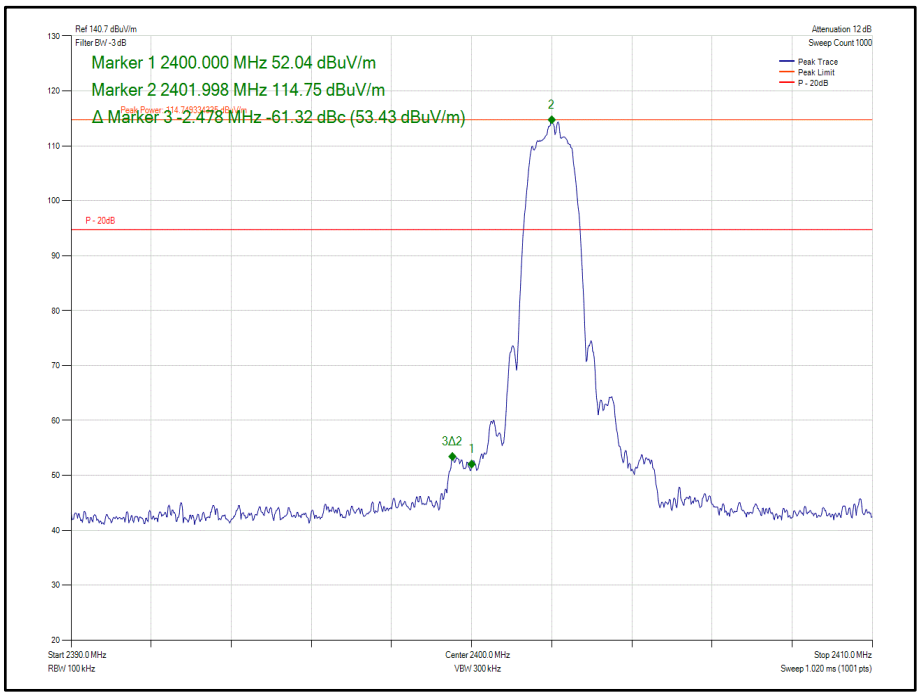

Figure 84 - Static - Core 0 - π/4 DQPSK/2DH5 - 2402 MHz - Band Edge Frequency 2400.0 MHz

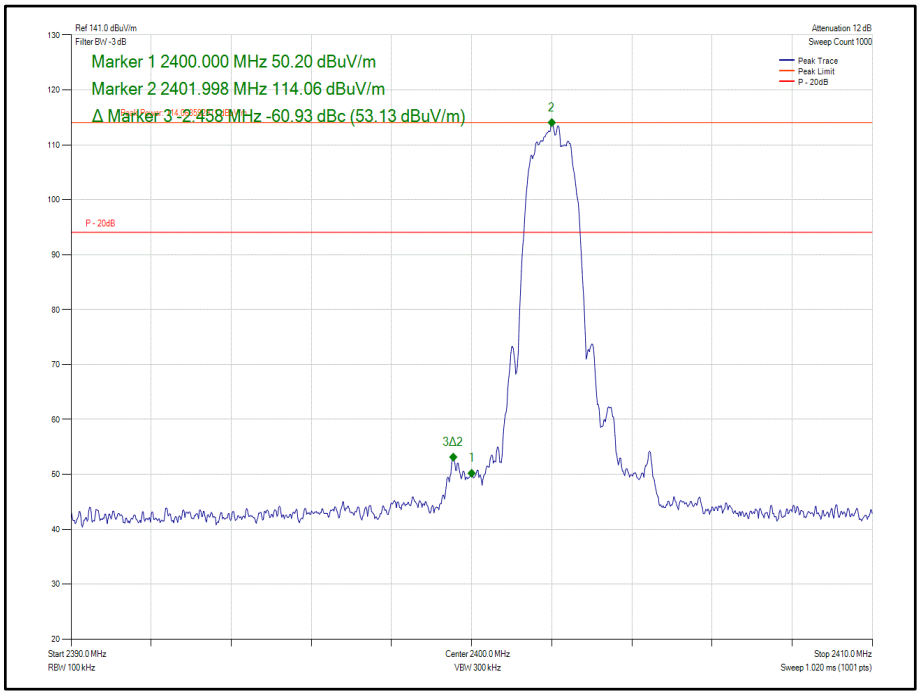

Figure 85 - Static - Core 0 - 8-DPSK/3DH5 - 2402 MHz - Band Edge Frequency 2400.0 MHz

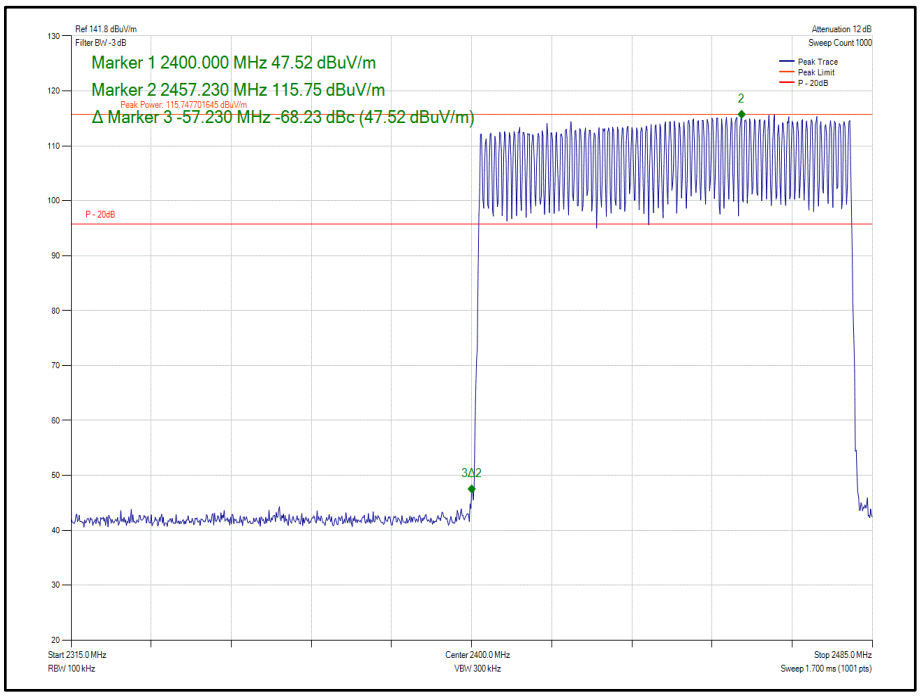

Figure 86 - Hopping - Core 0 - GFSK/DH5 - Band Edge Frequency 2400.0 MHz

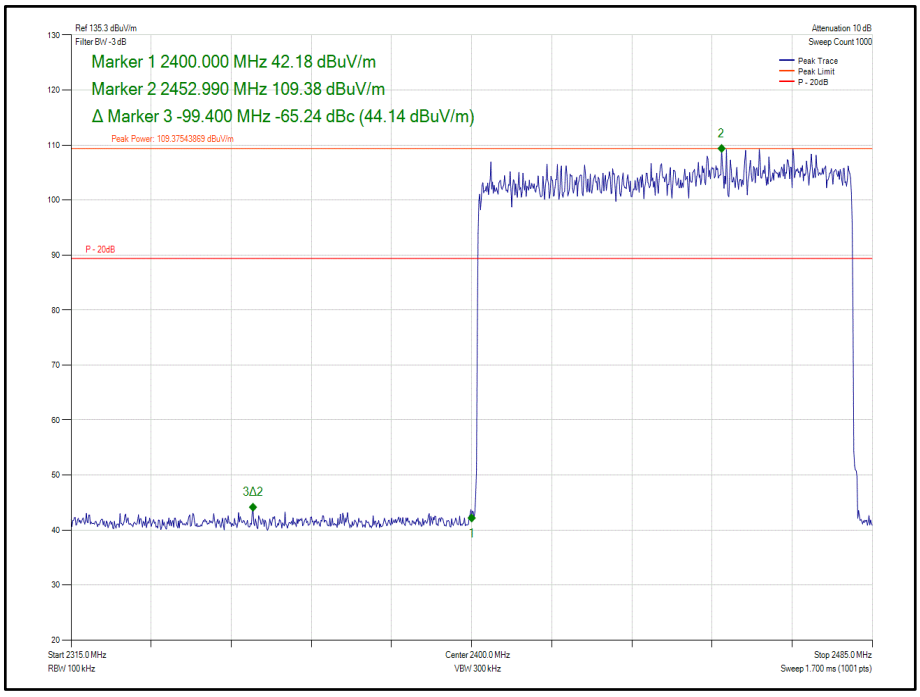

Figure 87 - Hopping - Core 0 - π/4 DQPSK/2DH5 - Band Edge Frequency 2400.0 MHz

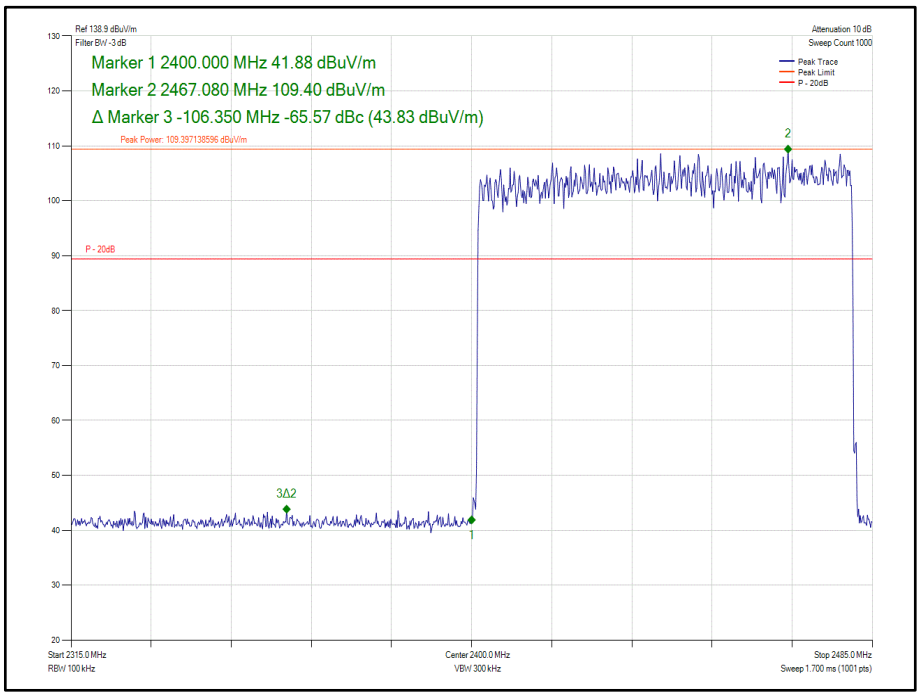

Figure 88 - Hopping - Core 0 - 8-DPSK/3DH5 - Band Edge Frequency 2400.0 MHz

Mode	Modulation	Core	Packet Type	Tx Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	GFSK	1	DH5	2402	2400.0	-65.00
Static	π/4 DQPSK	1	2DH5	2402	2400.0	-61.97
Static	8-DPSK	1	3DH5	2402	2400.0	-62.35
Hopping	GFSK	1	DH5	2402	2400.0	-68.04
Hopping	π/4 DQPSK	1	2DH5	2402	2400.0	-64.60
Hopping	8-DPSK	1	3DH5	2402	2400.0	-67.30

Table 43 - Authorised Band Edge Results

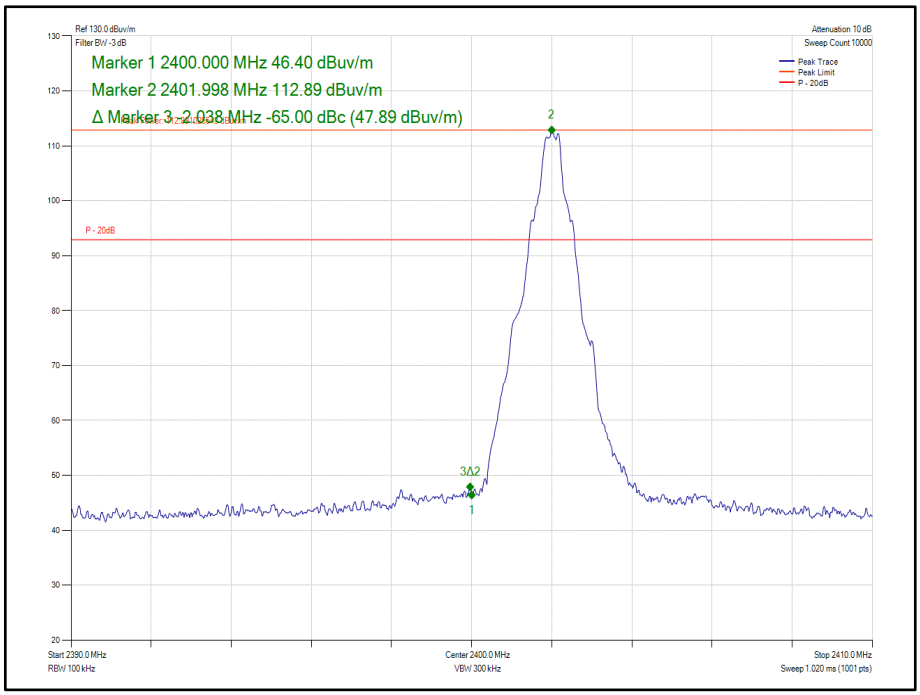

Figure 89 - Static - Core 1 - GFSK/DH5 - 2402 MHz - Band Edge Frequency 2400.0 MHz

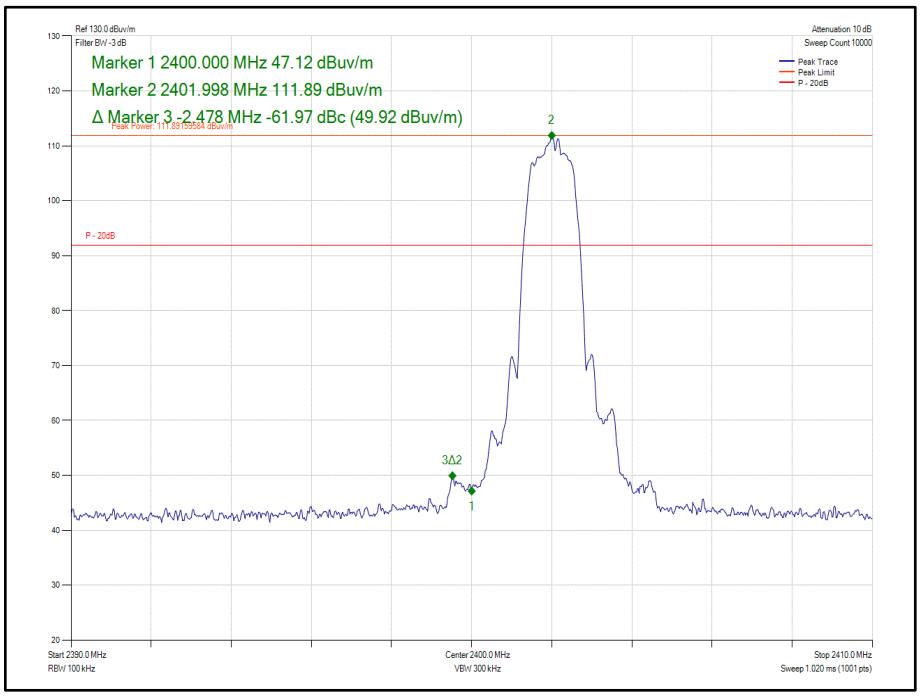

Figure 90 - Static - Core 1 - π/4 DQPSK/2DH5 - 2402 MHz - Band Edge Frequency 2400.0 MHz

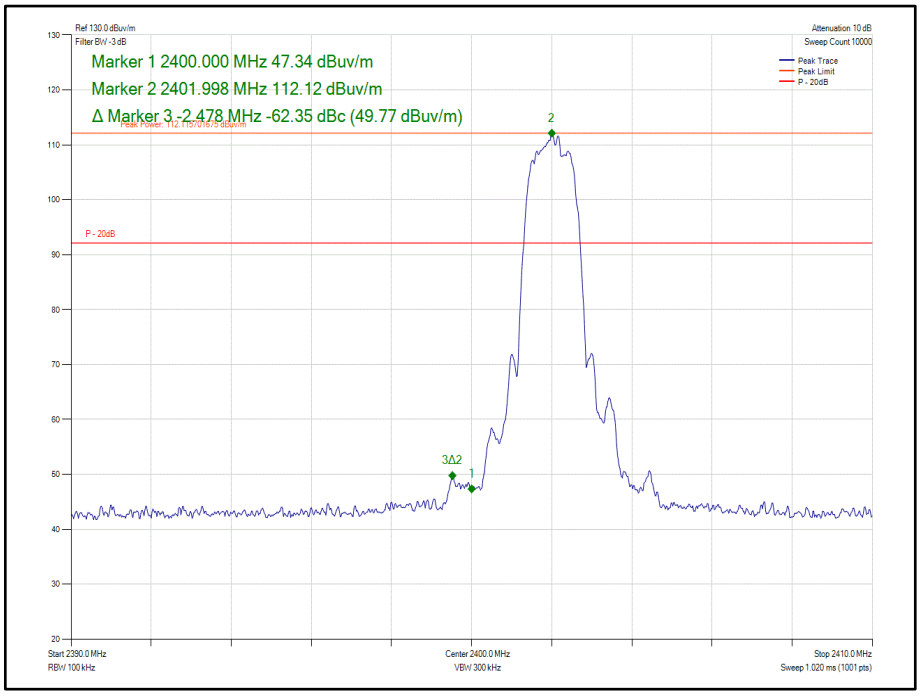

Figure 91 - Static - Core 1 - 8-DPSK/3DH5 - 2402 MHz - Band Edge Frequency 2400.0 MHz

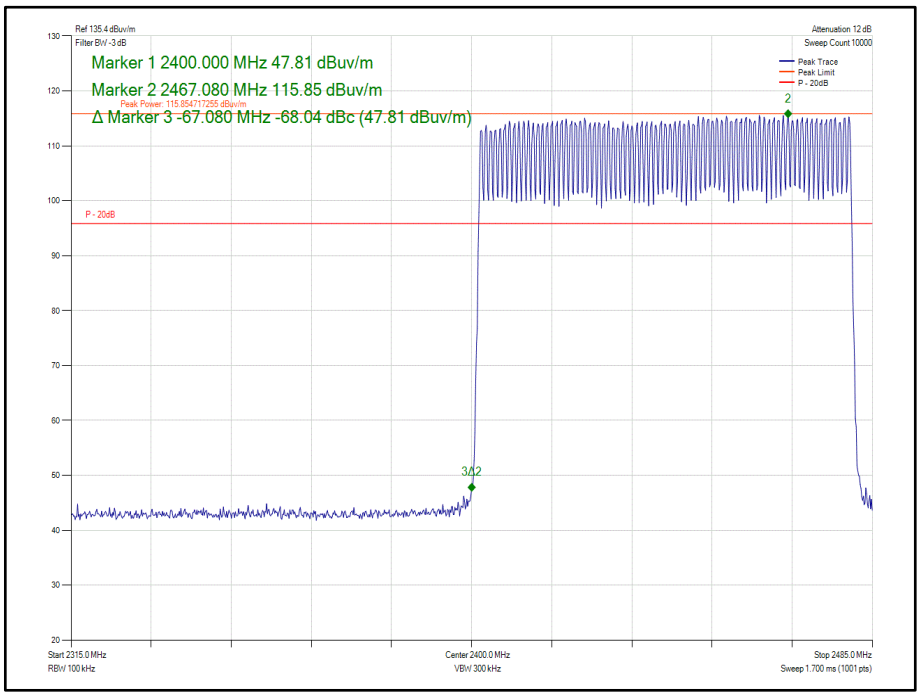

Figure 92 - Hopping - Core 1 - GFSK/DH5 - Band Edge Frequency 2400.0 MHz

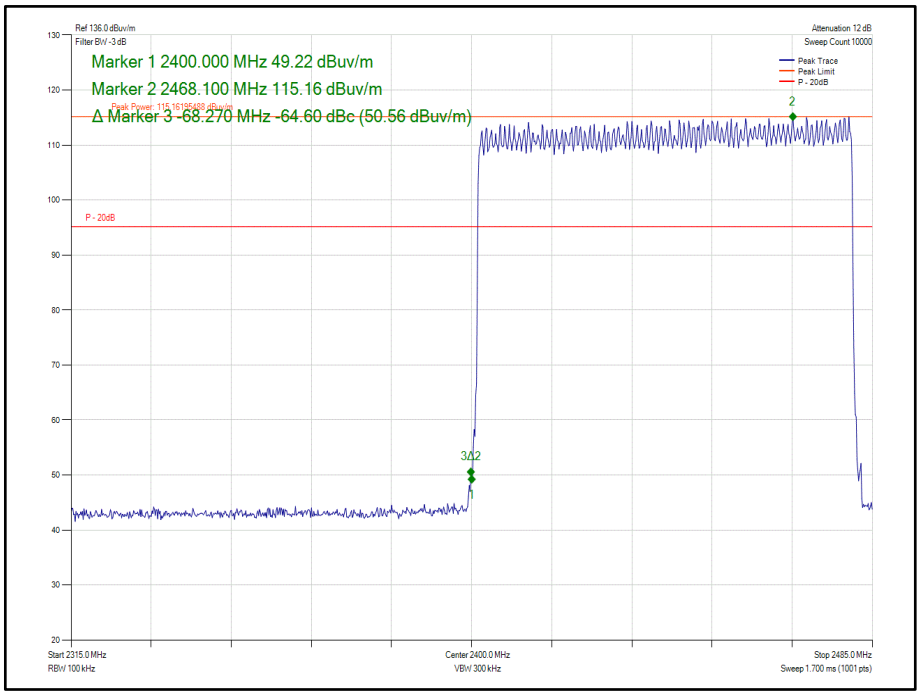

Figure 93 - Hopping - Core 1 - π/4 DQPSK/2DH5 - Band Edge Frequency 2400.0 MHz

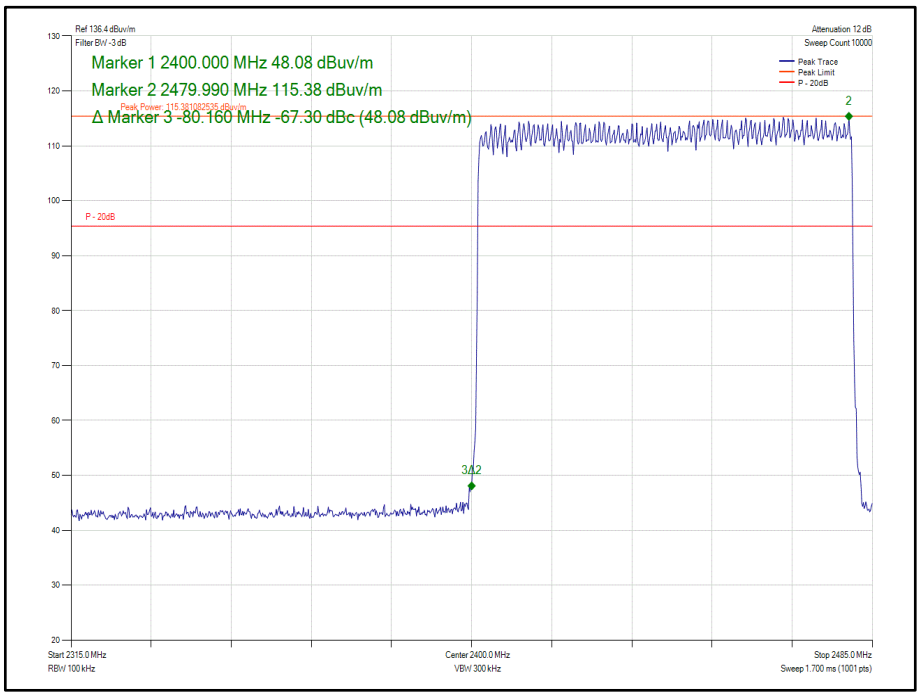

Figure 94 - Hopping - Core 1 - 8-DPSK/3DH5 - Band Edge Frequency 2400.0 MHz

Mode	Modulation	Core	Packet Type	Tx Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	GFSK	0-1	DH5	2402	2400.0	-62.22
Static	π/4 DQPSK	0-1	2DH5	2402	2400.0	-66.98
Static	8-DPSK	0-1	3DH5	2402	2400.0	-66.91
Hopping	GFSK	0-1	DH5	2402	2400.0	-62.86
Hopping	π/4 DQPSK	0-1	2DH5	2402	2400.0	-71.49
Hopping	8-DPSK	0-1	3DH5	2402	2400.0	-68.90

Table 44 - MIMO 2TX Authorised Band Edge Results

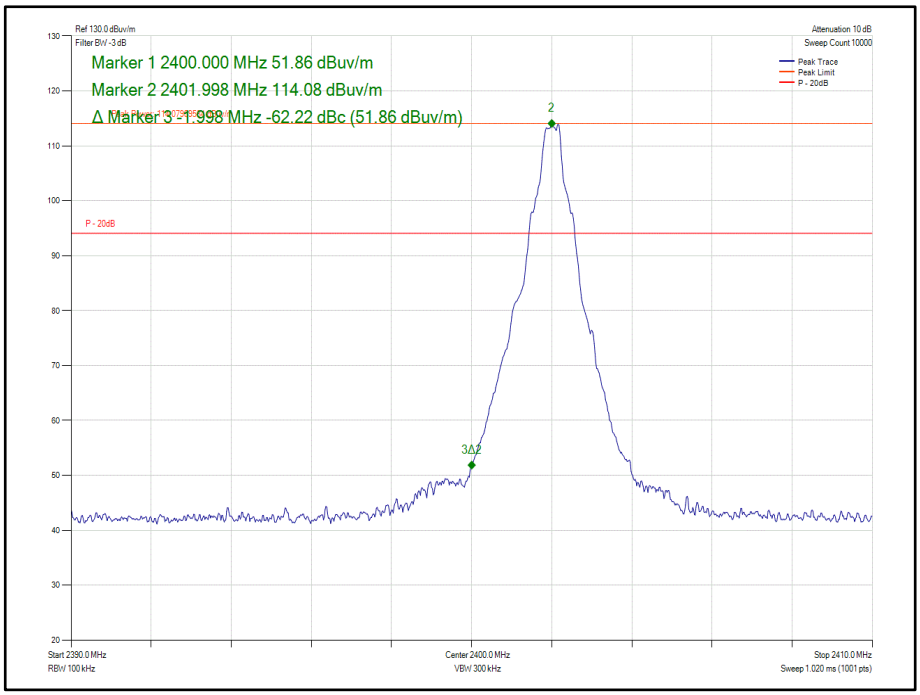

Figure 95 - Static - Core 0-1- GFSK/DH5 - 2402 MHz - Band Edge Frequency 2400.0 MHz

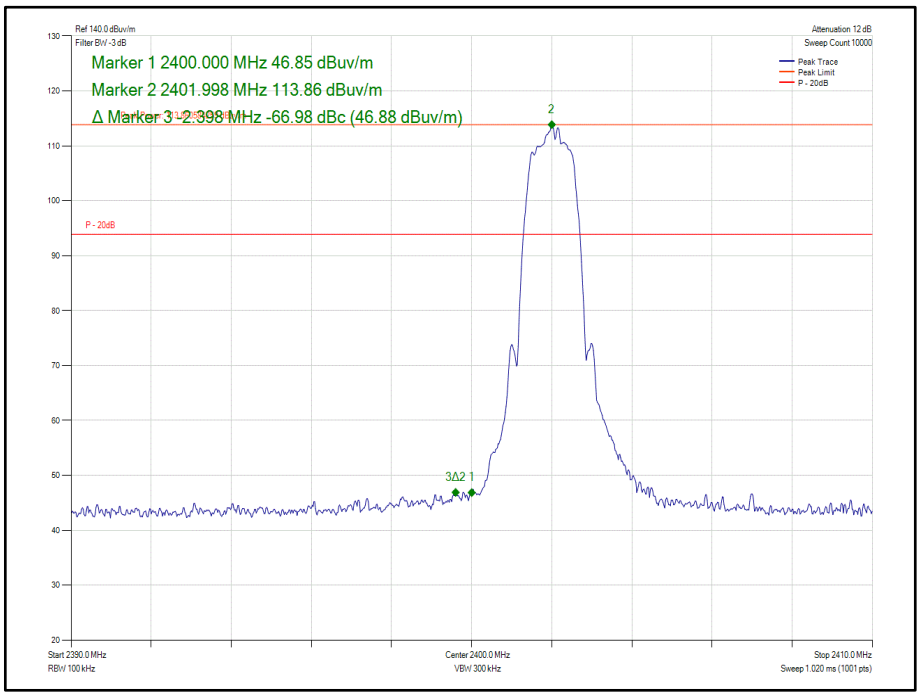

Figure 96 - Static - Core 0-1- π/4 DQPSK/2DH5 - 2402 MHz - Band Edge Frequency 2400.0 MHz

