

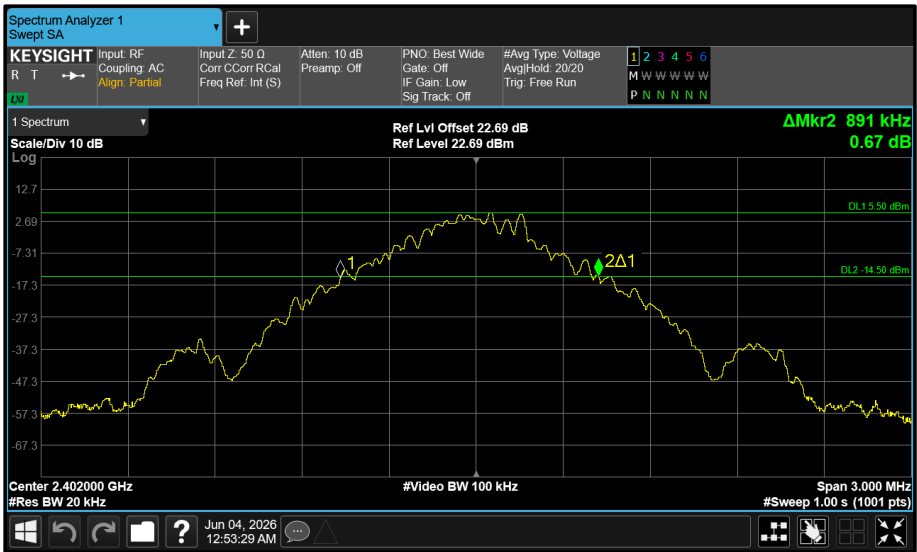


Figure 76 - Core 1 (B) 2402 MHz (CH0) 20 dB Bandwidth

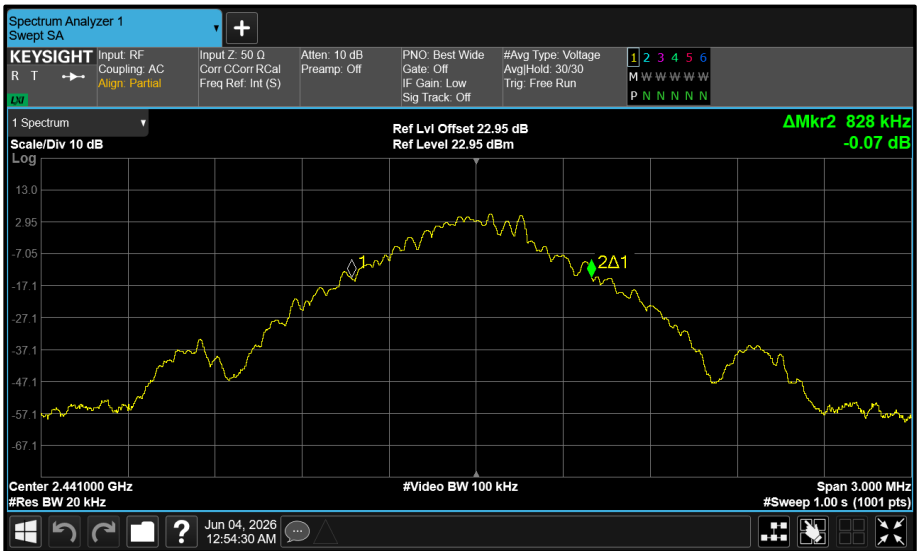


Figure 77 - Core 0 (A) 2441 MHz (CH39) 99% Bandwidth

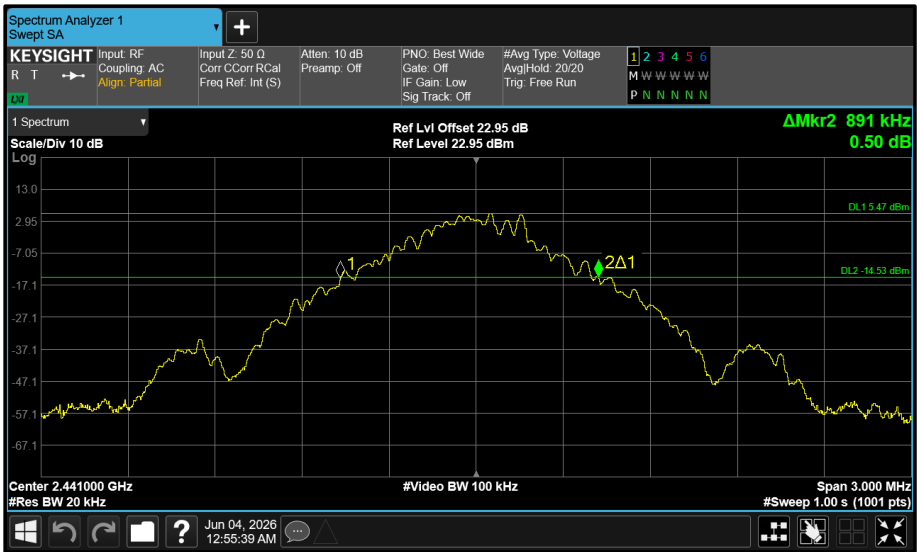


Figure 78 - Core 0 (A) 2441 MHz (CH39) 20 dB Bandwidth

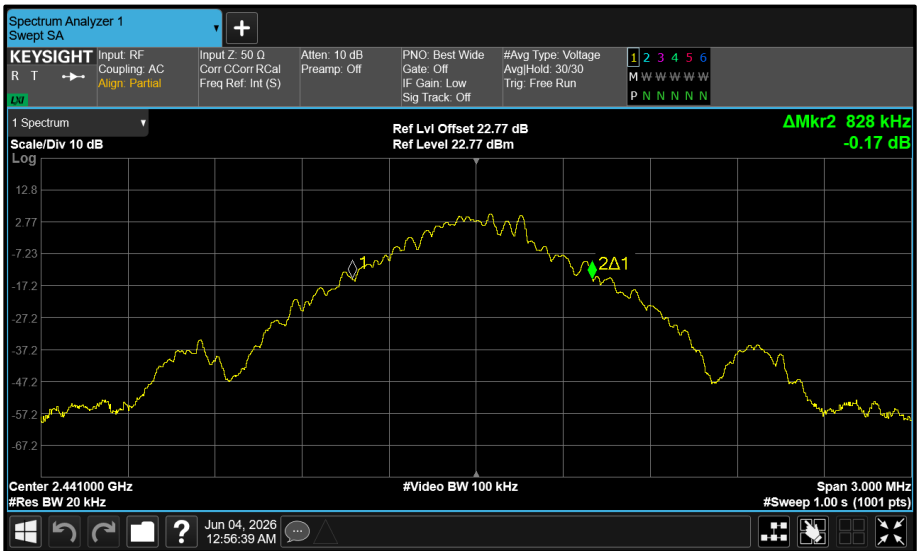


Figure 79 - Core 1 (B) 2441 MHz (CH39) 99% Bandwidth

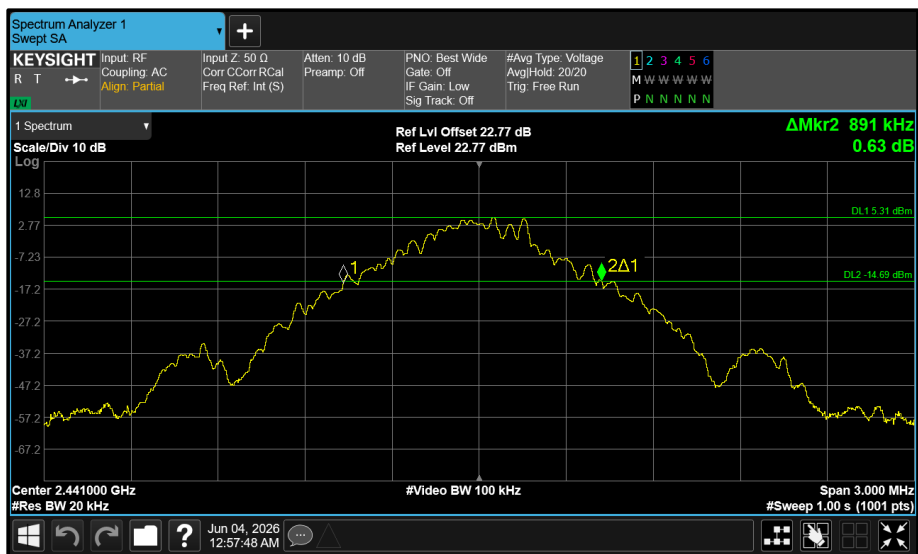


Figure 80 - Core 1 (B) 2441 MHz (CH39) 20 dB Bandwidth

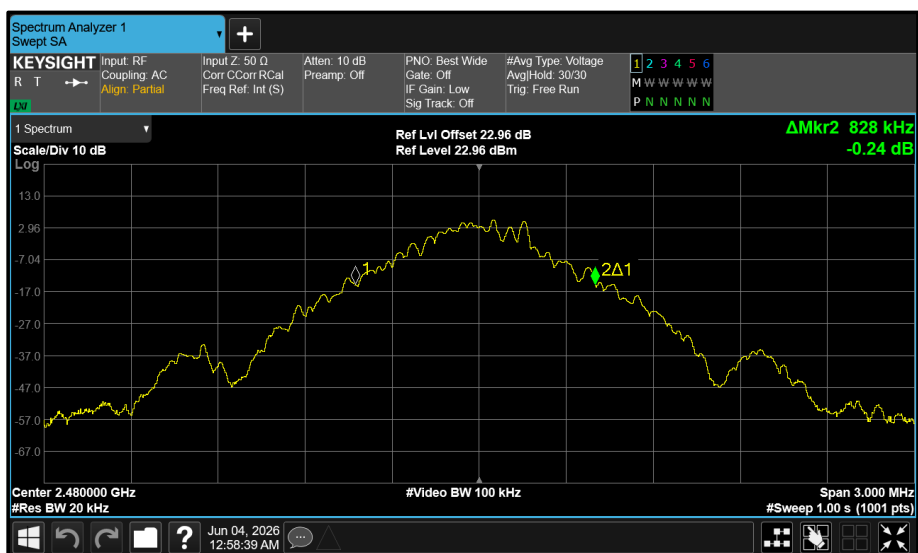


Figure 81 - Core 0 (A) 2480 MHz (CH78) 99% Bandwidth

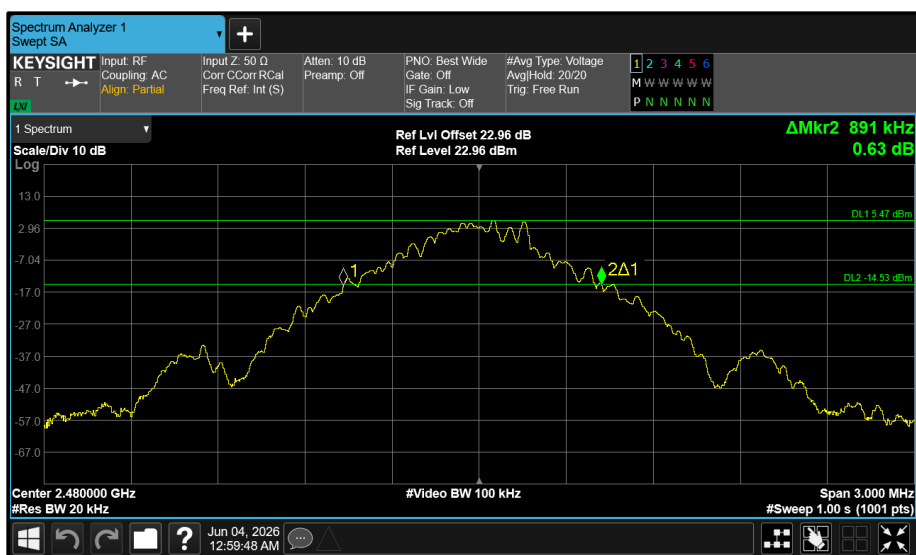


Figure 82 - Core 0 (A) 2480 MHz (CH78) 20 dB Bandwidth

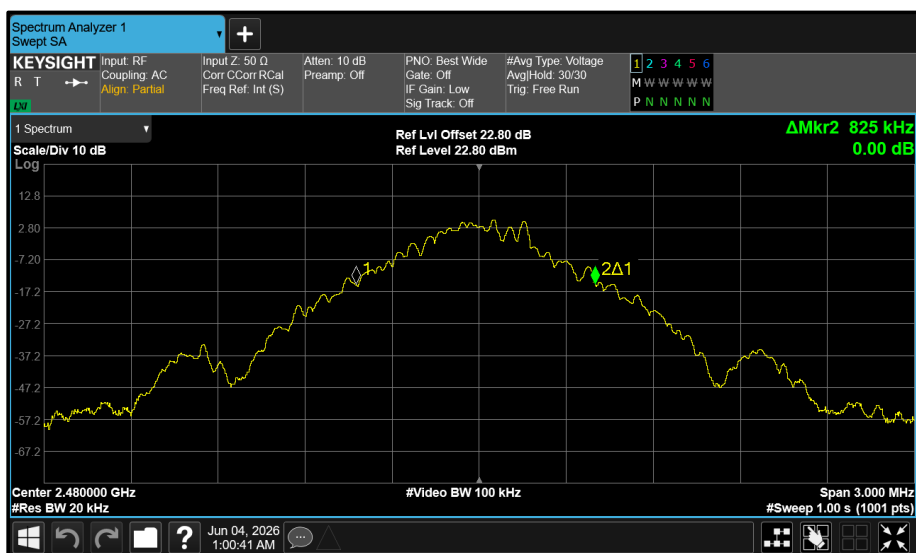


Figure 83 - Core 1 (B) 2480 MHz (CH78) 99% Bandwidth

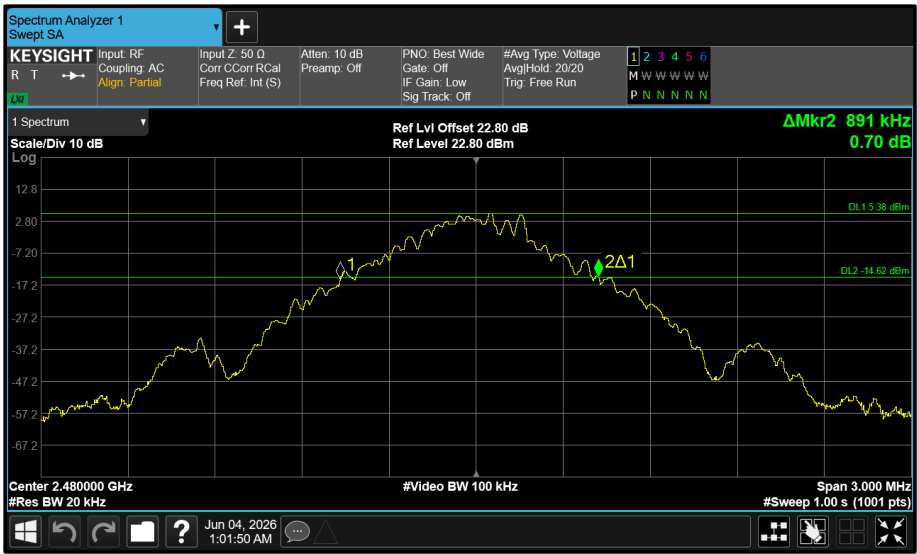


Figure 84 - Core 1 (B) 2480 MHz (CH78) 20 dB Bandwidth

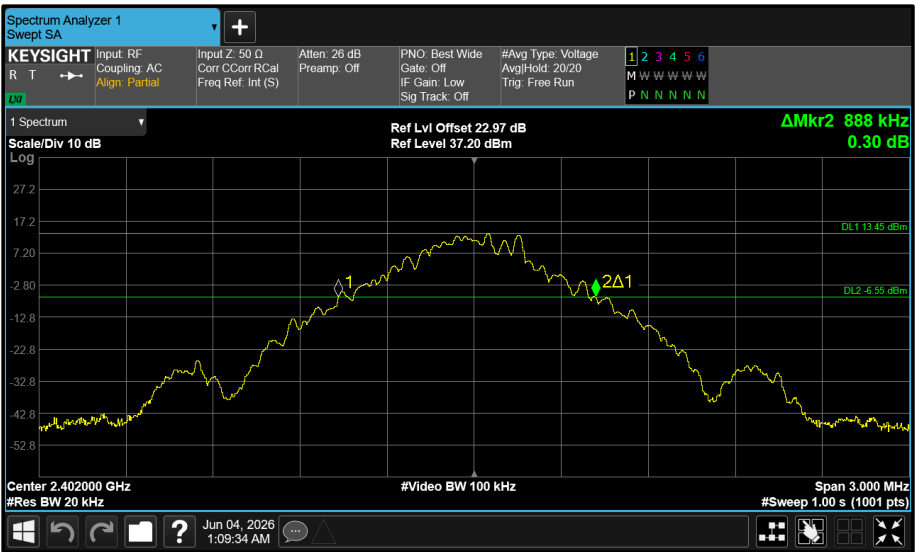


Figure 86 - Core 0 (A) 2402 MHz (CH0) 20 dB Bandwidth

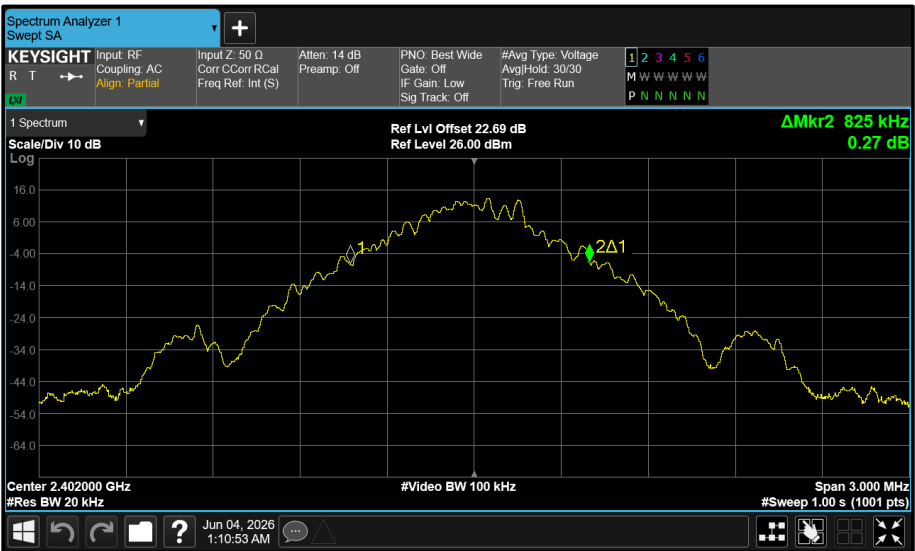


Figure 87 - Core 1 (B) 2402 MHz (CH0) 99% Bandwidth

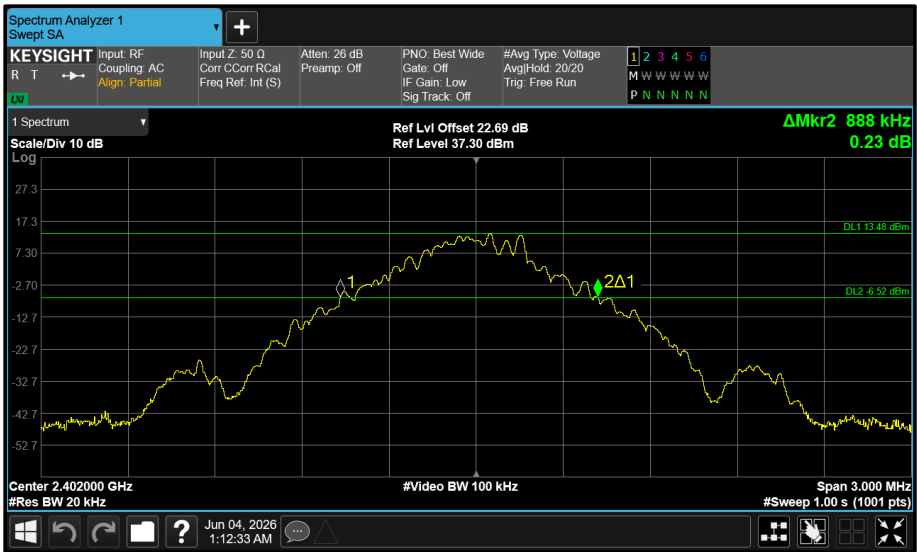


Figure 88 - Core 1 (B) 2402 MHz (CH0) 20 dB Bandwidth

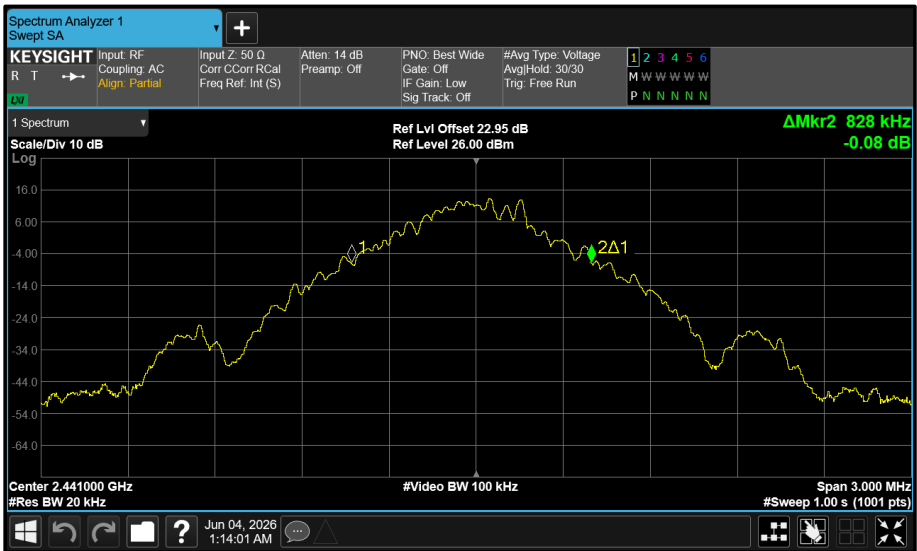


Figure 89 - Core 0 (A) 2441 MHz (CH39) 99% Bandwidth

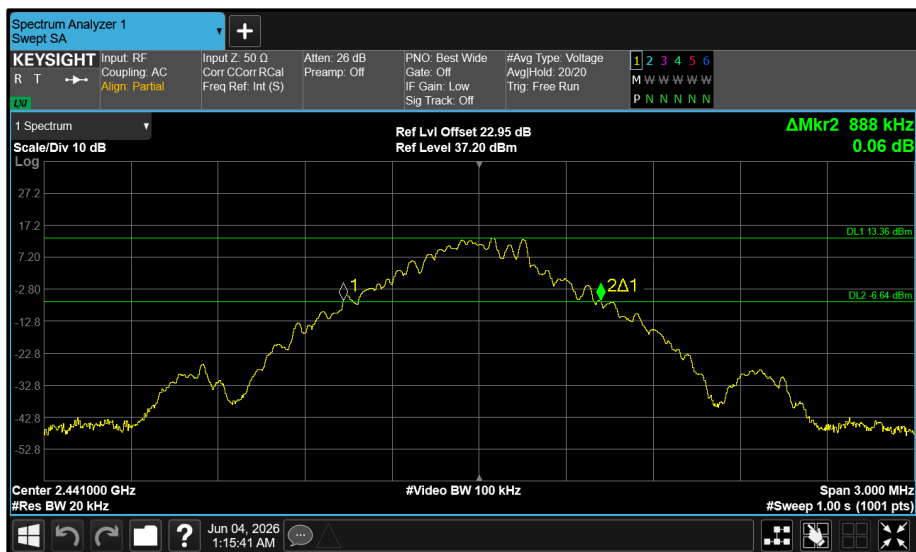


Figure 90 - Core 0 (A) 2441 MHz (CH39) 20 dB Bandwidth

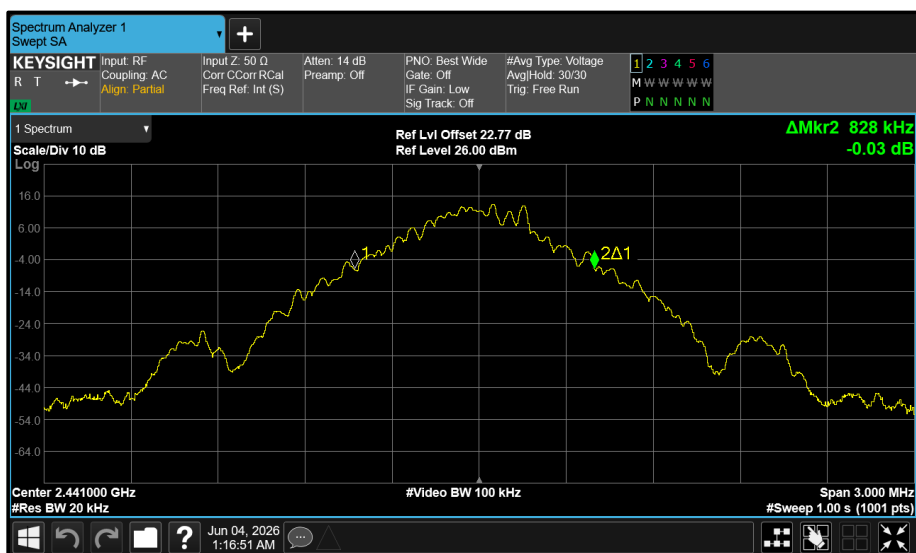


Figure 91 - Core 1 (B) 2441 MHz (CH39) 99% Bandwidth

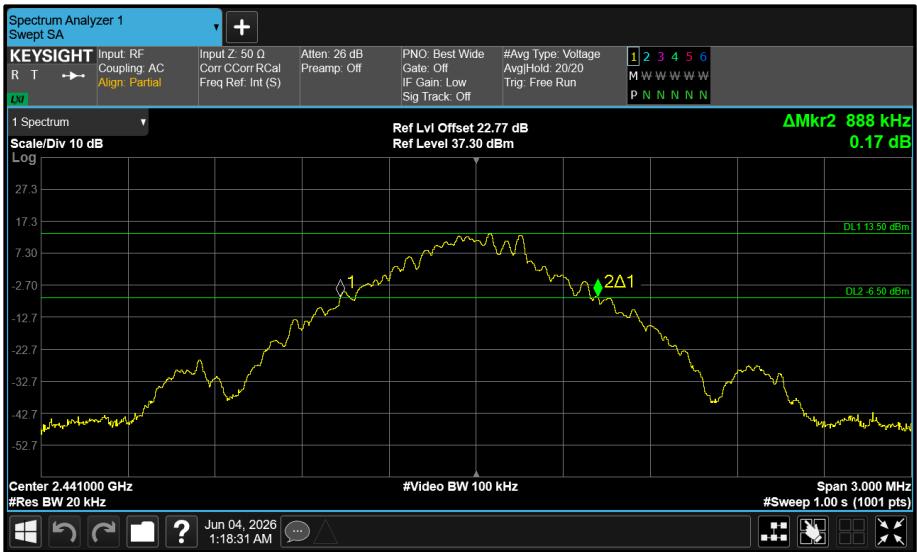


Figure 92 - Core 1 (B) 2441 MHz (CH39) 20 dB Bandwidth

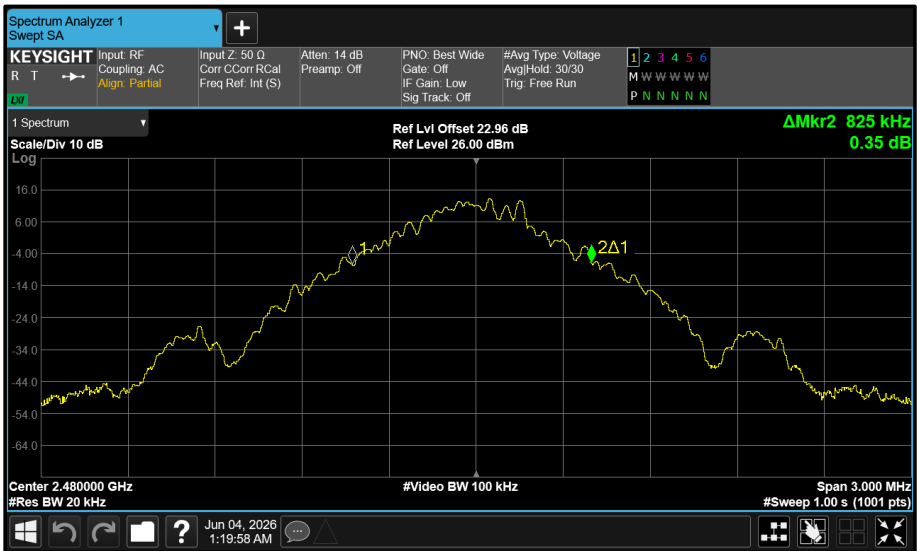


Figure 93 - Core 0 (A) 2480 MHz (CH78) 99% Bandwidth

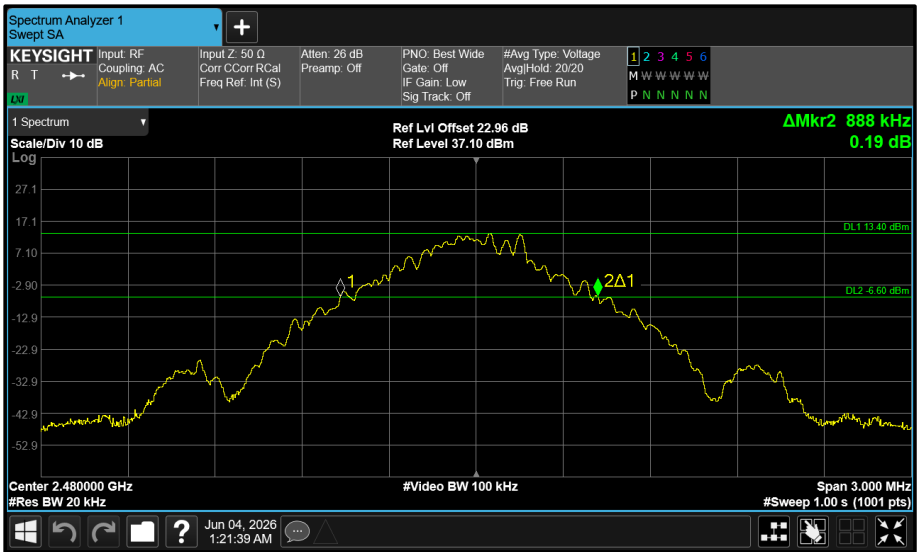


Figure 94 - Core 0 (A) 2480 MHz (CH78) 20 dB Bandwidth

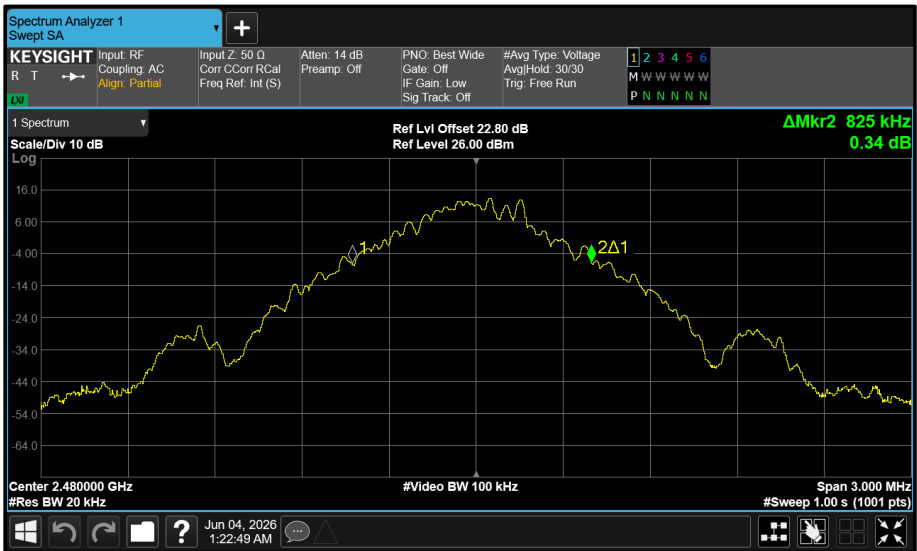
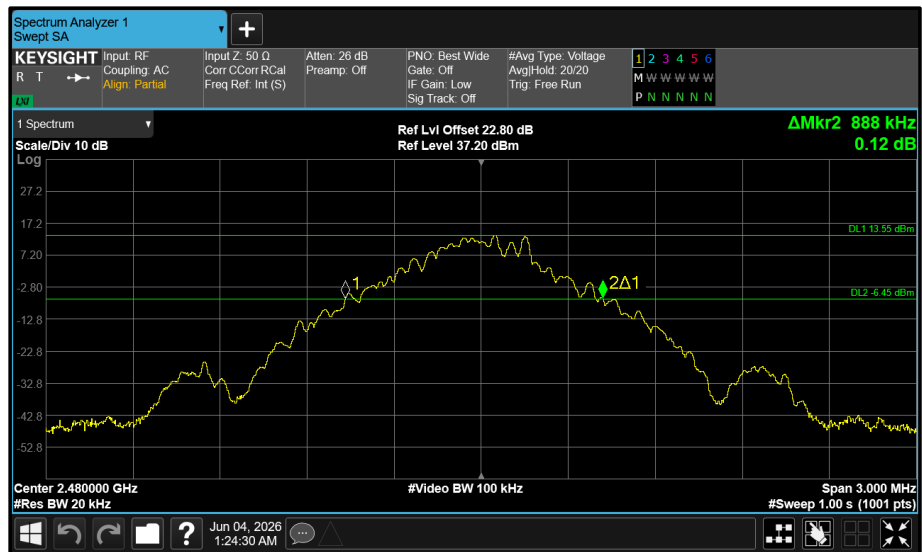


Figure 95 - Core 1 (B) 2480 MHz (CH78) 99% Bandwidth





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 18.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
1500VA AC Power Supply	iTech	IT7324	5907	-	O/P Mon
USB Power Sensors, 50MHz to 8GHz	Boonton	RTP5008	5921	12	29-Nov-2026
USB Power Sensors, 50MHz to 8GHz	Boonton	RTP5008	5922	12	29-Nov-2026
USB Power Sensors, 50MHz to 8GHz	Boonton	RTP5008	5923	12	29-Nov-2026
Modular Power System Mainframe	Keysight Technologies	N6701C	5969	-	O/P Mon
DC Power Module 60V 20A 300W	Keysight Technologies	N6754A	5970	-	O/P Mon
Humidity & Temperature meter	R.S Components	1364	6148	12	28-Aug-2026
MXA Signal Analyser	Keysight Technologies	N9020B	6417	24	14-Oct-2027
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6519	12	29-Nov-2026
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6520	12	29-Nov-2026
