

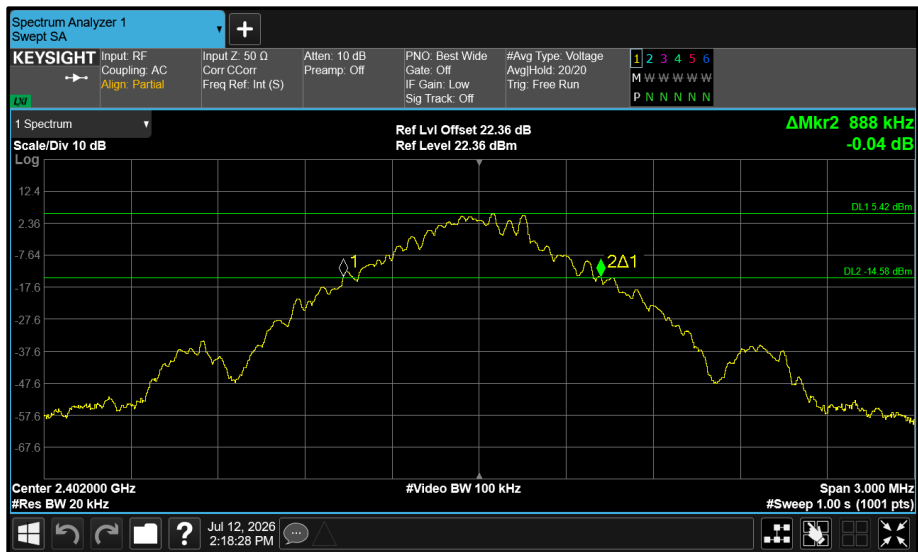


Figure 76 - Core 1 (B) 2402 MHz (CH0) 20 dB Bandwidth

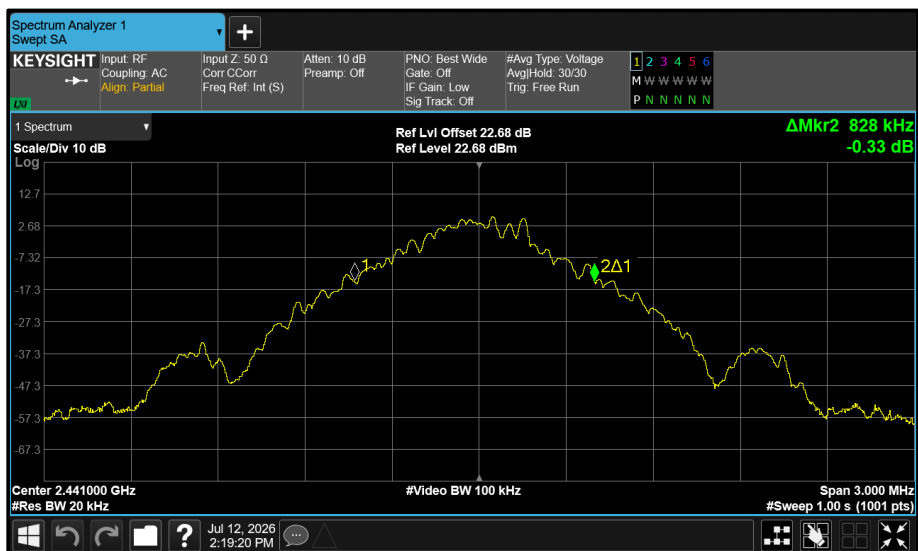


Figure 77 - Core 0 (A) 2441 MHz (CH39) 99% Bandwidth

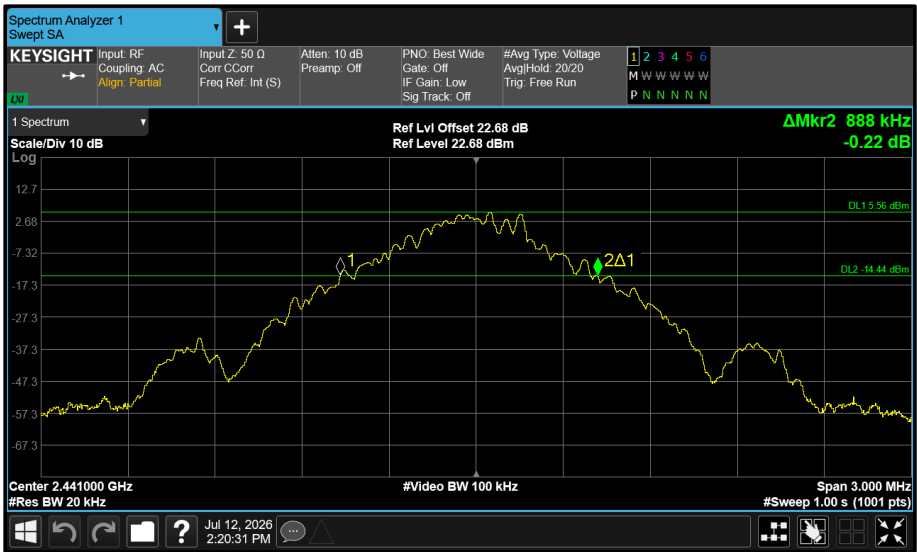


Figure 78 - Core 0 (A) 2441 MHz (CH39) 20 dB Bandwidth

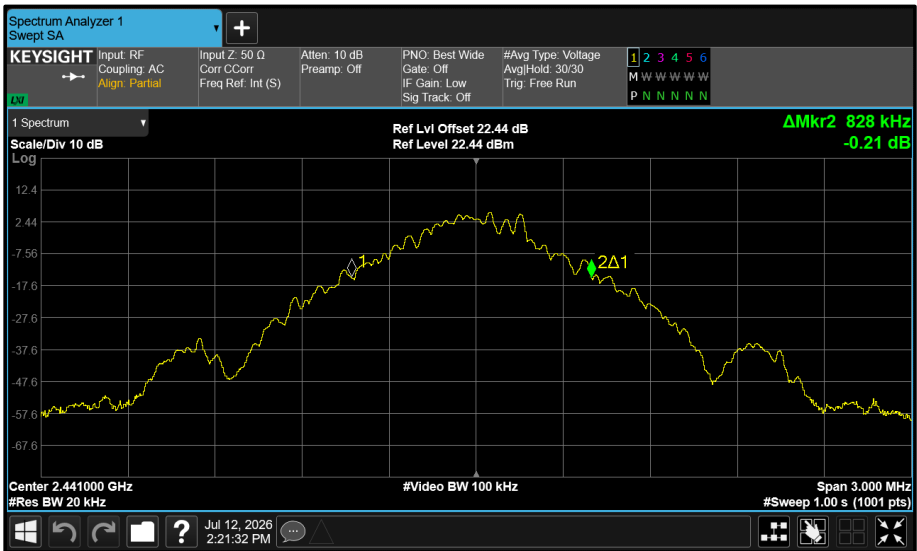


Figure 79 - Core 1 (B) 2441 MHz (CH39) 99% Bandwidth

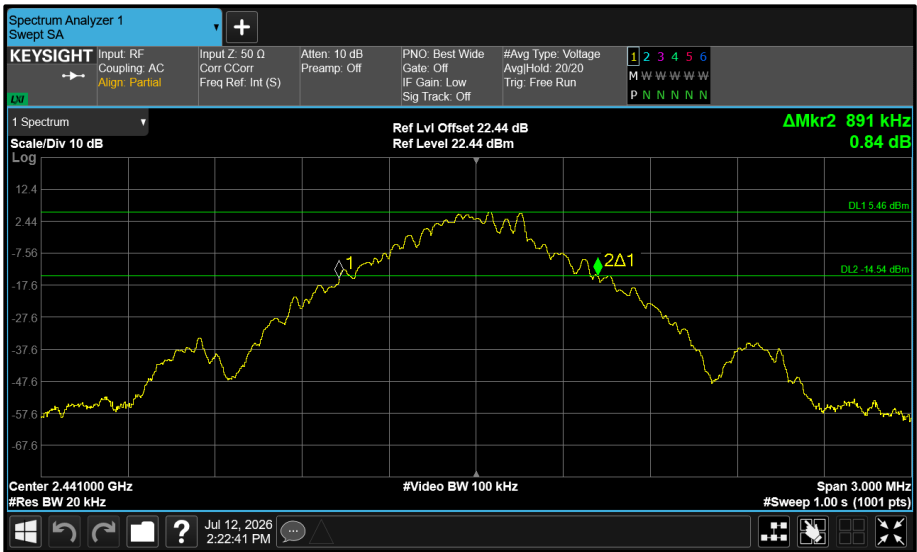


Figure 80 - Core 1 (B) 2441 MHz (CH39) 20 dB Bandwidth

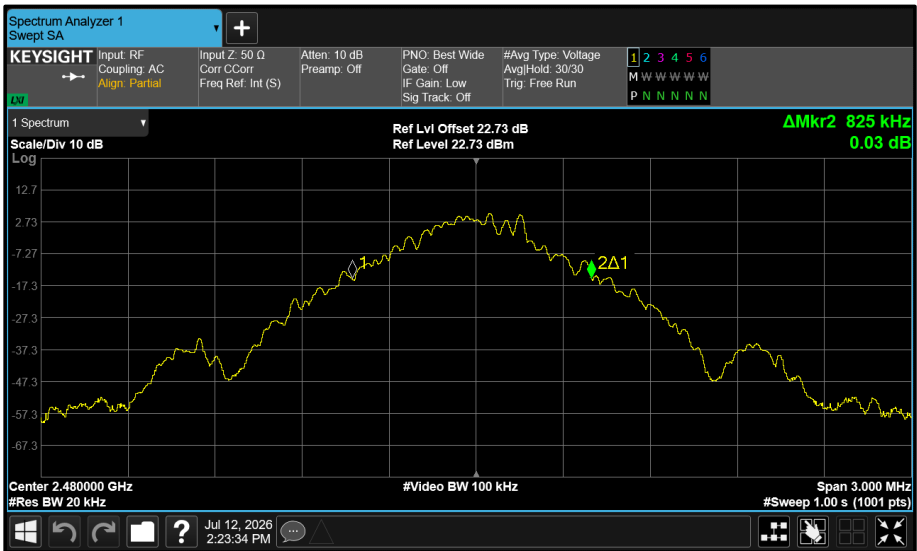


Figure 81 - Core 0 (A) 2480 MHz (CH78) 99% Bandwidth

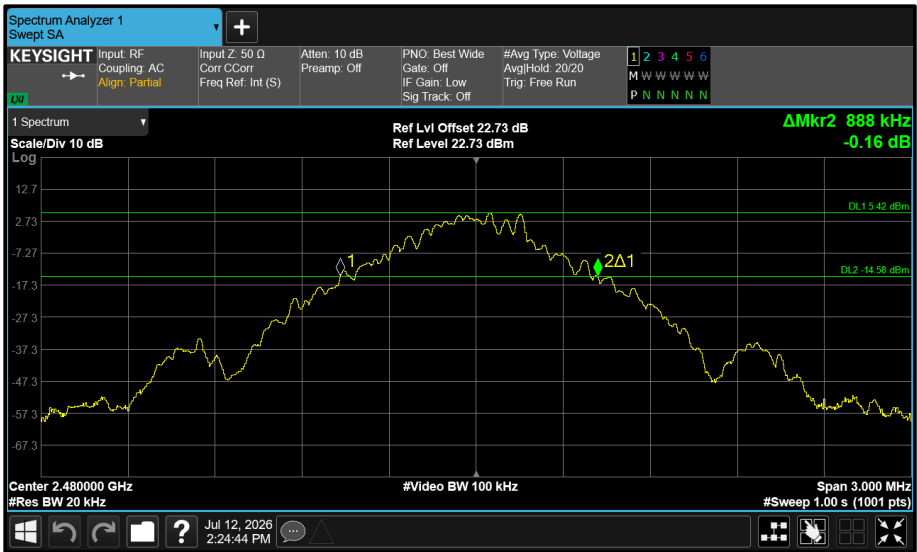


Figure 82 - Core 0 (A) 2480 MHz (CH78) 20 dB Bandwidth

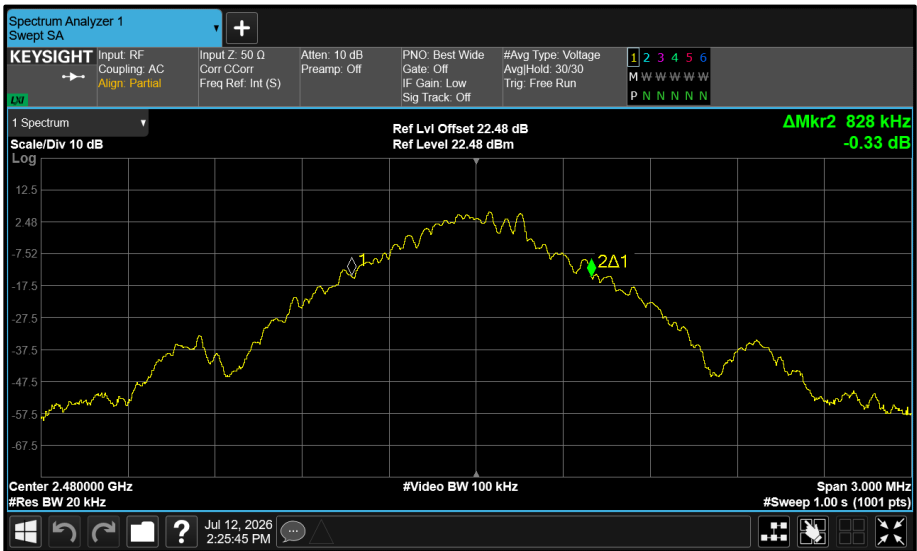


Figure 83 - Core 1 (B) 2480 MHz (CH78) 99% Bandwidth

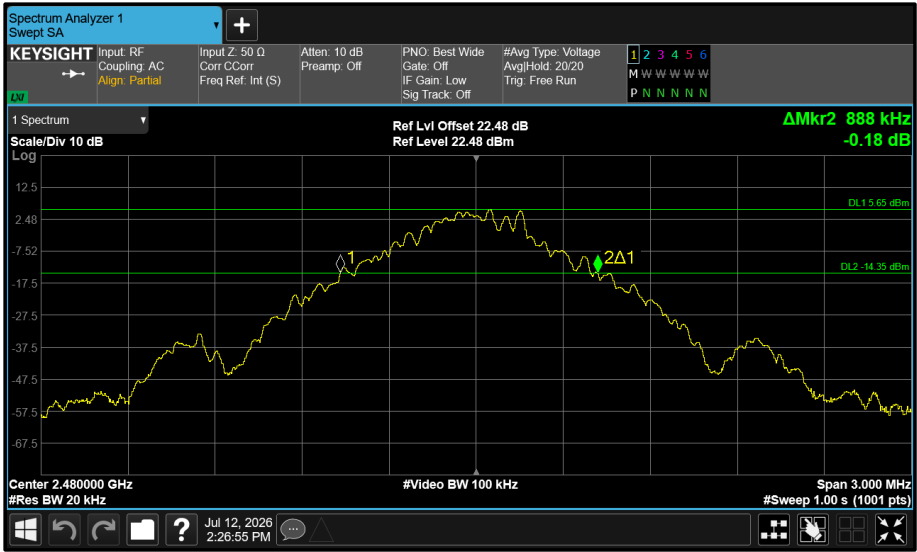


Figure 84 - Core 1 (B) 2480 MHz (CH78) 20 dB Bandwidth



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (a)(2) RSS-247 5.2 (a)	Test Method(s):	C63.10 6.9.3 C63.10 6.9.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA GFSK (DH5)	Duty Cycle (%):	-
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0+Core 1)	Peak Antenna Gain (dBi):	-

