DFS TEST REPORT

REPORT NO.:	RF140702E01C-2 R2
MODEL NO.:	AP-7502
FCC ID:	UZ7AP7502
RECEIVED:	Sep. 16, 2014
TESTED:	May 27, 2015
ISSUED:	June 11, 2015
APPLICANT:	Zebra Technologies Corporation
ADDRESS:	1 Zebra Plaza, Holtsville, NY 11742
MANUFACTURER:	Accton Technology Corporation
ADDRESS:	1, Creation 3rd Rd., Science-based Industrial Park, Hsinchu 300, Taiwan, R.O.C.
ISSUED BY:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF140702E01C-2	Original release	June 04, 2015
RF140702E01C-2 R1	Modified the information of applicant & address	June 05, 2015
RF140702E01C-2 R2	Modified brand name	June 11, 2015

1. CERTIFICATION

PRODUCT:	Dual Radio Wallplate AP
BRAND NAME:	Motorola
MODEL NO.:	AP-7502
TEST SAMPLE:	ENGINEERING SAMPLE
APPLICANT:	Zebra Technologies Corporation
TESTED:	May 27, 2015
STANDARDS:	**FCC Part 15, Subpart E (Section 15.407)** **KDB 905462 D02 UNII DFS Compliance Procedures New Rules v01r02**

The above equipment (Model: AP-7502) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and was in compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by : _____, **Date:** June 11, 2015
(Midoli Peng, Specialist)

Approved by : _____, **Date:** June 11, 2015
(May Chen, Manager)

2. EUT INFORMATION

2.1 OPERATING FREQUENCY BANDS AND MODE OF EUT

Table 1: Operating frequency bands and mode of EUT.

Operational Mode	Operating Frequency Range	
	5250~5350MHz	5470~5725MHz
Master	✓	✓

2.2 EUT SOFTWARE AND FIRMWARE VERSION

Table 2: The EUT software/firmware version.

No.	Product	Model No.	Software/Firmware Version
1	Dual Radio Wallplate AP	AP-7502	5.7.1.0-214164x

2.3 DESCRIPTION OF AVAILABLE ANTENNAS TO THE EUT

Table 3: Antenna list.

Transmitter Circuit	PCB Chain No.	Antenna Type	Antenna Gain(dBi) Including cable loss	Connector type	Frequency range (GHz to GHz)
Chain (0)	ALA140-091020	PCB-Dipole	7.22	I-Pex	5150~5850
Chain (1)	ALA140-091020	PCB-Dipole	7.3	I-Pex	5150~5850

2.4 EUT MAXIMUM CONDUCTED POWER

TABLE 4: THE MEASURED CONDUCTED OUTPUT POWER

802.11a

Frequency Band(MHz)	MAX. Power	
	Output Power(dBm)	Output Power(mW)
5250~5350MHz	18.21	66.23
5470~5725MHz	18.13	65.031

802.11ac (VHT20)

Frequency Band(MHz)	MAX. Power	
	Output Power(dBm)	Output Power(mW)
5250~5350MHz	18.03	63.532
5470~5725MHz	17.61	57.631

802.11ac (VHT40)

Frequency Band(MHz)	MAX. Power	
	Output Power(dBm)	Output Power(mW)
5250~5350MHz	17.13	51.59
5470~5725MHz	17.31	53.782

802.11ac (VHT80)

Frequency Band(MHz)	MAX. Power	
	Output Power(dBm)	Output Power(mW)
5250~5350MHz	9.57	9.06
5470~5725MHz	16.15	41.169

2.5 EUT MAXIMUM EIRP POWER

TABLE 5: THE EIRP OUTPUT POWER LIST

802.11a

Frequency Band(MHz)	MAX. Power	
	Output Power(dBm)	Output Power(mW)
5250~5350MHz	25.51	355.676
5470~5725MHz	25.43	349.237

802.11ac (VHT20)

Frequency Band(MHz)	MAX. Power	
	Output Power(dBm)	Output Power(mW)
5250~5350MHz	25.33	341.187
5470~5725MHz	24.91	309.497

802.11ac (VHT40)

Frequency Band(MHz)	MAX. Power	
	Output Power(dBm)	Output Power(mW)
5250~5350MHz	24.43	277.055
5470~5725MHz	24.61	288.826

802.11ac (VHT80)

Frequency Band(MHz)	MAX. Power	
	Output Power(dBm)	Output Power(mW)
5250~5350MHz	16.87	48.655
5470~5725MHz	23.45	221.091

2.6 TRANSMIT POWER CONTROL (TPC) MECHANISM

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

Maximum EIRP of this device is 355.676mW which less than 500mW, therefore it's not require TPC function.

2.7 STATEMENT OF MANUFACTURER

Manufacturer statement confirming that information regarding the parameters of the detected Radar Waveforms is not available to the end user.

3. U-NII DFS RULE REQUIREMENTS

3.1 WORKING MODES AND REQUIRED TEST ITEMS

The manufacturer shall state whether the UUT is capable of operating as a Master and/or a Client. If the UUT is capable of operating in more than one operating mode then each operating mode shall be tested separately. See tables 6 and 7 for the applicability of DFS requirements for each of the operational modes.

TABLE 6: APPLICABILITY OF DFS REQUIREMENTS PRIOR TO USE A CHANNEL

Requirement	Operational Mode		
	Master	Client without radar detection	Client with radar detection
Non-Occupancy Period	✓	Not required	✓
DFS Detection Threshold	✓	Not required	✓
Channel Availability Check Time	✓	Not required	Not required
U-NII Detection Bandwidth	✓	Not required	✓

TABLE 7: APPLICABILITY OF DFS REQUIREMENTS DURING NORMAL OPERATION

Requirement	Operational Mode	
	Master or Client with radar detection	Client without radar detection
DFS Detection Threshold	✓	Not required
Channel Closing Transmission Time	✓	✓
Channel Move Time	✓	✓
U-NII Detection Bandwidth	✓	Not required

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

3.2 TEST LIMITS AND RADAR SIGNAL PARAMETERS

DETECTION THRESHOLD VALUES

TABLE 8: DFS DETECTION THRESHOLDS FOR MASTER DEVICES AND CLIENT DEVICES WITH RADAR DETECTION

Maximum Transmit Power	Value (See Notes 1, 2, and 3)
EIRP ≥ 200 milliwatt	-64 dBm
EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz	-62 dBm
EIRP < 200 milliwatt that do not meet the power spectral density requirement	-64 dBm

Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna.
Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.
Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.

TABLE 9: DFS RESPONSE REQUIREMENT VALUES

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1.
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3

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

PARAMETERS OF DFS TEST SIGNALS

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.

TABLE 10: 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 5a ---------- Test B: 15 unique PRI values randomly selected within the range of 518-3066 μ sec, with a minimum increment of 1 μ sec, excluding PRI values selected in Test A	$\text{Roundup}\left\{\left(\frac{1}{360}\right)\cdot\left(\frac{19\cdot 10^6}{\text{PRI}_{\mu\text{sec}}}\right)\right\}$	60%	30
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 11: 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 12: 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

4. TEST & SUPPORT EQUIPMENT LIST

4.1 TEST INSTRUMENTS

Table 13: Test instruments list.

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer R&S	FSP40	100036	Jan. 22, 2015	Jan. 21, 2016
Vector Signal Generator R&S	SMJ100A	101878	Aug. 12, 2014	Aug. 11, 2015

4.2 DESCRIPTION OF SUPPORT UNITS

Table 14: Support Unit information.

No.	Product	Brand	Model No.	FCC ID	Spec.
1	Wireless LAN Unit	NEC	NP05LM	RRK-NECNP05LM	

NOTE: This device was functioned as a ☐Master ☒Slave device during the DFS test.

Table 15: Software/Firmware information.

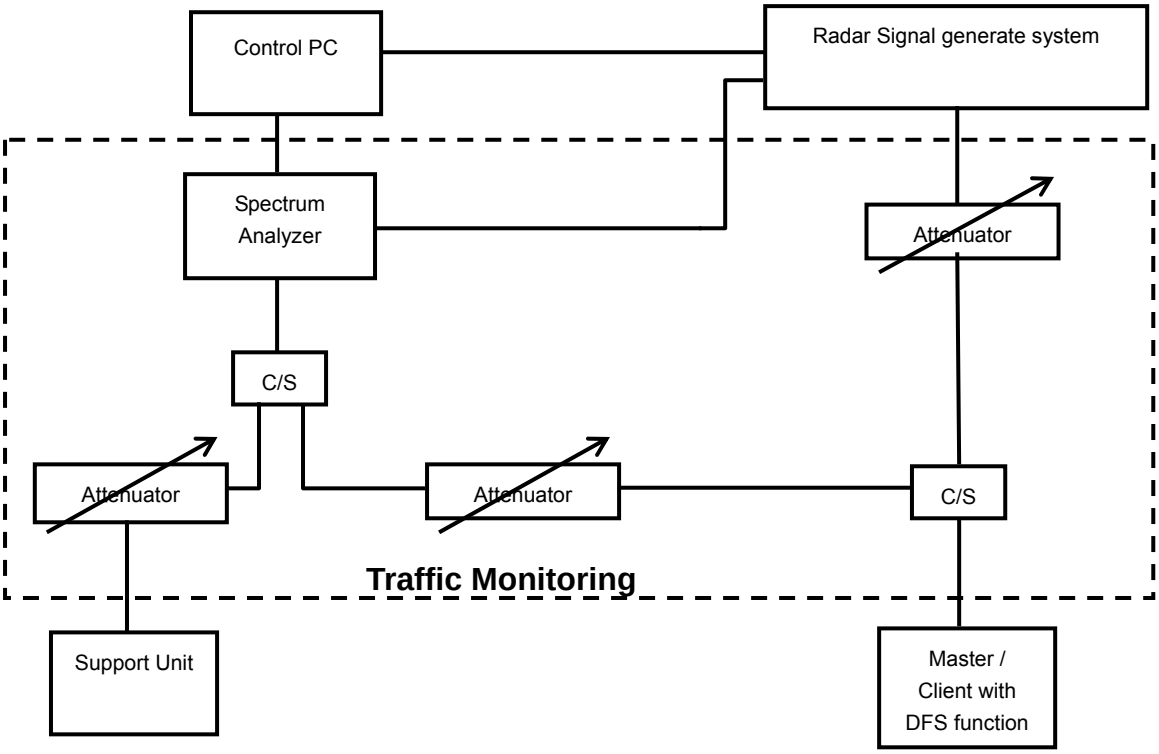
No.	Product	Model No.	Software/Firmware Version
1	Wireless LAN Unit	NP05LM	Driver Version: 06/18/2014, 1026.12.606.2014

5. TEST PROCEDURE

5.1 DFS MEASUREMENT SYSTEM:

A complete DFS Measurement System consists of Radar signal generate system to generating the radar waveforms in Table 10, 11 and 12. The traffic monitoring system is specified to the type of unit under test (UUT).

Conducted setup configuration of DFS Measurement System



Channel Loading

System testing will be performed with channel-loading using means appropriate to the data types that are used by the unlicensed device. The following requirements apply:

a)	The data file must be of a type that is typical for the device (i.e., MPEG-2, MPEG-4, WAV, MP3, MP4, AVI, etc.) and must generally be transmitting in a streaming mode.	
b)	Software to ping the client is permitted to simulate data transfer but must have random ping intervals.	
c)	Timing plots are required with calculations demonstrating a minimum channel loading of approximately 17% or greater.	✓
d)	Unicast or Multicast protocols are preferable but other protocols may be used. The appropriate protocol used must be described in the test procedures.	

5.2 CALIBRATION OF DFS DETECTION THRESHOLD LEVEL:

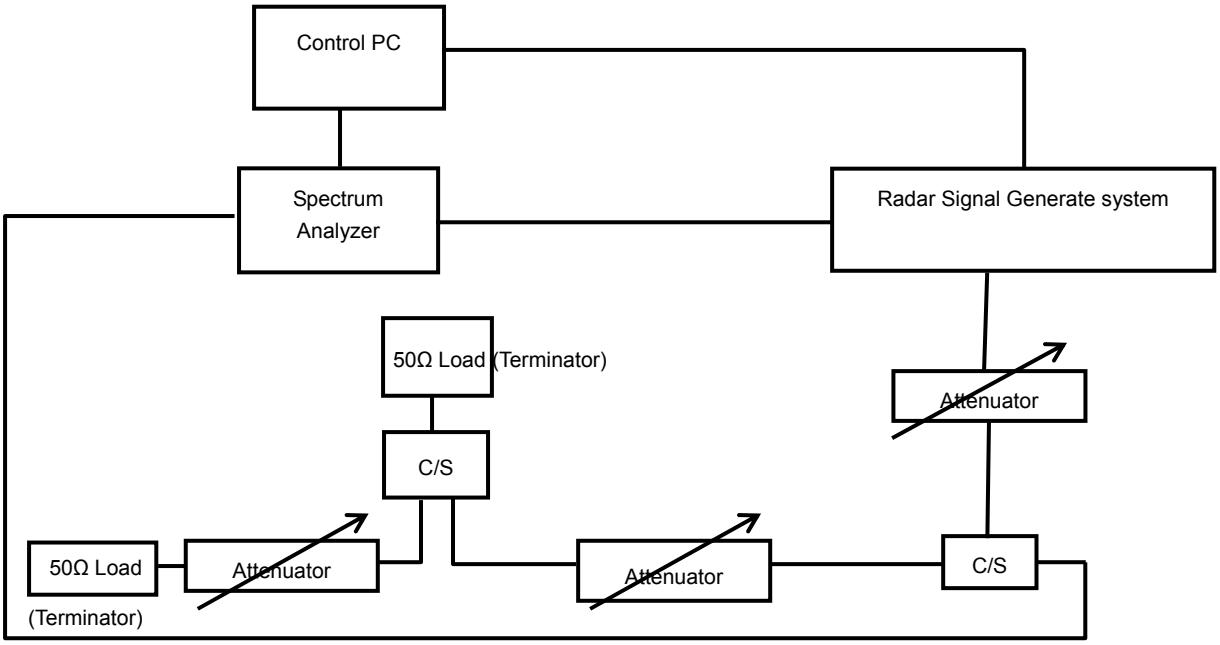
The measured channel is 5500MHz in 20MHz and 5510MHz in 40MHz and 5530 in 80MHz. The radar signal was the same as transmitted channels, and injected into the antenna port of AP (master) or Client Device with Radar Detection, measured the channel closing transmission time and channel move time.

5.2.1 MASTER MODE

The Master antenna net gain is 7.22dBi and required detection threshold is -55.78dBm (= -64+7.22+1) dBm.

The calibrated conducted detection threshold level is -55.78dBm.

Conducted setup configuration of Calibration of DFS Detection Threshold Level

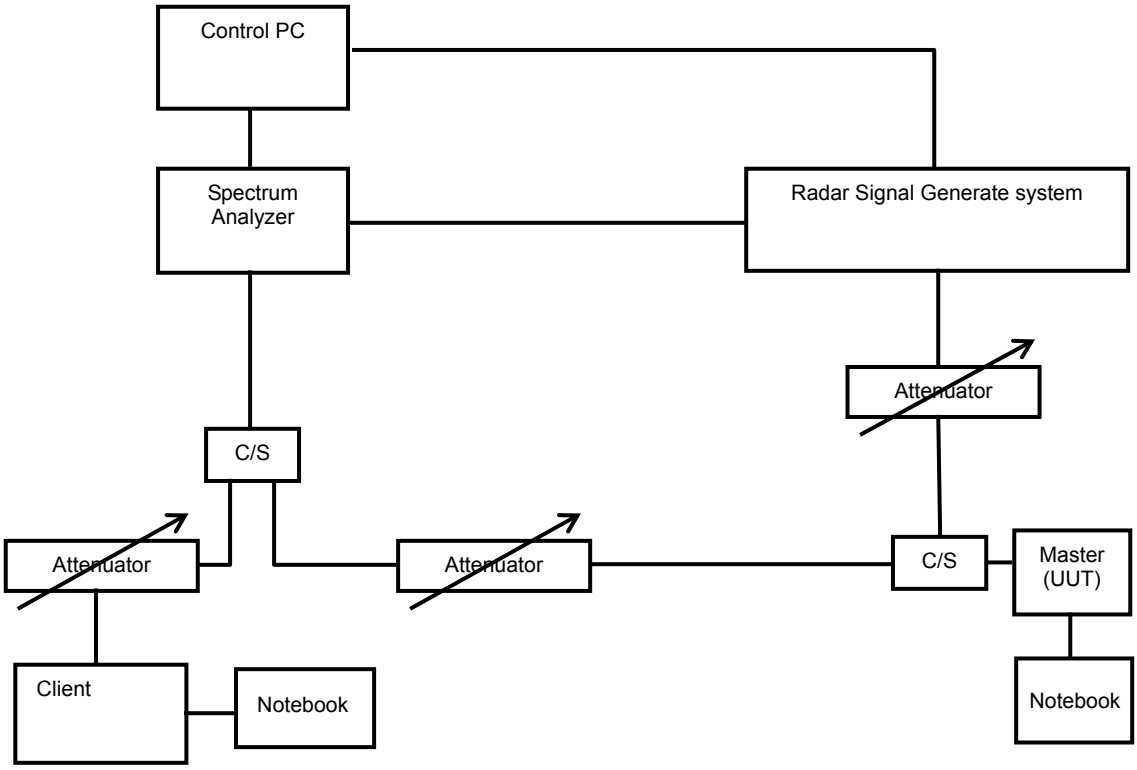


5.3 DEVIATION FROM TEST STANDARD

No deviation.

5.4 CONDUCTED TEST SETUP CONFIGURATION

MASTER MODE



The UUT is a U-NII Device operating in Master mode. The radar test signals are injected into the Master Device.

6. TEST RESULTS

6.1 SUMMARY OF TEST RESULT

MASTER MODE

Clause	Test Parameter	Remarks	Pass/Fail
15.407	DFS Detection Threshold	Applicable	Pass
15.407	Channel Availability Check Time	Applicable	Pass
15.407	Channel Move Time	Applicable	Pass
15.407	Channel Closing Transmission Time	Applicable	Pass
15.407	Non- Occupancy Period	Applicable	Pass
15.407	U-NII Detection Bandwidth	Applicable	Pass
15.407	Non-Co-Channel test	Applicable	Pass

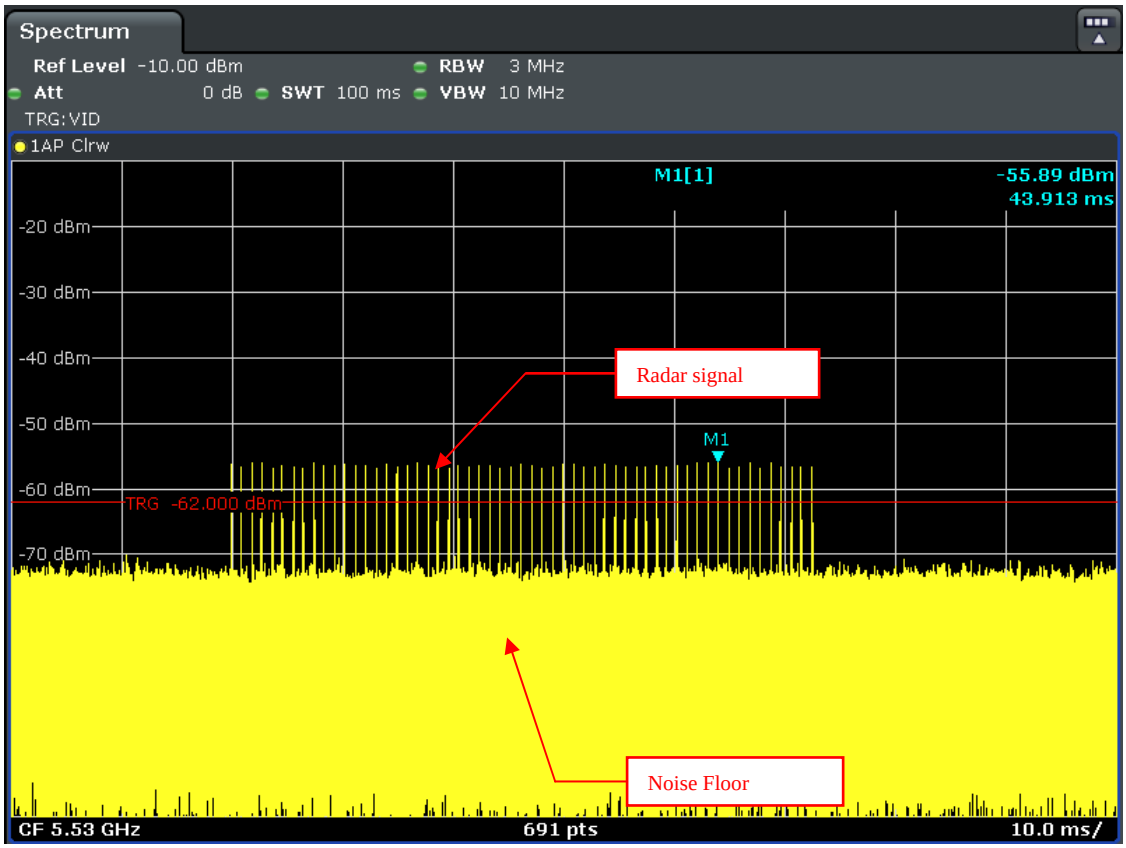
6.2 DETAILED TEST RESULTS

6.2.1. TEST MODE: DEVICE OPERATING IN MASTER MODE.

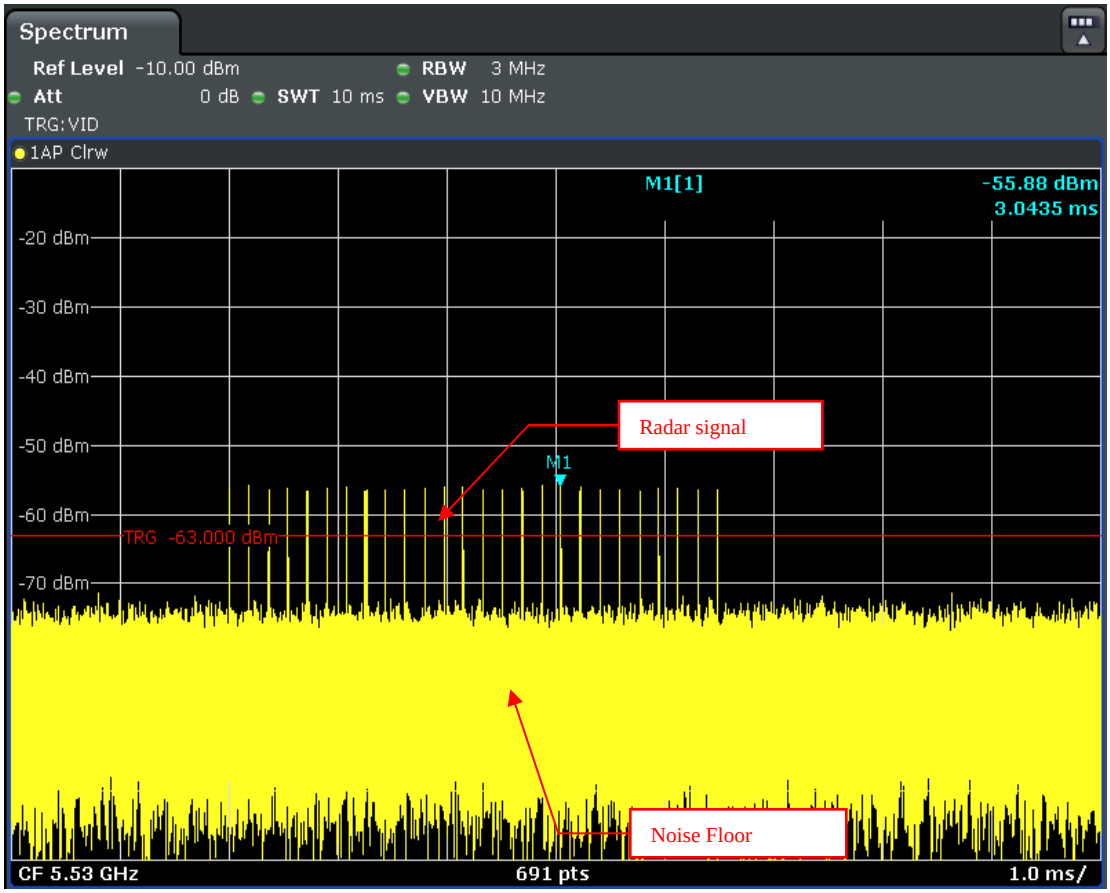
The radar test signals are injected into the Master Device.

