



Spot Check Evaluation

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History of this test report

Version	Description	Issued Date
01	Initial issue of report	Jun. 22, 2018
02	Remove WWAN spot check information.	Jun. 25, 2018



1. Introduction Section

The original model (FCC ID: PY7-04606A) and the variant model (FCC ID: PY7-43143E) has identical PCB layout, antenna, SW implementation for Bluetooth/Wi-Fi/NFC/GPS. Based on their similarity, the FCC Part 15C (equipment class: DTS, DSS, DXX) and Part 15E (equipment class: NII) test data issued test data of PY7-43143E references the test data of PY7-04606A

The applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID (FCC ID: PY7-43143E).



2. Difference Section

The original model (FCC ID: PY7-04606A) and the variant model (FCC ID: PY7-43143E) 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.

Cellular transmitter RF components are different in PY7-43143E, to support capability for different cellular bands.

The product specification is outlined in the following table:

FCC ID			PY7-04606A	PY7-43143E
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 (FDD/TDD)	QPSK/16QAM/64QAM		B2/B5/B7/B41	B2/B5/B7
Wi-Fi	11b/11g/11n(HT20)/11ac(VHT20)		2412-2462	
	11a/11n(HT20)/11n(HT40)/		5150-5250	
	11ac(VHT20)/ 11ac(VHT40)/		5250-5350	
	11ac(VHT80)		5470-5725 5725-5850	
Bluetooth	V5.0 LE		2402-2480 MHz	
NFC	ASK		13.56 MHz	



3. Spot Check Verification Data Section

Summary of the spot check:

Test Item	Mode	PY7-04606A Worst Result	PY7-43143E Worst Result	Difference (dB)
Average Conducted Power (dBm)	802.11b	19.30	19.37	-0.07
	802.11g	16.99	16.98	0.01
	11n HT20	13.91	13.92	-0.01
	11ac VHT20	13.84	13.88	-0.04
	BT (1Mbps)	11.53	10.96	0.57
	BT (2Mbps)	9.27	8.76	0.51
	BT (3Mbps)	9.26	8.77	0.49
	BT-LE(1Mbps)	1.26	1.28	-00.02
	BT-LE(2Mbps)	1.34	1.36	-0.02
	11a, 5.2GHz	16.96	16.99	-0.03
	11n HT20, 5.2GHz	13.99	13.87	0.12
	11n HT40, 5.2GHz	12.99	12.95	0.04
	11ac VHT20, 5.2GHz	13.88	13.86	0.02
	11ac VHT40, 5.2GHz	12.79	12.93	-0.14
	11ac VHT80, 5.2GHz	11.88	11.88	0
	11a, 5.3GHz	16.99	16.98	0.01
	11n HT20, 5.3GHz	13.99	13.86	0.13
	11n HT40, 5.3GHz	12.93	12.93	0
	11ac VHT20, 5.3GHz	13.98	13.85	0.13
	11ac VHT40, 5.3GHz	12.84	12.92	-0.08
	11ac VHT80, 5.3GHz	11.81	11.86	-0.05
	11a, 5.5GHz	16.98	16.93	0.05
	11n HT20, 5.5GHz	13.98	13.97	0.01
	11n HT40, 5.5GHz	12.83	12.99	-0.16
	11ac VHT20, 5.5GHz	13.94	13.91	0.03
	11ac VHT40, 5.5GHz	12.78	12.98	-0.20
	11ac VHT80, 5.5GHz	11.94	11.83	0.11
	11a, 5.8GHz	16.98	16.95	0.03
	11n HT20, 5.8GHz	13.87	13.91	-0.04
	11n HT40, 5.8GHz	12.84	12.99	-0.15
	11ac VHT20, 5.8GHz	13.89	13.80	0.09
	11ac VHT40, 5.8GHz	12.93	12.98	-0.05
	11ac VHT80, 5.8GHz	11.81	11.88	-0.07
	S/N of test sample	CQ3000NYWW	CQ3000VMUK	
	Test date	2018/04/3~2018/04/23	2018/05/18~2018/06/01	



Test Item	Mode	PY7-04606A Worst Result	PY7-43143E Worst Result	Difference (dB)
Peak Radiated Spurious Emission (Band Edge) (dBuV/m)	802.11b	54.56	56.88	-2.32
	802.11g	55.95	58.94	-2.99
	BT (2Mbps)	49.80	52.14	-2.34
	BT-LE(2Mbps)	53.56	56.35	-2.79
	802.11a, 5.2GHz	60.77	61.01	-0.24
	802.11n HT40, 5.3GHz	53.46	56.02	-2.56
	802.11a, 5.5GHz	61.36	58.54	2.82
	802.11a, 5.8GHz	49.82	52.77	-2.95
	S/N of test sample	CQ3000NYWV	CQ3000VMUR CQ3000U927	
	Test date	2018/04/3~2018/04/23	2018/05/18~2018/06/01	
Average Radiated Spurious Emission (Band Edge) (dBuV/m)	802.11b	44.54	47.18	-2.64
	802.11g	45.17	47.76	-2.59
	BT (2Mbps)	25.07	27.41	-2.34
	BT-LE(2Mbps)	44.33	46.94	-2.61
	802.11a, 5.2GHz	45.27	43.76	1.51
	802.11n HT40, 5.3GHz	42.46	44.77	-2.31
	S/N of test sample	CQ3000NYWV	CQ3000VMUR CQ3000U927	
	Test date	2018/04/3~2018/04/23	2018/05/18~2018/06/01	
Peak Radiated Spurious Emission (Harmonic) (dBuV/m)	802.11b	47.40	45.53	1.87
	802.11g	43.85	45.04	-1.19
	BT (2Mbps)	45.32	43.49	1.83
	BT-LE(2Mbps)	43.84	43.77	0.07
	802.11a, 5.2GHz	53.93	52.58	1.35
	802.11n HT40, 5.3GHz	48.50	48.46	0.04
	802.11a, 5.5GHz	48.07	49.27	-1.20
	802.11a, 5.8GHz	55.30	52.36	2.94
	S/N of test sample	CQ3000NYWV	CQ3000VMUR CQ3000U927	
	Test date	2018/04/3~2018/04/23	2018/05/18~2018/06/01	
NFC (dBuV/m)	RSE (30MHz to1GHz)	33.65	32.69	0.96
	S/N of test sample	CQ3000PSRK	CQ3000VMUR	
	Test date	2018/04/17~2018/04/25	2018/05/21~2018/05/22	

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 1dB, 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, 74dBuV/m, without further reporting the average measurement

