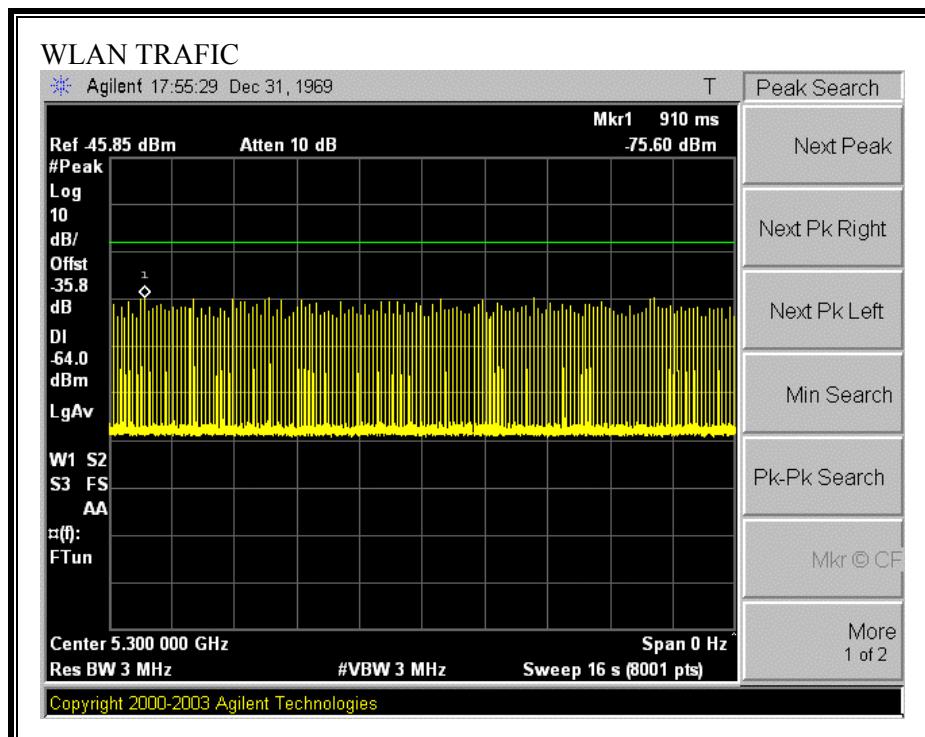


**PLOT OF WLAN TRAFFIC FROM MASTER**



#### **7.4.2. TEST CHANNEL AND METHOD**

All tests were performed at a channel center frequency of 5300 MHz utilizing a conducted test method.

#### **7.4.3. CHANNEL AVAILABILITY CHECK TIME**

##### **TEST PROCEDURE TO DETERMINE INITIAL POWER-UP CYCLE TIME**

A link was established on channel, then the EUT was rebooted. The time from the cessation of traffic to the re-initialization of traffic was measured as the time required for the EUT to complete the total power-up cycle. The time to complete the initial power-up period is 60 seconds less than this total power-up time.

##### **TEST PROCEDURE FOR TIMING OF RADAR BURST**

With a link established on channel, the EUT was rebooted. A radar signal was triggered within 0 to 6 seconds after the initial power-up period, and transmissions on the channel were monitored on the spectrum analyzer.

The Non-Occupancy list was cleared. With a link established on channel, the EUT was rebooted. A radar signal was triggered within 54 to 60 seconds after the initial power-up period, and transmissions on the channel were monitored on the spectrum analyzer.

**CHANNEL AVAILABILITY CHECK TIME RESULTS**

No non-compliance noted:

Time required for EUT to complete the initial power-up cycle (sec)
18.66

If a radar signal is detected during the channel availability check then the PC controlling the EUT displays a message stating that radar was detected.

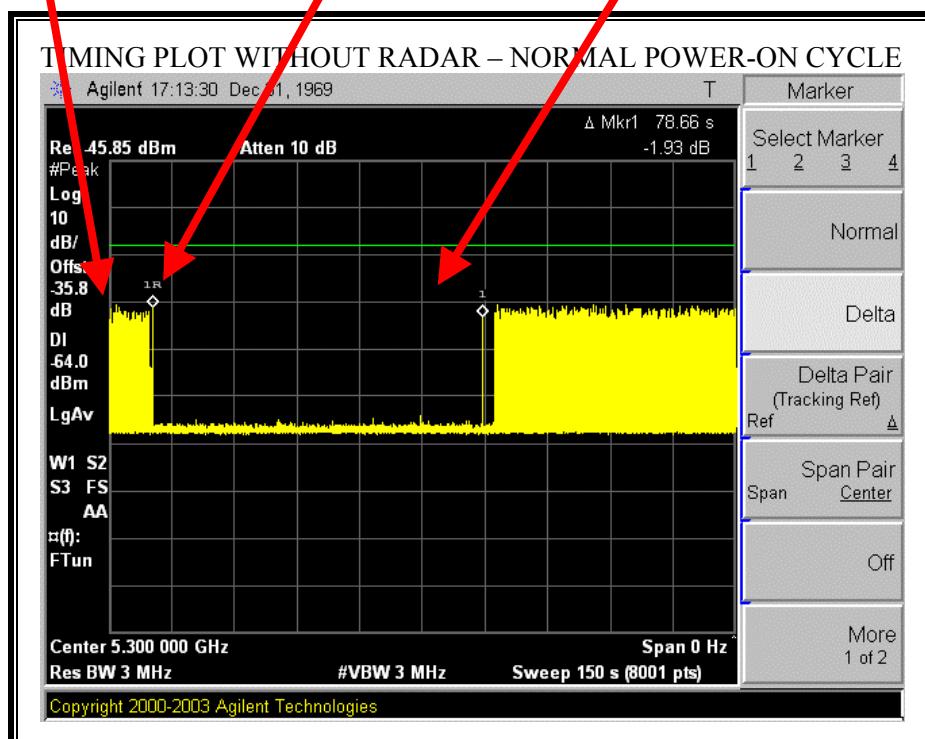
Timing of Radar Burst	Display on EUT / PC Control Computer	Spectrum Analyzer Display
No Radar Triggered	EUT Initiates Transmisisons	Transmissions begin on channel after completion of the initial power-up cycle and the 60 second CAC
Within 0 to 6 second window	EUT indicates radar detected  EUT does not display any radar parameter values	No transmissions on channel
Within 54 to 60 second window	EUT indicates radar detected  EUT does not display any radar parameter values	No transmissions on channel

**TIMING PLOT WITHOUT RADAR DURING CAC**

AP is rebooted  
Traffic ceases  
Start of Initial Power-up cycle

End of Initial Power-up cycle  
Start of CAC

End of CAC  
Traffic is Initiated



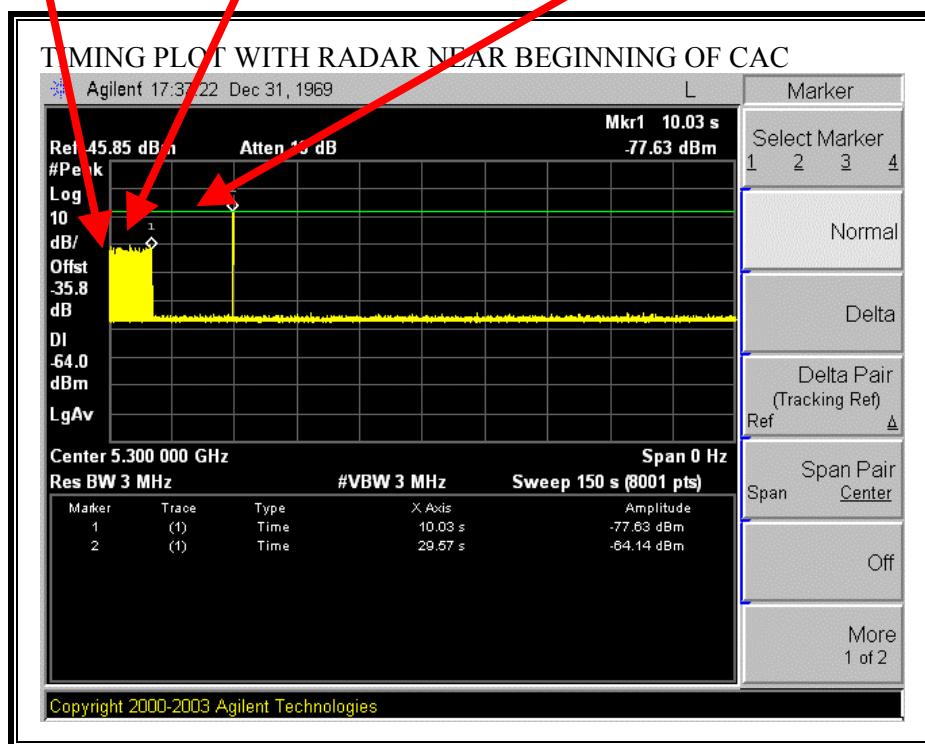
Note: The initial power-up cycle requires  $(78.66 - 60) = 18.66$  seconds.

**TIMING PLOT WITH RADAR NEAR BEGINNING OF CAC**

AP is rebooted  
Traffic ceases  
Start of Initial Power-up cycle

End of Initial Power-up cycle  
Start of CAC

Radar Signal Applied



The radar signal is applied  $(29.57 - 10.03) = 19.54$  seconds after reboot, which is  $(19.54 - 18.66) = 0.88$  seconds after the completion of the initial power-up cycle / start of the CAC period.

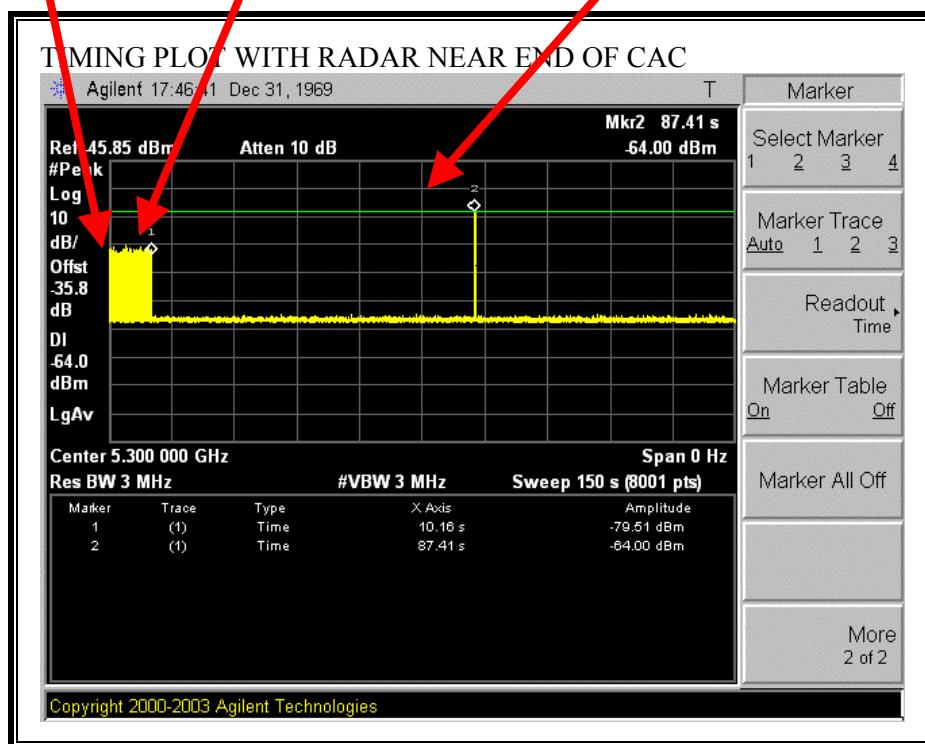
No EUT transmissions were observed after the radar signal.

**TIMING PLOT WITH RADAR NEAR END OF CAC**

AP is rebooted  
Traffic ceases  
Start of Initial Power-up cycle

End of Initial Power-up cycle  
Start of CAC

Radar Signal Applied



The radar signal is applied  $(87.41 - 10.16) = 77.25$  seconds after reboot, which is  $(67.25 - 18.66) = 48.59$  seconds after the completion of the initial power-up cycle / start of the CAC period.

No EUT transmissions were observed after the radar signal.

#### **7.4.4. CHANNEL MOVE TIME AND CHANNEL CLOSING TRANSMISSION TIME**

##### **SHORT PULSE 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:

The observation period over which the aggregate time is calculated for the FCC version  
Begins at (Reference Marker + 200 msec)

and

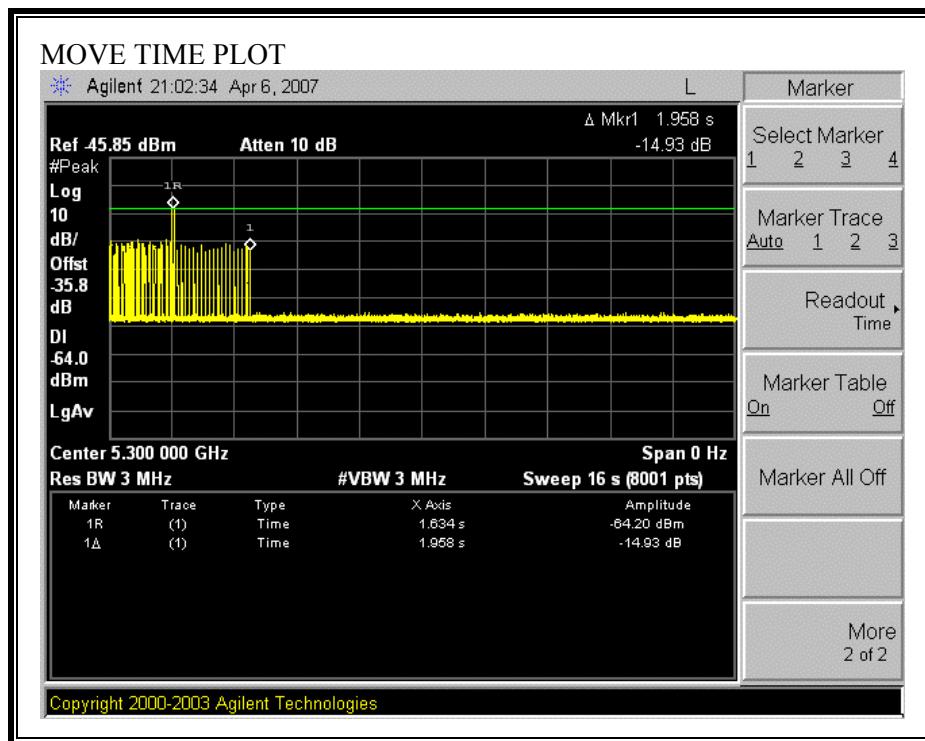
Ends no earlier than (Reference Marker + 10 sec).

The observation period over which the aggregate time is calculated for the IC version  
Begins at (Reference Marker)  
and  
Ends no earlier than (Reference Marker + 10 sec).

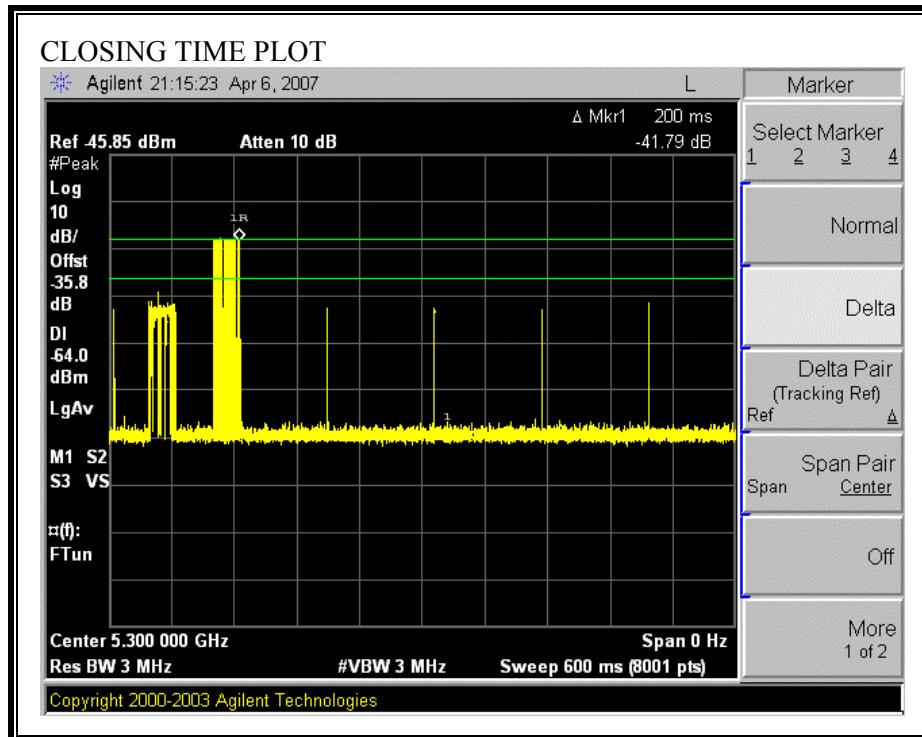
### CHANNEL MOVE TIME RESULTS

No non-compliance noted:

Channel Move Time (s)	Limit (s)
1.958	10



**CHANNEL CLOSING TIME RESULTS**

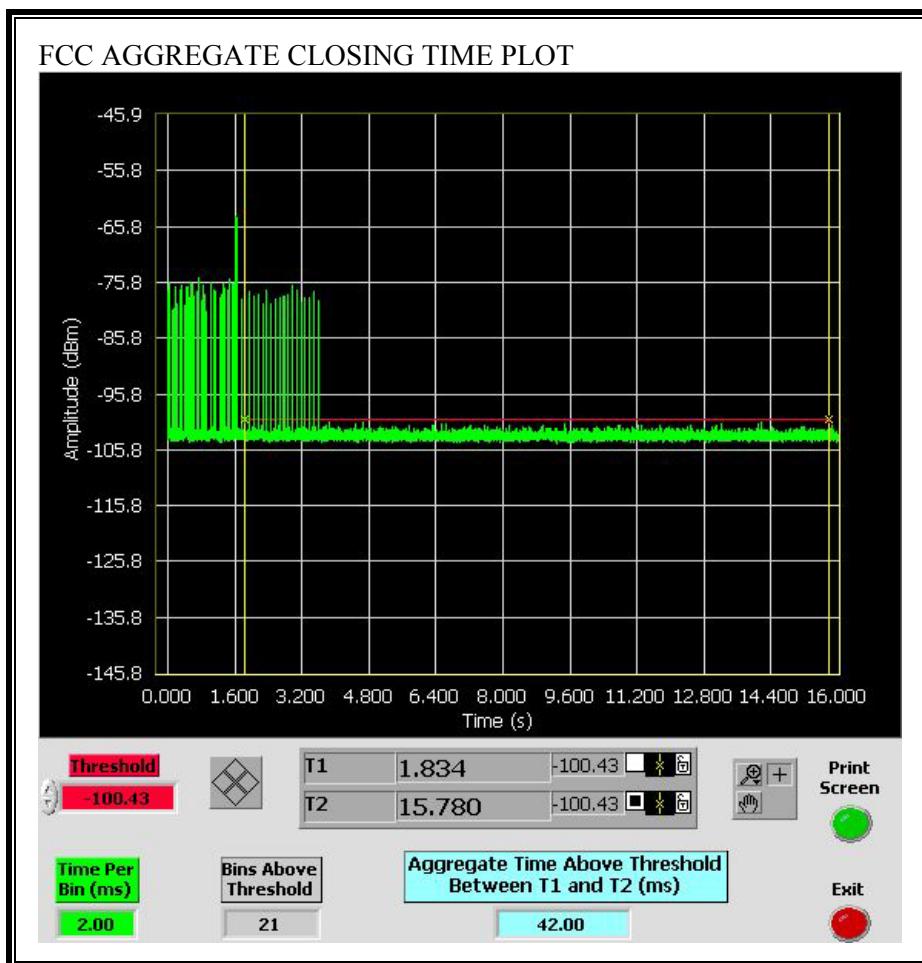


**FCC AGGREGATE CHANNEL CLOSING AGGREGATE TRANSMISSION TIME RESULTS**

No non-compliance noted:

Aggregate Transmission Time (ms)	Limit (ms)	Margin (ms)
42.00	60	18.00

Only intermittent transmissions are observed during the aggregate monitoring period.

