

Summary of Radiated Tx Emissions

Measured Frequency Range (MHz)	Channel Frequency	Antenna Polarization	Emission Frequency (MHz)	Measured Emission [E _{Meas}] (dBuV)	Antenna ACF [ACF] (dB)	Cable Loss [L _c] (dB)	Amplifier Gain [G _A] (dB)	Corrected Emission [E _{Corr}] (dBuV/m)	Limit (dBuV)	Margin (dB)
30-1000MHz	2412.0	Horizontal	47.5	10.23	14.33	0.75	0.00 (3)	25.3 (2)	40.0	14.7
30-1000MHz	2412.0	Horizontal	53.0	9.87	11.91	0.78	0.00 (3)	22.6 (2)	40.0	17.4
30-1000MHz	2412.0	Horizontal	57.0	9.09	10.90	0.80	0.00 (3)	20.8 (2)	40.0	19.2
30-1000MHz	2412.0	Horizontal	96.7	9.75	14.47	0.97	0.00 (3)	25.2 (2)	43.5	18.3
30-1000MHz	2412.0	Horizontal	920.2	9.85	29.80	2.97	0.00 (3)	42.6 (2)	46.0	3.4
30-1000MHz	2412.0	Horizontal	925.1	10.06	29.91	2.98	0.00 (3)	43.0 (2)	46.0	3.1
30-1000MHz	2412.0	Vertical	904.8	10.46	29.30	2.93	0.00 (3)	42.7 (2)	46.0	3.3
30-1000MHz	2412.0	Vertical	909.7	10.13	29.50	2.94	0.00 (3)	42.6 (2)	46.0	3.4
1 - 3GHz	2412.0	Horizontal	ND	ND (1)	27.40	4.58	0.00 (3)	ND	54.0	n/a
1 - 3GHz	2412.0	Vertical	ND	ND (1)	27.40	4.58	0.00 (3)	ND	54.0	n/a
3-13GHz	2412.0	Horizontal	ND	ND (1)	36.76	9.86	0.00 (3)	ND	54.0	n/a
3-13GHz	2412.0	Vertical	ND	ND (1)	36.76	9.86	0.00 (3)	ND	54.0	n/a
13-18GHz	2412.0	Horizontal	ND	ND (1)	38.75	16.54	0.00 (3)	ND	54.0	n/a
13-18GHz	2412.0	Vertical	ND	ND (1)	38.75	16.54	0.00 (3)	ND	54.0	n/a
18-26GHz	2412.0	Horizontal	ND	ND (1)	43.50	21.86	26.00	ND	54.0	n/a
18-26GHz	2412.0	Vertical	ND	ND (1)	43.50	21.86	26.00	ND	54.0	n/a
Results:									Complies	

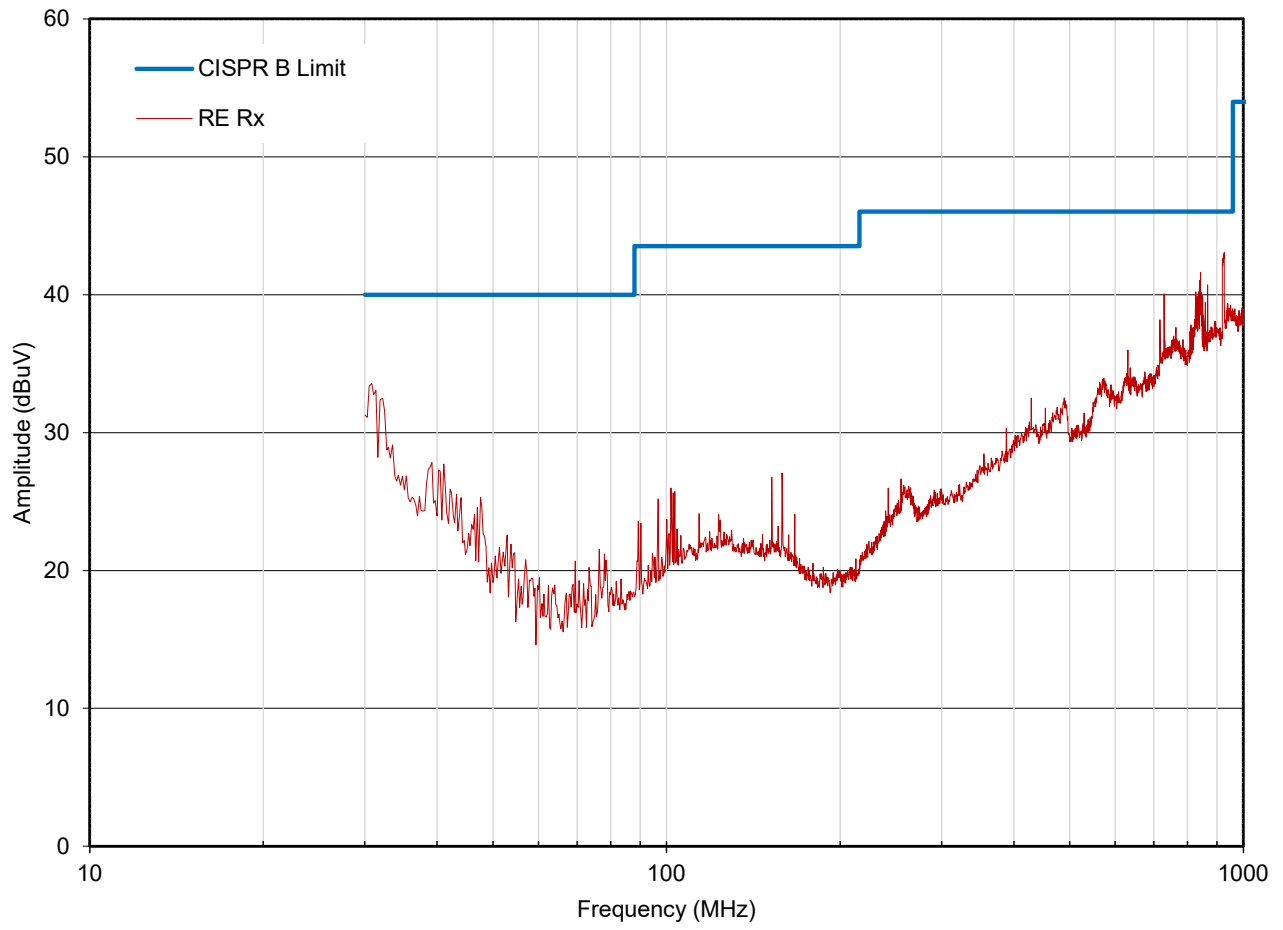
(1) No Emissions Detected (ND) above ambient or within 20dB of the limit

(2) Antenna ACF, Cable Loss and Amplifier Gain corrected in Spectrum Analyzer Transducer Factor

(3) External Amplifier not used

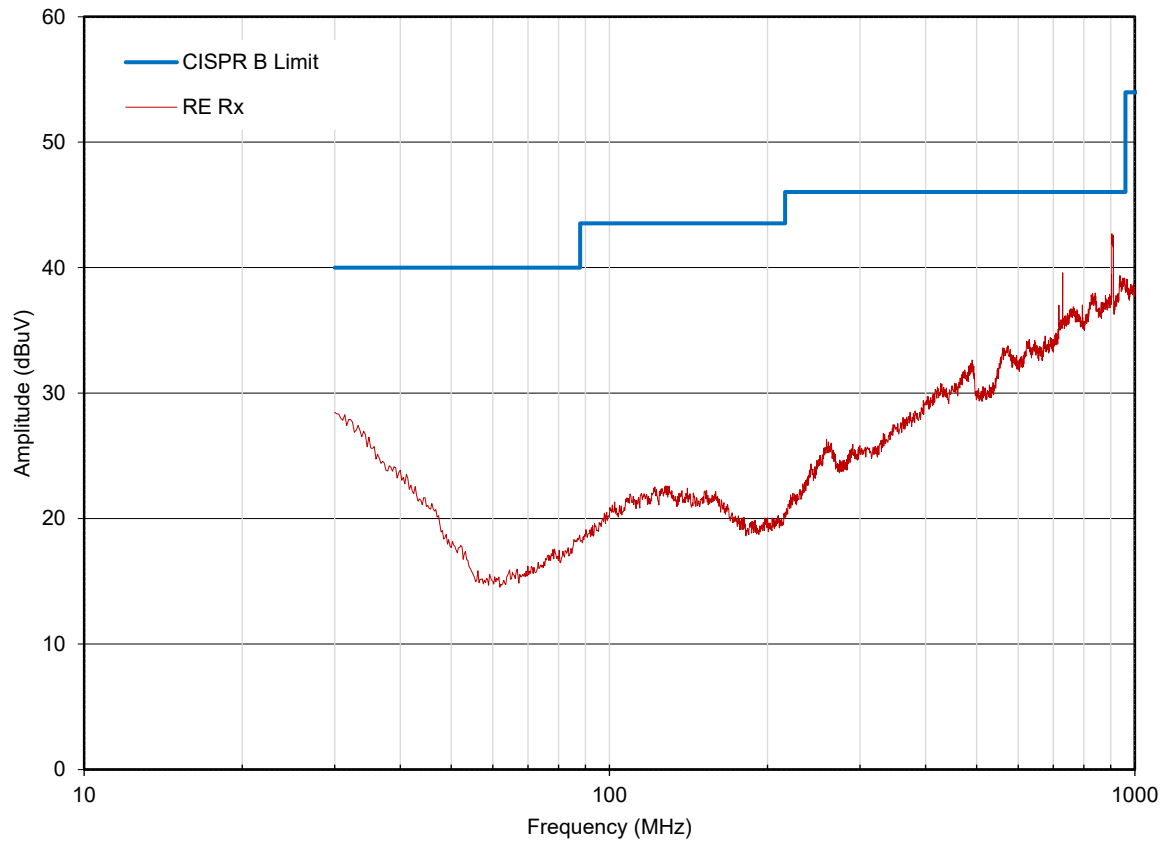
$$E_{\text{Corr}} = E_{\text{Meas}} + \text{ACF} + L_{\text{C}} - G_{\text{A}}$$

Radiated Tx Emissions (30MHz - 1GHz)
OATS Horizontal



Radiated Tx Emissions:

Radiated Tx Emissions (30MHz - 1GHz)
OATS Vertical



Radiated Tx Emissions:

