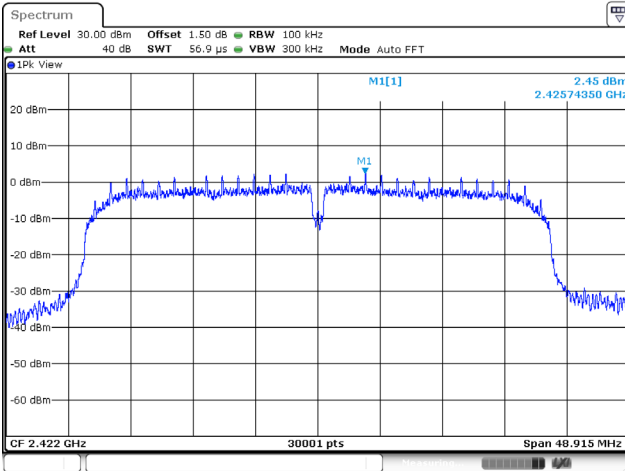
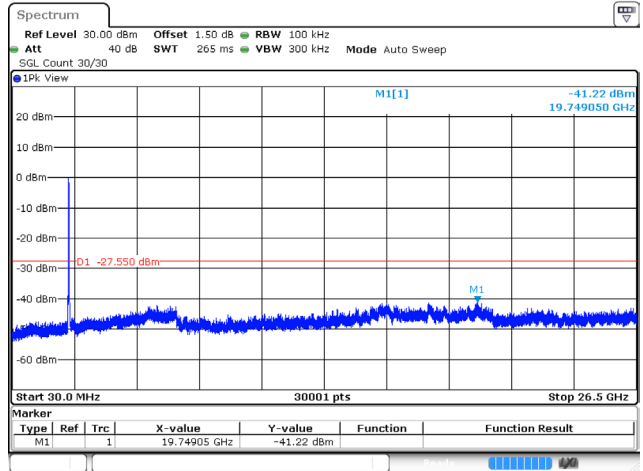


