master with radar detection. The outcome of the required DFS tests is located in this section. DFS testing was performed following the test procedures as outlined in KDB 905462.

The product passes all required DFS tests for a master with radar detection.

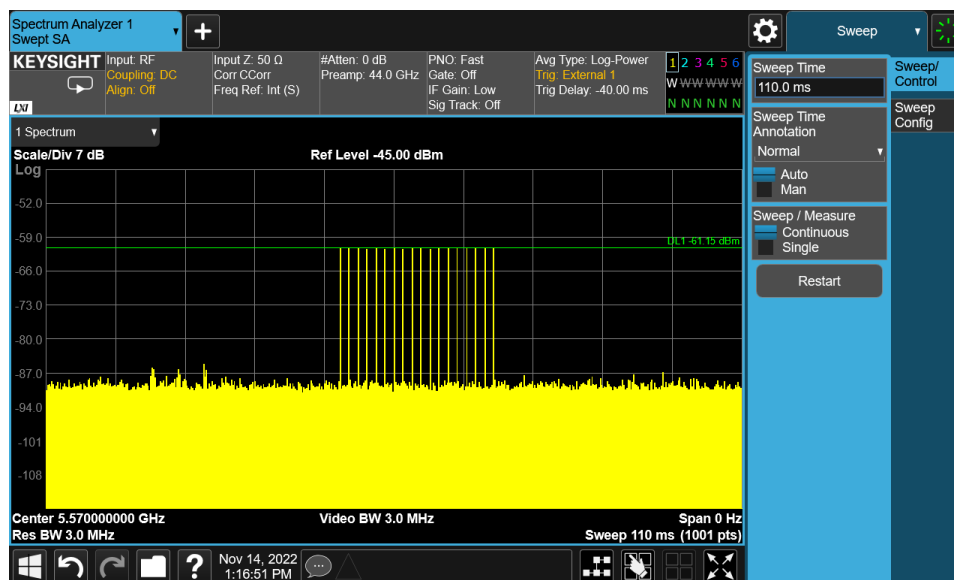
Information	Status
Possible Antenna/s	Integral
Antenna used for test	Integral
Operating mode	Master
Port used for testing	J1
DUT Antenna Gain considered for testing	2.85 dBi
EIRP range	> 200 milliwatts
Impedance of port	50 ohms
Channel loading technique	Data transfer was enacted to achieve a minimum channel loading of approximately 17%
Antenna measurement technique	See note 1
Time of power-on cycle	25s
Detection threshold level	-64 dBm

Requirement	Operational Mode		
	Master	Client Without Radar Detection	Client With Radar Detection
<i>Non-Occupancy Period</i>	Yes	Not Required	Yes
<i>DFS Detection Threshold</i>	Yes	Not Required	Yes
<i>Channel Availability Check Time</i>	Yes	Not Required	Not Required
<i>U-NII Detection Bandwidth</i>	Yes	Not Required	Yes

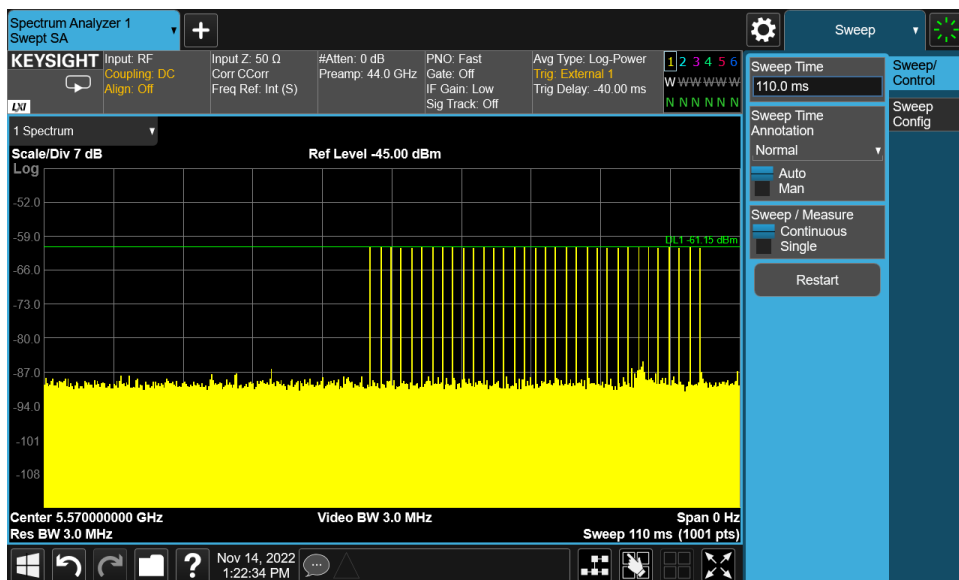
Requirement	Operational Mode	
	Master or Client Client Without Radar Detection	Client Without Radar Detection
<i>DFS Detection Threshold</i>	Yes	Not Required
<i>Channel Closing Transmission Time</i>	Yes	Yes
<i>Channel Move Time</i>	Yes	Yes
<i>U-NII Detection Bandwidth</i>	Yes	Not Required



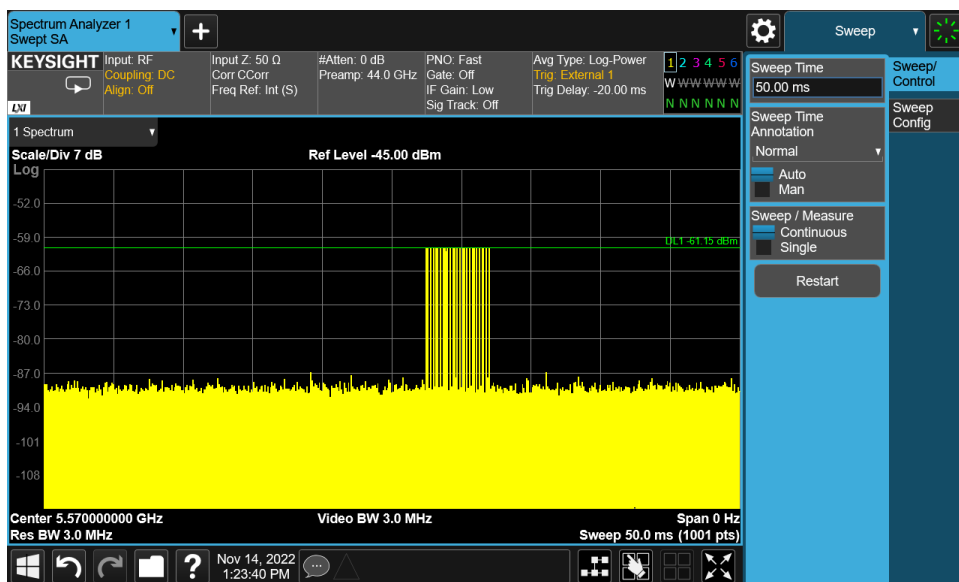
Maximum Transmit Power	Value (See Notes 1, 2, and 3)
EIRP $\geq$ 200 milliwatt	-64 dBm
EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz	-62 dBm
EIRP < 200 milliwatt that do not meet the power spectral density requirement	-64 dBm
Note 1: This is the level at the input of the receiver assuming 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. Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.	



