



427 West 12800 South
Draper, UT 84020

Explanation Summary, KDB484596 D01 Exhibit

FCC ID	SWX-AF60XR
ISED ID	6545A-AF60XR
Equipment Under Test	AF60-XR
Test Report Serial Number	TR6834_05
Date of Test	16 February 2023
Report Issue Date	24 January 2022

Test Personnel

Testing performed by: Kimberly Rodriquez	
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Test Location

Testing was performed at the Unified Compliance Laboratory located at 427 West 12800 South, Draper, UT 84020. Unified Compliance Laboratory is accredited by National Voluntary Laboratory Accreditation Program (NVLAP); NVLAP Code 600241-0 which is effective until 30 June 2023. This site has also been registered with Innovations, Science and Economic Development (ISED) department as was accepted under Appendix B, Phase 1 procedures of the APEC Tel MRA for Canadian recognition. ISED No.: 25346, effective until 30 June 2023. Unified Compliance Laboratory has been assigned Conformity Assessment Number US0223 by ISED and MRA US5037.



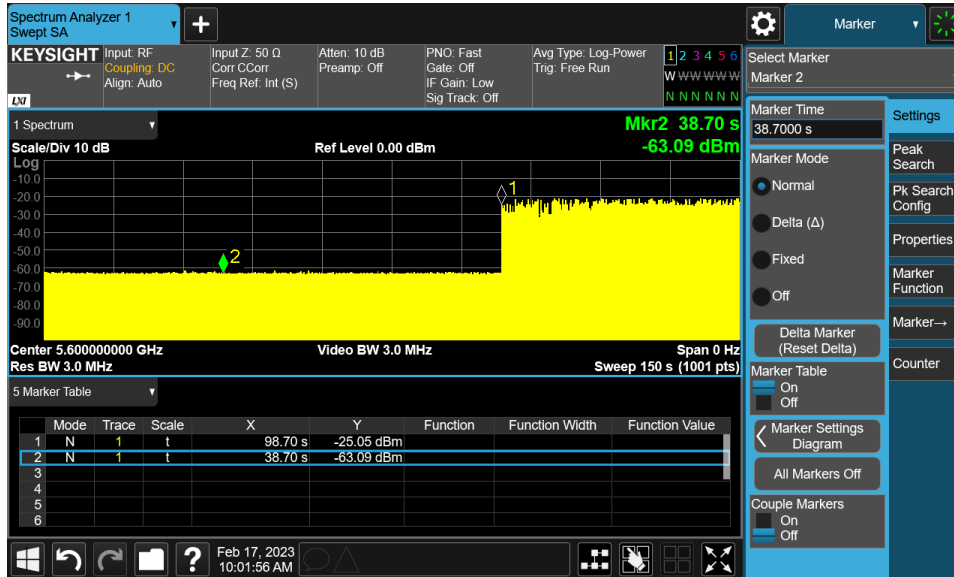
Model Number: AF60-XR / AF60-XG

The devices meet all the requirements for operation in the 5250 – 5350 MHz and 5470 – 5725 MHz band as specified in KDB 484569 D01 “Referencing Test Data” as they use identical internal printed circuit board layouts and differ only in the vendor of the 60 GHz transmitter. The following data summary is considered worst-case and tested to demonstrate validity of the referenced test data and compliance of the current device.

