

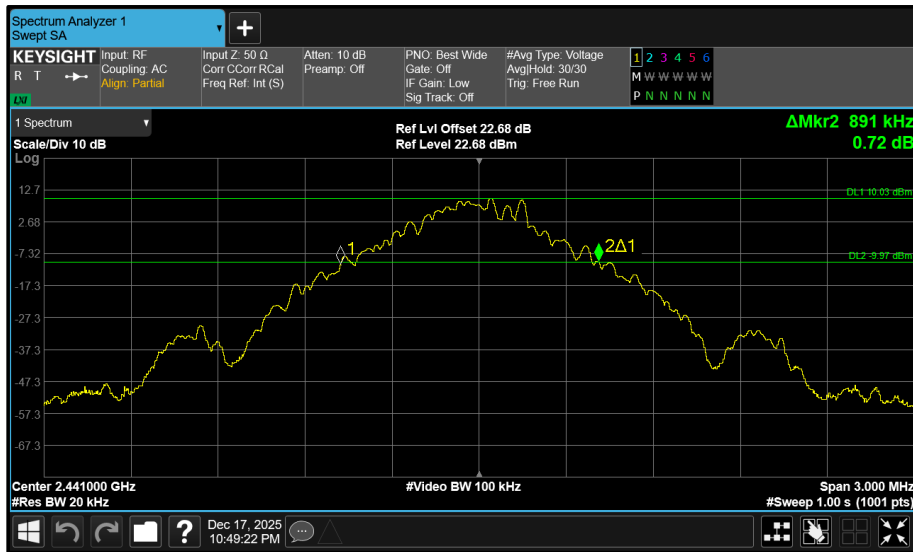


Figure 68 - Core 0 (A) 2441 MHz (CH39) 20 dB Bandwidth

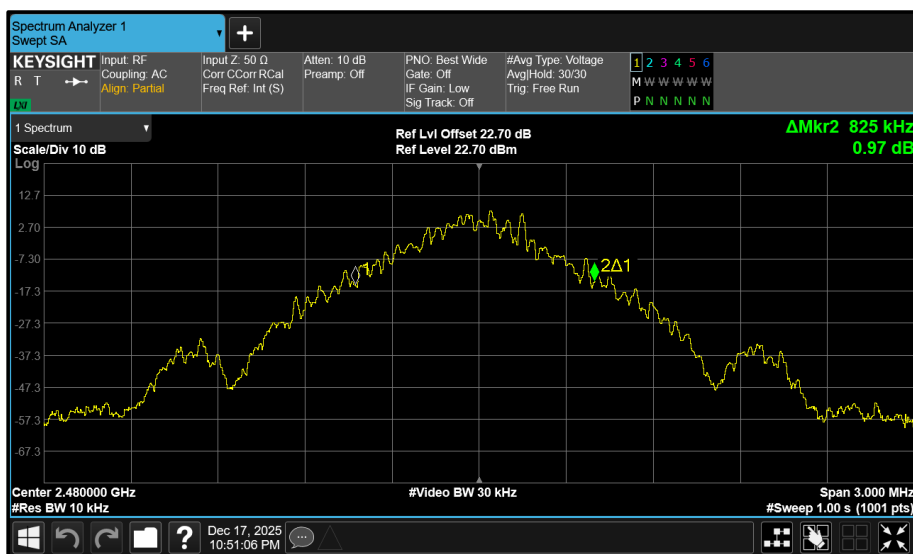


Figure 69 - Core 0 (A) 2480 MHz (CH78) 99% Bandwidth





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)	20 dB Bandwidth (MHz)			
	A	B	C	D
2402	-	0.888	-	-
2441	-	0.891	-	-
2480	-	0.888	-	-

Table 50 - 20 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2402	-	0.825	-	-	-
2441	-	0.831	-	-	-
2480	-	0.822	-	-	-

Table 51 - 99% Bandwidth Results

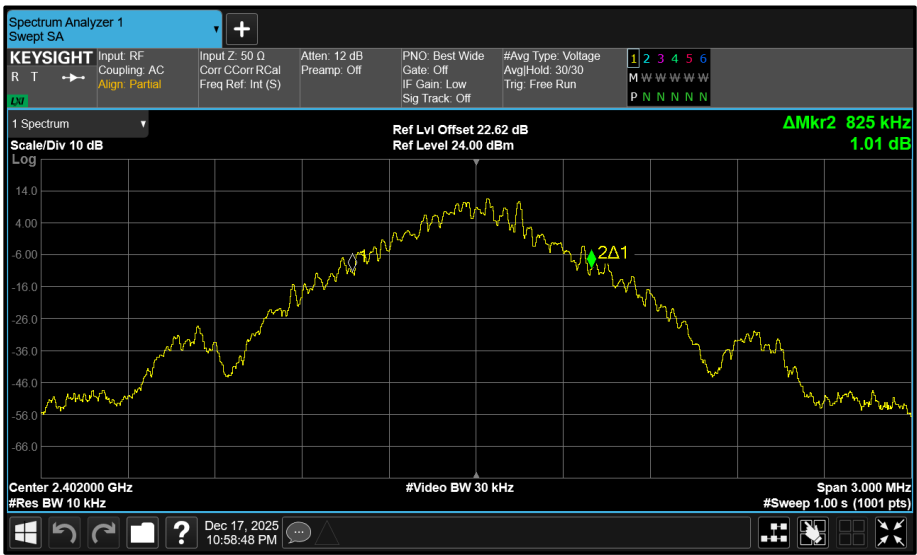


Figure 71 - Core 1 (B) 2402 MHz (CH0) 99% Bandwidth

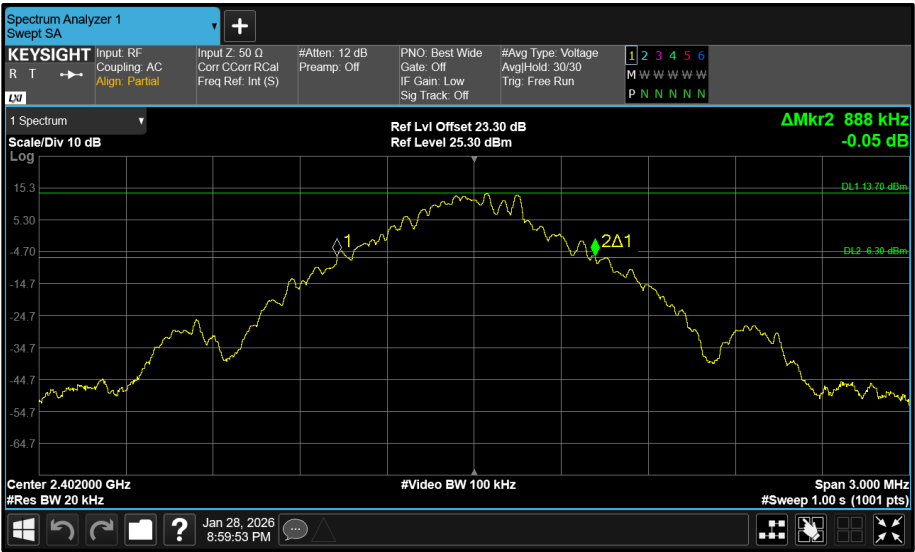


Figure 72 - Core 1 (B) 2402 MHz (CH0) 20 dB Bandwidth

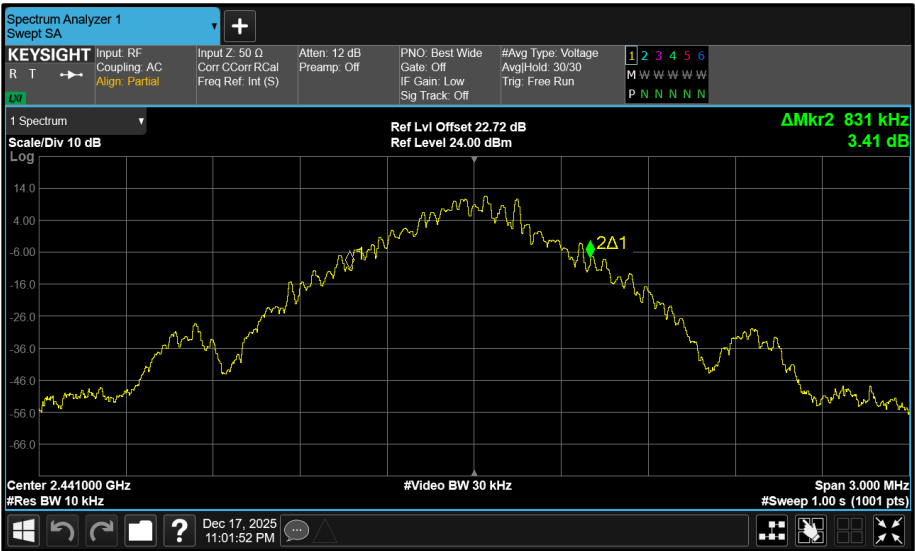


Figure 73 - Core 1 (B) 2441 MHz (CH39) 99% Bandwidth

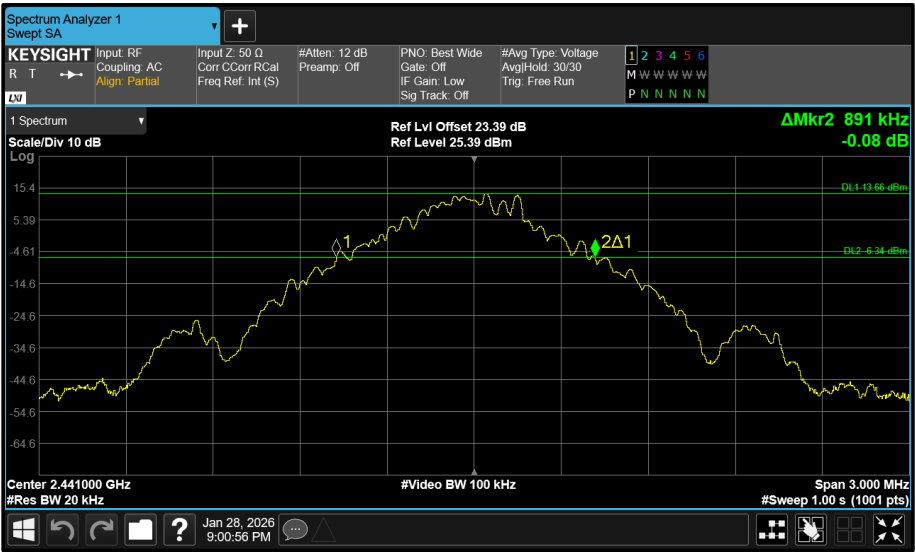


Figure 74 - Core 1 (B) 2441 MHz (CH39) 20 dB Bandwidth

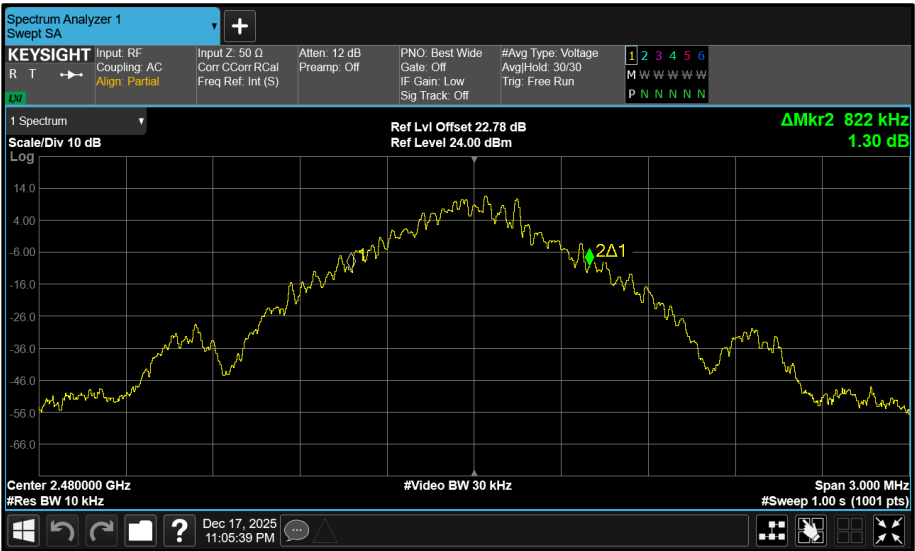


Figure 75 - Core 1 (B) 2480 MHz (CH78) 99% Bandwidth

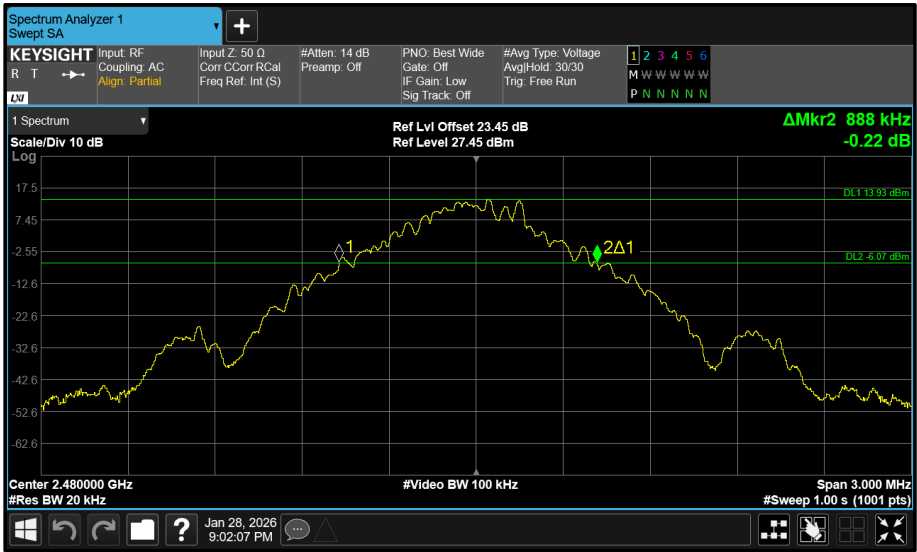


Figure 76 - Core 1 (B) 2480 MHz (CH78) 20 dB Bandwidth



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

Table 52 - 20 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2402	0.825	0.828	-	-	-
2441	0.831	0.834	-	-	-
2480	0.825	0.828	-	-	-