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



4. Reference detail Section

Rule Part	Equipment Class	Wireless Technology	Frequency Band (MHz)	Reference FCC ID	Type Grant/Permissive Change	Reference Report Title	Reference Application	Reference Report Sections
15C	DTS	Bluetooth – LE Wii-Fi	2400~2483.5	PY7-04606A	Original Grant	FCC RF Test Report	PY7-43143E	Part 15C (FR832501-01B, FR832501-01C)
	DSS	Bluetooth	2400~2483.5	PY7-04606A	Original Grant	FCC RF Test Report	PY7-43143E	Part 15C (FR832501-01A)
	DXX	NFC	13.56	PY7-04606A	Original Grant	FCC RF Test Report	PY7-43143E	Part 15C (FR832501-01D)
15E	NII	Wi-Fi	5150~5250 5250~5350 5470~5725 5725~5850	PY7-04606A	Original Grant	FCC RF Test Report	PY7-43143E	Part 15E (FR832501-01E, FR832501-01F)
		DFS	5470~5725	PY7-04606A	Original Grant	FCC RF Test Report	PY7-43143E	Part 15E (FZ7832501-01)

Appendix A. Spot Check Test Result

1.1 Conducted power

<2.4GHz WLAN>

2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-04606A Average power (dBm)	FCC ID PY7-43143E Average power (dBm)
	802.11b	CH 1	2412	1Mbps	19.5	19.30	19.37
		CH 6	2437			19.10	19.30
		CH 11	2462			19.26	19.27
	802.11g	CH 1	2412	6Mbps	17	16.99	16.98
		CH 6	2437			16.75	16.69
		CH 11	2462			16.93	16.80
	802.11n-HT20	CH 1	2412	MCS0	14	13.70	13.92
		CH 6	2437			13.91	13.84
		CH 11	2462			13.83	13.83
	802.11ac-VHT20	CH 1	2412	MCS0	14	13.58	13.88
		CH 6	2437			13.84	13.82
		CH 11	2462			13.78	13.80

**<Bluetooth>**

Mode	Channel	Frequency (MHz)	Tune-Up Limit	FCC ID PY7-04606A Average power (dBm)	FCC ID PY7-43143E Average power (dBm)
Bluetooth (1Mbps)	CH 00	2402	12	11.53	10.96
	CH 39	2441		10.66	10.53
	CH 78	2480		10.88	10.81
Bluetooth (2Mbps)	CH 00	2402	10	9.27	8.76
	CH 39	2441		8.07	7.96
	CH 78	2480		8.69	8.62
Bluetooth (3Mbps)	CH 00	2402	10	9.26	8.77
	CH 39	2441		8.02	7.97
	CH 78	2480		8.67	8.63
BLE (GFSK) (1Mbps)	CH 00	2402	1.5	0.97	0.36
	CH 19	2440		0.25	0.21
	CH 39	2480		1.26	1.28
BLE (GFSK) (2Mbps)	CH 00	2402	1.5	1.02	0.39
	CH 19	2440		0.33	0.26
	CH 39	2480		1.34	1.36

<5GHz WLAN>

5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-04606A Average power (dBm)	FCC ID PY7-43143E Average power (dBm)
	802.11a	CH 36	5180	6Mbps	17	16.96	16.99
		CH 44	5220			16.87	16.98
		CH 48	5240			16.95	16.97
	802.11n-HT20	CH 36	5180	MCS0	14	13.99	13.87
		CH 44	5220			13.86	13.85
		CH 48	5240			13.98	13.69
	802.11n-HT40	CH 38	5190	MCS0	13	12.99	12.95
		CH 46	5230			12.96	12.92
	802.11ac-VHT20	CH 36	5180	MCS0	14	13.88	13.86
		CH 44	5220			13.85	13.84
		CH 48	5240			13.86	13.67
	802.11ac-VHT40	CH 38	5190	MCS0	13	12.79	12.93
		CH 46	5230			12.78	12.91
	802.11ac-VHT80	CH 42	5210	MCS0	12	11.88	11.88

5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-04606A Average power (dBm)	FCC ID PY7-43143E Average power (dBm)
	802.11a	CH 52	5260	6Mbps	17	16.99	16.97
		CH 60	5300			16.88	16.97
		CH 64	5320			16.86	16.98
	802.11n-HT20	CH 52	5260	MCS0	14	13.99	13.81
		CH 60	5300			13.93	13.85
		CH 64	5320			13.92	13.86
	802.11n-HT40	CH 54	5270	MCS0	13	12.93	12.92
		CH 62	5310			12.92	12.93
	802.11ac-VHT20	CH 52	5260	MCS0	14	13.98	13.77
		CH 60	5300			13.86	13.81
		CH 64	5320			13.91	13.85
	802.11ac-VHT40	CH 54	5270	MCS0	13	12.84	12.90
		CH 62	5310			12.71	12.92
	802.11ac-VHT80	CH58	5290	MCS0	12	11.81	11.86



5.5GHz WLAN	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-04606A Average power (dBm)	FCC ID PY7-43143E Average power (dBm)
	802.11a	CH 100	5500	6Mbps	17	16.94	16.88
		CH 116	5580			16.93	16.93
		CH 140	5700			16.89	16.58
		CH144	5720			16.98	16.88
	802.11n-HT20	CH 100	5500	MCS0	14	13.97	13.97
		CH 116	5580			13.98	13.95
		CH 140	5700			13.78	13.95
		CH144	5720			13.84	13.78
	802.11n-HT40	CH 102	5510	MCS0	13	12.77	12.84
		CH 126	5630			12.81	12.99
		CH 134	5670			12.80	12.80
		CH142	5710			12.83	12.84
	802.11ac-VHT20	CH 100	5500	MCS0	14	13.89	13.91
		CH 116	5580			13.94	13.90
		CH 140	5700			13.65	13.90
		CH144	5720			13.72	13.72
	802.11ac-VHT40	CH 102	5510	MCS0	13	12.76	12.81
		CH 126	5630			12.78	12.98
		CH 134	5670			12.74	12.78
		CH142	5710			12.68	12.82
	802.11ac-VHT80	CH106	5530	MCS0	12	11.74	11.83
		CH122	5610			11.87	11.82
		CH138	5690			11.94	11.74

5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Data Rate	Tune-Up Limit	FCC ID PY7-04606A Average power (dBm)	FCC ID PY7-43143E Average power (dBm)
	802.11a	CH 149	5745	MCS0	17	16.98	16.90
		CH 157	5785			16.95	16.60
		CH 165	5825			16.94	16.95
	802.11n-HT20	CH 149	5745	MCS0	14	13.87	13.71
		CH 157	5785			13.76	13.91
		CH 165	5825			13.65	13.79
	802.11n-HT40	CH 151	5755	MCS0	13	12.77	12.99
		CH 159	5795			12.84	12.71
	802.11ac-VHT20	CH 149	5745	MCS0	14	13.89	13.68
		CH 157	5785			13.76	13.80
		CH 165	5825			13.73	13.78
	802.11ac-VHT40	CH 151	5755	MCS0	13	12.89	12.98
		CH 159	5795			12.93	12.70
	802.11ac-VHT80	CH155	5775	MCS0	12	11.81	11.88

