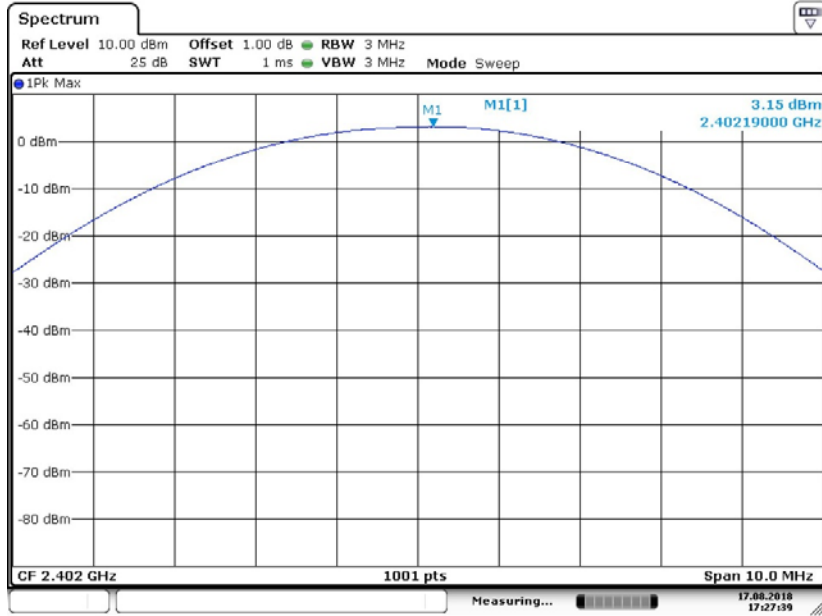
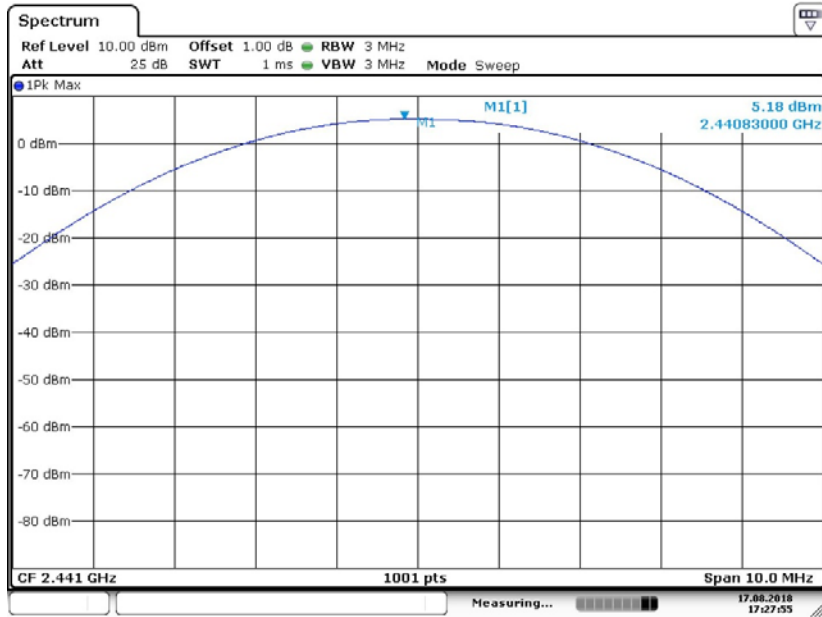


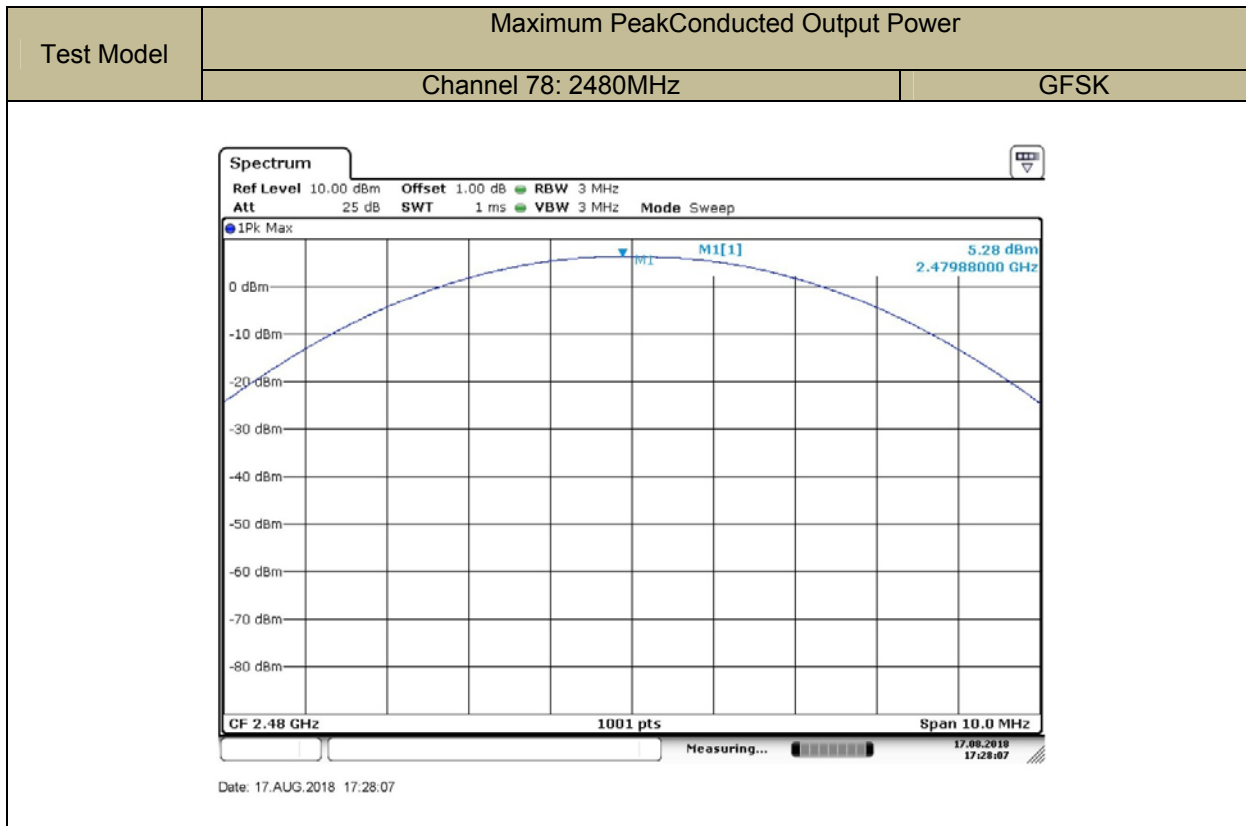


Test Model	Maximum PeakConducted Output Power	
	Channel 0: 2402MHz	GFSK

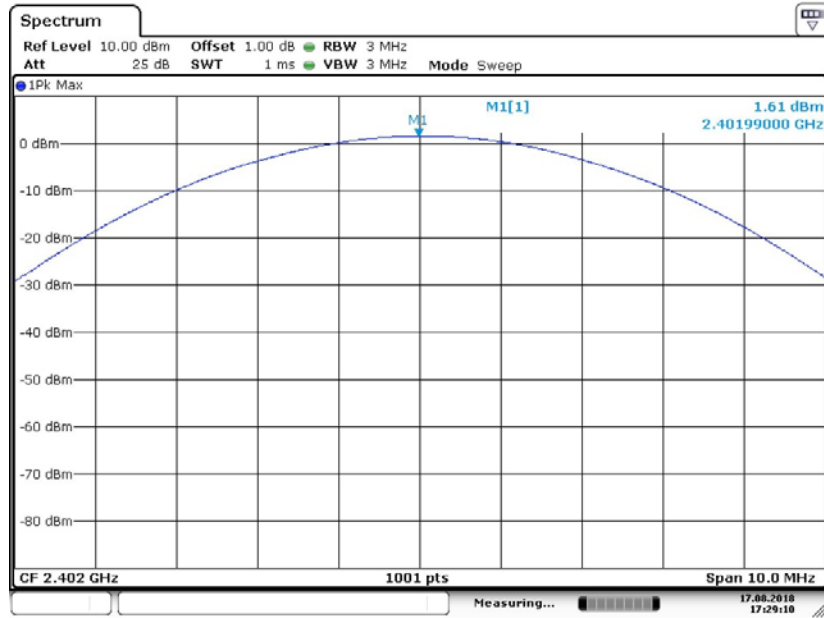


Test Model	Maximum PeakConducted Output Power	
	Channel 39: 2441MHz	GFSK



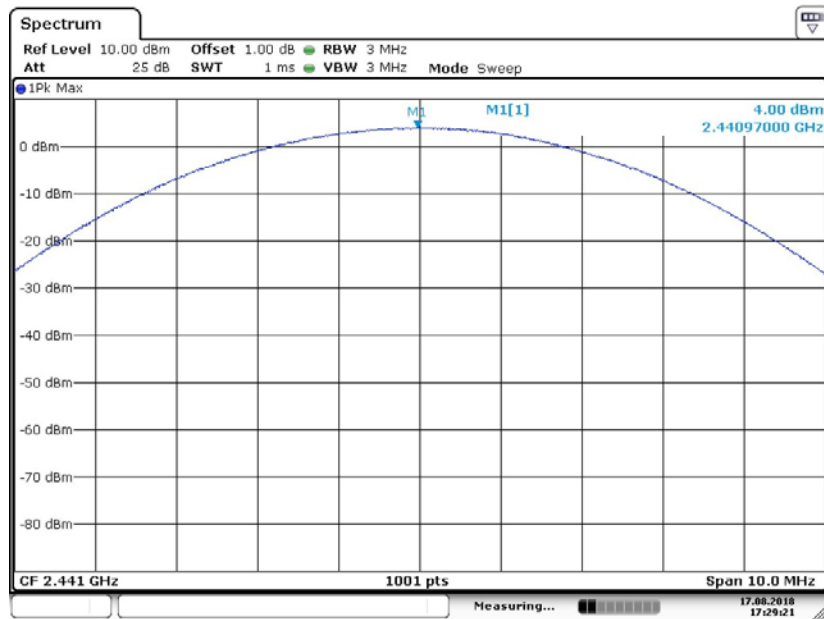


Test Model	Maximum PeakConducted Output Power	
	Channel 0: 2402MHz	8DPSK



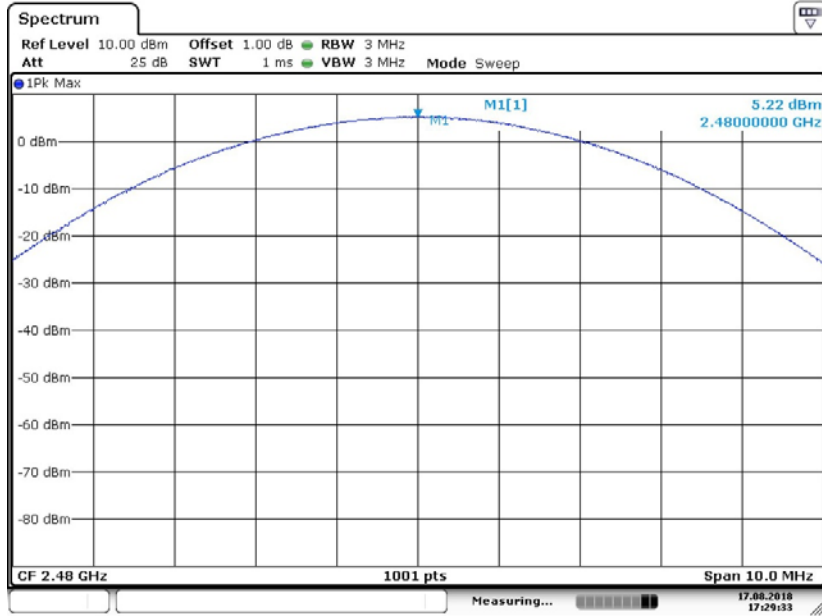
Date: 17.AUG.2018 17:29:10

Test Model	Maximum PeakConducted Output Power	
	Channel 39: 2441MHz	8DPSK



Date: 17.AUG.2018 17:29:22

Test Model	Maximum Peak Conducted Output Power	
	Channel 78: 2480MHz	8DPSK



Date: 17.AUG.2018 17:29:34

## 9.7 CONDUCTED SUPRIIOUS EMISSION

### 9.7.1 Applicable Standard

According to FCC Part 15.247(d) and DA 00-705

### 9.7.2 Conformance Limit

According to FCC Part 15.247(d):

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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, provided the transmitter demonstrates compliance with the peak conducted power limits.

### 9.7.3 Test Configuration

Test according to clause 7.1 radio frequency test setup 1

### 9.7.4 Test Procedure

The transmitter output (antenna port) was connected to the spectrum analyzer

#### ■ Reference level measurement

Establish a reference level by using the following procedure:

Set instrument center frequency to DSS channel center frequency.

Set Span = approximately 5 times the 20 dB bandwidth, centered on a hopping channel.

Set the RBW = 100 kHz. Set the VBW  $\geq 3 \times$  RBW.

Set Detector = peak. Set Sweep time = auto couple.

Set Trace mode = max hold. Allow trace to fully stabilize.

Use the peak marker function to determine the maximum Maximumconductetedlevel.

Note that the channel found to contain the maximum conducteted level can be used to establish the reference level.

#### ■ Band-edge Compliance of RF Conducted Emissions

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the emission operating on the channel closest to the band-edge, as well as any modulation products which fall outside of the authorized band of operation

Set RBW  $\geq 1\%$  of the span=100kHzSet VBW  $\geq$  RBW

Set Sweep = autoSetDetector function = peakSetTrace = max hold

Allow the trace to stabilize. Set the marker on the emission at the bandedge, or on the highest modulation product outside of the band, if this level is greater than that at the bandedge. Enable the marker-delta function, then use the marker-to-peak function to move the marker to the peak of the in-band emission.

The marker-delta value now displayed must comply with the limit specified in this Section.

Now, using the same instrument settings, enable the hopping function of the EUT. Allow the trace to stabilize. Follow the same procedure listed above to determine if any spurious emissions caused by the hopping function also comply with the specified limit.

#### ■ ConductetedSpurious RF Conducted Emission

Use the following spectrum analyzer settings:

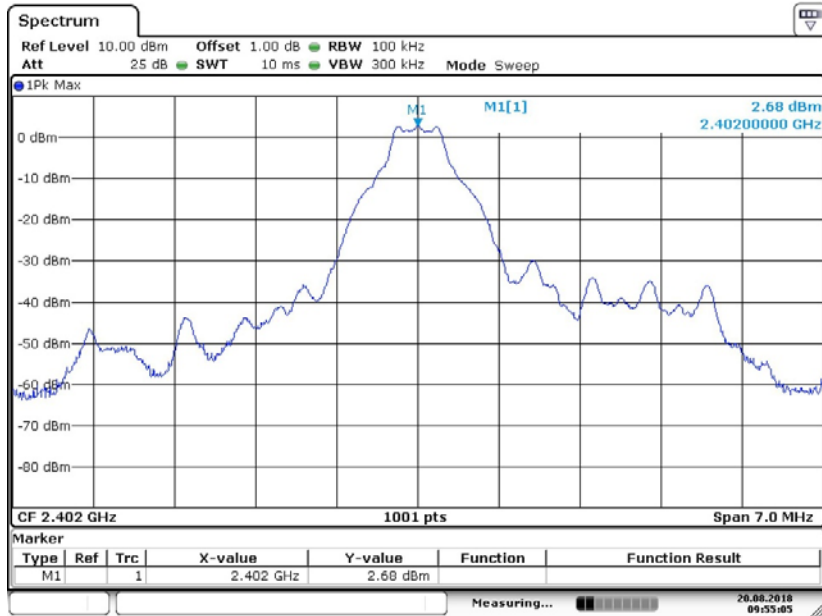
Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic.(30MHz to 25GHz).Set RBW = 100 kHzSetVBW  $\geq$  RBW

Set Sweep = autoSetDetector function = peakSetTrace = max hold

Allow the trace to stabilize. Set the marker on the peak of any spurious emission recorded. The level displayed must comply with the limit specified in this Section.

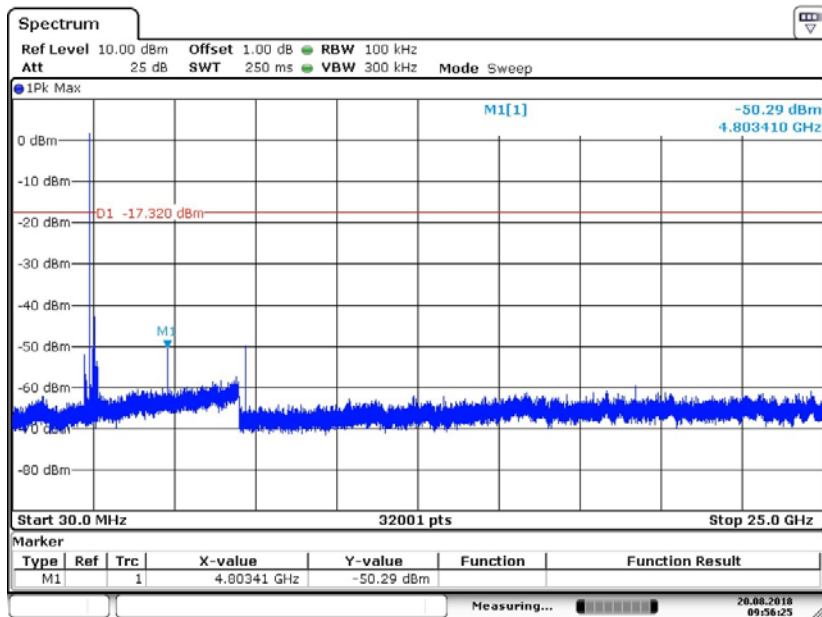
### 9.7.5 Test Results

Test Model	Maximum Conduceted Level RBW=100kHz	
	Channel 0: 2402MHz	GFSK



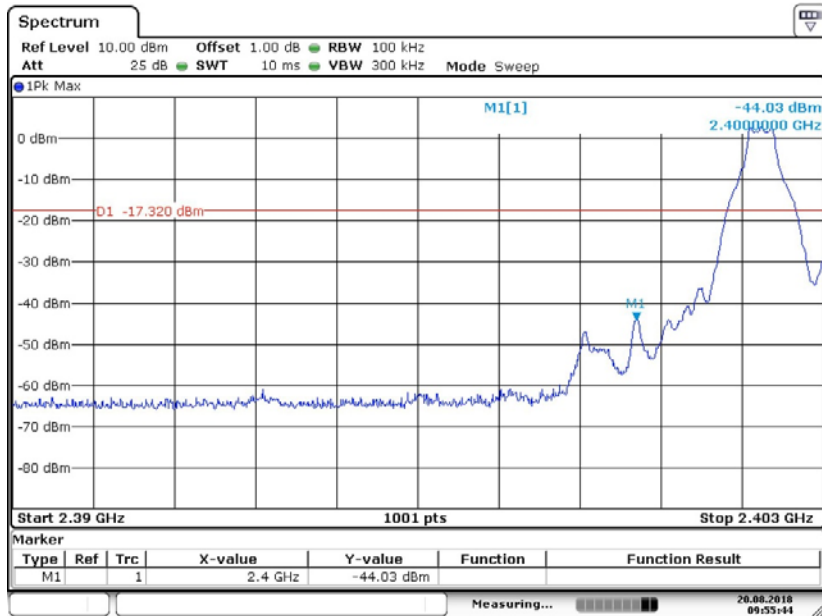
Date: 20.AUG.2018 09:55:04

Test Model	ConducetedSpurious RF Conducted Emission	
	Channel 0: 2402MHz	GFSK



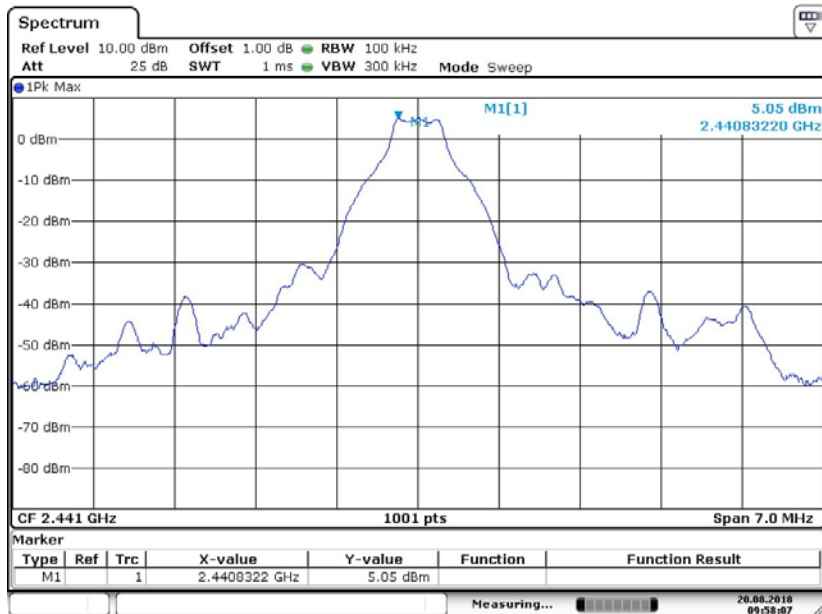
Date: 20.AUG.2018 09:56:25

Test Model	Band-edge Conducted Emissions	
	Channel 0: 2402MHz	GFSK



Date: 20.AUG.2018 09:55:44

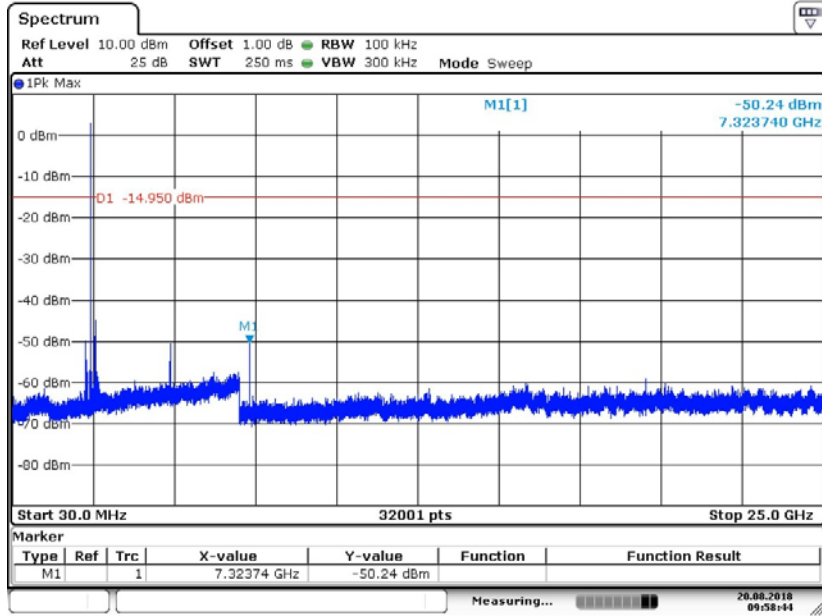
Test Model	Maximum Conduced Level RBW=100kHz	
	Channel 39: 2441MHz	GFSK



