UNIFIED COMPLIANCE LABORATORY

427 West 12800 South
Draper, UT 84020

Test Report

Certification

FCC ID	SWX-WAVEML
ISED ID	6545A-WAVEML
Equipment Under Test	Wave-MLO5
Test Report Serial Number	TR9530_02
Date of Test(s)	13, 29 – 30 August; 3 – 5 September; 30 October 2024, 21 December 2024 – 3 January 2025.
Report Issue Date	03 January 2025

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

NVLAP TESTING ilac-MRA

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 with the specifications provided by the manufacturer.

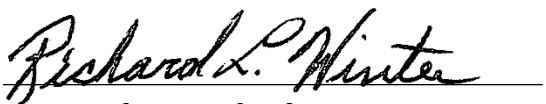
Applicant	Ubiquiti Inc.
Manufacturer	Ubiquiti Inc.
Brand Name	UBIQUITI
Model Number	Wave-MLO5
FCC ID	SWX-WAVEML
ISED ID	6545A-WAVEML

On this 3rd day of January 2025, 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: Richard L. Winter

Revision History		
Revision	**Description**	**Date**
01	Original Report Release	21 November 2024
02	Updated with 30 dBi Antenna	3 January 2025

Table of Contents

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	UBIQUITI
Model Number	Wave-MLO5
Serial Number	2F2513
Dimensions (cm)	24.9 x 8.2 x 4.8

2.2 Description of EUT

The Wave-MLO5 is a 5 GHz point-to-point customer premise equipment which features wave technology with a high throughput rate. The 5 GHz radio supports U-NII-1, U-NII-2 and U-NII-3 bands. The Wave-MLO5 has Bluetooth LE transceiver for system management. The Wave-MLO5 is an outdoor device and has an Ethernet port which is used for data transfer and is powered using a Model POE-54-30W-10G-WH 54-volt PoE power adapter.

The following is list of the antennas that the Wave-MLO5 can use.

Antenna Type	Model Number	Antenna Gain (dBi)
Omni	AMO-5G10	10 (Note 1)
	AMO-5G13	13
Dish	RD-5G30-LW	30
	RD-5G30	30 (Note 1)
	UISP Dish	30
	AF-5G30-S45	30
	AF-5G23-S45	23
Sector	AP-5AC-90-HD	22
	AM-5AC21-60	21
	AM-5AC22-45	22
	AM-V5G-Ti	21
	AM-M-V5G-Ti	17
	AM-5G16-120	16
	AM-5G17-90	17
	AM-5G19-120	19
	AM-5G20-90	20
Horn	UISP Horn	19.5
	Horn-5	19
Note 1: For reporting purposes the lowest and highest gain antennas are covered in this report		

The table below show the channels used within the different modulation bandwidths.

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*
	240 MHz	5600*
* 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: UBIQUITI MN: Wave-MLO5 SN: 2F2513	Wireless Access Point	See Section 2.4
BN: UBIQUITI MN: POE-54-30W-10G-WH 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
AC (PoE Injector)	1	3 conductor power cord/80cm
LAN (PoE Injector)	1	Shielded or Un-shielded cat 5e cable/1 meter
Data	1	Shielded or Un-shielded cat 5e cable/1 meter

2.5 Operating Environment

Power Supply	120 Volts AC Mains to 54 Volts PoE
AC Mains Frequency	60 Hz
Temperature	21.1 – 23.9 °C
Humidity	21.7 – 31.8 %
Barometric Pressure	1019 mBar

2.6 Operating Modes

The Wave-MLO5 was tested using test software in order to enable to constant transmission. The measurements within this report are corrected to reference a 100% duty cycle. All emission modes of 802.11 a/ax were investigated. All measurements are reported with the worst-case mode (802.11ax) unless otherwise stated.

2.7 EUT Exercise Software

EUT firmware version 1.0 was used to operate the transmitter using a constant transmit mode.

2.8 Block Diagram of Test Configuration

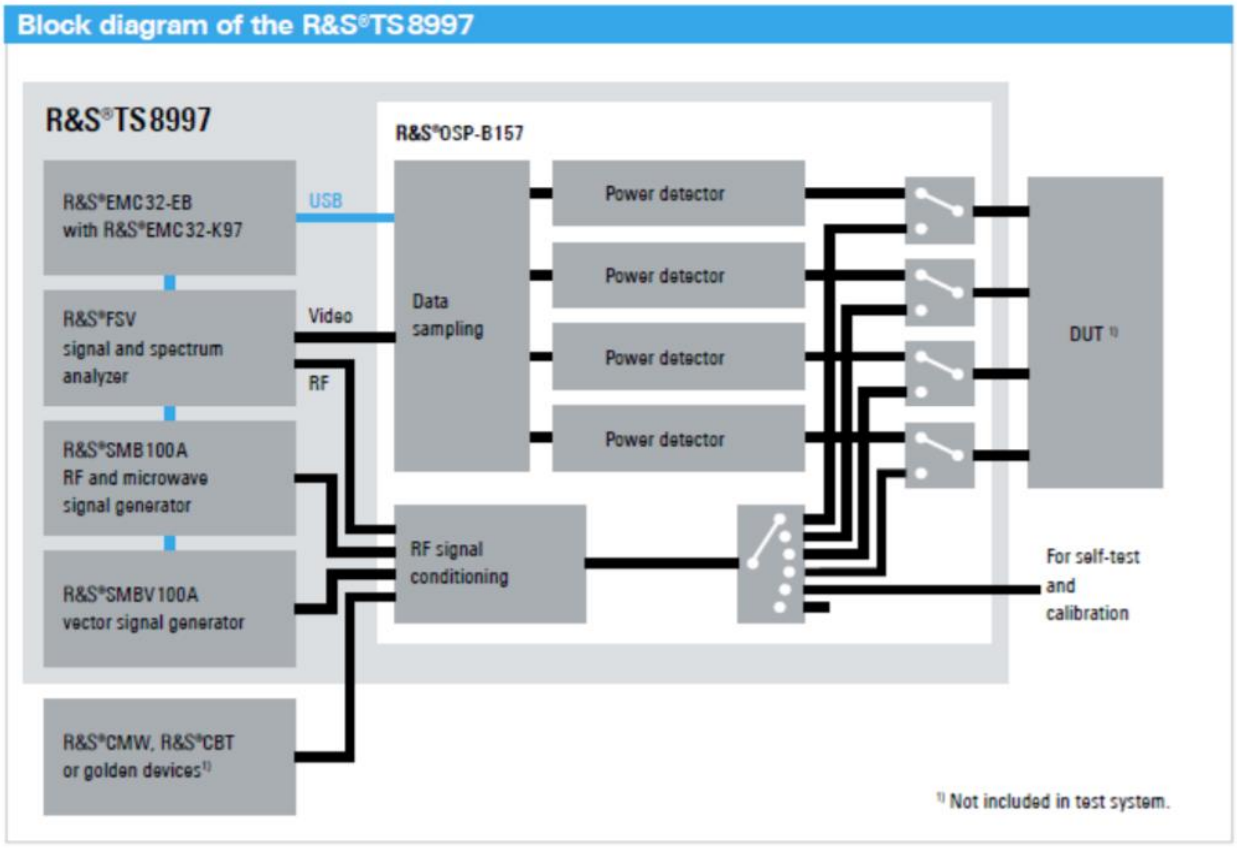


Diagram 1: Test Configuration Block Diagram

2.9 Modification Incorporated/Special Accessories on EUT

There were no modifications made to the EUT during testing to comply with the specification.

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
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

See test standard for details.

3.3 FCC Part 15, Subpart E

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 5720	Compliant
15.407(a)	RSS-247 §6.2.2, §6.2.3	Peak Output Power	5260 to 5720	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 5720	Compliant
15.407(h)	RSS-247 §6.3	DFS Requirements	5260 to 5720	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 3-Meter and 10-Meter chambers 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 2025. 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 2025.

Unified Compliance Laboratory has been assigned Designation Number US5037 by the FCC and Conformity Assessment Number US0223 by ISED.

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	1/23/2024	2/26/2025
LISN	AFJ	LS16C/10	UCL-2512	7/08/2024	7/08/2025
ISN	Teseq	ISN T800	UCL-2974	7/09/2024	7/09/2025
LISN	AFJ	LS16C\10	UCL-6749	1/29/2024	1/29/2025
AC Power Source	Laplace Instruments	AC1000A	UCL-2857	N/A	N/A
Test Software	AFJ	AFJ FFT3010	UCL-3107	N/A	N/A

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

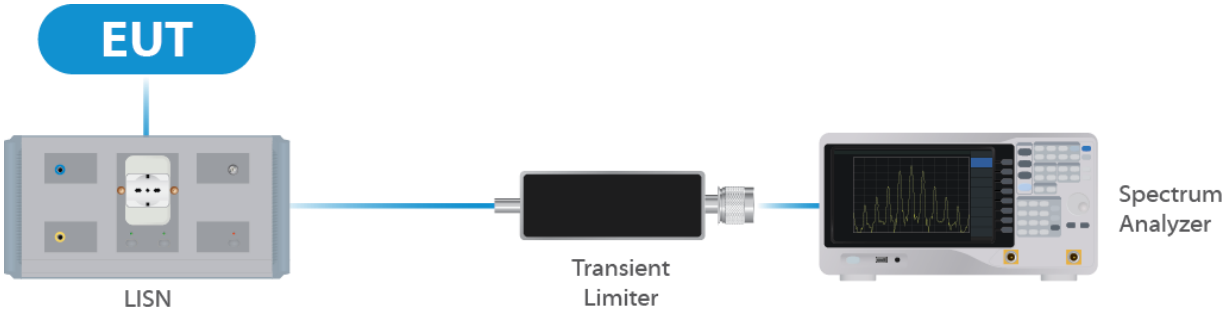


Figure 1: Conducted Emissions Test

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	12/27/2023	12/27/2024
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	4/12/2024	4/19/2025
Switch Extension	R&S	OSP-150W	UCL-2870	4/12/2024	4/19/2025
Test Software	R&S	EMC32	UCL-9442	-	-

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

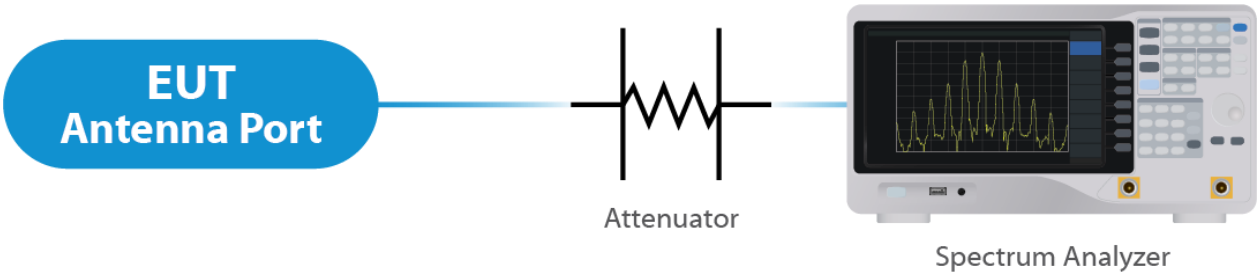


Figure 2: Direct Connect at the Antenna Port Test

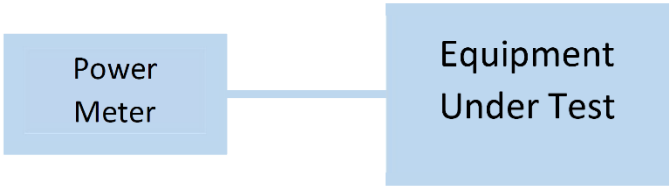


Figure 3: Output Power Measurement

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	1/25/2024	1/29/2025
Pre-Amplifier 9 kHz – 1 GHz	Sonoma Instruments	310N	UCL-2889	1/19/2024	1/19/2026
Broadband Antenna	Scwarzbeck	VULB 9163	UCL-3062	2/22/2023	2/22/2025
Broadband Antenna	Scwarzbeck	VULB 9163	UCL-3071	1/11/2023	1/11/2025
Double Ridge Horn Antenna	Scwarzbeck	BBHA 9120D	UCL-3065	3/10/2023	3/10/2025
Log Periodic	Scwarzbeck	STLP 9129	UCL-3068	1/27/2023	1/27/2025
15 - 40 GHz Horn Antenna	Scwarzbeck	BBHA 9170	UCL-2487	3/10/2023	3/10/2025
1 – 18 GHz Amplifier	Com-Power	PAM 118A	UCL-3833	1/19/2024	1/19/2026
Test Software	Nexio	BatEMC	UCL-5253 & UCL-5249	N/A	N/A

Table 4: List of equipment used for Radiated Emissions

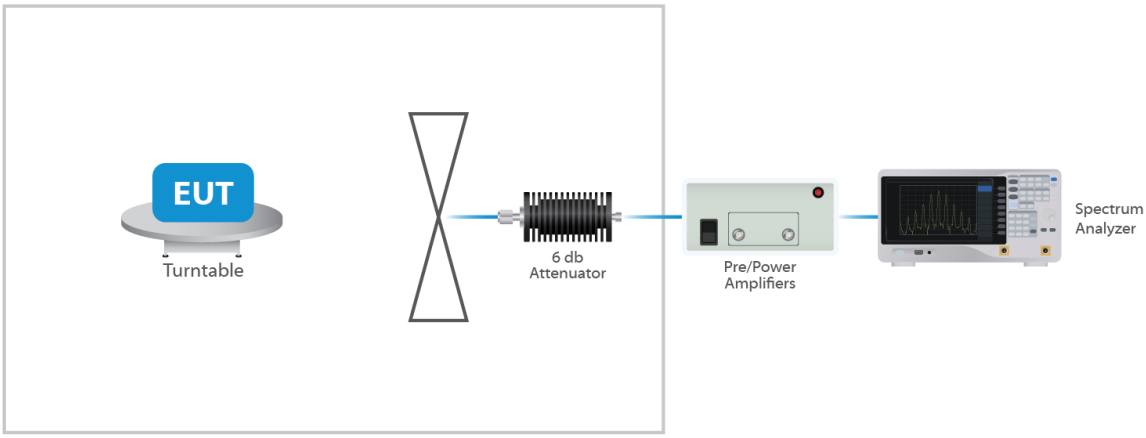


Figure 4: Radiated Emissions Test

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	5/3/2024	5/3/2025

4.4.1 Master Test Set Up

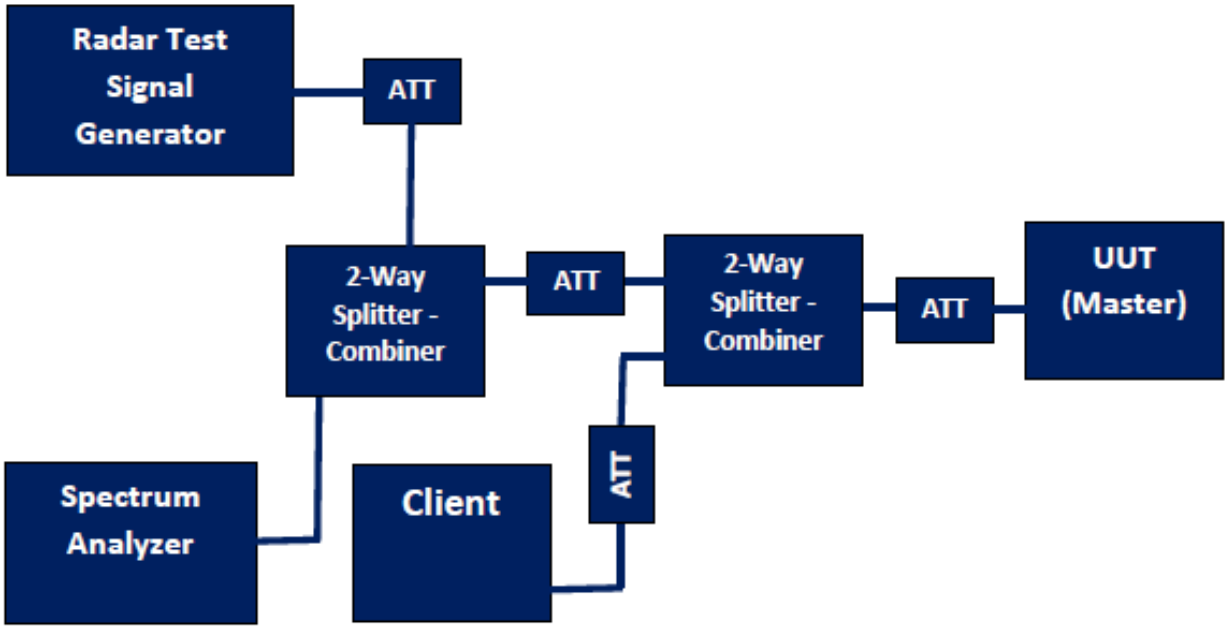


Figure 5: DFS Test Set Up - Master

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 (± 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 Omni, Sector, Dish or horn antenna. Per the manufacturer, the Maximum gain of the antenna per chain is 30 dBi. This is an 802.11 device and utilizes CDD as described in KDB 662911 D01. The antenna is user replaceable. For CDD transmissions, directional gain is calculated as follows.

