

## **FCC 15.247 DSS 2.4GHz Report**

*for*

**FUTABA Corporation**

**1080 Yabutsuka Chosei-son Chosei-gun  
Chiba, 299-4395 Japan.**

**Brand : Futaba**  
**Product Name : Radio Control**  
**Model Name : T6K-2.4G**  
**FCC ID : AZPT6K-24G**

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APPENDIX A TEST PLOTS  
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## TEST REPORT CERTIFICATION

Applicant : FUTABA Corporation  
Manufacture : FUTABA Corporation  
Product Name : Radio Control  
Model No. : T6K-2.4G  
Serial No. : N/A  
Brand : Futaba


Rules of Compliance and Measurement Standards:

FCC CFR 47 Part 15 Subpart C/Oct. 2014  
ANSI C63.10:2013  
FCC Public Notice DA 00-705

**AUDIX Technology Corp.** tested the equipment mentioned in accordance with the requirements set forth in the above standards. Test results indicate that the equipment tested is capable of demonstrating compliance with the requirements as documented within this report. **AUDIX Technology Corp.** does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens and samples.

Date of Test: 2015. 06. 08 ~ 17

Date of Report: 2015. 06. 18

Producer:   
(Annie Yu/Administrator)

Signatory:   
(Ben Cheng/Manager)

## 1. REPORT HISTORY

Revision	Date	Revision Summary	Report Number
0	2015. 06. 18	Original Report.	EM-F150297

## 2. SUMMARY OF TEST RESULTS

Rule	Description	Results
15.207	Conducted Emission	N/A
15.247(d)/15.209	Radiated Band Edge and Radiated Spurious Emission	PASS
15.247(a)(1)	20dB Bandwidth	PASS
15.247(a)(1)	Carrier Frequency Separation	PASS
15.247(a)(1)(iii)	Time of Occupancy	PASS
15.247(a)(1)(iii)	Number of Hopping Channels	PASS
15.247(b)(1)	Maximum Peak Output Power	PASS
15.247(d)/15.205	Conducted Band Edges and Conducted Spurious Emission	PASS
15.203	Antenna Requirement	PASS
Note: The EUT only employs battery power for operation, so it is unnecessary to test.		

### 3. GENERAL INFORMATION

#### 3.1. Description of EUT

Product	Radio Control
Model Number	T6K-2.4G
Serial Number	N/A
Brand Name	Futaba
Applicant	FUTABA Corporation 1080 YabutsukaChosei-son Chosei-gun Chiba, 299-4395 Japan.
Manufacture	FUTABA Corporation 1080 YabutsukaChosei-son Chosei-gun Chiba, 299-4395 Japan.
Transmit Type	1T1R
Date of Receipt of Sample	2015. 05. 26

### 3.2. EUT Specifications Assessed in Current Report

Fundamental Range (MHz)	Channel Number	Modulation	Data Rate (kbps)
2407.5-2467.5	31	T-FHSS	128
2403.25-2447.50	60	S-FHSS	128

Modulation: T-FHSS			
Channel List			
Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)
1	2407.5	17	2439.5
2	2409.5	18	2441.5
3	2411.5	19	2443.5
4	2413.5	20	2445.5
5	2415.5	21	2447.5
6	2417.5	22	2449.5
7	2419.5	23	2451.5
8	2421.5	24	2453.5
9	2423.5	25	2455.5
10	2425.5	26	2457.5
11	2427.5	27	2459.5
12	2429.5	28	2461.5
13	2431.5	29	2463.5
14	2433.5	30	2465.5
15	2435.5	31	2467.5
16	2437.5		



Modulation: S-FHSS					
Channel List					
Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)
1	2403.25	21	2418.25	41	2433.25
2	2404.00	22	2419.00	42	2434.00
3	2404.75	23	2419.75	43	2434.75
4	2405.50	24	2420.50	44	2435.50
5	2406.25	25	2421.25	45	2436.25
6	2407.00	26	2422.00	46	2437.00
7	2407.75	27	2422.75	47	2437.75
8	2408.50	28	2423.50	48	2438.50
9	2409.25	29	2424.25	49	2439.25
10	2410.00	30	2425.00	50	2440.00
11	2410.75	31	2425.75	51	2440.75
12	2411.50	32	2426.50	52	2441.50
13	2412.25	33	2427.25	53	2442.25
14	2413.00	34	2428.00	54	2443.00
15	2413.75	35	2428.75	55	2443.75
16	2414.50	36	2429.50	56	2444.50
17	2415.25	37	2430.25	57	2445.25
18	2416.00	38	2431.00	58	2446.00
19	2416.75	39	2431.75	59	2446.75
20	2417.50	40	2432.50	60	2447.50

### 3.3. Antenna Information

Manufacture	Antenna Type	Frequency	Max Gain (dBi)
SANSEI ELECTRIC CO., LTD	di-pole type	2.4GHz	2.14

### 3.4. Test Configuration

Modulation	T <sub>on</sub> (ms)
T-FHSS	1.56
S-FHSS	3.02

Item		Modulation	Test Channel
Radiated Test Case	Radiated Band Edge <sup>Note1</sup>	T-FHSS	1/31
		S-FHSS	1/60
	Radiated Spurious Emission <sup>Note1</sup>	T-FHSS	1/15/31
		S-FHSS	1/30/60
Conducted Test Case	20dB Bandwidth	T-FHSS	1/15/31
		S-FHSS	1/30/60
	Carrier Frequency Separation	T-FHSS	1/15/31
		S-FHSS	1/30/60
	Time of Occupancy	T-FHSS	1/15/31
		S-FHSS	1/30/60
	Number of Hopping Channels	T-FHSS	15
		S-FHSS	30
	Maximum Peak Output Power	T-FHSS	1/15/31
		S-FHSS	1/30/60
	Band Edges	T-FHSS	1/31
		S-FHSS	1/60
	Spurious Emission	T-FHSS	1/15/31
		S-FHSS	1/30/60

Note 1:

Mobile Device

Portable Device, and 3 axis were assessed. The worst scenario for Radiated Spurious Emission as follow:

- Lie
- Side
- Stand

### 3.5. Tested Supporting System List

#### 3.5.1. Support Peripheral Unit

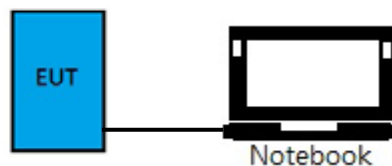
No.	Product	Brand	Model No.	Serial No.	FCC ID
1.	Notebook PC	ASUS	X5502E	N/A	PPD-AAR5B2 25
2.	Notebook PC	acer	MS2362	N/A	PPD-AAR5B2 2
3.	USB Jig	Futaba	CIU-2	N/A	N/A

#### 3.5.2. Cable Lists

No.	Cable Description Of The Above Support Units
1.	Adapter: Enerironix, M/N M/N EXA1208UH, DC Power Cord: Non-Shielded, Detachable, 1.8m AC Power Cord: Non-Shielded, Undetachable, 1.8m Bonded a ferrite core
2.	AC adapter: Chicony, M/N CPA09-A065N1, I/P: Non-Shielded, Detachable, 1.8m O/P: Shielded, Undetachable, 1.8m (Bonded a ferrite core)
3.	Cable: Non-Shielded, Detachable, 0.3m

### 3.6. Setup Configuration

#### 3.6.1. EUT Configuration for Power Line Emission



#### 3.6.2. EUT Configuration for Conducted Test Items



### 3.7. Operating Condition of EUT

Test program “Futaba Term” is used for enabling EUT RF function under continues transmitting and choosing data rate/ channel.

### 3.8. Description of Test Facility

Test Firm Name	:	<b>AUDIX Technology Corporation EMC Department</b> No. 53-11, Dingfu, Linkou Dist., New Taipei City 244, Taiwan
Test Location & Facility	:	<b>Semi-Anechoic Chamber</b> No. 53-11, Dingfu, Linkou Dist., New Taipei City 244, Taiwan May 11, 2012 File on Federal Communication Commission Registration Number: 90993
NVLAP Lab. Code	:	200077-0
TAF Accreditation No	:	1724

### 3.9. Measurement Uncertainty

Test Item	Frequency Range	Uncertainty
Radiation Test (Distance: 3m)	30MHz~300MHz	± 2.91dB
	300MHz~1000MHz	± 2.74dB
	Above 1GHz	± 5.02dB

Remark : Uncertainty =  $k_{u_c}(y)$ 

Test Item	Uncertainty
20dB Bandwidth	±0.2kHz
Carrier Frequency Separation	±0.2kHz
Time of Occupancy	±0.03sec
Maximum peak Output power	± 0.52dB
Conducted Emission Limitations	± 0.13dB

## 4. MEASUREMENT EQUIPMENT LIST

### 4.1. Radiated Emission Measurement

#### 4.1.1. Frequency Range 30MHz~1000MHz

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Interval
1.	Spectrum Analyzer	Agilent	N9010A-526	MY53400071	2014. 09. 15	1 Year
2.	Test Receiver	R & S	ESCS30	100338	2014. 06. 24	1 Year
3.	Amplifier	HP	8447D	2944A06305	2015. 02. 12	1 Year
4.	Bilog Antenna	TESEQ	CBL6112D	33821	2014. 08. 02	1 Year

#### 4.1.2. Frequency Range 30MHz~1000MHz

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Interval
1.	Spectrum Analyzer	Agilent	N9010A-526	MY53400071	2014. 09. 15	1 Year
2.	Test Receiver	R&S	ESCS30	100338	2014. 06. 24	1 Year
3.	Amplifier	Agilent	8449B	3008A00529	2015. 01. 22	1 Year
4.	2.4GHz Notch Filter	K&L	7NSL10-244 1.5E130.5-0 0	1	2014. 06. 12	1 Year
5.	3G High Pass Filter	Microwave Circuits	H3G018G1	484796	2014. 06. 12	1 Year
6.	Horn Antenna	EMCO	3115	9609-4927	2014. 06. 17	1 Year
7.	Horn Antenna	EMCO	3116	2653	2014. 10. 14	1 Year

### 4.2. RF Conducted Measurement

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Interval
1.	Spectrum Analyzer	Agilent	N9010A-507	MY52220264	2014. 08. 13	1 Year

## **5. CONDUCTED EMISSION MEASUREMENT**

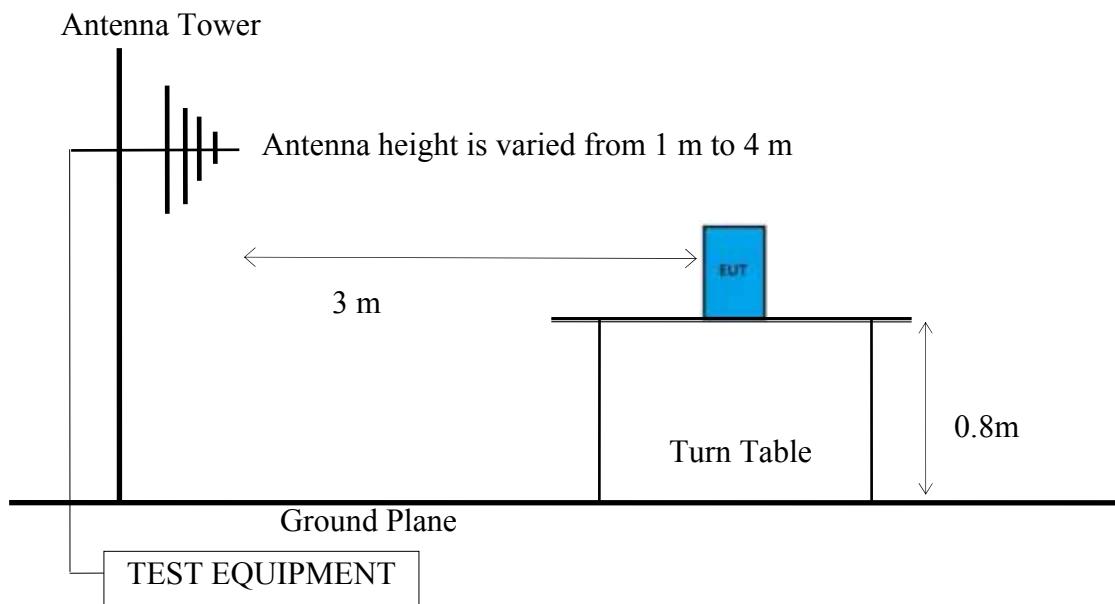
**【The EUT only employs battery power for operation, no conductive emission limits are required according to FCC Part 15 Section §15.207】**

## 6. RADIATED EMISSION MEASUREMENT

### 6.1. Block Diagram of Test Setup

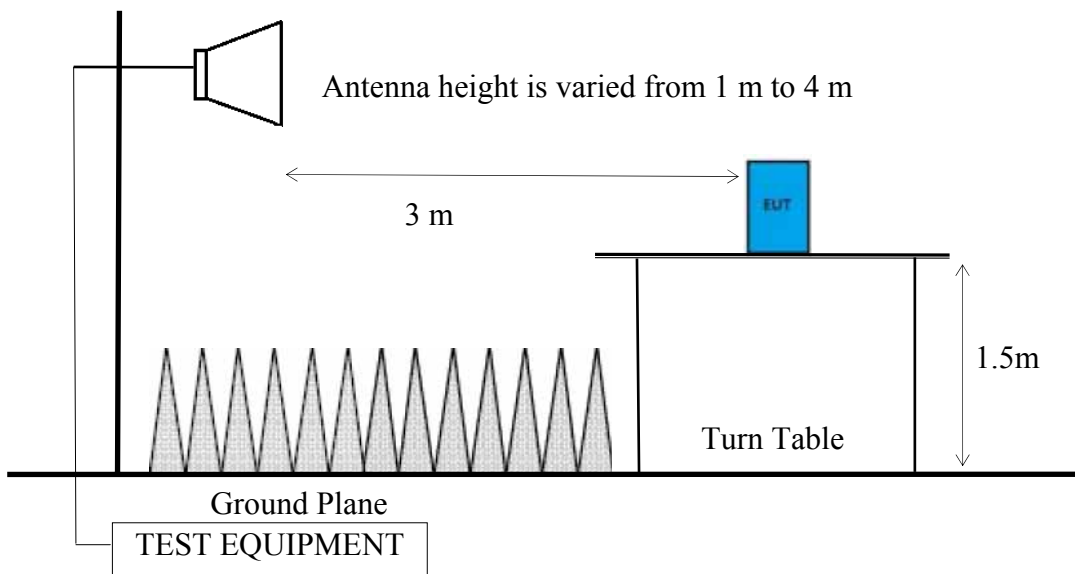
6.1.1. Block Diagram of connection between EUT and simulators  
Indicated as section 3.7

6.1.2. Setup Diagram for 30-1000MHz



6.1.3. Semi-Anechoic Chamber (3m) Setup Diagram for above 1GHz

Antenna Tower



## 6.2. Radiated Emission Limits

In any 100kHz bandwidth outside the frequency band, the radio frequency power produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level. In addition, radiated emissions which fall in restricted bands, as defined in Section 15.205, must also comply with the radiated emission limits specified as below.