### 802.11n (40 MHz) / 2422 MHz

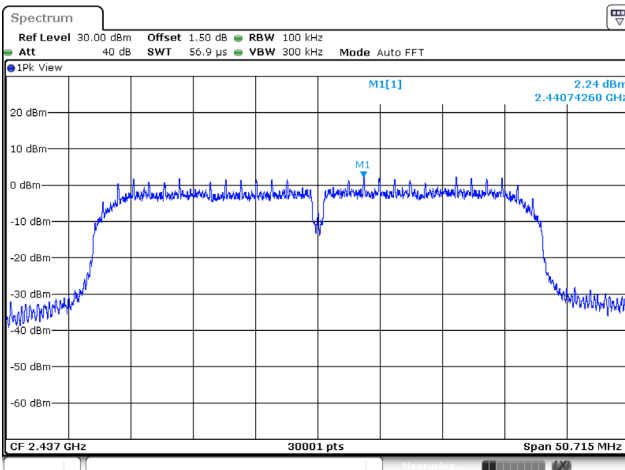


Date: 12.JUL.2022 14:38:05

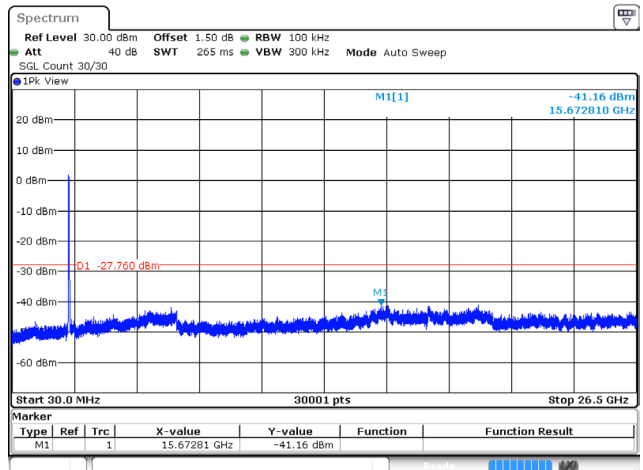


Date: 12.JUL.2022 14:38:53

### 802.11n (40 MHz) / 2437 MHz

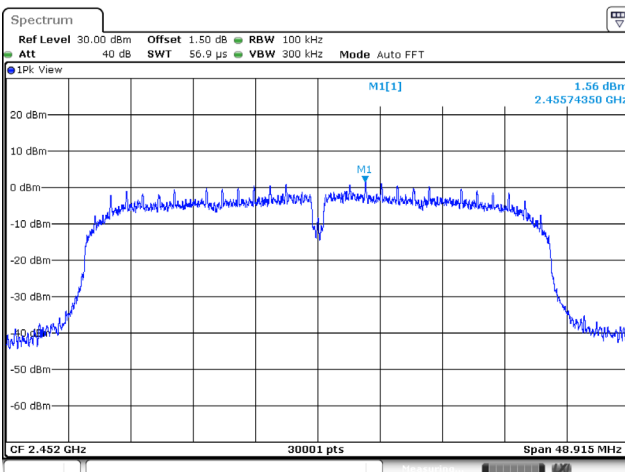


Date: 12.JUL.2022 14:27:47

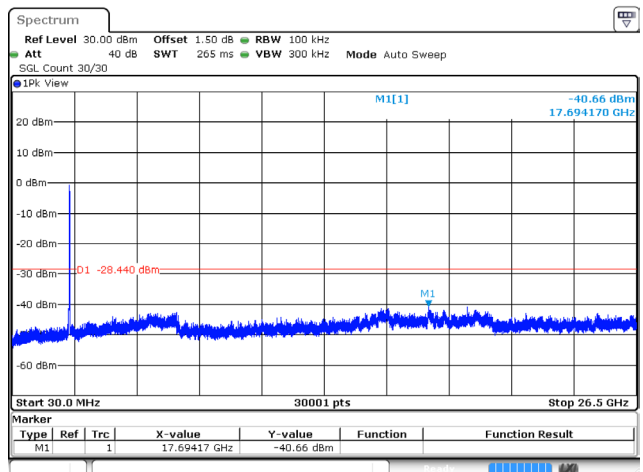


Date: 12.JUL.2022 14:28:25

### 802.11n (40 MHz) / 2452 MHz

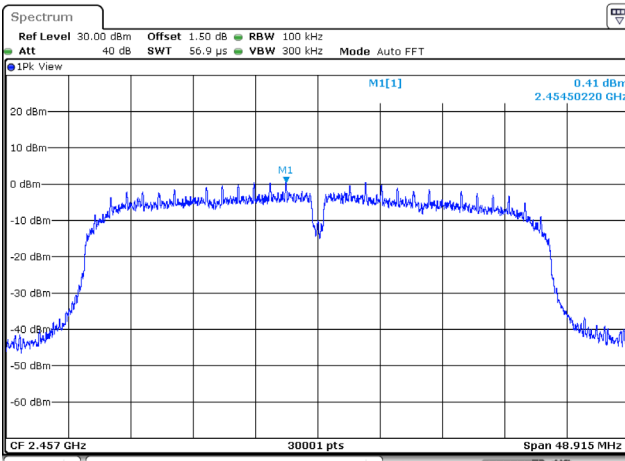


Date: 12.JUL.2022 14:23:41

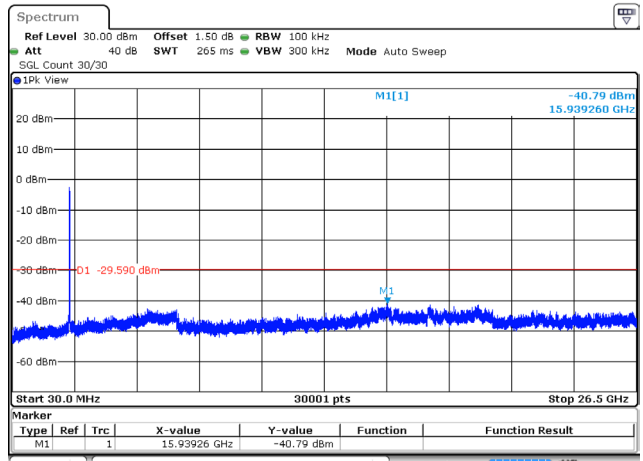


Date: 12.JUL.2022 14:24:30

### 802.11n (40 MHz) / 2457 MHz

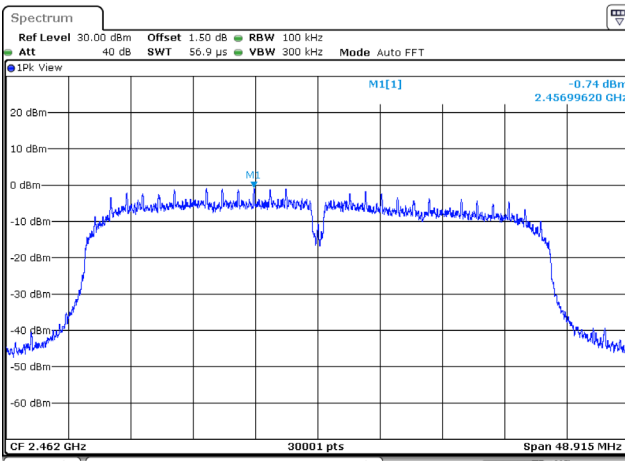


Date: 12.JUL.2022 14:18:54

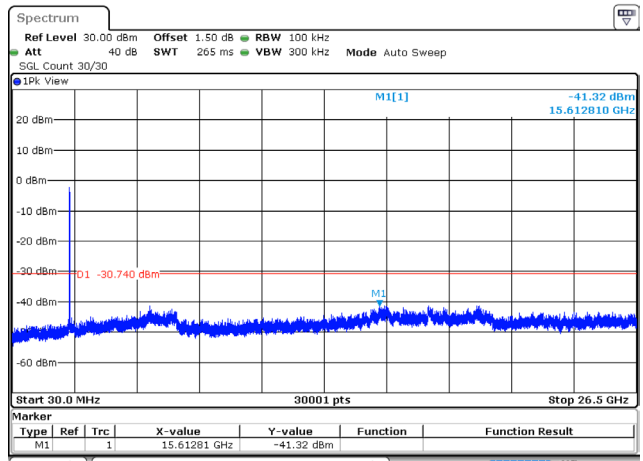


Date: 12.JUL.2022 14:19:41

### 802.11n (40 MHz) / 2462 MHz

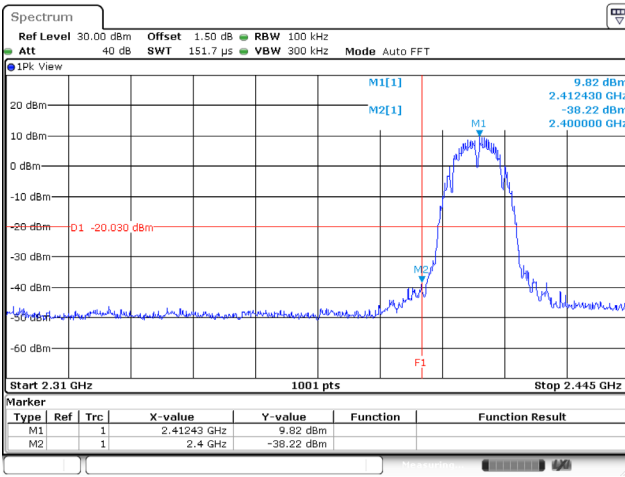


Date: 12.JUL.2022 14:15:55



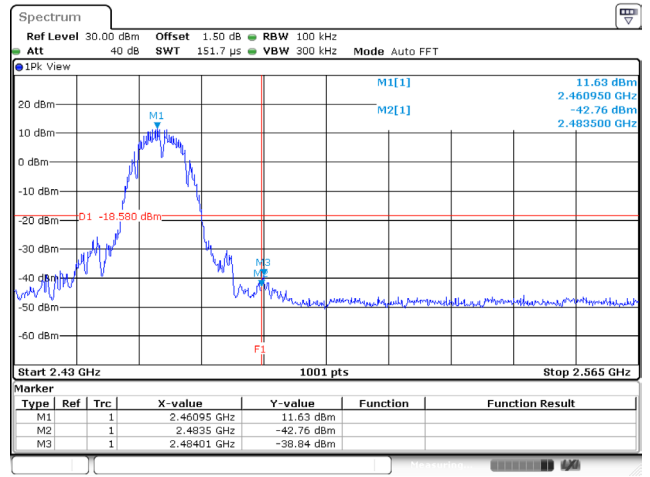
Date: 12.JUL.2022 14:16:43

### 802.11b / 2412 MHz (Band Edge)



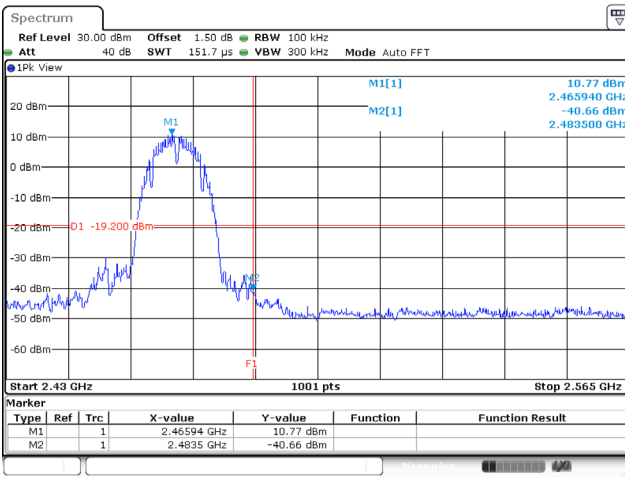
Date: 12.JUL.2022 11:47:03

### 802.11b / 2462 MHz (Band Edge)



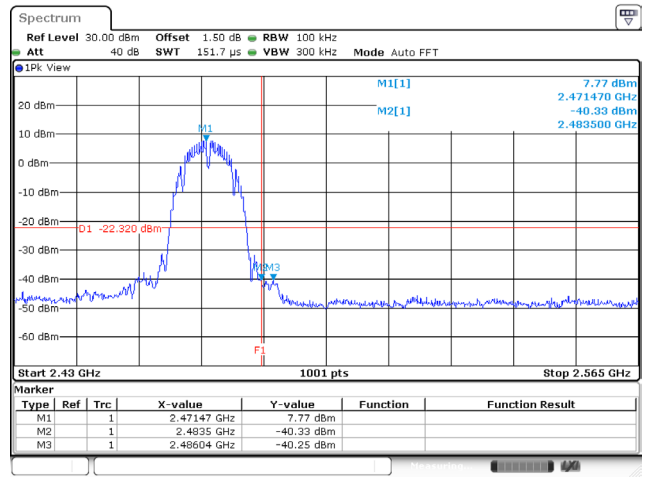
Date: 12.JUL.2022 11:59:26

### 802.11b / 2467 MHz (Band Edge)



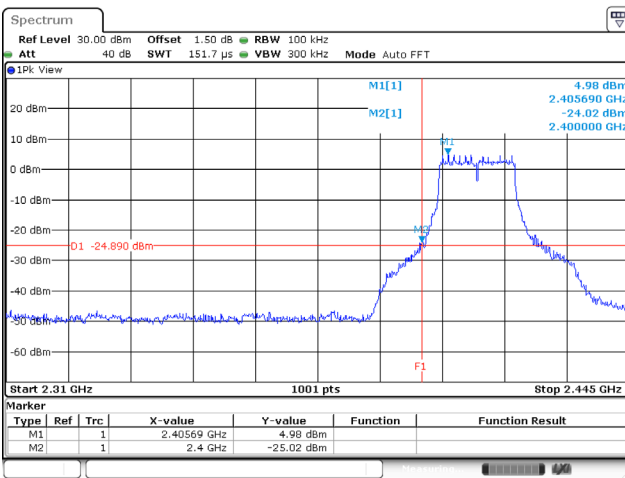
Date: 12.JUL.2022 13:07:33

### 802.11b / 2472 MHz (Band Edge)



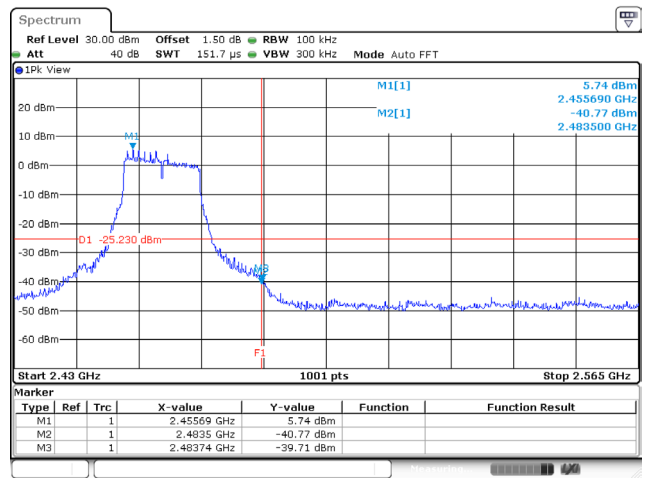
Date: 12.JUL.2022 13:15:23

### 802.11g / 2412 MHz (Band Edge)



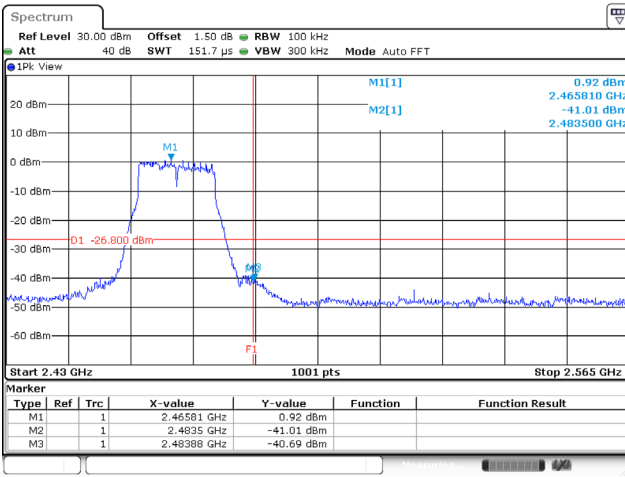
Date: 12.JUL.2022 13:30:10

### 802.11g / 2462 MHz (Band Edge)



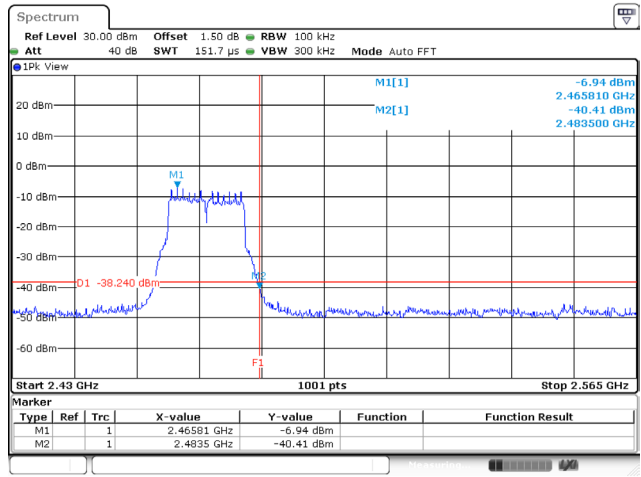
Date: 12.JUL.2022 13:23:41

### 802.11g / 2467 MHz (Band Edge)



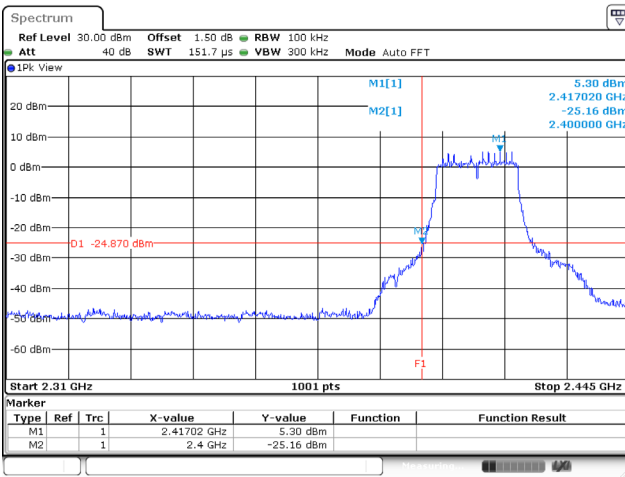
Date: 12.JUL.2022 13:20:50

### 802.11g / 2472 MHz (Band Edge)



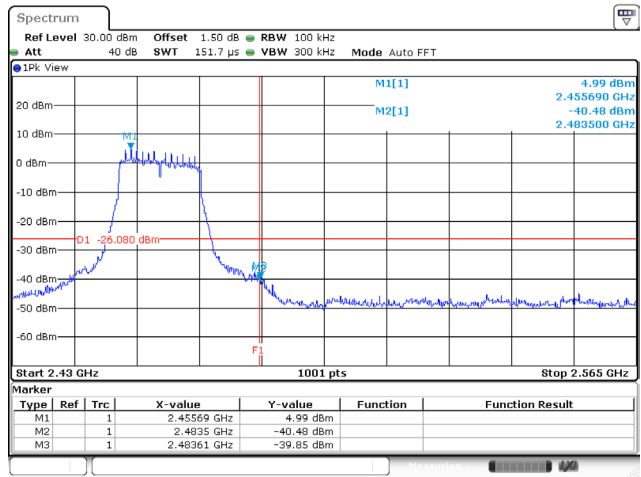
Date: 12.JUL.2022 13:18:05

### 802.11n (20 MHz) / 2412 MHz (Band Edge)



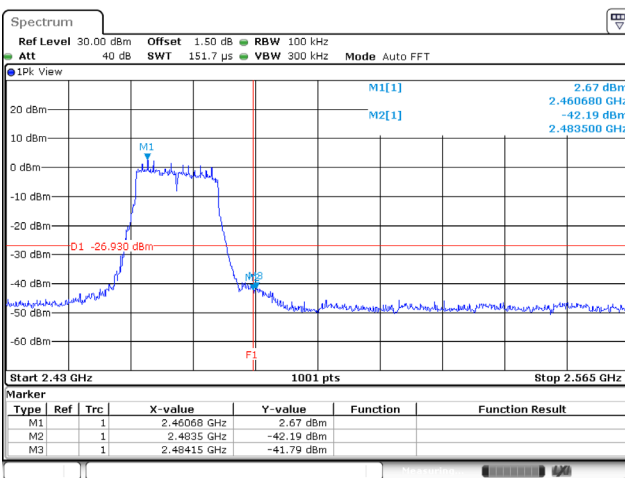
Date: 12.JUL.2022 13:38:45

### 802.11n (20 MHz) / 2462 MHz (Band Edge)



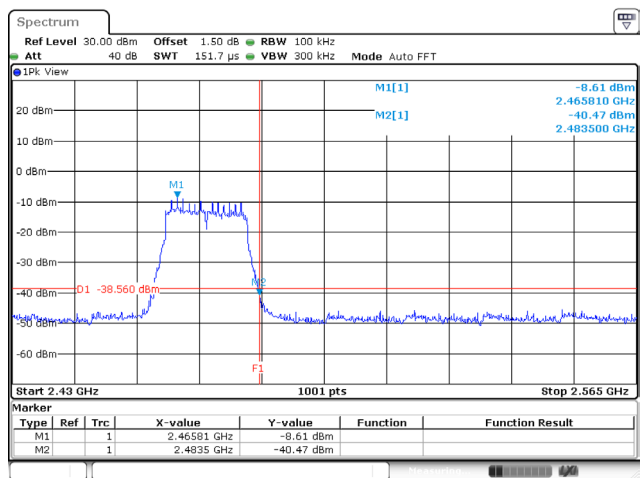
Date: 12.JUL.2022 13:51:41

### 802.11n (20 MHz) / 2467 MHz (Band Edge)

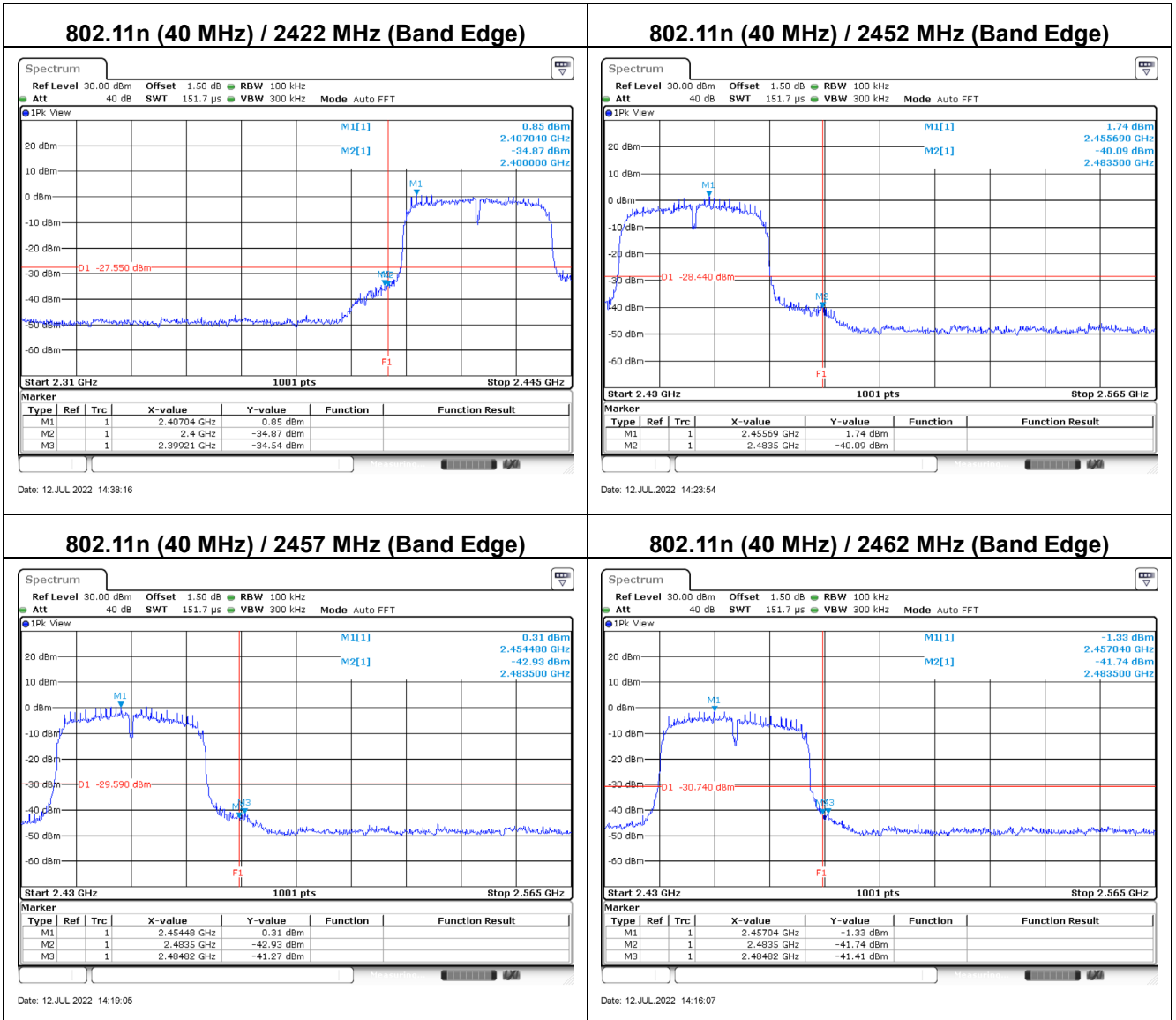


Date: 12.JUL.2022 13:54:05

### 802.11n (20 MHz) / 2472 MHz (Band Edge)

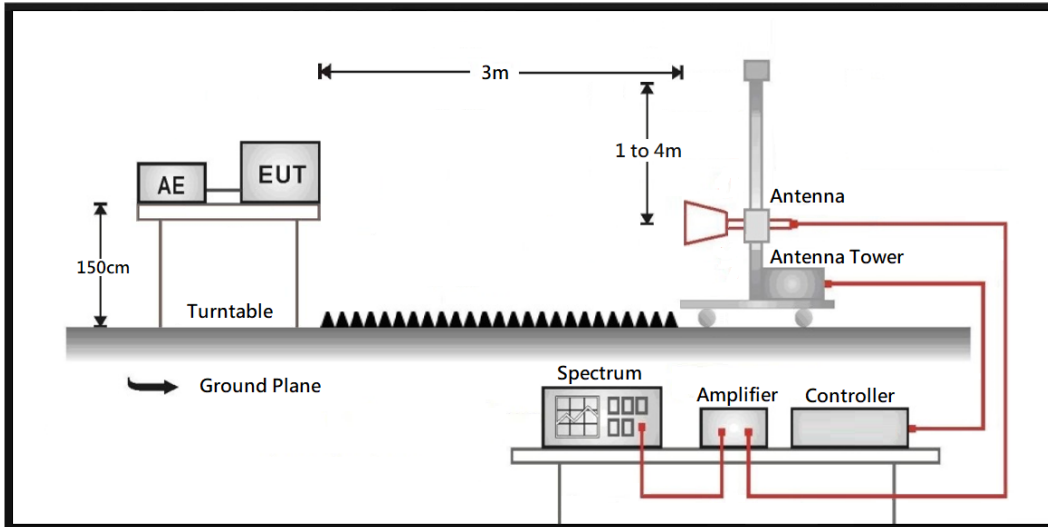


Date: 12.JUL.2022 14:12:36



## 5. Radiated Emission Band Edge

### 5.1. Test Setup



### 5.2. Test Limit

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 30 dB below the level of the fundamental or to the general radiated emission limit in paragraph 15.209, whichever is the lesser attenuation.

Frequency (MHz)	Field strength (uV/m)	Field strength (dBuV/m)	Measurement distance (m)
30 - 88	100	40	3
88 - 216	150	43.5	3
216 - 960	200	46	3
Above 960	500	54	3

Remarks:

1. Field strength (dBuV/m) = 20 log Field strength (uV/m)
2. In the Above Table, the tighter limit applies at the band edges.
3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system

### **5.3. Test Procedure**

The EUT was setup according to ANSI C63.10: 2013 and tested according to the FCC KDB 558074 D01 v05r02 for compliance to FCC 47CFR 15.247 requirements.

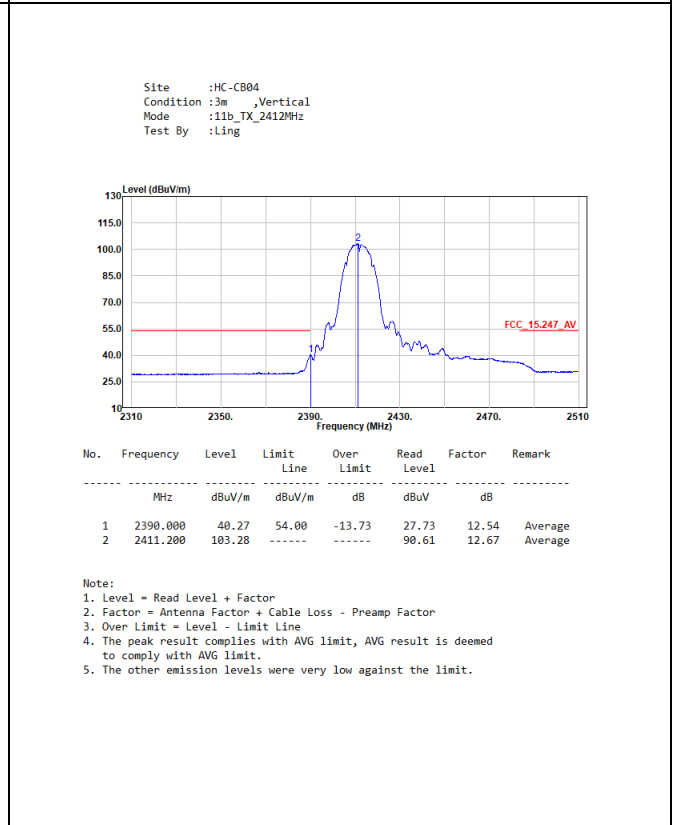
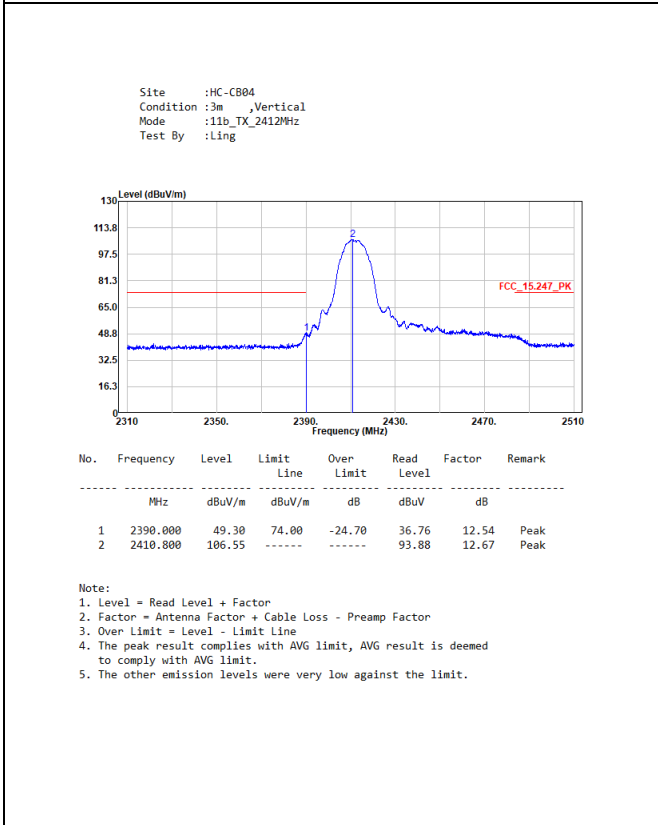
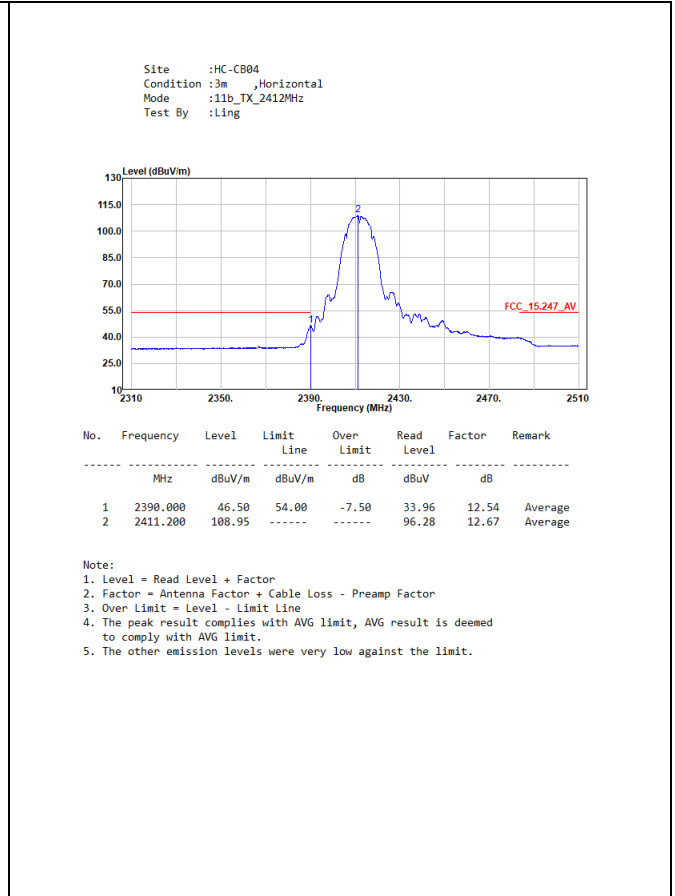
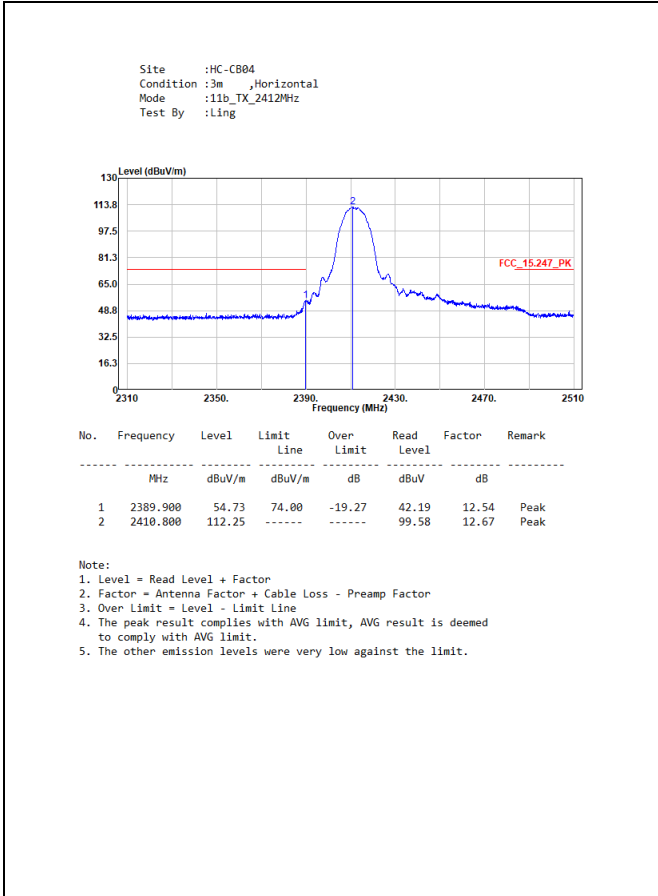
The EUT and its simulators are placed on a turn table which is 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated measurement.

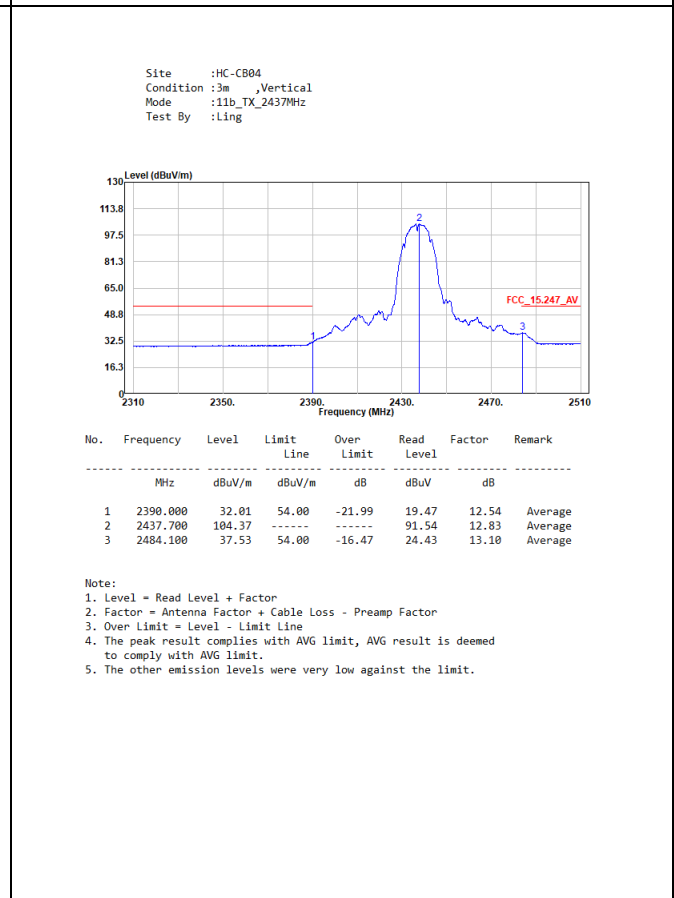
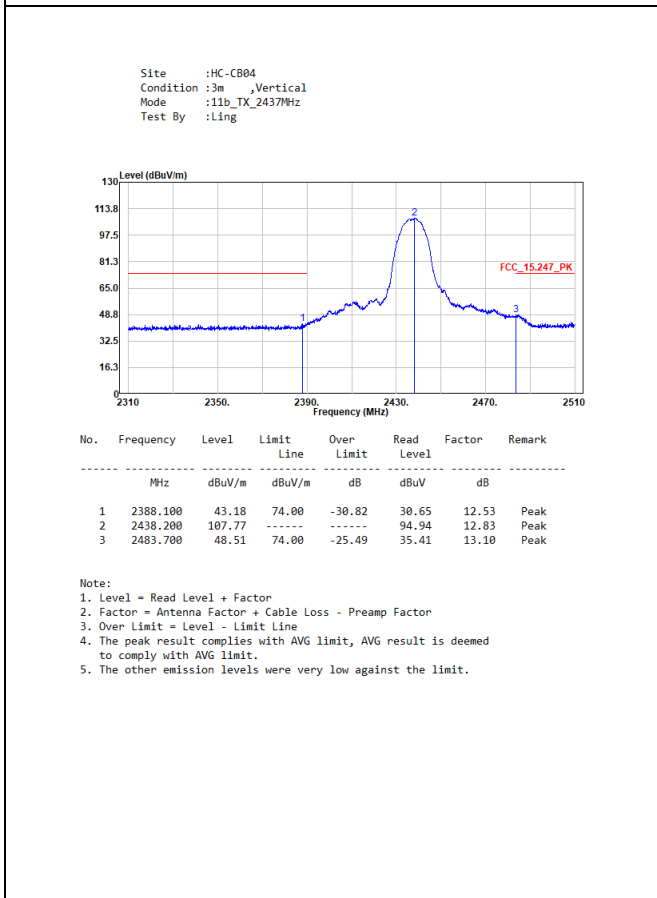
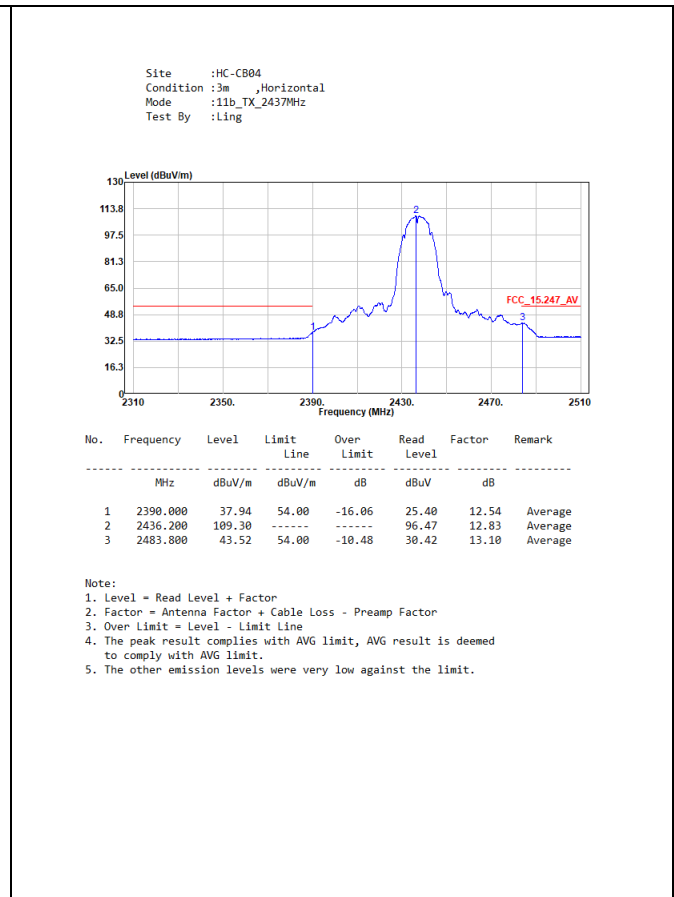
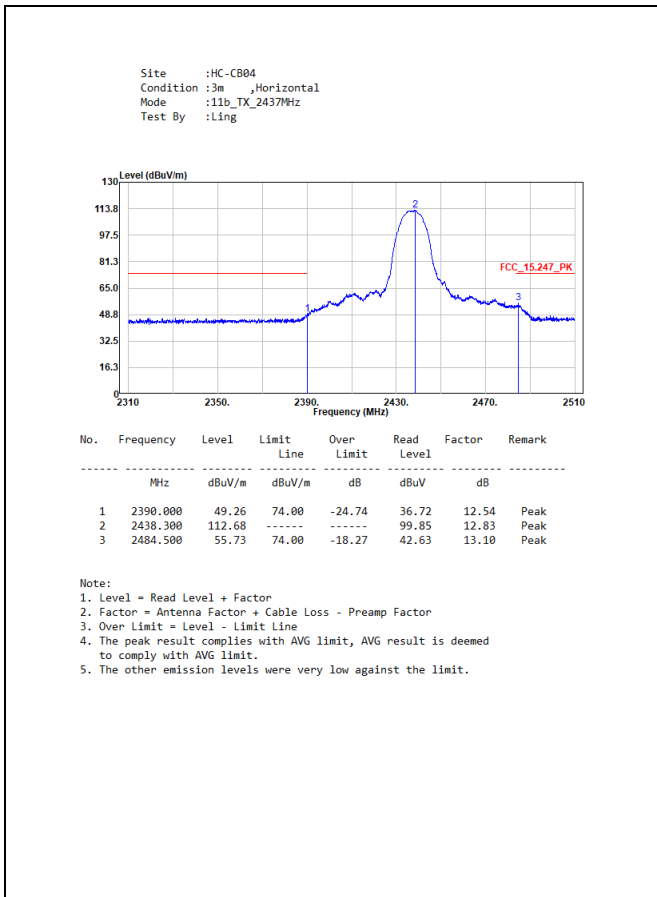
### **5.4. Test Specification**

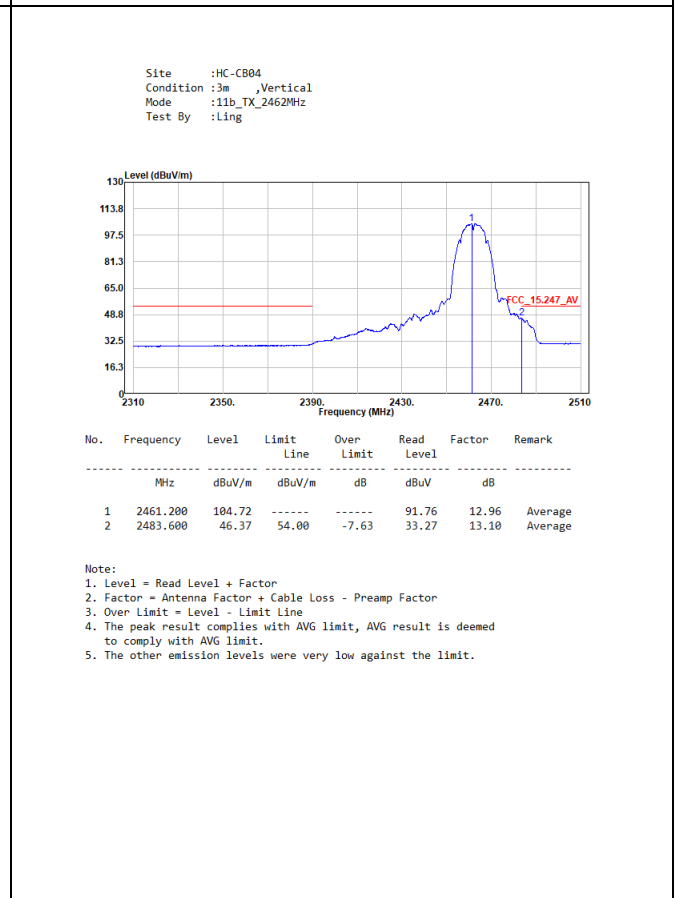
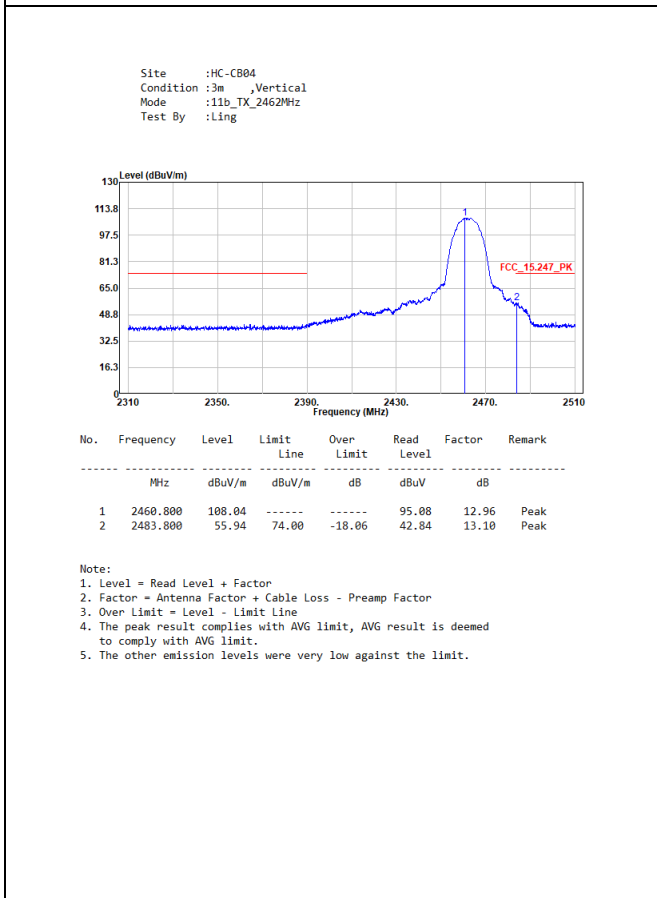
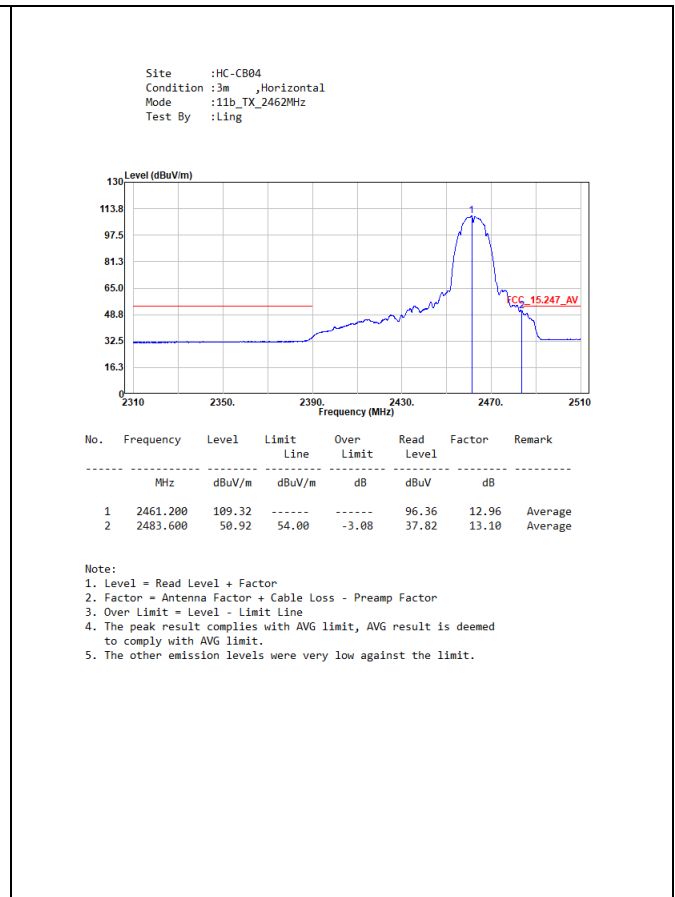
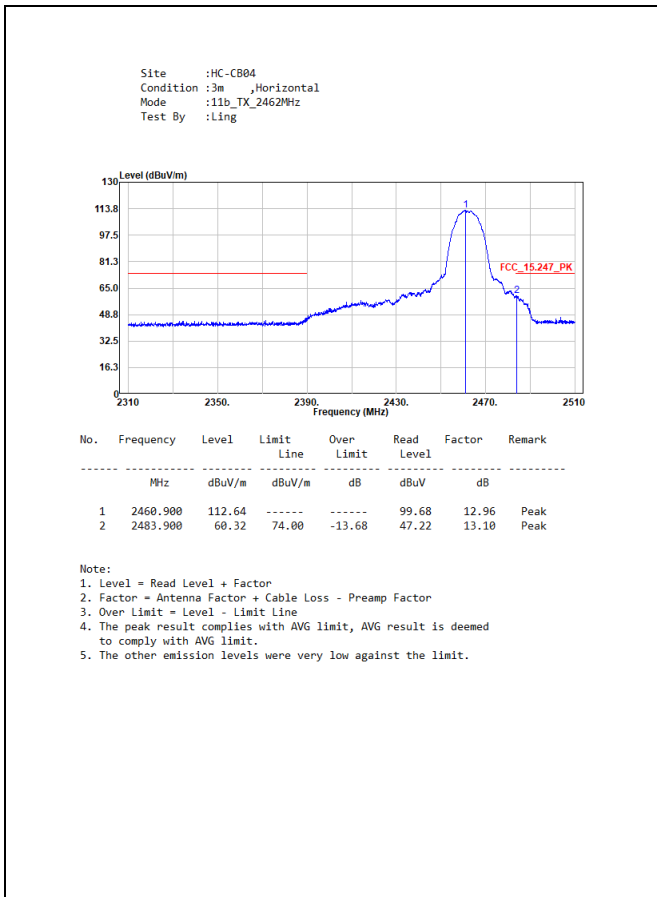
According to FCC Part 15 Subpart C Paragraph 15.247.

