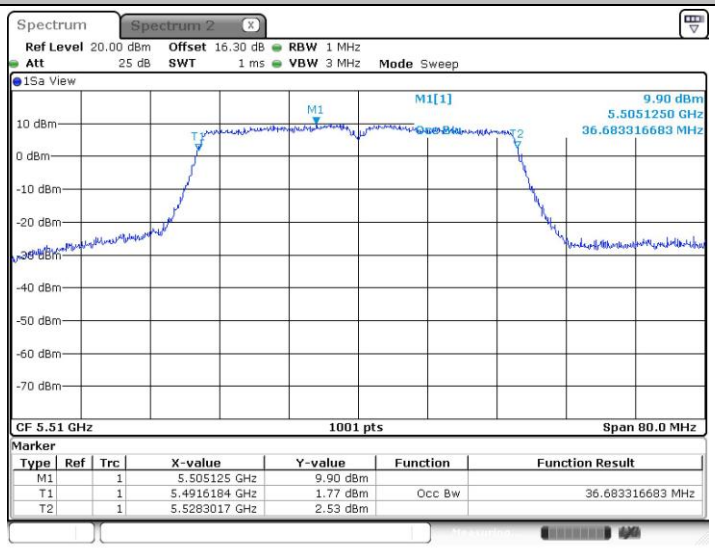
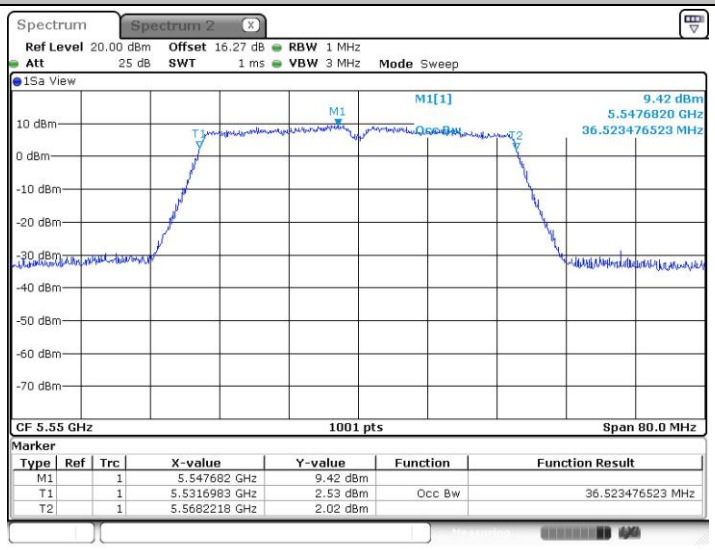
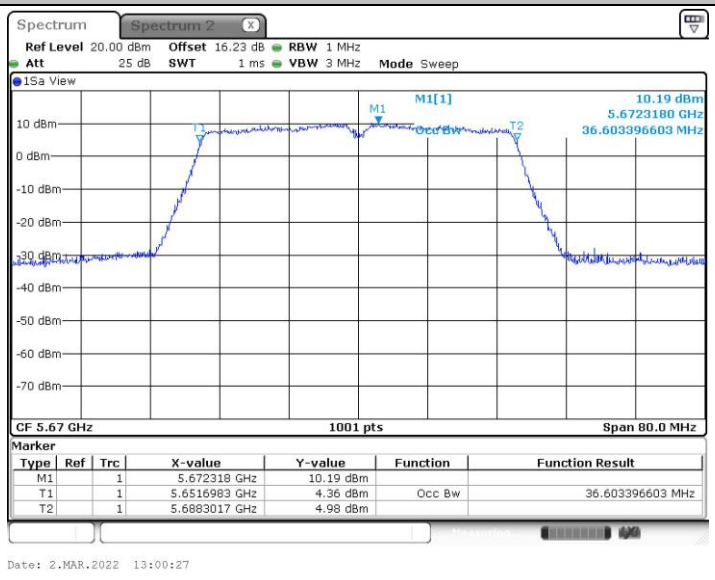
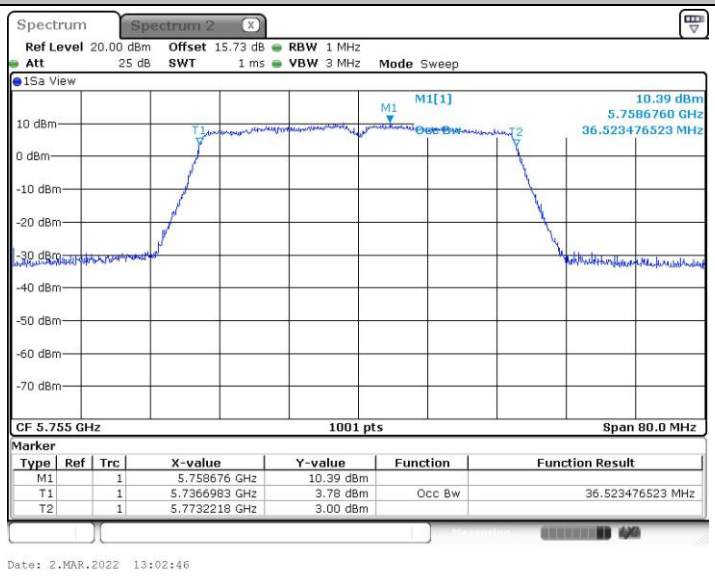
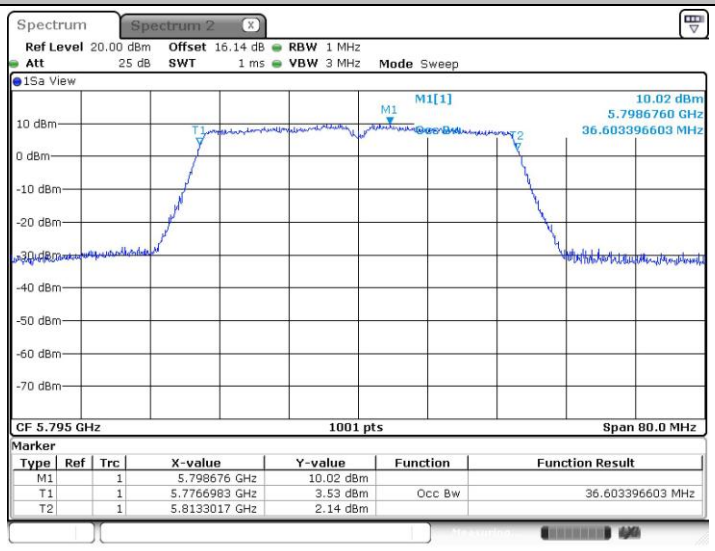
11AC40SISO_Ant1_5510