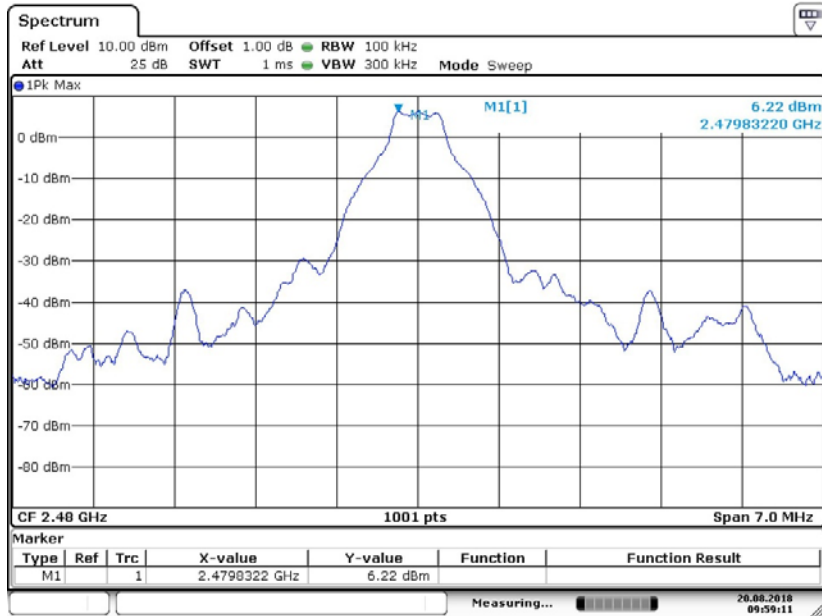
Date: 20.AUG.2018 09:58:07



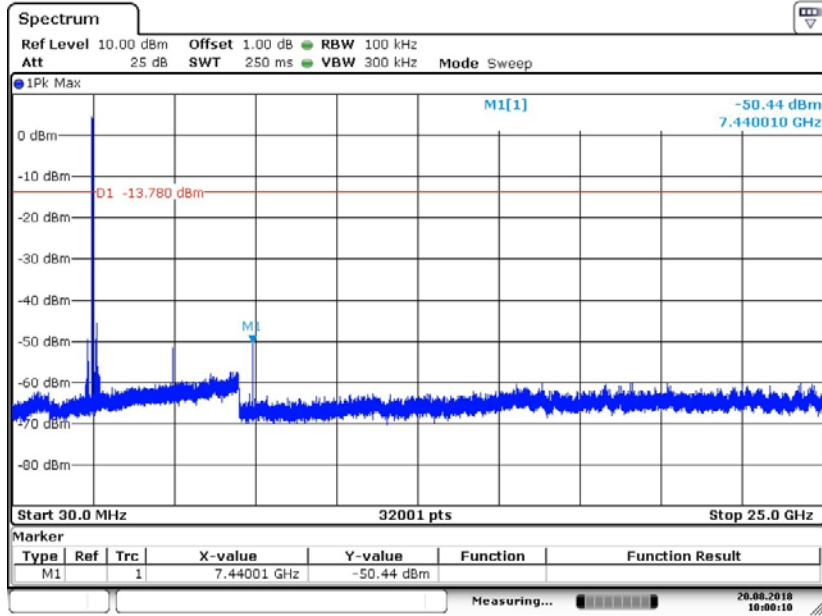
Test Model	Conducted Spurious RF Conducted Emission	
	Channel 39: 2441MHz	GFSK



