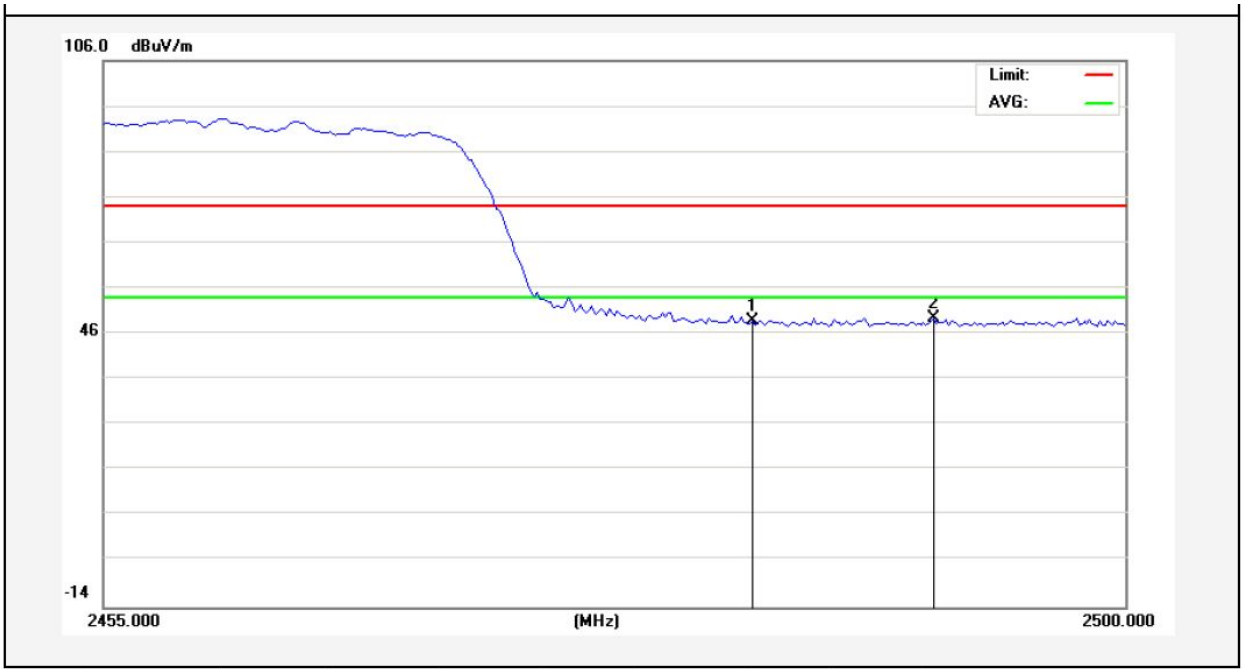
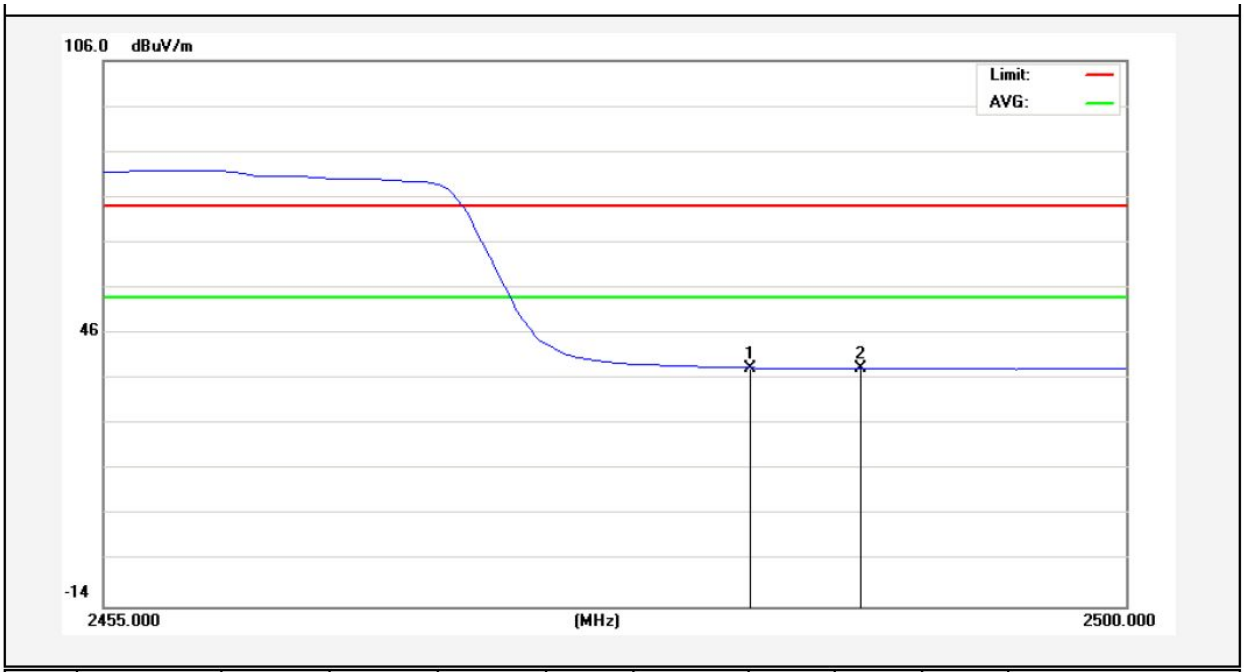
Test Mode: 802.11n (HT20)
2462MHz
Horizontal-PEAK:



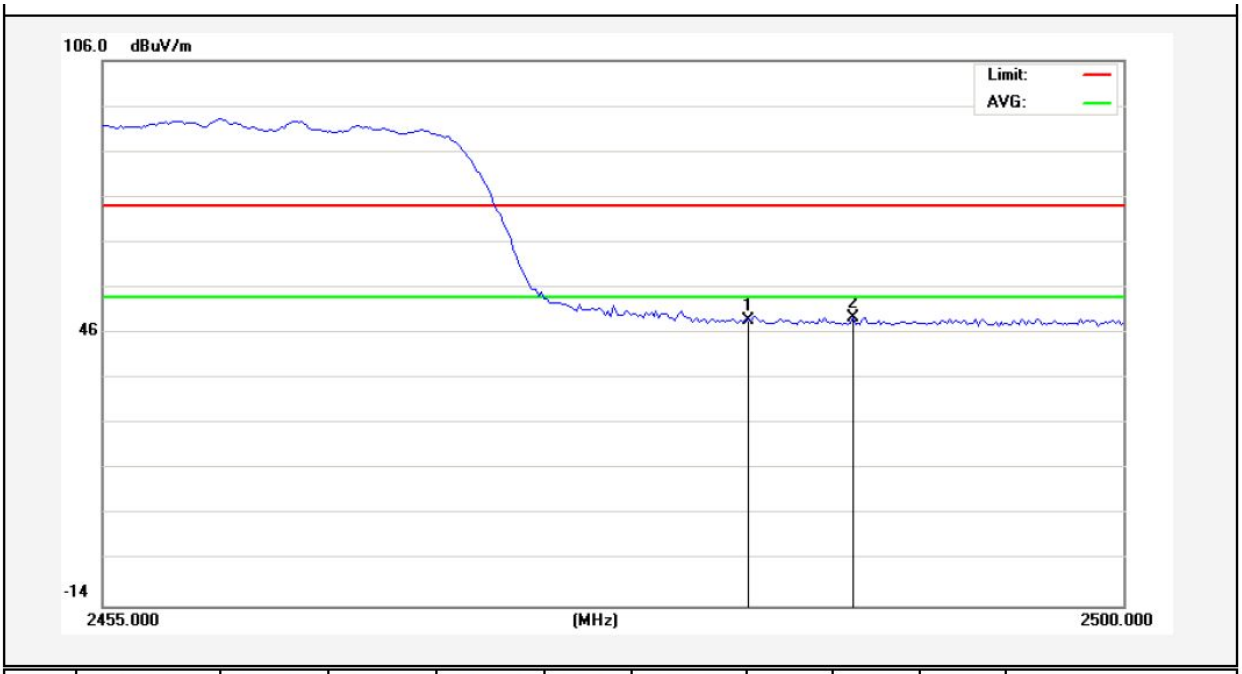
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	51.09	-2.31	48.78	74.00	-25.22	peak			
2	2491.563	51.64	-2.29	49.35	74.00	-24.65	peak			

Horizontal-AV:



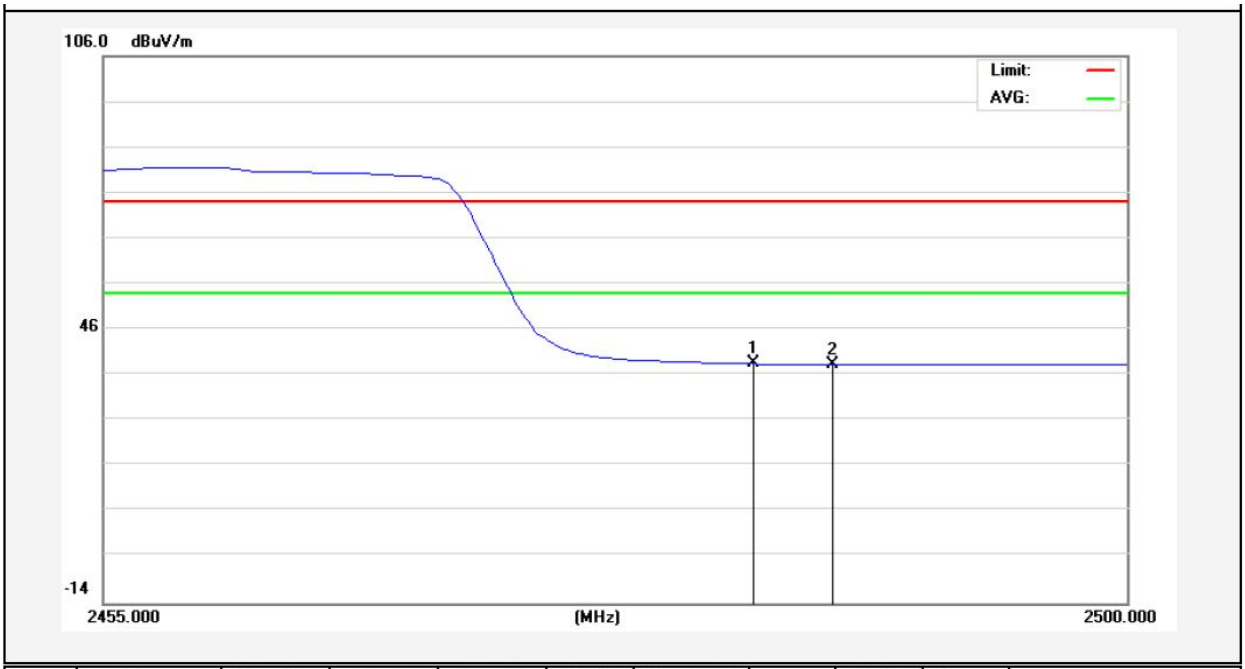
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	40.81	-2.31	38.50	54.00	-15.50	AVG			
2	2488.300	40.59	-2.30	38.29	54.00	-15.71	AVG			

Test Mode: 802.11n (HT20)
2462MHz
Vertical-PEAK:



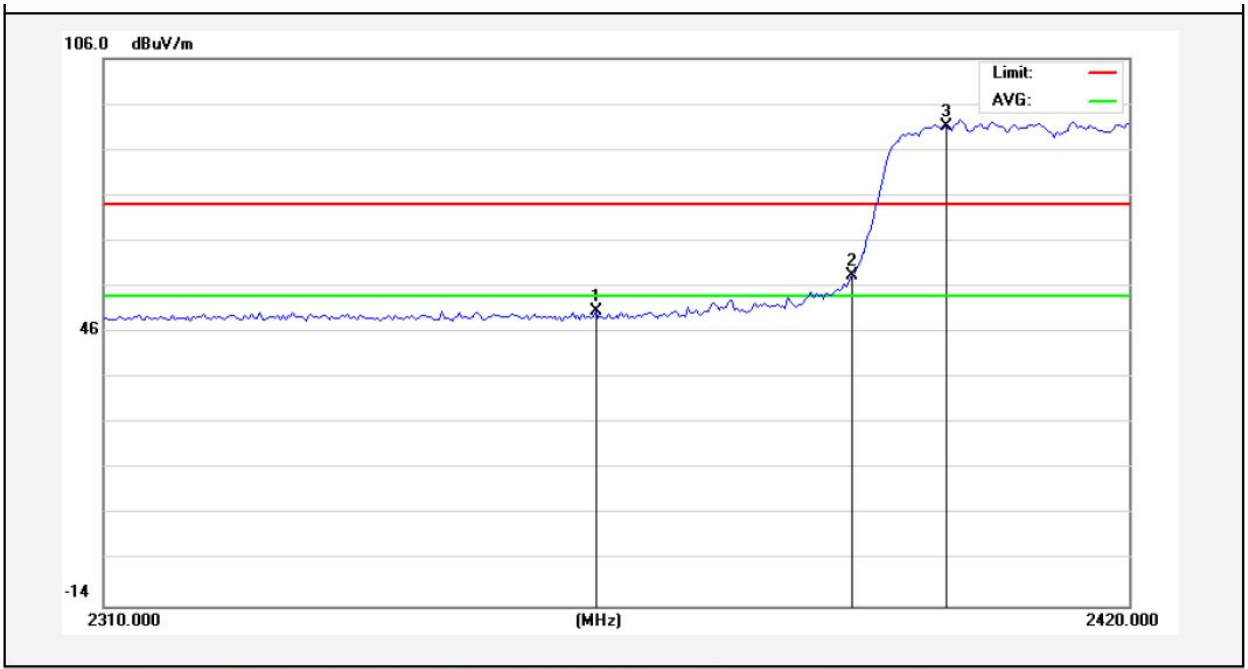
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	51.19	-2.31	48.88	74.00	-25.12	peak			
2	2488.075	51.75	-2.30	49.45	74.00	-24.55	peak			

Vertical-AV:



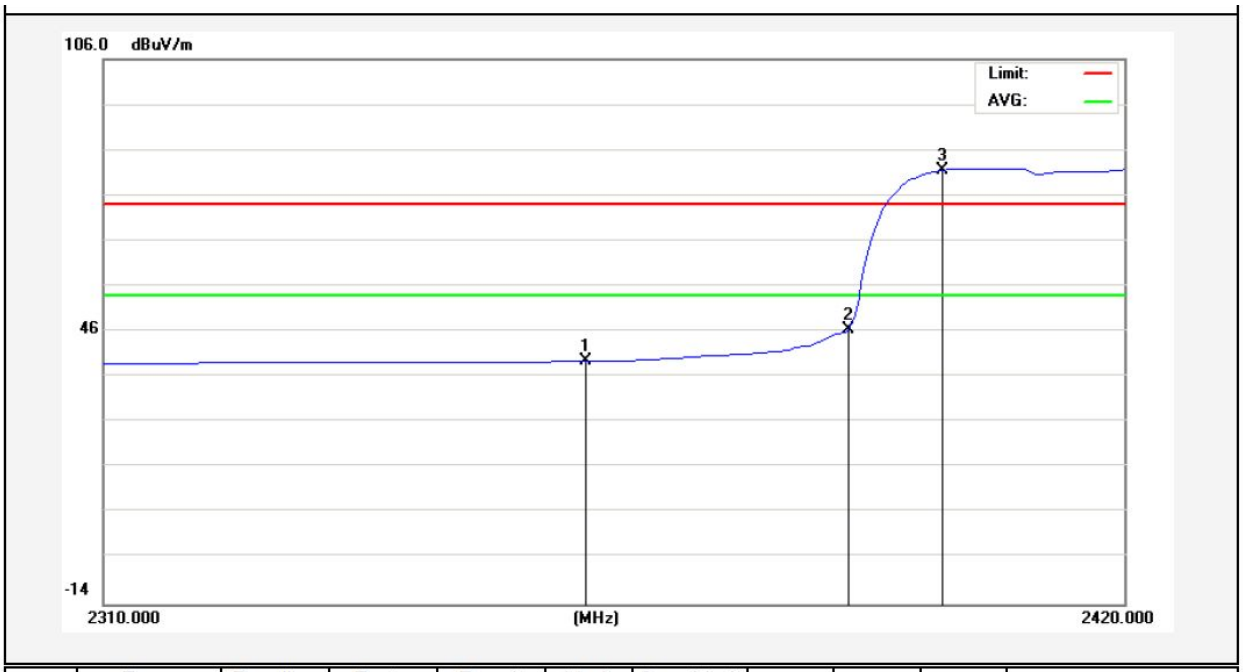
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	40.82	-2.31	38.51	54.00	-15.49	AVG			
2	2487.063	40.61	-2.30	38.31	54.00	-15.69	AVG			

Test Mode: 802.11n (HT40)
2422MHz
Horizontal-PEAK:



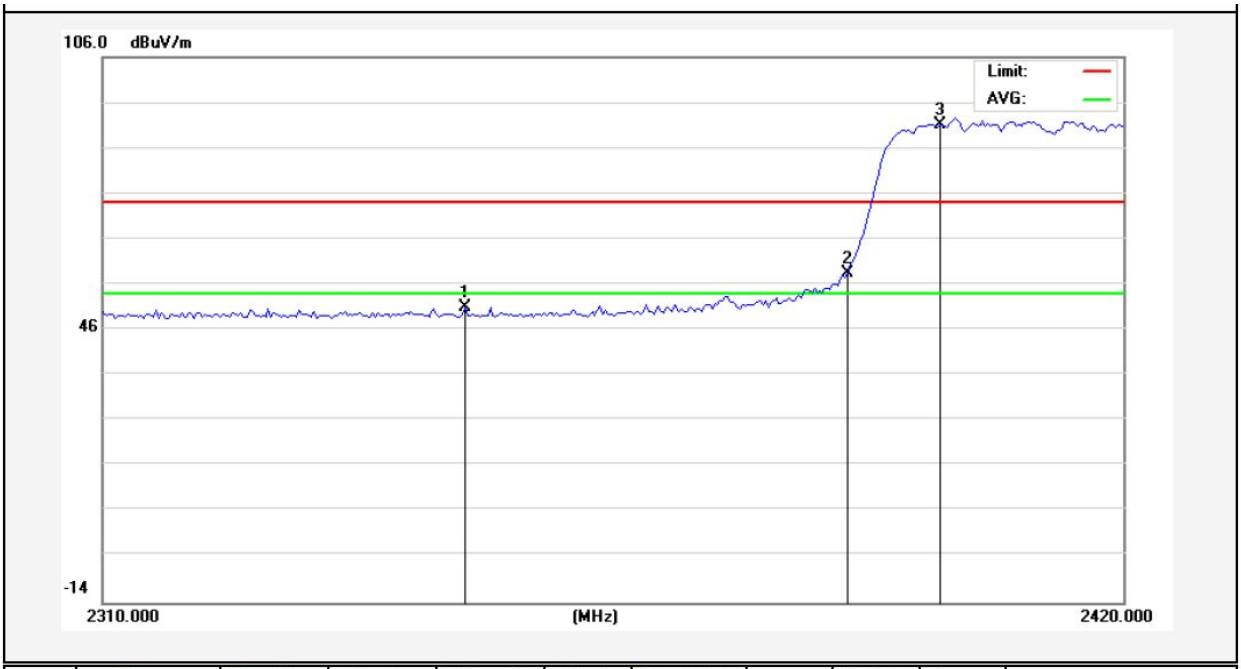
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2362.250	53.20	-2.58	50.62	74.00	-23.38	peak			
2	2390.000	60.99	-2.51	58.48	74.00	-15.52	peak			
3	2400.000	93.68	-2.49	91.19	74.00	17.19	peak			

Horizontal-AV:



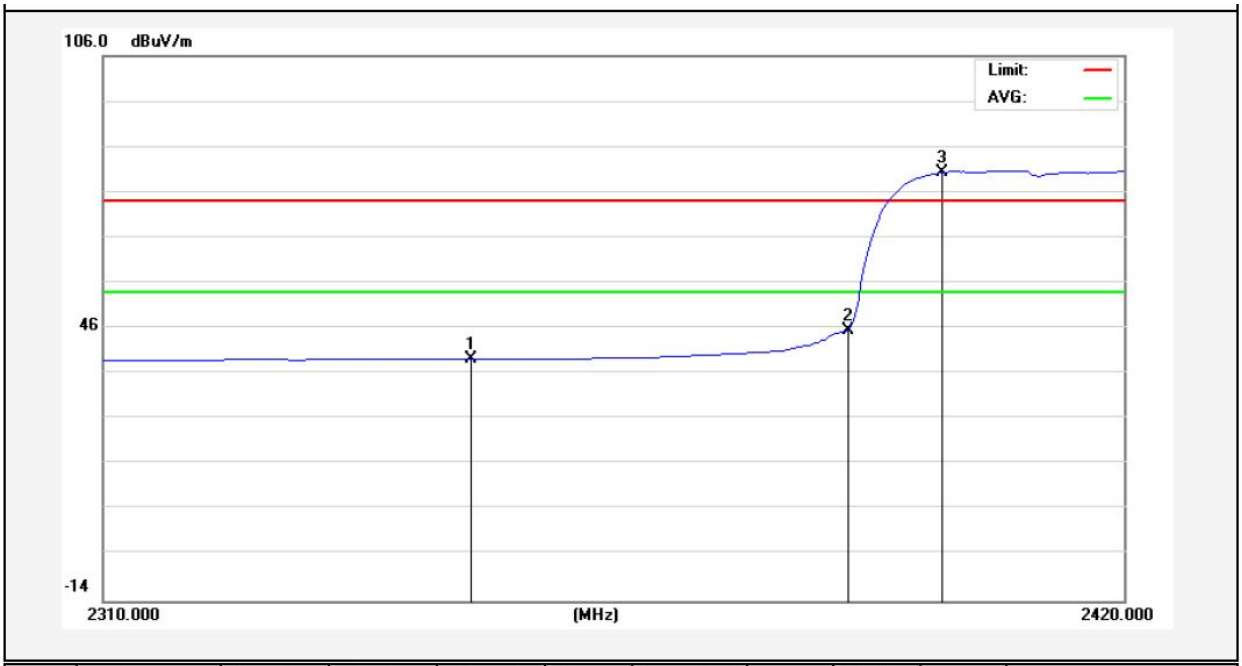
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2361.425	42.07	-2.58	39.49	54.00	-14.51	AVG			
2	2390.000	48.99	-2.51	46.48	54.00	-7.52	AVG			
3	2400.000	84.02	-2.49	81.53	54.00	27.53	AVG			

Test Mode: 802.11n (HT40)
2422MHz
Vertical-PEAK:



