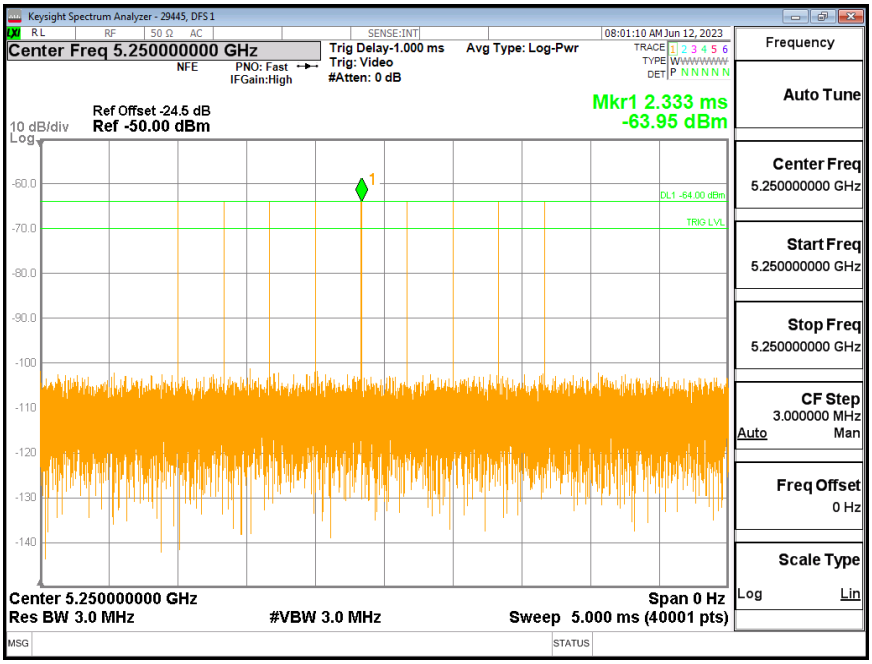
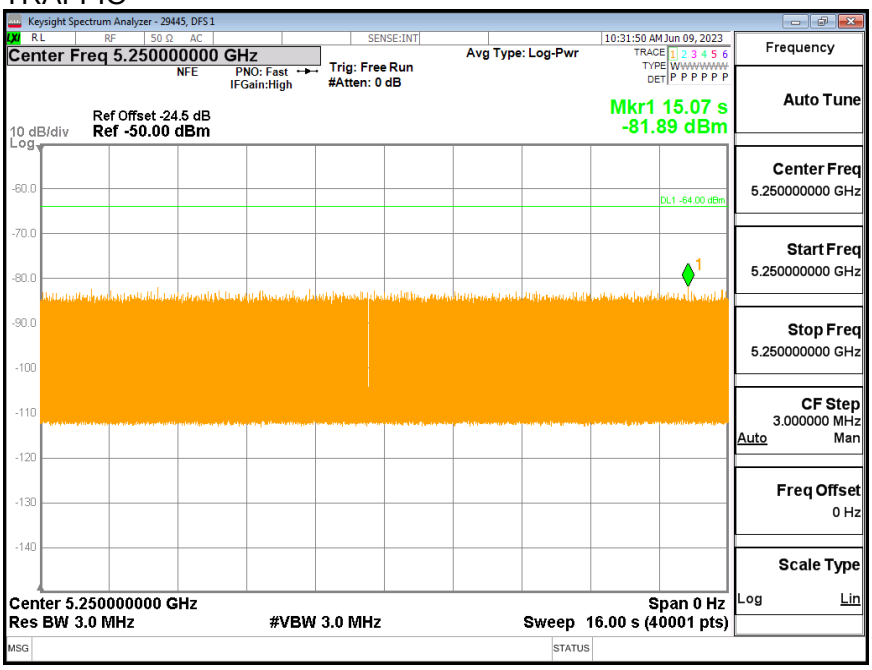
SINGLE BURST OF RADAR TYPE 6

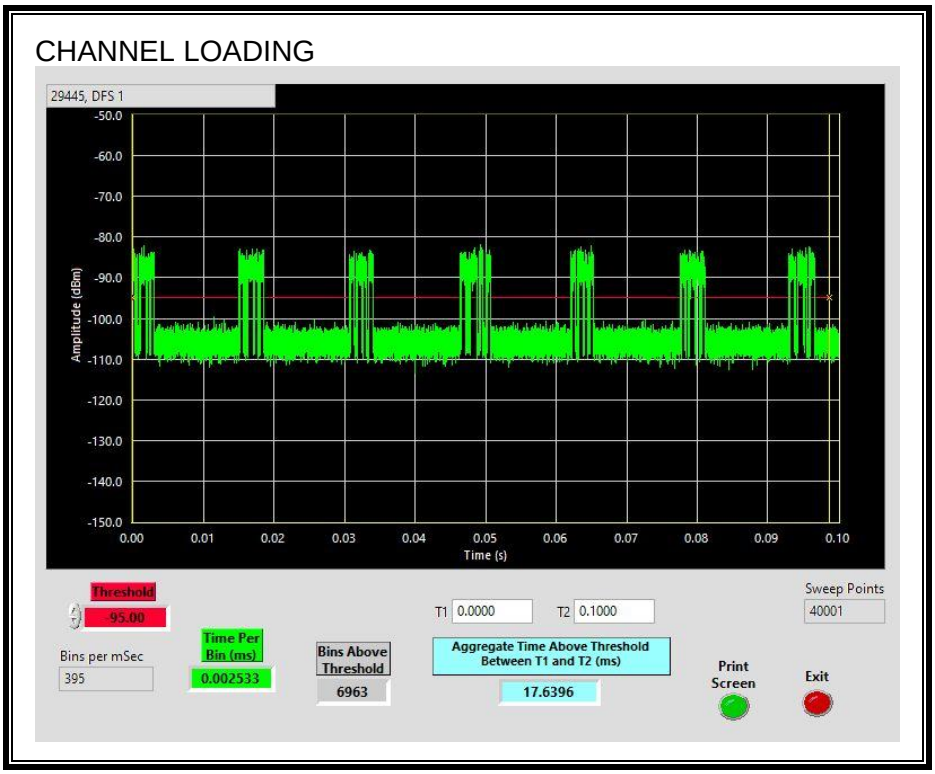


**TRAFFIC**

TRAFFIC



**CHANNEL LOADING**




The level of traffic loading on the channel by the EUT is 17.64%

## 7.5.3. CHANNEL AVAILABILITY CHECK TIME

**PROCEDURE TO DETERMINE CAC PERIOD TIME**

A software command was issued to the EUT to change to the test channel. The measured time from the software command to the start of traffic was measured. The initialization time is the 60-second CAC period subtracted from the total measured time of the plot.

**PROCEDURE FOR TIMING OF RADAR BURST**

A software command was issued to the EUT to change to the test channel. A radar signal was triggered within 0 to 6 seconds after the beginning of the CAC period. Transmissions on the channel were monitored on the spectrum analyzer and a plot was captured

The was rebooted to clear the Non-Occupancy list. A software command was issued to the EUT to change to the test channel. A radar signal was triggered within 54 to 60 seconds after the beginning of the CAC period. Transmissions on the channel were monitored on the spectrum analyzer and a plot was captured

## QUANTITATIVE RESULTS

**No Radar Triggered**

| Timing of Software Command (sec) | Timing of Start of Traffic (sec) | Channel Initialization Time (sec) |
|---|---|---|
| 0 | 73.19 | 13.19 |

**Radar Near Beginning of CAC**

| Timing of Software Command (sec) | Timing of Radar Burst (sec) | Radar Relative to Beginning of CAC (sec) |
|---|---|---|
| 0 | 16.13 | 2.94 |

**Radar Near End of CAC**

| Timing of Software Command (sec) | Timing of Radar Burst (sec) | Radar Relative to Beginning of CAC (sec) |
|---|---|---|
| 0 | 67.95 | 54.76 |

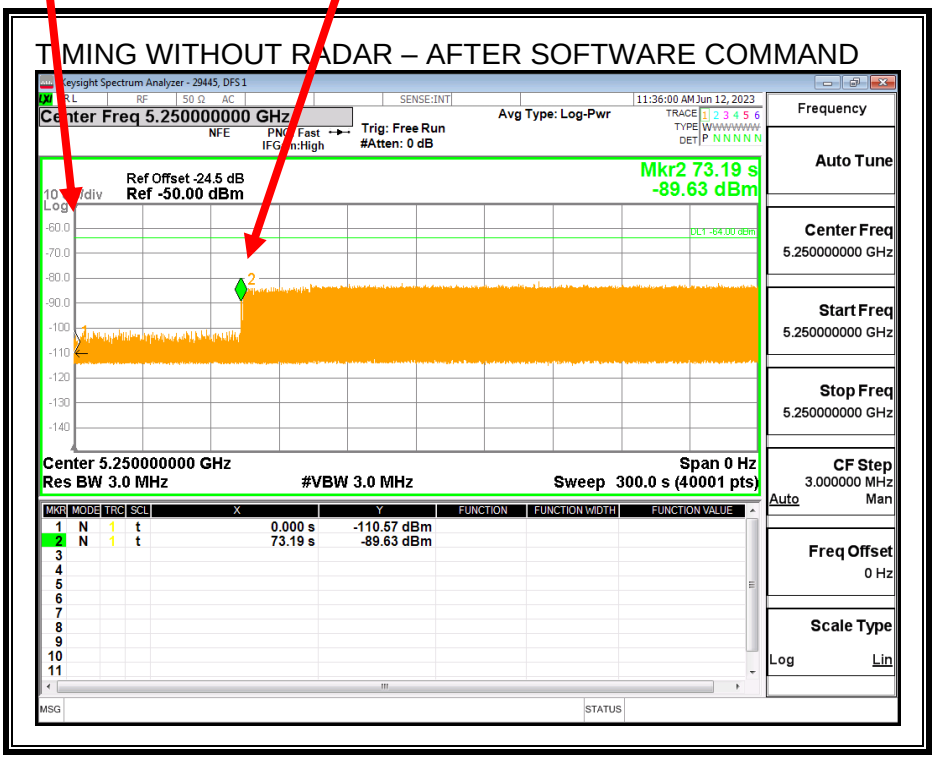
## QUALITATIVE RESULTS

| Timing of Radar Burst | Display on Control Computer | Spectrum Analyzer Display |
|---|---|---|
| No Radar Triggered | EUT marks Channel as active | Transmissions begin on channel after completion of the initialization cycle and 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**

Software Command Issued
Change to Test Channel

End of CAC Period

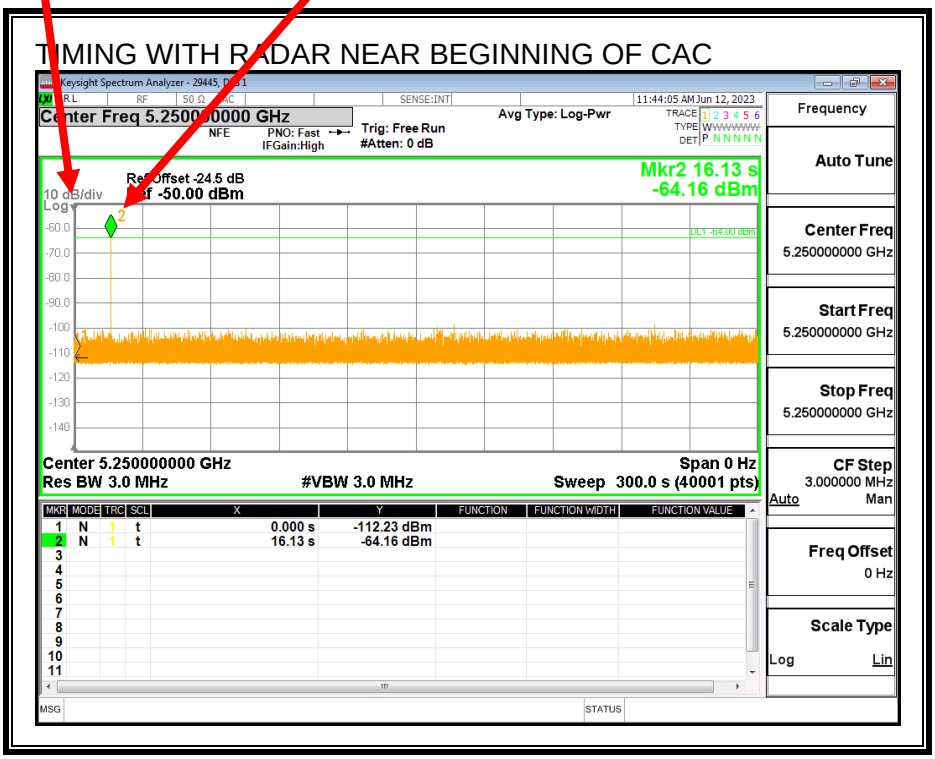



Transmissions begin on channel after completion of the initial power-up cycle and the CAC.

**TIMING WITH RADAR NEAR BEGINNING OF CAC**

Software Command Issued
Change to Test Channel

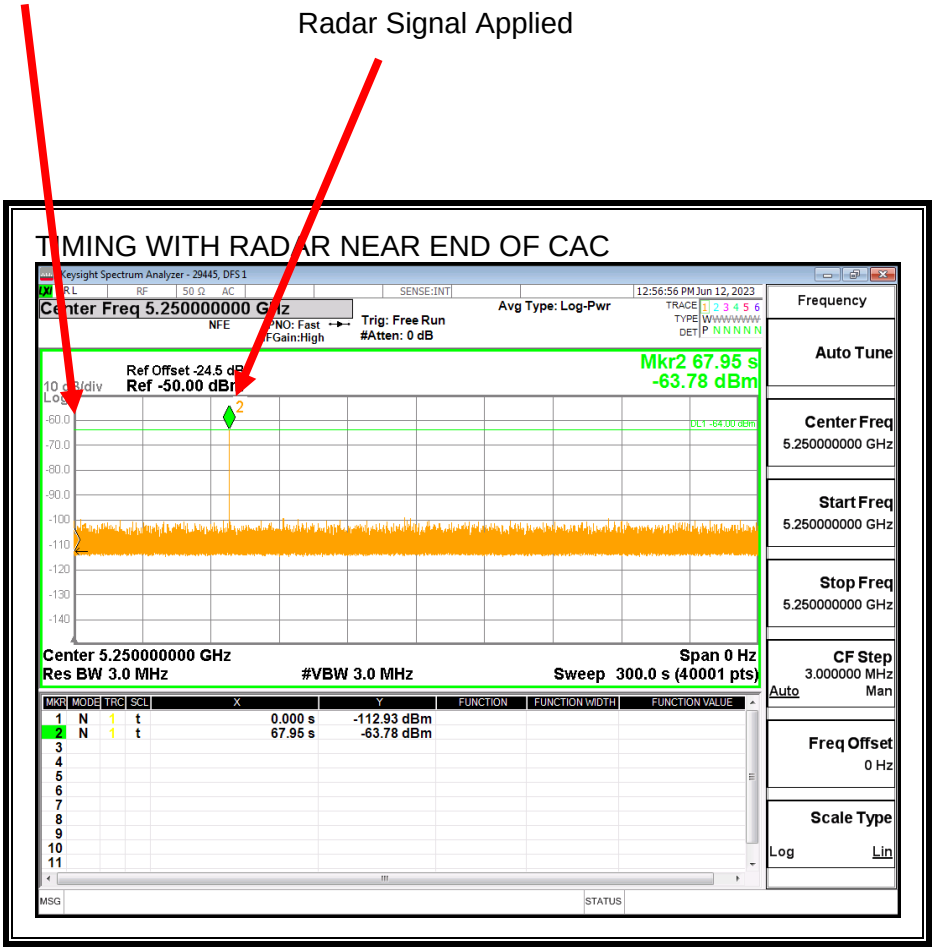
Radar Signal Applied




No EUT transmissions were observed after the radar signal.

**TIMING WITH RADAR NEAR END OF CAC**

Software Command Issued
Change to Test Channel




No EUT transmissions were observed after the radar signal.

## 7.5.4. OVERLAPPING CHANNEL TESTS

**RESULTS**

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

## 7.5.5. 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)

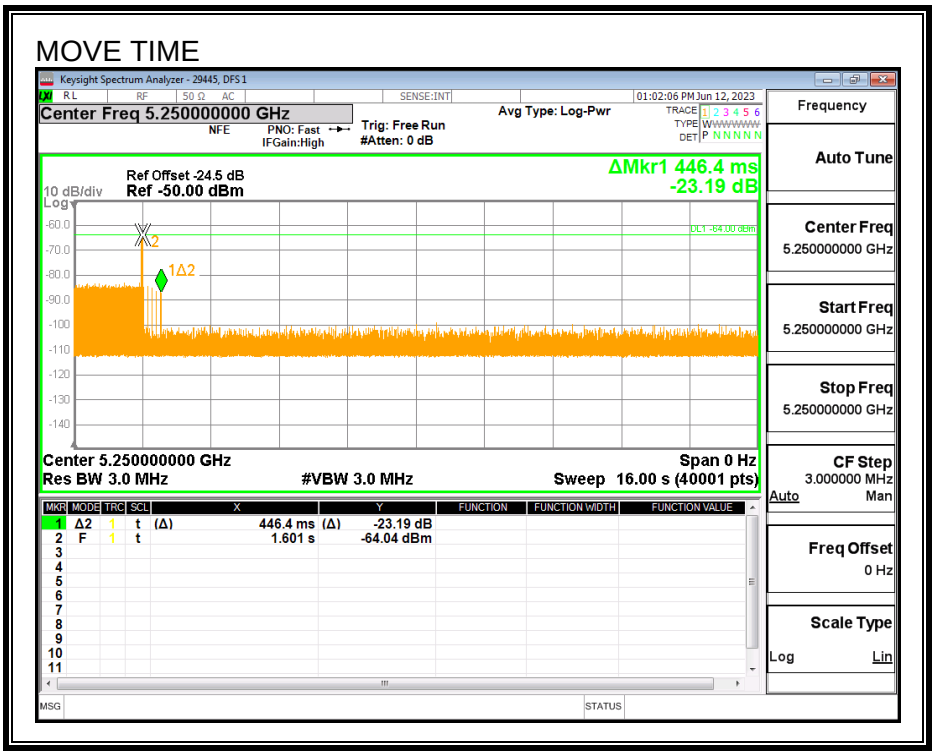
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

**RESULTS**

| Channel Move Time (sec) | Limit (sec) |
|---|---|
| 0.4464 | 10 |

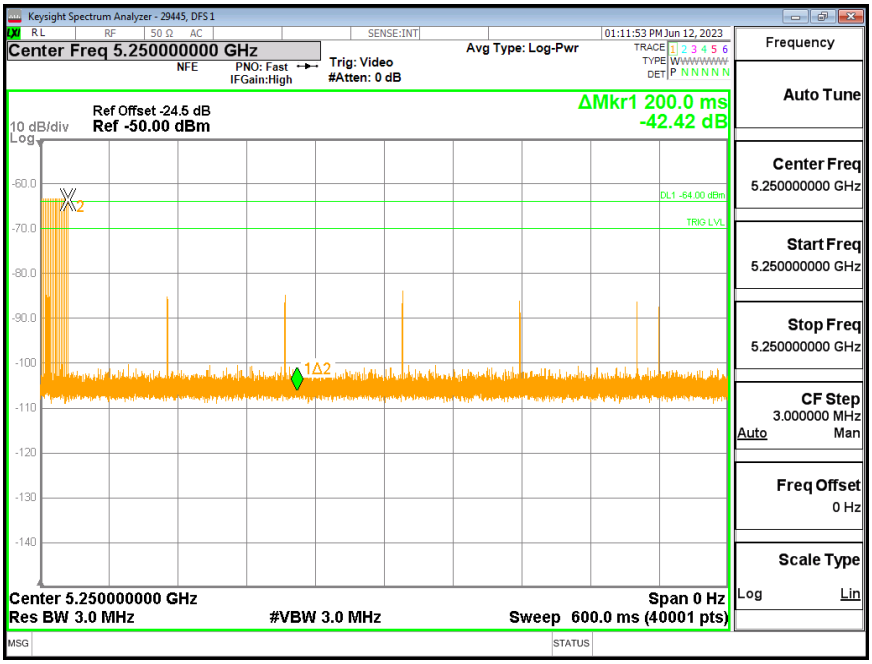
| Aggregate Channel Closing Transmission Time (msec) | Limit (msec) |
|---|---|
| 2.8 | 60 |

**MOVE TIME**



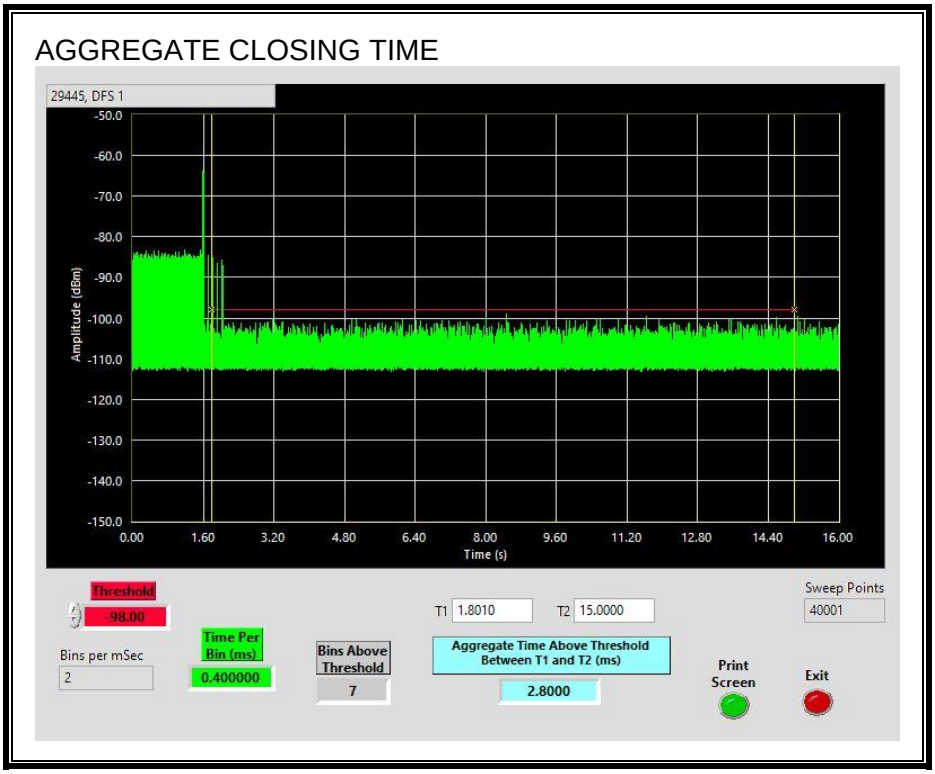
**CHANNEL CLOSING TIME**

CLOSING TIME



**AGGREGATE CHANNEL CLOSING TRANSMISSION TIME**

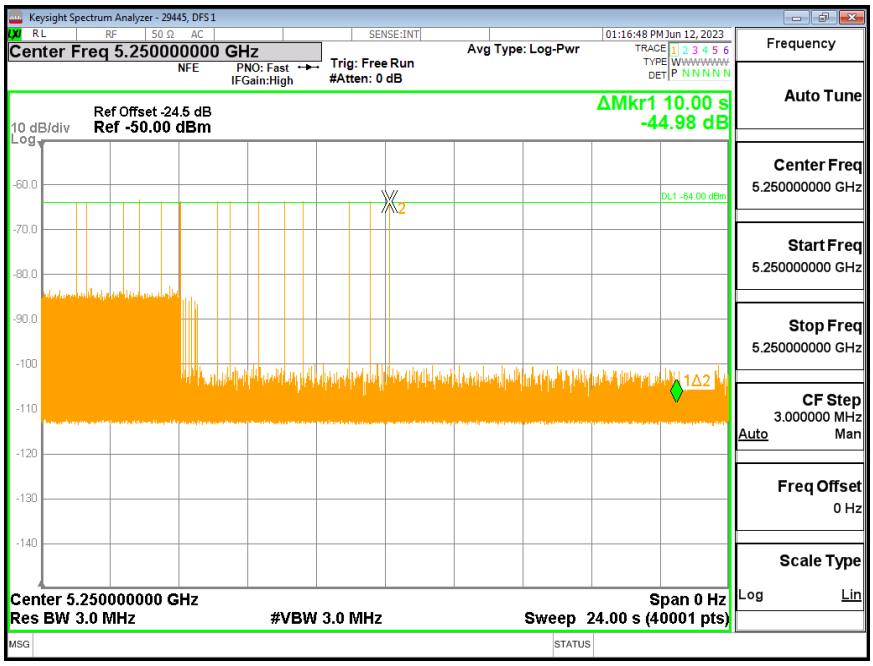
Only intermittent transmissions are observed during the aggregate monitoring period.