Table 53 - 99% Bandwidth Results

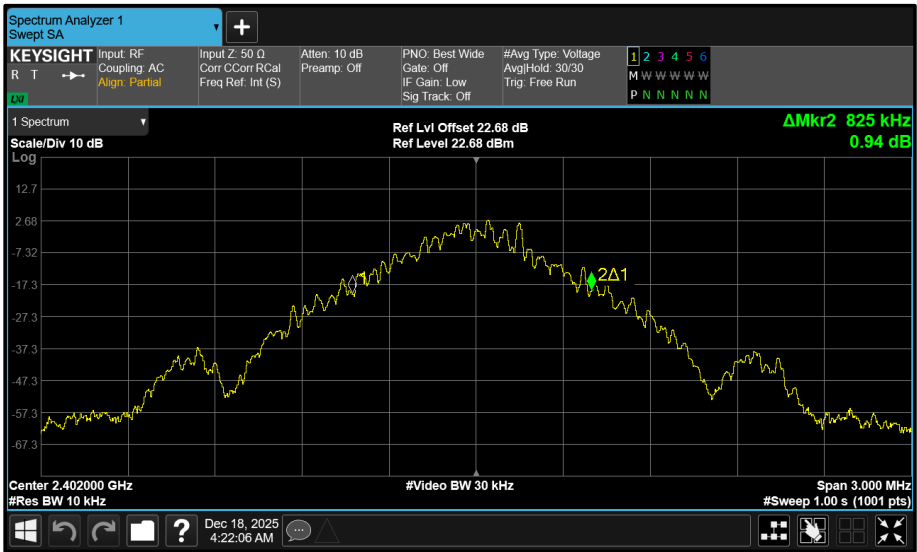


Figure 77 - Core 0 (A) 2402 MHz (CH0) 99% Bandwidth

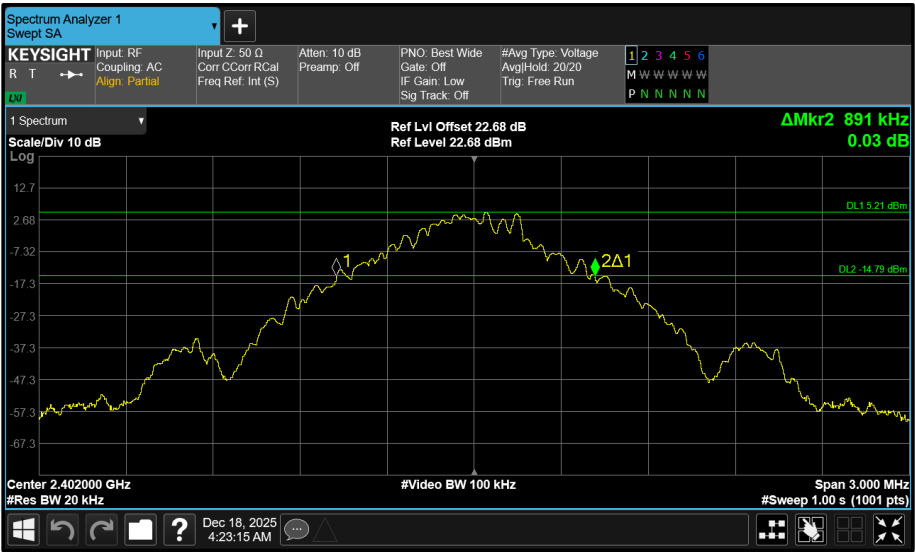


Figure 78 - Core 0 (A) 2402 MHz (CH0) 20 dB Bandwidth

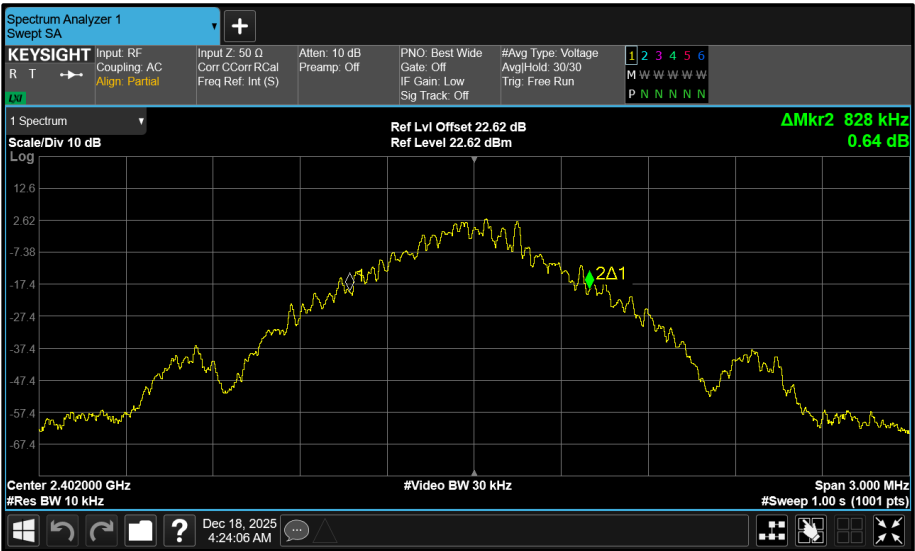


Figure 79 - Core 1 (B) 2402 MHz (CH0) 99% Bandwidth

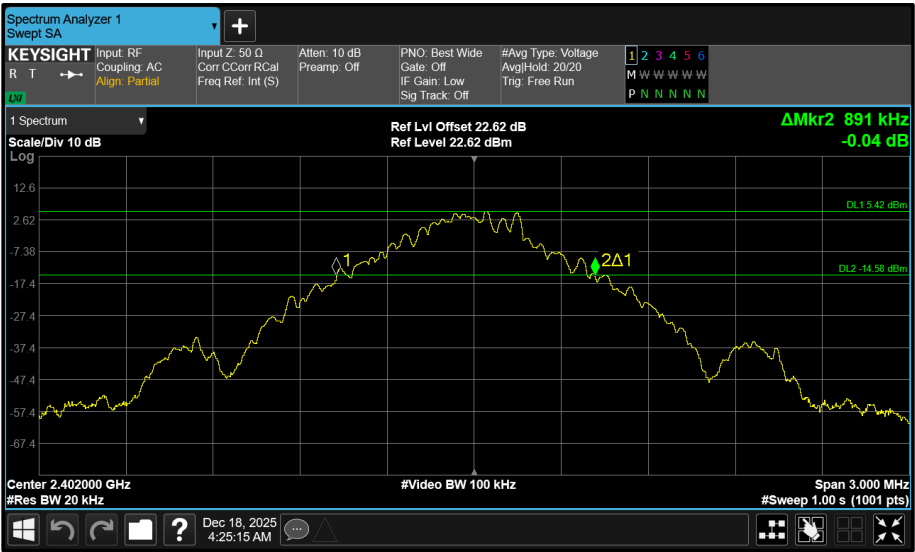


Figure 80 - Core 1 (B) 2402 MHz (CH0) 20 dB Bandwidth

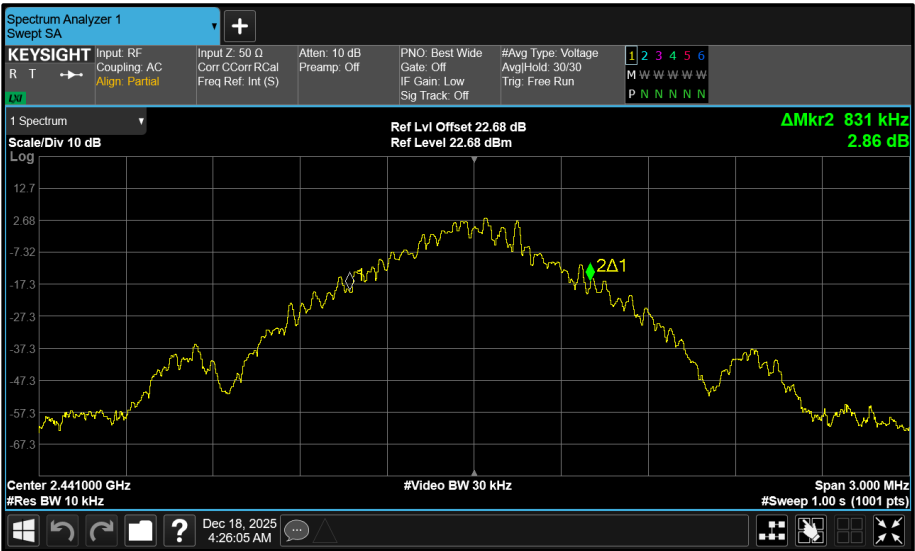


Figure 81 - Core 0 (A) 2441 MHz (CH39) 99% Bandwidth

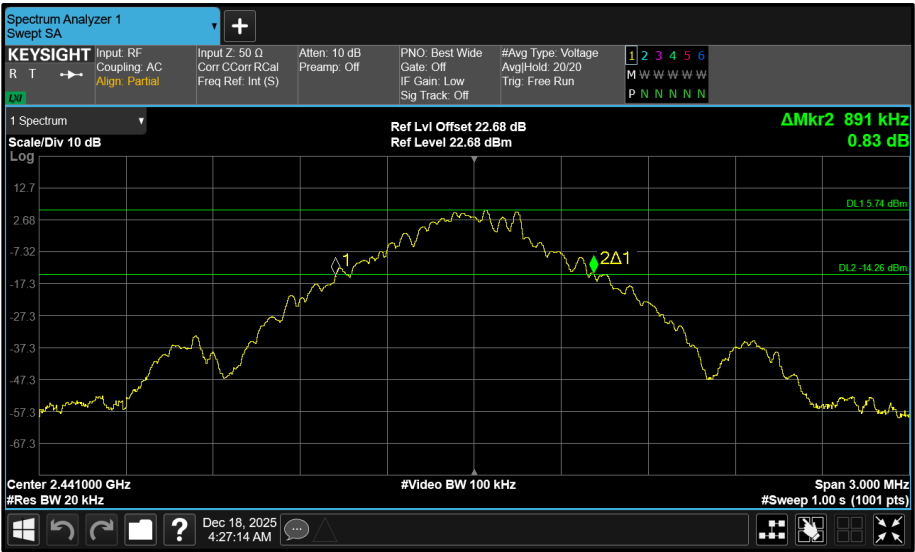


Figure 82 - Core 0 (A) 2441 MHz (CH39) 20 dB Bandwidth

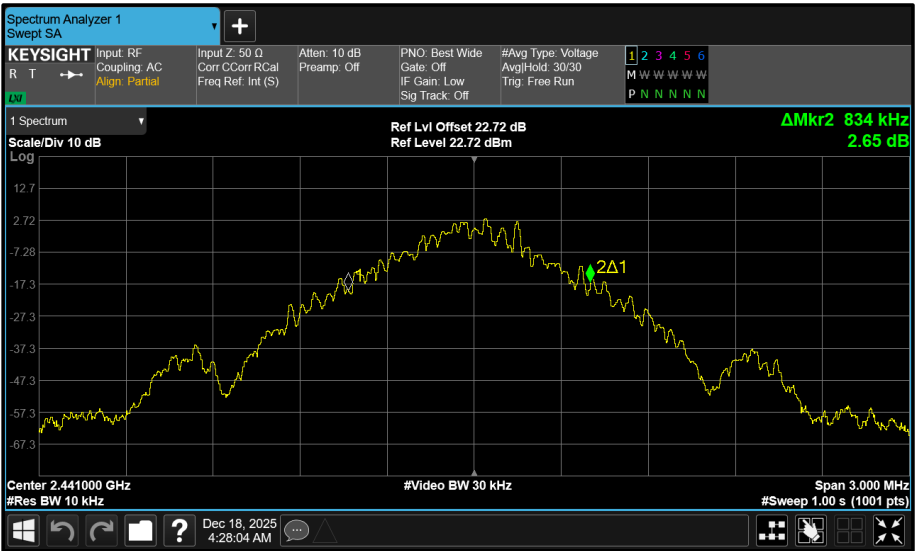


Figure 83 - Core 1 (B) 2441 MHz (CH39) 99% Bandwidth

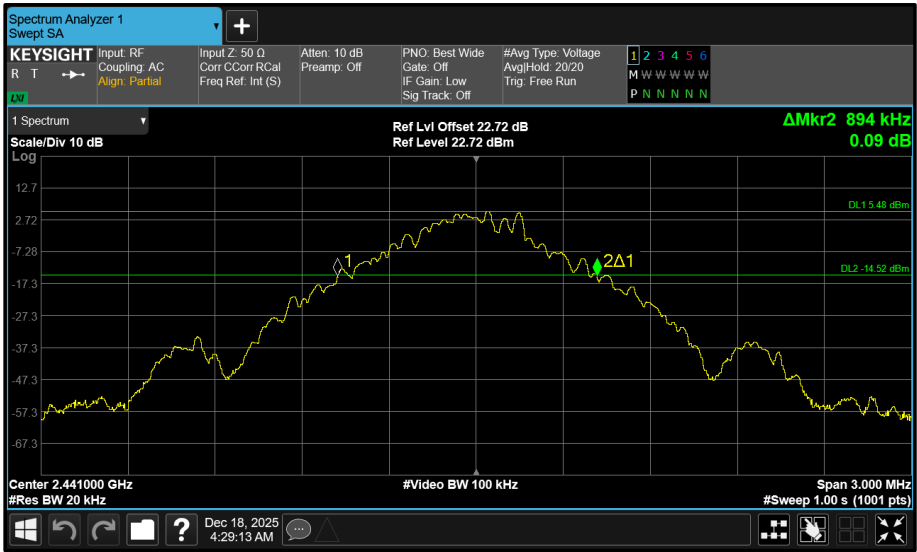


