DFS MEASUREMENT REPORT

FCC ID	:	2BCGWRE655BE
Applicant	:	TP-LINK CORPORATION PTE. LTD.
Application Type	:	Certification
Product	:	BE11000 Tri-Band Wi-Fi 7 Range Extender
Model No.	:	RE655BE
Brand Name	:	tp-link
FCC Classification	:	Unlicensed National Information Infrastructure (NII)
FCC Rule Part(s)	:	Part 15 Subpart E - 15.407 Section (h)(2)
Type of Device	:	Master Device Slave with Radar Detection
Received Date	:	January 30, 2024
Test Date	:	April 25, 2024~ May 14, 2024

Tested By : Peter Syu
(Peter Syu)

Reviewed By : Paddy Chen
(Paddy Chen)

Approved By : Chenz Ker
(Chenz Ker)

Testing Laboratory
3261

The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in KDB 905462 D02v02. Test results reported herein relate only to the item(s) tested.

Revision History

Report No.	Version	Description	Issue Date	Note
2401TW0118-U4	1.0	Original Report	2024-05-17	Valid

CONTENTS

General Information

Applicant	TP-LINK CORPORATION PTE. LTD.
Applicant Address	7 Temasek Boulevard #29-03 Suntec Tower One, Singapore 038987
Manufacturer	TP-LINK CORPORATION PTE. LTD.
Manufacturer Address	7 Temasek Boulevard #29-03 Suntec Tower One, Singapore 038987
Test Site	MRT Technology (Taiwan) Co., Ltd
Test Site Address	No. 38, Fuxing Second Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C)
MRT FCC Registration No.	291082
FCC Rule Part(s)	Part 15.407

Test Facility / Accreditations

1. MRT facility is a FCC registered (Reg. No. 291082) test facility with the site description report on file and is designated by the FCC as an Accredited Test Firm.
2. MRT facility is an IC registered (MRT Reg. No. 21723) test laboratory with the site description on file at Industry Canada.
3. MRT Lab is accredited to ISO 17025 by the Taiwan Accreditation Foundation (TAF Cert. No. 3261) in EMC, Telecommunications and Radio testing for FCC (Designation Number: TW3261), Industry Canada, EU and TELEC Rules.

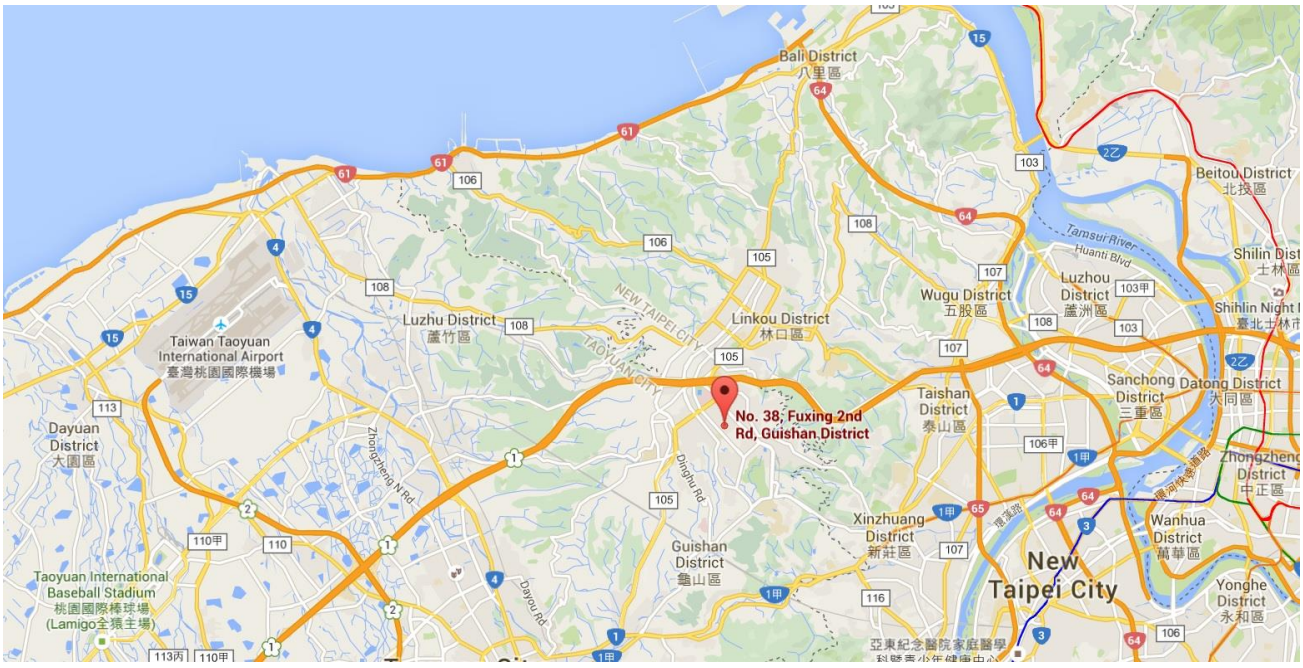
1. INTRODUCTION

1.1. Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Innovation, Science and Economic Development Canada and Certification and Engineering Bureau.

1.2. MRT Test Location

The map below shows the location of the MRT LABORATORY, its proximity to the Taoyuan City. These measurement tests were conducted at the MRT Technology (Taiwan) Co., Ltd. Facility located at No.38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 33377, Taiwan (R.O.C).



2. PRODUCT INFORMATION

2.1. Equipment Description

Product Name:	BE11000 Tri-Band Wi-Fi 7 Range Extender
Model No.:	RE655BE
Brand Name:	tp-link
Wi-Fi Specification:	802.11a/b/g/n/ac/ax/be
EUT Identification No.:	#1-3 (DFS)
Power Voltage	AC 100-240V 50-60Hz 0.5A

2.2. Product Specification Subjective to this Report

Frequency Range:	For 802.11a/n-HT20/ac-VHT20/ax-HE20/be-EHT20: 5260~5320 MHz, 5500~5720MHz For 802.11n-HT40/ac-VHT40/ax-HE40/be-EHT40: 5270~5310 MHz, 5510~5710MHz For 802.11ac-VHT80/ax-HE80/be-EHT80: 5290MHz, 5530MHz, 5610MHz, 5690MHz For 802.11ac-VHT160/ax-HE160/be-EHT160: 5250MHz, 5570MHz For 802.11 be-EHT240: 5650MHz
Type of Modulation:	802.11a/n/ac: OFDM, 802.11ax/be: OFDMA
TPC mechanism:	Support (Details refer to operational description)
Power-on cycle:	Requires 65.4 seconds to complete its power-on cycle
Uniform Spreading (For DFS Frequency Band):	For the 5250-5350MHz, 5470-5725 MHz bands, the Master device provides, on aggregate, uniform loading of the spectrum across all devices by selecting an operating channel among the available channels using a random algorithm.

2.3. Description of Available Antennas

Antenna Type	Frequency Band (MHz)	T_X Paths	Number of spatial streams	Max Antenna Gain (dBi)	Beamforming Directional Gain(dBi)	CDD Directional Gain (dBi)	
						For Power	For PSD
Dipole	5150 ~ 5850	2	1	3.00	6.01	3.00	6.01

Remark:

1. The EUT supports Cyclic Delay Diversity (CDD) mode, and CDD signals are correlated.

   If all antennas have the same gain, G_{ANT}, Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

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

   Array Gain = 10 log (N_{ANT}/ N_{SS}) dB;

   • For power measurements on IEEE 802.11 devices,

   Array Gain = 0 dB for $N_{ANT} \leq 4$;

2. The EUT also supports Beam Forming mode, and the Beam Forming support 802.11ac/ax/be, not include 802.11a/b/g/n. BF Directional gain = G_{ANT} + 10 log (N_{ANT}).

3. All messages of antenna were from the AUT report.

Test Mode	T_X Paths	CDD Mode	Beamforming Mode
802.11a/n (NII)	2	√	X
802.11ac/ax/be (NII)	2	√	√

2.4. Operating Frequency and Channel List for this Report

802.11a/n-HT20/ac-VHT20/ax-HE20/be-EHT20

Channel	Frequency	Channel	Frequency	Channel	Frequency
52	5260 MHz	56	5280 MHz	60	5300 MHz
64	5320 MHz	100	5500 MHz	104	5520 MHz
108	5540 MHz	112	5560 MHz	116	5580 MHz
120	5600 MHz	124	5620 MHz	128	5640 MHz
132	5660 MHz	136	5680 MHz	140	5700 MHz
144	5720 MHz	--	--	--	--

802.11n-HT40/ac-VHT40/ax-HE40/be-EHT40

Channel	Frequency	Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz	102	5510 MHz
110	5550 MHz	118	5590 MHz	126	5630 MHz
134	5670 MHz	142	5710 MHz	--	--

802.11ac-VHT80/ax-HE80/be-EHT80

Channel	Frequency	Channel	Frequency	Channel	Frequency
58	5290 MHz	106	5530 MHz	122	5610 MHz
138	5690 MHz	--	--	--	--

802.11ac-VHT160/ax-HE160/be-EHT160

Channel	Frequency	Channel	Frequency	Channel	Frequency
50	5250MHz	114	5570 MHz	--	--

802.11be-EHT240

Channel	Frequency	Channel	Frequency	Channel	Frequency
130	5650 MHz	--	--	--	--

2.5. Test Channels for this Report

Test Mode	Test Channel	Test Frequency
802.11be-EHT20	100	5500 MHz
802.11be-EHT40	102	5510 MHz
802.11be-EHT80	106	5530 MHz
802.11be-EHT160	50	5250 MHz
802.11be-EHT160	114	5570 MHz
802.11be-EHT240	130	5650 MHz

2.6. Test Mode

Test Mode	1. Make the EUT communicate with notebook at DFS channel_ Master 2. Make the EUT communicate with notebook at DFS channel_ Mesh 3. Make the EUT communicate with notebook at DFS channel_ Slave

2.7. Applied Standards

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

- FCC Part15 Subpart E (Section 15.407 Section (h)(2))
- KDB 905462 D02v02
- KDB 905462 D04v01

3. DFS DETECTION THRESHOLDS AND RADAR TEST WAVEFORMS

3.1. Applicability

The following table from FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02 lists the applicable requirements for the DFS testing.

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

Table 3-1: Applicability of DFS Requirements Prior to Use of a Channel

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

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

Table 3-2: Applicability of DFS Requirements during normal operation

3.2. DFS Devices Requirements

Per FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02 the following are the requirements for Master Devices:

(a) The Master Device will use DFS in order to detect Radar Waveforms with received signal strength above the DFS Detection Threshold in the 5250 ~ 5350 MHz and 5470 ~ 5725 MHz bands. DFS is not required in the 5150 ~ 5250 MHz or 5725 ~ 5825 MHz bands.

(b) Before initiating a network on a Channel, the Master Device will perform a Channel Availability Check for a specified time duration (Channel Availability Check Time) to ensure that there is no radar system operating on the Channel, using DFS described under subsection a) above.

(c) The Master Device initiates a U-NII network by transmitting control signals that will enable other U-NII devices to Associate with the Master Device.

(d) During normal operation, the Master Device will monitor the Channel (In-Service Monitoring) to ensure that there is no radar system operating on the Channel, using DFS described under a).

(e) If the Master Device has detected a Radar Waveform during In-Service Monitoring as described under d), the Operating Channel of the U-NII network is no longer an Available Channel. The Master Device will instruct all associated Client Device(s) to stop transmitting on this Channel within the Channel Move Time. The transmissions during the Channel Move Time will be limited to the Channel Closing Transmission Time.

(f) Once the Master Device has detected a Radar Waveform it will not utilize the Channel for the duration of the Non-Occupancy Period.

(g) If the Master Device delegates the In-Service Monitoring to a Client Device, then the combination will be tested to the requirements described under d) through f) above.

Channel Move Time and Channel Closing Transmission Time requirements are listed in the following table.

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1.
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.
Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.	

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions. Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

Table 3-3: DFS Response Requirements

3.3. DFS Detection Threshold Values

The DFS detection thresholds are defined for Master devices and Client Devices with In-service monitoring. These detection thresholds are listed in the following table.

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.	

Table 3-4: Detection Thresholds for Master Devices and Client Devices with Radar Detection

3.4. Parameters of DFS Test Signals

This section provides the parameters for required test waveforms, minimum percentage of successful detections, and the minimum number of trials that must be used for determining DFS conformance. Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 3-6	$\text{Roundup}\left\{\left(\frac{1}{360}\right)\cdot\left(\frac{19\cdot 10^6}{\text{PRI}_{\text{usec}}}\right)\right\}$	60%	30
		Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.					

Table 3-5: Parameters for Short Pulse Radar Waveforms

A minimum of 30 unique waveforms are required for each of the Short Pulse Radar Types 2 through 4. If more than 30 waveforms are used for Short Pulse Radar Types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms.

Pulse Repetition Frequency Number	Pulse Repetition Frequency (Pulses Per Second)	Pulse Repetition Interval (Microseconds)
1	1930.5	518
2	1858.7	538
3	1792.1	558
4	1730.1	578
5	1672.2	598
6	1618.1	618
7	1567.4	638
8	1519.8	658
9	1474.9	678
10	1432.7	698
11	1392.8	718
12	1355	738
13	1319.3	758
14	1285.3	778
15	1253.1	798
16	1222.5	818
17	1193.3	838
18	1165.6	858
19	1139	878
20	1113.6	898
21	1089.3	918
22	1066.1	938
23	326.2	3066

Table 3-6: Pulse Repetition Intervals Values for Test A

Long Pulse Radar Test Waveform

Radar Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Number of Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Number of Trials
5	50 - 100	5 - 20	1000 - 2000	1 - 3	8 - 20	80%	30

Table 3-7: Parameters for Long Pulse Radar Waveforms

The parameters for this waveform are randomly chosen. Thirty unique waveforms are required for the Long Pulse Radar Type waveforms. If more than 30 waveforms are used for the Long Pulse Radar Type waveforms, then each additional waveform must also be unique and not repeated from the previous waveforms.

Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (μsec)	PRI (μsec)	Pulses Per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Number of Trials
6	1	333	9	0.333	300	70%	30

Table 3-8: Parameters for Frequency Hopping Radar Waveforms

For the Frequency Hopping Radar Type, the same Burst parameters are used for each waveform. The hopping sequence is different for each waveform and a 100-length segment is selected from the hopping sequence defined by the following algorithm:

The first frequency in a hopping sequence is selected randomly from the group of 475 integer frequencies from 5250 – 5724MHz. Next, the frequency that was just chosen is removed from the group and a frequency is randomly selected from the remaining 474 frequencies in the group. This process continues until all 475 frequencies are chosen for the set. For selection of a random frequency, the frequencies remaining within the group are always treated as equally likely.

3.5. Conducted Test Setup

The FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02 describes a radiated test setup and a conducted test setup. The conducted test setup was used for this testing. Figure 3-1 shows the typical test setup.

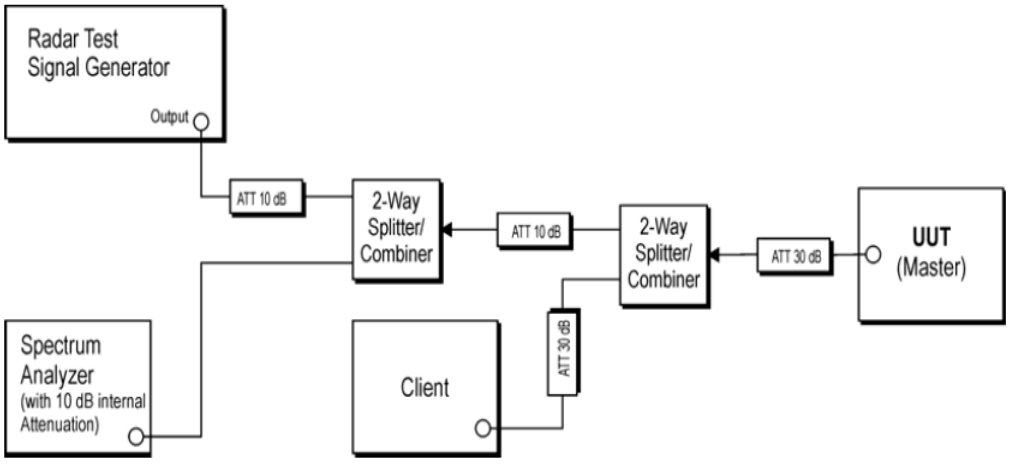


Figure 3-1: Conducted Test Setup where UUT is a Master and Radar Test Waveforms are injected into the Masters

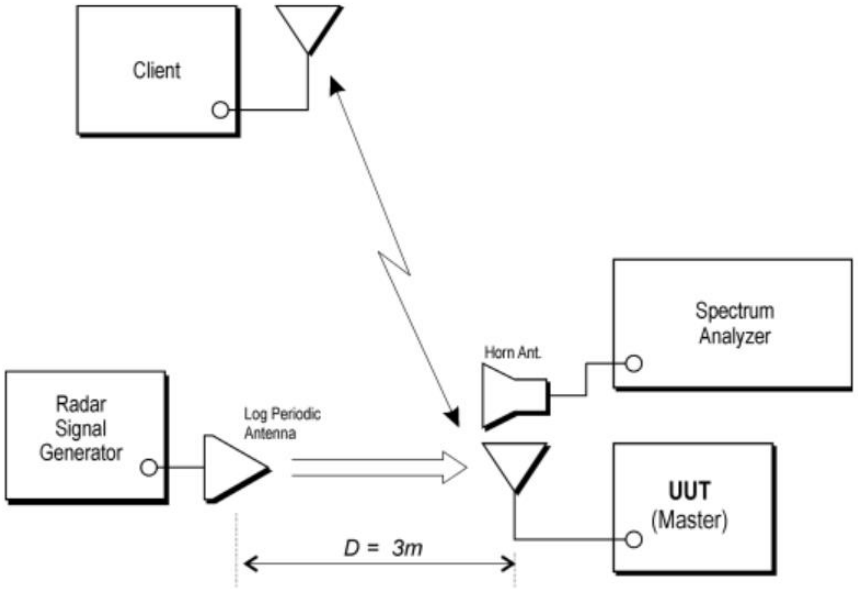


Figure 3-2: Radiated Test Setup where UUT is a Master and Radar Test Waveforms are injected into the UUT

4. TEST EQUIPMENT CALIBRATION DATE

Dynamic Frequency Selection (DFS)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EXA Signal Analyzer	KEYSIGHT	N9010A	MRTTWA00012	1 year	2024/10/17
EXA Signal Analyzer	KEYSIGHT	N9010B	MRTTWA00074	1 year	2024/7/19
Vector Signal Generator	Keysight	N5182B	MRTTWA00010	1 year	2024/5/22
Combiner	WOKEN	0120A04208001S	MRTTWE00008	1 year	2024/6/15

Client Information

Instrument	Manufacturer	Type No.	Certification Number
Wi-Fi Router	TP-LINK CORPORATION PTE.LTD.	RE655BE	FCC ID: 2BCGWRE655BE
Note: The device was config to client mode by the software and it has been compliance with IEEE 802.11be Draft Version 2.0.			

Software	Version	Manufacturer	Function
Pulse Building(N7607B)	V3.0.0	Keysight	Radar Signal Generation Software
DFS Tool	V6.7	Keysight	DFS Test Software

5. TEST RESULT

5.1. Summary

Parameter	Limit	Test Result	Reference
UNII Detection Bandwidth Measurement	Refer Table 3-3	Pass	Section 5.3
Initial Channel Availability Check Time	Refer Table 3-3	Pass	Section 5.4
Radar Burst at the Beginning of the Channel Availability Check Time	Refer Table 3-3	Pass	Section 5.5
Radar Burst at the End of the Channel Availability Check Time	Refer Table 3-3	Pass	Section 5.6
In-Service Monitoring for Channel Move Time, Channel Closing Transmission Time	Refer Table 3-3	Pass	Section 5.7
Non-Occupancy Period	Refer Table 3-3	Pass	Section 5.7
Statistical Performance Check	Refer Table 3-3	Pass	Section 5.8

Note:

1) Determining compliance is based on the test results met the regulation limits or requirements declared by clients, and the test results don't take into account the value of measurement uncertainty.

5.2. Radar Waveform Calibration

5.2.1. Calibration Setup

The conducted test setup was used for this calibration testing. Figure 3-2 shows the typical test setup.

