



PY7-PM0950

Test Report reusing data

Reviewed by: Joseph Lin / Supervisor

Approved by: Jones Tsai / Manager



SPORTON INTERNATIONAL INC.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.



TABLE OF CONTENTS

REVISION HISTORY	3
1. INTRODUCTION SECTION	4
2. DIFFERENCE SECTION	5
3. SPOT CHECK VERIFICATION DATA SECTION	6
4. REFERENCE DETAIL SECTION	9
APPENDIX A. SPOT CHECK TEST RESULT	



REVISION HISTORY

VERSION	DESCRIPTION	ISSUED DATE
Rev. 01	Initial issue of report	May. 30, 2016



1. Introduction Section

FCC ID: PY7-PM0952, which is the reference FCC ID, and FCC ID: PY7-PM0950, have the same physical PCB layout and most of the same components, PY7-PM0950 has some different population/depopulation of filters for different LTE bands support.

The Bluetooth/Wi-Fi/NFC/GPS PCB layout/components/antenna/SW implementation and RF TX power level is identical between PY7-PM0952 and PY7-PM0950, PY7-PM0950 will re-use the FCC Part 15C (equipment class: DTS, DSS, DXX), Part 15E (equipment class: NII), and WLAN SAR test data of PY7-PM0952 application

For details concerning the similarity with respect to component placement, mechanical/electrical design etc., please refer to the Operational Description.

The applicant takes full responsibility that the test data as referenced in section 4 below represent compliance for this FCC ID (FCC ID: PY7-PM0950).



2. Difference Section

The original model (FCC ID: PY7-PM0952) and the variant model (FCC ID: PY7-PM0950) has identical PCB layout, antenna, SW implementation for Bluetooth/Wi-Fi/NFC/GPS. The details of similarity and difference can be found in the Operating Description.

The product specification is outlined in the following table:

FCC ID			PY7-PM0952	PY7-PM0950
Wireless Tech	Mode		Frequency (MHz)	
GSM	GSM Voice GPRS (GMSK) EDGE (8PSK)	Multi-Slot Class 12 DTM: No	850/1900	850/1900
UMTS	AMR/RCM12.2Kbps HSDPA/HSUPA/DC-HSDPA		B5/B2	B5/B2
LTE	QPSK 16QAM		B5/B7/B41	B5/B2/B7
Wi-Fi	11b/11g/11n(HT20)/11n(HT40)		2412-2462	
	11a/11n(HT20)/11n(HT40)		5180-5240 5260-5320 5500-5700 5745-5825 *5600-5650 notched	
Bluetooth	V4.1 LE		2402-2480 MHz	
NFC	ASK		13.56 MHz	



3. Spot Check Verification Data Section

Summary of the spot check for Part 15C and 15E:

Test Item	Mode	PY7-PM0952 Worst Result	PY7-PM0950 Worst Result	Difference (dB)
Average Conducted Power (dBm)	802.11b	17.81	17.75	0.06
	802.11g	14.78	14.72	0.06
	11n HT20	11.36	11.27	0.09
	11n HT40	11.43	11.29	0.14
	BT (1Mbps)	6.99	6.57	0.42
	BT (2Mbps)	4.97	4.57	0.40
	BT (3Mbps)	4.96	4.66	0.30
	BT-LE	0.57	0.36	0.21
	11a, 5.2GHz	13.90	13.81	0.09
	11n HT20, 5.2GHz	11.42	11.36	0.06
	11n HT40, 5.2GHz	11.49	11.35	0.14
	11a, 5.3GHz	13.73	13.64	0.09
	11n HT20, 5.3GHz	11.34	11.28	0.06
	11n HT40, 5.3GHz	11.30	11.16	0.14
	11a, 5.5GHz	13.73	13.64	0.09
	11n HT20, 5.5GHz	11.31	11.25	0.06
	11n HT40, 5.5GHz	11.47	11.30	0.17
	11a, 5.8GHz	13.89	13.68	0.21
	11n HT20, 5.8GHz	11.44	11.41	0.03
	11n HT40, 5.8GHz	11.44	11.33	0.11
	S/N of test sample	WUJ01M8LEX	WUJ01M9E16	
	Test date	2016/2/5 – 2016/3/04	2016/4/18 – 2016/4/19	
Peak Radiated Spurious Emission (Band Edge) (dBuV/m)	802.11b	56.33	55.63	0.7
	802.11g	58.35	56.94	1.41
	11n HT40	58.28	57.55	0.73
	BT (2Mbps)	48.15	46.98	1.17
	BT-LE	55.99	55.91	0.08
	11n HT40, 5.2GHz	57.79	55.17	2.62
	11n HT40, 5.3GHz	61.02	58.55	2.47
	11n HT40, 5.5GHz	56.81	59.24	-2.43
	11n HT40, 5.8GHz	56.28	54.47	1.81
	11n HT40, 5.8GHz	62.75	63.28	-0.53
	S/N of test sample	WUJ01M8BA5	WUJ01M9E16	
	Test date	2016/2/23 – 2016/2/26	2016/5/09 – 2016/5/10	
Average Radiated Spurious Emission (Band Edge) (dBuV/m)	802.11b	45.08	45.75	-0.67
	802.11g	47.45	47.18	0.27
	11n HT40	47.17	47.04	0.13
	BT (2Mbps)	23.36	22.19	1.17
	BT-LE	46.69	46.47	0.22
	11n HT40, 5.2GHz	47.36	46.82	0.54
	11n HT40, 5.3GHz	50.02	49.56	0.46
	11n HT40, 5.5GHz	49.05	50.96	-1.91
	11n HT40, 5.8GHz	47.55	46.42	1.13
	S/N of test sample	WUJ01M8BA5	WUJ01M9E16	
	Test date	2016/2/23 – 2016/2/26	2016/5/09 – 2016/5/10	

Peak Radiated Spurious Emission (Harmonic) (dBuV/m)	802.11b	40.7	41.71	-1.01
	802.11g	40.72	40.7	0.02
	11n HT40	53.19	53	0.19
	BT (2Mbps)	44.96	44.59	0.37
	BT-LE	40.52	40.47	0.05
	11n HT40, 5.2GHz	43.81	44.13	-0.32
	11n HT40, 5.3GHz	43.65	44.74	-1.09
	11n HT40, 5.5GHz	45.49	46.05	-0.56
	11n HT40, 5.8GHz	45.75	47.33	-1.58
	S/N of test sample	WUJ01M8BA5	WUJ01M9E16	
	Test date	2016/2/23 – 2016/2/26	2016/5/09 – 2016/5/10	

