

Radiated Spurious Emission Measurement Result (above 1GHz)

Operation Mode	TX CH Mid	Test Date	2020/01/21
Fundamental Frequency	2441 MHz	Test By	Barry
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Over Limit dB	Remark	Pol V/H
1	4882.00	44.73	-9.21	35.52	74.00	-38.48	Peak	VERTICAL
2	7323.00	45.25	-1.75	43.50	74.00	-30.50	Peak	VERTICAL
1	4882.00	43.87	-9.21	34.66	74.00	-39.34	Peak	HORIZONTAL
2	7323.00	45.20	-1.75	43.45	74.00	-30.55	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

Operation Mode	TX CH High	Test Date	2020/01/21
Fundamental Frequency	2480 MHz	Test By	Barry
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Over Limit dB	Remark	Pol V/H
1	4960.00	44.31	-9.01	35.30	74.00	-38.70	Peak	VERTICAL
2	7440.00	45.14	-1.75	43.39	74.00	-30.61	Peak	VERTICAL
1	4960.00	43.49	-9.01	34.48	74.00	-39.52	Peak	HORIZONTAL
2	7440.00	45.54	-1.75	43.79	74.00	-30.21	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

8. 100kHz Bandwidth of Band Edges Measurement

8.1 Standard Applicable:

According to §15.247(d), in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power. In addition, 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).

8.2 Measurement Equipment Used:

8.2.1. Conducted Emission at antenna port:

Refer to section 6.2 for details.

8.2.2. Radiated emission:

Refer to section 7.2 for details.

8.3 Test SET-UP:

Refer to section 7.3 for details.

8.4 Measurement Procedure:

- 1 The EUT was placed on a turn table which is 0.8m above ground plane.
- 2 The turn table shall rotate 360 degrees to determine the position of maximum emission level.
- 3 EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emissions.
- 4 When measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made “while keeping the antenna in the ‘cone of radiation’ from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response.” is still within the 3dB illumination BW of the measurement antenna.
- 5 Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 6 And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 7 Repeat above procedures until all frequency measured were complete.

8.5 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor(if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

Where	FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
	RA = Reading Amplitude	AG = Amplifier Gain
	AF = Antenna Factor	

8.6 Measurement Result:

Note: Refer to next page spectrum analyzer data chart and tabular data sheets.

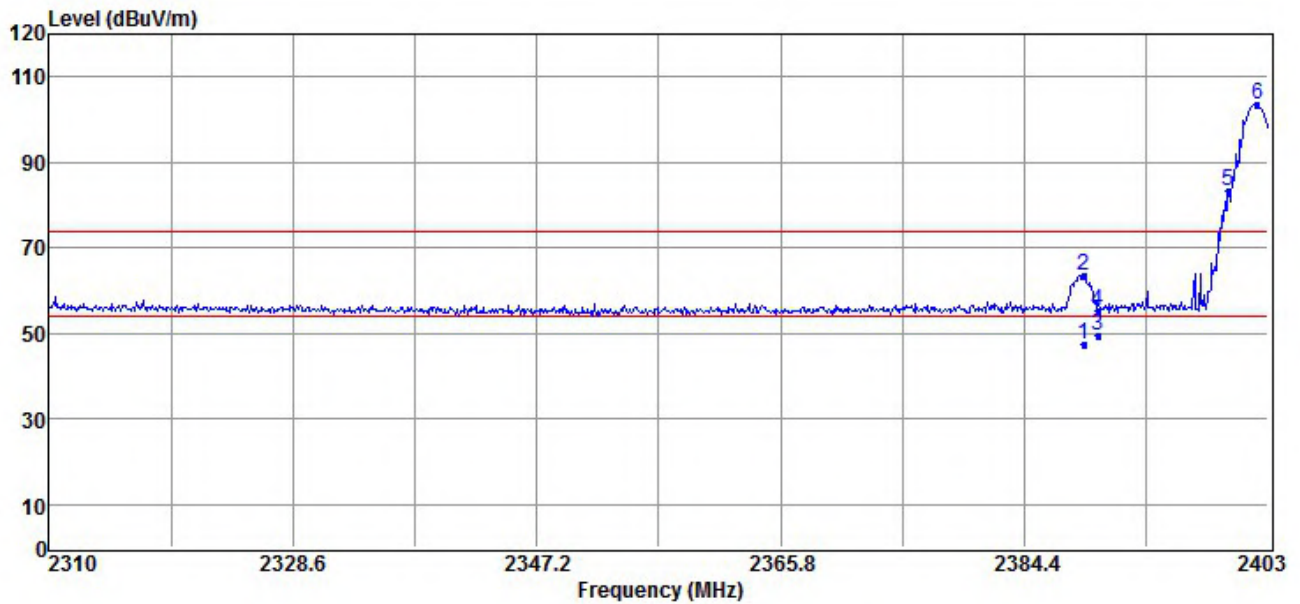
Dipole Antenna

Non-hopping mode:

Radiated Emission: (BDR mode)

Operation Mode TX CH Low
Fundamental Frequency 2402 MHz
Temperature 25 °C

Test Date 2020/01/21
Test By Barry
Humidity 60 %

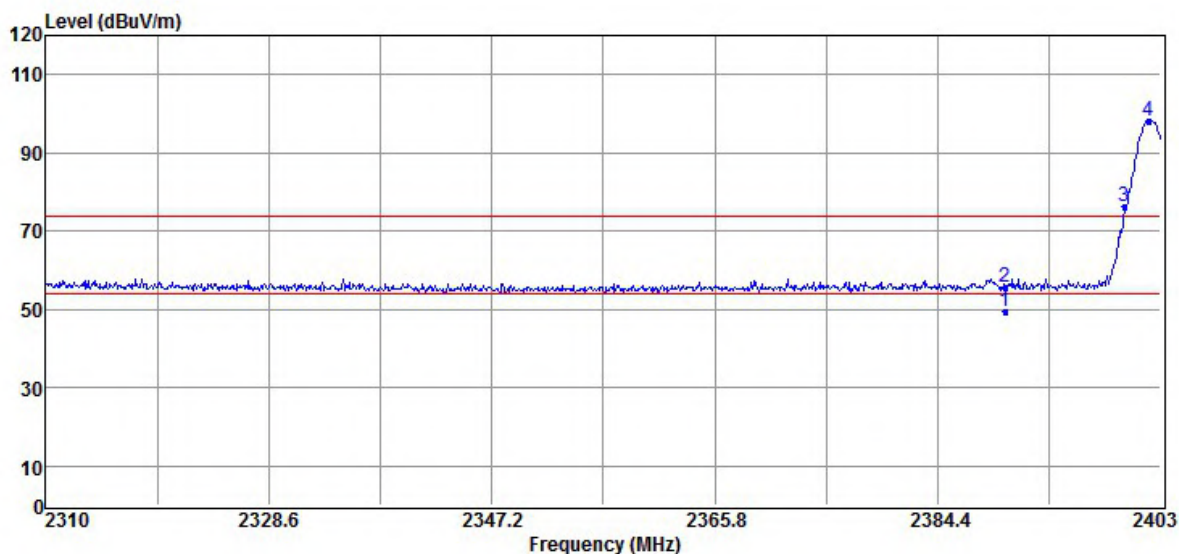


No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2388.96	15.00	32.59	47.59	54.00	-6.41	Average	VERTICAL
2	2388.96	30.93	32.59	63.52	74.00	-10.48	Peak	VERTICAL
3	2390.00	17.09	32.59	49.68	54.00	-4.32	Average	VERTICAL
4	2390.00	22.86	32.59	55.45	74.00	-18.55	Peak	VERTICAL
5	2400.00	50.87	32.58	83.45	83.62	-0.17	Peak	VERTICAL
6	2402.16	71.04	32.58	103.62	F	--	Peak	VERTICAL

Remark:

- Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency



No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2390.00	16.89	32.59	49.48	54.00	-4.52	Average	HORIZONTAL
2	2390.00	23.02	32.59	55.61	74.00	-18.39	Peak	HORIZONTAL
3	2400.00	43.76	32.58	76.34	78.27	-1.93	Peak	HORIZONTAL
4	2401.98	65.69	32.58	98.27	F	--	Peak	HORIZONTAL

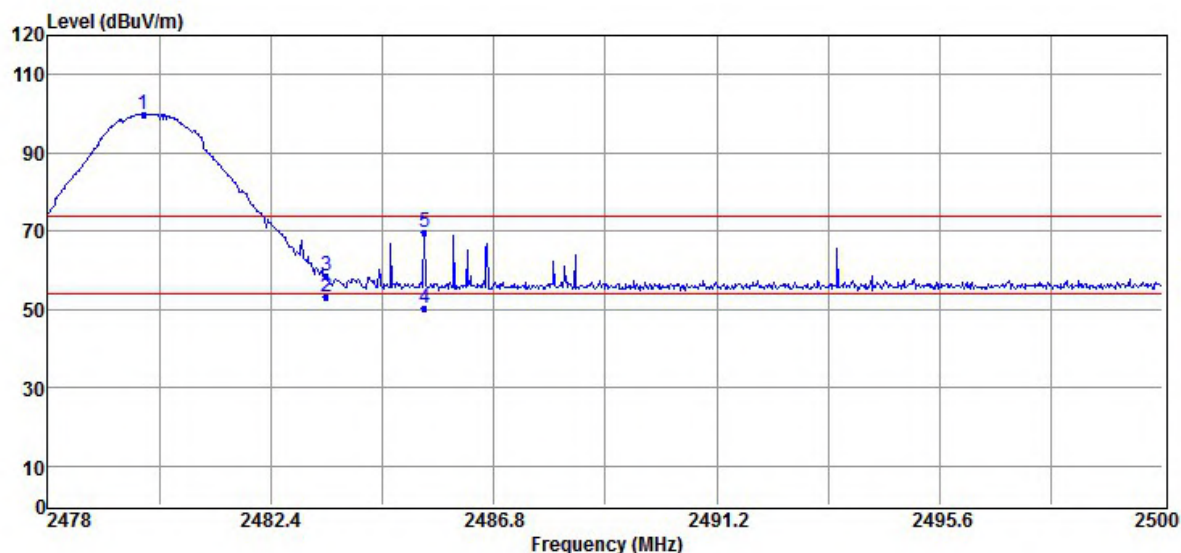
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- 3 Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 4 Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency

Operation Mode TX CH High
Fundamental Frequency 2480 MHz
Temperature 25 °C

Test Date 2020/01/21
Test By Barry
Humidity 60 %

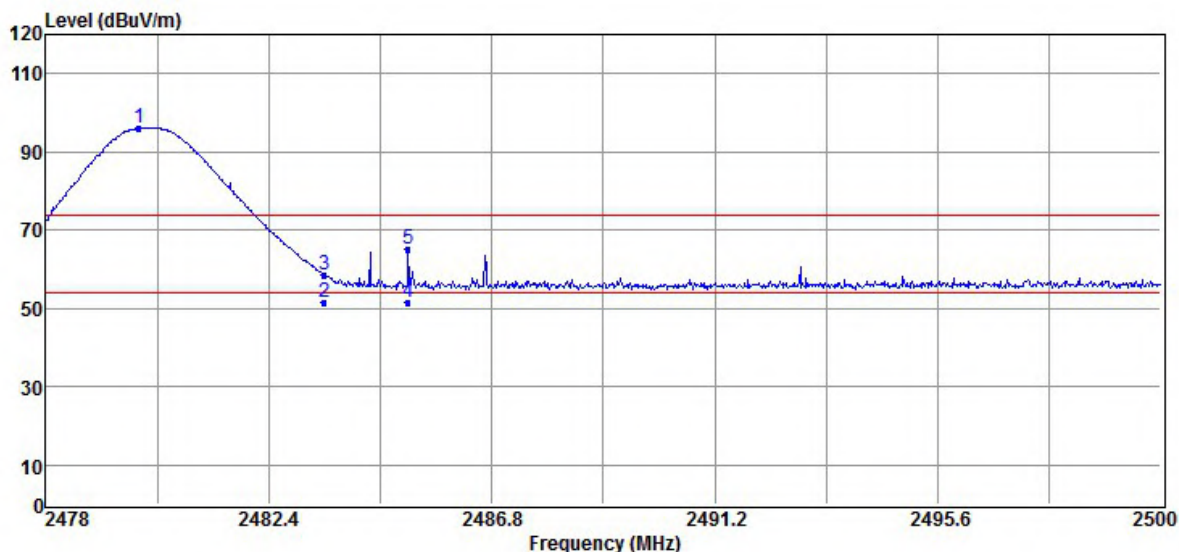


No	Freq MHz	Reading dBUV	Factor dB/m	Level dBUV/m	Limit dBUV/m	Margin dB	Remark	Pol V/H
1	2479.89	67.22	32.63	99.85	F	--	Peak	VERTICAL
2	2483.50	20.55	32.63	53.18	54.00	-0.82	Average	VERTICAL
3	2483.50	25.73	32.63	58.36	74.00	-15.64	Peak	VERTICAL
4	2485.44	17.54	32.64	50.18	54.00	-3.82	Average	VERTICAL
5	2485.44	37.09	32.64	69.73	74.00	-4.27	Peak	VERTICAL

Remark:

- Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency



No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2479.85	63.41	32.63	96.04	F	--	Peak	HORIZONTAL
2	2483.50	19.09	32.63	51.72	54.00	-2.28	Average	HORIZONTAL
3	2483.50	25.75	32.63	58.38	74.00	-15.62	Peak	HORIZONTAL
4	2485.15	19.05	32.64	51.69	54.00	-2.31	Average	HORIZONTAL
5	2485.15	32.63	32.64	65.27	74.00	-8.73	Peak	HORIZONTAL

Remark:

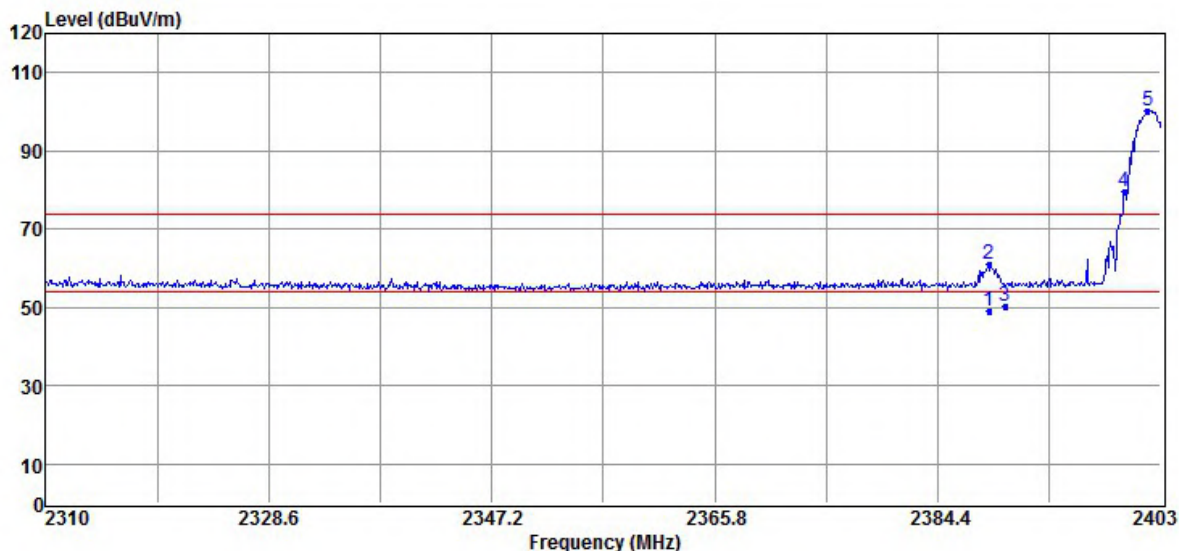
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- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 4 Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency

Radiated Emission (EDR 2M mode):

Operation Mode TX CH Low
Fundamental Frequency 2402 MHz
Temperature 25 °C

Test Date 2020/01/21
Test By Barry
Humidity 60 %

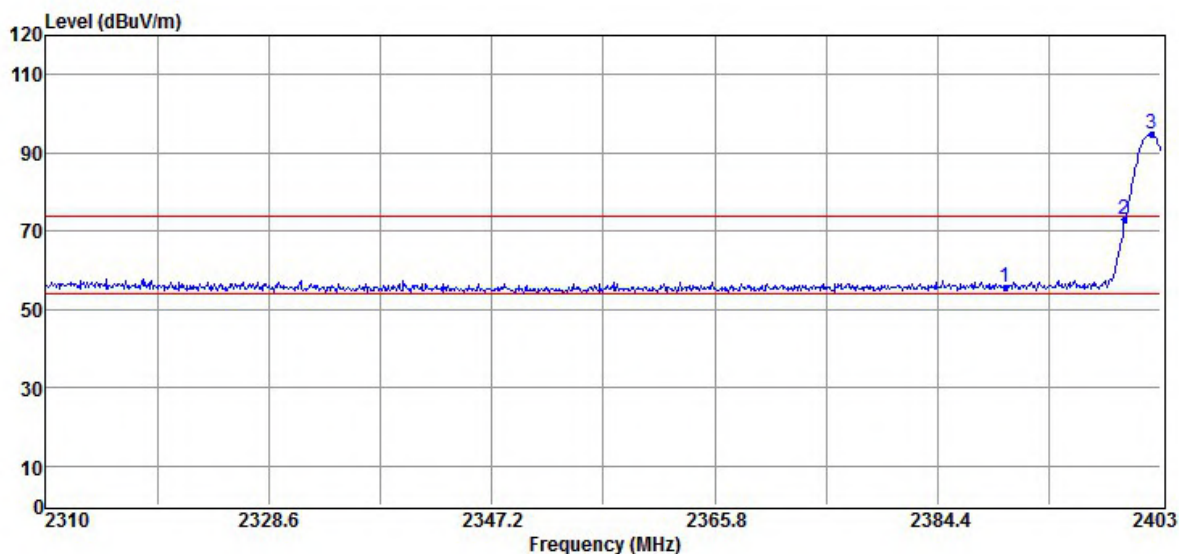


No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2388.68	16.66	32.59	49.25	54.00	-4.75	Average	VERTICAL
2	2388.68	28.28	32.59	60.87	74.00	-13.13	Peak	VERTICAL
3	2390.00	17.69	32.59	50.28	54.00	-3.72	Average	VERTICAL
4	2400.00	47.07	32.58	79.65	80.1	-0.45	Peak	VERTICAL
5	2401.88	67.52	32.58	100.10	F	--	Peak	VERTICAL

Remark:

- Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency



No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2390.00	22.90	32.59	55.49	74.00	-18.51	Peak	HORIZONTAL
2	2400.00	40.27	32.58	72.85	74.73	-1.88	Peak	HORIZONTAL
3	2402.26	62.15	32.58	94.73	F	--	Peak	HORIZONTAL

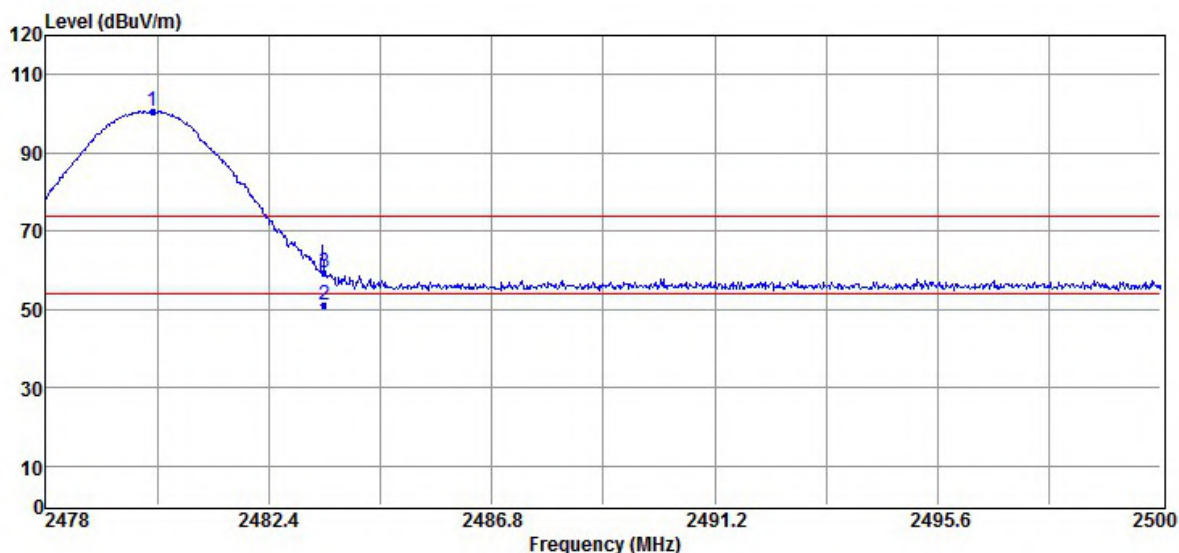
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- 3 Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 4 Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency

Operation Mode TX CH High
Fundamental Frequency 2480 MHz
Temperature 25 °C

Test Date 2020/01/21
Test By Barry
Humidity 60 %

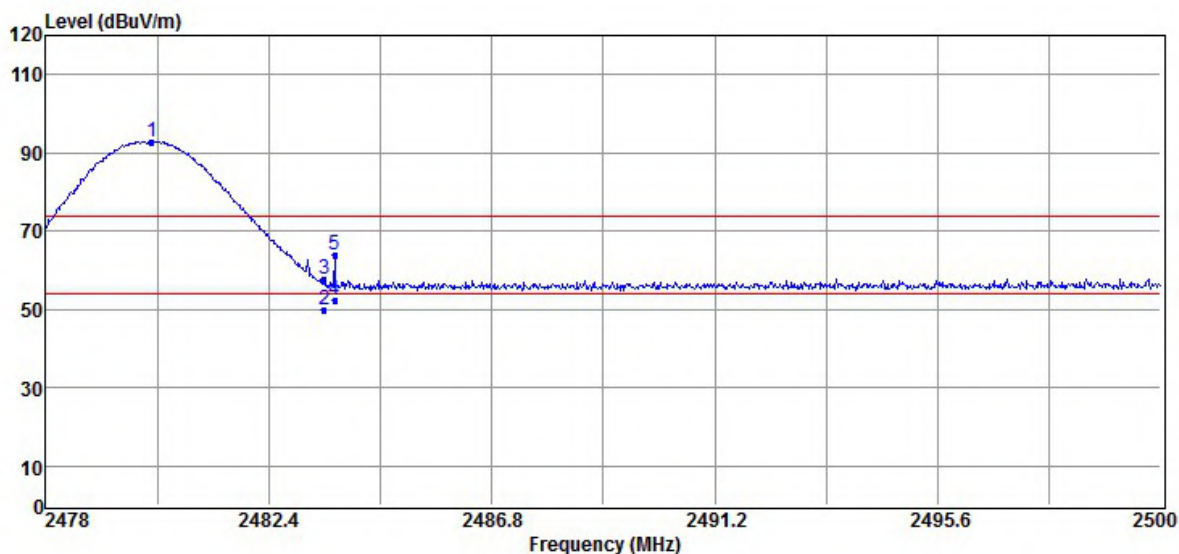


No	Freq MHz	Reading dBUV	Factor dB/m	Level dBUV/m	Limit dBUV/m	Margin dB	Remark	Pol V/H
1	2480.11	67.88	32.63	100.51	F	--	Peak	VERTICAL
2	2483.50	18.34	32.63	50.97	54.00	-3.03	Average	VERTICAL
3	2483.50	26.58	32.63	59.21	74.00	-14.79	Peak	VERTICAL

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- 3 Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 4 Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency



No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2480.09	60.24	32.63	92.87	F	--	Peak	HORIZONTAL
2	2483.50	17.26	32.63	49.89	54.00	-4.11	Average	HORIZONTAL
3	2483.50	24.90	32.63	57.53	74.00	-16.47	Peak	HORIZONTAL
4	2483.70	19.57	32.63	52.20	54.00	-1.80	Average	HORIZONTAL
5	2483.70	31.38	32.63	64.01	74.00	-9.99	Peak	HORIZONTAL

Remark:

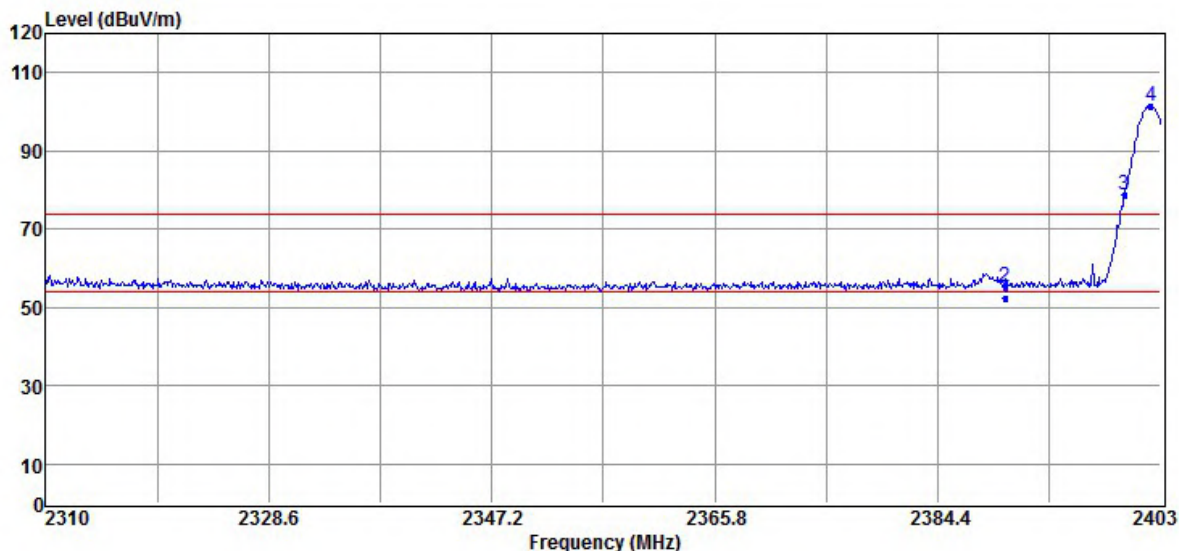
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- 4 Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency

Radiated Emission (EDR 3M mode):

Operation Mode TX CH Low
Fundamental Frequency 2402 MHz
Temperature 25 °C

Test Date 2020/01/21
Test By Barry
Humidity 60 %

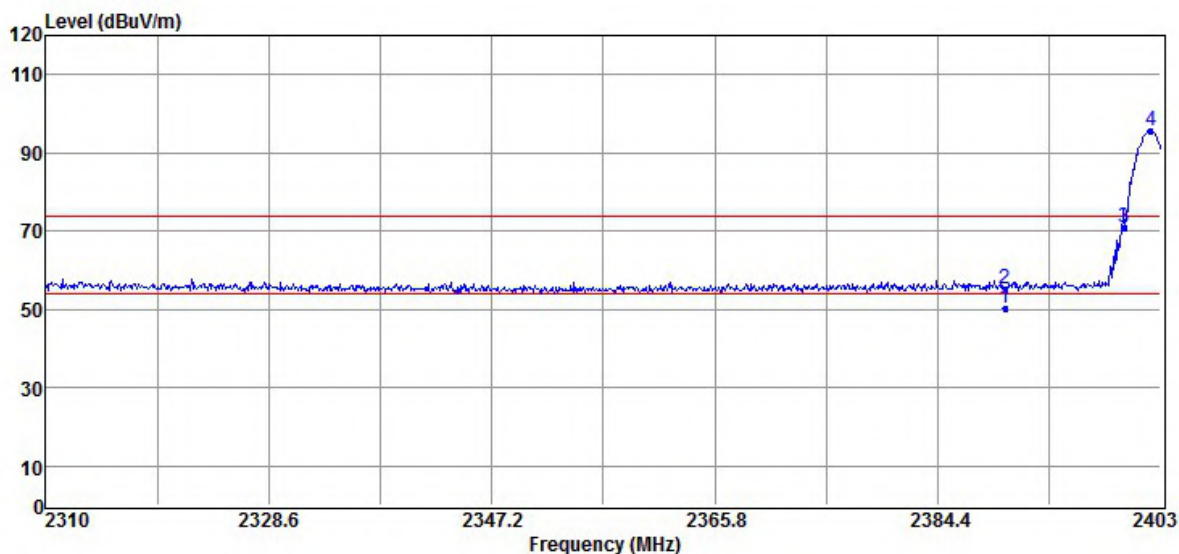


No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2390.00	19.73	32.59	52.32	54.00	-1.68	Average	VERTICAL
2	2390.00	22.55	32.59	55.14	74.00	-18.86	Peak	VERTICAL
3	2400.00	46.31	32.58	78.89	81.37	-2.48	Peak	VERTICAL
4	2402.16	68.79	32.58	101.37	F	--	Peak	VERTICAL

Remark:

- Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency



No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2390.00	17.73	32.59	50.32	54.00	-3.68	Average	HORIZONTAL
2	2390.00	22.57	32.59	55.16	74.00	-18.84	Peak	HORIZONTAL
3	2400.00	38.55	32.58	71.13	75.85	-4.72	Peak	HORIZONTAL
4	2402.16	63.27	32.58	95.85	F	--	Peak	HORIZONTAL

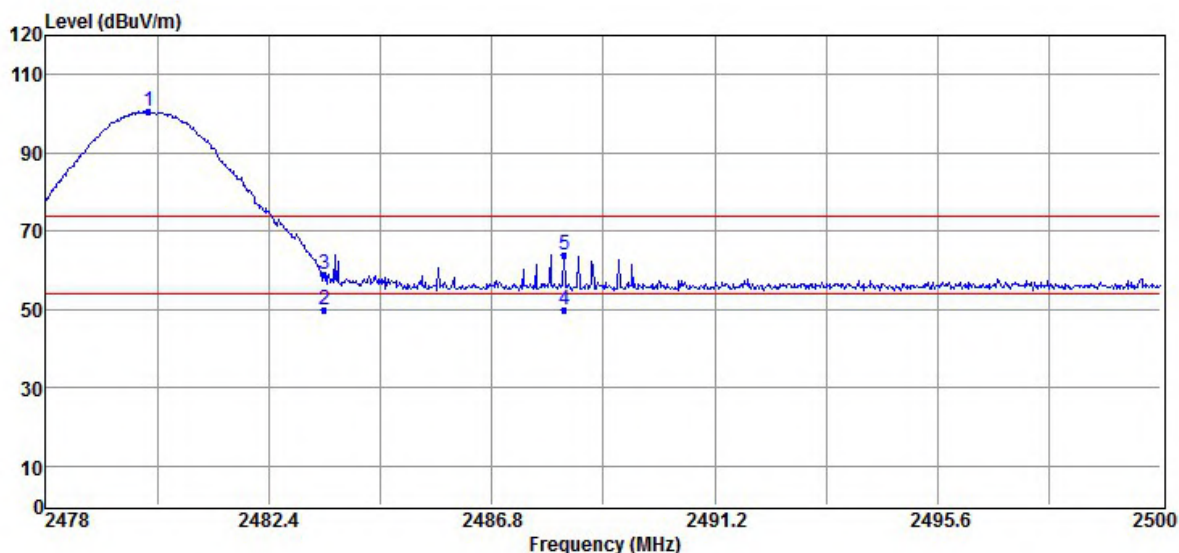
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- 4 Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency

Operation Mode TX CH High
Fundamental Frequency 2480 MHz
Temperature 25 °C

Test Date 2020/01/21
Test By Barry
Humidity 60 %

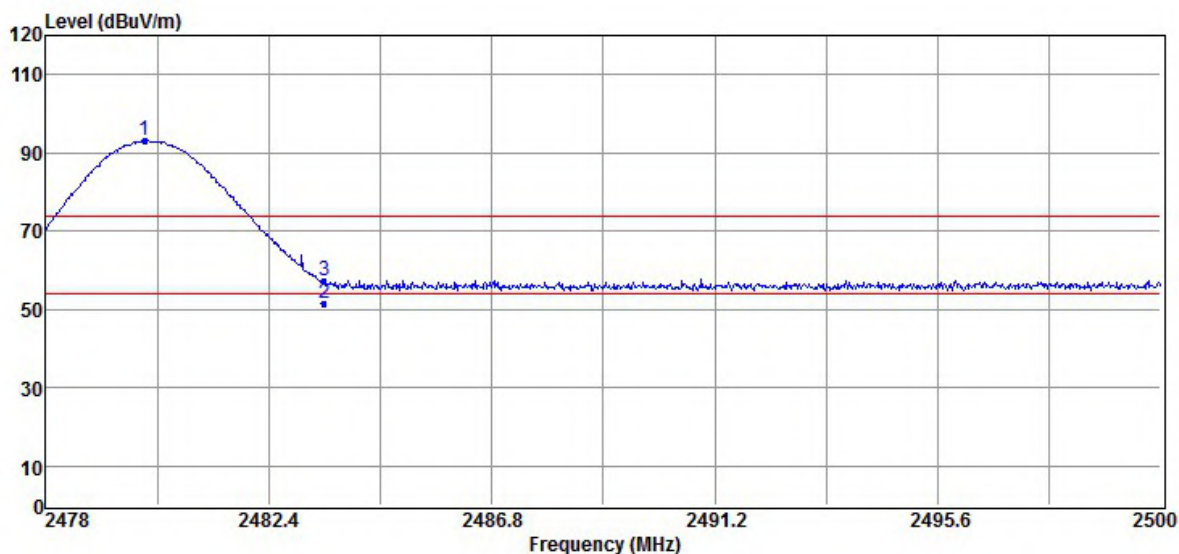


No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2480.02	68.06	32.63	100.69	F	--	Peak	VERTICAL
2	2483.50	17.35	32.63	49.98	54.00	-4.02	Average	VERTICAL
3	2483.50	26.32	32.63	58.95	74.00	-15.05	Peak	VERTICAL
4	2488.23	17.38	32.63	50.01	54.00	-3.99	Average	VERTICAL
5	2488.23	31.46	32.63	64.09	74.00	-9.91	Peak	VERTICAL

