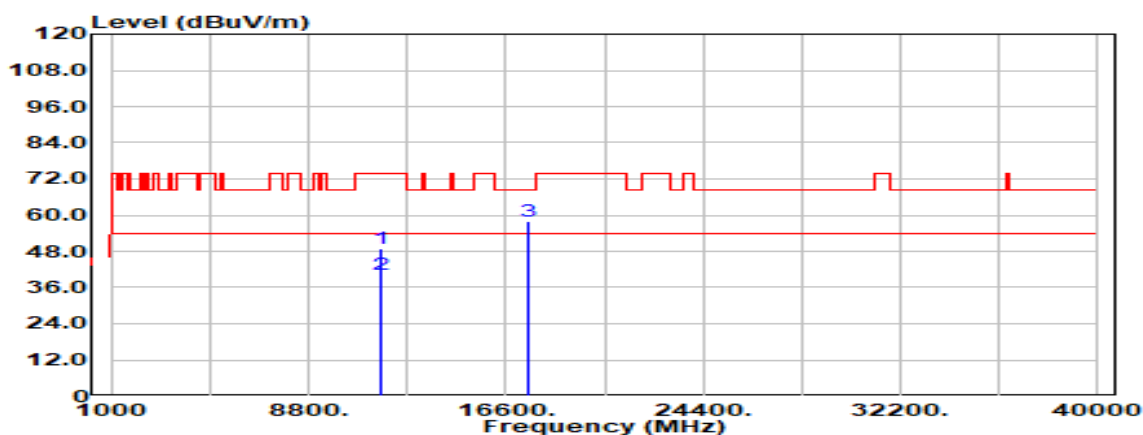


Report No.: TMWK2201000111KR

Test Mode	IEEE 802.11ac VHT20 / 5825 MHz	Temp/Hum	24.5(°C) / 56%RH
Test Item	Harmonic	Test Date	April 25, 2022
Polarize	Horizontal	Test Engineer	Tony Chao
Detector	Peak & Average		



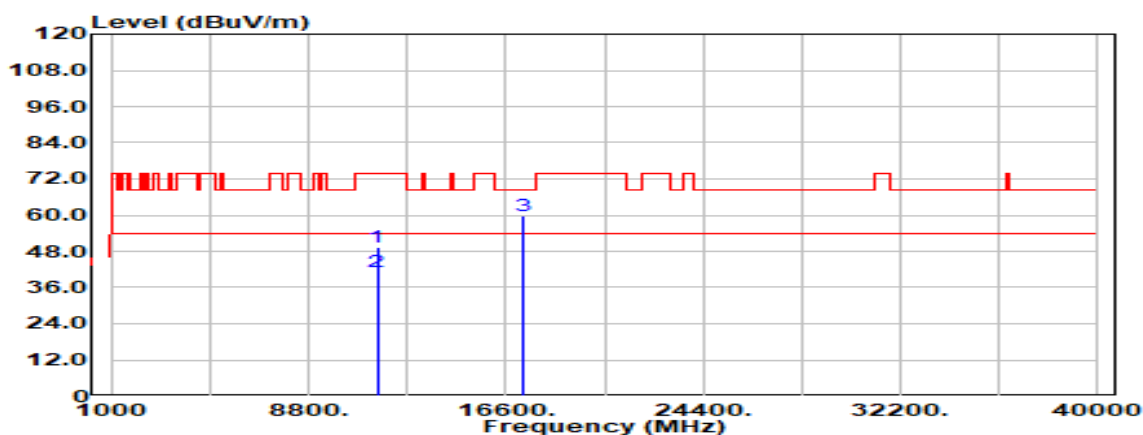
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
11650.000	Peak	28.98	19.90	48.88	74.00	-25.12
11650.000	Average	20.37	19.90	40.27	54.00	-13.73
17475.000	Peak	28.96	29.11	58.07	68.20	-10.13
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2201000111KR

Test Mode	IEEE 802.11ac VHT40 / 5755 MHz	Temp/Hum	23.4(°C) / 60%RH
Test Item	Harmonic	Test Date	April 26, 2022
Polarize	Vertical	Test Engineer	Tony Chao
Detector	Peak & Average		



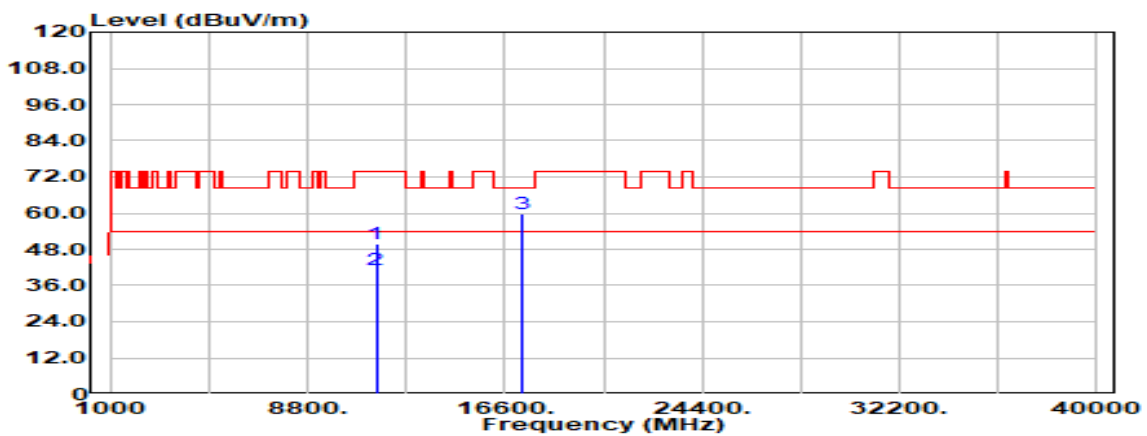
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
11510.000	Peak	29.78	19.73	49.50	74.00	-24.50
11510.000	Average	21.37	19.73	41.10	54.00	-12.90
17265.000	Peak	29.79	29.80	59.59	68.20	-8.61
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2201000111KR

Test Mode	IEEE 802.11ac VHT40 / 5755 MHz	Temp/Hum	23.4(°C) / 60%RH
Test Item	Harmonic	Test Date	April 26, 2022
Polarize	Horizontal	Test Engineer	Tony Chao
Detector	Peak & Average		



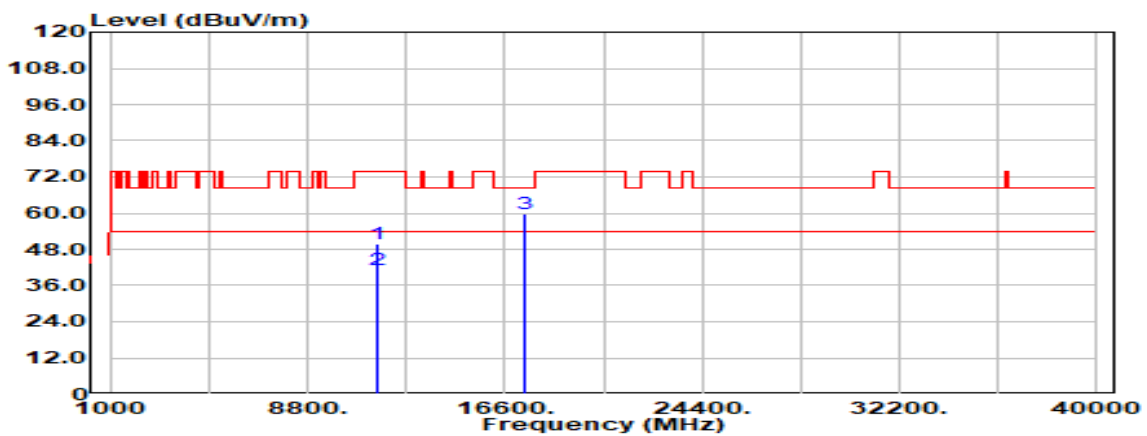
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
11510.000	Peak	29.91	19.73	49.63	74.00	-24.37
11510.000	Average	21.43	19.73	41.16	54.00	-12.84
17265.000	Peak	30.02	29.80	59.82	68.20	-8.38
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2201000111KR

Test Mode	IEEE 802.11ac VHT40 / 5795 MHz	Temp/Hum	23.4(°C) / 60%RH
Test Item	Harmonic	Test Date	April 26, 2022
Polarize	Vertical	Test Engineer	Tony Chao
Detector	Peak & Average		



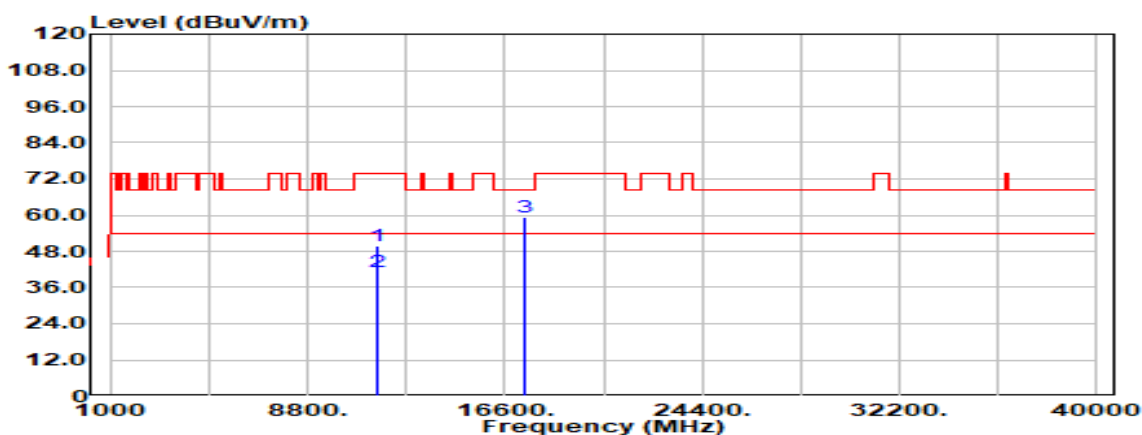
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
11590.000	Peak	29.79	19.86	49.66	74.00	-24.34
11590.000	Average	21.24	19.86	41.10	54.00	-12.90
17385.000	Peak	30.71	29.24	59.95	68.20	-8.25
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2201000111KR

Test Mode	IEEE 802.11ac VHT40 / 5795 MHz	Temp/Hum	23.4(°C) / 60%RH
Test Item	Harmonic	Test Date	April 26, 2022
Polarize	Horizontal	Test Engineer	Tony Chao
Detector	Peak & Average		



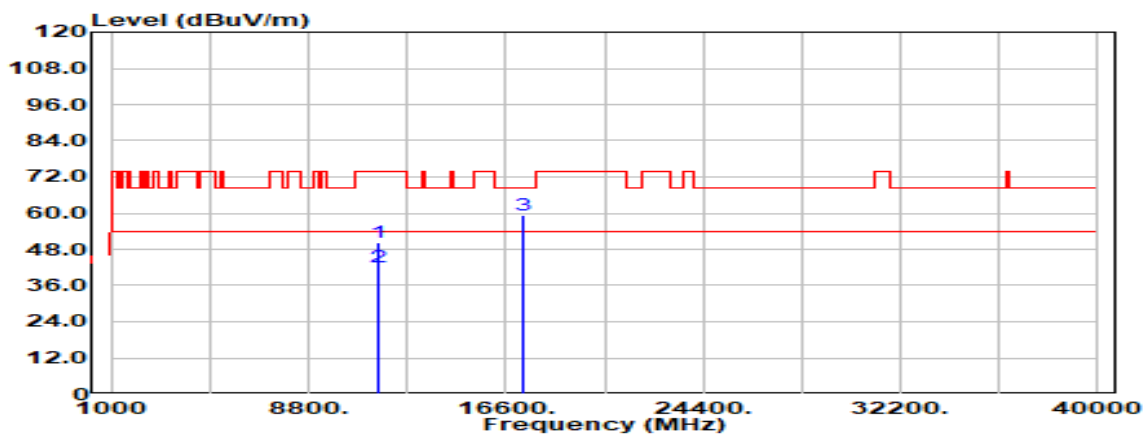
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
11590.000	Peak	30.15	19.86	50.02	74.00	-23.98
11590.000	Average	21.36	19.86	41.22	54.00	-12.78
17385.000	Peak	30.05	29.24	59.29	68.20	-8.91
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2201000111KR

Test Mode	IEEE 802.11ac VHT80 / 5775 MHz	Temp/Hum	23.4(°C) / 60%RH
Test Item	Harmonic	Test Date	April 26, 2022
Polarize	Vertical	Test Engineer	Tony Chao
Detector	Peak & Average		



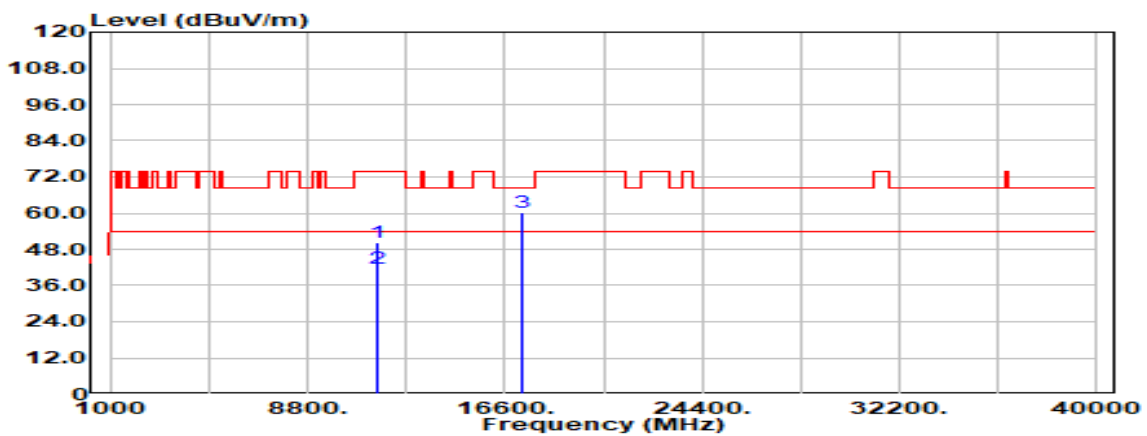
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
11550.000	Peak	30.51	19.80	50.31	74.00	-23.69
11550.000	Average	22.24	19.80	42.04	54.00	-11.96
17325.000	Peak	30.07	29.48	59.54	68.20	-8.66
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2201000111KR

Test Mode	IEEE 802.11ac VHT80 / 5775 MHz	Temp/Hum	23.4(°C)/ 60%RH
Test Item	Harmonic	Test Date	April 26, 2022
Polarize	Horizontal	Test Engineer	Tony Chao
Detector	Peak & Average		



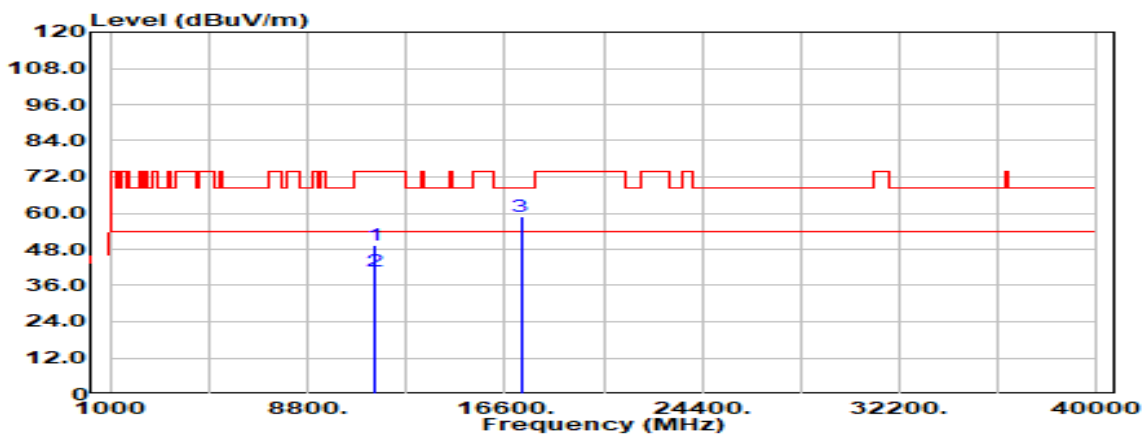
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
11550.000	Peak	30.41	19.80	50.21	74.00	-23.79
11550.000	Average	21.85	19.80	41.65	54.00	-12.35
17325.000	Peak	30.64	29.48	60.12	68.20	-8.08
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2201000111KR

Test Mode	IEEE 802.11ax HE20 / 5745MHz	Temp/Hum	23.4(°C)/ 60%RH
Test Item	Harmonic	Test Date	April 26, 2022
Polarize	Vertical	Test Engineer	Tony Chao
Detector	Peak & Average		



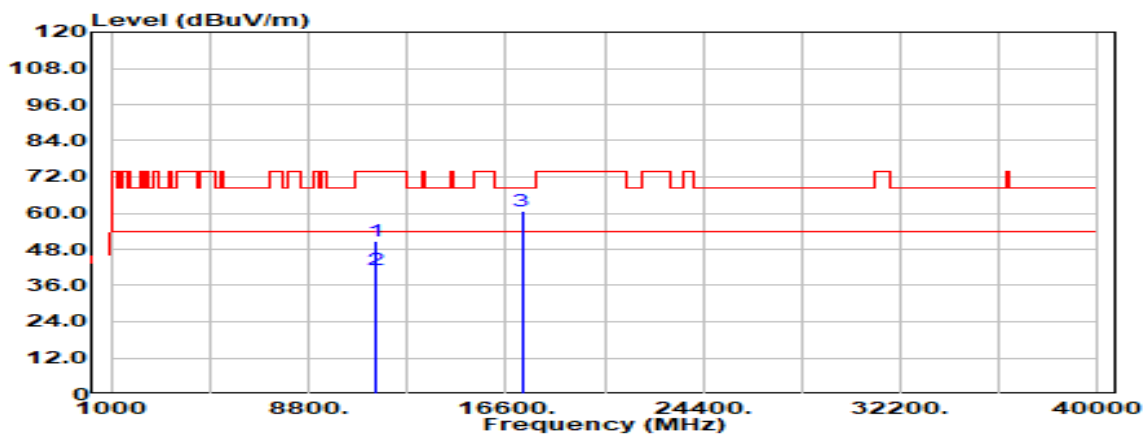
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBUV)	Factor (dB)	Actual FS (dBUV/m)	Limit @3m (dBUV/m)	Margin (dB)
11490.000	Peak	29.81	19.70	49.51	74.00	-24.49
11490.000	Average	21.27	19.70	40.97	54.00	-13.03
17235.000	Peak	29.06	30.01	59.07	68.20	-9.13
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2201000111KR

Test Mode	IEEE 802.11ax HE20 / 5745MHz	Temp/Hum	23.4(°C)/ 60%RH
Test Item	Harmonic	Test Date	April 26, 2022
Polarize	Horizontal	Test Engineer	Tony Chao
Detector	Peak & Average		



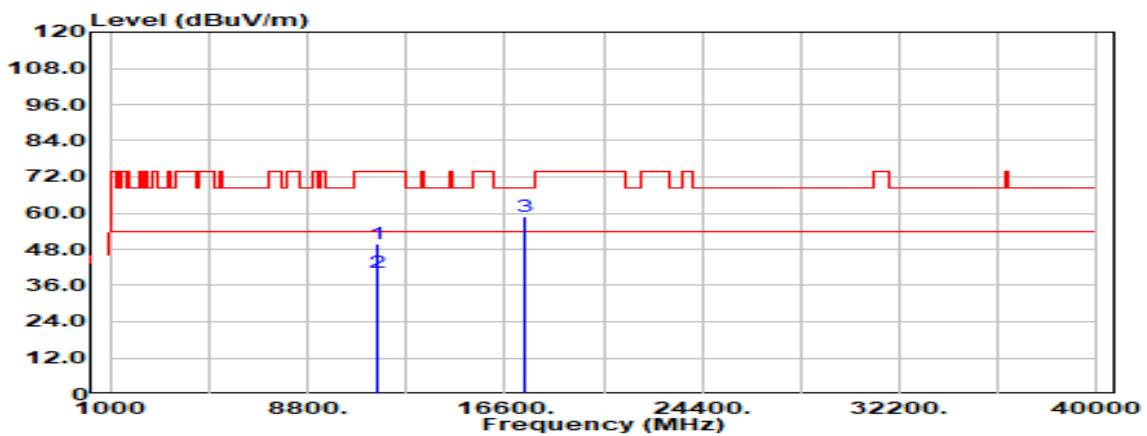
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
11490.000	Peak	30.86	19.70	50.56	74.00	-23.44
11490.000	Average	21.42	19.70	41.12	54.00	-12.88
17235.000	Peak	30.61	30.01	60.62	68.20	-7.58
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2201000111KR

Test Mode	IEEE 802.11ax HE20 / 5785MHz_	Temp/Hum	23.4(°C)/ 60%RH
Test Item	Harmonic	Test Date	April 26, 2022
Polarize	Vertical	Test Engineer	Tony Chao
Detector	Peak & Average		



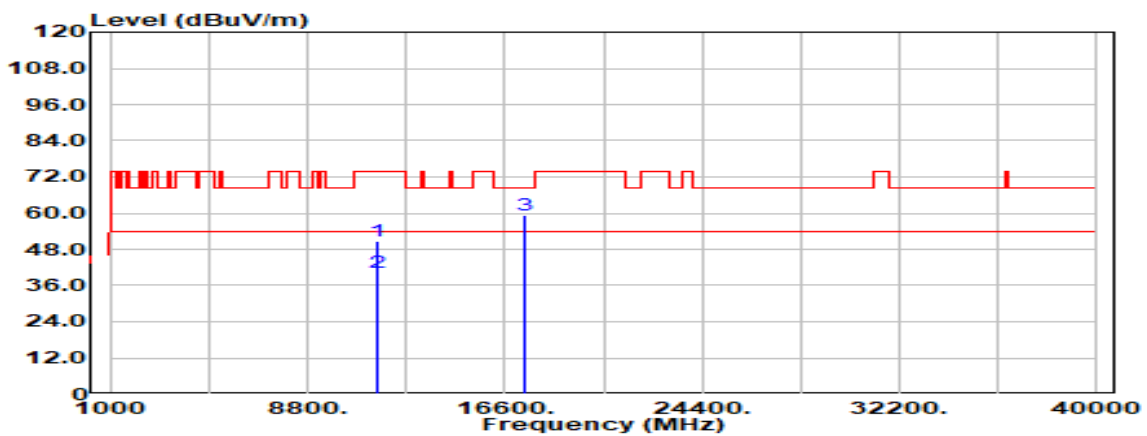
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
11570.000	Peak	30.17	19.83	50.00	74.00	-24.00
11570.000	Average	20.45	19.83	40.28	54.00	-13.72
17355.000	Peak	29.32	29.33	58.66	68.20	-9.54
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2201000111KR

Test Mode	IEEE 802.11ax HE20 / 5785MHz	Temp/Hum	23.4(°C) / 60%RH
Test Item	Harmonic	Test Date	April 26, 2022
Polarize	Horizontal	Test Engineer	Tony Chao
Detector	Peak & Average		



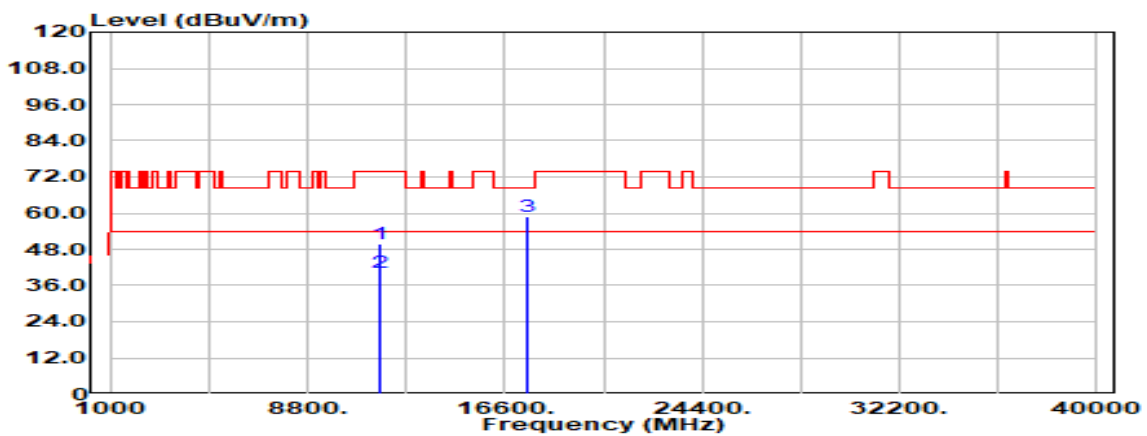
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
11570.000	Peak	30.72	19.83	50.56	74.00	-23.44
11570.000	Average	20.49	19.83	40.32	54.00	-13.68
17355.000	Peak	30.16	29.33	59.50	68.20	-8.70
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2201000111KR

Test Mode	IEEE 802.11ax HE20 / 5825MHz	Temp/Hum	23.4(°C) / 60%RH
Test Item	Harmonic	Test Date	April 26, 2022
Polarize	Vertical	Test Engineer	Tony Chao
Detector	Peak & Average		

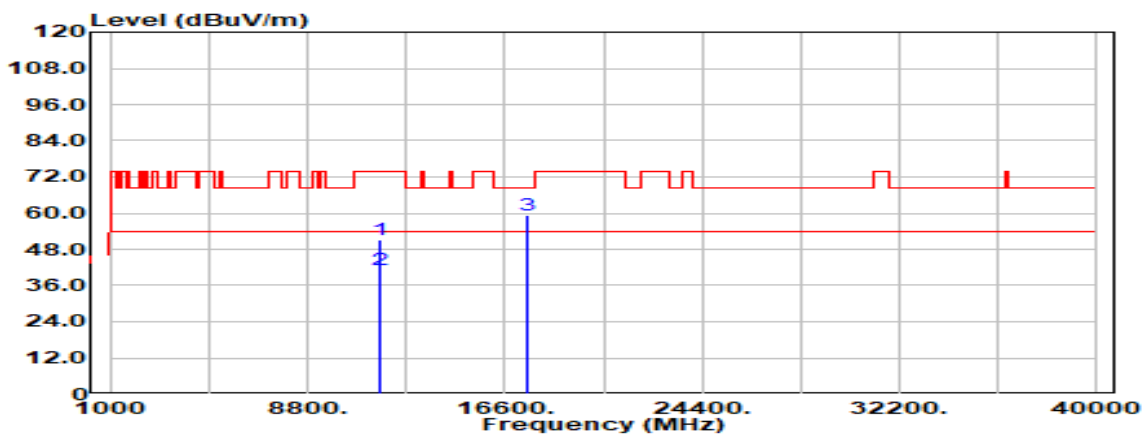


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
11650.000	Peak	30.10	19.90	50.00	74.00	-24.00
11650.000	Average	20.59	19.90	40.49	54.00	-13.51
17475.000	Peak	29.82	29.11	58.92	68.20	-9.28
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Test Mode	IEEE 802.11ax HE20 / 5825MHz_	Temp/Hum	23.4(°C) / 60%RH
Test Item	Harmonic	Test Date	April 26, 2022
Polarize	Horizontal	Test Engineer	Tony Chao
Detector	Peak & Average		



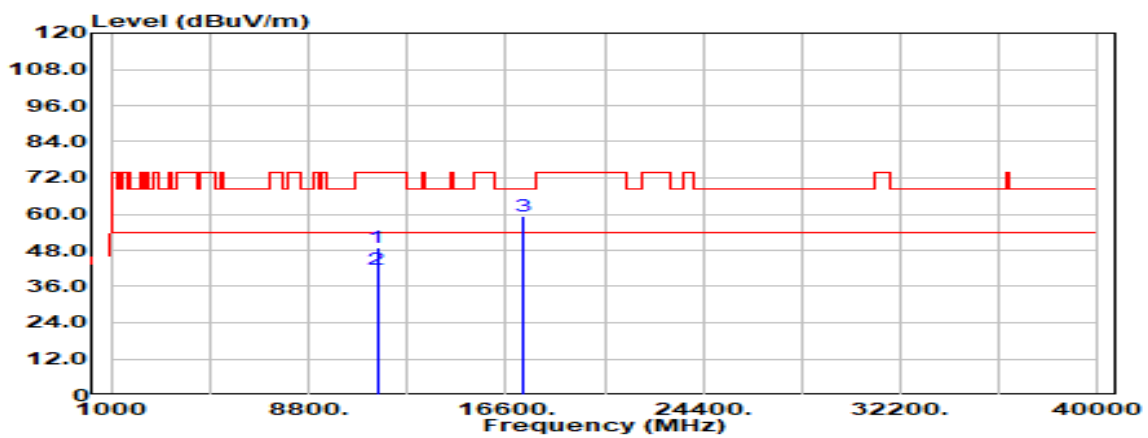
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
11650.000	Peak	31.13	19.90	51.03	74.00	-22.97
11650.000	Average	21.32	19.90	41.22	54.00	-12.78
17475.000	Peak	30.29	29.11	59.40	68.20	-8.80
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2201000111KR

Test Mode	IEEE 802.11ax HE40 / 5755MHz	Temp/Hum	24.3(°C)/ 55%RH
Test Item	Harmonic	Test Date	April 27, 2022
Polarize	Vertical	Test Engineer	Tony Chao
Detector	Peak & Average		



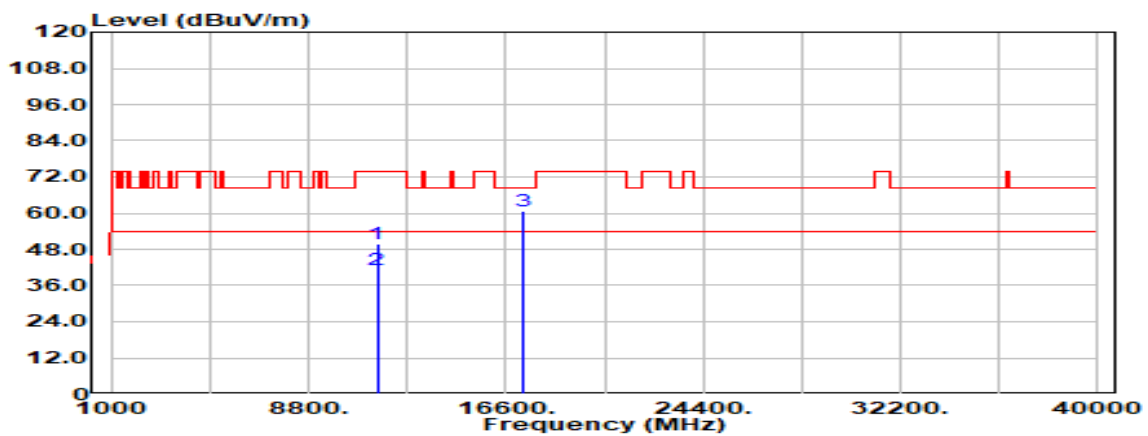
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
11510.000	Peak	29.40	19.73	49.13	74.00	-24.87
11510.000	Average	21.82	19.73	41.55	54.00	-12.45
17265.000	Peak	29.31	29.80	59.12	68.20	-9.08
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2201000111KR

Test Mode	IEEE 802.11ax HE40 / 5755MHz	Temp/Hum	24.3(°C) / 55%RH
Test Item	Harmonic	Test Date	April 27, 2022
Polarize	Horizontal	Test Engineer	Tony Chao
Detector	Peak & Average		



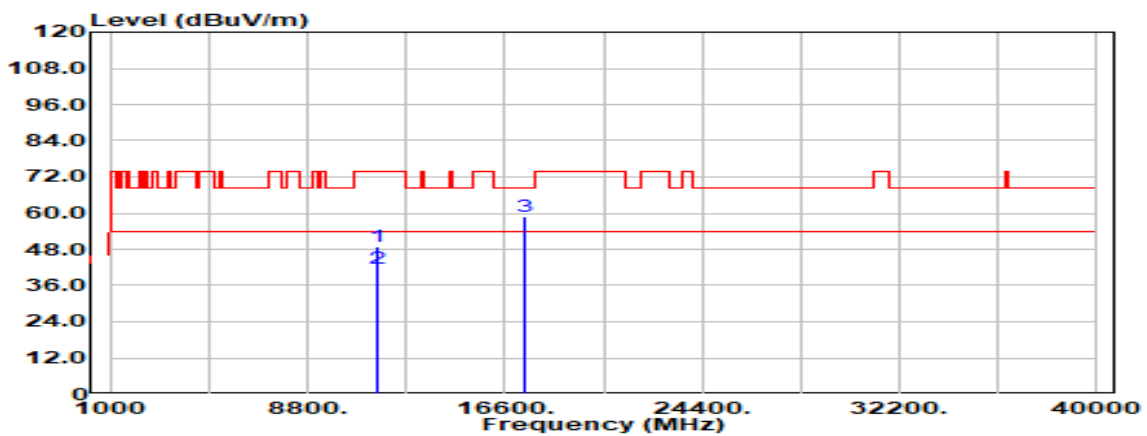
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
11510.000	Peak	30.22	19.73	49.95	74.00	-24.05
11510.000	Average	21.64	19.73	41.37	54.00	-12.63
17265.000	Peak	30.92	29.80	60.72	68.20	-7.48
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2201000111KR

Test Mode	IEEE 802.11ax HE40 / 5795MHz	Temp/Hum	24.3(°C) / 55%RH
Test Item	Harmonic	Test Date	April 27, 2022
Polarize	Vertical	Test Engineer	Tony Chao
Detector	Peak & Average		



