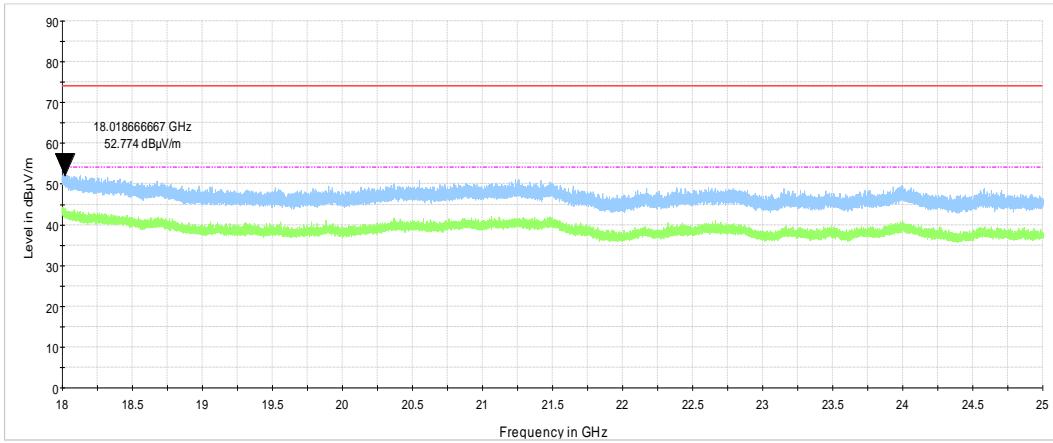




<b>Test specification: Section 15.247(d) / RSS-247 section 5.5, Radiated spurious emissions</b>			
<b>Test procedure:</b> ANSI C63.10 section 11.12.1			
<b>Test mode:</b> Compliance		<b>Verdict: PASS</b>	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

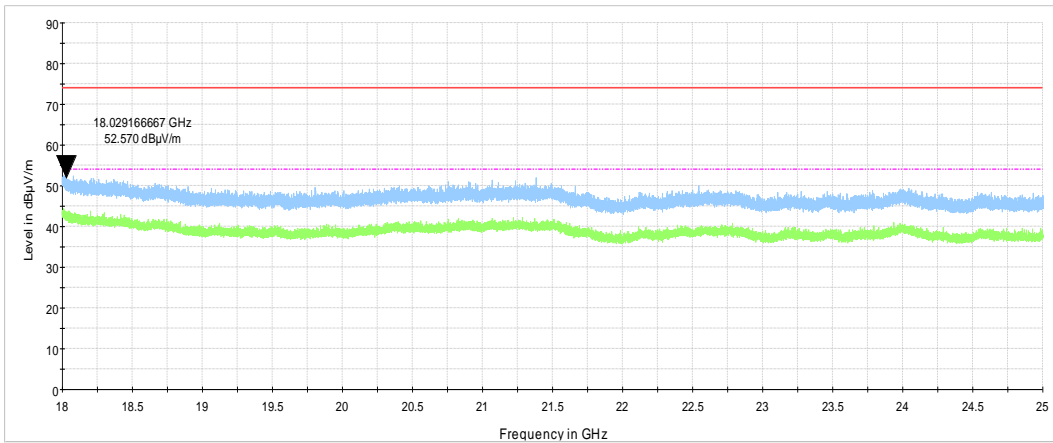
**Plot 7.2.51 Radiated emission measurements from 18 to 25 GHz at the mid carrier frequency**

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 CARRIER FREQUENCY: 2475.0 MHz  
 EUT TX ANTENNA: #1



**Plot 7.2.52 Radiated emission measurements from 18 to 25 GHz at the mid carrier frequency**

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 CARRIER FREQUENCY: 2475.0 MHz  
 EUT TX ANTENNA: #2

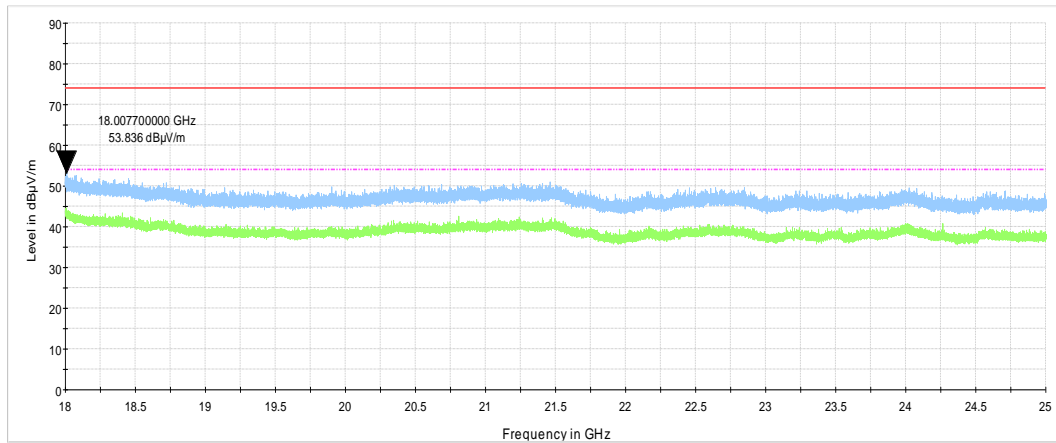




<b>Test specification: Section 15.247(d) / RSS-247 section 5.5, Radiated spurious emissions</b>			
<b>Test procedure:</b> ANSI C63.10 section 11.12.1			
<b>Test mode:</b> Compliance		<b>Verdict: PASS</b>	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

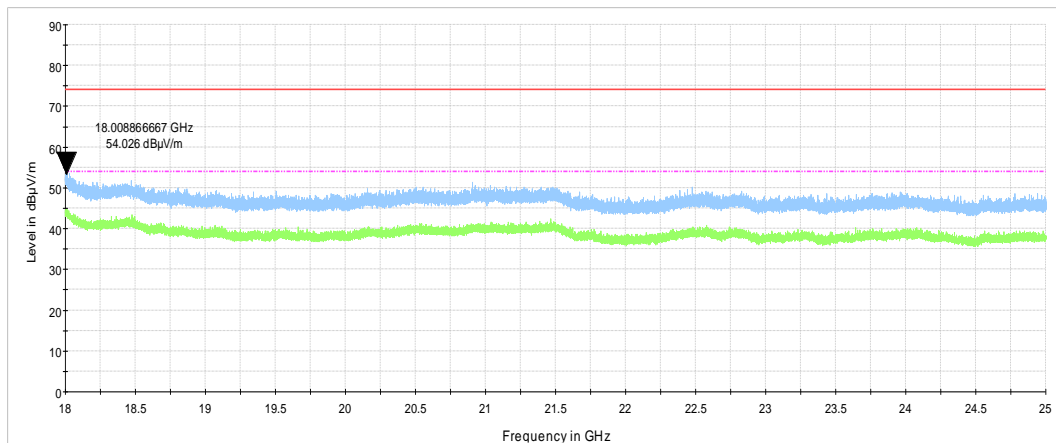
**Plot 7.2.53 Radiated emission measurements from 18 to 25 GHz at the high carrier frequency**

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 CARRIER FREQUENCY: 2480.0 MHz  
 EUT TX ANTENNA: #1



**Plot 7.2.54 Radiated emission measurements from 18 to 25 GHz at the high carrier frequency**

TEST SITE: Semi anechoic chamber  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical and Horizontal  
 CARRIER FREQUENCY: 2480.0 MHz  
 EUT TX ANTENNA: #2





<b>Test specification:</b> Section 15.247(b)3/ RSS-247 section 5.4(d), Peak output power			
<b>Test procedure:</b> ANSI C63.10 section 11.9.1.1			
<b>Test mode:</b> Compliance		<b>Verdict:</b> PASS	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

## 7.3 Peak output power

### 7.3.1 General

This test was performed to measure the maximum peak output power radiated by transmitter. Specification test limits are given in Table 7.3.1.

**Table 7.3.1 Peak output power limits**

Assigned frequency range, MHz	Maximum antenna gain, dBi	Peak output power*		Equivalent field strength limit @ 3m, dB(μV/m)**
		W	dBm	
902.0 – 928.0	6.0	1.0	30.0	131.2
<b>2400.0 – 2483.5</b>				
5725.0 – 5850.0				

\*- The limit is provided in terms of conducted RF power at the antenna connector. If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power limit shall be reduced below the stated value as follows:

- by 1 dB for every 3 dB that the directional gain of antenna exceeds 6 dBi for fixed point-to-point transmitters operate in 2400-2483.5 MHz band;
- without any corresponding reduction for fixed point-to-point transmitters operate in 5725-5850 MHz band;
- by the amount in dB that the directional gain of antenna exceeds 6 dBi for the rest of transmitters.

