



Appendix A. Radiated Spurious Emission

Test Engineer :	Kyle Jhuang, Citta Ke and Karl Hou	Temperature :	25~26°C
		Relative Humidity :	50~51%

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2386.59	55.68	-18.32	74	51.94	32.77	4.62	33.65	109	131	P	H
		2390	43.08	-10.92	54	39.34	32.77	4.62	33.65	109	131	A	H
	*	2410	98.31	-	-	94.48	32.81	4.65	33.63	109	131	P	H
	*	2410	92.78	-	-	88.95	32.81	4.65	33.63	109	131	A	H
													H
													H
		2357.16	54.92	-19.08	74	51.3	32.7	4.6	33.68	100	120	P	V
		2389.92	41.81	-12.19	54	38.07	32.77	4.62	33.65	100	120	A	V
	*	2410	88.35	-	-	84.52	32.81	4.65	33.63	100	120	P	V
	*	2410	83.06	-	-	79.23	32.81	4.65	33.63	100	120	A	V
													V
													V
802.11b CH 06 2437MHz		2325.84	55.6	-18.4	74	52.13	32.62	4.55	33.7	107	128	P	H
		2390	41.79	-12.21	54	38.05	32.77	4.62	33.65	107	128	A	H
	*	2435	95.54	-	-	91.63	32.85	4.68	33.62	107	128	P	H
	*	2435	90	-	-	86.09	32.85	4.68	33.62	107	128	A	H
		2490.08	55.3	-18.7	74	51.13	33	4.73	33.56	107	128	P	H
		2494.36	42.41	-11.59	54	38.24	33	4.73	33.56	107	128	A	H
		2379.66	54.6	-19.4	74	50.93	32.73	4.6	33.66	100	118	P	V
		2386.5	41.65	-12.35	54	37.91	32.77	4.62	33.65	100	118	A	V
	*	2435	86.15	-	-	82.24	32.85	4.68	33.62	100	118	P	V
	*	2435	81.08	-	-	77.17	32.85	4.68	33.62	100	118	A	V
		2497.4	54.94	-19.06	74	50.77	33	4.73	33.56	100	118	P	V
		2483.52	42.06	-11.94	54	37.94	32.96	4.73	33.57	100	118	A	V



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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 11 2462MHz	*	2460	95.54	-	-	91.51	32.92	4.7	33.59	106	132	P	H
	*	2460	90.2	-	-	86.17	32.92	4.7	33.59	106	132	A	H
		2487.36	55.85	-18.15	74	51.73	32.96	4.73	33.57	106	132	P	H
		2489.88	42.76	-11.24	54	38.59	33	4.73	33.56	106	132	A	H
													H
													H
	*	2463	88.19	-	-	84.16	32.92	4.7	33.59	200	344	P	V
	*	2463	82.99	-	-	78.96	32.92	4.7	33.59	200	344	A	V
		2494.84	55.39	-18.61	74	51.22	33	4.73	33.56	200	344	P	V
		2489.64	42.14	-11.86	54	37.97	33	4.73	33.56	200	344	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		4824	40.49	-33.51	74	57.53	35.03	6.54	58.61	100	0	P	H
													H
													H
													H
		4824	40.24	-33.76	74	57.28	35.03	6.54	58.61	100	0	P	V
													V
													V
													V
802.11b CH 06 2437MHz		4875	39.65	-34.35	74	56.59	35.02	6.56	58.52	100	0	P	H
		7311	41.99	-32.01	74	55.52	36.39	8.24	58.16	100	0	P	H
													H
													H
		4875	40.14	-33.86	74	57.08	35.02	6.56	58.52	100	0	P	V
		7311	42.23	-31.77	74	55.76	36.39	8.24	58.16	100	0	P	V
													V
													V
802.11b CH 11 2462MHz		4923	40.5	-33.5	74	57.32	35.01	6.59	58.42	100	0	P	H
		7386	41.85	-32.15	74	55.41	36.44	8.31	58.31	100	0	P	H
													H
													H
		4923	41.11	-32.89	74	57.93	35.01	6.59	58.42	100	0	P	V
		7386	42.25	-31.75	74	55.81	36.44	8.31	58.31	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz
WIFI 802.11g (Band Edge @ 3m)

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11g CH 01 2412MHz		2388.84	58.57	-15.43	74	54.83	32.77	4.62	33.65	110	130	P	H
		2390	44.18	-9.82	54	40.44	32.77	4.62	33.65	110	130	A	H
	*	2410	98.52	-	-	94.69	32.81	4.65	33.63	110	130	P	H
	*	2410	87.34	-	-	83.51	32.81	4.65	33.63	110	130	A	H
													H
													H
		2389.83	55	-19	74	51.26	32.77	4.62	33.65	100	121	P	V
		2390	42.02	-11.98	54	38.28	32.77	4.62	33.65	100	121	A	V
	*	2410	88.6	-	-	84.77	32.81	4.65	33.63	100	121	P	V
	*	2410	77.37	-	-	73.54	32.81	4.65	33.63	100	121	A	V
													V
													V
802.11g CH 06 2437MHz		2382.45	54.8	-19.2	74	51.11	32.73	4.62	33.66	109	133	P	H
		2388.48	42.12	-11.88	54	38.38	32.77	4.62	33.65	109	133	A	H
	*	2435	99.79	-	-	95.88	32.85	4.68	33.62	109	133	P	H
	*	2435	88.26	-	-	84.35	32.85	4.68	33.62	109	133	A	H
		2489.24	56.48	-17.52	74	52.31	33	4.73	33.56	109	133	P	H
		2492.52	42.82	-11.18	54	38.65	33	4.73	33.56	109	133	A	H
		2382.63	54.76	-19.24	74	51.07	32.73	4.62	33.66	100	120	P	V
		2387.22	41.69	-12.31	54	37.95	32.77	4.62	33.65	100	120	A	V
	*	2435	88.8	-	-	84.89	32.85	4.68	33.62	100	120	P	V
	*	2435	77.76	-	-	73.85	32.85	4.68	33.62	100	120	A	V
		2487.12	55.5	-18.5	74	51.38	32.96	4.73	33.57	100	120	P	V
		2484	42.1	-11.9	54	37.98	32.96	4.73	33.57	100	120	A	V