Frequency (MHz)	Distance(m)	Field Strengths Limits	
		$\mu\text{V/m}$	$\text{dB}\mu\text{V/m}$
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
Above 960	3	500	54.0
Above 1000	3	74.0 $\text{dB}\mu\text{V/m}$ (Peak) 54.0 $\text{dB}\mu\text{V/m}$ (Average)	

Remark : (1)  $\text{dB}\mu\text{V/m} = 20 \log (\mu\text{V/m})$

- (2) The tighter limit applies to the edge between two frequency bands.
- (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.
- (4) Fundamental and emission fall within operation band are exempted from this section.
- (5) Pursuant to ANSI C63.10: 6.6.4.3, if the maximized peak measured value complies with the average limit, then it is unnecessary to perform an average measurement.

## 6.3. Test Procedure

The EUT setup on the turn table which has 1.5 m height to the ground. The turn table rotated 360 degrees and antenna varied from 1 m to 4 m to find the maximum emission level. Both horizontal and vertical polarization are required. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10-2013 regulation.

Frequency below 1GHz:

Spectrum Analyzer is used for pre-testing with following setting:

- (1) RBW = 120KHz
- (2) VBW  $\geq 3 \times$  RBW.
- (3) Detector = Peak.
- (4) Sweep time = auto.
- (5) Trace mode = max hold.
- (6) Allow sweeps to continue until the trace stabilizes.
- (7) When peak-detected value is lower than limit that the measurement using the Q.P. detector is not required. Otherwise using Q.P. for finally measurement.



Frequency above 1GHz to 10th harmonic:

**Peak Measurement:**

- (1) RBW = 1 MHz
- (2) VBW  $\geq$  3 x RBW.
- (3) Detector = Peak.
- (4) Sweep time = auto.
- (5) Trace mode = max hold.
- (6) Allow sweeps to continue until the trace stabilizes.
- (7) When peak-detected value is lower than limit that the measurement using the average detector is not required. Otherwise using average for finally measurement.

**Average Measurement:**

**Option 1:**

- (1) RBW = 1 MHz
- (2) VBW = 1/T
- (3) Detector = Peak.
- (4) Sweep time = auto.
- (5) Trace mode = max hold.
- (6) Allow sweeps to continue until the trace stabilizes.

**Option 2:**

Average Emission Level = Peak Emission Level + D.C.C.F.

## 6.4. Measurement Result Explanation

Peak Emission Level = Antenna Factor + Cable Loss + Meter Reading

Average Emission Level = Antenna Factor + Cable Loss + Meter Reading

Average Emission Level = Peak Emission Level + DCCF

Duty Cycle Correction Factor (DCCF) =  $20\log(TX_{on}/100ms)$  presented in section 3.4

EPR = Peak Emission Level - 95.2dB - 2.14dBi

## 6.5. Test Results

**PASSED.**

Test Date	2015/06/08	Temp./Hum.	25 /58%
Test Voltage	DC 6V		

6.5.1. Emissions within Restricted Frequency Bands

6.5.1.1. Frequency Below 1GHz

Modulation	T-FHSS	Frequency	TX 2407.5MHz
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**Antenna at Horizontal Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
333.61	14.02	5.03	26.24	45.29	46.00	0.71	Peak
431.58	16.02	5.92	23.02	44.96	46.00	1.04	Peak
839.95	20.25	7.32	17.18	44.75	46.00	1.25	Peak

**Antenna at Vertical Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
288.02	12.96	4.58	21.37	38.91	46.00	7.09	Peak
455.83	16.38	6.12	20.67	43.17	46.00	2.83	Peak
580.96	18.08	6.49	15.79	40.36	46.00	5.64	Peak

Modulation	T-FHSS	Frequency	TX 2435.5MHz
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**Antenna at Horizontal Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
336.52	14.08	5.05	26.09	45.22	46.00	0.78	Peak
431.58	16.02	5.92	23.34	45.28	46.00	0.72	Peak
815.70	20.12	7.23	17.59	44.94	46.00	1.06	Peak

**Antenna at Vertical Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
288.02	12.96	4.58	21.30	38.84	46.00	7.16	Peak
444.19	16.22	6.03	21.11	43.36	46.00	2.64	Peak
580.96	18.08	6.49	16.71	41.28	46.00	4.72	Peak

Modulation	T-FHSS	Frequency	TX 2467.5MHz
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**Antenna at Horizontal Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB $\mu$ V)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Detector
288.02	12.96	4.58	27.34	44.88	46.00	1.12	Peak
384.05	15.20	5.51	24.55	45.26	46.00	0.74	Peak
815.70	20.12	7.23	17.76	45.11	46.00	0.89	Peak

**Antenna at Vertical Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB $\mu$ V)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Detector
384.05	15.20	5.51	19.04	39.75	46.00	6.25	Peak
444.19	16.22	6.03	21.26	43.51	46.00	2.49	Peak
815.70	20.12	7.23	10.18	37.53	46.00	8.47	Peak

Modulation	S-FHSS	Frequency	TX 2403.25MHz
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**Antenna at Horizontal Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
288.02	12.96	4.58	27.17	44.71	46.00	1.29	Peak
384.05	15.20	5.51	24.47	45.18	46.00	0.82	Peak
828.31	20.18	7.27	17.41	44.86	46.00	1.14	Peak

**Antenna at Vertical Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
332.64	13.99	5.01	23.82	42.82	46.00	3.18	Peak
444.19	16.22	6.03	20.83	43.08	46.00	2.92	Peak
580.96	18.08	6.49	15.73	40.30	46.00	5.70	Peak

Modulation	S-FHSS	Frequency	TX 2425.0MHz
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**Antenna at Horizontal Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
288.02	12.96	4.58	27.27	44.81	46.00	1.19	Peak
384.05	15.20	5.51	24.17	44.88	46.00	1.12	Peak
815.70	20.12	7.23	18.31	45.66	46.00	0.34	Peak

**Antenna at Vertical Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
288.02	12.96	4.58	21.25	38.79	46.00	7.21	Peak
444.19	16.22	6.03	20.79	43.04	46.00	2.96	Peak
580.96	18.08	6.49	14.84	39.41	46.00	6.59	Peak

Modulation	S-FHSS	Frequency	TX 2447.5MHz
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#### Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB $\mu$ V)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Detector
335.55	14.08	5.05	26.46	45.59	46.00	0.41	Peak
432.55	16.05	5.93	23.75	45.73	46.00	0.27	Peak
828.31	20.18	7.27	17.70	45.15	46.00	0.85	Peak

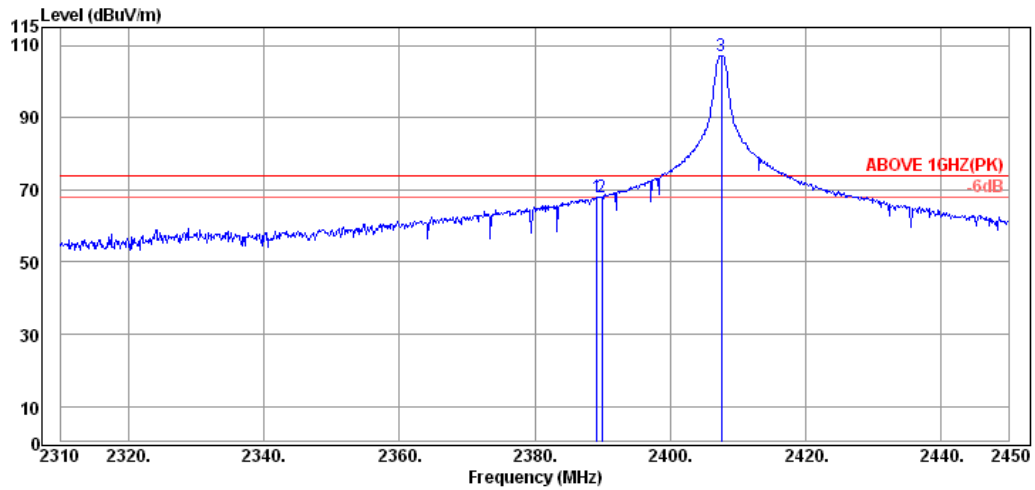
#### Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB $\mu$ V)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Detector
288.02	12.96	4.58	22.09	39.63	46.00	6.37	Peak
431.58	16.02	5.92	21.29	43.23	46.00	2.77	Peak
580.96	18.08	6.49	15.38	39.95	46.00	6.05	Peak

6.5.1.2. Frequency Above 1 GHz to 10<sup>th</sup> harmonics

**Band Edge:**

Modulation	T-FHSS	Frequency	TX 2407.5MHz
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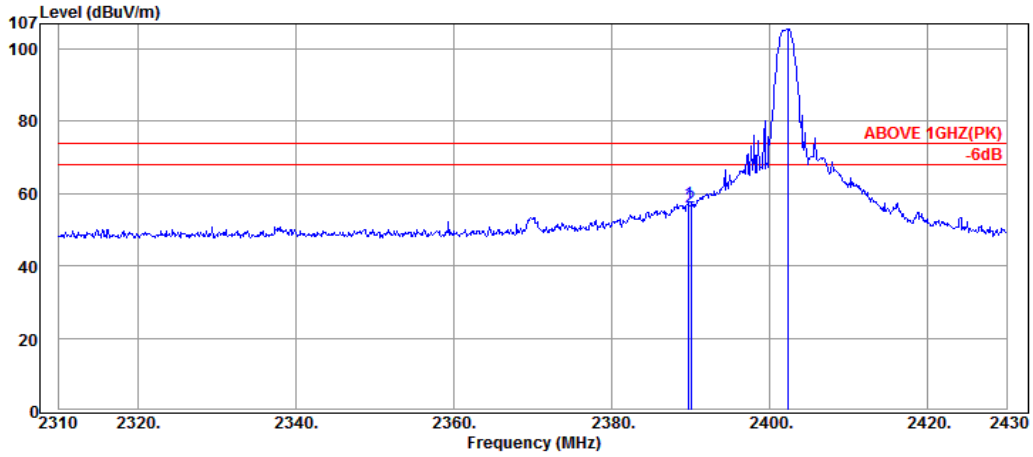


**Antenna at Horizontal Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.24	28.40	5.24	34.46	68.10	74.00	5.90	Peak
2389.94	28.40	5.24	34.26	67.90	74.00	6.10	Peak
2407.58	28.42	5.26	73.55	107.23	---	---	Peak

Emission Frequency (MHz)	Peak Emission Level (dB/m)	DCCF (dB)	Average Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
2389.80	72.56	-35.97	36.59	54.00	17.41	Average
2389.94	72.39	-35.97	36.42	54.00	17.58	Average

Modulation	T-FHSS	Frequency	TX 2407.5MHz
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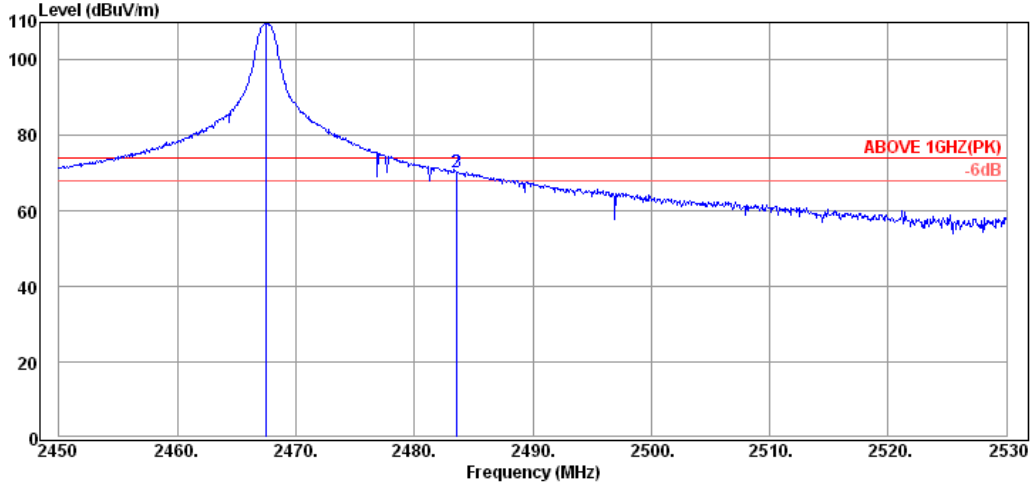


**Antenna at Vertical Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.24	28.40	5.24	34.46	68.10	74.00	5.90	Peak
2389.94	28.40	5.24	34.26	67.90	74.00	6.10	Peak
2407.58	28.42	5.26	73.55	107.23	---	---	Peak

Emission Frequency (MHz)	Peak Emission Level (dB/m)	DCCF (dB)	Average Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
2389.24	68.1	-35.97	32.13	54.00	21.87	Average
2389.94	67.9	-35.97	31.93	54.00	22.07	Average

Modulation	T-FHSS	Frequency	TX 2467.5MHz
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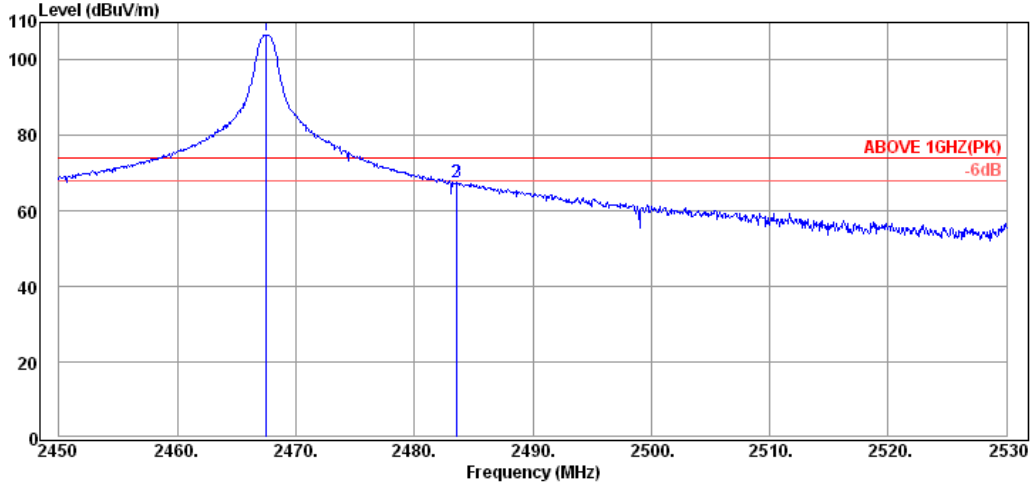
**Antenna at Horizontal Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2467.44	28.47	5.34	75.72	109.53	---	---	Peak
2483.52	28.49	5.37	36.32	70.18	74.00	3.82	Peak
2483.60	28.49	5.37	36.55	70.41	74.00	3.59	Peak

Emission Frequency (MHz)	Peak Emission Level (dB/m)	DCCF (dB)	Average Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
2483.52	70.18	-35.97	34.21	54.00	19.79	Average
2483.60	70.41	-35.97	34.44	54.00	19.56	Average



