



FCC TEST REPORT

Test report
On Behalf of
Shenzhen Yingdakang Technology CO., LTD
For
Wireless Repeater

Model No.: DA213WUS, DA213BUS, AC12RP, DWR-C5400R,
DWR-C4510R, W120RP, W121RP

FCC ID: 2ACSI-DA213WX

Prepared for : Shenzhen Yingdakang Technology CO., LTD
Room 8004, B/51, 2nd Dist ,Shangtang Songzi Park, MinZhi ,
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Date of Test: Apr. 15, 2020
Date of Report: Apr. 15, 2020 – May 06, 2020
Report Number: TZ200401300-E



TEST RESULT CERTIFICATION

Applicant's name.....: Shenzhen Yingdakang Technology CO., LTD
Address: Room 8004, B/51, 2nd Dist ,Shangtang Songzi Park,
MinZhi , Longhua , Shenzhen, China
Manufacture's Name: Shenzhen Yingdakang Technology CO., LTD
Address: Room 8004, B/51, 2nd Dist ,Shangtang Songzi Park,
MinZhi , Longhua , Shenzhen, China

Product description

Trade Mark: N/A
Product name: Wireless Repeater
Model No: DA213WUS, DA213BUS, AC12RP, DWR-C5400R,
DWR-C4510R, W120RP, W121RP

Standards.....: Part 15 Subpart E (15.407) / KDB 905462 D02 v02

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Date of Test:
Date (s) of performance of tests.....: Apr. 15, 2020
Date of Issue: Apr. 15, 2020 – May 06, 2020
Test Result.....: **PASS**

Testing Engineer : Anna Hu
(Anna Hu)

Technical Manager : Hugo Chen
(Hugo Chen)

Authorized Signatory : Andy Zhang
(Andy Zhang)



Revision History

Revision	Issue Date	Revisions	Revised By
00	2020/5/06	Initial Issue	Andy Zhang



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1 General Description

1.1 Applicant

Applicant name Shenzhen Yingdakang Technology CO., LTD
Applicant address Room 8004, B/51, 2nd Dist ,Shangtang Songzi Park, MinZhi ,
Longhua , Shenzhen, China

Manufacturer Shenzhen Yingdakang Technology CO., LTD
address Room 8004, B/51, 2nd Dist ,Shangtang Songzi Park, MinZhi ,
Longhua , Shenzhen, China

1.2 Feature of Equipment Under Test

GENERAL DESCRIPTION OF EUT	
Product name	Wireless Repeater
Model Name	DA213WUS
Brand name	N/A
Serial No.	DA213WUS, DA213BUS, AC12RP, DWR-C5400R, DWR-C4510R, W120RP, W121RP
FCC ID	2ACSI-DA213WX
BAND III	IEEE802.11 n HT20 5745-5825 MHz IEEE802.11 n HT40 5755-5795 MHz IEEE802.11 ac HT20 5745-5825 MHz IEEE802.11 ac HT40 5755-5795 MHz IEEE802.11 ac HT80 5775 MHz
Type of Modulation	OFDM (BPSK / QPSK / 16QAM / 64QAM)
EUT Stage	Production Unit
Operational Mode	Master
Antenna Type	Internal antenna
Antenna Gain	Antenna 1: 3dBi Antenna 2: 3dBi MIMO: 6.01dBi

Remark:1.above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

2. This device is not support TPC.

3. We use software to control the auxiliary equipment and EUT transmit the same channel



1.3 Specification of Equipment Under Test

Operational Mode	Master
Tx/Rx Channel Frequency Range	5250MHz~5350MHz&5470MHz~5725MHz
Type of Modulation	OFDM (BPSK / QPSK / 16QAM / 64QAM)

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5250-5350 MHz Band 2 (U-NII-2A)	52	5260	60	5300
	54	5270	62	5310
	56	5280	64	5320
	58	5290		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5470-5725 MHz Band 3 (U-NII-2C)	100	5500	122	5610
	102	5510	124	5620
	104	5520	126	5630
	106	5530	128	5640
	108	5540	130	5650
	110	5550	132	5660
	112	5560	134	5670
	114	5570	136	5680
	116	5580	138	5690
	118	5590	140	5700
	120	5600		

1.4 Conducted Output Power and PSD

802.11 Mode	Channel No.	Frequency [MHz]	Conducted Power [dBm]		EIRP [dBm]	
			ANT1	ANT2	ANT1	ANT2
n (20MHz)	149	5745	10.66	12.79	13.66	15.79
	157	5785	12.36	12.43	15.36	15.43
	165	5825	9.10	11.13	12.1	14.13
n (40MHz)	151	5755	10.90	10.89	13.9	13.89
	159	5795	9.03	10.64	12.03	13.64
ac (20MHz)	149	5745	11.90	11.61	14.9	14.61
	157	5785	10.99	11.21	13.99	14.21
	165	5825	10.27	10.95	13.27	13.95
ac(40MHz)	151	5755	8.80	10.89	11.8	13.89
	159	5795	10.36	10.38	13.36	13.38
ac(80MHz)	155	5775	7.11	9.68	10.11	12.68

**Power Spectral Density**

Mode	Channel No.	Frequency [MHz]	Measured PSD[dBm/510KHz]		Covert PSD [dBm/500KHz]	
			ANT1	ANT2	ANT1	ANT2
n (20MHz)	149	5745	8.388	7.958	8.302	7.872
	157	5785	8.352	8.109	8.266	8.023
	165	5825	7.55	7.721	7.464	7.635
n (40MHz)	151	5755	5.947	6.312	5.861	6.226
	159	5795	4.56	5.732	4.474	5.646
ac (20MHz)	149	5745	8.377	7.507	8.291	7.421
	157	5785	8.007	7.837	7.921	7.751
	165	5825	7.336	7.486	7.250	7.400
ac (40MHz)	151	5755	5.447	5.612	5.361	5.526
	159	5795	5.561	5.625	5.475	5.539
ac (80MHz)	155	5775	3.342	2.497	3.256	2.411

Note: Reference report of test results: HK2004170655-3E

MIMO/CDD Maximum Conducted Output Power

802.11 Mode	Channel No.	Freq. [MHz]	MIMO
n(20MHz)	149	5745	14.57
	157	5785	15.14
	165	5825	13.95
n(40MHz)	151	5755	13.88
	159	5795	13.16
ac(20MHz)	149	5745	14.64
	157	5785	13.97
	165	5825	13.60
ac(40MHz)	151	5755	13.72
	159	5795	13.25
ac(80MHz)	155	5775	12.15

Note: Reference report of test results: HK2004170655-3E



2 Testing site and standards

2.1 Testing Site

Test site	Shenzhen Tongzhou Testing Co.,Ltd
Test site location	1th Floor, Building 1, Haomai High-tech Park, Huating Road 387, Dalang Street, Longhua, Shenzhen, China

2.2 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ☒ FCC Part 15 Subpart E
- ☒ FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02
- ☒ FCC KDB 905462 D03 UNII Clients Without Radar Detection New Rules v01r02

Remark: All test items were verified and recorded according to the standards and without any deviation during the test



3 Requirements and Parameters for DFS Test

3.1 TEST LIMITS AND RADAR SIGNAL PARAMETERS

The manufacturer shall state whether the UUT is capable of operating as a Master and/or a Client. If the UUT is capable of operating in more than one operating mode then each operating mode shall be tested separately. See tables 1 and 2 for the applicability of DFS requirements for each of the operational modes.