6.2.1.1 DFS DETECTION THRESHOLD

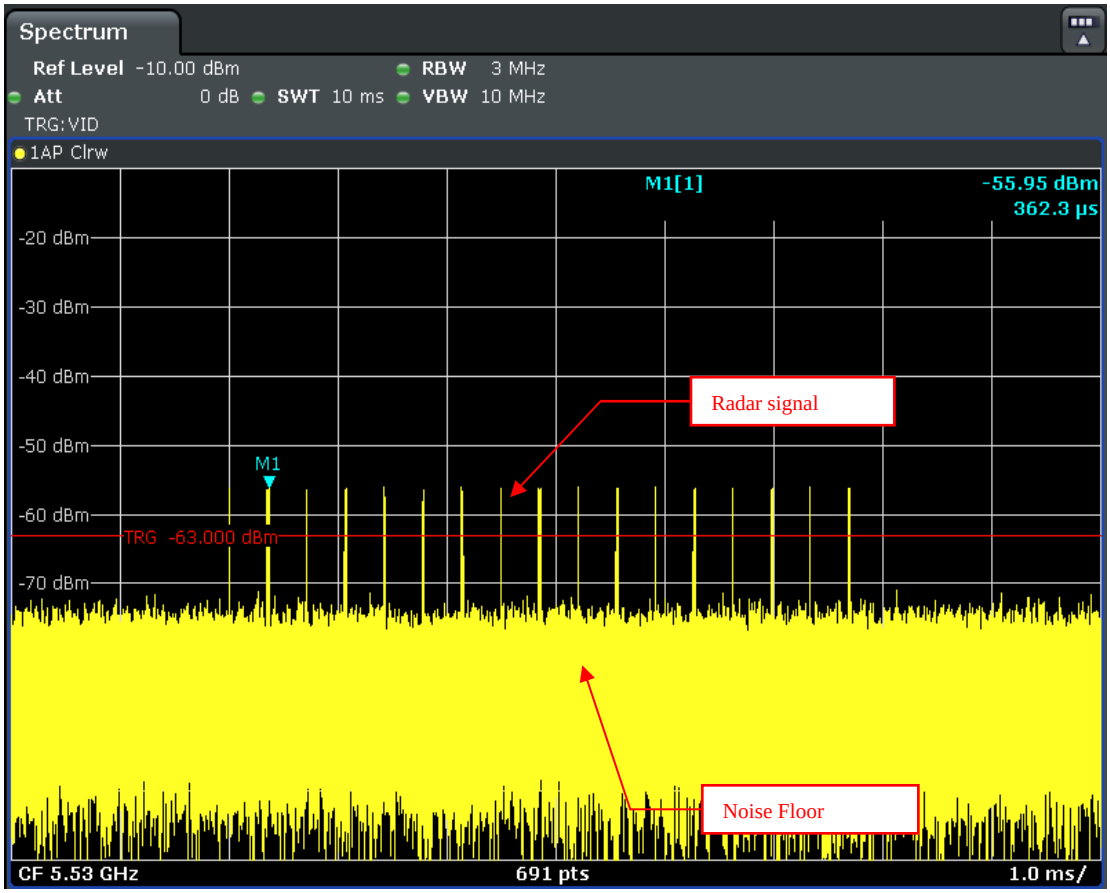
The required detection threshold is -55.78dBm (= -64 +7.22+1) dBm. The conducted radar burst level is lower than -55.78dBm.



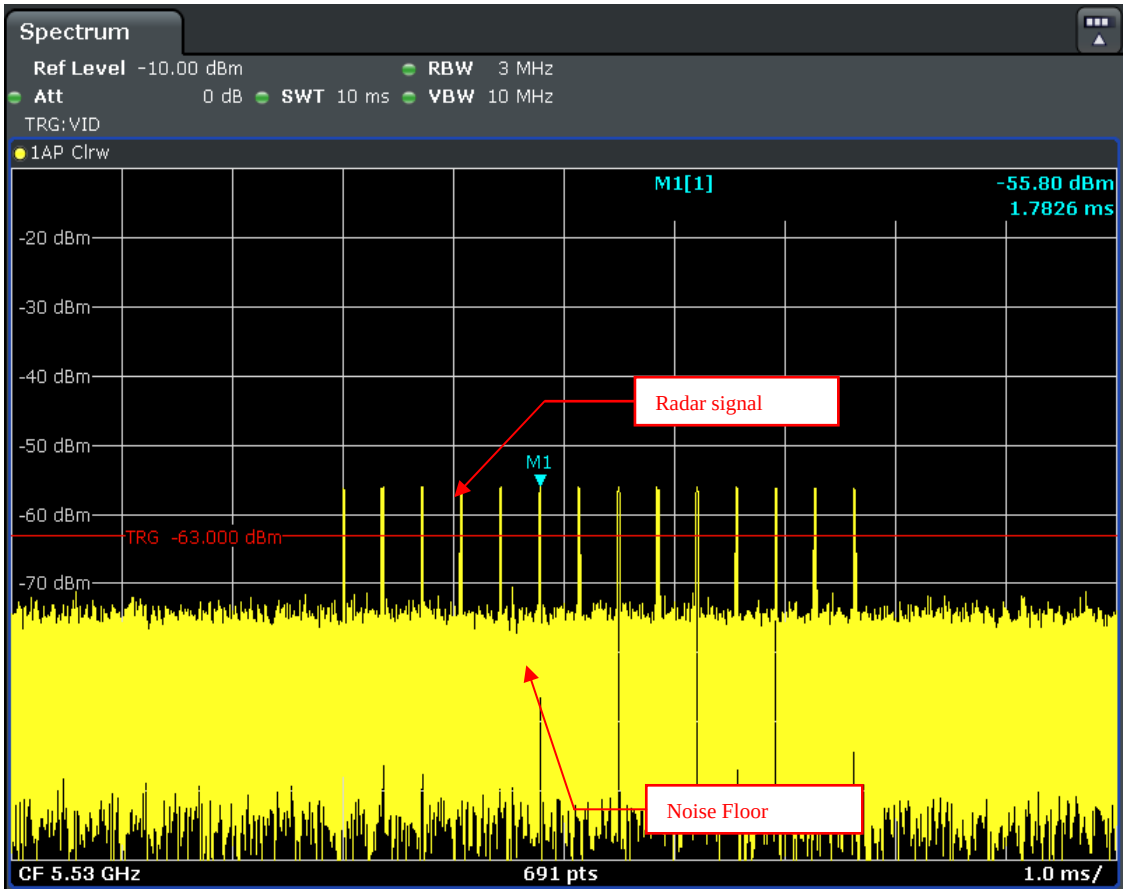
Radar Signal 1



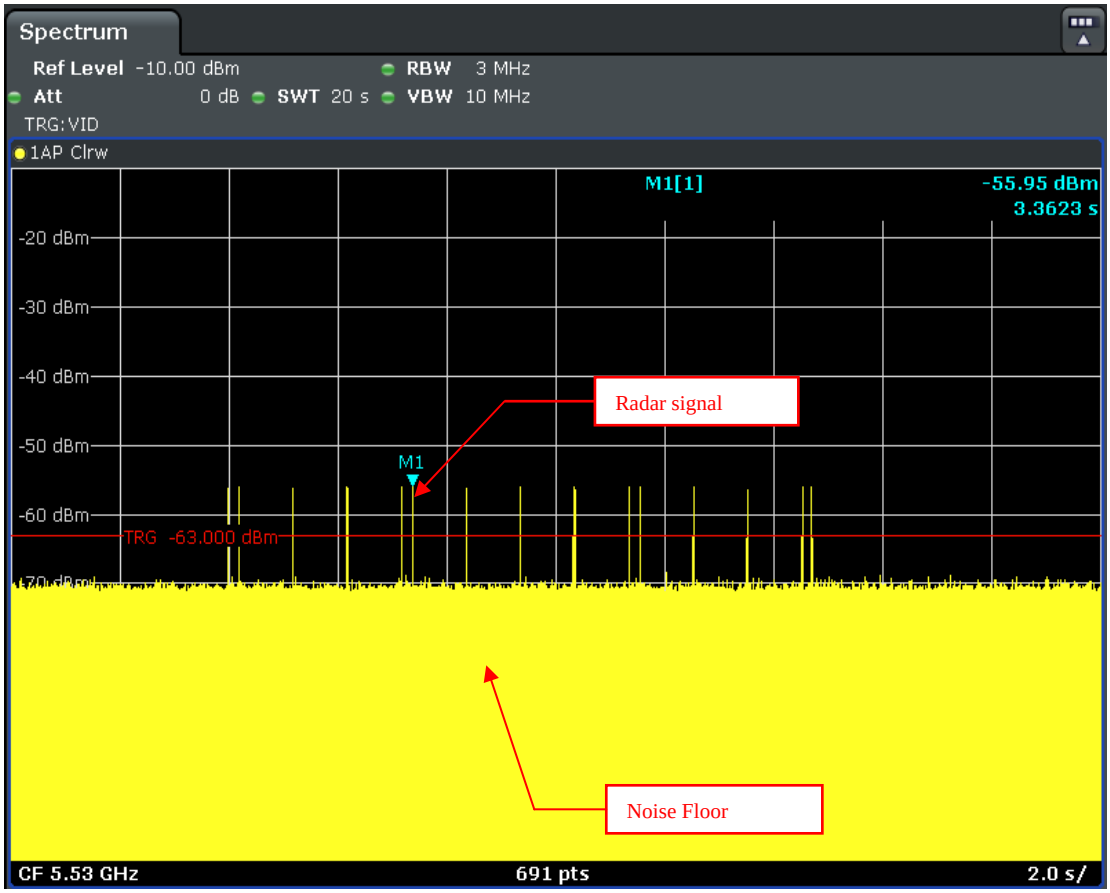
Radar Signal 2



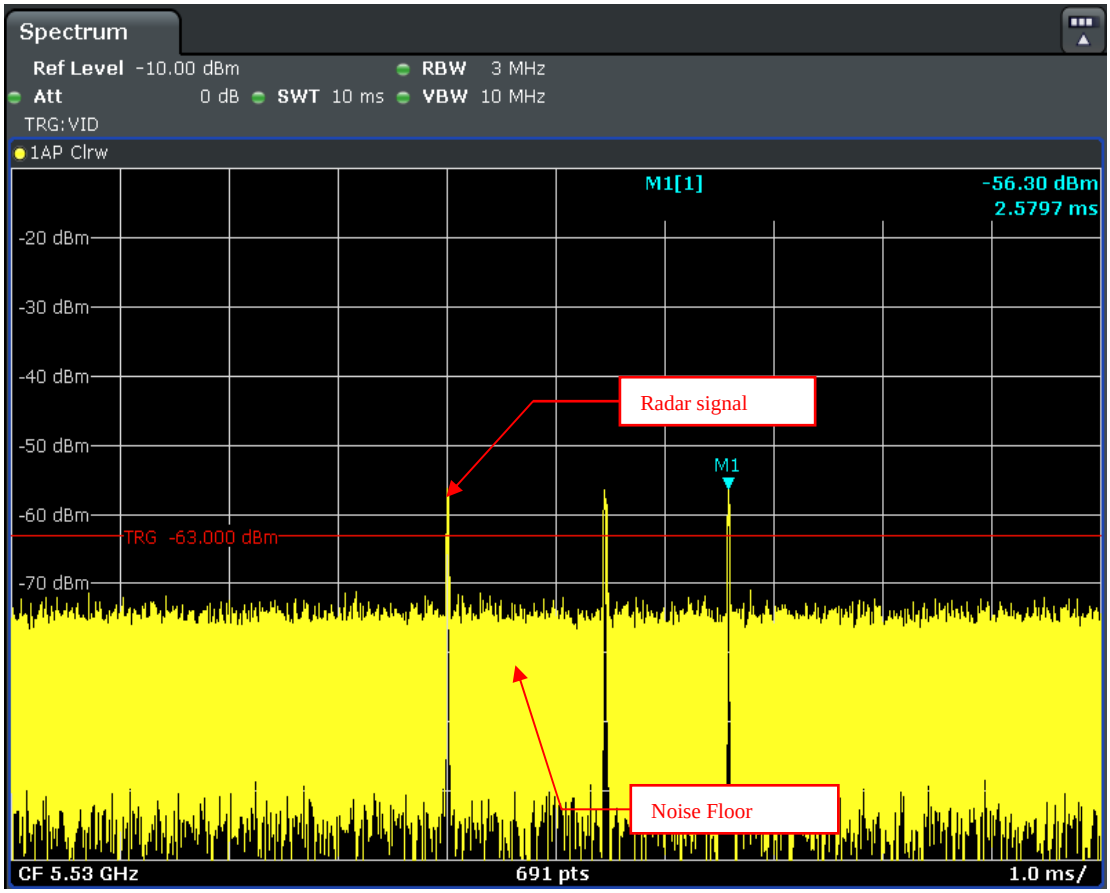
Radar Signal 3



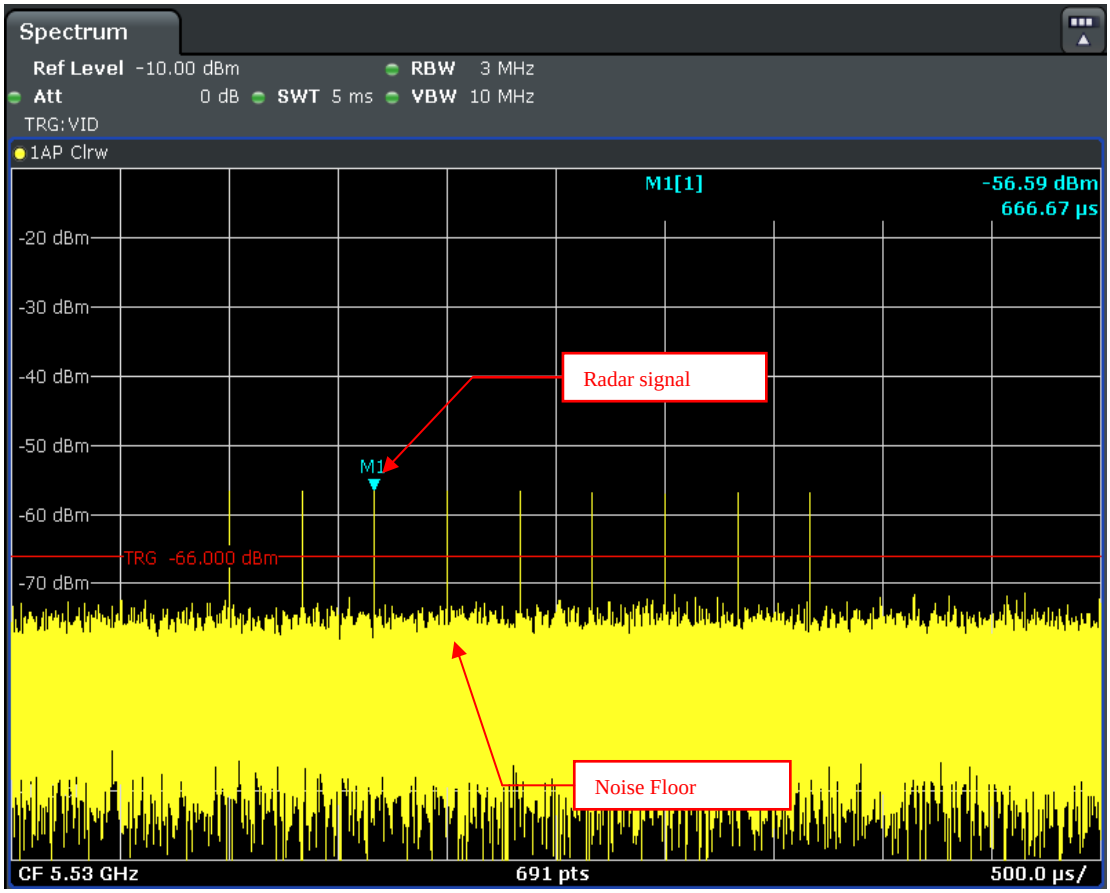
Radar Signal 4



Radar Signal 5



Single Burst of Radar Signal 5



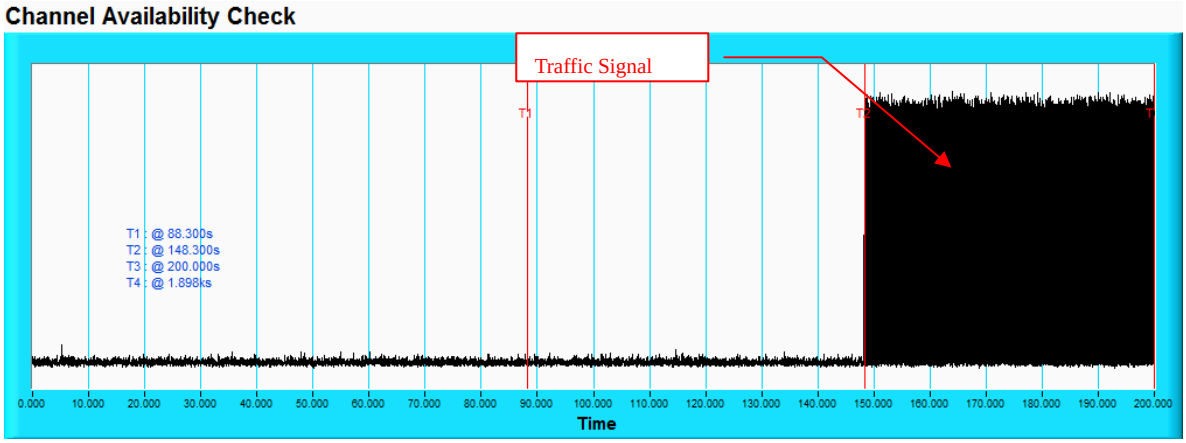
Radar Signal 6

6.2.1.2 CHANNEL AVAILABILITY CHECK TIME

If the EUT successfully detected the radar burst, it should be observed as the EUT has no transmissions occurred until the EUT starts transmitting on another channel.

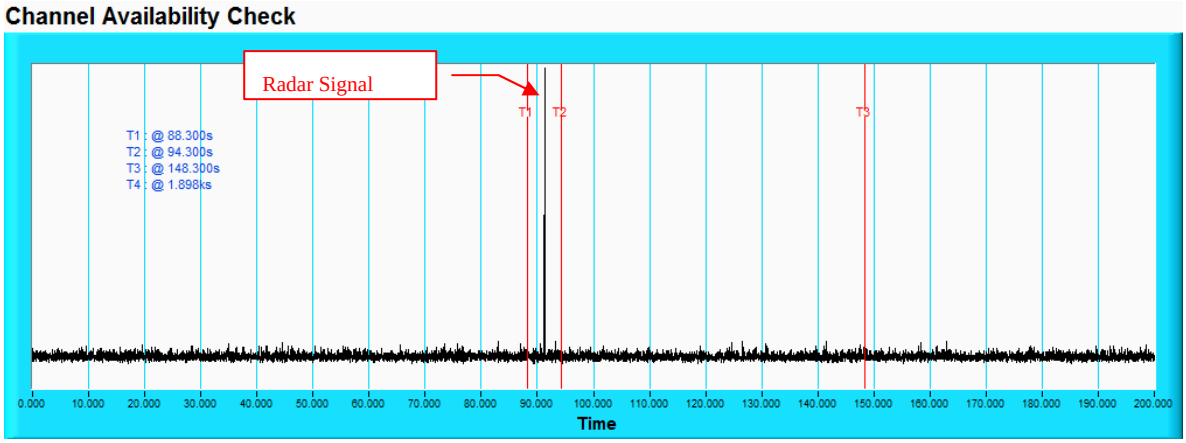
Timing of Radar Signal	Observation	
	EUT	Spectrum Analyzer
Within 1 to 6 second	Detected	No transmissions
Within 54 to 60 second	Detected	No transmissions

Initial Channel Availability Check Time



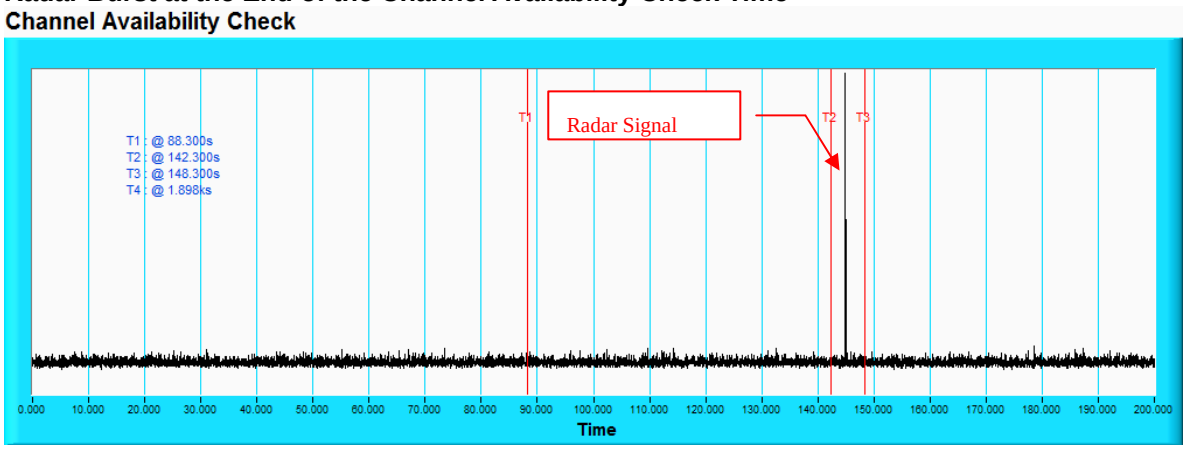
NOTE: T1 denotes the end of power-up time period is 88.3th second. T2 denotes the end of Channel Availability Check time is 148.3th second. Channel Availability Check time is equal to (T2 – T1) 60 seconds.

Radar Burst at the Beginning of the Channel Availability Check Time



NOTE: T1 denotes the end of power up time period is 88.3th second. T2 denotes 94.3th second and the radar burst was commenced within a 6 second window starting from the end of power-up sequence. T3 denotes the 148.3th second.

Radar Burst at the End of the Channel Availability Check Time



NOTE: T1 denotes the end of power up time period is 88.3h second.T2 denotes 142.3th second and the radar burst was commenced within 54th second to 60th second window starting from the end of power-up sequence. T3 denotes the 148.3th second.

6.2.1.3 CHANNEL CLOSING TRANSMISSION AND CHANNEL MOVE TIME

802.11ac (VHT20)

Short Pulse Radar Test Waveforms.

Radar Type	Pulse Width (µsec)	PRI (µsec)	Number of Pulses	Number of Trials(Times)	Percentage of Successful Detection (%)
1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a ---------- 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	$\text{Roundup}\left\{\left(\frac{1}{360}\right)\cdot\left(\frac{19\cdot 10^6}{PRI_{\mu sec}}\right)\right\}$	18	30	80%
2	1-5	150-230	23-29	30	83.3%
3	6-10	200-500	16-18	30	80%
4	11-20	200-500	12-16	30	83.3%
Aggregate (Radar Types 1-4)				120	81.65%

Long Pulse Radar Test Waveform

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

Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Number of Trials(Times)	Percentage of Successful Detection (%)
6	1	333	9	0.333	300	30	73.3%

802.11ac (VHT40)

Short Pulse Radar Test Waveforms.

Radar Type	Pulse Width (µsec)	PRI (µsec)	Number of Pulses	Number of Trials(Times)	Percentage of Successful Detection (%)
1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a ---------- 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	$\text{Roundup}\left\{\left(\frac{1}{360}\right)\cdot\left(\frac{19\cdot 10^6}{PRI_{\mu sec}}\right)\right\}$	18	30	80%
2	1-5	150-230	23-29	30	80%
3	6-10	200-500	16-18	30	83.3%
4	11-20	200-500	12-16	30	76.7%
Aggregate (Radar Types 1-4)				120	80%

Long Pulse Radar Test Waveform

Radar Type	Pulse Width (µsec)	Chirp Width (MHz)	PRI (µsec)	Number of Pulses per Burst	Number of Bursts	Number of Trials(Times)	Percentage of Successful Detection (%)
5	50-100	5-20	1000-2000	1-3	8-20	30	83.3%

Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Number of Trials(Times)	Percentage of Successful Detection (%)
6	1	333	9	0.333	300	30	80%

802.11ac (VHT80)

Short Pulse Radar Test Waveforms.