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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11g CH 11 2462MHz	*	2460	93.45	-	-	89.42	32.92	4.7	33.59	107	131	P	H
	*	2460	82.05	-	-	78.02	32.92	4.7	33.59	107	131	A	H
		2486.76	55.61	-18.39	74	51.49	32.96	4.73	33.57	107	131	P	H
		2483.52	42.54	-11.46	54	38.42	32.96	4.73	33.57	107	131	A	H
													H
													H
	*	2464	84.31	-	-	80.28	32.92	4.7	33.59	118	119	P	V
	*	2464	73.24	-	-	69.21	32.92	4.7	33.59	118	119	A	V
		2499.72	55.39	-18.61	74	51.22	33	4.73	33.56	118	119	P	V
		2484.08	42.13	-11.87	54	38.01	32.96	4.73	33.57	118	119	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11g CH 01 2412MHz		4824	40.89	-33.11	74	57.93	35.03	6.54	58.61	100	0	P	H
													H
													H
													H
		4824	40.54	-33.46	74	57.58	35.03	6.54	58.61	100	0	P	V
													V
													V
													V
802.11g CH 06 2437MHz		4875	41.14	-32.86	74	58.08	35.02	6.56	58.52	100	0	P	H
		7311	42.9	-31.1	74	56.43	36.39	8.24	58.16	100	0	P	H
													H
													H
		4875	40.12	-33.88	74	57.06	35.02	6.56	58.52	100	0	P	V
		7311	42.56	-31.44	74	56.09	36.39	8.24	58.16	100	0	P	V
													V
													V
802.11g CH 11 2462MHz		4923	40.51	-33.49	74	57.33	35.01	6.59	58.42	100	0	P	H
		7386	41.22	-32.78	74	54.78	36.44	8.31	58.31	100	0	P	H
													H
													H
		4923	40.17	-33.83	74	56.99	35.01	6.59	58.42	100	0	P	V
		7386	41.97	-32.03	74	55.53	36.44	8.31	58.31	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 01 2412MHz		2390	60.16	-13.84	74	56.42	32.77	4.62	33.65	110	136	P	H
		2390	44.51	-9.49	54	40.77	32.77	4.62	33.65	110	136	A	H
	*	2410	97.85	-	-	94.02	32.81	4.65	33.63	110	136	P	H
	*	2410	86.72	-	-	82.89	32.81	4.65	33.63	110	136	A	H
													H
													H
		2324.76	54.52	-19.48	74	51.05	32.62	4.55	33.7	173	341	P	V
		2390	42.08	-11.92	54	38.34	32.77	4.62	33.65	173	341	A	V
	*	2414	90.35	-	-	86.52	32.81	4.65	33.63	173	341	P	V
	*	2414	79.04	-	-	75.21	32.81	4.65	33.63	173	341	A	V
													V
													V
802.11n HT20 CH 06 2437MHz		2389.02	54.73	-19.27	74	50.99	32.77	4.62	33.65	107	136	P	H
		2389.83	41.89	-12.11	54	38.15	32.77	4.62	33.65	107	136	A	H
	*	2435	99.16	-	-	95.25	32.85	4.68	33.62	107	136	P	H
	*	2435	87.86	-	-	83.95	32.85	4.68	33.62	107	136	A	H
		2495.76	55.98	-18.02	74	51.81	33	4.73	33.56	107	136	P	H
		2490.84	42.62	-11.38	54	38.45	33	4.73	33.56	107	136	A	H
		2380.47	54.7	-19.3	74	51.01	32.73	4.62	33.66	174	343	P	V
		2390	41.65	-12.35	54	37.91	32.77	4.62	33.65	174	343	A	V
	*	2439	91.87	-	-	87.9	32.89	4.68	33.6	174	343	P	V
	*	2439	80.65	-	-	76.68	32.89	4.68	33.6	174	343	A	V
		2494.76	55.48	-18.52	74	51.31	33	4.73	33.56	174	343	P	V
		2483.96	42.04	-11.96	54	37.92	32.96	4.73	33.57	174	343	A	V