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6521	12	29-Nov-2026
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6522	12	29-Nov-2026
Digital Thermometer	R.S Components	RS 5511	6739	12	02-Mar-2027
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

A3590, S/N: G4F2X9GG6P - Modification State 0

2.6.3 Date of Test

01-June-2026 to 08-June-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	20.9 - 23.5 °C
Relative Humidity	48.9 - 59.8 %



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):	2.60

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	9.35	-	-	-	9.35	30.00	-20.65
2441	9.43	-	-	-	9.43	30.00	-20.57
2480	9.47	-	-	-	9.47	30.00	-20.53

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	9.35	-	-	-	9.35	30.00	-20.65	11.95	36.00	-24.05
2441	9.43	-	-	-	9.43	30.00	-20.57	12.03	36.00	-23.97
2480	9.47	-	-	-	9.47	30.00	-20.53	12.07	36.00	-23.93

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):	2.60

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	-	9.34	-	-	9.34	30.00	-20.66
2441	-	9.36	-	-	9.36	30.00	-20.64
2480	-	9.26	-	-	9.26	30.00	-20.74

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	-	9.34	-	-	9.34	30.00	-20.66	11.94	36.00	-24.06
2441	-	9.36	-	-	9.36	30.00	-20.64	11.96	36.00	-24.04
2480	-	9.26	-	-	9.26	30.00	-20.74	11.86	36.00	-24.14

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):	2.00

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	-	-	13.30	-	13.30	30.00	-16.70
2441	-	-	13.18	-	13.18	30.00	-16.82
2480	-	-	13.16	-	13.16	30.00	-16.84

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	-	-	13.30	-	13.30	30.00	-16.70	15.30	36.00	-20.70
2441	-	-	13.18	-	13.18	30.00	-16.82	15.18	36.00	-20.82
2480	-	-	13.16	-	13.16	30.00	-16.84	15.16	36.00	-20.84

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 (%):	76.5
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	2.60

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	18.44	-	-	-	18.44	30.00	-11.56
2441	18.45	-	-	-	18.45	30.00	-11.55
2480	18.45	-	-	-	18.45	30.00	-11.55

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	18.44	-	-	-	18.44	30.00	-11.56	21.04	36.00	-14.96
2441	18.45	-	-	-	18.45	30.00	-11.55	21.05	36.00	-14.95
2480	18.45	-	-	-	18.45	30.00	-11.55	21.05	36.00	-14.95

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 (%):	76.4
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	B (Core 1)	Peak Antenna Gain (dBi):	2.60

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	-	18.54	-	-	18.54	30.00	-11.46
2441	-	18.64	-	-	18.64	30.00	-11.36
2480	-	18.51	-	-	18.51	30.00	-11.49

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	-	18.54	-	-	18.54	30.00	-11.46	21.14	36.00	-14.86
2441	-	18.64	-	-	18.64	30.00	-11.36	21.24	36.00	-14.76
2480	-	18.51	-	-	18.51	30.00	-11.49	21.11	36.00	-14.89