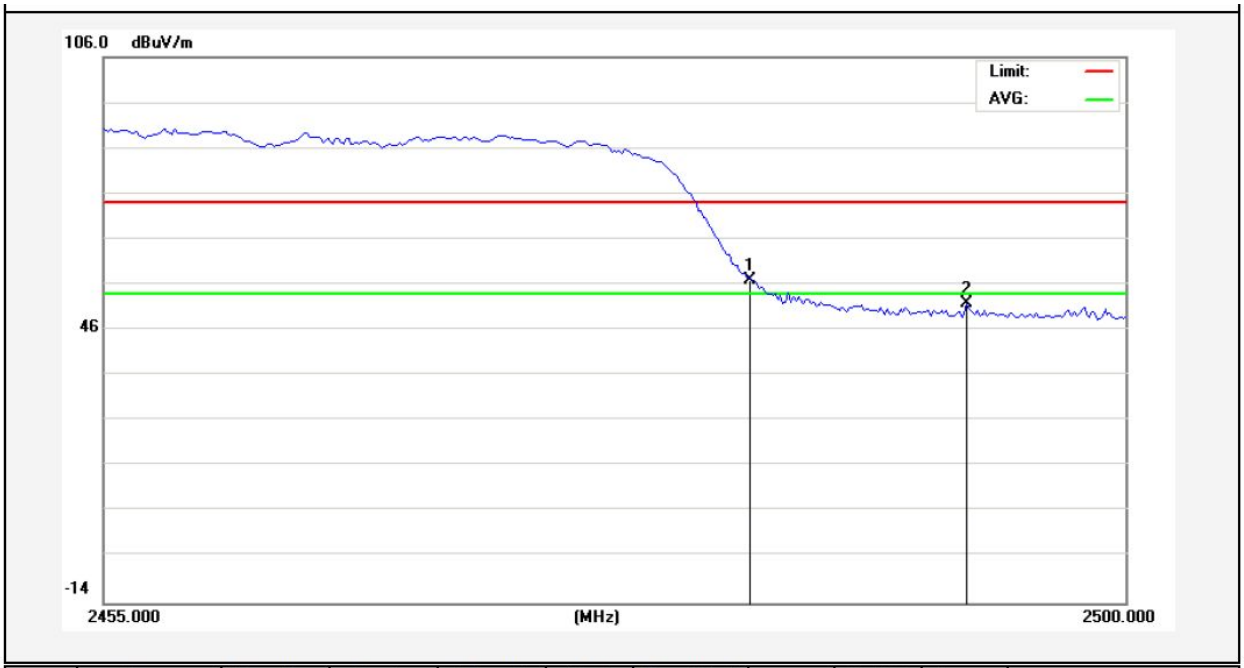
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2348.500	53.63	-2.61	51.02	74.00	-22.98	peak			
2	2390.000	61.03	-2.51	58.52	74.00	-15.48	peak			
3	2400.000	93.52	-2.49	91.03	74.00	17.03	peak			

Vertical-AV:



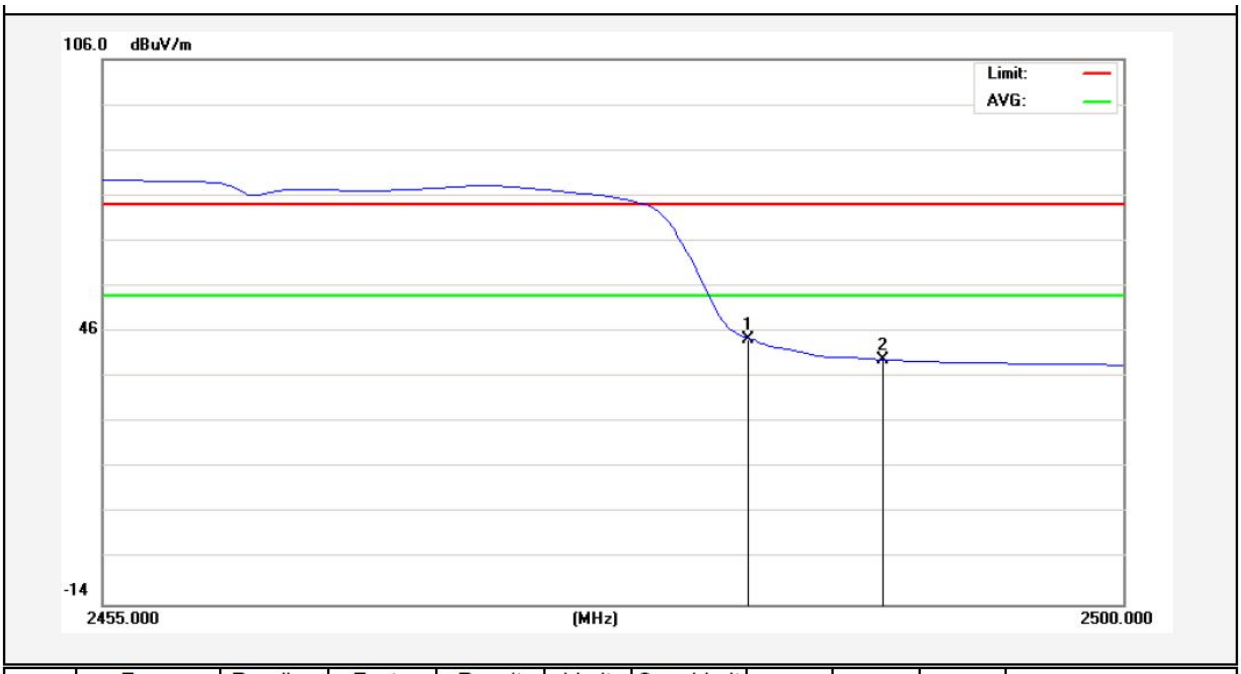
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2349.050	41.89	-2.61	39.28	54.00	-14.72	AVG			
2	2390.000	48.19	-2.51	45.68	54.00	-8.32	AVG			
3	2400.000	82.80	-2.49	80.31	54.00	26.31	AVG			

Test Mode: 802.11n (HT40)
2452MHz
Horizontal-PEAK:



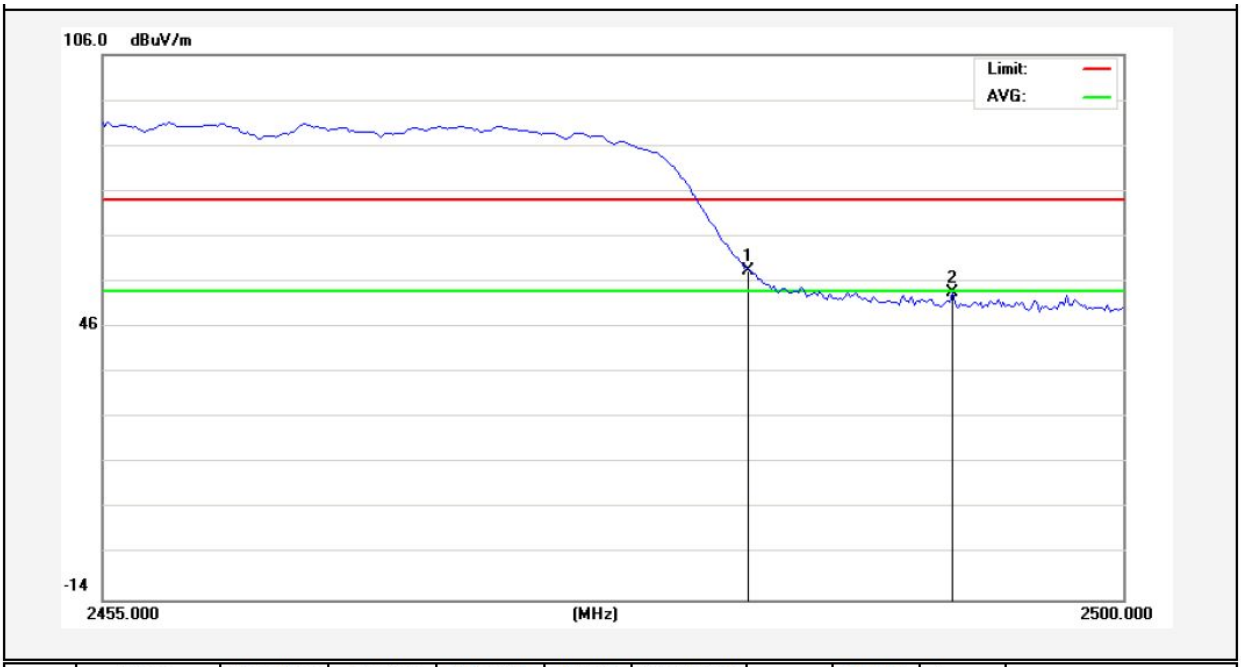
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	59.26	-2.31	56.95	74.00	-17.05	peak			
2	2493.025	54.06	-2.29	51.77	74.00	-22.23	peak			

Horizontal-AV:



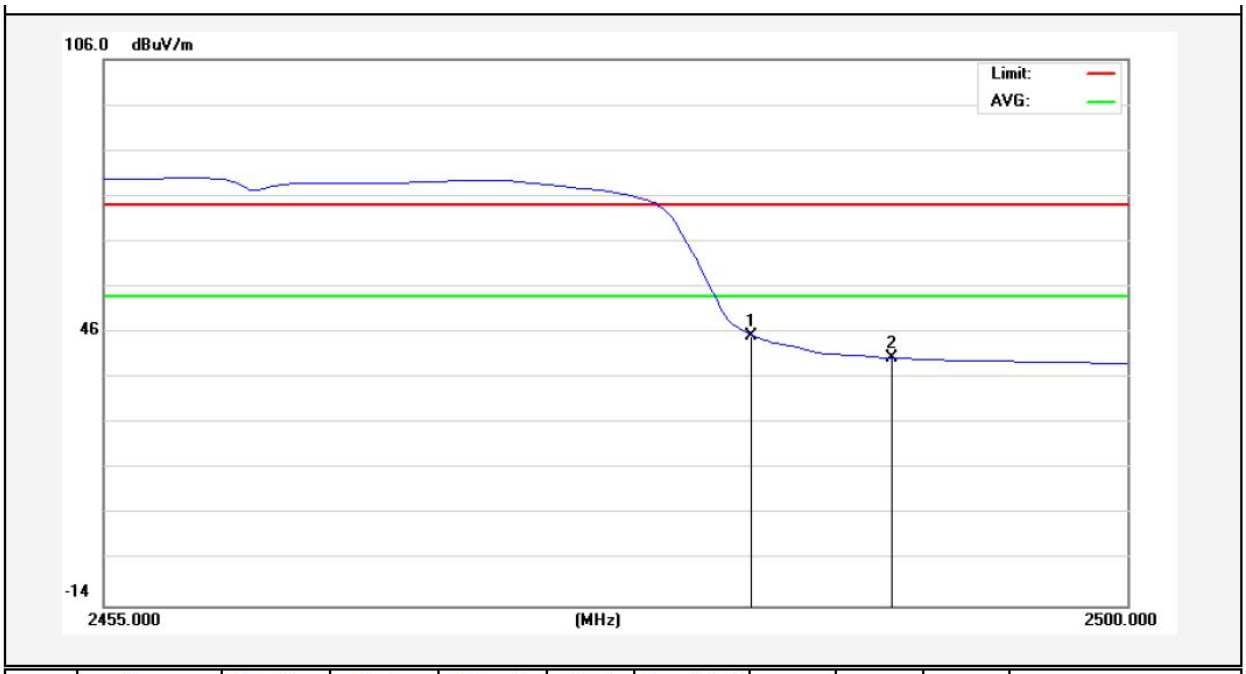
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	46.79	-2.31	44.48	54.00	-9.52	AVG			
2	2489.425	42.14	-2.29	39.85	54.00	-14.15	AVG			