Radar Type	Pulse Width (µsec)	PRI (µsec)	Number of Pulses	Number of Trials(Times)	Percentage of Successful Detection (%)
1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a ---------- 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	$\text{Roundup}\left\{\left(\frac{1}{360}\right)\cdot\left(\frac{19\cdot 10^6}{PRI_{\mu sec}}\right)\right\}$	18	30	83.3%
2	1-5	150-230	23-29	30	83.3%
3	6-10	200-500	16-18	30	80.0%
4	11-20	200-500	12-16	30	76.7%
Aggregate (Radar Types 1-4)				120	80.83%

Long Pulse Radar Test Waveform

Radar Type	Pulse Width (µsec)	Chirp Width (MHz)	PRI (µsec)	Number of Pulses per Burst	Number of Bursts	Number of Trials(Times)	Percentage of Successful Detection (%)
5	50-100	5-20	1000-2000	1-3	8-20	30	83.3%

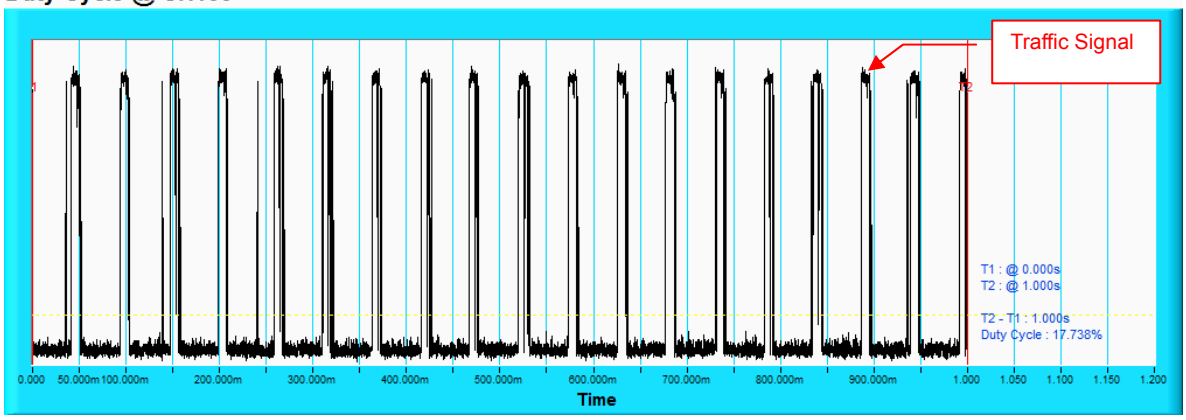
Frequency Hopping Radar Test Waveform

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

Wireless Traffic Loading

802.11ac (VHT20)

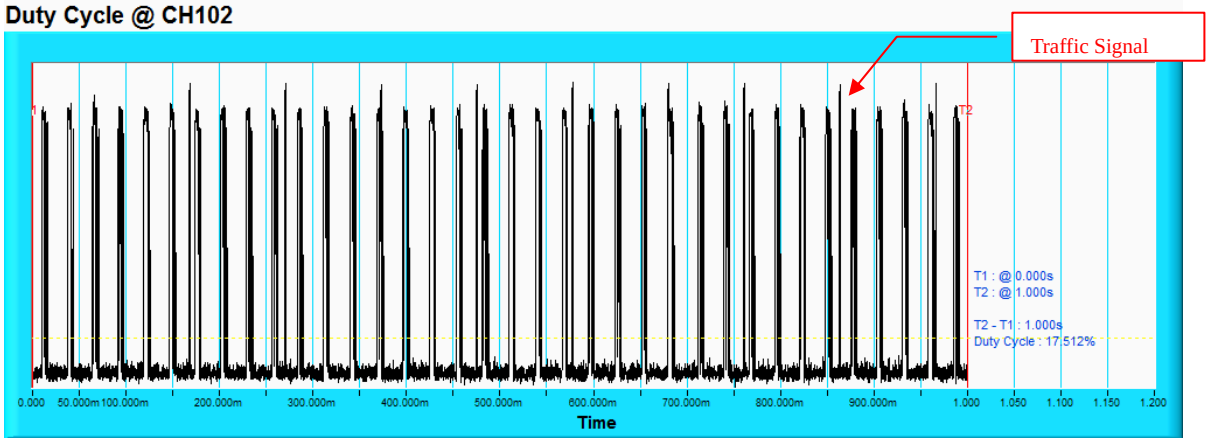
Duty Cycle @ CH100



NOTE: T1 denotes the start of duty cycle period is 0th second. T2 denotes the end of duty cycle period is 1th second. T2 – T1= 1 seconds. Duty Cycle = 17.738%

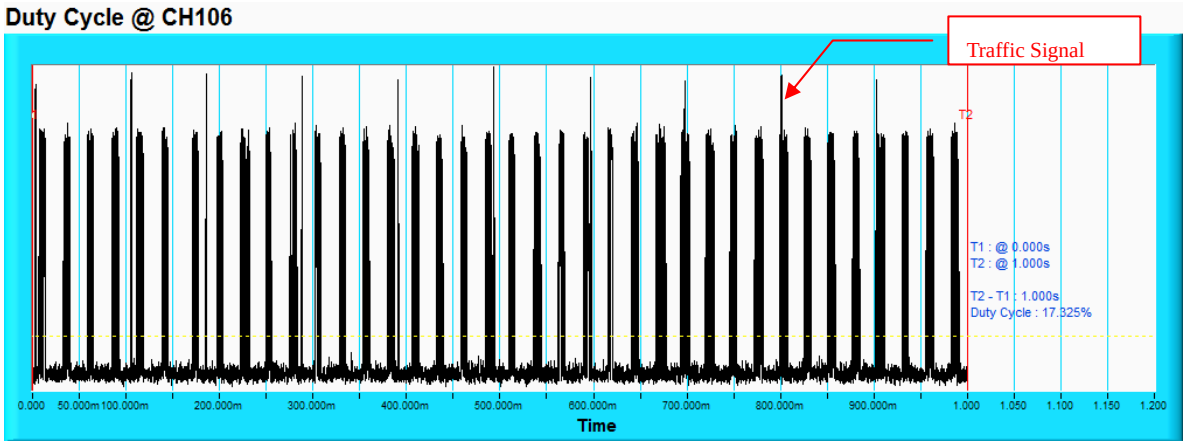
802.11ac (VHT40)

Duty Cycle @ CH102



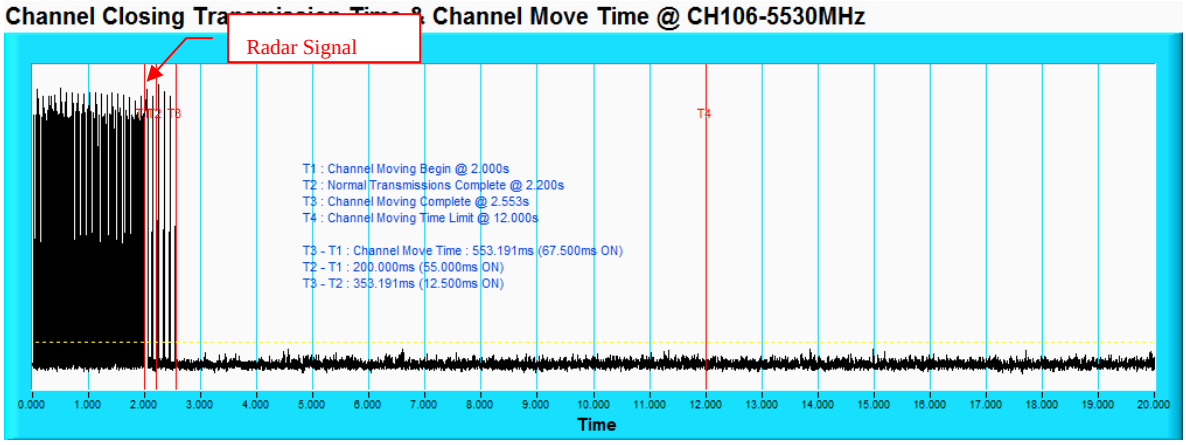
NOTE: T1 denotes the start of duty cycle period is 0th second. T2 denotes the end of duty cycle period is 1th second. T2 – T1= 1 seconds. Duty Cycle = 17.512%

802.11ac (VHT80)

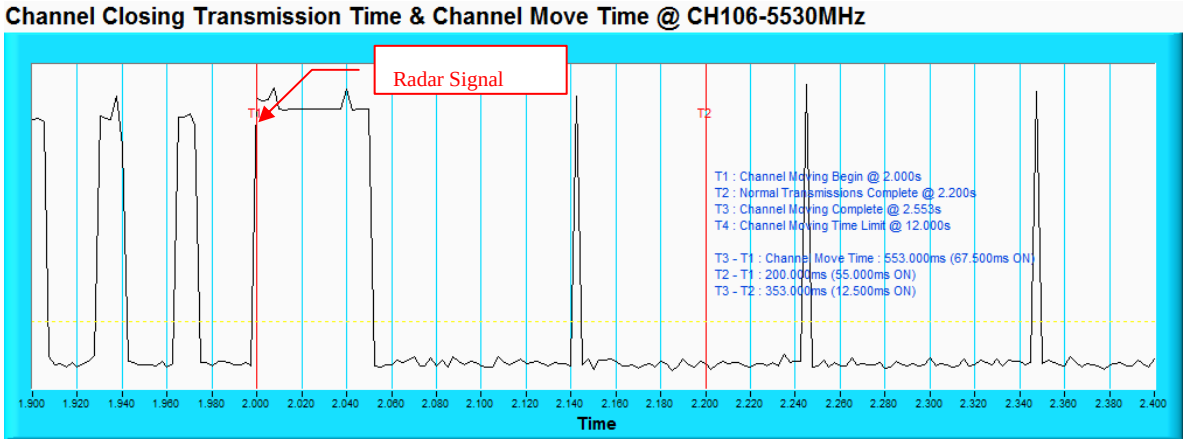


NOTE: T1 denotes the start of duty cycle period is 0th second. T2 denotes the end of duty cycle period is 1th second. T2 – T1= 1 seconds. Duty Cycle = 17.325%

Radar signal 1

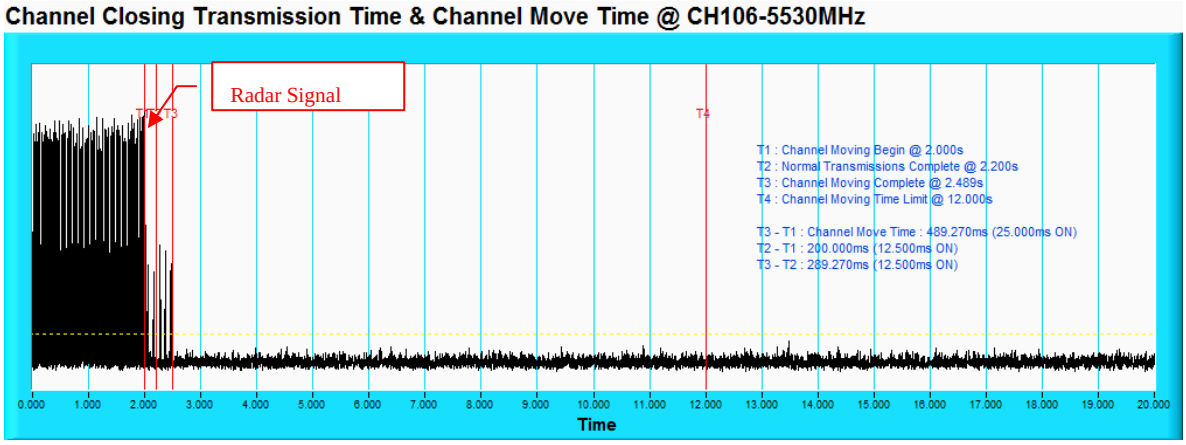


NOTE: T1 denotes the start of Channel Move Time upon the end of the last Radar burst. T2 denotes the data transmission time of 200ms from T1. T3 denotes the end of Channel Move Time. T4 denotes the 10 second from T1 to observe the aggregate duration of transmissions.

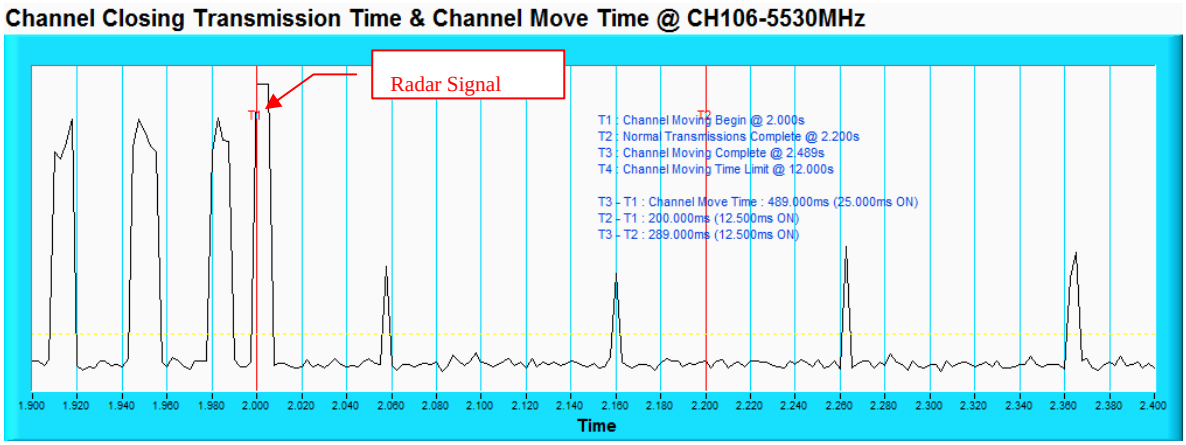


NOTE: An expanded plot for the device vacates the channel in the required 500ms.

Radar signal 2

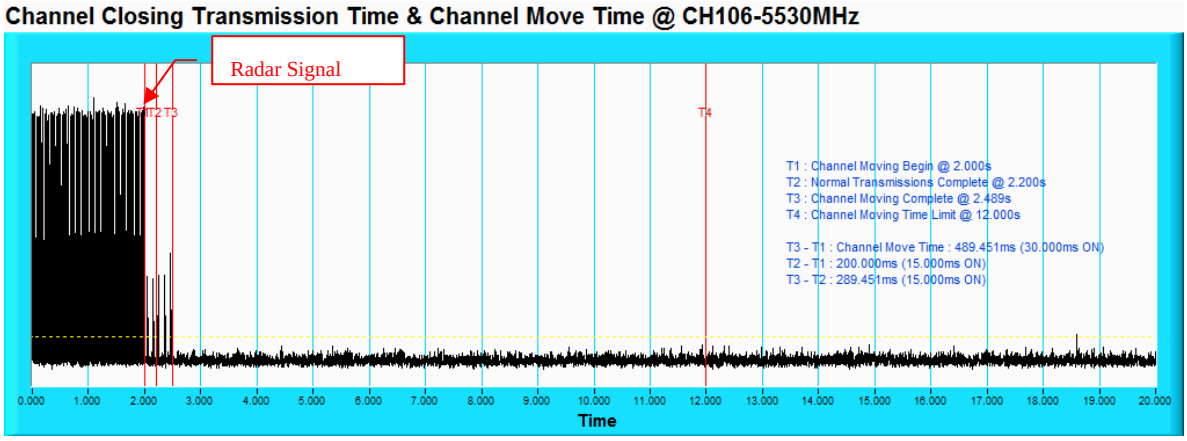


NOTE: T1 denotes the start of Channel Move Time upon the end of the last Radar burst. T2 denotes the data transmission time of 200ms from T1. T3 denotes the end of Channel Move Time. T4 denotes the 10 second from T1 to observe the aggregate duration of transmissions.

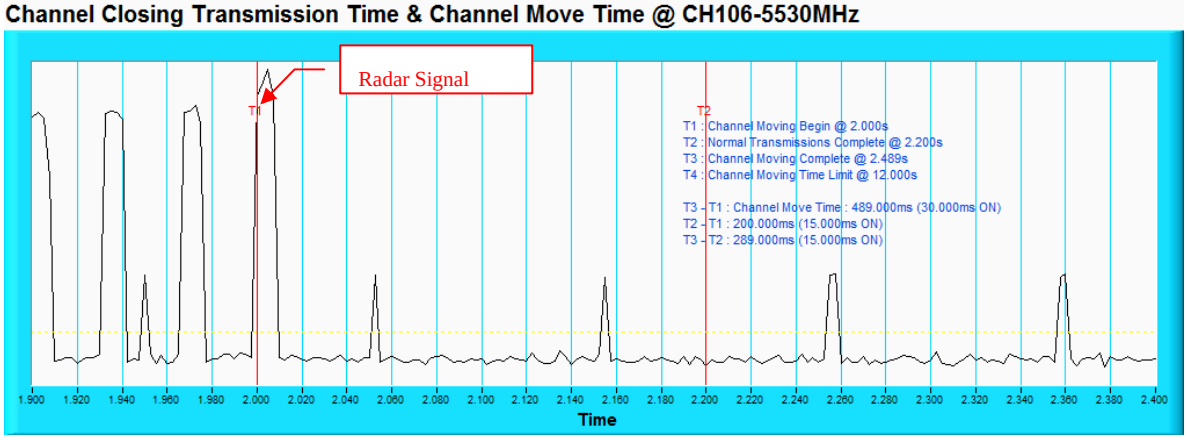


NOTE: An expanded plot for the device vacates the channel in the required 500ms.

Radar signal 3

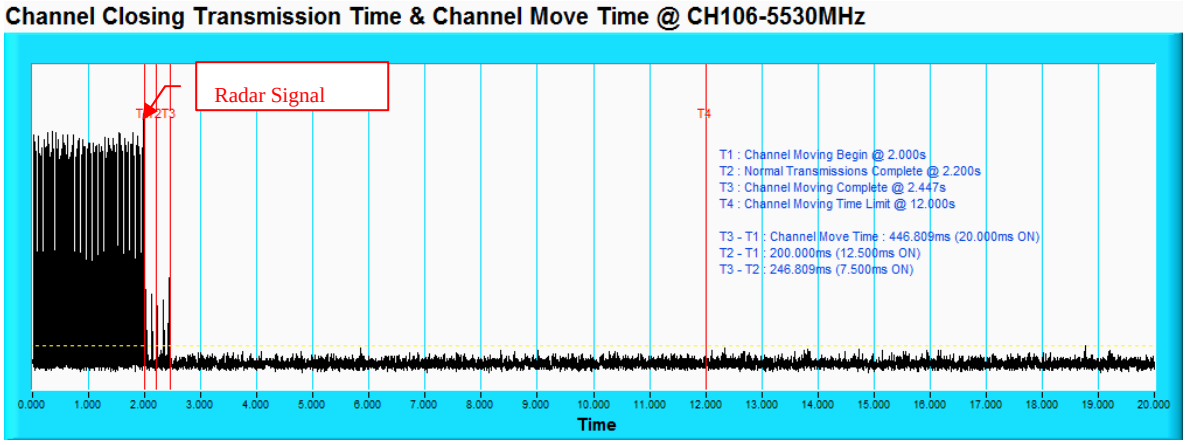


NOTE: T1 denotes the start of Channel Move Time upon the end of the last Radar burst. T2 denotes the data transmission time of 200ms from T1. T3 denotes the end of Channel Move Time. T4 denotes the 10 second from T1 to observe the aggregate duration of transmissions.

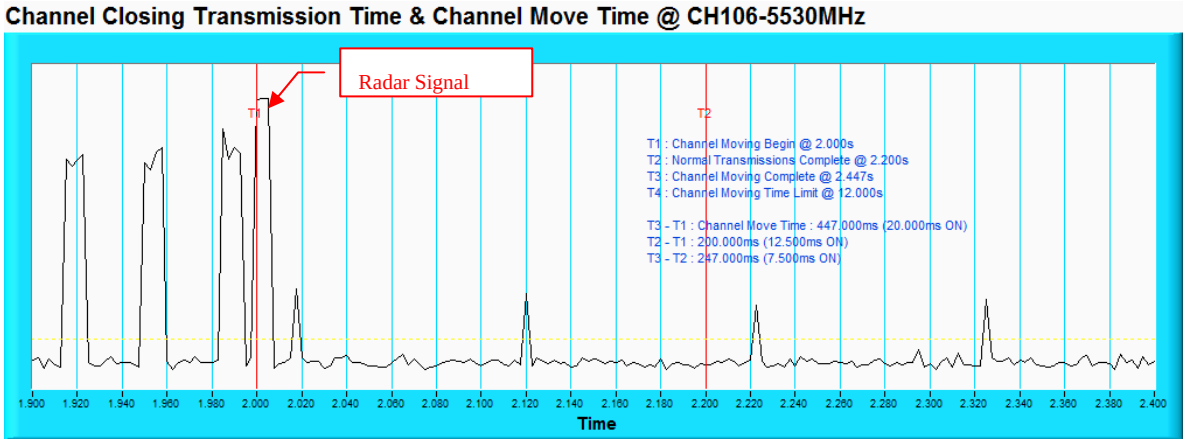


NOTE: An expanded plot for the device vacates the channel in the required 500ms.

Radar signal 4

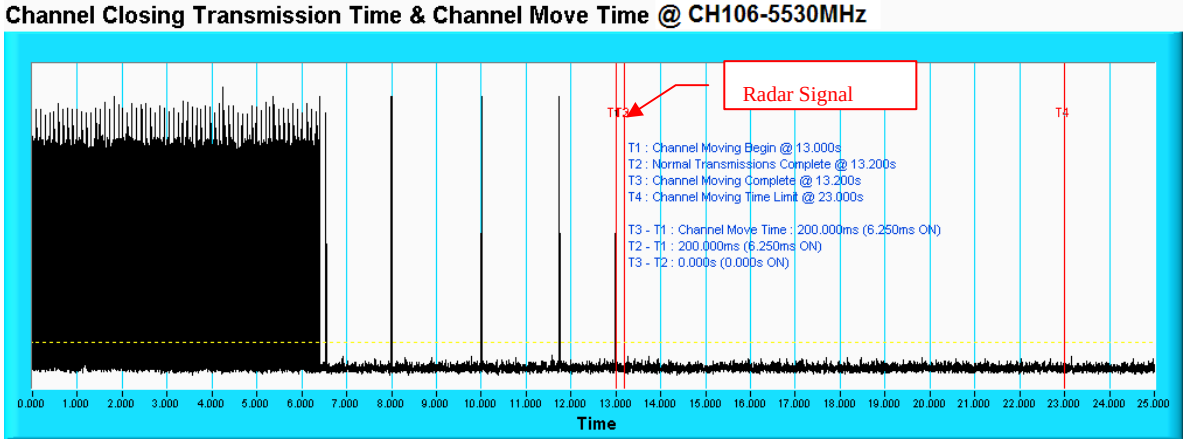


NOTE: T1 denotes the start of Channel Move Time upon the end of the last Radar burst. T2 denotes the data transmission time of 200ms from T1. T3 denotes the end of Channel Move Time. T4 denotes the 10 second from T1 to observe the aggregate duration of transmissions.

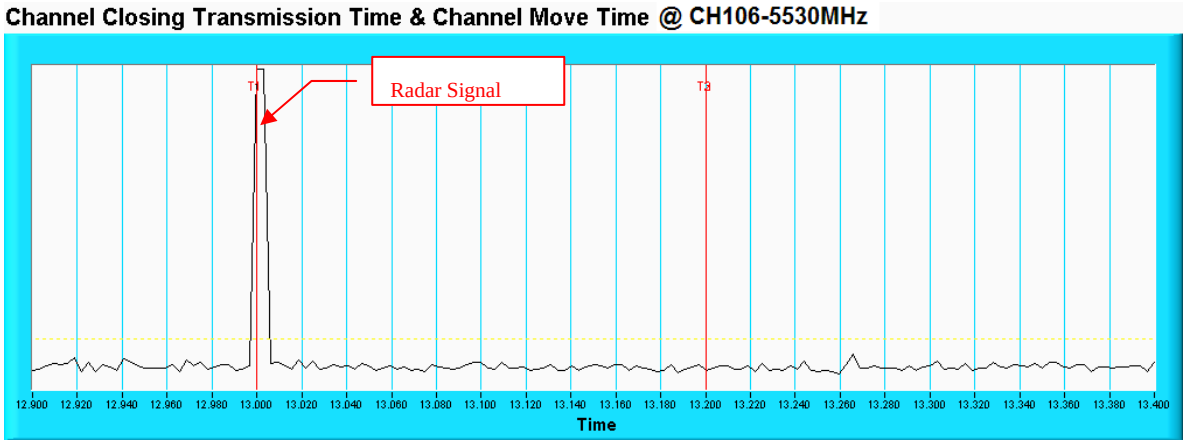


NOTE: An expanded plot for the device vacates the channel in the required 500ms.