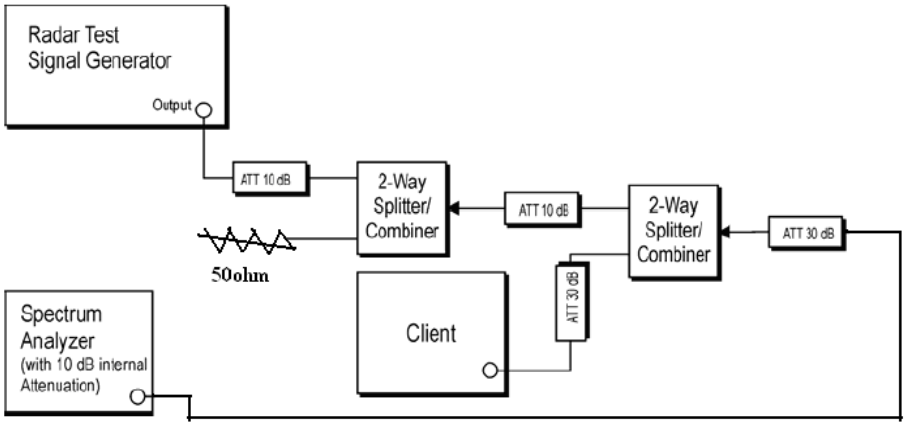


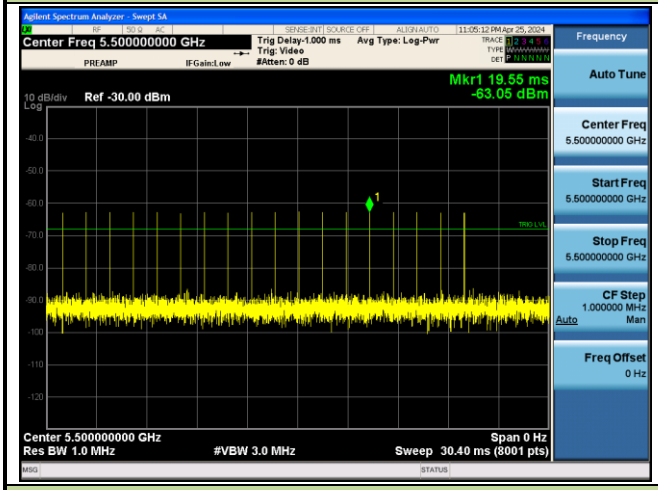
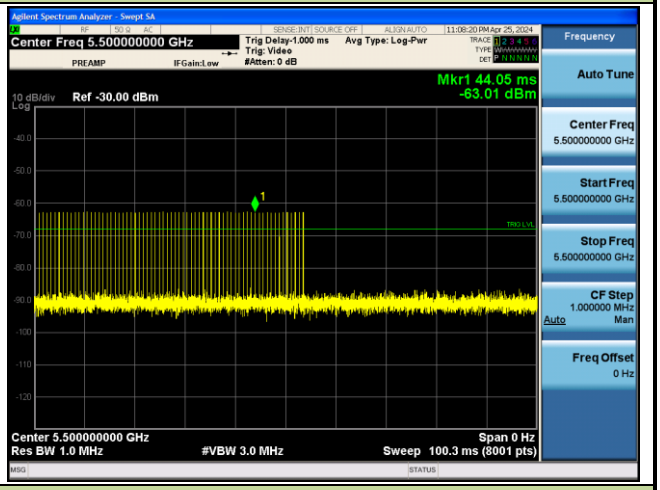
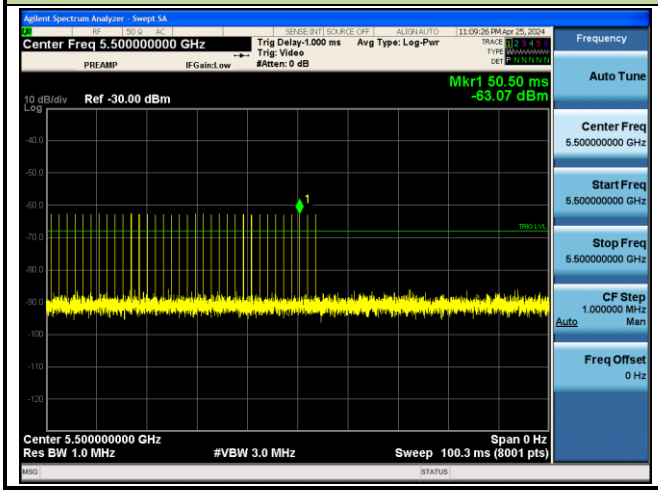
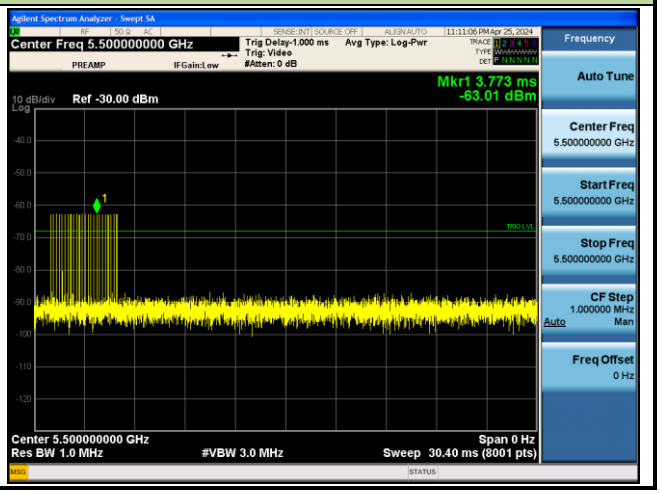
Figure 3-2: Conducted Test Setup

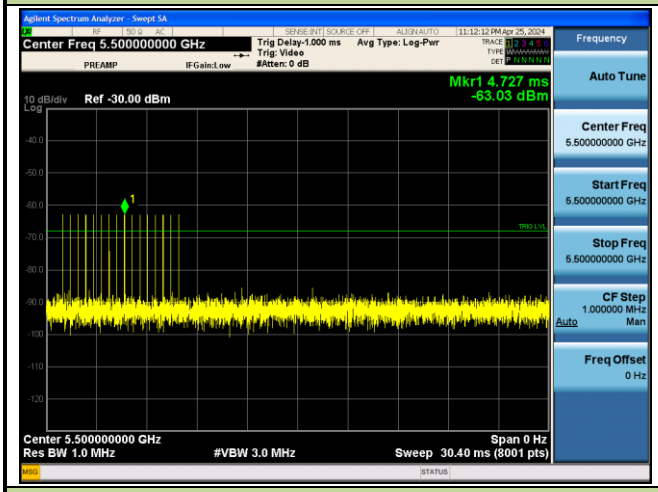
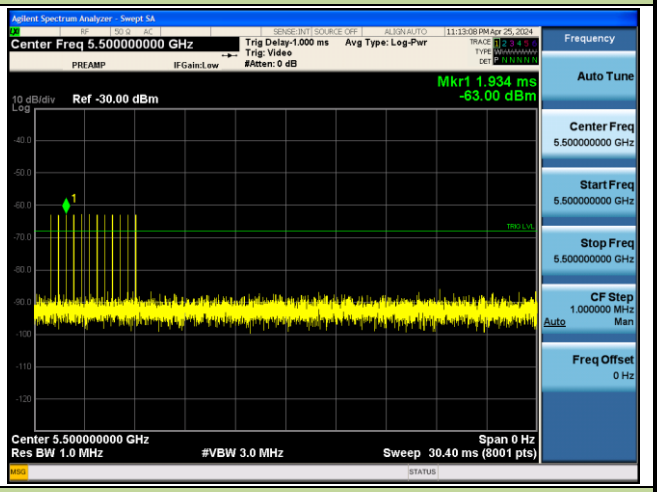
5.2.2. Calibration Procedure

The Interference Radar Detection Threshold Level is (-64dBm) + (0) [dBi] + 1 dB= -63 dBm that had been taken into account the output power range and antenna gain. The above equipment setup was used to calibrate the conducted Radar Waveform. A vector signal generator was utilized to establish the test signal level for each radar type. During this process there were replace 50ohm terminal form Master and Client device and no transmissions by either the Master or Client Device. The spectrum analyzer was switched to the zero span (Time Domain) at the frequency of the Radar Waveform generator. Peak detection was used. The spectrum analyzer resolution bandwidth (RBW) and video bandwidth (VBW) were set to at least 3MHz. The vector signal generator amplitude was set so that the power level measured at the spectrum analyzer was (-64dBm) + (0) [dBi] + 1 dB= -63dBm. Capture the spectrum analyzer plots on short pulse radar types, long pulse radar type and hopping radar waveform.

5.2.3. Calibration Result

Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	27°C
Test Engineer	Peter	Relative Humidity	65%
Test Site	SR5	Test Date	2024/4/25
Test Item	Radar Waveform Calibration_Master		

Radar #0	Radar #1 (Test A) PRI = 558us and the number of pulses = 95
	
Radar #1 (Test B) PRI = 2.683ms and the number of pulses = 20	Radar #2
	

Radar #3	Radar #4
	
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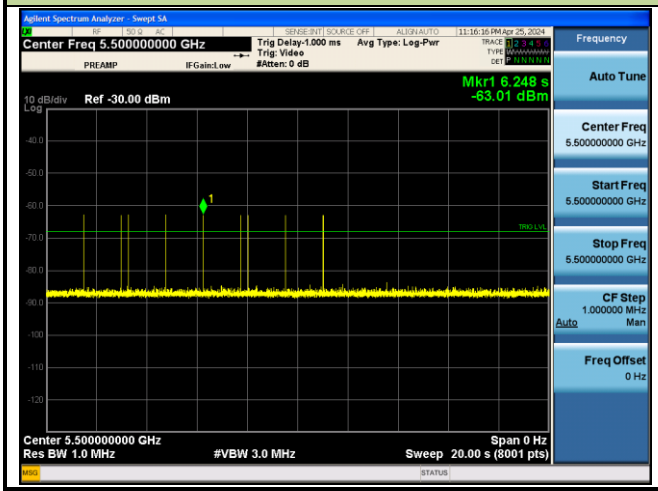
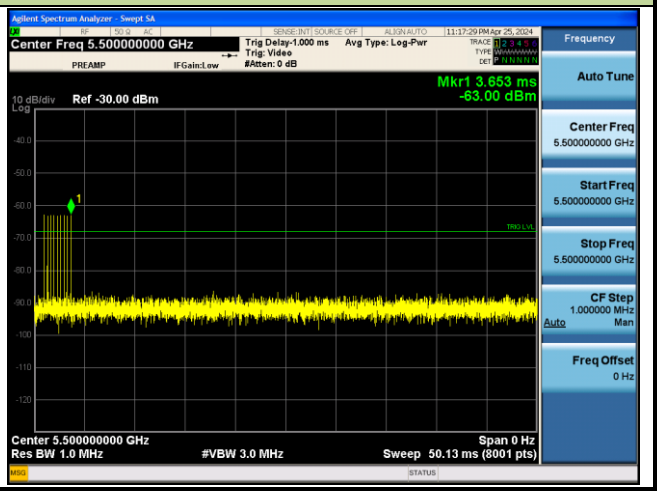
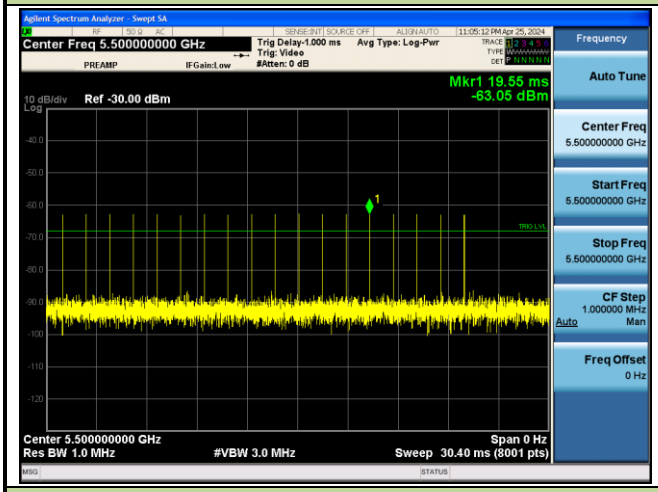
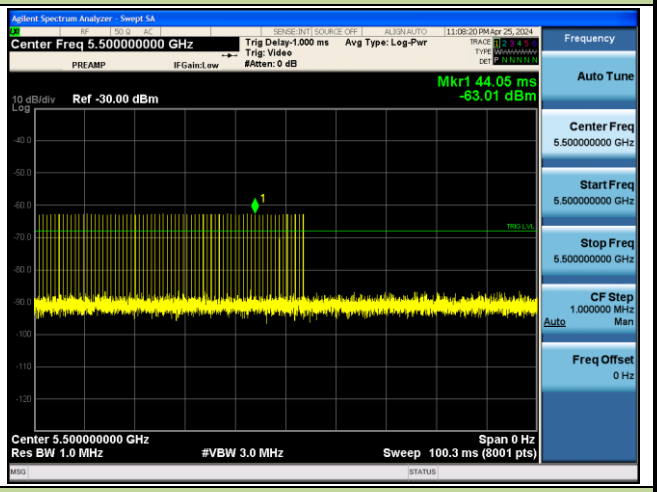
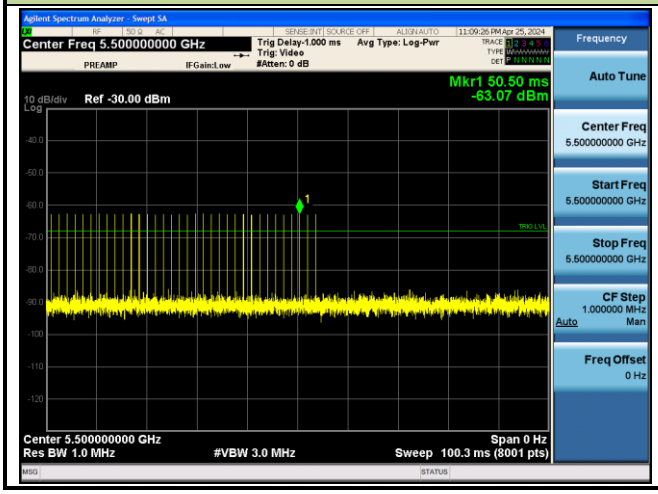
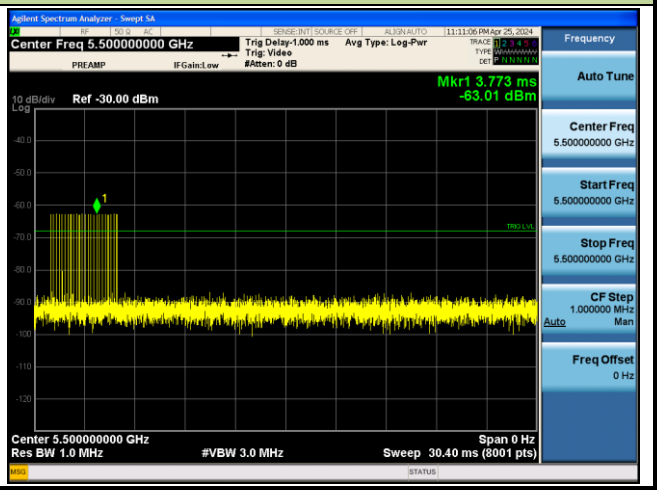
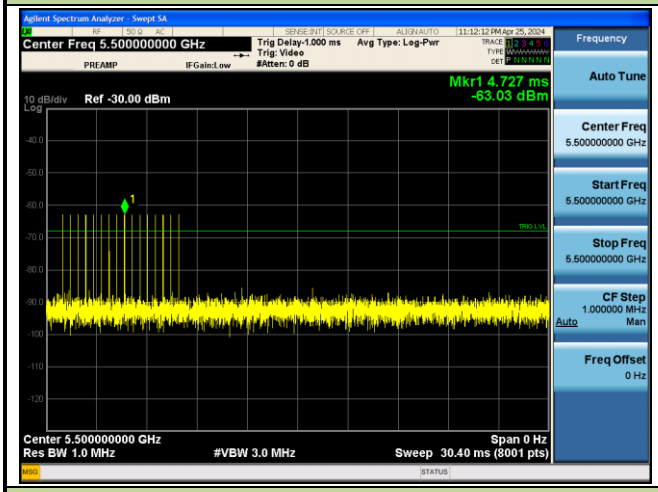
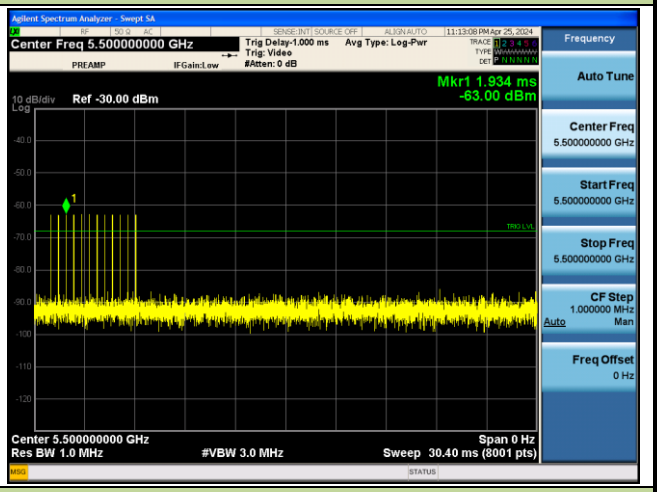
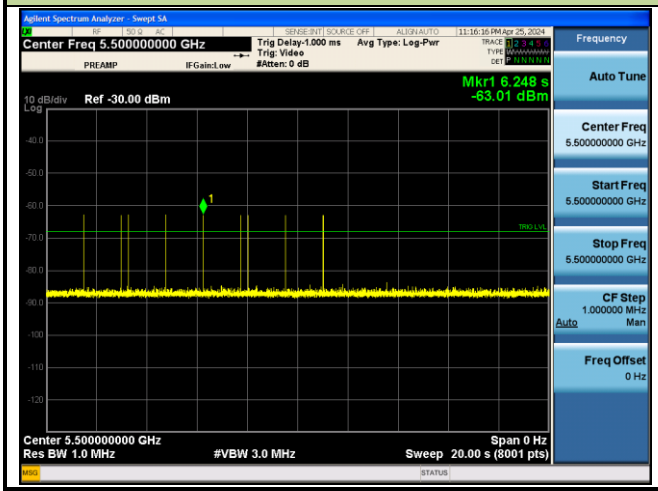
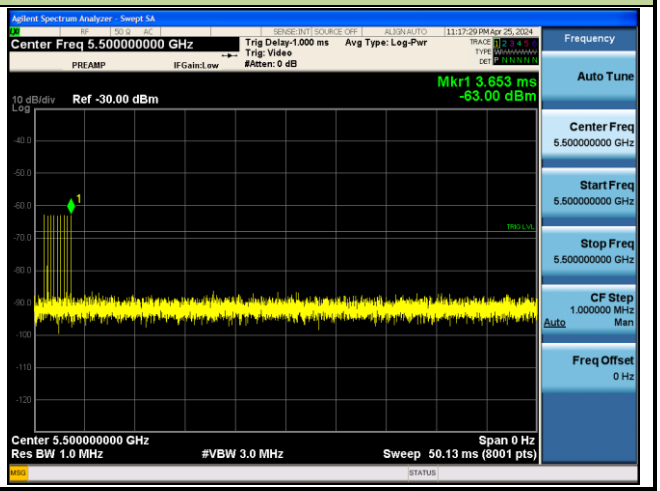
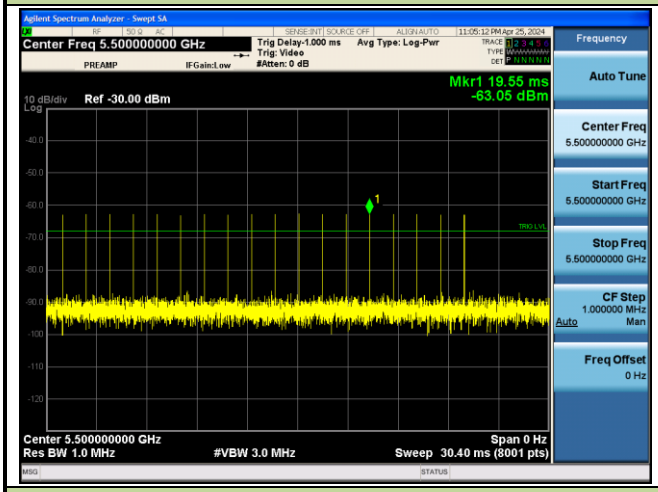
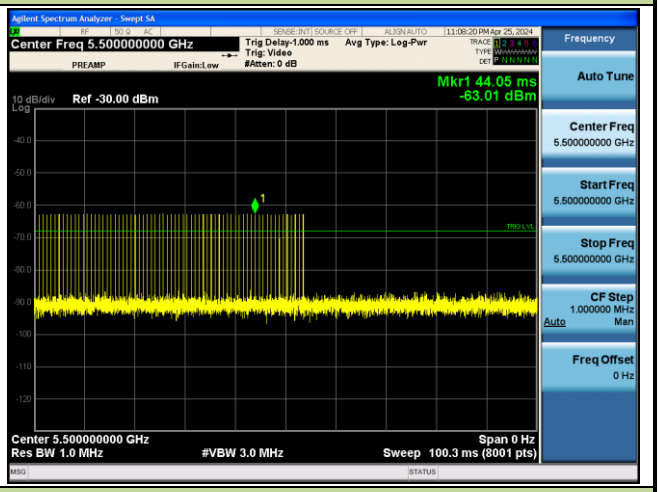
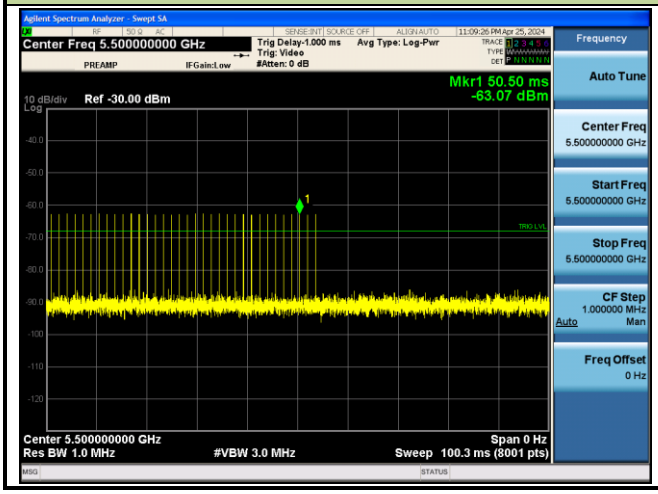
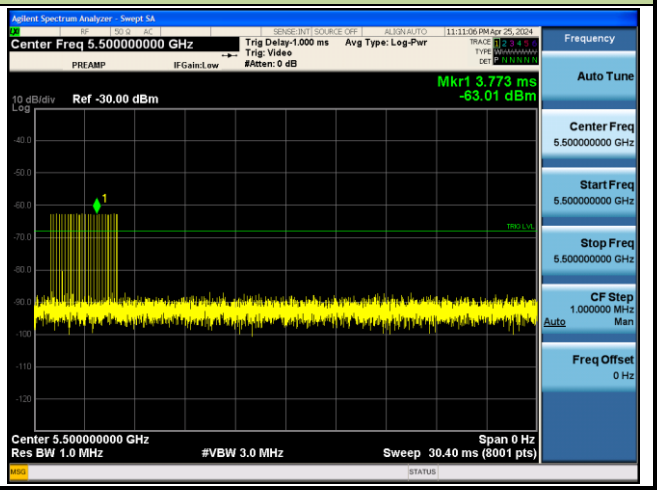
	