## LONG PULSE CHANNEL MOVE TIME

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

MOVE TIME FOR LONG PULSE RADAR

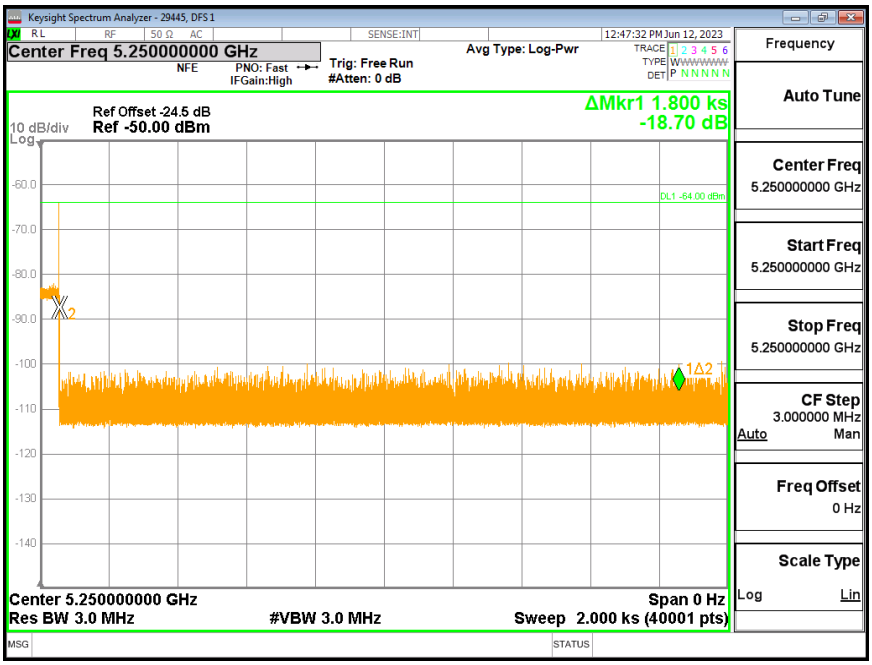


### 7.5.6. NON-OCCUPANCY PERIOD

**RESULTS**

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

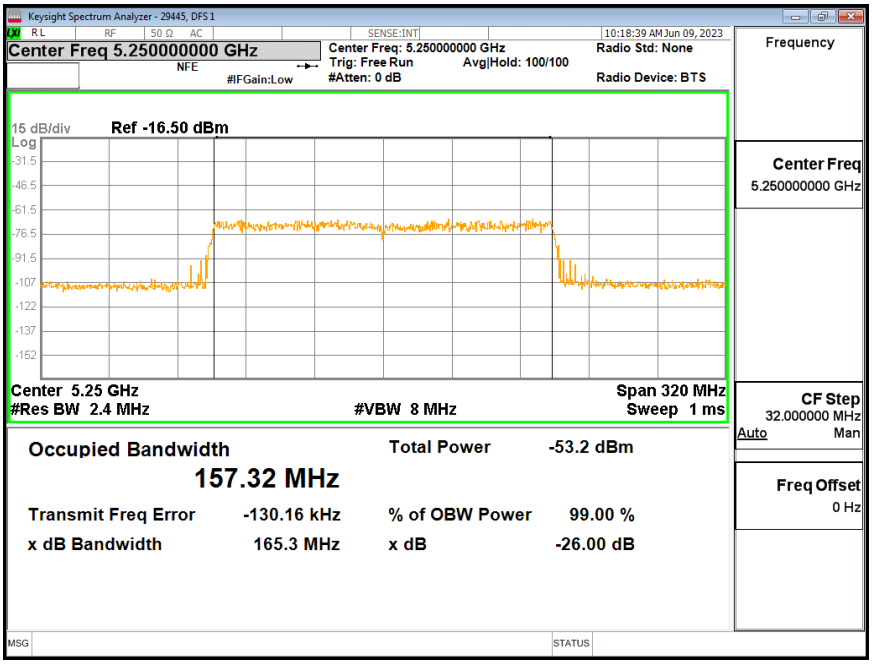
NON-OCCUPANCY PERIOD



## 7.5.7. DETECTION BANDWIDTH

**REFERENCE PLOT OF 99% POWER BANDWIDTH**

99% BANDWIDTH




**RESULTS**

| $F_L$ (MHz) | $F_H$ (MHz) | Detection Bandwidth (MHz) | Applicable 99% Power Bandwidth (MHz) | Ratio of Detection BW to 99% Power BW (%) | Minimum Limit (%) |
|---|---|---|---|---|---|
| 5250 | 5330 | 80 | 78.66 | 101.7 | 100 |

**Note:** Channels that occupy frequencies below the 5250 MHz to 5350 MHz band are not subject to the requirements related to DFS. Therefore, only the portion of the 99% Power Bandwidth residing in the 5250 MHz to 5350 MHz band has been taken into consideration for the Detection Bandwidth requirement.

**Applicable 99% Power Bandwidth = (Measured 99% Power Bandwidth)/2**

**DETECTION BANDWIDTH PROBABILITY**

DETECTION BANDWIDTH PROBABILITY RESULTS

| Detection Bandwidth Test Results | | 29445 | DFS 1 | |
|---|---|---|---|---|
| FCC Type 0 Waveform: 1 us Pulse Width, 1428 us PRI, 18 Pulses per Burst | | | | |
| Frequency (MHz) | Number of Trials | Number Detected | Detection (%) | Mark |
| 5250 | 10 | 10 | 100 | FL |
| 5255 | 10 | 10 | 100 | |
| 5260 | 10 | 10 | 100 | |
| 5265 | 10 | 10 | 100 | |
| 5270 | 10 | 10 | 100 | |
| 5275 | 10 | 10 | 100 | |
| 5280 | 10 | 10 | 100 | |
| 5285 | 10 | 10 | 100 | |
| 5290 | 10 | 10 | 100 | |
| 5295 | 10 | 10 | 100 | |
| 5300 | 10 | 10 | 100 | |
| 5305 | 10 | 10 | 100 | |
| 5310 | 10 | 10 | 100 | |
| 5315 | 10 | 10 | 100 | |
| 5320 | 10 | 10 | 100 | |
| 5325 | 10 | 10 | 100 | |
| 5330 | 10 | 10 | 100 | FH |

## 7.5.8. IN-SERVICE MONITORING

**RESULTS**

FCC Radar Test Summary

| Signal Type | Number of Trials | Detection (%) | Limit (%) | Pass/Fail | Detection Bandwidth FL | Detection Bandwidth FH | OBW | Test Location | Employee Number | In-Service Monitoring Version |
|---|---|---|---|---|---|---|---|---|---|---|
| FCC Short Pulse Type 1 | 30 | 96.67 | 60 | Pass | 5250 | 5330 | 78.66 | DFS 1 | 29445 | v4.1 |
| FCC Short Pulse Type 2 | 30 | 83.33 | 60 | Pass | 5250 | 5330 | 78.66 | DFS 1 | 29445 | v4.1 |
| FCC Short Pulse Type 3 | 30 | 76.67 | 60 | Pass | 5250 | 5330 | 78.66 | DFS 1 | 29445 | v4.1 |
| FCC Short Pulse Type 4 | 30 | 76.67 | 60 | Pass | 5250 | 5330 | 78.66 | DFS 1 | 29445 | v4.1 |
| Aggregate | | 83.33 | 80 | Pass | | | | | | |
| FCC Long Pulse Type 5 | 30 | 100.00 | 80 | Pass | 5250 | 5330 | 78.66 | DFS 1 | 29445 | v4.1 |
| FCC Hopping Type 6 | 81 | 100.00 | 70 | Pass | 5250 | 5330 | | DFS 1 | 29445 | v4.1 |

**Note:** Channels that occupy frequencies below the 5250 MHz to 5350 MHz band are not subject to the requirements related to DFS. Therefore, only the portion of the bandwidth residing in the 5250 MHz to 5350 MHz band has been taken into consideration for the In-Service Monitoring requirements.

**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 | 5257 | Yes |
| 1002 | 1 | 758 | 70 | A | 5288 | Yes |
| 1003 | 1 | 698 | 76 | A | 5308 | Yes |
| 1004 | 1 | 658 | 81 | A | 5270 | Yes |
| 1005 | 1 | 638 | 83 | A | 5285 | Yes |
| 1006 | 1 | 918 | 58 | A | 5321 | Yes |
| 1007 | 1 | 558 | 95 | A | 5313 | Yes |
| 1008 | 1 | 598 | 89 | A | 5291 | Yes |
| 1009 | 1 | 538 | 99 | A | 5298 | Yes |
| 1010 | 1 | 678 | 78 | A | 5280 | Yes |
| 1011 | 1 | 778 | 68 | A | 5285 | Yes |
| 1012 | 1 | 618 | 86 | A | 5329 | Yes |
| 1013 | 1 | 578 | 92 | A | 5329 | Yes |
| 1014 | 1 | 718 | 74 | A | 5329 | No |
| 1015 | 1 | 938 | 57 | A | 5286 | Yes |
| 1016 | 1 | 1840 | 29 | B | 5284 | Yes |
| 1017 | 1 | 990 | 54 | B | 5270 | Yes |
| 1018 | 1 | 2493 | 22 | B | 5328 | Yes |
| 1019 | 1 | 1773 | 30 | B | 5292 | Yes |
| 1020 | 1 | 2211 | 24 | B | 5273 | Yes |
| 1021 | 1 | 2973 | 18 | B | 5282 | Yes |
| 1022 | 1 | 2187 | 25 | B | 5298 | Yes |
| 1023 | 1 | 1885 | 28 | B | 5319 | Yes |
| 1024 | 1 | 1228 | 43 | B | 5314 | Yes |
| 1025 | 1 | 1055 | 51 | B | 5250 | Yes |
| 1026 | 1 | 1882 | 29 | B | 5284 | Yes |
| 1027 | 1 | 643 | 83 | B | 5288 | Yes |
| 1028 | 1 | 1599 | 34 | B | 5296 | Yes |
| 1029 | 1 | 3038 | 18 | B | 5255 | Yes |
| 1030 | 1 | 2929 | 19 | B | 5325 | 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 | 1.5 | 160 | 28 | 5279 | No |
| 2002 | 2.6 | 201 | 24 | 5263 | Yes |
| 2003 | 3.3 | 172 | 24 | 5303 | Yes |
| 2004 | 2.7 | 179 | 27 | 5274 | No |
| 2005 | 3.7 | 196 | 27 | 5254 | Yes |
| 2006 | 3.3 | 164 | 24 | 5289 | Yes |
| 2007 | 2.5 | 228 | 27 | 5286 | Yes |
| 2008 | 2.3 | 201 | 28 | 5284 | Yes |
| 2009 | 1.8 | 188 | 25 | 5329 | Yes |
| 2010 | 4 | 208 | 27 | 5260 | Yes |
| 2011 | 1.7 | 161 | 24 | 5288 | Yes |
| 2012 | 4.1 | 185 | 23 | 5283 | No |
| 2013 | 2.1 | 224 | 24 | 5263 | Yes |
| 2014 | 4.7 | 213 | 23 | 5284 | Yes |
| 2015 | 2.8 | 175 | 25 | 5316 | Yes |
| 2016 | 3.7 | 169 | 24 | 5317 | Yes |
| 2017 | 4.3 | 216 | 23 | 5266 | Yes |
| 2018 | 1.3 | 176 | 29 | 5260 | No |
| 2019 | 2 | 189 | 28 | 5268 | Yes |
| 2020 | 1.4 | 153 | 25 | 5296 | Yes |
| 2021 | 2.4 | 170 | 25 | 5301 | Yes |
| 2022 | 2 | 219 | 25 | 5312 | Yes |
| 2023 | 1.2 | 203 | 25 | 5311 | Yes |
| 2024 | 1 | 175 | 26 | 5256 | Yes |
| 2025 | 4.6 | 163 | 23 | 5254 | Yes |
| 2026 | 2.7 | 225 | 25 | 5323 | Yes |
| 2027 | 4.5 | 217 | 26 | 5282 | No |
| 2028 | 2.8 | 159 | 27 | 5306 | Yes |
| 2029 | 4.9 | 198 | 29 | 5315 | Yes |
| 2030 | 3.4 | 188 | 28 | 5296 | 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 | 6.5 | 500 | 18 | 5301 | Yes |
| 3002 | 9.6 | 481 | 18 | 5266 | Yes |
| 3003 | 8 | 376 | 18 | 5270 | Yes |
| 3004 | 9.1 | 251 | 17 | 5311 | No |
| 3005 | 9.8 | 292 | 17 | 5306 | Yes |
| 3006 | 9.2 | 432 | 16 | 5327 | Yes |
| 3007 | 6.1 | 485 | 18 | 5287 | Yes |
| 3008 | 9.8 | 386 | 16 | 5314 | No |
| 3009 | 9 | 335 | 16 | 5290 | Yes |
| 3010 | 6.9 | 382 | 16 | 5328 | Yes |
| 3011 | 6.4 | 461 | 18 | 5266 | No |
| 3012 | 6.4 | 404 | 18 | 5283 | No |
| 3013 | 8.2 | 378 | 16 | 5272 | Yes |
| 3014 | 6.5 | 451 | 17 | 5263 | No |
| 3015 | 8.6 | 320 | 17 | 5285 | Yes |
| 3016 | 7.1 | 288 | 17 | 5266 | Yes |
| 3017 | 7.4 | 421 | 17 | 5301 | Yes |
| 3018 | 8.3 | 401 | 17 | 5312 | Yes |
| 3019 | 6.7 | 296 | 17 | 5316 | Yes |
| 3020 | 9.9 | 423 | 16 | 5308 | Yes |
| 3021 | 8.5 | 464 | 16 | 5317 | No |
| 3022 | 7.9 | 352 | 18 | 5288 | Yes |
| 3023 | 8.9 | 406 | 16 | 5268 | No |
| 3024 | 6.5 | 307 | 18 | 5295 | Yes |
| 3025 | 7.7 | 256 | 16 | 5317 | Yes |
| 3026 | 9.7 | 303 | 18 | 5323 | Yes |
| 3027 | 9.2 | 264 | 17 | 5321 | Yes |
| 3028 | 7.2 | 324 | 18 | 5268 | Yes |
| 3029 | 6.9 | 299 | 18 | 5293 | Yes |
| 3030 | 9.3 | 254 | 16 | 5295 | 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 | 13.9 | 492 | 13 | 5291 | Yes |
| 4002 | 15.4 | 459 | 12 | 5311 | Yes |
| 4003 | 11.3 | 341 | 13 | 5268 | Yes |
| 4004 | 13.3 | 322 | 13 | 5274 | No |
| 4005 | 18.8 | 350 | 12 | 5313 | No |
| 4006 | 16.9 | 343 | 12 | 5283 | Yes |
| 4007 | 13.8 | 384 | 16 | 5250 | Yes |
| 4008 | 12.4 | 273 | 14 | 5258 | No |
| 4009 | 19.4 | 326 | 16 | 5297 | Yes |
| 4010 | 18.5 | 361 | 14 | 5288 | No |
| 4011 | 12 | 427 | 16 | 5309 | Yes |
| 4012 | 16.4 | 475 | 14 | 5278 | No |
| 4013 | 15.2 | 436 | 12 | 5311 | No |
| 4014 | 20 | 496 | 16 | 5328 | Yes |
| 4015 | 19.3 | 470 | 14 | 5314 | Yes |
| 4016 | 15.5 | 425 | 15 | 5297 | Yes |
| 4017 | 11 | 412 | 16 | 5315 | Yes |
| 4018 | 12.5 | 380 | 15 | 5293 | Yes |
| 4019 | 17.6 | 262 | 12 | 5323 | Yes |
| 4020 | 19.5 | 494 | 16 | 5270 | Yes |
| 4021 | 15.9 | 271 | 15 | 5322 | Yes |
| 4022 | 14.1 | 264 | 13 | 5313 | Yes |
| 4023 | 15.8 | 305 | 12 | 5280 | Yes |
| 4024 | 18.6 | 444 | 12 | 5317 | Yes |
| 4025 | 16.5 | 498 | 14 | 5296 | Yes |
| 4026 | 15.6 | 281 | 12 | 5278 | Yes |
| 4027 | 18.2 | 348 | 15 | 5293 | Yes |
| 4028 | 13.5 | 395 | 13 | 5314 | Yes |
| 4029 | 12.3 | 357 | 13 | 5264 | No |
| 4030 | 17.2 | 417 | 14 | 5284 | Yes |

**TYPE 5 DETECTION PROBABILITY**

| Data Sheet for FCC Long Pulse Radar Type 5 | | |
|---|---|---|
| Trial | Frequency (MHz) | Successful Detection (Yes/No) |
| 1 | 5290 | Yes |
| 2 | 5290 | Yes |
| 3 | 5290 | Yes |
| 4 | 5290 | Yes |
| 5 | 5290 | Yes |
| 6 | 5290 | Yes |
| 7 | 5290 | Yes |
| 8 | 5290 | Yes |
| 9 | 5290 | Yes |
| 10 | 5290 | Yes |
| 11 | 5253 | Yes |
| 12 | 5258 | Yes |
| 13 | 5259 | Yes |
| 14 | 5257 | Yes |
| 15 | 5254 | Yes |
| 16 | 5258 | Yes |
| 17 | 5258 | Yes |
| 18 | 5254 | Yes |
| 19 | 5255 | Yes |
| 20 | 5259 | Yes |
| 21 | 5323 | Yes |
| 22 | 5326 | Yes |
| 23 | 5322 | Yes |
| 24 | 5322 | Yes |
| 25 | 5327 | Yes |
| 26 | 5325 | Yes |
| 27 | 5321 | Yes |
| 28 | 5323 | Yes |
| 29 | 5326 | Yes |
| 30 | 5322 | Yes |

**TYPE 5 RADAR WAVEFORM PARAMETERS**

The Type 5 radar waveform parameters for the 160 MHz channel bandwidth tests are the same as the Type 5 radar waveform parameters documented in the 20 MHz channel bandwidth results section.

**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 | 648 | 5250 | 18 | Yes |
| 2 | 1123 | 5251 | 13 | Yes |
| 3 | 1598 | 5252 | 17 | Yes |
| 4 | 2073 | 5253 | 20 | Yes |
| 5 | 2548 | 5254 | 12 | Yes |
| 6 | 3023 | 5255 | 13 | Yes |
| 7 | 3498 | 5256 | 16 | Yes |
| 8 | 3973 | 5257 | 11 | Yes |
| 9 | 4448 | 5258 | 18 | Yes |
| 10 | 4923 | 5259 | 18 | Yes |
| 11 | 5398 | 5260 | 14 | Yes |
| 12 | 5873 | 5261 | 9 | Yes |
| 13 | 6348 | 5262 | 15 | Yes |
| 14 | 6823 | 5263 | 18 | Yes |
| 15 | 7298 | 5264 | 21 | Yes |
| 16 | 7773 | 5265 | 18 | Yes |
| 17 | 8248 | 5266 | 14 | Yes |
| 18 | 8723 | 5267 | 23 | Yes |
| 19 | 9198 | 5268 | 16 | Yes |
| 20 | 9673 | 5269 | 13 | Yes |
| 21 | 10148 | 5270 | 17 | Yes |
| 22 | 10623 | 5271 | 9 | Yes |
| 23 | 11098 | 5272 | 23 | Yes |
| 24 | 11573 | 5273 | 20 | Yes |
| 25 | 12048 | 5274 | 17 | Yes |
| 26 | 12523 | 5275 | 22 | Yes |
| 27 | 12998 | 5276 | 14 | Yes |
| 28 | 13473 | 5277 | 21 | Yes |
| 29 | 13948 | 5278 | 21 | Yes |
| 30 | 14423 | 5279 | 22 | Yes |
| 31 | 14898 | 5280 | 23 | Yes |
| 32 | 15373 | 5281 | 16 | Yes |
| 33 | 15848 | 5282 | 17 | Yes |
| 34 | 16323 | 5283 | 20 | Yes |
| 35 | 16798 | 5284 | 16 | Yes |
| 36 | 17273 | 5285 | 17 | Yes |
| 37 | 17748 | 5286 | 19 | Yes |
| 38 | 18223 | 5287 | 12 | Yes |
| 39 | 18698 | 5288 | 13 | Yes |

**TYPE 6 DETECTION PROBABILITY (CONTINUED)**

| | | | | |
|---|---|---|---|---|
| 40 | 19173 | 5289 | 19 | Yes |
| 41 | 19648 | 5290 | 12 | Yes |
| 42 | 20123 | 5291 | 19 | Yes |
| 43 | 20598 | 5292 | 17 | Yes |
| 44 | 21073 | 5293 | 19 | Yes |
| 45 | 21548 | 5294 | 22 | Yes |
| 46 | 22023 | 5295 | 16 | Yes |
| 47 | 22498 | 5296 | 20 | Yes |
| 48 | 22973 | 5297 | 16 | Yes |
| 49 | 23448 | 5298 | 18 | Yes |
| 50 | 23923 | 5299 | 15 | Yes |
| 51 | 24398 | 5300 | 22 | Yes |
| 52 | 24873 | 5301 | 15 | Yes |
| 53 | 25348 | 5302 | 22 | Yes |
| 54 | 25823 | 5303 | 12 | Yes |
| 55 | 26298 | 5304 | 8 | Yes |
| 56 | 26773 | 5305 | 12 | Yes |
| 57 | 27248 | 5306 | 15 | Yes |
| 58 | 27723 | 5307 | 17 | Yes |
| 59 | 28198 | 5308 | 15 | Yes |
| 60 | 28673 | 5309 | 19 | Yes |
| 61 | 29148 | 5310 | 16 | Yes |
| 62 | 29623 | 5311 | 20 | Yes |
| 63 | 30098 | 5312 | 11 | Yes |
| 64 | 30573 | 5313 | 18 | Yes |
| 65 | 31048 | 5314 | 14 | Yes |
| 66 | 31523 | 5315 | 22 | Yes |
| 67 | 31998 | 5316 | 14 | Yes |
| 68 | 32473 | 5317 | 15 | Yes |
| 69 | 32948 | 5318 | 16 | Yes |
| 70 | 33423 | 5319 | 17 | Yes |
| 71 | 33898 | 5320 | 22 | Yes |
| 72 | 34373 | 5321 | 15 | Yes |
| 73 | 34848 | 5322 | 16 | Yes |
| 74 | 35323 | 5323 | 18 | Yes |
| 75 | 35798 | 5324 | 21 | Yes |
| 76 | 36273 | 5325 | 19 | Yes |
| 77 | 36748 | 5326 | 13 | Yes |
| 78 | 37223 | 5327 | 9 | Yes |
| 79 | 37698 | 5328 | 23 | Yes |
| 80 | 38173 | 5329 | 20 | Yes |
| 81 | 38648 | 5330 | 18 | Yes |

# 7.6. UPPER BAND RESULTS FOR 160 MHz BANDWIDTH

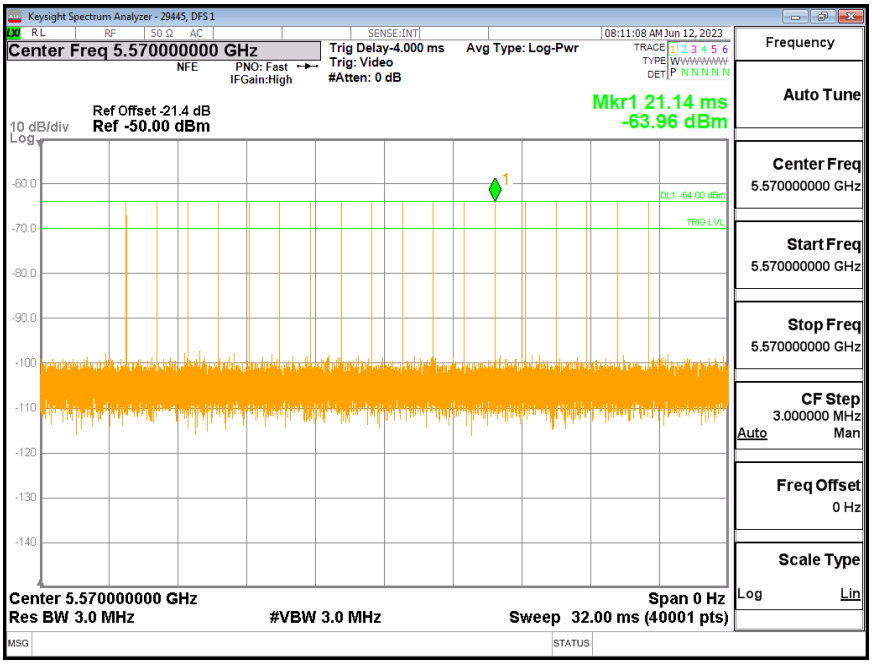
## 7.6.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5570 MHz.

