



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (a)(1) RSS-247 6.2.3	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:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	-

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

Table 49 - 99% Bandwidth Results

Test Frequency (MHz)	20 dB Bandwidth (MHz)			
	A	B	C	D
2402	0.891	-	-	-
2441	0.891	-	-	-
2480	0.891	-	-	-

Table 50 - 20 dB Bandwidth Results

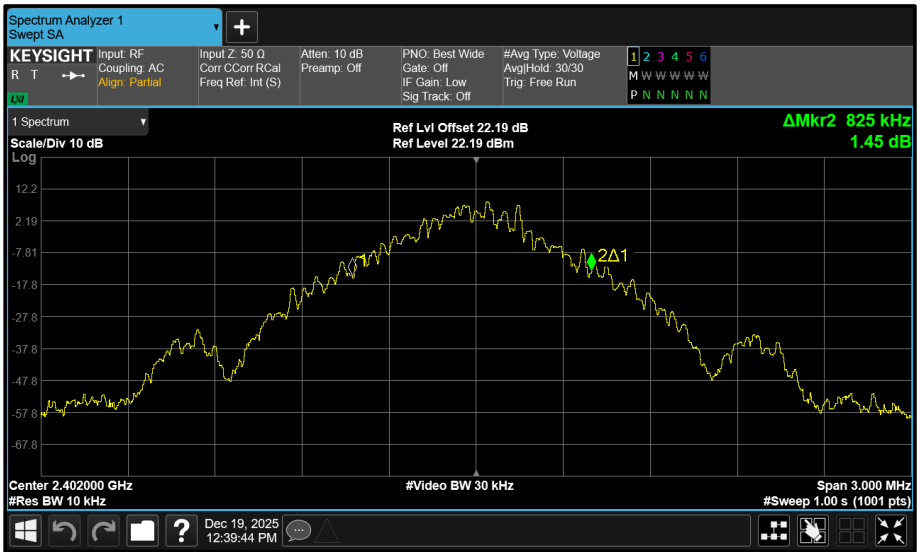


Figure 65 - Core 0 (A) 2402 MHz (CH0) 99% Bandwidth

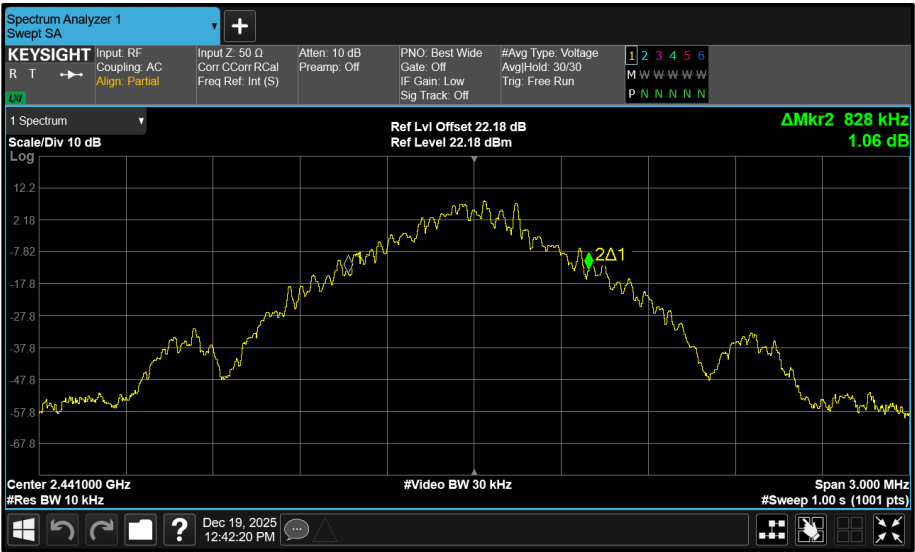


Figure 66 - Core 0 (A) 2441 MHz (CH39) 99% Bandwidth

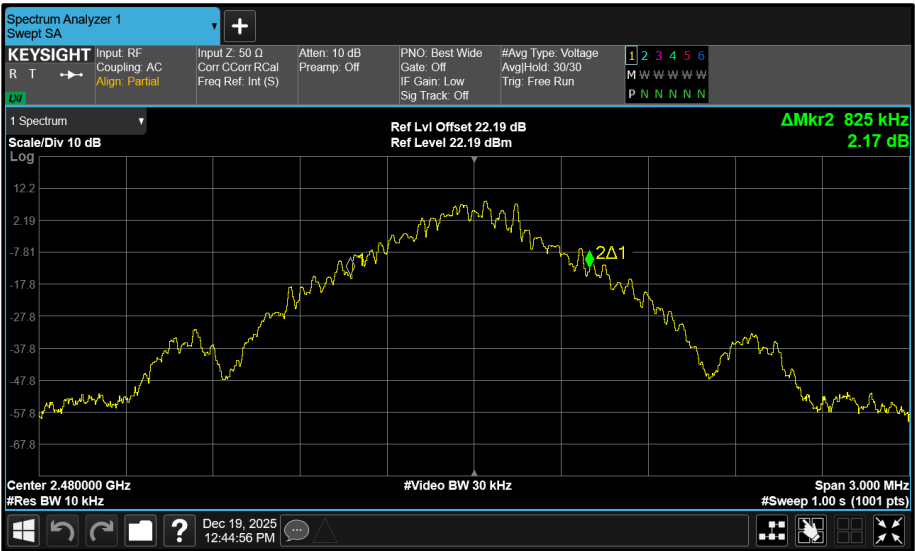


Figure 67 - Core 0 (A) 2480 MHz (CH78) 99% Bandwidth

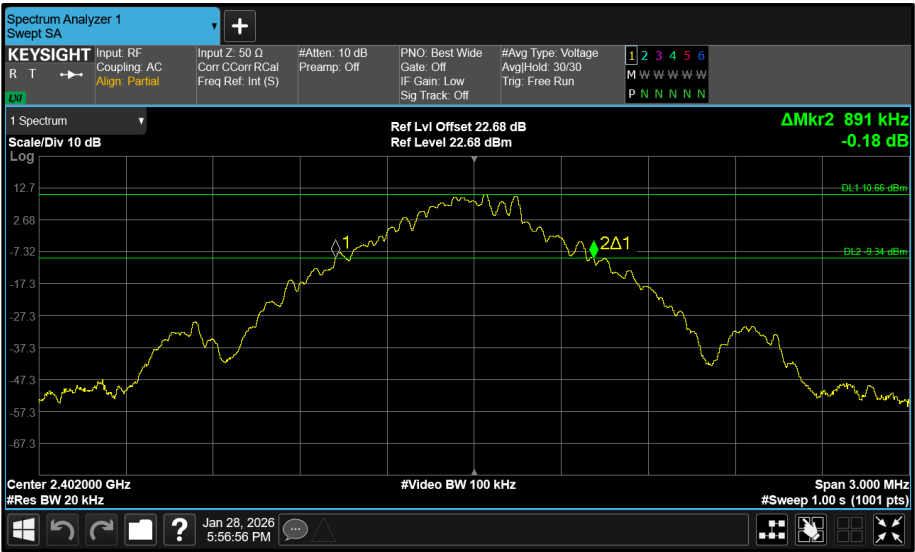


Figure 68 - Core 0 (A) 2402 MHz (CH0) 20 dB Bandwidth

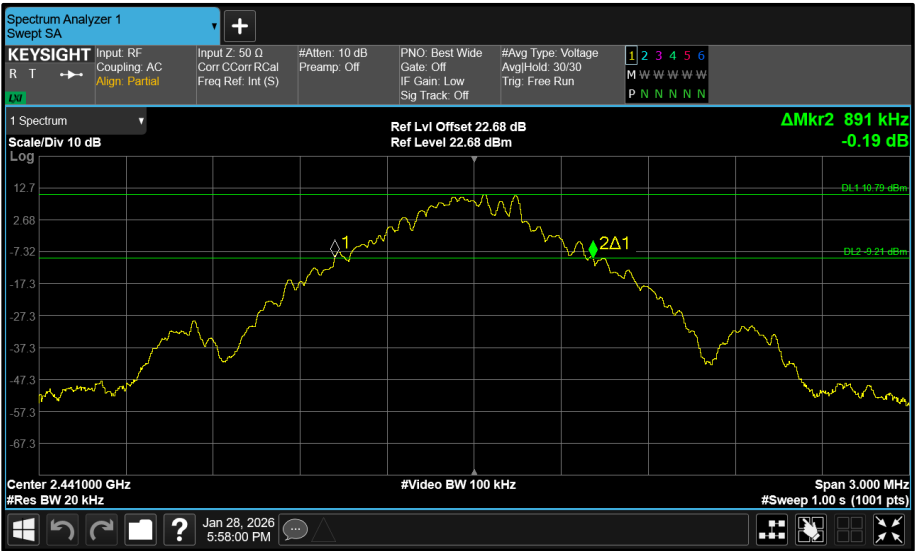


Figure 69 - Core 0 (A) 2441 MHz (CH39) 20 dB Bandwidth

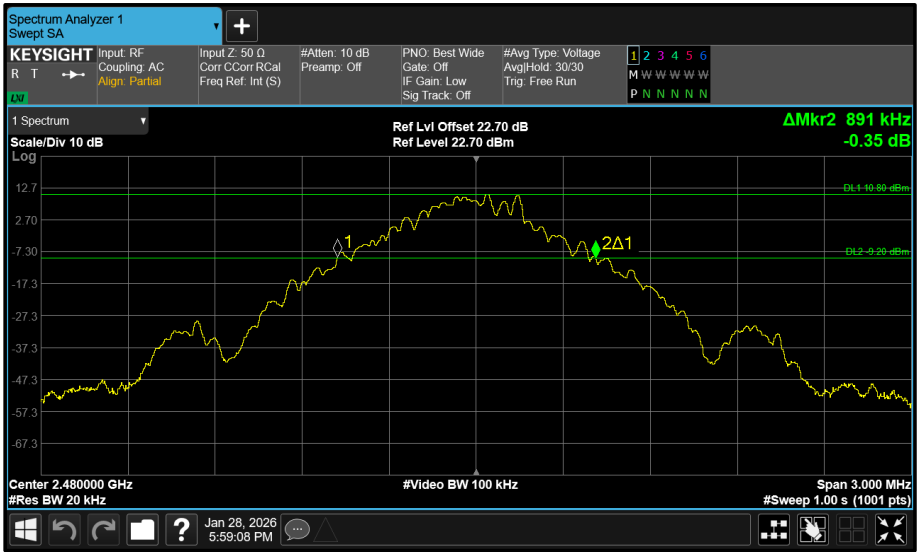


Figure 70 - Core 0 (A) 2480 MHz (CH78) 20 dB Bandwidth



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (a)(1) RSS-247 6.2.3	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:	SISO	DCCF (dB):	-
Active Port(s):	B (Core 1)	Peak Antenna Gain (dBi):	-

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

Table 51 - 99% Bandwidth Results

Test Frequency (MHz)	20 dB Bandwidth (MHz)			
	A	B	C	D
2402	-	0.891	-	-
2441	-	0.891	-	-
2480	-	0.891	-	-