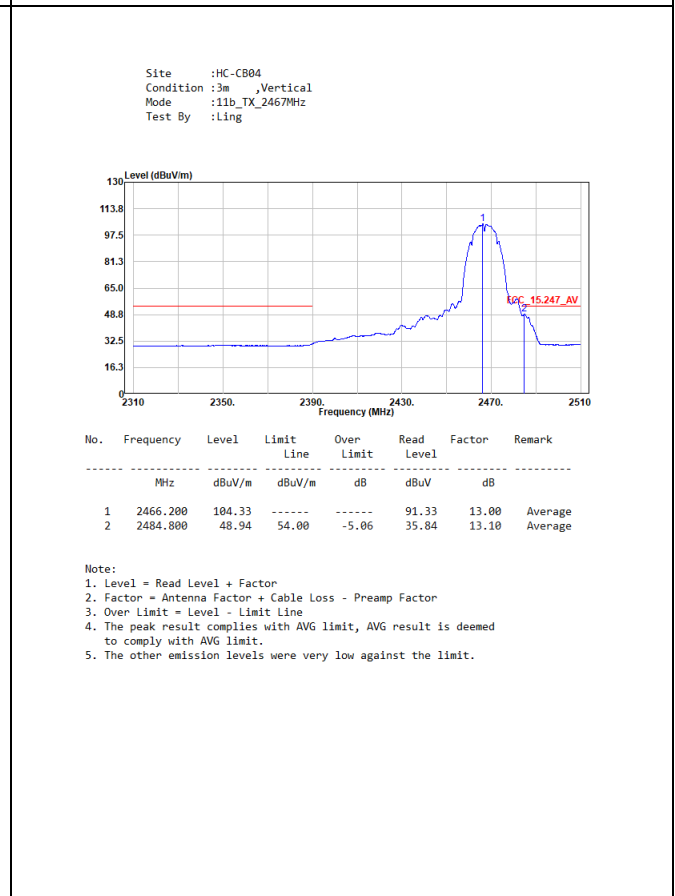
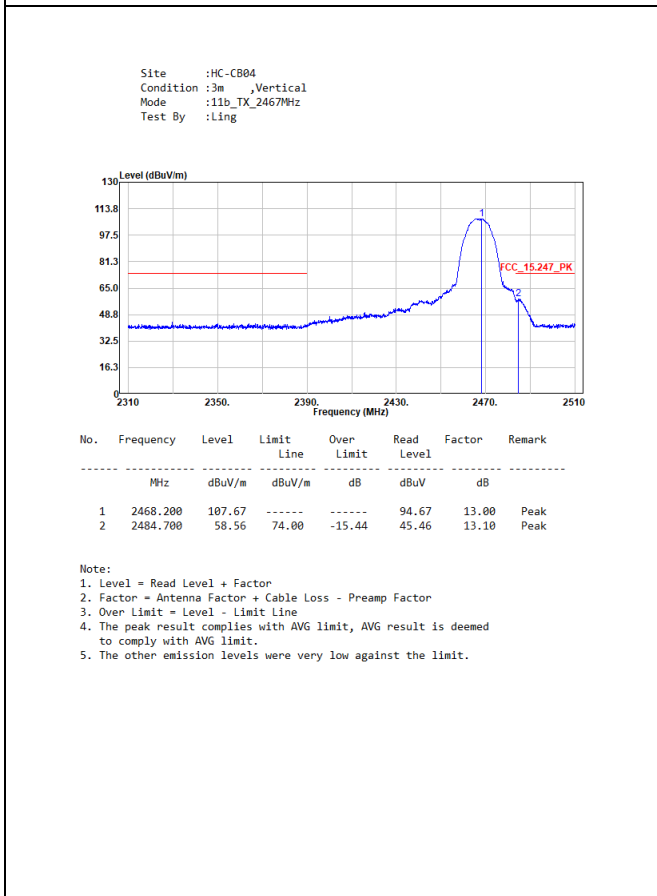
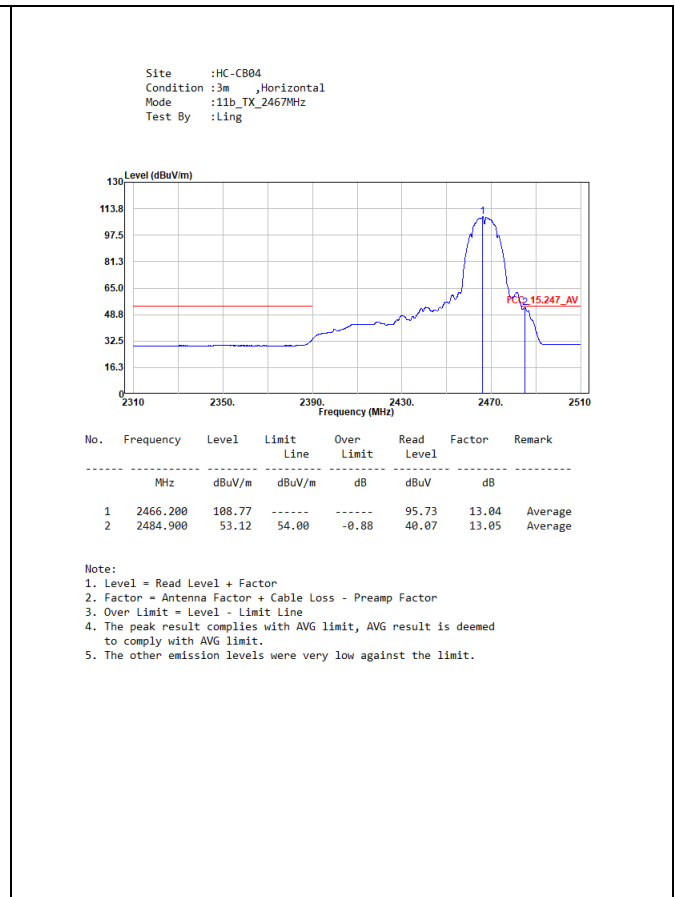
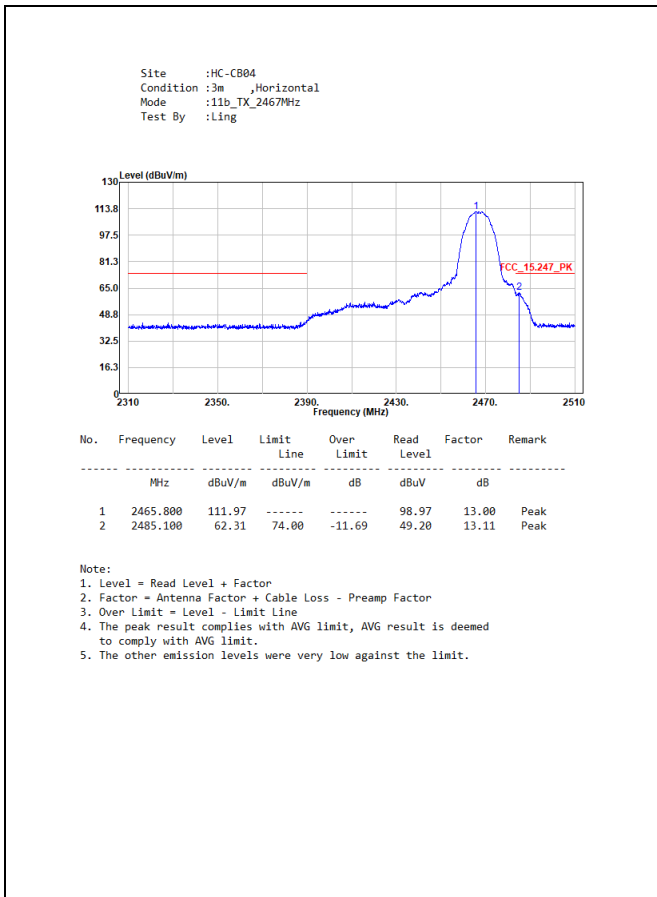
### 5.5. Test Result of Radiated Emission Band Edge

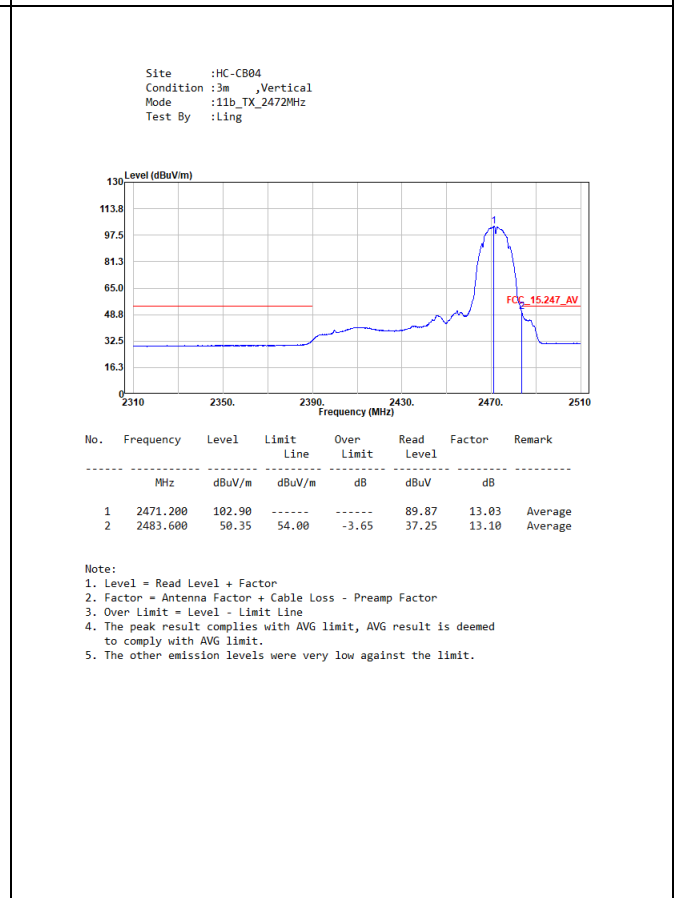
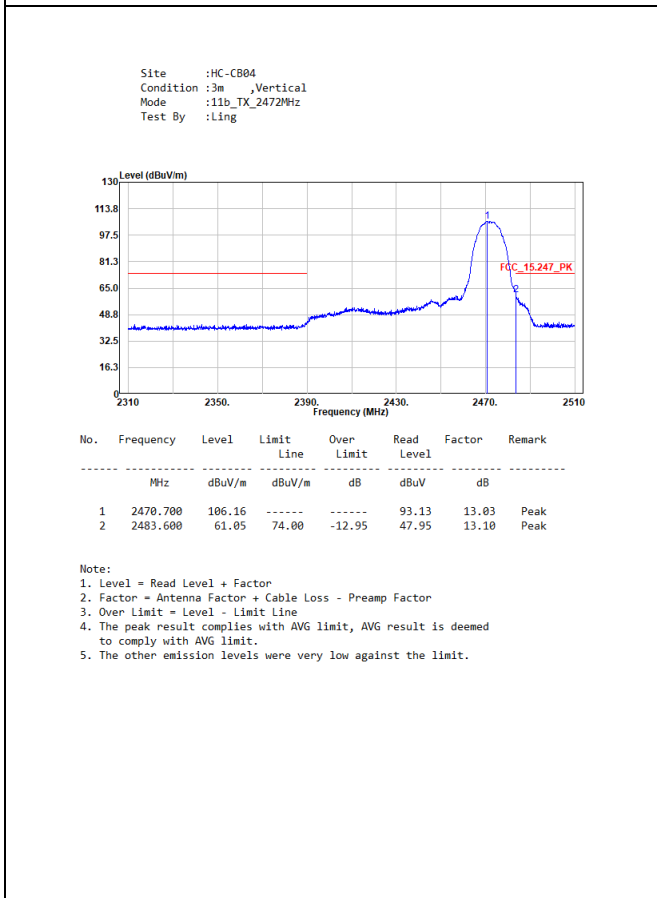
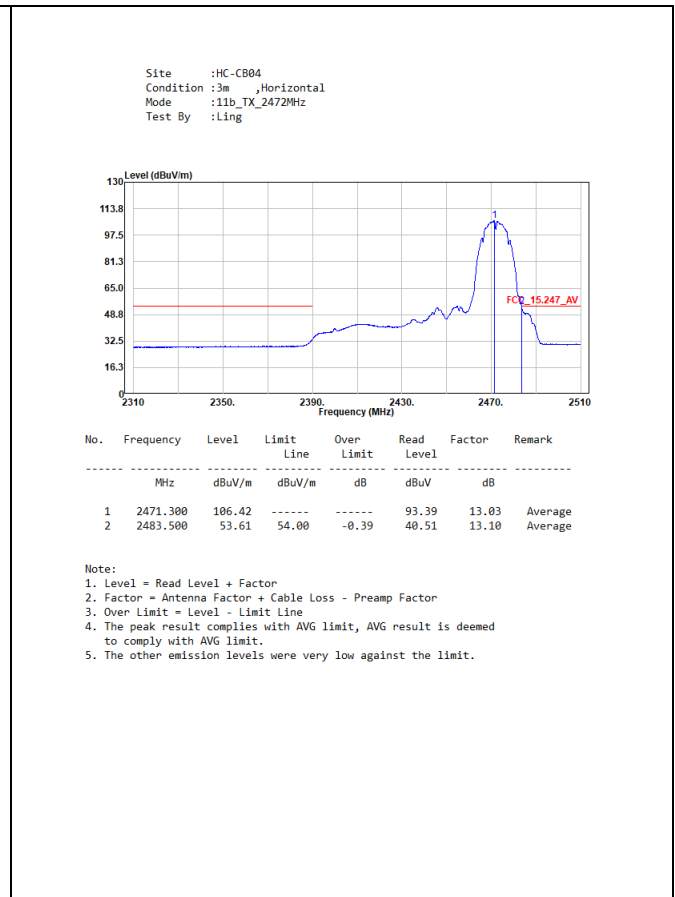
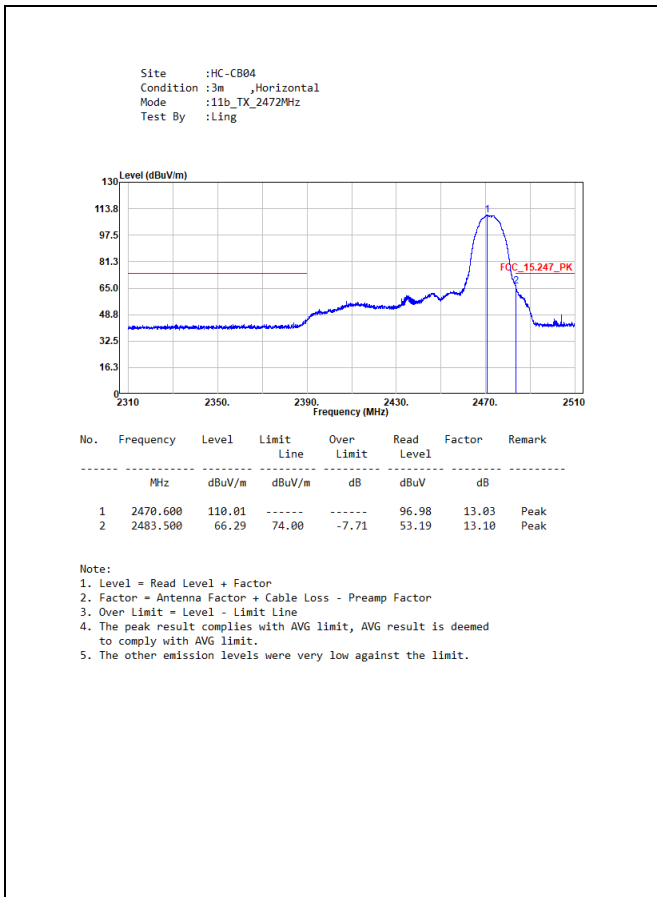


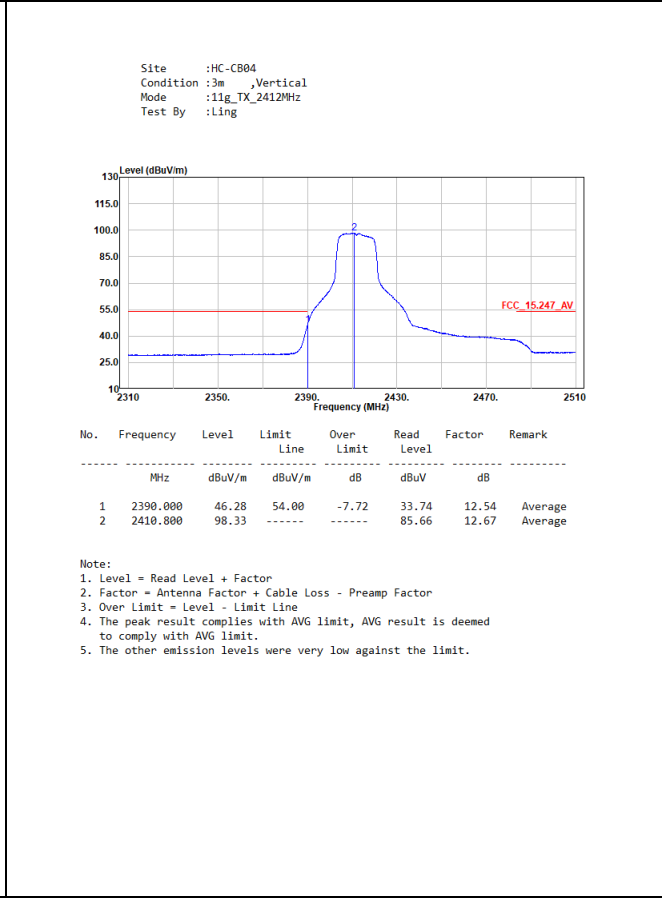
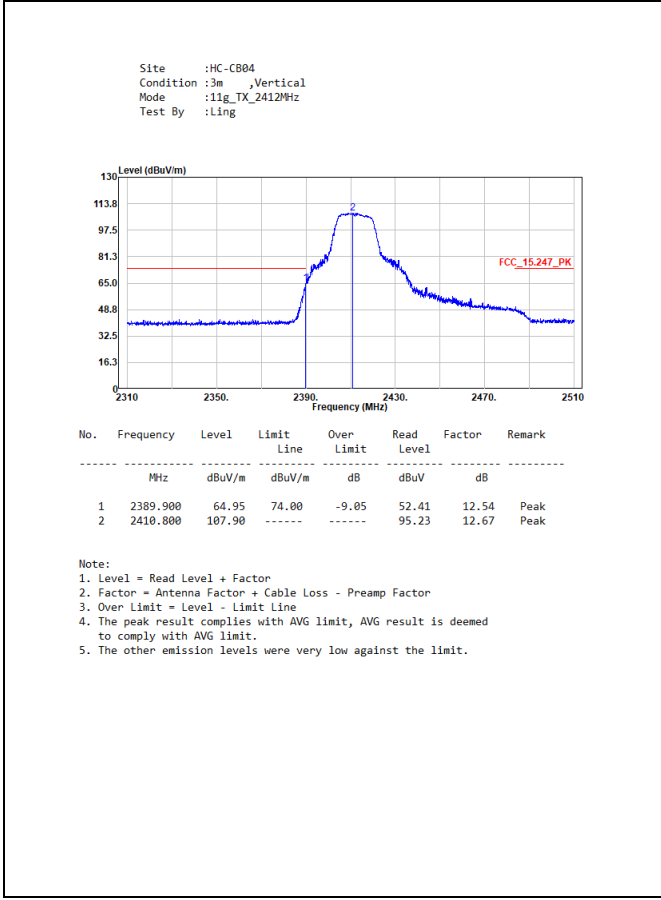
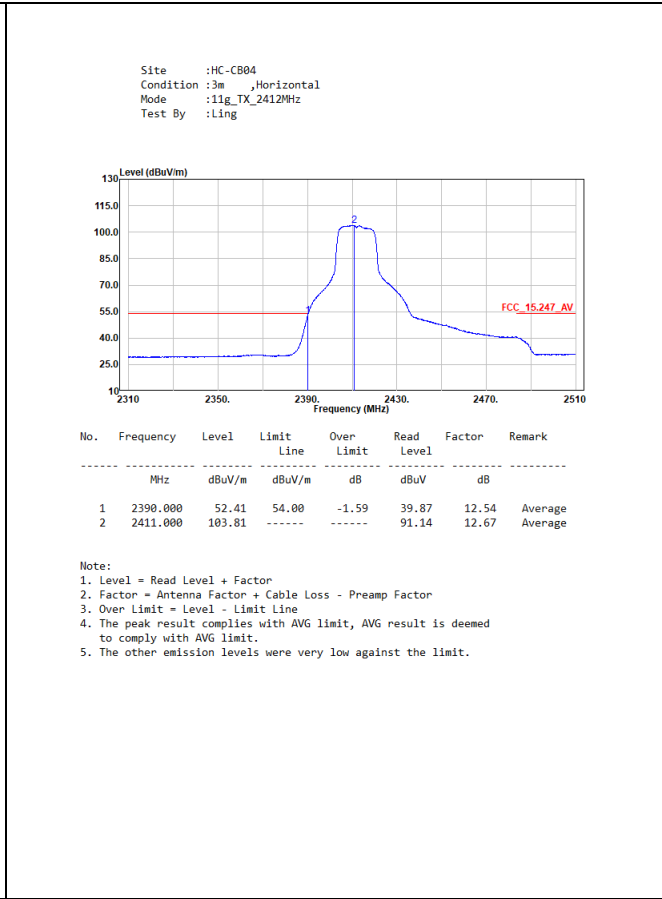
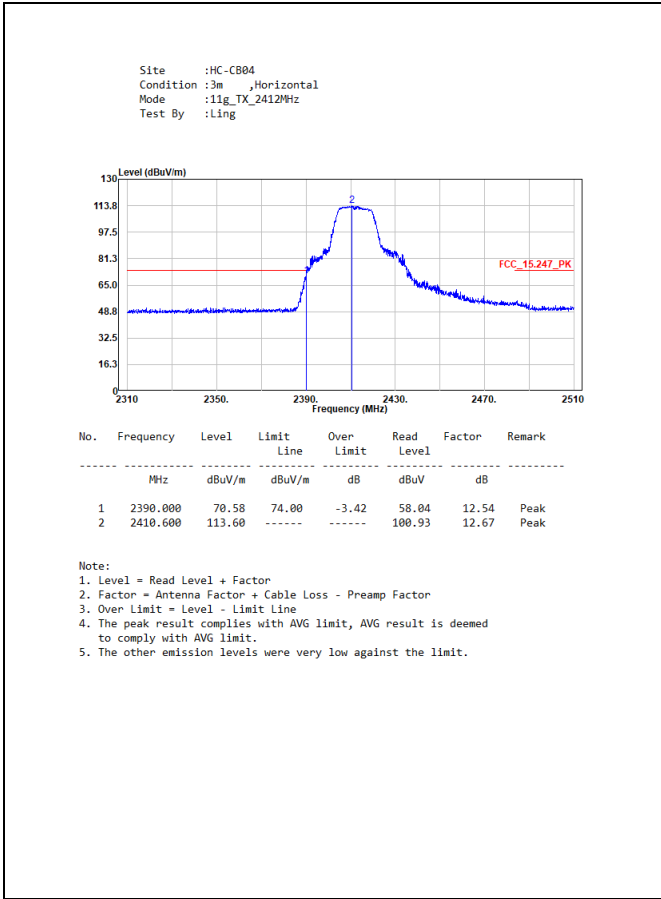