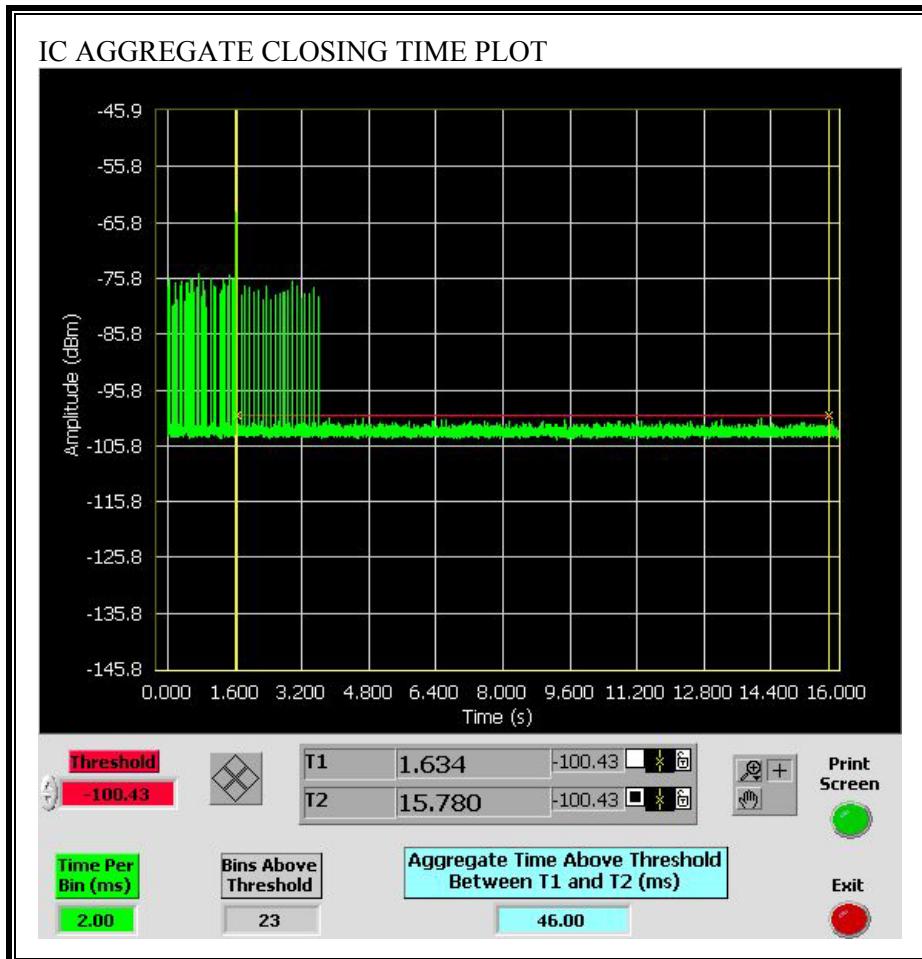


### IC AGGREGATE CHANNEL CLOSING TRANSMISSION TIME RESULTS

No non-compliance noted:

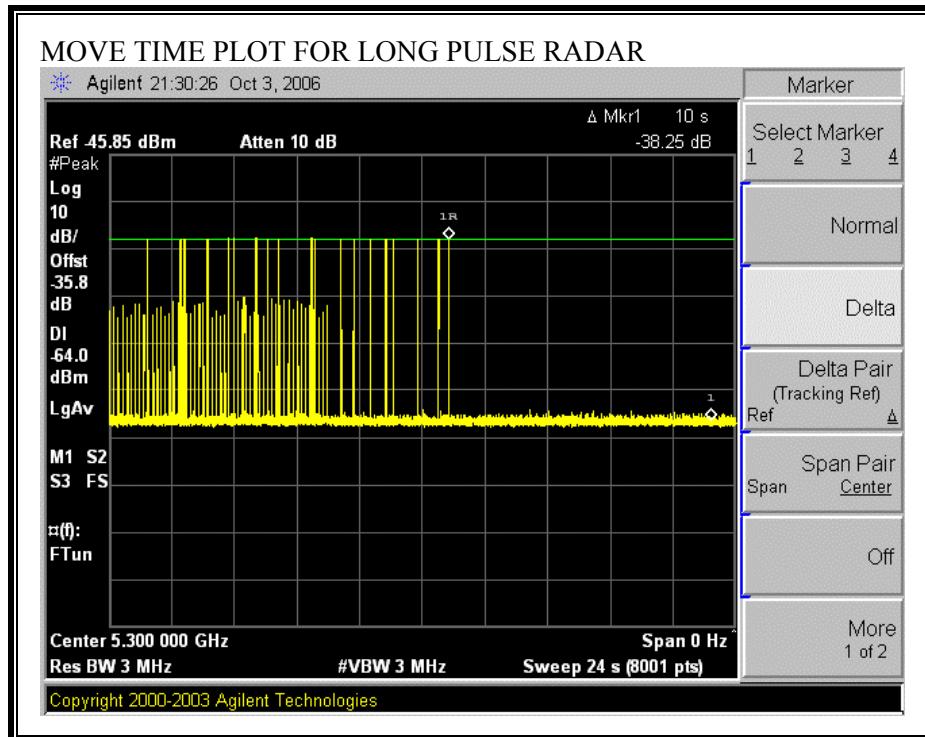
Aggregate Transmission Time (ms)	Limit (ms)	Margin (ms)
46.00	260	214.00

Only intermittent transmissions are observed during the aggregate monitoring period.



### **LONG PULSE CHANNEL MOVE TIME RESULTS**

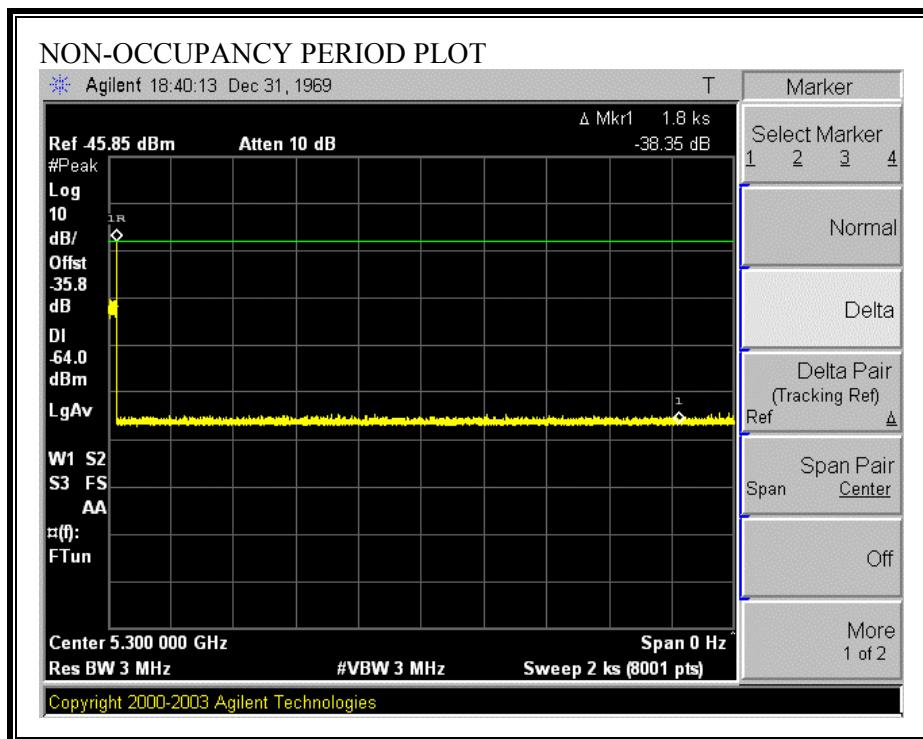
No non-compliance noted: The traffic ceases prior to the end of the radar waveform, therefore it also ceases prior to 10 seconds after the end of the radar waveform.



#### 7.4.5. NON-OCCUPANCY PERIOD

#### RESULTS

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



#### 7.4.6. DETECTION BANDWIDTH

##### REFERENCE PLOT OF 99% POWER BANDWIDTH



#### RESULTS

No non-compliance noted:

FL (MHz)	FH (MHz)	Detection Bandwidth (MHz)	99% Power Bandwidth (MHz)	Ratio of Detection BW to 99% Power BW (%)	Minimum Limit (%)
5291	5309	19	17.498	108.6	80

**DETECTION BANDWIDTH PROBABILITY**

DETECTION BANDWIDTH PROBABILITY RESULTS

Detection Bandwidth Test Results:			Waveform: TYPE 1	
Frequency (MHz)	Number of Trials	Number Detected	Detection (%)	Mark
5290	10	7	70.00	
5291	10	10	100.00	FL
5292	10	10	100.00	
5293	10	10	100.00	
5294	10	9	90.00	
5295	10	10	100.00	
5296	10	9	90.00	
5297	10	9	90.00	
5298	10	9	90.00	
5299	10	9	90.00	
5300	10	10	100.00	
5301	10	9	90.00	
5302	10	10	100.00	
5303	10	10	100.00	
5304	10	9	90.00	
5305	10	9	90.00	
5306	10	9	90.00	
5307	10	9	90.00	
5308	10	10	100.00	
5309	10	10	100.00	FH
5310	10	8	80.00	

#### 7.4.7. IN-SERVICE MONITORING

#### RESULTS

No non-compliance noted:

SUMMARY OF DETECTION PROBABILITY				
<b>Radar Test Summary:</b>				
Signal Type	Number of Waveforms	Detection (%)	Limit (%)	Pas/Fail
FCC TYPE 1	30	80.00	60.00	Pass
FCC TYPE 2	30	83.33	60.00	Pass
FCC TYPE 3	30	93.33	60.00	Pass
FCC TYPE 4	30	86.67	60.00	Pass
Aggregate		85.83	80.00	Pass
FCC TYPE 5	30	100.00	80.00	Pass
FCC TYPE 6	38	100.00	70.00	Pass

**TYPE 1 DETECTION PROBABILITY**

		Signal Type: FCC TYPE 1
Table 1: Data Sheet for Fixed Radar Signal 1		
Trial No.	Successful Detection (Yes/No)	
1	Yes	
2	Yes	
3	No	
4	Yes	
5	No	
6	No	
7	Yes	
8	Yes	
9	No	
10	Yes	
11	Yes	
12	Yes	
13	Yes	
14	Yes	
15	No	
16	Yes	
17	No	
18	Yes	
19	Yes	
20	Yes	
21	Yes	
22	Yes	
23	Yes	
24	Yes	
25	Yes	
26	Yes	
27	Yes	
28	Yes	
29	Yes	
30	Yes	

**TYPE 2 DETECTION PROBABILITY**

Table 2: Data Sheet for Fixed Radar Test Signal 2					Signal Type: FCC TYPE 2
Waveform No.	# Pulses per burst	Pulse Width (us)	Pulse repetition Interval (us)	Successful Detection (Yes/No)	
2001	25	3.80	154	Yes	
2002	25	2.90	203	Yes	
2003	29	4.60	214	Yes	
2004	28	3.50	153	Yes	
2005	23	4.10	175	No	
2006	27	3.00	151	No	
2007	29	1.80	163	Yes	
2008	23	4.60	193	Yes	
2009	24	1.80	199	Yes	
2010	26	4.20	213	No	
2011	24	3.20	172	Yes	
2012	24	4.10	192	Yes	
2013	24	2.10	196	Yes	
2014	25	3.90	197	Yes	
2015	28	3.10	182	Yes	
2016	27	5.00	197	Yes	
2017	25	4.40	183	Yes	
2018	26	2.80	218	No	
2019	24	3.40	176	Yes	
2020	25	4.00	175	Yes	
2021	24	3.30	180	Yes	
2022	29	3.00	198	Yes	
2023	28	2.20	193	Yes	
2024	28	2.00	223	No	
2025	29	1.60	222	Yes	
2026	27	1.30	228	Yes	
2027	29	5.00	163	Yes	
2028	27	2.80	171	Yes	
2029	25	1.50	230	Yes	
2030	25	1.30	158	Yes	

**TYPE 3 DETECTION PROBABILITY**

Table 3: Data Sheet for Fixed Radar Test Signal 3					Signal Type: FCC TYPE 3
Waveform No.	# Pulses per burst	Pulse Width (us)	Pulse repetition Interval (us)	Successful Detection (Yes/No)	
3001	18	8.80	363	Yes	
3002	18	5.50	408	Yes	
3003	18	7.80	406	Yes	
3004	18	8.50	325	Yes	
3005	16	9.60	388	Yes	
3006	16	6.10	349	Yes	
3007	16	7.40	296	Yes	
3008	17	10.00	480	Yes	
3009	18	9.30	456	Yes	
3010	17	5.60	497	Yes	
3011	16	6.70	469	No	
3012	18	7.60	255	No	
3013	18	9.80	354	Yes	
3014	18	7.20	288	Yes	
3015	16	5.40	325	Yes	
3016	18	7.10	466	Yes	
3017	17	6.70	463	Yes	
3018	18	9.70	319	Yes	
3019	17	8.80	327	Yes	
3020	17	5.80	285	Yes	
3021	17	7.40	451	Yes	
3022	16	8.00	255	Yes	
3023	18	6.90	275	Yes	
3024	18	5.60	402	Yes	
3025	17	8.60	397	Yes	
3026	18	7.20	338	Yes	
3027	17	8.40	425	Yes	
3028	16	5.80	470	Yes	
3029	16	8.00	414	Yes	
3030	16	8.40	414	Yes	

**TYPE 4 DETECTION PROBABILITY**

Table 4: Data Sheet for Fixed Radar Test Signal 4					Signal Type: FCC TYPE 4
Waveform No.	# Pulses per burst	Pulse Width (us)	Pulse repetition Interval (us)	Successful Detection (Yes/No)	
4001	14	11.90	495	Yes	
4002	13	15.50	472	Yes	
4003	15	16.10	443	Yes	
4004	16	18.40	410	Yes	
4005	15	19.70	320	Yes	
4006	16	15.60	397	Yes	
4007	16	14.90	259	No	
4008	13	11.70	250	Yes	
4009	13	16.50	467	Yes	
4010	16	15.40	348	Yes	
4011	13	18.60	343	Yes	
4012	14	19.70	351	Yes	
4013	16	19.70	270	Yes	
4014	12	15.70	273	Yes	
4015	16	16.20	452	Yes	
4016	13	10.90	286	Yes	
4017	14	18.30	280	Yes	
4018	16	12.40	355	Yes	
4019	15	10.60	302	Yes	
4020	12	13.70	448	Yes	
4021	16	18.70	403	No	
4022	16	13.30	310	No	
4023	13	11.30	270	No	
4024	16	19.00	306	Yes	
4025	13	16.50	453	Yes	
4026	14	18.50	307	Yes	
4027	16	15.40	451	Yes	
4028	15	14.10	262	Yes	
4029	12	13.60	440	Yes	
4030	12	17.60	346	Yes	

**TYPE 5 DETECTION PROBABILITY**

		Signal Type: FCC TYPE 5
Table 5: Data Sheet for Long Pulse Radar Test Signal 5		
Waveform No.	Successful Detection (Yes/No)	
5001	Yes	
5002	Yes	
5003	Yes	
5004	Yes	
5005	Yes	
5006	Yes	
5007	Yes	
5008	Yes	
5009	Yes	
5010	Yes	
5011	Yes	
5012	Yes	
5013	Yes	
5014	Yes	
5015	Yes	
5016	Yes	
5017	Yes	
5018	Yes	
5019	Yes	
5020	Yes	
5021	Yes	
5022	Yes	
5023	Yes	
5024	Yes	
5025	Yes	
5026	Yes	
5027	Yes	
5028	Yes	
5029	Yes	
5030	Yes	

