

Trial ID	Radar Type	Number of Bursts	Burst Period(s)	Wave from Length (s)	Center Frequency(GHz)	-		
29	Type 5	18	0.666667	12	5.5617			
	Burst ID	Burst Offset (us)	Pulse Width (us)	Chirp Width (MHz)	Number of Pulses per Burst	PRI-1 (us)	PRI-2 (us)	PRI-3 (us)
	0	277485	83.4	17	3	1454	1205	1801
	1	437880	97.3	17	3	1319	1826	1635
	2	598445	90.4	17	3	1079	1986	1674
	3	97088	91.8	17	3	1563	1151	1802
	4	257251	98.2	17	3	1876	1977	1766
	5	419893	59.5	17	1	1952	-	-
	6	580724	80	17	2	1253	1137	-
	7	77366	86.5	17	3	1054	1128	1828
	8	238032	91.1	17	3	1105	1599	1442
	9	398605	93.5	17	3	1867	1373	1087
	10	562025	60.7	17	1	1033	-	-
	11	57684	67.2	17	2	1288	1405	-
	12	219083	61.8	17	1	1585	-	-
	13	379234	79.4	17	2	1933	1667	-
	14	540896	81.4	17	2	1096	1464	-
	15	37916	65.7	17	1	1496	-	-
	16	198794	76	17	2	1733	1255	-
	17	359754	81	17	2	1326	1668	-

Radar Signal 6

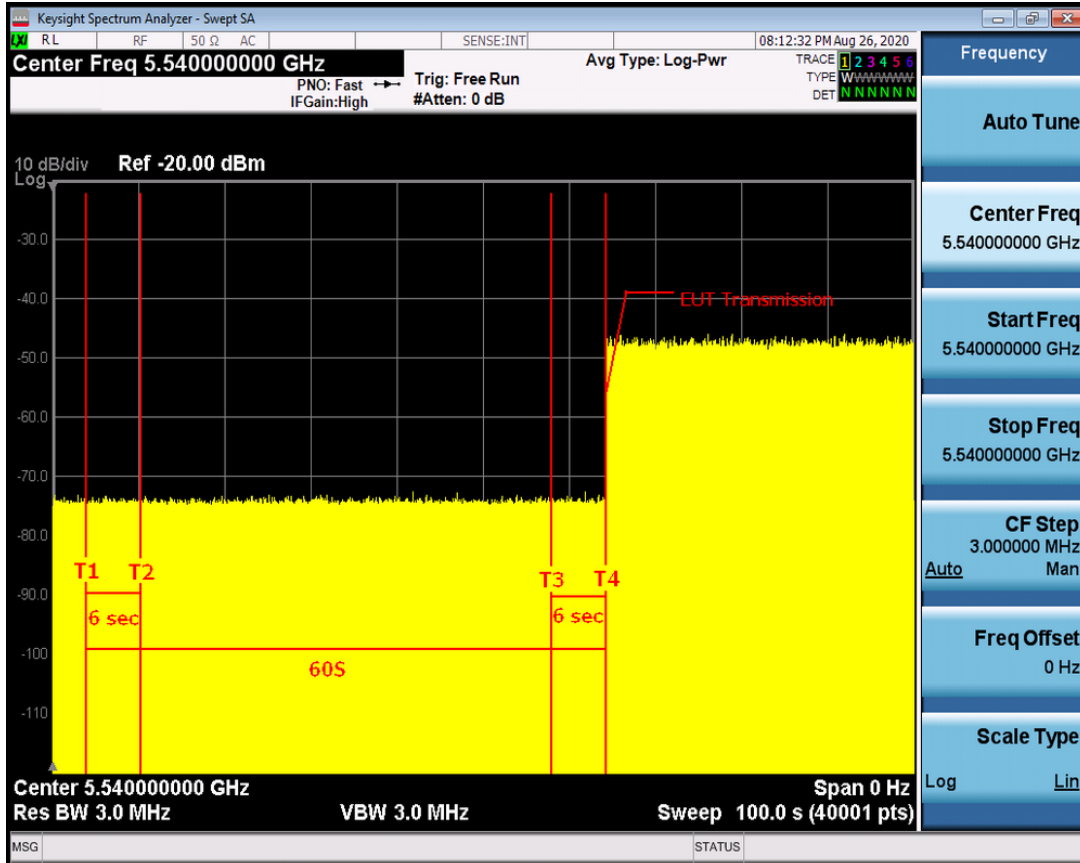
Trial ID	Radar Type	Pulse Width (μs)	PRI (μs)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (ms)	Number of Pulses
0	Type 6	1	333.3	9	0.3333	300	16
1	Type 6	1	333.3	9	0.3333	300	10
2	Type 6	1	333.3	9	0.3333	300	14
3	Type 6	1	333.3	9	0.3333	300	19
4	Type 6	1	333.3	9	0.3333	300	15
5	Type 6	1	333.3	9	0.3333	300	18
6	Type 6	1	333.3	9	0.3333	300	14
7	Type 6	1	333.3	9	0.3333	300	14
8	Type 6	1	333.3	9	0.3333	300	21
9	Type 6	1	333.3	9	0.3333	300	15
10	Type 6	1	333.3	9	0.3333	300	16
11	Type 6	1	333.3	9	0.3333	300	24
12	Type 6	1	333.3	9	0.3333	300	13
13	Type 6	1	333.3	9	0.3333	300	20
14	Type 6	1	333.3	9	0.3333	300	17
15	Type 6	1	333.3	9	0.3333	300	20
16	Type 6	1	333.3	9	0.3333	300	16
17	Type 6	1	333.3	9	0.3333	300	18
18	Type 6	1	333.3	9	0.3333	300	14
19	Type 6	1	333.3	9	0.3333	300	16
20	Type 6	1	333.3	9	0.3333	300	20
21	Type 6	1	333.3	9	0.3333	300	19
22	Type 6	1	333.3	9	0.3333	300	23
23	Type 6	1	333.3	9	0.3333	300	17
24	Type 6	1	333.3	9	0.3333	300	16
25	Type 6	1	333.3	9	0.3333	300	13
26	Type 6	1	333.3	9	0.3333	300	13
27	Type 6	1	333.3	9	0.3333	300	18
28	Type 6	1	333.3	9	0.3333	300	19
29	Type 6	1	333.3	9	0.3333	300	20