Test Frequency (MHz)	20 dB Bandwidth (MHz)			
	A	B	C	D
2402	0.888	0.888	-	-
2441	0.888	0.888	-	-
2480	0.888	0.888	-	-

Table 53 - 20 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2402	0.825	0.828	-	-	-
2441	0.825	0.825	-	-	-
2480	0.825	0.828	-	-	-

Table 54 - 99% Bandwidth Results

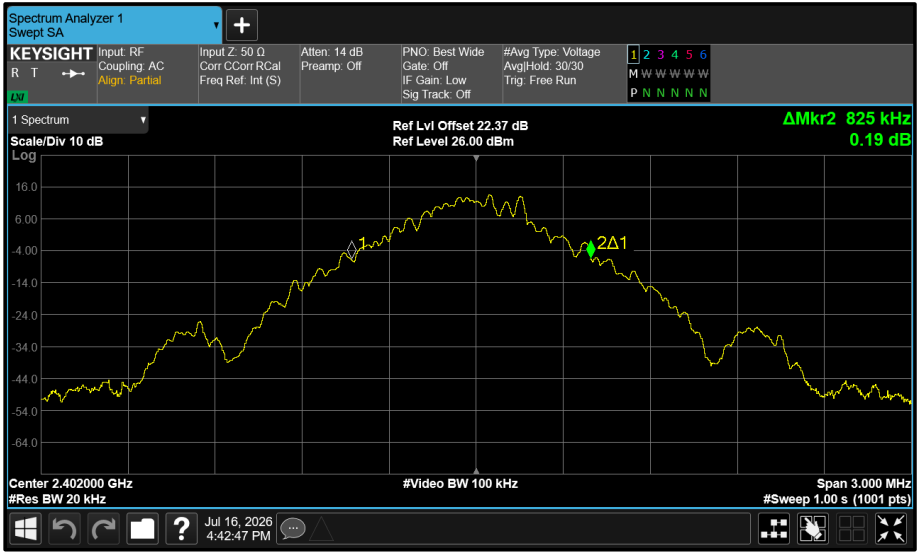


Figure 85 - Core 0 (A) 2402 MHz (CH0) 99% Bandwidth

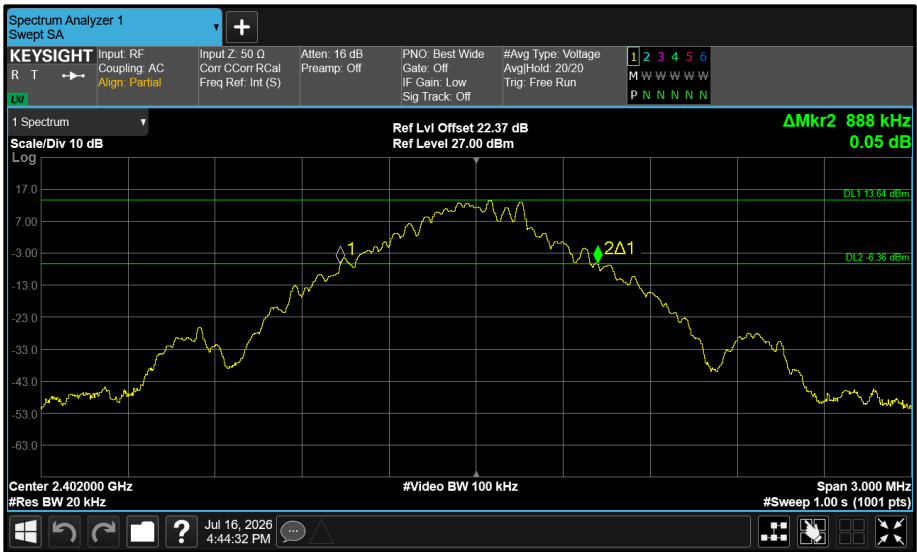


Figure 86 - Core 0 (A) 2402 MHz (CH0) 20 dB Bandwidth

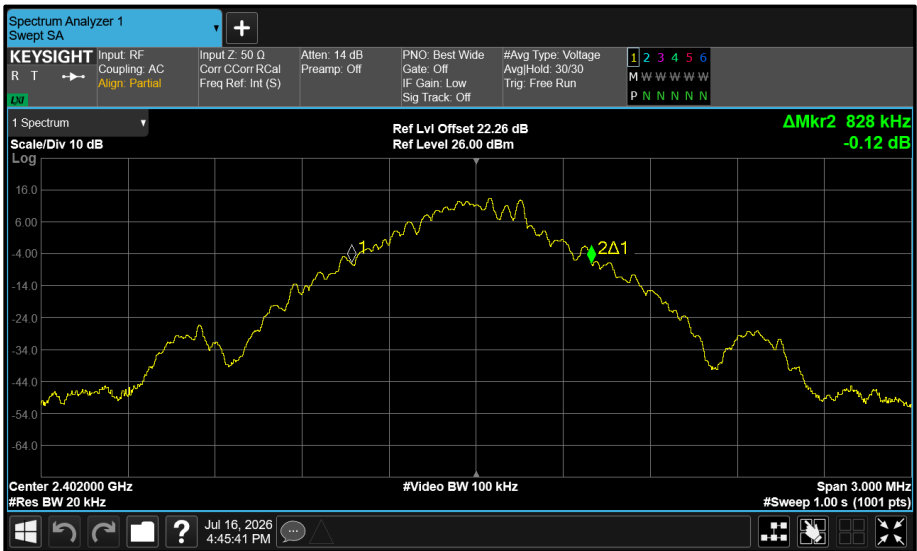


Figure 87 - Core 1 (B) 2402 MHz (CH0) 99% Bandwidth

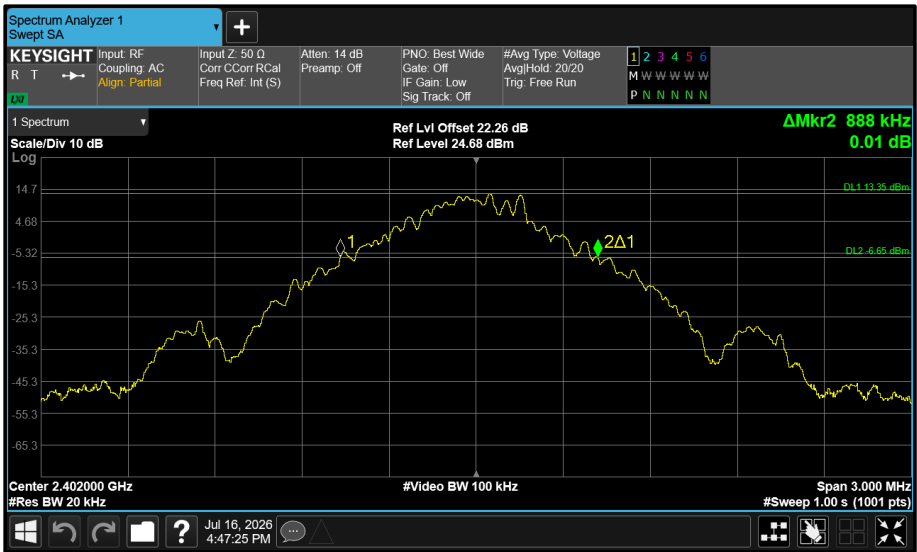


Figure 88 - Core 1 (B) 2402 MHz (CH0) 20 dB Bandwidth

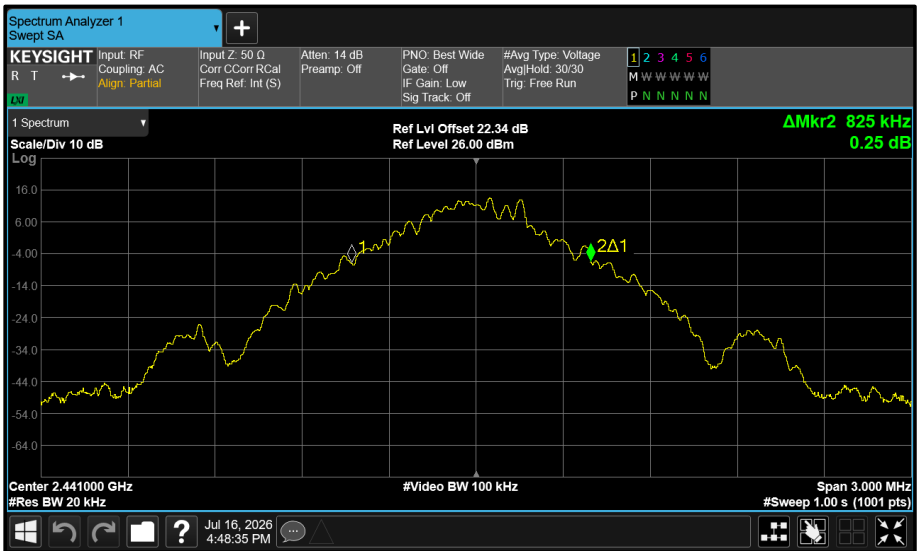


Figure 89 - Core 0 (A) 2441 MHz (CH39) 99% Bandwidth

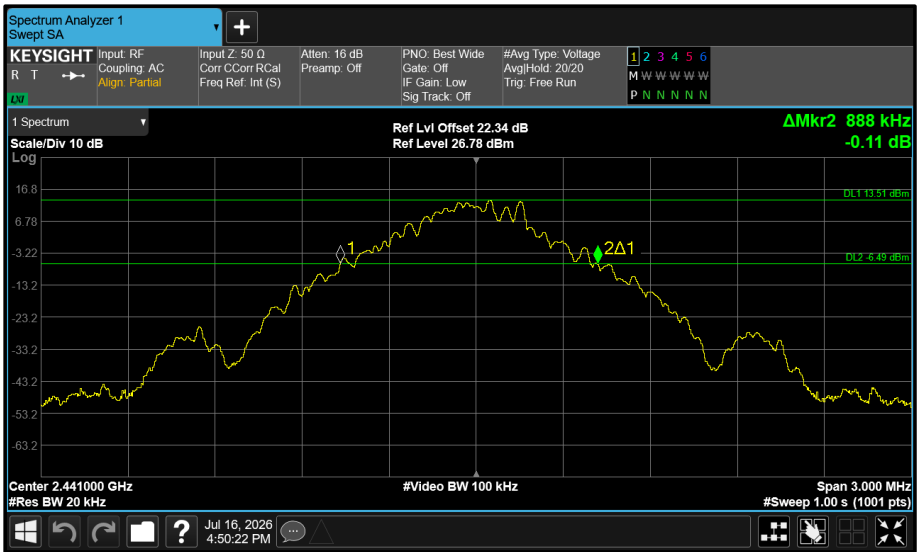


Figure 90 - Core 0 (A) 2441 MHz (CH39) 20 dB Bandwidth

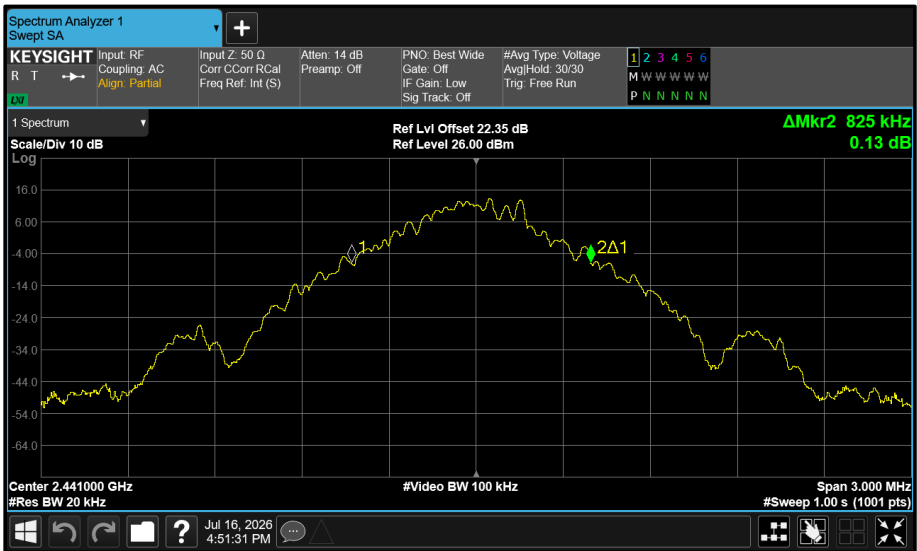


Figure 91 - Core 1 (B) 2441 MHz (CH39) 99% Bandwidth

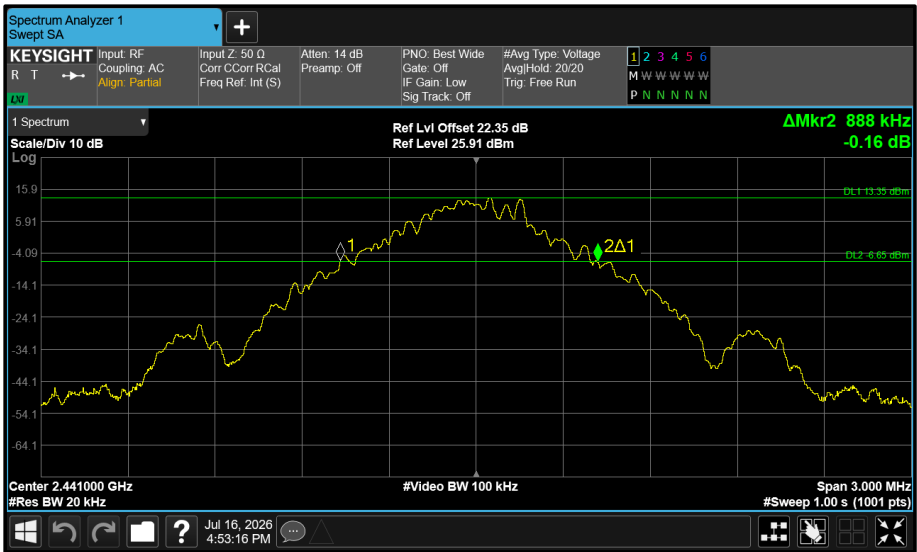


Figure 92 - Core 1 (B) 2441 MHz (CH39) 20 dB Bandwidth

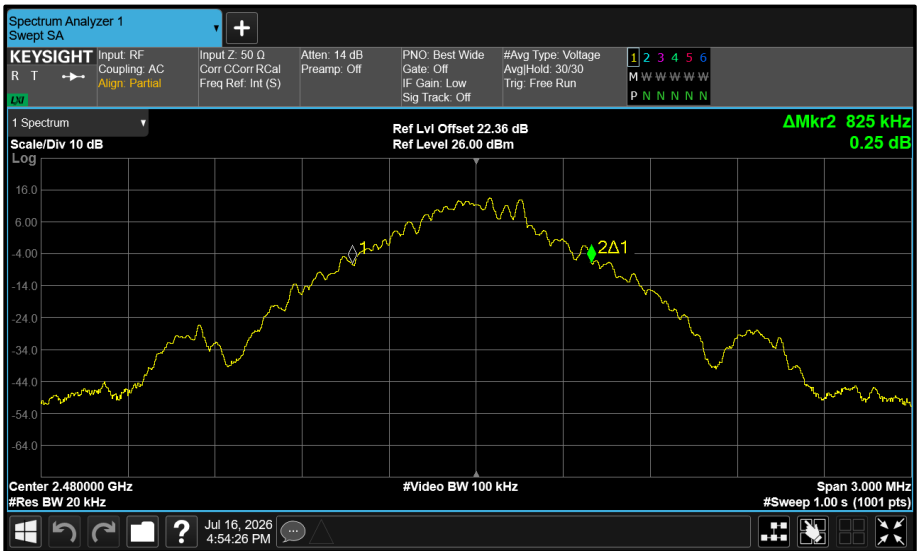


Figure 93 - Core 0 (A) 2480 MHz (CH78) 99% Bandwidth



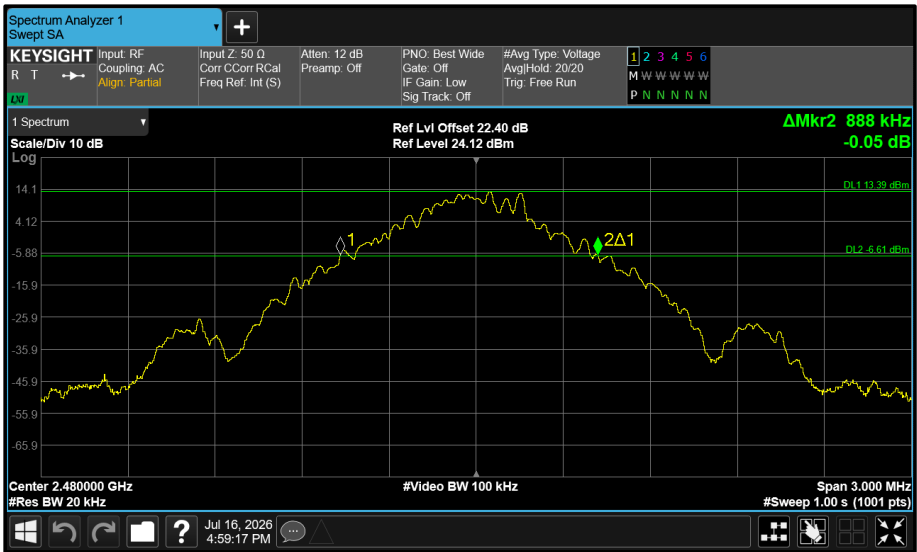


Figure 96 - Core 1 (B) 2480 MHz (CH78) 20 dB Bandwidth

FCC 47 CFR Part 15 and ISSED RSS-247 Limit Clause

None specified.