**TYPE 5 WAVEFORM PARAMETERS**

Waveform Parameters for Long Pulse Radar Test Signal 5						
Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 1; Num of Bursts = 19; Burst Interval (us) = 6315790.0; Total pulses in waveform = 33</b>						
1	1	65	13	---	---	35519
2	3	75	13	1881	1366	1218965
3	3	50	16	1433	1577	166515
4	3	60	16	1879	1147	869460
5	2	90	7	1682	---	830495
6	1	60	7	---	---	204376
7	2	75	17	1960	---	851314
8	1	85	5	---	---	439307
9	1	70	20	---	---	436088
10	2	85	9	1303	---	1214816
11	1	80	16	---	---	195979
12	1	50	17	---	---	986145
13	2	55	11	1026	---	469262
14	1	65	15	---	---	624650
15	2	85	8	1620	---	615032
16	1	95	7	---	---	293387
17	2	60	20	1939	---	923791
18	3	60	8	1356	1743	783157
19	1	50	19	---	---	417901
<b>Waveform Num = 2; Num of Bursts = 16; Burst Interval (us) = 750000.0; Total pulses in waveform = 30</b>						
1	1	70	7	---	---	220782
2	2	95	10	1910	---	859215
3	1	65	19	---	---	782262
4	2	70	6	1692	---	556725
5	1	85	14	---	---	1113444
6	1	75	5	---	---	542328
7	2	60	15	1753	---	954038
8	2	95	11	1214	---	206762
9	2	90	20	1522	---	937788
10	3	80	17	1363	1861	1189625
11	2	70	9	1634	---	669078
12	3	55	8	1086	1180	851803
13	2	65	19	1666	---	593576
14	3	85	11	1922	1037	423029
15	1	65	15	---	---	567047
16	2	85	17	1290	---	1056467

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 3; Num of Bursts = 9; Burst Interval (us) = 1333333.0; Total pulses in waveform = 18</b>						
1	3	60	14	1796	2000	377232
2	2	85	15	1729	---	1810823
3	2	90	14	1844	---	1777776
4	2	50	10	1585	---	738512
5	1	90	16	---	---	625361
6	3	95	9	1575	1919	1870545
7	2	70	6	1900	---	1511153
8	1	60	18	---	---	839366
9	2	75	9	1425	---	2067250
<b>Waveform Num = 4; Num of Bursts = 16; Burst Interval (us) = 750000.0; Total pulses in waveform = 35</b>						
1	1	90	20	---	---	293440
2	3	55	10	1246	1585	1055660
3	1	80	10	---	---	592860
4	1	85	17	---	---	488912
5	3	50	6	1711	1804	706133
6	3	70	15	1340	1979	1281244
7	2	70	10	1337	---	145032
8	3	100	20	1354	1433	1274018
9	2	70	12	1008	---	375448
10	1	70	20	---	---	1146050
11	1	65	7	---	---	548717
12	3	90	19	1818	1902	843410
13	3	70	16	1003	1009	896259
14	3	65	18	1918	1581	466009
15	3	80	19	1812	1803	925104
16	2	55	10	1613	---	813071
<b>Waveform Num = 5; Num of Bursts = 8; Burst Interval (us) = 1500000.0; Total pulses in waveform = 13</b>						
1	1	90	9	---	---	809624
2	3	75	19	1265	1451	1316205
3	2	95	13	1037	---	1644072
4	2	50	16	1035	---	1826695
5	1	95	18	---	---	904966
6	1	95	5	---	---	1574099
7	1	90	8	---	---	1576804
8	2	70	18	1843	---	1343177

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 6; Num of Bursts = 12; Burst Interval (us) = 1000000.0; Total pulses in waveform = 26</b>						
1	2	85	8	1073	---	466305
2	1	50	10	---	---	719292
3	2	85	20	1293	---	1575181
4	3	50	8	1953	1855	631030
5	3	50	10	1241	1336	702995
6	1	95	6	---	---	1025734
7	1	80	11	---	---	1781016
8	3	80	8	1469	1499	1006167
9	3	70	11	1850	1130	937552
10	1	70	5	---	---	944261
11	3	60	6	1184	1756	1014759
12	3	55	7	1296	1415	836294
<b>Waveform Num = 7; Num of Bursts = 12; Burst Interval (us) = 1000000.0; Total pulses in waveform = 27</b>						
1	3	90	10	1092	1313	198083
2	1	50	11	---	---	1720953
3	2	85	12	1928	---	174362
4	3	55	16	1886	1359	1634848
5	3	60	7	1153	1483	461834
6	2	50	14	1131	---	1719808
7	2	90	10	1815	---	959766
8	3	75	6	1057	1930	739722
9	3	95	12	1268	1377	1095406
10	1	100	8	---	---	1055142
11	1	60	17	---	---	685853
12	3	100	5	1299	1733	1427205
<b>Waveform Num = 8; Num of Bursts = 14; Burst Interval (us) = 857143.0; Total pulses in waveform = 30</b>						
1	1	75	10	---	---	288006
2	2	85	7	1228	---	943027
3	3	90	17	1205	1340	981160
4	3	60	5	1130	1158	903582
5	1	65	20	---	---	388292
6	2	90	13	1976	---	985662
7	2	55	13	1803	---	1073118
8	1	75	14	---	---	737679
9	2	65	17	1353	---	614336
10	2	100	7	1920	---	1227239
11	3	55	18	1869	1149	574498
12	3	95	14	1670	1700	1289499
13	2	85	19	1178	---	615174
14	3	90	13	1012	1533	878599

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 9; Num of Bursts = 15; Burst Interval (us) = 800000.0; Total pulses in waveform = 29</b>						
1	3	85	7	1320	1093	108590
2	2	70	17	1253	---	954843
3	2	90	9	1546	---	1311635
4	3	90	11	1363	1050	53620
5	1	95	20	---	---	1138223
6	2	80	20	1115	---	943107
7	3	80	14	1305	1943	1051546
8	1	75	18	---	---	745115
9	2	70	10	1305	---	820116
10	2	75	8	1663	---	250884
11	1	95	11	---	---	1098716
12	2	100	14	1943	---	868712
13	3	95	17	1636	1400	826651
14	1	50	15	---	---	601560
15	1	95	17	---	---	638228
<b>Waveform Num = 10; Num of Bursts = 20; Burst Interval (us) = 600000.0; Total pulses in waveform = 40</b>						
1	3	50	10	1890	1962	85259
2	2	50	16	1751	---	531535
3	3	85	19	1974	1387	1021559
4	2	75	5	1198	---	627444
5	1	65	17	---	---	277806
6	1	80	10	---	---	656565
7	1	65	6	---	---	560768
8	1	60	14	---	---	743977
9	3	65	18	1235	1046	647592
10	1	85	19	---	---	294414
11	2	100	13	1874	---	853259
12	3	90	17	1445	1337	455133
13	2	80	5	1898	---	632251
14	3	85	12	1032	1681	729884
15	3	65	8	1888	1906	600150
16	2	85	6	1122	---	397266
17	2	100	17	1015	---	440939
18	3	80	8	1328	1320	630489
19	1	90	16	---	---	663407
20	1	50	5	---	---	705609

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 11; Num of Bursts = 19; Burst Interval (us) = 631579.0; Total pulses in waveform = 46</b>						
1	3	60	17	1129	1158	71289
2	3	50	5	1139	1216	588334
3	3	50	8	1276	1246	1150185
4	3	60	8	1868	1855	202253
5	3	50	6	1914	1998	663716
6	1	60	13	---	---	638277
7	3	80	11	1912	1087	1041069
8	2	55	16	1927	---	610485
9	2	50	16	1806	---	621613
10	3	95	15	1926	1968	506821
11	1	95	9	---	---	324266
12	3	70	11	1396	1171	925436
13	3	60	13	1038	1242	785937
14	3	55	13	1499	1335	103296
15	3	95	15	1117	1839	931039
16	3	85	5	1478	1891	464262
17	1	90	13	---	---	579511
18	1	65	18	---	---	730709
19	2	50	17	1498	---	850118
<b>Waveform Num = 12; Num of Bursts = 11; Burst Interval (us) = 1090909.0; Total pulses in waveform = 21</b>						
1	1	70	8	---	---	380734
2	2	55	7	1624	---	1053767
3	1	85	11	---	---	1130702
4	3	75	6	1731	1127	1101884
5	1	70	7	---	---	828419
6	3	90	19	1473	1699	1258403
7	2	90	9	1374	---	1659261
8	3	70	7	1819	1529	734008
9	1	70	10	---	---	937339
10	3	100	5	1645	1349	1530190
11	1	85	6	---	---	906529
<b>Waveform Num = 13; Num of Bursts = 11; Burst Interval (us) = 1090909.0; Total pulses in waveform = 19</b>						
1	1	60	19	---	---	987535
2	1	80	11	---	---	337675
3	1	60	20	---	---	1382271
4	1	65	15	---	---	1098814
5	2	50	5	1007	---	1468611
6	3	100	5	1159	1519	856611
7	3	65	10	1778	1776	1461715
8	1	65	18	---	---	348206
9	3	60	15	1815	1704	1550790
10	2	65	6	2000	---	722171
11	1	50	13	---	---	957873

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 14; Num of Bursts = 18; Burst Interval (us) = 666667.0; Total pulses in waveform = 34</b>						
1	2	85	7	1940	---	525123
2	1	60	6	---	---	188686
3	2	65	15	1184	---	927526
4	3	100	10	1645	1274	709863
5	2	100	14	1999	---	815420
6	3	75	13	1189	1452	669603
7	2	80	15	1738	---	709675
8	2	75	7	1640	---	389176
9	1	80	14	---	---	451858
10	1	65	7	---	---	592173
11	3	80	7	1397	1756	855857
12	1	85	9	---	---	1086982
13	2	65	11	1673	---	684135
14	1	75	19	---	---	370445
15	3	50	12	1275	1881	371429
16	1	70	19	---	---	914631
17	1	70	14	---	---	695135
18	3	80	13	1385	1268	705474
<b>Waveform Num = 15; Num of Bursts = 13; Burst Interval (us) = 923077.0; Total pulses in waveform = 26</b>						
1	2	50	14	1258	---	298515
2	1	70	5	---	---	655283
3	1	95	9	---	---	1262446
4	2	55	13	1115	---	1027701
5	3	85	13	1659	1394	681978
6	3	55	13	1188	1887	1123745
7	2	60	13	1794	---	1056557
8	1	75	16	---	---	1021754
9	2	85	20	1842	---	422659
10	1	70	11	---	---	1457104
11	2	85	11	1233	---	517266
12	3	100	5	1467	1811	1090765
13	3	70	6	1990	1609	867640
<b>Waveform Num = 16; Num of Bursts = 9; Burst Interval (us) = 1333333.0; Total pulses in waveform = 17</b>						
1	1	60	11	---	---	641777
2	1	90	5	---	---	1851722
3	3	85	15	1357	1406	1377092
4	3	85	10	1539	1120	225501
5	2	75	5	1255	---	1724691
6	2	75	8	1049	---	1121831
7	2	100	8	1709	---	1800157
8	2	90	17	1541	---	1119516
9	1	75	7	---	---	2040315

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 17; Num of Bursts = 19; Burst Interval (us) = 631579.0; Total pulses in waveform = 35</b>						
1	1	85	8	---	---	453670
2	2	95	8	1327	---	668328
3	3	65	11	1677	1773	625307
4	2	90	14	1382	---	748678
5	1	55	11	---	---	51098
6	1	90	11	---	---	623935
7	2	100	7	1790	---	772399
8	3	85	16	1543	1336	469779
9	2	55	20	1601	---	909741
10	2	85	20	1227	---	350107
11	1	70	19	---	---	767505
12	3	60	12	1501	1597	636968
13	3	65	7	1049	1549	821155
14	2	60	12	1622	---	641625
15	1	85	12	---	---	465326
16	3	80	7	1528	1452	860962
17	1	55	13	---	---	266697
18	1	50	15	---	---	1022958
19	1	80	18	---	---	663451
<b>Waveform Num = 18; Num of Bursts = 19; Burst Interval (us) = 631579.0; Total pulses in waveform = 40</b>						
1	3	100	13	1963	1426	323732
2	1	80	7	---	---	510214
3	3	85	11	1681	1834	613175
4	1	85	11	---	---	1059497
5	1	100	16	---	---	210849
6	2	80	18	1986	---	829454
7	2	60	13	1321	---	598607
8	3	100	10	1480	1809	551402
9	1	95	10	---	---	404795
10	3	90	11	1110	1884	928510
11	1	85	10	---	---	868478
12	2	90	11	1369	---	358332
13	2	80	18	1437	---	792179
14	3	95	13	1921	1575	315739
15	3	90	16	1890	1180	973357
16	2	100	11	1607	---	338387
17	3	55	7	1490	1946	839254
18	2	60	20	1150	---	608146
19	2	70	8	1945	---	603176

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 19; Num of Bursts = 18; Burst Interval (us) = 666667.0; Total pulses in waveform = 36</b>						
1	1	95	13	---	---	421342
2	2	65	19	1554	---	430010
3	3	90	6	1367	1142	983801
4	1	100	14	---	---	177951
5	1	90	15	---	---	744040
6	1	75	15	---	---	1039949
7	1	75	13	---	---	375923
8	3	65	6	1414	1071	524549
9	3	60	14	1904	1465	778571
10	2	85	11	1237	---	972064
11	2	90	20	1760	---	488455
12	2	80	11	1858	---	739283
13	2	100	9	1826	---	572824
14	1	80	20	---	---	888380
15	3	60	11	1219	1033	679676
16	2	60	14	1503	---	779821
17	3	100	8	1503	1156	257786
18	3	90	14	1749	1242	830745
<b>Waveform Num = 20; Num of Bursts = 20; Burst Interval (us) = 600000.0; Total pulses in waveform = 38</b>						
1	1	80	5	---	---	111313
2	1	90	7	---	---	542548
3	2	60	6	1526	---	892315
4	3	80	10	1006	1341	780429
5	2	70	15	1117	---	513699
6	3	80	7	1139	1269	721921
7	3	50	20	1301	1009	308454
8	2	100	14	1009	---	811713
9	1	90	8	---	---	642579
10	2	65	5	1635	---	240950
11	2	65	5	1213	---	606750
12	1	95	5	---	---	516614
13	2	50	14	1684	---	999376
14	2	70	11	1204	---	166893
15	1	85	10	---	---	918902
16	2	50	13	1440	---	501079
17	1	50	11	---	---	352037
18	2	50	20	1579	---	783983
19	3	70	16	1161	1893	733159
20	2	50	15	1537	---	488276

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 21; Num of Bursts = 12; Burst Interval (us) = 1000000.0; Total pulses in waveform = 23</b>						
1	3	65	9	1584	1990	417480
2	1	85	7	---	---	1359064
3	1	75	18	---	---	675327
4	3	65	12	1404	1002	1130333
5	2	80	11	1537	---	535002
6	2	70	17	1857	---	1526841
7	1	50	13	---	---	1255728
8	3	65	15	1940	1193	393305
9	1	55	5	---	---	1043196
10	2	70	17	1658	---	1174640
11	2	70	16	1350	---	997010
12	2	85	14	1666	---	678326
<b>Waveform Num = 22; Num of Bursts = 9; Burst Interval (us) = 1333333.0; Total pulses in waveform = 19</b>						
1	1	50	5	---	---	991887
2	3	60	18	1789	1784	1061011
3	3	50	14	1670	1482	1193326
4	2	60	6	1083	---	940000
5	1	85	20	---	---	1693630
6	3	75	20	1321	1603	1214696
7	3	75	7	1500	1216	1479221
8	1	75	17	---	---	988211
9	2	75	8	1438	---	1675132
<b>Waveform Num = 23; Num of Bursts = 11; Burst Interval (us) = 1090909.0; Total pulses in waveform = 19</b>						
1	2	90	6	1917	---	1004369
2	1	90	7	---	---	885258
3	1	50	17	---	---	600801
4	2	55	6	1505	---	900302
5	2	60	5	1783	---	1297318
6	3	80	10	1246	1321	1130499
7	1	85	13	---	---	1509805
8	3	55	8	1475	1343	596064
9	2	75	15	1865	---	874833
10	1	80	15	---	---	1502488
11	1	85	5	---	---	834578

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 24; Num of Bursts = 20; Burst Interval (us) = 600000.0; Total pulses in waveform = 45</b>						
1	2	80	12	1589	---	23550
2	3	50	13	1695	1885	627958
3	2	100	12	1686	---	643509
4	3	85	15	1894	1955	650796
5	3	65	10	1486	1380	958074
6	3	80	16	1367	1905	159177
7	2	100	16	1434	---	891516
8	1	90	15	---	---	457746
9	1	60	10	---	---	407509
10	1	90	11	---	---	1092095
11	2	85	13	1551	---	530367
12	2	100	7	1410	---	287513
13	3	50	13	1935	1958	462441
14	3	70	10	1375	1081	985849
15	1	60	6	---	---	382265
16	3	95	9	1153	1399	549944
17	3	70	9	1013	1396	752907
18	3	85	8	1202	1604	450287
19	3	75	14	1906	1907	669966
20	1	90	7	---	---	821679
<b>Waveform Num = 25; Num of Bursts = 13; Burst Interval (us) = 923077.0; Total pulses in waveform = 29</b>						
1	1	75	17	---	---	201171
2	2	60	14	1621	---	1270657
3	1	90	10	---	---	1181136
4	3	70	15	1625	1229	847360
5	3	90	6	1821	1788	409970
6	2	75	10	1069	---	761160
7	3	70	15	1164	1404	927605
8	3	80	8	1876	1577	882058
9	3	100	6	1537	1512	1393904
10	1	60	10	---	---	869433
11	2	60	12	1296	---	593837
12	3	90	13	1017	1965	1263895
13	2	100	8	1415	---	500417

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 26; Num of Bursts = 12; Burst Interval (us) = 1000000.0; Total pulses in waveform = 26</b>						
1	1	95	5	---	---	602842
2	3	50	11	1722	1055	1143096
3	2	85	9	1050	---	365614
4	2	70	10	1695	---	1701136
5	3	80	8	1526	1334	844455
6	2	70	12	1892	---	1297093
7	3	50	17	1219	1254	349585
8	1	100	16	---	---	1414737
9	1	65	7	---	---	824677
10	3	90	15	1145	1511	921253
11	2	100	18	1339	---	1216849
12	3	80	17	1329	1570	1082425
<b>Waveform Num = 27; Num of Bursts = 10; Burst Interval (us) = 1200000.0; Total pulses in waveform = 17</b>						
1	1	95	16	---	---	625248
2	2	90	19	1546	---	741093
3	1	60	14	---	---	2166263
4	2	55	5	1820	---	1057719
5	2	60	11	1814	---	1271849
6	2	80	11	1070	---	1252385
7	1	95	11	---	---	763857
8	2	50	17	1206	---	816020
9	2	60	9	1187	---	1765512
10	2	95	9	1997	---	361849
<b>Waveform Num = 28; Num of Bursts = 8; Burst Interval (us) = 1500000.0; Total pulses in waveform = 14</b>						
1	1	65	16	---	---	183320
2	2	50	5	1768	---	1357682
3	3	80	16	1357	1028	2792250
4	2	55	20	1849	---	439320
5	2	65	17	1883	---	1468080
6	1	70	11	---	---	2455191
7	1	90	14	---	---	501637
8	2	55	14	1620	---	1926517