5.4 CHANNEL AVAILABILITY CHECK TIME

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

11ac 20MHz Mode

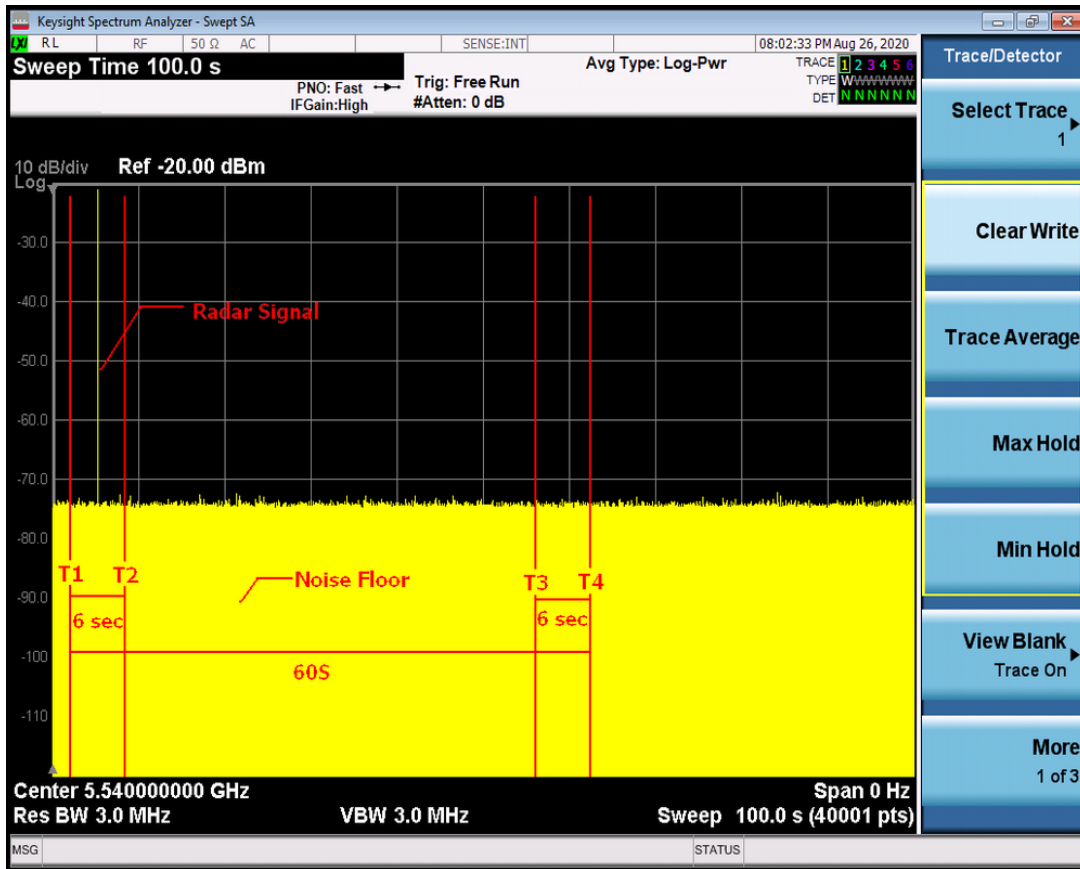
Initial Channel Availability Check Time



Note: T1 denotes the end of power-up time period is 6 second.
 T4 denotes the end of Channel Availability Check time is 66 second. Channel Availability Check time is equal to (T4 – T1) 60 seconds.

11ac 20MHz Mode

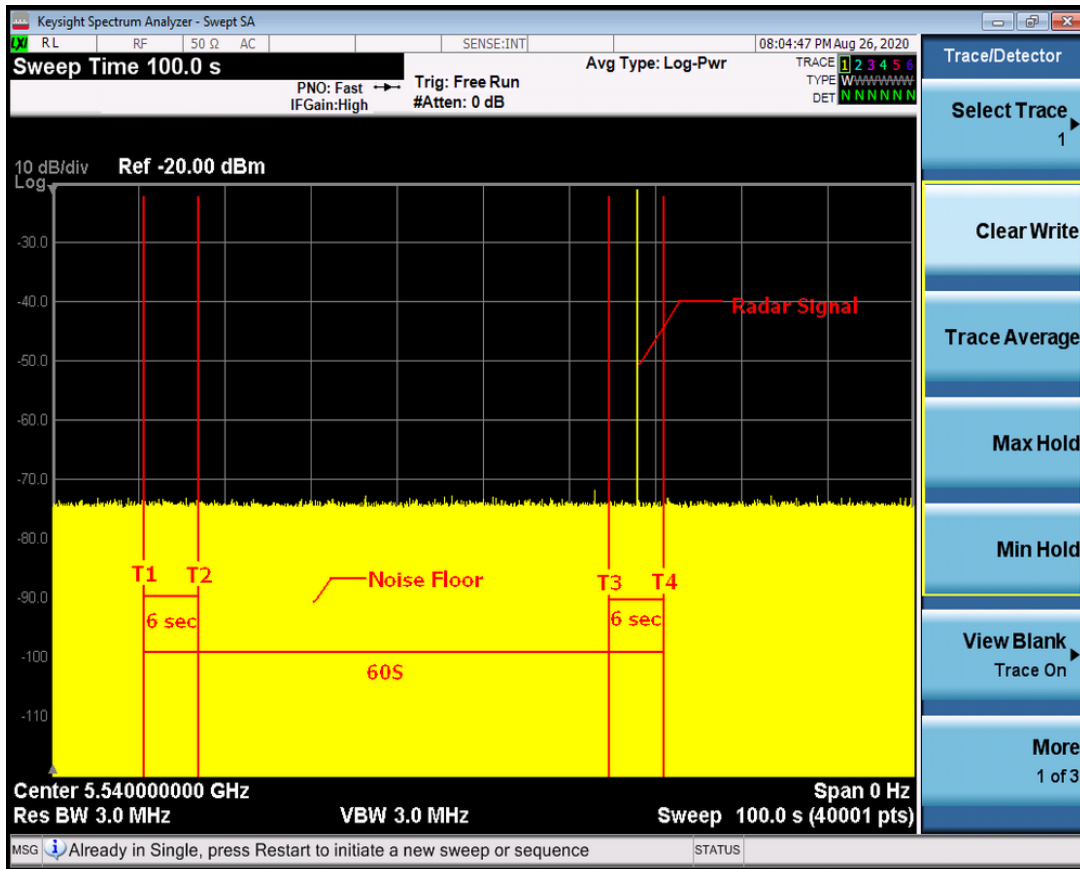
Radar Burst at the Beginning of the Channel Availability Check Time



Note: T1 denotes the end of power up time period is 6 second.
 T2 denotes 12 second. The radar burst was commenced within a 6 second window starting from the end of power-up sequence.
 T4 denotes the 66 second.

11ac 20MHz Mode

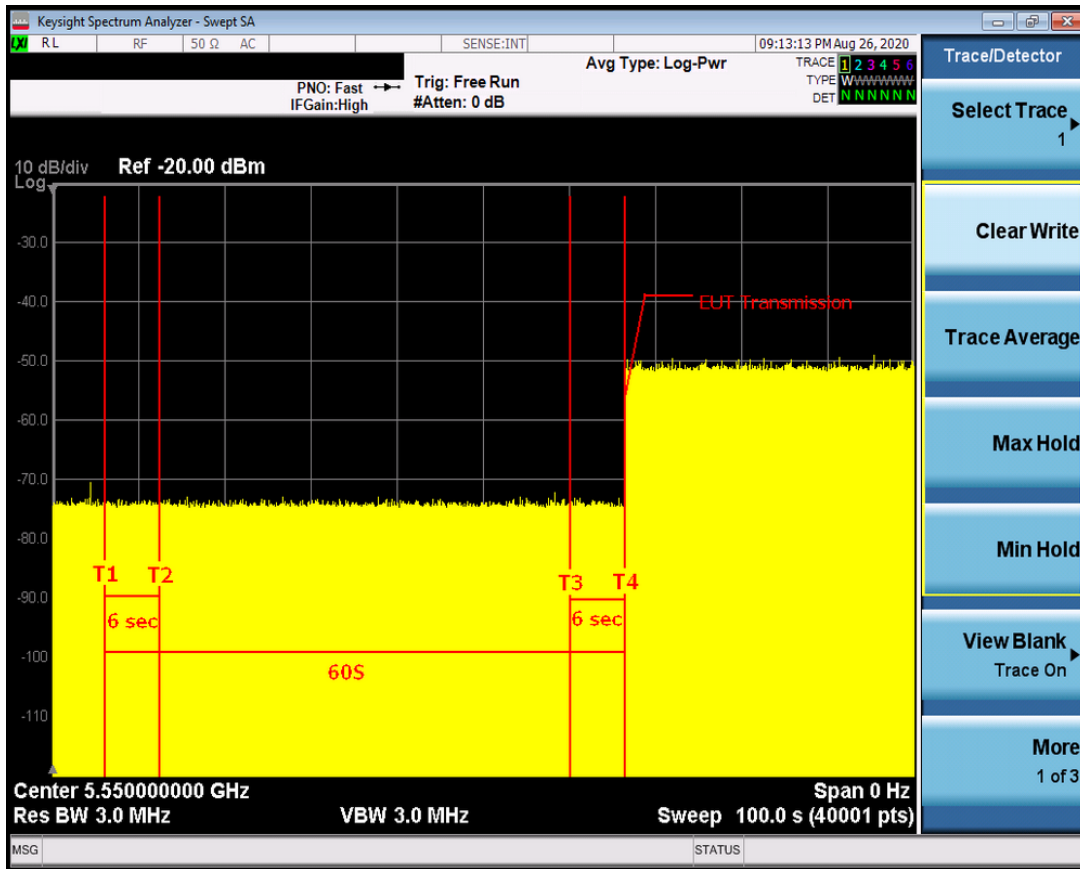
Radar Burst at the End of the Channel Availability Check Time