1.2 Radiated Spurious Emission

2.4GHz BT/WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-04606A						FCC ID PY7-43143E					
				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	2483.68	51.32	74	7440	44.18	74	2483.52	52.14	74	7440	43.49	74
			A	2483.68	26.56	54	7440	19.42	54	2483.52	27.41	54	7440	18.76	54
BLE(2Mbps)	CH 39	2480	P	2486.6	53.56	74	7440	43.84	74	2492.12	56.35	74	7440	43.77	74
			A	2499.56	44.33	54	-	-	-	2487.08	46.94	54	-	-	-
802.11b	CH 11	2462	P	2486.84	54.56	74	4924	47.4	74	2483.6	56.88	74	4924	45.53	74
			A	2483.52	44.54	54	-	-	-	2483.52	47.18	54	-	-	-
802.11g	CH 1	2412	P	2388.01	55.95	74	4824	43.85	74	2389.695	58.94	74	4824	45.04	74
			A	2390	45.17	54	-	-	-	2389.905	47.76	54	-	-	-

5.2GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-04606A						FCC ID PY7-43143E					
				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)
802.11a	CH 36	5180	P	5140.66	60.77	74	10360	53.93	68.2	5148.2	61.01	74	10360	52.58	68.2
			A	5149.76	45.27	54	-	-	-	5150	43.76	54	-	-	-

**5.3GHz WLAN**

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-04606A						FCC ID PY7-43143E					
				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)
802.11an 40	CH 62	5310	P	5351.52	53.46	74	10620	48.5	74	5350.08	56.02	74	10620	48.46	74
			A	5350.08	42.46	54	-	-	-	5351.28	44.77	54	-	-	-

5.5GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-04606A						FCC ID PY7-43143E					
				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)
802.11a	CH 140	5700	P	5725.72	61.36	68.2	17100	48.07	68.2	5729.96	58.54	68.2	17100	49.27	68.2

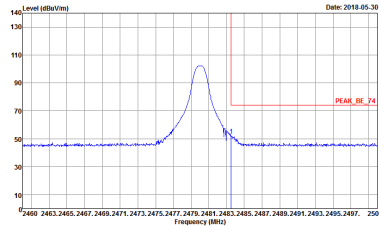
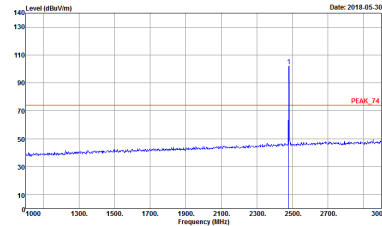
5.8GHz WLAN

Mode	Ch	Freq. (MHz)	Peak /Avg.	FCC ID PY7-04606A						FCC ID PY7-43143E					
				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)
802.11a	CH 165	5825	P	5926.6	49.82	68.2	17475	55.3	68.2	5946.2	52.77	68.2	17475	52.36	68.2



2.4GHz 2400~2483.5MHz

BT (Band Edge @ 3m)

BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
	BT CH78 2480MHz	
	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 1	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 1

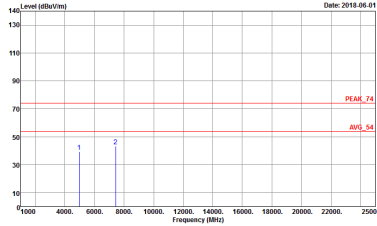
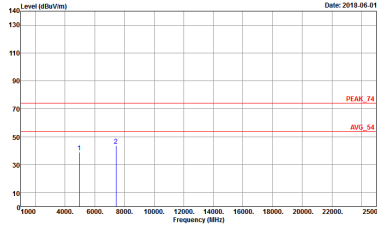


BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
	BT CH78 2480MHz	
	Vertical	Fundamental
Peak	Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000GHz VBW:3000.000GHz SWT:Auto Project : Peak Mode : 832504-01	Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000GHz VBW:3000.000GHz SWT:Auto Project : Peak Mode : 832504-01



2.4GHz 2400~2483.5MHz

BT (Harmonic @ 3m)

BT	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
	BT CH78 2480MHz	
	Horizontal	Vertical
Peak	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 1	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 832504-01 Mode : 1

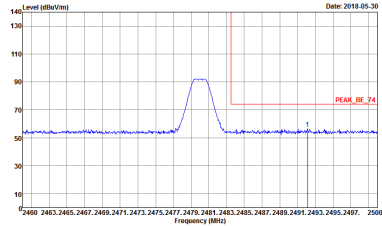
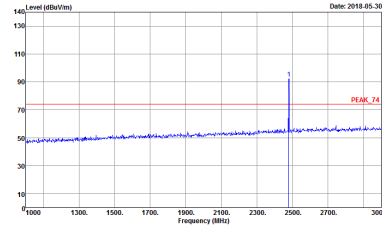
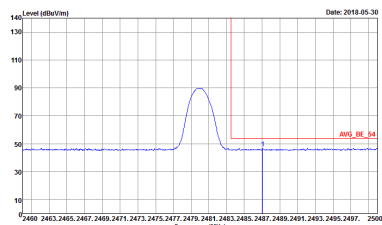
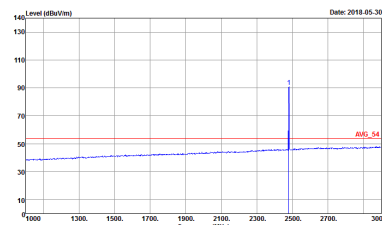


2.4GHz 2400~2483.5MHz

BLE (Band Edge @ 3m)

BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
	BLE CH39 2480MHz	
	Horizontal	Fundamental
Peak	Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 3	Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 3
Avg.	Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 3	Site : 03CH12-HY Condition : AVG_54 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 3

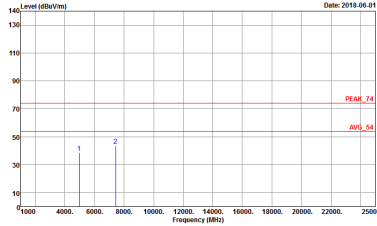
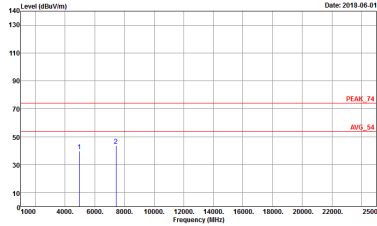


BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
	BLE CH39 2480MHz	
	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 832504-01 Date: 2018.05.30	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 832504-01 Date: 2018.05.30
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:10.000KHz SWT:Auto Project : Peak Mode : 832504-01 Date: 2018.05.30	 Site : 03CH12-HY Condition : AVG_54 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:10.000KHz SWT:Auto Project : Peak Mode : 832504-01 Date: 2018.05.30



2.4GHz 2400~2483.5MHz

BLE (Harmonic @ 3m)

BLE	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
	BLE CH39 2480MHz	
	Horizontal	Vertical
Peak	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 3	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 832504-01 Mode : 3