Figure 84 - Core 1 (B) 2441 MHz (CH39) 20 dB Bandwidth

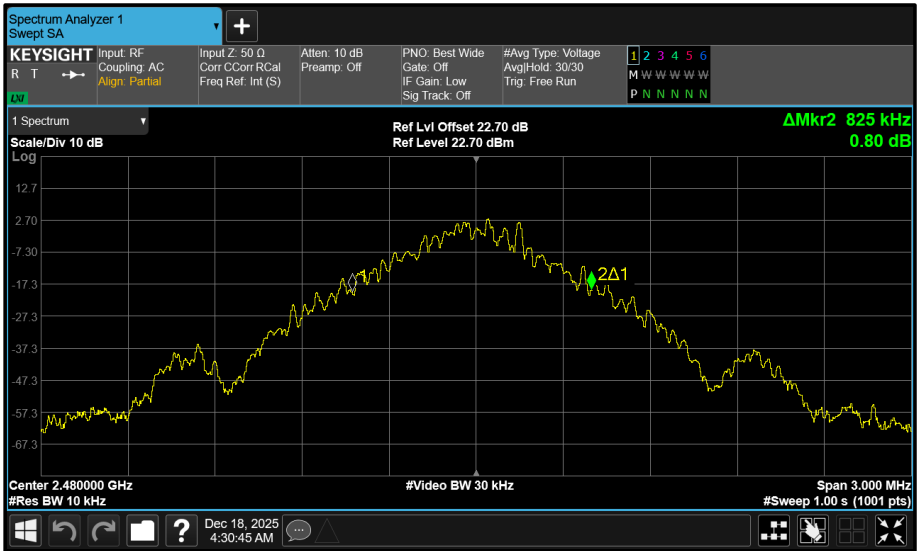


Figure 85 - Core 0 (A) 2480 MHz (CH78) 99% Bandwidth

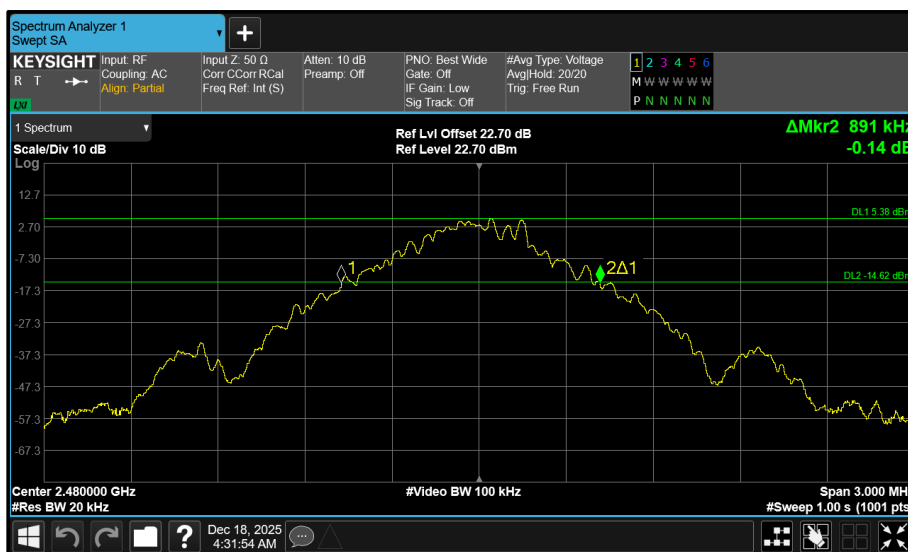


Figure 86 - Core 0 (A) 2480 MHz (CH78) 20 dB Bandwidth

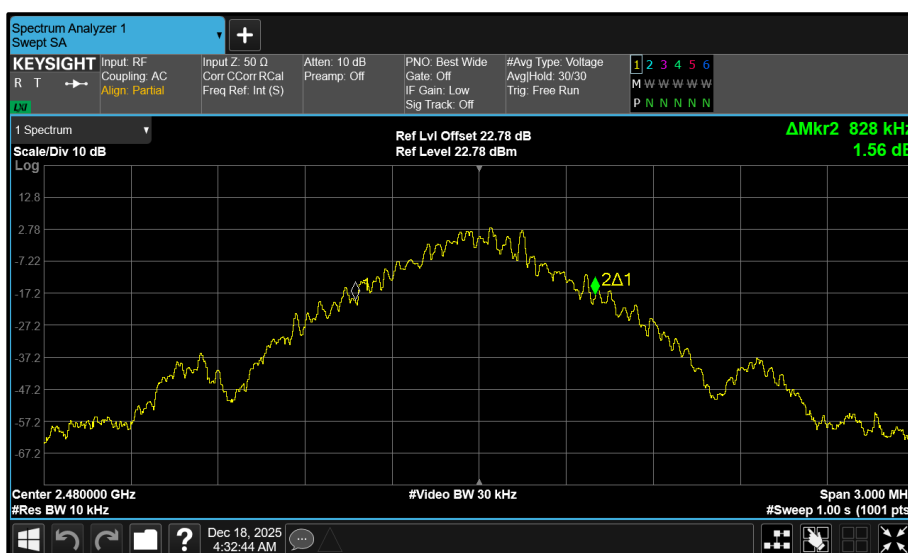


Figure 87 - Core 1 (B) 2480 MHz (CH78) 99% Bandwidth

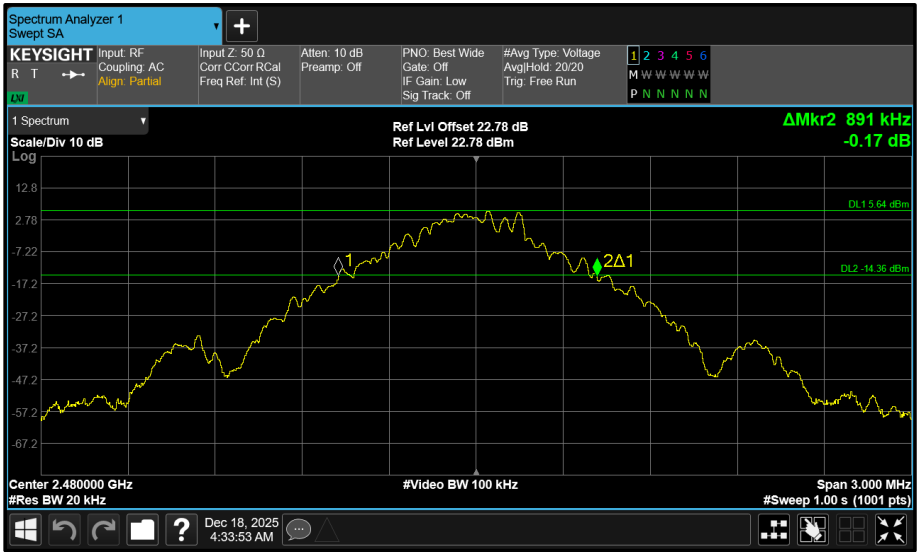


Figure 88 - Core 1 (B) 2480 MHz (CH78) 20 dB Bandwidth



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)	20 dB Bandwidth (MHz)			
	A	B	C	D
2402	0.891	0.888	-	-
2441	0.891	0.891	-	-
2480	0.888	0.888	-	-

Table 54 - 20 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2402	0.825	0.825	-	-	-
2441	0.828	0.825	-	-	-
2480	0.825	0.822	-	-	-

