



Appendix C. Radiated Spurious Emission

Only the worst results for each operation bandwidth are reported.

5150~5250MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant.	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		5145.28	63.46	-10.54	74	55.17	34.42	10.6	36.73	102	10	P	H
		5149.6	47.84	-6.16	54	39.55	34.42	10.6	36.73	102	10	A	H
	*	5188	99.02	-	-	90.62	34.45	10.64	36.69	102	10	P	H
		5188	92.87	-	-	84.47	34.45	10.64	36.69	102	10	A	H
		5379.3	47.34	-26.66	74	38.46	34.61	10.76	36.49	102	10	P	H
		5372.1	38.53	-15.47	54	29.69	34.59	10.76	36.51	102	10	A	H
		5149.92	67.48	-6.52	74	59.19	34.42	10.6	36.73	100	327	P	V
		5147.84	50.29	-3.71	54	42	34.42	10.6	36.73	100	327	A	V
	*	5188	101.92	-	-	93.52	34.45	10.64	36.69	100	327	P	V
		5188	95.68	-	-	87.28	34.45	10.64	36.69	100	327	A	V
		5371.92	47.8	-26.2	74	38.96	34.59	10.76	36.51	100	327	P	V
	5352.12	38.93	-15.07	54	30.12	34.58	10.75	36.52	100	327	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5150~5250MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant.	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	44.35	-23.95	68.3	58.48	37.41	15.47	67.01	300	0	P	H
		10377	44.15	-24.15	68.3	58.28	37.41	15.47	67.01	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5250~5350MHz

WIFI 802.11a (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)
802.11a CH 64 5320MHz		5351.3	58.66	-15.34	74	49.85	34.58	10.75	36.52	391	11	P	H
		5351.3	43.25	-10.75	54	34.44	34.58	10.75	36.52	391	11	A	H
		5320	102.98	-	-	94.26	34.55	10.73	36.56	391	11	P	H
		5320	95.95	-	-	87.23	34.55	10.73	36.56	391	11	A	H
		5357.9	64.23	-9.77	74	55.42	34.58	10.75	36.52	100	339	P	V
		5350.5	50.68	-3.32	54	41.87	34.58	10.75	36.52	100	339	A	V
		5320	106.99	-	-	98.27	34.55	10.73	36.56	100	339	P	V
		5320	101.04	-	-	92.32	34.55	10.73	36.56	100	339	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5250~5350MHz

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 64 5320MHz		10641	43.63	-30.37	74	57.17	37.58	15.7	66.82	300	0	P	H
		15965	53.16	-20.84	74	56.71	41.52	19.33	64.4	300	323	P	H
		15965	43.33	-10.67	54	46.88	41.52	19.33	64.4	300	323	A	H
		10640	43.48	-30.52	74	57.02	37.58	15.7	66.82	100	0	P	V
		15965	53.21	-20.79	74	56.76	41.52	19.33	64.4	100	3	P	V
		15965	43.24	-10.76	54	46.79	41.52	19.33	64.4	100	3	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5250~5350MHz

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 58 5290MHz		5127.36	49.73	-24.27	74	41.48	34.41	10.58	36.74	100	11	P	H
		5140.48	40.7	-13.3	54	32.41	34.42	10.6	36.73	100	11	A	H
	*	5296	92.95	-	-	84.27	34.54	10.71	36.57	100	11	P	H
		5296	86.53	-	-	77.85	34.54	10.71	36.57	100	11	A	H
		5361.4	53.04	-20.96	74	44.2	34.59	10.76	36.51	100	11	P	H
		5354.1	44.99	-9.01	54	36.18	34.58	10.75	36.52	100	11	A	H
		5137.76	50.75	-23.25	74	42.48	34.41	10.6	36.74	100	341	P	V
		5149.44	41.05	-12.95	54	32.76	34.42	10.6	36.73	100	341	A	V
	*	5284	97.81	-	-	89.17	34.53	10.7	36.59	100	341	P	V
		5284	89.99	-	-	81.35	34.53	10.7	36.59	100	341	A	V
		5361.7	58.76	-15.24	74	49.92	34.59	10.76	36.51	100	341	P	V
		5350	50.27	-3.73	54	41.46	34.58	10.75	36.52	100	341	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5250~5350MHz