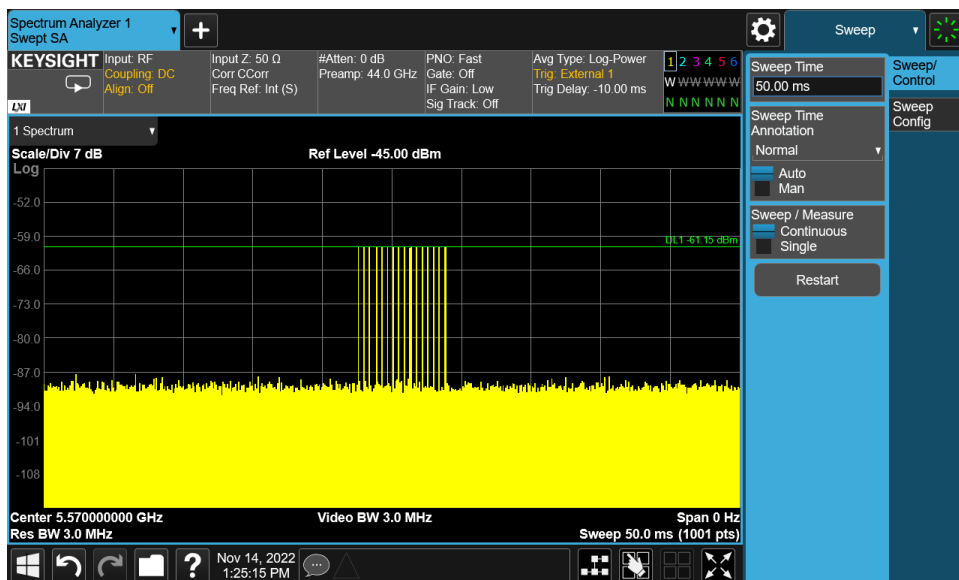
Plot 1: Radar Level 0



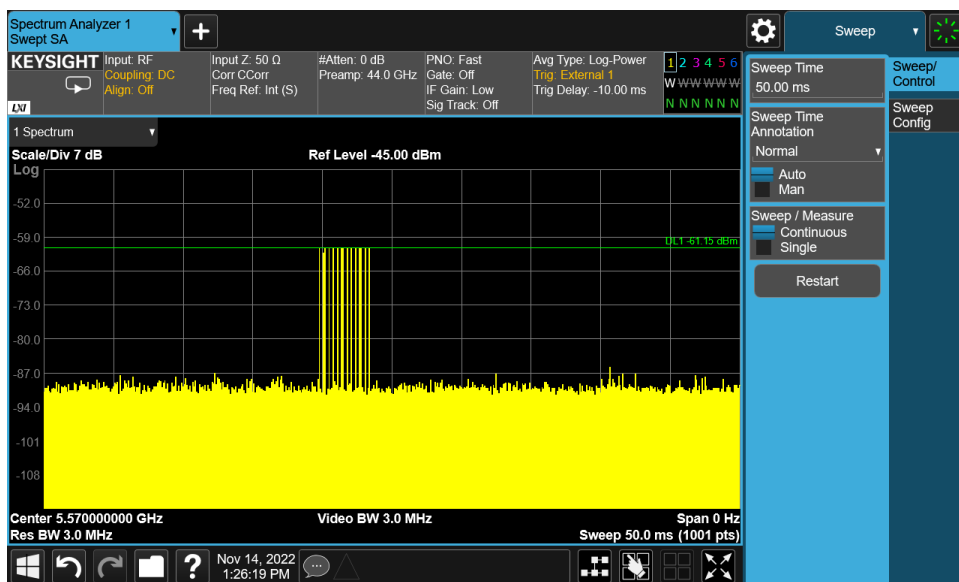
Plot 2: Radar Level 1



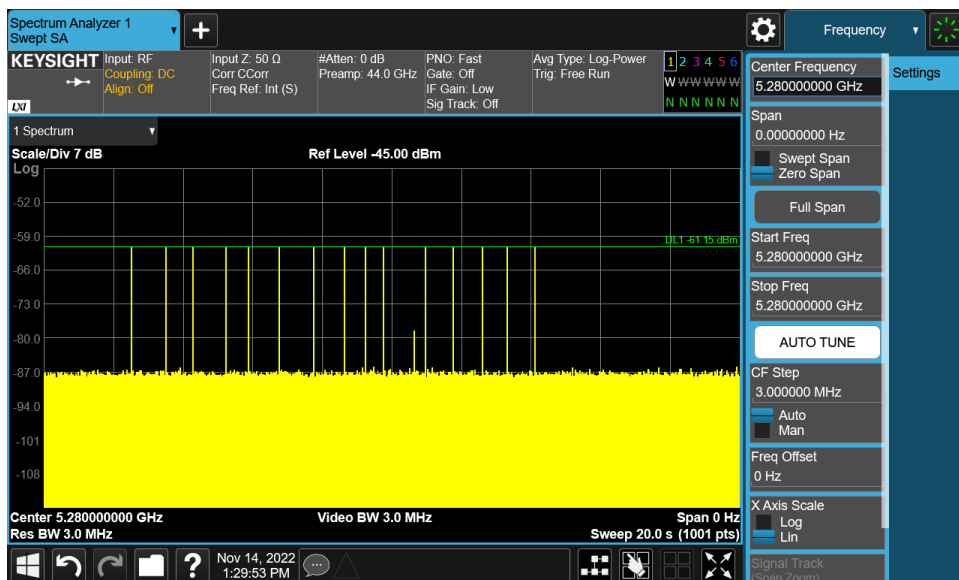
Plot 3: Radar Level 2



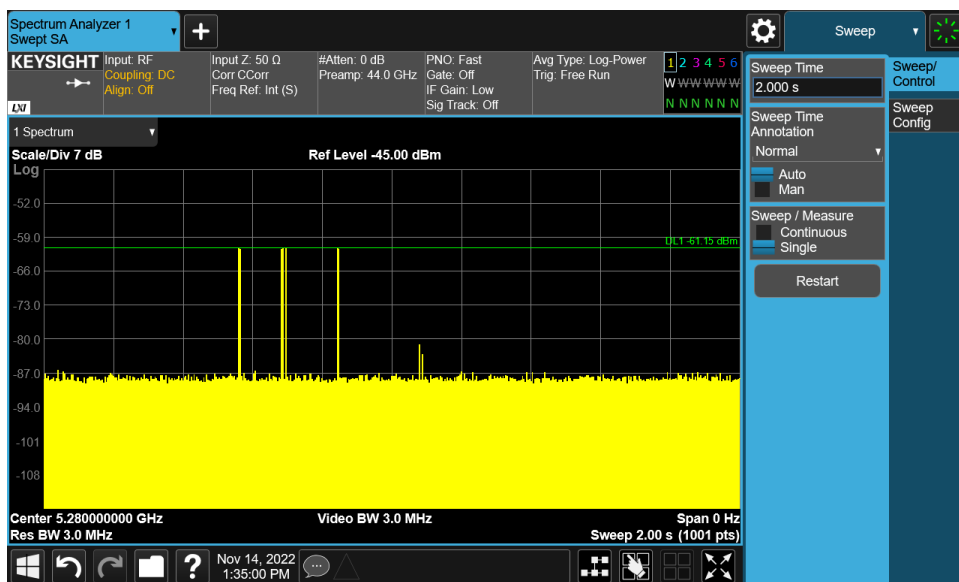
Plot 4: Radar Level 3



Plot 5: Radar Level 4



Plot 6: Radar Level 5



Plot 7: Radar Level 6

5.6.1 Channel Availability Check (CAC)

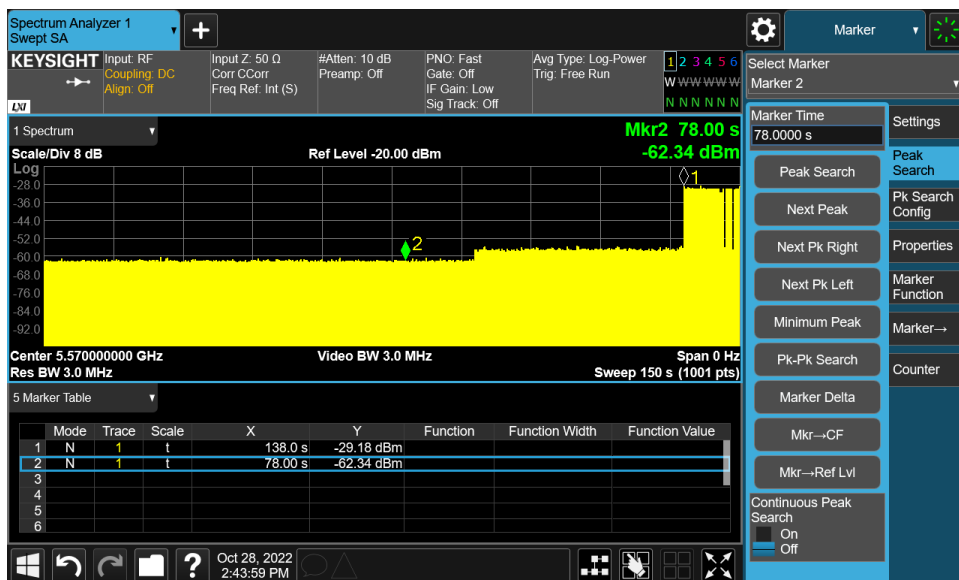
The EUT shall perform a CAC to ensure that there is no radar operating on the channel. After the power-up sequence, at-least 1 minute shall be monitored on the intended operating frequency.