Table 5: Applicability of DFS requirements prior to use a channel

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

Table 6: Applicability of DFS requirements during normal operation.

Requirement	Operational Mode		
	Master	Client Without Radar Detection	Client With Radar Detection
DFS Detection Threshold	Yes	Not required	Yes
Channel Closing Transmission Time	Yes	Yes	Yes
Channel Move Time	Yes	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required	Yes
Client Beacon Test	N/A	Yes	Yes



3.2 DETECTION THRESHOLD VALUES

Table 7: DFS Detection Thresholds for Master Devices and Client Devices With Radar Detection.

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

Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna.
Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.

NOTE: The radar Detection Threshold, lowest antenna gain is the parameter of Interference radar DFS detection threshold, The Interference Detection Threshold is the $(-62\text{dBm}) + (0) [\text{dBi}] + 1\text{ dB} = -61\text{ dBm}$.

DFS Response Requirement Values

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1.
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 100% of the 99% power bandwidth See Note 3.

Note 1: The instant that the Channel Move Time and the Channel Closing Transmission Time begins is as follows:

- *For the Short pulse radar Test Signals this instant is the end of the Burst.
- *For the Frequency Hopping radar Test Signal, this instant is the end of the last radar Burst generated.
- *For the Long Pulse radar Test Signal this instant is the end of the 12 second period defining the radar transmission.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any



additional intermittent control signals required to facilitate Channel changes (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 is used and for each frequency step the minimum percentage of detection is 90%. Measurements are performed with no data traffic.

3.3 PARAMETERS OF DFS TEST SIGNALS

Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms

Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	Note1	Note1
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 1μsec , excluding PRI values selected in Test A	$\text{Roundup} \left\{ \left(\frac{1}{360} \right) \cdot \left(\frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \right\}$	60%	30
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)			-	80%	120
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.					

Long Pulse Radar Test Waveform

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

Frequency Hopping Radar Test Waveform

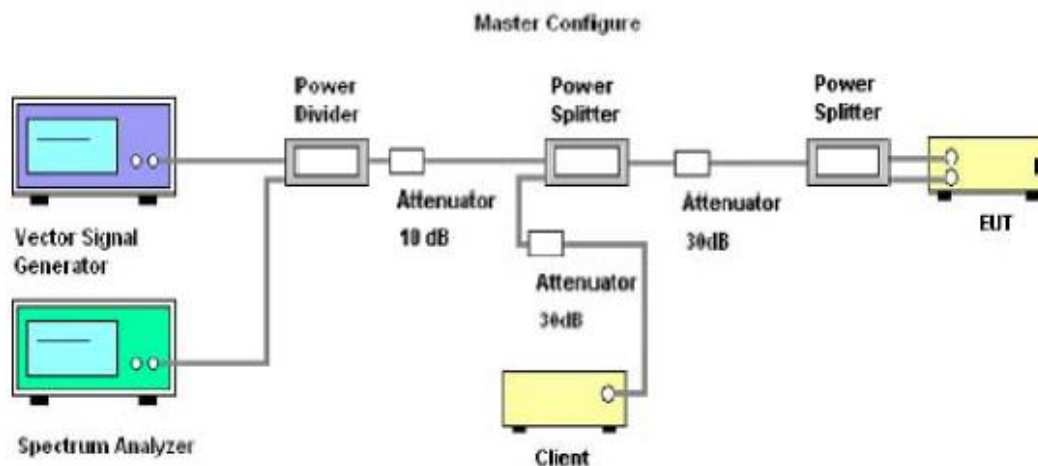
Radar Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Number of Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Number of Trials
6	1	333	9	0.333	300	70%	30

4 Calibration Setup and DFS Test Results

4.1 DFS measurement system

A complete ADT DFS Measurement System consists of two subsystems: (1) the Radar Signal Generating Subsystem and (2) the Traffic Monitoring Subsystem. The control PC is necessary for generating the Radar waveforms in Table 10, 11 and 12. The traffic monitoring subsystem is specified to the type of unit under test (UUT).

Master conducted measurement



System overview



The short pulse and long pulse signal generating system utilizes the NTIA software. The vector signal generator has been validated by the NTIA. The hopping signal generating system utilizes the CCSSimulated hopping method and system, which has been validated by DOD, FCC and NTIA. The software selects waveform parameters from within the bounds of the signal type on a random basis using uniform distribution.

The short pulse types 2.3 and 4 and the long pulse type 5 parameters are randomized at run-time.

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

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

Should multiple RF ports be utilized for the Master and/or Slave devices (for example, for diversity or MIMO implementations), additional combiner/dividers are inserted between the Master Combiner/Divider and the pad connected to the Master Device (and/or between the Slave Combiner/Divider and the pad connected to the Slave Device). Additional pads are utilized such that there is one pad at each RF port on each EUT.

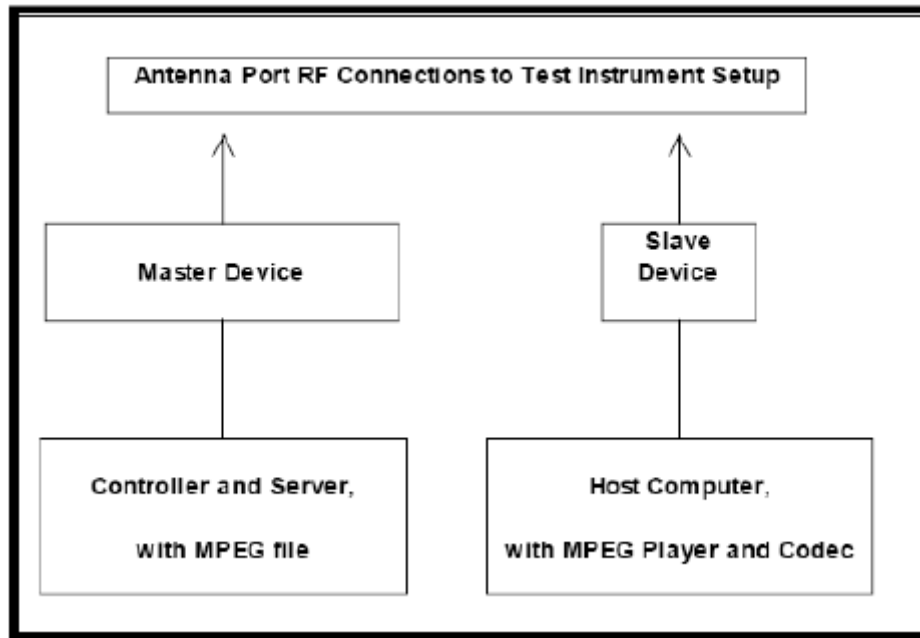
CALIBRATION OF DFS DETECTION THRESHOLD LEVEL:

A 50 ohm load is connected in place of the spectrum analyzer, and the spectrum analyzer is connected in place of the master device and the signal generator is set to CW mode. The amplitude of the signal generator is adjusted to yield a level of -62 dBm as measured on the spectrum analyzer.