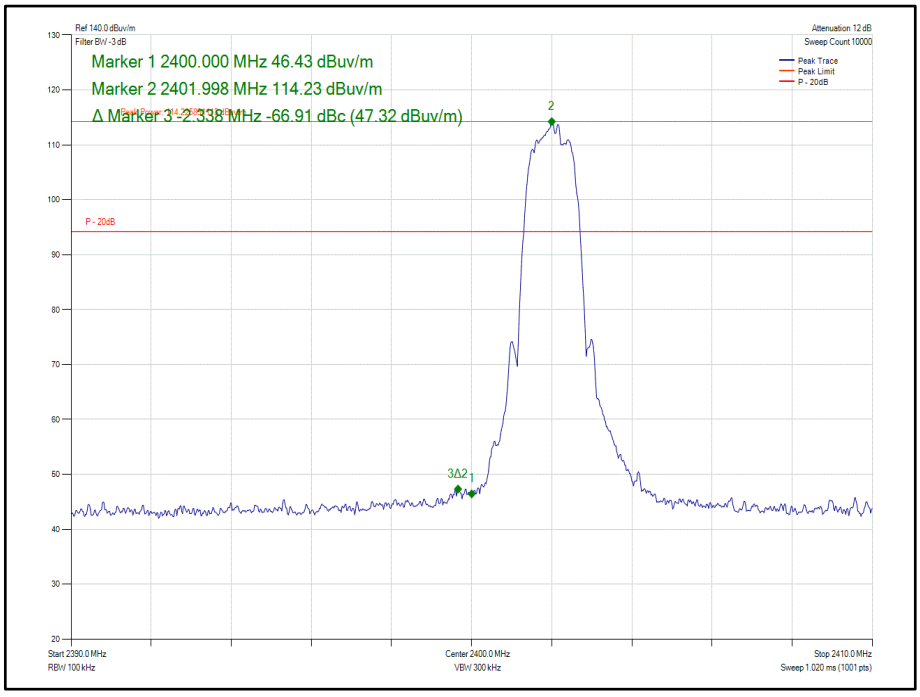

Figure 97 - Static Core 0-1- 8-DPSK/3DH5 - 2402 MHz - Band Edge Frequency 2400.0 MHz

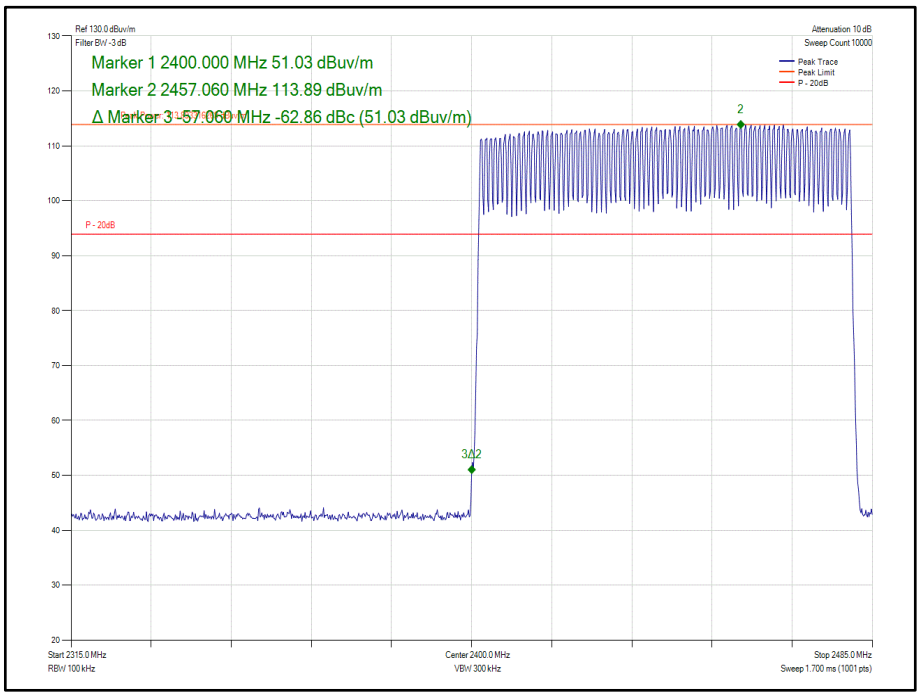

Figure 98 - Hopping - Core 0-1- GFSK/DH5 - Band Edge Frequency 2400.0 MHz

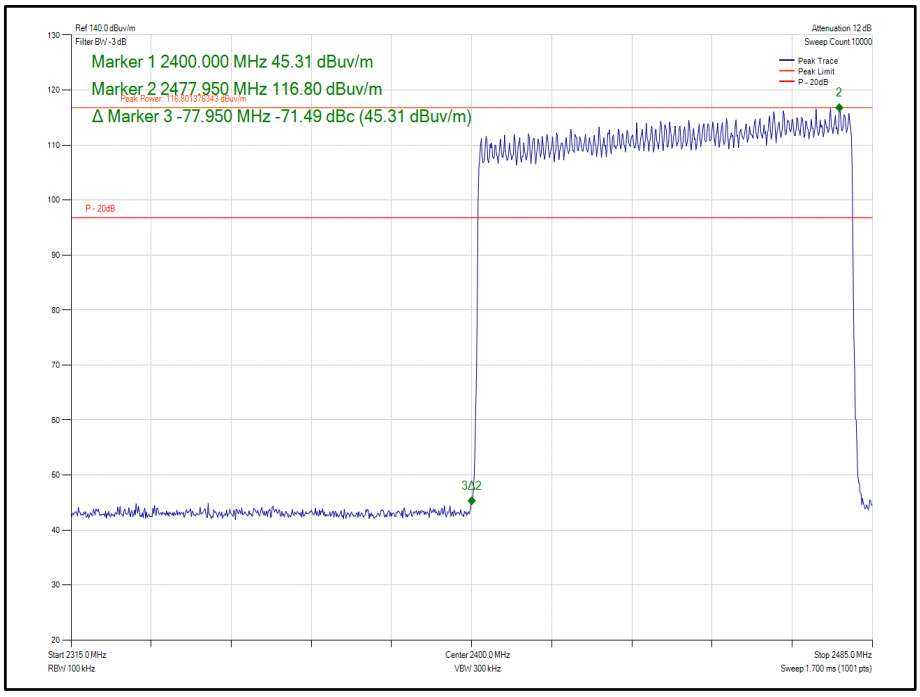

Figure 99 - Hopping - Core 0-1- π/4 DQPSK/2DH5 - Band Edge Frequency 2400.0 MHz

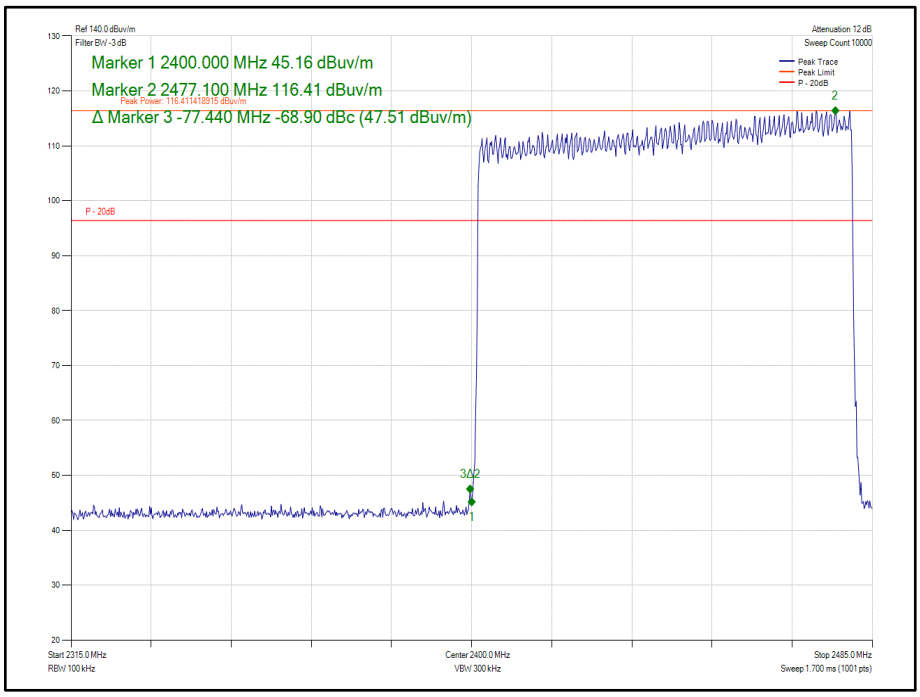

Figure 100 - Hopping - Core 0-1- 8-DPSK/3DH5 - Band Edge Frequency 2400.0 MHz

FCC 47 CFR Part 15, Limit Clause 15.247 (d)

20 dB below the fundamental measured in a 100 kHz bandwidth using a peak detector. If the transmitter complies with the conducted power limits, based on the use of RMS averaging over a time interval, the attenuation required shall be 30 dB below the fundamental instead of 20 dB.

ISED RSS-247, Limit Clause 5.5

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under Section 5.4(4), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

2.6.7 Test Location and Test Equipment Used

This test was carried out in RF Chamber 11.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Due
EMI Test Receiver	Rohde & Schwarz	ESW44	5084	12	28-Nov-2020
EmX Emissions Software	TUV SUD	EmX	5125	-	Software
Screened Room (11)	Rainford	Rainforf	5136	36	01-Nov-2021
Mast	Maturo	TAM 4.0-P	5158	-	TU
Mast and Turntable Controller	Maturo	Maturo NCD	5159	-	TU
Turntable	Maturo	TT 15WF	5160	-	TU
Horn Antenna (1-10GHz)	Schwarzbeck	BBHA 9120 B	5215	12	10-Mar-2021
Thermo-Hygro-Barometer	PCE Instruments	PCE-THB-40	5475	12	17-Mar-2021
Attenuator 5W 10dB DC-18GHz	Aaren	AT40A-4041-D18-10	5494	12	14-Apr-2021
2m SMA Cable	Junkosha	MWX221-02000AMSAMS/A	5518	12	01-Apr-2021
8m N Type Cable	Junkosha	MWX221-08000NMSNMS/B	5522	12	24-Mar-2021

Table 45

TU - Traceability Unscheduled

2.7 Restricted Band Edges

2.7.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.205
ISED RSS-GEN, Clause 8.10

2.7.2 Equipment Under Test and Modification State

A2338, S/N: C02CX02PQC36 - Modification State 0

2.7.3 Date of Test

04-August-2020 to 09-September-2020

2.7.4 Test Method

This test was performed in accordance with ANSI C63.10, clause 6.10.5.

Plots for average measurements were taken in accordance with ANSI C63.10, clause 4.1.4.2.5. These are shown for information purposes and were used to determine the worst-case measurement point. Final average measurements were then taken in accordance with ANSI C63.10, clause 4.1.4.2.2 to obtain the measurement result recorded in the test results tables.

The following conversion can be applied to convert from dBµV/m to µV/m:
10^(Field Strength in dBµV/m/20).

2.7.5 Environmental Conditions

Ambient Temperature	20.9-23.5 °C
Relative Humidity	34.4-60.1 %

2.7.6 Test Results

2.4 GHz Bluetooth (FHSS)

iPA

Mode	Modulation	Core	Packet Type	Tx Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBµV/m)	Average Level (dBµV/m)
Static	GFSK	0	DH5	2402	2390.0	54.38	39.49
Static	π/4 DQPSK	0	2DH5	2402	2390.0	53.73	39.41
Static	8-DPSK	0	3DH5	2402	2390.0	53.93	39.38
Static	GFSK	0	DH5	2480	2483.5	52.87	39.82
Static	π/4 DQPSK	0	2DH5	2480	2483.5	53.48	41.38
Static	8-DPSK	0	3DH5	2480	2483.5	53.21	41.37

Table 46 - Restricted Band Edge Results

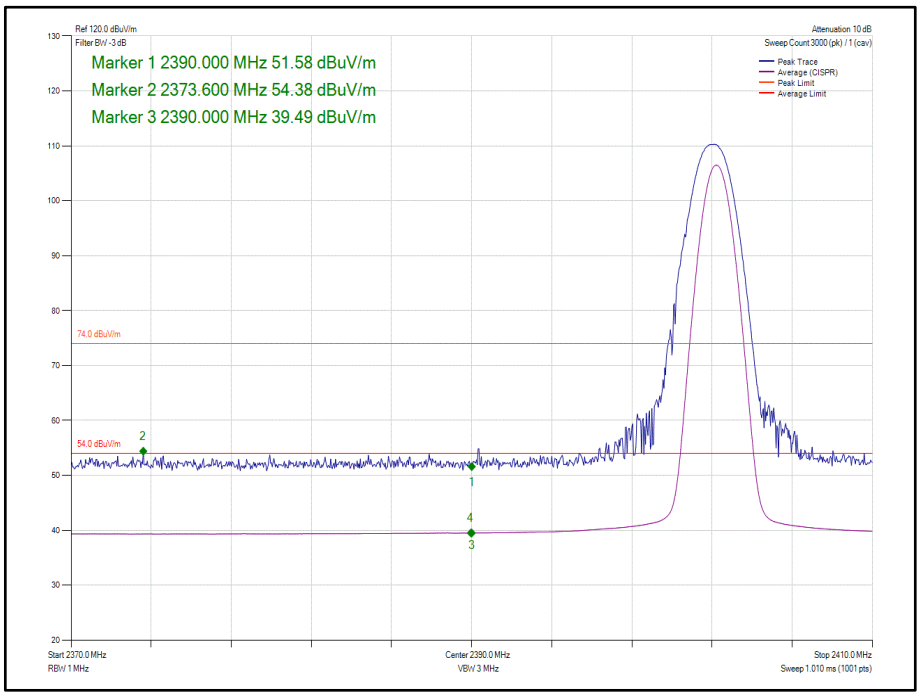

Figure 101 - Core 0 - GFSK/DH5 - 2402 MHz - Band Edge Frequency 2390.0 MHz

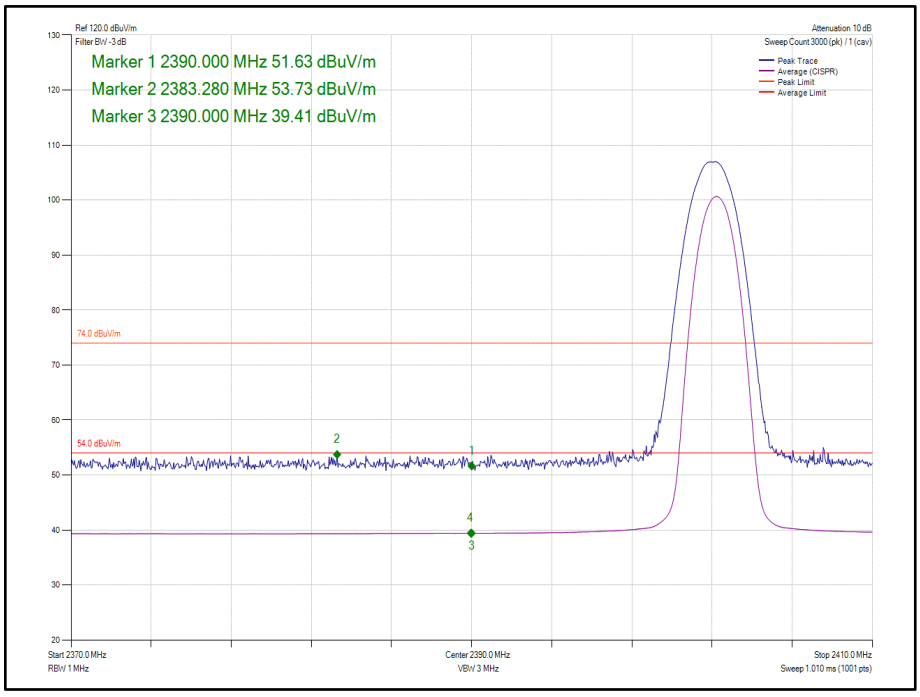

Figure 102 - Core 0 - π/4 DQPSK/2DH5 - 2402 MHz - Band Edge Frequency 2390.0 MHz

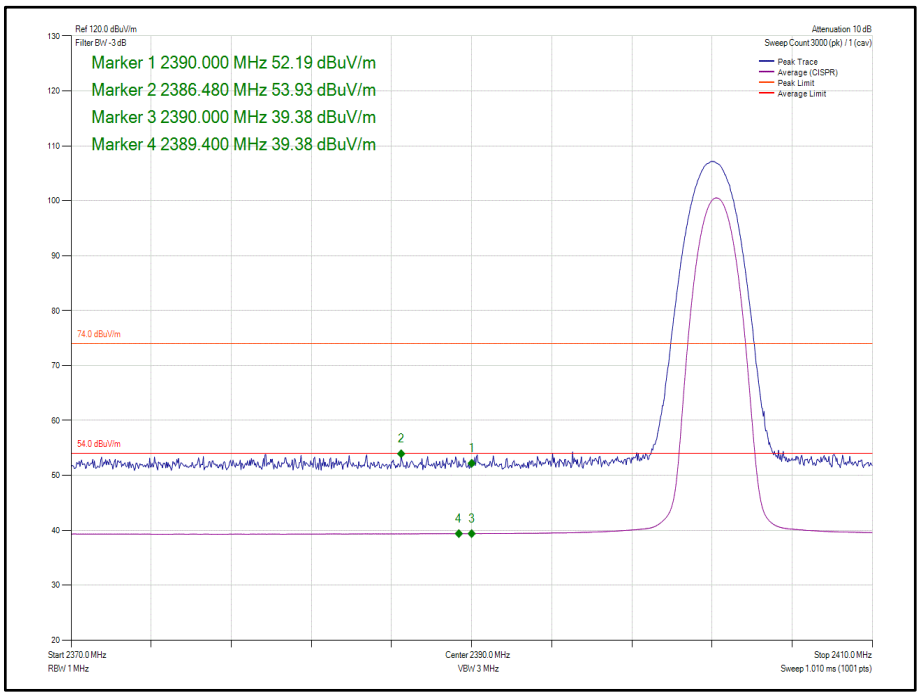

Figure 103 - Core 0 - 8-DPSK/3DH5 - 2402 MHz Band Edge Frequency 2390.0 MHz

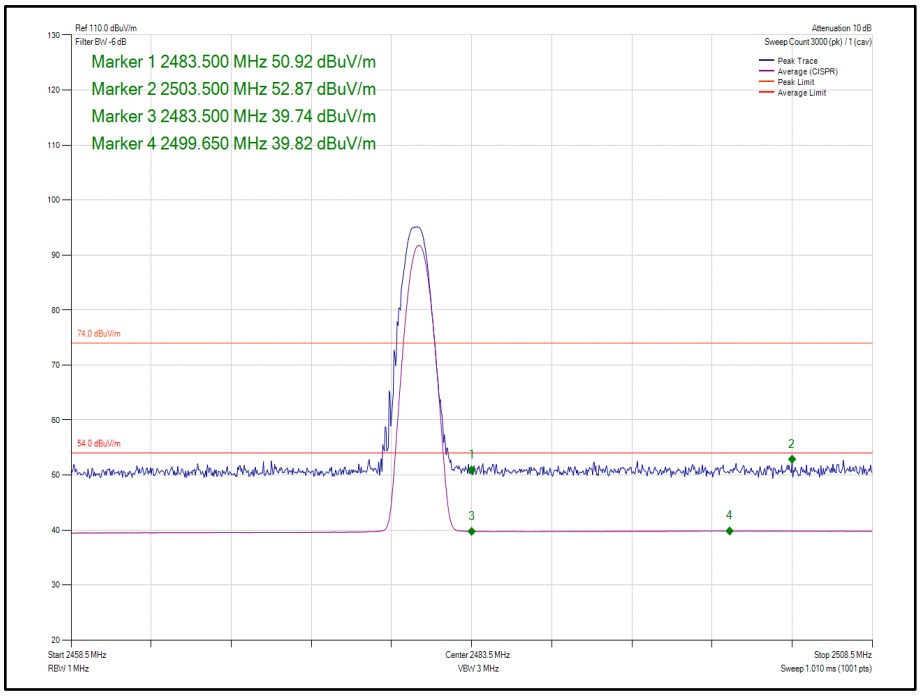

Figure 104 - Core 0 - GFSK/DH5 - 2480 MHz - Band Edge Frequency 2483.5 MHz

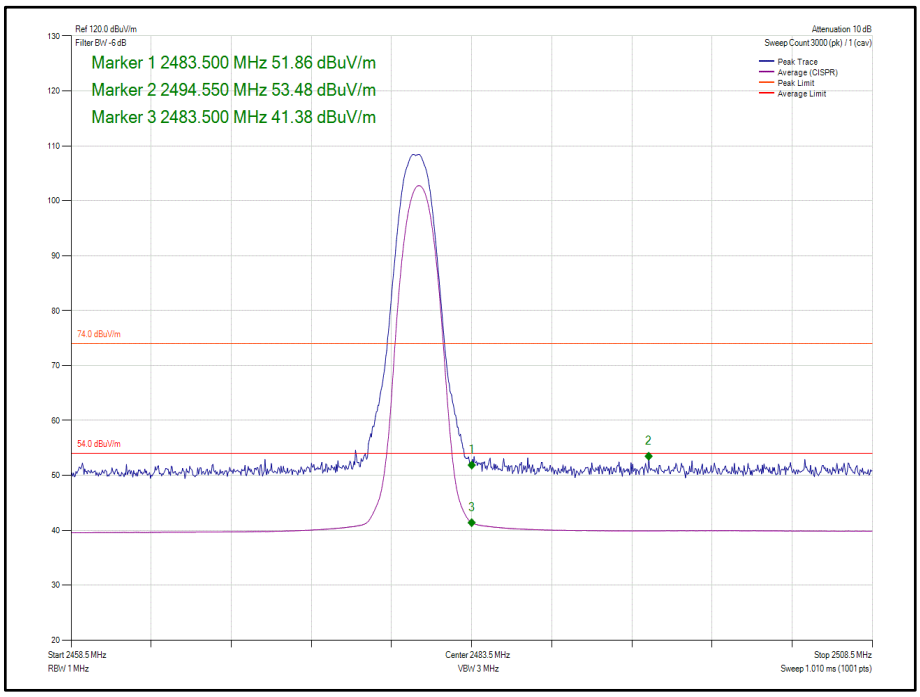

Figure 105 - Core 0 - π/4 DQPSK/2DH5 - 2480 MHz - Band Edge Frequency 2483.5 MHz

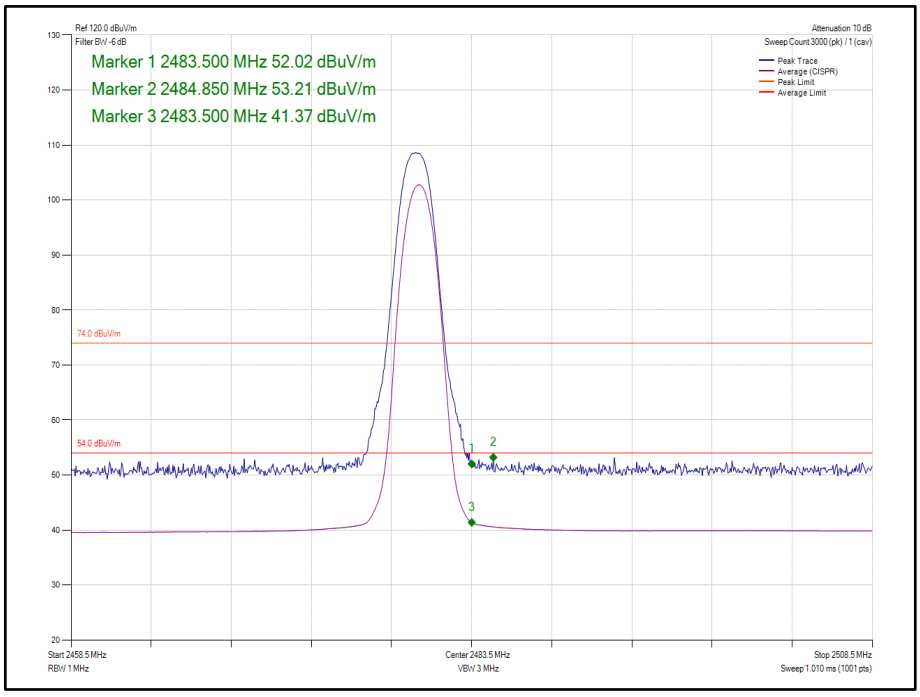

Figure 106 - Core 0 - 8-DPSK/3DH5 - 2480 MHz - Band Edge Frequency 2483.5 MHz

Mode	Modulation	Core	Packet Type	Tx Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBµV/m)	Average Level (dBµV/m)
Static	GFSK	1	DH5	2402	2390.0	53.60	39.45
Static	π/4 DQPSK	1	2DH5	2402	2390.0	54.59	39.36
Static	8-DPSK	1	3DH5	2402	2390.0	54.23	39.35
Static	GFSK	1	DH5	2480	2483.5	55.61	41.80
Static	π/4 DQPSK	1	2DH5	2480	2483.5	53.05	40.89
Static	8-DPSK	1	3DH5	2480	2483.5	52.56	40.84