Note: T1 denotes the end of power up time period is 6 second.
 T3 denotes 66 second and radar burst was commenced within 54 second to 60 second indow starting from the end of power-up sequence.
 T4 denotes the 66 second

11ac 40MHz Mode

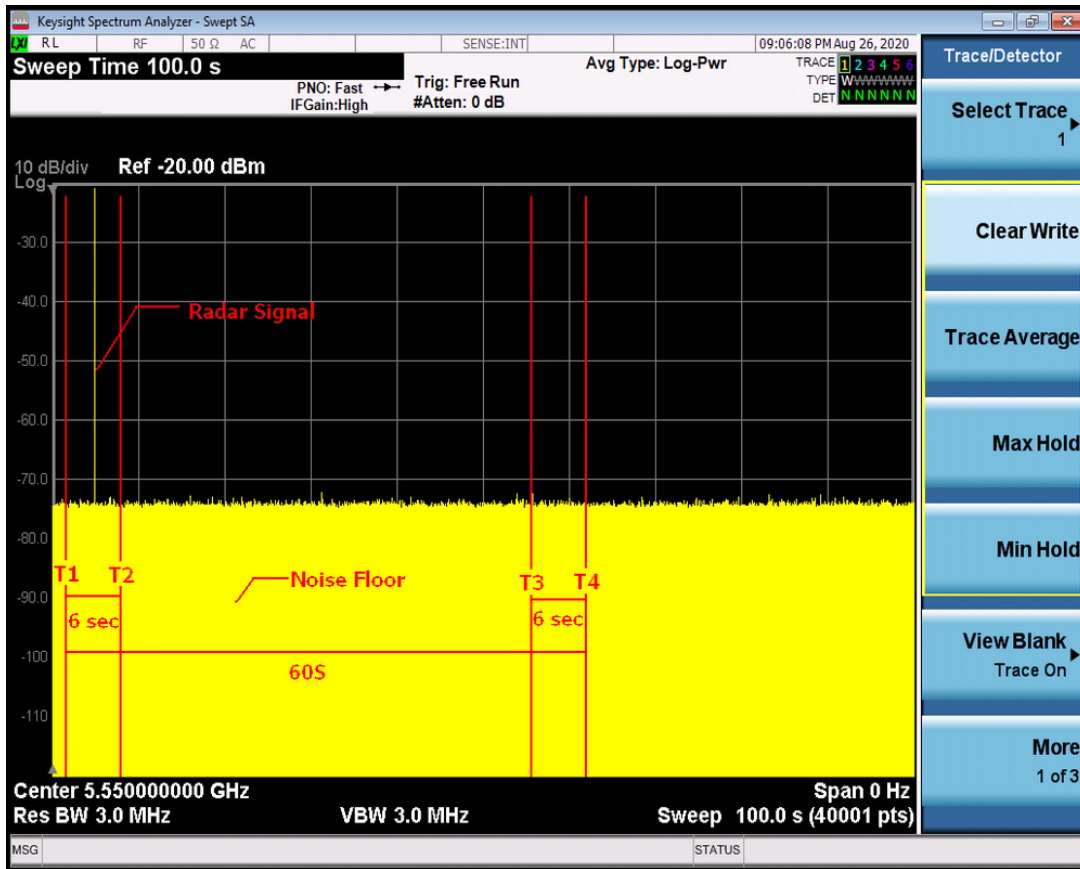
Initial Channel Availability Check Time



Note: T1 denotes the end of power-up time period is 6 second.
 T4 denotes the end of Channel Availability Check time is 66 second. Channel Availability Check time is equal to (T4 – T1) 60 seconds.

11ac 40MHz Mode

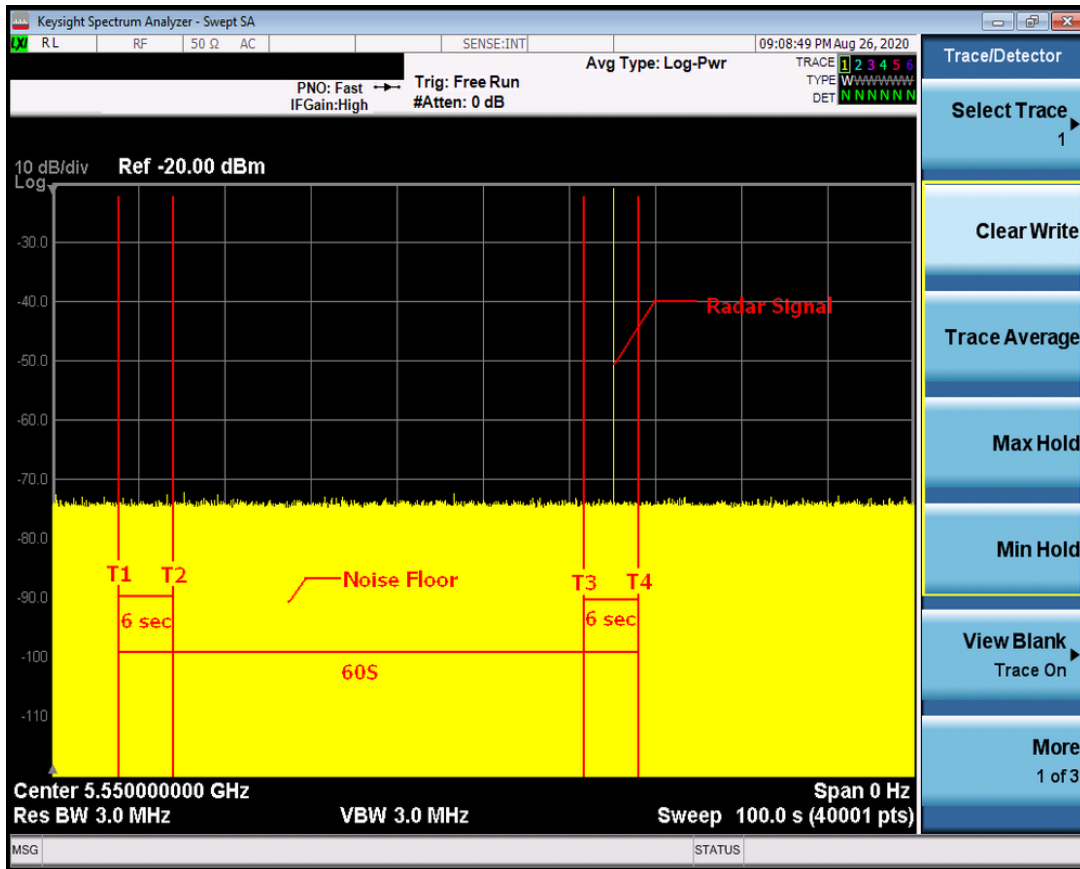
Radar Burst at the Beginning of the Channel Availability Check Time



Note: T1 denotes the end of power up time period is 6 second.
 T2 denotes 12 second. The radar burst was commenced within a 6 second window starting from the end of power-up sequence.
 T4 denotes the 66 second.