Radar signal 5

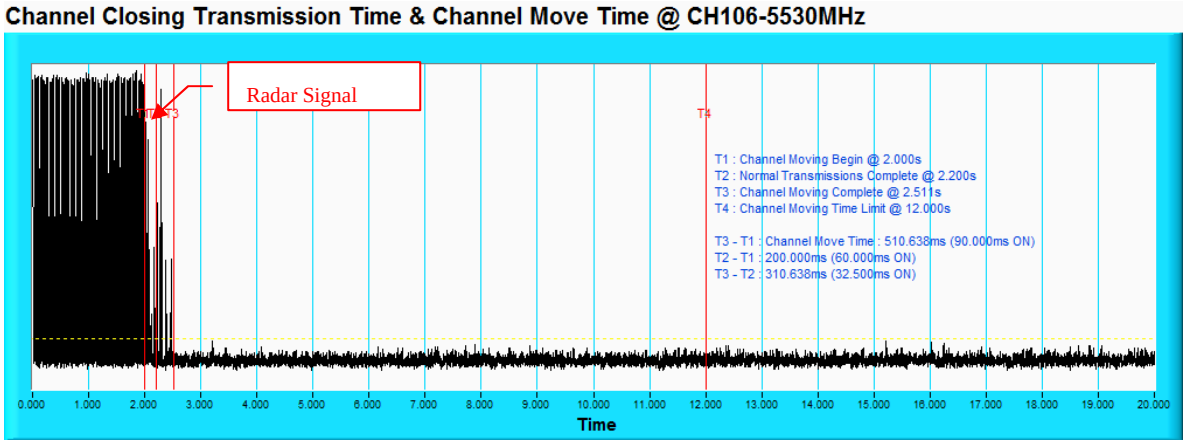


NOTE: T1 denotes the start of Channel Move Time upon the end of the last Radar burst. T2 denotes the data transmission time of 200ms from T1. T3 denotes the end of Channel Move Time. T4 denotes the 10 second from T1 to observe the aggregate duration of transmissions.

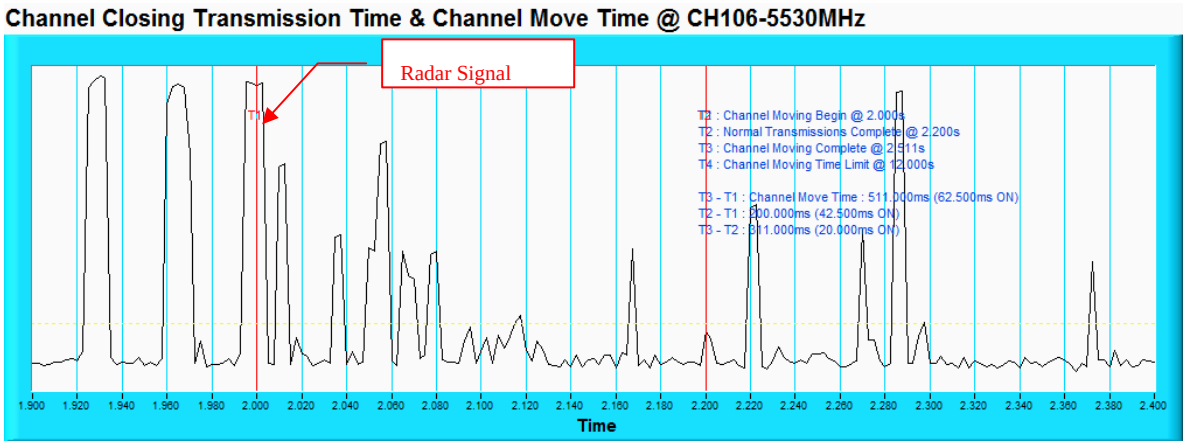


NOTE: An expanded plot for the device vacates the channel in the required 500ms.

Radar signal 6



NOTE: T1 denotes the start of Channel Move Time upon the end of the last Radar burst. T2 denotes the data transmission time of 200ms from T1. T3 denotes the end of Channel Move Time. T4 denotes the 10 second from T1 to observe the aggregate duration of transmissions.



NOTE: An expanded plot for the device vacates the channel in the required 500ms.

802.11ac (VHT20)

Type 1 Radar Statistical Performances					
Trial #	Pulse Repetition Frequency Number (1 to 23)	Pulse Repetition Frequency (Pulse per seconds)	Pulses per Burst	Pulse Repetition Interval (microseconds)	Detection
1	14	1285.3	68	778	Yes
2	13	1319.3	70	758	Yes
3	11	1392.8	74	718	No
4	8	1519.8	81	658	No
5	23	326.2	18	3066	Yes
6	1	1930.5	102	518	Yes
7	2	1858.7	99	538	Yes
8	19	1139	61	878	Yes
9	21	1474.9	58	918	Yes
10	20	1113.6	59	898	Yes
11	17	1193.3	63	838	Yes
12	9	1474.9	78	678	No
13	10	1432.7	76	698	Yes
14	12	1355	72	738	No
15	4	1730.1	92	578	Yes
16		762.8	41	1311	Yes
17		390.3	21	2562	Yes
18		442.3	24	2261	Yes
19		1869.2	99	535	Yes
20		653.2	35	1531	Yes
21		441.7	24	2264	Yes
22		1666.7	88	600	Yes
23		341.9	19	2925	Yes
24		1203.4	64	831	No
25		379.2	21	2637	Yes
26		361.7	20	2765	Yes
27		558.0	30	1792	Yes
28		684.0	37	1462	Yes
29		412.2	22	2426	Yes
30		618.8	33	1616	No
					Detection Rate: 80 %

802.11ac (VHT20)

Type 2 Radar Statistical Performances				
Trial #	Pulses per Burst	Pulse Width(us)	PRI(us)	Detection
1	27	2.4	154	No
2	25	3.1	173	Yes
3	27	2.3	185	Yes
4	24	3.9	229	Yes
5	26	3.6	190	Yes
6	26	2.8	176	Yes
7	24	3.3	188	Yes
8	27	3.8	224	Yes
9	27	4.2	187	Yes
10	28	3.1	157	No
11	28	2.8	212	Yes
12	24	4.6	212	Yes
13	27	3.7	224	Yes
14	27	3	194	No
15	27	1	175	Yes
16	29	1.4	193	Yes
17	26	4.8	186	Yes
18	24	3.8	199	Yes
19	26	1.8	162	Yes
20	28	1.2	203	Yes
21	28	4.4	159	Yes
22	25	1.1	189	Yes
23	28	2.3	215	No
24	26	3.1	214	No
25	24	3.4	197	Yes
26	28	3.4	186	Yes
27	26	2.9	205	Yes
28	23	3.4	216	Yes
29	24	4	221	Yes
30	27	2.5	220	Yes
				Detection Rate: 83.3 %

802.11ac (VHT20)

Type 3 Radar Statistical Performances				
Trial #	Pulses per Burst	Pulse Width(us)	PRI(us)	Detection
1	17	6.3	407	Yes
2	18	8.1	457	Yes
3	18	7	351	Yes
4	17	7.2	238	Yes
5	18	9	256	Yes
6	16	6.6	466	Yes
7	17	7.2	454	Yes
8	16	6.2	215	Yes
9	16	9.8	221	Yes
10	17	6.8	291	Yes
11	16	6.2	214	No
12	16	6.3	486	Yes
13	16	8.9	374	No
14	18	8.6	304	Yes
15	18	8.3	400	Yes
16	17	7.1	291	Yes
17	17	6.9	259	Yes
18	17	9.9	497	Yes
19	17	6.2	323	No
20	17	9	311	No
21	17	6.9	428	Yes
22	18	9.9	226	Yes
23	17	6.9	443	No
24	17	6.3	493	Yes
25	17	8.9	452	No
26	16	7.9	464	Yes
27	18	6.9	272	Yes
28	16	7.2	317	Yes
29	17	9.9	223	Yes
30	18	7.3	477	Yes
				Detection Rate: 80 %

802.11ac (VHT20)

Type 4 Radar Statistical Performances				
Trial #	Pulses per Burst	Pulse Width(us)	PRI(us)	Detection
1	16	20	239	Yes
2	13	12	465	Yes
3	15	14.9	270	Yes
4	16	15.7	233	Yes
5	14	14.5	441	Yes
6	15	17.5	231	No
7	12	18	306	Yes
8	13	17.7	389	Yes
9	13	14	214	No
10	14	16.1	415	Yes
11	14	19.4	495	Yes
12	14	19.3	343	Yes
13	16	15.6	349	Yes
14	13	16.9	393	No
15	12	17.4	250	Yes
16	15	14.8	425	Yes
17	16	20	372	Yes
18	14	11.3	476	Yes
19	13	17.7	425	Yes
20	14	17.5	347	Yes
21	12	16.8	483	No
22	13	17.4	350	Yes
23	13	19.1	476	Yes
24	14	19.3	365	No
25	13	13	260	Yes
26	15	19	303	Yes
27	15	18	311	Yes
28	15	19.8	493	Yes
29	16	13.5	333	Yes
30	13	13.6	478	Yes
				Detection Rate: 83.3 %

802.11ac (VHT20)

Type 5 Radar Statistical Performances			
Trial #	Chirp Center Frequency(MHz)	Test Signal Name	Detection
1	5500	LP_Signal_01	No
2	5498	LP_Signal_02	Yes
3	5502	LP_Signal_03	Yes
4	5496	LP_Signal_04	No
5	5498	LP_Signal_05	Yes
6	5504	LP_Signal_06	Yes
7	5507	LP_Signal_07	Yes
8	5502	LP_Signal_08	Yes
9	5494	LP_Signal_09	No
10	5505	LP_Signal_10	Yes
11	5495	LP_Signal_11	Yes
12	5493	LP_Signal_12	No
13	5501	LP_Signal_13	Yes
14	5504	LP_Signal_14	Yes
15	5497	LP_Signal_15	Yes
16	5505	LP_Signal_16	Yes
17	5507	LP_Signal_17	Yes
18	5504	LP_Signal_18	No
19	5494	LP_Signal_19	Yes
20	5505	LP_Signal_20	Yes
21	5507	LP_Signal_21	Yes
22	5496	LP_Signal_22	Yes
23	5505	LP_Signal_23	Yes
24	5504	LP_Signal_24	Yes
25	5507	LP_Signal_25	Yes
26	5499	LP_Signal_26	Yes
27	5493	LP_Signal_27	No
28	5495	LP_Signal_28	Yes
29	5506	LP_Signal_29	Yes
30	5500	LP_Signal_30	Yes
			Detection Rate: 80 %

The Long Pulse Radar pattern shown in Appendix B.1

802.11ac (VHT20)

Type 6 Radar Statistical Performances				
Trial #	Pulses per Burst	Pulse Width(us)	PRI(us)	Detection
1	9	1	333.3	Yes
2	9	1	333.3	Yes
3	9	1	333.3	Yes
4	9	1	333.3	No
5	9	1	333.3	Yes
6	9	1	333.3	Yes
7	9	1	333.3	Yes
8	9	1	333.3	No
9	9	1	333.3	No
10	9	1	333.3	No
11	9	1	333.3	Yes
12	9	1	333.3	No
13	9	1	333.3	Yes
14	9	1	333.3	Yes
15	9	1	333.3	Yes
16	9	1	333.3	No
17	9	1	333.3	Yes
18	9	1	333.3	No
19	9	1	333.3	Yes
20	9	1	333.3	Yes
21	9	1	333.3	Yes
22	9	1	333.3	Yes
23	9	1	333.3	Yes
24	9	1	333.3	Yes
25	9	1	333.3	No
26	9	1	333.3	Yes
27	9	1	333.3	Yes
28	9	1	333.3	Yes
29	9	1	333.3	Yes
30	9	1	333.3	Yes
Detection Rate: 73.3 %				

802.11ac (VHT20)

Type 6 Radar Statistical Performances		
Trial #	Hopping Frequency Sequence Name	Detection
1	HOP_FREQ_SEQ_01	Yes
2	HOP_FREQ_SEQ_02	Yes
3	HOP_FREQ_SEQ_03	Yes
4	HOP_FREQ_SEQ_04	No
5	HOP_FREQ_SEQ_05	Yes
6	HOP_FREQ_SEQ_06	Yes
7	HOP_FREQ_SEQ_07	Yes
8	HOP_FREQ_SEQ_08	No
9	HOP_FREQ_SEQ_09	No
10	HOP_FREQ_SEQ_10	No
11	HOP_FREQ_SEQ_11	Yes
12	HOP_FREQ_SEQ_12	No
13	HOP_FREQ_SEQ_13	Yes
14	HOP_FREQ_SEQ_14	Yes
15	HOP_FREQ_SEQ_15	Yes
16	HOP_FREQ_SEQ_16	No
17	HOP_FREQ_SEQ_17	Yes
18	HOP_FREQ_SEQ_18	No
19	HOP_FREQ_SEQ_19	Yes
20	HOP_FREQ_SEQ_20	Yes
21	HOP_FREQ_SEQ_21	Yes
22	HOP_FREQ_SEQ_22	Yes
23	HOP_FREQ_SEQ_23	Yes
24	HOP_FREQ_SEQ_24	Yes
25	HOP_FREQ_SEQ_25	No
26	HOP_FREQ_SEQ_26	Yes
27	HOP_FREQ_SEQ_27	Yes
28	HOP_FREQ_SEQ_28	Yes
29	HOP_FREQ_SEQ_29	Yes
30	HOP_FREQ_SEQ_30	Yes
		Detection Rate: 73.3 %

The Frequency Hopping Radar pattern shown in Appendix B.2

802.11ac (VHT40)

Type 1 Radar Statistical Performances					
Trial #	Pulse Repetition Frequency Number (1 to 23)	Pulse Repetition Frequency (Pulse per seconds)	Pulses per Burst	Pulse Repetition Interval (microseconds)	Detection
1	14	1285.3	68	778	Yes
2	13	1319.3	70	758	Yes
3	11	1392.8	74	718	Yes
4	8	1519.8	81	658	Yes
5	23	326.2	18	3066	No
6	1	1930.5	102	518	No
7	2	1858.7	99	538	Yes
8	19	1139	61	878	No
9	21	1474.9	58	918	Yes
10	20	1113.6	59	898	Yes
11	17	1193.3	63	838	Yes
12	9	1474.9	78	678	Yes
13	10	1432.7	76	698	Yes
14	12	1355	72	738	Yes
15	4	1730.1	92	578	Yes
16		762.8	41	1311	Yes
17		390.3	21	2562	No
18		442.3	24	2261	Yes
19		1869.2	99	535	Yes
20		653.2	35	1531	Yes
21		441.7	24	2264	No
22		1666.7	88	600	No
23		341.9	19	2925	Yes
24		1203.4	64	831	Yes
25		379.2	21	2637	Yes
26		361.7	20	2765	Yes
27		558.0	30	1792	Yes
28		684.0	37	1462	Yes
29		412.2	22	2426	Yes
30		618.8	33	1616	Yes
					Detection Rate: 80 %

802.11ac (VHT40)

Type 2 Radar Statistical Performances				
Trial #	Pulses per Burst	Pulse Width(us)	PRI(us)	Detection
1	27	2.4	154	Yes
2	25	3.1	173	No
3	27	2.3	185	Yes
4	24	3.9	229	Yes
5	26	3.6	190	Yes
6	26	2.8	176	Yes
7	24	3.3	188	Yes
8	27	3.8	224	No
9	27	4.2	187	Yes
10	28	3.1	157	No
11	28	2.8	212	Yes
12	24	4.6	212	Yes
13	27	3.7	224	No
14	27	3	194	Yes
15	27	1	175	Yes
16	29	1.4	193	No
17	26	4.8	186	Yes
18	24	3.8	199	Yes
19	26	1.8	162	Yes
20	28	1.2	203	Yes
21	28	4.4	159	Yes
22	25	1.1	189	Yes
23	28	2.3	215	Yes
24	26	3.1	214	Yes
25	24	3.4	197	No
26	28	3.4	186	Yes
27	26	2.9	205	Yes
28	23	3.4	216	Yes
29	24	4	221	Yes
30	27	2.5	220	Yes
				Detection Rate: 80 %

802.11ac (VHT40)

Type 3 Radar Statistical Performances				
Trial #	Pulses per Burst	Pulse Width(us)	PRI(us)	Detection
1	17	6.3	407	Yes
2	18	8.1	457	No
3	18	7	351	Yes
4	17	7.2	238	Yes
5	18	9	256	Yes
6	16	6.6	466	Yes
7	17	7.2	454	Yes
8	16	6.2	215	Yes
9	16	9.8	221	Yes
10	17	6.8	291	Yes
11	16	6.2	214	Yes
12	16	6.3	486	Yes
13	16	8.9	374	Yes
14	18	8.6	304	Yes
15	18	8.3	400	No
16	17	7.1	291	Yes
17	17	6.9	259	Yes
18	17	9.9	497	Yes
19	17	6.2	323	Yes
20	17	9	311	Yes
21	17	6.9	428	Yes
22	18	9.9	226	No
23	17	6.9	443	No
24	17	6.3	493	Yes
25	17	8.9	452	No
26	16	7.9	464	Yes
27	18	6.9	272	Yes
28	16	7.2	317	Yes
29	17	9.9	223	Yes
30	18	7.3	477	Yes
Detection Rate: 83.3 %				

802.11ac (VHT40)

Type 4 Radar Statistical Performances				
Trial #	Pulses per Burst	Pulse Width(us)	PRI(us)	Detection
1	16	20	239	No
2	13	12	465	Yes
3	15	14.9	270	No
4	16	15.7	233	Yes
5	14	14.5	441	Yes
6	15	17.5	231	No
7	12	18	306	Yes
8	13	17.7	389	Yes
9	13	14	214	No
10	14	16.1	415	Yes
11	14	19.4	495	Yes
12	14	19.3	343	Yes
13	16	15.6	349	Yes
14	13	16.9	393	No
15	12	17.4	250	Yes
16	15	14.8	425	Yes
17	16	20	372	Yes
18	14	11.3	476	Yes
19	13	17.7	425	Yes
20	14	17.5	347	Yes
21	12	16.8	483	No
22	13	17.4	350	Yes
23	13	19.1	476	Yes
24	14	19.3	365	Yes
25	13	13	260	No
26	15	19	303	Yes
27	15	18	311	Yes
28	15	19.8	493	Yes
29	16	13.5	333	Yes
30	13	13.6	478	Yes
				Detection Rate: 76.7 %

802.11ac (VHT40)

Type 5 Radar Statistical Performances			
Trial #	Chirp Center Frequency(MHz)	Test Signal Name	Detection
1	5510	LP_Signal_01	Yes
2	5520	LP_Signal_02	Yes
3	5500	LP_Signal_03	Yes
4	5520	LP_Signal_04	Yes
5	5523	LP_Signal_05	Yes
6	5505	LP_Signal_06	Yes
7	5502	LP_Signal_07	No
8	5505	LP_Signal_08	No
9	5496	LP_Signal_09	Yes
10	5500	LP_Signal_10	Yes
11	5524	LP_Signal_11	No
12	5524	LP_Signal_12	Yes
13	5504	LP_Signal_13	Yes
14	5503	LP_Signal_14	No
15	5511	LP_Signal_15	Yes
16	5519	LP_Signal_16	Yes
17	5505	LP_Signal_17	Yes
18	5499	LP_Signal_18	Yes
19	5517	LP_Signal_19	Yes
20	5517	LP_Signal_20	Yes
21	5499	LP_Signal_21	Yes
22	5498	LP_Signal_22	Yes
23	5518	LP_Signal_23	Yes
24	5500	LP_Signal_24	No
25	5516	LP_Signal_25	Yes
26	5497	LP_Signal_26	Yes
27	5516	LP_Signal_27	Yes
28	5497	LP_Signal_28	Yes
29	5520	LP_Signal_29	Yes
30	5522	LP_Signal_30	Yes
			Detection Rate: 83.3 %

The Long Pulse Radar pattern shown in Appendix B.1

802.11ac (VHT40)

Type 6 Radar Statistical Performances				
Trial #	Pulses per Burst	Pulse Width(us)	PRI(us)	Detection
1	9	1	333.3	No
2	9	1	333.3	No
3	9	1	333.3	No
4	9	1	333.3	No
5	9	1	333.3	Yes
6	9	1	333.3	Yes
7	9	1	333.3	Yes
8	9	1	333.3	No
9	9	1	333.3	Yes
10	9	1	333.3	Yes
11	9	1	333.3	Yes
12	9	1	333.3	Yes
13	9	1	333.3	Yes
14	9	1	333.3	Yes
15	9	1	333.3	Yes
16	9	1	333.3	Yes
17	9	1	333.3	Yes
18	9	1	333.3	Yes
19	9	1	333.3	No
20	9	1	333.3	Yes
21	9	1	333.3	Yes
22	9	1	333.3	Yes
23	9	1	333.3	Yes
24	9	1	333.3	Yes
25	9	1	333.3	Yes
26	9	1	333.3	Yes
27	9	1	333.3	Yes
28	9	1	333.3	Yes
29	9	1	333.3	Yes
30	9	1	333.3	Yes
				Detection Rate: 80 %

802.11ac (VHT40)

Type 6 Radar Statistical Performances		
Trial #	Hopping Frequency Sequence Name	Detection
1	HOP_FREQ_SEQ_01	No
2	HOP_FREQ_SEQ_02	No
3	HOP_FREQ_SEQ_03	No
4	HOP_FREQ_SEQ_04	No
5	HOP_FREQ_SEQ_05	Yes
6	HOP_FREQ_SEQ_06	Yes
7	HOP_FREQ_SEQ_07	Yes
8	HOP_FREQ_SEQ_08	No
9	HOP_FREQ_SEQ_09	Yes
10	HOP_FREQ_SEQ_10	Yes
11	HOP_FREQ_SEQ_11	Yes
12	HOP_FREQ_SEQ_12	Yes
13	HOP_FREQ_SEQ_13	Yes
14	HOP_FREQ_SEQ_14	Yes
15	HOP_FREQ_SEQ_15	Yes
16	HOP_FREQ_SEQ_16	Yes
17	HOP_FREQ_SEQ_17	Yes
18	HOP_FREQ_SEQ_18	Yes
19	HOP_FREQ_SEQ_19	No
20	HOP_FREQ_SEQ_20	Yes
21	HOP_FREQ_SEQ_21	Yes
22	HOP_FREQ_SEQ_22	Yes
23	HOP_FREQ_SEQ_23	Yes
24	HOP_FREQ_SEQ_24	Yes
25	HOP_FREQ_SEQ_25	Yes
26	HOP_FREQ_SEQ_26	Yes
27	HOP_FREQ_SEQ_27	Yes
28	HOP_FREQ_SEQ_28	Yes
29	HOP_FREQ_SEQ_29	Yes
30	HOP_FREQ_SEQ_30	Yes
		Detection Rate: 80 %

The Frequency Hopping Radar pattern shown in Appendix B.2

802.11ac (VHT80)

Type 1 Radar Statistical Performances					
Trial #	Pulse Repetition Frequency Number (1 to 23)	Pulse Repetition Frequency (Pulse per seconds)	Pulses per Burst	Pulse Repetition Interval (microseconds)	Detection
1	14	1285.3	68	778	Yes
2	13	1319.3	70	758	Yes
3	11	1392.8	74	718	Yes
4	8	1519.8	81	658	Yes
5	23	326.2	18	3066	Yes
6	1	1930.5	102	518	Yes
7	2	1858.7	99	538	Yes
8	19	1139	61	878	No
9	21	1474.9	58	918	Yes
10	20	1113.6	59	898	Yes
11	17	1193.3	63	838	Yes
12	9	1474.9	78	678	No
13	10	1432.7	76	698	No
14	12	1355	72	738	Yes
15	4	1730.1	92	578	Yes
16		762.8	41	1311	Yes
17		390.3	21	2562	Yes
18		442.3	24	2261	No
19		1869.2	99	535	Yes
20		653.2	35	1531	Yes
21		441.7	24	2264	Yes
22		1666.7	88	600	Yes
23		341.9	19	2925	Yes
24		1203.4	64	831	Yes
25		379.2	21	2637	Yes
26		361.7	20	2765	Yes
27		558.0	30	1792	No
28		684.0	37	1462	Yes
29		412.2	22	2426	Yes
30		618.8	33	1616	Yes
					Detection Rate: 83.3 %

