

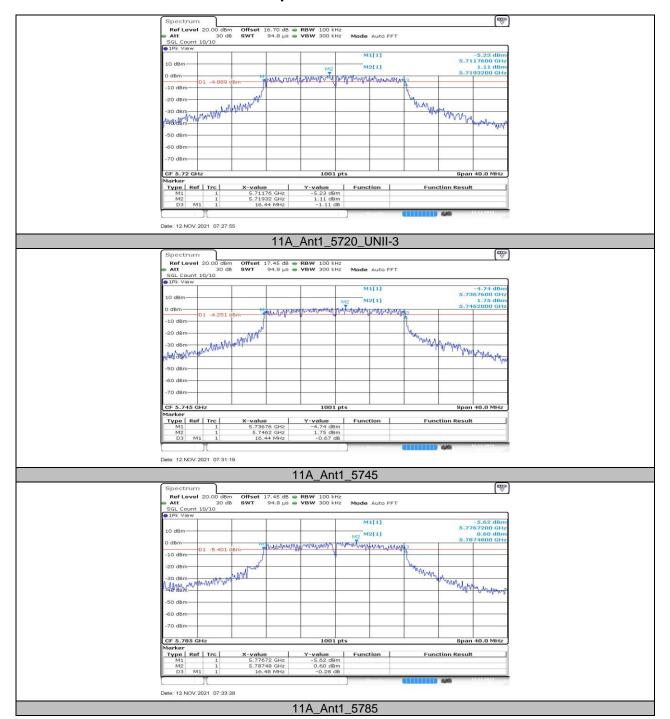


# 13.3. Appendix A3: Min emission bandwidth 13.3.1. Test Result

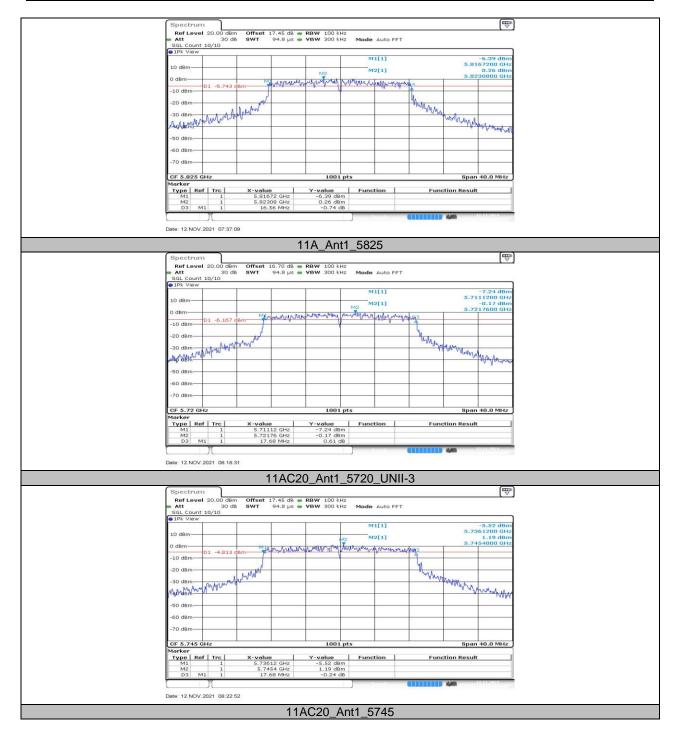
Test Mode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict	
		5720_UNII- 3	3.2	5725	5728.200	0.5	PASS	
11A	Ant1	5745	16.440	5736.760	5753.200	0.5	PASS	
		5785	16.480	5776.720	5793.200	0.5	PASS	
		5825	16.560	5816.720	5833.280	0.5	PASS	
	Ant1		5720_UNII- 3	3.8	5725	5728.800	0.5	PASS
11AC20		5745	17.680	5736.120	5753.800	0.5	PASS	
		5785	17.080	5776.160	5793.240	0.5	PASS	
		5825	17.520	5816.080	5833.600	0.5 0.5 0.5 0.5 0.5 0.5	PASS	
11AC40	•	5710_UNII- 3	3.24	5725	5728.240	0.5	PASS	
TTAC40	Ant1	5755	35.840	5736.680	5772.520	0.5	PASS	
		5795	36.080	5776.920	5813.000	0.5	PASS	
11AC80	Ant1	5690_UNII- 3	2.76	5725	5727.760	0.5	PASS	
		5775	75.520	5737.240	5812.760	0.5	PASS	