Remark:

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- Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency



No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2479.96	60.48	32.63	93.11	F	--	Peak	HORIZONTAL
2	2483.50	18.97	32.63	51.60	54.00	-2.40	Average	HORIZONTAL
3	2483.50	24.82	32.63	57.45	74.00	-16.55	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
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Note: “F” denotes fundamental frequency

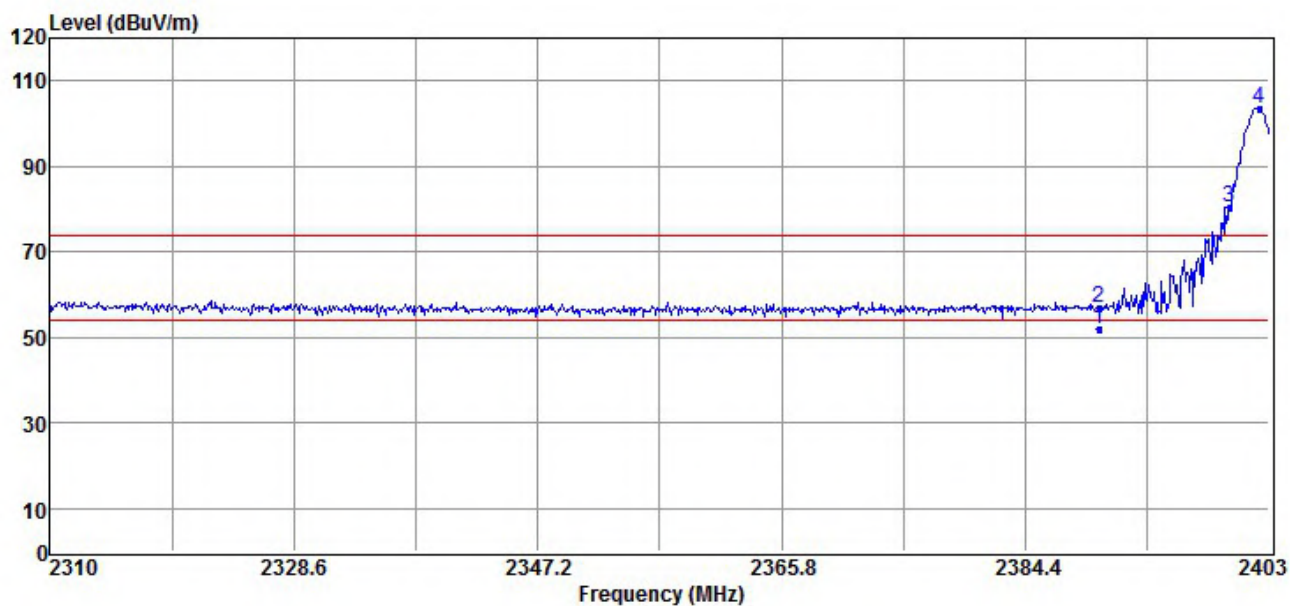
PIFA Antenna

Non-hopping mode:

Radiated Emission: (BDR mode)

Operation Mode TX CH Low
Fundamental Frequency 2402 MHz
Temperature 25 °C

Test Date 2020/04/10
Test By Barry
Humidity 60 %

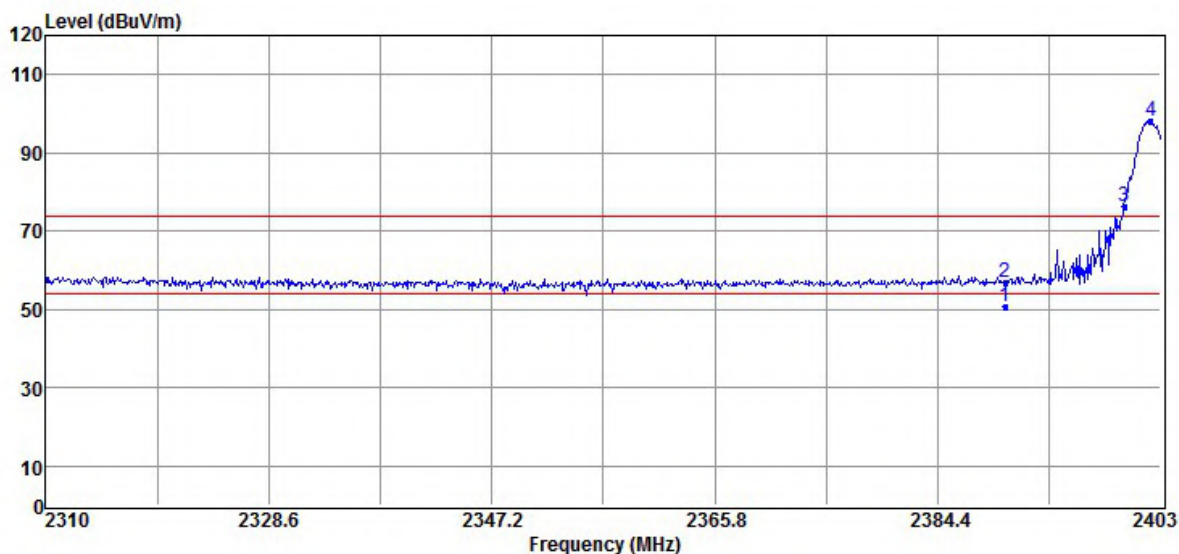


No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2390.00	19.25	32.73	51.98	54.00	-2.02	Average	VERTICAL
2	2390.00	24.05	32.73	56.78	74.00	-17.22	Peak	VERTICAL
3	2400.00	47.86	32.72	80.58	83.47	-2.89	Peak	VERTICAL
4	2402.26	70.74	32.73	103.47	F	--	Peak	VERTICAL

Remark:

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Note: “F” denotes fundamental frequency



No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2390.00	17.99	32.73	50.72	54.00	-3.28	Average	HORIZONTAL
2	2390.00	24.13	32.73	56.86	74.00	-17.14	Peak	HORIZONTAL
3	2400.00	43.59	32.72	76.31	78.05	-1.74	Peak	HORIZONTAL
4	2402.16	65.32	32.73	98.05	F	--	Peak	HORIZONTAL

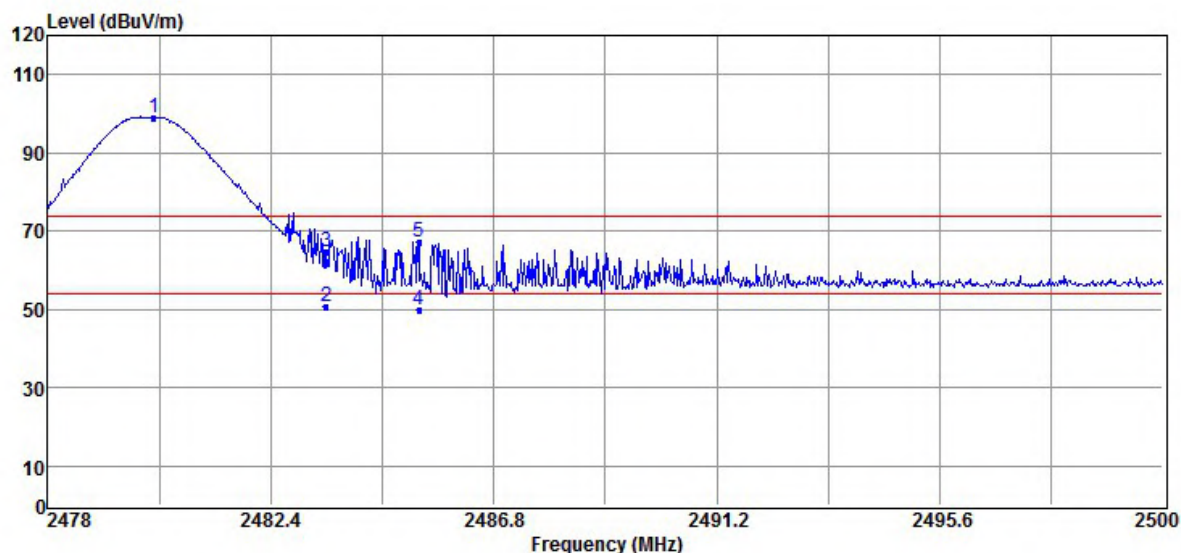
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Note: “F” denotes fundamental frequency

Operation Mode TX CH High
Fundamental Frequency 2480 MHz
Temperature 25 °C

Test Date 2020/04/10
Test By Barry
Humidity 60 %

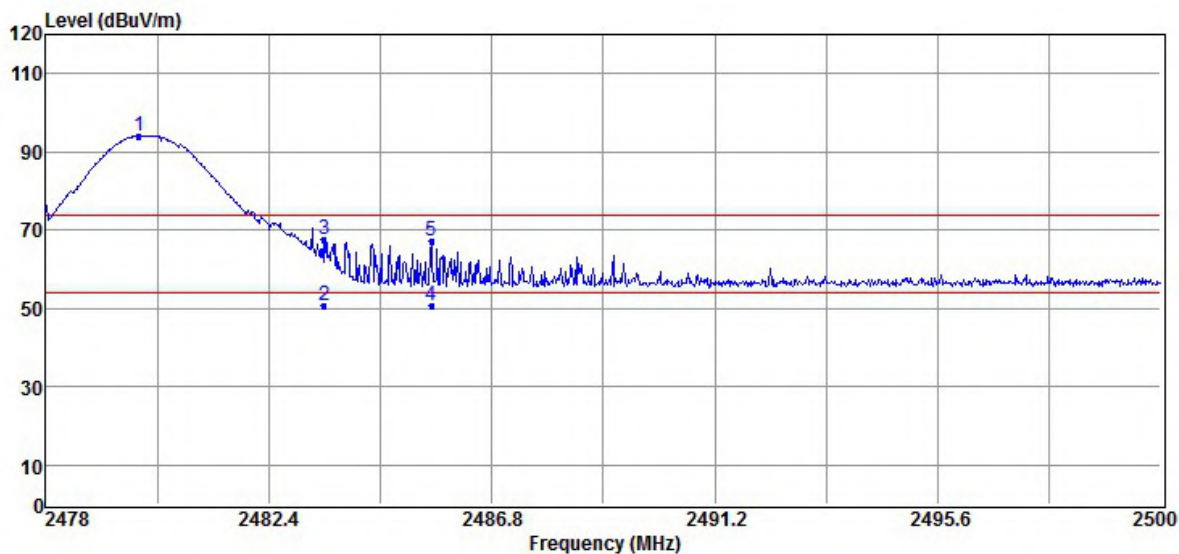


No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2480.09	66.34	32.78	99.12	F	--	Peak	VERTICAL
2	2483.50	17.82	32.78	50.60	54.00	-3.40	Average	VERTICAL
3	2483.50	31.97	32.78	64.75	74.00	-9.25	Peak	VERTICAL
4	2485.33	17.21	32.78	49.99	54.00	-4.01	Average	VERTICAL
5	2485.33	34.52	32.78	67.30	74.00	-6.70	Peak	VERTICAL

