

TEST REPORT

Report Number : R16197846-D1

Applicant : Sonos, Inc
301 Coromar Dr
Goleta, CA 93117
United States

Model : S59 Fronthaul

Brand : Sonos

FCC ID : SBVRM059

IC : 5373A-RM059

EUT Description : Wireless Smart Speaker

Test Standard(s) : DFS PORTION of FCC 47 CFR PART 15 SUBPART E
DFS PORTION of ISSED CANADA RSS-247 ISSUE 4

Date Of Issue:

2026-07-02

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Revision History

Rev.	Issue Date	Revisions	Revised By
V1	2026-04-29	Initial Issue	Tri Pham
V2	2026-05-06	Editorial Changes	Tri Pham
V3	2026-05-12	Editorial Changes	Tri Pham
V4	2026-07-02	Editorial Changes	Samuel Bryson

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Sonos, Inc.
301 Coromar Dr
Goleta, CA 93117
United States

EUT DESCRIPTION: Wireless Smart Speaker

MODEL: S59 Fronthaul

SERIAL NUMBER: 000E5843AB7EA

DATE TESTED: 2026-02-19 to 2026-03-02

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
DFS Portion of CFR 47 Part 15 Subpart E	Complies
DFS Portion of INDUSTRY CANADA RSS-247 Issue 4	Complies

UL LLC tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

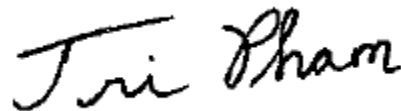
This document may not be altered or revised in any way unless done so by UL LLC Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL LLC Inc. will constitute fraud and shall nullify the document.

Approved & Released For
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UL LLC

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with the DFS portion of FCC CFR 47 Part 2, FCC CFR 47 Part 15, FCC KDB 789033, KDB 905462 D02 and D03 and RSS-247 Issue 4.

3. SUMMARY OF TEST RESULTS

Requirement Description	Result	Remarks
DFS Portion of FCC 47 CFR PART 15 SUBPART E	Complies	None
DFS Portion of INDUSTRY CANADA RSS-247 ISSUE 4	Complies	None

4. REFERENCE DOCUMENTS

Measurements of transmitter parameters as referenced in this report and all other manufacturer's declarations relevant to the RF test requirements are provided by manufacturer.

This report contains data provided by the customer which can impact the validity of results. UL LLC is only responsible for correctly integrating customer provided data with measurements performed by UL LLC.

Below is a list of the data provided by the customer:

1. Antenna gain and type (see section 7.1.6)
2. Max declared EIRP (see section 7.1.6)

5. FACILITIES AND ACCREDITATION

UL LLC is accredited by A2LA, certification # 0751.06, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

	Address	ISED CABID	ISED Company Number	FCC Registration
☐	Building: 12 Laboratory Dr Durham, NC 27713 U.S.A	US0067	2180C	825374
☒	Building: 2800 Perimeter Park Dr. Suite B Morrisville, NC 27560, U.S.A		27265	

6. DECISION RULES AND MEASUREMENT UNCERTAINTY

6.1. METROLOGICAL TRACEABILITY

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, with a maximum time between calibrations of one year or the manufacturers' recommendation, whichever is less, and where applicable is traceable to recognized national standards.

6.2. DECISION RULES

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4:2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement).

6.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	U _{Lab}
Radio Frequency (Spectrum Analyzer)	141.16 Hz
Occupied Bandwidth	1.22%
Power Spectral Density	2.47 dB
RF Power Measurement Direct Method Using Power Meter	1.3 dB (PK) / 0.45 dB (AV)
Unwanted Emissions, Conducted	1.94 dB
Worst Case Conducted Disturbance, 9kHz to 0.15 MHz	3.78 dB
Worst Case Conducted Disturbance, 0.15 to 30 MHz	3.40 dB
Worst Case Radiated Disturbance, 9kHz to 30 MHz	2.87 dB
Worst Case Radiated Disturbance, 30 to 1000 MHz	6.01 dB
Worst Case Radiated Disturbance, 1000 to 18000 MHz	4.73 dB
Worst Case Radiated Disturbance, 18000 to 26000 MHz	4.51 dB
Worst Case Radiated Disturbance, 26000 to 40000 MHz	5.29 dB
Time Domain Measurements	0.02 / 3.39%
Temperature	0.57°C
Humidity	3.39%
DC Supply Voltages	0.57%

Uncertainty figures are valid to a confidence level of 95%.

7. DYNAMIC FREQUENCY SELECTION

7.1. OVERVIEW

7.1.1. LIMITS

INNOVATION, SCIENCE and ECONOMIC DEVELOPMENT CANADA (ISED)

ISED RSS-247 is closely harmonized with FCC Part 15 DFS rules. The deviations are as follows:

RSS-247 Issue 4

Note: For the band 5600–5650 MHz, only the ETSI EN 301 893 test procedure shall be used to demonstrate compliance for devices with radar detection. Devices using the FCC KDB Procedure 905462 must operate exclusively within the 5250-5350 MHz, 5470-5600 MHz, 5650-5725 MHz bands, or any combination of these bands.

FCC

§15.407 (h), FCC 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”.

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 DFS)	Client (with DFS)
DFS Detection Threshold	Yes	Not required	Yes
Channel Closing Transmission Time	Yes	Yes	Yes
Channel Move Time	Yes	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required	Yes

Additional requirements for devices with multiple bandwidth modes	Master Device or Client with Radar DFS	Client (without DFS)
<i>U-NII Detection Bandwidth and Statistical Performance Check</i>	All BW modes must be tested	Not required
<i>Channel Move Time and Channel Closing Transmission Time</i>	Test using widest BW mode available	Test using the widest BW mode available for the link
<i>All other tests</i>	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 all 20 MHz channel blocks and a null frequency between the bonded 20 MHz channel blocks.		

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

Maximum Transmit Power	Value (see notes)
E.I.R.P. $\geq$ 200 mill watt	-64 dBm
E.I.R.P. < 200 mill watt and power spectral density < 10 dBm/MHz	-62 dBm
E.I.R.P. < 200 mill watt that do not meet 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: E.I.R.P. is based on the highest antenna gain. For MIMO devices refer to KDB publication 662911 D01.	

Table 4: DFS Response requirement values

Parameter	Value
<i>Non-occupancy period</i>	30 minutes
<i>Channel Availability Check Time</i>	60 seconds
<i>Channel Move Time</i>	10 seconds (See Note 1)
<i>Channel Closing Transmission Time</i>	200 milliseconds + approx. 60 milliseconds over remaining 10 second period. (See Notes 1 and 2)
<i>U-NII Detection Bandwidth</i>	Minimum 100% of the U- NII 99% transmission power bandwidth. (See Note 3)
Note 1: <i>Channel Move Time</i> and the <i>Channel Closing Transmission Time</i> should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. Note 2: The <i>Channel Closing Transmission Time</i> is comprised of 200 milliseconds starting at the beginning of the <i>Channel Move Time</i> plus any additional intermittent control signals required to facilitate a <i>Channel</i> 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 <i>U-NII Detection Bandwidth</i> 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 (usec)	PRI (usec)	Pulses	Minimum Percentage of Successful Detection	Minimum Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in table 5a	Roundup: $\{(1/360) \times (19 \times 10^6 / \text{PRI}_{\text{usec}})\}$	60%	30
		Test B: 15 unique PRI values randomly selected within the range of 518-3066 usec. With a minimum increment of 1 usec, 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 <i>Detection Bandwidth</i> test, <i>Channel Move Time</i> , and <i>Channel Closing Time</i> tests.					

Table 6 – Long Pulse Radar Test Signal

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

Table 7 – Frequency Hopping Radar Test Signal

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

SYSTEM OVERVIEW

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 1, 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 KDB 905462 D02. The frequency of the signal generator is incremented in 1 MHz steps from F_L to F_H 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. 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.

SYSTEM CALIBRATION

A 50-ohm load is connected in place of the spectrum analyzer, and the spectrum analyzer is connected to a horn antenna via a coaxial cable, with the reference level offset set to (horn antenna gain – coaxial cable loss). The signal generator is set to CW mode. The amplitude of the signal generator is adjusted to yield a level of –64 dBm as measured on the spectrum analyzer.

Without changing any of the instrument settings, the spectrum analyzer is reconnected to the Common port of the Spectrum Analyzer Combiner/Divider. The Reference Level Offset of the spectrum analyzer is adjusted so that the displayed amplitude of the signal is –64 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 –64 dBm and the spectrum analyzer will still indicate the level as received by the Master Device.

ADJUSTMENT OF DISPLAYED TRAFFIC LEVEL

A link is established between the Master and Client and the distance between the units is adjusted as needed to provide a suitable received level at the Master and Client devices. Iperf is used to generate WLAN traffic. Traffic that meets or exceeds the minimum loading requirement is streamed from the Master device to the Client Device. The monitoring antenna is adjusted so that the WLAN traffic level, as displayed on the spectrum analyzer, is at lower amplitude than the radar detection threshold.

TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

TEST EQUIPMENT LIST					
Description	Manufacturer	Model	ID Num	Cal Date	Cal Due
Spectrum Analyzer, PXA, 3Hz to 8.4GHz	Keysight	N9030A	89232	2025-07-31	2026-07-31
Signal Generator, MXG X-Series RF Vector	Keysight	N5182B	215042	2025-03-14	2026-03-14
Frequency Extender	Keysight	N5182BX07	215272	2025-03-14	2026-03-14
Arbitrary Waveform Generator	Agilent	33220A	62879	2025-01-13	2027-01-13
2.5-7.5 GHz Horn Antenna	Advanced Technical Materials INC.	250-441EM-NF/CAL	89408	2026-02-10	2027-02-10

Note: An MXG series Signal Generator and separate external Frequency Extender module are shown in the preceding test system block diagram as a stand-alone Signal Generator.

7.1.3. TEST AND MEASUREMENT SOFTWARE

The following test and measurement software was utilized for the tests documented in this report:

TEST SOFTWARE LIST		
Name	Version	Test / Function
Aggregate Time-PXA	3.1	Channel Loading and Aggregate Closing Time
PXA Read	3.1	Signal Generator Screen Capture
SGXProject.exe	1.7	Radar Waveform Generation and Download
FCC 2014 Detection Bandwidth-PXA	3.1.1	Detection Bandwidth in 5 MHz Steps
In Service Monitoring-PXA	4.1	In-Service Monitoring (Probability of Detection)

7.1.4. TEST ROOM ENVIRONMENT

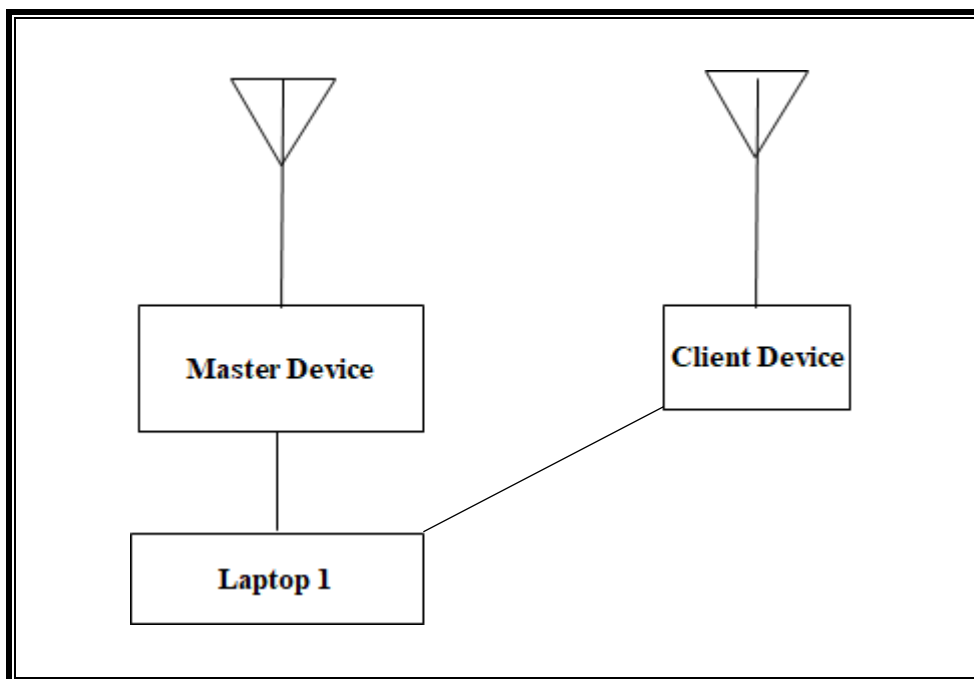
The test room temperature and humidity shall be maintained within normal temperature of 15~35 °C and normal humidity 20~75% (relative humidity).

ENVIRONMENT CONDITION

Parameter	Value
Temperature	21.4 – 24.9 °C
Humidity	18.5 – 44.2 %

7.1.5. SETUP OF EUT

RADIATED METHOD EUT TEST SETUP



SUPPORT EQUIPMENT

The following support equipment was utilized for the tests documented in this report:

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	Manufacturer	Model	Serial Number	FCC ID
Client Device	Sonos	S39	804AF2F205040	SBVRM039
Controller Laptop	Lenovo	20FAS4QL00	PC0KDTK6	PD98260NG
Laptop Power Supply	Lenovo	ADLX90NLC2A	N/A	N/A

7.1.6. DESCRIPTION OF EUT

The EUT operates over the 5250-5350 MHz and 5470-5725 MHz ranges.

The EUT is a Master Device.

The manufacturer has declared that the highest power level within these bands is 21.84 dBm EIRP in the 5250-5350 MHz band and 22.20 dBm EIRP in the 5470-5725 MHz band.

The manufacturer has declared that the highest gain antenna assembly utilized with the EUT has a gain of 6.1 dBi in the 5250-5350 MHz band and 5.7 dBi in the 5470-5725 MHz band.

The EUT's Radio0 backhaul radio and Radio1 fronthaul radio each have two transmitter/receiver chains. Each radio's chains route to either of two pairs of 50-ohm coaxial antenna ports depending on its WiFi band configuration. The four total antenna ports are each connected to one of the EUT's four remote antennas to meet the diversity and MIMO requirements. To perform conducted testing, all four antenna ports are connected to the test system via a power divider.

The calibrated radiated DFS Detection Threshold level is set to -64 dBm. The tested level is lower than the required level hence it provides a margin to the limit.

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

WLAN traffic that meets or exceeds the minimum required loading was generated by transferring a data stream from the Master Device to the Client Device using iPerf version 2.1.9 software package.

TPC is not required since the maximum EIRP declared is less than 500 mW (27 dBm).

The EUT utilizes the 802.11ax architecture. Three nominal channel bandwidths are implemented: 20 MHz, 40 MHz and 80 MHz.

Manufacturer declares that channel puncturing is not supported by the EUT.

Manufacturer declares that channel bandwidth reduction is supported by the EUT.

TDLS (Tunneled Direct Link Setup) mode is not supported by the EUT.

The software installed in the EUT is 95.0-74100-diag-gambit-dev-rbermani-202602111627.

UNIFORM CHANNEL SPREADING

This function is not required per KDB 905462.

OVERVIEW OF MASTER DEVICE WITH RESPECT TO §15.407 (h) REQUIREMENTS

The Master Device is a Sonos Soundbar, FCC ID: SBVRM059. The minimum antenna gain for the Master Device is 2.7 dBi.

The rated output power of the Master unit is > 23dBm (EIRP). Therefore the required interference threshold level is -64 dBm. After correction for procedural adjustments, the required radiated threshold at the antenna port is $-64 + 1 = -63$ dBm.

The calibrated radiated DFS Detection Threshold level is set to -64 dBm. The tested level is lower than the required level hence it provides a margin to the limit.

The software installed in the EUT is 95.0-74100-diag-gambit-dev-rbermani-202602111627.

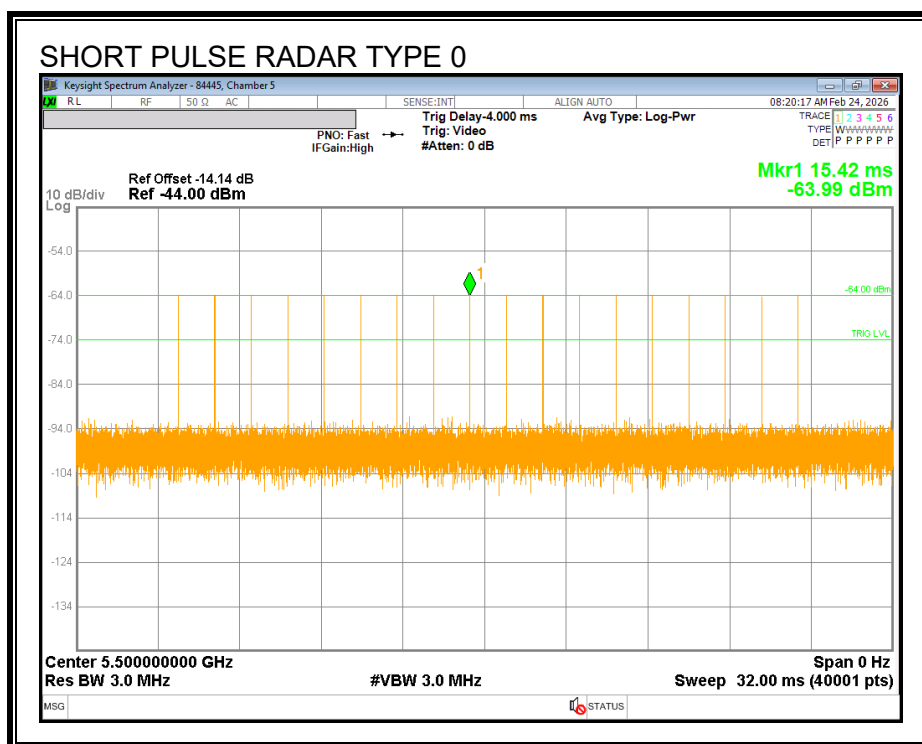
7.2. RESULTS FOR 20 MHz BANDWIDTH

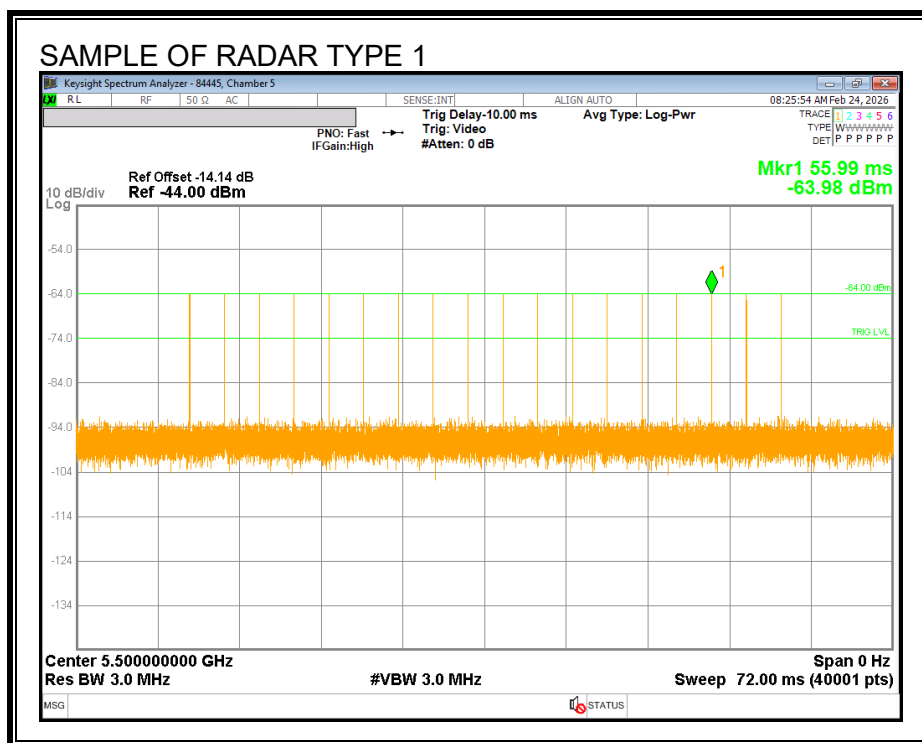
7.2.1. TEST CHANNEL

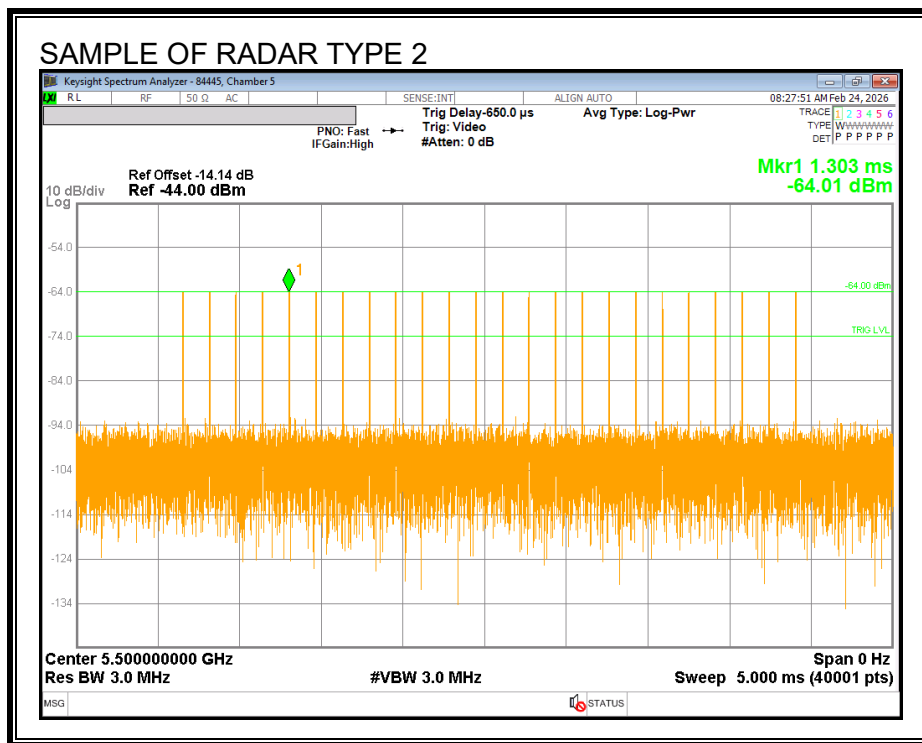
All tests were performed at a channel center frequency of 5500 MHz.