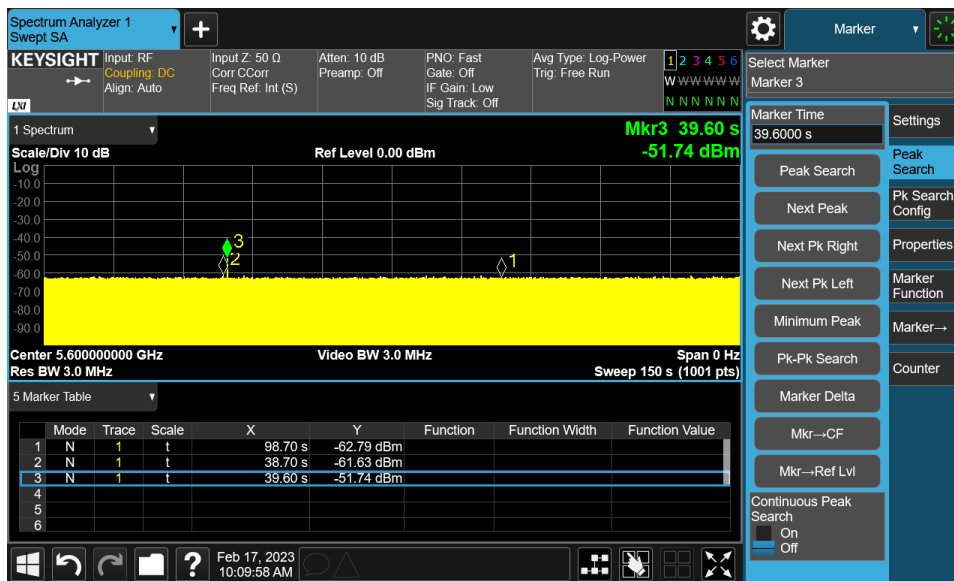
FCC UNII Device Data Summary

Test	Spot-Check	Reported
CAC Time	38.7 s	46.5 s (Note 1)
Detection Probability	Passed	Passed (Note 1)
Detection Bandwidth	Passed	Passed (Note 1)
5GHz / 2.4GHz Ant Gain	26 / 2 dBi	26 / 2 dBi
Threshold Level	-62 dBm (Note 2)	-62 dBm (Note 2)
Note 1: Data depicted in test report section 5.7 for DFS		
Note 2: Worst-case antenna gain testing for detection probability		