Modulation	T-FHSS	Frequency	TX 2467.5MHz
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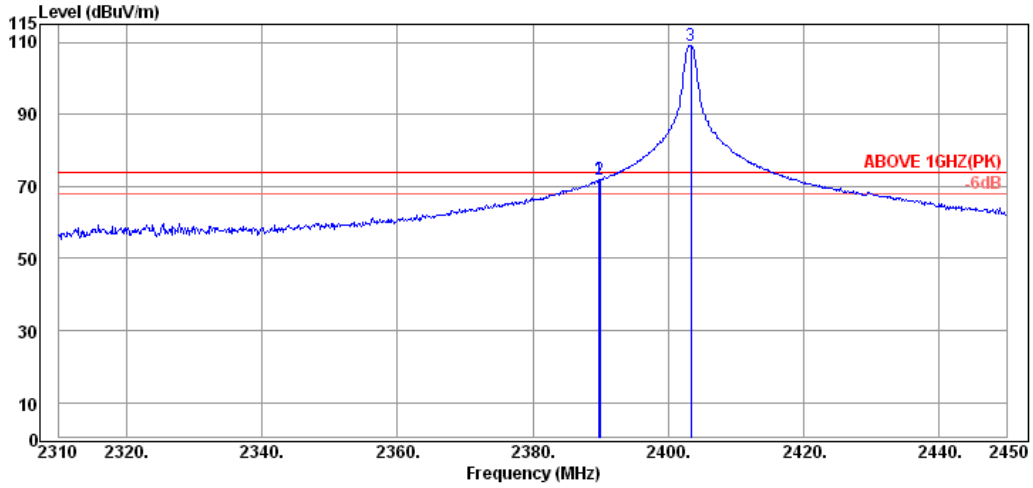


**Antenna at Vertical Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2467.52	28.47	5.35	72.81	106.63	---	---	Peak
2483.52	28.49	5.37	33.94	67.80	74.00	6.20	Peak
2483.60	28.49	5.37	33.65	67.51	74.00	6.49	Peak

Emission Frequency (MHz)	Peak Emission Level (dB/m)	DCCF (dB)	Average Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
2483.52	67.80	-35.97	31.83	54.00	22.17	Average
2483.60	67.51	-35.97	31.54	54.00	22.46	Average

Modulation	S-FHSS	Frequency	TX 2403.25MHz
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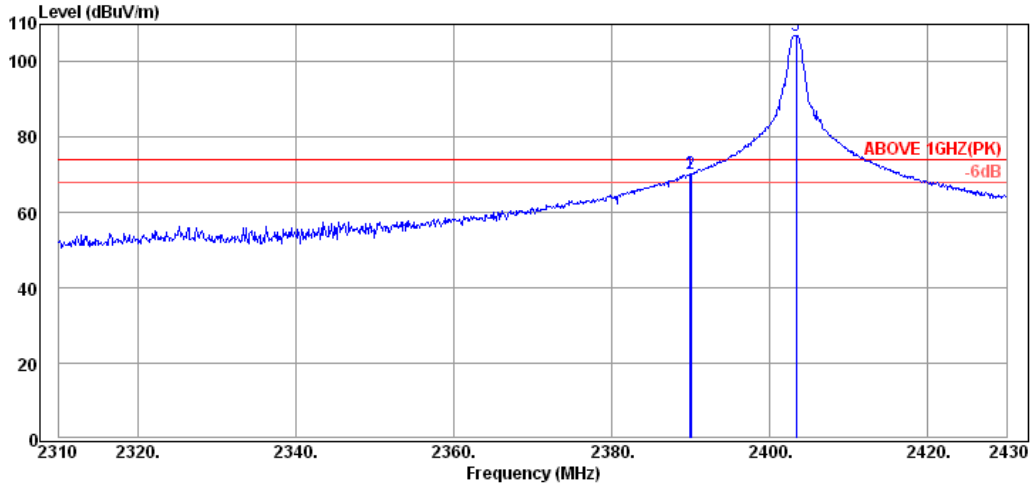


**Antenna at Horizontal Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.80	28.40	5.24	38.14	71.78	74.00	2.22	Peak
2389.94	28.40	5.24	38.10	71.74	74.00	2.26	Peak
2403.38	28.41	5.26	75.34	109.01	---	---	Peak

Emission Frequency (MHz)	Peak Emission Level (dB/m)	DCCF (dB)	Average Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
2389.80	71.78	-30.40	41.38	54.00	12.62	Average
2389.94	71.74	-30.40	41.34	54.00	12.66	Average

Modulation	S-FHSS	Frequency	TX 2403.25MHz
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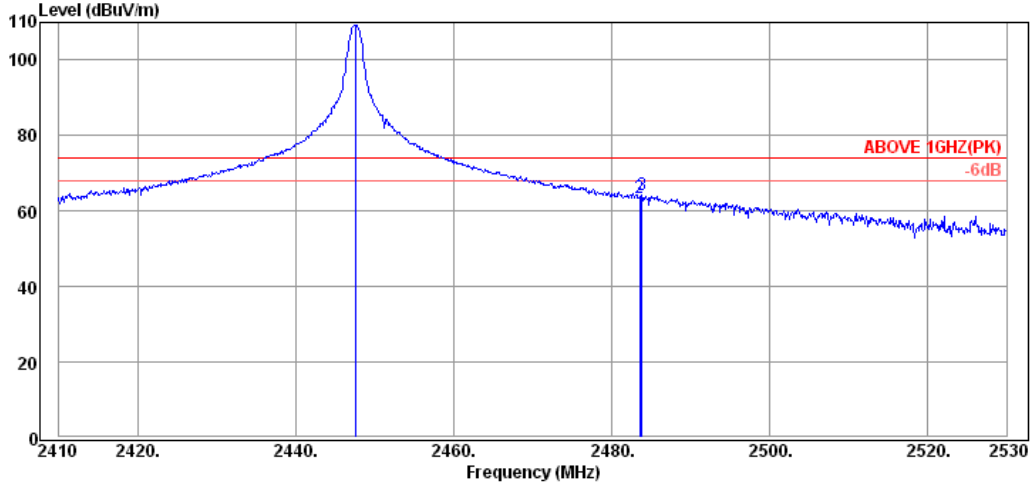


**Antenna at Vertical Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.92	28.40	5.24	36.65	70.29	74.00	3.71	Peak
2390.04	28.40	5.24	36.61	70.25	74.00	3.75	Peak
2403.36	28.41	5.26	73.47	107.14	---	---	Peak

Emission Frequency (MHz)	Peak Emission Level (dB/m)	DCCF (dB)	Average Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
2389.92	70.29	-30.40	39.89	54.00	14.11	Average
2390.04	70.25	-30.40	39.85	54.00	14.15	Average

Modulation	S-FHSS	Frequency	TX 2447.5MHz
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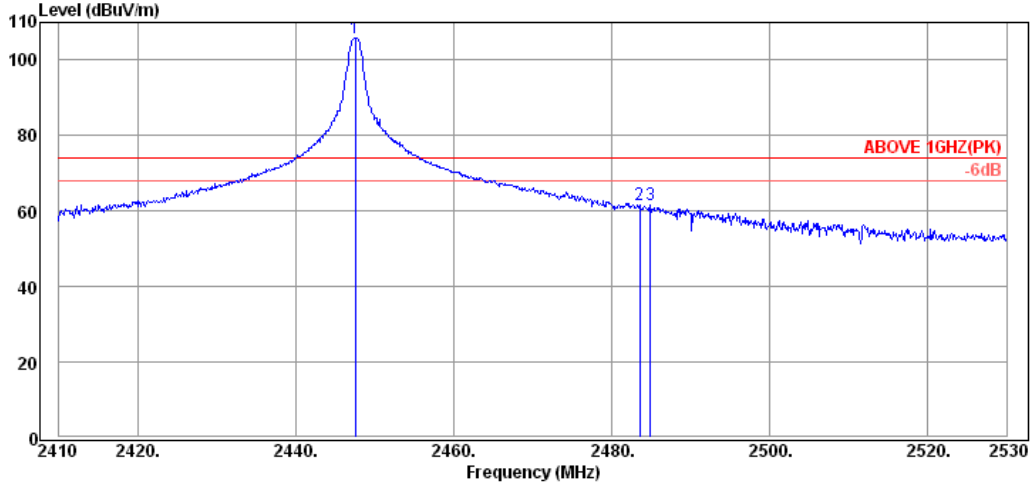


**Antenna at Horizontal Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2447.56	28.45	5.32	75.65	109.42	---	---	Peak
2483.56	28.49	5.37	29.71	63.57	74.00	10.43	Peak
2483.80	28.49	5.37	30.35	64.21	74.00	9.79	Peak

Emission Frequency (MHz)	Peak Emission Level (dB/m)	DCCF (dB)	Average Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
2483.56	63.57	-30.40	33.17	54.00	20.83	Average
2483.80	64.21	-30.40	33.81	54.00	20.19	Average

Modulation	S-FHSS	Frequency	TX 2447.5MHz
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**Antenna at Vertical Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2447.56	28.45	5.32	72.25	106.02	---	---	Peak
2483.56	28.49	5.37	27.89	61.75	74.00	12.25	Peak
2484.88	28.49	5.37	27.57	61.43	74.00	12.57	Peak

Emission Frequency (MHz)	Peak Emission Level (dB/m)	DCCF (dB)	Average Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
2483.56	61.75	-30.40	31.35	54.00	22.65	Average
2484.88	61.43	-30.40	31.03	54.00	22.97	Average

6.5.2. Emissions outside the frequency band:

The emissions (up to 25GHz) not reported for there is no emission be found.

Modulation	T-FHSS	Frequency	TX 2407.5MHz
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**Antenna at Horizontal Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2330.56	28.34	5.15	23.61	57.10	74.00	16.90	Peak
2537.20	28.63	5.47	31.08	65.18	74.00	8.82	Peak
4816.00	33.01	8.10	15.19	56.30	74.00	17.70	Peak
7222.00	35.80	9.98	13.40	59.18	74.00	14.82	Peak

Emission Frequency (MHz)	Peak Emission Level (dB/m)	DCCF (dB)	Average Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
2330.56	57.10	-35.97	21.13	54.00	32.87	Average
2537.20	65.18	-35.97	29.21	54.00	24.79	Average
4816.00	56.30	-35.97	20.33	54.00	33.67	Average
7222.00	59.18	-35.97	23.21	54.00	30.79	Average

**Antenna at Vertical Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2327.20	28.34	5.15	19.56	53.05	74.00	20.95	Peak
2538.88	28.63	5.47	27.71	61.81	74.00	12.19	Peak
4814.50	33.01	8.10	17.53	58.64	74.00	15.36	Peak
7222.00	35.80	9.98	15.73	61.51	74.00	12.49	Peak

Emission Frequency (MHz)	Peak Emission Level (dB/m)	DCCF (dB)	Average Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
2327.20	53.05	-35.97	17.08	54.00	36.92	Average
2538.88	61.81	-35.97	25.84	54.00	28.16	Average
4814.50	58.64	-35.97	22.67	54.00	31.33	Average
7222.00	61.51	-35.97	25.54	54.00	28.46	Average

Modulation	T-FHSS	Frequency	TX 2435.5MHz
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**Antenna at Horizontal Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2364.16	28.38	5.20	19.95	53.53	74.00	20.47	Peak
2538.88	28.63	5.47	38.53	72.63	74.00	1.37	Peak
4871.50	33.13	8.17	17.37	58.67	74.00	15.33	Peak
7306.00	36.01	10.02	14.14	60.17	74.00	13.83	Peak

Emission Frequency (MHz)	Peak Emission Level (dB/m)	DCCF (dB)	Average Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
2364.16	53.53	-35.97	17.56	54.00	36.44	Average
2538.88	72.63	-35.97	36.66	54.00	17.34	Average
4871.50	58.67	-35.97	36.66	54.00	17.34	Average
7306.00	60.17	-35.97	22.70	54.00	17.34	Average

**Antenna at Vertical Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2357.44	28.37	5.19	19.36	52.92	74.00	21.08	Peak
2540.56	28.65	5.47	31.39	65.51	74.00	8.49	Peak
4871.50	33.13	8.17	18.00	59.30	74.00	14.70	Peak
7306.00	36.01	10.02	13.20	59.23	74.00	14.77	Peak

Emission Frequency (MHz)	Peak Emission Level (dB/m)	DCCF (dB)	Average Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
2357.44	52.92	-35.97	16.95	54.00	37.05	Average
2540.56	65.51	-35.97	29.54	54.00	24.46	Average
4871.50	59.30	-35.97	23.33	54.00	30.67	Average
7306.00	59.23	-35.97	23.26	54.00	30.74	Average

Modulation	T-FHSS	Frequency	TX 2467.5MHz
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**Antenna at a Horizontal Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2364.16	28.38	5.20	18.83	52.41	74.00	21.59	Peak
4934.50	33.25	8.23	14.38	55.86	74.00	18.14	Peak

Emission Frequency (MHz)	Peak Emission Level (dB/m)	DCCF (dB)	Average Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
2364.16	52.41	-35.97	16.44	54.00	37.56	Average
4934.50	55.86	-35.97	19.89	54.00	34.11	Average

**Antenna at Vertical Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2370.88	28.38	5.21	19.57	53.16	74.00	20.84	Peak
2540.56	28.65	5.47	30.09	64.21	74.00	9.79	Peak
2825.20	29.57	6.04	14.12	49.73	74.00	24.27	Peak
4936.00	33.25	8.23	17.60	59.08	74.00	14.92	Peak

Emission Frequency (MHz)	Peak Emission Level (dB/m)	DCCF (dB)	Average Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
2370.88	70.41	-35.97	34.44	54.00	19.56	Average
2540.56	79.24	-35.97	43.27	54.00	10.73	Average
2825.20	49.73	-35.97	13.76	54.00	40.24	Average
4936.00	59.08	-35.97	23.11	54.00	30.89	Average



Modulation	S-FHSS	Frequency	TX 2405.25MHz
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**Antenna at Horizontal Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2248.24	28.26	5.03	19.66	52.95	74.00	21.05	Peak
4807.00	32.98	8.09	14.84	55.91	74.00	18.09	Peak
7210.00	35.74	9.96	14.58	60.28	74.00	13.72	Peak

Emission Frequency (MHz)	Peak Emission Level (dB/m)	DCCF (dB)	Average Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
2248.24	52.95	-30.40	22.55	54.00	31.45	Average
4807.00	55.91	-30.40	25.51	54.00	28.49	Average
7210.00	60.28	-30.40	29.88	54.00	24.12	Average

**Antenna at Vertical Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2248.24	28.26	5.03	14.47	47.76	74.00	26.24	Peak
4807.00	32.98	8.09	16.52	57.59	74.00	16.41	Peak
7210.00	35.74	9.96	15.10	60.80	74.00	13.20	Peak

Emission Frequency (MHz)	Peak Emission Level (dB/m)	DCCF (dB)	Average Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
2248.24	47.76	-30.40	17.36	54.00	36.64	Average
4807.00	57.59	-30.40	27.19	54.00	26.81	Average
7210.00	60.80	-30.40	30.40	54.00	23.60	Average

Modulation	S-FHSS	Frequency	TX 2425.0MHz
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**Antenna at Horizontal Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2315.44	28.32	5.13	22.29	55.74	74.00	18.26	Peak
4841.50	33.07	8.12	15.35	56.54	74.00	17.46	Peak
7260.00	35.90	10.00	14.81	60.71	74.00	13.29	Peak

Emission Frequency (MHz)	Peak Emission Level (dB/m)	DCCF (dB)	Average Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
2315.44	55.74	-30.40	25.34	54.00	28.66	Average
4841.50	56.54	-30.40	26.14	54.00	27.86	Average
7260.00	60.71	-30.40	30.31	54.00	23.69	Average

**Antenna at Vertical Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2328.88	28.34	5.15	22.19	55.68	74.00	18.32	Peak
4844.50	33.07	8.14	17.34	58.55	74.00	15.45	Peak
7266.00	35.90	10.00	14.38	60.28	74.00	13.72	Peak

Emission Frequency (MHz)	Peak Emission Level (dB/m)	DCCF (dB)	Average Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
2328.88	55.68	-30.40	25.28	54.00	28.72	Average
4844.50	58.55	-30.40	28.15	54.00	25.85	Average
7266.00	60.28	-30.40	29.88	54.00	24.12	Average

Modulation	S-FHSS	Frequency	TX 2447.5MHz
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**Antenna at Horizontal Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2291.92	28.31	5.10	21.19	54.60	74.00	19.40	Peak
4895.50	33.19	8.18	15.22	56.59	74.00	17.41	Peak

Emission Frequency (MHz)	Peak Emission Level (dB/m)	DCCF (dB)	Average Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
2291.92	54.60	-30.40	24.20	54.00	29.80	Average
4895.50	56.59	-30.40	26.19	54.00	27.81	Average

**Antenna at Vertical Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2291.92	28.31	5.10	17.92	51.33	74.00	22.67	Peak
4895.50	33.19	8.18	17.00	58.37	74.00	15.63	Peak

Emission Frequency (MHz)	Peak Emission Level (dB/m)	DCCF (dB)	Average Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
2291.92	51.33	-30.40	20.93	54.00	33.07	Average
4895.50	58.37	-30.40	27.97	54.00	26.03	Average

### 6.5.3. Emissions in Non-restricted Frequency Bands

All emission levels below the 15.209 general radiated emissions limits is not required.