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 58 5290MHz		10575	44	-24.3	68.3	57.7	37.54	15.65	66.89	300	0	P	H
		10575	44.3	-24	68.3	58	37.54	15.65	66.89	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		30.97	20.56	-19.44	40	27.67	24.98	0.71	32.8	-	-	P	H
		96.93	25.86	-17.64	43.5	39.68	17.47	1.49	32.78	-	-	P	H
		208.48	22.52	-20.98	43.5	36.58	16.84	2.2	33.1	-	-	P	H
		422.85	22.33	-23.67	46	28.82	23.12	3.14	32.75	-	-	P	H
		607.15	25.16	-20.84	46	28.38	25.55	3.76	32.53	-	-	P	H
		787.57	27.78	-18.22	46	29.24	26.8	4.29	32.55	-	-	P	H
		30	25.94	-14.06	40	32.43	25.5	0.71	32.7	-	-	P	V
		94.02	28.78	-14.72	43.5	43.16	16.84	1.46	32.68	-	-	P	V
		181.32	24.32	-19.18	43.5	38.51	16.75	2.05	32.99	-	-	P	V
		390.84	21.19	-24.81	46	28.53	22.47	3.01	32.82	-	-	P	V
		554.77	24.67	-21.33	46	27.8	25.86	3.6	32.59	-	-	P	V
		772.05	27.87	-18.13	46	29.55	26.68	4.25	32.61	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



5725~5850MHz

WIFI 802.11ac VHT20 (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)
802.11ac VHT20 CH 149 5745MHz		5647.6	51.66	-16.64	68.3	42.22	34.87	11.08	36.51	101	246	P	H
		5699.6	58.03	-46.98	105.01	48.53	34.93	11.13	36.56	101	246	P	H
		5720	68.96	-41.94	110.9	59.43	34.97	11.16	36.6	101	246	P	H
		5723.6	76.34	-42.77	119.11	66.79	34.97	11.18	36.6	101	246	P	H
		5746	107.98	-	-	98.4	34.99	11.21	36.62	101	246	P	H
		5746	101.59	-	-	92.01	34.99	11.21	36.62	101	246	A	H
		5646.8	50.6	-17.7	68.3	41.16	34.87	11.08	36.51	107	296	P	V
		5698.4	58.65	-45.47	104.12	49.15	34.93	11.13	36.56	107	296	P	V
		5720	68.17	-42.73	110.9	58.64	34.97	11.16	36.6	107	296	P	V
		5724	77.89	-42.13	120.02	68.34	34.97	11.18	36.6	107	296	P	V
		5746	109.24	-	-	99.66	34.99	11.21	36.62	107	296	P	V
	5746	102.71	-	-	93.13	34.99	11.21	36.62	107	296	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5725~5850MHz