Array Gain = 10 log(NANT/NSS) dB
NANT = number of transmit antennas and
NSS = number of spatial streams. NSS = 1 considered worst case.

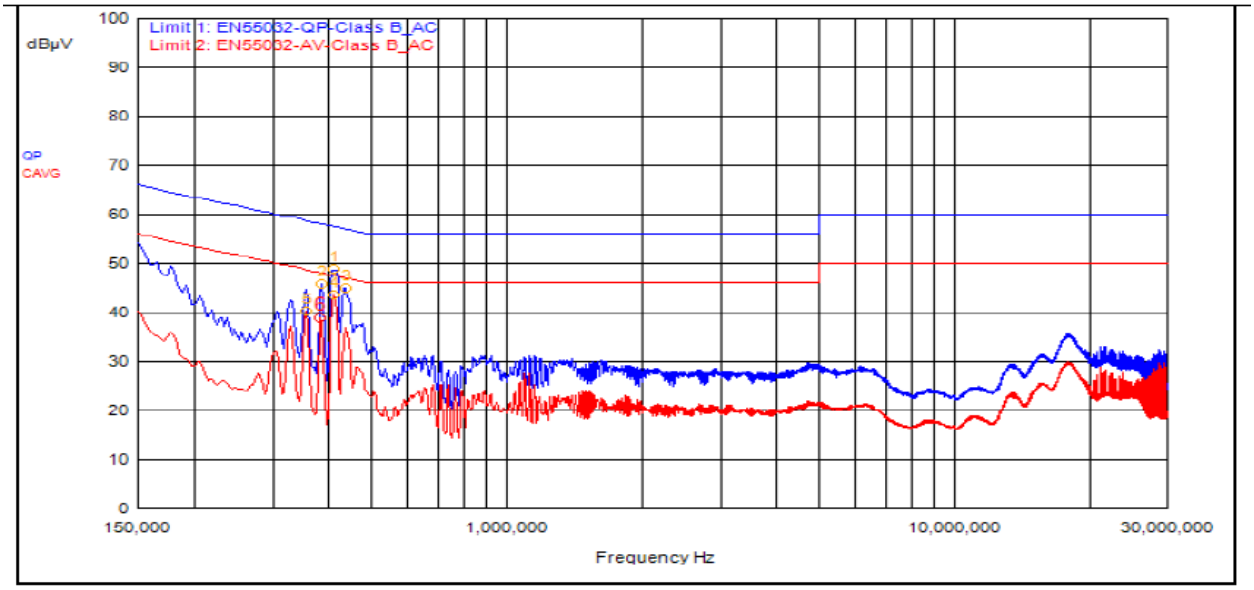
For power measurements on IEEE 802.11 devices, Array Gain = 0 dB for NANT ≤ 4;
For PSD measurements when Nss=1: Array Gain = 10 log(NANT/NSS) dB + Antenna Gain (dBi). Or 3.01 dB + 30 dBi = 33.01 dBi.

Results

The EUT complied with the specification

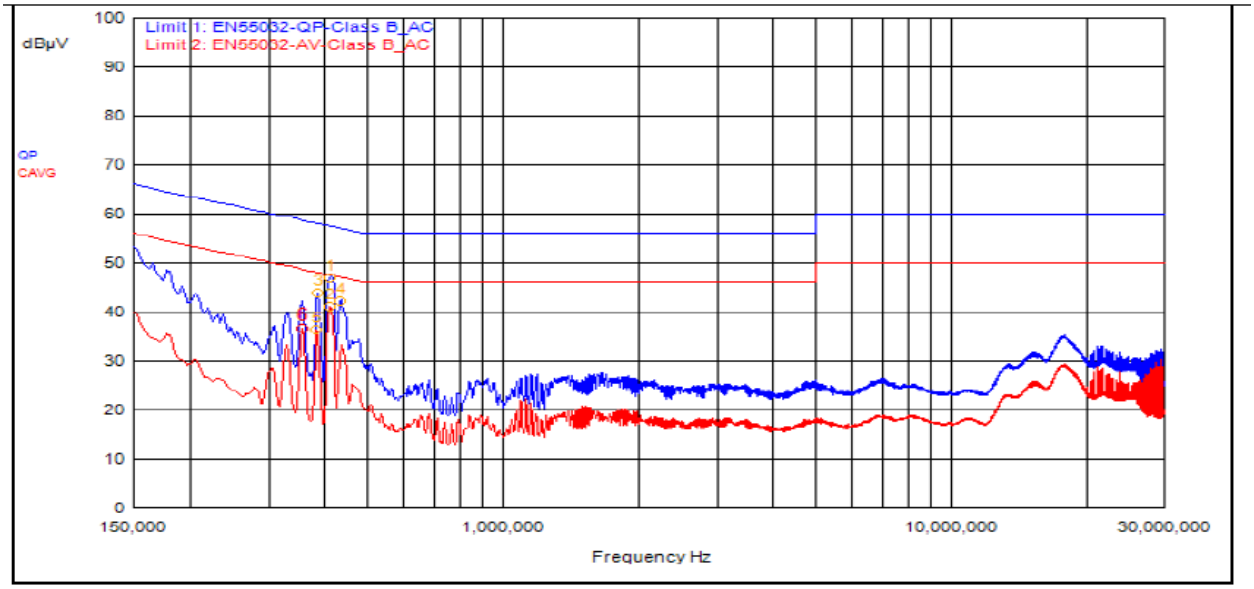
5.2 Conducted Emissions at Mains Ports Data

5.2.1 Line



ID	Frequency	Probe	Cable	Atten.	Detector	Meter Read	Meas Level	Limit 1	Limit 1 Dist.	Limit 2	Limit 2 Dist.	P/F
MU	MHz	dB	dB	dB	Type	dBµV	dBµV	dBµV	dB	dBµV	dB	P/F
1	411,000kHz	9.49			QPeak	39.26	48.75	57.63	-8.88			
3	435,000kHz	9.49			QPeak	35.61	45.10	57.16	-12.06			
2	387,000kHz	9.48			QPeak	36.48	45.96	58.13	-12.16			
4	411,000kHz	9.49			C_AVG	33.99	43.48			47.63	-4.15	
5	357,000kHz	9.48			C_AVG	30.67	40.15			48.80	-8.65	
6	384,000kHz	9.48			C_AVG	29.47	38.95			48.19	-9.24	

5.2.2 Neutral



ID	Frequency	Probe	Cable	Atten.	Detector	Meter Read	Meas Level	Limit 1	Limit 1 Dist.	Limit 2	Limit 2 Dist.	P/F
MU	MHz	dB	dB	dB	Type	dBµV	dBµV	dBµV	dB	dBµV	dB	P/F
1	411,000kHz	9.63			QPeak	37.40	47.03	57.63	-10.60			
3	387,000kHz	9.63			QPeak	34.35	43.98	58.13	-14.15			
4	432,000kHz	9.64			QPeak	32.63	42.27	57.21	-14.95			
2	411,000kHz	9.63			C_AVG	31.42	41.05			47.63	-6.58	
5	384,000kHz	9.63			C_AVG	26.89	36.52			48.19	-11.67	
6	357,000kHz	9.63			C_AVG	27.08	36.71			48.80	-12.09	

Result

The EUT complied with the specification limit.

5.3 §15.403(i) 26 dB Emissions Bandwidth

All chains were measured under the guidance of KDB 789033 Section II.C. and KDB 662911 D01. Please see associated annex for details on instrument settings.

5.3.1 UNII-2A

Omni Antenna

Bandwidth	Frequency (MHz)	99% Bandwidth (MHz)	Emissions 26 dB Bandwidth (MHz)
OFDM 20	5260	19.2	22.8
OFDM 20	5280	19.2	22.5
OFDM 20	5320	19.2	23.0
HE 20	5260	19.2	22.4
HE 20	5280	19.3	22.8
HE 20	5320	19.2	23.2
HE 40	5270	38.0	44.1
HE 40	5310	38.3	44.0
HE 80	5290	78.0	187.5
HE 160	5250	159.0	470.0

Dish Antenna

Bandwidth	Frequency (MHz)	99% Bandwidth (MHz)	Emissions 26 dB Bandwidth (MHz)
OFDM 20	5260	19.01	21.50
OFDM 20	5280	19.01	21.73
OFDM 20	5320	19.01	21.53
HE 20	5260	19.16	21.41
HE 20	5280	19.16	21.57
HE 20	5320	19.18	21.45
HE 40	5270	38.20	41.16

HE 40	5310	41.54	41.27
HE 80	5290	84.39	84.19
HE 160	5250	158.13	163.00

5.3.2 UNII-2C

Omni Antenna

Bandwidth	Frequency (MHz)	99% Bandwidth (MHz)	Emissions 26 dB Bandwidth (MHz)
OFDM 20	5500	17.0	22.3
OFDM 20	5600	17.0	23.6
OFDM 20	5720	17.0	22.9
HE 20	5500	19.1	22.6
HE 20	5600	19.1	22.5
HE 20	5720	19.1	22.4
HE 40	5510	38.3	43.7
HE 40	5590	38.3	43.2
HE 40	5710	38.3	42.8
HE 80	5530	78.5	87.0
HE 80	5610	78.5	164.0
HE 80	5690	78.5	89.5
HE 160	5570	159.0	445.6
HE 240	5600	238.10	245.2

Dish Antenna

Bandwidth	Frequency (MHz)	99% Bandwidth (MHz)	Emissions 26 dB Bandwidth (MHz)
OFDM 20	5500	16.75	21.71
OFDM 20	5600	16.76	21.32
OFDM 20	5720	16.76	21.63

HE 20	5500	19.16	21.57
HE 20	5600	19.17	21.37
HE 20	5720	19.17	21.31
HE 40	5510	38.19	41.08
HE 40	5590	38.21	41.00
HE 40	5710	38.18	41.14
HE 80	5530	77.93	84.35
HE 80	5610	78.14	84.80
HE 80	5690	78.14	84.11
HE 160	5570	158.10	163.00
HE 240	5600	238.07	245.2

Result

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

5.4 §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 662911 D01. Please see associated annex for details on instrument settings.

The maximum average RF conducted output power measured for this device using the Omni Antenna was 19.83 dBm or 96.16 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 10 dBi. Therefor the adjusted limit is 20 dBm.

The maximum average RF conducted output power measured for this device using the Dish Antenna was -0.02 dBm or 0.995 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 30 dBi. Therefor the adjusted limit is 0 dBm.

5.4.1 UNII-2A

Omni Antenna

NSS2

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	EIRP	Measured PSD
OFDM 20	5260	Mcs0_Nss2	17	19.08	29.08	6.43
OFDM 20	5280	Mcs0_Nss2	16	19.80	29.80	6.21
OFDM 20	5320	Mcs0_Nss2	17	19.35	29.35	6.75
HE 20	5260	Mcs0_Nss2	17	19.81	29.81	6.93
HE 20	5280	Mcs0_Nss2	17	19.83	29.83	6.93
HE 20	5320	Mcs0_Nss2	17	19.36	29.36	6.39
HE 40	5270	Mcs0_Nss2	17	19.77	29.77	4.09
HE 40	5310	Mcs0_Nss2	17	19.50	29.50	3.71
HE 80	5290	Mcs0_Nss2	17	19.46	29.46	1.01
HE 160	5250	Mcs0_Nss2	17	19.72	29.42	-1.68

NSS1

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	EIRP	Measured PSD
OFDM 20	5260	Mcs0_Nss1	10	12.08	22.08	-0.57
OFDM 20	5280	Mcs0_Nss1	9	12.80	22.80	-0.79

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	EIRP	Measured PSD
OFDM 20	5320	Mcs0_Nss1	10	12.35	22.35	-0.25
HE 20	5260	Mcs0_Nss1	10	12.81	22.81	-0.07
HE 20	5280	Mcs0_Nss1	10	12.83	22.83	-0.07
HE 20	5320	Mcs0_Nss1	10	12.36	22.36	-0.61
HE 40	5270	Mcs0_Nss1	12	14.77	24.77	-0.91
HE 40	5310	Mcs0_Nss1	13	15.50	25.50	-0.29
HE 80	5290	Mcs0_Nss1	15	17.46	27.46	-0.99
HE 160	5250	Mcs0_Nss1	17	19.72	29.42	-1.68

Dish Antenna

NSS2

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	EIRP	Measured PSD
OFDM 20	5260	Mcs0_Nss2	-2	-0.25	29.75	-13.27
OFDM 20	5280	Mcs0_Nss2	-3	-0.69	29.31	-13.70
OFDM 20	5320	Mcs0_Nss2	-3	-0.70	29.30	-13.71
HE 20	5260	Mcs0_Nss2	-3	-0.19	29.81	-13.20
HE 20	5280	Mcs0_Nss2	-3	-0.71	29.29	-13.72
HE 20	5320	Mcs0_Nss2	-3	-0.73	29.23	-13.74
HE 40	5270	Mcs0_Nss2	-3	-0.59	29.41	-16.61
HE 40	5310	Mcs0_Nss2	-3	-0.49	29.51	-16.51
HE 80	5290	Mcs0_Nss2	-2	-0.02	29.98	-19.05
HE 160	5250	Mcs0_Nss2	-2	-0.44	29.56	-22.48

NSS1

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	EIRP	Measured PSD
OFDM 20	5260	Mcs0_Nss1	-29	-27.25	2.75	-40.27
OFDM 20	5280	Mcs0_Nss1	-30	-27.69	2.31	-40.70

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	EIRP	Measured PSD
OFDM 20	5320	Mcs0_Nss1	-30	-27.70	2.30	-40.71
HE 20	5260	Mcs0_Nss1	-30	-27.19	2.81	-40.20
HE 20	5280	Mcs0_Nss1	-30	-27.71	2.29	-40.72
HE 20	5320	Mcs0_Nss1	-30	-27.83	2.17	-40.74
HE 40	5270	Mcs0_Nss1	-27	-24.59	5.41	-40.61
HE 40	5310	Mcs0_Nss1	-27	-24.49	5.51	-40.51
HE 80	5290	Mcs0_Nss1	-23	-21.02	8.98	-40.05
HE 160	5250	Mcs0_Nss1	-20	-18.44	11.56	-40.48

5.4.2 UNII-2C

Omni Antenna

NSS2

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	EIRP	Measured PSD
OFDM 20	5500	Mcs0_Nss2	16	18.25	28.25	6.95
OFDM 20	5600	Mcs0_Nss2	16	18.11	28.11	6.74
OFDM 20	5720	Mcs0_Nss2	16	18.39	28.39	6.97
HE 20	5500	Mcs0_Nss2	16	18.18	28.18	6.33
HE 20	5600	Mcs0_Nss2	16	18.02	28.02	5.91
HE 20	5720	Mcs0_Nss2	16	18.23	28.23	6.20
HE 40	5510	Mcs0_Nss2	18	19.79	29.79	5.61
HE 40	5590	Mcs0_Nss2	18	19.70	29.70	5.57
HE 40	5710	Mcs0_Nss2	18	19.72	29.72	5.38
HE 80	5530	Mcs0_Nss2	18	19.25	29.25	2.13
HE 80	5610	Mcs0_Nss2	18	19.58	29.58	2.12
HE 80	5690	Mcs0_Nss2	18	19.44	29.44	2.25
HE 160	5570	Mcs0_Nss2	18	19.75	29.75	-0.43
HE 240	5600	Mcs0_Nss2	17	19.06	29.06	-24.26