11ac 40MHz Mode

Radar Burst at the End of the Channel Availability Check Time



Note: T1 denotes the end of power up time period is 6 second.
 T3 denotes 66 second and radar burst was commenced within 54 second to 60 second indow starting from the end of power-up sequence.
 T4 denotes the 66 second

11ac 80MHz Mode

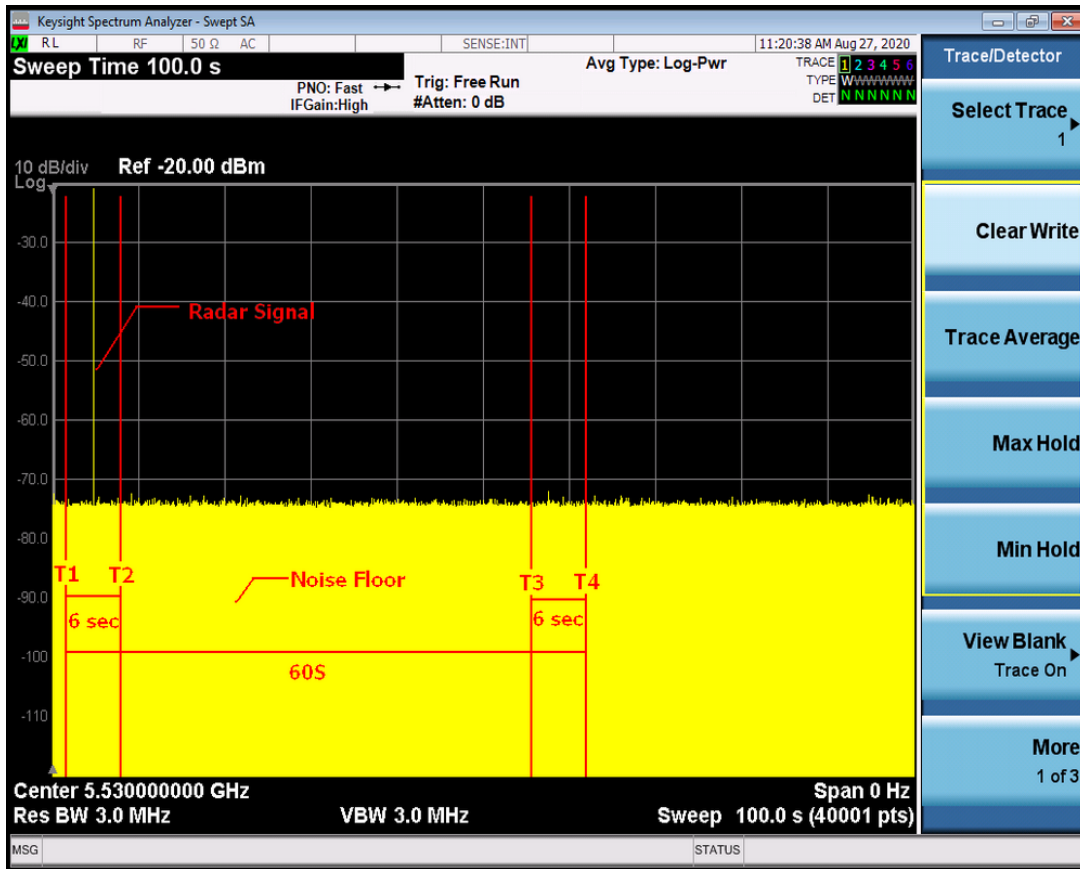
Initial Channel Availability Check Time



Note: T1 denotes the end of power-up time period is 6 second.
 T4 denotes the end of Channel Availability Check time is 66 second. Channel Availability Check time is equal to (T4 – T1) 60 seconds.

11ac 80MHz Mode

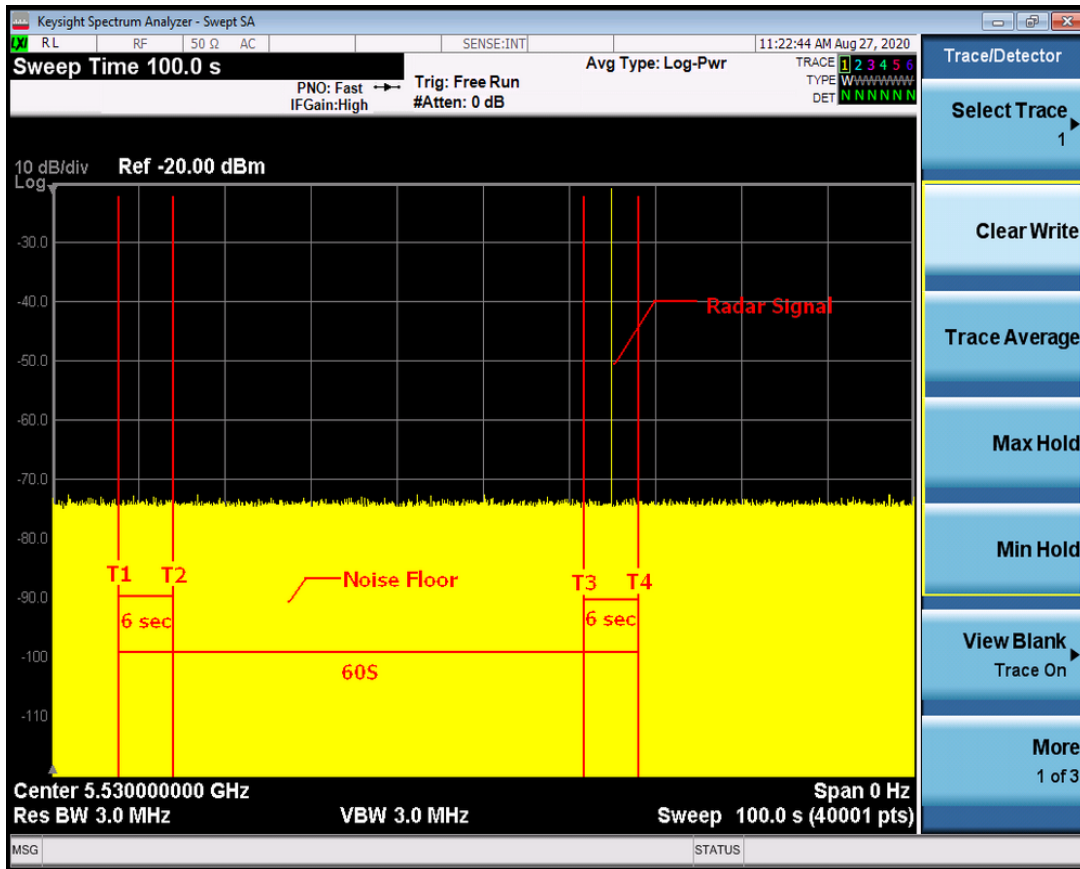
Radar Burst at the Beginning of the Channel Availability Check Time



Note: T1 denotes the end of power up time period is 6 second.
 T2 denotes 12 second. The radar burst was commenced within a 6 second window starting from the end of power-up sequence.
 T4 denotes the 66 second.