Table 47 - Restricted Band Edge Results

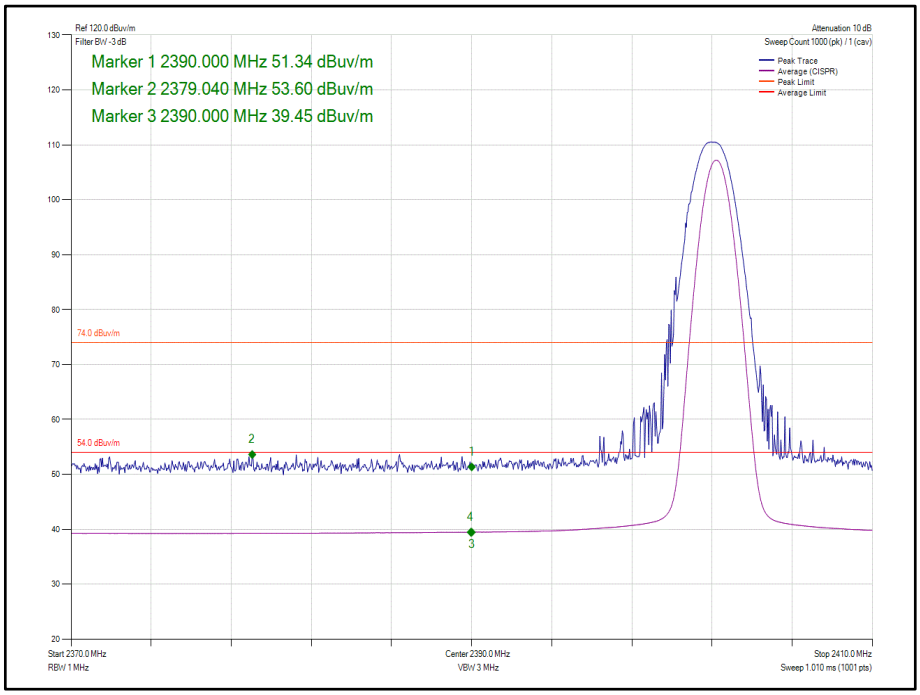

Figure 107 - Core 1 - GFSK/DH5 - 2402 MHz - Band Edge Frequency 2390.0 MHz

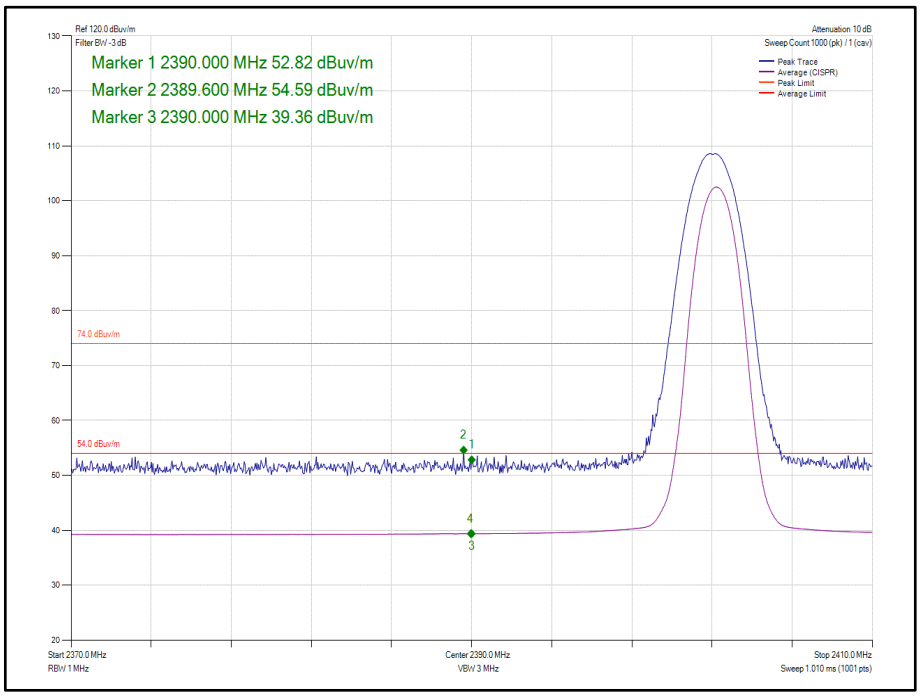

Figure 108 - Core 1 - π/4 DQPSK/2DH5 - 2402 MHz - Band Edge Frequency 2390.0 MHz

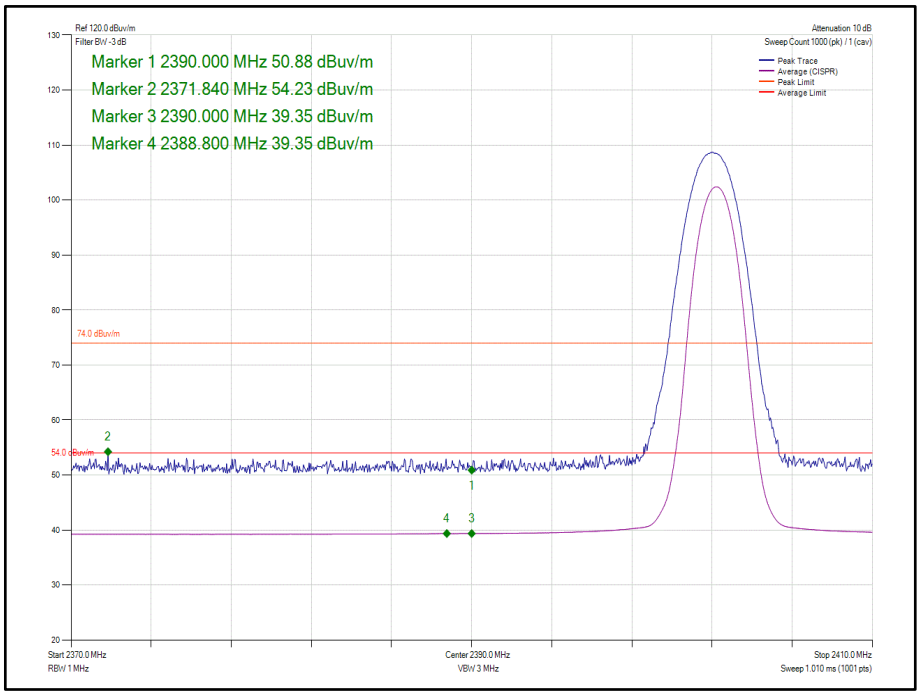

Figure 109 - Core 1 - 8-DPSK/3DH5 - 2402 MHz Band Edge Frequency 2390.0 MHz

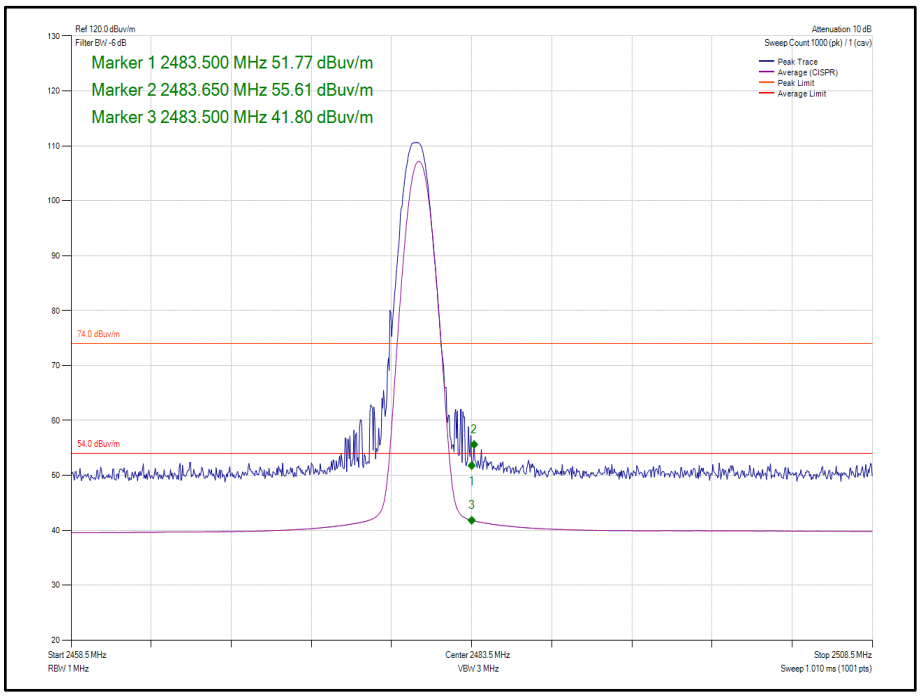

Figure 110 - Core 1 - GFSK/DH5 - 2480 MHz - Band Edge Frequency 2483.5 MHz

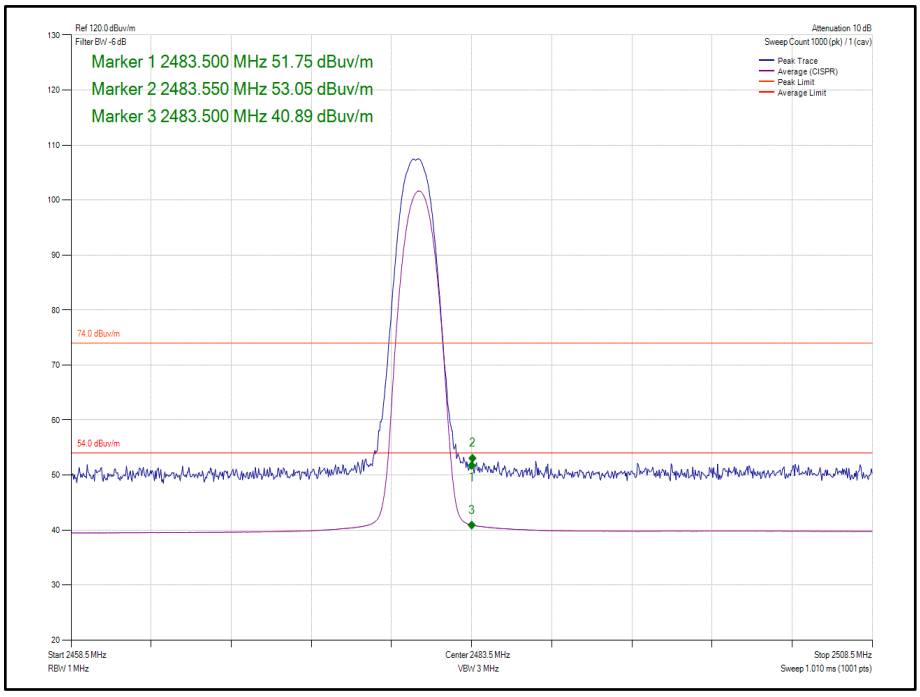

Figure 111 - Core 1 - π/4 DQPSK/2DH5 - 2480 MHz - Band Edge Frequency 2483.5 MHz

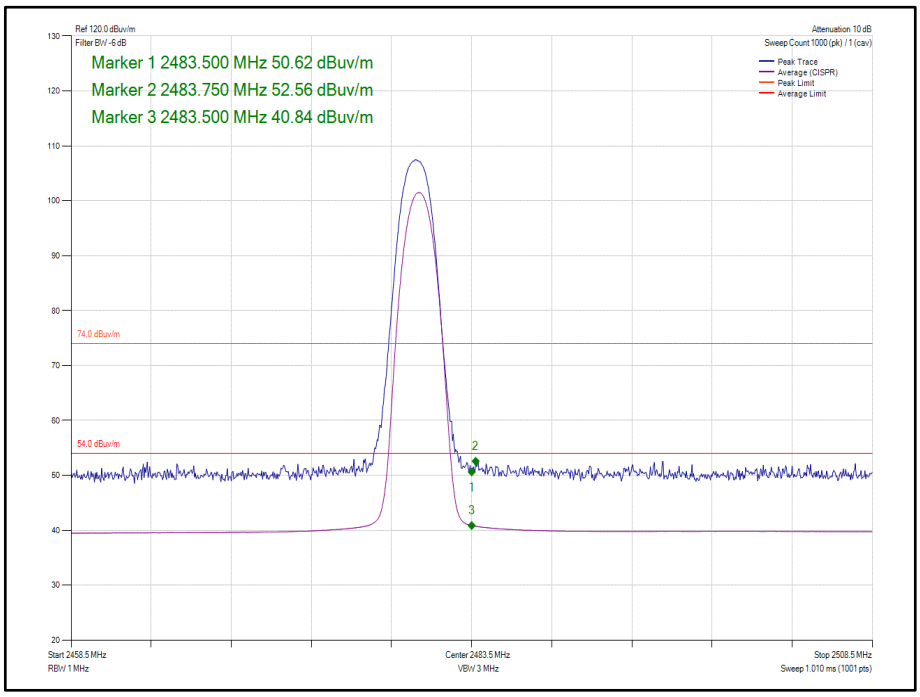

Figure 112 - Core 1 - 8-DPSK/3DH5 - 2480 MHz - Band Edge Frequency 2483.5 MHz

Mode	Modulation	Core	Packet Type	Tx Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBµV/m)	Average Level (dBµV/m)
Static	GFSK	0-1	DH5	2402	2390.0	53.21	39.36
Static	π/4 DQPSK	0-1	2DH5	2402	2390.0	53.58	39.42
Static	8-DPSK	0-1	3DH5	2402	2390.0	53.55	39.39
Static	GFSK	0-1	DH5	2480	2483.5	52.74	40.89
Static	π/4 DQPSK	0-1	2DH5	2480	2483.5	52.68	40.79
Static	8-DPSK	0-1	3DH5	2480	2483.5	52.85	40.80

Table 48 - MIMO 2Tx Restricted Band Edge Results

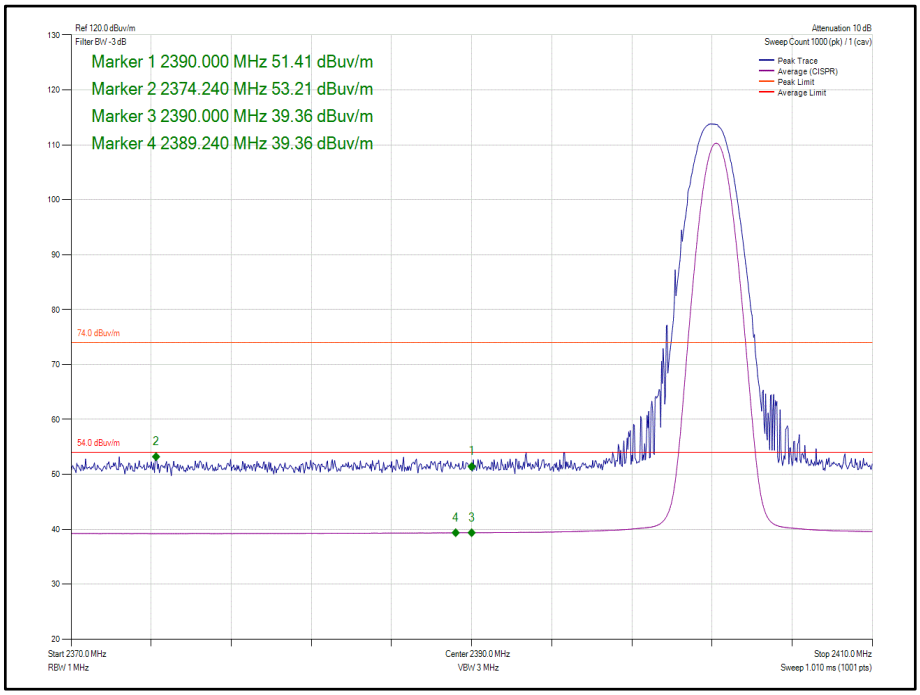

Figure 113 - Core 0-1- GFSK/DH5 - 2402 MHz - Band Edge Frequency 2390.0 MHz

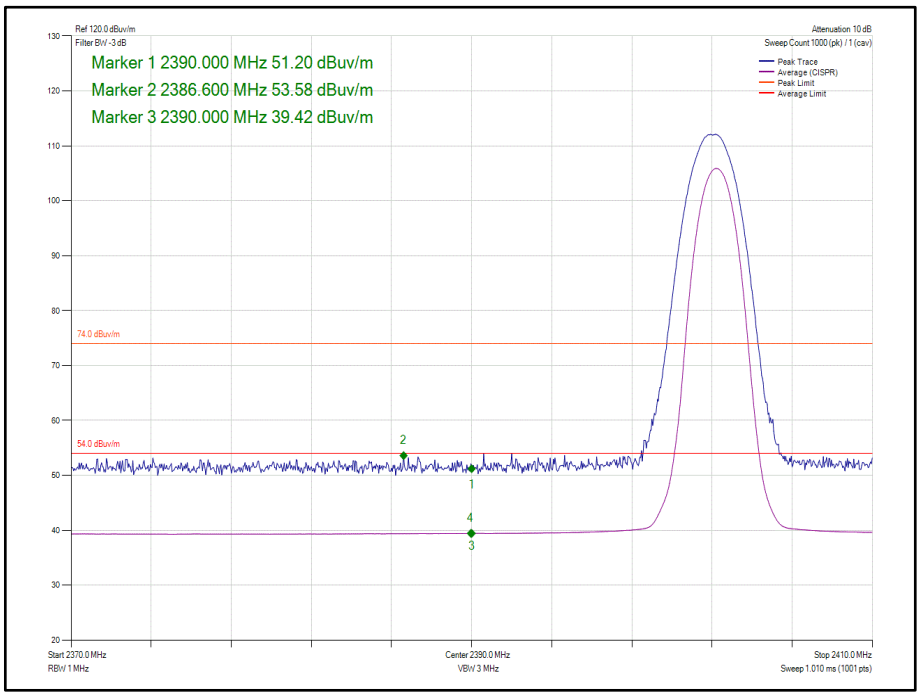

Figure 114 - Core 0-1- π/4 DQPSK/2DH5 - 2402 MHz - Band Edge Frequency 2390.0 MHz

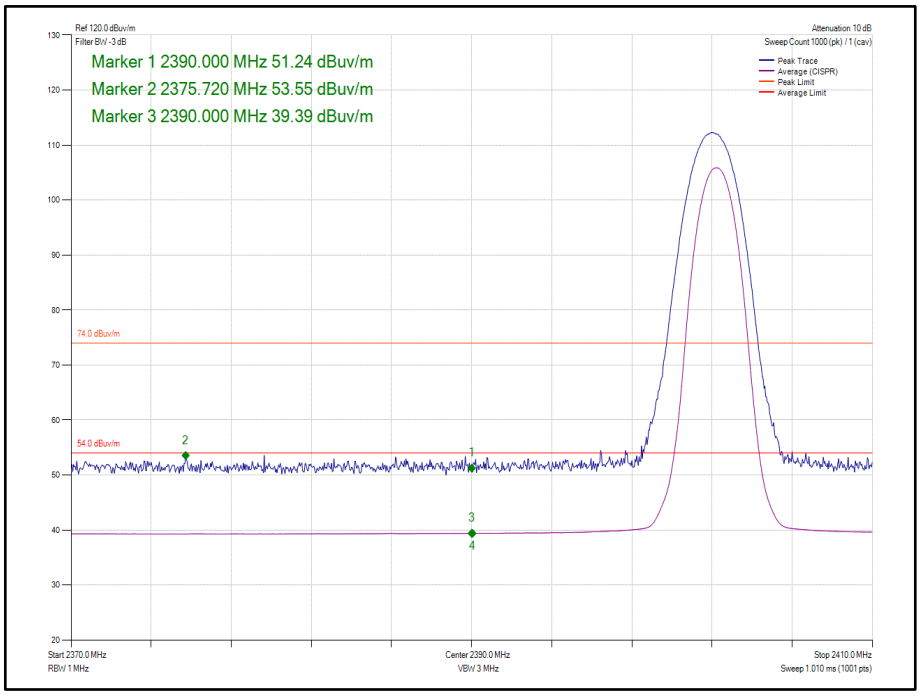

Figure 115 - Core 0-1- 8-DPSK/3DH5 - 2402 MHz Band Edge Frequency 2390.0 MHz

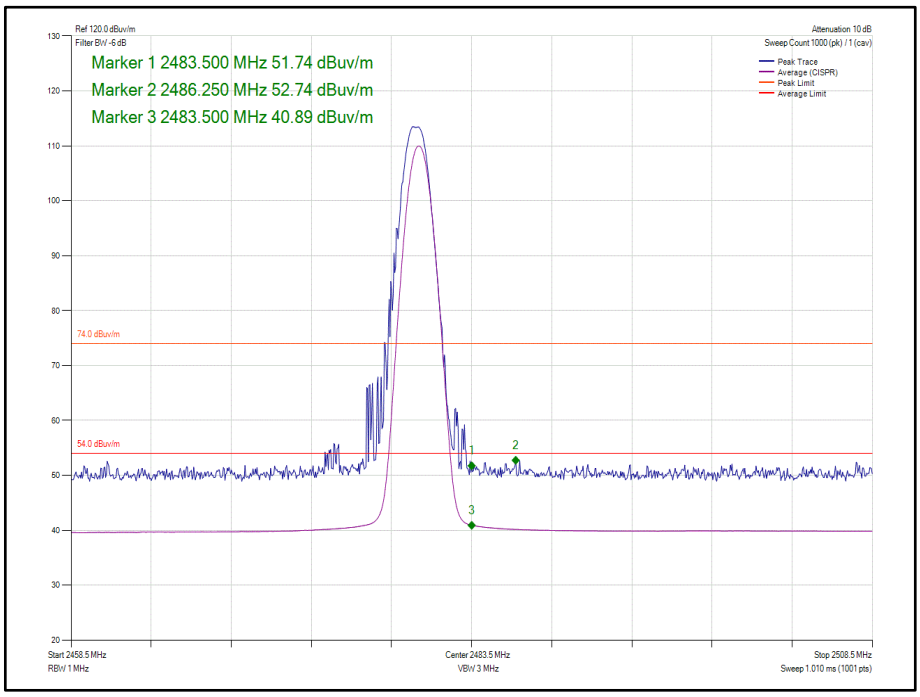

Figure 116 - Core 0-1- GFSK/DH5 - 2480 MHz - Band Edge Frequency 2483.5 MHz

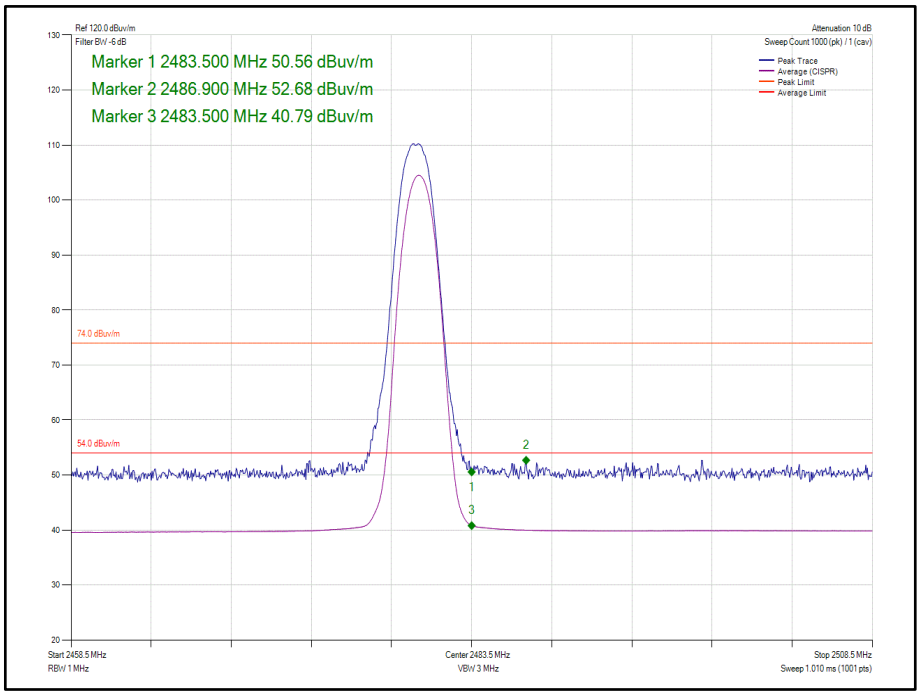

Figure 117 - Core 0-1- π/4 DQPSK/2DH5 - 2480 MHz - Band Edge Frequency 2483.5 MHz

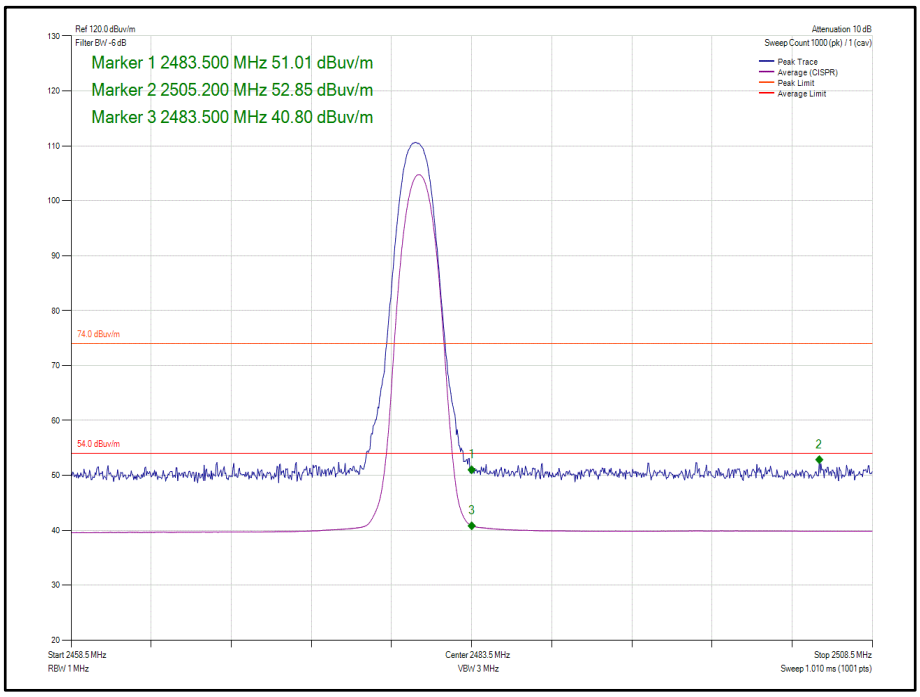

Figure 118 - Core 0-1- 8-DPSK/3DH5 - 2480 MHz - Band Edge Frequency 2483.5 MHz

ePA

Mode	Modulation	Core	Packet Type	Tx Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBµV/m)	Average Level (dBµV/m)
Static	GFSK	0	DH5	2402	2390.0	57.10	39.85
Static	π/4 DQPSK	0	2DH5	2402	2390.0	55.50	40.45
Static	8-DPSK	0	3DH5	2402	2390.0	54.14	39.39
Static	GFSK	0	DH5	2480	2483.5	57.19	43.27
Static	π/4 DQPSK	0	2DH5	2480	2483.5	58.29	43.21
Static	8-DPSK	0	3DH5	2480	2483.5	57.71	43.26