11AC40SISO_Ant1_5550


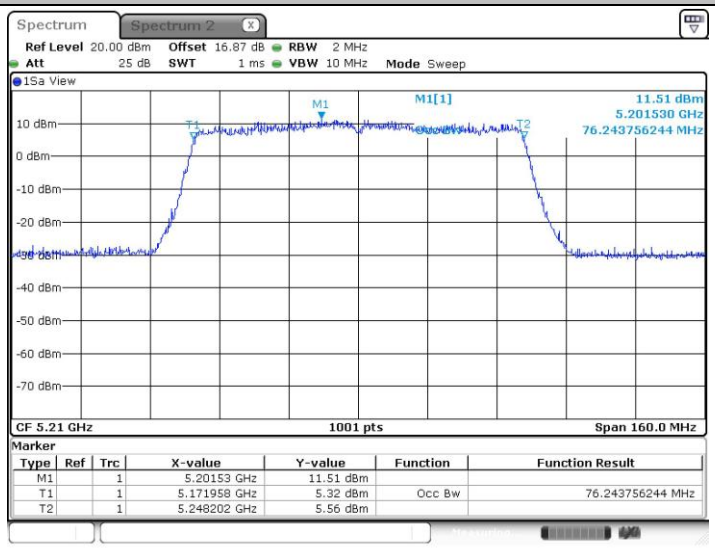
11AC40SISO_Ant1_5670


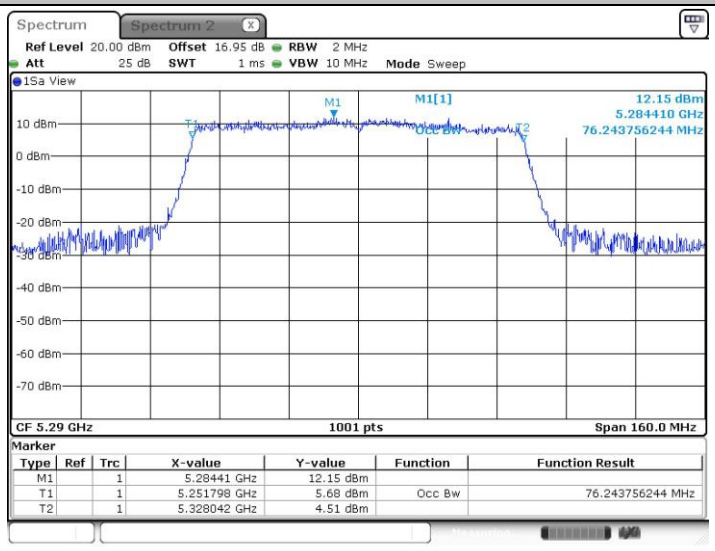
11AC40SISO_Ant1_5755


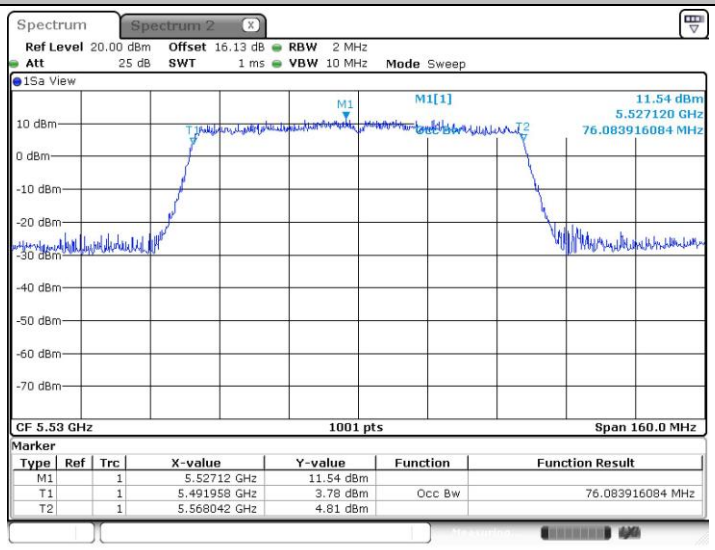
11AC40SISO_Ant1_5795

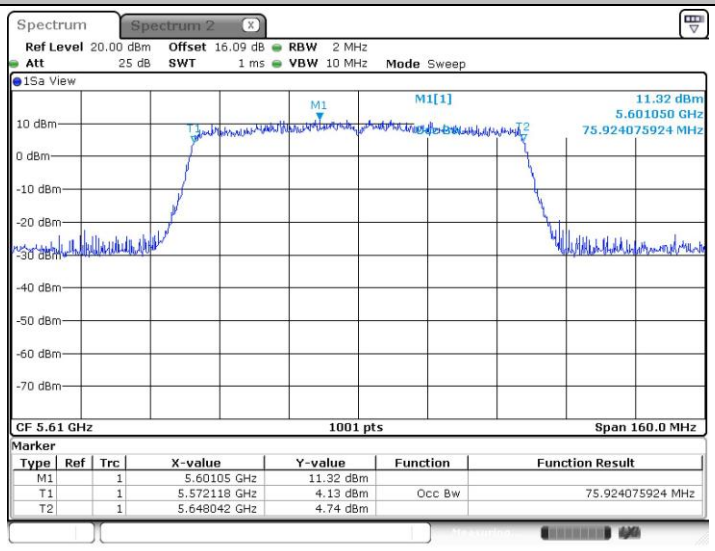


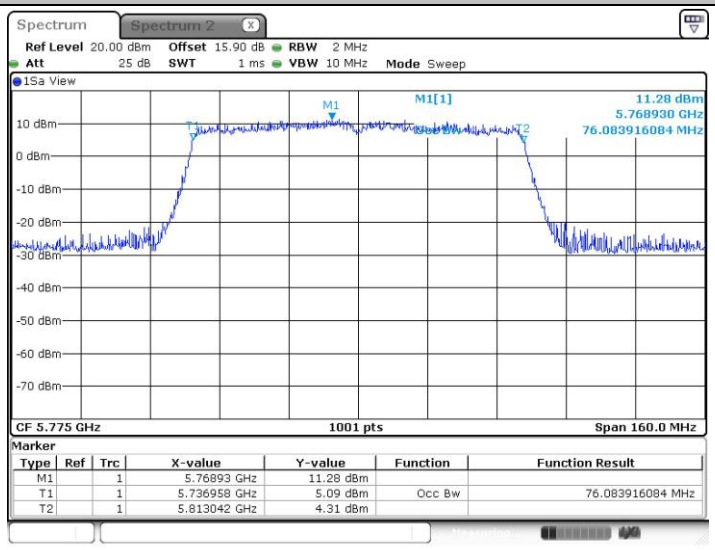
11AC80SISO_Ant1_5210



11AC80SISO_Ant1_5290


11AC80SISO_Ant1_5530


11AC80SISO_Ant1_5610


11AC80SISO_Ant1_5775


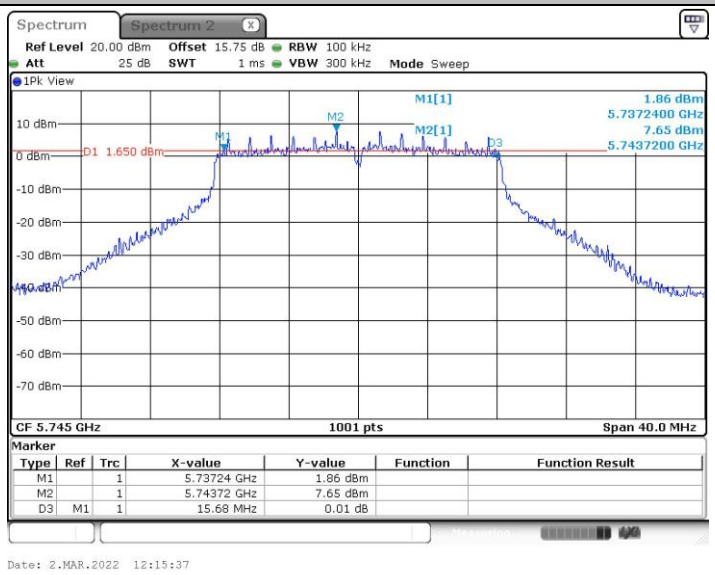
Min emission bandwidth

Test Result UNII-3

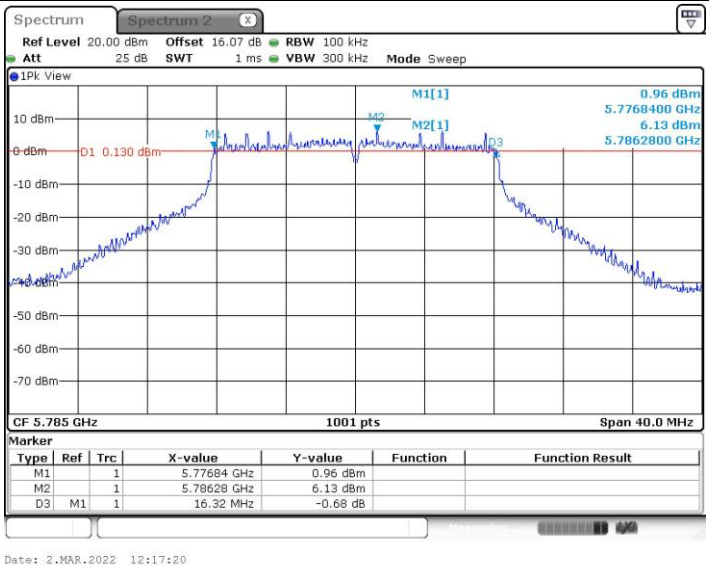
TestMode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	15.68	5737.24	5752.92	0.5	PASS
		5785	16.32	5776.84	5793.16	0.5	PASS
		5825	15.64	5817.24	5832.88	0.5	PASS
11AC20SISO	Ant1	5745	15.04	5737.52	5752.56	0.5	PASS
		5785	15.96	5776.60	5792.56	0.5	PASS
		5825	16.28	5816.84	5833.12	0.5	PASS
11AC40SISO	Ant1	5755	35.52	5737.08	5772.60	0.5	PASS
		5795	36.08	5776.84	5812.92	0.5	PASS
11AC80SISO	Ant1	5775	75.20	5737.40	5812.60	0.5	PASS