Without changing any of the instrument settings, the spectrum analyzer is reconnected to the Common port of the Spectrum Analyzer Combiner/Divider. Measure the amplitude and calculate the difference from -62 dBm. Adjust the Reference Level Offset of the spectrum analyzer to this difference.

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

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



4.2 Calibration Deviation

There is no deviation with the standard

4.3 TEST RESULTS

Test Parameter	Remarks	Pass/Fail
DFS Detection Threshold	Applicable	Pass
Channel Availability Check Time	Applicable	Pass
Channel Move Time	Applicable	Pass
Channel Closing Transmission Time	Applicable	Pass
Non- Occupancy Period	Applicable	Pass
Uniform Spreading	Applicable	Pass
U-NII Detection Bandwidth	Applicable	Pass



4.4 TEST MODE

Device operating in master mode

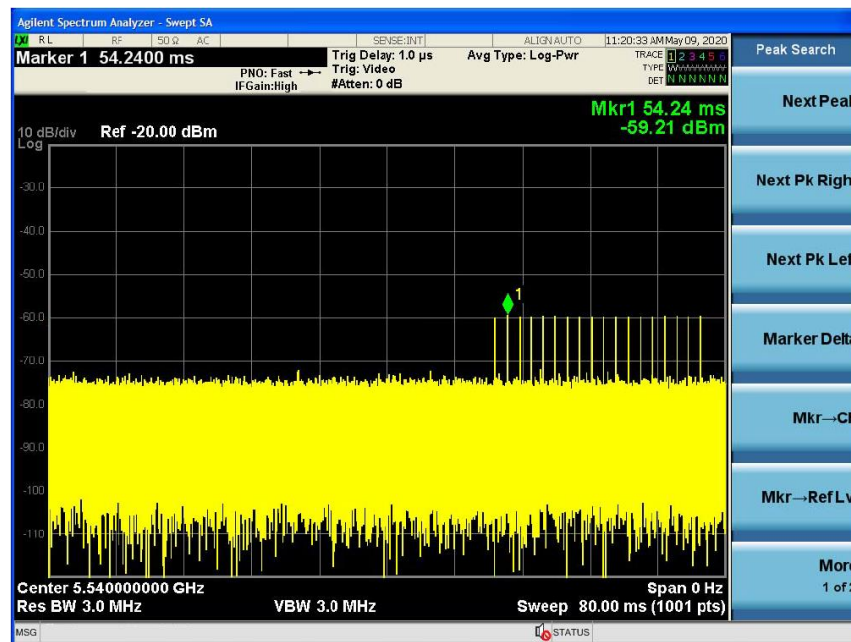
Master with injection at the Master. (Radar Test Waveforms are injected into the Master)

Calibration:

For a detection threshold level of -62dBm and the EUT antenna gain is 3dBi, required detection threshold is -59dBm ($= -62+3$)