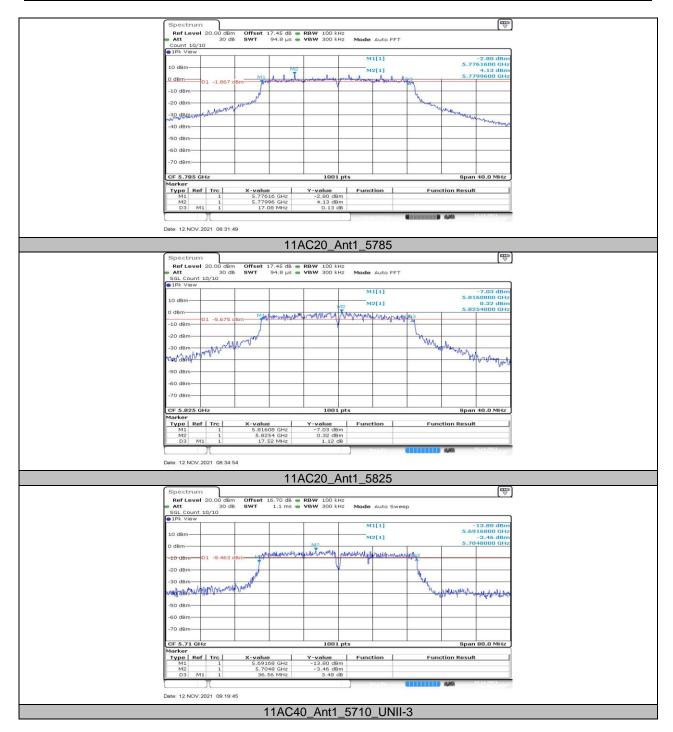
#### 13.3.2. Test Graphs



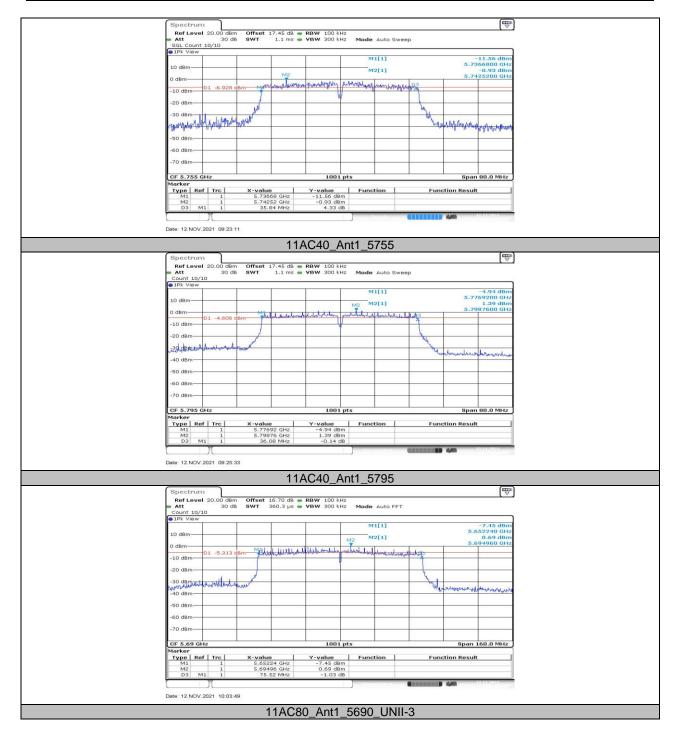




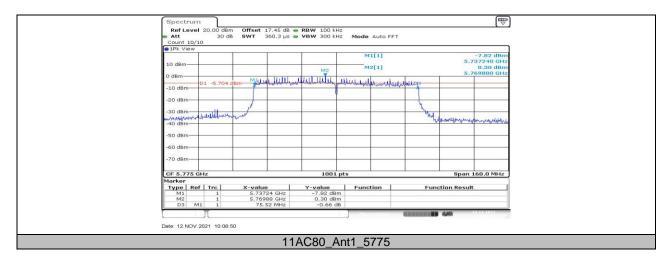


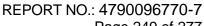














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## 13.4. Appendix B: Maximum conducted output power 13.4.1. Test Result

S180	Test Mode	Antenna	Channel	Power	FCC Limit	ISED Limit	EIRP	Limit	Verdict
11AC20   16.83   529.88     15.29   522.20   PASS				[dBm]	[dBm]	[dBm]	[dBm]	[dBm]	
11AC20									
11AC20									
11AC20  Ant1    5280									
11AC20									
11AC40  Ant1    5500									
11AA Ant1									
11AC40   Ant1   From									
11AC40   Ant1	11A	Ant1							
2C				15.85	≤23.98	≤23.29	14.31	≤29.29	PASS
11AC40   S745   16.15   S30   S30   14.61     PASS			2C					≤28.27	
S785									
5825									
11AC40							13.53		
S200						≤30			
S240							15.90		
S260									
11AC20  Ant1    5280			5240	16.53	≤23.98		14.99	≤22.56	
11AC20  Ant1    S320							14.54		
11AC20  Ant1    5500									
11AC20		Ant1							
S700									
11AC40    Solution	11AC20								
11AC40  Ant1  2C  13.71  22.45  5720_UNII-3  7.35  430  430  581   PASS  5745  15.45  430  430  13.91   PASS  5785  14.61  430  430  13.07   PASS  5825  14.64  430  430  13.07   PASS  5825  14.64  430  430  13.10   PASS  5190  17.63  423.98   16.09  423  430  13.70   PASS  5230  17.14  423.98   15.60  423  PASS  5270  16.41  423.98  423.98  14.45  430  PASS  5310  15.99  423.98  423.98  14.45  430  PASS  5510  14.94  423.98  423.98  14.45  430  PASS  5550  15.98  423.98  423.98  15.20  430  PASS  5710_UNII-3  2C  13.96  423.98  423.98  423.98  12.42  430  PASS  5710_UNII-3  2.18  430  430  13.70   PASS  5795  14.30  430  430  13.70   PASS  5795  14.30  430  430  13.70   PASS  5795  14.30  430  430  430  430  430  430  430				15.05	≤23.98	≤23.56	13.51	≤29.56	PASS
11AC40    5745				13.71	≤23.45	≤22.48	12.17	≤28.48	PASS
11AC40    5785			5720_UNII-3	7.35	≤30	≤30	5.81		PASS
Table   S825			5745	15.45	≤30	≤30	13.91		PASS
11AC40    Section   17.63   17.63   17.63   18.23.98   18.43   19.45			5785	14.61	≤30	≤30	13.07		PASS
11AC40  Ant1    5190			5825	14.64	≤30	≤30	13.10		PASS
11AC40  Ant1    Section   Figure   Fig			5190	17.63	≤23.98		16.09	≤23	PASS
11AC40  Ant1  Ant1    Ant1			5230	17.14	≤23.98		15.60	≤23	PASS
11AC40  Ant1    Ant1			5270	16.41	≤23.98	≤23.98	14.87	≤30	PASS
11AC40       Ant1       5550       15.98       ≤23.98       ≤23.98       15.20       ≤30       PASS         5670       14.48       ≤23.98       ≤23.98       12.94       ≤30       PASS         5710_UNII- 2C       13.96       ≤23.98       ≤23.98       12.42       ≤30       PASS         5710_UNII-3       2.18       ≤30       ≤30       0.64        PASS         5755       15.24       ≤30       ≤30       13.70        PASS         5795       14.30       ≤30       ≤30       12.76        PASS         5210       17.41       ≤23.98        15.87       ≤23       PASS         5290       16.44       ≤23.98       ≤23.98       14.90       ≤30       PASS         5530       16.57       ≤23.98       ≤23.98       15.03       ≤30       PASS         5690_UNII- 2C       15.72       ≤23.98       ≤23.98       14.18       ≤30       PASS         5690_UNII- 2C       5690_UNII- 3       0.86       ≤30       ≤30       -0.68        PASS			5310	15.99	≤23.98	≤23.98	14.45		PASS
T1AC40  Ant1    5670			5510	14.94	≤23.98	≤23.98	13.40		
11AC80    Solution	11 A C / O	Ant1		15.98			15.20		
2C   13.96   ≤23.96   12.42   ≤30   PASS	117040	Aliti		14.48	≤23.98	≤23.98	12.94	≤30	PASS
5755     15.24     ≤30     ≤30     13.70      PASS       5795     14.30     ≤30     ≤30     12.76      PASS       5210     17.41     ≤23.98      15.87     ≤23     PASS       5290     16.44     ≤23.98     ≤23.98     14.90     ≤30     PASS       5530     16.57     ≤23.98     ≤23.98     15.03     ≤30     PASS       5610     16.98     ≤23.98     ≤23.98     15.44     ≤30     PASS       5690_UNII- 2C     15.72     ≤23.98     ≤23.98     14.18     ≤30     PASS       5690_UNII-3     0.86     ≤30     ≤30     -0.68      PASS				13.96	≤23.98	≤23.98	12.42	≤30	PASS
5755     15.24     ≤30     ≤30     13.70      PASS       5795     14.30     ≤30     ≤30     12.76      PASS       5210     17.41     ≤23.98      15.87     ≤23     PASS       5290     16.44     ≤23.98     ≤23.98     14.90     ≤30     PASS       5530     16.57     ≤23.98     ≤23.98     15.03     ≤30     PASS       5610     16.98     ≤23.98     ≤23.98     15.44     ≤30     PASS       5690_UNII- 2C     15.72     ≤23.98     ≤23.98     14.18     ≤30     PASS       5690_UNII-3     0.86     ≤30     ≤30     -0.68      PASS			5710_UNII-3	2.18	≤30	≤30	0.64		PASS
11AC80  Ant1    5210   17.41   ≤23.98     15.87   ≤23   PASS     5290   16.44   ≤23.98   ≤23.98   14.90   ≤30   PASS     5530   16.57   ≤23.98   ≤23.98   15.03   ≤30   PASS     5610   16.98   ≤23.98   ≤23.98   15.44   ≤30   PASS     5690_UNII-2C   15.72   ≤23.98   ≤23.98   14.18   ≤30   PASS     5690_UNII-3   0.86   ≤30   ≤30   -0.68     PASS						≤30			
11AC80 Ant1			5795	14.30		≤30	12.76		PASS
11AC80 Ant1			5210	17.41	≤23.98		15.87	≤23	PASS
11AC80 Ant1				16.44	≤23.98	≤23.98	14.90		
TIAC80  Ant1  5690_UNII- 2C  15.72 ≤23.98 ≤23.98 14.18 ≤30 PASS  5690_UNII-3 0.86 ≤30 ≤30 -0.68 PASS				16.57		≤23.98	15.03	≤30	
5690_UNII- 2C     15.72     ≤23.98     ≤23.98     14.18     ≤30     PASS       5690_UNII-3     0.86     ≤30     ≤30     -0.68      PASS	11.000	Ant1		16.98	≤23.98	≤23.98	15.44	≤30	PASS
	TIACOU	Anti		15.72	≤23.98	≤23.98	14.18	≤30	PASS
			5690_UNII-3	0.86	≤30	≤30	-0.68		PASS
			5775						