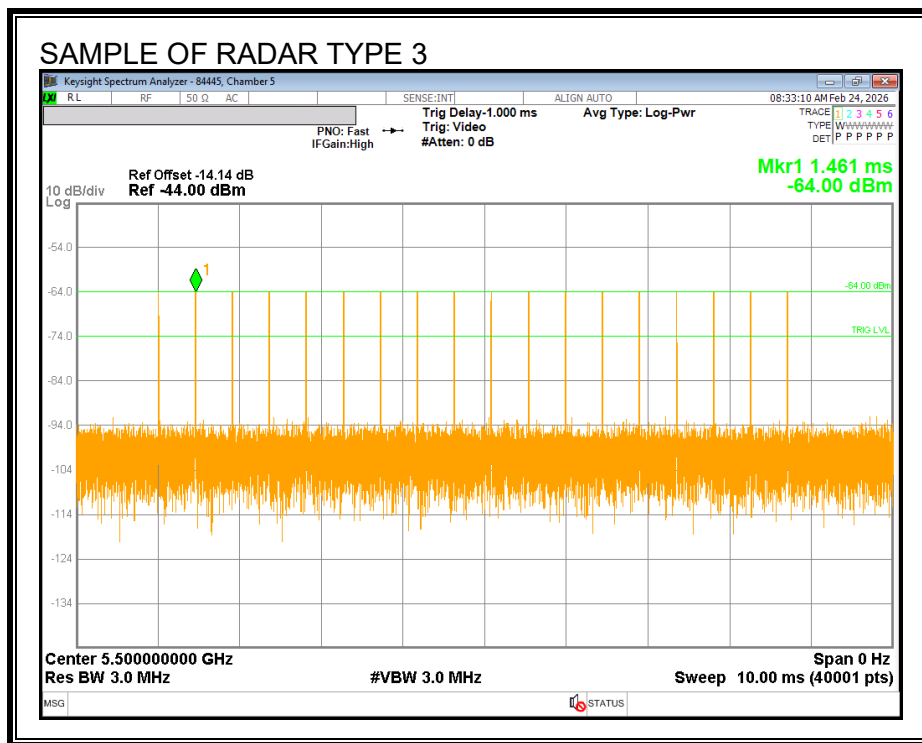
7.2.2. RADAR WAVEFORMS AND TRAFFIC

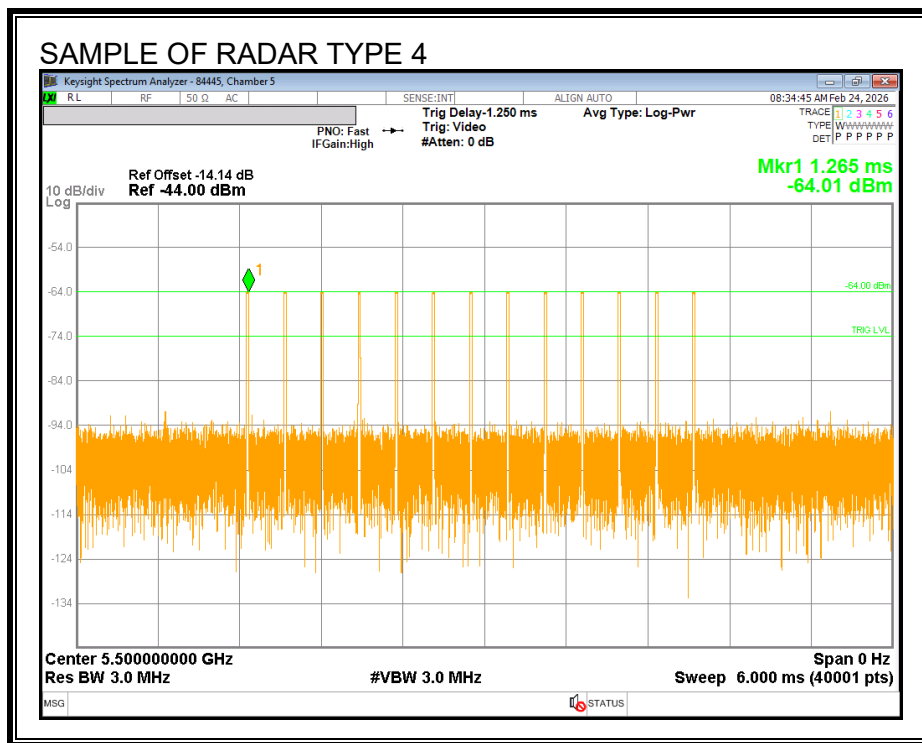
RADAR WAVEFORMS

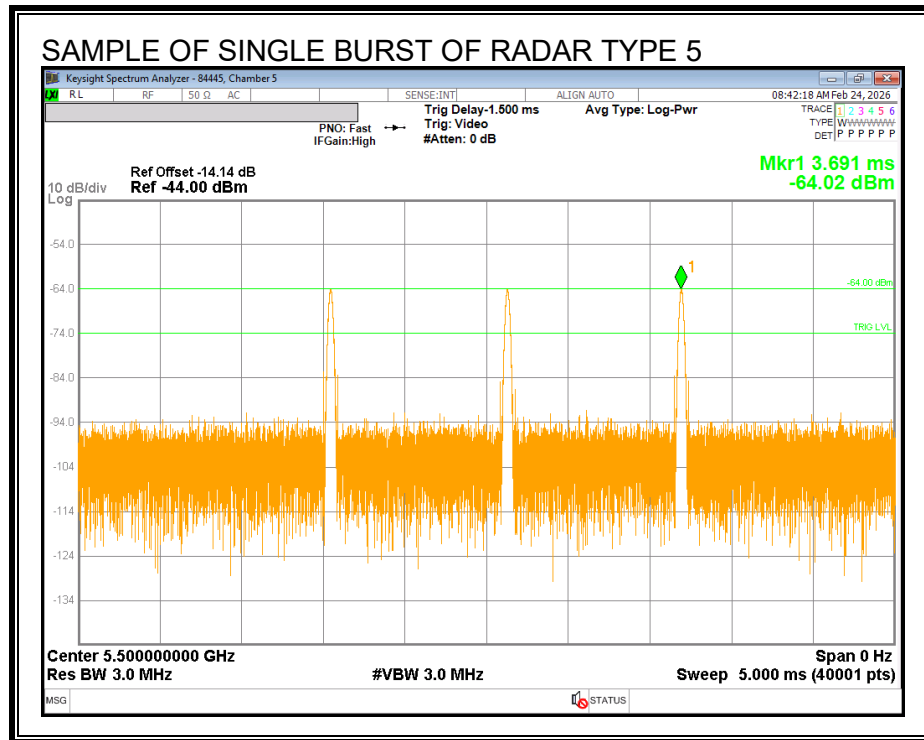


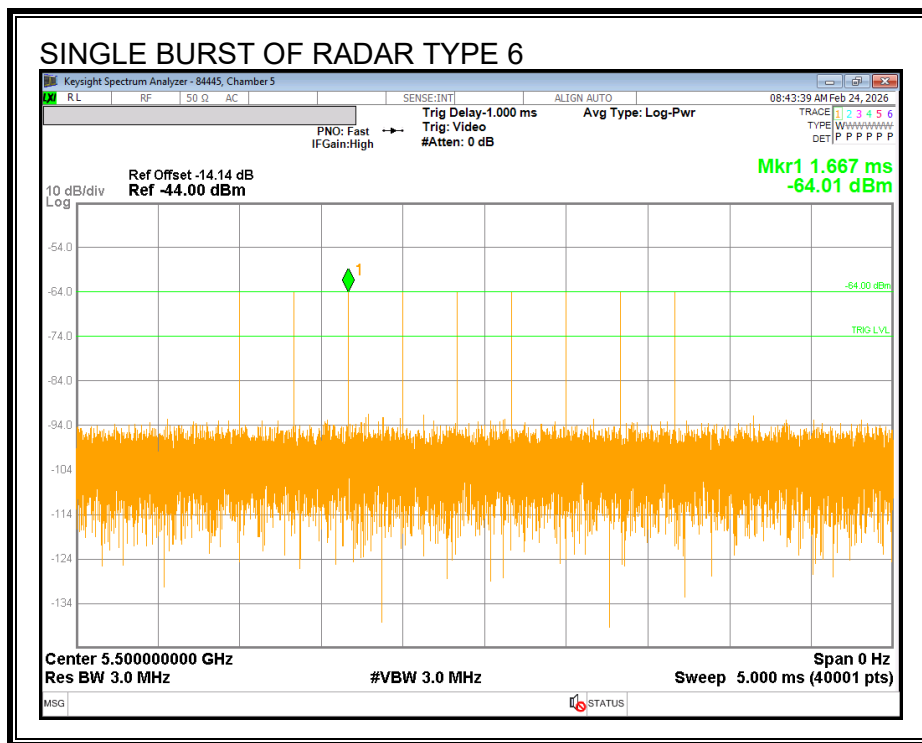




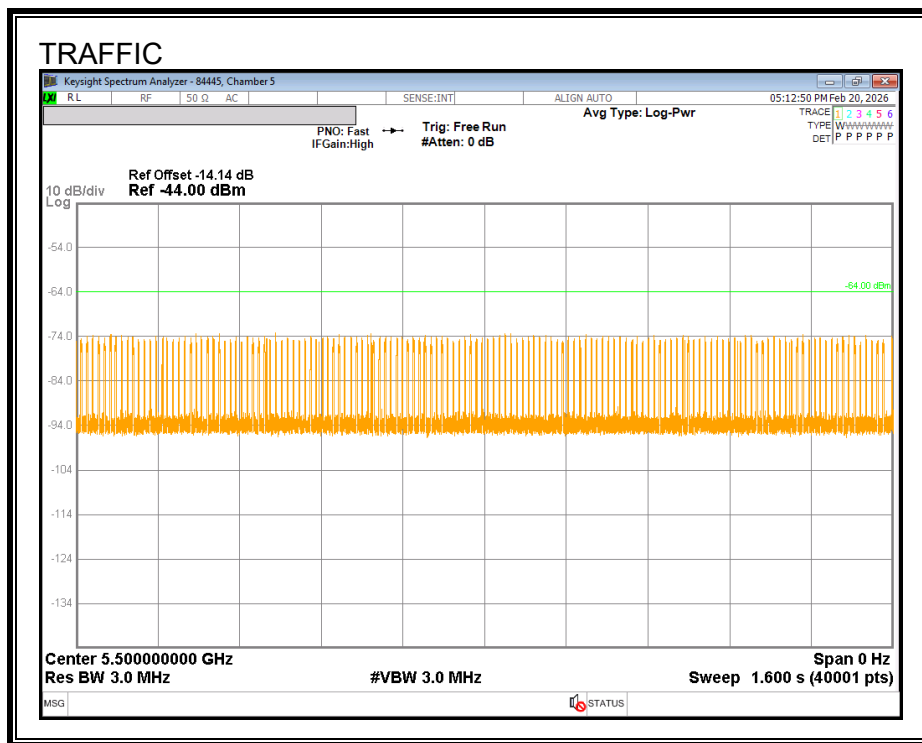




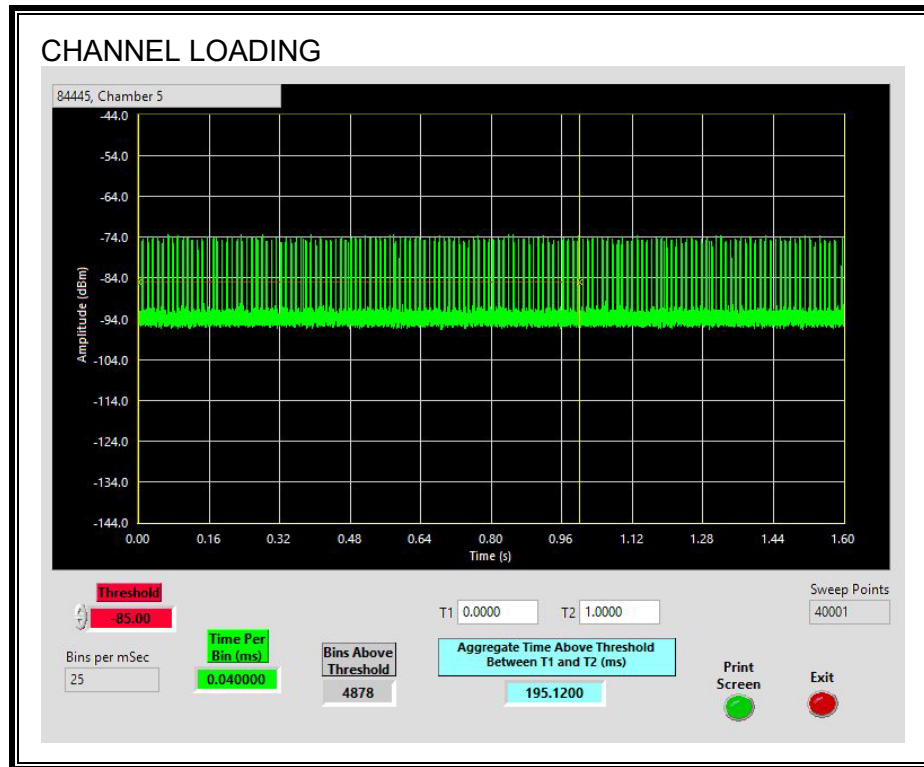




TRAFFIC



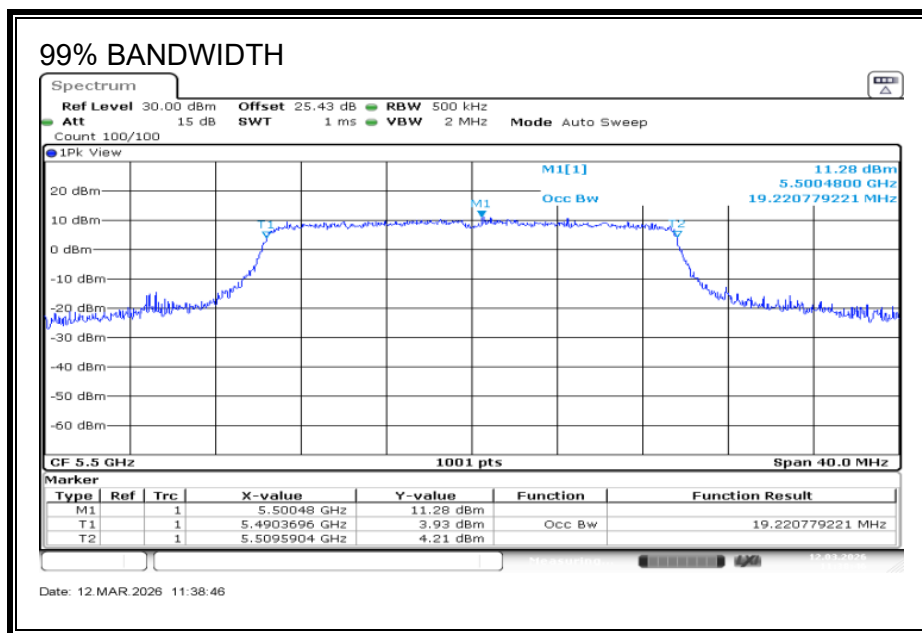
CHANNEL LOADING



The level of traffic loading on the channel by the EUT is 19.51%.

7.2.3. DETECTION BANDWIDTH

REFERENCE PLOT OF 99% POWER BANDWIDTH



RESULTS

F_L (MHz)	F_H (MHz)	Detection Bandwidth (MHz)	99% Power Bandwidth (MHz)	Ratio of Detection BW to 99% Power BW (%)	Minimum Limit (%)
5488	5512	24	19.22	124.9	100

DETECTION BANDWIDTH PROBABILITY

Detection Bandwidth Test Results			84445	Chamber 5
FCC Type 0 Waveform: 1 us Pulse Width, 1428 us PRI, 18 Pulses per Burst				
Frequency (MHz)	Number of Trials	Number Detected	Detection (%)	Mark
5487	3	0	0	
5488	10	10	100	FL
5489	10	10	100	
5490	10	10	100	
5495	10	10	100	
5500	10	10	100	
5505	10	10	100	
5510	10	10	100	
5511	10	10	100	
5512	10	10	100	FH
5513	4	0	0	

7.2.4. IN-SERVICE MONITORING

RESULTS

FCC Radar Test Summary										
Signal Type	Number	Detection	Limit	Pass/Fail	Detection Bandwidth			Test	Employee	In-Service Monitoring
	of Trials	(%)	(%)		FL	FH	OBW	Location	Number	Version
FCC Short Pulse Type 1	30	100.00	60	Pass	5488	5512	20	Chamber 5	84445	v4.1
FCC Short Pulse Type 2	30	70.00	60	Pass	5488	5512	20	Chamber 5	84445	v4.1
FCC Short Pulse Type 3	30	76.67	60	Pass	5488	5512	20	Chamber 5	84445	v4.1
FCC Short Pulse Type 4	30	76.67	60	Pass	5488	5512	20	Chamber 5	84445	v4.1
Aggregate		80.83	80	Pass						
FCC Long Pulse Type 5	30	96.67	80	Pass	5488	5512	20	Chamber 5	84445	v4.1
FCC Hopping Type 6	50	100.00	70	Pass	5488	5512		Chamber 5	84445	v4.1

TYPE 1 DETECTION PROBABILITY

Data Sheet for FCC Short Pulse Radar Type 1						
Waveform	Pulse Width (us)	PRI (us)	Pulses Per Burst	Test (A/B)	Frequency (MHz)	Successful Detection (Yes/No)
1001	1	3066	18	A	5509	Yes
1002	1	718	74	A	5494	Yes
1003	1	538	99	A	5502	Yes
1004	1	858	62	A	5499	Yes
1005	1	698	76	A	5508	Yes
1006	1	838	63	A	5493	Yes
1007	1	938	57	A	5488	Yes
1008	1	638	83	A	5509	Yes
1009	1	758	70	A	5497	Yes
1010	1	738	72	A	5491	Yes
1011	1	878	61	A	5511	Yes
1012	1	818	65	A	5492	Yes
1013	1	618	86	A	5508	Yes
1014	1	658	81	A	5489	Yes
1015	1	898	59	A	5507	Yes
1016	1	1890	28	B	5503	Yes
1017	1	845	63	B	5510	Yes
1018	1	1478	36	B	5494	Yes
1019	1	563	94	B	5505	Yes
1020	1	1325	40	B	5503	Yes
1021	1	539	98	B	5493	Yes
1022	1	2784	19	B	5495	Yes
1023	1	934	57	B	5509	Yes
1024	1	1955	27	B	5508	Yes
1025	1	1587	34	B	5504	Yes
1026	1	1543	35	B	5502	Yes
1027	1	2499	22	B	5501	Yes
1028	1	1390	38	B	5490	Yes
1029	1	1281	42	B	5512	Yes
1030	1	2849	19	B	5508	Yes

TYPE 2 DETECTION PROBABILITY

Data Sheet for FCC Short Pulse Radar Type 2					
Waveform	Pulse Width (us)	PRI (us)	Pulses Per Burst	Frequency (MHz)	Successful Detection (Yes/No)
2001	4.9	163	24	5497	Yes
2002	2.9	158	25	5499	No
2003	3.5	229	24	5499	No
2004	1.7	191	26	5498	No
2005	2.6	185	25	5493	No
2006	1	194	24	5500	Yes
2007	4.2	192	24	5490	Yes
2008	2.8	205	23	5496	No
2009	2.2	169	26	5490	Yes
2010	1.3	186	23	5494	Yes
2011	4.9	197	27	5493	Yes
2012	2	219	23	5497	Yes
2013	4	153	28	5511	No
2014	3.5	222	25	5492	Yes
2015	1.5	160	23	5490	Yes
2016	1.2	152	27	5492	Yes
2017	3.6	218	29	5499	Yes
2018	1.6	214	23	5491	No
2019	2.2	203	29	5504	Yes
2020	4.5	165	24	5495	No
2021	1.3	159	23	5510	Yes
2022	3.8	168	29	5503	Yes
2023	2.9	166	25	5496	Yes
2024	3.7	179	24	5491	Yes
2025	5	224	24	5489	No
2026	4.1	161	27	5495	Yes
2027	3.6	172	24	5495	Yes
2028	4.8	193	28	5510	Yes
2029	2.7	208	25	5510	Yes
2030	2.2	196	26	5508	Yes