NSS1

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	EIRP	Measured PSD
OFDM 20	5500	Mcs0_Nss1	9	11.25	21.25	-0.05
OFDM 20	5600	Mcs0_Nss1	9	11.11	21.11	-0.26
OFDM 20	5720	Mcs0_Nss1	9	11.39	21.39	-0.03
HE 20	5500	Mcs0_Nss1	9	11.18	21.18	-0.67
HE 20	5600	Mcs0_Nss1	10	12.02	22.02	-0.09
HE 20	5720	Mcs0_Nss1	9	11.23	21.23	-0.80
HE 40	5510	Mcs0_Nss1	12	13.79	23.79	-0.39
HE 40	5590	Mcs0_Nss1	12	13.70	23.70	-0.43
HE 40	5710	Mcs0_Nss1	12	13.72	23.72	-0.62
HE 80	5530	Mcs0_Nss1	15	16.25	26.25	-0.87
HE 80	5610	Mcs0_Nss1	15	16.58	26.58	-0.88
HE 80	5690	Mcs0_Nss1	15	16.44	26.44	-0.75
HE 160	5570	Mcs0_Nss1	18	19.75	29.75	-0.43
HE 240	5600	Mcs0_Nss1	17	19.06	29.06	-24.26

Dish Antenna

NSS2

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	EIRP	Measured PSD
OFDM 20	5500	Mcs0_Nss2	-3	-0.48	29.52	-13.48
OFDM 20	5600	Mcs0_Nss2	-3	-0.80	29.20	-13.81
OFDM 20	5720	Mcs0_Nss2	-3	-0.03	29.97	-13.04
HE 20	5500	Mcs0_Nss2	-3	-0.61	29.39	-13.62
HE 20	5600	Mcs0_Nss2	-3	-0.75	29.25	-13.76
HE 20	5720	Mcs0_Nss2	-4	-1.04	28.96	-14.05
HE 40	5510	Mcs0_Nss2	-3	-0.51	29.49	-16.54
HE 40	5590	Mcs0_Nss2	-2	-0.47	29.53	-16.49

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	EIRP	Measured PSD
HE 40	5710	Mcs0_Nss2	-2	-0.77	29.23	-16.79
HE 80	5530	Mcs0_Nss2	-3	-0.84	29.16	-19.87
HE 80	5610	Mcs0_Nss2	-2	-0.31	29.69	-19.34
HE 80	5690	Mcs0_Nss2	-3	-0.85	29.15	-19.88
HE 160	5570	Mcs0_Nss2	-2	-0.48	29.52	-22.51
HE 240	5600	Mcs0_Nss2	-2	-0.46	29.54	-24.26

NSS1

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	EIRP	Measured PSD
OFDM 20	5500	Mcs0_Nss1	-30	-27.48	2.52	-40.48
OFDM 20	5600	Mcs0_Nss1	-30	-27.80	2.20	-40.81
OFDM 20	5720	Mcs0_Nss1	-30	-27.03	2.97	-40.04
HE 20	5500	Mcs0_Nss1	-30	-27.61	2.39	-40.62
HE 20	5600	Mcs0_Nss1	-30	-27.75	2.25	-40.76
HE 20	5720	Mcs0_Nss1	-30	-27.04	2.96	-40.05
HE 40	5510	Mcs0_Nss1	-27	-24.51	5.49	-40.54
HE 40	5590	Mcs0_Nss1	-26	-24.47	5.53	-40.49
HE 40	5710	Mcs0_Nss1	-26	-24.77	5.23	-40.79
HE 80	5530	Mcs0_Nss1	-24	-21.84	8.16	-40.87
HE 80	5610	Mcs0_Nss1	-23	-21.31	8.69	-40.34
HE 80	5690	Mcs0_Nss1	-24	-21.85	8.15	-40.88
HE 160	5570	Mcs0_Nss1	-20	-18.48	11.52	-40.51
HE 240	5600	Mcs0_Nss1	-2	-0.46	29.54	-24.26

Result

In the configuration tested, the maximum average RF output power was less than 0.250 watt; therefore, the EUT complied with the requirements of the specification.

5.5 §15.407(b) Spurious Emissions

5.5.1 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 30 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.

5.5.2 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 (dBi) + Cable Loss (dB) - Pre-Amplifier Gain (dB), and is added to the Receiver reading.

5.5.3 UNII-2A

Omni Antenna

QuasiPeak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin	Azimuth (°)	Height	Pol.	Correction (dB)
31.30 MHz	39.85	40.0	-0.15	119	1	Vertical	-4.36
42.05 MHz	28.35	40.0	-11.65	295	1.97	Vertical	-11.55
282.57 MHz	31.96	47.0	-15.04	44	1.8	Horizontal	-9.99

Table 5: Radiated Emissions 30 – 1000 MHz

Peak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
11.63 GHz	53.98	74.0	-20.02	329	3.802	Vertical	10.58
14.11 GHz	56.97	74.0	-17.03	359	3.802	Vertical	13.13

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
15.78 GHz	58.45	74.0	-15.55	233	3.311	Vertical	10.54
10.94 GHz	55.49	74.0	-18.51	64	3.802	Horizontal	11.60
14.93 GHz	57.14	74.0	-16.86	217	3.798	Horizontal	13.73
15.78 GHz	62.56	74.0	-11.44	251	2.325	Horizontal	10.51

Avg

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
11.63 GHz	40.87	54.0	-13.13	329	3.802	Vertical	10.58
14.11 GHz	43.83	54.0	-10.17	359	3.802	Vertical	13.13
15.78 GHz	43.00	54.0	-11.00	233	3.311	Vertical	10.54
10.94 GHz	42.82	54.0	-11.18	64	3.802	Horizontal	11.60
14.93 GHz	44.19	54.0	-9.81	217	3.798	Horizontal	13.73
15.78 GHz	49.48	54.0	-4.52	251	2.325	Horizontal	10.51

Table 6: Radiated Emissions 1 – 17 GHz Lowest Frequency

Peak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
14.00 GHz	57.46	74.0	-16.54	87	1.833	Vertical	13.31
15.02 GHz	57.54	74.0	-16.46	1	2.142	Vertical	13.60
15.83 GHz	62.04	74.0	-11.96	250	2.645	Vertical	10.76
14.57 GHz	58.05	74.0	-15.95	328	1.638	Horizontal	13.93
15.85 GHz	64.26	74.0	-9.74	127	3.652	Horizontal	10.84

Avg

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
14.00 GHz	44.21	54.0	-9.79	87	1.833	Vertical	13.31
15.02 GHz	44.04	54.0	-9.96	1	2.142	Vertical	13.60
15.83 GHz	48.74	54.0	-5.26	250	2.645	Vertical	10.76
14.57 GHz	44.55	54.0	-9.45	328	1.638	Horizontal	13.93
15.85 GHz	50.70	54.0	-3.30	127	3.652	Horizontal	10.84

Table 7: Radiated Emissions 1 – 17 GHz Middle Frequency

Peak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
14.70 GHz	57.93	74.0	-16.07	283	1.643	Vertical	14.32
15.97 GHz	65.82	74.0	-8.18	194	2.142	Vertical	9.91
14.36 GHz	57.70	74.0	-16.30	31	3.802	Horizontal	13.68

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
15.96 GHz	67.70	74.0	-6.30	144	2.325	Horizontal	9.92

Avg

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
14.70 GHz	44.77	54.0	-9.23	283	1.643	Vertical	14.32
15.97 GHz	51.05	54.0	-2.95	194	2.142	Vertical	9.91
14.36 GHz	44.19	54.0	-9.81	31	3.802	Horizontal	13.68
15.96 GHz	51.52	54.0	-2.48	144	2.325	Horizontal	9.92

Table 8: Radiated Emissions 1 – 17 GHz Highest Frequency

Peak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Pol.	Correction (dB)
21.04 GHz	64.90	74.0	-9.10	349	Vertical	-0.02
30.94 GHz	55.93	74.0	-18.07	343	Vertical	1.64
35.68 GHz	55.44	74.0	-18.56	95	Vertical	4.97
21.04 GHz	64.73	74.0	-9.27	355	Horizontal	-0.01
33.82 GHz	55.88	74.0	-18.12	327	Horizontal	5.06

Avg

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Pol.	Correction (dB)
21.04 GHz	50.26	54.0	-3.74	349	Vertical	-0.02
30.94 GHz	47.12	54.0	-6.88	343	Vertical	1.64
35.68 GHz	42.48	54.0	-11.52	95	Vertical	4.97
21.04 GHz	51.16	54.0	-2.84	355	Horizontal	-0.01
33.82 GHz	42.38	54.0	-11.62	327	Horizontal	5.06

Table 9: Radiated Emissions 17 – 40 GHz Lowest Frequency (worse case)

Dish Antenna

QuasiPeak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin	Azimuth (°)	Height	Pol.	Correction (dB)
31.30 MHz	39.85	40.0	-0.15	119	1	Vertical	-4.36
42.05 MHz	28.35	40.0	-11.65	295	1.97	Vertical	-11.55
282.57 MHz	31.96	47.0	-15.04	44	1.8	Horizontal	-9.99

Table 10: Radiated Emissions 30 – 1000 MHz

Peak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
10.52 GHz	56.89	74.0	-17.11	164	1.643	Vertical	9.52
15.78 GHz	65.90	74.0	-8.10	6	2.142	Vertical	10.52
10.52 GHz	56.17	74.0	-17.83	266	2.645	Horizontal	9.53
15.78 GHz	65.78	74.0	-8.22	38	2.645	Horizontal	10.52

Avg

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
10.52 GHz	42.67	54.0	-11.33	164	1.643	Vertical	9.52
15.78 GHz	51.77	54.0	-2.23	6	2.142	Vertical	10.52
10.52 GHz	45.66	54.0	-8.34	266	2.645	Horizontal	9.53
15.78 GHz	51.65	54.0	-2.35	38	2.645	Horizontal	10.52

Table 11: Radiated Emissions 1 – 17 GHz Lowest Frequency

Peak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
10.76 GHz	53.23	74.0	-20.77	1	1.638	Vertical	9.48
10.91 GHz	54.92	74.0	-19.08	3	1.638	Vertical	11.25
15.96 GHz	64.90	74.0	-9.10	20	3.802	Vertical	9.92
10.85 GHz	54.31	74.0	-19.69	85	2.146	Horizontal	10.28
13.89 GHz	57.01	74.0	-16.99	83	4	Horizontal	13.32
15.96 GHz	56.83	74.0	-17.17	286	3.798	Horizontal	9.92

Avg

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
10.76 GHz	40.18	54.0	-13.82	1	1.638	Vertical	9.48
10.91 GHz	42.10	54.0	-11.90	3	1.638	Vertical	11.25
15.96 GHz	51.30	54.0	-2.70	20	3.802	Vertical	9.92
10.85 GHz	40.83	54.0	-13.17	85	2.146	Horizontal	10.28
13.89 GHz	44.18	54.0	-9.82	83	4	Horizontal	13.32
15.96 GHz	44.07	54.0	-9.93	286	3.798	Horizontal	9.92

Table 12: Radiated Emissions 1 – 17 GHz Middle Frequency

Peak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
10.55 GHz	55.72	74.0	-18.28	159	1.638	Vertical	9.57

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
15.84 GHz	58.50	74.0	-15.50	64	3.153	Vertical	10.80
10.55 GHz	57.44	74.0	-16.56	161	1.638	Horizontal	9.56
15.84 GHz	66.83	74.0	-7.17	40	2.65	Horizontal	10.80

Avg

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
10.55 GHz	41.82	54.0	-12.18	159	1.638	Vertical	9.57
15.84 GHz	44.83	54.0	-9.17	64	3.153	Vertical	10.80
10.55 GHz	43.40	54.0	-10.60	161	1.638	Horizontal	9.56
15.84 GHz	52.91	54.0	-1.09	40	2.65	Horizontal	10.80

Table 13: Radiated Emissions 1 – 17 GHz Highest Frequency

Peak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Pol.	Correction (dB)
21.03 GHz	58.18	74.0	-15.82	341	Vertical	-0.17
33.84 GHz	55.94	74.0	-18.06	8	Vertical	4.83
35.00 GHz	57.36	74.0	-16.64	141	Vertical	6.40
21.05 GHz	62.70	74.0	-11.30	48	Horizontal	0.10
33.80 GHz	55.93	74.0	-18.07	111	Horizontal	5.32

Avg

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Pol.	Correction (dB)
21.03 GHz	44.07	54.0	-9.93	341	Vertical	-0.17
33.84 GHz	42.29	54.0	-11.71	8	Vertical	4.83
35.00 GHz	44.12	54.0	-9.88	141	Vertical	6.40
21.05 GHz	48.43	54.0	-5.57	48	Horizontal	0.10
33.80 GHz	42.81	54.0	-11.19	111	Horizontal	5.32

Table 14: Radiated Emissions 17 – 40 GHz Lowest Frequency (worse case)

5.5.4 UNII-2C

Omni Antenna

QuasiPeak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin	Azimuth (°)	Height	Pol.	Correction (dB)
31.30 MHz	39.85	40.0	-0.15	119	1	Vertical	-4.36
42.05 MHz	28.35	40.0	-11.65	295	1.97	Vertical	-11.55
282.57 MHz	31.96	47.0	-15.04	44	1.8	Horizontal	-9.99

Table 15: Radiated Emissions 30 – 1000 MHz

Peak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
11.00 GHz	55.68	74.0	-18.32	233	1.638	Vertical	10.84
14.59 GHz	58.04	74.0	-15.96	171	1.638	Vertical	14.07
11.00 GHz	56.16	74.0	-17.84	242	3.802	Horizontal	10.84
14.73 GHz	57.91	74.0	-16.09	359	3.802	Horizontal	14.16
16.99 GHz	56.35	74.0	-17.65	177	3.802	Horizontal	14.58

Avg

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
11.00 GHz	43.97	54.0	-10.41	233	1.638	Vertical	10.84
14.59 GHz	44.59	54.0	-9.41	171	1.638	Vertical	14.07
11.00 GHz	44.93	54.0	-9.07	242	3.802	Horizontal	10.84
14.73 GHz	44.34	54.0	-9.66	359	3.802	Horizontal	14.16
16.99 GHz	43.51	54.0	-10.49	177	3.802	Horizontal	14.58

Table 16: Radiated Emissions 1 – 17 GHz Lowest Frequency

Peak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
10.96 GHz	54.23	74.0	-19.77	310	3.798	Vertical	11.28
15.03 GHz	56.82	74.0	-17.18	328	3.802	Vertical	13.54
16.65 GHz	55.40	74.0	-18.60	51	1.833	Vertical	13.19
11.20 GHz	56.45	74.0	-17.55	187	3.802	Horizontal	10.02
12.39 GHz	53.74	74.0	-20.26	75	3.802	Horizontal	10.95
14.64 GHz	57.31	74.0	-16.69	173	1.833	Horizontal	14.20

Avg

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
10.96 GHz	41.17	54.0	-12.83	310	3.798	Vertical	11.28
15.03 GHz	43.69	54.0	-10.31	328	3.802	Vertical	13.54
16.65 GHz	42.51	54.0	-11.49	51	1.833	Vertical	13.19
11.20 GHz	46.09	54.0	-7.91	187	3.802	Horizontal	10.02
12.39 GHz	40.73	54.0	-13.27	75	3.802	Horizontal	10.95
14.64 GHz	44.59	54.0	-9.41	173	1.833	Horizontal	14.20

Table 17: Radiated Emissions 1 – 17 GHz Middle Frequency

Peak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
10.93 GHz	54.49	74.0	-19.51	104	3.802	Vertical	11.62
12.37 GHz	54.46	74.0	-19.54	346	1.50	Vertical	10.96
14.70 GHz	58.00	74.0	-16.00	359	1.643	Vertical	14.32
11.44 GHz	54.70	74.0	-19.30	141	3.802	Horizontal	10.25
14.40 GHz	56.66	74.0	-17.34	8	3.802	Horizontal	13.76
17.00 GHz	56.61	74.0	-13.39	1	3.802	Horizontal	14.63