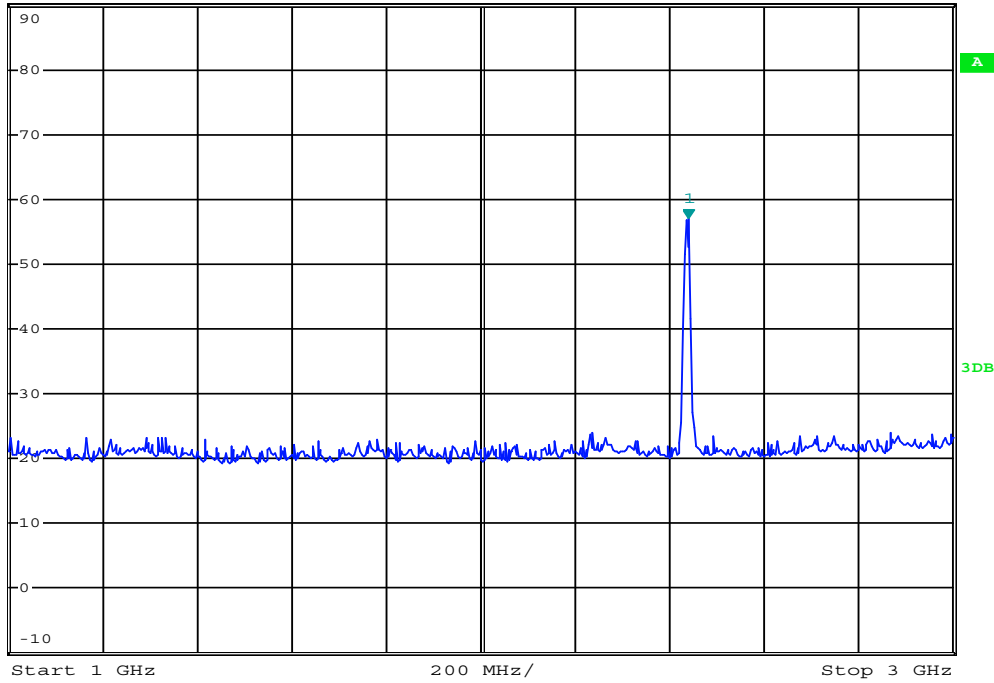


*RBW 1 MHz Marker 1 [T1]
VBW 3 MHz 56.96 dBμV
SWT 10 ms 2.440000000 GHz

Ref 90 dBμV

*Att 0 dB

1 PK
VIEW



Date: 31.JAN.2023 17:52:44

Channel:

Mode:

Polarization:

Marker 1 = Fundamental

Channel Frequency: MHz

Modulation:

Measured Emission: dBm

Radiated Tx Emissions:

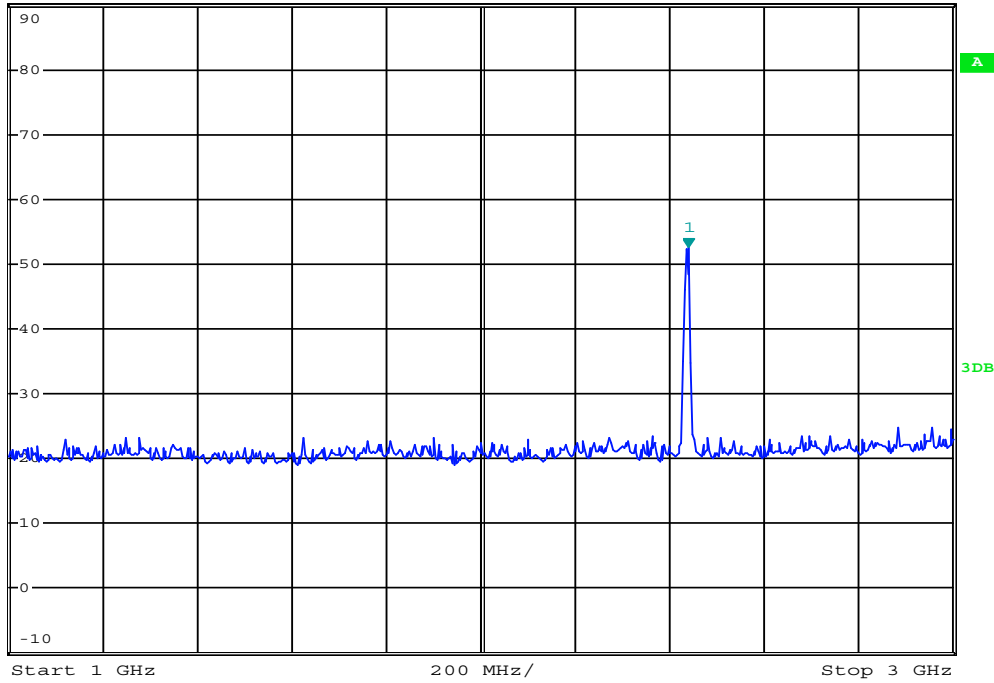


*RBW 1 MHz Marker 1 [T1]
VBW 3 MHz 52.58 dBμV
SWT 10 ms 2.440000000 GHz

Ref 90 dBμV

*Att 0 dB

1 PK
VIEW



Date: 31.JAN.2023 18:11:38

Channel:

Mode:

Polarization:

Marker 1 = Fundamental

Channel Frequency: MHz

Modulation:

Measured Emission: dBm

Radiated Tx Emissions:

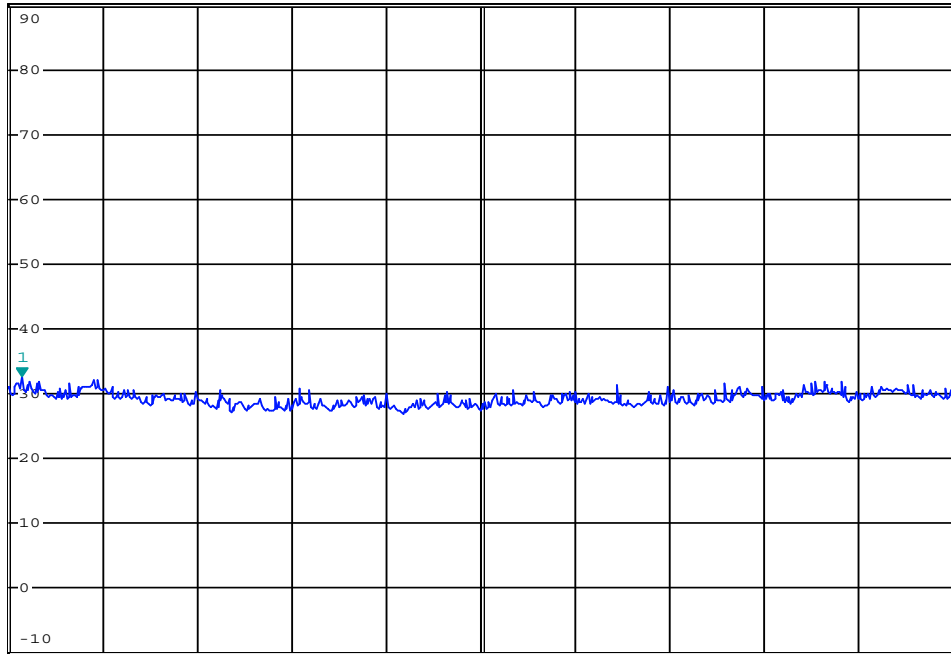


*RBW 1 MHz Marker 1 [T1]
VBW 3 MHz 32.57 dBμV
SWT 140 ms 3.098000000 GHz

Ref 90 dBμV

*Att 0 dB

1 PK
VIEW



Start 3 GHz

700 MHz/

Stop 10 GHz

Date: 31.JAN.2023 17:53:02

Channel:

Mode:

Polarization:

Channel Frequency: MHz

Modulation:

Measured Emission: dBm

Radiated Tx Emissions:

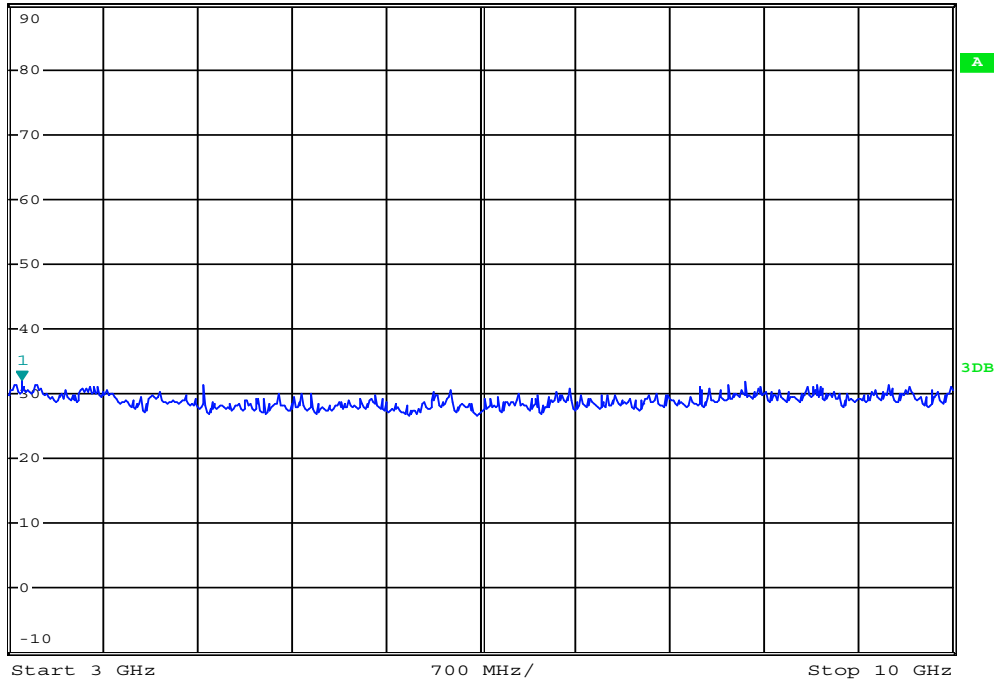


*RBW 1 MHz Marker 1 [T1]
VBW 3 MHz 32.03 dBµV
SWT 140 ms 3.098000000 GHz

Ref 90 dBµV

*Att 0 dB

1 PK
VIEW



Date: 31.JAN.2023 18:11:53

Channel:

Mode:

Polarization:

Channel Frequency: MHz

Modulation:

Measured Emission: dBm

Radiated Tx Emissions:

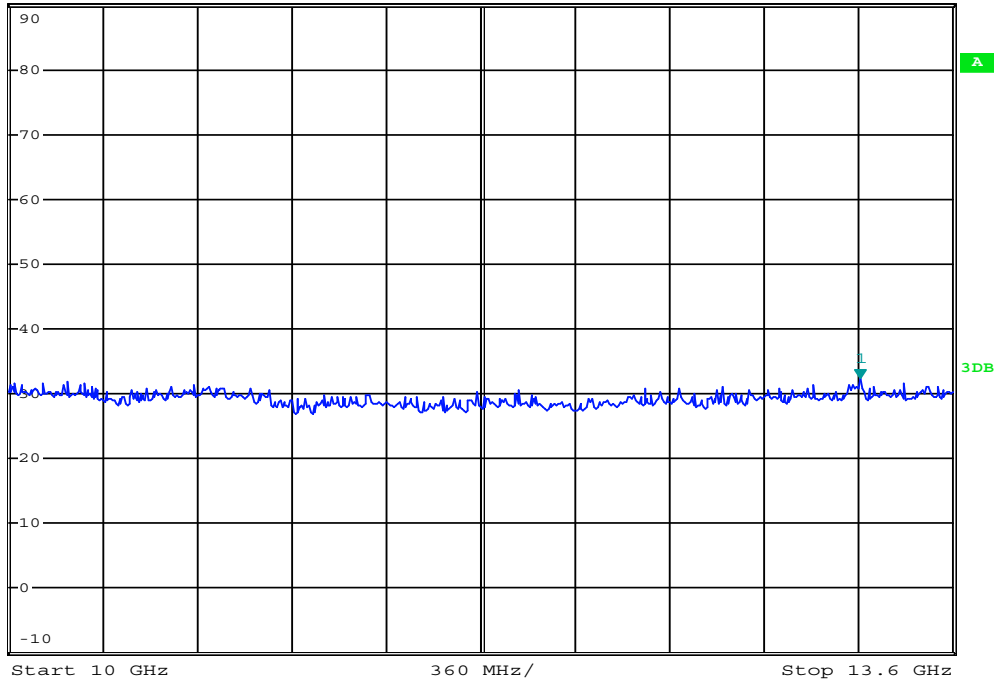


*RBW 1 MHz Marker 1 [T1]
VBW 3 MHz 32.38 dBμV
SWT 75 ms 13.247200000 GHz

Ref 90 dBμV

*Att 0 dB

1 PK
VIEW



Date: 31.JAN.2023 17:54:07

Channel:

Mode:

Polarization:

Channel Frequency: MHz

Modulation:

Measured Emission: dBm

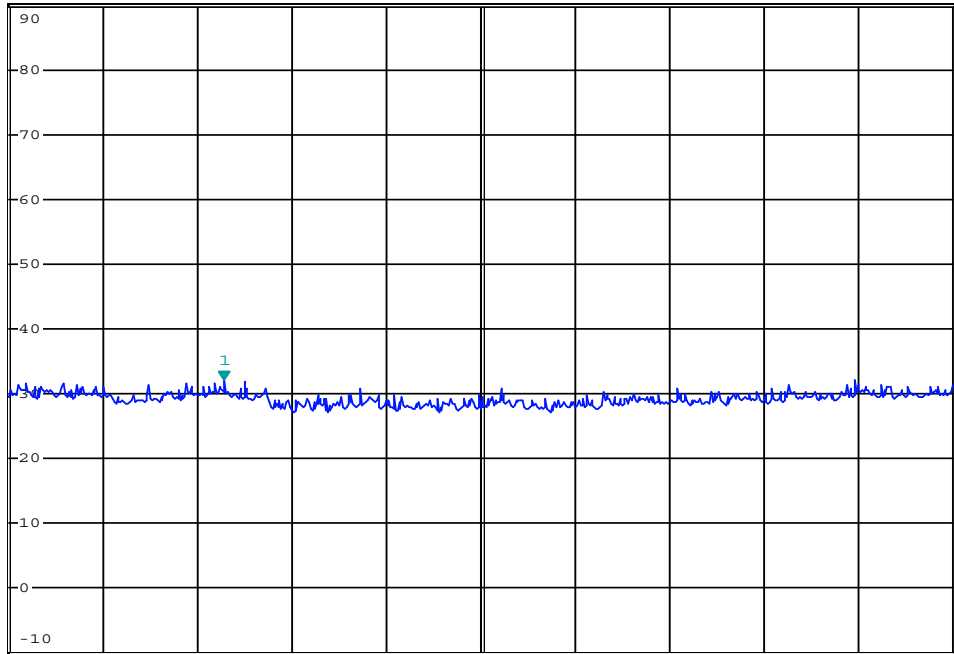
Radiated Tx Emissions:



*RBW 1 MHz Marker 1 [T1]
VBW 3 MHz 32.10 dBµV
SWT 75 ms 10.82080000 GHz

Ref 90 dBµV *Att 0 dB

1 PK
VIEW



Date: 31.JAN.2023 18:12:46

Channel:

Mode:

Polarization:

Channel Frequency: MHz

Modulation:

Measured Emission: dBm

Radiated Tx Emissions:

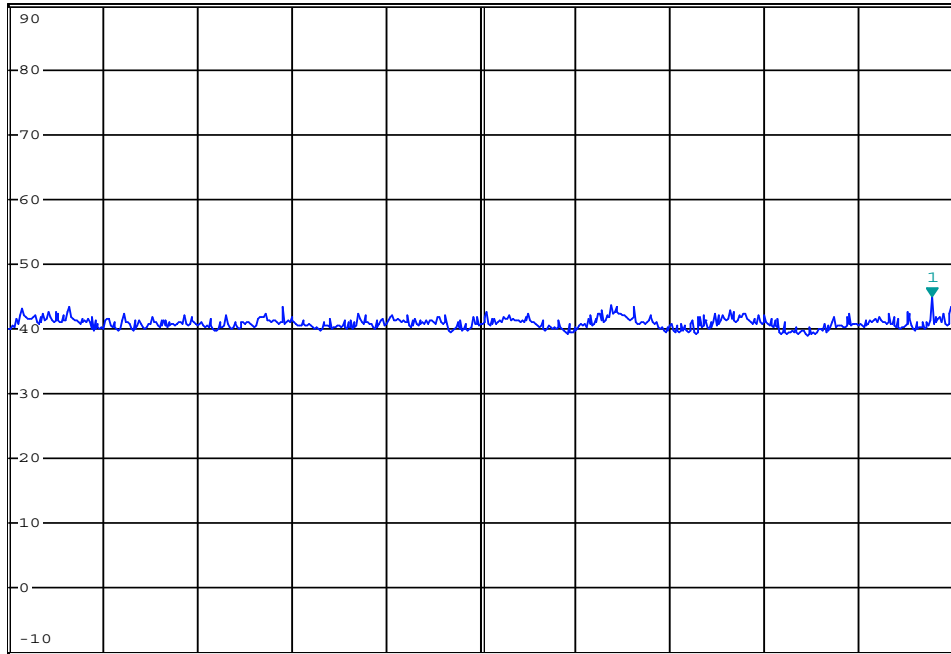


*RBW 1 MHz Marker 1 [T1]
VBW 3 MHz 44.91 dBμV
SWT 90 ms 17.903200000 GHz

Ref 90 dBμV

*Att 0 dB

1 PK
VIEW



Start 13.6 GHz

440 MHz/

Stop 18 GHz

Date: 31.JAN.2023 17:54:25

Channel:

Mode:

Polarization:

Channel Frequency: MHz

Modulation:

Measured Emission: dBm

Radiated Tx Emissions:

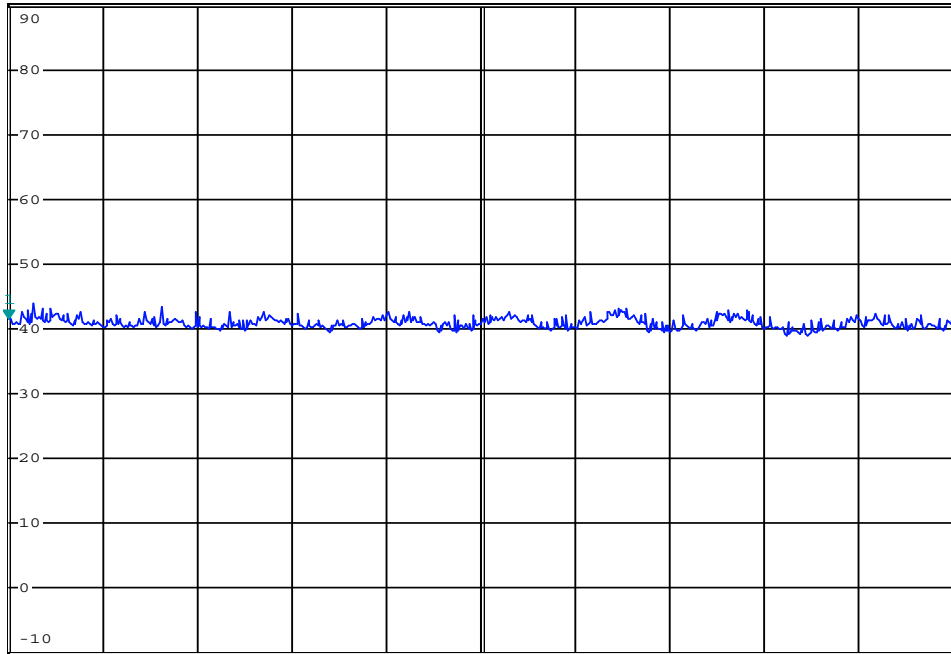


*RBW 1 MHz Marker 1 [T1]
VBW 3 MHz 41.67 dBμV
SWT 90 ms 13.600000000 GHz

Ref 90 dBμV

*Att 0 dB

1 PK
VIEW



Start 13.6 GHz 440 MHz/ Stop 18 GHz

Date: 31.JAN.2023 18:13:05

Channel:

Mode:

Polarization:

Channel Frequency: MHz

Modulation:

Measured Emission: dBm

Radiated Tx Emissions:

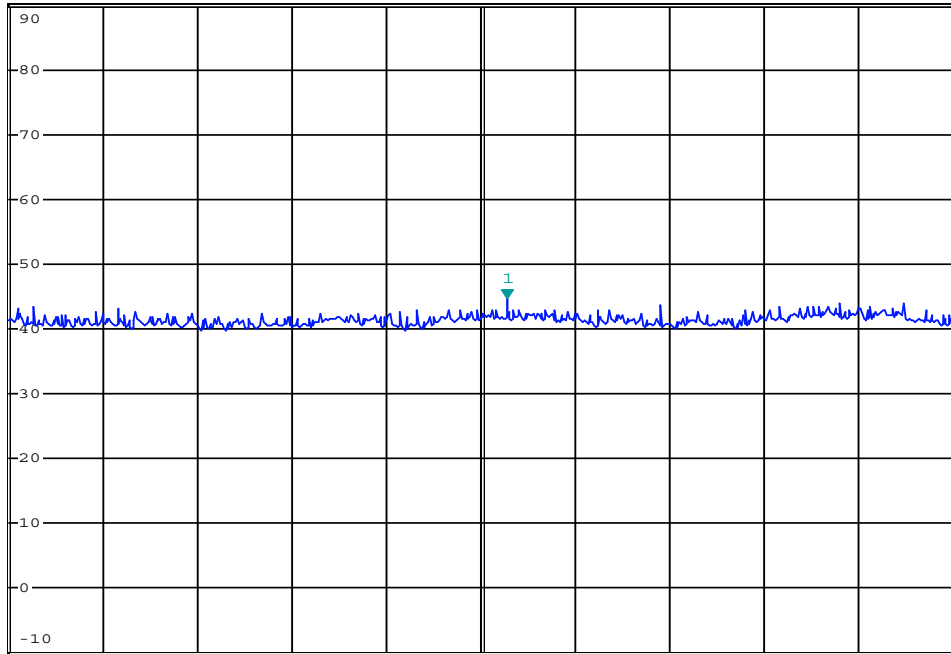


*RBW 1 MHz Marker 1 [T1]
VBW 3 MHz 44.84 dBμV
SWT 80 ms 20.11200000 GHz

Ref 90 dBμV

*Att 0 dB

1 PK
VIEW



Start 18 GHz 400 MHz/ Stop 22 GHz

Date: 31.JAN.2023 18:45:41

Channel:

Mode:

Polarization:

Channel Frequency: MHz

Modulation:

Measured Emission: dBm

Radiated Tx Emissions:

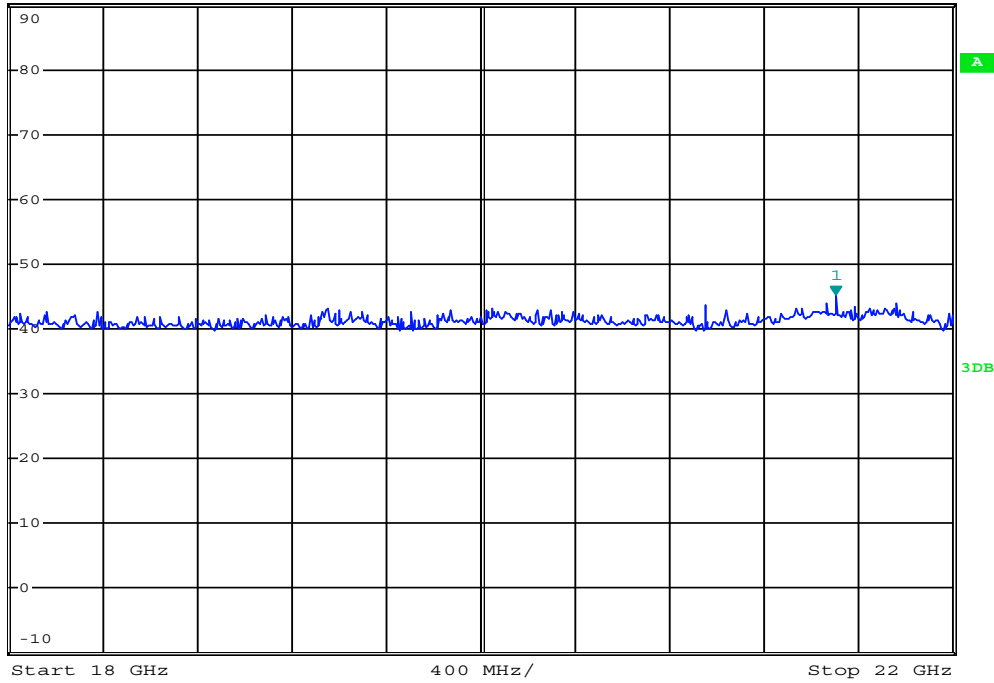


*RBW 1 MHz Marker 1 [T1]
VBW 3 MHz 45.15 dBμV
SWT 80 ms 21.504000000 GHz

Ref 90 dBμV

*Att 0 dB

1 PK
VIEW



Date: 31.JAN.2023 18:46:17

Channel:

Mode:

Polarization:

Channel Frequency: MHz

Modulation:

Measured Emission: dBm

Radiated Tx Emissions:

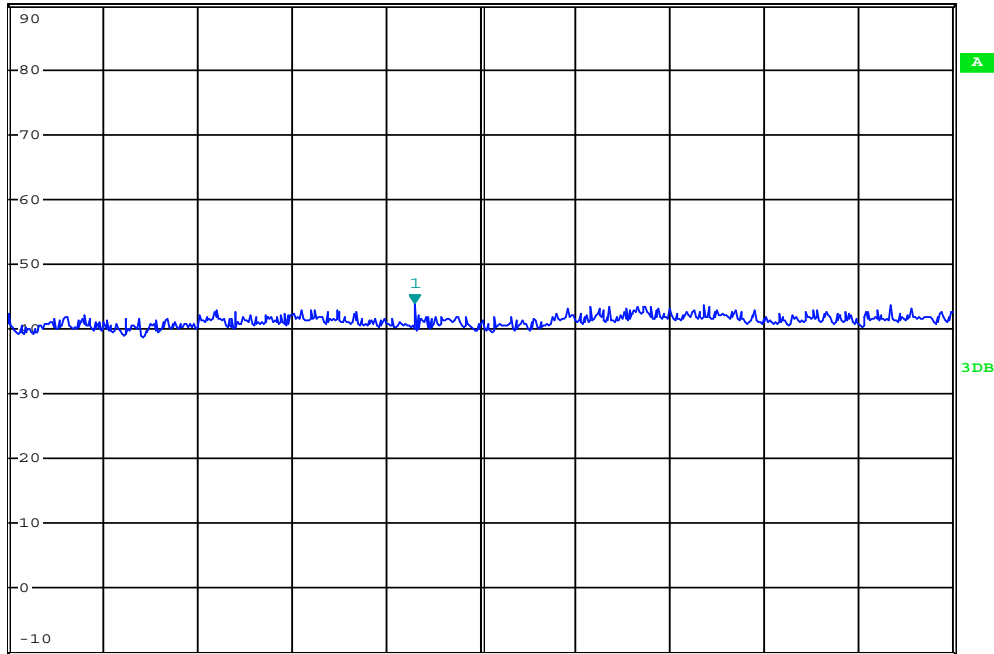


*RBW 1 MHz Marker 1 [T1]
VBW 3 MHz 43.93 dBμV
SWT 80 ms 23.72000000 GHz

Ref 90 dBμV

*Att 0 dB

1 PK
VIEW



Start 22 GHz 400 MHz/ Stop 26 GHz

Date: 31.JAN.2023 18:45:56

Channel:

Mode:

Polarization:

Channel Frequency: MHz

Modulation:

Measured Emission: dBm

Radiated Tx Emissions:

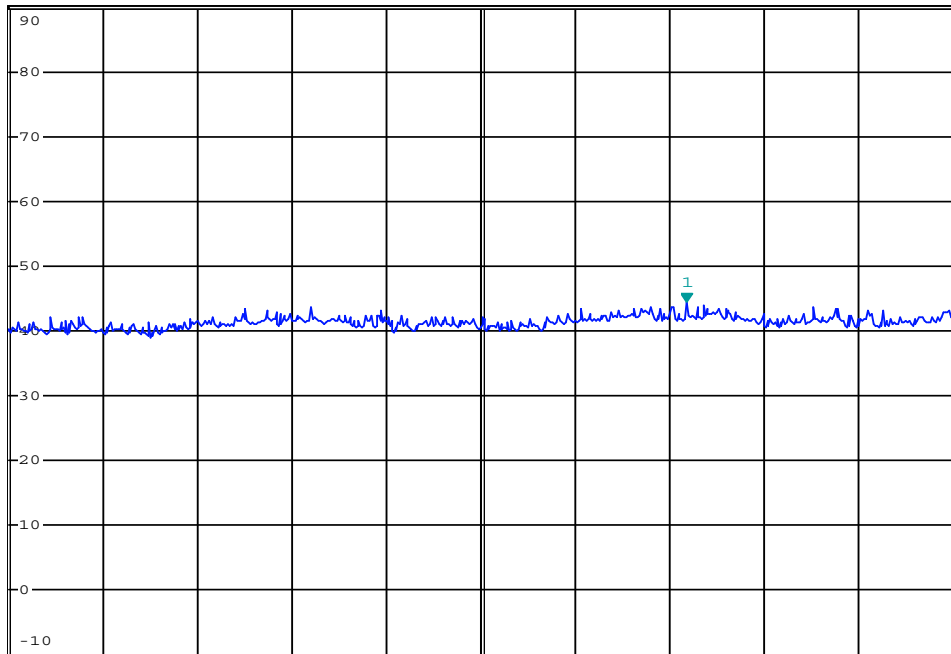


*RBW 1 MHz Marker 1 [T1]
VBW 3 MHz 44.53 dBμV
SWT 80 ms 24.872000000 GHz

Ref 90 dBμV

*Att 0 dB

1 PK
VIEW



Start 22 GHz

400 MHz/

Stop 26 GHz

Date: 31.JAN.2023 18:46:30

Channel:

Mode:

Polarization:

Channel Frequency: MHz

Modulation:

Measured Emission: dBm

Summary of Radiated Tx Emissions

Measured Frequency Range (MHz)	Channel Frequency	Antenna Polarization	Emission Frequency	Measured Emission [E _{Meas}] (dBuV)	Antenna ACF [ACF] (dB)	Cable Loss [L _c] (dB)	Amplifier Gain [G _A] (dB)	Corrected Emission [E _{Corr}] (dBuV/m)	Limit (dBuV)	Margin (dB)
30-1000MHz	2440.0	Horizontal	38.91	7.39	19.05	0.71	0.00 (3)	27.1 (2)	40.0	12.9
30-1000MHz	2440.0	Horizontal	73.74	7.33	11.67	0.87	0.00 (3)	19.9 (2)	40.0	20.1
30-1000MHz	2440.0	Horizontal	101.82	7.87	15.28	0.99	0.00 (3)	24.1 (2)	43.5	19.4
30-1000MHz	2440.0	Horizontal	827.80	8.83	29.22	2.82	0.00 (3)	40.9 (2)	46.0	5.1
30-1000MHz	2440.0	Vertical	729.10	8.51	28.30	2.66	0.00 (3)	39.5 (2)	46.0	6.6
30-1000MHz	2440.0	Vertical	904.80	8.66	29.30	2.93	0.00 (3)	40.9 (2)	46.0	5.1
30-1000MHz	2440.0	Vertical	909.70	8.33	29.50	2.94	0.00 (3)	40.8 (2)	46.0	5.2
1 - 3GHz	2440.0	Horizontal	ND	ND (1)	27.40	4.58	0.00 (3)	ND	54.0	n/a
1 - 3GHz	2440.0	Vertical	ND	ND (1)	27.40	4.58	0.00 (3)	ND	54.0	n/a
3-13GHz	2440.0	Horizontal	ND	ND (1)	36.76	9.86	0.00 (3)	ND	54.0	n/a
3-13GHz	2440.0	Vertical	ND	ND (1)	36.76	9.86	0.00 (3)	ND	54.0	n/a
13-18GHz	2440.0	Horizontal	ND	ND (1)	38.75	16.54	0.00 (3)	ND	54.0	n/a
13-18GHz	2440.0	Vertical	ND	ND (1)	38.75	16.54	0.00 (3)	ND	54.0	n/a
18-26GHz	2440.0	Horizontal	ND	ND (1)	43.50	21.86	26.00	ND	54.0	n/a
18-26GHz	2440.0	Vertical	ND	ND (1)	43.50	21.86	26.00	ND	54.0	n/a
Results:									Complies	

(1) No Emissions Detected (ND) above ambient or within 20dB of the limit

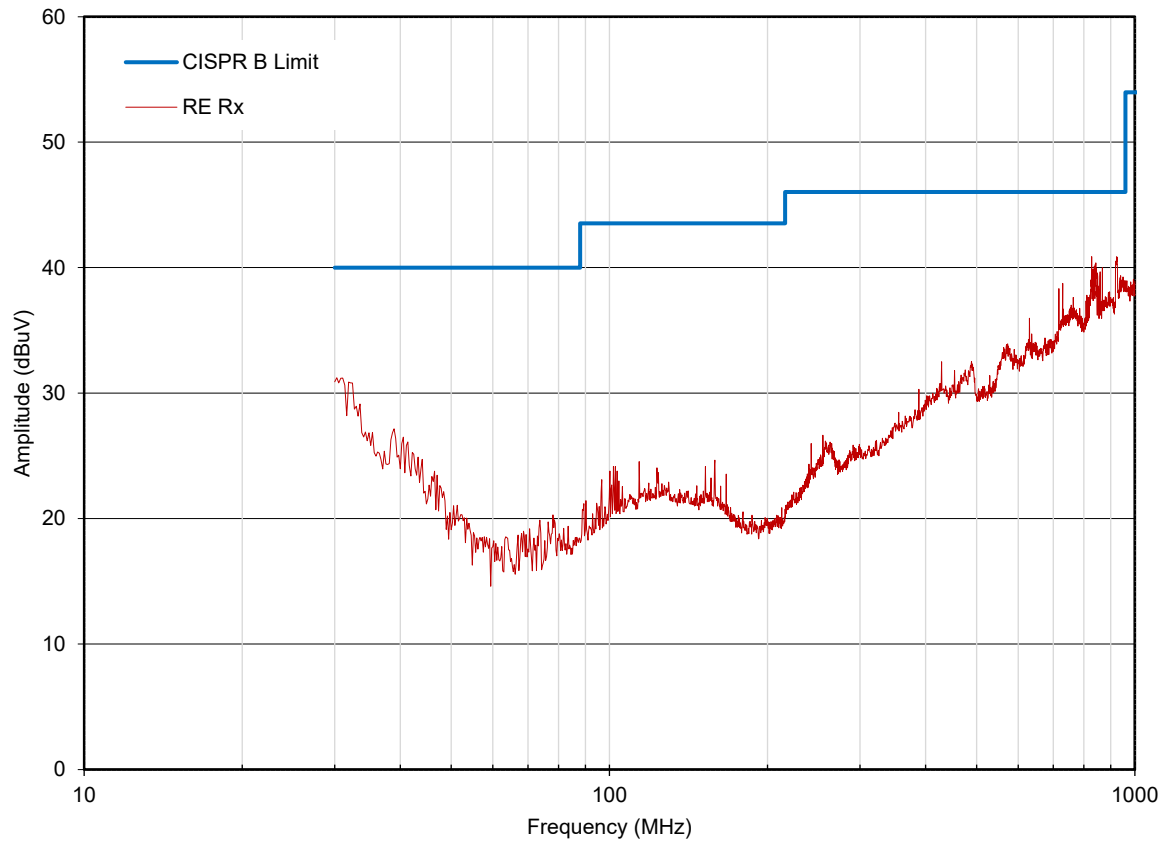
(2) Antenna ACF, Cable Loss and Amplifier Gain corrected in Spectrum Analyzer Transducer Factor

(3) External Amplifier not used

$$E_{\text{Corr}} = E_{\text{Meas}} + \text{ACF} + L_{\text{C}} - G_{\text{A}}$$

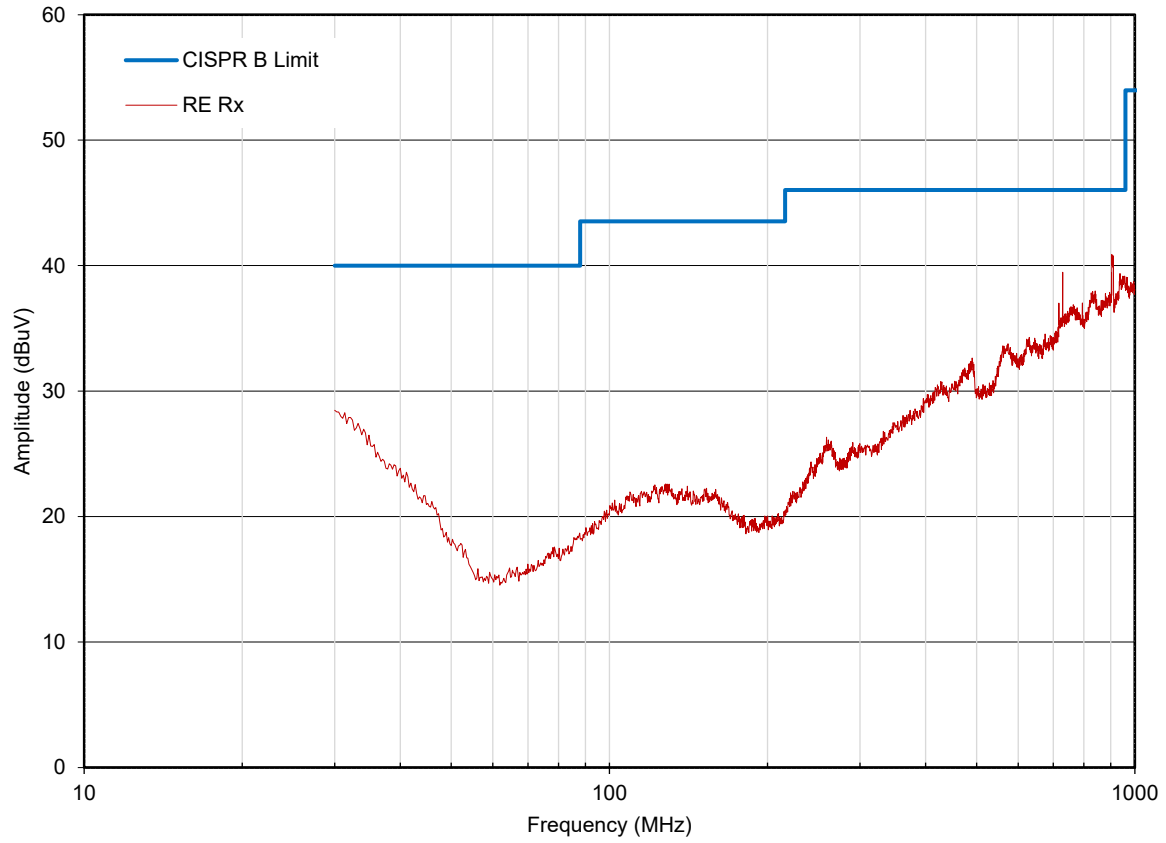
Radiated Tx Emissions:

Radiated Tx Emissions (30MHz - 1GHz)
OATS Horizontal



Radiated Tx Emissions:

Radiated Tx Emissions (30MHz - 1GHz)
OATS Vertical



Radiated Tx Emissions:

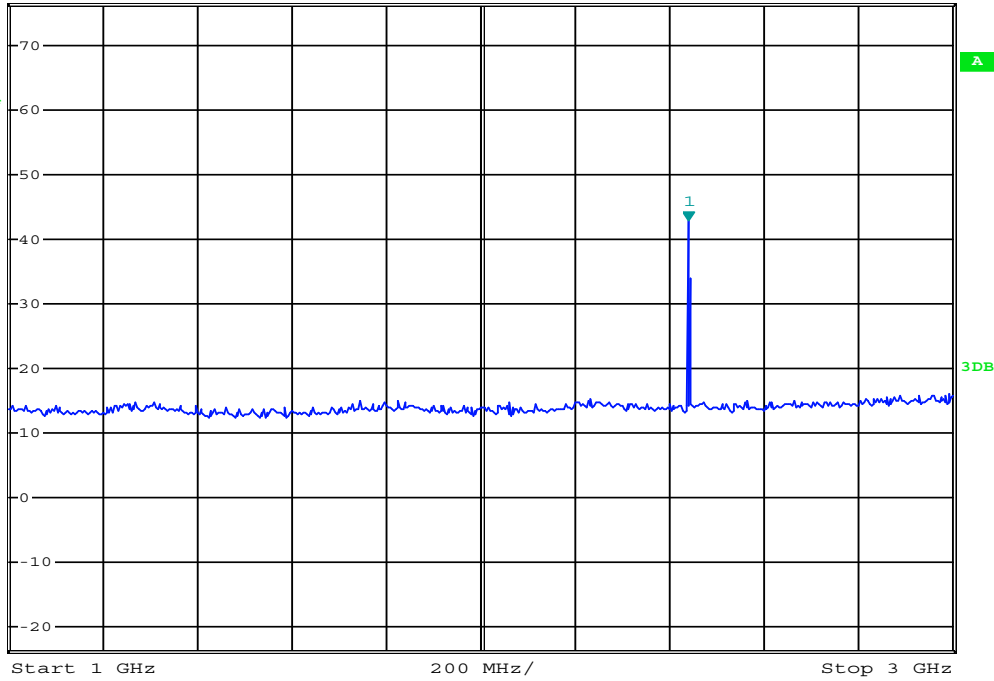


*RBW 1 MHz Marker 1 [T1]
VBW 10 MHz 42.74 dBμV
SWT 10 ms 2.440000000 GHz

Ref 76.3 dBμV

*Att 0 dB

1 RM
VIEW



Date: 31.JAN.2023 15:16:57

Channel:

Mode:

Polarization:

Marker 1 = Fundamental

Channel Frequency: MHz

Modulation:

Measured Emission: dBm

Radiated Tx Emissions:

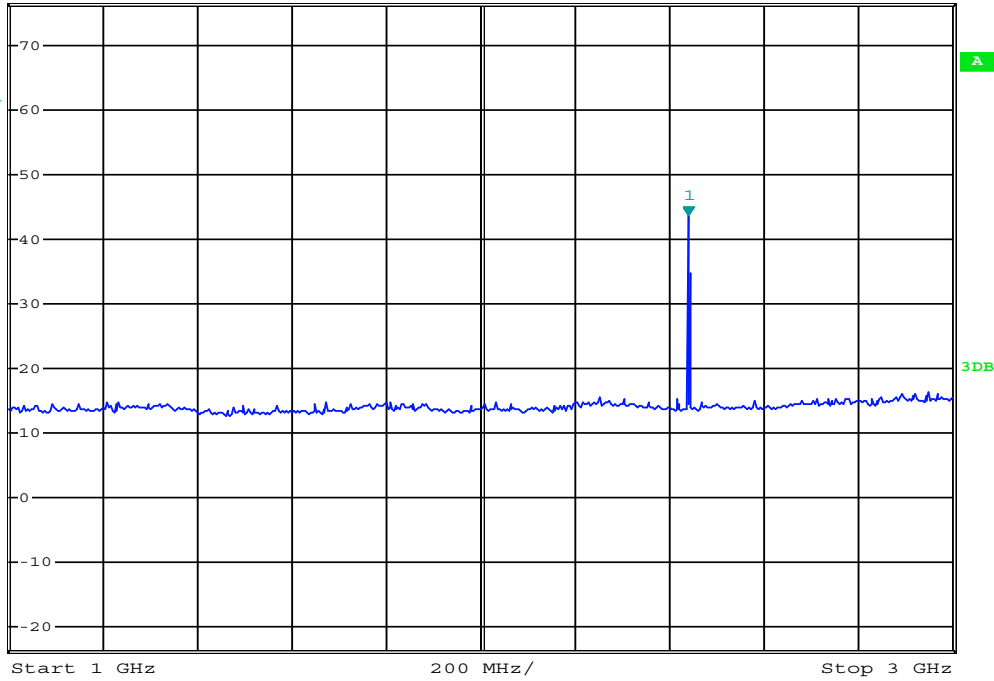


*RBW 1 MHz Marker 1 [T1]
VBW 10 MHz 43.66 dBμV
SWT 10 ms 2.440000000 GHz

Ref 76.3 dBμV

*Att 0 dB

1 RM
VIEW



Date: 31.JAN.2023 15:15:04

Channel:

Mode:

Polarization:

Marker 1 = Fundamental

Channel Frequency: MHz

Modulation:

Measured Emission: dBm

Radiated Tx Emissions:

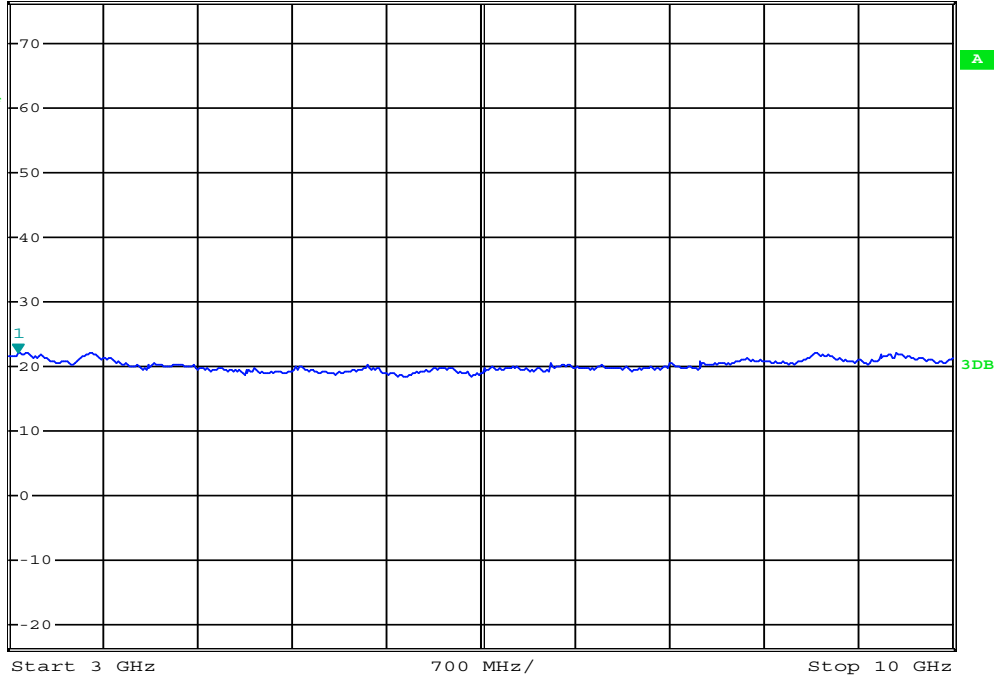


*RBW 1 MHz Marker 1 [T1]
VBW 10 MHz 22.13 dBμV
SWT 140 ms 3.070000000 GHz

Ref 76.3 dBμV

*Att 0 dB

1 RM
VIEW



Date: 31.JAN.2023 15:17:30

Channel:

Mode:

Polarization:

Channel Frequency: MHz

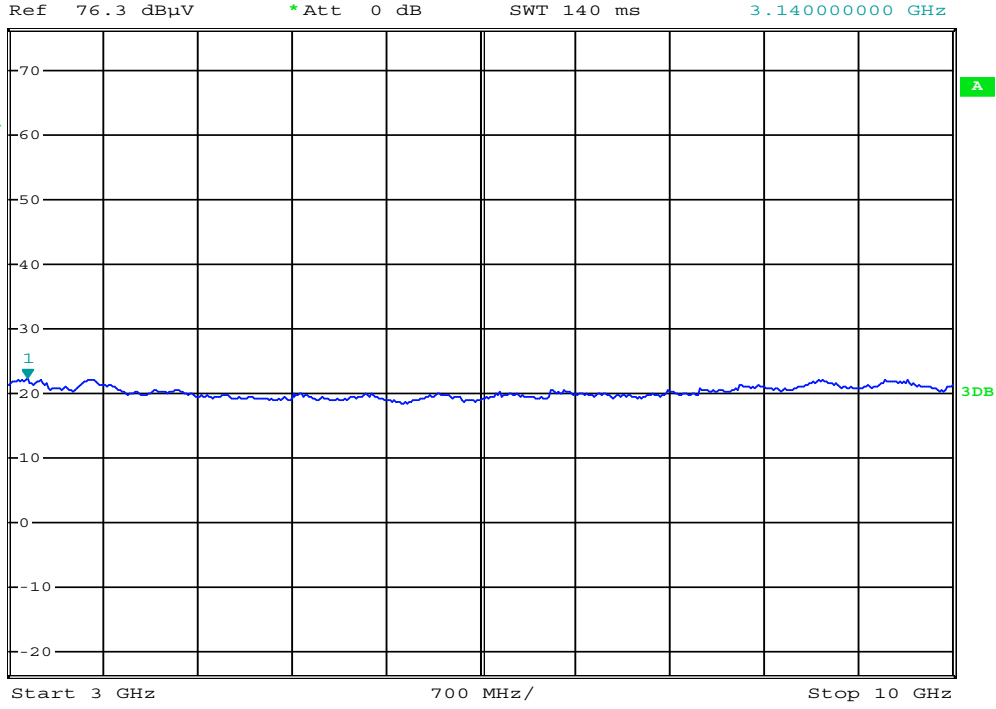
Modulation:

Measured Emission: dBm

Radiated Tx Emissions:



*RBW 1 MHz Marker 1 [T1]
 VBW 10 MHz 22.28 dBμV
 SWT 140 ms 3.140000000 GHz



Date: 31.JAN.2023 15:15:22

Channel: 38

Mode: BT BR

Polarization: Vertical

Channel Frequency: 2440 MHz

Modulation: GFSK

Measured Emission: ND dBm

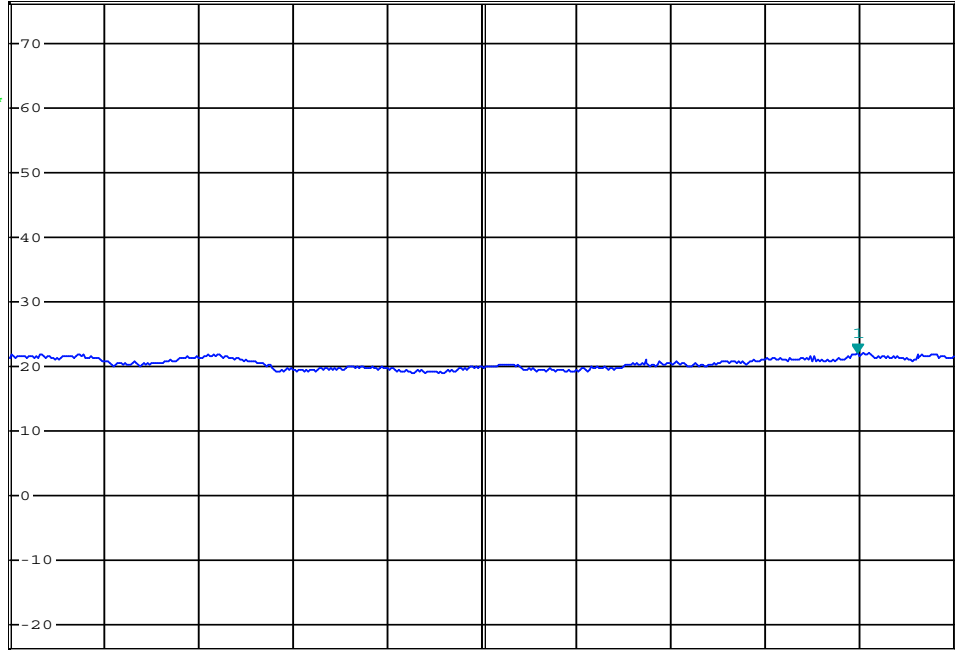
Radiated Tx Emissions:



*RBW 1 MHz Marker 1 [T1]
VBW 10 MHz 22.23 dBμV
SWT 75 ms 13.232800000 GHz

Ref 76.3 dBμV *Att 0 dB

1 RM
VIEW



Start 10 GHz 360 MHz/ Stop 13.6 GHz

Date: 31.JAN.2023 15:17:54

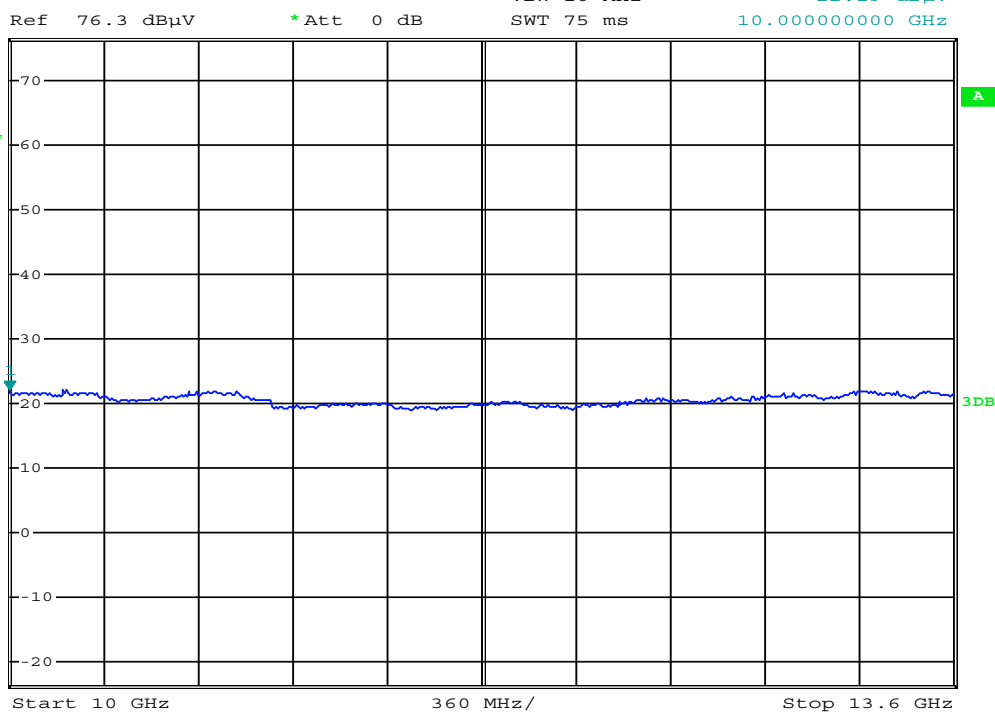
Channel:
Mode:
Polarization:

Channel Frequency: MHz
Modulation:
Measured Emission: dBm

Radiated Tx Emissions:



*RBW 1 MHz Marker 1 [T1]
 VBW 10 MHz 22.19 dBµV
 SWT 75 ms 10.000000000 GHz



Date: 31.JAN.2023 15:15:40

Channel:
 Mode:
 Polarization:

Channel Frequency: MHz
 Modulation:
 Measured Emission: dBm

Radiated Tx Emissions:

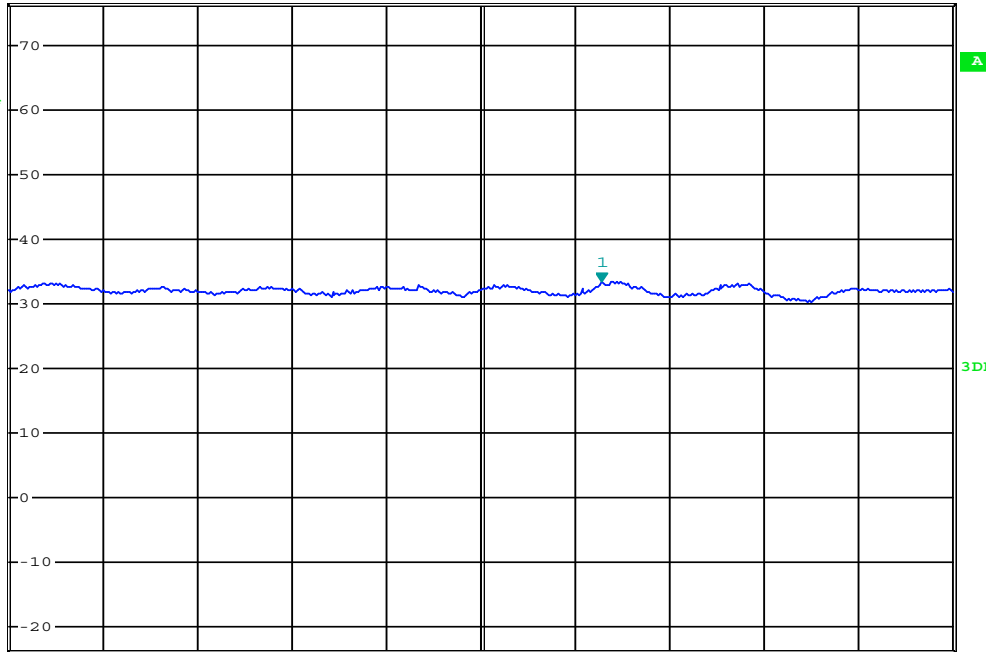


*RBW 1 MHz Marker 1 [T1]
VBW 10 MHz 33.53 dBμV
SWT 90 ms 16.363200000 GHz

Ref 76.3 dBμV

*Att 0 dB

1 RM
VIEW



Start 13.6 GHz

440 MHz/

Stop 18 GHz

Date: 31.JAN.2023 15:18:13

Channel:

Mode:

Polarization:

Channel Frequency: MHz

Modulation:

Measured Emission: dBm

Radiated Tx Emissions:

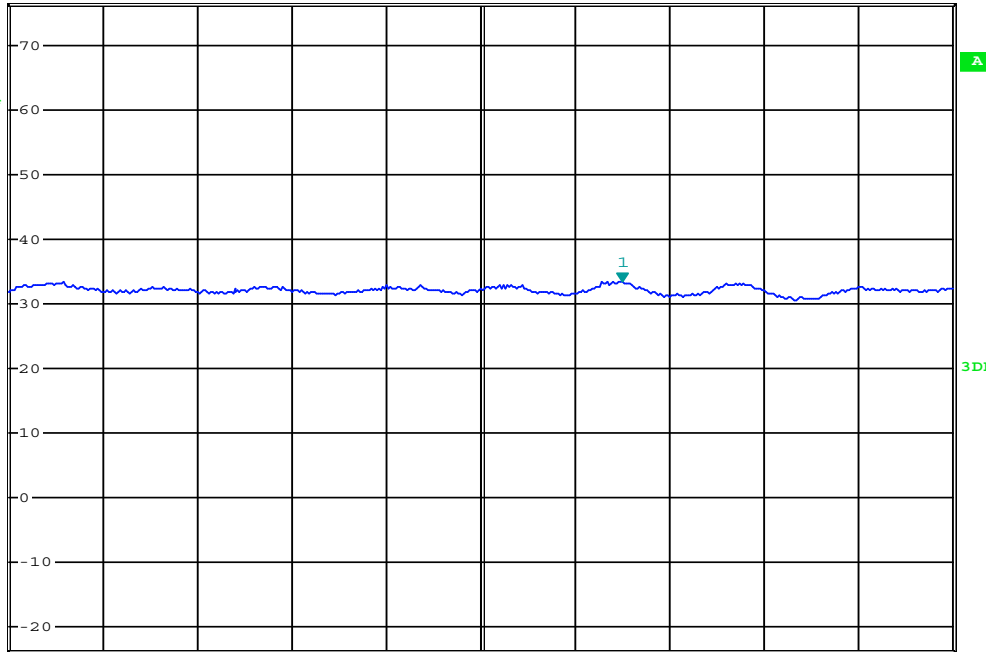


*RBW 1 MHz Marker 1 [T1]
VBW 10 MHz 33.37 dBμV
SWT 90 ms 16.460000000 GHz

Ref 76.3 dBμV

*Att 0 dB

1 RM
VIEW



Start 13.6 GHz

440 MHz/

Stop 18 GHz

Date: 31.JAN.2023 15:16:04

Channel:

Mode:

Polarization:

Channel Frequency: MHz

Modulation:

Measured Emission: dBm

Radiated Tx Emissions:

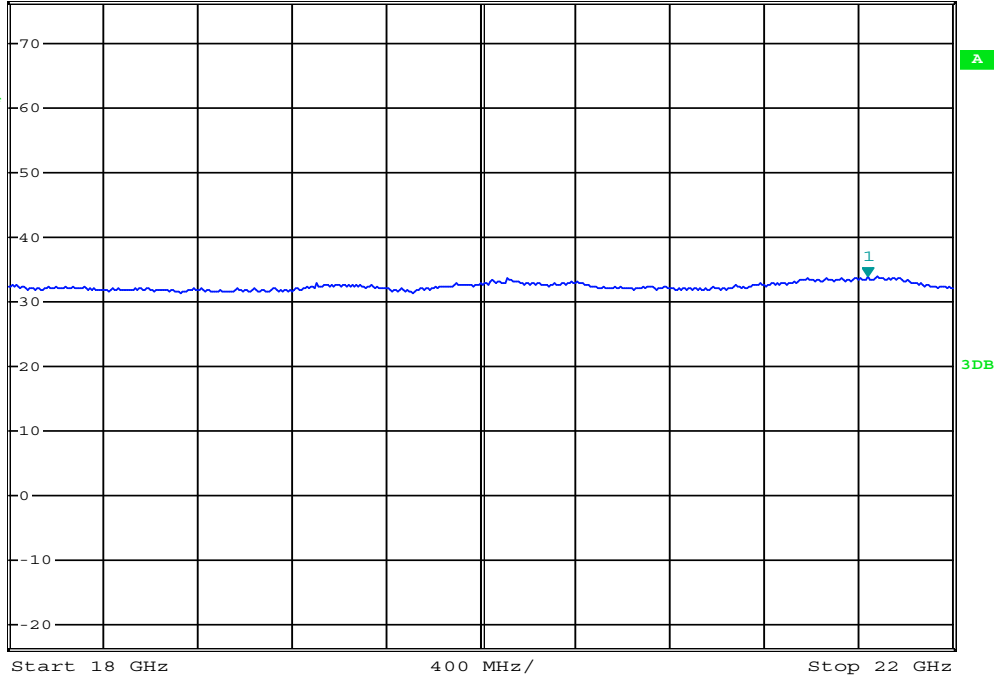


*RBW 1 MHz Marker 1 [T1]
VBW 10 MHz 33.88 dBμV
SWT 80 ms 21.640000000 GHz

Ref 76.3 dBμV

*Att 0 dB

1 RM
VIEW



Date: 31.JAN.2023 15:46:36

Channel:

Mode:

Polarization:

Channel Frequency: MHz

Modulation:

Measured Emission: dBm

Radiated Tx Emissions:

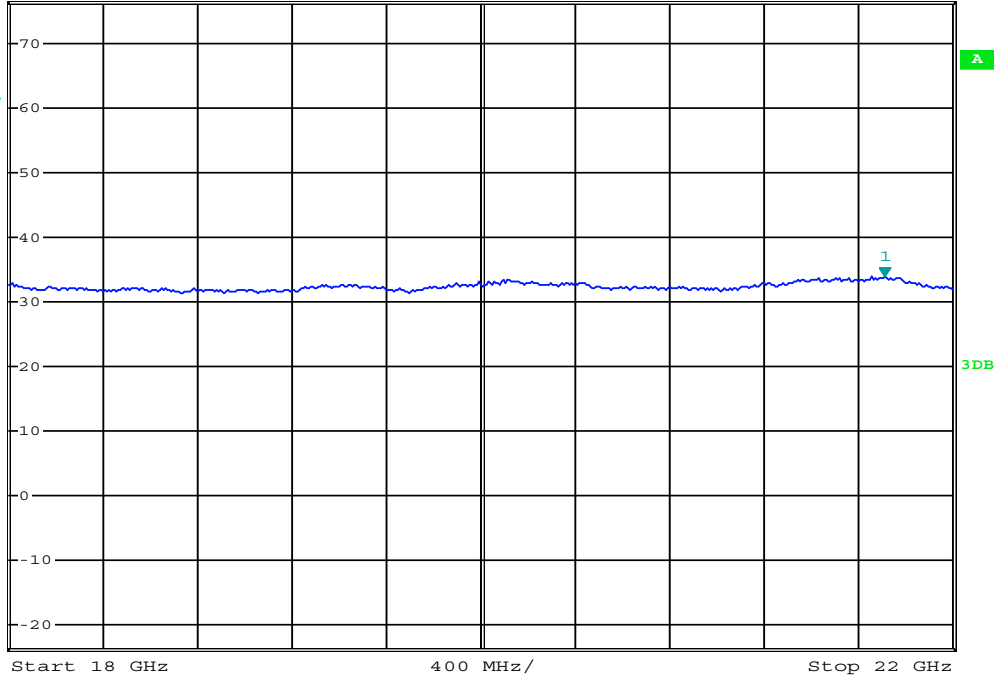


*RBW 1 MHz Marker 1 [T1]
VBW 10 MHz 33.94 dBμV
SWT 80 ms 21.712000000 GHz

Ref 76.3 dBμV

*Att 0 dB

1 RM
VIEW



Date: 31.JAN.2023 15:47:16

Channel:

Mode:

Polarization:

Channel Frequency: MHz

Modulation:

Measured Emission: dBm

Radiated Tx Emissions:



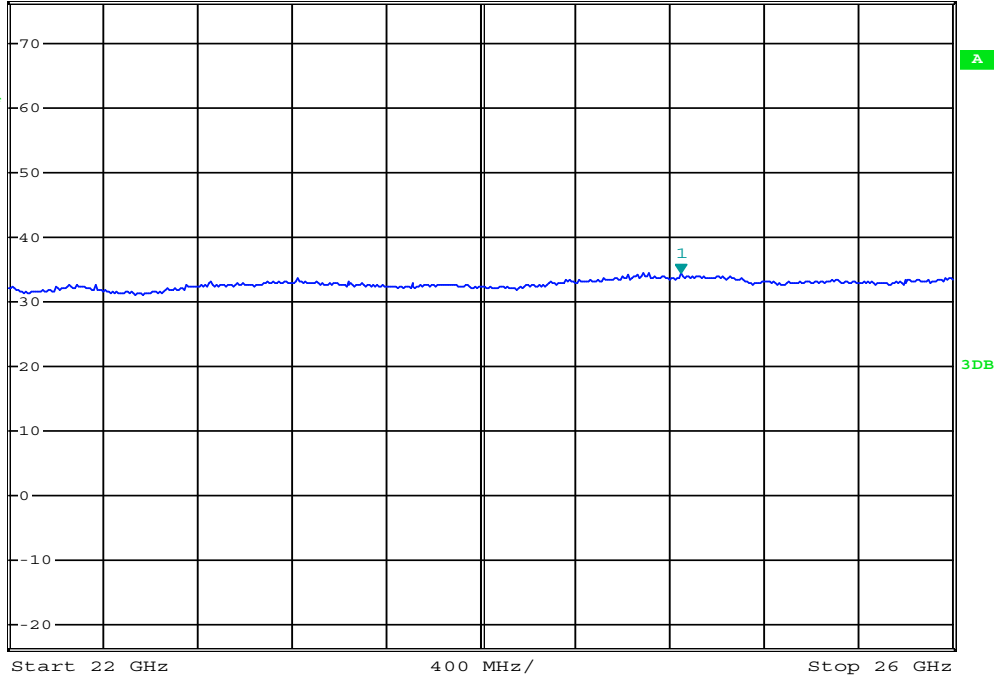
*RBW 1 MHz
 VBW 10 MHz
 SWT 80 ms

Marker 1 [T1]
 34.39 dBμV
 24.848000000 GHz

Ref 76.3 dBμV

*Att 0 dB

1 RM
 VIEW



Date: 31.JAN.2023 15:46:51

Channel:

Mode:

Polarization:

Channel Frequency: MHz

Modulation:

Measured Emission: dBm

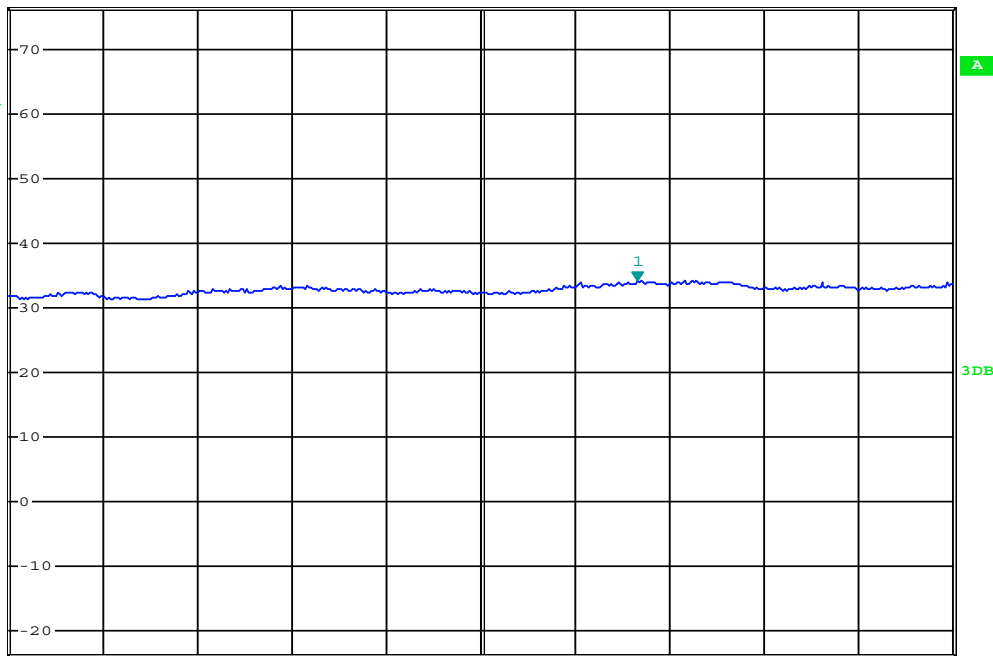
Radiated Tx Emissions:



*RBW 1 MHz Marker 1 [T1]
 VBW 10 MHz 34.19 dBμV
 SWT 80 ms 24.664000000 GHz

Ref 76.3 dBμV *Att 0 dB

1 RM
 VIEW



Start 22 GHz 400 MHz/ Stop 26 GHz

Date: 31.JAN.2023 15:47:34

Channel:
 Mode:
 Polarization:

Channel Frequency: MHz
 Modulation:
 Measured Emission: dBm