# Appendix B. Radiated Spurious Emission

## 15C 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.			2010.	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
4TX		(MHz)	( dBµV/m )	(dB)	( dBµV/m )	(dBµV)	( dB/m )	(dB)	(dB)	( cm )	( deg )		(H/V)
		2385.6	61.17	-12.83	74	55.58	32.18	7.75	34.34	285	264	Р	Н
		2389.29	49.17	-4.83	54	43.57	32.18	7.75	34.33	285	264	Α	Н
	*	2412	114.83	-	-	109.18	32.2	7.75	34.3	285	264	Р	Н
	*	2412	110.7	-	-	105.05	32.2	7.75	34.3	285	264	Α	Н
802.11b													Н
CH 01													Н
2412MHz		2388.57	59.95	-14.05	74	54.35	32.18	7.75	34.33	359	4	Р	V
2412111112		2389	49.08	-4.92	54	43.48	32.18	7.75	34.33	359	4	Α	V
	*	2412	115.23	-	-	109.58	32.2	7.75	34.3	359	4	Р	V
	*	2412	111.52	-	-	105.87	32.2	7.75	34.3	359	4	Α	V
													V
													V
		2366.79	58.93	-15.07	74	53.49	32.13	7.68	34.37	356	258	Р	Н
		2388.66	45.7	-8.3	54	40.1	32.18	7.75	34.33	356	258	Α	Н
	*	2437	117.82	-	-	112	32.24	7.83	34.25	356	258	Р	Н
	*	2437	114.25	-	-	108.43	32.24	7.83	34.25	356	258	Α	Н
000 445		2484.44	63.23	-10.77	74	57.22	32.28	7.91	34.18	356	258	Р	Н
802.11b CH 06		2484.92	50	-4	54	43.99	32.28	7.91	34.18	356	258	Α	Н
2437MHz		2325.21	59.37	-14.63	74	54.12	32.09	7.6	34.44	376	234	Р	V
		2388.57	45.17	-8.83	54	39.57	32.18	7.75	34.33	376	234	Α	V
	*	2437	115.64	-	-	109.82	32.24	7.83	34.25	376	234	Р	V
	*	2437	111.83	-	-	106.01	32.24	7.83	34.25	376	234	Α	V
		2488.44	63.17	-10.83	74	57.13	32.3	7.91	34.17	376	234	Р	V
		2485	48.29	-5.71	54	42.27	32.28	7.91	34.17	376	234	Α	V

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	_	1	1	_		1		ı	1	ı		1	
	*	2462	116.62	-	1	110.66	32.26	7.91	34.21	346	250	Р	Н
	*	2462	112.96	-	1	107	32.26	7.91	34.21	346	250	Α	Н
		2484.48	64.53	-9.47	74	58.52	32.28	7.91	34.18	346	250	Р	Н
		2484.6	53.87	-0.13	54	47.86	32.28	7.91	34.18	346	250	Р	Н
000 441													Н
802.11b CH 11													Н
2462MHz	*	2462	114.54	-	1	108.58	32.26	7.91	34.21	395	353	Р	V
2402111112	*	2462	110.75	-	1	104.79	32.26	7.91	34.21	395	353	Α	V
		2483.88	62.39	-11.61	74	56.38	32.28	7.91	34.18	395	353	Р	V
		2484.8	51.76	-2.24	54	45.75	32.28	7.91	34.18	395	353	Α	V
													V
													V
Remark	1. N	lo other spurious	s found.										
Remark	2. A	all results are PA	SS against F	Peak and	Average lim	it line.							

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#### 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.	
4TX		(MHz)	( dBµV/m )	(dB)	( dBµV/m )	(dBµV)	( dB/m )	( dB )	(dB)	( cm )	( deg )	(P/A)	(H/V)
		4824	54.02	-19.98	74	68.24	34.26	11.16	59.64	317	342	Р	Н
		4824	52.49	-1.51	54	66.71	34.26	11.16	59.64	317	342	Α	Н
802.11b													Н
													Н
CH 01 2412MHz		4824	55.04	-18.96	74	69.26	34.26	11.16	59.64	349	264	Р	V
24   ZIVINZ		4824	52.27	-1.73	54	66.49	34.26	11.16	59.64	349	264	Α	V
													V
													V
		4872	44.39	-29.61	74	58.45	34.3	11.21	59.57	100	0	Р	Н
		7308	58.23	-15.77	74	66.02	35.6	15.08	58.47	200	249	Р	Н
		7308	52.77	-1.23	54	60.56	35.6	15.08	58.47	200	249	Α	Н
802.11b													Н
CH 06 2437MHz		4872	54.49	-19.51	74	68.55	34.3	11.21	59.57	395	272	Р	V
2437 WII 12		4872	52.37	-1.63	54	66.43	34.3	11.21	59.57	395	272	Α	V
		7308	53.25	-20.75	74	61.04	35.6	15.08	58.47	395	262	Р	V
		7308	47.12	-6.88	54	54.91	35.6	15.08	58.47	395	262	Α	V
		4926	52.37	-21.63	74	66.26	34.34	11.27	59.5	300	0	Р	Н
		4926	49.9	-4.1	54	63.79	34.34	11.27	59.5	300	0	Α	Н
		7386	54.8	-19.2	74	62.64	35.6	15.14	58.58	200	252	Р	Н
802.11b		7386	48.33	-5.67	54	56.17	35.6	15.14	58.58	200	252	Α	Н
CH 11 2462MHz		4926	54.41	-19.59	74	68.3	34.34	11.27	59.5	395	273	Р	V
		4926	52.75	-1.25	54	66.64	34.34	11.27	59.5	395	273	Α	V
		7386	43.77	-30.23	74	51.61	35.6	15.14	58.58	100	0	Р	V
													V
Remark		o other spurious		eak and	l Average lim	it line.			1	l	ı		1