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 29; Num of Bursts = 14; Burst Interval (us) = 857143.0; Total pulses in waveform = 28</b>						
1	2	65	6	1469	---	16828
2	2	70	10	1706	---	1400866
3	1	95	9	---	---	841863
4	3	55	20	1788	1575	523936
5	1	70	14	---	---	1346703
6	1	60	12	---	---	786662
7	3	90	16	1706	1401	772820
8	2	60	12	1344	---	807871
9	1	70	18	---	---	545314
10	2	75	8	1431	---	1493747
11	3	55	8	1771	1136	733889
12	2	85	10	1718	---	452068
13	2	80	7	1139	---	1110559
14	3	60	7	1742	1107	860212
<b>Waveform Num = 30; Num of Bursts = 19; Burst Interval (us) = 631579.0; Total pulses in waveform = 41</b>						
1	1	95	20	---	---	255179
2	3	80	8	1561	1272	727828
3	3	95	5	1044	1394	810669
4	1	55	10	---	---	494533
5	3	80	9	1616	1297	765446
6	3	100	20	1490	1502	551300
7	1	60	5	---	---	683252
8	1	65	8	---	---	331083
9	2	80	12	1447	---	493181
10	3	65	17	1320	1805	706371
11	2	75	18	1297	---	977522
12	2	95	8	1341	---	205290
13	3	95	16	1074	1914	783879
14	3	80	18	1761	1958	452318
15	1	90	7	---	---	1172690
16	1	55	13	---	---	579120
17	2	50	16	1447	---	481046
18	3	60	6	1779	1751	249850
19	3	65	11	1456	1804	737283

**TYPE 6 DETECTION PROBABILITY**

Table 6: Data Sheet for Hopping Signal					Signal Type: FCC TYPE 6
Trial No.	Starting Index within NTIA August 2005 Sequence, Base 1	Signal Generator Frequency (MHz)	Hops within Detection BW	Successful Detection (Yes/No)	
1	210	5291	4	Yes	
2	685	5292	1	Yes	
3	1160	5293	6	Yes	
4	1635	5294	4	Yes	
5	2110	5295	4	Yes	
6	2585	5296	4	Yes	
7	3060	5297	5	Yes	
8	3535	5298	3	Yes	
9	4010	5299	6	Yes	
10	4485	5300	4	Yes	
11	4960	5301	2	Yes	
12	5435	5302	2	Yes	
13	5910	5303	6	Yes	
14	6385	5304	3	Yes	
15	6860	5305	4	Yes	
16	7335	5306	6	Yes	
17	7810	5307	5	Yes	
18	8285	5308	6	Yes	
19	8760	5309	2	Yes	
20	9235	5291	5	Yes	
21	9710	5292	1	Yes	
22	10185	5293	2	Yes	
23	10660	5294	4	Yes	
24	11135	5295	4	Yes	
25	11610	5296	6	Yes	
26	12085	5297	3	Yes	
27	12560	5298	6	Yes	
28	13035	5299	5	Yes	
29	13510	5300	2	Yes	
30	13985	5301	3	Yes	
31	14460	5302	7	Yes	
32	14935	5303	6	Yes	
33	15410	5304	4	Yes	
34	15885	5305	3	Yes	
35	16360	5306	3	Yes	
36	16835	5307	3	Yes	
37	17310	5308	4	Yes	
38	17785	5309	2	Yes	

#### **7.4.8. SLAVE DEVICE CONFIGURATION - CHANNEL MOVE TIME AND CHANNEL CLOSING TRANSMISSION 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)

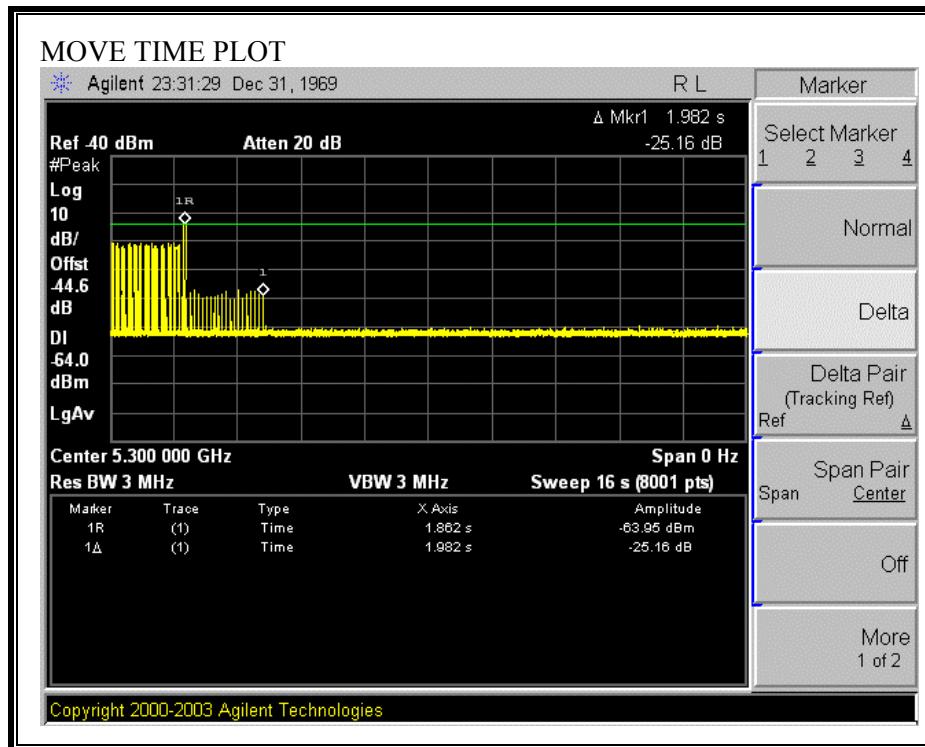
The observation period over which the aggregate time is calculated for the FCC version  
Begins at (Reference Marker + 200 msec)  
and  
Ends no earlier than (Reference Marker + 10 sec).

The observation period over which the aggregate time is calculated for the IC version  
Begins at (Reference Marker)  
and  
Ends no earlier than (Reference Marker + 10 sec).

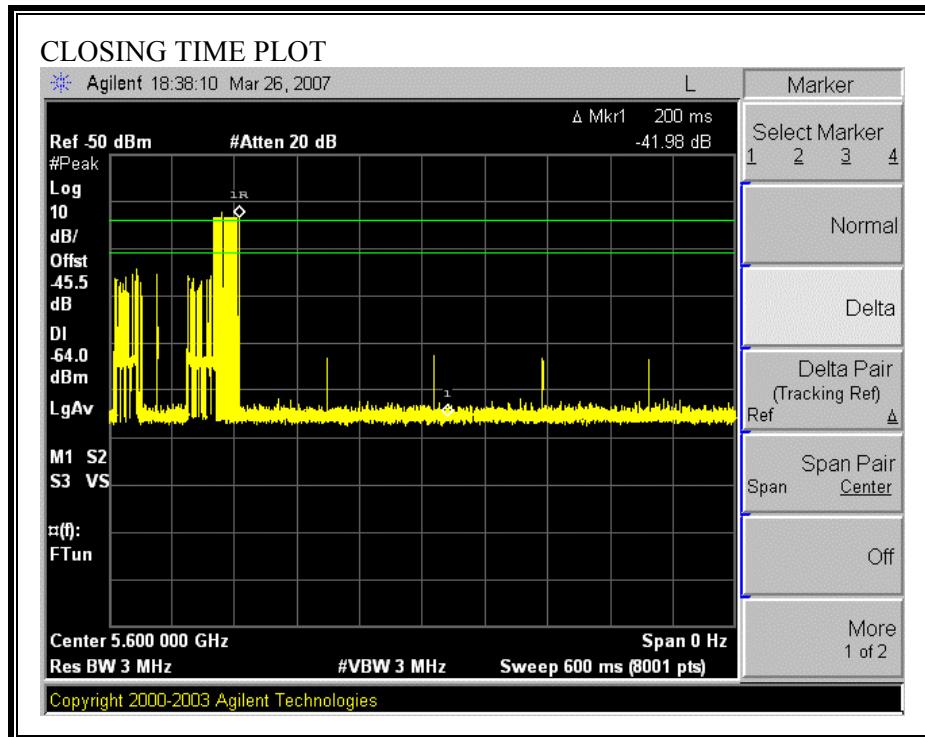
### CHANNEL MOVE TIME RESULTS

No non-compliance noted:

Channel Move Time (s)	Limit (s)
1.902	10



**CHANNEL CLOSING TIME RESULTS**

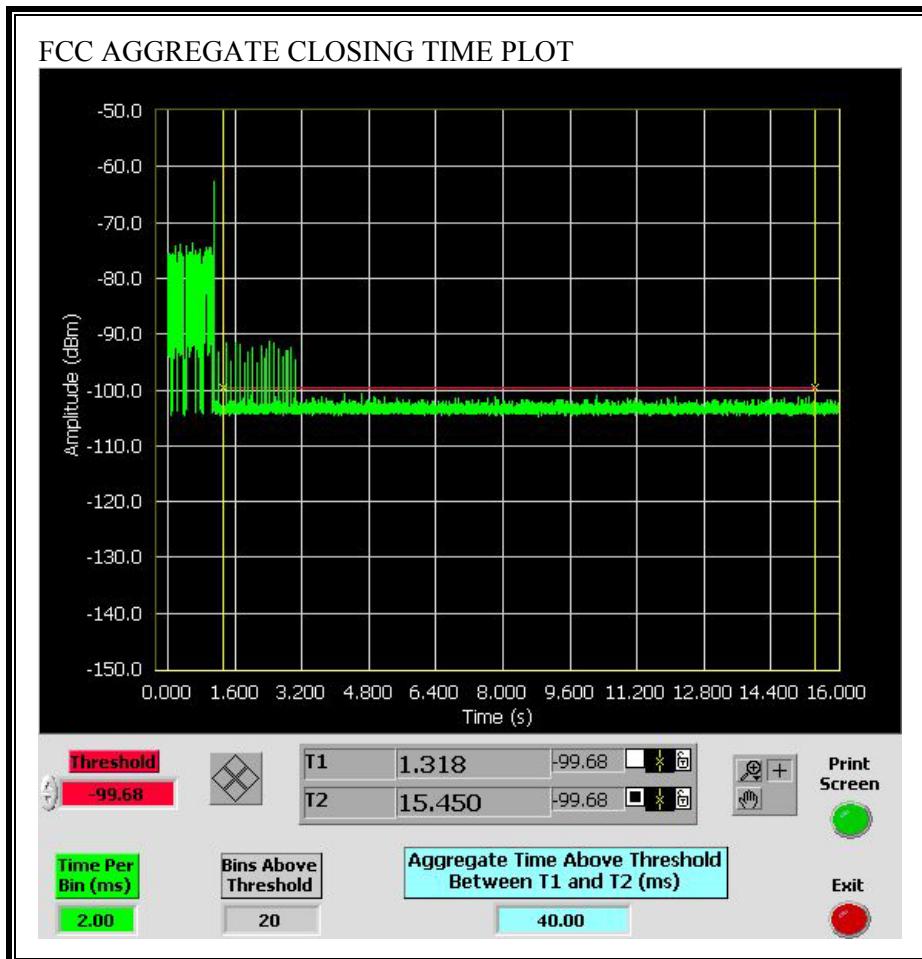


**FCC AGGREGATE CHANNEL CLOSING TRANSMISSION TIME RESULTS**

No non-compliance noted:

Aggregate Transmission Time (ms)	Limit (ms)	Margin (ms)
40.00	60	20.00

Only intermittent transmissions are observed during the aggregate monitoring period.

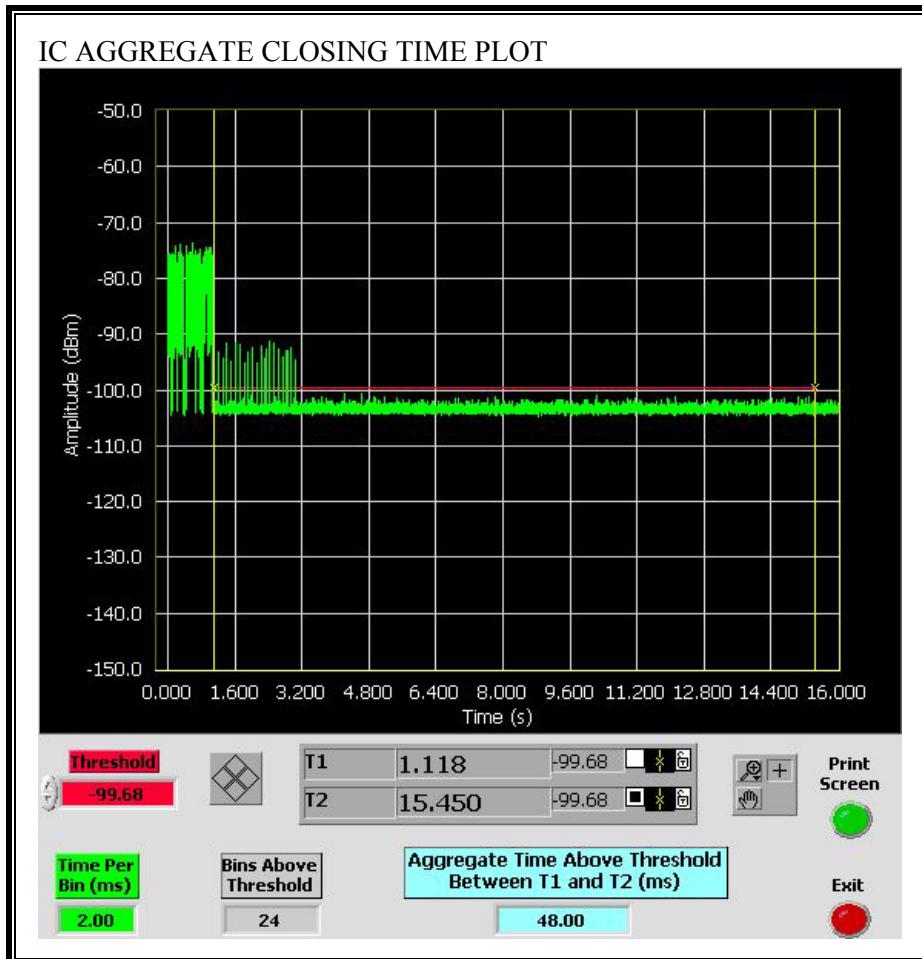


**IC AGGREGATE CHANNEL CLOSING TRANSMISSION TIME RESULTS**

No non-compliance noted:

Aggregate Transmission Time (ms)	Limit (ms)	Margin (ms)
48.00	260	212.00

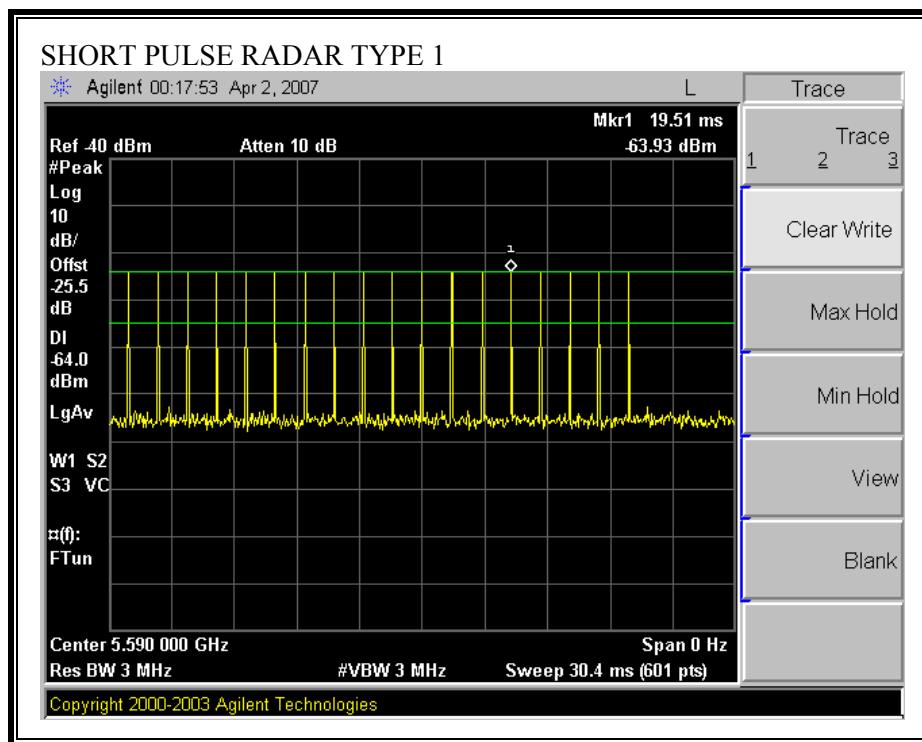
Only intermittent transmissions are observed during the aggregate monitoring period.