Note: 1. Conducted Power=Meas. Level+ Correction Factor

2. The Duty Cycle Factor (refer to section 7.1) had already compensated to the test data.



## 13.5. Appendix C: Maximum power spectral density 13.5.1. Test Result

Test Mode	Antenna	Channel	Power	Limit	EIRP	Limit	Verdict
Test Mode	Antenna		[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	
7 551 111040		5180	7.05	≤11	5.71	≤10	PASS
		5200	6.64	≤11	5.30	≤10	PASS
		5240	6.28	≤11	4.94	≤10	PASS
		5260	5.78	≤11			PASS
		5280	5.76	≤11			PASS
		5320	4.93	≤11			PASS
		5500	5.57	≤11			PASS
11A	Ant1	5580	5.45	≤11			PASS
		5700	5.3	≤11			PASS
		5720_UNII- 2C	4.47	≤11			PASS
		5720_UNII-3	0.29	≤11			PASS
		5745	2.63	≤30			PASS
		5785	1.5	≤30			PASS
		5825	1.27	≤30			PASS
		5180	6.51	≤11	5.17	≤10	PASS
		5200	5.62	≤11	4.28	≤10	PASS
		5240	5.46	≤11	4.12	≤10	PASS
		5260	5.3	≤11			PASS
		5280	5.32	≤11			PASS
	Ant1	5320	4.28	≤11			PASS
		5500	4.88	≤11			PASS
11AC20		5580	4.76	≤11			PASS
		5700	4.25	≤11			PASS
		5720_UNII- 2C	3.81	≤11			PASS
		5720_UNII-3	-0.76	≤11			PASS
		5745	1.87	≤30			PASS
		5785	0.83	≤30			PASS
		5825	-0.32	≤30			PASS
		5190	3.26	≤11	1.92	≤10	PASS
		5230	3.06	≤11	1.72	≤10	PASS
		5270	2.68	≤11			PASS
		5310	1.06	≤11			PASS
		5510	1.45	≤11			PASS
		5550	1.63	≤11			PASS
11AC40	Ant1	5670	0.84	≤11			PASS
		5710_UNII- 2C	0.15	≤11			PASS
		5710_UNII-3	-4.51	≤11			PASS
		5755	-1.15	≤30			PASS
		5795	-2.32	≤30			PASS
		5210	0.67	<u>=50</u> ≤11	-0.67	≤10	PASS
		5290	-2.84	≤11	-0.07	<u></u>	PASS
		5530	-0.6	<u>≤</u> 11			PASS
		5610	0.57	≤11			PASS
11AC80	Ant1	5690_UNII-					
		2C	-0.72	≤11			PASS
		5690_UNII-3	-6.45	≤11			PASS
	]	5775	-3.87	≤30			PASS