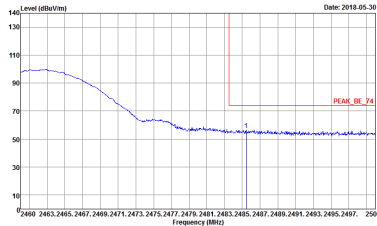
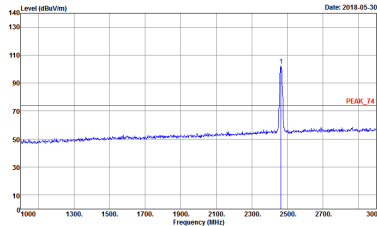
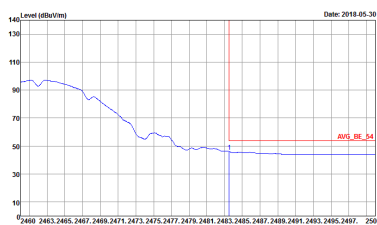
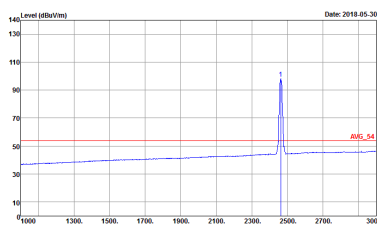
2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Fundamental
Peak	Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 5 Setting : 18.5	Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 5 Setting : 18.5
Avg.	Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 5 Setting : 18.5	Site : 03CH12-HY Condition : AVG_54 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 5 Setting : 18.5



FCC TEST REPORT

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 832504-01 Setting : 5 Setting : 18.5	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 832504-01 Setting : 5 Setting : 18.5
	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : Peak Mode : 832504-01 Setting : 5 Setting : 18.5	 Site : 03CH12-HY Condition : AVG_54 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:0.010KHz SWT:Auto Project : Peak Mode : 832504-01 Setting : 5 Setting : 18.5



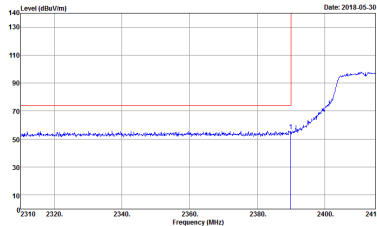
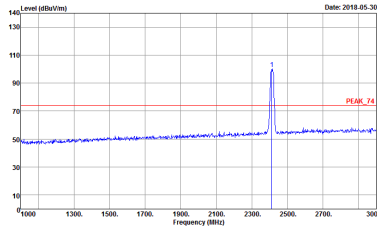
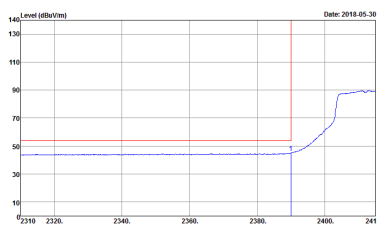
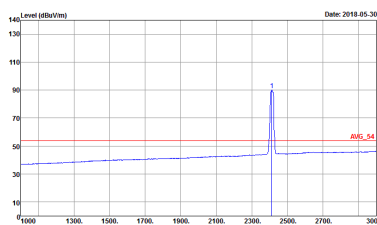
2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1	Horizontal	Fundamental
Peak	Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 7 Setting : 16.5	Site : 03CH12-HY Condition : PEAK_74 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 7 Setting : 16.5
Avg.	Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 7 Setting : 16.5	Site : 03CH12-HY Condition : AVG_54 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 7 Setting : 16.5



FCC TEST REPORT

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 832504-01 Setting : 7 Setting : 16.5	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 832504-01 Setting : 7 Setting : 16.5
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Project : Peak Mode : 832504-01 Setting : 7 Setting : 16.5	 Site : 03CH12-HY Condition : AVG_54 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Project : Peak Mode : 832504-01 Setting : 7 Setting : 16.5



2.4GHz 2400~2483.5MHz

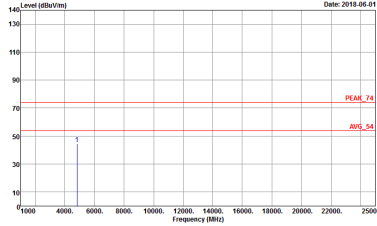
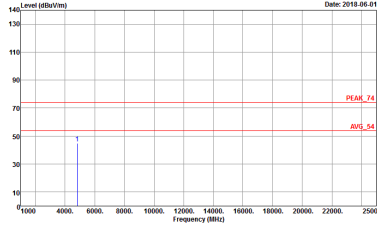
WIFI 802.11b (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Vertical
Peak	Site : 03CH12-HY Condition : PEAK_74 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 5	Site : 03CH12-HY Condition : PEAK_74 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 832504-01 Mode : 5



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH01 2412MHz	
1	Horizontal	Vertical
Peak	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 7	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 832504-01 Mode : 7



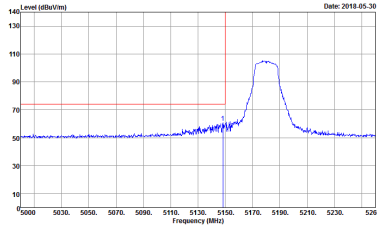
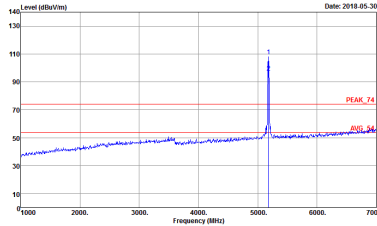
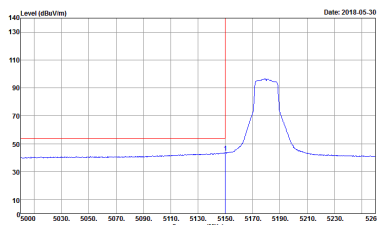
Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

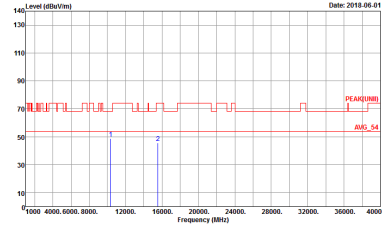
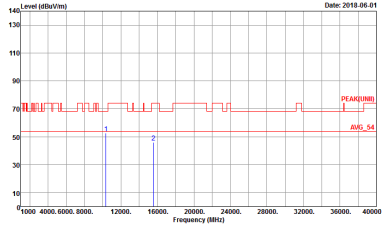
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1	Horizontal	Fundamental
Peak	Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 1 Setting : 14	Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 1 Setting : 14
Avg.	Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 1 Setting : 14	Left blank



FCC TEST REPORT

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 832504-01 Setting : 14	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 832504-01 Setting : 14
Avg.	 Site : 03CH12-HY Condition : AVG_BE_74 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:1.000KHz SWT:Auto Project : Peak Mode : 832504-01 Setting : 14	Left blank

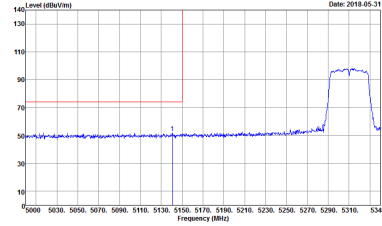
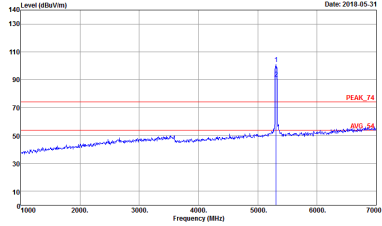
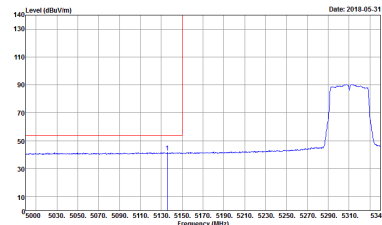
Band 1 - 5150~5250MHz
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH36 5180MHz	
1	Horizontal	Vertical
Peak	 Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 1	 Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 832504-01 Mode : 1