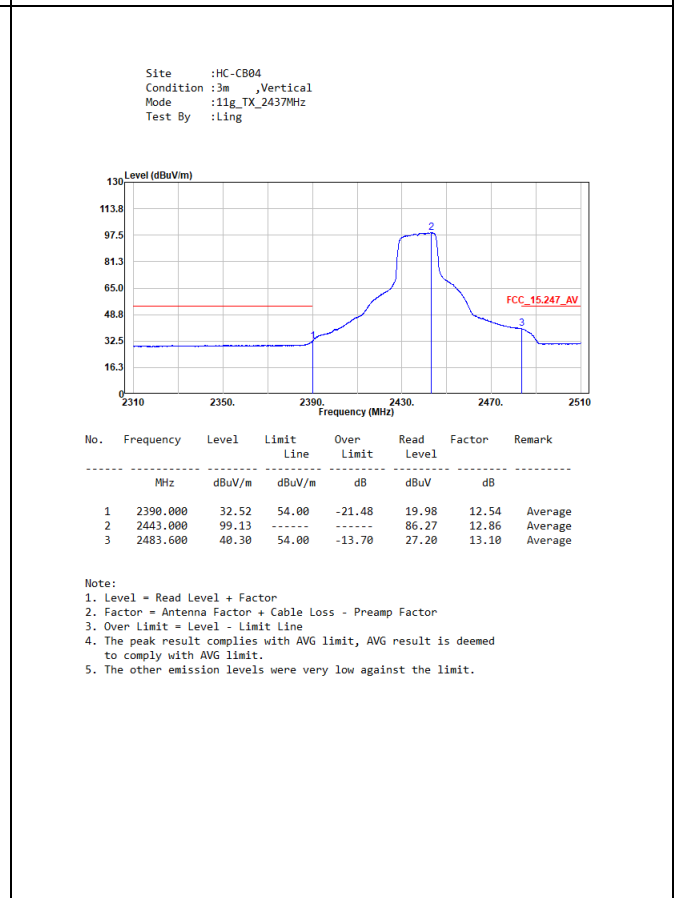
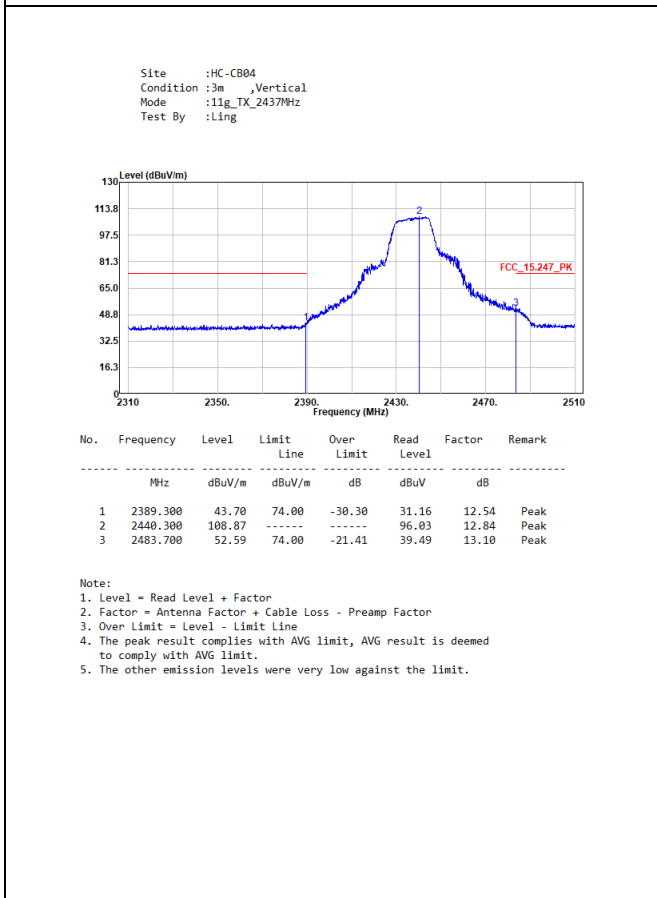
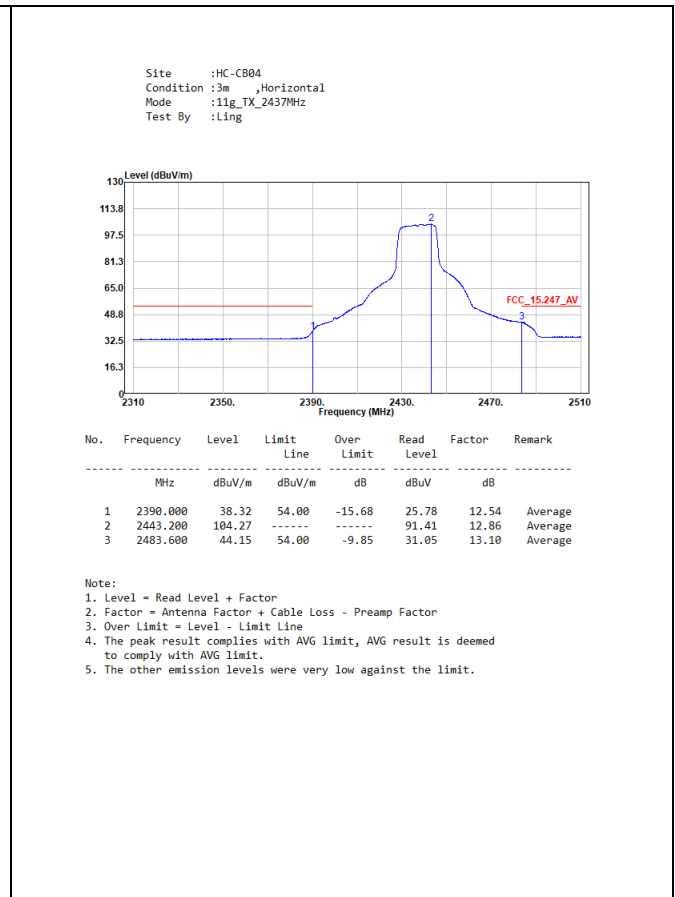
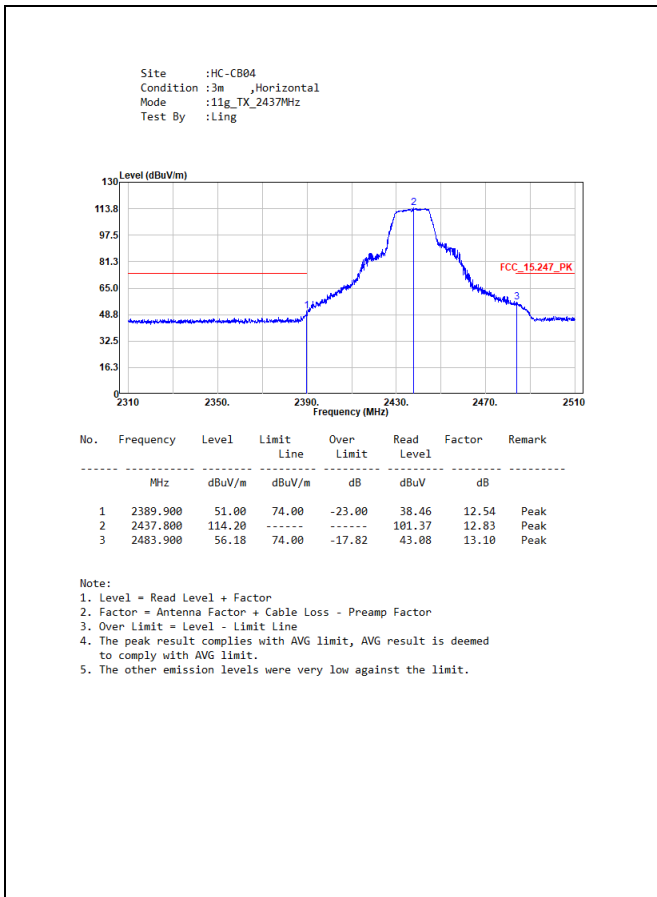


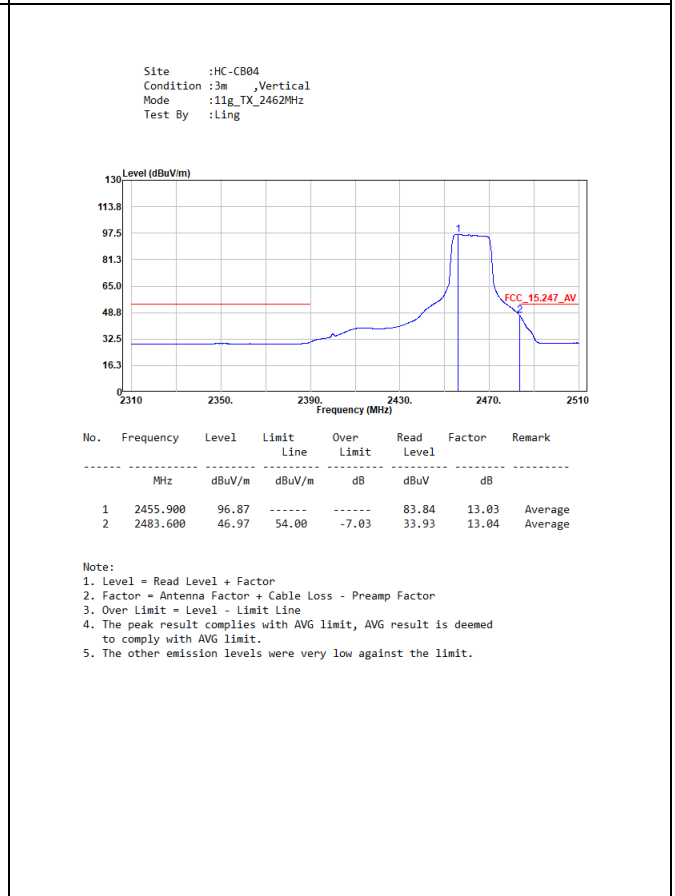
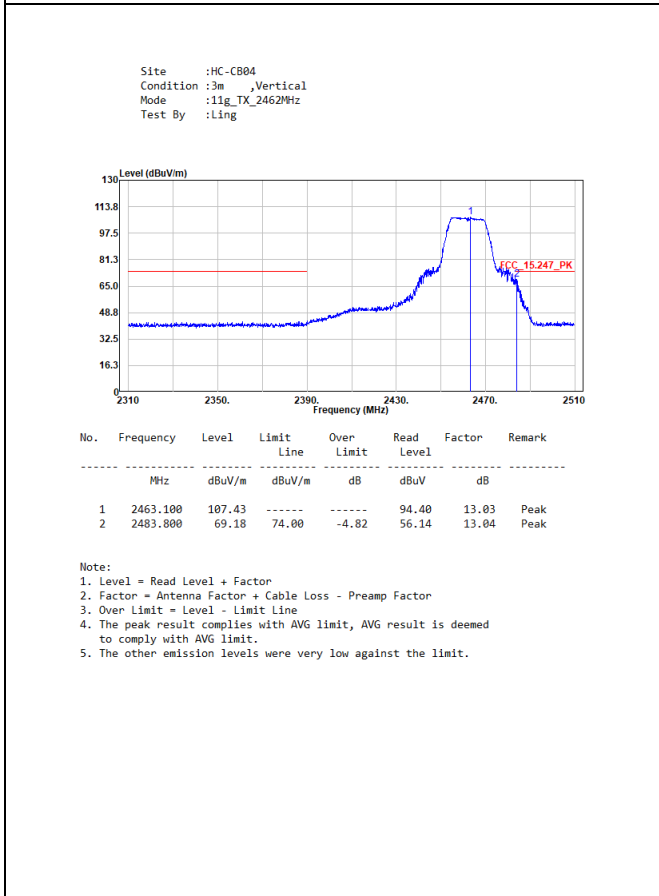
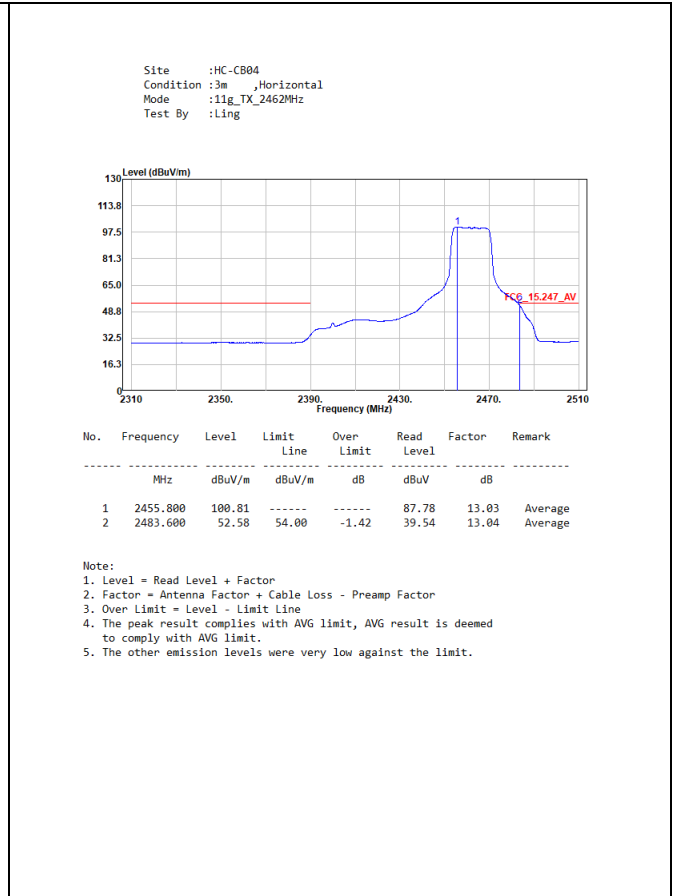
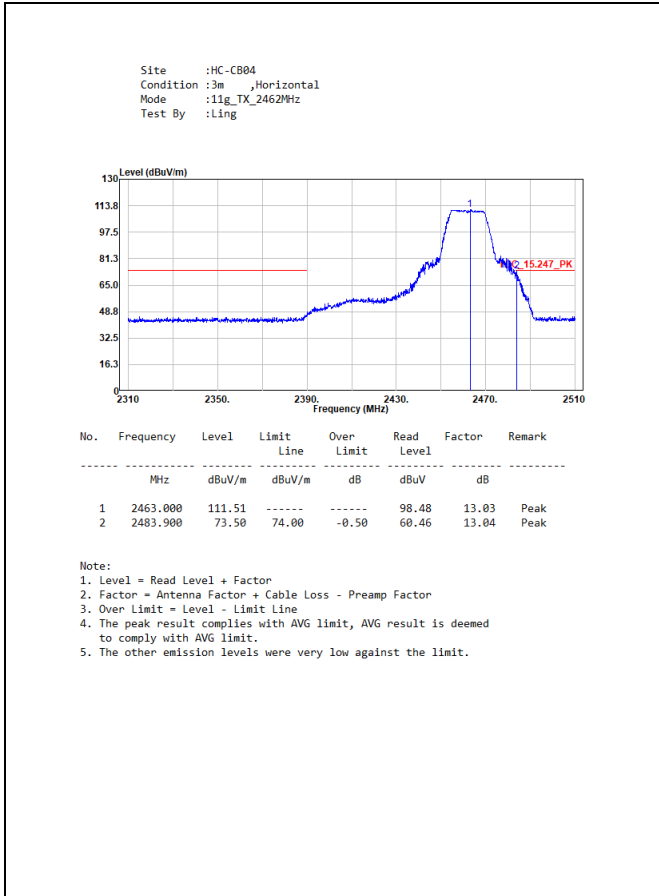


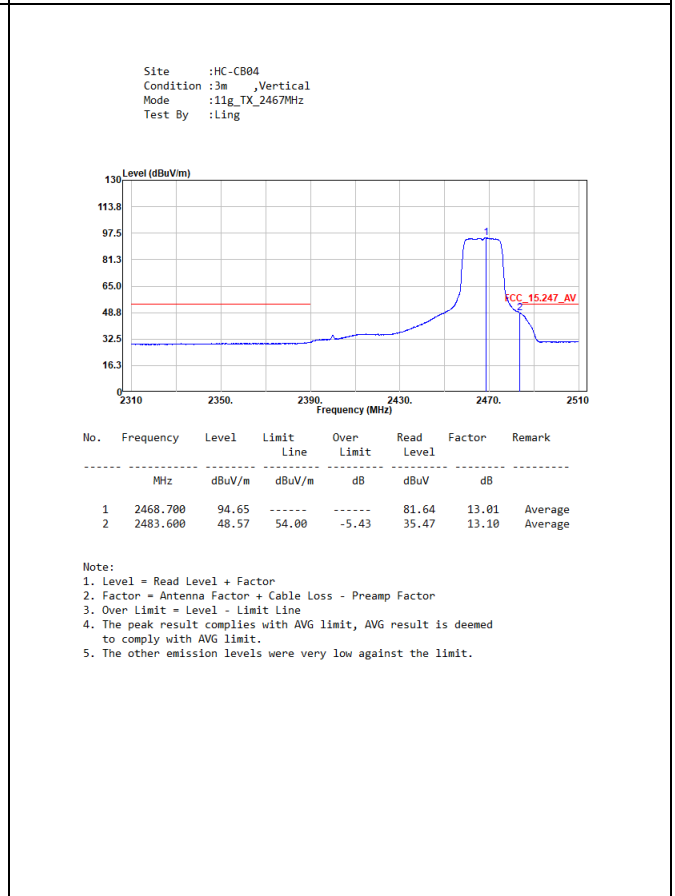
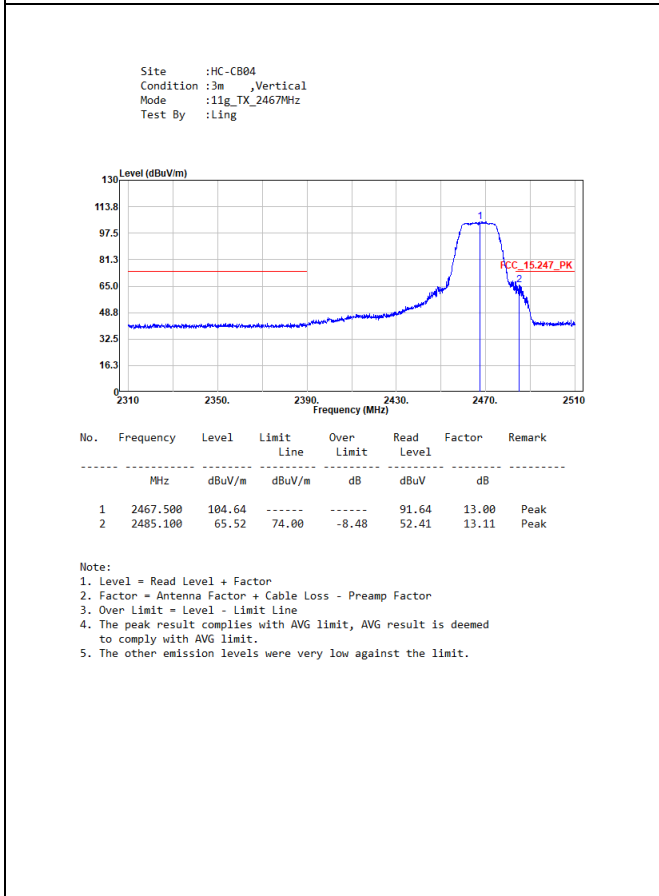
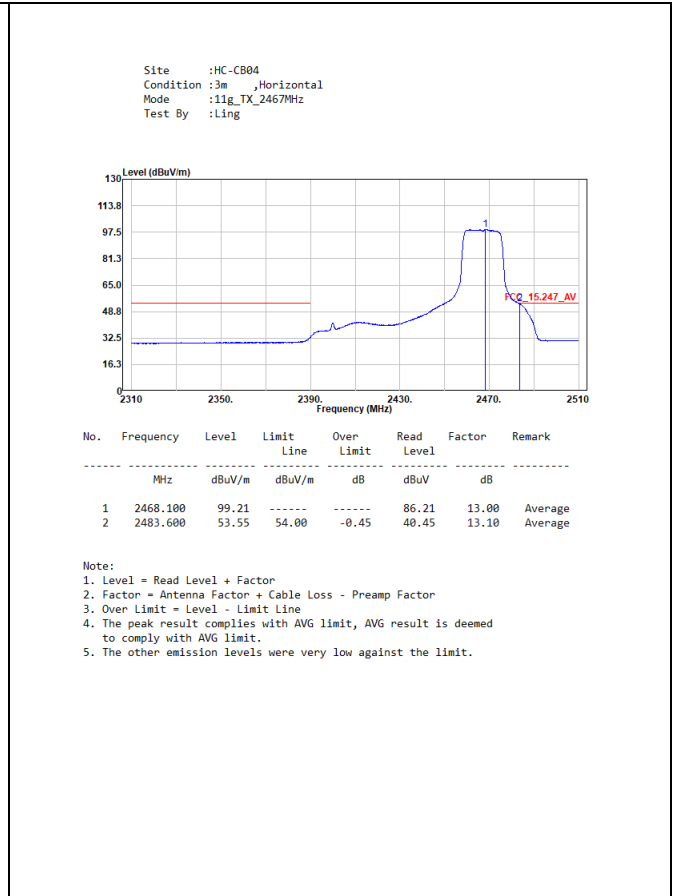
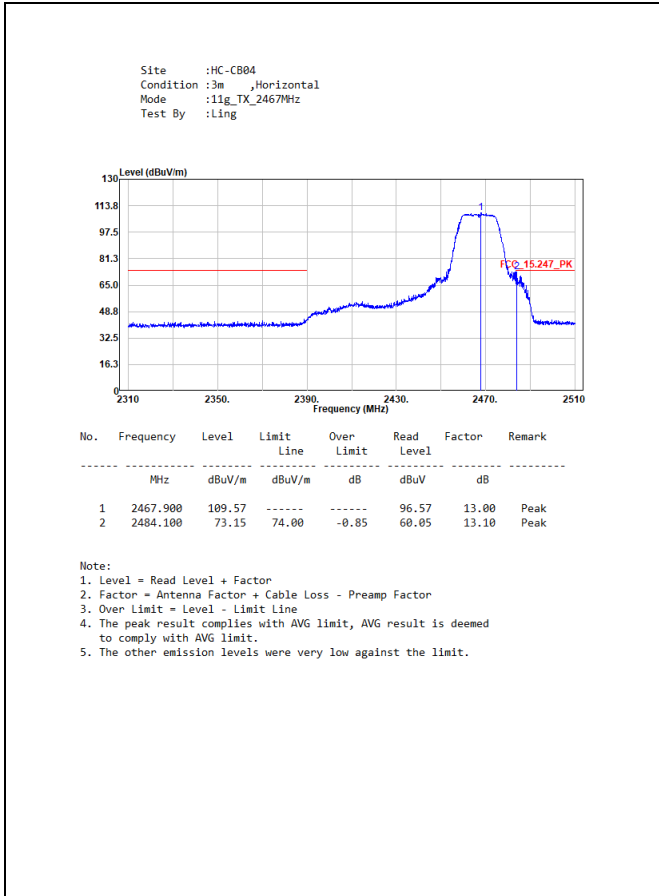