\*\*- Equivalent field strength limit was calculated from the peak output power as follows:  $E = \sqrt{30 \times P \times G} / r$ , where P is peak output power in Watts, r is antenna to EUT distance in meters and G is transmitter antenna gain in dBi.

### 7.3.2 Test procedure

**7.3.2.1** The EUT was set up as shown in Figure 7.3.1, energized and its proper operation was checked.

**7.3.2.2** The EUT was adjusted to produce maximum available to end user RF output power.

**7.3.2.3** The resolution bandwidth of spectrum analyzer was set wider than 6 dB bandwidth of the EUT and the field strength of the EUT carrier frequency was measured with antenna connected to spectrum analyzer/ EMI receiver. To find maximum radiation the turntable was rotated 360° and the measuring antenna height was swept in both vertical and horizontal polarizations.

**7.3.2.4** The maximum field strength of the EUT carrier frequency was measured as provided in Table 7.3.2 and associated plots.

**7.3.2.5** The maximum peak output power was calculated from the field strength of carrier as follows:

$$P = (E \times d)^2 / (30 \times G),$$

where P is the peak output power in W, E is the field strength in V/m, d is the test distance and G is the transmitter numeric antenna gain over an isotropic radiator.

The above equation was converted in logarithmic units for 3 m test distance:

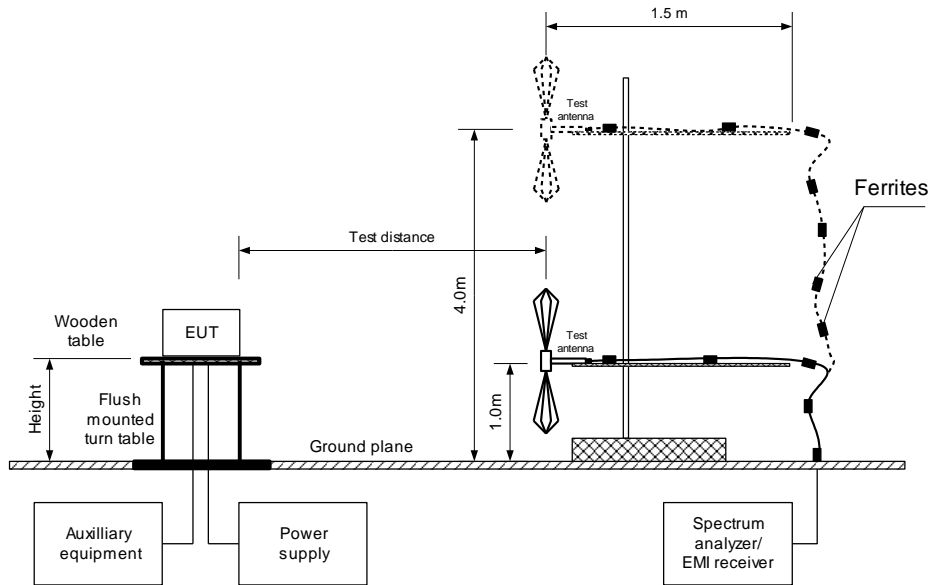
$$\text{Peak output power in dBm} = \text{Field strength in dB}(\mu\text{V/m}) - \text{Transmitter antenna gain in dBi} - 95.2 \text{ dB}$$

**7.3.2.6** The worst test results (the lowest margins) were recorded in Table 7.3.2.



<b>Test specification:</b> Section 15.247(b)3/ RSS-247 section 5.4(d), Peak output power			
<b>Test procedure:</b> ANSI C63.10 section 11.9.1.1			
<b>Test mode:</b> Compliance		<b>Verdict:</b> PASS	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

Figure 7.3.1 Setup for carrier field strength measurements





<b>Test specification:</b> Section 15.247(b)3/ RSS-247 section 5.4(d), Peak output power			
<b>Test procedure:</b> ANSI C63.10 section 11.9.1.1			
<b>Test mode:</b> Compliance		<b>Verdict:</b> PASS	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

Table 7.3.2 Peak output power test results

ASSIGNED FREQUENCY: 2400 -2483.5 MHz  
TEST DISTANCE: 3 m  
TEST SITE: Semi anechoic chamber  
EUT HEIGHT: 1.5 m  
DETECTOR USED: Peak  
TEST ANTENNA TYPE: Biconilog (30 MHz – 1000 MHz)  
Double ridged guide (above 1000 MHz)  
MODULATION: OQPSK  
BIT RATE: 250 Kbps  
TRANSMITTER OUTPUT POWER SETTINGS: Maximum  
DETECTOR USED: Peak  
RESOLUTION BANDWIDTH: 3.0 MHz  
VIDEO BANDWIDTH: 8.0 MHz  
CONFIGURATION: Antenna 1

Frequency, MHz	Field strength, dB(μV/m)	Antenna polarization	Antenna height, m	Azimuth, degrees*	EUT antenna gain, dBi	Peak output power, dBm**	Limit, dBm	Margin, dB***	Verdict
2404.12	114.06	Vertical	1.8	-60	1.0	17.86	30.0	-12.14	Pass
2404.12	113.04	Horizontal	2.6	0	1.0	16.84	30.0	-13.16	Pass
2444.24	114.56	Vertical	2.8	-90	1.0	18.36	30.0	-11.64	Pass
2444.78	112.78	Horizontal	2.5	0	1.0	16.58	30.0	-13.42	Pass
2475.62	113.98	Vertical	2.9	-100	1.0	17.78	30.0	-12.22	Pass
2475.50	112.98	Horizontal	3.0	0	1.0	16.78	30.0	-13.22	Pass
2480.50	96.00	Vertical	2.25	-105	1.0	-0.20	30.0	-30.20	Pass
2479.38	93.99	Horizontal	2.55	0	1.0	-2.21	30.0	-32.21	Pass

CONFIGURATION: Antenna 2

Frequency, MHz	Field strength, dB(μV/m)	Antenna polarization	Antenna height, m	Azimuth, degrees*	EUT antenna gain, dBi	Peak output power, dBm**	Limit, dBm	Margin, dB***	Verdict
2404.50	112.28	Vertical	1.55	-60	1.0	16.08	30.0	-13.92	Pass
2404.66	115.39	Horizontal	1.05	-180	1.0	19.19	30.0	-10.81	Pass
2444.26	112.93	Vertical	1.55	-45	1.0	16.73	30.0	-13.27	Pass
2444.56	115.40	Horizontal	1.25	-180	1.0	19.20	30.0	-10.80	Pass
2474.56	111.79	Vertical	1.55	-90	1.0	15.59	30.0	-14.41	Pass
2475.54	114.89	Horizontal	1.40	-180	1.0	18.69	30.0	-11.31	Pass
2479.32	95.72	Vertical	2.00	-120	1.0	-0.48	30.0	-30.48	Pass
2480.08	99.90	Horizontal	1.2	-180	1.0	3.70	30.0	-26.30	Pass

\*- EUT front panel refer to 0 degrees position of turntable.

\*\*- Peak output power was calculated from the field strength of carrier as follows:  $P = (E \times d)^2 / (30 \times G)$ ,where P is the peak output power in W, E is the field strength in V/m, d is the test distance in meters and G is the transmitter numeric antenna gain over an isotropic radiator. The above equation was converted in logarithmic units for 3 m test distance: *Peak output power in dBm = Field strength in dB(μV/m) - Transmitter antenna gain in dBi - 95.2 dB*

\*\*\*- Margin = Peak output power - specification limit.

Note: Maximum peak output power was obtained at Unom (115%Unom, 85%Unom) input power voltage.

**Reference numbers of test equipment used**

HL 4360	HL 3903	HL 4011	HL 5311	HL 5309	HL 4114	HL 5665	HL 5376
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Full description is given in Appendix A.