Avg

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
10.93 GHz	41.19	54.0	-12.81	104	3.802	Vertical	11.62
12.37 GHz	40.89	54.0	-13.11	346	1.50	Vertical	10.96
14.70 GHz	44.66	54.0	-9.34	359	1.643	Vertical	14.32
11.44 GHz	42.88	54.0	-11.12	141	3.802	Horizontal	10.25
14.40 GHz	43.83	54.0	-10.17	8	3.802	Horizontal	13.76
17.00 GHz	43.36	54.0	-10.64	1	3.802	Horizontal	14.63

Table 18: Radiated Emissions 1 – 17 GHz Highest Frequency

Peak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Pol.	Correction (dB)
16.50 GHz	58.28	74.0	-15.72	9	Vertical	0.98
22.01 GHz	55.22	74.0	-18.78	7	Vertical	0.53
30.94 GHz	59.01	74.0	-15.99	350	Vertical	1.64
35.04 GHz	57.14	74.0	-16.86	194	Vertical	6.16
16.50 GHz	57.90	74.0	-16.10	9	Horizontal	0.96

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Pol.	Correction (dB)
33.78 GHz	55.72	74.0	-18.28	261	Horizontal	4.98
34.92 GHz	56.89	74.0	-17.11	65	Horizontal	6.25
39.52 GHz	56.26	74.0	-17.94	1	Horizontal	4.56

Avg

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Pol.	Correction (dB)
16.50 GHz	44.02	54.0	-9.98	9	Vertical	0.98
22.01 GHz	42.07	54.0	-11.93	7	Vertical	0.53
30.94 GHz	51.48	54.0	-2.52	350	Vertical	1.64
35.04 GHz	43.69	54.0	-10.31	194	Vertical	6.16
16.50 GHz	45.57	54.0	-8.43	9	Horizontal	0.96
33.78 GHz	42.55	54.0	-11.45	261	Horizontal	4.98
34.92 GHz	43.84	54.0	-10.16	65	Horizontal	6.25
39.52 GHz	43.21	54.0	-10.79	1	Horizontal	4.56

Table 19: Radiated Emissions 17 – 40 GHz Lowest Frequency (worse case)

Dish Antenna

QuasiPeak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin	Azimuth (°)	Height	Pol.	Correction (dB)
31.30 MHz	39.85	40.0	-0.15	119	1	Vertical	-4.36
42.05 MHz	28.35	40.0	-11.65	295	1.97	Vertical	-11.55
282.57 MHz	31.96	47.0	-15.04	44	1.8	Horizontal	-9.99

Table 20: Radiated Emissions 30 – 1000 MHz

Peak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
11.01 GHz	54.28	74.0	-19.72	37	1.638	Vertical	10.76
16.51 GHz	57.24	74.0	-16.76	350	2.142	Vertical	12.78
11.00 GHz	59.61	74.0	-14.39	305	3.802	Horizontal	10.84
15.14 GHz	56.60	74.0	-17.40	6	3.802	Horizontal	12.90

Avg

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
11.01 GHz	41.18	54.0	-12.82	37	1.638	Vertical	10.76
16.51 GHz	43.99	54.0	-10.01	350	2.142	Vertical	12.78
11.00 GHz	53.17	54.0	-0.83	305	3.802	Horizontal	10.84
15.14 GHz	43.55	54.0	-10.45	6	3.802	Horizontal	12.90

Table 21: Radiated Emissions 1 – 17 GHz Lowest Frequency

Peak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
11.20 GHz	54.34	74.0	-19.66	270	1.638	Vertical	10.02
14.15 GHz	57.25	74.0	-16.75	130	1.638	Vertical	13.24
11.19 GHz	54.52	74.0	-19.48	89	3.752	Horizontal	10.03
14.62 GHz	58.21	74.0	-15.79	349	1.838	Horizontal	14.15
16.94 GHz	56.50	74.0	-17.50	276	2.146	Horizontal	14.15

Avg

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
11.20 GHz	40.95	54.0	-13.05	270	1.638	Vertical	10.02
14.15 GHz	44.00	54.0	-10.00	130	1.638	Vertical	13.24
11.19 GHz	40.91	54.0	-13.09	89	3.752	Horizontal	10.03
14.62 GHz	44.96	54.0	-9.04	349	1.838	Horizontal	14.15
16.94 GHz	43.52	54.0	-10.48	276	2.146	Horizontal	14.15

Table 22: Radiated Emissions 1 – 17 GHz Middle Frequency

Peak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
11.44 GHz	65.62	74.0	-8.38	159	1.643	Vertical	10.26
14.02 GHz	57.16	74.0	-16.84	21	1.638	Vertical	13.25
14.80 GHz	57.02	74.0	-16.98	1	1.638	Vertical	13.91
6.02 GHz	50.02	74.0	-23.98	158	1.638	Horizontal	-10.42
11.44 GHz	63.16	74.0	-10.84	164	1.638	Horizontal	10.22

Avg

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
11.44 GHz	51.77	54.0	-2.23	159	1.643	Vertical	10.26
14.02 GHz	44.26	54.0	-9.74	21	1.638	Vertical	13.25
14.80 GHz	44.41	54.0	-9.59	1	1.638	Vertical	13.91
6.02 GHz	36.82	54.0	-17.18	158	1.638	Horizontal	-10.42

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
11.44 GHz	48.08	54.0	-5.92	164	1.638	Horizontal	10.22

Table 23: Radiated Emissions 1 – 17 GHz Highest Frequency

Peak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Pol.	Correction (dB)
22.88 GHz	52.08	74.0	-21.92	56	Vertical	0.68
33.41 GHz	55.12	74.0	-18.88	267	Vertical	4.27
34.98 GHz	57.18	74.0	-16.82	8	Vertical	6.38
39.43 GHz	56.50	74.0	-17.50	208	Vertical	4.42
17.16 GHz	51.83	74.0	-22.07	327	Horizontal	0.05
22.88 GHz	54.76	74.0	-19.21	48	Horizontal	0.69
30.94 GHz	56.71	74.0	-17.29	14	Horizontal	1.64
39.50 GHz	56.66	74.0	-17.34	183	Horizontal	4.67

Avg

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Pol.	Correction (dB)
22.88 GHz	38.54	54.0	-15.46	56	Vertical	0.68
33.41 GHz	41.89	54.0	-12.11	267	Vertical	4.27
34.98 GHz	43.89	54.0	-10.11	8	Vertical	6.38
39.43 GHz	43.35	54.0	-10.65	208	Vertical	4.42
17.16 GHz	38.76	54.0	-15.24	327	Horizontal	0.05
22.88 GHz	41.24	54.0	-12.76	48	Horizontal	0.69
30.94 GHz	49.28	54.0	-4.72	14	Horizontal	1.64
39.50 GHz	46.37	54.0	-7.63	183	Horizontal	4.67

Table 24: Radiated Emissions 17 – 40 GHz Highest Frequency (worse case)

5.6 §15.407(a) Maximum Power Spectral Density

All chains were measured and summed under the guidance of KDB 789033 Section II. F. and KDB 662911 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 6 dBi antenna, the conducted limit for power spectral density is 11 dBm.

The Omni antenna has a gain of 10 dBi so the PSD adjusted limit is 7 dBm. The Dish antenna has a gain is 30 dBi so the PSD adjusted limit is -13 dBm.

As per KDB 662911, When the EUT is using spatial-multiplexing in HE modes, there is not additional array gain to accommodate. When the EUT uses Nss=1 data rates, the antenna gain of the Omni is 10 dBi + Array gain of 3.01 dB which is a total of 13.01 dBi for a Nss1 limit of 0.01.

As per KDB 662911, When the EUT is using spatial-multiplexing in HE modes, there is not additional array gain to accommodate. When the EUT uses Nss=1 data rates, the antenna gain of the Dish is 30 dBi + Array gain of 3.01 dB which is a total of 33.01 dBi for a Nss1 limit of -40.01.

Results of this testing are summarized.

5.6.1 UNII-2A

Omni Antenna

NSS2

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	EIRP	Measured PSD
OFDM 20	5260	Mcs0_Nss2	17	19.08	29.08	6.43
OFDM 20	5280	Mcs0_Nss2	16	19.80	29.80	6.21
OFDM 20	5320	Mcs0_Nss2	17	19.35	29.35	6.75
HE 20	5260	Mcs0_Nss2	17	19.81	29.81	6.93
HE 20	5280	Mcs0_Nss2	17	19.83	29.83	6.93
HE 20	5320	Mcs0_Nss2	17	19.36	29.36	6.39
HE 40	5270	Mcs0_Nss2	17	19.77	29.77	4.09
HE 40	5310	Mcs0_Nss2	17	19.50	29.50	3.71
HE 80	5290	Mcs0_Nss2	17	19.46	29.46	1.01
HE 160	5250	Mcs0_Nss2	17	19.72	29.42	-1.68

NSS1

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	EIRP	Measured PSD
OFDM 20	5260	Mcs0_Nss1	10	12.08	22.08	-0.57
OFDM 20	5280	Mcs0_Nss1	9	12.80	22.80	-0.79
OFDM 20	5320	Mcs0_Nss1	10	12.35	22.35	-0.25
HE 20	5260	Mcs0_Nss1	10	12.81	22.81	-0.07
HE 20	5280	Mcs0_Nss1	10	12.83	22.83	-0.07
HE 20	5320	Mcs0_Nss1	10	12.36	22.36	-0.61
HE 40	5270	Mcs0_Nss1	12	14.77	24.77	-0.91
HE 40	5310	Mcs0_Nss1	13	15.50	25.50	-0.29
HE 80	5290	Mcs0_Nss1	15	17.46	27.46	-0.99
HE 160	5250	Mcs0_Nss1	17	19.72	29.42	-1.68

Dish Antenna

NSS2

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	EIRP	Measured PSD
OFDM 20	5260	Mcs0_Nss2	-2	-0.25	29.75	-13.27
OFDM 20	5280	Mcs0_Nss2	-3	-0.69	29.31	-13.70
OFDM 20	5320	Mcs0_Nss2	-3	-0.70	29.30	-13.71
HE 20	5260	Mcs0_Nss2	-3	-0.19	29.81	-13.20
HE 20	5280	Mcs0_Nss2	-3	-0.71	29.29	-13.72
HE 20	5320	Mcs0_Nss2	-3	-0.73	29.23	-13.74
HE 40	5270	Mcs0_Nss2	-3	-0.59	29.41	-16.61
HE 40	5310	Mcs0_Nss2	-3	-0.49	29.51	-16.51
HE 80	5290	Mcs0_Nss2	-2	-0.02	29.98	-19.05
HE 160	5250	Mcs0_Nss2	-2	-0.44	29.56	-22.48

NSS1

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	EIRP	Measured PSD
OFDM 20	5260	Mcs0_Nss1	-29	-27.25	2.75	-40.27
OFDM 20	5280	Mcs0_Nss1	-30	-27.69	2.31	-40.70
OFDM 20	5320	Mcs0_Nss1	-30	-27.70	2.30	-40.71
HE 20	5260	Mcs0_Nss1	-30	-27.19	2.81	-40.20
HE 20	5280	Mcs0_Nss1	-30	-27.71	2.29	-40.72
HE 20	5320	Mcs0_Nss1	-30	-27.83	2.17	-40.74
HE 40	5270	Mcs0_Nss1	-27	-24.59	5.41	-40.61
HE 40	5310	Mcs0_Nss1	-27	-24.49	5.51	-40.51
HE 80	5290	Mcs0_Nss1	-23	-21.02	8.98	-40.05
HE 160	5250	Mcs0_Nss1	-20	-18.44	11.56	-40.48

5.6.2 UNII-2C

Omni Antenna

NSS2

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	EIRP	Measured PSD
OFDM 20	5500	Mcs0_Nss2	16	18.25	28.25	6.95
OFDM 20	5600	Mcs0_Nss2	16	18.11	28.11	6.74
OFDM 20	5720	Mcs0_Nss2	16	18.39	28.39	6.97
HE 20	5500	Mcs0_Nss2	16	18.18	28.18	6.33
HE 20	5600	Mcs0_Nss2	16	18.02	28.02	5.91
HE 20	5720	Mcs0_Nss2	16	18.23	28.23	6.20
HE 40	5510	Mcs0_Nss2	18	19.79	29.79	5.61
HE 40	5590	Mcs0_Nss2	18	19.70	29.70	5.57
HE 40	5710	Mcs0_Nss2	18	19.72	29.72	5.38
HE 80	5530	Mcs0_Nss2	18	19.25	29.25	2.13
HE 80	5610	Mcs0_Nss2	18	19.58	29.58	2.12
HE 80	5690	Mcs0_Nss2	18	19.44	29.44	2.25

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	EIRP	Measured PSD
HE 160	5570	Mcs0_Nss2	18	19.75	29.75	-0.43
HE 240	5600	Mcs0_Nss2	17	19.06	29.06	-24.26

NSS1

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	EIRP	Measured PSD
OFDM 20	5500	Mcs0_Nss1	9	11.25	21.25	-0.05
OFDM 20	5600	Mcs0_Nss1	9	11.11	21.11	-0.26
OFDM 20	5720	Mcs0_Nss1	9	11.39	21.39	-0.03
HE 20	5500	Mcs0_Nss1	9	11.18	21.18	-0.67
HE 20	5600	Mcs0_Nss1	10	12.02	22.02	-0.09
HE 20	5720	Mcs0_Nss1	9	11.23	21.23	-0.80
HE 40	5510	Mcs0_Nss1	12	13.79	23.79	-0.39
HE 40	5590	Mcs0_Nss1	12	13.70	23.70	-0.43
HE 40	5710	Mcs0_Nss1	12	13.72	23.72	-0.62
HE 80	5530	Mcs0_Nss1	15	16.25	26.25	-0.87
HE 80	5610	Mcs0_Nss1	15	16.58	26.58	-0.88
HE 80	5690	Mcs0_Nss1	15	16.44	26.44	-0.75
HE 160	5570	Mcs0_Nss1	18	19.75	29.75	-0.43
HE 240	5600	Mcs0_Nss1	17	19.06	29.06	-24.26

Dish Antenna

NSS2

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	EIRP	Measured PSD
OFDM 20	5500	Mcs0_Nss2	-3	-0.48	29.52	-13.48
OFDM 20	5600	Mcs0_Nss2	-3	-0.80	29.20	-13.81
OFDM 20	5720	Mcs0_Nss2	-3	-0.03	29.97	-13.04
HE 20	5500	Mcs0_Nss2	-3	-0.61	29.39	-13.62

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	EIRP	Measured PSD
HE 20	5600	Mcs0_Nss2	-3	-0.75	29.25	-13.76
HE 20	5720	Mcs0_Nss2	-4	-1.04	28.96	-14.05
HE 40	5510	Mcs0_Nss2	-3	-0.51	29.49	-16.54
HE 40	5590	Mcs0_Nss2	-2	-0.47	29.53	-16.49
HE 40	5710	Mcs0_Nss2	-2	-0.77	29.23	-16.79
HE 80	5530	Mcs0_Nss2	-3	-0.84	29.16	-19.87
HE 80	5610	Mcs0_Nss2	-2	-0.31	29.69	-19.34
HE 80	5690	Mcs0_Nss2	-3	-0.85	29.15	-19.88
HE 160	5570	Mcs0_Nss2	-2	-0.48	29.52	-22.51
HE 240	5600	Mcs0_Nss2	-2	-0.46	29.54	-24.26

NSS1

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power*	EIRP	Measured PSD
OFDM 20	5500	Mcs0_Nss1	-30	-27.48	2.52	-40.48
OFDM 20	5600	Mcs0_Nss1	-30	-27.80	2.20	-40.81
OFDM 20	5720	Mcs0_Nss1	-30	-27.03	2.97	-40.04
HE 20	5500	Mcs0_Nss1	-30	-27.61	2.39	-40.62
HE 20	5600	Mcs0_Nss1	-30	-27.75	2.25	-40.76
HE 20	5720	Mcs0_Nss1	-30	-27.04	2.96	-40.05
HE 40	5510	Mcs0_Nss1	-27	-24.51	5.49	-40.54
HE 40	5590	Mcs0_Nss1	-26	-24.47	5.53	-40.49
HE 40	5710	Mcs0_Nss1	-26	-24.77	5.23	-40.79
HE 80	5530	Mcs0_Nss1	-24	-21.84	8.16	-40.87
HE 80	5610	Mcs0_Nss1	-23	-21.31	8.69	-40.34
HE 80	5690	Mcs0_Nss1	-24	-21.85	8.15	-40.88
HE 160	5570	Mcs0_Nss1	-20	-18.48	11.52	-40.51
HE 240	5600	Mcs0_Nss1	-2	-0.46	29.54	-24.26

Result

The maximum average power spectral density was less than the adjusted limit of 7 and -13 dBm (Nss1 limits of -0.01 dBm for the Omni antenna and -40.01 dBm for the Dish antenna; therefore, the EUT complies with the specification.