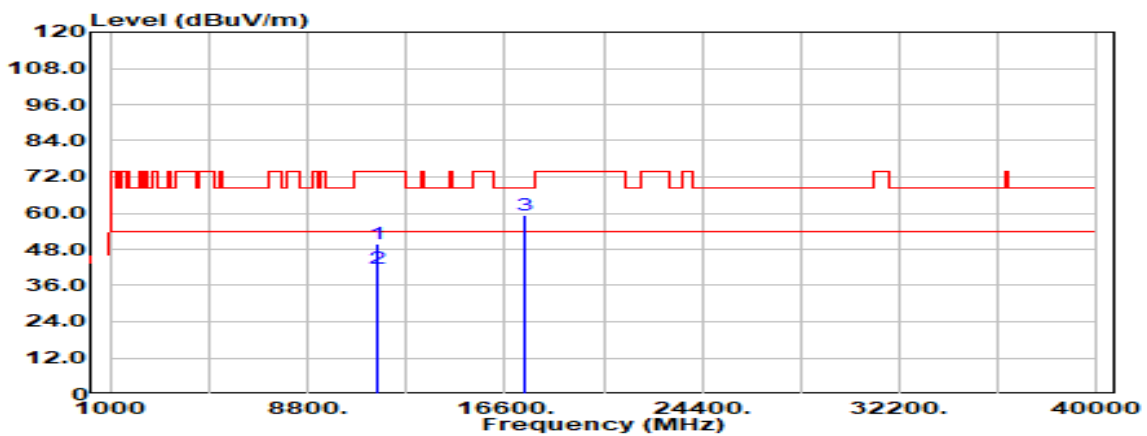
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
11590.000	Peak	29.27	19.86	49.13	74.00	-24.87
11590.000	Average	21.73	19.86	41.59	54.00	-12.41
17385.000	Peak	29.83	29.24	59.07	68.20	-9.13
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2201000111KR

Test Mode	IEEE 802.11ax HE40 / 5795MHz	Temp/Hum	24.3(°C) / 55%RH
Test Item	Harmonic	Test Date	April 27, 2022
Polarize	Horizontal	Test Engineer	Tony Chao
Detector	Peak & Average		



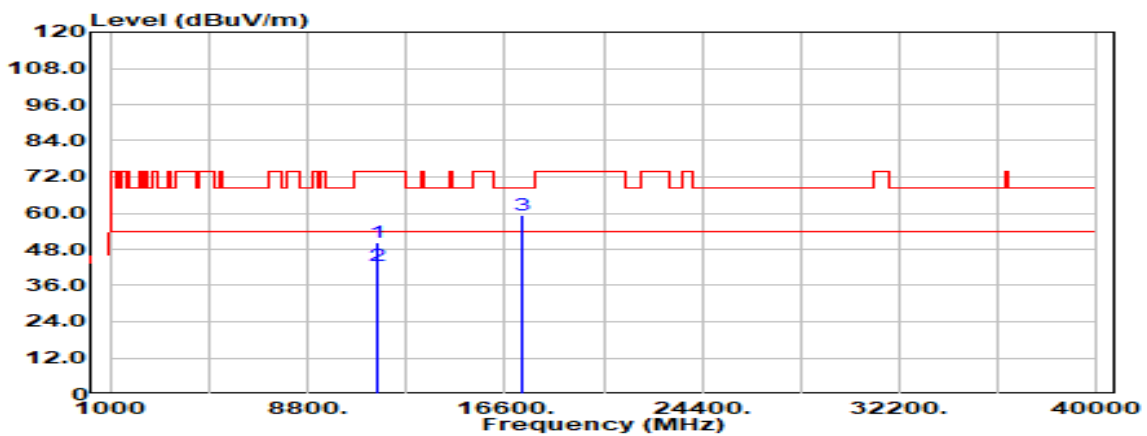
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
11590.000	Peak	30.05	19.86	49.92	74.00	-24.08
11590.000	Average	21.87	19.86	41.73	54.00	-12.27
17385.000	Peak	29.97	29.24	59.21	68.20	-8.99
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2201000111KR

Test Mode	IEEE 802.11ax HE80 / 5775 MHz	Temp/Hum	24.3(°C) / 55%RH
Test Item	Harmonic	Test Date	April 27, 2022
Polarize	Vertical	Test Engineer	Tony Chao
Detector	Peak & Average		

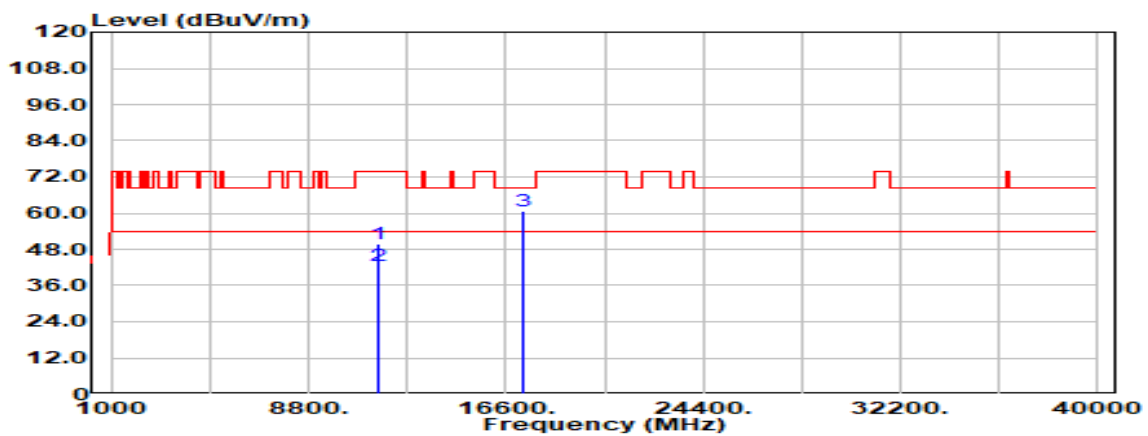


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
11550.000	Peak	30.33	19.80	50.13	74.00	-23.87
11550.000	Average	22.61	19.80	42.41	54.00	-11.59
17325.000	Peak	29.92	29.48	59.40	68.20	-8.80
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Test Mode	IEEE 802.11ax HE80 / 5775MHz	Temp/Hum	24.3(°C) / 55%RH
Test Item	Harmonic	Test Date	April 27, 2022
Polarize	Horizontal	Test Engineer	Tony Chao
Detector	Peak & Average		



Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
11550.000	Peak	29.99	19.80	49.79	74.00	-24.21
11550.000	Average	22.57	19.80	42.37	54.00	-11.63
17325.000	Peak	31.30	29.48	60.77	68.20	-7.43
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

5. DYNAMIC FREQUENCY SELECTION FOR SLAVE

5.1 TEST LIMIT

FCC according to §15.407 (h), KDB 905462 D02 "compliance measurement procedures for unlicensed-national information infrastructure devices operating in the 5250-5350 MHz and 5470-5725 MHz bands incorporating dynamic frequency selection". and KDB 905462 D03 " U-NII client devices without radar detection capability.

IC according RSS-247 section 6.3, and it harmonized with FCC Part 15 DFS rules.

The EIRP refer section 4.3 output power measurement in this report.

Table 1: Applicability of DFS requirements prior to use of a channel

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

Table 2: Applicability of DFS requirements during normal operation

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

Additional requirements for devices with multiple bandwidth mods	Master Device or Client with Radar Detection	Client Without Radar Detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required

Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.

Table 3: Interference Threshold values, Master or Client incorporating In-Service

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 4: 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.

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

Table 6 – Long Pulse Radar Test Signal

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 7 – Frequency Hopping Radar Test Signal

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

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5.2 TEST PROCEDURE

Overview Of EUT With Respect To §15.407 (H) Requirements

The firmware installed in the EUT during testing was:

Firmware Rev: 1.00.05

The EUT operates over the 5250-5350 MHz range as a Client Device that does not have radar detection capability.

The EUT uses one transmitter connected to two 50-ohm coaxial antenna ports via a diversity switch. Only one antenna port is connected to the test system since the EUT has one antenna only.

The Slave device associated with the EUT during these tests does not have radar detection capability.

WLAN traffic is generated by streaming the video file TestFile.mp2 “6 ½ Magic Hours” from the Master to the Slave in full motion video mode using the media player with the V2.61 Codec package.

The EUT utilizes the 802.11a architecture, with a nominal channel bandwidth of 20 MHz.

The rated output power of the Master unit is < 23dBm (EIRP). Therefore the required interference threshold level is -62 dBm. After correction for antenna gain and procedural adjustments, the required conducted threshold at the antenna port is $-62 + 5 = -57$ dBm.

The calibrated conducted DFS Detection Threshold level is set to -57 dBm. The tested level is lower than the required level hence it provides margin to the limit.

Manufacturer’s Statement Regarding Uniform Channel Spreading

The end product implements an automatic channel selection feature at startup such that operation commences on channels distributed across the entire set of allowed 5GHz channels. This feature will ensure uniform spreading is achieved while avoiding non-allowed channels due to prior radar events.

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TEST AND MEASUREMENT SYSTEM

System Overview

The measurement system is based on a conducted test method.

The short pulse and long pulse signal generating system utilizes the NTIA software. The Vector Signal Generator has been validated by the NTIA. The hopping signal generating system utilizes the CCS simulated hopping method and system, which has been validated by the DoD, FCC and NTIA. The software selects waveform parameters from within the bounds of the signal type on a random basis using uniform distribution.

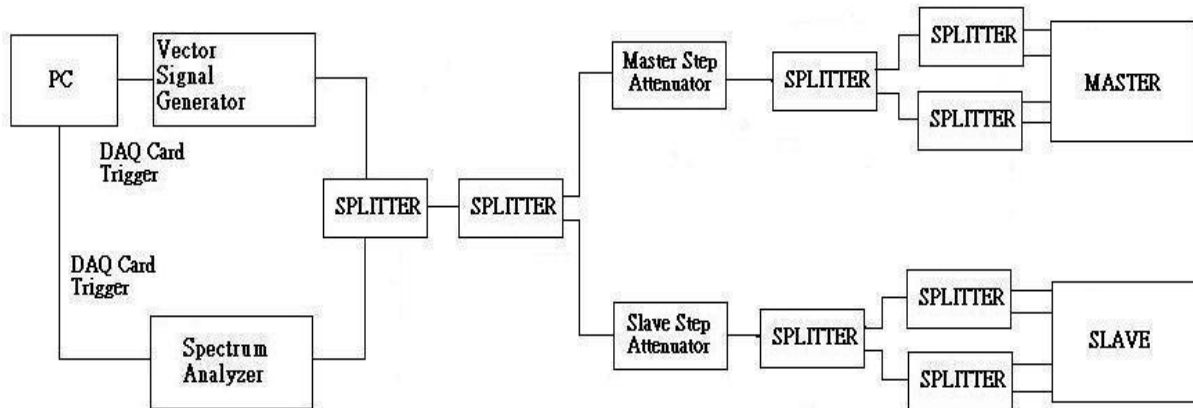
The short pulse types 2, 3 and 4, and the long pulse type 5 parameters are randomized at run-time.

The hopping type 6 pulse parameters are fixed while the hopping sequence is based on the August 2005 NTIA Hopping Frequency List. The initial starting point randomized at run-time and each subsequent starting point is incremented by 475. Each frequency in the 100-length segment is compared to the boundaries of the EUT Detection Bandwidth and the software creates a hopping burst pattern in accordance with Section 7.4.1.3 Method #2 Simulated Frequency Hopping Radar Waveform Generating Subsystem of FCC 06-96 APPENDIX. The frequency of the signal generator is incremented in 1 MHz steps from FL to FH for each successive trial. This incremental sequence is repeated as required to generate a minimum of 30 total trials and to maintain a uniform frequency distribution over the entire Detection Bandwidth.

The signal monitoring equipment consists of a spectrum analyzer set to display 8001 bins on the horizontal axis. The time-domain resolution is 2 msec / bin with a 16 second sweep time, meeting the 10 second short pulse reporting criteria. The aggregate ON time is calculated by multiplying the number of bins above a threshold during a particular observation period by the dwell time per bin, with the analyzer set to peak detection and max hold. The time-domain resolution is 3 msec / bin with a 24 second sweep time, meeting the 22 second long pulse reporting criteria and allowing a minimum of 10 seconds after the end of the long pulse waveform.

Should multiple RF ports be utilized for the Master and/or Slave devices (for example, for diversity or MIMO implementations), 50 ohm termination would be removed from the splitter so that connection can be established between splitter and the Master and/or Slave devices.

Conducted Method System Block Diagram



System Calibration

Connect the spectrum analyzer to the test system in place of the master device. Set the signal generator to CW mode. Adjust the amplitude of the signal generator to yield a measured level of -62 dBm on the spectrum analyzer.

Without changing any of the instrument settings, reconnect the spectrum analyzer to the Common port of the Spectrum Analyzer Combiner/Divider and connect a 50 ohm load to the Master Device port of the test system.

Measure the amplitude and calculate the difference from -62 dBm. Adjust the Reference Level Offset of the spectrum analyzer to this difference. Confirm that the signal is displayed at -62 dBm. Readjust the RBW and VBW to 3 MHz, set the span to 10 MHz, and confirm that the signal is still displayed at -62 dBm.

The spectrum analyzer displays the level of the signal generator as received at the antenna ports of the Master Device. The interference detection threshold may be varied from the calibrated value of -62 dBm and the spectrum analyzer will still indicate the level as received by the Master Device.

Set the signal generator to produce a radar waveform, trigger a burst manually and measure the level on the spectrum analyzer. Readjust the amplitude of the signal generator as required so that the peak level of the waveform is at a displayed level equal to the required or desired interference detection threshold. Separate signal generator amplitude settings are determined as required for each radar type.

Adjustment Of Displayed Traffic Level

Establish a link between the Master and Slave, adjusting the Link Step Attenuator as needed to provide a suitable received level at the Master and Slave devices. Stream the video test file to generate WLAN traffic. Confirm that the WLAN traffic level, as displayed on the spectrum analyzer, is at lower amplitude than the radar detection threshold. Confirm that the displayed traffic is from the Master Device. For Master Device testing confirm that the displayed traffic does not include Slave Device traffic. For Slave Device testing confirm that the displayed traffic does not include Master Device traffic.

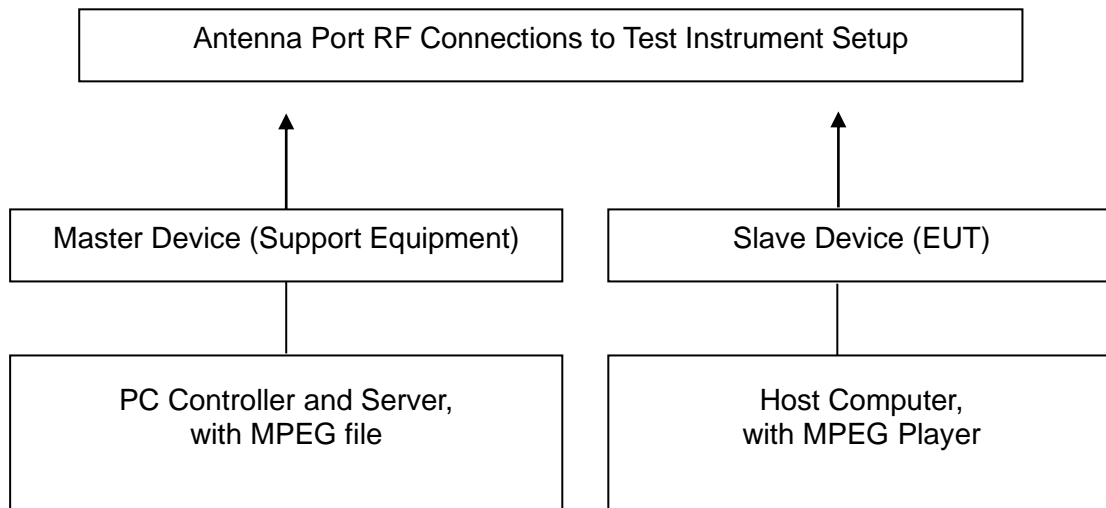
If a different setting of the Master Step Attenuator is required to meet the above conditions, perform a new System Calibration for the new Master Step Attenuator setting.

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. For example, channel loading can be estimated by setting the spectrum analyzer for zero span and approximate the Time On/ (Time On + Off Time). This can be done with any appropriate channel BW and modulation type.
- d) Unicast or Multicast protocols are preferable but other protocols may be used. The appropriate protocol used must be described in the test procedures.

5.3 TEST SETUP

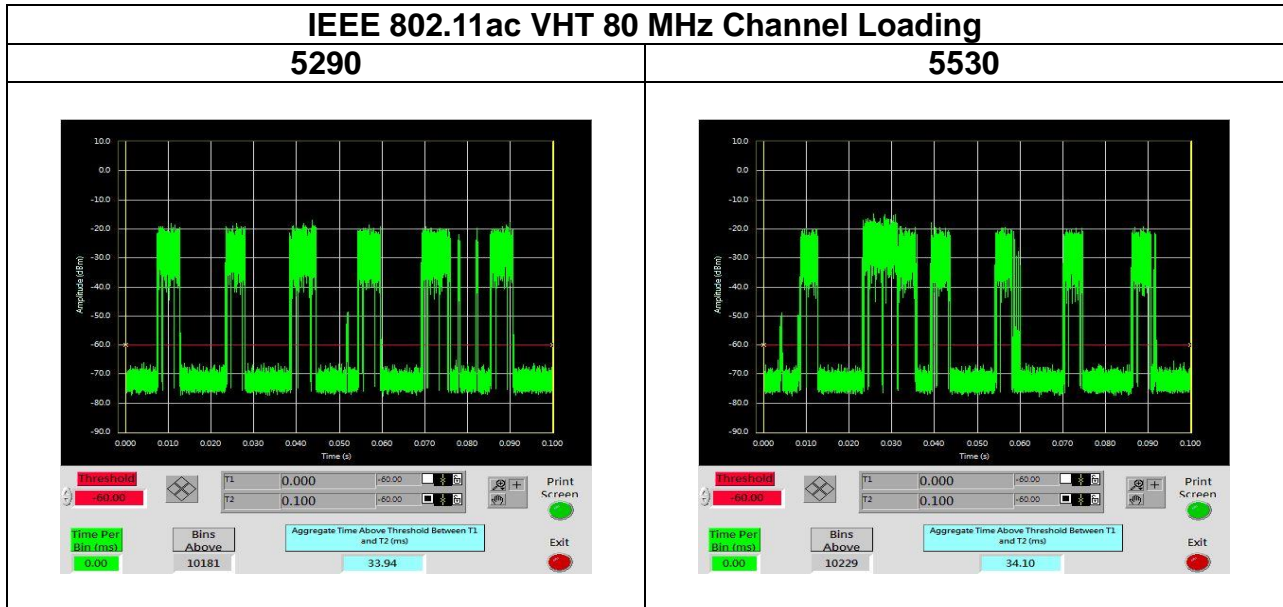


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5.4 TEST RESULT

Temperature: 21.9 ~ 24.6°C
Humidity: 46 ~ 62% RH

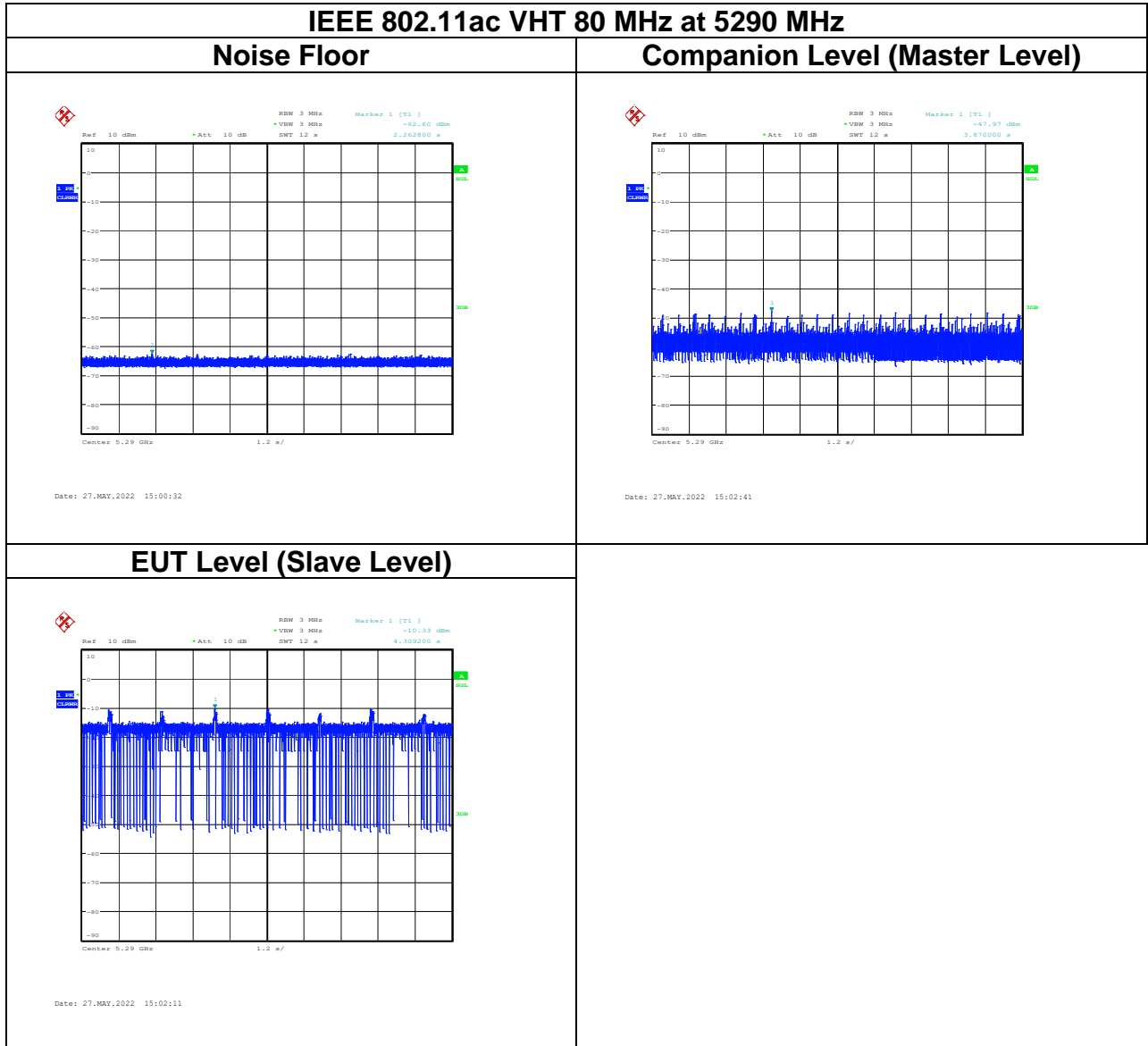
Test date: May 24 ~ June 23, 2022
Tested by: Jerry Chang



Note: During the monitoring period of 100ms, the packet flow exceeds 17%

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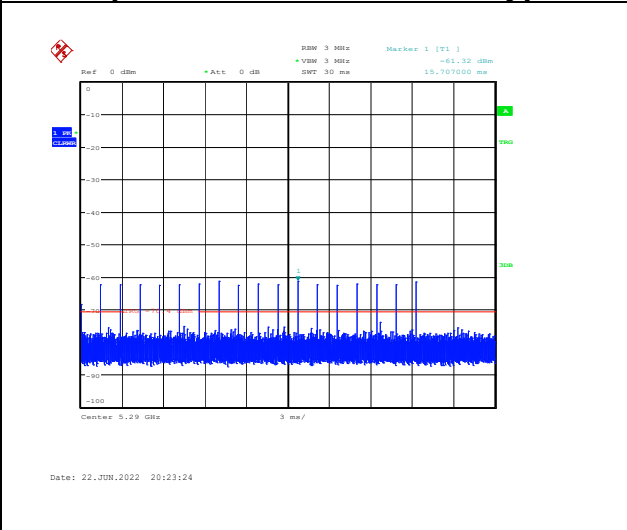
U-NII-2a



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Radar Waveforms

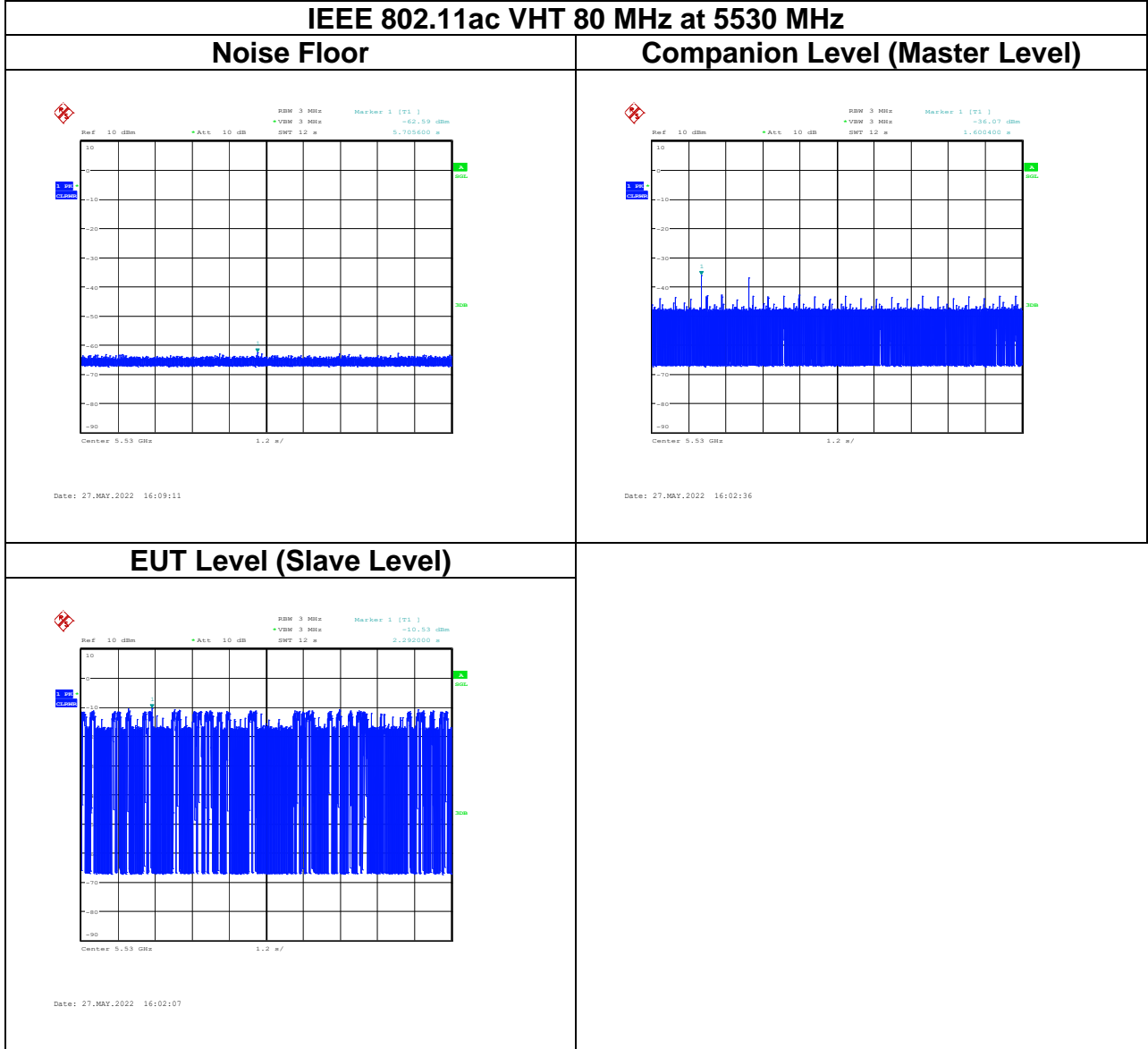
Sample of short Pluse Radar Type 0





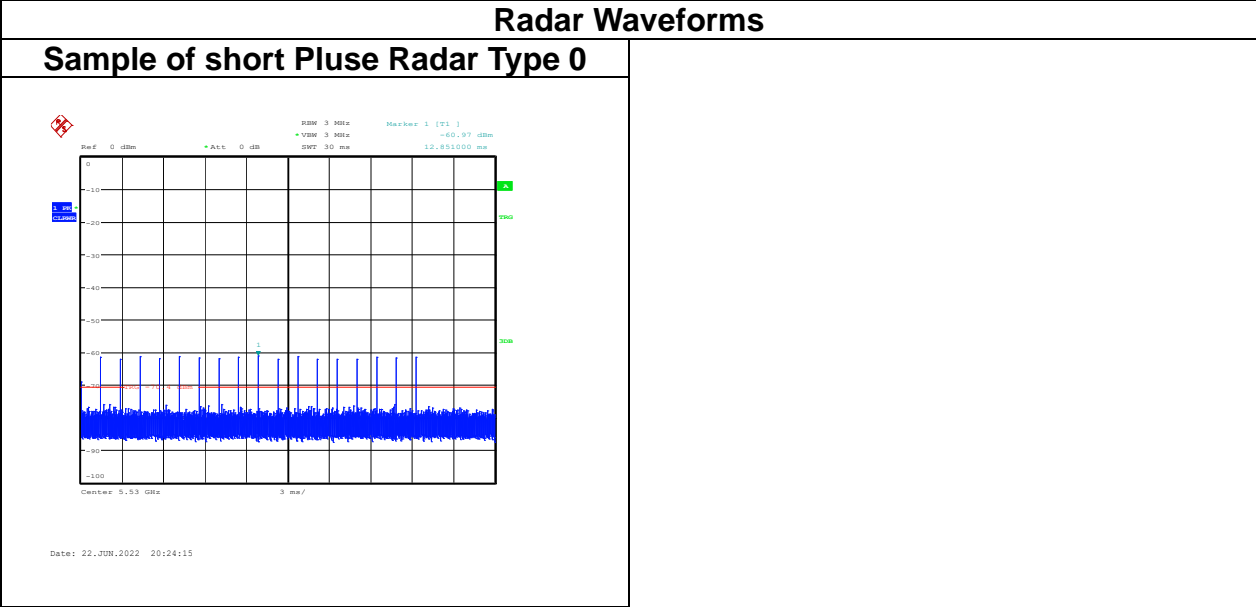
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U-NII-2c





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TEST CHANNEL AND METHOD

All tests were performed at a channel center frequency of 5290 MHz and 5530 MHz utilizing a conducted test method.

CHANNEL MOVE TIME AND CHANNEL CLOSING TRANSMISSION TIME

GENERAL REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =

(Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the aggregate time is calculated

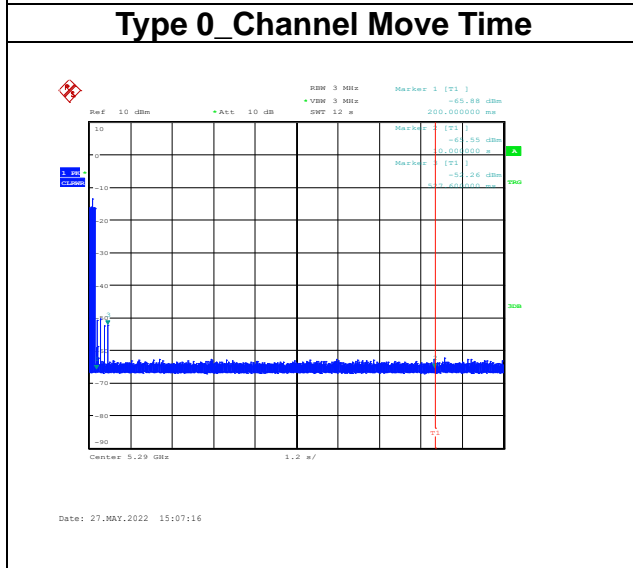
Begins at (Reference Marker + 200 msec) and

Ends no earlier than (Reference Marker + 10 sec).

