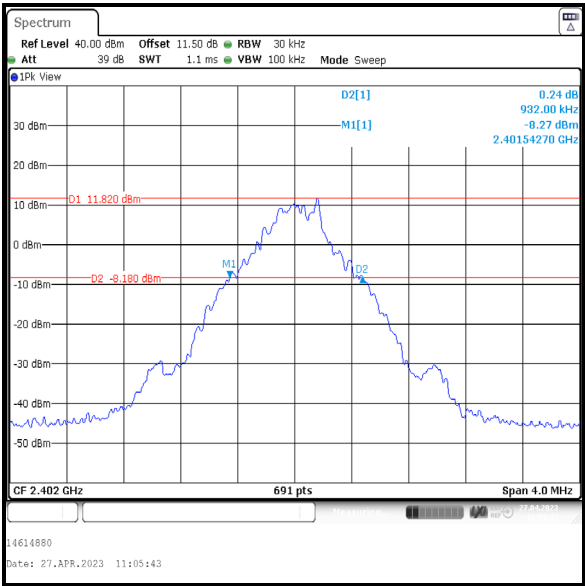


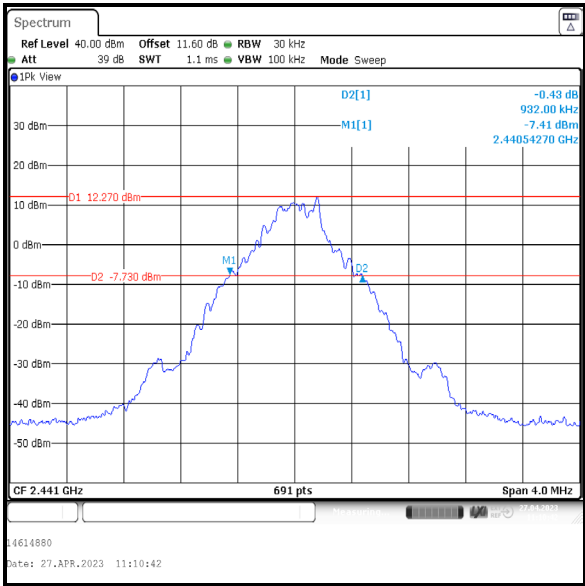
Transmitter 20 dB Bandwidth (continued)

Results: DH5 / Beamforming / Core 0

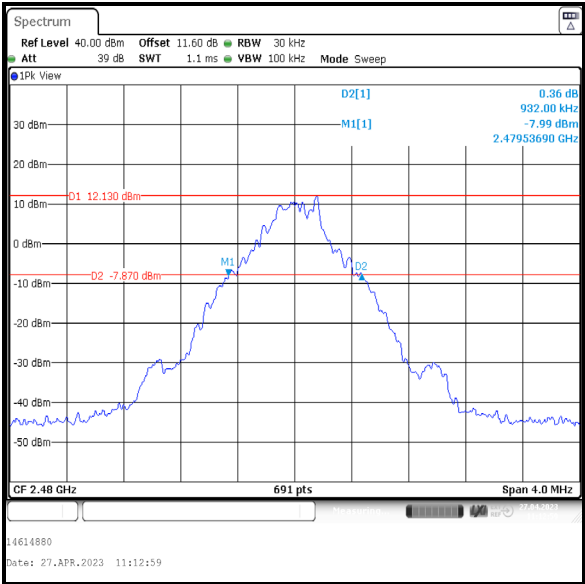
Channel	20 dB Bandwidth (kHz)
Bottom	932.000
Middle	932.000
Top	932.000



Bottom Channel



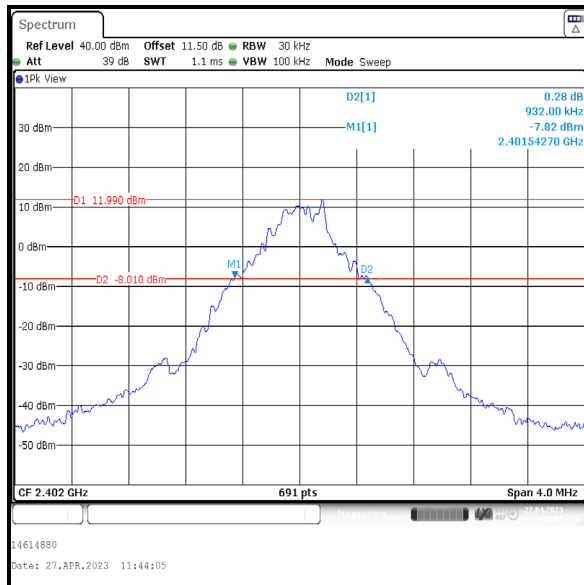
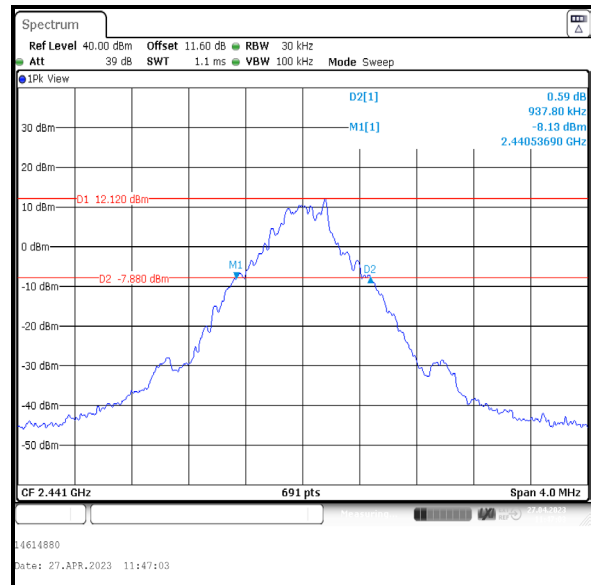
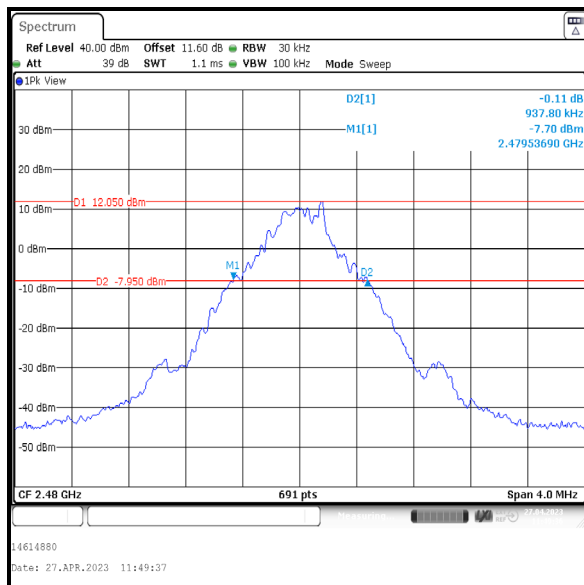
Middle Channel



Top Channel

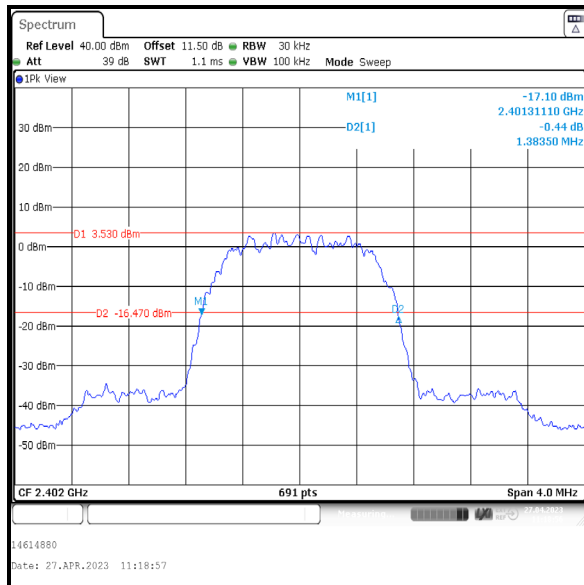
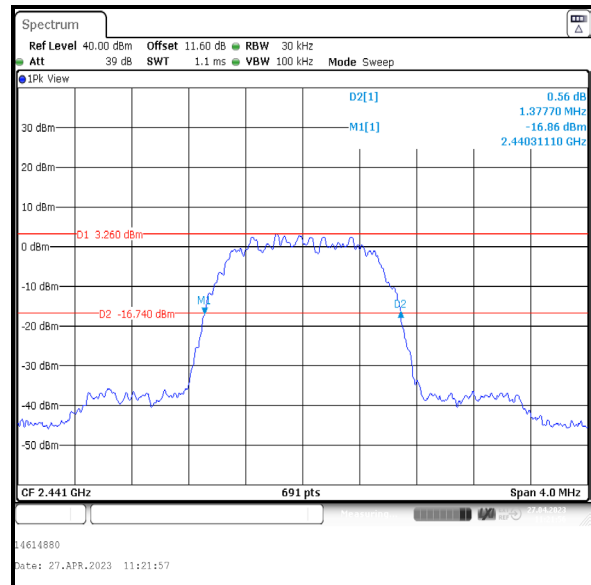
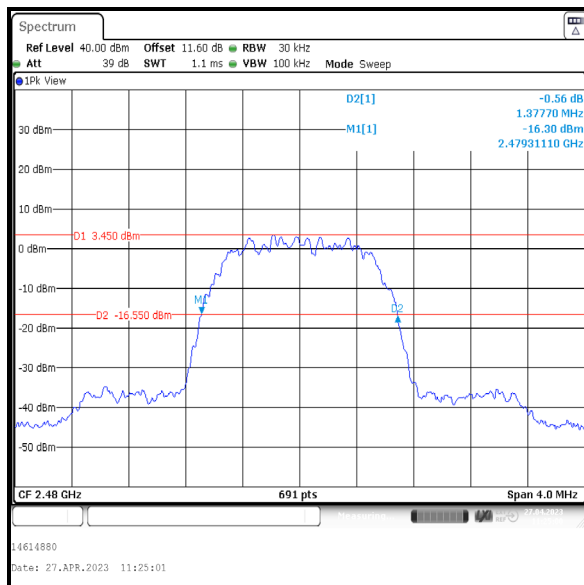
**Transmitter 20 dB Bandwidth (continued)****Results: DH5 / Beamforming / Core 1**