5.7 DFS Requirement

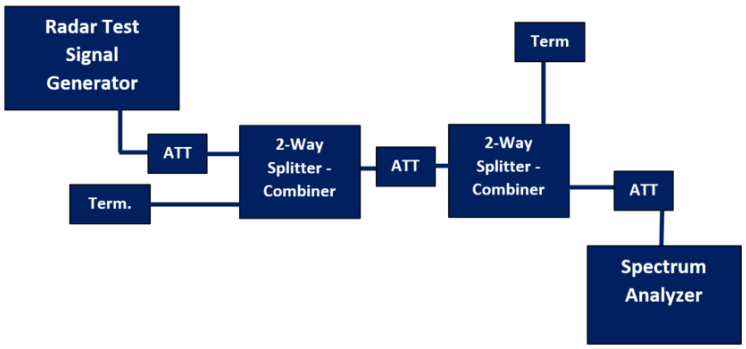
This product is a master with radar detection. The outcome of the required DFS tests is located in this section. DFS testing was performed following the test procedures as outlined in KDB 905462.

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

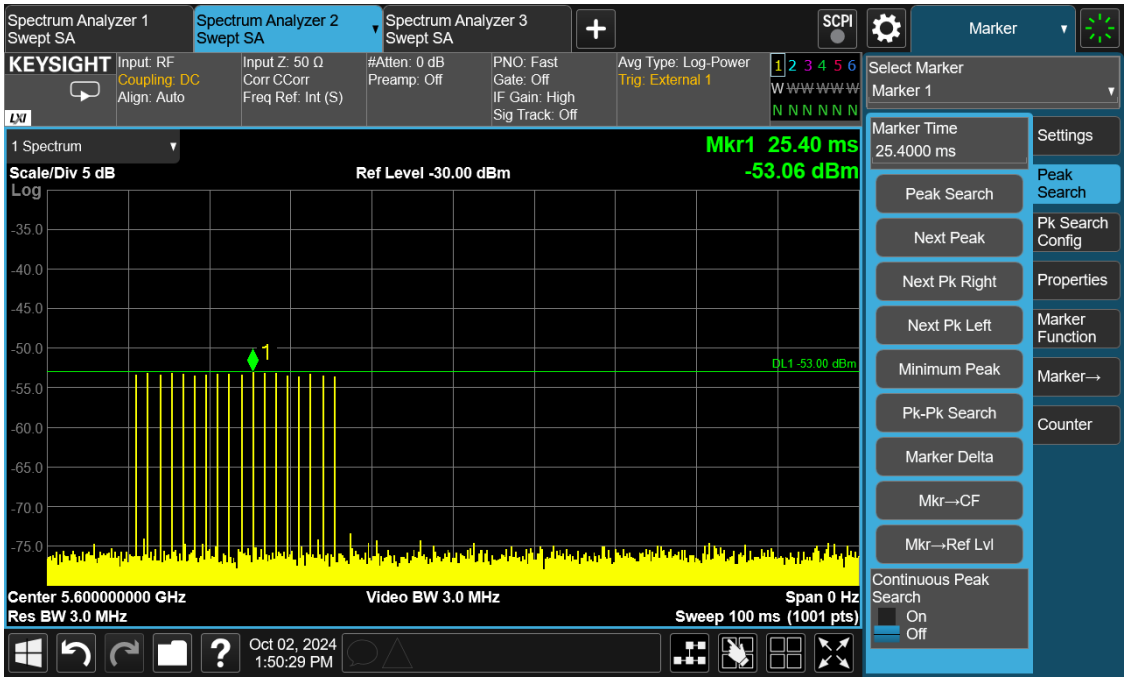
Information	Status
Possible Antenna/s	10 dBi Omni
Antenna used for test	Chain 0 / Chain 1
Operating mode	Master
If Client	Not Applicable
Port used for testing	Chain 0 / Chain 1
EIRP range	> 200 milliwatts
Impedance of port	50 ohms
Channel loading technique	Data transfer was enacted to achieve a minimum channel loading of approximately 17%
Antenna measurement technique	See note 1
Time of power-on cycle	25s
Detection threshold level	-53 dBm (-64 + 10 +1)

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

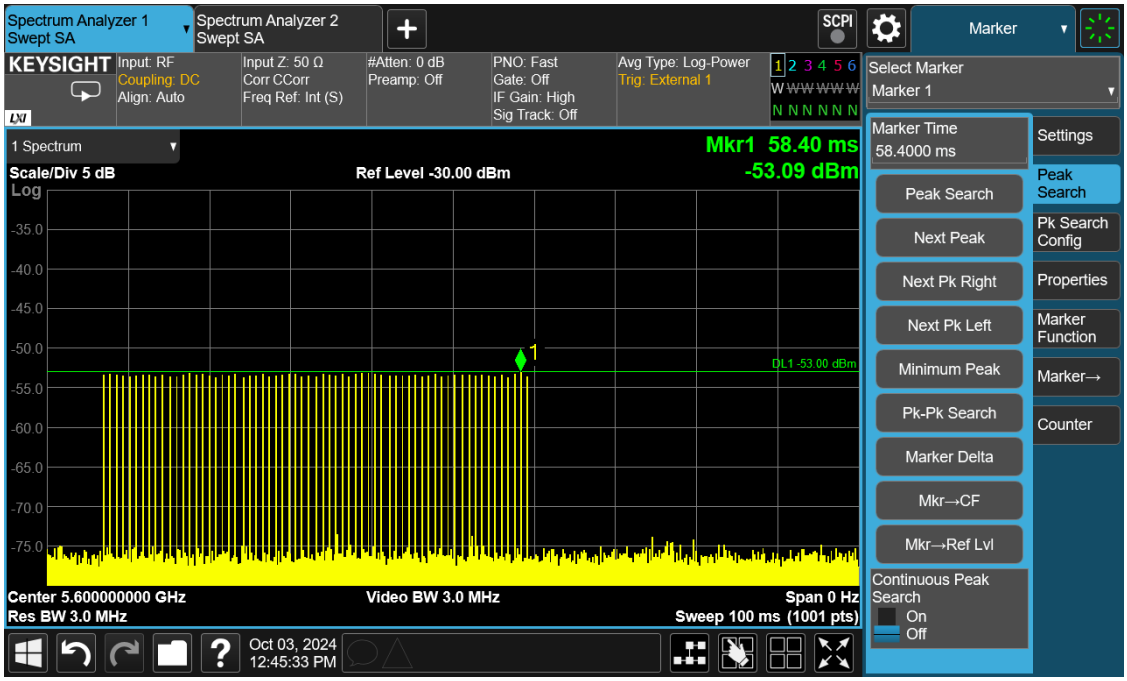
Requirement	Operational Mode	
	Master or Client Client Without Radar Detection	Client Without Radar Detection
DFS Detection Threshold	Yes	Not Required
Channel Closing Transmission Time	Yes	Yes
Channel Move Time	Yes	Yes
U-NII Detection Bandwidth	Yes	Not Required



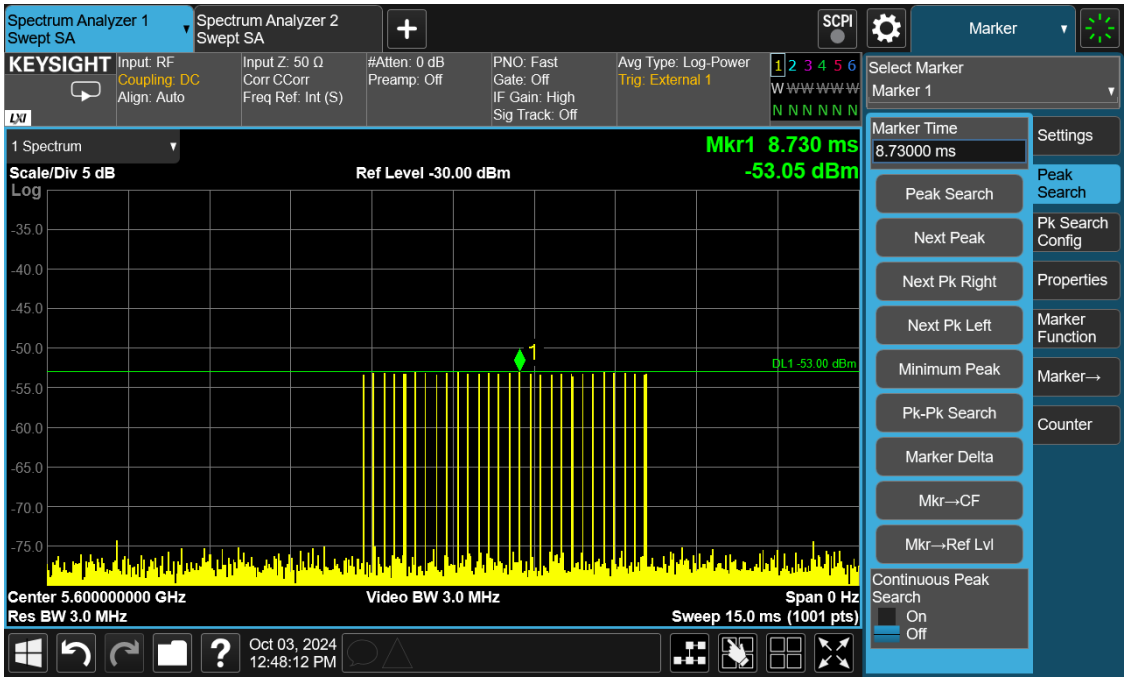
Maximum Transmit Power	**Value (See Notes 1, 2, and 3)**
EIRP ≥ 200 milliwatt	-64 dBm
EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz	-62 dBm
EIRP < 200 milliwatt that do not meet the power spectral density requirement	-64 dBm
Note 1: This is the level at the input of the receiver assuming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