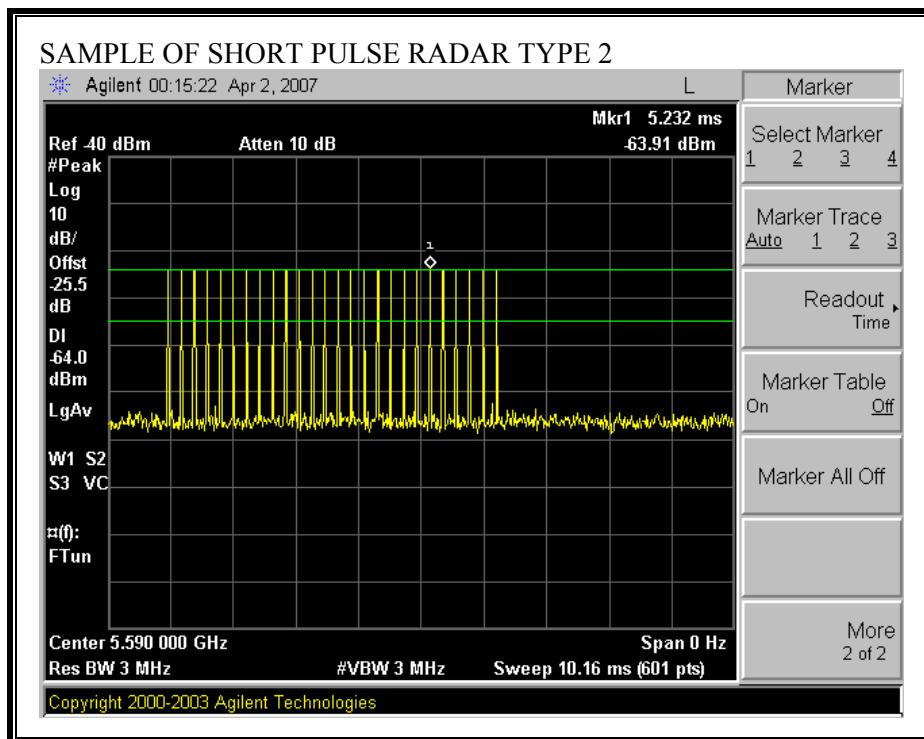


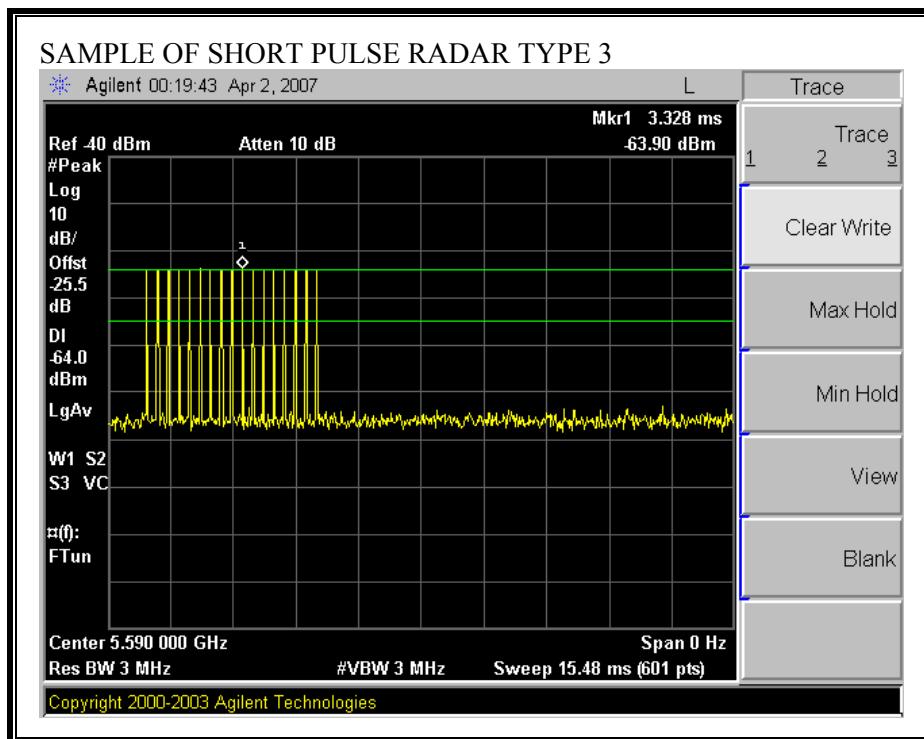
## 7.5. DFS RESULTS FOR 40 MHz BANDWIDTH

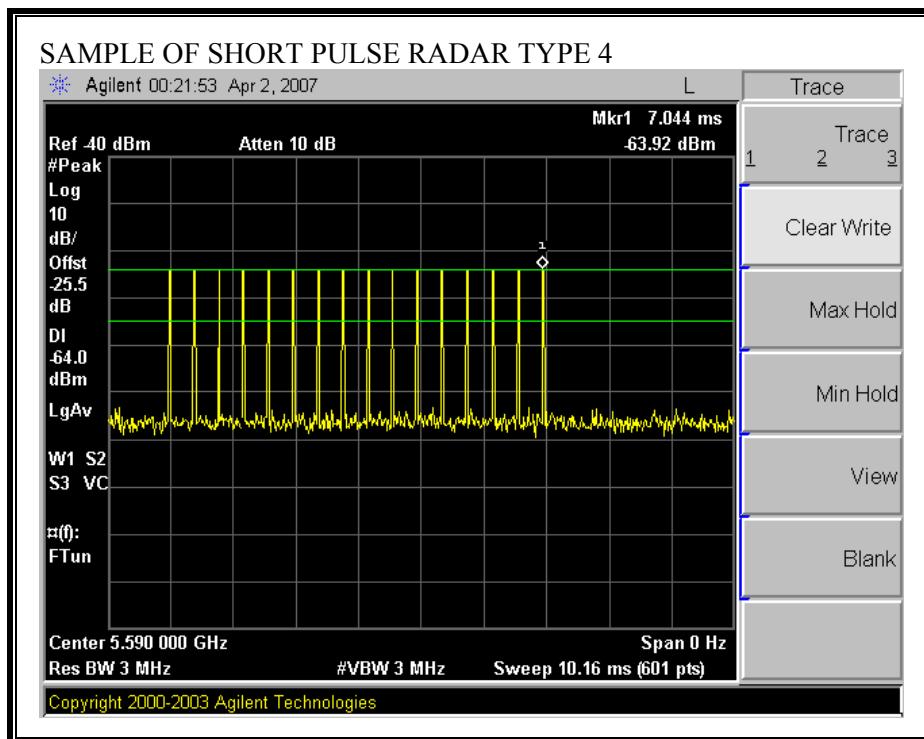
### 7.5.1. PLOTS OF RADAR WAVEFORM, AND WLAN TRAFFIC

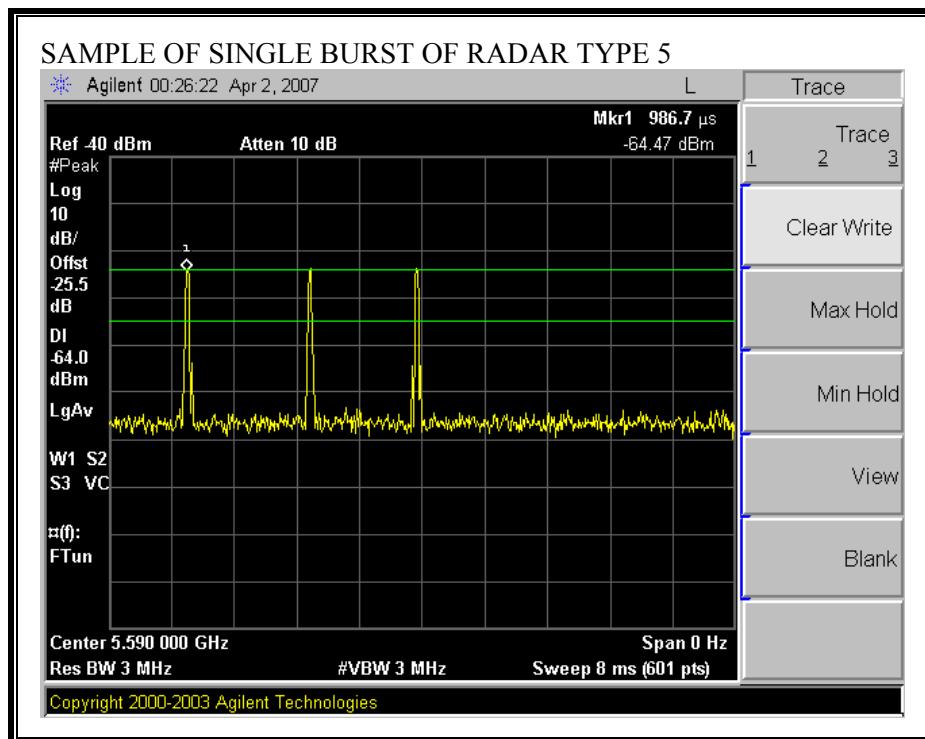
#### PLOTS OF RADAR WAVEFORMS

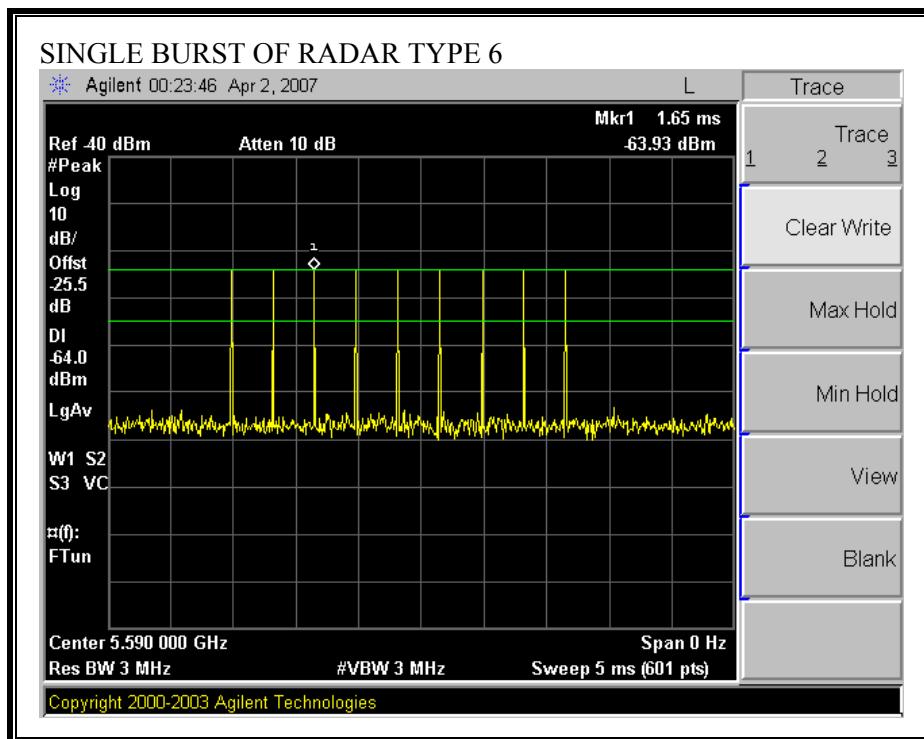




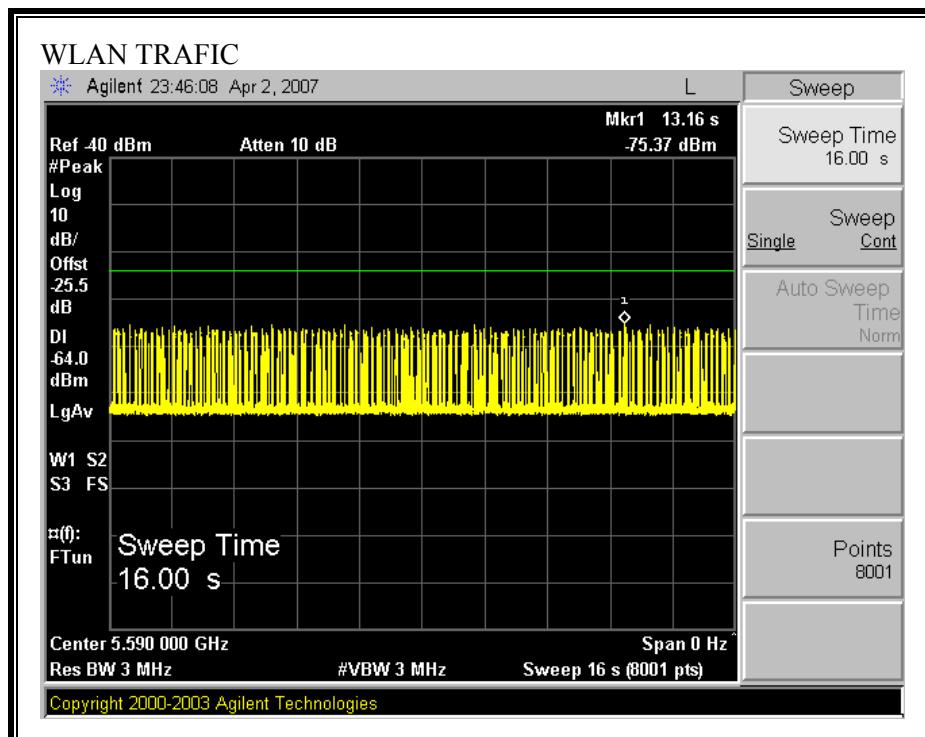








**PLOT OF WLAN TRAFFIC FROM MASTER**



### **7.5.2. TEST CHANNEL AND METHOD**

All tests were performed at a channel center frequency of 5590 MHz utilizing a conducted test method.

### **7.5.3. CHANNEL AVAILABILITY CHECK TIME**

#### **TEST PROCEDURE TO DETERMINE INITIAL POWER-UP CYCLE TIME**

A link was established on channel, then the EUT was rebooted. The time from the cessation of traffic to the re-initialization of traffic was measured as the time required for the EUT to complete the total power-up cycle. The time to complete the initial power-up period is 60 seconds less than this total power-up time.

#### **TEST PROCEDURE FOR TIMING OF RADAR BURST**

With a link established on channel, the EUT was rebooted. A radar signal was triggered within 0 to 6 seconds after the initial power-up period, and transmissions on the channel were monitored on the spectrum analyzer.

The Non-Occupancy list was cleared. With a link established on channel, the EUT was rebooted. A radar signal was triggered within 54 to 60 seconds after the initial power-up period, and transmissions on the channel were monitored on the spectrum analyzer.

**CHANNEL AVAILABILITY CHECK TIME RESULTS**

No non-compliance noted:

Time required for EUT to complete the initial power-up cycle (sec)
13.59

If a radar signal is detected during the channel availability check then the PC controlling the EUT displays a message stating that radar was detected.

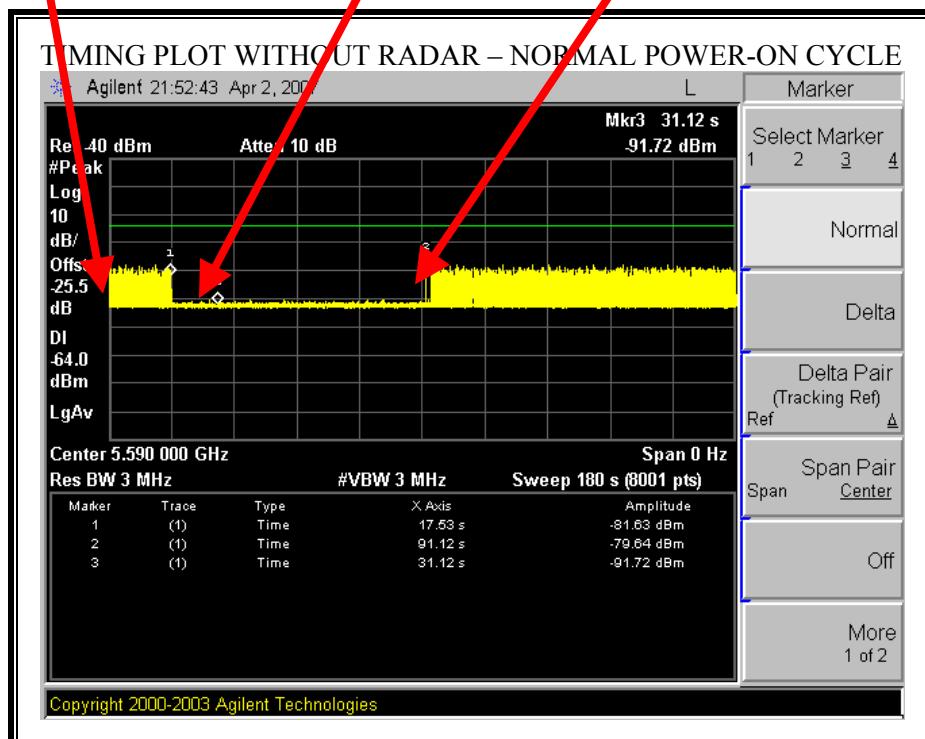
Timing of Radar Burst	Display on EUT / PC Control Computer	Spectrum Analyzer Display
No Radar Triggered	EUT Initiates Transmisisons	Transmissions begin on channel after completion of the initial power-up cycle and the 60 second CAC
Within 0 to 6 second window	EUT indicates radar detected  EUT does not display any radar parameter values	No transmissions on channel
Within 54 to 60 second window	EUT indicates radar detected  EUT does not display any radar parameter values	No transmissions on channel

**TIMING PLOT WITHOUT RADAR DURING CAC**

AP is rebooted  
Traffic ceases  
Start of Initial Power-up cycle

End of Initial Power-up cycle  
Start of CAC

End of CAC  
Traffic is Initiated



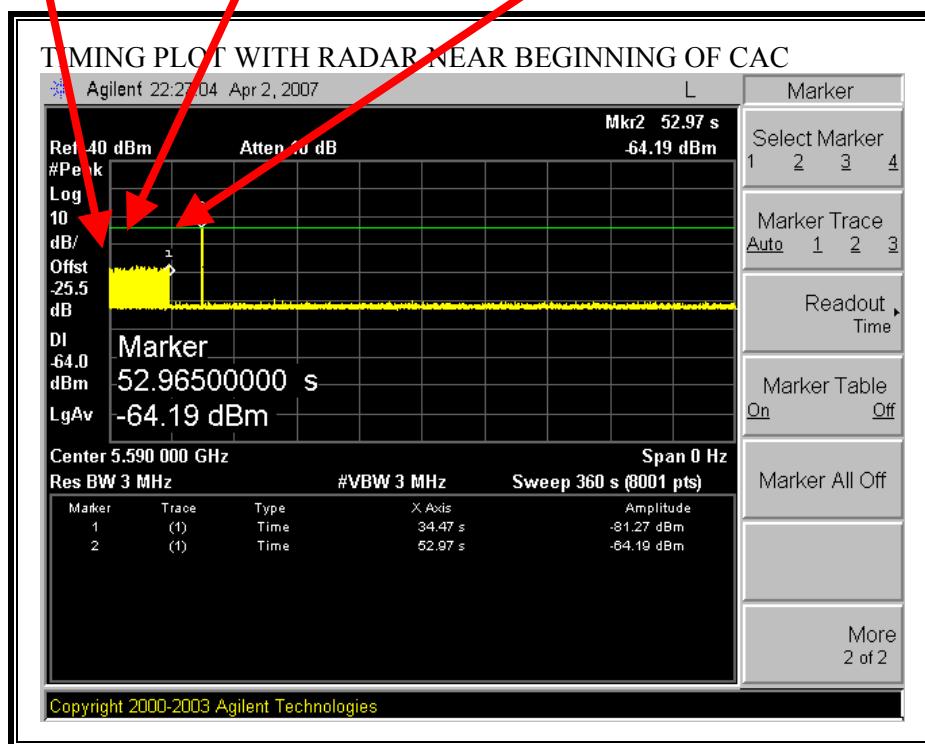
Note: The initial power-up cycle requires  $(91.12 - 17.53 - 60) = 13.59$  seconds.