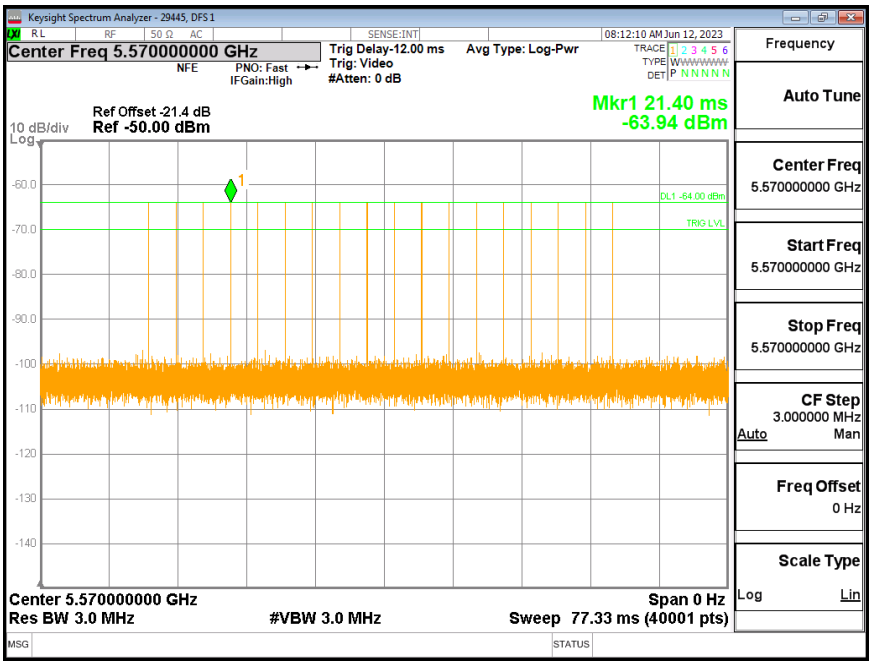
## 7.6.2. RADAR WAVEFORMS AND TRAFFIC

**RADAR WAVEFORMS**

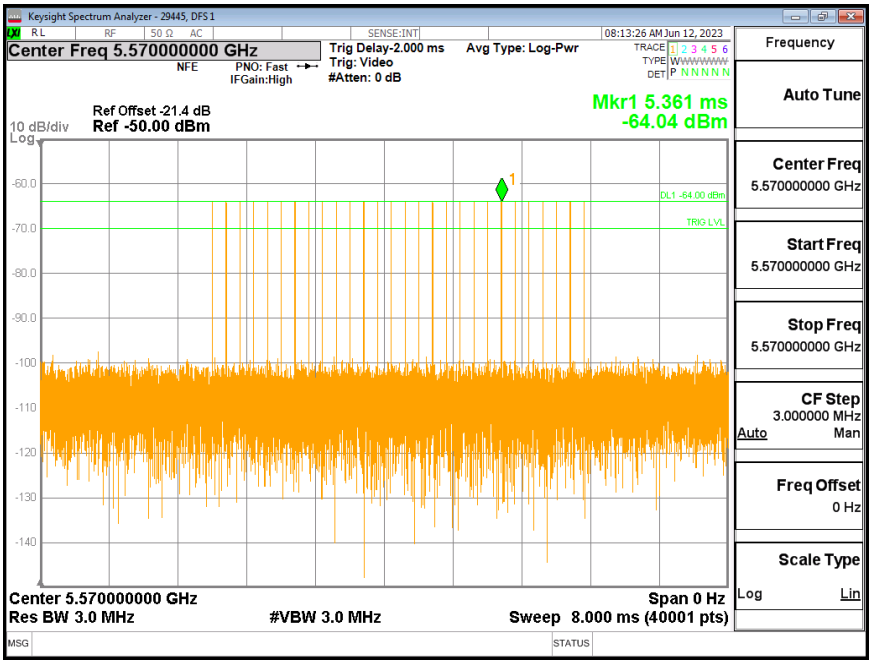
SHORT PULSE RADAR TYPE 0



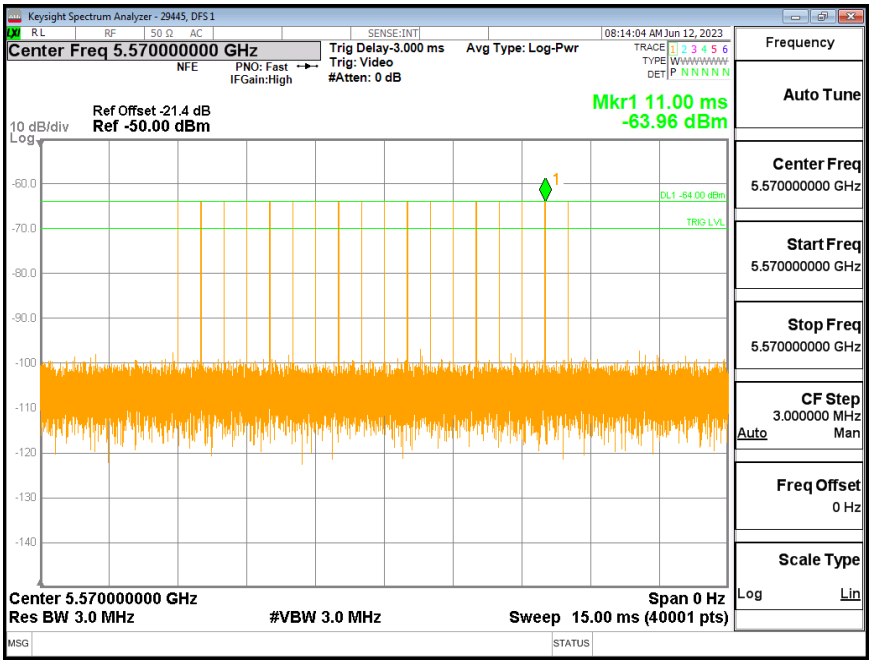
SAMPLE OF RADAR TYPE 1



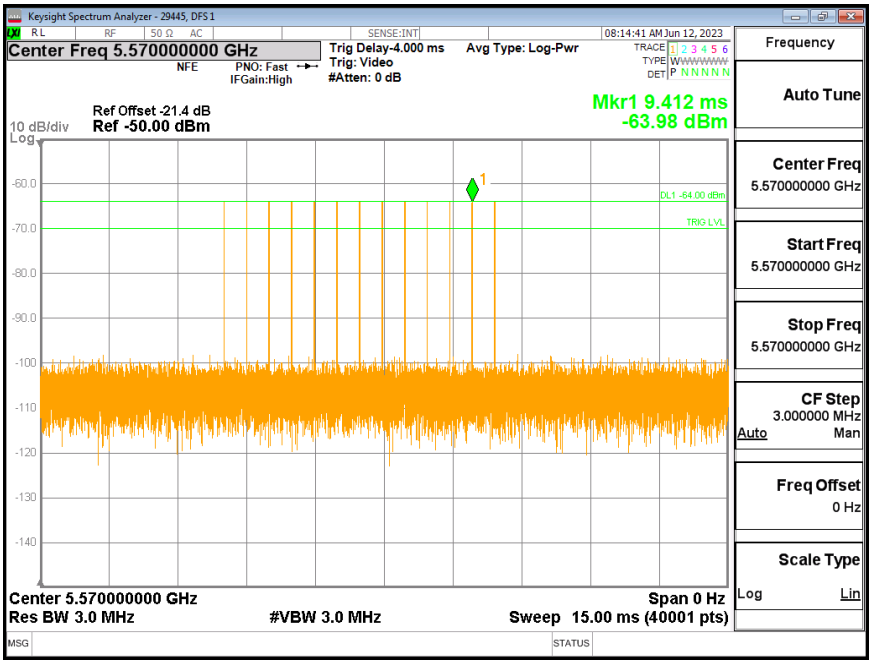
SAMPLE OF RADAR TYPE 2



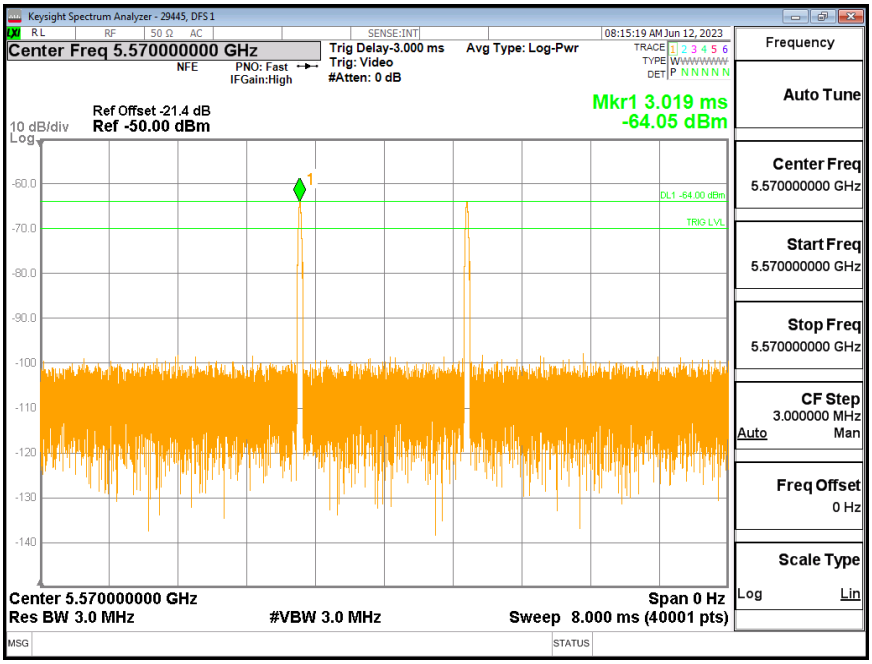
SAMPLE OF RADAR TYPE 3



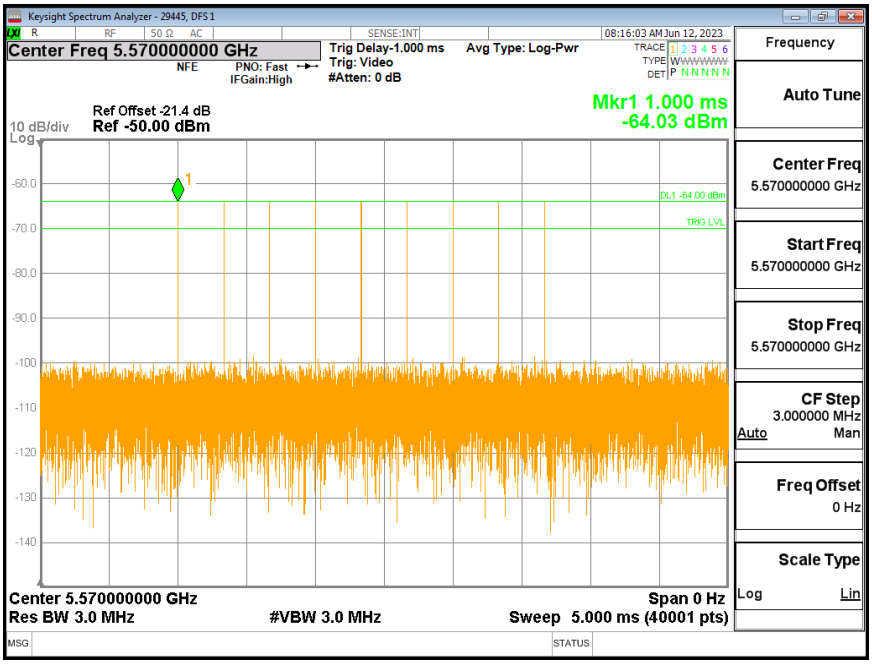
SAMPLE OF RADAR TYPE 4



SAMPLE OF SINGLE BURST OF RADAR TYPE 5

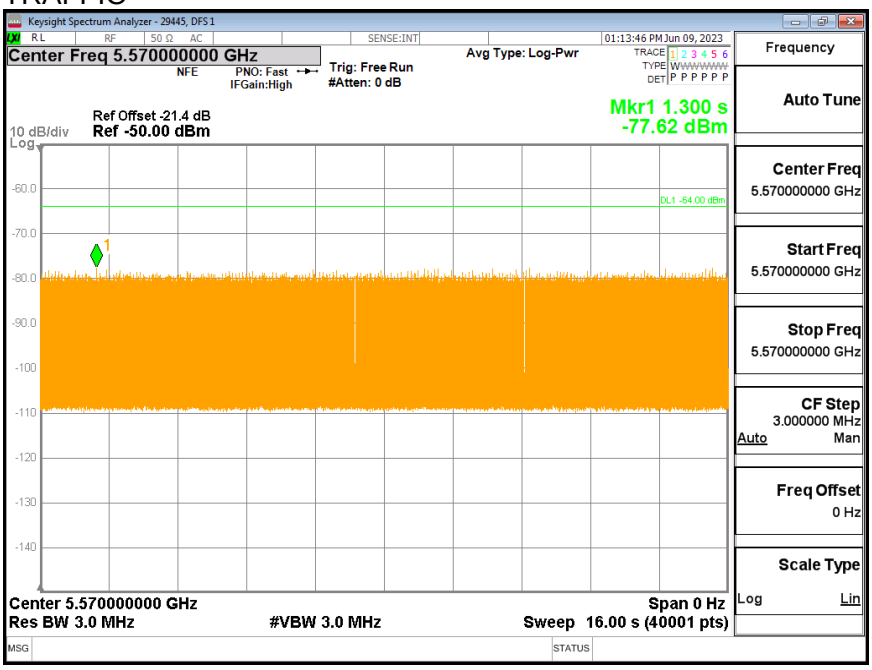


SINGLE BURST OF RADAR TYPE 6

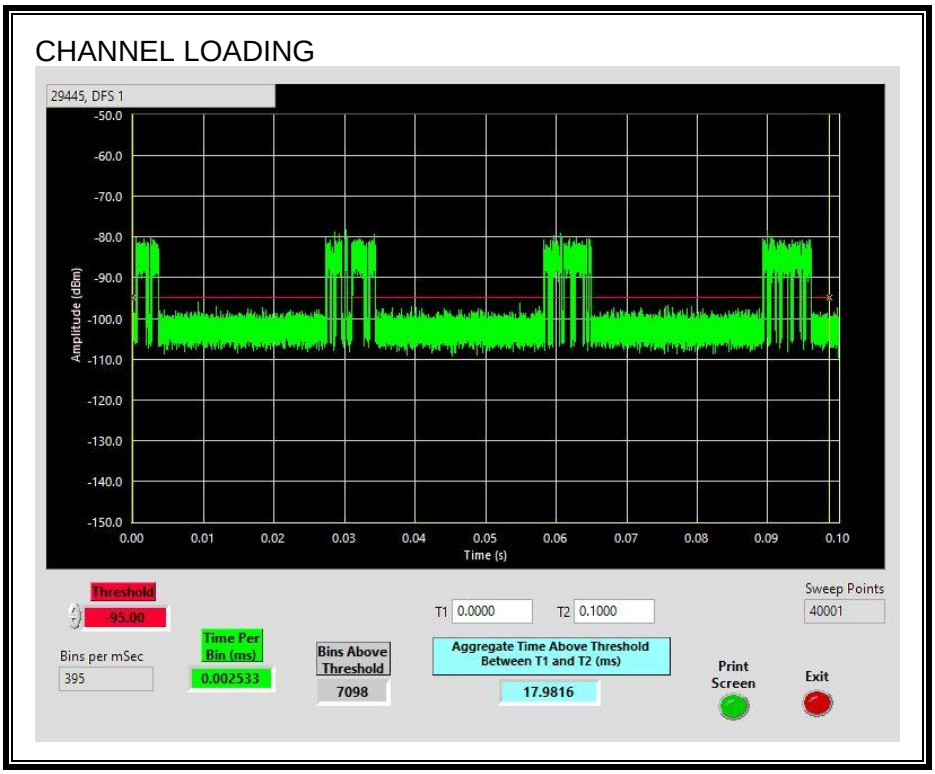


**TRAFFIC**

TRAFFIC



**CHANNEL LOADING**




The level of traffic loading on the channel by the EUT is 17.98%

## 7.6.3. CHANNEL AVAILABILITY CHECK TIME

**PROCEDURE TO DETERMINE CAC PERIOD TIME**

A software command was issued to the EUT to change to the test channel. The measured time from the software command to the start of traffic was measured. The initialization time is the 60-second CAC period subtracted from the total measured time of the plot.

**PROCEDURE FOR TIMING OF RADAR BURST**

A software command was issued to the EUT to change to the test channel. A radar signal was triggered within 0 to 6 seconds after the beginning of the CAC period. Transmissions on the channel were monitored on the spectrum analyzer and a plot was captured

The was rebooted to clear the Non-Occupancy list. A software command was issued to the EUT to change to the test channel. A radar signal was triggered within 54 to 60 seconds after the beginning of the CAC period. Transmissions on the channel were monitored on the spectrum analyzer and a plot was captured

## QUANTITATIVE RESULTS

**No Radar Triggered**

| Timing of Software Command (sec) | Timing of Start of Traffic (sec) | Channel Initialization Time (sec) |
|---|---|---|
| 0 | 68.89 | 8.89 |

**Radar Near Beginning of CAC**

| Timing of Software Command (sec) | Timing of Radar Burst (sec) | Radar Relative to Beginning of CAC (sec) |
|---|---|---|
| 0 | 11.89 | 3.00 |

**Radar Near End of CAC**

| Timing of Software Command (sec) | Timing of Radar Burst (sec) | Radar Relative to Beginning of CAC (sec) |
|---|---|---|
| 0 | 65.36 | 56.47 |

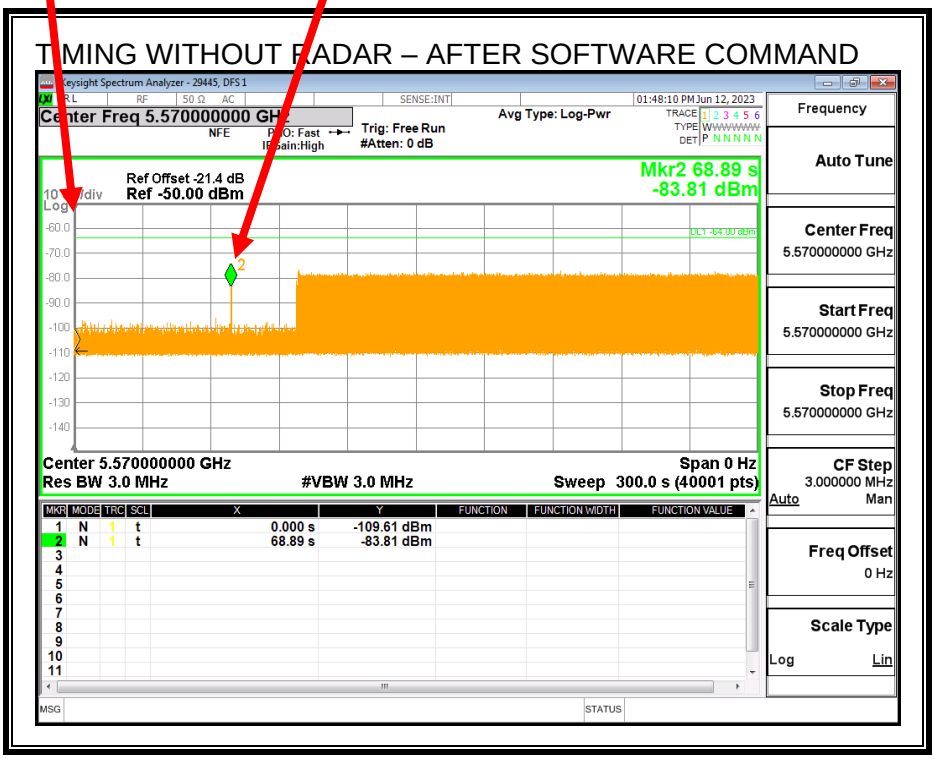
## QUALITATIVE RESULTS

| Timing of Radar Burst | Display on Control Computer | Spectrum Analyzer Display |
|---|---|---|
| No Radar Triggered | EUT marks Channel as active | Transmissions begin on channel after completion of the initialization cycle and 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**

Software Command Issued
Change to Test Channel

End of CAC Period

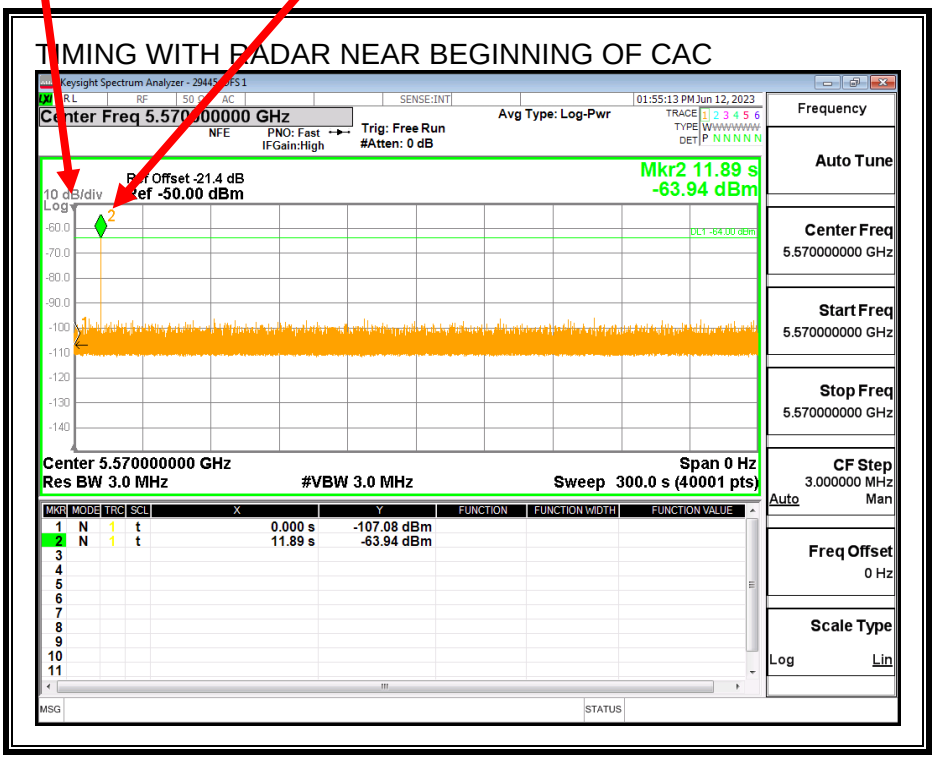



Transmissions begin on channel after completion of the initial power-up cycle and the CAC.

**TIMING WITH RADAR NEAR BEGINNING OF CAC**

Software Command Issued
Change to Test Channel

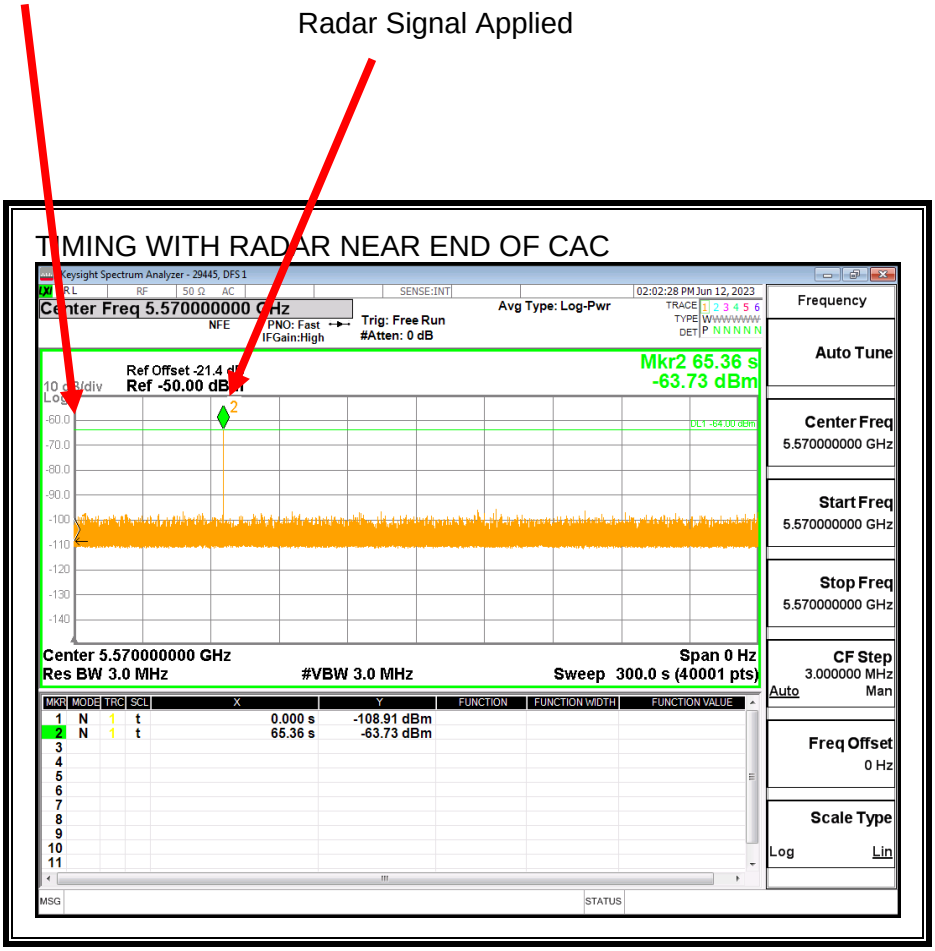
Radar Signal Applied




No EUT transmissions were observed after the radar signal.

**TIMING WITH RADAR NEAR END OF CAC**

Software Command Issued
Change to Test Channel




No EUT transmissions were observed after the radar signal.