Table 52 - 20 dB Bandwidth Results

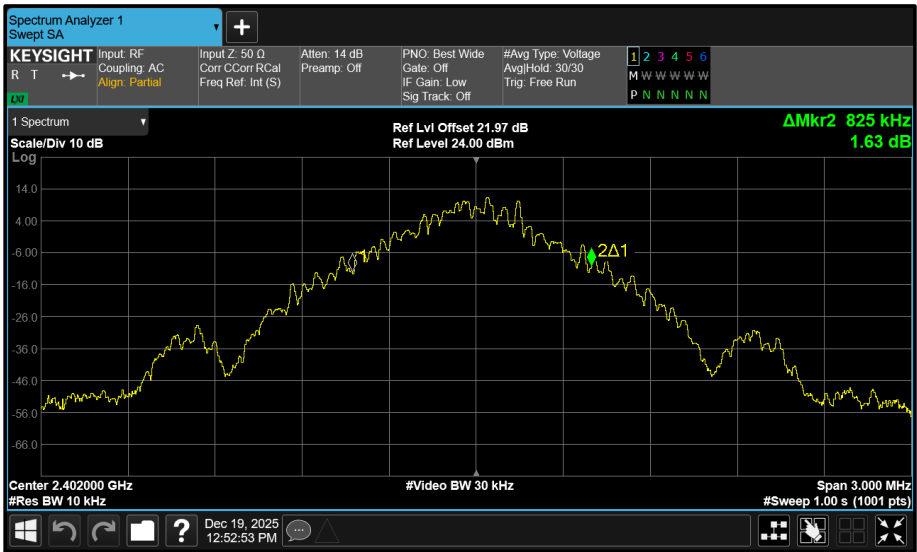


Figure 71 - Core 1 (B) 2402 MHz (CH0) 99% Bandwidth

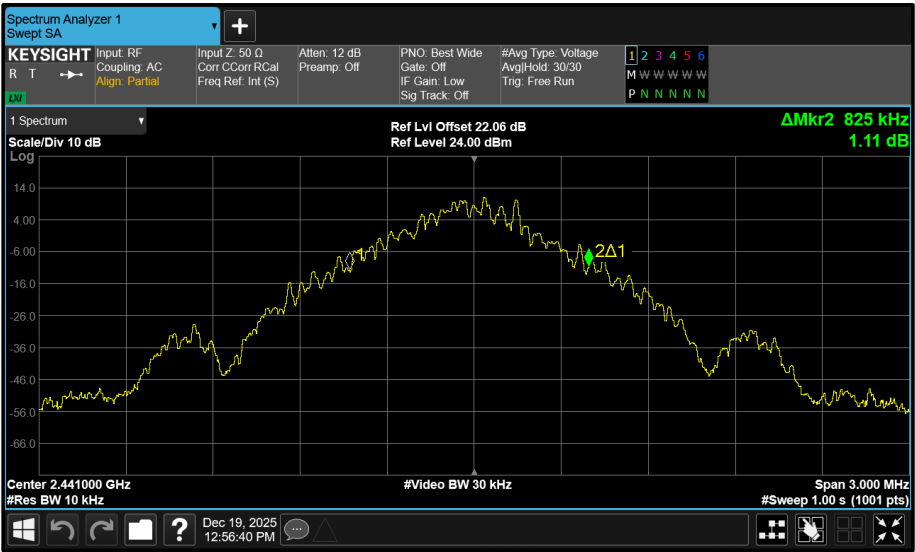


Figure 72 - Core 1 (B) 2441 MHz (CH39) 99% Bandwidth

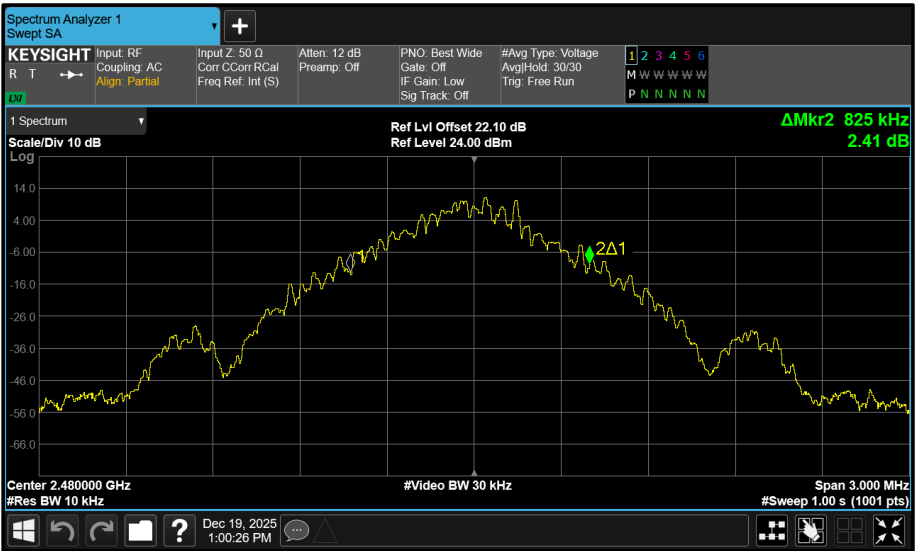


Figure 73 - Core 1 (B) 2480 MHz (CH78) 99% Bandwidth

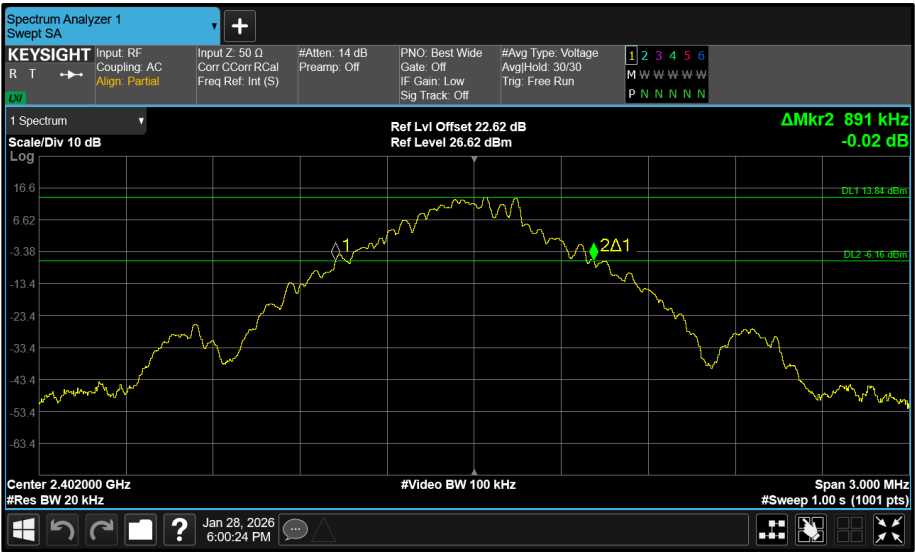


Figure 74 - Core 1 (B) 2402 MHz (CH0) 20 dB Bandwidth

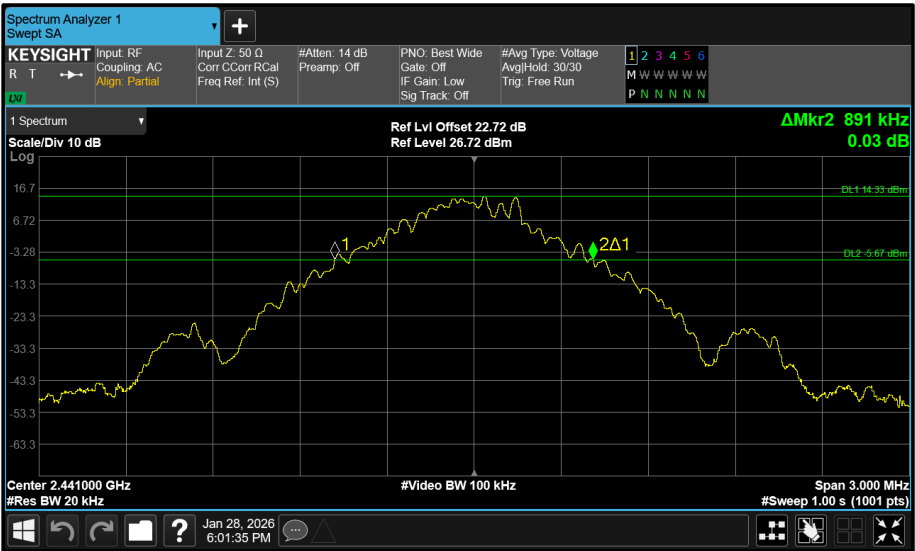


Figure 75 - Core 1 (B) 2441 MHz (CH39) 20 dB Bandwidth

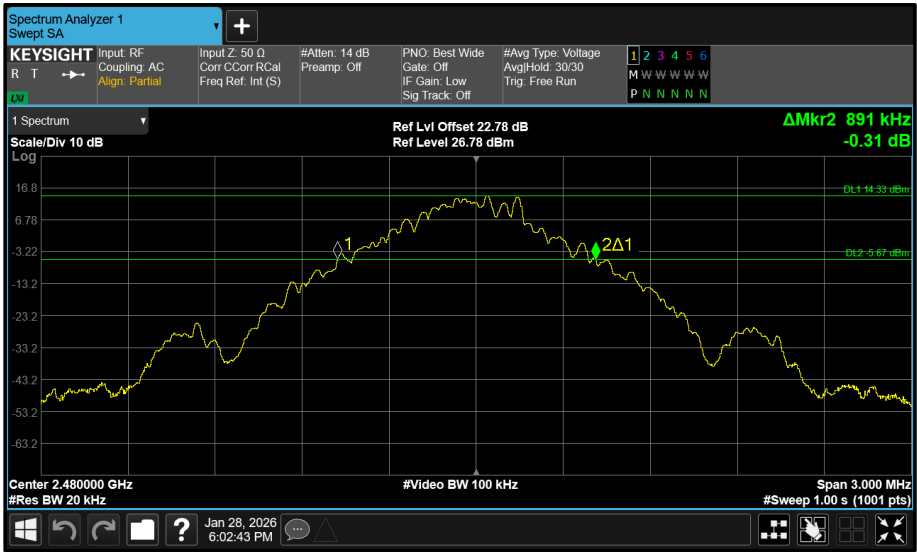


Figure 76 - Core 1 (B) 2480 MHz (CH78) 20 dB Bandwidth



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (a)(1) RSS-247 6.2.3	Test Method(s):	C63.10 6.9.3 C63.10 6.9.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA 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)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2402	0.822	0.828	-	-	-
2441	0.828	0.828	-	-	-
2480	0.831	0.828	-	-	-

Table 53 - 99% Bandwidth Results

Test Frequency (MHz)	20 dB Bandwidth (MHz)			
	A	B	C	D
2402	0.894	0.894	-	-
2441	0.894	0.891	-	-
2480	0.891	0.891	-	-