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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 11 2462MHz	*	2458.283	92.57	-	-	88.54	32.92	4.7	33.59	106	126	P	H
	*	2460	81.26	-	-	77.23	32.92	4.7	33.59	106	126	A	H
		2484.64	55.53	-18.47	74	51.41	32.96	4.73	33.57	106	126	P	H
		2483.52	42.59	-11.41	54	38.47	32.96	4.73	33.57	106	126	A	H
													H
													H
	*	2464	85.68	-	-	81.65	32.92	4.7	33.59	200	341	P	V
	*	2464	74.62	-	-	70.59	32.92	4.7	33.59	200	341	A	V
		2492.84	55.55	-18.45	74	51.38	33	4.73	33.56	200	341	P	V
		2489.44	42.06	-11.94	54	37.89	33	4.73	33.56	200	341	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 01 2412MHz		4824	39.52	-34.48	74	56.56	35.03	6.54	58.61	100	0	P	H
													H
													H
													H
		4824	40.75	-33.25	74	57.79	35.03	6.54	58.61	100	0	P	V
													V
													V
													V
802.11n HT20 CH 06 2437MHz		4875	40.46	-33.54	74	57.4	35.02	6.56	58.52	100	0	P	H
		7311	42.58	-31.42	74	56.11	36.39	8.24	58.16	100	0	P	H
													H
													H
		4875	40.57	-33.43	74	57.51	35.02	6.56	58.52	100	0	P	V
		7311	42.51	-31.49	74	56.04	36.39	8.24	58.16	100	0	P	V
													V
													V
802.11n HT20 CH 11 2462MHz		4923	41.02	-32.98	74	57.84	35.01	6.59	58.42	100	0	P	H
		7386	41.14	-32.86	74	54.7	36.44	8.31	58.31	100	0	P	H
													H
													H
		4923	40.67	-33.33	74	57.49	35.01	6.59	58.42	100	0	P	V
		7386	42.46	-31.54	74	56.02	36.44	8.31	58.31	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 03 2422MHz		2387.67	63.73	-10.27	74	59.99	32.77	4.62	33.65	111	131	P	H
		2389.56	50.63	-3.37	54	46.89	32.77	4.62	33.65	111	131	A	H
	*	2420	98.46	-	-	94.58	32.85	4.65	33.62	111	131	P	H
	*	2420	88.47	-	-	84.59	32.85	4.65	33.62	111	131	A	H
		2494.24	57.17	-16.83	74	53	33	4.73	33.56	111	131	P	H
		2483.84	45.23	-8.77	54	41.11	32.96	4.73	33.57	111	131	A	H
		2390	59.07	-14.93	74	55.33	32.77	4.62	33.65	176	341	P	V
		2389.56	46.45	-7.55	54	42.71	32.77	4.62	33.65	176	341	A	V
	*	2420	91.16	-	-	87.28	32.85	4.65	33.62	176	341	P	V
	*	2420	81.17	-	-	77.29	32.85	4.65	33.62	176	341	A	V
		2498.12	55.17	-18.83	74	51	33	4.73	33.56	176	341	P	V
		2497.32	43.21	-10.79	54	39.04	33	4.73	33.56	176	341	A	V
802.11n HT40 CH 06 2437MHz		2389.74	62.84	-11.16	74	59.1	32.77	4.62	33.65	107	133	P	H
		2389.47	47.98	-6.02	54	44.24	32.77	4.62	33.65	107	133	A	H
	*	2435	98.35	-	-	94.44	32.85	4.68	33.62	107	133	P	H
	*	2435	88.54	-	-	84.63	32.85	4.68	33.62	107	133	A	H
		2483.88	62.15	-11.85	74	58.03	32.96	4.73	33.57	107	133	P	H
		2483.52	47.72	-6.28	54	43.6	32.96	4.73	33.57	107	133	A	H
		2383.98	56.28	-17.72	74	52.59	32.73	4.62	33.66	113	343	P	V
		2389.92	44.66	-9.34	54	40.92	32.77	4.62	33.65	113	343	A	V
	*	2435	91	-	-	87.09	32.85	4.68	33.62	113	343	P	V
	*	2435	81.18	-	-	77.27	32.85	4.68	33.62	113	343	A	V
		2486.24	56.43	-17.57	74	52.31	32.96	4.73	33.57	113	343	P	V
		2484.08	44.47	-9.53	54	40.35	32.96	4.73	33.57	113	343	A	V



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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 09 2452MHz		2383.17	56.91	-17.09	74	53.22	32.73	4.62	33.66	139	132	P	H
		2389.83	44.24	-9.76	54	40.5	32.77	4.62	33.65	139	132	A	H
	*	2450	96.59	-	-	92.62	32.89	4.68	33.6	139	132	P	H
	*	2450	86.48	-	-	82.51	32.89	4.68	33.6	139	132	A	H
		2484.04	65.42	-8.58	74	61.3	32.96	4.73	33.57	139	132	P	H
		2485.2	52.47	-1.53	54	48.35	32.96	4.73	33.57	139	132	A	H
		2383.98	54.88	-19.12	74	51.19	32.73	4.62	33.66	172	340	P	V
		2389.47	43	-11	54	39.26	32.77	4.62	33.65	172	340	A	V
	*	2450	88.92	-	-	84.95	32.89	4.68	33.6	172	340	P	V
	*	2450	78.9	-	-	74.93	32.89	4.68	33.6	172	340	A	V
		2486.52	59.84	-14.16	74	55.72	32.96	4.73	33.57	172	340	P	V
		2483.52	47.44	-6.56	54	43.32	32.96	4.73	33.57	172	340	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 802.11n HT40 (Harmonic @ 3m)

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 03 2422MHz		4845	39.92	-34.08	74	56.92	35.03	6.55	58.58	100	0	P	H
		7266	41.95	-32.05	74	55.48	36.37	8.2	58.1	100	0	P	H
													H
													H
		4845	40.34	-33.66	74	57.34	35.03	6.55	58.58	100	0	P	V
		7266	41.05	-32.95	74	54.58	36.37	8.2	58.1	100	0	P	V
													V
													V
802.11n HT40 CH 06 2437MHz		4875	40.33	-33.67	74	57.27	35.02	6.56	58.52	100	0	P	H
		7311	41.89	-32.11	74	55.42	36.39	8.24	58.16	100	0	P	H
													H
													H
		4875	40.69	-33.31	74	57.63	35.02	6.56	58.52	100	0	P	V
		7311	42.34	-31.66	74	55.87	36.39	8.24	58.16	100	0	P	V
													V
													V
802.11n HT40 CH 09 2452MHz		4905	40.01	-33.99	74	56.86	35.02	6.59	58.46	100	0	P	H
		7356	41.32	-32.68	74	54.86	36.42	8.29	58.25	100	0	P	H
													H
													H
		4905	40.47	-33.53	74	57.32	35.02	6.59	58.46	100	0	P	V
		7356	42.37	-31.63	74	55.91	36.42	8.29	58.25	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

2.4GHz WIFI 802.11n HT40 (LF)

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11n HT40 LF		161.49	25.6	-17.9	43.5	45.83	10.22	1.33	31.78			P	H
		254.1	22.56	-23.44	46	39.67	13	1.66	31.77			P	H
		279.21	27.54	-18.46	46	44.76	12.81	1.73	31.76			P	H
		404.3	23.06	-22.94	46	36.75	16.08	2.03	31.8			P	H
		517.7	31.89	-14.11	46	43.44	18.1	2.27	31.92	123	159	P	H
		797	29.43	-16.57	46	36.52	22	2.83	31.92			P	H
													H
													H
													H
													H
													H
													H
		63.75	32.3	-7.7	40	57.22	5.98	0.89	31.79	100	301	P	V
		153.12	25.4	-18.1	43.5	45.1	10.8	1.28	31.78			P	V
		230.61	15.96	-30.04	46	35.93	10.22	1.58	31.77			P	V
		594	29.9	-16.1	46	39.87	19.64	2.42	32.03			P	V
		797	28.71	-17.29	46	35.8	22	2.83	31.92			P	V
		941.2	26.19	-19.81	46	29.72	24.52	3.05	31.1			P	V
													V
													V
													V
													V
													V
													V
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.
!	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	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		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. 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”.