Test Mode: 802.11n (HT40)
2452MHz
Vertical-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	60.73	-2.31	58.42	74.00	-15.58	peak			
2	2492.463	55.86	-2.29	53.57	74.00	-20.43	peak			

Vertical-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	47.68	-2.31	45.37	54.00	-8.63	AVG			
2	2489.650	42.70	-2.29	40.41	54.00	-13.59	AVG			

4.5. Peak Power Spectral Density

a. Limit

1. For direct sequence systems, the peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.
2. The direct sequence operating of the hybrid system, with the frequency hopping operation turned off, shall comply with the power density requirements of paragraph (d) of this section.

b. Test Procedure

1. Place the EUT on the table and set it in transmitting mode. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
2. Set the spectrum analyzer as RBW = 3kHz, VBW = 10kHz, Span = 1.5 times DTS BW, Sweep=500s
3. Record the max. reading.
4. Repeat the above procedure until the measurements for all frequencies are completed.

c. Test Equipment

Same as the equipment listed in 4.2.

d. Test Setup

See 4.1

e. Test Results

Pass

f. Test Data

Please refer to the following data.

g. Test Plot See the following pages

Test mode: IEEE 802.11b

Channel	Frequency (MHz)	PPSD (dBm/3KHz)	∑PPSD (dBm/3KHz)	Limit (dBm)	Result
Low	2412	-17.52	-		Pass
Mid	2437	-18.47	-	8.00	Pass
High	2462	-19.35	-		Pass

Test mode: IEEE 802.11g

Channel	Frequency (MHz)	PPSD (dBm)	∑PPSD (dBm)	Limit (dBm)	Result
Low	2412	-21.10	-		Pass
Mid	2437	-21.92	-	8.00	Pass
High	2462	-22.72	-		Pass

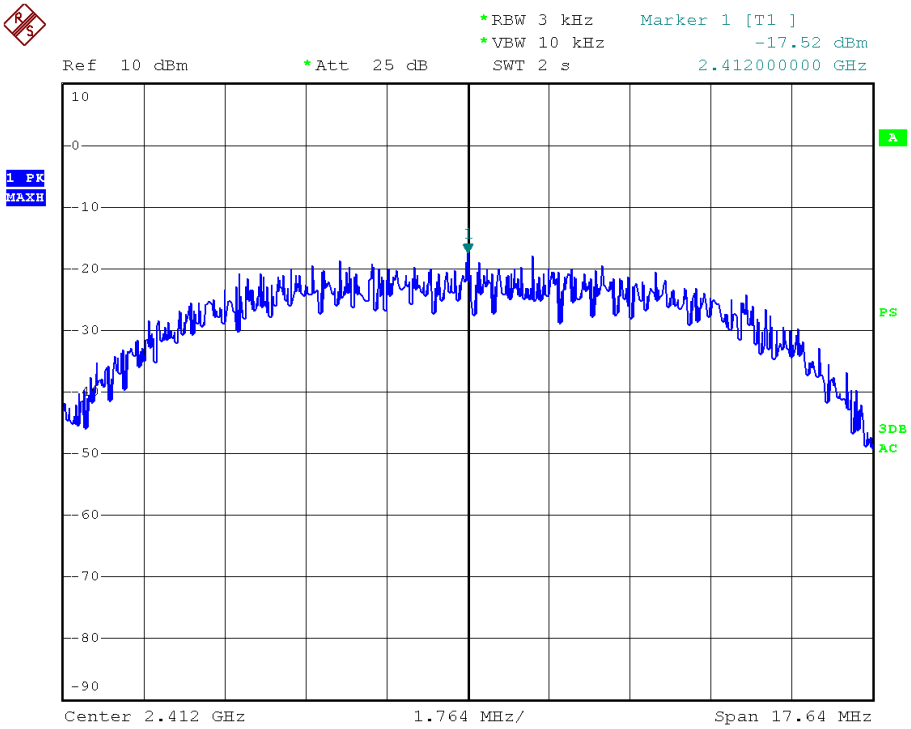
Test mode: IEEE 802.11n (HT20)

Channel	Frequency (MHz)	PPSD (dBm/3KHz)	∑PPSD (dBm/3KHz)	Limit (dBm)	Result
Low	2412	-20.46	-		Pass
Mid	2437	-22.12	-	8.00	Pass
High	2462	-23.05	-		Pass

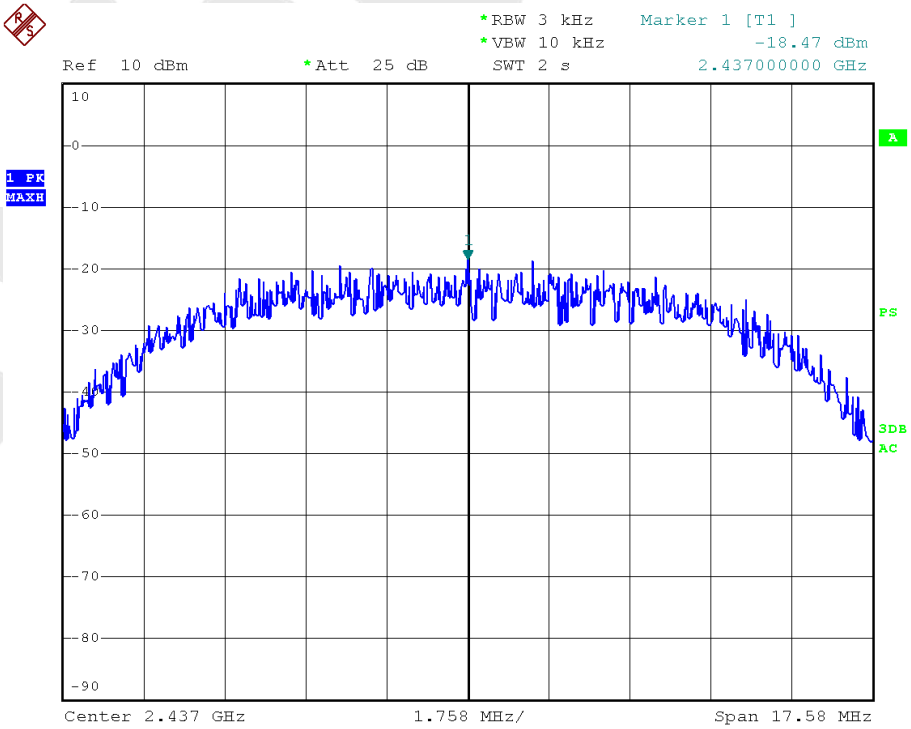
Test mode: IEEE 802.11n (HT40)

Channel	Frequency (MHz)	PPSD (dBm/3KHz)	∑PPSD (dBm/3KHz)	Limit (dBm)	Result
Low	2422	-21.70	-		Pass
Mid	2437	-21.81	-	8.00	Pass
High	2452	-22.68	-		Pass