Modulation	T-FHSS	Frequency	TX 2467.5MHz
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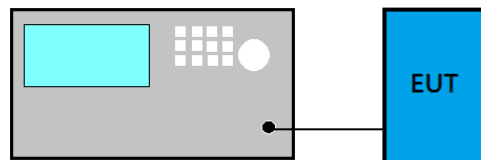
#### **Antenna at a Horizontal Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB $\mu$ V)	Emission Level (dB $\mu$ V/m)	ERP (dBm)	Limits (dBm)	Detector
2540.56	28.65	5.47	45.12	79.24	-18.1	-8.022	Peak

Note: Limit is 20 dB below peak output power presented in Appendix A.5.

## 7. 20dB BANDWIDTH MEASUREMENT

### 7.1. Block Diagram of Test Setup



### 7.2. Specification Limits

Alternatively, frequency hopping systems operating in the 2400-2483.5MHz band may have hopping channel carrier frequencies that are separated by 25kHz or two-thirds of the 20dB bandwidth of the hopping channel, whichever is greater.

### 7.3. Test Procedure

Following measurement procedure is reference to DA00-705:

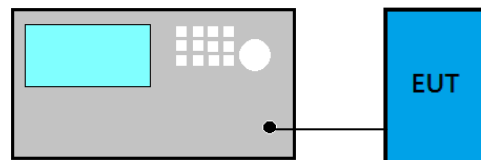
- (1) Set RBW close to 1% of OBW.
- (2) Set VBW = RBW.
- (3) Detector = Peak.
- (4) Trace mode = max hold.
- (5) Sweep = auto couple.
- (6) Allow the trace to stabilize.
- (7) Setting channel bandwidth function x dB to -20 dB to record the final bandwidth.

### 7.4. Test Results

Please refer to Appendix A

## 8. CARRIER FREQUENCY SEPARATION MEASUREMENT

### 8.1. Block Diagram of Test Setup



### 8.2. Specification Limits

Alternatively, frequency hopping systems operating in the 2400-2483.5MHz band may have hopping channel carrier frequencies that are separated by 25kHz or two-thirds of the 20dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output no greater than 125mW.

### 8.3. Test Procedure

Following measurement procedure is reference to DA00-705:

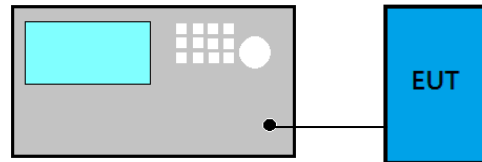
- (1) Span = wide enough to capture the peaks of two adjacent channels
- (2) RBW  $\geq$  1% of the span
- (3) VBW  $\geq$  RBW
- (4) Sweep = auto
- (5) Detector function = peak
- (6) Trace = max hold

### 8.4. Test Results

Please refer to Appendix A

## 9. TIME OF OCCUPANCY MEASUREMENT

### 9.1. Block Diagram of Test Setup



### 9.2. Specification Limits

Frequency hopping systems in the 2400-2483.5MHz shall use at least 15 non-overlapping channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by number of hopping channels employed.

### 9.3. Test Procedure

Following measurement procedure is reference to DA00-705:

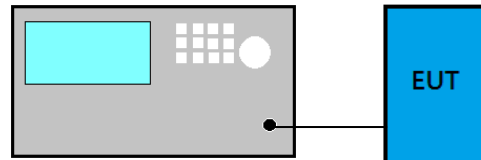
- (1) Span = zero span, centered on a hopping channel
- (2) RBW = 1 MHz
- (3) VBW  $\geq$  RBW
- (4) Sweep = as necessary to capture the entire dwell time per hopping channel
- (5) Detector function = peak
- (6) Trace = max hold

### 9.4. Test Results

Please refer to Appendix A

## 10. NUMBER OF HOPPING CHANNELS MEASUREMENT

### 10.1. Block Diagram of Test Setup



### 10.2. Specification Limits

Frequency hopping systems which use fewer than 20 hopping frequencies may employ intelligent hopping techniques to avoid interference to other transmissions. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 non-overlapping channels.

### 10.3. Test Procedure

Following measurement procedure is reference to DA00-705:

- (1) Span = the frequency band of operation
- (2) RBW  $\geq$  1% of the span
- (3) VBW  $\geq$  RBW
- (4) Sweep = auto
- (5) Detector function = peak
- (6) Trace = max hold

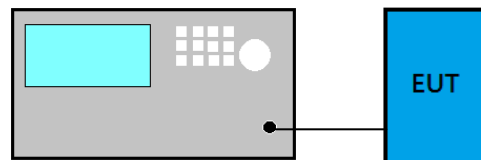
### 10.4. Test Results

Please refer to Appendix A



## 11. MAXIMUM PEAK OUTPUT POWER MEASUREMENT

### 11.1. Block Diagram of Test Setup



### 11.2. Specification Limits

The Limits of maximum Peak Output Power for frequency hopping systems in 2400-2483.5MHz is: 0.125Watt. (21dBm)

### 11.3. Test Procedure

Following measurement procedure is reference to DA00-705:

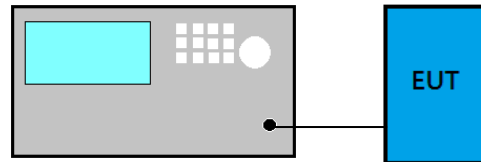
- (1) Span = approximately 5 times the 20 dB bandwidth, centered on a hopping channel
- (2) RBW  $\geq$  1% of the span
- (3) VBW  $\geq$  RBW
- (4) Sweep = auto
- (5) Detector function = peak
- (6) Trace = max hold

### 11.4. Test Results

Please refer to Appendix A

## 12. EMISSION LIMITATIONS MEASUREMENT

### 12.1. Block Diagram of Test Setup



### 12.2. Specification Limits

In any 100kHz 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 20dB below that in the 100kHz 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 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)). ( This test result attaching to §3.6.3)

### 12.3. Test Procedure

Following measurement procedure is reference to DA00-705:

- (1) Set span wide enough to capture the peak level of the in-band emission and all spurious emissions; up to 10<sup>th</sup> harmonic.
- (2) RBW = 100 kHz
- (3) VBW  $\geq$  RBW
- (4) Sweep = auto
- (5) Detector function = peak
- (6) Trace = max hold

### 12.4. Test Results

Please refer to Appendix A

## **13. DEVIATION TO TEST SPECIFICATIONS**

**【NONE】**



**AUDIX Technology Corp.**  
No. 53-11, Dingfu, Linkou, Dist.,  
New Taipei City 244, Taiwan

*APPENDIX A-Page 1 of 21*

*Tel: +886 2 26099301*  
*Fax: +886 2 26099303*

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# APPDNDIX A

## TEST PLOTS

(Model: T6K-2.4G)

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*File Number: C1M1505248*

*Report Number: EM-F150297*

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## A.1 20DB BANDWIDTH MEASUREMENT

Test Date	2015/06/08	Temp./Hum.	25°C/58%
Cable Loss	1.16dB	Test Voltage	DC 6V

### A.1.1 20dB Bandwidth Result

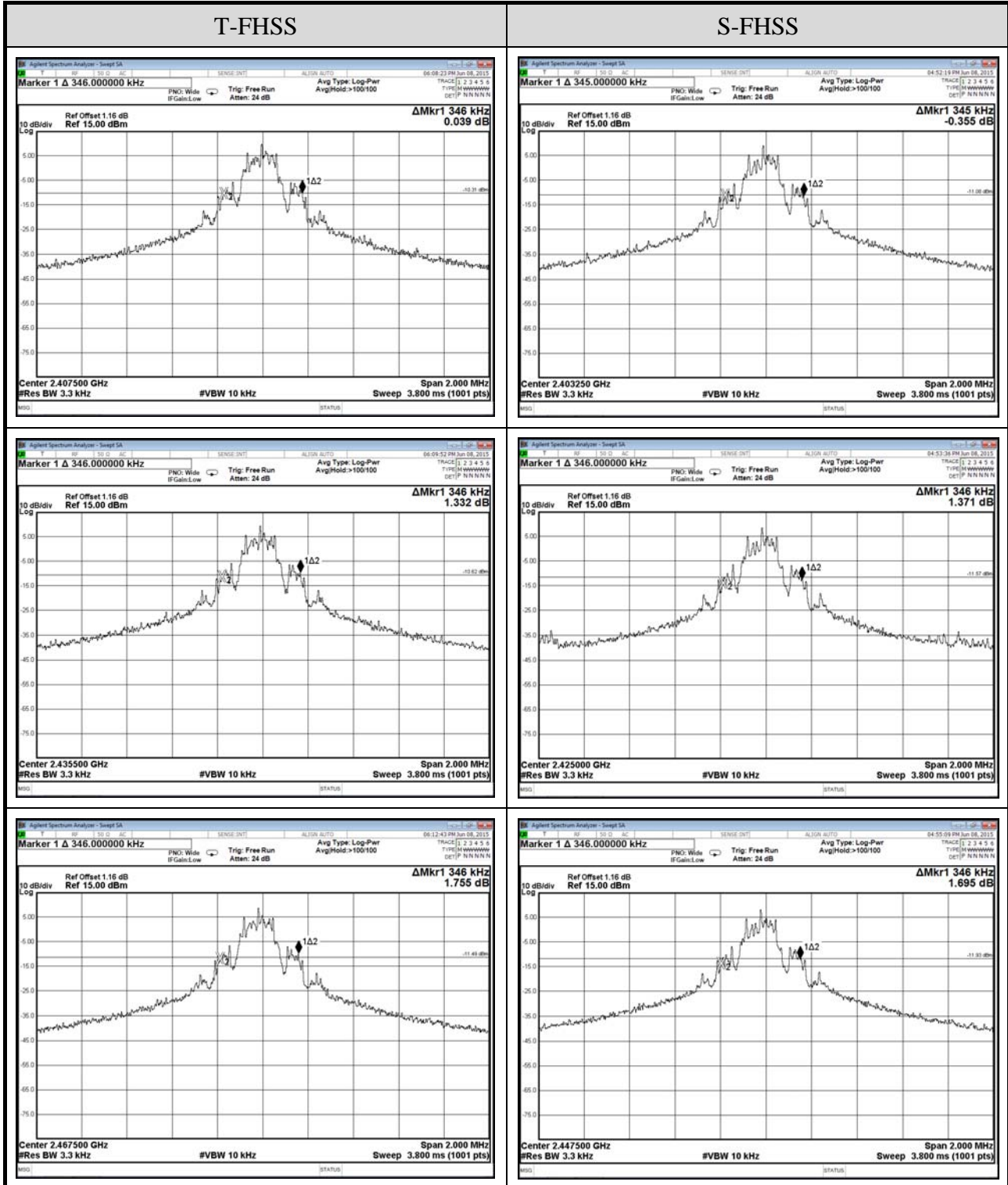
Modulation	Centre Frequency (MHz)	20 dB Bandwidth (MHz)	Limit 2/3 (20dB Bandwidth)
T-FHSS	2407.50	0.346	0.2307
	2435.50	0.346	0.2307
	2467.50	0.346	0.2307

Remark: The maximum two-thirds of the 20dB bandwidth shall be at maximum 0.2307kHz.

Modulation	Centre Frequency (MHz)	20 dB Bandwidth (MHz)	Limit 2/3 (20dB Bandwidth)
S-FHSS	2403.25	0.345	0.2300
	2425.00	0.346	0.2307
	2447.50	0.346	0.2307

Remark: The maximum two-thirds of the 20dB bandwidth shall be at maximum 0.2307kHz.