2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2356.44	54.95	-19.05	74	51.33	32.7	4.6	33.68	116	237	P	H
		2387.31	42.99	-11.01	54	39.25	32.77	4.62	33.65	116	237	A	H
	*	2410.438	98.37	-	-	94.54	32.81	4.65	33.63	116	237	P	H
	*	2411.105	92.94	-	-	89.11	32.81	4.65	33.63	116	237	A	H
													H
													H
		2387.76	54.95	-19.05	74	51.21	32.77	4.62	33.65	118	257	P	V
		2387.31	42.32	-11.68	54	38.58	32.77	4.62	33.65	118	257	A	V
	*	2410.688	96.29	-	-	92.46	32.81	4.65	33.63	118	257	P	V
	*	2411.189	90.86	-	-	87.03	32.81	4.65	33.63	118	257	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		4824	40.29	-33.71	74	57.33	35.03	6.54	58.61	100	0	P	H
													H
													H
													H
		4824	40.69	-33.31	74	57.73	35.03	6.54	58.61	100	0	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 09 2452MHz		2387.31	55.58	-18.42	74	51.84	32.77	4.62	33.65	114	174	P	H
		2388.12	43.64	-10.36	54	39.9	32.77	4.62	33.65	114	174	A	H
	*	2450	95.48	-	-	91.51	32.89	4.68	33.6	114	174	P	H
	*	2450	85.27	-	-	81.3	32.89	4.68	33.6	114	174	A	H
		2487.36	63.14	-10.86	74	59.02	32.96	4.73	33.57	114	174	P	H
		2485.2	50.45	-3.55	54	46.33	32.96	4.73	33.57	114	174	A	H
		2368.41	55.79	-18.21	74	52.17	32.7	4.6	33.68	117	271	P	V
		2389.2	43.85	-10.15	54	40.11	32.77	4.62	33.65	117	271	A	V
	*	2450	97.35	-	-	93.38	32.89	4.68	33.6	117	271	P	V
	*	2450	87.19	-	-	83.22	32.89	4.68	33.6	117	271	A	V
		2484.12	65.2	-8.8	74	61.08	32.96	4.73	33.57	117	271	P	V
		2483.52	51.6	-2.4	54	47.48	32.96	4.73	33.57	117	271	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 802.11n HT40 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 09 2452MHz		4905	40.69	-33.31	74	57.54	35.02	6.59	58.46	100	0	P	H
		7356	41.81	-32.19	74	55.35	36.42	8.29	58.25	100	0	P	H
													H
													H
		4905	41.35	-32.65	74	58.2	35.02	6.59	58.46	100	0	P	V
		7356	41.5	-32.5	74	55.04	36.42	8.29	58.25	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

2.4GHz WIFI 802.11n HT40 (LF)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11n HT40 LF		119.91	17.6	-25.9	43.5	36.7	11.5	1.18	31.78			P	H
		157.71	23.39	-20.11	43.5	43.24	10.62	1.31	31.78			P	H
		167.97	27.79	-15.71	43.5	48.47	9.74	1.36	31.78			P	H
		600.3	34.8	-11.2	46	44.7	19.7	2.44	32.04	112	0	P	H
		668.2	24.54	-21.46	46	33.68	20.3	2.6	32.04			P	H
		700.4	22.63	-23.37	46	31.32	20.7	2.65	32.04			P	H
													H
													H
													H
													H
													H
													H
		63.75	30.62	-9.38	40	55.54	5.98	0.89	31.79	103	99	P	V
		116.67	23.11	-20.39	43.5	41.98	11.74	1.17	31.78			P	V
		133.14	20.51	-22.99	43.5	39.31	11.74	1.24	31.78			P	V
		403.6	23.92	-22.08	46	37.65	16.05	2.02	31.8			P	V
		521.2	30.52	-15.48	46	42.06	18.11	2.27	31.92			P	V
		598.2	35.28	-10.72	46	45.21	19.68	2.43	32.04			P	V
													V
													V
													V
													V
													V
													V
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.
!	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	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		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. 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”.



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

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)
802.11n HT20 CH 01 2412MHz		2389.11	61.04	-12.96	74	57.3	32.77	4.62	33.65	115	236	P	H
		2388.93	44.05	-9.95	54	40.31	32.77	4.62	33.65	115	236	A	H
	*	2410	100.75	-	-	96.92	32.81	4.65	33.63	115	236	P	H
	*	2410	88.26	-	-	84.43	32.81	4.65	33.63	115	236	A	H
													H
													H
		2389.47	58.07	-15.93	74	54.33	32.77	4.62	33.65	141	74	P	V
		2390	43.9	-10.1	54	40.16	32.77	4.62	33.65	141	74	A	V
	*	2410	99.42	-	-	95.59	32.81	4.65	33.63	141	74	P	V
	*	2410	86.23	-	-	82.4	32.81	4.65	33.63	141	74	A	V
													V
													V
802.11n HT20 CH 06 2437MHz		2356.53	55.13	-18.87	74	51.51	32.7	4.6	33.68	190	342	P	H
		2384.52	41.83	-12.17	54	38.14	32.73	4.62	33.66	190	342	A	H
	*	2439	95.93	-	-	91.96	32.89	4.68	33.6	190	342	P	H
	*	2439	83.51	-	-	79.54	32.89	4.68	33.6	190	342	A	H
		2486.04	56.25	-17.75	74	52.13	32.96	4.73	33.57	190	342	P	H
		2487.36	42.15	-11.85	54	38.03	32.96	4.73	33.57	190	342	A	H
		2380.2	55.41	-18.59	74	51.72	32.73	4.62	33.66	140	77	P	V
		2388.48	42.19	-11.81	54	38.45	32.77	4.62	33.65	140	77	A	V
	*	2435	100.17	-	-	96.26	32.85	4.68	33.62	140	77	P	V
	*	2435	87.37	-	-	83.46	32.85	4.68	33.62	140	77	A	V
		2497.16	55.43	-18.57	74	51.26	33	4.73	33.56	140	77	P	V
		2489.6	42.28	-11.72	54	38.11	33	4.73	33.56	140	77	A	V