Channel	20 dB Bandwidth (kHz)
Bottom	932.000
Middle	937.800
Top	937.800

**Bottom Channel****Middle Channel****Top Channel**

**Transmitter 20 dB Bandwidth (continued)****Results: 2DH5 / Beamforming / Core 0**

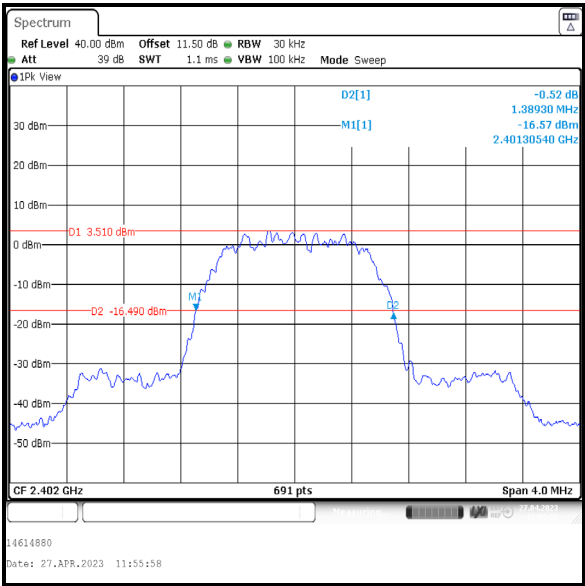
Channel	20 dB Bandwidth (kHz)
Bottom	1383.500
Middle	1377.700
Top	1377.700

**Bottom Channel****Middle Channel****Top Channel**

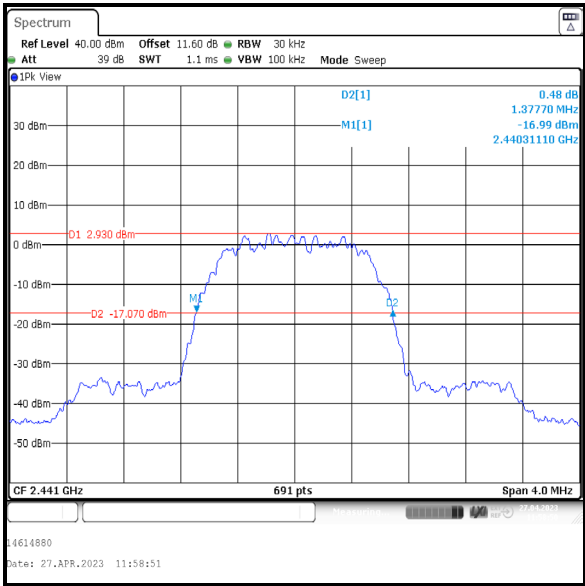
Transmitter 20 dB Bandwidth (continued)

Results: 2DH5 / Beamforming / Core 1

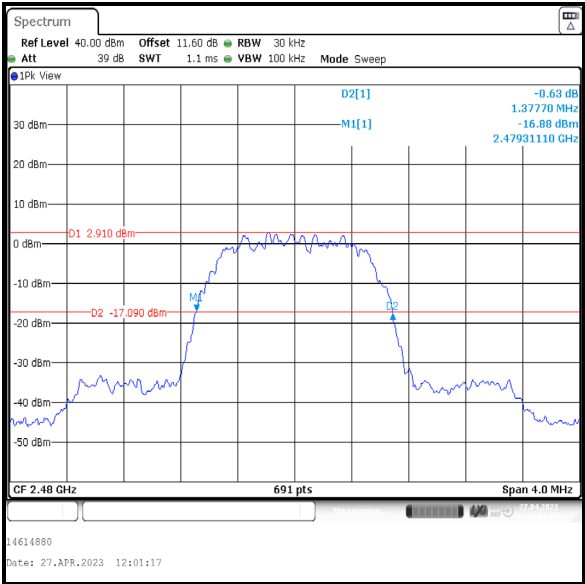
Channel	20 dB Bandwidth (kHz)
Bottom	1389.300
Middle	1377.700
Top	1377.700



Bottom Channel



Middle Channel

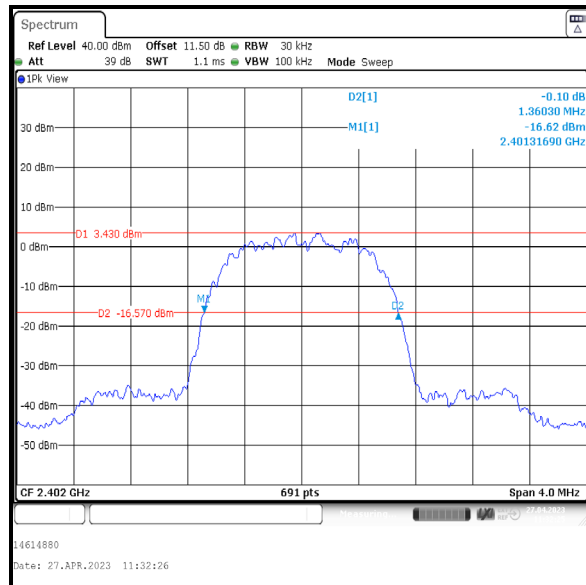


Top Channel

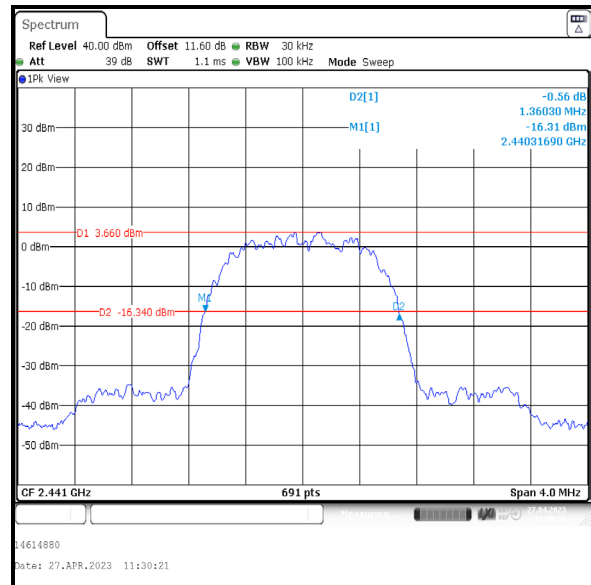
### Transmitter 20 dB Bandwidth (continued)

## Results: 3DH5 / Beamforming / Core 0

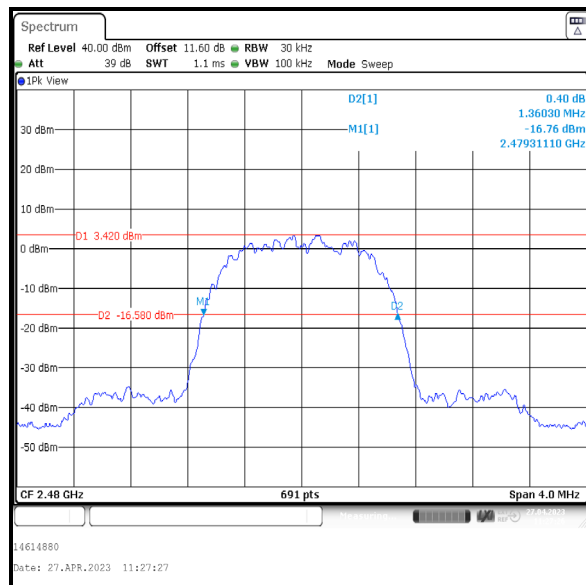
Channel	20 dB Bandwidth (kHz)
Bottom	1360.300
Middle	1360.300
Top	1360.300



### Bottom Channel



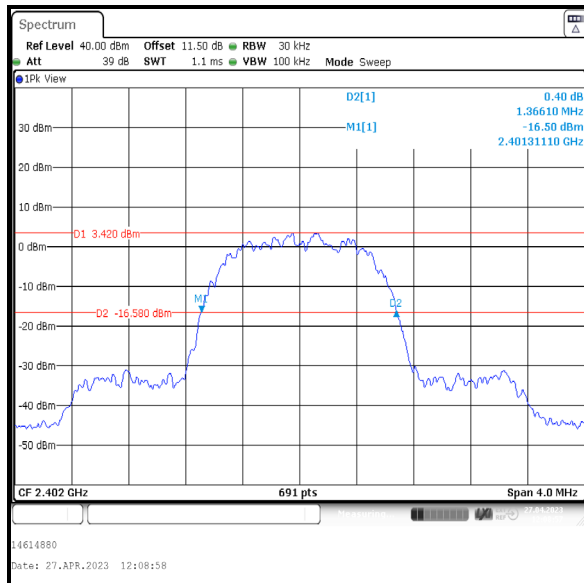
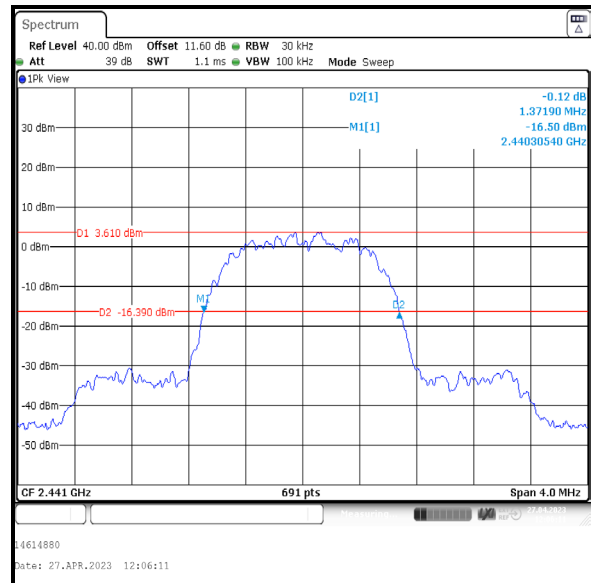
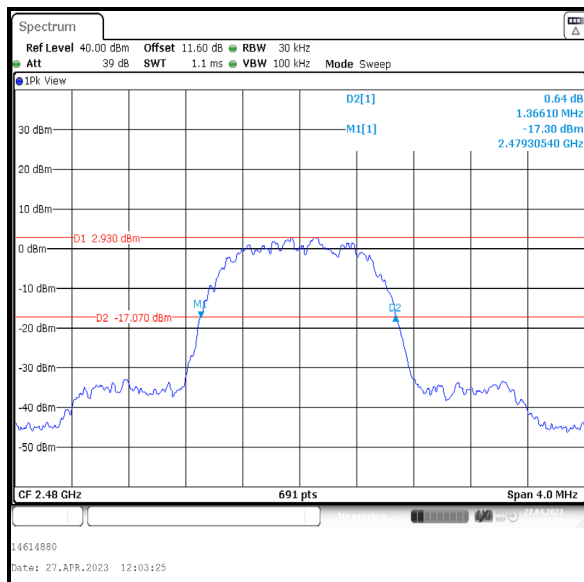
### Middle Channel