802.11ac (VHT80)

Type 2 Radar Statistical Performances				
Trial #	Pulses per Burst	Pulse Width(us)	PRI(us)	Detection
1	27	2.4	154	Yes
2	25	3.1	173	No
3	27	2.3	185	No
4	24	3.9	229	Yes
5	26	3.6	190	Yes
6	26	2.8	176	Yes
7	24	3.3	188	No
8	27	3.8	224	Yes
9	27	4.2	187	Yes
10	28	3.1	157	Yes
11	28	2.8	212	Yes
12	24	4.6	212	Yes
13	27	3.7	224	Yes
14	27	3	194	Yes
15	27	1	175	Yes
16	29	1.4	193	No
17	26	4.8	186	Yes
18	24	3.8	199	Yes
19	26	1.8	162	Yes
20	28	1.2	203	Yes
21	28	4.4	159	Yes
22	25	1.1	189	Yes
23	28	2.3	215	Yes
24	26	3.1	214	Yes
25	24	3.4	197	Yes
26	28	3.4	186	Yes
27	26	2.9	205	Yes
28	23	3.4	216	No
29	24	4	221	Yes
30	27	2.5	220	Yes
Detection Rate: 83.3 %				

802.11ac (VHT80)

Type 3 Radar Statistical Performances				
Trial #	Pulses per Burst	Pulse Width(us)	PRI(us)	Detection
1	17	6.3	407	Yes
2	18	8.1	457	Yes
3	18	7	351	Yes
4	17	7.2	238	No
5	18	9	256	Yes
6	16	6.6	466	Yes
7	17	7.2	454	Yes
8	16	6.2	215	Yes
9	16	9.8	221	Yes
10	17	6.8	291	Yes
11	16	6.2	214	No
12	16	6.3	486	Yes
13	16	8.9	374	Yes
14	18	8.6	304	Yes
15	18	8.3	400	Yes
16	17	7.1	291	Yes
17	17	6.9	259	Yes
18	17	9.9	497	Yes
19	17	6.2	323	Yes
20	17	9	311	No
21	17	6.9	428	Yes
22	18	9.9	226	No
23	17	6.9	443	No
24	17	6.3	493	Yes
25	17	8.9	452	Yes
26	16	7.9	464	Yes
27	18	6.9	272	Yes
28	16	7.2	317	Yes
29	17	9.9	223	Yes
30	18	7.3	477	No
Detection Rate: 80.0 %				

802.11ac (VHT80)

Type 4 Radar Statistical Performances				
Trial #	Pulses per Burst	Pulse Width(us)	PRI(us)	Detection
1	16	20	239	No
2	13	12	465	Yes
3	15	14.9	270	Yes
4	16	15.7	233	Yes
5	14	14.5	441	No
6	15	17.5	231	Yes
7	12	18	306	Yes
8	13	17.7	389	No
9	13	14	214	Yes
10	14	16.1	415	Yes
11	14	19.4	495	No
12	14	19.3	343	Yes
13	16	15.6	349	Yes
14	13	16.9	393	Yes
15	12	17.4	250	Yes
16	15	14.8	425	Yes
17	16	20	372	Yes
18	14	11.3	476	Yes
19	13	17.7	425	Yes
20	14	17.5	347	Yes
21	12	16.8	483	No
22	13	17.4	350	Yes
23	13	19.1	476	Yes
24	14	19.3	365	Yes
25	13	13	260	Yes
26	15	19	303	Yes
27	15	18	311	No
28	15	19.8	493	Yes
29	16	13.5	333	Yes
30	13	13.6	478	No
				Detection Rate: 76.7 %

802.11ac (VHT80)

Type 5 Radar Statistical Performances			
Trial #	Chirp Center Frequency(MHz)	Test Signal Name	Detection
1	5530	LP_Signal_01	Yes
2	5540	LP_Signal_02	Yes
3	5560	LP_Signal_03	Yes
4	5520	LP_Signal_04	No
5	5500	LP_Signal_05	Yes
6	5504	LP_Signal_06	Yes
7	5547	LP_Signal_07	Yes
8	5519	LP_Signal_08	Yes
9	5512	LP_Signal_09	Yes
10	5529	LP_Signal_10	No
11	5514	LP_Signal_11	Yes
12	5528	LP_Signal_12	Yes
13	5511	LP_Signal_13	Yes
14	5535	LP_Signal_14	Yes
15	5525	LP_Signal_15	Yes
16	5506	LP_Signal_16	Yes
17	5527	LP_Signal_17	No
18	5560	LP_Signal_18	Yes
19	5560	LP_Signal_19	Yes
20	5530	LP_Signal_20	Yes
21	5528	LP_Signal_21	Yes
22	5522	LP_Signal_22	No
23	5532	LP_Signal_23	No
24	5529	LP_Signal_24	Yes
25	5541	LP_Signal_25	Yes
26	5521	LP_Signal_26	Yes
27	5555	LP_Signal_27	Yes
28	5535	LP_Signal_28	Yes
29	5538	LP_Signal_29	Yes
30	5546	LP_Signal_30	Yes
			Detection Rate: 83.3 %

The Long Pulse Radar pattern shown in Appendix B.1

802.11ac (VHT80)

Type 6 Radar Statistical Performances				
Trial #	Pulses per Burst	Pulse Width(us)	PRI(us)	Detection
1	9	1	333.3	Yes
2	9	1	333.3	Yes
3	9	1	333.3	Yes
4	9	1	333.3	Yes
5	9	1	333.3	Yes
6	9	1	333.3	No
7	9	1	333.3	Yes
8	9	1	333.3	Yes
9	9	1	333.3	Yes
10	9	1	333.3	No
11	9	1	333.3	Yes
12	9	1	333.3	No
13	9	1	333.3	Yes
14	9	1	333.3	Yes
15	9	1	333.3	Yes
16	9	1	333.3	Yes
17	9	1	333.3	Yes
18	9	1	333.3	Yes
19	9	1	333.3	Yes
20	9	1	333.3	No
21	9	1	333.3	Yes
22	9	1	333.3	No
23	9	1	333.3	Yes
24	9	1	333.3	Yes
25	9	1	333.3	No
26	9	1	333.3	Yes
27	9	1	333.3	No
28	9	1	333.3	No
29	9	1	333.3	No
30	9	1	333.3	Yes
Detection Rate: 70 %				

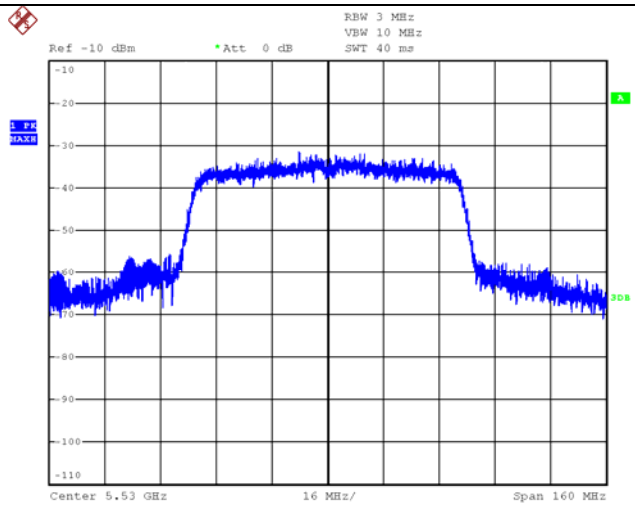
802.11ac (VHT80)

Type 6 Radar Statistical Performances		
Trial #	Hopping Frequency Sequence Name	Detection
1	HOP_FREQ_SEQ_01	Yes
2	HOP_FREQ_SEQ_02	Yes
3	HOP_FREQ_SEQ_03	Yes
4	HOP_FREQ_SEQ_04	Yes
5	HOP_FREQ_SEQ_05	Yes
6	HOP_FREQ_SEQ_06	No
7	HOP_FREQ_SEQ_07	Yes
8	HOP_FREQ_SEQ_08	Yes
9	HOP_FREQ_SEQ_09	Yes
10	HOP_FREQ_SEQ_10	No
11	HOP_FREQ_SEQ_11	Yes
12	HOP_FREQ_SEQ_12	No
13	HOP_FREQ_SEQ_13	Yes
14	HOP_FREQ_SEQ_14	Yes
15	HOP_FREQ_SEQ_15	Yes
16	HOP_FREQ_SEQ_16	Yes
17	HOP_FREQ_SEQ_17	Yes
18	HOP_FREQ_SEQ_18	Yes
19	HOP_FREQ_SEQ_19	Yes
20	HOP_FREQ_SEQ_20	No
21	HOP_FREQ_SEQ_21	Yes
22	HOP_FREQ_SEQ_22	No
23	HOP_FREQ_SEQ_23	Yes
24	HOP_FREQ_SEQ_24	Yes
25	HOP_FREQ_SEQ_25	No
26	HOP_FREQ_SEQ_26	Yes
27	HOP_FREQ_SEQ_27	No
28	HOP_FREQ_SEQ_28	No
29	HOP_FREQ_SEQ_29	No
30	HOP_FREQ_SEQ_30	Yes
		Detection Rate: 70 %

The Frequency Hopping Radar pattern shown in Appendix B.2

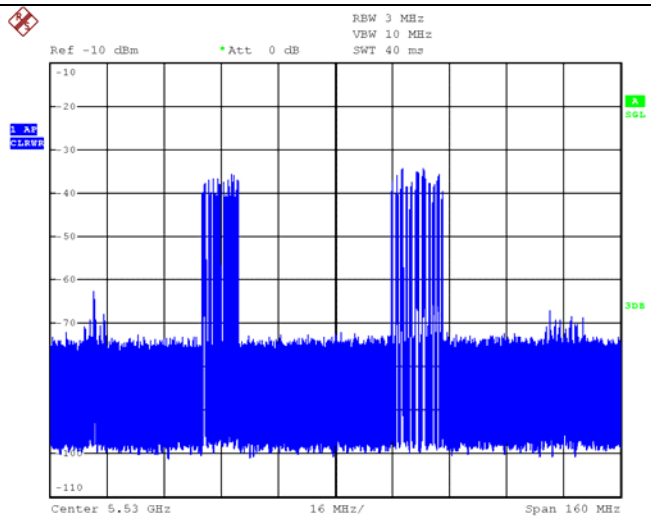
6.2.1.4 NON- OCCUPANCY PERIOD

1) Test results demonstrating an associated client link is established with the master on a test frequency.



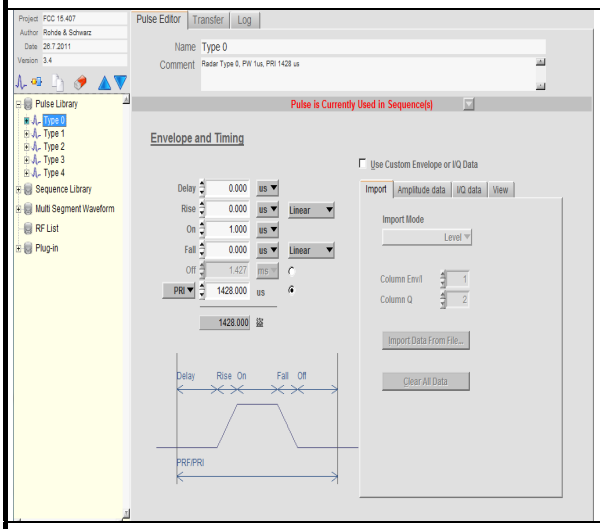
EUT (master) links with Client on 5530MHz

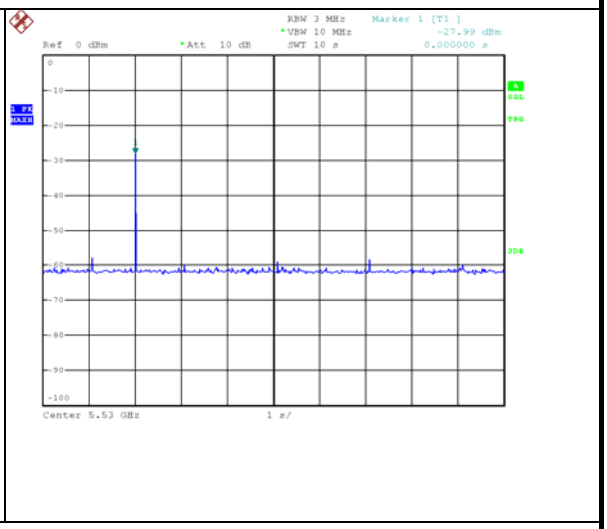
2) The master and DFS-certified client device are associated, and system testing will be performed with channel-loading for a non-occupancy period test.



Master performed with channel-loading via Client.

3). The device transmits one type of radar as specified in the DFS Order.



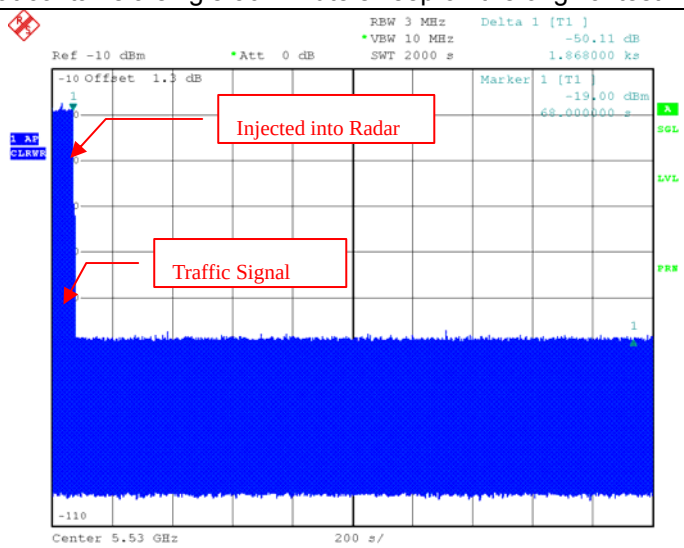


Radar 0 is used to test during DFS testing.

4) The test frequency has been monitored to ensure no transmission of any type has occurred for 30 minutes;

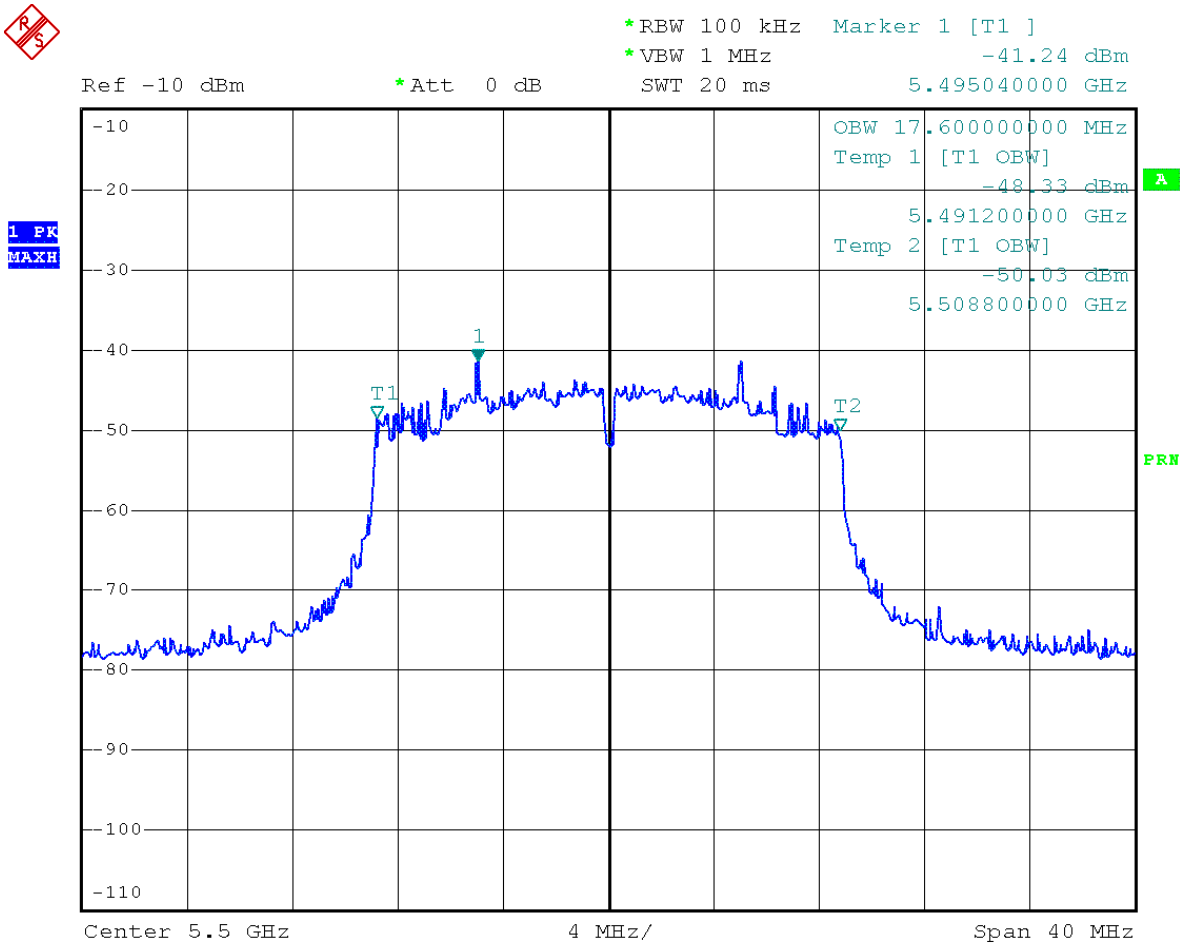
Note: If the client moves with the master, the device is considered compliant if nothing appears in the client non-occupancy period test. For devices that shut down (rather than moving channels), no beacons should appear;

5)An analyzer plot that contains a single 30-minute sweep on the original test frequency.



6.2.1.6 U-NII DETECTION BANDWIDTH

802.11ac (VHT20)

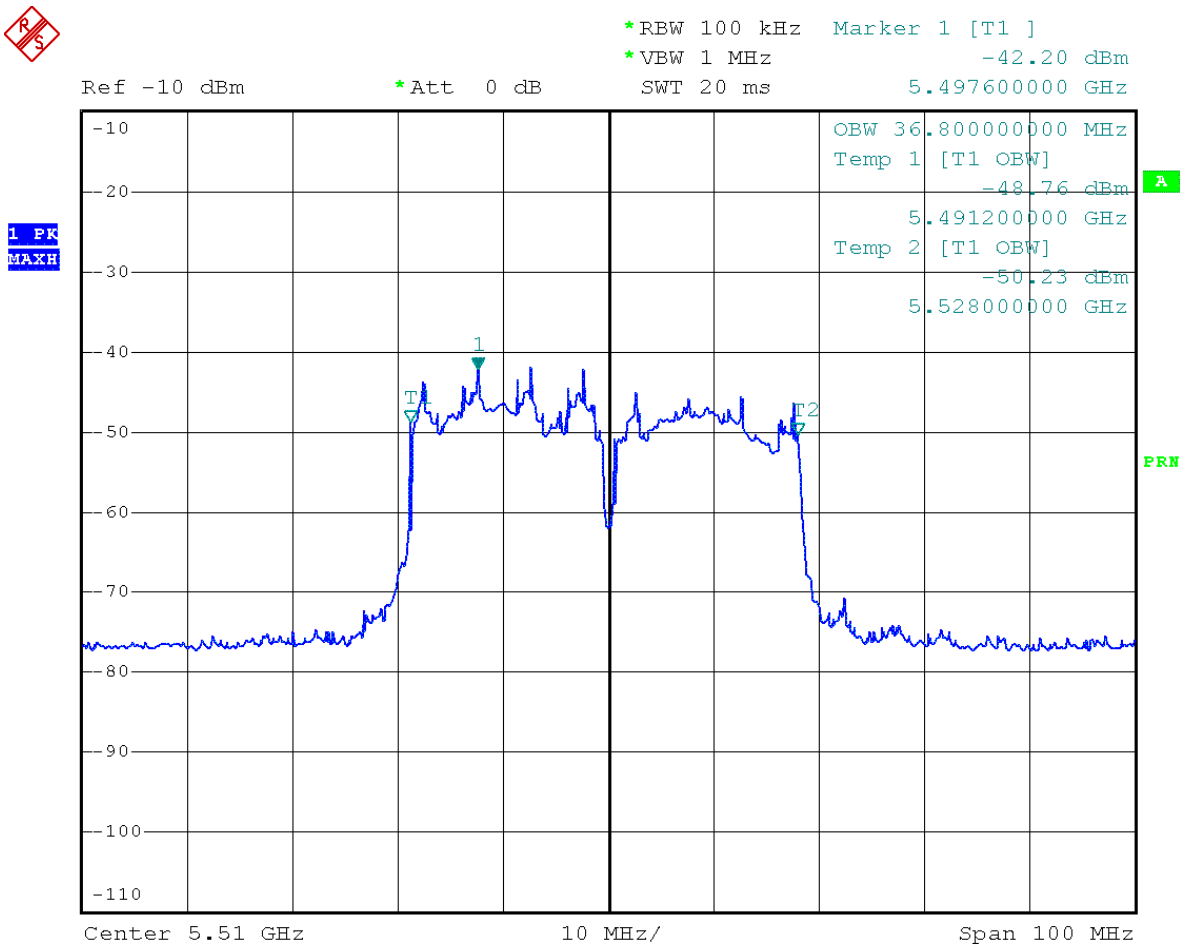


U-NII 99% Channel bandwidth

802.11ac (VHT20)

Detection Bandwidth Test											
EUT Frequency: 5.500GHz EUT 99% Power bandwidth: 17.6MHz Detection bandwidth limit (100% of EUT 99% Power bandwidth): 17.6MHz Detection Bandwidth (FH - FL): 18.00MHz Test Result : PASS											
Radar	Trial Number / Detection										Detection
Frequency (Hz)	1	2	3	4	5	6	7	8	9	10	Rate (%)
5.488G	No	No	No	No	No	No	No	No	No	No	0
5.489G	No	No	No	No	No	No	No	No	No	No	0
5.490G	No	No	No	No	No	No	No	No	No	No	0
5.491G (FL)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.492G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.493G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.494G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.495G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.496G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.497G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.498G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.499G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.500G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.501G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.502G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.503G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.504G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.505G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.506G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.507G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.508G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.509G (FH)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	90
5.510G	No	No	No	No	No	No	No	No	No	No	0
5.511G	No	No	No	No	No	No	No	No	No	No	0
5.512G	No	No	No	No	No	No	No	No	No	No	0

802.11ac (VHT40)



U-NII 99% Channel bandwidth

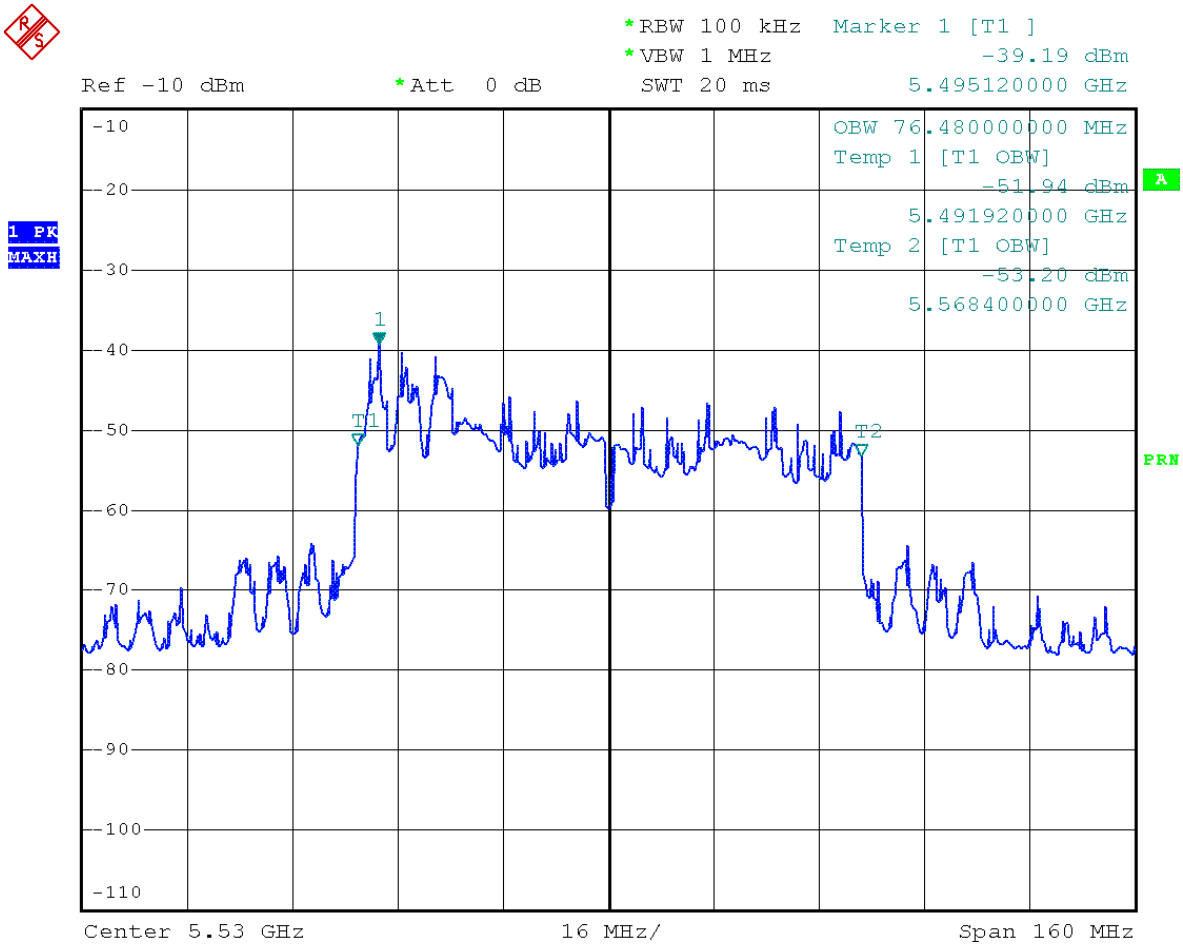
802.11ac (VHT40)