**TIMING PLOT WITH RADAR NEAR BEGINNING OF CAC**

AP is rebooted  
Traffic ceases  
Start of Initial Power-up cycle

End of Initial Power-up cycle  
Start of CAC

Radar Signal Applied



The radar signal is applied  $(52.97 - 34.47) = 18.5$  seconds after reboot, which is  $(18.5 - 13.59) = 4.91$  seconds after the completion of the initial power-up cycle / start of the CAC period.

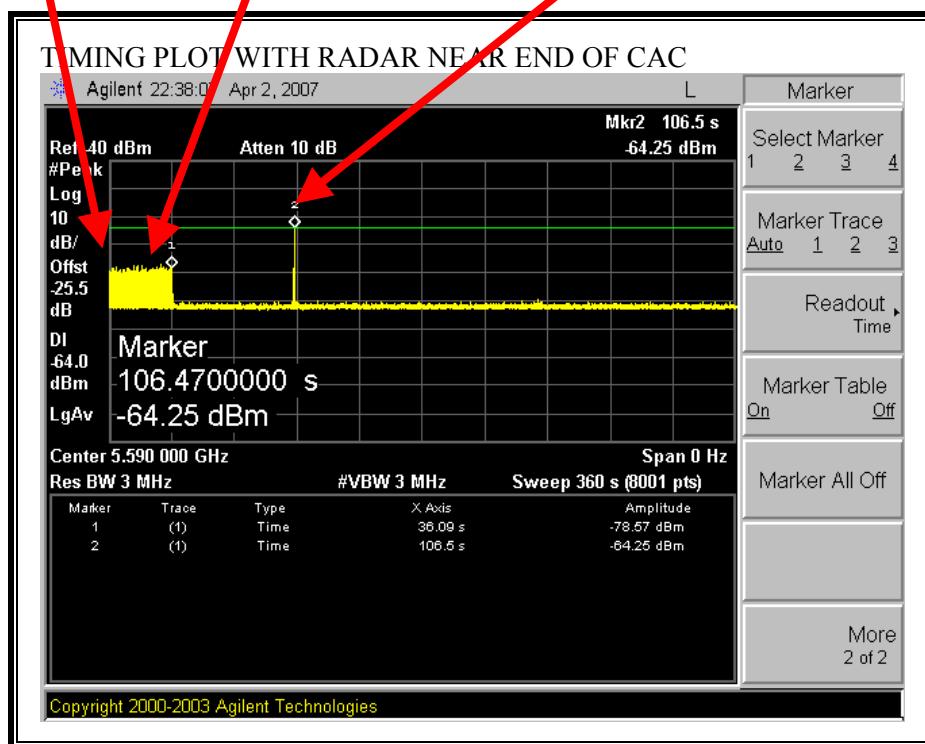
No EUT transmissions were observed after the radar signal.

### TIMING PLOT WITH RADAR NEAR END OF CAC

AP is rebooted  
Traffic ceases  
Start of Initial Power-up cycle

End of Initial Power-up cycle  
Start of CAC

Radar Signal Applied



The radar signal is applied  $(106.5 - 36.09) = 70.41$  seconds after reboot, which is  $(70.41 - 13.59) = 56.82$  seconds after the completion of the initial power-up cycle / start of the CAC period.

No EUT transmissions were observed after the radar signal.

#### **7.5.4. CHANNEL MOVE TIME AND CHANNEL CLOSING TRANSMISSION TIME**

##### **GENERAL REPORTING NOTES**

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

##### **SHORT PULSE RADAR REPORTING NOTES**

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 for the FCC version  
Begins at (Reference Marker + 200 msec)  
and  
Ends no earlier than (Reference Marker + 10 sec).

The observation period over which the aggregate time is calculated for the IC version  
Begins at (Reference Marker)  
and  
Ends no earlier than (Reference Marker + 10 sec).

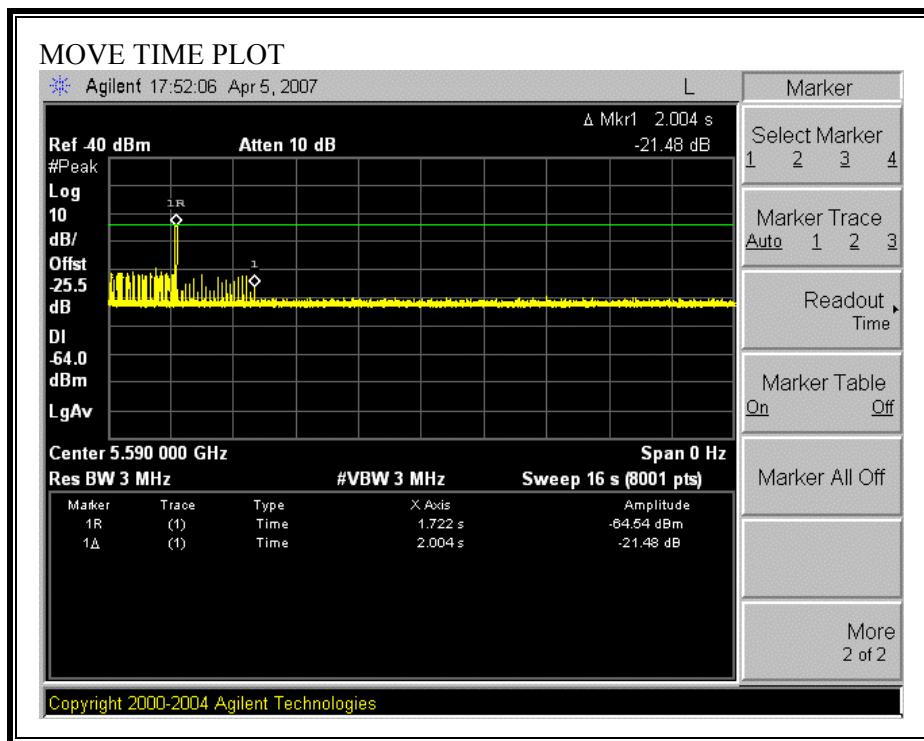
##### **LONG PULSE RADAR REPORTING NOTES**

The delta marker is set to 10 seconds after the end of the radar pulse.

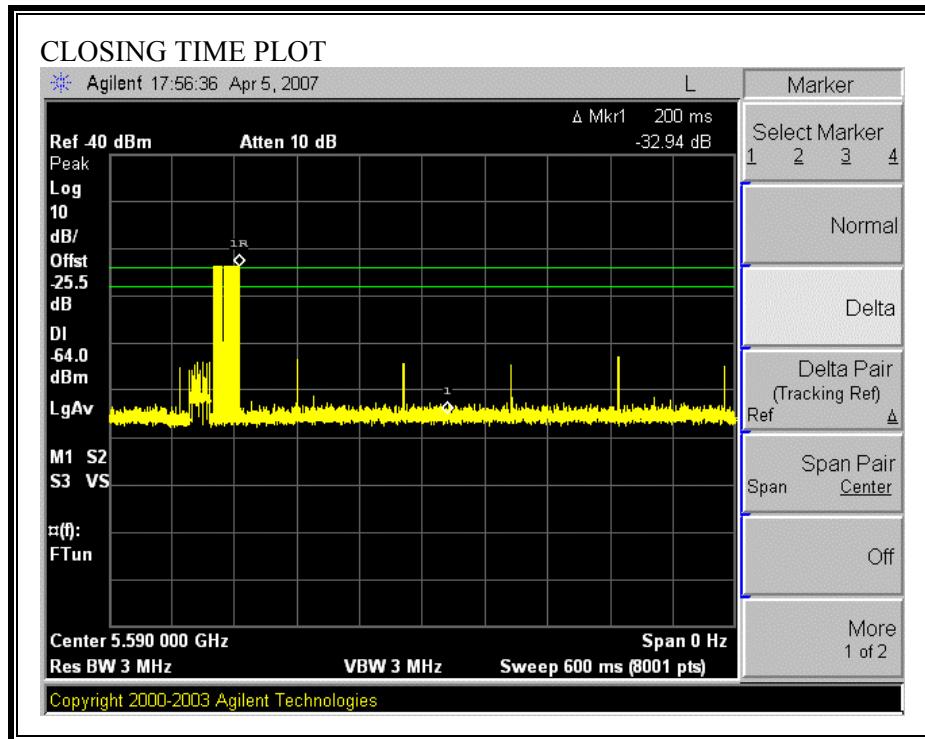
### CHANNEL MOVE TIME RESULTS

No non-compliance noted:

Channel Move Time (s)	Limit (s)
2.004	10



**CHANNEL CLOSING TIME RESULTS**

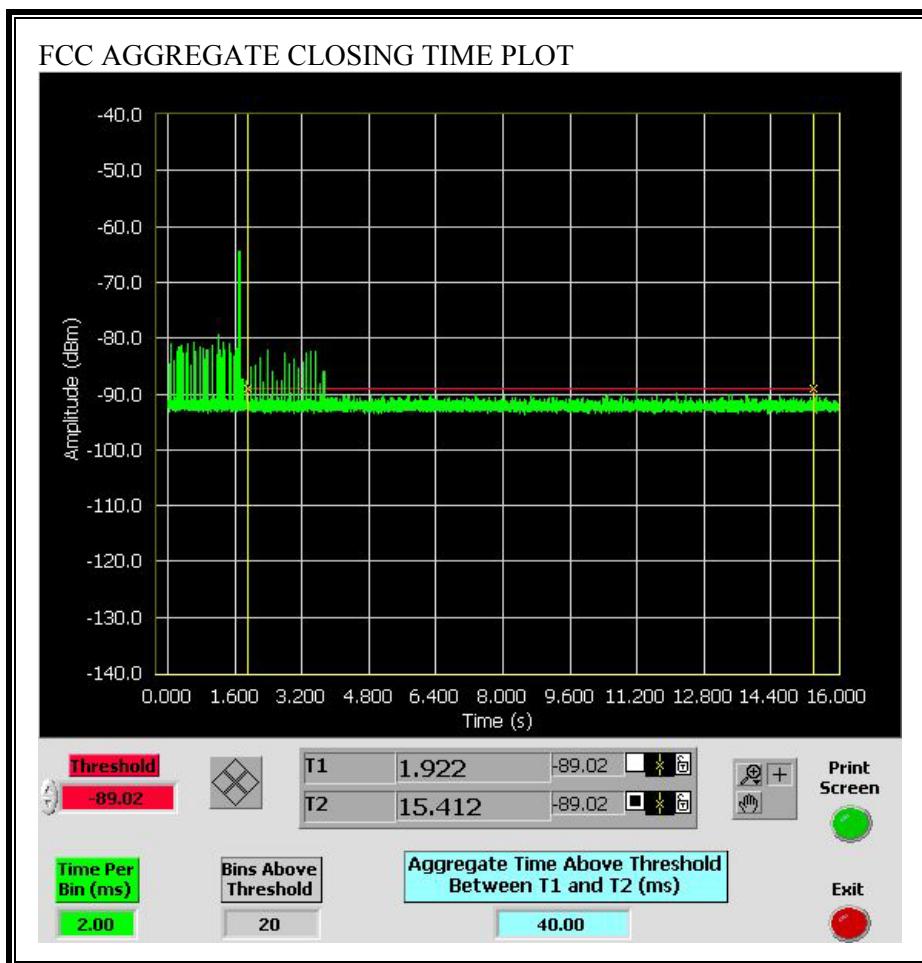


**FCC AGGREGATE CHANNEL CLOSING AGGREGATE TRANSMISSION TIME RESULTS**

No non-compliance noted:

Aggregate Transmission Time (ms)	Limit (ms)	Margin (ms)
40.00	60	20.00

Only intermittent transmissions are observed during the aggregate monitoring period.

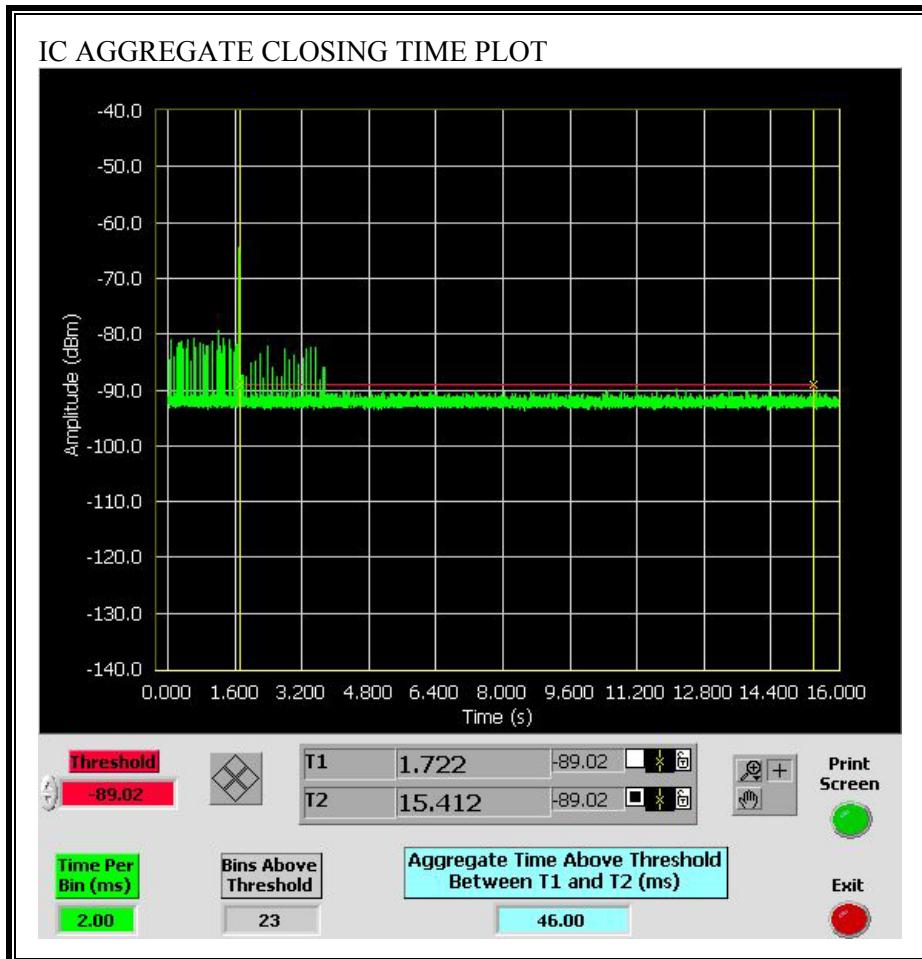


**IC AGGREGATE CHANNEL CLOSING TRANSMISSION TIME RESULTS**

No non-compliance noted:

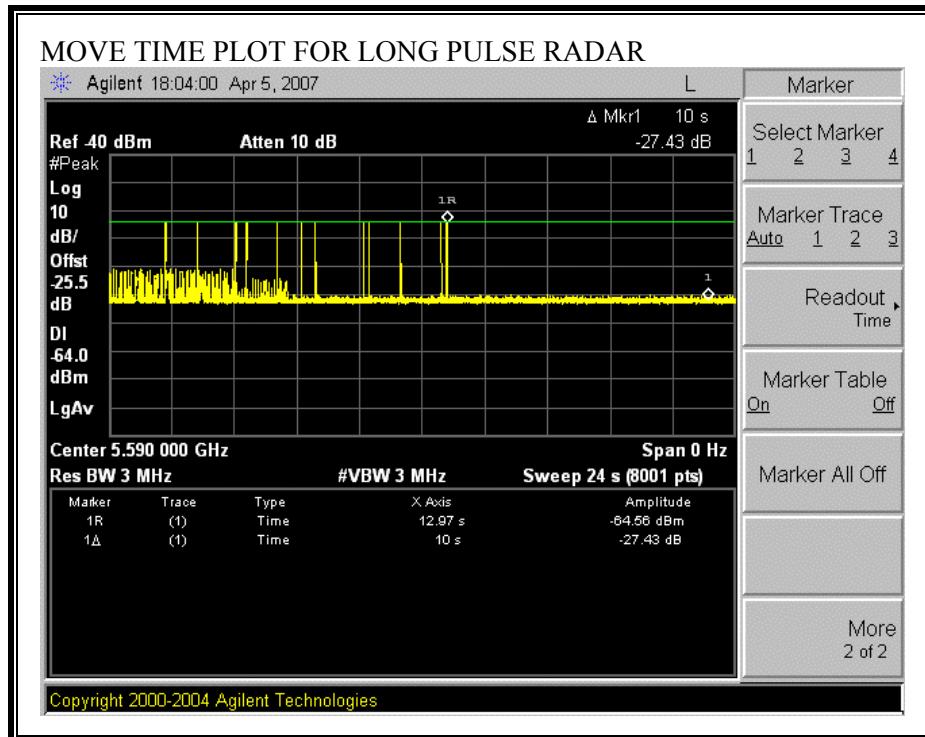
Aggregate Transmission Time (ms)	Limit (ms)	Margin (ms)
46.00	260	214.00

Only intermittent transmissions are observed during the aggregate monitoring period.