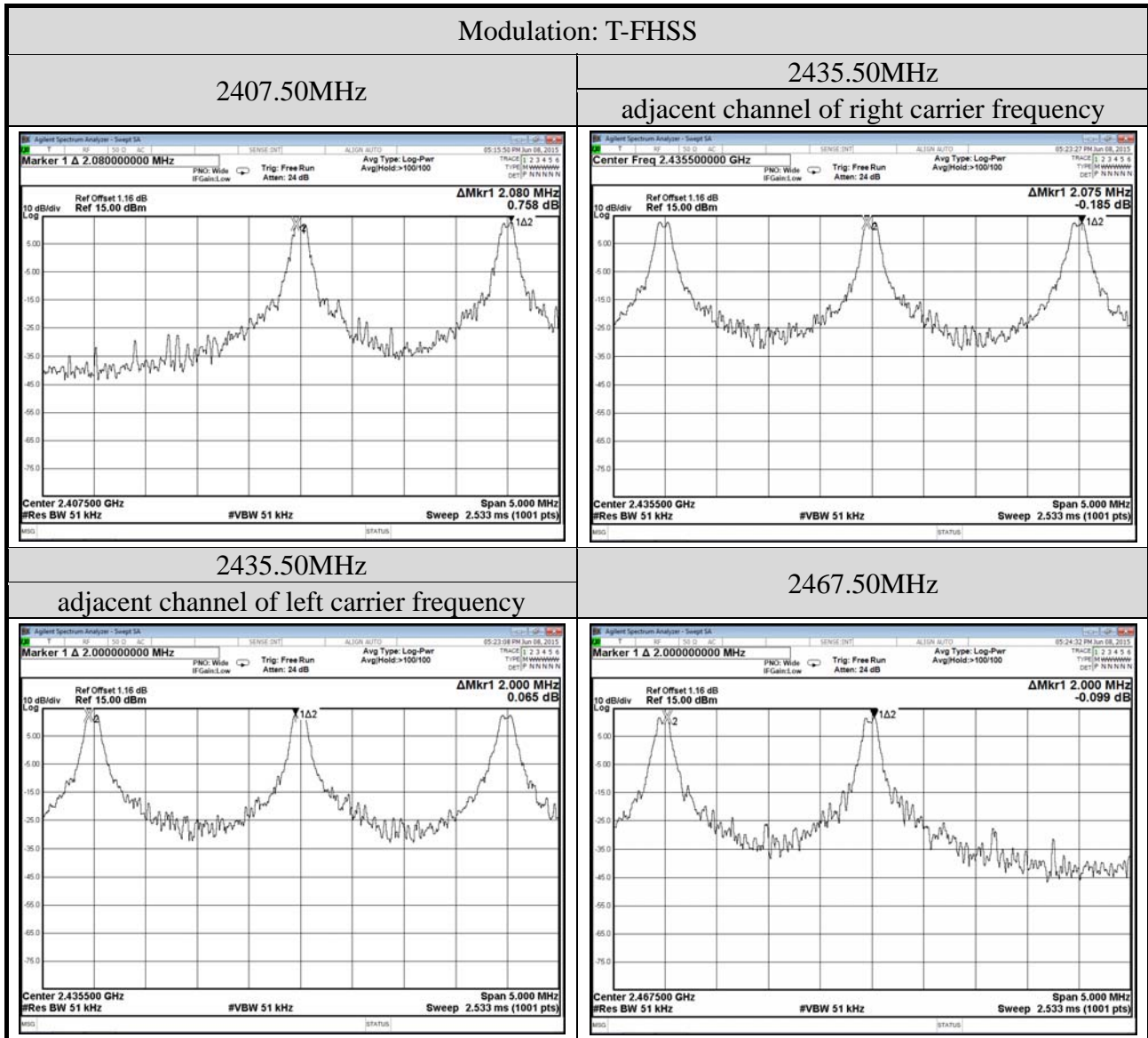
A.1.2 Measurement Plots



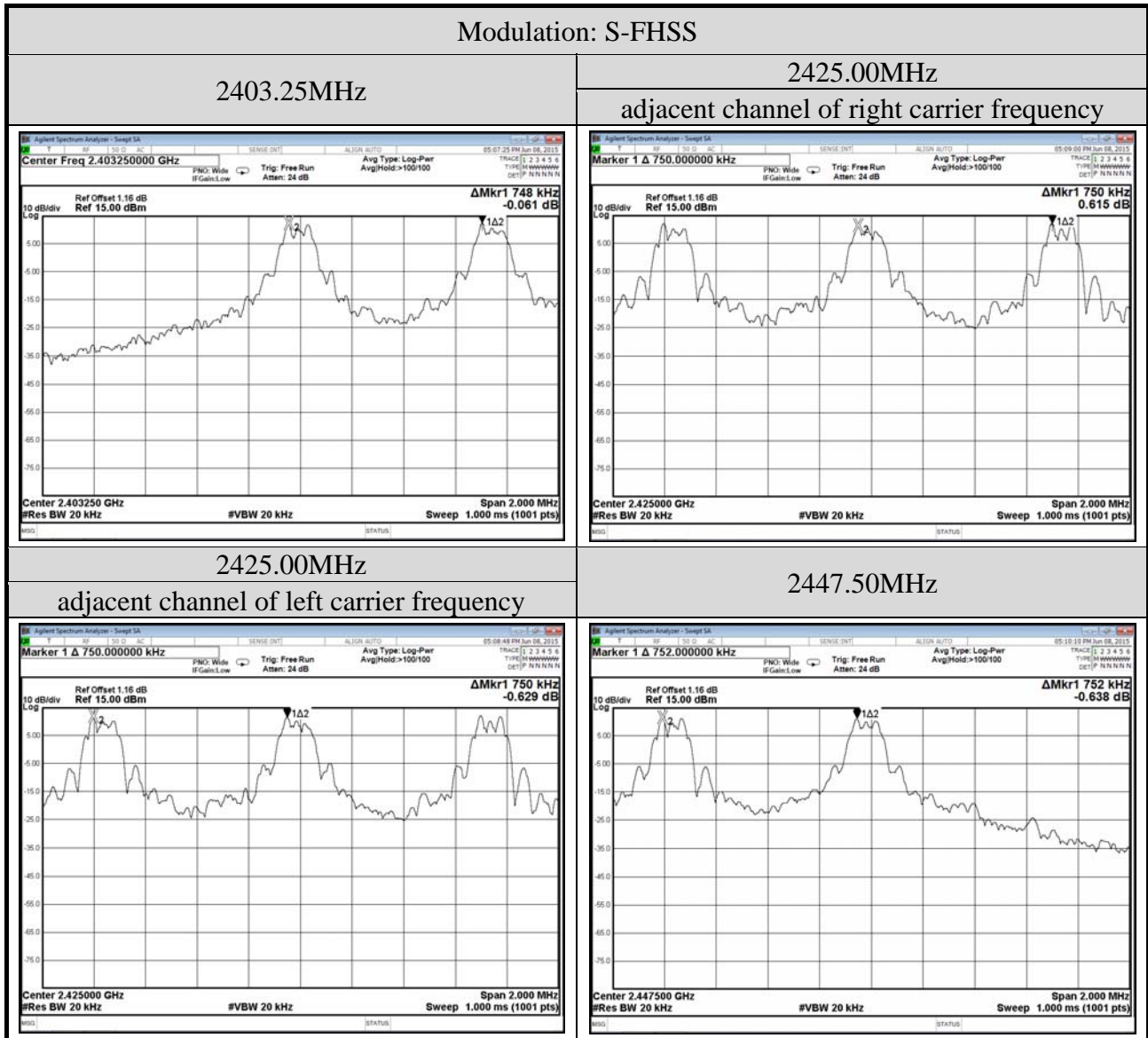
## A.2 CARRIER FREQUENCY SEPARATION MEASUREMENT

Test Date	2015/06/08	Temp./Hum.	25°C/58%
Cable Loss	1.16dB	Test Voltage	DC 6V

### A.2.1 Measurement Plots







### A.3 TIME OF OCCUPANCY MEASUREMENT

Test Date	2015/06/08	Temp./Hum.	25°C/58%
Cable Loss	1.16dB	Test Voltage	DC 6V

#### A.3.1 Time of Occupancy

Modulation	Centre Frequency (MHz)	Time of Occupancy (ms)	Maximum accumulated Time of Occupancy (ms)	Limit (ms)
T-FHSS	2407.500	1.56	58.032	<400
	2435.500	1.59	59.148	<400
	2467.500	1.53	56.916	<400

Duty cycle: 31 channels\*0.4 seconds = 12.4 seconds

#### **Test Frequency: 2407.500MHz**

For each second of 3 channel appearance, the longest time of occupancy for each of 12.4 seconds is:

$$3\text{channels} * 12.4 \text{ seconds} * 1.56\text{ms} = 58.032\text{ms}$$

#### **Test Frequency: 2435.500MHz**

For each second of 3 channel appearance, the longest time of occupancy for each of 12.4 seconds is:

$$3\text{channel} * 12.4 \text{ seconds} * 1.59\text{ms} = 59.148\text{ms}$$

#### **Test Frequency: 2467.500MHz**

For each second of 3 channel appearance, the longest time of occupancy for each of 12.4 seconds is:

$$3\text{channel} * 12.4 \text{ seconds} * 1.53\text{ms} = 56.916\text{ms}$$

Modulation	Centre Frequency (MHz)	Time of Occupancy (ms)	Maximum accumulated Time of Occupancy (ms)	Limit (ms)
S-FHSS	2403.25	2.98	357.60	<400
	2425.00	3.00	360.00	<400
	2447.50	3.02	362.40	<400

Duty cycle: 60 channels\*0.4 seconds = 24 seconds

**Test Frequency: 2403.250MHz**

For each second of 5 channel appearance, the longest time of occupancy for each of 12.4 seconds is:

$$5\text{channels} * 24 \text{ seconds} * 2.98\text{ms} = 357.60\text{ms}$$

**Test Frequency: 2425.00MHz**

For each second of 5 channel appearance, the longest time of occupancy for each of 12.4 seconds is:

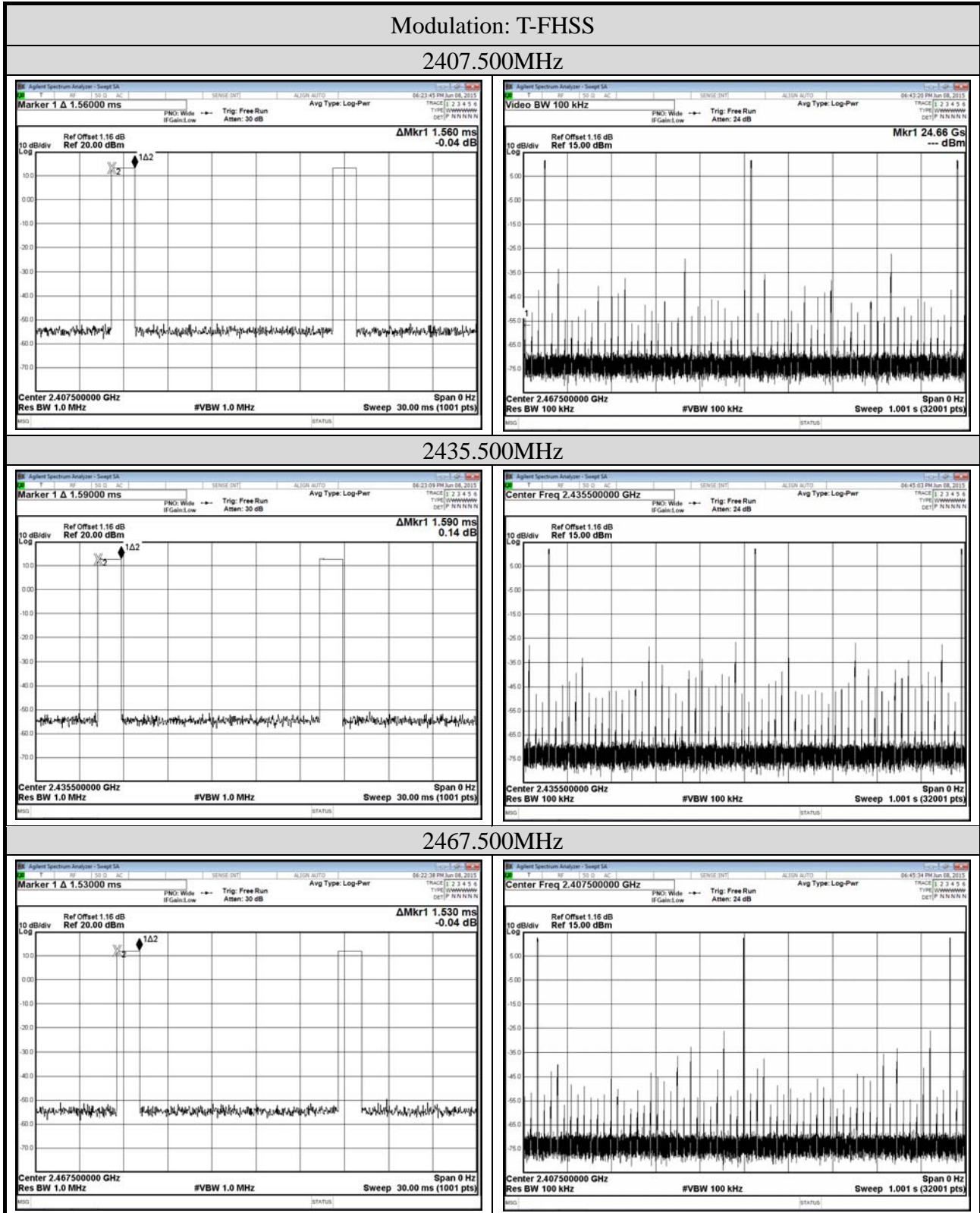
$$5\text{channel} * 12.4 \text{ seconds} * 3.00\text{ms} = 360.00\text{ms}$$

**Test Frequency: 2447.50MHz**

For each second of 5 channel appearance, the longest time of occupancy for each of 12.4 seconds is:

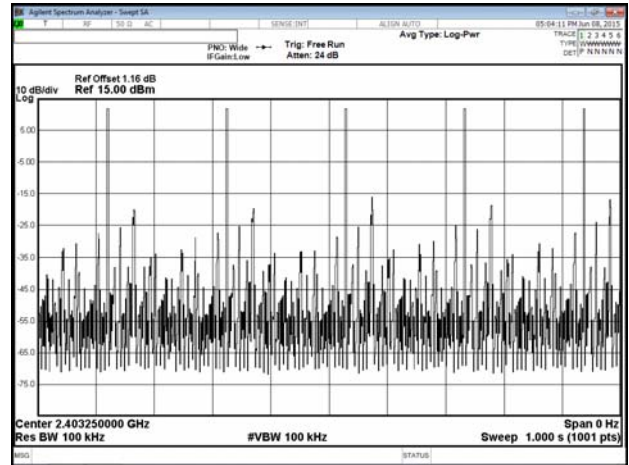
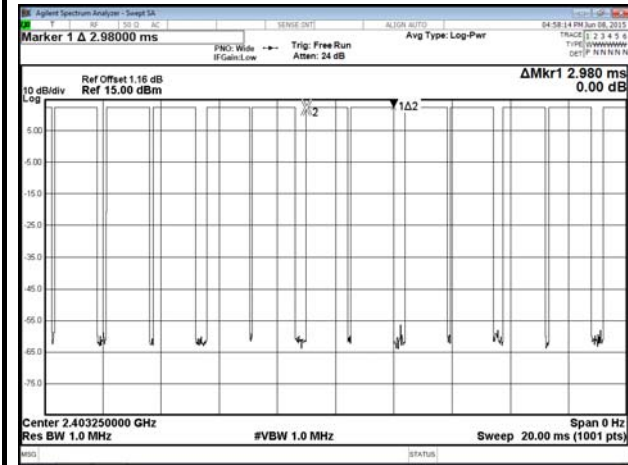
$$5\text{channel} * 12.4 \text{ seconds} * 3.02\text{ms} = 362.40\text{ms}$$

A.3.2 Measurement Plots

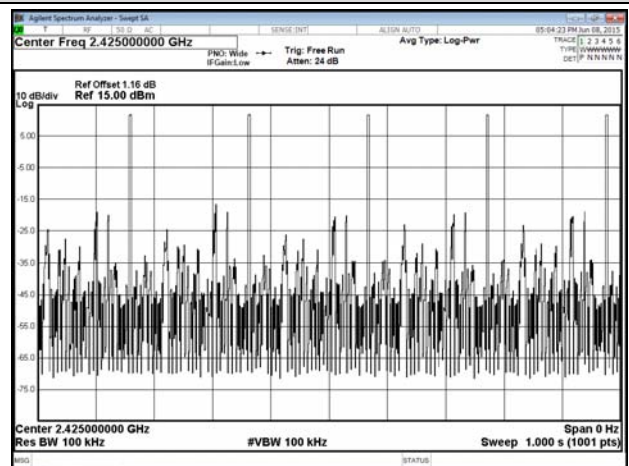
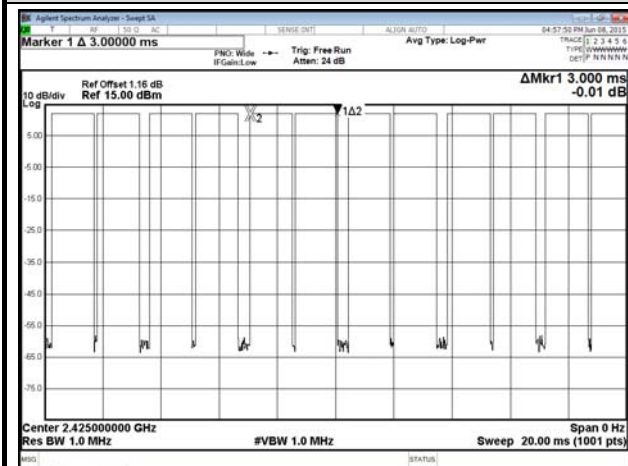