2.5.7 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 14.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
AC Programmable Power Supply	iTech	IT7324	5225	-	O/P Mon
MXA Signal Analyser	Keysight Technologies	N9020B	5529	24	02-Jan-2027
USB Power Sensor	Boonton	RTP5008	5820	12	16-Mar-2027
USB Power Sensor	Boonton	RTP5008	5821	12	16-Mar-2027
Modular Power System mainframe	Keysight Technologies	N6701C	6151	-	O/P Mon
DC Power Module	Keysight Technologies	N6754A	6152	-	O/P Mon
Climatic Chamber	Weiss Technik	ClimeEvent C/340/70a/3	6386	12	O/P Mon
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6426	12	16-Mar-2027
USB Wideband Power Sensor	Boonton	RTP5008	6591	12	16-Mar-2027
Digital Thermometer	R.S Components	RS 5511	6739	12	02-Mar-2027
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6752	12	16-Mar-2027
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6753	12	16-Mar-2027
SCU Cable Assembly SCU	TUV SUD	SPECTRUM_SCU_CA	6754	0	16-Mar-2027
Humidity & Temperature meter	Fluke	971	7103	12	05-Aug-2026
Multimeter	Fluke	115	7115	12	13-Aug-2026

Table 55

O/P Mon - Output Monitored using calibrated equipment



2.6 Maximum Conducted Output Power

2.6.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.247 (b)
ISED RSS-247, Clause 6.2.3.2
ISED RSS-GEN, Clause 6.12

2.6.2 Equipment Under Test and Modification State

A3546, S/N: JYKX4WQ023 - Modification State 0

2.6.3 Date of Test

11-July-2026 to 15-July-2026

2.6.4 Test Method

The test was performed in accordance with ANSI C63.10 clause 7.8.5 using a power meter.

MIMO output port summing was performed in accordance with KDB 662911 D01, with the Beamforming results Directional Gain being calculated in accordance with clause F)2)d)(i)

2.6.5 Environmental Conditions

Ambient Temperature	22.1 - 23.1 °C
Relative Humidity	46.4 - 47.3 %



2.6.6 Test Results

2.4 GHz Bluetooth - FHSS

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(1) RSS-247 6.2.3.2	Test Method(s):	C63.10 7.8.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA GFSK (DH5)	Duty Cycle (%):	76.4
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	1.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	9.15	-	-	-	9.15	30.00	-20.85
2441	9.21	-	-	-	9.21	30.00	-20.79
2480	9.07	-	-	-	9.07	30.00	-20.93

Table 56 - FCC Maximum Conducted (peak) Output Power Results

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)	EIRP (dBm)	EIRP Limit (dBm)	EIRP Margin (dB)
	A	B	C	D	Σ					
2402	9.15	-	-	-	9.15	30.00	-20.85	10.35	36.00	-25.65
2441	9.21	-	-	-	9.21	30.00	-20.79	10.41	36.00	-25.59
2480	9.07	-	-	-	9.07	30.00	-20.93	10.27	36.00	-25.73

Table 57 - ISSED Maximum Conducted (peak) Output Power Results



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(1) RSS-247 6.2.3.2	Test Method(s):	C63.10 7.8.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA GFSK (DH5)	Duty Cycle (%):	76.4
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	B (Core 1)	Peak Antenna Gain (dBi):	1.40

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	-	9.16	-	-	9.16	30.00	-20.84
2441	-	9.19	-	-	9.19	30.00	-20.81
2480	-	9.27	-	-	9.27	30.00	-20.73

Table 58 - FCC Maximum Conducted (peak) Output Power Results

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)	EIRP (dBm)	EIRP Limit (dBm)	EIRP Margin (dB)
	A	B	C	D	Σ					
2402	-	9.16	-	-	9.16	30.00	-20.84	10.56	36.00	-25.44
2441	-	9.19	-	-	9.19	30.00	-20.81	10.59	36.00	-25.41
2480	-	9.27	-	-	9.27	30.00	-20.73	10.67	36.00	-25.33

Table 59 - ISED Maximum Conducted (peak) Output Power Results



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(1) RSS-247 6.2.3.2	Test Method(s):	C63.10 7.8.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA GFSK (DH5)	Duty Cycle (%):	76.4
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	C (Core 2)	Peak Antenna Gain (dBi):	1.00

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	-	-	13.00	-	13.00	30.00	-17.00
2441	-	-	12.92	-	12.92	30.00	-17.08
2480	-	-	12.97	-	12.97	30.00	-17.03

Table 60 - FCC Maximum Conducted (peak) Output Power Results

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)	EIRP (dBm)	EIRP Limit (dBm)	EIRP Margin (dB)
	A	B	C	D	Σ					
2402	-	-	13.00	-	13.00	30.00	-17.00	14.00	36.00	-22.00
2441	-	-	12.92	-	12.92	30.00	-17.08	13.92	36.00	-22.08
2480	-	-	12.97	-	12.97	30.00	-17.03	13.97	36.00	-22.03

Table 61 - ISED Maximum Conducted (peak) Output Power Results



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(1) RSS-247 6.2.3.2	Test Method(s):	C63.10 7.8.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA GFSK (DH5)	Duty Cycle (%):	76.4
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	1.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	19.95	-	-	-	19.95	30.00	-10.05
2441	20.09	-	-	-	20.09	30.00	-9.91
2480	20.07	-	-	-	20.07	30.00	-9.93

Table 62 - FCC Maximum Conducted (peak) Output Power Results

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)	EIRP (dBm)	EIRP Limit (dBm)	EIRP Margin (dB)
	A	B	C	D	Σ					
2402	19.95	-	-	-	19.95	30.00	-10.05	21.15	36.00	-14.85
2441	20.09	-	-	-	20.09	30.00	-9.91	21.29	36.00	-14.71
2480	20.07	-	-	-	20.07	30.00	-9.93	21.27	36.00	-14.73

Table 63 - ISED Maximum Conducted (peak) Output Power Results



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(1) RSS-247 6.2.3.2	Test Method(s):	C63.10 7.8.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA GFSK (DH5)	Duty Cycle (%):	76.5
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	B (Core 1)	Peak Antenna Gain (dBi):	1.40

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	-	19.89	-	-	19.89	30.00	-10.11
2441	-	19.89	-	-	19.89	30.00	-10.11
2480	-	19.69	-	-	19.69	30.00	-10.31

Table 64 - FCC Maximum Conducted (peak) Output Power Results

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)	EIRP (dBm)	EIRP Limit (dBm)	EIRP Margin (dB)
	A	B	C	D	Σ					
2402	-	19.89	-	-	19.89	30.00	-10.11	21.29	36.00	-14.71
2441	-	19.89	-	-	19.89	30.00	-10.11	21.29	36.00	-14.71
2480	-	19.69	-	-	19.69	30.00	-10.31	21.09	36.00	-14.91

Table 65 - ISED Maximum Conducted (peak) Output Power Results



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(1) RSS-247 6.2.3.2	Test Method(s):	C63.10 7.8.5
Additional Reference(s):	662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	iPA GFSK (DH5)	Duty Cycle (%):	76.4
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0+Core 1)	Peak Antenna Gain (dBi):	4.31

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	9.11	9.15	-	-	12.14	30.00	-17.86
2441	9.19	9.18	-	-	12.20	30.00	-17.80
2480	9.08	9.27	-	-	12.19	30.00	-17.81

Table 66 - FCC Maximum Conducted (peak) Output Power Results

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)	EIRP (dBm)	EIRP Limit (dBm)	EIRP Margin (dB)
	A	B	C	D	Σ					
2402	9.11	9.15	-	-	12.14	30.00	-17.86	16.45	36.00	-19.55
2441	9.19	9.18	-	-	12.20	30.00	-17.80	16.51	36.00	-19.49
2480	9.08	9.27	-	-	12.19	30.00	-17.81	16.50	36.00	-19.50

Table 67 - ISED Maximum Conducted (peak) Output Power Results



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(1) RSS-247 6.2.3.2	Test Method(s):	C63.10 7.8.5
Additional Reference(s):	662911 D01 v02r01 F)2)d(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	ePA GFSK (DH5)	Duty Cycle (%):	76.4
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0+Core 1)	Peak Antenna Gain (dBi):	4.31

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	17.23	17.30	-	-	20.27	30.00	-9.73
2441	17.40	17.34	-	-	20.38	30.00	-9.62
2480	17.42	17.11	-	-	20.28	30.00	-9.72

Table 68 - FCC Maximum Conducted (peak) Output Power Results

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)	EIRP (dBm)	EIRP Limit (dBm)	EIRP Margin (dB)
	A	B	C	D	Σ					
2402	17.23	17.30	-	-	20.27	30.00	-9.73	24.59	36.00	-11.41
2441	17.40	17.34	-	-	20.38	30.00	-9.62	24.69	36.00	-11.31
2480	17.42	17.11	-	-	20.28	30.00	-9.72	24.59	36.00	-11.41

Table 69 - ISED Maximum Conducted (peak) Output Power Results

FCC 47 CFR Part 15, Limit Clause 15.247 (b)(1)

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

ISED RSS-247, Limit Clause 6.2.3.2

For FHSs operating in the band 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1.0 W if the hopset uses 75 or more hopping channel; the maximum peak conducted output power shall not exceed 0.125 W if the hopset uses less than 75 hopping channel. The e.i.r.p. shall not exceed 4 W except as provided in sections 6.5(a) and (b) of the specification.



2.6.7 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 14.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
AC Programmable Power Supply	iTech	IT7324	5225	-	O/P Mon
MXA Signal Analyser	Keysight Technologies	N9020B	5529	24	02-Jan-2027
USB Power Sensor	Boonton	RTP5008	5820	12	16-Mar-2027
USB Power Sensor	Boonton	RTP5008	5821	12	16-Mar-2027
Modular Power System mainframe	Keysight Technologies	N6701C	6151	-	O/P Mon
DC Power Module	Keysight Technologies	N6754A	6152	-	O/P Mon
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6426	12	16-Mar-2027
USB Wideband Power Sensor	Boonton	RTP5008	6591	12	16-Mar-2027
Digital Thermometer	R.S Components	RS 5511	6739	12	02-Mar-2027
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6752	12	16-Mar-2027
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6753	12	16-Mar-2027
SCU Cable Assembly SCU	TUV SUD	SPECTRUM_SCU_CA	6754	0	16-Mar-2027
Humidity & Temperature meter	Fluke	971	7103	12	05-Aug-2026
Multimeter	Fluke	115	7115	12	13-Aug-2026

Table 70

O/P Mon - Output Monitored using calibrated equipment



2.7 Authorised Band Edges

2.7.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.247 (d)
ISED RSS-247, Clause 6.6

2.7.2 Equipment Under Test and Modification State

A3546, S/N: KMW4GY9740 - Modification State 0

2.7.3 Date of Test

03-June-2026 to 04-June-2026

2.7.4 Test Method

The test was performed in accordance with ANSI C63.10, clause 6.10.4.

2.7.5 Environmental Conditions

Ambient Temperature	22.1 - 23.0 °C
Relative Humidity	38.5 - 41.5 %

2.7.6 Test Results

2.4 GHz Bluetooth - FHSS

iPA - Core 0 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-57.56
Hopping	DH5	2402-2480	2400	-63.59

Table 71 - SISO Authorised Band Edge Results

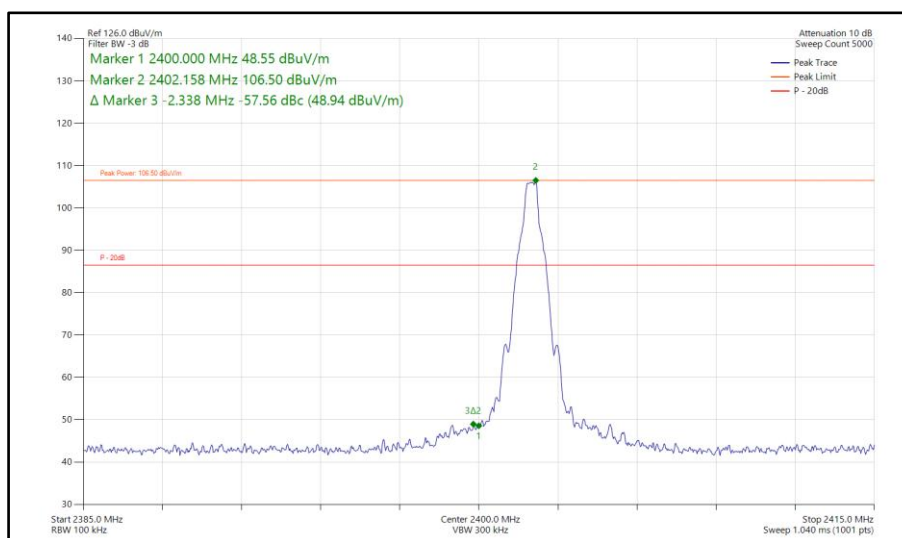


Figure 97 - Bluetooth DH5, SISO, Core 0 - 2402 MHz Band Edge Frequency 2400 MHz

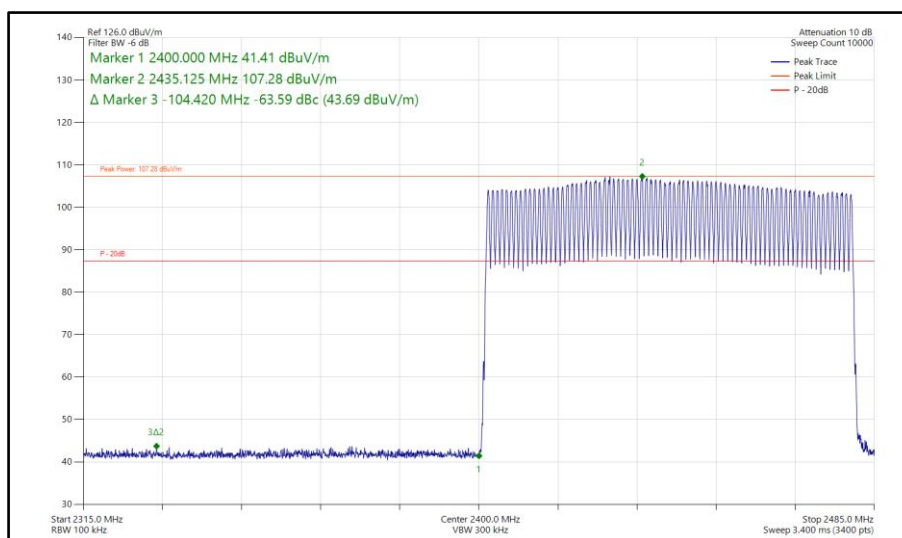


Figure 98 - Bluetooth DH5, SISO, Core 0 - 2402-2480 MHz Band Edge Frequency 2400 MHz

iPA - Core 1 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-58.66
Hopping	DH5	2402-2480	2400	-62.05