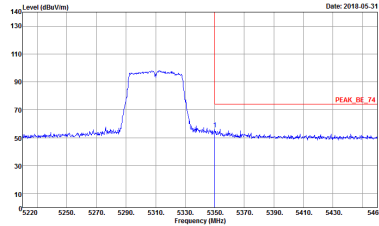
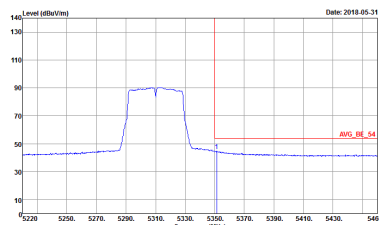
Band 2 - 5250~5350MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH12-1Y Condition : PEAK_BE_74 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 2	 Site : 03CH12-1Y Condition : PEAK_74 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 2
Avg.	 Site : 03CH12-1Y Condition : AVG_BE_54 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 2	Left blank



FCC TEST REPORT

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_91200_1328 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 832504-01 : 2	Left blank
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_91200_1328 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 832504-01 : 2	Left blank

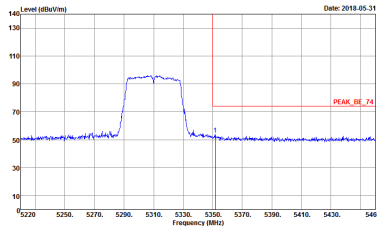
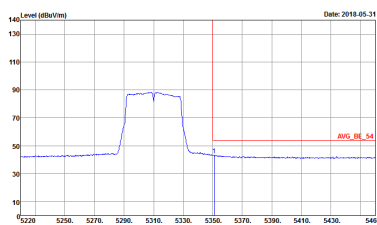


FCC TEST REPORT

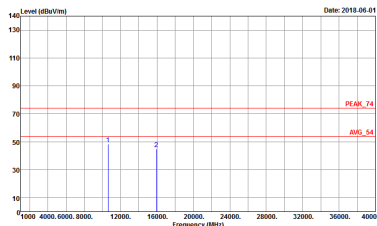
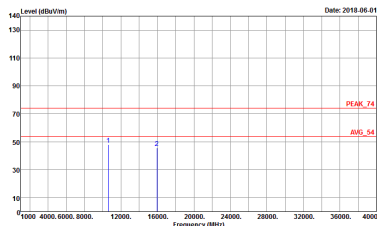
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 MHz - L	
1	Vertical	Fundamental
Peak	Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 832504-01 Mode : 2	Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 832504-01 Mode : 2
Avg.	Site : 03CH12-HY Condition : AVE_BE_74 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 832504-01 Mode : 2	Left blank



FCC TEST REPORT

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_91200_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 832504-01 : 2	Left blank
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_91200_1328 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 832504-01 : 2	Left blank

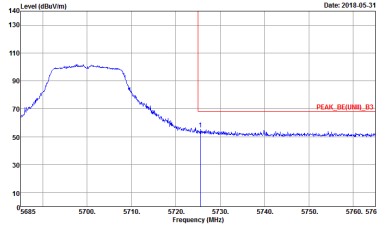
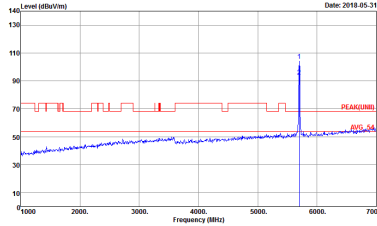
Band 2 - 5250~5350MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT40 CH62 5310 MHz	
1	Horizontal	Vertical
Peak	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 2	 Site : 03CH12-HY Condition : PEAK_74 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 832504-01 Mode : 2

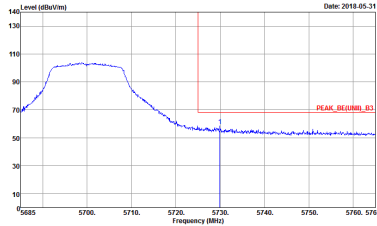
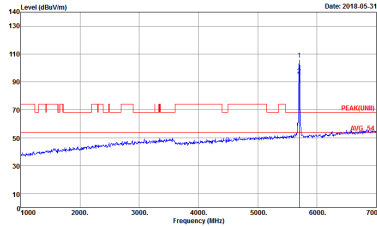


Band 3 - 5470~5725MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH12-14Y Condition : PEAK_BE(UNIT)_B3 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 3 Setting : 14	 Site : 03CH12-14Y Condition : PEAK(UNIT)_B3 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 3 Setting : 14

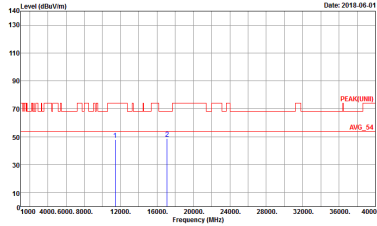
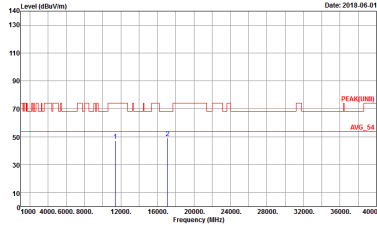


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH12-4Y Condition : PEAK_BE(UNIT)_B3 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 832504-01 Mode : 3 Setting : 14	 Site : 03CH12-4Y Condition : PEAK_F(UNIT)_B3 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 832504-01 Mode : 3 Setting : 14



Band 3 - 5470~5725MHz

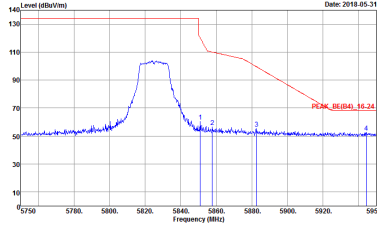
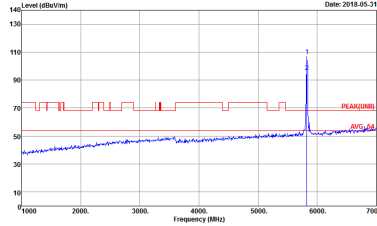
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH140 5700MHz	
1	Horizontal	Vertical
Peak	 Site : 03CH12-4Y Condition : PEAK(UNII) 3m HORN_91200_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 3	 Site : 03CH12-4Y Condition : PEAK(UNII) 3m HORN_91200_1328 VERTICAL Detector : Peak Project : 832504-01 Mode : 3