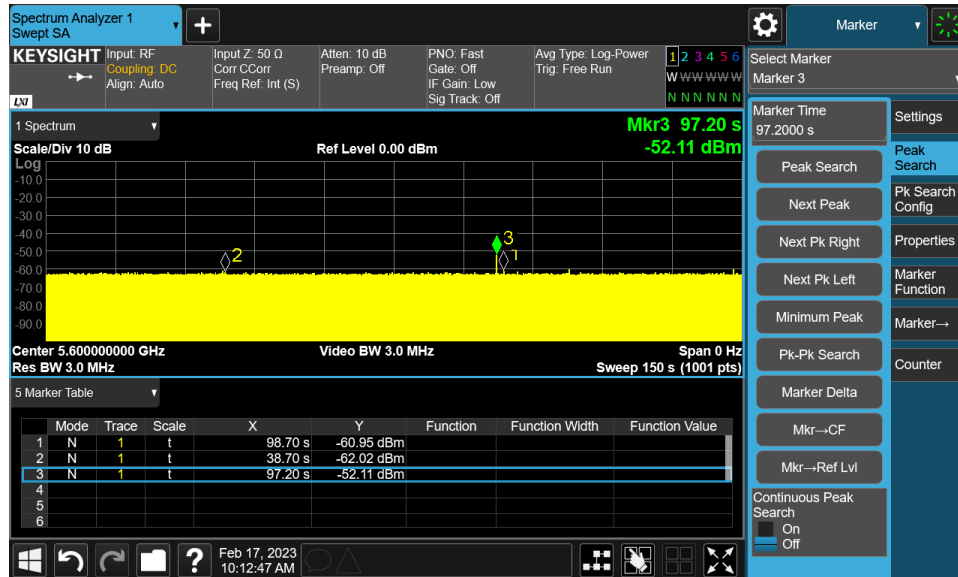
Test Results



Plot 1: CAC



Plot 2: CAC beginning



Plot 3: CAC end

EUT Frequency = 5600 MHz ; Bandwidth = 80 MHz											
Radar Frequency MHz	DFS Detection Trials (1 = Detection, 0 = No Detection)										Detection Rate %
	Trials										
	1	2	3	4	5	6	7	8	9	10	
F_Low 5560	1	1	1	1	1	1	1	1	1	1	100
5565	1	1	1	1	1	1	1	1	1	1	100
5570	1	1	1	1	1	1	1	1	1	1	100
5575	1	1	1	1	1	1	1	1	1	1	100
5580	1	1	1	1	1	1	1	1	1	1	100
5585	1	1	1	1	1	1	1	1	1	1	100
5590	1	1	1	1	1	1	1	1	1	1	100
5595	1	1	1	1	1	1	1	1	1	1	100
5600	1	1	1	1	1	1	1	1	1	1	100
5605	1	1	1	1	1	1	1	1	1	1	100
5610	1	1	1	1	1	1	1	1	1	1	100
5615	1	1	1	1	1	1	1	1	1	1	100
5620	1	1	1	1	1	1	1	1	1	1	100
5625	1	1	1	1	1	1	1	1	1	1	100
5630	1	1	1	1	1	1	1	1	1	1	100
5635	1	1	1	1	1	1	1	1	1	1	100
F_High 5640	1	1	1	1	1	1	1	1	1	1	100
Total Detection Percentage											100
Detection Bandwidth = FH-FL = 5560 MHz - 5640 MHz = 80 MHz											
99% Bandwidth = 79.2 MHz											

Table 1: Detection Bandwidth 80 MHz 5560-5640 MHz

Summary

Type	Detections	Trials	Detection Probability
Type 1	25	30	83%
Type 2	24	30	80%
Type 3	26	30	87%
Type 4	24	30	80%
Type 5	30	30	100%
Type 6	28	30	93%
Aggregate 1-4	99	120	83%

RADAR TYPE 1				
<small>Rohde & Schwarz K350 Pulse Sequencer DFS</small>				
Trial #	Number of Pulses per Burst	Pulse Width (µsec)	PRI (µs)	Detection (yes/no)
1	33	1	1644	y
2	20	1	2641	y
3	22	1	2466	y
4	49	1	1078	y
5	23	1	2309	y
6	29	1	1865	n
7	33	1	1610	y
8	60	1	881	y
9	34	1	1564	y
10	41	1	1303	y
11	49	1	1087	n
12	24	1	2247	y
13	35	1	1521	y
14	20	1	2729	y
15	42	1	1274	y
16	20	1	2749	y
17	19	1	2807	n
18	24	1	2198	y
19	44	1	1218	y
20	31	1	1740	y
21	18	1	2954	y
22	19	1	2884	n
23	47	1	1136	y
24	45	1	1175	y
25	62	1	852	y
26	19	1	2909	y
27	26	1	2031	y
28	18	1	3004	y
29	36	1	1469	n
30	25	1	2167	y
				25/30: 83.3%

RADAR TYPE 2				
<small>Rohde & Schwarz K350 Pulse Sequencer DFS</small>				
Trial #	Number of Pulses per Burst	Pulse Width (µsec)	PRI (µs)	Detection (yes/no)
1	28	1.8	221	y
2	25	2.1	199	n
3	25	3.8	223	y
4	27	4.3	184	n
5	27	2.4	223	y
6	28	1.5	227	y
7	27	2.7	172	y
8	27	1.7	227	y
9	24	3.5	163	y
10	27	1	195	y
11	29	1.6	213	y
12	24	2.1	173	y
13	27	1.2	174	y
14	26	1.8	153	y
15	25	1.8	222	n
16	27	3.8	165	y
17	27	1.6	159	y
18	29	2.4	169	y
19	25	2.2	196	y
20	29	3	206	y
21	28	4.3	216	y
22	24	3.8	179	y
23	27	1.2	221	y
24	28	3.3	225	n
25	26	2.7	222	n
26	26	3.7	161	y
27	28	4.4	182	y
28	28	1.2	164	n
29	25	2.8	214	y
30	26	4.2	171	y
				24/30: 80%