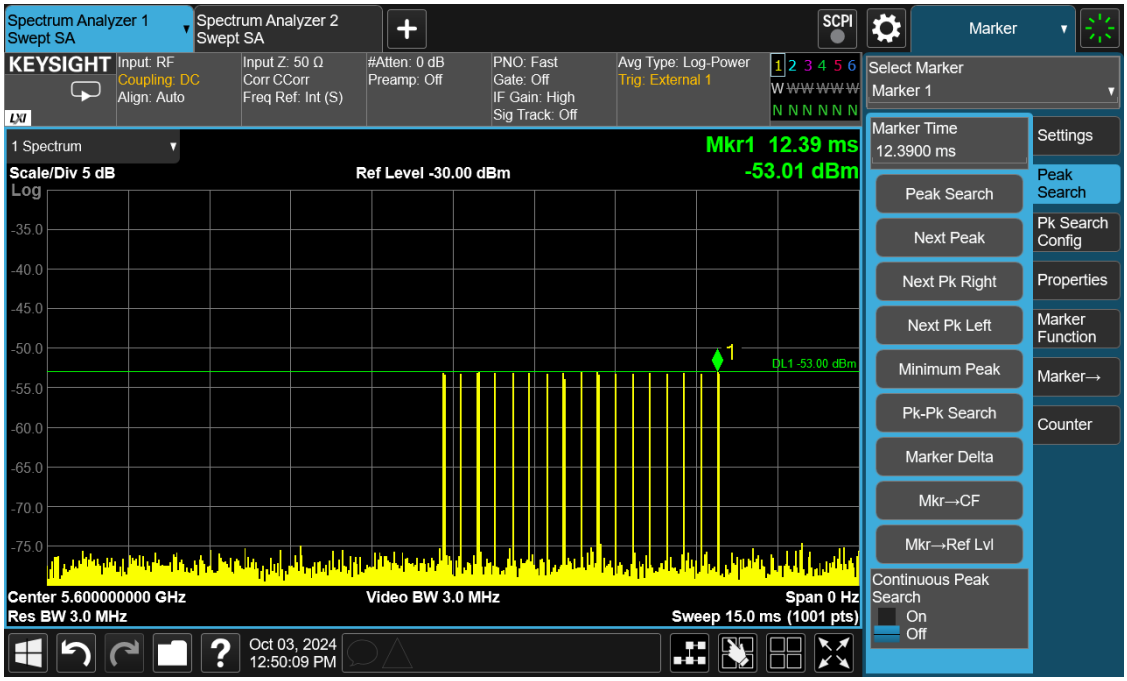
Plot 1: Radar Level 0



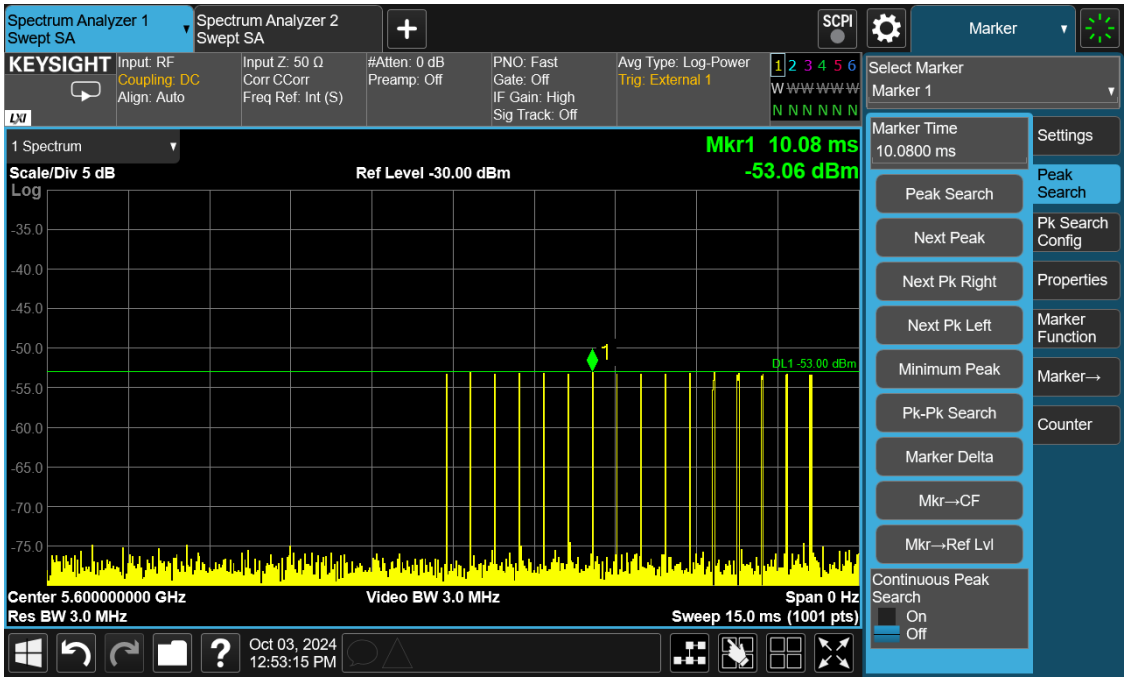
Plot 2: Radar Level 1



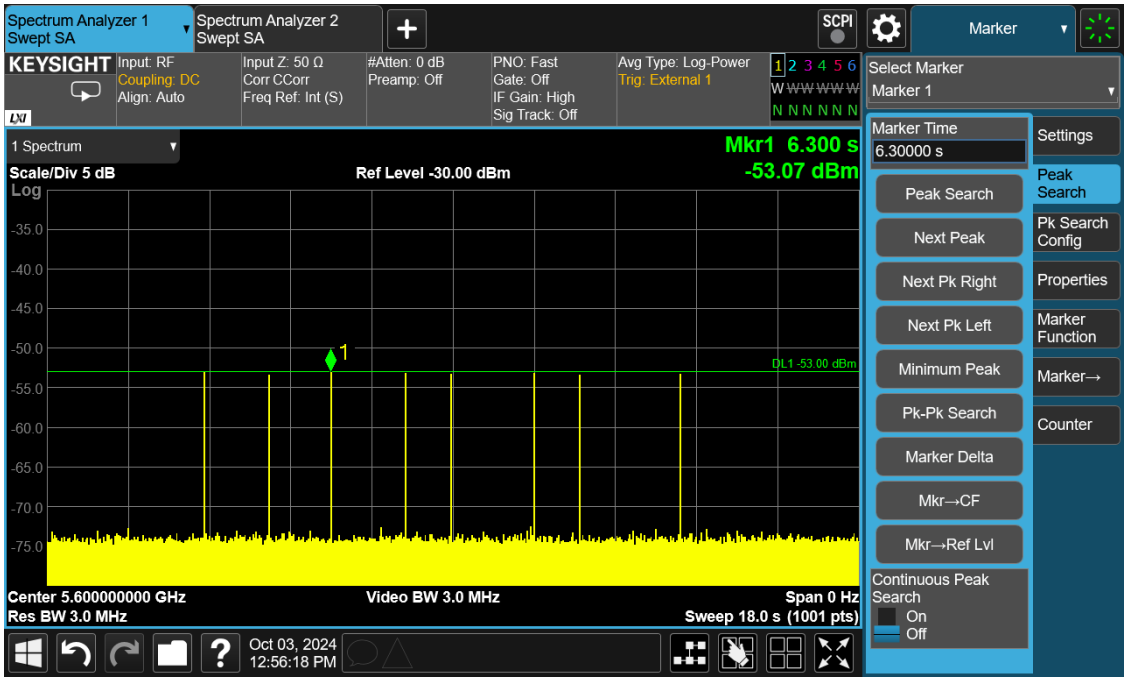
Plot 3: Radar Level 2



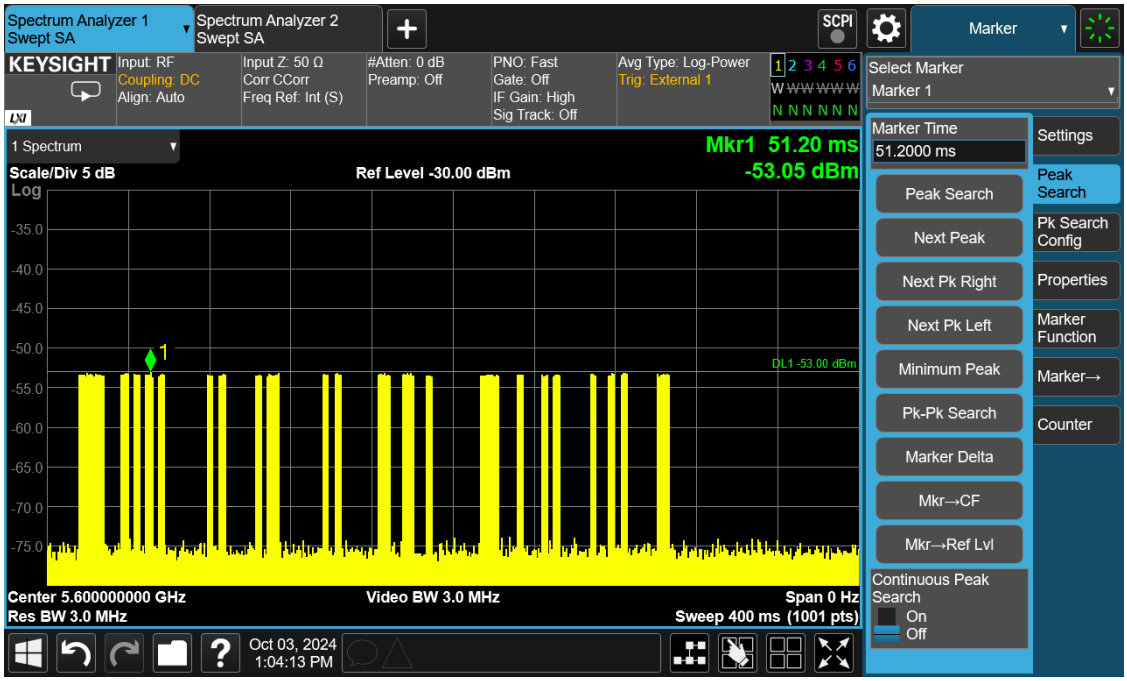
Plot 4: Radar Level 3



Plot 5: Radar Level 4



Plot 6: Radar Level 5



Plot 7: Radar Level 6

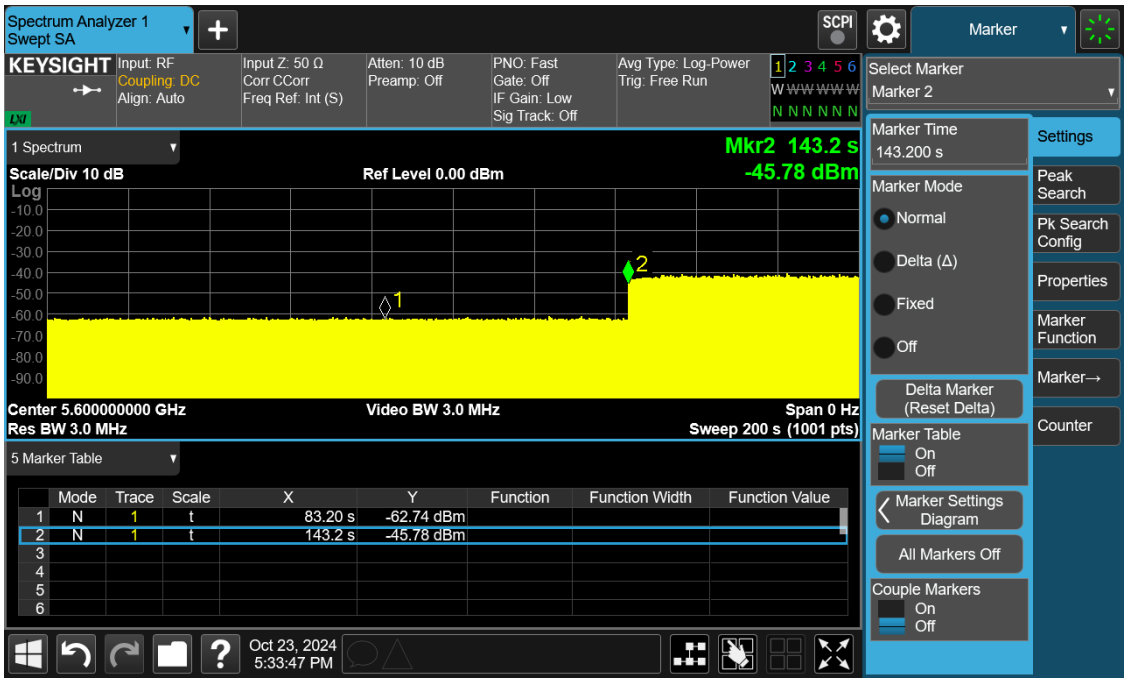
5.7.1 Channel Availability Check (CAC)

The EUT shall perform a CAC to ensure that there is no radar operating on the channel. After the power-up sequence, at-east 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.

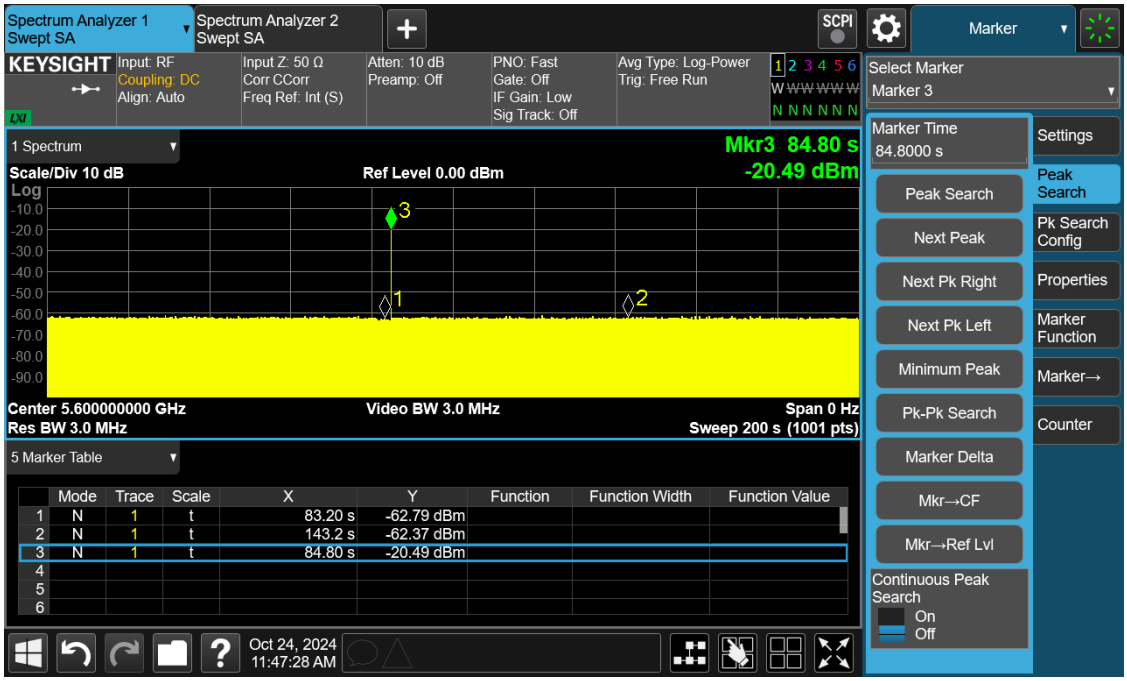
For radar burst at the beginning of the CAC. To verify successful radar detection on the selected channel during a period equal to the beginning of the CAC time, visual indication on the EUT of successful detection of the radar burst will be recorded and reported. Observation of the radar burst is show 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.

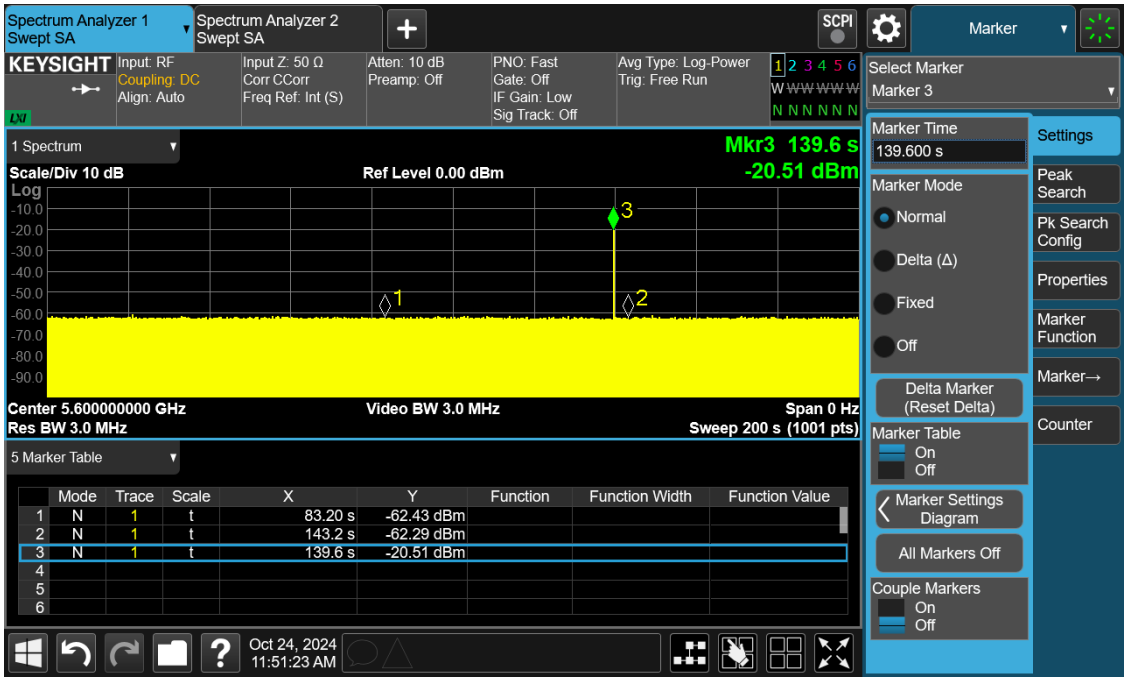
A spectrum analyzer is used as a monitor to verify that the EUT has vacated the channel within the channel closing transmission time and channel move time, and does not transmit on a channel during the non-occupancy period after the detection and channel move.



Plot 8: DUT Turn On



Plot 9: Beginning



Plot 10: End

5.7.2 In-service Monitoring

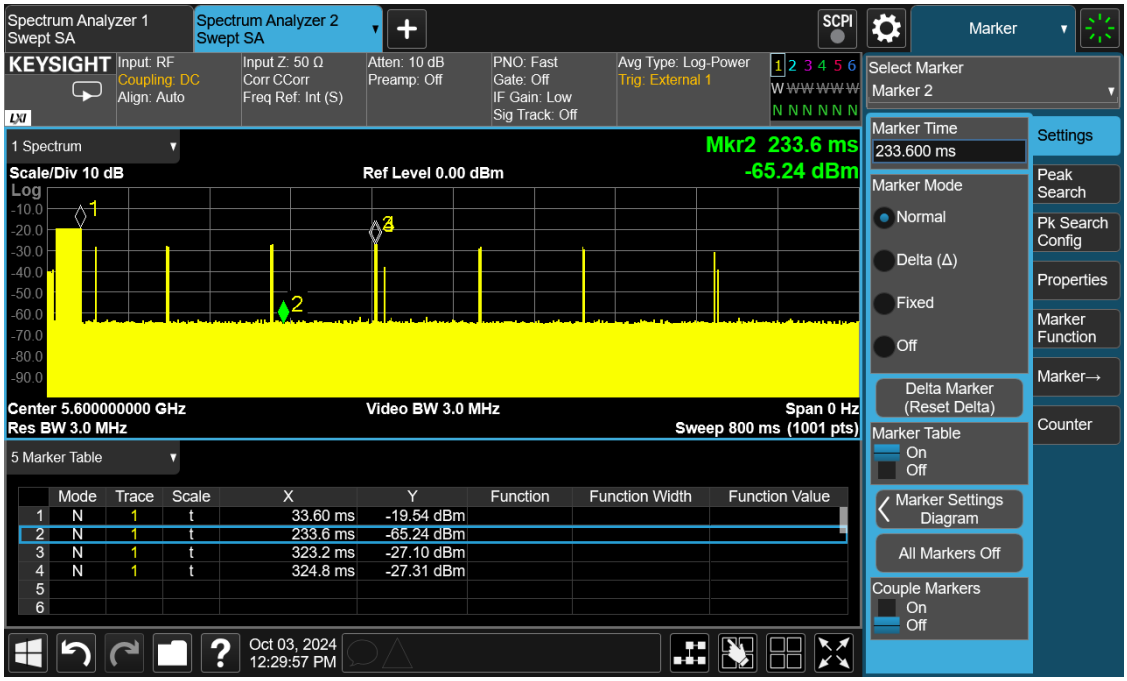
Channel Move Time	10 seconds
Channel Closing Transmission Time	200 ms + aggregate of 60 ms over remaining 10 second period
Non-occupancy period	Minimum 30 minutes

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.