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):	5.61

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	9.32	9.48	-	-	12.41	30.00	-17.59
2441	9.46	9.31	-	-	12.39	30.00	-17.61
2480	9.40	9.25	-	-	12.34	30.00	-17.66

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	9.32	9.48	-	-	12.41	30.00	-17.59	18.02	36.00	-17.98
2441	9.46	9.31	-	-	12.39	30.00	-17.61	18.00	36.00	-18.00
2480	9.40	9.25	-	-	12.34	30.00	-17.66	17.95	36.00	-18.05

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):	5.61

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	17.16	17.25	-	-	20.21	30.00	-9.79
2441	17.17	17.32	-	-	20.25	30.00	-9.75
2480	17.12	17.17	-	-	20.16	30.00	-9.84

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	17.16	17.25	-	-	20.21	30.00	-9.79	25.83	36.00	-10.17
2441	17.17	17.32	-	-	20.25	30.00	-9.75	25.86	36.00	-10.14
2480	17.12	17.17	-	-	20.16	30.00	-9.84	25.77	36.00	-10.23

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 18.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
1500VA AC Power Supply	iTech	IT7324	5907	-	O/P Mon
USB Power Sensors, 50MHz to 8GHz	Boonton	RTP5008	5921	12	29-Nov-2026
USB Power Sensors, 50MHz to 8GHz	Boonton	RTP5008	5922	12	29-Nov-2026
USB Power Sensors, 50MHz to 8GHz	Boonton	RTP5008	5923	12	29-Nov-2026
Modular Power System Mainframe	Keysight Technologies	N6701C	5969	-	O/P Mon
DC Power Module 60V 20A 300W	Keysight Technologies	N6754A	5970	-	O/P Mon
Humidity & Temperature meter	R.S Components	1364	6148	12	28-Aug-2026
MXA Signal Analyser	Keysight Technologies	N9020B	6417	24	14-Oct-2027
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6519	12	29-Nov-2026
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6520	12	29-Nov-2026
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6521	12	29-Nov-2026
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6522	12	29-Nov-2026
Digital Thermometer	R.S Components	RS 5511	6739	12	02-Mar-2027
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

A3590, S/N: JJRYT0H23C - Modification State 0
A3590, S/N: M77JGPPWWV - Modification State 0

2.7.3 Date of Test

07-April-2026 to 24-April-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	23.2 - 25.3 °C
Relative Humidity	31.5 - 42.1 %

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	-54.94
Hopping	DH5	2402-2480	2400	-60.53

Table 71 - SISO Authorised Band Edge Results

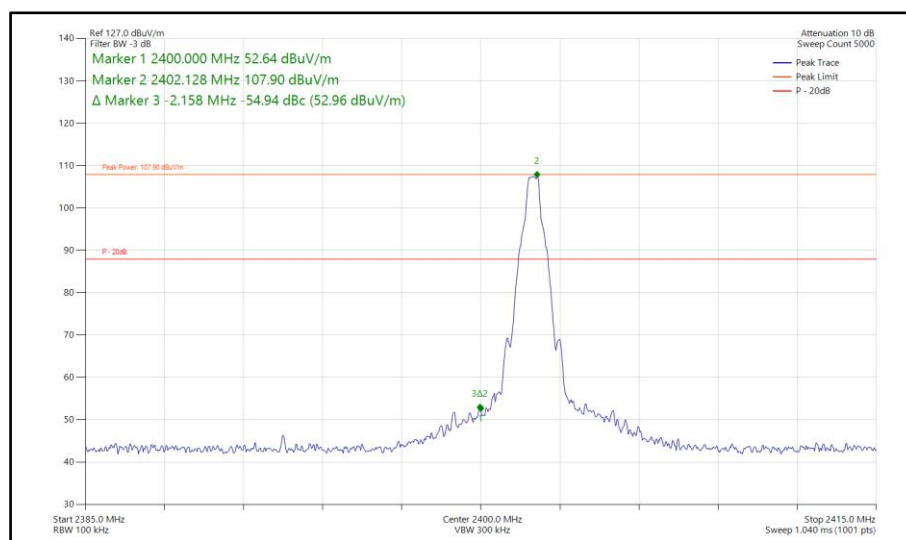


**Figure 97 - Bluetooth DH5, SISO, Core 0 - 2402 MHz
Band Edge Frequency 2400 MHz**

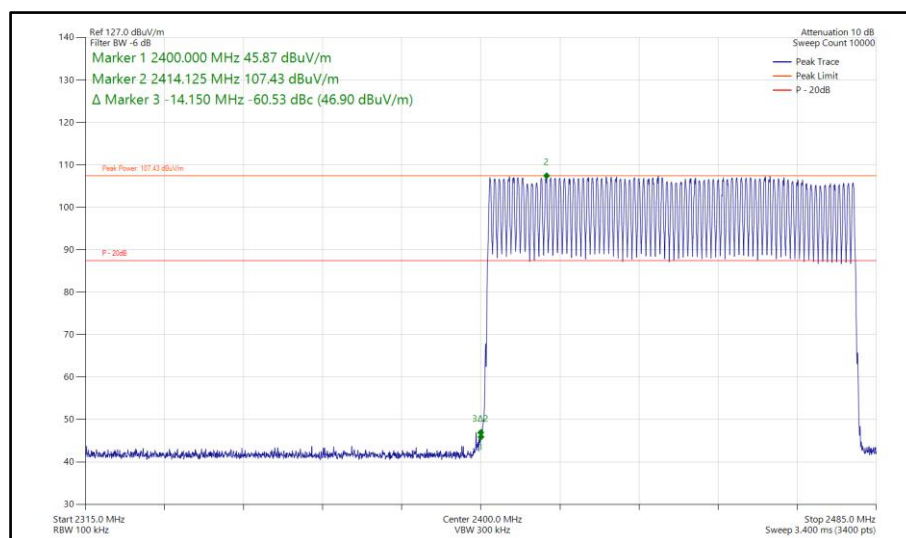


**Figure 98 - Bluetooth DH5, SISO, Core 0 - 2402-2480 MHz
Band Edge Frequency 2400 MHz**

iPA - Core 1 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-60.82
Hopping	DH5	2402-2480	2400	-63.22