For initial CAC, the EUT does not emit beacon, control, or data signals on the test channel until the power-up sequence has been completed and the UNII device checks for radar waveforms for one minute on the test channel. This test does not use any radar waveforms. The markers in the associated plots indicate initial beacons.

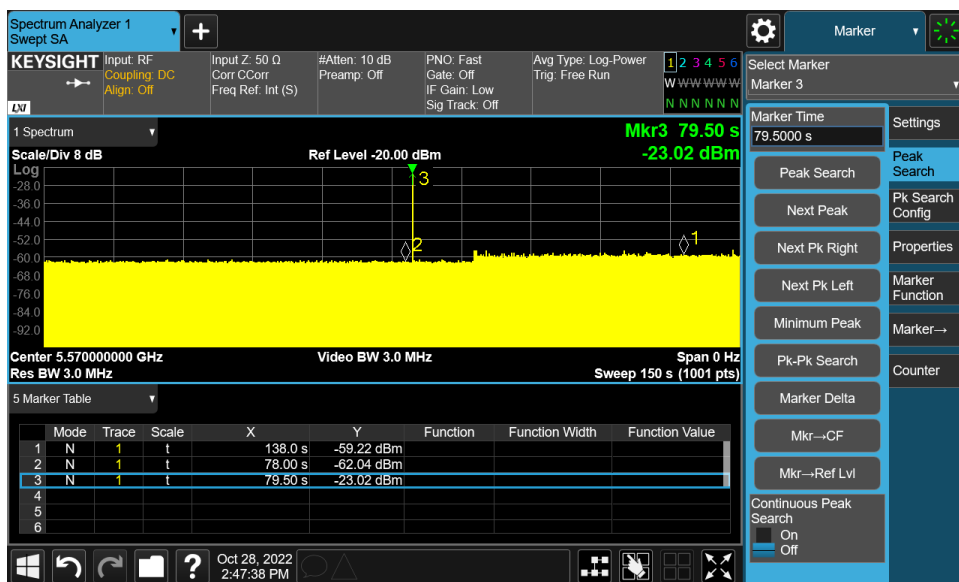
For radar burst at the beginning of the CAC. To verify successful radar detection on the selected channel during a period equal to the beginning of the CAC time, visual indication on the EUT of successful detection of the radar burst will be recorded and reported. Observation of the radar burst is show on the associated plot to be within the beginning of the CAC time. Emissions will continue to be monitored for the remaining 300 seconds.

For radar burst at the end of the CAC. To verify successful radar detection on the selected channel during a period equal to the end of the CAC time, visual indication on the EUT of successful detection of the radar burst will be recorded and reported. Observation of the radar burst is show on the associated plot to be within the end of the CAC time. Emissions will continue to be monitored for the remaining 300 seconds.

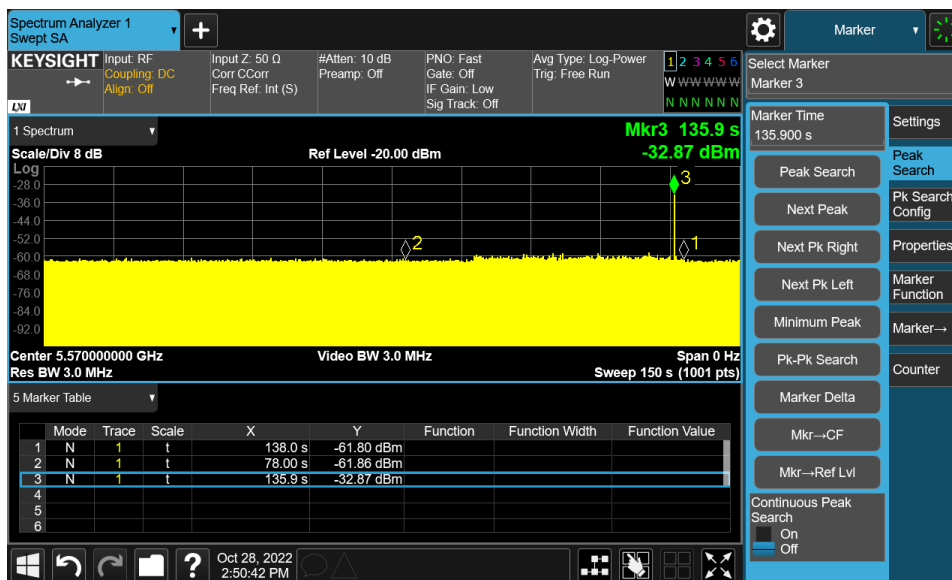
A spectrum analyzer is used as a monitor to verify that the EUT has vacated the channel within the channel closing transmission time and channel move time, and does not transmit on a channel during the non-occupancy period after the detection and channel move.



Plot 8: DUT Turn On



Plot 9: Beginning



Plot 10: End

5.6.2 In-service Monitoring

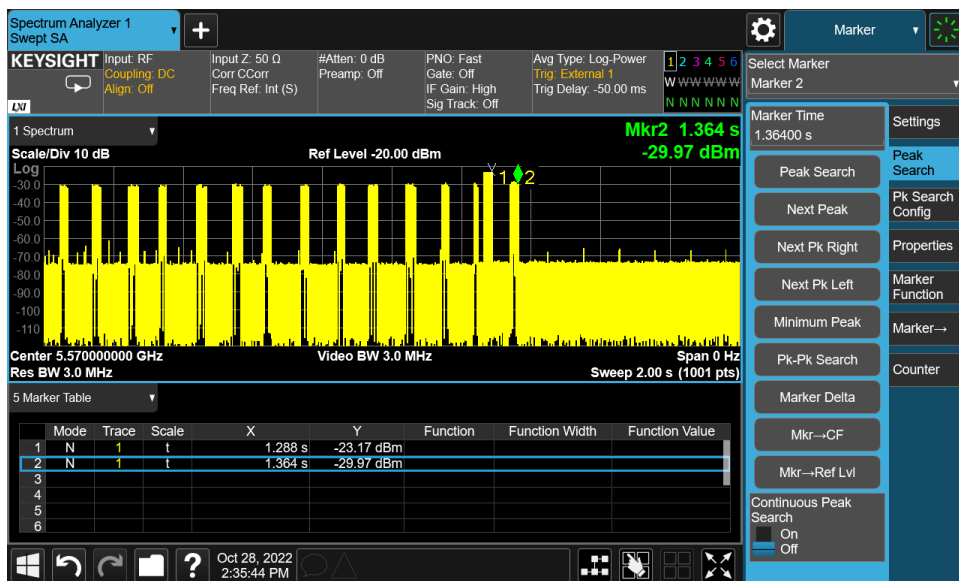
Channel Move Time	10 seconds
Channel Closing Transmission Time	200 ms + aggregate of 60 ms over remaining 10 second period
Non-occupancy period	Minimum 30 minutes

Verified during in-service monitoring: channel closing transmission time and channel move time. The transmissions were observed at the end of the radar burst on the operating channel for a duration of greater than 10 seconds. The transmissions were measured and recorded during the observation time. This was compared to the channel move time and channel closing time limits. One 12 second plot is reported for the short pulse radar type 0. A 60 ms plot is also provided to verify closing time for the aggregate transmission time starting from 200 ms after the end of the radar signal to the completion of the channel move.