Table 54 - 20 dB Bandwidth Results

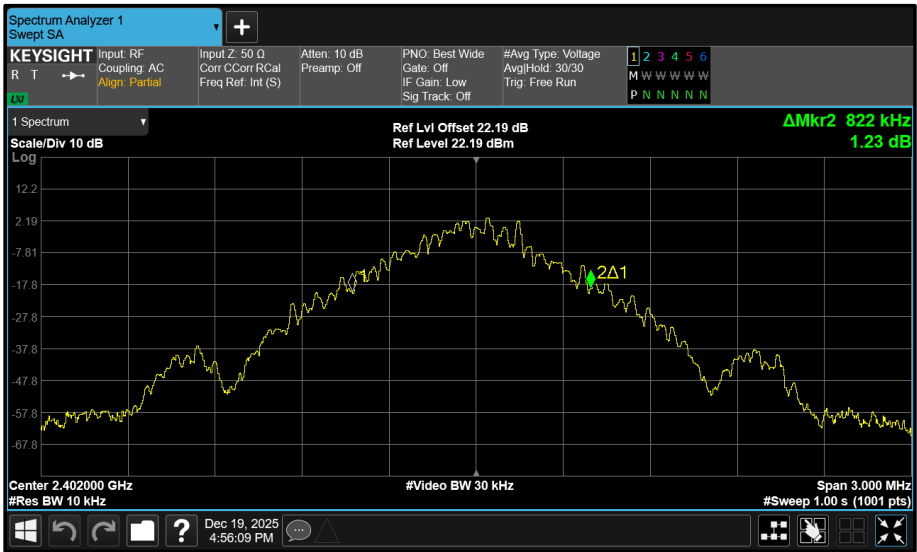


Figure 77 - Core 0 (A) 2402 MHz (CH0) 99% Bandwidth

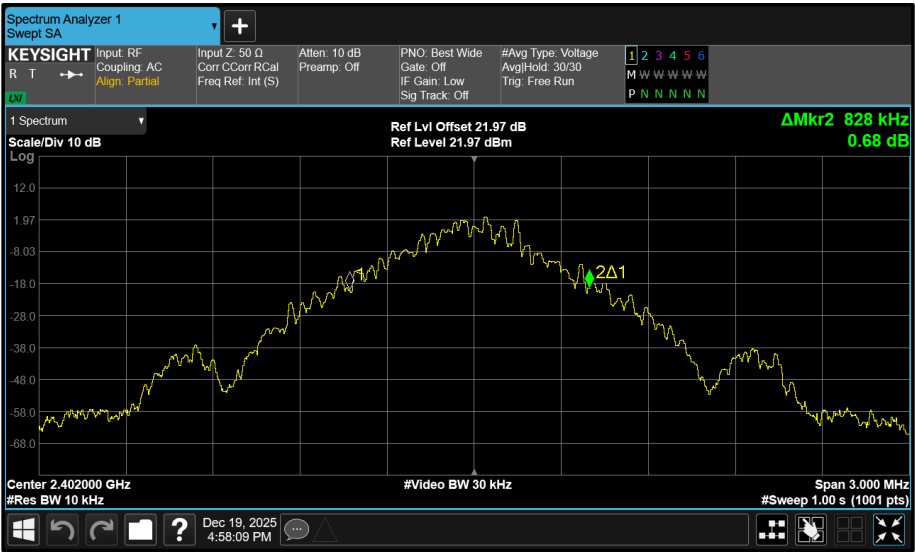


Figure 78 - Core 1 (B) 2402 MHz (CH0) 99% Bandwidth

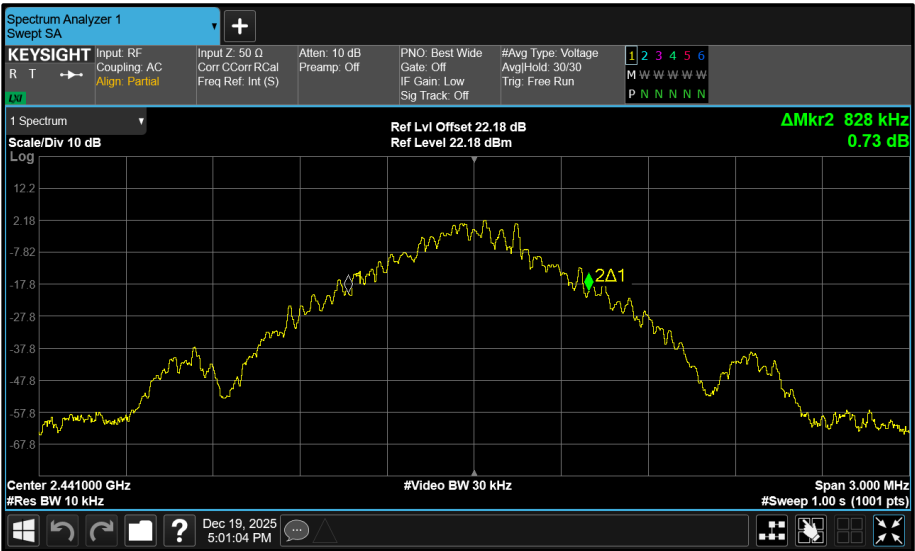


Figure 79 - Core 0 (A) 2441 MHz (CH39) 99% Bandwidth

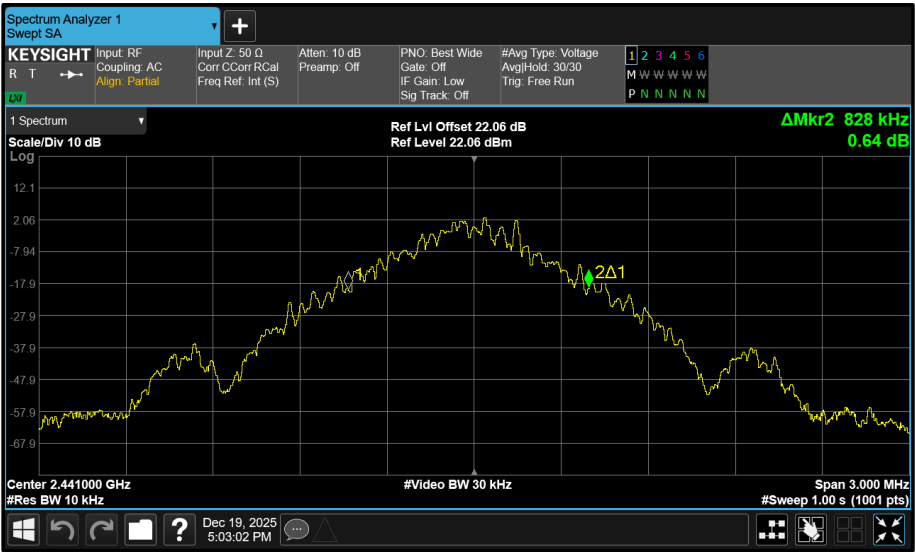


Figure 80 - Core 1 (B) 2441 MHz (CH39) 99% Bandwidth

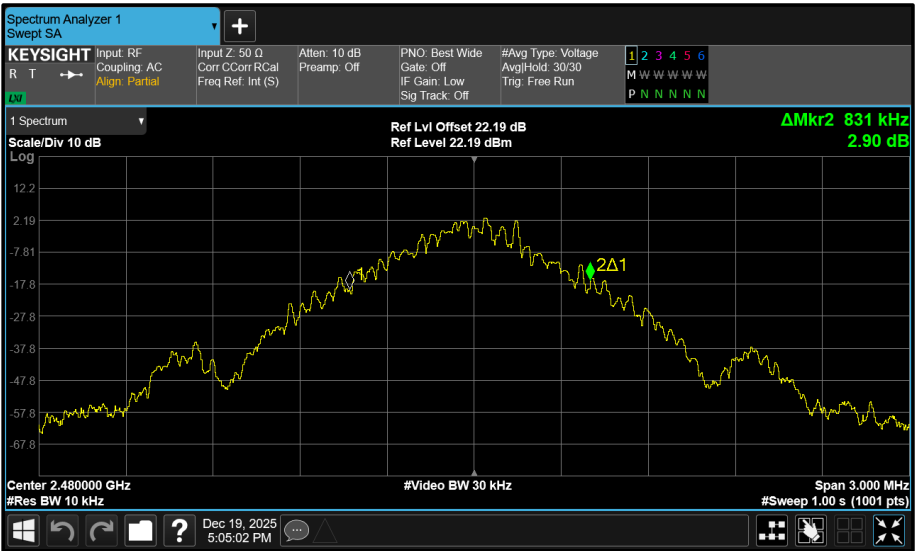


Figure 81 - Core 0 (A) 2480 MHz (CH78) 99% Bandwidth

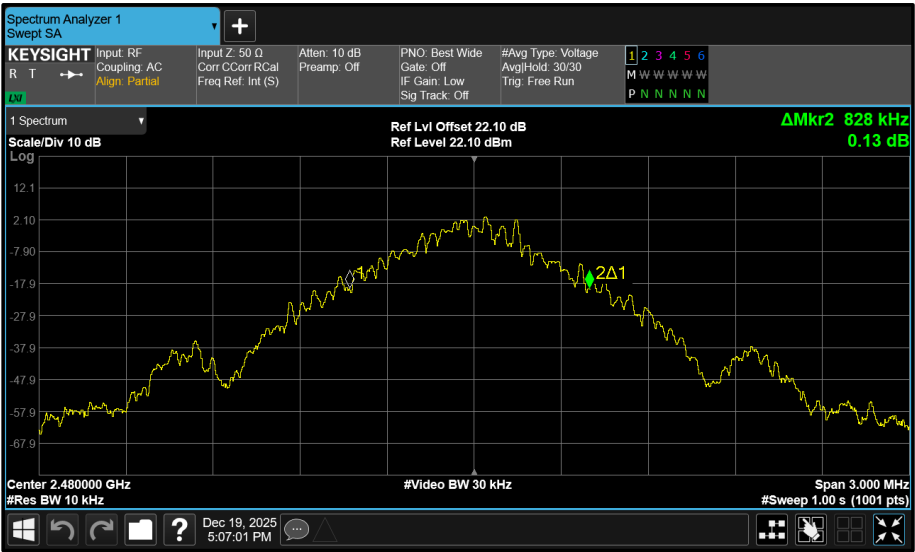


Figure 82 - Core 1 (B) 2480 MHz (CH78) 99% Bandwidth

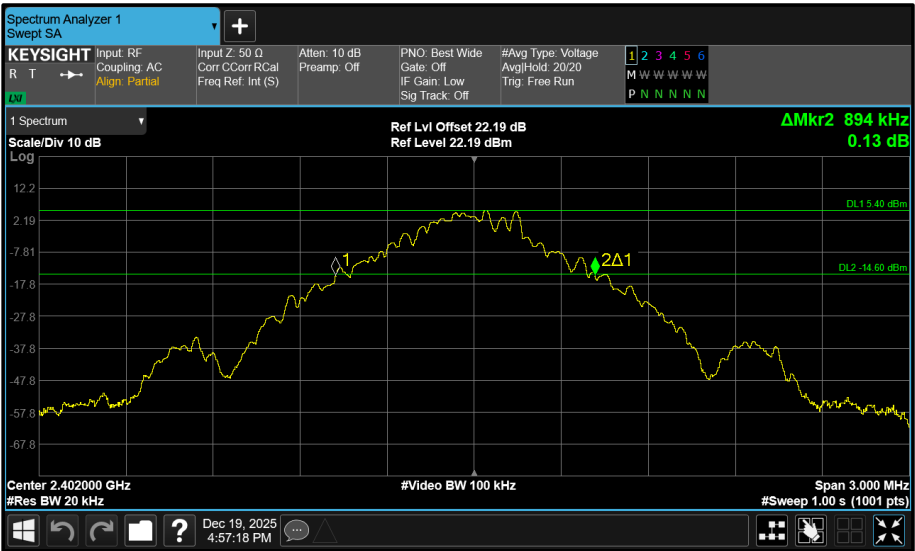


Figure 83 - Core 0 (A) 2402 MHz (CH0) 20 dB Bandwidth

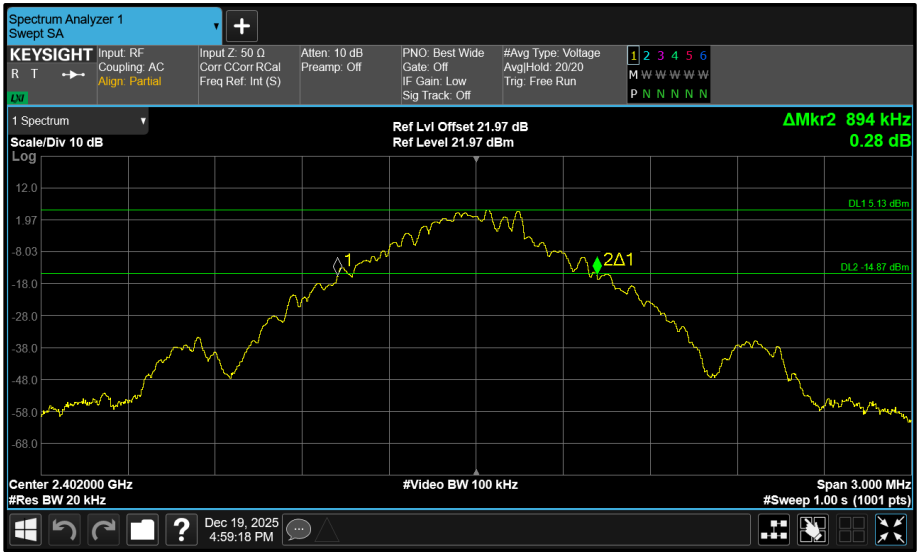


Figure 84 - Core 1 (B) 2402 MHz (CH0) 20 dB Bandwidth

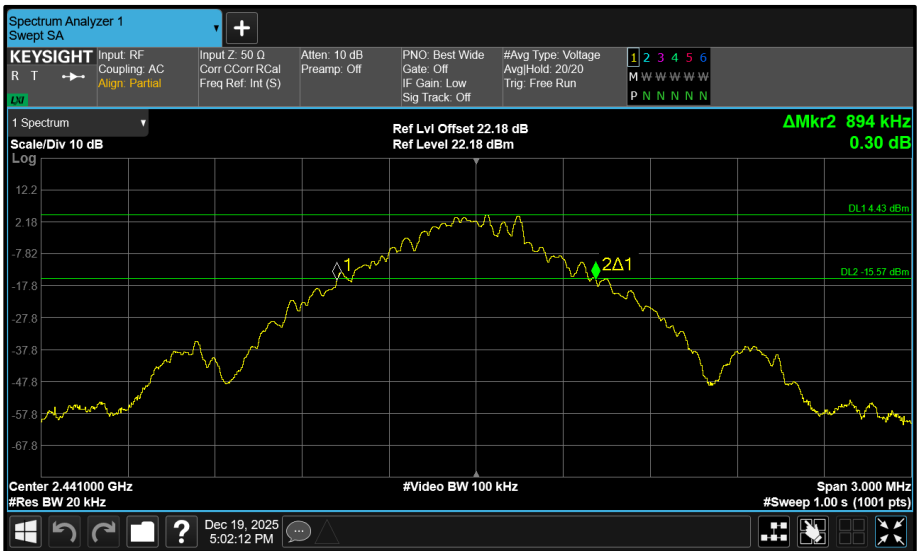


Figure 85 - Core 0 (A) 2441 MHz (CH39) 20 dB Bandwidth

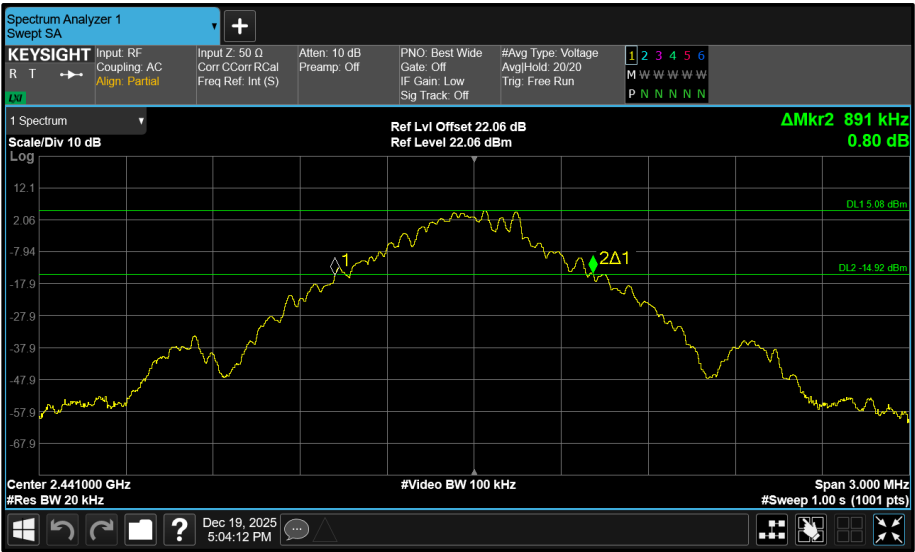


Figure 86 - Core 1 (B) 2441 MHz (CH39) 20 dB Bandwidth

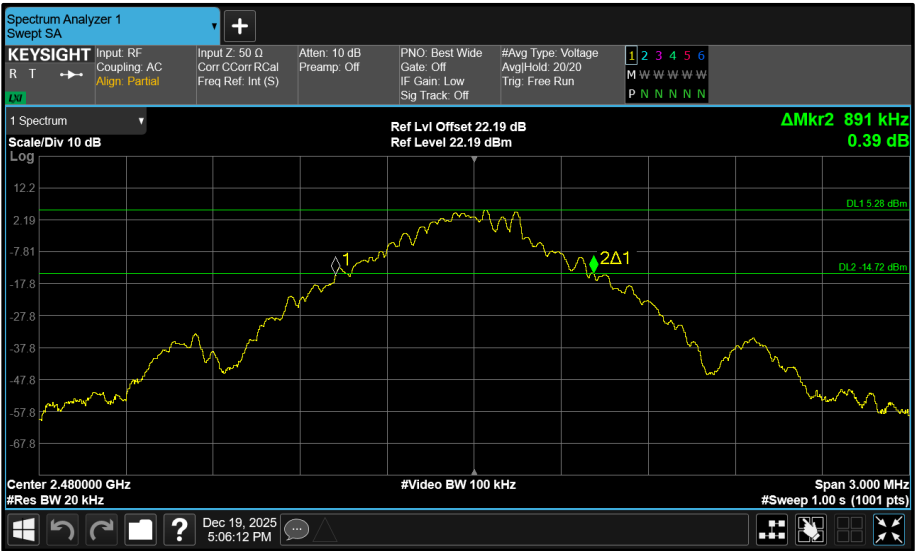


Figure 87 - Core 0 (A) 2480 MHz (CH78) 20 dB Bandwidth

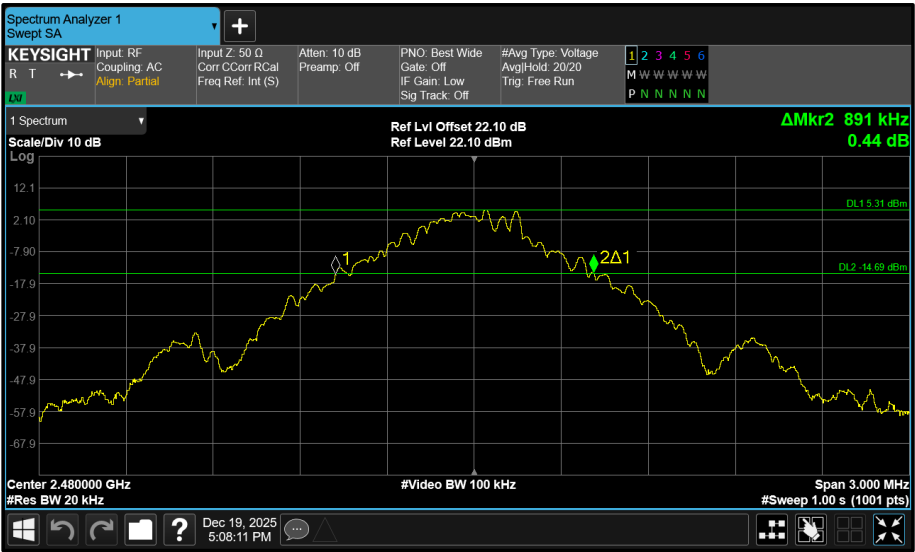


Figure 88 - Core 1 (B) 2480 MHz (CH78) 20 dB Bandwidth



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (a)(1) RSS-247 6.2.3	Test Method(s):	C63.10 6.9.3 C63.10 6.9.2
Additional Reference(s):	-		
Note(s):	TxBF cores were tested independently whilst transmitting at the cores respective powers and summed after test		

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

Table 55 - 99% Bandwidth Results

Test Frequency (MHz)	20 dB Bandwidth (MHz)			
	A	B	C	D
2402	0.891	0.891	-	-
2441	0.891	0.891	-	-
2480	0.891	0.891	-	-