Remark:

- Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency



No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2479.85	61.19	32.78	93.97	F	--	Peak	HORIZONTAL
2	2483.50	18.01	32.78	50.79	54.00	-3.21	Average	HORIZONTAL
3	2483.50	34.88	32.78	67.66	74.00	-6.34	Peak	HORIZONTAL
4	2485.61	18.01	32.78	50.79	54.00	-3.21	Average	HORIZONTAL
5	2485.61	34.42	32.78	67.20	74.00	-6.80	Peak	HORIZONTAL

Remark:

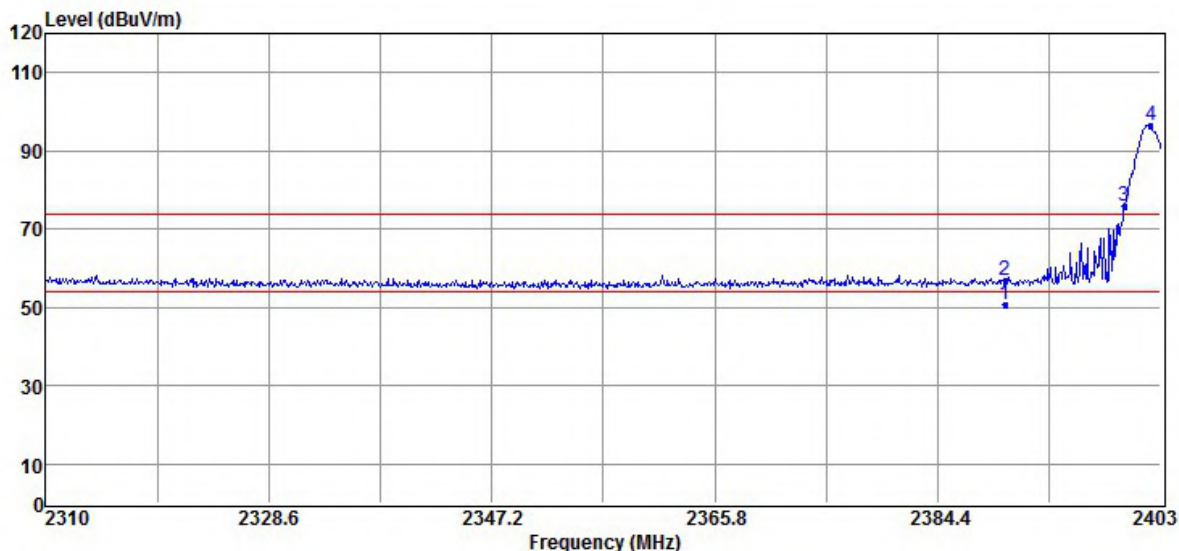
- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 4 Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency

Radiated Emission (EDR 2M mode):

Operation Mode TX CH Low
Fundamental Frequency 2402 MHz
Temperature 25 °C

Test Date 2020/04/10
Test By Barry
Humidity 60 %

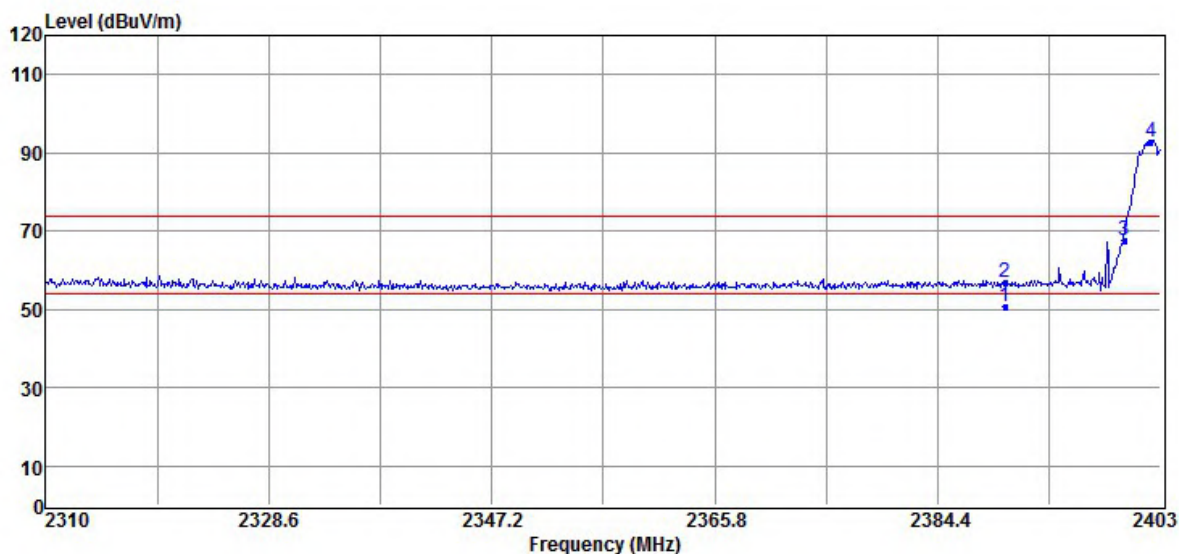


No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2390.00	18.02	32.73	50.75	54.00	-3.25	Average	VERTICAL
2	2390.00	24.33	32.73	57.06	74.00	-16.94	Peak	VERTICAL
3	2400.00	42.20	32.72	74.92	76.53	-1.61	Peak	VERTICAL
4	2402.16	63.80	32.73	96.53	F	--	Peak	VERTICAL

Remark:

- Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency



No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2390.00	17.97	32.73	50.70	54.00	-3.30	Average	HORIZONTAL
2	2390.00	24.34	32.73	57.07	74.00	-16.93	Peak	HORIZONTAL
3	2400.00	34.99	32.72	67.71	72.93	-5.22	Peak	HORIZONTAL
4	2402.16	60.20	32.73	92.93	F	--	Peak	HORIZONTAL

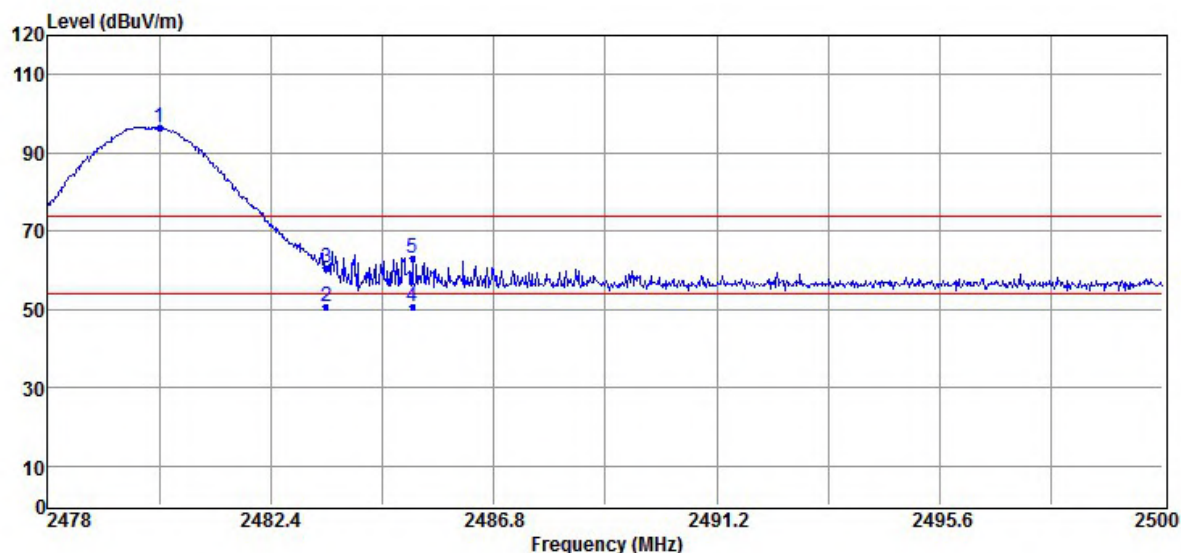
Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 4 Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency

Operation Mode TX CH High
Fundamental Frequency 2480 MHz
Temperature 25 °C

Test Date 2020/04/10
Test By Barry
Humidity 60 %

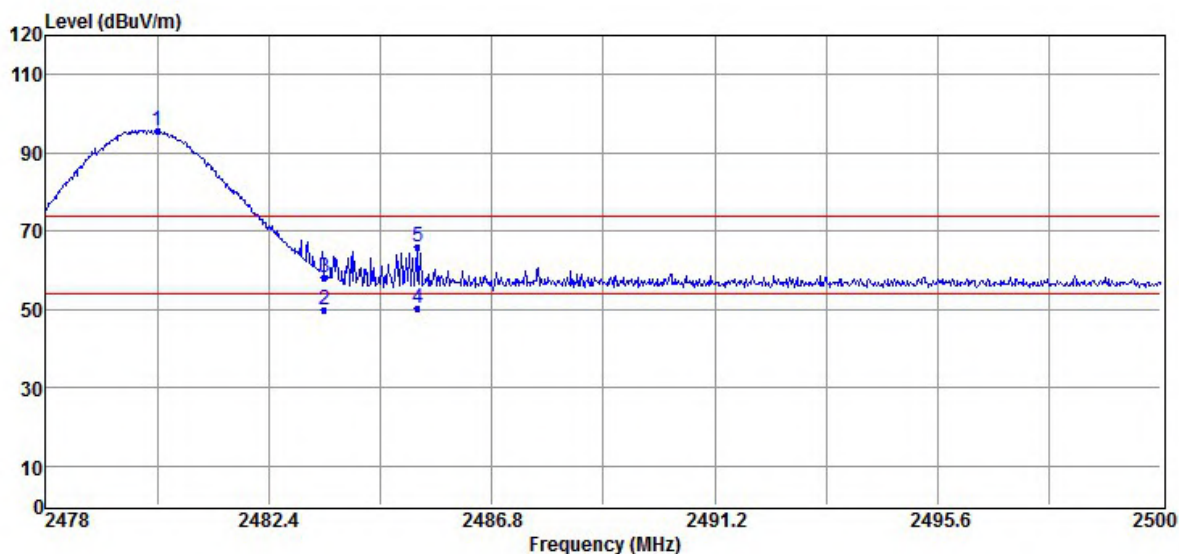


No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2480.20	63.82	32.78	96.60	F	--	Peak	VERTICAL
2	2483.50	18.01	32.78	50.79	54.00	-3.21	Average	VERTICAL
3	2483.50	27.93	32.78	60.71	74.00	-13.29	Peak	VERTICAL
4	2485.19	18.02	32.78	50.80	54.00	-3.20	Average	VERTICAL
5	2485.19	30.46	32.78	63.24	74.00	-10.76	Peak	VERTICAL