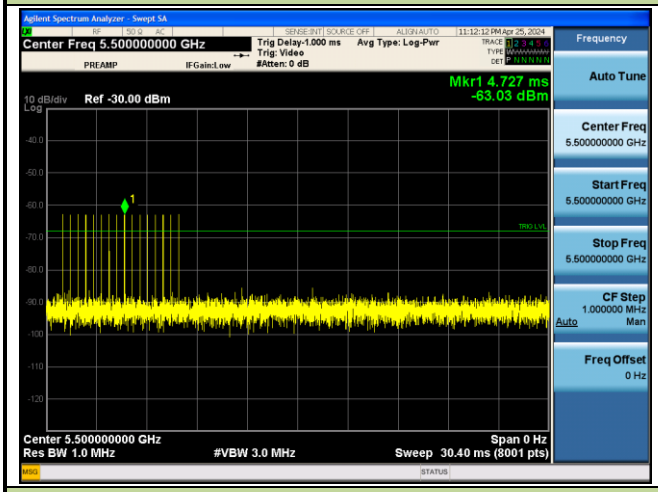
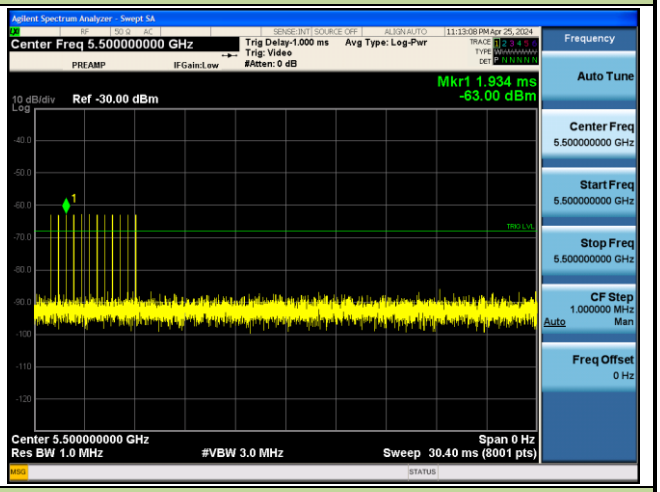
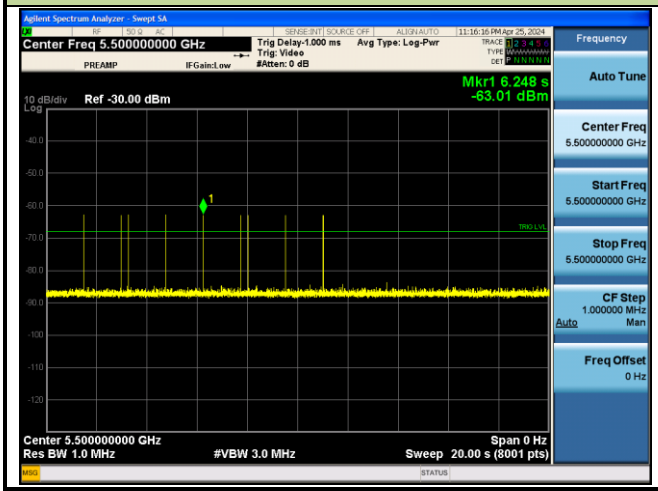
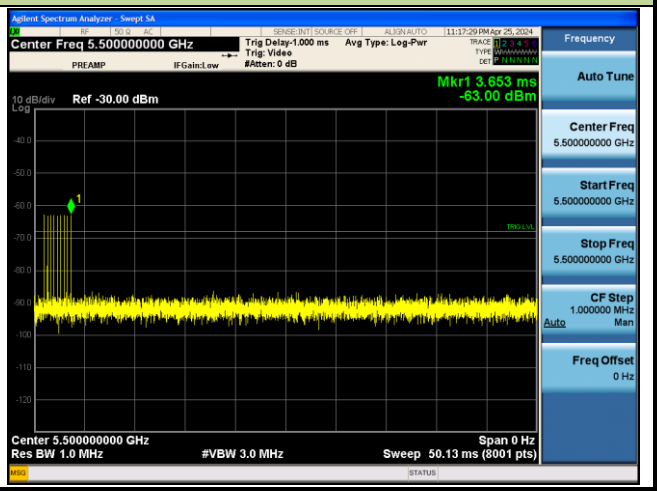
Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	27°C
Test Engineer	Peter	Relative Humidity	65%
Test Site	SR5	Test Date	2024/4/25
Test Item	Radar Waveform Calibration_MESH		

Radar #0	Radar #1 (Test A) PRI = 558us and the number of pulses = 95
	
Radar #1 (Test B) PRI = 2.683ms and the number of pulses = 20	Radar #2
	

Radar #3	Radar #4
	
Radar #5	Radar #6
	

Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	27°C
Test Engineer	Peter	Relative Humidity	65%
Test Site	SR5	Test Date	2024/4/25
Test Item	Radar Waveform Calibration_Slave		

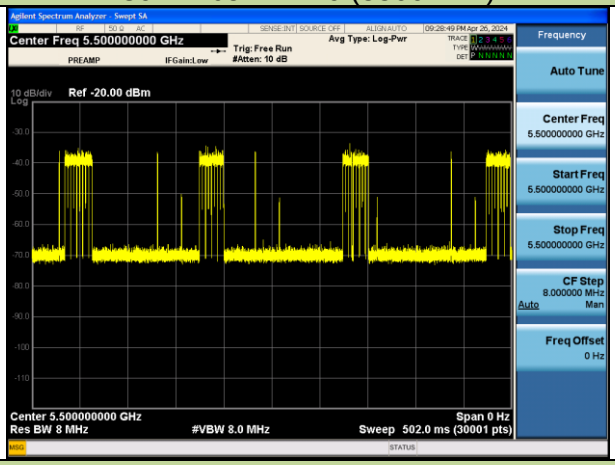
Radar #0	Radar #1 (Test A) PRI = 558us and the number of pulses = 95
	
Radar #1 (Test B) PRI = 2.683ms and the number of pulses = 20	Radar #2
	

Radar #3	Radar #4
	
Radar #5	Radar #6
	

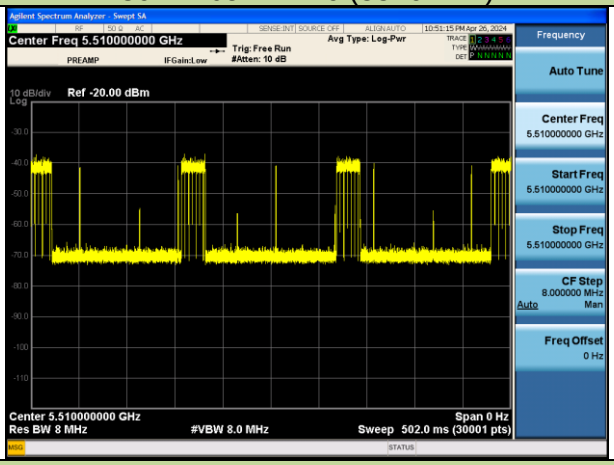
5.2.4. Channel Loading Test Result

Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	27°C
Test Engineer	Peter	Relative Humidity	65%
Test Site	SR5	Test Date	2024/4/26~2024/4/27
Test Item	Channel Loading_Master		

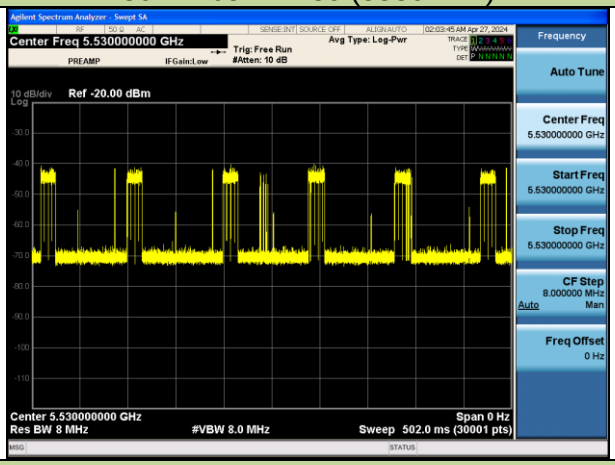
802.11be-EHT20 (5500MHz)



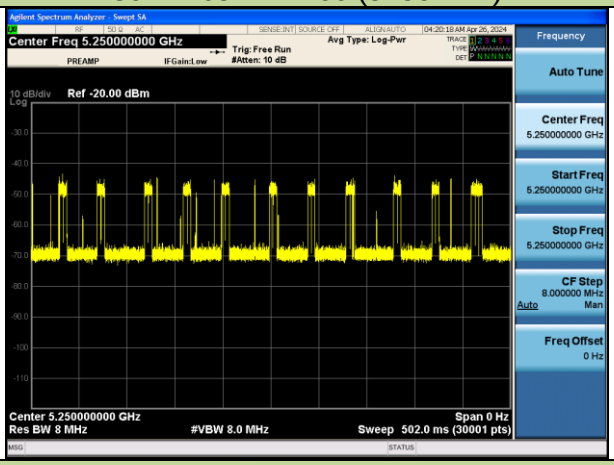
802.11be-EHT40 (5510MHz)



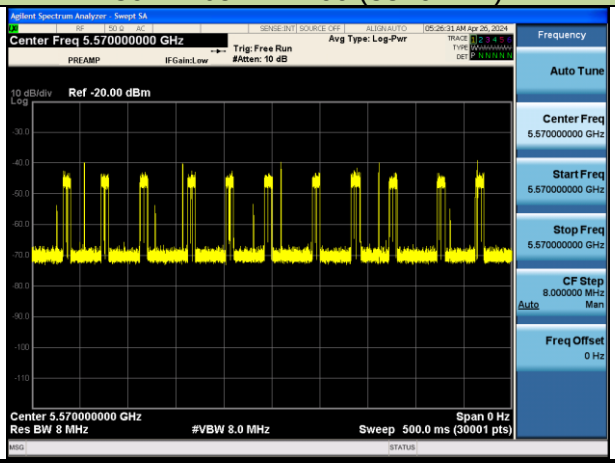
802.11be-EHT80 (5530MHz)



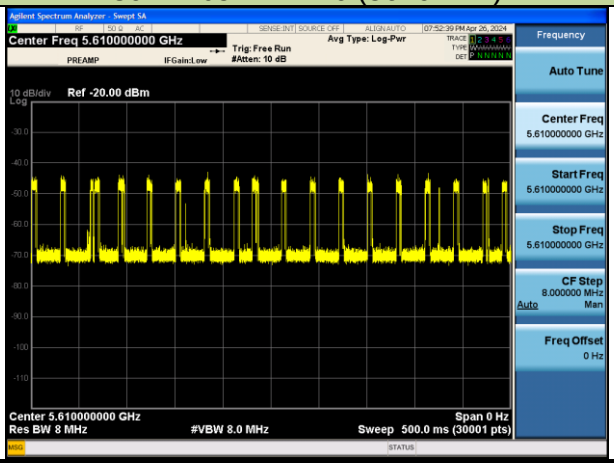
802.11be-EHT160 (5250MHz)



802.11be-EHT160 (5570MHz)



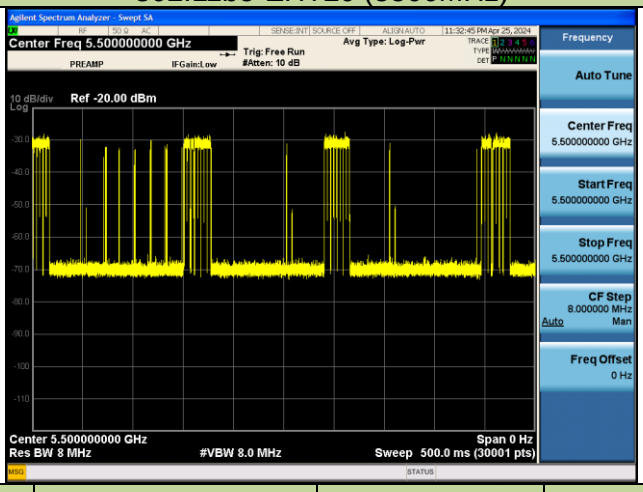
802.11be-EHT240 (5610MHz)



Test Mode	Test Frequency	Packet ratio	Requirement ratio	Test Result
802.11be-EHT20	5500 MHz	20.5%	≥ 17%	Pass
802.11be-EHT40	5510 MHz	18.28%	≥ 17%	Pass
802.11be-EHT80	5530 MHz	19.04%	≥ 17%	Pass
802.11be-EHT160	5250 MHz	18.6%	≥ 17%	Pass
802.11be-EHT160	5570 MHz	18.13%	≥ 17%	Pass
802.11be-EHT240	5610 MHz	19.49%	≥ 17%	Pass
Note: System testing was performed with the designated iperf test file. This file is used by IP and Frame based systems for loading the test channel during the In-service compliance testing of the U-NII device. Packet ratio = Time On / (Time On + Off Time).				

Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	27°C
Test Engineer	Peter	Relative Humidity	65%
Test Site	SR5	Test Date	2024/4/25
Test Item	Channel Loading_MESH		

802.11be-EHT20 (5500MHz)

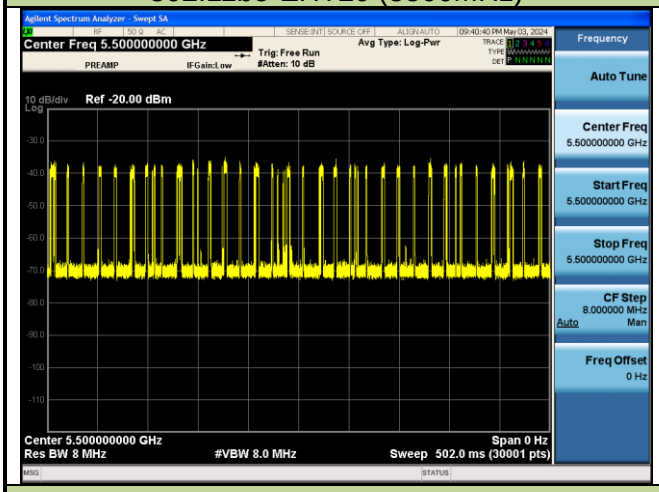


Test Mode	Test Frequency	Packet ratio	Requirement ratio	Test Result
802.11be-EHT20	5500 MHz	18.67%	≥ 17%	Pass

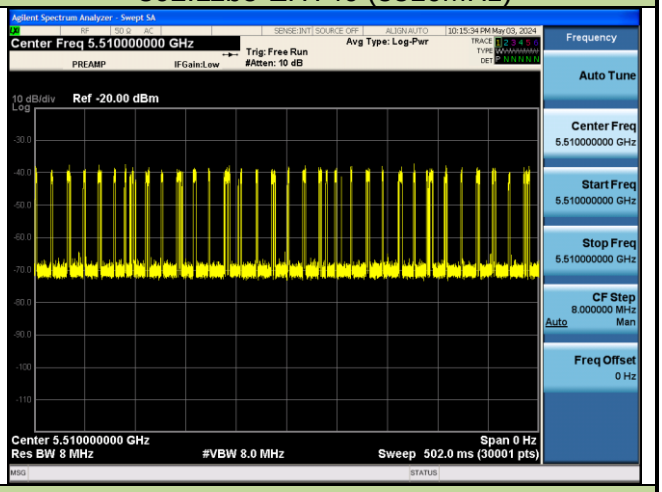
Note: System testing was performed with the designated iperf test file. This file is used by IP and Frame based systems for loading the test channel during the In-service compliance testing of the U-NII device. Packet ratio = Time On / (Time On + Off Time).

Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	27°C
Test Engineer	Peter	Relative Humidity	65%
Test Site	SR5	Test Date	2024/5/3~2024/5/8
Test Item	Channel Loading_Slave		

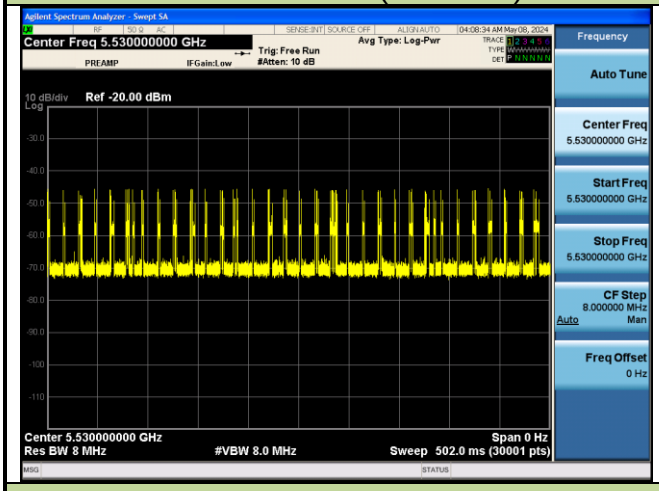
802.11be-EHT20 (5500MHz)



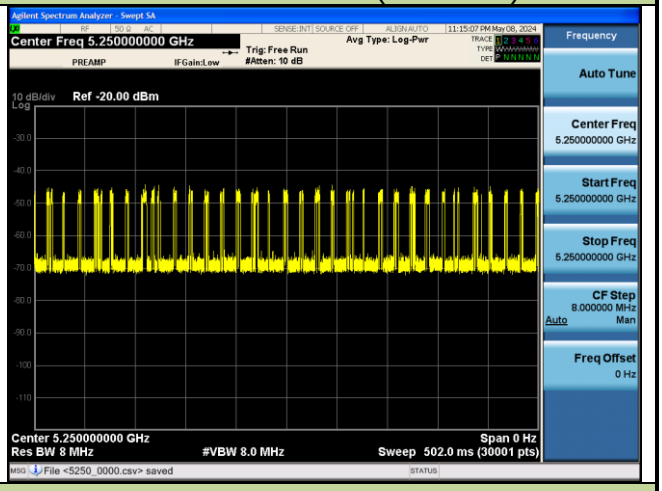
802.11be-EHT40 (5510MHz)



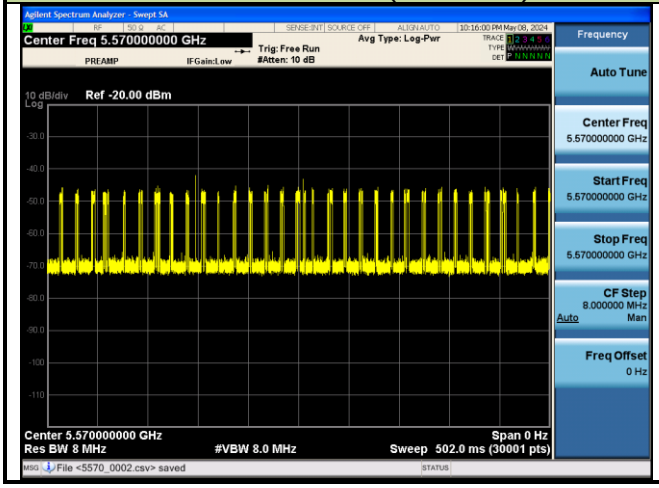
802.11be-EHT80 (5530MHz)



802.11be-EHT160 (5250MHz)



802.11be-EHT160 (5570MHz)



802.11be-EHT240 (5610MHz)

Test Mode	Test Frequency	Packet ratio	Requirement ratio	Test Result
802.11be-EHT20	5500 MHz	18.05%	≥ 17%	Pass
802.11be-EHT40	5510 MHz	17.7%	≥ 17%	Pass
802.11be-EHT80	5530 MHz	19.08%	≥ 17%	Pass
802.11be-EHT160	5250 MHz	21.48%	≥ 17%	Pass
802.11be-EHT160	5570 MHz	18.73%	≥ 17%	Pass
802.11be-EHT240	5610 MHz	19.74%	≥ 17%	Pass
Note: System testing was performed with the designated iperf test file. This file is used by IP and Frame based systems for loading the test channel during the In-service compliance testing of the U-NII device. Packet ratio = Time On / (Time On + Off Time).				