Table 56 - 20 dB Bandwidth Results

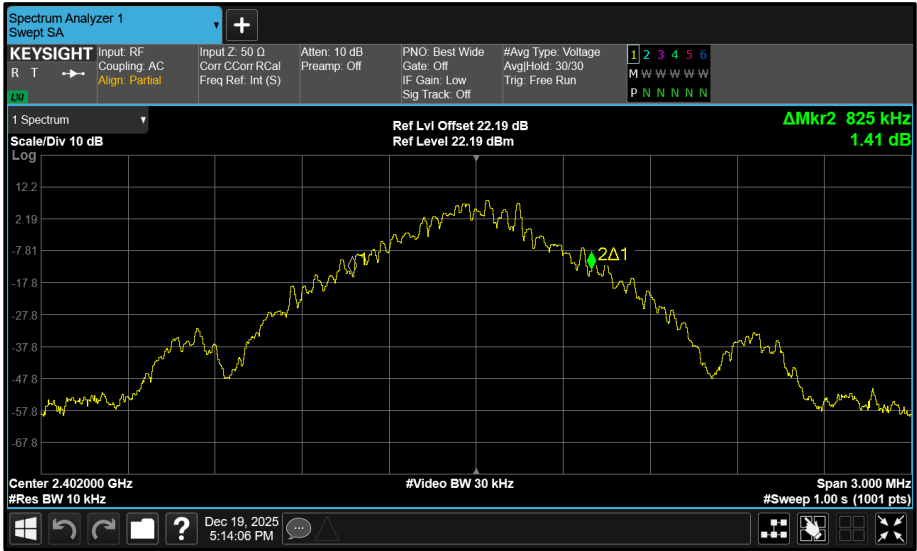


Figure 89 - Core 0 (A) 2402 MHz (CH0) 99% Bandwidth

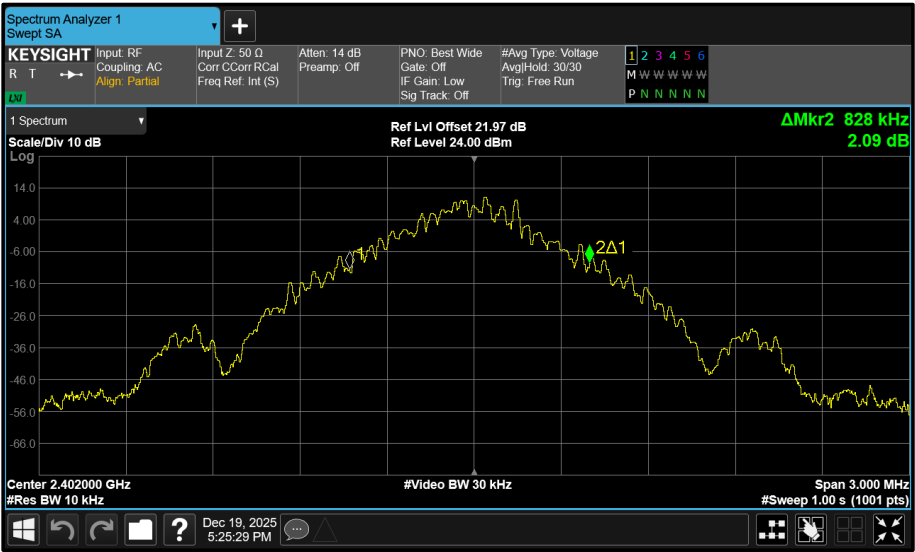


Figure 90 - Core 1 (B) 2402 MHz (CH0) 99% Bandwidth

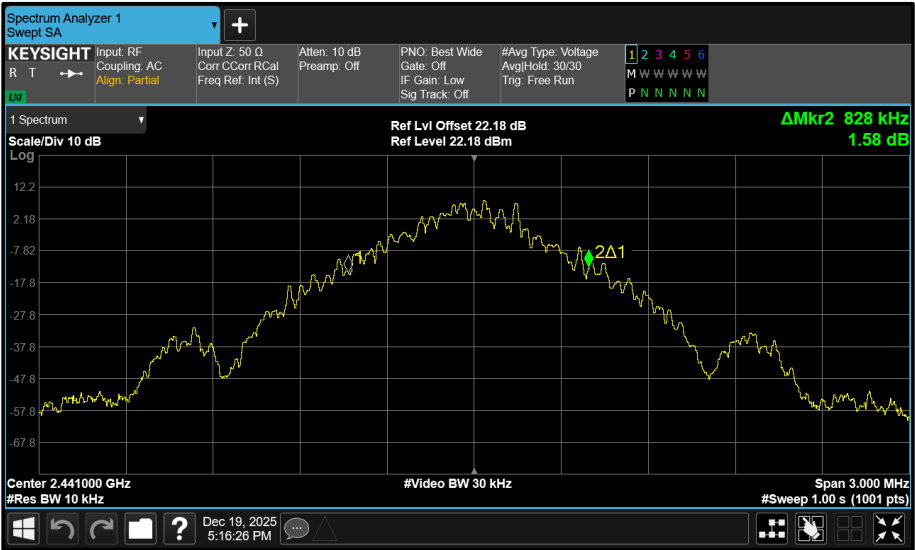


Figure 91 - Core 0 (A) 2441 MHz (CH39) 99% Bandwidth

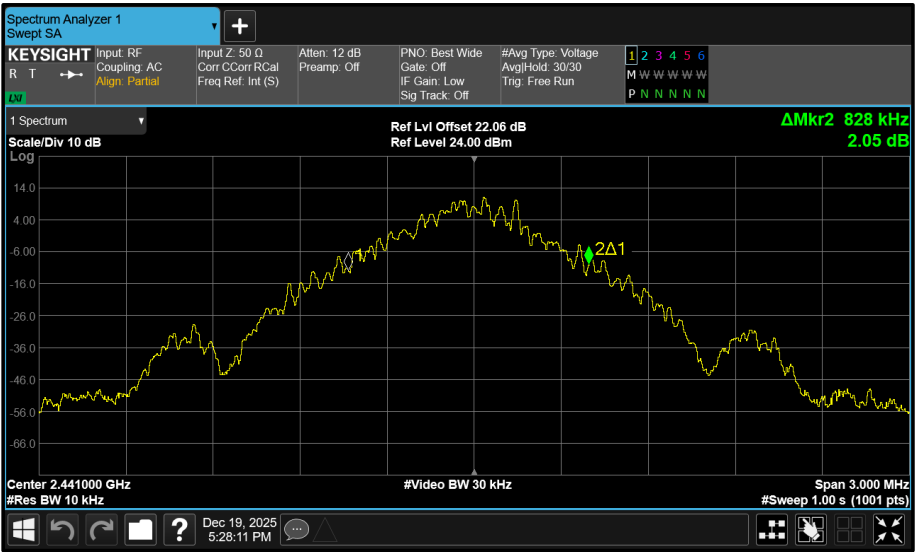


Figure 92 - Core 1 (B) 2441 MHz (CH39) 99% Bandwidth

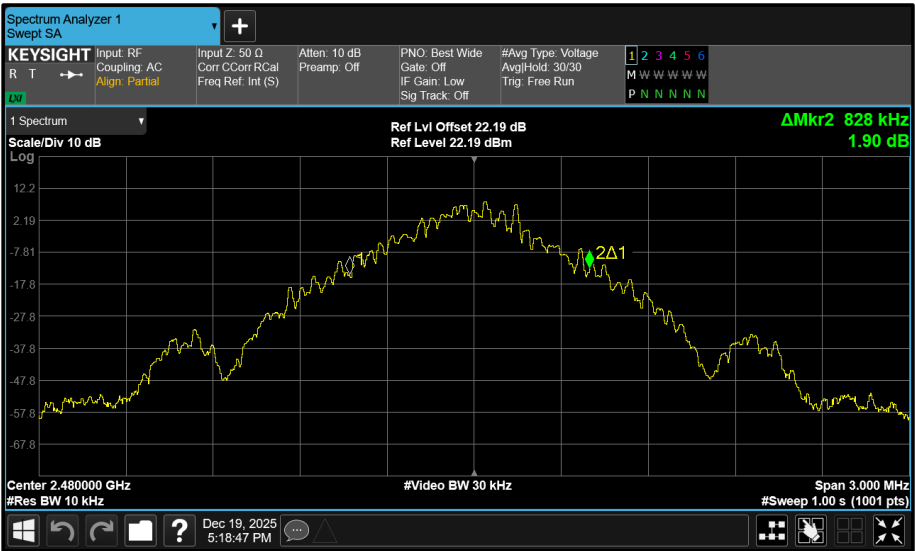


Figure 93 - Core 0 (A) 2480 MHz (CH78) 99% Bandwidth

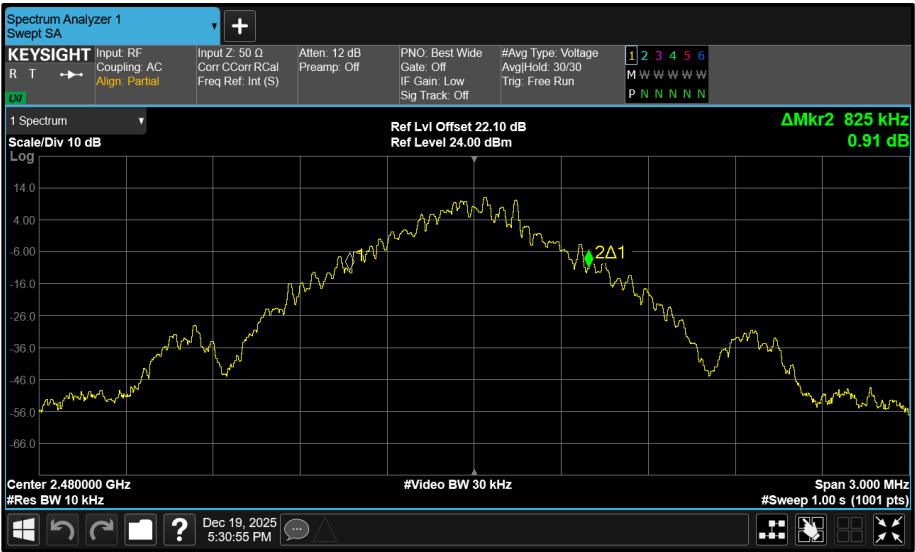


Figure 94 - Core 1 (B) 2480 MHz (CH78) 99% Bandwidth

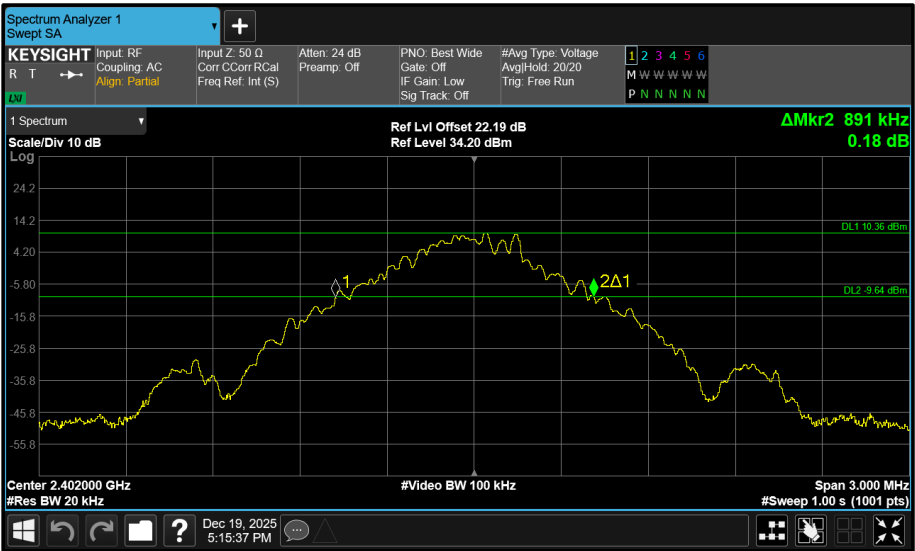


Figure 95 - Core 0 (A) 2402 MHz (CH0) 20 dB Bandwidth

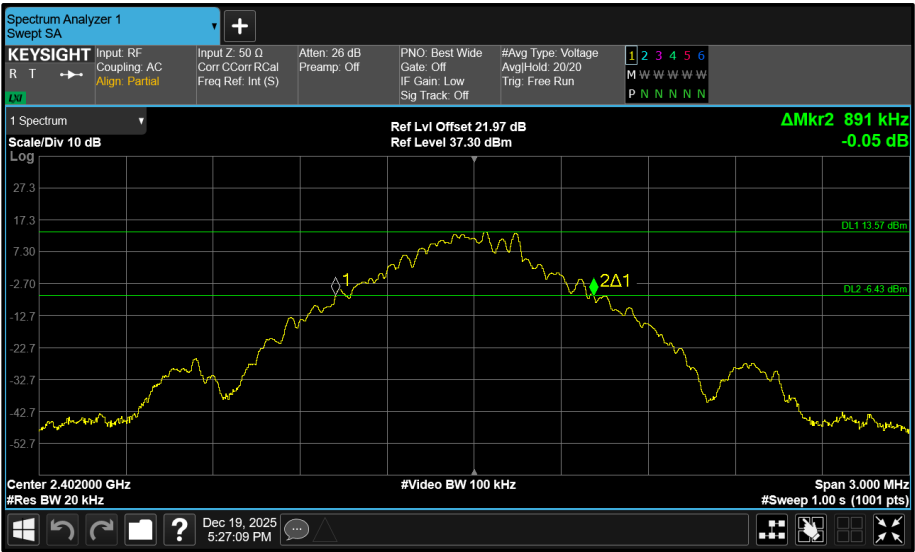


Figure 96 - Core 1 (B) 2402 MHz (CH0) 20 dB Bandwidth

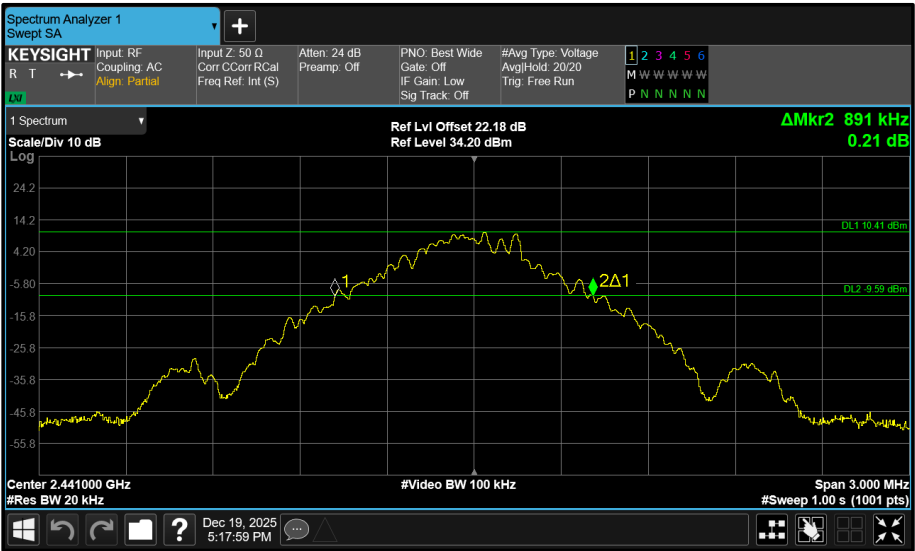


Figure 97 - Core 0 (A) 2441 MHz (CH39) 20 dB Bandwidth

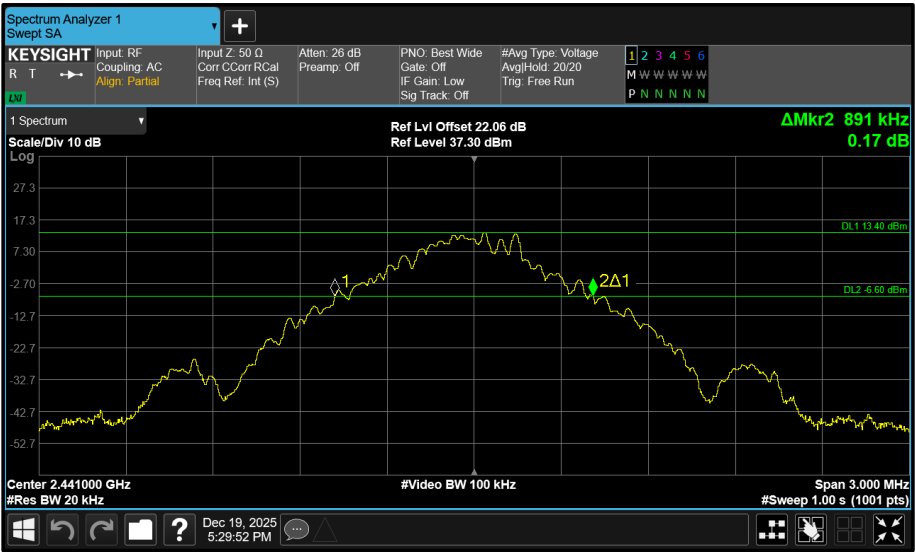


Figure 98 - Core 1 (B) 2441 MHz (CH39) 20 dB Bandwidth

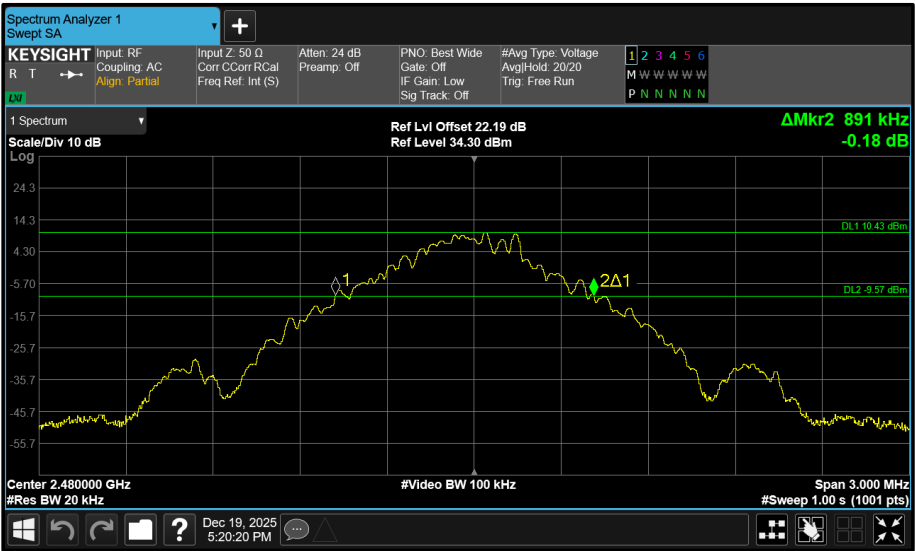


Figure 99 - Core 0 (A) 2480 MHz (CH78) 20 dB Bandwidth

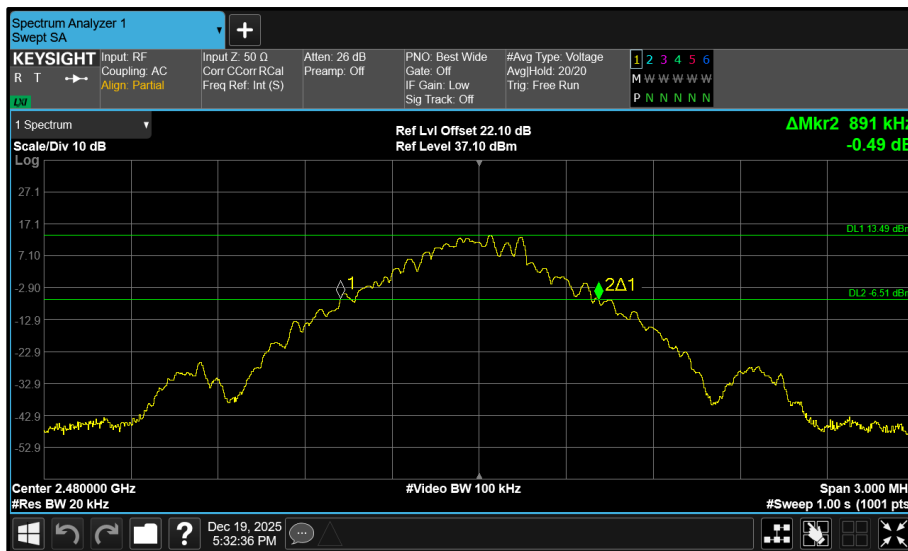


Figure 100 - Core 1 (B) 2480 MHz (CH78) 20 dB Bandwidth

FCC 47 CFR Part 15 and ISED 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
MXA Signal Analyser	Keysight Technologies	N9020B	5919	24	31-Mar-2028
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	6518	12	23-Feb-2026
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	6529	12	13-Mar-2026
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6530	12	23-Feb-2026
AC Programmable Power Supply	iTech	IT7324	6662	-	O/P Mon
Multimeter	Fluke	115	7115	12	13-Aug-2026

Table 57

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

A3428, S/N: G9F4Y6NJ31 - Modification State 0

2.6.3 Date of Test

19-December-2025 to 05-February-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	24.5 - 25.3 °C
Relative Humidity	35.5 - 42.4 %



2.6.6 Test Results

2.4 GHz Bluetooth BDR/EDR

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 a)	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):	5.80

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	9.06	-	-	-	9.06	30.00	-20.94
2441	9.37	-	-	-	9.37	30.00	-20.63
2480	9.15	-	-	-	9.15	30.00	-20.85

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	9.06	-	-	-	9.06	30.00	-20.94	14.86	36.00	-21.14
2441	9.37	-	-	-	9.37	30.00	-20.63	15.17	36.00	-20.83
2480	9.15	-	-	-	9.15	30.00	-20.85	14.95	36.00	-21.05

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 a)	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):	2.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	-	9.01	-	-	9.01	30.00	-20.99
2441	-	9.08	-	-	9.08	30.00	-20.92
2480	-	9.04	-	-	9.04	30.00	-20.96

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	-	9.01	-	-	9.01	30.00	-20.99	11.21	36.00	-24.79
2441	-	9.08	-	-	9.08	30.00	-20.92	11.28	36.00	-24.72
2480	-	9.04	-	-	9.04	30.00	-20.96	11.24	36.00	-24.76

Table 61 - 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 a)	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):	5.00

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	-	-	13.13	-	13.13	30.00	-16.87
2441	-	-	13.12	-	13.12	30.00	-16.88
2480	-	-	13.16	-	13.16	30.00	-16.84

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	-	-	13.13	-	13.13	30.00	-16.87	18.13	36.00	-17.87
2441	-	-	13.12	-	13.12	30.00	-16.88	18.12	36.00	-17.88
2480	-	-	13.16	-	13.16	30.00	-16.84	18.16	36.00	-17.84

Table 63 - 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 a)	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):	5.80

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	14.18	-	-	-	14.18	30.00	-15.82
2441	14.25	-	-	-	14.25	30.00	-15.75
2480	14.29	-	-	-	14.29	30.00	-15.71

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	14.18	-	-	-	14.18	30.00	-15.82	19.98	36.00	-16.02
2441	14.25	-	-	-	14.25	30.00	-15.75	20.05	36.00	-15.95
2480	14.29	-	-	-	14.29	30.00	-15.71	20.09	36.00	-15.91