Modulation: S-FHSS

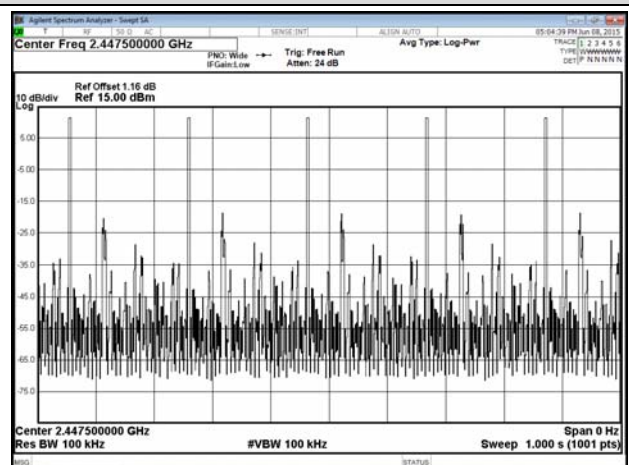
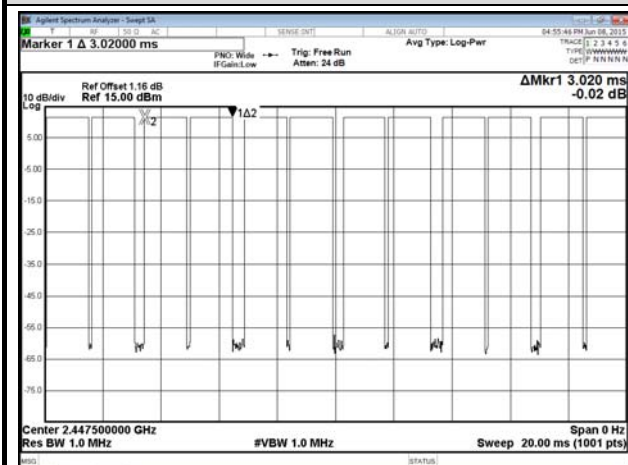
2403.25MHz



2425.00MHz



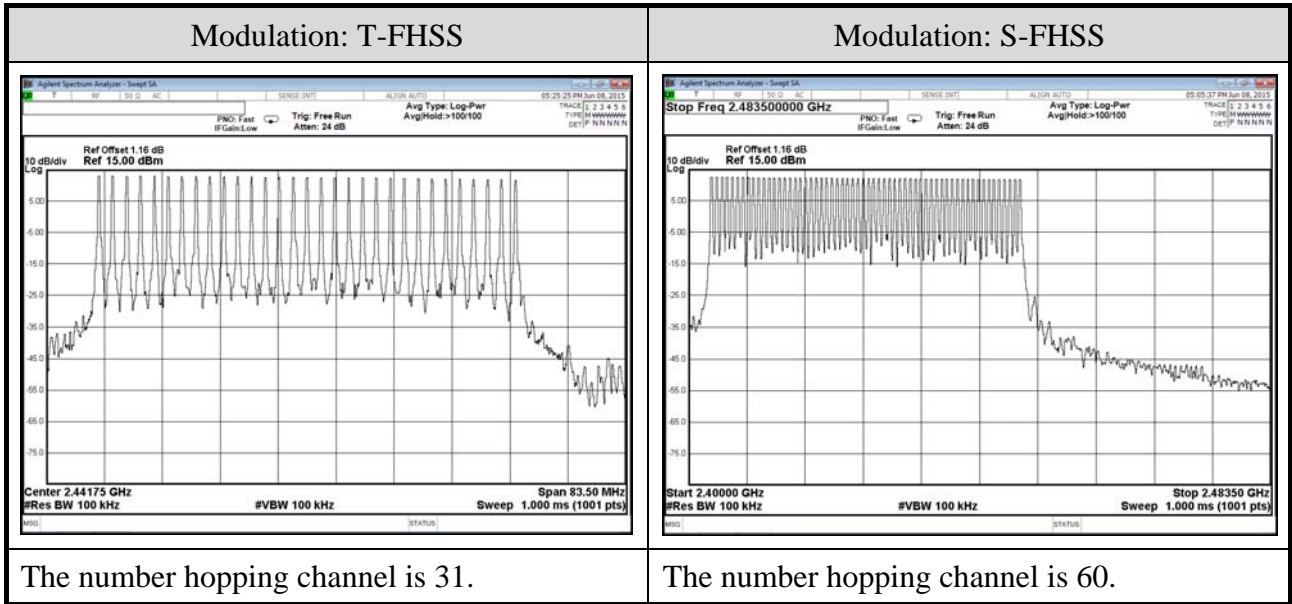
2447.50MHz



## A.4 NUMBER OF HOPPING CHANNELS MEASUREMENT

Test Date	2015/06/08	Temp./Hum.	25°C/58%
Cable Loss	1.16dB	Test Voltage	DC 6V

### A.4.1 Measurement Plots





## A.5 MAXIMUM PEAK OUTPUT POWER MEASUREMENT

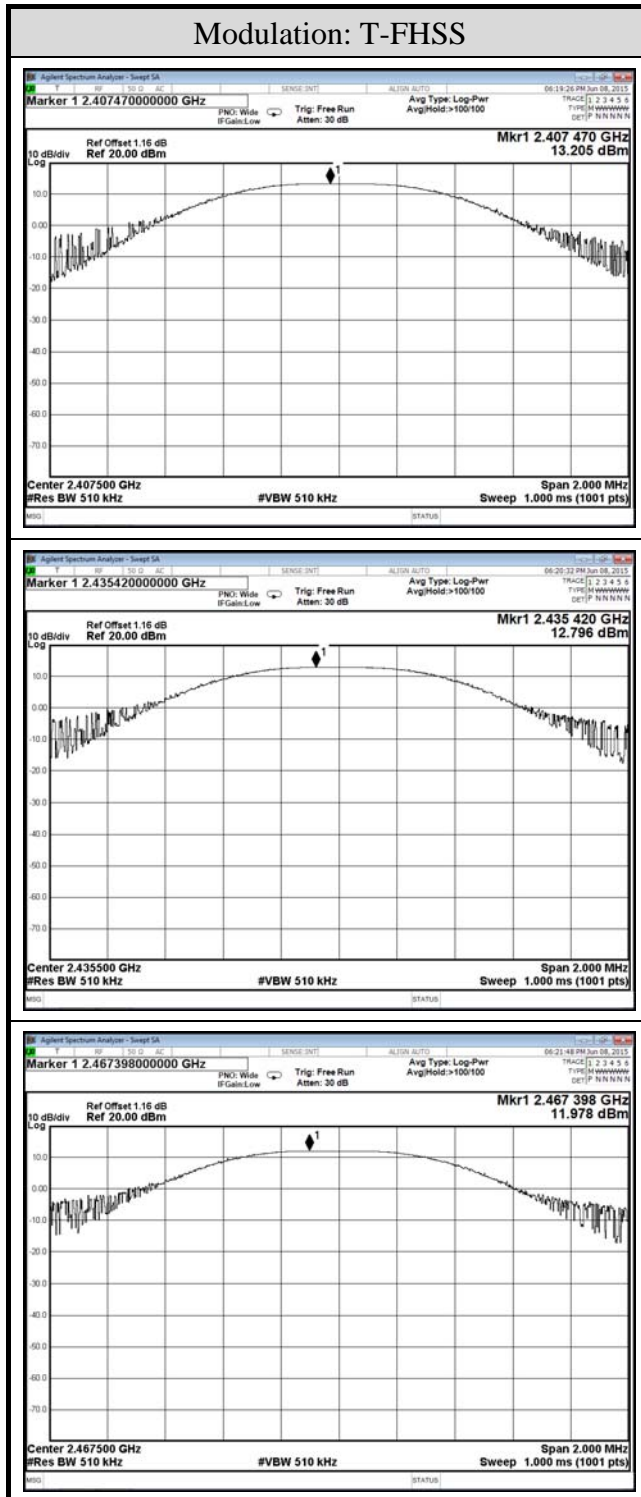
Test Date	2015/06/08	Temp./Hum.	25°C/58%
Cable Loss	1.16dB	Test Voltage	DC 6V

### A.5.1 Output Power

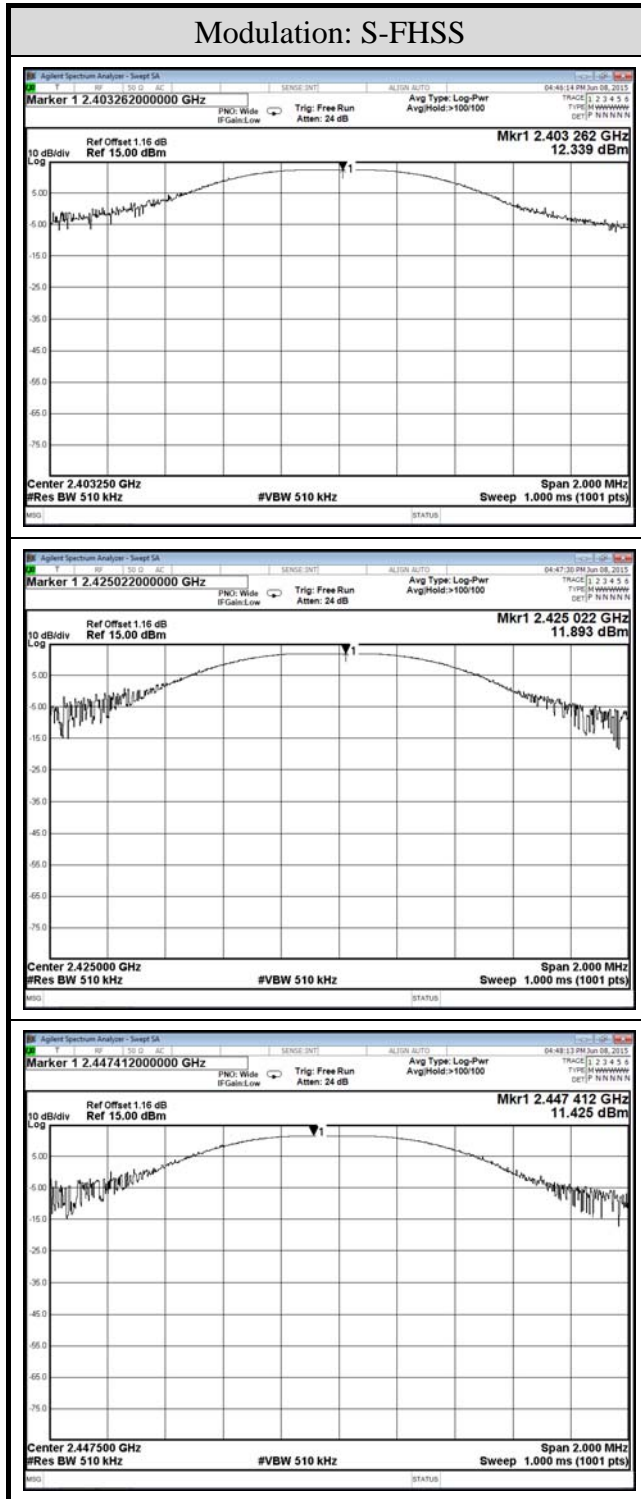
Modulation	Centre Frequency (MHz)	Peak Output Power		Limit
		dBm	W	
T-FHSS	2407.50	13.205	0.021	21dBm (0.125W)
	2435.50	12.796	0.019	
	2467.50	11.978	0.016	

Modulation	Centre Frequency (MHz)	Peak Output Power		Limit
		dBm	W	
S-FHSS	2403.25	12.339	0.017	21dBm (0.125W)
	2425.00	11.893	0.015	
	2447.50	11.425	0.014	