Table 72 - SISO Authorised Band Edge Results

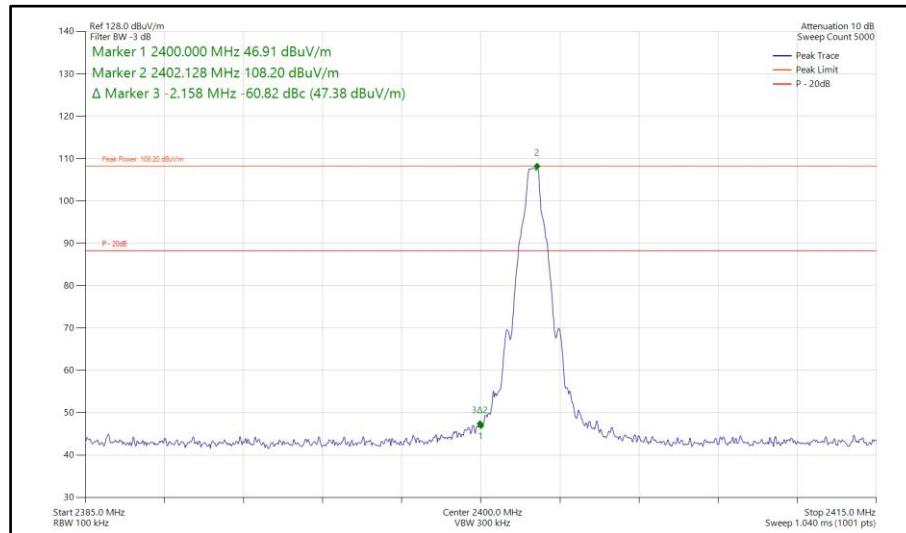


**Figure 99 - Bluetooth DH5, SISO, Core 1 - 2402 MHz
Band Edge Frequency 2400 MHz**

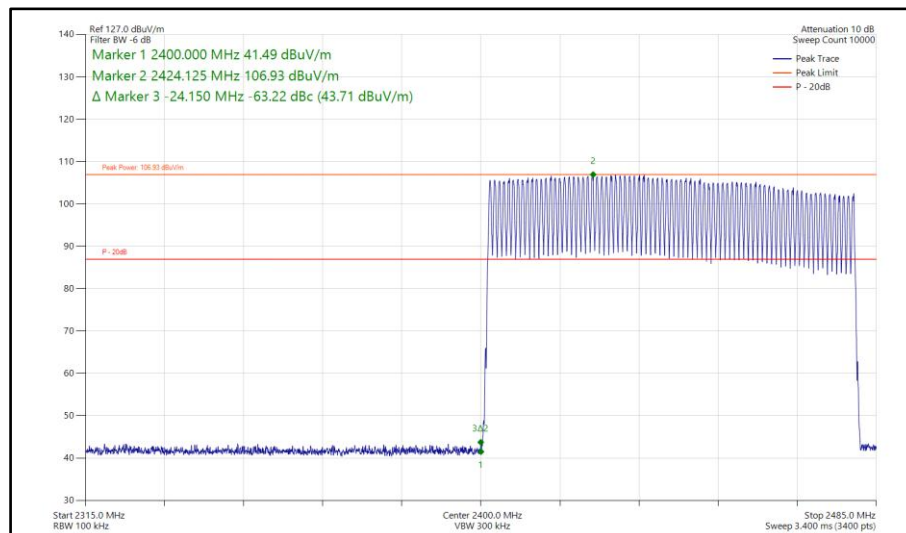


**Figure 100 - Bluetooth DH5, SISO, Core 1 - 2402-2480 MHz
Band Edge Frequency 2400 MHz**

iPA - Core 2 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-61.94
Hopping	DH5	2402-2480	2400	-64.67

Table 73 - SISO Authorised Band Edge Results

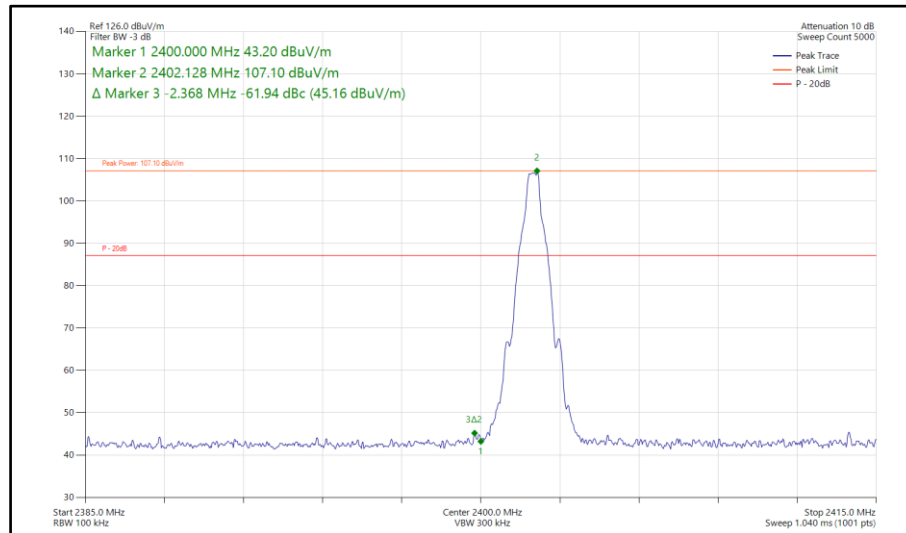


**Figure 101 - Bluetooth DH5, SISO, Core 2 - 2402 MHz
Band Edge Frequency 2400 MHz**

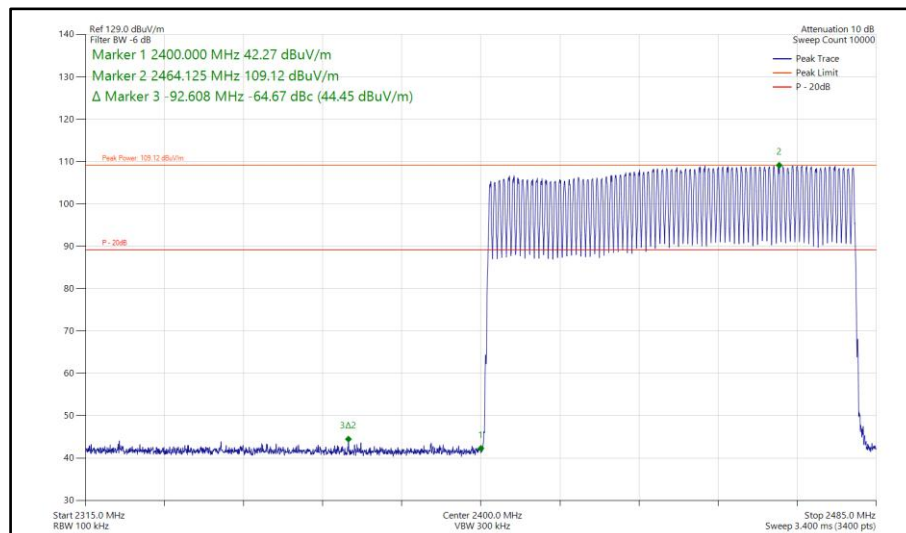


**Figure 102 - Bluetooth DH5, SISO, Core 2 - 2402-2480 MHz
Band Edge Frequency 2400 MHz**

iPA - Core 0-1 (MIMO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-56.06
Hopping	DH5	2402-2480	2400	-59.44

Table 74 - MIMO Authorised Band Edge Results

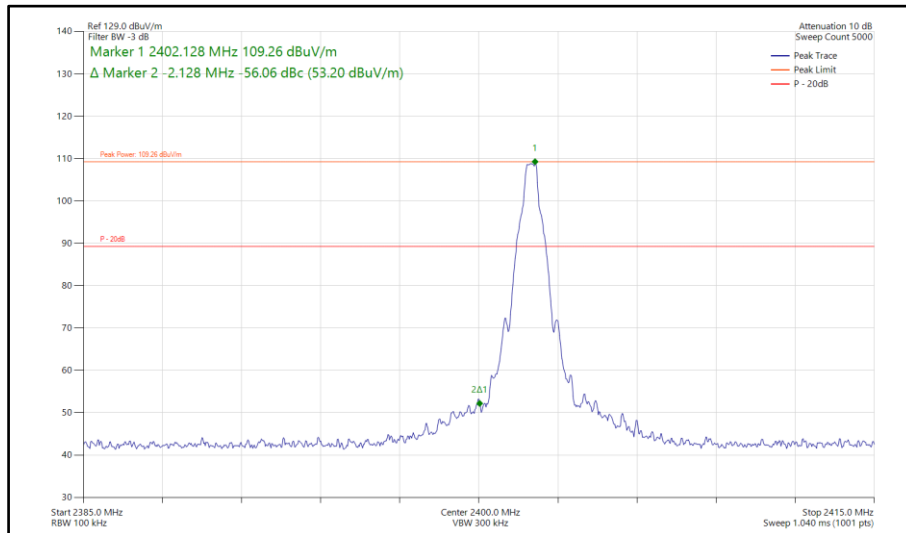


**Figure 103 - Bluetooth DH5, MIMO, Core 0-1 - 2402 MHz
Band Edge Frequency 2400 MHz**

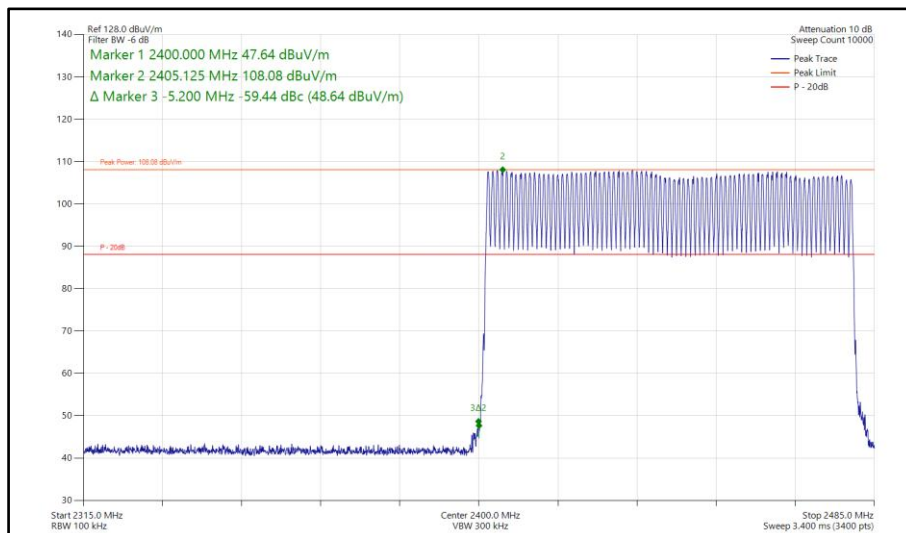


**Figure 104 - Bluetooth DH5, MIMO, Core 0-1 - 2402-2480 MHz
Band Edge Frequency 2400 MHz**

ePA - Core 0 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-65.78
Hopping	DH5	2402-2480	2400	-69.94

Table 75 - SISO Authorised Band Edge Results

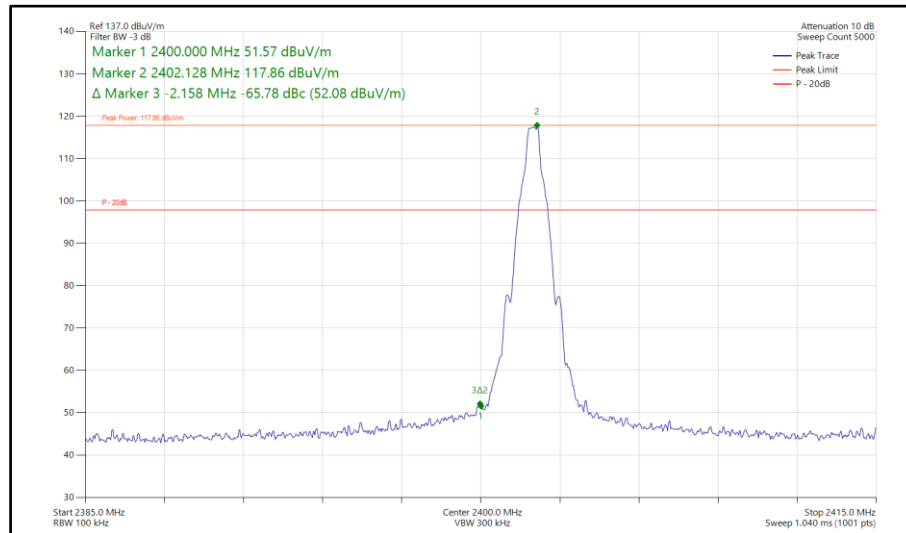


**Figure 105 - Bluetooth DH5, SISO, Core 0 - 2402 MHz
Band Edge Frequency 2400 MHz**

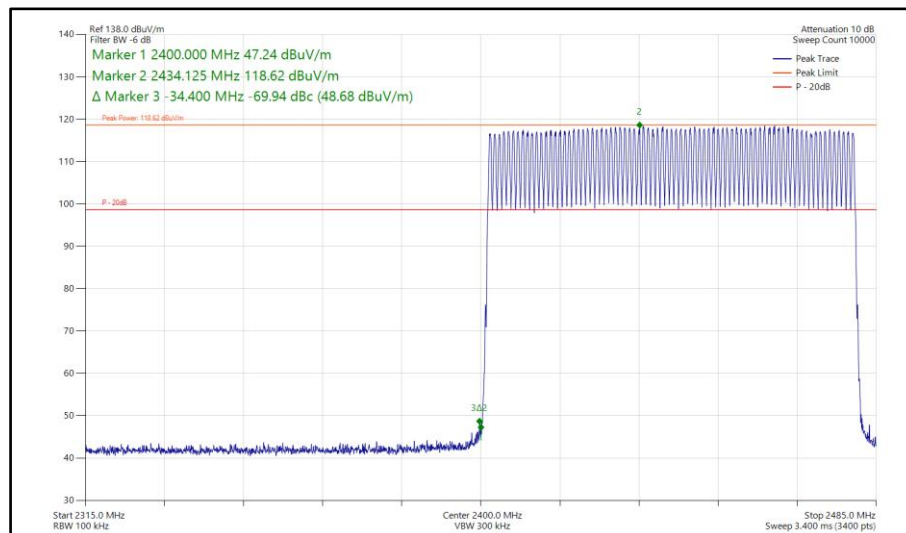


**Figure 106 - Bluetooth DH5, SISO, Core 0 - 2402-2480 MHz
Band Edge Frequency 2400 MHz**

ePA - Core 1 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-66.28
Hopping	DH5	2402-2480	2400	-68.85