Average Radiated Spurious Emission (Harmonic) (dBuV/m)	802.11b	50.74	49.03	1.71
	S/N of test sample	WUJ01M8BA5	WUJ01M9E16	
	Test date	2016/2/23 – 2016/2/26	2016/5/09 – 2016/5/10	

Summary of the spot check for SAR:

Test Item	Mode	PY7-PM0952 Result Reported 1g SAR (W/kg)	PY7-PM0950 Result Reported 1g SAR (W/kg)	Deviation (%)
Head Condition	2.4GHz WLAN	1.085	0.992	9.60
	5.2GHz WLAN	NA	NA	NA
	5.3GHz WLAN	0.636	0.577	9.66
	5.5GHz WLAN	1.196	1.274	-5.83
	5.8GHz WLAN	1.043	1.017	2.25
Hotspot Condition	2.4GHz WLAN	0.326	0.321	1.88
	5.2GHz WLAN	NA	NA	NA
	5.3GHz WLAN	NA	NA	NA
	5.5GHz WLAN	NA	NA	NA
	5.8GHz WLAN	NA	NA	NA
Body-worn Condition	2.4GHz WLAN	0.158	0.121	31.67
	5.2GHz WLAN	NA	NA	NA
	5.3GHz WLAN	0.071	0.083	-11.25
	5.5GHz WLAN	0.202	0.187	6.32
	5.8GHz WLAN	0.224	0.211	6.67
General Information	S/N	0123456789ABCDEFA201RXP10202	WUJ01M9E16	
	Test Date	2016/3/1 ~ 2016/3/12	2016/3/1 ~ 2016/3/12	

Test Item	Mode	PY7-PM0952 Result Reported 10g SAR (W/kg)	PY7-PM0950 Result Reported 10g SAR (W/kg)	Deviation (%)
Product Specific Condition	2.4GHz WLAN	Na	Na	NA
	5.2GHz WLAN	Na	Na	NA
	5.3GHz WLAN	0.343	0.394	0.88
	5.5GHz WLAN	0.580	0.565	0.00
	5.8GHz WLAN	0.444	0.409	0.91
General Information	S/N	0123456789ABCDEF201RXP10202	WUJ01M9E16	
	Test Date	2016/3/1 ~ 2016/3/12	2016/3/1 ~ 2016/3/12	

Conclusion:

Radiated spurious emission test against the variant model for non-cellular part based on the worst-case condition from the original model was performed in this filing to demonstrate the test data from original model remains representative for the variant model.

Based on the spot check test result (power levels measured are within 0.5dB, and the worst case of RSE spot check verification based on the worst condition from the original model is within 3dB, and are compliance with the limits), the test data from the original model is representative for the variant model.

The unwanted, harmonics, radiated spurious emission is reported peak measurement only due to spurious lower than 20dB than the limit.

Spot Check Results for SAR within one expanded STD uncertainty of reference device.

The detail test results can be found in this document, Appendix A, hereafter.



4. Reference detail Section

Equipment Class	Reference FCC ID	Folder Test/RF Exposure	Report Title / Section
DTS	PY7-PM0952	15C Test Report	FR620405B FCC RF Report DTS BLE / All sections FR620405C FCC RF Report DTS WLAN / All sections
		RF Exposure	FA620405 FCC SAR Report / Only sections related to DTS are applicable
NII	PY7-PM0952	15E Test Report	FR620405E FCC RF Report NII B1-B3 / All sections FR620405F FCC RF Report NII B4 / All sections FR620405Z FCC RF Report NII DFS / All sections
		RF Exposure	FA620405 FCC SAR Report / Only sections related to NII are applicable
DSS	PY7-PM0952	15C Test Report	FR620405A FCC RF Report DSS / All sections
		RF Exposure	FA620405 FCC SAR Report / Only sections related to DSS are applicable
DXX	PY7-PM0952	15C Test Report	FR620405D FCC RF Report DXX / All sections

Appendix A. Spot Check Test Result

1.1 Conducted power

<2.4GHz WLAN>

	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-PM0952 Average power (dBm)	FCC ID PY7-PM0950 Average power (dBm)
2.4GHz WLAN	802.11b	CH 1	2412	1Mbps	18.0	17.73	17.67
		CH 6	2437			17.81	17.75
		CH 11	2462			17.65	17.59
	802.11g	CH 1	2412	6Mbps	15.0	14.63	14.57
		CH 6	2437			14.78	14.72
		CH 11	2462			14.68	14.62
	802.11n-HT20	CH 1	2412	MCS0	11.5	11.29	11.20
		CH 6	2437			11.36	11.27
		CH 11	2462			11.19	11.10
	802.11n-HT40	CH 3	2422	MCS0	11.5	11.19	11.12
		CH 6	2437			11.36	11.29
		CH 9	2452			11.25	11.18

<Bluetooth>

Mode	Channel	Frequency (MHz)	Tune-Up Limit	FCC ID PY7-PM0952 Average power (dBm)	FCC ID PY7-PM0950 Average power (dBm)
Bluetooth (1Mbps)	CH 00	2402	7.0	6.73	6.31
	CH 39	2441		6.99	6.57
	CH 78	2480		6.84	6.42
Bluetooth (2Mbps)	CH 00	2402	5.0	4.30	3.90
	CH 39	2441		4.97	4.57
	CH 78	2480		4.51	4.11
Bluetooth (3Mbps)	CH 00	2402	5.0	4.33	4.03
	CH 39	2441		4.96	4.66
	CH 78	2480		4.52	4.22
BLE (GFSK)	CH 00	2402	1.0	-0.57	-0.74
	CH 19	2440		0.57	0.36
	CH 39	2480		-0.31	-0.38