Test Model	Maximum Conducted Level RBW=100kHz	
	Channel 78: 2480MHz	GFSK

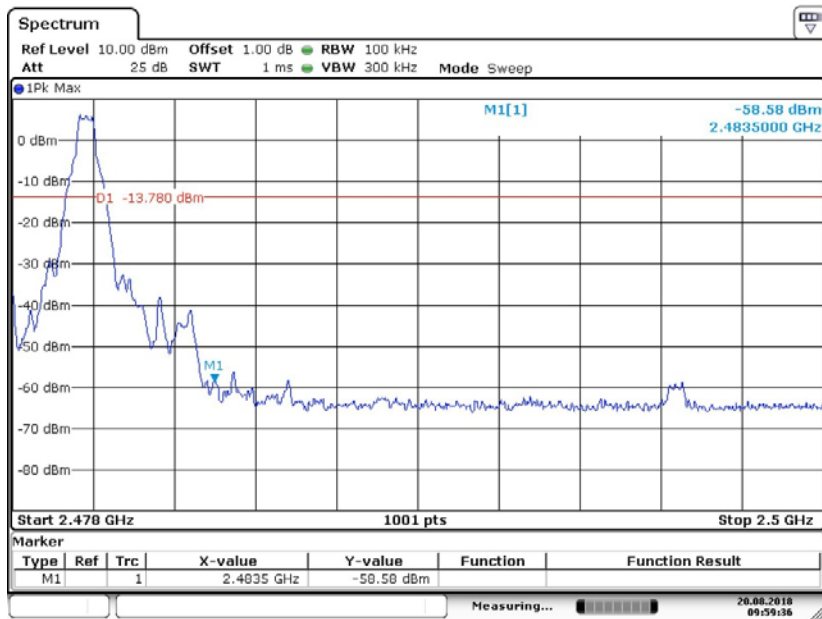


Test Model	Conducted Spurious RF Conducted Emission	
	Channel 78: 2480MHz	GFSK



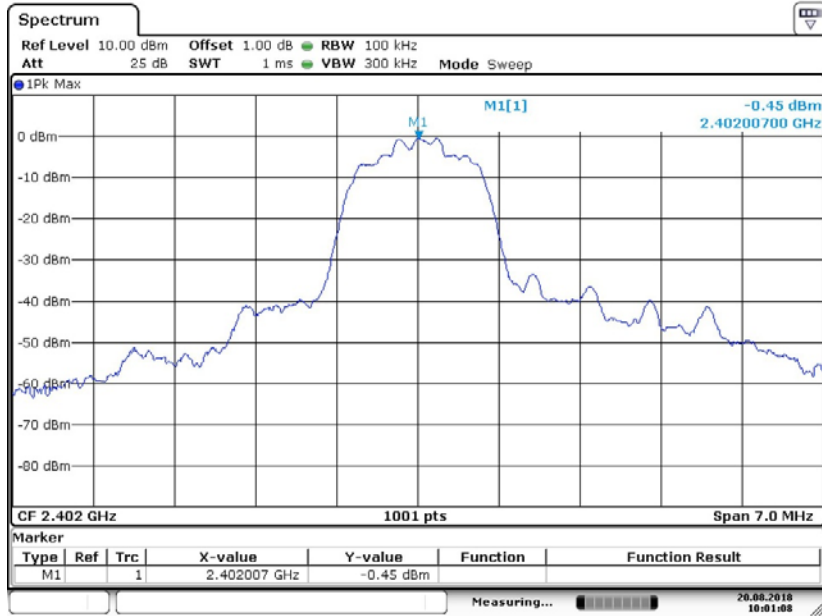
Date: 20.AUG.2018 10:00:09

Test Model	Band-edge Conducted Emissions	
	Channel 78: 2480MHz	GFSK



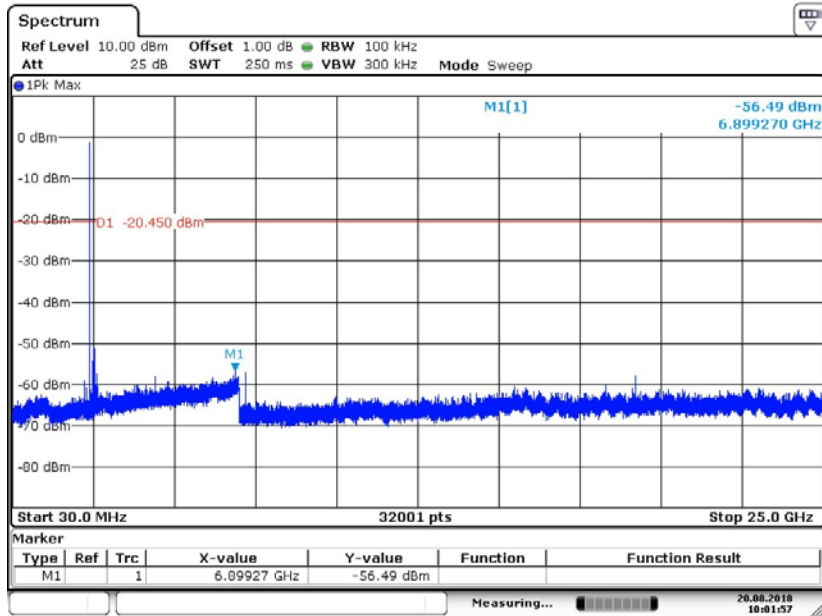
Date: 20.AUG.2018 09:59:36

Test Model	Maximum Conduceted Level RBW=100kHz	
	Channel 0: 2402MHz	8DPSK



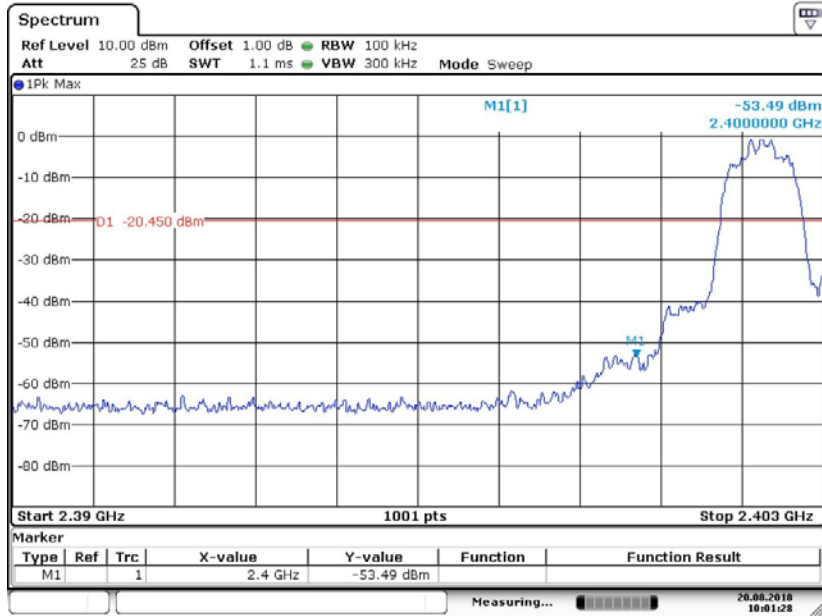
Date: 20.AUG.2018 10:01:08

Test Model	ConducetedSpurious RF Conducted Emission	
	Channel 0: 2402MHz	8DPSK



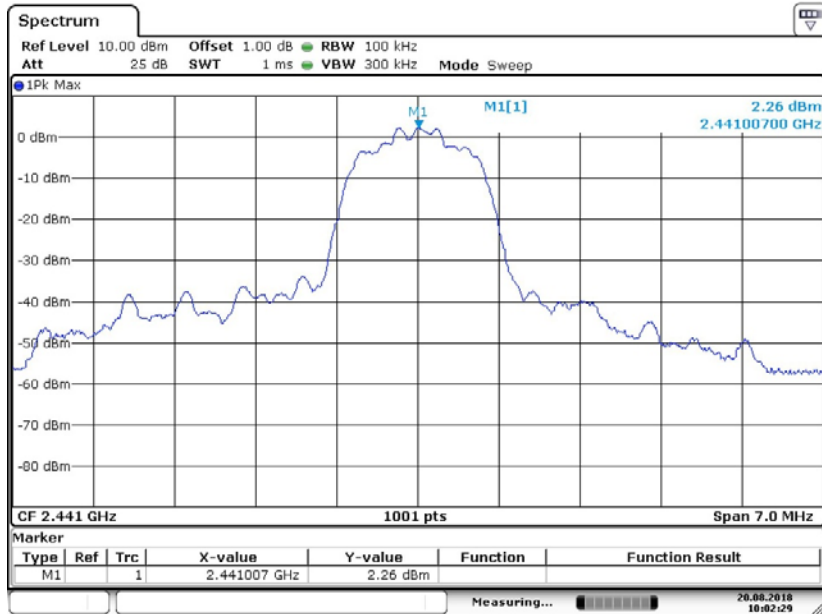
Date: 20.AUG.2018 10:01:56

Test Model	Band-edge Conducted Emissions	
	Channel 0: 2402MHz	8DPSK



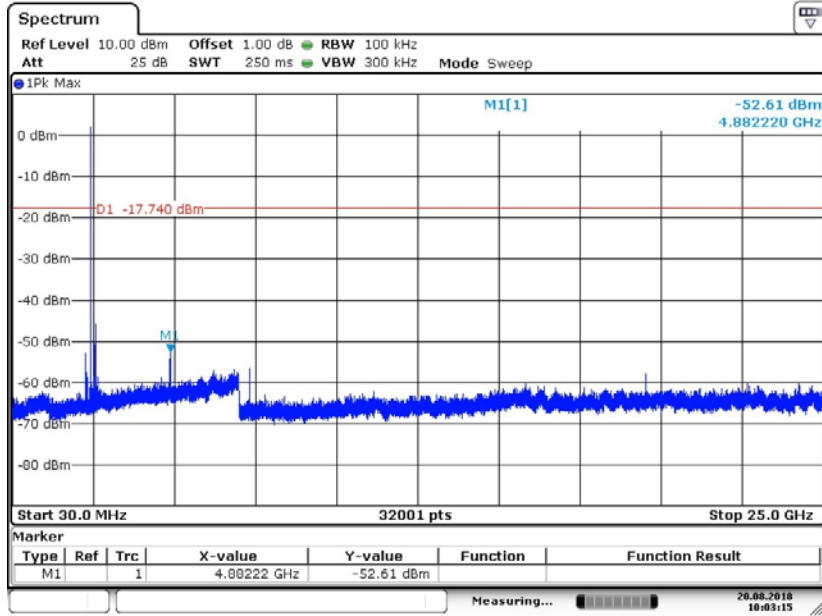
Date: 20.AUG.2018 10:01:27

Test Model	Maximum Conducted Level RBW=100kHz	
	Channel 39: 2441MHz	8DPSK



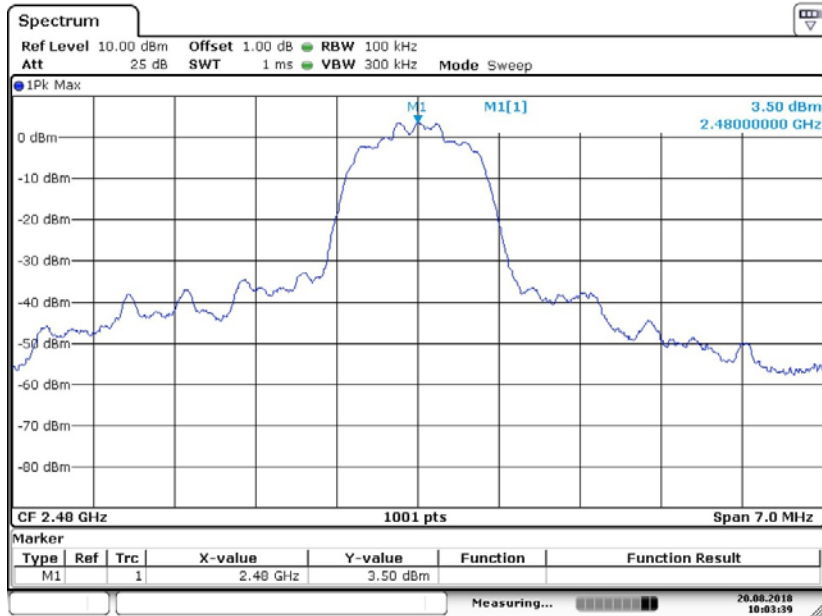
Date: 20.AUG.2018 10:02:29

Test Model	Conducted Spurious RF Conducted Emission	
	Channel 39: 2441MHz	8DPSK



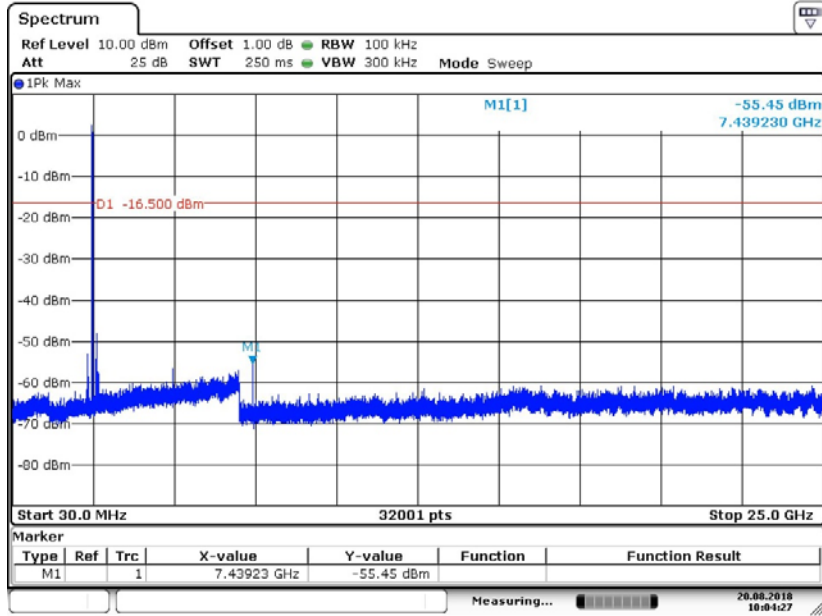
Date: 20.AUG.2018 10:03:15

Test Model	Maximum Conduced Level RBW=100kHz	
	Channel 78: 2480MHz	8DPSK



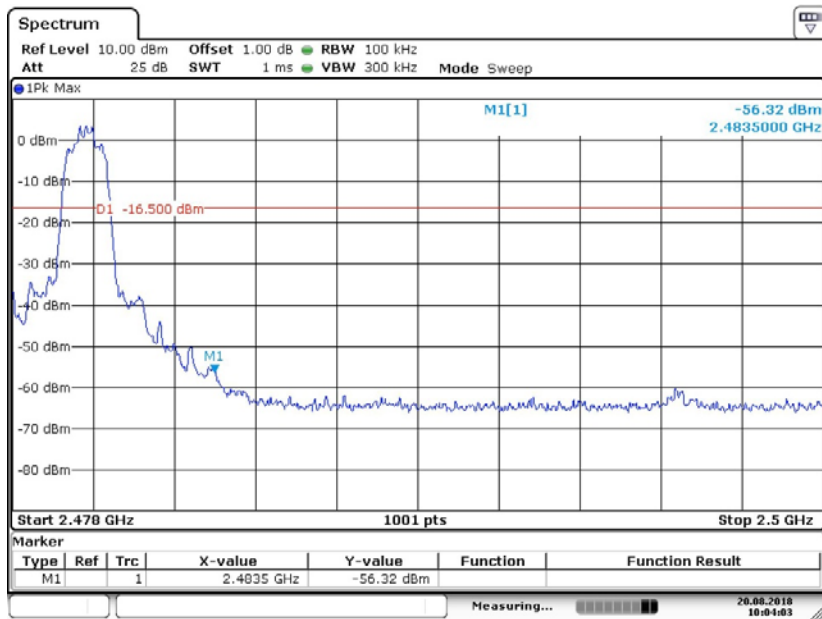
Date: 20.AUG.2018 10:03:39

Test Model	Conducted Spurious RF Conducted Emission	
	Channel 78: 2480MHz	8DPSK

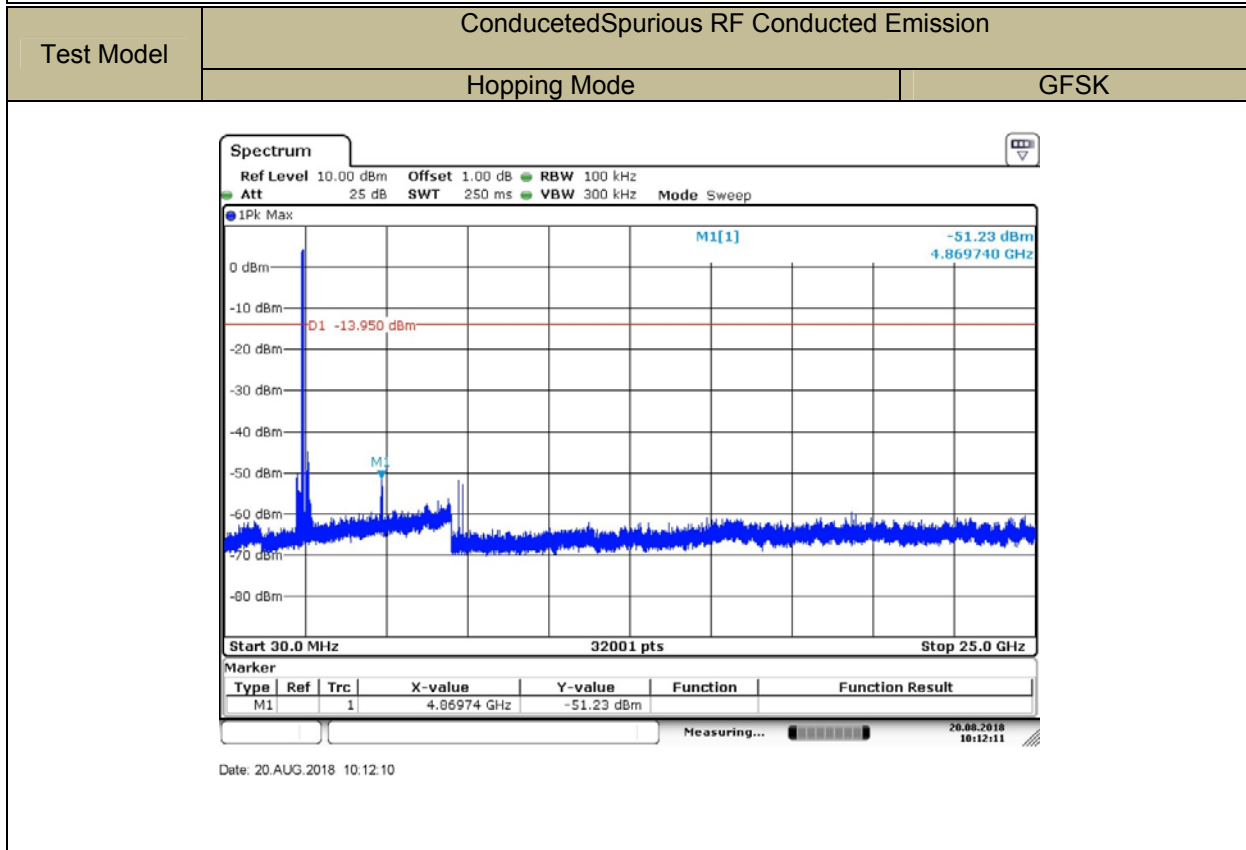
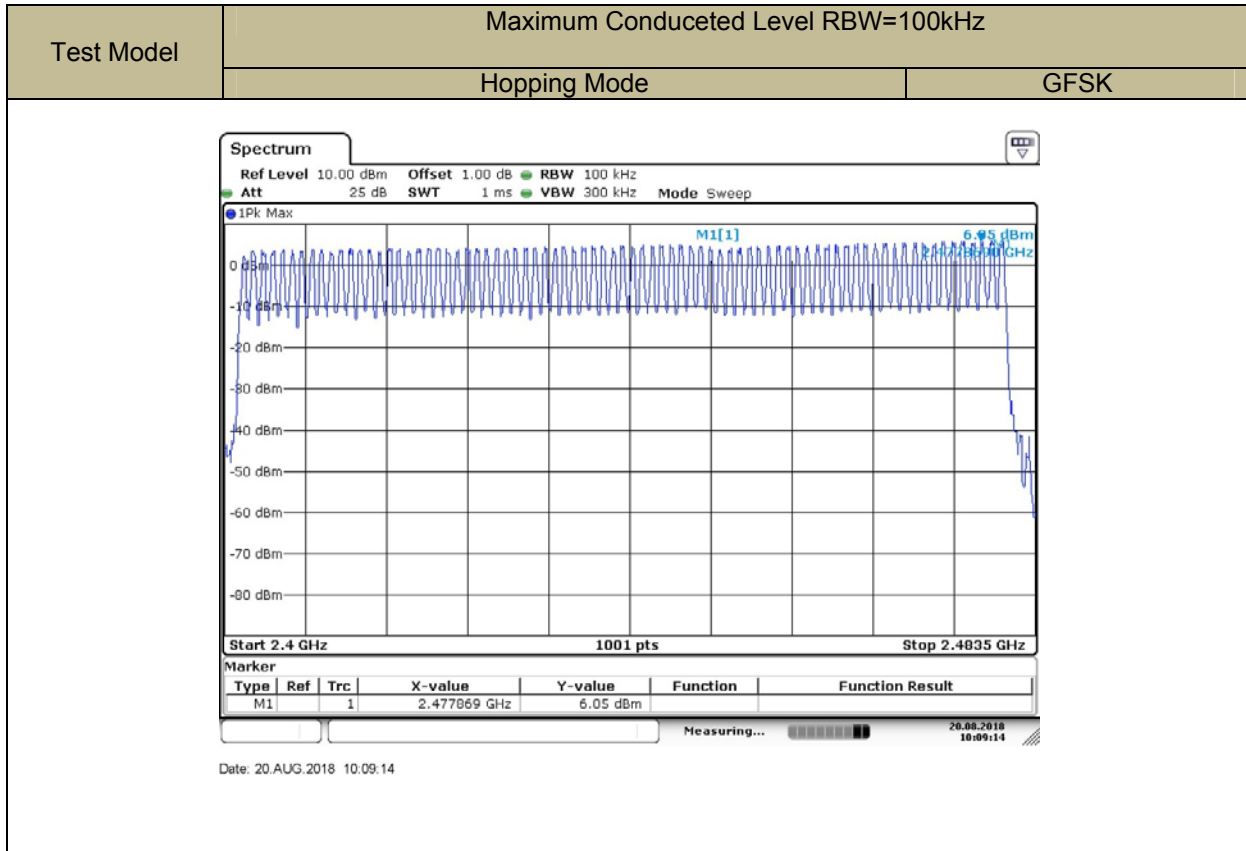


Date: 20.AUG.2018 10:04:27

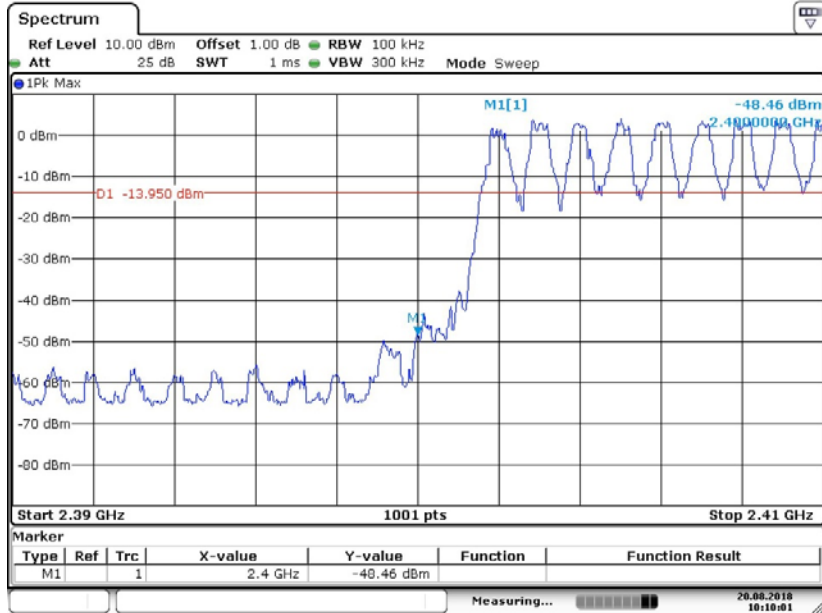
Test Model	Band-edge Conducted Emissions	
	Channel 78: 2480MHz	8DPSK



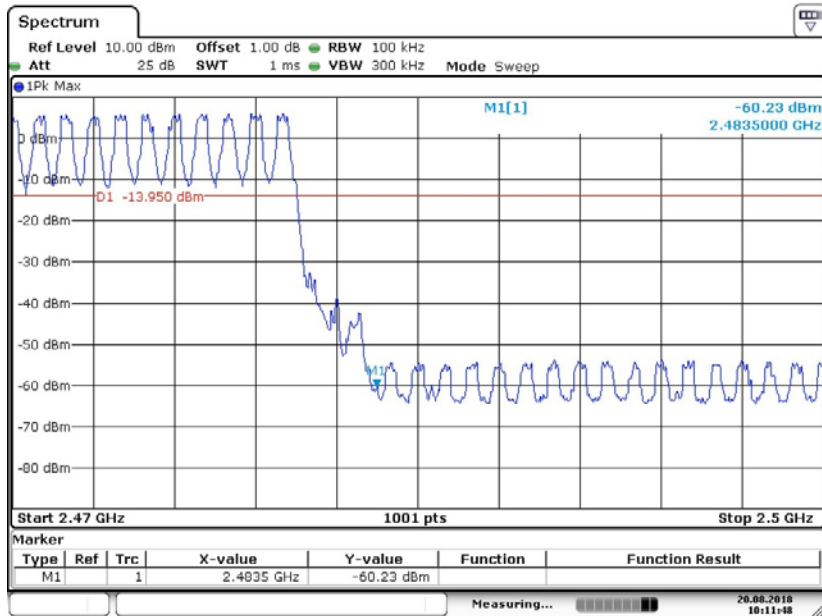
Date: 20.AUG.2018 10:04:02



Test Model	Band-edge Conducted Emissions	
	Hopping Mode	GFSK

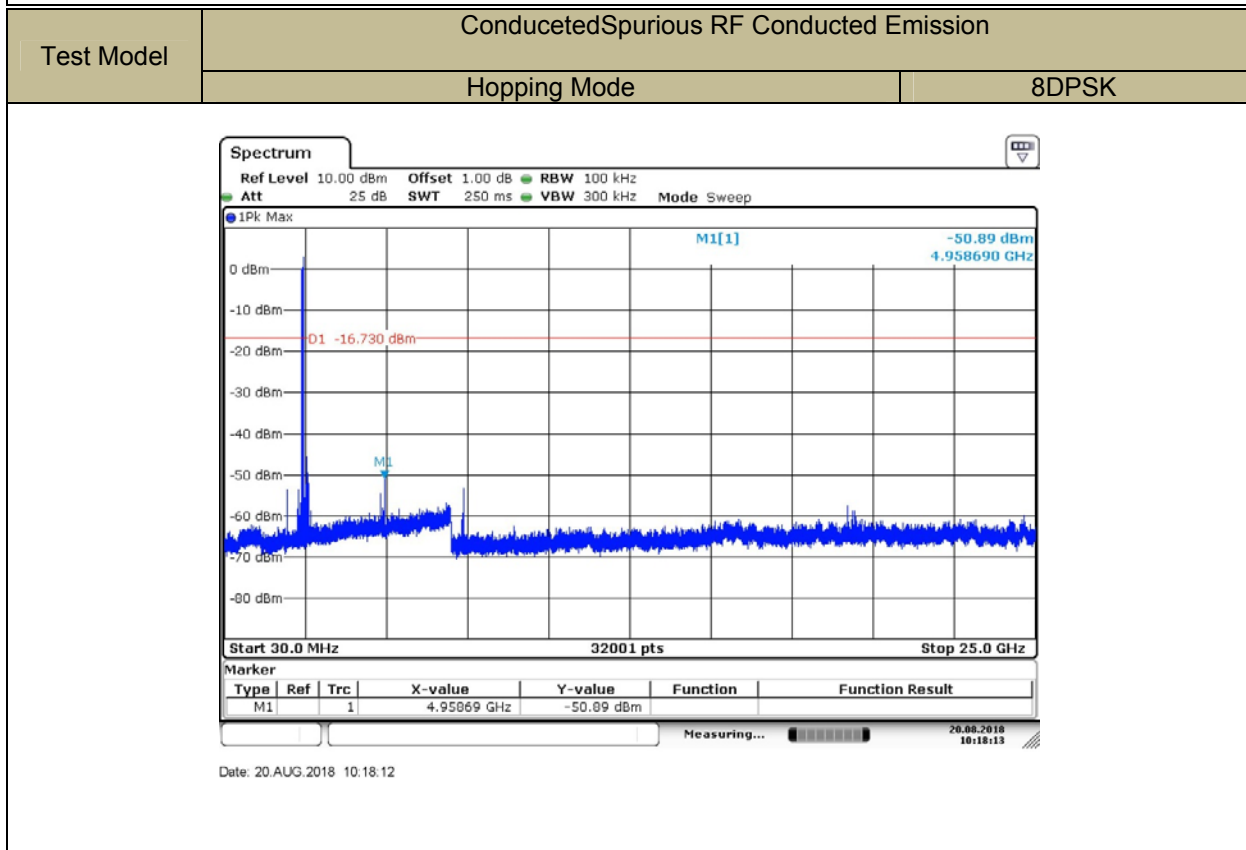
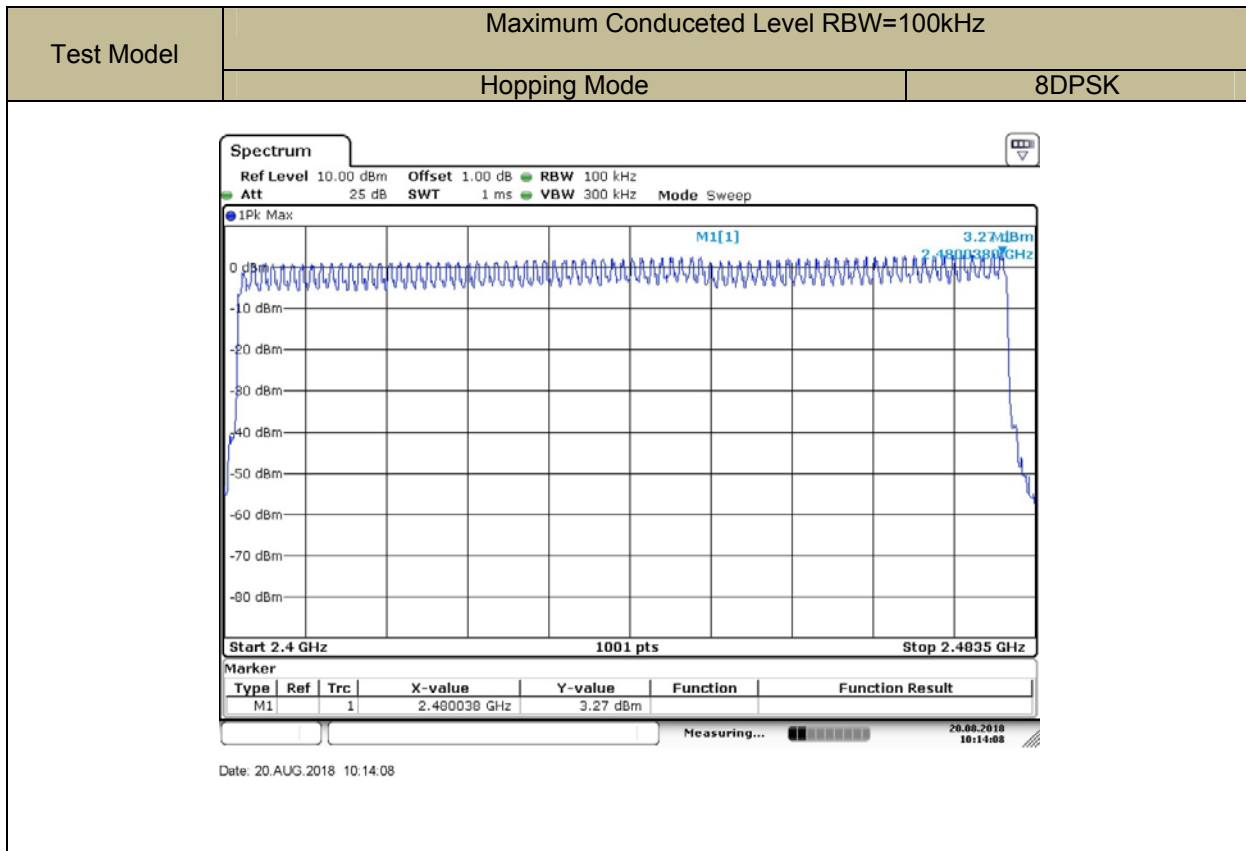


Date: 20.AUG.2018 10:10:01

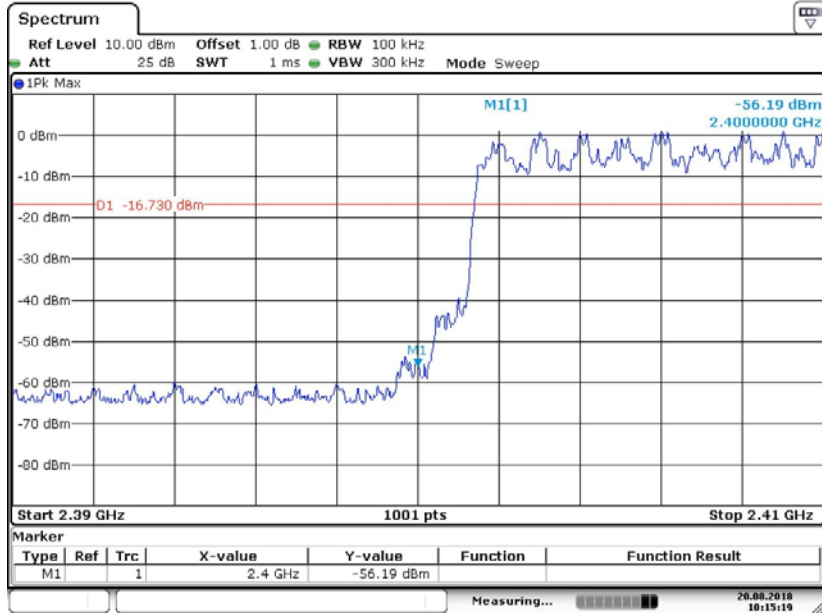


Date: 20.AUG.2018 10:11:47

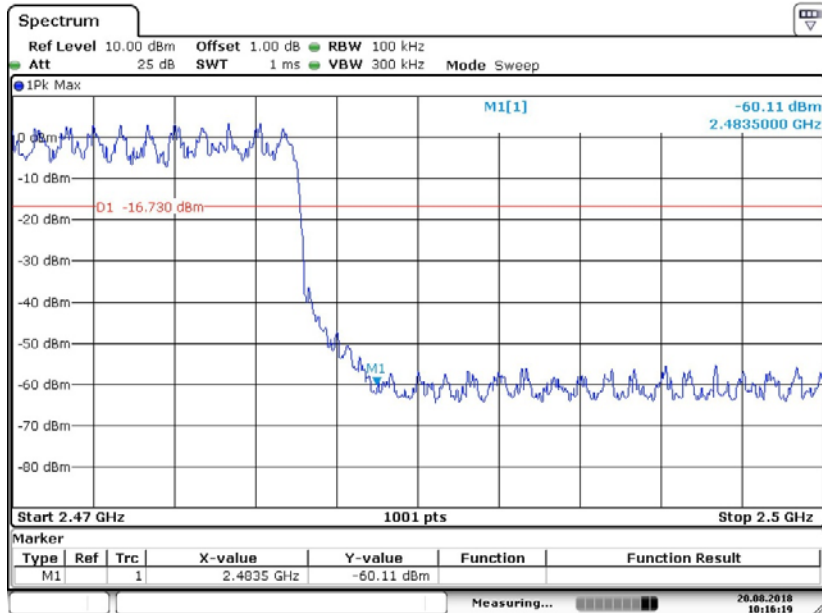




Test Model	Band-edge Conducted Emissions	
	Hopping Mode	8DPSK



Date: 20.AUG.2018 10:15:19



Date: 20.AUG.2018 10:16:18

**9.8 RADIATED SPURIOUS EMISSION**

**9.8.1 Applicable Standard**

According to FCC Part 15.247(d) and 15.209 and DA 00-705

**9.8.2 Conformance Limit**

According to FCC Part 15.247(d): radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).  
According to FCC Part 15.205, Restricted bands

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
10.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(2)
13.36-13.41			

According to FCC Part 15.205, the level of any transmitter spurious emission in Restricted bands shall not exceed the level of the emission specified in the following table

Restricted Frequency(MHz)	Field Strength (µV/m)	Field Strength (dBµV/m)	Measurement Distance
0.009-0.490	2400/F(KHz)	20 log (uV/m)	300
0.490-1.705	2400/F(KHz)	20 log (uV/m)	30
1.705-30	30	29.5	30
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

**9.8.3 Test Configuration**

Test according to clause 7.2 radio frequency test setup 2

**9.8.4 Test Procedure**

This test is required for any spurious emission that falls in a Restricted Band, as defined in Section 15.205. It must be performed with the highest gain of each type of antenna proposed for use with the EUT. Use the following spectrum analyzer settings:

The EUT was placed on a turn table which is 0.8m above ground plane.