11ac 80MHz Mode

Radar Burst at the End of the Channel Availability Check Time

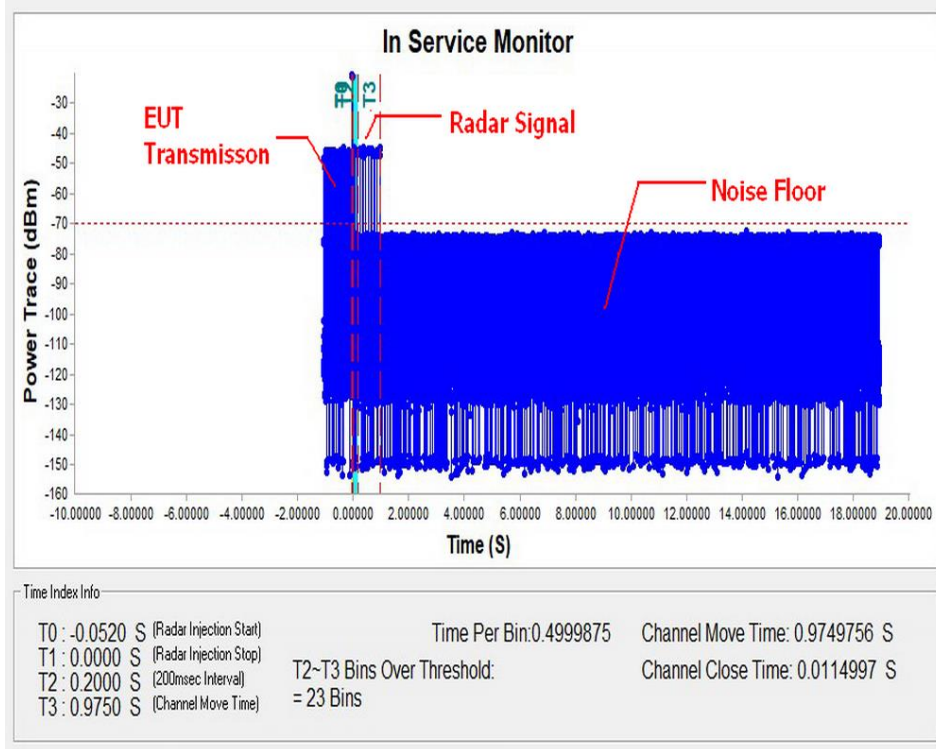


Note: T1 denotes the end of power up time period is 6 second.
 T3 denotes 66 second and radar burst was commenced within 54 second to 60 second indow starting from the end of power-up sequence.
 T4 denotes the 66 second

5.5 CHANNEL CLOSING TRANSMISSION AND CHANNEL MOVE TIME WLAN TRAFFIC

TX (11ac 20MHz Mode)

Radar signal 0

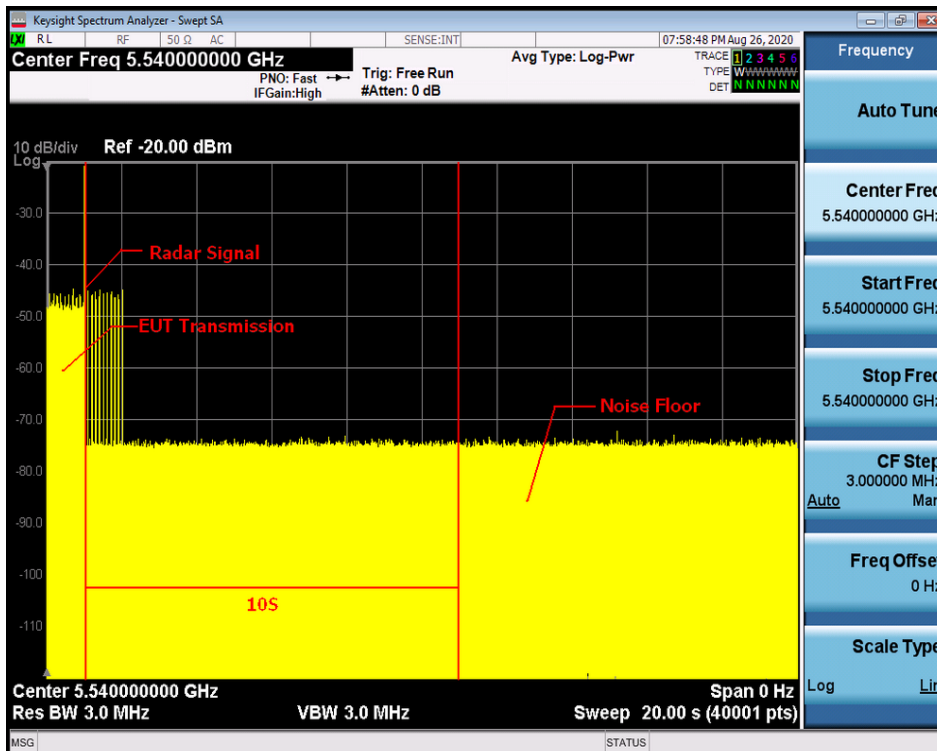


Note: T0 denotes the Radar Injection Start.

T1 denotes the start of Channel Move Time upon the end of the last Radar burst.

T2 denotes the data transmission time of 200ms from T1.

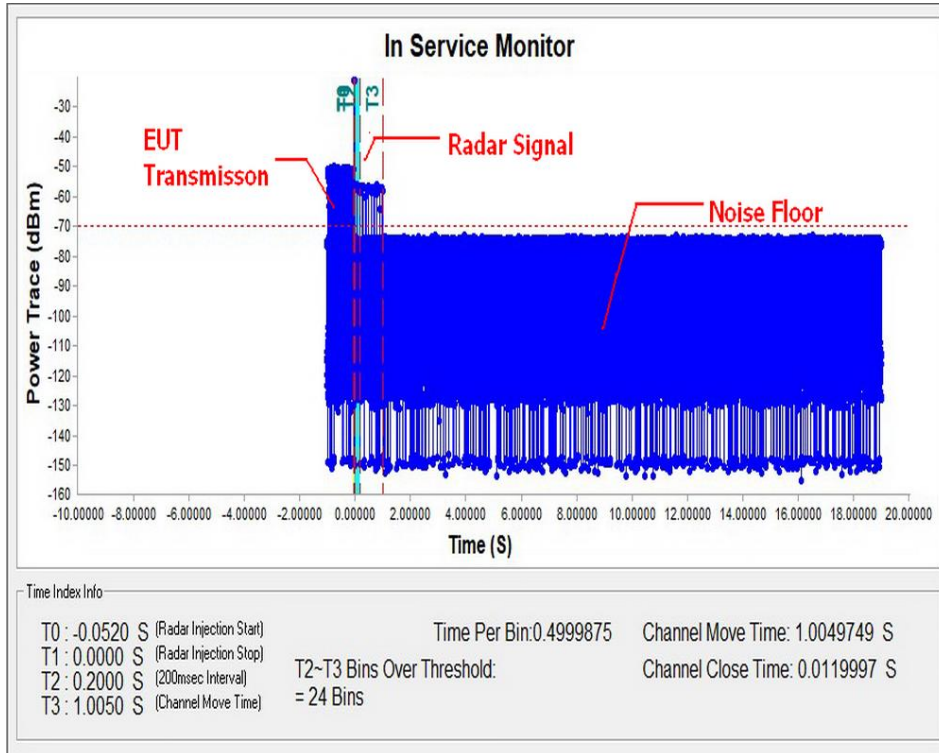
T3 denotes the end of Channel Move Time.



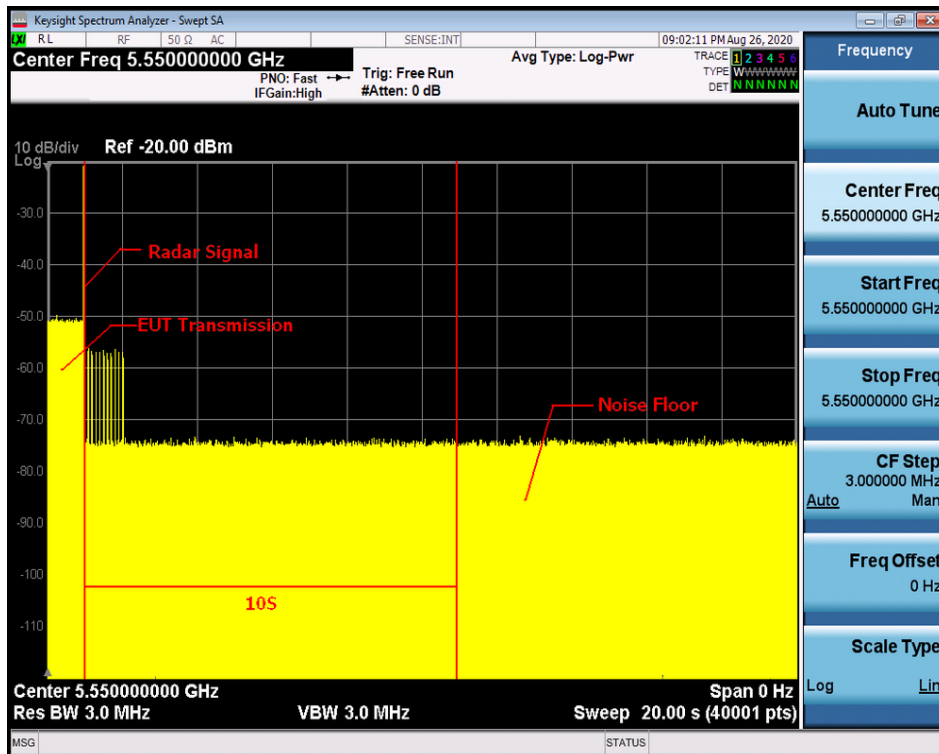
Note: An expanded plot for the device vacates the channel in the required 500ms