Table 76 - SISO Authorised Band Edge Results

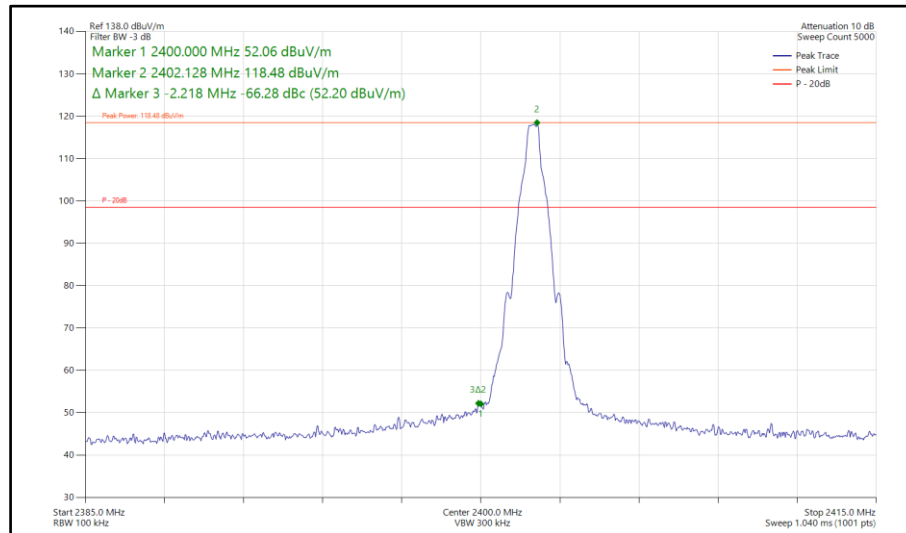


**Figure 107 - Bluetooth DH5, SISO, Core 1 - 2402 MHz
Band Edge Frequency 2400 MHz**

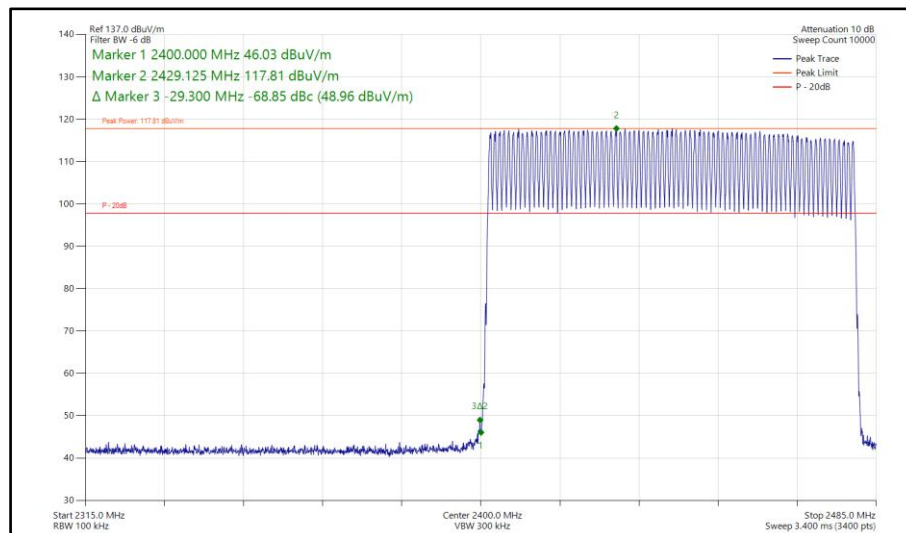


**Figure 108 - Bluetooth DH5, SISO, Core 1 - 2402-2480 MHz
Band Edge Frequency 2400 MHz**

ePA - Core 0-1 (MIMO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-66.80
Hopping	DH5	2402-2480	2400	-70.57

Table 77 - MIMO Authorised Band Edge Results

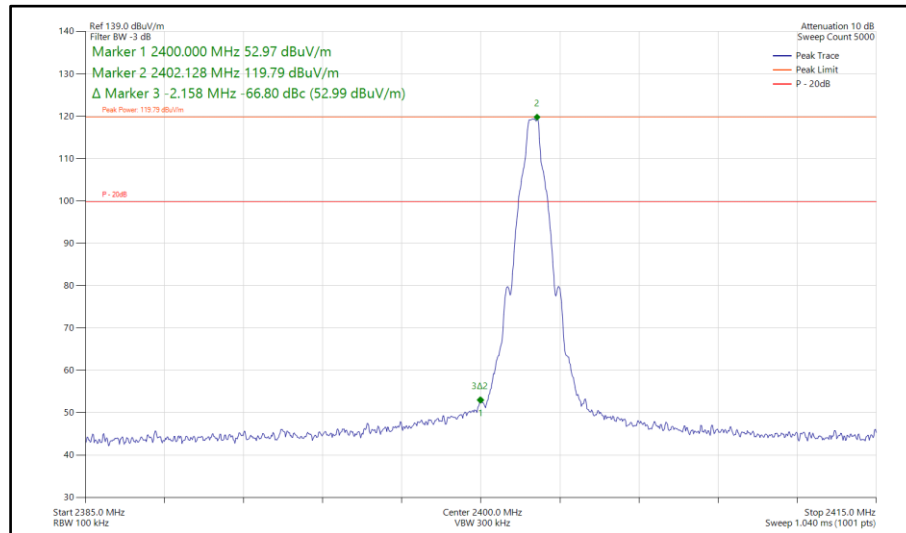


Figure 109 - Bluetooth DH5, MIMO, Core 0-1 - 2402 MHz
Band Edge Frequency 2400 MHz

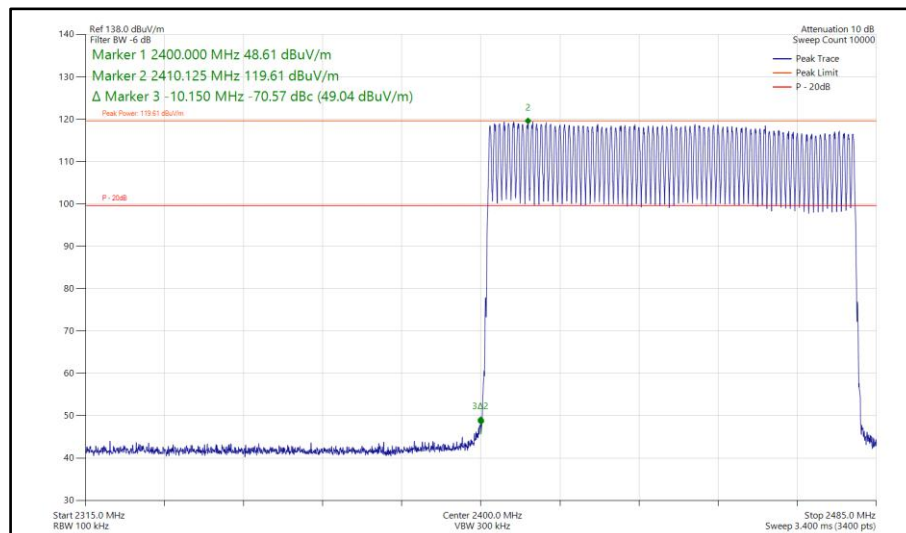


Figure 110 - Bluetooth DH5, MIMO, Core 0-1 - 2402-2480 MHz
Band Edge Frequency 2400 MHz



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 and RF Chamber 18.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Emissions Software	TUV SUD	EmX V3.6.1 V.	5125	-	O/P Mon
EMI Test Receiver	Rohde & Schwarz	ESW44	5911	12	29-Oct-2026
1500W (300V 12A) AC Power Supply	iTech	IT7324	5957	-	O/P Mon
Mast & Turntable Controller	Maturo Gmbh	FCU3.0	5960	-	TU
Tilt Antenna Mast	Maturo Gmbh	BAM4.5-P	5961	-	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
Horn Antenna (1-10 GHz)	Schwarzbeck	BBHA9120B	6142	12	14-Sep-2026
Digital Multimeter	Fluke	115	6145	12	06-Jun-2026
Humidity & Temperature meter	R.S Components	1364	6149	12	28-Aug-2026
SAC Switch Unit	TUV SUD	TUV_SSU_001	6191	12	18-Dec-2026
3m Semi-Anechoic Chamber	Albatross Projects	Chamber 18	6597	36	08-May-2028
1m Cable	Junkosha	MWX241-01000AMSAMS/B	6741	12	27-Apr-2026
8m Cable	Junkosha	MWX221-08000AMSAMS/B	6748	12	27-Apr-2026
Turntable	Maturo Gmbh	TT1.5SI	6797	-	TU
EMI Test Receiver	Rohde & Schwarz	ESW44	6805	12	24-Jul-2026
AC Programmable Power Supply	iTech	IT7324	6812	-	O/P Mon



Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Horn Antenna (1-10 GHz)	Schwarzbeck	BBHA9120B	6825	12	14-Sep-2026
Handheld Hygrometer	Fluke	971	6837	12	16-Sep-2026
1m SMA-Type Cable	Junkosha	MWX221-01000AMSAMS/B	6841	12	23-Sep-2026
8m SMA-Type Cable	Junkosha	MWX221-08000AMSAMS/B	6850	12	23-Oct-2026
Cable Assembly	Pasternack	PE300-60	6858	-	TU
Cable Assembly	Pasternack	PE300-60	6861	-	TU
Cable Assembly	Pasternack	PE300-60	6863	-	TU
Cable Assembly	Pasternack	PE300-60	6864	-	TU
SAC Switch Unit	TUV SUD	TUV_SSU_004 PLC	6886	12	02-Dec-2026
RF Amplifier BROADBAND AMPL/SMA/RoHS	Mini-Circuits	ZX60-83LN12+	6975	-	TU
RF Amplifier BROADBAND AMPL/SMA/RoHS	Mini-Circuits	ZX60-83LN12+	6978	-	TU

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

A3590, S/N: JJRYT0H23C - Modification State 0

2.8.3 Date of Test

09-August-2026 to 16-August-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, (74/54dBµV/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 $20 \times \text{LOG}(3/1) = 9.54$ 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.

2.8.7 Test Results

2.4 GHz Bluetooth - FHSS

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4137.734	29.76	54.00	-24.24	CISPR Avg	337	123	Vertical
4281.322	30.02	54.00	-23.98	CISPR Avg	108	377	Horizontal
4553.073	30.46	54.00	-23.54	CISPR Avg	251	330	Horizontal
4705.147	30.15	54.00	-23.85	CISPR Avg	45	104	Vertical

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

No other emissions found within 20 dB of the limit.

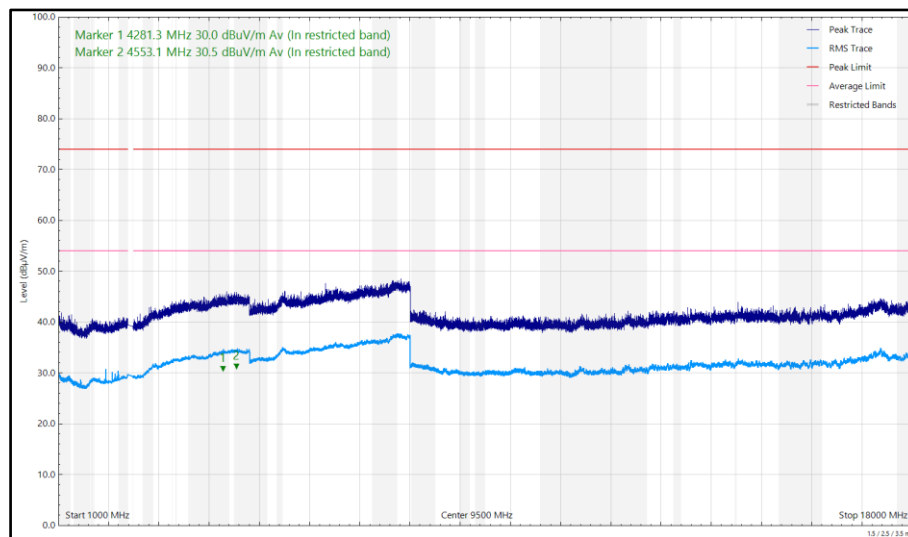


Figure 112 - 2402 MHz (CH2402), DH5, iPA, Core 0 + Core 1, 1 GHz to 18 GHz, Horizontal

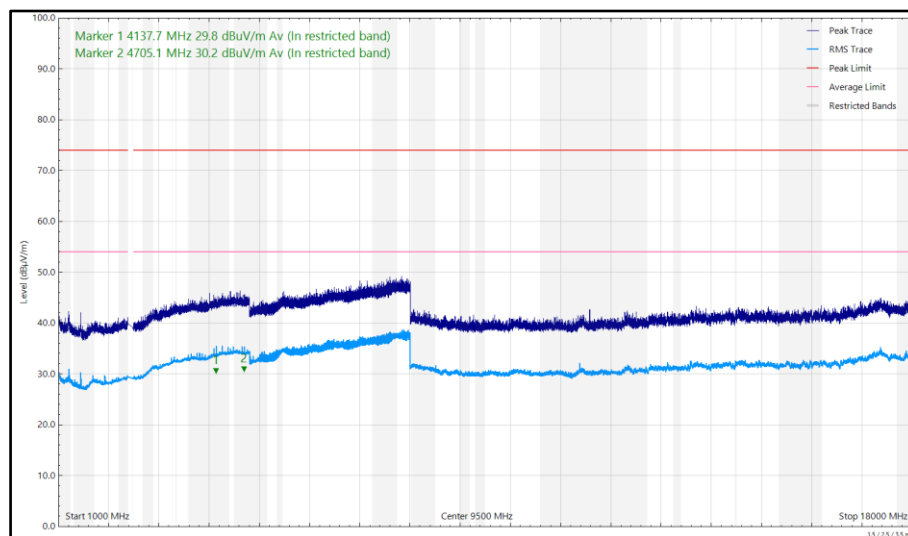


Figure 113 - 2402 MHz (CH2402), DH5, iPA, Core 0 + Core 1, 1 GHz to 18 GHz, Vertical

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
37.825	21.28	40.00	-18.72	Q-Peak	210	225	Horizontal
110.847	24.03	43.50	-19.47	Q-Peak	334	112	Vertical
114.006	19.12	43.50	-24.38	Q-Peak	0	110	Horizontal
163.759	21.12	43.50	-22.38	Q-Peak	132	390	Vertical
170.944	20.89	43.50	-22.61	Q-Peak	127	123	Horizontal
257.474	23.22	46.00	-22.78	Q-Peak	168	176	Horizontal
4145.357	29.69	54.00	-24.31	CISPR Avg	358	366	Vertical
4315.496	30.17	54.00	-23.83	CISPR Avg	74	320	Horizontal
4506.830	30.32	54.00	-23.68	CISPR Avg	39	352	Horizontal
4701.318	30.21	54.00	-23.79	CISPR Avg	0	140	Vertical
4981.545	28.82	54.00	-25.18	CISPR Avg	83	393	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.