Maximum procedure was performed on the highest emissions to ensure EUT compliance.

Span = wide enough to fully capture the emission being measured

RBW = 1 MHz for f ≥ 1 GHz(1GHz to 25GHz), 100 kHz for f < 1 GHz(30MHz to 1GHz)

VBW ≥ RBW

Sweep = auto

Detector function = peak

Trace = max hold

Follow the guidelines in ANSI C63.10-2013 respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization, etc. A pre-amp and a high pass filter are required for this test, in order to provide the measuring system with sufficient sensitivity. Allow the trace to stabilize. The peak reading of the emission, after being corrected by the antenna factor, cable loss, pre-amp gain, etc., is the peak field strength, which must comply with the limit specified in Section 15.35(b). Submit this data.

Now set the VBW to 10 Hz, while maintaining all of the other instrument settings. This peak level, once corrected, must comply with the limit specified in Section 15.209. If the dwell time per channel of the hopping signal is less than 100 ms, then the reading obtained with the 10 Hz VBW may be further adjusted by a “duty cycle correction factor”, derived from  $20\log(\text{dwell time}/100 \text{ ms})$ , in an effort to demonstrate compliance with the 15.209 limit. Submit this data.

Repeat above procedures until all frequency measured was complete.

### 9.8.5 Test Results

#### ■ Spurious Emission below 30MHz(9KHz to 30MHz)

Temperature:	24°C	Test Date:	August 17, 2018
Humidity:	53 %	Test By:	KK
Test mode:	TX Mode		

Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
--	--	--	--	--	--	--	--

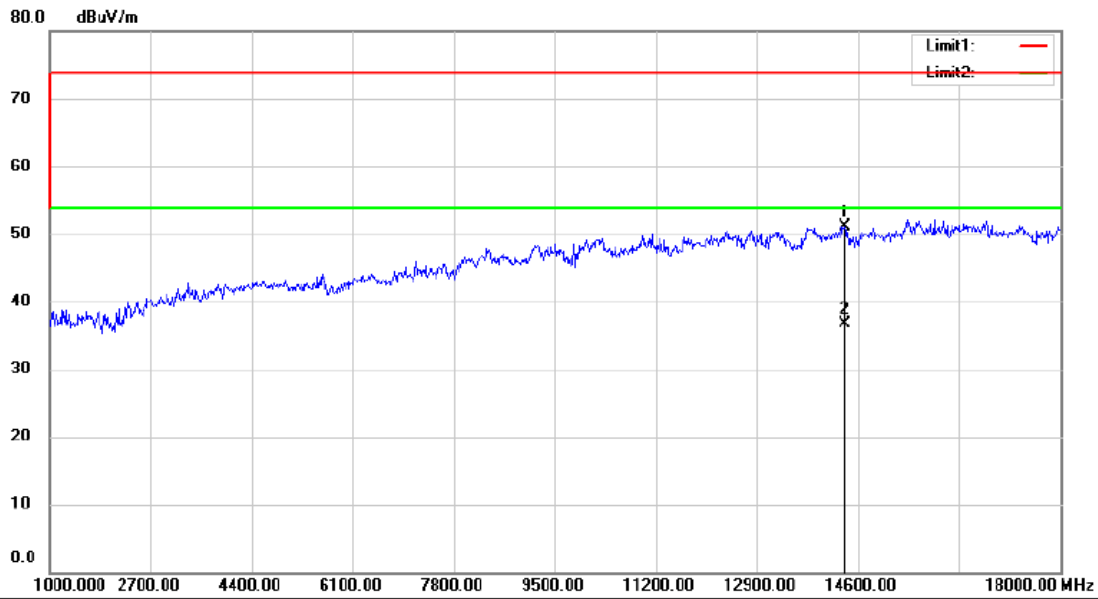
Note: the amplitude of spurious emission that is attenuated by more than 20dB below the permissible limit has no need to be reported.

Distance extrapolation factor =  $40\log(\text{Specific distance}/ \text{test distance})( \text{dB})$ ;

Limit line=Specific limits(dBuV) + distance extrapolation factor

#### ■ Spurious Emission Above 1GHz(1GHz to 25GHz)

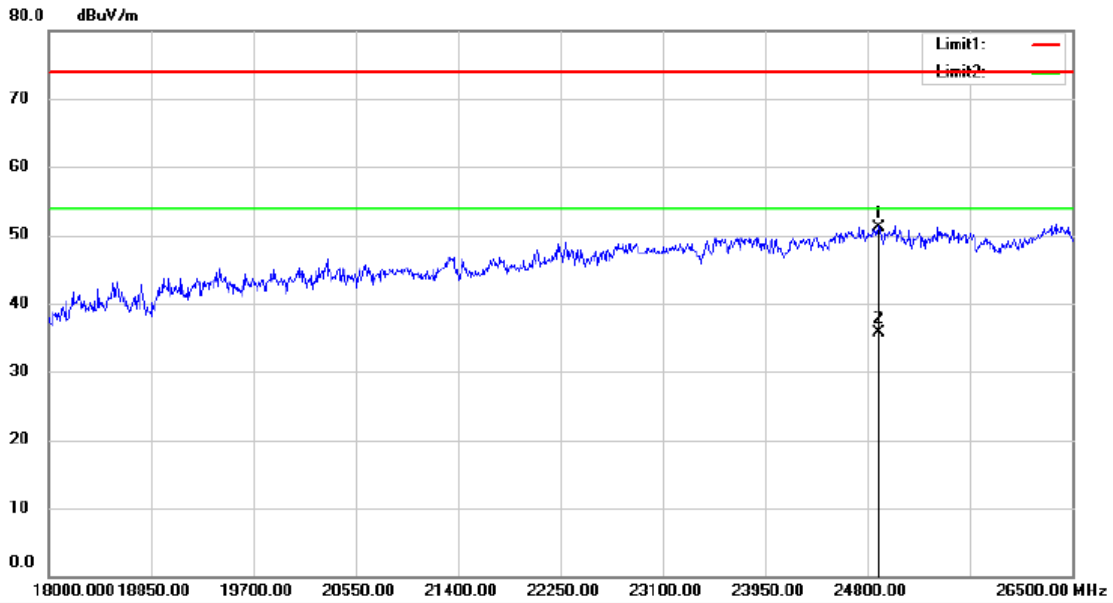
Temperature:	24°C	Test Date:	August 17, 2018
Humidity:	53 %	Test By:	KK
Test mode:	GFSK	Frequency:	Channel 0: 2402MHz



Site 3m Chamber 1# Polarization: **Vertical** Temperature: 24 C  
 Limit: (RE)FCC PART 15 C Power: DC 3.7V Humidity: 53 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode: GFSK 2402  
 Note:

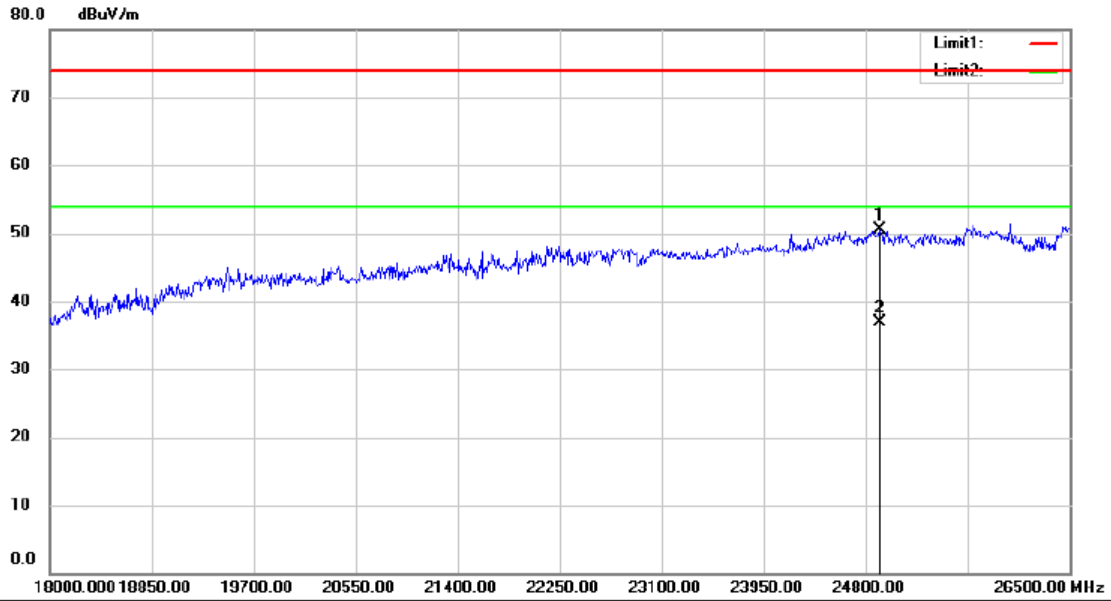
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		14379.00	59.62	-8.49	51.13	74.00	-22.87			peak
2	*	14379.00	45.19	-8.49	36.70	54.00	-17.30			AVG





Site 3m Chamber 1# Polarization: **Horizontal** Temperature: 24 C  
 Limit: (RE)FCC PART 15 C Power: DC 3.7V Humidity: 53 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode:GFSK 2402  
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		24893.50	88.22	-37.02	51.20	74.00	-22.80			peak
2	*	24893.50	72.72	-37.02	35.70	54.00	-18.30			AVG



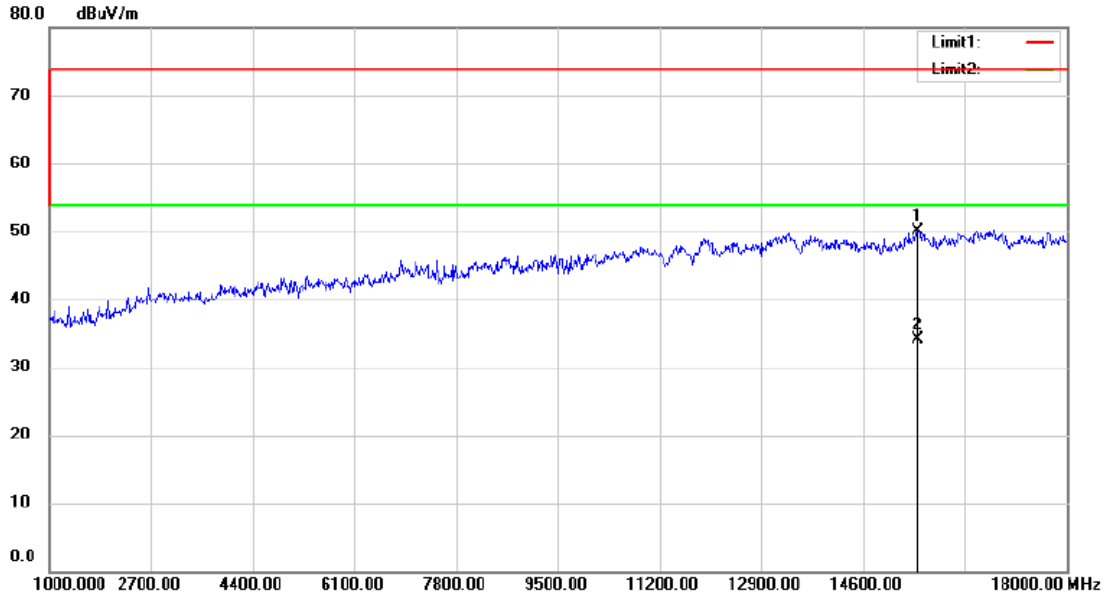
Site 3m Chamber 1# Polarization: **Vertical** Temperature: 24 C  
 Limit: (RE)FCC PART 15 C Power: DC 3.7V Humidity: 53 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode:GFSK 2402  
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		24919.00	87.46	-37.02	50.44	74.00	-23.56			peak
2	*	24919.00	73.92	-37.02	36.90	54.00	-17.10			AVG



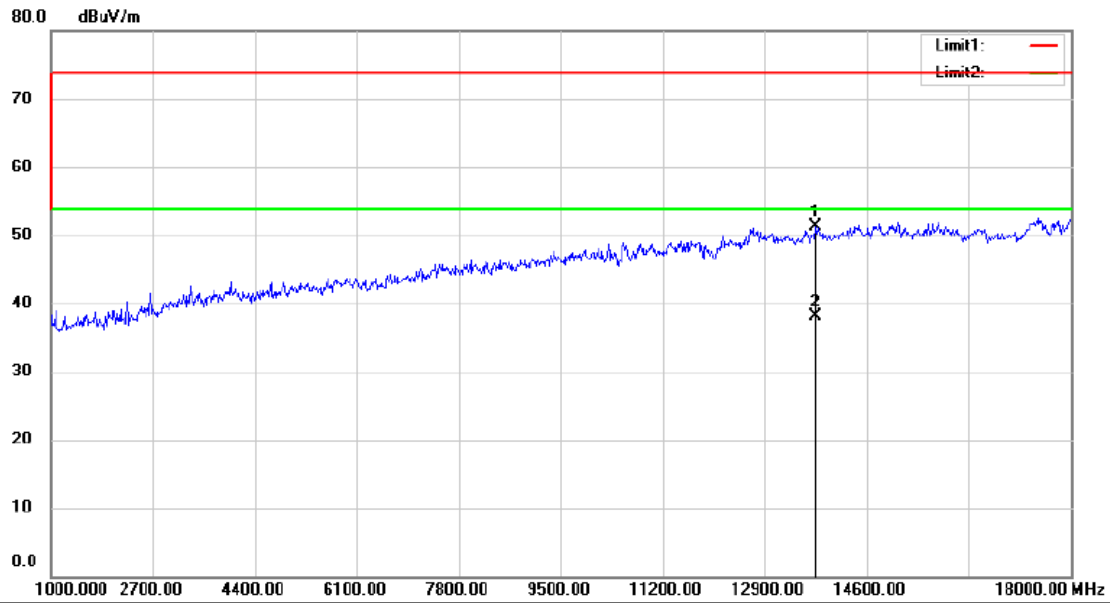
Temperature: 24°C  
Humidity: 53 %  
Test mode: GFSK

Test Date: August 17, 2018  
Test By: KK  
Frequency: Channel 39: 2441MHz



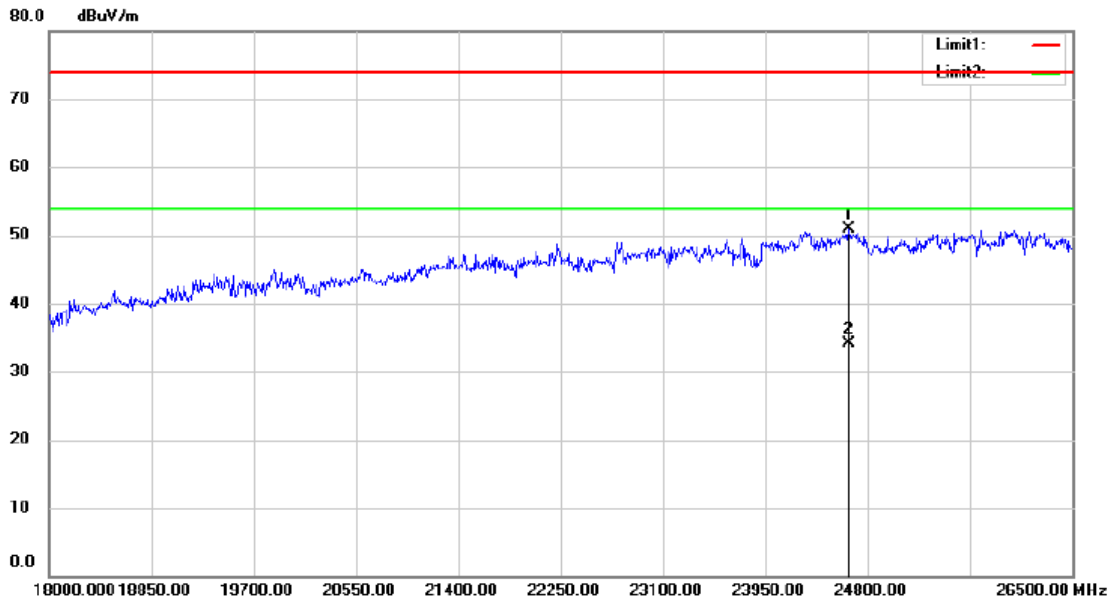
Site 3m Chamber 1# Polarization: **Vertical** Temperature: 24 C  
Limit: (RE)FCC PART 15 C Power: DC 3.7V Humidity: 53 %  
EUT: Bluetooth Around Neck Headset  
M/N: NS-HNECKPLUS  
Mode:GFSK 2441  
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		15518.00	61.43	-11.23	50.20	74.00	-23.80			peak
2	*	15518.00	45.33	-11.23	34.10	54.00	-19.90			AVG



Site 3m Chamber 1#      Polarization: **Horizontal**      Temperature: 24 C  
 Limit: (RE)FCC PART 15 C      Power: DC 3.7V      Humidity: 53 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode: GFSK 2441  
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		13750.00	60.29	-9.04	51.25	74.00	-22.75	peak		
2	*	13750.00	47.24	-9.04	38.20	54.00	-15.80	AVG		



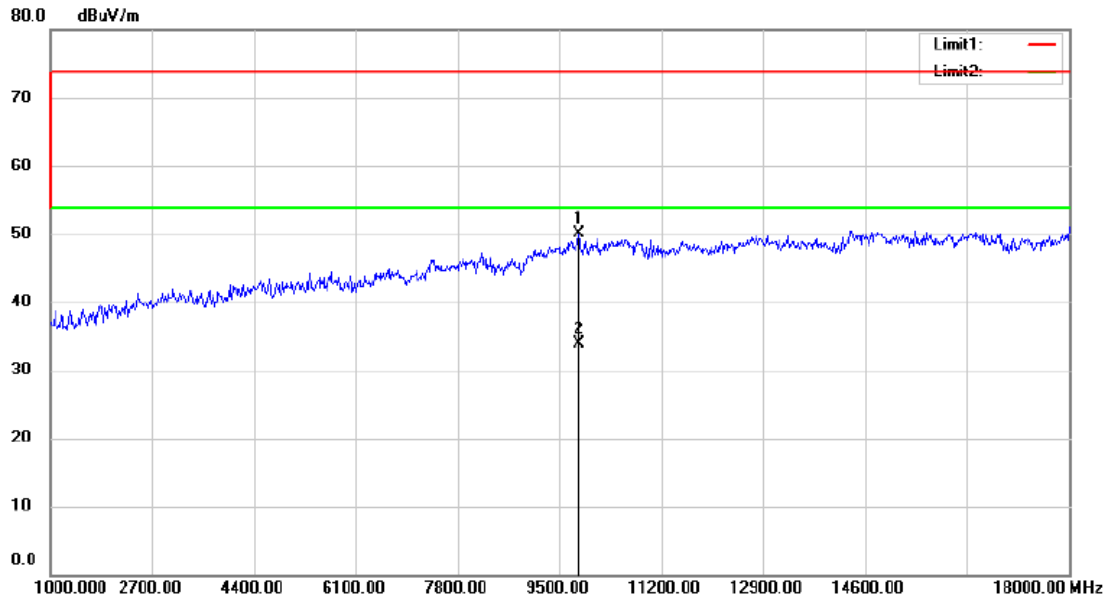
Site 3m Chamber 1# Polarization: **Vertical** Temperature: 24 C  
 Limit: (RE)FCC PART 15 C Power: DC 3.7V Humidity: 53 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode:GFSK 2441  
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		24647.00	88.01	-37.05	50.96	74.00	-23.04			peak
2	*	24647.00	71.25	-37.05	34.20	54.00	-19.80			AVG