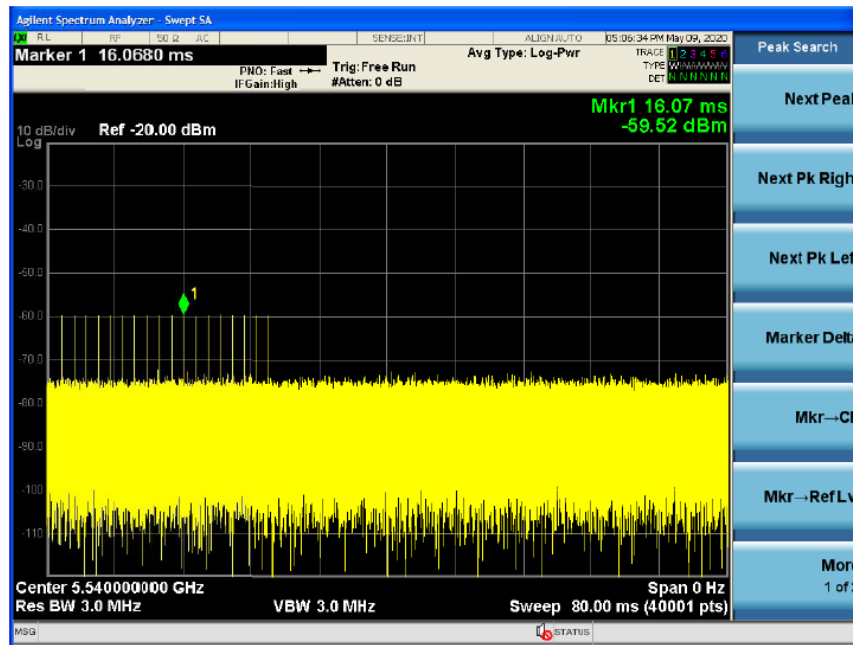
Radar Waveform Calibration Result

Radar Signal 0

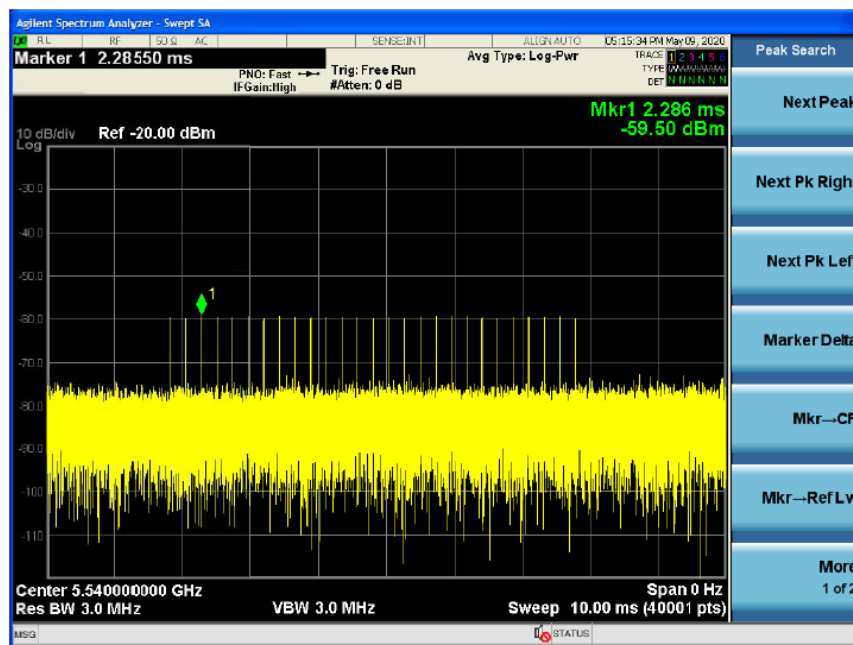




Radar Signal 1

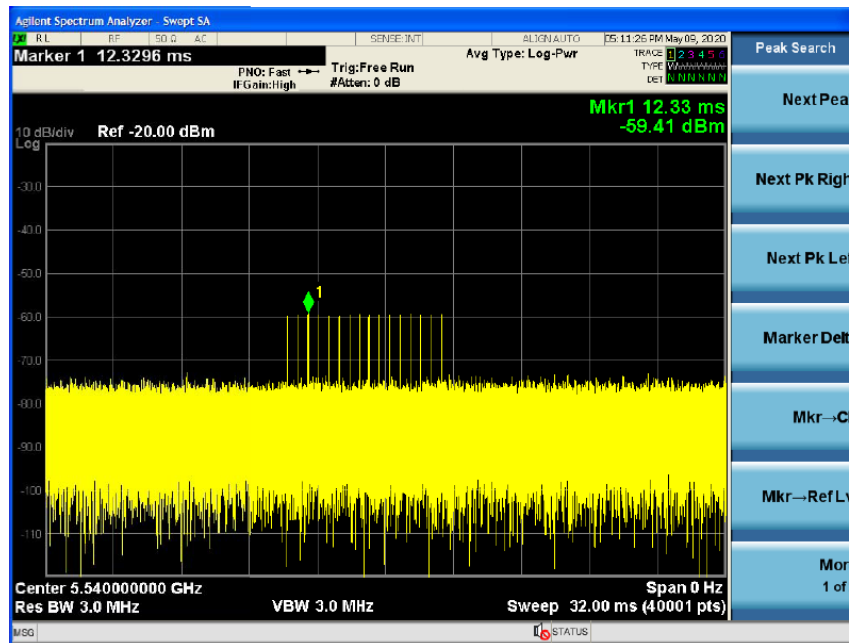


Radar Signal 2

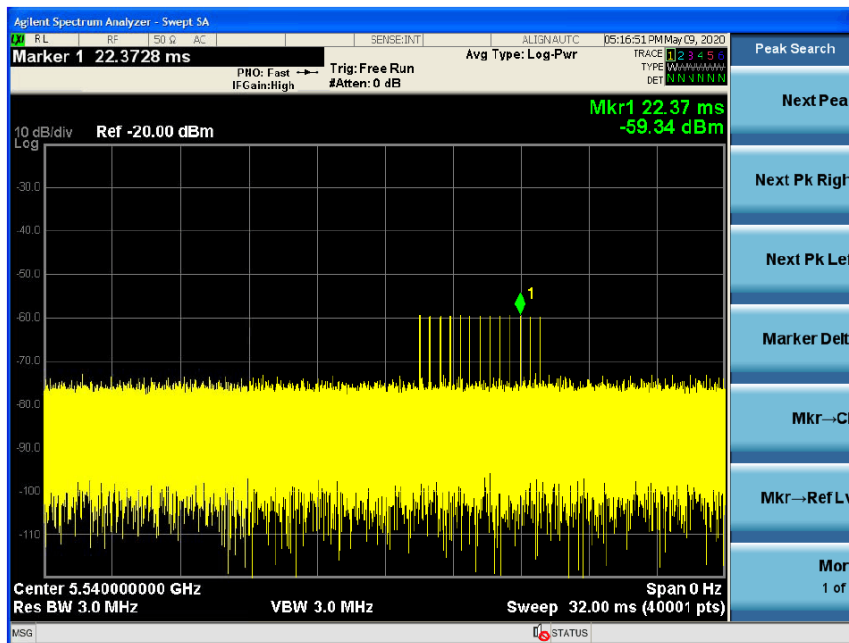




Radar Signal 3

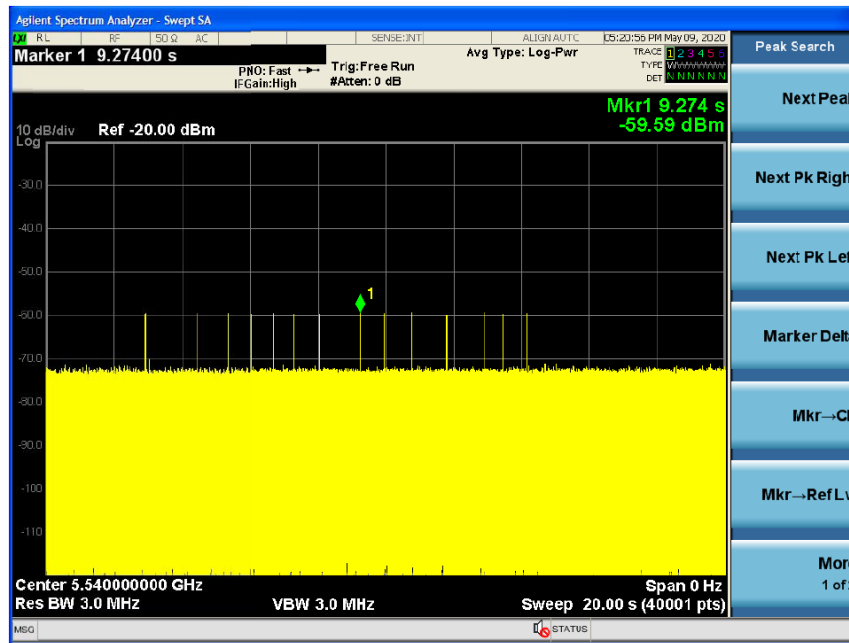


Radar Signal 4

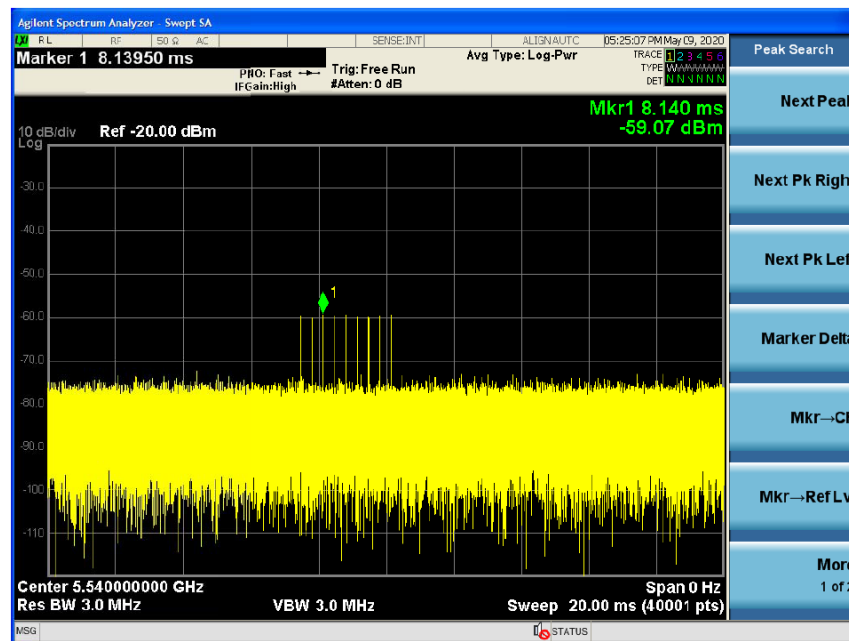




Radar Signal 5



Radar Signal 6



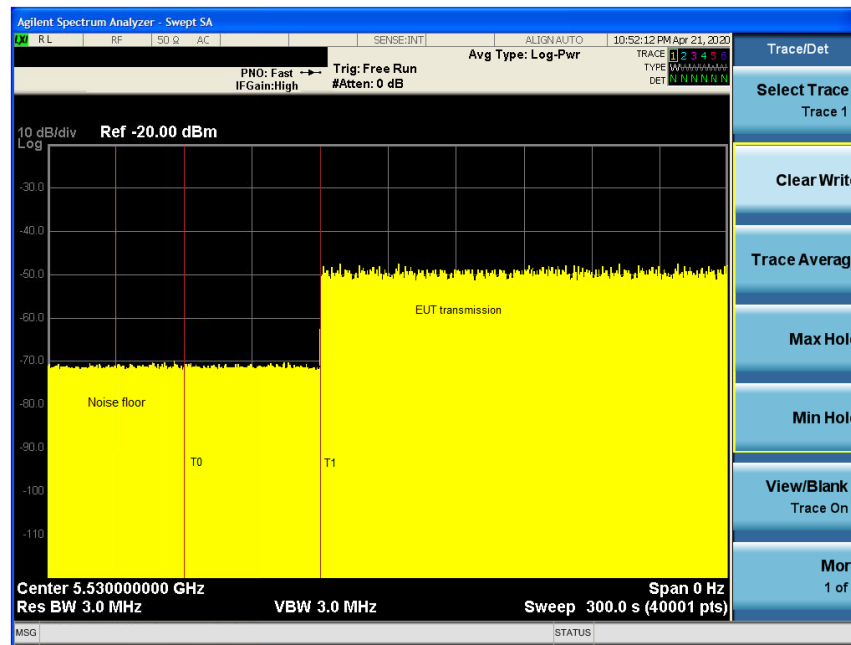


4.4 CHANNEL AVAILABILITY CHECK TIME

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

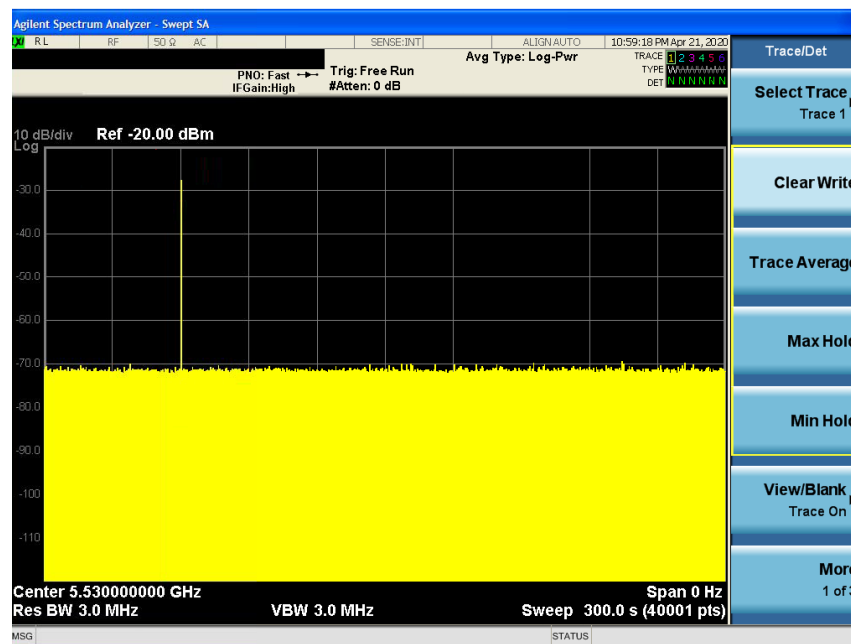
Modulation Mode	Fre.
802.11 ac80	5530MHz

Initial Channel Availability Check Time(Radar test signal: N/A)