## 7.6.4. OVERLAPPING CHANNEL TESTS

**RESULTS**

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

## 7.6.5. 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)

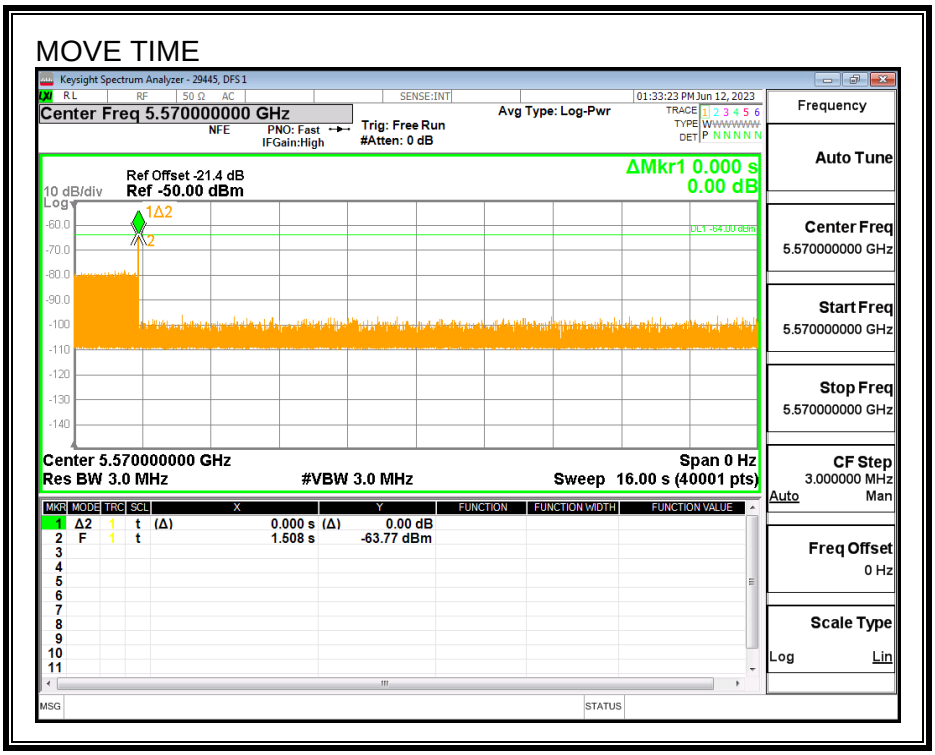
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

**RESULTS**

| Channel Move Time (sec) | Limit (sec) |
|---|---|
| 0.0 | 10 |

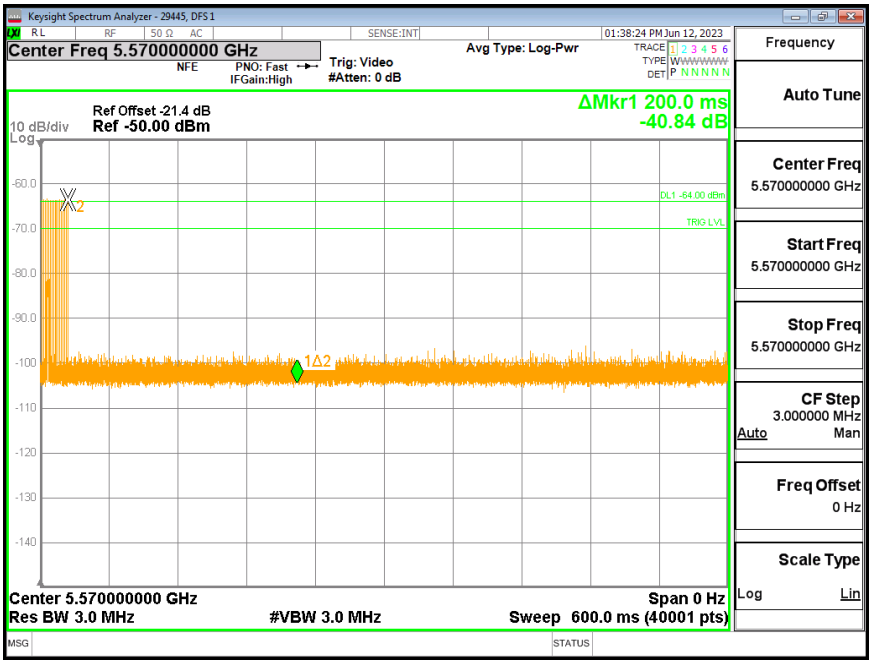
| Aggregate Channel Closing Transmission Time (msec) | Limit (msec) |
|---|---|
| 0.0 | 60 |

**MOVE TIME**



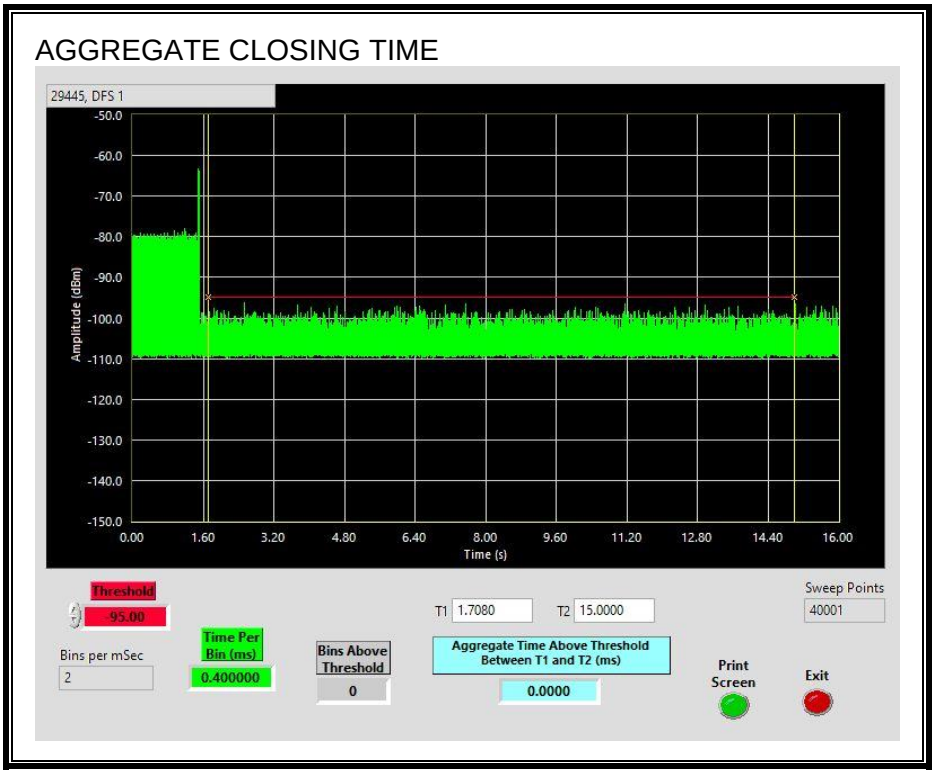
**CHANNEL CLOSING TIME**

CLOSING TIME



**AGGREGATE CHANNEL CLOSING TRANSMISSION TIME**

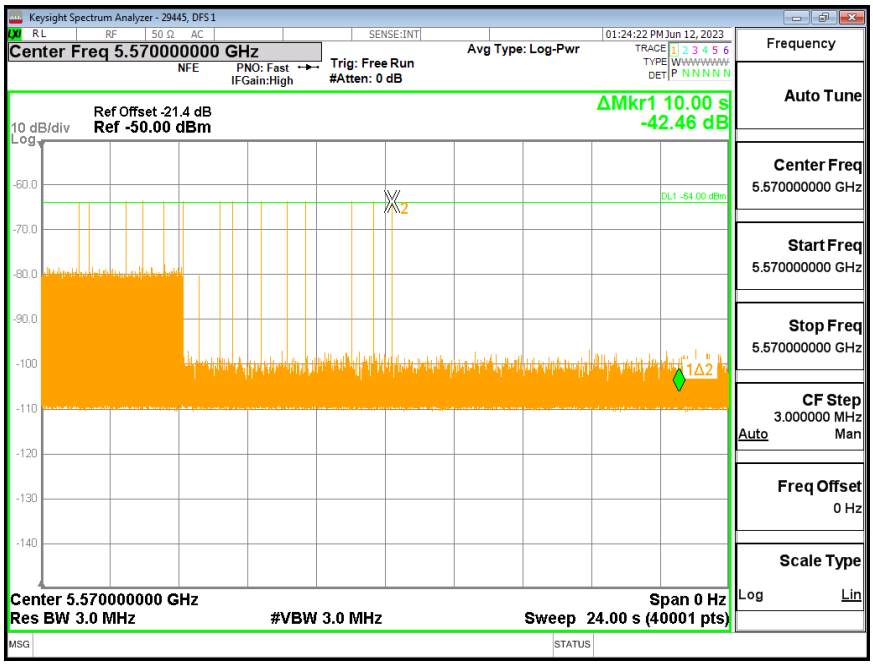
No transmissions are observed during the aggregate monitoring period.



## LONG PULSE CHANNEL MOVE TIME

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

MOVE TIME FOR LONG PULSE RADAR

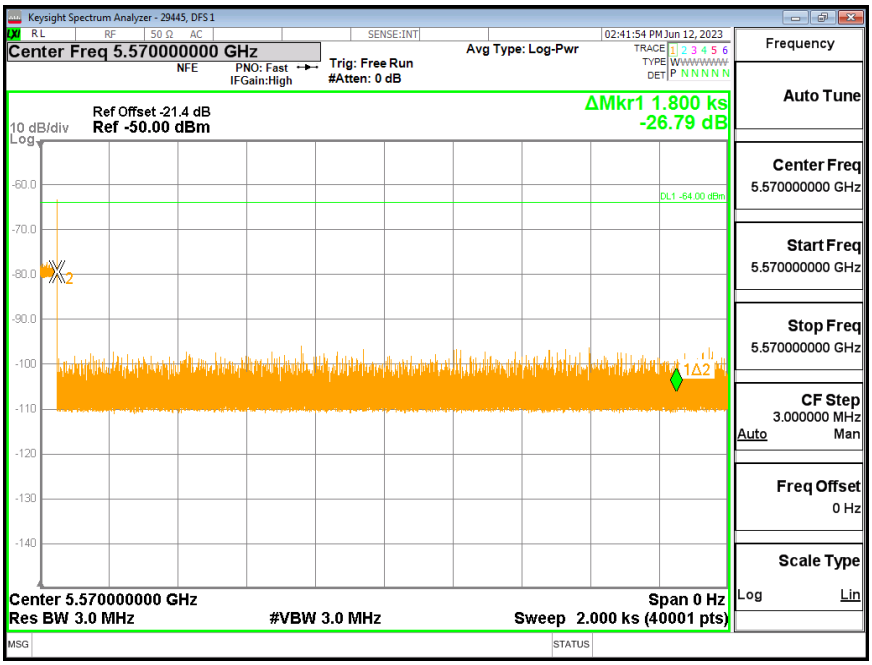


### 7.6.6. NON-OCCUPANCY PERIOD

**RESULTS**

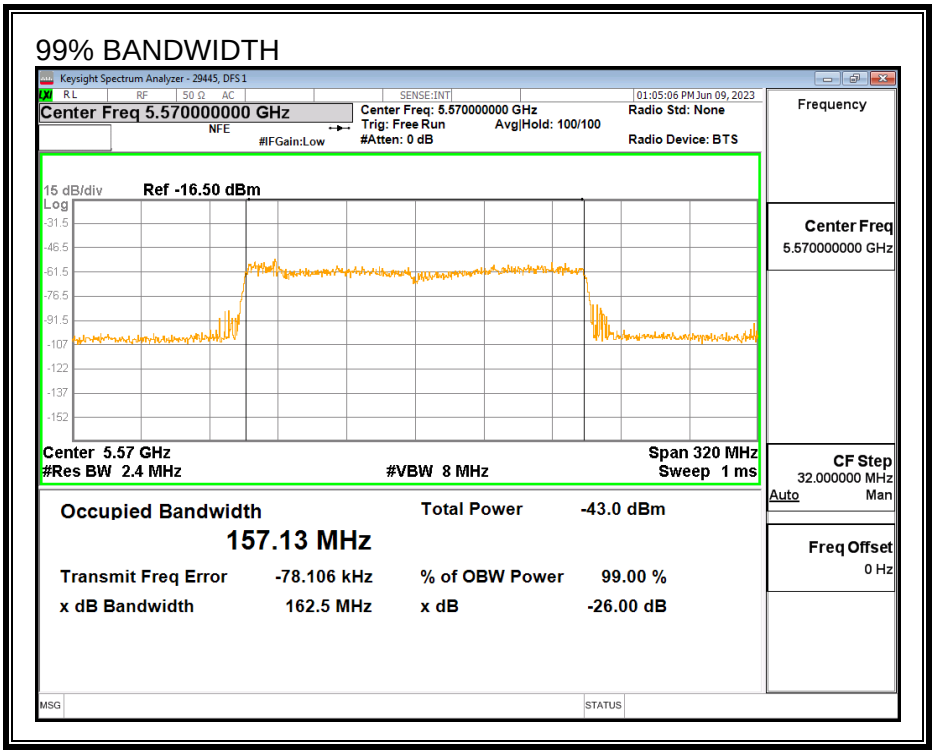
No EUT transmissions were observed on the test channel during the 30-minute observation time.

NON-OCCUPANCY PERIOD



## 7.6.7. 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 (%) |
|---|---|---|---|---|---|
| 5490 | 5650 | 160 | 157.13 | 101.8 | 100 |

**DETECTION BANDWIDTH PROBABILITY**

DETECTION BANDWIDTH PROBABILITY RESULTS

| Detection Bandwidth Test Results | | 29445 | DFS 1 | |
|---|---|---|---|---|
| FCC Type 0 Waveform: 1 us Pulse Width, 1428 us PRI, 18 Pulses per Burst | | | | |
| Frequency (MHz) | Number of Trials | Number Detected | Detection (%) | Mark |
| 5490 | 10 | 10 | 100 | FL |
| 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 | |
| 5580 | 10 | 10 | 100 | |
| 5585 | 10 | 10 | 100 | |
| 5590 | 10 | 10 | 100 | |
| 5595 | 10 | 10 | 100 | |
| 5600 | 10 | 10 | 100 | |
| 5605 | 10 | 10 | 100 | |
| 5610 | 10 | 10 | 100 | |
| 5615 | 10 | 10 | 100 | |
| 5620 | 10 | 10 | 100 | |
| 5625 | 10 | 10 | 100 | |
| 5630 | 10 | 10 | 100 | |
| 5635 | 10 | 10 | 100 | |
| 5640 | 10 | 10 | 100 | |
| 5645 | 10 | 10 | 100 | |
| 5650 | 10 | 10 | 100 | FH |

## 7.6.8. IN-SERVICE MONITORING

**RESULTS**

FCC Radar Test Summary

| Signal Type | Number of Trials | Detection (%) | Limit (%) | Pass/Fail | Detection Bandwidth FL | Detection Bandwidth FH | OBW | Test Location | Employee Number | In-Service Monitoring Version |
|---|---|---|---|---|---|---|---|---|---|---|
| FCC Short Pulse Type 1 | 30 | 96.67 | 60 | Pass | 5490 | 5650 | 157.13 | DFS 1 | 29445 | v4.1 |
| FCC Short Pulse Type 2 | 30 | 86.67 | 60 | Pass | 5490 | 5650 | 157.13 | DFS 1 | 29445 | v4.1 |
| FCC Short Pulse Type 3 | 30 | 70.00 | 60 | Pass | 5490 | 5650 | 157.13 | DFS 1 | 29445 | v4.1 |
| FCC Short Pulse Type 4 | 30 | 83.33 | 60 | Pass | 5490 | 5650 | 157.13 | DFS 1 | 29445 | v4.1 |
| Aggregate | | 84.17 | 80 | Pass | | | | | | |
| FCC Long Pulse Type 5 | 30 | 100.00 | 80 | Pass | 5490 | 5650 | 157.13 | DFS 1 | 29445 | v4.1 |
| FCC Hopping Type 6 | 161 | 100.00 | 70 | Pass | 5490 | 5650 | | DFS 1 | 29445 | 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 | 5512 | Yes |
| 1002 | 1 | 758 | 70 | A | 5569 | Yes |
| 1003 | 1 | 698 | 76 | A | 5622 | Yes |
| 1004 | 1 | 658 | 81 | A | 5645 | Yes |
| 1005 | 1 | 638 | 83 | A | 5563 | Yes |
| 1006 | 1 | 918 | 58 | A | 5497 | Yes |
| 1007 | 1 | 558 | 95 | A | 5586 | Yes |
| 1008 | 1 | 598 | 89 | A | 5645 | Yes |
| 1009 | 1 | 538 | 99 | A | 5512 | Yes |
| 1010 | 1 | 678 | 78 | A | 5514 | Yes |
| 1011 | 1 | 778 | 68 | A | 5600 | Yes |
| 1012 | 1 | 618 | 86 | A | 5648 | Yes |
| 1013 | 1 | 578 | 92 | A | 5600 | Yes |
| 1014 | 1 | 718 | 74 | A | 5561 | No |
| 1015 | 1 | 938 | 57 | A | 5524 | Yes |
| 1016 | 1 | 1840 | 29 | B | 5621 | Yes |
| 1017 | 1 | 990 | 54 | B | 5564 | Yes |
| 1018 | 1 | 2493 | 22 | B | 5548 | Yes |
| 1019 | 1 | 1773 | 30 | B | 5544 | Yes |
| 1020 | 1 | 2211 | 24 | B | 5568 | Yes |
| 1021 | 1 | 2973 | 18 | B | 5548 | Yes |
| 1022 | 1 | 2187 | 25 | B | 5538 | Yes |
| 1023 | 1 | 1885 | 28 | B | 5496 | Yes |
| 1024 | 1 | 1228 | 43 | B | 5640 | Yes |
| 1025 | 1 | 1055 | 51 | B | 5514 | Yes |
| 1026 | 1 | 1882 | 29 | B | 5591 | Yes |
| 1027 | 1 | 643 | 83 | B | 5520 | Yes |
| 1028 | 1 | 1599 | 34 | B | 5591 | Yes |
| 1029 | 1 | 3038 | 18 | B | 5639 | Yes |
| 1030 | 1 | 2929 | 19 | B | 5575 | 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 | 1.5 | 160 | 28 | 5498 | Yes |
| 2002 | 2.6 | 201 | 24 | 5555 | Yes |
| 2003 | 3.3 | 172 | 24 | 5569 | Yes |
| 2004 | 2.7 | 179 | 27 | 5598 | Yes |
| 2005 | 3.7 | 196 | 27 | 5494 | Yes |
| 2006 | 3.3 | 164 | 24 | 5521 | Yes |
| 2007 | 2.5 | 228 | 27 | 5499 | Yes |
| 2008 | 2.3 | 201 | 28 | 5570 | Yes |
| 2009 | 1.8 | 188 | 25 | 5644 | Yes |
| 2010 | 4 | 208 | 27 | 5580 | Yes |
| 2011 | 1.7 | 161 | 24 | 5606 | Yes |
| 2012 | 4.1 | 185 | 23 | 5588 | No |
| 2013 | 2.1 | 224 | 24 | 5635 | Yes |
| 2014 | 4.7 | 213 | 23 | 5495 | Yes |
| 2015 | 2.8 | 175 | 25 | 5556 | Yes |
| 2016 | 3.7 | 169 | 24 | 5649 | Yes |
| 2017 | 4.3 | 216 | 23 | 5507 | Yes |
| 2018 | 1.3 | 176 | 29 | 5593 | No |
| 2019 | 2 | 189 | 28 | 5610 | Yes |
| 2020 | 1.4 | 153 | 25 | 5539 | No |
| 2021 | 2.4 | 170 | 25 | 5596 | Yes |
| 2022 | 2 | 219 | 25 | 5519 | Yes |
| 2023 | 1.2 | 203 | 25 | 5586 | Yes |
| 2024 | 1 | 175 | 26 | 5609 | Yes |
| 2025 | 4.6 | 163 | 23 | 5633 | Yes |
| 2026 | 2.7 | 225 | 25 | 5627 | Yes |
| 2027 | 4.5 | 217 | 26 | 5626 | Yes |
| 2028 | 2.8 | 159 | 27 | 5574 | No |
| 2029 | 4.9 | 198 | 29 | 5578 | Yes |
| 2030 | 3.4 | 188 | 28 | 5628 | 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 | 6.5 | 500 | 18 | 5624 | Yes |
| 3002 | 9.6 | 481 | 18 | 5584 | Yes |
| 3003 | 8 | 376 | 18 | 5581 | Yes |
| 3004 | 9.1 | 251 | 17 | 5589 | No |
| 3005 | 9.8 | 292 | 17 | 5590 | Yes |
| 3006 | 9.2 | 432 | 16 | 5585 | No |
| 3007 | 6.1 | 485 | 18 | 5538 | Yes |
| 3008 | 9.8 | 386 | 16 | 5609 | Yes |
| 3009 | 9 | 335 | 16 | 5620 | Yes |
| 3010 | 6.9 | 382 | 16 | 5577 | No |
| 3011 | 6.4 | 461 | 18 | 5570 | Yes |
| 3012 | 6.4 | 404 | 18 | 5561 | No |
| 3013 | 8.2 | 378 | 16 | 5504 | Yes |
| 3014 | 6.5 | 451 | 17 | 5590 | Yes |
| 3015 | 8.6 | 320 | 17 | 5600 | No |
| 3016 | 7.1 | 288 | 17 | 5614 | No |
| 3017 | 7.4 | 421 | 17 | 5648 | Yes |
| 3018 | 8.3 | 401 | 17 | 5562 | No |
| 3019 | 6.7 | 296 | 17 | 5608 | No |
| 3020 | 9.9 | 423 | 16 | 5615 | Yes |
| 3021 | 8.5 | 464 | 16 | 5549 | Yes |
| 3022 | 7.9 | 352 | 18 | 5644 | Yes |
| 3023 | 8.9 | 406 | 16 | 5575 | Yes |
| 3024 | 6.5 | 307 | 18 | 5604 | Yes |
| 3025 | 7.7 | 256 | 16 | 5570 | Yes |
| 3026 | 9.7 | 303 | 18 | 5582 | No |
| 3027 | 9.2 | 264 | 17 | 5553 | Yes |
| 3028 | 7.2 | 324 | 18 | 5517 | Yes |
| 3029 | 6.9 | 299 | 18 | 5614 | Yes |
| 3030 | 9.3 | 254 | 16 | 5536 | 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 | 13.9 | 492 | 13 | 5539 | Yes |
| 4002 | 15.4 | 459 | 12 | 5634 | Yes |
| 4003 | 11.3 | 341 | 13 | 5549 | Yes |
| 4004 | 13.3 | 322 | 13 | 5623 | Yes |
| 4005 | 18.8 | 350 | 12 | 5497 | Yes |
| 4006 | 16.9 | 343 | 12 | 5521 | Yes |
| 4007 | 13.8 | 384 | 16 | 5639 | Yes |
| 4008 | 12.4 | 273 | 14 | 5538 | No |
| 4009 | 19.4 | 326 | 16 | 5588 | Yes |
| 4010 | 18.5 | 361 | 14 | 5541 | Yes |
| 4011 | 12 | 427 | 16 | 5569 | No |
| 4012 | 16.4 | 475 | 14 | 5626 | Yes |
| 4013 | 15.2 | 436 | 12 | 5601 | No |
| 4014 | 20 | 496 | 16 | 5553 | Yes |
| 4015 | 19.3 | 470 | 14 | 5609 | Yes |
| 4016 | 15.5 | 425 | 15 | 5501 | Yes |
| 4017 | 11 | 412 | 16 | 5538 | No |
| 4018 | 12.5 | 380 | 15 | 5550 | Yes |
| 4019 | 17.6 | 262 | 12 | 5618 | Yes |
| 4020 | 19.5 | 494 | 16 | 5545 | Yes |
| 4021 | 15.9 | 271 | 15 | 5534 | Yes |
| 4022 | 14.1 | 264 | 13 | 5511 | Yes |
| 4023 | 15.8 | 305 | 12 | 5591 | Yes |
| 4024 | 18.6 | 444 | 12 | 5602 | Yes |
| 4025 | 16.5 | 498 | 14 | 5574 | Yes |
| 4026 | 15.6 | 281 | 12 | 5593 | Yes |
| 4027 | 18.2 | 348 | 15 | 5500 | No |
| 4028 | 13.5 | 395 | 13 | 5539 | Yes |
| 4029 | 12.3 | 357 | 13 | 5502 | Yes |
| 4030 | 17.2 | 417 | 14 | 5512 | Yes |

**TYPE 5 DETECTION PROBABILITY**

| Data Sheet for FCC Long Pulse Radar Type 5 | | |
|---|---|---|
| Trial | Frequency (MHz) | Successful Detection (Yes/No) |
| 1 | 5570 | Yes |
| 2 | 5570 | Yes |
| 3 | 5570 | Yes |
| 4 | 5570 | Yes |
| 5 | 5570 | Yes |
| 6 | 5570 | Yes |
| 7 | 5570 | Yes |
| 8 | 5570 | Yes |
| 9 | 5570 | Yes |
| 10 | 5570 | Yes |
| 11 | 5494 | Yes |
| 12 | 5499 | Yes |
| 13 | 5500 | Yes |
| 14 | 5498 | Yes |
| 15 | 5495 | Yes |
| 16 | 5499 | Yes |
| 17 | 5499 | Yes |
| 18 | 5494 | Yes |
| 19 | 5496 | Yes |
| 20 | 5500 | Yes |
| 21 | 5643 | Yes |
| 22 | 5645 | Yes |
| 23 | 5641 | Yes |
| 24 | 5641 | Yes |
| 25 | 5646 | Yes |
| 26 | 5644 | Yes |
| 27 | 5641 | Yes |
| 28 | 5643 | Yes |
| 29 | 5645 | Yes |
| 30 | 5641 | Yes |

**TYPE 5 RADAR WAVEFORM PARAMETERS**

The Type 5 radar waveform parameters for the 160 MHz channel bandwidth tests are the same as the Type 5 radar waveform parameters documented in the 20 MHz channel bandwidth results section.