Table 72 - SISO Authorised Band Edge Results

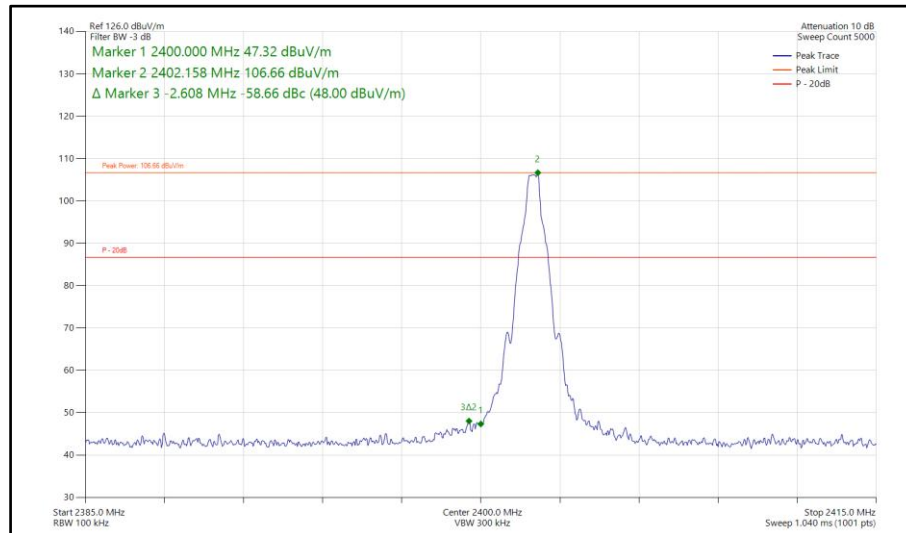


**Figure 99 - Bluetooth DH5, SISO, Core 1 - 2402 MHz
Band Edge Frequency 2400 MHz**

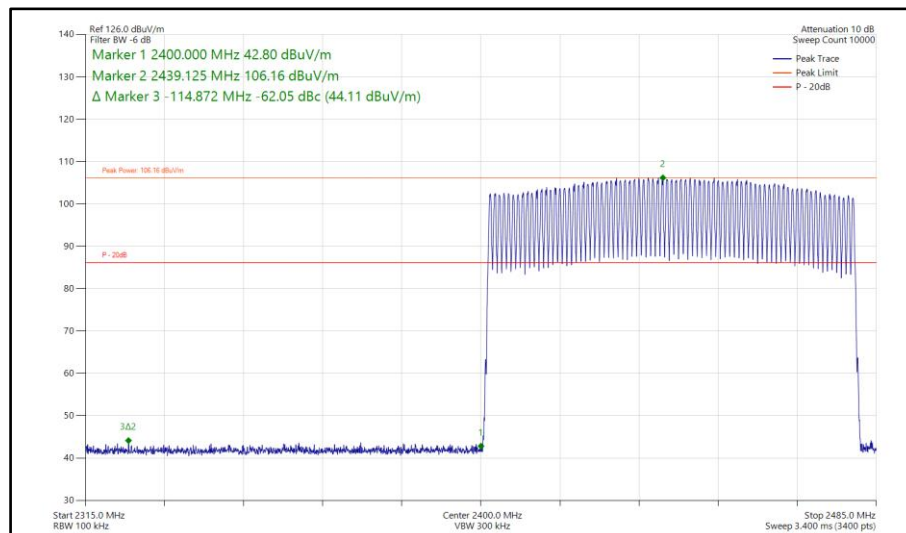


**Figure 100 - Bluetooth DH5, SISO, Core 1 - 2402-2480 MHz
Band Edge Frequency 2400 MHz**

iPA - Core 2 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-55.07
Hopping	DH5	2402-2480	2400	-64.45

Table 73 - SISO Authorised Band Edge Results

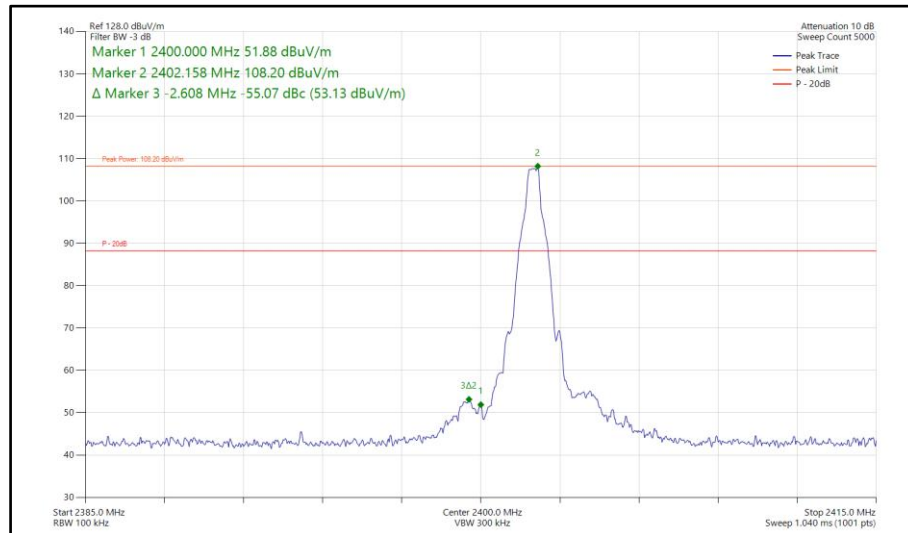


**Figure 101 - Bluetooth DH5, SISO, Core 2 - 2402 MHz
Band Edge Frequency 2400 MHz**

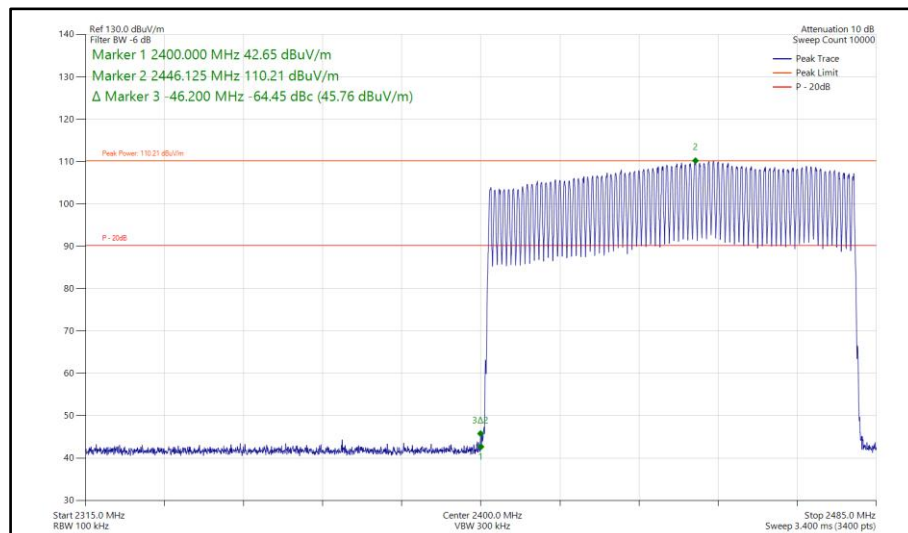


**Figure 102 - Bluetooth DH5, SISO, Core 2 - 2402-2480 MHz
Band Edge Frequency 2400 MHz**

iPA - Core 0-1 (MIMO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-61.56
Hopping	DH5	2402-2480	2400	-63.14

Table 74 - MIMO Authorised Band Edge Results

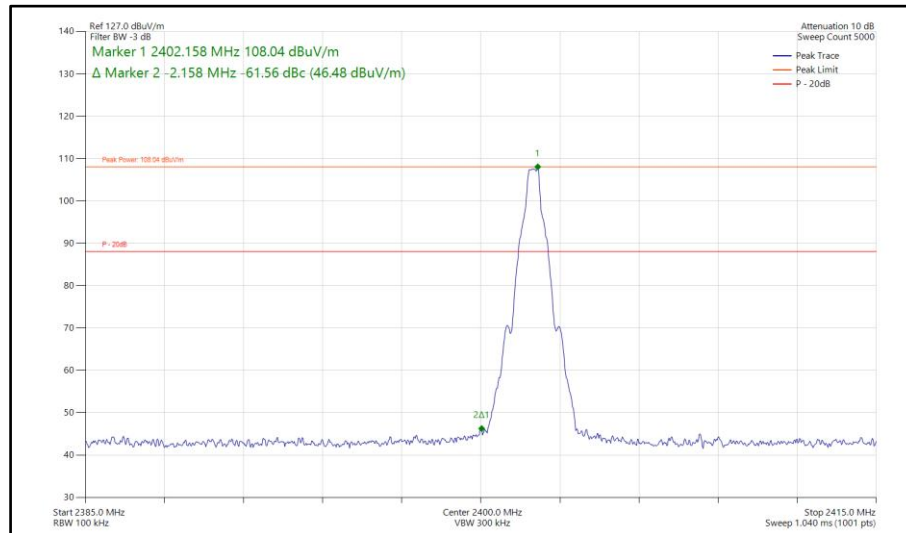


Figure 103 - Bluetooth DH5, MIMO, Core 0-1 - 2402 MHz
Band Edge Frequency 2400 MHz

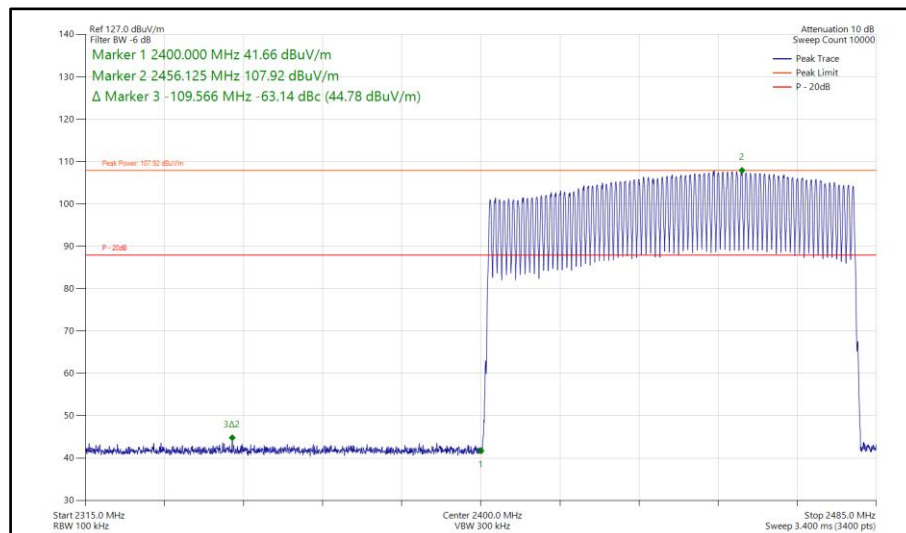


Figure 104 - Bluetooth DH5, MIMO, Core 0-1 - 2402-2480 MHz
Band Edge Frequency 2400 MHz

ePA - Core 0 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-65.86
Hopping	DH5	2402-2480	2400	-72.49

Table 75 - SISO Authorised Band Edge Results

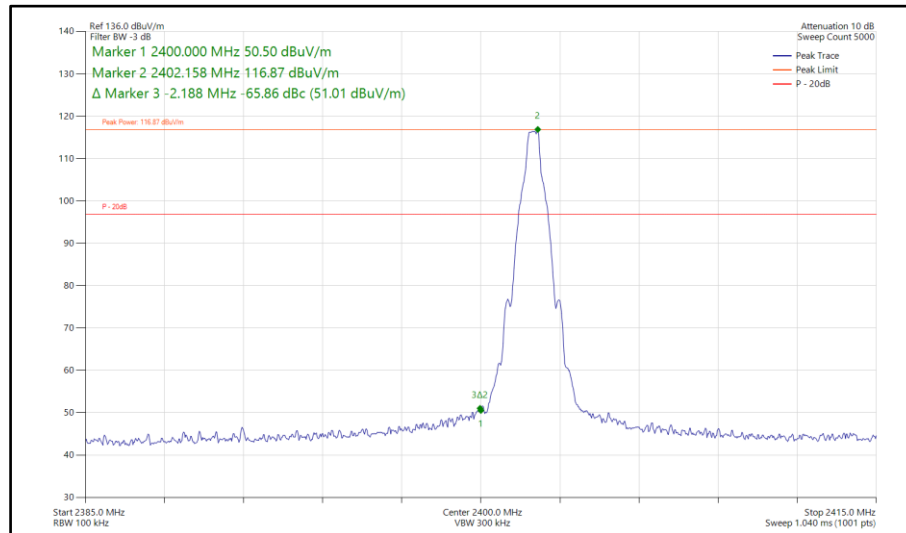


**Figure 105 - Bluetooth DH5, SISO, Core 0 - 2402 MHz
Band Edge Frequency 2400 MHz**

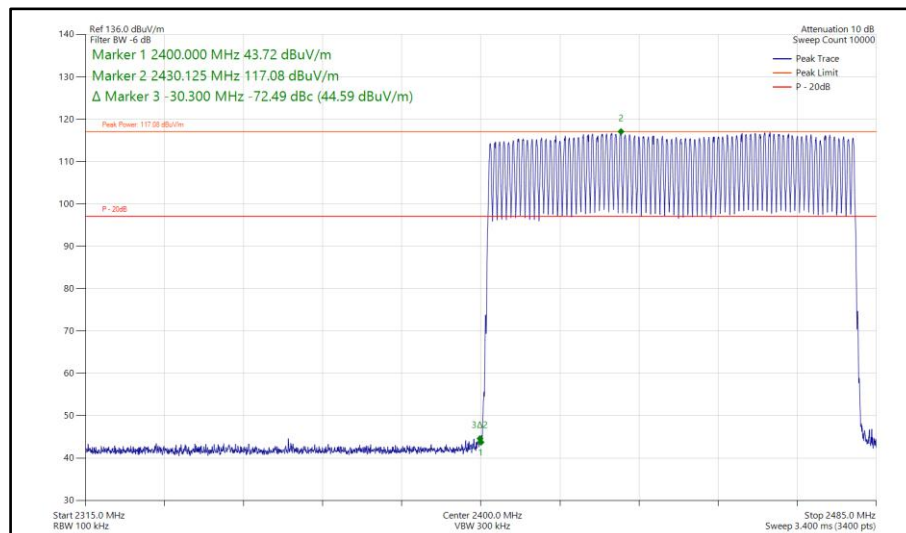


**Figure 106 - Bluetooth DH5, SISO, Core 0 - 2402-2480 MHz
Band Edge Frequency 2400 MHz**

ePA - Core 1 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-66.55
Hopping	DH5	2402-2480	2400	-69.62