5.3. UNII Detection Bandwidth Measurement

5.3.1. Test Limit

Minimum 100% of the UNII 99% transmission power bandwidth. During the U-NII Detection Bandwidth detection test, each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

5.3.2. Test Procedure

1. Adjust the equipment to produce a single Burst of any one of the Short Pulse Radar Types 0-4 in Table 3-5 at the center frequency of the EUT Operating Channel at the specified DFS Detection Threshold level.
2. The generating equipment is configured as shown in the Conducted Test Setup above section 3.5.
3. The EUT is set up as a stand-alone device (no associated Client or Master, as appropriate) and no traffic. Frame based systems will be set to a talk/listen ratio reflecting the worst case (maximum) that is user configurable during this test.
4. Generate a single radar Burst, and note the response of the EUT. Repeat for a minimum of 10 trials. The EUT must detect the Radar Waveform using the specified U-NII Detection Bandwidth criterion shown in Table 3-5. In cases where the channel bandwidth may exceed past the DFS band edge on specific channels (i.e., 802.11ac or wideband frame based systems) select a channel that has the entire emission bandwidth within the DFS band. If this is not possible, test the detection BW to the DFS band edge.
5. Starting at the center frequency of the UUT operating Channel, increase the radar frequency in 5 MHz steps, repeating the above test sequence, until the detection rate falls below the U-NII Detection Bandwidth criterion specified in Table 3-3. Repeat this measurement in 1MHz steps at frequencies 5 MHz below where the detection rate begins to fall. Record the highest frequency (denote as FH) at which detection is greater than or equal to the U-NII Detection Bandwidth criterion. Recording the detection rate at frequencies above FH is not required to demonstrate compliance.
6. Starting at the center frequency of the EUT operating Channel, decrease the radar frequency in 1 MHz steps, repeating the above item 4 test sequence, until the detection rate falls below the U-NII Detection Bandwidth criterion. Record the lowest frequency (denote as FL) at which detection is greater than or equal to the U-NII Detection Bandwidth criterion. Recording the detection rate at frequencies below FL is not required to demonstrate compliance.
7. The U-NII Detection Bandwidth is calculated as follows: U-NII Detection Bandwidth = FH – FL
8. The U-NII Detection Bandwidth must be at least 100% of the EUT transmitter 99% power, otherwise, the EUT does not comply with DFS requirements.

5.3.3. Test Result

Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	26°C
Test Engineer	Jay	Relative Humidity	50%
Test Site	SR5	Test Date	2024/05/01
Test Item	Detection Bandwidth (802.11be-EHT20 mode - 5500MHz)-Master		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490	1	1	1	1	0	1	1	1	1	1	90%
5490.5 FL	1	1	1	1	1	1	1	1	1	1	100%
5491	1	1	1	1	1	1	1	1	1	0	90%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	0	90%
5500	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5506	1	1	1	1	1	1	1	1	1	1	100%
5507	1	1	1	1	1	1	1	1	1	1	100%
5508	1	1	1	1	1	1	1	1	1	1	100%
5509	1	1	1	1	0	1	1	1	1	1	90%
5509.8 FH	1	1	1	1	1	1	1	1	1	1	100%
5510	1	1	1	1	1	1	1	1	1	1	100%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5500MHz. The 99% channel bandwidth is 19.024MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5509.8MHz – 5490.5MHz = 19.3MHz

Note 3: NII Detection Bandwidth Min. Limit (MHz): 19.024MHz x 100% = 19.024MHz.

Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	26°C
Test Engineer	Jay	Relative Humidity	50%
Test Site	SR5	Test Date	2024/05/01
Test Item	Detection Bandwidth (802.11be-EHT40 mode - 5510MHz)-Master		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490	1	1	1	1	1	1	1	1	1	1	100%
5491 FL	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
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	0	1	1	1	1	1	1	90%
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%
5526	1	1	1	1	1	1	1	1	1	1	100%
5527	1	1	1	1	1	1	1	1	1	1	100%
5528	1	1	1	1	1	1	1	1	1	1	100%
5529 FH	1	1	1	1	1	1	1	1	1	1	100%
5530	1	1	1	1	1	1	1	1	1	0	90%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5510MHz. The 99% channel bandwidth is 37.925MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5529MHz - 5491MHz = 38MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 37.925MHz x 100% =37.925 MHz.

Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	26°C
Test Engineer	Jay	Relative Humidity	50%
Test Site	SR5	Test Date	2024/05/01
Test Item	Detection Bandwidth (802.11be-EHT80 mode - 5530MHz)-Master		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490	1	1	1	1	1	1	0	1	1	1	90%
5491 FL	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
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%
5566	1	1	1	1	1	1	1	1	1	1	100%
5567	1	1	1	1	1	1	1	1	1	1	100%
5568	1	1	1	1	1	1	1	1	1	1	100%
5569 FH	1	1	1	1	1	1	1	1	1	1	100%
5570	1	1	1	1	1	1	1	1	1	1	100%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5530MHz. The 99% channel bandwidth is 77.684MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5569MHz - 5491MHz = 78MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 77.684MHz x 100% = 77.684MHz.

Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	26°C
Test Engineer	Jay	Relative Humidity	50%
Test Site	SR5	Test Date	2024/05/01
Test Item	Detection Bandwidth (802.11be-EHT160 mode - 5250MHz)-Master		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5249	0	0	0	0	0	0	0	0	0	0	0%
5249.5FL	1	1	1	1	1	1	1	1	1	1	100%
5250	1	1	0	1	1	1	1	1	1	1	90%
5251	1	1	1	1	1	1	1	1	1	1	100%
5252	1	1	1	1	1	1	1	1	1	0	90%
5253	1	1	1	1	1	1	1	1	1	1	100%
5254	1	1	1	1	1	1	1	1	1	1	100%
5255	1	1	1	1	1	1	1	1	1	1	100%
5260	1	1	1	1	1	1	1	1	1	1	100%
5265	1	1	1	1	1	1	1	1	1	0	90%
5270	1	1	1	1	1	1	1	1	1	1	100%
5275	1	1	1	1	1	1	1	1	1	1	100%
5280	1	1	1	1	1	1	1	1	1	1	100%
5285	1	1	1	1	1	1	1	1	1	1	100%
5290	1	1	1	1	1	1	1	1	1	1	100%
5295	1	1	1	1	1	1	1	1	1	1	100%
5300	1	1	1	1	1	1	1	1	1	0	90%
5305	1	1	1	1	1	1	1	1	1	0	90%
5310	1	1	1	1	1	1	1	1	1	1	100%
5315	1	1	1	1	1	1	1	1	1	1	100%
5320	1	1	1	1	1	1	1	1	1	1	100%
5325	1	1	1	1	1	1	1	1	1	1	100%
5326	1	1	1	1	1	1	1	1	1	1	100%
5327	1	1	1	1	1	1	1	1	1	1	100%
5328	1	1	1	1	1	1	1	1	1	1	100%
5328.5FH	1	1	1	1	1	1	1	1	1	1	100%
5329	1	1	1	1	1	1	1	1	1	1	100%
Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5250MHz. The 99% channel bandwidth is 157.030MHz. (See the 99% BW											

section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5328.5MHz – 5249.5MHz = 79MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz):157.030 MHz x 100% / 2 = 78.515MHz.

Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	26°C
Test Engineer	Jay	Relative Humidity	50%
Test Site	SR5	Test Date	2024/05/01
Test Item	Detection Bandwidth (802.11be-EHT160 mode - 5570MHz)-Master		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490	1	1	1	1	1	1	1	1	1	1	100%
5491 FL	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
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	0	1	1	1	1	1	90%
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	0	1	1	1	1	1	1	1	90%
5590	1	1	1	1	1	1	1	1	1	1	100%
5595	1	1	1	1	0	1	1	1	1	1	90%
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%
5646	1	1	1	1	1	1	1	1	1	1	100%
5647	1	1	1	1	1	1	1	1	1	1	100%
5648	1	1	1	1	1	1	1	1	1	1	100%
5649 FH	1	1	1	1	1	1	1	1	1	0	90%
5650	1	1	1	1	1	1	1	1	1	1	100%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5530MHz. The 99% channel bandwidth is 156.810MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5649MHz - 5491MHz = 158MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 156.810MHz x 100% = 156.810MHz.

Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	26°C
Test Engineer	Jay	Relative Humidity	50%
Test Site	SR5	Test Date	2024/05/01
Test Item	Detection Bandwidth (802.11be-EHT240 mode - 5650MHz)-Master		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490	1	1	1	1	1	1	1	1	1	1	100%
5491F_L	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
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%
5580	1	1	1	1	1	1	1	1	1	1	100%
5590	1	1	1	1	1	1	1	1	1	1	100%
5600	1	1	1	1	1	1	1	1	1	1	100%
5610	1	1	1	1	1	1	1	1	1	1	100%
5620	1	1	1	1	1	1	1	1	1	1	100%
5630	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%
5655	1	1	1	1	1	1	1	1	1	1	100%
5660	1	1	1	1	1	1	1	1	1	1	100%
5665	1	1	1	1	1	1	1	1	1	1	100%
5670	1	1	1	1	1	1	1	1	1	1	100%
5675	1	1	1	1	1	1	1	1	1	1	100%
5680	1	1	1	1	1	1	1	1	1	1	100%
5685	1	1	1	1	1	1	1	1	1	1	100%
5690	1	1	1	1	1	1	1	1	1	1	100%
5695	1	1	1	1	1	1	1	1	1	1	100%
5700	1	1	1	1	1	1	1	1	1	1	100%
5705	1	1	1	1	1	1	1	1	1	1	100%
5710	1	1	1	1	1	1	1	1	1	1	100%
5715	1	1	1	1	1	1	1	1	1	1	100%
5720	1	1	1	1	1	1	1	1	1	1	100%
5725	1	1	1	1	1	1	1	1	1	1	100%
5726	1	1	1	1	1	1	1	1	1	0	90%
5727	1	1	1	1	1	1	1	1	0	1	90%
5728	1	1	1	1	1	1	1	1	1	1	100%
5729F_H	1	1	1	1	1	1	1	1	1	1	100%
5730	1	1	1	1	1	1	1	1	1	1	100%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5650MHz. The 99% channel bandwidth within U-NII Band-2C is233.44MHz. (99% BW / 2 = 236.88MHz – (5610 +236.88 /2 – 5725) = 233.44MHz) (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = F_H - F_L = 5729MHz – 5491MHz = 238MHz

Note 3: NII Detection Bandwidth Min. Limit (MHz): MHz x 100% = 233.44MHz.

Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	26°C
Test Engineer	Jay	Relative Humidity	50%
Test Site	SR5	Test Date	2024/05/14
Test Item	Detection Bandwidth (802.11be-EHT20 mode - 5500MHz)-MESH		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490	1	1	1	1	1	1	1	1	1	1	100%
5490.25 FL	1	1	1	1	1	1	1	1	1	1	100%
5491	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
5500	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5506	1	1	1	1	1	1	1	1	1	1	100%
5507	1	1	1	1	1	1	1	1	1	1	100%
5508	1	1	1	1	1	1	1	1	1	1	100%
5509	1	1	1	1	1	1	1	1	1	1	100%
5509.75 FH	1	1	1	1	1	1	1	1	1	1	100%
5510	1	1	1	1	1	1	1	1	1	1	100%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5500MHz. The 99% channel bandwidth is 19.024MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5509.75MHz –5490.25MHz = 19.5MHz

Note 3: NII Detection Bandwidth Min. Limit (MHz): 19.024MHz x 100% = 19.024MHz.

Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	26°C
Test Engineer	Jay	Relative Humidity	50%
Test Site	SR5	Test Date	2024/05/09
Test Item	Detection Bandwidth (802.11be-EHT20 mode - 5500MHz)-Slave		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490	1	1	1	1	1	0	1	1	1	1	90%
5490.25 FL	1	1	1	1	1	1	1	1	1	1	100%
5491	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	0	1	1	90%
5500	1	1	1	1	1	1	1	1	1	1	100%
5505	1	1	1	1	1	1	1	1	1	1	100%
5506	1	1	1	1	1	1	1	1	1	1	100%
5507	1	1	1	1	1	1	1	1	1	1	100%
5508	1	1	1	1	1	1	1	1	1	0	90%
5509	1	1	1	1	1	1	1	1	1	1	100%
5509.75 FH	1	1	1	1	1	1	1	1	1	1	100%
5510	1	1	1	1	1	0	1	1	1	1	90%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5500MHz. The 99% channel bandwidth is 19.024MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5509.75MHz – 5490.25MHz = 19.5MHz

Note 3: NII Detection Bandwidth Min. Limit (MHz): 19.024MHz x 100% = 19.024MHz.

Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	26°C
Test Engineer	Jay	Relative Humidity	50%
Test Site	SR5	Test Date	2024/05/09
Test Item	Detection Bandwidth (802.11be-EHT40 mode - 5510MHz)-Slave		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490	1	1	1	1	1	1	1	1	1	1	100%
5491 FL	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	0	1	1	1	1	1	90%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	1	1	1	1	1	100%
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	0	1	1	1	1	1	1	1	90%
5525	1	1	1	1	1	1	1	1	1	1	100%
5526	1	1	1	1	1	1	1	1	1	1	100%
5527	1	1	1	1	1	1	1	1	1	1	100%
5528	1	1	1	1	1	1	1	1	1	1	100%
5529 FH	1	1	1	1	1	1	1	1	1	1	100%
5530	1	1	1	1	1	1	1	1	1	1	100%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5510MHz. The 99% channel bandwidth is 37.925MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5529MHz - 5491MHz = 38MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 37.925MHz x 100% =37.925 MHz.

Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	26°C
Test Engineer	Jay	Relative Humidity	50%
Test Site	SR5	Test Date	2024/05/09
Test Item	Detection Bandwidth (802.11be-EHT80 mode - 5530MHz)-Slave		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490	1	1	1	1	1	1	1	0	1	1	90%
5491 FL	1	1	1	0	1	1	1	1	1	1	90%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	0	1	1	90%
5494	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	0	1	1	1	90%
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	0	1	1	1	1	1	1	1	90%
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	0	1	1	1	90%
5566	1	1	1	1	1	1	1	1	1	1	100%
5567	1	1	1	1	1	1	1	1	1	1	100%
5568	1	1	1	1	1	1	1	1	1	1	100%
5569 FH	1	0	1	1	1	1	1	1	1	1	90%
5570	1	1	1	1	1	1	1	1	1	1	100%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5530MHz. The 99% channel bandwidth is 77.684MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5569MHz - 5491MHz = 78MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 77.684MHz x 100% = 77.684MHz.

Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	26°C
Test Engineer	Jay	Relative Humidity	50%
Test Site	SR5	Test Date	2024/05/09
Test Item	Detection Bandwidth (802.11be-EHT160 mode - 5250MHz)-Slave		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5249	0	0	0	0	0	0	0	0	0	0	0%
5249.5FL	1	1	1	1	1	1	1	1	1	1	100%
5250	1	1	1	1	1	1	1	1	1	1	100%
5251	1	1	1	1	1	1	1	1	1	1	100%
5252	1	1	1	1	1	1	1	1	1	1	100%
5253	1	1	1	1	1	1	1	1	1	1	100%
5254	1	1	1	1	1	1	1	1	1	1	100%
5255	1	1	1	1	1	1	1	1	1	1	100%
5260	1	1	1	1	1	1	1	1	1	1	100%
5265	1	1	1	1	1	1	1	1	1	1	100%
5270	1	1	1	1	1	1	1	1	1	1	100%
5275	1	1	1	1	1	0	1	1	1	1	90%
5280	1	1	1	1	1	1	1	1	1	0	90%
5285	1	1	1	1	1	1	1	1	1	1	100%
5290	1	1	1	1	1	1	1	1	1	1	100%
5295	1	1	1	1	1	1	1	1	1	1	100%
5300	1	1	1	1	1	1	1	1	1	1	100%
5305	1	1	1	1	1	1	1	1	1	0	90%
5310	1	1	1	1	1	1	1	1	1	1	100%
5315	1	1	1	1	1	1	1	1	1	1	100%
5320	1	1	1	1	1	1	1	1	1	1	100%
5325	1	1	1	1	1	1	1	1	1	1	100%
5326	1	1	1	1	1	1	1	1	1	1	100%
5327	1	1	1	1	1	1	1	1	1	1	100%
5328	1	1	1	1	1	1	1	1	1	1	100%
5328.5FH	1	1	1	1	1	1	1	1	1	1	100%
5329	1	1	1	1	1	1	1	0	1	1	90%
Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5250MHz. The 99% channel bandwidth is 157.030MHz. (See the 99% BW											

section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5328.5MHz - 5249.5MHz = 79MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz):157.030 MHz x 100% / 2 = 78.515MHz.

Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	26°C
Test Engineer	Jay	Relative Humidity	50%
Test Site	SR5	Test Date	2024/05/09
Test Item	Detection Bandwidth (802.11be-EHT160 mode - 5570MHz)-Slave		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490	1	1	1	1	1	1	1	1	1	1	100%
5491 FL	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	1	1	1	1	1	1	100%
5494	1	1	1	1	1	1	1	1	1	1	100%
5495	1	1	1	1	1	0	1	1	1	1	90%
5500	1	1	1	0	1	1	1	1	1	1	90%
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	0	1	1	1	1	90%
5520	1	1	1	1	1	0	1	1	1	1	90%
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	0	1	1	1	1	90%
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	0	1	1	1	1	1	1	90%
5625	1	1	1	1	0	1	1	1	1	1	90%
5630	1	1	1	1	1	1	1	1	1	1	100%
5635	1	1	1	1	1	1	1	0	1	1	90%
5640	1	1	1	1	1	1	1	1	1	1	100%
5645	1	1	1	1	1	1	1	1	1	1	100%
5646	1	1	1	1	1	1	1	1	1	1	100%
5647	1	1	1	0	1	1	1	1	1	1	90%
5648	1	1	1	1	1	1	1	1	1	1	100%
5649 FH	1	1	1	1	1	0	1	1	1	1	90%
5650	1	1	1	1	1	1	1	1	1	1	100%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5530MHz. The 99% channel bandwidth is 156.810MHz. (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = FH - FL = 5649MHz - 5491MHz = 158MHz.

Note 3: NII Detection Bandwidth Min. Limit (MHz): 156.810MHz x 100% = 156.810MHz.

Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	26°C
Test Engineer	Jay	Relative Humidity	50%
Test Site	SR5	Test Date	2024/05/09
Test Item	Detection Bandwidth (802.11be-EHT240 mode - 5650MHz)-Slave		

Radar Frequency (MHz)	DFS Detection Trials (1=Detection, 0= No Detection)										
	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
5490	1	1	1	1	1	1	1	1	0	1	90%
5491F_L	1	1	1	1	1	1	1	1	1	1	100%
5492	1	1	1	1	1	1	1	1	1	1	100%
5493	1	1	1	1	0	1	1	1	1	1	90%
5494	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	0	1	1	1	1	1	1	1	90%
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%
5580	1	1	1	1	1	1	1	1	1	1	100%
5590	1	1	1	1	1	1	1	1	1	1	100%
5600	1	1	1	1	1	1	1	1	1	1	100%
5610	1	1	1	1	1	1	1	1	1	1	100%
5620	1	1	1	1	1	1	1	1	1	1	100%
5630	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%
5655	1	1	1	1	1	1	1	1	1	1	100%
5660	1	1	1	1	1	1	1	1	1	1	100%
5665	1	1	1	1	1	1	1	1	1	1	100%
5670	1	1	1	1	1	1	1	1	0	1	90%
5675	1	1	1	1	1	1	1	1	1	1	100%
5680	1	1	1	1	1	1	1	1	1	1	100%
5685	1	1	1	1	1	1	1	1	1	1	100%
5690	1	1	1	1	1	1	1	1	1	1	100%
5695	1	1	1	1	1	1	1	1	1	1	100%
5700	1	1	1	1	1	1	1	1	1	1	100%
5705	1	1	1	1	1	1	1	1	1	1	100%
5710	1	1	1	1	1	1	1	1	1	1	100%
5715	1	1	1	1	1	1	1	1	0	1	90%
5720	1	1	1	1	1	1	1	1	1	1	100%
5725	1	1	1	1	1	1	1	1	1	1	100%
5726	1	1	1	1	1	0	1	1	1	1	90%
5727	1	1	1	1	1	1	1	1	1	1	100%
5728	1	1	0	1	1	1	1	1	1	1	90%
5729F_H	1	1	1	1	1	1	1	1	1	1	100%
5730	1	1	1	1	0	1	1	1	1	1	90%

Note 1: All NII channels for this device have identical Channel bandwidths. Therefore, all DFS testing was done at 5650MHz. The 99% channel bandwidth within U-NII Band-2C is233.44MHz. (99% BW / 2 = 236.88MHz – (5610 +236.88 /2 – 5725) = 233.44MHz) (See the 99% BW section of the RF report for further measurement details).

Note 2: Detection Bandwidth = F_H - F_L = 5729MHz – 5491MHz = 238MHz

Note 3: NII Detection Bandwidth Min. Limit (MHz): MHz x 100% = 233.44MHz.