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#### WIFI 802.11g (Band Edge @ 3m)

WIFI	Note	Erogueney	Level		Limit		,	Cabla	Drooms	Ant	Table	Peak	Del
	Note	Frequency	Levei	Over		Read	Antenna	Cable	Preamp	Ant	Table Pos		POI.
Ant. 4TX		( MHz )	( dBµV/m )	Limit (dB)	Line ( dBµV/m )	Level ( dBµV )	Factor ( dB/m )	(dB)	Factor (dB)	(cm)		Avg. (P/A)	(H/V)
		2388.93	68.98	-5.02	74	63.38	32.18	7.75	34.33	290	261	Р	Н
		2389.74	53	-1	54	47.4	32.18	7.75	34.33	290	261	Α	Н
	*	2412	115.54	-	-	109.89	32.2	7.75	34.3	290	261	Р	Н
	*	2412	104.04	-	-	98.39	32.2	7.75	34.3	290	261	Α	Н
802.11g													Н
CH 01													Н
2412MHz		2389.92	67.16	-6.84	74	61.56	32.18	7.75	34.33	371	234	Р	V
2412111112		2390	52.61	-1.39	54	47.01	32.18	7.75	34.33	371	234	Α	V
	*	2412	116.44	-	-	110.79	32.2	7.75	34.3	371	234	Р	V
	*	2412	104.17	ı	ı	98.52	32.2	7.75	34.3	371	234	Α	V
													V
													٧
		2387.31	61.89	-12.11	74	56.3	32.18	7.75	34.34	309	264	Р	Н
		2389.11	48.34	-5.66	54	42.74	32.18	7.75	34.33	309	264	Α	Н
	*	2437	117.35	ı	1	111.53	32.24	7.83	34.25	309	264	Р	Н
	*	2437	105.7	ı	ı	99.88	32.24	7.83	34.25	309	264	Α	Н
//		2483.96	65.91	-8.09	74	59.9	32.28	7.91	34.18	309	264	Р	Н
802.11g CH 06		2486	51.92	-2.08	54	45.9	32.28	7.91	34.17	309	264	Α	Н
2437MHz		2382.27	58.55	-15.45	74	52.99	32.16	7.75	34.35	377	228	Р	V
270/1911/12		2386.5	44.76	-9.24	54	39.17	32.18	7.75	34.34	377	228	Α	V
	*	2437	114.6	ı	-	108.78	32.24	7.83	34.25	377	228	Р	V
	*	2437	102.75	-	-	96.93	32.24	7.83	34.25	377	228	Α	V
	_	2484.84	64.08	-9.92	74	58.07	32.28	7.91	34.18	377	228	Р	V
		2484.52	50.18	-3.82	54	44.17	32.28	7.91	34.18	377	228	Α	V

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	*	2462	117.14	-	-	111.18	32.26	7.91	34.21	353	255	Р	Н
	*	2462	104.79	-	-	98.83	32.26	7.91	34.21	353	255	Α	Н
		2487.56	68.56	-5.44	74	62.52	32.3	7.91	34.17	353	255	Р	Н
		2486.44	50.57	-3.43	54	44.55	32.28	7.91	34.17	353	255	Α	Н
													Н
802.11g CH 11													Н
2462MHz	*	2462	116.16	-	1	110.2	32.26	7.91	34.21	355	233	Р	V
2402111112	*	2462	104.63	-	1	98.67	32.26	7.91	34.21	355	233	Α	V
		2484.56	67.24	-6.76	74	61.23	32.28	7.91	34.18	355	233	Р	V
		2483.52	49.81	-4.19	54	43.8	32.28	7.91	34.18	355	233	Α	V
													V
													V
Remark	1. N	o other spurious	s found.										
	2. A	ll results are PA	SS against F	Peak and	Average lim	it line.							