TYPE 3 DETECTION PROBABILITY

Data Sheet for FCC Short Pulse Radar Type 3					
Waveform	Pulse Width (us)	PRI (us)	Pulses Per Burst	Frequency (MHz)	Successful Detection (Yes/No)
3001	9.3	453	18	5503	Yes
3002	9	427	16	5494	Yes
3003	7.3	382	16	5497	Yes
3004	9.4	369	18	5494	Yes
3005	10	337	17	5492	Yes
3006	8.2	470	18	5495	Yes
3007	9.1	333	16	5492	Yes
3008	7.5	479	17	5494	Yes
3009	6.6	355	16	5496	Yes
3010	7.4	262	18	5500	Yes
3011	6.8	402	17	5488	No
3012	7.8	455	17	5502	Yes
3013	7.4	490	18	5490	Yes
3014	6.6	305	17	5489	No
3015	6.4	352	17	5495	Yes
3016	10	314	16	5511	No
3017	8.1	374	17	5512	No
3018	7.7	348	16	5506	Yes
3019	8.2	303	18	5495	Yes
3020	8.1	290	17	5503	Yes
3021	8.8	258	16	5500	No
3022	6.9	391	16	5503	Yes
3023	7.8	254	18	5499	Yes
3024	8.4	400	16	5508	Yes
3025	9.5	275	18	5491	Yes
3026	6.1	434	17	5511	No
3027	9.6	322	16	5491	Yes
3028	6.5	258	16	5490	No
3029	6.1	410	17	5509	Yes
3030	9.4	477	16	5509	Yes

TYPE 4 DETECTION PROBABILITY

Data Sheet for FCC Short Pulse Radar Type 4					
Waveform	Pulse Width (us)	PRI (us)	Pulses Per Burst	Frequency (MHz)	Successful Detection (Yes/No)
4001	18.2	273	13	5490	Yes
4002	17	485	16	5511	No
4003	12.7	294	12	5488	No
4004	12	269	15	5490	Yes
4005	13	475	14	5504	Yes
4006	12.8	344	15	5491	Yes
4007	14.3	312	16	5510	Yes
4008	19.3	311	15	5500	Yes
4009	12.2	425	15	5512	No
4010	13.4	320	16	5495	Yes
4011	15.8	447	14	5512	No
4012	17.6	354	13	5512	No
4013	16.2	376	16	5490	Yes
4014	18.3	430	15	5510	Yes
4015	17.4	331	13	5490	Yes
4016	15.8	280	16	5504	Yes
4017	15.3	445	16	5501	Yes
4018	14.1	406	14	5507	Yes
4019	19	466	15	5509	Yes
4020	14	322	13	5506	Yes
4021	19.3	395	12	5492	Yes
4022	14.8	265	13	5489	No
4023	11.4	483	13	5497	Yes
4024	16.5	365	14	5493	Yes
4025	18.4	346	13	5510	Yes
4026	19.7	492	12	5505	Yes
4027	13	367	12	5501	Yes
4028	14.7	408	16	5494	Yes
4029	13.3	297	14	5502	Yes
4030	15.5	350	14	5512	No

TYPE 5 DETECTION PROBABILITY

Data Sheet for FCC Long Pulse Radar Type 5		
Trial	Frequency (MHz)	Successful Detection (Yes/No)
1	5500	Yes
2	5500	Yes
3	5500	Yes
4	5500	Yes
5	5500	Yes
6	5500	Yes
7	5500	Yes
8	5500	Yes
9	5500	Yes
10	5500	Yes
11	5494	Yes
12	5493	Yes
13	5494	Yes
14	5493	Yes
15	5494	Yes
16	5493	Yes
17	5494	Yes
18	5493	Yes
19	5494	Yes
20	5493	Yes
21	5506	Yes
22	5508	Yes
23	5506	Yes
24	5508	Yes
25	5506	Yes
26	5508	Yes
27	5506	Yes
28	5508	Yes
29	5505	Yes
30	5502	No

Note: The Type 5 randomized parameters tested are located in Appenix A.

TYPE 6 DETECTION PROBABILITY

Data Sheet for FCC Hopping Radar Type 6
1 us Pulse Width, 333 us PRI, 9 Pulses per Burst, 1 Burst per Hop
NTIA August 2005 Hopping Sequence

Trial	Starting Index Within Sequence	Signal Generator Frequency (MHz)	Hops within Detection BW	Successful Detection (Yes/No)
1	633	5488	5	Yes
2	1108	5489	7	Yes
3	1583	5490	5	Yes
4	2058	5491	2	Yes
5	2533	5492	6	Yes
6	3008	5493	7	Yes
7	3483	5494	4	Yes
8	3958	5495	5	Yes
9	4433	5496	7	Yes
10	4908	5497	4	Yes
11	5383	5498	7	Yes
12	5858	5499	7	Yes
13	6333	5500	8	Yes
14	6808	5501	4	Yes
15	7283	5502	4	Yes
16	7758	5503	6	Yes
17	8233	5504	7	Yes
18	8708	5505	8	Yes
19	9183	5506	5	Yes
20	9658	5507	6	Yes
21	10133	5508	6	Yes
22	10608	5509	3	Yes
23	11083	5510	5	Yes
24	11558	5511	6	Yes
25	12033	5512	6	Yes
26	12508	5488	5	Yes
27	12983	5489	5	Yes
28	13458	5490	8	Yes
29	13933	5491	7	Yes
30	14408	5492	4	Yes
31	14883	5493	3	Yes
32	15358	5494	5	Yes
33	15833	5495	6	Yes
34	16308	5496	5	Yes
35	16783	5497	3	Yes
36	17258	5498	5	Yes
37	17733	5499	4	Yes
38	18208	5500	6	Yes
39	18683	5501	9	Yes
40	19158	5502	6	Yes
41	19633	5503	9	Yes
42	20108	5504	5	Yes
43	20583	5505	7	Yes
44	21058	5506	6	Yes
45	21533	5507	2	Yes
46	22008	5508	2	Yes
47	22483	5509	3	Yes
48	22958	5510	10	Yes
49	23433	5511	4	Yes
50	23908	5512	4	Yes

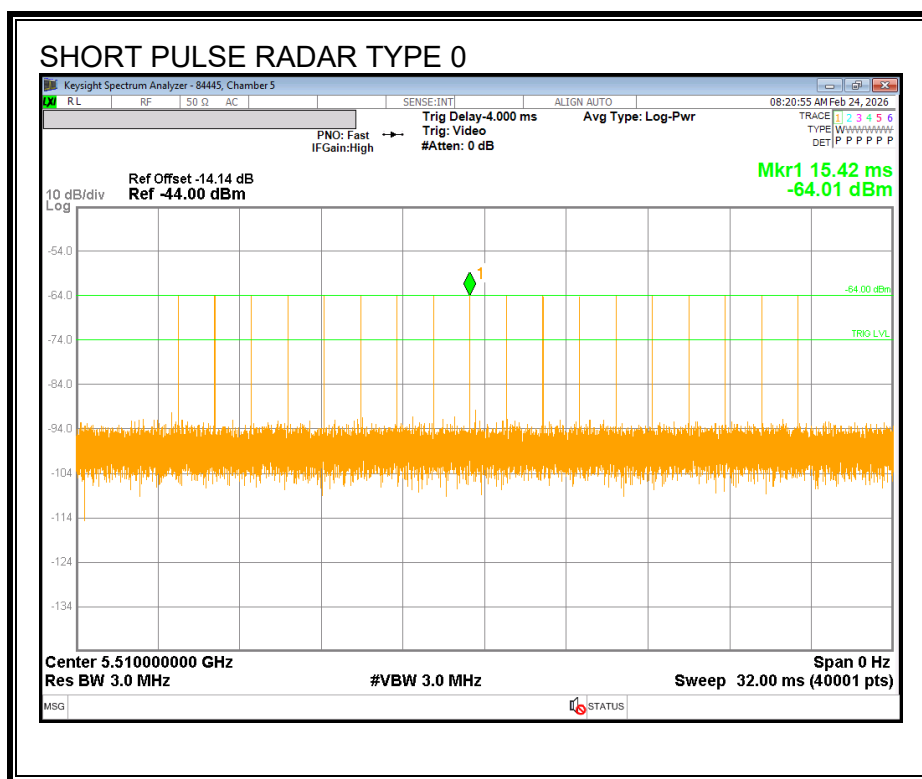
7.3. RESULTS FOR 40 MHz BANDWIDTH

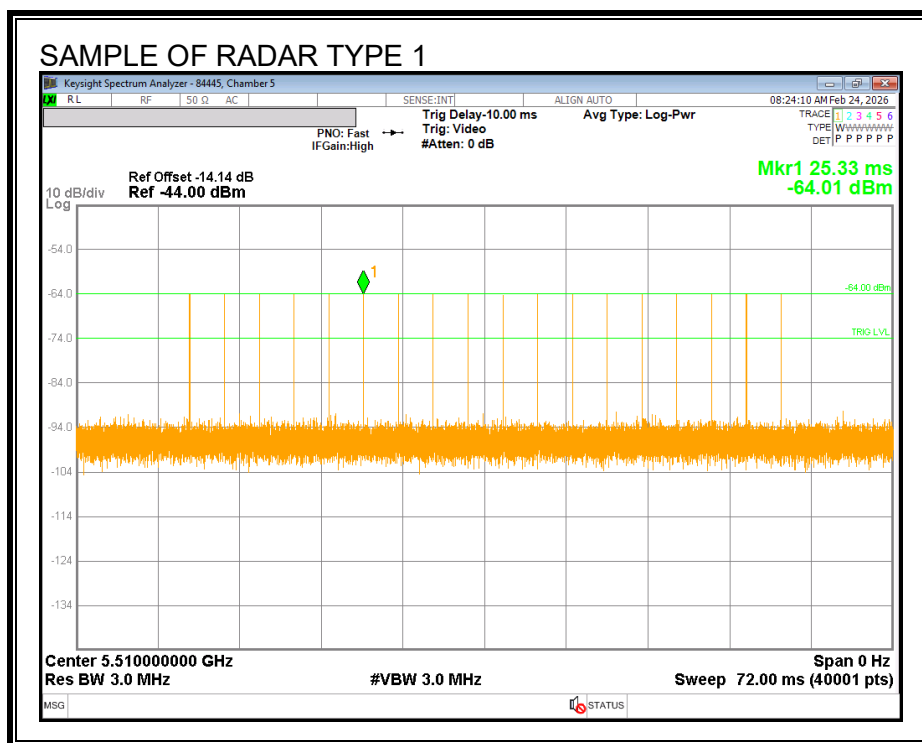
7.3.1. TEST CHANNEL

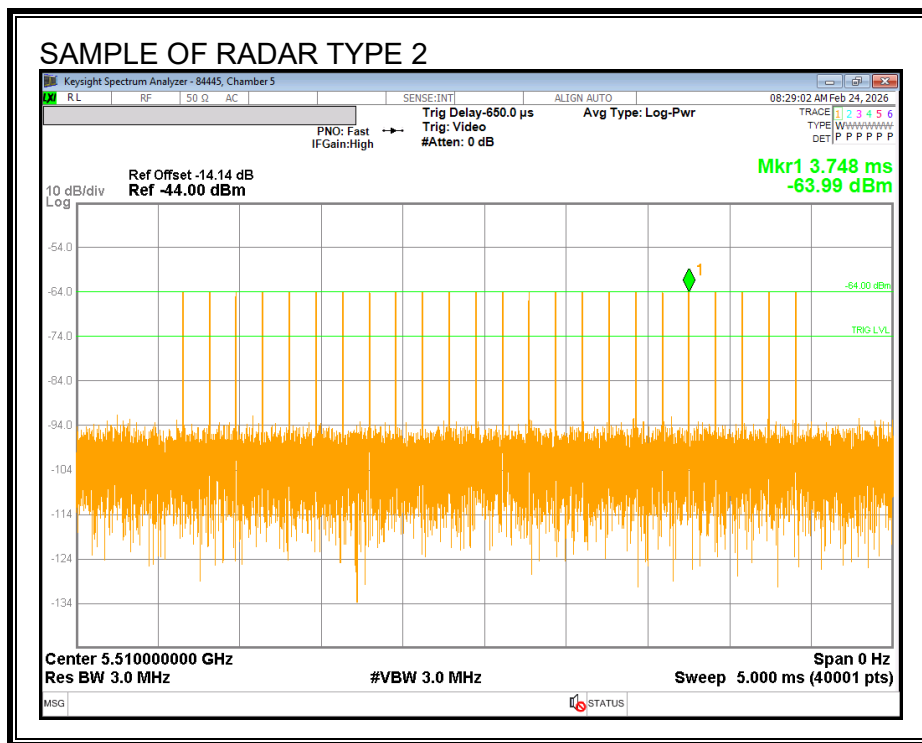
All tests were performed at a channel center frequency of 5510 MHz.