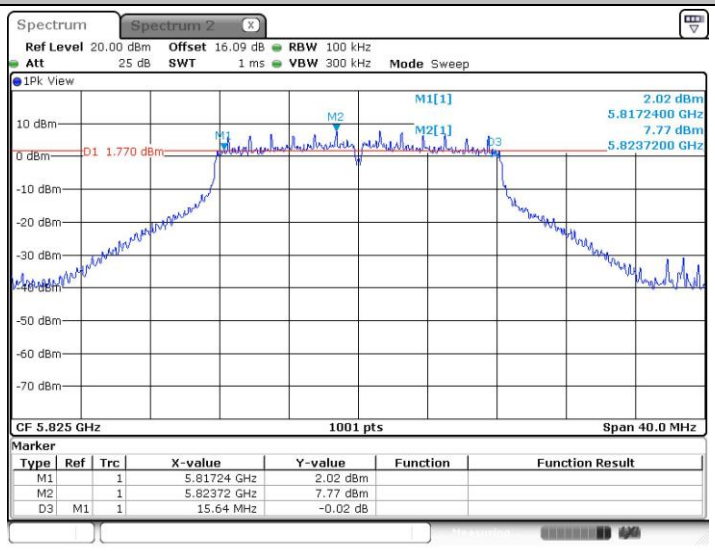
Test Graphs UNII-3

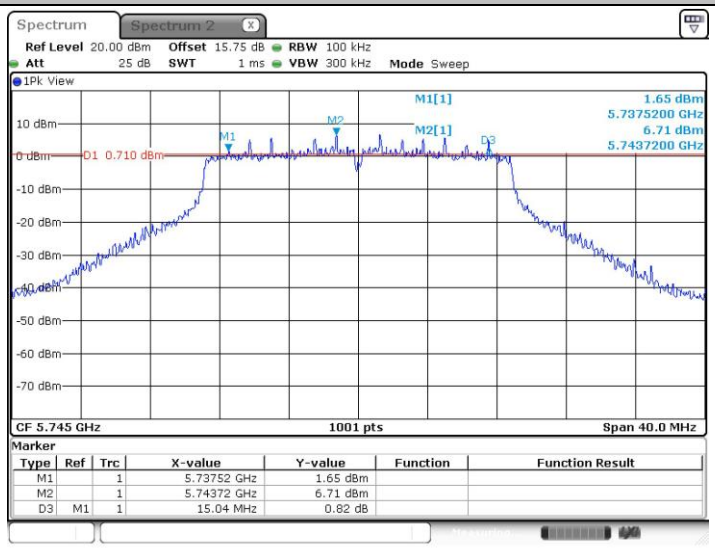
11A_Ant1_5745

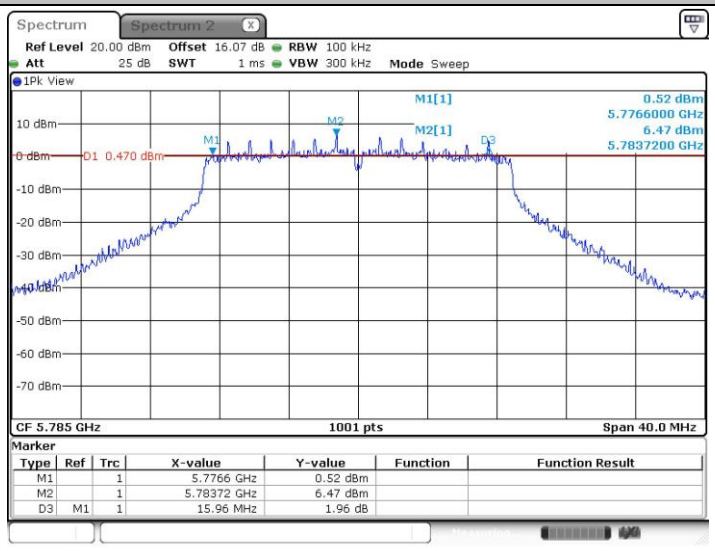


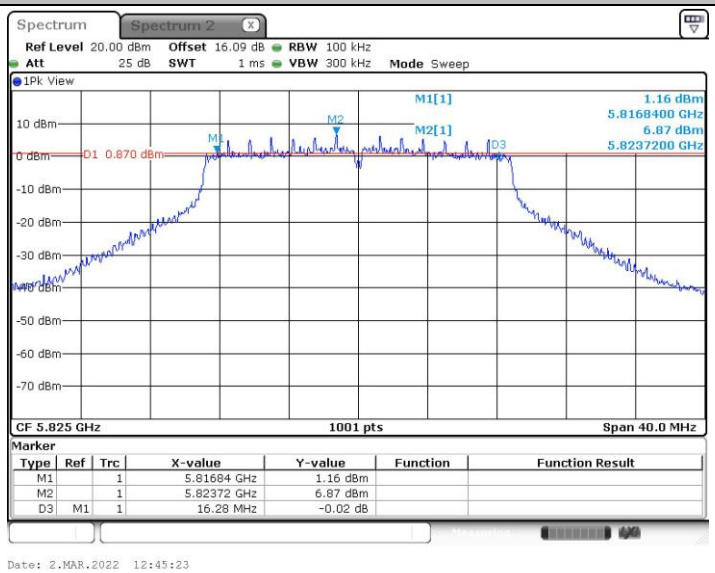
11A_Ant1_5785



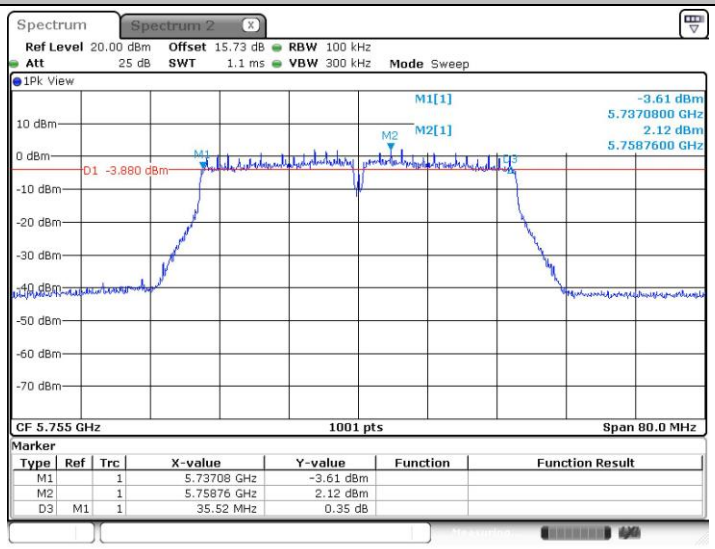
11A_Ant1_5825


11AC20SISO_Ant1_5745


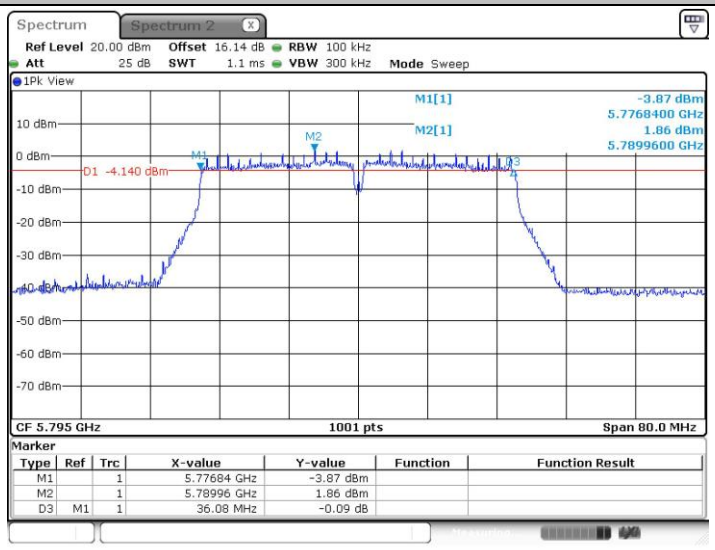
11AC20SISO_Ant1_5785


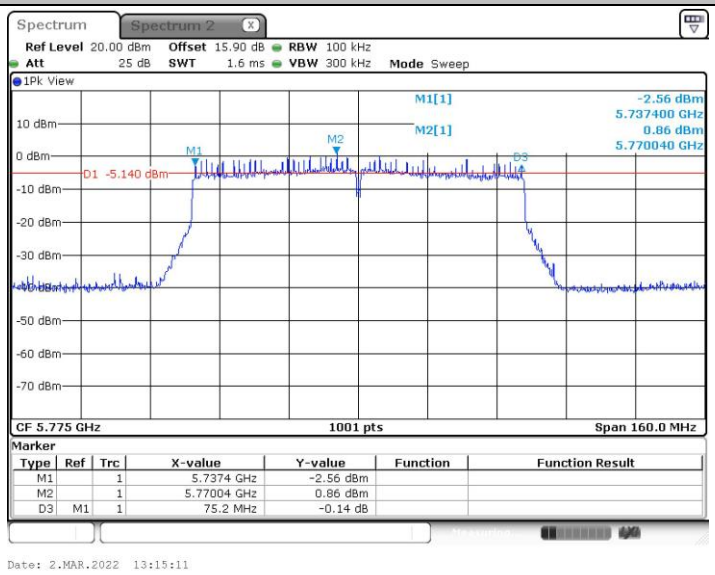
11AC20SISO_Ant1_5825


11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5775


Maximum power spectral density

Test Result

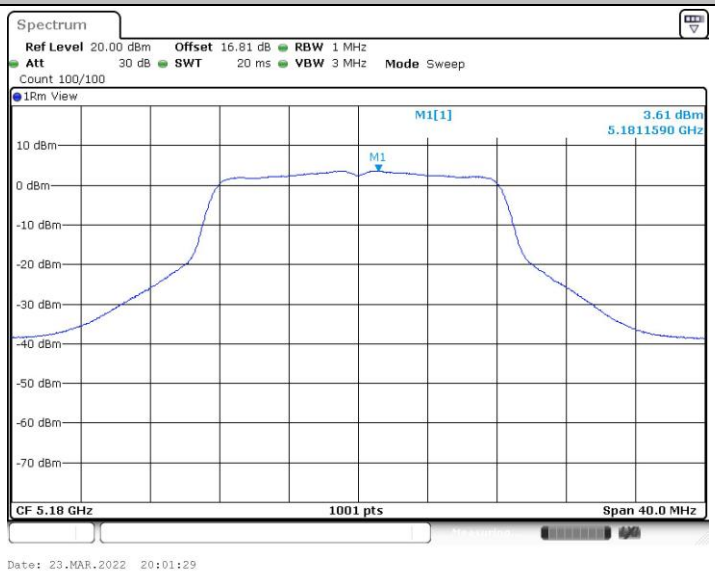
TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	3.61	≤11.00	PASS
		5220	3.29	≤11.00	PASS
		5240	4.18	≤11.00	PASS
		5260	3.76	≤11.00	PASS
		5300	3.99	≤11.00	PASS
		5320	3.46	≤11.00	PASS
		5500	6.5	≤11.00	PASS
		5580	6.03	≤11.00	PASS
		5700	6.34	≤11.00	PASS
		5745	2.06	≤30.00	PASS
		5785	1.77	≤30.00	PASS
		5825	2.1	≤30.00	PASS
11AC20SISO	Ant1	5180	3.16	≤11.00	PASS
		5220	2.8	≤11.00	PASS
		5240	3.66	≤11.00	PASS
		5260	3.27	≤11.00	PASS
		5300	3.4	≤11.00	PASS
		5320	2.92	≤11.00	PASS
		5500	5.22	≤11.00	PASS
		5580	4.81	≤11.00	PASS
		5700	5.01	≤11.00	PASS
		5745	1.61	≤30.00	PASS
		5785	1.21	≤30.00	PASS
		5825	1.54	≤30.00	PASS
11AC40SISO	Ant1	5190	0.93	≤11.00	PASS
		5230	0.23	≤11.00	PASS
		5270	0.6	≤11.00	PASS
		5310	0.42	≤11.00	PASS
		5510	1.2	≤11.00	PASS
		5550	0.66	≤11.00	PASS
		5670	1.23	≤11.00	PASS
		5755	-1.8	≤30.00	PASS
		5795	-2.18	≤30.00	PASS

11AC80SISO	Ant1	5210	-2.43	≤11.00	PASS
		5290	-2.24	≤11.00	PASS
		5530	-1.69	≤11.00	PASS
		5610	-1.81	≤11.00	PASS
		5775	-4.32	≤30.00	PASS

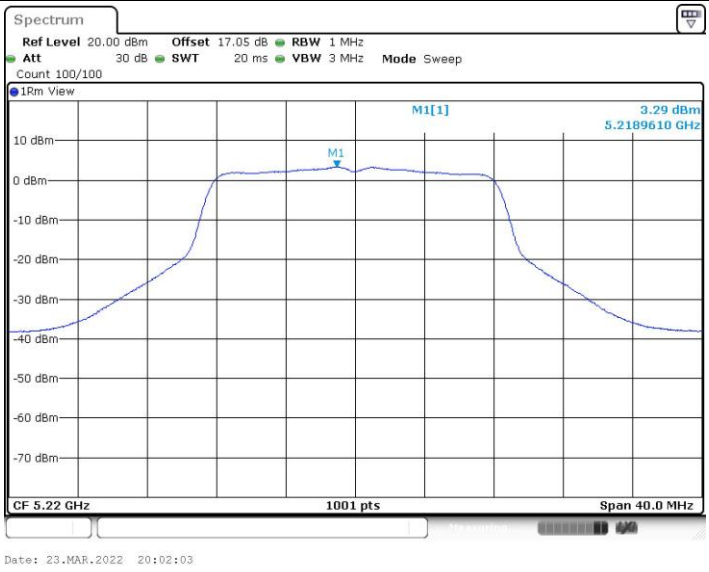
Note：1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

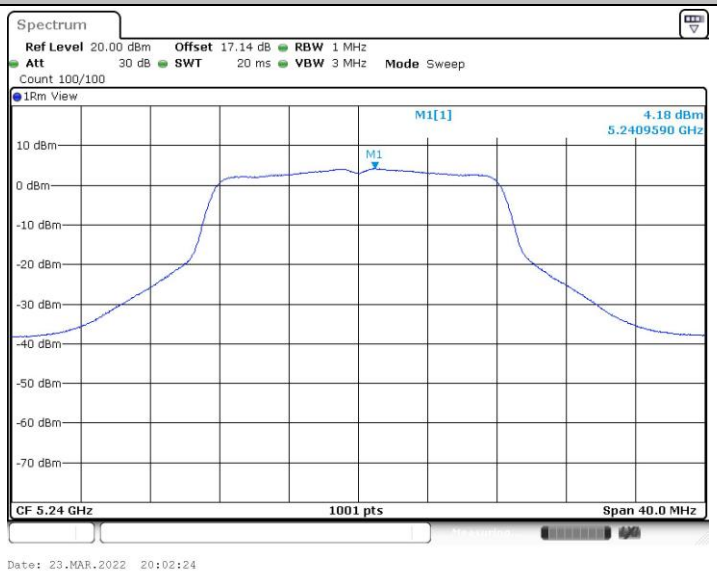
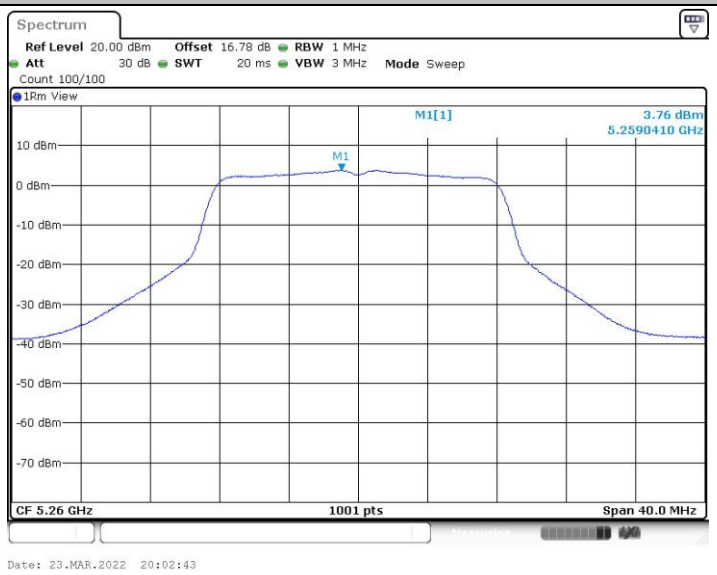
Test Graphs

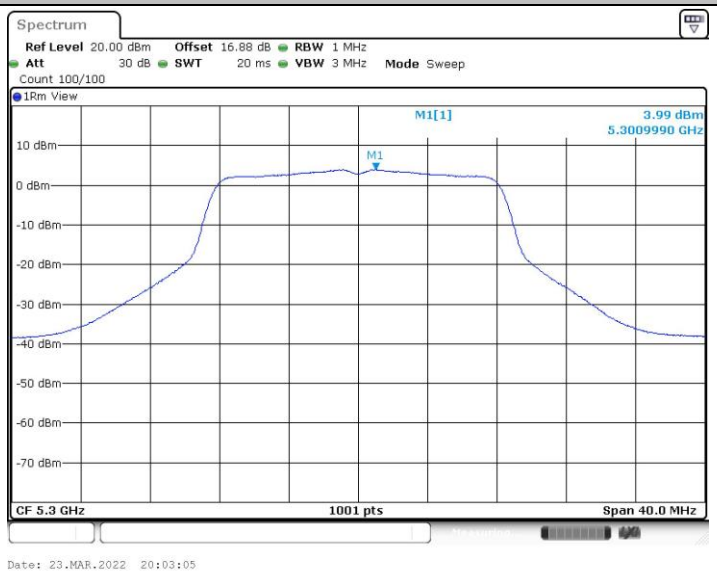
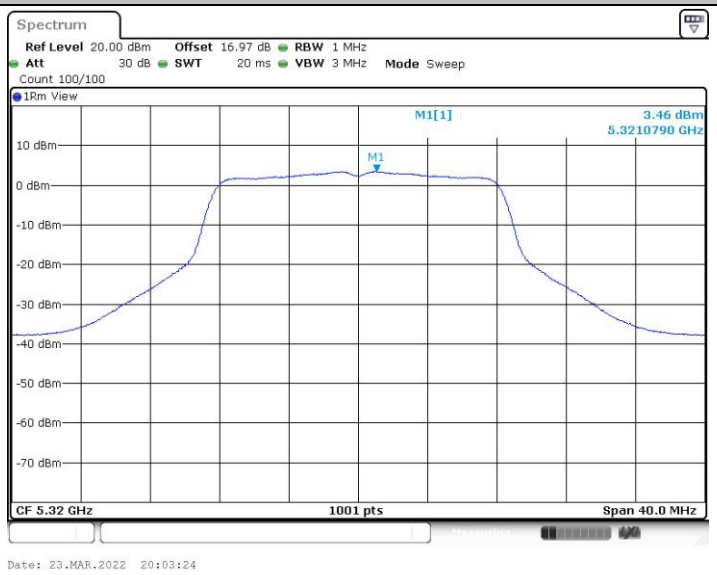
11A_Ant1_5180