**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 | 529 | 5490 | 37 | Yes |
| 2 | 1004 | 5491 | 32 | Yes |
| 3 | 1479 | 5492 | 27 | Yes |
| 4 | 1954 | 5493 | 32 | Yes |
| 5 | 2429 | 5494 | 45 | Yes |
| 6 | 2904 | 5495 | 34 | Yes |
| 7 | 3379 | 5496 | 29 | Yes |
| 8 | 3854 | 5497 | 36 | Yes |
| 9 | 4329 | 5498 | 38 | Yes |
| 10 | 4804 | 5499 | 38 | Yes |
| 11 | 5279 | 5500 | 33 | Yes |
| 12 | 5754 | 5501 | 29 | Yes |
| 13 | 6229 | 5502 | 37 | Yes |
| 14 | 6704 | 5503 | 34 | Yes |
| 15 | 7179 | 5504 | 32 | Yes |
| 16 | 7654 | 5505 | 26 | Yes |
| 17 | 8129 | 5506 | 30 | Yes |
| 18 | 8604 | 5507 | 35 | Yes |
| 19 | 9079 | 5508 | 29 | Yes |
| 20 | 9554 | 5509 | 35 | Yes |
| 21 | 10029 | 5510 | 25 | Yes |
| 22 | 10504 | 5511 | 30 | Yes |
| 23 | 10979 | 5512 | 26 | Yes |
| 24 | 11454 | 5513 | 33 | Yes |
| 25 | 11929 | 5514 | 40 | Yes |
| 26 | 12404 | 5515 | 36 | Yes |
| 27 | 12879 | 5516 | 32 | Yes |
| 28 | 13354 | 5517 | 37 | Yes |
| 29 | 13829 | 5518 | 41 | Yes |
| 30 | 14304 | 5519 | 39 | Yes |
| 31 | 14779 | 5520 | 30 | Yes |
| 32 | 15254 | 5521 | 27 | Yes |
| 33 | 15729 | 5522 | 32 | Yes |
| 34 | 16204 | 5523 | 32 | Yes |
| 35 | 16679 | 5524 | 28 | Yes |
| 36 | 17154 | 5525 | 29 | Yes |
| 37 | 17629 | 5526 | 37 | Yes |
| 38 | 18104 | 5527 | 34 | Yes |
| 39 | 18579 | 5528 | 33 | Yes |

**TYPE 6 DETECTION PROBABILITY (CONTINUED)**

| | | | | |
|---|---|---|---|---|
| 40 | 19054 | 5529 | 34 | Yes |
| 41 | 19529 | 5530 | 30 | Yes |
| 42 | 20004 | 5531 | 33 | Yes |
| 43 | 20479 | 5532 | 35 | Yes |
| 44 | 20954 | 5533 | 34 | Yes |
| 45 | 21429 | 5534 | 35 | Yes |
| 46 | 21904 | 5535 | 34 | Yes |
| 47 | 22379 | 5536 | 38 | Yes |
| 48 | 22854 | 5537 | 30 | Yes |
| 49 | 23329 | 5538 | 31 | Yes |
| 50 | 23804 | 5539 | 31 | Yes |
| 51 | 24279 | 5540 | 35 | Yes |
| 52 | 24754 | 5541 | 36 | Yes |
| 53 | 25229 | 5542 | 39 | Yes |
| 54 | 25704 | 5543 | 29 | Yes |
| 55 | 26179 | 5544 | 28 | Yes |
| 56 | 26654 | 5545 | 30 | Yes |
| 57 | 27129 | 5546 | 31 | Yes |
| 58 | 27604 | 5547 | 35 | Yes |
| 59 | 28079 | 5548 | 33 | Yes |
| 60 | 28554 | 5549 | 32 | Yes |
| 61 | 29029 | 5550 | 32 | Yes |
| 62 | 29504 | 5551 | 28 | Yes |
| 63 | 29979 | 5552 | 41 | Yes |
| 64 | 30454 | 5553 | 38 | Yes |
| 65 | 30929 | 5554 | 28 | Yes |
| 66 | 31404 | 5555 | 33 | Yes |
| 67 | 31879 | 5556 | 36 | Yes |
| 68 | 32354 | 5557 | 36 | Yes |
| 69 | 32829 | 5558 | 31 | Yes |
| 70 | 33304 | 5559 | 29 | Yes |
| 71 | 33779 | 5560 | 31 | Yes |
| 72 | 34254 | 5561 | 34 | Yes |
| 73 | 34729 | 5562 | 33 | Yes |
| 74 | 35204 | 5563 | 31 | Yes |
| 75 | 35679 | 5564 | 33 | Yes |
| 76 | 36154 | 5565 | 32 | Yes |
| 77 | 36629 | 5566 | 32 | Yes |
| 78 | 37104 | 5567 | 31 | Yes |
| 79 | 37579 | 5568 | 38 | Yes |
| 80 | 38054 | 5569 | 40 | Yes |

**TYPE 6 DETECTION PROBABILITY (CONTINUED)**

| | | | | |
|---|---|---|---|---|
| 81 | 38529 | 5570 | 34 | Yes |
| 82 | 39004 | 5571 | 35 | Yes |
| 83 | 39479 | 5572 | 34 | Yes |
| 84 | 39954 | 5573 | 42 | Yes |
| 85 | 40429 | 5574 | 39 | Yes |
| 86 | 40904 | 5575 | 33 | Yes |
| 87 | 41379 | 5576 | 30 | Yes |
| 88 | 41854 | 5577 | 29 | Yes |
| 89 | 42329 | 5578 | 38 | Yes |
| 90 | 42804 | 5579 | 27 | Yes |
| 91 | 43279 | 5580 | 36 | Yes |
| 92 | 43754 | 5581 | 36 | Yes |
| 93 | 44229 | 5582 | 33 | Yes |
| 94 | 44704 | 5583 | 30 | Yes |
| 95 | 45179 | 5584 | 34 | Yes |
| 96 | 45654 | 5585 | 34 | Yes |
| 97 | 46129 | 5586 | 36 | Yes |
| 98 | 46604 | 5587 | 30 | Yes |
| 99 | 47079 | 5588 | 35 | Yes |
| 100 | 47554 | 5589 | 34 | Yes |
| 101 | 48029 | 5590 | 40 | Yes |
| 102 | 48504 | 5591 | 37 | Yes |
| 103 | 48979 | 5592 | 31 | Yes |
| 104 | 49454 | 5593 | 32 | Yes |
| 105 | 49929 | 5594 | 34 | Yes |
| 106 | 50404 | 5595 | 37 | Yes |
| 107 | 50879 | 5596 | 28 | Yes |
| 108 | 51354 | 5597 | 34 | Yes |
| 109 | 51829 | 5598 | 32 | Yes |
| 110 | 52304 | 5599 | 34 | Yes |
| 111 | 52779 | 5600 | 28 | Yes |
| 112 | 53254 | 5601 | 35 | Yes |
| 113 | 53729 | 5602 | 33 | Yes |
| 114 | 54204 | 5603 | 40 | Yes |
| 115 | 54679 | 5604 | 30 | Yes |
| 116 | 55154 | 5605 | 31 | Yes |
| 117 | 55629 | 5606 | 35 | Yes |
| 118 | 56104 | 5607 | 38 | Yes |
| 119 | 56579 | 5608 | 36 | Yes |
| 120 | 57054 | 5609 | 35 | Yes |

**TYPE 6 DETECTION PROBABILITY (CONTINUED)**

| | | | | |
|---|---|---|---|---|
| 121 | 57529 | 5610 | 36 | Yes |
| 122 | 58004 | 5611 | 41 | Yes |
| 123 | 58479 | 5612 | 27 | Yes |
| 124 | 58954 | 5613 | 44 | Yes |
| 125 | 59429 | 5614 | 40 | Yes |
| 126 | 59904 | 5615 | 34 | Yes |
| 127 | 60379 | 5616 | 34 | Yes |
| 128 | 60854 | 5617 | 32 | Yes |
| 129 | 61329 | 5618 | 35 | Yes |
| 130 | 61804 | 5619 | 37 | Yes |
| 131 | 62279 | 5620 | 39 | Yes |
| 132 | 62754 | 5621 | 33 | Yes |
| 133 | 63229 | 5622 | 34 | Yes |
| 134 | 63704 | 5623 | 39 | Yes |
| 135 | 64179 | 5624 | 34 | Yes |
| 136 | 64654 | 5625 | 40 | Yes |
| 137 | 65129 | 5626 | 32 | Yes |
| 138 | 68 | 5627 | 29 | Yes |
| 139 | 543 | 5628 | 40 | Yes |
| 140 | 1018 | 5629 | 32 | Yes |
| 141 | 1493 | 5630 | 29 | Yes |
| 142 | 1968 | 5631 | 30 | Yes |
| 143 | 2443 | 5632 | 40 | Yes |
| 144 | 2918 | 5633 | 38 | Yes |
| 145 | 3393 | 5634 | 28 | Yes |
| 146 | 3868 | 5635 | 33 | Yes |
| 147 | 4343 | 5636 | 35 | Yes |
| 148 | 4818 | 5637 | 36 | Yes |
| 149 | 5293 | 5638 | 30 | Yes |
| 150 | 5768 | 5639 | 31 | Yes |
| 151 | 6243 | 5640 | 36 | Yes |
| 152 | 6718 | 5641 | 31 | Yes |
| 153 | 7193 | 5642 | 32 | Yes |
| 154 | 7668 | 5643 | 27 | Yes |
| 155 | 8143 | 5644 | 28 | Yes |
| 156 | 8618 | 5645 | 38 | Yes |
| 157 | 9093 | 5646 | 33 | Yes |
| 158 | 9568 | 5647 | 35 | Yes |
| 159 | 10043 | 5648 | 24 | Yes |
| 160 | 10518 | 5649 | 32 | Yes |
| 161 | 10993 | 5650 | 30 | Yes |

# 7.7. RESULTS FOR 240 MHz BANDWIDTH

## 7.7.1. TEST CHANNEL

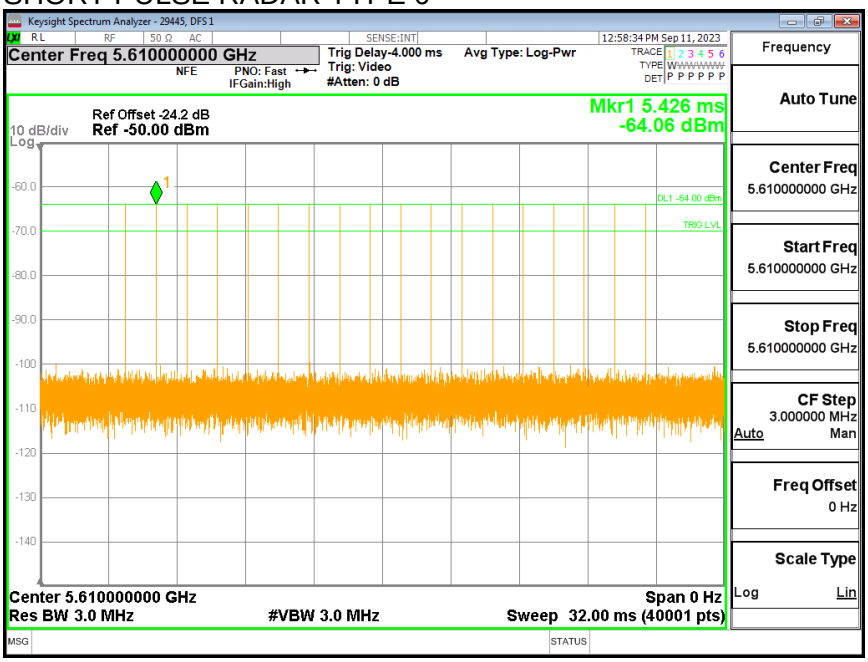
All tests were performed at a channel center frequency of 5610 MHz.

**Note:** This channel occupies the 5600 MHz to 5650 MHz frequency range and the use of it in Canada is prohibited by ISED.

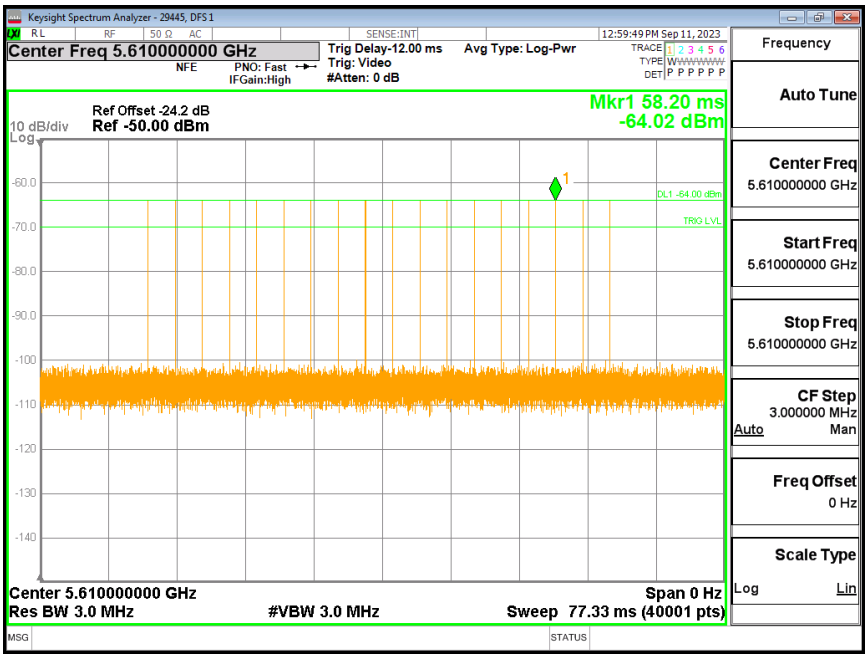
## 7.7.2. RADAR WAVEFORMS AND TRAFFIC

**RADAR WAVEFORMS**

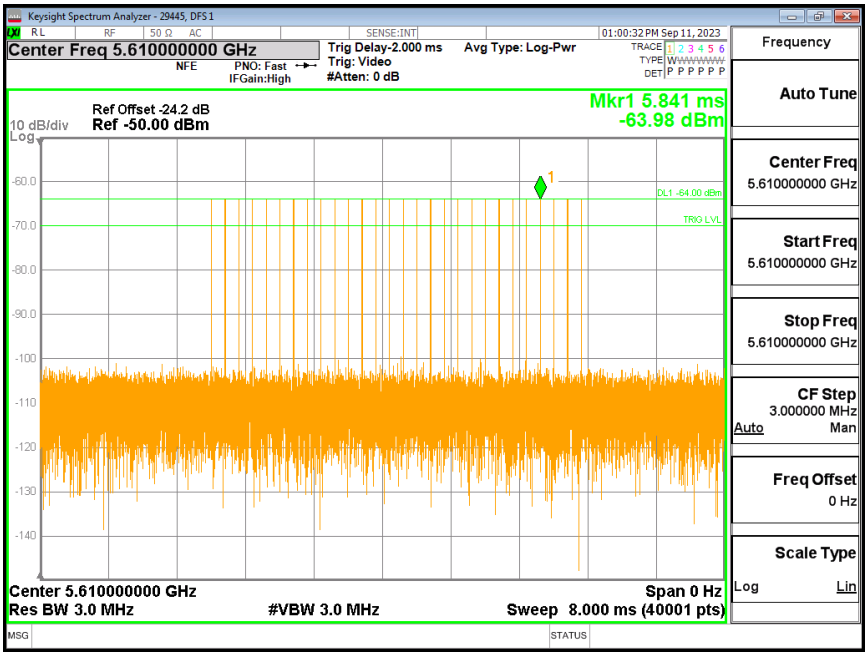
SHORT PULSE RADAR TYPE 0



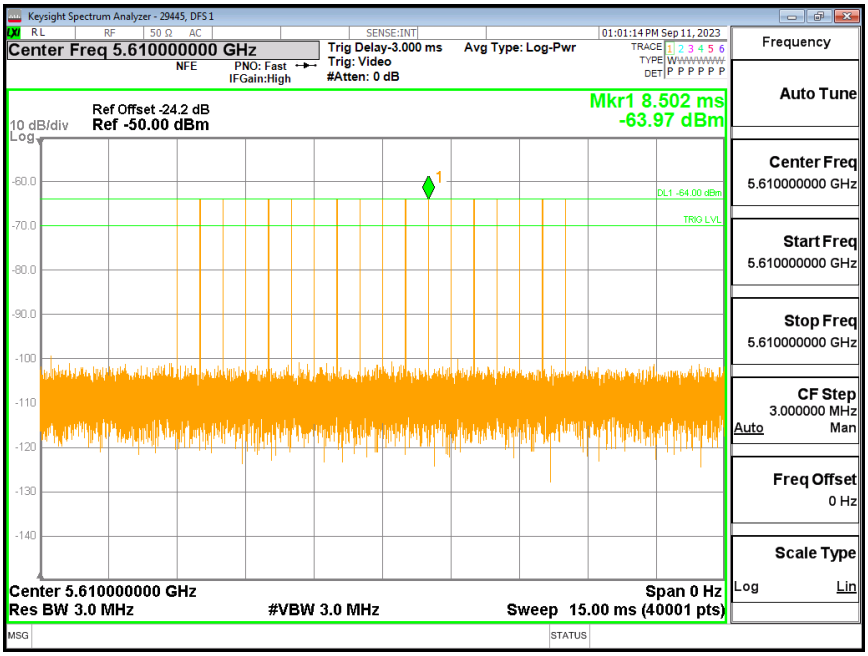
SAMPLE OF RADAR TYPE 1



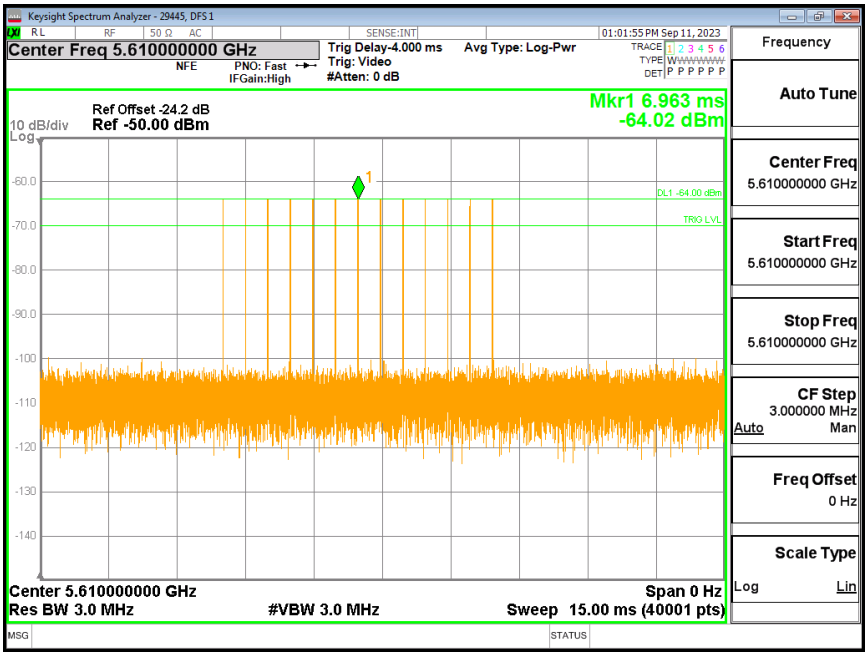
SAMPLE OF RADAR TYPE 2



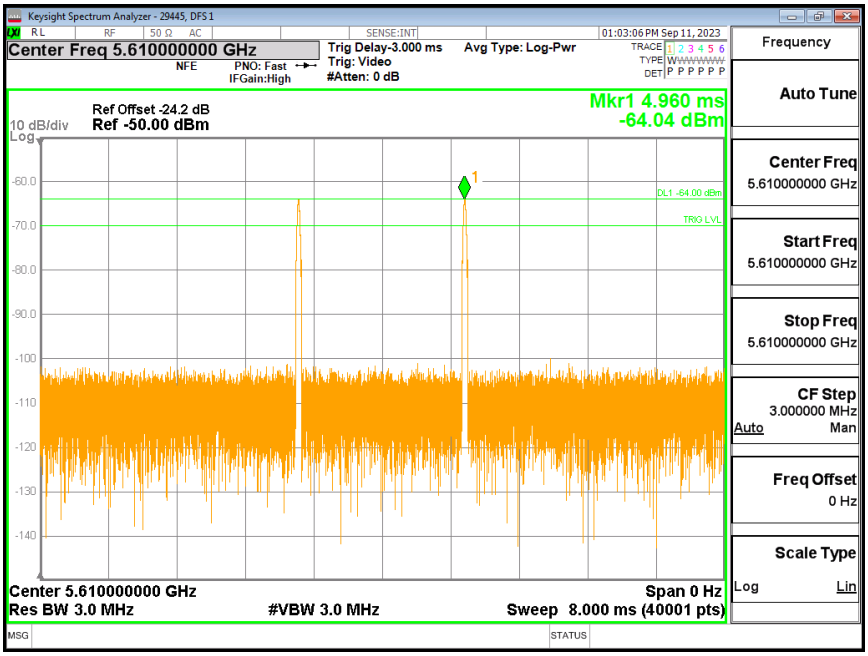
SAMPLE OF RADAR TYPE 3



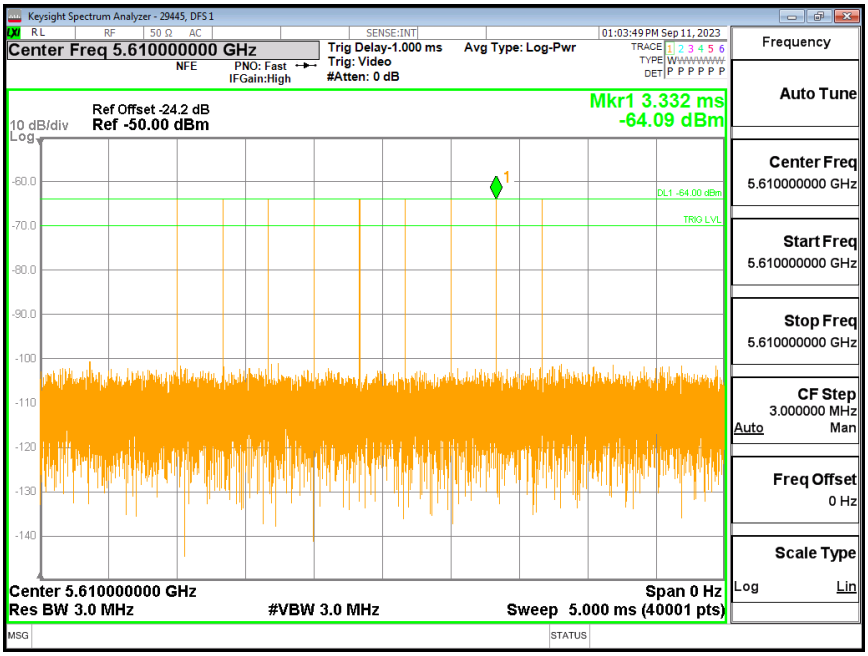
SAMPLE OF RADAR TYPE 4



SAMPLE OF SINGLE BURST OF RADAR TYPE 5

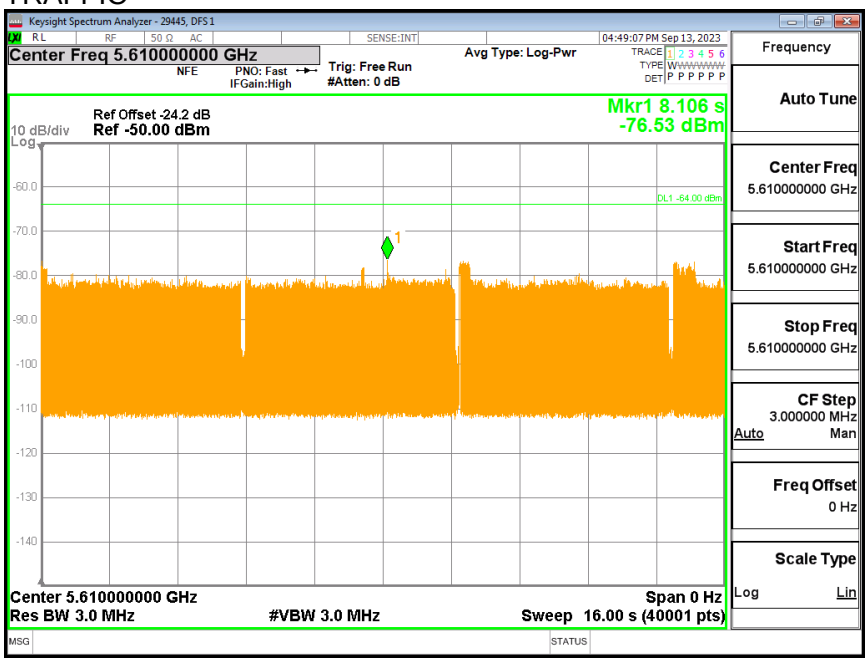


SINGLE BURST OF RADAR TYPE 6

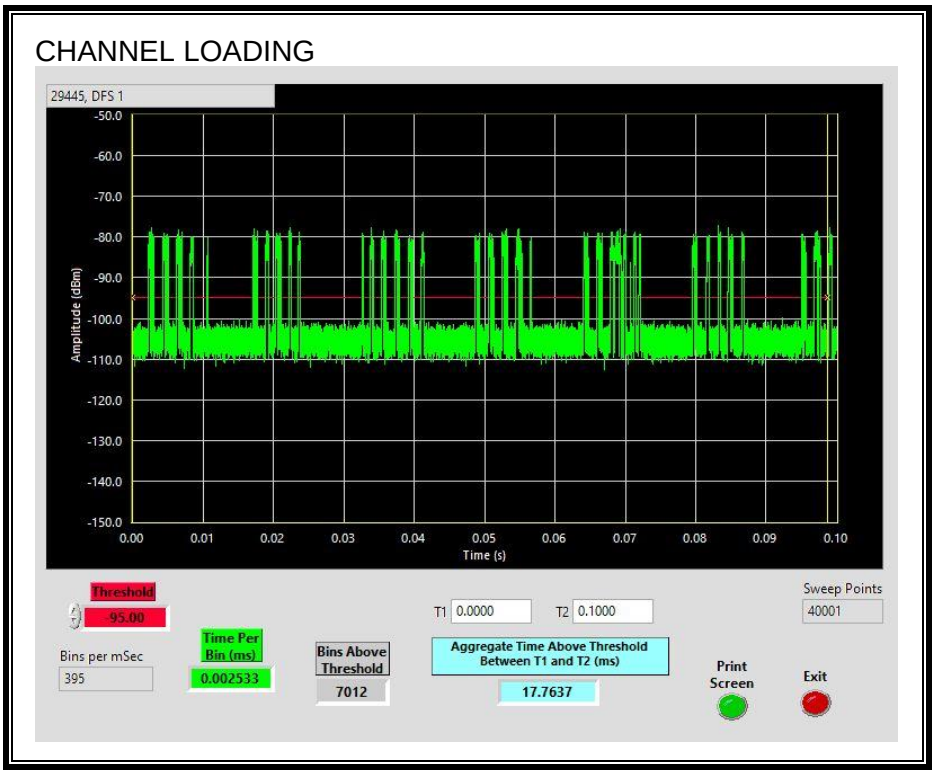


**TRAFFIC**

TRAFFIC



**CHANNEL LOADING**




The level of traffic loading on the channel by the EUT is 17.76%

## 7.7.3. CHANNEL AVAILABILITY CHECK TIME

**PROCEDURE TO DETERMINE CAC PERIOD TIME**

A software command was issued to the EUT to change to the test channel. The measured time from the software command to the start of traffic was measured. The initialization time is the 60-second CAC period subtracted from the total measured time of the plot.