<5GHz WLAN>

	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-PM0952 Average power (dBm)	FCC ID PY7-PM0950 Average power (dBm)
5.2GHz WLAN	802.11a	CH 36	5180	6Mbps	14.0	13.90	13.81
		CH 44	5220			13.83	13.74
		CH 48	5240			13.87	13.78
	802.11n-HT20	CH 36	5180	MCS0	11.5	11.42	11.36
		CH 44	5220			11.38	11.32
		CH 48	5240			11.34	11.28
	802.11n-HT40	CH 38	5190	MCS0	11.5	11.49	11.35
		CH 46	5230			11.47	11.33
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-PM0952 Average power (dBm)	FCC ID PY7-PM0950 Average power (dBm)
	802.11a	CH 52	5260	6Mbps	14.0	13.67	13.58
		CH 60	5300			13.68	13.59
		CH 64	5320			13.73	13.64
	802.11n-HT20	CH 52	5260	MCS0	11.5	11.25	11.19
		CH 60	5300			11.26	11.20
		CH 64	5320			11.34	11.28
	802.11n-HT40	CH 54	5270	MCS0	11.5	11.30	11.16
		CH 62	5310		10.5	10.42	10.28
5.5GHz WLAN	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-PM0952 Average power (dBm)	FCC ID PY7-PM0950 Average power (dBm)
	802.11a	CH 100	5500	6Mbps	14.0	13.73	13.64
		CH 116	5580			13.65	13.56
		CH 140	5700			13.60	13.51
	802.11n-HT20	CH 100	5500	MCS0	11.5	11.31	11.25
		CH 116	5580			11.22	11.16
		CH 140	5700			11.10	11.04
	802.11n-HT40	CH 102	5510	MCS0	11.5	11.47	11.30
		CH 126	5630			11.34	11.20
		CH 134	5670			11.30	11.16
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-PM0952 Average power (dBm)	FCC ID PY7-PM0950 Average power (dBm)
	802.11a	CH 149	5745	MCS0	10.0	9.77	9.71
		CH 157	5785		14.0	13.74	13.68
		CH 165	5825			13.89	13.83
	802.11n-HT20	CH 149	5745	MCS0	11.5	11.28	11.25
		CH 157	5785			11.36	11.33
		CH 165	5825			11.44	11.41
	802.11n-HT40	CH 151	5755	MCS0	9.5	9.21	9.10
		CH 159	5795		11.5	11.44	11.33



1.2 Radiated Spurious Emission

2.4GHz BT/WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-PM0952						FCC ID PY7-PM0950					
				Band edge			Harmonic			Band edge			Harmonic		
				Frequency	Level	Limit	Frequency	Level	Limit	Frequency	Level	Limit	Frequency	Level	Limit
				(MHz)	(dBuV/m)	(dBuV/m)	(MHz)	(dBuV/m)	(dBuV/m)	(MHz)	(dBuV/m)	(dBuV/m)	(MHz)	(dBuV/m)	(dBuV/m)
BT(2Mbps)	CH 78	2480	P	2484.32	48.15	74	4960	40.7	74	2483.69	46.98	74	4962	41.71	74
			A	2484.32	23.36	54				2483.69	22.19	54			
BLE	CH 19	2440	P	2495.04	55.99	74	7320	40.72	74	2494.8	55.91	74	7320	40.7	74
			A	2493.04	46.69	54				2487.24	46.47	54			
802.11b	CH 11	2462	P	2495.24	56.33	74	4924	53.19	74	2486.8	55.63	74	4924	53	74
			A	2486.72	45.08	54	4924	50.74	54	2484.96	45.75	54	4924	49.03	54
802.11g	CH 11	2462	P	2484	58.35	74	4924	44.96	74	2485.32	56.94	74	4924	44.59	74
			A	2483.56	47.45	54				2483.6	47.18	54			
802.11n-HT40	CH 09	2452	P	2483.6	58.28	74	7356	40.52	74	2484.8	57.55	74	7356	40.47	74
			A	2487.36	47.17	54				2483.6	47.04	54			

5.2GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-PM0952						FCC ID PY7-PM0950					
				Band edge			Harmonic			Band edge			Harmonic		
				Frequency	Level	Limit	Frequency	Level	Limit	Frequency	Level	Limit	Frequency	Level	Limit
				(MHz)	(dBuV/m)	(dBuV/m)	(MHz)	(dBuV/m)	(dBuV/m)	(MHz)	(dBuV/m)	(dBuV/m)	(MHz)	(dBuV/m)	(dBuV/m)
802.11n-HT40	CH 38	5190	P	5149.85	57.79	74	15570	43.81	74	5149.4	55.17	74	15570	44.13	74
			A	5149.25	47.36	54				5149.7	46.82	54			

**5.3GHz WLAN**

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-PM0952						FCC ID PY7-PM0950					
				Band edge			Harmonic			Band edge			Harmonic		
				Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)
802.11n-HT40	CH 62	5310	P	5350.99	61.02	74	15930	43.65	74	5351.32	58.55	74	15930	44.74	74
			A	5352.31	50.02	54				5350.66	49.56	54			

5.5GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-PM0952						FCC ID PY7-PM0950					
				Band edge			Harmonic			Band edge			Harmonic		
				Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)
802.11n-HT40	CH 102	5510	P	5467.28	56.81	74	16530	45.49	74	5470	59.24	74	16530	46.05	74
			A	5469.84	49.05	54				5468.56	50.96	54			

5.8GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-PM0952						FCC ID PY7-PM0950					
				Band edge			Harmonic			Band edge			Harmonic		
				Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)
802.11n-HT40	CH 151	5755	P	5713.56	56.28	74	17268	45.75	74	5710.92	54.47	74	17265	47.33	74
			P	5719.24	62.75	78.3				5722.36	63.28	78.3			
			A	5715	47.55	54				5714.92	46.42	54			



BLE (Band Edge @ 3m)

BLE	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)
BLE CH 19 2440MHz		2324.76	56.27	-17.73	74	51.78	31.75	7.18	34.44	148	6	P	H
		2384.97	45.95	-8.05	54	41.11	31.89	7.31	34.36	148	6	A	H
	*	2439.83	91.73	-	-	86.57	32.07	7.36	34.27	148	6	P	H
	*	2440.08	91.13	-	-	85.97	32.07	7.36	34.27	148	6	A	H
		2495.2	56.02	-17.98	74	50.57	32.2	7.4	34.15	148	6	P	H
		2490.96	46.43	-7.57	54	41.02	32.2	7.4	34.19	148	6	A	H
		2351.49	55.49	-18.51	74	50.85	31.8	7.24	34.4	319	94	P	V
		2366.43	45.98	-8.02	54	41.26	31.84	7.24	34.36	319	94	A	V
	*	2439.83	88.84	-	-	83.68	32.07	7.36	34.27	319	94	P	V
	*	2440	88.16	-	-	83	32.07	7.36	34.27	319	94	A	V
		2494.8	55.91	-18.09	74	50.46	32.2	7.4	34.15	319	94	P	V
		2487.24	46.47	-7.53	54	41.1	32.16	7.4	34.19	319	94	A	V

BLE (Harmonic @ 3m)

BLE	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)
BLE CH 19 2440MHz		4878	39.98	-34.02	74	53.16	34.23	11.53	58.94	100	0	P	H
		7320	40.59	-33.41	74	49.14	35.6	13.81	57.96	100	0	P	H
		4878	40.09	-33.91	74	53.27	34.23	11.53	58.94	100	0	P	V
		7320	40.7	-33.3	74	49.25	35.6	13.81	57.96	100	0	P	V

Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												
---------------	---	--	--	--	--	--	--	--	--	--	--	--	--


2.4GHz 2400~2483.5MHz
BT (Band Edge @ 3m)