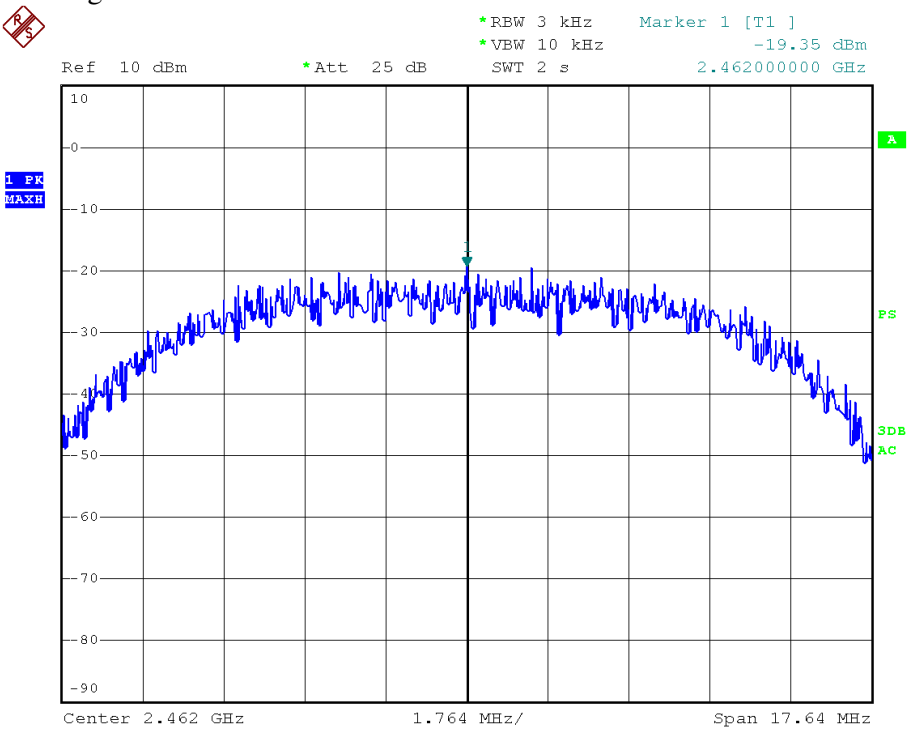
802.11 b CH--Low



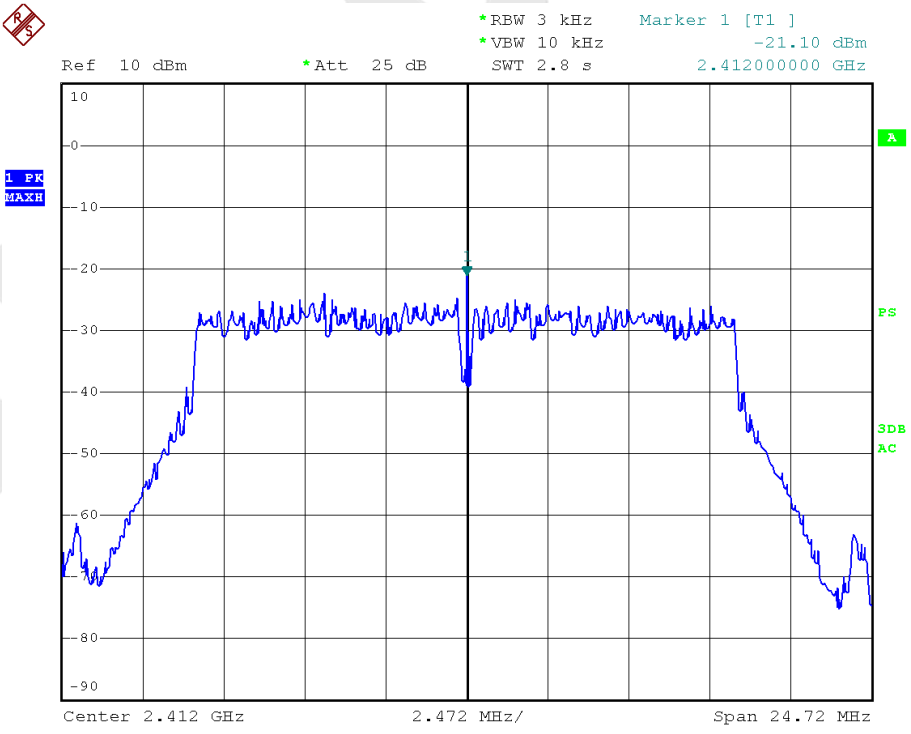
802.11 b CH--Mid



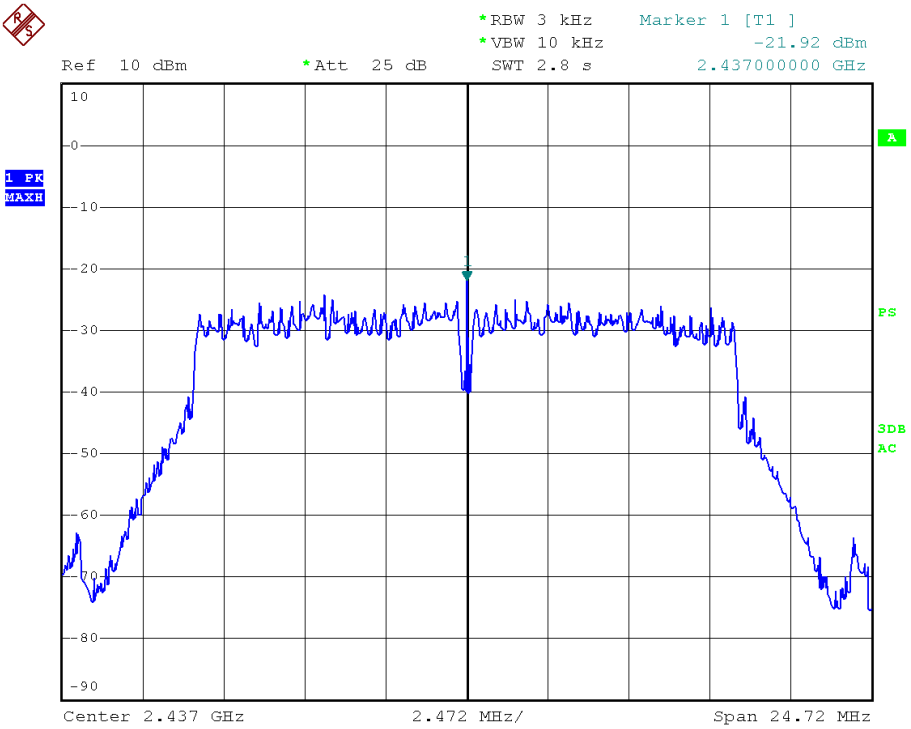
802.11 b CH--High



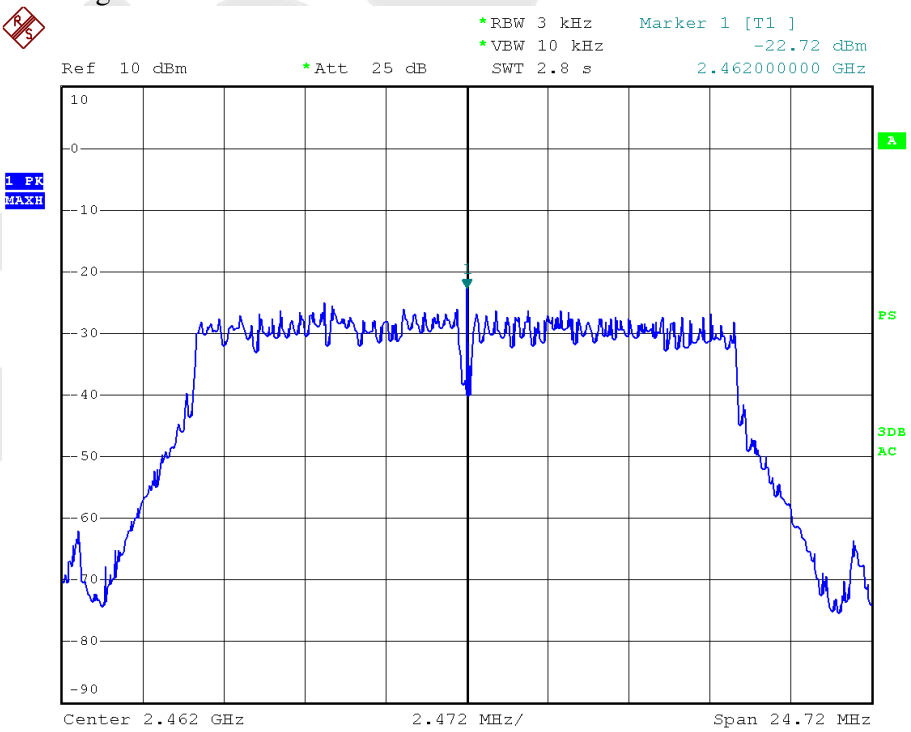
802.11g CH--Low



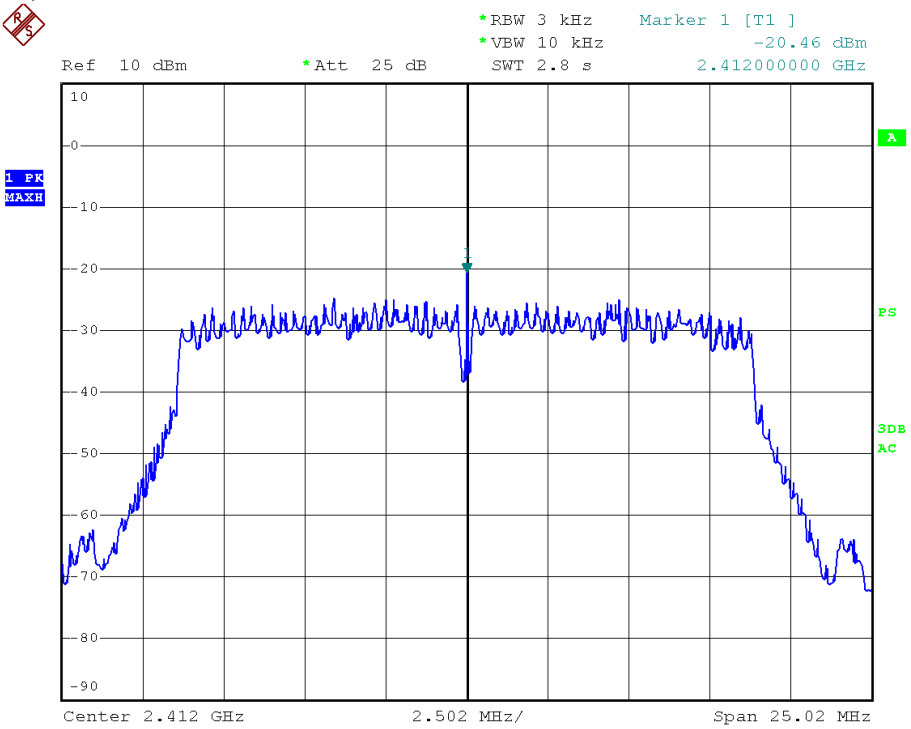
802.11g CH--Mid



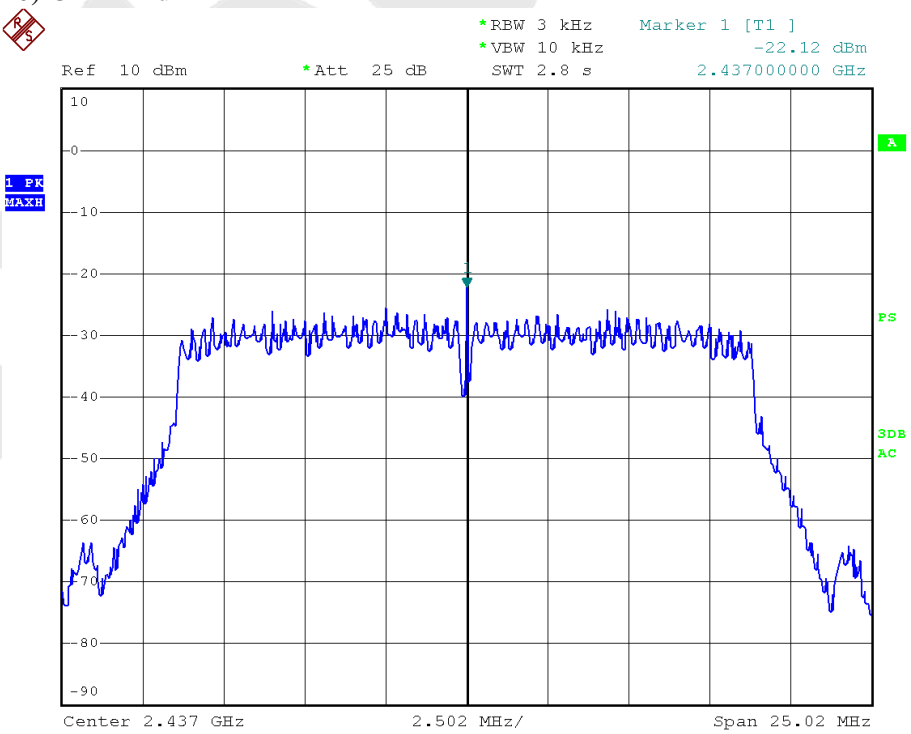
802.11g CH--High



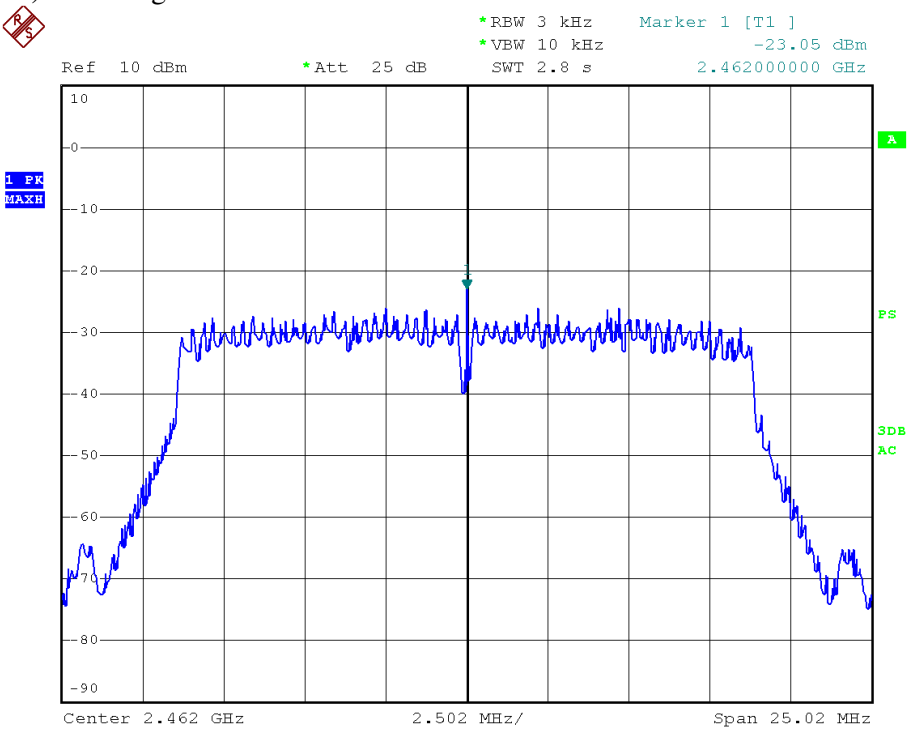
802.11n (HT20) CH—Low



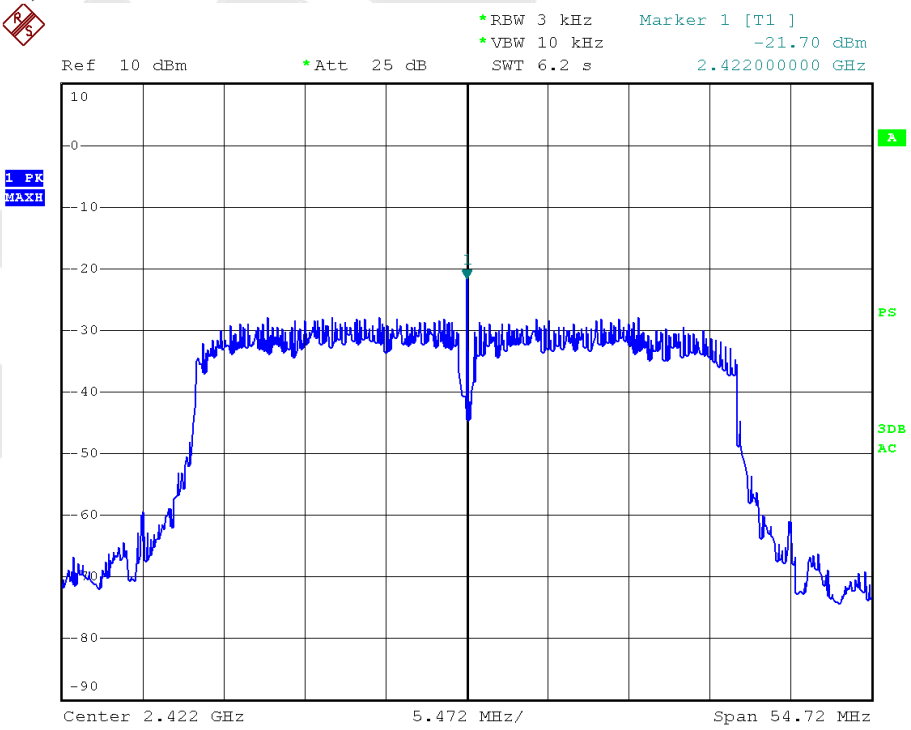
802.11n (HT20) CH—Mid



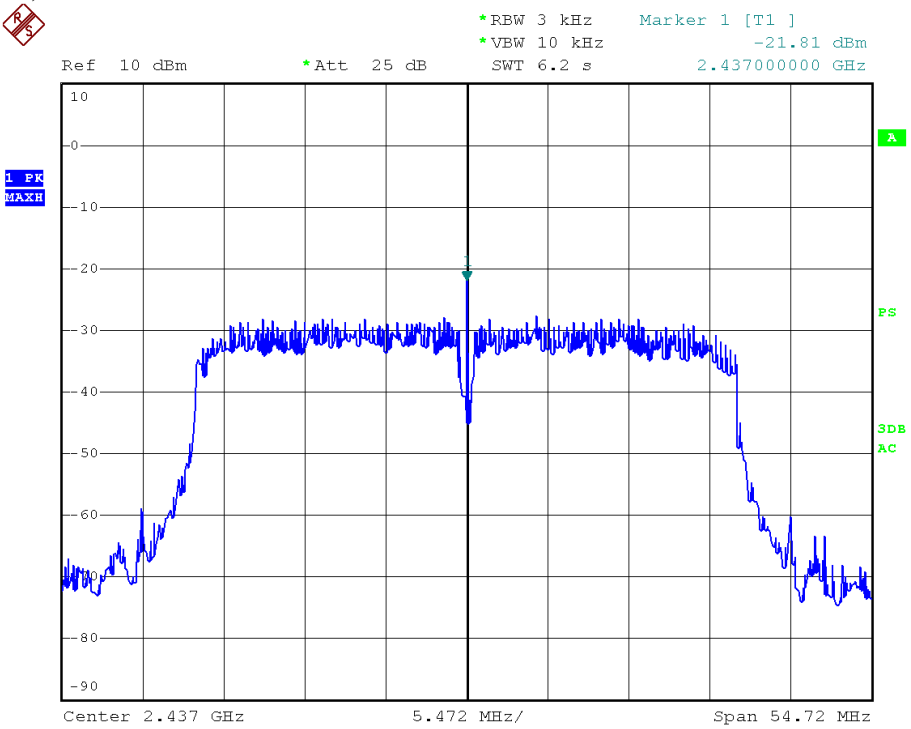
802.11n (HT20) CH—High



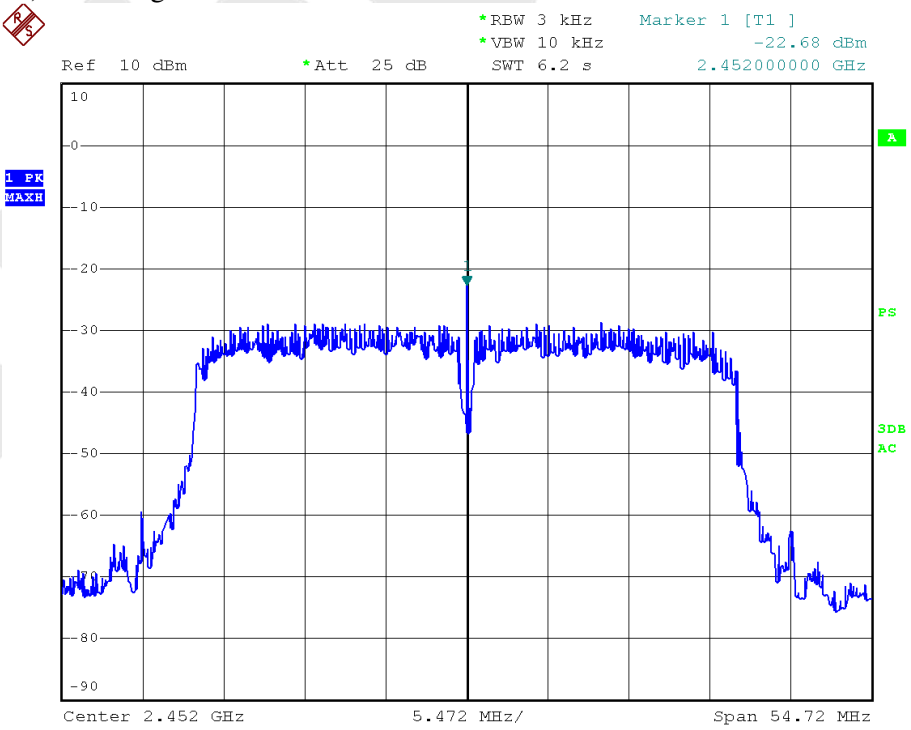
802.11n (HT40) CH—Low



802.11n (HT40) CH—Mid



802.11n (HT40) CH—High



4.6. Radiated Emissions

4.6.1.1. Test Limits (< 30 MHZ)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meter)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30

4.6.1.2. Test Limits (≥ 30 MHZ)

FIELD STRENGTH of Fundamental: @3M	FIELD STRENGTH of Harmonics	S15.209 30 - 88 MHz	40 dBuV/m
902-928 MHZ		88 - 216 MHz	43.5
2.4-2.4835 GHz		216 - 960 MHz	46