WIFI 802.11ac VHT20 (Harmonic @ 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)
802.11ac VHT20 CH 149 5745MHz		11488	45.87	-28.13	74	57.81	38.19	16.35	66.48	300	0	P	H
		17230	56.5	-11.8	68.3	59.51	41.71	20.15	64.87	300	0	P	H
		11488	45.11	-28.89	74	57.05	38.19	16.35	66.48	100	0	P	V
		17241	60.61	-7.69	68.3	63.61	41.71	20.16	64.87	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 159 5795MHz		5634.8	48.5	-19.8	68.3	39.09	34.87	11.05	36.51	100	252	P	H
		5693.2	52.69	-47.6	100.29	43.19	34.93	11.13	36.56	100	252	P	H
		5720	54.99	-55.91	110.9	45.46	34.97	11.16	36.6	100	252	P	H
		5724.8	56.1	-65.74	121.84	46.55	34.97	11.18	36.6	100	252	P	H
		5800	105.47	-	-	95.8	35.05	11.29	36.67	100	252	P	H
		5800	98.46	-	-	88.79	35.05	11.29	36.67	100	252	A	H
		5852.4	59.67	-57.16	116.83	49.95	35.11	11.33	36.72	100	252	P	H
		5861.6	60.07	-48.98	109.05	50.34	35.13	11.34	36.74	100	252	P	H
		5879.6	53.62	-48.26	101.88	43.86	35.16	11.36	36.76	100	252	P	H
		5957.2	50.72	-17.58	68.3	40.87	35.26	11.43	36.84	100	252	P	H
		5631.6	50.09	-18.21	68.3	40.69	34.84	11.05	36.49	100	245	P	V
		5698	53.09	-50.74	103.83	43.59	34.93	11.13	36.56	100	245	P	V
		5720	55.28	-55.62	110.9	45.75	34.97	11.16	36.6	100	245	P	V
		5724	59.33	-60.69	120.02	49.78	34.97	11.18	36.6	100	245	P	V
		5794	104.44	-	-	94.8	35.05	11.26	36.67	100	245	P	V
		5794	98.21	-	-	88.57	35.05	11.26	36.67	100	245	A	V
		5850	59.39	-62.91	122.3	49.67	35.11	11.33	36.72	100	245	P	V
		5858.4	58.27	-51.68	109.95	48.54	35.13	11.34	36.74	100	245	P	V
	5876.4	53.17	-51.09	104.26	43.41	35.16	11.36	36.76	100	245	P	V	
	5946.4	49.96	-18.34	68.3	40.13	35.24	11.42	36.83	100	245	P	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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		11590	44.56	-29.44	74	56.3	38.25	16.41	66.4	300	0	P	H
VHT40		17373	51.76	-16.54	68.3	54.75	41.61	20.25	64.85	300	0	P	H
CH 159		11587	44.45	-29.55	74	56.19	38.25	16.41	66.4	100	0	P	V
5795MHz		17384	53.94	-14.36	68.3	56.94	41.59	20.25	64.84	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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		5650	59.27	-9.03	68.3	49.83	34.89	11.08	36.53	100	113	P	H
		5700	71.81	-33.49	105.3	62.31	34.93	11.13	36.56	100	113	P	H
		5719.6	73.54	-37.25	110.79	64.01	34.97	11.16	36.6	100	113	P	H
		5724	74.96	-45.06	120.02	65.41	34.97	11.18	36.6	100	113	P	H
		5852.4	69.28	-47.55	116.83	59.56	35.11	11.33	36.72	100	113	P	H
		5858.8	67.75	-42.08	109.83	58.02	35.13	11.34	36.74	100	113	P	H
		5878.4	61.59	-41.18	102.77	51.83	35.16	11.36	36.76	100	113	P	H
		5928.8	53.15	-15.15	68.3	43.34	35.22	11.4	36.81	100	113	P	H
		5770	101.38	-	-	91.76	35.03	11.24	36.65	100	113	P	H
		5770	94.19	-	-	84.57	35.03	11.24	36.65	100	113	A	H
		5649.2	59.46	-8.84	68.3	50.02	34.87	11.08	36.51	100	297	P	V
		5689.2	72.58	-24.76	97.34	63.08	34.93	11.13	36.56	100	297	P	V
		5713.2	79.23	-29.77	109	69.7	34.95	11.16	36.58	100	297	P	V
		5724.8	76.32	-45.52	121.84	66.77	34.97	11.18	36.6	100	297	P	V
		5852.8	70.94	-44.98	115.92	61.22	35.11	11.33	36.72	100	297	P	V
		5869.2	69.24	-37.68	106.92	59.51	35.13	11.34	36.74	100	297	P	V
		5876.36	67.39	-36.9	104.29	57.63	35.16	11.36	36.76	100	297	P	V
		5927.6	54.41	-13.89	68.3	44.6	35.22	11.4	36.81	100	297	P	V
		5764	103.52	-	-	93.9	35.01	11.24	36.63	100	297	P	V
		5764	95.71	-	-	86.09	35.01	11.24	36.63	100	297	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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		11554	44.93	-29.07	74	56.74	38.23	16.39	66.43	300	0	P	H
CH 155 5775MHz		11554	44.81	-29.19	74	56.62	38.23	16.39	66.43	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 VHT80 (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 VHT20 LF		30	20.97	-19.03	40	27.46	25.5	0.71	32.7	-	-	P	H
		97.9	25.5	-18	43.5	39.15	17.68	1.49	32.82	-	-	P	H
		208.48	21.79	-21.71	43.5	35.85	16.84	2.2	33.1	-	-	P	H
		410.24	20.53	-25.47	46	27.33	22.89	3.09	32.78	-	-	P	H
		515	23.32	-22.68	46	27.68	24.91	3.47	32.74	-	-	P	H
		830.25	28.07	-17.93	46	29.15	27.08	4.4	32.56	-	-	P	H
		30.97	26.64	-13.36	40	33.75	24.98	0.71	32.8	-	-	P	V
		94.02	27.71	-15.79	43.5	42.09	16.84	1.46	32.68	-	-	P	V
		181.32	24.35	-19.15	43.5	38.54	16.75	2.05	32.99	-	-	P	V
		350.1	21.13	-24.87	46	29.78	21.4	2.85	32.9	-	-	P	V
		555.74	24.52	-21.48	46	27.66	25.85	3.6	32.59	-	-	P	V
	759.44	28.32	-17.68	46	30.18	26.58	4.22	32.66	-	-	P	V	
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