### **LONG PULSE CHANNEL MOVE TIME RESULTS**

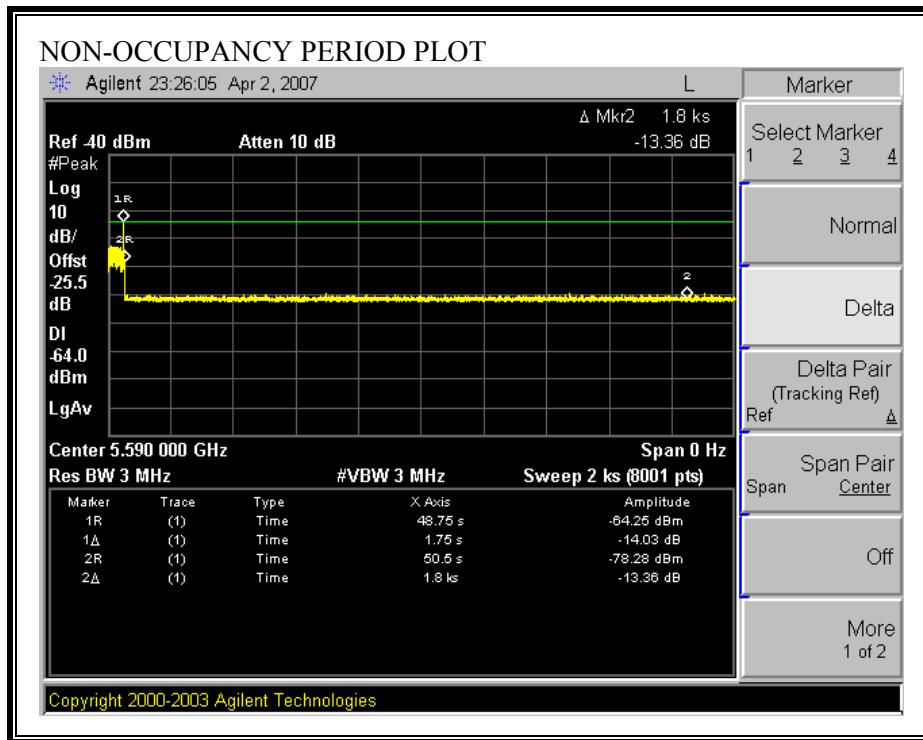
No non-compliance noted: The traffic ceases prior to the end of the radar waveform, therefore it also ceases prior to 10 seconds after the end of the radar waveform.



### 7.5.5. NON-OCCUPANCY PERIOD

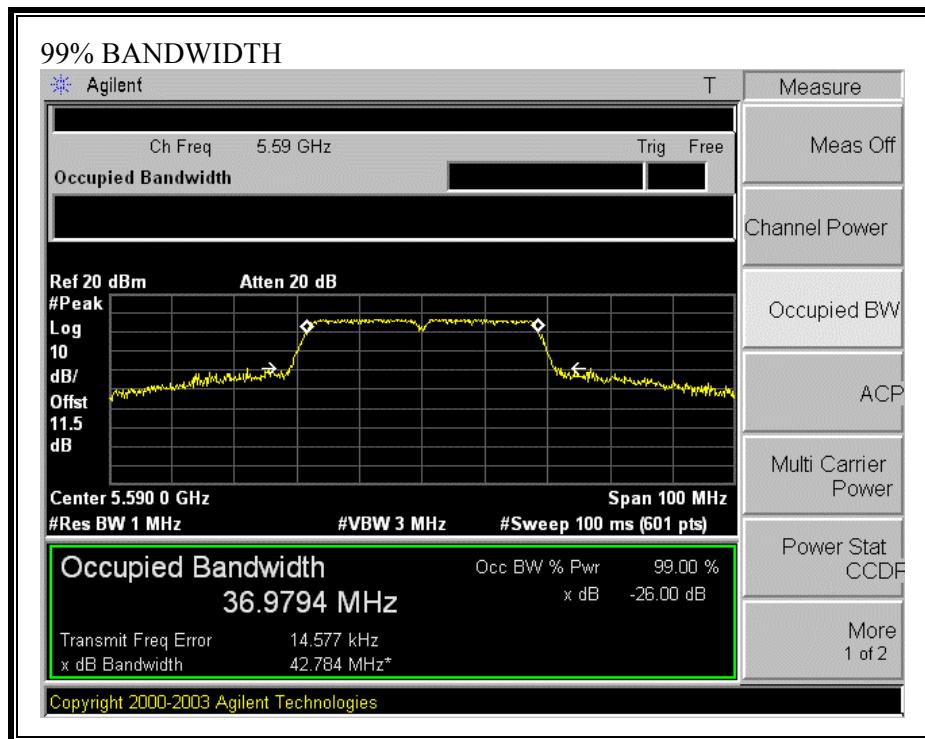
#### RESULTS

No non-compliance noted: No EUT transmissions were observed on the test channel during the 30 minute observation time; the observation period commenced 1.75 seconds after the end of the radar burst.



### 7.5.6. DETECTION BANDWIDTH

#### REFERENCE PLOT OF 99% POWER BANDWIDTH



#### RESULTS

No non-compliance noted:

FL (MHz)	FH (MHz)	Detection Bandwidth (MHz)	99% Power Bandwidth (MHz)	Ratio of Detection BW to 99% Power BW (%)	Minimum Limit (%)
5571	5609	39	36.979	105.5	80

**DETECTION BANDWIDTH PROBABILITY**

**DETECTION BANDWIDTH PROBABILITY RESULTS**

Fixed Waveform Test Results:			Waveform Name: FCC TYPE 1	
Frequency (MHz)	Number of Trials	Number Detected	Detection (%)	Mark
5570	10	3	30.00	
5571	10	10	100.00	FL
5572	10	10	100.00	
5573	10	10	100.00	
5574	10	10	100.00	
5575	10	10	100.00	
5576	10	10	100.00	
5577	10	10	100.00	
5578	10	10	100.00	
5579	10	10	100.00	
5580	10	10	100.00	
5581	10	10	100.00	
5582	10	10	100.00	
5583	10	10	100.00	
5584	10	10	100.00	
5585	10	10	100.00	
5586	10	10	100.00	
5587	10	10	100.00	
5588	10	10	100.00	
5589	10	10	100.00	
5590	10	10	100.00	
5591	10	10	100.00	
5592	10	10	100.00	
5593	10	10	100.00	
5594	10	10	100.00	
5595	10	10	100.00	
5596	10	10	100.00	
5597	10	10	100.00	
5598	10	10	100.00	
5599	10	10	100.00	
5600	10	10	100.00	
5601	10	10	100.00	
5602	10	10	100.00	
5603	10	10	100.00	
5604	10	10	100.00	
5605	10	10	100.00	
5606	10	10	100.00	
5607	10	10	100.00	
5608	10	10	100.00	
5609	10	10	100.00	FH
5610	10	0	0.00	

### 7.5.7. IN-SERVICE MONITORING

#### RESULTS

No non-compliance noted:

SUMMARY OF DETECTION PROBABILITY				
<b>Radar Test Summary:</b>				
Signal Type	Number of Waveforms	Detection (%)	Limit (%)	Pas/Fail
FCC TYPE 1	30	80.00	60.00	Pass
FCC TYPE 2	30	93.33	60.00	Pass
FCC TYPE 3	30	90.00	60.00	Pass
FCC TYPE 4	30	83.33	60.00	Pass
Aggregate		86.67	80.00	Pass
FCC TYPE 5	30	100.00	80.00	Pass
FCC TYPE 6	39	97.44	70.00	Pass

**TYPE 1 DETECTION PROBABILITY**

		Signal Type: FCC TYPE 1
Table 1: Data Sheet for Fixed Radar Signal 1		
Trial No.	Successful Detection (Yes/No)	
1	Yes	
2	Yes	
3	Yes	
4	Yes	
5	Yes	
6	Yes	
7	Yes	
8	Yes	
9	Yes	
10	Yes	
11	Yes	
12	No	
13	Yes	
14	Yes	
15	Yes	
16	Yes	
17	Yes	
18	Yes	
19	Yes	
20	Yes	
21	Yes	
22	No	
23	No	
24	No	
25	No	
26	Yes	
27	Yes	
28	No	
29	Yes	
30	Yes	

**TYPE 2 DETECTION PROBABILITY**

					Signal Type: FCC TYPE 2
Waveform No.	# Pulses per burst	Pulse Width (us)	Pulse repetition Interval (us)	Successful Detection (Yes/No)	
2001	28	2.90	174	Yes	
2002	26	2.40	204	Yes	
2003	25	3.80	191	Yes	
2004	29	3.40	194	Yes	
2005	25	4.10	207	Yes	
2006	24	1.90	200	Yes	
2007	23	2.20	203	Yes	
2008	24	1.80	205	Yes	
2009	25	2.10	218	Yes	
2010	26	4.70	215	Yes	
2011	27	3.70	153	Yes	
2012	28	1.60	183	Yes	
2013	27	4.00	155	Yes	
2014	23	1.70	200	Yes	
2015	29	3.00	157	Yes	
2016	28	4.60	212	No	
2017	26	2.20	183	Yes	
2018	29	3.30	230	Yes	
2019	24	3.80	200	Yes	
2020	23	1.50	180	Yes	
2021	24	1.50	157	Yes	
2022	23	1.90	203	Yes	
2023	24	3.30	211	Yes	
2024	25	2.50	179	Yes	
2025	26	1.50	205	No	
2026	28	4.40	174	Yes	
2027	27	3.90	169	Yes	
2028	24	2.90	208	Yes	
2029	28	1.30	159	Yes	
2030	25	3.60	164	Yes	

**TYPE 3 DETECTION PROBABILITY**

Table 3: Data Sheet for Fixed Radar Test Signal 3					Signal Type: FCC TYPE 3
Waveform No.	# Pulses per burst	Pulse Width (us)	Pulse repetition Interval (us)	Successful Detection (Yes/No)	
3001	16	9.10	351	Yes	
3002	18	9.40	402	Yes	
3003	16	8.80	394	Yes	
3004	17	6.90	387	Yes	
3005	17	5.20	279	Yes	
3006	17	8.10	458	Yes	
3007	18	6.90	379	Yes	
3008	17	5.90	470	Yes	
3009	16	7.00	404	Yes	
3010	16	8.90	313	No	
3011	17	9.60	447	No	
3012	17	7.00	471	Yes	
3013	16	5.50	294	Yes	
3014	17	8.70	311	Yes	
3015	17	6.00	309	Yes	
3016	16	5.00	269	Yes	
3017	17	9.40	391	Yes	
3018	16	7.40	367	Yes	
3019	16	6.90	375	Yes	
3020	17	5.70	290	Yes	
3021	18	7.30	415	Yes	
3022	17	5.90	266	Yes	
3023	18	7.60	467	Yes	
3024	17	7.60	252	Yes	
3025	17	6.50	388	Yes	
3026	18	7.00	327	Yes	
3027	18	7.00	362	Yes	
3028	18	8.40	269	No	
3029	18	6.40	369	Yes	
3030	17	7.60	457	Yes	

**TYPE 4 DETECTION PROBABILITY**

Table 4: Data Sheet for Fixed Radar Test Signal 4					Signal Type: FCC TYPE 4
Waveform No.	# Pulses per burst	Pulse Width (us)	Pulse repetition Interval (us)	Successful Detection (Yes/No)	
4001	16	10.90	347	Yes	
4002	16	10.40	324	No	
4003	12	12.90	351	Yes	
4004	16	13.60	309	Yes	
4005	15	16.60	381	Yes	
4006	16	19.20	252	Yes	
4007	14	19.70	346	Yes	
4008	15	10.80	391	Yes	
4009	14	18.40	260	Yes	
4010	12	19.70	390	Yes	
4011	14	15.90	419	Yes	
4012	16	18.20	341	Yes	
4013	14	19.30	443	No	
4014	13	16.30	450	Yes	
4015	12	20.00	399	Yes	
4016	14	11.70	288	Yes	
4017	16	14.90	391	Yes	
4018	12	18.20	448	Yes	
4019	15	11.50	294	Yes	
4020	13	17.90	354	No	
4021	16	16.50	479	Yes	
4022	14	14.30	255	Yes	
4023	13	13.00	306	Yes	
4024	13	16.30	452	Yes	
4025	13	14.00	335	Yes	
4026	15	18.20	264	No	
4027	13	13.40	353	Yes	
4028	15	16.10	337	Yes	
4029	15	16.50	397	Yes	
4030	14	14.20	366	No	

**TYPE 5 DETECTION PROBABILITY**

		Signal Type: FCC TYPE 5
Table 5: Data Sheet for Long Pulse Radar Test Signal 5		
Waveform No.	Successful Detection (Yes/No)	
5001	Yes	
5002	Yes	
5003	Yes	
5004	Yes	
5005	Yes	
5006	Yes	
5007	Yes	
5008	Yes	
5009	Yes	
5010	Yes	
5011	Yes	
5012	Yes	
5013	Yes	
5014	Yes	
5015	Yes	
5016	Yes	
5017	Yes	
5018	Yes	
5019	Yes	
5020	Yes	
5021	Yes	
5022	Yes	
5023	Yes	
5024	Yes	
5025	Yes	
5026	Yes	
5027	Yes	
5028	Yes	
5029	Yes	
5030	Yes	

**TYPE 5 WAVEFORM PARAMETERS**

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 1; Num of Bursts = 12; Burst Interval (us) = 1000000.0; Total pulses in waveform = 25</b>						
1	3	55	5	1129	1882	277738
2	2	100	13	1253	---	1236751
3	3	85	19	1001	1742	1462858
4	2	60	11	1254	---	409748
5	3	100	13	1521	1442	1170848
6	1	100	15	---	---	939995
7	2	60	8	1628	---	552813
8	1	85	15	---	---	1843621
9	2	50	12	1932	---	221493
10	1	70	7	---	---	1199095
11	2	95	13	1712	---	1558718
12	3	75	13	1571	1633	209177
<b>Waveform Num = 2; Num of Bursts = 8; Burst Interval (us) = 1500000.0; Total pulses in waveform = 14</b>						
1	2	55	15	1406	---	755252
2	1	95	9	---	---	1800385
3	1	60	10	---	---	1200768
4	1	75	16	---	---	1933068
5	3	95	8	1012	1096	436349
6	1	55	20	---	---	2835628
7	2	75	17	1934	---	1268740
8	3	70	7	1265	1136	281725
<b>Waveform Num = 3; Num of Bursts = 12; Burst Interval (us) = 1000000.0; Total pulses in waveform = 28</b>						
1	1	55	12	---	---	796924
2	1	65	8	---	---	373757
3	3	75	17	1816	1439	1394593
4	3	70	8	1552	1519	1410240
5	2	55	15	1617	---	382290
6	3	90	14	1786	1151	835140
7	3	55	11	1680	1055	1308605
8	3	100	9	1961	1469	1385940
9	3	95	15	1567	1280	829060
10	1	100	9	---	---	1015106
11	3	80	13	1412	1634	898225
12	2	75	11	1456	---	541066

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 4; Num of Bursts = 11; Burst Interval (us) = 1090909.0; Total pulses in waveform = 20</b>						
1	3	50	19	1705	1279	830121
2	2	85	12	1386	---	1224597
3	3	50	9	1852	1422	837317
4	2	50	10	1676	---	1272787
5	1	70	8	---	---	786097
6	1	80	18	---	---	659911
7	1	50	10	---	---	1860621
8	2	65	18	1684	---	200378
9	1	60	15	---	---	1567311
10	2	80	13	1850	---	892314
11	2	75	12	1719	---	946219
<b>Waveform Num = 5; Num of Bursts = 11; Burst Interval (us) = 1090909.0; Total pulses in waveform = 20</b>						
1	3	70	11	1402	1503	919085
2	1	55	17	---	---	912801
3	1	85	15	---	---	1225314
4	1	85	19	---	---	853846
5	2	95	11	1714	---	1524216
6	2	55	7	1469	---	910015
7	3	80	19	1476	1273	895138
8	1	75	18	---	---	678331
9	3	50	14	1425	1959	1239075
10	1	75	18	---	---	1144248
11	2	50	11	1484	---	1180882
<b>Waveform Num = 6; Num of Bursts = 17; Burst Interval (us) = 705882.0; Total pulses in waveform = 37</b>						
1	3	100	14	1345	1514	322897
2	2	55	20	1541	---	962636
3	1	60	11	---	---	491560
4	2	50	9	1768	---	444246
5	2	60	9	1368	---	1023828
6	1	85	13	---	---	621180
7	2	65	10	1666	---	1032837
8	2	60	5	1069	---	84747
9	3	70	14	1701	1728	1018585
10	3	60	12	1312	1667	626321
11	3	85	16	1485	1208	1011524
12	2	60	9	1994	---	487195
13	2	75	20	1983	---	669590
14	3	95	17	1990	1405	655717
15	2	75	16	1348	---	954927
16	2	90	8	1050	---	528067
17	2	75	5	1925	---	779624

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 7; Num of Bursts = 17; Burst Interval (us) = 705882.0; Total pulses in waveform = 34</b>						
1	1	70	8	---	---	113094
2	1	80	15	---	---	1020709
3	1	80	11	---	---	563044
4	1	55	8	---	---	522016
5	3	90	16	1684	1836	1084439
6	3	80	5	1190	1075	342457
7	3	90	18	1769	1153	782472
8	2	90	5	1431	---	979841
9	1	50	16	---	---	530911
10	2	55	20	1905	---	715338
11	2	90	14	1325	---	704393
12	2	90	19	1327	---	674320
13	3	60	12	1875	1697	922053
14	2	80	19	1452	---	670332
15	3	60	16	1890	1932	857180
16	1	85	14	---	---	364788
17	3	80	10	1299	1332	429680
<b>Waveform Num = 8; Num of Bursts = 18; Burst Interval (us) = 666667.0; Total pulses in waveform = 33</b>						
1	1	100	9	---	---	649825
2	1	70	20	---	---	528447
3	1	85	20	---	---	413366
4	3	90	17	1472	1696	465291
5	3	100	10	1762	1510	946968
6	2	80	14	1197	---	462869
7	3	90	20	1871	1687	1130285
8	1	60	18	---	---	507168
9	2	90	13	1431	---	628921
10	1	65	18	---	---	391065
11	2	65	11	1831	---	692812
12	2	85	10	1550	---	1036238
13	2	70	6	1644	---	575288
14	2	90	17	1692	---	255027
15	1	60	9	---	---	1031153
16	1	65	15	---	---	558629
17	2	95	8	1353	---	537352
18	3	75	16	1482	1519	755918