### Top Channel

**Transmitter 20 dB Bandwidth (continued)****Results: 3DH5 / Beamforming / Core 1**

Channel	20 dB Bandwidth (kHz)
Bottom	1366.100
Middle	1371.900
Top	1366.100

**Bottom Channel****Middle Channel****Top Channel**

### **4.3 Transmitter Carrier Frequency Separation**

#### **Test Summary:**

<b>Test Engineers:</b>	Max Passell & Jiyu Zou	<b>Test Dates:</b>	27 April 2023 & 28 April 2023
<b>Test Sample Serial Number:</b>	VXT97D7WDV		

<b>FCC Reference:</b>	Part 15.247(a)(1)
<b>ISED Canada Reference:</b>	RSS-247 5.1(b)
<b>Test Method Used:</b>	ANSI C63.10 Section 7.8.2

#### **Environmental Conditions:**

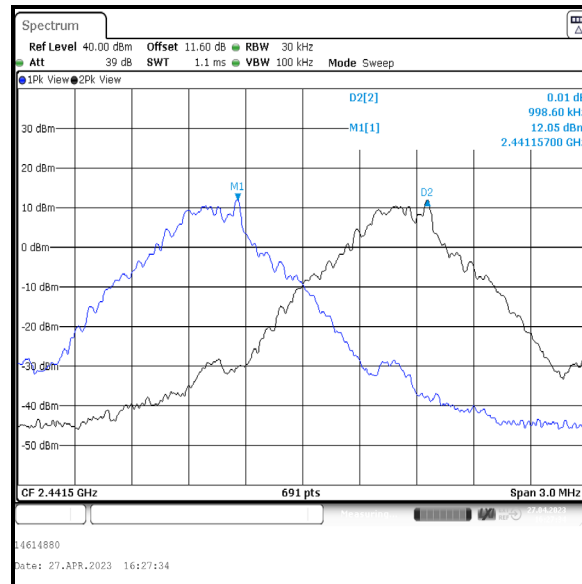
<b>Temperature (°C):</b>	20 to 23
<b>Relative Humidity (%):</b>	48 to 52

#### **Note(s):**

1. The 20 dB bandwidth measured for the middle channel operating at 2441 MHz was used to calculate the limit.
2. The signal analyser resolution bandwidth was set to 30 kHz and video bandwidth 100 kHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold. The span was set to 3 MHz. A marker was placed at the centre of one signal and then a delta marker was placed in the same place on the second signal.
3. The signal analyser was connected to the RF port on the EUT using suitable attenuation and RF cable.

**Transmitter Carrier Frequency Separation (continued)****Results: DH5 / SISO / Core 1**

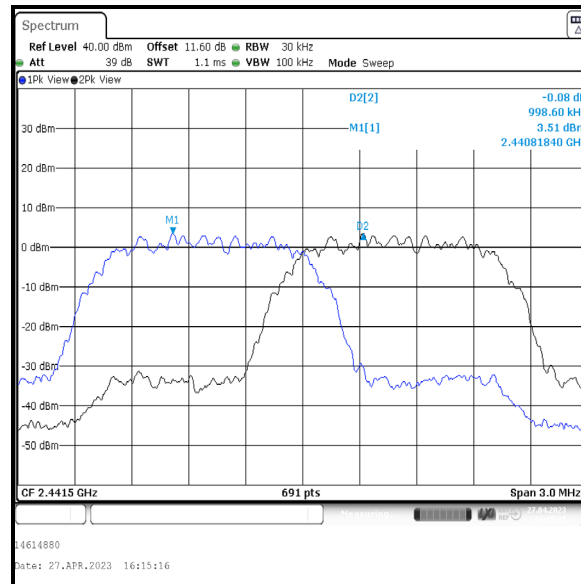
Carrier Frequency Separation (kHz)	Limit ( $2/3$ of 20 dB BW) (kHz)	Margin (kHz)	Result
998.600	621.333	377.267	Complied





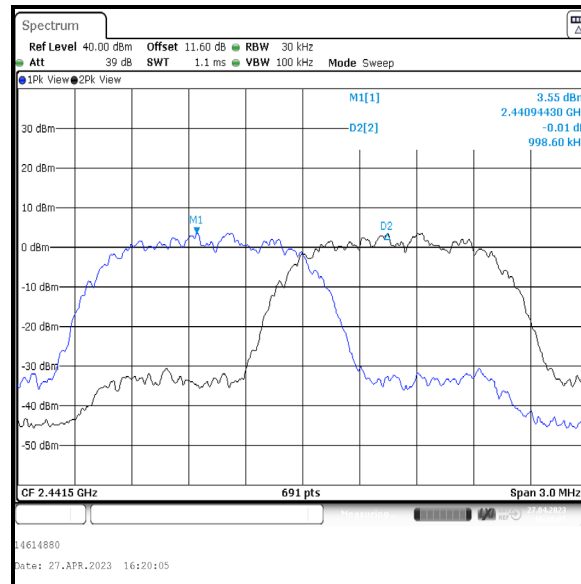
**Transmitter Carrier Frequency Separation (continued)****Results: 2DH5 / SISO / Core 1**

Carrier Frequency Separation (kHz)	Limit ( $2/3$ of 20 dB BW) (kHz)	Margin (kHz)	Result
998.600	918.467	80.133	Complied



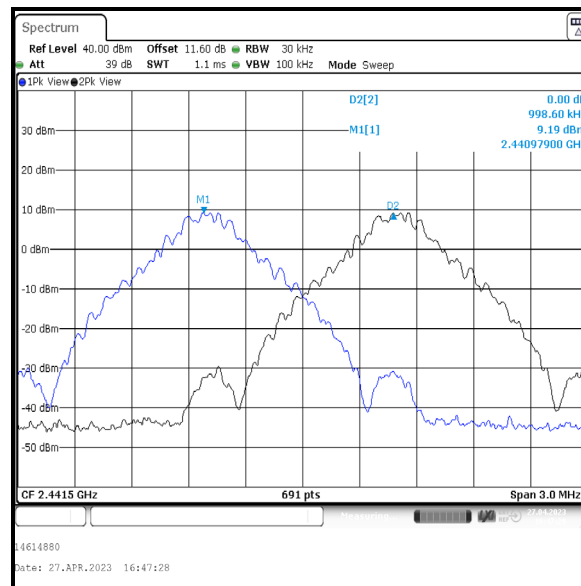
**Transmitter Carrier Frequency Separation (continued)****Results: 3DH5 / SISO / Core 1**

Carrier Frequency Separation (kHz)	Limit ( $2/3$ of 20 dB BW) (kHz)	Margin (kHz)	Result
998.600	914.600	84.000	Complied



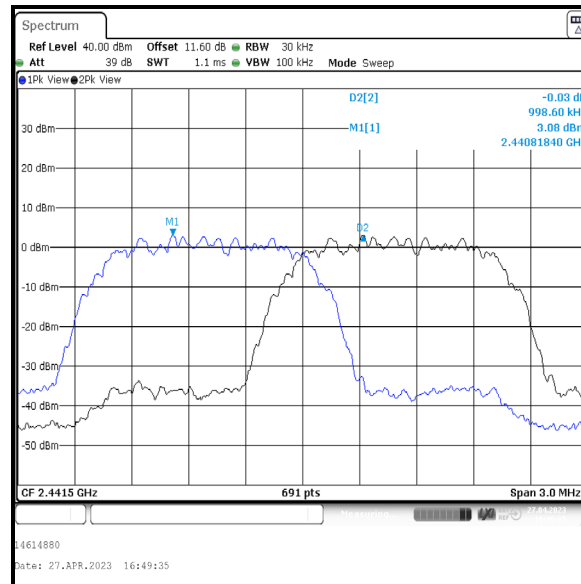
**Transmitter Carrier Frequency Separation (continued)****Results: DH5 / SISO / Core 2**

Carrier Frequency Separation (kHz)	Limit ( $2/3$ of 20 dB BW) (kHz)	Margin (kHz)	Result
998.600	613.600	385.000	Complied



**Transmitter Carrier Frequency Separation (continued)****Results: 2DH5 / SISO / Core 2**

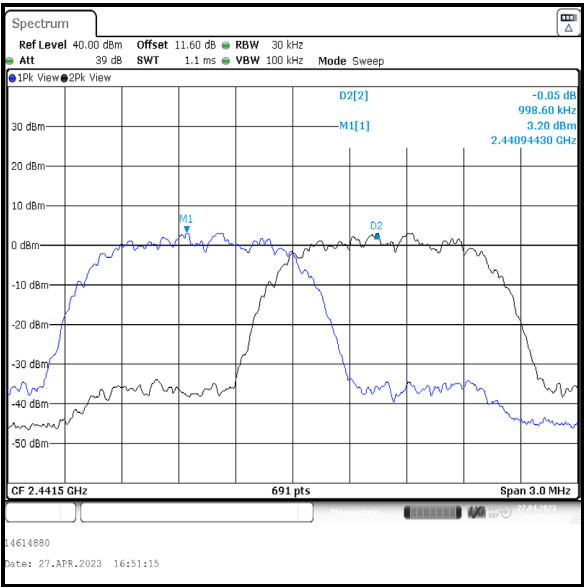
Carrier Frequency Separation (kHz)	Limit ( $2/3$ of 20 dB BW) (kHz)	Margin (kHz)	Result
998.600	918.467	80.133	Complied