Note : 1. The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

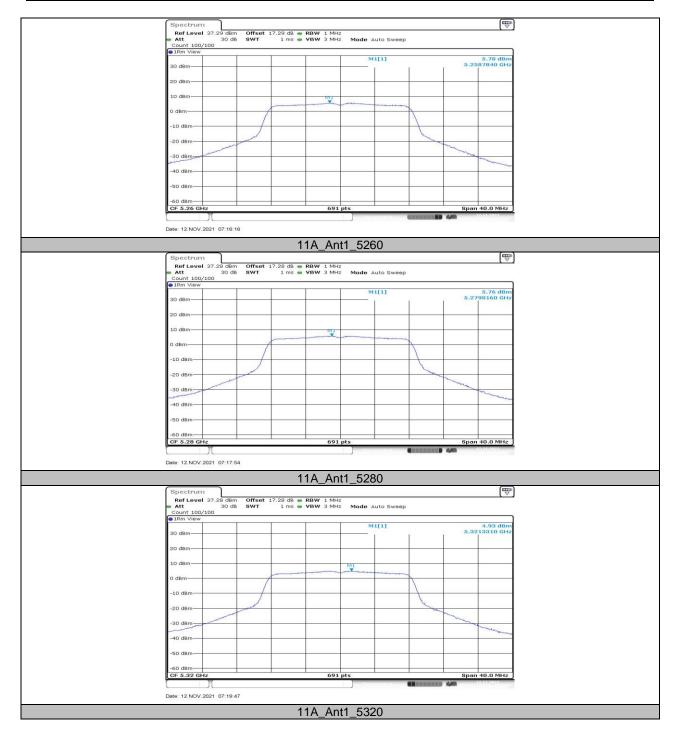
<sup>2.</sup> The Duty Cycle Factor and RBW Factor is compensated in the graph.