**PROCEDURE FOR TIMING OF RADAR BURST**

A software command was issued to the EUT to change to the test channel. A radar signal was triggered within 0 to 6 seconds after the beginning of the CAC period. Transmissions on the channel were monitored on the spectrum analyzer and a plot was captured

The was rebooted to clear the Non-Occupancy list. A software command was issued to the EUT to change to the test channel. A radar signal was triggered within 54 to 60 seconds after the beginning of the CAC period. Transmissions on the channel were monitored on the spectrum analyzer and a plot was captured

## QUANTITATIVE RESULTS

**No Radar Triggered**

| Timing of Software Command (sec) | Timing of Start of Traffic (sec) | Channel Initialization Time (sec) |
|---|---|---|
| 0 | 65.12 | 5.12 |

**Radar Near Beginning of CAC**

| Timing of Software Command (sec) | Timing of Radar Burst (sec) | Radar Relative to Beginning of CAC (sec) |
|---|---|---|
| 0 | 7.853 | 2.733 |

**Radar Near End of CAC**

| Timing of Software Command (sec) | Timing of Radar Burst (sec) | Radar Relative to Beginning of CAC (sec) |
|---|---|---|
| 0 | 61.98 | 56.86 |

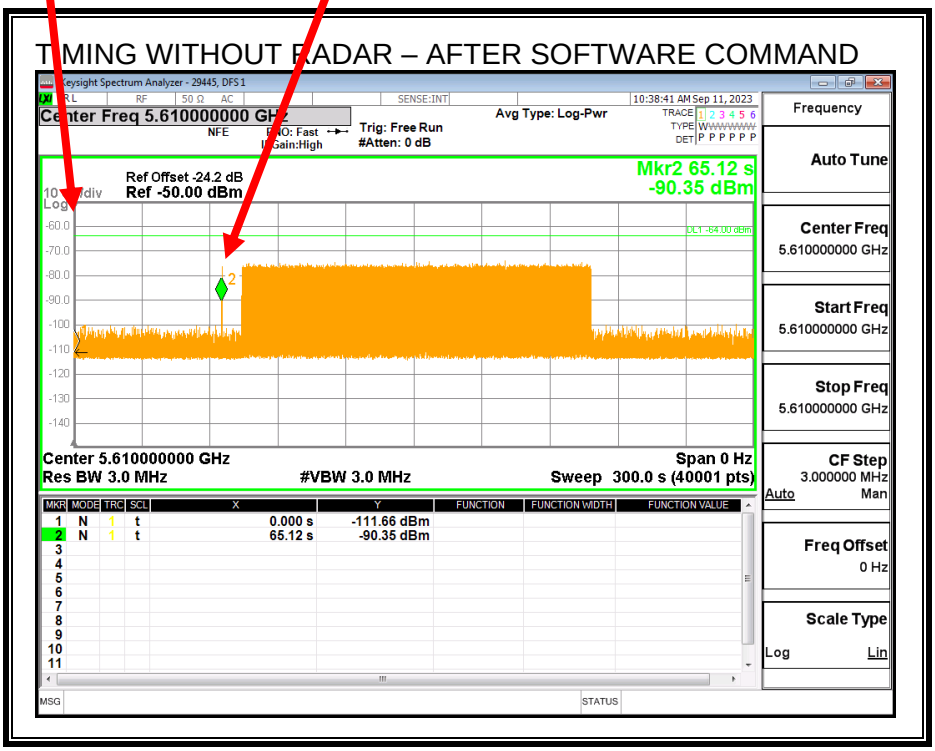
## QUALITATIVE RESULTS

| Timing of Radar Burst | Display on Control Computer | Spectrum Analyzer Display |
|---|---|---|
| No Radar Triggered | EUT marks Channel as active | Transmissions begin on channel after completion of the initialization cycle and 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**

Software Command Issued
Change to Test Channel

End of CAC Period

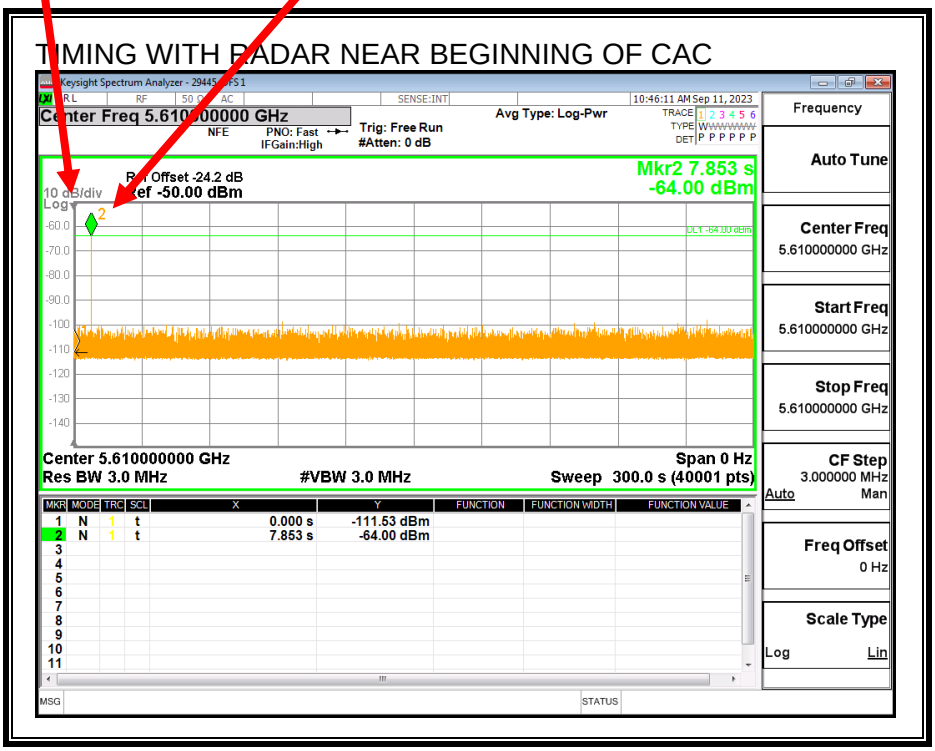



Transmissions begin on channel after completion of the initialization cycle and the CAC.

**TIMING WITH RADAR NEAR BEGINNING OF CAC**

Software Command Issued
Change to Test Channel

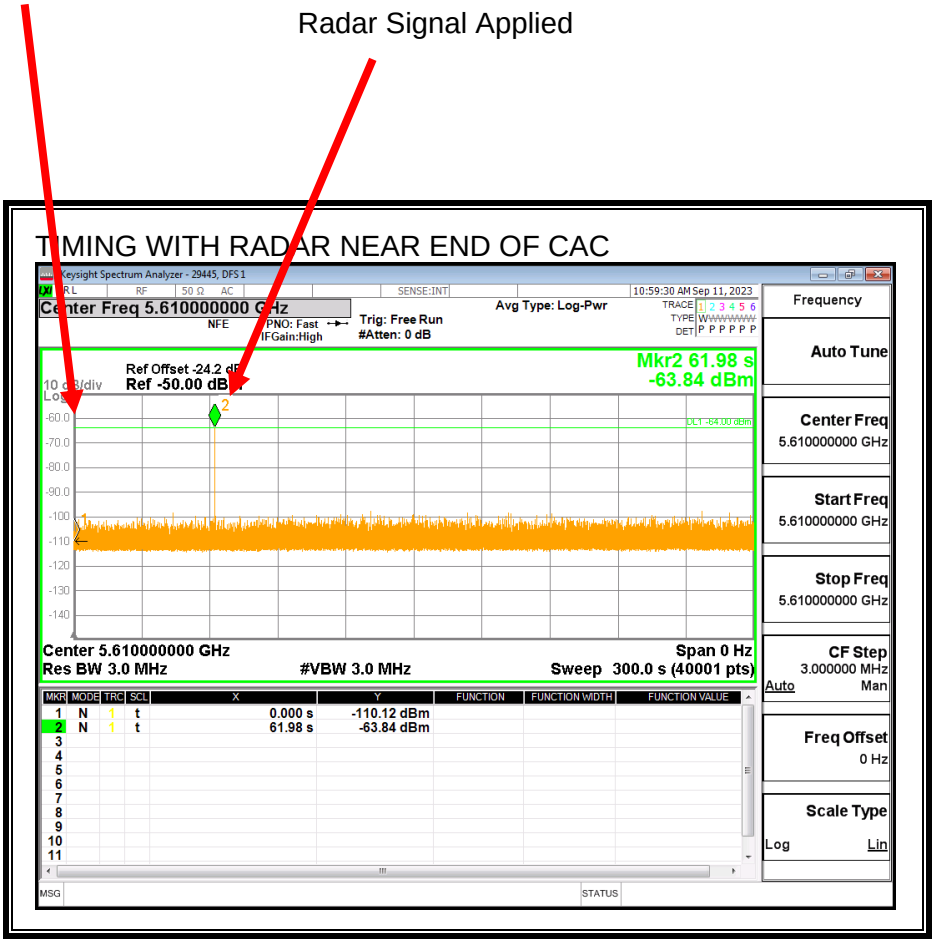
Radar Signal Applied




No EUT transmissions were observed after the radar signal.

**TIMING WITH RADAR NEAR END OF CAC**

Software Command Issued
Change to Test Channel




No EUT transmissions were observed after the radar signal.

## 7.7.4. OVERLAPPING CHANNEL TESTS

**RESULTS**

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

## 7.7.5. 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)

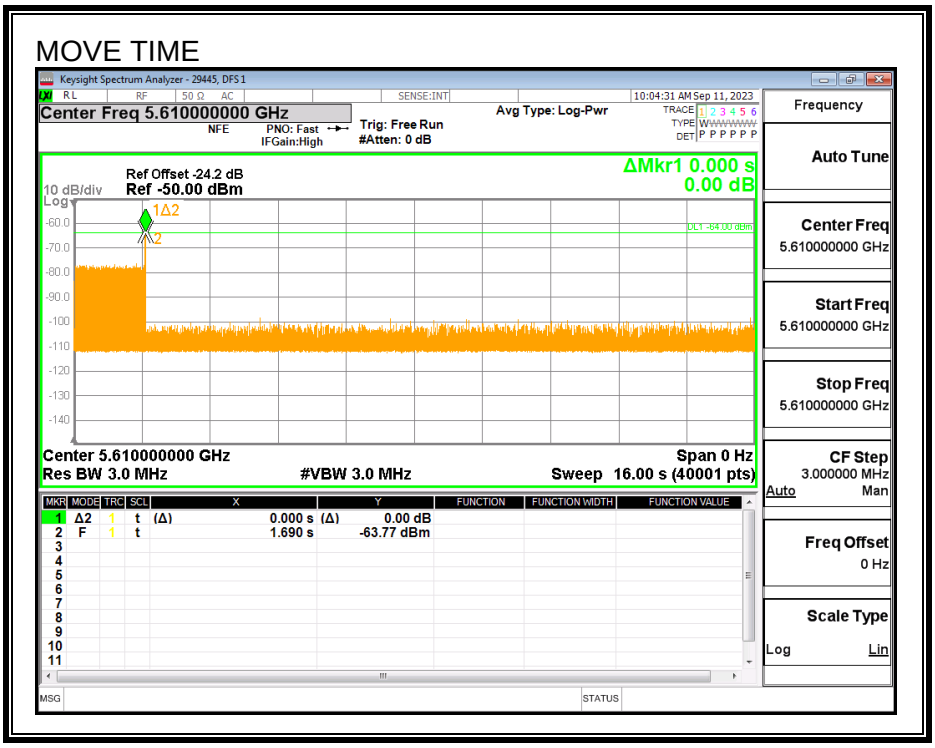
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

**RESULTS**

| Channel Move Time (sec) | Limit (sec) |
|---|---|
| 0.00 | 10 |

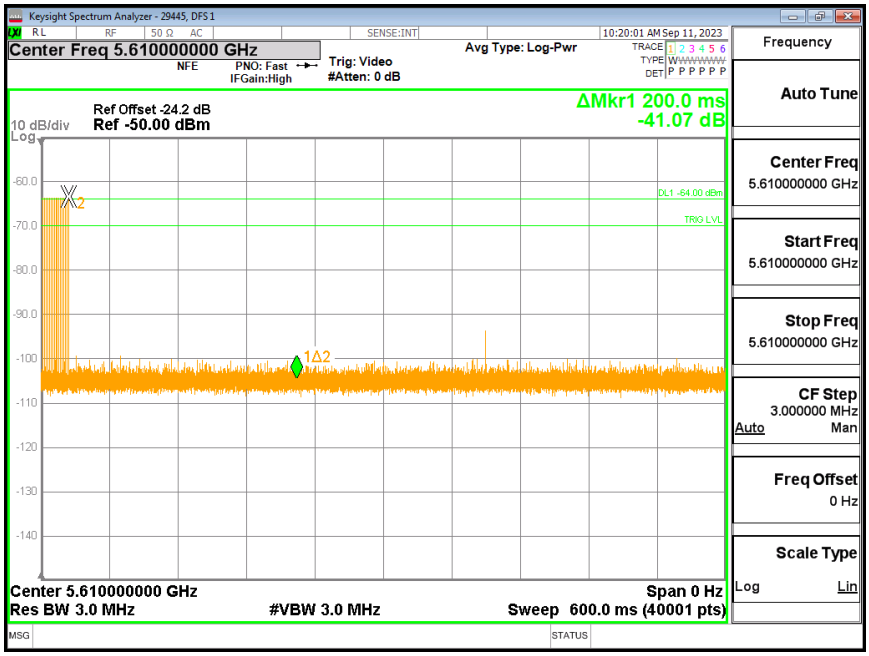
| Aggregate Channel Closing Transmission Time (msec) | Limit (msec) |
|---|---|
| 0.00 | 60 |

**MOVE TIME**



## CHANNEL CLOSING TIME

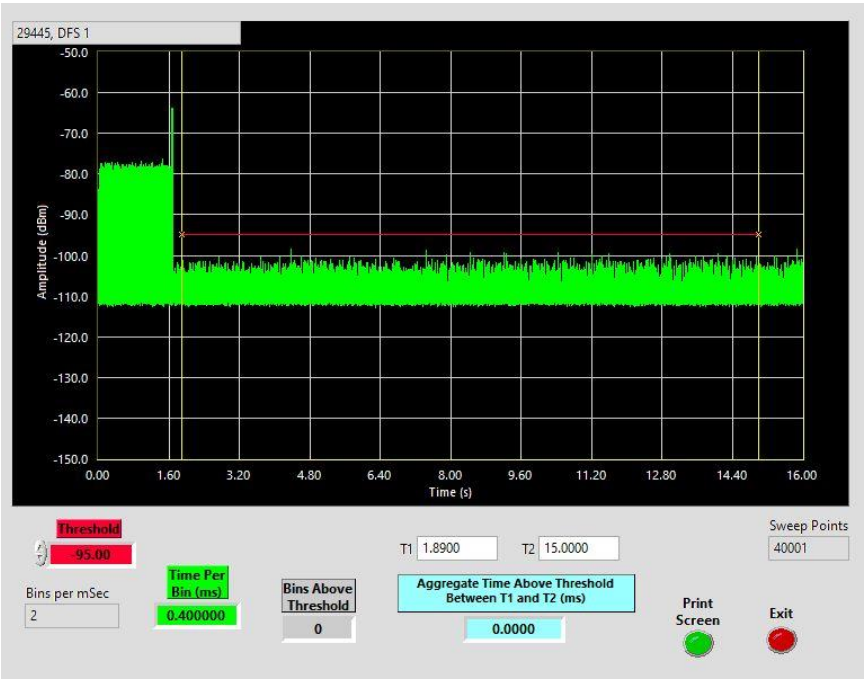
CLOSING TIME



**AGGREGATE CHANNEL CLOSING TRANSMISSION TIME**

No transmissions are observed during the aggregate monitoring period.

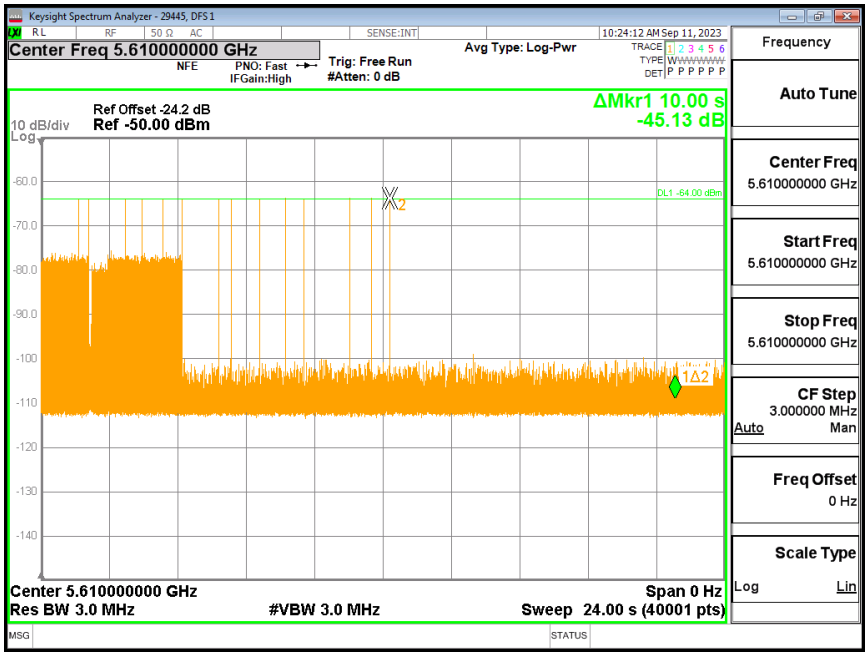
AGGREGATE CLOSING TIME



## LONG PULSE CHANNEL MOVE TIME

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

MOVE TIME FOR LONG PULSE RADAR

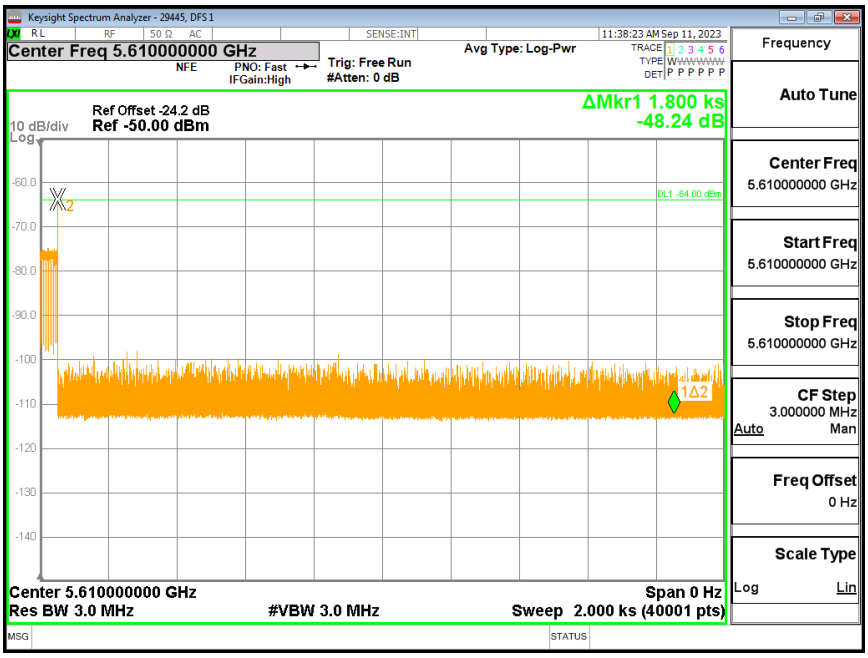


### 7.7.6. NON-OCCUPANCY PERIOD

**RESULTS**

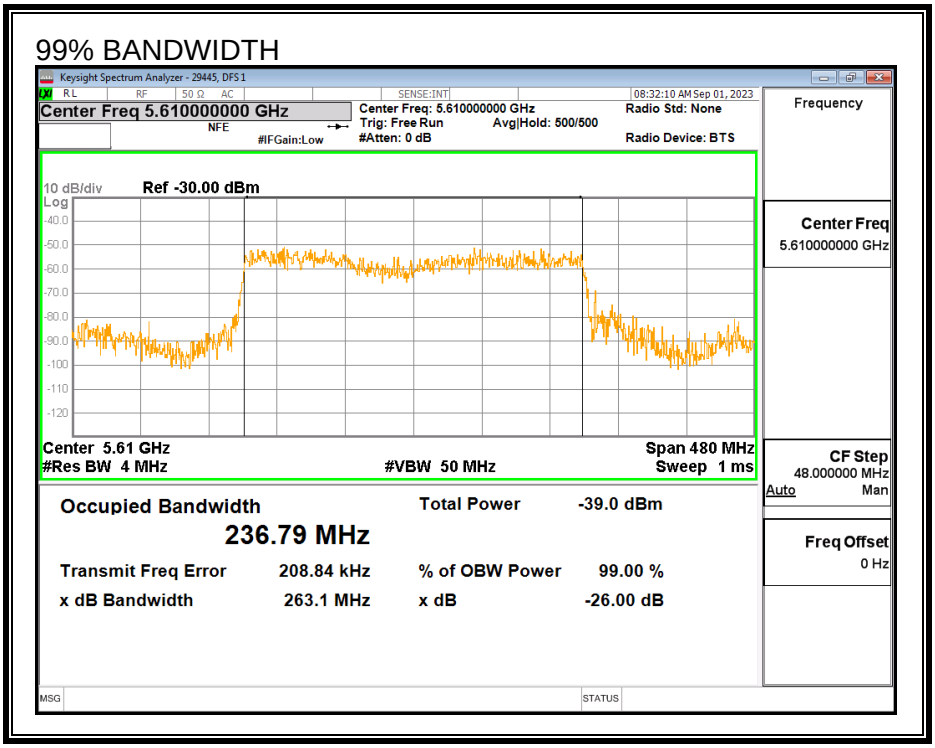
No EUT transmissions were observed on the test channel during the 30-minute observation time.

NON-OCCUPANCY PERIOD



## 7.7.7. 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 (%) |
|---|---|---|---|---|---|
| 5490 | 5730 | 240 | 236.79 | 101.4 | 100 |

**DETECTION BANDWIDTH PROBABILITY**

DETECTION BANDWIDTH PROBABILITY RESULTS

Detection Bandwidth Test Results 29445 DFS 1

FCC Type 0 Waveform: 1 us Pulse Width, 1428 us PRI, 18 Pulses per Burst

| Frequency (MHz) | Number of Trials | Number Detected | Detection (%) | Mark |
|---|---|---|---|---|
| 5490 | 10 | 10 | 100 | FL |
| 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 | |
| 5580 | 10 | 10 | 100 | |
| 5585 | 10 | 10 | 100 | |
| 5590 | 10 | 10 | 100 | |
| 5595 | 10 | 10 | 100 | |
| 5600 | 10 | 10 | 100 | |
| 5605 | 10 | 10 | 100 | |
| 5610 | 10 | 9 | 90 | |
| 5615 | 10 | 10 | 100 | |
| 5620 | 10 | 10 | 100 | |
| 5625 | 10 | 10 | 100 | |
| 5630 | 10 | 10 | 100 | |
| 5635 | 10 | 10 | 100 | |
| 5640 | 10 | 10 | 100 | |
| 5645 | 10 | 10 | 100 | |
| 5650 | 10 | 10 | 100 | |
| 5655 | 10 | 10 | 100 | |
| 5660 | 10 | 10 | 100 | |
| 5665 | 10 | 10 | 100 | |
| 5670 | 10 | 10 | 100 | |
| 5675 | 10 | 10 | 100 | |
| 5680 | 10 | 10 | 100 | |
| 5685 | 10 | 10 | 100 | |
| 5690 | 10 | 10 | 100 | |
| 5695 | 10 | 10 | 100 | |
| 5700 | 10 | 10 | 100 | |
| 5705 | 10 | 10 | 100 | |
| 5710 | 10 | 10 | 100 | |
| 5715 | 10 | 10 | 100 | |
| 5720 | 10 | 10 | 100 | |
| 5725 | 10 | 10 | 100 | |
| 5730 | 10 | 10 | 100 | FH |