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)
802.11n HT20 CH 11 2462MHz	*	2464	96.9	-	-	92.87	32.92	4.7	33.59	152	124	P	H
	*	2464	83.01	-	-	78.98	32.92	4.7	33.59	152	124	A	H
		2483.92	55.61	-18.39	74	51.49	32.96	4.73	33.57	152	124	P	H
		2484.44	42.7	-11.3	54	38.58	32.96	4.73	33.57	152	124	A	H
													H
													H
	*	2460	96.83	-	-	92.8	32.92	4.7	33.59	136	263	P	V
	*	2460	84.05	-	-	80.02	32.92	4.7	33.59	136	263	A	V
		2483.8	56.72	-17.28	74	52.6	32.96	4.73	33.57	136	263	P	V
		2483.52	42.86	-11.14	54	38.74	32.96	4.73	33.57	136	263	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

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)
802.11n HT20 CH 01 2412MHz		4824	40.06	-33.94	74	57.1	35.03	6.54	58.61	100	0	P	H
													H
													H
													H
		4824	39.92	-34.08	74	56.96	35.03	6.54	58.61	100	0	P	V
													V
													V
													V
802.11n HT20 CH 06 2437MHz		4875	40.29	-33.71	74	57.23	35.02	6.56	58.52	100	0	P	H
		7311	42.26	-31.74	74	55.79	36.39	8.24	58.16	100	0	P	H
													H
													H
		4875	40.35	-33.65	74	57.29	35.02	6.56	58.52	100	0	P	V
		7311	41.84	-32.16	74	55.37	36.39	8.24	58.16	100	0	P	V
													V
													V
802.11n HT20 CH 11 2462MHz		4923	40.33	-33.67	74	57.15	35.01	6.59	58.42	100	0	P	H
		7386	41.54	-32.46	74	55.1	36.44	8.31	58.31	100	0	P	H
													H
													H
		4923	40.68	-33.32	74	57.5	35.01	6.59	58.42	100	0	P	V
		7386	40.7	-33.3	74	54.26	36.44	8.31	58.31	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

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)
802.11n HT40 CH 03 2422MHz		2386.59	62.03	-11.97	74	58.29	32.77	4.62	33.65	116	241	P	H
		2389.47	50.2	-3.8	54	46.46	32.77	4.62	33.65	116	241	A	H
	*	2420	100.66	-	-	96.78	32.85	4.65	33.62	116	241	P	H
	*	2420	90.67	-	-	86.79	32.85	4.65	33.62	116	241	A	H
		2490.4	55.57	-18.43	74	51.4	33	4.73	33.56	116	241	P	H
		2485.52	43.92	-10.08	54	39.8	32.96	4.73	33.57	116	241	A	H
		2389.74	61.75	-12.25	74	58.01	32.77	4.62	33.65	116	103	P	V
		2390	49.52	-4.48	54	45.78	32.77	4.62	33.65	116	103	A	V
	*	2420	99.47	-	-	95.59	32.85	4.65	33.62	116	103	P	V
	*	2420	89.62	-	-	85.74	32.85	4.65	33.62	116	103	A	V
		2487.52	56.05	-17.95	74	51.88	33	4.73	33.56	116	103	P	V
		2485.12	43.89	-10.11	54	39.77	32.96	4.73	33.57	116	103	A	V
802.11n HT40 CH 06 2437MHz		2386.68	55.2	-18.8	74	51.46	32.77	4.62	33.65	194	345	P	H
		2389.29	43.87	-10.13	54	40.13	32.77	4.62	33.65	194	345	A	H
	*	2435	95.34	-	-	91.43	32.85	4.68	33.62	194	345	P	H
	*	2435	85.49	-	-	81.58	32.85	4.68	33.62	194	345	A	H
		2497.28	56.13	-17.87	74	51.96	33	4.73	33.56	194	345	P	H
		2484.16	43.61	-10.39	54	39.49	32.96	4.73	33.57	194	345	A	H
		2390	59.45	-14.55	74	55.71	32.77	4.62	33.65	138	75	P	V
		2390	45.73	-8.27	54	41.99	32.77	4.62	33.65	138	75	A	V
	*	2435	99.7	-	-	95.79	32.85	4.68	33.62	138	75	P	V
	*	2435	89.3	-	-	85.39	32.85	4.68	33.62	138	75	A	V
		2486.08	56.34	-17.66	74	52.22	32.96	4.73	33.57	138	75	P	V
		2491.12	43.87	-10.13	54	39.7	33	4.73	33.56	138	75	A	V