Table 49 - Restricted Band Edge Results

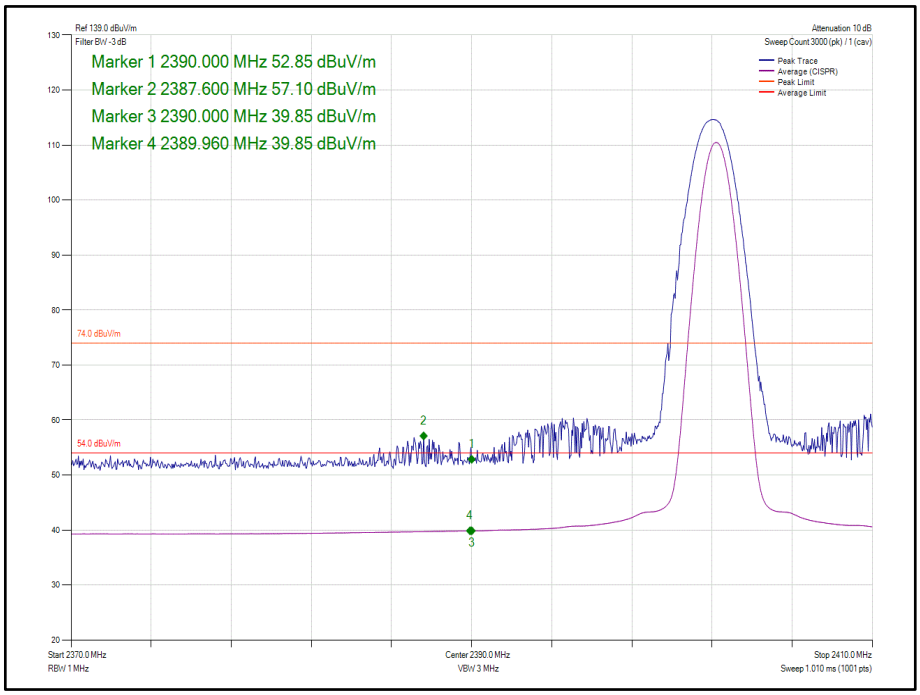

Figure 119 - Core 0 - GFSK/DH5 - 2402 MHz - Band Edge Frequency 2390.0 MHz

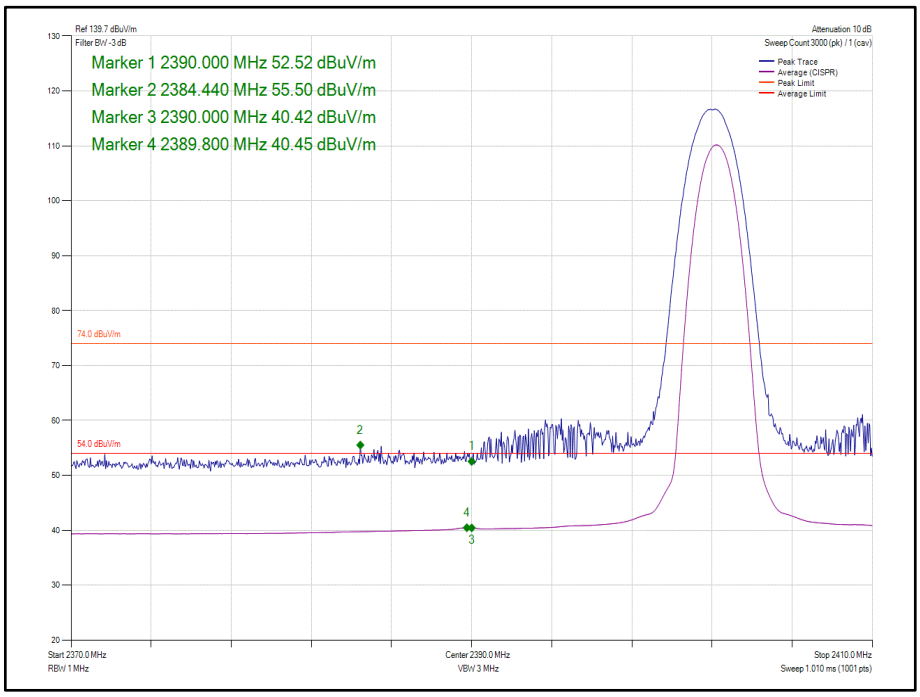

Figure 120 - Core 0 - π/4 DQPSK/2DH5 - 2402 MHz - Band Edge Frequency 2390.0 MHz

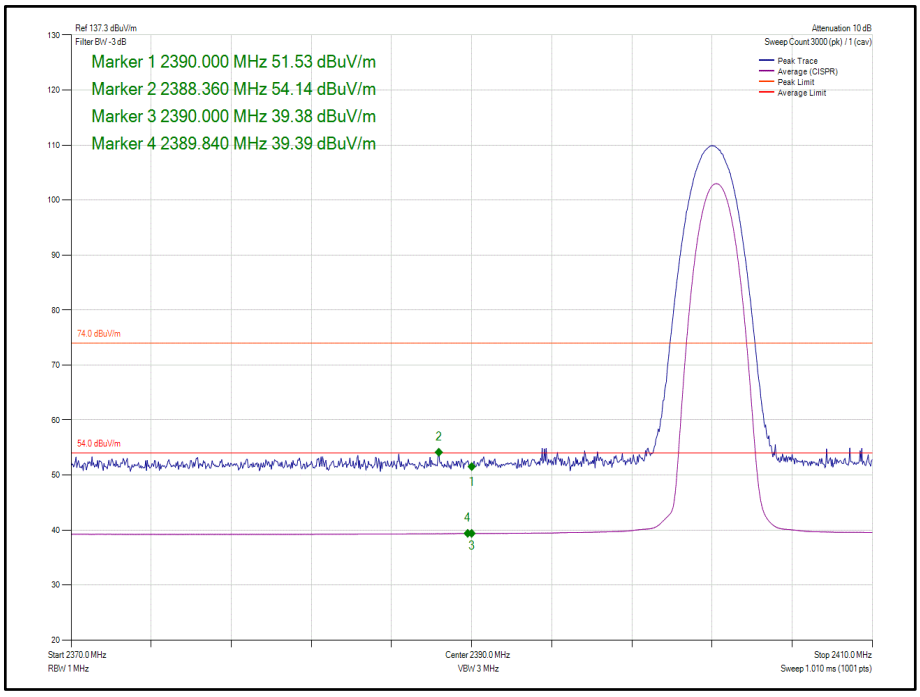

Figure 121 - Core 0 - 8-DPSK/3DH5 - 2402 MHz Band Edge Frequency 2390.0 MHz

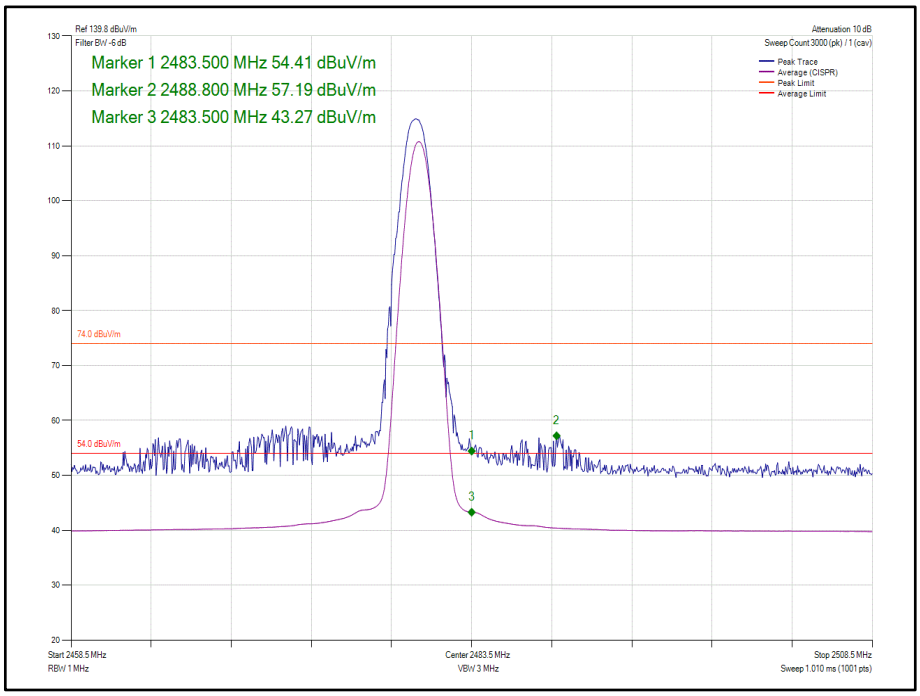

Figure 122 - Core 0 - GFSK/DH5 - 2480 MHz - Band Edge Frequency 2483.5 MHz

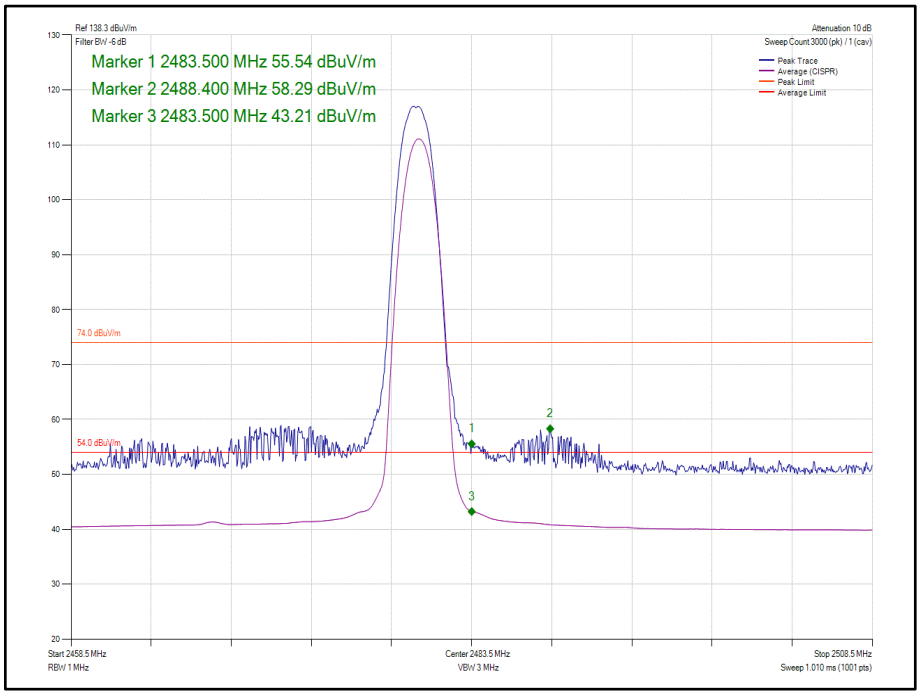

Figure 123 - Core 0 - π/4 DQPSK/2DH5 - 2480 MHz - Band Edge Frequency 2483.5 MHz

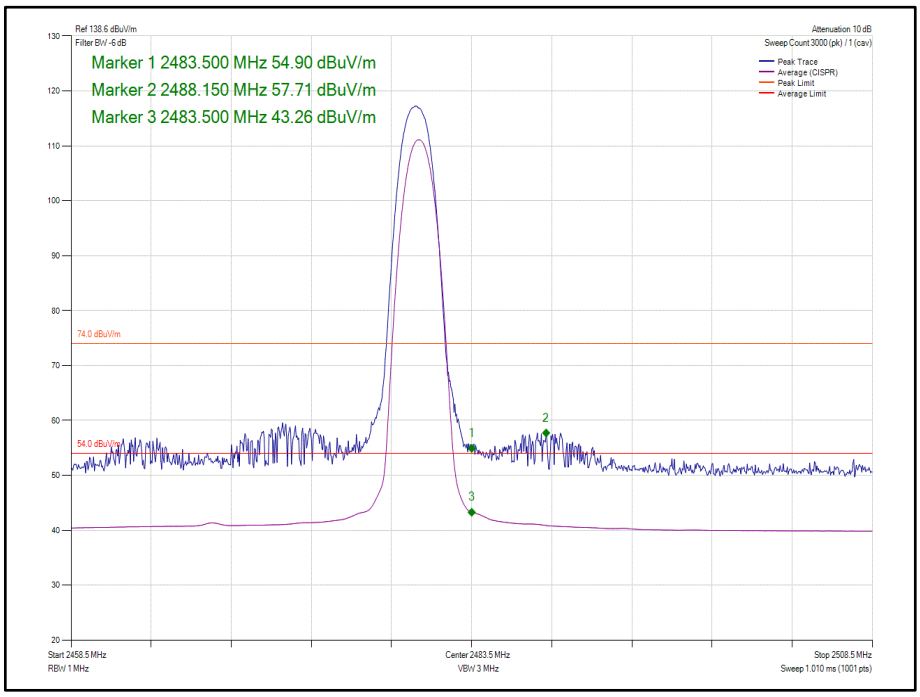

Figure 124 - Core 0 - 8-DPSK/3DH5 - 2480 MHz - Band Edge Frequency 2483.5 MHz

Mode	Modulation	Core	Packet Type	Tx Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBµV/m)	Average Level (dBµV/m)
Static	GFSK	1	DH5	2402	2390.0	56.78	39.84
Static	π/4 DQPSK	1	2DH5	2402	2390.0	53.75	40.00
Static	8-DPSK	1	3DH5	2402	2390.0	53.72	40.11
Static	GFSK	1	DH5	2480	2483.5	57.87	44.04
Static	π/4 DQPSK	1	2DH5	2480	2483.5	56.89	42.87
Static	8-DPSK	1	3DH5	2480	2483.5	56.41	42.80

Table 50 - Restricted Band Edge Results

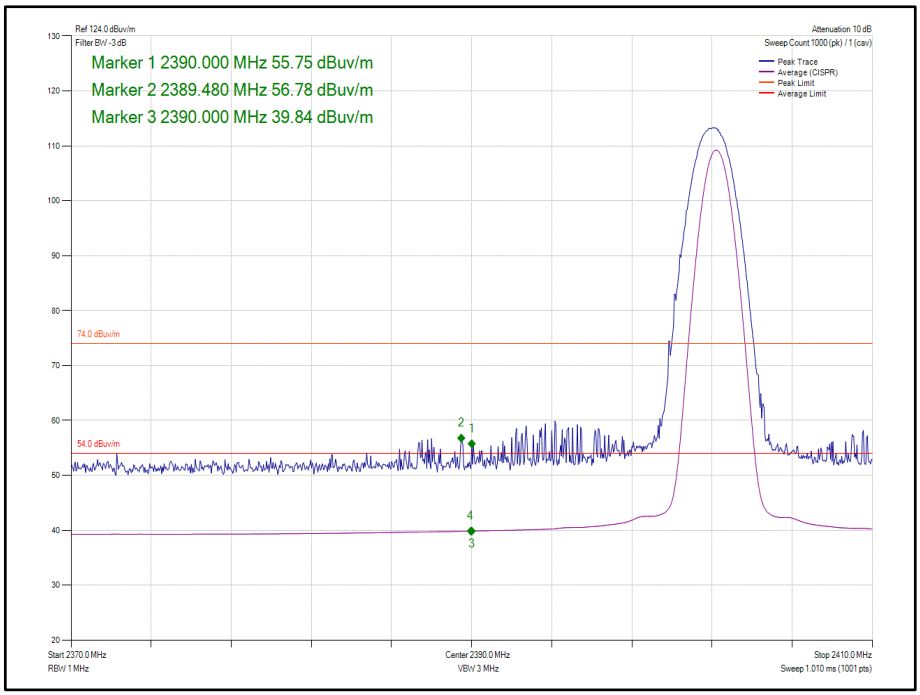

Figure 125 - Core 1 - GFSK/DH5 - 2402 MHz - Band Edge Frequency 2390.0 MHz

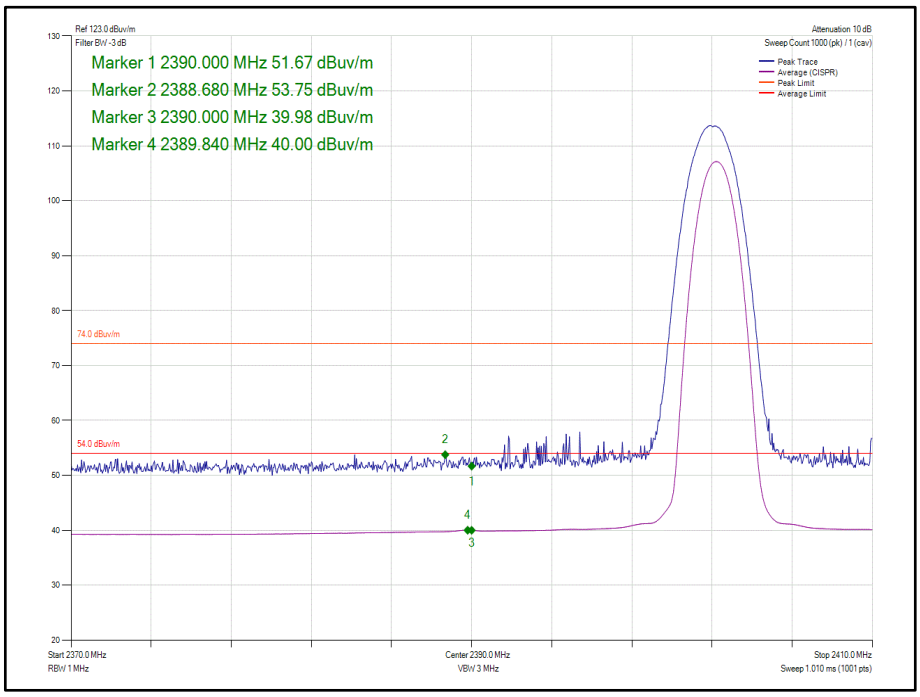

Figure 126 - Core 1 - π/4 DQPSK/2DH5 - 2402 MHz - Band Edge Frequency 2390.0 MHz

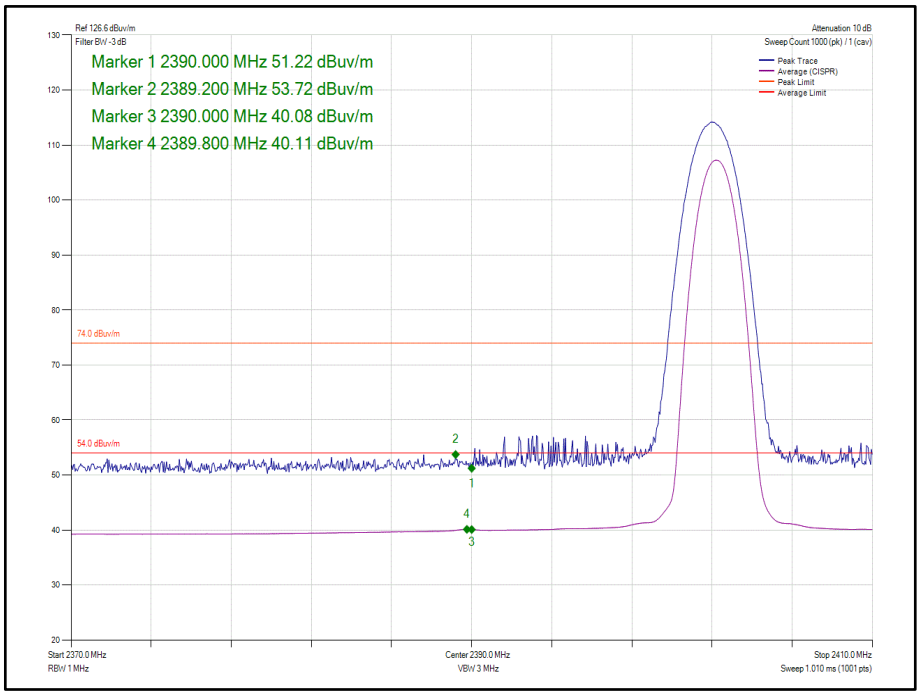

Figure 127 - Core 1 - 8-DPSK/3DH5 - 2402 MHz Band Edge Frequency 2390.0 MHz

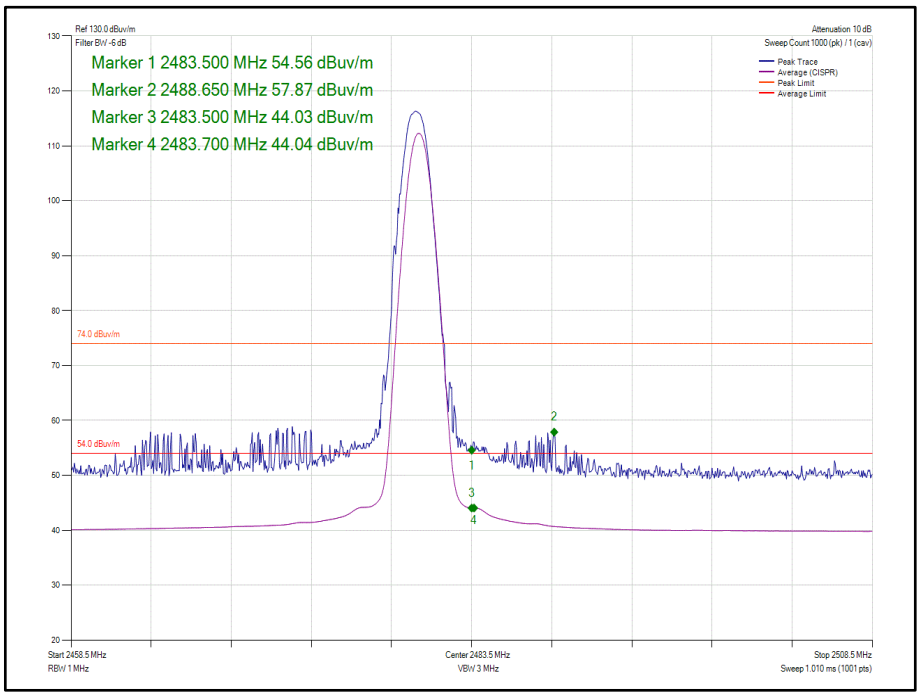

Figure 128 - Core 1 - GFSK/DH5 - 2480 MHz - Band Edge Frequency 2483.5 MHz

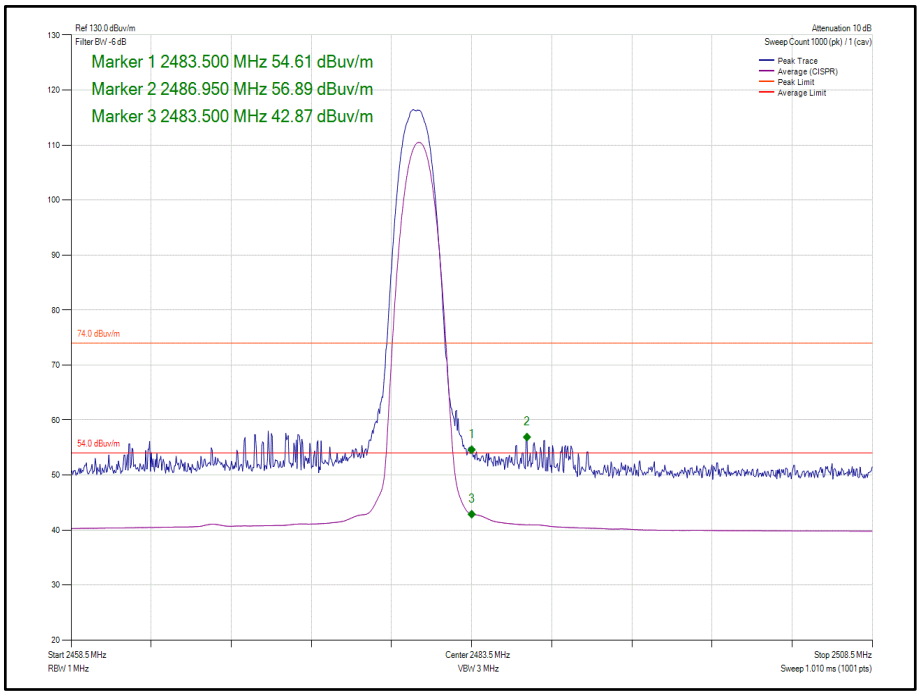

Figure 129 - Core 1 - π/4 DQPSK/2DH5 - 2480 MHz - Band Edge Frequency 2483.5 MHz

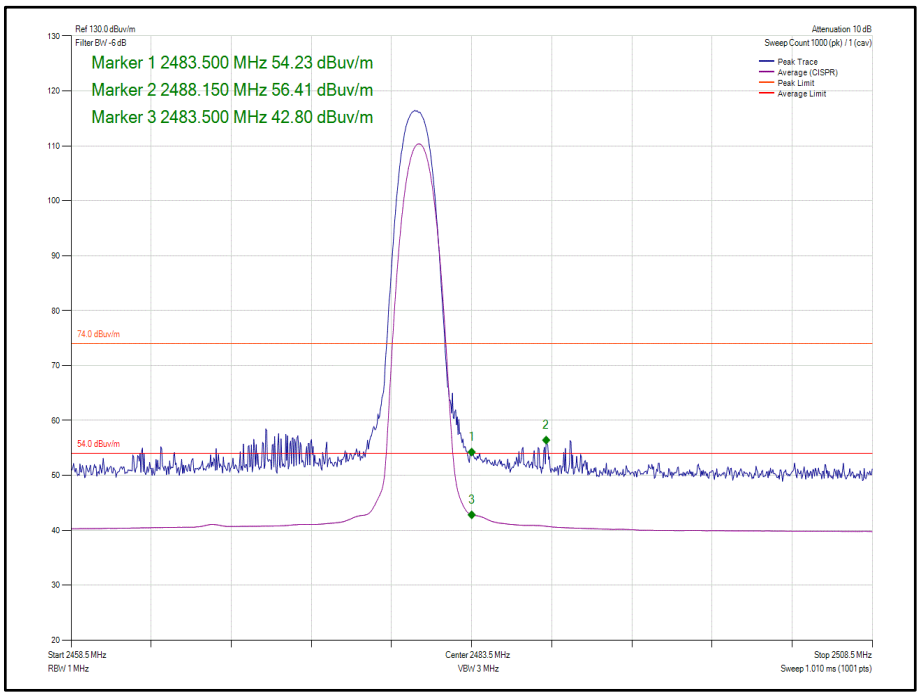

Figure 130 - Core 1 - 8-DPSK/3DH5 - 2480 MHz - Band Edge Frequency 2483.5 MHz

Mode	Modulation	Core	Packet Type	Tx Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBµV/m)	Average Level (dBµV/m)
Static	GFSK	0-1	DH5	2402	2390.0	54.10	39.48
Static	π/4 DQPSK	0-1	2DH5	2402	2390.0	54.16	40.26
Static	8-DPSK	0-1	3DH5	2402	2390.0	54.25	40.21
Static	GFSK	0-1	DH5	2480	2483.5	53.16	40.91
Static	π/4 DQPSK	0-1	2DH5	2480	2483.5	57.47	42.64
Static	8-DPSK	0-1	3DH5	2480	2483.5	58.35	42.64

Table 51 - MIMO 2Tx Restricted Band Edge Results

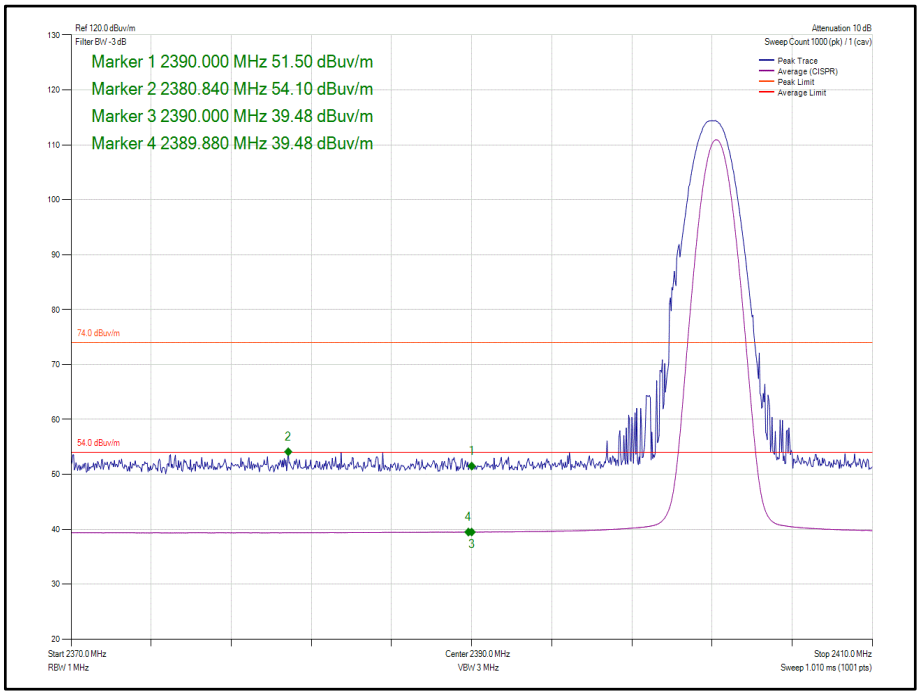

Figure 131 - Core 0-1- GFSK/DH5 - 2402 MHz - Band Edge Frequency 2390.0 MHz

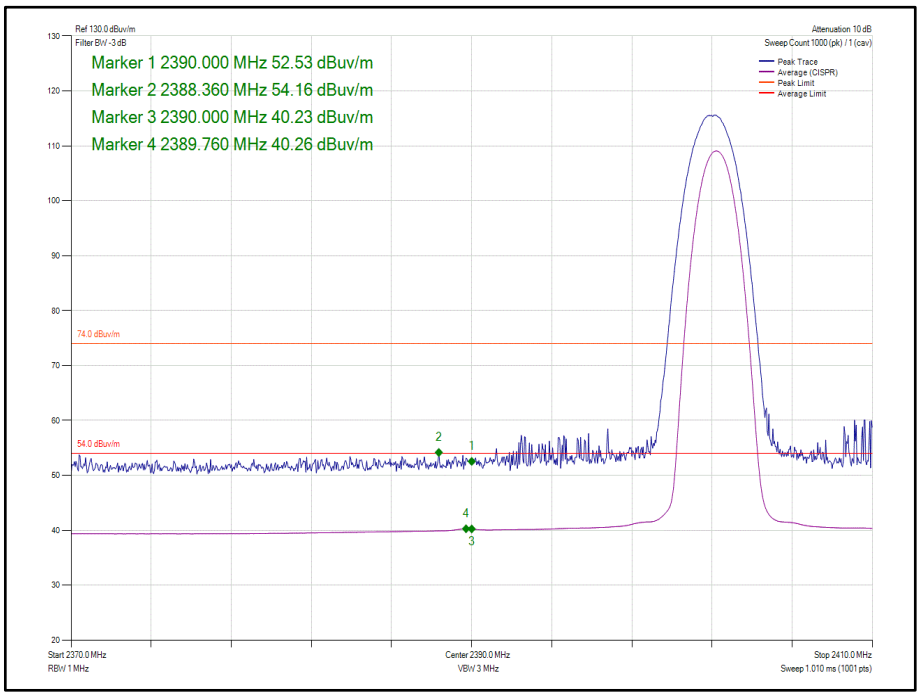

Figure 132 - Core 0-1- π/4 DQPSK/2DH5 - 2402 MHz - Band Edge Frequency 2390.0 MHz

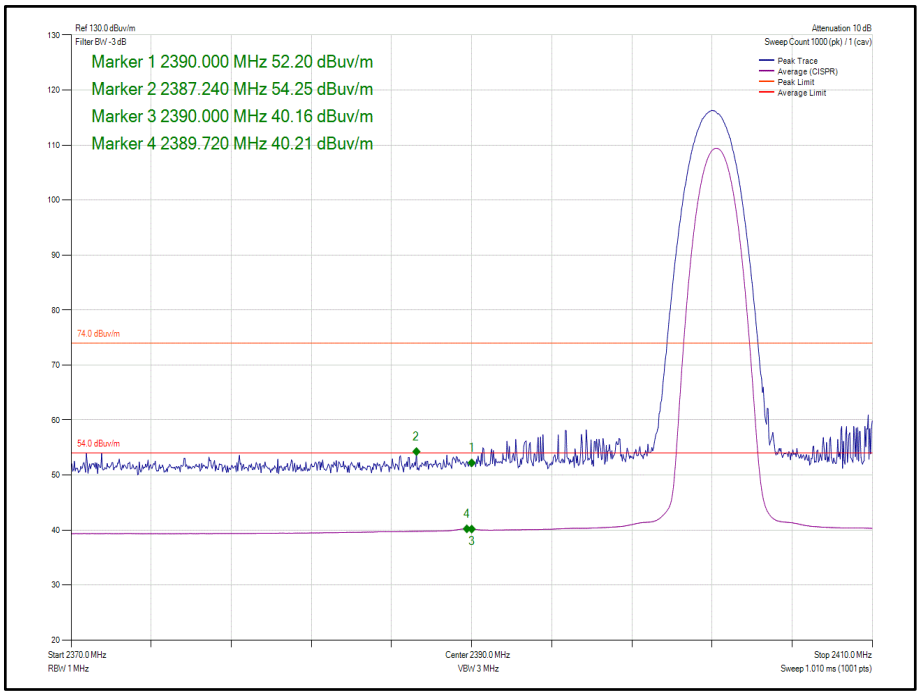

Figure 133 - Core 0-1- 8-DPSK/3DH5 - 2402 MHz Band Edge Frequency 2390.0 MHz

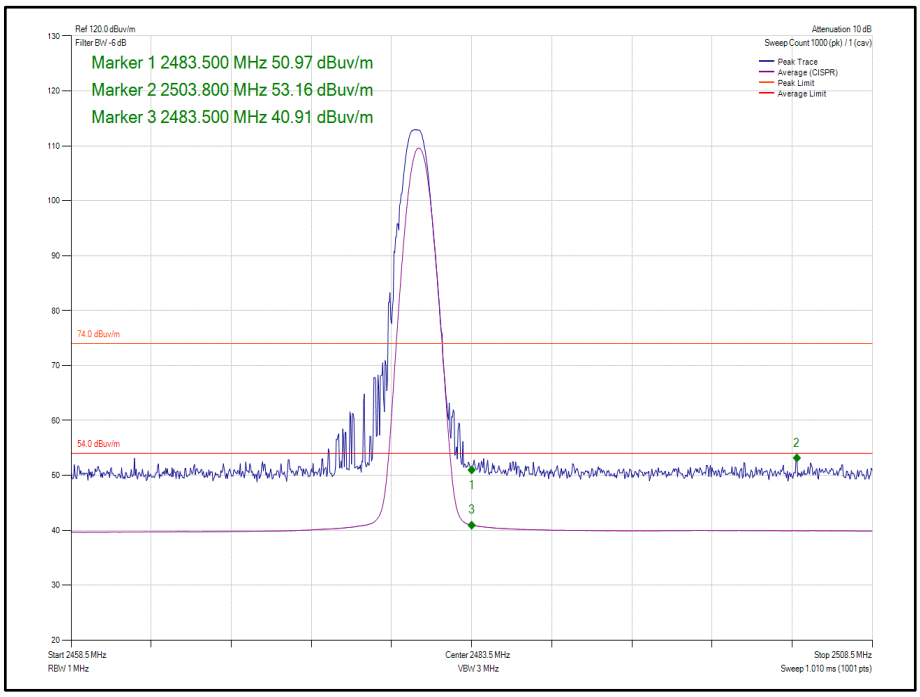

Figure 134 - Core 0-1- GFSK/DH5 - 2480 MHz - Band Edge Frequency 2483.5 MHz

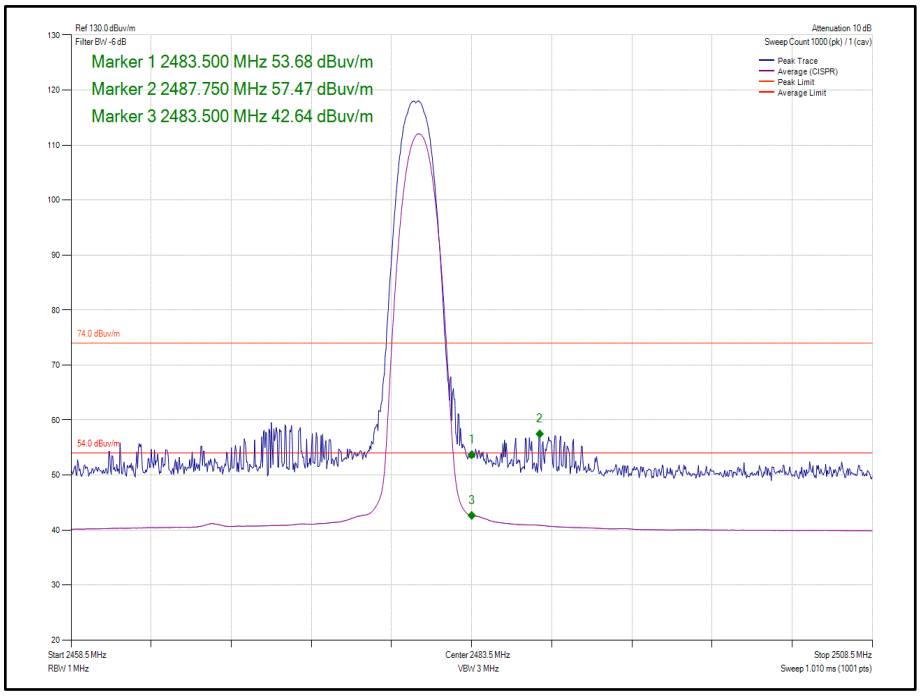

Figure 135 - Core 0-1- π/4 DQPSK/2DH5 - 2480 MHz - Band Edge Frequency 2483.5 MHz