BT	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)
BT CH 78 2480MHz	*	2480	95.01	-	-	89.63	32.16	7.4	34.18	241	6	P	H
	*	2480	70.22	-	-	-	-	-	-	-	-	A	H
		2483.69	46.98	-27.02	74	41.6	32.16	7.4	34.18	241	6	P	H
		2483.69	22.19	-31.81	54	-	-	-	-	-	-	A	H
	*	2480	96.39	-	-	91.01	32.16	7.4	34.18	225	268	P	V
	*	2480	71.6	-	-	-	-	-	-	-	-	A	V
		2489.43	46.76	-27.24	74	41.33	32.2	7.4	34.17	225	268	P	V
		2489.43	21.97	-32.03	54	-	-	-	-	-	-	A	V

BT (Harmonic @ 3m)

BT	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)
BT CH 78 2480MHz		4962	40.65	-33.35	74	53.92	34.28	11.22	58.77	100	0	P	H
		4960	15.86	-38.14	54	-	-	-	-	-	-	A	H
		7440	40.85	-33.15	74	49.33	35.6	14.05	58.13	100	0	P	H
		7440	16.06	-37.94	54	-	-	-	-	-	-	A	H
		4962	41.71	-32.29	74	54.98	34.28	11.22	58.77	100	0	P	V
		4960	16.92	-37.08	54	-	-	-	-	-	-	A	V
		7440	40.78	-33.22	74	49.26	35.6	14.05	58.13	100	0	P	V
		7440	15.99	-38.01	54	-	-	-	-	-	-	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 802.11b (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)
802.11b CH 11 2462MHz	*	2462	104.15	-	-	98.87	32.11	7.4	34.23	149	48	P	H
	*	2460	100.99	-	-	95.75	32.11	7.36	34.23	149	48	A	H
		2486.28	56.75	-17.25	74	51.38	32.16	7.4	34.19	149	48	P	H
		2484.96	45.75	-8.25	54	40.38	32.16	7.4	34.19	149	48	A	H
	*	2462	102.14	-	-	96.86	32.11	7.4	34.23	319	125	P	V
	*	2460	98.98	-	-	93.74	32.11	7.36	34.23	319	125	A	V
		2486.8	55.63	-18.37	74	50.26	32.16	7.4	34.19	319	125	P	V
		2484.96	45.75	-8.25	54	40.38	32.16	7.4	34.19	319	125	A	V

WIFI 802.11b (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)
802.11b CH 11 2462MHz		4924	53	-21	74	66.21	34.26	11.37	58.84	105	236	P	H
		4924	49.03	-4.97	54	62.24	34.26	11.37	58.84	105	236	A	H
		7386	42.5	-31.5	74	51.01	35.6	13.95	58.06	100	0	P	H
		4924	45.22	-28.78	74	58.43	34.26	11.37	58.84	100	0	P	V
		7386	40.89	-33.11	74	49.4	35.6	13.95	58.06	100	0	P	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 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)
802.11g CH 11 2462MHz	*	2462	104.63	-	-	99.35	32.11	7.4	34.23	150	49	P	H
	*	2462	97.04	-	-	91.76	32.11	7.4	34.23	150	49	A	H
		2485.32	56.94	-17.06	74	51.57	32.16	7.4	34.19	150	49	P	H
		2483.6	47.18	-6.82	54	41.81	32.16	7.4	34.19	150	49	A	H
	*	2462	101.87	-	-	96.59	32.11	7.4	34.23	319	125	P	V
	*	2462	94.83	-	-	89.55	32.11	7.4	34.23	319	125	A	V
		2495.56	55.69	-18.31	74	50.24	32.2	7.4	34.15	319	125	P	V
		2483.92	45.98	-8.02	54	40.61	32.16	7.4	34.19	319	125	A	V

WIFI 802.11g (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)
802.11g CH 11 2462MHz		4924	44.59	-29.41	74	57.8	34.26	11.37	58.84	100	0	P	H
		7386	41.08	-32.92	74	49.59	35.6	13.95	58.06	100	0	P	H
		4924	40.86	-33.14	74	54.07	34.26	11.37	58.84	100	0	P	V
		7386	41.8	-32.2	74	50.31	35.6	13.95	58.06	100	0	P	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 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 09 2452MHz		2348.97	54.72	-19.28	74	50.08	31.8	7.24	34.4	150	48	P	H
		2388.03	45.97	-8.03	54	41.09	31.93	7.31	34.36	150	48	A	H
	*	2454	97.56	-	-	92.32	32.11	7.36	34.23	150	48	P	H
	*	2454	90.03	-	-	84.79	32.11	7.36	34.23	150	48	A	H
		2485.8	58.22	-15.78	74	52.85	32.16	7.4	34.19	150	48	P	H
		2484.32	46.9	-7.1	54	41.53	32.16	7.4	34.19	150	48	A	H
		2350.59	55.1	-18.9	74	50.46	31.8	7.24	34.4	316	122	P	V
		2383.08	46.02	-7.98	54	41.18	31.89	7.31	34.36	316	122	A	V
	*	2451	95.9	-	-	90.7	32.07	7.36	34.23	316	122	P	V
	*	2451	88.63	-	-	83.43	32.07	7.36	34.23	316	122	A	V
		2484.8	57.55	-16.45	74	52.18	32.16	7.4	34.19	316	122	P	V
		2483.6	47.04	-6.96	54	41.67	32.16	7.4	34.19	316	122	A	V

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 09 2452MHz		4904	39.9	-34.1	74	53.15	34.25	11.37	58.87	100	0	P	H
		7356	40.47	-33.53	74	49	35.6	13.88	58.01	100	0	P	H
		4904	39.65	-34.35	74	52.9	34.25	11.37	58.87	100	0	P	V
		7356	40.3	-33.7	74	48.83	35.6	13.88	58.01	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz
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 38 5190MHz		5106.95	49.84	-24.16	74	39.3	34.58	11.18	35.22	380	137	P	H
		5111	42.05	-11.95	54	31.51	34.58	11.18	35.22	380	137	A	H
	*	5190	93.36	-	-	82.59	34.74	11.25	35.22	380	137	P	H
	*	5190	85.66	-	-	74.89	34.74	11.25	35.22	380	137	A	H
		5450.43	50.23	-23.77	74	38.2	35.38	11.89	35.24	380	137	P	H
		5425.9	42	-12	54	30.05	35.3	11.89	35.24	380	137	A	H
		5149.4	55.17	-18.83	74	44.52	34.66	11.21	35.22	238	292	P	V
		5149.7	46.82	-7.18	54	36.17	34.66	11.21	35.22	238	292	A	V
	*	5190	98.2	-	-	87.43	34.74	11.25	35.22	238	292	P	V
	*	5190	90.55	-	-	79.78	34.74	11.25	35.22	238	292	A	V
		5452.85	49.91	-24.09	74	37.88	35.38	11.89	35.24	238	292	P	V
		5458.13	42.02	-11.98	54	29.99	35.38	11.89	35.24	238	292	A	V