A.5.2 Measurement Plots



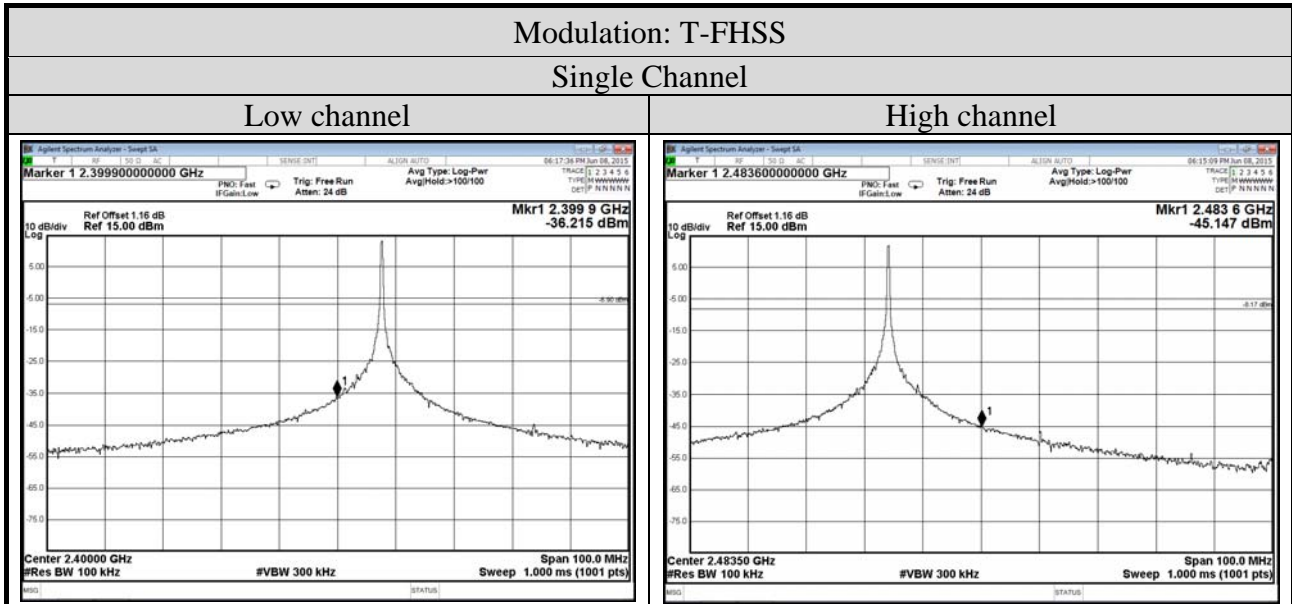




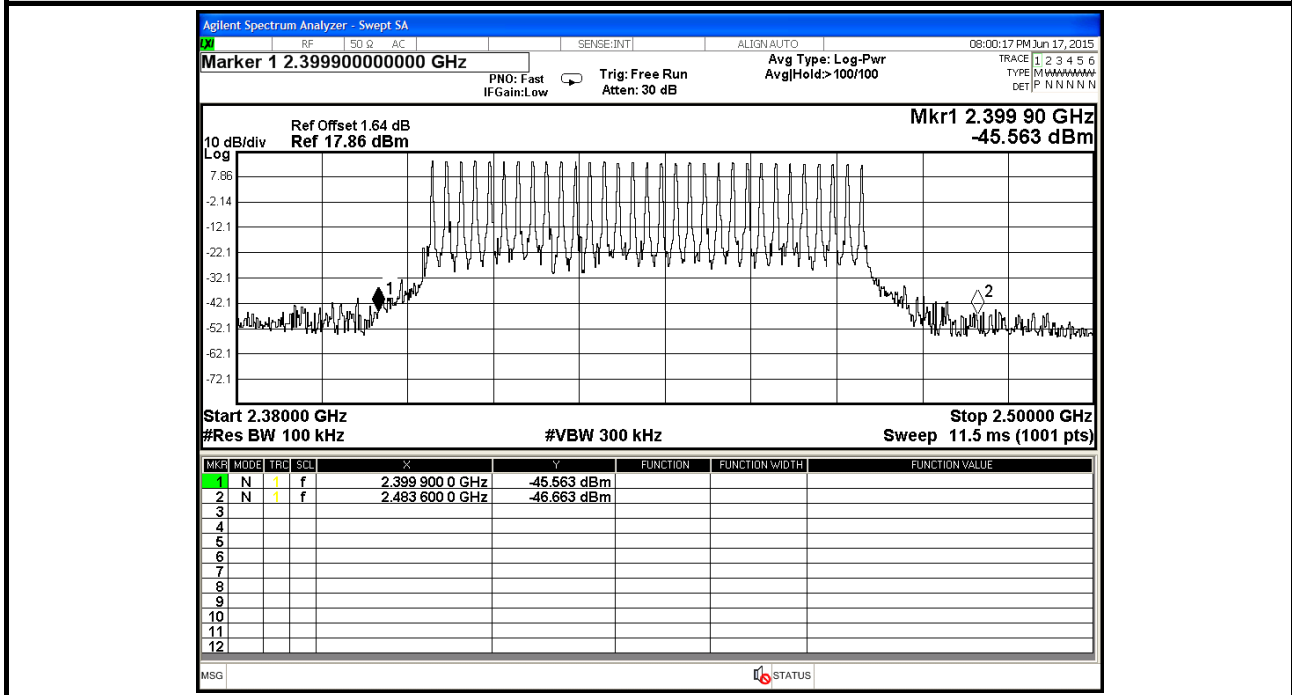
## A.6 EMISSION LIMITATIONS MEASUREMENT

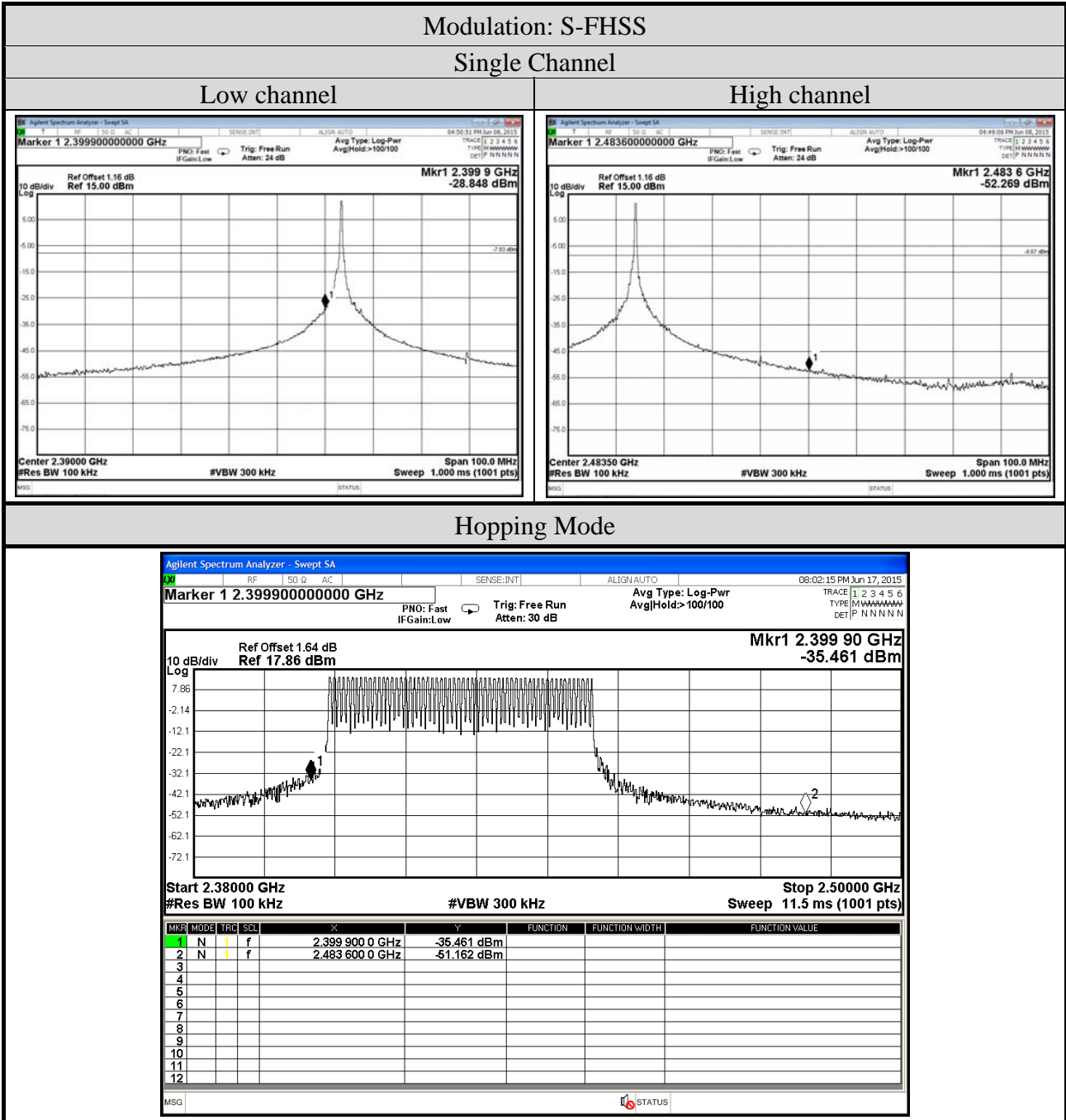
### A.6.1 Band Edge

Test Date	2015/06/08 ~ 17	Temp./Hum.	25°C/58%
Cable Loss	1.16dB, 1.64dB	Test Voltage	DC 6V



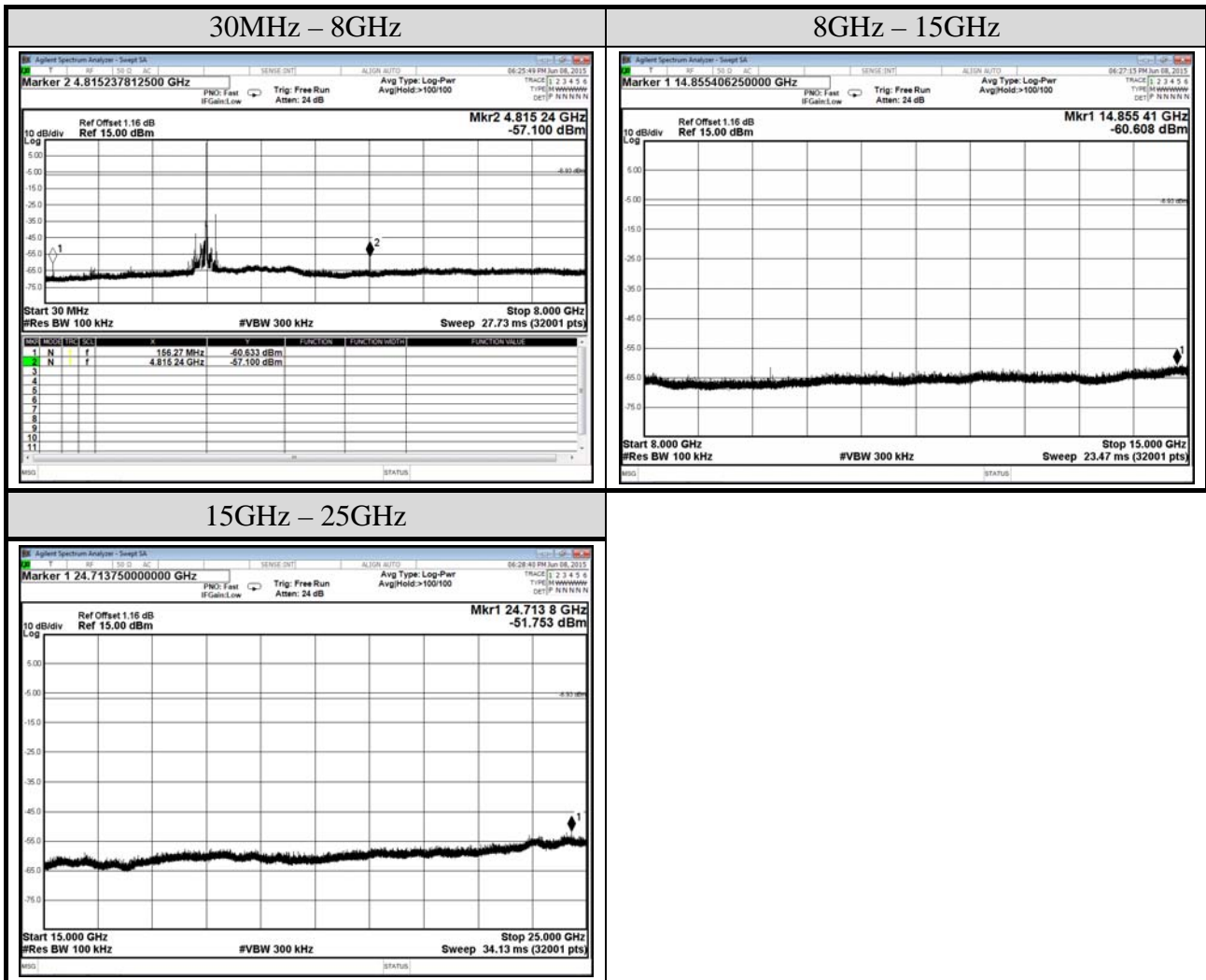
### Hopping Mode





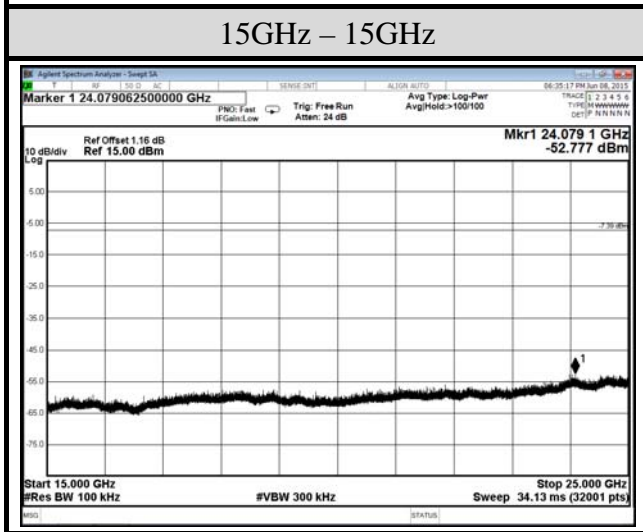
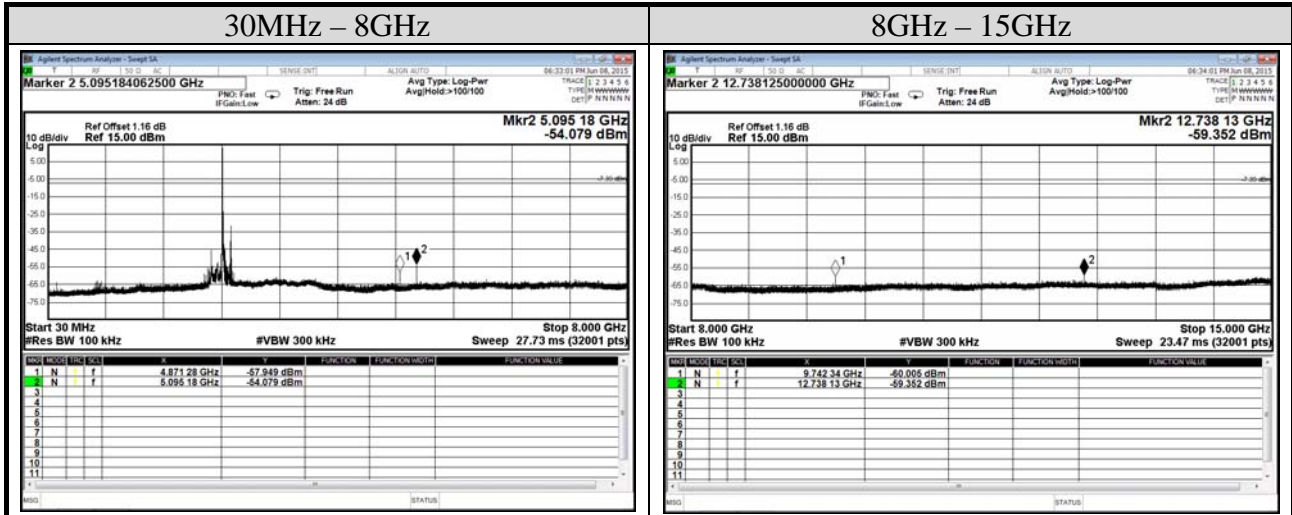
A.6.2 Spurious Emission

Test Date	2015/06/08	Temp./Hum.	25°C/58%
Mode	TX	Modulation	T-FHSS
		Frequency	2407.50MHz
Cable Loss	1.16dB	Test Voltage	DC 6V