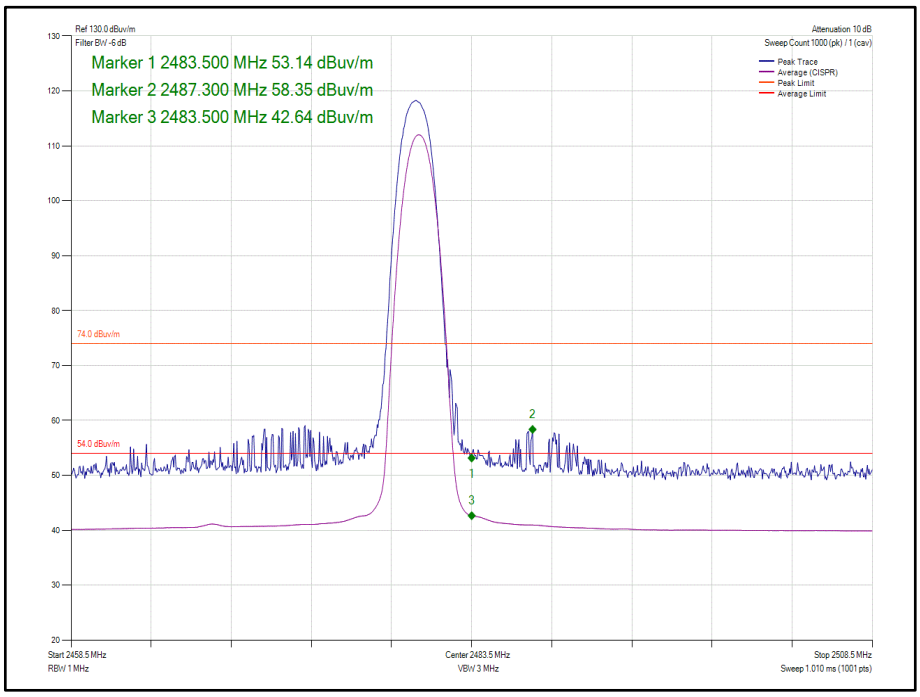

Figure 136 - Core 0-1- 8-DPSK/3DH5 - 2480 MHz - Band Edge Frequency 2483.5 MHz

FCC 47 CFR Part 15, Limit Clause 15.209

Frequency (MHz)	Field Strength (µV/m at 3 m)
30 to 88	100
88 to 216	150
216 to 960	200
Above 960	500

Table 52

ISED RSS-GEN, Limit Clause 8.9

Frequency (MHz)	Field Strength (µV/m at 3 m)
30 to 88	100
88 to 216	150
216 to 960	200
Above 960*	500

Table 53

*Unless otherwise specified, for all frequencies greater than 1 GHz, the radiated emission limits for licence-exempt radio apparatus stated in applicable RSSs (including RSS-Gen) are based on measurements using a linear average detector function having a minimum resolution bandwidth of 1 MHz. If an average limit is specified for the EUT, then the peak emission shall also be measured with instrumentation properly adjusted for such factors as pulse desensitization to ensure the peak emission is less than 20 dB above the average limit.

2.7.7 Test Location and Test Equipment Used

This test was carried out in RF Chamber 11.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Due
EMI Test Receiver	Rohde & Schwarz	ESW44	5084	12	28-Nov-2020
EmX Emissions Software	TUV SUD	EmX	5125	-	Software
Screened Room (11)	Rainford	Rainforf	5136	36	01-Nov-2021
Mast	Maturo	TAM 4.0-P	5158	-	TU
Mast and Turntable Controller	Maturo	Maturo NCD	5159	-	TU
Turntable	Maturo	TT 15WF	5160	-	TU
Horn Antenna (1-10GHz)	Schwarzbeck	BBHA 9120 B	5215	12	10-Mar-2021
Thermo-Hygro-Barometer	PCE Instruments	PCE-THB-40	5475	12	17-Mar-2021
Attenuator 5W 10dB DC-18GHz	Aaren	AT40A-4041-D18-10	5494	12	14-Apr-2021
2m SMA Cable	Junkosha	MWX221-02000AMSAMS/A	5518	12	01-Apr-2021
8m N Type Cable	Junkosha	MWX221-08000NMSNMS/B	5522	12	24-Mar-2021

Table 54

TU - Traceability Unscheduled

2.8 Spurious Radiated Emissions

2.8.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.247 (d) and 15.205
ISED RSS-247, Clause 5.5
ISED RSS-GEN, Clause 6.13

2.8.2 Equipment Under Test and Modification State

A2338, S/N: C02CX02PQC36 - Modification State 0

2.8.3 Date of Test

23-August-2020 to 04-September-2020

2.8.4 Test Method

This test was performed in accordance with ANSI C63.10, clause 6.3, 6.5 and 6.6.

The EUT was placed on the non-conducting platform in a manner typical of a normal installation.

Ports on the EUT were terminated with loads as described in ANSI C63.4 clause 6.2.4. One port of each type was loaded.

For frequencies > 1 GHz, plots for average measurements were taken in accordance with ANSI C63.10, clause 4.1.4.2.5 to characterize the EUT. Where emissions were detected, final average measurements were taken in accordance with ANSI C63.10, clause 4.1.4.2.2.

The plots shown are the characterisation of the EUT. The limits on the plots represent the most stringent case for restricted bands, (74/54 dBuV/m) when compared to 20 dBc outside restricted bands. The limits shown have been used as a threshold to determine where further measurements are necessary. Where results are within 10 dB of the limits shown on the plots, further investigation was carried out and reported in results tables.

The following conversion can be applied to convert from dBµV/m to µV/m:
10^(Field Strength in dBµV/m/20).

To determine the emission characteristic of the EUT above 18 GHz, the test antenna was swept over all faces of the EUT whilst observing a spectral display. The frequency of any emissions of interest was noted for formal measurement at the correct measurement distance of 1m. This procedure was repeated for all relevant transmit operating channels.

At a measurement distance of 1 meter the limit line was increased by 20*LOG(3/1) = 9.54 dB.

Representative noise floor plots are presented in the plot section of the report for one operating channel only.

Where formal measurements have been necessary, the results have been presented in the emissions table.

In the 30 MHz to 1 GHz range pre-scans were only performed on the mid channel (2441 MHz).

2.8.5 Example Test Setup Diagram

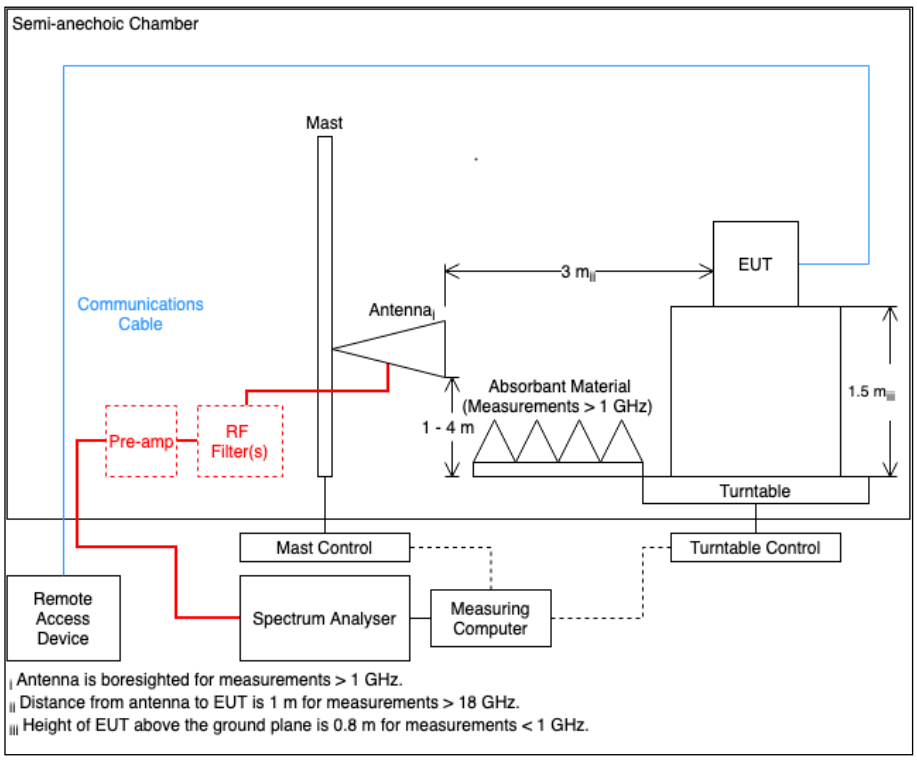

Figure 137

2.8.6 Environmental Conditions

Ambient Temperature	20.3 - 24.7 °C
Relative Humidity	51.1 - 67.2 %

2.8.7 Test Results

2.4 GHz Bluetooth (FHSS)

iPA

Frequency (MHz)	Level (dBuv/m)	Limit (dBuv/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4804.256	38.2	54.0	-15.9	CISPR Avg	8	307	Vertical

Table 55 - 2402 MHz (CH0), DH5, iPA, Core 0, 1 GHz to 26 GHz

No other emissions found within 6 dB of the limit.

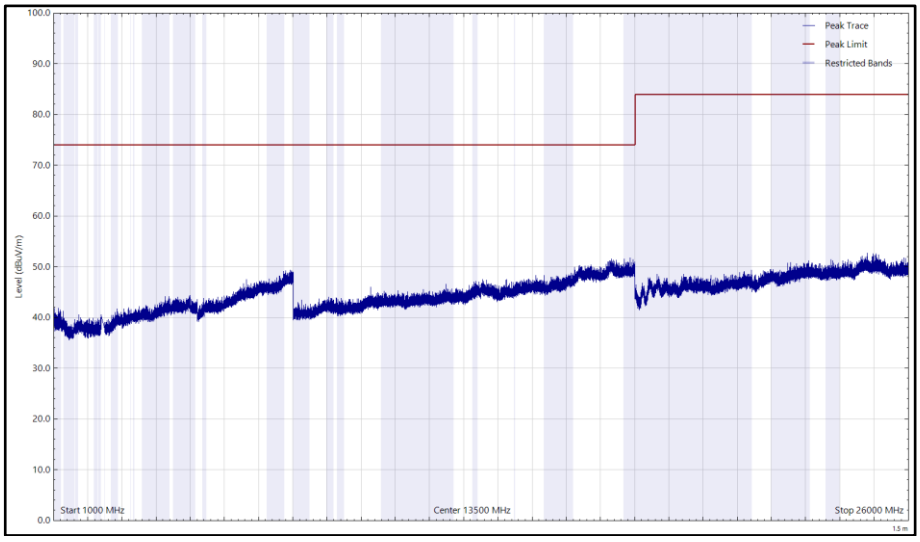

Figure 138 - 2402 MHz (CH0), DH5, iPA, Core 0, 1 GHz to 26 GHz, Horizontal (Peak)

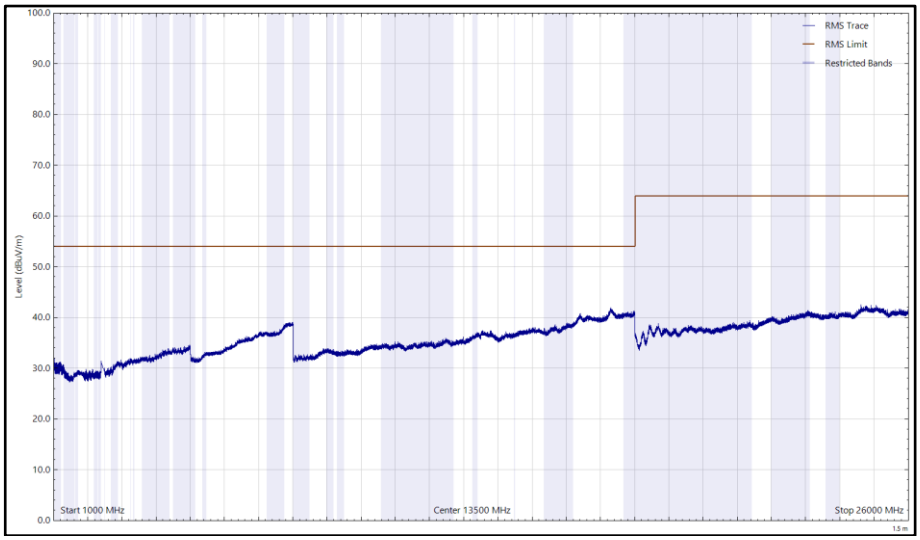

Figure 139 - 2402 MHz (CH0), DH5, iPA, Core 0, 1 GHz to 26 GHz, Horizontal (rms)

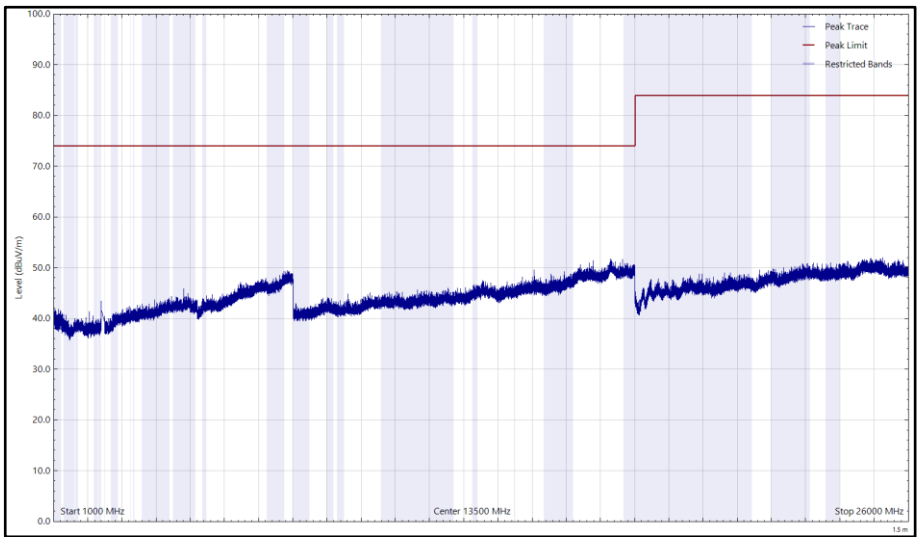

Figure 140 - 2402 MHz (CH0), DH5, iPA, Core 0, 1 GHz to 26 GHz, Vertical (Peak)

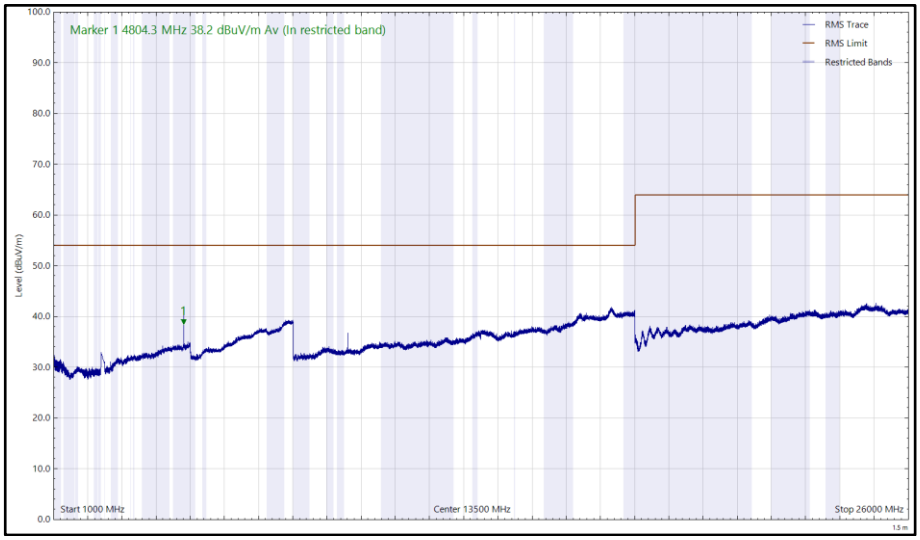

Figure 141 - 2402 MHz (CH0), DH5, iPA, Core 0, 1 GHz to 26 GHz, Vertical (rms)

Frequency (MHz)	Level (dBuv/m)	Limit (dBuv/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
70.423	20.2	40.0	-19.9	Q-Peak	156	103	Vertical
4881.994	37.1	54.0	-16.9	CISPR Avg	1	296	Vertical
4882.417	48.2	74.0	-25.8	Peak	360	315	Vertical

Table 56 - 2441 MHz (CH39), DH5, iPA, Core 0, 30 MHz to 26 GHz

No other emissions found within 6 dB of the limit.

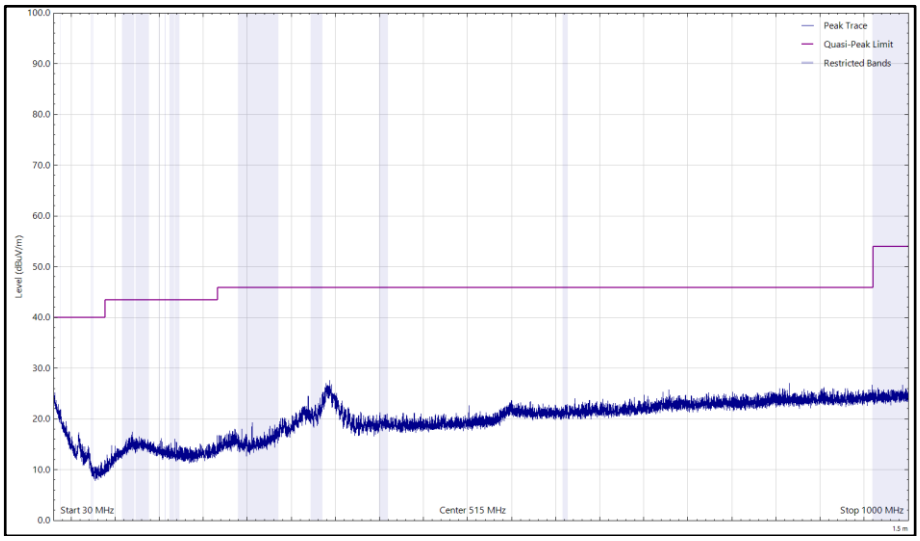

Figure 142 - 2441 MHz (CH39), DH5, iPA, Core 0, 30 MHz to 1 GHz, Horizontal (Peak)

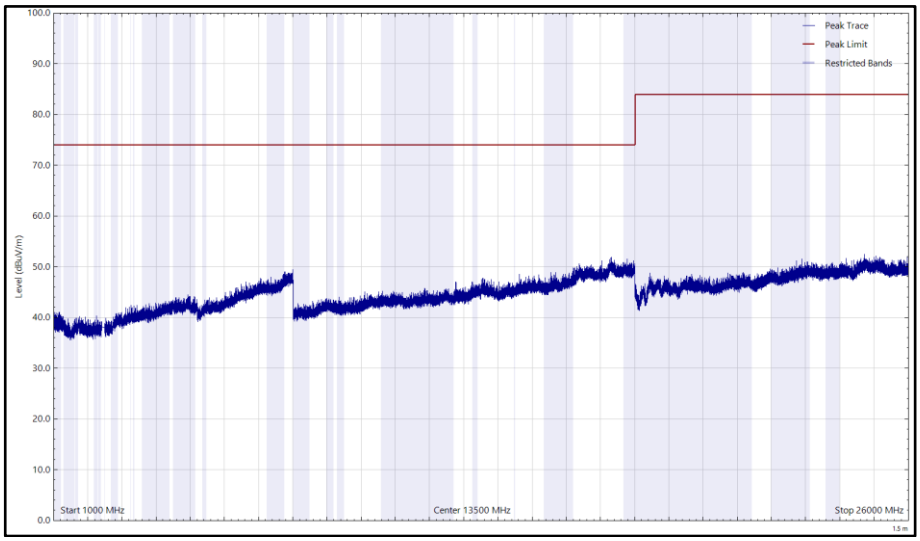

Figure 143 - 2441 MHz (CH39), DH5, iPA, Core 0, 1 GHz to 26 GHz, Horizontal (Peak)

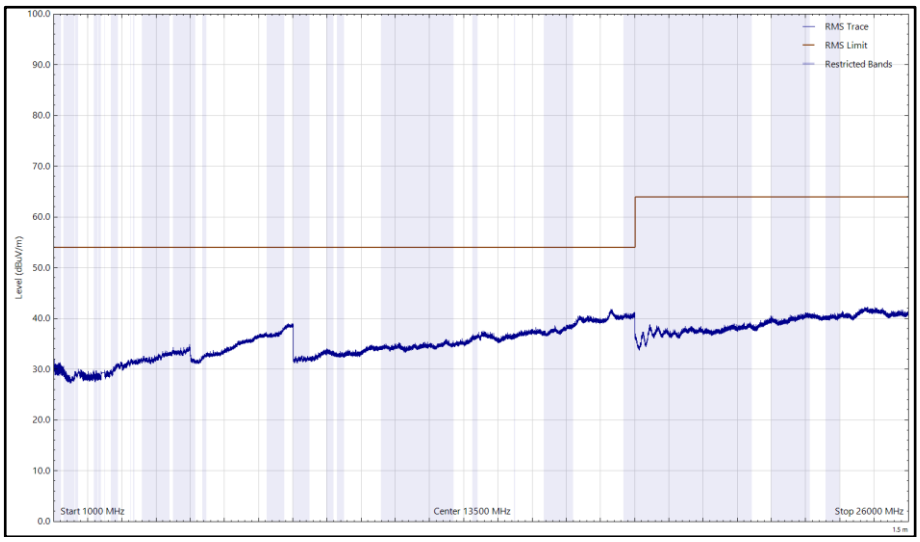

Figure 144 - 2441 MHz (CH39), DH5, iPA, Core 0, 1 GHz to 26 GHz, Horizontal (rms)

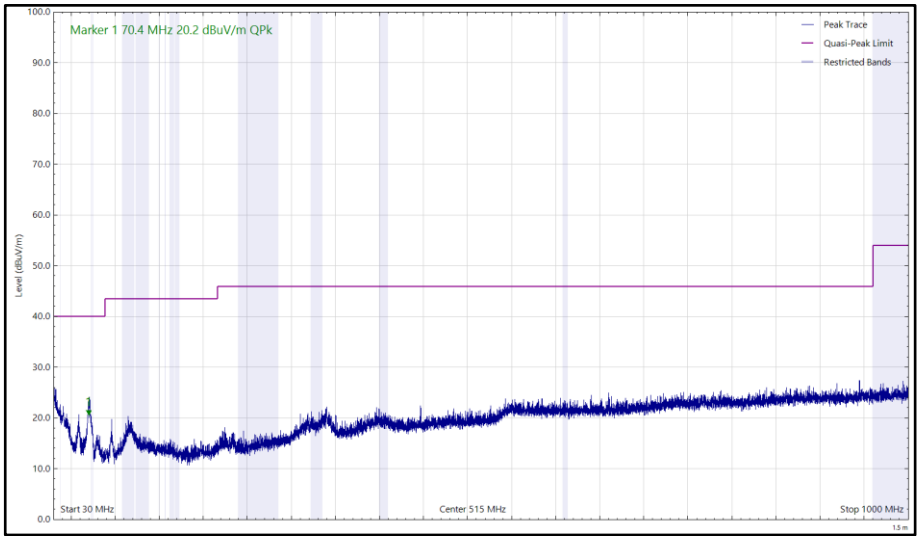

Figure 145 - 2441 MHz (CH39), DH5, iPA, Core 0, 30 MHz to 1 GHz, Vertical (Peak)

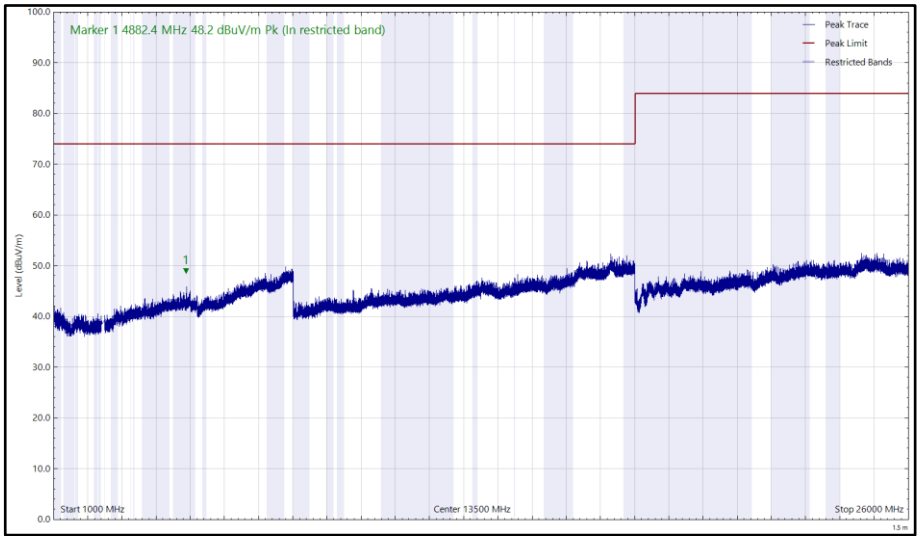

Figure 146 - 2441 MHz (CH39), DH5, iPA, Core 0, 1 GHz to 26 GHz, Vertical (Peak)

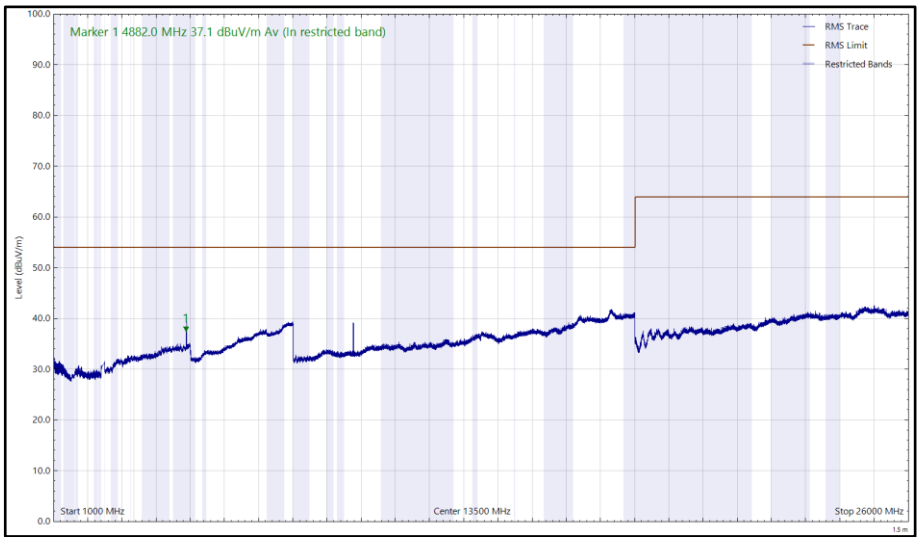

Figure 147 - 2441 MHz (CH39), DH5, iPA, Core 0, 1 GHz to 26 GHz, Vertical (rms)

Frequency (MHz)	Level (dBuv/m)	Limit (dBuv/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4960.072	37.7	54.0	-16.3	CISPR Avg	356	297	Vertical

Table 57 - 2480 MHz (CH78), DH5, iPA, Core 0, 1 GHz to 26 GHz

No other emissions found within 6 dB of the limit.