**Transmitter Carrier Frequency Separation (continued)**

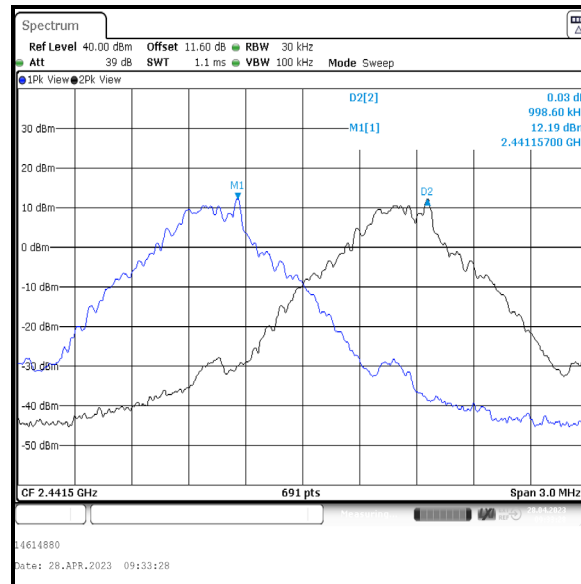
**Results: 3DH5 / SISO / Core 2**

Carrier Frequency Separation (kHz)	Limit ( <sup>2</sup> / <sub>3</sub> of 20 dB BW) (kHz)	Margin (kHz)	Result
998.600	910.733	87.867	Complied



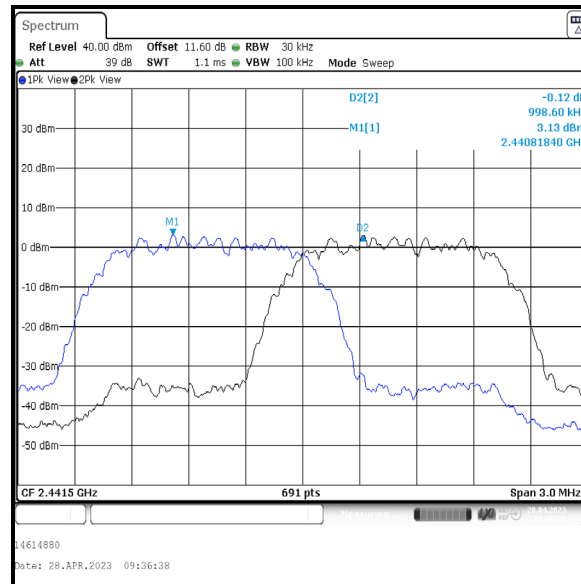
**Transmitter Carrier Frequency Separation (continued)****Results: DH5 / Beamforming / Core 1**

Carrier Frequency Separation (kHz)	Limit ( $2/3$ of 20 dB BW) (kHz)	Margin (kHz)	Result
998.600	625.200	373.400	Complied



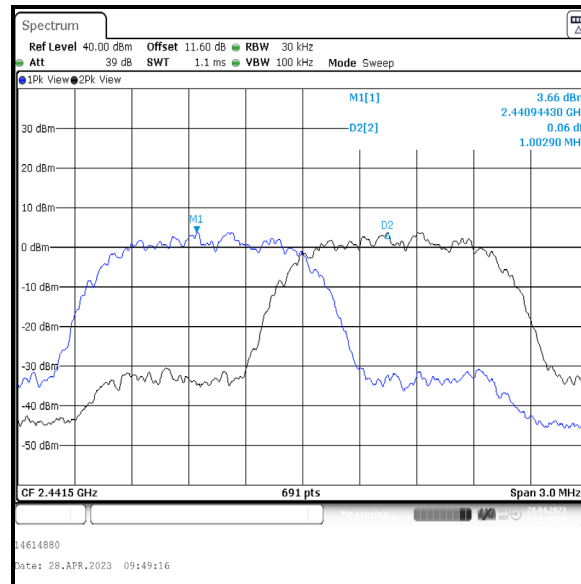
**Transmitter Carrier Frequency Separation (continued)****Results: 2DH5 / Beamforming / Core 1**

Carrier Frequency Separation (kHz)	Limit ( $2/3$ of 20 dB BW) (kHz)	Margin (kHz)	Result
998.600	918.467	80.133	Complied



**Transmitter Carrier Frequency Separation (continued)****Results: 3DH5 / Beamforming / Core 1**

Carrier Frequency Separation (kHz)	Limit ( $2/3$ of 20 dB BW) (kHz)	Margin (kHz)	Result
1002.900	914.600	88.300	Complied





#### **4.4 Transmitter Number of Hopping Frequencies and Average Time of Occupancy**

##### **Test Summary:**

<b>Test Engineers:</b>	Max Passell & Jiyu Zou	<b>Test Dates:</b>	28 April 2023 & 02 May 2023
<b>Test Sample Serial Number:</b>	VXT97D7WDV		

<b>FCC Reference:</b>	Part 15.247(a)(1)(iii)
<b>ISED Canada Reference:</b>	RSS-247 5.1(d)
<b>Test Method Used:</b>	ANSI C63.10 Sections 7.8.3 & 7.8.4

##### **Environmental Conditions:**

<b>Temperature (°C):</b>	23
<b>Relative Humidity (%):</b>	46 to 48

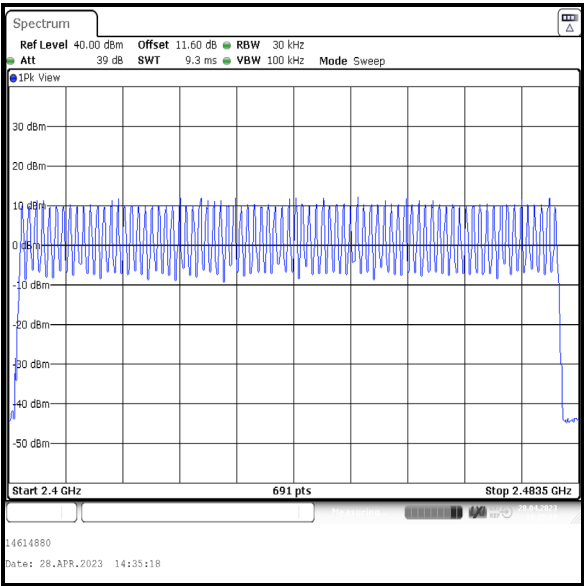
##### **Note(s):**

1. Tests were performed to identify the average time of occupancy in number of channels (79) x 0.4 seconds. The calculated period is 31.6 seconds.
2. The signal analyser was set up for the Number of Hopping Frequencies measurement as follows: the resolution bandwidth was set to 30 kHz and video bandwidth of 100 kHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold. The span was set to 83.5 MHz.
3. The signal analyser was set up for the Emission Width measurement as follows: the resolution bandwidth was set to 30 kHz and video bandwidth of 100 kHz. A peak detector was used and sweep time was set to auto with a span of zero Hz. The signal analyser was set to trigger at 1 ms, with a marker placed at the start of the emission and a delta marked place at the end of the emission. The emission width is recorded in the table below
4. The signal analyser was set up for the Number of Hopping Frequencies in 32 seconds measurement as follows: the resolution bandwidth was set to 30 kHz and video bandwidth of 100 kHz. A peak detector was used and sweep time was set to 32 seconds. The EUT was set to transmit in a hopping frequency mode with zero span. The total number of hopping frequencies were recorded in the table below.
5. The signal analyser was connected to the RF port on the EUT using suitable attenuation and RF cable.

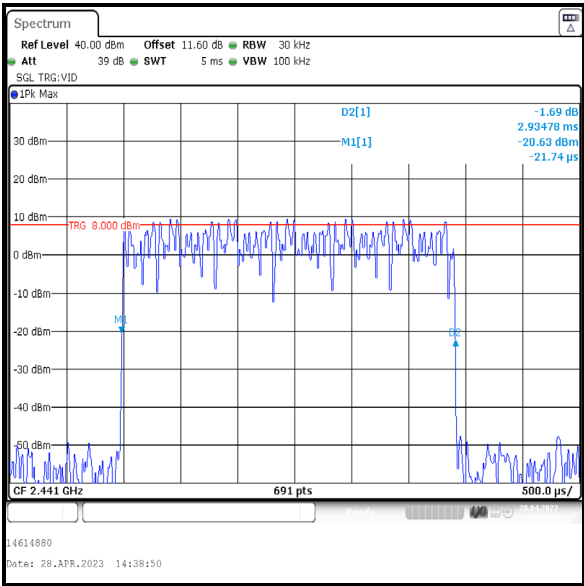
Transmitter Number of Hopping Frequencies and Average Time of Occupancy (continued)

Results: SISO / Core 1

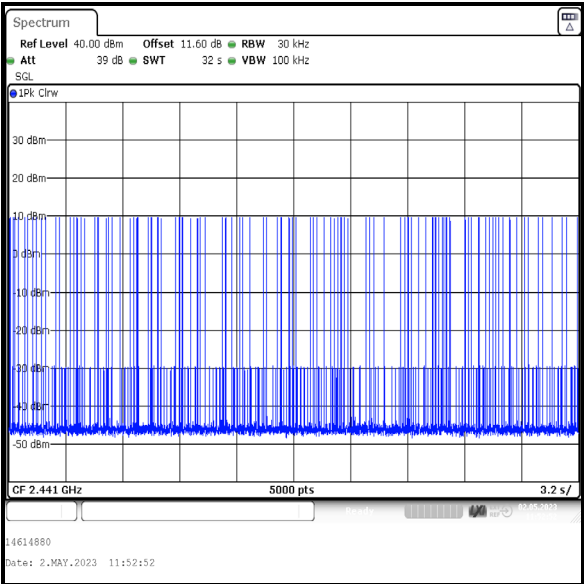
Emission Width (μs)	Number of Hops in 31.6 Seconds	Average Time of Occupancy (s)	Limit (s)	Margin (s)	Result
2934.780	105	0.308	0.4	0.092	Complied