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)
802.11n HT40 CH 09 2452MHz		2359.5	55.49	-18.51	74	51.87	32.7	4.6	33.68	109	36	P	H
		2389.56	43.41	-10.59	54	39.67	32.77	4.62	33.65	109	36	A	H
	*	2450	98.56	-	-	94.59	32.89	4.68	33.6	109	36	P	H
	*	2450	88.5	-	-	84.53	32.89	4.68	33.6	109	36	A	H
		2484	61.53	-12.47	74	57.41	32.96	4.73	33.57	109	36	P	H
		2483.84	49.37	-4.63	54	45.25	32.96	4.73	33.57	109	36	A	H
		2384.25	54.92	-19.08	74	51.23	32.73	4.62	33.66	163	96	P	V
		2382.18	43.25	-10.75	54	39.56	32.73	4.62	33.66	163	96	A	V
	*	2450	96.22	-	-	92.25	32.89	4.68	33.6	163	96	P	V
	*	2450	86.43	-	-	82.46	32.89	4.68	33.6	163	96	A	V
		2485.36	59.59	-14.41	74	55.47	32.96	4.73	33.57	163	96	P	V
		2483.52	47.24	-6.76	54	43.12	32.96	4.73	33.57	163	96	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 802.11n HT40 (Harmonic @ 3m)

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)
802.11n HT40 CH 03 2422MHz		4845	41.2	-32.8	74	58.2	35.03	6.55	58.58	100	0	P	H
		7266	41.87	-32.13	74	55.4	36.37	8.2	58.1	100	0	P	H
													H
													H
		4845	39.69	-34.31	74	56.69	35.03	6.55	58.58	100	0	P	V
		7266	41.65	-32.35	74	55.18	36.37	8.2	58.1	100	0	P	V
													V
													V
802.11n HT40 CH 06 2437MHz		4875	39.98	-34.02	74	56.92	35.02	6.56	58.52	100	0	P	H
		7311	41.88	-32.12	74	55.41	36.39	8.24	58.16	100	0	P	H
													H
													H
		4875	41.13	-32.87	74	58.07	35.02	6.56	58.52	100	0	P	V
		7311	43.06	-30.94	74	56.59	36.39	8.24	58.16	100	0	P	V
													V
													V
802.11n HT40 CH 09 2452MHz		4905	41.29	-32.71	74	58.14	35.02	6.59	58.46	100	0	P	H
		7356	42.54	-31.46	74	56.08	36.42	8.29	58.25	100	0	P	H
													H
													H
		4905	40.64	-33.36	74	57.49	35.02	6.59	58.46	100	0	P	V
		7356	42.28	-31.72	74	55.82	36.42	8.29	58.25	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

2.4GHz WIFI 802.11n HT40 (LF)

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)
2.4GHz 802.11n HT40 LF		119.1	16.57	-26.93	43.5	35.61	11.56	1.18	31.78			P	H
		165.81	26.26	-17.24	43.5	46.91	9.78	1.35	31.78	172	49	P	H
		227.37	23.32	-22.68	46	43.66	9.86	1.57	31.77			P	H
		429.5	22.12	-23.88	46	34.96	16.9	2.09	31.83			P	H
		591.9	28.35	-17.65	46	38.35	19.62	2.41	32.03			P	H
		717.9	22.41	-23.59	46	30.42	21.32	2.69	32.02			P	H
													H
													H
													H
													H
													H
													H
		63.75	31.33	-8.67	40	56.25	5.98	0.89	31.79			P	V
		178.23	27.55	-15.95	43.5	48.9	9.03	1.4	31.78			P	V
		235.74	20.36	-25.64	46	39.71	10.82	1.6	31.77			P	V
		600.3	37.46	-8.54	46	47.36	19.7	2.44	32.04	105	99	P	V
		796.3	21.64	-24.36	46	28.73	22	2.83	31.92			P	V
		840.4	22.6	-23.4	46	28.22	23.2	2.9	31.72			P	V
													V
													V
													V
													V
													V
													V
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.
!	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	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		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. 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”.



Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 149 5745MHz	*	5747	103.01	-	-	92.15	35.79	7.18	32.11	105	119	P	H
	*	5747	91.6	-	-	80.74	35.79	7.18	32.11	105	119	A	H
													H
													H
	*	5743	102.71	-	-	91.85	35.79	7.18	32.11	105	91	P	V
	*	5743	91.47	-	-	80.61	35.79	7.18	32.11	105	91	A	V
													V
													V
802.11a CH 157 5785MHz	*	5784	104.4	-	-	93.48	35.82	7.2	32.1	104	118	P	H
	*	5784	93.37	-	-	82.45	35.82	7.2	32.1	104	118	A	H
													H
													H
	*	5787	105.12	-	-	94.19	35.83	7.2	32.1	196	97	P	V
	*	5787	94.06	-	-	83.13	35.83	7.2	32.1	196	97	A	V
													V
													V
802.11a CH 165 5825MHz	*	5823	103.23	-	-	92.22	35.86	7.24	32.09	103	118	P	H
	*	5823	92.02	-	-	81.01	35.86	7.24	32.09	103	118	A	H
													H
													H
	*	5824	103.16	-	-	92.15	35.86	7.24	32.09	182	87	P	V
	*	5824	91.87	-	-	80.86	35.86	7.24	32.09	182	87	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 149 5745MHz		11490	44.52	-29.48	74	52.11	38.99	10.33	56.91	100	0	P	H
													H
													H
													H
		11490	45.9	-28.1	74	53.49	38.99	10.33	56.91	100	0	P	V
													V
													V
													V
802.11a CH 157 5785MHz		11571	44.52	-29.48	74	52.04	39.03	10.36	56.91	100	0	P	H
													H
													H
													H
		11571	45.77	-28.23	74	53.29	39.03	10.36	56.91	100	0	P	V
													V
													V
													V
802.11a CH 165 5825MHz		11649	46.4	-27.6	74	53.86	39.06	10.41	56.93	100	0	P	H
													H
													H
													H
		11649	46.51	-27.49	74	53.97	39.06	10.41	56.93	100	0	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 149 5745MHz	*	5747	103.54	-	-	92.68	35.79	7.18	32.11	105	119	P	H
	*	5747	92.25	-	-	81.39	35.79	7.18	32.11	105	119	A	H
													H
													H
	*	5743	104.17	-	-	93.31	35.79	7.18	32.11	105	91	P	V
	*	5743	92.41	-	-	81.55	35.79	7.18	32.11	105	91	A	V
													V
													V
802.11n HT20 CH 157 5785MHz	*	5784	104.6	-	-	93.68	35.82	7.2	32.1	104	119	P	H
	*	5784	93.48	-	-	82.56	35.82	7.2	32.1	104	119	A	H
													H
													H
	*	5784	104.99	-	-	94.07	35.82	7.2	32.1	104	88	P	V
	*	5784	93.43	-	-	82.51	35.82	7.2	32.1	104	88	A	V
													V
													V
802.11n HT20 CH 165 5825MHz	*	5827	103.3	-	-	92.29	35.86	7.24	32.09	103	119	P	H
	*	5827	92.21	-	-	81.2	35.86	7.24	32.09	103	119	A	H
													H
													H
	*	5824	103.25	-	-	92.24	35.86	7.24	32.09	158	88	P	V
	*	5824	92.27	-	-	81.26	35.86	7.24	32.09	158	88	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 149 5745MHz		11490	45.71	-28.29	74	53.3	38.99	10.33	56.91	100	0	P	H
													H
													H
													H
		11490	46.76	-27.24	74	54.35	38.99	10.33	56.91	100	0	P	V
													V
													V
													V
802.11n HT20 CH 157 5785MHz		11571	44.9	-29.1	74	52.42	39.03	10.36	56.91	100	0	P	H
													H
													H
													H
		11571	45.23	-28.77	74	52.75	39.03	10.36	56.91	100	0	P	V
													V
													V
													V
802.11n HT20 CH 165 5825MHz		11649	46.21	-27.79	74	53.67	39.06	10.41	56.93	100	0	P	H
													H
													H
													H
		11649	47.07	-26.93	74	54.53	39.06	10.41	56.93	100	0	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 151 5755MHz	*	5757	102.14	-	-	91.26	35.81	7.18	32.11	105	119	P	H
	*	5757	92.22	-	-	81.34	35.81	7.18	32.11	105	119	A	H
													H
													H
	*	5757	102.03	-	-	91.15	35.81	7.18	32.11	184	91	P	V
	*	5757	92.45	-	-	81.57	35.81	7.18	32.11	184	91	A	V
													V
													V
802.11n HT40 CH 159 5795MHz	*	5793	101.88	-	-	90.93	35.83	7.22	32.1	103	120	P	H
	*	5793	92.2	-	-	81.25	35.83	7.22	32.1	103	120	A	H
													H
													H
	*	5793	101.43	-	-	90.48	35.83	7.22	32.1	121	87	P	V
	*	5793	91.46	-	-	80.51	35.83	7.22	32.1	121	87	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 151 5755MHz		11510	43.97	-30.03	74	51.53	39	10.34	56.9	100	0	P	H
													H
													H
													H
		11512	45.74	-28.26	74	53.3	39	10.34	56.9	100	0	P	V
													V
													V
													V
802.11n HT40 CH 159 5795MHz		11590	45.02	-28.98	74	52.53	39.03	10.38	56.92	100	0	P	H
													H
													H
													H
		11590	46.21	-27.79	74	53.72	39.03	10.38	56.92	100	0	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 155 5775MHz	*	5777	98.82	-	-	87.9	35.82	7.2	32.1	103	119	P	H
	*	5777	88.86	-	-	77.94	35.82	7.2	32.1	103	119	A	H
													H
													H
													H
													H
													H
													H
	*	5777	98.24	-	-	87.32	35.82	7.2	32.1	195	95	P	V
	*	5777	88.78	-	-	77.86	35.82	7.2	32.1	195	95	A	V
													V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15C Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 155 5775MHz		11552	45.55	-28.45	74	53.08	39.02	10.36	56.91	100	0	P	H
													H
													H
													H
		11550	44.4	-29.6	74	51.93	39.02	10.36	56.91	100	0	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

5GHz WIFI 802.11a (LF @ 3m)

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
5GHz 802.11a LF		149.07	20.2	-23.3	43.5	39.77	10.94	1.27	31.78			P	H
		190.65	24.51	-18.99	43.5	46.05	8.8	1.44	31.78			P	H
		235.74	21.36	-24.64	46	40.71	10.82	1.6	31.77			P	H
		399.4	32.69	-13.31	46	46.57	15.9	2.02	31.8	100	299	P	H
		664	20.68	-25.32	46	29.83	20.3	2.59	32.04			P	H
		826.4	27.18	-18.82	46	33.3	22.79	2.88	31.79			P	H
													H
													H
													H
													H
													H
													H
		53.76	23.34	-16.66	40	47.15	7.16	0.83	31.8			P	V
		149.61	23.42	-20.08	43.5	42.99	10.94	1.27	31.78			P	V
		202.8	19.69	-23.81	43.5	40.86	9.13	1.48	31.78			P	V
		589.1	35.9	-10.1	46	45.92	19.6	2.4	32.02	123	39	P	V
		797	26.06	-19.94	46	33.15	22	2.83	31.92			P	V
		923.7	25.66	-20.34	46	29.85	24.02	3.03	31.24			P	V
													V
													V
													V
													V
													V
													V
													V
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.
!	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	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		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. 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”.



Band 4 5725~5850MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 165 5825MHz	*	5823	97.85	-	-	86.84	35.86	7.24	32.09	100	286	P	H
	*	5823	88.32	-	-	77.31	35.86	7.24	32.09	100	286	A	H
													H
													H
													H
													H
	*	5825	99.61	-	-	88.6	35.86	7.24	32.09	101	271	P	V
	*	5825	89.97	-	-	78.96	35.86	7.24	32.09	101	271	A	V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 165 5825MHz		11660	50.78	-23.22	74	58.24	39.06	10.41	56.93	100	0	P	H
													H
													H
													H
		11645	50.72	-23.28	74	58.18	39.06	10.41	56.93	100	0	P	V
													V
													V
													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	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		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. 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”.