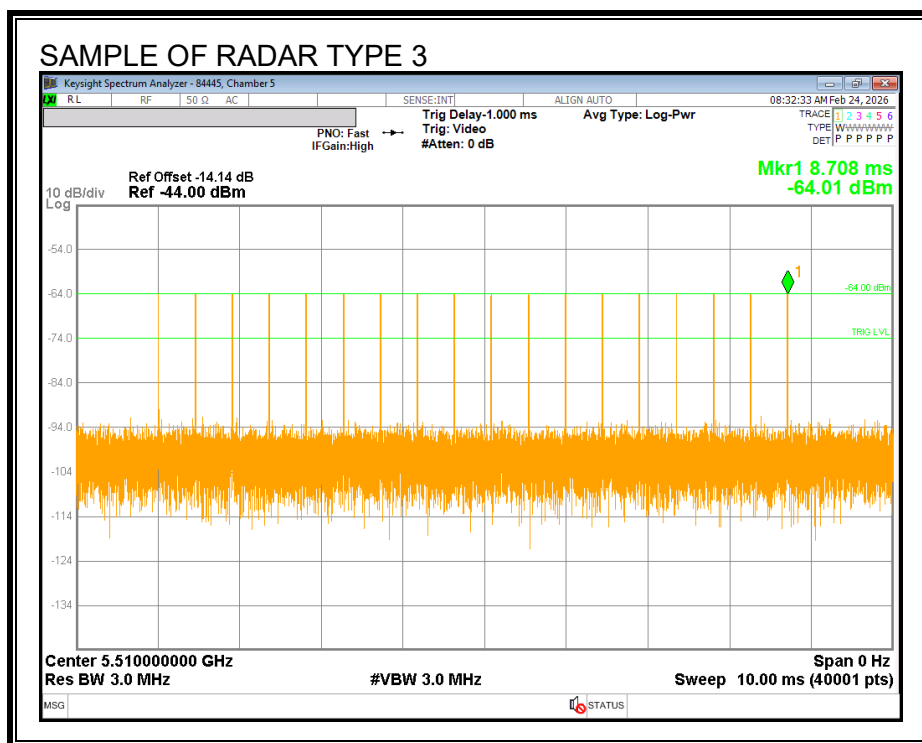
7.3.2. RADAR WAVEFORMS AND TRAFFIC

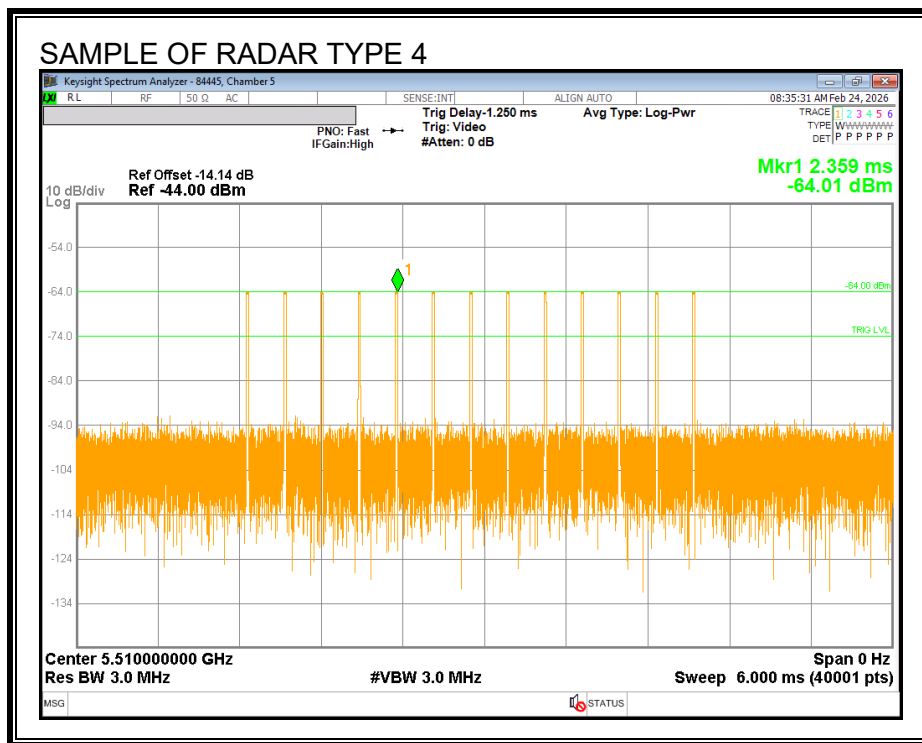
RADAR WAVEFORMS

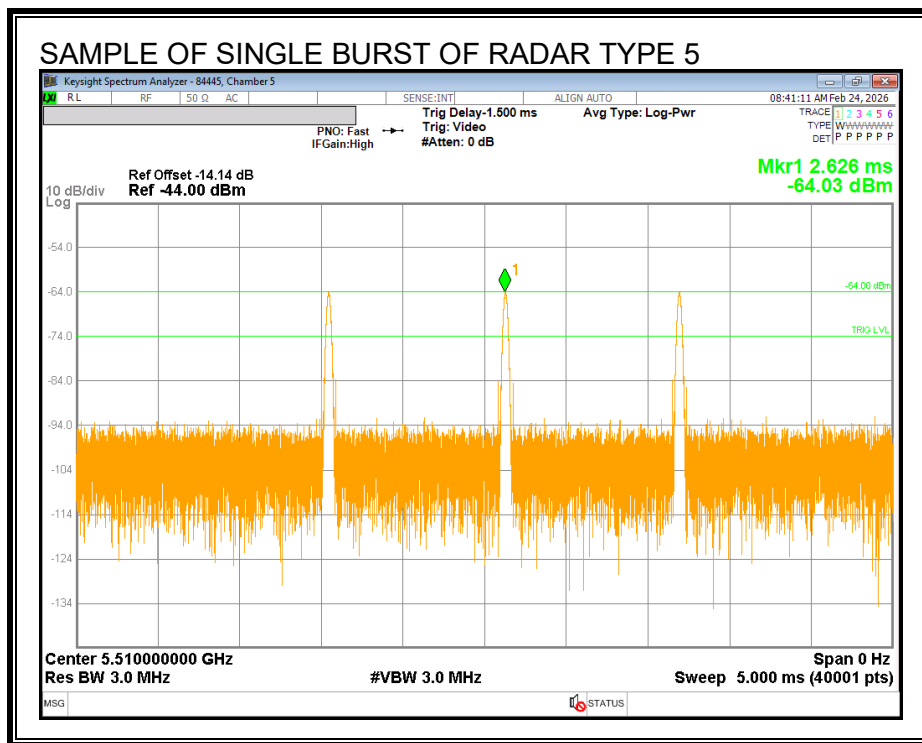


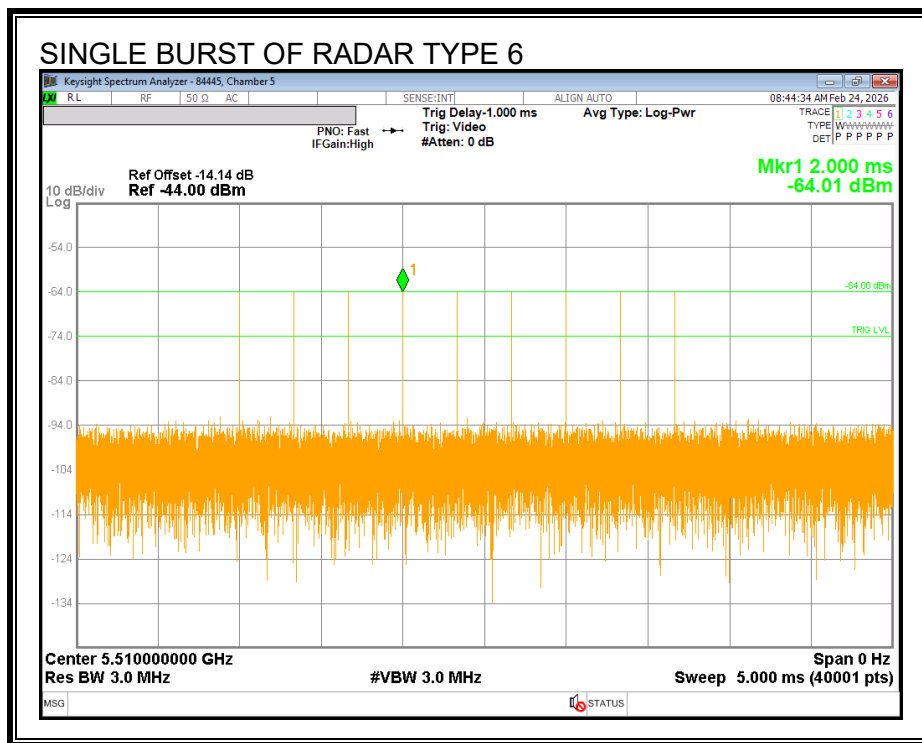




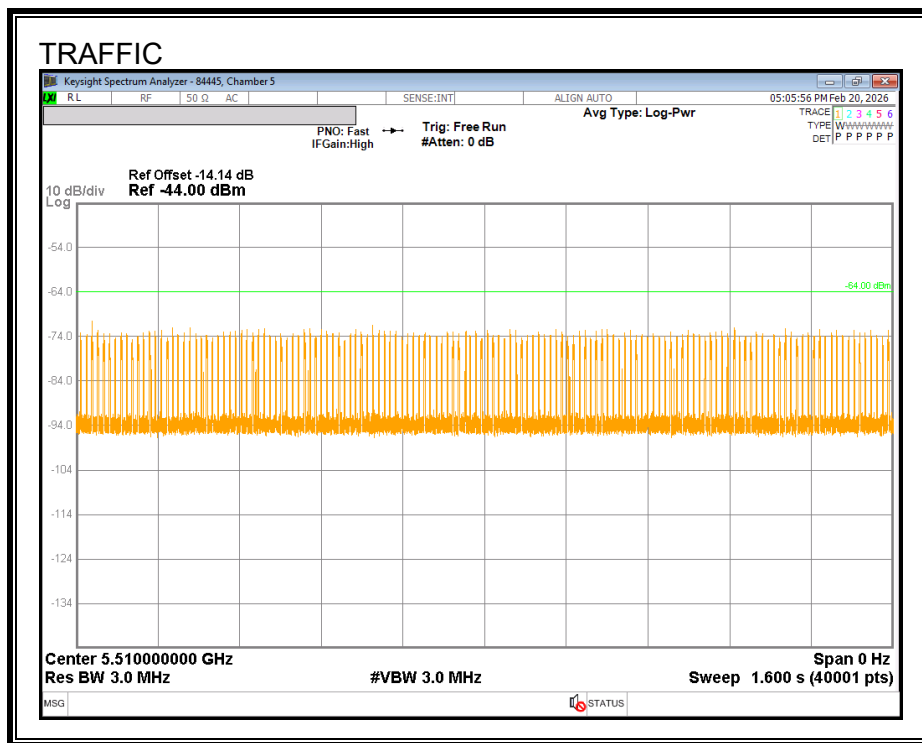




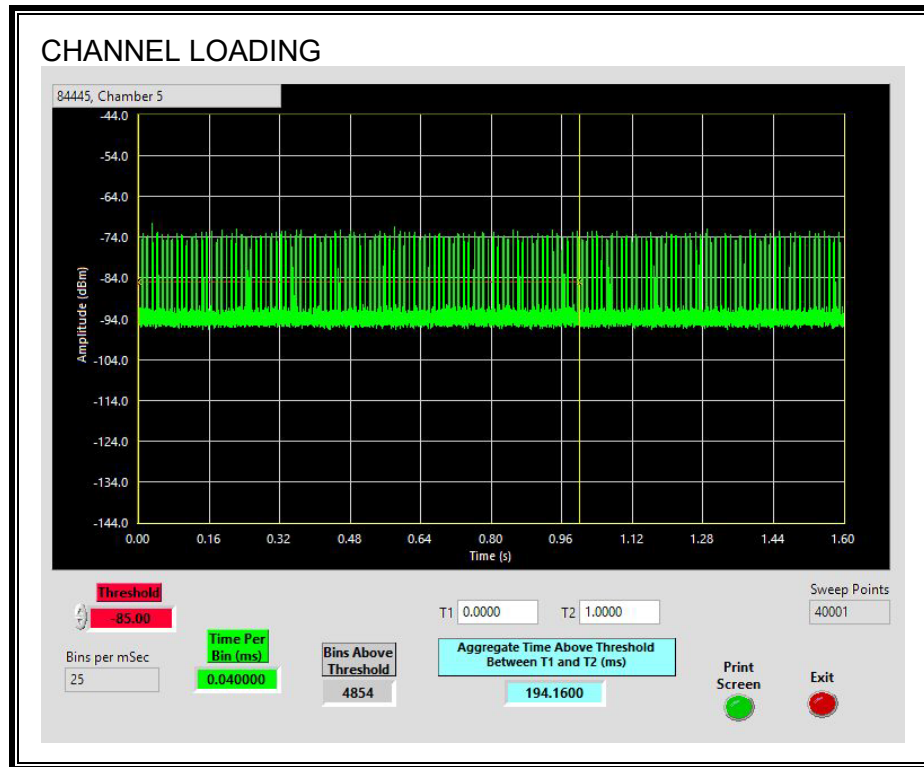




TRAFFIC



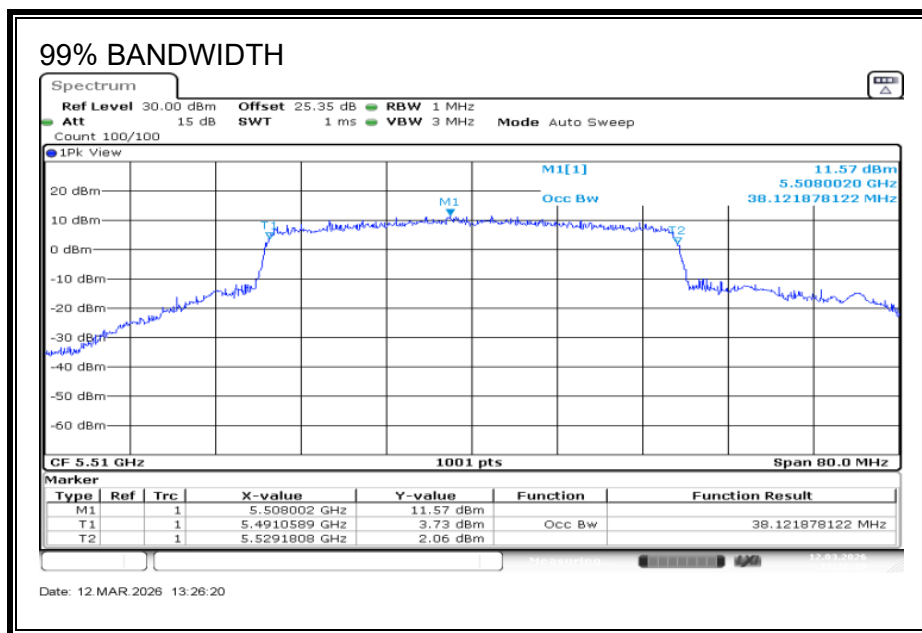
CHANNEL LOADING



The level of traffic loading on the channel by the EUT is 19.42%.

7.3.3. DETECTION BANDWIDTH

REFERENCE PLOT OF 99% POWER BANDWIDTH



RESULTS

F _L (MHz)	F _H (MHz)	Detection Bandwidth (MHz)	99% Power Bandwidth (MHz)	Ratio of Detection BW to 99% Power BW (%)	Minimum Limit (%)
5486	5535	49	38.1218	128.5	100

DETECTION BANDWIDTH PROBABILITY

Detection Bandwidth Test Results			84445	Chamber 5
FCC Type 0 Waveform: 1 us Pulse Width, 1428 us PRI, 18 Pulses per Burst				
Frequency (MHz)	Number of Trials	Number Detected	Detection (%)	Mark
5485	4	0	0	
5486	10	10	100	FL
5487	10	10	100	
5488	10	10	100	
5489	10	10	100	
5490	10	10	100	
5495	10	10	100	
5500	10	10	100	
5505	10	10	100	
5510	10	10	100	
5515	10	10	100	
5520	10	10	100	
5525	10	10	100	
5530	10	10	100	
5535	10	10	100	FH
5536	6	0	0	

7.3.4. IN-SERVICE MONITORING

RESULTS

FCC Radar Test Summary										
Signal Type	Number of Trials	Detection (%)	Limit (%)	Pass/Fail	Detection Bandwidth		OBW	Test Location	Employee Number	In-Service Monitoring Version
					FL	FH				
FCC Short Pulse Type 1	30	96.67	60	Pass	5486	5535	40	Chamber 5	84445	v4.1
FCC Short Pulse Type 2	30	76.67	60	Pass	5486	5535	40	Chamber 5	84445	v4.1
FCC Short Pulse Type 3	30	96.67	60	Pass	5486	5535	40	Chamber 5	84445	v4.1
FCC Short Pulse Type 4	30	80.00	60	Pass	5486	5535	40	Chamber 5	84445	v4.1
Aggregate		87.50	80	Pass						
FCC Long Pulse Type 5	30	100.00	80	Pass	5486	5535	40	Chamber 5	84445	v4.1
FCC Hopping Type 6	50	100.00	70	Pass	5486	5535		Chamber 5	84445	v4.1

TYPE 1 DETECTION PROBABILITY

Data Sheet for FCC Short Pulse Radar Type 1						
Waveform	Pulse Width (us)	PRI (us)	Pulses Per Burst	Test (A/B)	Frequency (MHz)	Successful Detection (Yes/No)
1001	1	3066	18	A	5514	Yes
1002	1	718	74	A	5517	Yes
1003	1	538	99	A	5488	Yes
1004	1	858	62	A	5499	Yes
1005	1	698	76	A	5498	Yes
1006	1	838	63	A	5524	Yes
1007	1	938	57	A	5489	Yes
1008	1	638	83	A	5492	Yes
1009	1	758	70	A	5488	Yes
1010	1	738	72	A	5496	Yes
1011	1	878	61	A	5530	Yes
1012	1	818	65	A	5491	Yes
1013	1	618	86	A	5490	Yes
1014	1	658	81	A	5520	Yes
1015	1	898	59	A	5534	Yes
1016	1	1890	28	B	5505	Yes
1017	1	845	63	B	5497	Yes
1018	1	1478	36	B	5531	Yes
1019	1	563	94	B	5515	Yes
1020	1	1325	40	B	5522	Yes
1021	1	539	98	B	5503	Yes
1022	1	2784	19	B	5535	Yes
1023	1	934	57	B	5511	Yes
1024	1	1955	27	B	5493	Yes
1025	1	1587	34	B	5523	Yes
1026	1	1543	35	B	5509	Yes
1027	1	2499	22	B	5488	Yes
1028	1	1390	38	B	5535	No
1029	1	1281	42	B	5494	Yes
1030	1	2849	19	B	5527	Yes

TYPE 2 DETECTION PROBABILITY

Data Sheet for FCC Short Pulse Radar Type 2					
Waveform	Pulse Width (us)	PRI (us)	Pulses Per Burst	Frequency (MHz)	Successful Detection (Yes/No)
2001	4.9	163	24	5504	Yes
2002	2.9	158	25	5489	Yes
2003	3.5	229	24	5488	No
2004	1.7	191	26	5507	Yes
2005	2.6	185	25	5504	Yes
2006	1	194	24	5528	Yes
2007	4.2	192	24	5518	Yes
2008	2.8	205	23	5487	Yes
2009	2.2	169	26	5498	Yes
2010	1.3	186	23	5514	Yes
2011	4.9	197	27	5522	Yes
2012	2	219	23	5526	No
2013	4	153	28	5523	Yes
2014	3.5	222	25	5519	Yes
2015	1.5	160	23	5498	No
2016	1.2	152	27	5491	No
2017	3.6	218	29	5521	Yes
2018	1.6	214	23	5498	Yes
2019	2.2	203	29	5508	No
2020	4.5	165	24	5501	Yes
2021	1.3	159	23	5533	Yes
2022	3.8	168	29	5514	Yes
2023	2.9	166	25	5495	Yes
2024	3.7	179	24	5516	Yes
2025	5	224	24	5531	Yes
2026	4.1	161	27	5521	Yes
2027	3.6	172	24	5522	No
2028	4.8	193	28	5488	No
2029	2.7	208	25	5494	Yes
2030	2.2	196	26	5519	Yes

TYPE 3 DETECTION PROBABILITY

Data Sheet for FCC Short Pulse Radar Type 3					
Waveform	Pulse Width (us)	PRI (us)	Pulses Per Burst	Frequency (MHz)	Successful Detection (Yes/No)
3001	9.3	453	18	5519	Yes
3002	9	427	16	5501	Yes
3003	7.3	382	16	5509	Yes
3004	9.4	369	18	5534	No
3005	10	337	17	5524	Yes
3006	8.2	470	18	5505	Yes
3007	9.1	333	16	5530	Yes
3008	7.5	479	17	5522	Yes
3009	6.6	355	16	5499	Yes
3010	7.4	262	18	5510	Yes
3011	6.8	402	17	5505	Yes
3012	7.8	455	17	5517	Yes
3013	7.4	490	18	5488	Yes
3014	6.6	305	17	5504	Yes
3015	6.4	352	17	5504	Yes
3016	10	314	16	5525	Yes
3017	8.1	374	17	5503	Yes
3018	7.7	348	16	5494	Yes
3019	8.2	303	18	5521	Yes
3020	8.1	290	17	5507	Yes
3021	8.8	258	16	5489	Yes
3022	6.9	391	16	5520	Yes
3023	7.8	254	18	5517	Yes
3024	8.4	400	16	5531	Yes
3025	9.5	275	18	5495	Yes
3026	6.1	434	17	5516	Yes
3027	9.6	322	16	5503	Yes
3028	6.5	258	16	5509	Yes
3029	6.1	410	17	5495	Yes
3030	9.4	477	16	5492	Yes

TYPE 4 DETECTION PROBABILITY

Data Sheet for FCC Short Pulse Radar Type 4					
Waveform	Pulse Width (us)	PRI (us)	Pulses Per Burst	Frequency (MHz)	Successful Detection (Yes/No)
4001	18.2	273	13	5513	Yes
4002	17	485	16	5505	Yes
4003	12.7	294	12	5534	No
4004	12	269	15	5488	No
4005	13	475	14	5505	Yes
4006	12.8	344	15	5534	No
4007	14.3	312	16	5494	Yes
4008	19.3	311	15	5523	Yes
4009	12.2	425	15	5487	No
4010	13.4	320	16	5491	Yes
4011	15.8	447	14	5521	Yes
4012	17.6	354	13	5511	Yes
4013	16.2	376	16	5498	Yes
4014	18.3	430	15	5504	Yes
4015	17.4	331	13	5518	Yes
4016	15.8	280	16	5517	Yes
4017	15.3	445	16	5523	Yes
4018	14.1	406	14	5493	Yes
4019	19	466	15	5491	Yes
4020	14	322	13	5494	Yes
4021	19.3	395	12	5509	No
4022	14.8	265	13	5528	Yes
4023	11.4	483	13	5507	Yes
4024	16.5	365	14	5486	No
4025	18.4	346	13	5513	Yes
4026	19.7	492	12	5490	Yes
4027	13	367	12	5497	Yes
4028	14.7	408	16	5514	Yes
4029	13.3	297	14	5524	Yes
4030	15.5	350	14	5504	Yes

TYPE 5 DETECTION PROBABILITY

Data Sheet for FCC Long Pulse Radar Type 5		
Trial	Frequency (MHz)	Successful Detection (Yes/No)
1	5510	Yes
2	5510	Yes
3	5510	Yes
4	5510	Yes
5	5510	Yes
6	5510	Yes
7	5510	Yes
8	5510	Yes
9	5510	Yes
10	5510	Yes
11	5494	Yes
12	5493	Yes
13	5494	Yes
14	5493	Yes
15	5494	Yes
16	5493	Yes
17	5494	Yes
18	5493	Yes
19	5494	Yes
20	5493	Yes
21	5526	Yes
22	5528	Yes
23	5526	Yes
24	5528	Yes
25	5526	Yes
26	5528	Yes
27	5526	Yes
28	5528	Yes
29	5525	Yes
30	5522	Yes

Note: The Type 5 randomized parameters tested are located in Appenix A.

TYPE 6 DETECTION PROBABILITY

Data Sheet for FCC Hopping Radar Type 6
1 us Pulse Width, 333 us PRI, 9 Pulses per Burst, 1 Burst per Hop
NTIA August 2005 Hopping Sequence

Trial	Starting Index Within Sequence	Signal Generator Frequency (MHz)	Hops within Detection BW	Successful Detection (Yes/No)
1	493	5486	13	Yes
2	968	5487	14	Yes
3	1443	5488	8	Yes
4	1918	5489	14	Yes
5	2393	5490	17	Yes
6	2868	5491	12	Yes
7	3343	5492	12	Yes
8	3818	5493	10	Yes
9	4293	5494	13	Yes
10	4768	5495	10	Yes
11	5243	5496	9	Yes
12	5718	5497	9	Yes
13	6193	5498	7	Yes
14	6668	5499	14	Yes
15	7143	5500	9	Yes
16	7618	5501	12	Yes
17	8093	5502	13	Yes
18	8568	5503	6	Yes
19	9043	5504	9	Yes
20	9518	5505	10	Yes
21	9993	5506	10	Yes
22	10468	5507	8	Yes
23	10943	5508	9	Yes
24	11418	5509	11	Yes
25	11893	5510	11	Yes
26	12368	5511	9	Yes
27	12843	5512	10	Yes
28	13318	5513	8	Yes
29	13793	5514	13	Yes
30	14268	5515	9	Yes
31	14743	5516	10	Yes
32	15218	5517	15	Yes
33	15693	5518	8	Yes
34	16168	5519	15	Yes
35	16643	5520	12	Yes
36	17118	5521	10	Yes
37	17593	5522	12	Yes
38	18068	5523	14	Yes
39	18543	5524	9	Yes
40	19018	5525	10	Yes
41	19493	5526	5	Yes
42	19968	5527	9	Yes
43	20443	5528	10	Yes
44	20918	5529	8	Yes
45	21393	5530	10	Yes
46	21868	5531	11	Yes
47	22343	5532	12	Yes
48	22818	5533	7	Yes
49	23293	5534	10	Yes
50	23768	5535	13	Yes

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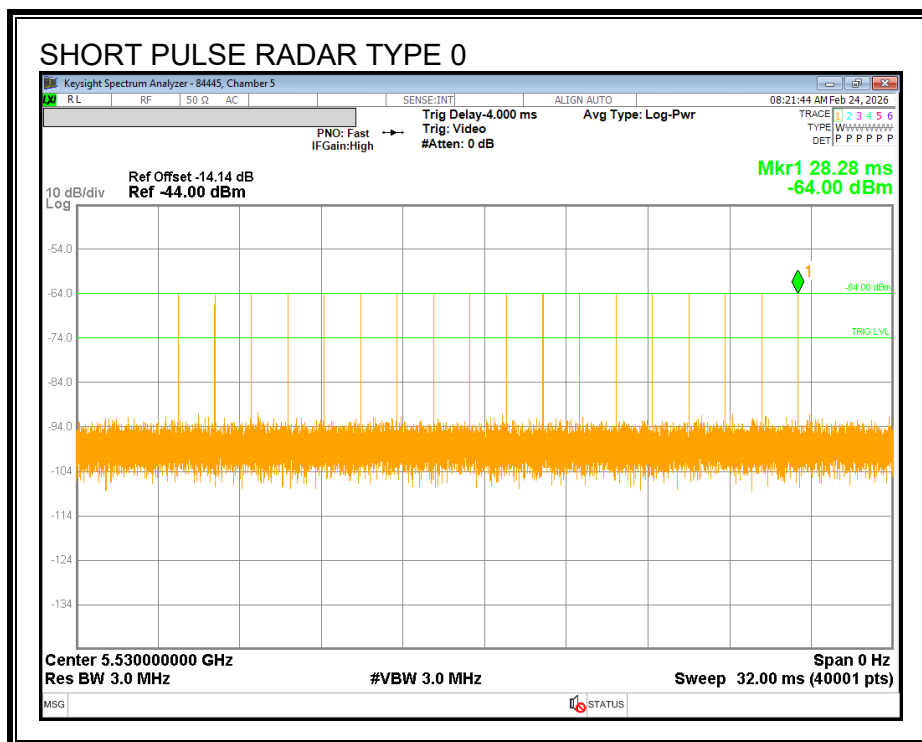
7.4. RESULTS FOR 80 MHz BANDWIDTH