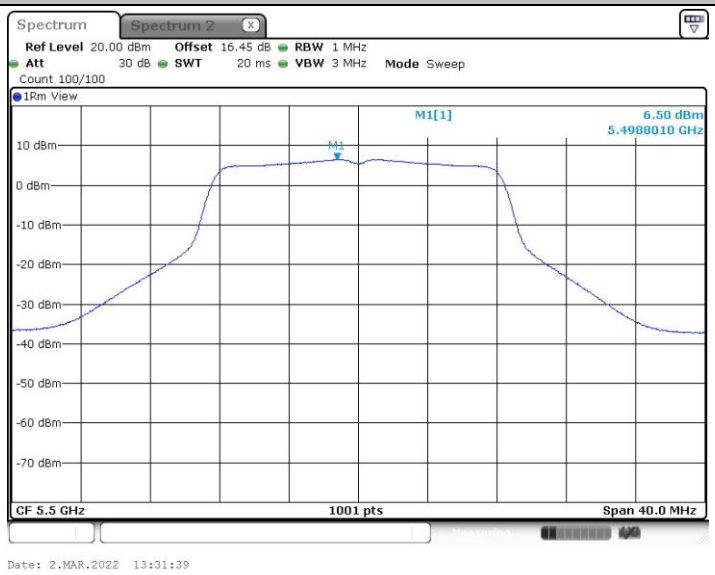


11A_Ant1_5220

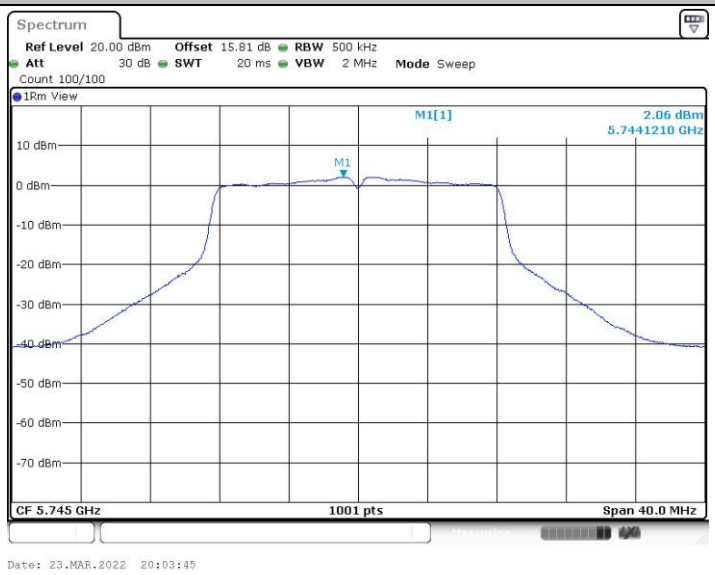


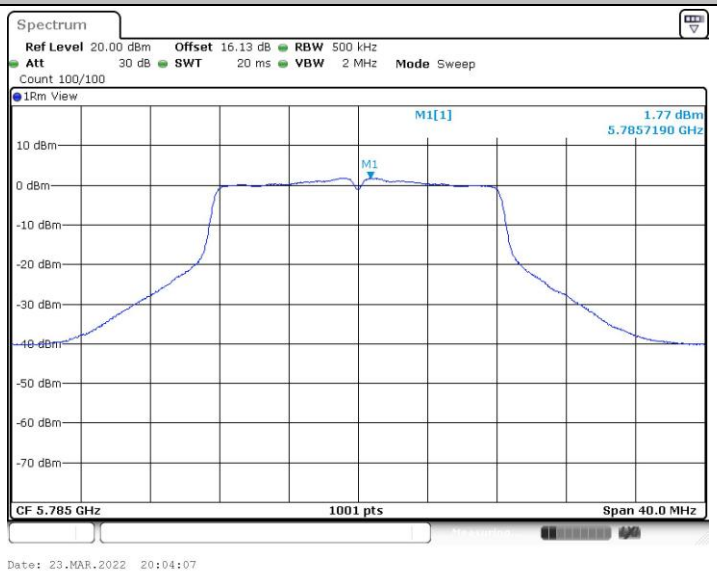
11A_Ant1_5240

11A_Ant1_5260


11A_Ant1_5300

11A_Ant1_5320


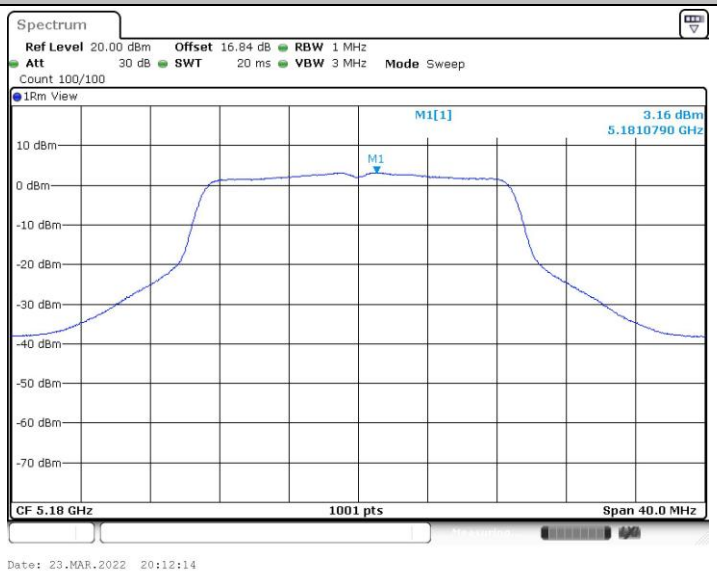
11A_Ant1_5500

11A_Ant1_5580


11A_Ant1_5700

11A_Ant1_5745


11A_Ant1_5785


11A_Ant1_5825


11AC20SISO_Ant1_5180

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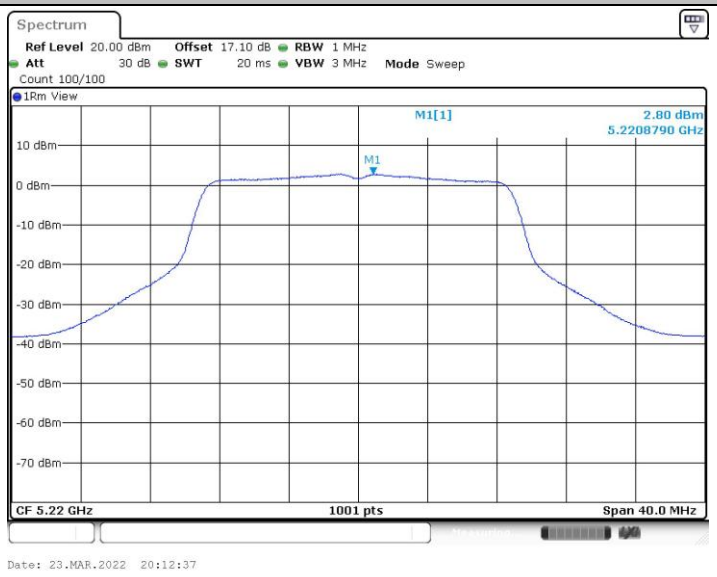
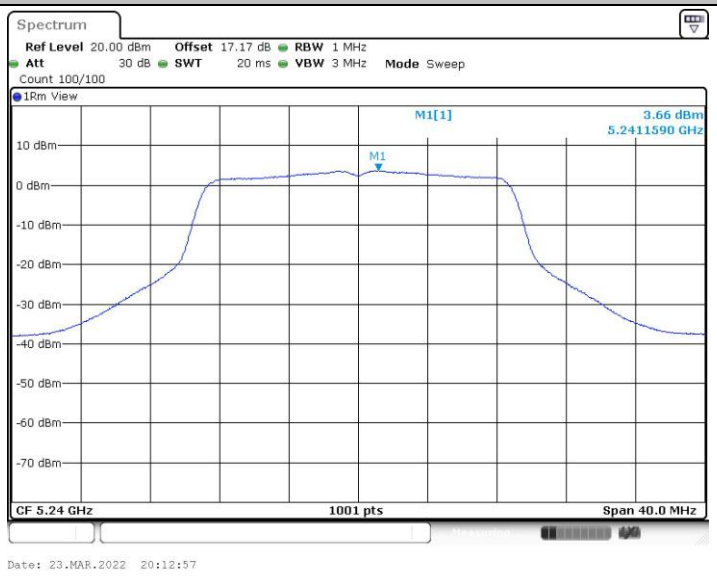
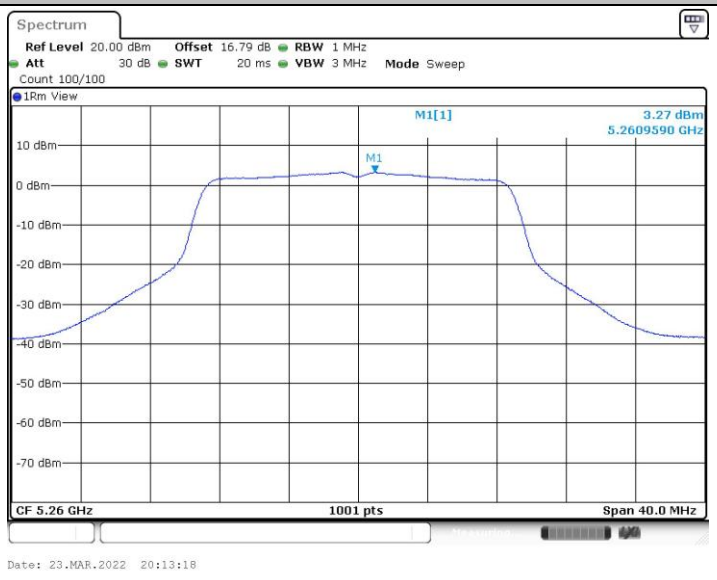
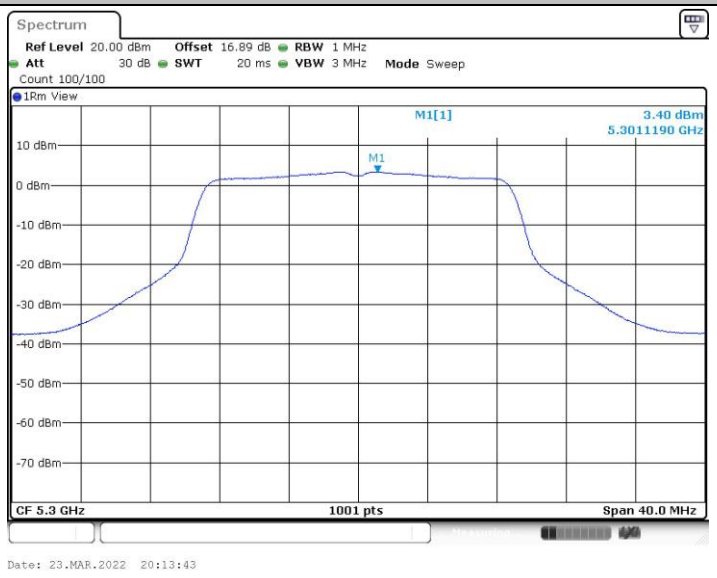