Table 65 - 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 a)	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):	2.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	-	17.80	-	-	17.80	30.00	-12.20
2441	-	17.69	-	-	17.69	30.00	-12.31
2480	-	18.09	-	-	18.09	30.00	-11.91

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	-	17.80	-	-	17.80	30.00	-12.20	20.00	36.00	-16.00
2441	-	17.69	-	-	17.69	30.00	-12.31	19.89	36.00	-16.11
2480	-	18.09	-	-	18.09	30.00	-11.91	20.29	36.00	-15.71

Table 67 - 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 a)	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):	7.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	9.25	9.08	-	-	12.18	28.80	-16.63
2441	8.38	9.08	-	-	11.75	28.80	-17.05
2480	9.21	9.18	-	-	12.21	28.80	-16.60

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	9.25	9.08	-	-	12.18	30.00	-17.82	19.37	36.00	-16.63
2441	8.38	9.08	-	-	11.75	30.00	-18.25	18.95	36.00	-17.05
2480	9.21	9.18	-	-	12.21	30.00	-17.79	19.40	36.00	-16.60

Table 69 - 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 a)	Test Method(s):	C63.10 7.8.5
Additional Reference(s):	662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1)		
Note(s):	TxBF cores were tested independently whilst transmitting at the cores respective powers and summed after test		

DUT Configuration			
Mode:	ePA GFSK (DH5)	Duty Cycle (%):	76.5
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0+Core 1)	Peak Antenna Gain (dBi):	7.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	14.19	17.34	-	-	19.06	28.80	-9.74
2441	14.24	17.26	-	-	19.02	28.80	-9.78
2480	14.28	17.15	-	-	18.95	28.80	-9.85

Table 70 - 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	14.19	17.34	-	-	19.06	30.00	-10.94	26.26	36.00	-9.74
2441	14.24	17.26	-	-	19.02	30.00	-10.98	26.22	36.00	-9.78
2480	14.28	17.15	-	-	18.95	30.00	-11.05	26.15	36.00	-9.85

Table 71 - ISCED 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
Humidity & Temperature meter	R.S Components	1364	6148	12	28-Aug-2026
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6518	12	23-Feb-2026
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	6529	12	13-Mar-2026
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6530	12	23-Feb-2026
USB Wideband Power Sensor	Boonton	RTP5008	6587	12	23-Feb-2026
USB Wideband Power Sensor	Boonton	RTP5008	6588	12	23-Feb-2026
DC Power Module	Keysight Technologies	N6754A	6663	-	O/P Mon
Multimeter	Fluke	115	7115	12	13-Aug-2026

Table 72

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

A3428, S/N: FF9MP4FP2G - Modification State 0
A3428, S/N: J6NX2X6RCP - Modification State 0
A3428, S/N: L61HW7H962 - Modification State 0

2.7.3 Date of Test

21-October-2025 to 17-January-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	22.3 – 24.7 °C
Relative Humidity	39.5 – 46.1 %

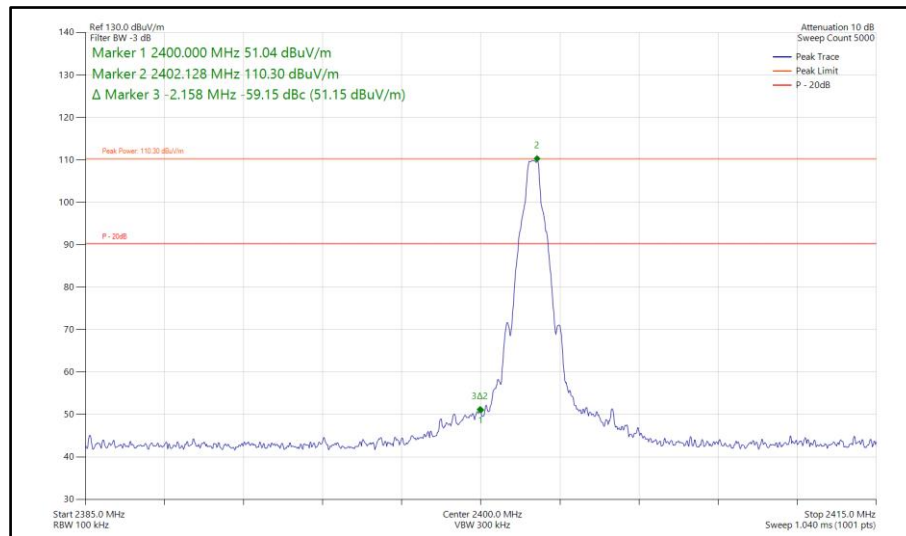
2.7.6 Test Results

2.4 GHz Bluetooth BDR/EDR

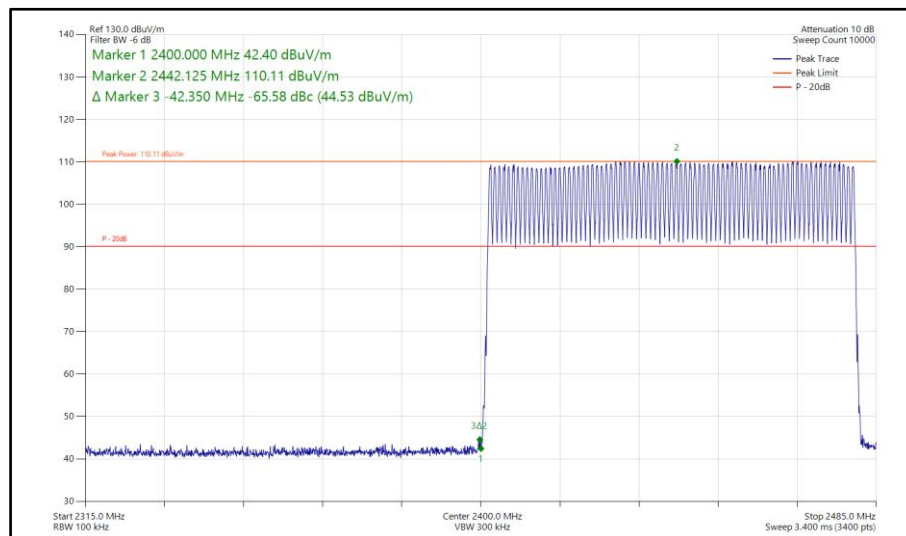
iPA - Core 0 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-59.15
Hopping	DH5	2402-2480	2400	-65.58

Table 73 - SISO Authorised Band Edge Results



**Figure 101 - Bluetooth DH5, SISO, Core 0 - 2402 MHz
Band Edge Frequency 2400 MHz**



**Figure 102 - 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	-60.94
Hopping	DH5	2402-2480	2400	-66.52

Table 74 - SISO Authorised Band Edge Results

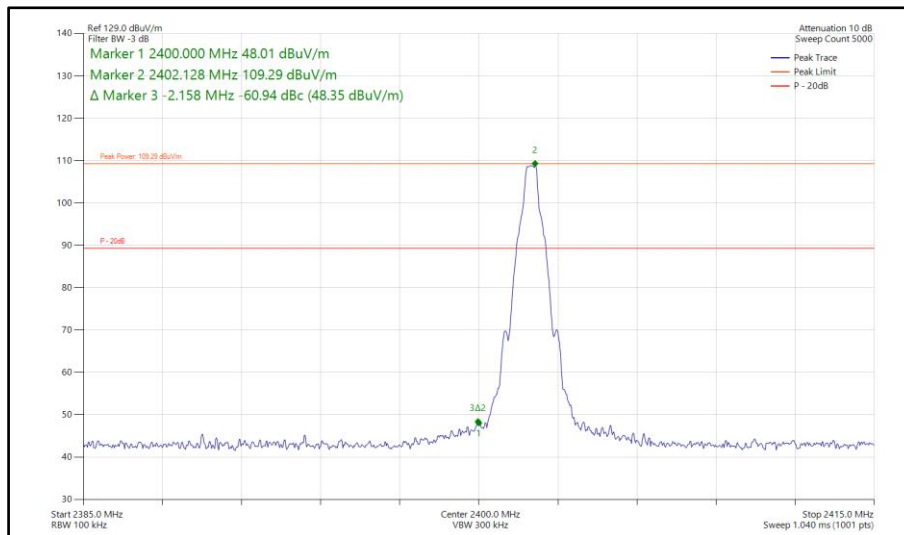


Figure 103 - Bluetooth DH5, SISO, Core 1 - 2402 MHz
Band Edge Frequency 2400 MHz

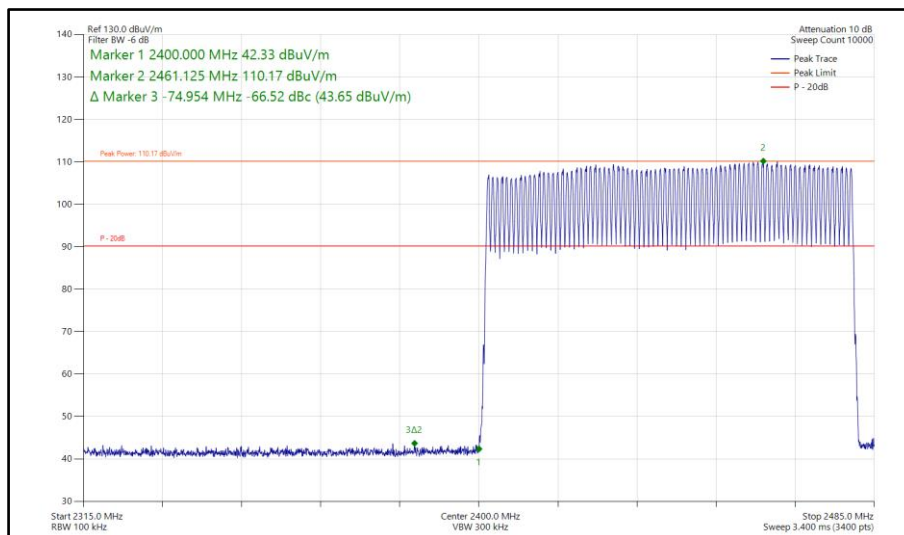


Figure 104 - Bluetooth DH5, SISO, Core 1 - 2402-2480 MHz
Band Edge Frequency 2400 MHz

iPA - Core 2 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-55.42
Hopping	DH5	2402-2480	2400	-62.11

Table 75 - SISO Authorised Band Edge Results

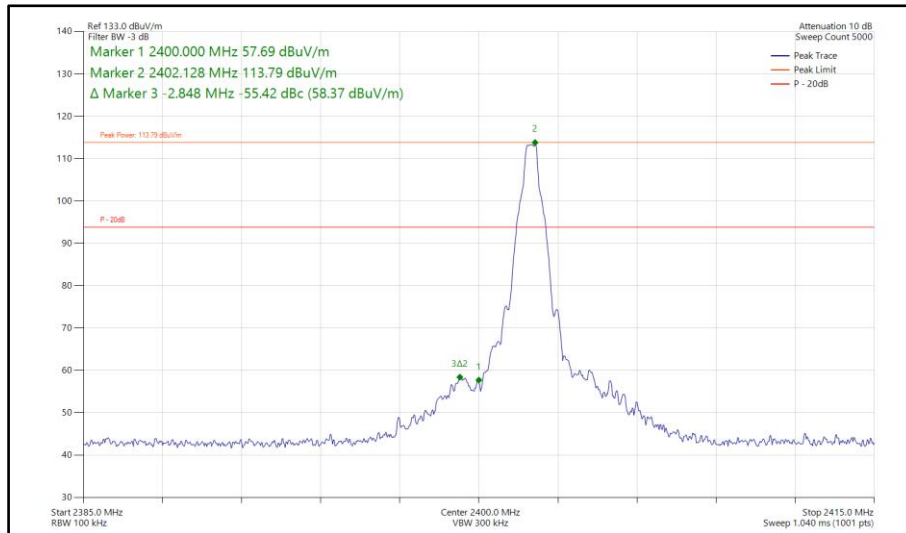


Figure 105 - Bluetooth DH5, SISO, Core 2 - 2402 MHz
Band Edge Frequency 2400 MHz

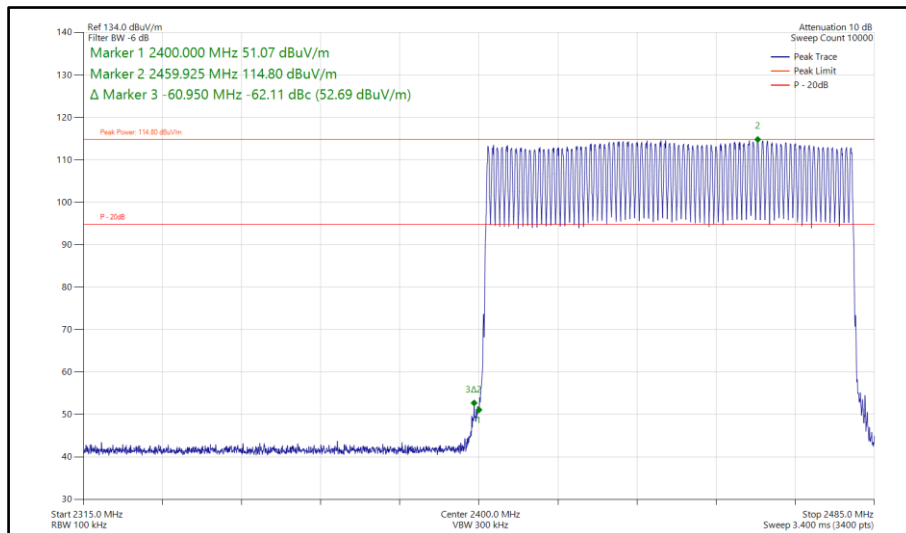
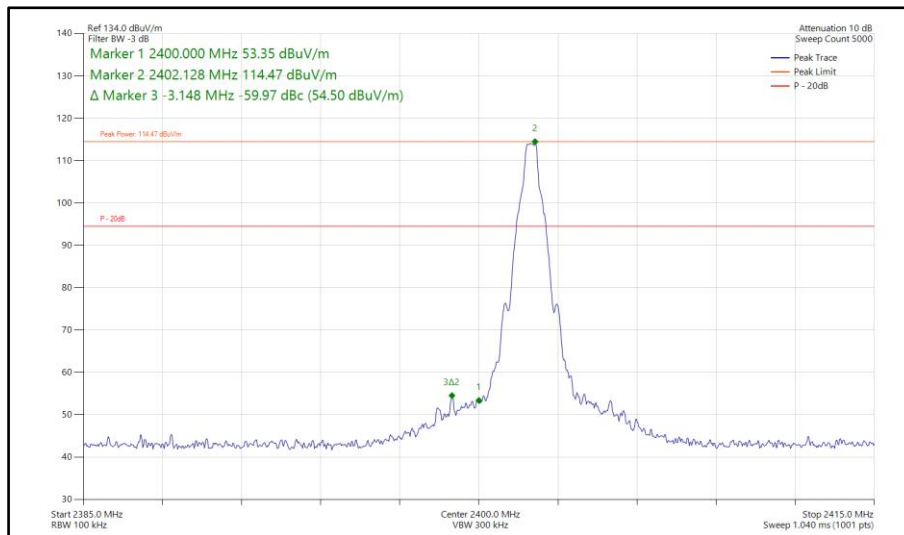


Figure 106 - Bluetooth DH5, SISO, Core 2 - 2402-2480 MHz
Band Edge Frequency 2400 MHz

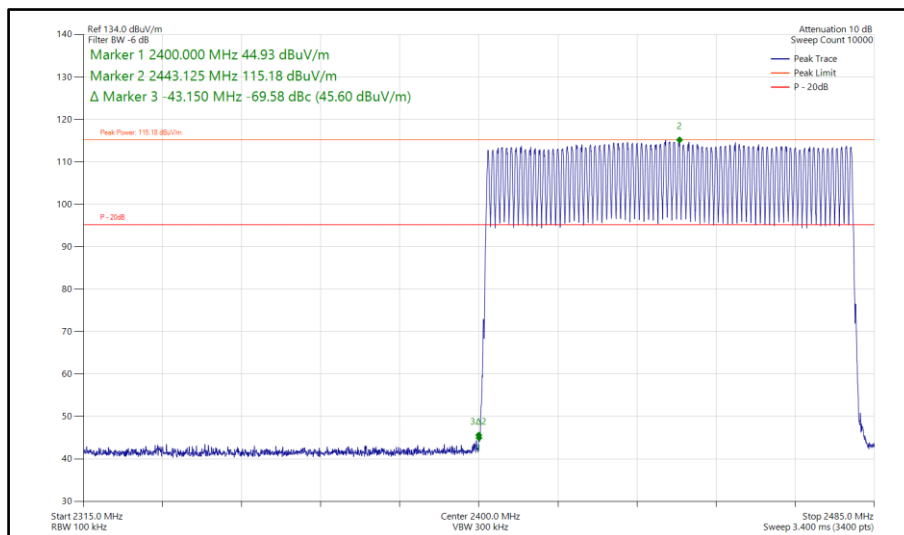
iPA - Core 0-1 (MIMO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-59.97
Hopping	DH5	2402-2480	2400	-69.58