Band 1 5150~5250MHz
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 38 5190MHz		10380	43.28	-30.72	74	47.92	37.38	17.17	59.19	100	0	P	H
		15570	44.13	-29.87	74	41.24	40.42	19.63	57.16	100	0	P	H
		10380	43.32	-30.68	74	47.96	37.38	17.17	59.19	100	0	P	V
		15570	43.85	-30.15	74	40.96	40.42	19.63	57.16	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11n 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 62 5310MHz		5119.85	50.04	-23.96	74	39.5	34.58	11.18	35.22	380	142	P	H
		5124.95	41.99	-12.01	54	31.41	34.62	11.18	35.22	380	142	A	H
	*	5310	92.69	-	-	81.23	35.06	11.63	35.23	380	142	P	H
	*	5310	85.68	-	-	74.22	35.06	11.63	35.23	380	142	A	H
		5350.77	53.78	-20.22	74	42.11	35.14	11.76	35.23	380	142	P	H
		5350.77	43.49	-10.51	54	31.82	35.14	11.76	35.23	380	142	A	H
		5148.65	50.45	-23.55	74	39.8	34.66	11.21	35.22	200	236	P	V
		5145.05	42.31	-11.69	54	31.66	34.66	11.21	35.22	200	236	A	V
	*	5310	98.9	-	-	87.44	35.06	11.63	35.23	200	236	P	V
	*	5310	91.5	-	-	80.04	35.06	11.63	35.23	200	236	A	V
		5351.32	58.55	-15.45	74	46.88	35.14	11.76	35.23	200	236	P	V
		5350.66	49.56	-4.44	54	37.89	35.14	11.76	35.23	200	236	A	V

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 62 5310MHz		10620	43.55	-30.45	74	47.71	37.6	17.17	58.93	100	0	P	H
		15930	43.91	-30.09	74	39.93	41.08	19.84	56.94	100	0	P	H
		10620	42.81	-31.19	74	46.97	37.6	17.17	58.93	100	0	P	V
		15930	44.74	-29.26	74	40.76	41.08	19.84	56.94	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												


Band 3 - 5470~5725MHz
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 102 5510MHz		5470	49.97	-24.03	74	37.9	35.42	11.89	35.24	357	326	P	H
		5469.52	43.89	-10.11	54	31.82	35.42	11.89	35.24	357	326	A	H
	*	5510	93.14	-	-	81	35.5	11.89	35.25	357	326	P	H
	*	5510	86.03	-	-	73.89	35.5	11.89	35.25	357	326	A	H
		5750.28	50.52	-23.48	74	38.15	35.55	12.11	35.29	357	326	P	H
		5762.52	42.65	-11.35	54	30.29	35.55	12.11	35.3	357	326	A	H
		5470	59.24	-14.76	74	47.17	35.42	11.89	35.24	200	230	P	V
		5468.56	50.96	-3.04	54	38.89	35.42	11.89	35.24	200	230	A	V
	*	5510	100.83	-	-	88.69	35.5	11.89	35.25	200	230	P	V
	*	5510	93.65	-	-	81.51	35.5	11.89	35.25	200	230	A	V
		5725	51	-23	74	38.68	35.54	12.06	35.28	200	230	P	V
		5739.8	42.7	-11.3	54	30.38	35.55	12.06	35.29	200	230	A	V

Band 3 - 5470~5725MHz
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		11020	44.33	-29.67	74	47.6	37.92	17.17	58.36	100	0	P	H
HT40		16530	45.79	-28.21	74	39.98	41.64	20.25	56.08	100	0	P	H
CH 102		11020	43.56	-30.44	74	46.83	37.92	17.17	58.36	100	0	P	V
5510MHz		16530	46.05	-27.95	74	40.24	41.64	20.25	56.08	100	0	P	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		5714.76	52.91	-21.09	74	40.59	35.54	12.06	35.28	250	332	P	H
		5719.32	58.75	-19.55	78.3	46.43	35.54	12.06	35.28	250	332	P	H
		5713.8	44.18	-9.82	54	31.86	35.54	12.06	35.28	250	332	A	H
	*	5755	90.34	-	-	77.97	35.55	12.11	35.29	250	332	P	H
	*	5755	83.35	-	-	70.98	35.55	12.11	35.29	250	332	A	H
		5852	50.72	-27.58	78.3	38.18	35.57	12.28	35.31	250	332	P	H
		5864.24	50.31	-23.69	74	37.67	35.57	12.39	35.32	250	332	P	H
		5878	43.21	-10.79	54	30.56	35.58	12.39	35.32	250	332	A	H
		5710.92	54.47	-19.53	74	42.15	35.54	12.06	35.28	202	186	P	V
		5722.36	63.28	-15.02	78.3	50.96	35.54	12.06	35.28	202	186	P	V
		5714.92	46.42	-7.58	54	34.1	35.54	12.06	35.28	202	186	A	V
	*	5755	96.84	-	-	84.47	35.55	12.11	35.29	202	186	P	V
	*	5755	89.45	-	-	77.08	35.55	12.11	35.29	202	186	A	V
		5850	50.75	-23.25	74	38.21	35.57	12.28	35.31	202	186	P	V
		5880.48	50.93	-23.07	74	38.28	35.58	12.39	35.32	202	186	P	V
		5875.6	43.36	-10.64	54	30.71	35.58	12.39	35.32	202	186	A	V

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	42.99	-31.01	74	44.73	38.4	17.16	57.3	100	0	P	H
		17265	46.86	-27.14	74	39.94	42.04	20.79	55.91	100	0	P	H
		11510	42.8	-31.2	74	44.54	38.4	17.16	57.3	100	0	P	V
		17265	47.33	-26.67	74	40.41	42.04	20.79	55.91	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Note symbol

*	Fundamental Frequency which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is over limit line.
P/A	Peak or Average
H/V	H orizontal or V ertical
-L	L ow channel location
-R	H igh channel location



2.4GHz 2400~2483.5MHz

BT (Band Edge @ 3m)

BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH78 2480MHz	
1	Horizontal	Vertical
Peak	Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT 130829 VERTICAL Detector : RBW 1000.000kHz VIEW 3000.000kHz SWT Auto Project : 620410 Mode : 1	Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT 130829 HORIZONTAL Detector : RBW 1000.000kHz VIEW 3000.000kHz SWT Auto Project : 620410 Mode : 1



2.4GHz 2400~2483.5MHz

BT (Harmonic @ 3m)