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 9; Num of Bursts = 14; Burst Interval (us) = 857143.0; Total pulses in waveform = 31</b>						
1	1	60	19	---	---	321195
2	1	75	17	---	---	600309
3	3	80	9	<b>1444</b>	<b>1019</b>	<b>1617865</b>
4	1	90	8	---	---	273465
5	2	90	20	<b>1728</b>	---	731920
6	1	60	17	---	---	895001
7	3	65	15	<b>1932</b>	<b>1027</b>	<b>1055469</b>
8	3	95	20	<b>1741</b>	<b>1068</b>	<b>506210</b>
9	3	70	9	<b>1076</b>	<b>1528</b>	<b>1613818</b>
10	3	60	12	<b>1462</b>	<b>1351</b>	<b>655980</b>
11	2	90	19	<b>1894</b>	---	<b>542993</b>
12	3	60	7	<b>1995</b>	<b>1678</b>	<b>812864</b>
13	3	65	10	<b>1343</b>	<b>1654</b>	<b>1452641</b>
14	2	65	11	<b>1815</b>	---	<b>236165</b>
<b>Waveform Num = 10; Num of Bursts = 16; Burst Interval (us) = 750000.0; Total pulses in waveform = 31</b>						
1	3	50	19	<b>1947</b>	<b>1140</b>	<b>534608</b>
2	1	55	14	---	---	<b>564997</b>
3	1	<b>100</b>	17	---	---	<b>893181</b>
4	1	65	19	---	---	<b>835193</b>
5	2	65	12	<b>1733</b>	---	<b>847173</b>
6	3	75	11	<b>1321</b>	<b>1728</b>	<b>234777</b>
7	3	95	6	<b>1669</b>	<b>1379</b>	<b>1283622</b>
8	2	55	17	<b>1192</b>	---	<b>533754</b>
9	2	65	19	<b>1108</b>	---	<b>877418</b>
10	3	75	19	<b>1236</b>	<b>1313</b>	<b>276319</b>
11	2	80	20	<b>1198</b>	---	<b>731607</b>
12	2	80	5	<b>1858</b>	---	<b>1025733</b>
13	3	80	13	<b>1839</b>	<b>1282</b>	<b>767729</b>
14	1	60	6	---	---	<b>1040562</b>
15	1	<b>100</b>	<b>11</b>	---	---	<b>659097</b>
16	1	65	11	---	---	<b>293999</b>

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 11; Num of Bursts = 10; Burst Interval (us) = 1200000.0; Total pulses in waveform = 19</b>						
1	1	70	8	---	---	1189096
2	1	95	10	---	---	1014204
3	3	80	13	1044	1117	1352015
4	3	85	15	1194	1684	506322
5	1	75	13	---	---	1193951
6	2	100	11	1095	---	1118887
7	1	50	12	---	---	1635779
8	2	75	12	1072	---	880874
9	2	75	7	1701	---	1679756
10	3	90	10	1645	1913	285515
<b>Waveform Num = 12; Num of Bursts = 9; Burst Interval (us) = 1333333.0; Total pulses in waveform = 20</b>						
1	3	60	17	1291	1776	830307
2	1	65	20	---	---	1580366
3	2	95	20	1539	---	1257869
4	1	55	12	---	---	877830
5	3	85	11	1872	1199	2093065
6	2	95	16	1914	---	171607
7	3	55	16	1647	1671	2127346
8	3	65	19	1549	1926	548559
9	2	100	10	1918	---	2368432
<b>Waveform Num = 13; Num of Bursts = 16; Burst Interval (us) = 750000.0; Total pulses in waveform = 32</b>						
1	3	70	7	1929	1728	368349
2	1	100	13	---	---	427312
3	3	75	8	1243	1784	833323
4	1	90	10	---	---	767150
5	1	95	13	---	---	1138905
6	1	70	11	---	---	271240
7	3	50	12	1467	1570	1313430
8	2	70	9	1506	---	356031
9	2	65	11	1272	---	555385
10	2	95	19	1816	---	1417101
11	3	90	11	1018	1894	286869
12	1	60	6	---	---	738712
13	2	60	11	1180	---	725828
14	2	50	19	1745	---	1042728
15	2	55	16	1492	---	729819
16	3	70	8	1343	1691	456997

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 14; Num of Bursts = 16; Burst Interval (us) = 750000.0; Total pulses in waveform = 37</b>						
1	3	65	20	1828	1620	27114
2	3	95	7	1713	1627	719476
3	2	70	9	1341	---	1302568
4	1	55	11	---	---	492574
5	3	90	14	1410	1014	1116913
6	3	85	11	1324	1667	773012
7	2	100	12	1251	---	570109
8	3	65	5	1348	1889	376498
9	2	95	7	1142	---	740694
10	1	50	20	---	---	997849
11	3	60	16	1430	1549	951456
12	3	50	14	1230	1272	703624
13	2	85	7	1812	---	443757
14	1	50	20	---	---	738232
15	3	100	5	1163	1582	908958
16	2	90	7	1849	---	701621
<b>Waveform Num = 15; Num of Bursts = 19; Burst Interval (us) = 631579.0; Total pulses in waveform = 37</b>						
1	1	100	9	---	---	452307
2	3	60	9	1617	1403	636667
3	3	75	15	1988	1915	196744
4	2	70	5	1600	---	964552
5	3	90	18	1100	1898	599525
6	2	100	19	1328	---	572687
7	1	50	13	---	---	494107
8	1	95	8	---	---	691813
9	3	75	16	1144	1261	955729
10	3	100	17	1988	1785	111419
11	1	80	6	---	---	1088968
12	3	100	19	1801	1613	487344
13	3	70	9	1334	1818	729037
14	1	55	19	---	---	470770
15	3	65	10	1251	1988	420709
16	1	70	16	---	---	1137929
17	1	75	10	---	---	261426
18	1	70	18	---	---	940812
19	1	85	7	---	---	201861

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 16; Num of Bursts = 16; Burst Interval (us) = 750000.0; Total pulses in waveform = 30</b>						
1	3	65	13	1976	1658	661491
2	2	90	15	1267	---	626869
3	2	100	14	1254	---	415611
4	2	75	19	1244	---	869849
5	2	85	12	1344	---	945527
6	1	85	10	---	---	309360
7	2	85	16	1662	---	990874
8	1	90	16	---	---	425639
9	2	80	18	1746	---	1329090
10	1	75	10	---	---	162910
11	3	85	18	1016	1947	1409791
12	2	85	12	1735	---	236208
13	1	50	6	---	---	949286
14	1	95	13	---	---	1102594
15	2	95	19	1099	---	765926
16	3	90	8	1943	1234	145743
<b>Waveform Num = 17; Num of Bursts = 11; Burst Interval (us) = 1090909.0; Total pulses in waveform = 29</b>						
1	3	90	5	1772	1546	264577
2	3	100	5	1237	1322	1304026
3	2	90	20	1073	---	1649095
4	3	60	7	1150	1305	879726
5	2	65	9	1824	---	1242039
6	3	55	20	1989	1179	414618
7	1	100	11	---	---	1388490
8	3	70	19	1288	1584	1340686
9	3	60	20	1180	1371	1251383
10	3	50	13	1584	1379	547020
11	3	50	7	1028	1014	1489120
<b>Waveform Num = 18; Num of Bursts = 10; Burst Interval (us) = 1200000.0; Total pulses in waveform = 18</b>						
1	2	95	13	1159	---	384102
2	2	85	14	1954	---	1497205
3	1	75	11	---	---	1603659
4	3	75	6	1918	1847	546070
5	1	70	12	---	---	1426942
6	1	100	13	---	---	702605
7	3	80	19	1087	1964	2004762
8	2	95	17	1145	---	821772
9	1	100	7	---	---	1370249
10	2	75	7	1599	---	621389

Burst #	Number of Pulses	Pulse Width (usec)	Chirp Width (MHz)	Pulse 1 to 2 Pri (usec)	Pulse 2 to 3 Pri (usec)	Starting Location Within Interval (usec)
<b>Waveform Num = 19; Num of Bursts = 13; Burst Interval (us) = 923077.0; Total pulses in waveform = 31</b>						
1	2	60	6	1513	---	176208
2	2	70	6	1492	---	1344742
3	2	65	5	1614	---	439468
4	3	55	6	1219	1945	1529107
5	3	90	15	1821	1649	1071515
6	2	75	19	1170	---	553321
7	1	85	13	---	---	932196
8	3	100	18	1583	1993	982846
9	3	95	13	1742	1115	1043041
10	3	90	14	1434	1901	723611
11	1	65	10	---	---	766787
12	3	55	6	1265	1694	857532
13	3	65	11	1209	1595	718832
<b>Waveform Num = 20; Num of Bursts = 14; Burst Interval (us) = 857143.0; Total pulses in waveform = 28</b>						
1	3	80	19	1542	1228	755013
2	3	85	9	1675	1029	912813
3	1	70	11	---	---	394278
4	3	70	19	1705	1301	1211404
5	1	90	17	---	---	416075
6	3	90	6	1221	1518	1327351
7	1	95	20	---	---	652221
8	1	60	13	---	---	740101

**TYPE 6 DETECTION PROBABILITY**

				Signal Type: FCC TYPE 6
Trial No.	Starting Index within NTIA August 2005 Sequence	Signal Generator Frequency (MHz)	Hops within Detection BW	Successful Detection (Yes/No)
1	322	5571	8	Yes
2	797	5572	5	Yes
3	1272	5573	7	Yes
4	1747	5574	6	Yes
5	2222	5575	8	Yes
6	2697	5576	8	Yes
7	3172	5577	12	Yes
8	3647	5578	9	Yes
9	4122	5579	7	Yes
10	4597	5580	10	Yes
11	5072	5581	8	Yes
12	5547	5582	2	Yes
13	6022	5583	8	Yes
14	6497	5584	7	Yes
15	6972	5585	6	Yes
16	7447	5586	13	Yes
17	7922	5587	4	Yes
18	8397	5588	15	Yes
19	8872	5589	10	Yes
20	9347	5590	9	Yes
21	9822	5591	11	Yes
22	10297	5592	7	Yes
23	10772	5593	9	Yes
24	11247	5594	9	Yes
25	11722	5595	8	Yes
26	12197	5596	5	Yes
27	12672	5597	6	Yes
28	13147	5598	10	Yes
29	13622	5599	9	Yes
30	14097	5600	7	Yes
31	14572	5601	8	Yes
32	15047	5602	9	Yes
33	15522	5603	5	Yes
34	15997	5604	8	Yes
35	16472	5605	6	Yes
36	16947	5606	10	Yes
37	17422	5607	10	Yes
38	17897	5608	7	No
39	18372	5609	12	Yes

### **7.5.8. SLAVE DEVICE CONFIGURATION - CHANNEL MOVE TIME AND CHANNEL CLOSING TRANSMISSION 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)

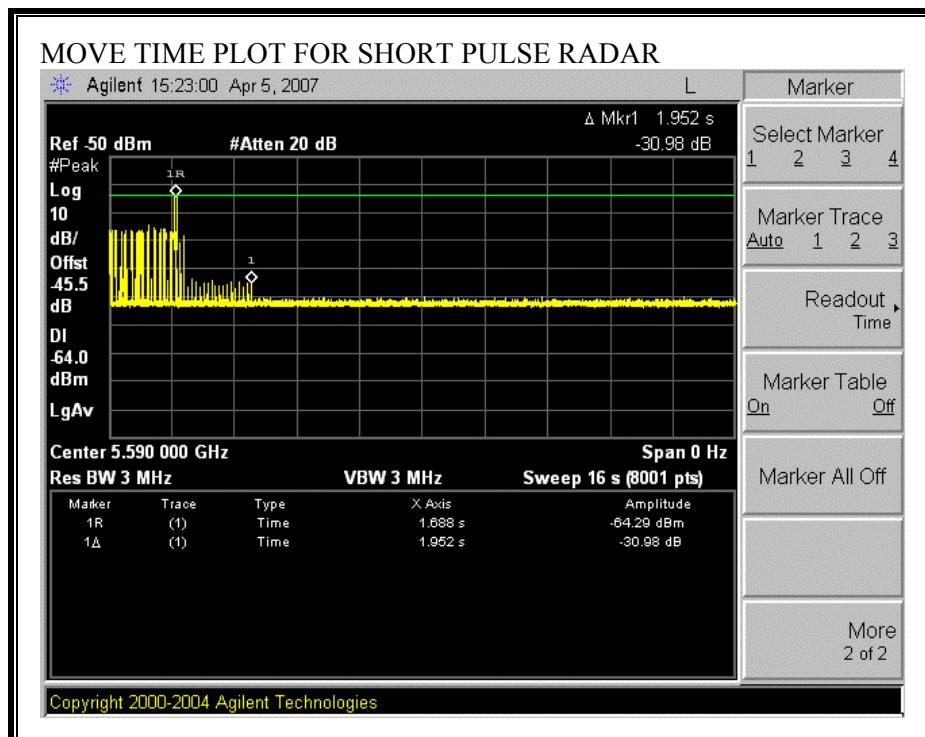
The observation period over which the aggregate time is calculated for the FCC version  
Begins at (Reference Marker + 200 msec)  
and  
Ends no earlier than (Reference Marker + 10 sec).

The observation period over which the aggregate time is calculated for the IC version  
Begins at (Reference Marker)  
and  
Ends no earlier than (Reference Marker + 10 sec).

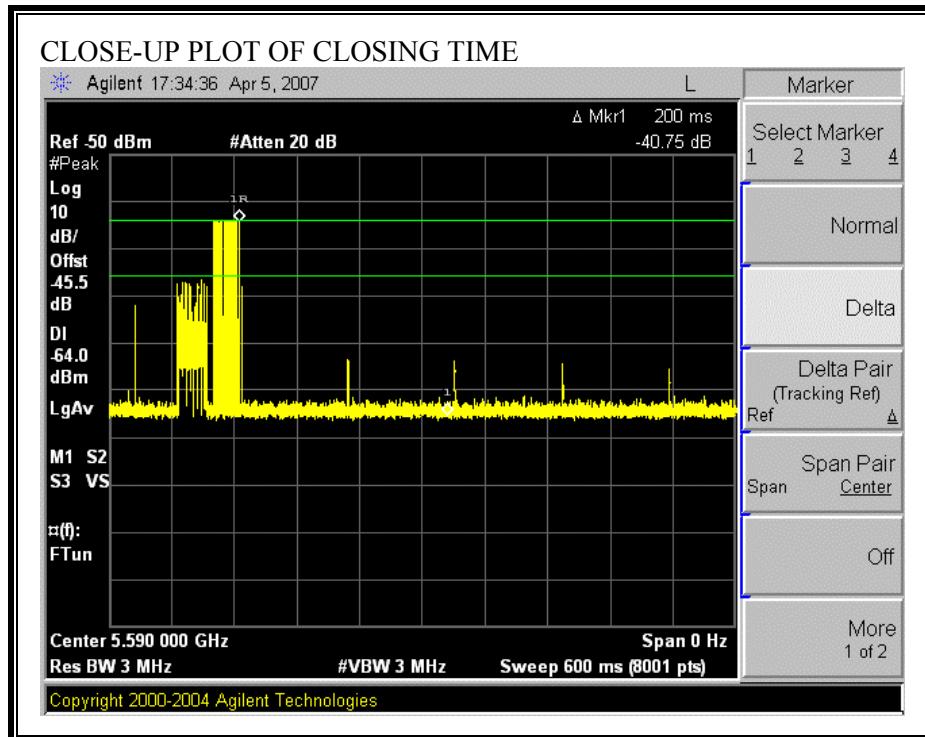
### CHANNEL MOVE TIME RESULTS

No non-compliance noted:

Channel Move Time (s)	Limit (s)
1.952	10



**CHANNEL CLOSING TIME RESULTS**

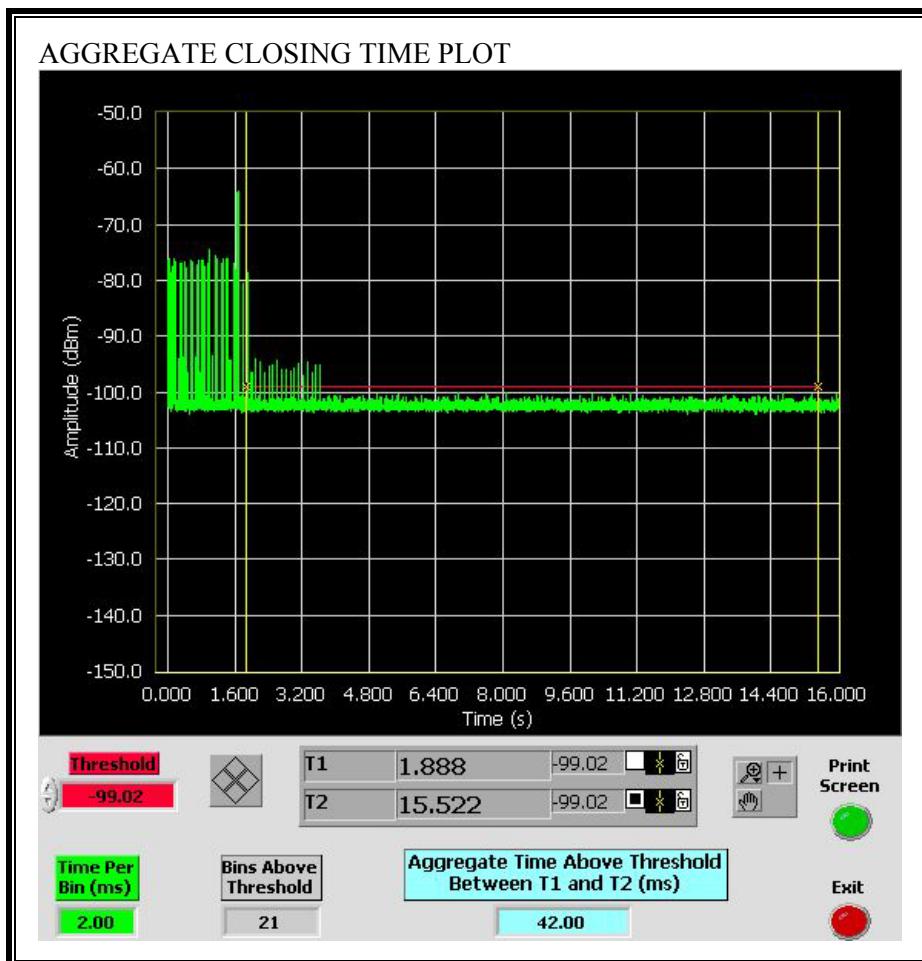


**FCC AGGREGATE CHANNEL CLOSING TRANSMISSION TIME RESULTS**

No non-compliance noted:

Aggregate Transmission Time (ms)	Limit (ms)	Margin (ms)
42.00	60	18.00

Only intermittent transmissions are observed during the aggregate monitoring period.



**IC AGGREGATE CHANNEL CLOSING TRANSMISSION TIME RESULTS**

No non-compliance noted:

Aggregate Transmission Time (ms)	Limit (ms)	Margin (ms)
46.00	260	214.00

Only intermittent transmissions are observed during the aggregate monitoring period.