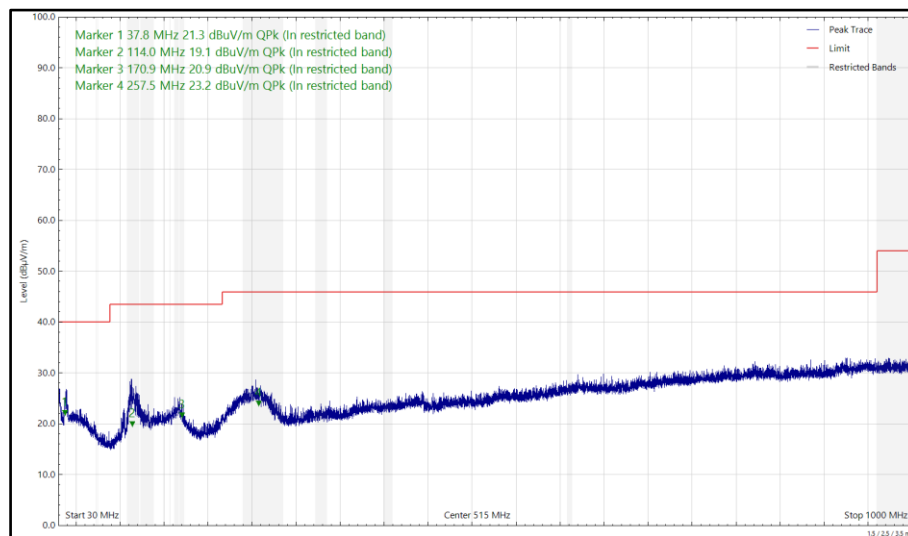


Figure 114 - 2441 MHz (CH2441), DH5, iPA, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

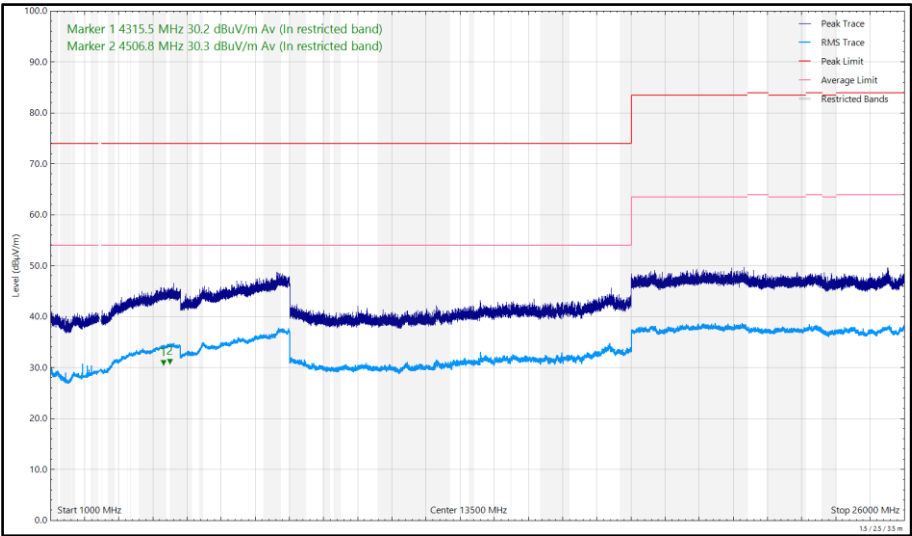


Figure 115 - 2441 MHz (CH2441), DH5, iPA, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal

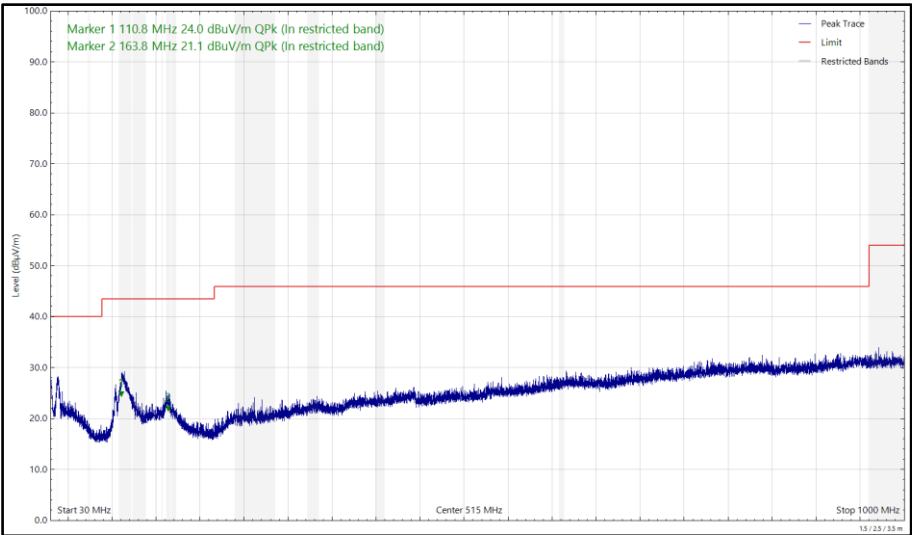


Figure 116 - 2441 MHz (CH2441), DH5, iPA, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

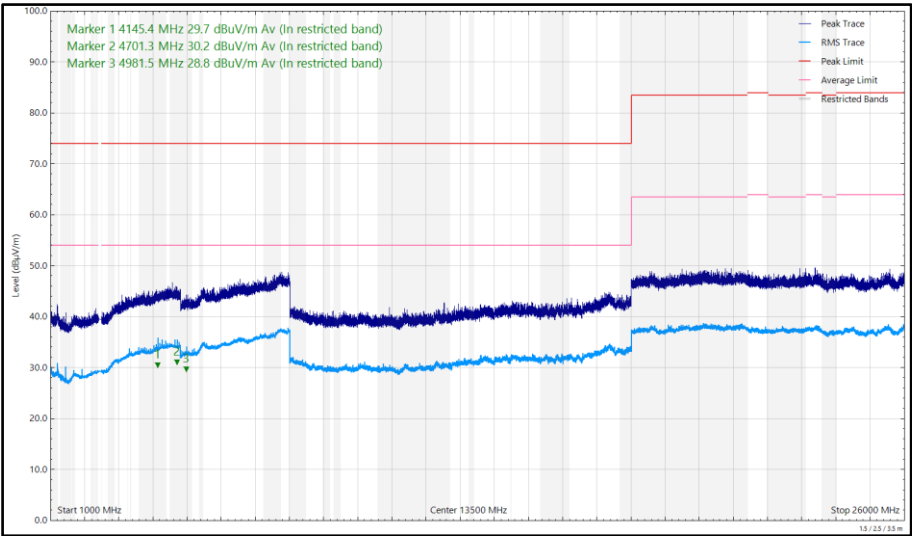


Figure 117 - 2441 MHz (CH2441), DH5, iPA, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4144.232	30.11	54.00	-23.89	CISPR Avg	350	311	Vertical
4318.859	30.08	54.00	-23.92	CISPR Avg	190	311	Horizontal
4524.238	30.27	54.00	-23.73	CISPR Avg	144	123	Horizontal
4701.053	30.17	54.00	-23.83	CISPR Avg	185	219	Vertical

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

No other emissions found within 20 dB of the limit.

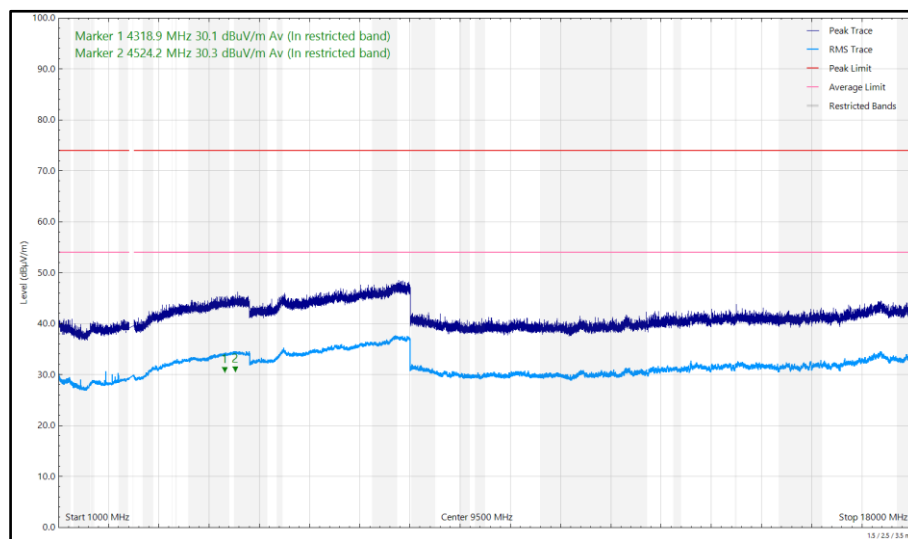


Figure 118 - 2480 MHz (CH2480), DH5, iPA, Core 0 + Core 1, 1 GHz to 18 GHz, Horizontal

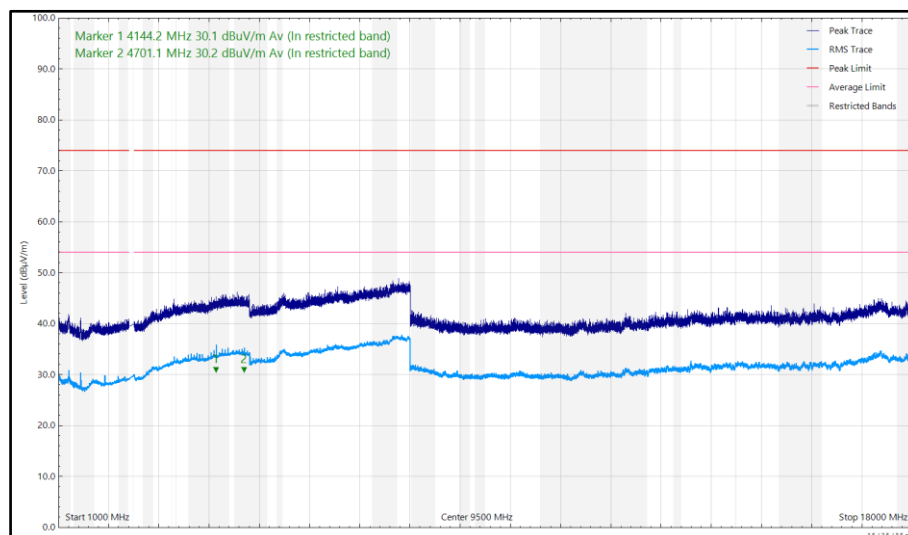


Figure 119 - 2480 MHz (CH2480), DH5, iPA, Core 0 + Core 1, 1 GHz to 18 GHz, Vertical

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4036.682	29.83	54.00	-24.17	CISPR Avg	9	277	Vertical
4317.046	30.65	54.00	-23.35	CISPR Avg	337	109	Horizontal
4797.473	30.98	54.00	-23.02	CISPR Avg	217	116	Horizontal
4803.960	31.17	54.00	-22.83	CISPR Avg	317	222	Horizontal
4803.984	29.98	54.00	-24.02	CISPR Avg	345	180	Vertical

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

No other emissions found within 20 dB of the limit.

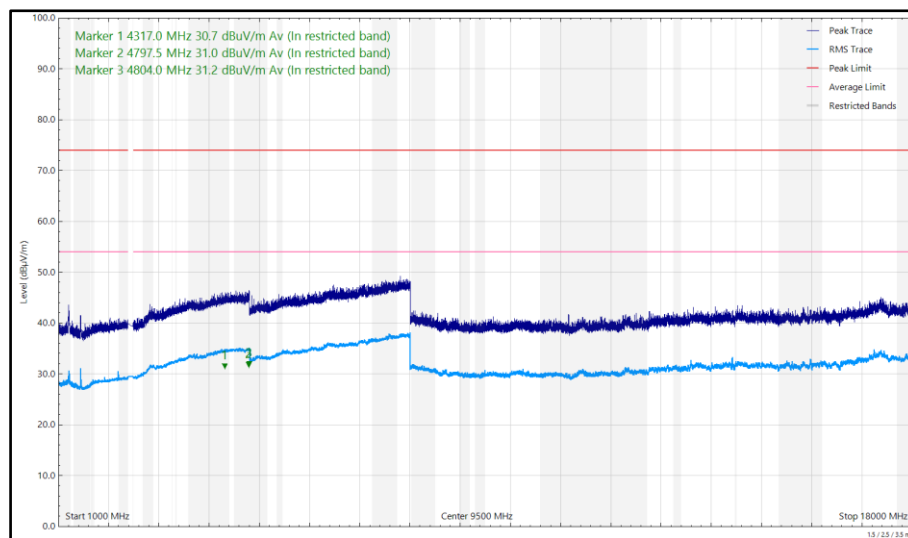


Figure 120 - 2402 MHz (CH2402), DH5, iPA, Core 2, 1 GHz to 18 GHz, Horizontal

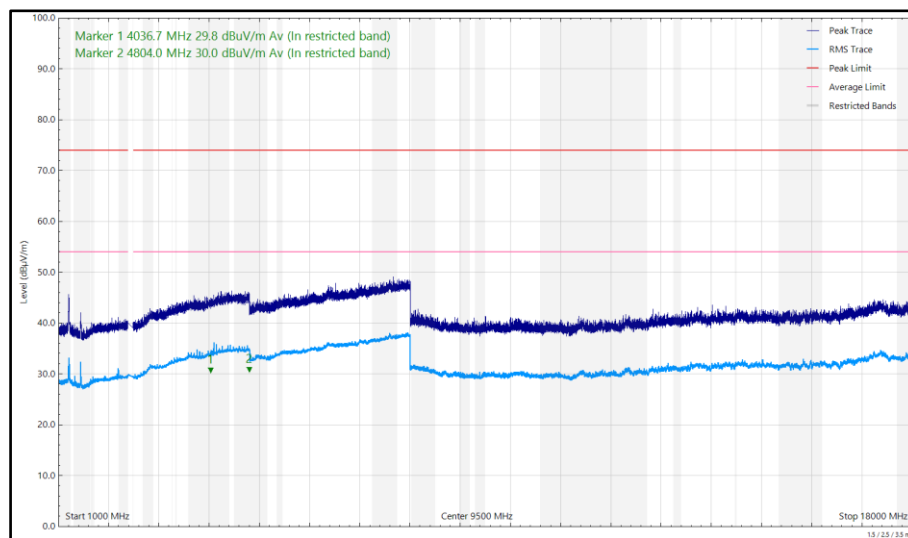


Figure 121 - 2402 MHz (CH2402), DH5, iPA, Core 2, 1 GHz to 18 GHz, Vertical

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
110.546	23.87	43.50	-19.63	Q-Peak	338	107	Vertical
119.317	19.08	43.50	-24.42	Q-Peak	360	245	Horizontal
124.872	19.92	43.50	-23.58	Q-Peak	355	150	Vertical
164.070	21.09	43.50	-22.41	Q-Peak	42	383	Vertical
166.024	21.39	43.50	-22.11	Q-Peak	126	215	Horizontal
252.754	24.04	46.00	-21.96	Q-Peak	188	117	Horizontal
4041.456	29.95	54.00	-24.05	CISPR Avg	103	100	Vertical
4139.808	30.19	54.00	-23.81	CISPR Avg	39	110	Vertical
4357.064	30.61	54.00	-23.39	CISPR Avg	0	238	Horizontal
4763.672	30.90	54.00	-23.10	CISPR Avg	296	106	Vertical
4773.641	30.86	54.00	-23.14	CISPR Avg	301	100	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.