BT	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	BT CH78 2480MHz	
1	Horizontal	Vertical
Peak Avg.	Site : 03CH07-HY Condition : FCC CLASS-B 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 620410 Mode : 1	Site : 03CH07-HY Condition : FCC CLASS-B 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 620410 Mode : 1



2.4GHz 2400~2483.5MHz
BLE (Band Edge @ 3m)

BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BLE CH19 2440MHz - L	
1	Horizontal	Vertical
Peak	Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT_130829 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 620410 Mode : 2	Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT_130829 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 620410 Mode : 2
Avg.	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 HORIZONTAL Detector : RBW:1000.000kHz VBW:3.000kHz SWT:Auto Project : 620410 Mode : 2	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 VERTICAL Detector : RBW:1000.000kHz VBW:3.000kHz SWT:Auto Project : 620410 Mode : 2



BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BLE CH19 2440MHz - R	
1	Horizontal	Vertical
Peak	Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT, 130829 HORIZONTAL Detector : Peak Project : 620410 Mode : 2	Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT, 130829 VERTICAL Detector : Peak Project : 620410 Mode : 2
Avg.	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT, 130829 HORIZONTAL Detector : Peak Project : 620410 Mode : 2	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT, 130829 VERTICAL Detector : Peak Project : 620410 Mode : 2



2.4GHz 2400~2483.5MHz

BLE (Harmonic @ 3m)

BLE	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	BLE CH19 2440MHz	
1	Horizontal	Vertical
Peak Avg.	Site : 03CH07.HY Condition : FCC CLASS-B 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 620410 Mode : 2	Site : 03CH07.HY Condition : FCC CLASS-B 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 620410 Mode : 2



2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Vertical
Peak	Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT_130829 HORIZONTAL RBW:1000.000kHz VSW:3000.000kHz SWT:Auto Detector : Peak Project : 620410 Mode : 3	Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT_130829 VERTICAL RBW:1000.000kHz VSW:3000.000kHz SWT:Auto Detector : Peak Project : 620410 Mode : 3
Avg.	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 HORIZONTAL RBW:1000.000kHz VSW:0.010kHz SWT:Auto Detector : Peak Project : 620410 Mode : 3	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 VERTICAL RBW:1000.000kHz VSW:0.010kHz SWT:Auto Detector : Peak Project : 620410 Mode : 3



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1	Horizontal	Vertical
Peak	Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT_130829 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 620410 Mode : 4	Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT_130829 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 620410 Mode : 4
Avg.	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 HORIZONTAL RBW:1000.000kHz VBW:1.000kHz SWT:Auto Detector : Peak Project : 620410 Mode : 4	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 VERTICAL RBW:1000.000kHz VBW:1.000kHz SWT:Auto Detector : Peak Project : 620410 Mode : 4



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - L	
1	Horizontal	Vertical
Peak	Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT_130829 HORIZONTAL RBW: 1000.000kHz VBW: 3000.000kHz SWT: Auto Detector : Peak Project : 620410 Mode : 5	Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT_130829 VERTICAL RBW: 1000.000kHz VBW: 3000.000kHz SWT: Auto Detector : Peak Project : 620410 Mode : 5
Avg.	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 HORIZONTAL RBW: 1000.000kHz VBW: 3.000kHz SWT: Auto Detector : Peak Project : 620410 Mode : 5	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 VERTICAL RBW: 1000.000kHz VBW: 3.000kHz SWT: Auto Detector : Peak Project : 620410 Mode : 5



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - R	
1	Horizontal	Vertical
Peak	Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT_130829 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 620410 Mode : 5	Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT_130829 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 620410 Mode : 5
Avg.	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 HORIZONTAL RBW:1000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 620410 Mode : 5	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 VERTICAL RBW:1000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 620410 Mode : 5



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

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.	Horizontal Peak Average Spectrum Plot showing Level (dBuV/m) vs Frequency (MHz). The plot includes two red horizontal lines for FCC CLASS-B limits at 73.1 dBuV/m and 58.5 dBuV/m (avg). Three blue vertical lines are present at approximately 4500, 5000, and 6000 MHz, with peak levels around 50 dBuV/m. The x-axis ranges from 1000 to 25000 MHz, and the y-axis ranges from 14.6 to 111.1 dBuV/m. Site : 03CH074HY Condition : FCC CLASS-B 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 620410 Mode : 3	Vertical Peak Average Spectrum Plot showing Level (dBuV/m) vs Frequency (MHz). The plot includes two red horizontal lines for FCC CLASS-B limits at 73.1 dBuV/m and 58.5 dBuV/m (avg). Two blue vertical lines are present at approximately 4500 and 5000 MHz, with peak levels around 45 dBuV/m. The x-axis ranges from 1000 to 25000 MHz, and the y-axis ranges from 14.6 to 111.1 dBuV/m. Site : 03CH074HY Condition : FCC CLASS-B 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 620410 Mode : 3



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.	Site : 03CH07-HY Condition : FCC CLASS-B 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 620410 Mode : 4	Site : 03CH07-HY Condition : FCC CLASS-B 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 620410 Mode : 4



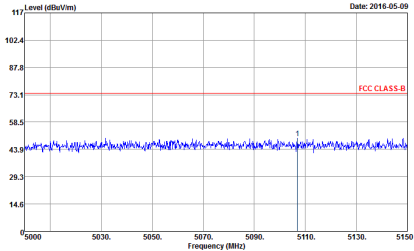
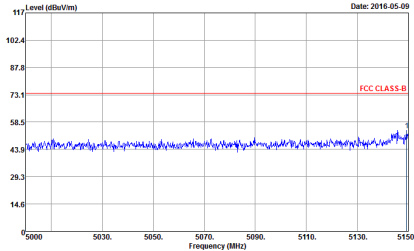
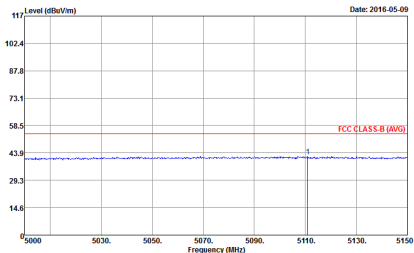
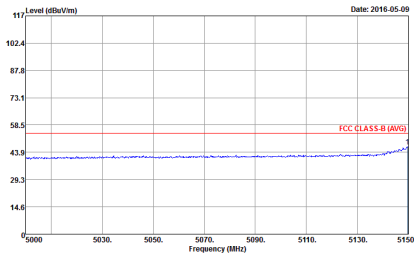
2.4GHz 2400~2483.5MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH09 2452MHz	
1	Horizontal	Vertical
Peak Avg.	Site : 03CH07-HY Condition : FCC CLASS-B 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 620410 Mode : 5	Site : 03CH07-HY Condition : FCC CLASS-B 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 620410 Mode : 5