Table 55 - 99% Bandwidth Results

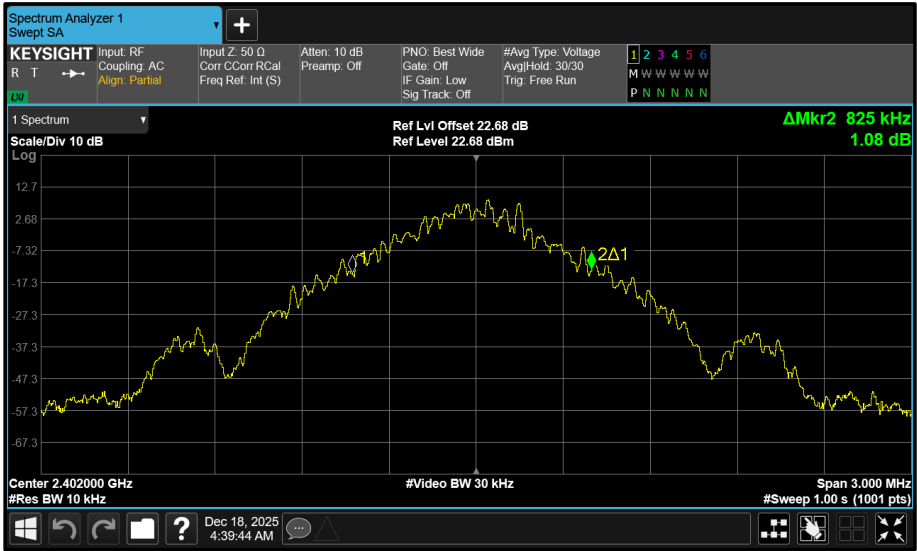


Figure 89 - Core 0 (A) 2402 MHz (CH0) 99% Bandwidth

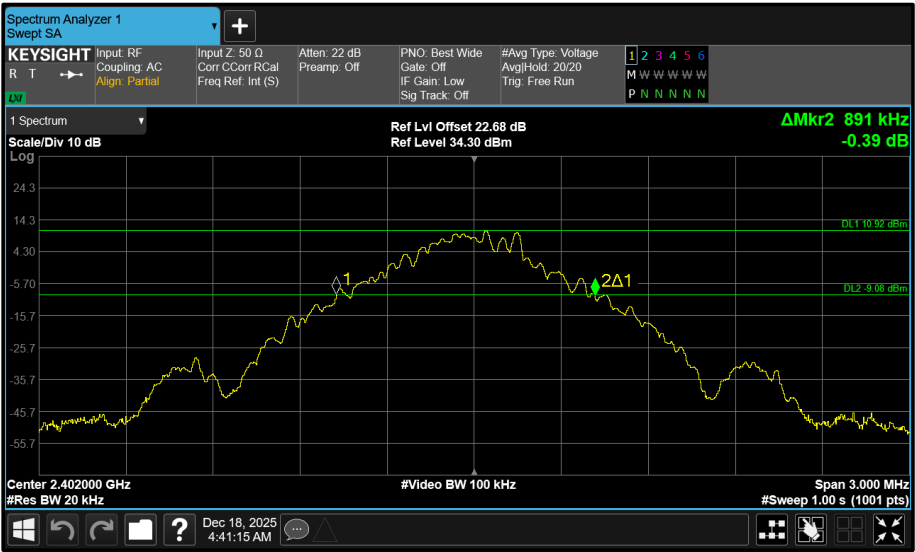


Figure 90 - Core 0 (A) 2402 MHz (CH0) 20 dB Bandwidth

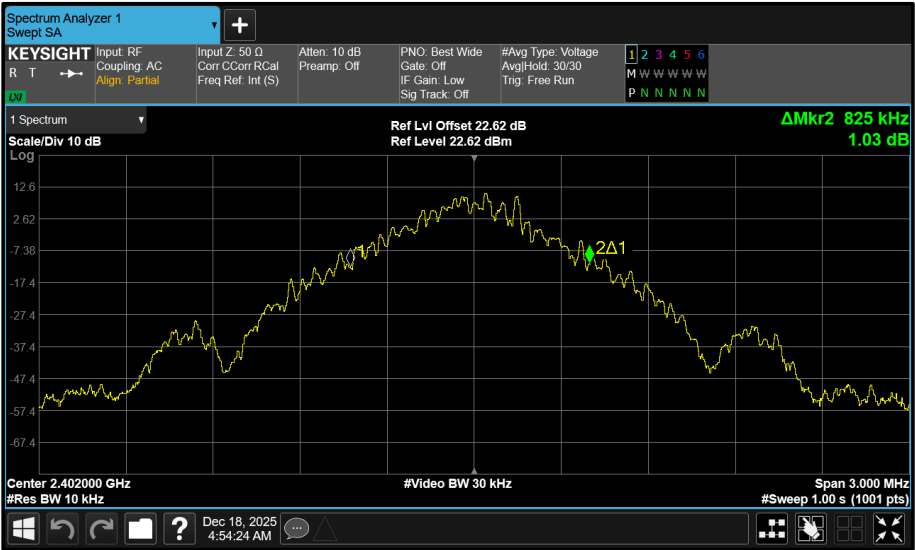


Figure 91 - Core 1 (B) 2402 MHz (CH0) 99% Bandwidth

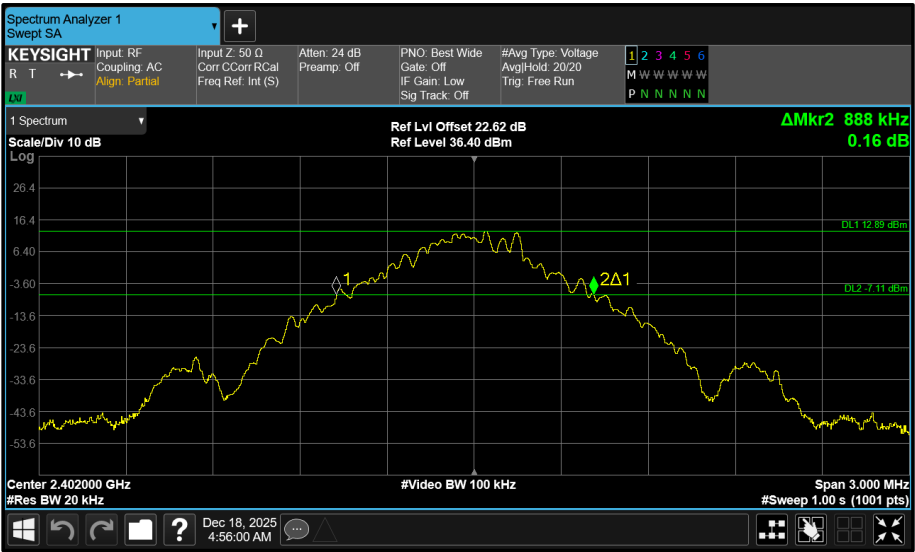


Figure 92 - Core 1 (B) 2402 MHz (CH0) 20 dB Bandwidth

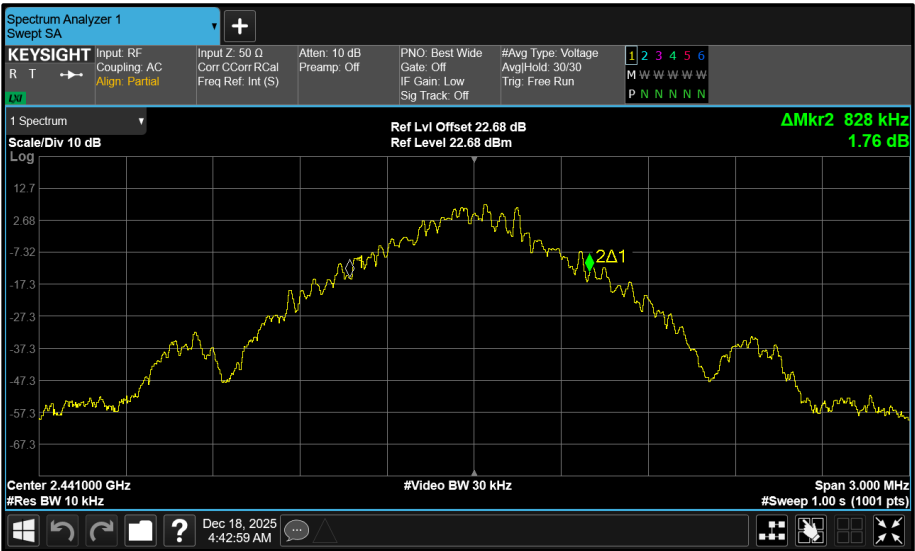


Figure 93 - Core 0 (A) 2441 MHz (CH39) 99% Bandwidth

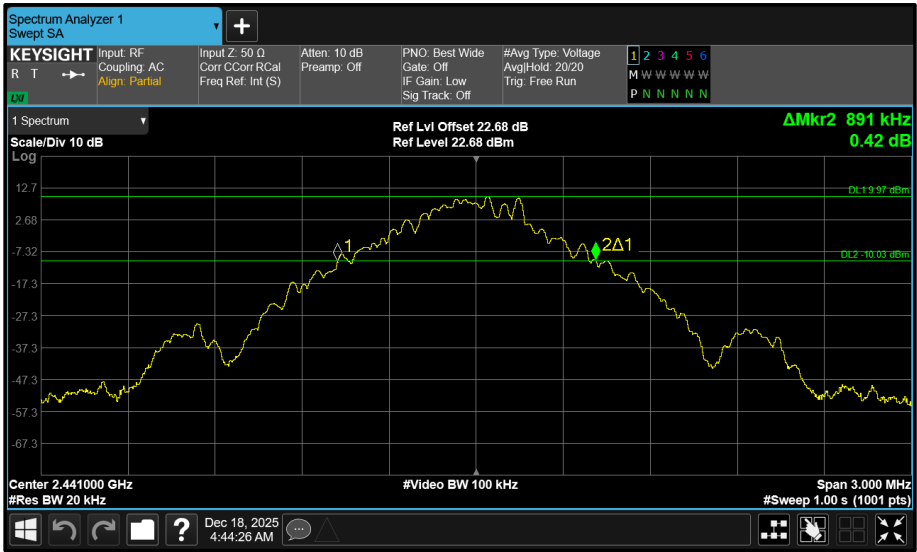


Figure 94 - Core 0 (A) 2441 MHz (CH39) 20 dB Bandwidth

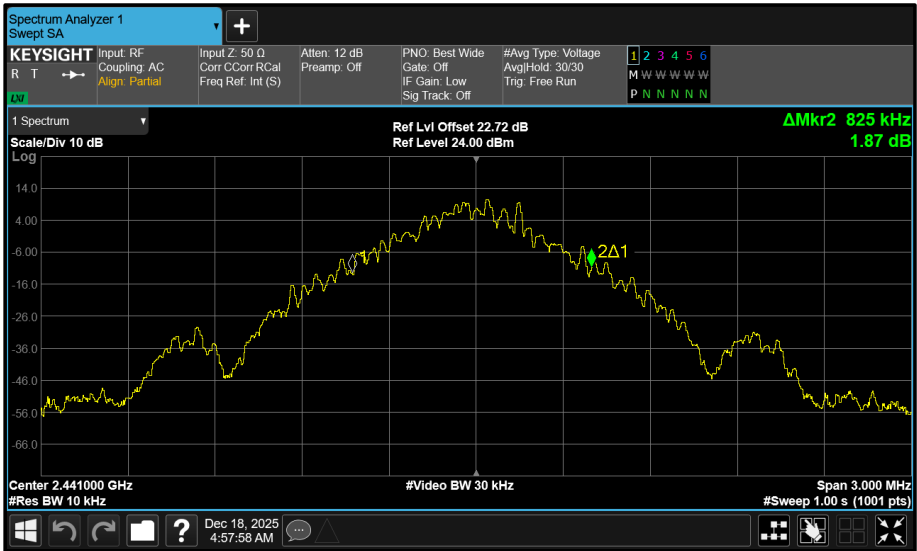


Figure 95 - Core 1 (B) 2441 MHz (CH39) 99% Bandwidth

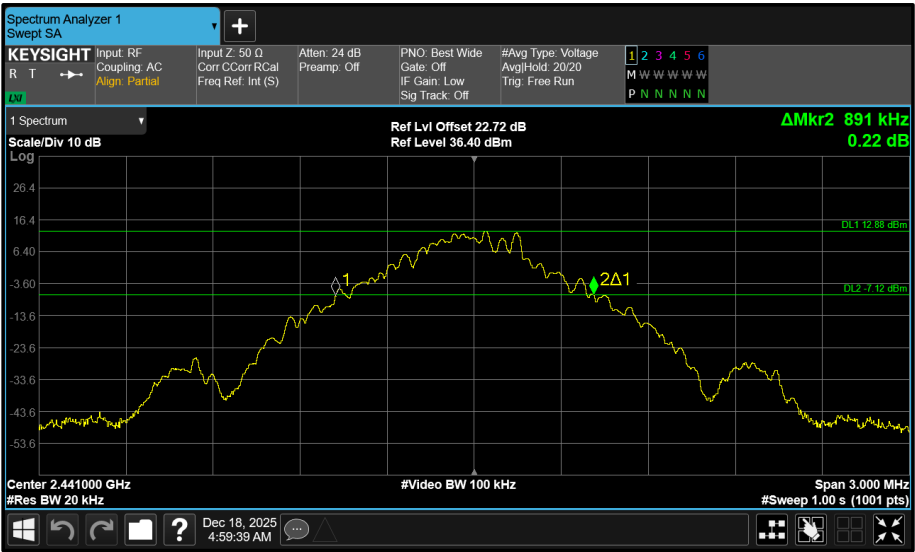


Figure 96 - Core 1 (B) 2441 MHz (CH39) 20 dB Bandwidth

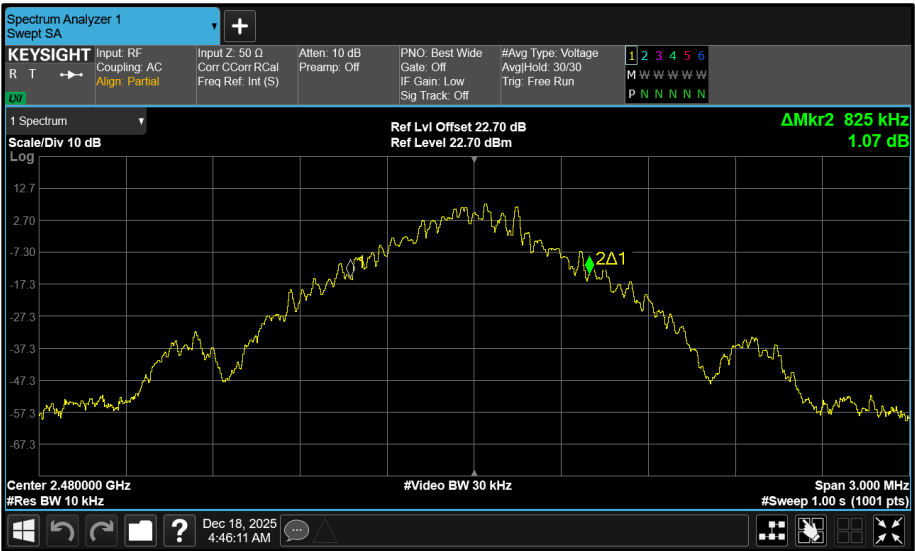


Figure 97 - Core 0 (A) 2480 MHz (CH78) 99% Bandwidth

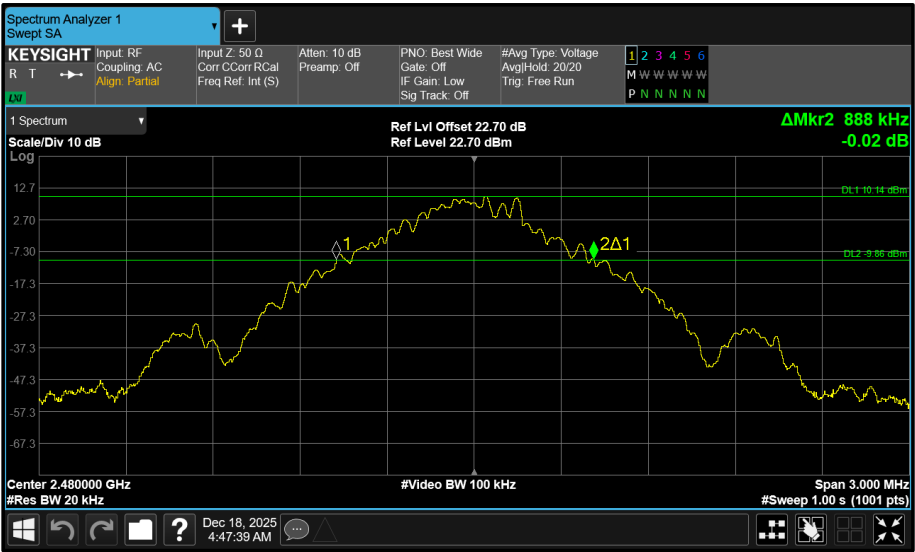


Figure 98 - Core 0 (A) 2480 MHz (CH78) 20 dB Bandwidth

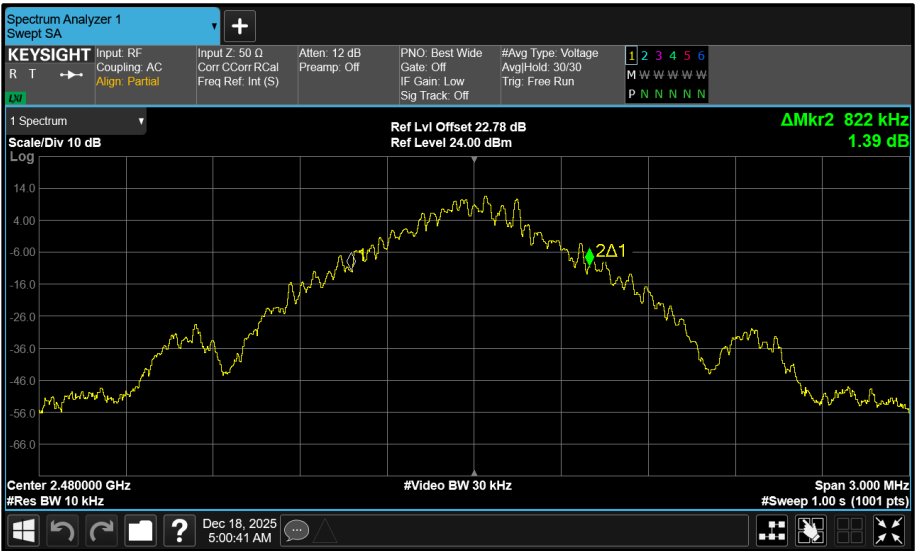


Figure 99 - Core 1 (B) 2480 MHz (CH78) 99% Bandwidth

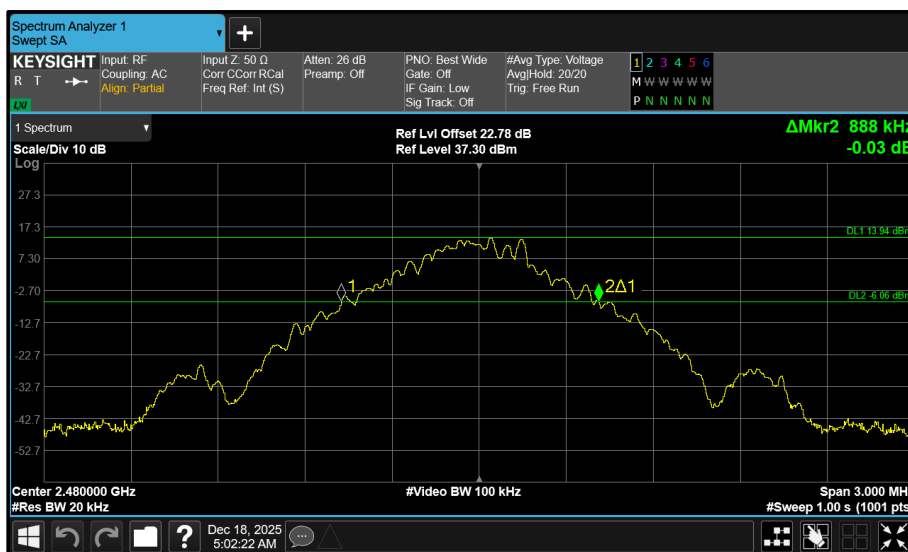


Figure 100 - Core 1 (B) 2480 MHz (CH78) 20 dB Bandwidth

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 and RF Laboratory 18.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
MXA Signal Analyzer	Keysight Technologies	N9020B	6416	24	07-May-2027
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6517	12	27-Feb-2026
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6526	12	27-Feb-2026
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6527	12	27-Feb-2026
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6528	12	27-Feb-2026
AC Programmable Power Supply	iTech	IT7324	6662	-	O/P Mon

Table 56

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

A3429, S/N: CN4XJK3W6Y - Modification State 0

2.6.3 Date of Test

17-January-2026 to 28-January-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 - 22.4 °C
Relative Humidity	39.6 - 45.2 %



2.6.6 Test Results

2.4 GHz Bluetooth FHSS BDR

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	9.14	-	-	-	9.14	30.00	-20.86
2441	8.37	-	-	-	8.37	30.00	-21.63
2480	8.82	-	-	-	8.82	30.00	-21.18

Table 57 - 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	9.14	-	-	-	9.14	30.00	-20.86	14.94	36.00	-21.06
2441	8.37	-	-	-	8.37	30.00	-21.63	14.17	36.00	-21.83
2480	8.82	-	-	-	8.82	30.00	-21.18	14.62	36.00	-21.38

Table 58 - 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	-	9.04	-	-	9.04	30.00	-20.96
2441	-	9.13	-	-	9.13	30.00	-20.87
2480	-	9.20	-	-	9.20	30.00	-20.80

Table 59 - 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	-	9.04	-	-	9.04	30.00	-20.96	11.24	36.00	-24.76
2441	-	9.13	-	-	9.13	30.00	-20.87	11.33	36.00	-24.67
2480	-	9.20	-	-	9.20	30.00	-20.80	11.40	36.00	-24.60

Table 60 - ISCED 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	-	-	12.86	-	12.86	30.00	-17.14
2441	-	-	13.07	-	13.07	30.00	-16.93
2480	-	-	13.04	-	13.04	30.00	-16.96

Table 61 - 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	-	-	12.86	-	12.86	30.00	-17.14	17.86	36.00	-18.14
2441	-	-	13.07	-	13.07	30.00	-16.93	18.07	36.00	-17.93
2480	-	-	13.04	-	13.04	30.00	-16.96	18.04	36.00	-17.96

Table 62 - 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 (%):	76.4
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	14.40	-	-	-	14.40	30.00	-15.60
2441	13.48	-	-	-	13.48	30.00	-16.52
2480	13.51	-	-	-	13.51	30.00	-16.49

Table 63 - 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	14.40	-	-	-	14.40	30.00	-15.60	20.20	36.00	-15.80