Band 4 5725~5850MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

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)
802.11n HT20 CH 149 5745MHz	*	5743	101.07	-	-	90.21	35.79	7.18	32.11	109	152	P	H
	*	5743	89.9	-	-	79.04	35.79	7.18	32.11	109	152	A	H
													H
													H
	*	5743	100.79	-	-	89.93	35.79	7.18	32.11	133	192	P	V
	*	5743	89.02	-	-	78.16	35.79	7.18	32.11	133	192	A	V
													V
													V
802.11n HT20 CH 157 5785MHz	*	5783	102.05	-	-	91.13	35.82	7.2	32.1	108	108	P	H
	*	5783	90.95	-	-	80.03	35.82	7.2	32.1	108	108	A	H
													H
													H
	*	5787	101.38	-	-	90.45	35.83	7.2	32.1	155	181	P	V
	*	5787	90.34	-	-	79.41	35.83	7.2	32.1	155	181	A	V
													V
													V
802.11n HT20 CH 165 5825MHz	*	5824	101.23	-	-	90.22	35.86	7.24	32.09	101	18	P	H
	*	5824	90.11	-	-	79.1	35.86	7.24	32.09	101	18	A	H
													H
													H
	*	5823	101.01	-	-	90	35.86	7.24	32.09	155	355	P	V
	*	5823	89.92	-	-	78.91	35.86	7.24	32.09	155	355	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

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)
802.11n HT20 CH 149 5745MHz		11492	48.97	-25.03	74	56.56	38.99	10.33	56.91	100	0	P	H
													H
													H
													H
		11492	49.53	-24.47	74	57.12	38.99	10.33	56.91	100	0	P	V
													V
													V
													V
802.11n HT20 CH 157 5785MHz		11572	51.14	-22.86	74	58.66	39.03	10.36	56.91	100	0	P	H
													H
													H
													H
		11572	52.59	-21.41	74	60.11	39.03	10.36	56.91	100	0	P	V
													V
													V
													V
802.11n HT20 CH 165 5825MHz		11649	49.08	-24.92	74	56.54	39.06	10.41	56.93	100	0	P	H
													H
													H
													H
		11649	50.7	-23.3	74	58.16	39.06	10.41	56.93	100	0	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

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)
802.11n HT40 CH 151 5755MHz	*	5757	97.57	-	-	86.67	35.81	7.2	32.11	107	162	P	H
	*	5757	87.72	-	-	76.84	35.81	7.18	32.11	107	162	A	H
													H
													H
	*	5757	95.93	-	-	85.05	35.81	7.18	32.11	158	190	P	V
	*	5757	86.13	-	-	75.25	35.81	7.18	32.11	158	190	A	V
													V
													V
802.11n HT40 CH 159 5795MHz	*	5797	98.23	-	-	87.28	35.83	7.22	32.1	100	55	P	H
	*	5797	87.52	-	-	76.57	35.83	7.22	32.1	100	55	A	H
													H
													H
	*	5793	96.36	-	-	85.41	35.83	7.22	32.1	118	194	P	V
	*	5793	86.08	-	-	75.13	35.83	7.22	32.1	118	194	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

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)
802.11n HT40 CH 151 5755MHz		11510	46.03	-27.97	74	53.59	39	10.34	56.9	100	0	P	H
													H
													H
													H
		11510	46.6	-27.4	74	54.16	39	10.34	56.9	100	0	P	V
													V
													V
													V
802.11n HT40 CH 159 5795MHz		11590	44.93	-29.07	74	52.44	39.03	10.38	56.92	100	0	P	H
													H
													H
													H
		11590	44.48	-29.52	74	51.99	39.03	10.38	56.92	100	0	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

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)
802.11ac VHT80 CH 155 5775MHz	*	5777	94.43	-	-	82.51	35.82	7.2	32.1	105	111	P	H
	*	5777	84.11	-	-	73.19	35.82	7.2	32.1	105	111	A	H
													H
													H
													H
													H
													H
													H
	*	5777	93.47	-	-	82.55	35.82	7.2	32.1	130	345	P	V
	*	5777	83.51	-	-	72.59	35.82	7.2	32.1	130	345	A	V
													V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

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)
802.11ac VHT80 CH 155 5775MHz		11550	44.87	-29.13	74	52.4	39.02	10.36	56.91	100	0	P	H
													H
													H
													H
		11550	44.63	-29.37	74	52.16	39.02	10.36	56.91	100	0	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

5GHz WIFI 802.11n HT20 (LF @ 3m)

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)
5GHz 802.11n HT20 LF		33.78	26.82	-13.18	40	41.09	16.82	0.72	31.81	118	25	P	H
		113.43	11.07	-32.43	43.5	30.19	11.5	1.16	31.78			P	H
		174.18	25.88	-17.62	43.5	46.98	9.3	1.38	31.78			P	H
		600.3	31.28	-14.72	46	41.18	19.7	2.44	32.04			P	H
		741.7	21.76	-24.24	46	28.82	22.2	2.73	31.99			P	H
		797	30.02	-15.98	46	37.11	22	2.83	31.92			P	H
													H
													H
													H
													H
													H
													H
		64.02	31.35	-8.65	40	56.27	5.98	0.89	31.79			P	V
		113.43	20.3	-23.2	43.5	39.42	11.5	1.16	31.78			P	V
		137.19	19.24	-24.26	43.5	38.26	11.5	1.26	31.78			P	V
		399.4	23.12	-22.88	46	37	15.9	2.02	31.8			P	V
		596.1	37.77	-8.23	46	47.71	19.66	2.43	32.03	169	71	P	V
		785.1	21.05	-24.95	46	28.13	22.05	2.81	31.94			P	V
													V
													V
													V
													V
													V
													V
													V
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.
!	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	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		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. 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”.