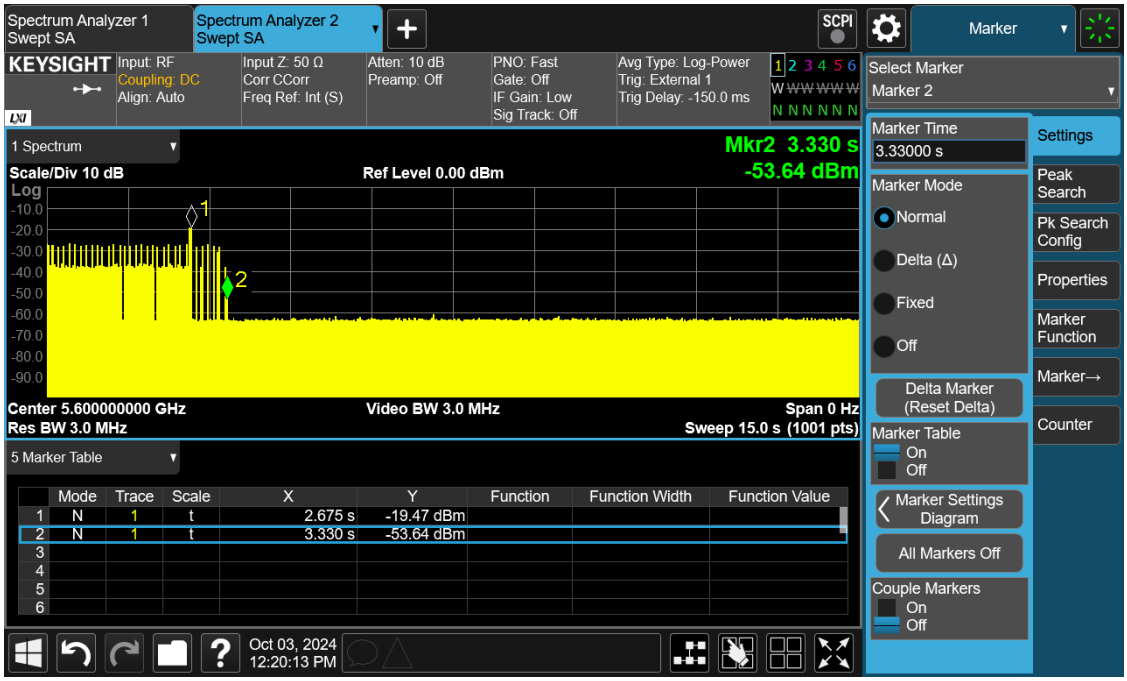
During the 30 minutes observation time, the EUT did not make any transmissions on a channel after a radar signal was detected.

Please see plots below.

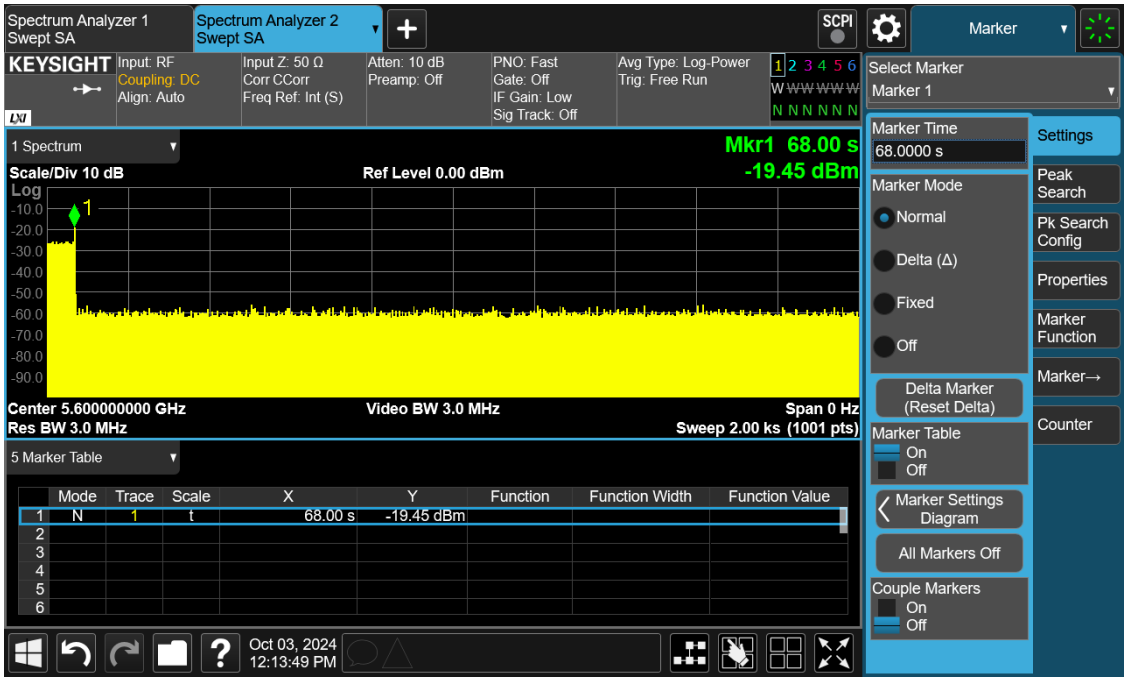
A spectrum analyzer is used as a monitor to verify that the EUT has vacated the channel within the channel closing transmission time and channel move time, and does not transmit on a channel during the non-occupancy period after the detection and channel move.



Plot 11: Channel Close



Plot 12: Channel Move



Plot 13: Non-Occupancy

5.7.3 DFS Detection Bandwidth

20 MHz

EUT Frequency = 5600 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	
5590	1	1	1	1	1	1	1	1	1	1	100
5595	1	1	1	1	1	1	1	1	1	1	100
5600	1	1	1	1	1	1	1	1	1	1	100
5605	1	1	1	1	1	1	1	1	1	1	100
5610	1	1	1	1	1	1	1	1	1	1	100

Parameter	Value
U-NII 99% Transmission Power Bandwidth:	19.1
Lowest frequency with at least 90% detection (F_L):	5590
Highest frequency with at least 90% detection (F_H):	5610
Detection Bandwidth (F_H - F_L):	20
Detection Bandwidth percentage of 99% Transmission Power Bandwidth:	105%

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	
5570	1	1	1	1	1	1	1	1	1	1	100
5575	1	1	1	1	1	1	1	1	1	1	100
5580	1	1	1	1	1	1	1	1	1	1	100
5585	1	1	1	1	1	1	1	1	1	1	100
5590	1	1	1	1	1	1	1	1	1	1	100
5595	1	1	1	1	1	1	1	1	1	1	100
5600	1	1	1	1	1	1	1	1	1	1	100
5605	1	1	1	1	1	1	1	1	1	1	100
5610	1	1	1	1	1	1	1	1	1	1	100
Parameter											Value
U-NII 99% Transmission Power Bandwidth:											38.25
Lowest frequency with at least 90% detection (F_L):											5570
Highest frequency with at least 90% detection (F_H):											5610
Detection Bandwidth (F_H - F_L):											40
Detection Bandwidth percentage of 99% Transmission Power Bandwidth:											105%

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	
5570	1	1	1	1	1	1	1	1	1	1	100
5575	1	1	1	1	1	1	1	1	1	1	100
5580	1	1	1	1	1	1	1	1	1	1	100
5585	1	1	1	1	1	1	1	1	1	1	100
5590	1	1	1	1	1	1	1	1	1	1	100
5595	1	1	1	1	1	1	1	1	1	1	100
5600	1	1	1	1	1	1	1	1	1	1	100
5605	1	1	1	1	1	1	1	1	1	1	100
5610	1	1	1	1	1	1	1	1	1	1	100
5615	1	1	1	1	1	1	1	1	1	1	100
5620	1	1	1	1	1	1	1	1	1	1	100
5625	1	1	1	1	1	1	1	1	1	1	100
5630	1	1	1	1	1	1	1	1	1	1	100
5635	1	1	1	1	1	1	1	1	1	1	100
5640	1	1	1	1	1	1	1	1	1	1	100
5645	1	1	1	1	1	1	1	1	1	1	100
5650	1	1	1	1	1	1	1	1	1	1	100
Parameter											Value
U-NII 99% Transmission Power Bandwidth:											78.5
Lowest frequency with at least 90% detection (F_L):											5570
Highest frequency with at least 90% detection (F_H):											5650
Detection Bandwidth (F_H - F_L):											80
Detection Bandwidth percentage of 99% Transmission Power Bandwidth:											102%

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	
5490	1	1	1	1	1	1	1	1	1	1	100
5495	1	1	1	1	1	1	1	1	1	1	100
5500	1	1	1	1	1	1	1	1	1	1	100
5505	1	1	1	1	1	1	1	1	1	1	100
5510	1	1	1	1	1	1	1	1	1	1	100
5515	1	1	1	1	1	1	1	1	1	1	100
5520	1	1	1	1	1	1	1	1	1	1	100
5525	1	1	1	1	1	1	1	1	1	1	100
5530	1	1	1	1	1	1	1	1	1	1	100
5535	1	1	1	1	1	1	1	1	1	1	100
5540	1	1	1	1	1	1	1	1	1	1	100
5545	1	1	1	1	1	1	1	1	1	1	100
5550	1	1	1	1	1	1	1	1	1	1	100
5555	1	1	1	1	1	1	1	1	1	1	100
5560	1	1	1	1	1	1	1	1	1	1	100
5565	1	1	1	1	1	1	1	1	1	1	100
5570	1	1	1	1	1	1	1	1	1	1	100
5575	1	1	1	1	1	1	1	1	1	1	100
5580	1	1	1	1	1	1	1	1	1	1	100
5585	1	1	1	1	1	1	1	1	1	1	100
5590	1	1	1	1	1	1	1	1	1	1	100
5595	1	1	1	1	1	1	1	1	1	1	100
5600	1	1	1	1	1	1	1	1	1	1	100
5605	1	1	1	1	1	1	1	1	1	1	100
5610	1	1	1	1	1	1	1	1	1	1	100
5615	1	1	1	1	1	1	1	1	1	1	100
5620	1	1	1	1	1	1	1	1	1	1	100
5625	1	1	1	1	1	1	1	1	1	1	100
5630	1	1	1	1	1	1	1	1	1	1	100
5635	1	1	1	1	1	1	1	1	1	1	100
5640	1	1	1	1	1	1	1	1	1	1	100
5645	1	1	1	1	1	1	1	1	1	1	100
5650	1	1	1	1	1	1	1	1	1	1	100
Parameter											Value
U-NII 99% Transmission Power Bandwidth:											159
Lowest frequency with at least 90% detection (F_L):											5490
Highest frequency with at least 90% detection (F_H):											5650
Detection Bandwidth (F_H - F_L):											160
Detection Bandwidth percentage of 99% Transmission Power Bandwidth:											101%

5.7.4 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

Summary

Type	Detections	Trials	Detection Probability
Type 1	28	30	93%
Type 2	30	30	100%
Type 3	27	30	90%
Type 4	27	30	90%
Type 5	30	30	100%
Type 6	28	30	93%
Aggregate 1-4	112	120	93%

RADAR TYPE 1				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	**Number of Pulses per Burst**	**Pulse Width (µsec)**	**PRI (µs)**	**Detection (yes/no)**
1	22	1	2423	y
2	49	1	1081	y
3	22	1	2470	y
4	29	1	1841	y
5	22	1	2493	y
6	36	1	1480	y
7	70	1	760	y
8	51	1	1034	y
9	24	1	2250	y
10	28	1	1919	y
11	19	1	2793	n
12	31	1	1700	y
13	29	1	1878	n
14	21	1	2516	y
15	34	1	1565	y
16	30	1	1782	y
17	56	1	949	y
18	19	1	2839	y
19	22	1	2432	y
20	39	1	1386	y
21	25	1	2177	y
22	37	1	1456	y
23	41	1	1313	y
24	26	1	2078	y
25	28	1	1900	y
26	23	1	2377	y
27	61	1	873	y
28	25	1	2190	y
29	67	1	788	y
30	43	1	1235	y
				28/30: 93.3%

RADAR TYPE 2				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	**Number of Pulses per Burst**	**Pulse Width (µsec)**	**PRI (µs)**	**Detection (yes/no)**
1	27	1.9	170	y
2	24	3.3	184	y
3	29	2.8	195	y
4	23	3.7	152	y
5	28	3.5	184	y
6	26	1.3	201	y
7	29	1.1	213	y
8	24	3.3	177	y
9	23	2.1	160	y
10	29	3.7	150	y
11	29	4.3	199	y
12	25	2.7	179	y
13	25	4.2	229	y
14	29	2.2	207	y
15	25	2.1	186	y
16	25	1.2	228	y
17	26	4.6	166	y
18	24	2.4	191	y
19	26	3.4	208	y
20	24	4.4	222	y
21	26	2.4	204	y
22	25	4.1	174	y
23	28	4.7	204	y
24	29	4.2	205	y
25	26	3.7	228	y
26	26	4	161	y
27	27	1.3	218	y
28	23	2.3	217	y
29	23	2.4	195	y
30	27	4.4	219	y
				30/30: 100%

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	6.5	317	y
2	17	6.8	318	y
3	16	9.1	410	n
4	17	6.4	238	y
5	17	7.3	206	y
6	17	9.3	369	y
7	17	6.6	403	y
8	17	6.8	376	y
9	16	7.1	459	y
10	16	9	327	n
11	17	6.2	222	y
12	16	8.1	481	y
13	17	8.3	283	y
14	17	9.6	320	y
15	18	6	258	y
16	17	8.9	224	y
17	17	9.3	204	y
18	17	7.6	267	y
19	18	6.1	247	y
20	18	7.4	469	y
21	16	9	464	y
22	16	6.7	373	y
23	17	8.9	356	y
24	18	6.1	336	y
25	17	8.2	281	y
26	18	8.9	269	y
27	16	6.7	377	n
28	17	8.1	425	y
29	17	8.4	466	y
30	16	7.8	240	y
				27/30: 90%

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	12.8	399	y
2	14	11.7	482	y
3	13	14.4	230	y
4	15	18.4	273	y
5	12	11.9	463	y
6	14	13.6	224	y
7	15	13	206	y
8	12	11.8	297	y
9	14	13.6	353	n
10	16	14.8	308	y
11	12	16.2	214	y
12	16	19.1	358	n
13	16	13.3	227	y
14	13	15.8	358	y
15	15	11.8	225	y
16	15	13.7	217	y
17	13	17.6	436	y
18	13	16.8	384	n
19	13	15.8	345	y
20	13	17.2	380	y
21	14	17.1	324	y
22	12	13.7	399	y
23	15	14.3	213	y
24	13	12.7	252	y
25	12	19.1	265	y
26	15	15.1	337	y
27	15	18	259	y
28	14	18.8	274	y
29	13	18.2	306	y
30	15	15.7	249	y
				27/30: 90%

TYPE 5	Rohde & Schwarz K350 Pulse Sequencer DFS			
Trial #	**Detection (yes/no)**	**Chirp Width (MHz)**	**Subset**	**Fc**
1	y	18	1	5500
2	y	19	1	5500
3	y	15	1	5500
4	y	19	1	5500
5	y	9	1	5500
6	y	9	1	5500
7	y	13	1	5500
8	y	17	1	5500
9	y	9	1	5500
10	y	9	1	5500
11	y	10	2	5495
12	y	9	2	5494.6
13	y	19	2	5498.6
14	y	6	2	5493.4
15	y	13	2	5496.2
16	y	16	2	5497.4
17	y	9	2	5494.6
18	y	15	2	5497
19	y	17	2	5497.8
20	y	14	2	5496.6
21	y	16	3	5502.6
22	y	9	3	5505.4
23	y	12	3	5504.2
24	y	5	3	5507
25	y	9	3	5505.4
26	y	13	3	5503.8
27	y	10	3	5505
28	y	16	3	5502.6
29	y	7	3	5506.2
30	y	18	3	5501.8

30/30: 100%

TYPE 6 S	Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	**Detection (yes/no)**
1	y
2	y
3	y
4	y
5	y
6	y
7	y
8	y
9	y
10	y
11	y
12	y
13	y
14	y
15	n
16	y
17	y
18	y
19	n
20	y
21	y
22	y
23	y
24	y
25	y
26	y
27	y
28	y
29	y
30	y
	28/30: 93.3%

40 MHz

Summary

Type	Detections	Trials	Detection Probability
Type 1	29	30	97%
Type 2	30	30	100%
Type 3	30	30	100%
Type 4	26	30	87%
Type 5	30	30	100%
Type 6	30	30	100%
Aggregate 1-4	115	120	96%