2441	13.48	-	-	-	13.48	30.00	-16.52	19.28	36.00	-16.72
2480	13.51	-	-	-	13.51	30.00	-16.49	19.31	36.00	-16.69

Table 64 - 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:	ePA 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	-	17.46	-	-	17.46	30.00	-12.54
2441	-	17.42	-	-	17.42	30.00	-12.58
2480	-	17.28	-	-	17.28	30.00	-12.72

Table 65 - 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	-	17.46	-	-	17.46	30.00	-12.54	19.66	36.00	-16.34
2441	-	17.42	-	-	17.42	30.00	-12.58	19.62	36.00	-16.38
2480	-	17.28	-	-	17.28	30.00	-12.72	19.48	36.00	-16.52

Table 66 - ISCED 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	8.65	9.03	-	-	11.85	28.80	-16.95
2441	9.27	9.10	-	-	12.19	28.80	-16.61
2480	8.86	9.09	-	-	11.99	28.80	-16.81

Table 67 - 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	8.65	9.03	-	-	11.85	30.00	-18.15	19.05	36.00	-16.95
2441	9.27	9.10	-	-	12.19	30.00	-17.81	19.39	36.00	-16.61
2480	8.86	9.09	-	-	11.99	30.00	-18.01	19.19	36.00	-16.81

Table 68 - 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:	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):	7.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	14.32	16.40	-	-	18.50	28.80	-10.30
2441	13.49	16.39	-	-	18.18	28.80	-10.62
2480	13.68	17.30	-	-	18.87	28.80	-9.93

Table 69 - 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	14.32	16.40	-	-	18.50	30.00	-11.50	25.70	36.00	-10.30
2441	13.49	16.39	-	-	18.18	30.00	-11.82	25.38	36.00	-10.62
2480	13.68	17.30	-	-	18.87	30.00	-11.13	26.07	36.00	-9.93

Table 70 - 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 14 and RF Laboratory 18.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Climatic Chamber	Weiss Technik	ClimeEvent C/340/70a/3	6386	12	Class 1 (Int)
MXA Signal Analyzer	Keysight Technologies	N9020B	6416	24	07-May-2027
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6517	12	27-Feb-2026
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6526	12	27-Feb-2026
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6527	12	27-Feb-2026
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6528	12	27-Feb-2026
USB Wideband Power Sensor	Boonton	RTP5008	6585	12	27-Feb-2026
USB Wideband Power Sensor	Boonton	RTP5008	6586	12	27-Feb-2026
USB Wideband Power Sensor	Boonton	RTP5008	6587	12	23-Feb-2026
DC Power Module	Keysight Technologies	N6754A	6663	-	O/P Mon
Modular Power System Mainframe	Keysight Technologies	N6701C	6664	-	O/P Mon
AC Programmable Power Supply	iTech	IT7324	6665	-	O/P Mon
Digital Thermometer	R.S Components	RS 5511	6739	12	07-Feb-2026
Humidity & Temperature meter	Fluke	971	7103	12	05-Aug-2026
Multimeter	Fluke	115	7115	12	13-Aug-2026

Table 71

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

A3429, S/N: F7KVTYJKG4 - Modification State 0
A3429, S/N: FL72Y9HKC4 - Modification State 0

2.7.3 Date of Test

24-September-2025 to 24-October-2025

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	21.2 - 23.8 °C
Relative Humidity	31.9 – 36.4%

2.7.6 Test Results

2.4 GHz Bluetooth FHSS BDR

iPA - Core 0 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-59.99
Hopping	DH5	2402-2480	2400	-64.81

Table 72 - SISO Authorised Band Edge Results

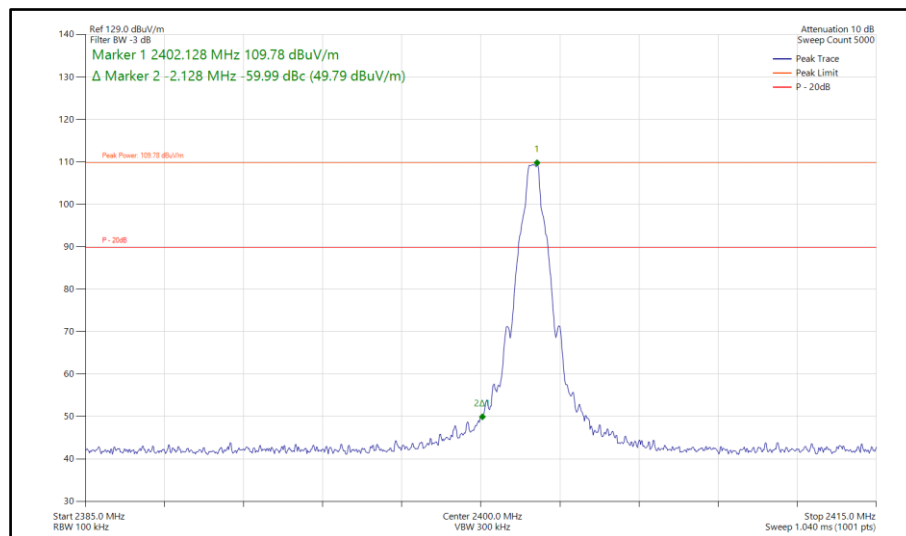


**Figure 101 - Bluetooth DH5, SISO, Core 0 - 2402 MHz
Band Edge Frequency 2400 MHz**

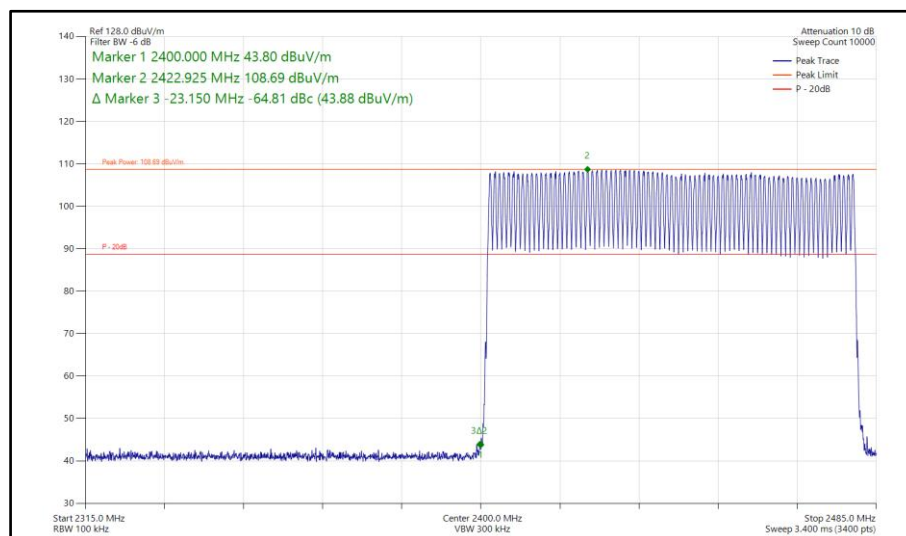


**Figure 102 - Bluetooth DH5, SISO, Core 0 - 2402-2480 MHz
Band Edge Frequency 2400 MHz**

iPA - Core 1 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-60.10
Hopping	DH5	2402-2480	2400	-65.56