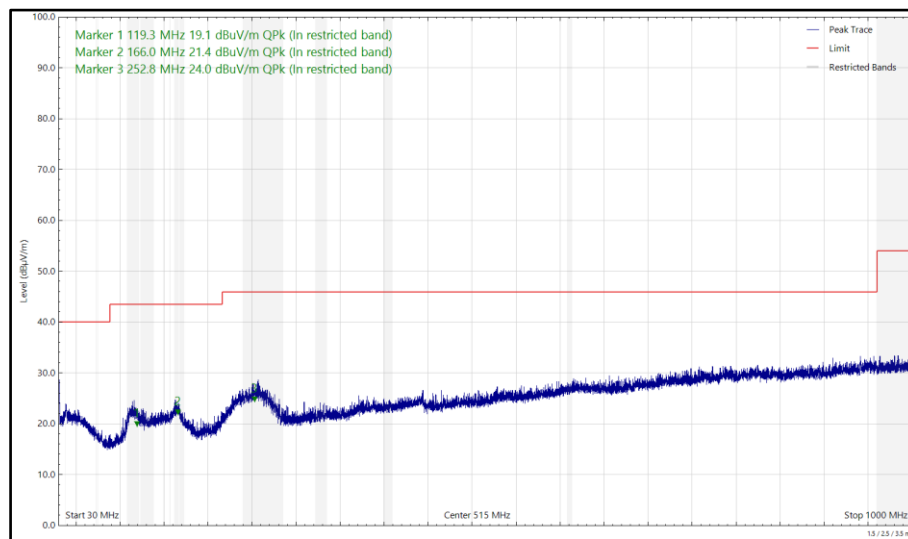


Figure 122 - 2441 MHz (CH2441), DH5, iPA, Core 2, 30 MHz to 1 GHz, Horizontal (Peak)

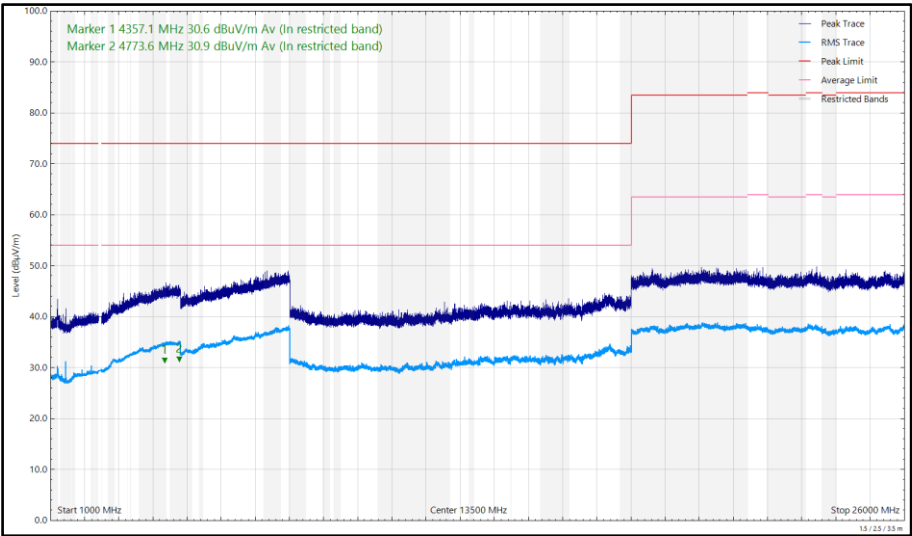


Figure 123 - 2441 MHz (CH2441), DH5, iPA, Core 2, 1 GHz to 26 GHz, Horizontal

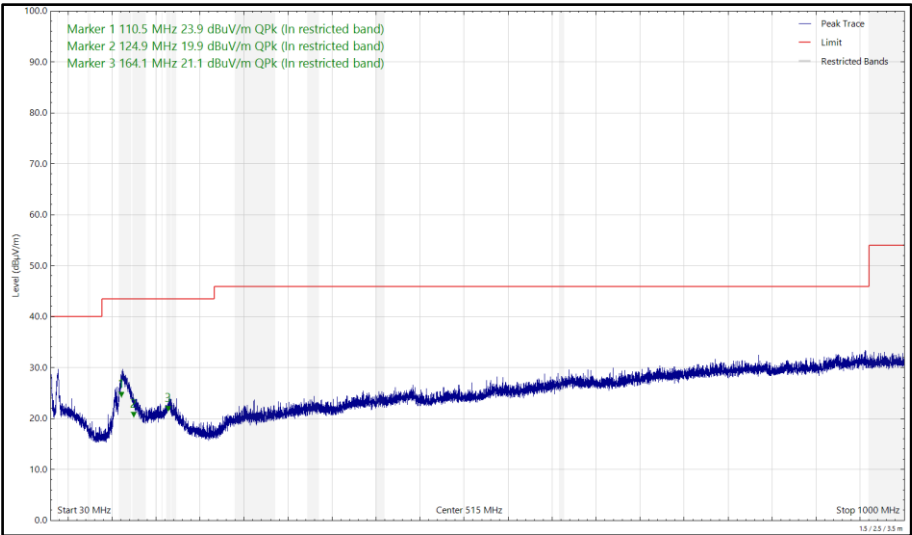


Figure 124 - 2441 MHz (CH2441), DH5, iPA, Core 2, 30 MHz to 1 GHz, Vertical (Peak)

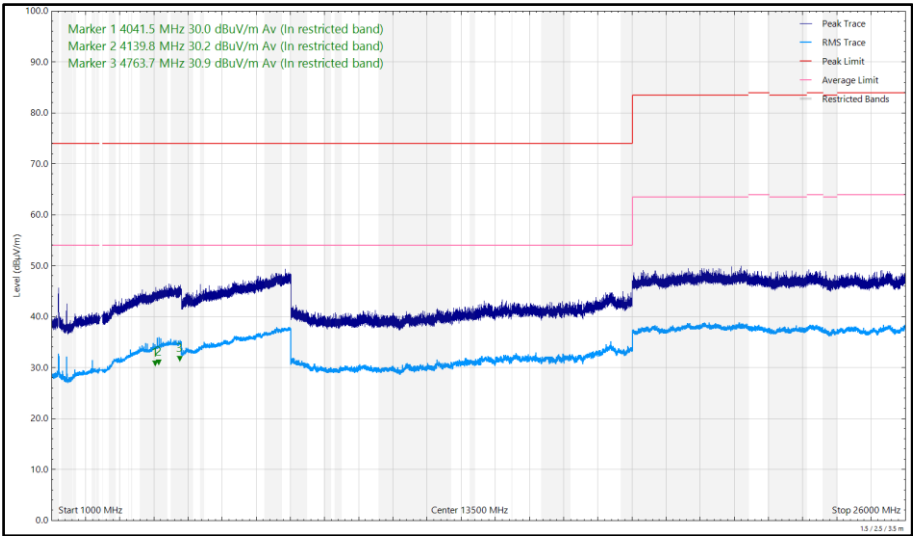


Figure 125 - 2441 MHz (CH2441), DH5, iPA, Core 2, 1 GHz to 26 GHz, Vertical

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4032.317	30.25	54.00	-23.75	CISPR Avg	354	157	Vertical
4148.387	30.26	54.00	-23.74	CISPR Avg	324	107	Vertical
4234.418	30.56	54.00	-23.44	CISPR Avg	0	102	Horizontal
4643.389	30.66	54.00	-23.34	CISPR Avg	220	353	Vertical
4769.940	30.91	54.00	-23.09	CISPR Avg	280	115	Horizontal
4957.720	29.27	54.00	-24.73	CISPR Avg	142	253	Horizontal

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

No other emissions found within 20 dB of the limit.

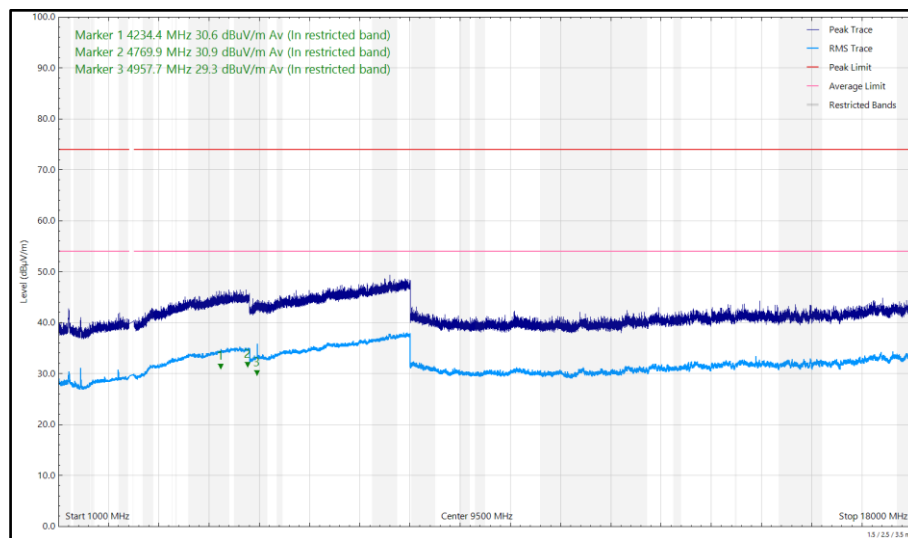


Figure 126 - 2480 MHz (CH2480), DH5, iPA, Core 2, 1 GHz to 18 GHz, Horizontal

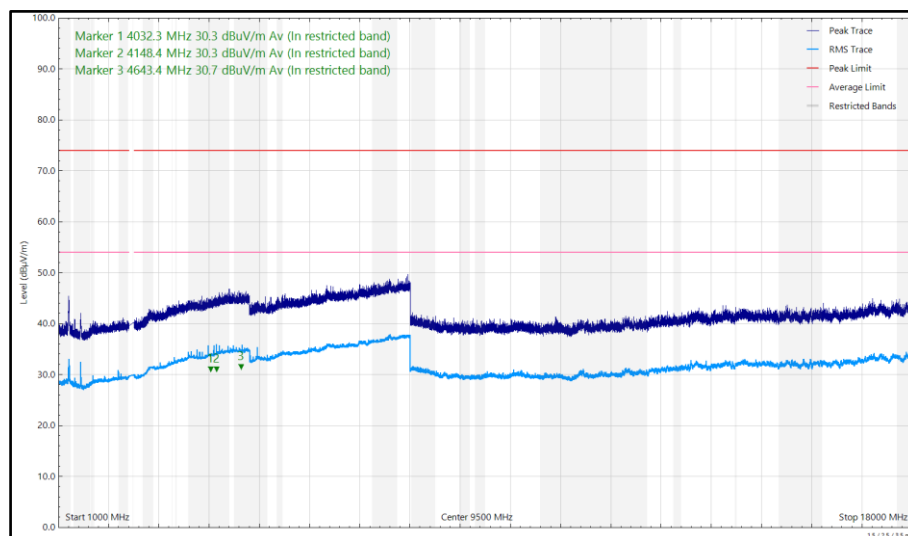


Figure 127 - 2480 MHz (CH2480), DH5, iPA, Core 2, 1 GHz to 18 GHz, Vertical

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
2484.203	30.79	54.00	-23.21	CISPR Avg	170	185	Vertical
2487.358	29.72	54.00	-24.28	CISPR Avg	171	100	Vertical
4037.736	29.96	54.00	-24.04	CISPR Avg	102	225	Vertical
4321.511	30.50	54.00	-23.50	CISPR Avg	8	340	Vertical

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

No other emissions found within 20 dB of the limit.

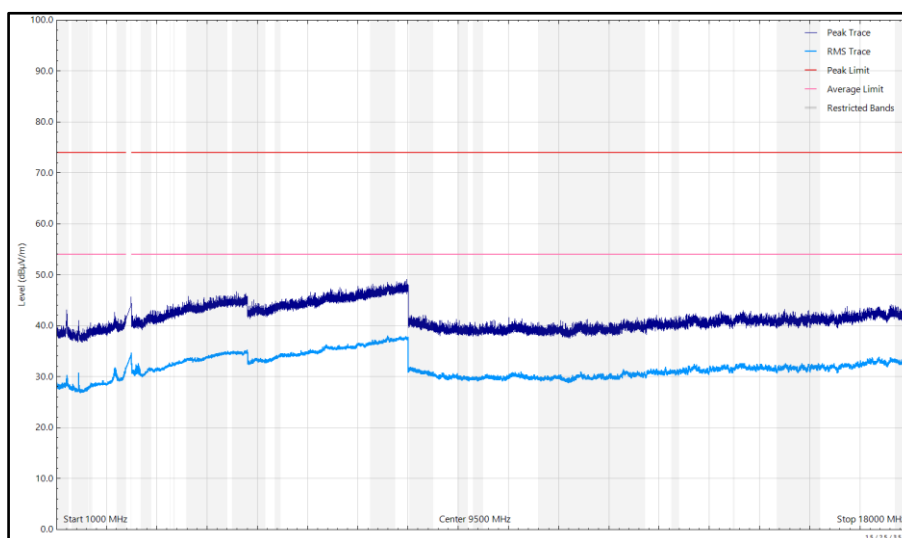


Figure 128 - 2402 MHz (CH2402), DH5, ePA, Core 0 + Core 1, 1 GHz to 18 GHz, Horizontal

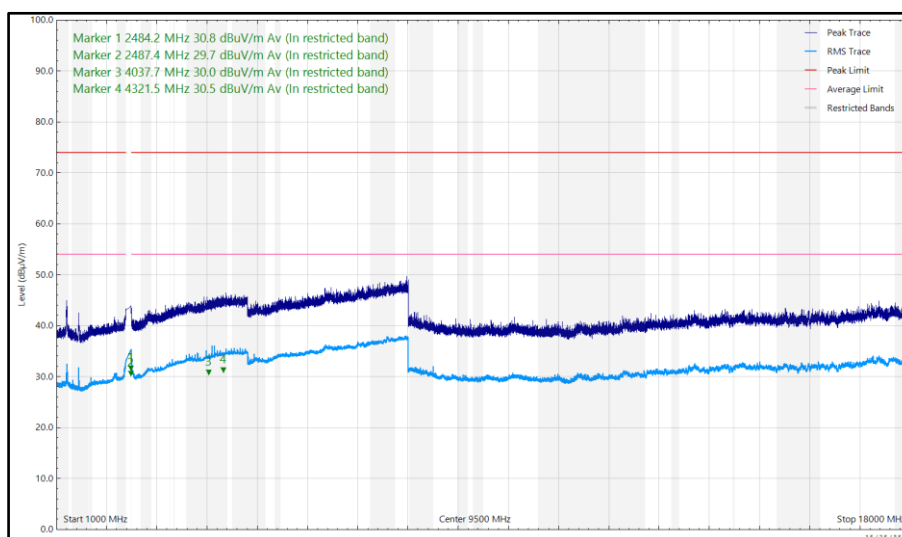


Figure 129 - 2402 MHz (CH2402), DH5, ePA, Core 0 + Core 1, 1 GHz to 18 GHz, Vertical

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
37.927	20.88	40.00	-19.12	Q-Peak	93	266	Horizontal
38.190	24.61	40.00	-15.39	Q-Peak	358	241	Vertical
112.365	24.76	43.50	-18.74	Q-Peak	326	110	Vertical
165.504	21.13	43.50	-22.37	Q-Peak	19	116	Horizontal
253.425	23.37	46.00	-22.63	Q-Peak	186	188	Horizontal
2389.535	31.09	54.00	-22.91	CISPR Avg	74	300	Horizontal
2389.984	31.85	54.00	-22.15	CISPR Avg	180	110	Vertical
2483.571	33.52	54.00	-20.48	CISPR Avg	184	168	Vertical
2484.146	33.03	54.00	-20.97	CISPR Avg	116	104	Horizontal
4040.686	30.02	54.00	-23.98	CISPR Avg	160	369	Vertical
4878.830	28.82	54.00	-25.18	CISPR Avg	59	198	Horizontal

Table 86 - 2441 MHz (CH2441), DH5, ePA, Core 0 + Core 1, 1 GHz to 18 GHz

No other emissions found within 20 dB of the limit.