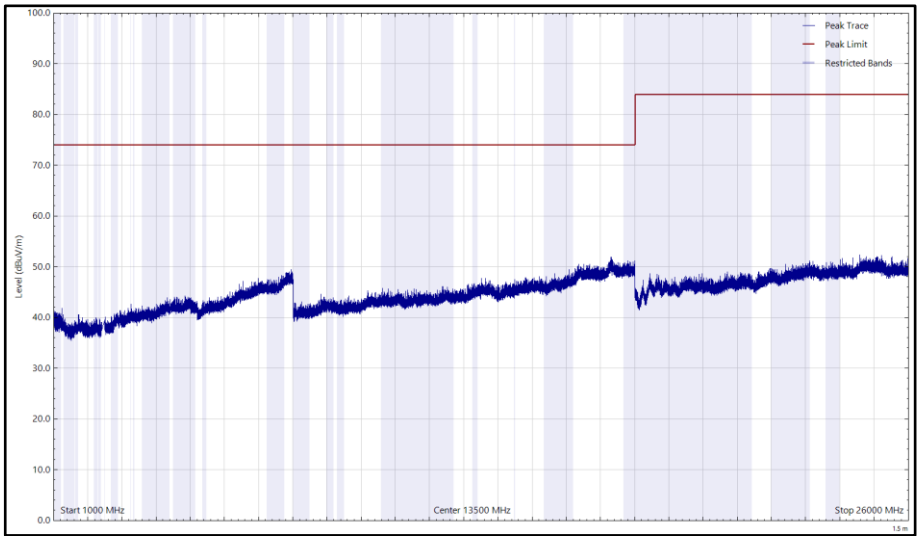

Figure 148 - 2480 MHz (CH78), DH5, iPA, Core 0, 1 GHz to 26 GHz, Horizontal (Peak)

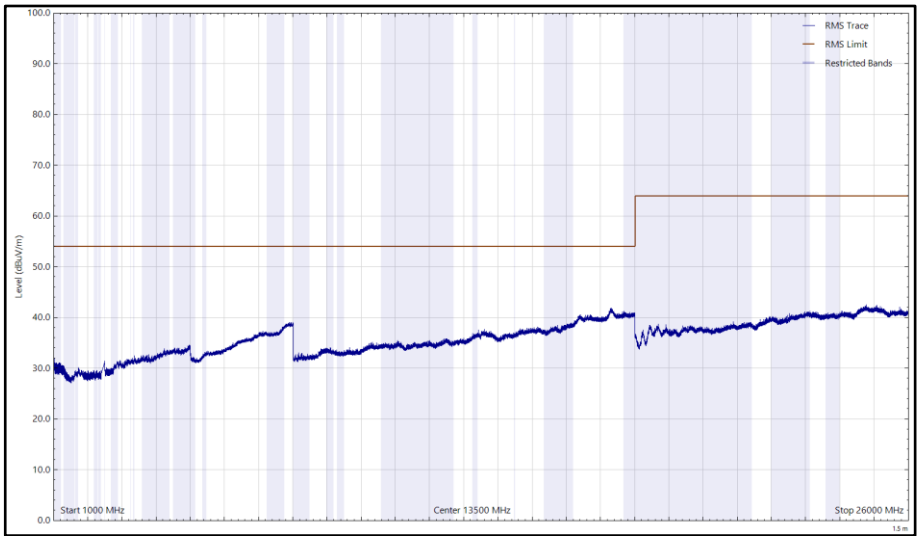

Figure 149 - 2480 MHz (CH78), DH5, iPA, Core 0, 1 GHz to 26 GHz, Horizontal (rms)

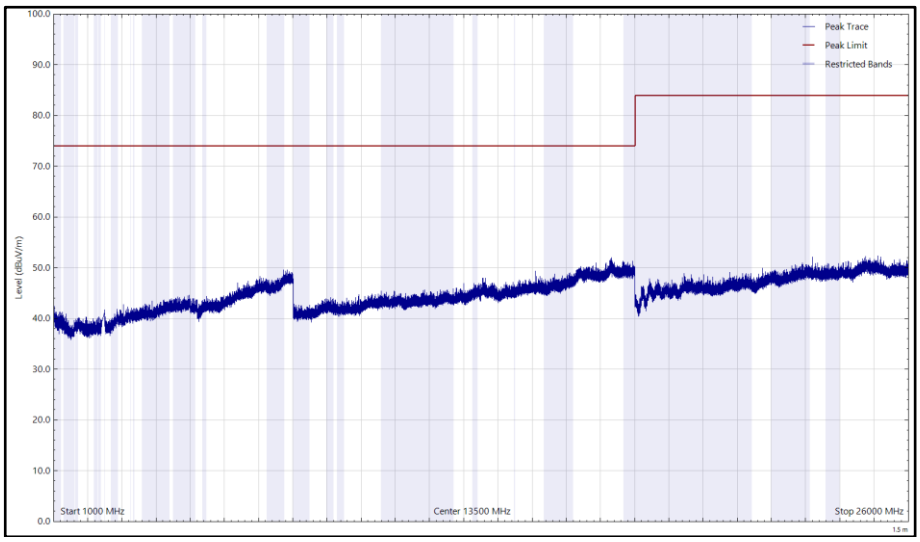

Figure 150 - 2480 MHz (CH78), DH5, iPA, Core 0, 1 GHz to 26 GHz, Vertical (Peak)

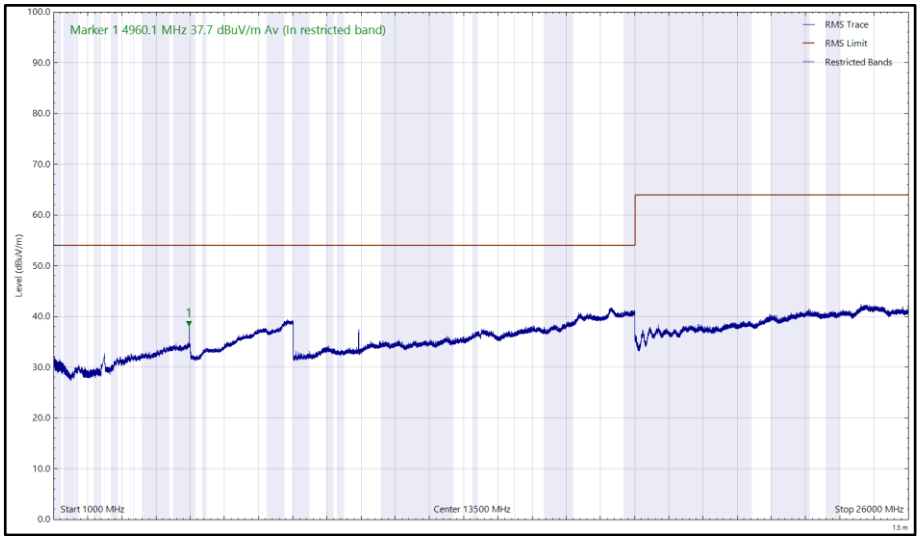

Figure 151 - 2480 MHz (CH78), DH5, iPA, Core 0, 1 GHz to 26 GHz, Vertical (rms)

Frequency (MHz)	Level (dBuv/m)	Limit (dBuv/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4803.406	33.1	54.0	-20.9	CISPR Avg	6	287	Vertical

Table 58 - 2402 MHz (CH0), DH5, iPA, Core 1, 1 GHz to 26 GHz

No other emissions found within 6 dB of the limit.

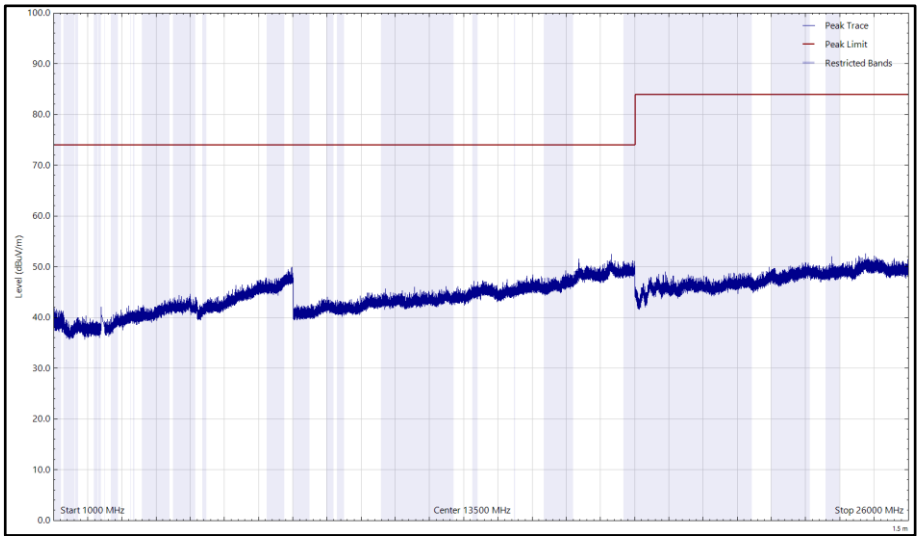

Figure 152 - 2402 MHz (CH0), DH5, iPA, Core 1, 1 GHz to 26 GHz, Horizontal (Peak)

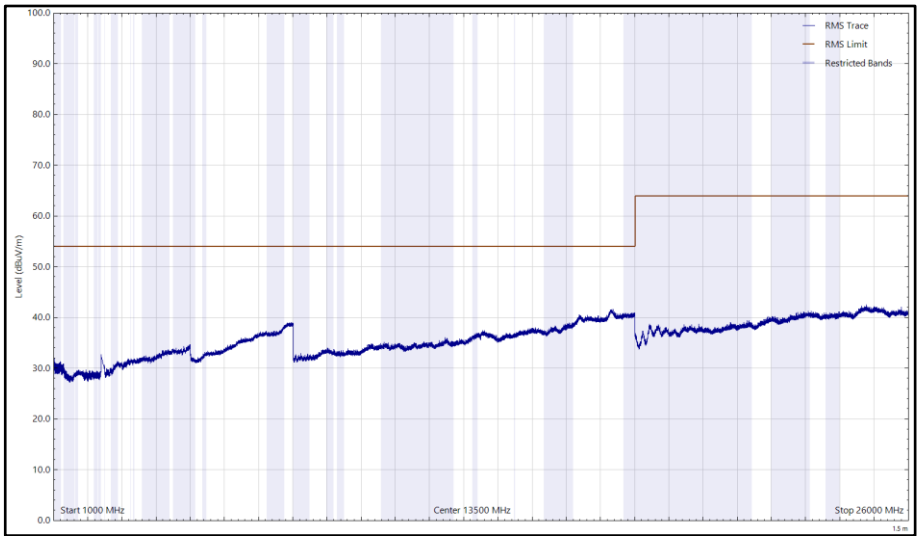

Figure 153 - 2402 MHz (CH0), DH5, iPA, Core 1, 1 GHz to 26 GHz, Horizontal (rms)

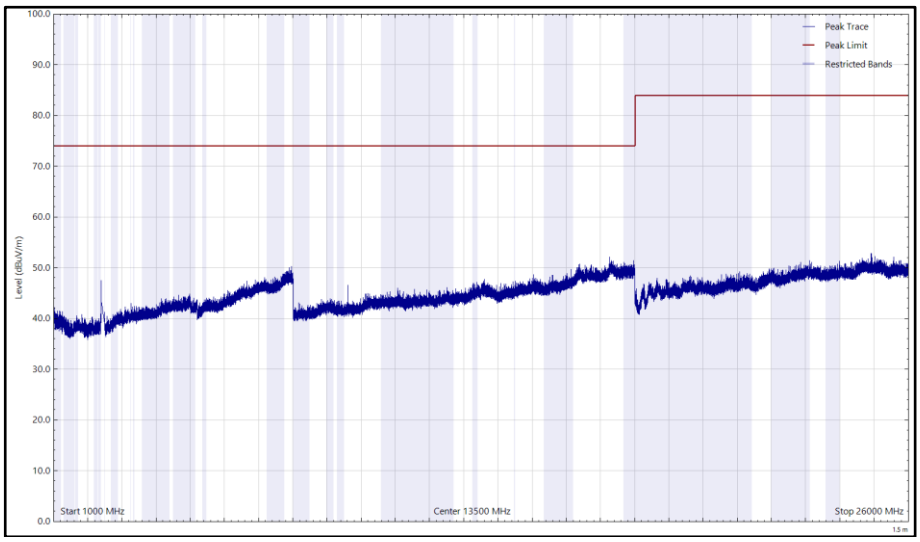

Figure 154 - 2402 MHz (CH0), DH5, iPA, Core 1, 1 GHz to 26 GHz, Vertical (Peak)

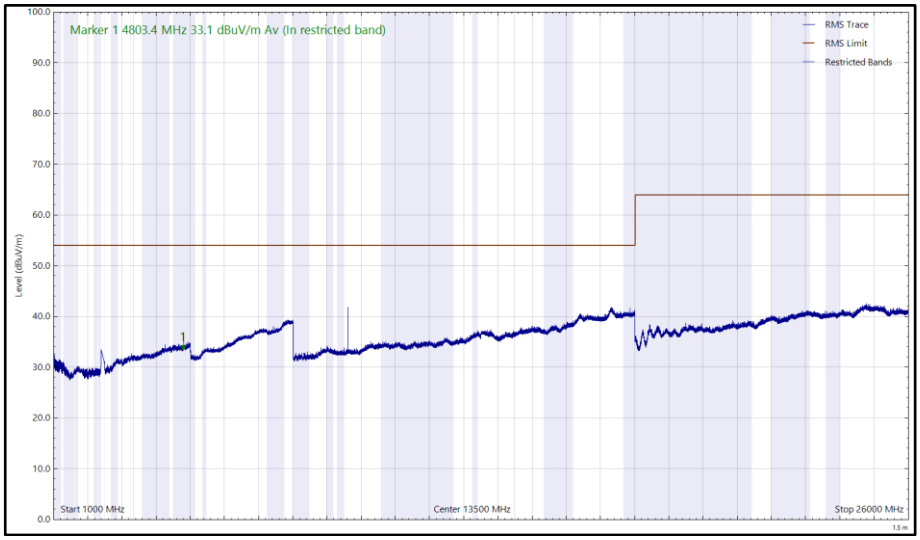

Figure 155 - 2402 MHz (CH0), DH5, iPA, Core 1, 1 GHz to 26 GHz, Vertical (rms)

Frequency (MHz)	Level (dBuv/m)	Limit (dBuv/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
70.314	21.1	40.0	-18.9	Q-Peak	93	102	Vertical
4882.357	38.9	54.0	-15.1	CISPR Avg	6	310	Vertical

Table 59 - 2441 MHz (CH39), DH5, iPA, Core 1, 30 MHz to 26 GHz

No other emissions found within 6 dB of the limit.

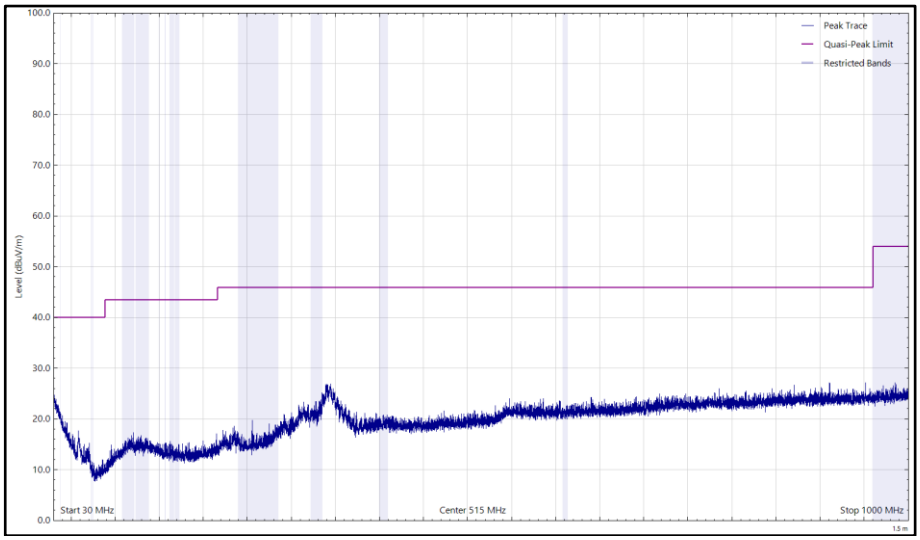

Figure 156 - 2441 MHz (CH39), DH5, iPA, Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

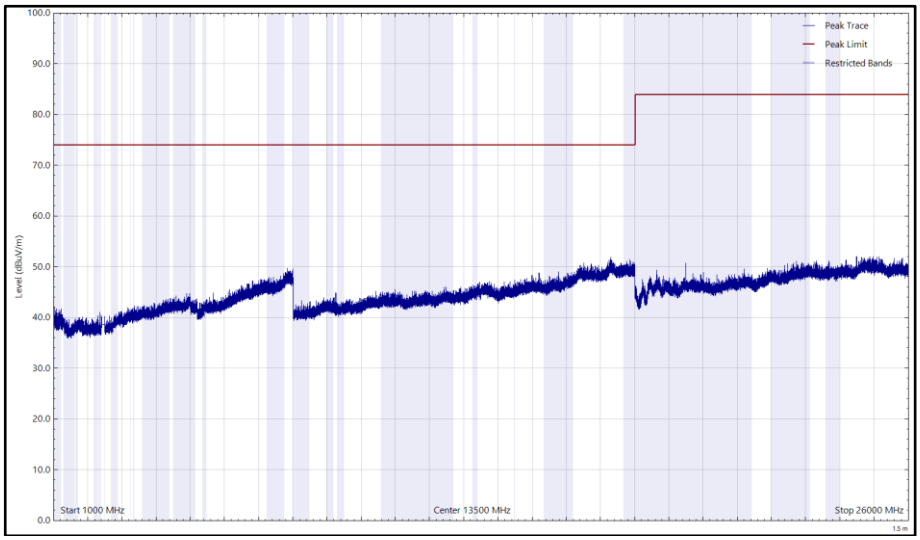

Figure 157 - 2441 MHz (CH39), DH5, iPA, Core 1, 1 GHz to 26 GHz, Horizontal (Peak)

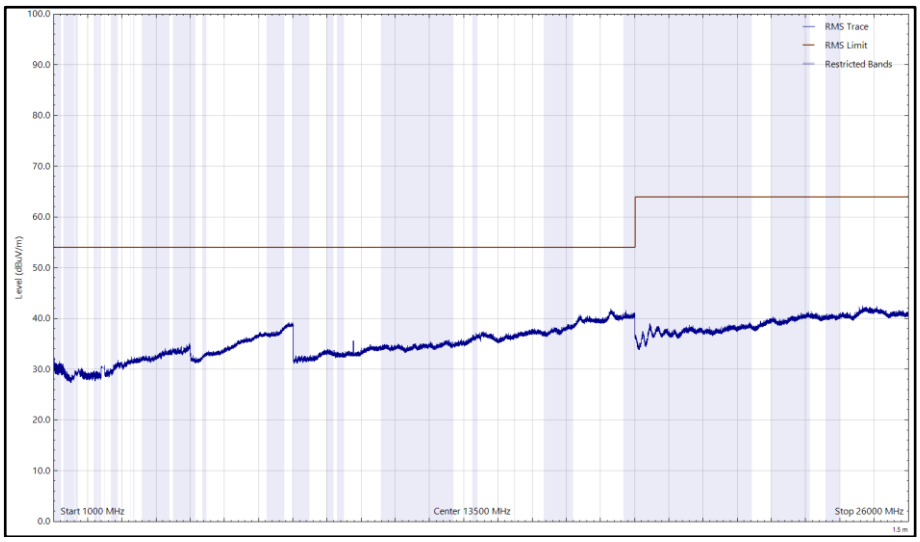

Figure 158 - 2441 MHz (CH39), DH5, iPA, Core 1, 1 GHz to 26 GHz, Horizontal (rms)

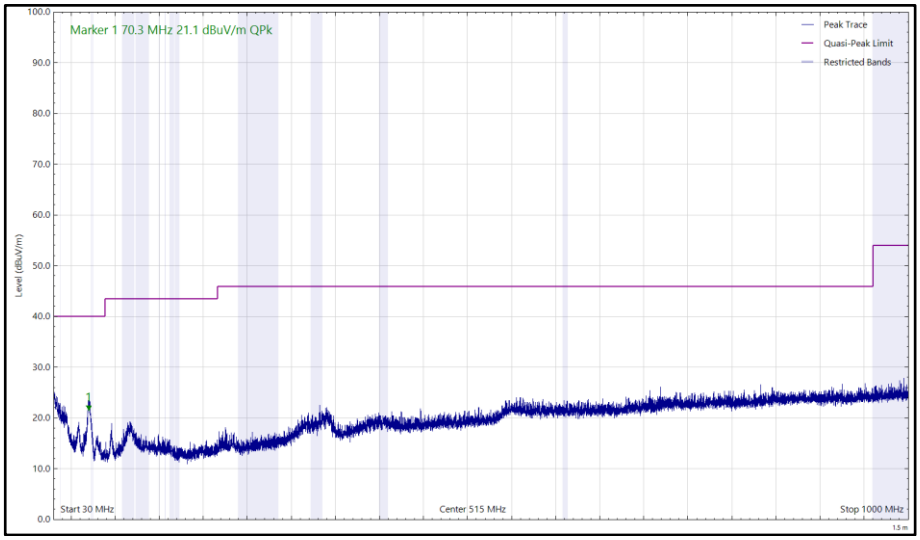

Figure 159 - 2441 MHz (CH39), DH5, iPA, Core 1, 30 MHz to 1 GHz, Vertical (Peak)

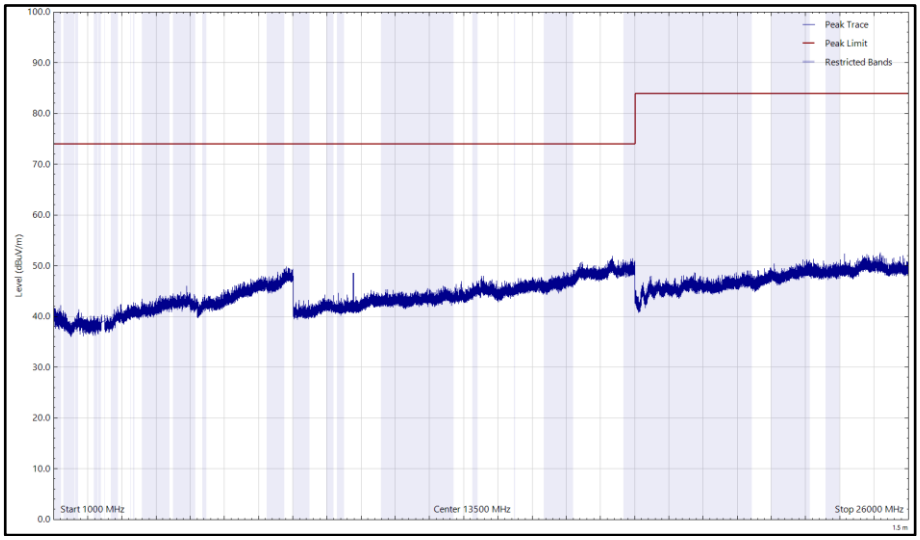

Figure 160 - 2441 MHz (CH39), DH5, iPA, Core 1, 1 GHz to 26 GHz, Vertical (Peak)

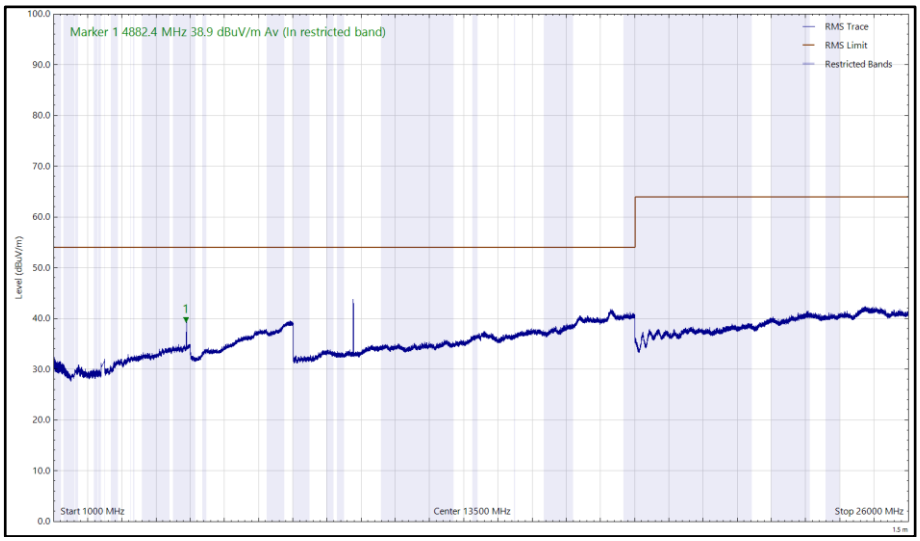

Figure 161 - 2441 MHz (CH39), DH5, iPA, Core 1, 1 GHz to 26 GHz, Vertical (rms)

Frequency (MHz)	Level (dBuv/m)	Limit (dBuv/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4959.642	39.3	54.0	-14.7	CISPR Avg	359	301	Vertical

Table 60 - 2480 MHz (CH78), DH5, iPA, Core 1, 1 GHz to 26 GHz

No other emissions found within 6 dB of the limit.