NOTE: The EUT do not transmit any beacon or data transmissions until at least 60s after the completion of the power-on cycle. The initial Check Time of the EUT is indicated by T0, initial beacons/data transmissions are indicated by T1

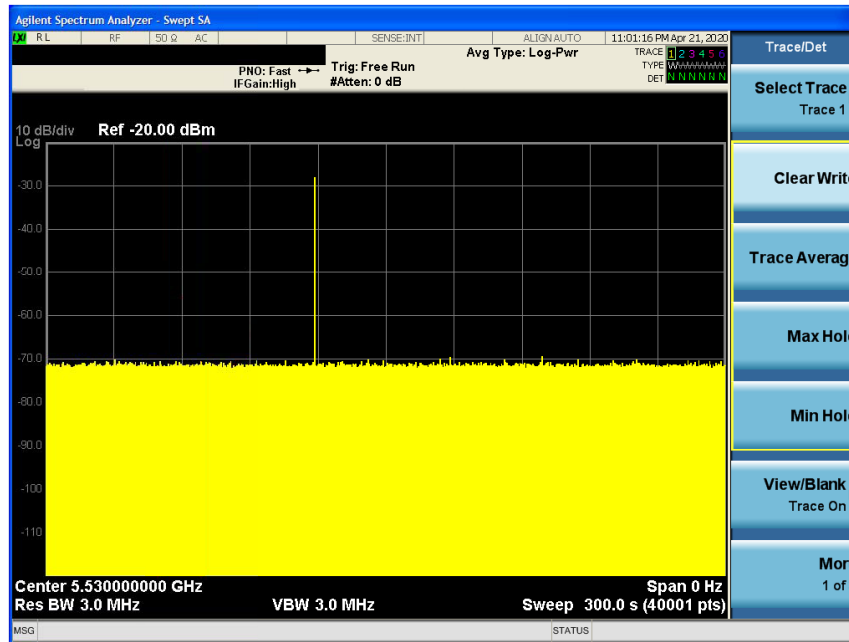
Beginning of the Channel Availability Check Time (Radar test signal: Type 0)





NOTE: visual indication on the EUT of successful detection of the radar burst will be recorded and reported. Observation of emission will continue for 240 seconds after the radar burst has been generated. verify that during the 300 seconds measurement without no EUT transmission occurred.

