



Appendix B. Radiated Spurious Emission

Test Engineer :	Luke Chang, Ricky Su, and Nick Yu	Temperature :	20~24°C
		Relative Humidity :	50~54%

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		5705.48	51.96	-22.04	74	42.22	32.29	11.61	34.16	106	110	P	H
		5724.52	54.69	-23.61	78.3	44.93	32.31	11.61	34.16	106	110	P	H
		5714.84	40.36	-13.64	54	30.62	32.29	11.61	34.16	106	110	A	H
	*	5743	101.09	-	-	91.27	32.34	11.64	34.16	106	110	P	H
	*	5743	90.82	-	-	81	32.34	11.64	34.16	106	110	A	H
													H
													H
													H
		5711.24	51.2	-22.8	74	41.46	32.29	11.61	34.16	377	85	P	V
		5724.68	53.31	-24.99	78.3	43.55	32.31	11.61	34.16	377	85	P	V
		5710.6	39.45	-14.55	54	29.71	32.29	11.61	34.16	377	85	A	V
	*	5747	99.23	-	-	89.41	32.34	11.64	34.16	377	85	P	V
	*	5747	89.15	-	-	79.33	32.34	11.64	34.16	377	85	A	V
													V
													V
													V



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 157 5785MHz		5695.08	51.53	-22.47	74	41.81	32.27	11.61	34.16	139	113	P	H
		5716.68	50.58	-27.72	78.3	40.84	32.29	11.61	34.16	139	113	P	H
		5699	38.62	-15.38	54	28.9	32.27	11.61	34.16	139	113	A	H
	*	5783	100.2	-	-	90.31	32.39	11.67	34.17	139	113	P	H
	*	5783	90.19	-	-	80.3	32.39	11.67	34.17	139	113	A	H
		5857.76	50.04	-28.26	78.3	39.95	32.51	11.76	34.18	139	113	P	H
		5874.64	51.78	-22.22	74	41.67	32.53	11.76	34.18	139	113	P	H
		5889.36	38.84	-15.16	54	28.65	32.56	11.81	34.18	139	113	A	H
		5694.04	50.45	-23.55	74	40.73	32.27	11.61	34.16	390	89	P	V
		5721.16	51.85	-26.45	78.3	42.09	32.31	11.61	34.16	390	89	P	V
		5712.04	38.58	-15.42	54	28.84	32.29	11.61	34.16	390	89	A	V
	*	5783	98.41	-	-	88.52	32.39	11.67	34.17	390	89	P	V
	*	5783	88.32	-	-	78.43	32.39	11.67	34.17	390	89	A	V
		5850.16	49.95	-28.35	78.3	39.88	32.48	11.76	34.17	390	89	P	V
		5881.44	51.18	-22.82	74	41.07	32.53	11.76	34.18	390	89	P	V
		5887.6	38.67	-15.33	54	28.48	32.56	11.81	34.18	390	89	A	V