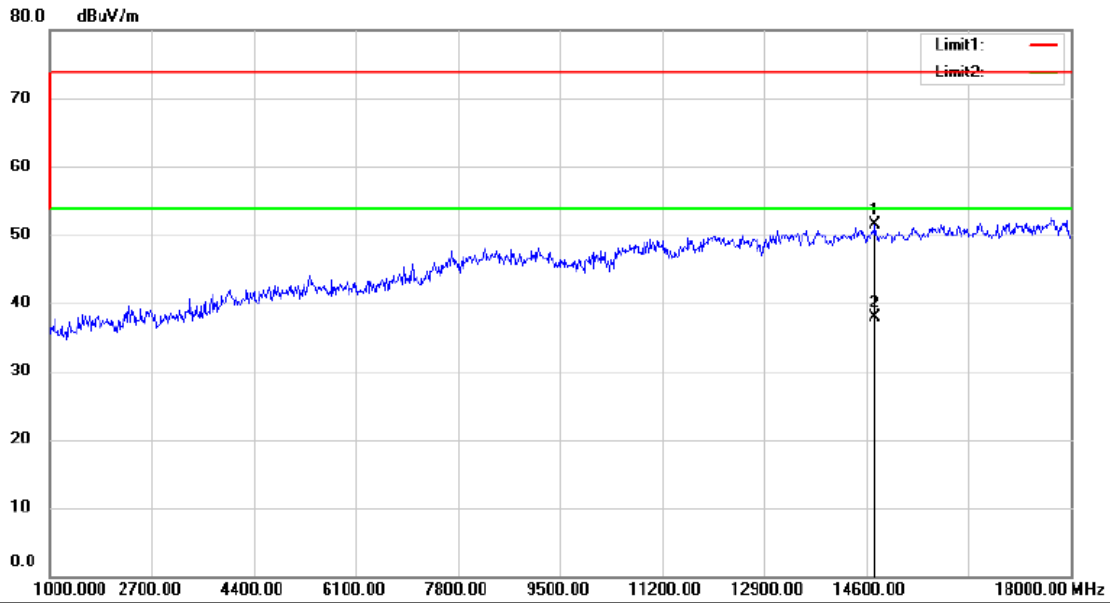
Temperature: 24 °C  
Humidity: 53 %  
Test mode: GFSK

Test Date: August 17, 2018  
Test By: KK  
Frequency: Channel 78: 2480MHz



Site 3m Chamber 1# Polarization: **Horizontal** Temperature: 24 C  
Limit: (RE)FCC PART 15 C Power: DC 3.7V Humidity: 53 %  
EUT: Bluetooth Around Neck Headset  
M/N: NS-HNECKPLUS  
Mode:GFSK 2480  
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		9823.000	65.91	-15.86	50.05	74.00	-23.95	peak		
2	*	9823.000	49.76	-15.86	33.90	54.00	-20.10	AVG		



Site: 3m Chamber 1#      Polarization: *Vertical*      Temperature: 24 C  
 Limit: (RE)FCC PART 15 C      Power: DC 3.7V      Humidity: 53 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode: GFSK 2480  
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		14753.00	60.74	-9.15	51.59	74.00	-22.41			peak
2	*	14753.00	47.05	-9.15	37.90	54.00	-16.10			AVG

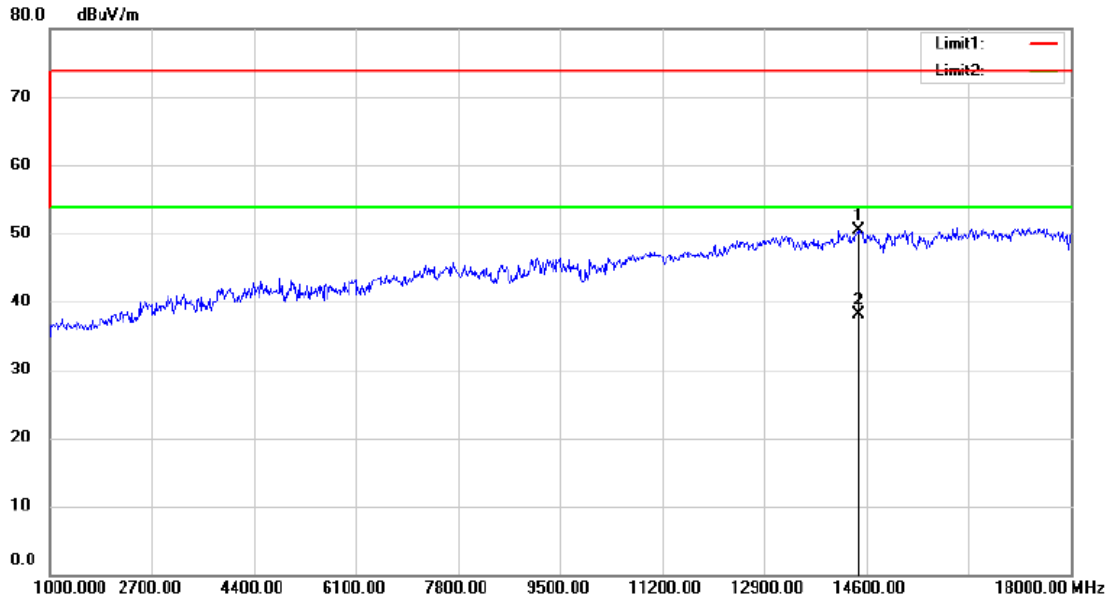






Temperature: 24°C  
Humidity: 53 %  
Test mode: 8DPSK

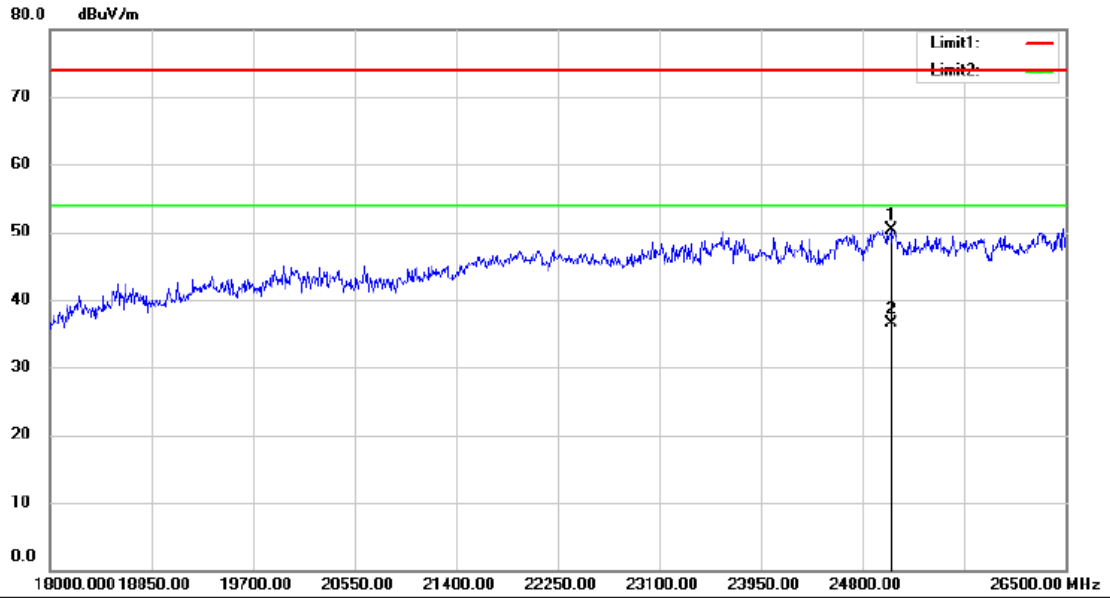
Test Date: August 17, 2018  
Test By: KK  
Frequency: Channel 0: 2402MHz



Site 3m Chamber 1# Polarization: **Vertical** Temperature: 24 C  
Limit: (RE)FCC PART 15 C Power: DC 3.7V Humidity: 53 %  
EUT: Bluetooth Around Neck Headset  
M/N: NS-HNECKPLUS  
Mode:8DPSK 2402  
Note:

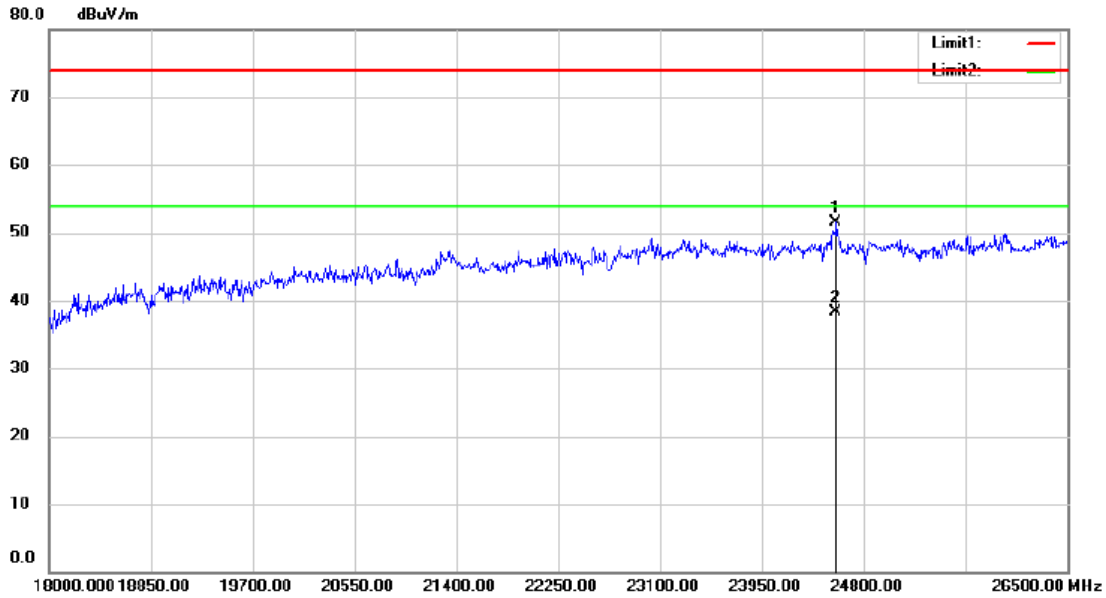
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		14481.00	59.26	-8.68	50.58	74.00	-23.42	peak		
2	*	14481.00	46.78	-8.68	38.10	54.00	-15.90	AVG		





Site 3m Chamber 1#      Polarization: **Horizontal**      Temperature: 24 C  
 Limit: (RE)FCC PART 15 C      Power: DC 3.7V      Humidity: 53 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode:8DPSK 2402  
 Note:

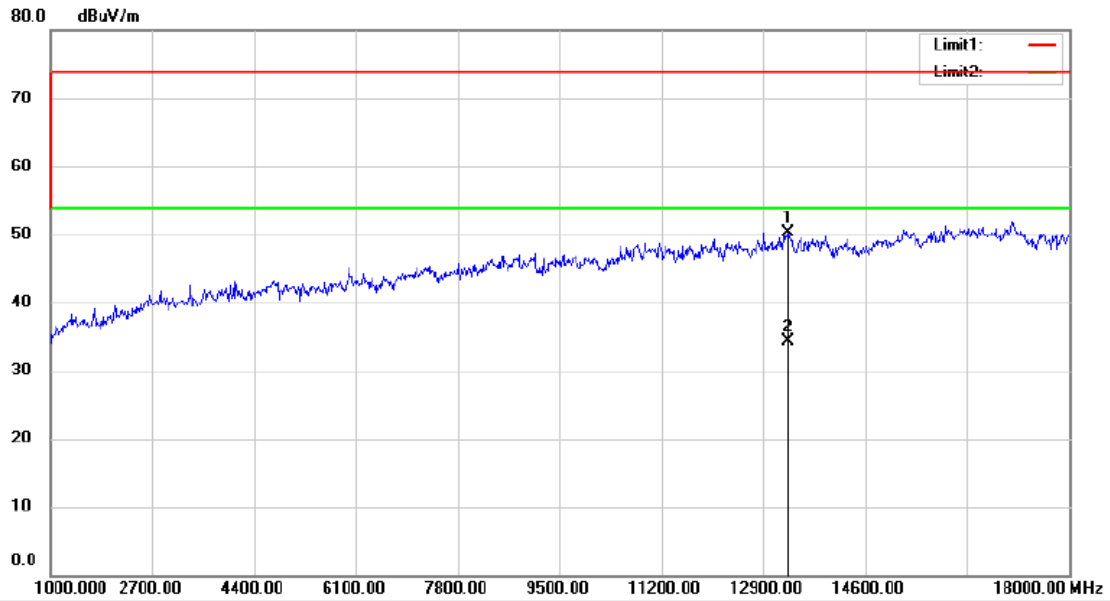
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		25038.00	87.22	-36.96	50.26	74.00	-23.74	peak		
2	*	25038.00	73.56	-36.96	36.60	54.00	-17.40	AVG		



Site 3m Chamber 1# Polarization: **Vertical** Temperature: 24 C  
 Limit: (RE)FCC PART 15 C Power: DC 3.7V Humidity: 53 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode:8DPSK 2402  
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		24570.50	88.57	-37.06	51.51	74.00	-22.49			peak
2	*	24570.50	75.36	-37.06	38.30	54.00	-15.70			AVG

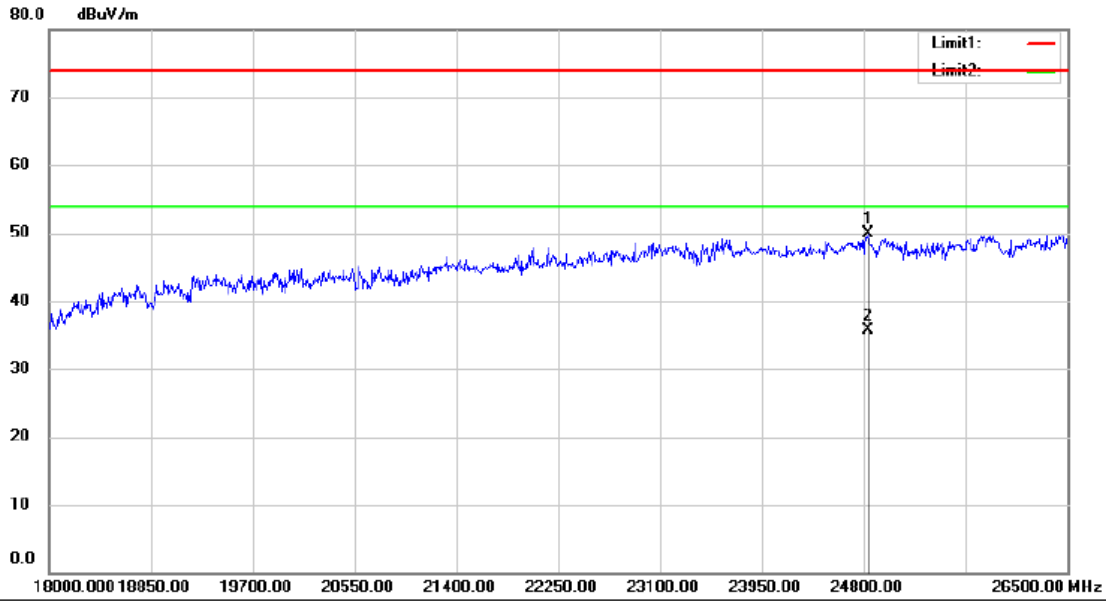




Site 3m Chamber 1# Polarization: **Horizontal** Temperature: 24 C  
 Limit: (RE)FCC PART 15 C Power: DC 3.7V Humidity: 53 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode:8DPSK 2441  
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		13325.00	61.44	-11.13	50.31	74.00	-23.69	peak		
2	*	13325.00	45.43	-11.13	34.30	54.00	-19.70	AVG		





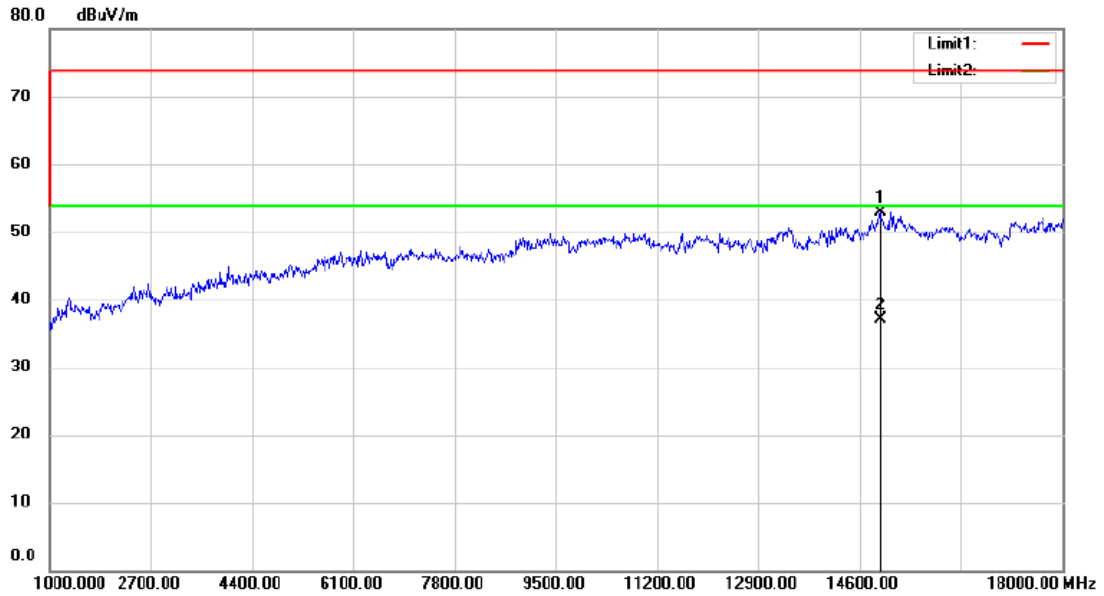
Site 3m Chamber 1# Polarization: **Horizontal** Temperature: 24 C  
 Limit: (RE)FCC PART 15 C Power: DC 3.7V Humidity: 53 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode:8DPSK 2441  
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		24842.50	86.90	-37.03	49.87	74.00	-24.13			peak
2	*	24842.50	72.83	-37.03	35.80	54.00	-18.20			AVG



Temperature: 24°C  
Humidity: 53 %  
Test mode: 8DPSK

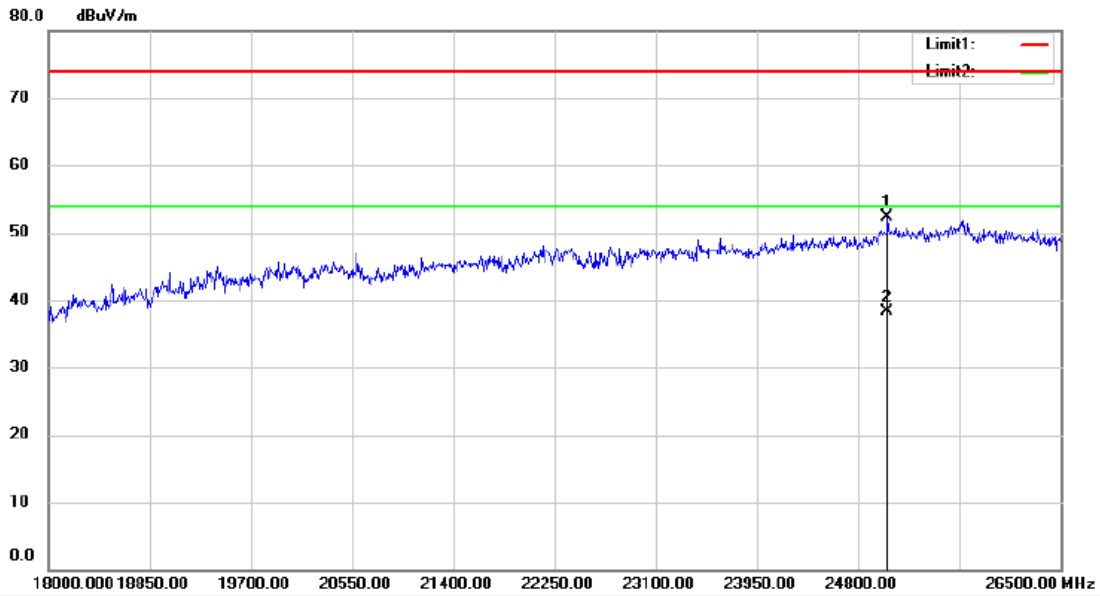
Test Date: August 17, 2018  
Test By: KK  
Frequency: Channel 78: 2480MHz