Table 73 - SISO Authorised Band Edge Results

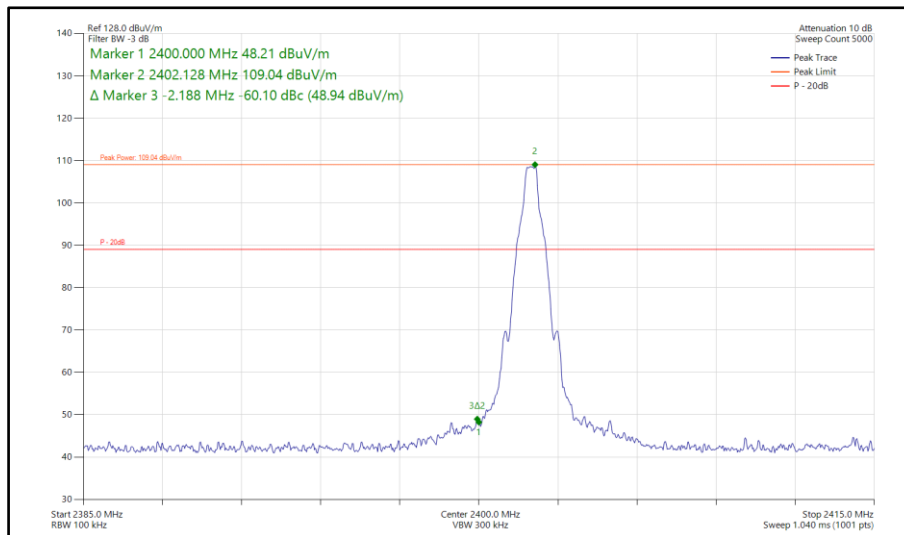


**Figure 103 - Bluetooth DH5, SISO, Core 1 - 2402 MHz
Band Edge Frequency 2400 MHz**

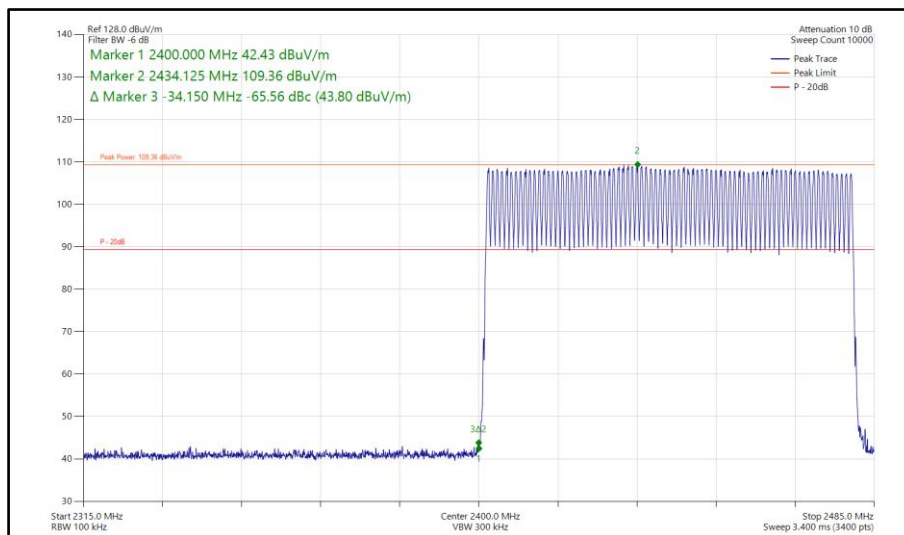


**Figure 104 - Bluetooth DH5, SISO, Core 1 - 2402-2480 MHz
Band Edge Frequency 2400 MHz**

iPA - Core 2 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-55.38
Hopping	DH5	2402-2480	2400	-62.46

Table 74 - SISO Authorised Band Edge Results

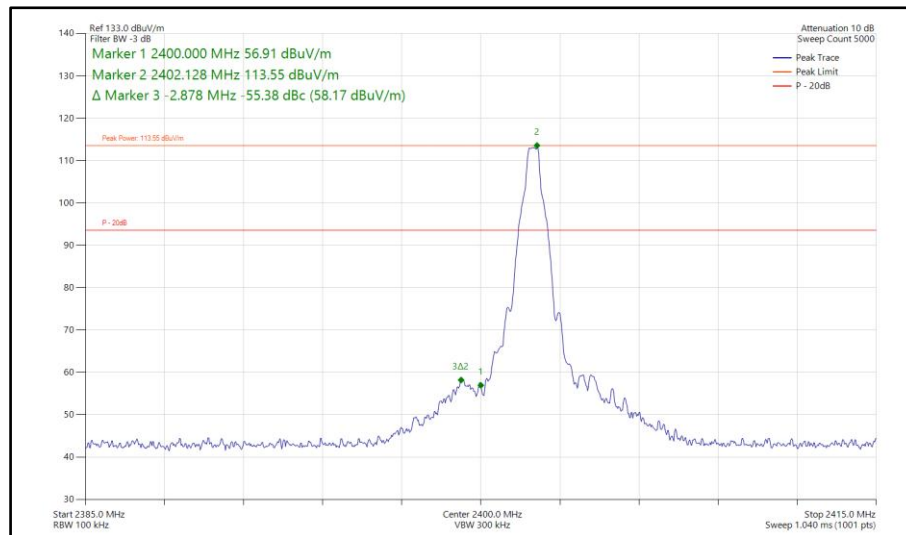


**Figure 105 - Bluetooth DH5, SISO, Core 2 - 2402 MHz
Band Edge Frequency 2400 MHz**

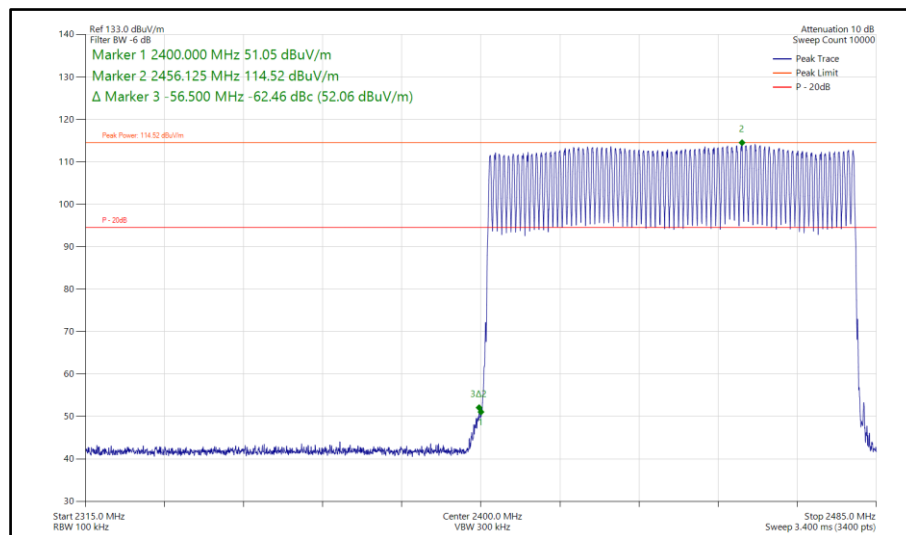


**Figure 106 - Bluetooth DH5, SISO, Core 2 - 2402-2480 MHz
Band Edge Frequency 2400 MHz**

iPA - Core 0-1 (MIMO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-61.95
Hopping	DH5	2402-2480	2400	-62.01

Table 75 - MIMO Authorised Band Edge Results

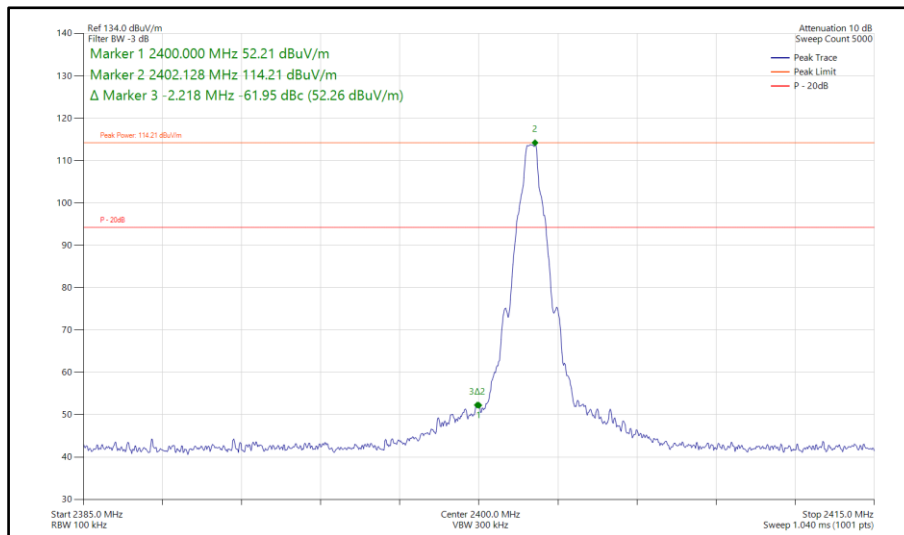


**Figure 107 - Bluetooth DH5, MIMO, Core 0-1 - 2402 MHz
Band Edge Frequency 2400 MHz**

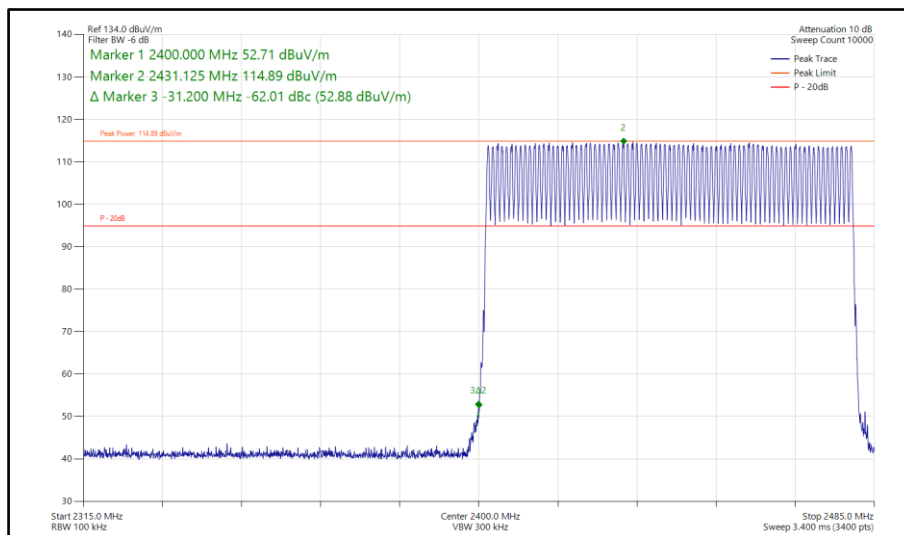


**Figure 108 - Bluetooth DH5, MIMO, Core 0-1 - 2402-2480 MHz
Band Edge Frequency 2400 MHz**

ePA - Core 0 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-67.04
Hopping	DH5	2402-2480	2400	-72.00

Table 76 - SISO Authorised Band Edge Results

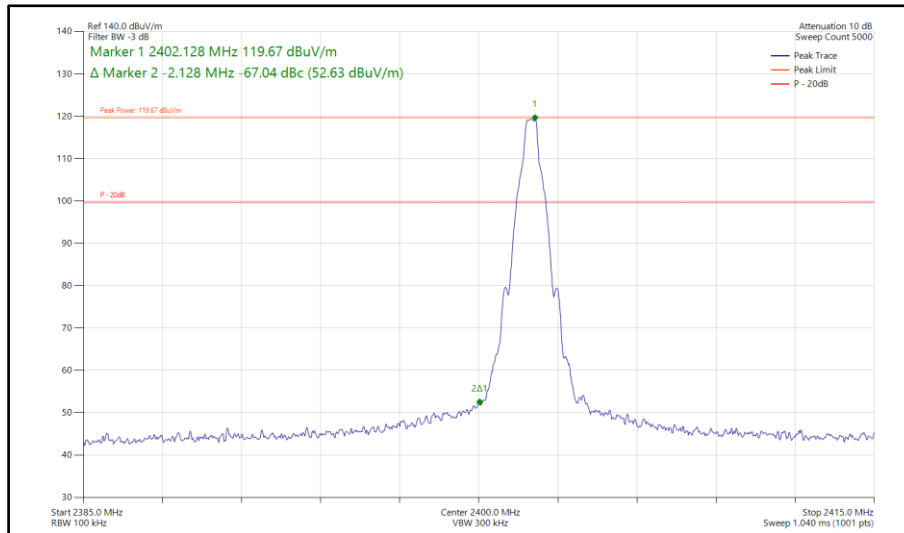


**Figure 109 - Bluetooth DH5, SISO, Core 0 - 2402 MHz
Band Edge Frequency 2400 MHz**

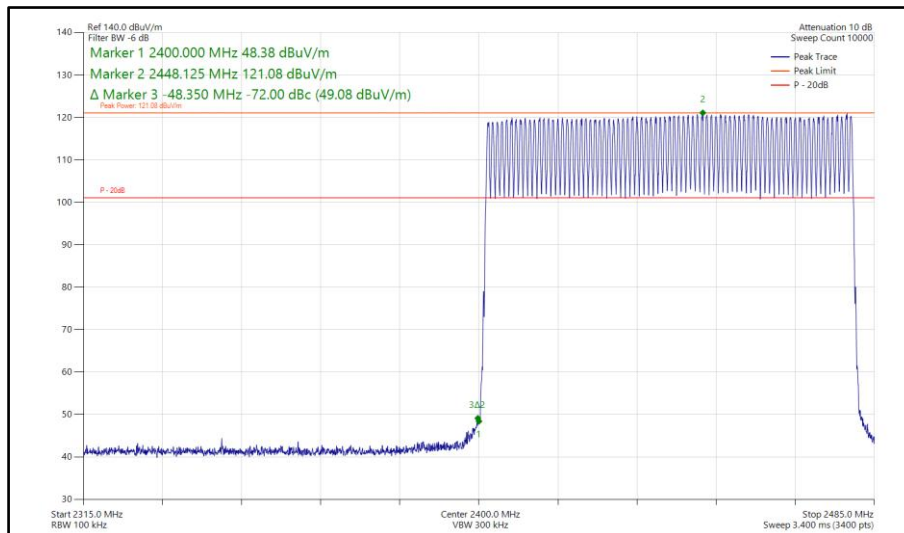


**Figure 110 - Bluetooth DH5, SISO, Core 0 - 2402-2480 MHz
Band Edge Frequency 2400 MHz**

ePA - Core 1 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-66.74
Hopping	DH5	2402-2480	2400	-70.24