Table 76 - SISO Authorised Band Edge Results

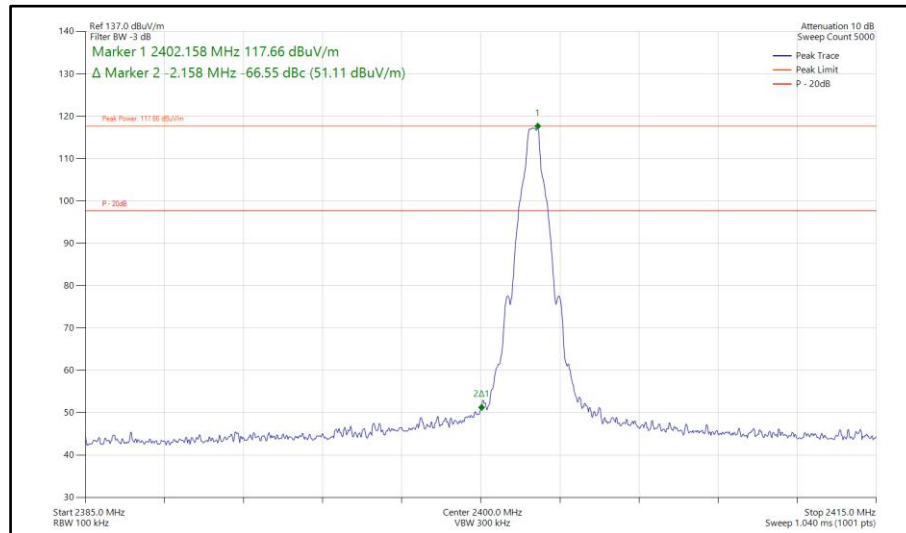


**Figure 107 - Bluetooth DH5, SISO, Core 1 - 2402 MHz
Band Edge Frequency 2400 MHz**

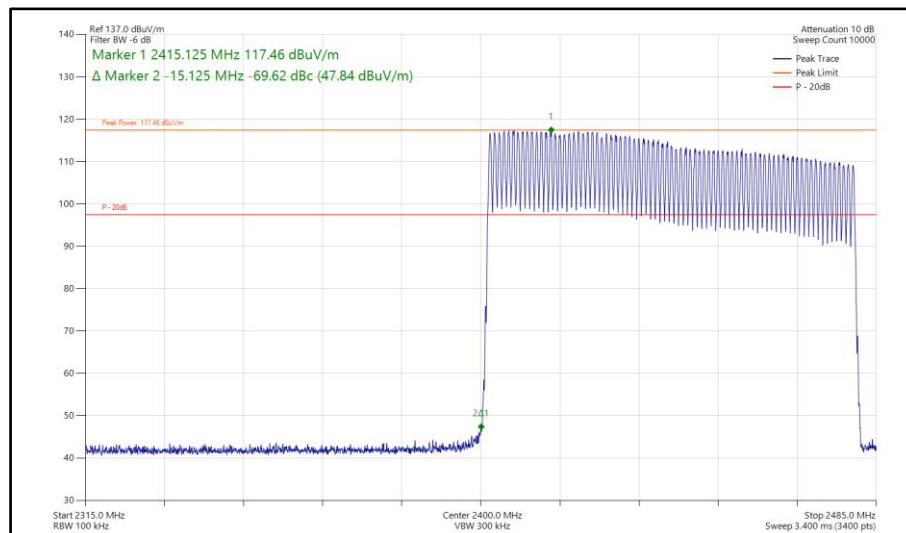


**Figure 108 - Bluetooth DH5, SISO, Core 1 - 2402-2480 MHz
Band Edge Frequency 2400 MHz**

ePA - Core 0-1 (MIMO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-66.99
Hopping	DH5	2402-2480	2400	-71.82

Table 77 - MIMO Authorised Band Edge Results

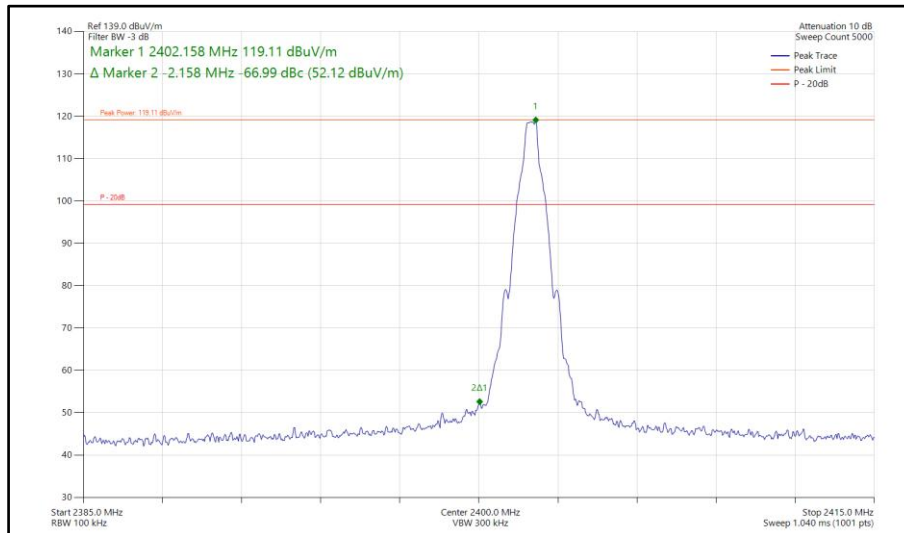


**Figure 109 - Bluetooth DH5, MIMO, Core 0-1 - 2402 MHz
Band Edge Frequency 2400 MHz**

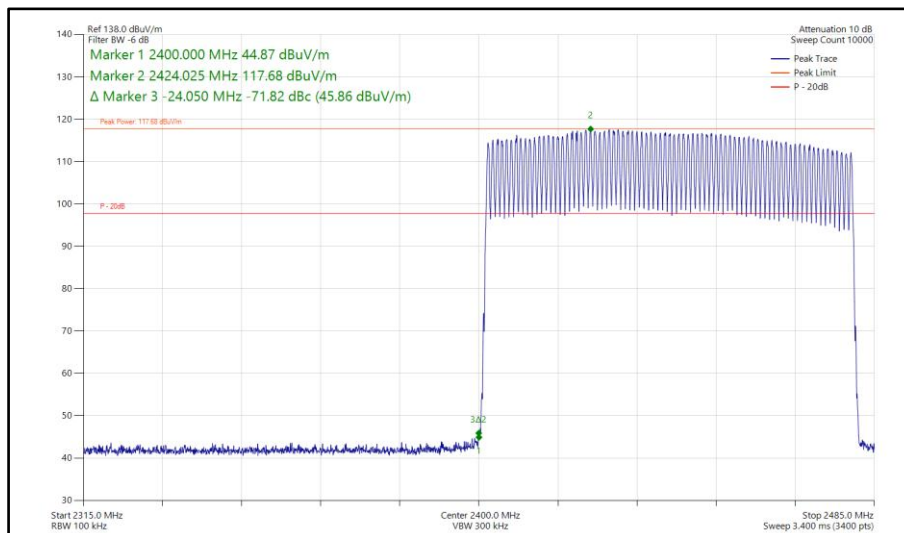


**Figure 110 - Bluetooth DH5, MIMO, Core 0-1 - 2402-2480 MHz
Band Edge Frequency 2400 MHz**



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 6.6

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.

2.7.7 Test Location and Test Equipment Used

This test was carried out in RF Chamber 16.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Emissions Software	TUV SUD	EmX V3.6.3 V.	5125	-	TU
1500W (300V 12A) AC Power Supply	iTech	IT7324	5957	-	O/P Mon
3m Semi-Anechoic Chamber, Chamber16	Albatross Projects	RF Chamber 16	5972	36	07-May-2028
Mast & Turntable Controller	Maturo Gmbh	FCU3.0	5973	-	TU
Tilt Antenna Mast	Maturo Gmbh	BAM4.5-P	5974	-	TU
Turntable	Maturo Gmbh	TT1.5SI	5975	-	TU
Horn Antenna (1-10 GHz)	Schwarzbeck	BBHA9120B	6142	12	14-Sep-2026
Digital Multimeter	Fluke	115	6145	12	02-Jun-2027
SAC Switch Unit	TUV SUD	TUV_SSU_001	6191	12	18-Dec-2026
EMI Test Receiver	Rohde & Schwarz	ESW44	6805	12	24-Jul-2026
Handheld Hygrometer	Fluke	971	6837	12	16-Sep-2026
1m SMA-Type Cable	Junkosha	MWX221-01000AMSAMS/B	6844	12	06-Sep-2026
8m SMA-Type Cable	Junkosha	MWX221-08000AMSAMS/B	6849	12	06-Nov-2026

Table 78

TU - Traceability Unscheduled

O/P Mon - Output Monitored using calibrated equipment



2.8 Spurious Radiated Emissions

2.8.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.209 and 15.247 (d)
ISED RSS-247, Clause 2.4 and 6.6
ISED RSS-GEN, Clause 6.13 and 8.9

2.8.2 Equipment Under Test and Modification State

A3546, S/N: KMW4GY9740 - Modification State 0

2.8.3 Date of Test

06-June-2026 to 13-June-2026

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.

Pre-scans in the 30 MHz to 1 GHz & 18 GHz to 26GHz range were limited to mid channel (2441 MHz).

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 20 dB of the limits shown on the plots, further investigation was carried out and reported in results tables.

Ports on the EUT were terminated with loads as described in ANSI C63.4 clause 6.2.4. For EUT's with multiple connectors of the same type, additional interconnecting cables were connected, and pre-scans performed to determine whether the level of the emissions were increased by >2 dB.

The following conversion can be applied to convert from dBμV/m to μV/m:
 $10^{(\text{Field Strength in dB}\mu\text{V/m}/20)}$

Above 18 GHz, the measurement distance was reduced to 1 m. The limit line was increased by $20 \cdot \text{LOG}(3/1) = 9.54$ dB.

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

A reduced frequency range for testing was employed on some of the test modes within this test section, based on the manufacturers RSE test plan. With any reduction based on their pre-assessment of the device, to determine the ranges and test channels that were most likely to produce emissions.

2.8.5 Example Test Setup Diagram

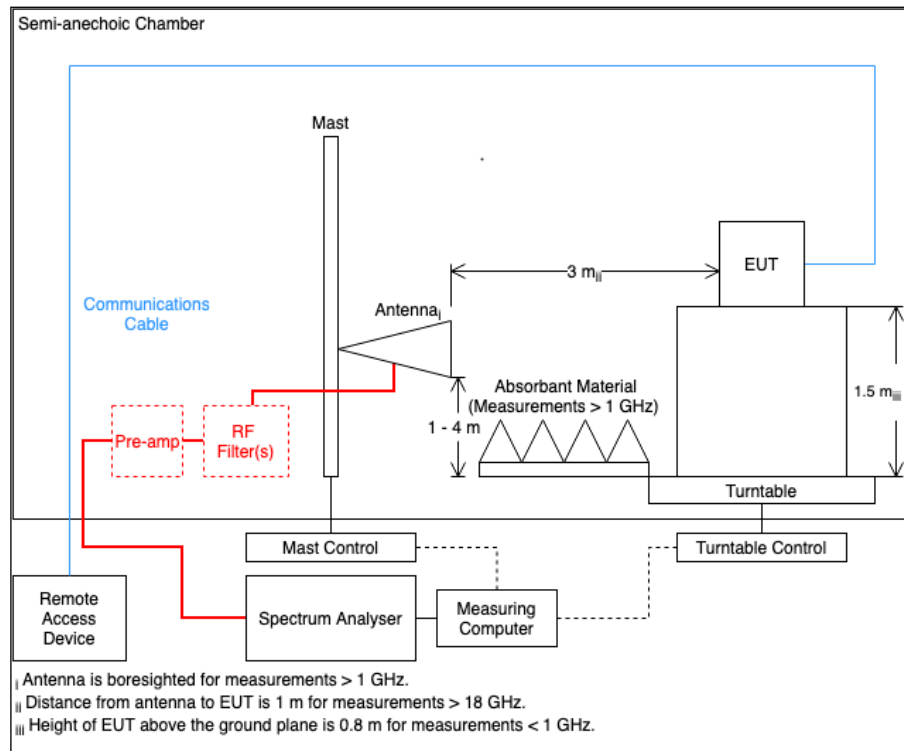


Figure 111

2.8.6 Environmental Conditions

Ambient Temperature	19.4 - 23.5 °C
Relative Humidity	37.4 - 42.9 %

2.8.7 Test Results

2.4 GHz Bluetooth - FHSS

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

Table 79 - 2402 MHz (CH2402), DH5, iPA, Core 0 + Core 1, 1 GHz to 18 GHz

*No emissions found within 20 dB of the limit.

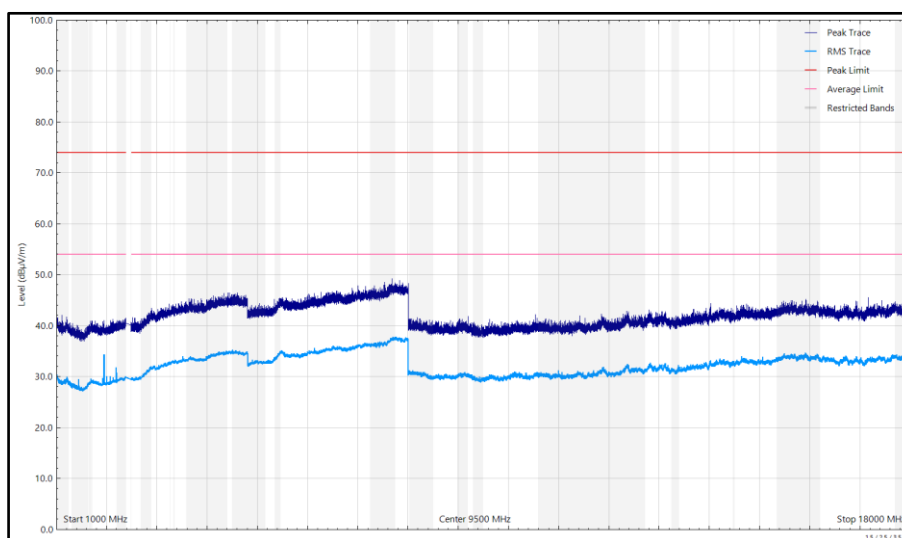


Figure 112 - 2402 MHz (CH2402), DH5, iPA, Core 0 + Core 1, 1 GHz to 18 GHz, Horizontal

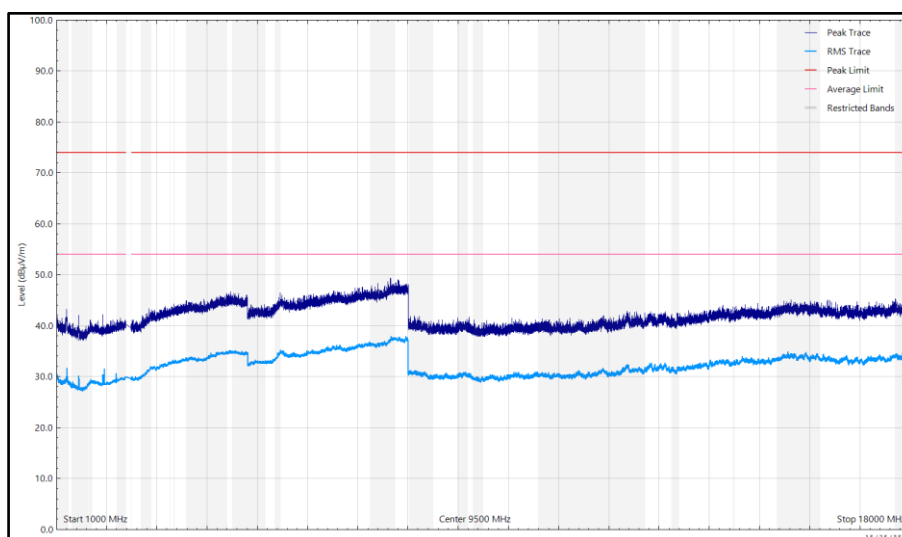


Figure 113 - 2402 MHz (CH2402), DH5, iPA, Core 0 + Core 1, 1 GHz to 18 GHz, Vertical

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
37.758	20.08	40.00	-19.92	Q-Peak	343	398	Vertical
38.175	20.09	40.00	-19.91	Q-Peak	113	164	Horizontal
166.726	21.85	43.50	-21.65	Q-Peak	331	253	Horizontal
169.017	21.72	43.50	-21.78	Q-Peak	94	389	Vertical

Table 80 - 2441 MHz (CH2441), DH5, iPA, Core 0 + Core 1, 30 MHz to 26 GHz

No other emissions found within 20 dB of the limit.