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 165 5825MHz	*	5825	99.5	-	-	89.49	32.46	11.72	34.17	125	112	P	H
	*	5825	89.55	-	-	79.54	32.46	11.72	34.17	125	112	A	H
		5854.32	51.21	-27.09	78.3	41.12	32.51	11.76	34.18	125	112	P	H
		5864.8	51	-23	74	40.91	32.51	11.76	34.18	125	112	P	H
		5881.28	39.01	-14.99	54	28.9	32.53	11.76	34.18	125	112	A	H
													H
													H
													H
	*	5823	98.34	-	-	88.33	32.46	11.72	34.17	368	92	P	V
	*	5823	88.11	-	-	78.1	32.46	11.72	34.17	368	92	A	V
		5853.52	50.97	-27.33	78.3	40.88	32.51	11.76	34.18	368	92	P	V
		5874.64	51.25	-22.75	74	41.14	32.53	11.76	34.18	368	92	P	V
		5860.4	38.66	-15.34	54	28.57	32.51	11.76	34.18	368	92	A	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 802.11a (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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 149 5745MHz		11490	46.88	-27.12	74	47.22	40.11	17.73	58.18	100	0	P	H
		17235	49.31	-24.69	74	44.55	41.65	20.8	57.69	100	0	P	H
													H
													H
		11490	49.65	-24.35	74	49.99	40.11	17.73	58.18	100	0	P	V
		17235	49.69	-24.31	74	44.93	41.65	20.8	57.69	100	0	P	V
													V
													V
802.11a CH 157 5785MHz		11570	45.59	-28.41	74	46.02	39.95	17.83	58.21	100	0	P	H
		17355	47.75	-26.25	74	43.05	42.02	20.77	58.09	100	0	P	H
													H
													H
		11570	49.47	-24.53	74	49.9	39.95	17.83	58.21	100	0	P	V
		17355	47.88	-26.12	74	43.18	42.02	20.77	58.09	100	0	P	V
													V
													V
802.11a CH 165 5825MHz		11650	46.3	-27.7	74	46.81	39.8	17.92	58.23	100	0	P	H
		17475	48.52	-25.48	74	43.89	42.39	20.73	58.49	100	0	P	H
													H
													H
		11650	50.63	-23.37	74	51.14	39.8	17.92	58.23	100	0	P	V
		17475	48.97	-25.03	74	44.34	42.39	20.73	58.49	100	0	P	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 Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 149 5745MHz		5707.56	52.14	-21.86	74	42.4	32.29	11.61	34.16	129	112	P	H
		5724.44	54.88	-23.42	78.3	45.12	32.31	11.61	34.16	129	112	P	H
		5713.88	40.51	-13.49	54	30.77	32.29	11.61	34.16	129	112	A	H
	*	5747	100.62	-	-	90.8	32.34	11.64	34.16	129	112	P	H
	*	5747	90.32	-	-	80.5	32.34	11.64	34.16	129	112	A	H
													H
													H
													H
		5691.72	51.24	-22.76	74	41.52	32.27	11.61	34.16	375	84	P	V
		5723.48	53	-25.3	78.3	43.24	32.31	11.61	34.16	375	84	P	V
		5714.52	39.44	-14.56	54	29.7	32.29	11.61	34.16	375	84	A	V
	*	5747	98.33	-	-	88.51	32.34	11.64	34.16	375	84	P	V
	*	5747	88.54	-	-	78.72	32.34	11.64	34.16	375	84	A	V
													V
													V
													V



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 157 5785MHz		5705.56	51.56	-22.44	74	41.82	32.29	11.61	34.16	122	112	P	H
		5716.12	50.71	-27.59	78.3	40.97	32.29	11.61	34.16	122	112	P	H
		5690.6	38.56	-15.44	54	28.84	32.27	11.61	34.16	122	112	A	H
	*	5783	100.04	-	-	90.15	32.39	11.67	34.17	122	112	P	H
	*	5783	89.9	-	-	80.01	32.39	11.67	34.17	122	112	A	H
		5851.76	50.84	-27.46	78.3	40.77	32.48	11.76	34.17	122	112	P	H
		5873.12	51.06	-22.94	74	40.95	32.53	11.76	34.18	122	112	P	H
		5879.76	38.62	-15.38	54	28.51	32.53	11.76	34.18	122	112	A	H
		5710.76	50.97	-23.03	74	41.23	32.29	11.61	34.16	390	90	P	V
		5716.2	50.43	-27.87	78.3	40.69	32.29	11.61	34.16	390	90	P	V
		5695.24	38.44	-15.56	54	28.72	32.27	11.61	34.16	390	90	A	V
	*	5782	98.08	-	-	88.19	32.39	11.67	34.17	390	90	P	V
	*	5782	87.9	-	-	78.01	32.39	11.67	34.17	390	90	A	V
		5857.2	50.43	-27.87	78.3	40.34	32.51	11.76	34.18	390	90	P	V
		5881.44	50.84	-23.16	74	40.73	32.53	11.76	34.18	390	90	P	V
		5885.2	38.67	-15.33	54	28.56	32.53	11.76	34.18	390	90	A	V