RADAR TYPE 1				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	**Number of Pulses per Burst**	**Pulse Width (µsec)**	**PRI (µs)**	**Detection (yes/no)**
1	89	1	594	y
2	59	1	905	y
3	49	1	1078	y
4	21	1	2576	y
5	78	1	681	y
6	82	1	645	y
7	18	1	2950	n
8	100	1	530	y
9	90	1	587	y
10	83	1	641	y
11	39	1	1378	y
12	18	1	2967	y
13	18	1	3040	y
14	20	1	2654	y
15	54	1	990	y
16	21	1	2630	y
17	31	1	1706	y
18	50	1	1072	y
19	38	1	1392	y
20	23	1	2366	y
21	53	1	998	y
22	20	1	2635	y
23	40	1	1342	y
24	18	1	2998	y
25	21	1	2551	y
26	47	1	1143	y
27	21	1	2597	y
28	35	1	1530	y
29	34	1	1552	y
30	57	1	926	y
				29/30: 96.7%

RADAR TYPE 2				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	**Number of Pulses per Burst**	**Pulse Width (µsec)**	**PRI (µs)**	**Detection (yes/no)**
1	25	3.1	153	y
2	23	4.9	205	y
3	23	2	159	y
4	25	1.9	194	y
5	29	3.5	173	y
6	29	3.9	223	y
7	23	1.7	178	y
8	26	1.6	160	y
9	28	4.6	205	y
10	28	2.1	153	y
11	24	3.2	222	y
12	25	1.6	168	y
13	24	2	169	y
14	25	2.5	218	y
15	28	1.8	204	y
16	28	3.4	225	y
17	23	2.5	154	y
18	25	1	199	y
19	26	3.8	218	y
20	28	3.9	209	y
21	24	2	222	y
22	29	4.4	153	y
23	26	2.7	189	y
24	25	3.2	150	y
25	24	4.9	183	y
26	28	2.9	210	y
27	28	4.5	168	y
28	26	1.2	204	y
29	24	3.7	165	y
30	26	3.4	225	y
				30/30: 100%

RADAR TYPE 3				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	**Number of Pulses per Burst**	**Pulse Width (µsec)**	**PRI (µs)**	**Detection (yes/no)**
1	16	6.3	262	y
2	16	8.3	339	y
3	18	8.2	356	y
4	16	9.6	284	y
5	17	8.7	486	y
6	17	9.8	295	y
7	16	9.1	339	y
8	16	7.7	318	y
9	17	8	281	y
10	16	9.5	234	y
11	18	9.9	214	y
12	17	9.4	442	y
13	18	8.4	308	y
14	18	8.1	258	y
15	16	8.3	244	y
16	18	7.4	316	y
17	17	9.7	483	y
18	17	7.9	340	y
19	18	9.4	380	y
20	18	8.5	455	y
21	17	9.7	358	y
22	16	7.5	344	y
23	17	7.3	420	y
24	16	8.1	326	y
25	17	6.9	223	y
26	17	9.5	432	y
27	16	8.2	249	y
28	17	8	360	y
29	18	7.1	485	y
30	16	9.1	200	y
				30/30: 100%

RADAR TYPE 4				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	**Number of Pulses per Burst**	**Pulse Width (µsec)**	**PRI (µs)**	**Detection (yes/no)**
1	13	12.9	365	y
2	14	15.6	220	y
3	14	11.4	449	y
4	14	13.9	215	y
5	13	16.3	469	y
6	15	11.9	452	y
7	12	17.9	311	y
8	12	12.1	388	y
9	15	16.3	420	y
10	14	16.8	403	n
11	14	16.2	429	y
12	13	16.8	484	y
13	15	18.4	427	y
14	13	19.7	346	y
15	13	12.4	261	y
16	13	16.9	361	y
17	16	18.8	325	y
18	14	16.2	289	n
19	15	15.2	404	n
20	14	11.8	327	y
21	13	16.4	496	y
22	14	11.2	291	y
23	14	12.8	391	y
24	12	16.5	373	y
25	13	17.7	371	y
26	15	11.5	468	y
27	16	14.4	318	n
28	16	12.2	452	y
29	15	14	224	y
30	13	14.2	305	y
				26/30: 86.7%

TYPE 5	Rohde & Schwarz K350 Pulse Sequencer DFS			
Trial #	**Detection (yes/no)**	**Chirp Width (MHz)**	**Subset**	**Fc**
1	y	10	1	5500
2	y	7	1	5500
3	y	7	1	5500
4	y	15	1	5500
5	y	12	1	5500
6	y	16	1	5500
7	y	19	1	5500
8	y	6	1	5500
9	y	19	1	5500
10	y	11	1	5500
11	y	11	2	5495.4
12	y	8	2	5494.2
13	y	17	2	5497.8
14	y	7	2	5493.8
15	y	10	2	5495
16	y	5	2	5493
17	y	11	2	5495.4
18	y	6	2	5493.4
19	y	14	2	5496.6
20	y	16	2	5497.4
21	y	12	3	5504.2
22	y	17	3	5502.2
23	y	5	3	5507
24	y	19	3	5501.4
25	y	12	3	5504.2
26	y	10	3	5505
27	y	14	3	5503.4
28	y	18	3	5501.8
29	y	8	3	5505.8
30	y	8	3	5505.8

30/30: 100%

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

80 MHz

Summary

Type	Detections	Trials	Detection Probability
Type 1	30	30	100%
Type 2	30	30	100%
Type 3	28	30	93%
Type 4	26	30	87%
Type 5	29	30	97%
Type 6	26	30	87%
Aggregate 1-4	114	120	95%

RADAR TYPE 1				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	**Number of Pulses per Burst**	**Pulse Width (µsec)**	**PRI (µs)**	**Detection (yes/no)**
1	34	1	1579	y
2	18	1	2952	y
3	23	1	2391	y
4	53	1	1002	y
5	27	1	1985	y
6	66	1	799	y
7	18	1	3065	y
8	48	1	1114	y
9	27	1	1968	y
10	18	1	2929	y
11	31	1	1736	y
12	25	1	2168	y
13	21	1	2561	y
14	39	1	1363	y
15	49	1	1079	y
16	37	1	1453	y
17	54	1	988	y
18	99	1	533	y
19	27	1	2014	y
20	21	1	2525	y
21	35	1	1536	y
22	24	1	2281	y
23	22	1	2471	y
24	18	1	2938	y
25	18	1	3048	y
26	25	1	2125	y
27	27	1	2025	y
28	49	1	1086	y
29	33	1	1622	y
30	69	1	771	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	2.5	221	y
2	26	4.8	189	y
3	27	4.8	176	y
4	24	2.8	215	y
5	28	3.7	210	y
6	28	2.7	226	y
7	26	1.6	201	y
8	26	1.4	160	y
9	27	4.3	171	y
10	28	3.9	205	y
11	28	3.4	208	y
12	27	1.2	160	y
13	28	1.2	178	y
14	25	4.9	151	y
15	27	3.4	204	y
16	23	4.9	205	y
17	28	2.8	228	y
18	27	1.6	224	y
19	27	3.7	155	y
20	25	3.2	202	y
21	24	1.8	213	y
22	27	3.2	178	y
23	25	3.7	213	y
24	24	4.5	210	y
25	29	4.9	186	y
26	26	1.1	160	y
27	25	1.5	150	y
28	23	4.6	222	y
29	23	1.1	208	y
30	25	2.7	228	y
				30/30: 100%

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	7.8	470	y
2	18	7.2	256	y
3	16	8.6	357	y
4	17	8.8	496	y
5	16	9.3	328	y
6	18	7	291	y
7	17	6.3	448	y
8	17	6	457	y
9	17	7.1	218	y
10	16	9.9	304	y
11	17	9.7	386	y
12	16	6.4	375	y
13	18	9.8	352	y
14	16	7.7	322	y
15	16	6.4	204	n
16	16	6.7	238	y
17	16	7.1	264	y
18	17	8.8	423	n
19	16	8.4	257	y
20	17	9.1	374	y
21	17	8.8	353	y
22	17	6.3	336	y
23	18	8.8	403	y
24	16	7.7	281	y
25	17	8.7	458	y
26	16	6.9	282	y
27	18	9.3	283	y
28	17	7.2	449	y
29	16	8.9	429	y
30	17	6.8	474	y
				28/30: 93.3%

RADAR TYPE 4				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	**Number of Pulses per Burst**	**Pulse Width (µsec)**	**PRI (µs)**	**Detection (yes/no)**
1	15	12.9	478	y
2	13	13.5	341	y
3	13	18	481	y
4	15	12.2	379	n
5	15	17.7	381	y
6	13	12.7	313	y
7	13	13.1	300	n
8	12	19.8	486	n
9	13	12.6	458	y
10	14	16.8	445	y
11	16	14.7	364	y
12	13	13.5	275	y
13	12	18.6	443	n
14	13	15.1	294	y
15	15	13.9	289	y
16	16	19.7	227	y
17	15	14.2	424	y
18	15	13	355	y
19	15	19.2	427	y
20	14	13.6	237	y
21	14	13.6	442	y
22	16	16.2	408	y
23	13	18.5	473	y
24	12	18.1	467	y
25	12	16.9	207	y
26	16	14.5	207	y
27	14	19.5	479	y
28	13	12.9	457	y
29	13	16.3	274	y
30	15	15	287	y
				26/30: 86.7%

TYPE 5	Rohde & Schwarz K350 Pulse Sequencer DFS			
Trial #	**Detection (yes/no)**	**Chirp Width (MHz)**	**Subset**	**Fc**
1	y	10	1	5500
2	y	17	1	5500
3	y	17	1	5500
4	y	15	1	5500
5	y	10	1	5500
6	y	18	1	5500
7	y	8	1	5500
8	y	16	1	5500
9	y	15	1	5500
10	y	11	1	5500
11	y	9	2	5494.6
12	y	18	2	5498.2
13	n	9	2	5494.6
14	y	7	2	5493.8
15	y	13	2	5496.2
16	y	8	2	5494.2
17	y	6	2	5493.4
18	y	16	2	5497.4
19	y	7	2	5493.8
20	y	13	2	5496.2
21	y	19	3	5501.4
22	y	5	3	5507
23	y	10	3	5505
24	y	17	3	5502.2
25	y	18	3	5501.8
26	y	8	3	5505.8
27	y	11	3	5504.6
28	y	7	3	5506.2
29	y	11	3	5504.6
30	y	10	3	5505

29/30: 96.7%

TYPE 6 S	Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	**Detection (yes/no)**
1	y
2	y
3	y
4	n
5	y
6	y
7	y
8	y
9	y
10	y
11	y
12	n
13	y
14	y
15	y
16	n
17	y
18	y
19	y
20	y
21	y
22	y
23	n
24	y
25	y
26	y
27	y
28	y
29	y
30	y
	26/30: 86.7%

160 MHz

Summary

Type	Detections	Trials	Detection Probability
Type 1	28	30	93%
Type 2	27	30	90%
Type 3	26	30	87%
Type 4	26	30	87%
Type 5	30	30	100%
Type 6	27	30	90%
Aggregate 1-4	107	120	89%

RADAR TYPE 1				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	**Number of Pulses per Burst**	**Pulse Width (µsec)**	**PRI (µs)**	**Detection (yes/no)**
1	61	1	878	y
2	78	1	678	y
3	58	1	918	y
4	62	1	858	y
5	70	1	758	y
6	63	1	838	y
7	83	1	638	y
8	89	1	598	y
9	68	1	778	y
10	76	1	698	y
11	102	1	518	y
12	18	1	3066	y
13	57	1	938	y
14	67	1	798	y
15	65	1	818	y
16	30	1	1788	y
17	35	1	1514	y
18	66	1	808	y
19	85	1	621	y
20	23	1	2296	y
21	45	1	1178	n
22	31	1	1737	y
23	26	1	2068	n
24	59	1	902	y
25	18	1	2938	y
26	23	1	2311	y
27	28	1	1889	y
28	55	1	961	y
29	31	1	1710	y
30	38	1	1412	y
				28/30: 93.3%

RADAR TYPE 2				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	**Number of Pulses per Burst**	**Pulse Width (µsec)**	**PRI (µs)**	**Detection (yes/no)**
1	23	2.8	171	y
2	27	3	181	n
3	25	1.2	161	y
4	27	3.7	218	y
5	27	4.4	167	y
6	29	4.3	196	y
7	25	3.3	155	n
8	27	1.3	157	y
9	24	1.4	225	y
10	24	2	213	y
11	28	3.2	188	y
12	27	3.1	151	y
13	26	3.3	164	y
14	26	2.3	181	y
15	26	1.8	177	y
16	29	1.4	188	y
17	25	1.3	178	y
18	25	4.2	177	y
19	26	1.9	182	y
20	27	1.6	156	y
21	27	4.3	174	y
22	26	2.6	210	y
23	24	1.2	172	y
24	29	1.5	223	y
25	27	2.7	158	y
26	29	1.2	222	y
27	27	1.9	156	y
28	25	2.9	219	y
29	28	3	185	y
30	28	2.7	212	n
				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	16	6.4	218	y
2	17	6.5	276	y
3	18	9.8	255	y
4	18	6.8	372	n
5	17	9.9	340	y
6	17	9.8	248	y
7	18	8.1	288	y
8	17	9.5	240	y
9	18	7.9	417	y
10	16	9.6	342	y
11	17	7.8	486	y
12	16	7.5	374	y
13	17	9.3	361	y
14	18	9.2	249	y
15	17	8.3	456	y
16	16	7.8	337	y
17	16	9.9	462	y
18	17	6.7	246	y
19	17	7.5	267	y
20	16	9.9	233	n
21	16	9.6	296	y
22	16	6	274	y
23	16	7.8	341	n
24	17	9.4	485	y
25	18	9.6	208	y
26	16	9.9	290	y
27	17	7.5	381	y
28	16	8.9	430	y
29	17	9.6	285	n
30	18	9.7	303	y
				26/30: 86.7%

RADAR TYPE 4				Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	**Number of Pulses per Burst**	**Pulse Width (µsec)**	**PRI (µs)**	**Detection (yes/no)**
1	13	17.7	476	y
2	13	14	482	y
3	14	19.5	488	n
4	14	14.9	202	y
5	15	16.6	348	y
6	14	11.5	433	y
7	12	19.6	339	n
8	13	11.4	347	y
9	13	16.7	205	y
10	16	11.6	309	y
11	14	12.1	417	y
12	16	13.8	206	n
13	16	18.8	257	y
14	13	15.6	310	y
15	15	16.8	384	y
16	14	17.8	208	y
17	12	17	222	y
18	16	15.6	409	y
19	13	11.2	344	y
20	14	16.3	394	y
21	14	17.4	358	n
22	13	14.3	456	y
23	14	18.1	484	y
24	12	14	250	y
25	15	17.4	304	y
26	15	18.4	339	y
27	15	15.3	201	y
28	13	14.6	418	y
29	13	17.9	221	y
30	14	17.6	351	y
				26/30: 86.7%

TYPE 5	Rohde & Schwarz K350 Pulse Sequencer DFS			
Trial #	**Detection (yes/no)**	**Chirp Width (MHz)**	**Subset**	**Fc**
1	y	12	1	5500
2	y	14	1	5500
3	y	16	1	5500
4	y	15	1	5500
5	y	6	1	5500
6	y	8	1	5500
7	y	6	1	5500
8	y	9	1	5500
9	y	18	1	5500
10	y	6	1	5500
11	y	13	2	5496.2
12	y	7	2	5493.8
13	y	18	2	5498.2
14	y	13	2	5496.2
15	y	12	2	5495.8
16	y	9	2	5494.6
17	y	17	2	5497.8
18	y	7	2	5493.8
19	y	16	2	5497.4
20	y	6	2	5493.4
21	y	17	3	5502.2
22	y	17	3	5502.2
23	y	15	3	5503
24	y	9	3	5505.4
25	y	12	3	5504.2
26	y	6	3	5506.6
27	y	8	3	5505.8
28	y	8	3	5505.8
29	y	19	3	5501.4
30	y	14	3	5503.4

30/30: 100%

TYPE 6 S	Rohde & Schwarz K350 Pulse Sequencer DFS
Trial #	**Detection (yes/no)**
1	y
2	y
3	y
4	y
5	y
6	y
7	y
8	y
9	y
10	n
11	y
12	y
13	y
14	y
15	y
16	y
17	y
18	y
19	y
20	y
21	y
22	y
23	y
24	y
25	y
26	y
27	n
28	y
29	n
30	y
	27/30: 90%

-- End of Test Report --