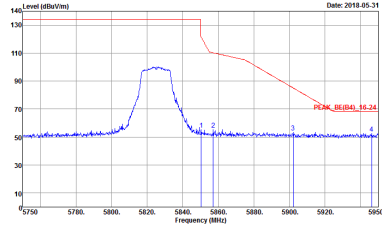
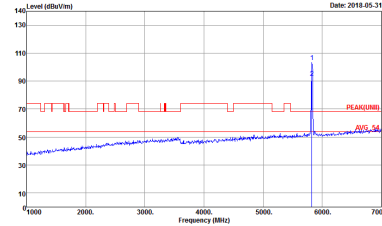


Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH12-4Y Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 HORIZONTAL Detector : RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto Project : Peak Mode : 832504-01 Setting : 5 Setting : 12	 Site : 03CH12-4Y Condition : PEAK(UNIT) 3m HORN_9120D_1328 HORIZONTAL Detector : RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto Project : Peak Mode : 832504-01 Setting : 5 Setting : 12

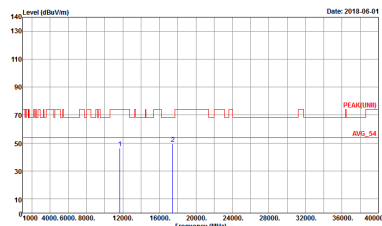
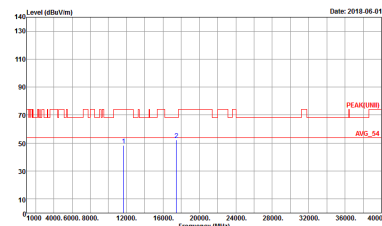


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto Peak Project : 832504-01 Mode : 5 Setting : 12	 Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 VERTICAL Detector : RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto Peak Project : 832504-01 Mode : 5 Setting : 12



Band 4 - 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
1	Horizontal	Vertical
Peak	 Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 HORIZONTAL Detector : Peak Project : 832504-01 Mode : 7	 Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 VERTICAL Detector : Peak Project : 832504-01 Mode : 7

**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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
BT CH 78 2480MHz	*	2480	101.99	-	-	99.4	27.36	6.79	31.56	238	52	P	H
	*	2480	77.26	-	-	-	-	-	-	-	-	A	H
		2483.52	52.14	-21.86	74	49.55	27.36	6.79	31.56	238	52	P	H
		2483.52	27.41	-26.59	54	-	-	-	-	-	-	A	H
													H
													H
	*	2480	101.25	-	-	98.66	27.36	6.79	31.56	299	90	P	V
	*	2480	76.52	-	-	-	-	-	-	-	-	A	V
		2484.12	51.72	-22.28	74	49.13	27.36	6.79	31.56	299	90	P	V
		2484.12	26.99	-27.01	54	-	-	-	-	-	-	A	V
													V
													V

**2.4GHz 2400~2483.5MHz****BT (Harmonic @ 3m)**

BT	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
BT CH 78 2480MHz		4960	39.26	-34.74	74	53.33	31.63	10.82	56.52	100	0	P	H
		4960	14.53	-39.47	54	-	-	-	-	-	-	A	H
		7440	43.25	-30.75	74	49.72	36.47	13.13	56.07	100	0	P	H
		7440	18.52	-35.48	54	-	-	-	-	-	-	A	H
		4960	39.1	-34.9	74	53.17	31.63	10.82	56.52	100	0	P	V
		4960	14.37	-39.63	54	-	-	-	-	-	-	A	V
		7440	43.49	-30.51	74	49.96	36.47	13.13	56.07	100	0	P	V
		7440	18.76	-35.24	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****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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
BLE CH 39 2480MHz	*	2480	94.3	-	-	81.68	27.36	16.82	31.56	100	119	P	H
	*	2480	92.75	-	-	80.13	27.36	16.82	31.56	100	119	A	H
		2485.88	56.36	-17.64	74	43.74	27.36	16.82	31.56	100	119	P	H
		2491.28	46.84	-7.16	54	34.17	27.4	16.83	31.56	100	119	A	H
													H
													H
	*	2480	92.54	-	-	79.92	27.36	16.82	31.56	400	9	P	V
	*	2480	90.84	-	-	78.22	27.36	16.82	31.56	400	9	A	V
		2492.12	56.35	-17.65	74	43.67	27.4	16.83	31.55	400	9	P	V
		2487.08	46.94	-7.06	54	34.31	27.36	16.83	31.56	400	9	A	V
													V
													V

**2.4GHz 2400~2483.5MHz****BLE (Harmonic @ 3m)**

BLE	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
BLE CH 39 2480MHz		4960	38.64	-35.36	74	52.71	31.63	10.82	56.52	100	0	P	H
		7440	43.58	-30.42	74	50.05	36.47	13.13	56.07	100	0	P	H
													H
													H
		4960	39.68	-34.32	74	53.75	31.63	10.82	56.52	100	0	P	V
		7440	43.77	-30.23	74	50.24	36.47	13.13	56.07	100	0	P	V
													V
													V
Remark	3. No other spurious found. 4. 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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 11 2462MHz	*	2462	104.86	-	-	92.31	27.32	16.79	31.56	135	348	P	H
	*	2462	100.75	-	-	88.2	27.32	16.79	31.56	135	348	A	H
		2483.6	56.88	-17.12	74	44.26	27.36	16.82	31.56	135	348	P	H
		2483.52	47.18	-6.82	54	34.56	27.36	16.82	31.56	135	348	A	H
													H
													H
	*	2462	102.42	-	-	89.87	27.32	16.79	31.56	106	15	P	V
	*	2462	98.2	-	-	85.65	27.32	16.79	31.56	106	15	A	V
		2485.44	56.45	-17.55	74	43.83	27.36	16.82	31.56	106	15	P	V
		2483.52	46.05	-7.95	54	33.43	27.36	16.82	31.56	106	15	A	V
													V
													V



2.4GHz 2400~2483.5MHz

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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 11 2462MHz		4924	45.53	-28.47	74	59.7	31.56	10.8	56.53	100	0	P	H
		7386	44.12	-29.88	74	50.87	36.33	13.06	56.14	100	0	P	H
													H
													H
		4924	44.87	-29.13	74	59.04	31.56	10.8	56.53	100	0	P	V
		7386	43.82	-30.18	74	50.57	36.33	13.06	56.14	100	0	P	V
													V
													V
Remark	5. No other spurious found. 6. 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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2389.695	58.94	-15.06	74	46.69	27.15	16.68	31.58	148	347	P	H
		2389.905	47.76	-6.24	54	35.5	27.15	16.68	31.57	148	347	A	H
	*	2412	106.25	-	-	93.91	27.19	16.72	31.57	148	347	P	H
	*	2412	95.62	-	-	83.28	27.19	16.72	31.57	148	347	A	H
													H
													H
		2389.905	55.79	-18.21	74	43.53	27.15	16.68	31.57	100	18	P	V
		2390	45.05	-8.95	54	32.78	27.15	16.69	31.57	100	18	A	V
	*	2412	100.16	-	-	87.82	27.19	16.72	31.57	100	18	P	V
	*	2412	90.12	-	-	77.78	27.19	16.72	31.57	100	18	A	V
													V
													V