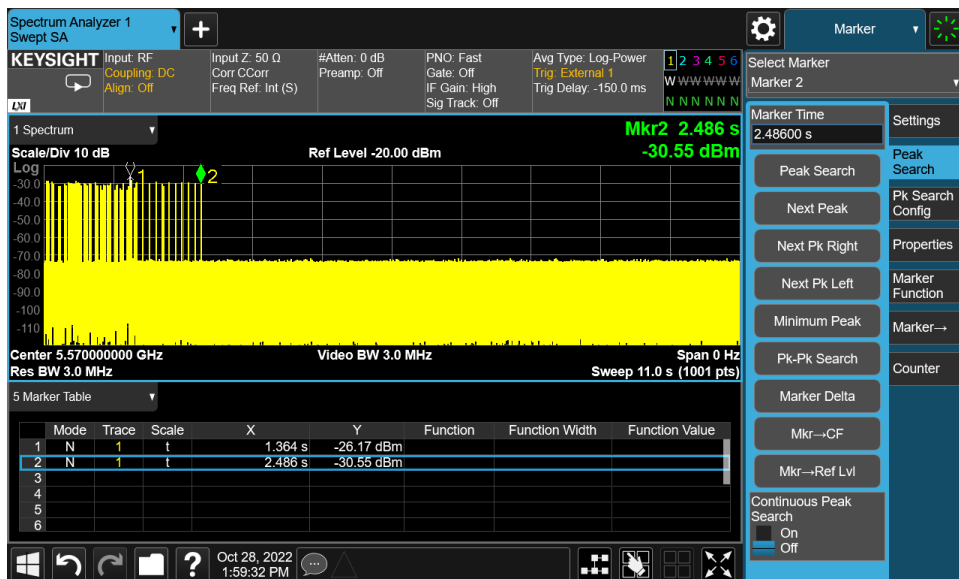
During the 30 minutes observation time, the EUT did not make any transmissions on a channel after a radar signal was detected.

Please see plots below.

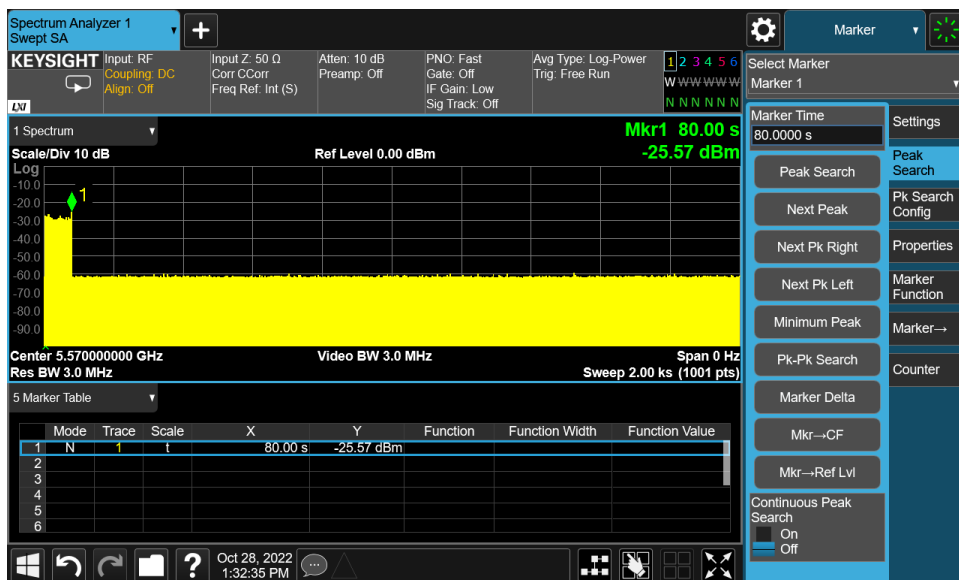
A spectrum analyzer is used as a monitor to verify that the EUT has vacated the channel within the channel closing transmission time and channel move time, and does not transmit on a channel during the non-occupancy period after the detection and channel move.



Plot 11: Close (2 s)



Plot 12: Move



Plot 13: Non-Occupancy

5.6.3 DFS Detection Bandwidth

20 MHz

EUT Frequency = 5570 MHz ; Bandwidth = 20 MHz											
Radar Frequency MHz	DFS Detection Trials (1 = Detection, 0 = No Detection)										Detection Rate %
	Trials										
	1	2	3	4	5	6	7	8	9	10	
F_Low 5570	1	1	1	1	1	1	1	1	1	1	100
5571											
5572											
5573											
5574											
5575	1	1	1	1	1	1	1	1	1	1	100
5576											
5577											
5578											
5579											
5580	1	1	1	0	1	1	1	1	1	1	90
5581											
5582											
5583											
5584											
5585	1	1	1	1	1	1	1	1	1	1	100
5586											
5587											
5588											
5589											
F_High 5590	1	1	1	1	1	1	1	1	1	1	100
Total Detection Percentage											98
Detection Bandwidth = FH-FL = 5590 MHz - 5610 MHz = 20 MHz											
99% Bandwidth = 19.8 MHz											

40 MHz

EUT Frequency = 5590 MHz ; Bandwidth = 40 MHz											
Radar Frequency MHz	DFS Detection Trials (1 = Detection, 0 = No Detection)										Detection Rate %
	Trials										
	1	2	3	4	5	6	7	8	9	10	
F_Low 5570	1	1	1	1	1	1	1	1	1	1	100
5571											
5572											
5573											
5574											
5575	1	1	1	1	1	1	1	1	1	1	100
5576											
5577											
5578											
5579											
5580	1	1	1	1	1	1	1	1	1	1	100
5581											
5582											
5583											
5584											
5585	1	1	1	1	1	1	1	1	1	1	100
5586											
5587											
5588											
5589											
5590	1	1	1	1	1	1	1	1	1	1	100
5591											
5592											
5593											
5594											
5595	1	1	1	1	1	1	1	1	1	1	100
5596											
5597											
5598											
5599											
5600	1	1	1	1	1	1	1	1	1	1	100
5601											
5602											
5603											
5604											
5605	1	1	1	1	1	1	1	1	1	1	100
5606											
5607											
5608											
5609											
F_High 5610	1	1	1	1	1	1	1	1	1	1	100
Total Detection Percentage											100
Detection Bandwidth = FH-FL = 5570 MHz - 5610 MHz = 40 MHz											
99% Bandwidth = 39.6 MHz											

80 MHz

EUT Frequency = 5610 MHz ; Bandwidth = 80 MHz											
Radar Frequency MHz	DFS Detection Trials (1 = Detection, 0 = No Detection)										Detection Rate %
	Trials										
	1	2	3	4	5	6	7	8	9	10	
F_Low 5490	1	1	1	1	1	1	1	1	1	1	100
5491											
5492											
5493											
5494											
5495	1	1	1	1	1	1	1	1	1	1	100
5496											
5497											
5498											
5499											
5500	1	1	1	1	1	1	1	1	1	1	100
5501											
5502											
5503											
5504											
5505	1	1	1	1	1	1	1	1	1	1	100
5506											
5507											
5508											
5509											
5510	1	1	1	1	1	1	1	1	1	1	100
5511											
5512											
5513											
5514											
5515	1	1	1	1	1	1	1	1	1	1	100
5516											
5517											
5518											
5519											
5520	0	1	1	1	1	1	1	1	1	1	90
5521											
5522											

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

5562												
5563												
5564												
5565	1	1	1	1	1	1	1	1	1	1	1	100
5566												
5567												
5568												
5569												
F_High 5570	1	1	1	1	1	1	1	1	1	1	1	100
Total Detection Percentage												99.41176471
Detection Bandwidth = FH-FL = 5570 MHz - 5650 MHz = 80 MHz												
99% Bandwidth = 79.2 MHz												