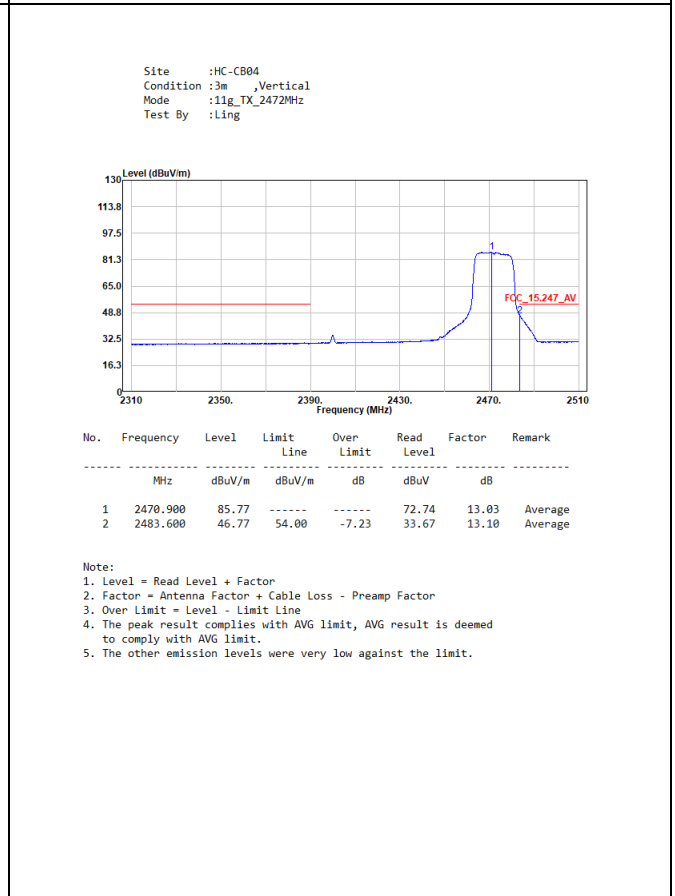
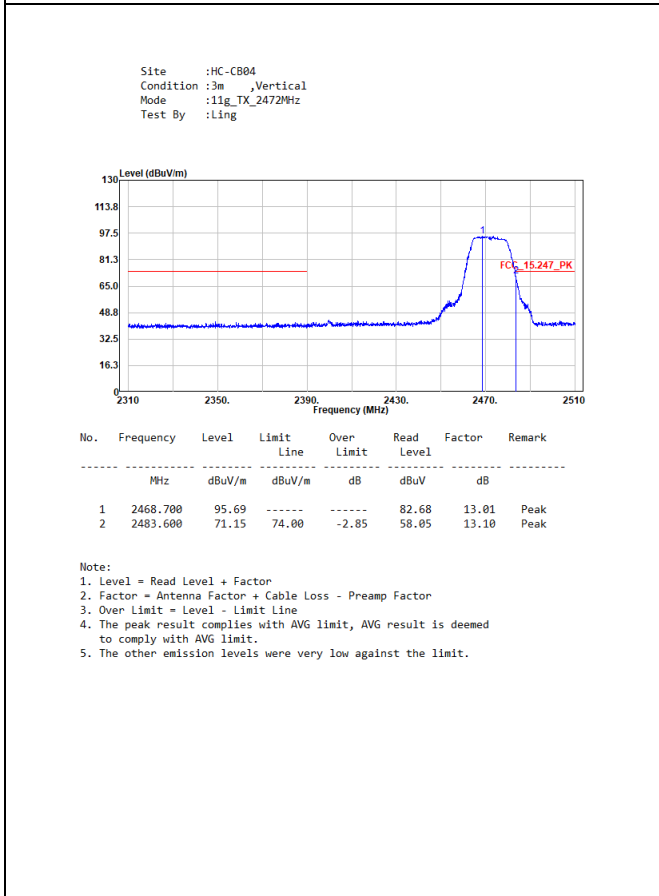
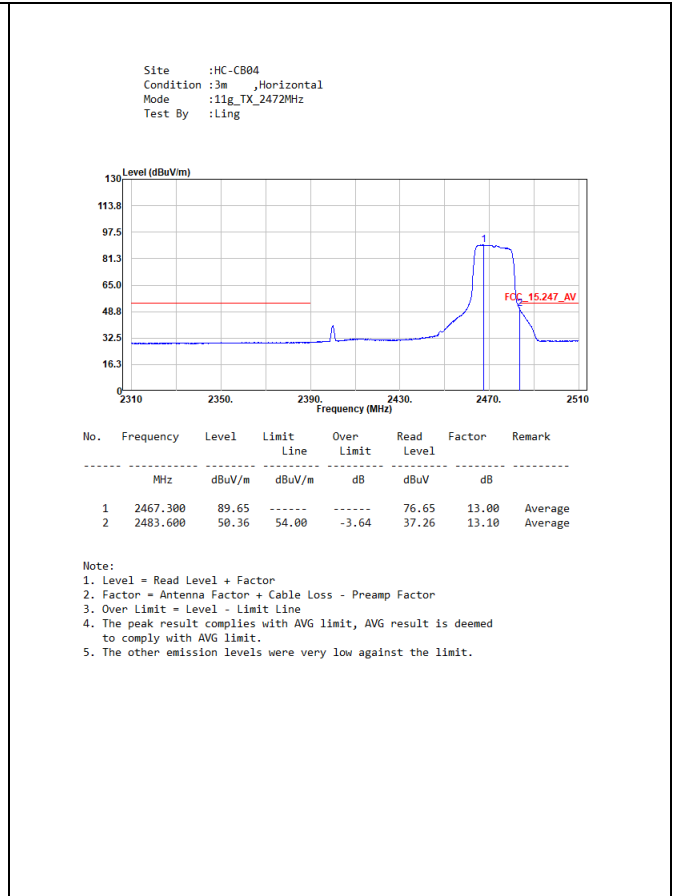
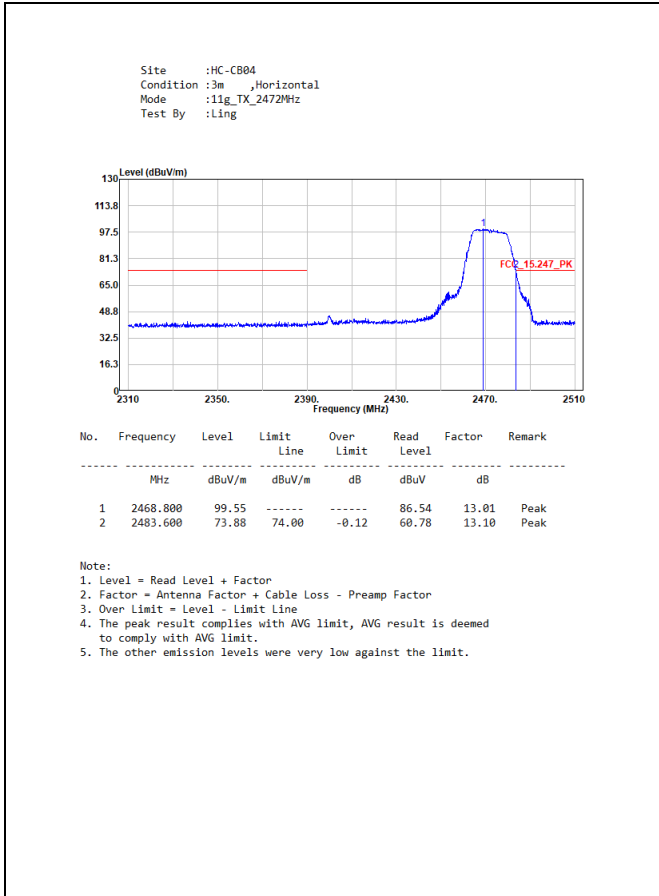


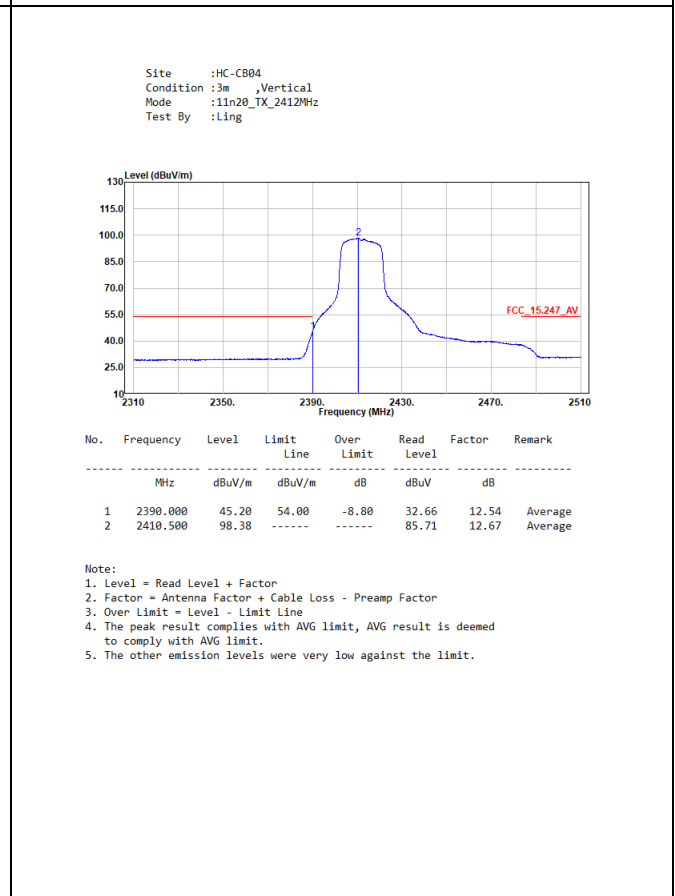
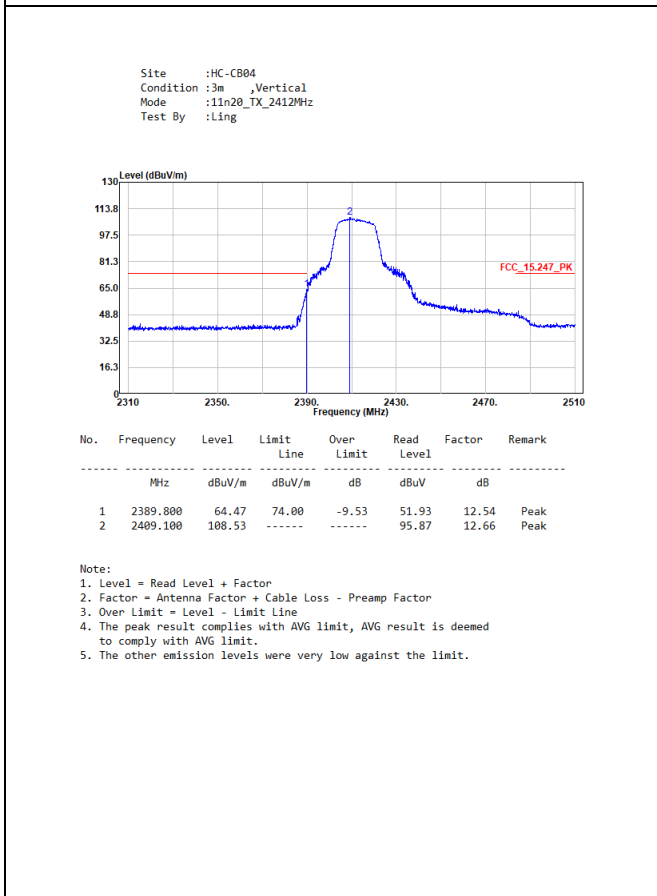
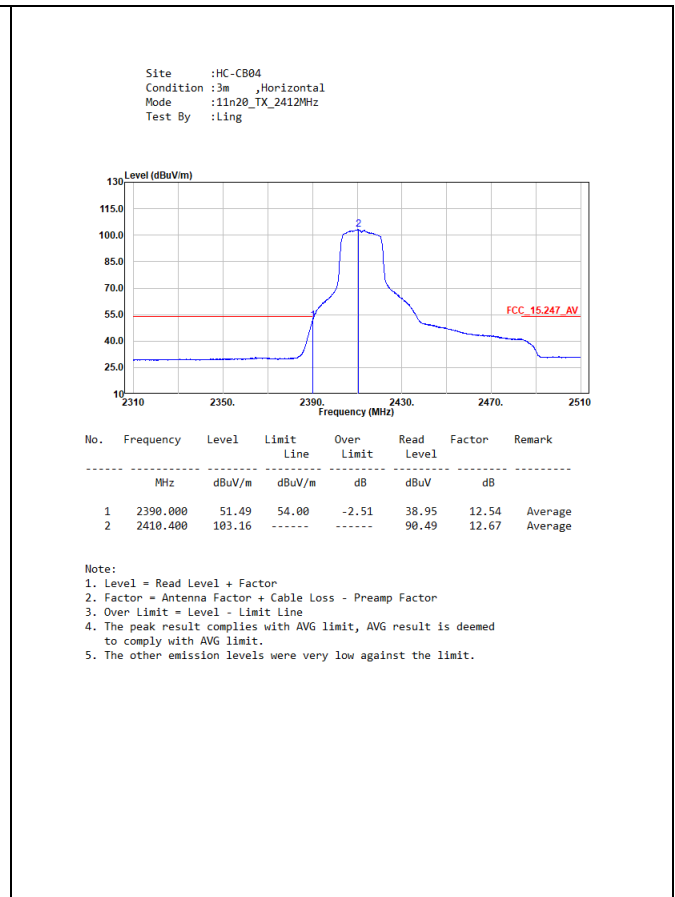
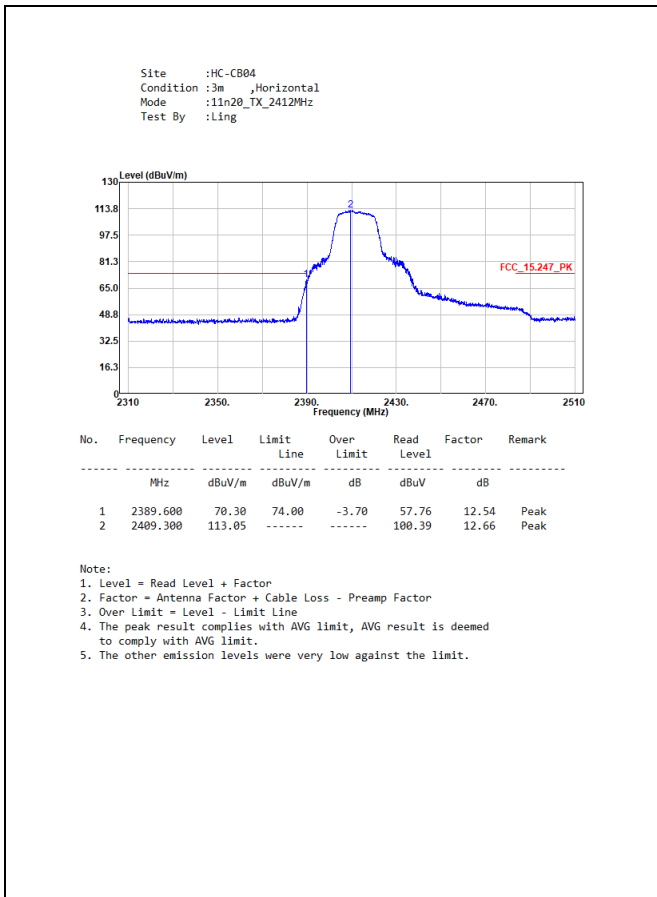


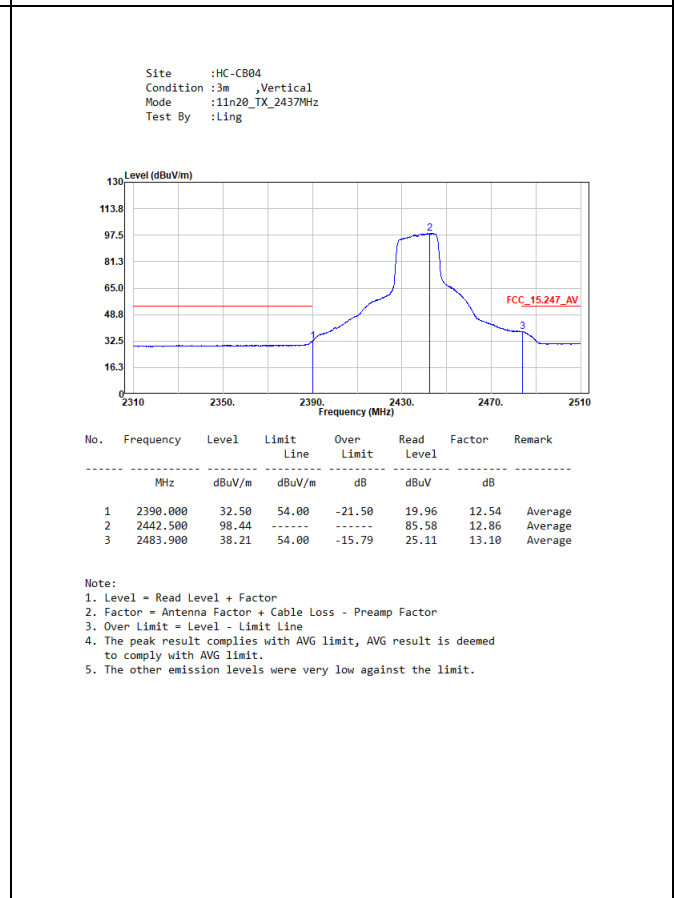
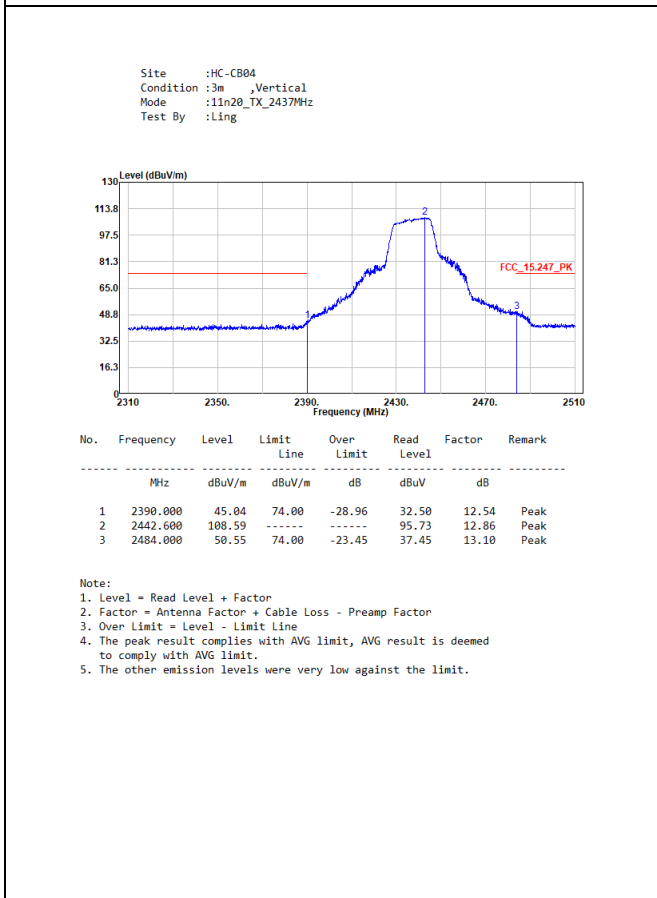
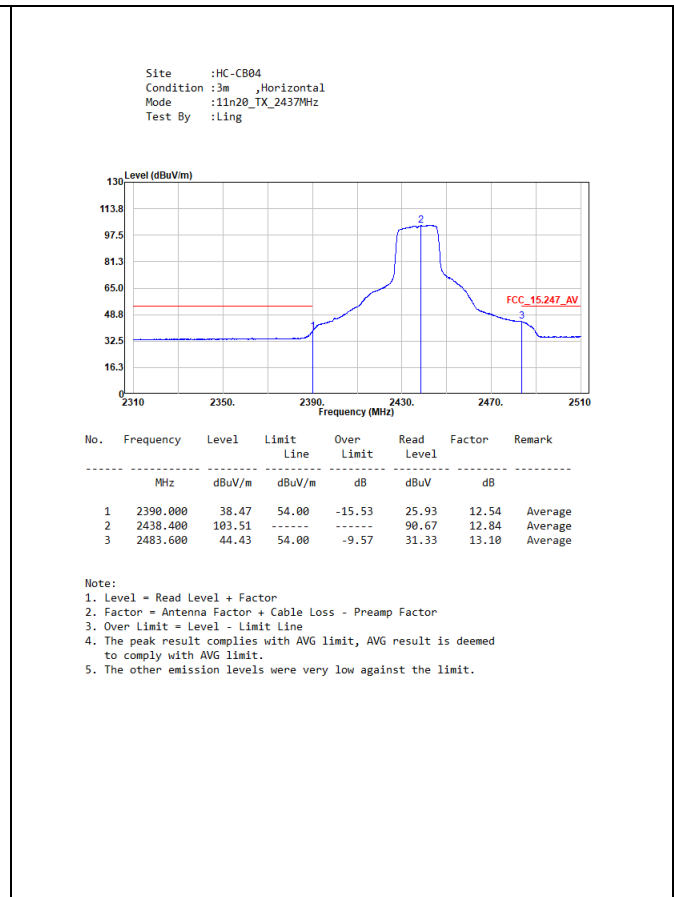
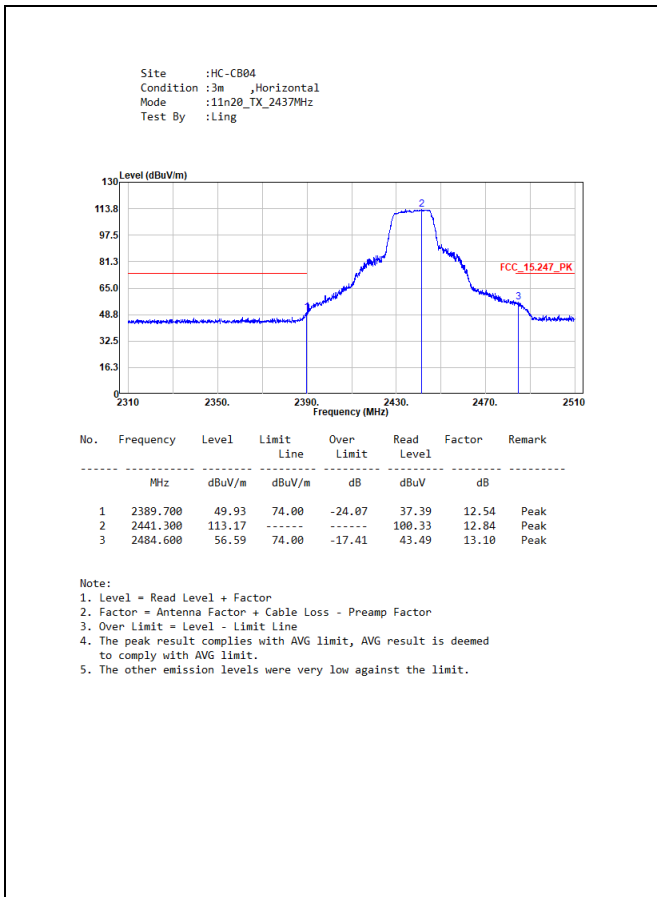




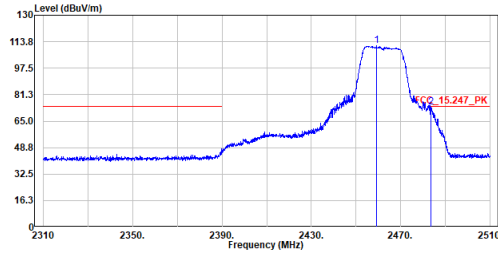








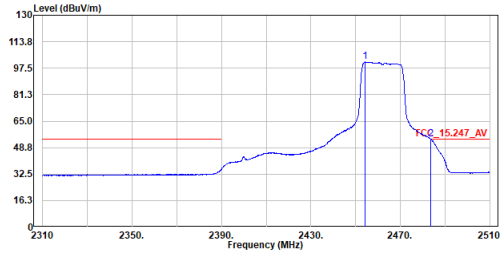
Site :HC-CB04  
 Condition :3m ,Horizontal  
 Mode :11n20\_TX\_2462MHz  
 Test By :Ling



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2459.100	111.40	-----	-----	98.44	12.96	Peak
2	2483.700	73.37	74.00	-0.63	60.27	13.10	Peak

Note:  
 1. Level = Read Level + Factor  
 2. Factor = Antenna Factor + Cable Loss - Preamp Factor  
 3. Over Limit = Level - Limit Line  
 4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.  
 5. The other emission levels were very low against the limit.