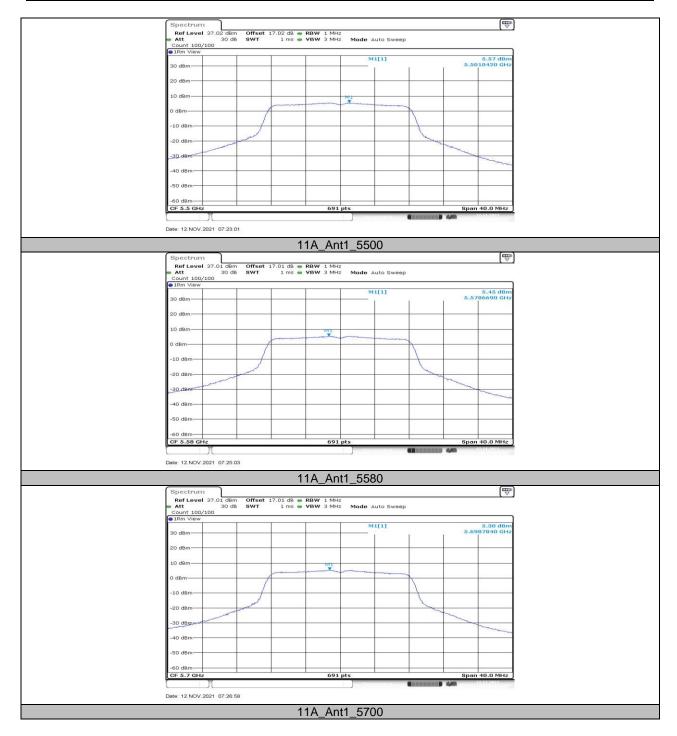
### 13.5.2. Test Graphs







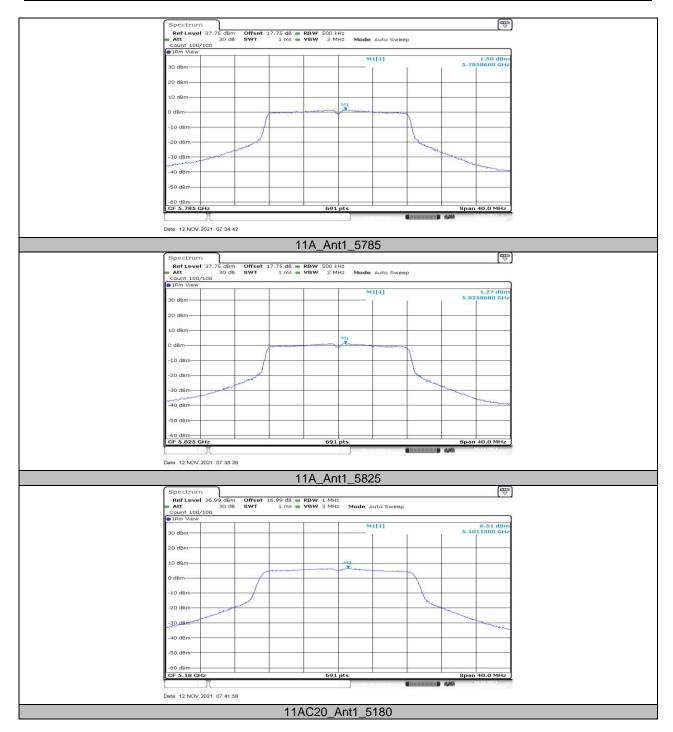




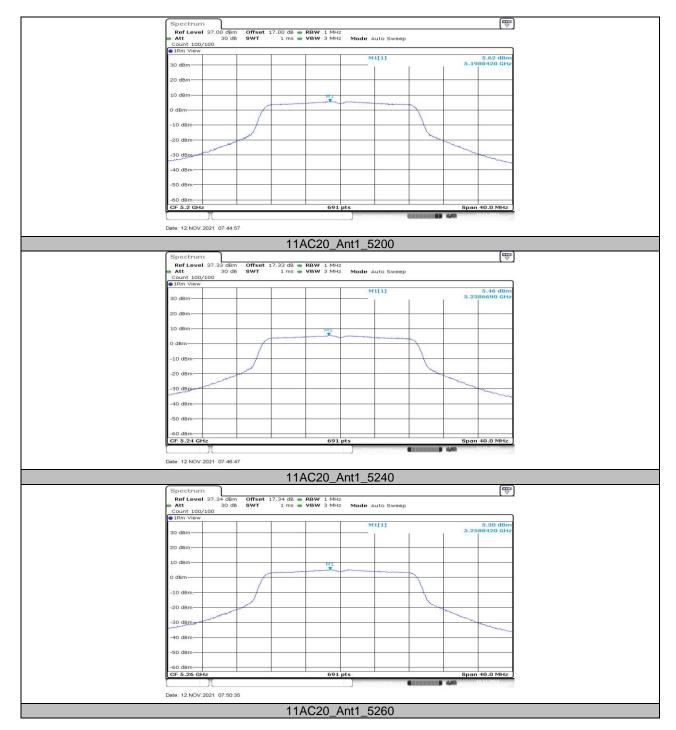




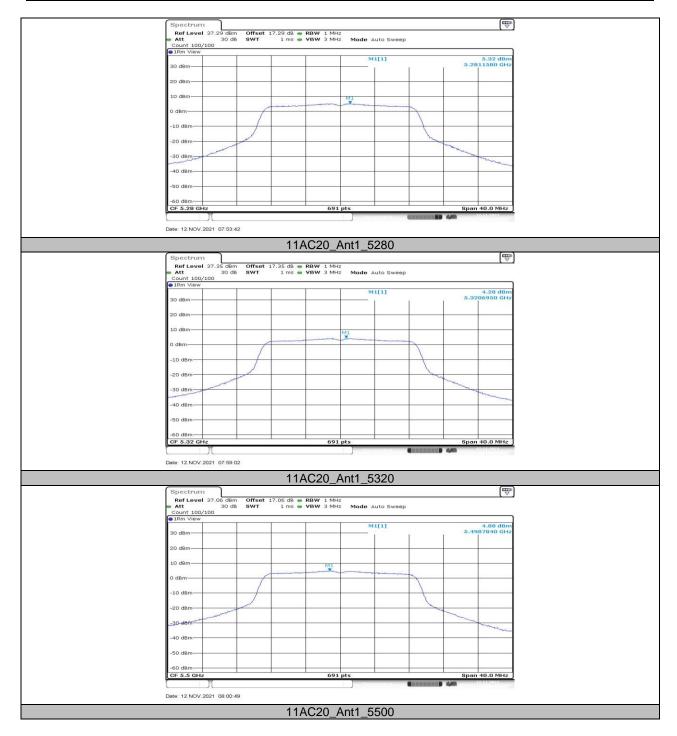




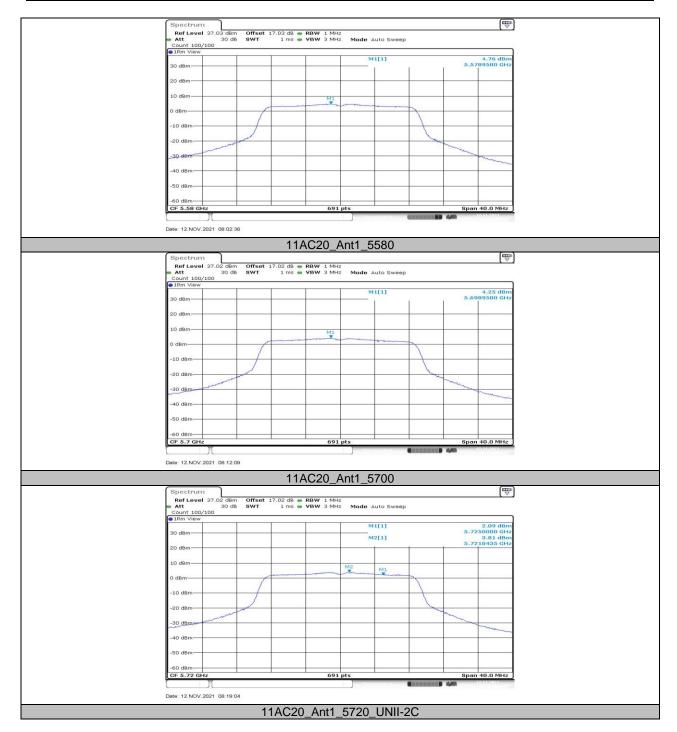




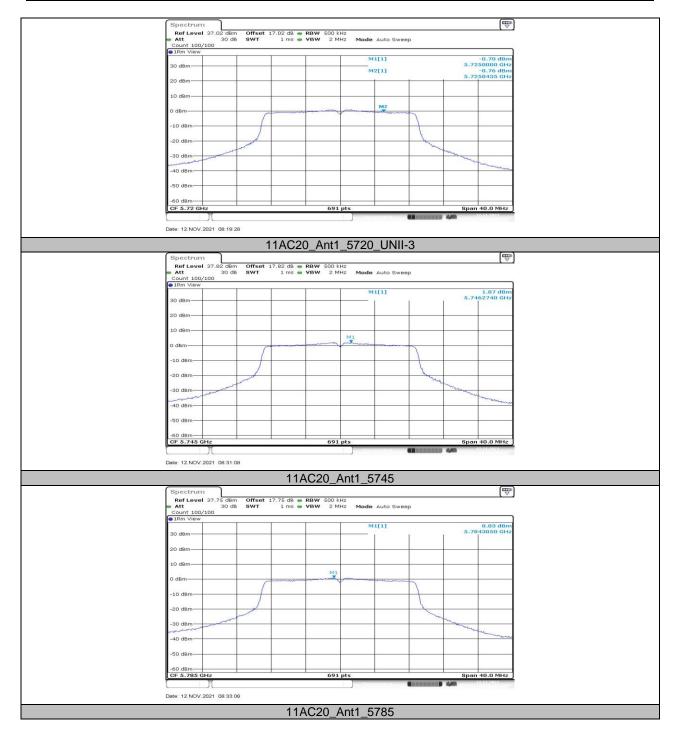




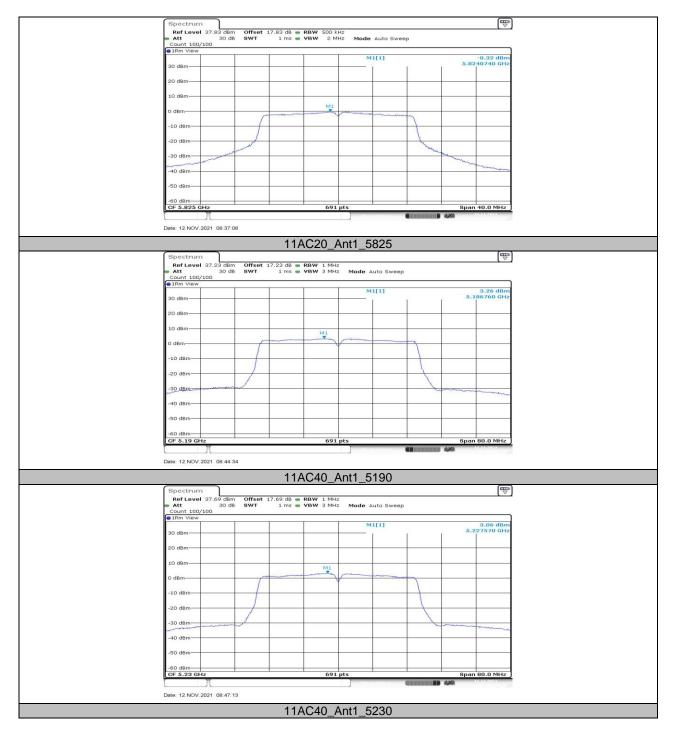




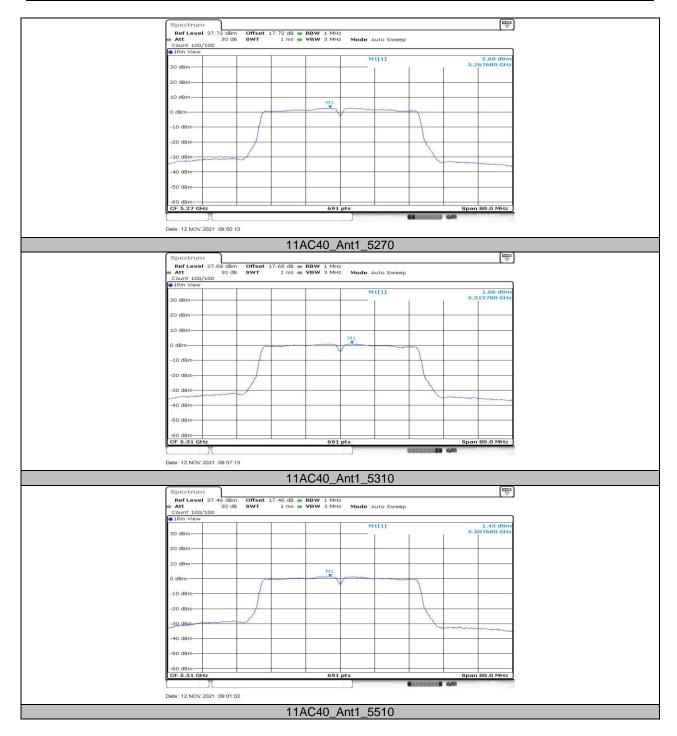