Table 76 - MIMO Authorised Band Edge Results



**Figure 107 - Bluetooth DH5, MIMO, Core 0-1 - 2402 MHz
Band Edge Frequency 2400 MHz**



**Figure 108 - 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	-66.30
Hopping	DH5	2402-2480	2400	-71.54

Table 77 - SISO Authorised Band Edge Results

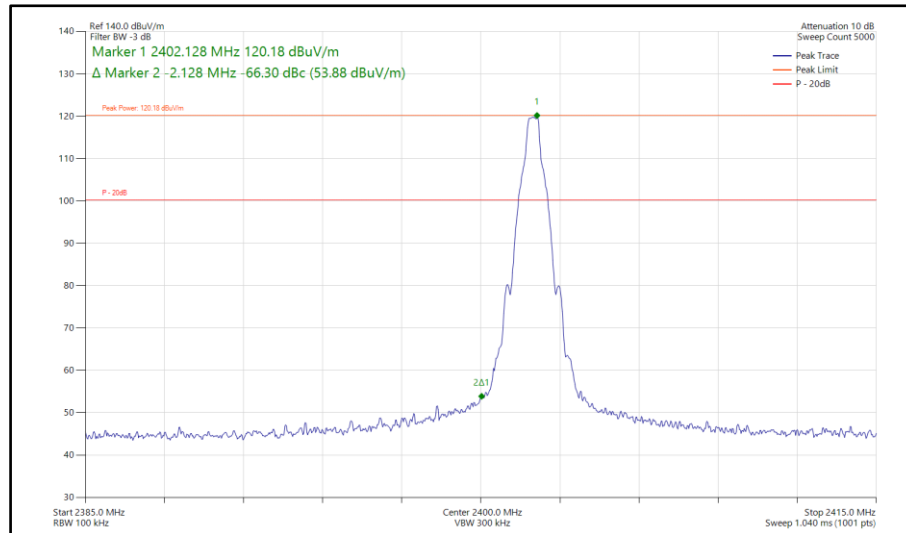


Figure 109 - Bluetooth DH5, SISO, Core 0 - 2402 MHz
Band Edge Frequency 2400 MHz

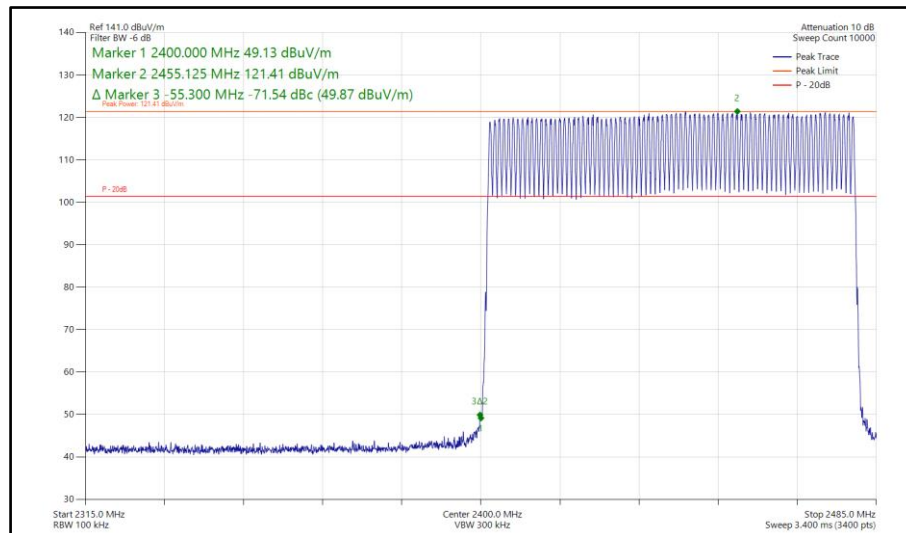


Figure 110 - Bluetooth DH5, SISO, Core 0 - 2402-2480 MHz
Band Edge Frequency 2400 MHz



ePA - Core 1 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-67.67
Hopping	DH5	2402-2480	2400	-72.02

Table 78 - SISO Authorised Band Edge Results

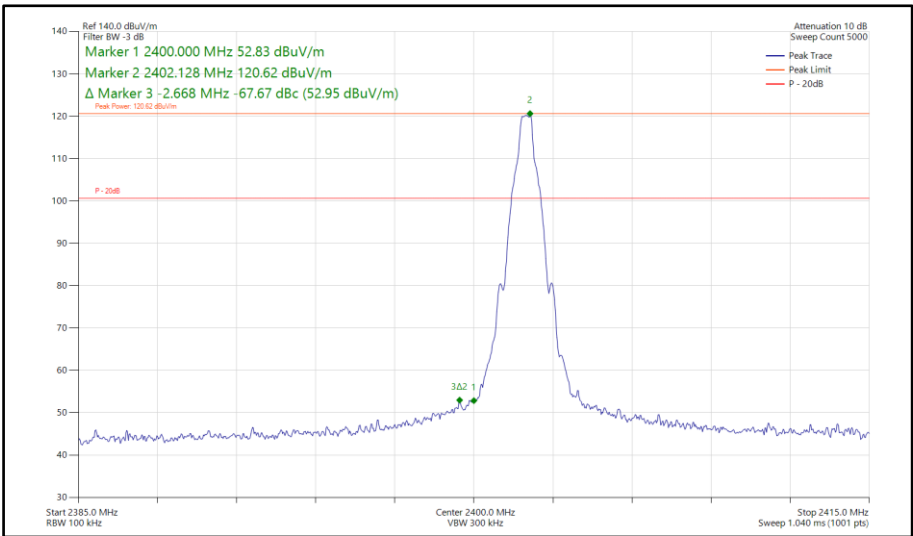


Figure 111 - Bluetooth DH5, SISO, Core 1 - 2402 MHz
Band Edge Frequency 2400 MHz

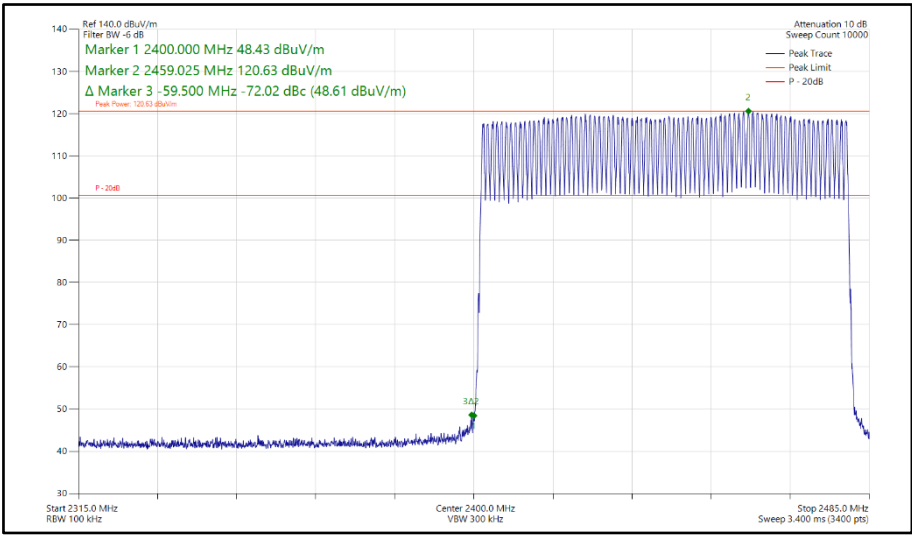


Figure 112 - Bluetooth DH5, SISO, Core 1 - 2402-2480 MHz
Band Edge Frequency 2400 MHz

ePA - Core 0-1 (MIMO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-66.75
Hopping	DH5	2402-2480	2400	-69.30

Table 79 - MIMO Authorised Band Edge Results

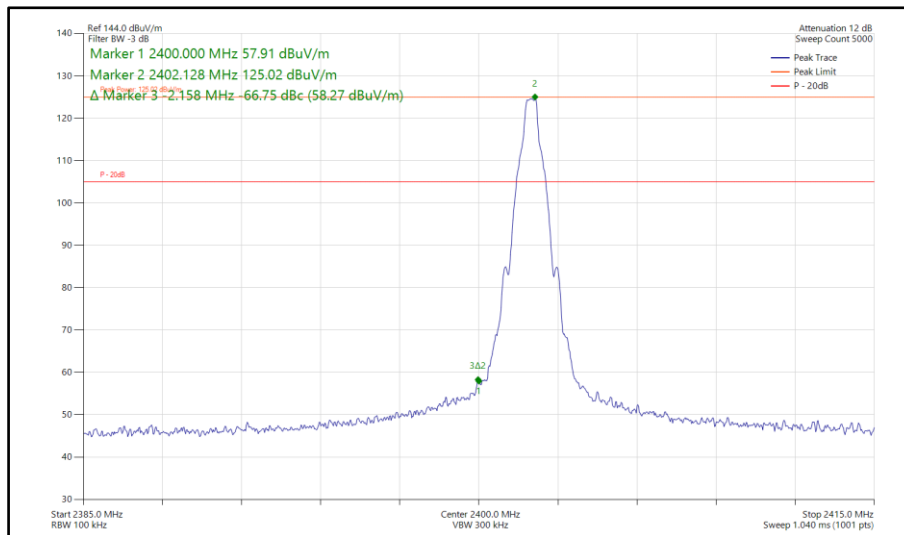


Figure 113 - Bluetooth DH5, MIMO, Core 0-1 - 2402 MHz
Band Edge Frequency 2400 MHz

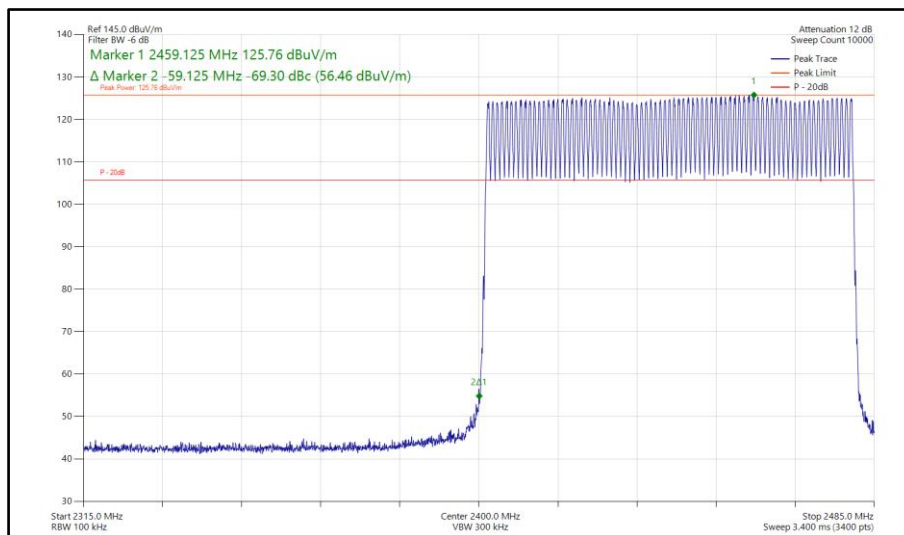


Figure 114 - Bluetooth DH5, MIMO, Core 0-1 - 2402-2480 MHz
Band Edge Frequency 2400 MHz



iPA - Core 0-2 (MIMO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-59.33
Hopping	DH5	2402-2480	2400	-65.17

Table 80 - MIMO Authorised Band Edge Results

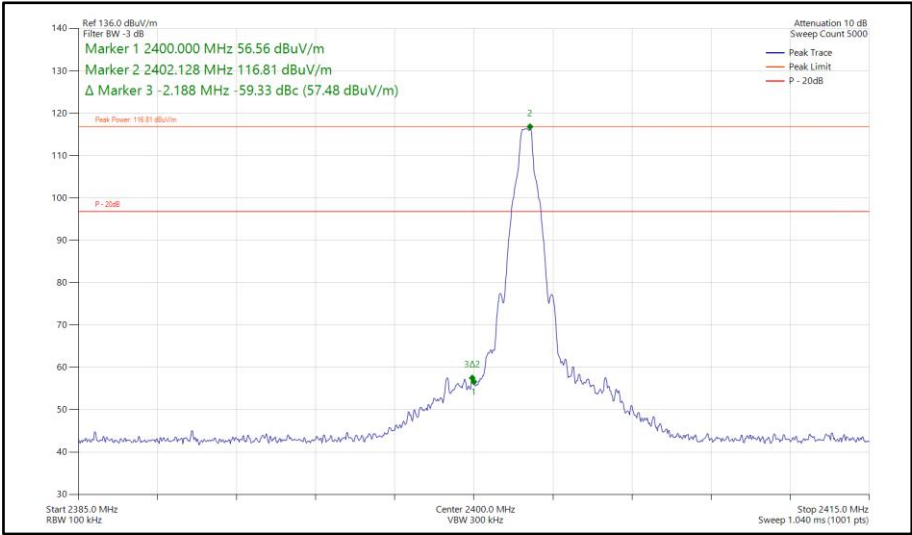


Figure 115 - Bluetooth DH5, MIMO, Core 0-2 - 2402 MHz
Band Edge Frequency 2400 MHz

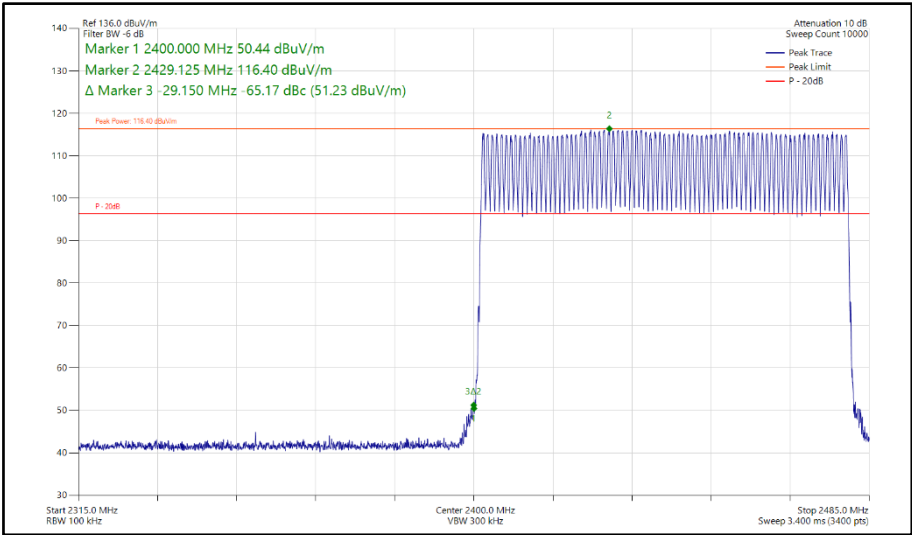


Figure 116 - Bluetooth DH5, MIMO, Core 0-2 - 2402-2480 MHz
Band Edge Frequency 2400 MHz

iPA - Core 1-2 (MIMO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-55.77
Hopping	DH5	2402-2480	2400	-66.37

Table 81 - MIMO Authorised Band Edge Results

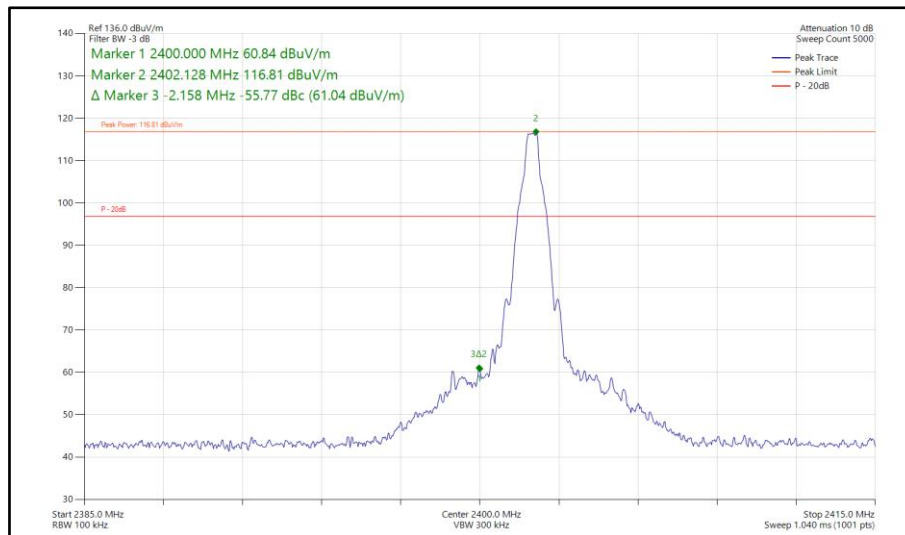


Figure 117 - Bluetooth DH5, MIMO, Core 1-2 - 2402 MHz
Band Edge Frequency 2400 MHz