Table 77 - SISO Authorised Band Edge Results

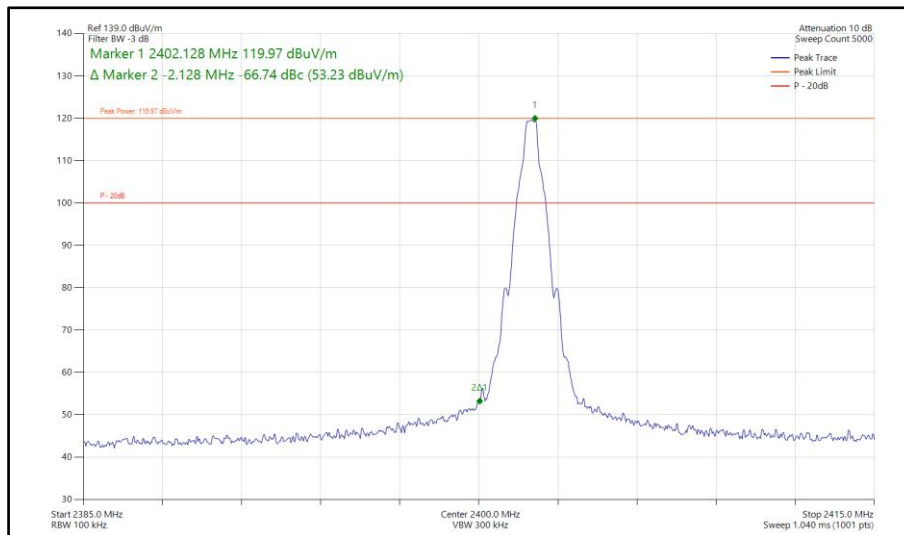


Figure 111 - Bluetooth DH5, SISO, Core 1 - 2402 MHz
Band Edge Frequency 2400 MHz

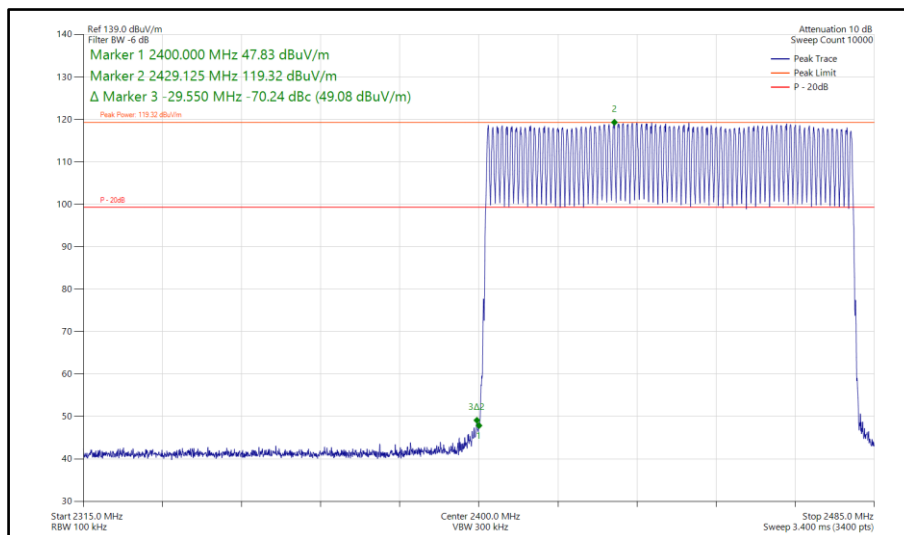


Figure 112 - Bluetooth DH5, SISO, Core 1 - 2402-2480 MHz
Band Edge Frequency 2400 MHz

ePA - Core 0-1 (MIMO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-68.19
Hopping	DH5	2402-2480	2400	-73.31

Table 78 - MIMO Authorised Band Edge Results

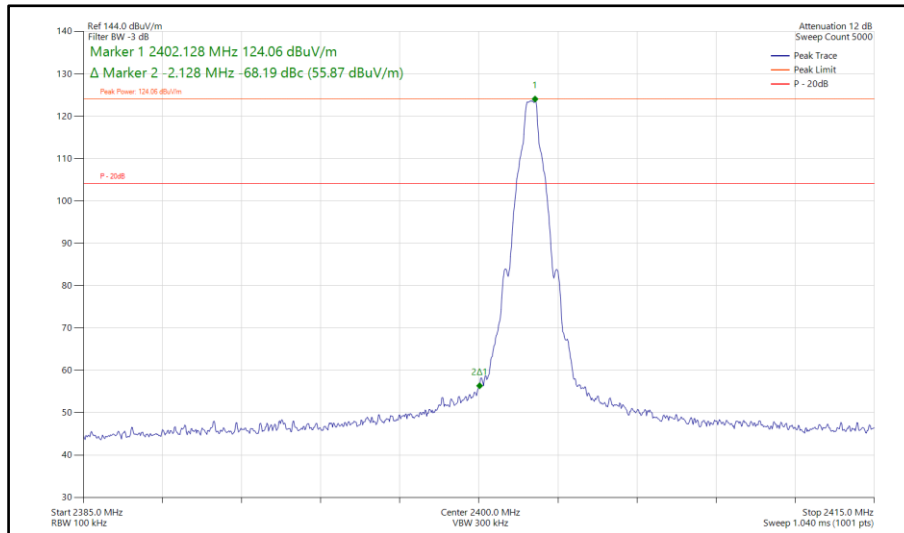


Figure 113 - Bluetooth DH5, MIMO, Core 0-1 - 2402 MHz
Band Edge Frequency 2400 MHz

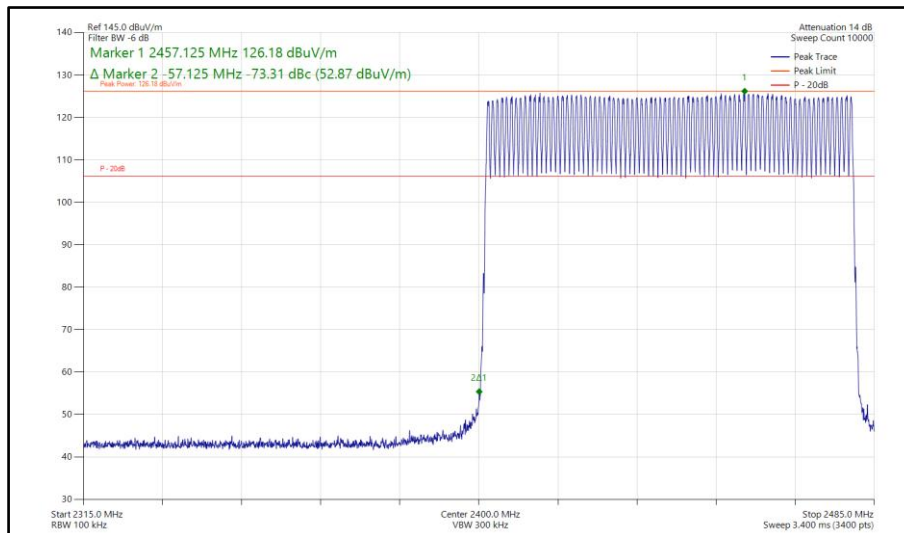


Figure 114 - Bluetooth DH5, MIMO, Core 0-1 - 2402-2480 MHz
Band Edge Frequency 2400 MHz

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-58.60
Hopping	DH5	2402-2480	2400	-62.52

Ref 136.0 dBuV/m
Filter BW -3 dB

Marker 1 2400.000 MHz 57.16 dBuV/m
Marker 2 2402.128 MHz 116.49 dBuV/m
Marker 3 -2.158 MHz -58.60 dBc (57.89 dBuV/m)

Peak Power: 116.49 dBu/m

P - 20dB

2

34.2

Start 2385.0 MHz
RBW 100 kHz

Center 2400.0 MHz
VBW 300 kHz

Stop 2415.0 MHz
Sweep 1.040 ms (1001 pts)

Attenuation 10 dB
Sweep Count 5000

Legend:
Peak Trace
Peak Limit
P - 20dB

Ref 135.0 dBuV/m
Filter BW -6 dB

Marker 1 2400.000 MHz 52.30 dBuV/m
Marker 2 2431.125 MHz 115.83 dBuV/m
Marker 3 -31.150 MHz -62.52 dBc (53.31 dBuV/m)

Peak Power: 115.83 dBuV/m
P - 20dB

Start 2315.0 MHz
Center 2400.0 MHz
Stop 2485.0 MHz
RBW 100 kHz
VBW 300 kHz
Sweep 3.400 ms (3400 pts)

Attenuation 10 dB
Sweep Count 10000

Peak Trace
Peak Limit
P - 20dB

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iPA - Core 1-2 (MIMO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-60.41
Hopping	DH5	2402-2480	2400	-64.63

Table 80 - MIMO Authorised Band Edge Results

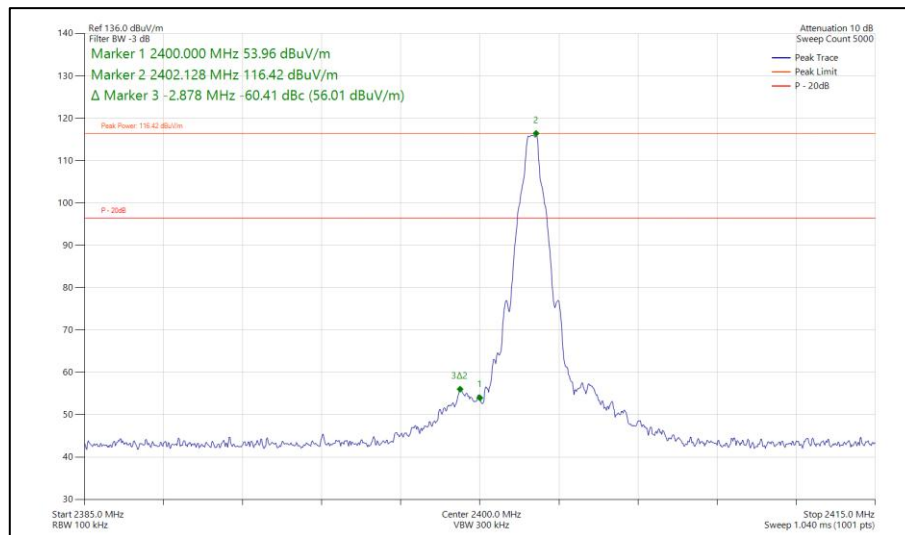


**Figure 117 - Bluetooth DH5, MIMO, Core 1-2 - 2402 MHz
Band Edge Frequency 2400 MHz**

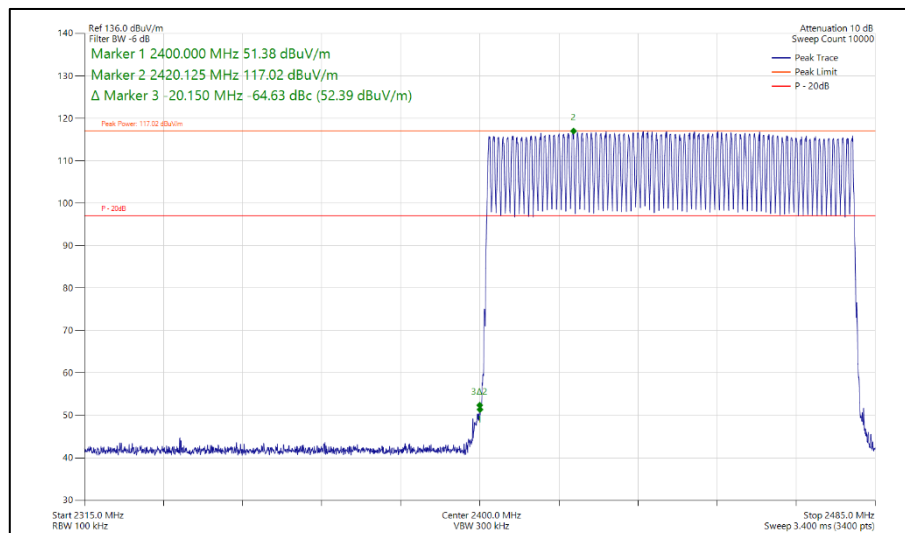


**Figure 118 - Bluetooth DH5, MIMO, Core 1-2 - 2402-2480 MHz
Band Edge Frequency 2400 MHz**



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 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 17.