5.4. Initial Channel Availability Check Time Measurement

5.4.1. Test Limit

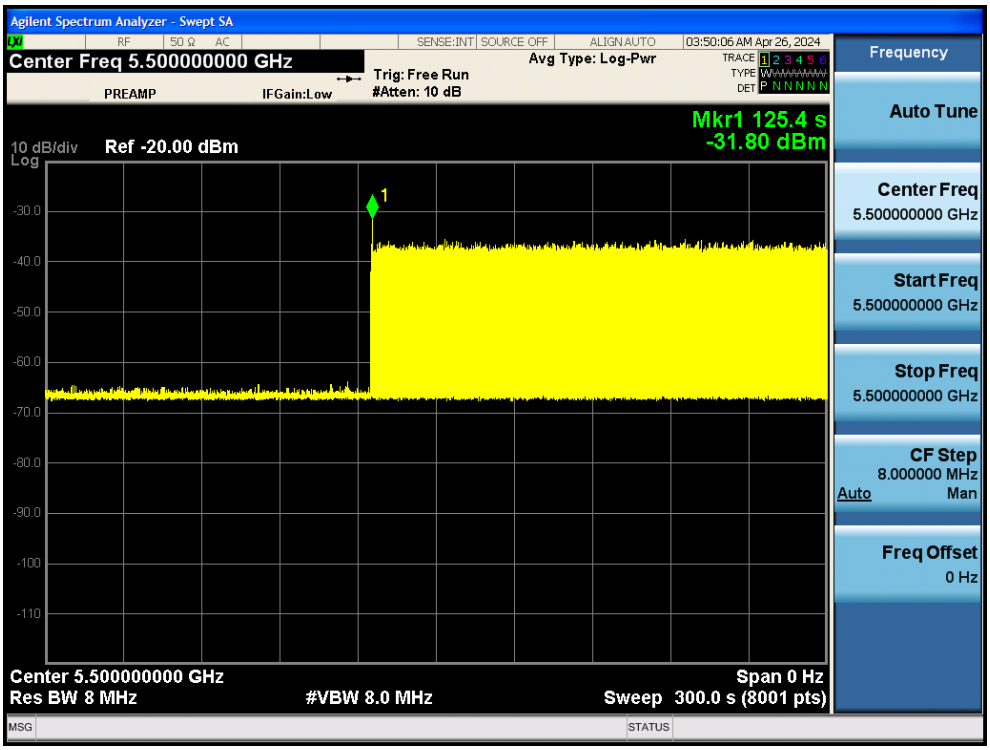
The EUT shall perform a Channel Availability Check to ensure that there is no radar operating on the channel. After power-up sequence, receive at least 1 minute on the intended operating frequency.

5.4.2. Test Procedure

1. The U-NII devices will be powered on and be instructed to operate on the appropriate U-NII Channel that must incorporate DFS functions. At the same time the EUT is powered on, the spectrum analyzer will be set to zero span mode with a 3 MHz RBW and 3 MHz VBW on the Channel occupied by the radar (Chr) with a 2.5 minute sweep time. The spectrum analyzer's sweep will be started at the same time power is applied to the U-NII device.
2. The EUT should not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle.
3. Confirm that the EUT initiates transmission on the channel. Measurement system showing its nominal noise floor is marker1.

5.4.3. Test Result

Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	27°C
Test Engineer	Peter	Relative Humidity	65%
Test Site	SR5	Test Date	2024/4/26
Test Item	Initial Channel Availability Check Time (802.11be-EHT20 mode - 5500MHz)		

Initial Channel Availability Check Time

Note: The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle (65.4 sec). Initial beacons/data transmissions are indicated by marker 1 (125.4 sec).

5.5. Radar Burst at the Beginning of the Channel Availability Check Time Measurement

5.5.1. Test Limit

In beginning of the Channel Availability Check (CAC) Time, radar is detected on this channel, select another intended channel and perform a CAC on that channel.

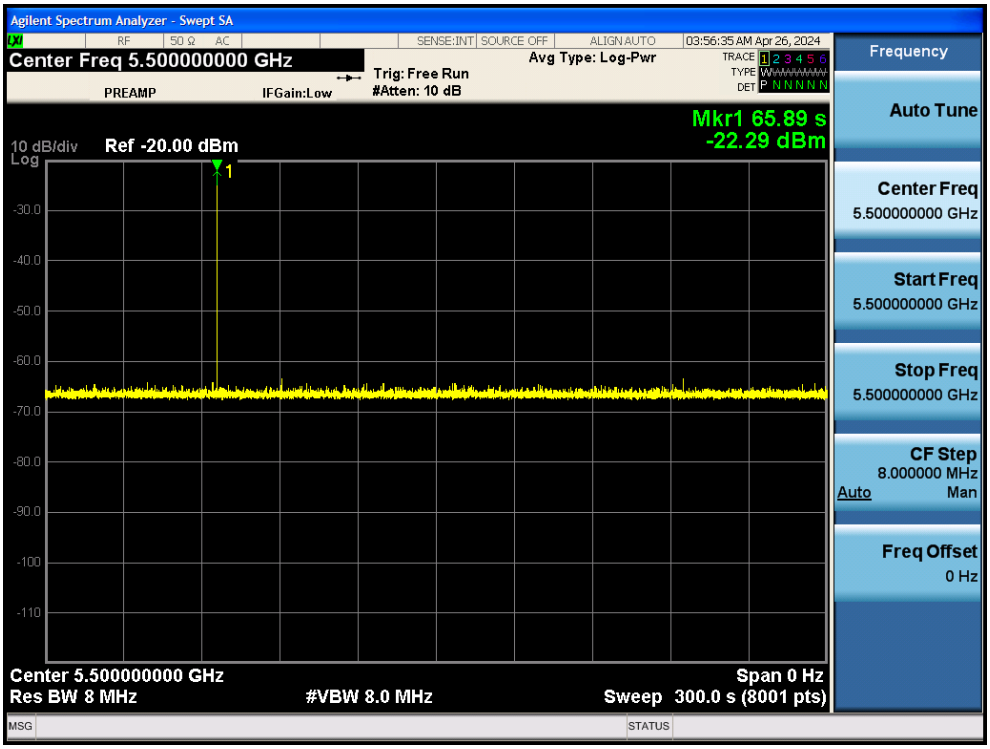
5.5.2. Test Procedure

1. The steps below define the procedure to verify successful radar detection on the selected Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold + 1 dB occurs at the beginning of the Channel Availability Check Time.
2. The EUT is in completion power-up cycle (from T0 to T1). T1 denotes the instant when the EUT has completed its power-up sequence. The Channel Availability Check Time commences at instant T1 and will end no sooner than T1 + 60 seconds. A single Burst of one of Short Pulse Radar Types 0-4 at DFS Detection Threshold + 1 dB will commence within a 6 second window starting at T1.
3. Visual indication on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of emissions will continue for 2.5 minutes after the radar Burst has been generated. Verify that during the 2.5 minutes measurement window no EUT transmissions occurred.

5.5.3. Test Result

Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	27°C
Test Engineer	Peter	Relative Humidity	65%
Test Site	SR5	Test Date	2024/4/26
Test Item	Beginning of the Channel Availability Check Time (802.11be-EHT20 mode - 5500MHz)		

Beginning of the Channel Availability Check Time



5.6. Radar Burst at the End of the Channel Availability Check Time Measurement

5.6.1. Test Limit

In the end of Channel Availability Check (CAC) Time, radar is detected on this channel, select another intended channel and perform a CAC on that channel.

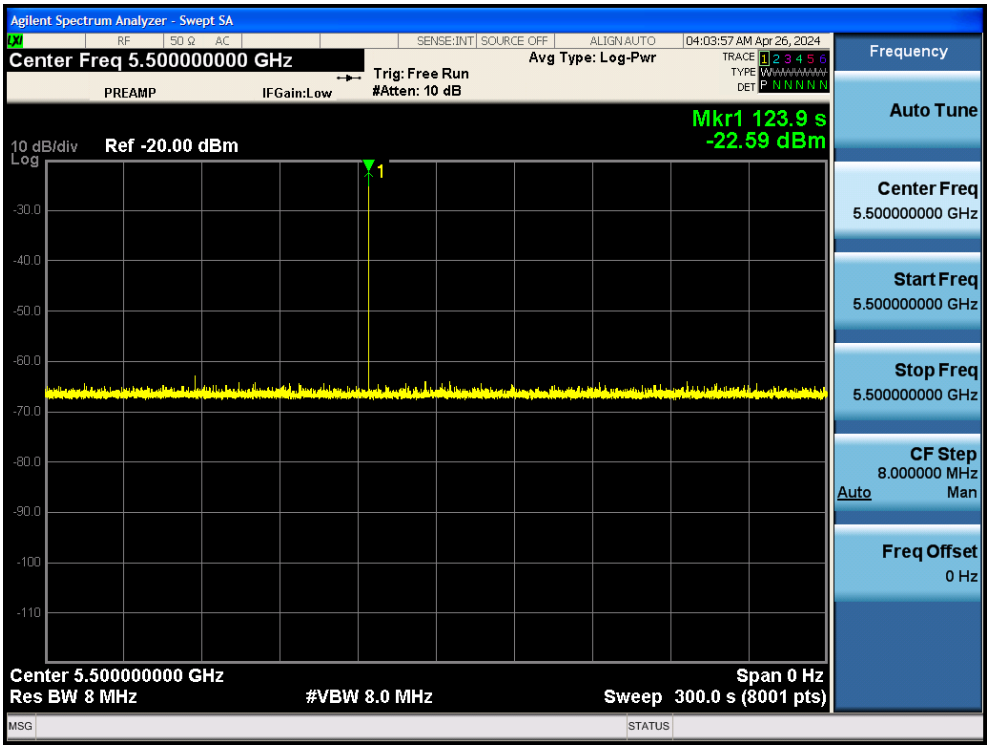
5.6.2. Test Procedure

1. The steps below define the procedure to verify successful radar detection on the selected Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold + 1 dB occurs at the beginning of the Channel Availability Check Time.
2. The EUT is powered on at T0. T1 denotes the instant when the EUT has completed its power-up sequence. The Channel Availability Check Time commences at instant T1 and will end no sooner thanT1 + 60 seconds. A single Burst of one of Short Pulse Radar Types 0-4 at DFS Detection Threshold + 1 dB will commence within a 6 second window starting at T1+ 54 seconds.
3. Visual indication on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of emissions will continue for 2.5 minutes after the radar Burst has been generated. Verify that during the 2.5 minutes measurement window no EUT transmissions occurred.

5.6.3. Test Result

Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	27°C
Test Engineer	Peter	Relative Humidity	65%
Test Site	SR5	Test Date	2024/4/26
Test Item	End of the Channel Availability Check Time (802.11be-EHT20 mode - 5500MHz)		

End of the Channel Availability Check Time



5.7. In-Service Monitoring for Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period Measurement

5.7.1. Test Limit

The EUT has In-Service Monitoring function to continuously monitor the radar signals. If the radar is detected, must leave the channel (Shutdown). The Channel Move Time to cease all transmissions on the current channel upon detection of a Radar Waveform above the DFS Detection Threshold within 10 sec. The total duration of Channel Closing Transmission Time is 260ms, consisting of data signals and the aggregate of control signals, by a U-NII device during the Channel Move Time. The Non-Occupancy Period time is 30 minute during which a Channel will not be utilized after a Radar Waveform is detected on that Channel.

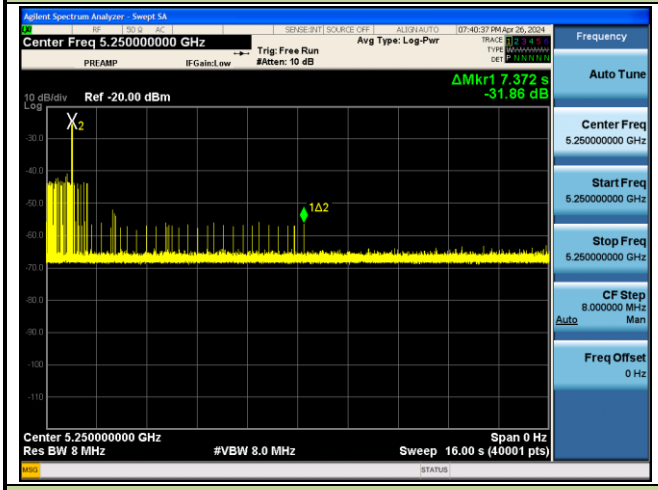
5.7.2. Test Procedure Used

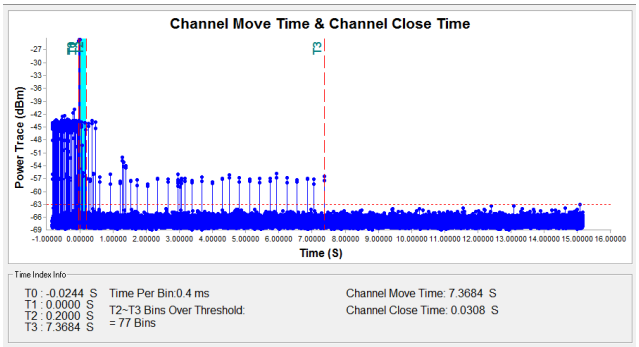
1. The test should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0.
2. When the radar burst with a level equal to the DFS Detection Threshold + 1dB is generated on the Operating Channel of the U-NII device. A U-NII device operating as a Master Device will associate with the Client Device at Channel. Stream the MPEG test file from the Master Device to the Client Device on the selected Channel for the entire period of the test. At time T0 the Radar Waveform generator sends a Burst of pulses for each of the radar types at Detection Threshold + 1dB.
3. Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the EUT during the observation time (Channel Move Time).
4. Measurement of the aggregate duration of the Channel Closing Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: Dwell (1.5ms) = S (12 sec) / B (8000); where Dwell is the dwell time per spectrum analyzer sampling bin, S is the sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: C = N X Dwell; where C is the Closing Time, N is the number of spectrum analyzer sampling bins showing a U-NII transmission and Dwell is the dwell time per bin.
5. Measure the EUT for more than 30 minutes following the channel close/move time to verify that the EUT does not resume any transmissions on this Channel.

5.7.3. Test Result

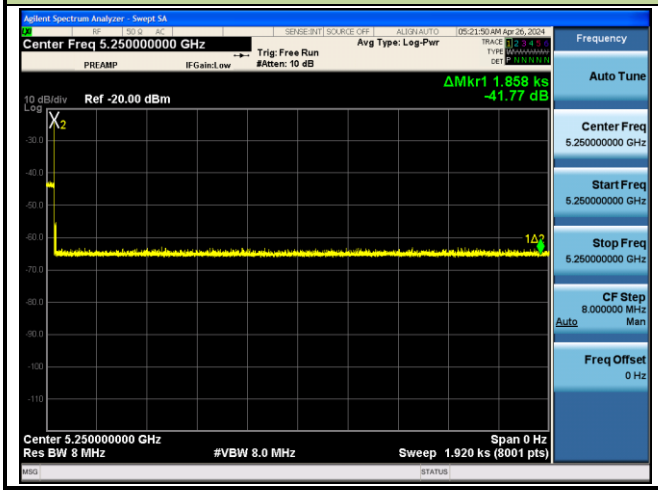
Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	27°C
Test Engineer	Peter	Relative Humidity	65%
Test Site	SR5	Test Date	2024/4/26
Test Item	Channel Move Time and Channel Closing Transmission Time (802.11be-EHT160 mode - 5250MHz) _Master		

Channel Move Time and Channel Closing Transmission Time





Non-Occupancy Period

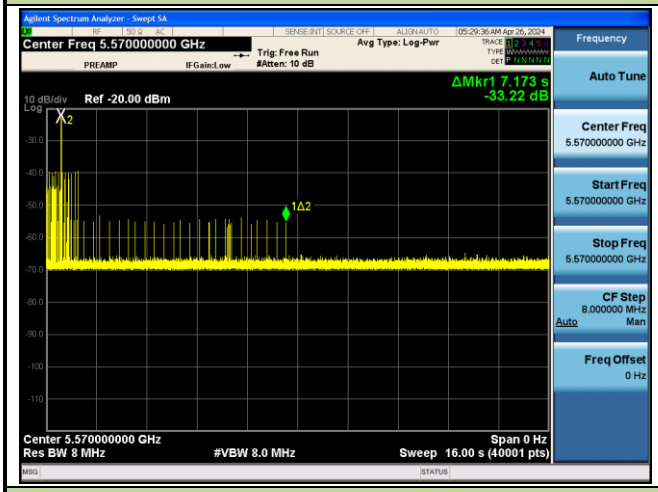


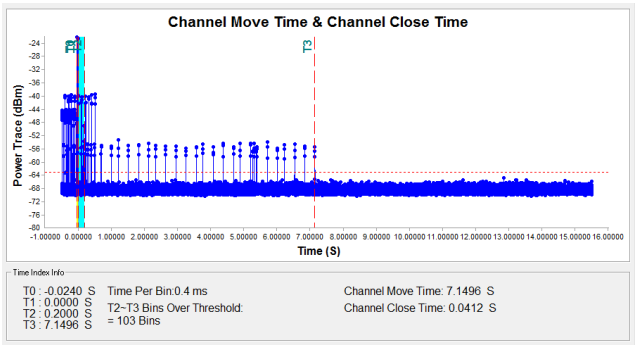
Parameter	Test Result	Limit
	Type 0	
Channel Move Time (s)	7.3684s	<10s
Channel Closing Transmission Time (ms) (Note)	30.8ms	< 60ms
Non-Occupancy Period (min)	≥ 30min	≥ 30 min
Note: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the		

beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 seconds period. The aggregate duration of control signals will not count quiet periods in between transmissions.

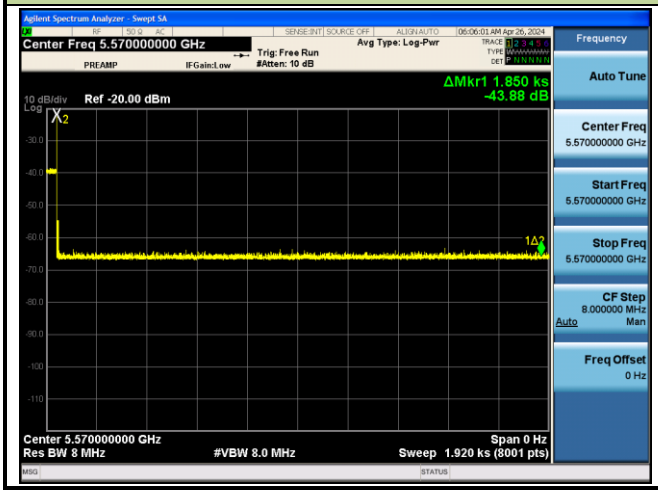
Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	27°C
Test Engineer	Peter	Relative Humidity	65%
Test Site	SR5	Test Date	2024/4/26
Test Item	Channel Move Time and Channel Closing Transmission Time (802.11be-EHT160 mode - 5570MHz) _Master		

Channel Move Time and Channel Closing Transmission Time





Non-Occupancy Period

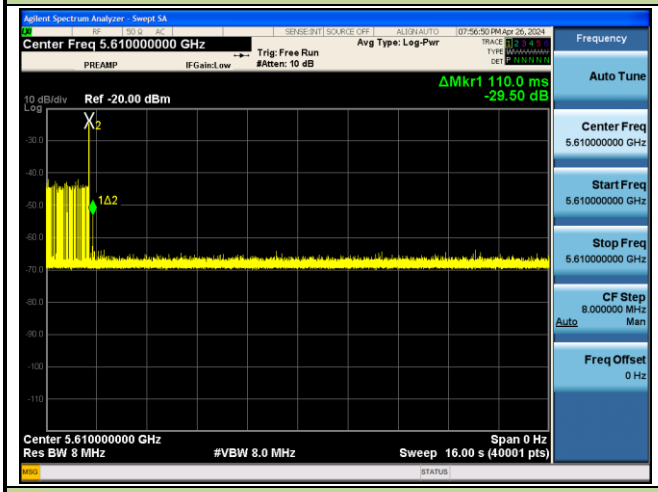


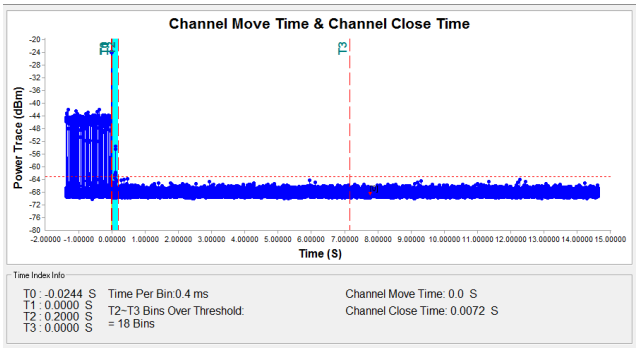
Parameter	Test Result	Limit
	Type 0	
Channel Move Time (s)	7.1496s	<10s
Channel Closing Transmission Time (ms) (Note)	41.2ms	< 60ms
Non-Occupancy Period (min)	≥ 30min	≥ 30 min
Note: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 seconds		

period. The aggregate duration of control signals will not count quiet periods in between transmissions.