## 7.7.8. IN-SERVICE MONITORING

**RESULTS**

FCC Radar Test Summary

| Signal Type | Number of Trials | Detection (%) | Limit (%) | Pass/Fail | Detection Bandwidth FL | Detection Bandwidth FH | OBW | Test Location | Employee Number | In-Service Monitoring Version |
|---|---|---|---|---|---|---|---|---|---|---|
| FCC Short Pulse Type 1 | 30 | 100.00 | 60 | Pass | 5490 | 5730 | 200 | DFS 1 | 29445 | v4.1 |
| FCC Short Pulse Type 2 | 30 | 83.33 | 60 | Pass | 5490 | 5730 | 200 | DFS 1 | 29445 | v4.1 |
| FCC Short Pulse Type 3 | 30 | 93.33 | 60 | Pass | 5490 | 5730 | 200 | DFS 1 | 29445 | v4.1 |
| FCC Short Pulse Type 4 | 30 | 96.67 | 60 | Pass | 5490 | 5730 | 200 | DFS 1 | 29445 | v4.1 |
| Aggregate | | 93.33 | 80 | Pass | | | | | | |
| FCC Long Pulse Type 5 | 30 | 96.67 | 80 | Pass | 5490 | 5730 | 200 | DFS 1 | 29445 | v4.1 |
| FCC Hopping Type 6 | 241 | 98.34 | 70 | Pass | 5490 | 5730 | | DFS 1 | 29445 | 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 | 5715 | Yes |
| 1002 | 1 | 758 | 70 | A | 5534 | Yes |
| 1003 | 1 | 698 | 76 | A | 5714 | Yes |
| 1004 | 1 | 658 | 81 | A | 5613 | Yes |
| 1005 | 1 | 638 | 83 | A | 5633 | Yes |
| 1006 | 1 | 918 | 58 | A | 5540 | Yes |
| 1007 | 1 | 558 | 95 | A | 5553 | Yes |
| 1008 | 1 | 598 | 89 | A | 5557 | Yes |
| 1009 | 1 | 538 | 99 | A | 5697 | Yes |
| 1010 | 1 | 678 | 78 | A | 5545 | Yes |
| 1011 | 1 | 778 | 68 | A | 5499 | Yes |
| 1012 | 1 | 618 | 86 | A | 5601 | Yes |
| 1013 | 1 | 578 | 92 | A | 5699 | Yes |
| 1014 | 1 | 718 | 74 | A | 5653 | Yes |
| 1015 | 1 | 938 | 57 | A | 5667 | Yes |
| 1016 | 1 | 1840 | 29 | B | 5720 | Yes |
| 1017 | 1 | 990 | 54 | B | 5655 | Yes |
| 1018 | 1 | 2493 | 22 | B | 5620 | Yes |
| 1019 | 1 | 1773 | 30 | B | 5618 | Yes |
| 1020 | 1 | 2211 | 24 | B | 5718 | Yes |
| 1021 | 1 | 2973 | 18 | B | 5588 | Yes |
| 1022 | 1 | 2187 | 25 | B | 5564 | Yes |
| 1023 | 1 | 1885 | 28 | B | 5593 | Yes |
| 1024 | 1 | 1228 | 43 | B | 5514 | Yes |
| 1025 | 1 | 1055 | 51 | B | 5642 | Yes |
| 1026 | 1 | 1882 | 29 | B | 5513 | Yes |
| 1027 | 1 | 643 | 83 | B | 5542 | Yes |
| 1028 | 1 | 1599 | 34 | B | 5726 | Yes |
| 1029 | 1 | 3038 | 18 | B | 5714 | Yes |
| 1030 | 1 | 2929 | 19 | B | 5634 | 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 | 1.5 | 160 | 28 | 5611 | Yes |
| 2002 | 2.6 | 201 | 24 | 5632 | Yes |
| 2003 | 3.3 | 172 | 24 | 5596 | Yes |
| 2004 | 2.7 | 179 | 27 | 5618 | No |
| 2005 | 3.7 | 196 | 27 | 5569 | Yes |
| 2006 | 3.3 | 164 | 24 | 5597 | Yes |
| 2007 | 2.5 | 228 | 27 | 5587 | Yes |
| 2008 | 2.3 | 201 | 28 | 5545 | Yes |
| 2009 | 1.8 | 188 | 25 | 5713 | Yes |
| 2010 | 4 | 208 | 27 | 5598 | Yes |
| 2011 | 1.7 | 161 | 24 | 5650 | Yes |
| 2012 | 4.1 | 185 | 23 | 5558 | No |
| 2013 | 2.1 | 224 | 24 | 5539 | Yes |
| 2014 | 4.7 | 213 | 23 | 5524 | Yes |
| 2015 | 2.8 | 175 | 25 | 5655 | No |
| 2016 | 3.7 | 169 | 24 | 5590 | Yes |
| 2017 | 4.3 | 216 | 23 | 5539 | Yes |
| 2018 | 1.3 | 176 | 29 | 5600 | No |
| 2019 | 2 | 189 | 28 | 5608 | Yes |
| 2020 | 1.4 | 153 | 25 | 5580 | Yes |
| 2021 | 2.4 | 170 | 25 | 5606 | Yes |
| 2022 | 2 | 219 | 25 | 5714 | Yes |
| 2023 | 1.2 | 203 | 25 | 5532 | Yes |
| 2024 | 1 | 175 | 26 | 5679 | No |
| 2025 | 4.6 | 163 | 23 | 5627 | Yes |
| 2026 | 2.7 | 225 | 25 | 5602 | Yes |
| 2027 | 4.5 | 217 | 26 | 5575 | Yes |
| 2028 | 2.8 | 159 | 27 | 5679 | Yes |
| 2029 | 4.9 | 198 | 29 | 5633 | Yes |
| 2030 | 3.4 | 188 | 28 | 5600 | 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 | 6.5 | 500 | 18 | 5681 | Yes |
| 3002 | 9.6 | 481 | 18 | 5637 | Yes |
| 3003 | 8 | 376 | 18 | 5716 | Yes |
| 3004 | 9.1 | 251 | 17 | 5500 | Yes |
| 3005 | 9.8 | 292 | 17 | 5619 | Yes |
| 3006 | 9.2 | 432 | 16 | 5669 | Yes |
| 3007 | 6.1 | 485 | 18 | 5697 | Yes |
| 3008 | 9.8 | 386 | 16 | 5669 | Yes |
| 3009 | 9 | 335 | 16 | 5589 | Yes |
| 3010 | 6.9 | 382 | 16 | 5635 | Yes |
| 3011 | 6.4 | 461 | 18 | 5519 | Yes |
| 3012 | 6.4 | 404 | 18 | 5609 | Yes |
| 3013 | 8.2 | 378 | 16 | 5565 | Yes |
| 3014 | 6.5 | 451 | 17 | 5716 | Yes |
| 3015 | 8.6 | 320 | 17 | 5508 | Yes |
| 3016 | 7.1 | 288 | 17 | 5581 | Yes |
| 3017 | 7.4 | 421 | 17 | 5633 | Yes |
| 3018 | 8.3 | 401 | 17 | 5525 | Yes |
| 3019 | 6.7 | 296 | 17 | 5502 | Yes |
| 3020 | 9.9 | 423 | 16 | 5723 | Yes |
| 3021 | 8.5 | 464 | 16 | 5711 | Yes |
| 3022 | 7.9 | 352 | 18 | 5592 | Yes |
| 3023 | 8.9 | 406 | 16 | 5563 | Yes |
| 3024 | 6.5 | 307 | 18 | 5548 | Yes |
| 3025 | 7.7 | 256 | 16 | 5649 | Yes |
| 3026 | 9.7 | 303 | 18 | 5548 | Yes |
| 3027 | 9.2 | 264 | 17 | 5698 | Yes |
| 3028 | 7.2 | 324 | 18 | 5648 | No |
| 3029 | 6.9 | 299 | 18 | 5500 | No |
| 3030 | 9.3 | 254 | 16 | 5632 | 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 | 13.9 | 492 | 13 | 5682 | Yes |
| 4002 | 15.4 | 459 | 12 | 5719 | No |
| 4003 | 11.3 | 341 | 13 | 5662 | Yes |
| 4004 | 13.3 | 322 | 13 | 5726 | Yes |
| 4005 | 18.8 | 350 | 12 | 5659 | Yes |
| 4006 | 16.9 | 343 | 12 | 5638 | Yes |
| 4007 | 13.8 | 384 | 16 | 5632 | Yes |
| 4008 | 12.4 | 273 | 14 | 5711 | Yes |
| 4009 | 19.4 | 326 | 16 | 5688 | Yes |
| 4010 | 18.5 | 361 | 14 | 5651 | Yes |
| 4011 | 12 | 427 | 16 | 5633 | Yes |
| 4012 | 16.4 | 475 | 14 | 5631 | Yes |
| 4013 | 15.2 | 436 | 12 | 5529 | Yes |
| 4014 | 20 | 496 | 16 | 5671 | Yes |
| 4015 | 19.3 | 470 | 14 | 5617 | Yes |
| 4016 | 15.5 | 425 | 15 | 5521 | Yes |
| 4017 | 11 | 412 | 16 | 5611 | Yes |
| 4018 | 12.5 | 380 | 15 | 5520 | Yes |
| 4019 | 17.6 | 262 | 12 | 5676 | Yes |
| 4020 | 19.5 | 494 | 16 | 5531 | Yes |
| 4021 | 15.9 | 271 | 15 | 5592 | Yes |
| 4022 | 14.1 | 264 | 13 | 5534 | Yes |
| 4023 | 15.8 | 305 | 12 | 5575 | Yes |
| 4024 | 18.6 | 444 | 12 | 5499 | Yes |
| 4025 | 16.5 | 498 | 14 | 5727 | Yes |
| 4026 | 15.6 | 281 | 12 | 5571 | Yes |
| 4027 | 18.2 | 348 | 15 | 5670 | Yes |
| 4028 | 13.5 | 395 | 13 | 5567 | Yes |
| 4029 | 12.3 | 357 | 13 | 5649 | Yes |
| 4030 | 17.2 | 417 | 14 | 5556 | Yes |

**TYPE 5 DETECTION PROBABILITY**

| Data Sheet for FCC Long Pulse Radar Type 5 | | |
|---|---|---|
| Trial | Frequency (MHz) | Successful Detection (Yes/No) |
| 1 | 5610 | Yes |
| 2 | 5610 | Yes |
| 3 | 5610 | Yes |
| 4 | 5610 | Yes |
| 5 | 5610 | Yes |
| 6 | 5610 | Yes |
| 7 | 5610 | Yes |
| 8 | 5610 | Yes |
| 9 | 5610 | Yes |
| 10 | 5610 | Yes |
| 11 | 5513 | Yes |
| 12 | 5517 | Yes |
| 13 | 5518 | Yes |
| 14 | 5516 | Yes |
| 15 | 5513 | No |
| 16 | 5518 | Yes |
| 17 | 5518 | Yes |
| 18 | 5513 | Yes |
| 19 | 5515 | Yes |
| 20 | 5518 | Yes |
| 21 | 5704 | Yes |
| 22 | 5707 | Yes |
| 23 | 5702 | Yes |
| 24 | 5702 | Yes |
| 25 | 5707 | Yes |
| 26 | 5706 | Yes |
| 27 | 5702 | Yes |
| 28 | 5704 | Yes |
| 29 | 5707 | Yes |
| 30 | 5702 | 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 | 545 | 5490 | 56 | Yes |
| 2 | 1020 | 5491 | 46 | Yes |
| 3 | 1495 | 5492 | 42 | Yes |
| 4 | 1970 | 5493 | 43 | Yes |
| 5 | 2445 | 5494 | 53 | Yes |
| 6 | 2920 | 5495 | 47 | Yes |
| 7 | 3395 | 5496 | 39 | Yes |
| 8 | 3870 | 5497 | 45 | Yes |
| 9 | 4345 | 5498 | 54 | Yes |
| 10 | 4820 | 5499 | 51 | Yes |
| 11 | 5295 | 5500 | 44 | Yes |
| 12 | 5770 | 5501 | 45 | Yes |
| 13 | 6245 | 5502 | 54 | Yes |
| 14 | 6720 | 5503 | 50 | Yes |
| 15 | 7195 | 5504 | 46 | Yes |
| 16 | 7670 | 5505 | 39 | Yes |
| 17 | 8145 | 5506 | 42 | Yes |
| 18 | 8620 | 5507 | 49 | Yes |
| 19 | 9095 | 5508 | 49 | Yes |
| 20 | 9570 | 5509 | 51 | Yes |
| 21 | 10045 | 5510 | 45 | Yes |
| 22 | 10520 | 5511 | 49 | Yes |
| 23 | 10995 | 5512 | 52 | Yes |
| 24 | 11470 | 5513 | 47 | Yes |
| 25 | 11945 | 5514 | 58 | Yes |
| 26 | 12420 | 5515 | 47 | Yes |
| 27 | 12895 | 5516 | 48 | Yes |
| 28 | 13370 | 5517 | 47 | Yes |
| 29 | 13845 | 5518 | 55 | Yes |
| 30 | 14320 | 5519 | 50 | Yes |
| 31 | 14795 | 5520 | 50 | Yes |
| 32 | 15270 | 5521 | 44 | Yes |
| 33 | 15745 | 5522 | 51 | Yes |
| 34 | 16220 | 5523 | 46 | Yes |
| 35 | 16695 | 5524 | 43 | No |
| 36 | 17170 | 5525 | 49 | Yes |
| 37 | 17645 | 5526 | 55 | Yes |
| 38 | 18120 | 5527 | 46 | Yes |
| 39 | 18595 | 5528 | 49 | Yes |

**TYPE 6 DETECTION PROBABILITY (CONTINUED)**

| | | | | |
|---|---|---|---|---|
| 40 | 19070 | 5529 | 47 | Yes |
| 41 | 19545 | 5530 | 40 | No |
| 42 | 20020 | 5531 | 48 | Yes |
| 43 | 20495 | 5532 | 42 | Yes |
| 44 | 20970 | 5533 | 45 | Yes |
| 45 | 21445 | 5534 | 48 | Yes |
| 46 | 21920 | 5535 | 53 | Yes |
| 47 | 22395 | 5536 | 60 | Yes |
| 48 | 22870 | 5537 | 52 | Yes |
| 49 | 23345 | 5538 | 55 | Yes |
| 50 | 23820 | 5539 | 47 | Yes |
| 51 | 24295 | 5540 | 49 | No |
| 52 | 24770 | 5541 | 48 | Yes |
| 53 | 25245 | 5542 | 52 | Yes |
| 54 | 25720 | 5543 | 46 | Yes |
| 55 | 26195 | 5544 | 50 | Yes |
| 56 | 26670 | 5545 | 47 | Yes |
| 57 | 27145 | 5546 | 47 | Yes |
| 58 | 27620 | 5547 | 54 | Yes |
| 59 | 28095 | 5548 | 50 | Yes |
| 60 | 28570 | 5549 | 50 | Yes |
| 61 | 29045 | 5550 | 46 | Yes |
| 62 | 29520 | 5551 | 46 | Yes |
| 63 | 29995 | 5552 | 47 | Yes |
| 64 | 30470 | 5553 | 53 | Yes |
| 65 | 30945 | 5554 | 47 | Yes |
| 66 | 31420 | 5555 | 49 | Yes |
| 67 | 31895 | 5556 | 53 | Yes |
| 68 | 32370 | 5557 | 50 | Yes |
| 69 | 32845 | 5558 | 48 | Yes |
| 70 | 33320 | 5559 | 48 | Yes |
| 71 | 33795 | 5560 | 42 | Yes |
| 72 | 34270 | 5561 | 56 | Yes |
| 73 | 34745 | 5562 | 46 | Yes |
| 74 | 35220 | 5563 | 48 | Yes |
| 75 | 35695 | 5564 | 52 | Yes |
| 76 | 36170 | 5565 | 51 | Yes |
| 77 | 36645 | 5566 | 51 | Yes |
| 78 | 37120 | 5567 | 55 | Yes |
| 79 | 37595 | 5568 | 47 | Yes |

**TYPE 6 DETECTION PROBABILITY (CONTINUED)**

| | | | | |
|---|---|---|---|---|
| 80 | 38070 | 5569 | 54 | Yes |
| 81 | 38545 | 5570 | 49 | Yes |
| 82 | 39020 | 5571 | 52 | Yes |
| 83 | 39495 | 5572 | 53 | Yes |
| 84 | 39970 | 5573 | 57 | Yes |
| 85 | 40445 | 5574 | 53 | Yes |
| 86 | 40920 | 5575 | 53 | Yes |
| 87 | 41395 | 5576 | 45 | Yes |
| 88 | 41870 | 5577 | 42 | Yes |
| 89 | 42345 | 5578 | 49 | Yes |
| 90 | 42820 | 5579 | 43 | Yes |
| 91 | 43295 | 5580 | 52 | Yes |
| 92 | 43770 | 5581 | 51 | Yes |
| 93 | 44245 | 5582 | 45 | Yes |
| 94 | 44720 | 5583 | 48 | Yes |
| 95 | 45195 | 5584 | 51 | Yes |
| 96 | 45670 | 5585 | 52 | Yes |
| 97 | 46145 | 5586 | 50 | Yes |
| 98 | 46620 | 5587 | 43 | Yes |
| 99 | 47095 | 5588 | 50 | Yes |
| 100 | 47570 | 5589 | 49 | Yes |
| 101 | 48045 | 5590 | 51 | Yes |
| 102 | 48520 | 5591 | 52 | Yes |
| 103 | 48995 | 5592 | 48 | Yes |
| 104 | 49470 | 5593 | 54 | Yes |
| 105 | 49945 | 5594 | 57 | Yes |
| 106 | 50420 | 5595 | 56 | Yes |
| 107 | 50895 | 5596 | 48 | Yes |
| 108 | 51370 | 5597 | 49 | Yes |
| 109 | 51845 | 5598 | 46 | Yes |
| 110 | 52320 | 5599 | 52 | Yes |
| 111 | 52795 | 5600 | 43 | Yes |
| 112 | 53270 | 5601 | 48 | Yes |
| 113 | 53745 | 5602 | 47 | Yes |
| 114 | 54220 | 5603 | 54 | Yes |
| 115 | 54695 | 5604 | 43 | Yes |
| 116 | 55170 | 5605 | 47 | Yes |
| 117 | 55645 | 5606 | 39 | Yes |
| 118 | 56120 | 5607 | 50 | Yes |
| 119 | 56595 | 5608 | 53 | Yes |

**TYPE 6 DETECTION PROBABILITY (CONTINUED)**

| | | | | |
|---|---|---|---|---|
| 120 | 57070 | 5609 | 49 | Yes |
| 121 | 57545 | 5610 | 53 | Yes |
| 122 | 58020 | 5611 | 49 | Yes |
| 123 | 58495 | 5612 | 44 | Yes |
| 124 | 58970 | 5613 | 53 | Yes |
| 125 | 59445 | 5614 | 56 | Yes |
| 126 | 59920 | 5615 | 50 | Yes |
| 127 | 60395 | 5616 | 50 | Yes |
| 128 | 60870 | 5617 | 49 | Yes |
| 129 | 61345 | 5618 | 57 | Yes |
| 130 | 61820 | 5619 | 55 | Yes |
| 131 | 62295 | 5620 | 50 | Yes |
| 132 | 62770 | 5621 | 44 | Yes |
| 133 | 63245 | 5622 | 53 | Yes |
| 134 | 63720 | 5623 | 49 | Yes |
| 135 | 64195 | 5624 | 45 | Yes |
| 136 | 64670 | 5625 | 59 | Yes |
| 137 | 65145 | 5626 | 51 | Yes |
| 138 | 84 | 5627 | 45 | Yes |
| 139 | 559 | 5628 | 53 | Yes |
| 140 | 1034 | 5629 | 50 | Yes |
| 141 | 1509 | 5630 | 45 | Yes |
| 142 | 1984 | 5631 | 46 | Yes |
| 143 | 2459 | 5632 | 58 | Yes |
| 144 | 2934 | 5633 | 48 | Yes |
| 145 | 3409 | 5634 | 37 | Yes |
| 146 | 3884 | 5635 | 44 | Yes |
| 147 | 4359 | 5636 | 48 | Yes |
| 148 | 4834 | 5637 | 50 | Yes |
| 149 | 5309 | 5638 | 45 | Yes |
| 150 | 5784 | 5639 | 47 | Yes |
| 151 | 6259 | 5640 | 50 | Yes |
| 152 | 6734 | 5641 | 50 | Yes |
| 153 | 7209 | 5642 | 46 | Yes |
| 154 | 7684 | 5643 | 43 | Yes |
| 155 | 8159 | 5644 | 40 | Yes |
| 156 | 8634 | 5645 | 50 | Yes |
| 157 | 9109 | 5646 | 53 | Yes |
| 158 | 9584 | 5647 | 50 | Yes |
| 159 | 10059 | 5648 | 43 | Yes |

**TYPE 6 DETECTION PROBABILITY (CONTINUED)**

| | | | | |
|---|---|---|---|---|
| 160 | 10534 | 5649 | 51 | Yes |
| 161 | 11009 | 5650 | 55 | Yes |
| 162 | 11484 | 5651 | 46 | Yes |
| 163 | 11959 | 5652 | 54 | Yes |
| 164 | 12434 | 5653 | 51 | Yes |
| 165 | 12909 | 5654 | 47 | Yes |
| 166 | 13384 | 5655 | 48 | Yes |
| 167 | 13859 | 5656 | 53 | Yes |
| 168 | 14334 | 5657 | 49 | Yes |
| 169 | 14809 | 5658 | 49 | Yes |
| 170 | 15284 | 5659 | 46 | Yes |
| 171 | 15759 | 5660 | 48 | Yes |
| 172 | 16234 | 5661 | 45 | Yes |
| 173 | 16709 | 5662 | 46 | Yes |
| 174 | 17184 | 5663 | 49 | Yes |
| 175 | 17659 | 5664 | 56 | Yes |
| 176 | 18134 | 5665 | 45 | Yes |
| 177 | 18609 | 5666 | 53 | Yes |
| 178 | 19084 | 5667 | 47 | Yes |
| 179 | 19559 | 5668 | 43 | Yes |
| 180 | 20034 | 5669 | 49 | Yes |
| 181 | 20509 | 5670 | 41 | Yes |
| 182 | 20984 | 5671 | 47 | Yes |
| 183 | 21459 | 5672 | 48 | Yes |
| 184 | 21934 | 5673 | 53 | Yes |
| 185 | 22409 | 5674 | 54 | Yes |
| 186 | 22884 | 5675 | 56 | Yes |
| 187 | 23359 | 5676 | 50 | Yes |
| 188 | 23834 | 5677 | 46 | Yes |
| 189 | 24309 | 5678 | 49 | Yes |
| 190 | 24784 | 5679 | 50 | Yes |
| 191 | 25259 | 5680 | 52 | Yes |
| 192 | 25734 | 5681 | 48 | Yes |
| 193 | 26209 | 5682 | 57 | Yes |
| 194 | 26684 | 5683 | 43 | Yes |
| 195 | 27159 | 5684 | 50 | Yes |
| 196 | 27634 | 5685 | 49 | Yes |
| 197 | 28109 | 5686 | 47 | Yes |
| 198 | 28584 | 5687 | 54 | Yes |
| 199 | 29059 | 5688 | 48 | Yes |

**TYPE 6 DETECTION PROBABILITY (CONTINUED)**

| | | | | |
|---|---|---|---|---|
| 200 | 29534 | 5689 | 48 | Yes |
| 201 | 30009 | 5690 | 46 | Yes |
| 202 | 30484 | 5691 | 53 | Yes |
| 203 | 30959 | 5692 | 42 | Yes |
| 204 | 31434 | 5693 | 49 | Yes |
| 205 | 31909 | 5694 | 54 | Yes |
| 206 | 32384 | 5695 | 50 | Yes |
| 207 | 32859 | 5696 | 52 | No |
| 208 | 33334 | 5697 | 47 | Yes |
| 209 | 33809 | 5698 | 41 | Yes |
| 210 | 34284 | 5699 | 58 | Yes |
| 211 | 34759 | 5700 | 47 | Yes |
| 212 | 35234 | 5701 | 46 | Yes |
| 213 | 35709 | 5702 | 49 | Yes |
| 214 | 36184 | 5703 | 51 | Yes |
| 215 | 36659 | 5704 | 49 | Yes |
| 216 | 37134 | 5705 | 55 | Yes |
| 217 | 37609 | 5706 | 51 | Yes |
| 218 | 38084 | 5707 | 53 | Yes |
| 219 | 38559 | 5708 | 54 | Yes |
| 220 | 39034 | 5709 | 49 | Yes |
| 221 | 39509 | 5710 | 52 | Yes |
| 222 | 39984 | 5711 | 55 | Yes |
| 223 | 40459 | 5712 | 48 | Yes |
| 224 | 40934 | 5713 | 48 | Yes |
| 225 | 41409 | 5714 | 46 | Yes |
| 226 | 41884 | 5715 | 47 | Yes |
| 227 | 42359 | 5716 | 53 | Yes |
| 228 | 42834 | 5717 | 46 | Yes |
| 229 | 43309 | 5718 | 53 | Yes |
| 230 | 43784 | 5719 | 54 | Yes |
| 231 | 44259 | 5720 | 45 | Yes |
| 232 | 44734 | 5721 | 48 | Yes |
| 233 | 45209 | 5722 | 50 | Yes |
| 234 | 45684 | 5723 | 52 | Yes |
| 235 | 46159 | 5724 | 55 | Yes |
| 236 | 46634 | 5725 | 43 | Yes |
| 237 | 47109 | 5726 | 50 | Yes |
| 238 | 47584 | 5727 | 50 | Yes |
| 239 | 48059 | 5728 | 51 | Yes |
| 240 | 48534 | 5729 | 51 | Yes |
| 241 | 49009 | 5730 | 52 | Yes |

## 7.8. BRIDGE MODE RESULTS

Per KDB 905462 D02, Section 5.1 (footnote 2):

Networks Access Points with Bridge and/or MESH modes of operation are permitted to operate in the DFS bands but must employ a DFS function. The functionality of the Bridge mode as specified in §15.403(a) must be validated in the DFS test report. Devices operating as relays where they act as master and client must also employ DFS function for the master. The method used to validate the functionality must be documented and validation data must be documented. Bridge mode can be validated by performing a test statistical performance check (Section 7.8.4) on any one of the radar types. This is an abbreviated test to verify DFS functionality. MESH mode operational methodology must be submitted in the application for certification for evaluation by the FCC.

The manufacturer has declared that the EUT is a Access Point Device operating in a mesh network environment.

### 7.8.1. 20 MHz BANDWIDTH BRIDGE MODE IN-SERVICE MONITORING

The EUT does not support this channel bandwidth while operating in Bridge Mode. Therefore this test was not performed.

### 7.8.2. 40 MHz BANDWIDTH BRIDGE MODE IN-SERVICE MONITORING

The EUT does not support this channel bandwidth while operating in Bridge Mode. Therefore this test was not performed.