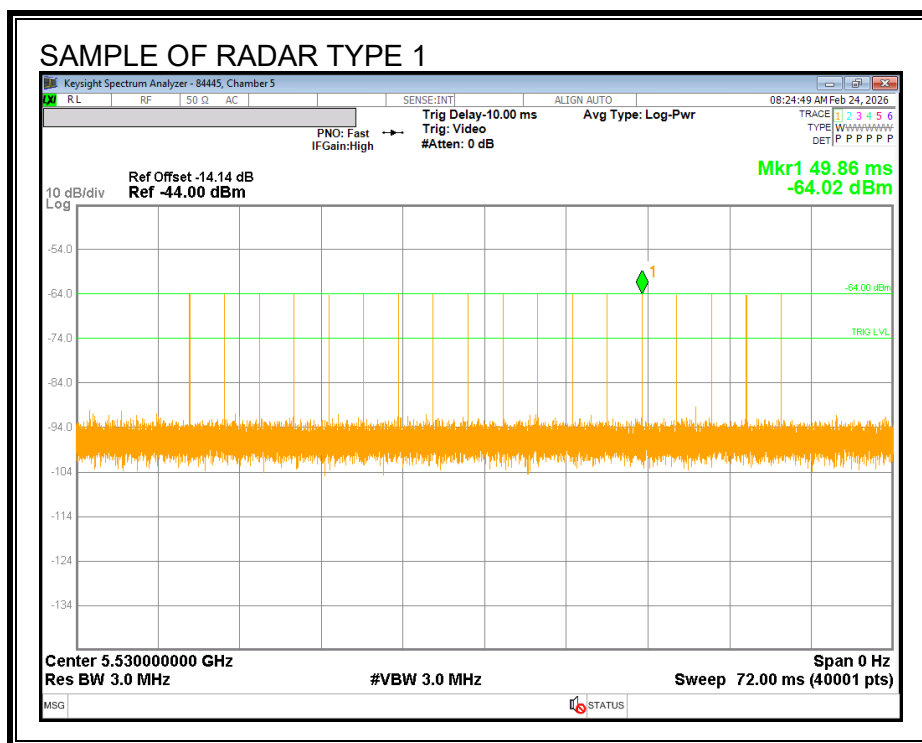
7.4.1. TEST CHANNEL

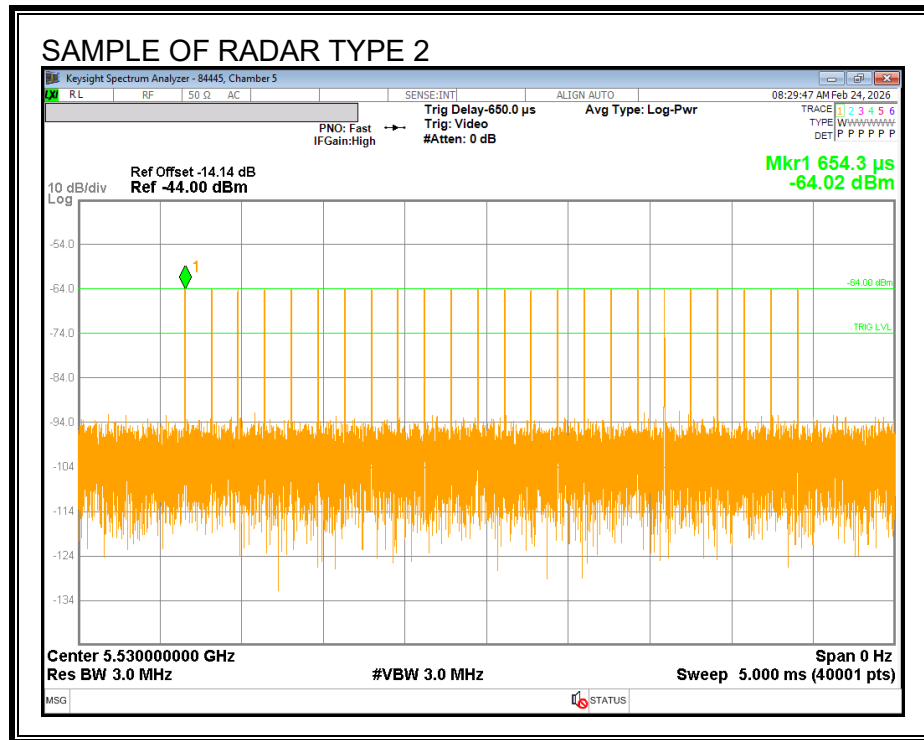
All tests were performed at a channel center frequency of 5530 MHz.

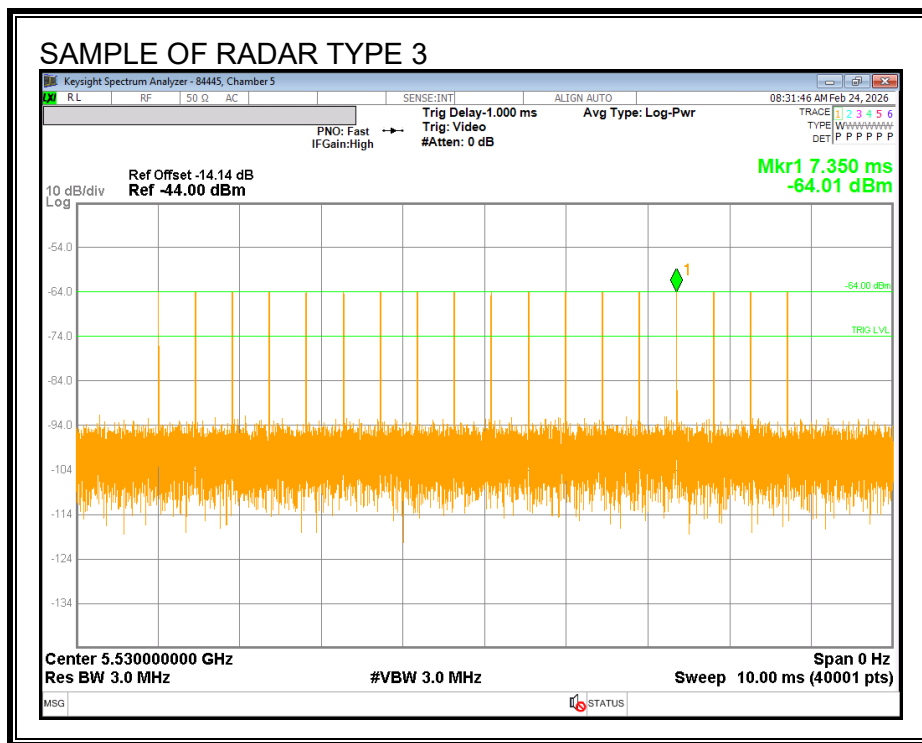
7.4.2. RADAR WAVEFORMS AND TRAFFIC

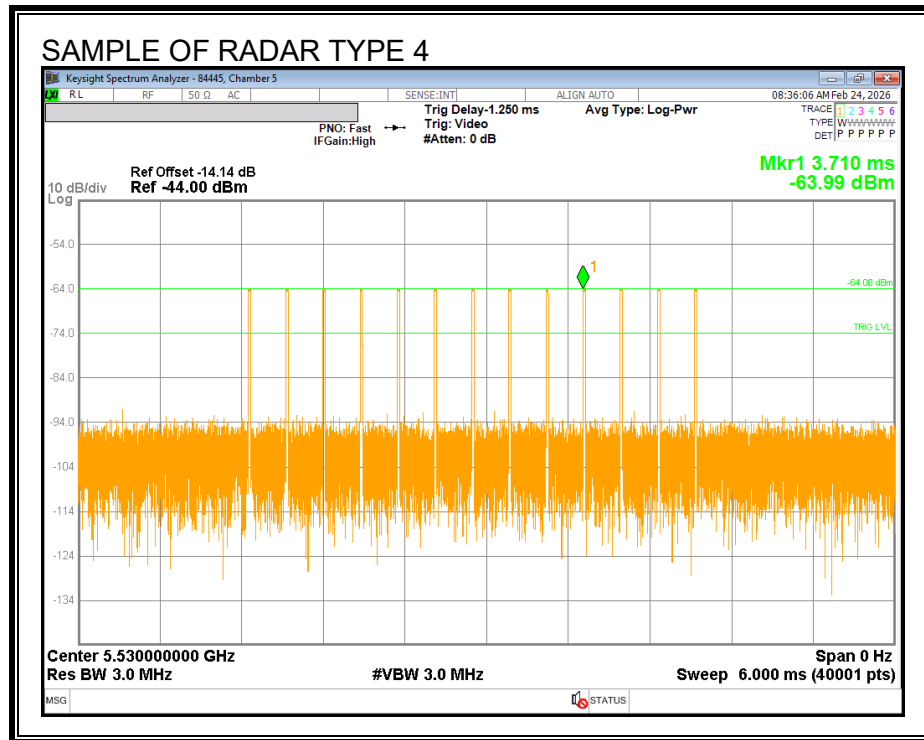
RADAR WAVEFORMS

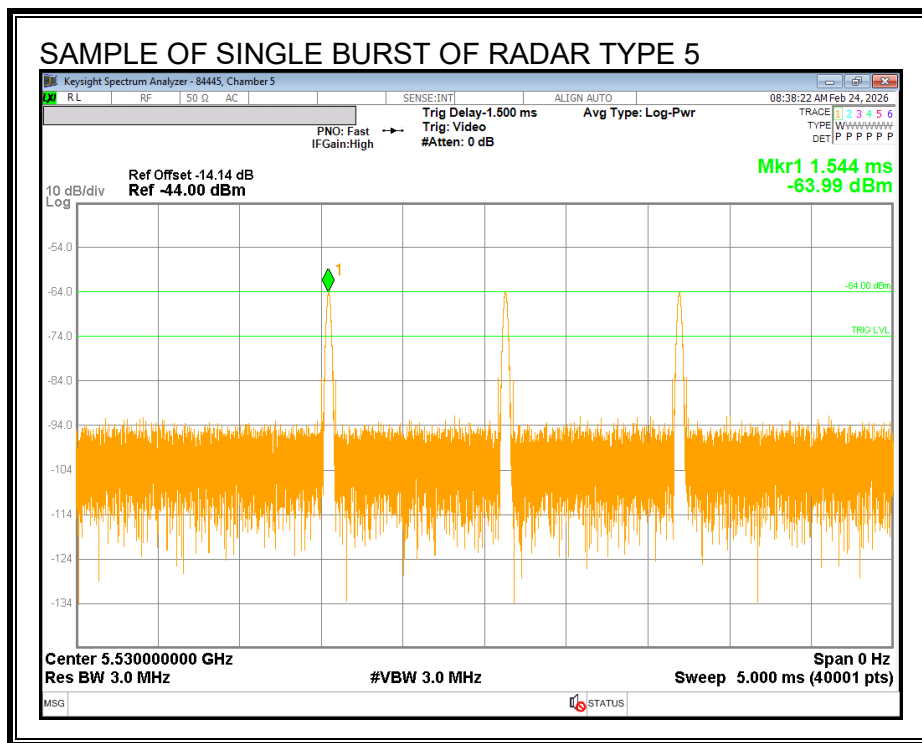


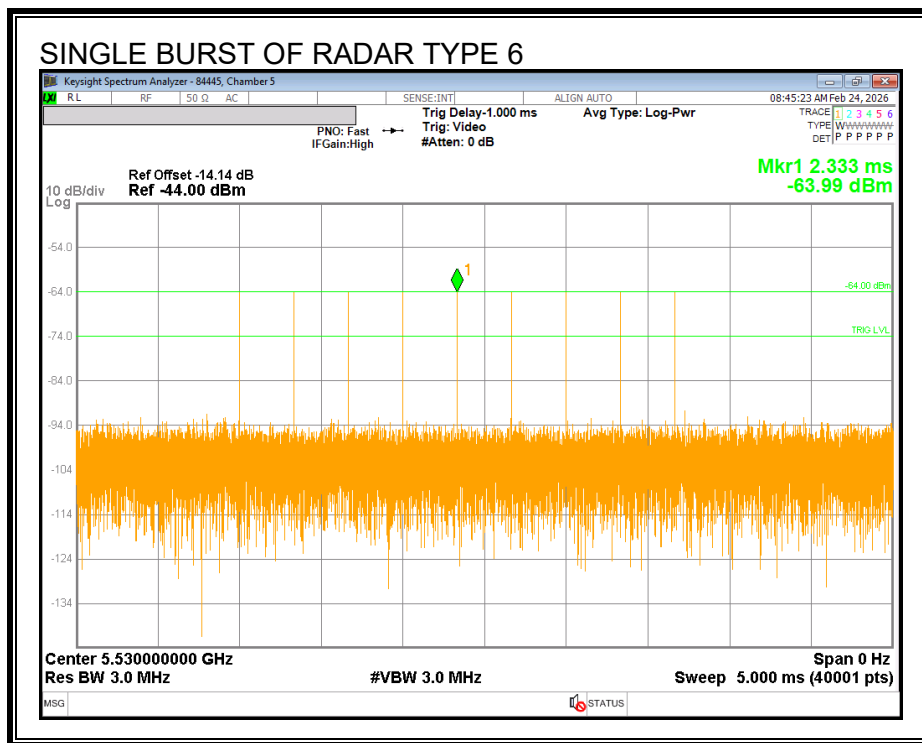




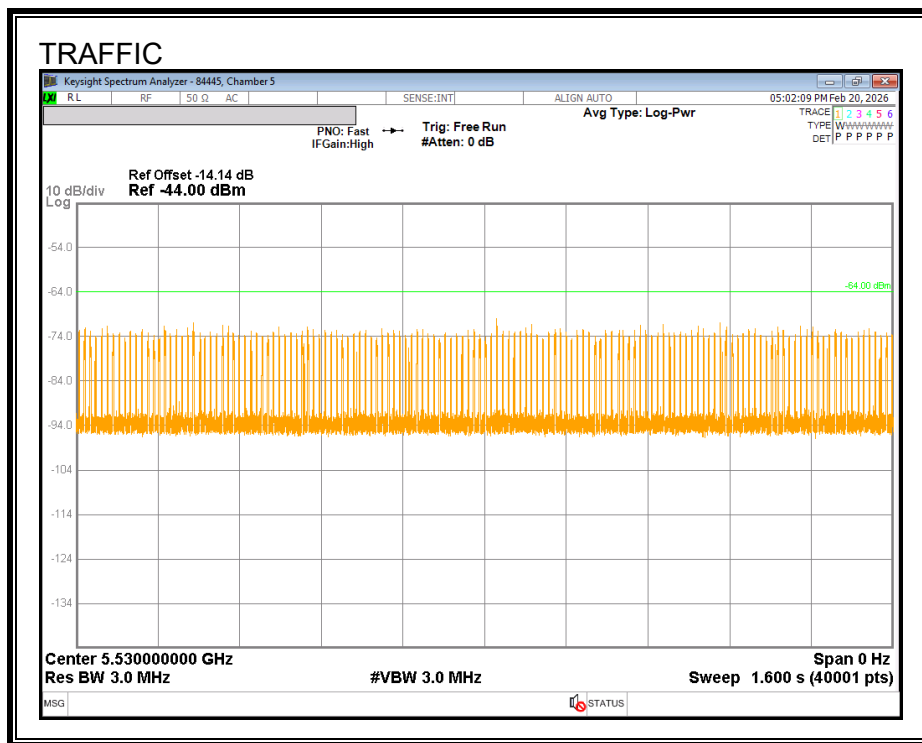




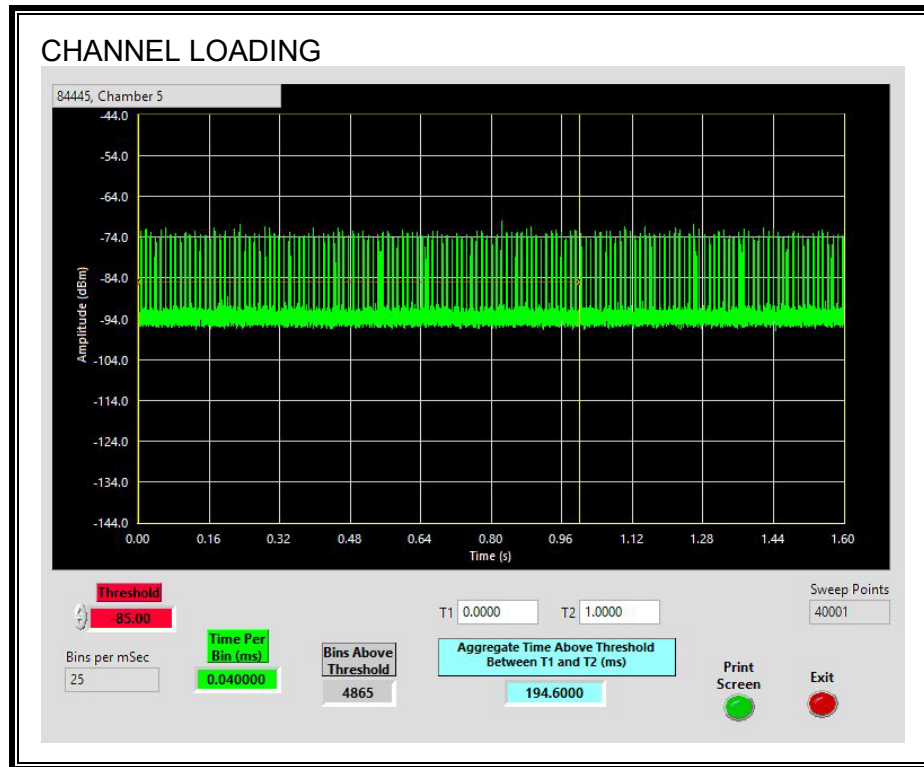




TRAFFIC



CHANNEL LOADING



The level of traffic loading on the channel by the EUT is 19.46%.

7.4.3. CHANNEL AVAILABILITY CHECK TIME

PROCEDURE TO DETERMINE INITIAL CHANNEL JUMP CYCLE TIME

A software command was sent to the EUT to jump to the test channel. The time from the command being sent to the initialization of traffic was measured as the time required for the EUT to complete the transition to the test channel. The time it took to process the command and get off the previous channel is 60 seconds less than this total channel jump time.

PROCEDURE FOR TIMING OF RADAR BURST

With a link established on a random channel, the channel jump command was sent to the EUT. A radar signal was triggered within 0 to 6 seconds after the processing period, and transmissions on the channel were monitored on the spectrum analyzer.

The Non-Occupancy list was cleared. With a link established on a random channel, the channel jump command was sent. A radar signal was triggered within 54 to 60 seconds after the processing period, and transmissions on the channel were monitored on the spectrum analyzer.

QUANTITATIVE RESULTS

No Radar Triggered

Timing of Command (sec)	Timing of Start of Traffic (sec)	Total Channel Jump Time (sec)	Initial Command Processing Time (sec)
0	69.38	69.38	9.38

Radar Near Beginning of CAC

Timing of Command (sec)	Timing of Radar Burst (sec)	Radar Relative to Command (sec)	Radar Relative to Start of CAC (sec)
0	10.52	10.5	1.14

Radar Near End of CAC

Timing of Command (sec)	Timing of Radar Burst (sec)	Radar Relative to Command (sec)	Radar Relative to Start of CAC (sec)
0	68.41	68.4	59.03

QUALITATIVE RESULTS

Timing of Radar Burst	Display on Control Computer	Spectrum Analyzer Display
No Radar Triggered	EUT marks Channel as active	Transmissions begin on channel after the CAC
Within 0 to 6 second window	EUT indicates radar detected	No transmissions on channel
Within 54 to 60 second window	EUT indicates radar detected	No transmissions on channel

TIMING WITHOUT RADAR DURING CAC

AP is rebooted

Traffic ceases

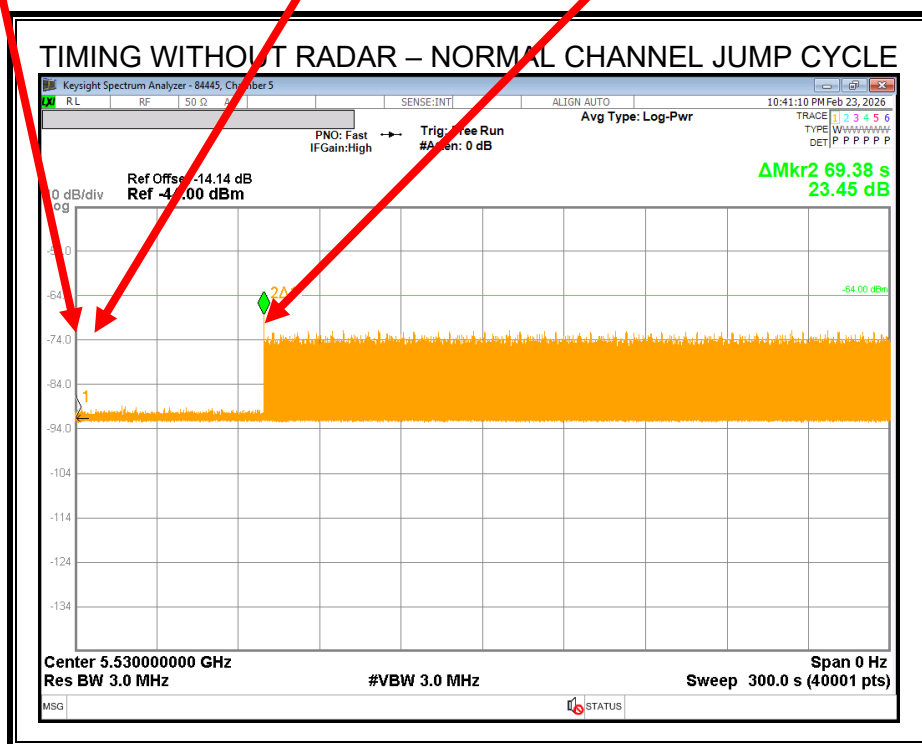
Start of Initial channel jump cycle

End of Initial channel jump cycle

Start of CAC

End of CAC

Traffic is Initiated



Transmissions begin on channel after completion of the initial channel jump cycle and the CAC.