160 MHz

EUT Frequency = 5570 MHz ; Bandwidth = 160 MHz												
Radar Frequency MHz	DFS Detection Trials (1 = Detection, 0 = No Detection)										Detection Rate %	
	Trials											
	1	2	3	4	5	6	7	8	9	10		
F_Low 5490	1	1	1	1	1	1	1	1	1	1	100	
5491												
5492												
5493												
5494												
5495	1	1	1	1	1	1	1	1	1	1	100	
5496												
5497												
5498												
5499												
5500	1	1	1	1	1	1	1	1	1	1	100	
5501												
5502												
5503												
5504												
5505	1	1	1	1	1	1	1	1	1	1	100	
5506												
5507												
5508												
5509												

5510	1	1	1	1	1	1	1	1	1	1	1	100
5511												
5512												
5513												
5514												
5515	1	1	1	1	1	1	1	1	1	1	1	100
5516												
5517												
5518												
5519												
5520	1	1	1	1	1	1	1	1	1	1	1	100
5521												
5522												
5523												
5524												
5525	1	1	1	1	1	1	1	1	1	1	1	100
5526												
5527												
5528												
5529												
5530	1	1	1	1	1	1	1	1	1	1	1	100
5531												
5532												
5533												
5534												
5535	1	1	1	1	1	1	1	1	1	1	1	100
5536												
5537												
5538												
5539												
5540	1	1	1	1	1	1	1	1	1	1	1	100
5541												
5542												
5543												
5544												
5545	1	1	1	1	1	1	1	1	1	1	1	100
5546												
5547												
5548												

5549												
5550	1	1	1	1	1	1	1	1	1	1	1	100
5551												
5552												
5553												
5554												
5555	1	1	1	1	1	1	1	1	1	1	1	100
5556												
5557												
5558												
5559												
5560	1	1	1	1	1	1	1	1	1	1	1	100
5561												
5562												
5563												
5564												
5565	1	1	1	1	1	1	1	1	1	1	1	100
5566												
5567												
5568												
5569												
5570	1	1	1	1	1	1	1	1	1	1	1	100
5571												
5572												
5573												
5574												
5575	1	1	1	1	1	1	1	1	1	1	1	100
5576												
5577												
5578												
5579												
5580	1	1	1	1	1	1	1	1	1	1	1	100
5581												
5582												
5583												
5584												
5585	1	1	1	1	1	1	1	1	1	1	1	100
5586												
5587												

5588												
5589												
5590	1	1	1	1	0	1	1	1	1	1	90	
5591												
5592												
5593												
5594												
5595	1	1	1	1	1	1	1	1	1	1	100	
5596												
5597												
5598												
5599												
5600	1	1	1	1	1	1	1	1	1	1	100	
5601												
5602												
5603												
5604												
5605	1	1	1	1	1	1	1	1	1	1	100	
5606												
5607												
5608												
5609												
5610	1	1	1	1	1	1	1	1	1	1	100	
5611												
5612												
5613												
5614												
5615	1	1	1	1	1	1	1	1	1	1	100	
5616												
5617												
5618												
5619												
5620	1	1	1	1	1	1	1	1	1	1	100	
5621												
5622												
5623												
5624												
5625	1	1	1	1	1	1	1	1	1	1	100	
5626												

5627												
5628												
5629												
5630	1	1	1	1	1	1	1	1	1	1	1	100
5631												
5632												
5633												
5634												
5635	1	1	1	1	1	1	1	1	1	1	1	100
5636												
5637												
5638												
5639												
5640	1	1	1	1	1	1	1	1	1	1	1	100
5641												
5642												
5643												
5644												
5645	1	1	1	1	1	1	1	1	1	1	1	100
5646												
5647												
5648												
5649												
F_High 5650	1	1	1	1	1	1	1	1	1	1	1	100
Total Detection Percentage												99.6969697
Detection Bandwidth = FH-FL = 5490 MHz - 5650 MHz = 160 MHz												
99% Bandwidth = 158.4 MHz												

5.6.4 Detection Probability

For statistical performance check. Demonstrating a minimum channel loading of approximately 17% or greater of the test. Observe the transmissions of the EUT at the end of the burst on the operating channel for duration greater than 10 seconds for short pulse radar type 1-4 and 6 to ensure detection occurs. Then observe the transmissions of the EUT at the end of the burst on the operating channel for duration greater than 22 seconds for long pulse radar type 5 to ensure detection occurs. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trial runs.

Please see data below.

Radar Type	Min successful detection (%)	Minimum Trials
1	60	30
2	60	30
3	60	30
4	60	30
Types 1 - 4	80	120
5	80	30
6	70	30

20 MHz

RADAR TYPE 1				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Number of Pulses per Burst	Pulse Width (µsec)	PRI (µs)	Detection (yes/no)
1	28	1	1922	y
2	21	1	2630	y
3	22	1	2412	y
4	84	1	634	y
5	22	1	2505	y
6	32	1	1684	y
7	23	1	2365	y
8	26	1	2042	y
9	43	1	1247	y
10	24	1	2211	y
11	43	1	1236	y
12	19	1	2892	y
13	23	1	2372	y
14	42	1	1265	y
15	20	1	2744	y
16	21	1	2571	y
17	80	1	661	y
18	37	1	1425	y
19	22	1	2454	y
20	44	1	1206	y
21	19	1	2808	y
22	24	1	2215	y
23	102	1	521	y
24	23	1	2339	y
25	22	1	2507	y
26	37	1	1447	y
27	27	1	1959	y
28	22	1	2426	y
29	22	1	2501	y
30	19	1	2927	y
				30/30: 100%

RADAR TYPE 2				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Number of Pulses per Burst	Pulse Width (μsec)	PRI (μs)	Detection (yes/no)
1	28	4.9	151	y
2	24	4.2	219	y
3	27	4.5	199	n
4	27	4.7	204	y
5	28	3.2	213	y
6	26	4.1	190	n
7	29	1.8	172	y
8	25	3.7	229	y
9	25	1	223	y
10	28	4.8	151	y
11	26	2	215	y
12	28	4.5	229	y
13	26	1.5	192	y
14	26	4.4	205	y
15	28	4.1	153	y
16	24	4.5	171	y
17	28	1.1	197	y
18	23	2.5	207	n
19	23	4.2	193	y
20	29	3.4	164	y
21	27	4.6	202	y
22	26	1.5	203	y
23	25	4.5	174	y
24	28	1.2	189	y
25	26	1.6	202	y
26	26	4.3	172	n
27	26	4.4	176	n
28	28	4.6	182	y
29	28	3.9	221	y
30	24	4.2	225	y
				25/30: 83.3%

RADAR TYPE 3				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Number of Pulses per Burst	Pulse Width (μsec)	PRI (μs)	Detection (yes/no)
1	17	9.8	385	y
2	16	8	476	n
3	18	8.1	284	y
4	18	6.2	470	y
5	16	6.1	308	y
6	16	6.8	342	y
7	16	6.1	292	y
8	17	6.3	296	y
9	16	9.2	341	y
10	17	7.9	258	y
11	17	7.1	481	y
12	16	6.1	239	y
13	17	8.6	482	y
14	18	6.1	377	y
15	18	6.3	431	y
16	16	7.6	345	y
17	18	9.6	356	n
18	16	6.5	315	n
19	18	7.1	358	y
20	17	6	319	y
21	18	9.7	253	n
22	17	7.7	453	y
23	17	8.3	223	y
24	17	8.5	288	y
25	17	7.7	435	y
26	16	9.8	203	y
27	17	9.6	388	y
28	16	8.5	475	y
29	17	7.1	360	y
30	16	9.1	405	y
				26/30: 86.7%