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 165 5825MHz	*	5823	99.11	-	-	89.1	32.46	11.72	34.17	136	113	P	H
	*	5823	89.02	-	-	79.01	32.46	11.72	34.17	136	113	A	H
		5859.28	51.05	-27.25	78.3	40.96	32.51	11.76	34.18	136	113	P	H
		5862.16	51.16	-22.84	74	41.07	32.51	11.76	34.18	136	113	P	H
		5861.84	38.93	-15.07	54	28.84	32.51	11.76	34.18	136	113	A	H
													H
													H
													H
	*	5824	97.9	-	-	87.89	32.46	11.72	34.17	368	93	P	V
	*	5824	87.7	-	-	77.69	32.46	11.72	34.17	368	93	A	V
		5856.32	51.68	-26.62	78.3	41.59	32.51	11.76	34.18	368	93	P	V
		5878.16	51.41	-22.59	74	41.3	32.53	11.76	34.18	368	93	P	V
		5862.56	38.71	-15.29	54	28.62	32.51	11.76	34.18	368	93	A	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 Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 149 5745MHz		11490	46.47	-27.53	74	46.81	40.11	17.73	58.18	100	0	P	H
		17235	50.1	-23.9	74	45.34	41.65	20.8	57.69	100	0	P	H
													H
													H
		11490	49.73	-24.27	74	50.07	40.11	17.73	58.18	100	0	P	V
		17235	49.85	-24.15	74	45.09	41.65	20.8	57.69	100	0	P	V
													V
													V
802.11n HT20 CH 157 5785MHz		11570	46.24	-27.76	74	46.67	39.95	17.83	58.21	100	0	P	H
		17355	48.08	-25.92	74	43.38	42.02	20.77	58.09	100	0	P	H
													H
													H
		11570	50.76	-23.24	74	51.19	39.95	17.83	58.21	100	0	P	V
		17355	47.78	-26.22	74	43.08	42.02	20.77	58.09	100	0	P	V
													V
													V
802.11n HT20 CH 165 5825MHz		11650	46.25	-27.75	74	46.76	39.8	17.92	58.23	100	0	P	H
		17475	48.29	-25.71	74	43.66	42.39	20.73	58.49	100	0	P	H
													H
													H
		11650	50.86	-23.14	74	51.37	39.8	17.92	58.23	100	0	P	V
		17475	48.17	-25.83	74	43.54	42.39	20.73	58.49	100	0	P	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 Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 151 5755MHz		5702.76	58.45	-15.55	74	48.71	32.29	11.61	34.16	138	111	P	H
		5724.84	59.1	-19.2	78.3	49.34	32.31	11.61	34.16	138	111	P	H
		5714.6	43.86	-10.14	54	34.12	32.29	11.61	34.16	138	111	A	H
	*	5753	97.53	-	-	87.7	32.36	11.64	34.17	138	111	P	H
	*	5753	87.9	-	-	78.07	32.36	11.64	34.17	138	111	A	H
		5852.32	50.28	-28.02	78.3	40.21	32.48	11.76	34.17	138	111	P	H
		5880.32	51	-23	74	40.89	32.53	11.76	34.18	138	111	P	H
		5880.48	39.28	-14.72	54	29.17	32.53	11.76	34.18	138	111	A	H
		5712.68	56.56	-17.44	74	46.82	32.29	11.61	34.16	358	91	P	V
		5725	58.83	-19.47	78.3	49.07	32.31	11.61	34.16	358	91	P	V
		5715	42.42	-11.58	54	32.68	32.29	11.61	34.16	358	91	A	V
	*	5753	96.2	-	-	86.37	32.36	11.64	34.17	358	91	P	V
	*	5753	86.45	-	-	76.62	32.36	11.64	34.17	358	91	A	V
		5859.36	50.01	-28.29	78.3	39.92	32.51	11.76	34.18	358	91	P	V
		5885.92	50.98	-23.02	74	40.82	32.53	11.81	34.18	358	91	P	V
		5887.68	39.53	-14.47	54	29.34	32.56	11.81	34.18	358	91	A	V