Number of Hopping Frequencies



Emission Width

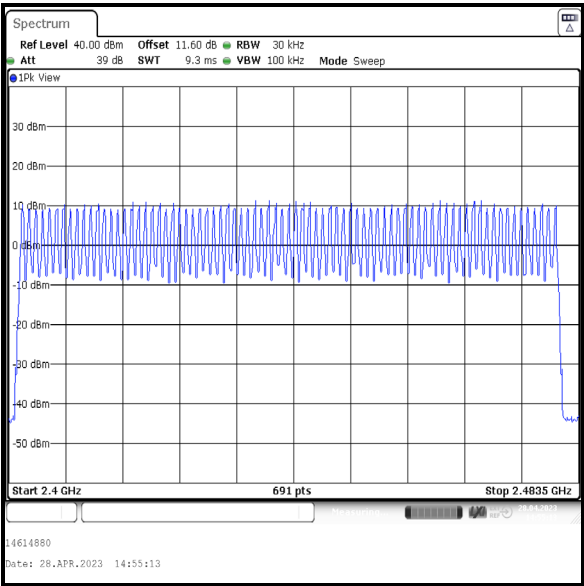


Number of Hopping Frequencies in 32 s

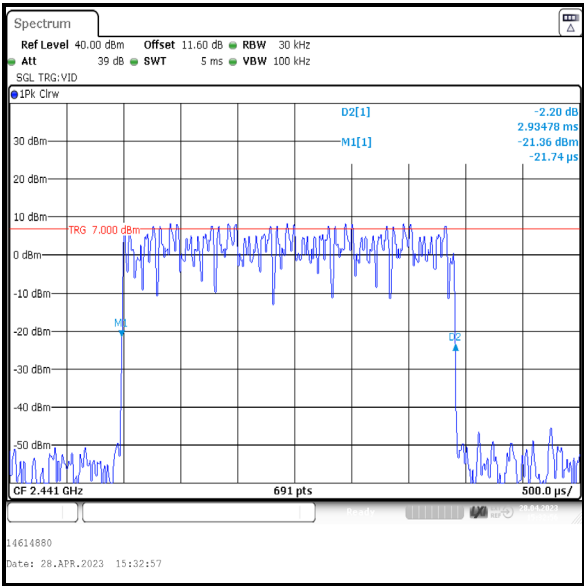
Transmitter Number of Hopping Frequencies and Average Time of Occupancy (continued)

Results: SISO / Core 2

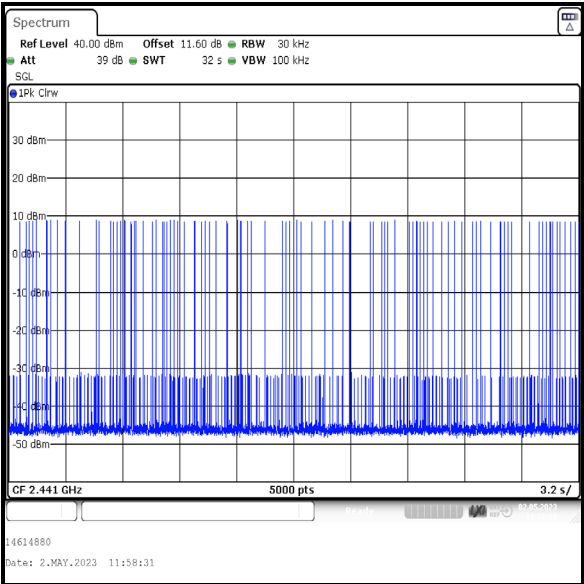
Emission Width (μs)	Number of Hops in 31.6 Seconds	Average Time of Occupancy (s)	Limit (s)	Margin (s)	Result
2934.780	95	0.279	0.4	0.121	Complied



Number of Hopping Frequencies



Emission Width

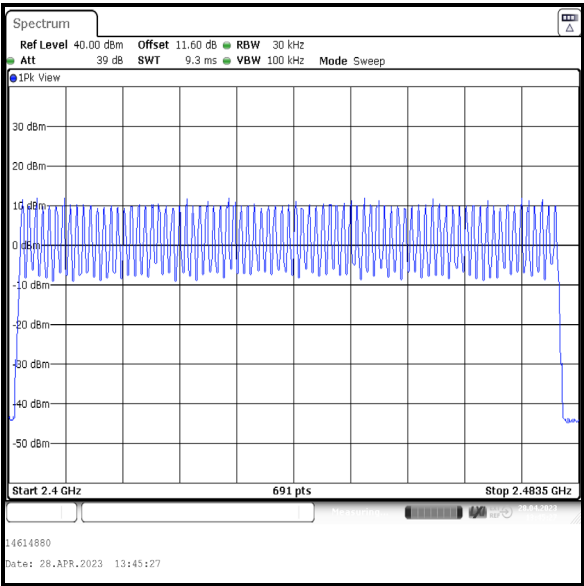


Number of Hopping Frequencies in 32 s

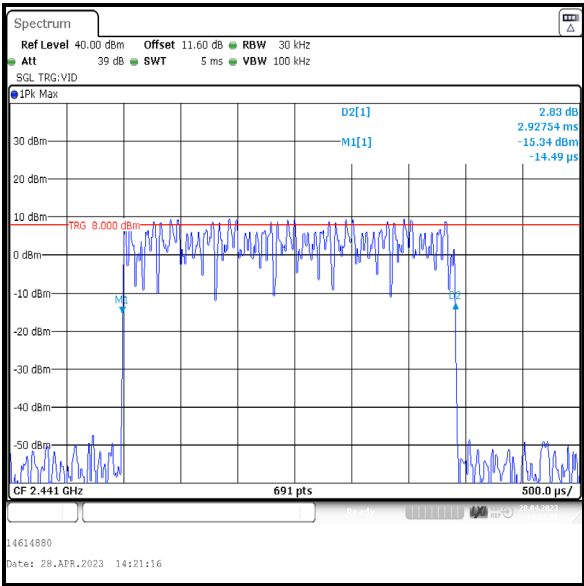
Transmitter Number of Hopping Frequencies and Average Time of Occupancy (continued)

Results: Beamforming / Core 1

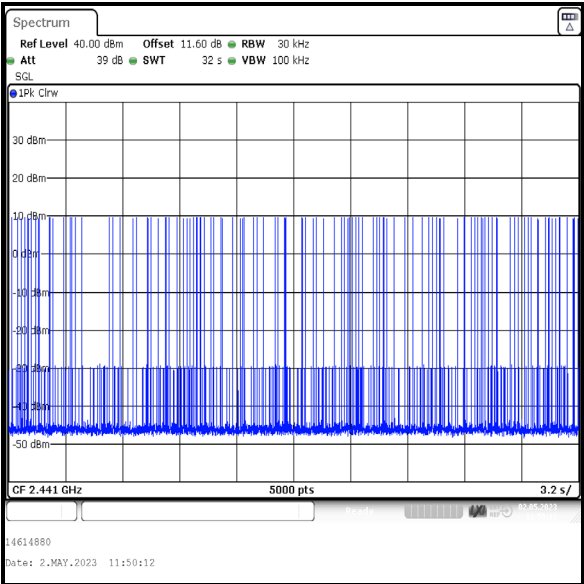
Emission Width (μs)	Number of Hops in 31.6 Seconds	Average Time of Occupancy (s)	Limit (s)	Margin (s)	Result
2927.540	115	0.337	0.4	0.063	Complied



Number of Hopping Frequencies



Emission Width



Number of Hopping Frequencies in 32 s

#### **4.5 Transmitter Maximum Peak Output Power**

##### **Test Summary:**

<b>Test Engineers:</b>	Max Passell & Jiyu Zou	<b>Test Date:</b>	25 April 2023
<b>Test Sample Serial Number:</b>	VXT97D7WDV		

<b>FCC Reference:</b>	Part 15.247(b)(1)
<b>ISED Canada Reference:</b>	RSS-Gen 6.12 / RSS-247 5.4(b)
<b>Test Method Used:</b>	ANSI C63.10 Section 7.8.5

##### **Environmental Conditions:**

<b>Temperature (°C):</b>	22
<b>Relative Humidity (%):</b>	30

##### **Note(s):**

1. For BDR, the signal analyser resolution bandwidth was set to 2 MHz (>20 dB bandwidth) and video bandwidth of 10 MHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold. The span was set to 5 MHz. A marker was placed at the peak of the signal and the results recorded in the tables below.
2. For EDR, the signal analyser resolution bandwidth was set to 2 MHz (>20 dB bandwidth) and video bandwidth of 10 MHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold. The span was set to 7 MHz. A marker was placed at the peak of the signal and the results recorded in the tables below.
3. For beamforming modes, conducted power was measured on Core 0 & Core 1 and then combined using the measure-and-sum technique stated in FCC KDB 662911 D01 Section E1). For EIRP, the directional antenna gain was added to the conducted output power.
4. For beamforming modes, the limit for conducted output power has been reduced by the same amount in dB that the directional gain of the antenna exceeds 6 dBi, in accordance with 15.247(b)(4).
5. The signal analyser was connected to the RF port on the EUT using suitable attenuation and RF cable. An RF offset level was entered on the signal analyser to compensate for the loss of the attenuator and RF cable.

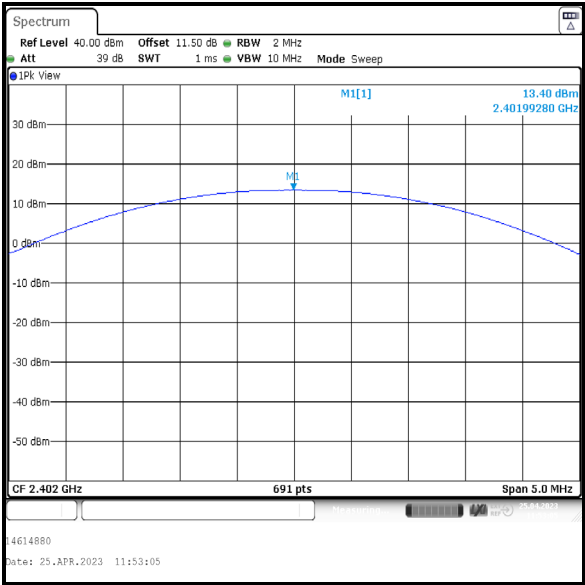
**Transmitter Maximum Peak Output Power (continued)****Results: DH5 / SISO / Core 1**

Channel	Conducted Peak Power (dBm)	Conducted Peak Power Limit (dBm)	Margin (dB)	Result
Bottom	13.4	21.0	7.6	Complied
Middle	13.6	21.0	7.4	Complied
Top	13.5	21.0	7.5	Complied