<Simultaneous transmission>

2.4GHz 2400~2483.5MHz

WIFI 802.11a & BLE & EDGE850 (Band Edge @ 3m)

BLE	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
BLE CH 39 2480MHz	*	2493.28	49.2	-24.8	74	45.73	33	7.28	36.81	298	187	P	H
	*	2484.16	41.41	-12.59	54	38	32.98	7.25	36.82	298	187	A	H
		2480	95.2	-	-	91.79	32.98	7.25	36.82	298	187	P	H
		2480	93.17	-	-	89.76	32.98	7.25	36.82	298	187	A	H
	*	2483.92	49.55	-24.45	74	46.14	32.98	7.25	36.82	245	113	P	V
	*	2484.1	42.02	-11.98	54	38.61	32.98	7.25	36.82	245	113	A	V
		2480	96.2	-	-	92.79	32.98	7.25	36.82	245	113	P	V
		2480	94.14	-	-	90.73	32.98	7.25	36.82	245	113	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11a & BLE & EDGE850 (Harmonic @ 3m)

BLE	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
BLE CH 39 2480MHz		4965	40.97	-33.03	74	61.75	34.28	10.41	65.47	100	0	P	H
		7440	41.75	-32.25	74	59.38	35.89	12.79	66.31	100	0	P	H
		4960	39.66	-34.34	74	60.46	34.28	10.39	65.47	100	360	P	V
		7440	42.1	-31.9	74	59.73	35.89	12.79	66.31	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 - 5250~5350MHz

WIFI 802.11a & BLE & EDGE850 (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)
802.11a CH 64 5320MHz		5350.7	58.03	-15.97	74	49.22	34.58	10.75	36.52	386	6	P	H
		5350	44.86	-9.14	54	36.05	34.58	10.75	36.52	386	6	A	H
		5320	101.97	-	-	93.25	34.55	10.73	36.56	386	6	P	H
		5320	95.63	-	-	86.91	34.55	10.73	36.56	386	6	A	H
		5350.3	63.71	-10.29	74	54.9	34.58	10.75	36.52	100	346	P	V
		5350.1	49.79	-4.21	54	40.98	34.58	10.75	36.52	100	346	A	V
		5320	106.81	-	-	98.09	34.55	10.73	36.56	100	346	P	V
		5320	98.75	-	-	90.03	34.55	10.73	36.56	100	346	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11a & BLE & EDGE850 (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 64 5320MHz		10641	43.86	-30.14	74	57.4	37.58	15.7	66.82	300	0	P	H
		10641	45.01	-28.99	74	58.55	37.58	15.7	66.82	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	Peak or Average
H/V	Horizontal or Vertical



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		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		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)

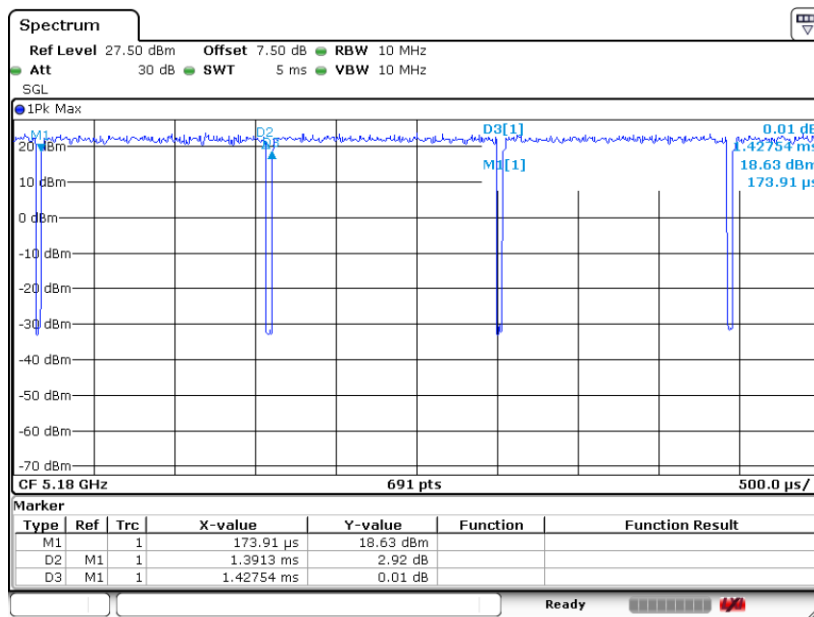
Both peak and average measured complies with the limit line, so test result is “PASS”.