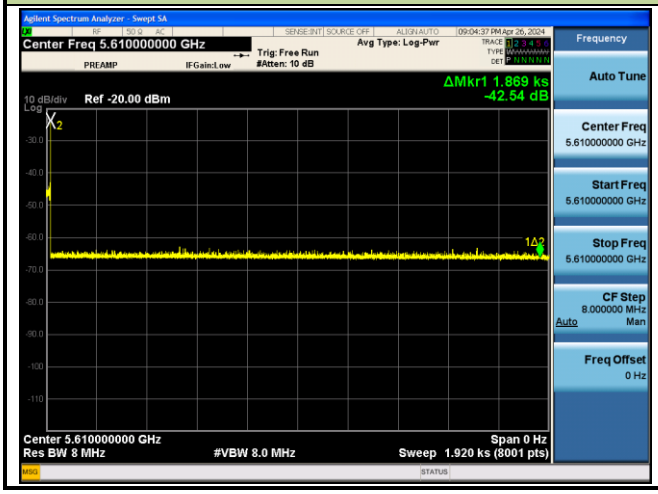
Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	27°C
Test Engineer	Peter	Relative Humidity	65%
Test Site	SR5	Test Date	2024/4/26
Test Item	Channel Move Time and Channel Closing Transmission Time(802.11be-EHT240 mode - 5610MHz) _Master		

Channel Move Time and Channel Closing Transmission Time





Non-Occupancy Period

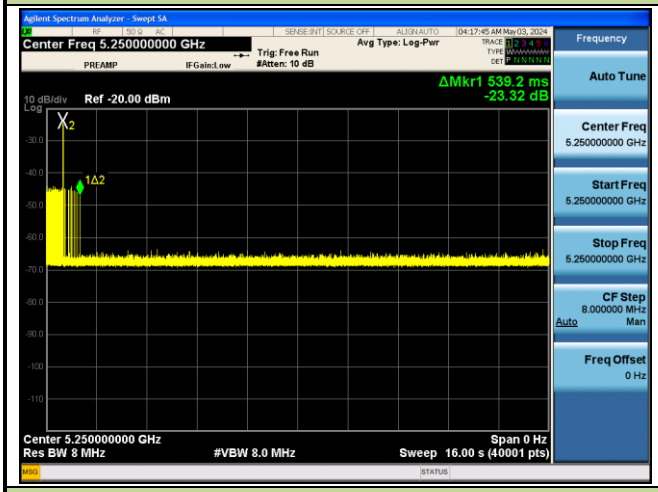


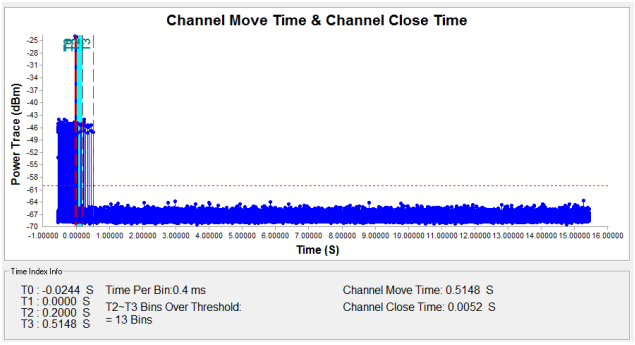
Parameter	Test Result	Limit
	Type 0	
Channel Move Time (s)	0.0s	<10s
Channel Closing Transmission Time (ms) (Note)	7.2ms	< 60ms
Non-Occupancy Period (min)	≥ 30min	≥ 30 min
Note: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 seconds		

period. The aggregate duration of control signals will not count quiet periods in between transmissions.

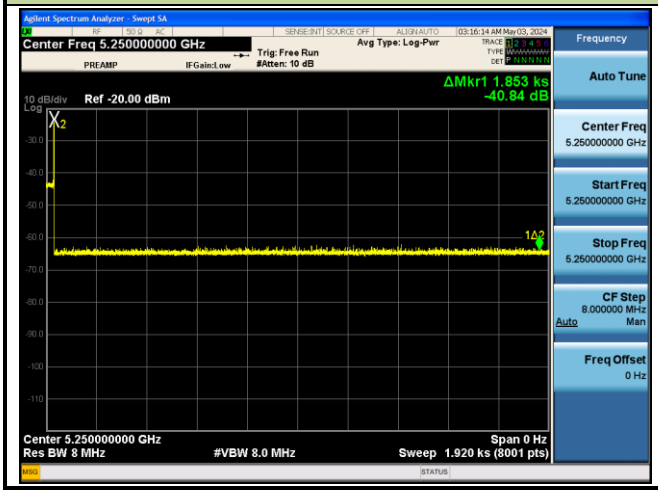
Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	27°C
Test Engineer	Peter	Relative Humidity	65%
Test Site	SR5	Test Date	2024/5/3
Test Item	Channel Move Time and Channel Closing Transmission Time (802.11be-EHT160 mode - 5250MHz) _Slave		

Channel Move Time and Channel Closing Transmission Time





Non-Occupancy Period

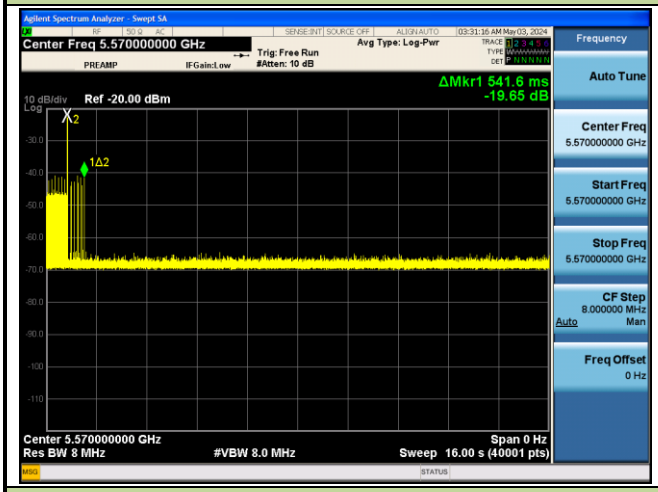


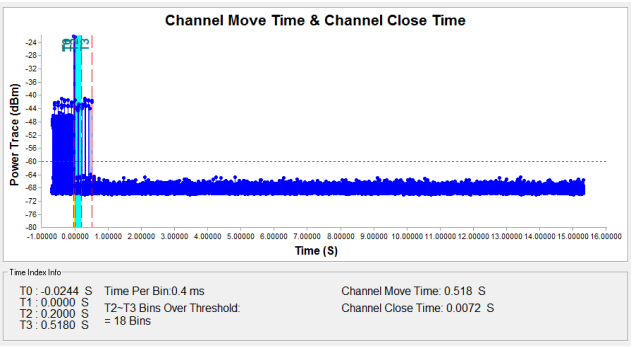
Parameter	Test Result	Limit
	Type 0	
Channel Move Time (s)	0.5148s	<10s
Channel Closing Transmission Time (ms) (Note)	5.2ms	< 60ms
Non-Occupancy Period (min)	≥ 30min	≥ 30 min
Note: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 seconds		

period. The aggregate duration of control signals will not count quiet periods in between transmissions.

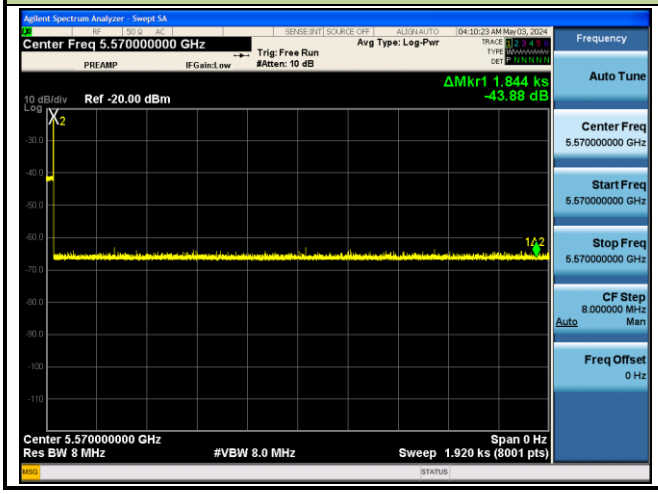
Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	27°C
Test Engineer	Peter	Relative Humidity	65%
Test Site	SR5	Test Date	2024/5/3
Test Item	Channel Move Time and Channel Closing Transmission Time (802.11be-EHT160 mode - 5570MHz) _Slave		

Channel Move Time and Channel Closing Transmission Time





Non-Occupancy Period

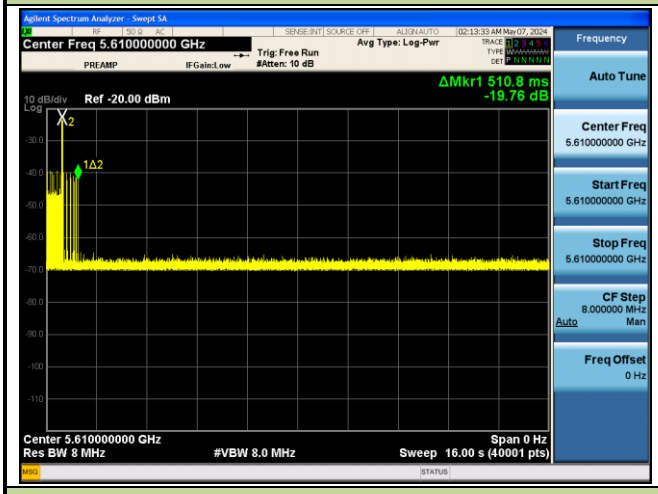


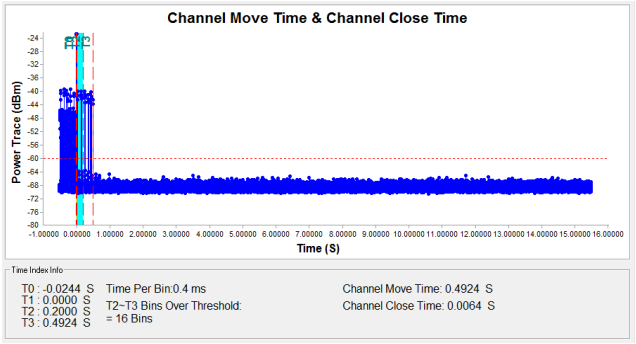
Parameter	Test Result	Limit
	Type 0	
Channel Move Time (s)	0.518s	<10s
Channel Closing Transmission Time (ms) (Note)	7.2ms	< 60ms
Non-Occupancy Period (min)	≥ 30min	≥ 30 min
Note: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 seconds		

period. The aggregate duration of control signals will not count quiet periods in between transmissions.

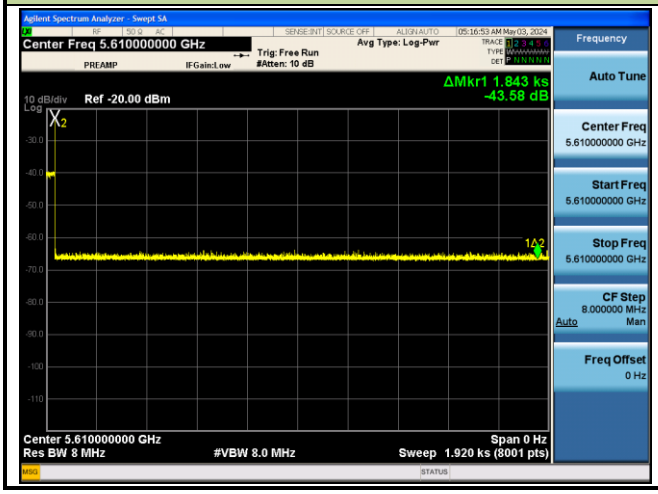
Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	27°C
Test Engineer	Peter	Relative Humidity	65%
Test Site	SR5	Test Date	2024/5/3~2024/5/7
Test Item	Channel Move Time and Channel Closing Transmission Time(802.11be-EHT240 mode - 5610MHz) _Slave		

Channel Move Time and Channel Closing Transmission Time





Non-Occupancy Period



Parameter	Test Result	Limit
	Type 0	
Channel Move Time (s)	0.4924s	<10s
Channel Closing Transmission Time (ms) (Note)	6.4ms	< 60ms
Non-Occupancy Period (min)	≥ 30min	≥ 30 min
Note: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to		

facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 seconds period. The aggregate duration of control signals will not count quiet periods in between transmissions.

5.8. Statistical Performance Check Measurement

5.8.1. Test Limit

The minimum percentage of successful detection requirements found in below table when a radar burst with a level equal to the DFS Detection Threshold + 1dB is generated on the Operating Channel of the U-NII device (In- Service Monitoring).

Radar Type	Minimum Number of Trails	Detection Probability
0	30	Pd > 60%
1	30(15 of test A and 15 of test B)	Pd > 60%
2	30	Pd > 60%
3	30	Pd > 60%
4	30	Pd > 60%
Aggregate (Radar Types 1-4)	120	Pd > 80%
5	30	Pd > 80%
6	30	Pd > 70%

The percentage of successful detection is calculated by:
(Total Waveform Detections / Total Waveform Trails) * 100 = Probability of Detection Radar Waveform In addition an aggregate minimum percentage of successful detection across all Short Pulse Radar Types 1-4 is required and is calculated as follows: (Pd1 + Pd2 + Pd3 + Pd4) / 4.

5.8.2. Test Procedure

1. Stream the MPEG test file from the Master Device to the Client Device on the test Channel for the entire period of the test.
2. At time T0 the Radar Waveform generator sends the individual waveform for each of the Radar Types 1-6, at levels equal to the DFS Detection Threshold + 1dB, on the Operating Channel.
3. 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 Types 0 to ensure detection occurs.
4. 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.
5. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trial runs.
6. The Minimum number of trails, minimum percentage of successful detection and the average minimum percentage of successful detection are found in below table.

5.8.3. Test Result

Product	BE11000 Tri-Band Wi-Fi 7 Range Extender	Temperature	26°C
Test Engineer	Jay	Relative Humidity	50%
Test Site	SR5	Test Date	2024/05/01
Test Item	Radar Statistical Performance Check (802.11be-EHT20 – 5500MHz)-Master		

Radar Type 1-4 - Radar Statistical Performance

Trial	Frequency	1=Detection, 0=No Detection			
	(MHz)	Radar Type 1	Radar Type 2	Radar Type 3	Radar Type 4
0	5490	1	1	1	1
1	5490	1	1	1	1
2	5491	1	0	0	0
3	5491	1	1	0	1
4	5492	1	1	1	1
5	5492	1	1	1	1
6	5493	1	1	0	1
7	5493	1	1	1	1
8	5494	1	1	1	1
9	5494	1	1	1	1
10	5495	1	1	1	0
11	5496	1	1	1	1
12	5497	1	1	1	0
13	5498	1	1	1	1
14	5499	1	0	1	1
15	5500	1	1	1	0
16	5501	1	1	0	1
17	5502	1	1	0	1
18	5503	1	1	1	0
19	5504	1	1	1	1
20	5505	1	0	1	1
21	5506	1	1	0	0
22	5507	1	1	1	0
23	5507	1	1	1	0
24	5508	1	1	1	1
25	5508	1	1	0	1
26	5509	1	1	1	1

Trial	Frequency	1=Detection, 0=No Detection			
	(MHz)	Radar Type 1	Radar Type 2	Radar Type 3	Radar Type 4
27	5509	1	1	1	1
28	5510	1	1	0	0
29	5510	1	1	1	1
Probability:		100%	90%	73.33%	70%
Type1-4		83.33% (>80%)			

Radar Type 1 - Radar Waveform

	Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Wavefor Length (us)
Downloa	0	Type 1	1.0	798.0	67	53466.0
Downloa	1	Type 1	1.0	818.0	65	53170.0
Downloa	2	Type 1	1.0	578.0	92	53176.0
Downloa	3	Type 1	1.0	718.0	74	53132.0
Downloa	4	Type 1	1.0	938.0	57	53466.0
Downloa	5	Type 1	1.0	638.0	83	52954.0
Downloa	6	Type 1	1.0	538.0	99	53262.0
Downloa	7	Type 1	1.0	658.0	81	53298.0
Downloa	8	Type 1	1.0	518.0	102	52836.0
Downloa	9	Type 1	1.0	878.0	61	53558.0
Downloa	10	Type 1	1.0	918.0	58	53244.0
Downloa	11	Type 1	1.0	3066.0	18	55188.0
Downloa	12	Type 1	1.0	678.0	78	52884.0
Downloa	13	Type 1	1.0	598.0	89	53222.0
Downloa	14	Type 1	1.0	618.0	86	53148.0
Downloa	15	Type 1	1.0	900.0	59	53100.0
Downloa	16	Type 1	1.0	977.0	55	53735.0
Downloa	17	Type 1	1.0	1598.0	34	54332.0
Downloa	18	Type 1	1.0	1369.0	39	53391.0
Downloa	19	Type 1	1.0	847.0	63	53361.0
Downloa	20	Type 1	1.0	2496.0	22	54912.0
Downloa	21	Type 1	1.0	1889.0	28	52892.0
Downloa	22	Type 1	1.0	2877.0	19	54663.0
Downloa	23	Type 1	1.0	1559.0	34	53006.0
Downloa	24	Type 1	1.0	1965.0	27	53055.0
Downloa	25	Type 1	1.0	2895.0	19	55005.0
Downloa	26	Type 1	1.0	1722.0	31	53382.0
Downloa	27	Type 1	1.0	1271.0	42	53382.0
Downloa	28	Type 1	1.0	1237.0	43	53191.0
Downloa	29	Type 1	1.0	1934.0	28	54152.0

Radar Type 2 - Radar Waveform

	Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Wavefor Length (us)
Downloa	0	Type 2	1.7	174.0	24	4176.0
Downloa	1	Type 2	3.8	176.0	27	4752.0
Downloa	2	Type 2	4.0	161.0	28	4508.0
Downloa	3	Type 2	4.3	226.0	28	6328.0
Downloa	4	Type 2	1.9	193.0	24	4632.0
Downloa	5	Type 2	1.1	230.0	23	5290.0
Downloa	6	Type 2	4.5	198.0	29	5742.0
Downloa	7	Type 2	2.9	227.0	26	5902.0
Downloa	8	Type 2	2.8	171.0	26	4446.0
Downloa	9	Type 2	3.6	221.0	27	5967.0
Downloa	10	Type 2	1.1	180.0	23	4140.0
Downloa	11	Type 2	1.3	189.0	23	4347.0
Downloa	12	Type 2	2.5	204.0	25	5100.0
Downloa	13	Type 2	4.5	203.0	29	5887.0
Downloa	14	Type 2	5.0	170.0	29	4930.0
Downloa	15	Type 2	3.1	201.0	26	5226.0
Downloa	16	Type 2	2.1	218.0	24	5232.0
Downloa	17	Type 2	2.6	208.0	25	5200.0
Downloa	18	Type 2	1.8	223.0	24	5352.0
Downloa	19	Type 2	1.2	220.0	23	5060.0
Downloa	20	Type 2	2.9	224.0	26	5824.0
Downloa	21	Type 2	4.0	160.0	28	4480.0
Downloa	22	Type 2	2.5	209.0	25	5225.0
Downloa	23	Type 2	1.0	205.0	23	4715.0
Downloa	24	Type 2	3.7	151.0	27	4077.0
Downloa	25	Type 2	2.5	186.0	25	4650.0
Downloa	26	Type 2	1.5	190.0	23	4370.0
Downloa	27	Type 2	1.3	185.0	23	4255.0
Downloa	28	Type 2	1.2	175.0	23	4025.0
Downloa	29	Type 2	1.7	216.0	24	5184.0

Radar Type 3 - Radar Waveform

	Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Wavefor Length (us)
Downloa	0	Type 3	6.7	467.0	16	7472.0
Downloa	1	Type 3	8.8	304.0	18	5472.0
Downloa	2	Type 3	9.0	316.0	18	5688.0
Downloa	3	Type 3	9.3	439.0	18	7902.0
Downloa	4	Type 3	6.9	420.0	16	6720.0
Downloa	5	Type 3	6.1	249.0	16	3984.0
Downloa	6	Type 3	9.5	463.0	18	8334.0
Downloa	7	Type 3	7.9	258.0	17	4386.0
Downloa	8	Type 3	7.8	212.0	17	3604.0
Downloa	9	Type 3	8.6	236.0	17	4012.0
Downloa	10	Type 3	6.1	474.0	16	7584.0
Downloa	11	Type 3	6.3	461.0	16	7376.0
Downloa	12	Type 3	7.5	437.0	17	7429.0
Downloa	13	Type 3	9.5	287.0	18	5166.0
Downloa	14	Type 3	10.0	395.0	18	7110.0
Downloa	15	Type 3	8.1	322.0	17	5474.0
Downloa	16	Type 3	7.1	468.0	16	7488.0
Downloa	17	Type 3	7.6	255.0	17	4335.0
Downloa	18	Type 3	6.8	423.0	16	6768.0
Downloa	19	Type 3	6.2	456.0	16	7296.0
Downloa	20	Type 3	7.9	351.0	17	5967.0
Downloa	21	Type 3	9.0	411.0	18	7398.0
Downloa	22	Type 3	7.5	279.0	17	4743.0
Downloa	23	Type 3	6.0	431.0	16	6896.0
Downloa	24	Type 3	8.7	324.0	17	5508.0
Downloa	25	Type 3	7.5	419.0	17	7123.0
Downloa	26	Type 3	6.5	447.0	16	7152.0
Downloa	27	Type 3	6.3	481.0	16	7696.0
Downloa	28	Type 3	6.2	438.0	16	7008.0
Downloa	29	Type 3	6.7	270.0	16	4320.0

Radar Type 4 - Radar Waveform

	Trial Id	Radar Type	Pulse Width (us)	PRI (us)	Number of Pulses	Wavefor Length (us)
Downloa	0	Type 4	12.5	467.0	12	5604.0
Downloa	1	Type 4	17.2	304.0	15	4560.0
Downloa	2	Type 4	17.8	316.0	15	4740.0
Downloa	3	Type 4	18.5	439.0	16	7024.0
Downloa	4	Type 4	13.1	420.0	13	5460.0
Downloa	5	Type 4	11.3	249.0	12	2988.0
Downloa	6	Type 4	18.8	463.0	16	7408.0
Downloa	7	Type 4	15.3	258.0	14	3612.0
Downloa	8	Type 4	15.1	212.0	14	2968.0
Downloa	9	Type 4	16.9	236.0	15	3540.0
Downloa	10	Type 4	11.2	474.0	12	5688.0
Downloa	11	Type 4	11.7	461.0	12	5532.0
Downloa	12	Type 4	14.4	437.0	13	5681.0
Downloa	13	Type 4	18.9	287.0	16	4592.0
Downloa	14	Type 4	19.9	395.0	16	6320.0
Downloa	15	Type 4	15.7	322.0	14	4508.0
Downloa	16	Type 4	13.4	468.0	13	6084.0
Downloa	17	Type 4	14.5	255.0	13	3315.0
Downloa	18	Type 4	12.9	423.0	13	5499.0
Downloa	19	Type 4	11.5	456.0	12	5472.0
Downloa	20	Type 4	15.3	351.0	14	4914.0
Downloa	21	Type 4	17.8	411.0	15	6165.0
Downloa	22	Type 4	14.3	279.0	13	3627.0
Downloa	23	Type 4	11.1	431.0	12	5172.0
Downloa	24	Type 4	17.0	324.0	15	4860.0
Downloa	25	Type 4	14.5	419.0	13	5447.0
Downloa	26	Type 4	12.1	447.0	12	5364.0
Downloa	27	Type 4	11.7	481.0	12	5772.0
Downloa	28	Type 4	11.6	438.0	12	5256.0
Downloa	29	Type 4	12.7	270.0	12	3240.0