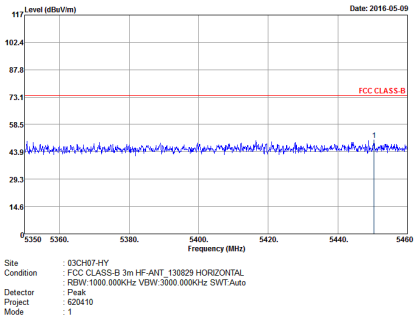
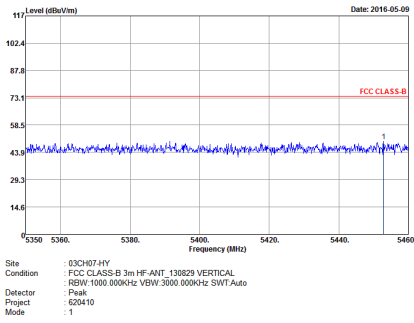
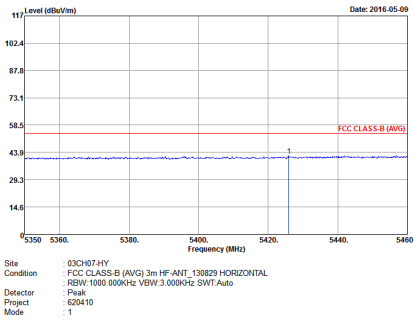
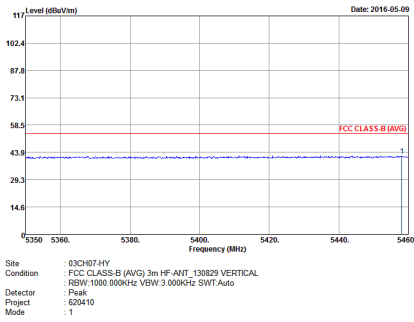


Band 1 5150~5250MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1	Horizontal	Vertical
Peak	 Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT_130829 HORIZONTAL Detector : Peak Project : 620410 Mode : 1	 Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT_130829 VERTICAL Detector : Peak Project : 620410 Mode : 1
Avg.	 Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 HORIZONTAL Detector : Peak Project : 620410 Mode : 1	 Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 VERTICAL Detector : Peak Project : 620410 Mode : 1



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1	Horizontal	Vertical
Peak	 Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT_130829 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 620410 Mode : 1	 Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT_130829 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 620410 Mode : 1
Avg.	 Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 HORIZONTAL RBW:1000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 620410 Mode : 1	 Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 VERTICAL RBW:1000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 620410 Mode : 1



Band 1 5150~5250MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT40 CH38 5190MHz	
1	Horizontal	Vertical
Peak Avg.	Site : 03CH07.HY Condition : FCC CLASS-B 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 620410 Mode : 1	Site : 03CH07.HY Condition : FCC CLASS-B 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 620410 Mode : 1



Band 2 5250~5350MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

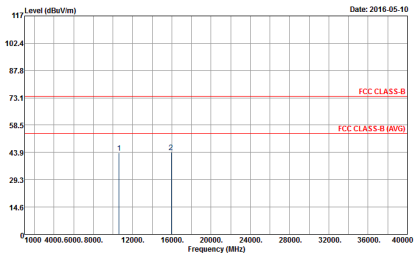
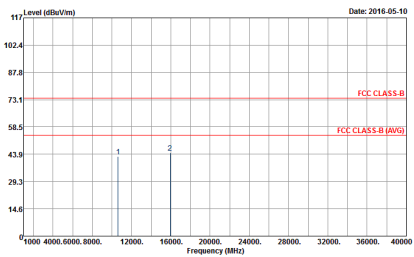
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - L	
1	Horizontal	Vertical
Peak	Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT_130829 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 620410 Mode : 2	Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT_130829 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 620410 Mode : 2
Avg.	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 HORIZONTAL RBW:1000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 620410 Mode : 2	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 VERTICAL RBW:1000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 620410 Mode : 2



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - R	
1	Horizontal	Vertical
Peak	Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT_130829 HORIZONTAL Detector : Peak Project : 620410 Mode : 2	Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT_130829 VERTICAL Detector : Peak Project : 620410 Mode : 2
Avg.	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 HORIZONTAL Detector : Peak Project : 620410 Mode : 2	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 VERTICAL Detector : Peak Project : 620410 Mode : 2



Band 2 5250~5350MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT40 CH62 5310	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH07.HY Condition : FCC CLASS-B 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 620410 Mode : 2	 Site : 03CH07.HY Condition : FCC CLASS-B 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 620410 Mode : 2



Band 3 5470~5725MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

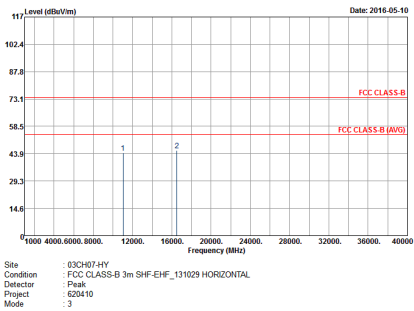
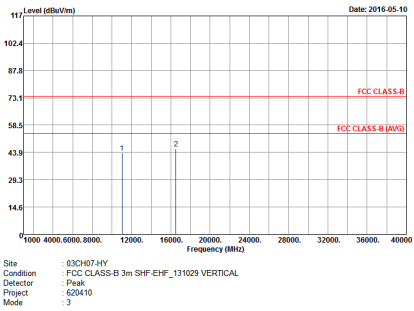
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1	Horizontal	Vertical
Peak	Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT_130829 HORIZONTAL Detector : Peak Project : 620410 Mode : 3	Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT_130829 VERTICAL Detector : Peak Project : 620410 Mode : 3
Avg.	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 HORIZONTAL Detector : Peak Project : 620410 Mode : 3	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 VERTICAL Detector : Peak Project : 620410 Mode : 3



WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1	Horizontal	Vertical
Peak	Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT_130829 HORIZONTAL Detector : Peak Project : 620410 Mode : 3	Site : 03CH07-HY Condition : FCC CLASS-B 3m HF-ANT_130829 VERTICAL Detector : Peak Project : 620410 Mode : 3
Avg.	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 HORIZONTAL Detector : Peak Project : 620410 Mode : 3	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 VERTICAL Detector : Peak Project : 620410 Mode : 3



Band 3 5470~5725MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT40 CH102 5510MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH07.HY Condition : FCC CLASS-B 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 620410 Mode : 3	 Site : 03CH07.HY Condition : FCC CLASS-B 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 620410 Mode : 3



