Appendix A. Radiated Spurious Emission

15C 2.4GHz 2400~2483.5MHz

BT (Band Edge @ 3m)

BT	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
BT CH 78 2480MHz	*	2480.12	108.18	-	-	103.33	32.28	7	34.43	105	2	P	H
	*	2480.12	83.39	-	-	-	-	-	-	-	-	A	H
		2483.55	51.39	-22.61	74	46.54	32.28	7	34.43	105	2	P	H
		2483.55	26.6	-27.4	54	-	-	-	-	-	-	A	H
													H
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	*	2480.19	100.96	-	-	96.11	32.28	7	34.43	200	205	P	V
	*	2480.19	76.17	-	-	-	-	-	-	-	-	A	V
		2498.95	48.23	-25.77	74	43.41	32.3	7	34.48	200	205	P	V
		2498.95	23.44	-30.56	54	-	-	-	-	-	-	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

15C 2.4GHz 2400~2483.5MHz

BT (Harmonic @ 3m)

BT	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable 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)
BT CH 78 2480MHz		4962	40.96	-33.04	74	56.16	34.37	9.09	58.66	100	0	P	H
		4962	16.17	-37.83	54	-	-	-	-	-	-	A	H
		7440	42.25	-31.75	74	53.38	35.6	11.12	57.85	100	0	P	H
		7440	17.46	-36.54	54	-	-	-	-	-	-	A	H
		4962	40.65	-33.35	74	55.85	34.37	9.09	58.66	100	0	P	V
		4962	15.86	-38.14	54	-	-	-	-	-	-	A	V
		7440	40.7	-33.3	74	51.83	35.6	11.12	57.85	100	0	P	V
		7440	15.91	-38.09	54	-	-	-	-	-	-	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

15C Emission below 1GHz

2.4GHz BT (LF)

BT	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable 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)
2.4GHz BT LF		93.45	25.35	-18.15	43.5	46.49	9	0.96	31.1			P	H
		201.99	38.38	-5.12	43.5	59.03	9.12	1.33	31.1	125	38	P	H
		284.61	33.21	-12.79	46	49.61	12.92	1.66	30.98			P	H
		309.8	24.11	-21.89	46	40.03	13.29	1.79	31			P	H
		636	27.08	-18.92	46	34.41	20.4	2.8	30.53			P	H
		750.1	35.93	-10.07	46	41.17	22.1	3.06	30.4			P	H
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		53.22	23.43	-16.57	40	46.71	7.2	0.72	31.2			P	V
		99.12	21.92	-21.58	43.5	41.87	10.16	0.99	31.1			P	V
		277.59	25.24	-20.76	46	41.7	12.83	1.64	30.93			P	V
		385.4	17.12	-28.88	46	30.68	15.3	2.11	30.97			P	V
		599.6	25.11	-20.89	46	33.43	19.59	2.69	30.6			P	V
		750.1	34.07	-11.93	46	39.31	22.1	3.06	30.4	158	71	P	V
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Remark

1. No other spurious found.
2. All results are PASS against 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 per 15.209(c).
!	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	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(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. Level(dBμV/m) =

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

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

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable 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) + Cable 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".