**2.4GHz 2400~2483.5MHz****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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		4824	44.58	-29.42	74	59.06	31.36	10.73	56.57	100	0	P	H
													H
													H
													H
		4824	45.04	-28.96	74	59.52	31.36	10.73	56.57	100	0	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**Band 1 - 5150~5250MHz****WIFI 802.11a (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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		5147.94	58.8	-15.2	74	48.17	31.79	9.98	31.14	106	235	P	H
		5147.42	42.9	-11.1	54	32.27	31.79	9.98	31.14	106	235	A	H
	*	5180	107.31	-	-	96.62	31.81	10.02	31.14	106	235	P	H
	*	5180	95.98	-	-	85.29	31.81	10.02	31.14	106	235	A	H
													H
													H
		5148.2	61.01	-12.99	74	50.38	31.79	9.98	31.14	102	344	P	V
		5150	43.76	-10.24	54	33.13	31.79	9.98	31.14	102	344	A	V
	*	5180	108.49	-	-	97.8	31.81	10.02	31.14	102	344	P	V
	*	5180	96.72	-	-	86.03	31.81	10.02	31.14	102	344	A	V
													V
													V

**Band 1 5150~5250MHz****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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10360	48.81	-19.39	68.2	53.05	39.86	15.89	59.99	100	0	P	H
		15540	45.48	-28.52	74	45.45	38.53	19.54	58.04	100	0	P	H
													H
													H
		10360	52.58	-15.62	68.2	56.82	39.86	15.89	59.99	100	0	P	V
		15540	46.04	-27.96	74	46.01	38.53	19.54	58.04	100	0	P	V
													V
													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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 62 5310MHz		5140.76	51.96	-22.04	74	41.34	31.79	9.97	31.14	119	237	P	H
		5136	41.63	-12.37	54	31.03	31.78	9.96	31.14	119	237	A	H
	*	5310	101.53	-	-	90.66	31.89	10.13	31.15	119	237	P	H
	*	5310	90.84	-	-	79.97	31.89	10.13	31.15	119	237	A	H
		5350.08	56.02	-17.98	74	45.1	31.91	10.16	31.15	119	237	P	H
		5351.28	44.77	-9.23	54	33.85	31.91	10.16	31.15	119	237	A	H
		5089.76	52.1	-21.9	74	41.57	31.76	9.91	31.14	100	344	P	V
		5132.26	41.82	-12.18	54	31.22	31.78	9.96	31.14	100	344	A	V
	*	5310	99.35	-	-	88.48	31.89	10.13	31.15	100	344	P	V
	*	5310	89.05	-	-	78.18	31.89	10.13	31.15	100	344	A	V
		5351.76	53.82	-20.18	74	42.9	31.91	10.16	31.15	100	344	P	V
		5351.04	43.47	-10.53	54	32.55	31.91	10.16	31.15	100	344	A	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 (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)	Path 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	48.46	-25.54	74	52.79	40.2	16.06	60.59	100	0	P	H
		15930	44.87	-29.13	74	44.94	37.74	19.69	57.5	100	0	P	H
													H
													H
		10620	48.03	-25.97	74	52.36	40.2	16.06	60.59	100	0	P	V
		15930	45.71	-28.29	74	45.78	37.74	19.69	57.5	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**Band 3 - 5470~5725MHz****WIFI 802.11a (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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 140 5700MHz	*	5700	104.51	-	-	92.99	32.27	10.5	31.25	130	356	P	H
	*	5700	93.07	-	-	81.55	32.27	10.5	31.25	130	356	A	H
		5725.56	55.25	-12.95	68.2	43.68	32.31	10.52	31.26	130	356	P	H
													H
													H
													H
	*	5700	106.23	-	-	94.71	32.27	10.5	31.25	101	354	P	V
	*	5700	94.91	-	-	83.39	32.27	10.5	31.25	101	354	A	V
		5729.96	58.54	-9.66	68.2	46.97	32.31	10.52	31.26	101	354	P	V
													V
													V
													V


Band 3 - 5470~5725MHz
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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 140 5700MHz		11400	48.12	-25.88	74	52.93	40.18	16.59	61.58	100	0	P	H
		17100	48.63	-19.57	68.2	43.17	41.06	20.48	56.08	100	0	P	H
													H
													H
		11400	47.22	-26.78	74	52.03	40.18	16.59	61.58	100	0	P	V
		17100	49.27	-18.93	68.2	43.81	41.06	20.48	56.08	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 802.11a (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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 165 5825MHz	*	5825	107.43	-	-	95.68	32.46	10.6	31.31	100	30	P	H
	*	5825	95.99	-	-	84.24	32.46	10.6	31.31	100	30	A	H
		5851	60.5	-59.42	119.92	48.72	32.48	10.62	31.32	100	30	P	H
		5857.8	56.74	-53.27	110.01	44.94	32.51	10.62	31.33	100	30	P	H
		5882.6	55.18	-44.38	99.56	43.34	32.53	10.64	31.33	100	30	P	H
		5944.4	52.52	-15.68	68.2	40.57	32.63	10.69	31.37	100	30	P	H
													H
													H
	*	5825	103.72	-	-	91.97	32.46	10.6	31.31	108	11	P	V
	*	5825	92.4	-	-	80.65	32.46	10.6	31.31	108	11	A	V
		5850.4	55.51	-65.78	121.29	43.73	32.48	10.62	31.32	108	11	P	V
		5857.2	55.53	-54.65	110.18	43.72	32.51	10.62	31.32	108	11	P	V
		5902	53.43	-31.75	85.18	41.55	32.56	10.66	31.34	108	11	P	V
		5946.2	52.77	-15.43	68.2	40.82	32.63	10.69	31.37	108	11	P	V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