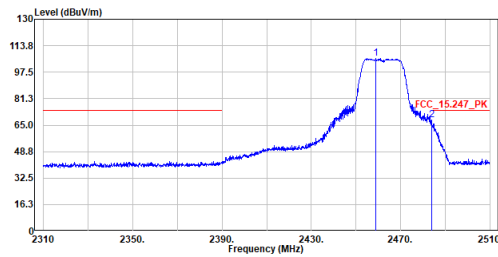
Site :HC-CB04  
 Condition :3m ,Horizontal  
 Mode :11n20\_TX\_2462MHz  
 Test By :Ling



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2454.300	101.35	-----	-----	88.42	12.93	Average
2	2483.700	53.81	54.00	-0.19	40.71	13.10	Average

Note:  
 1. Level = Read Level + Factor  
 2. Factor = Antenna Factor + Cable Loss - Preamp Factor  
 3. Over Limit = Level - Limit Line  
 4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.  
 5. The other emission levels were very low against the limit.

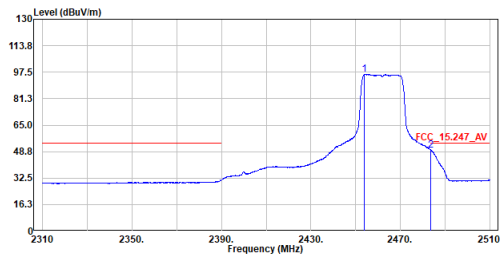
Site :HC-CB04  
 Condition :3m ,Vertical  
 Mode :11n20\_TX\_2462MHz  
 Test By :Ling



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2459.000	106.12	-----	-----	93.16	12.96	Peak
2	2483.800	68.02	74.00	-5.98	54.92	13.10	Peak

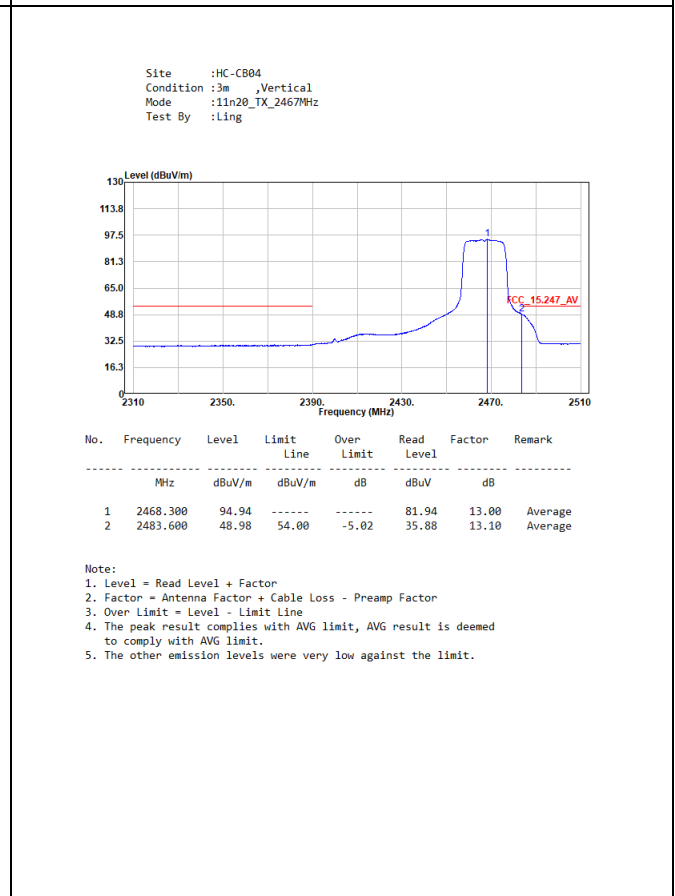
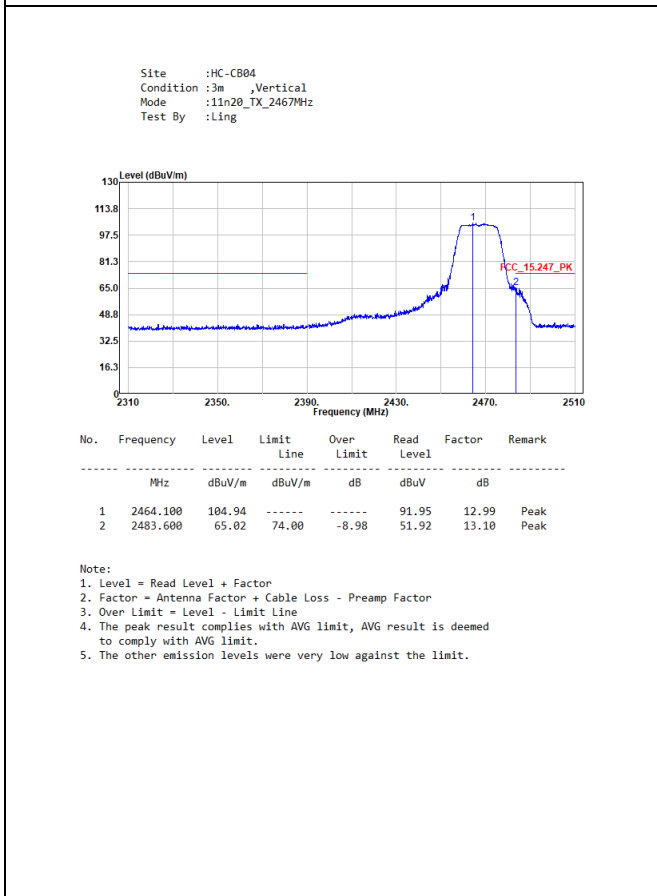
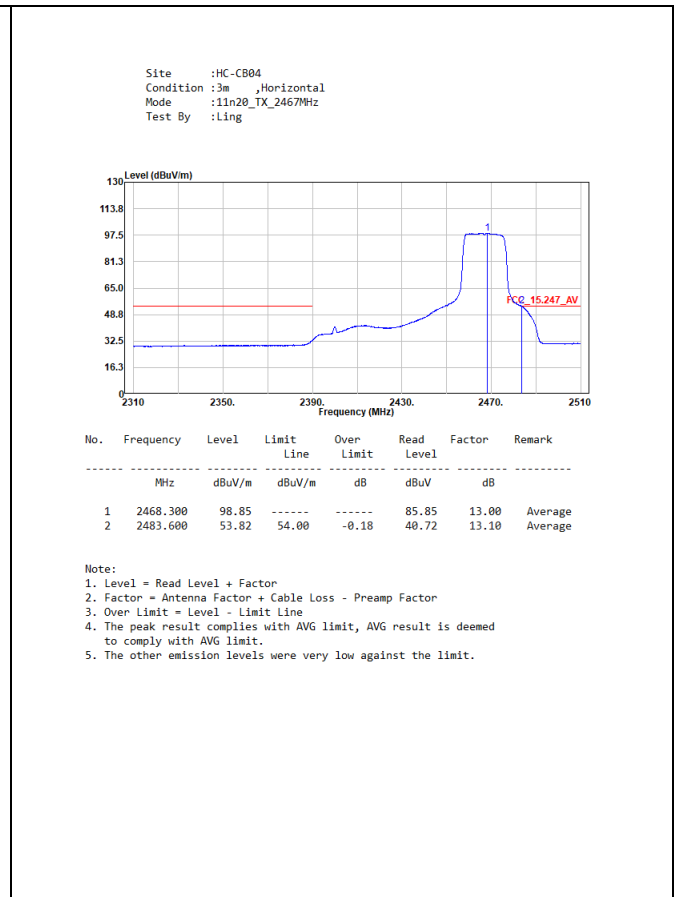
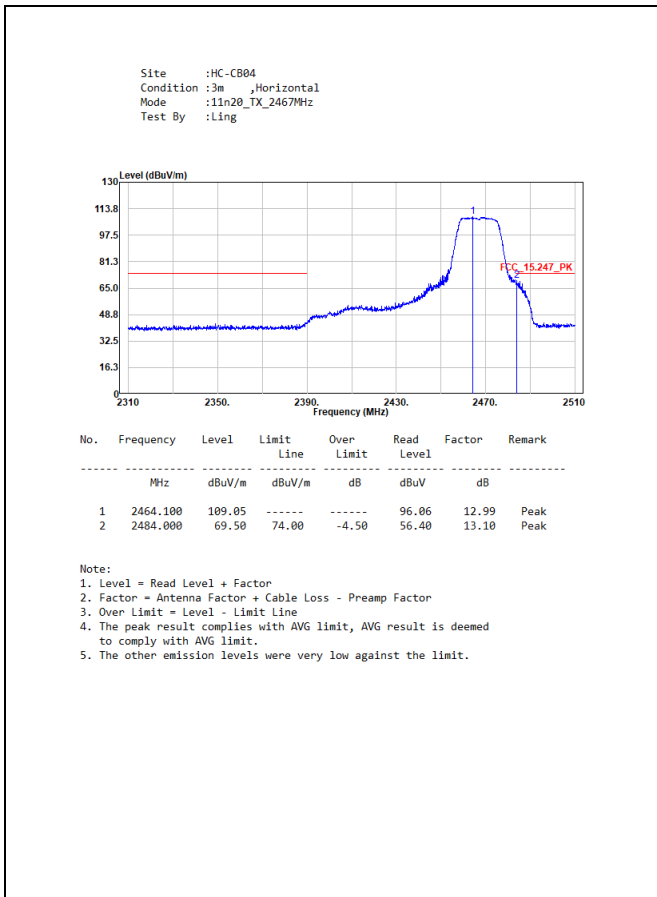
Note:  
 1. Level = Read Level + Factor  
 2. Factor = Antenna Factor + Cable Loss - Preamp Factor  
 3. Over Limit = Level - Limit Line  
 4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.  
 5. The other emission levels were very low against the limit.

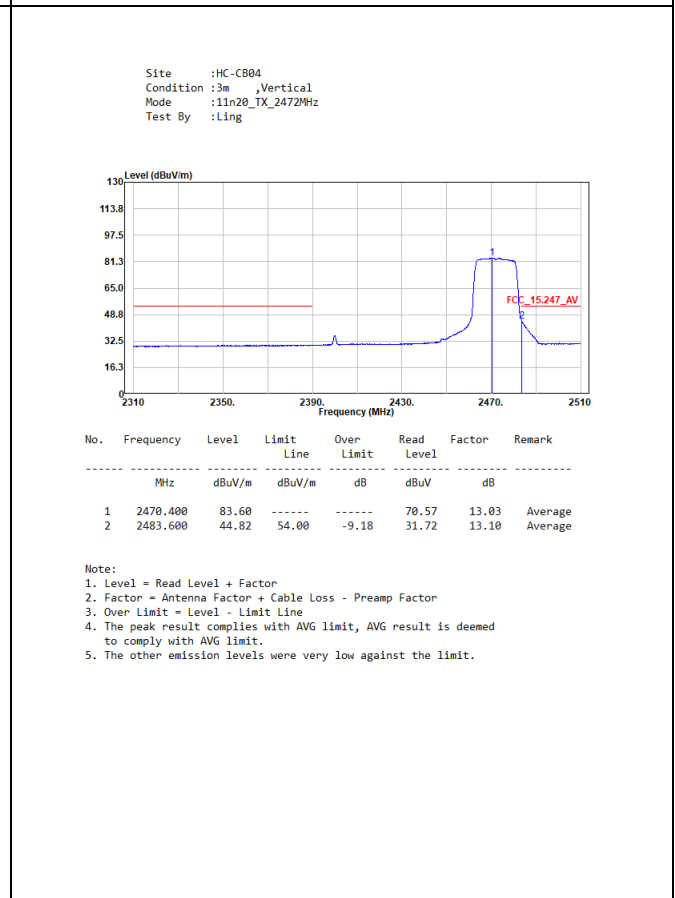
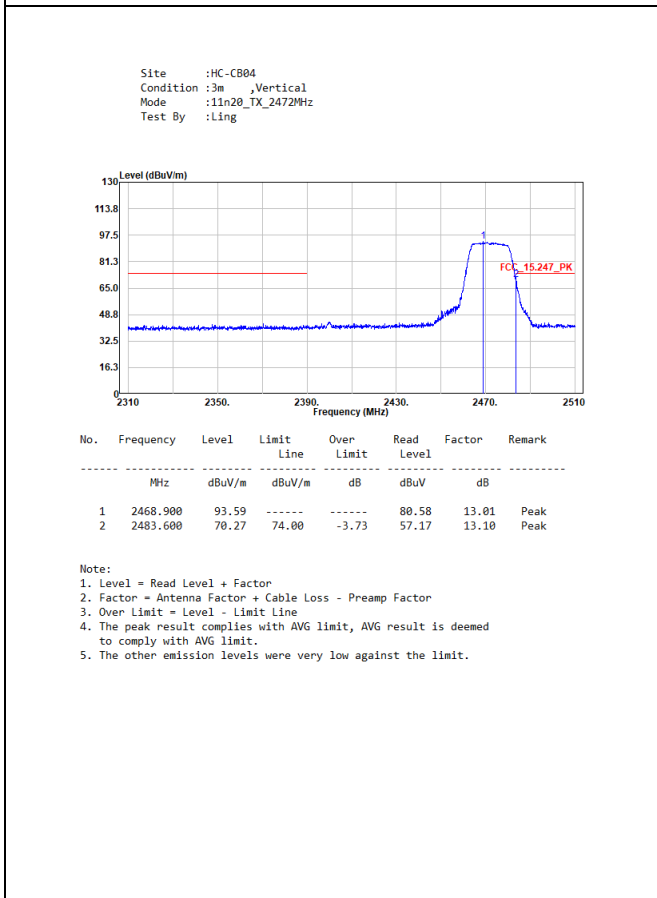
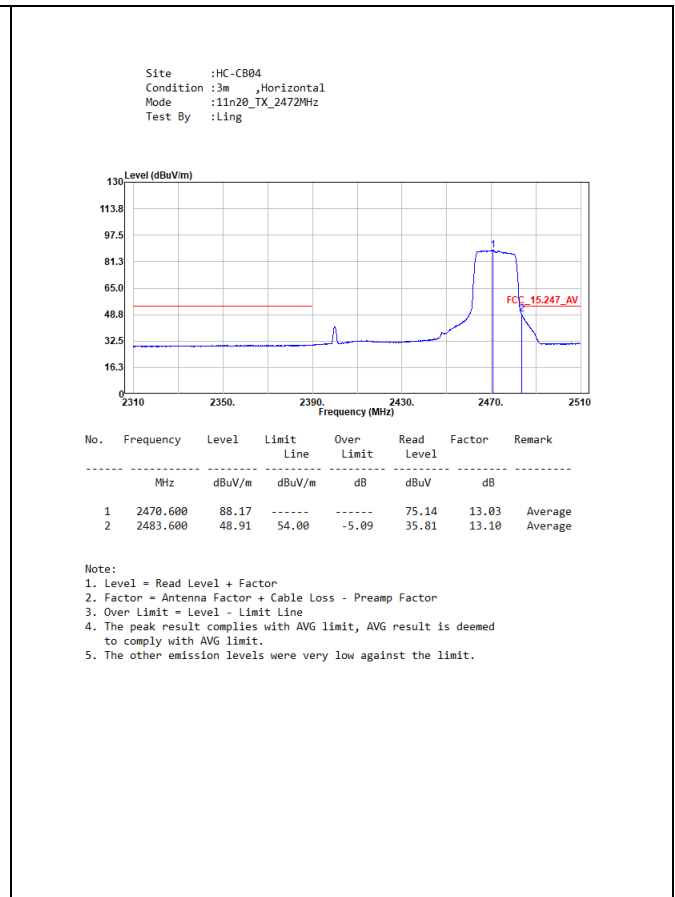
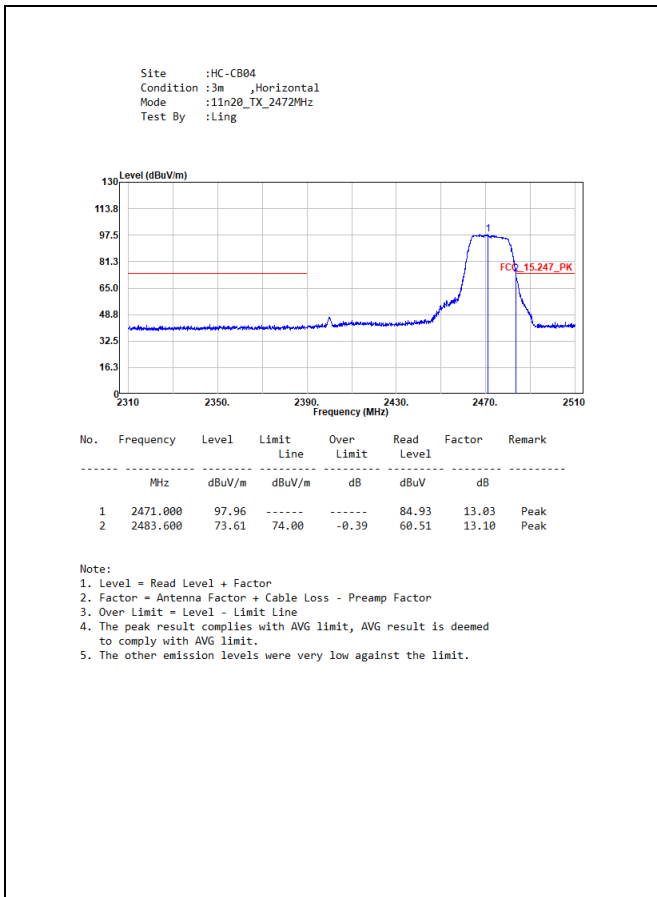
Site :HC-CB04  
 Condition :3m ,Vertical  
 Mode :11n20\_TX\_2462MHz  
 Test By :Ling

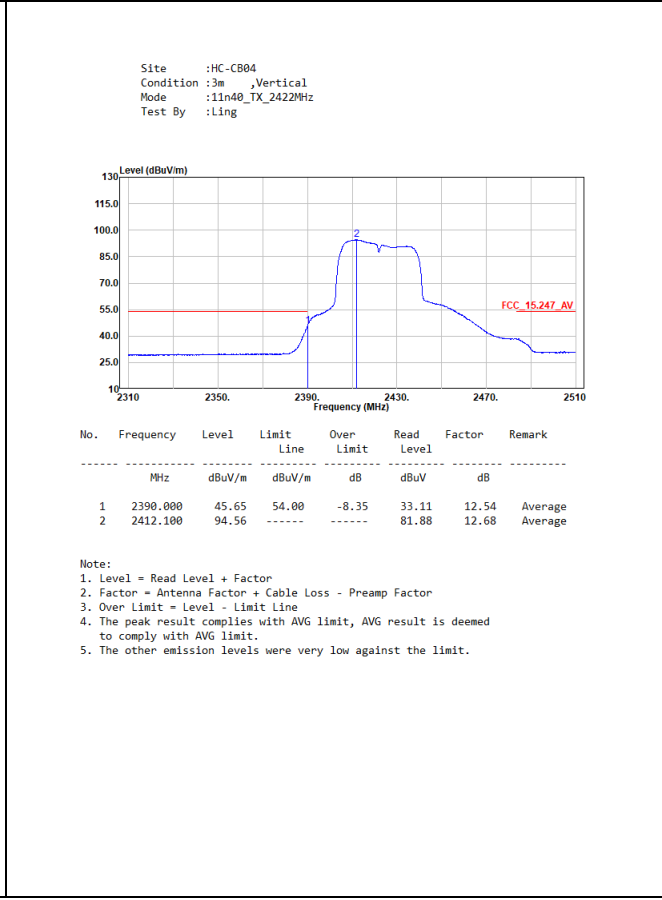
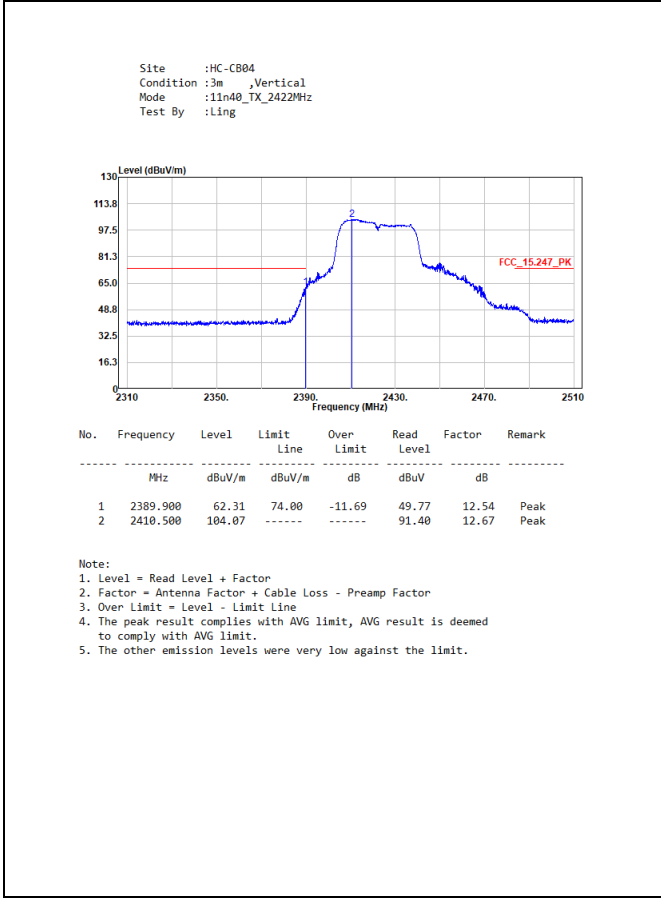
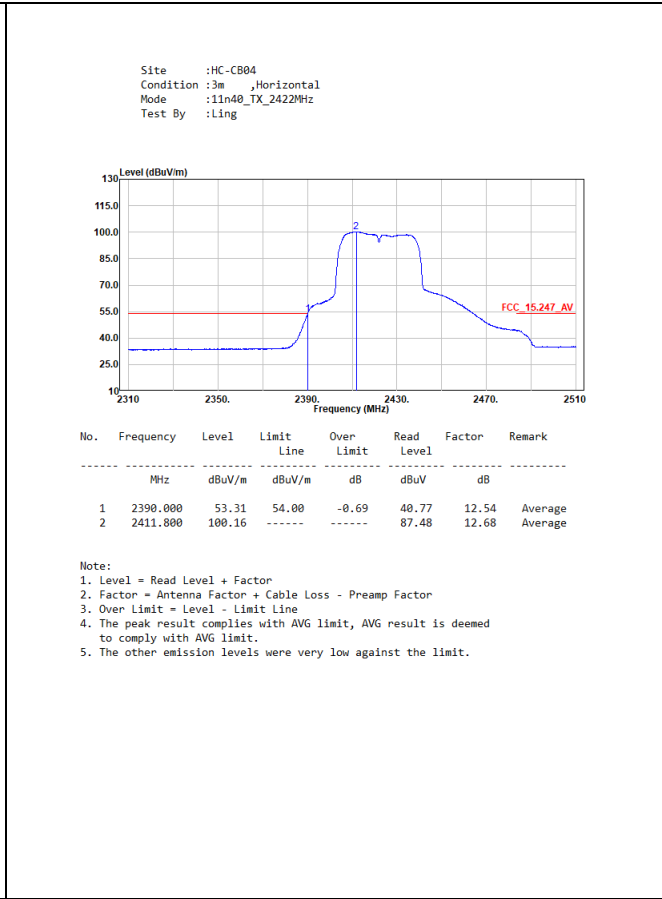
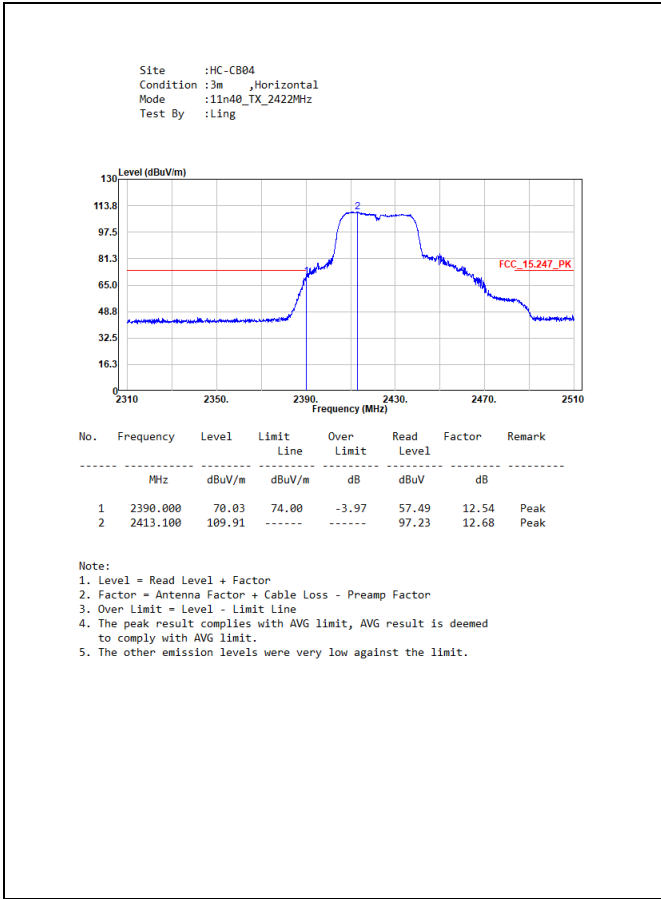