RADAR TYPE 4				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Number of Pulses per Burst	Pulse Width (μ sec)	PRI (μ s)	Detection (yes/no)
1	14	16.8	375	y
2	13	13.6	339	y
3	13	19.3	307	y
4	14	12.9	414	y
5	12	16	310	n
6	13	17.9	265	n
7	15	17	406	n
8	15	11.4	388	y
9	13	17.4	274	y
10	12	14.1	475	y
11	13	16.4	296	n
12	13	13.4	244	y
13	13	15.1	485	y
14	12	15.7	376	y
15	14	15.9	261	y
16	13	13.9	396	y
17	13	14.2	357	y
18	15	13.9	367	y
19	13	13	492	y
20	14	19	286	y
21	16	17.4	226	y
22	15	14.3	450	y
23	15	11.1	375	y
24	16	12	310	y
25	14	19.7	227	y
26	15	11.8	446	n
27	12	11.5	473	y
28	15	18.6	321	y
29	13	18.3	415	y
30	16	16	355	y
				25/30: 83.3%

TYPE 5					
Rohde & Schwarz K350 Pulse Sequencer DFS					
Trial #	Detection (yes/no)	Chirp Width (MHz)	Subset	Fc	
1	y	12	1	5500	Parameter Sheet
2	y	16	1	5500	Parameter Sheet
3	y	7	1	5500	Parameter Sheet
4	y	18	1	5500	Parameter Sheet
5	y	18	1	5500	Parameter Sheet
6	n	18	1	5500	Parameter Sheet
7	y	7	1	5500	Parameter Sheet
8	y	16	1	5500	Parameter Sheet
9	y	9	1	5500	Parameter Sheet
10	y	15	1	5500	Parameter Sheet
11	y	10	2	5495	Parameter Sheet
12	y	11	2	5495.4	Parameter Sheet
13	y	16	2	5497.4	Parameter Sheet
14	n	10	2	5495	Parameter Sheet
15	y	10	2	5495	Parameter Sheet
16	y	13	2	5496.2	Parameter Sheet
17	y	15	2	5497	Parameter Sheet
18	y	7	2	5493.8	Parameter Sheet
19	y	9	2	5494.6	Parameter Sheet
20	y	11	2	5495.4	Parameter Sheet
21	y	11	3	5504.6	Parameter Sheet
22	y	12	3	5504.2	Parameter Sheet
23	y	8	3	5505.8	Parameter Sheet
24	y	5	3	5507	Parameter Sheet
25	y	7	3	5506.2	Parameter Sheet
26	n	9	3	5505.4	Parameter Sheet
27	y	9	3	5505.4	Parameter Sheet
28	y	12	3	5504.2	Parameter Sheet
29	y	14	3	5503.4	Parameter Sheet
30	y	10	3	5505	Parameter Sheet
27/30: 90%					

TYPE 6 S		Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Detection (yes/no)	
1	y	Parameter Sheet
2	y	Parameter Sheet
3	y	Parameter Sheet
4	y	Parameter Sheet
5	y	Parameter Sheet
6	y	Parameter Sheet
7	y	Parameter Sheet
8	y	Parameter Sheet
9	y	Parameter Sheet
10	y	Parameter Sheet
11	y	Parameter Sheet
12	y	Parameter Sheet
13	y	Parameter Sheet
14	y	Parameter Sheet
15	y	Parameter Sheet
16	y	Parameter Sheet
17	y	Parameter Sheet
18	y	Parameter Sheet
19	y	Parameter Sheet
20	y	Parameter Sheet
21	y	Parameter Sheet
22	y	Parameter Sheet
23	y	Parameter Sheet
24	y	Parameter Sheet
25	y	Parameter Sheet
26	y	Parameter Sheet
27	y	Parameter Sheet
28	y	Parameter Sheet
29	y	Parameter Sheet
30	y	Parameter Sheet
30/30: 100%		

40 MHz

RADAR TYPE 1				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Number of Pulses per Burst	Pulse Width (µsec)	PRI (µs)	Detection (yes/no)
1	59	1	898	y
2	70	1	758	y
3	67	1	798	y
4	78	1	678	y
5	62	1	858	y
6	58	1	918	y
7	68	1	778	y
8	95	1	558	y
9	102	1	518	y
10	61	1	878	y
11	74	1	718	y
12	65	1	818	y
13	57	1	938	y
14	98	1	538	y
15	63	1	838	y
16	53	1	1009	y
17	18	1	3060	y
18	19	1	2807	y
19	24	1	2240	y
20	23	1	2395	y
21	18	1	2997	y
22	19	1	2826	y
23	34	1	1565	y
24	86	1	619	y
25	32	1	1687	y
26	35	1	1522	y
27	37	1	1438	y
28	46	1	1166	y
29	21	1	2569	y
30	35	1	1513	y
				30/30: 100%

RADAR TYPE 2				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Number of Pulses per Burst	Pulse Width (μ sec)	PRI (μ s)	Detection (yes/no)
1	23	4.2	203	y
2	26	3.2	196	y
3	25	2.4	151	y
4	24	4.4	201	y
5	24	2.5	157	y
6	27	1.7	154	y
7	27	4	215	y
8	27	1.1	159	y
9	29	4.5	229	y
10	26	2.1	159	y
11	26	2	207	y
12	27	4.2	193	y
13	24	3.8	192	y
14	29	4.4	194	y
15	27	2.3	227	y
16	27	4.8	173	y
17	28	1.5	154	y
18	25	3.6	181	n
19	29	1.2	228	y
20	26	3.6	173	y
21	27	1.2	198	y
22	28	3.3	150	y
23	28	2.4	169	n
24	27	2.2	168	y
25	27	4	173	y
26	23	1.4	171	y
27	24	3.3	151	y
28	26	4.6	169	y
29	27	4	215	y
30	24	2	213	y
				28/30: 93.3%

RADAR TYPE 3				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Number of Pulses per Burst	Pulse Width (μsec)	PRI (μs)	Detection (yes/no)
1	18	6.6	492	y
2	17	7.7	349	n
3	17	7	348	n
4	18	8.4	451	n
5	16	8	487	y
6	17	8.3	207	n
7	17	7.7	280	y
8	16	9.2	487	y
9	18	8.6	413	y
10	18	8.1	281	n
11	16	7.1	439	y
12	18	6.3	369	y
13	18	9.5	350	y
14	18	9.2	328	n
15	18	6.4	475	y
16	16	6.2	210	y
17	16	9.8	409	y
18	16	7	438	y
19	17	7	329	y
20	18	9.8	360	y
21	17	9.4	425	n
22	18	8.5	499	y
23	17	6.8	319	y
24	17	8.5	434	n
25	18	8.7	385	y
26	17	7.7	379	y
27	18	6.7	350	y
28	17	7.1	361	y
29	16	6.5	468	n
30	17	8.7	487	y
				21/30: 70%

RADAR TYPE 4				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Number of Pulses per Burst	Pulse Width (μsec)	PRI (μs)	Detection (yes/no)
1	16	18.1	242	y
2	13	15.6	399	y
3	14	19	297	y
4	12	11.7	339	y
5	13	13.1	332	y
6	15	12.8	327	y
7	12	17.5	210	y
8	12	13.3	315	y
9	16	19.2	283	y
10	13	18.2	472	n
11	12	16.2	345	y
12	14	12.7	355	n
13	13	12.1	313	y
14	14	11	330	y
15	15	18.3	459	y
16	13	13	205	y
17	15	17.6	211	y
18	13	15.7	352	y
19	16	12.2	261	y
20	14	12.4	279	y
21	15	15.1	343	y
22	16	16.3	229	n
23	16	12.1	468	y
24	15	18.6	320	y
25	14	13	443	y
26	12	12.4	209	y
27	13	19.5	266	y
28	14	11.5	479	y
29	16	17.3	337	y
30	14	13.4	465	y
				27/30: 90%