RADAR TYPE 3					RADAR TYPE 4				
Rohde & Schwarz K350 Pulse Sequencer DFS					Rohde & Schwarz K350 Pulse Sequencer DFS				
Trial #	Number of Pulses per Burst	Pulse Width (µsec)	PRI (µs)	Detection (yes/no)	Trial #	Number of Pulses per Burst	Pulse Width (µsec)	PRI (µs)	Detection (yes/no)
1	18	8	320	y	1	14	12.6	301	y
2	17	7.1	275	y	2	14	12.7	241	n
3	16	6	214	y	3	12	11.9	389	y
4	17	6.2	294	y	4	15	19.3	474	y
5	17	8	490	y	5	15	16.1	422	y
6	16	6.7	367	y	6	12	14.4	374	y
7	17	8.2	351	y	7	14	13.8	457	y
8	17	7.6	274	y	8	14	14.6	257	n
9	17	9	238	y	9	15	17.8	215	y
10	18	8.6	379	y	10	13	12.1	300	y
11	17	6.9	313	y	11	15	18.8	394	y
12	18	9.7	395	y	12	13	16.5	433	y
13	18	7.8	385	n	13	13	14.6	442	n
14	18	6.1	397	y	14	13	19	412	y
15	17	7.1	236	n	15	15	14.9	306	y
16	17	7.6	282	n	16	13	14.9	330	n
17	17	8.8	449	y	17	16	16.6	214	y
18	18	7.8	200	y	18	14	13.1	408	n
19	17	8	336	y	19	13	11	317	y
20	18	8.5	431	y	20	15	13.8	262	y
21	16	6	481	y	21	15	18.5	459	n
22	17	9.3	407	y	22	12	17.5	312	y
23	17	9.7	310	y	23	16	17.2	377	y
24	17	9.2	231	y	24	16	15.1	251	y
25	16	6.8	287	n	25	14	19.5	381	y
26	17	7.1	230	y	26	13	16.8	212	y
27	17	6.3	221	y	27	14	12.2	398	y
28	16	9.1	423	y	28	13	11.8	442	y
29	18	6.9	201	y	29	12	18	388	y
30	17	7.4	405	y	30	13	18.1	456	y
26/30: 86.7%					24/30: 80%				

TYPE 5					TYPE 6 S	
Rohde & Schwarz K350 Pulse Sequencer DFS					Rohde & Schwarz K350 Pulse Sequencer DFS	
Trial #	Detection (yes/no)	Chirp Width (MHz)	Subset	Fc	Trial #	Detection (yes/no)
1	y	11	1	5600	1	y
2	y	18	1	5600	2	y
3	y	12	1	5600	3	y
4	y	14	1	5600	4	y
5	y	9	1	5600	5	y
6	y	12	1	5600	6	y
7	y	5	1	5600	7	y
8	y	16	1	5600	8	y
9	y	15	1	5600	9	y
10	y	11	1	5600	10	y
11	y	19	2	5597.6	11	y
12	y	8	2	5593.2	12	y
13	y	12	2	5594.8	13	y
14	y	12	2	5594.8	14	y
15	y	15	2	5596	15	n
16	y	8	2	5593.2	16	y
17	y	12	2	5594.8	17	y
18	y	11	2	5594.4	18	y
19	y	12	2	5594.8	19	y
20	y	6	2	5592.4	20	y
21	y	14	3	5604.4	21	y
22	y	15	3	5604	22	y
23	y	5	3	5608	23	y
24	y	14	3	5604.4	24	y
25	y	9	3	5606.4	25	y
26	y	6	3	5607.6	26	y
27	y	9	3	5606.4	27	n
28	y	7	3	5607.2	28	y
29	y	7	3	5607.2	29	y
30	y	11	3	5605.6	30	y
30/30: 100%					28/30: 93.3%	

1.1 Reference Section

Reference test data from a separate source has been uploaded into the new FCC ID filing and can be found in the test report:

AF60-XR_FCC_15.407_UNII-2
AF60-XR_FCC_15.407_UNII-2_Annex

-- End of Report --