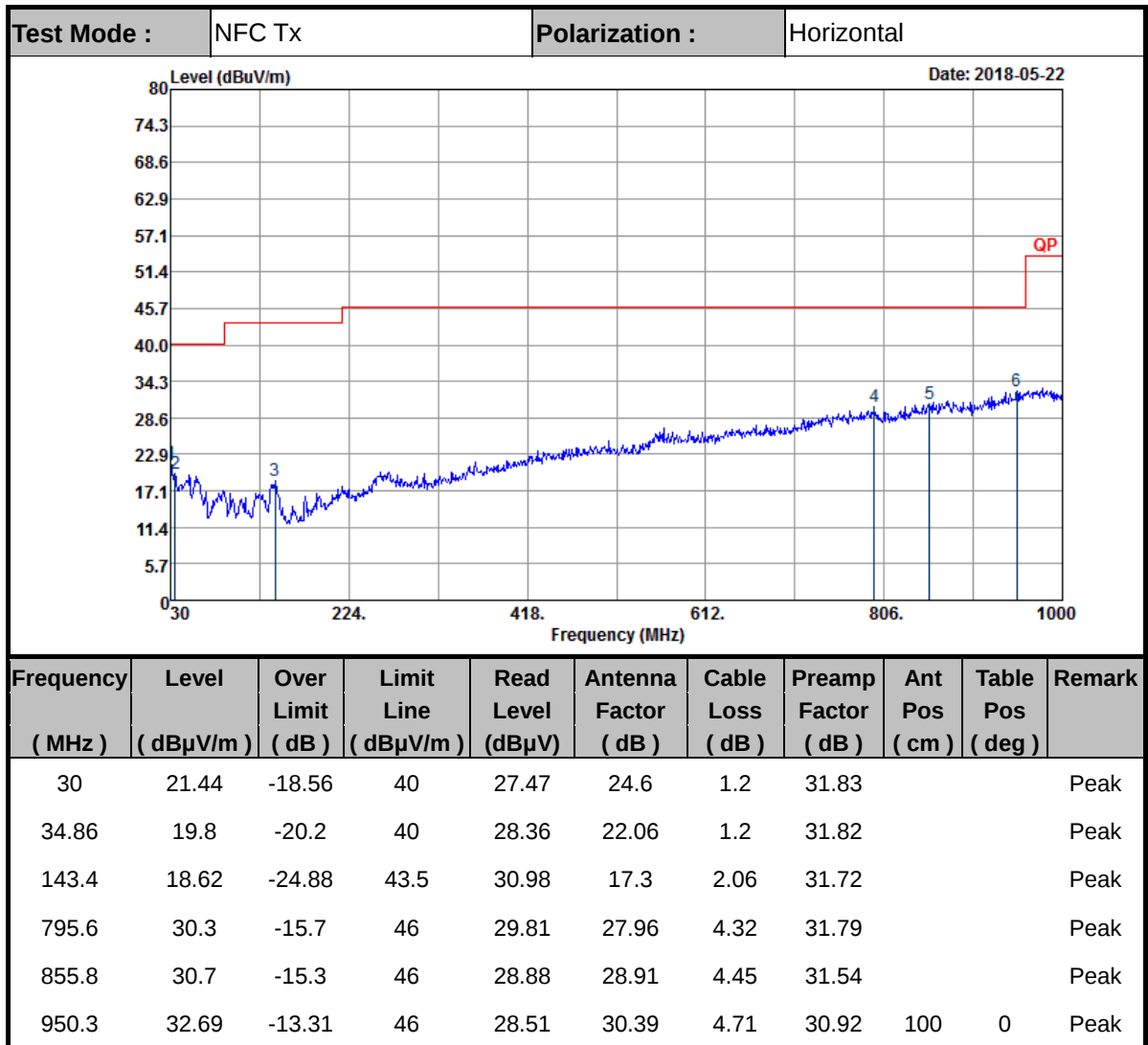


Band 4 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

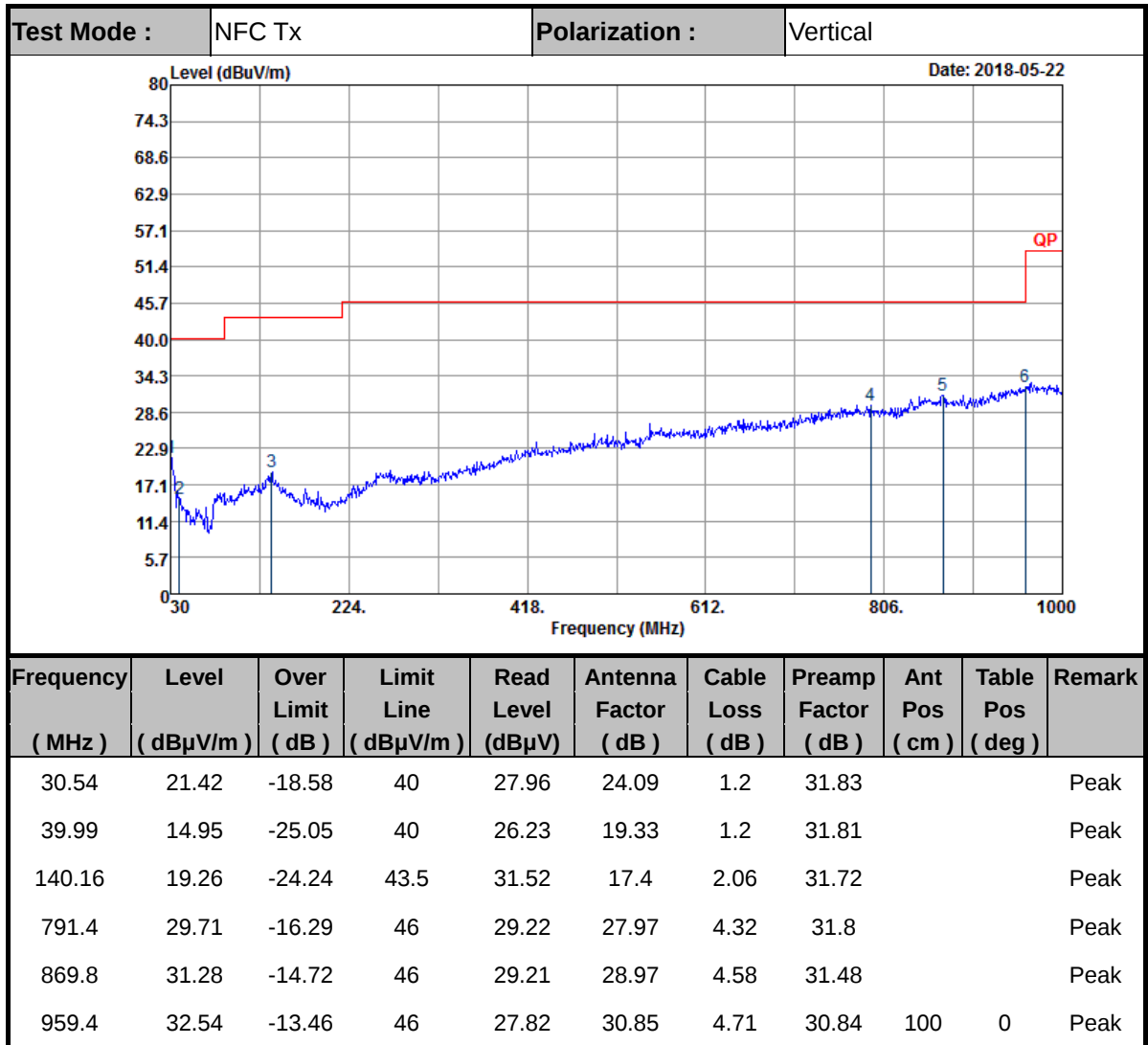
WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 165 5825MHz		11650	46.57	-27.43	74	51.97	39.77	16.76	61.93	100	0	P	H
		17475	49.4	-18.8	68.2	41.55	42.38	20.73	55.26	100	0	P	H
													H
													H
		11650	48.18	-25.82	74	53.58	39.77	16.76	61.93	100	0	P	V
		17475	52.36	-15.84	68.2	44.51	42.38	20.73	55.26	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

NFC





FCC TEST REPORT



End of this report