Band 4 5725~5850MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz - L	
1	Horizontal	Vertical
Peak	Site : 03CH07-HY Condition : FCC CLASS-B_BAND 4 3m HF-ANT_130829 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : Peak Mode : 620410 Date: 2016-05-10	Site : 03CH07-HY Condition : FCC CLASS-B_BAND 4 3m HF-ANT_130829 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : Peak Mode : 620410 Date: 2016-05-10
Avg.	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 HORIZONTAL Detector : RBW:1000.000kHz VBW:3.000kHz SWT:Auto Project : Peak Mode : 620410 Date: 2016-05-10	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 VERTICAL Detector : RBW:1000.000kHz VBW:3.000kHz SWT:Auto Project : Peak Mode : 620410 Date: 2016-05-10



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz - R	
1	Horizontal	Vertical
Peak	Site : 03CH07-HY Condition : FCC CLASS-B BAND 4 3m HF-ANT_130829 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 620410 Mode : 4	Site : 03CH07-HY Condition : FCC CLASS-B BAND 4 3m HF-ANT_130829 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 620410 Mode : 4
Avg.	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 HORIZONTAL Detector : RBW:1000.000kHz VBW:3.000kHz SWT:Auto Project : 620410 Mode : 4	Site : 03CH07-HY Condition : FCC CLASS-B (AVG) 3m HF-ANT_130829 VERTICAL Detector : RBW:1000.000kHz VBW:3.000kHz SWT:Auto Project : 620410 Mode : 4



Band 4 5725~5850MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
1	Horizontal	Vertical
Peak Avg.	Site : 03CH07-HY Condition : FCC CLASS-B_BAND 4 3m SHF-EHF_131029 HORIZONTAL Detector : Peak Project : 620410 Mode : 4	Site : 03CH07-HY Condition : FCC CLASS-B_BAND 4 3m SHF-EHF_131029 VERTICAL Detector : Peak Project : 620410 Mode : 4

SAR Test Results

General Note:

- 1st: original test results for PY7-PM0952
- 2nd: spot check results for PY7-PM0950

<Head Condition>

No.	Band	Modulation	Mode	Test Position	Gap (mm)	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
1st	WLAN2.4GHz	DSSS	802.11b 1Mbps	Right Cheek	0mm	1	2412	17.73	18.00	1.064	100	1.000	0.18	1.020	1.085
2nd	WLAN2.4GHz	DSSS	802.11b 1Mbps	Right Cheek	0mm	1	2412	17.67	18.00	1.079	100	1.000	0.04	0.919	0.992
1st	WLAN5GHz	OFDM	802.11a 6Mbps	Right Tilted	0mm	64	5320	13.73	14.00	1.064	97.2	1.029	0.15	0.581	0.636
2nd	WLAN5GHz	OFDM	802.11a 6Mbps	Right Tilted	0mm	64	5320	13.64	14.00	1.086	97.2	1.029	-0.13	0.516	0.577
1st	WLAN5GHz	OFDM	802.11a 6Mbps	Right Tilted	0mm	132	5660	13.68	14.00	1.076	97.2	1.029	0.04	1.080	1.196
2nd	WLAN5GHz	OFDM	802.11a 6Mbps	Right Tilted	0mm	132	5660	13.68	14.00	1.076	97.2	1.029	0.1	1.150	1.274
1st	WLAN5GHz	OFDM	802.11a 6Mbps	Left Tilted	0mm	165	5825	13.89	14.00	1.026	97.2	1.029	-0.01	0.988	1.043
2nd	WLAN5GHz	OFDM	802.11a 6Mbps	Left Tilted	0mm	165	5825	13.83	14.00	1.040	97.2	1.029	0.11	0.950	1.017

<Hotspot Condition>

No.	Band	Modulation	Mode	Test Position	Gap (mm)	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
1st	WLAN2.4GHz	DSSS	802.11b 1Mbps	Back	10mm	11	2462	17.65	18.00	1.084	100	1.000	-0.08	0.301	0.326
2nd	WLAN2.4GHz	DSSS	802.11b 1Mbps	Back	10mm	11	2462	17.59	18.00	1.099	100	1.000	0.12	0.292	0.321

<Body-worn Condition>

No.	Band	Modulation	Mode	Test Position	Gap (mm)	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
1st	WLAN2.4GHz	DSSS	802.11b 1Mbps	Front	15mm	6	2437	17.81	18.00	1.045	100	1.000	0.08	0.151	0.158
2nd	WLAN2.4GHz	DSSS	802.11b 1Mbps	Front	15mm	6	2437	17.75	18.00	1.059	100	1.000	0.01	0.114	0.121
1st	WLAN5GHz	OFDM	802.11a 6Mbps	Front	15mm	64	5320	13.73	14.00	1.064	97.2	1.029	0.11	0.065	0.071
2nd	WLAN5GHz	OFDM	802.11a 6Mbps	Front	15mm	64	5320	13.64	14.00	1.086	97.2	1.029	-0.02	0.074	0.083
1st	WLAN5GHz	OFDM	802.11a 6Mbps	Front	15mm	132	5660	13.68	14.00	1.076	97.2	1.029	0.1	0.182	0.202
2nd	WLAN5GHz	OFDM	802.11a 6Mbps	Front	15mm	132	5660	13.68	14.00	1.076	97.2	1.029	-0.07	0.169	0.187
1st	WLAN5GHz	OFDM	802.11a 6Mbps	Front	15mm	165	5825	13.89	14.00	1.026	97.2	1.029	-0.06	0.212	0.224
2nd	WLAN5GHz	OFDM	802.11a 6Mbps	Front	15mm	165	5825	13.83	14.00	1.040	97.2	1.029	-0.19	0.197	0.211

<Product Specific Condition>

No.	Band	Modulation	Mode	Test Position	Gap (mm)	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
1st	WLAN5GHz	OFDM	802.11a 6Mbps	Top Side	0mm	64	5320	13.73	14.00	1.064	97.2	1.029	0.18	0.313	0.343
2nd	WLAN5GHz	OFDM	802.11a 6Mbps	Top Side	0mm	64	5320	13.64	14.00	1.086	97.2	1.029	0.12	0.352	0.394
1st	WLAN5GHz	OFDM	802.11a 6Mbps	Back	0mm	100	5500	13.73	14.00	1.064	97.2	1.029	-0.1	0.530	0.580
2nd	WLAN5GHz	OFDM	802.11a 6Mbps	Back	0mm	100	5500	13.64	14.00	1.086	97.2	1.029	0.18	0.505	0.565
1st	WLAN5GHz	OFDM	802.11a 6Mbps	Top Side	0mm	157	5785	13.74	14.00	1.062	97.2	1.029	-0.19	0.406	0.444
2nd	WLAN5GHz	OFDM	802.11a 6Mbps	Top Side	0mm	157	5785	13.68	14.00	1.076	97.2	1.029	-0.11	0.369	0.409

End of this report