TIMING WITH RADAR NEAR BEGINNING OF CAC

AP is rebooted

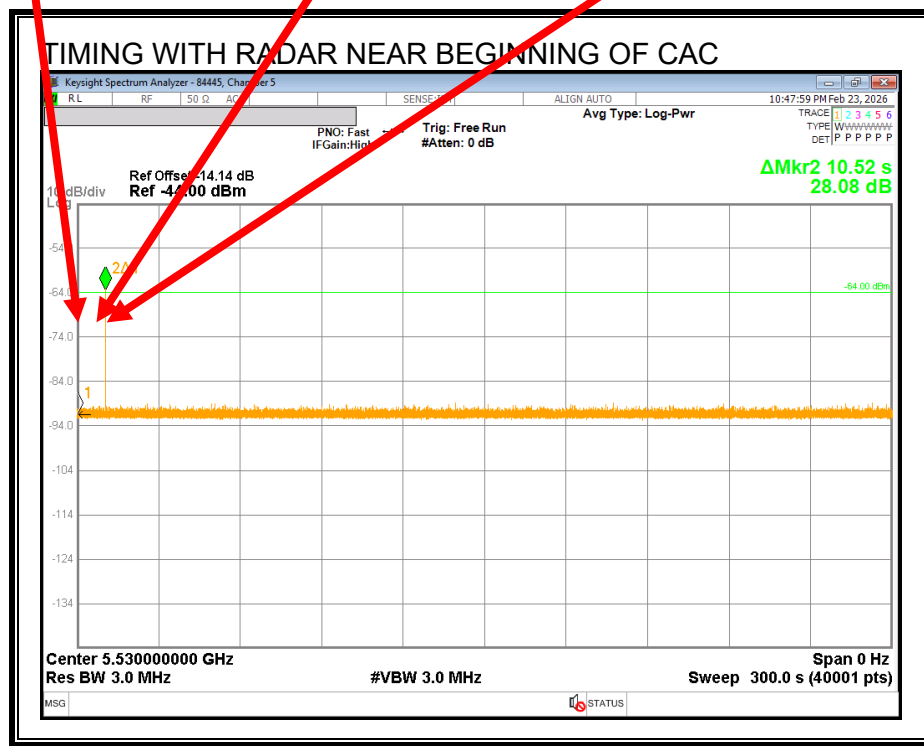
Traffic ceases

Start of Initial channel jump cycle

End of Initial channel jump cycle

Start of CAC

Radar Signal Applied



No EUT transmissions were observed after the radar signal.

TIMING WITH RADAR NEAR END OF CAC

AP is rebooted

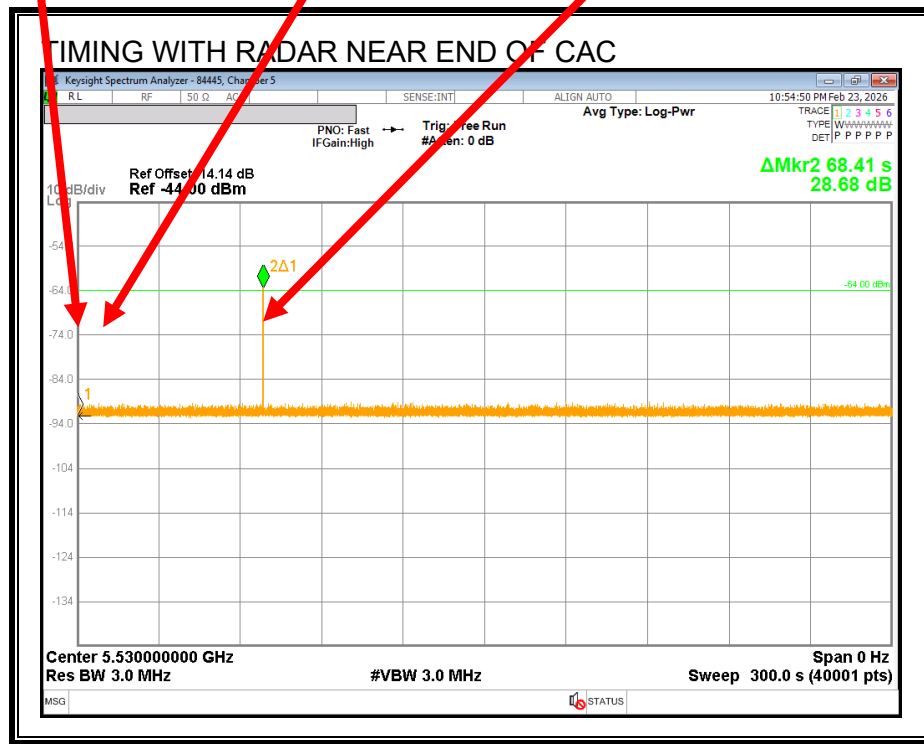
Traffic ceases

Start of Initial channel jump cycle

End of Initial channel jump cycle

Start of CAC

Radar Signal Applied



No EUT transmissions were observed after the radar signal.

7.4.4. OVERLAPPING CHANNEL TESTS

RESULTS

The channel spacing is not less than the channel bandwidth therefore the EUT does not have an overlapping channel plan.

These tests are not applicable.

7.4.5. MOVE AND CLOSING TIME

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)

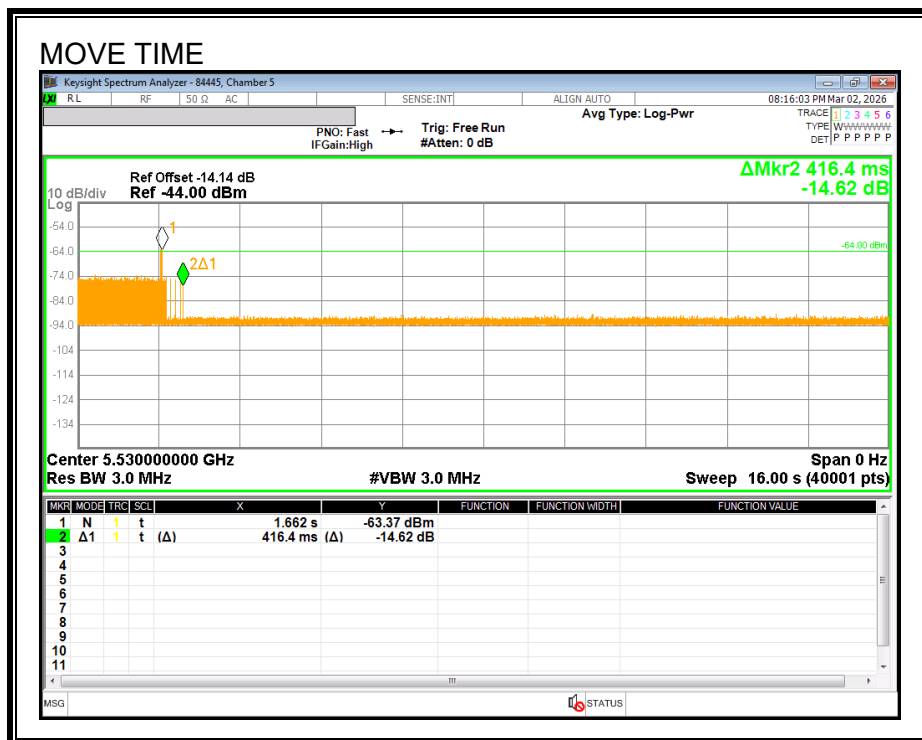
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

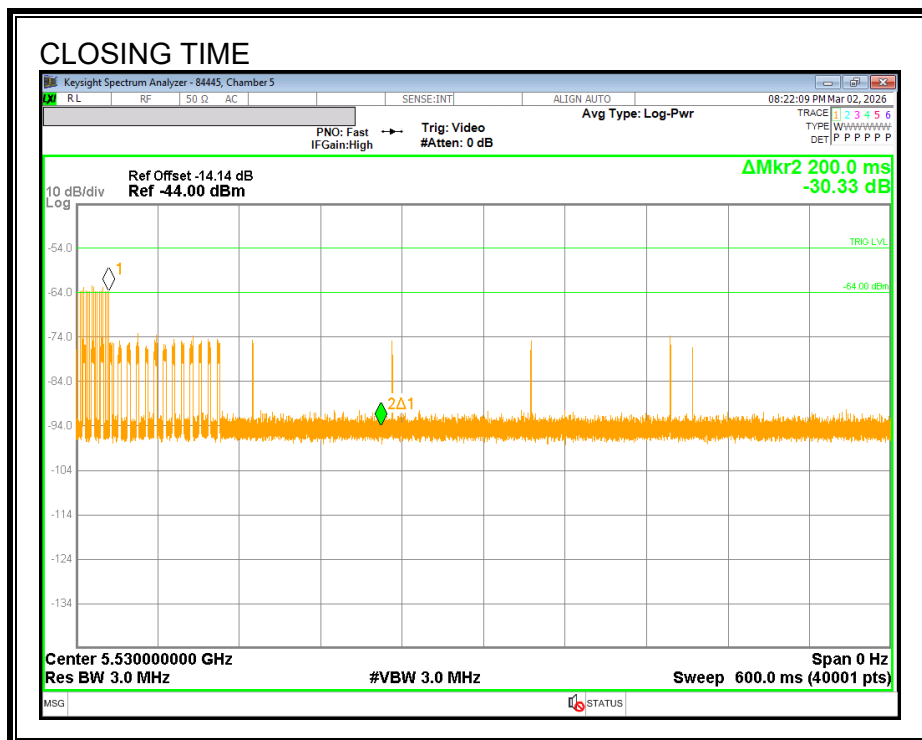
Channel Move Time (sec)	Limit (sec)
0.4164	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
2.4	60

MOVE TIME

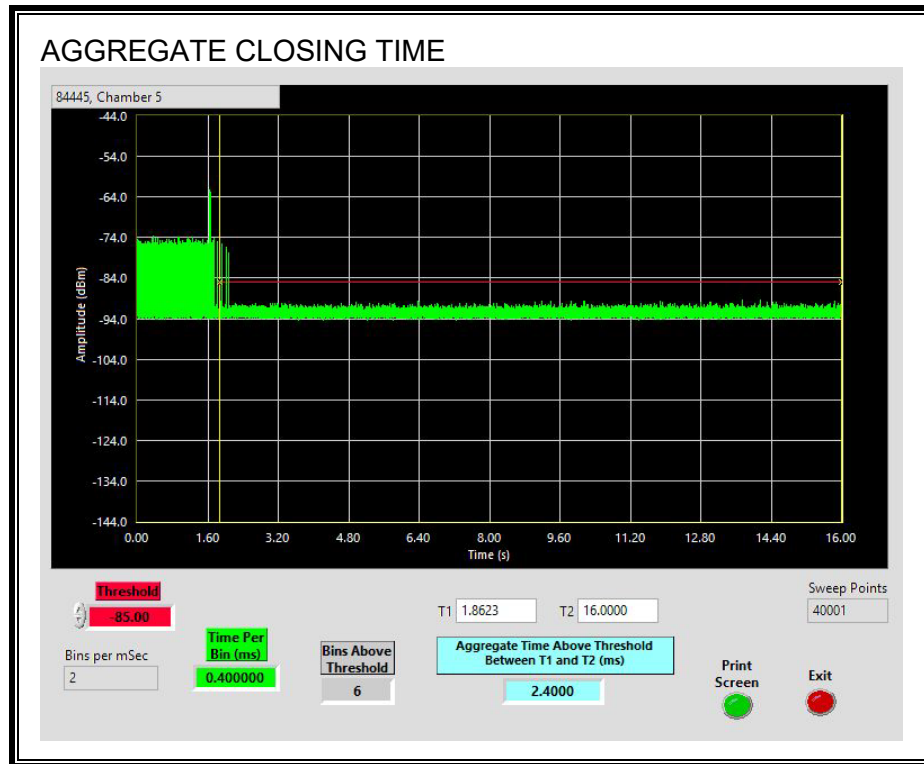


CHANNEL CLOSING TIME



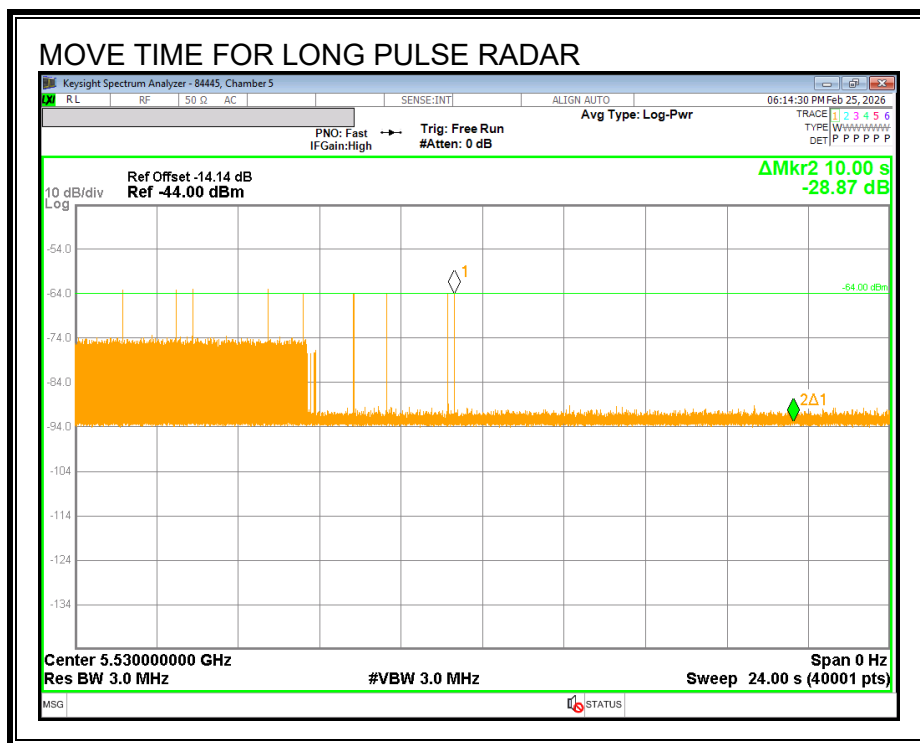
AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.



LONG PULSE CHANNEL MOVE TIME

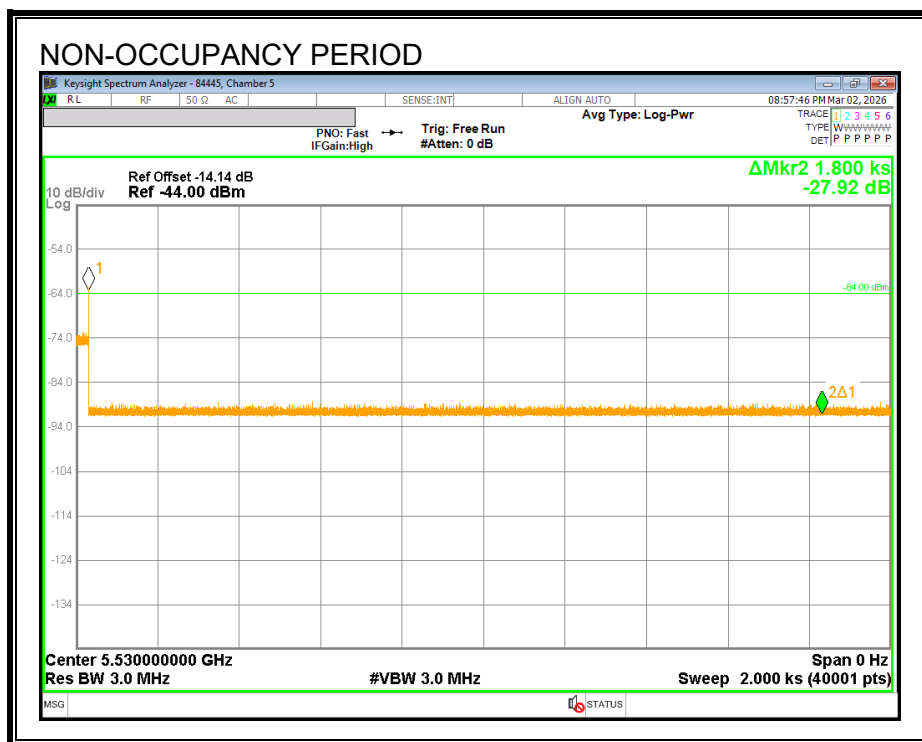
The traffic ceases prior to 10 seconds after the end of the radar waveform.



7.4.6. NON-OCCUPANCY PERIOD

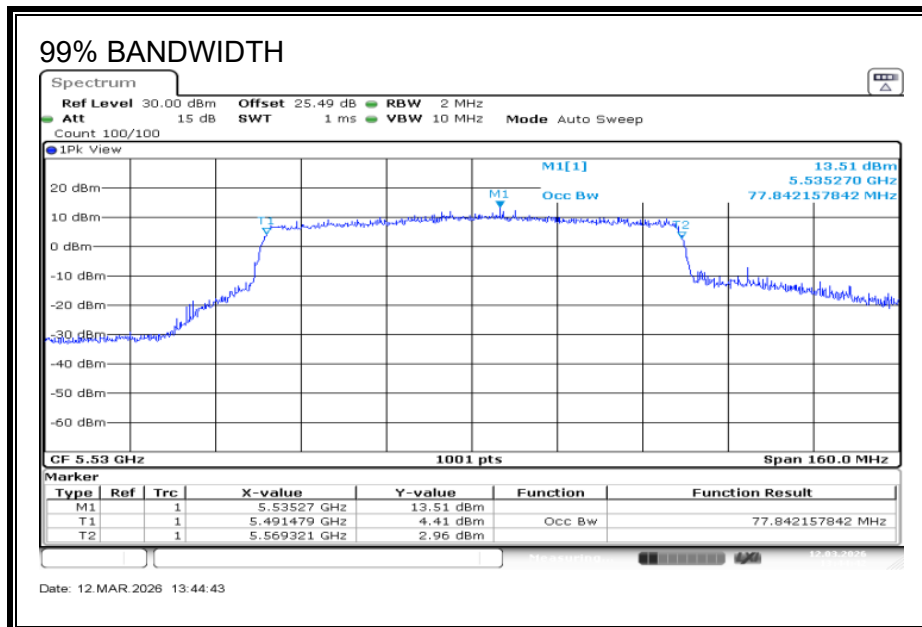
RESULTS

No EUT transmissions were observed on the test channel during the 30-minute observation time.



7.4.7. DETECTION BANDWIDTH

REFERENCE PLOT OF 99% POWER BANDWIDTH



RESULTS

F _L (MHz)	F _H (MHz)	Detection Bandwidth (MHz)	99% Power Bandwidth (MHz)	Ratio of Detection BW to 99% Power BW (%)	Minimum Limit (%)
5484	5576	92	77.842	118.2	100

DETECTION BANDWIDTH PROBABILITY

Detection Bandwidth Test Results				84445	Chamber 5
FCC Type 0 Waveform: 1 us Pulse Width, 1428 us PRI, 18 Pulses per Burst					
Frequency (MHz)	Number of Trials	Number Detected	Detection (%)	Mark	
5483	10	7	70		
5484	10	10	100	FL	
5485	10	10	100		
5490	10	10	100		
5495	10	10	100		
5500	10	10	100		
5505	10	10	100		
5510	10	10	100		
5515	10	10	100		
5520	10	10	100		
5525	10	10	100		
5530	10	10	100		
5535	10	10	100		
5540	10	10	100		
5545	10	10	100		
5550	10	10	100		
5555	10	10	100		
5560	10	10	100		
5565	10	10	100		
5570	10	10	100		
5575	10	10	100		
5576	10	10	100	FH	
5577	3	0	0		

7.4.8. IN-SERVICE MONITORING

RESULTS

FCC Radar Test Summary										
Signal Type	Number of Trials	Detection (%)	Limit (%)	Pass/Fail	Detection Bandwidth		OBW	Test Location	Employee Number	In-Service Monitoring Version
					FL	FH				
FCC Short Pulse Type 1	30	100.00	60	Pass	5484	5576	80	Chamber 5	84445	v4.1
FCC Short Pulse Type 2	30	76.67	60	Pass	5484	5576	80	Chamber 5	84445	v4.1
FCC Short Pulse Type 3	30	80.00	60	Pass	5484	5576	80	Chamber 5	84445	v4.1
FCC Short Pulse Type 4	30	73.33	60	Pass	5484	5576	80	Chamber 5	84445	v4.1
Aggregate		82.50	80	Pass						
FCC Long Pulse Type 5	30	100.00	80	Pass	5484	5576	80	Chamber 5	84445	v4.1
FCC Hopping Type 6	93	100.00	70	Pass	5484	5576		Chamber 5	84445	v4.1

TYPE 1 DETECTION PROBABILITY

Data Sheet for FCC Short Pulse Radar Type 1						
Waveform	Pulse Width (us)	PRI (us)	Pulses Per Burst	Test (A/B)	Frequency (MHz)	Successful Detection (Yes/No)
1001	1	3066	18	A	5494	Yes
1002	1	718	74	A	5497	Yes
1003	1	538	99	A	5562	Yes
1004	1	858	62	A	5532	Yes
1005	1	698	76	A	5547	Yes
1006	1	838	63	A	5511	Yes
1007	1	938	57	A	5541	Yes
1008	1	638	83	A	5486	Yes
1009	1	758	70	A	5520	Yes
1010	1	738	72	A	5525	Yes
1011	1	878	61	A	5489	Yes
1012	1	818	65	A	5520	Yes
1013	1	618	86	A	5512	Yes
1014	1	658	81	A	5534	Yes
1015	1	898	59	A	5486	Yes
1016	1	1890	28	B	5508	Yes
1017	1	845	63	B	5508	Yes
1018	1	1478	36	B	5569	Yes
1019	1	563	94	B	5545	Yes
1020	1	1325	40	B	5573	Yes
1021	1	539	98	B	5565	Yes
1022	1	2784	19	B	5543	Yes
1023	1	934	57	B	5510	Yes
1024	1	1955	27	B	5538	Yes
1025	1	1587	34	B	5570	Yes
1026	1	1543	35	B	5491	Yes
1027	1	2499	22	B	5529	Yes
1028	1	1390	38	B	5529	Yes
1029	1	1281	42	B	5506	Yes
1030	1	2849	19	B	5567	Yes