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# 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.	
4TX		(MHz)	( dBµV/m )	(dB)	( dBµV/m )	(dBµV)	( dB/m )	( dB )	(dB)	( cm )	( deg )	(P/A)	(H/V)
		4824	64.33	-9.67	74	78.55	34.26	11.16	59.64	395	341	Р	Н
		4824	49.06	-4.94	54	63.28	34.26	11.16	59.64	395	341	Α	Н
002 44 ~													Н
802.11g													Н
CH 01 2412MHz		4824	66.87	-7.13	74	81.09	34.26	11.16	59.64	395	272	Р	٧
24   ZIVII   Z		4824	51.36	-2.64	54	65.58	34.26	11.16	59.64	395	272	Α	V
													٧
													٧
		4874	60.05	-13.95	74	74.11	34.3	11.21	59.57	395	148	Р	Н
		4874	44.92	-9.08	54	58.98	34.3	11.21	59.57	395	148	Α	Н
		7308	57.86	-16.14	74	65.65	35.6	15.08	58.47	300	293	Р	Н
802.11g		7308	39.39	-14.61	54	47.18	35.6	15.08	58.47	300	293	Α	Н
CH 06 2437MHz		4874	65.24	-8.76	74	79.3	34.3	11.21	59.57	395	272	Р	V
2437111112		4874	49.46	-4.54	54	63.52	34.3	11.21	59.57	395	272	Α	٧
		7308	50.86	-23.14	74	58.65	35.6	15.08	58.47	100	0	Р	V
													V
		4924	61.5	-12.5	74	75.39	34.34	11.27	59.5	331	351	Р	Н
		4924	47.89	-6.11	54	61.78	34.34	11.27	59.5	331	351	Α	Н
		7386	55.44	-18.56	74	63.28	35.6	15.14	58.58	288	257	Р	Н
802.11g		7386	37.96	-16.04	54	45.8	35.6	15.14	58.58	288	257	Α	Н
CH 11 2462MHz		4924	62.78	-11.22	74	76.67	34.34	11.27	59.5	333	359	Р	V
		4924	48.26	-5.74	54	62.15	34.34	11.27	59.5	333	359	Α	V
		7386	49.07	-24.93	74	56.91	35.6	15.14	58.58	100	0	Р	V
													٧
Remark		o other spurious		eak and	Average lim	it line							

All results are PASS against Peak and Average limit line.

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# 15C 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.	
4TX		(MHz)	( dBµV/m )	(dB)	( dBµV/m )	(dBµV)	( dB/m )	(dB)	(dB)	( cm )	( deg )	(P/A)	(H/V)
		2389.83	66.21	-7.79	74	60.61	32.18	7.75	34.33	395	38	Р	Н
		2390	52.01	-1.99	54	46.41	32.18	7.75	34.33	395	38	Α	Н
	*	2412	112.98	-	-	107.33	32.2	7.75	34.3	395	38	Р	Н
	*	2412	102.04	-	-	96.39	32.2	7.75	34.3	395	38	Α	Н
802.11n													Н
HT20													Н
CH 01		2389.92	69.29	-4.71	74	63.69	32.18	7.75	34.33	391	14	Р	٧
2412MHz		2390	53.29	-0.71	54	47.69	32.18	7.75	34.33	391	14	Α	V
	*	2412	116.52	-	-	110.87	32.2	7.75	34.3	391	14	Р	٧
	*	2412	104.93	-	-	99.28	32.2	7.75	34.3	391	14	Α	V
													V
													V
		2386.68	59.34	-14.66	74	53.75	32.18	7.75	34.34	381	40	Р	Н
		2387.4	45.06	-8.94	54	39.47	32.18	7.75	34.34	381	40	Α	Н
	*	2437	109.25	-	-	103.43	32.24	7.83	34.25	381	40	Р	Н
	*	2437	96.03	-	-	90.21	32.24	7.83	34.25	381	40	Α	Н
802.11n		2485.28	59.99	-14.01	74	53.97	32.28	7.91	34.17	381	40	Р	Н
HT20		2488.92	45.73	-8.27	54	39.69	32.3	7.91	34.17	381	40	Α	Н
CH 06		2389.29	59.17	-14.83	74	53.57	32.18	7.75	34.33	386	10	Р	V
2437MHz		2386.68	45.58	-8.42	54	39.99	32.18	7.75	34.34	386	10	Α	V
	*	2437	112.06	-	-	106.24	32.24	7.83	34.25	386	10	Р	V
	*	2437	99.44	-	-	93.62	32.24	7.83	34.25	386	10	Α	V
		2485.36	62.12	-11.88	74	56.1	32.28	7.91	34.17	386	10	Р	V
		2486.88	46.75	-7.25	54	40.73	32.28	7.91	34.17	386	10	Α	V

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	1	1	1			1		1	ı	1		1	
	*	2462	112	-	1	106.04	32.26	7.91	34.21	385	31	Р	Н
	*	2462	100.53	-	-	94.57	32.26	7.91	34.21	385	31	Α	Н
		2483.6	70.25	-3.75	74	64.24	32.28	7.91	34.18	385	31	Р	Н
		2483.52	52.49	-1.51	54	46.48	32.28	7.91	34.18	385	31	Α	Н
802.11n													Н
HT20													Н
CH 11	*	2462	115.56	-	-	109.6	32.26	7.91	34.21	378	17	Р	V
2462MHz	*	2462	103.94	-	-	97.98	32.26	7.91	34.21	378	17	Α	V
		2483.6	70.81	-3.19	74	64.8	32.28	7.91	34.18	378	17	Р	V
		2483.52	53.27	-0.73	54	47.26	32.28	7.91	34.18	378	17	Α	V
													V
													V
Remark	1. N	o other spurious	s found.										
	2. A	ll results are PA	SS against F	Peak and	Average lim	it line.							