TYPE 5		Rohde & Schwarz K350 Pulse Sequencer DFS			
Trial #	Detection (yes/no)	Chirp Width (MHz)	Subset	Fc	
1	y	8	1	5500	Parameter Sheet
2	y	19	1	5500	Parameter Sheet
3	y	11	1	5500	Parameter Sheet
4	y	15	1	5500	Parameter Sheet
5	y	6	1	5500	Parameter Sheet
6	y	8	1	5500	Parameter Sheet
7	y	14	1	5500	Parameter Sheet
8	y	15	1	5500	Parameter Sheet
9	y	18	1	5500	Parameter Sheet
10	y	6	1	5500	Parameter Sheet
11	y	6	2	5493.4	Parameter Sheet
12	y	19	2	5498.6	Parameter Sheet
13	y	14	2	5496.6	Parameter Sheet
14	y	19	2	5498.6	Parameter Sheet
15	y	14	2	5496.6	Parameter Sheet
16	y	6	2	5493.4	Parameter Sheet
17	y	9	2	5494.6	Parameter Sheet
18	y	12	2	5495.8	Parameter Sheet
19	y	5	2	5493	Parameter Sheet
20	y	18	2	5498.2	Parameter Sheet
21	y	13	3	5503.8	Parameter Sheet
22	y	10	3	5505	Parameter Sheet
23	y	16	3	5502.6	Parameter Sheet
24	y	13	3	5503.8	Parameter Sheet
25	y	19	3	5501.4	Parameter Sheet
26	y	6	3	5506.6	Parameter Sheet
27	y	17	3	5502.2	Parameter Sheet
28	y	5	3	5507	Parameter Sheet
29	y	15	3	5503	Parameter Sheet
30	y	18	3	5501.8	Parameter Sheet
30/30: 100%					

TYPE 6 S		Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Detection (yes/no)	
1	y	Parameter Sheet
2	y	Parameter Sheet
3	y	Parameter Sheet
4	y	Parameter Sheet
5	y	Parameter Sheet
6	y	Parameter Sheet
7	y	Parameter Sheet
8	y	Parameter Sheet
9	y	Parameter Sheet
10	y	Parameter Sheet
11	y	Parameter Sheet
12	y	Parameter Sheet
13	y	Parameter Sheet
14	y	Parameter Sheet
15	y	Parameter Sheet
16	y	Parameter Sheet
17	y	Parameter Sheet
18	y	Parameter Sheet
19	y	Parameter Sheet
20	y	Parameter Sheet
21	y	Parameter Sheet
22	y	Parameter Sheet
23	y	Parameter Sheet
24	y	Parameter Sheet
25	y	Parameter Sheet
26	y	Parameter Sheet
27	y	Parameter Sheet
28	y	Parameter Sheet
29	y	Parameter Sheet
30	y	Parameter Sheet
30/30: 100%		

80 MHz

RADAR TYPE 1				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Number of Pulses per Burst	Pulse Width (μsec)	PRI (μs)	Detection (yes/no)
1	29	1	1823	y
2	21	1	2568	y
3	19	1	2917	y
4	86	1	615	n
5	23	1	2319	y
6	18	1	3047	y
7	25	1	2114	y
8	44	1	1224	n
9	18	1	3025	y
10	45	1	1174	n
11	93	1	572	y
12	31	1	1709	y
13	52	1	1023	y
14	21	1	2549	n
15	42	1	1274	y
16	43	1	1237	y
17	21	1	2604	y
18	33	1	1609	y
19	36	1	1473	n
20	50	1	1066	y
21	32	1	1681	y
22	18	1	3024	y
23	43	1	1228	y
24	25	1	2163	y
25	91	1	585	y
26	36	1	1487	y
27	26	1	2062	y
28	44	1	1201	y
29	38	1	1398	y
30	19	1	2795	n
				24/30: 80%

RADAR TYPE 2				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Number of Pulses per Burst	Pulse Width (µsec)	PRI (µs)	Detection (yes/no)
1	28	3.4	194	y
2	23	3.4	219	n
3	24	1.8	189	y
4	25	4.5	151	y
5	26	2.4	171	y
6	25	4	216	y
7	29	2.3	153	y
8	26	2.8	156	y
9	23	1.2	153	y
10	27	2.7	188	y
11	24	2.3	176	y
12	28	3.4	155	y
13	29	1.5	169	y
14	28	2.1	214	y
15	25	2.9	213	y
16	29	1	188	n
17	24	2.8	189	y
18	28	3	152	y
19	26	1	179	y
20	29	3.6	156	y
21	24	1.8	189	y
22	27	2.8	212	y
23	26	2.4	179	n
24	27	3.1	185	n
25	27	2.8	199	y
26	24	3.6	223	y
27	29	4.3	182	y
28	26	2.5	184	y
29	26	1.1	156	y
30	23	4.3	181	y
				26/30: 86.7%

RADAR TYPE 3				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Number of Pulses per Burst	Pulse Width (μsec)	PRI (μs)	Detection (yes/no)
1	17	7.5	299	y
2	16	6.6	423	n
3	17	8.4	228	y
4	17	7.1	410	n
5	17	7	276	y
6	17	6.9	408	y
7	17	8.6	416	n
8	17	8.7	203	y
9	18	8.9	381	y
10	16	9.1	389	n
11	17	7.8	285	y
12	16	8.9	393	y
13	17	9	298	y
14	18	7.8	434	y
15	17	9.4	358	y
16	17	8.6	413	y
17	16	9.5	404	y
18	17	7.4	344	n
19	17	6.1	456	y
20	16	6.5	395	y
21	18	9.9	397	y
22	17	7.8	440	y
23	17	7.8	270	y
24	18	8.6	411	y
25	17	9	451	y
26	16	7	306	y
27	16	7.3	340	y
28	16	6.8	290	y
29	17	8	438	y
30	17	6.3	219	y
				25/30: 83.3%

RADAR TYPE 4				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Number of Pulses per Burst	Pulse Width (μsec)	PRI (μs)	Detection (yes/no)
1	12	11.7	327	y
2	16	16.6	358	y
3	13	13.9	308	y
4	14	18.5	202	y
5	15	16.5	200	y
6	15	15.9	466	y
7	13	12.7	482	y
8	16	16.3	218	y
9	15	19.9	484	y
10	16	12.5	245	n
11	13	11.4	368	y
12	14	11.6	231	y
13	15	16.8	267	y
14	13	16.8	332	y
15	12	13.8	249	n
16	13	17	353	n
17	15	16.7	302	n
18	14	11.6	273	n
19	14	11.6	423	y
20	15	18.9	284	y
21	16	12.1	292	y
22	15	19.9	345	y
23	15	19.3	374	n
24	16	17.1	220	y
25	15	18.6	268	y
26	13	13.5	264	y
27	16	19.2	218	y
28	15	15.7	373	y
29	15	19.4	224	y
30	15	17.5	288	y
				24/30: 80%

TYPE 5		Rohde & Schwarz K350 Pulse Sequencer DFS			
Trial #	Detection (yes/no)	Chirp Width (MHz)	Subset	Fc	
1	y	18	1	5500	Parameter Sheet
2	n	16	1	5500	Parameter Sheet
3	y	11	1	5500	Parameter Sheet
4	y	9	1	5500	Parameter Sheet
5	y	13	1	5500	Parameter Sheet
6	y	7	1	5500	Parameter Sheet
7	y	14	1	5500	Parameter Sheet
8	y	13	1	5500	Parameter Sheet
9	y	12	1	5500	Parameter Sheet
10	y	8	1	5500	Parameter Sheet
11	y	19	2	5498.6	Parameter Sheet
12	y	19	2	5498.6	Parameter Sheet
13	y	11	2	5495.4	Parameter Sheet
14	y	15	2	5497	Parameter Sheet
15	y	9	2	5494.6	Parameter Sheet
16	n	11	2	5495.4	Parameter Sheet
17	y	19	2	5498.6	Parameter Sheet
18	y	16	2	5497.4	Parameter Sheet
19	y	5	2	5493	Parameter Sheet
20	y	17	2	5497.8	Parameter Sheet
21	y	15	3	5503	Parameter Sheet
22	y	11	3	5504.6	Parameter Sheet
23	y	8	3	5505.8	Parameter Sheet
24	y	13	3	5503.8	Parameter Sheet
25	y	7	3	5506.2	Parameter Sheet
26	y	12	3	5504.2	Parameter Sheet
27	y	15	3	5503	Parameter Sheet
28	y	10	3	5505	Parameter Sheet
29	y	16	3	5502.6	Parameter Sheet
30	y	6	3	5506.6	Parameter Sheet
28/30: 93.3%					