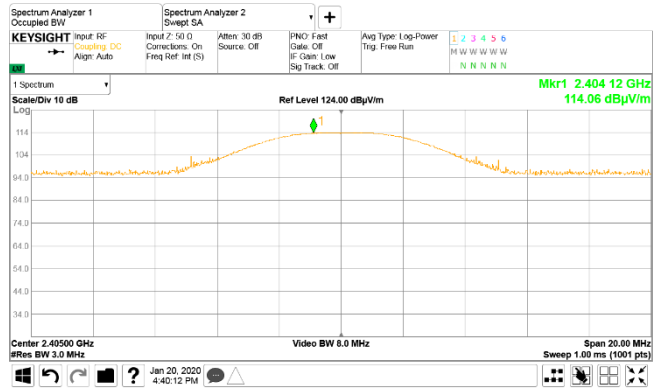


HERMON LABORATORIES

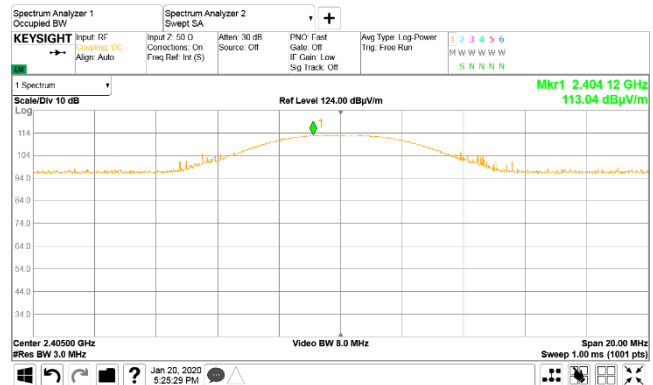
<b>Test specification:</b> Section 15.247(b)3/ RSS-247 section 5.4(d), Peak output power			
<b>Test procedure:</b> ANSI C63.10 section 11.9.1.1			
<b>Test mode:</b> Compliance		<b>Verdict:</b> PASS	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

Plot 7.3.1 Field strength of carrier at low frequency ch.11, Antenna 1

ANTENNA POLARIZATION: Vertical



ANTENNA POLARIZATION: Horizontal



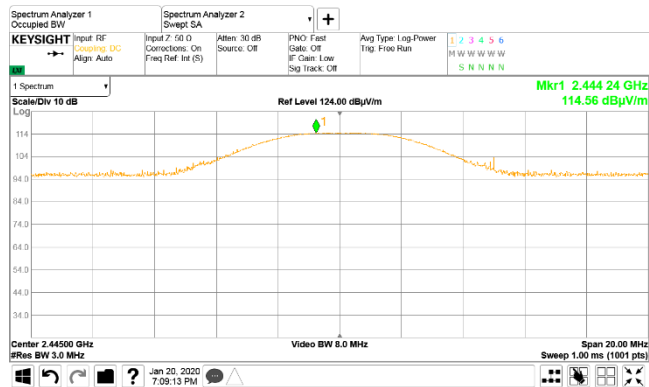


HERMON LABORATORIES

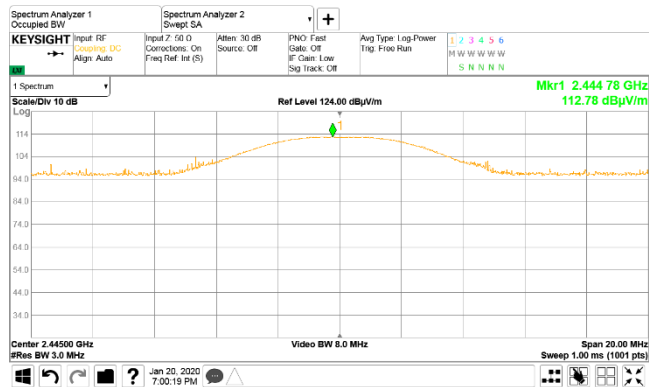
<b>Test specification:</b> Section 15.247(b)3/ RSS-247 section 5.4(d), Peak output power			
<b>Test procedure:</b> ANSI C63.10 section 11.9.1.1			
<b>Test mode:</b> Compliance		<b>Verdict:</b> PASS	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

Plot 7.3.2 Field strength of carrier at mid frequency ch.19, Antenna 1

ANTENNA POLARIZATION: Vertical



ANTENNA POLARIZATION: Horizontal

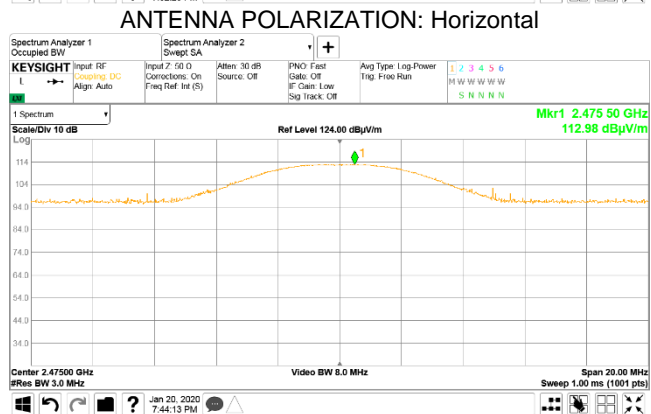
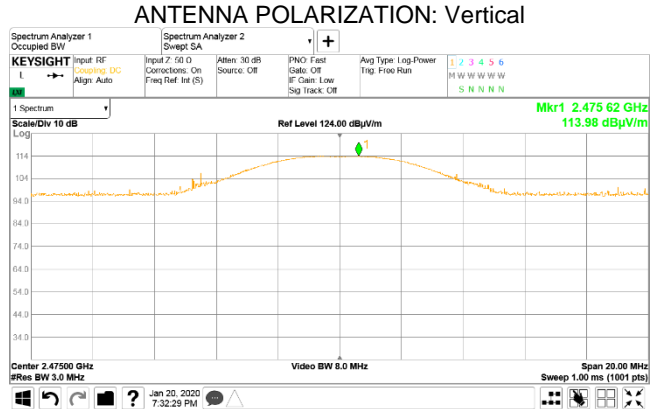




HERMON LABORATORIES

<b>Test specification:</b> Section 15.247(b)3/ RSS-247 section 5.4(d), Peak output power			
<b>Test procedure:</b> ANSI C63.10 section 11.9.1.1			
<b>Test mode:</b> Compliance		<b>Verdict:</b> PASS	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

Plot 7.3.3 Field strength of carrier at mid frequency ch.25, Antenna 1



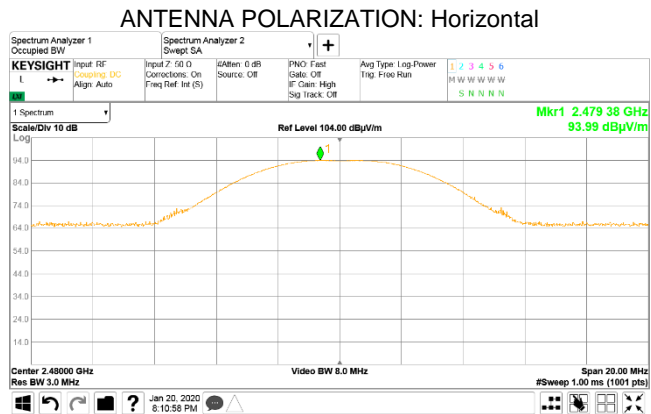
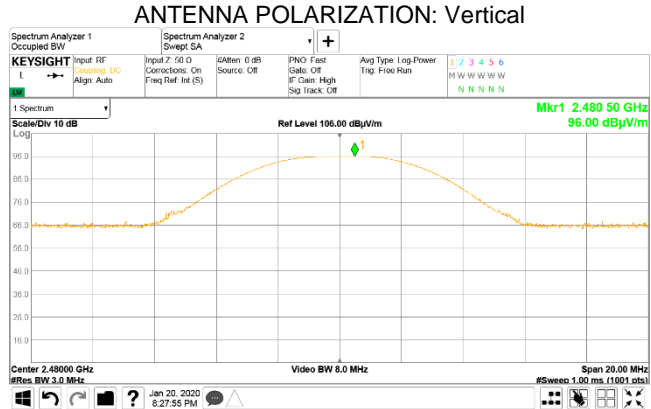




HERMON LABORATORIES

<b>Test specification:</b> Section 15.247(b)3/ RSS-247 section 5.4(d), Peak output power			
<b>Test procedure:</b> ANSI C63.10 section 11.9.1.1			
<b>Test mode:</b> Compliance		<b>Verdict:</b> PASS	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