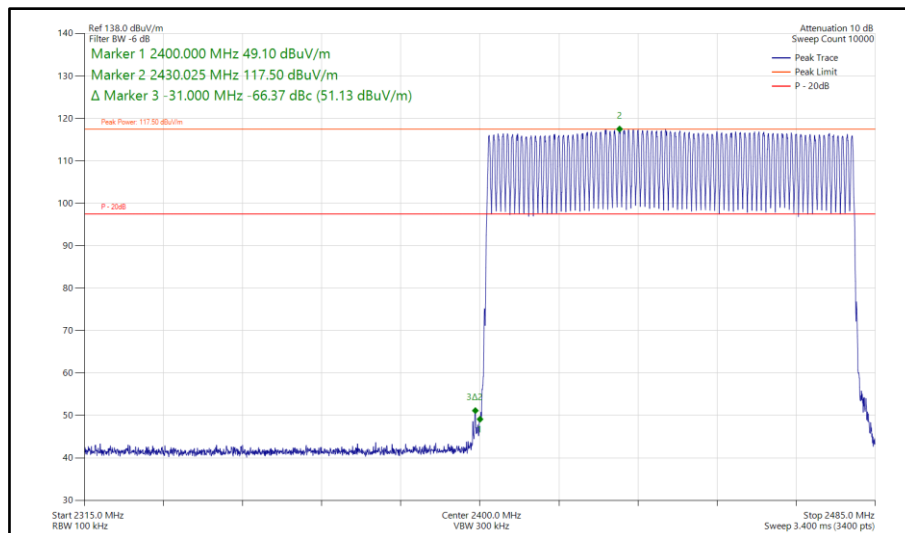


Figure 118 - Bluetooth DH5, MIMO, Core 1-2 - 2402-2480 MHz
Band Edge Frequency 2400 MHz



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 6.3.2, 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 14, RF Chamber 15 & RF Chamber 16

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
1.0kΩ variable resistive load	Arcol	VRH320 - 1K0	5848	-	TU
3M N Type Cable	Scott Cables	LMR600-NMNM-3.00M	5857	-	TU
EMI Test Receiver	Rohde & Schwarz	ESW44	5912	12	04-Sep-2026
Test Receiver	Rohde & Schwarz	ESW44	5914	12	17-Jun-2026
1500W (300V 12A) AC Power Supply	iTech	IT7324	5955	-	O/P Mon
1500W (300V 12A) AC Power Supply	iTech	IT7324	5956	-	O/P Mon
1500W (300V 12A) AC Power Supply	iTech	IT7324	5957	-	O/P Mon
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
5m Semi-Anechoic Chamber (Dual-Axis), Chamber 15	Albatross Projects	RF Chamber 15	5963	36	23-Apr-2028
Compact Antenna Mast	Maturo Gmbh	CAM4.0-P	5964	-	TU
Mast & Turntable Controller	Maturo Gmbh	FCU3.0	5966	-	TU
Tilt Antenna Mast	Maturo Gmbh	BAM4.5-P	5967	-	TU
Turntable	Maturo Gmbh	TT1.5SI	5968	-	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



Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Turntable	Maturo Gmbh	TT1.5SI	5975	-	TU
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/A	5996	12	23-May-2026
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/A	6008	12	23-May-2026
Horn Antenna (1-10.5 GHz)	Schwarzbeck	BBHA9120B	6140	12	14-Sep-2026
Horn Antenna (1-10 GHz)	Schwarzbeck	BBHA9120B	6141	12	14-Sep-2026
Horn Antenna (1-10 GHz)	Schwarzbeck	BBHA9120B	6142	12	14-Sep-2026
SAC Switch Unit	TUV SUD	TUV_SSU_001	6144	12	05-Dec-2026
Digital Multimeter	Fluke	115	6145	12	06-Jun-2026
Digital Multimeter	Fluke	115	6146	12	05-Jun-2026
Digital Multimeter	Fluke	115	6147	12	05-Jun-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
USB Spectrum Analyser	Signal Hound	SA124B	6296	-	TU
USB Spectrum Analyser	Signal Hound	SA124B	6297	-	TU
Cable (SMA to SMA 1m)	Junkosha	MWX221/B	6305	12	23-May-2026
Humidity and Temperature Meter	R.S Components	1364	6346	12	13-Mar-2026
USB Spectrum Analyser	Signal Hound	SA124B	6383	-	TU
Humidity and Temperature Meter	R.S Components	1364	6486	12	01-Jul-2026
1m Cable	Junkosha	MWX241-01000AMSAMS/B	6740	12	27-Apr-2026
1m Cable	Junkosha	MWX241-01000AMSAMS/B	6741	12	27-Apr-2026
8m Cable	Junkosha	MWX221-08000AMSAMS/B	6748	12	27-Apr-2026
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
8M SMA Cable	Junkosha	MWX221-08000AMSAMS/B	6833	12	18-Aug-2026
Handheld Hygrometer	Fluke	971	6837	12	16-Sep-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
Cable Assembly	Pasternack	PE300-60	6856	-	TU
Cable Assembly	Pasternack	PE300-60	6857	-	TU
Cable Assembly	Pasternack	PE300-60	6858	-	TU
Cable Assembly	Pasternack	PE300-60	6862	-	TU
Cable Assembly	Pasternack	PE300-60	6864	-	TU



Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Cable Assembly	Pasternack	PE300-60	6866	-	TU
Cable Assembly	Pasternack	PE300-60	6867	-	TU
Cable Assembly	Pasternack	PE300-60	6868	-	TU
RF Amplifier BROADBAND AMPL/SMA/RoHS	Mini-Circuits	ZX60-83LN12+	6976	12	05-Apr-2026
RF Amplifier BROADBAND AMPL/SMA/RoHS	Mini-Circuits	ZX60-83LN12+	6977	12	05-Apr-2026
RF Amplifier BROADBAND AMPL/SMA/RoHS	Mini-Circuits	ZX60-83LN12+	6978	12	05-Apr-2026

Table 82

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

A3428, S/N: FF9MP4FP2G - Modification State 0
A3428, S/N: GJM3XKXYGQ - Modification State 0

2.8.3 Date of Test

16-December-2025 to 20-December-2025

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.

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

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.



2.8.7 Test Results

2.4 GHz Bluetooth FHSS BDR

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

Table 83 - 2402 MHz (CH2402), DH5, iPA, Core 0 + Core 1, 1 GHz to 18 GHz

*No emissions found within 20 dB of the limit.

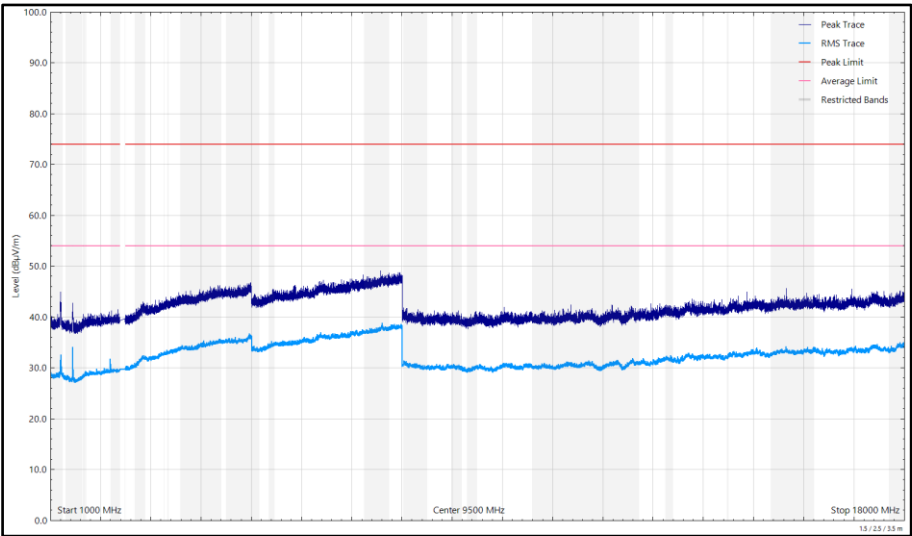


Figure 120 - 2402 MHz (CH2402), DH5, iPA, Core 0 + Core 1, 1 GHz to 18 GHz, Horizontal

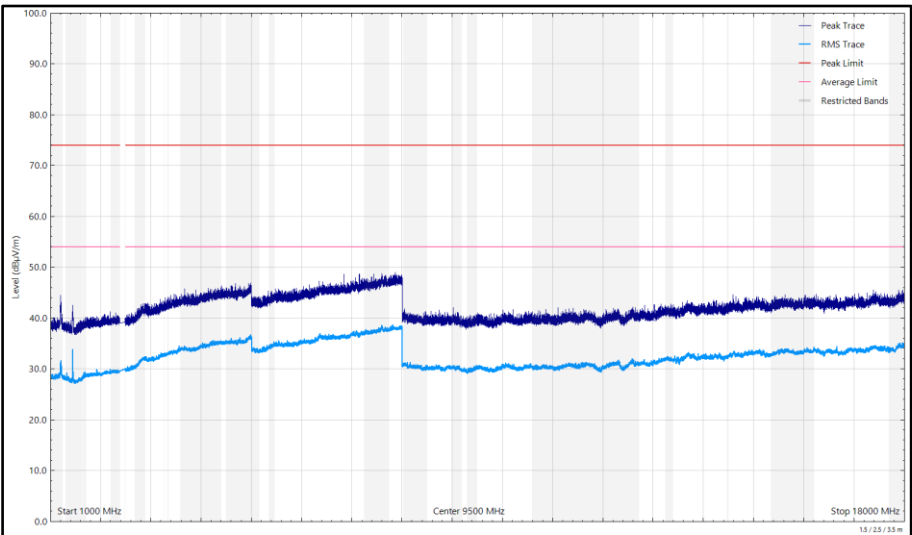


Figure 121 - 2402 MHz (CH2402), DH5, iPA, Core 0 + Core 1, 1 GHz to 18 GHz, Vertical

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
37.773	21.40	40.00	-18.60	Q-Peak	258	180	Vertical
37.856	20.27	40.00	-19.73	Q-Peak	101	254	Horizontal
73.192	23.42	40.00	-16.58	Q-Peak	98	101	Vertical
114.149	21.69	43.50	-21.81	Q-Peak	351	279	Horizontal
135.897	19.64	43.50	-23.86	Q-Peak	281	388	Horizontal
137.516	21.35	43.50	-22.15	Q-Peak	356	118	Vertical
270.211	20.46	46.00	-25.54	Q-Peak	277	102	Vertical

Table 84 - 2441 MHz (CH2441), DH5, iPA, Core 0 + Core 1, 30 MHz to 26 GHz

No other emissions found within 20 dB of the limit.

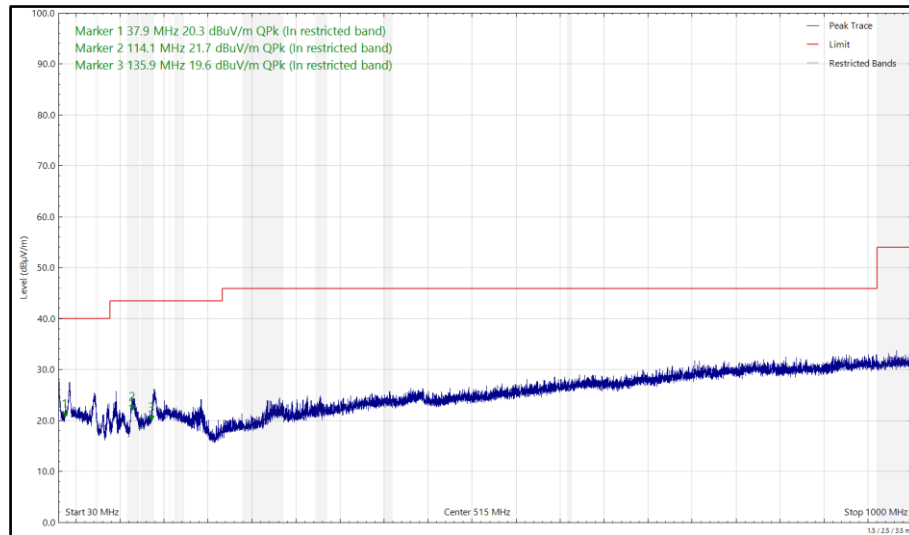


Figure 122 - 2441 MHz (CH2441), DH5, iPA, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

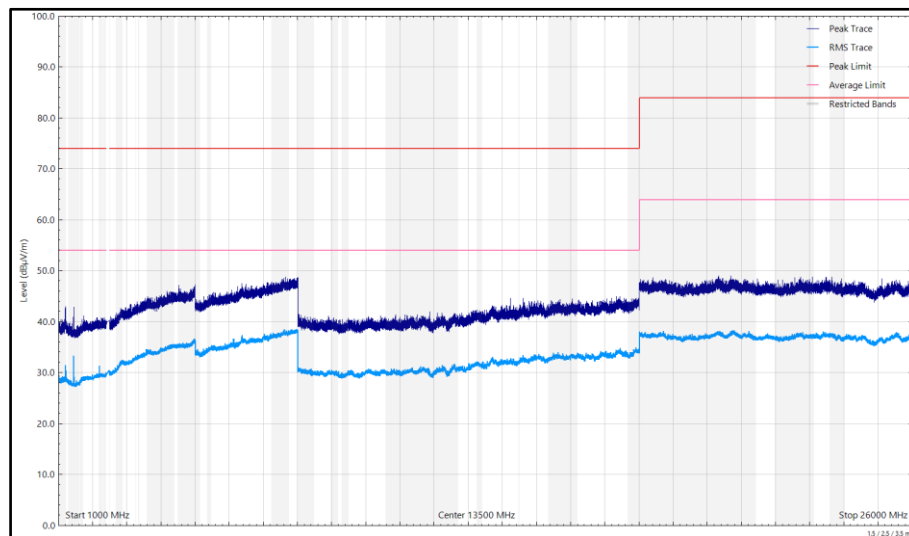


Figure 123 - 2441 MHz (CH2441), DH5, iPA, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal

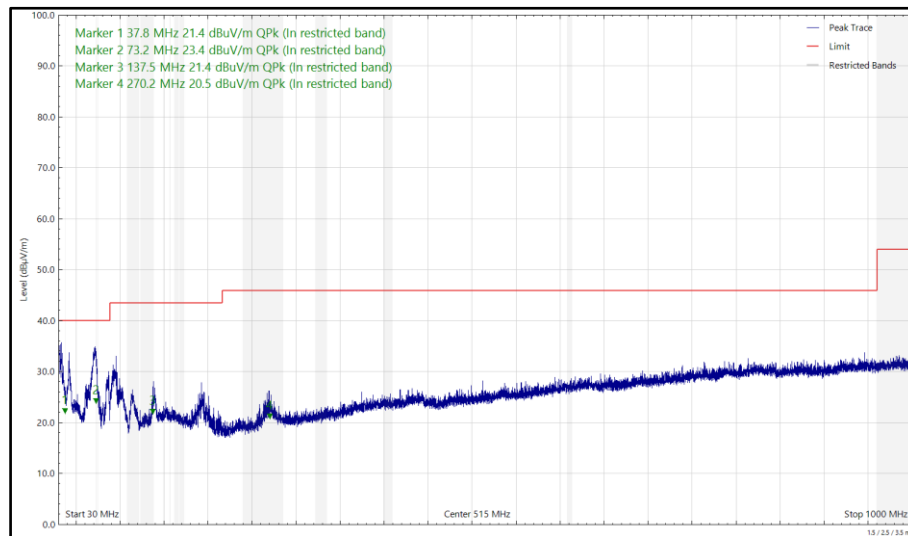


Figure 124 - 2441 MHz (CH2441), DH5, iPA, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

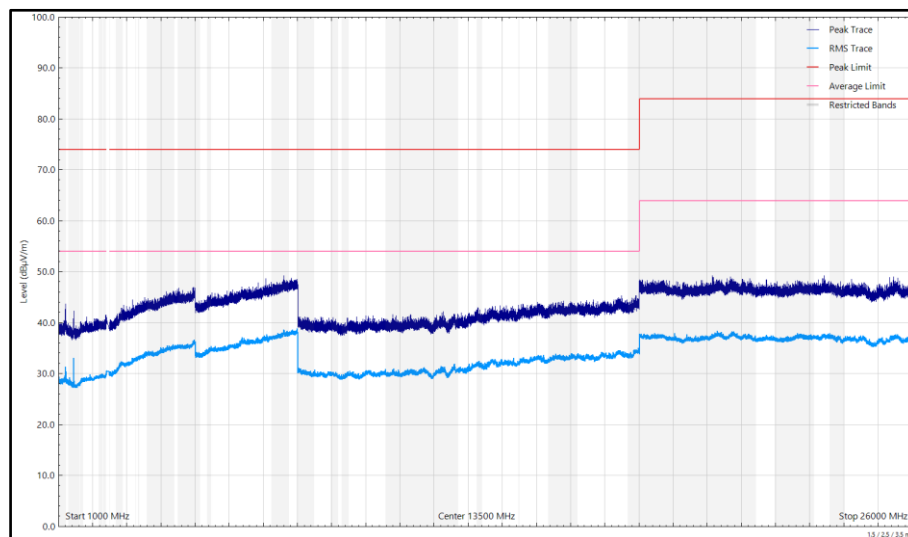


Figure 125 - 2441 MHz (CH2441), DH5, iPA, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical



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

Table 85 - 2480 MHz (CH2480), DH5, iPA, Core 0 + Core 1, 1 GHz to 18 GHz

*No emissions found within 20 dB of the limit.