11AC20SISO_Ant1_5240

11AC20SISO_Ant1_5260


11AC20SISO_Ant1_5300

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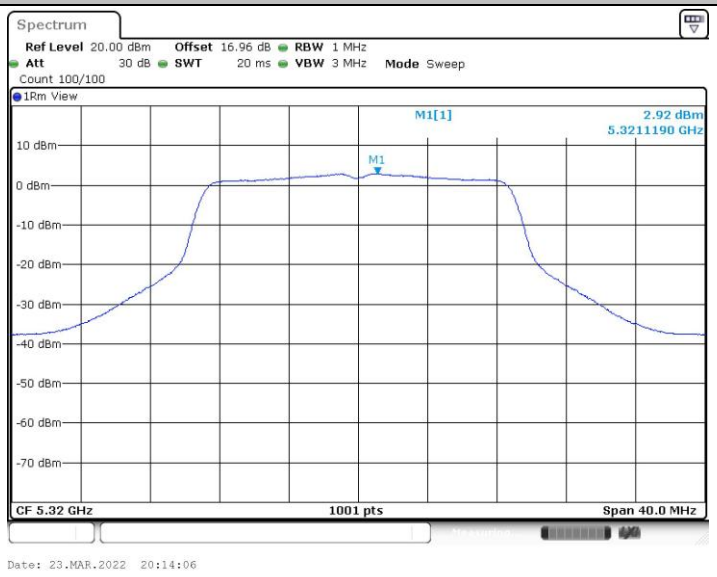
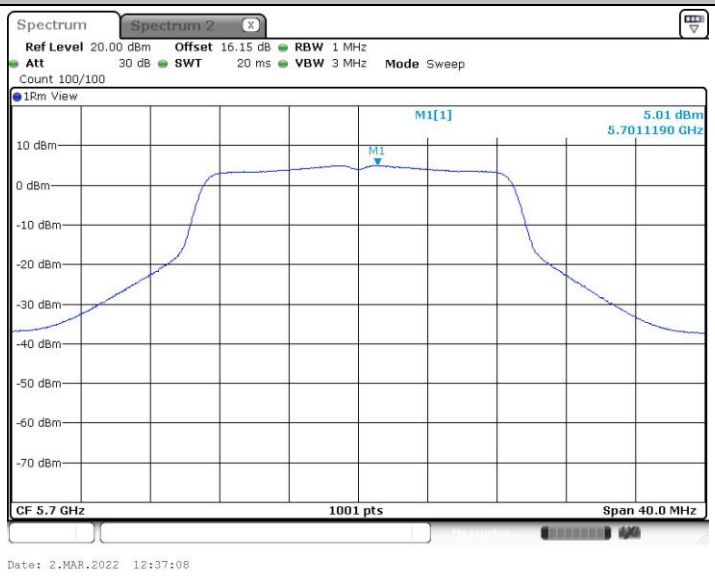
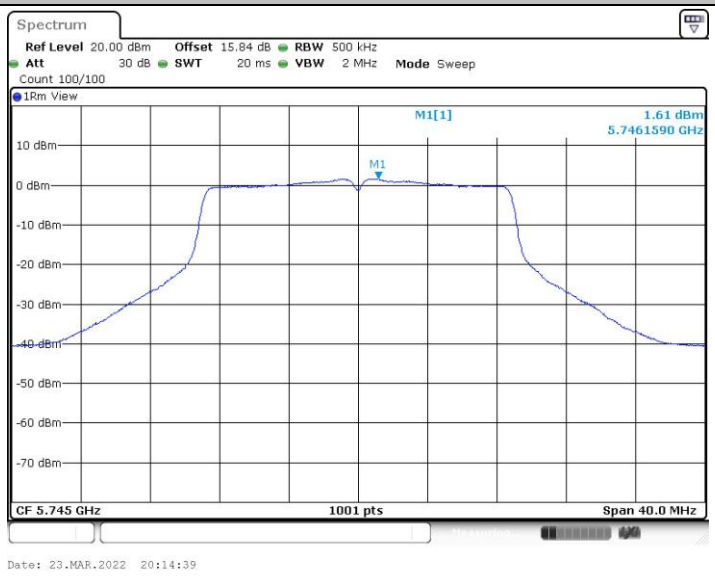
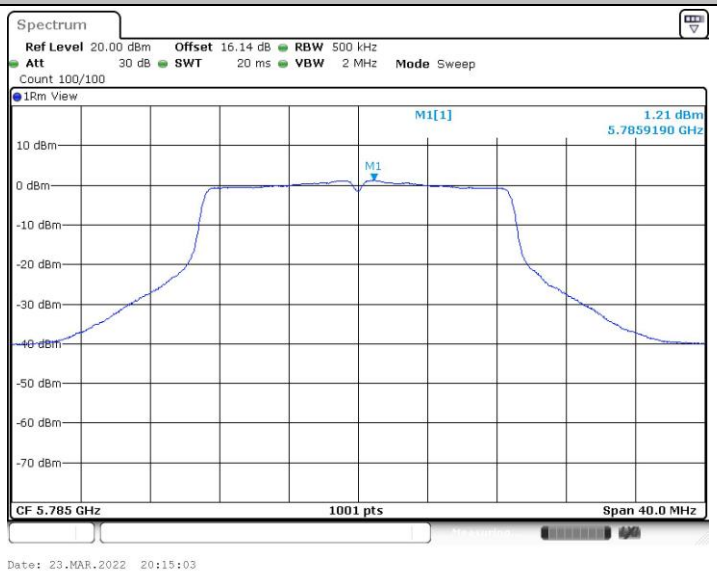
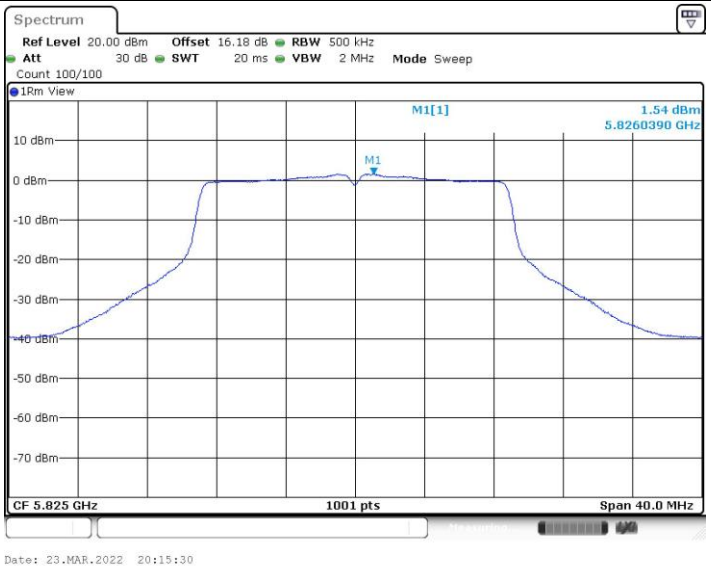