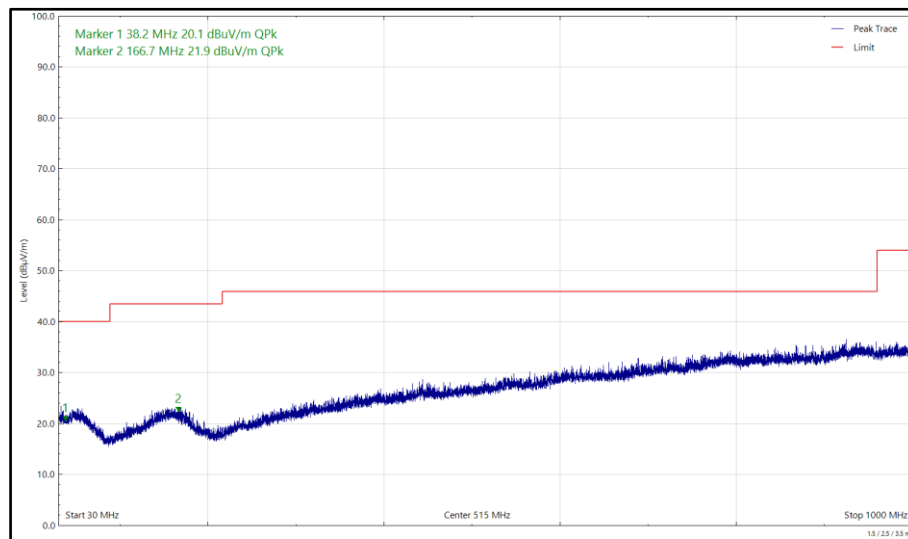


Figure 114 - 2441 MHz (CH2441), DH5, iPA, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

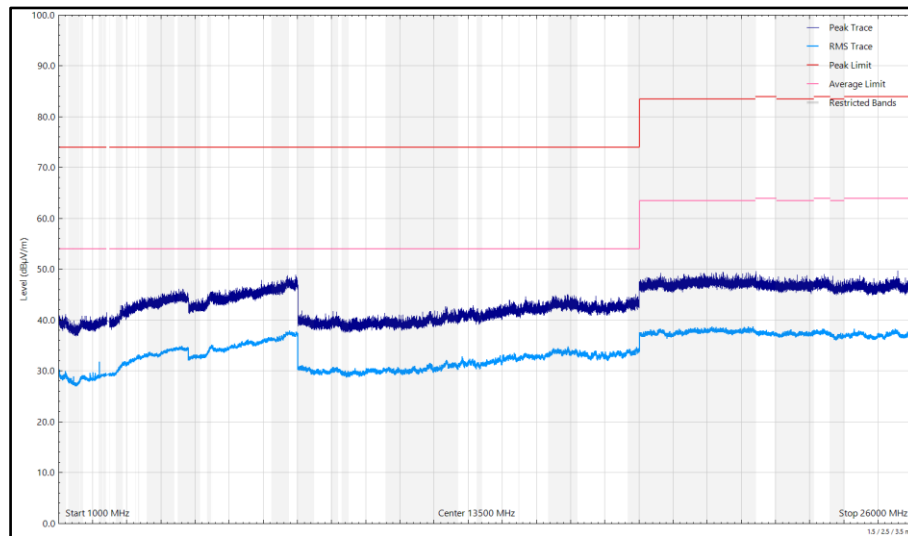


Figure 115 - 2441 MHz (CH2441), DH5, iPA, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal

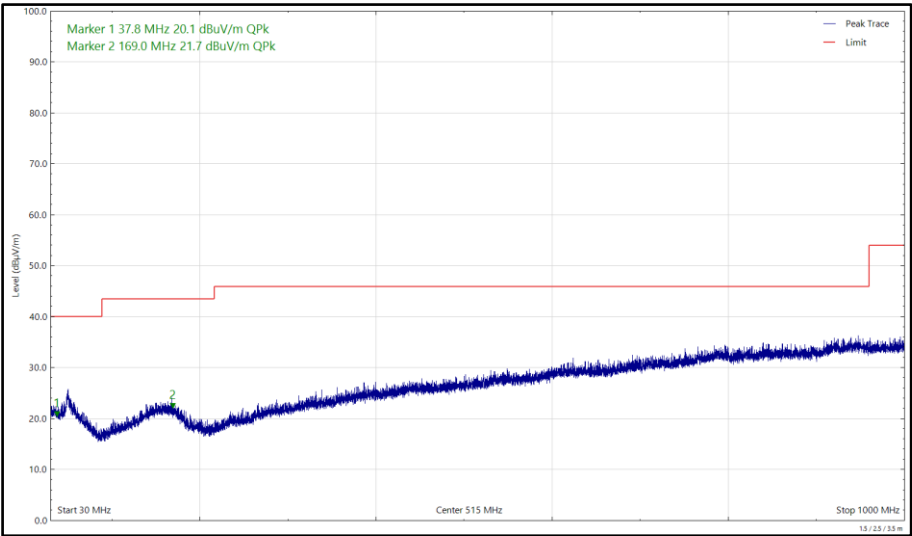


Figure 116 - 2441 MHz (CH2441), DH5, iPA, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

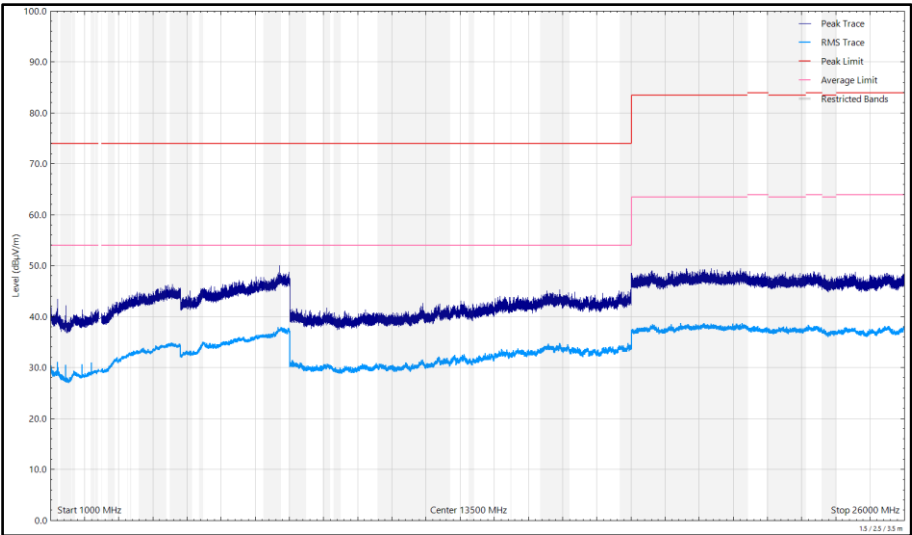


Figure 117 - 2441 MHz (CH2441), DH5, iPA, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical



Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

Table 81 - 2480 MHz (CH2480), DH5, iPA, Core 0 + Core 1, 1 GHz to 18 GHz

*No emissions found within 20 dB of the limit.

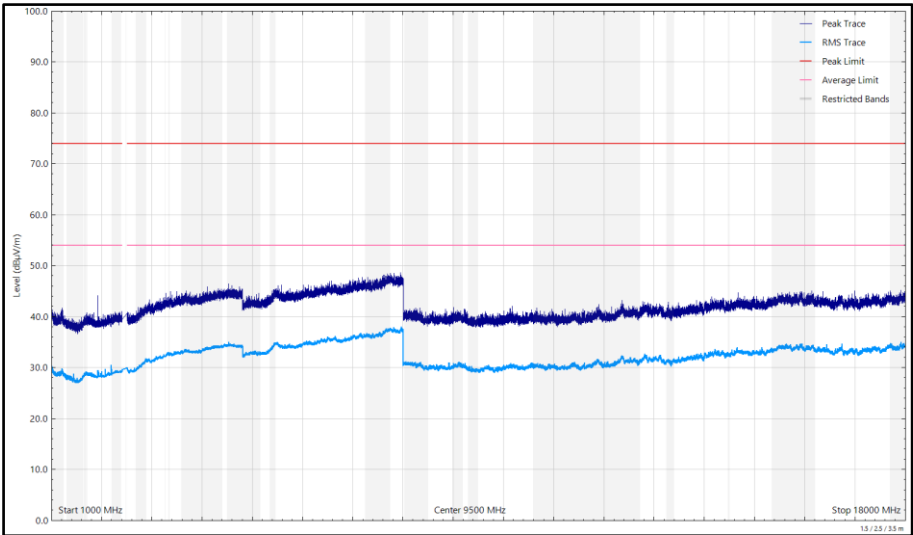


Figure 118 - 2480 MHz (CH2480), DH5, iPA, Core 0 + Core 1, 1 GHz to 18 GHz, Horizontal

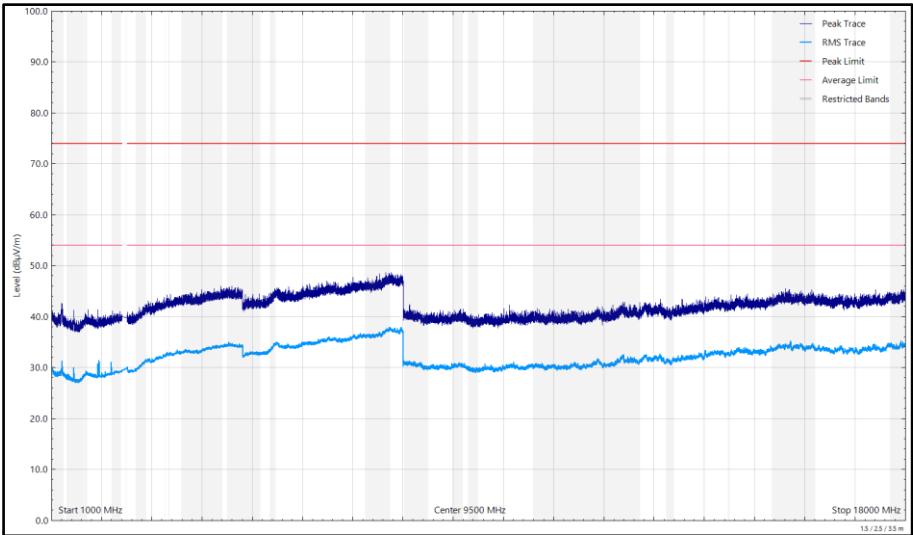


Figure 119 - 2480 MHz (CH2480), DH5, iPA, Core 0 + Core 1, 1 GHz to 18 GHz, Vertical



Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

Table 82 - 2402 MHz (CH2402), DH5, iPA, Core 2, 1 GHz to 18 GHz

*No emissions found within 20 dB of the limit.

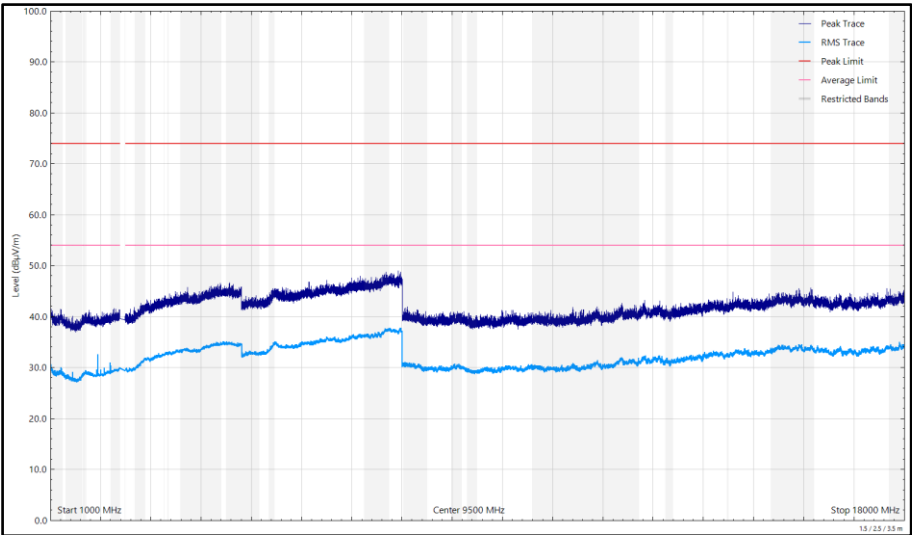


Figure 120 - 2402 MHz (CH2402), DH5, iPA, Core 2, 1 GHz to 18 GHz, Horizontal

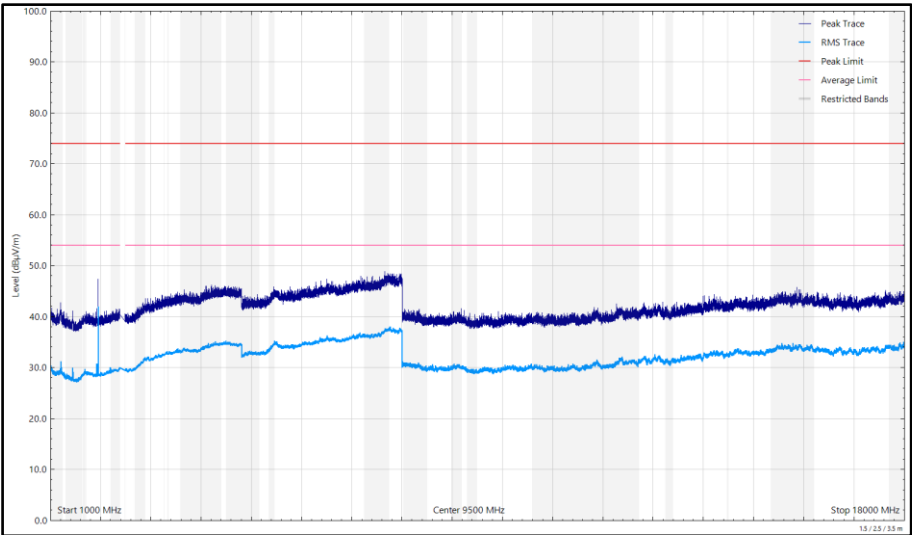


Figure 121 - 2402 MHz (CH2402), DH5, iPA, Core 2, 1 GHz to 18 GHz, Vertical

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
37.558	20.16	40.00	-19.84	Q-Peak	80	280	Vertical
37.615	20.12	40.00	-19.88	Q-Peak	163	350	Horizontal
164.593	21.85	43.50	-21.65	Q-Peak	347	262	Vertical
164.908	21.81	43.50	-21.69	Q-Peak	5	393	Horizontal

Table 83 - 2441 MHz (CH2441), DH5, iPA, Core 2, 30 MHz to 26 GHz

No other emissions found within 20 dB of the limit.