Remark:

- Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency



No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2480.20	62.94	32.78	95.72	F	--	Peak	HORIZONTAL
2	2483.50	17.09	32.78	49.87	54.00	-4.13	Average	HORIZONTAL
3	2483.50	25.30	32.78	58.08	74.00	-15.92	Peak	HORIZONTAL
4	2485.35	17.39	32.78	50.17	54.00	-3.83	Average	HORIZONTAL
5	2485.35	33.21	32.78	65.99	74.00	-8.01	Peak	HORIZONTAL

Remark:

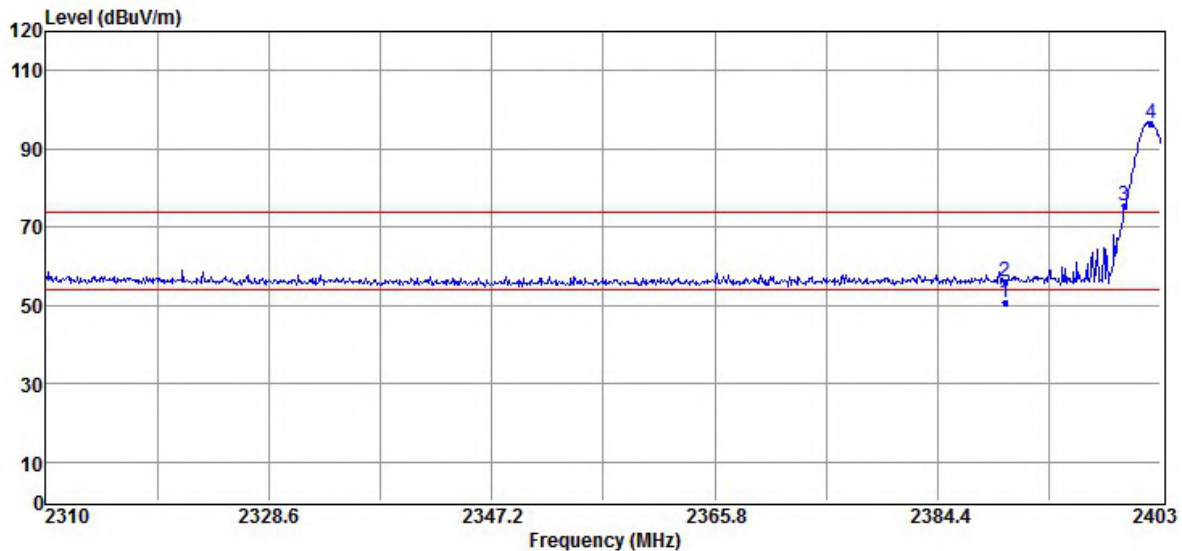
- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 4 Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency

Radiated Emission (EDR 3M mode):

Operation Mode TX CH Low
Fundamental Frequency 2402 MHz
Temperature 25 °C

Test Date 2020/04/10
Test By Barry
Humidity 60 %

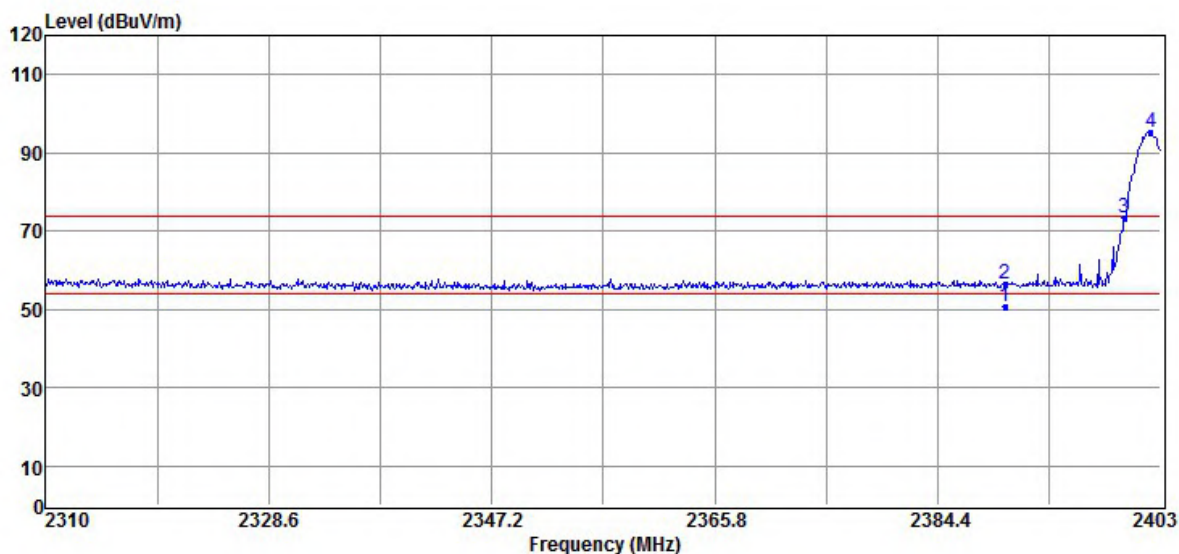


No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2390.00	18.01	32.73	50.74	54.00	-3.26	Average	VERTICAL
2	2390.00	23.41	32.73	56.14	74.00	-17.86	Peak	VERTICAL
3	2400.00	41.77	32.72	74.49	76.56	-2.07	Peak	VERTICAL
4	2402.16	63.83	32.73	96.56	F	--	Peak	VERTICAL

Remark:

- Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency



No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2390.00	18.02	32.73	50.75	54.00	-3.25	Average	HORIZONTAL
2	2390.00	23.66	32.73	56.39	74.00	-17.61	Peak	HORIZONTAL
3	2400.00	40.53	32.72	73.25	75.18	-1.93	Peak	HORIZONTAL
4	2402.16	62.45	32.73	95.18	F	--	Peak	HORIZONTAL

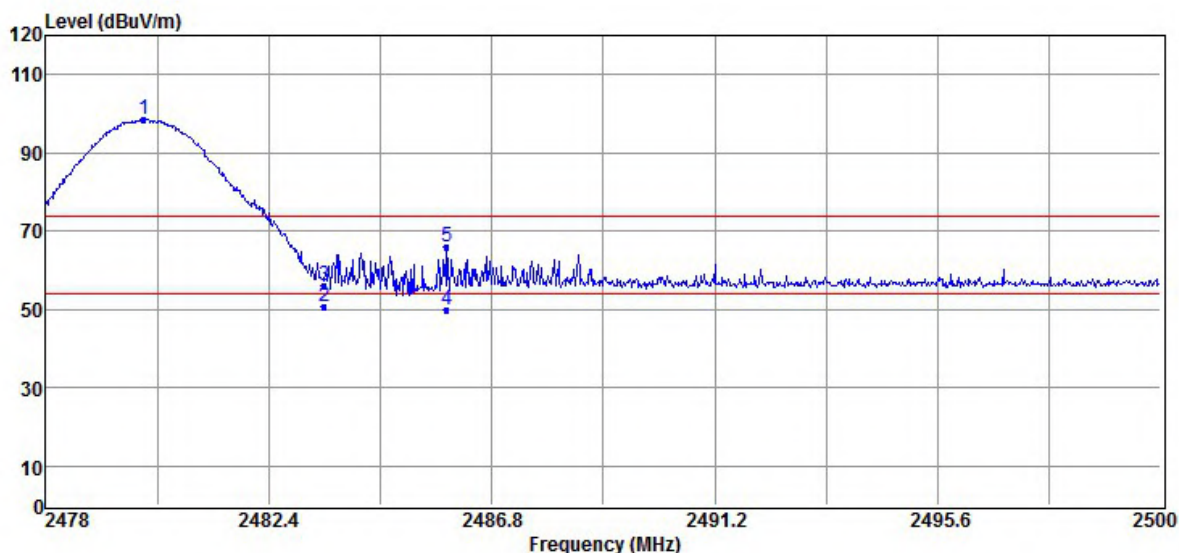
Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 4 Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency

Operation Mode TX CH High
Fundamental Frequency 2480 MHz
Temperature 25 °C

Test Date 2020/04/10
Test By Barry
Humidity 60 %

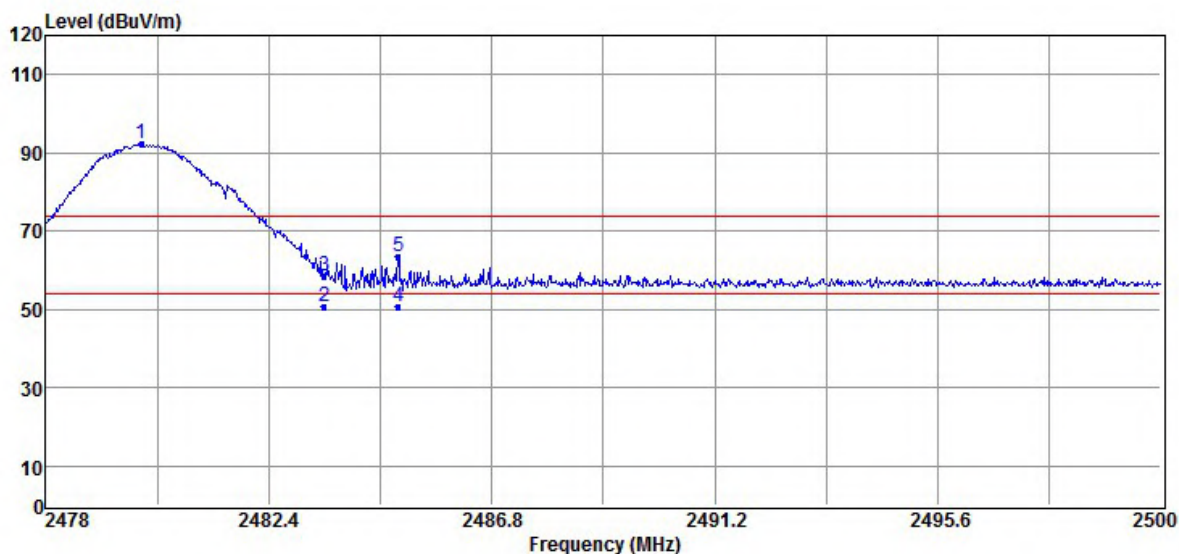


No	Freq MHz	Reading dBUV	Factor dB/m	Level dBUV/m	Limit dBUV/m	Margin dB	Remark	Pol V/H
1	2479.94	65.82	32.78	98.60	F	--	Peak	VERTICAL
2	2483.50	18.01	32.78	50.79	54.00	-3.21	Average	VERTICAL
3	2483.50	23.60	32.63	56.23	74.00	-17.77	Peak	VERTICAL
4	2485.92	16.99	32.79	49.78	54.00	-4.22	Average	VERTICAL
5	2485.92	32.99	32.79	65.78	74.00	-8.22	Peak	VERTICAL