11AC20SISO_Ant1_5500

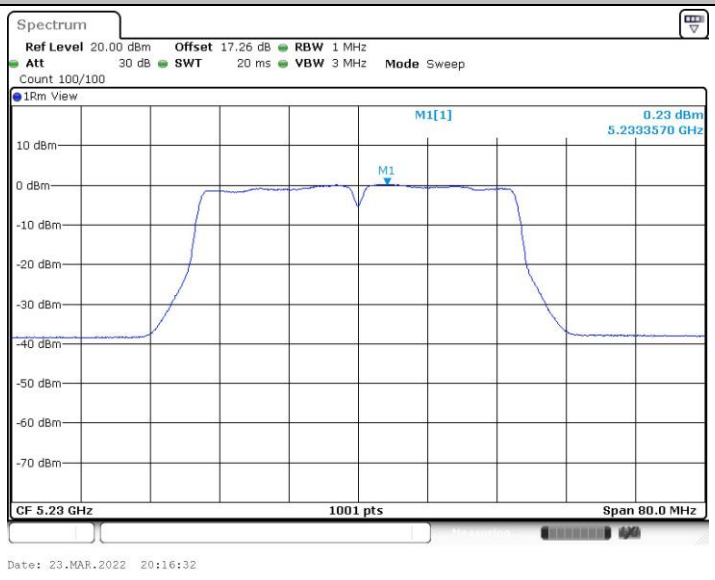
11AC20SISO_Ant1_5580

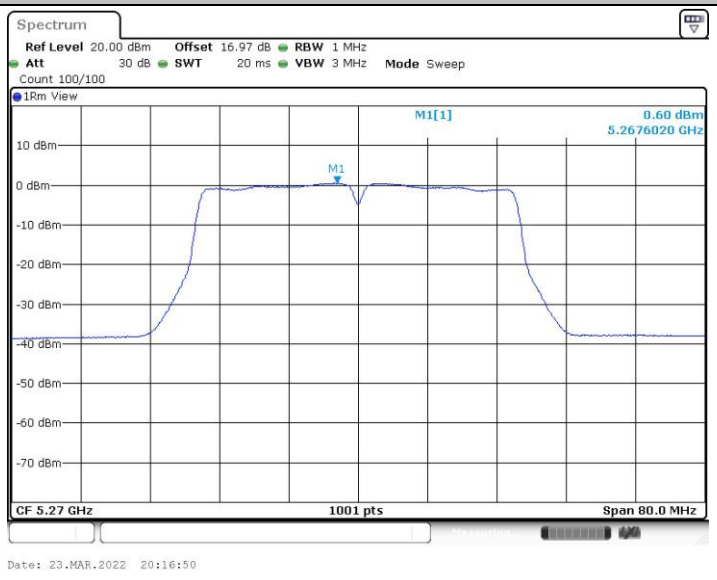

11AC20SISO_Ant1_5700

11AC20SISO_Ant1_5745


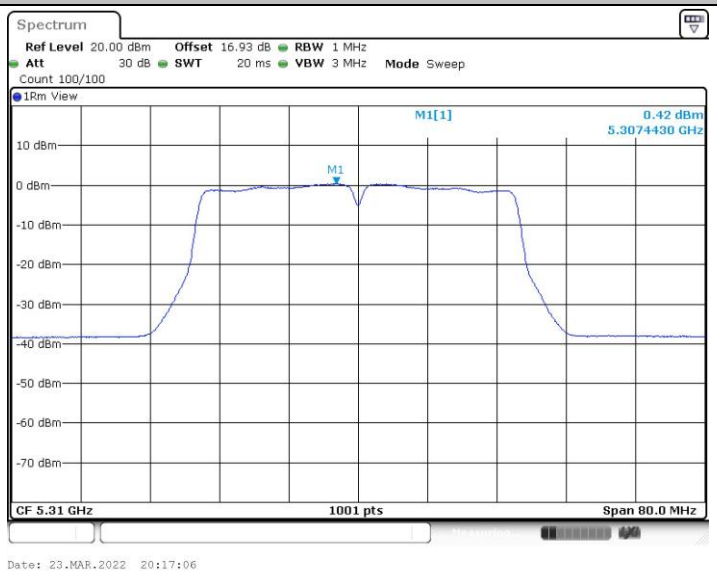
11AC20SISO_Ant1_5785


11AC20SISO_Ant1_5825


11AC40SISO_Ant1_5190

11AC40SISO_Ant1_5230


11AC40SISO_Ant1_5270


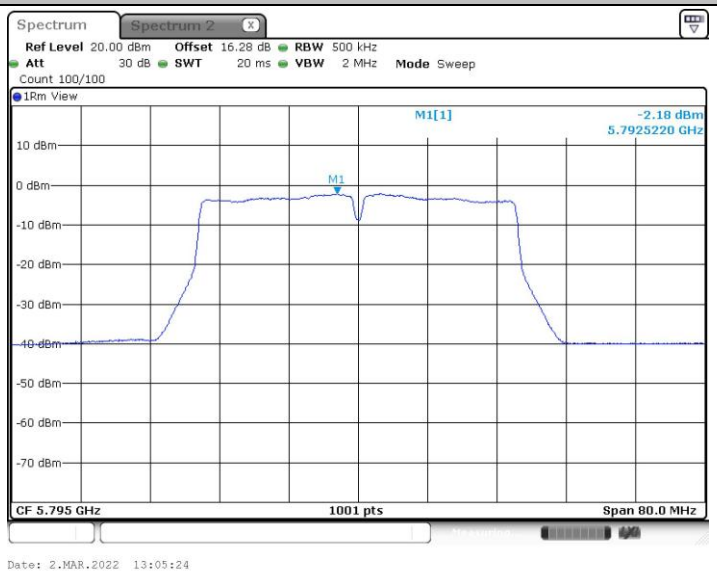
11AC40SISO_Ant1_5310


11AC40SISO_Ant1_5510

11AC40SISO_Ant1_5550


11AC40SISO_Ant1_5670

11AC40SISO_Ant1_5755


11AC40SISO_Ant1_5795

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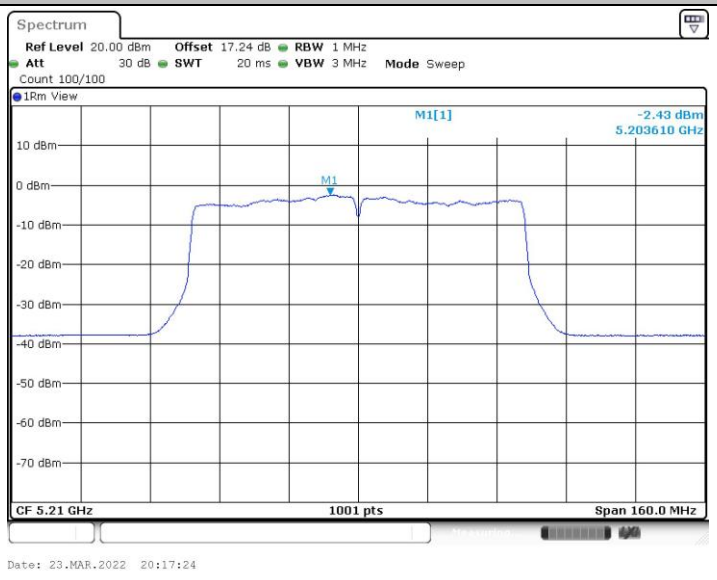
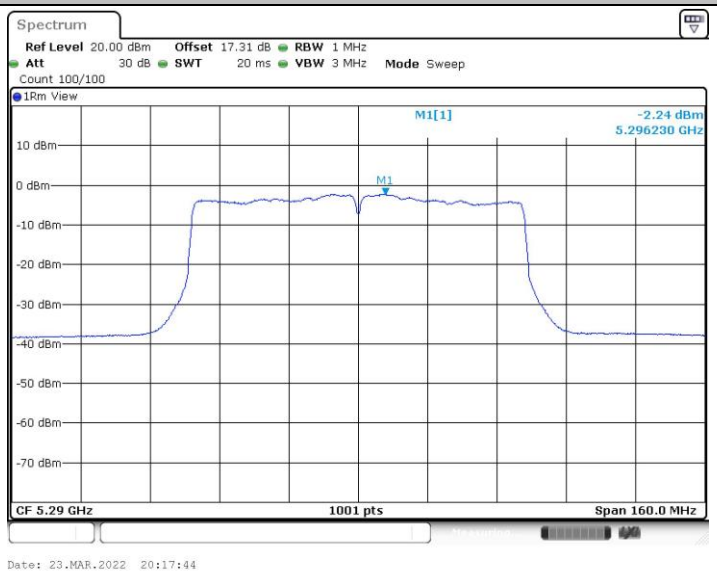
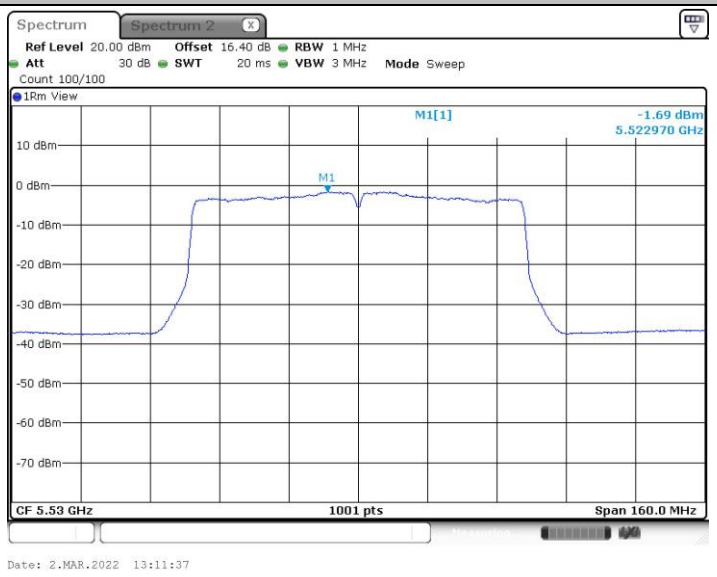
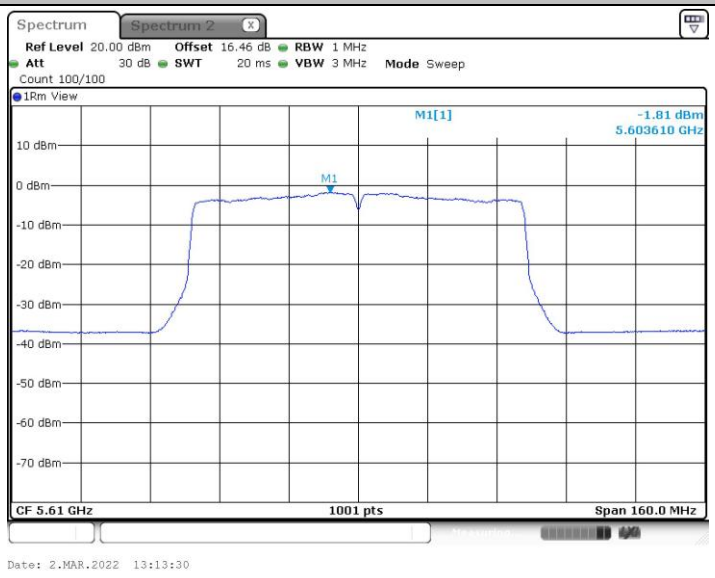
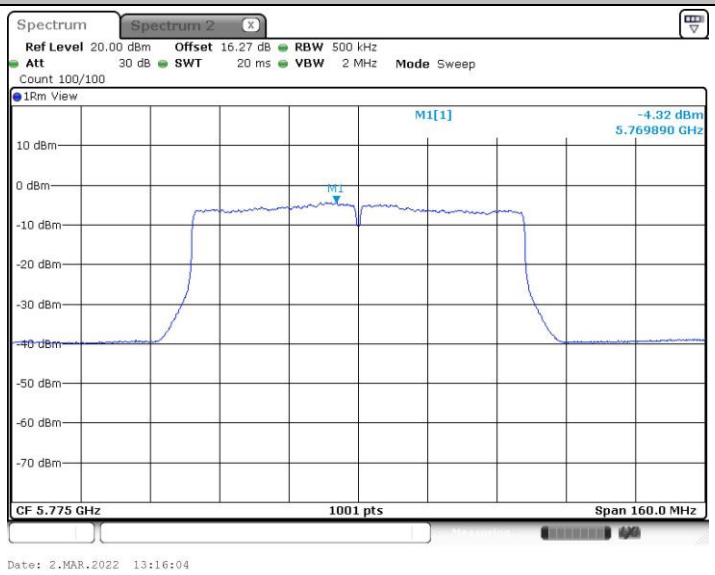


11AC80SISO_Ant1_5290


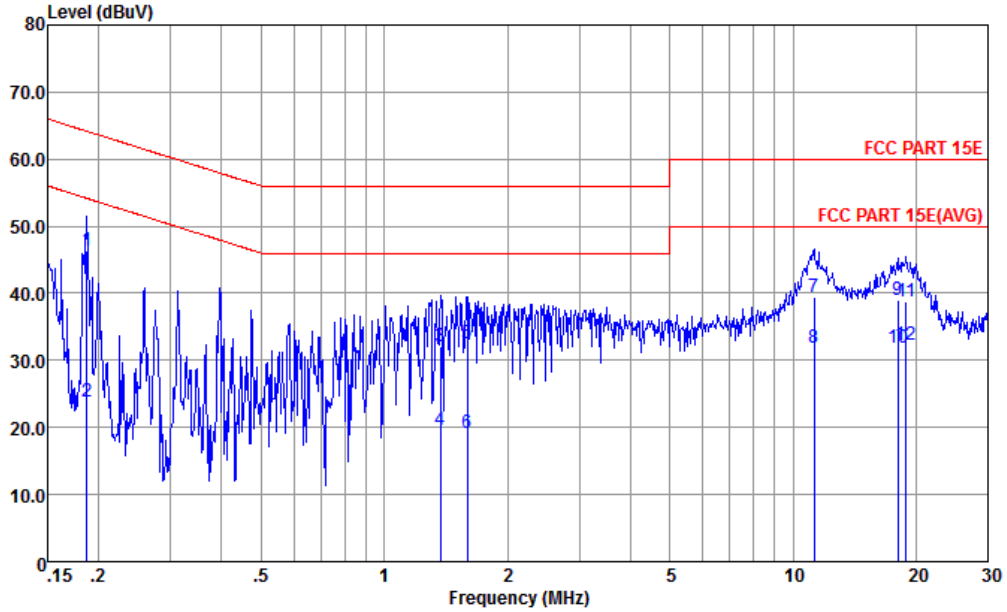
11AC80SISO_Ant1_5530


11AC80SISO_Ant1_5610


11AC80SISO_Ant1_5775


Appendix B. AC Conducted Emission Test Results

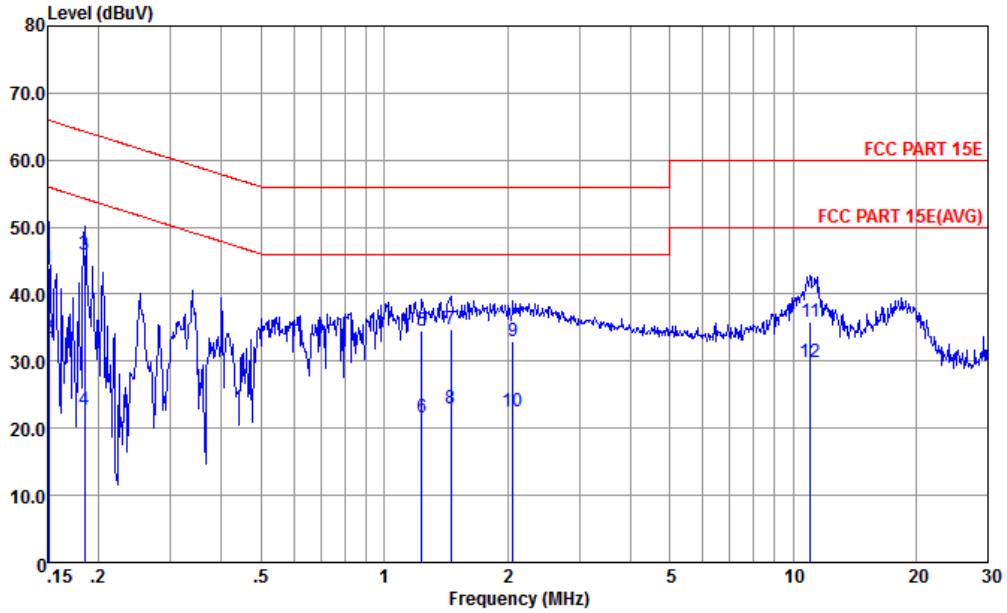
Test Engineer :	Amos Zhang	**Temperature :**	25.3~26.2℃
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-KS
Condition : FCC PART 15E LISN-060105-L LINE
Project : (FZ) 152403-02
mode : Mode 1
: 355870090012011/355870090012029 #50