TYPE 6 S		Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Detection (yes/no)	
1	y	Parameter Sheet
2	y	Parameter Sheet
3	y	Parameter Sheet
4	y	Parameter Sheet
5	y	Parameter Sheet
6	y	Parameter Sheet
7	y	Parameter Sheet
8	y	Parameter Sheet
9	y	Parameter Sheet
10	y	Parameter Sheet
11	y	Parameter Sheet
12	y	Parameter Sheet
13	y	Parameter Sheet
14	y	Parameter Sheet
15	y	Parameter Sheet
16	y	Parameter Sheet
17	y	Parameter Sheet
18	y	Parameter Sheet
19	y	Parameter Sheet
20	y	Parameter Sheet
21	y	Parameter Sheet
22	y	Parameter Sheet
23	y	Parameter Sheet
24	y	Parameter Sheet
25	y	Parameter Sheet
26	y	Parameter Sheet
27	y	Parameter Sheet
28	y	Parameter Sheet
29	y	Parameter Sheet
30	y	Parameter Sheet
30/30: 100%		

160 MHz

RADAR TYPE 1				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Number of Pulses per Burst	Pulse Width (μsec)	PRI (μs)	Detection (yes/no)
1	46	1	1153	y
2	26	1	2060	y
3	20	1	2763	y
4	78	1	679	y
5	19	1	2846	y
6	25	1	2166	y
7	31	1	1701	n
8	19	1	2882	n
9	23	1	2322	y
10	31	1	1756	n
11	22	1	2483	y
12	33	1	1633	y
13	58	1	915	y
14	19	1	2899	y
15	25	1	2141	y
16	36	1	1468	y
17	80	1	661	y
18	28	1	1910	y
19	70	1	759	y
20	18	1	2946	y
21	79	1	670	y
22	45	1	1178	y
23	51	1	1049	y
24	49	1	1087	n
25	31	1	1718	y
26	18	1	3043	y
27	36	1	1478	y
28	56	1	957	y
29	22	1	2448	y
30	23	1	2384	y
				26/30: 86.7%

RADAR TYPE 2				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Number of Pulses per Burst	Pulse Width (μ sec)	PRI (μ s)	Detection (yes/no)
1	25	3.5	195	y
2	24	1.1	152	y
3	26	2.9	227	y
4	28	1.6	195	y
5	27	2.2	190	y
6	28	1	216	y
7	24	1.6	166	y
8	28	3.7	217	y
9	24	3.3	215	y
10	24	4.2	186	y
11	26	2.5	191	y
12	28	2.2	154	y
13	24	2.6	156	y
14	28	2.3	200	y
15	28	1	152	n
16	26	2.9	162	n
17	24	1.6	182	y
18	27	3.1	158	y
19	24	1.5	219	y
20	24	1.9	216	y
21	26	3.2	223	y
22	29	2	182	y
23	24	3.9	179	n
24	27	4.3	166	y
25	27	4.7	211	y
26	26	1	194	y
27	24	3.7	195	y
28	25	1.6	182	y
29	26	1.5	158	y
30	28	3.3	170	y
				27/30: 90%

RADAR TYPE 3				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Number of Pulses per Burst	Pulse Width (μsec)	PRI (μs)	Detection (yes/no)
1	17	8.5	307	y
2	16	8	241	y
3	17	8.5	325	y
4	17	7	354	y
5	18	7.5	228	y
6	16	6.3	430	n
7	18	9.5	473	y
8	18	9.1	269	y
9	18	9.4	368	n
10	17	6	255	n
11	18	9.8	404	y
12	17	6.9	412	y
13	17	6.2	317	y
14	17	6.9	469	y
15	16	8.4	474	y
16	17	8.7	373	n
17	17	8.6	208	n
18	17	7.5	408	y
19	17	7.4	442	y
20	17	9.6	236	y
21	17	9.9	387	y
22	17	9.8	397	n
23	17	7.2	326	y
24	17	9.1	214	y
25	17	9.2	287	y
26	18	7.2	451	y
27	18	6.7	237	y
28	18	6.9	203	y
29	17	8	396	y
30	17	8.1	385	y
				24/30: 80%

RADAR TYPE 4				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Number of Pulses per Burst	Pulse Width (μsec)	PRI (μs)	Detection (yes/no)
1	14	17	202	y
2	14	13.4	284	y
3	15	11.7	327	y
4	16	12.4	350	n
5	14	14.2	370	y
6	13	16.8	219	y
7	14	11.2	345	y
8	15	19	396	y
9	14	14.5	236	y
10	12	16.5	272	y
11	15	14.3	225	y
12	12	12.8	297	y
13	13	14.3	320	y
14	15	13.2	305	y
15	13	16.1	446	y
16	14	18.4	442	y
17	14	12.8	228	n
18	13	19.3	209	n
19	12	19.4	473	y
20	15	17.8	289	n
21	13	16.3	304	y
22	15	16.1	497	y
23	14	13.4	434	n
24	13	16.5	422	y
25	14	17.9	307	y
26	15	11.6	320	y
27	13	19.3	410	y
28	12	18	293	y
29	15	19.5	456	y
30	13	11.4	303	y
				25/30: 83.3%

TYPE 5		Rohde & Schwarz K350 Pulse Sequencer DFS			
Trial #	Detection (yes/no)	Chirp Width (MHz)	Subset	Fc	
1	y	9	1	5500	Parameter Sheet
2	y	16	1	5500	Parameter Sheet
3	y	11	1	5500	Parameter Sheet
4	y	7	1	5500	Parameter Sheet
5	y	13	1	5500	Parameter Sheet
6	y	8	1	5500	Parameter Sheet
7	y	6	1	5500	Parameter Sheet
8	y	13	1	5500	Parameter Sheet
9	y	19	1	5500	Parameter Sheet
10	y	8	1	5500	Parameter Sheet
11	y	8	2	5494.2	Parameter Sheet
12	y	6	2	5493.4	Parameter Sheet
13	y	10	2	5495	Parameter Sheet
14	y	7	2	5493.8	Parameter Sheet
15	y	17	2	5497.8	Parameter Sheet
16	y	13	2	5496.2	Parameter Sheet
17	y	7	2	5493.8	Parameter Sheet
18	y	18	2	5498.2	Parameter Sheet
19	y	10	2	5495	Parameter Sheet
20	y	6	2	5493.4	Parameter Sheet
21	y	17	3	5502.2	Parameter Sheet
22	y	7	3	5506.2	Parameter Sheet
23	y	7	3	5506.2	Parameter Sheet
24	y	10	3	5505	Parameter Sheet
25	y	19	3	5501.4	Parameter Sheet
26	y	18	3	5501.8	Parameter Sheet
27	y	17	3	5502.2	Parameter Sheet
28	y	18	3	5501.8	Parameter Sheet
29	y	19	3	5501.4	Parameter Sheet
30	y	18	3	5501.8	Parameter Sheet
30/30: 100%					

TYPE 6 S		Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	Detection (yes/no)	
1	y	Parameter Sheet
2	y	Parameter Sheet
3	y	Parameter Sheet
4	y	Parameter Sheet
5	y	Parameter Sheet
6	y	Parameter Sheet
7	y	Parameter Sheet
8	y	Parameter Sheet
9	y	Parameter Sheet
10	y	Parameter Sheet
11	y	Parameter Sheet
12	y	Parameter Sheet
13	y	Parameter Sheet
14	y	Parameter Sheet
15	y	Parameter Sheet
16	y	Parameter Sheet
17	y	Parameter Sheet
18	y	Parameter Sheet
19	y	Parameter Sheet
20	y	Parameter Sheet
21	y	Parameter Sheet
22	y	Parameter Sheet
23	y	Parameter Sheet
24	y	Parameter Sheet
25	y	Parameter Sheet
26	y	Parameter Sheet
27	y	Parameter Sheet
28	y	Parameter Sheet
29	y	Parameter Sheet
30	y	Parameter Sheet
30/30: 100%		

-- End of Test Report --