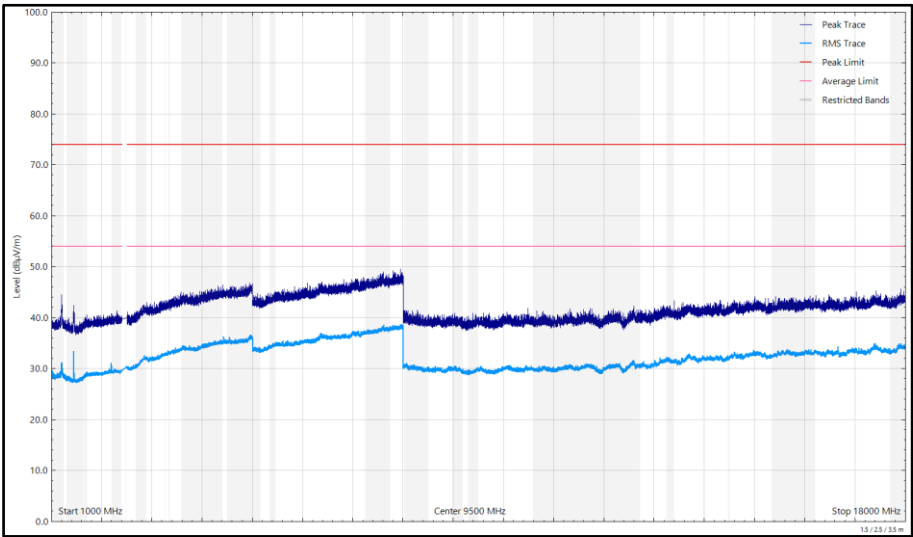


Figure 126 - 2480 MHz (CH2480), DH5, iPA, Core 0 + Core 1, 1 GHz to 18 GHz, Horizontal

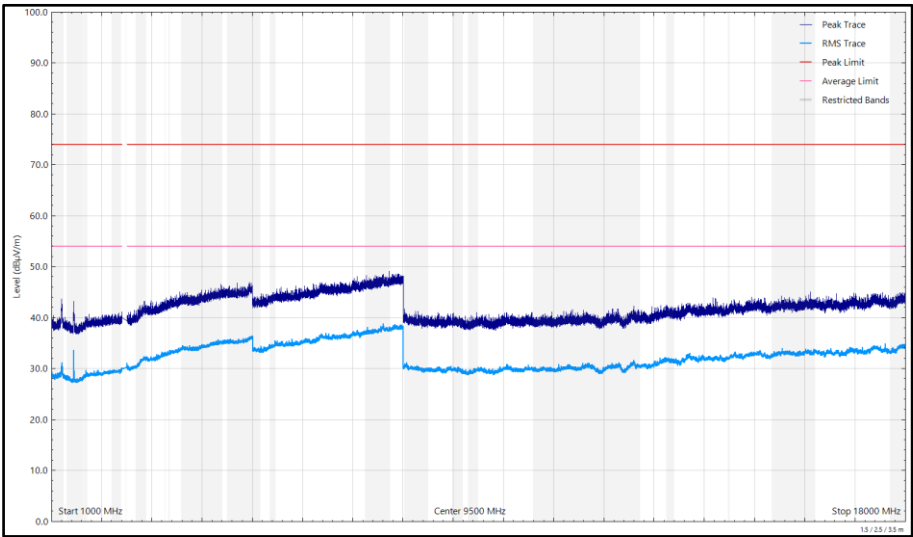


Figure 127 - 2480 MHz (CH2480), DH5, iPA, Core 0 + Core 1, 1 GHz to 18 GHz, Vertical

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4799.613	31.06	54.00	-22.94	CISPR Avg	240	243	Vertical

Table 86 - 2402 MHz (CH2402), DH5, iPA, Core 2, 1 GHz to 18 GHz

No other emissions found within 20 dB of the limit.

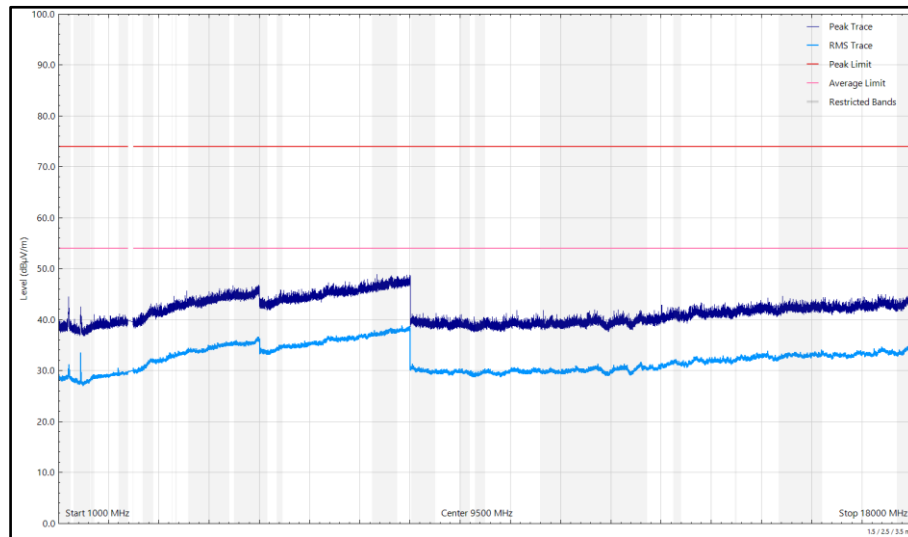


Figure 128 - 2402 MHz (CH2402), DH5, iPA, Core 2, 1 GHz to 18 GHz, Horizontal

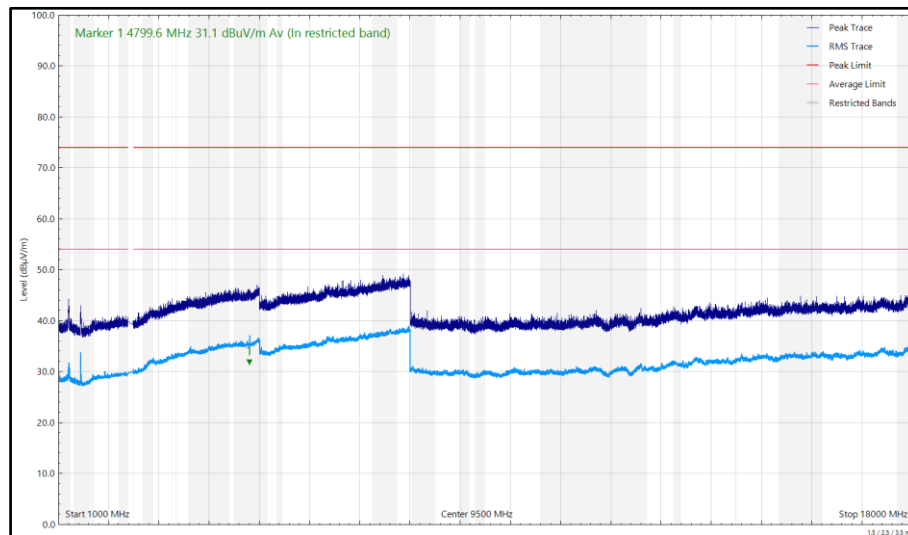


Figure 129 - 2402 MHz (CH2402), DH5, iPA, Core 2, 1 GHz to 18 GHz, Vertical

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
37.613	21.43	40.00	-18.57	Q-Peak	73	166	Vertical
38.013	20.10	40.00	-19.90	Q-Peak	251	400	Horizontal
73.303	17.43	40.00	-22.57	Q-Peak	169	365	Horizontal
73.322	23.50	40.00	-16.50	Q-Peak	231	100	Vertical
114.113	22.03	43.50	-21.47	Q-Peak	282	134	Vertical
137.561	20.80	43.50	-22.70	Q-Peak	300	398	Horizontal
268.638	20.26	46.00	-25.74	Q-Peak	254	100	Vertical
4894.550	31.20	54.00	-22.80	CISPR Avg	275	347	Vertical

Table 87 - 2441 MHz (CH2441), DH5, iPA, Core 2, 30 MHz to 26 GHz

No other emissions found within 20 dB of the limit.

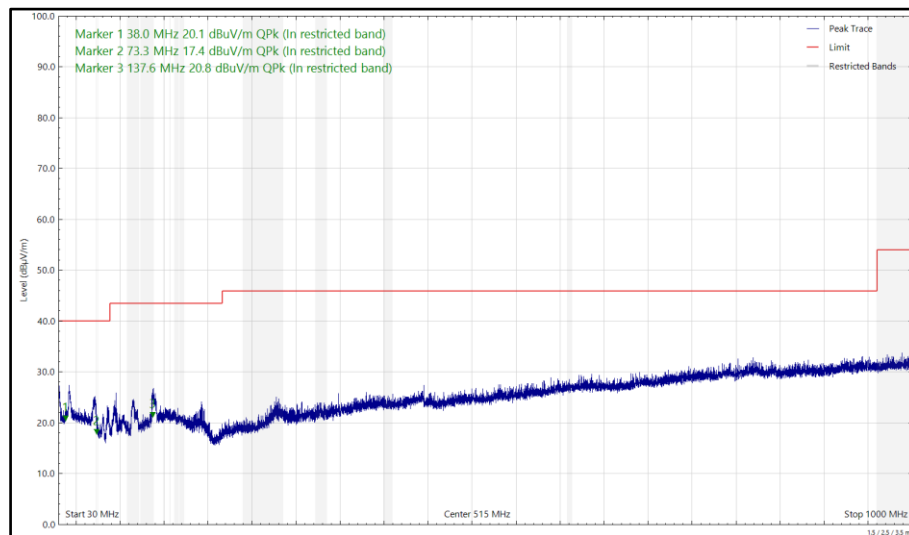


Figure 130 - 2441 MHz (CH2441), DH5, iPA, Core 2, 30 MHz to 1 GHz, Horizontal (Peak)

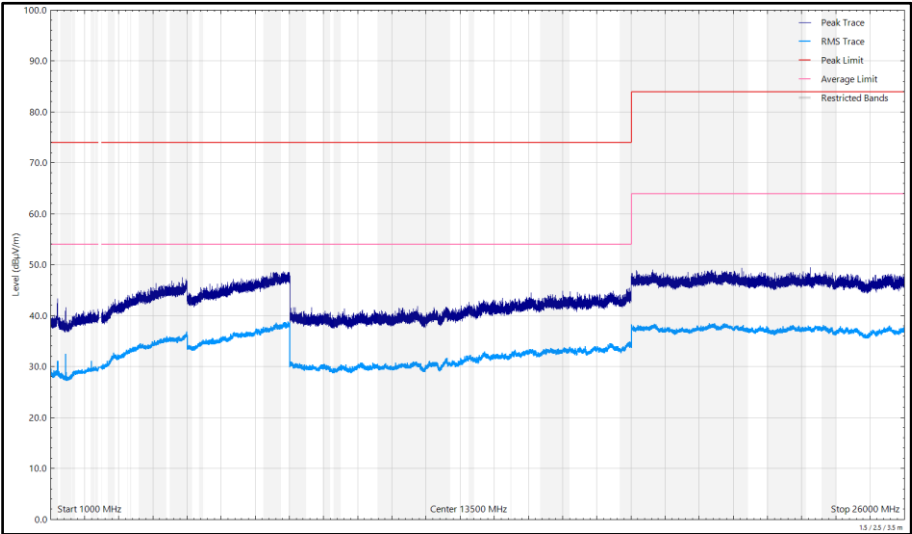


Figure 131 - 2441 MHz (CH2441), DH5, iPA, Core 2, 1 GHz to 26 GHz, Horizontal

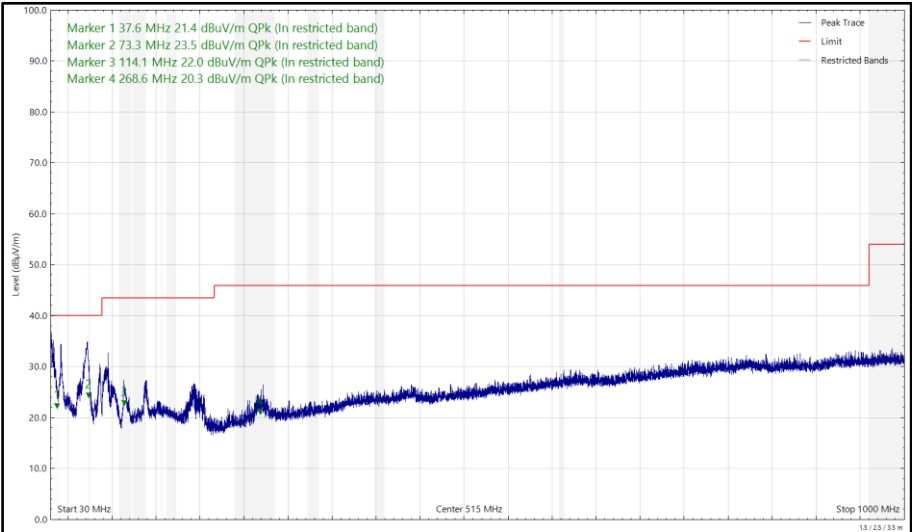


Figure 132 - 2441 MHz (CH2441), DH5, iPA, Core 2, 30 MHz to 1 GHz, Vertical (Peak)

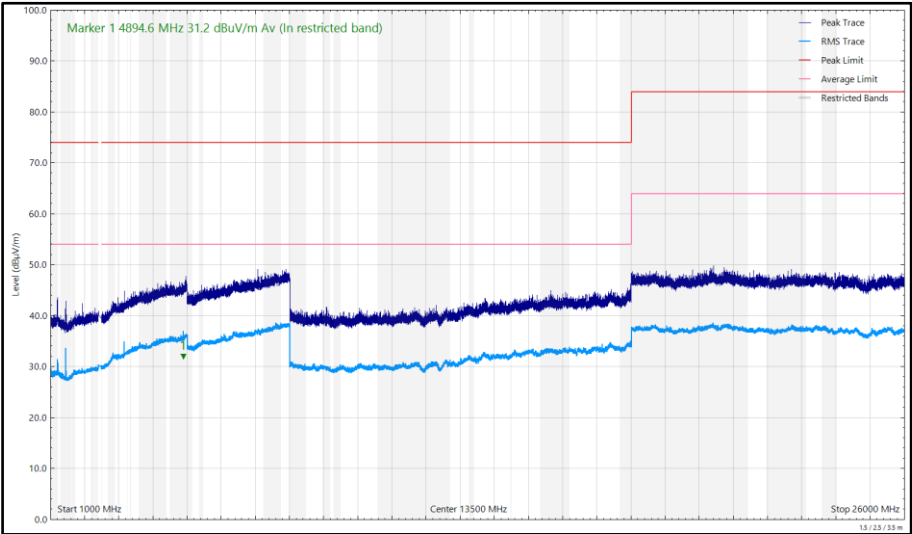


Figure 133 - 2441 MHz (CH2441), DH5, iPA, Core 2, 1 GHz to 26 GHz, Vertical