Plot 7.3.4 Field strength of carrier at high frequency ch.26, Antenna 1



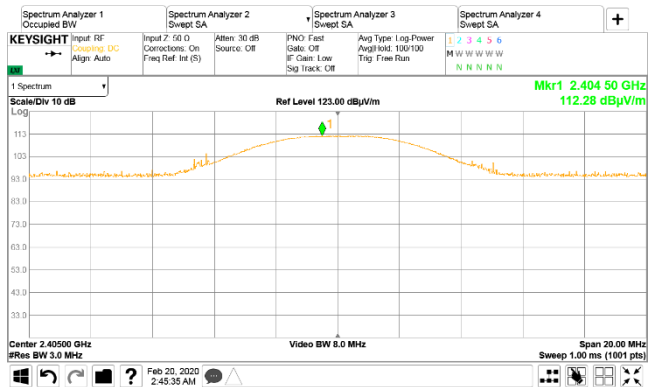


HERMON LABORATORIES

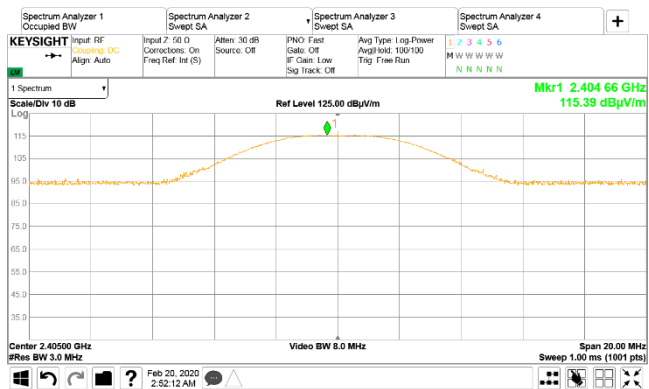
<b>Test specification:</b> Section 15.247(b)3/ RSS-247 section 5.4(d), Peak output power			
<b>Test procedure:</b> ANSI C63.10 section 11.9.1.1			
<b>Test mode:</b> Compliance		<b>Verdict:</b> PASS	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

Plot 7.3.5 Field strength of carrier at low frequency ch.11, Antenna 2

ANTENNA POLARIZATION: Vertical



ANTENNA POLARIZATION: Horizontal



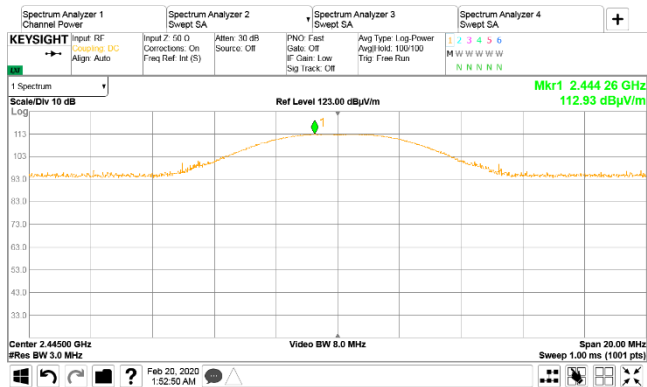


HERMON LABORATORIES

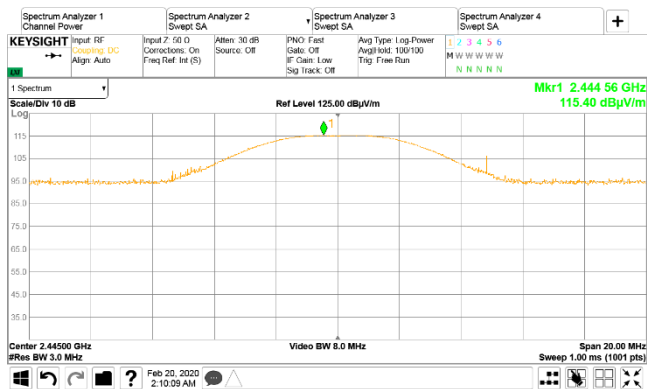
<b>Test specification:</b> Section 15.247(b)3/ RSS-247 section 5.4(d), Peak output power			
<b>Test procedure:</b> ANSI C63.10 section 11.9.1.1			
<b>Test mode:</b> Compliance		<b>Verdict:</b> PASS	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

Plot 7.3.6 Field strength of carrier at mid frequency ch.19, Antenna 2

ANTENNA POLARIZATION: Vertical



ANTENNA POLARIZATION: Horizontal



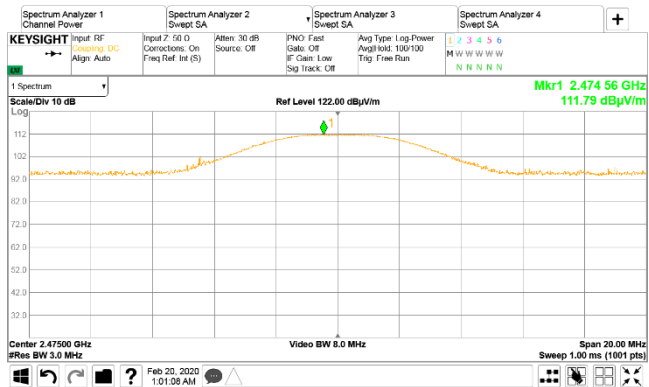


HERMON LABORATORIES

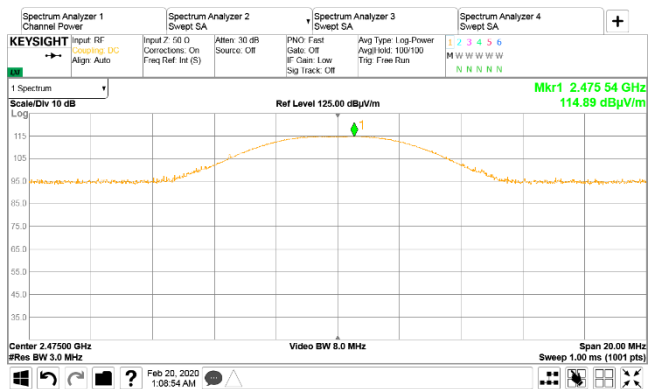
<b>Test specification:</b> Section 15.247(b)3/ RSS-247 section 5.4(d), Peak output power			
<b>Test procedure:</b> ANSI C63.10 section 11.9.1.1			
<b>Test mode:</b> Compliance		<b>Verdict:</b> PASS	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

Plot 7.3.7 Field strength of carrier at mid frequency ch.25, Antenna 2

ANTENNA POLARIZATION: Vertical



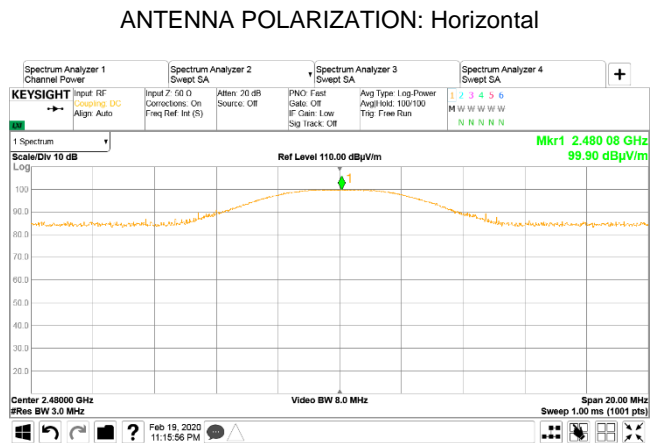
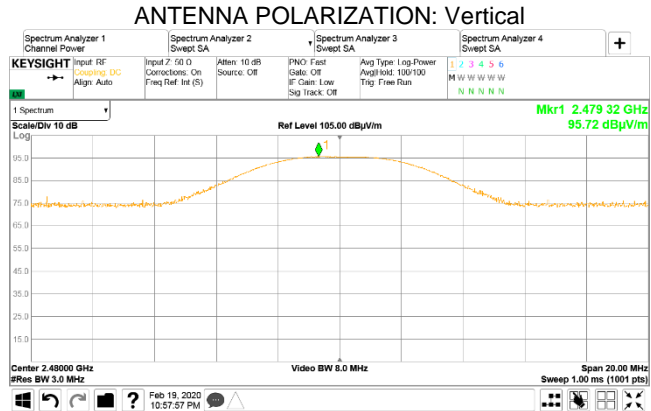
ANTENNA POLARIZATION: Horizontal





<b>Test specification:</b> Section 15.247(b)3/ RSS-247 section 5.4(d), Peak output power			
<b>Test procedure:</b> ANSI C63.10 section 11.9.1.1			
<b>Test mode:</b> Compliance		<b>Verdict:</b> PASS	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

Plot 7.3.8 Field strength of carrier at high frequency ch.26, Antenna 2





<b>Test specification: Section 15.247(d) / RSS-247 section 5.5, Band edge emissions</b>			
<b>Test procedure:</b> ANSI C63.10 section 11.12.1			
<b>Test mode:</b> Compliance		<b>Verdict: PASS</b>	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

## 7.4 Band edge radiated emissions

### 7.4.1 General

This test was performed to measure emissions, radiated from the EUT at the assigned frequency band edges. Specification test limits are given in Table 7.4.1.