Site 3m Chamber 1# Polarization: *Horizontal* Temperature: 24 C  
Limit: (RE)FCC PART 15 C Power: DC 3.7V Humidity: 53 %  
EUT: Bluetooth Around Neck Headset  
M/N: NS-HNECKPLUS  
Mode:8DPSK 2480  
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		14940.00	62.38	-9.48	52.90	74.00	-21.10			peak
2	*	14940.00	46.68	-9.48	37.20	54.00	-16.80			AVG



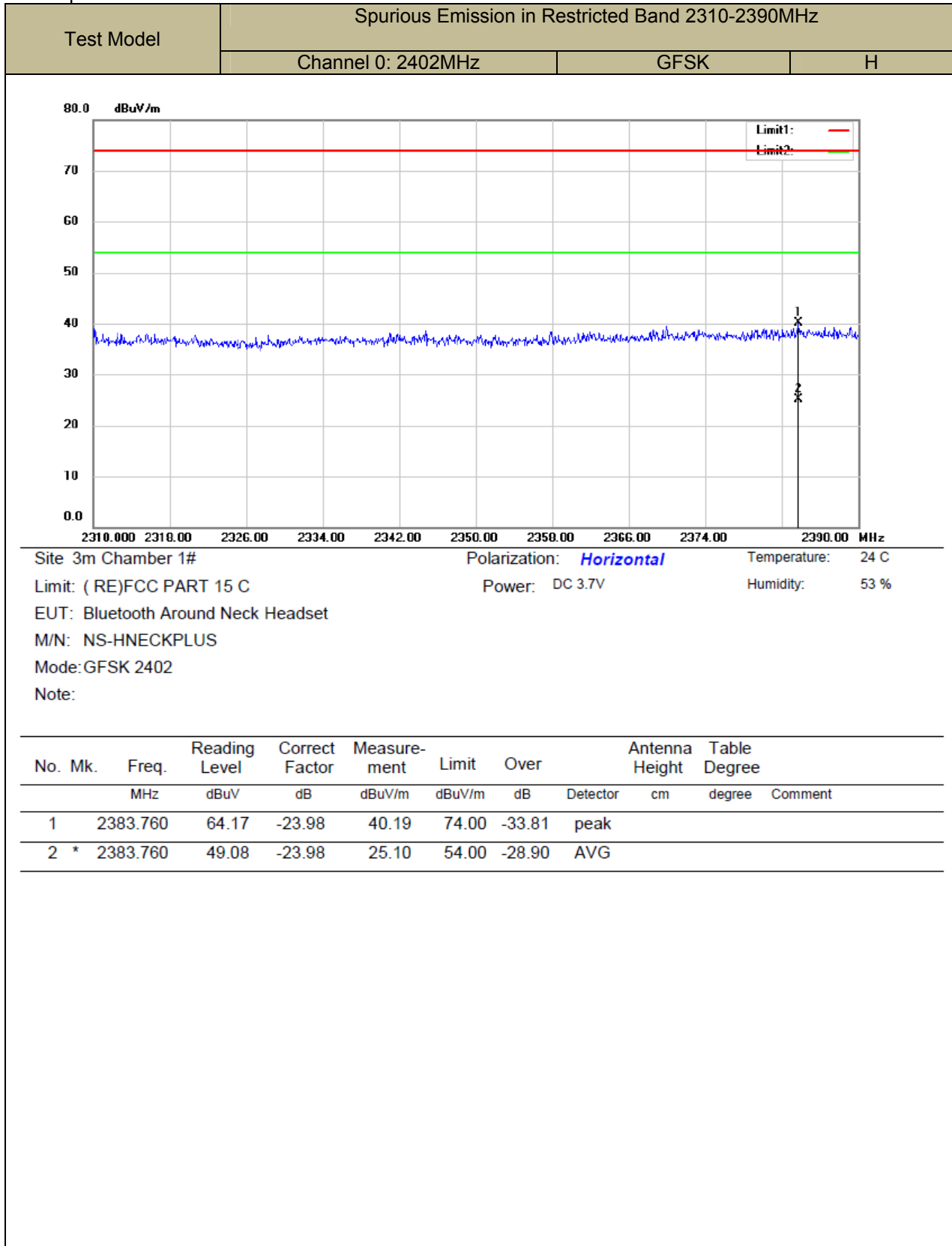


Site 3m Chamber 1#      Polarization: **Horizontal**      Temperature: 24 C  
 Limit: (RE)FCC PART 15 C      Power: DC 3.7V      Humidity: 53 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode:8DPSK 2480  
 Note:

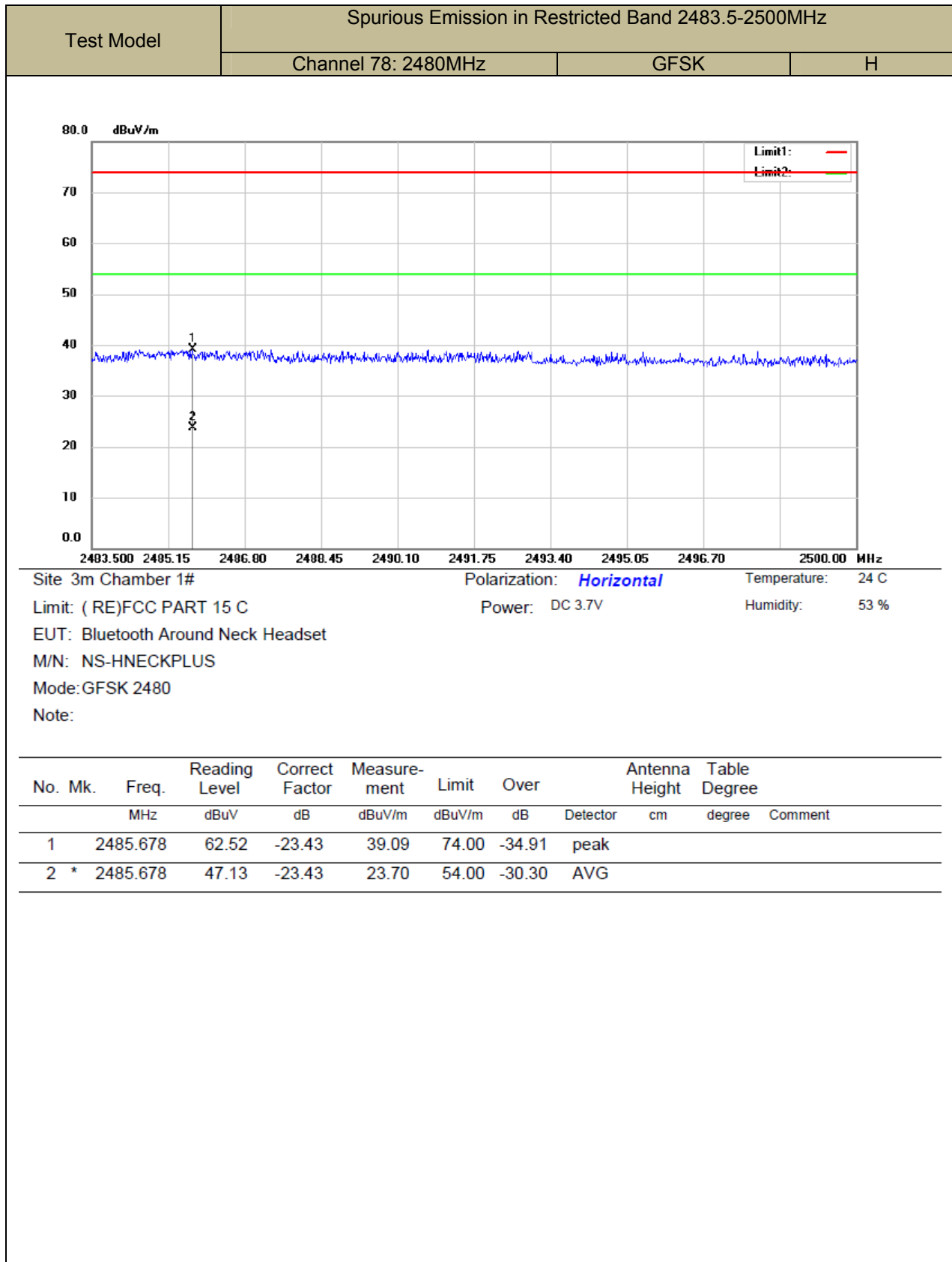
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		25046.50	89.16	-36.95	52.21	74.00	-21.79			peak
2	*	25046.50	75.25	-36.95	38.30	54.00	-15.70			AVG



■ Spurious Emission in Restricted Band 2310-2390MHz and 2483.5-2500MHz

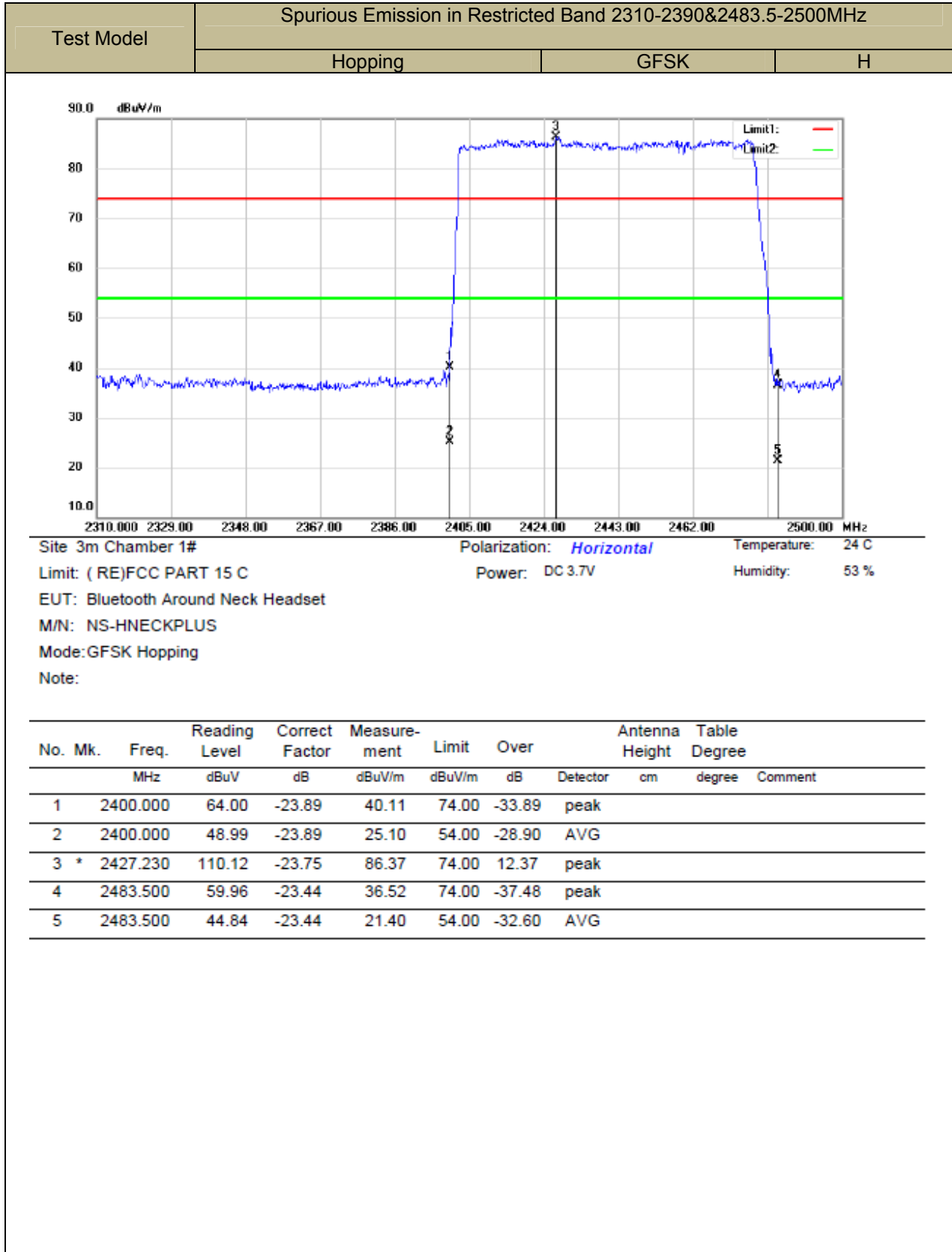




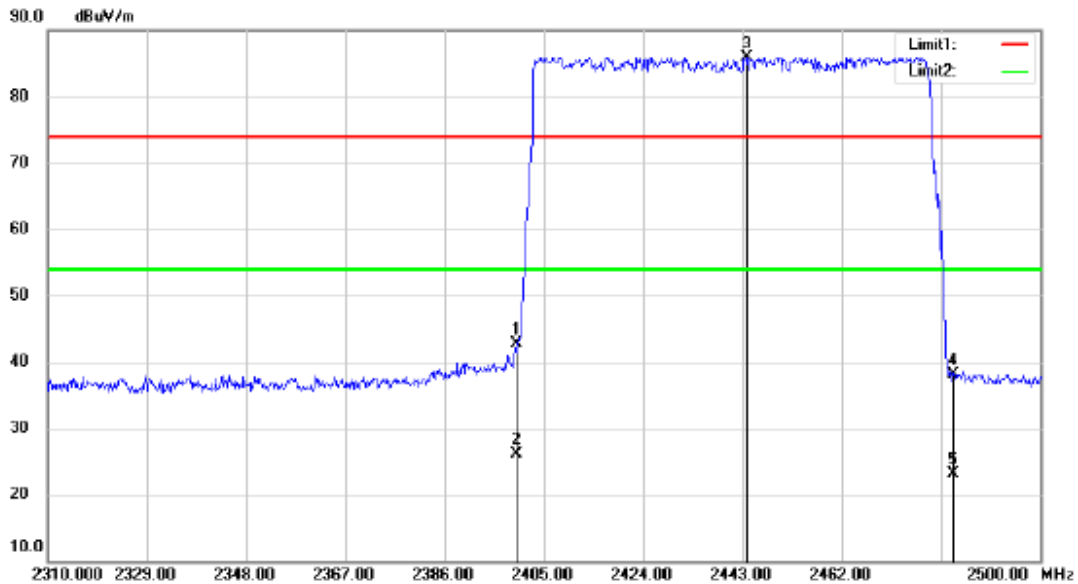








Test Model	Spurious Emission in Restricted Band 2310-2390&2483.5-2500MHz		
	Hopping	GFSK	V



Site: 3m Chamber 1#      Polarization: *Vertical*      Temperature: 24 C  
 Limit: (RE)FCC PART 15 C      Power: DC 3.7V      Humidity: 53 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode: GFSK Hopping  
 Note:

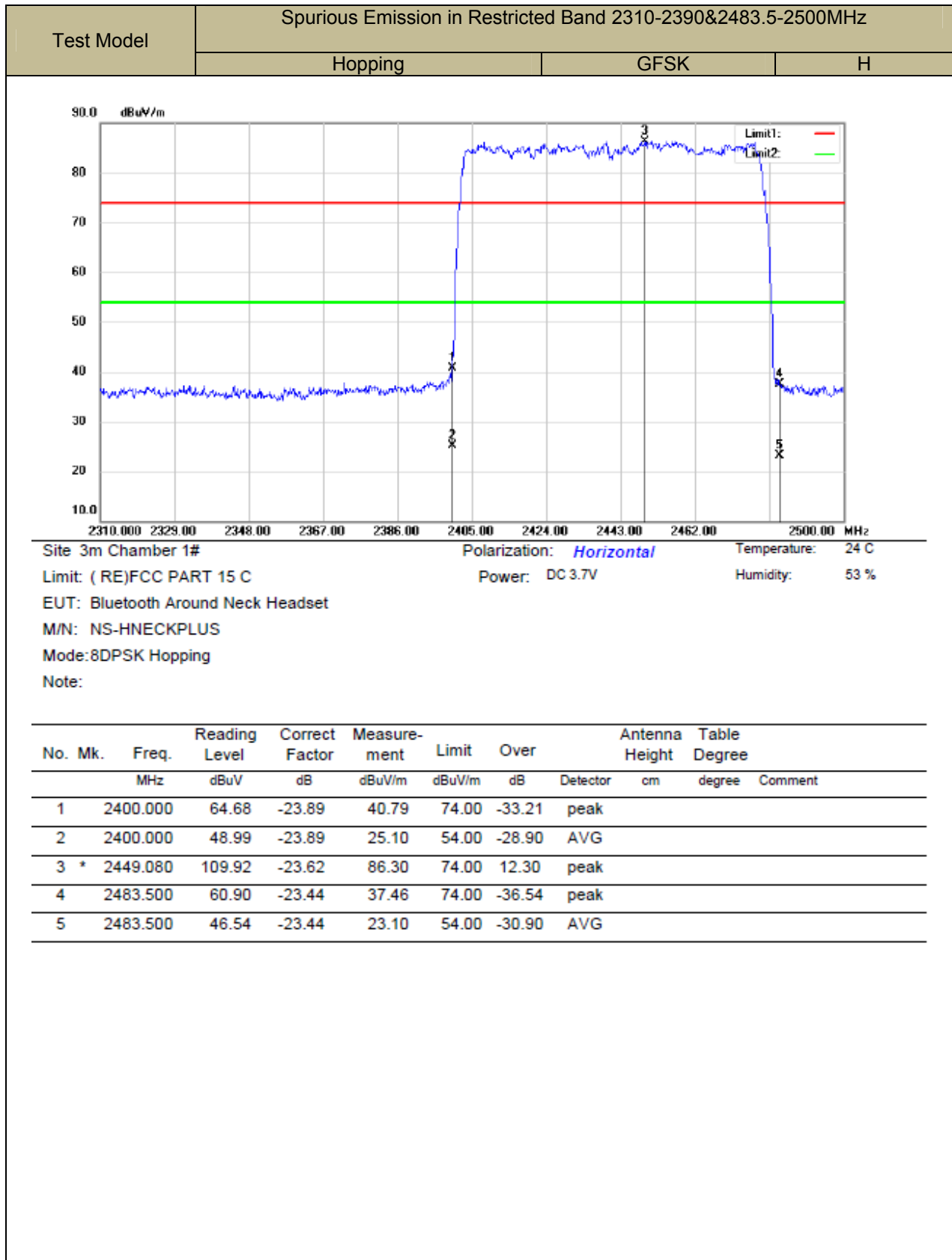
No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1	2400.000	66.52	-23.89	42.63	74.00	-31.37	peak			
2	2400.000	49.99	-23.89	26.10	54.00	-27.90	AVG			
3 *	2443.760	109.64	-23.65	85.99	74.00	11.99	peak			
4	2483.500	61.60	-23.44	38.16	74.00	-35.84	peak			
5	2483.500	46.54	-23.44	23.10	54.00	-30.90	AVG			



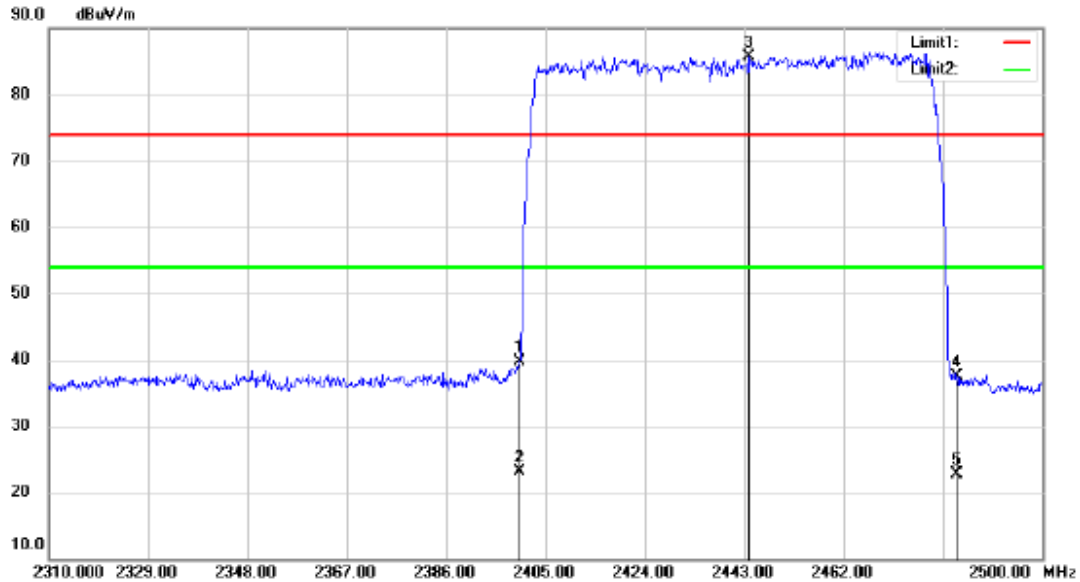








Test Model	Spurious Emission in Restricted Band 2310-2390 & 2483.5-2500 MHz		
	Hopping	GFSK	V