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U-NII-2a

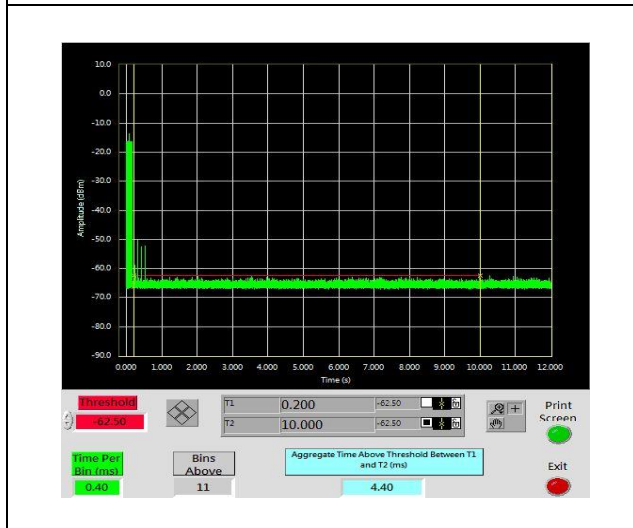
IEEE 802.11ac VHT 80 MHz at 5290



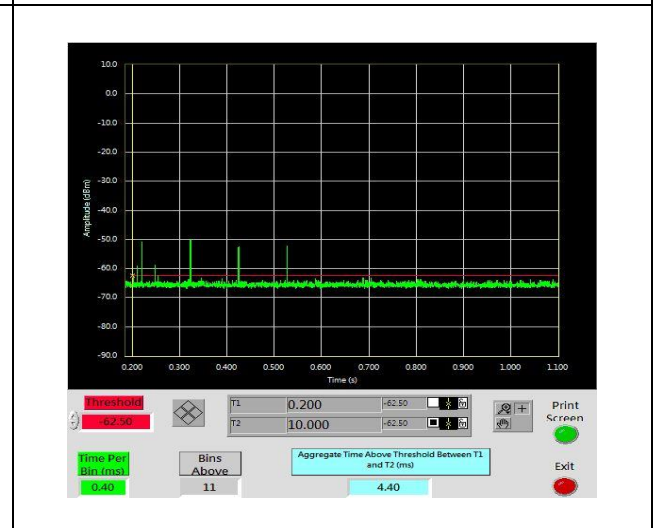
Channel Move Time (s)	Limit (s)
0.5276	10

IEEE 802.11ac VHT 80 MHz at 5290

Type 0_Channel closing transmission time



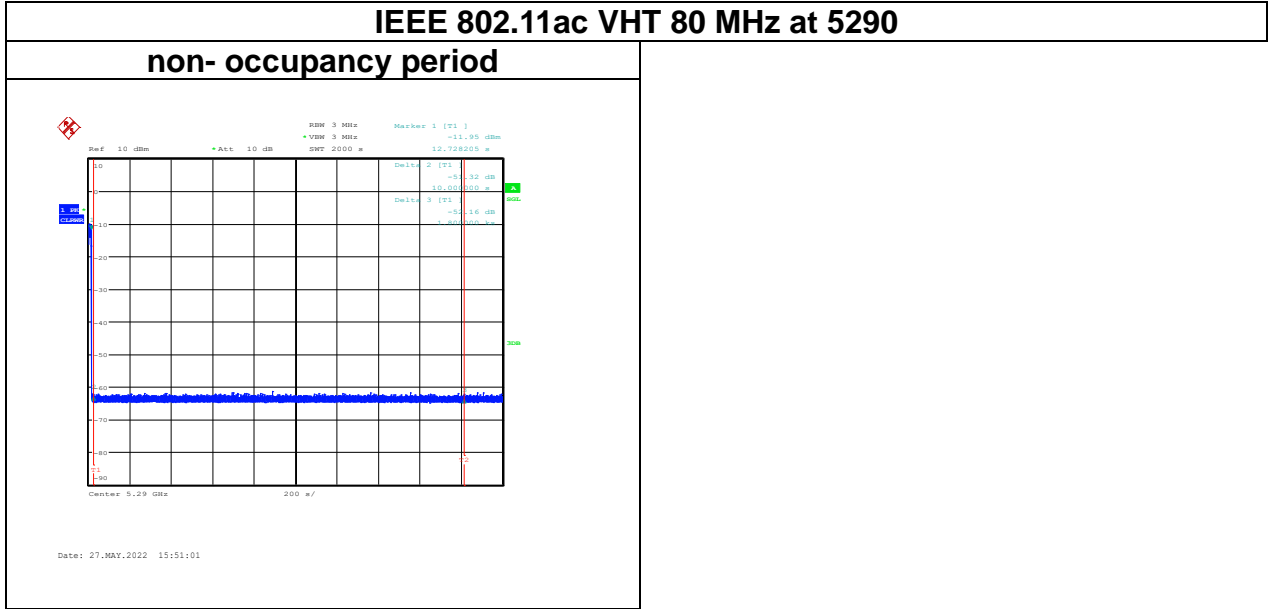
Type 0_Channel closing transmission time-caculate



Channel closing transmission time (ms)	Limit (ms)	Margin (ms)
4.40	60	-55.6



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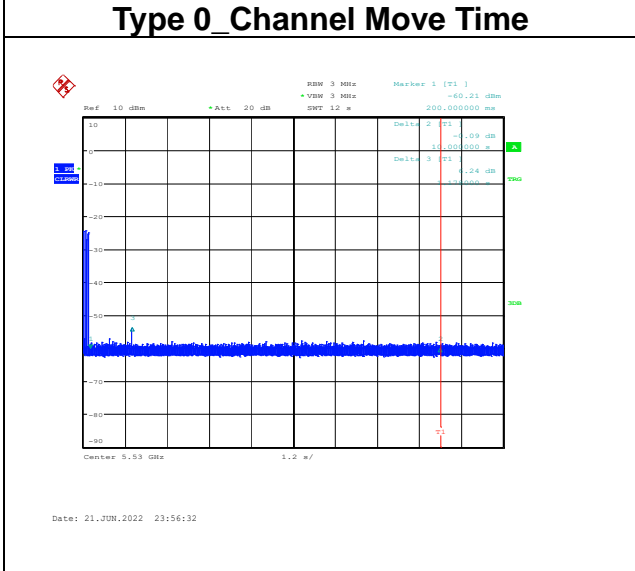




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U-NII-2c

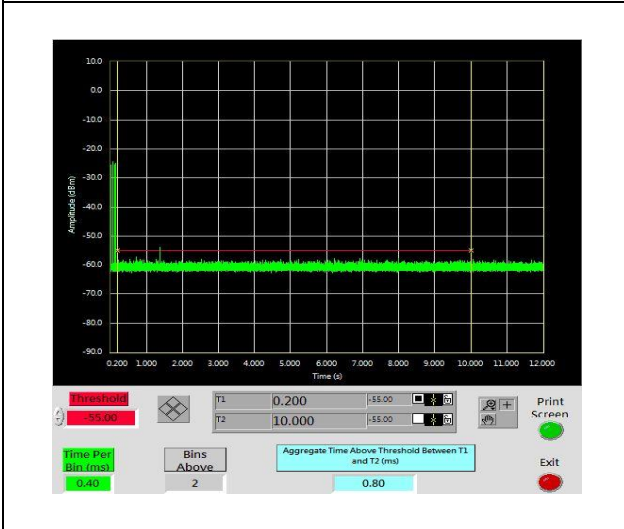
IEEE 802.11ac VHT 80 MHz at 5530



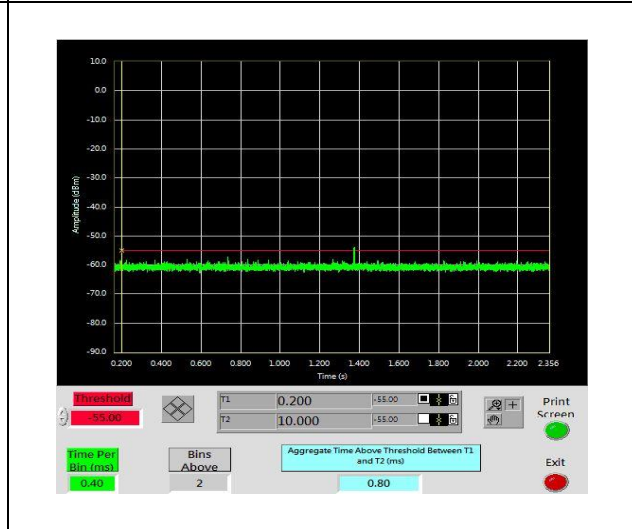
Channel Move Time (s)	Limit (s)
1.1780	10

IEEE 802.11ac VHT 80 MHz at 5530

Type 0_Channel closing transmission time

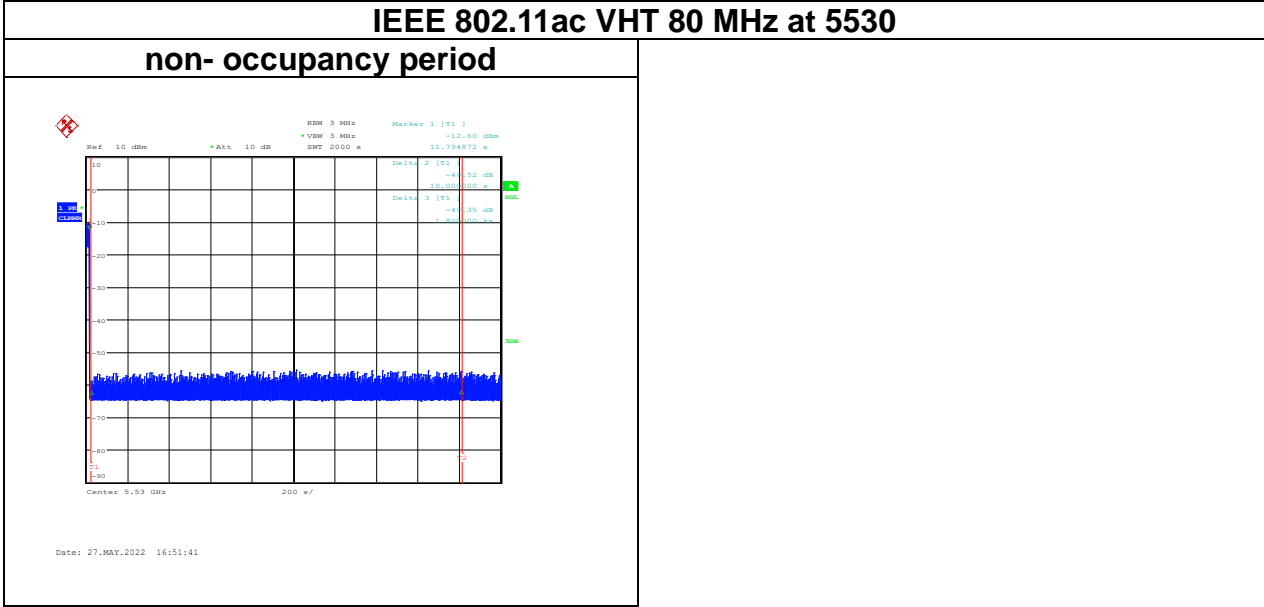


Type 0_Channel closing transmission time-caculate



Channel closing transmission time (ms)	Limit (ms)	Margin (ms)
0.80	60	-59.2

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6. DYNAMIC FREQUENCY SELECTION FOR MASTER

TEST PROCEDURE

According to FCC 47 CFR Part 15 Subpart E (Section 15.407), KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02, KDB 905462 D04 Operational Modes for DFS Testing New Rules v01 EUT is considered as a master device.

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

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

Table 2: Applicability of DFS requirements during normal operation

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

Additional requirements for devices with multiple bandwidth modes	Operational Mode	
	Master Devise 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.

6.1 DFS DETECTION THRESHOLDS

Table 3 below provides the DFS Detection Thresholds for Master Devices as well as Client Devices incorporating In-Service Monitoring.

Table 3: DFS Detection Thresholds for Master Devices

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

Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna.
Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.
Note 3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.

6.2 DFS RESPONSE REQUIREMENT

Table 4 provides the response requirements for Master and Client Devices incorporating DFS.

Table 4: 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 periods. See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 100% of the 99% 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 Channel changes (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 is used and for each frequency step the minimum percentage of detection is 90%. Measurements are performed with no data traffic.

6.3 RADAR TEST WAVEFORMS

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

6.3.1 Short Pulse Radar Test Waveforms

Radar Type 0 was used in the evaluation of the Client device for the purpose of measuring the Channel Move Time and the Channel Closing Transmission Time.

Table 5 – 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	
1	1	Test A	$\text{Roundup}\left\{\left(\frac{1}{360}\right) \cdot \left(\frac{19 \cdot 10^6}{PRI_{\mu\text{sec}}}\right)\right\}$	60%	30
		Test B			
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.					

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

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

If more than 30 waveforms are used for Short Pulse Radar Type 1, then each additional waveform is generated with Test B and must also be unique and not repeated from the previous waveforms in Tests A or B.

The aggregate is the average of the percentage of successful detections of short pulse radar types 1-4.

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Table 5a - Pulse Repetition Intervals Values for Test A

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

6.3.2 Long Pulse Radar Test Waveform

Table 6 – Long Pulse Radar Test Waveforms

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

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

Each waveform is defined as follows:

Note: The center frequency for each of the 30 trials of the Bin 5 radar shall be randomly selected within 80% of the Occupied Bandwidth.

- (1) The transmission period for the Long Pulse Radar test signal is 12 seconds.
- (2) There are a total of 8 to 20 Bursts in the 12 second period, with the number of Bursts being randomly chosen. This number is Burst_Count.
- (3) Each Burst consists of 1 to 3 pulses, with the number of pulses being randomly chosen. Each Burst within the 12 second sequence may have a different number of pulses.
- (4) The pulse width is between 50 and 100 microseconds, with the pulse width being randomly chosen. Each pulse within a Burst will have the same pulse width. Pulses in different Bursts may have different pulse widths.
- (5) Each pulse has a linear frequency modulated chirp between 5 and 20 MHz, with the chirp width being randomly chosen. Each pulse within a **transmission period** will have the same chirp width. The chirp is centered on the pulse. For example, with a radar frequency of 5300 MHz and a 20 MHz chirped signal, the chirp starts at 5290 MHz and ends at 5310 MHz
- (6) If more than one pulse is present in a Burst, the time between the pulses will be between 1000 and 2000 microseconds, with the time being randomly chosen. If three pulses are present in a Burst, the time between the first and second pulses is chosen independently of the time between the second and third pulses.
- (7) The 12 second transmission period is divided into even intervals. The number of intervals is equal to Burst_Count. Each interval is of length $(12,000,000 / \text{Burst_Count})$ microseconds. Each interval contains one Burst. The start time for the Burst, relative to the beginning of the interval, is between 1 and $[(12,000,000 / \text{Burst_Count}) - (\text{Total Burst Length}) + (\text{One Random PRI Interval})]$ microseconds, with the start time being randomly chosen. The step interval for the start time is 1 microsecond. The start time for each Burst is chosen independently.

A representative example of a Long Pulse radar test waveform:

- (1) The total test signal length is 12 seconds.
- (2) 8 Bursts are randomly generated for the Burst_Count.
- (3) Burst 1 has 2 randomly generated pulses.
- (4) The pulse width (for both pulses) is randomly selected to be 75 microseconds.
- (5) The PRI is randomly selected to be at 1213 microseconds.
- (6) Bursts 2 through 8 are generated using steps 3 – 5.
- (7) Each Burst is contained in even intervals of 1,500,000 microseconds. The starting location for Pulse 1, Burst 1 is randomly generated (1 to 1,500,000 minus the total Burst 1 length + 1 random PRI interval) at the 325,001 microsecond step. Bursts 2 through 8 randomly fall in successive 1,500,000 microsecond intervals (i.e. Burst 2 falls in the 1,500,001 – 3,000,000 microsecond range).

6.3.3 Frequency Hopping Radar Test Waveform

Table 7 – Frequency Hopping Radar Test Signal

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

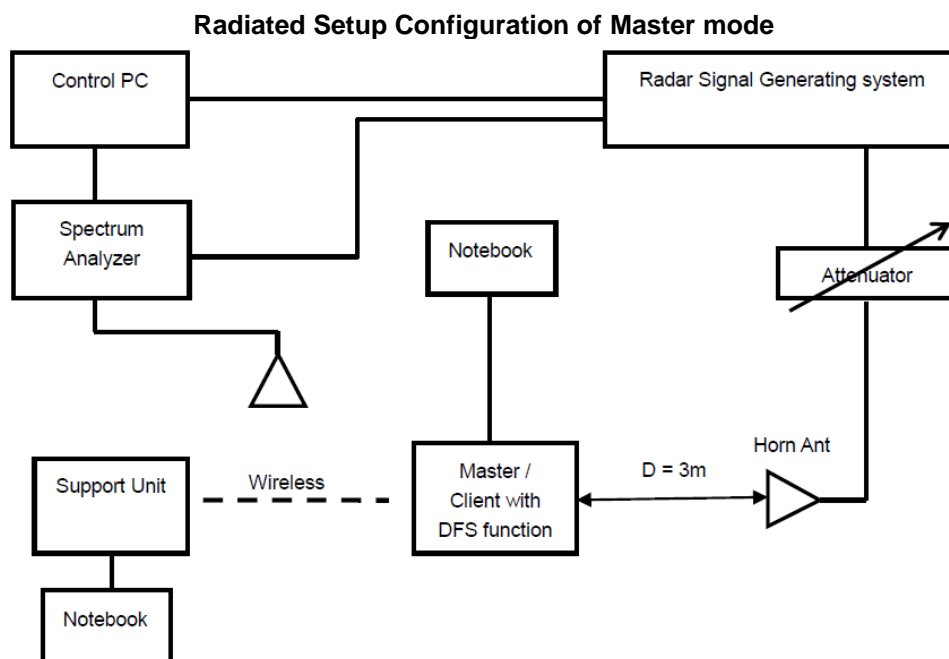
For the Frequency Hopping Radar Type, the same Burst parameters are used for each waveform. The hopping sequence is different for each waveform and a 100-length segment is selected from the hopping sequence defined by the following algorithm:

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

6.4 CALIBRATION SETUP AND DFS TEST SETUP CONFIGURATION

6.4.1 Radiated Test Setup Configuration

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



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:

<input type="checkbox"/>	(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.
<input type="checkbox"/>	(b) Software to ping the client is permitted to simulate data transfer but must have random ping intervals.
<input checked="" type="checkbox"/>	(c) Timing plots are required with calculations demonstrating a minimum channel loading of approximately 17% or greater. For example, channel loading can be estimated by setting the spectrum analyzer for zero span and approximate the Time On/ (Time On + Off Time). This can be done with any appropriate channel BW and modulation type.
<input type="checkbox"/>	(d) Unicast or Multicast protocols are preferable but other protocols may be used. The appropriate protocol used must be described in the test procedures.

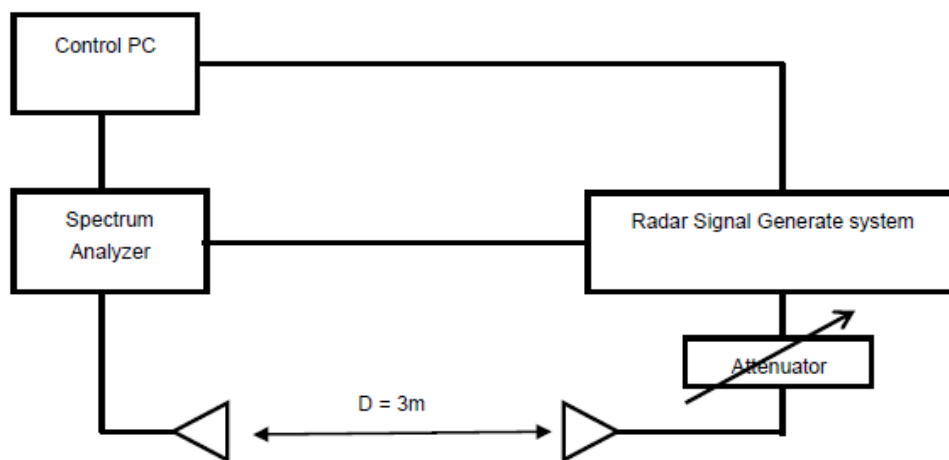
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6.4.2 Calibration of Radar Waveform

The radar signal was the same as transmitted channels, and injected into the antenna of AP (master) or Client Device with Radar Detection, measured the channel closing transmission time and channel move time.

Radiated setup configuration of Calibration of DFS Detection Threshold Level

The calibrated conducted detection threshold level is set to -64dBm. The tested level is lower than required level hence it provides margin to the limit.



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6.4.3 Radar Waveform Calibration Result

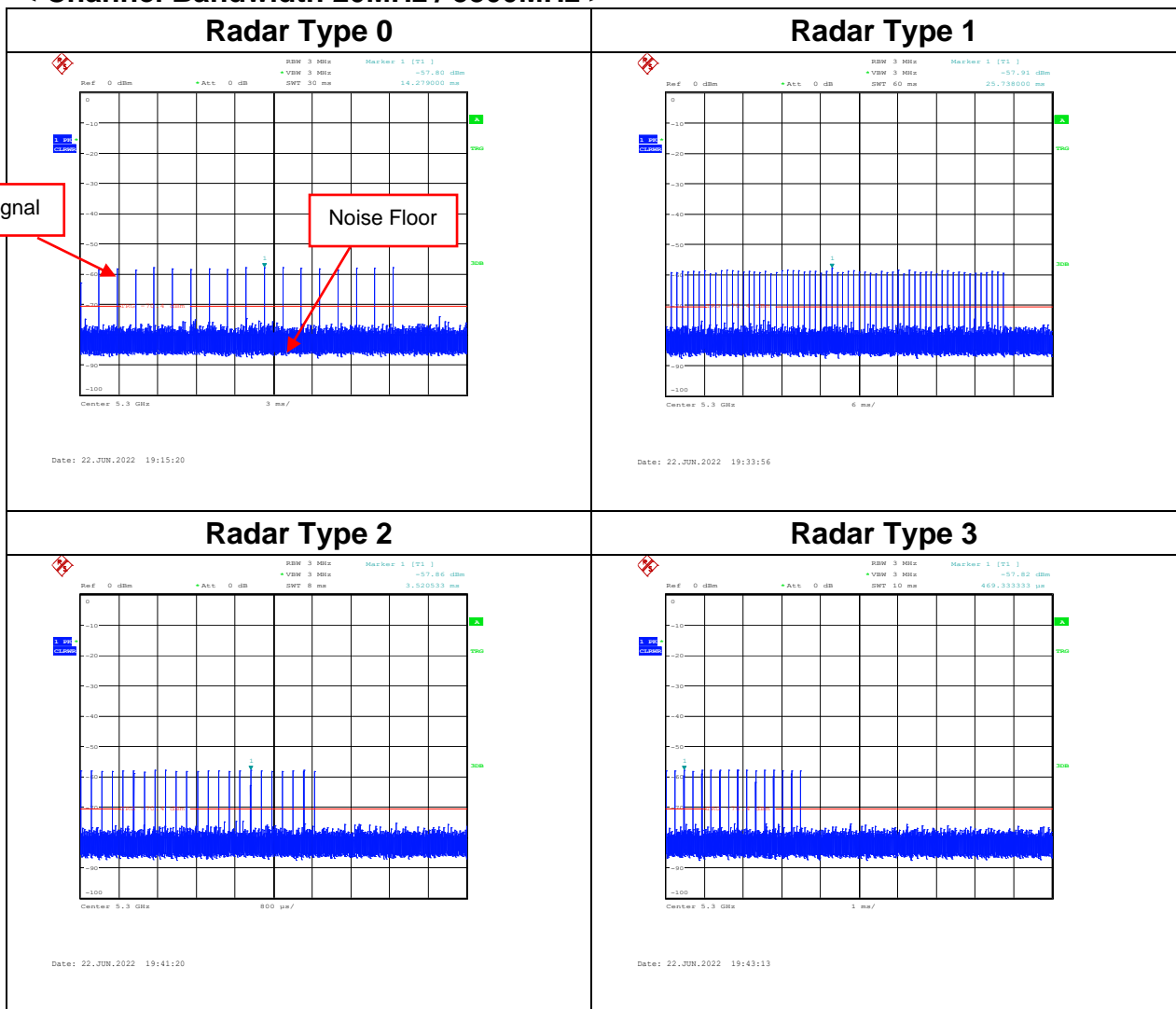
Temperature: 21.9 ~ 24.6°C

Test date: May 24 ~ June 23, 2022

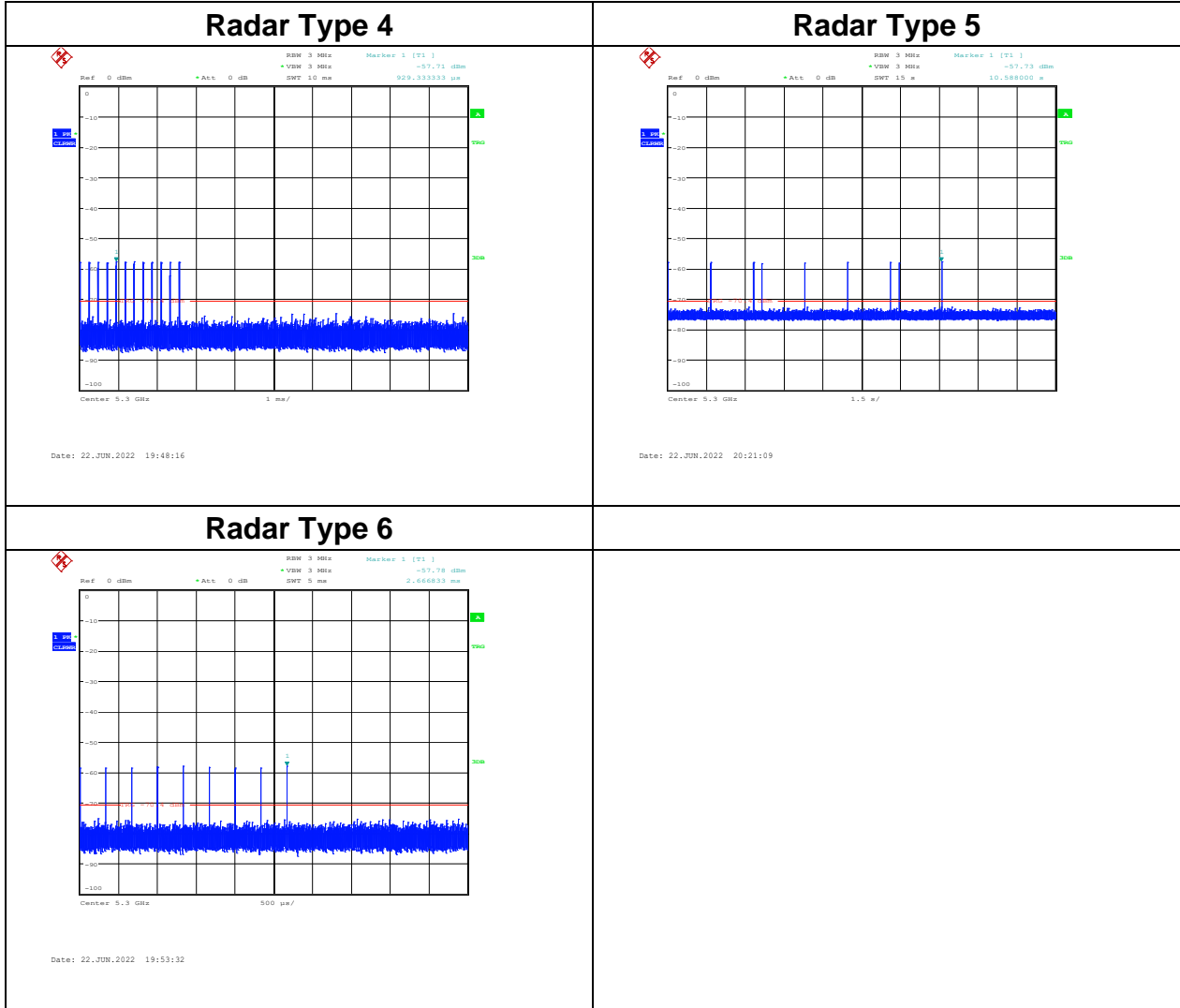
Humidity: 46 ~ 62% RH

Tested by: Jerry Chang

< Channel Bandwidth 20MHz / 5300MHz >

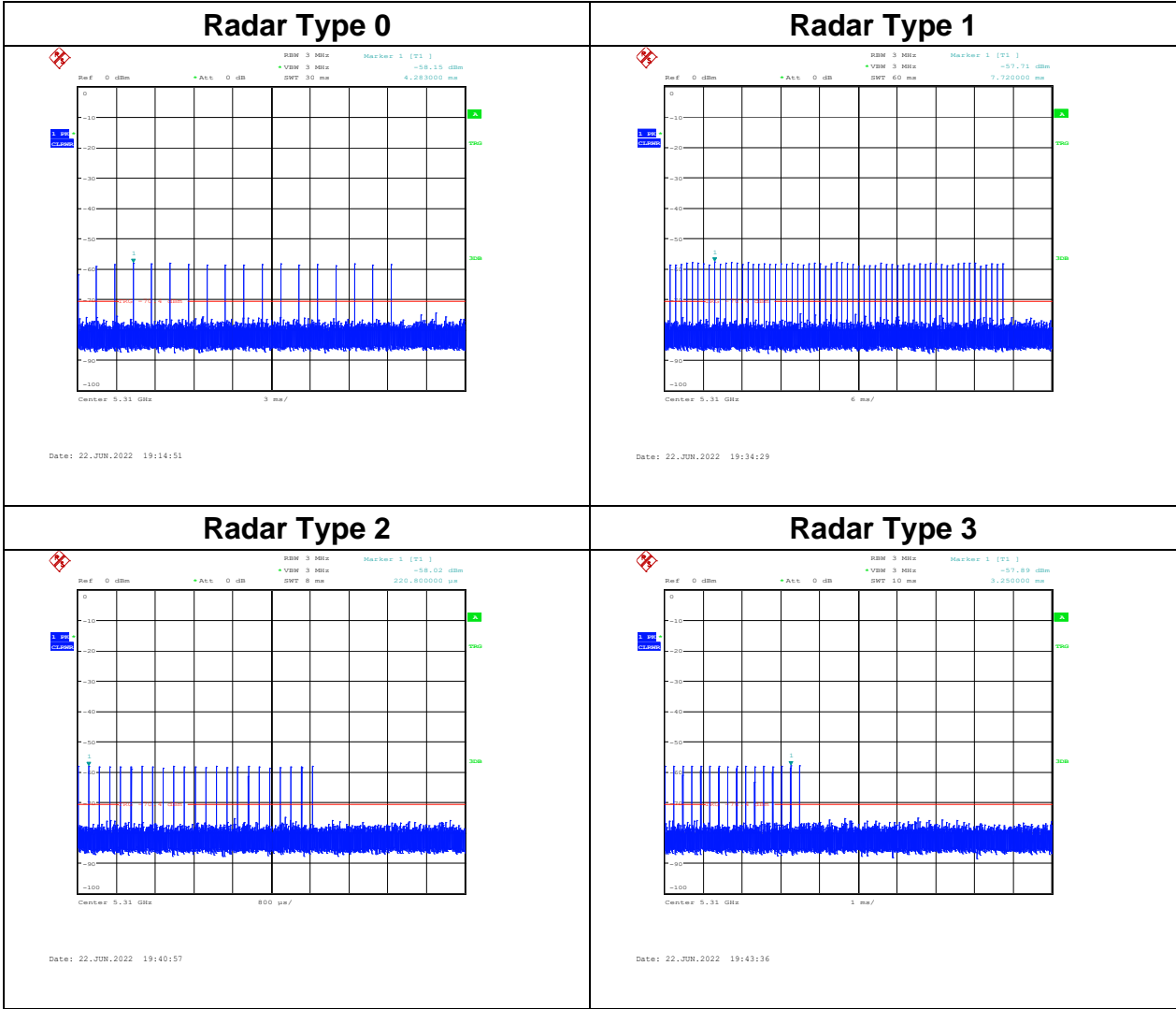


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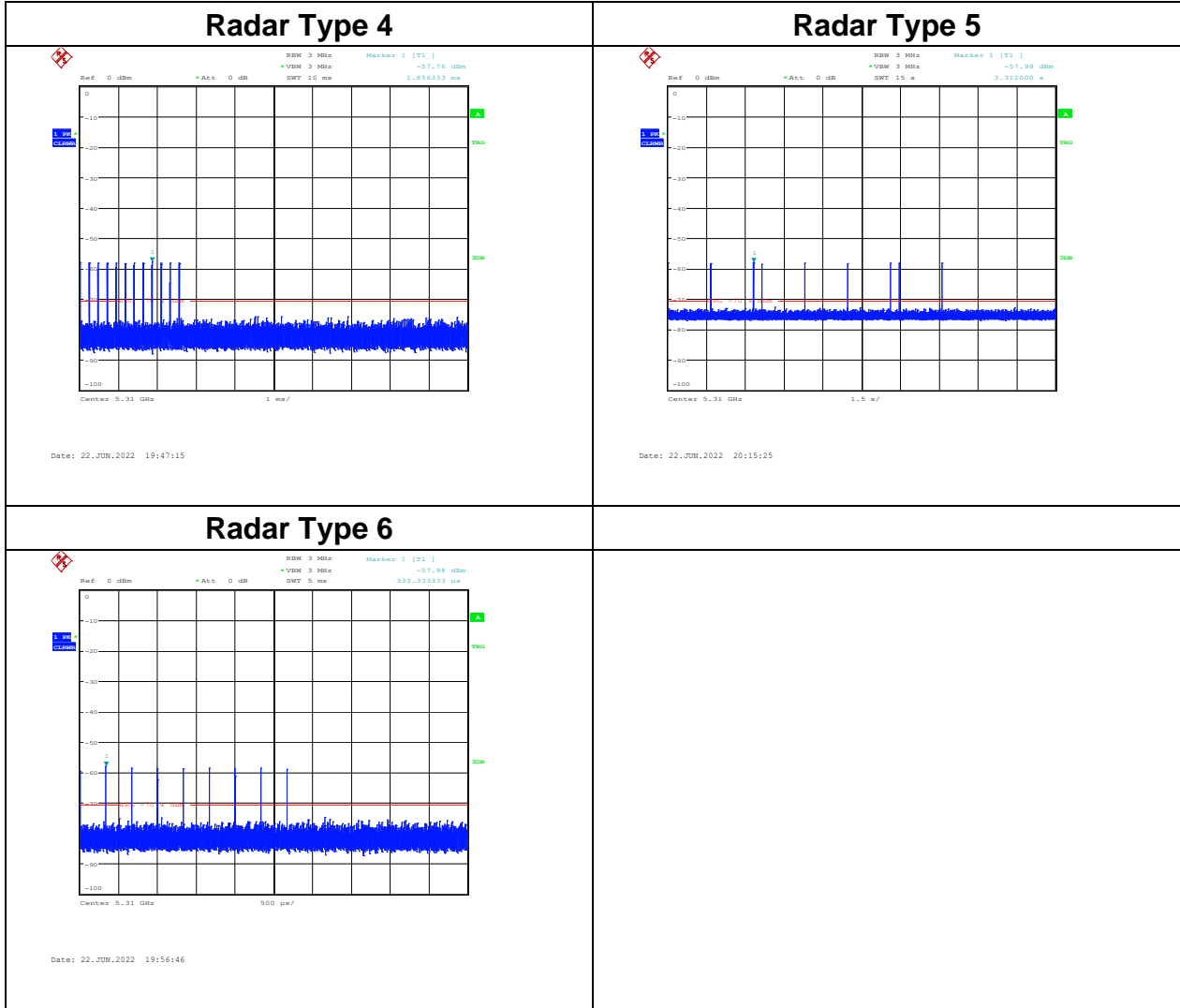