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.187	46.33	-17.82	64.15	35.90	0.04	10.39	QP
2	0.187	23.93	-30.22	54.15	13.50	0.04	10.39	Average
3	1.374	32.17	-23.83	56.00	21.81	0.13	10.23	QP
4	1.374	19.57	-26.43	46.00	9.21	0.13	10.23	Average
5	1.593	32.57	-23.43	56.00	22.20	0.14	10.23	QP
6	1.593	19.17	-26.83	46.00	8.80	0.14	10.23	Average
7	11.257	39.40	-20.60	60.00	28.80	0.24	10.36	QP
8	11.257	31.80	-18.20	50.00	21.20	0.24	10.36	Average
9	18.039	39.08	-20.92	60.00	28.20	0.42	10.46	QP
10	18.039	31.78	-18.22	50.00	20.90	0.42	10.46	Average
11	18.920	38.73	-21.27	60.00	27.81	0.45	10.47	QP
12 *	18.920	32.23	-17.77	50.00	21.31	0.45	10.47	Average

Test Engineer :	Amos Zhang	**Temperature :**	25.3~26.2℃
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	**Phase :**	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-KS
Condition : FCC PART 15E LISN-060105-N NEUTRAL
Project : (FZ) 152403-02
mode : Mode 1
: 355870090012011/355870090012029 #50

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.151	43.79	-22.17	65.96	33.20	0.11	10.48	QP
2		0.151	33.49	-22.47	55.96	22.90	0.11	10.48	Average
3	*	0.184	46.00	-18.28	64.28	35.50	0.10	10.40	QP
4		0.184	22.70	-31.58	54.28	12.20	0.10	10.40	Average
5		1.236	34.46	-21.54	56.00	24.10	0.13	10.23	QP
6		1.236	21.72	-24.28	46.00	11.36	0.13	10.23	Average
7		1.456	34.66	-21.34	56.00	24.30	0.13	10.23	QP
8		1.456	22.96	-23.04	46.00	12.60	0.13	10.23	Average
9		2.066	32.97	-23.03	56.00	22.60	0.14	10.23	QP
10		2.066	22.57	-23.43	46.00	12.20	0.14	10.23	Average
11		11.021	35.80	-24.20	60.00	25.20	0.25	10.35	QP
12		11.021	29.90	-20.10	50.00	19.30	0.25	10.35	Average

Note:

1. Level(dBμV) = Read Level(dBμV) + LISN Factor(dB) + Cable Loss(dB)
2. Over Limit(dB) = Level(dBμV) – Limit Line(dBμV)

Appendix C. Radiated Spurious Emission

UNII-1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5149.92	57.24	-16.76	74	43.37	35.03	10.65	31.81	282	2	P	H
		5150	47.08	-6.92	54	33.21	35.03	10.65	31.81	282	2	A	H
	*	5176	103.58	-	-	89.66	35.05	10.69	31.82	282	2	P	H
		5176	96.27	-	-	82.35	35.05	10.69	31.82	282	2	A	H
		5149.76	59.54	-14.46	74	45.67	35.03	10.65	31.81	286	0	P	V
		5150	49.92	-4.08	54	36.05	35.03	10.65	31.81	286	0	A	V
	*	5182	107.26	-	-	93.33	35.06	10.69	31.82	286	0	P	V
		5182	100.45	-	-	86.52	35.06	10.69	31.82	286	0	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10355	44.88	-23.42	68.3	53.41	38.01	15.36	61.9	300	0	P	H
		10355	44.89	-23.41	68.3	53.42	38.01	15.36	61.9	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-1 5150~5250MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 38 5190MHz		5143.68	56.68	-17.32	74	43.2	34.62	10.65	31.79	232	1	P	H
		5148.32	46.97	-7.03	54	33.51	34.62	10.65	31.81	232	1	A	H
	*	5194	99.99	-	-	86.44	34.66	10.71	31.82	232	1	P	H
		5194	91.98	-	-	78.43	34.66	10.71	31.82	232	1	A	H
		5398.38	54.54	-19.46	74	40.86	34.82	10.81	31.95	232	1	P	H
		5369.58	44.81	-9.19	54	31.16	34.79	10.79	31.93	232	1	A	H
		5144.48	58.02	-15.98	74	44.56	34.62	10.65	31.81	299	0	P	V
		5145.76	47.81	-6.19	54	34.35	34.62	10.65	31.81	299	0	A	V
	*	5188	103.2	-	-	89.68	34.65	10.69	31.82	299	0	P	V
		5188	95.58	-	-	82.06	34.65	10.69	31.82	299	0	A	V
		5396.58	54.39	-19.61	74	40.71	34.82	10.81	31.95	299	0	P	V
		5383.98	44.78	-9.22	54	31.12	34.81	10.8	31.95	299	0	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-1 5150~5250MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 38 5190MHz		10377	45.08	-23.22	68.3	53.5	38.03	15.39	61.84	300	0	P	H
		10377	47.1	-21.2	68.3	55.52	38.03	15.39	61.84	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-1 5150~5250MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		5147.36	57.34	-16.66	74	43.88	34.62	10.65	31.81	185	47	P	H
		5135.68	47.89	-6.11	54	34.44	34.61	10.63	31.79	185	47	A	H
	*	5206	95.97	-	-	82.44	34.66	10.71	31.84	185	47	P	H
		5206	88.73	-	-	75.2	34.66	10.71	31.84	185	47	A	H
		5362.92	53.79	-20.21	74	40.14	34.79	10.79	31.93	185	47	P	H
		5393.88	45.15	-8.85	54	31.49	34.81	10.8	31.95	185	47	A	H
		5139.52	58.48	-15.52	74	45	34.62	10.65	31.79	300	0	P	V
		5149.76	49.08	-4.92	54	35.62	34.62	10.65	31.81	300	0	A	V
	*	5206	99.57	-	-	86.04	34.66	10.71	31.84	300	0	P	V
		5206	91.96	-	-	78.43	34.66	10.71	31.84	300	0	A	V
		5390.46	54.05	-19.95	74	40.39	34.81	10.8	31.95	300	0	P	V
		5353.92	45.18	-8.82	54	31.55	34.78	10.78	31.93	300	0	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-1 5150~5250MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		10421	45.07	-23.23	68.3	53.38	38.05	15.41	61.77	300	0	P	H
		10421	44.56	-23.74	68.3	52.87	38.05	15.41	61.77	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

WIFI 802.11a (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a LF		152.22	30.12	-13.38	43.5	42.9	16.55	1.99	31.32	-	-	P	H
		243.4	30.1	-15.9	46	40.78	18.16	2.52	31.36	-	-	P	H
		392.78	27.12	-18.88	46	33.67	21.51	3.23	31.29	-	-	P	H
		762.35	28.18	-17.82	46	29.04	25.79	4.49	31.14	-	-	P	H
		840.92	28.9	-17.1	46	28.9	26.58	4.72	31.3	-	-	P	H
		998.06	29.59	-24.41	54	27.37	27.53	5.14	30.45	-	-	P	H
		41.64	34.42	-5.58	40	46.46	18.86	0.75	31.65	200	0	P	V
		94.99	27.42	-16.08	43.5	40.75	17.05	1.56	31.94	-	-	P	V
		149.31	26.73	-16.77	43.5	38.58	17.51	1.97	31.33	-	-	P	V
		171.62	25.01	-18.49	43.5	37.25	16.98	2.11	31.33	-	-	P	V
		240.49	27.43	-18.57	46	37.49	18.8	2.5	31.36	-	-	P	V
		937.92	29.79	-16.21	46	27.54	27.78	4.99	30.52	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