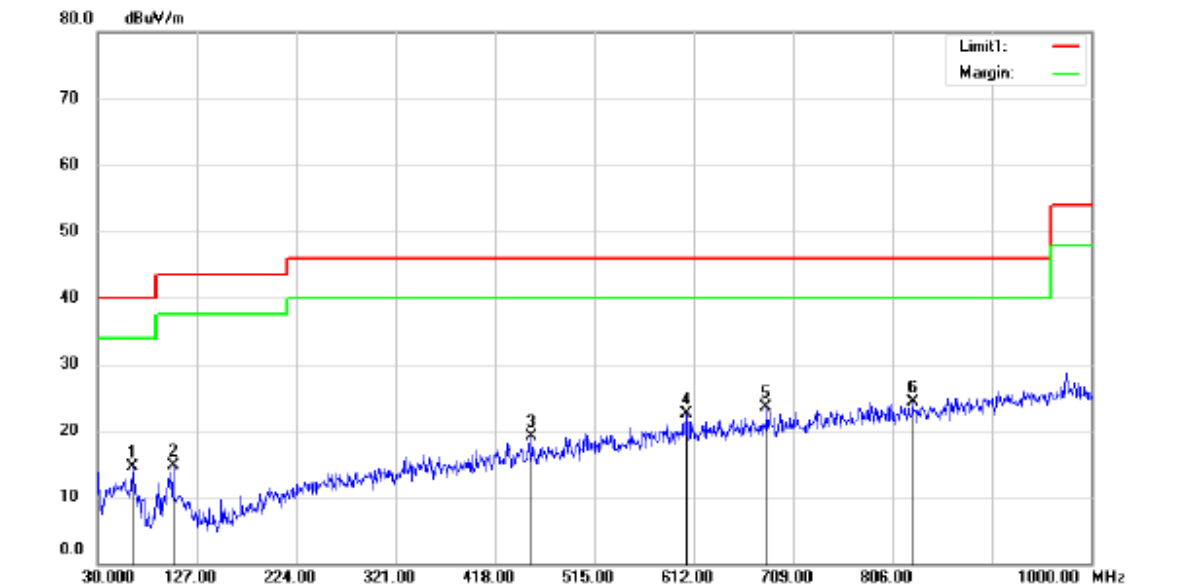


Site: 3m Chamber 1#      Polarization: *Vertical*      Temperature: 24 C  
 Limit: (RE)FCC PART 15 C      Power: DC 3.7V      Humidity: 53 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode: 8DPSK Hopping  
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	
1		2400.000	63.57	-23.89	39.68	74.00	-34.32	peak		
2		2400.000	46.99	-23.89	23.10	54.00	-30.90	AVG		
3	*	2443.950	109.39	-23.65	85.74	74.00	11.74	peak		
4		2483.500	61.02	-23.44	37.58	74.00	-36.42	peak		
5		2483.500	46.14	-23.44	22.70	54.00	-31.30	AVG		



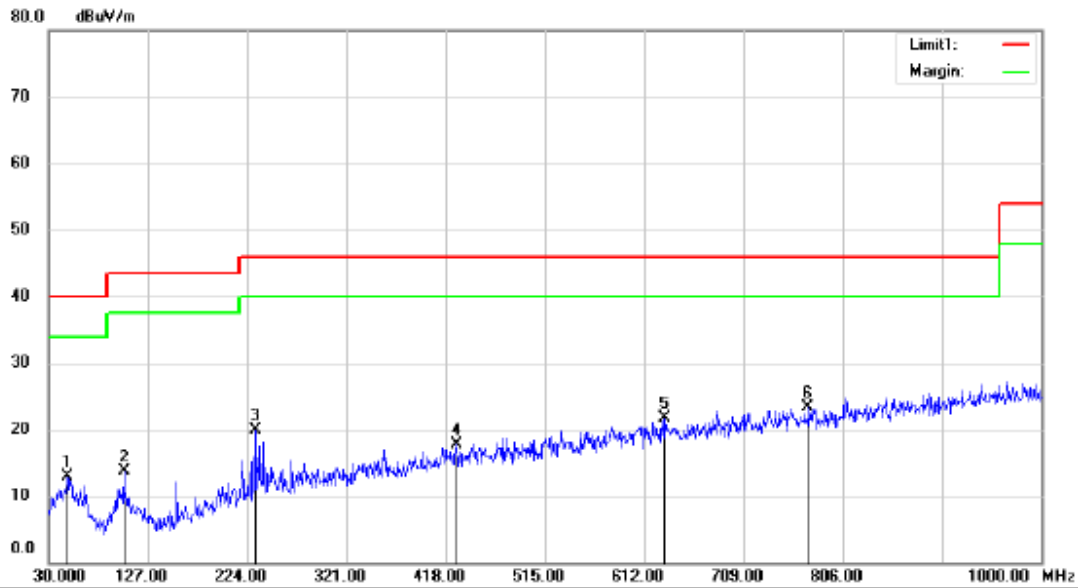
■ Spurious Emission below 1GHz(30MHz to 1GHz)



Site 3m Chamber #3  
 Limit: (RE)FCC PART 15C  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode:GFSK TX 2402  
 Note:

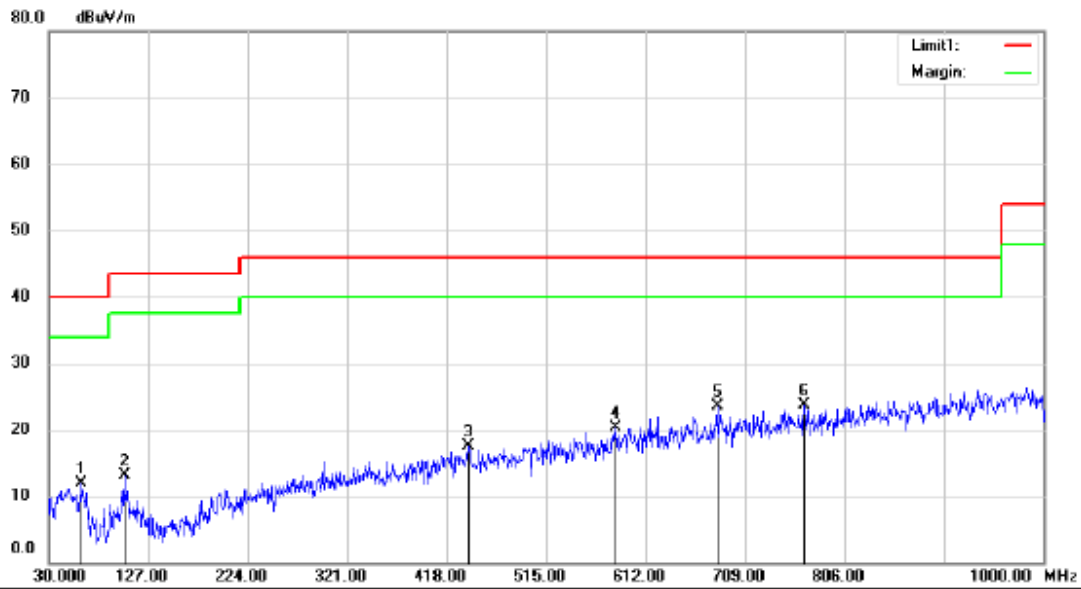
Polarization: *Vertical*  
 Power: AC 120V/60Hz  
 Temperature: 23 C  
 Humidity: 51 %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1		64.7987	31.08	-16.63	14.45	40.00	-25.55	QP			
2		103.9625	30.82	-16.16	14.66	43.50	-28.84	QP			
3		454.3750	28.73	-9.58	19.15	46.00	-26.85	QP			
4		605.9375	28.72	-6.17	22.55	46.00	-23.45	QP			
5		683.5375	28.77	-5.24	23.53	46.00	-22.47	QP			
6	*	825.4000	27.53	-3.15	24.38	46.00	-21.62	QP			



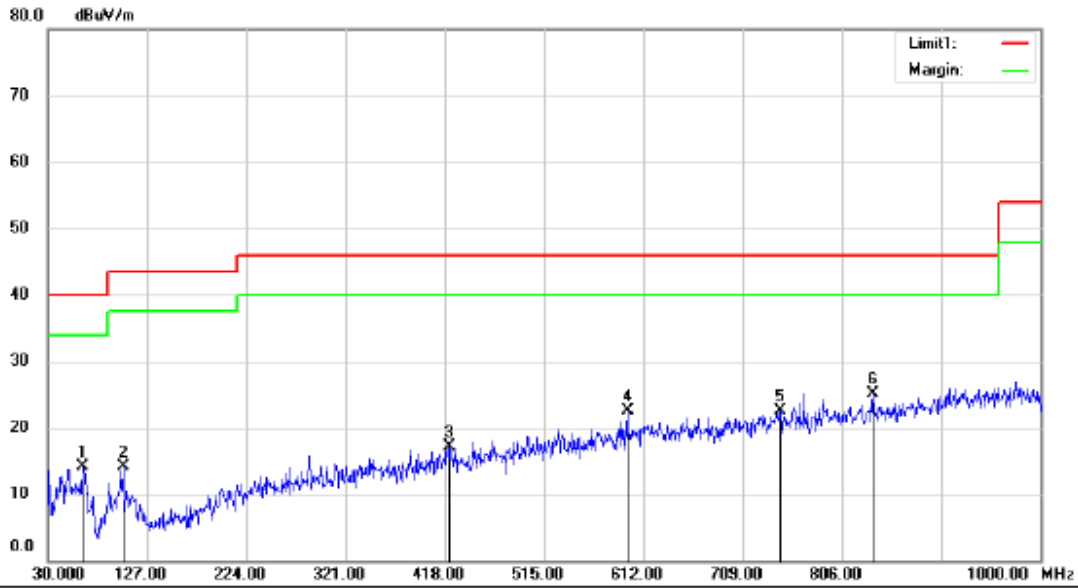
Site 3m Chamber #3 Polarization: *Horizontal* Temperature: 23 C  
 Limit: (RE)FCC PART 15C Power: AC 120V/60Hz Humidity: 51 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode:GFSK TX 2402  
 Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1		49.2788	27.24	-14.42	12.82	40.00	-27.18	QP			
2		103.9625	29.83	-16.16	13.67	43.50	-29.83	QP			
3		232.0025	34.78	-14.87	19.91	46.00	-26.09	QP			
4		429.5188	27.68	-9.93	17.75	46.00	-28.25	QP			
5		632.6125	27.60	-5.90	21.70	46.00	-24.30	QP			
6	*	772.5350	27.07	-3.80	23.27	46.00	-22.73	QP			



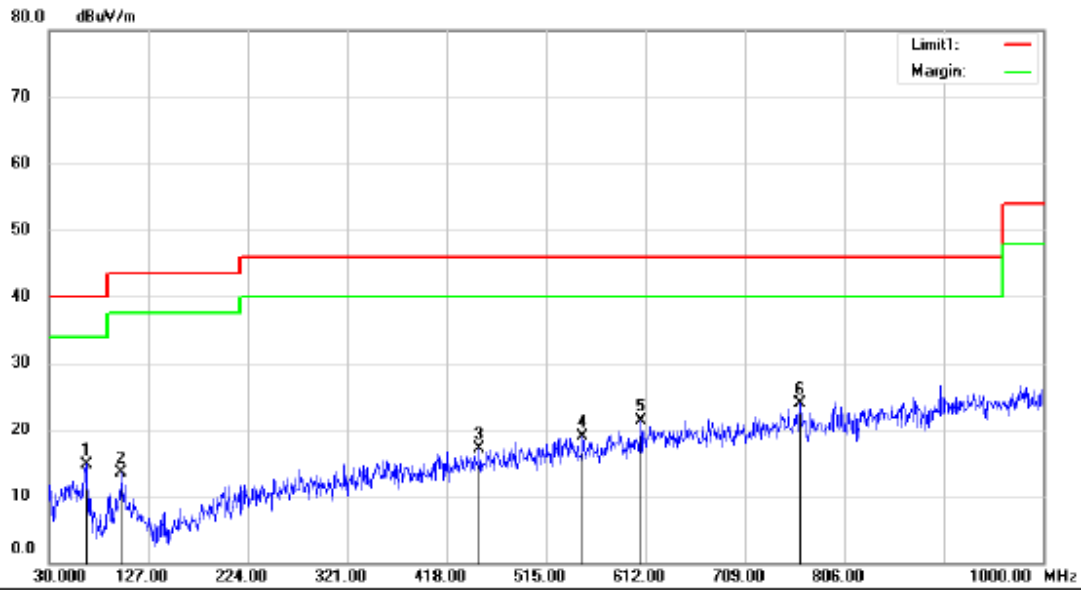
Site 3m Chamber #3 Polarization: *Horizontal* Temperature: 23 C  
 Limit: (RE)FCC PART 15C Power: AC 120V/60Hz Humidity: 51 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode:GFSK TX 2441  
 Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	
1		62.2525	28.23	-16.33	11.90	40.00	-28.10	QP		
2		103.9625	29.28	-16.16	13.12	43.50	-30.38	QP		
3		439.5825	27.36	-9.78	17.58	46.00	-28.42	QP		
4		583.1425	27.18	-6.80	20.38	46.00	-25.62	QP		
5		681.8400	28.85	-5.28	23.57	46.00	-22.43	QP		
6	*	766.9575	27.54	-3.83	23.71	46.00	-22.29	QP		



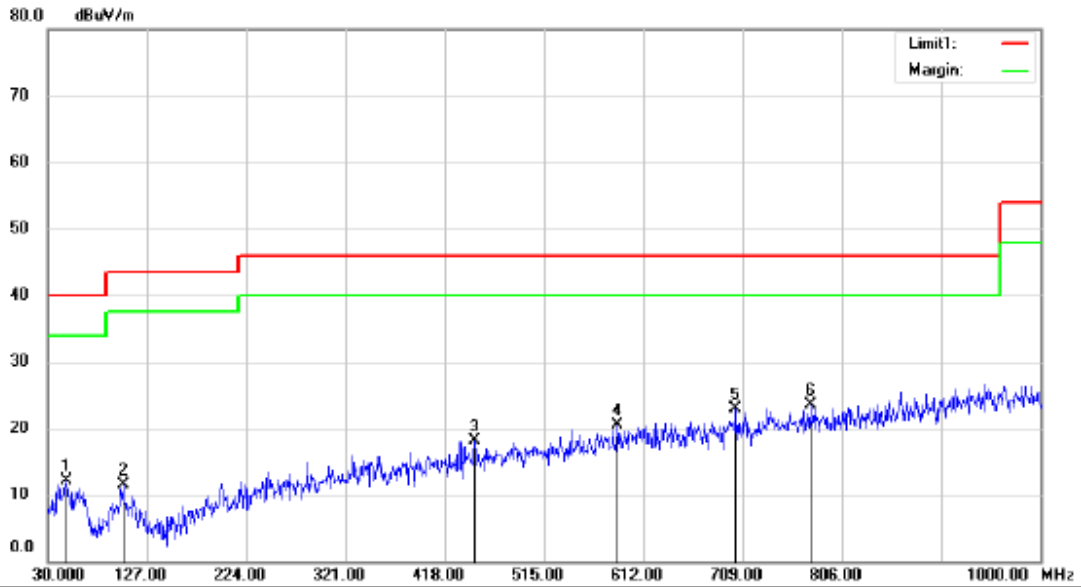
Site 3m Chamber #3 Polarization: *Vertical* Temperature: 23 C  
 Limit: (RE)FCC PART 15C Power: AC 120V/60Hz Humidity: 51 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode:GFSK TX 2441  
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		64.5563	30.80	-16.60	14.20	40.00	-25.80	QP		
2		103.9625	30.35	-16.16	14.19	43.50	-29.31	QP		
3		421.8800	26.97	-9.89	17.08	46.00	-28.92	QP		
4		596.6013	28.97	-6.43	22.54	46.00	-23.46	QP		
5		746.1025	26.53	-3.98	22.55	46.00	-23.45	QP		
6	*	836.7975	27.87	-2.86	25.01	46.00	-20.99	QP		



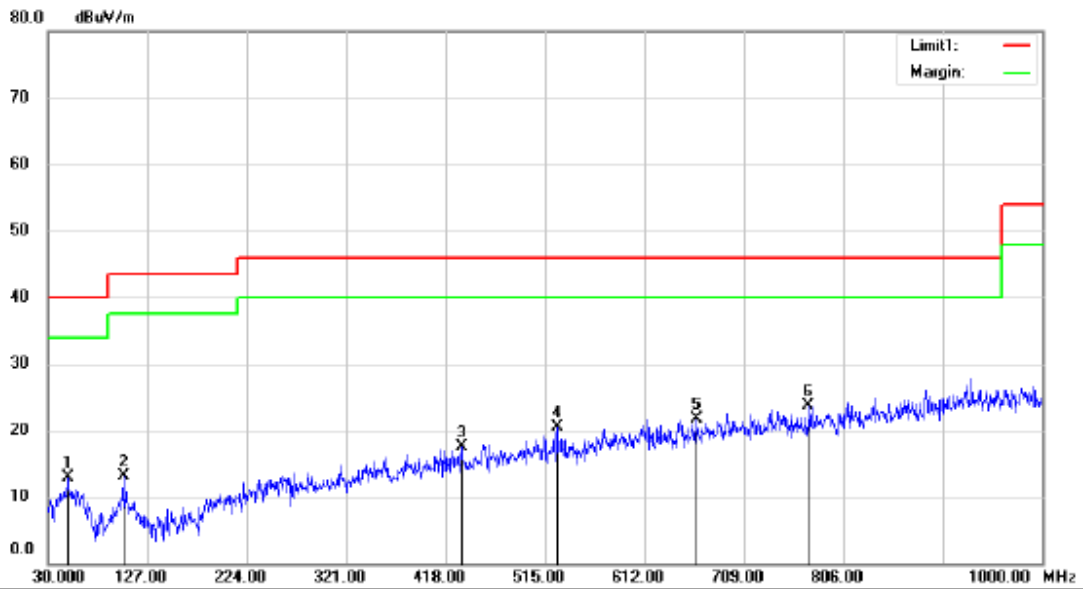
Site: 3m Chamber #3      Polarization: *Vertical*      Temperature: 23 C  
 Limit: (RE)FCC PART 15C      Power: AC 120V/60Hz      Humidity: 51 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode:GFSK TX 2480  
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		66.8600	32.26	-17.46	14.80	40.00	-25.20	QP		
2		101.1737	29.83	-16.41	13.42	43.50	-30.08	QP		
3		450.3737	26.75	-9.71	17.04	46.00	-28.96	QP		
4		551.3750	26.72	-7.79	18.93	46.00	-27.07	QP		
5		607.2713	27.45	-6.13	21.32	46.00	-24.68	QP		
6	*	762.5925	27.79	-3.80	23.99	46.00	-22.01	QP		



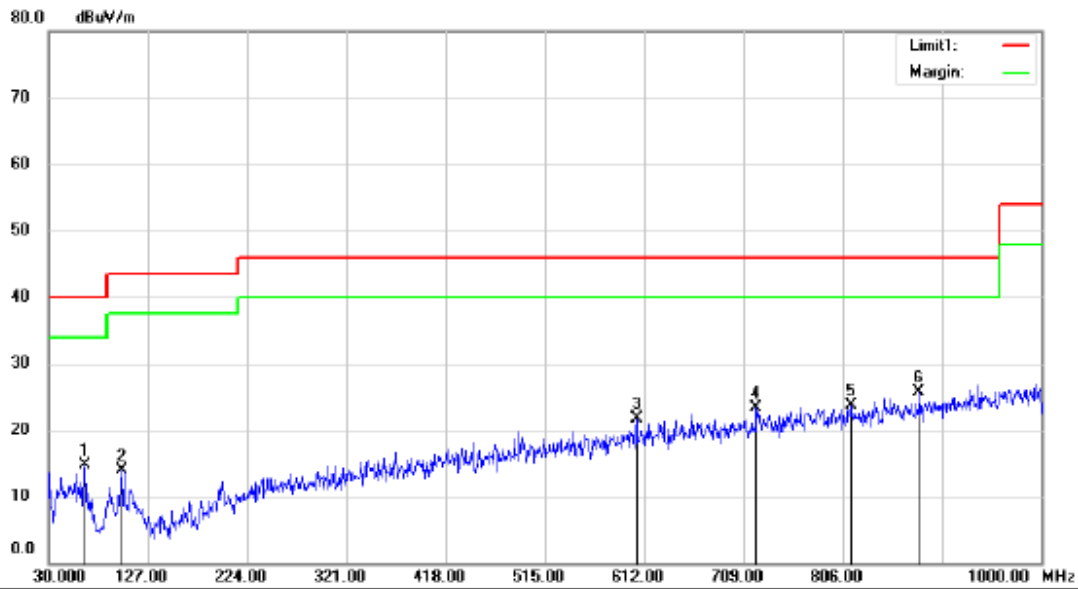
Site 3m Chamber #3 Polarization: *Horizontal* Temperature: 23 C  
 Limit: (RE)FCC PART 15C Power: AC 120V/60Hz Humidity: 51 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode:GFSK TX 2480  
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		49.0363	26.42	-14.37	12.05	40.00	-27.95			QP
2		103.9625	27.71	-16.16	11.55	43.50	-31.95			QP
3		447.8275	27.80	-9.73	18.07	46.00	-27.93			QP
4		587.0225	27.14	-6.72	20.42	46.00	-25.58			QP
5		702.4525	27.84	-4.91	22.93	46.00	-23.07			QP
6	*	775.2025	27.18	-3.75	23.43	46.00	-22.57			QP