TX (11ac 40MHz Mode)

Radar signal 0



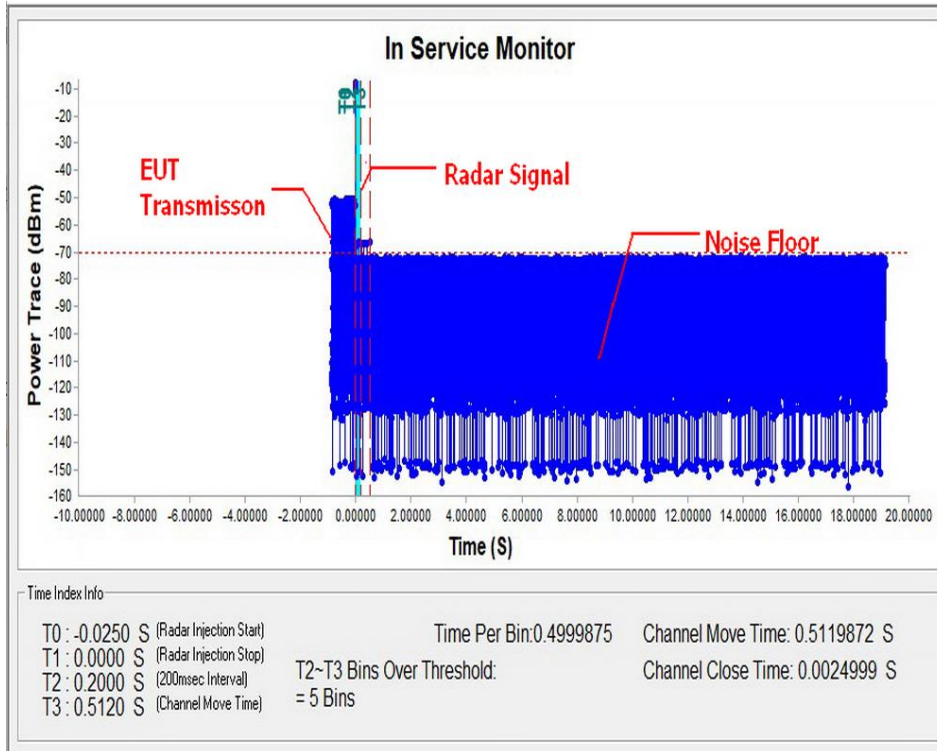
Note: T0 denotes the Radar Injection Start.
 T1 denotes the start of Channel Move Time upon the end of the last Radar burst.
 T2 denotes the data transmission time of 200ms from T1.
 T3 denotes the end of Channel Move Time.



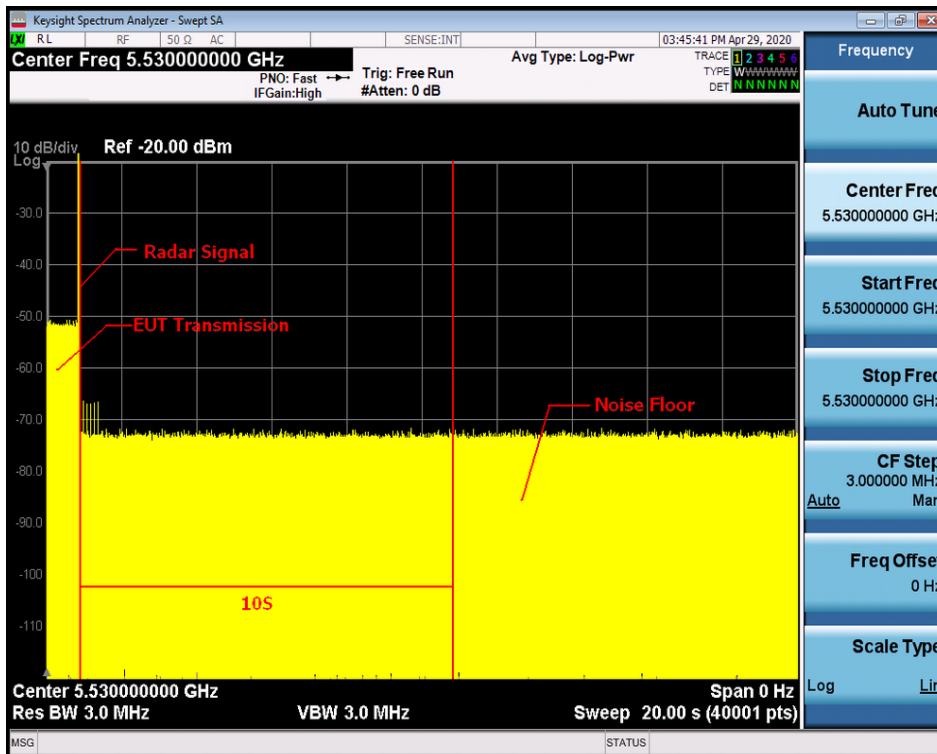
Note: An expanded plot for the device vacates the channel in the required 500ms

TX (11ac 80MHz Mode)

Radar signal 0



Note: T0 denotes the Radar Injection Start.
 T1 denotes the start of Channel Move Time upon the end of the last Radar burst.
 T2 denotes the data transmission time of 200ms from T1.
 T3 denotes the end of Channel Move Time.



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

11ac 20MHz Mode		
Item	Measured Value(s)	Limit(s)
Channel Move Time	0.9749756	10
Channel Close Time	0.0114997	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period.

11ac 40MHz Mode		
Item	Measured Value(s)	Limit(s)
Channel Move Time	1.0049749	10
Channel Close Time	0.0119997	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period.

11ac 80MHz Mode		
Item	Measured Value(s)	Limit(s)
Channel Move Time	0.5119872	10
Channel Close Time	0.0024999	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period.

TX (11ac 20MHz Mode)

Table 1: Short Pulse Radar Test Waveforms.

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Pass times	Fail times	Percentage of Successful Detection (%)
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A	$\text{Roundup} \left\{ \begin{array}{l} \left(\frac{1}{360} \right) \cdot \\ \left(\frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \end{array} \right\}$	30	0	100
2	1-5	150-230	23-29	29	1	97
3	6-10	200-500	16-18	29	1	97
4	11-20	200-500	12-16	30	0	100
Aggregate (Radar Types 1-4)			-	118	2	98

Table 2: Long Pulse Radar Test Waveform

Radar Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Number of Pulses Per Burst	Number of Bursts	Pass times	Fail times	Percentage of Successful Detection (%)
5	50-100	5-20	1000-2000	1-3	8-20	29	1	97

Table 3: Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (μsec)	PRI (μsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Pass times	Fail times	Percentage of Successful Detection (%)
6	1	333	9	0.333	300	29	1	97

Radar type	Trial #	Detection	Trial #	Detection
		YES / NO		YES / NO
Type1	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES
Type2	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	NO	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES

Type3	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	NO
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES
Type4	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES

Radar type	Trial #	Detection	Trial #	Detection
		YES / NO		YES / NO
Type5	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	NO	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES

Radar type	Trial #	Detection	Trial #	Detection
		YES / NO		YES / NO
Type6	1	NO	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES

TX (11ac 40MHz Mode)

Table 1: Short Pulse Radar Test Waveforms.