Radar Type 5 - Radar Statistical Performance

Trail #	Test Freq. (MHz)	1=Detection 0=No Detection	Trail #	Test Freq. (MHz)	1=Detection 0=No Detection
0	5494	1	15	5500	1
1	5500	1	16	5495	1
2	5500	1	17	5497	1
3	5500	1	18	5506	1
4	5494	1	19	5507	1
5	5493	1	20	5504	1
6	5500	1	21	5500	1
7	5496	1	22	5505	1
8	5497	1	23	5506	1
9	5500	1	24	5500	1
10	5498	1	25	5504	1
11	5499	1	26	5506	1
12	5496	1	27	5507	1
13	5500	1	28	5508	1
14	5500	1	29	5506	1
Detection Percentage (%)					100%

Type 5 Radar Waveform_0

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	500001.0	58.7	7	1	1765.0	-	-
1	788858.0	84.3	7	3	1452.0	1398.0	1571.0
2	107934...	87.4	7	3	1358.0	1377.0	1111.0
3	173235.0	91.4	7	3	1554.0	1036.0	1662.0
4	464181.0	61.8	7	1	1828.0	-	-
5	754905.0	51.8	7	1	1621.0	-	-
6	104321...	93.4	7	3	1063.0	1317.0	1923.0
7	137661.0	73.8	7	2	1804.0	1156.0	-
8	427962.0	72.6	7	2	1935.0	1079.0	-
9	718561.0	82.5	7	2	1049.0	1478.0	-

Type 5 Radar Waveform_1

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	630504.0	51.3	15	1	1713.0	-	-
1	63719.0	54.0	15	1	1485.0	-	-
2	244829.0	69.1	15	2	1043.0	1750.0	-
3	424983.0	93.8	15	3	1665.0	1844.0	1155.0
4	605585.0	99.1	15	3	1505.0	1825.0	1538.0
5	41253.0	76.0	15	2	1866.0	1508.0	-
6	222776.0	63.5	15	1	1889.0	-	-
7	403831.0	69.8	15	2	1024.0	1578.0	-
8	586300.0	60.9	15	1	1067.0	-	-
9	19004.0	52.9	15	1	1162.0	-	-
10	200185.0	73.7	15	2	1211.0	1581.0	-
11	380411.0	87.8	15	3	1516.0	1753.0	1473.0
12	562652.0	68.6	15	2	1029.0	1730.0	-
13	744707.0	50.9	15	1	1930.0	-	-
14	177818.0	83.0	15	2	1675.0	1303.0	-
15	359125.0	69.5	15	2	1296.0	1410.0	-

Type 5 Radar Waveform_2

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	509264.0	56.4	16	1	1603.0	-	-
1	680130.0	53.9	16	1	1545.0	-	-
2	146533.0	53.5	16	1	1943.0	-	-
3	317593.0	59.4	16	1	1206.0	-	-
4	487066.0	78.5	16	2	1305.0	1969.0	-
5	655737.0	86.1	16	3	1355.0	1823.0	1948.0
6	125182.0	67.0	16	2	1788.0	1958.0	-
7	296065.0	74.5	16	2	1213.0	1124.0	-
8	466535.0	81.3	16	2	1215.0	1366.0	-
9	636980.0	81.5	16	2	1429.0	1293.0	-
10	104267.0	79.9	16	2	1345.0	1990.0	-
11	275181.0	50.5	16	1	1996.0	-	-
12	444173.0	88.4	16	3	1871.0	1121.0	1723.0
13	616638.0	65.7	16	1	1964.0	-	-
14	83142.0	93.0	16	3	1962.0	1265.0	1267.0
15	254505.0	63.6	16	1	1020.0	-	-
16	424165.0	78.1	16	2	1737.0	1422.0	-

Type 5 Radar Waveform_3

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	561917.0	76.8	18	2	1105.0	1462.0	-
1	58856.0	72.6	18	2	1668.0	1188.0	-
2	219757.0	70.4	18	2	1321.0	1820.0	-
3	381519.0	57.0	18	1	1683.0	-	-
4	539847.0	88.6	18	3	1721.0	1611.0	1967.0
5	39100.0	55.0	18	1	1594.0	-	-
6	199396.0	93.3	18	3	1624.0	1678.0	1625.0
7	360062.0	86.7	18	3	1720.0	1540.0	1349.0
8	520177.0	86.7	18	3	1816.0	1617.0	1754.0
9	19237.0	57.7	18	1	1382.0	-	-
10	180157.0	78.1	18	2	1561.0	1416.0	-
11	341761.0	59.9	18	1	1734.0	-	-
12	502148.0	71.0	18	2	1677.0	1220.0	-
13	664532.0	65.7	18	1	1497.0	-	-
14	160058.0	86.4	18	3	1957.0	1088.0	1054.0
15	322202.0	58.3	18	1	1104.0	-	-
16	481097.0	92.3	18	3	1589.0	1800.0	1189.0
17	641560.0	95.4	18	3	1147.0	1801.0	1748.0

Type 5 Radar Waveform_4

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	230026.0	89.4	8	3	1574.0	1736.0	1023.0
1	494090.0	70.2	8	2	1655.0	1500.0	-
2	759097.0	63.2	8	1	1445.0	-	-
3	102365...	53.9	8	1	1098.0	-	-
4	198005.0	65.2	8	1	1918.0	-	-
5	461089.0	87.1	8	3	1453.0	1658.0	1236.0
6	724508.0	94.6	8	3	1896.0	1154.0	1456.0
7	990596.0	62.4	8	1	1646.0	-	-
8	165301.0	67.6	8	2	1600.0	1439.0	-
9	428206.0	96.2	8	3	1629.0	1909.0	1879.0
10	693781.0	62.9	8	1	1793.0	-	-

Type 5 Radar Waveform_5

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	131669...	81.4	5	2	1413.0	1565.0	-
1	182514.0	95.3	5	3	1774.0	1131.0	1995.0
2	546487.0	60.0	5	1	1160.0	-	-
3	909540.0	60.1	5	1	1922.0	-	-
4	127359...	59.6	5	1	1069.0	-	-
5	137882.0	91.8	5	3	1259.0	1810.0	1477.0
6	501010.0	78.4	5	2	1763.0	1487.0	-
7	865247.0	62.6	5	1	1122.0	-	-

Type 5 Radar Waveform_6

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	516946.0	62.4	18	1	1000.0	-	-
1	39179.0	67.9	18	2	1925.0	1039.0	-
2	191187.0	99.0	18	3	1890.0	1228.0	1326.0
3	345057.0	60.3	18	1	1210.0	-	-
4	496341.0	72.7	18	2	1688.0	1548.0	-
5	20344.0	91.9	18	3	1988.0	1503.0	1201.0
6	172985.0	78.3	18	2	1309.0	1198.0	-
7	324992.0	88.9	18	3	1080.0	1399.0	1115.0
8	479203.0	64.5	18	1	1087.0	-	-
9	1625.0	60.3	18	1	1133.0	-	-
10	154419.0	65.8	18	1	1579.0	-	-
11	305517.0	93.5	18	3	1619.0	1682.0	1758.0
12	457252.0	92.2	18	3	1533.0	1842.0	1979.0
13	609099.0	96.2	18	3	1672.0	1744.0	1971.0
14	135269.0	70.3	18	2	1414.0	1692.0	-
15	288335.0	53.5	18	1	1706.0	-	-
16	439137.0	93.4	18	3	1870.0	1242.0	1395.0
17	594115.0	64.9	18	1	1438.0	-	-
18	116504.0	72.9	18	2	1239.0	1817.0	-

Type 5 Radar Waveform_7

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	366038.0	57.3	12	1	1698.0	-	-
1	572552.0	83.3	12	2	1700.0	1427.0	-
2	780751.0	62.5	12	1	1952.0	-	-
3	132806.0	76.1	12	2	1612.0	1397.0	-
4	339391.0	87.5	12	3	1139.0	1901.0	1400.0
5	545977.0	97.1	12	3	1352.0	1798.0	1636.0
6	754249.0	73.8	12	2	1496.0	1536.0	-
7	107497.0	55.2	12	1	1357.0	-	-
8	314885.0	62.5	12	1	1811.0	-	-
9	521546.0	68.1	12	2	1251.0	1843.0	-
10	727998.0	99.9	12	3	1819.0	1057.0	1017.0
11	81932.0	61.3	12	1	1342.0	-	-
12	288728.0	73.9	12	2	1725.0	1872.0	-
13	496814.0	58.0	12	1	1747.0	-	-

Type 5 Radar Waveform_8

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	755599.0	95.8	12	3	1465.0	1975.0	1904.0
1	60603.0	79.9	12	2	1764.0	1174.0	-
2	283803.0	77.4	12	2	1235.0	1584.0	-
3	506280.0	90.4	12	3	1114.0	1974.0	1027.0
4	731529.0	59.9	12	1	1126.0	-	-
5	33037.0	90.5	12	3	1275.0	1985.0	1845.0
6	256800.0	62.0	12	1	1062.0	-	-
7	478398.0	87.0	12	3	1463.0	1587.0	1887.0
8	701468.0	98.3	12	3	1586.0	1187.0	1651.0
9	5625.0	80.1	12	2	1277.0	1881.0	-
10	229189.0	52.1	12	1	1330.0	-	-
11	452740.0	51.7	12	1	1333.0	-	-
12	675900.0	52.7	12	1	1867.0	-	-

Type 5 Radar Waveform_9

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	728602.0	70.7	15	2	1934.0	1731.0	-
1	163064.0	85.3	15	3	1179.0	1751.0	1711.0
2	344919.0	75.0	15	2	1034.0	1261.0	-
3	526501.0	56.4	15	1	1954.0	-	-
4	707567.0	66.7	15	2	1243.0	1090.0	-
5	140840.0	94.8	15	3	1224.0	1970.0	1214.0
6	322286.0	68.8	15	2	1701.0	1280.0	-
7	503381.0	71.0	15	2	1563.0	1537.0	-
8	684698.0	79.4	15	2	1525.0	1389.0	-
9	118479.0	100.0	15	3	1717.0	1498.0	1740.0
10	299495.0	91.9	15	3	1295.0	1037.0	1829.0
11	481809.0	61.5	15	1	1949.0	-	-
12	663548.0	63.2	15	1	1596.0	-	-
13	96313.0	99.0	15	3	1254.0	1919.0	1073.0
14	277029.0	86.6	15	3	1606.0	1849.0	1202.0
15	459655.0	65.8	15	1	1635.0	-	-

Type 5 Radar Waveform_10

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	128199...	70.7	5	2	1897.0	1749.0	-
1	148716.0	64.6	5	1	1965.0	-	-
2	511400.0	99.0	5	3	1012.0	1045.0	1772.0
3	873819.0	91.9	5	3	1583.0	1466.0	1549.0
4	123645...	85.5	5	3	1420.0	1780.0	1459.0
5	103733.0	96.5	5	3	1530.0	1924.0	1835.0
6	467414.0	66.2	5	1	1550.0	-	-
7	828841.0	92.9	5	3	1929.0	1335.0	1883.0

Type 5 Radar Waveform_11

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	106135...	63.1	6	1	1642.0	-	-
1	52533.0	83.5	6	3	1005.0	1981.0	1250.0
2	375121.0	74.5	6	2	1914.0	1474.0	-
3	698701.0	60.9	6	1	1430.0	-	-
4	102035...	70.4	6	2	1680.0	1542.0	-
5	12834.0	85.1	6	3	1048.0	1127.0	1393.0
6	335516.0	82.4	6	2	1605.0	1282.0	-
7	658234.0	74.0	6	2	1108.0	1691.0	-
8	979549.0	85.7	6	3	1486.0	1976.0	1212.0

Type 5 Radar Waveform_12

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	975763.0	94.4	11	3	1385.0	1336.0	1376.0
1	221907.0	53.0	11	1	1805.0	-	-
2	463536.0	70.0	11	2	1248.0	1558.0	-
3	704621.0	87.6	11	3	1403.0	1170.0	1315.0
4	948913.0	61.7	11	1	1042.0	-	-
5	191927.0	83.2	11	2	1100.0	1535.0	-
6	434514.0	66.6	11	1	1038.0	-	-
7	676534.0	55.1	11	1	1423.0	-	-
8	915669.0	87.0	11	3	1789.0	1306.0	1643.0
9	162331.0	66.4	11	1	1409.0	-	-
10	404114.0	80.0	11	2	1319.0	1094.0	-
11	644572.0	85.6	11	3	1891.0	1291.0	1529.0

Type 5 Radar Waveform_13

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	559643.0	78.9	18	2	1613.0	1263.0	-
1	83132.0	96.7	18	3	1627.0	1432.0	1986.0
2	235098.0	91.5	18	3	1472.0	1759.0	1784.0
3	388261.0	75.4	18	2	1274.0	1795.0	-
4	540400.0	71.1	18	2	1968.0	1444.0	-
5	64622.0	77.5	18	2	1588.0	1441.0	-
6	217521.0	65.4	18	1	1710.0	-	-
7	370455.0	53.1	18	1	1419.0	-	-
8	523206.0	59.9	18	1	1518.0	-	-
9	45893.0	67.3	18	2	1195.0	1168.0	-
10	198422.0	74.2	18	2	1386.0	1216.0	-
11	350921.0	69.0	18	2	1557.0	1132.0	-
12	503059.0	82.1	18	2	1987.0	1186.0	-
13	27020.0	93.3	18	3	1365.0	1032.0	1728.0
14	179613.0	83.3	18	2	1103.0	1568.0	-
15	331979.0	70.3	18	2	1699.0	1281.0	-
16	485741.0	57.9	18	1	1285.0	-	-
17	8305.0	50.6	18	1	1850.0	-	-
18	160375.0	94.3	18	3	1479.0	1218.0	1733.0

Type 5 Radar Waveform_14

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	297680.0	67.5	20	2	1434.0	1117.0	-
1	441995.0	67.8	20	2	1567.0	1773.0	-
2	586834.0	75.9	20	2	1846.0	1362.0	-
3	134817.0	68.9	20	2	1237.0	1818.0	-
4	278690.0	96.0	20	3	1339.0	1796.0	1852.0
5	425629.0	66.6	20	1	1289.0	-	-
6	568519.0	78.3	20	2	1862.0	1856.0	-
7	117306.0	58.9	20	1	1412.0	-	-
8	261916.0	81.5	20	2	1113.0	1591.0	-
9	406632.0	82.4	20	2	1059.0	1861.0	-
10	550186.0	86.8	20	3	1797.0	1163.0	1320.0
11	98921.0	98.5	20	3	1268.0	1300.0	1868.0
12	244128.0	80.1	20	2	1086.0	1482.0	-
13	387268.0	86.3	20	3	1860.0	1407.0	1998.0
14	535106.0	57.2	20	1	1241.0	-	-
15	81010.0	84.3	20	3	1808.0	1873.0	1628.0
16	225534.0	86.8	20	3	1258.0	1302.0	1978.0
17	370865.0	83.0	20	2	1690.0	1378.0	-
18	514322.0	85.6	20	3	1327.0	1956.0	1311.0
19	63364.0	99.4	20	3	1112.0	1815.0	1262.0

Type 5 Radar Waveform_15

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	298559.0	57.5	13	1	1379.0	-	-
1	505048.0	67.0	13	2	1551.0	1620.0	-
2	712288.0	70.9	13	2	1939.0	1083.0	-
3	65334.0	75.7	13	2	1332.0	1476.0	-
4	272524.0	77.1	13	2	1840.0	1010.0	-
5	479639.0	78.8	13	2	1371.0	1618.0	-
6	688000.0	51.0	13	1	1494.0	-	-
7	39859.0	55.4	13	1	1794.0	-	-
8	247001.0	68.5	13	2	1590.0	1266.0	-
9	453464.0	100.0	13	3	1484.0	1314.0	1428.0
10	660486.0	96.4	13	3	1363.0	1361.0	1292.0
11	14259.0	97.2	13	3	1694.0	1480.0	1446.0
12	221241.0	86.4	13	3	1447.0	1227.0	1102.0
13	428688.0	72.1	13	2	1184.0	1638.0	-

Type 5 Radar Waveform_16

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	810996.0	62.4	9	1	1329.0	-	-
1	107330...	67.8	9	2	1364.0	1937.0	-
2	249825.0	53.0	9	1	1790.0	-	-
3	513186.0	77.8	9	2	1546.0	1906.0	-
4	776261.0	95.6	9	3	1145.0	1743.0	1499.0
5	104282...	58.8	9	1	1199.0	-	-
6	216805.0	92.8	9	3	1424.0	1408.0	1381.0
7	480761.0	68.5	9	2	1340.0	1972.0	-
8	743697.0	84.0	9	3	1607.0	1663.0	1270.0
9	100839...	70.8	9	2	1468.0	1760.0	-
10	184481.0	73.1	9	2	1869.0	1515.0	-

Type 5 Radar Waveform_17

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	379027.0	68.8	11	2	1504.0	1973.0	-
1	601267.0	94.2	11	3	1920.0	1299.0	1467.0
2	826098.0	82.7	11	2	1003.0	1351.0	-
3	128582.0	74.8	11	2	1597.0	1457.0	-
4	352167.0	58.9	11	1	1874.0	-	-
5	573713.0	96.5	11	3	1838.0	1708.0	1328.0
6	796850.0	87.3	11	3	1405.0	1271.0	1687.0
7	101143.0	72.4	11	2	1200.0	1433.0	-
8	324788.0	51.3	11	1	1475.0	-	-
9	546355.0	86.8	11	3	1159.0	1652.0	1942.0
10	772173.0	50.4	11	1	1056.0	-	-
11	73442.0	97.0	11	3	1884.0	1876.0	1415.0
12	297241.0	50.1	11	1	1519.0	-	-

Type 5 Radar Waveform_18

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	675668.0	91.9	8	3	1301.0	1337.0	1645.0
1	966684.0	67.2	8	2	1983.0	1040.0	-
2	60080.0	65.5	8	1	1671.0	-	-
3	350468.0	72.8	8	2	1489.0	1016.0	-
4	640208.0	90.5	8	3	1552.0	1180.0	1064.0
5	930430.0	81.6	8	2	1807.0	1853.0	-
6	24223.0	86.0	8	3	1312.0	1905.0	1278.0
7	314287.0	89.6	8	3	1152.0	1068.0	1832.0
8	605824.0	62.1	8	1	1119.0	-	-
9	896505.0	58.0	8	1	1234.0	-	-

Type 5 Radar Waveform_19

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	148262...	73.8	5	2	1071.0	1915.0	-
1	348501.0	89.5	5	3	1294.0	1450.0	1025.0
2	712087.0	81.2	5	2	1144.0	1146.0	-
3	107622...	59.0	5	1	1041.0	-	-
4	143687...	87.5	5	3	1096.0	1941.0	1018.0
5	303833.0	76.7	5	2	1667.0	1947.0	-
6	667663.0	56.5	5	1	1573.0	-	-
7	102959...	89.0	5	3	1033.0	1391.0	1304.0

Type 5 Radar Waveform_20

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	795066.0	83.1	12	2	1762.0	1058.0	-
1	148131.0	50.0	12	1	1739.0	-	-
2	355877.0	52.6	12	1	1055.0	-	-
3	563078.0	58.2	12	1	1704.0	-	-
4	768221.0	84.6	12	3	1226.0	1177.0	1886.0
5	122378.0	68.3	12	2	1269.0	1851.0	-
6	329595.0	80.6	12	2	1814.0	1074.0	-
7	537959.0	59.5	12	1	1009.0	-	-
8	745244.0	53.4	12	1	1417.0	-	-
9	97056.0	59.1	12	1	1431.0	-	-
10	304250.0	74.8	12	2	1002.0	1394.0	-
11	510244.0	85.0	12	3	1670.0	1755.0	1158.0
12	717553.0	85.3	12	3	1307.0	1560.0	1078.0
13	71512.0	61.9	12	1	1197.0	-	-

Type 5 Radar Waveform_21

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	229509.0	70.8	17	2	1022.0	1015.0	-
1	400529.0	52.9	17	1	1483.0	-	-
2	569230.0	86.0	17	3	1524.0	1308.0	1287.0
3	37714.0	78.4	17	2	1821.0	1406.0	-
4	207532.0	93.3	17	3	1991.0	1966.0	1290.0
5	378491.0	70.0	17	2	1858.0	1471.0	-
6	548974.0	78.1	17	2	1507.0	1705.0	-
7	16774.0	52.4	17	1	1060.0	-	-
8	186482.0	84.8	17	3	1859.0	1839.0	1993.0
9	357118.0	83.5	17	3	1150.0	1492.0	1443.0
10	529488.0	56.7	17	1	1208.0	-	-
11	697766.0	86.2	17	3	1674.0	1125.0	1053.0
12	166571.0	58.8	17	1	1436.0	-	-
13	335823.0	85.4	17	3	1686.0	1509.0	1577.0
14	507436.0	77.7	17	2	1297.0	1298.0	-
15	676055.0	87.4	17	3	1649.0	1894.0	1075.0
16	145003.0	99.8	17	3	1185.0	1167.0	1616.0