Remark:

- Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency



No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2479.89	59.48	32.78	92.26	F	--	Peak	HORIZONTAL
2	2483.50	18.09	32.78	50.87	54.00	-3.13	Average	HORIZONTAL
3	2483.50	25.86	32.78	58.64	74.00	-15.36	Peak	HORIZONTAL
4	2484.95	18.01	32.78	50.79	54.00	-3.21	Average	HORIZONTAL
5	2484.95	30.73	32.78	63.51	74.00	-10.49	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 4 Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency

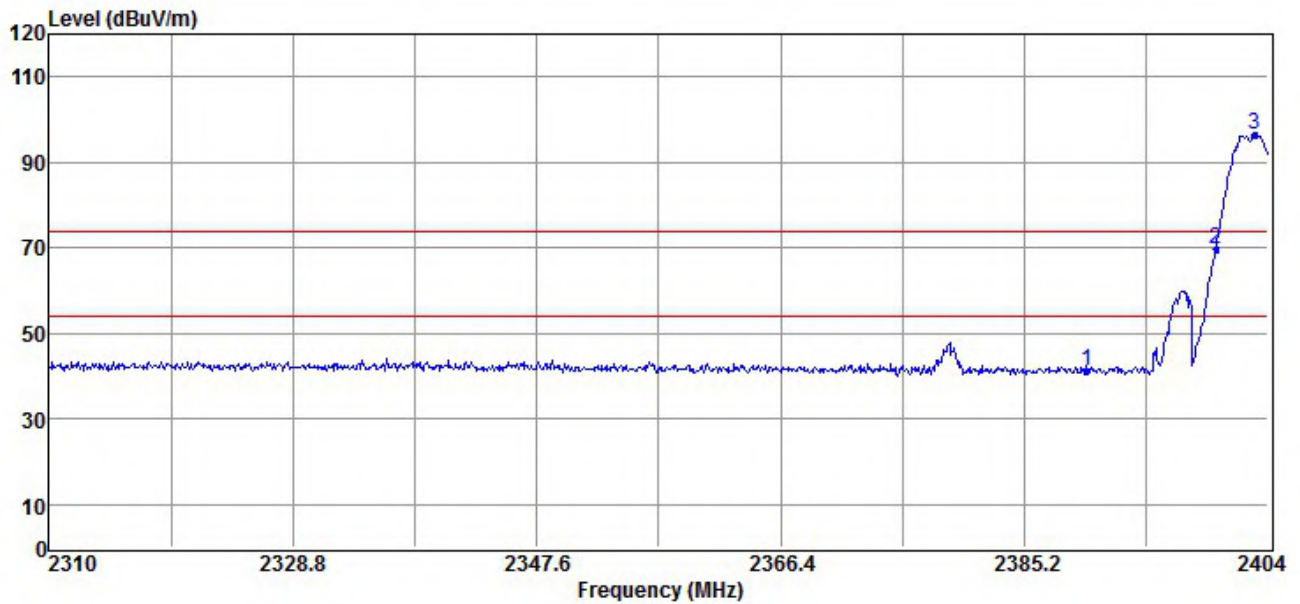
Dipole Antenna

Hopping mode:

Radiated Emission: (BDR mode)

Operation Mode TX CH Low
Fundamental Frequency 2402 MHz
Temperature 25 °C

Test Date 2020/01/21
Test By Barry
Humidity 60 %

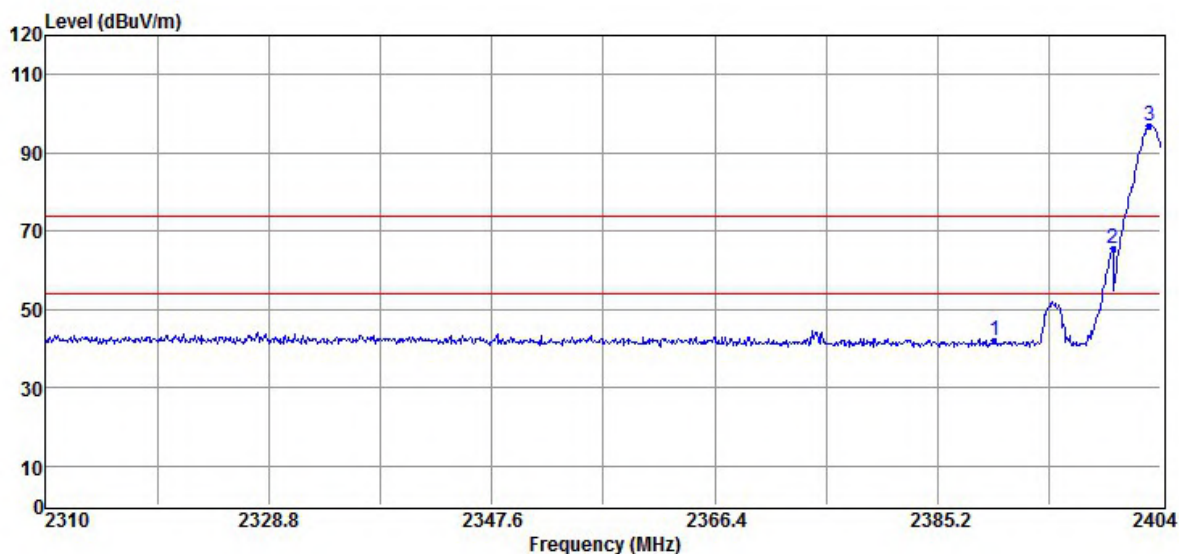


No	Freq MHz	Reading dBUV	Factor dB/m	Level dBUV/m	Limit dBUV/m	Margin dB	Remark	Pol V/H
1	2390.00	56.89	-15.84	41.05	74.00	-32.95	Peak	VERTICAL
2	2400.00	85.49	-15.86	69.63	76.35	-6.72	Peak	VERTICAL
3	2402.97	112.21	-15.86	96.35	F	--	Peak	VERTICAL

Remark:

- Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency



No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2390.00	57.89	-15.84	42.05	74.00	-31.95	Peak	HORIZONTAL
2	2400.00	81.48	-15.86	65.62	77.05	-11.43	Peak	HORIZONTAL
3	2403.06	112.91	-15.86	97.05	F	--	Peak	HORIZONTAL

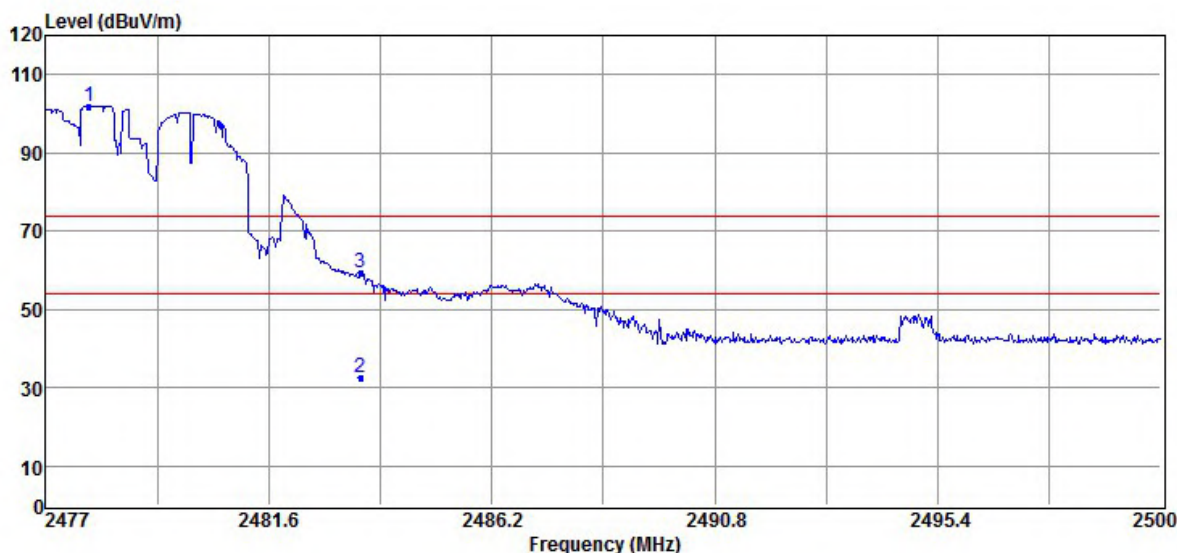
Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 4 Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency

Operation Mode TX CH High
Fundamental Frequency 2480 MHz
Temperature 25 °C

Test Date 2020/01/21
Test By Barry
Humidity 60 %

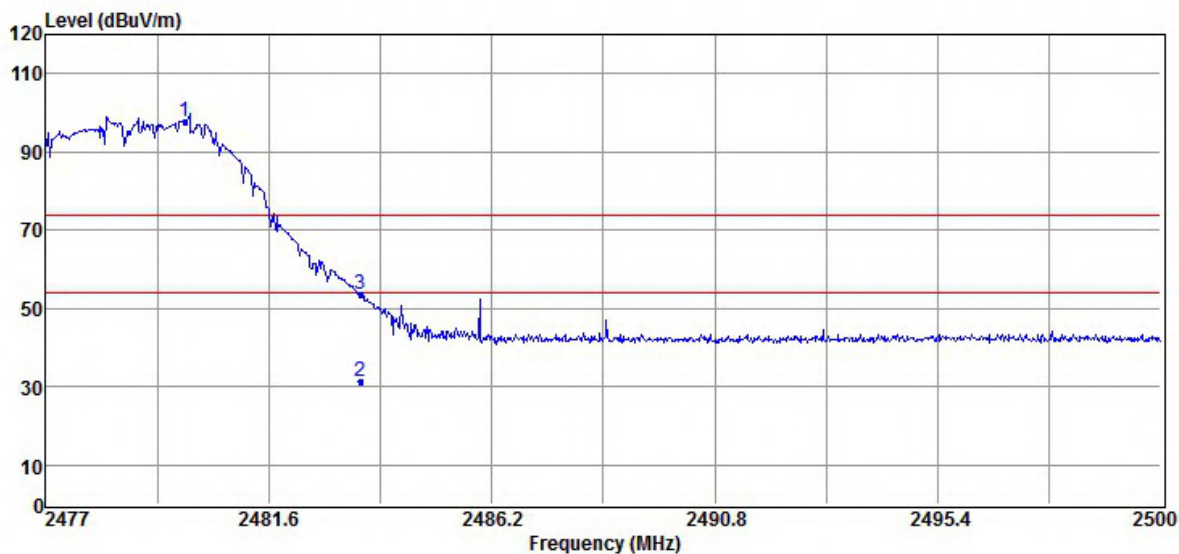


No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2477.90	117.87	-15.84	102.03	F	--	Peak	VERTICAL
2	2483.50	48.31	-15.84	32.47	54.00	-21.53	Average	VERTICAL
3	2483.50	75.04	-15.84	59.20	74.00	-14.80	Peak	VERTICAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 4 Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency



No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2479.88	113.58	-15.84	97.74	F	--	Peak	HORIZONTAL
2	2483.50	47.35	-15.84	31.51	54.00	-22.49	Average	HORIZONTAL
3	2483.50	69.34	-15.84	53.50	74.00	-20.50	Peak	HORIZONTAL

Remark:

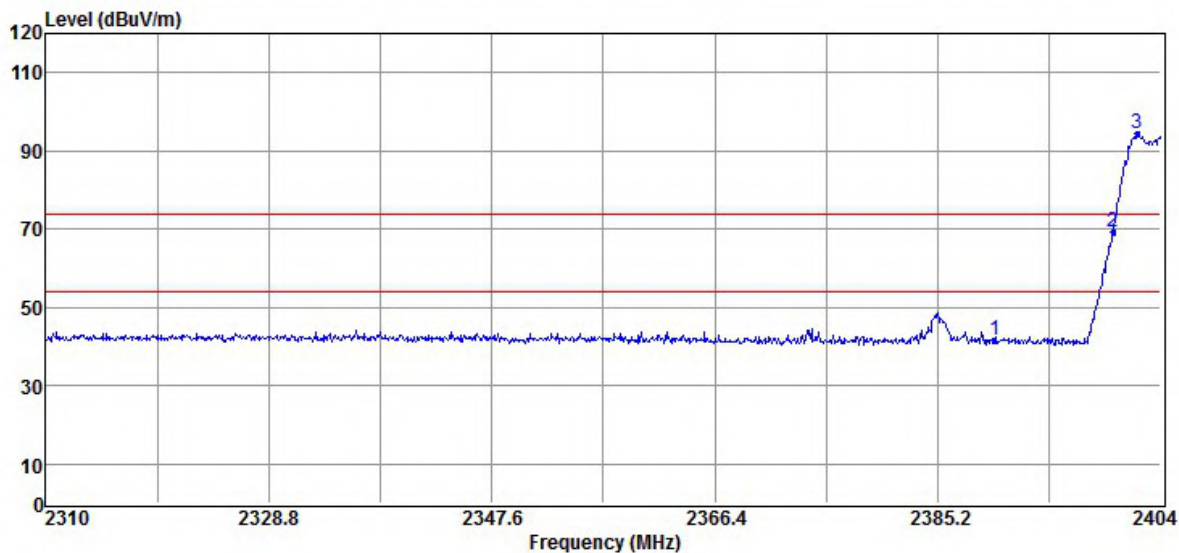
- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 4 Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency

Radiated Emission (EDR 2M mode):

Operation Mode TX CH Low
Fundamental Frequency 2402 MHz
Temperature 25 °C

Test Date 2020/01/21
Test By Barry
Humidity 60 %

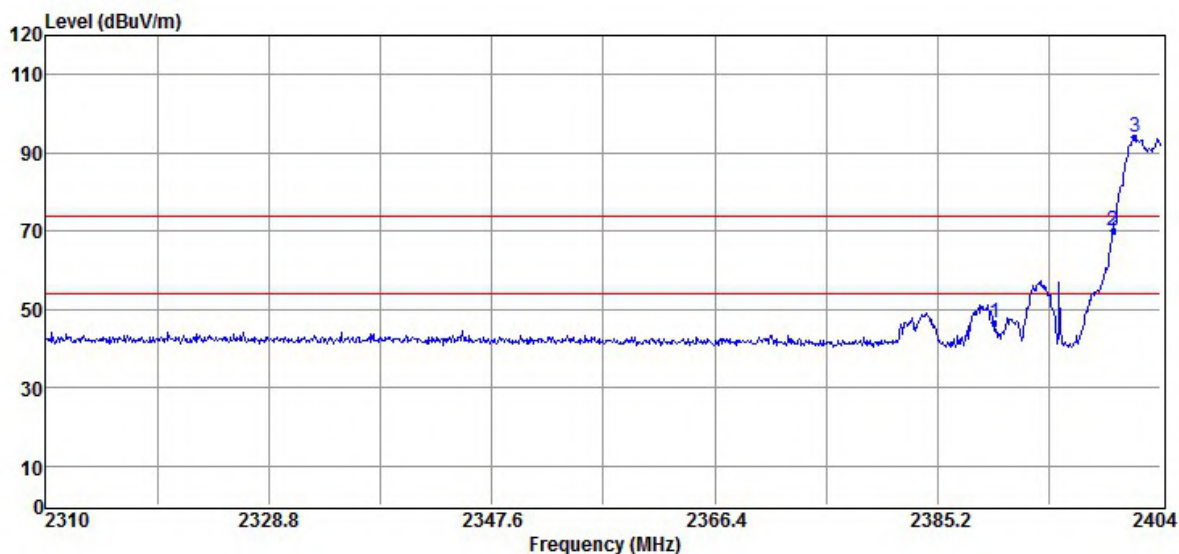


No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2390.00	57.34	-15.84	41.50	74.00	-32.50	Peak	VERTICAL
2	2400.00	85.27	-15.86	69.41	74.31	-4.9	Peak	VERTICAL
3	2402.03	110.17	-15.86	94.31	F	--	Peak	VERTICAL

Remark:

- Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency



No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2390.00	62.34	-15.84	46.50	74.00	-27.50	Peak	HORIZONTAL
2	2400.00	86.10	-15.86	70.24	73.85	-3.61	Peak	HORIZONTAL
3	2401.84	109.71	-15.86	93.85	F	--	Peak	HORIZONTAL

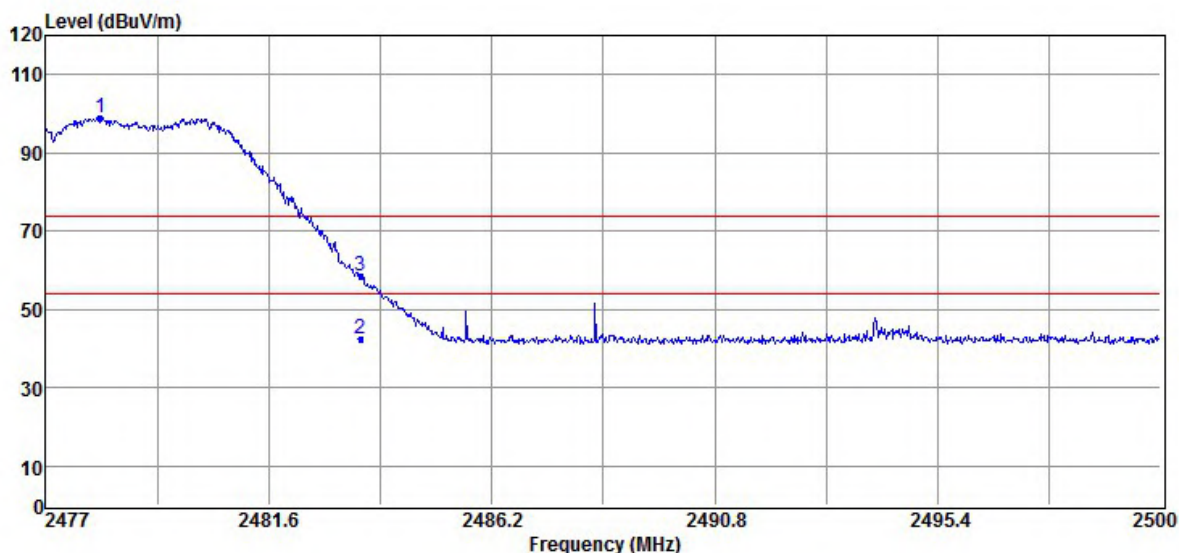
Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 4 Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency

Operation Mode TX CH High
Fundamental Frequency 2480 MHz
Temperature 25 °C

Test Date 2020/01/21
Test By Barry
Humidity 60 %

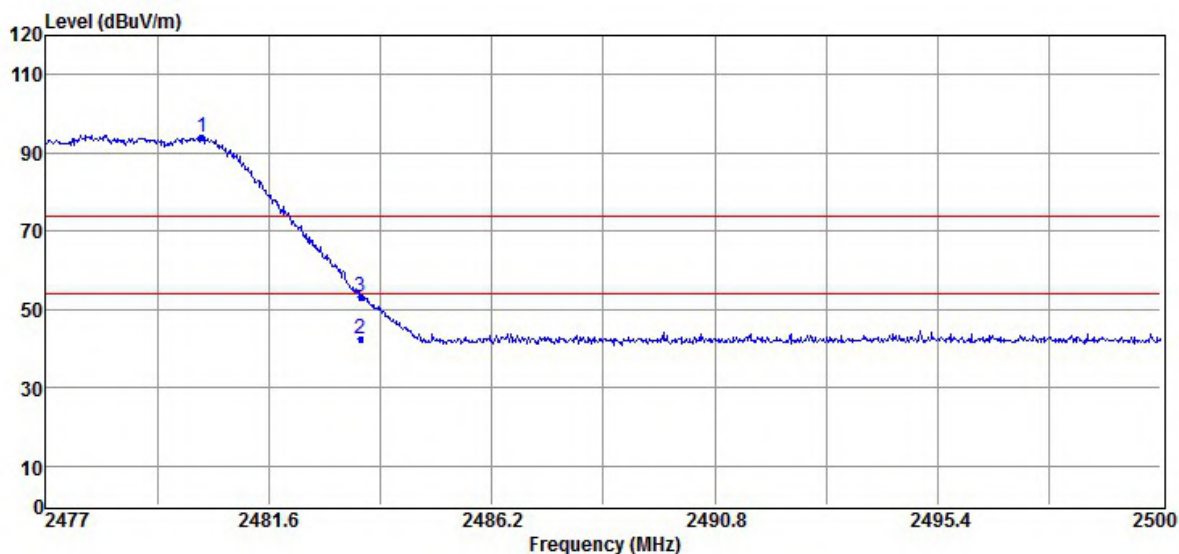


No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2478.13	114.84	-15.84	99.00	F	--	Peak	VERTICAL
2	2483.50	58.31	-15.84	42.47	54.00	-11.53	Average	VERTICAL
3	2483.50	74.45	-15.84	58.61	74.00	-15.39	Peak	VERTICAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 4 Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency



No	Freq MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2480.22	109.88	-15.84	94.04	F	--	Peak	HORIZONTAL
2	2483.50	58.31	-15.84	42.47	54.00	-11.53	Average	HORIZONTAL
3	2483.50	69.12	-15.84	53.28	74.00	-20.72	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Spectrum Peak mode IF bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 4 Spectrum AV mode if bandwidth Setting : 1GHz- 26GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Note: “F” denotes fundamental frequency