94 dBμV/m @3m	54 dBμV/m @3m	ABOVE 960 MHz	54dBuV/m

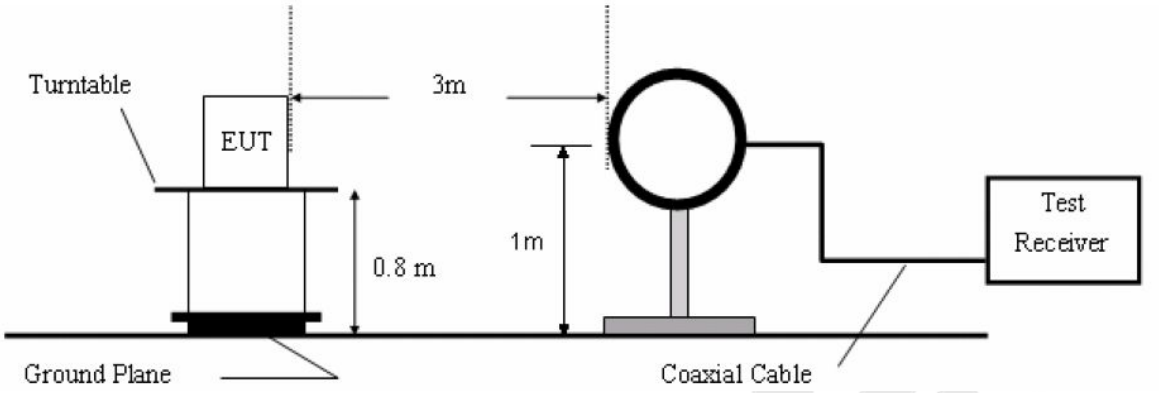
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

Test Equipment

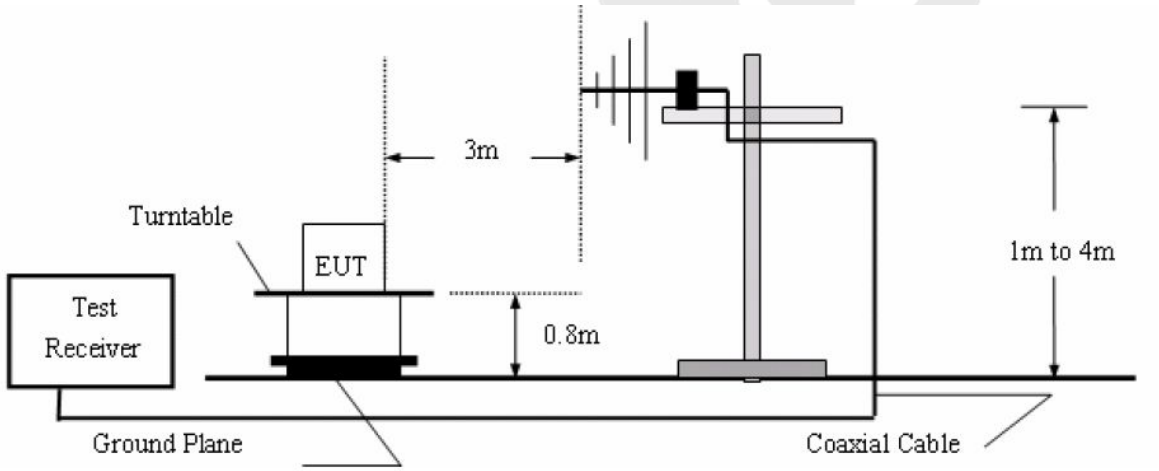
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analysis	Agilent	E4407B	US39390582	Aug. 08, 2014	1 Year
2.	Preamplifier	Instruments corporation	EMC011830	980100	Aug. 08, 2014	1 Year
3.	EMI Test Receiver	Rohde & Schwarz	ESPI	101604	Apr. 22, 2014	1 Year
4.	Double Ridged Horn Antenna	Instruments corporation	GTH-0118	351600	Apr. 04, 2014	1 Year
5.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	VULB 9163-289	Apr. 24, 2014	1 Year
6.	Pre-amplifier	SONOMA	310N	186860	Aug. 08, 2014	1 Year
7.	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	N/A	N/A

4.6.2. Test Configuration:

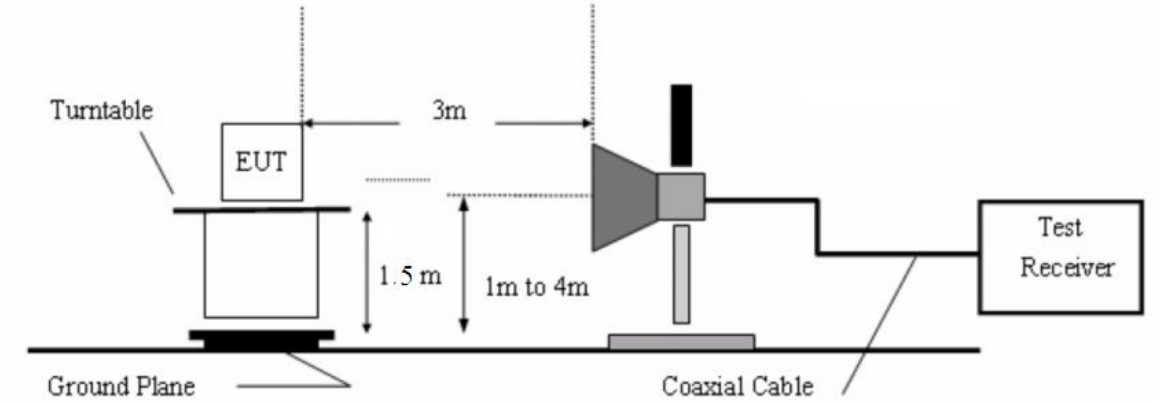
4.6.2.1. 9k to 30MHz emissions:



4.6.2.2. 30M to 1G emissions:



4.6.2.3. 1G to 40G emissions:



4.6.3. Test Procedure

The EUT is placed on a turn table which is 0.8 meter high above the ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on test.