Detection Bandwidth Test

EUT Frequency: 5.510GHz
EUT 99% Power bandwidth: 36.8 MHz
Detection bandwidth limit (100% of EUT 99% Power bandwidth): 36.8 MHz
Detection Bandwidth (FH - FL): 38 MHz
Test Result : PASS

Radar Frequency (Hz)	Trial Number / Detection										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5.489G	No	No	No	No	No	No	No	No	No	No	0
5.490G	No	No	No	No	No	No	No	No	No	No	0
5.491G (FL)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.492G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.493G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.494G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.495G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.496G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.497G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.498G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.499G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.500G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.501G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.502G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.503G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.504G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.505G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.506G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.507G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.508G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.509G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.510G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.511G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.512G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.513G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.514G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.515G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.516G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.517G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.518G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.519G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.520G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.521G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.522G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.523G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.524G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.525G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.526G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.527G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.528G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.529G (FH)	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	90
5.530G	No	No	No	No	No	No	No	No	No	No	0
5.531G	No	No	No	No	No	No	No	No	No	No	0

802.11ac VHT80



U-NII 99% Channel bandwidth

802.11ac VHT80

Detection Bandwidth Test											
EUT Frequency: 5.530GHz EUT 99% Power bandwidth: 76.48MHz Detection bandwidth limit (100% of EUT 99% Power bandwidth): 76.48MHz Detection Bandwidth (FH - FL): 78MHz Test Result : PASS											
Radar Frequency (Hz)	Trial Number / Detection										Detection Rate (%)
	1	2	3	4	5	6	7	8	9	10	
5.489G	No	No	No	No	No	No	No	No	No	No	0
5.490G	No	No	No	No	No	No	No	No	No	No	0
5.491G (FL)	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	90
5.492G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.493G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.494G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.495G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.496G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.497G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.498G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.499G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.500G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.501G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.502G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.503G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.504G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.505G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.506G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.507G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.508G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.509G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.510G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.511G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.512G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.513G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.514G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.515G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.516G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.517G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.518G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.519G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.520G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.521G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.522G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.523G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.524G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.525G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.526G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.527G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.528G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.529G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.530G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.531G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.532G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100

5.533G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.534G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.535G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.536G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.537G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.538G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.539G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.540G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.541G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.542G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.543G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.544G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.545G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.546G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.547G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.548G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.549G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.550G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.551G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.552G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.553G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.554G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.555G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.556G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.557G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.558G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.559G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.560G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.561G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.562G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.563G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.564G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.565G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.566G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.567G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.568G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.569G (FH)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100
5.570G	No	No	No	No	No	No	No	No	No	No	0
5.571G	No	No	No	No	No	No	No	No	No	No	0

6.2.1.7 NON-CO-CHANNEL TEST

The UUT was investigated after radar was detected the channel and made sure no co-channel operation with radars.

7. INFORMATION ON THE TESTING LABORATORIES

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025:

If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab:
Tel: 886-2-26052180
Fax: 886-2-26052943

Hsin Chu EMC/RF/Telecom Lab:
Tel: 886-3-5935343
Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Lab:
Tel: 886-3-3183232
Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com
Web Site: www.bureauveritas-adt.com

The address and road map of all our labs can be found in our web site also.

8. APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

Modifications or adding components during the test

No any modifications are made to the EUT by the lab during the test.

9. APPENDIX-B

RADAR TEST SIGNAL

B.1 The Long Pulse Radar Pattern

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_01 Number of Bursts in Trial: 11						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	1	9	64.7			583.9
2	3	16	84.9	103	152	846.7
3	3	18	93.3	306	130	22.9
4	1	8	59.9			287.3
5	2	13	78	366		550.6
6	1	7	59			815.8
7	1	9	62.5			1080.0
8	3	20	97.4	395	158	254.1
9	2	10	67.4	124		518.4
10	2	11	69	517		781.9
11	2	13	75.1	179		1045.1

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_02 Number of Bursts in Trial: 17						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	3	17	90.5	95	58	143.1
2	3	16	84.8	436	261	313.0
3	1	5	51.5			485.3
4	1	6	54.1			655.9
5	3	19	95.2	44	320	121.9
6	1	6	56.1			293.5
7	3	18	92.8	111	159	462.6
8	3	17	87.9	249	210	632.1
9	2	12	73.8	603		101.3
10	1	8	60.7			272.3
11	2	14	79.2	531		442.0
12	2	12	74.9	780		612.7
13	1	6	54			80.5
14	3	20	99.7	585	31	250.1
15	2	12	72.8	-140		421.453
16	2	13	75.7	-137		592.436
17	2	13	77.3	-310		59.269

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_03 Number of Bursts in Trial: 20						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	2	11	68.8	775		205.6
2	2	12	74.9	154		358.2
3	1	9	64.7			511.5
4	1	8	62.2			34.4
5	2	13	75.2	215		186.7
6	1	6	53.1			340.2
7	3	16	84.5	206	541	490.4
8	3	19	94.7	378	516	15.5
9	2	13	75.8	560		168.0
10	2	11	71.3	248		320.6
11	3	18	92.9	251	6	472.1
12	2	15	83.1	37		624.5
13	3	17	90.4	61	354	148.6
14	2	13	77.5	50		301.9
15	3	18	91.8	375	-851	453.032
16	2	14	80.7	16		606.502
17	2	12	74.4	157		130.534
18	2	11	71.8	-245		283.168
19	2	10	67.9	-138		435.646

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_04 Number of Bursts in Trial: 10						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	2	13	75.2	661		1118.9
2	2	12	72	616		212.5
3	2	14	80.9	958		502.9
4	3	17	88	604	93	792.2
5	1	6	53.5			1084.6
6	3	17	90	430	492	176.5
7	1	6	54.9			467.6
8	3	17	89.8	209	35	756.2
9	3	16	85.5	495	154	1046.0
10	1	8	59.9			141.2

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_05 Number of Bursts in Trial: 10						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	2	13	75.2	661		1118.9
2	2	12	72	616		212.5
3	2	14	80.9	958		502.9
4	3	17	88	604	93	792.2
5	1	6	53.5			1084.6
6	3	17	90	430	492	176.5
7	1	6	54.9			467.6
8	3	17	89.8	209	35	756.2
9	3	16	85.5	495	154	1046.0
10	1	8	59.9			141.2

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_06 Number of Bursts in Trial: 10						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	2	13	75.2	661		1118.9
2	2	12	72	616		212.5
3	2	14	80.9	958		502.9
4	3	17	88	604	93	792.2
5	1	6	53.5			1084.6
6	3	17	90	430	492	176.5
7	1	6	54.9			467.6
8	3	17	89.8	209	35	756.2
9	3	16	85.5	495	154	1046.0
10	1	8	59.9			141.2

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_07 Number of Bursts in Trial: 10						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	2	13	75.2	661		1118.9
2	2	12	72	616		212.5
3	2	14	80.9	958		502.9
4	3	17	88	604	93	792.2
5	1	6	53.5			1084.6
6	3	17	90	430	492	176.5
7	1	6	54.9			467.6
8	3	17	89.8	209	35	756.2
9	3	16	85.5	495	154	1046.0
10	1	8	59.9			141.2

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_08 Number of Bursts in Trial: 10						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	2	13	75.2	661		1118.9
2	2	12	72	616		212.5
3	2	14	80.9	958		502.9
4	3	17	88	604	93	792.2
5	1	6	53.5			1084.6
6	3	17	90	430	492	176.5
7	1	6	54.9			467.6
8	3	17	89.8	209	35	756.2
9	3	16	85.5	495	154	1046.0
10	1	8	59.9			141.2

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_09 Number of Bursts in Trial: 10						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	2	13	75.2	661		1118.9
2	2	12	72	616		212.5
3	2	14	80.9	958		502.9
4	3	17	88	604	93	792.2
5	1	6	53.5			1084.6
6	3	17	90	430	492	176.5
7	1	6	54.9			467.6
8	3	17	89.8	209	35	756.2
9	3	16	85.5	495	154	1046.0
10	1	8	59.9			141.2

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_10 Number of Bursts in Trial: 12						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	2	15	82.9	195		849.7
2	2	12	73.8	465		94.7
3	1	8	62.3			336.9
4	1	6	55.2			579.3
5	2	14	78.2	265		819.6
6	3	16	84.4	451	46	64.9
7	3	17	88.3	238	223	306.5
8	2	10	67.9	452		548.5
9	2	10	68.1	618		790.3
10	2	11	71.3	136		35.2

11	2	10	68.6	401		277.0
12	3	18	92.3	70	258	518.0

Long Pulse Radar Test Signal
Test Signal Name: LP_Signal_11
Number of Bursts in Trial: 14

Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	3	18	92.8	628	75	650.8
2	2	13	76.4	412		4.6
3	3	15	83.9	328	97	211.6
4	1	7	57.5			419.6
5	3	16	87.1	99	275	625.7
6	3	20	98.7	137	277	831.0
7	1	7	56.9			186.5
8	1	5	51			394.1
9	2	11	69.1	651		600.5
10	2	13	76.9	47		807.5
11	2	14	78.7	13		160.7
12	3	16	87.3	324	806	367.2
13	2	10	66.8	343		575.3
14	2	13	75.4	289		781.9

Long Pulse Radar Test Signal
Test Signal Name: LP_Signal_12
Number of Bursts in Trial: 18

Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	1	7	58.1			105.3
2	3	18	93.6	455	10	265.2
3	2	15	83.3	482		426.7
4	2	11	70.7	205		587.9
5	1	8	61.4			85.4
6	2	10	68.2	197		246.0
7	3	17	90.3	513	255	406.4
8	3	17	87.8	10	611	567.1
9	2	14	78.6	412		65.4
10	2	14	79.2	347		226.3
11	3	18	91.3	413	658	386.3
12	2	14	79.9	2		547.5
13	3	18	93.4	7	262	45.5
14	2	12	72.1	269		206.5
15	1	8	59.8			368.3
16	3	20	97.8	453	193	527.0
17	3	18	91.6	54	77	25.7
18	1	8	61			187.2

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_13 Number of Bursts in Trial: 17						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	2	15	81.8	535		368.0
2	3	18	90.7	443	127	537.1
3	3	16	87.1	499	375	6.3
4	1	9	64.3			177.2
5	2	11	71.7	700		347.3
6	3	16	85.5	121	220	516.7
7	1	6	53.7			689.5
8	3	19	96.5	218	346	155.4
9	1	8	61.2			326.8
10	2	10	66.9	94		497.3
11	1	6	55.6			668.7
12	1	6	55.9			135.1
13	3	19	95.2	394	244	304.5
14	2	13	75	368		476.0
15	3	17	88.5	257	210	644.3
16	1	5	52.8			114.0
17	2	13	76.2	369		284.1

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_14 Number of Bursts in Trial: 8						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	3	19	94.7	32	292	967.8
2	3	16	84.6	404	798	1330.3
3	3	20	97.4	142	735	197.4
4	1	8	59.8			561.0
5	1	5	50.3			924.6
6	1	5	52			1287.7
7	1	6	54.9			153.0
8	3	20	97.9	287	681	515.3

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_15 Number of Bursts in Trial: 9						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	1	6	54.7			782.0
2	1	10	66.2			1105.1
3	1	7	57.1			96.2
4	1	6	55.2			419.2
5	3	16	84.9	55	40	740.2
6	3	18	91.2	639	763	1062.5
7	2	11	71.4	400		56.3
8	3	16	85.4	99	71	378.5
9	2	10	67.6	702		701.7

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_16 Number of Bursts in Trial: 19						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	1	6	55.5			485.3
2	2	13	76.1	372		7.8
3	3	17	88.3	709	58	159.8
4	3	19	93.9	195	160	312.2
5	2	11	71.8	627		465.1
6	3	20	97.9	244	385	616.2
7	2	10	67	132		141.4
8	1	9	65			294.5
9	1	7	56.9			447.1
10	2	12	73.3	473		599.3
11	2	15	82.2	541		122.7
12	2	12	72.7	370		275.1
13	3	15	84	591	190	426.7
14	1	10	66.3			581.8
15	3	18	91.5	512	114	103.7
16	3	17	90.6	530	130	255.9
17	3	19	95.9	557	313	407.6
18	1	9	65.1			562.6
19	1	9	63.1			85.4

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_17 Number of Bursts in Trial: 9						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	3	19	94.3	141	140	502.4
2	1	5	51.1			826.8
3	2	15	81.4	403		1148.5
4	3	17	88.7	344	122	140.4
5	2	15	82.1	153		463.2
6	1	10	66.5			786.8
7	2	10	67	129		1108.3
8	2	11	69.2	532		100.8
9	3	19	96.6	629	268	423.0

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_18 Number of Bursts in Trial: 19						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	3	18	91.2	645	509	352.1
2	2	13	76.4	473		504.8
3	2	13	75.8	167		28.9
4	3	15	84.3	563	302	181.0
5	2	11	70.5	123		333.3
6	2	13	77.5	590		485.9
7	2	11	69.5	513		10.1
8	1	8	62.3			162.9
9	1	9	64.5			315.8
10	2	15	82.4	10		467.5
11	2	12	72.9	112		620.3
12	3	16	86.8	215	53	143.2
13	2	14	80.3	435		296.1
14	3	19	94.9	118	957	447.8
15	3	18	93.5	387	400	599.6
16	2	14	78.7	484		125.0
17	2	12	72.8	408		277.4
18	2	13	75.2	517		429.8
19	2	11	70.7	534		582.0

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_19 Number of Bursts in Trial: 17						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	3	20	100	607	563	118.6
2	1	9	65.6			289.9
3	1	9	64.7			460.9
4	3	17	89.1	514	799	628.5
5	2	13	76.1	401		97.7
6	1	7	58.2			268.9
7	3	18	91.2	72	357	437.7
8	1	10	66.5			610.4
9	2	12	74.2	338		76.7
10	3	16	87.5	369	382	246.9
11	1	6	56.2			418.8
12	2	13	77.4	119		588.5
13	1	6	54.7			55.9
14	2	14	78.6	430		226.1
15	2	11	70.4	13		396.5
16	2	12	73.9	371		567.1
17	2	14	80.6	463		34.7

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_20 Number of Bursts in Trial: 10						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	3	20	97.6	608	323	249.1
2	3	20	97.9	442	350	456.0
3	1	5	52.1			664.9
4	1	7	56.5			16.7
5	3	19	96.8	29	822	223.6
6	2	14	79.2	35		431.0
7	2	13	76	907		638.2
8	1	9	63.4			846.5
9	3	18	92.2	322	722	198.0
10	2	13	76.3	543		405.6
11	1	9	63.9			613.9
12	1	7	56.3			821.1
13	3	17	87.9	437	271	172.5
14	1	8	59.9			380.5

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_21 Number of Bursts in Trial: 10						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	1	7	59.2			823.7
2	3	18	91.4	498	471	1111.7
3	3	19	96.4	295	659	206.1
4	2	11	69.2	182		496.5
5	2	14	81	852		787.1
6	2	13	76.4	387		1077.1
7	3	16	87.3	272	200	170.4
8	3	20	99.7	18	647	460.6
9	2	13	76	251		751.6
10	2	14	79.4	18		1041.0

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_22 Number of Bursts in Trial: 15						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	1	8	61			89.9
2	3	19	95.4	92	150	282.2
3	2	12	74.9	320		476.1
4	1	7	58.3			670.9
5	1	6	54.9			66.1
6	2	10	68.1	680		259.3
7	1	7	58.2			453.4
8	1	8	59.8			647.5
9	2	11	70.9	387		42.2
10	1	9	62.8			236.0
11	2	14	81.2	562		428.9
12	2	12	75	310		621.8
13	2	12	73	397		18.4
14	1	9	64.2			212.1
15	1	6	53.2			405.5

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_23 Number of Bursts in Trial: 14						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	3	16	86.4	523	851	640.1
2	3	17	88.7	287	476	847.6
3	2	13	75.6	44		201.3
4	3	15	83.9	231	159	407.8
5	2	15	82	205		615.2
6	2	13	77.2	317		822.6
7	1	8	60.1			176.1
8	3	16	86.3	344	67	382.6
9	2	13	77.5	711		590.3
10	3	20	97	156	386	796.2
11	3	16	86.1	177	507	150.0
12	1	7	58.4			358.2
13	1	7	59.3			565.6
14	3	17	89.5	38	88	769.8

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_24 Number of Bursts in Trial: 10						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	3	20	97.5	153	55	194.2
2	3	18	93.4	27	168	516.2
3	3	20	97.9	400	528	838.2
4	2	11	71.8	89		1161.8
5	2	12	72.7	151		154.7
6	3	19	95.5	35	354	476.4
7	1	5	51.4			800.5
8	1	6	54.3			1124.2
9	2	10	67.7	715		114.9

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_25 Number of Bursts in Trial: 20						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	1	7	58.5			196.9
2	2	12	74.1	64		341.3
3	2	10	68.1	892		485.9
4	1	6	54.1			33.8
5	3	16	85.5	375	2	178.3
6	2	13	75.1	328		323.0
7	2	14	78.7	109		468.5
8	3	15	84.3	82	404	15.8
9	2	10	68.3	70		160.8
10	2	15	82.2	335		305.1
11	1	10	66			451.5
12	3	19	94.6	189	202	594.4
13	3	17	87.8	265	276	142.3
14	1	8	61.6			288.1
15	1	10	65.8			433.7
16	3	19	94.1	433	161	576.4
17	1	5	52.1			125.4
18	1	5	50.9			270.4
19	1	7	59.1			415.4
20	0	20	97.4	182	344	558.6

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_26 Number of Bursts in Trial: 13						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	1	8	61.4			165.5
2	2	11	68.9	536		388.2
3	1	8	59.7			612.3
4	3	20	99	296	469	833.7
5	2	11	70.4	652		137.7
6	2	12	73.4	607		360.7
7	2	11	69.5	339		584.3
8	3	15	83.4	856	377	805.8
9	1	6	53.1			110.4
10	1	5	50.3			333.8
11	2	10	68.7	167		556.3
12	1	5	51.8			780.7
13	2	15	82.1	747		82.7

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_27 Number of Bursts in Trial: 14						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	2	11	70.9	5		284.2
2	2	10	67.1	527		491.3
3	1	8	59.8			699.3
4	1	9	63.8			51.4
5	2	12	73.1	478		258.3
6	2	12	74.6	251		465.6
7	1	8	61.2			674.1
8	3	20	98.8	256	635	25.7
9	1	9	62.7			233.4
10	2	10	67.8	22		439.7
11	2	13	76.2	68		647.8
12	3	18	93.3	95	42	0.2
13	3	19	94.9	93	375	207.2
14	1	8	59.7			415.3

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_28 Number of Bursts in Trial: 15						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	2	15	81.7	469		579.7
2	2	15	82	50		772.9
3	2	13	77.7	129		169.7
4	2	11	70.6	10		362.6
5	3	19	94.6	103	648	555.2
6	3	18	92.3	864	707	748.4
7	1	7	57			146.2
8	1	7	56.3			340.0
9	3	17	89.7	120	515	531.1
10	1	9	64.3			727.1
11	2	11	69.2	26		122.0
12	3	15	83.7	279	380	314.8
13	1	8	62			509.7
14	1	6	55.5			703.2
15	3	19	95.4	270	489	98.1

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_29 Number of Bursts in Trial: 12						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	2	14	81.1	748		364.8
2	2	10	68	49		606.4
3	1	9	63.4			849.7
4	1	9	64.2			93.3
5	1	9	62.5			335.5
6	2	10	66.8	667		576.7
7	3	19	94.6	650	165	817.3
8	1	6	56			63.5
9	2	14	80.2	671		305.2
10	2	14	79	589		546.8
11	2	13	76.3	608		788.7
12	3	20	98	91	583	33.5

Long Pulse Radar Test Signal Test Signal Name: LP_Signal_30 Number of Bursts in Trial: 14						
Burst	Pulses per Burst	Chrip (MHz)	Pulse Width(us)	Pulse 1 to 2 Spacing (us)	Pulse 2 to 3 Spacing (us)	Start Location (ms)
1	3	20	98.6	569	88	235.5
2	3	20	98.7	139	525	442.4
3	1	5	51			651.7
4	3	15	83.5	131	187	3.2
5	1	6	55.6			210.8
6	2	13	75.5	105		417.5
7	1	9	63.6			626.1
8	3	17	87.9	218	121	829.9
9	1	5	51.3			185.2
10	2	13	75.5	331		392.2
11	2	14	79.7	780		599.3
12	2	12	74.2	384		806.5
13	1	8	59.5			159.6
14	2	13	75.1	58		366.3