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 159 5795MHz		5706.52	52.37	-21.63	74	42.63	32.29	11.61	34.16	130	111	P	H
		5716.44	53.27	-25.03	78.3	43.53	32.29	11.61	34.16	130	111	P	H
		5704.36	39.37	-14.63	54	29.63	32.29	11.61	34.16	130	111	A	H
	*	5797	97.16	-	-	87.25	32.41	11.67	34.17	130	111	P	H
	*	5797	86.92	-	-	77.01	32.41	11.67	34.17	130	111	A	H
		5858.08	53.58	-24.72	78.3	43.49	32.51	11.76	34.18	130	111	P	H
		5869.84	51.97	-22.03	74	41.88	32.51	11.76	34.18	130	111	P	H
		5867.68	39.45	-14.55	54	29.36	32.51	11.76	34.18	130	111	A	H
		5699.72	50.8	-23.2	74	41.08	32.27	11.61	34.16	389	87	P	V
		5724.04	50.82	-27.48	78.3	41.06	32.31	11.61	34.16	389	87	P	V
		5713.16	39.22	-14.78	54	29.48	32.29	11.61	34.16	389	87	A	V
	*	5797	95.44	-	-	85.53	32.41	11.67	34.17	389	87	P	V
	*	5797	85.67	-	-	75.76	32.41	11.67	34.17	389	87	A	V
		5851.76	50.5	-27.8	78.3	40.43	32.48	11.76	34.17	389	87	P	V
		5889.52	51.43	-22.57	74	41.24	32.56	11.81	34.18	389	87	P	V
		5879.68	39.47	-14.53	54	29.36	32.53	11.76	34.18	389	87	A	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 Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 151 5755MHz		11510	46.73	-27.27	74	47.1	40.1	17.73	58.2	100	0	P	H
		17265	50.98	-23.02	74	46.25	41.75	20.79	57.81	100	0	P	H
													H
													H
		11510	49.04	-24.96	74	49.41	40.1	17.73	58.2	100	0	P	V
		17265	49.7	-24.3	74	44.97	41.75	20.79	57.81	100	0	P	V
													V
													V
802.11n HT40 CH 159 5795MHz		11590	46.53	-27.47	74	47.01	39.91	17.83	58.22	100	0	P	H
		17388	47.57	-26.43	74	42.88	42.13	20.76	58.2	100	0	P	H
													H
													H
		11590	48.13	-25.87	74	48.61	39.91	17.83	58.22	100	0	P	V
		17385	48.2	-25.8	74	43.51	42.13	20.76	58.2	100	0	P	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 Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 155 5775MHz		5712.92	55.98	-18.02	74	46.24	32.29	11.61	34.16	119	111	P	H
		5724.6	57.87	-20.43	78.3	48.11	32.31	11.61	34.16	119	111	P	H
		5712.2	44.21	-9.79	54	34.47	32.29	11.61	34.16	119	111	A	H
	*	5773	93.06	-	-	83.17	32.39	11.67	34.17	119	111	P	H
	*	5773	82.7	-	-	72.81	32.39	11.67	34.17	119	111	A	H
		5850.88	50.73	-27.57	78.3	40.66	32.48	11.76	34.17	119	111	P	H
		5863.36	51.36	-22.64	74	41.27	32.51	11.76	34.18	119	111	P	H
		5871.04	39.62	-14.38	54	29.51	32.53	11.76	34.18	119	111	A	H
		5704.92	54.1	-19.9	74	44.36	32.29	11.61	34.16	377	88	P	V
		5722.12	55.54	-22.76	78.3	45.78	32.31	11.61	34.16	377	88	P	V
		5714.84	42.54	-11.46	54	32.8	32.29	11.61	34.16	377	88	A	V
	*	5773	91.1	-	-	81.21	32.39	11.67	34.17	377	88	P	V
	*	5773	81.11	-	-	71.22	32.39	11.67	34.17	377	88	A	V
		5855.36	51.04	-27.26	78.3	40.95	32.51	11.76	34.18	377	88	P	V
		5868.4	51.45	-22.55	74	41.36	32.51	11.76	34.18	377	88	P	V
		5867.28	39.46	-14.54	54	29.37	32.51	11.76	34.18	377	88	A	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 Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 155 5775MHz		11550	45.84	-28.16	74	46.28	39.99	17.78	58.21	100	0	P	H
		17325	47.63	-26.37	74	42.93	41.91	20.77	57.98	100	0	P	H
													H
													H
		11550	46.52	-27.48	74	46.96	39.99	17.78	58.21	100	0	P	V
		17325	48.25	-25.75	74	43.55	41.91	20.77	57.98	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

5GHz WIFI 802.11n HT40 (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 802.11n HT40 LF		64.83	23.3	-16.7	40	46.26	6.1	1.39	30.45			P	H
		157.71	30.74	-12.76	43.5	48.45	10.75	1.89	30.35	125	0	P	H
		215.76	26.99	-16.51	43.5	45.86	9.2	2.21	30.28			P	H
		305.6	30.25	-15.75	46	44.6	13.23	2.56	30.14			P	H
		449.1	26.95	-19.05	46	36.8	17.04	3.03	29.92			P	H
		521.2	28.92	-17.08	46	37.33	18.06	3.31	29.78			P	H
													H
													H
													H
													H
													H
													H
		85.35	36.82	-3.18	40	57.76	8.1	1.39	30.43	100	34	P	V
		112.35	32.51	-10.99	43.5	50.11	11.16	1.64	30.4			P	V
		209.55	37.34	-6.16	43.5	56.38	9.16	2.09	30.29			P	V
		321	39.88	-6.12	46	54	13.45	2.56	30.13			P	V
		496	29.08	-16.92	46	37.79	17.8	3.31	29.82			P	V
		703.9	28.2	-17.8	46	33.23	20.6	3.88	29.51			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		(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”.