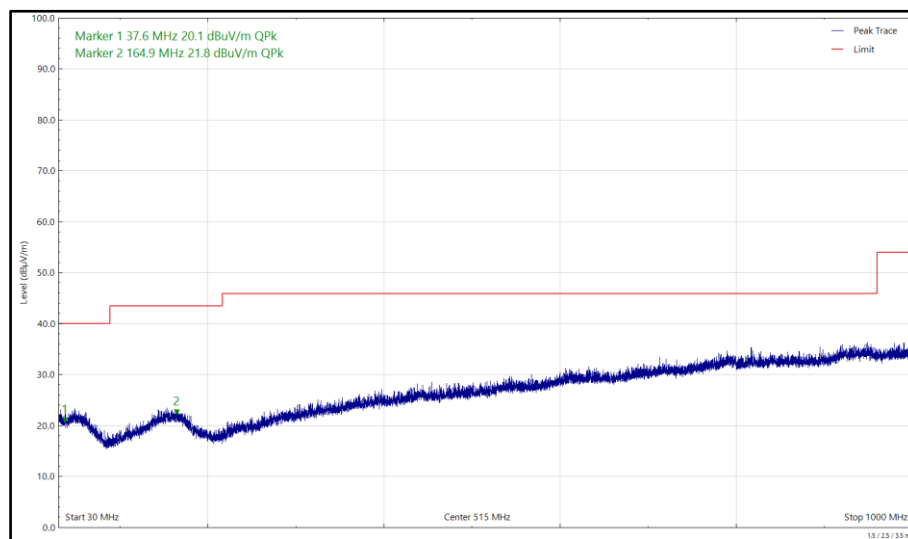


Figure 122 - 2441 MHz (CH2441), DH5, iPA, Core 2, 30 MHz to 1 GHz, Horizontal (Peak)

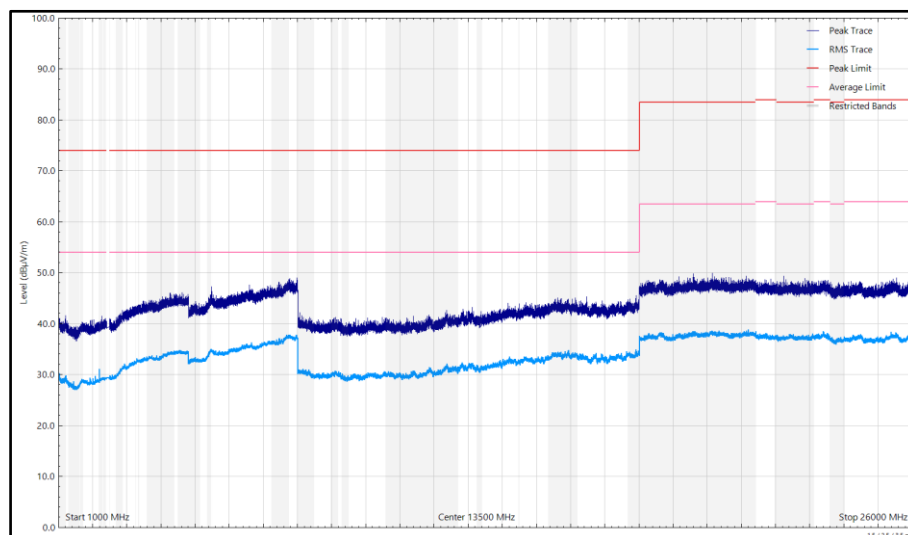


Figure 123 - 2441 MHz (CH2441), DH5, iPA, Core 2, 1 GHz to 26 GHz, Horizontal

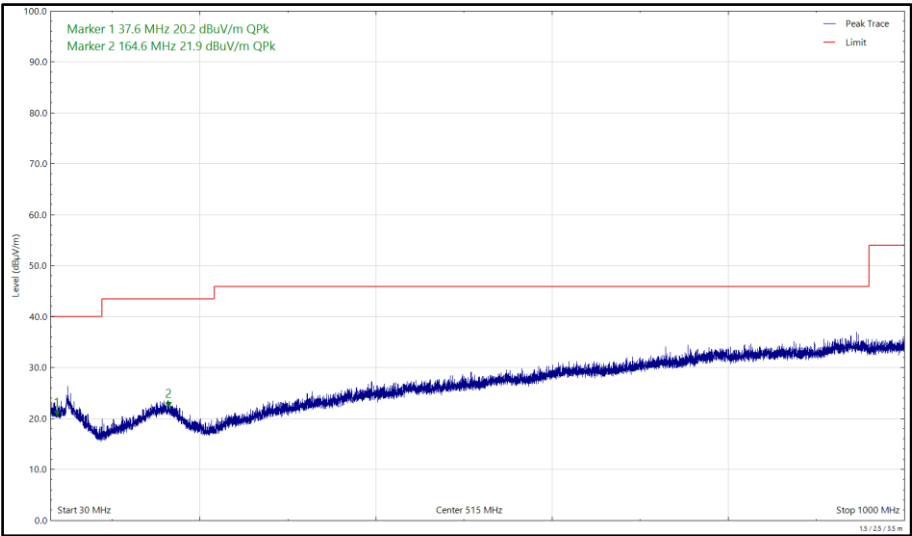


Figure 124 - 2441 MHz (CH2441), DH5, iPA, Core 2, 30 MHz to 1 GHz, Vertical (Peak)

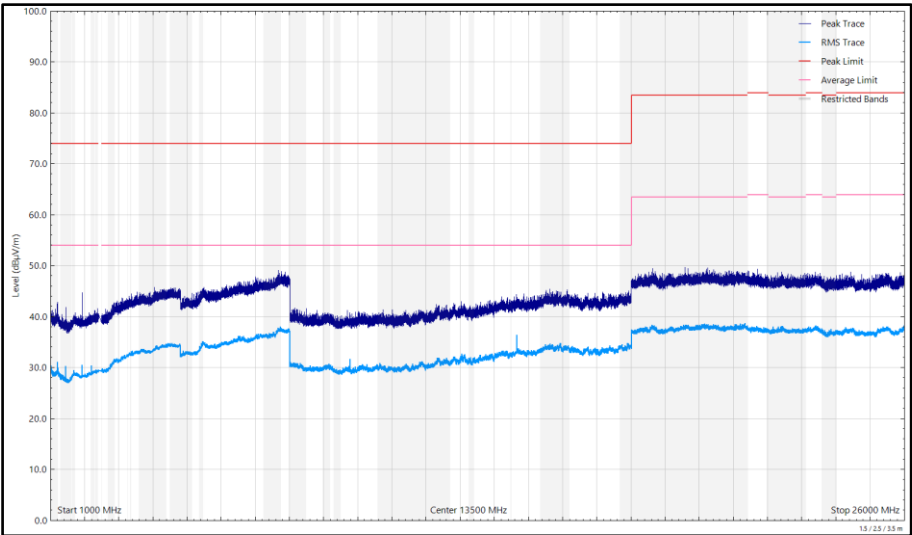


Figure 125 - 2441 MHz (CH2441), DH5, iPA, Core 2, 1 GHz to 26 GHz, Vertical



Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4960.340	32.52	54.00	-21.48	CISPR Avg	112	121	Vertical

Table 84 - 2480 MHz (CH2480), DH5, iPA, Core 2, 1 GHz to 18 GHz

No other emissions found within 20 dB of the limit.

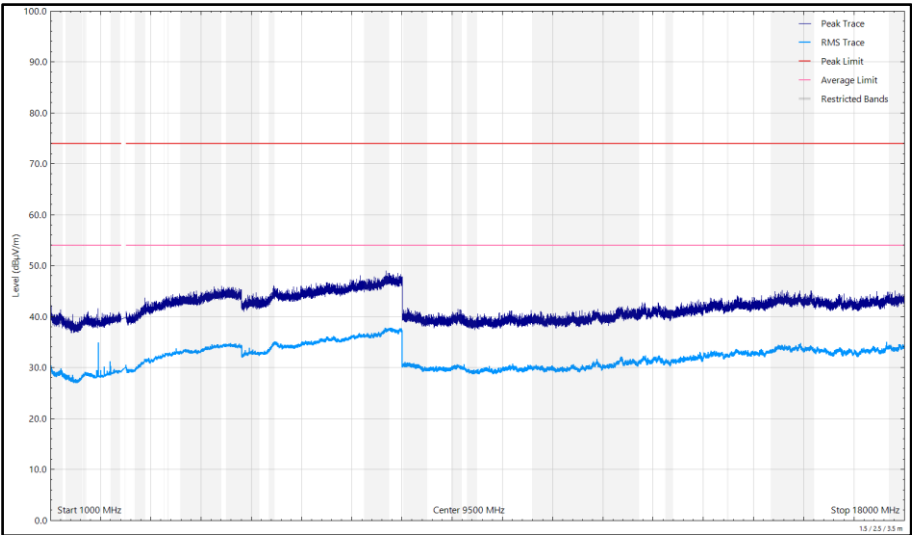


Figure 126 - 2480 MHz (CH2480), DH5, iPA, Core 2, 1 GHz to 18 GHz, Horizontal

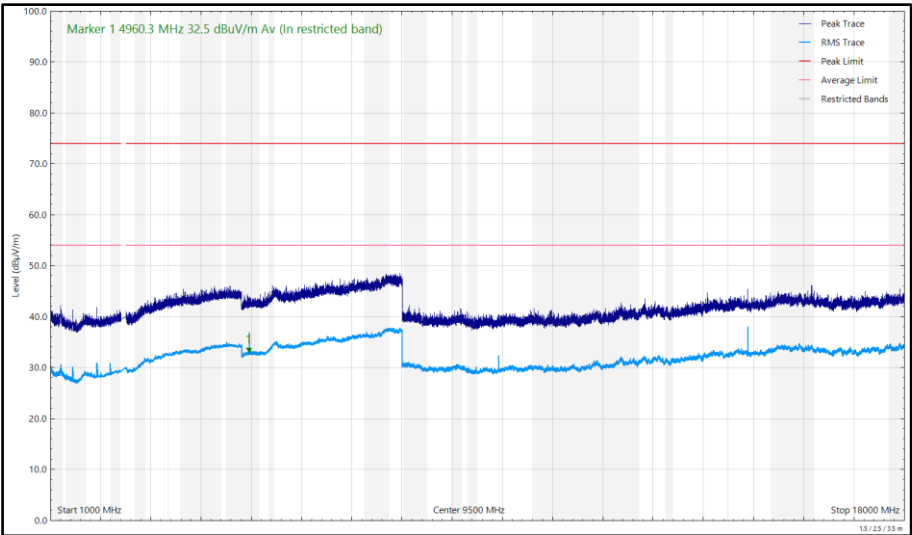


Figure 127 - 2480 MHz (CH2480), DH5, iPA, Core 2, 1 GHz to 18 GHz, Vertical



Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

Table 85 - 2402 MHz (CH2402), DH5, ePA, Core 0 + Core 1, 1 GHz to 18 GHz

*No emissions found within 20 dB of the limit.

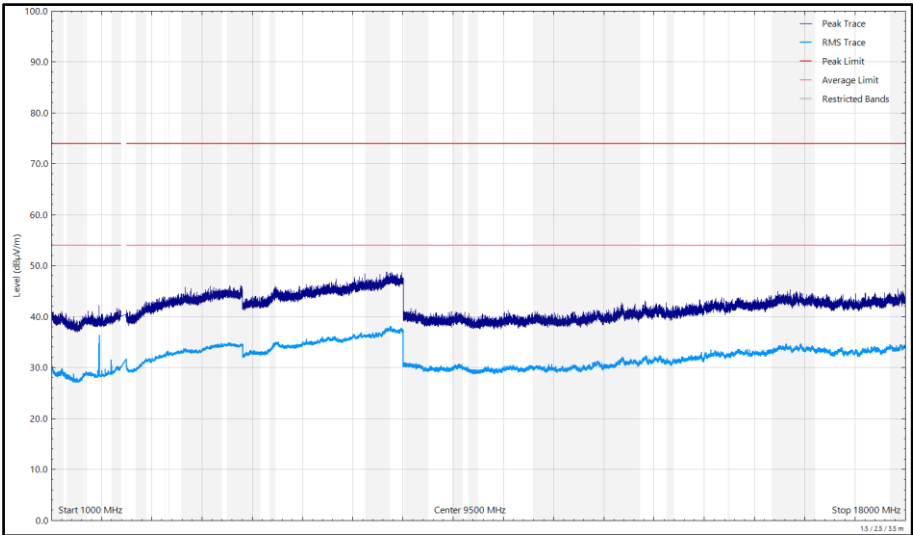


Figure 128 - 2402 MHz (CH2402), DH5, ePA, Core 0 + Core 1, 1 GHz to 18 GHz, Horizontal

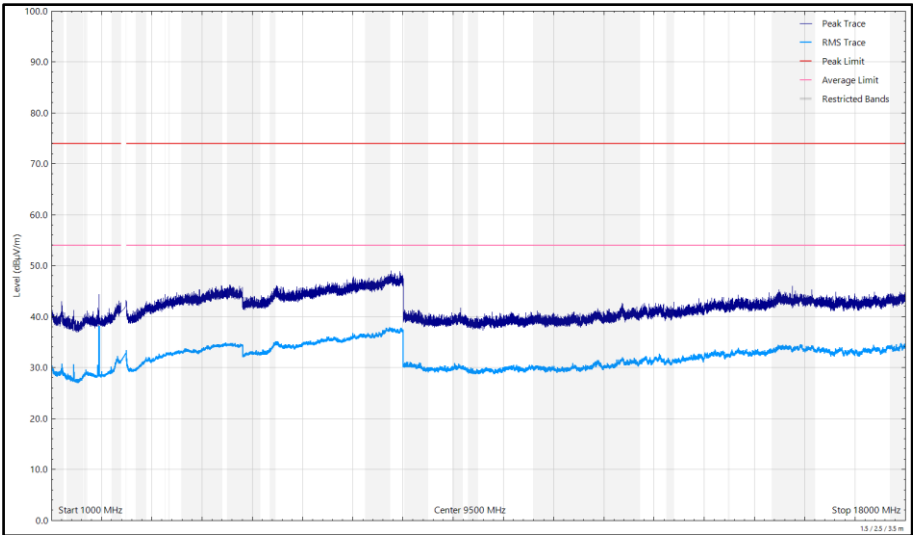


Figure 129 - 2402 MHz (CH2402), DH5, ePA, Core 0 + Core 1, 1 GHz to 18 GHz, Vertical

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
37.642	20.15	40.00	-19.85	Q-Peak	164	391	Vertical
73.728	17.61	40.00	-22.39	Q-Peak	359	260	Horizontal
162.532	21.86	43.50	-21.64	Q-Peak	350	293	Horizontal
164.731	21.83	43.50	-21.67	Q-Peak	360	209	Vertical

Table 86 - 2441 MHz (CH2441), DH5, ePA, Core 0 + Core 1, 30 MHz to 26 GHz

No other emissions found within 20 dB of the limit.