Measurements are made on 9KHz to 30MHz and 30MHz to 26GHz range with the transmitter set to the lowest, middle, and highest channels.

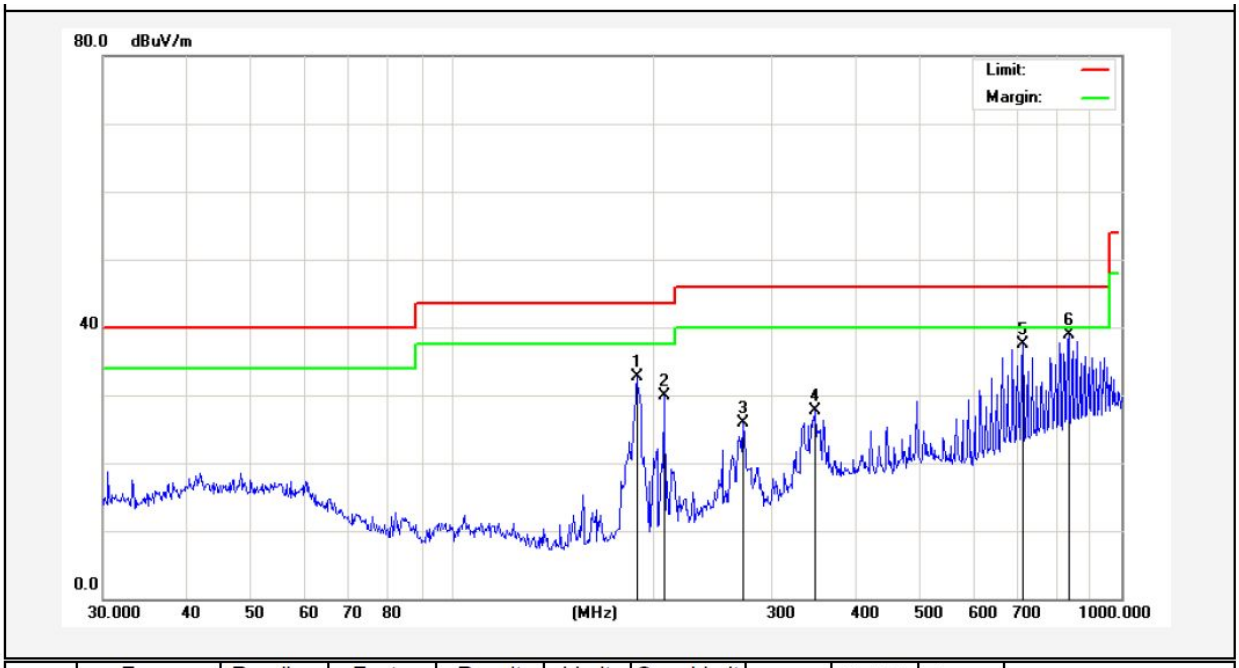
All readings from 30MHz to 1GHz are quasi-peak values with a resolution bandwidth of 120kHz. All reading are above 1GHz, peak & average values with a resolution bandwidth of 1MHz.
The EUT is tested in 9*6*6 Chamber.

The test results are listed in Section 4.6.4.

4.6.4. Test Results

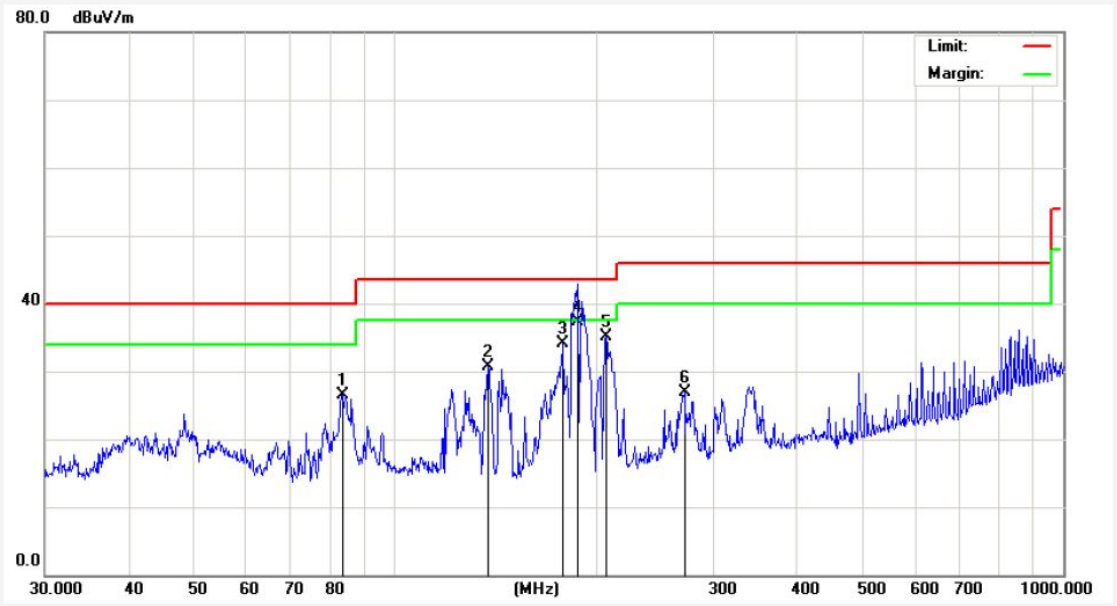
Please refer to the following pages.

Job No.:	**011503376E**	**Polarization:**	**Horizontal**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**AC 120V/60Hz for adapter**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Test Mode:	**On**	**Distance:**	**3m**



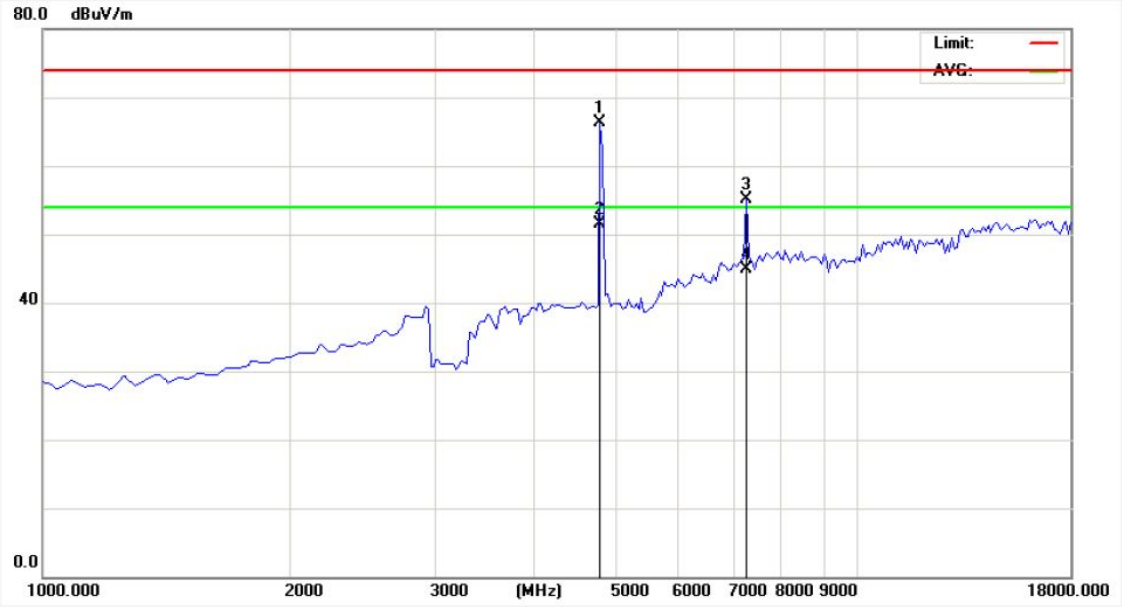
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	188.4125	53.81	-21.07	32.74	43.50	-10.76	peak			
2	207.1226	50.47	-20.60	29.87	43.50	-13.63	peak			
3	271.3246	44.37	-18.56	25.81	46.00	-20.19	peak			
4	348.0274	41.84	-14.05	27.79	46.00	-18.21	peak			
5	711.6734	45.69	-8.24	37.45	46.00	-8.55	peak			
6	833.3171	44.75	-5.90	38.85	46.00	-7.15	peak			

Job No.:	**011503376E**	**Polarization:**	**Vertical**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**AC 120V/60Hz for adapter**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Test Mode:	**On**	**Distance:**	**3m**



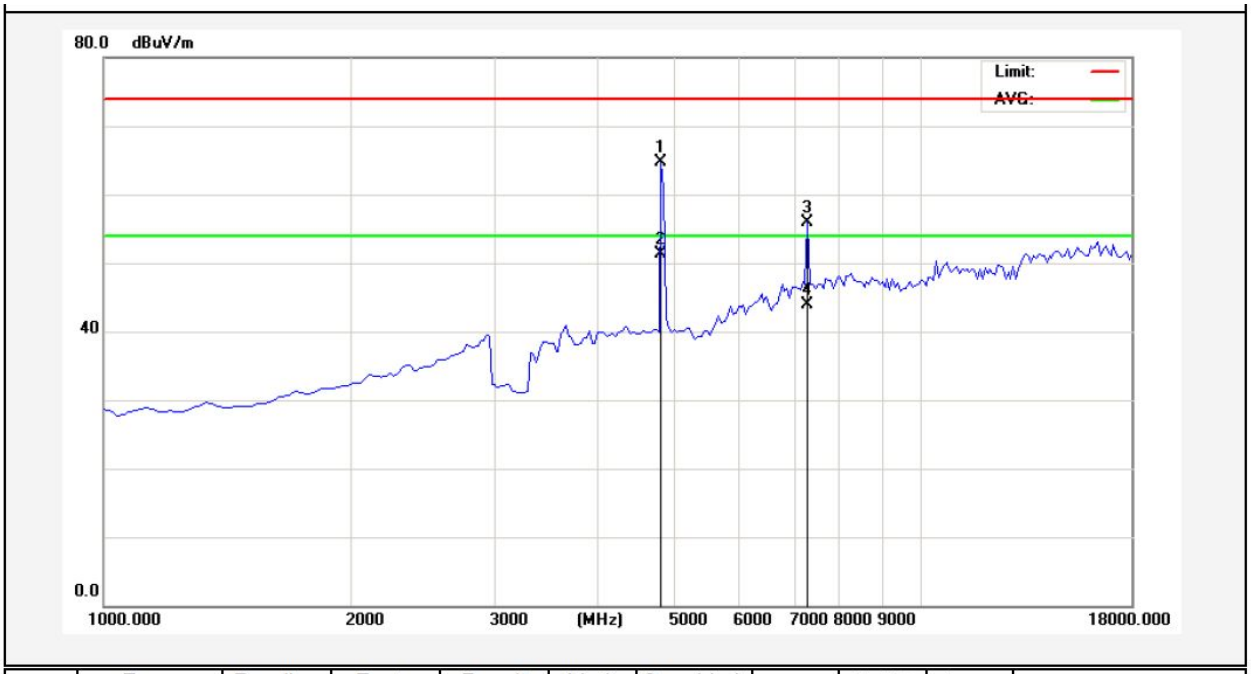
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	83.8156	45.26	-18.73	26.53	40.00	-13.47	peak			
2	137.9028	49.05	-18.34	30.71	43.50	-12.79	peak			
3	178.7584	51.07	-16.94	34.13	43.50	-9.37	peak			
4	187.8730	53.49	-16.13	37.36	43.50	-6.14	QP	100	0	
5	207.1226	50.68	-15.60	35.08	43.50	-8.42	peak			
6	271.3246	41.61	-14.69	26.92	46.00	-19.08	peak			