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#### WIFI 802.11n HT20 (Harmonic @ 3m)

er	quency	,	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
lz	/Hz)		( dBµV/m )	(dB)	( dBµV/m )	(dBµV)	( dB/m )	(dB)	(dB)	( cm )	( deg )	(P/A)	(H/V)
24	824		65.51	-8.49	74	79.73	34.26	11.16	59.64	336	334	Р	Н
24	824		50.24	-3.76	54	64.46	34.26	11.16	59.64	336	334	Α	Н
													Н
													Н
24	824		65.99	-8.01	74	80.21	34.26	11.16	59.64	352	359	Р	٧
24	824		51.01	-2.99	54	65.23	34.26	11.16	59.64	352	359	Α	٧
													V
													٧
'4	874		64.37	-9.63	74	78.43	34.3	11.21	59.57	334	334	Р	Н
'4	874		49.15	-4.85	54	63.21	34.3	11.21	59.57	334	334	Α	Н
1	'311		55.96	-18.04	74	63.75	35.6	15.08	58.47	353	291	Р	Н
1	311		37.64	-16.36	54	45.43	35.6	15.08	58.47	353	291	Α	Н
'4	874		66.63	-7.37	74	80.69	34.3	11.21	59.57	366	301	Р	٧
'4	874		50.47	-3.53	54	64.53	34.3	11.21	59.57	366	301	Α	V
1	311		55.12	-18.88	74	62.91	35.6	15.08	58.47	332	313	Р	٧
1	311		38.64	-15.36	54	46.43	35.6	15.08	58.47	332	313	Α	٧
24	924		62.43	-11.57	74	76.32	34.34	11.27	59.5	291	337	Р	Н
24	924		46.89	-7.11	54	60.78	34.34	11.27	59.5	291	337	Α	Н
36	386		48.2	-25.8	74	56.04	35.6	15.14	58.58	100	0	Р	Н
													Н
24	924		66.56	-7.44	74	80.45	34.34	11.27	59.5	356	360	Р	V
24	924		50.87	-3.13	54	64.76	34.34	11.27	59.5	356	360	Α	٧
36	386		52.22	-21.78	74	60.06	35.6	15.14	58.58	244	238	Р	V
36	386		35.48	-18.52	54	43.32	35.6	15.14	58.58	244	238	Α	V
36 pt	386 spurio			-18.52	54	43	.32	.32 35.6	.32 35.6 15.14	.32 35.6 15.14 58.58	.32 35.6 15.14 58.58 244	.32 35.6 15.14 58.58 244 238	.32 35.6 15.14 58.58 244 238 A

All results are PASS against Peak and Average limit line.

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## 15C 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.	
4TX		(MHz)	( dBµV/m )	(dB)	( dBµV/m )	(dBµV)	( dB/m )	( dB )	(dB)	( cm )	( deg )	(P/A)	(H/V)
		2383.35	68.26	-5.74	74	62.69	32.16	7.75	34.34	353	289	Р	Н
		2383.17	51.56	-2.44	54	45.99	32.16	7.75	34.34	353	289	Α	Н
	*	2422	114.23	-	-	108.46	32.22	7.83	34.28	353	289	Р	Н
	*	2422	102.25	-	-	96.48	32.22	7.83	34.28	353	289	Α	Н
802.11n		2494.84	61.24	-12.76	74	55.19	32.3	7.91	34.16	353	289	Р	Н
HT40		2483.56	46.76	-7.24	54	40.75	32.28	7.91	34.18	353	289	Α	Н
CH 03		2386.86	68.93	-5.07	74	63.34	32.18	7.75	34.34	345	334	Р	V
2422MHz		2386.86	52.66	-1.34	54	47.07	32.18	7.75	34.34	345	334	Α	V
	*	2422	111.75	-	-	105.98	32.22	7.83	34.28	345	334	Р	٧
	*	2422	100.55	-	-	94.78	32.22	7.83	34.28	345	334	Α	٧
		2486.2	60.47	-13.53	74	54.45	32.28	7.91	34.17	345	334	Р	٧
		2484.72	46.24	-7.76	54	40.23	32.28	7.91	34.18	345	334	Α	٧
		2390	64.92	-9.08	74	59.32	32.18	7.75	34.33	356	290	Р	Н
		2390	49.84	-4.16	54	44.24	32.18	7.75	34.33	356	290	Α	Τ
	*	2437	112.81	-	-	106.99	32.24	7.83	34.25	356	290	Р	Н
	*	2437	101.57	-	-	95.75	32.24	7.83	34.25	356	290	Α	Н
802.11n		2486	66.33	-7.67	74	60.31	32.28	7.91	34.17	356	290	Р	Н
HT40		2483.6	49.82	-4.18	54	43.81	32.28	7.91	34.18	356	290	Α	Н
CH 06		2387.94	59.58	-14.42	74	53.99	32.18	7.75	34.34	386	340	Р	V
2437MHz		2390	46.52	-7.48	54	40.92	32.18	7.75	34.33	386	340	Α	V
	*	2437	109.14	-	-	103.32	32.24	7.83	34.25	386	340	Р	V
	*	2437	97.46	-1	-	91.64	32.24	7.83	34.25	386	340	Α	V
		2490.64	62.04	-11.96	74	56	32.3	7.91	34.17	386	340	Р	V
		2489.72	46.78	-7.22	54	40.74	32.3	7.91	34.17	386	340	Α	V