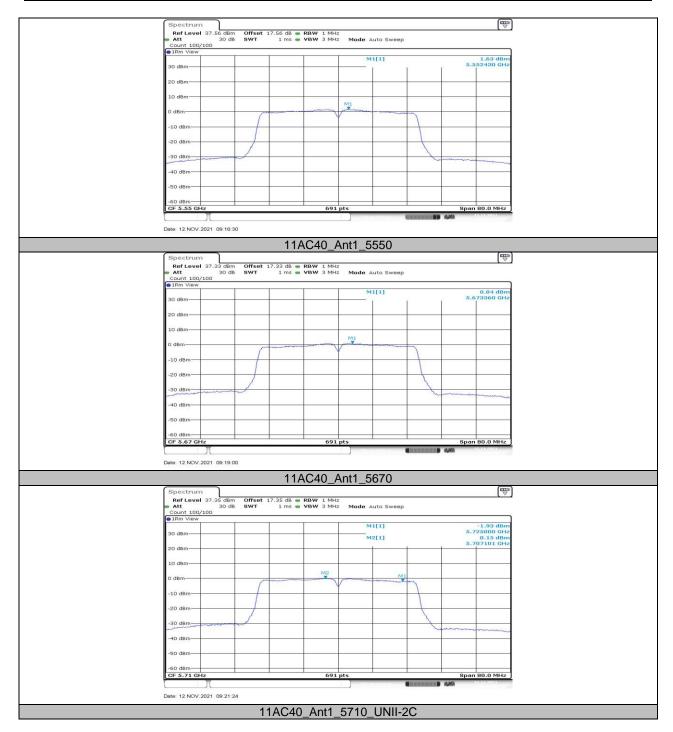




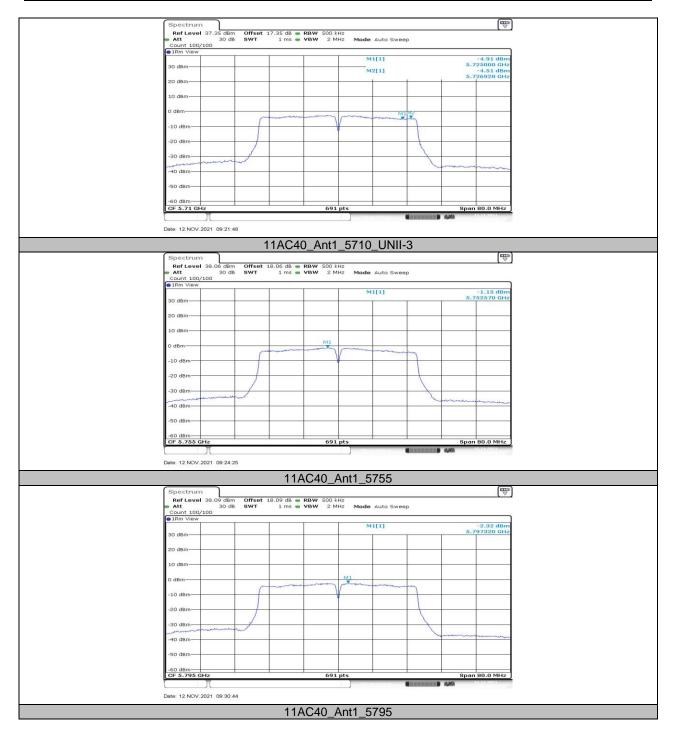




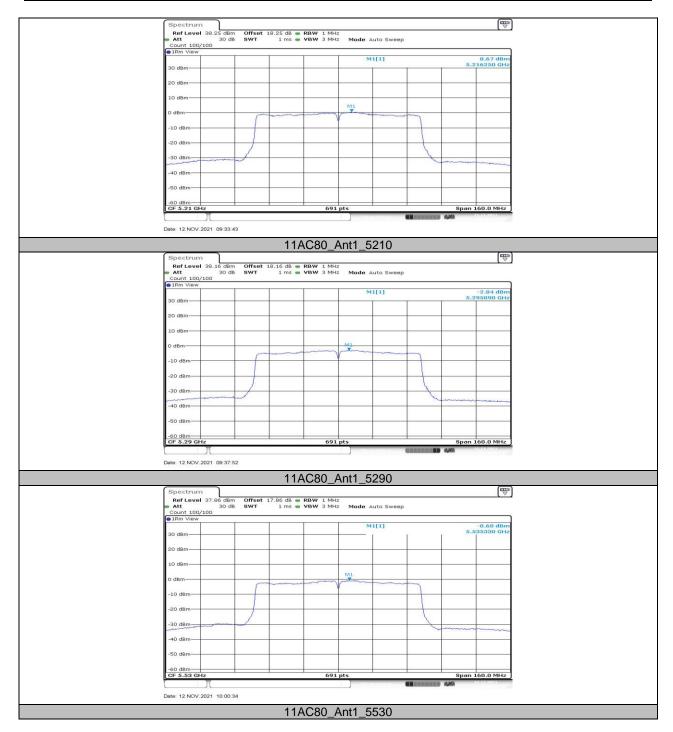




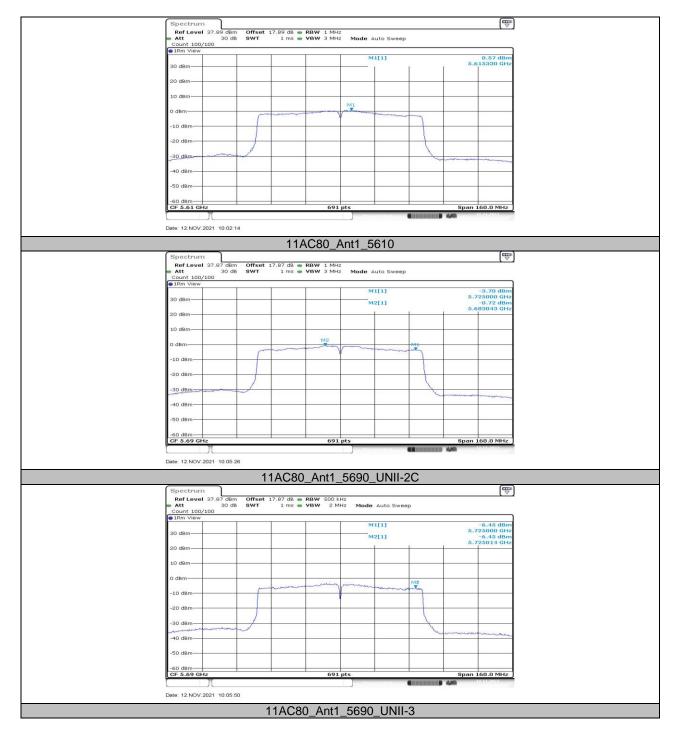




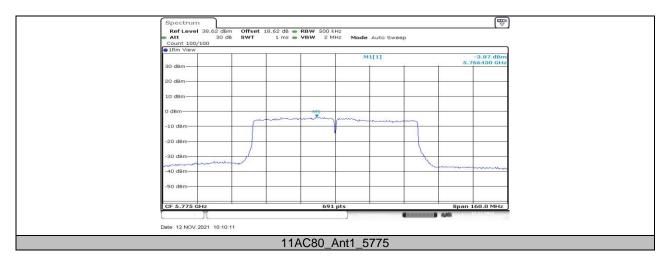














## 13.6. Appendix D: Duty Cycle 13.6.1. Test Result

Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
11A	2.00	2.15	0.9302	93.02	0.31	0.50	0.5