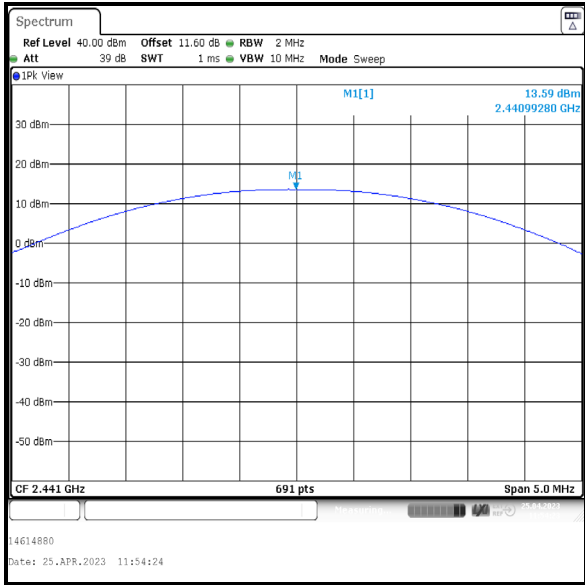
Channel	Conducted Peak Power (dBm)	Declared Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Margin (dB)	Result
Bottom	13.4	5.8	19.2	36.0	16.8	Complied
Middle	13.6	5.8	19.4	36.0	16.6	Complied
Top	13.5	5.8	19.3	36.0	16.7	Complied

Transmitter Maximum Peak Output Power (continued)

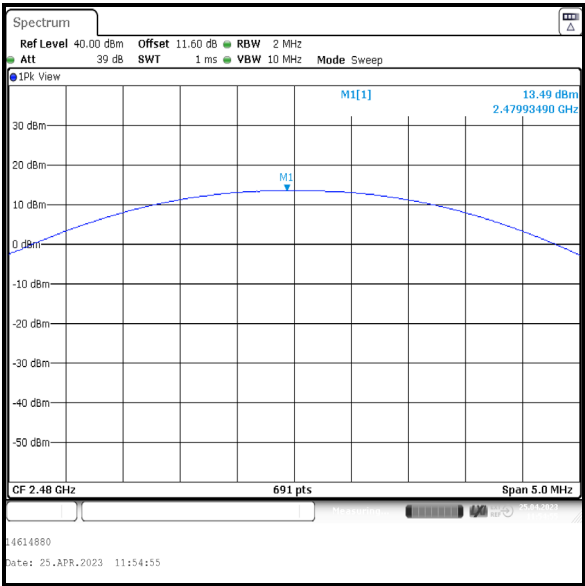
Results: DH5 / SISO / Core 1



Bottom Channel



Middle Channel



Top Channel

**Transmitter Maximum Peak Output Power (continued)****Results: 2DH5 / SISO / Core 1**

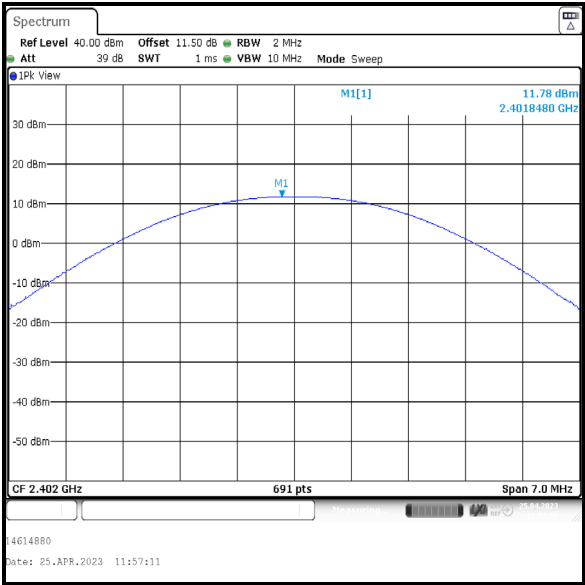
Channel	Conducted Peak Power (dBm)	Conducted Peak Power Limit (dBm)	Margin (dB)	Result
Bottom	11.8	21.0	9.2	Complied
Middle	11.8	21.0	9.2	Complied
Top	11.8	21.0	9.2	Complied

Channel	Conducted Peak Power (dBm)	Declared Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Margin (dB)	Result
Bottom	11.8	5.8	17.6	36.0	18.4	Complied
Middle	11.8	5.8	17.6	36.0	18.4	Complied
Top	11.8	5.8	17.6	36.0	18.4	Complied

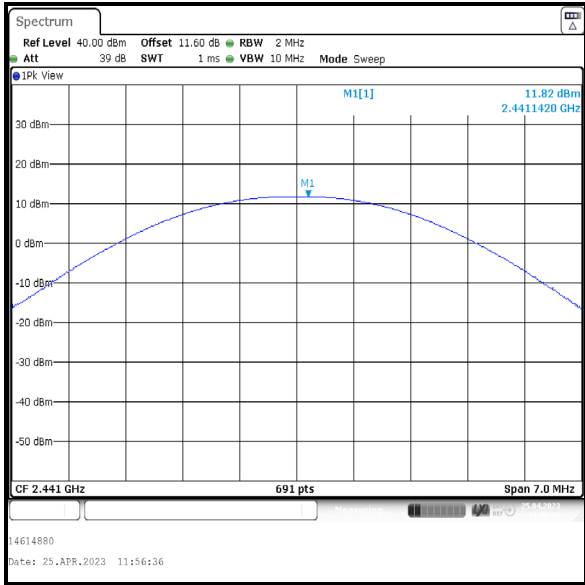


Transmitter Maximum Peak Output Power (continued)

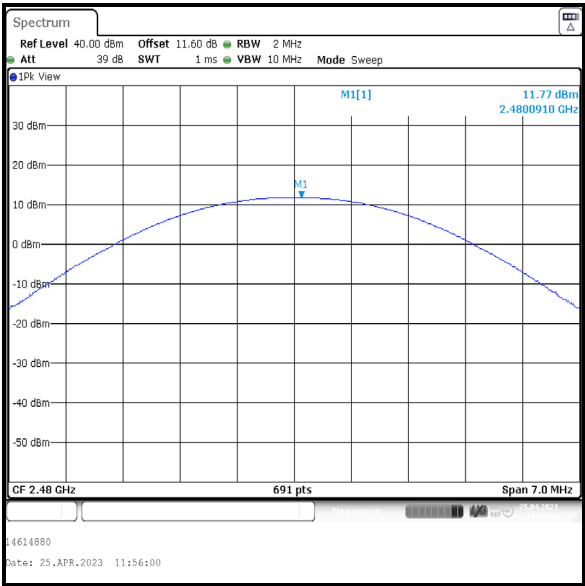
Results: 2DH5 / SISO / Core 1



Bottom Channel



Middle Channel



Top Channel

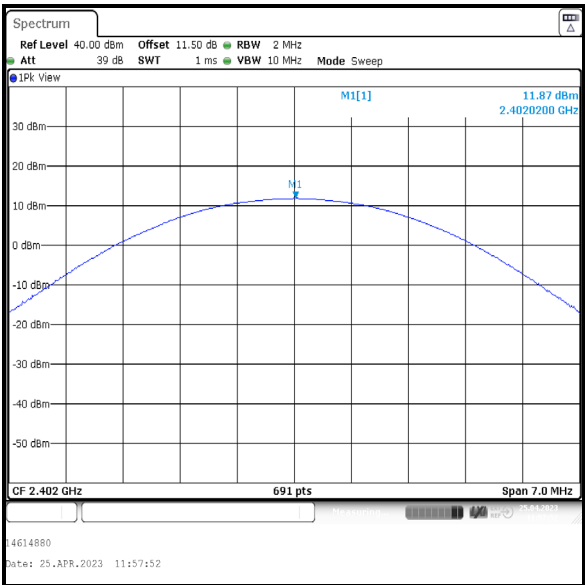
**Transmitter Maximum Peak Output Power (continued)****Results: 3DH5 / SISO / Core 1**

Channel	Conducted Peak Power (dBm)	Conducted Peak Power Limit (dBm)	Margin (dB)	Result
Bottom	11.9	21.0	9.1	Complied
Middle	12.2	21.0	8.8	Complied
Top	12.0	21.0	9.0	Complied

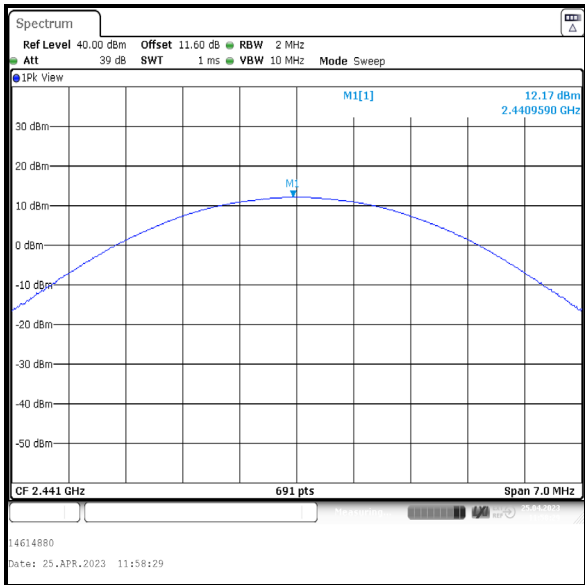
Channel	Conducted Peak Power (dBm)	Declared Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Margin (dB)	Result
Bottom	11.9	5.8	17.7	36.0	18.3	Complied
Middle	12.2	5.8	18.0	36.0	18.0	Complied
Top	12.0	5.8	17.8	36.0	18.2	Complied

Transmitter Maximum Peak Output Power (continued)

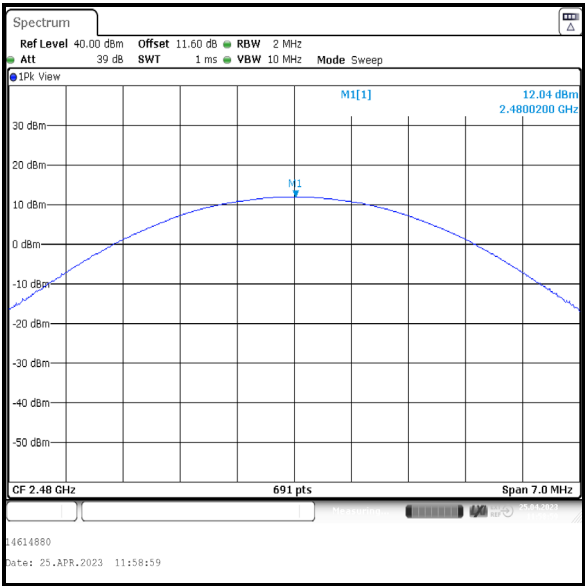
Results: 3DH5 / SISO / Core 1



Bottom Channel



Middle Channel



Top Channel

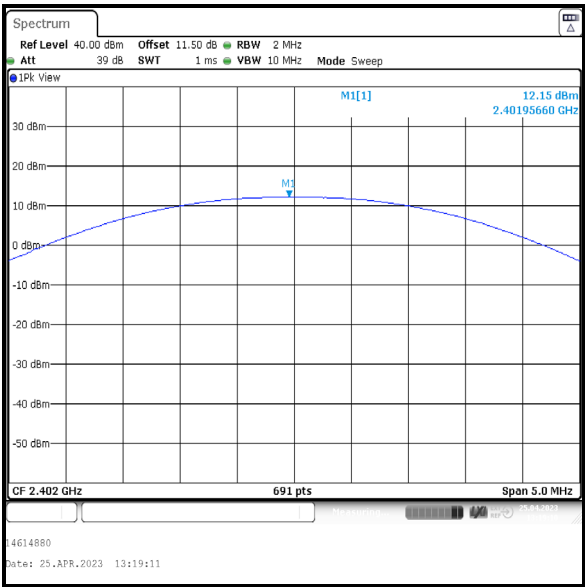
**Transmitter Maximum Peak Output Power (continued)****Results: DH5 / SISO / Core 2**