B.2 The Frequency Hopping Radar pattern

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_01							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.584G	2	5.421G	3	5.459G	4	5.643G
5	5.336G	6	5.438G	7	5.682G	8	5.708G
9	5.435G	10	5.681G	11	5.537G	12	5.495G
13	5.265G	14	5.711G	15	5.594G	16	5.505G
17	5.621G	18	5.534G	19	5.455G	20	5.718G
21	5.577G	22	5.427G	23	5.617G	24	5.322G
25	5.39G	26	5.287G	27	5.68G	28	5.251G
29	5.382G	30	5.375G	31	5.38G	32	5.424G
33	5.501G	34	5.465G	35	5.493G	36	5.325G
37	5.545G	38	5.53G	39	5.497G	40	5.72G
41	5.722G	42	5.618G	43	5.562G	44	5.561G
45	5.554G	46	5.627G	47	5.423G	48	5.657G
49	5.516G	50	5.553G	51	5.477G	52	5.274G
53	5.504G	54	5.529G	55	5.387G	56	5.6G
57	5.299G	58	5.58G	59	5.303G	60	5.576G
61	5.407G	62	5.551G	63	5.363G	64	5.719G
65	5.525G	66	5.565G	67	5.616G	68	5.685G
69	5.384G	70	5.46G	71	5.343G	72	5.631G
73	5.402G	74	5.279G	75	5.588G	76	5.376G
77	5.349G	78	5.306G	79	5.54G	80	5.589G
81	5.693G	82	5.538G	83	5.521G	84	5.655G
85	5.448G	86	5.487G	87	5.669G	88	5.705G
89	5.558G	90	5.261G	91	5.277G	92	5.567G
93	5.721G	94	5.714G	95	5.463G	96	5.469G
97	5.479G	98	5.481G	99	5.695G	100	5.474G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_02							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.364G	2	5.66G	3	5.395G	4	5.329G
5	5.556G	6	5.577G	7	5.704G	8	5.308G
9	5.598G	10	5.413G	11	5.468G	12	5.284G
13	5.306G	14	5.431G	15	5.615G	16	5.496G
17	5.273G	18	5.54G	19	5.403G	20	5.435G
21	5.585G	22	5.558G	23	5.411G	24	5.363G
25	5.65G	26	5.532G	27	5.454G	28	5.486G
29	5.409G	30	5.519G	31	5.41G	32	5.458G
33	5.68G	34	5.645G	35	5.523G	36	5.684G
37	5.621G	38	5.293G	39	5.398G	40	5.636G
41	5.298G	42	5.701G	43	5.5G	44	5.63G
45	5.353G	46	5.534G	47	5.71G	48	5.481G
49	5.332G	50	5.653G	51	5.325G	52	5.593G
53	5.352G	54	5.709G	55	5.313G	56	5.253G
57	5.295G	58	5.597G	59	5.547G	60	5.439G
61	5.716G	62	5.405G	63	5.551G	64	5.351G
65	5.511G	66	5.634G	67	5.377G	68	5.594G
69	5.537G	70	5.617G	71	5.603G	72	5.53G
73	5.345G	74	5.469G	75	5.521G	76	5.366G
77	5.328G	78	5.702G	79	5.399G	80	5.518G
81	5.7G	82	5.655G	83	5.29G	84	5.45G
85	5.386G	86	5.573G	87	5.512G	88	5.509G
89	5.572G	90	5.257G	91	5.252G	92	5.618G
93	5.583G	94	5.327G	95	5.379G	96	5.513G
97	5.323G	98	5.294G	99	5.453G	100	5.605G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_03							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.619G	2	5.424G	3	5.331G	4	5.49G
5	5.398G	6	5.629G	7	5.383G	8	5.286G
9	5.717G	10	5.302G	11	5.548G	12	5.347G
13	5.626G	14	5.636G	15	5.584G	16	5.4G
17	5.643G	18	5.448G	19	5.627G	20	5.593G
21	5.662G	22	5.596G	23	5.403G	24	5.336G
25	5.441G	26	5.481G	27	5.657G	28	5.687G
29	5.443G	30	5.561G	31	5.299G	32	5.415G
33	5.42G	34	5.419G	35	5.343G	36	5.251G
37	5.712G	38	5.564G	39	5.551G	40	5.55G
41	5.612G	42	5.309G	43	5.438G	44	5.298G
45	5.555G	46	5.66G	47	5.514G	48	5.318G
49	5.442G	50	5.666G	51	5.668G	52	5.683G
53	5.354G	54	5.376G	55	5.682G	56	5.65G
57	5.653G	58	5.501G	59	5.485G	60	5.319G
61	5.421G	62	5.568G	63	5.406G	64	5.35G
65	5.48G	66	5.274G	67	5.554G	68	5.64G
69	5.583G	70	5.413G	71	5.426G	72	5.622G
73	5.327G	74	5.706G	75	5.603G	76	5.408G
77	5.355G	78	5.506G	79	5.314G	80	5.589G
81	5.495G	82	5.502G	83	5.618G	84	5.341G
85	5.311G	86	5.391G	87	5.462G	88	5.418G
89	5.558G	90	5.607G	91	5.578G	92	5.466G
93	5.282G	94	5.295G	95	5.422G	96	5.258G
97	5.685G	98	5.681G	99	5.6G	100	5.277G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_04							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.399G	2	5.663G	3	5.267G	4	5.651G
5	5.618G	6	5.661G	7	5.458G	8	5.352G
9	5.449G	10	5.708G	11	5.337G	12	5.388G
13	5.346G	14	5.657G	15	5.672G	16	5.527G
17	5.271G	18	5.493G	19	5.344G	20	5.504G
21	5.353G	22	5.537G	23	5.492G	24	5.309G
25	5.329G	26	5.333G	27	5.288G	28	5.316G
29	5.477G	30	5.603G	31	5.372G	32	5.635G
33	5.571G	34	5.541G	35	5.39G	36	5.425G
37	5.457G	38	5.326G	39	5.561G	40	5.548G
41	5.489G	42	5.279G	43	5.538G	44	5.649G
45	5.589G	46	5.494G	47	5.401G	48	5.5G
49	5.719G	50	5.555G	51	5.559G	52	5.53G
53	5.427G	54	5.296G	55	5.473G	56	5.689G
57	5.636G	58	5.578G	59	5.613G	60	5.392G
61	5.697G	62	5.295G	63	5.312G	64	5.575G
65	5.463G	66	5.532G	67	5.514G	68	5.605G
69	5.303G	70	5.686G	71	5.508G	72	5.679G
73	5.385G	74	5.465G	75	5.709G	76	5.483G
77	5.395G	78	5.451G	79	5.567G	80	5.525G
81	5.415G	82	5.615G	83	5.461G	84	5.546G
85	5.673G	86	5.406G	87	5.517G	88	5.59G
89	5.587G	90	5.264G	91	5.285G	92	5.693G
93	5.617G	94	5.644G	95	5.272G	96	5.374G
97	5.432G	98	5.69G	99	5.554G	100	5.421G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_05							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.557G	2	5.427G	3	5.678G	4	5.337G
5	5.46G	6	5.703G	7	5.576G	8	5.436G
9	5.515G	10	5.656G	11	5.639G	12	5.601G
13	5.429G	14	5.541G	15	5.285G	16	5.654G
17	5.374G	18	5.538G	19	5.633G	20	5.512G
21	5.422G	22	5.478G	23	5.484G	24	5.282G
25	5.595G	26	5.491G	27	5.42G	28	5.511G
29	5.645G	30	5.649G	31	5.329G	32	5.278G
33	5.345G	34	5.361G	35	5.529G	36	5.516G
37	5.253G	38	5.479G	39	5.475G	40	5.387G
41	5.572G	42	5.692G	43	5.303G	44	5.646G
45	5.518G	46	5.377G	47	5.558G	48	5.297G
49	5.435G	50	5.706G	51	5.482G	52	5.674G
53	5.444G	54	5.402G	55	5.59G	56	5.293G
57	5.432G	58	5.363G	59	5.351G	60	5.261G
61	5.715G	62	5.619G	63	5.401G	64	5.446G
65	5.664G	66	5.481G	67	5.388G	68	5.468G
69	5.309G	70	5.408G	71	5.472G	72	5.672G
73	5.528G	74	5.424G	75	5.63G	76	5.354G
77	5.684G	78	5.464G	79	5.647G	80	5.561G
81	5.348G	82	5.622G	83	5.685G	84	5.412G
85	5.461G	86	5.39G	87	5.274G	88	5.471G
89	5.681G	90	5.313G	91	5.277G	92	5.367G
93	5.642G	94	5.327G	95	5.634G	96	5.699G
97	5.376G	98	5.353G	99	5.535G	100	5.413G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_06							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.337G	2	5.666G	3	5.614G	4	5.498G
5	5.68G	6	5.367G	7	5.598G	8	5.511G
9	5.678G	10	5.485G	11	5.473G	12	5.487G
13	5.47G	14	5.639G	15	5.699G	16	5.276G
17	5.684G	18	5.477G	19	5.486G	20	5.35G
21	5.52G	22	5.588G	23	5.516G	24	5.573G
25	5.255G	26	5.483G	27	5.609G	28	5.694G
29	5.524G	30	5.545G	31	5.309G	32	5.538G
33	5.286G	34	5.493G	35	5.497G	36	5.559G
37	5.668G	38	5.607G	39	5.632G	40	5.389G
41	5.701G	42	5.655G	43	5.63G	44	5.543G
45	5.643G	46	5.357G	47	5.567G	48	5.519G
49	5.707G	50	5.689G	51	5.407G	52	5.529G
53	5.571G	54	5.291G	55	5.59G	56	5.544G
57	5.629G	58	5.334G	59	5.48G	60	5.426G
61	5.282G	62	5.451G	63	5.324G	64	5.489G
65	5.39G	66	5.43G	67	5.424G	68	5.579G
69	5.686G	70	5.658G	71	5.611G	72	5.377G
73	5.383G	74	5.502G	75	5.352G	76	5.445G
77	5.327G	78	5.574G	79	5.604G	80	5.311G
81	5.273G	82	5.409G	83	5.627G	84	5.364G
85	5.496G	86	5.714G	87	5.522G	88	5.454G
89	5.608G	90	5.442G	91	5.373G	92	5.69G
93	5.427G	94	5.339G	95	5.279G	96	5.36G
97	5.71G	98	5.638G	99	5.708G	100	5.261G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_07							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.592G	2	5.43G	3	5.55G	4	5.562G
5	5.522G	6	5.409G	7	5.523G	8	5.586G
9	5.366G	10	5.692G	11	5.404G	12	5.276G
13	5.608G	14	5.359G	15	5.72G	16	5.364G
17	5.336G	18	5.483G	19	5.531G	20	5.542G
21	5.431G	22	5.657G	23	5.457G	24	5.565G
25	5.703G	26	5.274G	27	5.461G	28	5.422G
29	5.25G	30	5.579G	31	5.351G	32	5.427G
33	5.718G	34	5.708G	35	5.271G	36	5.379G
37	5.71G	38	5.698G	39	5.32G	40	5.407G
41	5.4G	42	5.54G	43	5.263G	44	5.568G
45	5.686G	46	5.64G	47	5.279G	48	5.337G
49	5.65G	50	5.577G	51	5.403G	52	5.497G
53	5.583G	54	5.58G	55	5.66G	56	5.681G
57	5.498G	58	5.673G	59	5.448G	60	5.683G
61	5.609G	62	5.591G	63	5.702G	64	5.283G
65	5.625G	66	5.435G	67	5.688G	68	5.363G
69	5.51G	70	5.471G	71	5.489G	72	5.713G
73	5.644G	74	5.614G	75	5.701G	76	5.313G
77	5.342G	78	5.398G	79	5.426G	80	5.684G
81	5.385G	82	5.475G	83	5.406G	84	5.347G
85	5.267G	86	5.459G	87	5.677G	88	5.582G
89	5.476G	90	5.331G	91	5.607G	92	5.724G
93	5.309G	94	5.29G	95	5.334G	96	5.441G
97	5.689G	98	5.266G	99	5.356G	100	5.715G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_08							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.372G	2	5.669G	3	5.486G	4	5.723G
5	5.267G	6	5.451G	7	5.545G	8	5.661G
9	5.432G	10	5.424G	11	5.713G	12	5.54G
13	5.649G	14	5.554G	15	5.266G	16	5.452G
17	5.463G	18	5.586G	19	5.576G	20	5.259G
21	5.439G	22	5.348G	23	5.398G	24	5.654G
25	5.676G	26	5.637G	27	5.41G	28	5.625G
29	5.354G	30	5.613G	31	5.393G	32	5.413G
33	5.675G	34	5.448G	35	5.423G	36	5.674G
37	5.374G	38	5.314G	39	5.688G	40	5.56G
41	5.476G	42	5.443G	43	5.506G	44	5.317G
45	5.258G	46	5.635G	47	5.456G	48	5.384G
49	5.441G	50	5.284G	51	5.631G	52	5.274G
53	5.618G	54	5.557G	55	5.394G	56	5.388G
57	5.641G	58	5.281G	59	5.647G	60	5.687G
61	5.548G	62	5.381G	63	5.414G	64	5.328G
65	5.399G	66	5.72G	67	5.67G	68	5.31G
69	5.252G	70	5.714G	71	5.453G	72	5.289G
73	5.301G	74	5.343G	75	5.617G	76	5.541G
77	5.504G	78	5.356G	79	5.697G	80	5.542G
81	5.306G	82	5.519G	83	5.547G	84	5.527G
85	5.475G	86	5.529G	87	5.297G	88	5.385G
89	5.569G	90	5.307G	91	5.389G	92	5.425G
93	5.339G	94	5.571G	95	5.369G	96	5.629G
97	5.401G	98	5.295G	99	5.375G	100	5.46G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_09							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.53G	2	5.433G	3	5.422G	4	5.409G
5	5.584G	6	5.493G	7	5.47G	8	5.261G
9	5.595G	10	5.253G	11	5.644G	12	5.329G
13	5.69G	14	5.274G	15	5.287G	16	5.54G
17	5.59G	18	5.689G	19	5.621G	20	5.451G
21	5.447G	22	5.417G	23	5.339G	24	5.646G
25	5.649G	26	5.525G	27	5.262G	28	5.256G
29	5.458G	30	5.647G	31	5.532G	32	5.302G
33	5.632G	34	5.566G	35	5.672G	36	5.397G
37	5.513G	38	5.502G	39	5.484G	40	5.713G
41	5.703G	42	5.315G	43	5.526G	44	5.444G
45	5.691G	46	5.515G	47	5.297G	48	5.341G
49	5.596G	50	5.412G	51	5.317G	52	5.46G
53	5.682G	54	5.344G	55	5.501G	56	5.582G
57	5.406G	58	5.578G	59	5.561G	60	5.625G
61	5.295G	62	5.446G	63	5.592G	64	5.519G
65	5.374G	66	5.327G	67	5.712G	68	5.277G
69	5.435G	70	5.552G	71	5.633G	72	5.473G
73	5.382G	74	5.717G	75	5.265G	76	5.26G
77	5.312G	78	5.587G	79	5.485G	80	5.608G
81	5.332G	82	5.706G	83	5.559G	84	5.303G
85	5.645G	86	5.425G	87	5.482G	88	5.489G
89	5.415G	90	5.481G	91	5.723G	92	5.349G
93	5.462G	94	5.488G	95	5.695G	96	5.569G
97	5.324G	98	5.55G	99	5.472G	100	5.449G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_10							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.31G	2	5.672G	3	5.358G	4	5.57G
5	5.329G	6	5.632G	7	5.492G	8	5.336G
9	5.283G	10	5.46G	11	5.575G	12	5.593G
13	5.256G	14	5.469G	15	5.308G	16	5.531G
17	5.717G	18	5.317G	19	5.569G	20	5.643G
21	5.583G	22	5.377G	23	5.26G	24	5.622G
25	5.316G	26	5.686G	27	5.459G	28	5.562G
29	5.681G	30	5.574G	31	5.288G	32	5.589G
33	5.306G	34	5.349G	35	5.692G	36	5.555G
37	5.28G	38	5.488G	39	5.714G	40	5.629G
41	5.609G	42	5.382G	43	5.456G	44	5.253G
45	5.444G	46	5.277G	47	5.424G	48	5.654G
49	5.465G	50	5.536G	51	5.571G	52	5.636G
53	5.258G	54	5.549G	55	5.642G	56	5.348G
57	5.295G	58	5.36G	59	5.293G	60	5.596G
61	5.611G	62	5.634G	63	5.351G	64	5.675G
65	5.37G	66	5.438G	67	5.701G	68	5.374G
69	5.287G	70	5.428G	71	5.276G	72	5.551G
73	5.699G	74	5.342G	75	5.626G	76	5.619G
77	5.694G	78	5.281G	79	5.285G	80	5.255G
81	5.466G	82	5.385G	83	5.442G	84	5.678G
85	5.395G	86	5.3G	87	5.554G	88	5.548G
89	5.267G	90	5.542G	91	5.38G	92	5.532G
93	5.496G	94	5.547G	95	5.627G	96	5.494G
97	5.333G	98	5.341G	99	5.499G	100	5.49G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_11							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.565G	2	5.436G	3	5.294G	4	5.256G
5	5.646G	6	5.674G	7	5.417G	8	5.411G
9	5.446G	10	5.667G	11	5.409G	12	5.479G
13	5.297G	14	5.567G	15	5.329G	16	5.619G
17	5.272G	18	5.42G	19	5.614G	20	5.36G
21	5.366G	22	5.652G	23	5.318G	24	5.252G
25	5.595G	26	5.679G	27	5.538G	28	5.662G
29	5.288G	30	5.618G	31	5.616G	32	5.546G
33	5.521G	34	5.598G	35	5.415G	36	5.694G
37	5.684G	38	5.648G	39	5.641G	40	5.628G
41	5.468G	42	5.692G	43	5.32G	44	5.599G
45	5.25G	46	5.276G	47	5.635G	48	5.507G
49	5.712G	50	5.518G	51	5.326G	52	5.447G
53	5.337G	54	5.309G	55	5.638G	56	5.465G
57	5.292G	58	5.483G	59	5.314G	60	5.386G
61	5.577G	62	5.47G	63	5.553G	64	5.301G
65	5.579G	66	5.658G	67	5.316G	68	5.261G
69	5.65G	70	5.41G	71	5.594G	72	5.698G
73	5.554G	74	5.623G	75	5.685G	76	5.345G
77	5.475G	78	5.653G	79	5.405G	80	5.54G
81	5.455G	82	5.459G	83	5.559G	84	5.274G
85	5.548G	86	5.584G	87	5.505G	88	5.723G
89	5.486G	90	5.269G	91	5.367G	92	5.317G
93	5.5G	94	5.666G	95	5.593G	96	5.312G
97	5.474G	98	5.605G	99	5.678G	100	5.37G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_12							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.345G	2	5.297G	3	5.705G	4	5.417G
5	5.391G	6	5.716G	7	5.439G	8	5.486G
9	5.609G	10	5.496G	11	5.34G	12	5.268G
13	5.338G	14	5.287G	15	5.35G	16	5.707G
17	5.399G	18	5.426G	19	5.659G	20	5.552G
21	5.374G	22	5.343G	23	5.259G	24	5.341G
25	5.568G	26	5.47G	27	5.39G	28	5.392G
29	5.652G	30	5.28G	31	5.541G	32	5.503G
33	5.261G	34	5.275G	35	5.71G	36	5.358G
37	5.3G	38	5.444G	39	5.319G	40	5.542G
41	5.307G	42	5.397G	43	5.636G	44	5.364G
45	5.722G	46	5.68G	47	5.615G	48	5.59G
49	5.673G	50	5.571G	51	5.688G	52	5.323G
53	5.513G	54	5.36G	55	5.252G	56	5.288G
57	5.614G	58	5.671G	59	5.646G	60	5.576G
61	5.396G	62	5.441G	63	5.682G	64	5.466G
65	5.524G	66	5.587G	67	5.424G	68	5.262G
69	5.462G	70	5.696G	71	5.446G	72	5.329G
73	5.357G	74	5.317G	75	5.293G	76	5.348G
77	5.702G	78	5.612G	79	5.597G	80	5.525G
81	5.428G	82	5.565G	83	5.715G	84	5.626G
85	5.37G	86	5.294G	87	5.469G	88	5.451G
89	5.523G	90	5.493G	91	5.537G	92	5.42G
93	5.482G	94	5.506G	95	5.603G	96	5.475G
97	5.324G	98	5.472G	99	5.458G	100	5.306G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_13							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.6G	2	5.536G	3	5.641G	4	5.578G
5	5.708G	6	5.283G	7	5.364G	8	5.561G
9	5.675G	10	5.703G	11	5.271G	12	5.532G
13	5.379G	14	5.482G	15	5.371G	16	5.32G
17	5.526G	18	5.529G	19	5.607G	20	5.366G
21	5.285G	22	5.412G	23	5.297G	24	5.333G
25	5.541G	26	5.358G	27	5.339G	28	5.593G
29	5.496G	30	5.686G	31	5.322G	32	5.527G
33	5.46G	34	5.524G	35	5.433G	36	5.497G
37	5.391G	38	5.715G	39	5.569G	40	5.553G
41	5.718G	42	5.48G	43	5.574G	44	5.604G
45	5.719G	46	5.512G	47	5.595G	48	5.673G
49	5.256G	50	5.624G	51	5.478G	52	5.577G
53	5.689G	54	5.411G	55	5.438G	56	5.489G
57	5.558G	58	5.287G	59	5.291G	60	5.714G
61	5.631G	62	5.469G	63	5.419G	64	5.25G
65	5.305G	66	5.645G	67	5.385G	68	5.636G
69	5.538G	70	5.389G	71	5.279G	72	5.448G
73	5.551G	74	5.547G	75	5.571G	76	5.49G
77	5.409G	78	5.315G	79	5.664G	80	5.354G
81	5.365G	82	5.528G	83	5.685G	84	5.556G
85	5.491G	86	5.668G	87	5.647G	88	5.637G
89	5.26G	90	5.539G	91	5.401G	92	5.272G
93	5.388G	94	5.257G	95	5.562G	96	5.376G
97	5.295G	98	5.652G	99	5.616G	100	5.648G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_14							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.283G	2	5.3G	3	5.577G	4	5.264G
5	5.453G	6	5.422G	7	5.386G	8	5.636G
9	5.363G	10	5.435G	11	5.58G	12	5.321G
13	5.42G	14	5.677G	15	5.392G	16	5.311G
17	5.653G	18	5.632G	19	5.652G	20	5.558G
21	5.293G	22	5.578G	23	5.713G	24	5.514G
25	5.624G	26	5.666G	27	5.699G	28	5.6G
29	5.72G	30	5.364G	31	5.416G	32	5.417G
33	5.594G	34	5.676G	35	5.253G	36	5.539G
37	5.482G	38	5.511G	39	5.722G	40	5.467G
41	5.557G	42	5.563G	43	5.512G	44	5.272G
45	5.338G	46	5.441G	47	5.575G	48	5.281G
49	5.314G	50	5.365G	51	5.39G	52	5.462G
53	5.527G	54	5.312G	55	5.405G	56	5.475G
57	5.554G	58	5.481G	59	5.412G	60	5.383G
61	5.368G	62	5.251G	63	5.648G	64	5.486G
65	5.421G	66	5.371G	67	5.277G	68	5.341G
69	5.265G	70	5.451G	71	5.4G	72	5.523G
73	5.53G	74	5.438G	75	5.29G	76	5.633G
77	5.346G	78	5.688G	79	5.479G	80	5.496G
81	5.354G	82	5.304G	83	5.588G	84	5.305G
85	5.521G	86	5.542G	87	5.583G	88	5.337G
89	5.615G	90	5.671G	91	5.617G	92	5.506G
93	5.719G	94	5.299G	95	5.629G	96	5.586G
97	5.352G	98	5.469G	99	5.325G	100	5.322G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_15							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.538G	2	5.539G	3	5.513G	4	5.328G
5	5.295G	6	5.464G	7	5.408G	8	5.711G
9	5.526G	10	5.642G	11	5.511G	12	5.585G
13	5.558G	14	5.397G	15	5.413G	16	5.399G
17	5.305G	18	5.26G	19	5.697G	20	5.275G
21	5.301G	22	5.269G	23	5.654G	24	5.487G
25	5.512G	26	5.615G	27	5.427G	28	5.704G
29	5.279G	30	5.503G	31	5.374G	32	5.334G
33	5.45G	34	5.548G	35	5.678G	36	5.67G
37	5.404G	38	5.4G	39	5.381G	40	5.396G
41	5.268G	42	5.335G	43	5.37G	44	5.555G
45	5.364G	46	5.633G	47	5.63G	48	5.329G
49	5.566G	50	5.616G	51	5.61G	52	5.349G
53	5.663G	54	5.508G	55	5.671G	56	5.706G
57	5.257G	58	5.497G	59	5.486G	60	5.456G
61	5.474G	62	5.672G	63	5.687G	64	5.543G
65	5.36G	66	5.547G	67	5.619G	68	5.348G
69	5.551G	70	5.724G	71	5.499G	72	5.489G
73	5.31G	74	5.313G	75	5.371G	76	5.598G
77	5.323G	78	5.533G	79	5.643G	80	5.559G
81	5.676G	82	5.621G	83	5.389G	84	5.496G
85	5.689G	86	5.403G	87	5.502G	88	5.608G
89	5.554G	90	5.62G	91	5.299G	92	5.507G
93	5.406G	94	5.35G	95	5.366G	96	5.611G
97	5.303G	98	5.376G	99	5.71G	100	5.48G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_16							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.318G	2	5.303G	3	5.449G	4	5.489G
5	5.515G	6	5.506G	7	5.333G	8	5.311G
9	5.689G	10	5.471G	11	5.345G	12	5.599G
13	5.495G	14	5.434G	15	5.487G	16	5.335G
17	5.363G	18	5.267G	19	5.467G	20	5.687G
21	5.338G	22	5.692G	23	5.503G	24	5.46G
25	5.4G	26	5.63G	27	5.43G	28	5.313G
29	5.545G	30	5.291G	31	5.331G	32	5.549G
33	5.602G	34	5.271G	35	5.342G	36	5.286G
37	5.675G	38	5.65G	39	5.392G	40	5.71G
41	5.351G	42	5.388G	43	5.277G	44	5.332G
45	5.677G	46	5.535G	47	5.447G	48	5.686G
49	5.517G	50	5.68G	51	5.564G	52	5.705G
53	5.433G	54	5.671G	55	5.376G	56	5.462G
57	5.386G	58	5.525G	59	5.703G	60	5.626G
61	5.651G	62	5.401G	63	5.39G	64	5.397G
65	5.618G	66	5.51G	67	5.492G	68	5.396G
69	5.413G	70	5.439G	71	5.422G	72	5.324G
73	5.334G	74	5.554G	75	5.573G	76	5.378G
77	5.448G	78	5.279G	79	5.347G	80	5.352G
81	5.375G	82	5.314G	83	5.719G	84	5.66G
85	5.635G	86	5.463G	87	5.514G	88	5.354G
89	5.45G	90	5.601G	91	5.667G	92	5.627G
93	5.642G	94	5.284G	95	5.663G	96	5.637G
97	5.588G	98	5.57G	99	5.587G	100	5.718G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_17							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.573G	2	5.542G	3	5.385G	4	5.65G
5	5.357G	6	5.548G	7	5.355G	8	5.386G
9	5.28G	10	5.678G	11	5.276G	12	5.26G
13	5.64G	14	5.69G	15	5.455G	16	5.575G
17	5.462G	18	5.369G	19	5.659G	20	5.695G
21	5.504G	22	5.633G	23	5.592G	24	5.433G
25	5.666G	26	5.319G	27	5.358G	28	5.534G
29	5.347G	30	5.587G	31	5.655G	32	5.288G
33	5.667G	34	5.376G	35	5.566G	36	5.384G
37	5.377G	38	5.471G	39	5.328G	40	5.306G
41	5.549G	42	5.434G	43	5.326G	44	5.517G
45	5.329G	46	5.606G	47	5.418G	48	5.53G
49	5.391G	50	5.264G	51	5.307G	52	5.459G
53	5.443G	54	5.615G	55	5.634G	56	5.564G
57	5.416G	58	5.576G	59	5.722G	60	5.674G
61	5.341G	62	5.698G	63	5.661G	64	5.711G
65	5.441G	66	5.432G	67	5.72G	68	5.709G
69	5.7G	70	5.396G	71	5.32G	72	5.654G
73	5.325G	74	5.354G	75	5.407G	76	5.626G
77	5.553G	78	5.49G	79	5.333G	80	5.446G
81	5.57G	82	5.399G	83	5.657G	84	5.591G
85	5.635G	86	5.402G	87	5.574G	88	5.309G
89	5.697G	90	5.501G	91	5.71G	92	5.421G
93	5.579G	94	5.641G	95	5.297G	96	5.409G
97	5.572G	98	5.565G	99	5.469G	100	5.346G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_18							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.256G	2	5.306G	3	5.321G	4	5.336G
5	5.577G	6	5.687G	7	5.28G	8	5.461G
9	5.443G	10	5.41G	11	5.682G	12	5.524G
13	5.681G	14	5.476G	15	5.566G	16	5.589G
17	5.472G	18	5.26G	19	5.376G	20	5.703G
21	5.573G	22	5.574G	23	5.584G	24	5.406G
25	5.554G	26	5.268G	27	5.561G	28	5.638G
29	5.381G	30	5.629G	31	5.544G	32	5.72G
33	5.407G	34	5.528G	35	5.289G	36	5.523G
37	5.468G	38	5.364G	39	5.481G	40	5.695G
41	5.485G	42	5.517G	43	5.264G	44	5.66G
45	5.326G	46	5.438G	47	5.398G	48	5.613G
49	5.352G	50	5.317G	51	5.669G	52	5.335G
53	5.619G	54	5.666G	55	5.505G	56	5.457G
57	5.462G	58	5.277G	59	5.37G	60	5.541G
61	5.645G	62	5.409G	63	5.506G	64	5.388G
65	5.626G	66	5.607G	67	5.534G	68	5.39G
69	5.371G	70	5.455G	71	5.504G	72	5.503G
73	5.657G	74	5.649G	75	5.33G	76	5.366G
77	5.595G	78	5.673G	79	5.536G	80	5.411G
81	5.307G	82	5.556G	83	5.351G	84	5.563G
85	5.654G	86	5.311G	87	5.538G	88	5.719G
89	5.537G	90	5.501G	91	5.662G	92	5.483G
93	5.522G	94	5.261G	95	5.426G	96	5.309G
97	5.671G	98	5.464G	99	5.463G	100	5.448G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_19							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.511G	2	5.545G	3	5.257G	4	5.497G
5	5.419G	6	5.254G	7	5.302G	8	5.536G
9	5.606G	10	5.714G	11	5.516G	12	5.313G
13	5.722G	14	5.605G	15	5.654G	16	5.716G
17	5.575G	18	5.305G	19	5.568G	20	5.614G
21	5.264G	22	5.612G	23	5.673G	24	5.379G
25	5.345G	26	5.595G	27	5.667G	28	5.267G
29	5.415G	30	5.293G	31	5.53G	32	5.677G
33	5.622G	34	5.584G	35	5.662G	36	5.559G
37	5.635G	38	5.256G	39	5.706G	40	5.324G
41	5.697G	42	5.425G	43	5.42G	44	5.367G
45	5.378G	46	5.696G	47	5.41G	48	5.37G
49	5.459G	50	5.686G	51	5.32G	52	5.717G
53	5.594G	54	5.28G	55	5.406G	56	5.465G
57	5.384G	58	5.36G	59	5.519G	60	5.441G
61	5.671G	62	5.333G	63	5.458G	64	5.447G
65	5.553G	66	5.26G	67	5.339G	68	5.407G
69	5.287G	70	5.396G	71	5.684G	72	5.637G
73	5.389G	74	5.282G	75	5.498G	76	5.306G
77	5.325G	78	5.564G	79	5.679G	80	5.392G
81	5.569G	82	5.607G	83	5.252G	84	5.554G
85	5.603G	86	5.561G	87	5.597G	88	5.596G
89	5.506G	90	5.439G	91	5.687G	92	5.55G
93	5.308G	94	5.418G	95	5.31G	96	5.361G
97	5.33G	98	5.552G	99	5.633G	100	5.409G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_20							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.291G	2	5.309G	3	5.668G	4	5.658G
5	5.639G	6	5.296G	7	5.702G	8	5.611G
9	5.294G	10	5.446G	11	5.447G	12	5.577G
13	5.288G	14	5.325G	15	5.518G	16	5.267G
17	5.368G	18	5.678G	19	5.35G	20	5.285G
21	5.622G	22	5.333G	23	5.553G	24	5.665G
25	5.352G	26	5.708G	27	5.544G	28	5.395G
29	5.468G	30	5.449G	31	5.335G	32	5.419G
33	5.634G	34	5.362G	35	5.454G	36	5.307G
37	5.326G	38	5.272G	39	5.431G	40	5.409G
41	5.62G	42	5.638G	43	5.305G	44	5.417G
45	5.358G	46	5.304G	47	5.423G	48	5.346G
49	5.562G	50	5.496G	51	5.293G	52	5.683G
53	5.578G	54	5.253G	55	5.556G	56	5.278G
57	5.574G	58	5.557G	59	5.49G	60	5.57G
61	5.361G	62	5.29G	63	5.273G	64	5.596G
65	5.558G	66	5.497G	67	5.666G	68	5.487G
69	5.709G	70	5.375G	71	5.347G	72	5.282G
73	5.284G	74	5.436G	75	5.341G	76	5.25G
77	5.373G	78	5.336G	79	5.679G	80	5.388G
81	5.416G	82	5.593G	83	5.551G	84	5.323G
85	5.441G	86	5.5G	87	5.56G	88	5.313G
89	5.495G	90	5.46G	91	5.407G	92	5.637G
93	5.377G	94	5.584G	95	5.568G	96	5.43G
97	5.327G	98	5.621G	99	5.259G	100	5.655G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_21							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.546G	2	5.548G	3	5.604G	4	5.344G
5	5.481G	6	5.435G	7	5.724G	8	5.686G
9	5.36G	10	5.653G	11	5.378G	12	5.463G
13	5.329G	14	5.423G	15	5.539G	16	5.355G
17	5.398G	18	5.306G	19	5.298G	20	5.574G
21	5.63G	22	5.499G	23	5.494G	24	5.279G
25	5.325G	26	5.396G	27	5.598G	28	5.572G
29	5.483G	30	5.377G	31	5.405G	32	5.591G
33	5.48G	34	5.703G	35	5.602G	36	5.368G
37	5.363G	38	5.702G	39	5.562G	40	5.534G
41	5.477G	42	5.388G	43	5.456G	44	5.43G
45	5.414G	46	5.603G	47	5.338G	48	5.484G
49	5.429G	50	5.476G	51	5.611G	52	5.341G
53	5.672G	54	5.297G	55	5.304G	56	5.269G
57	5.707G	58	5.289G	59	5.376G	60	5.461G
61	5.699G	62	5.623G	63	5.32G	64	5.597G
65	5.542G	66	5.284G	67	5.712G	68	5.382G
69	5.558G	70	5.29G	71	5.403G	72	5.361G
73	5.288G	74	5.636G	75	5.718G	76	5.393G
77	5.354G	78	5.588G	79	5.314G	80	5.644G
81	5.656G	82	5.518G	83	5.342G	84	5.62G
85	5.505G	86	5.511G	87	5.655G	88	5.521G
89	5.45G	90	5.629G	91	5.605G	92	5.632G
93	5.666G	94	5.283G	95	5.266G	96	5.348G
97	5.358G	98	5.714G	99	5.706G	100	5.262G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_22							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.704G	2	5.312G	3	5.54G	4	5.408G
5	5.701G	6	5.477G	7	5.649G	8	5.286G
9	5.523G	10	5.482G	11	5.687G	12	5.252G
13	5.37G	14	5.618G	15	5.56G	16	5.346G
17	5.525G	18	5.343G	19	5.291G	20	5.541G
21	5.568G	22	5.532G	23	5.271G	24	5.298G
25	5.387G	26	5.723G	27	5.326G	28	5.676G
29	5.517G	30	5.516G	31	5.294G	32	5.548G
33	5.695G	34	5.38G	35	5.422G	36	5.507G
37	5.454G	38	5.595G	39	5.337G	40	5.448G
41	5.413G	42	5.394G	43	5.573G	44	5.411G
45	5.318G	46	5.567G	47	5.487G	48	5.432G
49	5.498G	50	5.692G	51	5.373G	52	5.395G
53	5.483G	54	5.602G	55	5.519G	56	5.457G
57	5.661G	58	5.479G	59	5.67G	60	5.353G
61	5.313G	62	5.265G	63	5.526G	64	5.497G
65	5.488G	66	5.485G	67	5.418G	68	5.539G
69	5.475G	70	5.347G	71	5.388G	72	5.423G
73	5.612G	74	5.677G	75	5.277G	76	5.581G
77	5.439G	78	5.335G	79	5.268G	80	5.327G
81	5.425G	82	5.647G	83	5.719G	84	5.545G
85	5.713G	86	5.722G	87	5.281G	88	5.583G
89	5.6G	90	5.328G	91	5.465G	92	5.428G
93	5.655G	94	5.707G	95	5.285G	96	5.555G
97	5.332G	98	5.648G	99	5.361G	100	5.684G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_23							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.484G	2	5.551G	3	5.476G	4	5.569G
5	5.543G	6	5.519G	7	5.671G	8	5.361G
9	5.686G	10	5.689G	11	5.618G	12	5.516G
13	5.508G	14	5.338G	15	5.581G	16	5.434G
17	5.652G	18	5.415G	19	5.388G	20	5.483G
21	5.549G	22	5.259G	23	5.473G	24	5.36G
25	5.271G	26	5.275G	27	5.672G	28	5.529G
29	5.305G	30	5.558G	31	5.658G	32	5.505G
33	5.435G	34	5.629G	35	5.62G	36	5.646G
37	5.545G	38	5.391G	39	5.49G	40	5.459G
41	5.252G	42	5.651G	43	5.332G	44	5.408G
45	5.364G	46	5.298G	47	5.65G	48	5.485G
49	5.288G	50	5.568G	51	5.446G	52	5.572G
53	5.425G	54	5.463G	55	5.645G	56	5.615G
57	5.669G	58	5.489G	59	5.306G	60	5.482G
61	5.478G	62	5.685G	63	5.358G	64	5.323G
65	5.531G	66	5.308G	67	5.61G	68	5.357G
69	5.371G	70	5.623G	71	5.644G	72	5.43G
73	5.272G	74	5.588G	75	5.636G	76	5.721G
77	5.701G	78	5.582G	79	5.316G	80	5.52G
81	5.437G	82	5.681G	83	5.336G	84	5.404G
85	5.542G	86	5.433G	87	5.722G	88	5.598G
89	5.643G	90	5.317G	91	5.676G	92	5.378G
93	5.397G	94	5.589G	95	5.592G	96	5.66G
97	5.264G	98	5.67G	99	5.525G	100	5.527G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_24							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.264G	2	5.315G	3	5.412G	4	5.255G
5	5.288G	6	5.561G	7	5.596G	8	5.436G
9	5.374G	10	5.421G	11	5.549G	12	5.305G
13	5.533G	14	5.602G	15	5.522G	16	5.304G
17	5.518G	18	5.433G	19	5.675G	20	5.557G
21	5.328G	22	5.414G	23	5.352G	24	5.719G
25	5.541G	26	5.524G	27	5.635G	28	5.506G
29	5.585G	30	5.6G	31	5.644G	32	5.462G
33	5.65G	34	5.306G	35	5.44G	36	5.688G
37	5.636G	38	5.662G	39	5.643G	40	5.373G
41	5.566G	42	5.259G	43	5.27G	44	5.578G
45	5.502G	46	5.293G	47	5.656G	48	5.258G
49	5.538G	50	5.444G	51	5.25G	52	5.497G
53	5.661G	54	5.723G	55	5.31G	56	5.358G
57	5.472G	58	5.384G	59	5.686G	60	5.277G
61	5.514G	62	5.63G	63	5.665G	64	5.721G
65	5.477G	66	5.509G	67	5.559G	68	5.393G
69	5.581G	70	5.515G	71	5.552G	72	5.716G
73	5.416G	74	5.491G	75	5.564G	76	5.595G
77	5.593G	78	5.724G	79	5.297G	80	5.547G
81	5.5G	82	5.467G	83	5.442G	84	5.625G
85	5.606G	86	5.539G	87	5.47G	88	5.449G
89	5.673G	90	5.562G	91	5.394G	92	5.526G
93	5.474G	94	5.294G	95	5.492G	96	5.319G
97	5.654G	98	5.423G	99	5.592G	100	5.482G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_25							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.519G	2	5.554G	3	5.348G	4	5.416G
5	5.605G	6	5.7G	7	5.618G	8	5.511G
9	5.44G	10	5.25G	11	5.383G	12	5.569G
13	5.59G	14	5.253G	15	5.623G	16	5.61G
17	5.334G	18	5.621G	19	5.381G	20	5.392G
21	5.468G	22	5.494G	23	5.355G	24	5.441G
25	5.692G	26	5.429G	27	5.473G	28	5.363G
29	5.619G	30	5.264G	31	5.533G	32	5.322G
33	5.293G	34	5.555G	35	5.638G	36	5.352G
37	5.349G	38	5.418G	39	5.287G	40	5.405G
41	5.342G	42	5.683G	43	5.721G	44	5.499G
45	5.6G	46	5.636G	47	5.341G	48	5.564G
49	5.591G	50	5.698G	51	5.426G	52	5.548G
53	5.275G	54	5.449G	55	5.254G	56	5.546G
57	5.477G	58	5.505G	59	5.723G	60	5.643G
61	5.333G	62	5.672G	63	5.497G	64	5.547G
65	5.423G	66	5.332G	67	5.508G	68	5.413G
69	5.31G	70	5.41G	71	5.402G	72	5.445G
73	5.54G	74	5.562G	75	5.369G	76	5.296G
77	5.278G	78	5.549G	79	5.56G	80	5.718G
81	5.567G	82	5.53G	83	5.439G	84	5.528G
85	5.379G	86	5.666G	87	5.604G	88	5.504G
89	5.521G	90	5.697G	91	5.396G	92	5.252G
93	5.4G	94	5.259G	95	5.403G	96	5.509G
97	5.374G	98	5.26G	99	5.321G	100	5.485G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_26							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.299G	2	5.318G	3	5.284G	4	5.577G
5	5.35G	6	5.267G	7	5.543G	8	5.586G
9	5.603G	10	5.457G	11	5.314G	12	5.455G
13	5.631G	14	5.351G	15	5.644G	16	5.601G
17	5.461G	18	5.724G	19	5.426G	20	5.584G
21	5.476G	22	5.66G	23	5.393G	24	5.433G
25	5.665G	26	5.695G	27	5.325G	28	5.566G
29	5.714G	30	5.653G	31	5.306G	32	5.422G
33	5.279G	34	5.508G	35	5.329G	36	5.458G
37	5.491G	38	5.44G	39	5.571G	40	5.298G
41	5.719G	42	5.522G	43	5.621G	44	5.486G
45	5.496G	46	5.529G	47	5.616G	48	5.424G
49	5.622G	50	5.327G	51	5.574G	52	5.505G
53	5.599G	54	5.272G	55	5.576G	56	5.637G
57	5.38G	58	5.667G	59	5.324G	60	5.694G
61	5.297G	62	5.498G	63	5.617G	64	5.373G
65	5.369G	66	5.533G	67	5.368G	68	5.623G
69	5.677G	70	5.633G	71	5.482G	72	5.388G
73	5.594G	74	5.672G	75	5.516G	76	5.513G
77	5.434G	78	5.489G	79	5.439G	80	5.259G
81	5.326G	82	5.67G	83	5.499G	84	5.256G
85	5.593G	86	5.436G	87	5.64G	88	5.528G
89	5.696G	90	5.629G	91	5.321G	92	5.372G
93	5.475G	94	5.47G	95	5.691G	96	5.417G
97	5.406G	98	5.497G	99	5.415G	100	5.526G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_27							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.457G	2	5.654G	3	5.695G	4	5.263G
5	5.667G	6	5.309G	7	5.565G	8	5.661G
9	5.291G	10	5.664G	11	5.623G	12	5.719G
13	5.672G	14	5.546G	15	5.665G	16	5.689G
17	5.588G	18	5.255G	19	5.471G	20	5.301G
21	5.484G	22	5.254G	23	5.334G	24	5.522G
25	5.638G	26	5.583G	27	5.652G	28	5.294G
29	5.343G	30	5.687G	31	5.348G	32	5.408G
33	5.711G	34	5.723G	35	5.481G	36	5.656G
37	5.63G	38	5.531G	39	5.622G	40	5.724G
41	5.655G	42	5.605G	43	5.462G	44	5.251G
45	5.493G	46	5.458G	47	5.596G	48	5.507G
49	5.68G	50	5.697G	51	5.592G	52	5.45G
53	5.681G	54	5.65G	55	5.55G	56	5.57G
57	5.52G	58	5.35G	59	5.382G	60	5.521G
61	5.568G	62	5.426G	63	5.663G	64	5.562G
65	5.258G	66	5.296G	67	5.412G	68	5.356G
69	5.406G	70	5.404G	71	5.455G	72	5.472G
73	5.436G	74	5.651G	75	5.597G	76	5.395G
77	5.403G	78	5.609G	79	5.485G	80	5.337G
81	5.305G	82	5.377G	83	5.42G	84	5.278G
85	5.433G	86	5.36G	87	5.431G	88	5.538G
89	5.416G	90	5.526G	91	5.621G	92	5.414G
93	5.582G	94	5.509G	95	5.498G	96	5.524G
97	5.543G	98	5.703G	99	5.346G	100	5.698G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_28							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.712G	2	5.418G	3	5.631G	4	5.424G
5	5.412G	6	5.351G	7	5.49G	8	5.261G
9	5.454G	10	5.493G	11	5.554G	12	5.508G
13	5.713G	14	5.266G	15	5.686G	16	5.302G
17	5.715G	18	5.358G	19	5.419G	20	5.395G
21	5.42G	22	5.275G	23	5.514G	24	5.611G
25	5.374G	26	5.601G	27	5.497G	28	5.544G
29	5.721G	30	5.487G	31	5.297G	32	5.668G
33	5.463G	34	5.255G	35	5.476G	36	5.672G
37	5.622G	38	5.499G	39	5.494G	40	5.688G
41	5.4G	42	5.491G	43	5.29G	44	5.576G
45	5.59G	46	5.641G	47	5.653G	48	5.479G
49	5.704G	50	5.382G	51	5.701G	52	5.639G
53	5.393G	54	5.367G	55	5.538G	56	5.288G
57	5.572G	58	5.34G	59	5.539G	60	5.555G
61	5.353G	62	5.507G	63	5.565G	64	5.597G
65	5.557G	66	5.355G	67	5.343G	68	5.665G
69	5.267G	70	5.714G	71	5.723G	72	5.457G
73	5.697G	74	5.37G	75	5.371G	76	5.431G
77	5.372G	78	5.632G	79	5.628G	80	5.318G
81	5.258G	82	5.633G	83	5.584G	84	5.341G
85	5.43G	86	5.652G	87	5.334G	88	5.477G
89	5.608G	90	5.68G	91	5.48G	92	5.394G
93	5.709G	94	5.272G	95	5.515G	96	5.468G
97	5.283G	98	5.657G	99	5.309G	100	5.703G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_29							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.492G	2	5.657G	3	5.567G	4	5.585G
5	5.254G	6	5.49G	7	5.512G	8	5.336G
9	5.617G	10	5.7G	11	5.485G	12	5.297G
13	5.279G	14	5.461G	15	5.707G	16	5.39G
17	5.367G	18	5.464G	19	5.307G	20	5.403G
21	5.489G	22	5.313G	23	5.603G	24	5.584G
25	5.262G	26	5.453G	27	5.648G	28	5.28G
29	5.529G	30	5.283G	31	5.625G	32	5.581G
33	5.407G	34	5.674G	35	5.713G	36	5.311G
37	5.652G	38	5.612G	39	5.333G	40	5.296G
41	5.338G	42	5.634G	43	5.487G	44	5.694G
45	5.556G	46	5.673G	47	5.699G	48	5.706G
49	5.269G	50	5.58G	51	5.558G	52	5.277G
53	5.253G	54	5.594G	55	5.251G	56	5.717G
57	5.287G	58	5.51G	59	5.684G	60	5.518G
61	5.549G	62	5.397G	63	5.423G	64	5.304G
65	5.379G	66	5.497G	67	5.42G	68	5.32G
69	5.443G	70	5.347G	71	5.719G	72	5.299G
73	5.428G	74	5.414G	75	5.651G	76	5.404G
77	5.427G	78	5.372G	79	5.334G	80	5.319G
81	5.615G	82	5.703G	83	5.645G	84	5.434G
85	5.642G	86	5.432G	87	5.437G	88	5.521G
89	5.502G	90	5.64G	91	5.293G	92	5.388G
93	5.682G	94	5.535G	95	5.716G	96	5.439G
97	5.629G	98	5.607G	99	5.561G	100	5.635G