Site 3m Chamber #3 Polarization: *Horizontal* Temperature: 23 C  
 Limit: (RE)FCC PART 15C Power: AC 120V/60Hz Humidity: 51 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode:8DPSK TX 2480  
 Note:

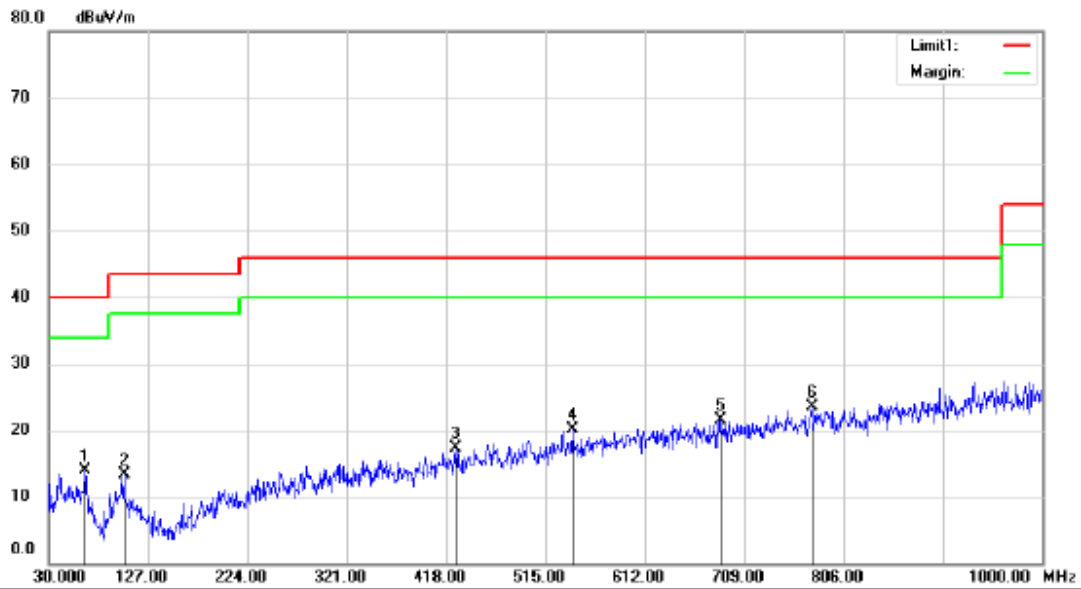
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1		49.7637	27.47	-14.50	12.97	40.00	-27.03	QP			
2		103.9625	29.28	-16.16	13.12	43.50	-30.38	QP			
3		434.1262	27.44	-9.87	17.57	46.00	-28.43	QP			
4		527.3674	28.48	-7.90	20.58	46.00	-25.42	QP			
5		663.4100	27.31	-5.52	21.79	46.00	-24.21	QP			
6	*	772.2925	27.50	-3.80	23.70	46.00	-22.30	QP			



Site 3m Chamber #3 Polarization: *Vertical* Temperature: 23 C  
 Limit: (RE)FCC PART 15C Power: AC 120V/60Hz Humidity: 51 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode:8DPSK TX 2480  
 Note:

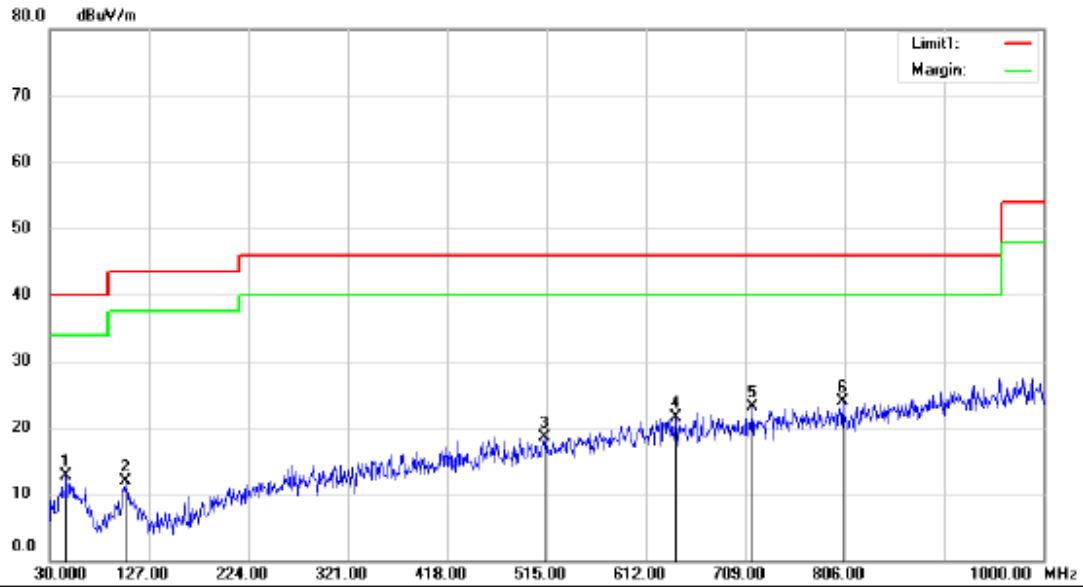
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	
1		65.1625	31.50	-16.72	14.78	40.00	-25.22	QP		
2		102.1437	30.21	-16.33	13.88	43.50	-29.62	QP		
3		604.8463	27.90	-6.19	21.71	46.00	-24.29	QP		
4		722.4588	27.89	-4.59	23.30	46.00	-22.70	QP		
5		815.5788	26.98	-3.29	23.69	46.00	-22.31	QP		
6	*	881.5388	27.80	-2.19	25.61	46.00	-20.39	QP		





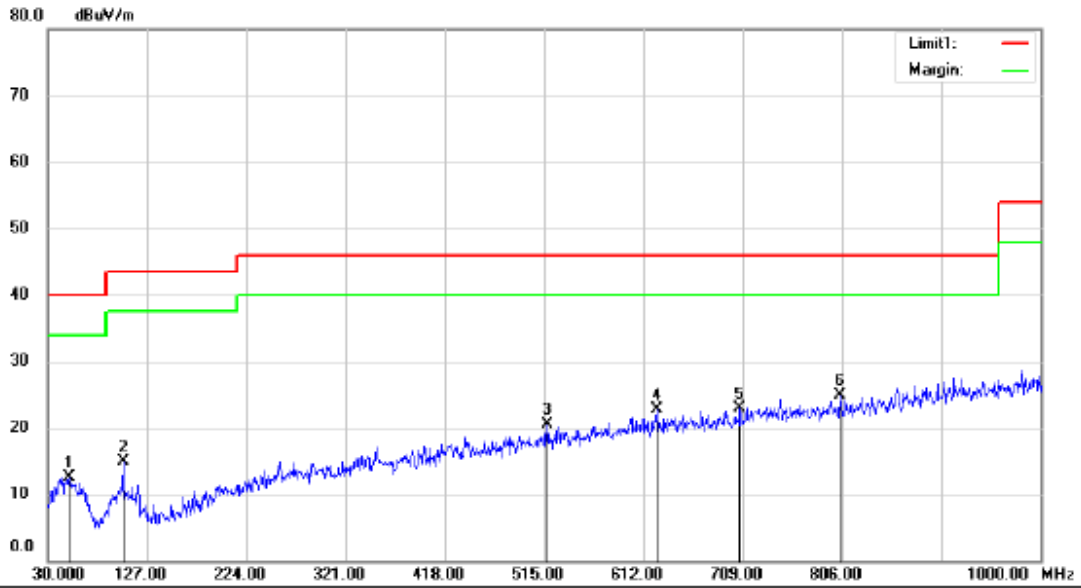
Site 3m Chamber #3 Polarization: *Vertical* Temperature: 23 C  
 Limit: (RE)FCC PART 15C Power: AC 120V/60Hz Humidity: 51 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode:8DPSK TX 2440  
 Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	
1		65.7687	30.96	-16.98	13.98	40.00	-26.02	QP		
2		103.9625	29.43	-16.16	13.27	43.50	-30.23	QP		
3		427.7000	27.18	-9.92	17.26	46.00	-28.74	QP		
4		541.6750	28.06	-7.93	20.13	46.00	-25.87	QP		
5		685.9625	26.71	-5.19	21.52	46.00	-24.48	QP		
6	*	775.5662	27.17	-3.74	23.43	46.00	-22.57	QP		



Site 3m Chamber #3 Polarization: *Horizontal* Temperature: 23 C  
 Limit: (RE)FCC PART 15C Power: AC 120V/60Hz Humidity: 51 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode:8DPSK TX 2440  
 Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	
1		46.6112	27.07	-14.33	12.74	40.00	-27.26	QP		
2		103.9625	28.12	-16.16	11.96	43.50	-31.54	QP		
3		513.6662	26.94	-8.42	18.52	46.00	-27.48	QP		
4		641.3425	27.29	-5.83	21.46	46.00	-24.54	QP		
5		715.9112	27.67	-4.66	23.01	46.00	-22.99	QP		
6	*	804.5450	27.43	-3.43	24.00	46.00	-22.00	QP		



Site 3m Chamber #3 Polarization: *Horizontal* Temperature: 23 C  
 Limit: (RE)FCC PART 15C Power: AC 120V/60Hz Humidity: 51 %

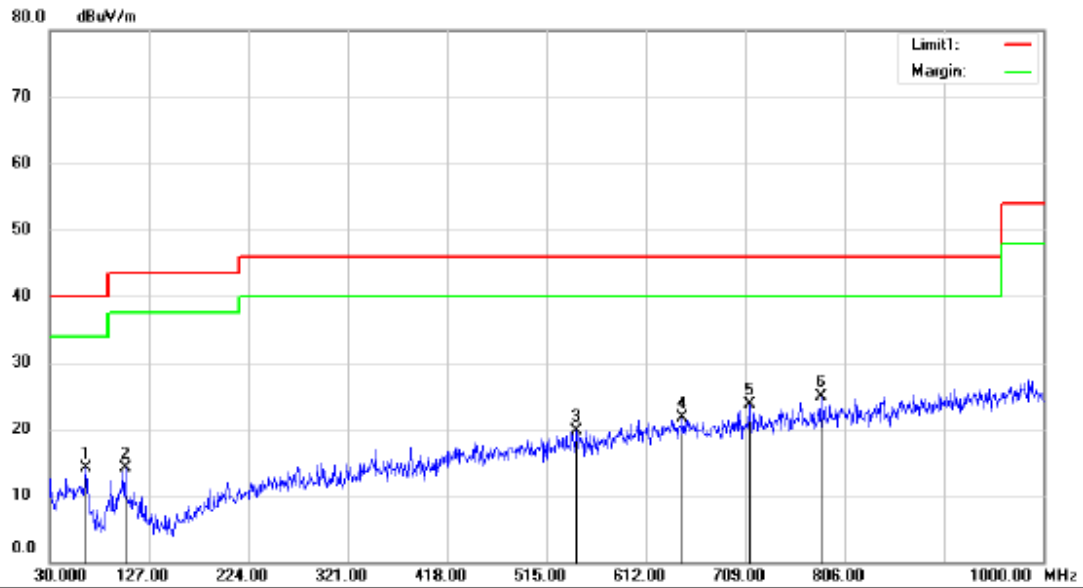
EUT: Bluetooth Around Neck Headset

M/N: NS-HNECKPLUS

Mode:8DPSK TX 2402

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		51.9462	26.98	-14.44	12.54	40.00	-27.46	QP		
2		103.9625	30.97	-16.16	14.81	43.50	-28.69	QP		
3		518.0313	28.72	-8.27	20.45	46.00	-25.55	QP		
4		626.0650	28.72	-5.98	22.74	46.00	-23.26	QP		
5		706.4538	27.65	-4.76	22.89	46.00	-23.11	QP		
6	*	804.6662	28.27	-3.43	24.84	46.00	-21.16	QP		



Site 3m Chamber #3 Polarization: *Vertical* Temperature: 23 C  
 Limit: (RE)FCC PART 15C Power: AC 120V/60Hz Humidity: 51 %  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode:8DPSK TX 2402  
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		65.0413	30.80	-16.67	14.13	40.00	-25.87	QP		
2		103.9625	30.32	-16.16	14.16	43.50	-29.34	QP		
3		544.7062	27.68	-7.89	19.79	46.00	-26.21	QP		
4		648.2537	27.39	-5.71	21.68	46.00	-24.32	QP		
5		713.3650	28.30	-4.64	23.66	46.00	-22.34	QP		
6	*	783.0838	28.47	-3.58	24.89	46.00	-21.11	QP		

## 9.9 CONDUCTED EMISSION TEST

### 9.9.1 Applicable Standard

According to FCC Part 15.207(a)

### 9.9.2 Conformance Limit

Frequency(MHz)	Conducted Emission Limit	
	Quasi-peak	Average
0.15-0.5	66-56	56-46
0.5-5.0	56	46
5.0-30.0	60	50

Note: 1. The lower limit shall apply at the transition frequencies  
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

### 9.9.3 Test Configuration

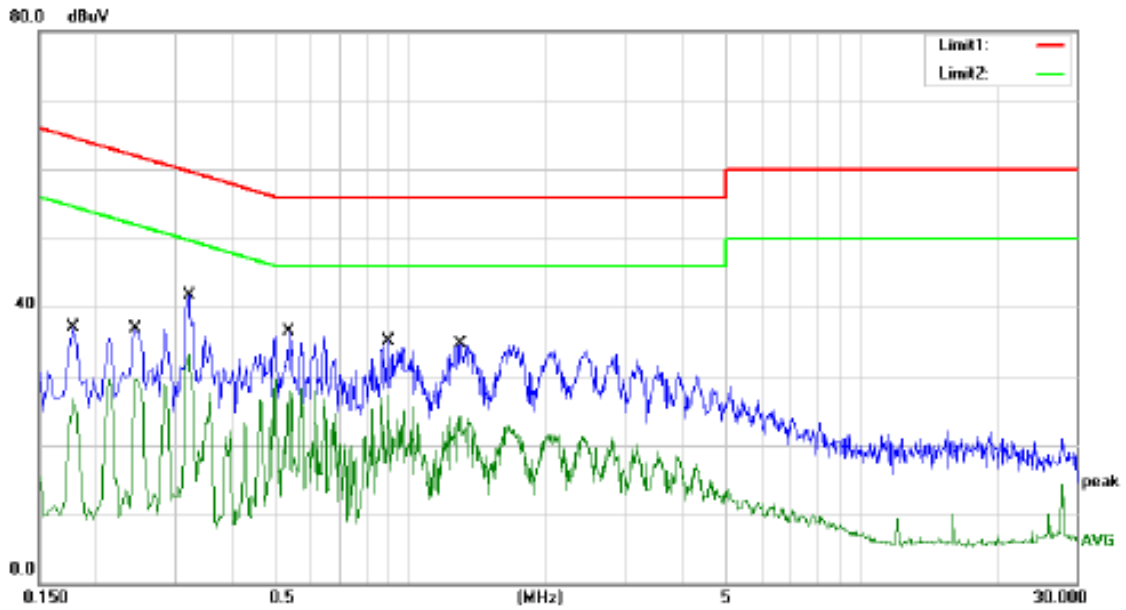
Test according to clause 7.3 conducted emission test setup

### 9.9.4 Test Procedure

The EUT was placed on a table which is 0.8m above ground plane.  
Maximum procedure was performed on the highest emissions to ensure EUT compliance.  
Repeat above procedures until all frequency measured were complete.

### 9.9.5 Test Results

The 120V &240V voltage have been tested, and the worst result recorded was report as below:



Site Conduction #2

Phase: L1

Temperature: 24.9

Limit: (CE)FCC PART 15. 207

Power: DC 5V by Adapter

Humidity: 54 %

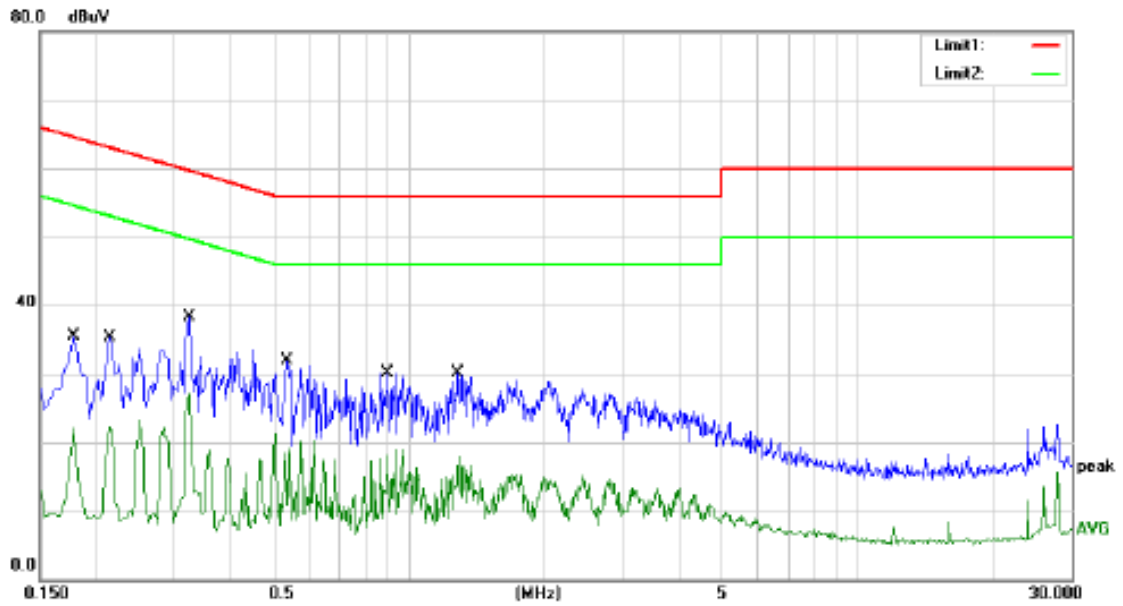
EUT: Bluetooth Around Neck Headset

M/N: NS-HNECKPLUS

Mode: BT transmitting

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1780	27.28	9.90	37.18	64.58	-27.40	QP	
2		0.1780	16.86	9.90	26.76	54.58	-27.82	AVG	
3		0.2460	27.05	9.90	36.95	61.89	-24.94	QP	
4		0.2460	19.70	9.90	29.60	51.89	-22.29	AVG	
5		0.3220	31.76	9.91	41.67	59.66	-17.99	QP	
6		0.3220	23.25	9.91	33.16	49.66	-16.50	AVG	
7		0.5380	26.56	9.92	36.48	56.00	-19.52	QP	
8	*	0.5380	19.62	9.92	29.54	46.00	-16.46	AVG	
9		0.8940	25.27	9.93	35.20	56.00	-20.80	QP	
10		0.8940	17.46	9.93	27.39	46.00	-18.61	AVG	
11		1.2900	24.69	9.93	34.62	56.00	-21.38	QP	
12		1.2900	14.38	9.93	24.31	46.00	-21.69	AVG	



Site: Conduction #2  
 Limit: (CE)FCC PART 15. 207  
 EUT: Bluetooth Around Neck Headset  
 M/N: NS-HNECKPLUS  
 Mode: BT transmitting  
 Note:

Phase: *N*  
 Power: DC 5V by Adapter  
 Temperature: 24.9  
 Humidity: 54 %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1780	25.68	9.90	35.58	64.58	-29.00	QP	
2		0.1780	12.21	9.90	22.11	54.58	-32.47	AVG	
3		0.2140	25.42	9.90	35.32	63.05	-27.73	QP	
4		0.2140	13.30	9.90	23.20	53.05	-29.85	AVG	
5	*	0.3220	28.39	9.91	38.30	59.66	-21.36	QP	
6		0.3220	17.27	9.91	27.18	49.66	-22.48	AVG	
7		0.5340	21.92	9.92	31.84	56.00	-24.16	QP	
8		0.5340	11.40	9.92	21.32	46.00	-24.68	AVG	
9		0.8940	20.21	9.93	30.14	56.00	-25.86	QP	
10		0.8940	8.99	9.93	18.92	46.00	-27.08	AVG	
11		1.2860	20.15	9.93	30.08	56.00	-25.92	QP	
12		1.2860	8.05	9.93	17.98	46.00	-28.02	AVG	

**9.10 ANTENNA APPLICATION**

**9.10.1 Antenna Requirement**

Standard	Requirement
FCC CRF Part15.203	An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

**9.10.2 Result**

The EUT'S antenna is Internal antenna for BT. The antenna's gain is 0.6 dBi, and the antenna can't be replaced by the user which in accordance to section 15.203, please refer to the photos.