Report No.: TMWK2201000111KR

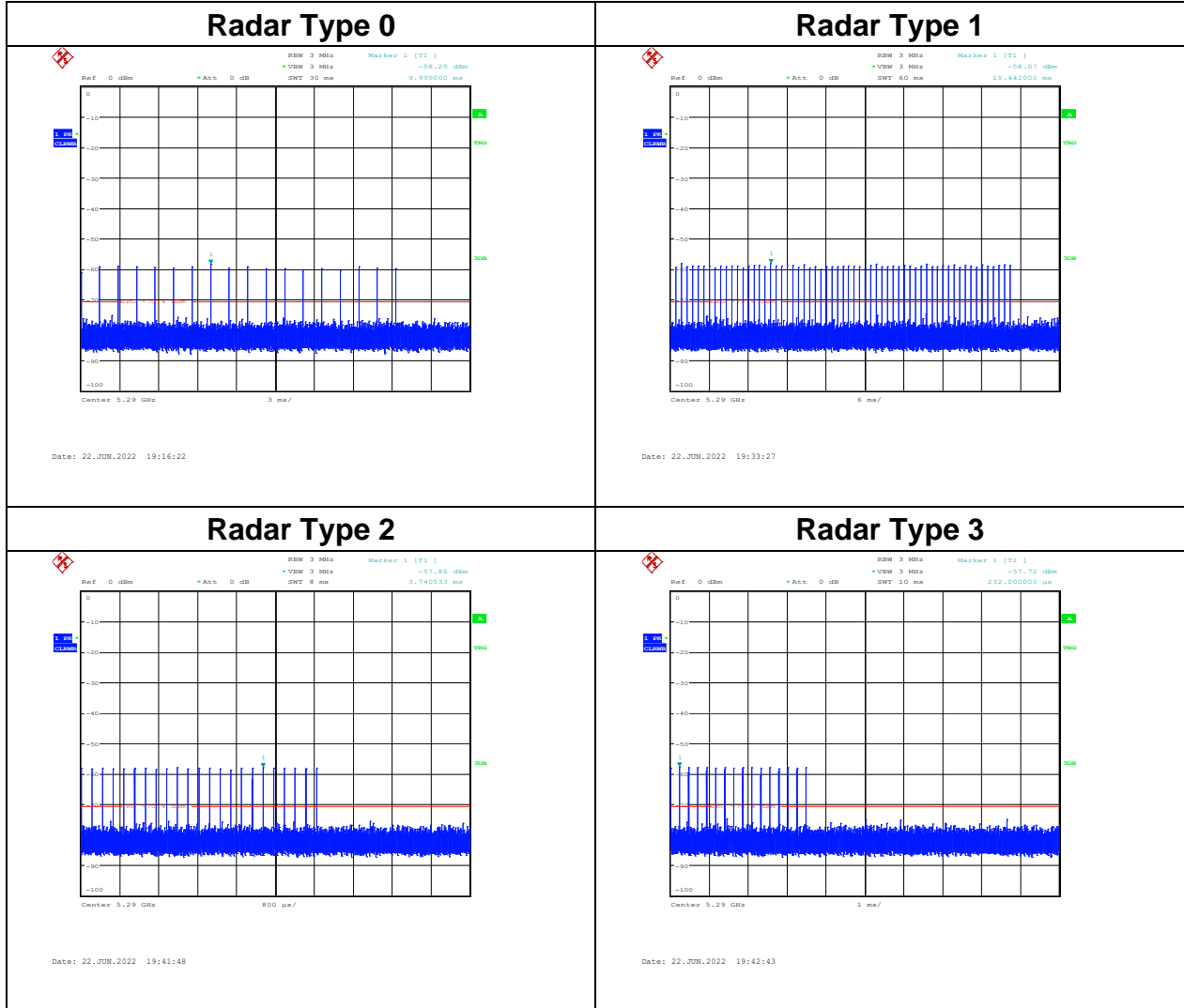
< Channel Bandwidth 40MHz / 5310MHz >



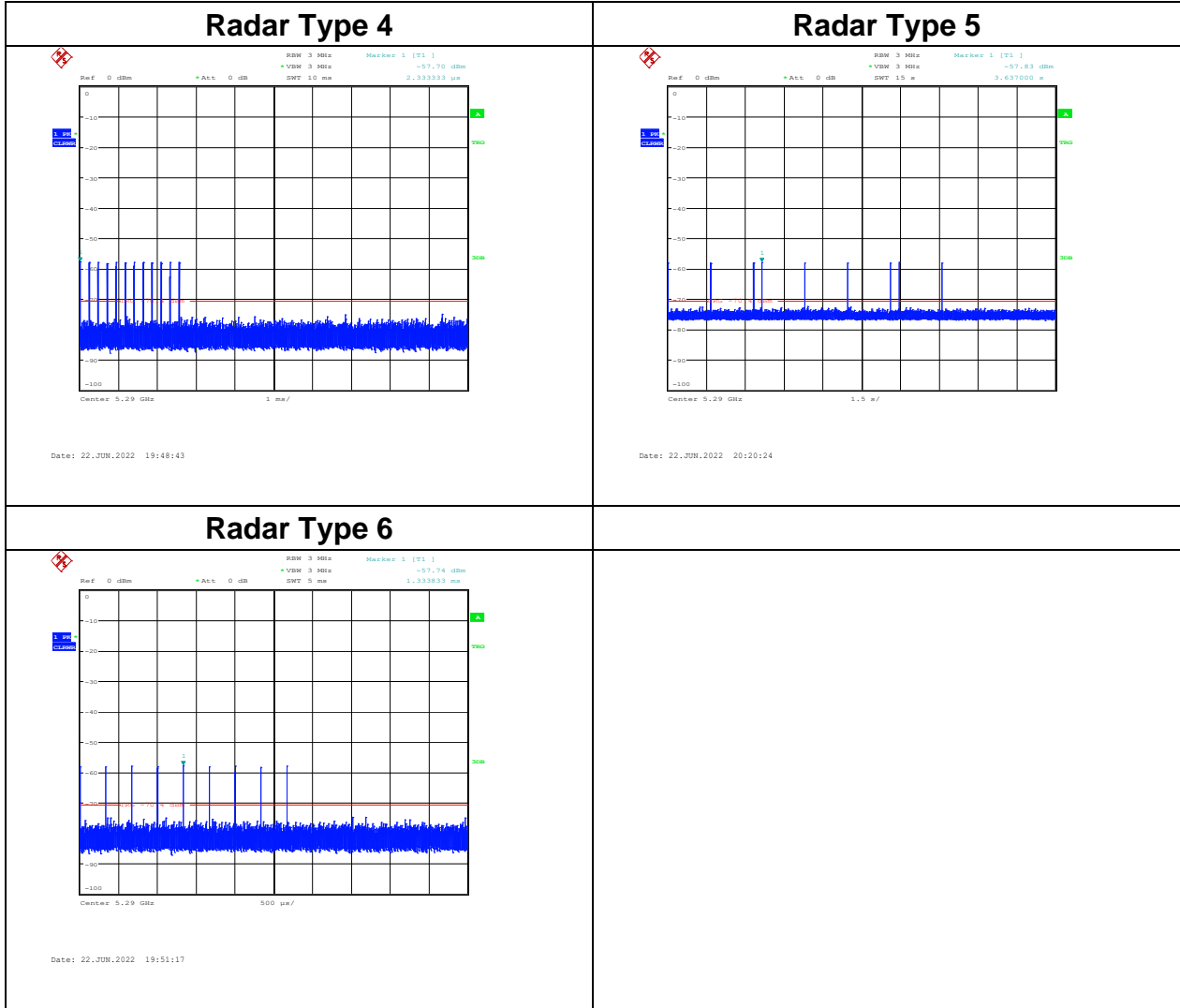
Report No.: TMWK2201000111KR



< Channel Bandwidth 80MHz / 5290MHz >

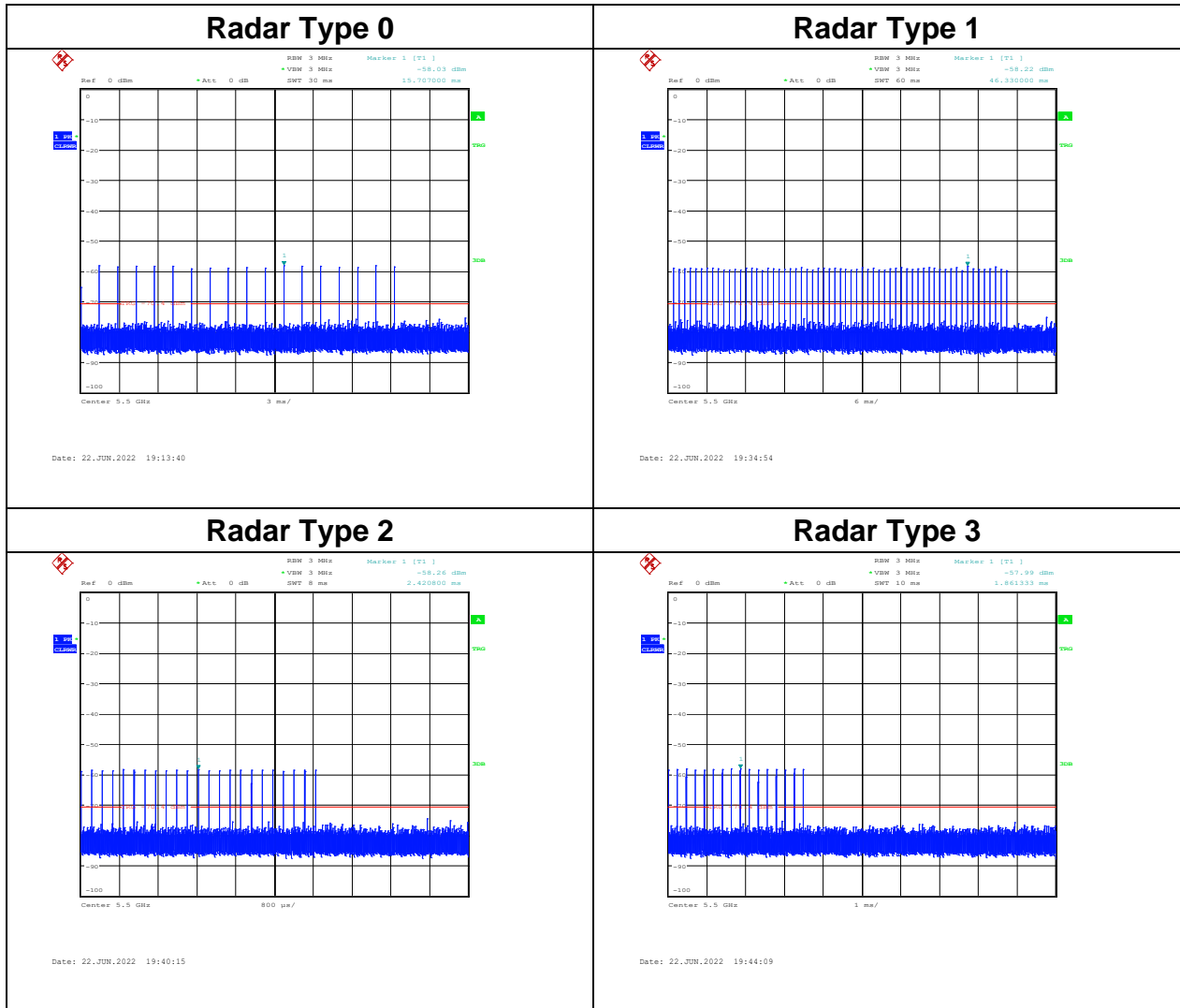


Report No.: TMWK2201000111KR

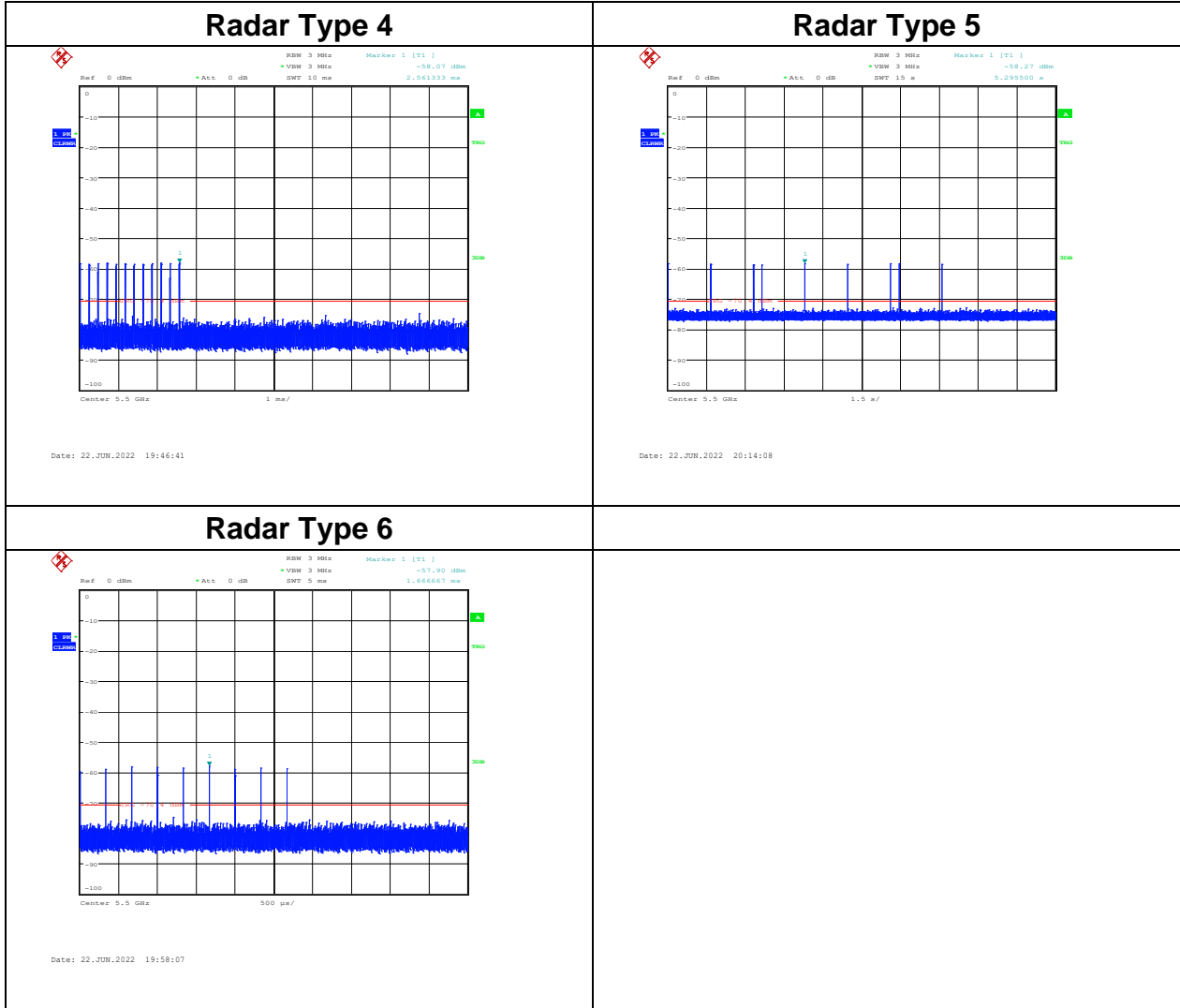


Report No.: TMWK2201000111KR

< Channel Bandwidth 20MHz / 5500MHz >

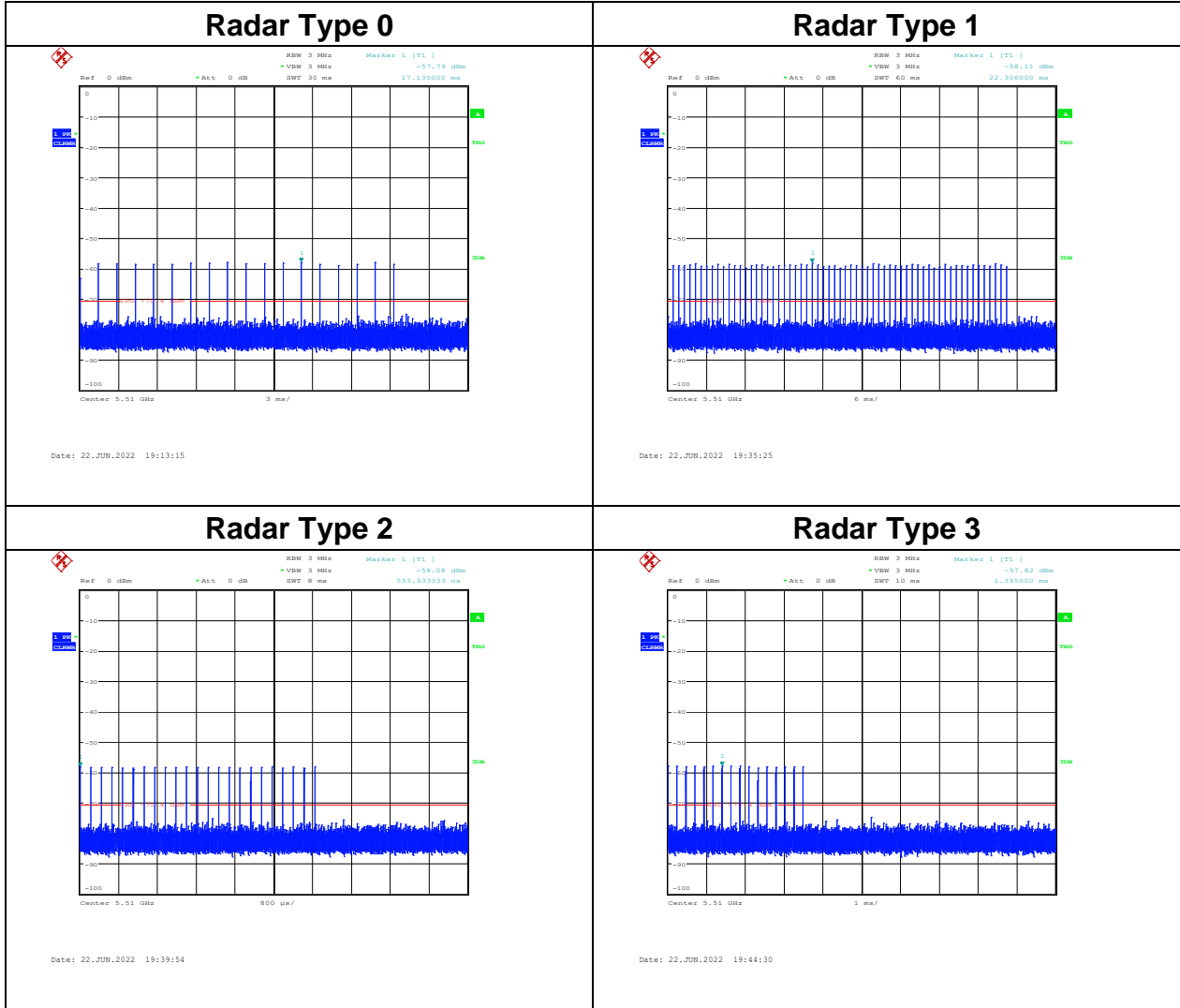


Report No.: TMWK2201000111KR

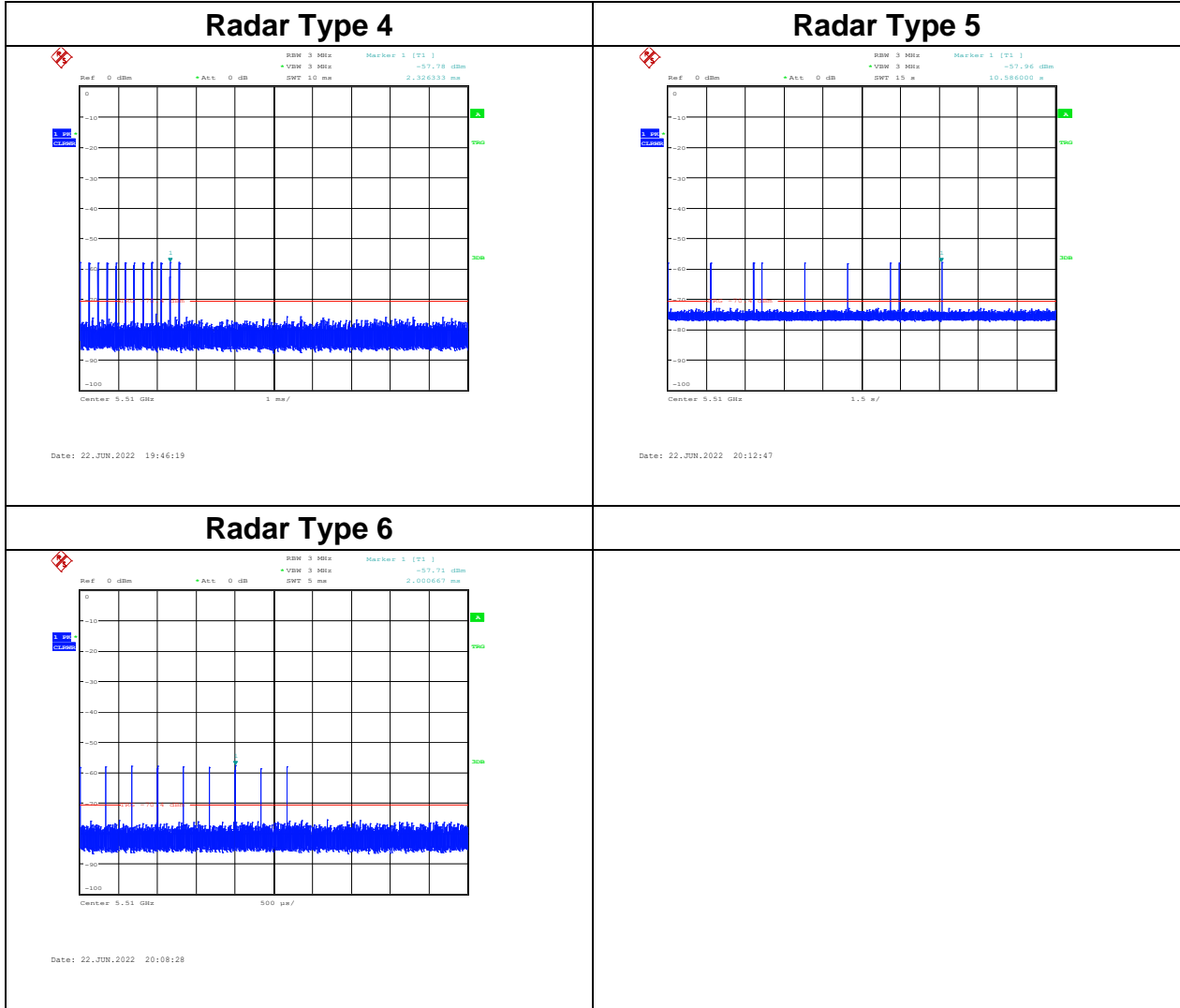


Report No.: TMWK2201000111KR

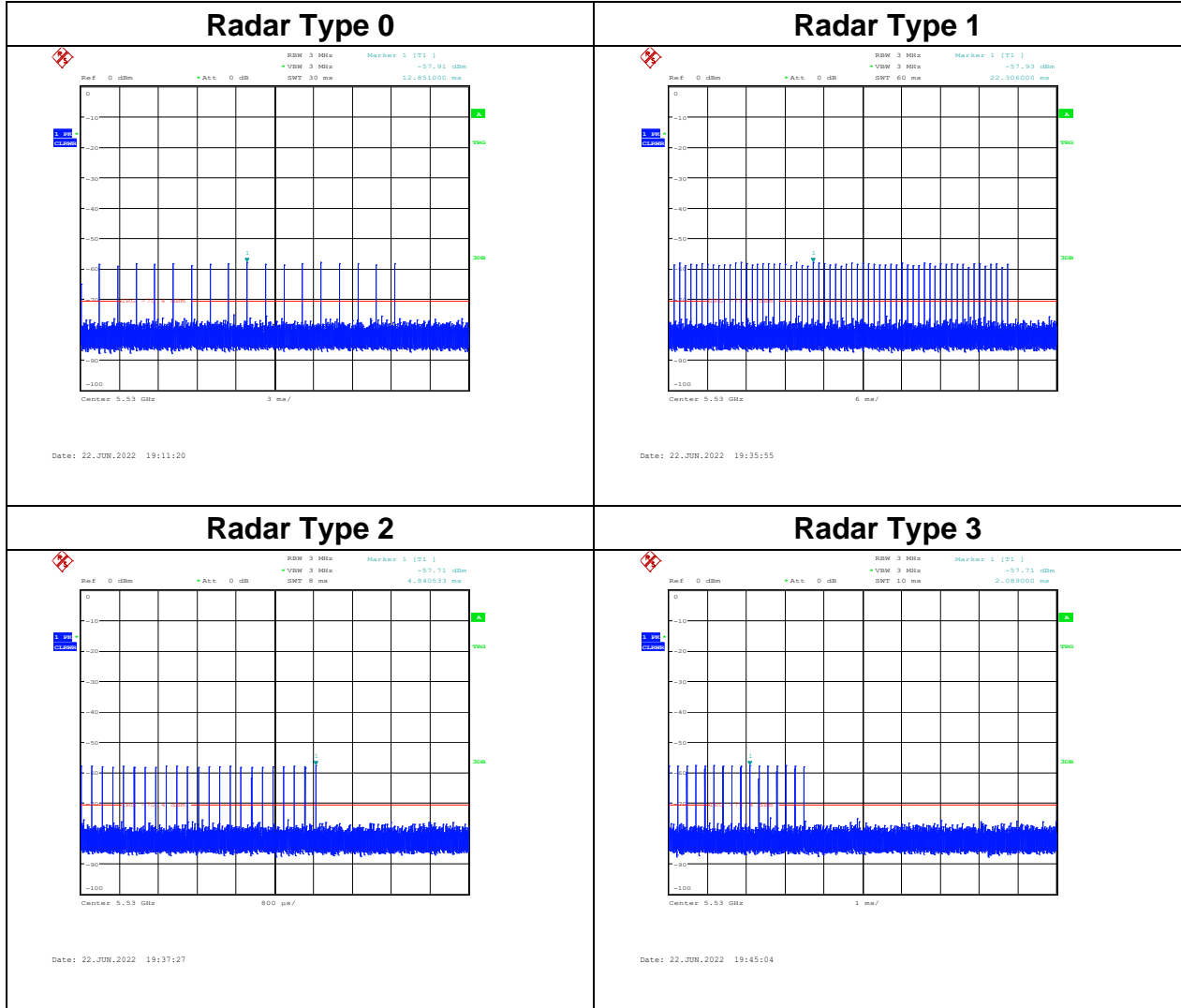
< Channel Bandwidth 40MHz / 5510MHz >



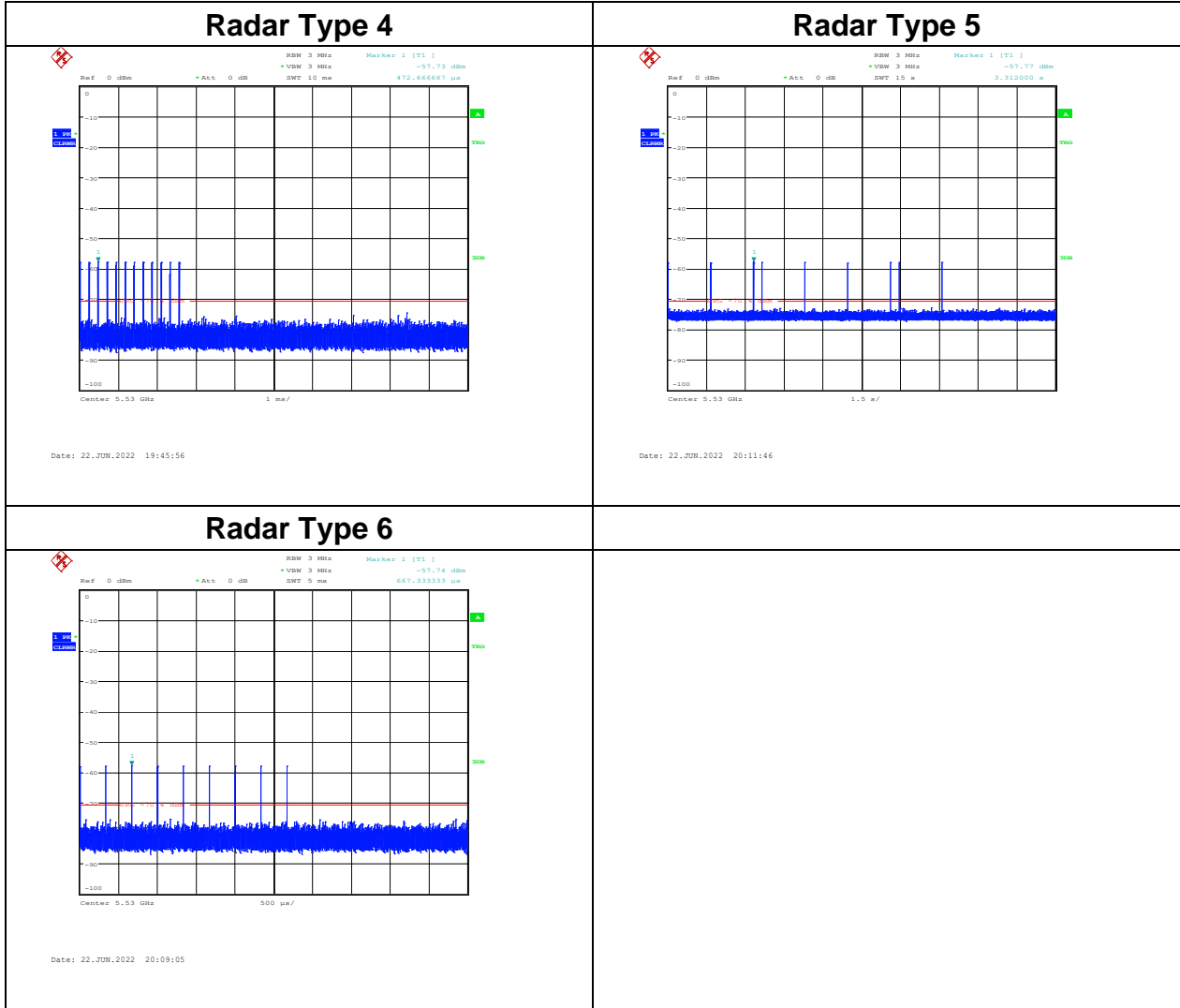
Report No.: TMWK2201000111KR



< Channel Bandwidth 80MHz / 5530MHz >



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6.5 U-NII DETECTION BANDWIDTH (7.8.1)

6.5.1 Limit of U-NII Detection Bandwidth

The U-NII Detection Bandwidth shall contain minimum 100% of the 99% power bandwidth. During the U-NII Detection Bandwidth detection test, radar type 0 is used and for each frequency step the minimum percentage of detection is 90%. Measurements are performed with no data traffic.

6.5.2 Test Procedure

1. Adjust the equipment to produce a single burst of the Short Pulse Radar Type 0 at the center frequency of the EUT Operating Channel at the specified DFS Detection Threshold level.
2. Set the EUT up as a standalone device (no associated Client or Master, as appropriate) and no traffic. Frame based systems will be set to a talk/listen ratio reflecting the worst case (maximum) that is user configurable during this test.
3. Generate a single radar burst, and note the response of the EUT. Repeat for a minimum of 10 trials. The EUT must detect the Radar Waveform using the specified U-NII Detection Bandwidth criterion.
4. Starting at the center frequency of the EUT operating Channel, increase the radar frequency in 5 MHz steps, repeating the above test sequence, until the detection rate falls below the U-NII Detection Bandwidth criterion specified in report Table 4. Repeat this measurement in 1MHz steps at frequencies 5 MHz below where the detection rate begins to fall. Record the highest frequency (denote as F_H) at which detection is greater than or equal to the U-NII Detection Bandwidth criterion. Recording the detection rate at frequencies above F_H is not required to demonstrate compliance.
5. Starting at the center frequency of the EUT operating Channel, decrease the radar frequency in 5 MHz steps, repeating the above test sequence, until the detection rate falls below the U-NII Detection Bandwidth criterion specified in report Table 4. Repeat this measurement in 1MHz steps at frequencies 5 MHz above where the detection rate begins to fall. Record the lowest frequency (denote as F_L) at which detection is greater than or equal to the U-NII Detection Bandwidth criterion. Recording the detection rate at frequencies below F_L is not required to demonstrate compliance.
6. The U-NII Detection Bandwidth is calculated as follows:
U-NII Detection Bandwidth = $F_H - F_L$

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6.5.3 Result of U-NII Detection Bandwidth

Channel Bandwidth 20MHz / 5300 MHz

CH60_5300MHz											Radar type 0	
Frequency (MHz)	Trial Number (Detection = Y, No Detection = N)										Detection Rate (%)	F _H /F _L
	1	2	3	4	5	6	7	8	9	10		
5290	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F _L
5295	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5300	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5305	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5310	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F _H
Detection Bandwidth = F _H - F _L = 5310 - 5290 = 20MHz												
EUT 99% Bandwidth = 16.44 MHz												

Channel Bandwidth 20MHz / 5500 MHz

CH100_5500MHz											Radar type 0	
Frequency (MHz)	Trial Number (Detection = Y, No Detection = N)										Detection Rate (%)	F _H /F _L
	1	2	3	4	5	6	7	8	9	10		
5490	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F _L
5495	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5500	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5505	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5510	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F _H
Detection Bandwidth = F _H - F _L = 5510 - 5490 = 20MHz												
EUT 99% Bandwidth = 16.45 MHz												

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Channel Bandwidth 40MHz / 5310 MHz

CH102_5310MHz											Radar type 0	
Frequency (MHz)	Trial Number (Detection = Y, No Detection = N)										Detection Rate (%)	F _H /F _L
	1	2	3	4	5	6	7	8	9	10		
5290	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F _L
5295	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5300	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5305	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5310	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5315	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5320	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5325	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5330	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F _H
Detection Bandwidth = F _H - F _L = 5330 - 5290 = 40MHz												
EUT 99% Bandwidth = 35.788 MHz												

Channel Bandwidth 40MHz / 5510 MHz

CH102_5510MHz											Radar type 0	
Frequency (MHz)	Trial Number (Detection = Y, No Detection = N)										Detection Rate (%)	F _H /F _L
	1	2	3	4	5	6	7	8	9	10		
5490	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F _L
5495	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5500	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5505	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5510	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5515	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5520	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5525	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5530	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F _H
Detection Bandwidth = F _H - F _L = 5530 - 5490 = 40MHz												
EUT 99% Bandwidth = 35.826 MHz												

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Channel Bandwidth 80MHz / 5290 MHz

CH106_5290MHz											Radar type 0	
Frequency (MHz)	Trial Number (Detection = Y, No Detection = N)										Detection Rate (%)	F _H /F _L
	1	2	3	4	5	6	7	8	9	10		
5250	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F _L
5255	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5260	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5265	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5270	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5275	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5280	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5285	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5290	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5295	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5300	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5305	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5310	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5315	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5320	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5325	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5330	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F _H
Detection Bandwidth = F _H - F _L = 5330 - 5250 = 80MHz												
EUT 99% Bandwidth = 75.054MHz												

Channel Bandwidth 80MHz / 5530 MHz

CH106_5530MHz											Radar type 0	
Frequency (MHz)	Trial Number (Detection = Y, No Detection = N)										Detection Rate (%)	F _H /F _L
	1	2	3	4	5	6	7	8	9	10		
5490	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F _L
5495	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5500	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5505	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5510	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5515	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5520	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5525	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5530	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5535	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5540	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5545	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5550	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5555	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5560	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5565	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5570	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F _H
Detection Bandwidth = F _H - F _L = 5570 - 5490 = 80MHz												
EUT 99% Bandwidth = 75.040MHz												

6.6 CHANNEL AVAILABILITY CHECK (7.8.2)

6.6.1 Limit of Channel Availability Check

The Initial Channel Availability Check Time tests that the EUT does not emit beacon, control, or data signals on the test Channel until the power-up sequence has been completed and the U-NII device checks for Radar Waveforms for **one minute** on the test Channel.