end of the Channel Availability Check Time (Radar test signal: Type 0)



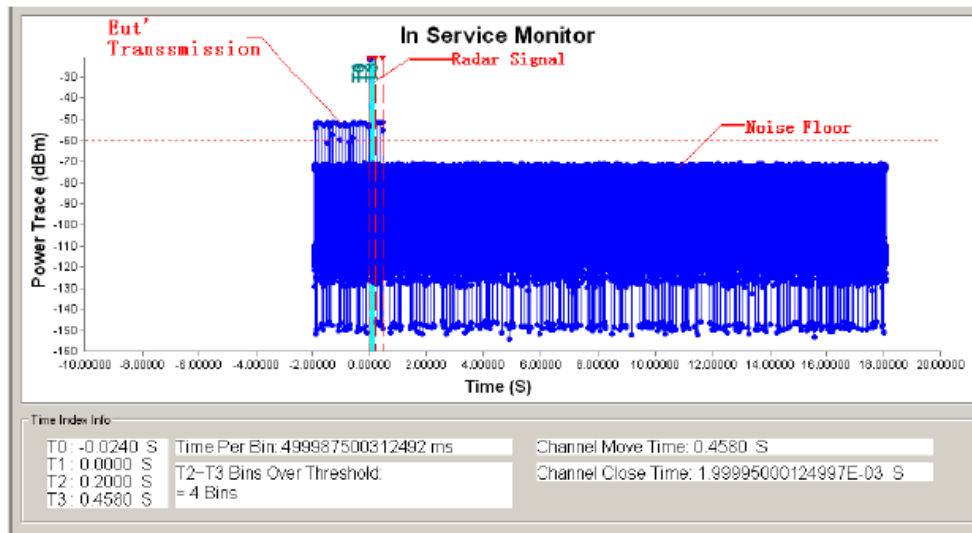
NOTE: visual indication on the EUT of successful detection of the radar burst will be recorded and reported. Observation of emission will continue for 198 seconds after the radar burst has been generated. verify that during the 300 seconds measurement without no EUT transmission occurred.



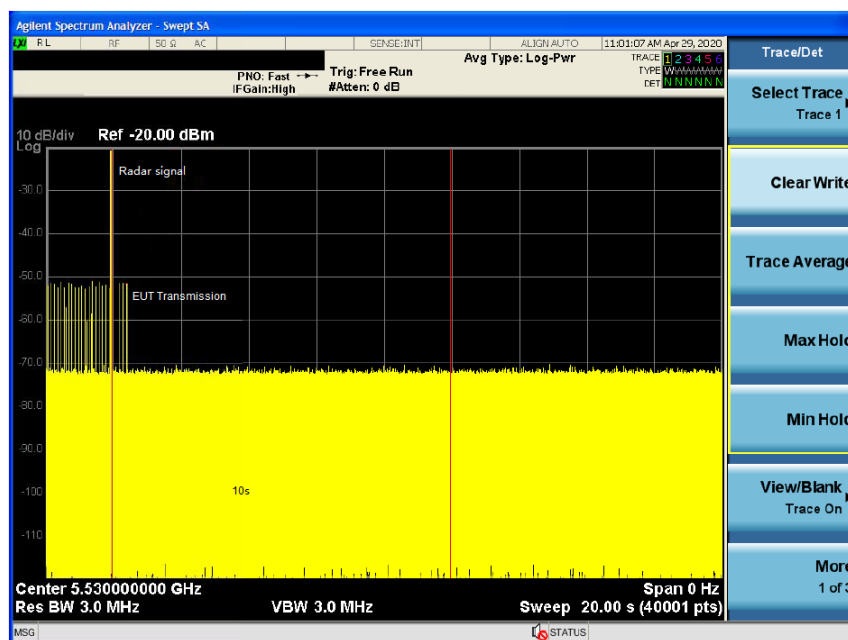
TEST RESULT OF MOVE TIME

802.11 ac80 mode

Parameter	Test result	Limit
	Type 0	
Test channel	5530MHz	-
Channel move time(s)	0.458	< 10s
Channel closing time(ms)	1.999	260ms



Note: T0 denotes the start of Channel Move Time upon the end of the last Radar burst.
T1 denotes the data transmission time of 200ms from T0.
T2 denotes the end of Channel Move Time.
T3 denotes the 10 second from T0 to observe the aggregate duration of transmissions.





PERFORMANCE CHECK

CHECK LIMIT:

Radar Type	Minimum Percentage of Successful Detection (Pd)	Minimum Trials
1	60%	30
2	60%	30
3	60%	30
4	60%	30
Aggregate (Radar Types 1-4)	80%	120
5	80%	30
6	70%	30

The percentage of successful detection is calculated by:

$$\frac{\text{TotalWaveformDetections}}{\text{TotalWaveformTrials}} \times 100 = \text{Probability of Detection Radar Waveform}$$

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

$$\frac{Pd1 + Pd2 + Pd3 + Pd4}{4}$$

TEST PROCEDURES

Test Method
☒ For Statistical Performance Check test. Demonstrating a minimum channel loading of approximately 17% or greater of the test. Observe the transmissions of the UUT at the end of the Burst on the Operating Channel for duration greater than 10 seconds for Short Pulse Radar Types 1-4 and 6 to ensure detection occurs. Then Observe the transmissions of the UUT at the end of the Burst on the Operating Channel for duration greater than 22 seconds for Long Pulse Radar Type 5 to ensure detection occurs. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trial runs.

802.11AC80



Radar1 Statical Performances				
Trial #	Pluse per Burst	Pluse Width(us)	PRI(us)	Detection(Yes / No)
1	18	1.0u	1.428	YES
2	18	1.0u	1.428	YES
3	18	1.0u	1.428	YES
4	18	1.0u	1.428	YES
5	18	1.0u	1.428	YES
6	18	1.0u	1.428	YES
7	18	1.0u	1.428	YES
8	18	1.0u	1.428	YES
9	18	1.0u	1.428	YES
10	18	1.0u	1.428	YES
11	18	1.0u	1.428	YES
12	18	1.0u	1.428	YES
13	18	1.0u	1.428	YES
14	18	1.0u	1.428	YES
15	18	1.0u	1.428	YES
16	18	1.0u	1.428	YES
17	18	1.0u	1.428	YES
18	18	1.0u	1.428	YES
19	18	1.0u	1.428	YES
20	18	1.0u	1.428	YES
21	18	1.0u	1.428	YES
22	18	1.0u	1.428	YES
23	18	1.0u	1.428	YES
24	18	1.0u	1.428	YES
25	18	1.0u	1.428	YES
26	18	1.0u	1.428	YES
27	18	1.0u	1.428	YES
28	18	1.0u	1.428	YES
29	18	1.0u	1.428	YES
30	18	1.0u	1.428	YES
Detection Rate 100%				