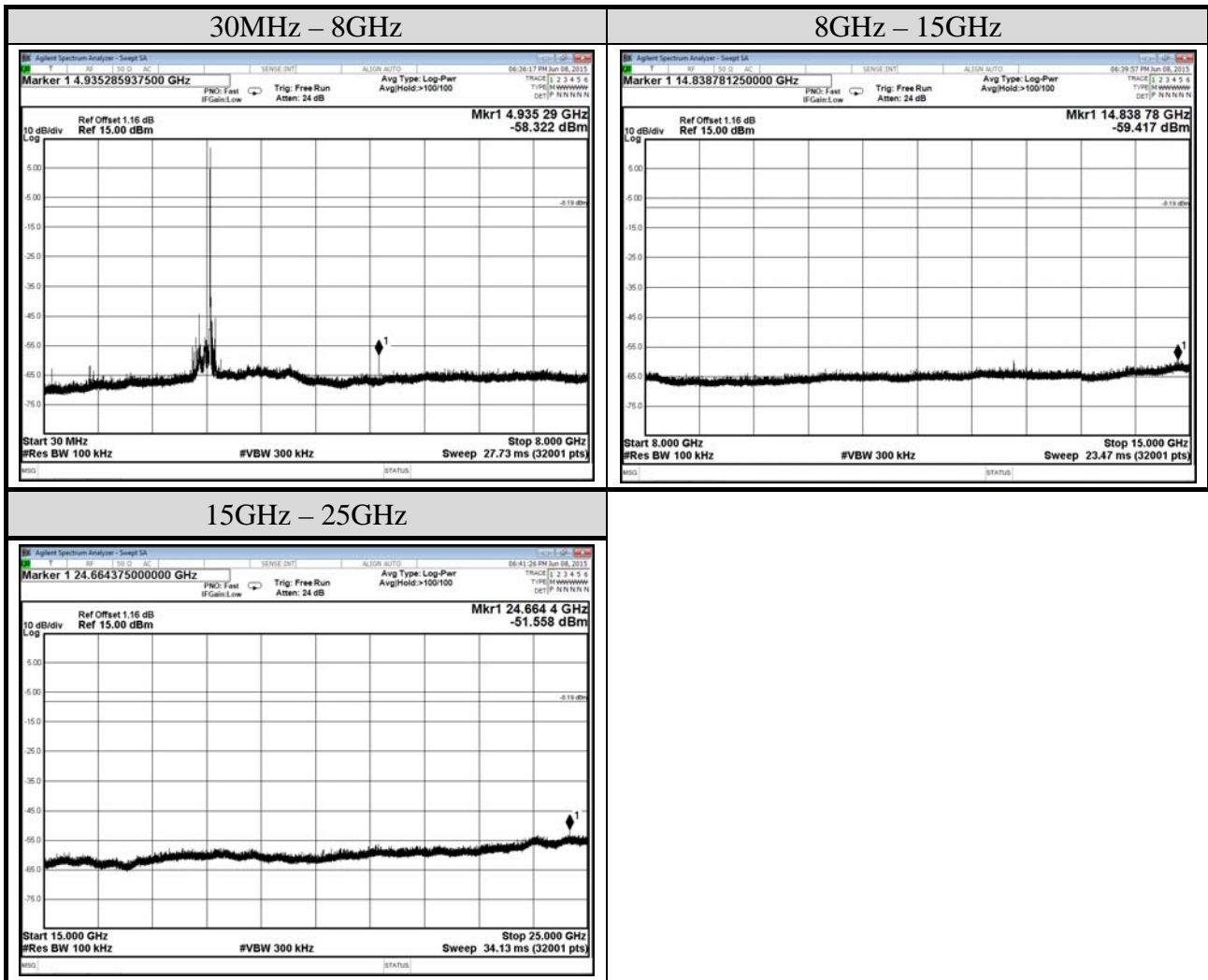
Note: All results have been included cable loss and simultaneous factor.

Test Date	2015/06/08	Temp./Hum.	25°C/58%
Mode	TX	Modulation	T-FHSS
		Frequency	2437.50MHz
Cable Loss	1.16dB	Test Voltage	DC 6V



Note: All results have been included cable loss and simultaneous factor.

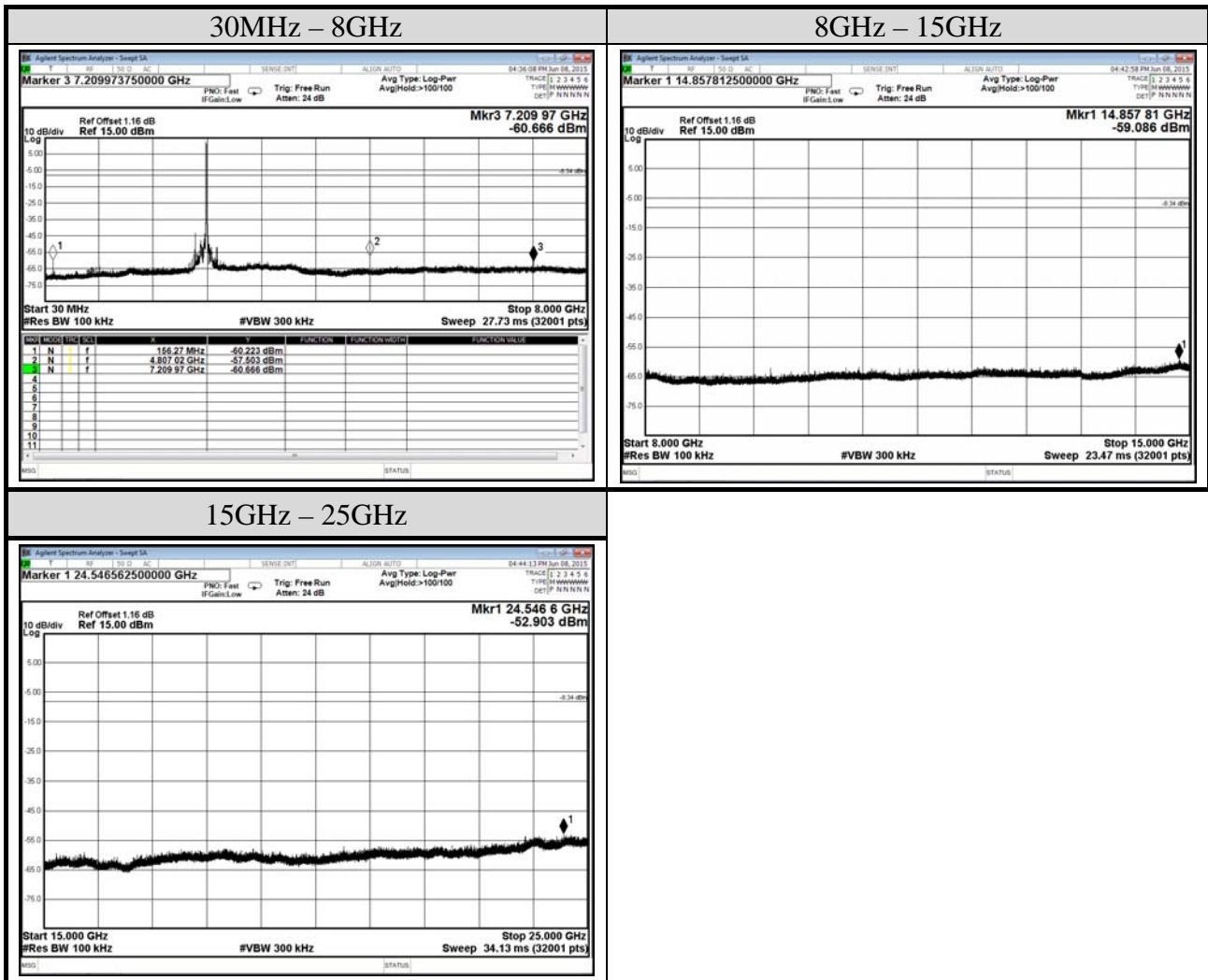
Test Date	2015/06/08	Temp./Hum.	25°C/58%
Mode	TX	Modulation	T-FHSS
		Frequency	2467.50MHz
Cable Loss	1.16dB	Test Voltage	DC 6V



Note: All results have been included cable loss and simultaneous factor.

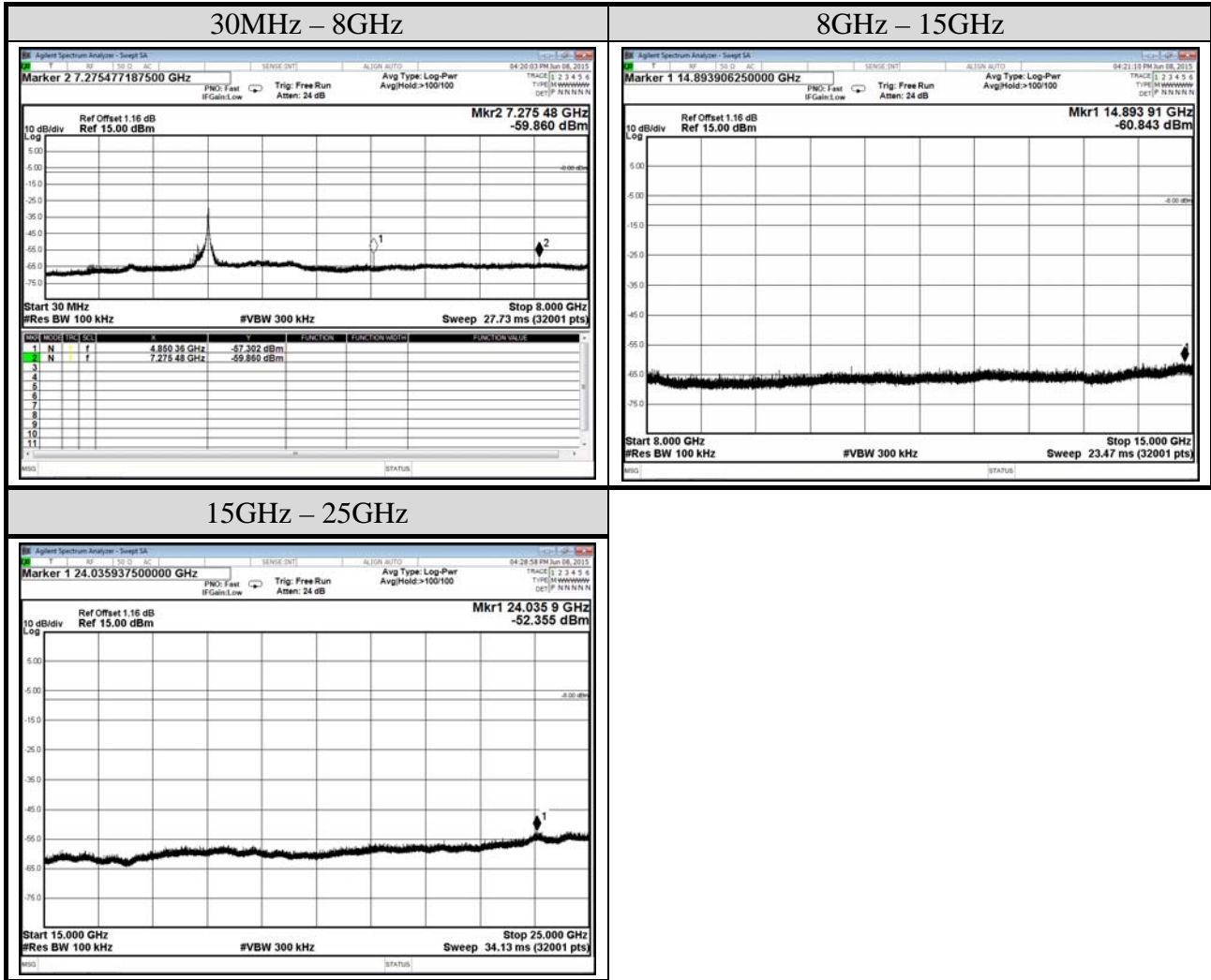


Test Date	2015/06/08	Temp./Hum.	25°C/58%
Mode	TX	Modulation	S-FHSS
		Frequency	2403.25MHz
Cable Loss	1.16dB	Test Voltage	DC 6V



Note: All results have been included cable loss and simultaneous factor.

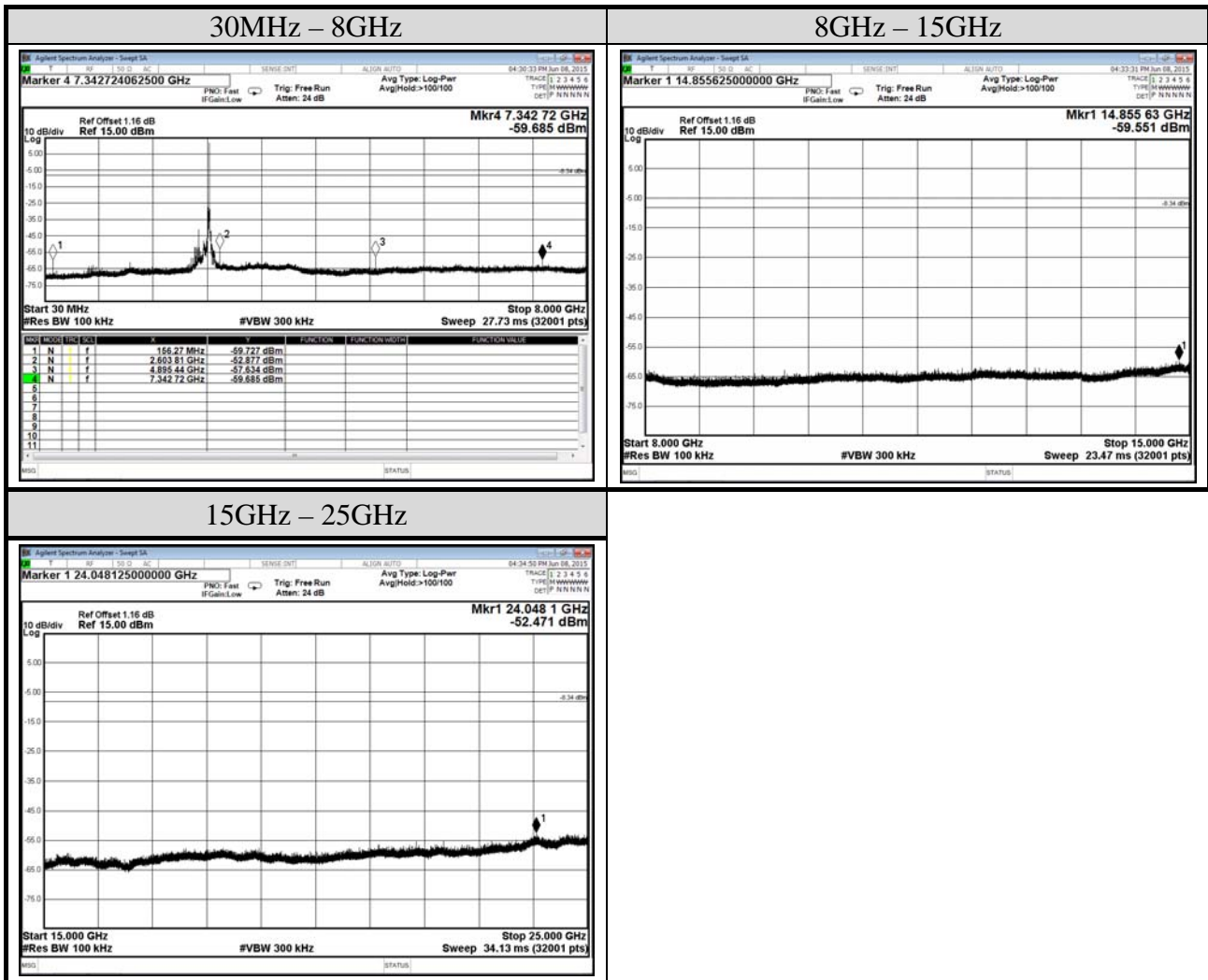
Test Date	2015/06/08	Temp./Hum.	25°C/58%
Mode	TX	Modulation	S-FHSS
		Frequency	2425.00MHz
Cable Loss	1.16dB	Test Voltage	DC 6V



Note: All results have been included cable loss and simultaneous factor.



Test Date	2015/06/08	Temp./Hum.	25°C/58%
Mode	TX	Modulation	S-FHSS
		Frequency	2447.50MHz
Cable Loss	1.16dB	Test Voltage	DC 6V



Note: All results have been included cable loss and simultaneous factor.