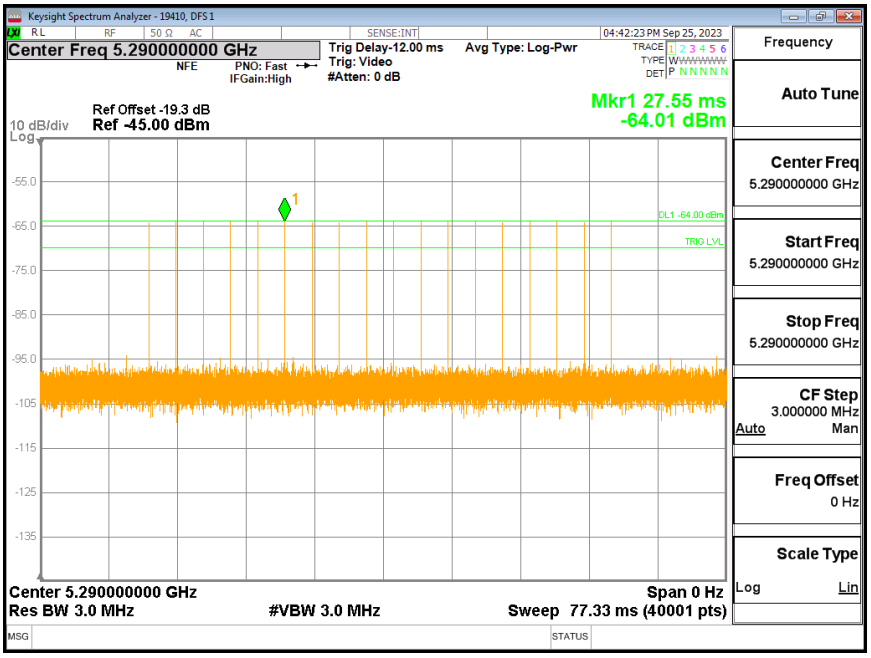
## 7.8.3. 80 MHz BANDWIDTH BRIDGE MODE IN-SERVICE MONITORING

**TEST CHANNEL**

All tests were performed at a channel center frequency of 5290 MHz.

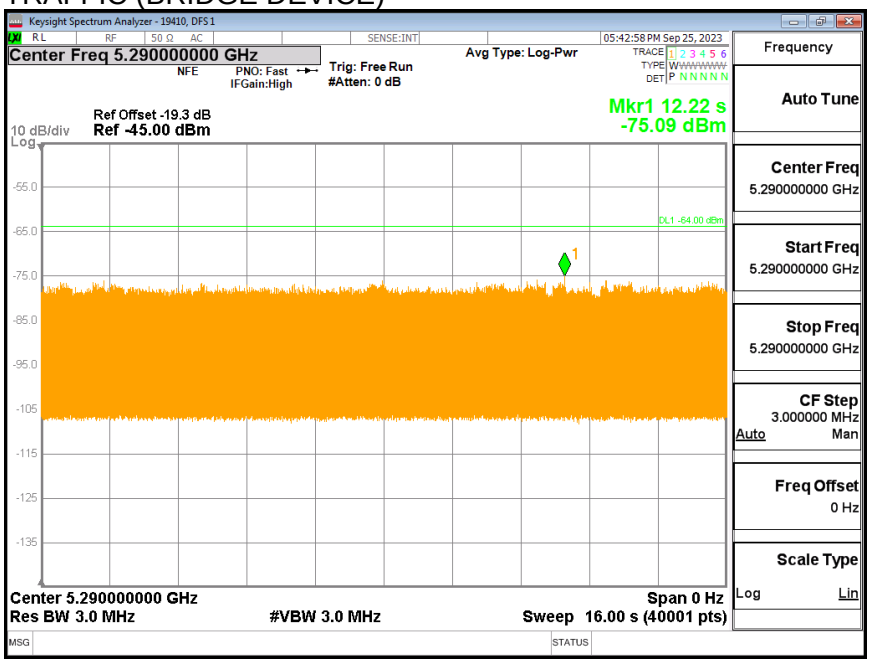
**RADAR WAVEFORM**

SAMPLE OF RADAR TYPE 1



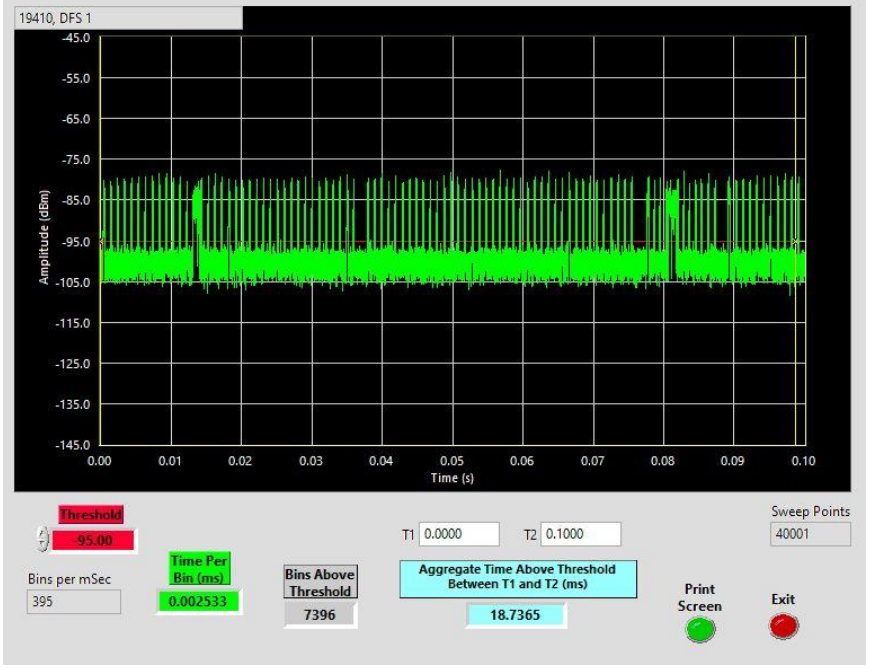
**TRAFFIC**

TRAFFIC (BRIDGE DEVICE)



**CHANNEL LOADING**

CHANNEL LOADING (BRIDGE DEVICE)




The level of traffic loading on the channel by the EUT is 18.73%

**RESULTS**

FCC Radar Test Summary

| Signal Type | Number of Trials | Detection (%) | Limit (%) | Pass/Fail | Detection Bandwidth FL | Detection Bandwidth FH | OBW | Test Location | Employee Number | In-Service Monitoring Version |
|---|---|---|---|---|---|---|---|---|---|---|
| FCC Short Pulse Type 1 | 30 | 96.67 | 60 | Pass | 5250 | 5330 | 78.66 | DFS 1 | 19410 | 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 | 5254 | Yes |
| 1002 | 1 | 758 | 70 | A | 5323 | Yes |
| 1003 | 1 | 698 | 76 | A | 5273 | Yes |
| 1004 | 1 | 658 | 81 | A | 5299 | Yes |
| 1005 | 1 | 638 | 83 | A | 5330 | Yes |
| 1006 | 1 | 918 | 58 | A | 5294 | Yes |
| 1007 | 1 | 558 | 95 | A | 5292 | Yes |
| 1008 | 1 | 598 | 89 | A | 5329 | Yes |
| 1009 | 1 | 538 | 99 | A | 5306 | Yes |
| 1010 | 1 | 678 | 78 | A | 5290 | Yes |
| 1011 | 1 | 778 | 68 | A | 5299 | Yes |
| 1012 | 1 | 618 | 86 | A | 5293 | Yes |
| 1013 | 1 | 578 | 92 | A | 5266 | Yes |
| 1014 | 1 | 718 | 74 | A | 5268 | No |
| 1015 | 1 | 938 | 57 | A | 5271 | Yes |
| 1016 | 1 | 1840 | 29 | B | 5296 | Yes |
| 1017 | 1 | 990 | 54 | B | 5312 | Yes |
| 1018 | 1 | 2493 | 22 | B | 5300 | Yes |
| 1019 | 1 | 1773 | 30 | B | 5308 | Yes |
| 1020 | 1 | 2211 | 24 | B | 5265 | Yes |
| 1021 | 1 | 2973 | 18 | B | 5254 | Yes |
| 1022 | 1 | 2187 | 25 | B | 5252 | Yes |
| 1023 | 1 | 1885 | 28 | B | 5321 | Yes |
| 1024 | 1 | 1228 | 43 | B | 5265 | Yes |
| 1025 | 1 | 1055 | 51 | B | 5311 | Yes |
| 1026 | 1 | 1882 | 29 | B | 5277 | Yes |
| 1027 | 1 | 643 | 83 | B | 5259 | Yes |
| 1028 | 1 | 1599 | 34 | B | 5292 | Yes |
| 1029 | 1 | 3038 | 18 | B | 5282 | Yes |
| 1030 | 1 | 2929 | 19 | B | 5271 | Yes |

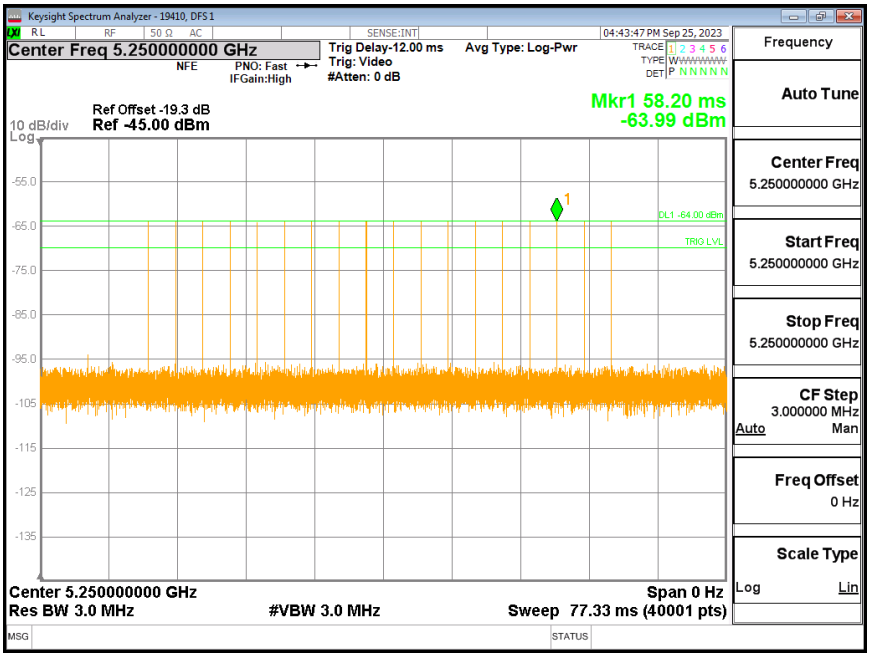
## 7.8.4. 160 MHz BANDWIDTH BRIDGE MODE IN-SERVICE MONITORING

**TEST CHANNEL**

All tests were performed at a channel center frequency of 5250 MHz.

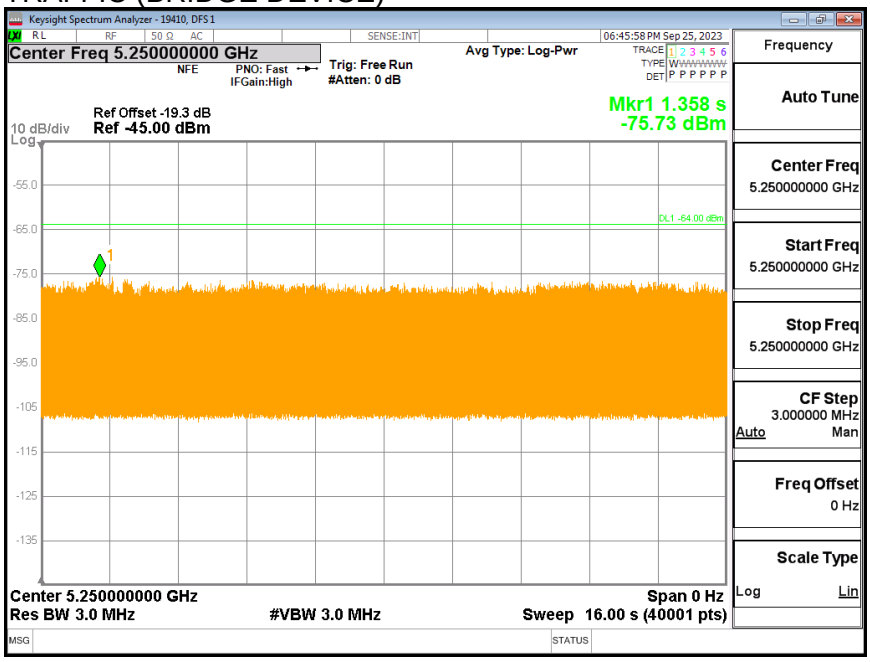
**RADAR WAVEFORM**

SAMPLE OF RADAR TYPE 1



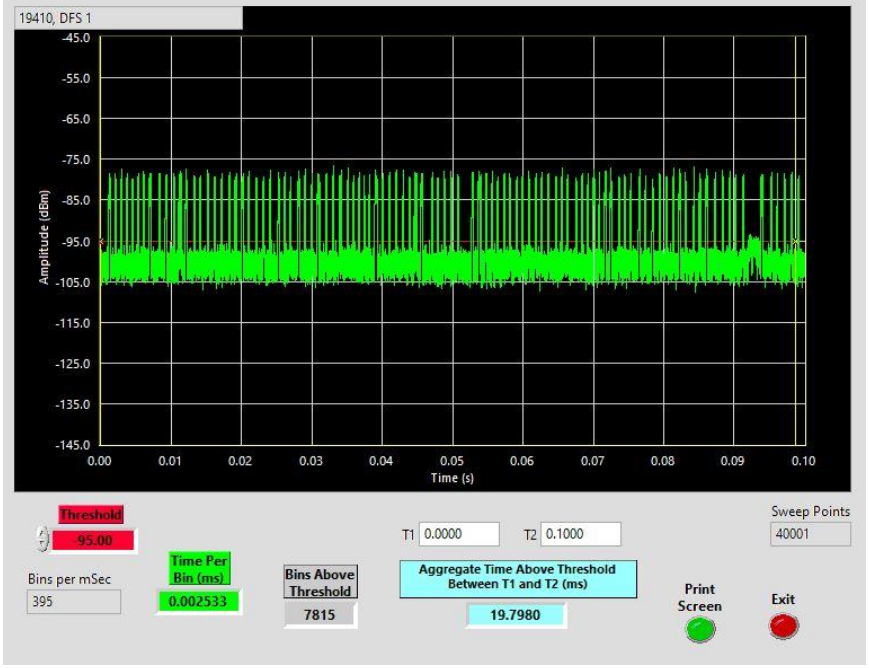
**TRAFFIC**

TRAFFIC (BRIDGE DEVICE)



**CHANNEL LOADING**

CHANNEL LOADING (BRIDGE DEVICE)




The level of traffic loading on the channel by the EUT is 19.79%

**RESULTS**

FCC Radar Test Summary

| Signal Type | Number of Trials | Detection (%) | Limit (%) | Pass/Fail | Detection Bandwidth FL | Detection Bandwidth FH | OBW | Test Location | Employee Number | In-Service Monitoring Version |
|---|---|---|---|---|---|---|---|---|---|---|
| FCC Short Pulse Type 1 | 30 | 80.00 | 60 | Pass | 5170 | 5330 | 157.38 | DFS 1 | 19410 | 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 | 5313 | Yes |
| 1002 | 1 | 758 | 70 | A | 5216 | No |
| 1003 | 1 | 698 | 76 | A | 5330 | Yes |
| 1004 | 1 | 658 | 81 | A | 5285 | Yes |
| 1005 | 1 | 638 | 83 | A | 5251 | Yes |
| 1006 | 1 | 918 | 58 | A | 5180 | No |
| 1007 | 1 | 558 | 95 | A | 5272 | Yes |
| 1008 | 1 | 598 | 89 | A | 5257 | Yes |
| 1009 | 1 | 538 | 99 | A | 5289 | Yes |
| 1010 | 1 | 678 | 78 | A | 5274 | Yes |
| 1011 | 1 | 778 | 68 | A | 5257 | Yes |
| 1012 | 1 | 618 | 86 | A | 5231 | Yes |
| 1013 | 1 | 578 | 92 | A | 5330 | Yes |
| 1014 | 1 | 718 | 74 | A | 5211 | No |
| 1015 | 1 | 938 | 57 | A | 5237 | No |
| 1016 | 1 | 1840 | 29 | B | 5317 | Yes |
| 1017 | 1 | 990 | 54 | B | 5227 | Yes |
| 1018 | 1 | 2493 | 22 | B | 5182 | No |
| 1019 | 1 | 1773 | 30 | B | 5280 | Yes |
| 1020 | 1 | 2211 | 24 | B | 5322 | Yes |
| 1021 | 1 | 2973 | 18 | B | 5243 | No |
| 1022 | 1 | 2187 | 25 | B | 5173 | Yes |
| 1023 | 1 | 1885 | 28 | B | 5286 | Yes |
| 1024 | 1 | 1228 | 43 | B | 5308 | Yes |
| 1025 | 1 | 1055 | 51 | B | 5270 | Yes |
| 1026 | 1 | 1882 | 29 | B | 5209 | Yes |
| 1027 | 1 | 643 | 83 | B | 5320 | Yes |
| 1028 | 1 | 1599 | 34 | B | 5253 | Yes |
| 1029 | 1 | 3038 | 18 | B | 5270 | Yes |
| 1030 | 1 | 2929 | 19 | B | 5221 | Yes |

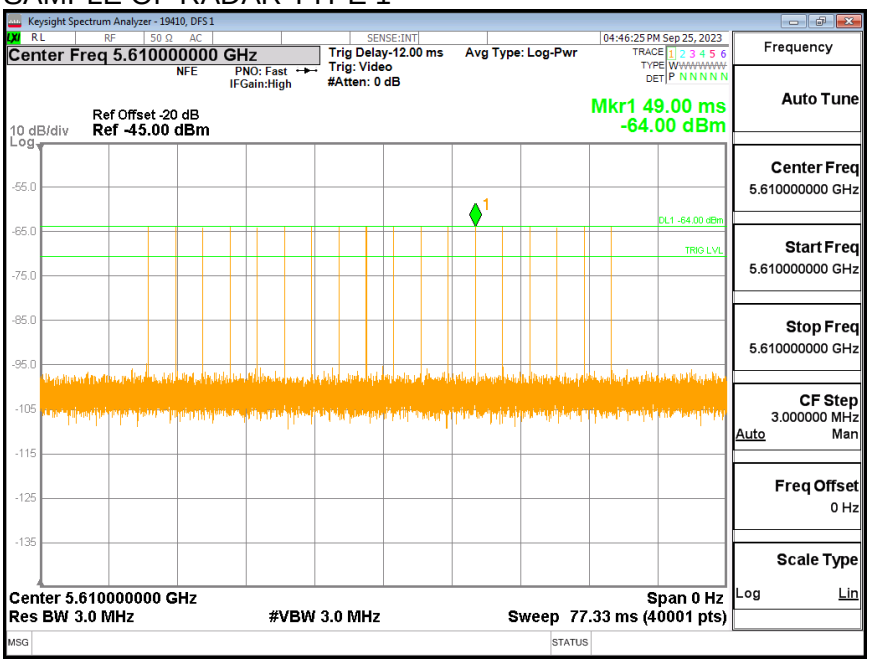
## 7.8.5. 240 MHz BANDWIDTH BRIDGE MODE IN-SERVICE MONITORING

**TEST CHANNEL**

All tests were performed at a channel center frequency of 5610 MHz.

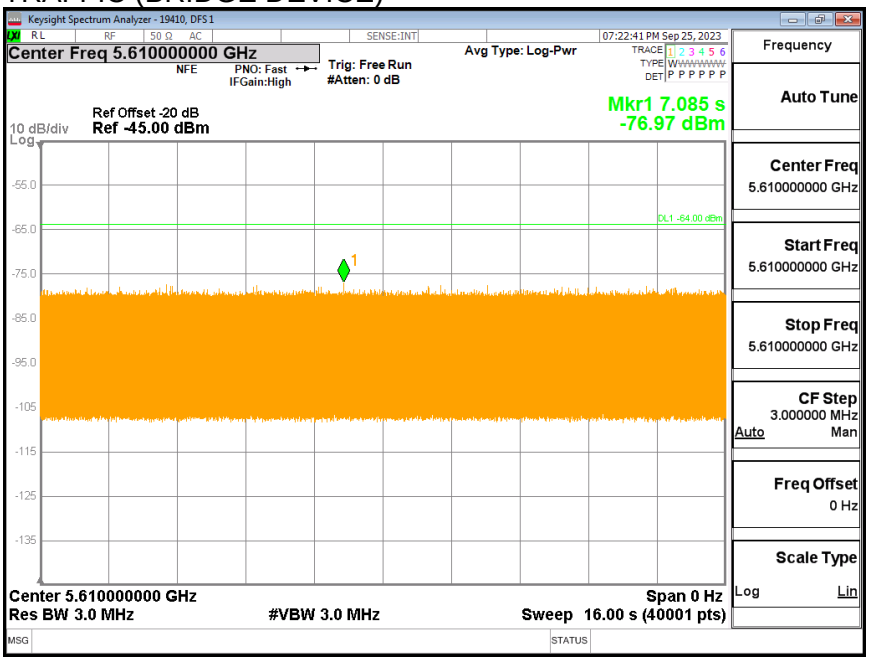
**RADAR WAVEFORM**

SAMPLE OF RADAR TYPE 1



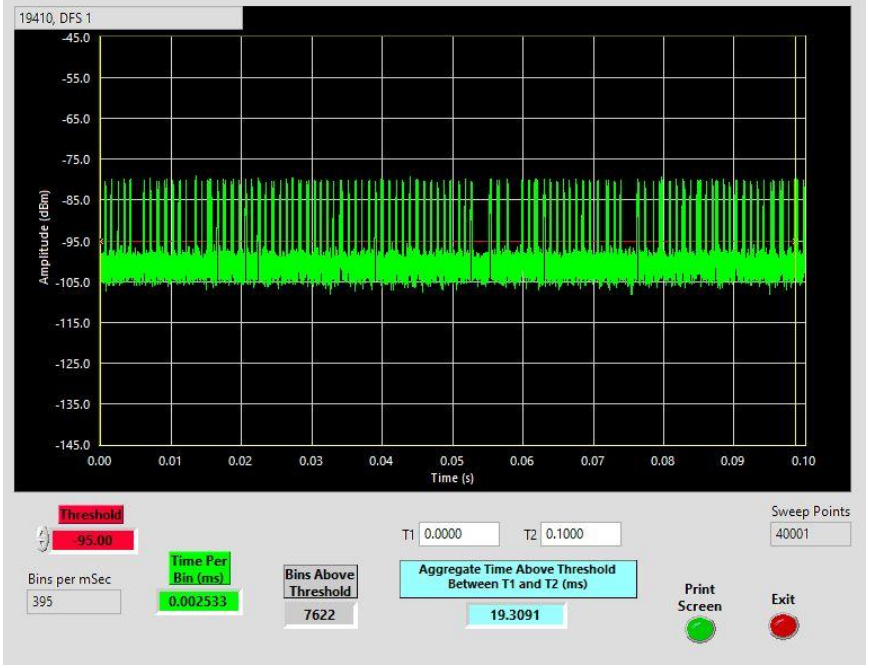
**TRAFFIC**

TRAFFIC (BRIDGE DEVICE)



**CHANNEL LOADING**

CHANNEL LOADING (BRIDGE DEVICE)




The level of traffic loading on the channel by the EUT is 19.30%

**RESULTS**

FCC Radar Test Summary

| Signal Type | Number of Trials | Detection (%) | Limit (%) | Pass/Fail | Detection Bandwidth FL | Detection Bandwidth FH | OBW | Test Location | Employee Number | In-Service Monitoring Version |
|---|---|---|---|---|---|---|---|---|---|---|
| FCC Short Pulse Type 1 | 30 | 86.67 | 60 | Pass | 5490 | 5730 | 200 | DFS 1 | 19410 | 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 | 5613 | Yes |
| 1002 | 1 | 758 | 70 | A | 5497 | No |
| 1003 | 1 | 698 | 76 | A | 5608 | Yes |
| 1004 | 1 | 658 | 81 | A | 5500 | Yes |
| 1005 | 1 | 638 | 83 | A | 5646 | Yes |
| 1006 | 1 | 918 | 58 | A | 5609 | Yes |
| 1007 | 1 | 558 | 95 | A | 5550 | Yes |
| 1008 | 1 | 598 | 89 | A | 5515 | Yes |
| 1009 | 1 | 538 | 99 | A | 5560 | Yes |
| 1010 | 1 | 678 | 78 | A | 5500 | No |
| 1011 | 1 | 778 | 68 | A | 5630 | Yes |
| 1012 | 1 | 618 | 86 | A | 5623 | Yes |
| 1013 | 1 | 578 | 92 | A | 5654 | Yes |
| 1014 | 1 | 718 | 74 | A | 5494 | Yes |
| 1015 | 1 | 938 | 57 | A | 5543 | No |
| 1016 | 1 | 1840 | 29 | B | 5715 | Yes |
| 1017 | 1 | 990 | 54 | B | 5508 | Yes |
| 1018 | 1 | 2493 | 22 | B | 5564 | Yes |
| 1019 | 1 | 1773 | 30 | B | 5595 | Yes |
| 1020 | 1 | 2211 | 24 | B | 5683 | Yes |
| 1021 | 1 | 2973 | 18 | B | 5659 | No |
| 1022 | 1 | 2187 | 25 | B | 5565 | Yes |
| 1023 | 1 | 1885 | 28 | B | 5507 | Yes |
| 1024 | 1 | 1228 | 43 | B | 5523 | Yes |
| 1025 | 1 | 1055 | 51 | B | 5581 | Yes |
| 1026 | 1 | 1882 | 29 | B | 5691 | Yes |
| 1027 | 1 | 643 | 83 | B | 5535 | Yes |
| 1028 | 1 | 1599 | 34 | B | 5661 | Yes |
| 1029 | 1 | 3038 | 18 | B | 5535 | Yes |
| 1030 | 1 | 2929 | 19 | B | 5699 | Yes |

## 8. SETUP PHOTOS

Please refer to 14749497-EP2 for setup photo.

# END OF TEST REPORT