Table 7.4.1 Band edge emission limits

Output power	Assigned frequency, MHz	Attenuation below carrier*, dBc	Field strength at 3 m within restricted bands, dB(μV/m)	
			Peak	Average
Peak	902.0 – 928.0	20.0	74.0	54.0
	<b>2400.0 – 2483.5</b>			
	5725.0 – 5850.0			

\* - Band edge emission limit is provided in terms of attenuation below the peak of modulated carrier measured with the same resolution bandwidth.

### 7.4.2 Test procedure

- 7.4.2.1 The EUT was set up as shown in Figure 7.4.1, energized normally modulated at the maximum data rate and its proper operation was checked.
- 7.4.2.2 The EUT was adjusted to produce maximum available to end user RF output power at the lowest carrier frequency.
- 7.4.2.3 The spectrum analyzer span was set to capture the carrier frequency and associated modulation products. The resolution bandwidth was set wider than 1 % of the frequency span.
- 7.4.2.4 The spectrum analyzer was set in max hold mode and allowed trace to stabilize. The highest emission level within the authorized band was measured.
- 7.4.2.5 The maximum band edge emission and modulation product outside of the band were measured as provided in Table 7.4.2 and associated plots and referenced to the highest emission level measured within the authorized band.
- 7.4.2.6 The above procedure was repeated with the EUT adjusted to produce maximum RF output power at the highest carrier frequency.
- 7.4.2.7 The above procedure was repeated with the frequency hopping function enabled.

Figure 7.4.1 Band edge emission test setup





<b>Test specification:</b> Section 15.247(d) / RSS-247 section 5.5, Band edge emissions			
<b>Test procedure:</b> ANSI C63.10 section 11.12.1			
<b>Test mode:</b> Compliance		<b>Verdict:</b> PASS	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

Table 7.4.2 Band edge emission test results

ASSIGNED FREQUENCY RANGE: 2400 - 2483.5 MHz  
DETECTOR USED: Peak  
MODULATION: OQPSK  
BIT RATE: 250 kbps  
TRANSMITTER OUTPUT POWER SETTINGS: Maximum  
TRANSMITTER OUTPUT POWER: 17.8 dBm at low ch.11 carrier frequency Antenna 1  
17.71 dBm at mid ch.25 carrier frequency Antenna 1  
-0.24 dBm at high ch.26 carrier frequency Antenna 1  
19.19 dBm at low ch.11 carrier frequency Antenna 2  
18.69 dBm at mid ch.25 carrier frequency Antenna 2  
3.70 dBm at high ch.26 carrier frequency Antenna 2  
RESOLUTION BANDWIDTH: 100 kHz  
VIDEO BANDWIDTH: ≥ RBW

Frequency, MHz	Band edge emission, dBuV/m	Emission at carrier, dBuV/m	Attenuation below carrier, dBc	Limit, dBc	Margin, dB*	Verdict
<b>Antenna 1</b>						
2404.12	55.67	114.06	58.39	20	38.39	Pass
<b>Antenna 2</b>						
2404.66	63.41	115.39	51.98	20	31.98	Pass

\*- Margin = Attenuation below carrier – specification limit.



<b>Test specification:</b> Section 15.247(d) / RSS-247 section 5.5, Band edge emissions			
<b>Test procedure:</b> ANSI C63.10 section 11.12.1			
<b>Test mode:</b> Compliance		<b>Verdict:</b> PASS	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

Table 7.4.3 Band edge emissions above 1 GHz within restricted bands

ASSIGNED FREQUENCY: 2400 - 2483.5 MHz  
 TEST DISTANCE: 3 m  
 MODULATION: OQPSK  
 BIT RATE: 250 kbps  
 DUTY CYCLE: 100 %  
 TRANSMITTER OUTPUT POWER SETTINGS: Maximum  
 DETECTOR USED: Peak / Average  
 RESOLUTION BANDWIDTH: 1000 kHz  
 TEST ANTENNA TYPE: Double ridged guide

Frequency, MHz	Antenna			Peak field strength(VBW=3 MHz)			Average field strength(VBW=10 kHz)				Verdict
	Polarization	Height, m	Azimuth, degrees*	Measured, dB(µV/m)	Limit, dB(µV/m)	Margin, dB**	Measured, dB(µV/m)	Calculated, dB(µV/m)	Limit, dB(µV/m)	Margin, dB***	
<b>Antenna 1</b>											
<b>Low carrier frequency: Channel 11</b>											
2377.920	Vertical	1.8	-60	54.50	74.0	-19.50	41.81	41.81	54.0	-12.19	Pass
<b>Mid carrier frequency : Channel 25</b>											
2333.2800	Vertical	2.9	-100	57.52	74.0	-16.48	45.80	45.80	54.0	-8.20	Pass
<b>High carrier frequency 1: Channel 26</b>											
2483.5000	Vertical	2.25	-105	54.67	74.0	-19.33	43.14	43.14	54.0	-10.86	Pass
<b>Antenna 2</b>											
<b>Low carrier frequency: Channel 11</b>											
2370.0000	Horizontal	1.05	-180	59.75	74.0	-14.25	49.12	49.12	54.0	-4.88	Pass
<b>Mid carrier frequency 1: Channel 25</b>											
2483.9125	Horizontal	1.40	-180	58.33	74.0	-15.67	48.28	48.28	54.0	-5.72	Pass
<b>High carrier frequency 1: Channel 26</b>											
2483.5000	Horizontal	1.20	-180	58.70	74.0	-15.30	47.13	47.13	54.0	-6.87	Pass

\*- EUT front panel refers to 0 degrees position of turntable.  
 \*\*- Margin = Measured field strength - specification limit.  
 \*\*\*- Margin = Calculated field strength - specification limit,  
 where Calculated field strength = Measured field strength + average factor.

Reference numbers of test equipment used

HL 4360	HL 3903	HL 4011	HL 5311	HL 5309	HL 5665	HL 4114	HL 5376
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Full description is given in Appendix A.



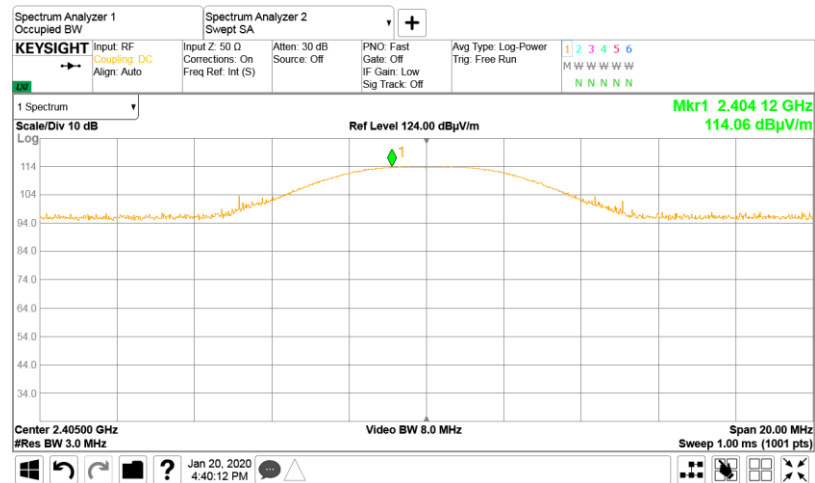


HERMON LABORATORIES

<b>Test specification:</b> Section 15.247(d) / RSS-247 section 5.5, Band edge emissions			
<b>Test procedure:</b> ANSI C63.10 section 11.12.1			
<b>Test mode:</b> Compliance		<b>Verdict:</b> PASS	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