Radar2 Statical Performances				
Trial #	Pluse per Burst	Pluse Width(us)	PRI(us)	Detection(Yes / No)
1	23	1.2u	207	YES
2	23	1.4u	158	YES
3	25	1.5u	208	YES
4	26	2.6u	160	YES
5	24	2.2u	184	YES
6	27	1.3u	186	YES
7	27	3.2u	221	YES
8	26	4.3u	227	YES
9	26	3.1u	169	YES
10	26	3.1u	169	YES
11	25	2.2u	208	YES
12	27	1.3u	220	YES
13	28	1.4u	168	YES
14	25	4.5u	209	YES
15	24	3.3u	204	YES
16	23	2.4u	229	YES
17	27	3.8u	224	YES
18	23	1.4u	158	YES
19	27	1.3u	186	YES
20	28	1.4u	172	YES
21	28	4.5u	170	YES
22	29	2.7u	221	YES
23	27	2.9u	203	YES
24	24	1.8u	190	YES
25	27	3.8u	224	YES
26	23	1.2u	207	YES
27	23	1.4u	158	YES
28	25	1.5u	208	YES
29	26	2.6u	160	YES
30	24	2.2u	184	YES
Detection Rate 100%				



Radar3 Statical Performances				
Trial #	Pluse per Burst	Pluse Width(s)	PRI(us)	Detection(Yes / No)
1	16	9.9u	481	YES
2	17	8.5u	436	YES
3	17	8.0u	447	YES
4	18	8.6u	410	YES
5	18	8.8u	409	YES
6	16	7.6u	398	YES
7	16	7.9u	364	YES
8	16	9.0u	398	YES
9	17	9.5u	364	YES
10	17	6.6u	369	YES
11	16	8.8u	258	YES
12	16	9.5u	477	YES
13	18	9.8u	206	YES
14	18	8.6u	213	YES
15	16	8.0u	366	YES
16	18	9.9u	260	YES
17	16	8.5u	269	NO
18	17	8.0u	431	YES
19	18	9.6u	330	YES
20	18	6.0u	440	YES
21	18	8.6u	300	YES
22	18	8.2u	336	YES
23	17	8.7u	328	YES
24	18	9.0u	408	YES
25	16	9.8u	492	YES
26	18	9.5u	463	YES
27	17	9.8u	445	YES
28	16	8.6u	442	YES
29	16	8.2u	405	YES
30	18	8.7u	409	YES
Detection Rate 97%				



Radar4 Statical Performances				
Trial #	Pluse per Burst	Pluse Width(us)	PRI(us)	Detection(Yes / No)
1	13	13.9u	409	YES
2	15	18.0u	477	YES
3	16	13.2u	206	YES
4	12	12.0u	206	YES
5	13	12.0u	213	YES
6	13	13.8u	482	YES
7	13	14.9u	436	NO
8	12	12.7u	330	YES
9	14	12.0u	335	YES
10	15	13.8u	328	YES
11	15	14.9u	445	YES
12	13	19.8u	442	YES
13	15	14.6u	405	YES
14	13	19.3u	405	YES
15	16	18.2u	409	YES
16	16	15.3u	481	NO
17	14	19.0u	492	YES
18	14	13.8u	463	YES
19	13	14.9u	445	YES
20	16	15.8u	442	YES
21	15	15.8u	447	YES
22	15	14.6u	258	YES
23	14	13.9u	270	YES
24	14	16.5u	441	YES
25	15	14.0u	332	YES
26	16	15.6u	478	YES
27	12	17.0u	442	YES
28	16	19.6u	405	YES
29	12	13.9u	334	YES
30	14	17.0u	470	YES
Detection Rate 93%				



Radar5 Statical Performances		
Trial #	Test Signal name	Detection(Yes / No)
1	LP_Signal_01	Yes
2	LP_Signal_02	Yes
3	LP_Signal_03	Yes
4	LP_Signal_04	Yes
5	LP_Signal_05	Yes
6	LP_Signal_06	Yes
7	LP_Signal_07	Yes
8	LP_Signal_08	Yes
9	LP_Signal_09	Yes
10	LP_Signal_10	Yes
11	LP_Signal_11	Yes
12	LP_Signal_12	Yes
13	LP_Signal_13	Yes
14	LP_Signal_14	Yes
15	LP_Signal_15	Yes
16	LP_Signal_16	Yes
17	LP_Signal_17	Yes
18	LP_Signal_18	Yes
19	LP_Signal_19	Yes
20	LP_Signal_20	Yes
21	LP_Signal_21	Yes
22	LP_Signal_22	Yes
23	LP_Signal_23	Yes
24	LP_Signal_24	Yes
25	LP_Signal_25	Yes
26	LP_Signal_26	Yes
27	LP_Signal_27	Yes
28	LP_Signal_28	Yes
29	LP_Signal_29	Yes
30	LP_Signal_30	Yes
Detection Rate 100%		



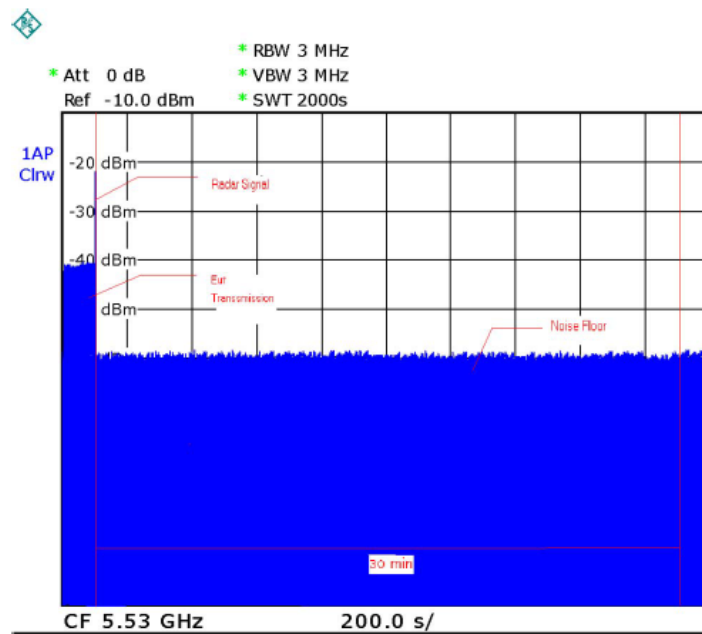
Radar6 Statical Performances		
Trial #	Hoping Frequency Sequence Name	Detection(Yes / No)
1	HOP_FREQ_SEQ_01	Yes
2	HOP_FREQ_SEQ_02	Yes
3	HOP_FREQ_SEQ_03	Yes
4	HOP_FREQ_SEQ_04	Yes
5	HOP_FREQ_SEQ_05	Yes
6	HOP_FREQ_SEQ_06	Yes
7	HOP_FREQ_SEQ_07	Yes
8	HOP_FREQ_SEQ_08	Yes
9	HOP_FREQ_SEQ_09	Yes
10	HOP_FREQ_SEQ_10	Yes
11	HOP_FREQ_SEQ_11	Yes
12	HOP_FREQ_SEQ_12	Yes
13	HOP_FREQ_SEQ_13	Yes
14	HOP_FREQ_SEQ_14	Yes
15	HOP_FREQ_SEQ_15	Yes
16	HOP_FREQ_SEQ_16	Yes
17	HOP_FREQ_SEQ_17	Yes
18	HOP_FREQ_SEQ_18	Yes
19	HOP_FREQ_SEQ_19	Yes
20	HOP_FREQ_SEQ_20	Yes
21	HOP_FREQ_SEQ_21	Yes
22	HOP_FREQ_SEQ_22	Yes
23	HOP_FREQ_SEQ_23	Yes
24	HOP_FREQ_SEQ_24	Yes
25	HOP_FREQ_SEQ_25	Yes
26	HOP_FREQ_SEQ_26	Yes
27	HOP_FREQ_SEQ_27	Yes
28	HOP_FREQ_SEQ_28	Yes
29	HOP_FREQ_SEQ_29	Yes
30	HOP_FREQ_SEQ_30	Yes
Detection Rate 100%		