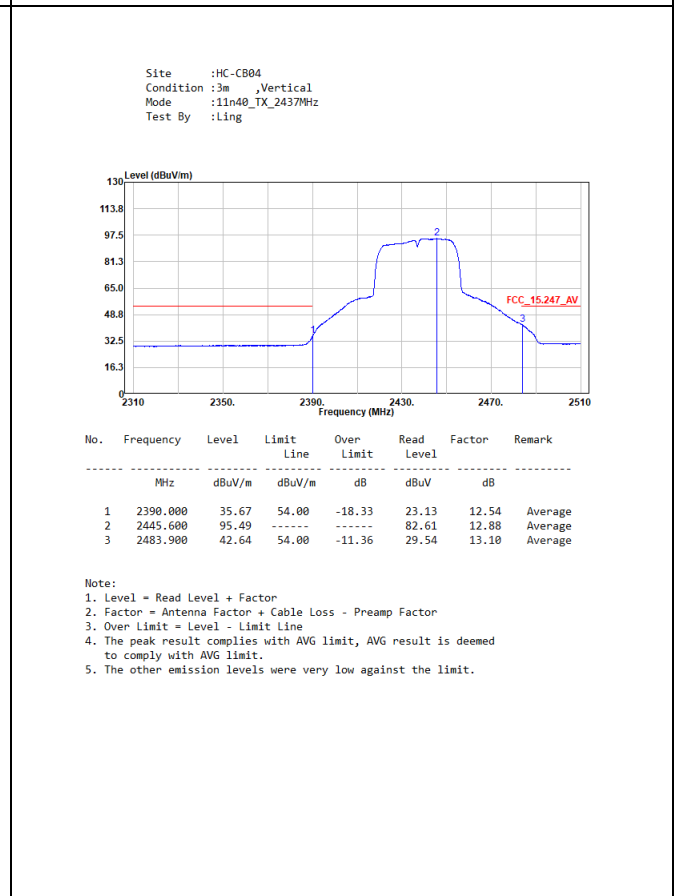
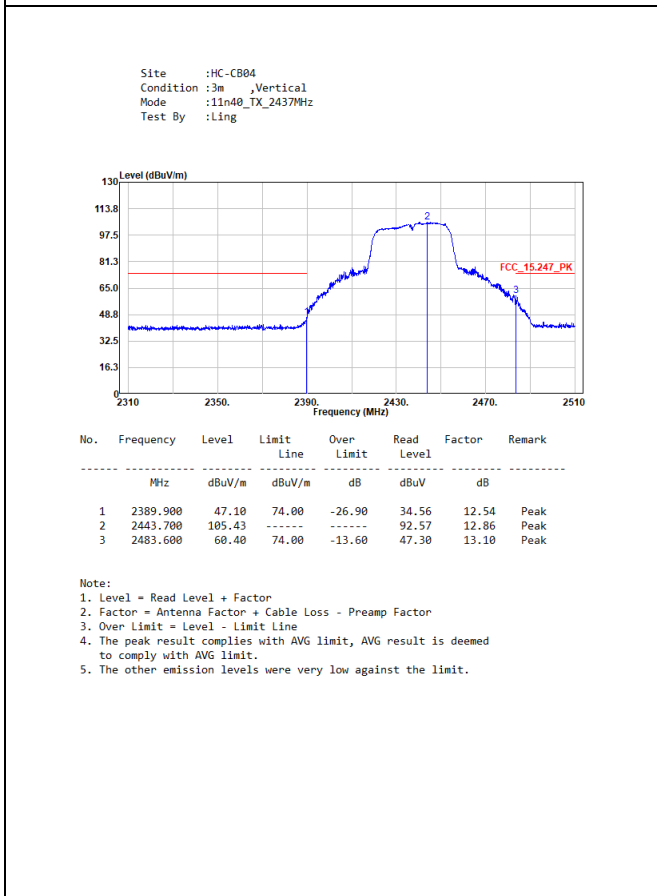
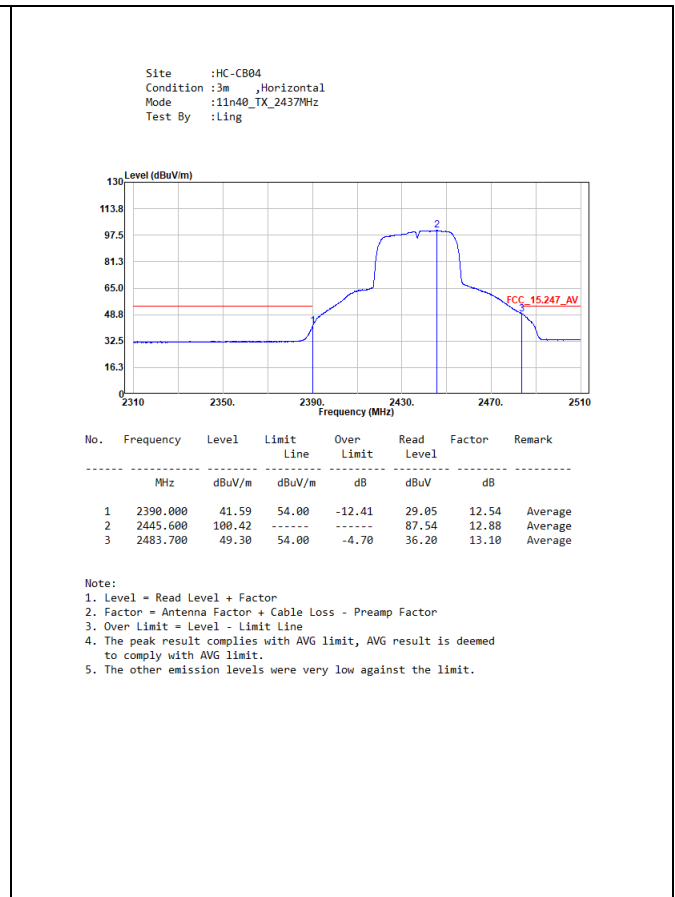
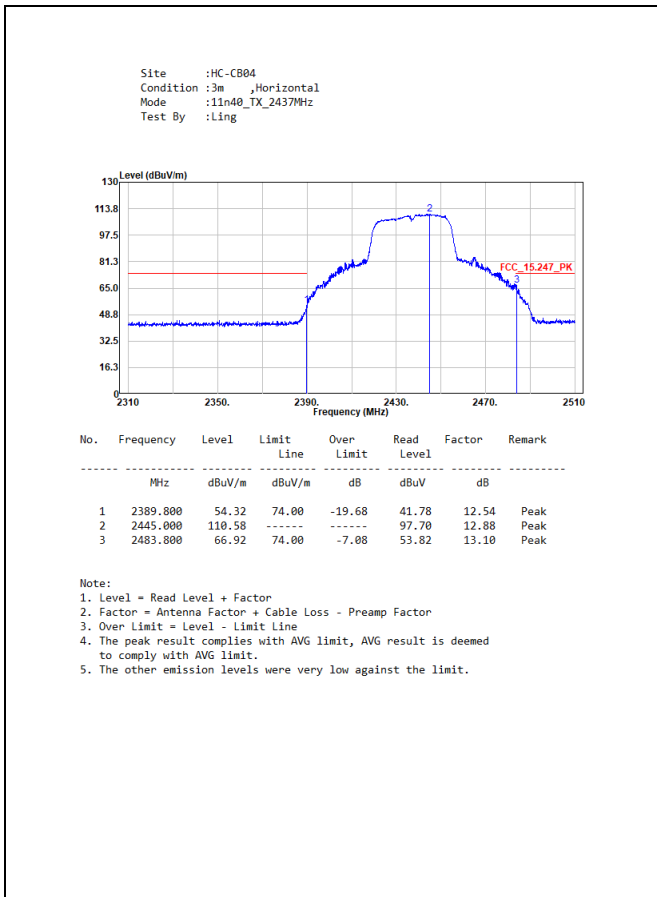
No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2453.900	96.20	-----	-----	83.27	12.93	Average
2	2483.600	49.79	54.00	-4.21	36.69	13.10	Average

Note:  
 1. Level = Read Level + Factor  
 2. Factor = Antenna Factor + Cable Loss - Preamp Factor  
 3. Over Limit = Level - Limit Line  
 4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.  
 5. The other emission levels were very low against the limit.

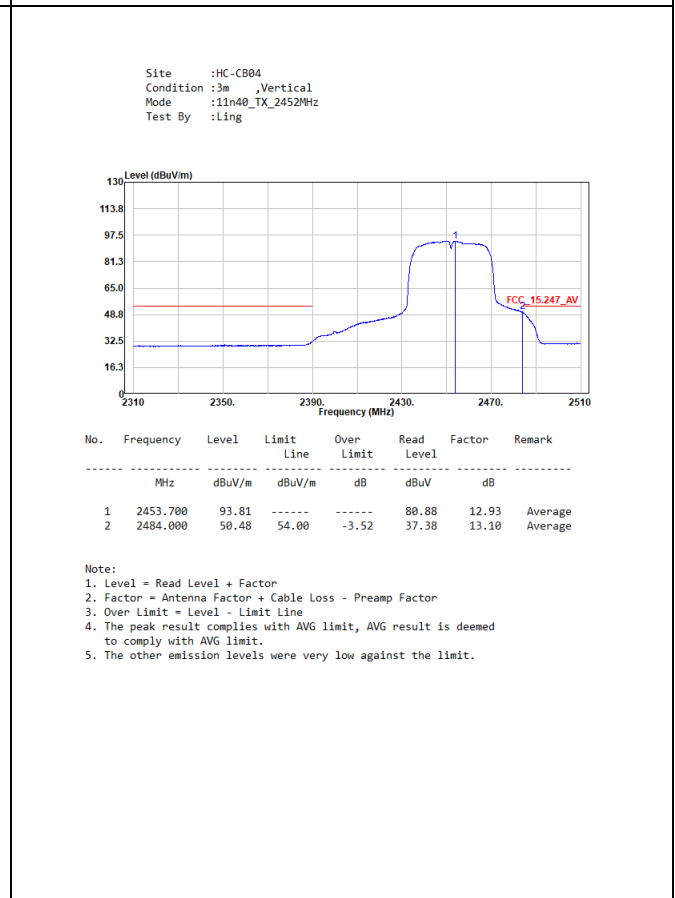
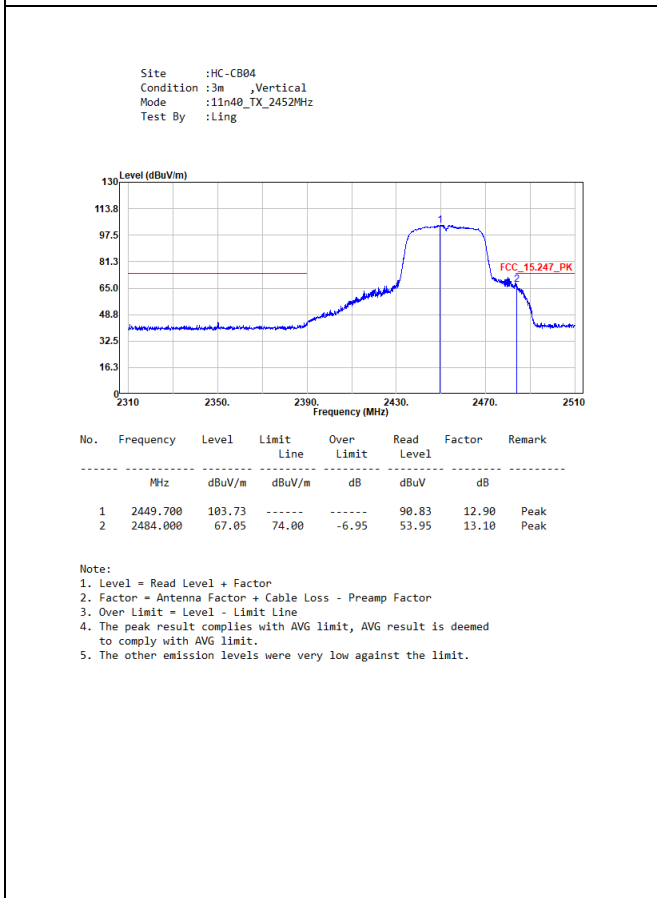
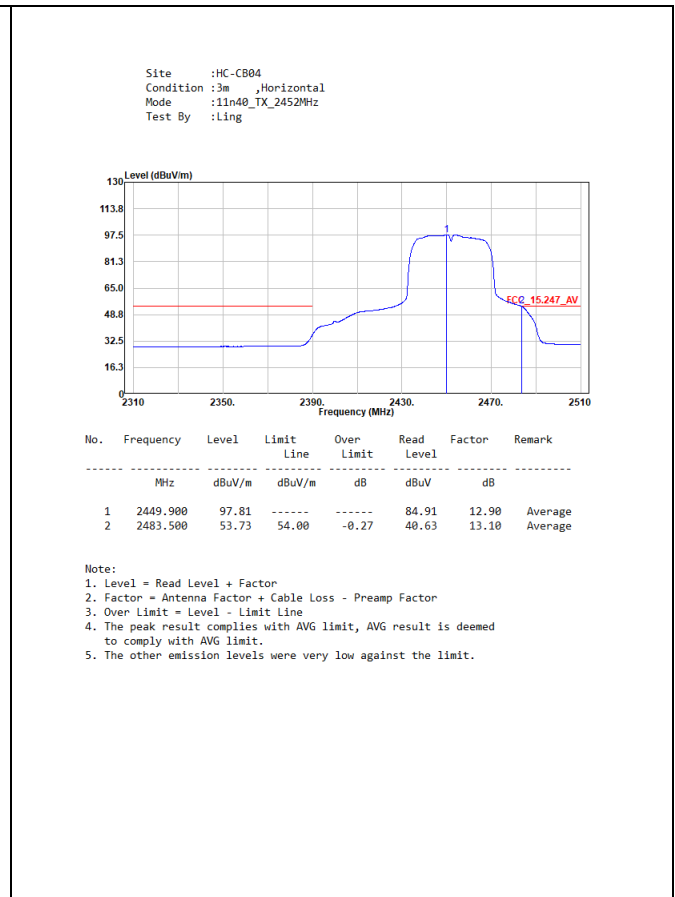
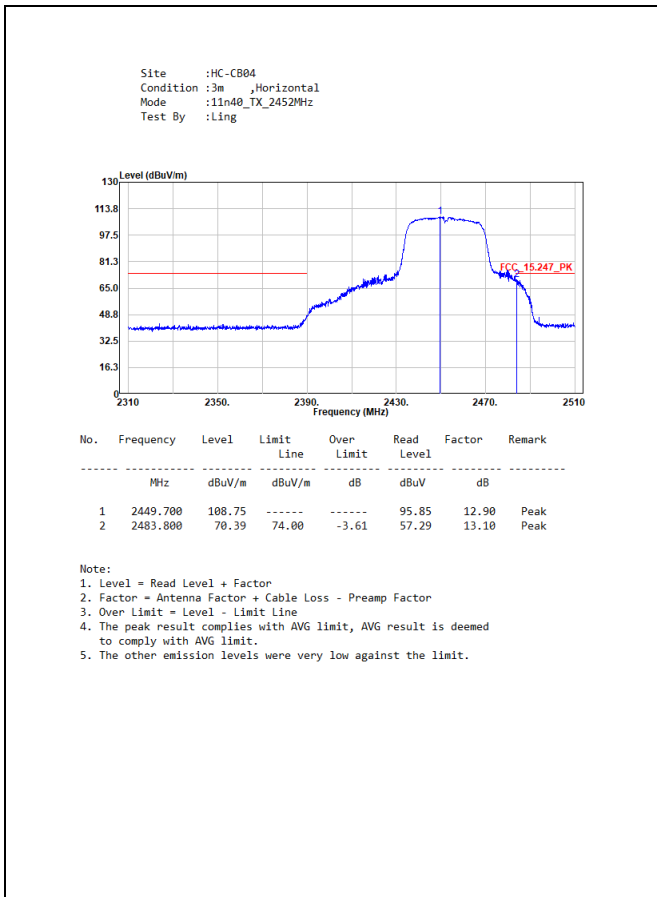


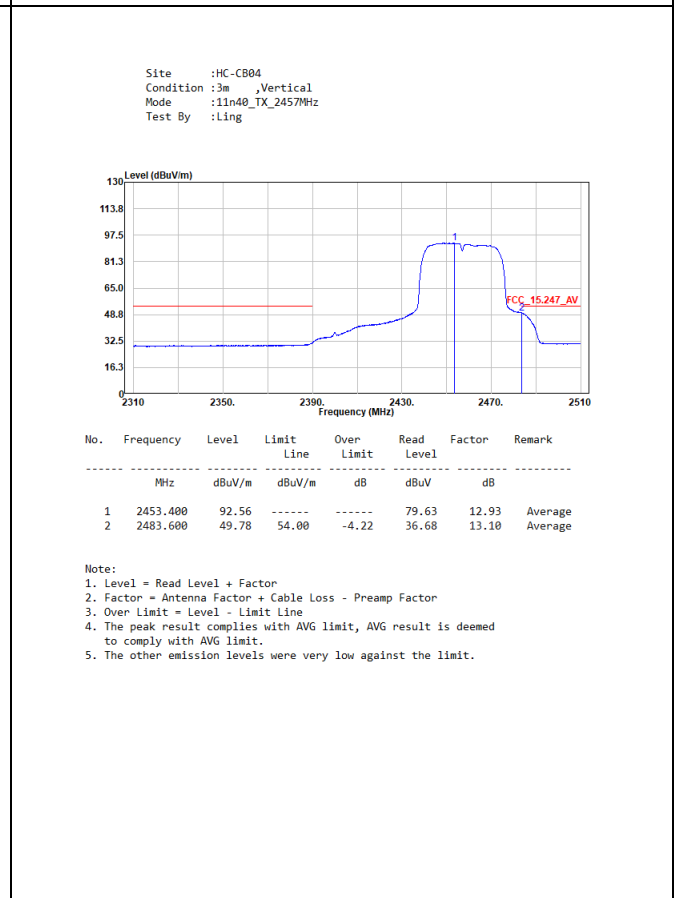
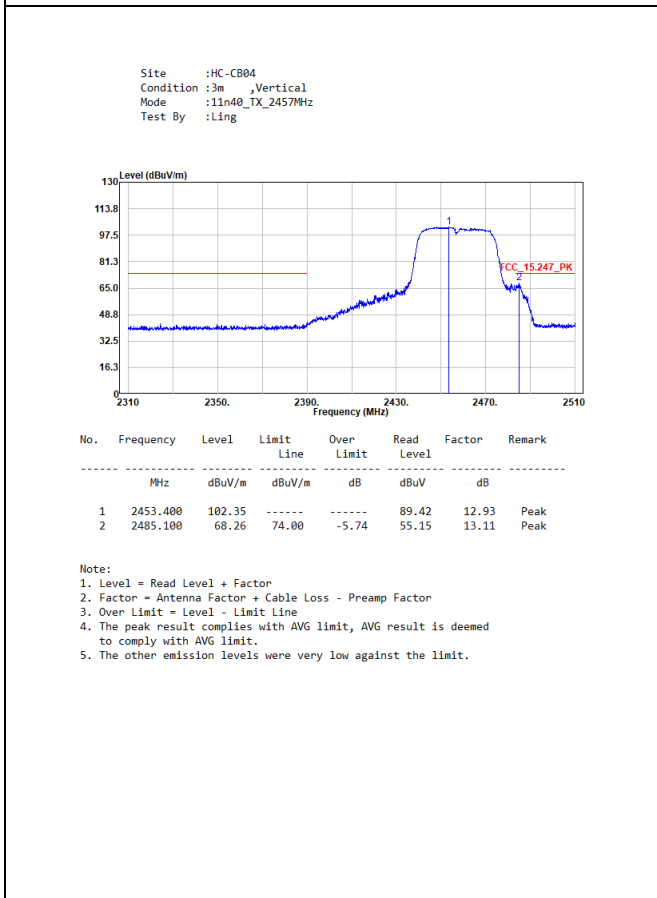
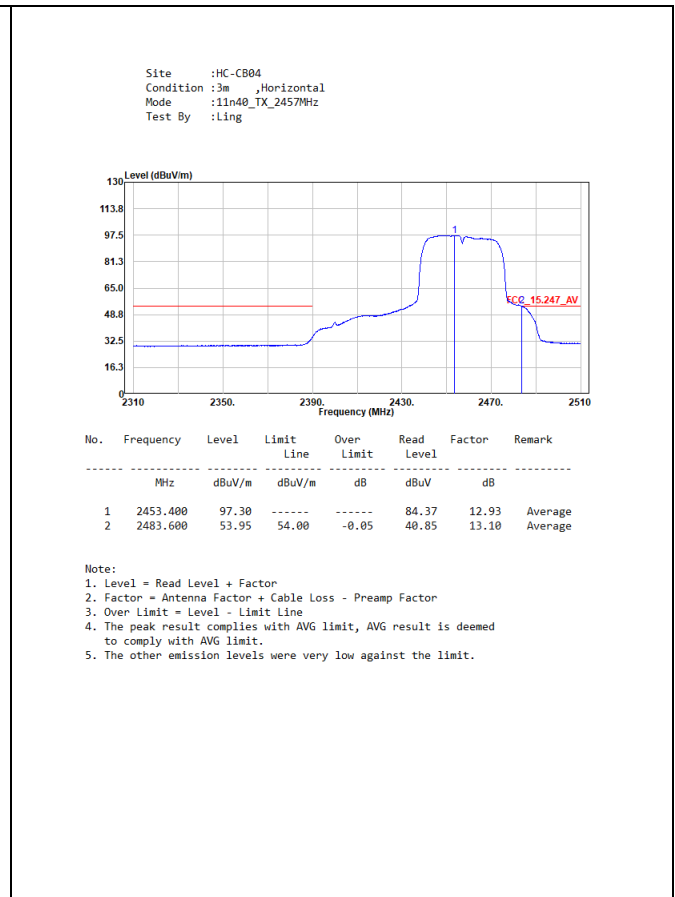
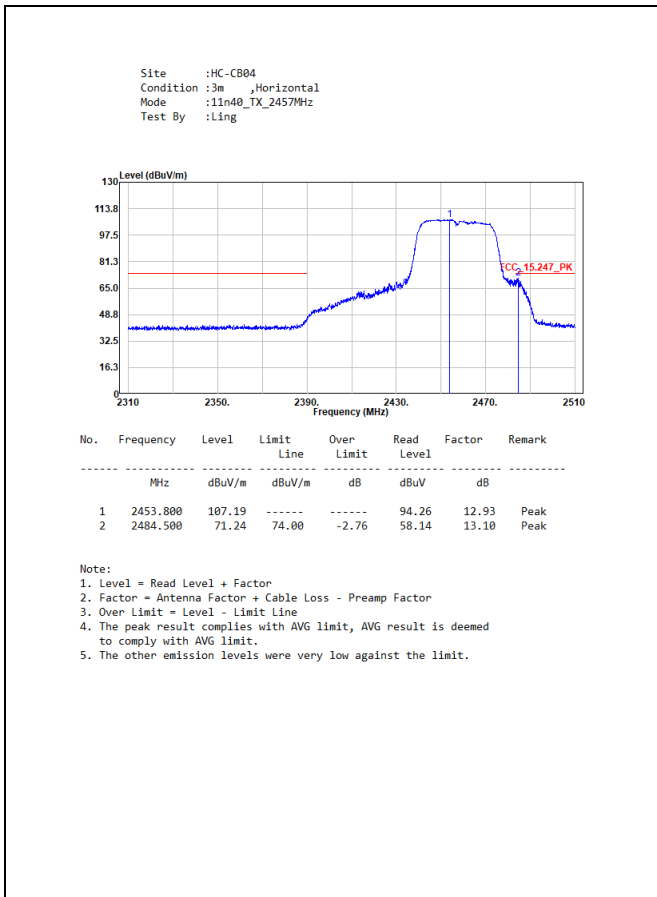