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		2357.88	58.56	-15.44	74	53.14	32.13	7.68	34.39	395	264	Р	Н
		2389.47	44.65	-9.35	54	39.05	32.18	7.75	34.33	395	264	Α	Н
	*	2460.371	112	-	-	106.05	32.26	7.91	34.22	395	264	Р	Н
	*	2459.953	99.83	-	-	93.96	32.26	7.83	34.22	395	264	Α	Н
802.11n		2485.6	68.66	-5.34	74	62.64	32.28	7.91	34.17	395	264	Р	Н
HT40		2483.52	51.18	-2.82	54	45.17	32.28	7.91	34.18	395	264	Α	Н
CH 09		2378.94	58.8	-15.2	74	53.31	32.16	7.68	34.35	379	10	Р	٧
2452MHz		2389.47	44.44	-9.56	54	38.84	32.18	7.75	34.33	379	10	Α	V
	*	2454.275	108.31	-	-	102.45	32.26	7.83	34.23	379	10	Р	V
	*	2453.44	96.29	-	-	90.45	32.24	7.83	34.23	379	10	Α	V
		2488.52	64.08	-9.92	74	58.04	32.3	7.91	34.17	379	10	Р	V
		2483.52	48.45	-5.55	54	42.44	32.28	7.91	34.18	379	10	Α	٧
Remark	1. N	lo other spurious	s found.			•		•	•	•	•		•
	2. A	II results are PA	SS against	Peak and	Average lin	nit line.							

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#### WIFI 802.11n HT40 (Harmonic @ 3m)