Channel	Conducted Peak Power (dBm)	Conducted Peak Power Limit (dBm)	Margin (dB)	Result
Bottom	12.2	21.0	8.8	Complied
Middle	12.3	21.0	8.7	Complied
Top	12.1	21.0	8.9	Complied

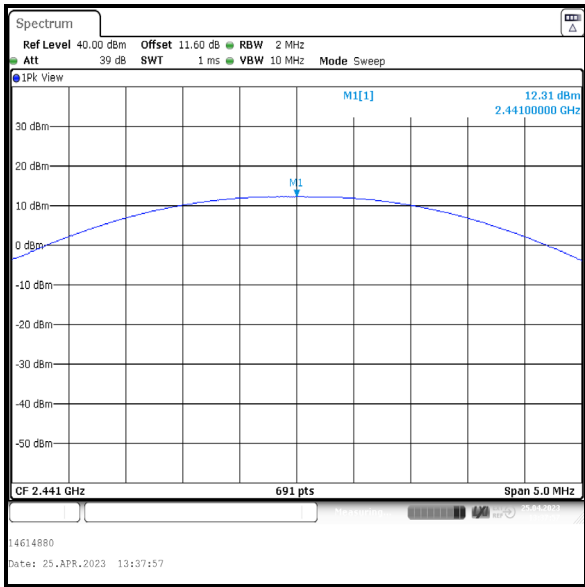
Channel	Conducted Peak Power (dBm)	Declared Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Margin (dB)	Result
Bottom	12.2	5.8	18.0	36.0	18.0	Complied
Middle	12.3	5.8	18.1	36.0	17.9	Complied
Top	12.1	5.8	17.9	36.0	18.1	Complied

Transmitter Maximum Peak Output Power (continued)

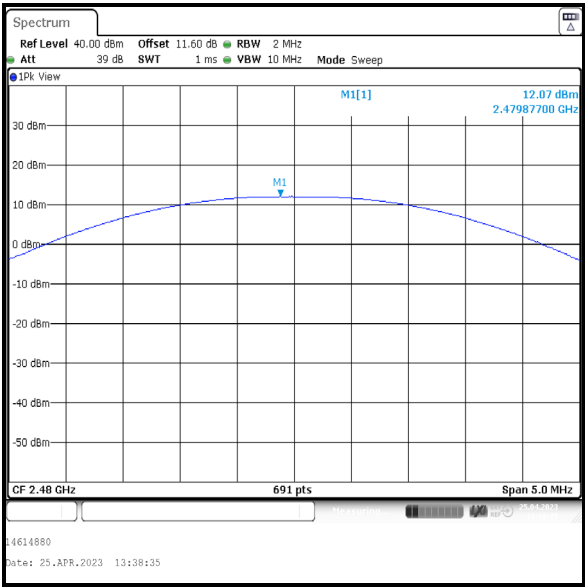
Results: DH5 / SISO / Core 2



Bottom Channel



Middle Channel



Top Channel

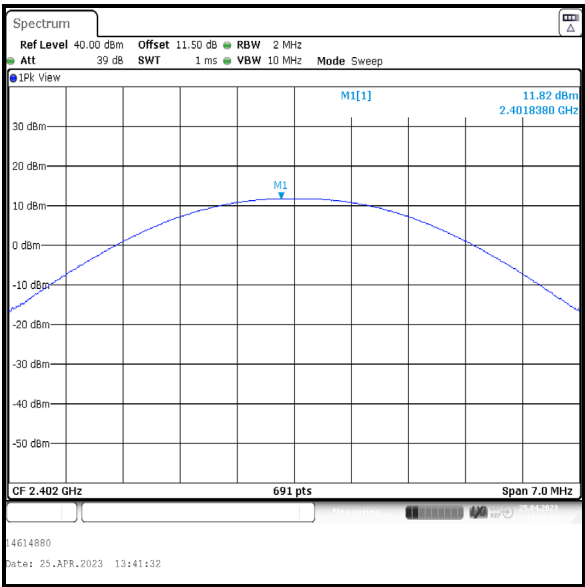
**Transmitter Maximum Peak Output Power (continued)****Results: 2DH5 / SISO / Core 2**

Channel	Conducted Peak Power (dBm)	Conducted Peak Power Limit (dBm)	Margin (dB)	Result
Bottom	11.8	21.0	9.2	Complied
Middle	11.5	21.0	9.5	Complied
Top	11.9	21.0	9.1	Complied

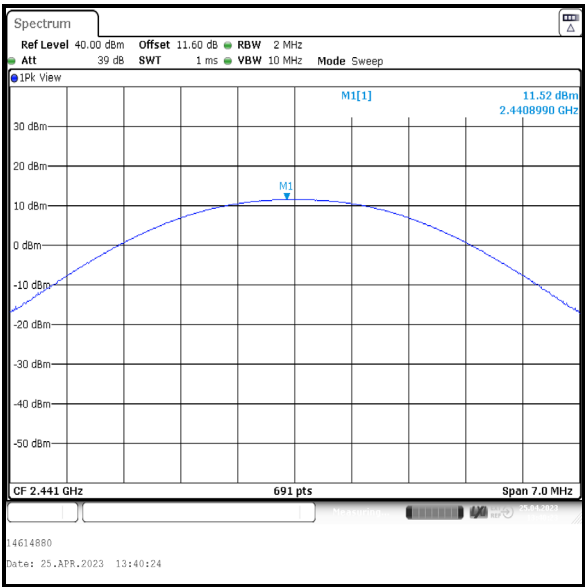
Channel	Conducted Peak Power (dBm)	Declared Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Margin (dB)	Result
Bottom	11.8	5.8	17.6	36.0	18.4	Complied
Middle	11.5	5.8	17.3	36.0	18.7	Complied
Top	11.9	5.8	17.7	36.0	18.3	Complied

Transmitter Maximum Peak Output Power (continued)

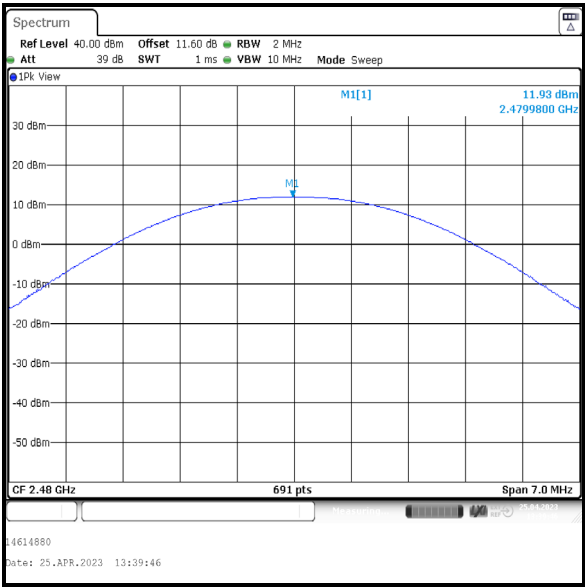
Results: 2DH5 / SISO / Core 2



Bottom Channel



Middle Channel



Top Channel

**Transmitter Maximum Peak Output Power (continued)****Results: 3DH5 / SISO / Core 2**

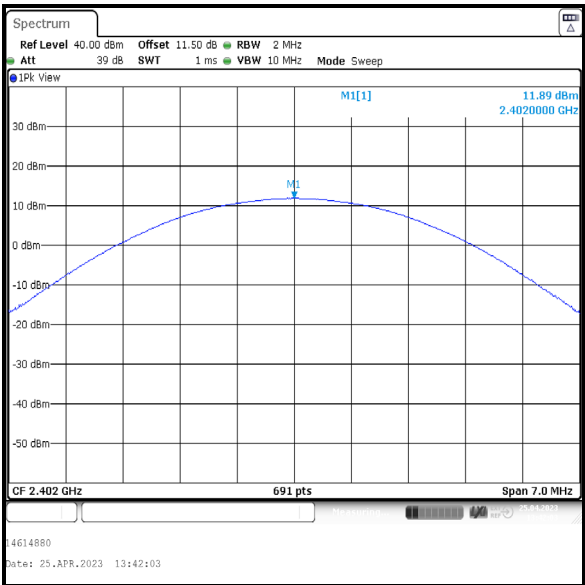
Channel	Conducted Peak Power (dBm)	Conducted Peak Power Limit (dBm)	Margin (dB)	Result
Bottom	11.9	21.0	9.1	Complied
Middle	11.9	21.0	9.1	Complied
Top	12.2	21.0	8.8	Complied

Channel	Conducted Peak Power (dBm)	Declared Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Margin (dB)	Result
Bottom	11.9	5.8	17.7	36.0	18.3	Complied
Middle	11.9	5.8	17.7	36.0	18.3	Complied
Top	12.2	5.8	18.0	36.0	18.0	Complied