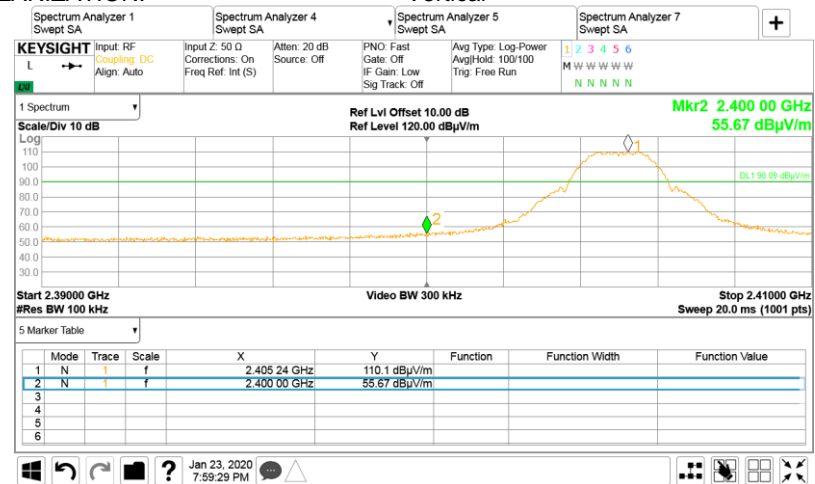
Plot 7.4.1 The highest emission level within the assigned band at low carrier frequency ch.11, Antenna 1

ANTENNA POLARIZATION: Vertical



Plot 7.4.2 The highest band edge emission at low carrier frequency ch.11, Antenna 1

FREQUENCY RANGE: 2390 – 2400 MHz  
TEST DISTANCE: 3 m  
ANTENNA POLARIZATION: Vertical



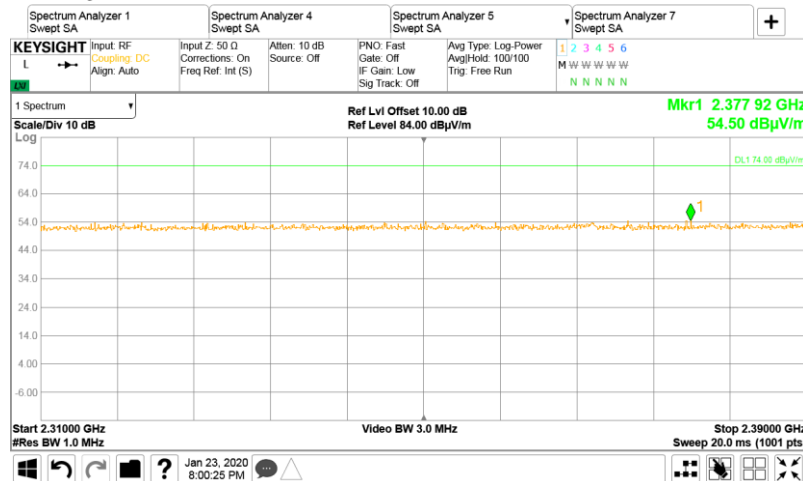


HERMON LABORATORIES

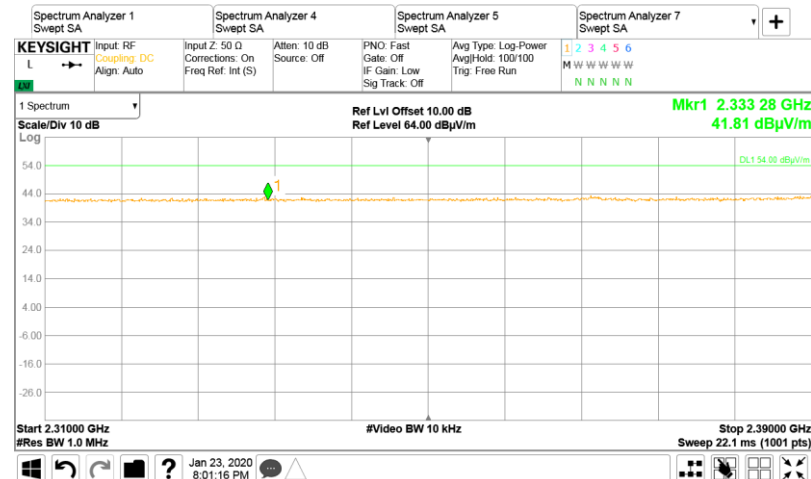
<b>Test specification:</b> Section 15.247(d) / RSS-247 section 5.5, Band edge emissions			
<b>Test procedure:</b> ANSI C63.10 section 11.12.1			
<b>Test mode:</b> Compliance		<b>Verdict:</b> PASS	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

Plot 7.4.3 The highest band edge emission at low carrier frequency ch.11, Antenna 1

FREQUENCY RANGE: 2310 – 2390 MHz  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 RBW = 1 MHz VBW = 3 MHz



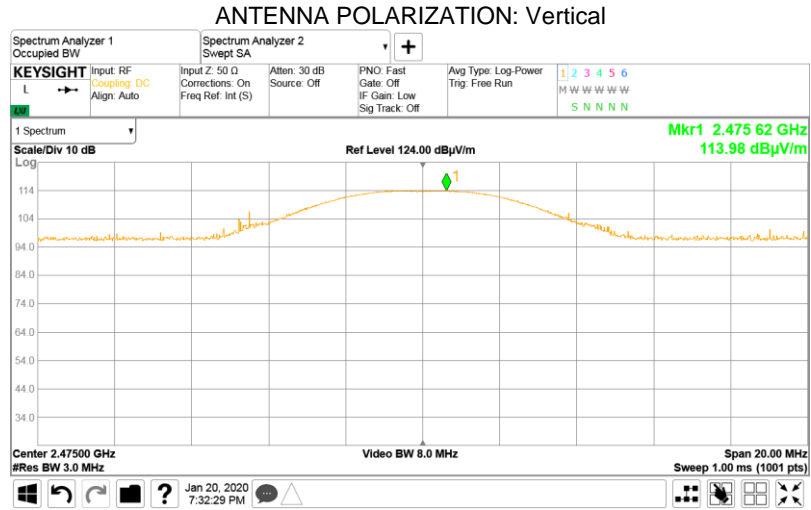
FREQUENCY RANGE: 2310 – 2390 MHz  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 RBW = 1 MHz VBW = 10 kHz





<b>Test specification: Section 15.247(d) / RSS-247 section 5.5, Band edge emissions</b>			
<b>Test procedure:</b> ANSI C63.10 section 11.12.1			
<b>Test mode:</b> Compliance		<b>Verdict: PASS</b>	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

Plot 7.4.4 The highest emission level within the assigned band at mid carrier frequency ch.25, Antenna 1



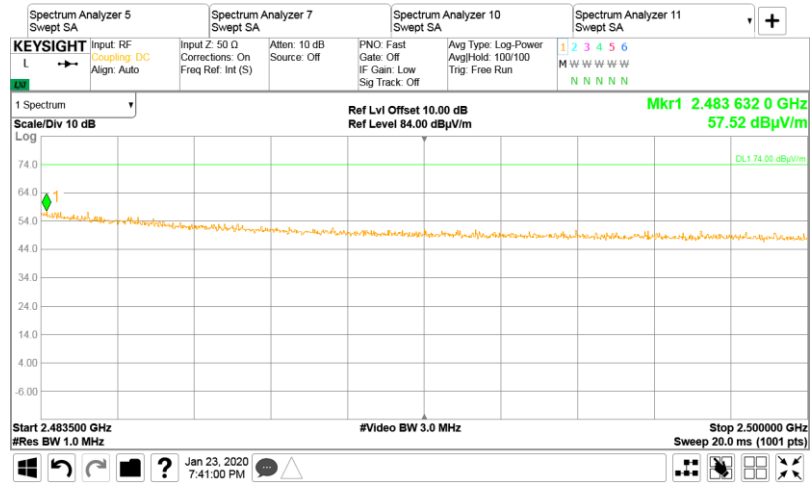


HERMON LABORATORIES

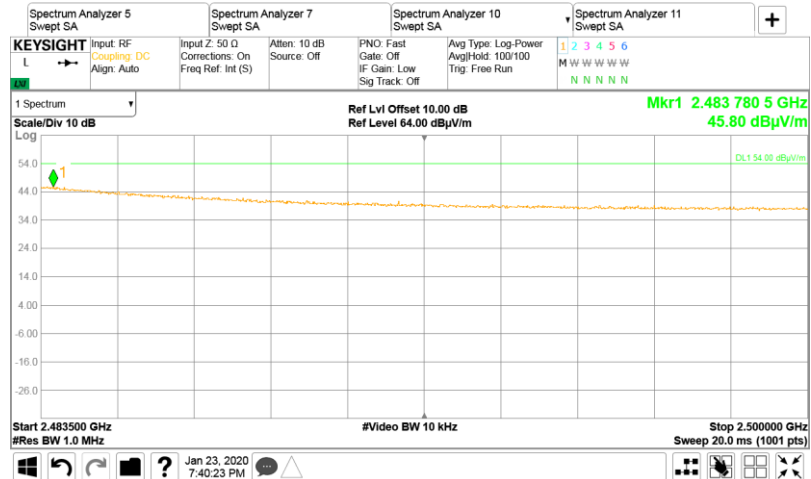
<b>Test specification: Section 15.247(d) / RSS-247 section 5.5, Band edge emissions</b>			
<b>Test procedure:</b> ANSI C63.10 section 11.12.1			
<b>Test mode:</b> Compliance		<b>Verdict: PASS</b>	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