TYPE 2 DETECTION PROBABILITY

Data Sheet for FCC Short Pulse Radar Type 2

Waveform	Pulse Width (us)	PRI (us)	Pulses Per Burst	Frequency (MHz)	Successful Detection (Yes/No)
2001	4.9	163	24	5554	Yes
2002	2.9	158	25	5487	No
2003	3.5	229	24	5543	Yes
2004	1.7	191	26	5511	Yes
2005	2.6	185	25	5564	Yes
2006	1	194	24	5501	Yes
2007	4.2	192	24	5506	Yes
2008	2.8	205	23	5547	Yes
2009	2.2	169	26	5522	Yes
2010	1.3	186	23	5575	Yes
2011	4.9	197	27	5502	Yes
2012	2	219	23	5566	No
2013	4	153	28	5513	No
2014	3.5	222	25	5538	Yes
2015	1.5	160	23	5571	Yes
2016	1.2	152	27	5552	Yes
2017	3.6	218	29	5551	Yes
2018	1.6	214	23	5574	Yes
2019	2.2	203	29	5545	No
2020	4.5	165	24	5569	No
2021	1.3	159	23	5494	No
2022	3.8	168	29	5574	No
2023	2.9	166	25	5525	Yes
2024	3.7	179	24	5503	Yes
2025	5	224	24	5513	Yes
2026	4.1	161	27	5563	Yes
2027	3.6	172	24	5501	Yes
2028	4.8	193	28	5518	Yes
2029	2.7	208	25	5525	Yes
2030	2.2	196	26	5497	Yes

TYPE 3 DETECTION PROBABILITY

Data Sheet for FCC Short Pulse Radar Type 3					
Waveform	Pulse Width (us)	PRI (us)	Pulses Per Burst	Frequency (MHz)	Successful Detection (Yes/No)
3001	9.3	453	18	5563	Yes
3002	9	427	16	5567	Yes
3003	7.3	382	16	5520	Yes
3004	9.4	369	18	5540	Yes
3005	10	337	17	5533	Yes
3006	8.2	470	18	5525	Yes
3007	9.1	333	16	5537	Yes
3008	7.5	479	17	5522	Yes
3009	6.6	355	16	5544	Yes
3010	7.4	262	18	5540	Yes
3011	6.8	402	17	5512	Yes
3012	7.8	455	17	5560	Yes
3013	7.4	490	18	5489	No
3014	6.6	305	17	5522	Yes
3015	6.4	352	17	5515	Yes
3016	10	314	16	5504	Yes
3017	8.1	374	17	5568	No
3018	7.7	348	16	5509	Yes
3019	8.2	303	18	5527	Yes
3020	8.1	290	17	5552	Yes
3021	8.8	258	16	5484	No
3022	6.9	391	16	5565	Yes
3023	7.8	254	18	5561	No
3024	8.4	400	16	5547	Yes
3025	9.5	275	18	5562	Yes
3026	6.1	434	17	5512	Yes
3027	9.6	322	16	5503	Yes
3028	6.5	258	16	5519	Yes
3029	6.1	410	17	5568	No
3030	9.4	477	16	5490	No

TYPE 4 DETECTION PROBABILITY

Data Sheet for FCC Short Pulse Radar Type 4

Waveform	Pulse Width (us)	PRI (us)	Pulses Per Burst	Frequency (MHz)	Successful Detection (Yes/No)
4001	18.2	273	13	5507	No
4002	17	485	16	5538	Yes
4003	12.7	294	12	5512	No
4004	12	269	15	5515	Yes
4005	13	475	14	5569	No
4006	12.8	344	15	5516	Yes
4007	14.3	312	16	5548	Yes
4008	19.3	311	15	5504	Yes
4009	12.2	425	15	5538	Yes
4010	13.4	320	16	5536	Yes
4011	15.8	447	14	5491	Yes
4012	17.6	354	13	5503	Yes
4013	16.2	376	16	5526	Yes
4014	18.3	430	15	5496	Yes
4015	17.4	331	13	5559	Yes
4016	15.8	280	16	5572	No
4017	15.3	445	16	5575	No
4018	14.1	406	14	5505	No
4019	19	466	15	5539	Yes
4020	14	322	13	5508	Yes
4021	19.3	395	12	5494	Yes
4022	14.8	265	13	5496	Yes
4023	11.4	483	13	5546	Yes
4024	16.5	365	14	5576	No
4025	18.4	346	13	5549	Yes
4026	19.7	492	12	5547	Yes
4027	13	367	12	5501	Yes
4028	14.7	408	16	5562	Yes
4029	13.3	297	14	5568	No
4030	15.5	350	14	5536	Yes

TYPE 5 DETECTION PROBABILITY

Data Sheet for FCC Long Pulse Radar Type 5		
Trial	Frequency (MHz)	Successful Detection (Yes/No)
1	5530	Yes
2	5530	Yes
3	5530	Yes
4	5530	Yes
5	5530	Yes
6	5530	Yes
7	5530	Yes
8	5530	Yes
9	5530	Yes
10	5530	Yes
11	5494	Yes
12	5493	Yes
13	5494	Yes
14	5493	Yes
15	5494	Yes
16	5493	Yes
17	5494	Yes
18	5493	Yes
19	5494	Yes
20	5493	Yes
21	5566	Yes
22	5568	Yes
23	5566	Yes
24	5568	Yes
25	5566	Yes
26	5568	Yes
27	5566	Yes
28	5568	Yes
29	5565	Yes
30	5562	Yes

Note: The Type 5 randomized parameters tested are located in Appendix A.

TYPE 6 DETECTION PROBABILITY

Data Sheet for FCC Hopping Radar Type 6

1 us Pulse Width, 333 us PRI, 9 Pulses per Burst, 1 Burst per Hop

NTIA August 2005 Hopping Sequence

Trial	Starting Index Within Sequence	Signal Generator Frequency (MHz)	Hops within Detection BW	Successful Detection (Yes/No)
1	829	5484	13	Yes
2	1304	5485	15	Yes
3	1779	5486	24	Yes
4	2254	5487	22	Yes
5	2729	5488	19	Yes
6	3204	5489	15	Yes
7	3679	5490	15	Yes
8	4154	5491	13	Yes
9	4629	5492	22	Yes
10	5104	5493	18	Yes
11	5579	5494	16	Yes
12	6054	5495	18	Yes
13	6529	5496	15	Yes
14	7004	5497	24	Yes
15	7479	5498	17	Yes
16	7954	5499	16	Yes
17	8429	5500	15	Yes
18	8904	5501	23	Yes
19	9379	5502	28	Yes
20	9854	5503	14	Yes
21	10329	5504	13	Yes
22	10804	5505	22	Yes
23	11279	5506	23	Yes
24	11754	5507	18	Yes
25	12229	5508	16	Yes
26	12704	5509	17	Yes
27	13179	5510	27	Yes
28	13654	5511	18	Yes
29	14129	5512	15	Yes
30	14604	5513	20	Yes
31	15079	5514	20	Yes
32	15554	5515	19	Yes
33	16029	5516	18	Yes
34	16504	5517	23	Yes
35	16979	5518	23	Yes
36	17454	5519	23	Yes
37	17929	5520	17	Yes
38	18404	5521	22	Yes
39	18879	5522	18	Yes
40	19354	5523	17	Yes
41	19829	5524	26	Yes

TYPE 6 DETECTION PROBABILITY (CONTINUED)

42	20304	5525	21	Yes
43	20779	5526	17	Yes
44	21254	5527	11	Yes
45	21729	5528	21	Yes
46	22204	5529	19	Yes
47	22679	5530	15	Yes
48	23154	5531	13	Yes
49	23629	5532	17	Yes
50	24104	5533	17	Yes
51	24579	5534	22	Yes
52	25054	5535	20	Yes
53	25529	5536	22	Yes
54	26004	5537	21	Yes
55	26479	5538	22	Yes
56	26954	5539	17	Yes
57	27429	5540	20	Yes
58	27904	5541	18	Yes
59	28379	5542	25	Yes
60	28854	5543	19	Yes
61	29329	5544	21	Yes
62	29804	5545	24	Yes
63	30279	5546	16	Yes
64	30754	5547	19	Yes
65	31229	5548	16	Yes
66	31704	5549	26	Yes
67	32179	5550	17	Yes
68	32654	5551	23	Yes
69	33129	5552	24	Yes
70	33604	5553	22	Yes
71	34079	5554	24	Yes
72	34554	5555	22	Yes
73	35029	5556	15	Yes
74	35504	5557	27	Yes
75	35979	5558	24	Yes
76	36454	5559	23	Yes
77	36929	5560	19	Yes
78	37404	5561	17	Yes
79	37879	5562	21	Yes
80	38354	5563	19	Yes
81	38829	5564	17	Yes
82	39304	5565	17	Yes
83	39779	5566	21	Yes
84	40254	5567	14	Yes
85	40729	5568	18	Yes
86	41204	5569	12	Yes
87	41679	5570	16	Yes
88	42154	5571	14	Yes
89	42629	5572	18	Yes
90	43104	5573	22	Yes
91	43579	5574	15	Yes
92	44054	5575	15	Yes
93	44529	5576	18	Yes

8. APPENDIX A: FCC TYPE 5 RADAR PARAMETERS

FCC Long Pulse 02-20-2026 12:06:50

Waveform Num = 1
Num of Bursts = 10
Burst Interval (us) = 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	5859	3	13	90	1082	1064	1972	5859	0	1199999
2	1297997	3	13	80	1117	1783	1373	1307974	1200000	2399999
3	1248624	1	13	80	1253	0	0	2560871	2400000	3599999
4	1739805	3	13	90	1133	1647	1022	4301929	3600000	4799999
5	1001797	2	13	55	1167	1834	0	5307528	4800000	5999999
6	1238030	3	13	65	1612	1304	1185	6548559	6000000	7199999
7	1410474	2	13	85	1698	1604	0	7963134	7200000	8399999
8	440748	2	13	60	1218	1416	0	8407184	8400000	9599999
9	1799144	3	13	70	1663	1886	1236	10208962	9600000	10799999
10	849025	2	13	90	1749	1655	0	11062772	10800000	11999999

Total number of pulses in waveform = 24

Waveform Num = 2
Num of Bursts = 10
Burst Interval (us) = 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	292945	3	9	75	1056	1305	1946	292945	0	1199999
2	1298049	3	9	90	1091	1492	1348	1595301	1200000	2399999
3	858968	3	9	60	1227	1844	1852	2458200	2400000	3599999
4	1491366	1	9	65	1997	0	0	3954489	3600000	4799999
5	1320951	2	9	95	1142	1074	0	5277437	4800000	5999999
6	1790824	2	9	65	1321	1278	0	7070477	6000000	7199999
7	183896	2	9	55	1690	1407	0	7256972	7200000	8399999
8	1289541	2	9	80	1920	1193	0	8549610	8400000	9599999
9	2077088	2	9	100	1338	1904	0	10629811	9600000	10799999
10	1350529	2	9	75	1150	1741	0	11983582	10800000	11999999
Total number of pulses in waveform = 22										

Waveform Num = 3
Num of Bursts = 16
Burst Interval (us) = 750000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	23457	2	19	75	1775	1175	0	23457	0	749999
2	1405287	1	19	100	1955	0	0	1431694	750000	1499999
3	95836	2	19	75	1733	1791	0	1529485	1500000	2249999
4	1281796	3	19	100	1202	1552	1826	2814805	2250000	2999999
5	184280	1	19	50	1972	0	0	3003665	3000000	3749999
6	811702	3	19	80	1117	1783	1373	3817339	3750000	4499999
7	778869	1	19	80	1253	0	0	4600481	4500000	5249999
8	1086135	3	19	90	1133	1647	1022	5687869	5250000	5999999
9	625057	2	19	55	1167	1834	0	6316728	6000000	6749999
10	772415	3	19	65	1612	1304	1185	7092144	6750000	7499999
11	879924	2	19	85	1698	1604	0	7976169	7500000	8249999
12	275013	2	19	60	1218	1416	0	8254484	8250000	8999999
13	1122569	3	19	70	1663	1886	1236	9379687	9000000	9749999
14	529480	2	19	90	1749	1655	0	9913952	9750000	10499999
15	931903	1	19	60	1801	0	0	10849259	10500000	11249999
16	582213	1	19	65	1946	0	0	11433273	11250000	11999999
Total number of pulses in waveform = 32										

Waveform Num = 4
Num of Bursts = 20
Burst Interval (us) = 600000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	197854	1	18	75	1348	0	0	197854	0	599999
2	429778	3	18	60	1227	1844	1852	628980	600000	1199999
3	743046	1	18	65	1997	0	0	1376949	1200000	1799999
4	659331	2	18	95	1142	1074	0	2038277	1800000	2399999
5	893584	2	18	65	1321	1278	0	2934077	2400000	2999999
6	91736	2	18	55	1690	1407	0	3028412	3000000	3599999
7	643101	2	18	80	1920	1193	0	3674610	3600000	4199999
8	1035788	2	18	100	1338	1904	0	4713511	4200000	4799999
9	673609	2	18	75	1150	1741	0	5390362	4800000	5399999
10	469388	2	18	100	1620	1501	0	5862641	5400000	5999999
11	685665	1	18	50	1014	0	0	6551427	6000000	6599999
12	518485	3	18	100	1527	1535	1733	7070926	6600000	7199999
13	245258	1	18	85	1980	0	0	7320979	7200000	7799999
14	515796	2	18	95	1758	1082	0	7838755	7800000	8399999
15	1024677	3	18	50	1963	1578	1117	8866272	8400000	8999999
16	280215	2	18	50	1262	1561	0	9151145	9000000	9599999
17	525591	1	18	95	1809	0	0	9679559	9600000	10199999
18	613892	2	18	50	1587	1544	0	10295260	10200000	10799999
19	904032	1	18	95	1424	0	0	11202423	10800000	11399999
20	306911	1	18	80	1304	0	0	11510758	11400000	11999999
Total number of pulses in waveform = 36										

Waveform Num = 5
Num of Bursts = 13
Burst Interval (us) = 923077

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	193197	3	11	85	1604	1638	1595	193197	0	923076
2	1391793	1	11	70	1006	0	0	1589827	923077	1846153
3	724038	2	11	85	1886	1236	0	2314871	1846154	2769230
4	653198	2	11	90	1749	1655	0	2971191	2769231	3692307
5	1147765	1	11	60	1801	0	0	4122360	3692308	4615384
6	716901	1	11	65	1946	0	0	4841062	4615385	5538461
7	999232	3	11	90	1091	1492	1348	5842240	5538462	6461538
8	660082	3	11	60	1227	1844	1852	6506253	6461539	7384615
9	1145987	1	11	65	1997	0	0	7657163	7384616	8307692
10	1015588	2	11	95	1142	1074	0	8674748	8307693	9230769
11	1376714	2	11	65	1321	1278	0	10053678	9230770	10153846
12	141361	2	11	55	1690	1407	0	10197638	10153847	11076923
13	991184	2	11	80	1920	1193	0	11191919	11076924	12000000
Total number of pulses in waveform = 25										

Waveform Num = 6
Num of Bursts = 13
Burst Interval (us) = 923077

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	445246	2	20	95	1861	1476	0	445246	0	923076
2	1054411	1	20	90	1989	0	0	1502994	923077	1846153
3	370015	3	20	80	1501	1775	1175	1874998	1846154	2769230
4	1729201	1	20	100	1955	0	0	3608650	2769231	3692307
5	118025	2	20	75	1733	1791	0	3728630	3692308	4615384
6	1579176	3	20	100	1202	1552	1826	5311330	4615385	5538461
7	227065	1	20	50	1972	0	0	5542975	5538462	6461538
8	999560	3	20	80	1117	1783	1373	6544507	6461539	7384615
9	959544	1	20	80	1253	0	0	7508324	7384616	8307692
10	1337547	3	20	90	1133	1647	1022	8847124	8307693	9230769
11	769956	2	20	55	1167	1834	0	9620882	9230770	10153846
12	951498	3	20	65	1612	1304	1185	10575381	10153847	11076923
13	1083983	2	20	85	1698	1604	0	11663465	11076924	12000000

Total number of pulses in waveform = 27

Waveform Num = 7
Num of Bursts = 15
Burst Interval (us) = 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	577753	1	8	70	1006	0	0	577753	0	799999
2	627250	2	8	85	1886	1236	0	1206009	800000	1599999
3	565801	2	8	90	1749	1655	0	1774932	1600000	2399999
4	994263	1	8	60	1801	0	0	2772599	2400000	3199999
5	621123	1	8	65	1946	0	0	3395523	3200000	3999999
6	865632	3	8	90	1091	1492	1348	4263101	4000000	4799999
7	571688	3	8	60	1227	1844	1852	4838720	4800000	5599999
8	992486	1	8	65	1997	0	0	5836129	5600000	6399999
9	879871	2	8	95	1142	1074	0	6717997	6400000	7199999
10	1192664	2	8	65	1321	1278	0	7912877	7200000	7999999
11	122456	2	8	55	1690	1407	0	8037932	8000000	8799999
12	858581	2	8	80	1920	1193	0	8899610	8800000	9599999
13	1382888	2	8	100	1338	1904	0	10285611	9600000	10399999
14	899249	2	8	75	1150	1741	0	11188102	10400000	11199999
15	626668	2	8	100	1620	1501	0	11817661	11200000	11999999
Total number of pulses in waveform = 28										

Waveform Num = 8
Num of Bursts = 10
Burst Interval (us) = 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	1091779	1	5	100	1955	0	0	1091779	0	1199999
2	153526	2	5	75	1733	1791	0	1247260	1200000	2399999
3	2054986	3	5	100	1202	1552	1826	3305770	2400000	3599999
4	295520	1	5	50	1972	0	0	3605870	3600000	4799999
5	1300132	3	5	80	1117	1783	1373	4907974	4800000	5999999
6	1248624	1	5	80	1253	0	0	6160871	6000000	7199999
7	1739805	3	5	90	1133	1647	1022	7901929	7200000	8399999
8	1001797	2	5	55	1167	1834	0	8907528	8400000	9599999
9	1238030	3	5	65	1612	1304	1185	10148559	9600000	10799999
10	1410474	2	5	85	1698	1604	0	11563134	10800000	11999999

Total number of pulses in waveform = 21

Waveform Num = 9
Num of Bursts = 15
Burst Interval (us) = 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	577753	1	8	70	1006	0	0	577753	0	799999
2	627250	2	8	85	1886	1236	0	1206009	800000	1599999
3	565801	2	8	90	1749	1655	0	1774932	1600000	2399999
4	994263	1	8	60	1801	0	0	2772599	2400000	3199999
5	621123	1	8	65	1946	0	0	3395523	3200000	3999999
6	865632	3	8	90	1091	1492	1348	4263101	4000000	4799999
7	571688	3	8	60	1227	1844	1852	4838720	4800000	5599999
8	992486	1	8	65	1997	0	0	5836129	5600000	6399999
9	879871	2	8	95	1142	1074	0	6717997	6400000	7199999
10	1192664	2	8	65	1321	1278	0	7912877	7200000	7999999
11	122456	2	8	55	1690	1407	0	8037932	8000000	8799999
12	858581	2	8	80	1920	1193	0	8899610	8800000	9599999
13	1382888	2	8	100	1338	1904	0	10285611	9600000	10399999
14	899249	2	8	75	1150	1741	0	11188102	10400000	11199999
15	626668	2	8	100	1620	1501	0	11817661	11200000	11999999
Total number of pulses in waveform = 28										

Waveform Num = 10
Num of Bursts = 10
Burst Interval (us) = 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	1091779	1	5	100	1955	0	0	1091779	0	1199999
2	153526	2	5	75	1733	1791	0	1247260	1200000	2399999
3	2054986	3	5	100	1202	1552	1826	3305770	2400000	3599999
4	295520	1	5	50	1972	0	0	3605870	3600000	4799999
5	1300132	3	5	80	1117	1783	1373	4907974	4800000	5999999
6	1248624	1	5	80	1253	0	0	6160871	6000000	7199999
7	1739805	3	5	90	1133	1647	1022	7901929	7200000	8399999
8	1001797	2	5	55	1167	1834	0	8907528	8400000	9599999
9	1238030	3	5	65	1612	1304	1185	10148559	9600000	10799999
10	1410474	2	5	85	1698	1604	0	11563134	10800000	11999999