11AC20	1.69	1.83	0.9235	92.35	0.35	0.59	1
11AC40	0.83	0.95	0.8737	87.37	0.59	1.20	2
11AC80	0.41	0.55	0.7455	74.55	1.28	2.44	3

Note:

Duty Cycle Correction Factor=10log (1/x).

Where: x is Duty Cycle (Linear)

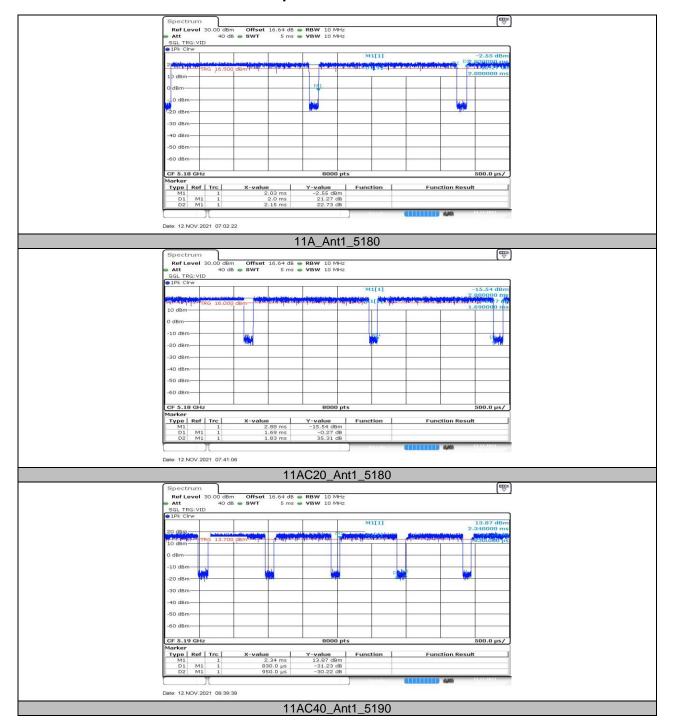
Where: T is On Time

If that calculated VBW is not available on the analyzer then the next higher value should be