						Cable					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
4844	55.51	-18.49	74	69.69	34.28	11.16	59.62	346	339	Р	Н
4844	40.45	-13.55	54	54.63	34.28	11.16	59.62	346	339	Α	Н
7266	49.01	-24.99	74	56.78	35.6	15.06	58.43	100	0	Р	Н
											Н
4844	58.56	-15.44	74	72.74	34.28	11.16	59.62	332	360	Р	V
4844	42.5	-11.5	54	56.68	34.28	11.16	59.62	332	360	Α	V
7266	46.55	-27.45	74	54.32	35.6	15.06	58.43	100	0	Р	V
											V
4874	60.06	-13.94	74	74.12	34.3	11.21	59.57	253	338	Р	Н
4874	43.88	-10.12	54	57.94	34.3	11.21	59.57	253	338	Α	Н
7311	46.16	-27.84	74	53.95	35.6	15.08	58.47	100	0	Р	Н
											Н
4874	62.7	-11.3	74	76.76	34.3	11.21	59.57	341	3	Р	V
4874	47.74	-6.26	54	61.8	34.3	11.21	59.57	341	3	Α	V
7311	44.26	-29.74	74	52.05	35.6	15.08	58.47	100	0	Р	V
											V
4904	56.89	-17.11	74	70.81	34.33	11.27	59.52	280	32	Р	Н
4904	41.81	-12.19	54	55.73	34.33	11.27	59.52	280	32	Α	Н
7356	43.28	-30.72	74	51.1	35.6	15.11	58.53	100	0	Р	Н
											Н
4904	60.31	-13.69	74	74.23	34.33	11.27	59.52	369	359	Р	V
4904	42.86	-11.14	54	56.78	34.33	11.27	59.52	369	359	Α	V
7356	44.21	-29.79	74	52.03	35.6	15.11	58.53	100	0	Р	V
											V
	4844 7266  4844 4844 7266  4874 4874 7311  4874 4874 7311  4904 4904 7356  4904 4904	4844       40.45         7266       49.01         4844       58.56         4844       42.5         7266       46.55         4874       60.06         4874       43.88         7311       46.16         4874       47.74         4874       47.74         7311       44.26         4904       56.89         4904       41.81         7356       43.28         4904       60.31         4904       42.86	4844       40.45       -13.55         7266       49.01       -24.99         4844       58.56       -15.44         4844       42.5       -11.5         7266       46.55       -27.45         4874       60.06       -13.94         4874       43.88       -10.12         7311       46.16       -27.84         4874       62.7       -11.3         4874       47.74       -6.26         7311       44.26       -29.74         4904       56.89       -17.11         4904       41.81       -12.19         7356       43.28       -30.72         4904       60.31       -13.69         4904       42.86       -11.14	4844       40.45       -13.55       54         7266       49.01       -24.99       74         4844       58.56       -15.44       74         4844       42.5       -11.5       54         7266       46.55       -27.45       74         4874       60.06       -13.94       74         4874       43.88       -10.12       54         7311       46.16       -27.84       74         4874       62.7       -11.3       74         4874       47.74       -6.26       54         7311       44.26       -29.74       74         4904       56.89       -17.11       74         4904       41.81       -12.19       54         7356       43.28       -30.72       74         4904       60.31       -13.69       74         4904       42.86       -11.14       54	4844       40.45       -13.55       54       54.63         7266       49.01       -24.99       74       56.78         4844       58.56       -15.44       74       72.74         4844       42.5       -11.5       54       56.68         7266       46.55       -27.45       74       54.32         4874       60.06       -13.94       74       74.12         4874       43.88       -10.12       54       57.94         7311       46.16       -27.84       74       53.95         4874       62.7       -11.3       74       76.76         4874       47.74       -6.26       54       61.8         7311       44.26       -29.74       74       52.05         4904       56.89       -17.11       74       70.81         4904       41.81       -12.19       54       55.73         7356       43.28       -30.72       74       51.1         4904       60.31       -13.69       74       74.23         4904       42.86       -11.14       54       56.78	4844       40.45       -13.55       54       54.63       34.28         7266       49.01       -24.99       74       56.78       35.6         4844       58.56       -15.44       74       72.74       34.28         4844       42.5       -11.5       54       56.68       34.28         7266       46.55       -27.45       74       54.32       35.6         4874       60.06       -13.94       74       74.12       34.3         4874       43.88       -10.12       54       57.94       34.3         7311       46.16       -27.84       74       53.95       35.6         4874       62.7       -11.3       74       76.76       34.3         4874       47.74       -6.26       54       61.8       34.3         7311       44.26       -29.74       74       52.05       35.6         4904       56.89       -17.11       74       70.81       34.33         4904       41.81       -12.19       54       55.73       34.33         7356       43.28       -30.72       74       51.1       35.6         4904       60.31       -1	4844       40.45       -13.55       54       54.63       34.28       11.16         7266       49.01       -24.99       74       56.78       35.6       15.06         4844       58.56       -15.44       74       72.74       34.28       11.16         4844       42.5       -11.5       54       56.68       34.28       11.16         7266       46.55       -27.45       74       54.32       35.6       15.06         4874       60.06       -13.94       74       74.12       34.3       11.21         7311       46.16       -27.84       74       53.95       35.6       15.08         4874       62.7       -11.3       74       76.76       34.3       11.21         4874       47.74       -6.26       54       61.8       34.3       11.21         4874       47.74       -6.26       54       61.8       34.3       11.21         7311       44.26       -29.74       74       52.05       35.6       15.08         4904       56.89       -17.11       74       70.81       34.33       11.27         4904       41.81       -12.19       54	4844       40.45       -13.55       54       54.63       34.28       11.16       59.62         7266       49.01       -24.99       74       56.78       35.6       15.06       58.43         4844       58.56       -15.44       74       72.74       34.28       11.16       59.62         4844       42.5       -11.5       54       56.68       34.28       11.16       59.62         7266       46.55       -27.45       74       54.32       35.6       15.06       58.43         4874       60.06       -13.94       74       74.12       34.3       11.21       59.57         4874       43.88       -10.12       54       57.94       34.3       11.21       59.57         7311       46.16       -27.84       74       53.95       35.6       15.08       58.47         4874       62.7       -11.3       74       76.76       34.3       11.21       59.57         4874       47.74       -6.26       54       61.8       34.3       11.21       59.57         7311       44.26       -29.74       74       52.05       35.6       15.08       58.47         4904<	4844         40.45         -13.55         54         54.63         34.28         11.16         59.62         346           7266         49.01         -24.99         74         56.78         35.6         15.06         58.43         100           4844         58.56         -15.44         74         72.74         34.28         11.16         59.62         332           4844         42.5         -11.5         54         56.68         34.28         11.16         59.62         332           7266         46.55         -27.45         74         54.32         35.6         15.06         58.43         100           4874         60.06         -13.94         74         74.12         34.3         11.21         59.57         253           7311         46.16         -27.84         74         53.95         35.6         15.08         58.47         100           4874         62.7         -11.3         74         76.76         34.3         11.21         59.57         341           4874         47.74         -6.26         54         61.8         34.3         11.21         59.57         341           7311         44.26         -	4844       40.45       -13.55       54       54.63       34.28       11.16       59.62       346       339         7266       49.01       -24.99       74       56.78       35.6       15.06       58.43       100       0         4844       58.56       -15.44       74       72.74       34.28       11.16       59.62       332       360         4844       42.5       -11.5       54       56.68       34.28       11.16       59.62       332       360         7266       46.55       -27.45       74       54.32       35.6       15.06       58.43       100       0         4874       60.06       -13.94       74       74.12       34.3       11.21       59.57       253       338         4874       43.88       -10.12       54       57.94       34.3       11.21       59.57       253       338         7311       46.16       -27.84       74       53.95       35.6       15.08       58.47       100       0         4874       47.74       -6.26       54       61.8       34.3       11.21       59.57       341       3         7311       44.26	4844       40.45       -13.55       54       54.63       34.28       11.16       59.62       346       339       A         7266       49.01       -24.99       74       56.78       35.6       15.06       58.43       100       0       P         4844       58.56       -15.44       74       72.74       34.28       11.16       59.62       332       360       P         4844       42.5       -11.5       54       56.68       34.28       11.16       59.62       332       360       A         7266       46.55       -27.45       74       54.32       35.6       15.06       58.43       100       0       P         4874       60.06       -13.94       74       74.12       34.3       11.21       59.57       253       338       A         7311       46.16       -27.84       74       53.95       35.6       15.08       58.47       100       0       P         4874       62.7       -11.3       74       76.76       34.3       11.21       59.57       341       3       A         7311       44.26       -29.74       74       52.05       35.6 <t< td=""></t<>