6.6.2 Test Procedure

6.6.2.1 Initial Channel Availability Check Time

This test does not use any radar waveforms and only needs to be performed one time.

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

6.6.2.2 Radar Burst at the Beginning of the Channel Availability Check Time

The steps below define the procedure to verify successful radar detection on the test Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold + 1 dB occurs at the beginning of the Channel Availability Check Time. This is illustrated in Figure 15.

1. The Radar Waveform generator and EUT are connected using the applicable test setup and the power of the EUT is switched off.
2. The EUT is powered on at T_0 . T_1 denotes the instant when the EUT has completed its power-up sequence (T_{power_up}). The Channel Availability Check Time commences on Ch_r at instant T_1 and will end no sooner than $T_1 + Tch_avail_check$.
3. A single Burst of one of the Short Pulse Radar Types 0-4 will commence within a 6 second window starting at T_1 . An additional 1 dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.
4. Visual indication or measured results on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of Ch_r for EUT emissions will continue for 2.5 minutes after the radar Burst has been generated.
5. Verify that during the 2.5 minute measurement window no EUT transmissions occurred on Ch_r . The Channel Availability Check results will be recorded.

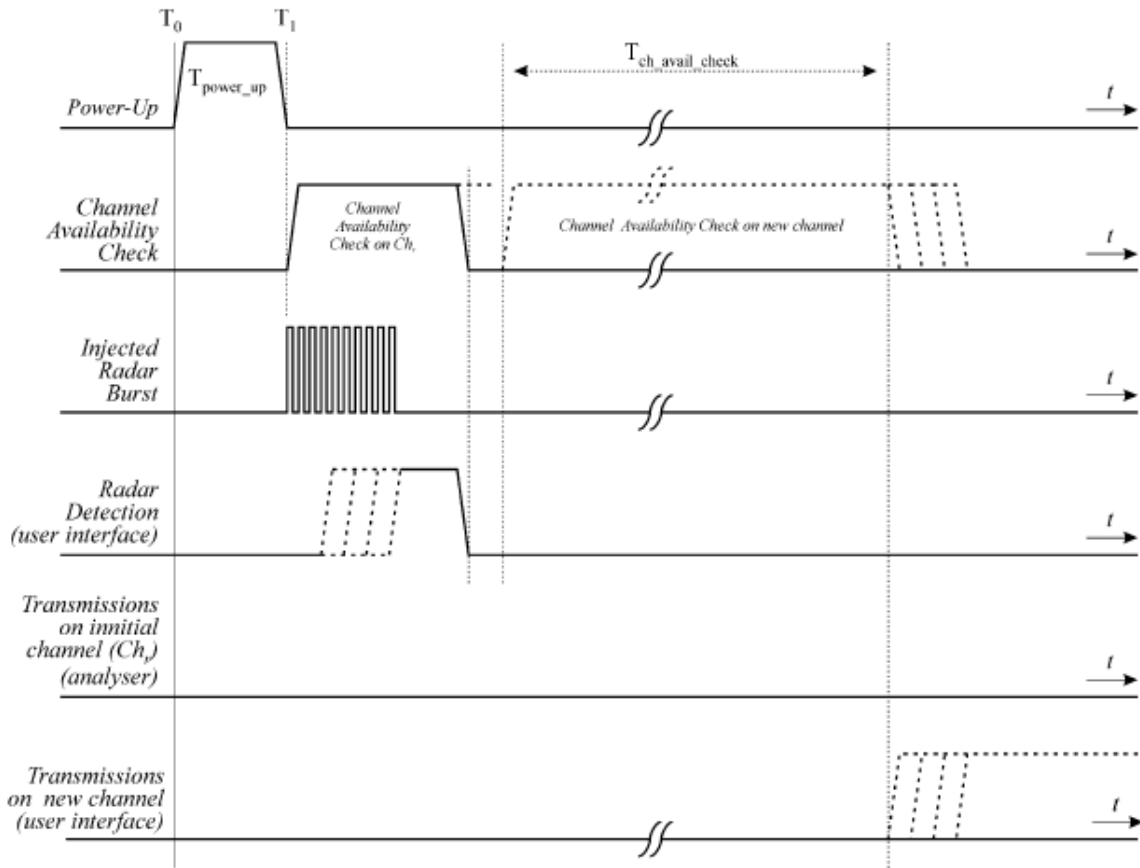


Figure 15: Example of timing for radar testing at the beginning of the Channel Availability Check Time

6.6.2.3 Radar Burst at the End of the Channel Availability Check Time

The steps below define the procedure to verify successful radar detection on the test Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold + 1dB occurs at the end of the Channel Availability Check Time. This is illustrated in Figure 16.

1. The Radar Waveform generator and EUT are connected using the applicable test setup and the power of the EUT is switched off.
2. The EUT is powered on at T_0 . T_1 denotes the instant when the EUT has completed its power-up sequence (T_{power_up}). The Channel Availability Check Time commences on Chr at instant T_1 and will end no sooner than $T_1 + T_{ch_avail_check}$.
3. A single Burst of one of the Short Pulse Radar Types 1-4 will commence within a 6 second window starting at $T_1 + 54$ seconds. An additional 1 dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.
4. Visual indication or measured results on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of Chr for EUT emissions will continue for 2.5 minutes after the radar Burst has been generated.
5. Verify that during the 2.5 minute measurement window no EUT transmissions occurred on Chr. The Channel Availability Check results will be recorded.

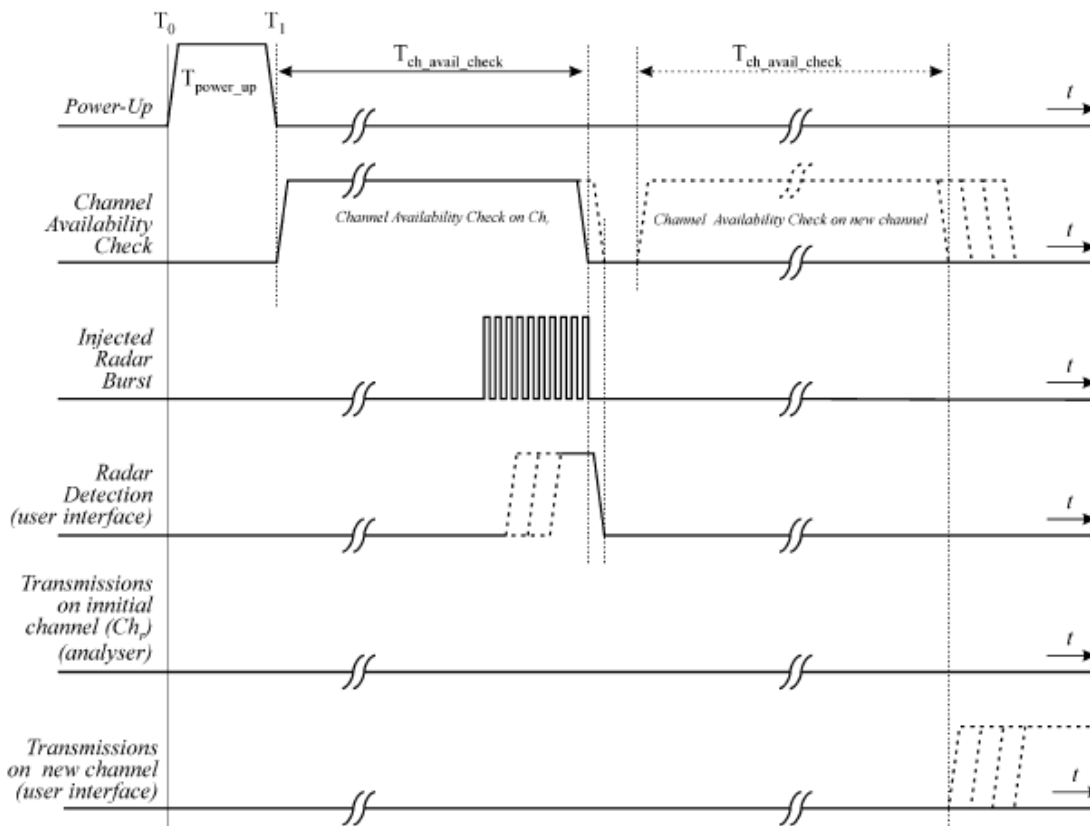
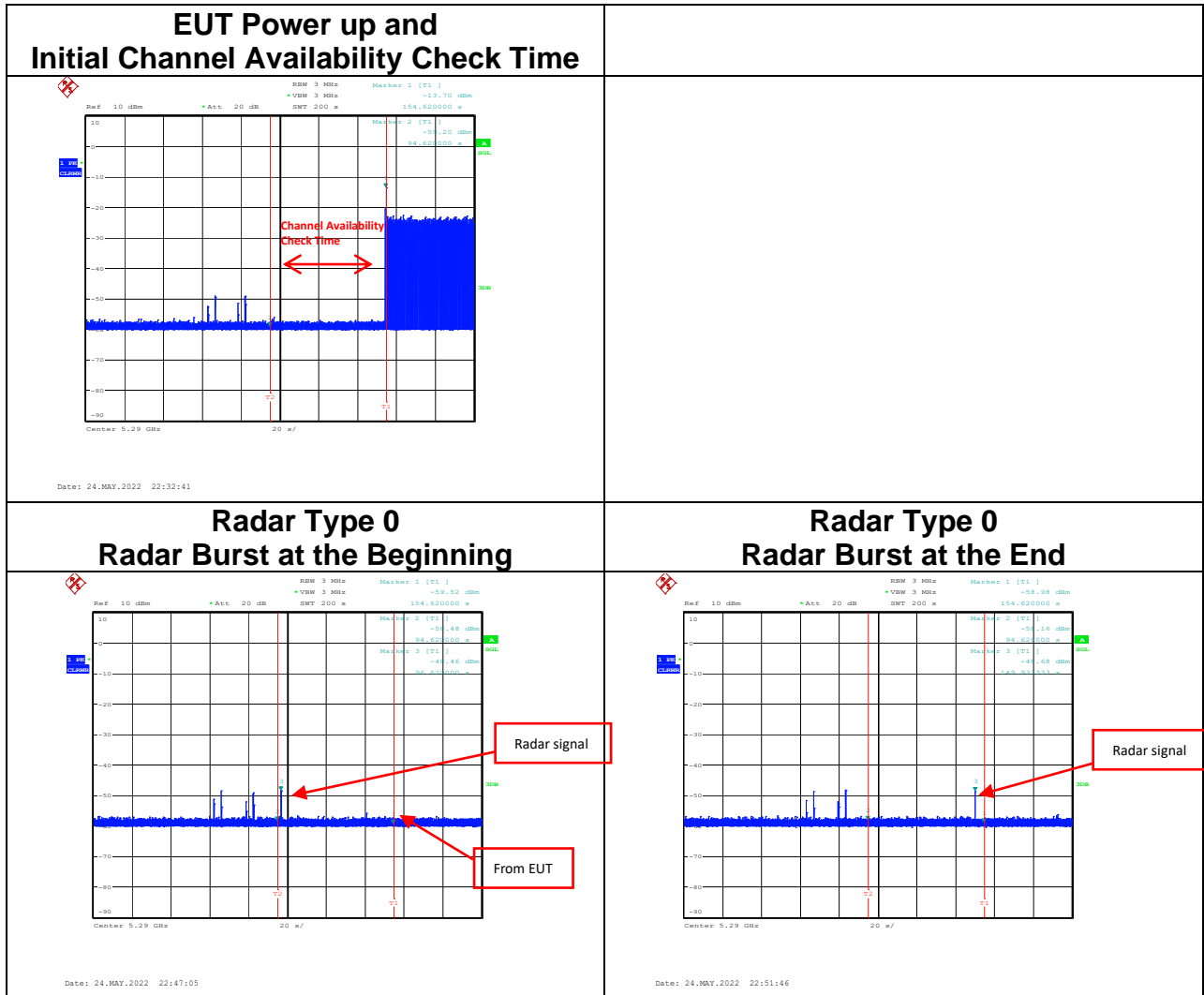


Figure 16: Example of timing for radar testing towards the end of the Channel Availability Check Time

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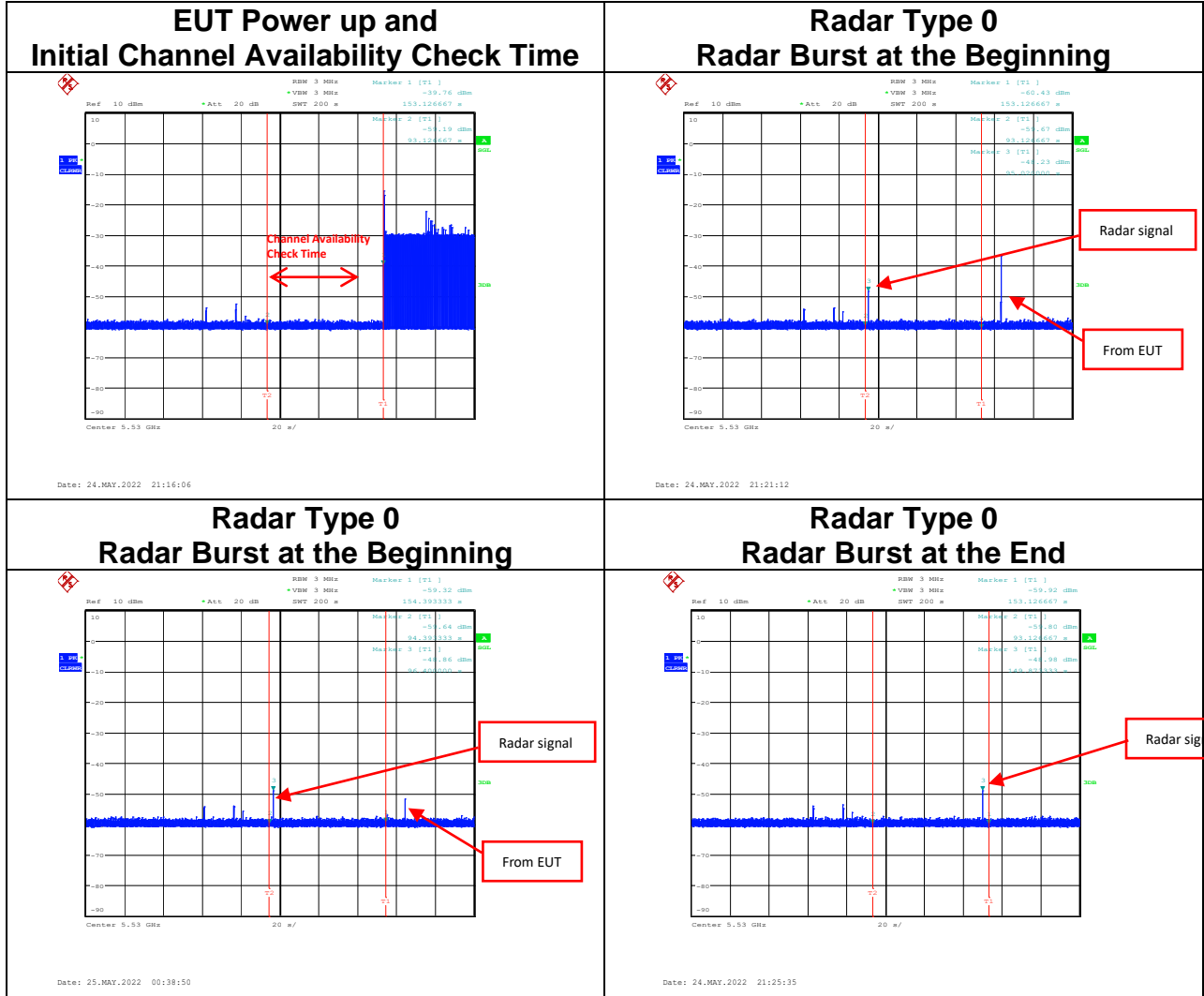
6.6.3 Result of Channel Availability Check

Channel Bandwidth 80MHz / 5290MHz



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Channel Bandwidth 80MHz / 5530MHz



6.7 IN-SERVICE MONITORING: CHANNEL MOVE TIME, CHANNEL CLOSING TRANSMISSION TIME AND NON-OCCUPANCY PERIOD (7.8.3)

6.7.1 Limit of In-Service Monitoring

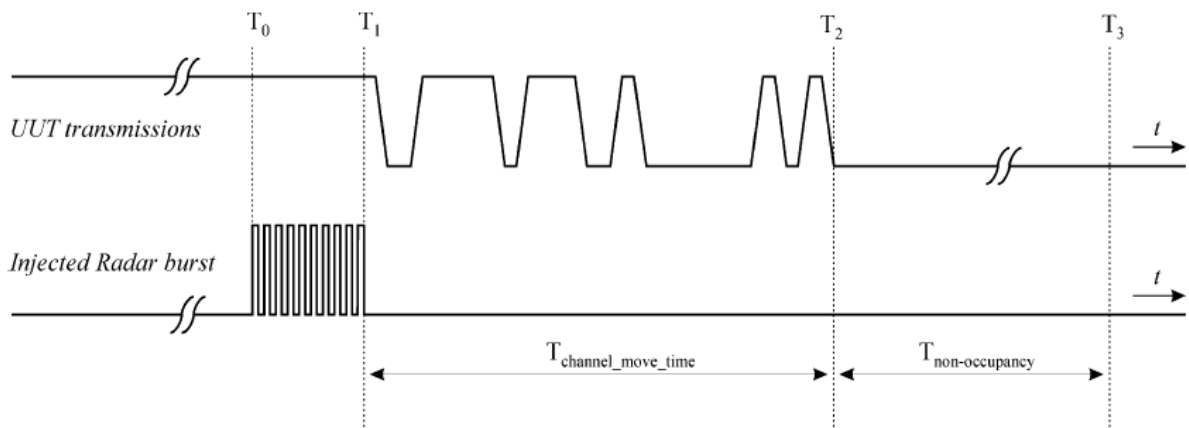
The EUT has In-Service Monitoring function to continuously monitor the radar signals, If radar is detected, it must leave the channel (Shutdown). The Channel Move Time to cease all transmissions on the current Channel upon detection of a Radar Waveform above the DFS Detection Threshold within **10 sec**.

The total duration of Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required facilitating Channel changes (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.

Non-Occupancy Period time is **30 minute** during which a Channel will not be utilized after a Radar Waveform is detected on that Channel

6.7.2 Test Procedures

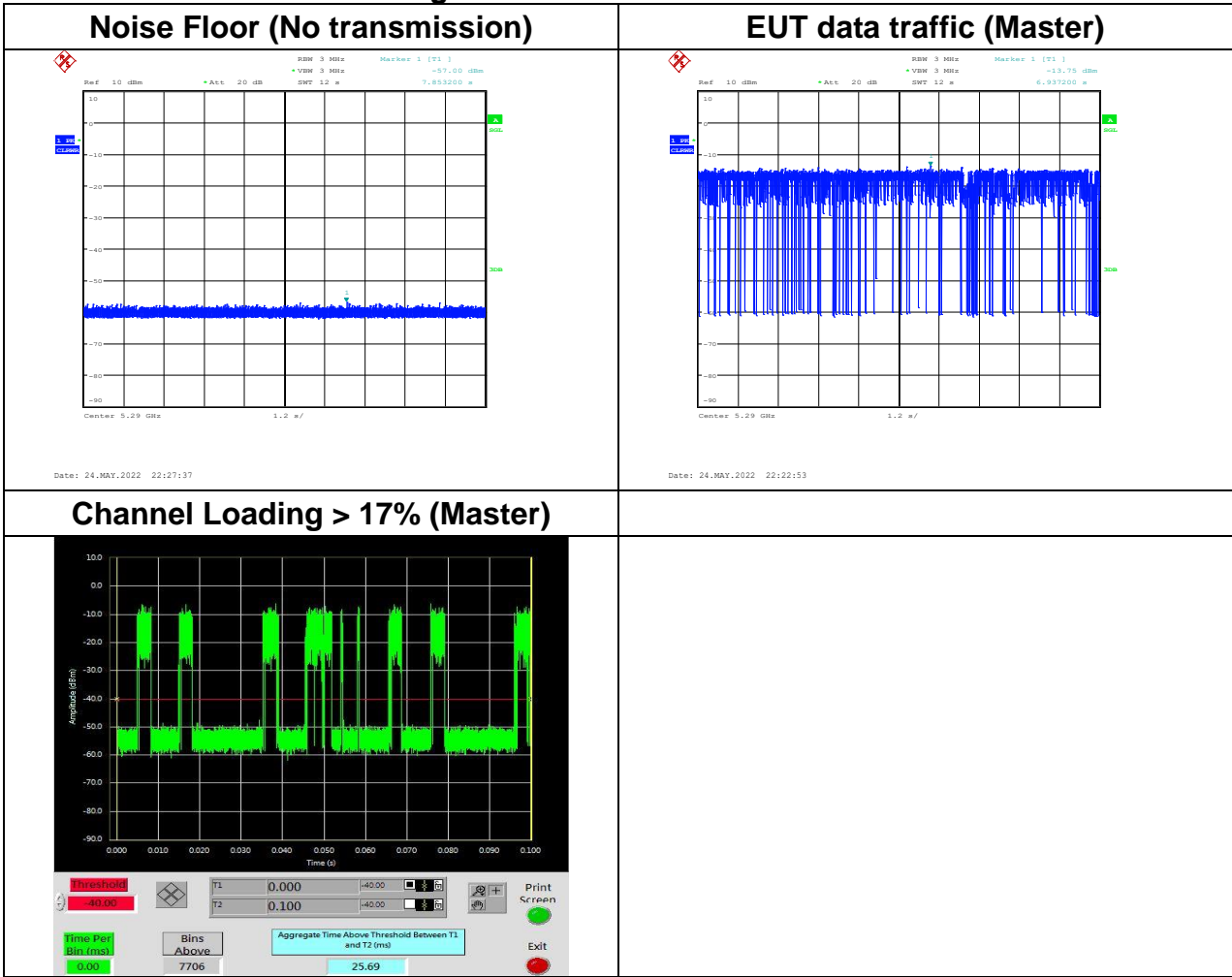
1. One frequency will be chosen from the Operating Channels of the EUT within the 5250-5350 MHz or 5470-5725 MHz bands. For 802.11 devices, the test frequency must contain control signals. This can be verified by disabling channel loading and monitoring the spectrum analyzer. If no control signals are detected, another frequency must be selected within the emission bandwidth where control signals are detected.
2. In case the EUT is a Master Device, a U-NII device operating as a Client Device will be used and it is assumed that the Client will associate with the EUT (Master). For radiated tests, the emissions of the Radar Waveform generator will be directed towards the Master Device. If the Master Device has antenna gain, the main beam of the antenna will be directed toward the radar emitter. Vertical polarization is used for testing.
3. The TCP protocol unicast data stream was generated by the LanTest software with at least 17% activity ratio over any 100ms period.
4. Timing plots are reported with calculations demonstrating a minimum channel loading of approximately 17% or greater. For example, channel loading can be estimated by setting the spectrum analyzer for zero span and approximate the Time On/ (Time On + Off Time).
5. At time T_0 the Radar Waveform generator sends a Burst of pulses for one of the Radar Type 0 in Table 5 at levels defined in Table 3, on the Operating Channel. An additional 1 dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.
6. Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds. Measure and record the transmissions from the EUT during the observation time (Channel Move Time). Measure and record the Channel Move Time and Channel Closing Transmission Time if radar detection occurs.
7. When operating as a Master Device, monitor the UUT for more than 30 minutes following instant T_2 to verify that the EUT does not resume any transmissions on this Channel. Perform this test once and record the measurement result.



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6.7.3 Result of Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period

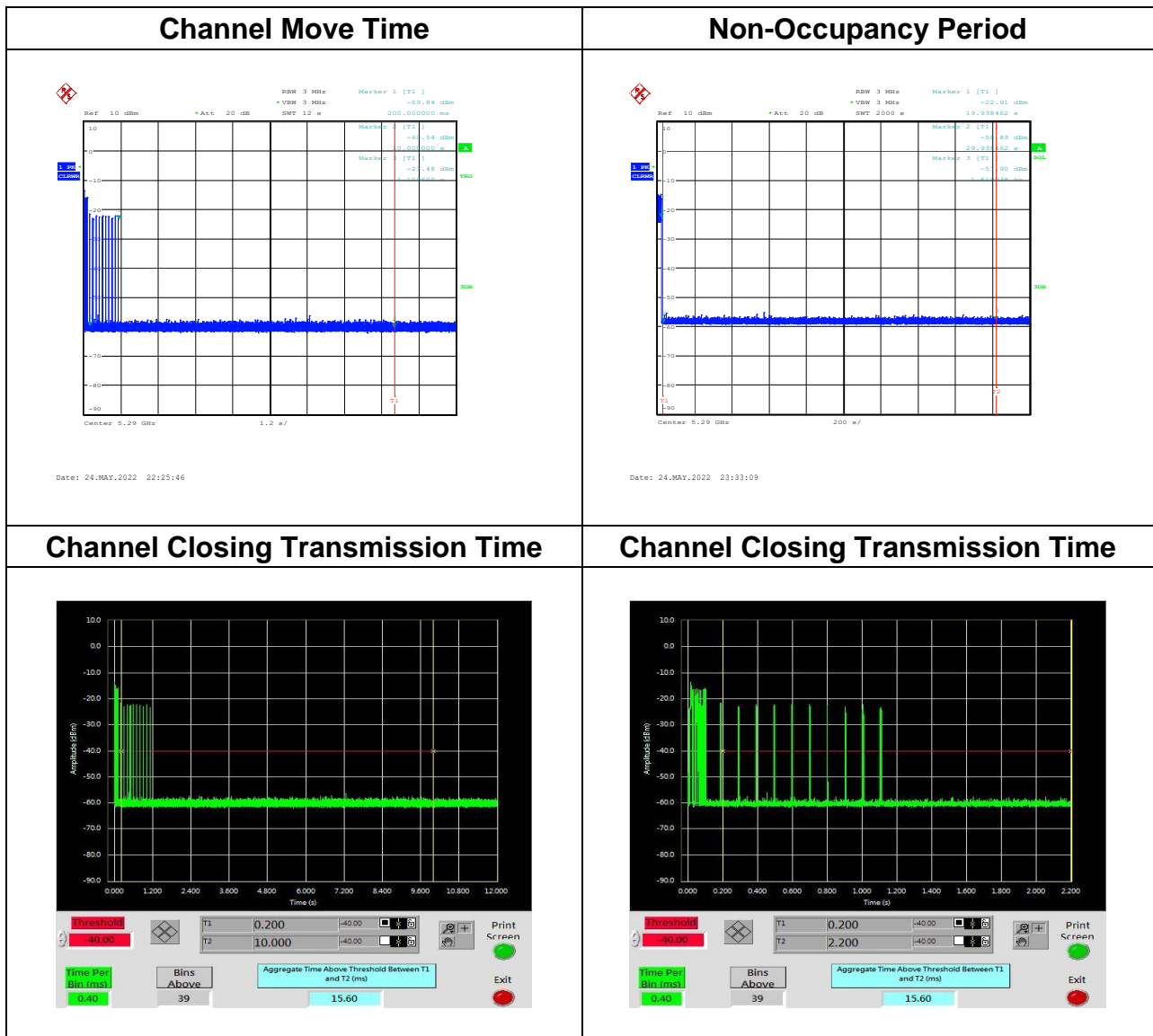
Channel Bandwidth 80MHz / 5290MHz
Data Traffic Channel Loading and Noise Floor Plots



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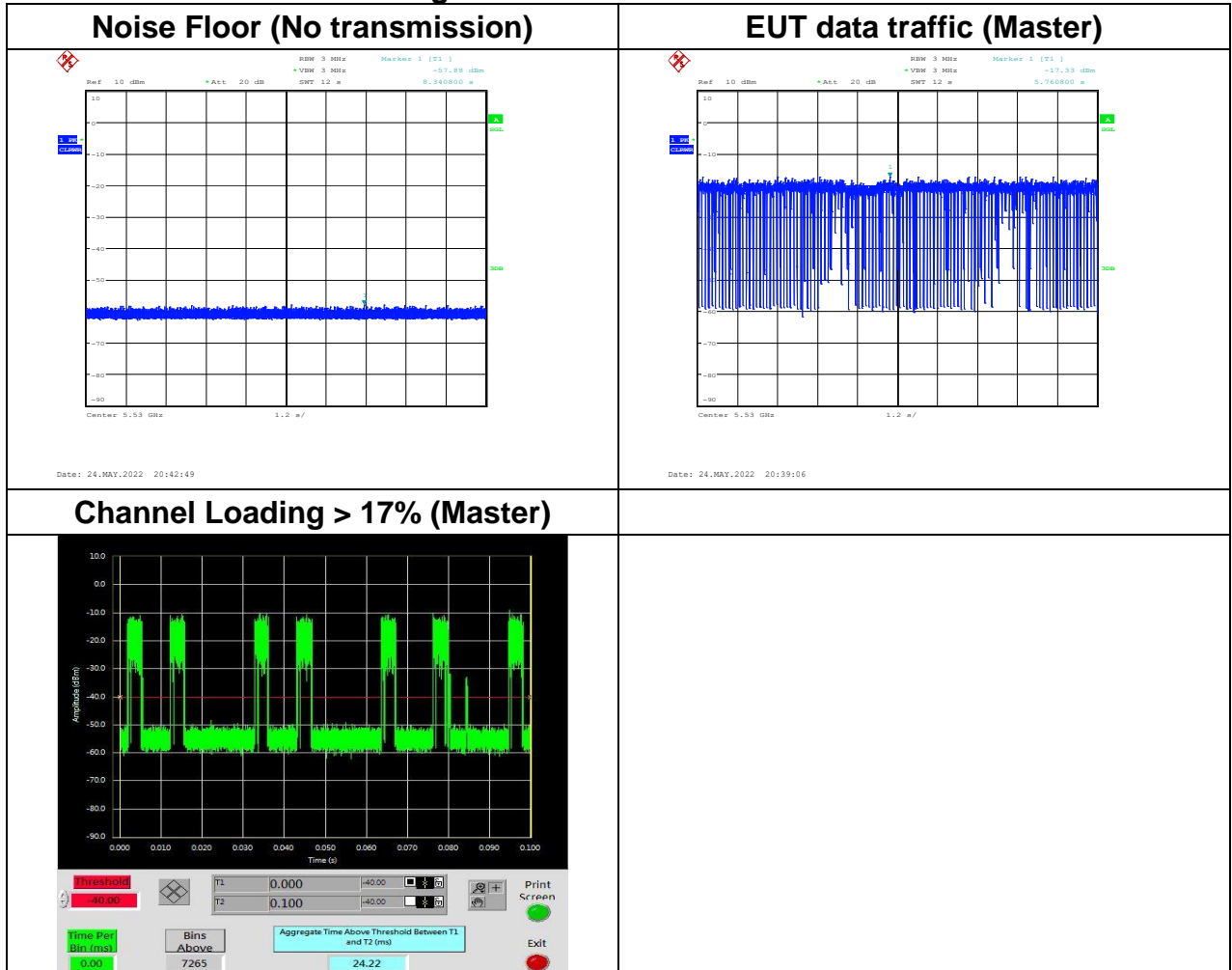
Channel Bandwidth 80MHz / 5290MHz

	Test Result	Limit
Channel Move Time	1.1056s	<10s
Channel closing transmission time	15.60 ms	60 ms



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**Channel Bandwidth 80MHz / 5530MHz
Data Traffic Channel Loading and Noise Floor Plots**

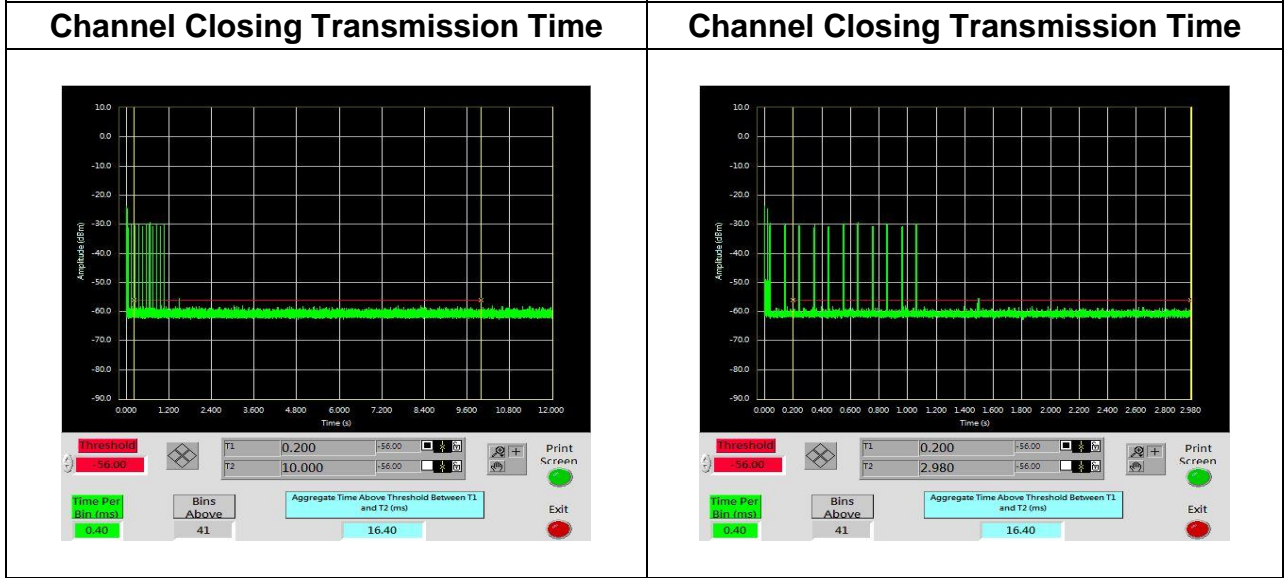
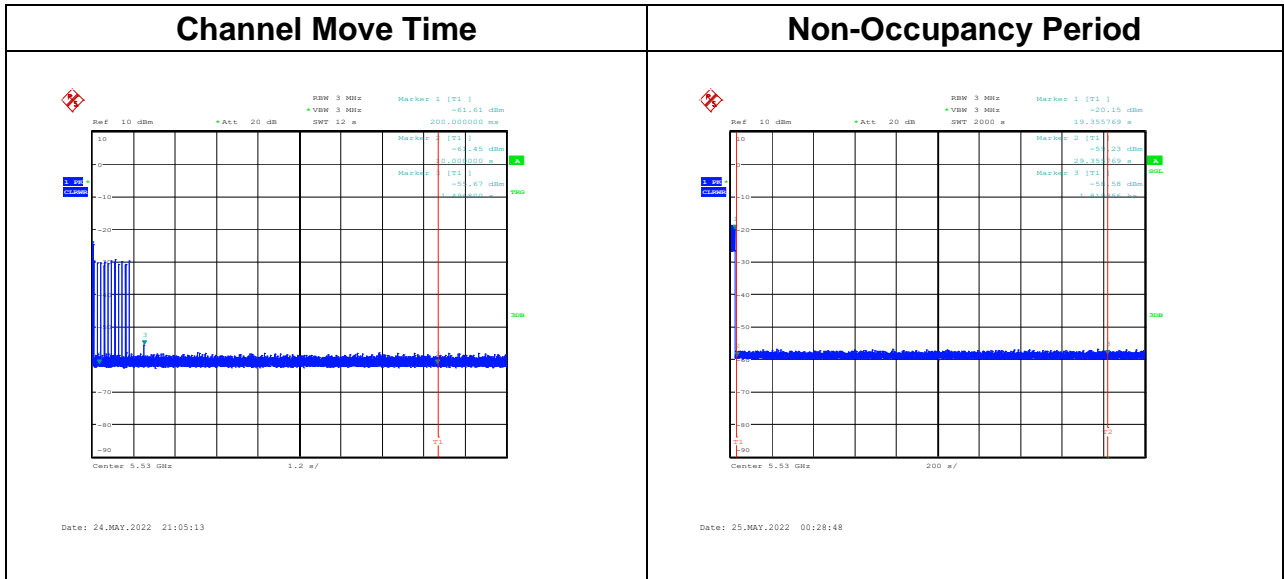




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Channel Bandwidth 80MHz / 5530MHz

	Test Result	Limit
Channel Move Time	1.4968s	<10s
Channel closing transmission time	16.40 ms	60 ms



6.8 STATISTICAL PERFORMANCE CHECK (7.8.4)

6.8.1 Limit of Statistical Performance Check

Short Pulse Radar Test

Once the performance requirements check is complete, statistical data will be gathered, to determine the ability of the device to detect the radar test waveforms (Short Pulse Radar Types 1-4) found in Table 5. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trials. The percentage of successful detection is calculated by:

$$\frac{\text{TotalWaveformDetections}}{\text{TotalWaveformTrials}} \times 100 = \text{Percentage of Successful Detection Radar Waveform } N = P_d N$$

In addition an aggregate minimum percentage of successful detection across all Short Pulse Radar Types 1-4 is required and is calculated as follows:

$$\frac{P_d 1 + P_d 2 + P_d 3 + P_d 4}{4}$$

The minimum number of trails, minimum percentage of successful detection and the aggregate minimum percentage of successful detection are found in Table 5.