Appendix D. Duty Cycle Plots

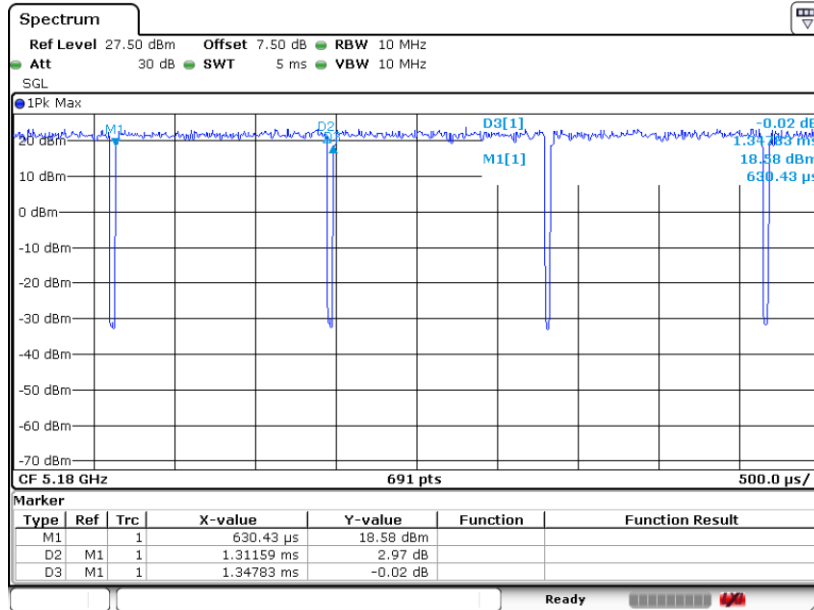
Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11a	97.46	1.391	0.719	0.75KHz
802.11ac VHT20	97.31	1.312	0.762	0.82KHz
802.11ac VHT40	94.35	0.654	1.530	1.6KHz
802.11ac VHT80	89.20	0.323	3.094	3.3KHz

802.11a

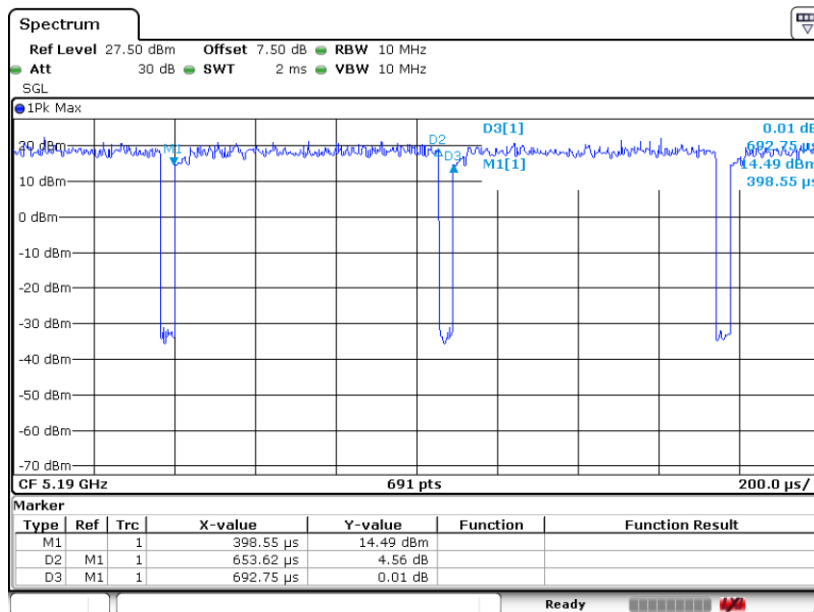




802.11ac VHT20



802.11ac VHT40





802.11ac VHT80