All results are PASS against Peak and Average limit line.

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# 15C 2.4GHz 2400~2483.5MHz 15C Emission below 1GHz

#### 2.4GHz WIFI 802.11b (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.	
4TX		(MHz)	( dBµV/m )	(dB)	( dBµV/m )	(dBµV)	( dB/m )	(dB)	(dB)	( cm )	( deg )	(P/A)	(H/V)
		30	34.29	-5.71	40	44.12	19.9	1.77	31.5	-	-	Р	Н
		147.99	37.54	-5.96	43.5	54.68	11.35	2.61	31.1	-	-	Р	Н
		258.42	39.99	-6.01	46	54.13	13.9	2.96	31	-	-	Р	Н
		324.5	39.59	-6.41	46	52.71	14.6	3.28	31	-	-	Р	Н
		650	41.63	-4.37	46	48.21	19.7	4.22	30.5	100	23	Р	Н
		687.8	38.18	-7.82	46	44.55	19.7	4.35	30.42	-	-	Р	Н
													Н
													Н
													Н
													Н
													Н
2.4GHz													Н
802.11b LF		30	36.89	-3.11	40	46.72	19.9	1.77	31.5	100	44	Р	V
LF		148.8	34.14	-9.36	43.5	51.28	11.35	2.61	31.1	-	-	Р	٧
		256.53	37.78	-8.22	46	52.02	13.8	2.96	31	-	-	Р	٧
		324.5	34.04	-11.96	46	47.16	14.6	3.28	31	-	-	Р	٧
		650	39.71	-6.29	46	46.29	19.7	4.22	30.5	-	-	Р	٧
		687.8	32.42	-13.58	46	38.79	19.7	4.35	30.42	-	-	Р	٧
													V
													٧
													٧
													٧
													V
													V
Remark		other spurious		mit line.									

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## 15C Emission below 1GHz 2.4GHz WIFI 802.11g (LF)

		_			4GHZ WIFI				_				
WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp		Table		Pol.
Ant. 4TX		( MHz )	( dBµV/m )	Limit (dB)	Line ( dBµV/m )	Level (dBµV)	Factor ( dB/m )	Loss (dB)	Factor (dB)	Pos ( cm )	Pos ( deg )	Avg.	
417		30.27	31.35	-8.65	40	41.18	19.9	1.77	31.5	-	( deg )	P	(п <b>/ v )</b> Н
		149.34	37.84	-5.66	43.5	55.06	11.27	2.61	31.1	-	-	P	Н
		259.23	39.6	-6.4	46	53.64	14	2.96	31	-	-	Р	Н
		324.5	38.84	-7.16	46	51.96	14.6	3.28	31	-	-	Р	Н
		650	41.35	-4.65	46	47.93	19.7	4.22	30.5	100	22	Р	Н
		687.8	37.54	-8.46	46	43.91	19.7	4.35	30.42	-	-	Р	Н
													Н
													Н
													Н
													Н
2.4GHz													Н
802.11g													Н
LF		30.27	36.94	-3.06	40	46.77	19.9	1.77	31.5	100	51	Р	V
		149.34	34.72	-8.78	43.5	51.94	11.27	2.61	31.1	-	-	Р	V
		258.96	36.35	-9.65	46	50.39	14	2.96	31	-	-	Р	V
		324.5	33.77	-12.23	46	46.89	14.6	3.28	31	-	-	Р	V
		650	39.09	-6.91	46	45.67	19.7	4.22	30.5	-	-	Р	V
		687.8	32.07	-13.93	46	38.44	19.7	4.35	30.42	-	-	Р	V
													V
													V
													V
													V
													V
													V
Remark		o other spuriou		mit lina									
	2. Al	l results are PA	ుం against li	mit line.									