4.6 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 – 802.11ac80 mode





Test Result Table

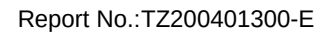
BAND 2A:

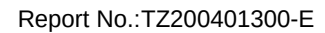
FRE.	5260MHz (BW=20MHz)										
Test result	PASS										
Radar Fre.	DFS Detection Trials(1- Detection; 0- no Detection)										Detection Rate (%)
MHz	1	2	3	4	5	6	7	8	9	10	
5249	1	0	0	1	1	1	1	0	1	0	60
5250	1	1	1	1	1	1	1	1	1	1	100
5251	1	1	1	1	1	1	1	1	1	1	100
5252	1	1	1	1	1	1	1	1	1	1	100
5253	1	1	1	1	1	1	1	1	1	1	100
5254	1	1	1	1	1	1	1	1	1	1	100
5255	1	1	1	1	1	1	1	1	1	1	100
5256	1	1	1	1	1	1	1	1	1	1	100
5257	1	1	1	1	1	1	1	1	1	1	100
5258	1	1	1	1	1	1	1	1	1	1	
5259	1	1	1	1	1	1	1	1	1	1	100
5260	1	1	1	1	1	1	1	1	1	1	100
5261	1	1	1	1	1	1	1	1	1	1	100
5262	1	1	1	1	1	1	1	1	1	1	100
5263	1	1	1	1	1	1	1	1	1	1	100
5264	1	1	1	1	1	1	1	1	1	1	100
5265	1	1	1	1	1	1	1	1	1	1	100
5266	1	1	1	1	1	1	1	1	1	1	100
5267	1	1	1	1	1	1	1	1	1	1	100
5268	1	1	1	1	1	1	1	1	1	1	100
5269	1	1	1	1	1	1	1	1	1	1	100
5270	1	1	1	1	1	1	1	1	1	1	100
5271	1	0	1	0	1	0	0	1	1	1	60



BAND 2C:

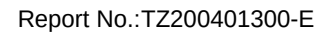
FRE.	5540MHz (BW=20MHz)										
Test result	PASS										
Radar Fre.	DFS Detection Trials(1- Detection; 0- no Detection)										Detection Rate (%)
MHz	1	2	3	4	5	6	7	8	9	10	
5529	1	0	0	1	1	0	0	0	1	1	50
5530(FL)	1	1	0	0	0	1	0	1	0	1	50
5531	1	1	1	1	1	1	1	1	1	1	100
5532	1	1	1	1	1	1	1	1	1	1	100
5533	1	1	1	1	1	1	1	1	1	1	100
5534	1	1	1	1	1	1	1	1	1	1	100
5535	1	1	1	1	1	1	1	1	1	1	100
5536	1	1	1	1	1	1	1	1	1	1	100
5537	1	1	1	1	1	1	1	1	1	1	100
5538	1	1	1	1	1	1	1	1	1	1	100
5539	1	1	1	1	1	1	1	1	1	1	100
5540	1	1	1	1	1	1	1	1	1	1	100
5541	1	1	1	1	1	1	1	1	1	1	100
5542	1	1	1	1	1	1	1	1	1	1	100
5543	1	1	1	1	1	1	1	1	1	1	100
5544	1	1	1	1	1	1	1	1	1	1	100
5545	1	1	1	1	1	1	1	1	1	1	100
5546	1	1	1	1	1	1	1	1	1	1	100
5547	1	1	1	1	1	1	1	1	1	1	100
5548	1	1	1	1	1	1	1	1	1	1	100
5549	1	1	1	1	1	1	1	1	1	1	100
5550(FH)	0	1	0	0	0	1	0	0	0	1	40
5551	1	0	1	0	0	0	1	0	1	1	50

[illegible]



5568	1	1	1	1	1	1	1	1	1	1	100
5569	1	1	1	1	1	1	1	1	1	1	100
5570(FH)	1	0	1	1	0	1	0	0	1	0	50
5571	1	0	0	1	0	1	1	0	0	1	40

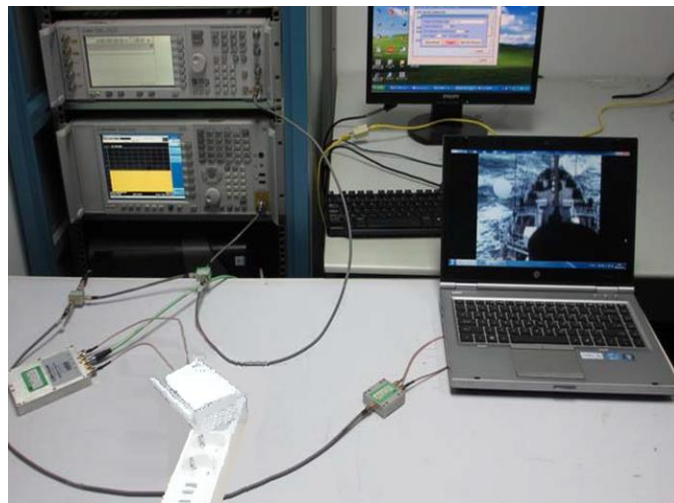
[illegible]

[illegible]



5564	1	1	1	1	1	1	1	1	1	1	100
5565	1	1	1	1	1	1	1	1	1	1	100
5566	1	1	1	1	1	1	1	1	1	1	100
5567	1	1	1	1	1	1	1	1	1	1	100
5568	1	1	1	1	1	1	1	1	1	1	100
5569	1	1	1	1	1	1	1	1	1	1	100
5570(FH)	1	1	1	1	1	1	1	1	1	1	100
5571	0	1	0	0	0	0	1	0	0	0	20

TEST SETUP



*****END OF REPORT*****