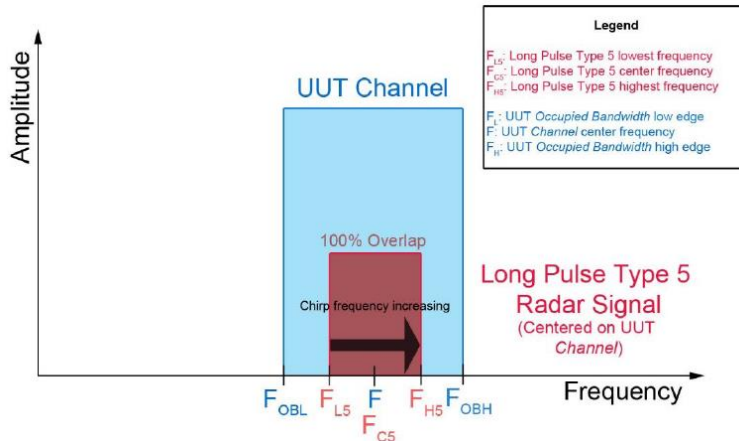
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Long Pulse Radar Test

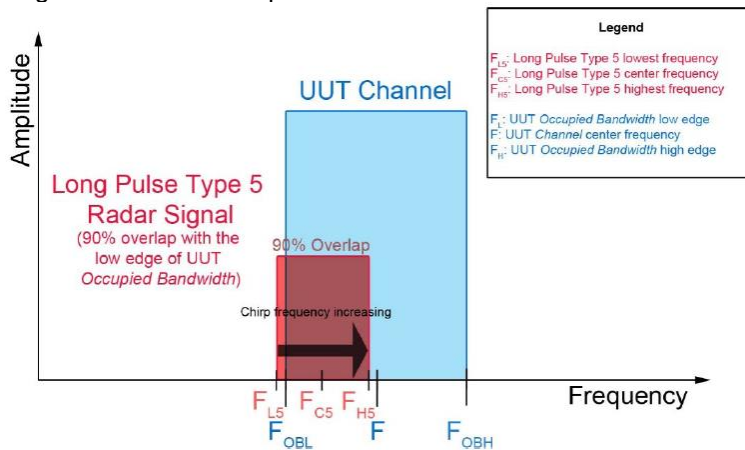
Statistical data will be gathered to determine the ability of the device to detect the Long Pulse Radar Type 5 found in Table 6. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trials.

Three subsets of trials will be performed with a minimum of ten trials per subset. The subset of trials differ in where the Long Pulse Type 5 Signal is tuned in frequency:

(a) The Channel center frequency.

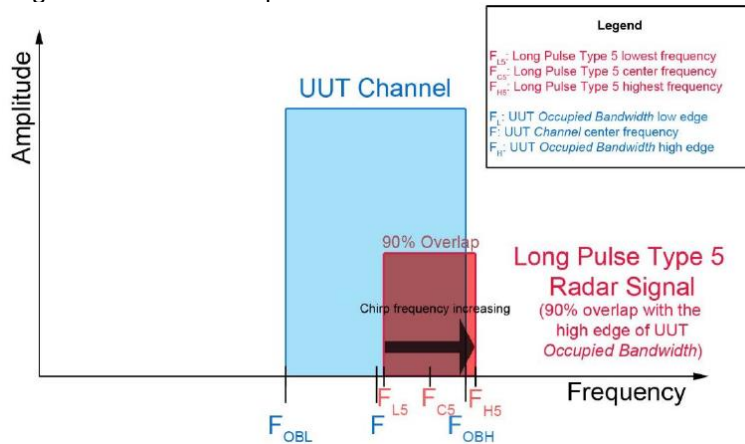


(b) Tuned frequencies such that 90% of the Long Pulse Type 5 frequency modulation is within the low edge of the EUT Occupied Bandwidth.



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(c) Tuned frequencies such that 90% of the Long Pulse Type 5 frequency modulation is within the high edge of the EUT Occupied Bandwidth.



For subset case 1: the center frequency of the signal generator will remain fixed at the center of the UUT Channel.

For subset case 2: to retain 90% frequency overlap between the radar signal and the UUT Occupied Bandwidth, the center frequency of the signal generator will vary for each of the ten trials in subset case 2. The center frequency of the signal generator for each trial is calculated by:

$$F_L + (0.4 * \text{Chirp Width [in MHz]})$$

For subset case 3: to retain 90% frequency overlap between the radar signal and the UUT Occupied Bandwidth, the center frequency of the signal generator will vary for each of the ten trials in subset case 3. The center frequency of the signal generator for each trial is calculated by:

$$F_H - (0.4 * \text{Chirp Width [in MHz]})$$

The percentage of successful detection is calculated by dividing the sum of the detections for the three subsets by the sum of trials for the three subsets:

$$\frac{\text{TotalWaveformDetections}}{\text{TotalWaveformTrials}} \times 100$$



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Frequency Hopping Radar Test

Statistical data will be gathered to determine the ability of the device to detect the Frequency Hopping radar test signal (radar type 6) found in Table 7. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trial runs. The probability of successful detection is calculated by:

$$\frac{\textit{TotalWaveformDetections}}{\textit{TotalWaveformTriaals}} \times 100$$

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6.8.2 Test Procedures

1. One frequency will be chosen from the Operating Channels of the UUT within the 5250-5350 MHz or 5470-5725 MHz bands.
2. In case the UUT is a Master Device, a U-NII device operating as a Client Device will be used and it is assumed that the Client will associate with the UUT (Master). For radiated tests, the emissions of the Radar Waveform generator will be directed towards the Master Device. If the Master Device has antenna gain, the main beam of the antenna will be directed toward the radar emitter. Vertical polarization is used for testing.
3. The TCP protocol unicast data stream was generated by the LanTest software with at least 17% activity ratio over any 100ms period.
4. At time T₀ the Radar Waveform generator sends a Burst of pulses for each of the Radar Types 1-6 at DFS Detection Threshold levels on the Operating Channel. An additional 1 dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.
5. Observe the transmissions of the EUT at the end of the Burst on the Operating Channel for duration greater than 10 seconds for Radar Types 1-4 and 6 to ensure detection occurs.
6. Observe the transmissions of the EUT at the end of the Burst on the Operating Channel for duration greater than 22 seconds for Long Pulse Radar Type 5 to ensure detection occurs.

Channel Bandwidth 20MHz/ 5300MHz

Short Pulse Radar Type	Minimum Number of Trials	Detection(%)		Minmum Percentage of Successful Detection(%)	Pass/Fail
1	30	93.33		60	Pass
2	30	86.67		60	Pass
3	30	93.33		60	Pass
4	30	90		60	Pass
Aggregate (Radar Types 1-4)	120	90.8325		80	Pass
Long Pulse Radar Type	Minimum Number of Trials	Each Detection(%)	Total Detection(%)	Minmum Percentage of Successful Detection(%)	Pass/Fail
5	Center:10	100	90	80	Pass
	Low Edge:10	90			
	High Edge:10	80			
Frequency Hopping Radar Type	Minimum Number of Trials	Detection(%)		Minmum Percentage of Successful Detection(%)	Pass/Fail
6	30	90		70	Pass

Channel Bandwidth 40MHz/ 5310MHz

Short Pulse Radar Type	Minimum Number of Trials	Detection(%)		Minmum Percentage of Successful Detection(%)	Pass/Fail
1	30	93.33		60	Pass
2	30	86.67		60	Pass
3	30	80		60	Pass
4	30	76.67		60	Pass
Aggregate (Radar Types 1-4)	120	84.17		80	Pass
Long Pulse Radar Type	Minimum Number of Trials	Each Detection(%)	Total Detection(%)	Minmum Percentage of Successful Detection(%)	Pass/Fail
5	Center:10	90	93.33	80	Pass
	Low Edge:10	100			
	High Edge:10	90			
Frequency Hopping Radar Type	Minimum Number of Trials	Detection(%)		Minmum Percentage of Successful Detection(%)	Pass/Fail
6	30	100		70	Pass

Channel Bandwidth 80MHz/ 5290MHz

Short Pulse Radar Type	Minimum Number of Trials	Detection(%)		Minmum Percentage of Successful Detection(%)	Pass/Fail
1	30	83.33		60	Pass
2	30	86.67		60	Pass
3	30	83.33		60	Pass
4	30	86.67		60	Pass
Aggregate (Radar Types 1-4)	120	85		80	Pass
Long Pulse Radar Type	Minimum Number of Trials	Each Detection(%)	Total Detection(%)	Minmum Percentage of Successful Detection(%)	Pass/Fail
5	Center:10	100	90	80	Pass
	Low Edge:10	80			
	High Edge:10	90			
Frequency Hopping Radar Type	Minimum Number of Trials	Detection(%)		Minmum Percentage of Successful Detection(%)	Pass/Fail
6	30	100		70	Pass

Channel Bandwidth 20MHz/ 5500MHz

Short Pulse Radar Type	Minimum Number of Trials	Detection(%)		Minmum Percentage of Successful Detection(%)	Pass/Fail
1	30	100		60	Pass
2	30	83.33		60	Pass
3	30	93.33		60	Pass
4	30	76.67		60	Pass
Aggregate (Radar Types 1-4)	120	88.33		80	Pass
Long Pulse Radar Type	Minimum Number of Trials	Each Detection(%)	Total Detection(%)	Minmum Percentage of Successful Detection(%)	Pass/Fail
5	Center:10	100	90	80	Pass
	Low Edge:10	80			
	High Edge:10	90			
Frequency Hopping Radar Type	Minimum Number of Trials	Detection(%)		Minmum Percentage of Successful Detection(%)	Pass/Fail
6	30	93.33		70	Pass

Channel Bandwidth 40MHz/ 5510MHz

Short Pulse Radar Type	Minimum Number of Trials	Detection(%)		Minmum Percentage of Successful Detection(%)	Pass/Fail
1	30	86.67		60	Pass
2	30	93.33		60	Pass
3	30	83.33		60	Pass
4	30	90		60	Pass
Aggregate (Radar Types 1-4)	120	88.33		80	Pass
Long Pulse Radar Type	Minimum Number of Trials	Each Detection(%)	Total Detection(%)	Minmum Percentage of Successful Detection(%)	Pass/Fail
5	Center:10	90	96.67	80	Pass
	Low Edge:10	100			
	High Edge:10	100			
Frequency Hopping Radar Type	Minimum Number of Trials	Detection(%)		Minmum Percentage of Successful Detection(%)	Pass/Fail
6	30	100		70	Pass

Channel Bandwidth 80MHz/ 5530MHz

Short Pulse Radar Type	Minimum Number of Trials	Detection(%)		Minmum Percentage of Successful Detection(%)	Pass/Fail
1	30	100		60	Pass
2	30	83.33		60	Pass
3	30	83.33		60	Pass
4	30	86.67		60	Pass
Aggregate (Radar Types 1-4)	120	88.33		80	Pass
Long Pulse Radar Type	Minimum Number of Trials	Each Detection(%)	Total Detection(%)	Minmum Percentage of Successful Detection(%)	Pass/Fail
5	Center:10	90	93.33	80	Pass
	Low Edge:10	100			
	High Edge:10	90			
Frequency Hopping Radar Type	Minimum Number of Trials	Detection(%)		Minmum Percentage of Successful Detection(%)	Pass/Fail
6	30	100		70	Pass

-- End of Test Report --

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7. APPENDIX I RADAR TEST WAVEFORMS

< Channel Bandwidth 20MHz / 5300MHz >

Short Pulse Radar Test Waveforms

Radar Type 1

Trial	VSG Frequency (MHz)	Pulse Repetition Frequency	Pulse Repetition Frequency	PRI	Test A/B	Successful Detection
		Number (1 to 23)	(Pulses Per Second)	(msec)	A/B	(Yes/No)
1	5300	2	1858.7	538	A	Yes
2	5300	14	1285.3	778	A	Yes
3	5300	5	1672.2	598	A	Yes
4	5300	9	1474.9	678	A	Yes
5	5300	6	1618.1	618	A	Yes
6	5300	4	1730.1	578	A	Yes
7	5300	16	1222.5	818	A	Yes
8	5300	12	1355	738	A	Yes
9	5300	22	1066.1	938	A	Yes
10	5300	17	1193.3	838	A	No
11	5300	3	1792.1	558	A	Yes
12	5300	18	1165.5	858	A	Yes
13	5300	7	1567.4	638	A	Yes
14	5300	15	1253.1	798	A	Yes
15	5300	23	326.2	3066	A	Yes
16	5300	-	727.8	1374	B	Yes
17	5300	-	531.6	1881	B	No
18	5300	-	1194.7	837	B	Yes
19	5300	-	327.5	3053	B	Yes
20	5300	-	819	1221	B	Yes
21	5300	-	1075.3	930	B	Yes
22	5300	-	455	2198	B	Yes
23	5300	-	492.9	2029	B	Yes
24	5300	-	432.5	2312	B	Yes
25	5300	-	963.4	1038	B	Yes
26	5300	-	598.4	1671	B	Yes
27	5300	-	523	1912	B	Yes
28	5300	-	1278.8	782	B	Yes
29	5300	-	364.8	2741	B	Yes
30	5300	-	465.1	2150	B	Yes

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Radar Type 2

Trial	VSG Frequency (MHz)	Number Pulses per Burst (23-29)	Pulse Width (1-5)	PRI (150-230)	Successful Detection
			(μ s)	(μ s)	(Yes/No)
1	5300	23	1.2	204	Yes
2	5300	28	4.2	154	Yes
3	5300	24	1.9	169	Yes
4	5300	28	4	166	No
5	5300	25	2.5	186	Yes
6	5300	28	4.2	162	Yes
7	5300	23	1.2	195	Yes
8	5300	29	4.7	208	Yes
9	5300	29	4.8	219	Yes
10	5300	29	4.6	221	Yes
11	5300	28	4	198	No
12	5300	26	3	210	Yes
13	5300	27	3.8	215	No
14	5300	26	3	184	Yes
15	5300	27	3.4	176	Yes
16	5300	29	4.6	155	Yes
17	5300	27	3.8	200	Yes
18	5300	29	4.8	174	Yes
19	5300	24	1.9	160	Yes
20	5300	25	2.7	189	No
21	5300	26	2.9	151	Yes
22	5300	29	5	159	Yes
23	5300	28	4.3	170	Yes
24	5300	23	1.5	164	Yes
25	5300	24	2.1	230	Yes
26	5300	23	1.5	197	Yes
27	5300	27	3.6	226	Yes
28	5300	23	1.1	172	Yes
29	5300	25	2.4	201	Yes
30	5300	26	3	180	Yes

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Radar Type 3

Trial	VSG Frequency (MHz)	Number Pulses per Burst (16-18)	Pulse Width (6-10)	PRI (200-500)	Successful Detection
			(μ s)	(μ s)	(Yes/No)
1	5300	16	6.2	271	Yes
2	5300	18	9.2	360	Yes
3	5300	16	6.9	257	Yes
4	5300	18	9	265	Yes
5	5300	17	7.5	207	Yes
6	5300	18	9.2	290	Yes
7	5300	16	6.2	460	Yes
8	5300	18	9.7	312	Yes
9	5300	18	9.8	363	Yes
10	5300	18	9.6	293	Yes
11	5300	18	9	493	Yes
12	5300	17	8	438	Yes
13	5300	18	8.8	337	No
14	5300	17	8	282	Yes
15	5300	17	8.4	332	Yes
16	5300	18	9.6	457	No
17	5300	18	8.8	241	Yes
18	5300	18	9.8	485	Yes
19	5300	16	6.9	288	Yes
20	5300	17	7.7	320	Yes
21	5300	17	7.9	385	Yes
22	5300	18	10	245	Yes
23	5300	18	9.3	301	Yes
24	5300	16	6.5	347	Yes
25	5300	16	7.1	286	Yes
26	5300	16	6.5	280	Yes
27	5300	17	8.6	475	Yes
28	5300	16	6.1	200	Yes
29	5300	17	7.4	370	Yes
30	5300	17	8	458	Yes

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Radar Type 4

Trial	VSG Frequency (MHz)	Number Pulses per Burst (12-16)	Pulse Width (11-20)	PRI (200-500)	Successful Detection
			(μ s)	(μ s)	(Yes/No)
1	5300	12	11.5	271	Yes
2	5300	15	18.1	360	Yes
3	5300	13	13.2	257	Yes
4	5300	15	17.6	265	Yes
5	5300	13	14.3	207	Yes
6	5300	16	18.3	290	Yes
7	5300	12	11.5	460	Yes
8	5300	16	19.2	312	Yes
9	5300	16	19.5	363	Yes
10	5300	16	19	293	No
11	5300	15	17.6	493	Yes
12	5300	14	15.5	438	Yes
13	5300	15	17.2	337	Yes
14	5300	14	15.4	282	No
15	5300	15	16.5	332	Yes
16	5300	16	19.2	457	Yes
17	5300	15	17.2	241	Yes
18	5300	16	19.4	485	Yes
19	5300	13	13.1	288	Yes
20	5300	14	14.8	320	Yes
21	5300	14	15.4	385	Yes
22	5300	16	20	245	Yes
23	5300	16	18.4	301	Yes
24	5300	12	12.1	347	Yes
25	5300	13	13.5	286	No
26	5300	12	12.1	280	Yes
27	5300	15	16.9	475	Yes
28	5300	12	11.3	200	Yes
29	5300	13	14.1	370	Yes
30	5300	14	15.5	458	Yes

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Long Pulse Radar Test Waveforms
Radar Type 5_Trial 1

Data Sheet for FCC Radar Type 5						
Trial Number:		1		VSG Frequency(MHz):		5300
Number of Bursts in Trial:		8		Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	53.2	6			459314
2	3	89.6	6	998.4	1307.4	821434
3	1	62.1	6			1186533
4	3	86.8	6	919.2	1099.2	51133
5	2	68.6	6	1810.4		414158
6	3	90.2	6	1080.8	1125.8	776674
7	1	52.9	6			1141879
8	3	95.3	6	1248.7	1727.7	6431

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Radar Type 5_Trial 2

Data Sheet for FCC Radar Type 5						
Trial Number:		2		VSG Frequency(MHz):		5300
Number of Bursts in Trial:			18		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	96.9	17	1340.1	1029.1	163511
2	3	94.4	17	1556.6	1284.6	324198
3	3	86.8	17	1042.2	1205.2	484699
4	2	75.2	17	1683.8		646027
5	3	84.2	17	1427.8	1526.8	143646
6	2	74.5	17	1760.5		304987
7	2	80.3	17	1816.7		465883
8	3	95.1	17	1243.9	1173.9	625495
9	3	84.3	17	1029.7	1748.7	123936
10	3	96.6	17	1090.4	1559.4	284669
11	1	61.8	17			447236
12	2	71.1	17	1366.9		607278
13	2	74.4	17	974.6		104457
14	3	99.8	17	925.2	1384.2	264840
15	3	90.9	17	1481.1	1014.1	425378
16	1	56.4	17			588812
17	1	64.1	17			84728
18	1	56.1	17			246100

Radar Type 5_Trial 3

Data Sheet for FCC Radar Type 5						
Trial Number:		3		VSG Frequency(MHz):		5300
Number of Bursts in Trial:			11		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	82.8	8	1102.2		666579
2	1	52	8			931571
3	2	67.4	8	970.6		106031
4	2	75.1	8	1515.9		369972
5	2	80.4	8	1839.6		633702
6	3	88.9	8	1169.1	1465.1	896473
7	1	60.8	8			73640
8	1	57	8			337830
9	3	96.8	8	1565.2	1367.2	600209
10	3	97	8	1095	1003	864171
11	2	68.9	8	1875.1		41002

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Radar Type 5_Trial 4

Data Sheet for FCC Radar Type 5						
Trial Number:		4		VSG Frequency(MHz):		5300
Number of Bursts in Trial:			17		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	92.1	16	917.9	1647.9	196661
2	1	57.7	16			368454
3	1	63.3	16			538834
4	3	84.8	16	1677.2	958.2	5499
5	2	71.3	16	1326.7		176130
6	1	59.3	16			347347
7	3	98.5	16	1485.5	1896.5	515465
8	1	60.6	16			688722
9	1	52.2	16			155360
10	3	87	16	1859	1298	324415
11	1	59.4	16			497001
12	3	95	16	1107	1462	664738
13	2	77.8	16	1085.2		134020
14	3	88.2	16	1126.8	913.8	304178
15	2	81.5	16	1414.5		474730
16	3	96	16	1409	1457	644296
17	2	72.1	16	1714.9		112918

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Radar Type 5_Trial 5

Data Sheet for FCC Radar Type 5						
Trial Number:		5		VSG Frequency(MHz):		5300
Number of Bursts in Trial:			12		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	88.3	10	1788.7	1844.7	401291
2	1	53.5	10			644528
3	3	98.7	10	1295.3	1867.3	883873
4	1	55.7	10			130699
5	2	72.7	10	1011.3		372566
6	1	62.5	10			614976
7	1	57.3	10			857127
8	1	50.8	10			100816
9	2	77.9	10	1276.1		342628
10	2	71.7	10	1359.3		584328
11	1	63.9	10			827704
12	3	97.9	10	1501.1	1557.1	70803

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Radar Type 5_Trial 6

Data Sheet for FCC Radar Type 5						
Trial Number:		6		VSG Frequency(MHz):		5300
Number of Bursts in Trial:			18		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	64.4	17			208665
2	2	77.2	17	1504.8		369289
3	2	77.8	17	1610.2		529738
4	3	83.4	17	1767.6	1416.6	27312
5	2	76.2	17	1082.8		188429
6	3	92.2	17	1400.8	1080.8	348828
7	3	88.9	17	1327.1	934.1	509666
8	3	98.5	17	1247.5	1419.5	7537
9	3	86.3	17	1852.7	1317.7	168095
10	1	53	17			329982
11	3	90.4	17	1488.6	1879.6	489261
12	3	92.4	17	1382.6	1602.6	649287
13	3	95.8	17	1877.2	1770.2	148111
14	1	61.8	17			310145
15	2	69.1	17	1109.9		470854
16	2	73.4	17	1512.6		631023
17	1	57	17			129050
18	3	89.6	17	1541.4	1462.4	289166

Radar Type 5_Trial 7

Data Sheet for FCC Radar Type 5						
Trial Number:		7		VSG Frequency(MHz):		5300
Number of Bursts in Trial:			8		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	86.9	5	1260.1	1123.1	1016169
2	3	99	5	948	1257	1379189
3	3	92.9	5	1014.1	1224.1	245822
4	3	88.7	5	952.3	1503.3	608513
5	2	68.7	5	1721.3		971813
6	3	93.3	5	1350.7	1052.7	1334356
7	3	98.3	5	1701.7	1233.7	201008
8	1	63.2	5			564898

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Radar Type 5_Trial 8

Data Sheet for FCC Radar Type 5						
Trial Number:		8		VSG Frequency(MHz):		5300
Number of Bursts in Trial:			19		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	69.4	19	1794.6		389132
2	3	95.2	19	1271.8	1425.8	540635
3	1	55.9	19			65824
4	3	84	19	1874	1015	217529
5	3	93.5	19	1125.5	1080.5	369977
6	3	87.6	19	1060.4	1753.4	521468
7	3	84.6	19	1824.4	1799.4	46743
8	1	62.8	19			199972
9	3	87.9	19	1754.1	1066.1	351062
10	1	59.7	19			505236
11	2	81.7	19	1656.3		28162
12	1	61.6	19			180959
13	1	51.6	19			333991
14	3	96.1	19	1048.9	1758.9	484225
15	3	92.7	19	1601.3	1625.3	9343
16	3	97.6	19	1840.4	1700.4	161123
17	3	85.8	19	1252.2	1287.2	313724
18	3	85.2	19	1184.8	1385.8	466069
19	1	63.1	19			620197

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Radar Type 5_Trial 9

Data Sheet for FCC Radar Type 5						
Trial Number:		9		VSG Frequency(MHz):		5300
Number of Bursts in Trial:			20		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	56.2	19			136162
2	1	59.9	19			281247
3	1	60.8	19			426683
4	3	93.4	19	1383.6	1869.6	568139
5	3	84	19	1161	1884	117631
6	3	93.9	19	1033.1	1110.1	262537
7	3	88.3	19	1813.7	1480.7	406272
8	3	84.9	19	1553.1	1600.1	550915
9	1	65	19			100358
10	1	55	19			245755
11	2	75.7	19	1077.3		389803
12	1	58.5	19			536040
13	3	84.5	19	1698.5	1678.5	82003
14	3	85.1	19	1705.9	1434.9	226312
15	1	62.9	19			373153
16	2	72.7	19	1490.3		516368
17	3	93.7	19	1554.3	1378.3	64309
18	3	92.6	19	1664.4	971.4	208779
19	1	52.3	19			354793
20	1	59.6	19			500384

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Radar Type 5_Trial 10

Data Sheet for FCC Radar Type 5						
Trial Number:		10		VSG Frequency(MHz):		5300
Number of Bursts in Trial:			19		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	52.8	19			49260
2	1	57.8	19			202140
3	2	83	19	1305		353936
4	2	74	19	1861		506007
5	1	59.4	19			30431
6	3	91.7	19	1575.3	1588.3	182322
7	3	95.4	19	1337.6	1334.6	334546
8	3	88	19	1165	1070	487057
9	3	90.9	19	1684.1	983.1	11563
10	1	56.2	19			164446
11	3	95.4	19	1197.6	1185.6	315733
12	1	52.9	19			470176
13	3	83.5	19	1579.5	1373.5	619668
14	2	80.1	19	1089.9		145363
15	3	92.1	19	1575.9	952.9	297174
16	1	53.3	19			451187
17	1	58.6	19			604463
18	1	51.7	19			126753
19	2	71.9	19	1641.1		278960

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Radar Type 5_Trial 11

Data Sheet for FCC Radar Type 5						
Trial Number:		11		VSG Frequency(MHz):		5306.4
Number of Bursts in Trial:			17		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	90.1	16	1138.9	1217.9	481413
2	1	55.1	16			653906
3	1	52.7	16			120632
4	2	69.5	16	1710.5		290690
5	1	57.7	16			462185
6	1	62.1	16			633007
7	1	51.2	16			99602
8	3	97.2	16	1470.8	919.8	269538
9	2	76.6	16	1901.4		440016
10	3	88.7	16	998.3	1593.3	609479
11	2	73.3	16	1224.7		78521
12	3	99	16	1094	1119	248546
13	1	55	16			420349
14	3	83.5	16	1775.5	1797.5	587997
15	2	75.6	16	1036.4		57466
16	1	60.3	16			228380
17	3	98.4	16	1427.6	1124.6	397604

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Radar Type 5_Trial 12

Data Sheet for FCC Radar Type 5						
Trial Number:		12		VSG Frequency(MHz):		5305.2
Number of Bursts in Trial:			14		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	76.9	13	1672.1		691148
2	3	86.9	13	941.1	950.1	44260
3	3	84	13	1379	1518	251083
4	3	92.4	13	1787.6	1001.6	457737
5	3	98.5	13	1022.5	1330.5	664724
6	1	50.3	13			18810
7	3	94	13	1567	1362	225484
8	1	58.7	13			433775
9	1	59.7	13			641135
10	2	72.8	13	1386.2		847055
11	2	75.1	13	1627.9		200267
12	1	54.4	13			408278
13	3	93	13	1463	1097	613649
14	1	59.6	13			823457

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Radar Type 5_Trial 13

Data Sheet for FCC Radar Type 5						
Trial Number:		13		VSG Frequency(MHz):		5306
Number of Bursts in Trial:			16		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	64.1	15			153202
2	3	92	15	966	1481	333417
3	2	70.6	15	1188.4		515668
4	1	62.2	15			697688
5	1	54.4	15			130940
6	1	50	15			312396
7	3	88.4	15	1699.6	1680.6	491494
8	2	75.3	15	1458.7		674401
9	1	61.8	15			108536
10	1	58.1	15			290240
11	3	94.5	15	1530.5	1329.5	469678
12	2	68.7	15	1006.3		652215
13	3	99.4	15	982.6	1080.6	85877
14	2	67.6	15	1179.4		267155
15	1	57.3	15			448973
16	3	90.3	15	1199.7	1206.7	628339

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Radar Type 5_Trial 14

Data Sheet for FCC Radar Type 5						
Trial Number:		14		VSG Frequency(MHz):		5304.8
Number of Bursts in Trial:			14		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	69.4	12	1677.6		72808
2	1	57.9	12			280627
3	2	69.8	12	1504.2		486976
4	3	93.7	12	1045.3	1162.3	693801
5	2	76.5	12	1777.5		47300
6	2	71.7	12	1824.3		254267
7	2	67.8	12	1359.2		461607
8	2	79.6	12	1637.4		668524
9	3	91.7	12	1031.3	1334.3	21773
10	1	54.8	12			229278
11	1	58.8	12			437015
12	1	60.7	12			644496
13	3	98.1	12	1728.9	957.9	849306
14	3	89.4	12	1400.6	1263.6	203056

Radar Type 5_Trial 15

Data Sheet for FCC Radar Type 5						
Trial Number:		15		VSG Frequency(MHz):		5305.6
Number of Bursts in Trial:			15		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	76.2	14	1217.8		383368
2	3	92.8	14	1814.2	1185.2	574892
3	3	83.7	14	1300.3	1324.3	768520
4	2	79	14	1089		166183
5	1	59.2	14			359935
6	1	57	14			553490
7	3	84.5	14	1451.5	1328.5	744859
8	2	71.2	14	1404.8		142291
9	2	71.1	14	985.9		335518
10	1	60.2	14			529838
11	1	60	14			723720
12	1	51.6	14			118619
13	2	75	14	1128		311772
14	2	75.8	14	1749.2		504866
15	3	97.9	14	1243.1	1859.1	696515

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Radar Type 5_Trial 16

Data Sheet for FCC Radar Type 5						
Trial Number:		16		VSG Frequency(MHz):		5307.6
Number of Bursts in Trial:			19		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	79.7	19	1520.3		74561
2	1	50.9	19			227754
3	2	76.4	19	978.6		379515
4	1	51.3	19			532896
5	2	69.4	19	1674.6		55798
6	1	53.3	19			208795
7	2	67.1	19	985.9		360960
8	3	84.6	19	1834.4	1907.4	511221
9	3	99.3	19	915.7	1207.7	37023
10	2	83.2	19	1073.8		189717
11	3	92.4	19	1531.6	1813.6	340813
12	2	74.1	19	1579.9		494006
13	3	91	19	1546	1227	18219
14	2	70.6	19	1858.4		170549
15	3	99.7	19	1614.3	1219.3	322579
16	3	91.3	19	1634.7	1156.7	474230
17	2	77.6	19	1042.4		628603
18	2	77.2	19	1294.8		151957
19	2	72.5	19	1144.5		304348