SPORTON INTERNATIONAL INC.

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## 15C Emission below 1GHz 2.4GHz WIFI 802.11n HT20 (LF)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos		Avg.	
4TX		(MHz)	( dBµV/m )	( dB )	( dBµV/m )	(dBµV)	( dB/m )	( dB )	(dB)	( cm )	( deg )	(P/A)	(H/V
		30.27	30.65	-9.35	40	40.48	19.9	1.77	31.5	-	-	Р	Н
		149.07	38.67	-4.83	43.5	55.89	11.27	2.61	31.1	-	-	Р	Н
		260.85	38.9	-7.1	46	52.69	14.05	3.16	31	-	-	Р	Н
		324.5	39.17	-6.83	46	52.29	14.6	3.28	31	-	-	Р	Н
		650	41.24	-4.76	46	47.82	19.7	4.22	30.5	100	26	Р	Н
		687.8	37.64	-8.36	46	44.01	19.7	4.35	30.42	-	-	Р	Н
													Н
													Н
													Н
													Н
2.4GHz													Н
802.11n													Н
HT20		30	36.59	-3.41	40	46.42	19.9	1.77	31.5	100	77	Р	V
LF		148.8	34.07	-9.43	43.5	51.21	11.35	2.61	31.1	-	-	Р	V
		260.58	37.63	-8.37	46	51.42	14.05	3.16	31	-	-	Р	V
		324.5	34.43	-11.57	46	47.55	14.6	3.28	31	-	-	Р	V
		650	39.92	-6.08	46	46.5	19.7	4.22	30.5	-	-	Р	V
		687.8	31.86	-14.14	46	38.23	19.7	4.35	30.42	-	-	Р	V
													V
													V
													V
													V
													V
													V

2. All results are PASS against limit line.

SPORTON INTERNATIONAL INC.

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## 15C 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.	
4TX		(MHz)	( dBµV/m )	(dB)	( dBµV/m )	(dBµV)	( dB/m )	( dB )	(dB)	( cm )	( deg )	(P/A)	
		30.54	31.62	-8.38	40	41.97	19.34	1.77	31.46	-	-	Р	Н
		148.8	38.79	-4.71	43.5	55.93	11.35	2.61	31.1	-	-	Р	Н
		260.31	38.92	-7.08	46	52.66	14.1	3.16	31	-	-	Р	Н
		324.5	40.55	-5.45	46	53.67	14.6	3.28	31	-	-	Р	Н
		650	41.67	-4.33	46	48.25	19.7	4.22	30.5	100	31	Р	Н
		687.8	37.62	-8.38	46	43.99	19.7	4.35	30.42	-	-	Р	Н
													Н
													Н
													Н
													Н
2.4GHz													Н
802.11n													Н
HT40		30	36.34	-3.66	40	46.17	19.9	1.77	31.5	100	84	Р	V
LF		148.53	34.62	-8.88	43.5	51.76	11.35	2.61	31.1	1	-	Р	V
		260.31	37.63	-8.37	46	51.37	14.1	3.16	31	1	-	Р	V
		324.5	33.24	-12.76	46	46.36	14.6	3.28	31	1	-	Р	V
		650	39.57	-6.43	46	46.15	19.7	4.22	30.5	1	-	Р	V
		687.8	31.83	-14.17	46	38.2	19.7	4.35	30.42	-	-	Р	V
													V
													V
													V
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													V
										•			V

2. All results are PASS against limit line.

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### 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 <b>over limit</b> line.									
P/A	Peak or Average									
H/V	Horizontal or Vertical									

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

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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 )	(dB <sub>µ</sub> V)	( 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	Р	Н
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	Α	Н

1. Level( $dB\mu V/m$ ) =

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

2. Over Limit(dB) = Level(dB $\mu$ V/m) – Limit Line(dB $\mu$ V/m)

#### For Peak Limit @ 2390MHz:

- 1. Level(dBµV/m)
- = Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBµV) Preamp Factor(dB)
- $= 32.22(dB/m) + 4.58(dB) + 54.51(dB\mu V) 35.86 (dB)$
- $= 55.45 (dB\mu V/m)$
- 2. Over Limit(dB)
- = Level( $dB\mu V/m$ ) Limit Line( $dB\mu V/m$ )
- $= 55.45(dB\mu V/m) 74(dB\mu V/m)$
- = -18.55(dB)

#### For Average Limit @ 2390MHz:

- 1. Level(dBµV/m)
- = Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBµV) Preamp Factor(dB)
- $= 32.22(dB/m) + 4.58(dB) + 42.6(dB\mu V) 35.86 (dB)$
- $= 43.54 (dB\mu V/m)$
- 2. Over Limit(dB)
- = Level( $dB\mu V/m$ ) Limit Line( $dB\mu V/m$ )
- $= 43.54(dB\mu V/m) 54(dB\mu V/m)$
- = -10.46(dB)

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

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