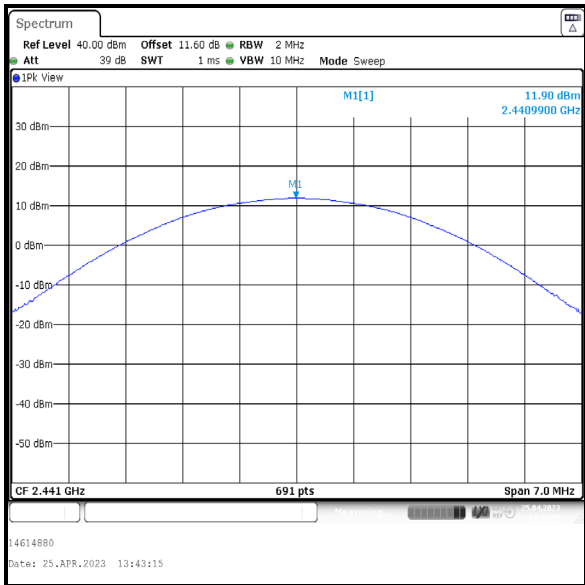


Transmitter Maximum Peak Output Power (continued)

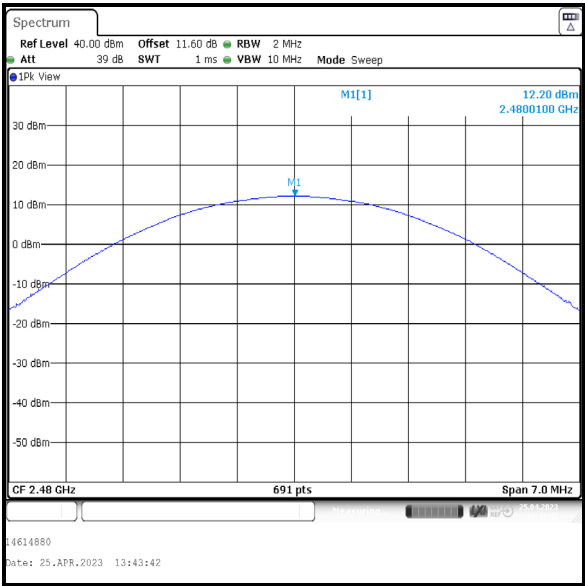
Results: 3DH5 / SISO / Core 2



Bottom Channel



Middle Channel



Top Channel

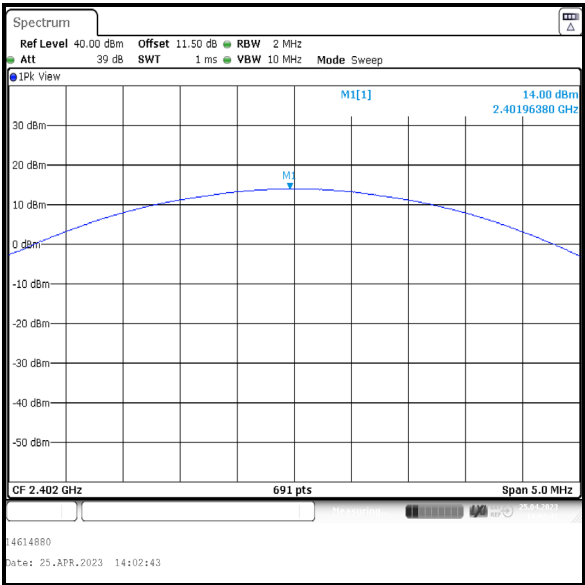
**Transmitter Maximum Peak Output Power (continued)****Results: DH5 / Beamforming**

Channel	Conducted Peak Power Core 0 (dBm)	Conducted Peak Power Core 1 (dBm)	Combined Conducted Peak Power (dBm)	Conducted Peak Power Limit (dBm)	Margin (dB)	Result
Bottom	14.0	13.4	16.7	18.6	1.9	Complied
Middle	14.1	13.6	17.0	18.6	1.6	Complied
Top	13.9	13.5	16.7	18.6	1.9	Complied

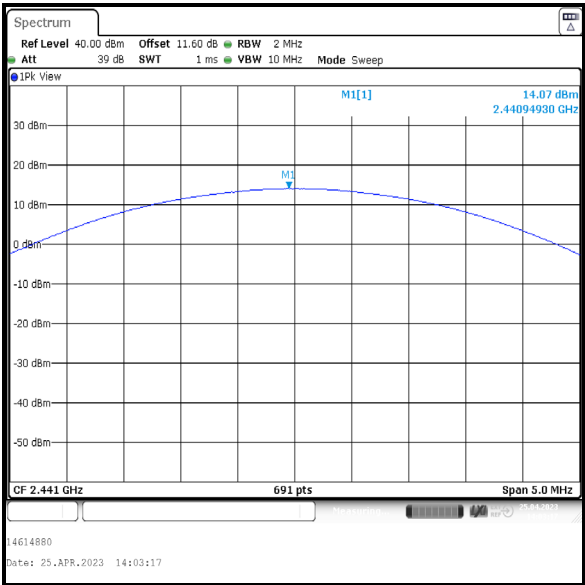
Channel	Combined Conducted Peak Power (dBm)	Declared Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Margin (dB)	Result
Bottom	16.7	8.4	25.1	36.0	10.9	Complied
Middle	17.0	8.4	25.4	36.0	10.6	Complied
Top	16.7	8.4	25.1	36.0	10.9	Complied

Transmitter Maximum Peak Output Power (continued)

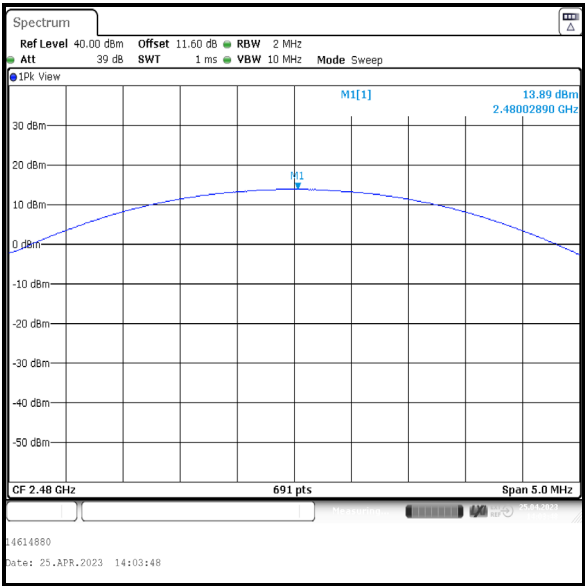
Results: DH5 / Beamforming / Core 0



Bottom Channel



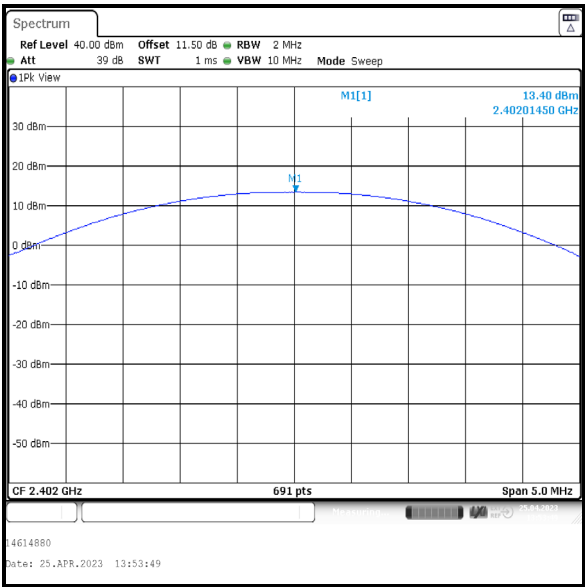
Middle Channel



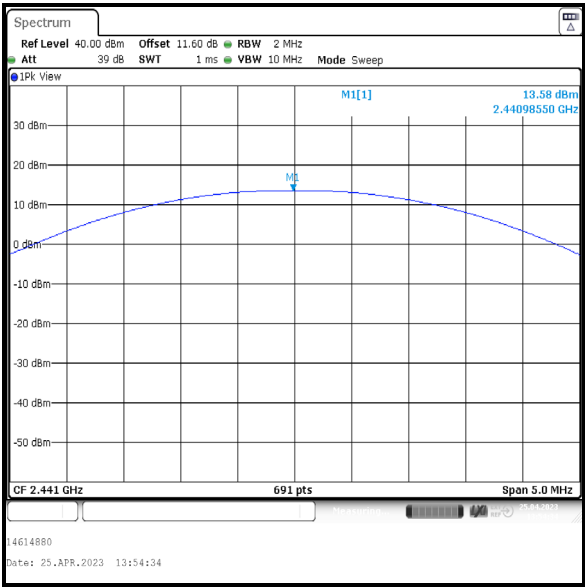
Top Channel

Transmitter Maximum Peak Output Power (continued)

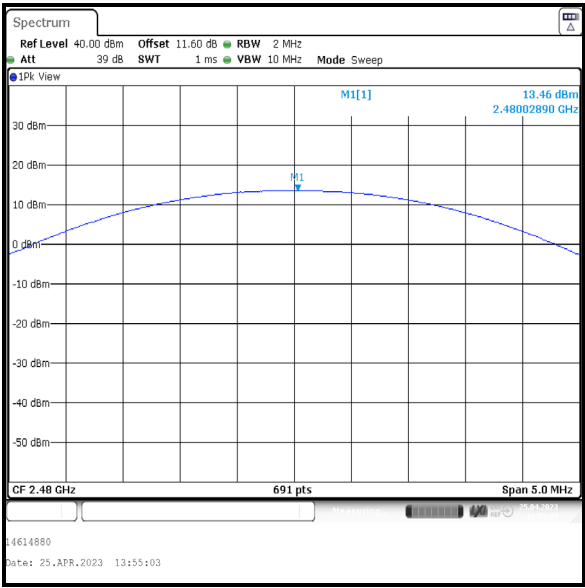
Results: DH5 / Beamforming / Core 1



Bottom Channel



Middle Channel



Top Channel

**Transmitter Maximum Peak Output Power (continued)****Results: 2DH5 / Beamforming**

Channel	Conducted Peak Power Core 0 (dBm)	Conducted Peak Power Core 1 (dBm)	Combined Conducted Peak Power (dBm)	Conducted Peak Power Limit (dBm)	Margin (dB)	Result
Bottom	12.0	11.7	14.9	18.6	3.7	Complied
Middle	11.8	11.3	14.6	18.6	4.0	Complied
Top	12.0	11.8	14.9	18.6	3.7	Complied

Channel	Combined Conducted Peak Power (dBm)	Declared Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Margin (dB)	Result
Bottom	14.9	8.4	23.3	36.0	12.7	Complied
Middle	14.6	8.4	23.0	36.0	13.0	Complied
Top	14.9	8.4	23.3	36.0	12.7	Complied