UNII-3 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 165 5825MHz		5824	107.42	-	-	92.73	35.29	11.35	31.95	144	60	P	H
		5824	99.86	-	-	85.17	35.29	11.35	31.95	144	60	A	H
		5850	61.94	-60.36	122.3	47.2	35.31	11.36	31.93	144	60	P	H
		5856.4	60.55	-49.96	110.51	45.77	35.33	11.38	31.93	144	60	P	H
		5882.8	57.38	-42.13	99.51	42.58	35.36	11.39	31.95	144	60	P	H
		5944.8	56.45	-11.85	68.3	41.57	35.44	11.45	32.01	144	60	P	H
		5824	104.41	-	-	89.72	35.29	11.35	31.95	262	63	P	V
		5824	96.82	-	-	82.13	35.29	11.35	31.95	262	63	A	V
		5851.6	62.14	-56.51	118.65	47.4	35.31	11.36	31.93	262	63	P	V
		5857.6	59.16	-51.01	110.17	44.38	35.33	11.38	31.93	262	63	P	V
		5916	56.84	-18.1	74.94	42	35.4	11.43	31.99	262	63	P	V
		5956.4	56.25	-12.05	68.3	41.33	35.46	11.47	32.01	262	63	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-3 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 165 5825MHz		11653	46.65	-27.35	74	52.73	38.92	16.47	61.47	300	0	P	H
		11653	46.66	-27.34	74	52.74	38.92	16.47	61.47	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-3 5725~5850MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 151 5755MHz		5639.6	56.17	-12.13	68.3	42.04	35.07	11.16	32.1	100	238	P	H
		5699.2	57.22	-47.49	104.71	42.93	35.13	11.22	32.06	100	238	P	H
		5710.4	62.03	-46.18	108.21	47.69	35.15	11.23	32.04	100	238	P	H
		5724	63.09	-56.93	120.02	48.71	35.17	11.25	32.04	100	238	P	H
		5758	103.66	-	-	89.15	35.21	11.29	31.99	100	238	P	H
		5758	95.58	-	-	81.07	35.21	11.29	31.99	100	238	A	H
		5852.4	52.97	-63.86	116.83	38.23	35.31	11.36	31.93	100	238	P	H
		5866	55.47	-52.35	107.82	40.71	35.33	11.38	31.95	100	238	P	H
		5883.6	56.04	-42.87	98.91	41.26	35.36	11.39	31.97	100	238	P	H
		5942.4	56.72	-11.58	68.3	41.84	35.44	11.45	32.01	100	238	P	H
		5602	54.62	-13.68	68.3	40.54	35.02	11.13	32.07	242	219	P	V
		5700	55.76	-49.54	105.3	41.47	35.13	11.22	32.06	242	219	P	V
		5719.2	57.95	-52.73	110.68	43.57	35.17	11.25	32.04	242	219	P	V
		5724	60.48	-59.54	120.02	46.1	35.17	11.25	32.04	242	219	P	V
		5758	100.45	-	-	85.94	35.21	11.29	31.99	242	219	P	V
		5758	92.05	-	-	77.54	35.21	11.29	31.99	242	219	A	V
		5851.2	54.39	-65.17	119.56	39.65	35.31	11.36	31.93	242	219	P	V
		5868.4	57.29	-49.86	107.15	42.53	35.33	11.38	31.95	242	219	P	V
		5905.6	56.29	-26.33	82.62	41.43	35.4	11.43	31.97	242	219	P	V
		5962.4	55.42	-12.88	68.3	40.52	35.46	11.47	32.03	242	219	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-3 5725~5850MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 151 5755MHz		11510	46.34	-27.66	74	52.73	38.8	16.32	61.51	300	0	P	H
		11510	46.96	-27.04	74	53.35	38.8	16.32	61.51	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-3 5725~5850MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 155 5775MHz		5649.6	55.33	-12.97	68.3	41.16	35.09	11.18	32.1	197	288	P	H
		5700	61.08	-44.22	105.3	46.79	35.13	11.22	32.06	197	288	P	H
		5718.8	63.02	-47.54	110.56	48.64	35.17	11.25	32.04	197	288	P	H
		5721.2	63.67	-49.97	113.64	49.29	35.17	11.25	32.04	197	288	P	H
		5782	100.19	-	-	85.63	35.23	11.3	31.97	197	288	P	H
		5782	92.17	-	-	77.61	35.23	11.3	31.97	197	288	A	H
		5852.4	62.53	-54.3	116.83	47.79	35.31	11.36	31.93	197	288	P	H
		5862.8	63.68	-45.03	108.71	48.92	35.33	11.38	31.95	197	288	P	H
		5875.2	62.64	-42.51	105.15	47.84	35.36	11.39	31.95	197	288	P	H
		5964	55.45	-12.85	68.3	40.55	35.46	11.47	32.03	197	288	P	H
		5604.8	55.73	-12.57	68.3	41.66	35.02	11.13	32.08	300	282	P	V
		5695.2	58.86	-42.9	101.76	44.57	35.13	11.22	32.06	300	282	P	V
		5719.6	61.66	-49.13	110.79	47.28	35.17	11.25	32.04	300	282	P	V
		5721.2	60.7	-52.94	113.64	46.32	35.17	11.25	32.04	300	282	P	V
		5764	97.23	-	-	82.72	35.21	11.29	31.99	300	282	P	V
		5764	89.35	-	-	74.84	35.21	11.29	31.99	300	282	A	V
		5854.4	61.02	-51.25	112.27	46.24	35.33	11.38	31.93	300	282	P	V
		5864	62.21	-46.17	108.38	47.45	35.33	11.38	31.95	300	282	P	V
		5876.8	61.84	-42.12	103.96	47.04	35.36	11.39	31.95	300	282	P	V
		5982	55.75	-12.55	68.3	40.82	35.48	11.48	32.03	300	282	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-3 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 155 5775MHz		11554	46.4	-27.6	74	52.69	38.84	16.37	61.5	300	0	P	H
		11554	46.2	-27.8	74	52.49	38.84	16.37	61.5	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

5GHz WIFI 802.11ac VHT40 (LF)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
5GHz 802.11ac VHT40 LF		30	23.69	-16.31	40	29.19	25.15	0.58	31.23			P	H
		94.02	20.96	-22.54	43.5	35.08	16.27	1.54	31.93			P	H
		152.22	31.12	-12.38	43.5	43.9	16.55	1.99	31.32			P	H
		213.33	32.81	-10.69	43.5	45.5	16.29	2.37	31.35			P	H
		333.61	24.02	-21.98	46	32.7	20.01	2.96	31.65			P	H
		628.49	27.08	-18.92	46	29.08	25.21	4.08	31.29			P	H
		31.94	30.8	-9.2	40	37	24.46	0.61	31.27			P	V
		41.64	32.42	-7.58	40	44.46	18.86	0.75	31.65			P	V
		94.99	29.42	-14.08	43.5	42.75	17.05	1.56	31.94			P	V
		149.31	27.73	-15.77	43.5	39.58	17.51	1.97	31.33			P	V
		240.49	28.43	-17.57	46	38.49	18.8	2.5	31.36			P	V
		544.1	28.28	-17.72	46	30.36	25.74	3.79	31.61			P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Co-location:

UNII-1 - 5150~5250MHz

WIFI 802.11a&PCS1900 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5147.36	57.99	-16.01	74	44.53	34.62	10.65	31.81	100	347	P	H
		5150	46.09	-7.91	54	32.63	34.62	10.65	31.81	100	347	A	H
	*	5182	100.32	-	-	86.8	34.65	10.69	31.82	100	347	P	H
		5182	93.01	-	-	79.49	34.65	10.69	31.82	100	347	A	H
		5148.8	58.65	-15.35	74	45.19	34.62	10.65	31.81	125	337	P	V
		5150	48.58	-5.42	54	35.12	34.62	10.65	31.81	125	337	A	V
	*	5182	106.05	-	-	92.53	34.65	10.69	31.82	125	337	P	V
		5182	98.79	-	-	85.27	34.65	10.69	31.82	125	337	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-1 5150~5250MHz

WIFI 802.11a&PCS1900 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10355	45.1	-23.2	68.3	53.63	38.01	15.36	61.9	300	0	P	H
		10355	45.37	-22.93	68.3	53.9	38.01	15.36	61.9	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Note symbol

*	**Fundamental Frequency** which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is **over limit** line.
P/A	**P**eak or **A**verage
H/V	**H**orizontal or **V**ertical

A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

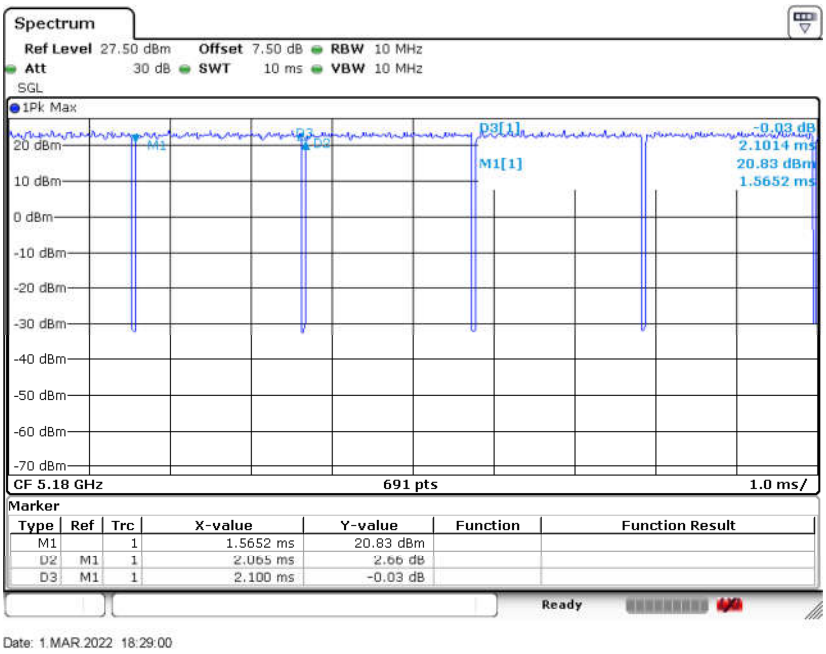
= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is "PASS".

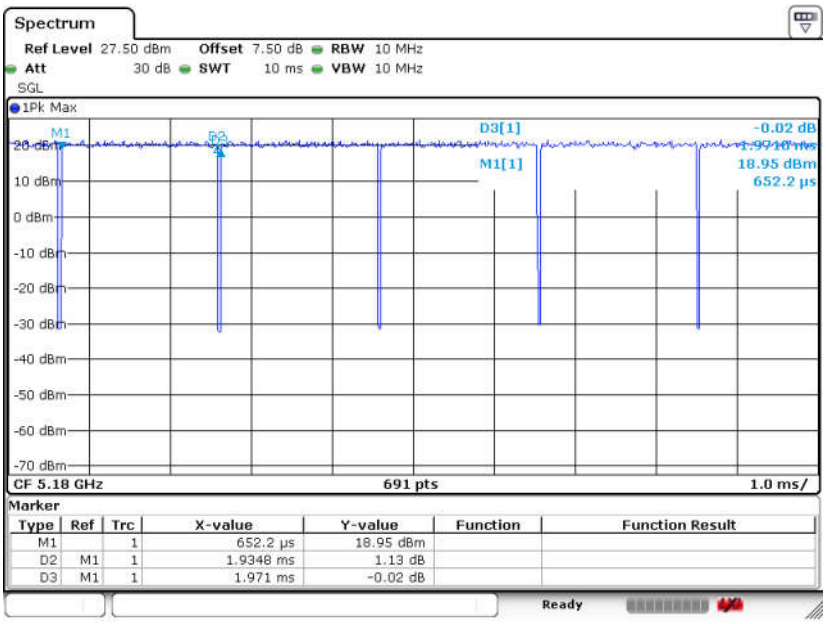
Appendix D. Duty Cycle Plots

Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11a	98.33	-	-	10HZ
802.11ac VHT20	98.16	-	-	10HZ
802.11ac VHT40	96.32	0.949	1.053	1.1KHZ
802.11ac VHT80	92.49	0.464	2.156	2.2KHZ

802.11a



802.11ac VHT 20



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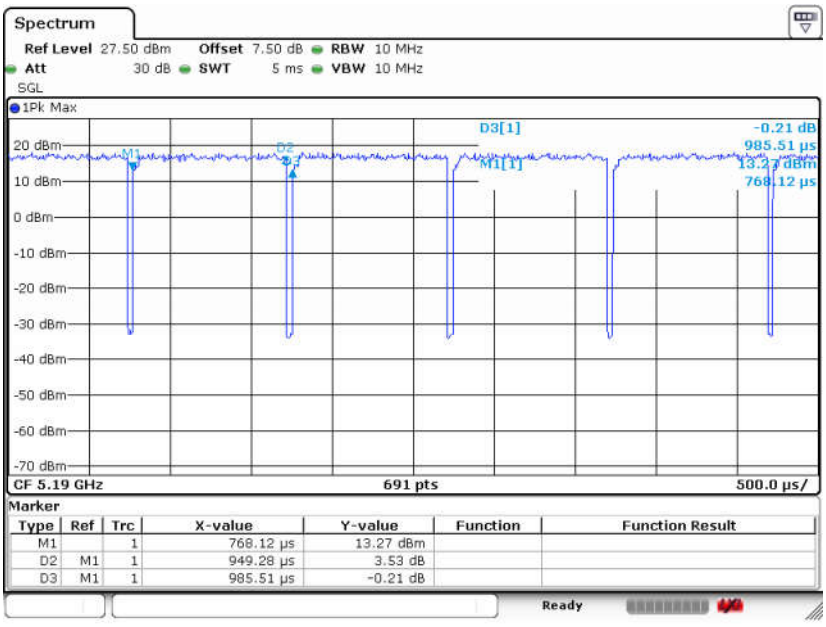
802.11ac VHT 40



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802.11ac VHT80