Type 5 Radar Waveform_22

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	447229.0	95.7	10	3	1353.0	1813.0	1028.0
1	688316.0	94.9	10	3	1735.0	1994.0	1084.0
2	929912.0	97.9	10	3	1354.0	1792.0	1418.0
3	176291.0	67.4	10	2	1348.0	1008.0	-
4	417300.0	96.9	10	3	1916.0	1425.0	1283.0
5	659121.0	97.6	10	3	1384.0	1050.0	1569.0
6	901006.0	83.6	10	3	1231.0	1219.0	1194.0
7	146470.0	82.6	10	2	1128.0	1346.0	-
8	387774.0	97.2	10	3	1142.0	1769.0	1173.0
9	629493.0	92.3	10	3	1181.0	1164.0	1458.0
10	871823.0	80.9	10	2	1222.0	1756.0	-
11	116586.0	78.1	10	2	1190.0	1999.0	-

Type 5 Radar Waveform_23

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	538038.0	76.9	5	2	1564.0	1767.0	-
1	902167.0	64.7	5	1	1437.0	-	-
2	126430...	77.1	5	2	1046.0	1944.0	-
3	130381.0	72.7	5	2	1440.0	1374.0	-
4	494082.0	61.9	5	1	1035.0	-	-
5	856449.0	68.6	5	2	1205.0	1892.0	-
6	122012...	78.3	5	2	1047.0	1273.0	-
7	85626.0	73.1	5	2	1426.0	1863.0	-

Type 5 Radar Waveform_24

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	224291.0	59.1	15	1	1718.0	-	-
1	404797.0	83.5	15	3	1070.0	1129.0	1318.0
2	585565.0	86.5	15	3	1176.0	1253.0	1442.0
3	20469.0	60.8	15	1	1209.0	-	-
4	201494.0	80.7	15	2	2000.0	1360.0	-
5	383735.0	65.2	15	1	1101.0	-	-
6	564279.0	69.1	15	2	1511.0	1030.0	-
7	746938.0	51.5	15	1	1161.0	-	-
8	178837.0	98.5	15	3	1061.0	1951.0	1812.0
9	361254.0	59.5	15	1	1325.0	-	-
10	540817.0	95.3	15	3	1284.0	1650.0	1169.0
11	723236.0	81.8	15	2	1460.0	1077.0	-
12	157347.0	66.0	15	1	1149.0	-	-
13	338866.0	59.3	15	1	1373.0	-	-
14	519043.0	79.2	15	2	1836.0	1534.0	-
15	698893.0	90.2	15	3	1455.0	1738.0	1490.0

Type 5 Radar Waveform_25

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	165660.0	87.5	11	3	1343.0	1331.0	1313.0
1	388227.0	94.6	11	3	1448.0	1543.0	1803.0
2	611977.0	73.9	11	2	1722.0	1514.0	-
3	836637.0	55.4	11	1	1506.0	-	-
4	138508.0	52.3	11	1	1960.0	-	-
5	361157.0	95.8	11	3	1240.0	1380.0	1252.0
6	583572.0	96.1	11	3	1372.0	1411.0	1908.0
7	807375.0	77.8	11	2	1885.0	1593.0	-
8	110712.0	97.2	11	3	1021.0	1614.0	1633.0
9	334129.0	74.3	11	2	1582.0	1097.0	-
10	558353.0	57.9	11	1	1031.0	-	-
11	779576.0	68.8	11	2	1927.0	1936.0	-
12	83349.0	79.6	11	2	1857.0	1470.0	-

Type 5 Radar Waveform_26

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	443672.0	63.4	7	1	1595.0	-	-
1	764888.0	97.0	7	3	1451.0	1660.0	1562.0
2	108877...	66.7	7	2	1116.0	1544.0	-
3	80701.0	99.5	7	3	1553.0	1526.0	1768.0
4	404035.0	64.3	7	1	1107.0	-	-
5	724735.0	90.7	7	3	1992.0	1626.0	1899.0
6	104983...	62.1	7	1	1630.0	-	-
7	41111.0	58.3	7	1	1676.0	-	-
8	363203.0	87.0	7	3	1726.0	1696.0	1464.0

Type 5 Radar Waveform_27

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	685484.0	86.8	6	3	1673.0	1383.0	1653.0
1	100844...	81.7	6	2	1841.0	1911.0	-
2	1327.0	78.4	6	2	1900.0	1229.0	-
3	324073.0	82.1	6	2	1527.0	1072.0	-
4	645590.0	84.1	6	3	1893.0	1742.0	1491.0
5	968147.0	87.7	6	3	1247.0	1341.0	1955.0
6	129015...	97.0	6	3	1559.0	1685.0	1572.0
7	283759.0	99.1	6	3	1641.0	1727.0	1848.0
8	607681.0	62.0	6	1	1245.0	-	-

Type 5 Radar Waveform_28

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	104641...	67.5	6	2	1193.0	1182.0	-
1	140782...	85.6	6	3	1221.0	1741.0	1338.0
2	274722.0	86.9	6	3	1580.0	1775.0	1809.0
3	637750.0	85.3	6	3	1082.0	1854.0	1095.0
4	100067...	67.3	6	2	1898.0	1977.0	-
5	136308...	94.8	6	3	1791.0	1350.0	1230.0
6	230397.0	72.9	6	2	1681.0	1323.0	-
7	593534.0	70.7	6	2	1709.0	1123.0	-

Type 5 Radar Waveform_29

Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
0	766096.0	63.3	8	1	1044.0	-	-
1	105361...	87.4	8	3	1945.0	1602.0	1203.0
2	148646.0	58.7	8	1	1556.0	-	-
3	439290.0	63.6	8	1	1598.0	-	-
4	730238.0	56.3	8	1	1110.0	-	-
5	102035...	57.2	8	1	1878.0	-	-
6	112833.0	50.3	8	1	1659.0	-	-
7	403062.0	71.9	8	2	1143.0	1724.0	-
8	692419.0	85.1	8	3	1404.0	1715.0	1449.0
9	985054.0	62.5	8	1	1276.0	-	-

Radar Type 6 - Radar Statistical Performance

Trail #	1=Detection 0=No Detection	Trail #	1=Detection 0=No Detection
0	1	15	1
1	1	16	1
2	1	17	1
3	1	18	1
4	1	19	1
5	1	20	1
6	1	21	1
7	1	22	1
8	1	23	1
9	1	24	1
10	1	25	1
11	1	26	1
12	1	27	1
13	1	28	1
14	1	29	1
Detection Percentage (%)			100%

Type 6 Radar Waveform_0

Frequenc List (MHz)	0	1	2	3	4
0	5684	5647	5388	5528	5616
5	5491	5605	5502	5588	5683
10	5313	5430	5420	5521	5622
15	5292	5485	5489	5387	5265
20	5419	5271	5508	5386	5410
25	5494	5600	5471	5711	5584
30	5719	5342	5361	5308	5639
35	5397	5580	5664	5667	5349
40	5290	5541	5665	5322	5585
45	5501	5330	5264	5350	5718
50	5447	5378	5340	5445	5285
55	5389	5252	5368	5469	5713
60	5384	5516	5254	5689	5318
65	5416	5459	5607	5475	5514
70	5630	5542	5263	5379	5455
75	5411	5550	5617	5554	5708
80	5688	5619	5604	5258	5695
85	5559	5301	5690	5596	5537
90	5701	5448	5611	5658	5338
95	5525	5327	5413	5555	5546

Type 6 Radar Waveform_1

Frequenc List (MHz)	0	1	2	3	4
0	5464	5411	5324	5689	5458
5	5630	5530	5577	5276	5415
10	5719	5316	5461	5619	5643
15	5380	5612	5592	5432	5554
20	5427	5340	5449	5475	5383
25	5382	5549	5674	5437	5618
30	5286	5706	5318	5523	5595
35	5264	5293	5460	5442	5263
40	5604	5624	5603	5562	5582
45	5430	5310	5347	5311	5296
50	5712	5254	5516	5496	5374
55	5687	5574	5556	5423	5331
60	5581	5487	5379	5723	5285
65	5650	5298	5463	5666	5337
70	5541	5548	5538	5668	5260
75	5526	5677	5586	5376	5669
80	5299	5277	5289	5255	5462
85	5384	5361	5407	5588	5474
90	5681	5395	5482	5396	5670
95	5355	5580	5700	5295	5658

Type 6 Radar Waveform_2

Frequenc List (MHz)	0	1	2	3	4
0	5719	5650	5260	5278	5678
5	5672	5552	5652	5439	5622
10	5580	5502	5339	5664	5371
15	5264	5695	5477	5271	5338
20	5506	5487	5467	5356	5648
25	5401	5402	5541	5425	5692
30	5275	5263	5565	5415	5306
35	5384	5256	5595	5540	5707
40	5327	5579	5359	5668	5430
45	5369	5252	5599	5605	5547
50	5560	5510	5518	5269	5280
55	5521	5400	5458	5512	5544
60	5305	5555	5586	5596	5499
65	5412	5689	5607	5344	5620
70	5524	5293	5636	5697	5422
75	5551	5337	5405	5441	5352
80	5610	5365	5701	5324	5429
85	5542	5722	5272	5498	5419
90	5304	5372	5635	5723	5598
95	5274	5286	5564	5281	5589

Type 6 Radar Waveform_3

Frequenc List (MHz)	0	1	2	3	4
0	5499	5414	5671	5439	5520
5	5714	5477	5252	5505	5451
10	5484	5369	5543	5534	5685
15	5459	5391	5323	5425	5463
20	5346	5575	5428	5556	5329
25	5536	5350	5605	5645	5686
30	5467	5581	5707	5381	5717
35	5710	5445	5475	5624	5273
40	5663	5379	5412	5479	5470
45	5673	5666	5648	5513	5427
50	5305	5389	5481	5393	5598
55	5649	5711	5365	5457	5709
60	5694	5332	5641	5250	5387
65	5509	5542	5700	5361	5424
70	5622	5314	5510	5296	5336
75	5478	5595	5342	5565	5631
80	5328	5447	5661	5508	5415
85	5724	5330	5640	5287	5297
90	5593	5495	5567	5504	5453
95	5635	5316	5486	5690	5376

Type 6 Radar Waveform_4

Frequenc List (MHz)	0	1	2	3	4
0	5657	5653	5607	5600	5265
5	5378	5499	5327	5668	5658
10	5415	5633	5681	5254	5706
15	5547	5421	5329	5470	5655
20	5354	5266	5369	5645	5302
25	5677	5333	5274	5720	5509
30	5664	5596	5491	5433	5584
35	5566	5420	5426	5577	5693
40	5495	5320	5710	5670	5595
45	5628	5388	5358	5276	5260
50	5569	5649	5263	5534	5309
55	5663	5513	5303	5295	5399
60	5316	5335	5488	5523	5310
65	5256	5294	5425	5386	5496
70	5299	5660	5454	5554	5462
75	5708	5612	5580	5460	5442
80	5672	5478	5624	5525	5268
85	5482	5347	5411	5262	5646
90	5290	5701	5510	5390	5503
95	5270	5313	5610	5492	5485

Type 6 Radar Waveform_5

Frequenc List (MHz)	0	1	2	3	4
0	5437	5417	5543	5286	5582
5	5420	5424	5402	5356	5390
10	5346	5422	5722	5449	5252
15	5635	5548	5432	5515	5372
20	5265	5335	5407	5637	5275
25	5690	5529	5439	5475	5279
30	5551	5456	5621	5336	5643
35	5253	5626	5657	5691	5676
40	5491	5532	5578	5258	5667
45	5427	5608	5301	5446	5411
50	5541	5611	5270	5700	5352
55	5357	5631	5358	5617	5616
60	5710	5274	5327	5564	5712
65	5623	5636	5531	5724	5259
70	5466	5661	5606	5555	5579
75	5399	5509	5333	5513	5268
80	5485	5570	5698	5361	5638
85	5342	5646	5324	5310	5506
90	5605	5598	5419	5585	5391
95	5516	5302	5534	5520	5325

Type 6 Radar Waveform_6

Frequenc List (MHz)	0	1	2	3	4
0	5692	5656	5479	5447	5327
5	5462	5446	5477	5519	5694
10	5655	5308	5288	5547	5273
15	5723	5675	5535	5560	5564
20	5501	5348	5251	5578	5478
25	5642	5579	5313	5690	5345
30	5551	5417	5451	5290	5370
35	5487	5354	5502	5468	5283
40	5671	5618	5664	5356	5588
45	5384	5504	5464	5428	5276
50	5441	5575	5449	5571	5331
55	5529	5720	5456	5254	5657
60	5455	5559	5683	5652	5298
65	5409	5627	5565	5402	5358
70	5309	5472	5615	5605	5422
75	5609	5680	5525	5701	5537
80	5646	5263	5698	5473	5552
85	5667	5556	5619	5361	5562
90	5546	5380	5281	5287	5471
95	5503	5649	5548	5607	5467

Type 6 Radar Waveform_7

Frequenc List (MHz)	0	1	2	3	4
0	5472	5420	5415	5608	5644
5	5504	5371	5552	5585	5426
10	5586	5572	5329	5267	5294
15	5714	5327	5638	5508	5281
20	5667	5289	5718	5696	5369
25	5330	5370	5683	5347	5257
30	5709	5535	5669	5569	5271
35	5429	5461	5380	5507	5416
40	5307	5366	5609	5383	5661
45	5285	5568	5467	5465	5517
50	5693	5266	5622	5627	5381
55	5422	5637	5525	5521	5348
60	5594	5419	5602	5287	5385
65	5423	5273	5632	5688	5251
70	5687	5699	5551	5502	5431
75	5584	5250	5468	5652	5260
80	5592	5615	5549	5580	5333
85	5438	5506	5440	5603	5721
90	5625	5395	5444	5655	5651
95	5435	5362	5660	5353	5326

Type 6 Radar Waveform_8

Frequenc List (MHz)	0	1	2	3	4
0	5252	5659	5351	5294	5389
5	5643	5393	5627	5273	5633
10	5517	5361	5370	5462	5315
15	5327	5454	5266	5553	5473
20	5667	5261	5332	5669	5257
25	5279	5573	5312	5381	5299
30	5695	5492	5409	5343	5469
35	5568	5552	5651	5282	5330
40	5621	5449	5547	5623	5280
45	5592	5451	5550	5523	5580
50	5617	5323	5378	5716	5679
55	5366	5350	5479	5614	5545
60	5565	5714	5584	5594	5308
65	5466	5571	5581	5340	5618
70	5490	5537	5505	5434	5390
75	5611	5541	5328	5516	5281
80	5612	5452	5519	5510	5306
85	5557	5688	5326	5411	5631
90	5704	5289	5668	5346	5558
95	5429	5521	5657	5436	5339

Type 6 Radar Waveform_9

Frequenc List (MHz)	0	1	2	3	4
0	5410	5423	5287	5358	5706
5	5685	5318	5702	5436	5462
10	5351	5625	5411	5657	5336
15	5415	5484	5272	5598	5675
20	5427	5268	5324	5642	5523
25	5606	5301	5513	5438	5584
30	5449	5624	5495	5289	5610
35	5643	5447	5435	5341	5460
40	5532	5485	5388	5277	5521
45	5431	5633	5581	5526	5370
50	5493	5499	5429	5330	5502
55	5688	5538	5433	5329	5364
60	5536	5368	5274	5589	5609
65	5412	5297	5530	5663	5550
70	5413	5293	5465	5620	5605
75	5283	5712	5349	5425	5490
80	5614	5445	5512	5269	5452
85	5361	5356	5271	5511	5461
90	5621	5576	5637	5366	5586
95	5545	5553	5689	5719	5648

Type 6 Radar Waveform_10

Frequenc List (MHz)	0	1	2	3	4
0	5665	5662	5698	5519	5451
5	5252	5340	5302	5599	5669
10	5282	5414	5452	5377	5357
15	5503	5611	5375	5643	5479
20	5683	5496	5684	5413	5615
25	5411	5458	5407	5617	5449
30	5480	5473	5406	5364	5269
35	5584	5274	5259	5588	5255
40	5299	5712	5423	5531	5353
45	5716	5542	5579	5257	5369
50	5675	5419	5325	5632	5251
55	5387	5658	5507	5400	5439
60	5534	5355	5435	5358	5498
65	5602	5382	5305	5474	5634
70	5606	5608	5607	5688	5308
75	5394	5513	5595	5570	5553
80	5609	5575	5509	5464	5678
85	5416	5614	5562	5709	5344
90	5266	5468	5410	5702	5600
95	5668	5635	5442	5372	5385

Type 6 Radar Waveform_11

Frequenc List (MHz)	0	1	2	3	4
0	5445	5523	5634	5680	5293
5	5294	5265	5377	5665	5401
10	5591	5300	5493	5475	5378
15	5494	5263	5478	5671	5594
20	5662	5722	5405	5588	5677
25	5407	5610	5721	5483	5522
30	5459	5363	5482	5421	5307
35	5413	5447	5611	5644	5710
40	5320	5361	5296	5271	5282
45	5391	5324	5600	5632	5623
50	5376	5531	5605	5479	5439
55	5341	5709	5477	5381	5529
60	5604	5358	5304	5321	5428
65	5638	5689	5575	5277	5706
70	5592	5708	5456	5567	5267
75	5266	5633	5371	5576	5347
80	5561	5334	5676	5506	5659
85	5258	5617	5379	5514	5579
90	5516	5542	5431	5337	5253
95	5519	5655	5395	5349	5647

Type 6 Radar Waveform_12

Frequenc List (MHz)	0	1	2	3	4
0	5700	5287	5570	5366	5513
5	5433	5452	5353	5705	5522
10	5564	5631	5670	5399	5582
15	5390	5581	5636	5388	5602
20	5256	5663	5494	5561	5565
25	5259	5338	5350	5517	5661
30	5348	5320	5697	5552	5538
35	5407	5516	5655	5549	5403
40	5677	5536	5268	5686	5371
45	5658	5685	5409	5499	5455
50	5694	5349	5423	5530	5295
55	5424	5674	5352	5294	5659
60	5347	5377	5370	5555	5400
65	5675	5711	5683	5543	5701
70	5710	5278	5514	5557	5502
75	5671	5590	5365	5323	5503
80	5379	5258	5459	5439	5706
85	5447	5567	5633	5362	5596
90	5277	5610	5531	5358	5722
95	5529	5460	5465	5334	5319

Type 6 Radar Waveform_13

Frequenc List (MHz)	0	1	2	3	4
0	5383	5526	5506	5527	5355
5	5475	5687	5516	5437	5453
10	5353	5672	5390	5420	5670
15	5517	5684	5681	5580	5610
20	5422	5604	5486	5534	5356
25	5683	5541	5551	5703	5334
30	5277	5347	5325	5594	5629
35	5678	5669	5569	5388	5583
40	5615	5301	5362	5518	5351
45	5490	5619	5263	5674	5375
50	5631	5633	5308	5647	5270
55	5718	5724	5614	5493	5323
60	5312	5459	5466	5423	5485
65	5293	5345	5326	5613	5256
70	5262	5358	5472	5661	5714
75	5532	5519	5660	5582	5398
80	5657	5538	5279	5371	5529
85	5386	5500	5574	5636	5402
90	5412	5521	5406	5560	5286
95	5283	5395	5640	5290	5363

Type 6 Radar Waveform_14

Frequenc List (MHz)	0	1	2	3	4
0	5638	5290	5442	5688	5575
5	5517	5709	5602	5679	5644
10	5287	5617	5713	5585	5441
15	5283	5547	5690	5629	5297
20	5521	5491	5545	5507	5719
25	5535	5269	5655	5270	5698
30	5652	5596	5620	5258	5720
35	5571	5444	5483	5702	5666
40	5553	5359	5447	5331	5573
45	5677	5316	5561	5251	5332
50	5684	5397	5470	5689	5431
55	5581	5329	5312	5294	5624
60	5411	5255	5408	5714	5546
65	5275	5649	5466	5532	5636
70	5641	5647	5339	5381	5495
75	5619	5551	5421	5703	5616
80	5531	5319	5627	5693	5449
85	5497	5391	5539	5715	5462
90	5518	5280	5572	5654	5380
95	5451	5289	5342	5277	5274

Type 6 Radar Waveform_15

Frequenc List (MHz)	0	1	2	3	4
0	5418	5529	5378	5374	5417
5	5559	5634	5677	5270	5473
10	5693	5406	5279	5305	5462
15	5274	5674	5318	5489	5657
20	5583	5567	5480	5607	5387
25	5375	5284	5619	5409	5587
30	5666	5295	5273	5343	5397
35	5336	5367	5597	5638	5491
40	5684	5356	5689	5656	5260
45	5272	5351	5505	5508	5293
50	5536	5535	5422	5509	5643
55	5314	5562	5709	5282	5369
60	5699	5588	5298	5424	5342
65	5713	5633	5705	5471	5578
70	5520	5541	5371	5308	5332
75	5408	5285	5512	5586	5539
80	5557	5425	5710	5720	5526
85	5427	5616	5392	5286	5400
90	5428	5513	5675	5676	5653
95	5495	5304	5724	5315	5698