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Pass times	Fail times	Percentage of Successful Detection (%)
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A	$\text{Roundup} \left\{ \begin{array}{l} \left(\frac{1}{360} \right) \\ \left(\frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \end{array} \right\}$	28	2	93
2	1-5	150-230	23-29	30	0	100
3	6-10	200-500	16-18	30	0	100
4	11-20	200-500	12-16	29	1	97
Aggregate (Radar Types 1-4)			-	117	3	98

Table 2: Long Pulse Radar Test Waveform

Radar Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Number of Pulses Per Burst	Number of Bursts	Pass times	Fail times	Percentage of Successful Detection (%)
5	50-100	5-20	1000-2000	1-3	8-20	29	1	97

Table 3: Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (μsec)	PRI (μsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Pass times	Fail times	Percentage of Successful Detection (%)
6	1	333	9	0.333	300	29	1	97

Radar type	Trial #	Detection	Trial #	Detection
		YES / NO		YES / NO
Type1	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	NO	29	NO
	15	YES	30	YES
Type2	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES

Type3	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES
Type4	1	NO	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES

Radar type	Trial #	Detection	Trial #	Detection
		YES / NO		YES / NO
Type5	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	NO	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES

Radar type	Trial #	Detection	Trial #	Detection
		YES / NO		YES / NO
Type6	1	YES	16	YES
	2	YES	17	YES
	3	NO	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES

TX (11ac 80MHz Mode)

Table 1: Short Pulse Radar Test Waveforms.

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Pass times	Fail times	Percentage of Successful Detection (%)
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A	$\text{Roundup} \left\{ \frac{1}{360} \cdot \left(\frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \right\}$	29	1	97
2	1-5	150-230	23-29	29	1	97
3	6-10	200-500	16-18	30	0	100
4	11-20	200-500	12-16	30	0	100
Aggregate (Radar Types 1-4)			-	118	2	98

Table 2: Long Pulse Radar Test Waveform

Radar Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Number of Pulses Per Burst	Number of Bursts	Pass times	Fail times	Percentage of Successful Detection (%)
5	50-100	5-20	1000-2000	1-3	8-20	29	1	97

Table 3: Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (μsec)	PRI (μsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Pass times	Fail times	Percentage of Successful Detection (%)
6	1	333	9	0.333	300	28	2	93

Radar type	Trial #	Detection	Trial #	Detection
		YES / NO		YES / NO
Type1	1	NO	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES
Type2	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	NO
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES

Type3	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES
Type4	1	YES	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES

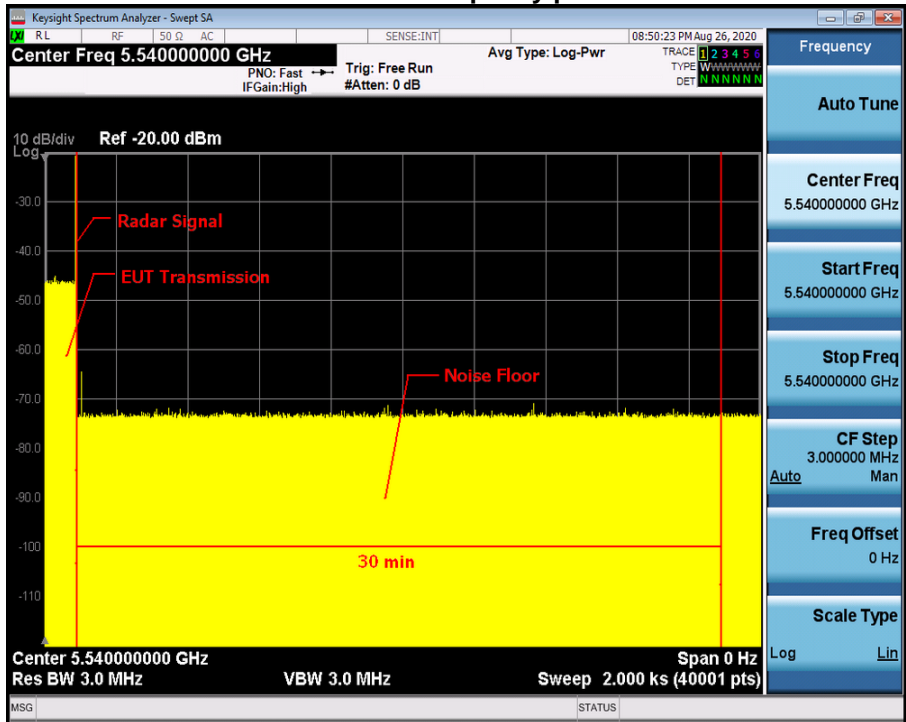
Radar type	Trial #	Detection	Trial #	Detection
		YES / NO		YES / NO
Type5	1	NO	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	YES	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES

Radar type	Trial #	Detection	Trial #	Detection
		YES / NO		YES / NO
Type6	1	NO	16	YES
	2	YES	17	YES
	3	YES	18	YES
	4	YES	19	YES
	5	YES	20	YES
	6	YES	21	YES
	7	YES	22	YES
	8	NO	23	YES
	9	YES	24	YES
	10	YES	25	YES
	11	YES	26	YES
	12	YES	27	YES
	13	YES	28	YES
	14	YES	29	YES
	15	YES	30	YES

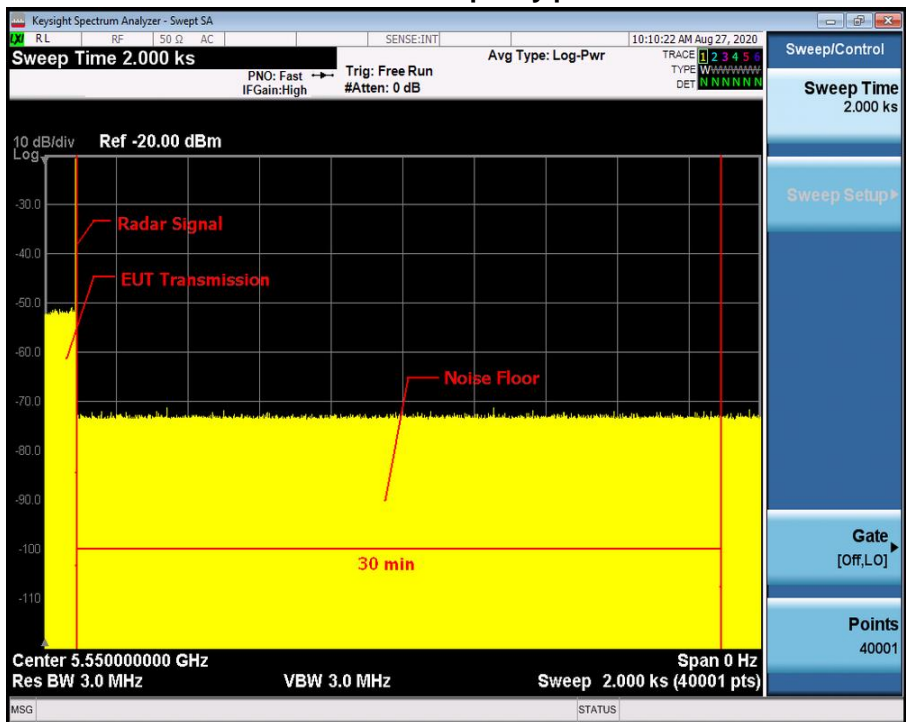
5.6 NON- OCCUPANCY PERIOD

During the 30 minutes observation time, UUT did not make any transmissions on a channel after a radar signal was detected on that channel by either the Channel Availability Check or the In-Service Monitoring.