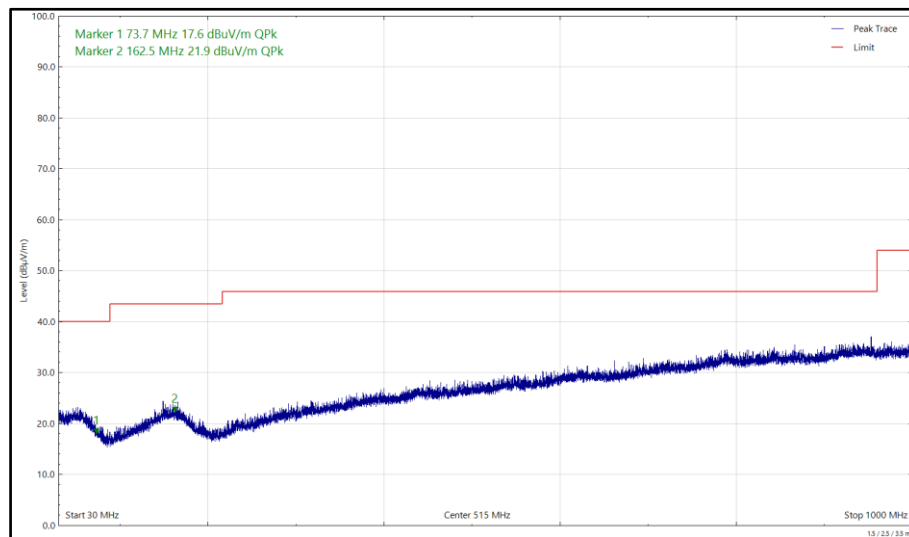


Figure 130 - 2441 MHz (CH2441), DH5, ePA, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

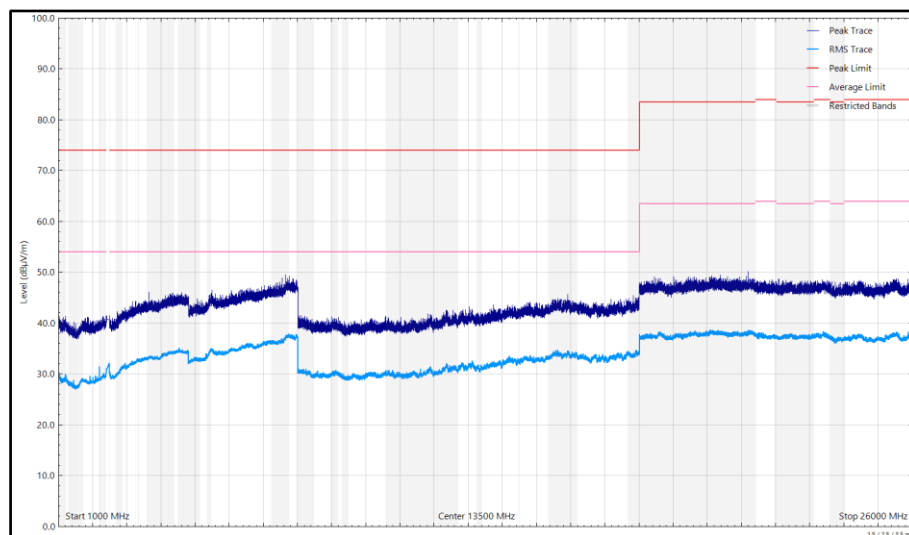


Figure 131 - 2441 MHz (CH2441), DH5, ePA, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal

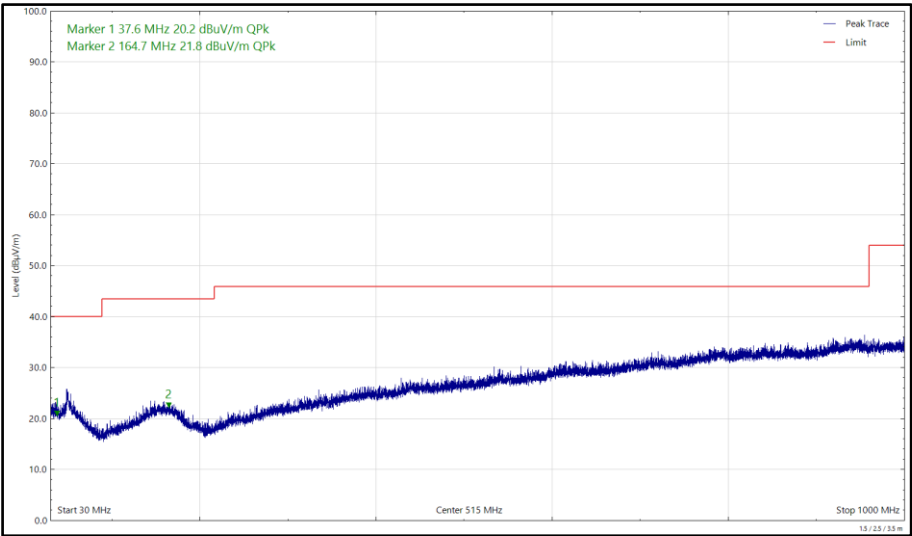


Figure 132 - 2441 MHz (CH2441), DH5, ePA, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

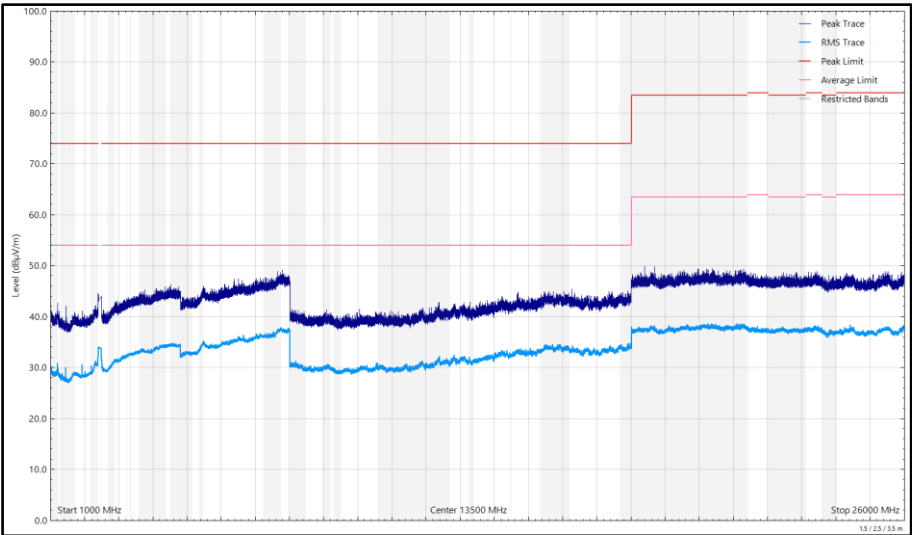


Figure 133 - 2441 MHz (CH2441), DH5, ePA, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical



Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

Table 87 - 2480 MHz (CH2480), DH5, ePA, Core 0 + Core 1, 1 GHz to 18 GHz

*No emissions found within 20 dB of the limit.

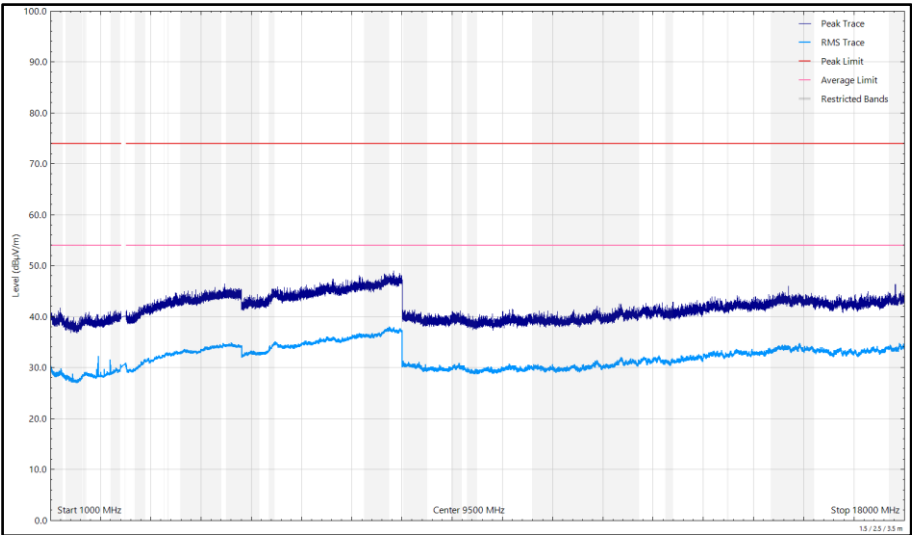


Figure 134 - 2480 MHz (CH2480), DH5, ePA, Core 0 + Core 1, 1 GHz to 18 GHz, Horizontal

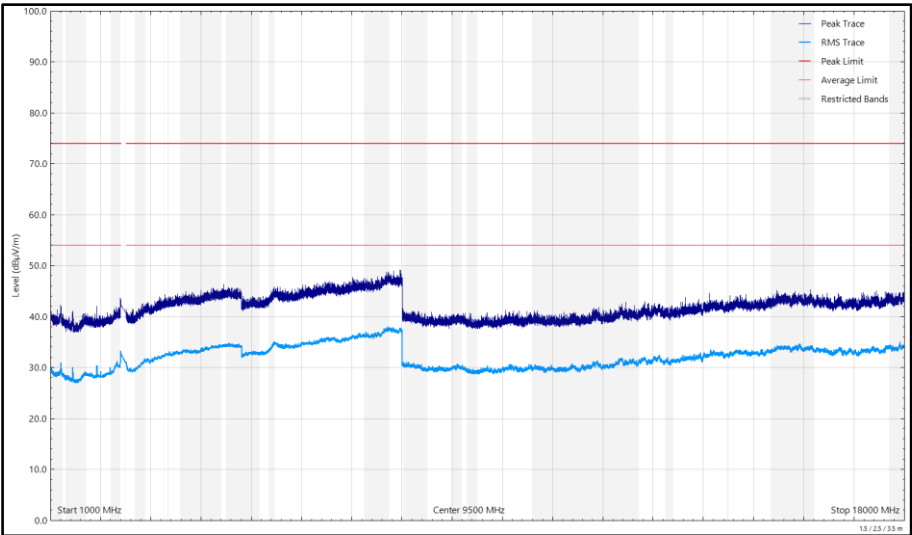


Figure 135 - 2480 MHz (CH2480), DH5, ePA, Core 0 + Core 1, 1 GHz to 18 GHz, Vertical



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 6.6

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.

In addition, radiated emissions which fall in the restricted bands, as defined in RSS-GEN, clause 8.10, must also comply with the radiated emission limits specified in RSS-GEN clause 8.9.



2.8.8 Test Location and Test Equipment Used

This test was carried out in RF Chamber 14 & RF Chamber 16.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Emissions Software	TUV SUD	EmX V3.6.1	5125	-	TU
EMI Test Receiver	Rohde & Schwarz	ESW44	5912	12	04-Sep-2026
Cable (K Type 2m)	Junkosha	MWX241-02000KMSKMS/B	5937	12	12-Jun-2026
DRG Horn Antenna (7.5-18GHz)	Schwarzbeck	HWRD750	5939	12	23-May-2027
1500W (300V 12A) AC Power Supply	iTech	IT7324	5955	-	TU
1500W (300V 12A) AC Power Supply	iTech	IT7324	5957	-	TU
5m Semi-Anechoic Chamber (Dual-Axis)	Albatross Projects	RF Chamber 14	5958	36	23-Apr-2028
Compact Antenna Mast	Maturo Gmbh	CAM4.0-P	5959	-	TU
Turntable	Maturo Gmbh	TT1.5SI	5962	-	TU
3m Semi-Anechoic Chamber, Chamber16	Albatross Projects	RF Chamber 16	5972	36	07-May-2028
Mast & Turntable Controller	Maturo Gmbh	FCU3.0	5973	-	TU
Tilt Antenna Mast	Maturo Gmbh	BAM4.5-P	5974	-	TU
Turntable	Maturo Gmbh	TT1.5SI	5975	-	TU
Cable (N-Type to N-Type, 8 m)	Junkosha	MWX221-08000NMSNMS/A	6017	12	12-Sep-2026
Horn Antenna (1-10 GHz)	Schwarzbeck	BBHA9120B	6142	12	14-Sep-2026
Digital Multimeter	Fluke	115	6145	12	02-Jun-2027
Digital Multimeter	Fluke	115	6147	12	03-Jun-2027
Double Ridge Active Horn Antenna (18-40 GHz)	Com-Power	AHA-840	6189	24	26-Sep-2026
SAC Switch Unit	TUV SUD	TUV_SSU_001	6190	12	11-Dec-2026
SAC Switch Unit	TUV SUD	TUV_SSU_001	6191	12	18-Dec-2026
8GHz Highpass Filter	Wainwright	WHKX 7150 8000 18000 50SS	6194	12	23-Apr-2027
Pre Amp 8 - 18 GHz	Wright Technologies	APS06 0061	6200	12	23-Apr-2027
Attenuator 4dB	Pasternack	PE7074-4	6204	24	13-Mar-2027
Cable (SMA to SMA 20cm)	TUV SUD	MH-FH 8-18	6215	12	23-Apr-2027
Cable (K Type 2m)	Junkosha	MWX241-02000KMSKMS/B	6323	12	27-Apr-2027
Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9168	6456	24	13-Mar-2027



Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Mast & Turntable Controller	Maturo Gmbh	FCU3.0	6795	-	TU
Tilt Antenna Mast	Maturo Gmbh	BAM4.5-P	6796	-	TU
EMI Test Receiver	Rohde & Schwarz	ESW44	6805	12	24-Jul-2026
1M SMA Cable	Junkosha	MWX221-01000AMSAMS/B	6832	12	18-Aug-2026
Handheld Hygrometer	Fluke	971	6837	12	16-Sep-2026
Handheld Hygrometer	Fluke	971	6838	12	16-Sep-2026
1m SMA-Type Cable	Junkosha	MWX221-01000AMSAMS/B	6842	12	23-Sep-2026
1m SMA-Type Cable	Junkosha	MWX221-01000AMSAMS/B	6843	12	06-Sep-2026
1m SMA-Type Cable	Junkosha	MWX221-01000AMSAMS/B	6844	12	06-Sep-2026
8m SMA-Type Cable	Junkosha	MWX221-08000AMSAMS/B	6847	12	06-Nov-2026
8m SMA-Type Cable	Junkosha	MWX221-08000AMSAMS/B	6848	12	23-Oct-2026
8m SMA-Type Cable	Junkosha	MWX221-08000AMSAMS/B	6849	12	06-Nov-2026

Table 88

TU - Traceability Unscheduled

3 Measurement Uncertainty

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

Test Name	Measurement Uncertainty
Restricted Band Edges	30 MHz to 1 GHz: ± 5.2 dB 1 GHz to 40 GHz: ± 6.3 dB
Frequency Hopping Systems - Average Time of Occupancy	-
Frequency Hopping Systems - Channel Separation	± 34.68 kHz
Frequency Hopping Systems - Number of Hopping Channels	-
Frequency Hopping Systems - 20 dB Bandwidth	± 34.68 kHz
Maximum Conducted Output Power	Method PM: ± 0.65 dB Method SA: ± 1.05 dB
Authorised 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 89

Measurement Uncertainty Decision Rule – Accuracy Method

Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115:2021, Clause 4.4.3 (Procedure 2). The measurement results are directly compared with the test limit to determine conformance with the requirements of the standard.

Risk: The uncertainty of measurement about the measured result is negligible with regard to the final pass/fail decision. The measurement result can be directly compared with the test limit to determine conformance with the requirement (compare IEC Guide 115). The level of risk to falsely accept and falsely reject items is further described in ILAC-G8.