Plot 7.4.5 The highest band edge emission at mid carrier frequency ch.25, Antenna 1

FREQUENCY RANGE: 2483.5 – 2500 MHz  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 RBW = 1 MHz VBW = 3 MHz



FREQUENCY RANGE: 2483.5 – 2500 MHz  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 RBW = 1 MHz VBW = 10 KHz

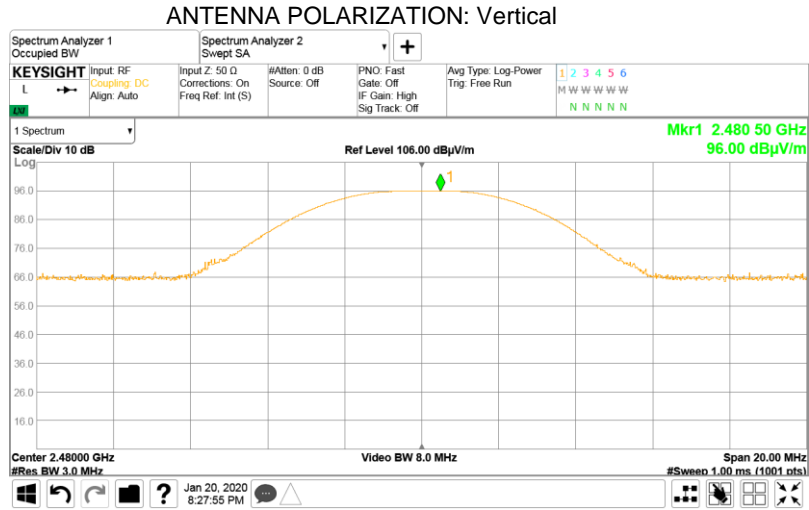




HERMON LABORATORIES

<b>Test specification:</b> Section 15.247(d) / RSS-247 section 5.5, Band edge emissions			
<b>Test procedure:</b> ANSI C63.10 section 11.12.1			
<b>Test mode:</b> Compliance		<b>Verdict:</b> PASS	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

Plot 7.4.6 The highest emission level within the assigned band at high carrier frequency ch.26, Antenna 1



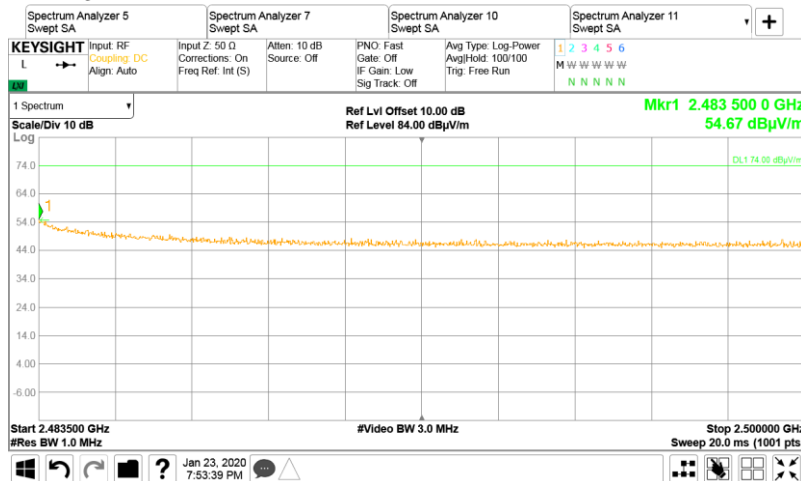


HERMON LABORATORIES

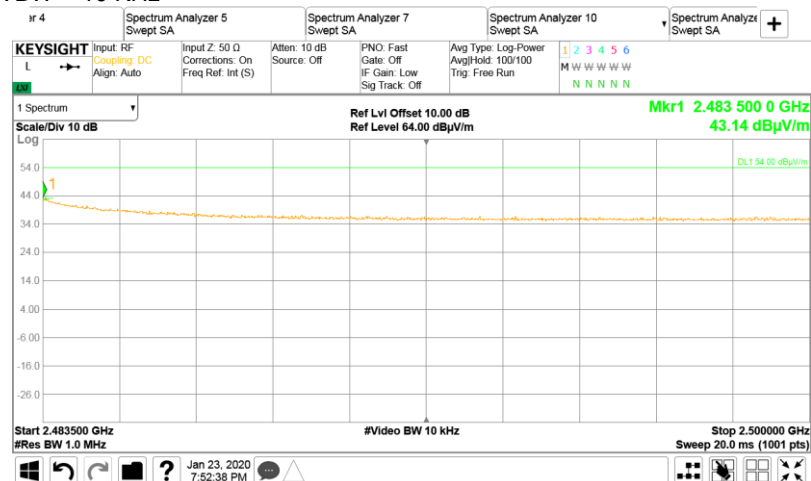
<b>Test specification:</b> Section 15.247(d) / RSS-247 section 5.5, Band edge emissions			
<b>Test procedure:</b> ANSI C63.10 section 11.12.1			
<b>Test mode:</b> Compliance		<b>Verdict:</b> PASS	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

Plot 7.4.7 The highest band edge emission at high carrier frequency ch.26, Antenna 1

FREQUENCY RANGE: 2483.5 – 2500 MHz  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 RBW = 1 MHz VBW = 3 MHz



FREQUENCY RANGE: 2483.5 – 2500 MHz  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Vertical  
 RBW = 1 MHz VBW = 10 KHz



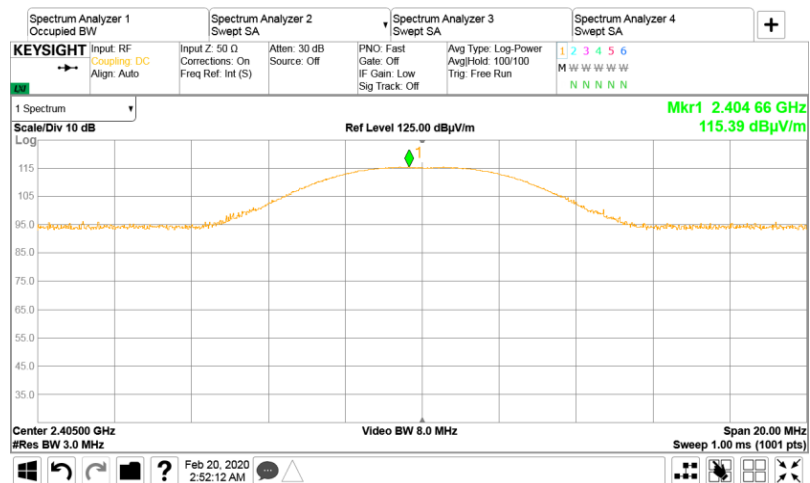


HERMON LABORATORIES

<b>Test specification:</b> Section 15.247(d) / RSS-247 section 5.5, Band edge emissions			
<b>Test procedure:</b> ANSI C63.10 section 11.12.1			
<b>Test mode:</b> Compliance		<b>Verdict:</b> PASS	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