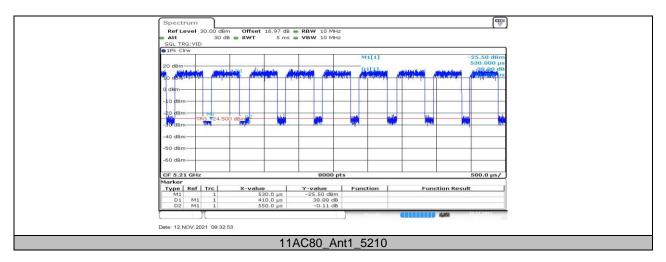
used.

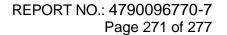


### 13.6.2. Test Graphs









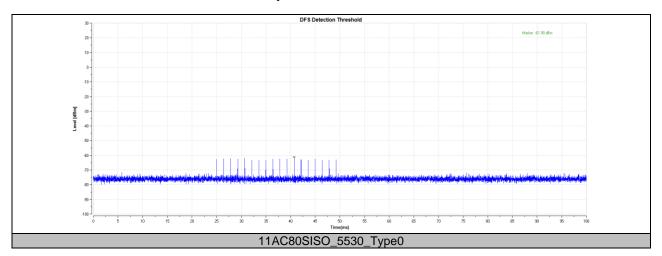


13.7. Appendix E: DFS Detection Thresholds 13.7.1. Test Result

Test Mode	Channel	Radar Type	Result	Verdict
11AC80SISO	5530	Type0	-61.90	PASS



### 13.7.2. Test Graphs





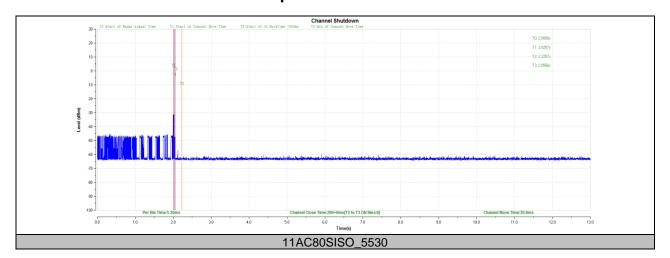
# 13.8. Appendix F: Channel Move Time and Channel Closing Transmission Time

#### 13.8.1. Test Result

Test Mode	Channel	CCT[ms]	Limit[ms]	CMT[ms]	Limit[ms]	Verdict
11AC80SISO	5530	200+0	200+60	30.9	10000	PASS



## 13.8.2. Test Graphs





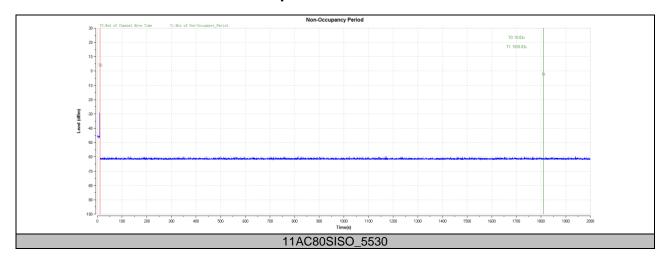
13.9. Appendix G: Non-Occupancy Period

### **Test Result**

Test Mode	Channel	Result	Limit[s]	Verdict
11AC80SISO	5530	see test graph	≥1800	PASS



## 13.9.1. Test Graphs





13.10. Appendix H: Frequency Stability 13.10.1. Test Result

	Frequency Error vs. Voltage												
	802.11a20:5200MHz												
_		0 Minu	ıte	2 Min	ute	5 Minu	ute	10 Min	ute				
Temp.	Volt.	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)				
TN	VL	5199. 9787	-4.09	5199. 9861	-2.67	5199. 9761	-4.60	5200.0236	4.54				
TN	VN	5200.0073	1.40	5200.0094	1.81	5199. 9768	-4.46	5199. 9897	-1.98				
TN	VH	5199. 9956	-0.84	5200.0003	0.06	5199. 9855	-2.79	5200. 0235	4.52				

#### Frequency Error vs. Temperature

#### 802.11a:5200MHz

_	Volt.		0 Minute		2 Min	2 Minute		5 Minute		10 Minute	
Temp.		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)		
50	VN	5199. 9947	-1.02	5199. 9760	-4.61	5199.9980	-0.39	5199. 9758	-4.65		
40	VN	5199. 9835	-3.17	5200.0130	2.50	5199. 9766	-4.51	5200.0161	3.09		
30	VN	5199. 9939	-1.17	5199. 9839	-3.10	5199.9906	-1.81	5199. 9835	-3.18		
20	VN	5200.0027	0.53	5199. 9882	-2.26	5199. 9871	-2.47	5200.0024	0.46		
10	VN	5200.0071	1.36	5199. 9987	-0.26	5199. 9819	-3.48	5200.0134	2.57		
0	VN	5200.0216	4.16	5199. 9823	-3.41	5200.0041	0.80	5200.0051	0.99		
-10	VN	5200. 0146	2.80	5200. 0213	4.10	5199. 9813	-3.59	5200.0050	0.96		

#### Note:

- 1. All antennas and test modes have been tested, only the worst data record in the report.
- 2. For the detail Test Conditions, please refer to section 10 TEST ENVIRONMENT.

**END OF REPORT**