Total number of pulses in waveform = 21

Waveform Num = 11
Num of Bursts = 15
Burst Interval (us) = 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	577753	1	8	70	1006	0	0	577753	0	799999
2	627250	2	8	85	1886	1236	0	1206009	800000	1599999
3	565801	2	8	90	1749	1655	0	1774932	1600000	2399999
4	994263	1	8	60	1801	0	0	2772599	2400000	3199999
5	621123	1	8	65	1946	0	0	3395523	3200000	3999999
6	865632	3	8	90	1091	1492	1348	4263101	4000000	4799999
7	571688	3	8	60	1227	1844	1852	4838720	4800000	5599999
8	992486	1	8	65	1997	0	0	5836129	5600000	6399999
9	879871	2	8	95	1142	1074	0	6717997	6400000	7199999
10	1192664	2	8	65	1321	1278	0	7912877	7200000	7999999
11	122456	2	8	55	1690	1407	0	8037932	8000000	8799999
12	858581	2	8	80	1920	1193	0	8899610	8800000	9599999
13	1382888	2	8	100	1338	1904	0	10285611	9600000	10399999
14	899249	2	8	75	1150	1741	0	11188102	10400000	11199999
15	626668	2	8	100	1620	1501	0	11817661	11200000	11999999

Total number of pulses in waveform = 28

Waveform Num = 12
Num of Bursts = 10
Burst Interval (us) = 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	1091779	1	5	100	1955	0	0	1091779	0	1199999
2	153526	2	5	75	1733	1791	0	1247260	1200000	2399999
3	2054986	3	5	100	1202	1552	1826	3305770	2400000	3599999
4	295520	1	5	50	1972	0	0	3605870	3600000	4799999
5	1300132	3	5	80	1117	1783	1373	4907974	4800000	5999999
6	1248624	1	5	80	1253	0	0	6160871	6000000	7199999
7	1739805	3	5	90	1133	1647	1022	7901929	7200000	8399999
8	1001797	2	5	55	1167	1834	0	8907528	8400000	9599999
9	1238030	3	5	65	1612	1304	1185	10148559	9600000	10799999
10	1410474	2	5	85	1698	1604	0	11563134	10800000	11999999

Total number of pulses in waveform = 21

Waveform Num = 13
Num of Bursts = 15
Burst Interval (us) = 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	577753	1	8	70	1006	0	0	577753	0	799999
2	627250	2	8	85	1886	1236	0	1206009	800000	1599999
3	565801	2	8	90	1749	1655	0	1774932	1600000	2399999
4	994263	1	8	60	1801	0	0	2772599	2400000	3199999
5	621123	1	8	65	1946	0	0	3395523	3200000	3999999
6	865632	3	8	90	1091	1492	1348	4263101	4000000	4799999
7	571688	3	8	60	1227	1844	1852	4838720	4800000	5599999
8	992486	1	8	65	1997	0	0	5836129	5600000	6399999
9	879871	2	8	95	1142	1074	0	6717997	6400000	7199999
10	1192664	2	8	65	1321	1278	0	7912877	7200000	7999999
11	122456	2	8	55	1690	1407	0	8037932	8000000	8799999
12	858581	2	8	80	1920	1193	0	8899610	8800000	9599999
13	1382888	2	8	100	1338	1904	0	10285611	9600000	10399999
14	899249	2	8	75	1150	1741	0	11188102	10400000	11199999
15	626668	2	8	100	1620	1501	0	11817661	11200000	11999999
Total number of pulses in waveform = 28										

Waveform Num = 14
Num of Bursts = 10
Burst Interval (us) = 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	1091779	1	5	100	1955	0	0	1091779	0	1199999
2	153526	2	5	75	1733	1791	0	1247260	1200000	2399999
3	2054986	3	5	100	1202	1552	1826	3305770	2400000	3599999
4	295520	1	5	50	1972	0	0	3605870	3600000	4799999
5	1300132	3	5	80	1117	1783	1373	4907974	4800000	5999999
6	1248624	1	5	80	1253	0	0	6160871	6000000	7199999
7	1739805	3	5	90	1133	1647	1022	7901929	7200000	8399999
8	1001797	2	5	55	1167	1834	0	8907528	8400000	9599999
9	1238030	3	5	65	1612	1304	1185	10148559	9600000	10799999
10	1410474	2	5	85	1698	1604	0	11563134	10800000	11999999
Total number of pulses in waveform = 21										

Waveform Num = 15
Num of Bursts = 15
Burst Interval (us) = 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	577753	1	8	70	1006	0	0	577753	0	799999
2	627250	2	8	85	1886	1236	0	1206009	800000	1599999
3	565801	2	8	90	1749	1655	0	1774932	1600000	2399999
4	994263	1	8	60	1801	0	0	2772599	2400000	3199999
5	621123	1	8	65	1946	0	0	3395523	3200000	3999999
6	865632	3	8	90	1091	1492	1348	4263101	4000000	4799999
7	571688	3	8	60	1227	1844	1852	4838720	4800000	5599999
8	992486	1	8	65	1997	0	0	5836129	5600000	6399999
9	879871	2	8	95	1142	1074	0	6717997	6400000	7199999
10	1192664	2	8	65	1321	1278	0	7912877	7200000	7999999
11	122456	2	8	55	1690	1407	0	8037932	8000000	8799999
12	858581	2	8	80	1920	1193	0	8899610	8800000	9599999
13	1382888	2	8	100	1338	1904	0	10285611	9600000	10399999
14	899249	2	8	75	1150	1741	0	11188102	10400000	11199999
15	626668	2	8	100	1620	1501	0	11817661	11200000	11999999
Total number of pulses in waveform = 28										

Waveform Num = 16
Num of Bursts = 10
Burst Interval (us) = 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	1091779	1	5	100	1955	0	0	1091779	0	1199999
2	153526	2	5	75	1733	1791	0	1247260	1200000	2399999
3	2054986	3	5	100	1202	1552	1826	3305770	2400000	3599999
4	295520	1	5	50	1972	0	0	3605870	3600000	4799999
5	1300132	3	5	80	1117	1783	1373	4907974	4800000	5999999
6	1248624	1	5	80	1253	0	0	6160871	6000000	7199999
7	1739805	3	5	90	1133	1647	1022	7901929	7200000	8399999
8	1001797	2	5	55	1167	1834	0	8907528	8400000	9599999
9	1238030	3	5	65	1612	1304	1185	10148559	9600000	10799999
10	1410474	2	5	85	1698	1604	0	11563134	10800000	11999999

Total number of pulses in waveform = 21

Waveform Num = 17
Num of Bursts = 15
Burst Interval (us) = 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	577753	1	8	70	1006	0	0	577753	0	799999
2	627250	2	8	85	1886	1236	0	1206009	800000	1599999
3	565801	2	8	90	1749	1655	0	1774932	1600000	2399999
4	994263	1	8	60	1801	0	0	2772599	2400000	3199999
5	621123	1	8	65	1946	0	0	3395523	3200000	3999999
6	865632	3	8	90	1091	1492	1348	4263101	4000000	4799999
7	571688	3	8	60	1227	1844	1852	4838720	4800000	5599999
8	992486	1	8	65	1997	0	0	5836129	5600000	6399999
9	879871	2	8	95	1142	1074	0	6717997	6400000	7199999
10	1192664	2	8	65	1321	1278	0	7912877	7200000	7999999
11	122456	2	8	55	1690	1407	0	8037932	8000000	8799999
12	858581	2	8	80	1920	1193	0	8899610	8800000	9599999
13	1382888	2	8	100	1338	1904	0	10285611	9600000	10399999
14	899249	2	8	75	1150	1741	0	11188102	10400000	11199999
15	626668	2	8	100	1620	1501	0	11817661	11200000	11999999
Total number of pulses in waveform = 28										

Waveform Num = 18
Num of Bursts = 10
Burst Interval (us) = 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	1091779	1	5	100	1955	0	0	1091779	0	1199999
2	153526	2	5	75	1733	1791	0	1247260	1200000	2399999
3	2054986	3	5	100	1202	1552	1826	3305770	2400000	3599999
4	295520	1	5	50	1972	0	0	3605870	3600000	4799999
5	1300132	3	5	80	1117	1783	1373	4907974	4800000	5999999
6	1248624	1	5	80	1253	0	0	6160871	6000000	7199999
7	1739805	3	5	90	1133	1647	1022	7901929	7200000	8399999
8	1001797	2	5	55	1167	1834	0	8907528	8400000	9599999
9	1238030	3	5	65	1612	1304	1185	10148559	9600000	10799999
10	1410474	2	5	85	1698	1604	0	11563134	10800000	11999999

Total number of pulses in waveform = 21

Waveform Num = 19
Num of Bursts = 15
Burst Interval (us) = 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	577753	1	8	70	1006	0	0	577753	0	799999
2	627250	2	8	85	1886	1236	0	1206009	800000	1599999
3	565801	2	8	90	1749	1655	0	1774932	1600000	2399999
4	994263	1	8	60	1801	0	0	2772599	2400000	3199999
5	621123	1	8	65	1946	0	0	3395523	3200000	3999999
6	865632	3	8	90	1091	1492	1348	4263101	4000000	4799999
7	571688	3	8	60	1227	1844	1852	4838720	4800000	5599999
8	992486	1	8	65	1997	0	0	5836129	5600000	6399999
9	879871	2	8	95	1142	1074	0	6717997	6400000	7199999
10	1192664	2	8	65	1321	1278	0	7912877	7200000	7999999
11	122456	2	8	55	1690	1407	0	8037932	8000000	8799999
12	858581	2	8	80	1920	1193	0	8899610	8800000	9599999
13	1382888	2	8	100	1338	1904	0	10285611	9600000	10399999
14	899249	2	8	75	1150	1741	0	11188102	10400000	11199999
15	626668	2	8	100	1620	1501	0	11817661	11200000	11999999
Total number of pulses in waveform = 28										

Waveform Num = 20
Num of Bursts = 10
Burst Interval (us) = 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	1091779	1	5	100	1955	0	0	1091779	0	1199999
2	153526	2	5	75	1733	1791	0	1247260	1200000	2399999
3	2054986	3	5	100	1202	1552	1826	3305770	2400000	3599999
4	295520	1	5	50	1972	0	0	3605870	3600000	4799999
5	1300132	3	5	80	1117	1783	1373	4907974	4800000	5999999
6	1248624	1	5	80	1253	0	0	6160871	6000000	7199999
7	1739805	3	5	90	1133	1647	1022	7901929	7200000	8399999
8	1001797	2	5	55	1167	1834	0	8907528	8400000	9599999
9	1238030	3	5	65	1612	1304	1185	10148559	9600000	10799999
10	1410474	2	5	85	1698	1604	0	11563134	10800000	11999999

Total number of pulses in waveform = 21

Waveform Num = 21
Num of Bursts = 15
Burst Interval (us) = 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	577753	1	8	70	1006	0	0	577753	0	799999
2	627250	2	8	85	1886	1236	0	1206009	800000	1599999
3	565801	2	8	90	1749	1655	0	1774932	1600000	2399999
4	994263	1	8	60	1801	0	0	2772599	2400000	3199999
5	621123	1	8	65	1946	0	0	3395523	3200000	3999999
6	865632	3	8	90	1091	1492	1348	4263101	4000000	4799999
7	571688	3	8	60	1227	1844	1852	4838720	4800000	5599999
8	992486	1	8	65	1997	0	0	5836129	5600000	6399999
9	879871	2	8	95	1142	1074	0	6717997	6400000	7199999
10	1192664	2	8	65	1321	1278	0	7912877	7200000	7999999
11	122456	2	8	55	1690	1407	0	8037932	8000000	8799999
12	858581	2	8	80	1920	1193	0	8899610	8800000	9599999
13	1382888	2	8	100	1338	1904	0	10285611	9600000	10399999
14	899249	2	8	75	1150	1741	0	11188102	10400000	11199999
15	626668	2	8	100	1620	1501	0	11817661	11200000	11999999
Total number of pulses in waveform = 28										

Waveform Num = 22
Num of Bursts = 10
Burst Interval (us) = 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	1091779	1	5	100	1955	0	0	1091779	0	1199999
2	153526	2	5	75	1733	1791	0	1247260	1200000	2399999
3	2054986	3	5	100	1202	1552	1826	3305770	2400000	3599999
4	295520	1	5	50	1972	0	0	3605870	3600000	4799999
5	1300132	3	5	80	1117	1783	1373	4907974	4800000	5999999
6	1248624	1	5	80	1253	0	0	6160871	6000000	7199999
7	1739805	3	5	90	1133	1647	1022	7901929	7200000	8399999
8	1001797	2	5	55	1167	1834	0	8907528	8400000	9599999
9	1238030	3	5	65	1612	1304	1185	10148559	9600000	10799999
10	1410474	2	5	85	1698	1604	0	11563134	10800000	11999999

Total number of pulses in waveform = 21

Waveform Num = 23
Num of Bursts = 15
Burst Interval (us) = 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	577753	1	8	70	1006	0	0	577753	0	799999
2	627250	2	8	85	1886	1236	0	1206009	800000	1599999
3	565801	2	8	90	1749	1655	0	1774932	1600000	2399999
4	994263	1	8	60	1801	0	0	2772599	2400000	3199999
5	621123	1	8	65	1946	0	0	3395523	3200000	3999999
6	865632	3	8	90	1091	1492	1348	4263101	4000000	4799999
7	571688	3	8	60	1227	1844	1852	4838720	4800000	5599999
8	992486	1	8	65	1997	0	0	5836129	5600000	6399999
9	879871	2	8	95	1142	1074	0	6717997	6400000	7199999
10	1192664	2	8	65	1321	1278	0	7912877	7200000	7999999
11	122456	2	8	55	1690	1407	0	8037932	8000000	8799999
12	858581	2	8	80	1920	1193	0	8899610	8800000	9599999
13	1382888	2	8	100	1338	1904	0	10285611	9600000	10399999
14	899249	2	8	75	1150	1741	0	11188102	10400000	11199999
15	626668	2	8	100	1620	1501	0	11817661	11200000	11999999
Total number of pulses in waveform = 28										

Waveform Num = 24
Num of Bursts = 10
Burst Interval (us) = 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	1091779	1	5	100	1955	0	0	1091779	0	1199999
2	153526	2	5	75	1733	1791	0	1247260	1200000	2399999
3	2054986	3	5	100	1202	1552	1826	3305770	2400000	3599999
4	295520	1	5	50	1972	0	0	3605870	3600000	4799999
5	1300132	3	5	80	1117	1783	1373	4907974	4800000	5999999
6	1248624	1	5	80	1253	0	0	6160871	6000000	7199999
7	1739805	3	5	90	1133	1647	1022	7901929	7200000	8399999
8	1001797	2	5	55	1167	1834	0	8907528	8400000	9599999
9	1238030	3	5	65	1612	1304	1185	10148559	9600000	10799999
10	1410474	2	5	85	1698	1604	0	11563134	10800000	11999999

Total number of pulses in waveform = 21

Waveform Num = 25
Num of Bursts = 15
Burst Interval (us) = 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	577753	1	8	70	1006	0	0	577753	0	799999
2	627250	2	8	85	1886	1236	0	1206009	800000	1599999
3	565801	2	8	90	1749	1655	0	1774932	1600000	2399999
4	994263	1	8	60	1801	0	0	2772599	2400000	3199999
5	621123	1	8	65	1946	0	0	3395523	3200000	3999999
6	865632	3	8	90	1091	1492	1348	4263101	4000000	4799999
7	571688	3	8	60	1227	1844	1852	4838720	4800000	5599999
8	992486	1	8	65	1997	0	0	5836129	5600000	6399999
9	879871	2	8	95	1142	1074	0	6717997	6400000	7199999
10	1192664	2	8	65	1321	1278	0	7912877	7200000	7999999
11	122456	2	8	55	1690	1407	0	8037932	8000000	8799999
12	858581	2	8	80	1920	1193	0	8899610	8800000	9599999
13	1382888	2	8	100	1338	1904	0	10285611	9600000	10399999
14	899249	2	8	75	1150	1741	0	11188102	10400000	11199999
15	626668	2	8	100	1620	1501	0	11817661	11200000	11999999
Total number of pulses in waveform = 28										

Waveform Num = 26
Num of Bursts = 10
Burst Interval (us) = 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	1091779	1	5	100	1955	0	0	1091779	0	1199999
2	153526	2	5	75	1733	1791	0	1247260	1200000	2399999
3	2054986	3	5	100	1202	1552	1826	3305770	2400000	3599999
4	295520	1	5	50	1972	0	0	3605870	3600000	4799999
5	1300132	3	5	80	1117	1783	1373	4907974	4800000	5999999
6	1248624	1	5	80	1253	0	0	6160871	6000000	7199999
7	1739805	3	5	90	1133	1647	1022	7901929	7200000	8399999
8	1001797	2	5	55	1167	1834	0	8907528	8400000	9599999
9	1238030	3	5	65	1612	1304	1185	10148559	9600000	10799999
10	1410474	2	5	85	1698	1604	0	11563134	10800000	11999999

Total number of pulses in waveform = 21

Waveform Num = 27
Num of Bursts = 15
Burst Interval (us) = 800000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	577753	1	8	70	1006	0	0	577753	0	799999
2	627250	2	8	85	1886	1236	0	1206009	800000	1599999
3	565801	2	8	90	1749	1655	0	1774932	1600000	2399999
4	994263	1	8	60	1801	0	0	2772599	2400000	3199999
5	621123	1	8	65	1946	0	0	3395523	3200000	3999999
6	865632	3	8	90	1091	1492	1348	4263101	4000000	4799999
7	571688	3	8	60	1227	1844	1852	4838720	4800000	5599999
8	992486	1	8	65	1997	0	0	5836129	5600000	6399999
9	879871	2	8	95	1142	1074	0	6717997	6400000	7199999
10	1192664	2	8	65	1321	1278	0	7912877	7200000	7999999
11	122456	2	8	55	1690	1407	0	8037932	8000000	8799999
12	858581	2	8	80	1920	1193	0	8899610	8800000	9599999
13	1382888	2	8	100	1338	1904	0	10285611	9600000	10399999
14	899249	2	8	75	1150	1741	0	11188102	10400000	11199999
15	626668	2	8	100	1620	1501	0	11817661	11200000	11999999
Total number of pulses in waveform = 28										

Waveform Num = 28
Num of Bursts = 10
Burst Interval (us) = 1200000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	1091779	1	5	100	1955	0	0	1091779	0	1199999
2	153526	2	5	75	1733	1791	0	1247260	1200000	2399999
3	2054986	3	5	100	1202	1552	1826	3305770	2400000	3599999
4	295520	1	5	50	1972	0	0	3605870	3600000	4799999
5	1300132	3	5	80	1117	1783	1373	4907974	4800000	5999999
6	1248624	1	5	80	1253	0	0	6160871	6000000	7199999
7	1739805	3	5	90	1133	1647	1022	7901929	7200000	8399999
8	1001797	2	5	55	1167	1834	0	8907528	8400000	9599999
9	1461181	3	5	75	1799	1491	1372	10371710	9600000	10799999
10	1410117	2	5	95	1885	1791	0	11786489	10800000	11999999

Total number of pulses in waveform = 21

Waveform Num = 29
Num of Bursts = 18
Burst Interval (us) = 666667

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	365557	2	11	80	1193	1911	0	365557	0	666666
2	928683	3	11	50	1423	1697	1628	1297344	666667	1333333
3	685344	3	11	95	1407	1364	1448	1987436	1333334	2000000
4	295212	2	11	60	1492	1133	0	2286867	2000001	2666667
5	829042	1	11	50	1278	0	0	3118534	2666668	3333334
6	488600	2	11	75	1893	1457	0	3608412	3333335	4000001
7	584276	1	11	50	1235	0	0	4196038	4000002	4666668
8	506285	2	11	60	1483	1706	0	4703558	4666669	5333335
9	1004555	1	11	60	1586	0	0	5711302	5333336	6000002
10	699003	2	11	75	1465	1081	0	6411891	6000003	6666669
11	408192	1	11	95	1594	0	0	6822629	6666670	7333336
12	716272	2	11	90	1106	1380	0	7540495	7333337	8000003
13	488565	2	11	55	1526	1090	0	8031546	8000004	8666670
14	749002	2	11	85	1337	1928	0	8783164	8666671	9333337
15	786729	3	11	55	1808	1688	1962	9573158	9333338	10000004
16	515233	1	11	60	1107	0	0	10093849	10000005	10666671
17	1183000	1	11	85	1722	0	0	11277956	10666672	11333338
18	543192	3	11	60	1868	1166	1389	11822870	11333339	12000005
Total number of pulses in waveform = 34										

Waveform Num = 30
Num of Bursts = 8
Burst Interval (us) = 1500000

Burst #	Off Time (us)	# Pulses	Chirp (MHz)	PW (us)	Pulse 1 Pri (us)	Pulse 2 Pri (us)	Pulse 3 Pri (us)	Start Loc (us)	Start Burst Interval (us)	End Burst
1	287478	1	20	60	1158	0	0	287478	0	1499999
2	2665249	1	20	90	1304	0	0	2953885	1500000	2999999
3	703554	2	20	65	1449	1749	0	3658743	3000000	4499999
4	1317420	1	20	50	1996	0	0	4979361	4500000	5999999
5	1548823	3	20	60	1774	1731	1346	6530180	6000000	7499999
6	1714189	1	20	80	1860	0	0	8249220	7500000	8999999
7	2097775	3	20	75	1372	1646	1578	10348855	9000000	10499999
8	752620	3	20	90	1825	1782	1397	11106071	10500000	11999999

Total number of pulses in waveform = 15

9. SETUP PHOTOS

Please refer to R16197846-EP1 for setup photos.

END OF TEST REPORT