Hopping Frequency Sequence Name: HOP_FREQ_SEQ_30							
SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)	SEQ#	Frequency (Hz)
1	5.272G	2	5.421G	3	5.503G	4	5.649G
5	5.474G	6	5.532G	7	5.437G	8	5.411G
9	5.683G	10	5.432G	11	5.319G	12	5.561G
13	5.32G	14	5.656G	15	5.253G	16	5.381G
17	5.397G	18	5.564G	19	5.509G	20	5.499G
21	5.655G	22	5.254G	23	5.595G	24	5.557G
25	5.625G	26	5.402G	27	5.331G	28	5.277G
29	5.692G	30	5.571G	31	5.647G	32	5.582G
33	5.321G	34	5.494G	35	5.475G	36	5.329G
37	5.33G	38	5.526G	39	5.476G	40	5.276G
41	5.399G	42	5.581G	43	5.439G	44	5.281G
45	5.282G	46	5.284G	47	5.631G	48	5.456G
49	5.259G	50	5.328G	51	5.342G	52	5.417G
53	5.633G	54	5.671G	55	5.477G	56	5.453G
57	5.481G	58	5.716G	59	5.704G	60	5.346G
61	5.347G	62	5.415G	63	5.707G	64	5.429G
65	5.698G	66	5.489G	67	5.703G	68	5.446G
69	5.323G	70	5.349G	71	5.688G	72	5.28G
73	5.287G	74	5.441G	75	5.67G	76	5.34G
77	5.327G	78	5.567G	79	5.712G	80	5.636G
81	5.675G	82	5.42G	83	5.513G	84	5.485G
85	5.252G	86	5.602G	87	5.527G	88	5.425G
89	5.279G	90	5.691G	91	5.383G	92	5.638G
93	5.366G	94	5.669G	95	5.611G	96	5.306G
97	5.389G	98	5.308G	99	5.646G	100	5.303G

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