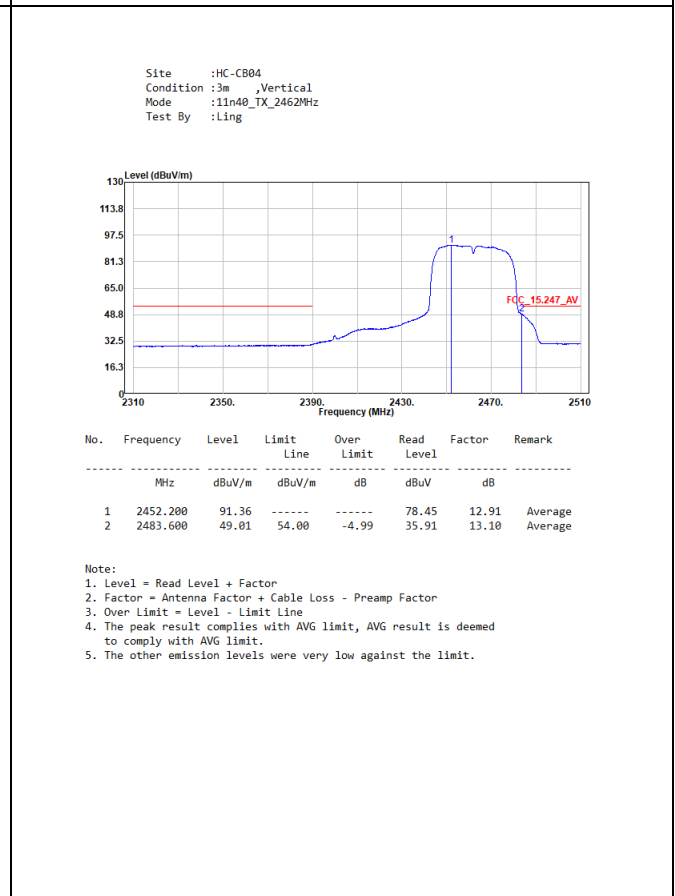
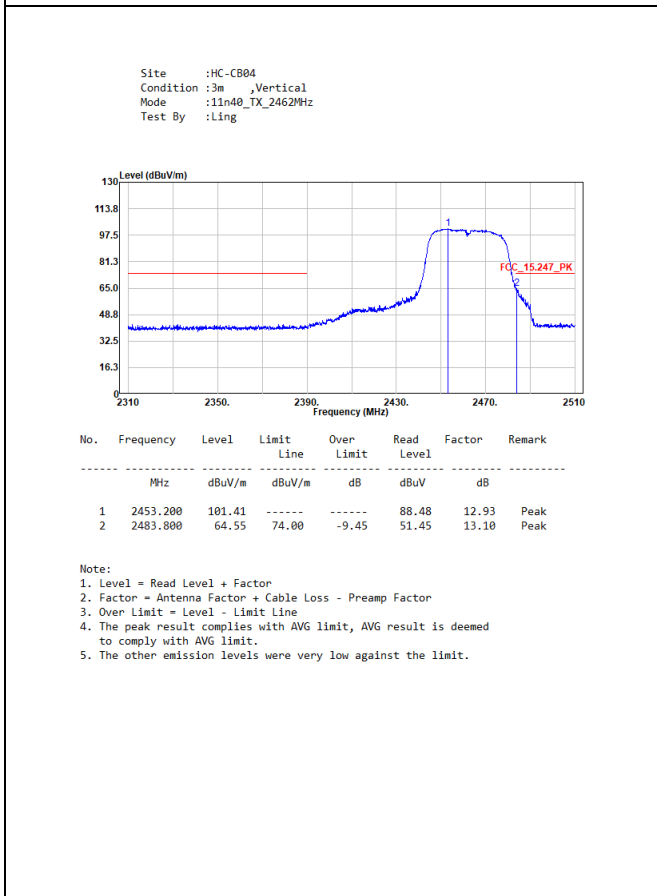
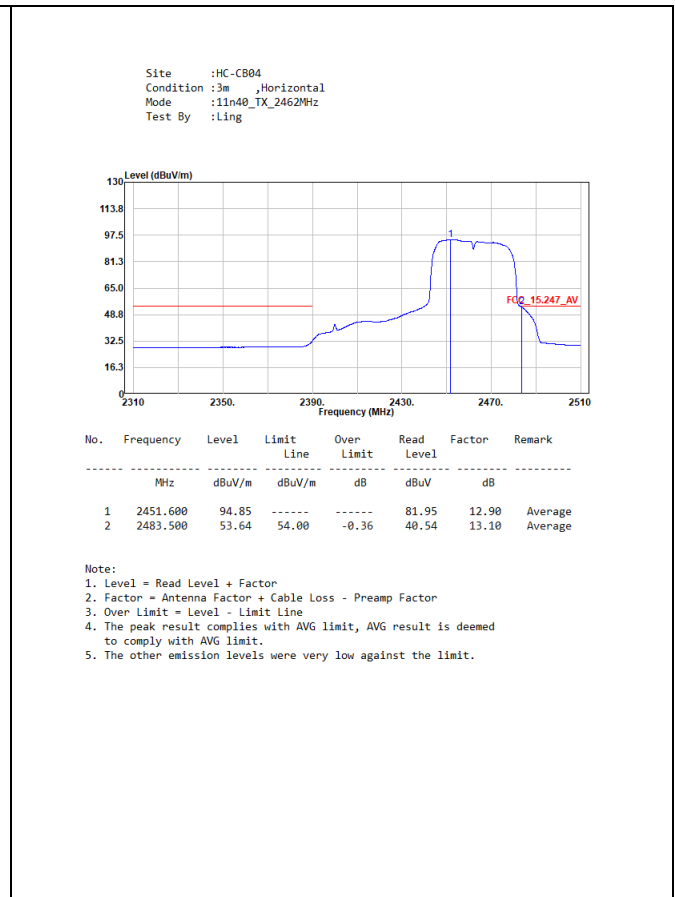
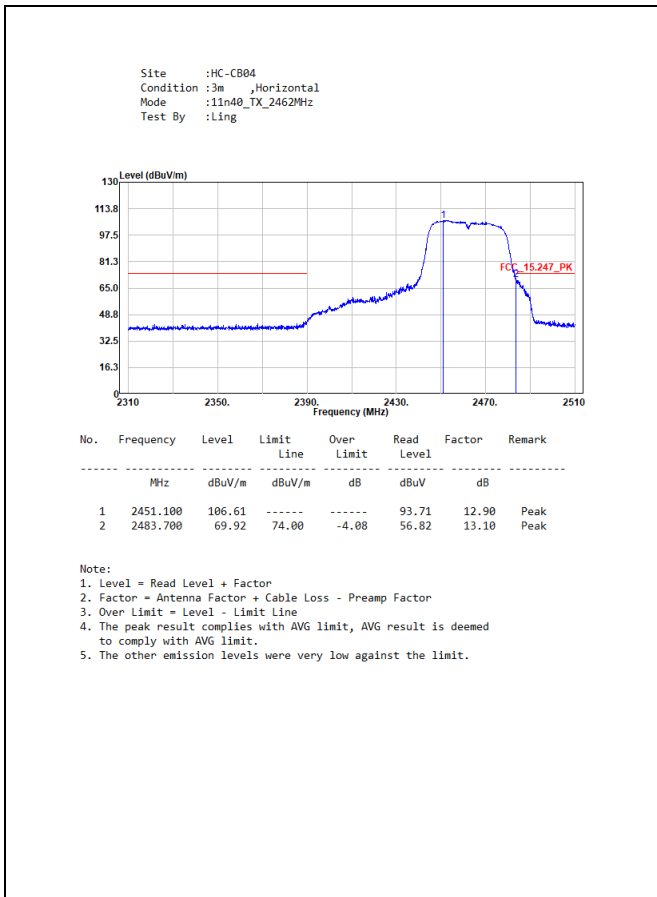






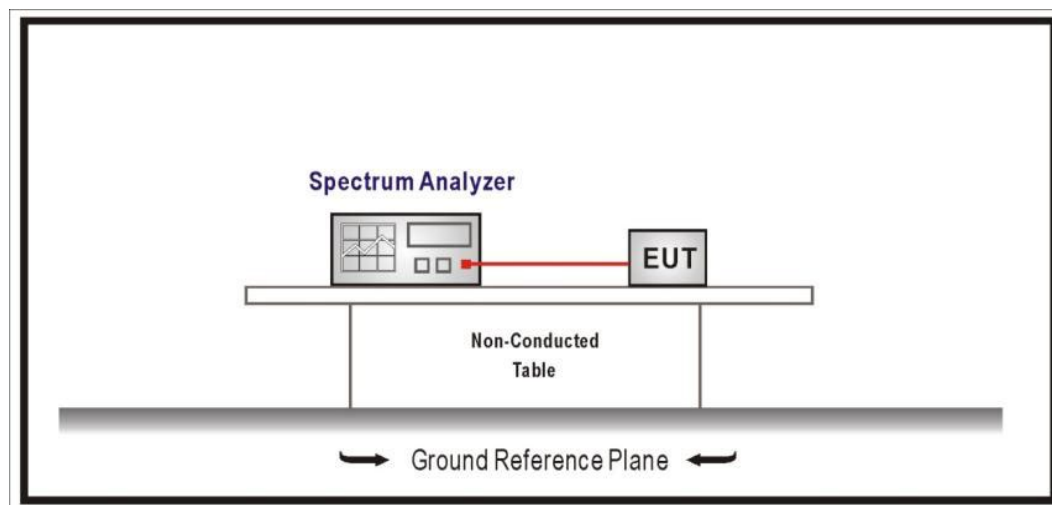






## 6. Occupied Bandwidth & DTS Bandwidth

### 6.1. Test Setup



### 6.2. Test Limit

The 6 dB bandwidth:  $\geq 0.50$  MHz.

Occupied Bandwidth: NA

### 6.3. Test Procedures

The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB 558074 D01 V05r02 for compliance to FCC 47CFR 15.247 requirements.

### 6.4. Test Specification

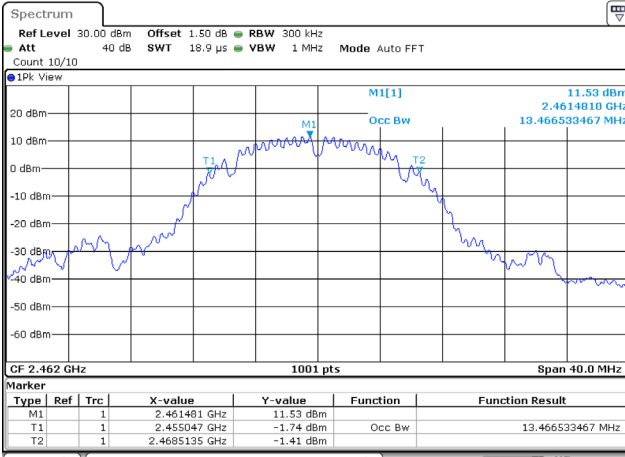
According to FCC Part 15 Subpart C Paragraph 15.247.

## 6.5. Test Result of Occupied Bandwidth

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Limit (MHz)
802.11b	1	2412	13.146	-
	6	2437	13.106	-
	11	2462	13.466	-
	12	2467	13.426	-
	13	2472	13.186	-
802.11g	1	2412	17.422	-
	6	2437	17.622	-
	11	2462	17.062	-
	12	2467	17.502	-
	13	2472	17.822	-
802.11n (20 MHz)	1	2412	18.461	-
	6	2437	18.421	-
	11	2462	18.101	-
	12	2467	18.061	-
	13	2472	18.341	-
802.11n (40 MHz)	3	2422	34.925	-
	6	2437	35.084	-
	9	2452	34.525	-
	10	2457	34.605	-
	11	2462	34.685	-

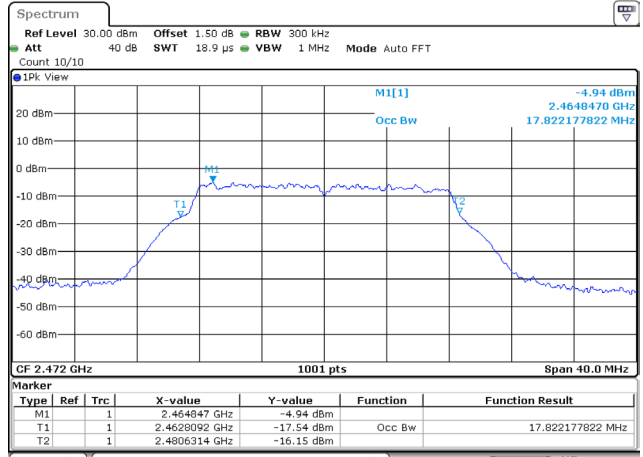
Spectrum plot of maximum value

802.11b / Ant. 0 / 2462 MHz



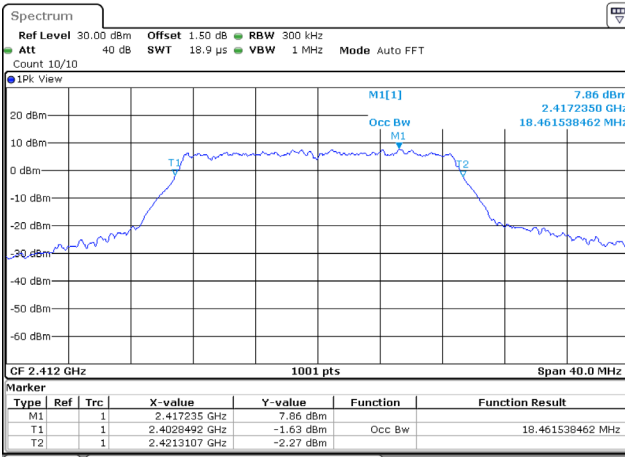
Date: 12.JUL.2022 11:58:50

802.11g / Ant. 0 / 2472 MHz



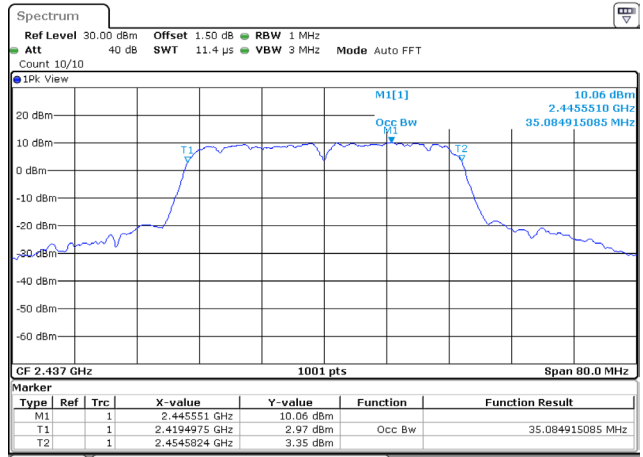
Date: 12.JUL.2022 13:17:30

802.11n (20 MHz) / Ant. 0 / 2412 MHz



Date: 12.JUL.2022 13:38:11

802.11n (40 MHz) / Ant. 0 / 2437 MHz



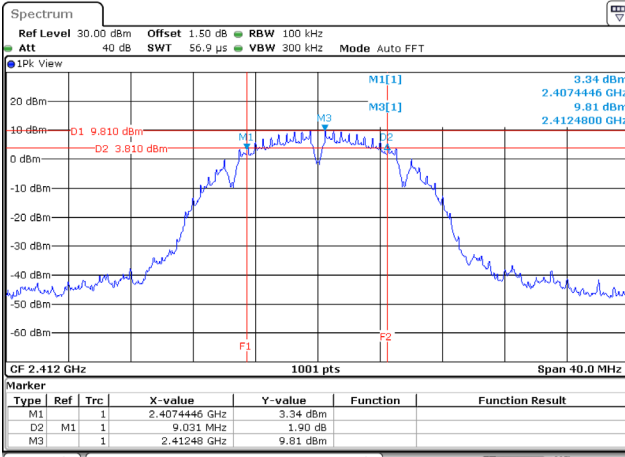
Date: 12.JUL.2022 14:27:25

## 6.6. Test Result of DTS Bandwidth

Modulation	Channel	Frequency (MHz)	DTS Bandwidth (MHz)	Limit (MHz)	Result
802.11b	1	2412	9.031	$\geq 0.50$	Pass
	6	2437	9.031	$\geq 0.50$	Pass
	11	2462	9.550	$\geq 0.50$	Pass
	12	2467	9.550	$\geq 0.50$	Pass
	13	2472	9.550	$\geq 0.50$	Pass
802.11g	1	2412	16.303	$\geq 0.50$	Pass
	6	2437	16.303	$\geq 0.50$	Pass
	11	2462	15.904	$\geq 0.50$	Pass
	12	2467	16.063	$\geq 0.50$	Pass
	13	2472	16.303	$\geq 0.50$	Pass
802.11n (20 MHz)	1	2412	17.582	$\geq 0.50$	Pass
	6	2437	17.582	$\geq 0.50$	Pass
	11	2462	17.302	$\geq 0.50$	Pass
	12	2467	16.903	$\geq 0.50$	Pass
	13	2472	17.582	$\geq 0.50$	Pass
802.11n (40 MHz)	3	2422	32.607	$\geq 0.50$	Pass
	6	2437	33.806	$\geq 0.50$	Pass
	9	2452	32.607	$\geq 0.50$	Pass
	10	2457	32.607	$\geq 0.50$	Pass
	11	2462	32.607	$\geq 0.50$	Pass

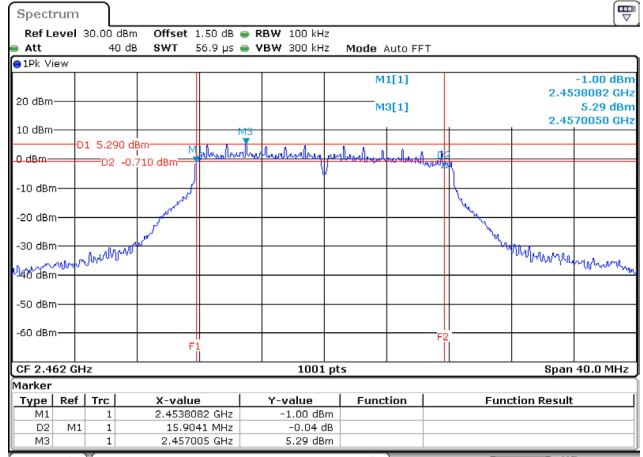
Spectrum plot of worst value

802.11b / Ant. 0 / 2412 MHz



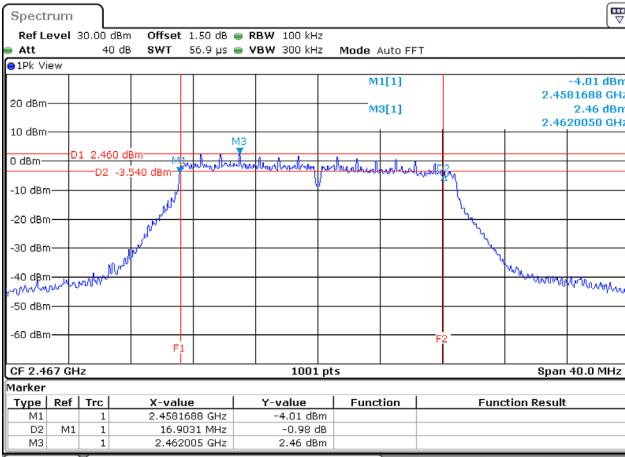
Date: 12.JUL.2022 11:46:19

802.11g / Ant. 0 / 2462 MHz



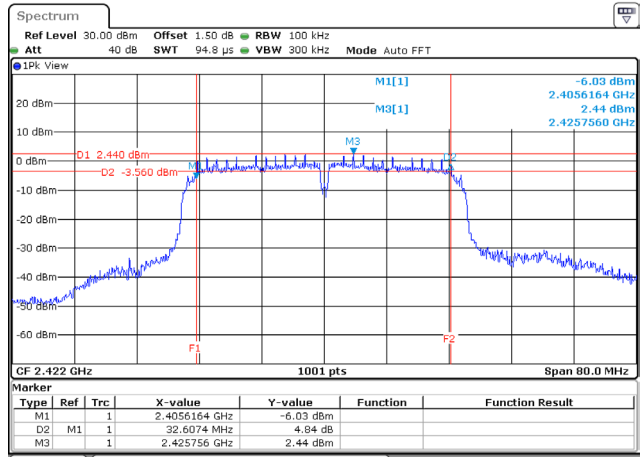
Date: 12.JUL.2022 13:22:56

802.11n (20 MHz) / Ant. 0 / 2467 MHz



Date: 12.JUL.2022 13:53:19

802.11n (40 MHz) / Ant. 0 / 2422 MHz

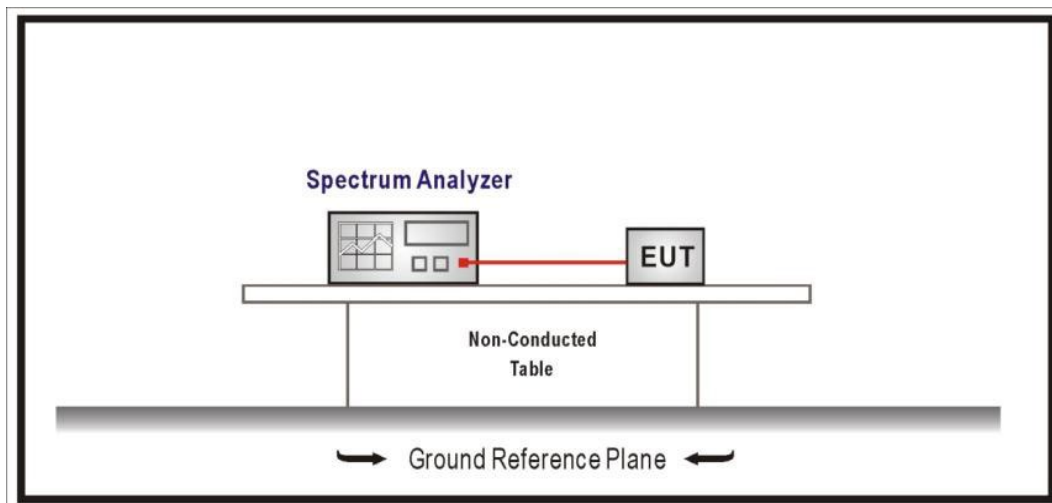


Date: 12.JUL.2022 14:37:31



## 7. Maximum Power Spectral Density

### 7.1. Test Setup



### 7.2. Test Limit

The peak power spectral density conducted from the intentional radiated to the antenna shall not be greater than +8 dBm in any 3 kHz band during any time interval of continuous transmission.

### 7.3. Test Procedures

The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB 558074 D01 V05r02 for compliance to FCC 47CFR 15.247 requirements.

### 7.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247.

## 7.5. Test Result of Maximum Power Spectral Density

Modulation	Channel	Frequency (MHz)	Power Spectral Density (dBm / 3kHz)		Limit (dBm / 3kHz)	Result
			Ant. 0	Total		
802.11b	1	2412	-7.800	-7.800	$\leq 8.00$	Pass
	6	2437	-7.820	-7.820	$\leq 8.00$	Pass
	11	2462	-6.310	-6.310	$\leq 8.00$	Pass
	12	2467	-7.010	-7.010	$\leq 8.00$	Pass
	13	2472	-9.930	-9.930	$\leq 8.00$	Pass
802.11g	1	2412	-11.490	-11.490	$\leq 8.00$	Pass
	6	2437	-11.260	-11.260	$\leq 8.00$	Pass
	11	2462	-11.930	-11.930	$\leq 8.00$	Pass
	12	2467	-14.500	-14.500	$\leq 8.00$	Pass
	13	2472	-24.880	-24.880	$\leq 8.00$	Pass
802.11n (20 MHz)	1	2412	-12.060	-12.034	$\leq 8.00$	Pass
	6	2437	-11.800	-11.774	$\leq 8.00$	Pass
	11	2462	-12.620	-12.594	$\leq 8.00$	Pass
	12	2467	-14.540	-14.514	$\leq 8.00$	Pass
	13	2472	-26.350	-26.324	$\leq 8.00$	Pass
802.11n (40 MHz)	3	2422	-14.150	-14.097	$\leq 8.00$	Pass
	6	2437	-14.610	-14.557	$\leq 8.00$	Pass
	9	2452	-15.150	-15.097	$\leq 8.00$	Pass
	10	2457	-16.130	-16.077	$\leq 8.00$	Pass
	11	2462	-16.720	-16.667	$\leq 8.00$	Pass

Note: Total power spectral density = power spectral density + duty factor, and the duty factor refer to section 1.10.