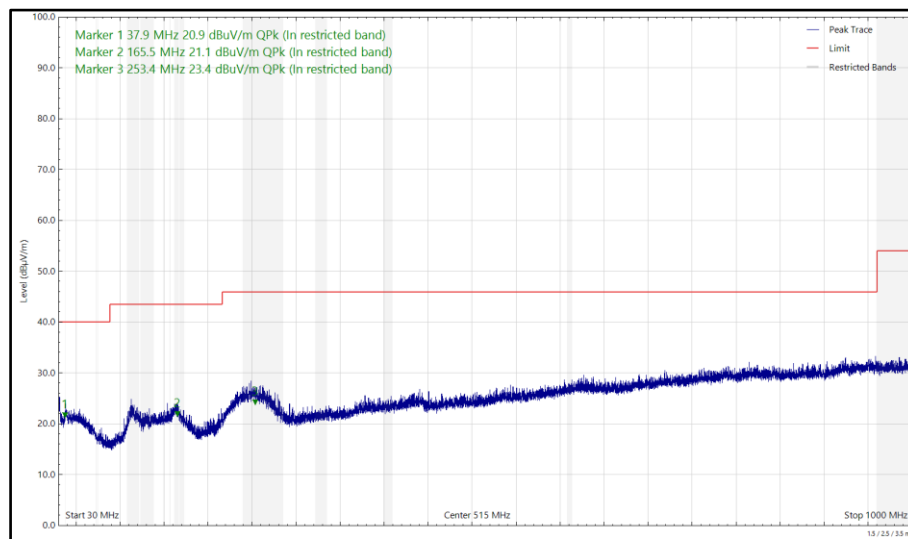


Figure 130 - 2441 MHz (CH2441), DH5, ePA, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

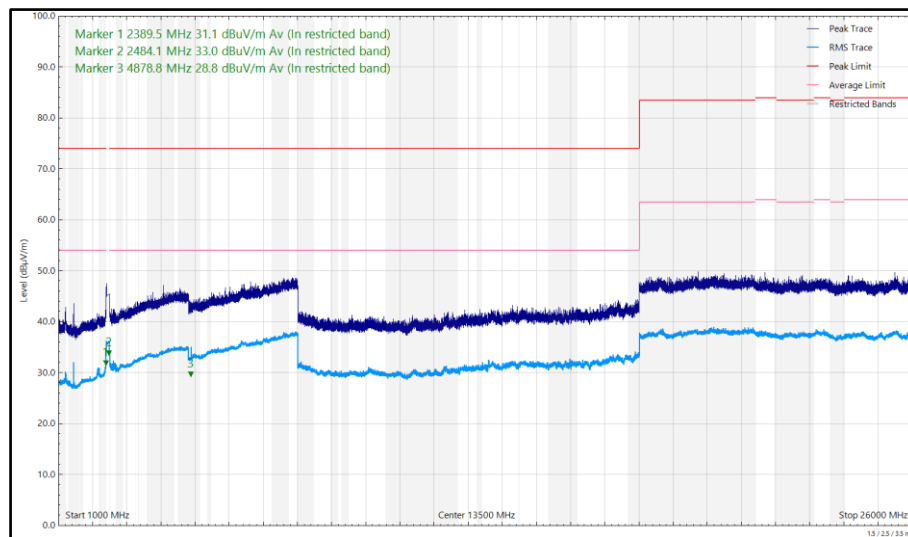


Figure 131 - 2441 MHz (CH2441), DH5, ePA, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal

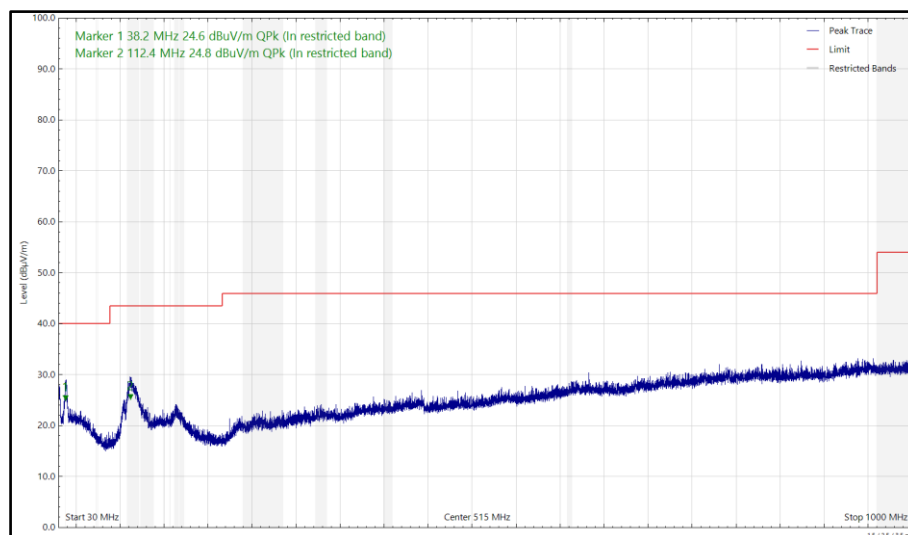


Figure 132 - 2441 MHz (CH2441), DH5, ePA, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

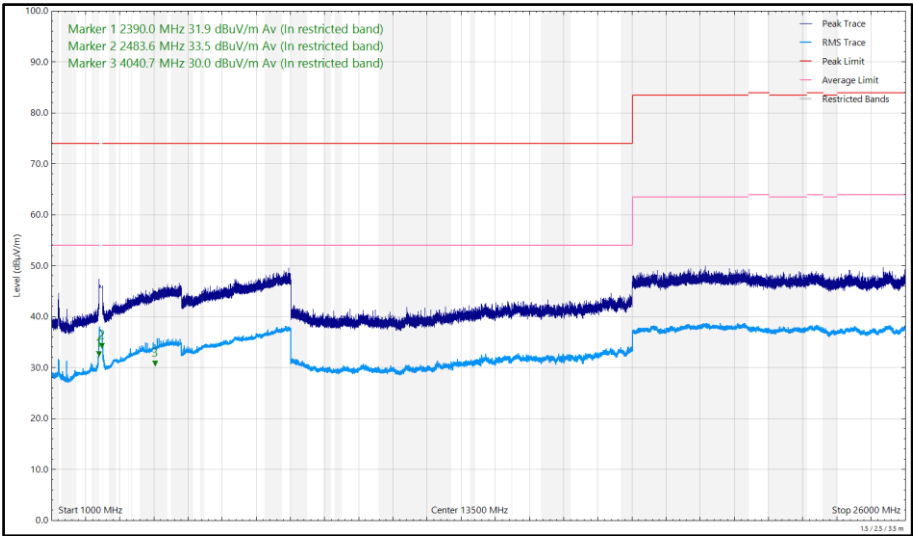


Figure 133 - 2441 MHz (CH2441), DH5, ePA, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
2389.145	30.33	54.00	-23.67	CISPR Avg	185	141	Vertical
2389.423	29.63	54.00	-24.37	CISPR Avg	238	145	Horizontal
4084.338	29.81	54.00	-24.19	CISPR Avg	66	389	Vertical
4150.231	30.19	54.00	-23.81	CISPR Avg	42	116	Vertical
4374.736	30.57	54.00	-23.43	CISPR Avg	350	231	Vertical
4959.580	33.23	54.00	-20.77	CISPR Avg	4	139	Horizontal

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

No other emissions found within 20 dB of the limit.

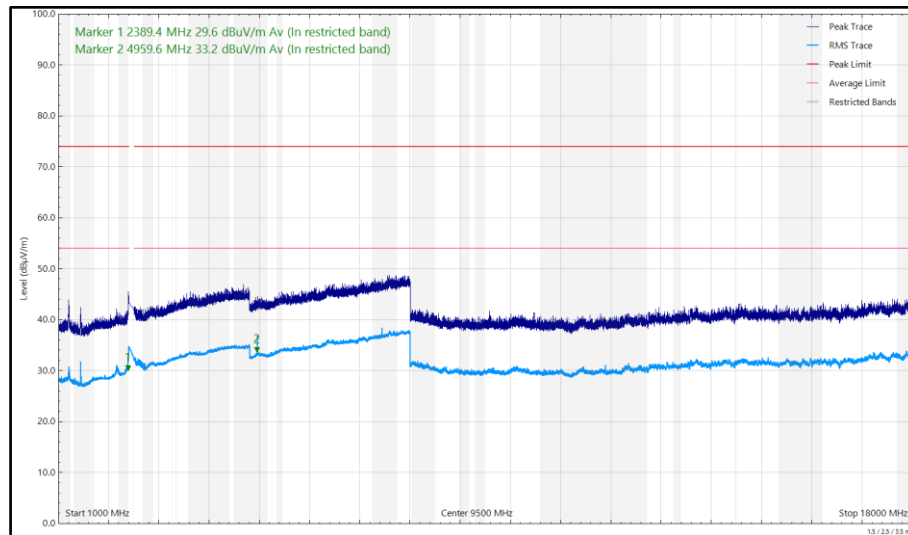


Figure 134 - 2480 MHz (CH2480), DH5, ePA, Core 0 + Core 1, 1 GHz to 18 GHz, Horizontal

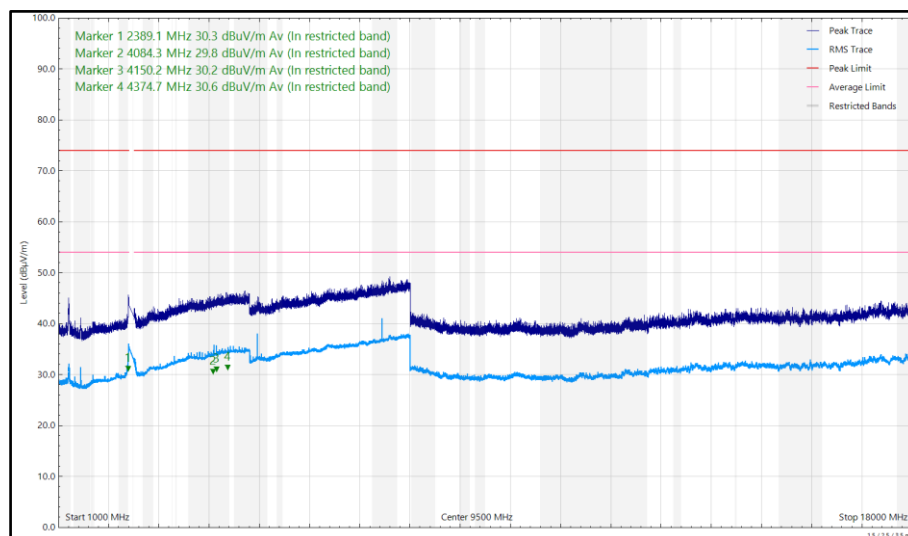


Figure 135 - 2480 MHz (CH2480), DH5, ePA, Core 0 + Core 1, 1 GHz to 18 GHz, Vertical



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 16 and RF Chamber 17.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Emissions Software	TUV SUD	EmX V3.6.3	5125	-	TU
DRG Horn Antenna (7.5-18GHz)	Schwarzbeck	HWRD750	5940	12	23-May-2027
TRILOG Super Broadband Test Antenna	Schwarzbeck	VULB 9168	5944	24	03-Jan-2027
1500W (300V 12A) AC Power Supply	iTech	IT7324	5957	-	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
Horn Antenna (1-10 GHz)	Schwarzbeck	BBHA9120B	6142	12	14-Sep-2026
Digital Multimeter	Fluke	115	6145	12	02-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	6191	12	18-Dec-2026
8GHz Highpass Filter	Wainwright	WHKX 7150 8000 18000 50SS	6195	12	23-Apr-2027
Attenuator 4dB	Pasternack	PE7074-4	6203	24	03-Jan-2027
Cable (SMA to SMA 20cm)	TUV SUD	MH-FH 8-18	6214	12	23-Apr-2027
EMI Test Receiver	Rohde & Schwarz	ESW44	6294	12	23-Mar-2027
Cable (SMA to SMA 1m)	Junkosha	MWX221/B	6305	12	19-May-2027
Cable (K Type 2m)	Junkosha	MWX241-02000KMSKMS/B	6323	12	27-Apr-2027
SAC Switch Unit	TUV SUD	TUV_SSU_004 PLC	6349	12	18-May-2027
Horn Antenna (1–10.5 GHz)	Schwarzbeck	BBHA 9120 B	6457	12	14-Sep-2026
AC Power Supply	iTech	IT7324	6657	-	TU
3m Semi-Anechoic Chamber	Albatross Projects	RF Chamber 17	6658	36	07-May-2028
Mast and Turntable Controller	Maturo Gmbh	FCU3.0	6659	-	TU



Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Tilt Antenna Mast	Maturo Gmbh	BAM4.5-P	6660	-	TU
Turntable	Maturo Gmbh	TT1.5SI	6661	-	TU
EMI Test Receiver	Rohde & Schwarz	ESW44	6805	60	22-Sep-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	6844	12	06-Sep-2026
8m SMA-Type Cable	Junkosha	MWX221-08000AMSAMS/B	6849	12	06-Nov-2026
8m SMA-Type Cable	Junkosha	MWX221-08000AMSAMS/B	6851	12	06-Nov-2026
Pre Amp 8 - 18 GHz	Wright Technologies	APS06-0061	6985	12	23-Apr-2027

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	± 33.04 kHz
Frequency Hopping Systems - Number of Hopping Channels	-
Frequency Hopping Systems - 20 dB Bandwidth	± 33.04 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.