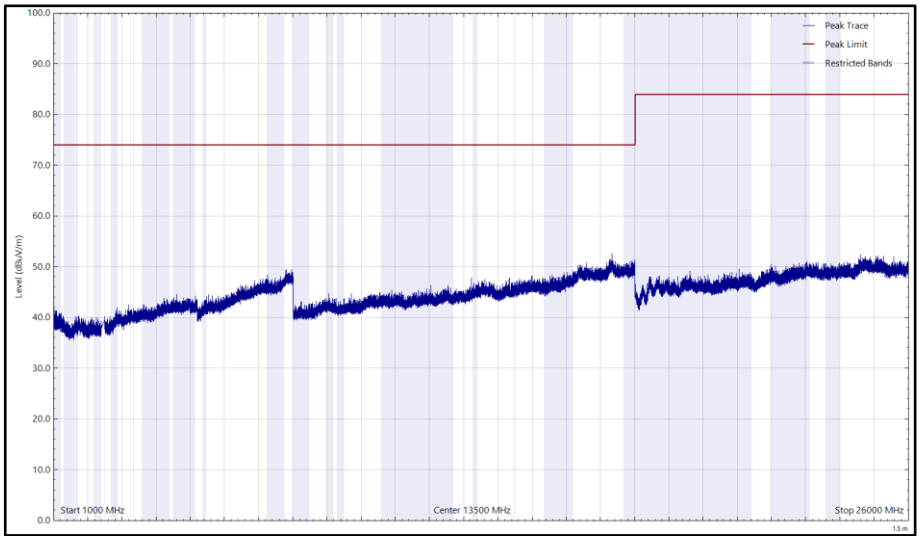

Figure 162 - 2480 MHz (CH78), DH5, iPA, Core 1, 1 GHz to 26 GHz, Horizontal (Peak)

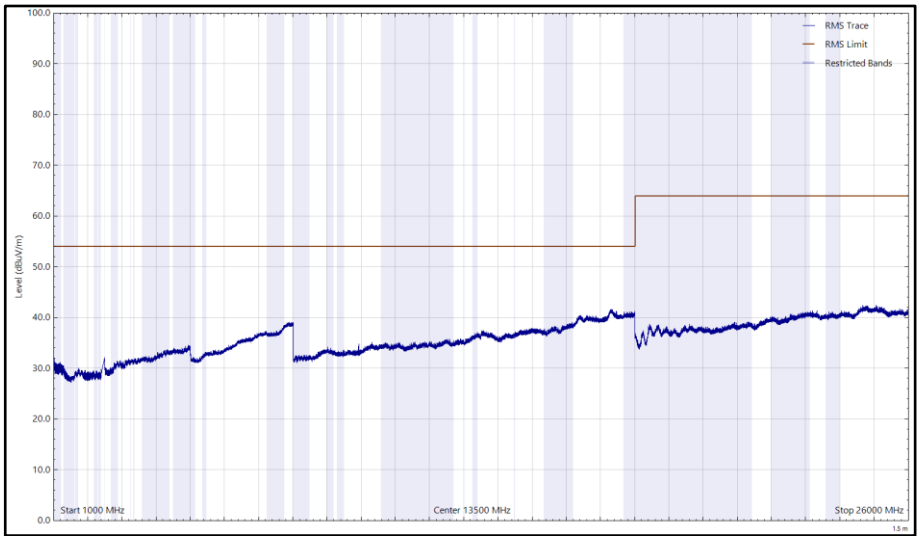

Figure 163 - 2480 MHz (CH78), DH5, iPA, Core 1, 1 GHz to 26 GHz, Horizontal (rms)

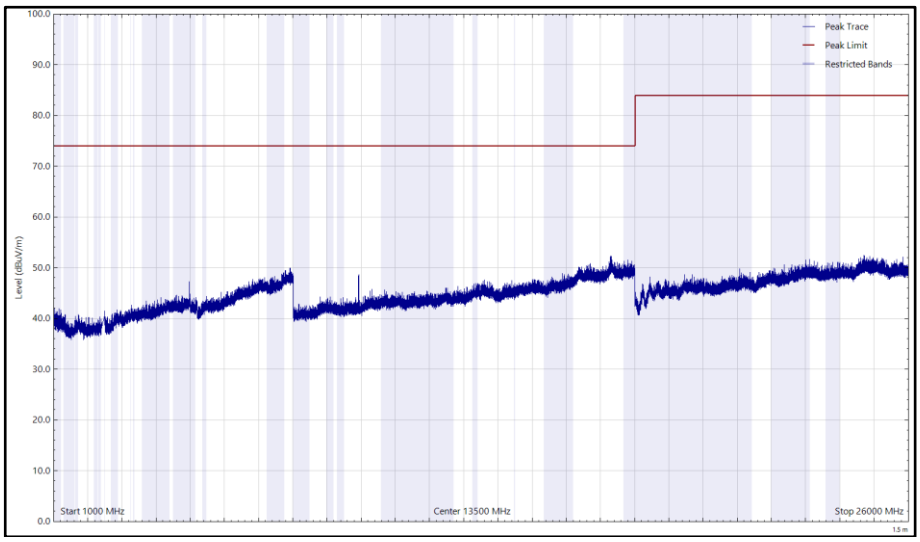

Figure 164 - 2480 MHz (CH78), DH5, iPA, Core 1, 1 GHz to 26 GHz, Vertical (Peak)

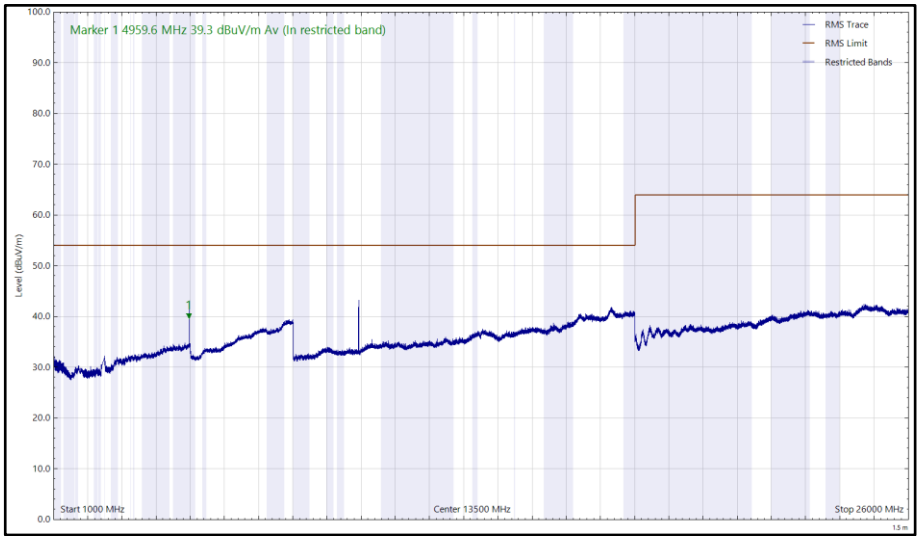

Figure 165 - 2480 MHz (CH78), DH5, iPA, Core 1, 1 GHz to 26 GHz, Vertical (rms)

ePA

Frequency (MHz)	Level (dBuv/m)	Limit (dBuv/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4804.029	48.6	74.0	-25.4	Peak	353	339	Vertical
4804.119	39.0	54.0	-15.0	CISPR Avg	348	275	Vertical

Table 61 - 2402 MHz (CH0), DH5, ePA, Core 0, 1 GHz to 26 GHz

No other emissions found within 6 dB of the limit.

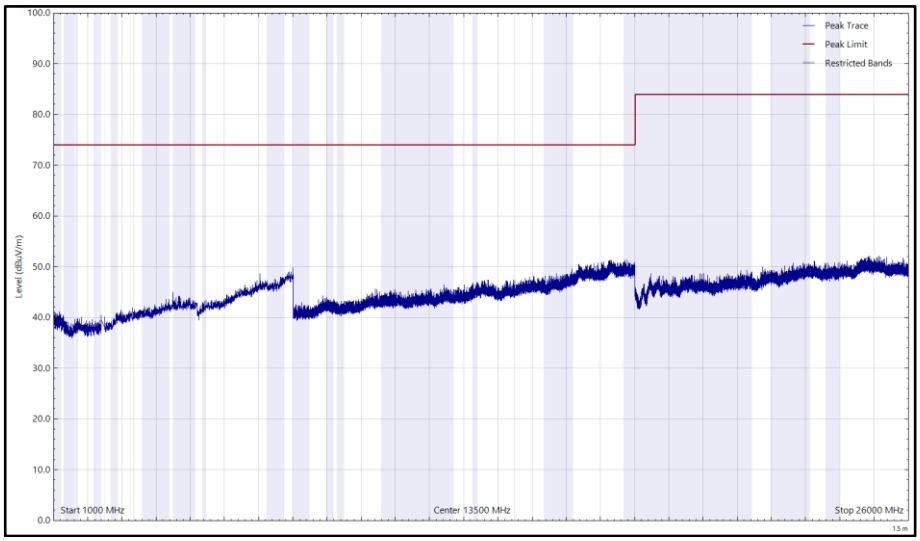

Figure 166 - 2402 MHz (CH0), DH5, ePA, Core 0, 1 GHz to 26 GHz, Horizontal (Peak)

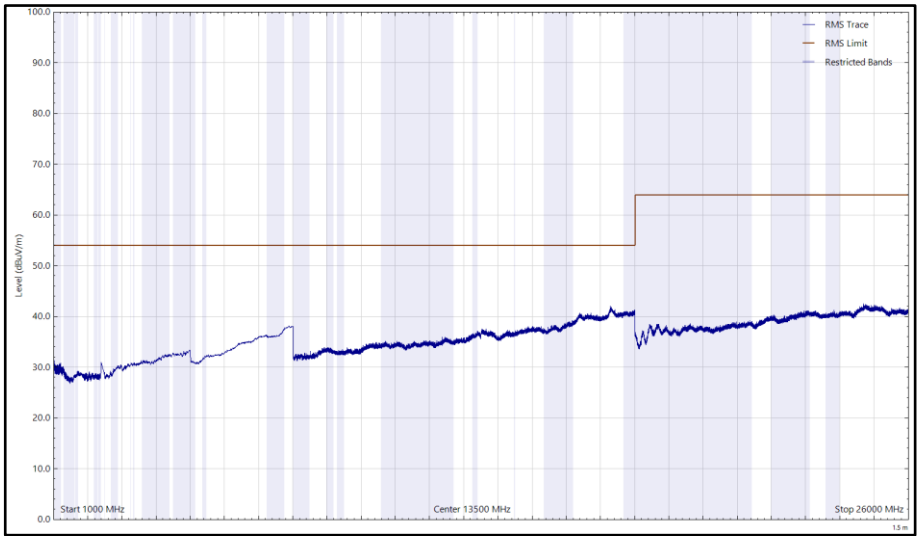

Figure 167 - 2402 MHz (CH0), DH5, ePA, Core 0, 1 GHz to 26 GHz, Horizontal (rms)

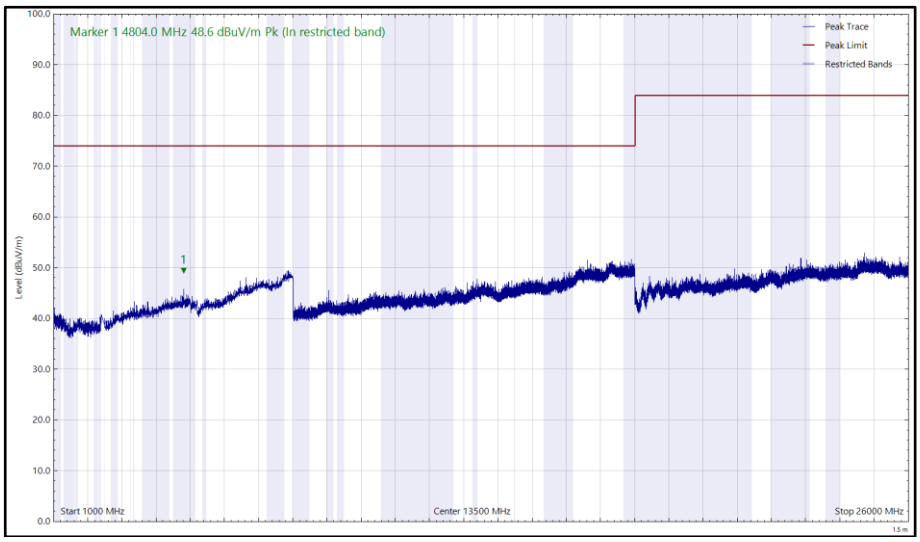

Figure 168 - 2402 MHz (CH0), DH5, ePA, Core 0, 1 GHz to 26 GHz, Vertical (Peak)

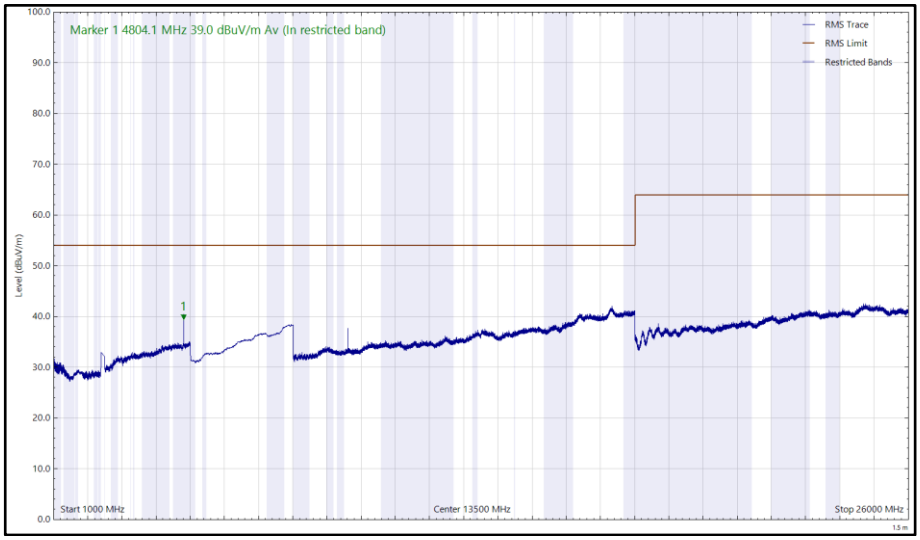

Figure 169 - 2402 MHz (CH0), DH5, ePA, Core 0, 1 GHz to 26 GHz, Vertical (rms)

Frequency (MHz)	Level (dBuv/m)	Limit (dBuv/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
70.357	20.5	40.0	-19.5	Q-Peak	113	125	Vertical
340.660	24.1	46.0	-21.9	Q-Peak	340	100	Horizontal
4881.716	48.3	74.0	-25.7	Peak	349	322	Vertical
4881.920	39.2	54.0	-14.8	CISPR Avg	352	288	Vertical

Table 62 - 2441 MHz (CH39), DH5, ePA, Core 0, 30 MHz to 26 GHz

No other emissions found within 6 dB of the limit.

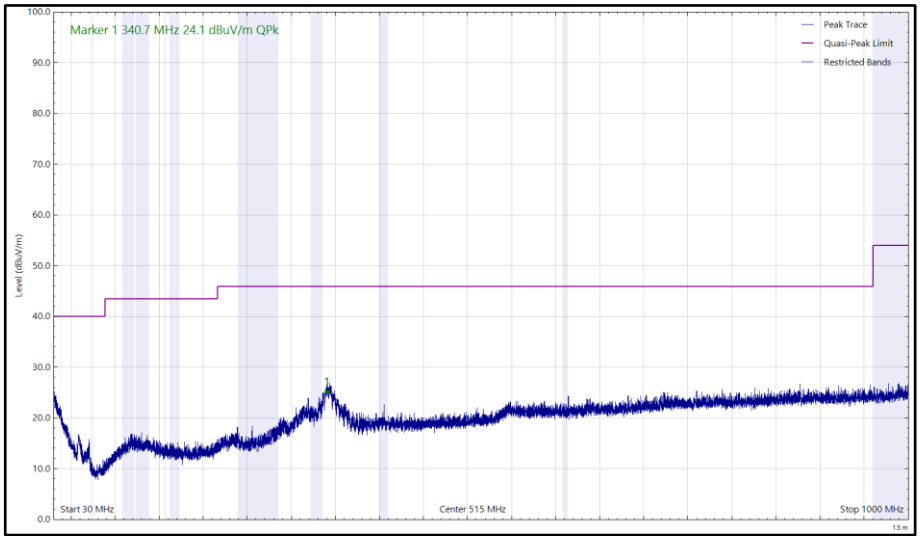

Figure 170 - 2441 MHz (CH39), DH5, ePA, Core 0, 30 MHz to 1 GHz, Horizontal (Peak)

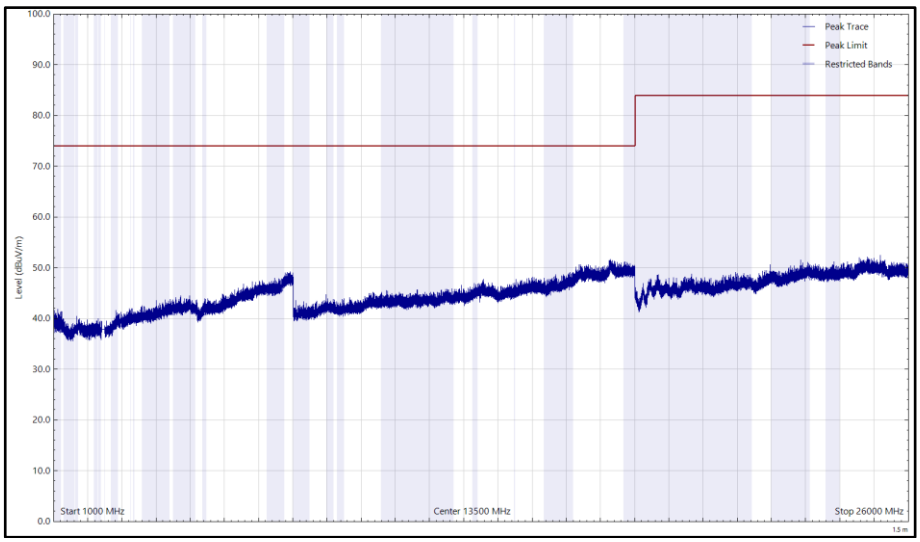

Figure 171 - 2441 MHz (CH39), DH5, ePA, Core 0, 1 GHz to 26 GHz, Horizontal (Peak)

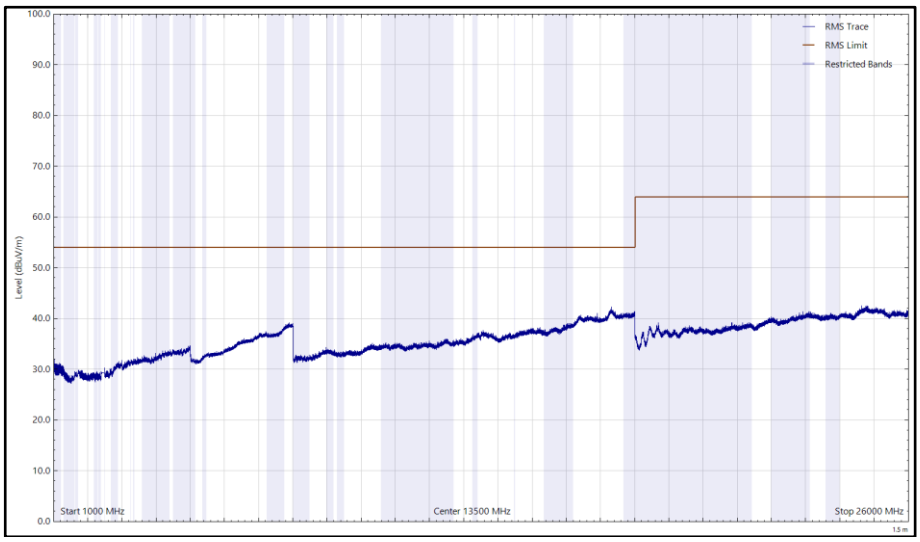

Figure 172 - 2441 MHz (CH39), DH5, ePA, Core 0, 1 GHz to 26 GHz, Horizontal (rms)

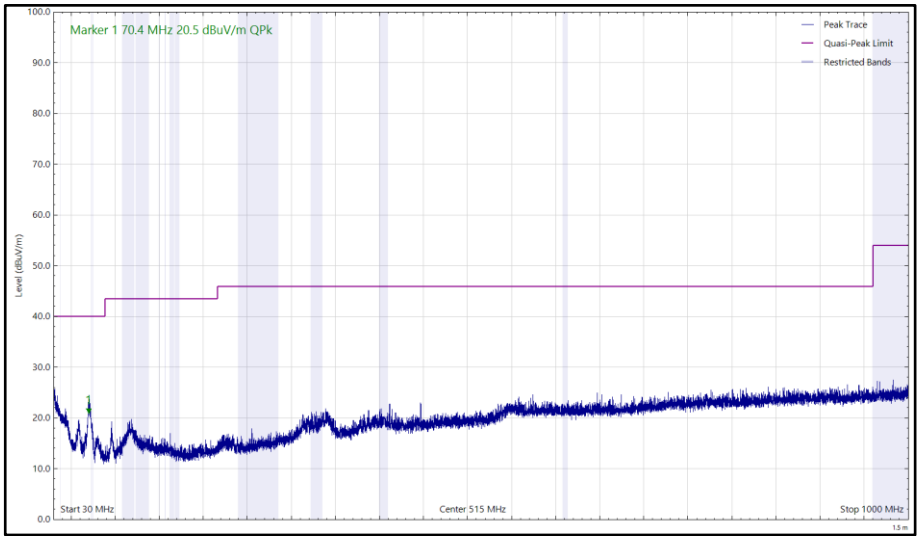

Figure 173 - 2441 MHz (CH39), DH5, ePA, Core 0, 30 MHz to 1 GHz, Vertical (Peak)

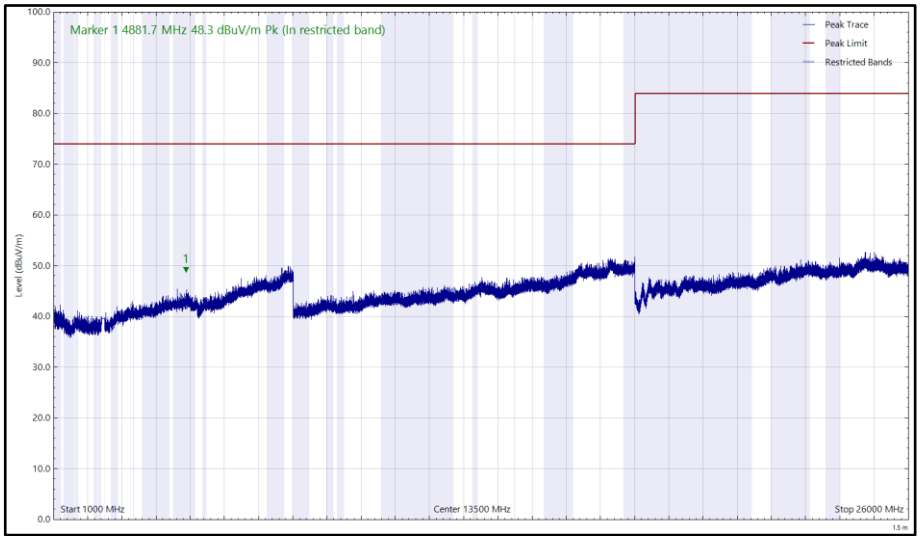

Figure 174 - 2441 MHz (CH39), DH5, ePA, Core 0, 1 GHz to 26 GHz, Vertical (Peak)

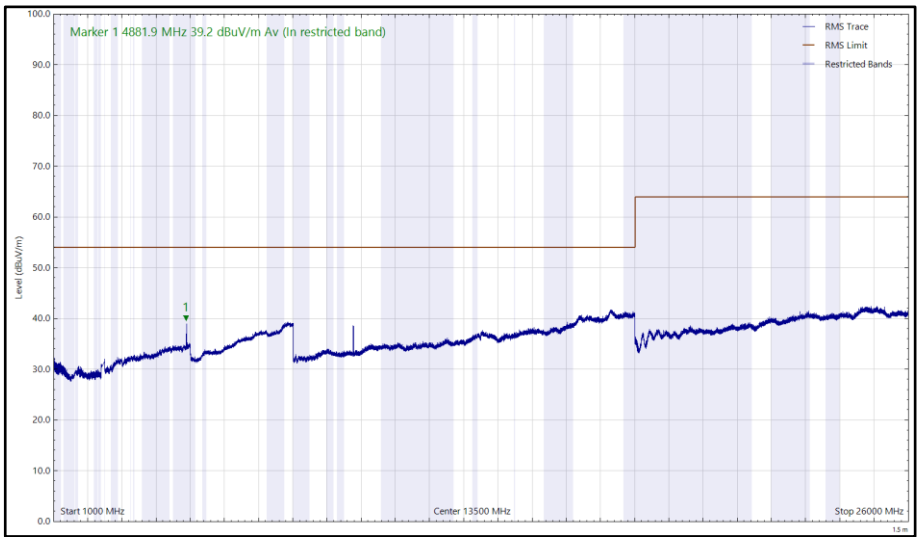

Figure 175 - 2441 MHz (CH39), DH5, ePA, Core 0, 1 GHz to 26 GHz, Vertical (rms)

Frequency (MHz)	Level (dBuv/m)	Limit (dBuv/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4959.977	41.4	54.0	-12.6	CISPR Avg	0	275	Vertical

Table 63 - 2480 MHz (CH78), DH5, ePA, Core 0, 1 GHz to 26 GHz

No other emissions found within 6 dB of the limit.

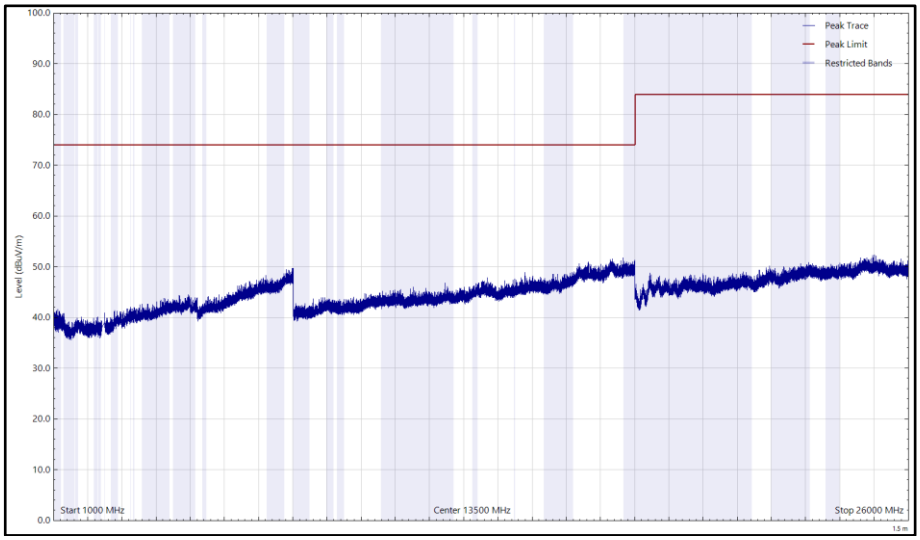

Figure 176 - 2480 MHz (CH78), DH5, ePA, Core 0, 1 GHz to 26 GHz, Horizontal (Peak)

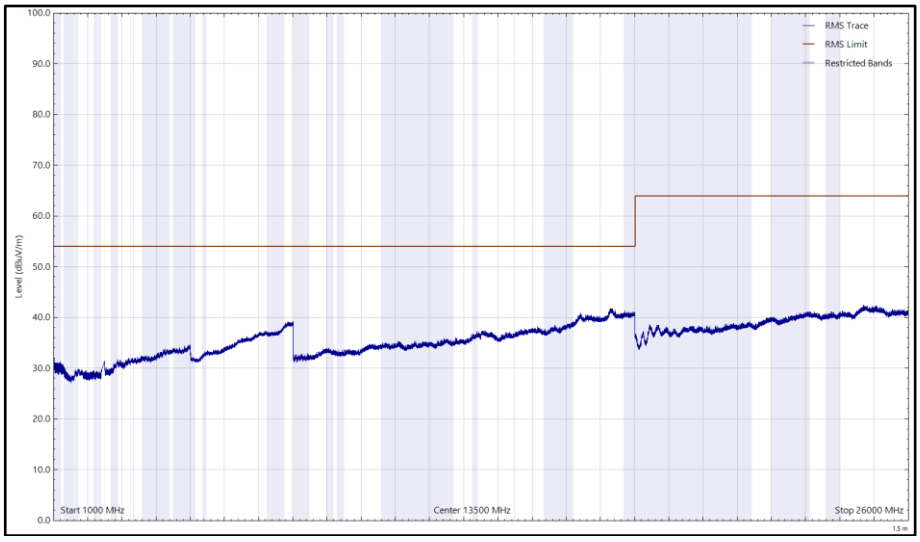

Figure 177 - 2480 MHz (CH78), DH5, ePA, Core 0, 1 GHz to 26 GHz, Horizontal (rms)

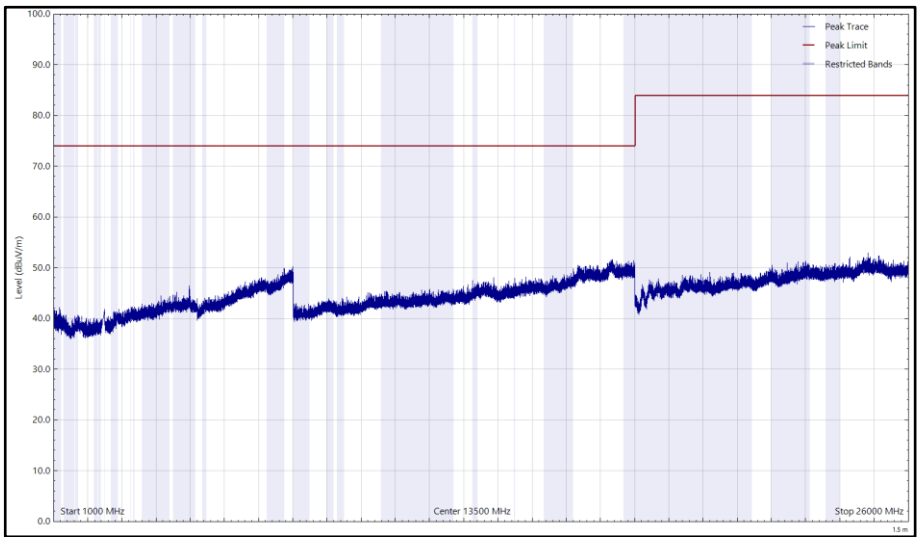

Figure 178 - 2480 MHz (CH78), DH5, ePA, Core 0, 1 GHz to 26 GHz, Vertical (Peak)

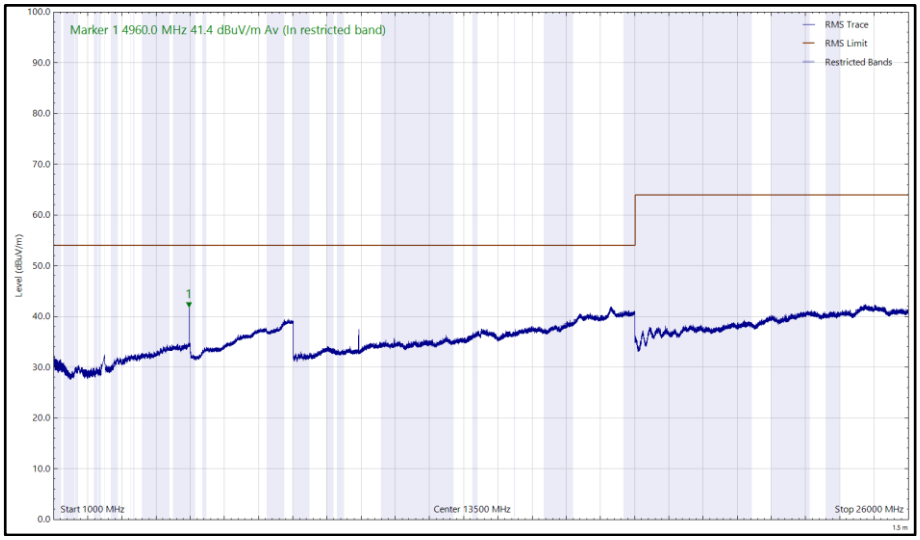

Figure 179 - 2480 MHz (CH78), DH5, ePA, Core 0, 1 GHz to 26 GHz, Vertical (rms)

Frequency (MHz)	Level (dBuv/m)	Limit (dBuv/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4804.221	30.6	54.0	-23.4	CISPR Avg	318	382	Vertical

Table 64 - 2402 MHz (CH0), DH5, ePA, Core 1, 1 GHz to 26 GHz

No other emissions found within 6 dB of the limit.