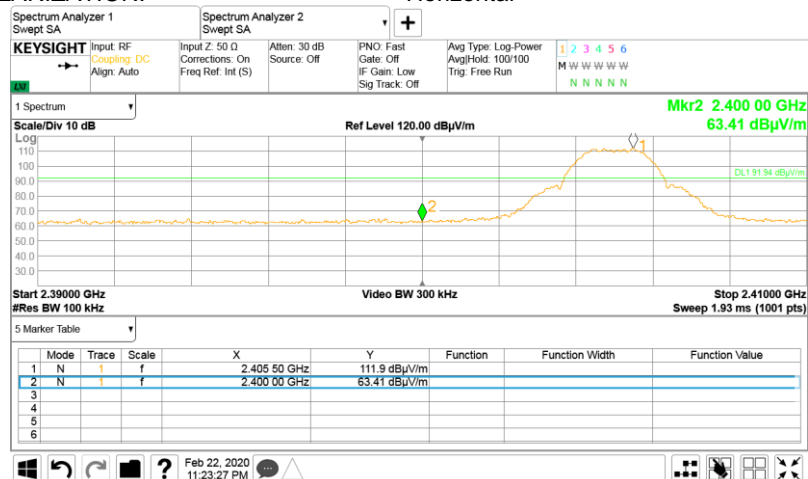
Plot 7.4.8 The highest emission level within the assigned band at low carrier frequency ch.11, Antenna 2

ANTENNA POLARIZATION: Horizontal



Plot 7.4.9 The highest band edge emission at low carrier frequency ch.11, Antenna 2

FREQUENCY RANGE: 2390 – 2400 MHz  
TEST DISTANCE: 3 m  
ANTENNA POLARIZATION: Horizontal



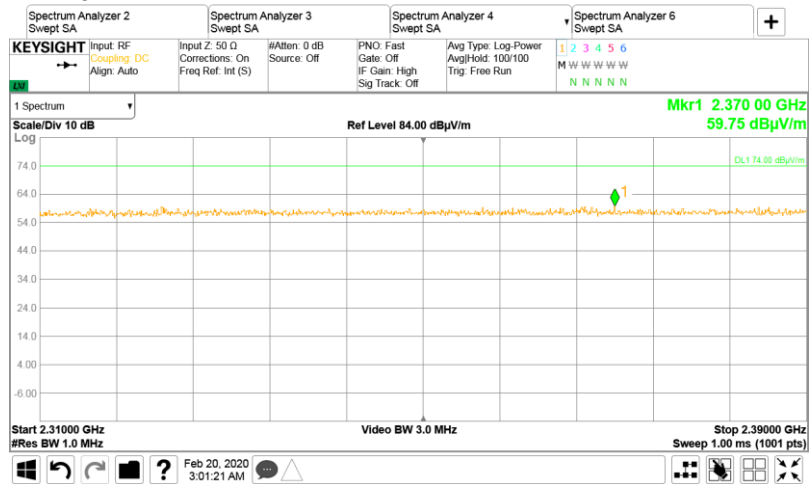


HERMON LABORATORIES

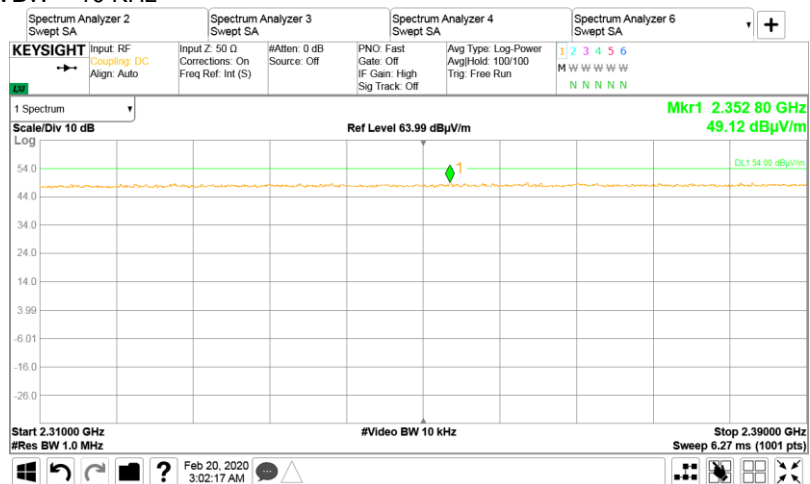
<b>Test specification: Section 15.247(d) / RSS-247 section 5.5, Band edge emissions</b>			
<b>Test procedure:</b> ANSI C63.10 section 11.12.1			
<b>Test mode:</b> Compliance		<b>Verdict: PASS</b>	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

Plot 7.4.10 The highest band edge emission at low carrier frequency ch.11, Antenna 2

FREQUENCY RANGE: 2310 – 2390 MHz  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Horizontal  
 RBW = 1 MHz VBW = 3 MHz



FREQUENCY RANGE: 2310 – 2390 MHz  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Horizontal  
 RBW = 1 MHz VBW = 10 KHz





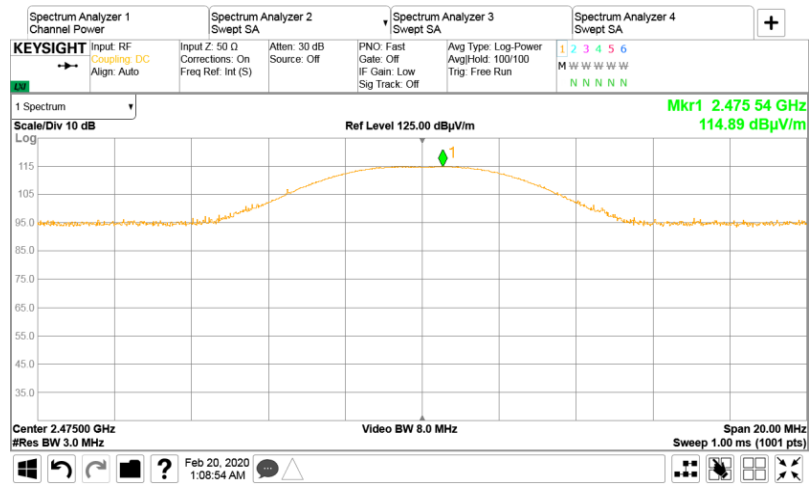


HERMON LABORATORIES

<b>Test specification:</b> Section 15.247(d) / RSS-247 section 5.5, Band edge emissions			
<b>Test procedure:</b> ANSI C63.10 section 11.12.1			
<b>Test mode:</b> Compliance		<b>Verdict:</b> PASS	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

Plot 7.4.11 The highest emission level within the assigned band at mid carrier frequency ch.25, Antenna 2

ANTENNA POLARIZATION: Horizontal



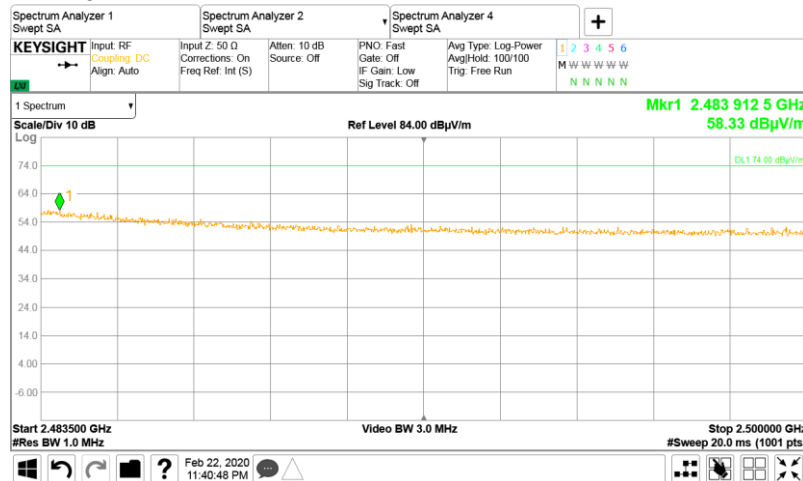


HERMON LABORATORIES

<b>Test specification:</b> Section 15.247(d) / RSS-247 section 5.5, Band edge emissions			
<b>Test procedure:</b> ANSI C63.10 section 11.12.1			
<b>Test mode:</b> Compliance		<b>Verdict:</b> PASS	
<b>Date(s):</b> 16-Dec-19			
<b>Temperature:</b> 22 °C	<b>Relative Humidity:</b> 47 %	<b>Air Pressure:</b> 1020 hPa	<b>Power:</b> 3 VDC
<b>Remarks:</b>			

Plot 7.4.12 The highest band edge emission at mid carrier frequency ch.25, Antenna 2

FREQUENCY RANGE: 2483.5 – 2500 MHz  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Horizontal  
 RBW = 1 MHz VBW = 3 MHz



FREQUENCY RANGE: 2483.5 – 2500 MHz  
 TEST DISTANCE: 3 m  
 ANTENNA POLARIZATION: Horizontal  
 RBW = 1 MHz VBW = 10 KHz