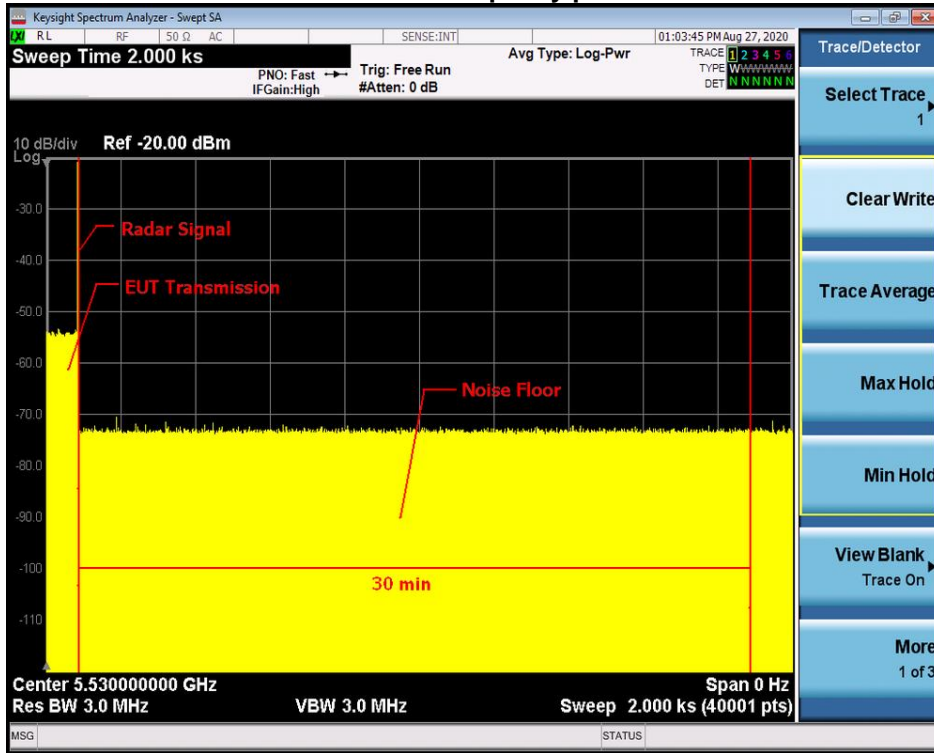
**TX (11ac 20MHz Mode)
5540 Non-Occupancy period**



**TX (11ac 40MHz Mode)
5550 Non-Occupancy period**



TX (11ac 80MHz Mode) 5530 Non-Occupancy period

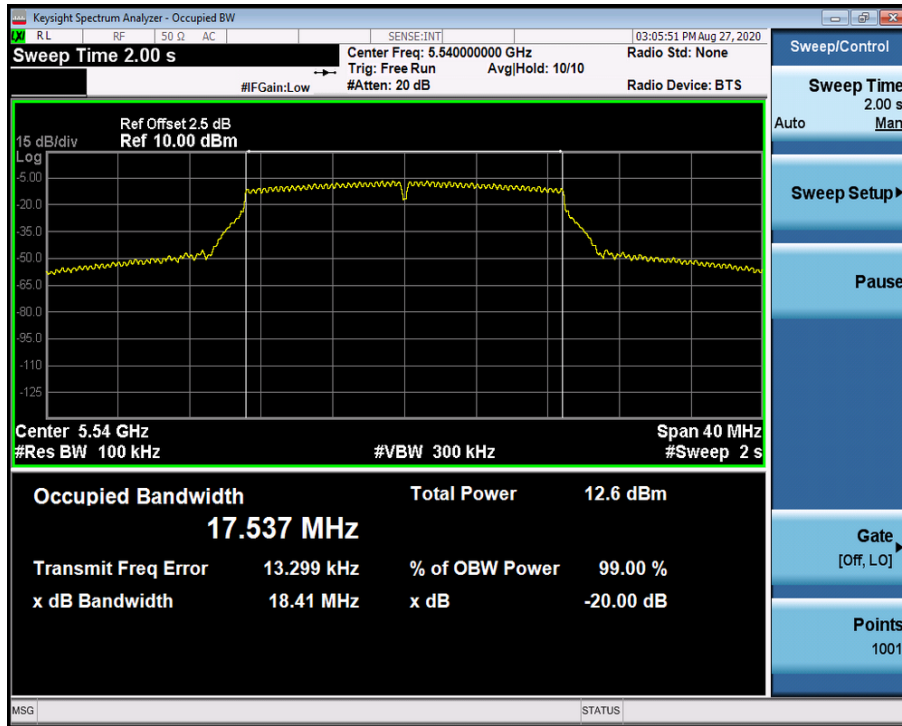


5.7 UNIFORM SPREADING

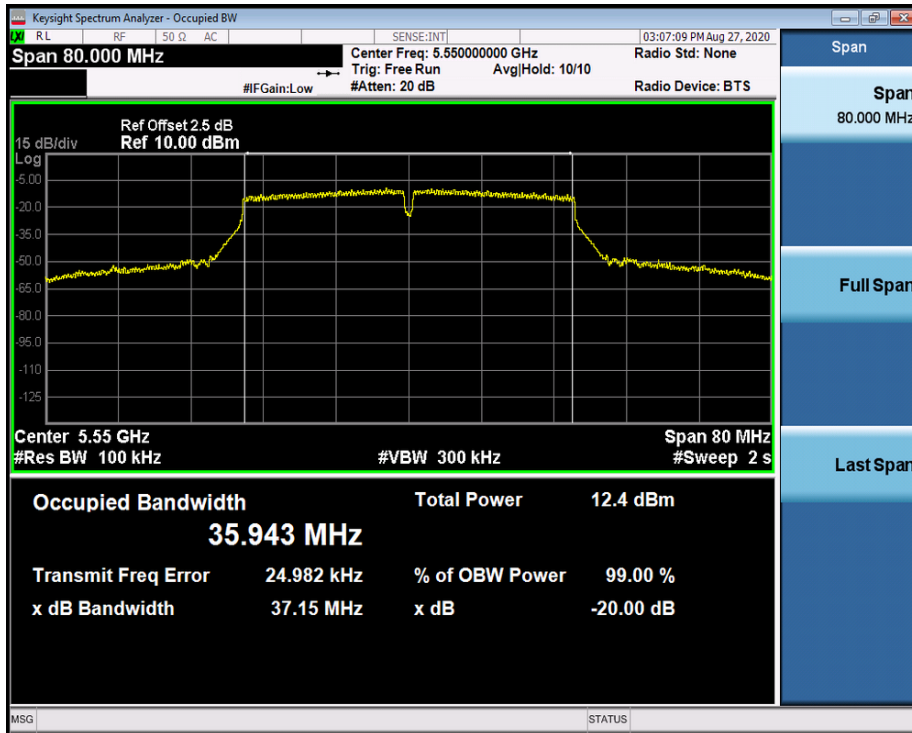
The intention of the uniform spreading is to provide, on aggregate, a uniform loading of the spectrum. The UUT using the bands 5250 to 5350MHz and 5470 to 5600 MHz channels so that the probability of selecting a given channel shall be the same for channels. The UUT will select channel by random mode and remember this channel when detect radar signal, so that will select unused channel by random mode.

5.8 U-NII DETECTION BANDWIDTH

**TX (11ac 20MHz Mode)
U-NII 99% Channel bandwidth**



TX (11c 40MHz Mode) U-NII 99% Channel bandwidth



TX (11ac 80MHz Mode) U-NII 99% Channel bandwidth