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Radar Type 5_Trial 17

Data Sheet for FCC Radar Type 5						
Trial Number:		17		VSG Frequency(MHz):		5306
Number of Bursts in Trial:			16		Successful Detection: No	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	82	15	969		543472
2	1	51.7	15			725146
3	3	85.1	15	1693.9	999.9	158028
4	2	70.3	15	1105.7		339426
5	1	58.3	15			521318
6	1	50.3	15			703266
7	1	55.8	15			136114
8	3	98.3	15	1307.7	1849.7	316257
9	3	86.9	15	976.1	1804.1	497212
10	1	59.5	15			681054
11	3	83.7	15	1447.3	1116.3	113373
12	2	74.8	15	943.2		294796
13	3	96.8	15	1796.2	945.2	475285
14	3	92	15	1825	1003	656139
15	2	81.7	15	1819.3		91236
16	1	61.9	15			273109

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Radar Type 5_Trial 18

Data Sheet for FCC Radar Type 5						
Trial Number:		18		VSG Frequency(MHz):		5307.6
Number of Bursts in Trial:			20		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	53.8	19			363616
2	2	82.4	19	1337.6		507450
3	1	59.4	19			55233
4	2	78.7	19	1788.3		199696
5	3	86	19	1910	1890	343053
6	1	59	19			490862
7	1	58.1	19			37402
8	3	84.4	19	1752.6	1191.6	181734
9	3	95.9	19	1615.1	1620.1	325962
10	2	66.9	19	1207.1		472008
11	2	82.9	19	1529.1		19442
12	3	93.5	19	1351.5	1715.5	163704
13	1	50.6	19			309892
14	2	71.5	19	1238.5		454151
15	2	69	19	1393		1625
16	2	82.5	19	1576.5		146435
17	2	74.4	19	1121.6		291312
18	1	52.5	19			437218
19	3	93.8	19	1678.2	1434.2	578944
20	3	96.2	19	1084.8	1798.8	128344

Radar Type 5_Trial 19

Data Sheet for FCC Radar Type 5						
Trial Number:		19		VSG Frequency(MHz):		5303.2
Number of Bursts in Trial:			11		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	94.6	8	1308.4	1690.4	497477
2	2	80.7	8	1165.3		762444
3	2	68	8	1186		1026116
4	1	51	8			202167
5	1	63.5	8			466395
6	1	55.1	8			730369
7	2	80.3	8	1563.7		993228
8	2	75.1	8	1122.9		169322
9	1	65.6	8			433563
10	1	58.3	8			698062
11	3	95.7	8	1176.3	1373.3	959946

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Radar Type 5_Trial 20

Data Sheet for FCC Radar Type 5						
Trial Number:		20		VSG Frequency(MHz):		5304.4
Number of Bursts in Trial:			13		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	82.2	11	1328.8		115675
2	1	59.2	11			339298
3	1	58.6	11			562656
4	3	95.8	11	1237.2	971.2	784346
5	1	58.8	11			88370
6	2	68.2	11	1676.8		311242
7	3	98.6	11	1112.4	1558.4	533540
8	3	86.5	11	1841.5	1844.5	755808
9	2	73	11	995		60765
10	3	93.6	11	1730.4	1509.4	283302
11	1	50.7	11			507804
12	2	74.4	11	961.6		730324
13	3	91.5	11	1673.5	1896.5	33175

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Radar Type 5_Trial 21

Data Sheet for FCC Radar Type 5						
Trial Number:		21		VSG Frequency(MHz):		5295.2
Number of Bursts in Trial:			14		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	67.5	12	1421.5		237889
2	1	62.4	12			446108
3	3	97.6	12	1252.4	1660.4	651045
4	1	65.3	12			5352
5	3	90.6	12	1753.4	1878.4	211813
6	1	51.1	12			420256
7	1	50.4	12			627877
8	3	94.2	12	1365.8	1360.8	832373
9	3	98.2	12	1730.8	1131.8	186588
10	3	85.6	12	1750.4	1763.4	392961
11	2	67.3	12	1835.7		601128
12	2	73.2	12	960.8		808645
13	1	64.3	12			161806
14	1	58.3	12			369422

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Radar Type 5_Trial 22

Data Sheet for FCC Radar Type 5						
Trial Number:		22		VSG Frequency(MHz):		5292
Number of Bursts in Trial:			20		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	65.1	20			403594
2	2	80.9	20	1458.1		547087
3	2	78.7	20	1724.3		94947
4	2	83	20	1724		239833
5	2	68.7	20	1034.3		384648
6	3	87.5	20	1176.5	1347.5	528248
7	2	71.2	20	1408.8		77213
8	1	50.6	20			222635
9	3	84.2	20	1455.8	1224.8	366185
10	3	92	20	1407	1816	509720
11	2	75.8	20	1230.2		59401
12	1	60.1	20			204585
13	1	64.3	20			349682
14	2	75.8	20	1465.2		493924
15	1	66	20			41647
16	2	70.8	20	1423.2		186439
17	1	52.5	20			331832
18	3	93.9	20	1602.1	1793.1	473933
19	1	56.2	20			23748
20	2	76.6	20	1357.4		168585

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Radar Type 5_Trial 23

Data Sheet for FCC Radar Type 5						
Trial Number:		23		VSG Frequency(MHz):		5292.8
Number of Bursts in Trial:			18		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	83.5	18	1141.5	1876.5	347257
2	1	51.1	18			510455
3	1	57.5	18			6514
4	1	64.9	18			167727
5	3	84.6	18	1654.4	1614.4	327341
6	1	64.4	18			490380
7	1	57.8	18			651329
8	1	51.4	18			147922
9	3	84	18	1804	1013	308079
10	2	73.7	18	1905.3		469204
11	3	91.4	18	1530.6	1451.6	629026
12	2	72.5	18	1394.5		127795
13	3	94.5	18	1651.5	927.5	288214
14	1	59.8	18			450519
15	3	83.5	18	1558.5	1856.5	608587
16	1	55.6	18			108227
17	3	94.3	18	988.7	1379.7	268511
18	1	60.6	18			430733

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Radar Type 5_Trial 24

Data Sheet for FCC Radar Type 5						
Trial Number:		24		VSG Frequency(MHz):		5297.2
Number of Bursts in Trial:			9		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	82.1	7	1253.9		1184478
2	3	87	7	1424	1783	176431
3	2	70.2	7	995.8		499421
4	2	66.8	7	1217.2		822029
5	2	78.2	7	1314.8		1145080
6	1	55.6	7			137108
7	3	89.6	7	1607.4	942.4	459079
8	2	80.4	7	1784.6		781771
9	3	86.9	7	1756.1	1643.1	1103279

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Radar Type 5_Trial 25

Data Sheet for FCC Radar Type 5						
Trial Number:		25		VSG Frequency(MHz):		5296.4
Number of Bursts in Trial:			11		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	74.6	9	1673.4		79513
2	2	78.1	9	1898.9		343326
3	2	77.4	9	1380.6		607224
4	2	83.1	9	1606.9		870860
5	2	73.5	9	1076.5		47039
6	2	66.9	9	1441.1		310982
7	3	87.8	9	1587.2	1260.2	573662
8	2	74.8	9	1224.2		838445
9	1	63.9	9			14527
10	2	73.3	9	1121.7		278481
11	1	63.7	9			542820

Radar Type 5_Trial 26

Data Sheet for FCC Radar Type 5						
Trial Number:		26		VSG Frequency(MHz):		5297.6
Number of Bursts in Trial:			9		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	98.5	6	1770.5	1754.5	984387
2	1	54.2	6			1309680
3	2	79.6	6	1836.4		300461
4	2	69.8	6	1422.2		623132
5	2	66.7	6	1170.3		946283
6	1	60.5	6			1269536
7	1	50.6	6			261275
8	1	53.2	6			584228
9	1	65.6	6			907546

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Radar Type 5_Trial 27

Data Sheet for FCC Radar Type 5						
Trial Number:		27		VSG Frequency(MHz):		5294
Number of Bursts in Trial:			16		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	54.4	15			691462
2	3	92.4	15	1521.6	1696.6	123813
3	1	60.4	15			305771
4	2	76.5	15	1841.5		486181
5	3	92	15	1853	1290	666478
6	1	61.8	15			102006
7	2	69.3	15	1828.7		282780
8	1	56.3	15			465445
9	2	66.7	15	1067.3		645845
10	2	72.9	15	1116.1		79615
11	1	51.9	15			261092
12	2	75.3	15	1502.7		442137
13	1	54.1	15			624512
14	2	77.5	15	1436.5		57262
15	2	83.3	15	1212.7		238468
16	2	73.3	15	995.7		419960

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Radar Type 5_Trial 28

Data Sheet for FCC Radar Type 5						
Trial Number:		28		VSG Frequency(MHz):		5298
Number of Bursts in Trial:			8		Successful Detection: No	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	56.6	5			1204947
2	3	90.6	5	1569.4	1073.4	69914
3	2	67.8	5	1182.2		433042
4	1	55.6	5			796930
5	1	56.7	5			1160679
6	3	85	5	942	924	25243
7	2	69.5	5	1294.5		388398
8	2	82.4	5	1481.6		751251

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Radar Type 5_Trial 29

Data Sheet for FCC Radar Type 5						
Trial Number:		29		VSG Frequency(MHz):		5296
Number of Bursts in Trial:			12		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	80.5	10	1270.5		742202
2	1	62.1	10			985899
3	2	77.8	10	1877.2		228650
4	1	57.3	10			471433
5	1	50.4	10			713779
6	1	50	10			955770
7	2	67.6	10	1159.4		199024
8	1	54.9	10			441427
9	3	86.4	10	1112.6	1787.6	681917
10	1	64.8	10			925532
11	2	82.4	10	1685.6		169151
12	2	82.3	10	1522.7		411022

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Radar Type 5_Trial 30

Data Sheet for FCC Radar Type 5						
Trial Number:		30		VSG Frequency(MHz):		5294.8
Number of Bursts in Trial:			14		Successful Detection: No	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	67.7	13	1744.3		559141
2	1	50.8	13			767953
3	3	91.2	13	937.8	1171.8	119382
4	1	61.7	13			327124
5	3	97.6	13	1397.4	962.4	533226
6	2	81.5	13	1154.5		740954
7	1	58.1	13			94102
8	3	91.1	13	1599.9	1415.9	300600
9	2	71.3	13	1106.7		508326
10	3	88.4	13	1409.6	1430.6	714290
11	3	94.4	13	1157.6	1056.6	68412
12	2	76.7	13	1340.3		275776
13	3	96.4	13	1154.6	1169.6	481944
14	3	96.5	13	1885.5	1342.5	687978

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Frequency Hopping Radar Test Waveforms

Radar Type 6

Trial	Pulse Width	PRI	Pulses per Hop	Hopping Rate	Hopping Sequence Length	Successful Detection
	(μ sec)	(μ sec)		(kHz)	(msec)	(Yes/No)
1	1	333	9	0.333	300	Yes
2	1	333	9	0.333	300	Yes
3	1	333	9	0.333	300	Yes
4	1	333	9	0.333	300	Yes
5	1	333	9	0.333	300	Yes
6	1	333	9	0.333	300	Yes
7	1	333	9	0.333	300	Yes
8	1	333	9	0.333	300	Yes
9	1	333	9	0.333	300	Yes
10	1	333	9	0.333	300	Yes
11	1	333	9	0.333	300	Yes
12	1	333	9	0.333	300	Yes
13	1	333	9	0.333	300	Yes
14	1	333	9	0.333	300	Yes
15	1	333	9	0.333	300	Yes
16	1	333	9	0.333	300	Yes
17	1	333	9	0.333	300	Yes
18	1	333	9	0.333	300	Yes
19	1	333	9	0.333	300	Yes
20	1	333	9	0.333	300	Yes
21	1	333	9	0.333	300	Yes
22	1	333	9	0.333	300	No
23	1	333	9	0.333	300	Yes
24	1	333	9	0.333	300	Yes
25	1	333	9	0.333	300	Yes
26	1	333	9	0.333	300	Yes
27	1	333	9	0.333	300	Yes
28	1	333	9	0.333	300	No
29	1	333	9	0.333	300	No
30	1	333	9	0.333	300	Yes

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< Channel Bandwidth 40MHz / 5310MHz >
Short Pulse Radar Test Waveforms
Radar Type 1

Trial	VSG Frequency (MHz)	Pulse Repetition Frequency	Pulse Repetition Frequency	PRI	Test A/B	Successful Detection
		Number (1 to 23)	(Pulses Per Second)	(msec)	A/B	(Yes/No)
1	5310	2	1858.7	538	A	Yes
2	5310	14	1285.3	778	A	Yes
3	5310	5	1672.2	598	A	Yes
4	5310	9	1474.9	678	A	Yes
5	5310	6	1618.1	618	A	Yes
6	5310	4	1730.1	578	A	Yes
7	5310	16	1222.5	818	A	Yes
8	5310	12	1355	738	A	Yes
9	5310	22	1066.1	938	A	Yes
10	5310	17	1193.3	838	A	No
11	5310	3	1792.1	558	A	Yes
12	5310	18	1165.5	858	A	Yes
13	5310	7	1567.4	638	A	Yes
14	5310	15	1253.1	798	A	Yes
15	5310	23	326.2	3066	A	Yes
16	5310	-	727.8	1374	B	Yes
17	5310	-	531.6	1881	B	Yes
18	5310	-	1194.7	837	B	Yes
19	5310	-	327.5	3053	B	Yes
20	5310	-	819	1221	B	Yes
21	5310	-	1075.3	930	B	Yes
22	5310	-	455	2198	B	Yes
23	5310	-	492.9	2029	B	Yes
24	5310	-	432.5	2312	B	Yes
25	5310	-	963.4	1038	B	Yes
26	5310	-	598.4	1671	B	No
27	5310	-	523	1912	B	Yes
28	5310	-	1278.8	782	B	Yes
29	5310	-	364.8	2741	B	Yes
30	5310	-	465.1	2150	B	Yes

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Radar Type 2

Trial	VSG Frequency (MHz)	Number Pulses per Burst (23-29)	Pulse Width (1-5)	PRI (150-230)	Successful Detection
			(μ s)	(μ s)	(Yes/No)
1	5310	23	1.2	204	Yes
2	5310	28	4.2	154	Yes
3	5310	24	1.9	169	Yes
4	5310	28	4	166	Yes
5	5310	25	2.5	186	Yes
6	5310	28	4.2	162	Yes
7	5310	23	1.2	195	No
8	5310	29	4.7	208	Yes
9	5310	29	4.8	219	Yes
10	5310	29	4.6	221	Yes
11	5310	28	4	198	Yes
12	5310	26	3	210	Yes
13	5310	27	3.8	215	Yes
14	5310	26	3	184	Yes
15	5310	27	3.4	176	Yes
16	5310	29	4.6	155	Yes
17	5310	27	3.8	200	Yes
18	5310	29	4.8	174	Yes
19	5310	24	1.9	160	Yes
20	5310	25	2.7	189	Yes
21	5310	26	2.9	151	Yes
22	5310	29	5	159	Yes
23	5310	28	4.3	170	Yes
24	5310	23	1.5	164	Yes
25	5310	24	2.1	230	Yes
26	5310	23	1.5	197	No
27	5310	27	3.6	226	Yes
28	5310	23	1.1	172	No
29	5310	25	2.4	201	Yes
30	5310	26	3	180	No

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Radar Type 3

Trial	VSG Frequency (MHz)	Number Pulses per Burst (16-18)	Pulse Width (6-10)	PRI (200-500)	Successful Detection
			(μ s)	(μ s)	(Yes/No)
1	5310	16	6.2	271	Yes
2	5310	18	9.2	360	Yes
3	5310	16	6.9	257	Yes
4	5310	18	9	265	Yes
5	5310	17	7.5	207	Yes
6	5310	18	9.2	290	Yes
7	5310	16	6.2	460	Yes
8	5310	18	9.7	312	No
9	5310	18	9.8	363	No
10	5310	18	9.6	293	Yes
11	5310	18	9	493	Yes
12	5310	17	8	438	Yes
13	5310	18	8.8	337	Yes
14	5310	17	8	282	Yes
15	5310	17	8.4	332	Yes
16	5310	18	9.6	457	Yes
17	5310	18	8.8	241	No
18	5310	18	9.8	485	Yes
19	5310	16	6.9	288	Yes
20	5310	17	7.7	320	Yes
21	5310	17	7.9	385	Yes
22	5310	18	10	245	Yes
23	5310	18	9.3	301	Yes
24	5310	16	6.5	347	No
25	5310	16	7.1	286	No
26	5310	16	6.5	280	Yes
27	5310	17	8.6	475	Yes
28	5310	16	6.1	200	No
29	5310	17	7.4	370	Yes
30	5310	17	8	458	Yes

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Radar Type 4

Trial	VSG Frequency (MHz)	Number Pulses per Burst (12-16)	Pulse Width (11-20)	PRI (200-500)	Successful Detection
			(μ s)	(μ s)	(Yes/No)
1	5310	12	11.5	271	Yes
2	5310	15	18.1	360	No
3	5310	13	13.2	257	Yes
4	5310	15	17.6	265	Yes
5	5310	13	14.3	207	Yes
6	5310	16	18.3	290	Yes
7	5310	12	11.5	460	Yes
8	5310	16	19.2	312	Yes
9	5310	16	19.5	363	No
10	5310	16	19	293	Yes
11	5310	15	17.6	493	Yes
12	5310	14	15.5	438	Yes
13	5310	15	17.2	337	Yes
14	5310	14	15.4	282	Yes
15	5310	15	16.5	332	Yes
16	5310	16	19.2	457	Yes
17	5310	15	17.2	241	Yes
18	5310	16	19.4	485	No
19	5310	13	13.1	288	Yes
20	5310	14	14.8	320	Yes
21	5310	14	15.4	385	No
22	5310	16	20	245	Yes
23	5310	16	18.4	301	Yes
24	5310	12	12.1	347	No
25	5310	13	13.5	286	Yes
26	5310	12	12.1	280	Yes
27	5310	15	16.9	475	No
28	5310	12	11.3	200	Yes
29	5310	13	14.1	370	Yes
30	5310	14	15.5	458	No

Long Pulse Radar Test Waveforms

Radar Type 5_Trial 1

Data Sheet for FCC Radar Type 5						
Trial Number:		1		VSG Frequency(MHz):		5310
Number of Bursts in Trial:			8		Successful Detection: No	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	53.2	6			459314
2	3	89.6	6	998.4	1307.4	821434
3	1	62.1	6			1186533
4	3	86.8	6	919.2	1099.2	51133
5	2	68.6	6	1810.4		414158
6	3	90.2	6	1080.8	1125.8	776674
7	1	52.9	6			1141879
8	3	95.3	6	1248.7	1727.7	6431

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Radar Type 5_Trial 2

Data Sheet for FCC Radar Type 5						
Trial Number:		2		VSG Frequency(MHz):		5310
Number of Bursts in Trial:			18		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	96.9	17	1340.1	1029.1	163511
2	3	94.4	17	1556.6	1284.6	324198
3	3	86.8	17	1042.2	1205.2	484699
4	2	75.2	17	1683.8		646027
5	3	84.2	17	1427.8	1526.8	143646
6	2	74.5	17	1760.5		304987
7	2	80.3	17	1816.7		465883
8	3	95.1	17	1243.9	1173.9	625495
9	3	84.3	17	1029.7	1748.7	123936
10	3	96.6	17	1090.4	1559.4	284669
11	1	61.8	17			447236
12	2	71.1	17	1366.9		607278
13	2	74.4	17	974.6		104457
14	3	99.8	17	925.2	1384.2	264840
15	3	90.9	17	1481.1	1014.1	425378
16	1	56.4	17			588812
17	1	64.1	17			84728
18	1	56.1	17			246100

Radar Type 5_Trial 3

Data Sheet for FCC Radar Type 5						
Trial Number:		3		VSG Frequency(MHz):		5310
Number of Bursts in Trial:			11		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	82.8	8	1102.2		666579
2	1	52	8			931571
3	2	67.4	8	970.6		106031
4	2	75.1	8	1515.9		369972
5	2	80.4	8	1839.6		633702
6	3	88.9	8	1169.1	1465.1	896473
7	1	60.8	8			73640
8	1	57	8			337830
9	3	96.8	8	1565.2	1367.2	600209
10	3	97	8	1095	1003	864171
11	2	68.9	8	1875.1		41002

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Radar Type 5_Trial 4

Data Sheet for FCC Radar Type 5						
Trial Number:		4		VSG Frequency(MHz):		5310
Number of Bursts in Trial:			17		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	92.1	16	917.9	1647.9	196661
2	1	57.7	16			368454
3	1	63.3	16			538834
4	3	84.8	16	1677.2	958.2	5499
5	2	71.3	16	1326.7		176130
6	1	59.3	16			347347
7	3	98.5	16	1485.5	1896.5	515465
8	1	60.6	16			688722
9	1	52.2	16			155360
10	3	87	16	1859	1298	324415
11	1	59.4	16			497001
12	3	95	16	1107	1462	664738
13	2	77.8	16	1085.2		134020
14	3	88.2	16	1126.8	913.8	304178
15	2	81.5	16	1414.5		474730
16	3	96	16	1409	1457	644296
17	2	72.1	16	1714.9		112918

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Radar Type 5_Trial 5

Data Sheet for FCC Radar Type 5						
Trial Number:		5		VSG Frequency(MHz):		5310
Number of Bursts in Trial:			12		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	88.3	10	1788.7	1844.7	401291
2	1	53.5	10			644528
3	3	98.7	10	1295.3	1867.3	883873
4	1	55.7	10			130699
5	2	72.7	10	1011.3		372566
6	1	62.5	10			614976
7	1	57.3	10			857127
8	1	50.8	10			100816
9	2	77.9	10	1276.1		342628
10	2	71.7	10	1359.3		584328
11	1	63.9	10			827704
12	3	97.9	10	1501.1	1557.1	70803

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Radar Type 5_Trial 6

Data Sheet for FCC Radar Type 5						
Trial Number:		6		VSG Frequency(MHz):		5310
Number of Bursts in Trial:			18		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	64.4	17			208665
2	2	77.2	17	1504.8		369289
3	2	77.8	17	1610.2		529738
4	3	83.4	17	1767.6	1416.6	27312
5	2	76.2	17	1082.8		188429
6	3	92.2	17	1400.8	1080.8	348828
7	3	88.9	17	1327.1	934.1	509666
8	3	98.5	17	1247.5	1419.5	7537
9	3	86.3	17	1852.7	1317.7	168095
10	1	53	17			329982
11	3	90.4	17	1488.6	1879.6	489261
12	3	92.4	17	1382.6	1602.6	649287
13	3	95.8	17	1877.2	1770.2	148111
14	1	61.8	17			310145
15	2	69.1	17	1109.9		470854
16	2	73.4	17	1512.6		631023
17	1	57	17			129050
18	3	89.6	17	1541.4	1462.4	289166

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Radar Type 5_Trial 7

Data Sheet for FCC Radar Type 5						
Trial Number:		7		VSG Frequency(MHz):		5310
Number of Bursts in Trial:			8		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	86.9	5	1260.1	1123.1	1016169
2	3	99	5	948	1257	1379189
3	3	92.9	5	1014.1	1224.1	245822
4	3	88.7	5	952.3	1503.3	608513
5	2	68.7	5	1721.3		971813
6	3	93.3	5	1350.7	1052.7	1334356
7	3	98.3	5	1701.7	1233.7	201008
8	1	63.2	5			564898

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Radar Type 5_Trial 8

Data Sheet for FCC Radar Type 5						
Trial Number:		8		VSG Frequency(MHz):		5310
Number of Bursts in Trial:			19		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	69.4	19	1794.6		389132
2	3	95.2	19	1271.8	1425.8	540635
3	1	55.9	19			65824
4	3	84	19	1874	1015	217529
5	3	93.5	19	1125.5	1080.5	369977
6	3	87.6	19	1060.4	1753.4	521468
7	3	84.6	19	1824.4	1799.4	46743
8	1	62.8	19			199972
9	3	87.9	19	1754.1	1066.1	351062
10	1	59.7	19			505236
11	2	81.7	19	1656.3		28162
12	1	61.6	19			180959
13	1	51.6	19			333991
14	3	96.1	19	1048.9	1758.9	484225
15	3	92.7	19	1601.3	1625.3	9343
16	3	97.6	19	1840.4	1700.4	161123
17	3	85.8	19	1252.2	1287.2	313724
18	3	85.2	19	1184.8	1385.8	466069
19	1	63.1	19			620197

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Radar Type 5_Trial 9

Data Sheet for FCC Radar Type 5						
Trial Number:		9		VSG Frequency(MHz):		5310
Number of Bursts in Trial:			20		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	56.2	19			136162
2	1	59.9	19			281247
3	1	60.8	19			426683
4	3	93.4	19	1383.6	1869.6	568139
5	3	84	19	1161	1884	117631
6	3	93.9	19	1033.1	1110.1	262537
7	3	88.3	19	1813.7	1480.7	406272
8	3	84.9	19	1553.1	1600.1	550915
9	1	65	19			100358
10	1	55	19			245755
11	2	75.7	19	1077.3		389803
12	1	58.5	19			536040
13	3	84.5	19	1698.5	1678.5	82003
14	3	85.1	19	1705.9	1434.9	226312
15	1	62.9	19			373153
16	2	72.7	19	1490.3		516368
17	3	93.7	19	1554.3	1378.3	64309
18	3	92.6	19	1664.4	971.4	208779
19	1	52.3	19			354793
20	1	59.6	19			500384

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Radar Type 5_Trial 10

Data Sheet for FCC Radar Type 5						
Trial Number:		10		VSG Frequency(MHz):		5310
Number of Bursts in Trial:			19		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	52.8	19			49260
2	1	57.8	19			202140
3	2	83	19	1305		353936
4	2	74	19	1861		506007
5	1	59.4	19			30431
6	3	91.7	19	1575.3	1588.3	182322
7	3	95.4	19	1337.6	1334.6	334546
8	3	88	19	1165	1070	487057
9	3	90.9	19	1684.1	983.1	11563
10	1	56.2	19			164446
11	3	95.4	19	1197.6	1185.6	315733
12	1	52.9	19			470176
13	3	83.5	19	1579.5	1373.5	619668
14	2	80.1	19	1089.9		145363
15	3	92.1	19	1575.9	952.9	297174
16	1	53.3	19			451187
17	1	58.6	19			604463
18	1	51.7	19			126753
19	2	71.9	19	1641.1		278960

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Radar Type 5_Trial 11

Data Sheet for FCC Radar Type 5						
Trial Number:		11		VSG Frequency(MHz):		5316.4
Number of Bursts in Trial:			17		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	90.1	16	1138.9	1217.9	481413
2	1	55.1	16			653906
3	1	52.7	16			120632
4	2	69.5	16	1710.5		290690
5	1	57.7	16			462185
6	1	62.1	16			633007
7	1	51.2	16			99602
8	3	97.2	16	1470.8	919.8	269538
9	2	76.6	16	1901.4		440016
10	3	88.7	16	998.3	1593.3	609479
11	2	73.3	16	1224.7		78521
12	3	99	16	1094	1119	248546
13	1	55	16			420349
14	3	83.5	16	1775.5	1797.5	587997
15	2	75.6	16	1036.4		57466
16	1	60.3	16			228380
17	3	98.4	16	1427.6	1124.6	397604

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Radar Type 5_Trial 12

Data Sheet for FCC Radar Type 5						
Trial Number:		12		VSG Frequency(MHz):		5315.2
Number of Bursts in Trial:			14		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	76.9	13	1672.1		691148
2	3	86.9	13	941.1	950.1	44260
3	3	84	13	1379	1518	251083
4	3	92.4	13	1787.6	1001.6	457737
5	3	98.5	13	1022.5	1330.5	664724
6	1	50.3	13			18810
7	3	94	13	1567	1362	225484
8	1	58.7	13			433775
9	1	59.7	13			641135
10	2	72.8	13	1386.2		847055
11	2	75.1	13	1627.9		200267
12	1	54.4	13			408278
13	3	93	13	1463	1097	613649
14	1	59.6	13			823457

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Radar Type 5_Trial 13

Data Sheet for FCC Radar Type 5						
Trial Number:		13		VSG Frequency(MHz):		5316
Number of Bursts in Trial:			16		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	64.1	15			153202
2	3	92	15	966	1481	333417
3	2	70.6	15	1188.4		515668
4	1	62.2	15			697688
5	1	54.4	15			130940
6	1	50	15			312396
7	3	88.4	15	1699.6	1680.6	491494
8	2	75.3	15	1458.7		674401
9	1	61.8	15			108536
10	1	58.1	15			290240
11	3	94.5	15	1530.5	1329.5	469678
12	2	68.7	15	1006.3		652215
13	3	99.4	15	982.6	1080.6	85877
14	2	67.6	15	1179.4		267155
15	1	57.3	15			448973
16	3	90.3	15	1199.7	1206.7	628339

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Radar Type 5_Trial 14

Data Sheet for FCC Radar Type 5						
Trial Number:		14		VSG Frequency(MHz):		5314.8
Number of Bursts in Trial:			14		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	69.4	12	1677.6		72808
2	1	57.9	12			280627
3	2	69.8	12	1504.2		486976
4	3	93.7	12	1045.3	1162.3	693801
5	2	76.5	12	1777.5		47300
6	2	71.7	12	1824.3		254267
7	2	67.8	12	1359.2		461607
8	2	79.6	12	1637.4		668524
9	3	91.7	12	1031.3	1334.3	21773
10	1	54.8	12			229278
11	1	58.8	12			437015
12	1	60.7	12			644496
13	3	98.1	12	1728.9	957.9	849306
14	3	89.4	12	1400.6	1263.6	203056

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Radar Type 5_Trial 15

Data Sheet for FCC Radar Type 5						
Trial Number:		15		VSG Frequency(MHz):		5315.6
Number of Bursts in Trial:			15		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	76.2	14	1217.8		383368
2	3	92.8	14	1814.2	1185.2	574892
3	3	83.7	14	1300.3	1324.3	768520
4	2	79	14	1089		166183
5	1	59.2	14			359935
6	1	57	14			553490
7	3	84.5	14	1451.5	1328.5	744859
8	2	71.2	14	1404.8		142291
9	2	71.1	14	985.9		335518
10	1	60.2	14			529838
11	1	60	14			723720
12	1	51.6	14			118619
13	2	75	14	1128		311772
14	2	75.8	14	1749.2		504866
15	3	97.9	14	1243.1	1859.1	696515

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Radar Type 5_Trial 16

Data Sheet for FCC Radar Type 5						
Trial Number:		16		VSG Frequency(MHz):		5317.6
Number of Bursts in Trial:			19		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	79.7	19	1520.3		74561
2	1	50.9	19			227754
3	2	76.4	19	978.6		379515
4	1	51.3	19			532896
5	2	69.4	19	1674.6		55798
6	1	53.3	19			208795
7	2	67.1	19	985.9		360960
8	3	84.6	19	1834.4	1907.4	511221
9	3	99.3	19	915.7	1207.7	37023
10	2	83.2	19	1073.8		189717
11	3	92.4	19	1531.6	1813.6	340813
12	2	74.1	19	1579.9		494006
13	3	91	19	1546	1227	18219
14	2	70.6	19	1858.4		170549
15	3	99.7	19	1614.3	1219.3	322579
16	3	91.3	19	1634.7	1156.7	474230
17	2	77.6	19	1042.4		628603
18	2	77.2	19	1294.8		151957
19	2	72.5	19	1144.5		304348

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Radar Type 5_Trial 17

Data Sheet for FCC Radar Type 5						
Trial Number:		17		VSG Frequency(MHz):		5316
Number of Bursts in Trial:			16		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	82	15	969		543472
2	1	51.7	15			725146
3	3	85.1	15	1693.9	999.9	158028
4	2	70.3	15	1105.7		339426
5	1	58.3	15			521318
6	1	50.3	15			703266
7	1	55.8	15			136114
8	3	98.3	15	1307.7	1849.7	316257
9	3	86.9	15	976.1	1804.1	497212
10	1	59.5	15			681054
11	3	83.7	15	1447.3	1116.3	113373
12	2	74.8	15	943.2		294796
13	3	96.8	15	1796.2	945.2	475285
14	3	92	15	1825	1003	656139
15	2	81.7	15	1819.3		91236
16	1	61.9	15			273109

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Radar Type 5_Trial 18

Data Sheet for FCC Radar Type 5						
Trial Number:		18		VSG Frequency(MHz):		5317.6
Number of Bursts in Trial:			20		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	53.8	19			363616
2	2	82.4	19	1337.6		507450
3	1	59.4	19			55233
4	2	78.7	19	1788.3		199696
5	3	86	19	1910	1890	343053
6	1	59	19			490862
7	1	58.1	19			37402
8	3	84.4	19	1752.6	1191.6	181734
9	3	95.9	19	1615.1	1620.1	325962
10	2	66.9	19	1207.1		472008
11	2	82.9	19	1529.1		19442
12	3	93.5	19	1351.5	1715.5	163704
13	1	50.6	19			309892
14	2	71.5	19	1238.5		454151
15	2	69	19	1393		1625
16	2	82.5	19	1576.5		146435
17	2	74.4	19	1121.6		291312
18	1	52.5	19			437218
19	3	93.8	19	1678.2	1434.2	578944
20	3	96.2	19	1084.8	1798.8	128344

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Radar Type 5_Trial 19

Data Sheet for FCC Radar Type 5						
Trial Number:		19		VSG Frequency(MHz):		5313.2
Number of Bursts in Trial:			11		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	94.6	8	1308.4	1690.4	497477
2	2	80.7	8	1165.3		762444
3	2	68	8	1186		1026116
4	1	51	8			202167
5	1	63.5	8			466395
6	1	55.1	8			730369
7	2	80.3	8	1563.7		993228
8	2	75.1	8	1122.9		169322
9	1	65.6	8			433563
10	1	58.3	8			698062
11	3	95.7	8	1176.3	1373.3	959946