Job No.:	**011503376E**	**Polarization:**	**Horizontal**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**AC 120V/60Hz for adapter**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**802.11b(2412MHz)**	**Distance:**	**3m**



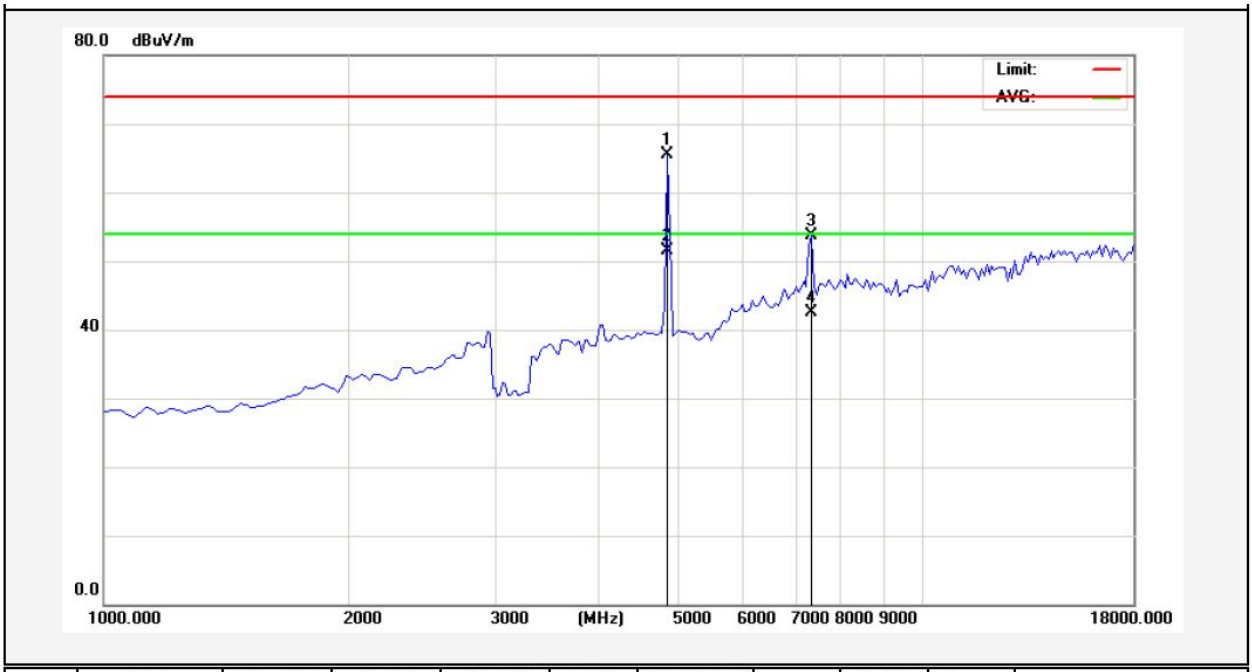
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4825.000	62.93	3.34	66.27	74.00	-7.73	peak			
2	4825.000	48.10	3.34	51.44	54.00	-2.56	AVG			
3	7247.500	46.59	8.48	55.07	74.00	-18.93	peak			
4	7247.500	36.34	8.48	44.82	54.00	-9.18	AVG			

Job No.:	**011503376E**	**Polarization:**	**Vertical**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**AC 120V/60Hz for adapter**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**802.11b(2412MHz)**	**Distance:**	**3m**



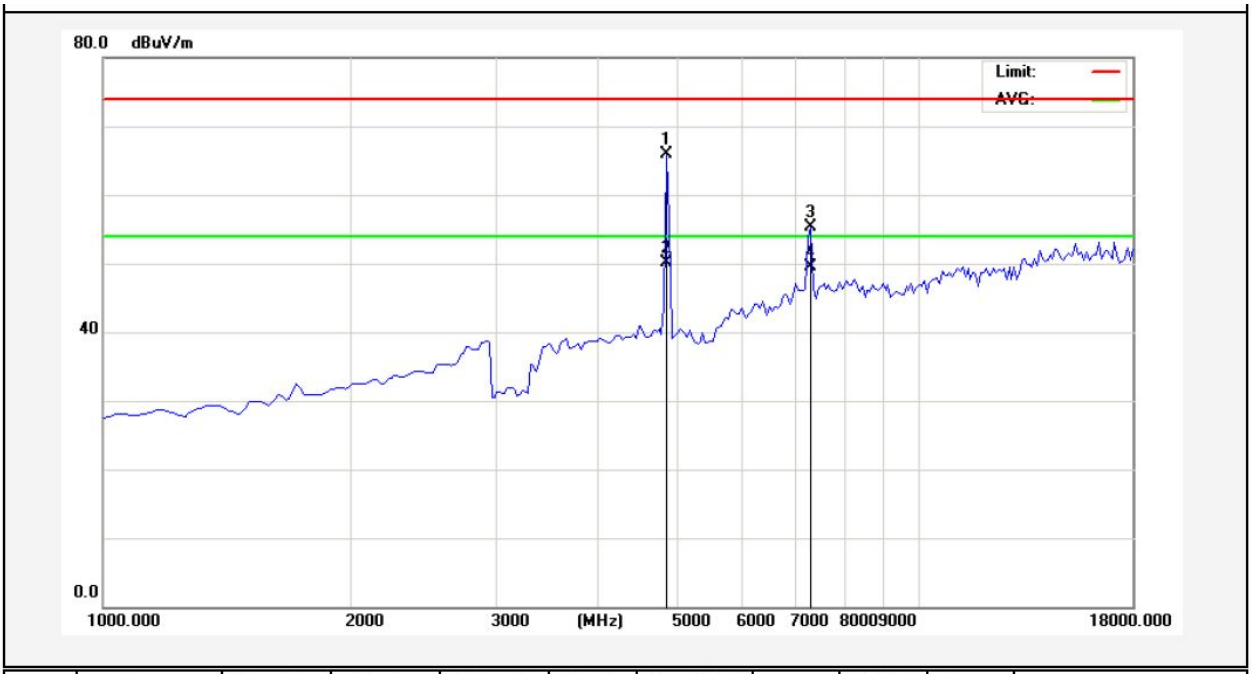
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4825.000	61.27	3.34	64.61	74.00	-9.39	peak			
2	4825.000	47.90	3.34	51.24	54.00	-2.76	AVG			
3	7247.500	47.50	8.48	55.98	74.00	-18.02	peak			
4	7247.500	35.50	8.48	43.98	54.00	-10.02	AVG			

Job No.:	**011503376E**	**Polarization:**	**Horizontal**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**AC 120V/60Hz for adapter**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**802.11b(2437MHz)**	**Distance:**	**3m**



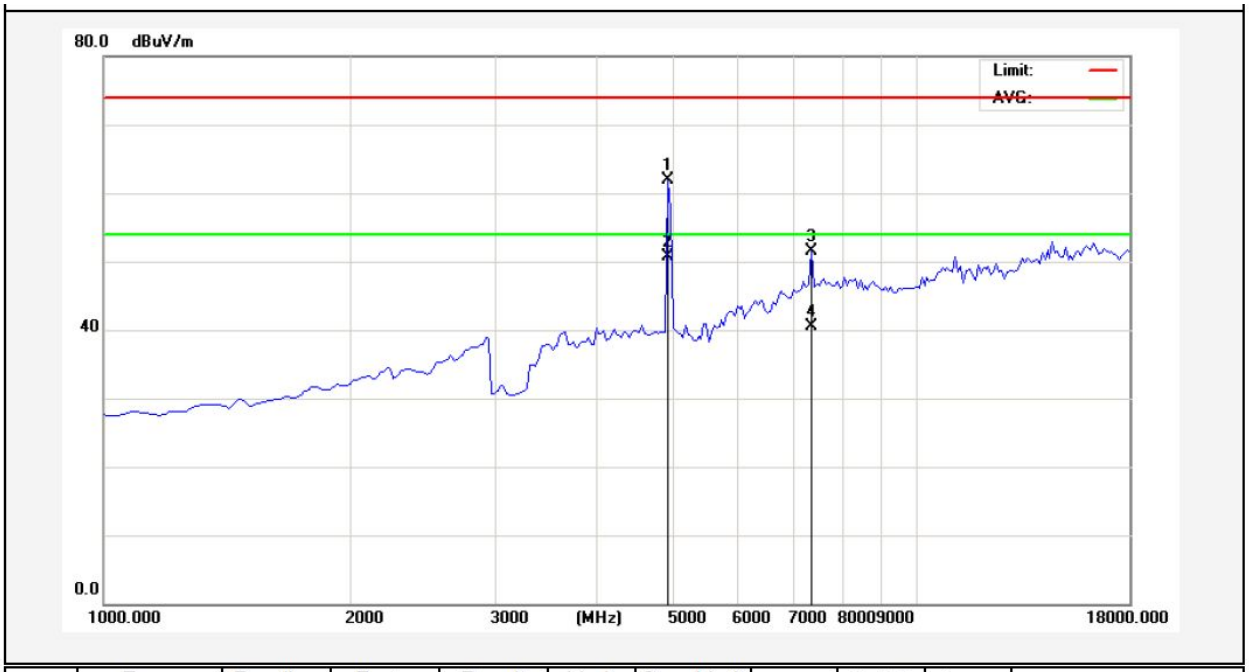
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4867.500	62.03	3.41	65.44	74.00	-8.56	peak			
2	4867.500	48.13	3.41	51.54	54.00	-2.46	AVG			
3	7332.500	45.08	8.58	53.66	74.00	-20.34	peak			
4	7332.500	33.99	8.58	42.57	54.00	-11.43	AVG			

Job No.:	**011503376E**	**Polarization:**	**Vertical**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**AC 120V/60Hz for adapter**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**802.11b(2437MHz)**	**Distance:**	**3m**



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4867.500	62.47	3.41	65.88	74.00	-8.12	peak			
2	4867.500	46.71	3.41	50.12	54.00	-3.88	AVG			
3	7332.500	46.65	8.58	55.23	74.00	-18.77	peak			
4	7332.500	40.96	8.58	49.54	54.00	-4.46	AVG			

Job No.:	**011503376E**	**Polarization:**	**Horizontal**
Standard:	**(RE)FCC PART15 C _3m**	**Power Source:**	**AC 120V/60Hz for adapter**
Test item:	**Radiation Test**	**Temp.(C)/Hum.(%RH):**	**24.3(C)/55%RH**
Note:	**802.11b(2462MHz)**	**Distance:**	**3m**



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	4910.000	58.47	3.49	61.96	74.00	-12.04	peak			
2	4910.000	47.16	3.49	50.65	54.00	-3.35	AVG			
3	7375.000	42.82	8.63	51.45	74.00	-22.55	peak			
4	7375.000	31.81	8.63	40.44	54.00	-13.56	AVG			