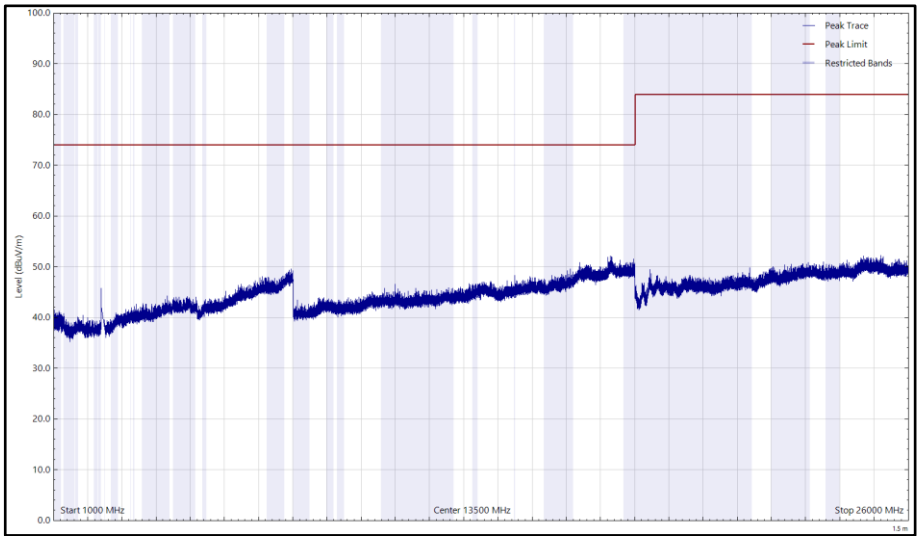

Figure 180 - 2402 MHz (CH0), DH5, ePA, Core 1, 1 GHz to 26 GHz, Horizontal (Peak)

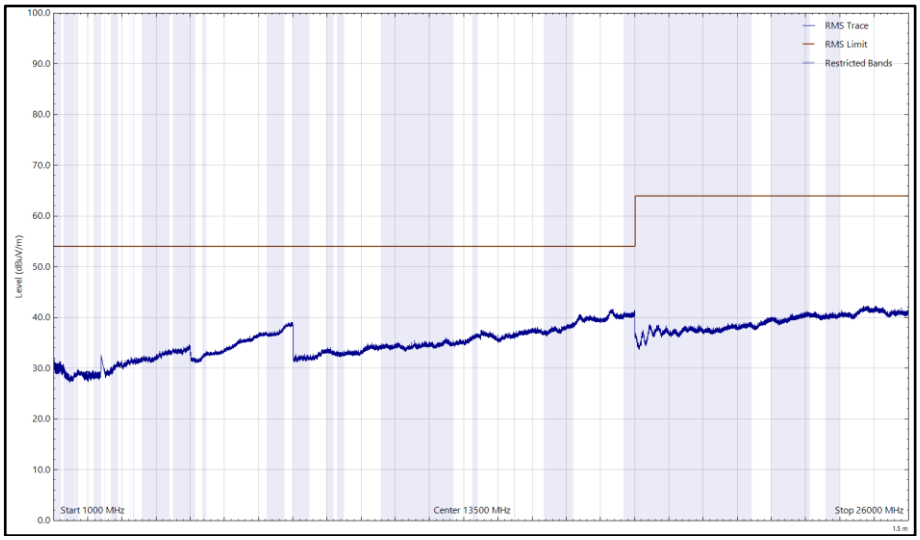

Figure 181 - 2402 MHz (CH0), DH5, ePA, Core 1, 1 GHz to 26 GHz, Horizontal (rms)

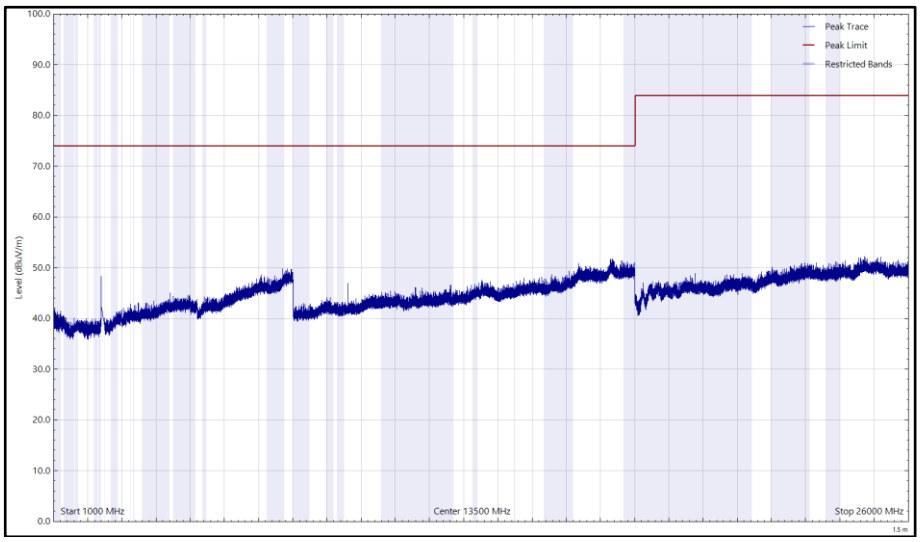

Figure 182 - 2402 MHz (CH0), DH5, ePA, Core 1, 1 GHz to 26 GHz, Vertical (Peak)

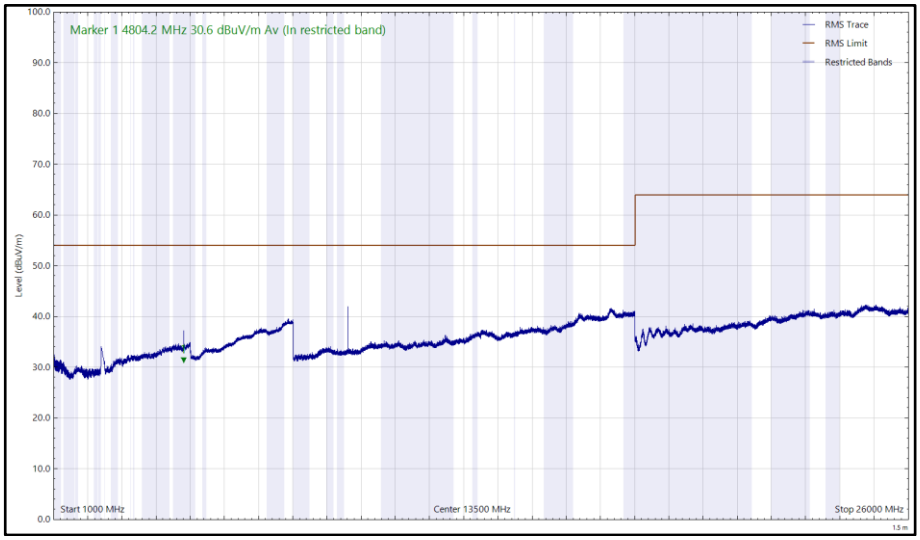

Figure 183 - 2402 MHz (CH0), DH5, ePA, Core 1, 1 GHz to 26 GHz, Vertical (rms)

Frequency (MHz)	Level (dBuv/m)	Limit (dBuv/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
70.274	20.3	40.0	-19.7	Q-Peak	141	101	Vertical
4882.557	34.1	54.0	-19.9	CISPR Avg	350	259	Vertical

Table 65 - 2441 MHz (CH39), DH5, ePA, Core 1, 30 MHz to 26 GHz

No other emissions found within 6 dB of the limit.

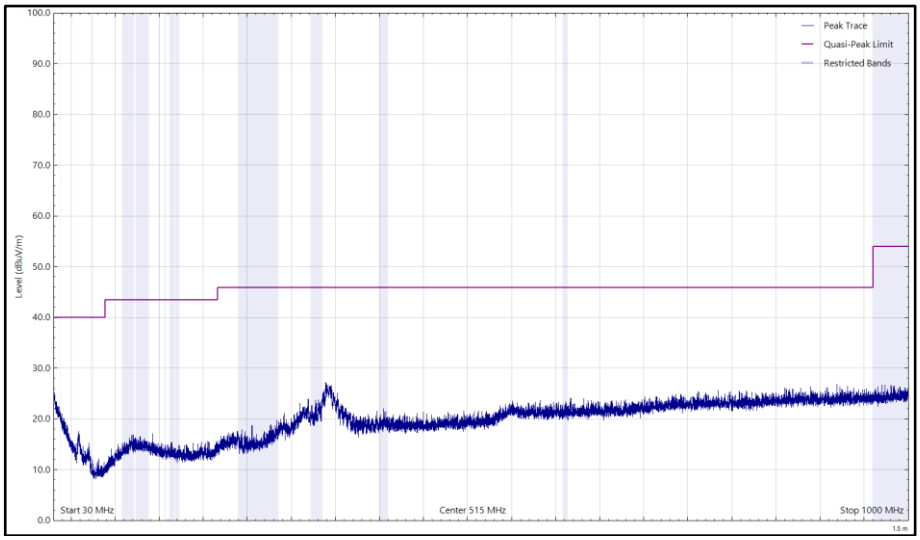

Figure 184 - 2441 MHz (CH39), DH5, ePA, Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

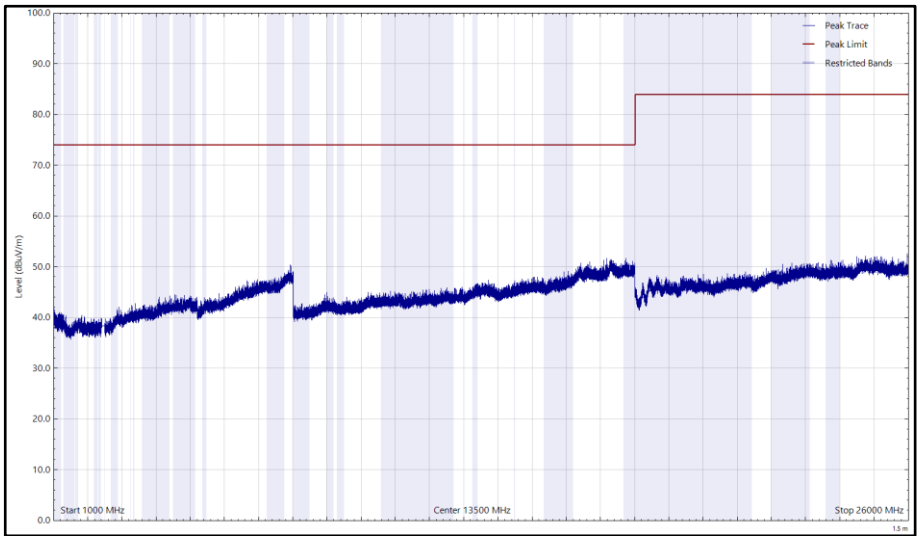

Figure 185 - 2441 MHz (CH39), DH5, ePA, Core 1, 1 GHz to 26 GHz, Horizontal (Peak)

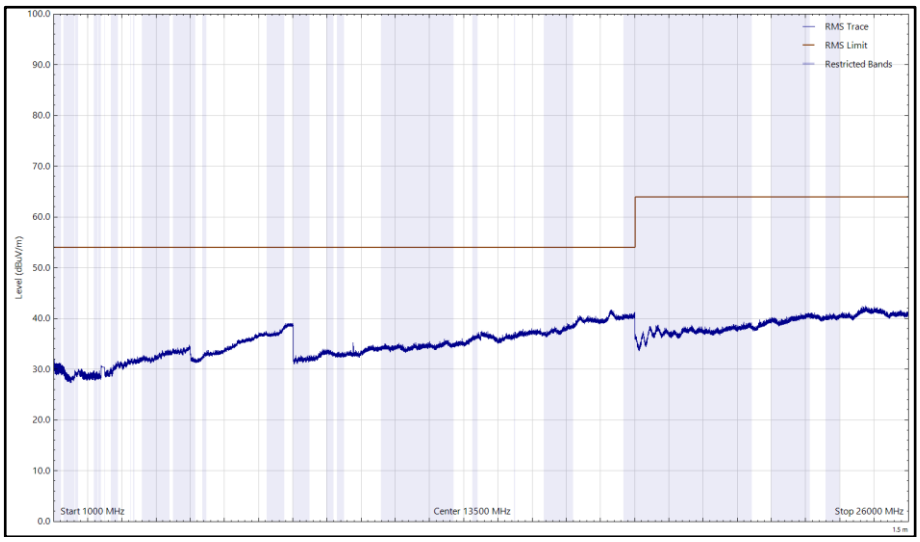

Figure 186 - 2441 MHz (CH39), DH5, ePA, Core 1, 1 GHz to 26 GHz, Horizontal (rms)

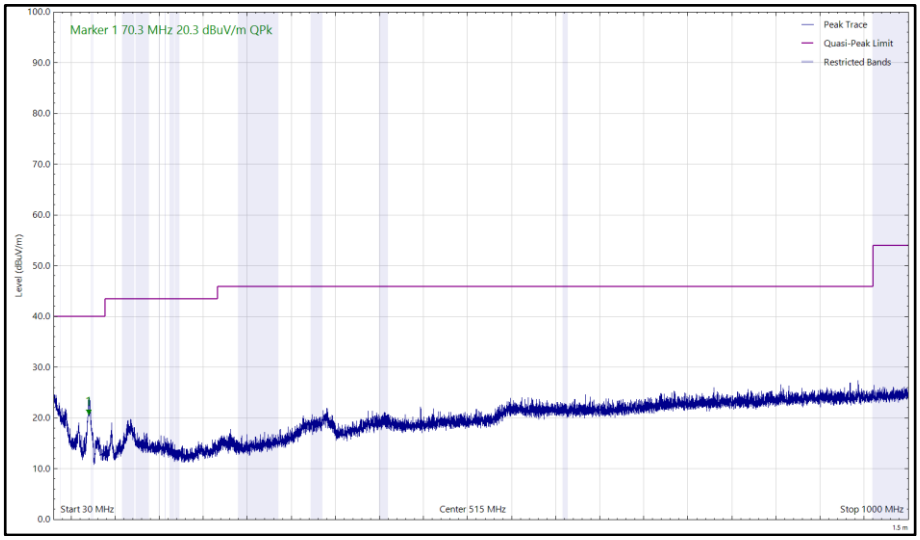

Figure 187 - 2441 MHz (CH39), DH5, ePA, Core 1, 30 MHz to 1 GHz, Vertical (Peak)

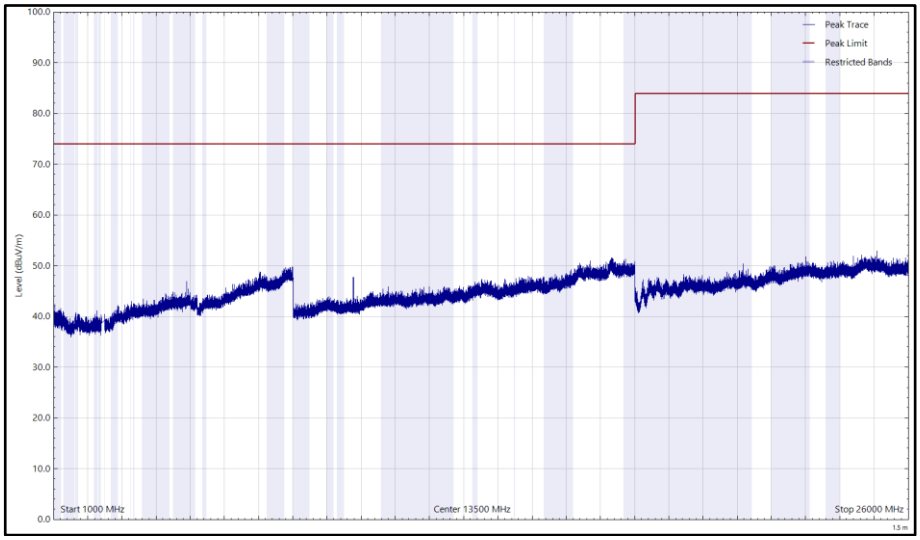

Figure 188 - 2441 MHz (CH39), DH5, ePA, Core 1, 1 GHz to 26 GHz, Vertical (Peak)

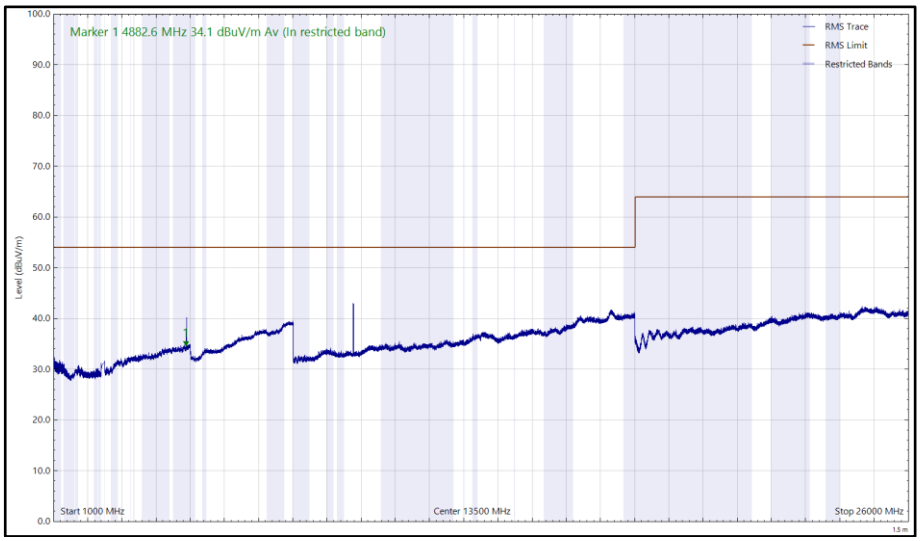

Figure 189 - 2441 MHz (CH39), DH5, ePA, Core 1, 1 GHz to 26 GHz, Vertical (rms)

Frequency (MHz)	Level (dBuv/m)	Limit (dBuv/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4959.892	40.8	54.0	-13.2	CISPR Avg	358	307	Vertical

Table 66 - 2480 MHz (CH78), DH5, ePA, Core 1, 1 GHz to 26 GHz

No other emissions found within 6 dB of the limit.

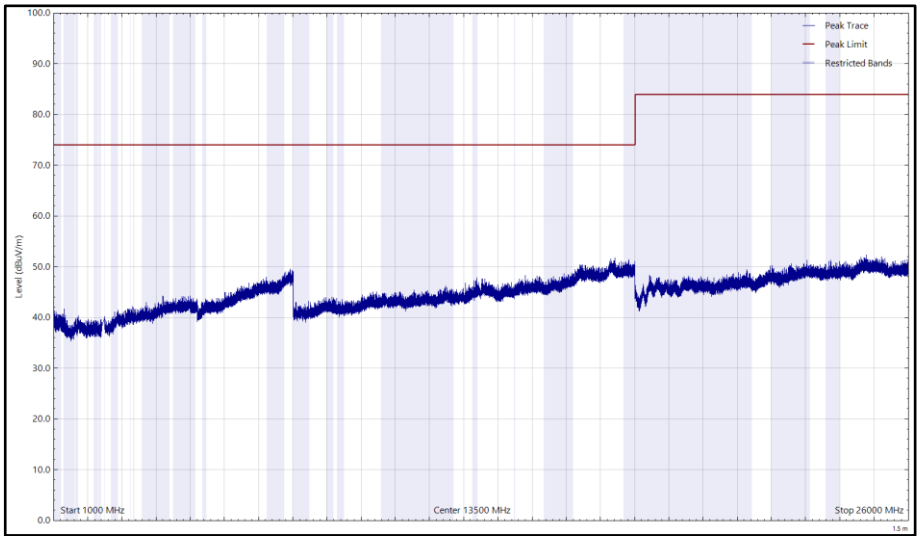

Figure 190 - 2480 MHz (CH78), DH5, ePA, Core 1, 1 GHz to 26 GHz, Horizontal (Peak)

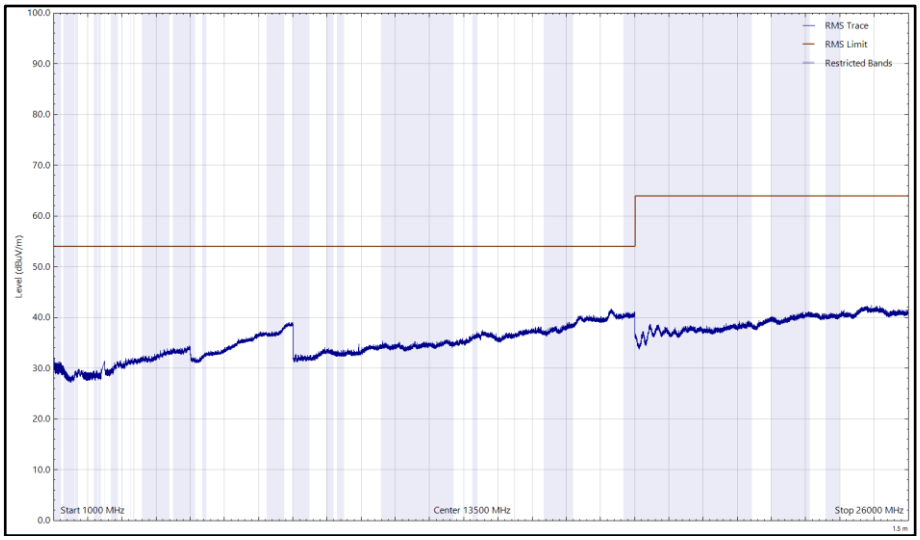

Figure 191 - 2480 MHz (CH78), DH5, ePA, Core 1, 1 GHz to 26 GHz, Horizontal (rms)

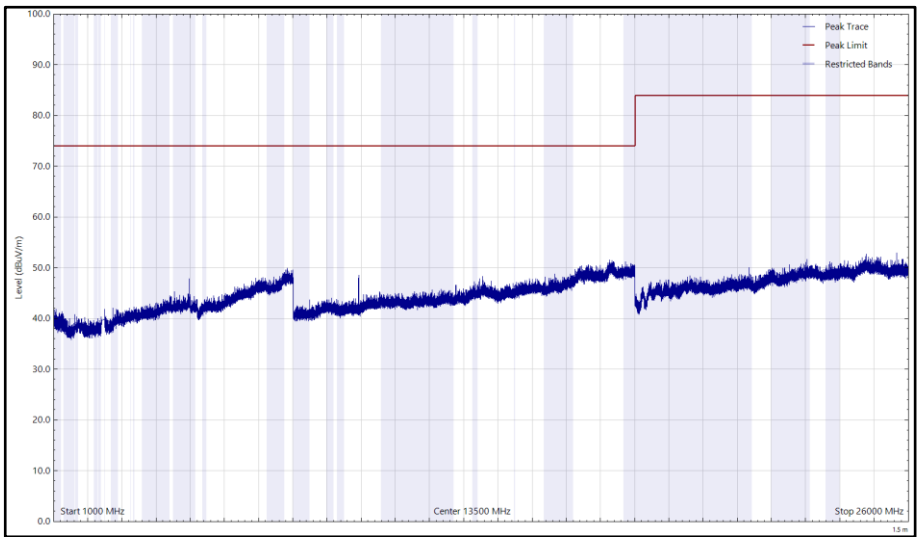

Figure 192 - 2480 MHz (CH78), DH5, ePA, Core 1, 1 GHz to 26 GHz, Vertical (Peak)

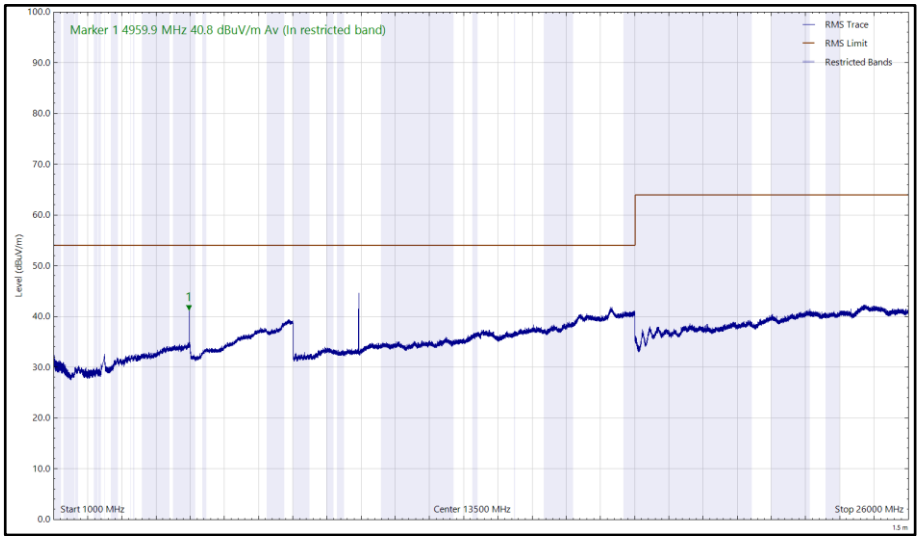

Figure 193 - 2480 MHz (CH78), DH5, ePA, Core 1, 1 GHz to 26 GHz, Vertical (rms)

FCC 47 CFR Part 15, Limit Clause 15.247 (d)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

Attenuation below the general limits specified in § 15.209(a) is not required. 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)

ISED RSS-247, Limit Clause 5.5

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under Section 5.4(4), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

2.8.8 Test Location and Test Equipment Used

This test was carried out in EMC Chamber 5.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Due
Screened Room (5)	Rainford	Rainford	1545	36	23-Jan-2021
Turntable Controller	Inn-Co GmbH	CO 1000	1606	-	TU
Multimeter	Iso-tech	IDM101	2417	12	11-Nov-2020
Antenna with permanent attenuator (Bilog)	Chase	CBL6143	2904	24	30-Sep-2021
Tilt Antenna Mast	Maturo Gmbh	TAM 4.0-P	4811	-	TU
Double Ridge Broadband Horn Antenna	Schwarzbeck	BBHA 9120 B	4848	12	10-Mar-2021
Cable (18 GHz)	Rosenberger	LU7-036-1000	5031	12	22-Jul-2021
Band Reject Filter - 2.425 GHz	Wainwright	WRCGV14-2390-2400-2450-2460-50SS	5067	12	01-Oct-2020
Band Reject Filter - 2.4585 GHz	Wainwright	WRCGV14-2423.5-2433.5-2483.5-2493.5-50SS	5069	12	01-Oct-2020
EmX Emissions Software	TUV SUD	EmX	5125	-	Software
DRG Horn Antenna (7.5-18GHz)	Schwarzbeck	HWRD750	5216	12	10-Mar-2021
Horn Antenna (15-40GHz)	Schwarzbeck	BBHA 9170	5217	12	12-Oct-2020
Preamplifier (30 dB 18-40GHz)	Schwarzbeck	BBV 9721	5218	12	12-Oct-2020
Preamplifier (30dB 1GHz to 18GHz)	Schwarzbeck	BBV 9718 C	5261	12	07-Apr-2021
1m -SMA Cable	Junkosha	MWX221-01000AMSAMS/A	5513	12	01-Apr-2021
1m -SMA Cable	Junkosha	MWX221-01000AMSAMS/A	5515	12	01-Apr-2021
2m SMA Cable	Junkosha	MWX221-02000AMSAMS/A	5517	12	01-Apr-2021
8m N-Type Cable	Junkosha	MWX221-08000NMSNMS/B	5520	12	24-Mar-2021
2 m K Type Cable	Junkosha	MWX241-02000KMSKMS/A	5523	12	03-Apr-2021
EMI Test Receiver	Rohde & Schwarz	ESW44	5527	12	06-Feb-2021
3 GHz High pass Filter	Wainwright	WHKX12-2580-3000-18000-80SS	5548	12	05-May-2021
8 - 18 GHz Amplifier	Wright Technologies	APS06-0061	5596	12	25-Aug-2021

Table 67

TU - Traceability Unscheduled

3 Measurement Uncertainty

For a 95% confidence level, the measurement uncertainties for defined systems are:

Test Name	Measurement Uncertainty
Frequency Hopping Systems - Average Time of Occupancy	-
Frequency Hopping Systems - Channel Separation	± 14.71 kHz
Frequency Hopping Systems - Number of Hopping Channels	-
Frequency Hopping Systems - 20 dB Bandwidth	± 14.72 kHz
Maximum Conducted Output Power	± 3.2 dB
Authorised Band Edges	30 MHz to 1 GHz: ± 5.2 dB 1 GHz to 40 GHz: ± 6.3 dB
Restricted Band Edges	30 MHz to 1 GHz: ± 5.2 dB 1 GHz to 40 GHz: ± 6.3 dB
Spurious Radiated Emissions	30 MHz to 1 GHz: ± 5.2 dB 1 GHz to 40 GHz: ± 6.3 dB

Table 68

Measurement Uncertainty Decision Rule

Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115: 2007, clause 4.4.3 and 4.5.1.