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Radar Type 5_Trial 20

Data Sheet for FCC Radar Type 5						
Trial Number:		20		VSG Frequency(MHz):		5314.4
Number of Bursts in Trial:			13		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	82.2	11	1328.8		115675
2	1	59.2	11			339298
3	1	58.6	11			562656
4	3	95.8	11	1237.2	971.2	784346
5	1	58.8	11			88370
6	2	68.2	11	1676.8		311242
7	3	98.6	11	1112.4	1558.4	533540
8	3	86.5	11	1841.5	1844.5	755808
9	2	73	11	995		60765
10	3	93.6	11	1730.4	1509.4	283302
11	1	50.7	11			507804
12	2	74.4	11	961.6		730324
13	3	91.5	11	1673.5	1896.5	33175

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Radar Type 5_Trial 21

Data Sheet for FCC Radar Type 5						
Trial Number:		21		VSG Frequency(MHz):		5305.2
Number of Bursts in Trial:			14		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	67.5	12	1421.5		237889
2	1	62.4	12			446108
3	3	97.6	12	1252.4	1660.4	651045
4	1	65.3	12			5352
5	3	90.6	12	1753.4	1878.4	211813
6	1	51.1	12			420256
7	1	50.4	12			627877
8	3	94.2	12	1365.8	1360.8	832373
9	3	98.2	12	1730.8	1131.8	186588
10	3	85.6	12	1750.4	1763.4	392961
11	2	67.3	12	1835.7		601128
12	2	73.2	12	960.8		808645
13	1	64.3	12			161806
14	1	58.3	12			369422

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Radar Type 5_Trial 22

Data Sheet for FCC Radar Type 5						
Trial Number:		22		VSG Frequency(MHz):		5302
Number of Bursts in Trial:			20		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	65.1	20			403594
2	2	80.9	20	1458.1		547087
3	2	78.7	20	1724.3		94947
4	2	83	20	1724		239833
5	2	68.7	20	1034.3		384648
6	3	87.5	20	1176.5	1347.5	528248
7	2	71.2	20	1408.8		77213
8	1	50.6	20			222635
9	3	84.2	20	1455.8	1224.8	366185
10	3	92	20	1407	1816	509720
11	2	75.8	20	1230.2		59401
12	1	60.1	20			204585
13	1	64.3	20			349682
14	2	75.8	20	1465.2		493924
15	1	66	20			41647
16	2	70.8	20	1423.2		186439
17	1	52.5	20			331832
18	3	93.9	20	1602.1	1793.1	473933
19	1	56.2	20			23748
20	2	76.6	20	1357.4		168585

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Radar Type 5_Trial 23

Data Sheet for FCC Radar Type 5						
Trial Number:		23		VSG Frequency(MHz):		5302.8
Number of Bursts in Trial:			18		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	83.5	18	1141.5	1876.5	347257
2	1	51.1	18			510455
3	1	57.5	18			6514
4	1	64.9	18			167727
5	3	84.6	18	1654.4	1614.4	327341
6	1	64.4	18			490380
7	1	57.8	18			651329
8	1	51.4	18			147922
9	3	84	18	1804	1013	308079
10	2	73.7	18	1905.3		469204
11	3	91.4	18	1530.6	1451.6	629026
12	2	72.5	18	1394.5		127795
13	3	94.5	18	1651.5	927.5	288214
14	1	59.8	18			450519
15	3	83.5	18	1558.5	1856.5	608587
16	1	55.6	18			108227
17	3	94.3	18	988.7	1379.7	268511
18	1	60.6	18			430733

Radar Type 5_Trial 24

Data Sheet for FCC Radar Type 5						
Trial Number:		24		VSG Frequency(MHz):		5307.2
Number of Bursts in Trial:			9		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	82.1	7	1253.9		1184478
2	3	87	7	1424	1783	176431
3	2	70.2	7	995.8		499421
4	2	66.8	7	1217.2		822029
5	2	78.2	7	1314.8		1145080
6	1	55.6	7			137108
7	3	89.6	7	1607.4	942.4	459079
8	2	80.4	7	1784.6		781771
9	3	86.9	7	1756.1	1643.1	1103279

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Radar Type 5_Trial 25

Data Sheet for FCC Radar Type 5						
Trial Number:		25		VSG Frequency(MHz):		5306.4
Number of Bursts in Trial:			11		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	74.6	9	1673.4		79513
2	2	78.1	9	1898.9		343326
3	2	77.4	9	1380.6		607224
4	2	83.1	9	1606.9		870860
5	2	73.5	9	1076.5		47039
6	2	66.9	9	1441.1		310982
7	3	87.8	9	1587.2	1260.2	573662
8	2	74.8	9	1224.2		838445
9	1	63.9	9			14527
10	2	73.3	9	1121.7		278481
11	1	63.7	9			542820

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Radar Type 5_Trial 26

Data Sheet for FCC Radar Type 5						
Trial Number:		26		VSG Frequency(MHz):		5307.6
Number of Bursts in Trial:			9		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	98.5	6	1770.5	1754.5	984387
2	1	54.2	6			1309680
3	2	79.6	6	1836.4		300461
4	2	69.8	6	1422.2		623132
5	2	66.7	6	1170.3		946283
6	1	60.5	6			1269536
7	1	50.6	6			261275
8	1	53.2	6			584228
9	1	65.6	6			907546

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Radar Type 5_Trial 27

Data Sheet for FCC Radar Type 5						
Trial Number:		27		VSG Frequency(MHz):		5304
Number of Bursts in Trial:			16		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	54.4	15			691462
2	3	92.4	15	1521.6	1696.6	123813
3	1	60.4	15			305771
4	2	76.5	15	1841.5		486181
5	3	92	15	1853	1290	666478
6	1	61.8	15			102006
7	2	69.3	15	1828.7		282780
8	1	56.3	15			465445
9	2	66.7	15	1067.3		645845
10	2	72.9	15	1116.1		79615
11	1	51.9	15			261092
12	2	75.3	15	1502.7		442137
13	1	54.1	15			624512
14	2	77.5	15	1436.5		57262
15	2	83.3	15	1212.7		238468
16	2	73.3	15	995.7		419960

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Radar Type 5_Trial 28

Data Sheet for FCC Radar Type 5						
Trial Number:		28		VSG Frequency(MHz):		5308
Number of Bursts in Trial:			8		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	56.6	5			1204947
2	3	90.6	5	1569.4	1073.4	69914
3	2	67.8	5	1182.2		433042
4	1	55.6	5			796930
5	1	56.7	5			1160679
6	3	85	5	942	924	25243
7	2	69.5	5	1294.5		388398
8	2	82.4	5	1481.6		751251

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Radar Type 5_Trial 29

Data Sheet for FCC Radar Type 5						
Trial Number:		29		VSG Frequency(MHz):		5306
Number of Bursts in Trial:			12		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	80.5	10	1270.5		742202
2	1	62.1	10			985899
3	2	77.8	10	1877.2		228650
4	1	57.3	10			471433
5	1	50.4	10			713779
6	1	50	10			955770
7	2	67.6	10	1159.4		199024
8	1	54.9	10			441427
9	3	86.4	10	1112.6	1787.6	681917
10	1	64.8	10			925532
11	2	82.4	10	1685.6		169151
12	2	82.3	10	1522.7		411022

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Radar Type 5_Trial 30

Data Sheet for FCC Radar Type 5						
Trial Number:		30		VSG Frequency(MHz):		5304.8
Number of Bursts in Trial:			14		Successful Detection: No	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	67.7	13	1744.3		559141
2	1	50.8	13			767953
3	3	91.2	13	937.8	1171.8	119382
4	1	61.7	13			327124
5	3	97.6	13	1397.4	962.4	533226
6	2	81.5	13	1154.5		740954
7	1	58.1	13			94102
8	3	91.1	13	1599.9	1415.9	300600
9	2	71.3	13	1106.7		508326
10	3	88.4	13	1409.6	1430.6	714290
11	3	94.4	13	1157.6	1056.6	68412
12	2	76.7	13	1340.3		275776
13	3	96.4	13	1154.6	1169.6	481944
14	3	96.5	13	1885.5	1342.5	687978

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< Channel Bandwidth 80MHz / 5290MHz >
Short Pulse Radar Test Waveforms
Radar Type 1

Trial	VSG Frequency (MHz)	Pulse Repetition Frequency	Pulse Repetition Frequency	PRI	Test A/B	Successful Detection
		Number (1 to 23)	(Pulses Per Second)	(msec)	A/B	(Yes/No)
1	5290	2	1858.7	538	A	Yes
2	5290	14	1285.3	778	A	Yes
3	5290	5	1672.2	598	A	Yes
4	5290	9	1474.9	678	A	Yes
5	5290	6	1618.1	618	A	Yes
6	5290	4	1730.1	578	A	No
7	5290	16	1222.5	818	A	Yes
8	5290	12	1355	738	A	Yes
9	5290	22	1066.1	938	A	Yes
10	5290	17	1193.3	838	A	No
11	5290	3	1792.1	558	A	Yes
12	5290	18	1165.5	858	A	Yes
13	5290	7	1567.4	638	A	Yes
14	5290	15	1253.1	798	A	Yes
15	5290	23	326.2	3066	A	Yes
16	5290	-	727.8	1374	B	Yes
17	5290	-	531.6	1881	B	Yes
18	5290	-	1194.7	837	B	Yes
19	5290	-	327.5	3053	B	No
20	5290	-	819	1221	B	Yes
21	5290	-	1075.3	930	B	Yes
22	5290	-	455	2198	B	Yes
23	5290	-	492.9	2029	B	Yes
24	5290	-	432.5	2312	B	Yes
25	5290	-	963.4	1038	B	Yes
26	5290	-	598.4	1671	B	No
27	5290	-	523	1912	B	Yes
28	5290	-	1278.8	782	B	Yes
29	5290	-	364.8	2741	B	Yes
30	5290	-	465.1	2150	B	No

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Radar Type 2

Trial	VSG Frequency (MHz)	Number Pulses per Burst (23-29)	Pulse Width (1-5)	PRI (150-230)	Successful Detection
			(μ s)	(μ s)	(Yes/No)
1	5290	23	1.2	204	Yes
2	5290	28	4.2	154	No
3	5290	24	1.9	169	Yes
4	5290	28	4	166	No
5	5290	25	2.5	186	Yes
6	5290	28	4.2	162	Yes
7	5290	23	1.2	195	Yes
8	5290	29	4.7	208	Yes
9	5290	29	4.8	219	Yes
10	5290	29	4.6	221	Yes
11	5290	28	4	198	Yes
12	5290	26	3	210	Yes
13	5290	27	3.8	215	No
14	5290	26	3	184	Yes
15	5290	27	3.4	176	Yes
16	5290	29	4.6	155	Yes
17	5290	27	3.8	200	Yes
18	5290	29	4.8	174	Yes
19	5290	24	1.9	160	Yes
20	5290	25	2.7	189	Yes
21	5290	26	2.9	151	Yes
22	5290	29	5	159	Yes
23	5290	28	4.3	170	Yes
24	5290	23	1.5	164	Yes
25	5290	24	2.1	230	Yes
26	5290	23	1.5	197	Yes
27	5290	27	3.6	226	Yes
28	5290	23	1.1	172	Yes
29	5290	25	2.4	201	No
30	5290	26	3	180	Yes

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Radar Type 3

Trial	VSG Frequency (MHz)	Number Pulses per Burst (16-18)	Pulse Width (6-10)	PRI (200-500)	Successful Detection
			(μ s)	(μ s)	(Yes/No)
1	5290	16	6.2	271	Yes
2	5290	18	9.2	360	No
3	5290	16	6.9	257	Yes
4	5290	18	9	265	Yes
5	5290	17	7.5	207	No
6	5290	18	9.2	290	Yes
7	5290	16	6.2	460	Yes
8	5290	18	9.7	312	Yes
9	5290	18	9.8	363	Yes
10	5290	18	9.6	293	Yes
11	5290	18	9	493	No
12	5290	17	8	438	Yes
13	5290	18	8.8	337	Yes
14	5290	17	8	282	Yes
15	5290	17	8.4	332	Yes
16	5290	18	9.6	457	Yes
17	5290	18	8.8	241	Yes
18	5290	18	9.8	485	Yes
19	5290	16	6.9	288	Yes
20	5290	17	7.7	320	Yes
21	5290	17	7.9	385	Yes
22	5290	18	10	245	Yes
23	5290	18	9.3	301	Yes
24	5290	16	6.5	347	Yes
25	5290	16	7.1	286	No
26	5290	16	6.5	280	Yes
27	5290	17	8.6	475	Yes
28	5290	16	6.1	200	Yes
29	5290	17	7.4	370	Yes
30	5290	17	8	458	No

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Radar Type 4

Trial	VSG Frequency (MHz)	Number Pulses per Burst (12-16)	Pulse Width (11-20)	PRI (200-500)	Successful Detection
			(μ s)	(μ s)	(Yes/No)
1	5290	12	11.5	271	Yes
2	5290	15	18.1	360	Yes
3	5290	13	13.2	257	No
4	5290	15	17.6	265	Yes
5	5290	13	14.3	207	Yes
6	5290	16	18.3	290	Yes
7	5290	12	11.5	460	Yes
8	5290	16	19.2	312	Yes
9	5290	16	19.5	363	Yes
10	5290	16	19	293	No
11	5290	15	17.6	493	Yes
12	5290	14	15.5	438	Yes
13	5290	15	17.2	337	Yes
14	5290	14	15.4	282	Yes
15	5290	15	16.5	332	Yes
16	5290	16	19.2	457	Yes
17	5290	15	17.2	241	Yes
18	5290	16	19.4	485	Yes
19	5290	13	13.1	288	Yes
20	5290	14	14.8	320	Yes
21	5290	14	15.4	385	No
22	5290	16	20	245	Yes
23	5290	16	18.4	301	Yes
24	5290	12	12.1	347	Yes
25	5290	13	13.5	286	Yes
26	5290	12	12.1	280	Yes
27	5290	15	16.9	475	Yes
28	5290	12	11.3	200	Yes
29	5290	13	14.1	370	Yes
30	5290	14	15.5	458	No

Long Pulse Radar Test Waveforms

Radar Type 5_Trial 1

Data Sheet for FCC Radar Type 5						
Trial Number:		1		VSG Frequency(MHz):		5290
Number of Bursts in Trial:			8		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	53.2	6			459314
2	3	89.6	6	998.4	1307.4	821434
3	1	62.1	6			1186533
4	3	86.8	6	919.2	1099.2	51133
5	2	68.6	6	1810.4		414158
6	3	90.2	6	1080.8	1125.8	776674
7	1	52.9	6			1141879
8	3	95.3	6	1248.7	1727.7	6431

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Radar Type 5_Trial 2

Data Sheet for FCC Radar Type 5						
Trial Number:		2		VSG Frequency(MHz):		5290
Number of Bursts in Trial:			18		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	96.9	17	1340.1	1029.1	163511
2	3	94.4	17	1556.6	1284.6	324198
3	3	86.8	17	1042.2	1205.2	484699
4	2	75.2	17	1683.8		646027
5	3	84.2	17	1427.8	1526.8	143646
6	2	74.5	17	1760.5		304987
7	2	80.3	17	1816.7		465883
8	3	95.1	17	1243.9	1173.9	625495
9	3	84.3	17	1029.7	1748.7	123936
10	3	96.6	17	1090.4	1559.4	284669
11	1	61.8	17			447236
12	2	71.1	17	1366.9		607278
13	2	74.4	17	974.6		104457
14	3	99.8	17	925.2	1384.2	264840
15	3	90.9	17	1481.1	1014.1	425378
16	1	56.4	17			588812
17	1	64.1	17			84728
18	1	56.1	17			246100

Radar Type 5_Trial 3

Data Sheet for FCC Radar Type 5						
Trial Number:		3		VSG Frequency(MHz):		5290
Number of Bursts in Trial:			11		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	82.8	8	1102.2		666579
2	1	52	8			931571
3	2	67.4	8	970.6		106031
4	2	75.1	8	1515.9		369972
5	2	80.4	8	1839.6		633702
6	3	88.9	8	1169.1	1465.1	896473
7	1	60.8	8			73640
8	1	57	8			337830
9	3	96.8	8	1565.2	1367.2	600209
10	3	97	8	1095	1003	864171
11	2	68.9	8	1875.1		41002

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Radar Type 5_Trial 4

Data Sheet for FCC Radar Type 5						
Trial Number:		4		VSG Frequency(MHz):		5290
Number of Bursts in Trial:			17		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	92.1	16	917.9	1647.9	196661
2	1	57.7	16			368454
3	1	63.3	16			538834
4	3	84.8	16	1677.2	958.2	5499
5	2	71.3	16	1326.7		176130
6	1	59.3	16			347347
7	3	98.5	16	1485.5	1896.5	515465
8	1	60.6	16			688722
9	1	52.2	16			155360
10	3	87	16	1859	1298	324415
11	1	59.4	16			497001
12	3	95	16	1107	1462	664738
13	2	77.8	16	1085.2		134020
14	3	88.2	16	1126.8	913.8	304178
15	2	81.5	16	1414.5		474730
16	3	96	16	1409	1457	644296
17	2	72.1	16	1714.9		112918

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Radar Type 5_Trial 5

Data Sheet for FCC Radar Type 5						
Trial Number:		5		VSG Frequency(MHz):		5290
Number of Bursts in Trial:			12		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	88.3	10	1788.7	1844.7	401291
2	1	53.5	10			644528
3	3	98.7	10	1295.3	1867.3	883873
4	1	55.7	10			130699
5	2	72.7	10	1011.3		372566
6	1	62.5	10			614976
7	1	57.3	10			857127
8	1	50.8	10			100816
9	2	77.9	10	1276.1		342628
10	2	71.7	10	1359.3		584328
11	1	63.9	10			827704
12	3	97.9	10	1501.1	1557.1	70803

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Radar Type 5_Trial 6

Data Sheet for FCC Radar Type 5						
Trial Number:		6		VSG Frequency(MHz):		5290
Number of Bursts in Trial:			18		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	64.4	17			208665
2	2	77.2	17	1504.8		369289
3	2	77.8	17	1610.2		529738
4	3	83.4	17	1767.6	1416.6	27312
5	2	76.2	17	1082.8		188429
6	3	92.2	17	1400.8	1080.8	348828
7	3	88.9	17	1327.1	934.1	509666
8	3	98.5	17	1247.5	1419.5	7537
9	3	86.3	17	1852.7	1317.7	168095
10	1	53	17			329982
11	3	90.4	17	1488.6	1879.6	489261
12	3	92.4	17	1382.6	1602.6	649287
13	3	95.8	17	1877.2	1770.2	148111
14	1	61.8	17			310145
15	2	69.1	17	1109.9		470854
16	2	73.4	17	1512.6		631023
17	1	57	17			129050
18	3	89.6	17	1541.4	1462.4	289166

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Radar Type 5_Trial 7

Data Sheet for FCC Radar Type 5						
Trial Number:		7		VSG Frequency(MHz):		5290
Number of Bursts in Trial:			8		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	86.9	5	1260.1	1123.1	1016169
2	3	99	5	948	1257	1379189
3	3	92.9	5	1014.1	1224.1	245822
4	3	88.7	5	952.3	1503.3	608513
5	2	68.7	5	1721.3		971813
6	3	93.3	5	1350.7	1052.7	1334356
7	3	98.3	5	1701.7	1233.7	201008
8	1	63.2	5			564898

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Radar Type 5_Trial 8

Data Sheet for FCC Radar Type 5						
Trial Number:		8		VSG Frequency(MHz):		5290
Number of Bursts in Trial:			19		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	69.4	19	1794.6		389132
2	3	95.2	19	1271.8	1425.8	540635
3	1	55.9	19			65824
4	3	84	19	1874	1015	217529
5	3	93.5	19	1125.5	1080.5	369977
6	3	87.6	19	1060.4	1753.4	521468
7	3	84.6	19	1824.4	1799.4	46743
8	1	62.8	19			199972
9	3	87.9	19	1754.1	1066.1	351062
10	1	59.7	19			505236
11	2	81.7	19	1656.3		28162
12	1	61.6	19			180959
13	1	51.6	19			333991
14	3	96.1	19	1048.9	1758.9	484225
15	3	92.7	19	1601.3	1625.3	9343
16	3	97.6	19	1840.4	1700.4	161123
17	3	85.8	19	1252.2	1287.2	313724
18	3	85.2	19	1184.8	1385.8	466069
19	1	63.1	19			620197

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Radar Type 5_Trial 9

Data Sheet for FCC Radar Type 5						
Trial Number:		9		VSG Frequency(MHz):		5290
Number of Bursts in Trial:			20		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	56.2	19			136162
2	1	59.9	19			281247
3	1	60.8	19			426683
4	3	93.4	19	1383.6	1869.6	568139
5	3	84	19	1161	1884	117631
6	3	93.9	19	1033.1	1110.1	262537
7	3	88.3	19	1813.7	1480.7	406272
8	3	84.9	19	1553.1	1600.1	550915
9	1	65	19			100358
10	1	55	19			245755
11	2	75.7	19	1077.3		389803
12	1	58.5	19			536040
13	3	84.5	19	1698.5	1678.5	82003
14	3	85.1	19	1705.9	1434.9	226312
15	1	62.9	19			373153
16	2	72.7	19	1490.3		516368
17	3	93.7	19	1554.3	1378.3	64309
18	3	92.6	19	1664.4	971.4	208779
19	1	52.3	19			354793
20	1	59.6	19			500384

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Radar Type 5_Trial 10

Data Sheet for FCC Radar Type 5						
Trial Number:		10		VSG Frequency(MHz):		5290
Number of Bursts in Trial:			19		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	52.8	19			49260
2	1	57.8	19			202140
3	2	83	19	1305		353936
4	2	74	19	1861		506007
5	1	59.4	19			30431
6	3	91.7	19	1575.3	1588.3	182322
7	3	95.4	19	1337.6	1334.6	334546
8	3	88	19	1165	1070	487057
9	3	90.9	19	1684.1	983.1	11563
10	1	56.2	19			164446
11	3	95.4	19	1197.6	1185.6	315733
12	1	52.9	19			470176
13	3	83.5	19	1579.5	1373.5	619668
14	2	80.1	19	1089.9		145363
15	3	92.1	19	1575.9	952.9	297174
16	1	53.3	19			451187
17	1	58.6	19			604463
18	1	51.7	19			126753
19	2	71.9	19	1641.1		278960

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Radar Type 5_Trial 11

Data Sheet for FCC Radar Type 5						
Trial Number:		11		VSG Frequency(MHz):		5296.4
Number of Bursts in Trial:			17		Successful Detection: No	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	90.1	16	1138.9	1217.9	481413
2	1	55.1	16			653906
3	1	52.7	16			120632
4	2	69.5	16	1710.5		290690
5	1	57.7	16			462185
6	1	62.1	16			633007
7	1	51.2	16			99602
8	3	97.2	16	1470.8	919.8	269538
9	2	76.6	16	1901.4		440016
10	3	88.7	16	998.3	1593.3	609479
11	2	73.3	16	1224.7		78521
12	3	99	16	1094	1119	248546
13	1	55	16			420349
14	3	83.5	16	1775.5	1797.5	587997
15	2	75.6	16	1036.4		57466
16	1	60.3	16			228380
17	3	98.4	16	1427.6	1124.6	397604

Radar Type 5_Trial 12

Data Sheet for FCC Radar Type 5						
Trial Number:		12		VSG Frequency(MHz):		5295.2
Number of Bursts in Trial:			14		Successful Detection: No	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	76.9	13	1672.1		691148
2	3	86.9	13	941.1	950.1	44260
3	3	84	13	1379	1518	251083
4	3	92.4	13	1787.6	1001.6	457737
5	3	98.5	13	1022.5	1330.5	664724
6	1	50.3	13			18810
7	3	94	13	1567	1362	225484
8	1	58.7	13			433775
9	1	59.7	13			641135
10	2	72.8	13	1386.2		847055
11	2	75.1	13	1627.9		200267
12	1	54.4	13			408278
13	3	93	13	1463	1097	613649
14	1	59.6	13			823457

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Radar Type 5_Trial 13

Data Sheet for FCC Radar Type 5						
Trial Number:		13		VSG Frequency(MHz):		5296
Number of Bursts in Trial:			16		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	64.1	15			153202
2	3	92	15	966	1481	333417
3	2	70.6	15	1188.4		515668
4	1	62.2	15			697688
5	1	54.4	15			130940
6	1	50	15			312396
7	3	88.4	15	1699.6	1680.6	491494
8	2	75.3	15	1458.7		674401
9	1	61.8	15			108536
10	1	58.1	15			290240
11	3	94.5	15	1530.5	1329.5	469678
12	2	68.7	15	1006.3		652215
13	3	99.4	15	982.6	1080.6	85877
14	2	67.6	15	1179.4		267155
15	1	57.3	15			448973
16	3	90.3	15	1199.7	1206.7	628339

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Radar Type 5_Trial 14

Data Sheet for FCC Radar Type 5						
Trial Number:		14		VSG Frequency(MHz):		5294.8
Number of Bursts in Trial:			14		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	69.4	12	1677.6		72808
2	1	57.9	12			280627
3	2	69.8	12	1504.2		486976
4	3	93.7	12	1045.3	1162.3	693801
5	2	76.5	12	1777.5		47300
6	2	71.7	12	1824.3		254267
7	2	67.8	12	1359.2		461607
8	2	79.6	12	1637.4		668524
9	3	91.7	12	1031.3	1334.3	21773
10	1	54.8	12			229278
11	1	58.8	12			437015
12	1	60.7	12			644496
13	3	98.1	12	1728.9	957.9	849306
14	3	89.4	12	1400.6	1263.6	203056

Radar Type 5_Trial 15

Data Sheet for FCC Radar Type 5						
Trial Number:		15		VSG Frequency(MHz):		5295.6
Number of Bursts in Trial:			15		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	76.2	14	1217.8		383368
2	3	92.8	14	1814.2	1185.2	574892
3	3	83.7	14	1300.3	1324.3	768520
4	2	79	14	1089		166183
5	1	59.2	14			359935
6	1	57	14			553490
7	3	84.5	14	1451.5	1328.5	744859
8	2	71.2	14	1404.8		142291
9	2	71.1	14	985.9		335518
10	1	60.2	14			529838
11	1	60	14			723720
12	1	51.6	14			118619
13	2	75	14	1128		311772
14	2	75.8	14	1749.2		504866
15	3	97.9	14	1243.1	1859.1	696515

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Radar Type 5_Trial 16

Data Sheet for FCC Radar Type 5						
Trial Number:		16		VSG Frequency(MHz):		5297.6
Number of Bursts in Trial:			19		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	79.7	19	1520.3		74561
2	1	50.9	19			227754
3	2	76.4	19	978.6		379515
4	1	51.3	19			532896
5	2	69.4	19	1674.6		55798
6	1	53.3	19			208795
7	2	67.1	19	985.9		360960
8	3	84.6	19	1834.4	1907.4	511221
9	3	99.3	19	915.7	1207.7	37023
10	2	83.2	19	1073.8		189717
11	3	92.4	19	1531.6	1813.6	340813
12	2	74.1	19	1579.9		494006
13	3	91	19	1546	1227	18219
14	2	70.6	19	1858.4		170549
15	3	99.7	19	1614.3	1219.3	322579
16	3	91.3	19	1634.7	1156.7	474230
17	2	77.6	19	1042.4		628603
18	2	77.2	19	1294.8		151957
19	2	72.5	19	1144.5		304348

Radar Type 5_Trial 17

Data Sheet for FCC Radar Type 5						
Trial Number:		17		VSG Frequency(MHz):		5296
Number of Bursts in Trial:			16		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	82	15	969		543472
2	1	51.7	15			725146
3	3	85.1	15	1693.9	999.9	158028
4	2	70.3	15	1105.7		339426
5	1	58.3	15			521318
6	1	50.3	15			703266
7	1	55.8	15			136114
8	3	98.3	15	1307.7	1849.7	316257
9	3	86.9	15	976.1	1804.1	497212
10	1	59.5	15			681054
11	3	83.7	15	1447.3	1116.3	113373
12	2	74.8	15	943.2		294796
13	3	96.8	15	1796.2	945.2	475285
14	3	92	15	1825	1003	656139
15	2	81.7	15	1819.3		91236
16	1	61.9	15			273109

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Radar Type 5_Trial 18

Data Sheet for FCC Radar Type 5						
Trial Number:		18		VSG Frequency(MHz):		5297.6
Number of Bursts in Trial:			20		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	53.8	19			363616
2	2	82.4	19	1337.6		507450
3	1	59.4	19			55233
4	2	78.7	19	1788.3		199696
5	3	86	19	1910	1890	343053
6	1	59	19			490862
7	1	58.1	19			37402
8	3	84.4	19	1752.6	1191.6	181734
9	3	95.9	19	1615.1	1620.1	325962
10	2	66.9	19	1207.1		472008
11	2	82.9	19	1529.1		19442
12	3	93.5	19	1351.5	1715.5	163704
13	1	50.6	19			309892
14	2	71.5	19	1238.5		454151
15	2	69	19	1393		1625
16	2	82.5	19	1576.5		146435
17	2	74.4	19	1121.6		291312
18	1	52.5	19			437218
19	3	93.8	19	1678.2	1434.2	578944
20	3	96.2	19	1084.8	1798.8	128344

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Radar Type 5_Trial 19

Data Sheet for FCC Radar Type 5						
Trial Number:		19		VSG Frequency(MHz):		5293.2
Number of Bursts in Trial:			11		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	94.6	8	1308.4	1690.4	497477
2	2	80.7	8	1165.3		762444
3	2	68	8	1186		1026116
4	1	51	8			202167
5	1	63.5	8			466395
6	1	55.1	8			730369
7	2	80.3	8	1563.7		993228
8	2	75.1	8	1122.9		169322
9	1	65.6	8			433563
10	1	58.3	8			698062
11	3	95.7	8	1176.3	1373.3	959946

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Radar Type 5_Trial 20

Data Sheet for FCC Radar Type 5						
Trial Number:		20		VSG Frequency(MHz):		5294.4
Number of Bursts in Trial:			13		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	82.2	11	1328.8		115675
2	1	59.2	11			339298
3	1	58.6	11			562656
4	3	95.8	11	1237.2	971.2	784346
5	1	58.8	11			88370
6	2	68.2	11	1676.8		311242
7	3	98.6	11	1112.4	1558.4	533540
8	3	86.5	11	1841.5	1844.5	755808
9	2	73	11	995		60765
10	3	93.6	11	1730.4	1509.4	283302
11	1	50.7	11			507804
12	2	74.4	11	961.6		730324
13	3	91.5	11	1673.5	1896.5	33175

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Radar Type 5_Trial 21

Data Sheet for FCC Radar Type 5						
Trial Number:		21		VSG Frequency(MHz):		5285.2
Number of Bursts in Trial:			14		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	67.5	12	1421.5		237889
2	1	62.4	12			446108
3	3	97.6	12	1252.4	1660.4	651045
4	1	65.3	12			5352
5	3	90.6	12	1753.4	1878.4	211813
6	1	51.1	12			420256
7	1	50.4	12			627877
8	3	94.2	12	1365.8	1360.8	832373
9	3	98.2	12	1730.8	1131.8	186588
10	3	85.6	12	1750.4	1763.4	392961
11	2	67.3	12	1835.7		601128
12	2	73.2	12	960.8		808645
13	1	64.3	12			161806
14	1	58.3	12			369422

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Radar Type 5_Trial 22

Data Sheet for FCC Radar Type 5						
Trial Number:		22		VSG Frequency(MHz):		5282
Number of Bursts in Trial:			20		Successful Detection: No	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	1	65.1	20			403594
2	2	80.9	20	1458.1		547087
3	2	78.7	20	1724.3		94947
4	2	83	20	1724		239833
5	2	68.7	20	1034.3		384648
6	3	87.5	20	1176.5	1347.5	528248
7	2	71.2	20	1408.8		77213
8	1	50.6	20			222635
9	3	84.2	20	1455.8	1224.8	366185
10	3	92	20	1407	1816	509720
11	2	75.8	20	1230.2		59401
12	1	60.1	20			204585
13	1	64.3	20			349682
14	2	75.8	20	1465.2		493924
15	1	66	20			41647
16	2	70.8	20	1423.2		186439
17	1	52.5	20			331832
18	3	93.9	20	1602.1	1793.1	473933
19	1	56.2	20			23748
20	2	76.6	20	1357.4		168585

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Radar Type 5_Trial 23

Data Sheet for FCC Radar Type 5						
Trial Number:		23		VSG Frequency(MHz):		5282.8
Number of Bursts in Trial:			18		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	3	83.5	18	1141.5	1876.5	347257
2	1	51.1	18			510455
3	1	57.5	18			6514
4	1	64.9	18			167727
5	3	84.6	18	1654.4	1614.4	327341
6	1	64.4	18			490380
7	1	57.8	18			651329
8	1	51.4	18			147922
9	3	84	18	1804	1013	308079
10	2	73.7	18	1905.3		469204
11	3	91.4	18	1530.6	1451.6	629026
12	2	72.5	18	1394.5		127795
13	3	94.5	18	1651.5	927.5	288214
14	1	59.8	18			450519
15	3	83.5	18	1558.5	1856.5	608587
16	1	55.6	18			108227
17	3	94.3	18	988.7	1379.7	268511
18	1	60.6	18			430733

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Radar Type 5_Trial 24

Data Sheet for FCC Radar Type 5						
Trial Number:		24		VSG Frequency(MHz):		5287.2
Number of Bursts in Trial:			9		Successful Detection: Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(μ sec)	(MHz)	(μ sec)	(μ sec)	(μ sec)
1	2	82.1	7	1253.9		1184478
2	3	87	7	1424	1783	176431
3	2	70.2	7	995.8		499421
4	2	66.8	7	1217.2		822029
5	2	78.2	7	1314.8		1145080
6	1	55.6	7			137108
7	3	89.6	7	1607.4	942.4	459079
8	2	80.4	7	1784.6		781771
9	3	86.9	7	1756.1	1643.1	1103279