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	5912	12	04-Sep-2026
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
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/A	6018	12	12-Jun-2026
Horn Antenna (1-10 GHz)	Schwarzbeck	BBHA9120B	6142	12	14-Sep-2026
Digital Multimeter	Fluke	115	6145	12	06-Jun-2026
SAC Switch Unit	TUV SUD	TUV_SSU_001	6191	12	18-Dec-2026
EMI Test Receiver	Rohde & Schwarz	ESW44	6294	12	24-Feb-2026
USB Spectrum Analyser	Signal Hound	SA124B	6298	-	TU
Digital Multimeter	Fluke	115	6345	12	24-Jul-2026
Humidity and Temperature Meter	R.S Components	1364	6346	12	13-Mar-2026
SAC Switch Unit	TUV SUD	TUV_SSU_004 PLC	6349	12	16-May-2026
USB Spectrum Analyser	Signal Hound	SA124B	6383	-	TU
Horn Antenna (1–10.5 GHz)	Schwarzbeck	BBHA 9120 B	6457	12	14-Sep-2026



Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
AC Power Supply	iTech	IT7324	6657	-	O/P Mon
3m Semi-Anechoic Chamber	Albatross Projects	RF Chamber 17	6658	36	07-May-2028
Mast and Turntable Controller	Maturo Gmbh	FCU3.0	6659	-	TU
Tilt Antenna Mast	Maturo Gmbh	BAM4.5-P	6660	-	TU
Turntable	Maturo Gmbh	TT1.5SI	6661	-	TU
1m Cable	Junkosha	MWX241-01000AMSAMS/B	6741	12	27-Apr-2026
8m Cable	Junkosha	MWX221-08000AMSAMS/B	6748	12	27-Apr-2026
EMI Test Receiver	Rohde & Schwarz	ESW44	6805	12	24-Jul-2026
Handheld Hygrometer	Fluke	971	6837	12	16-Sep-2026
8m SMA-Type Cable	Junkosha	MWX221-08000AMSAMS/B	6846	12	23-Oct-2026
Cable Assembly	Pasternack	PE300-60	6858	-	TU
Cable Assembly	Pasternack	PE300-60	6859	-	TU
Cable Assembly	Pasternack	PE300-60	6860	-	TU
Cable Assembly	Pasternack	PE300-60	6864	-	TU
RF Amplifier BROADBAND AMPL/SMA/RoHS	Mini-Circuits	ZX60-83LN12+	6978	12	05-Apr-2026
RF Amplifier BROADBAND AMPL/SMA/RoHS	Mini-Circuits	ZX60-83LN12+	6979	12	05-Apr-2026

Table 81

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

A3429, S/N: DQ5K9FY355 - Modification State 0
A3429, S/N: DQXLNQJKGL - Modification State 0
A3429, S/N: F7KVTYJKG4 - Modification State 0

2.8.3 Date of Test

04-December-2025 to 10-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.

The diagram illustrates the setup of a Semi-anechoic Chamber for antenna measurements. The chamber is represented by a large blue rectangle. Inside, a vertical Mast is positioned. A Communications Cable (blue line) runs from the Remote Access Device (RAD) outside the chamber to the Mast. The Mast is connected to a Mast Control unit and a Spectrum Analyser. A Pre-amp (red dashed box) and RF Filter(s) (red dashed box) are connected to the Mast. The Mast is also connected to an Antenna. The Antenna is positioned at a height of 1 - 4 m above the ground plane. The distance from the Antenna to the EUT (Under Test) is 3 m_{II}. The EUT is placed on a Turntable, which is supported by a base. The Turntable is connected to a Turntable Control unit. The EUT is positioned at a height of 1.5 m_{III} above the ground plane. The ground plane is covered with Absorbant Material (Measurements > 1 GHz) with a height of 1 - 4 m. A Measuring Computer is connected to the Mast Control, Turntable Control, and Spectrum Analyser.

Legend:

- i Antenna is boresighted for measurements > 1 GHz.
- ii Distance from antenna to EUT is 1 m for measurements > 18 GHz.
- iii Height of EUT above the ground plane is 0.8 m for measurements < 1 GHz.

2.8.6 Environmental Conditions

COMMERCIAL-IN-CONFIDENCE

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 82 - 2402 MHz, DH5, iPA, Core 0 + Core 1, 1 GHz to 18 GHz

*No emissions found within 20 dB of the limit.

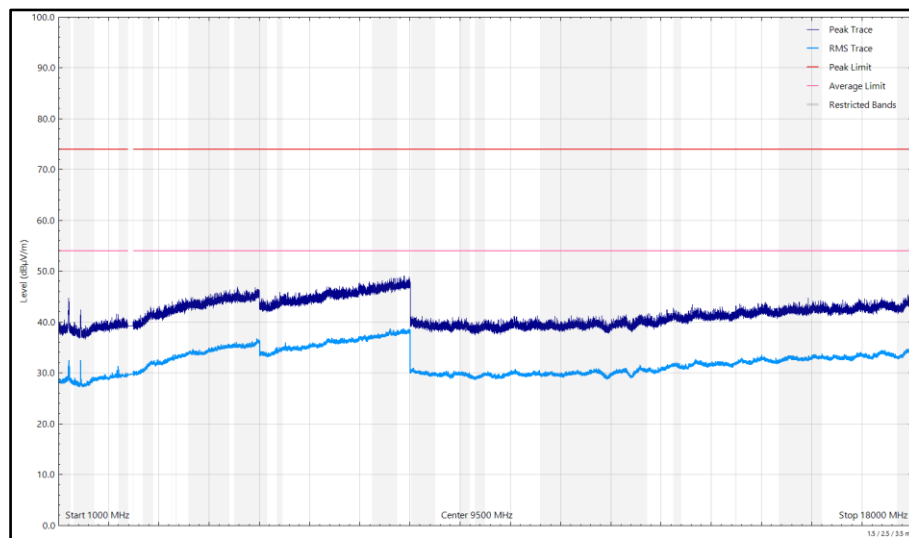


Figure 120 - 2402 MHz, DH5, iPA, Core 0 + Core 1, 1 GHz to 18 GHz, Horizontal

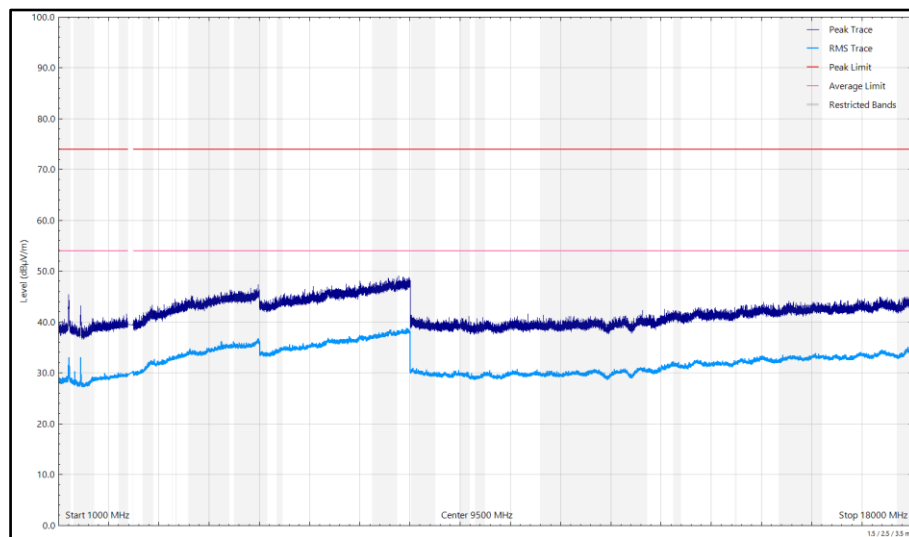


Figure 121 - 2402 MHz, DH5, iPA, Core 0 + Core 1, 1 GHz to 18 GHz, Vertical

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
37.816	22.42	40.00	-17.58	Q-Peak	106	124	Vertical
73.281	17.85	40.00	-22.15	Q-Peak	137	395	Horizontal
73.457	20.63	40.00	-19.37	Q-Peak	351	209	Vertical
111.484	17.63	43.50	-25.87	Q-Peak	211	269	Vertical
119.281	18.14	43.50	-25.36	Q-Peak	31	243	Horizontal
136.445	20.51	43.50	-22.99	Q-Peak	176	100	Vertical
164.330	20.30	43.50	-23.20	Q-Peak	312	347	Vertical
247.052	20.81	46.00	-25.19	Q-Peak	156	182	Horizontal

Table 83 - 2441 MHz, DH5, iPA, Core 0 + Core 1, 30 MHz to 26 GHz

No other emissions found within 20 dB of the limit.

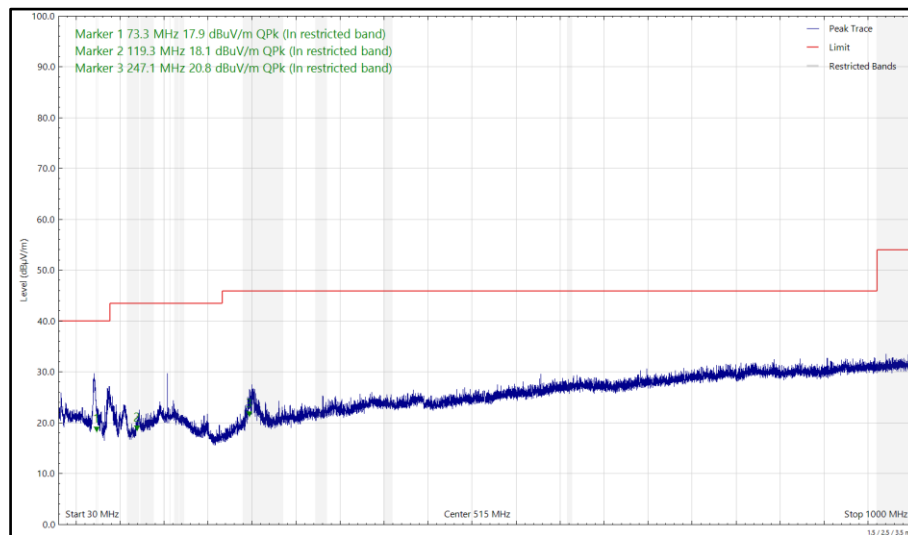


Figure 122 - 2441 MHz, DH5, iPA, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

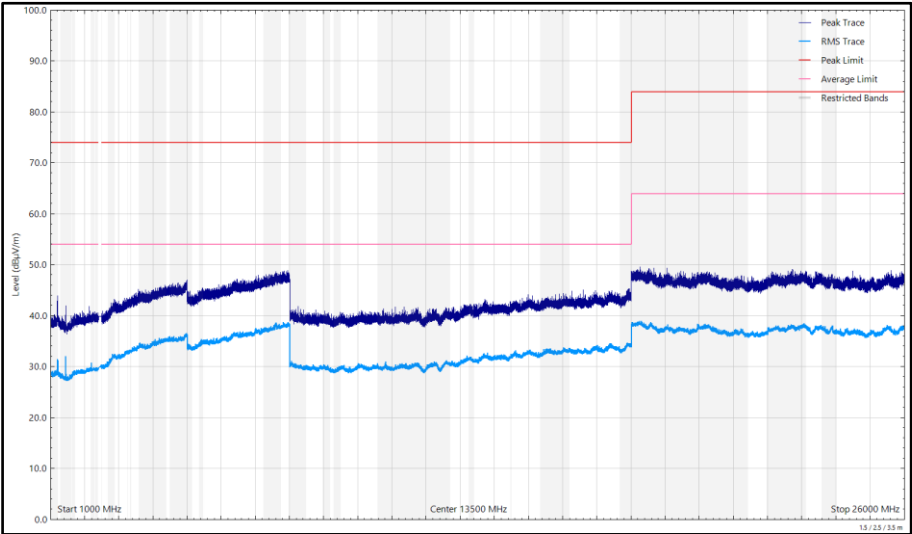


Figure 123 - 2441 MHz, DH5, iPA, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal

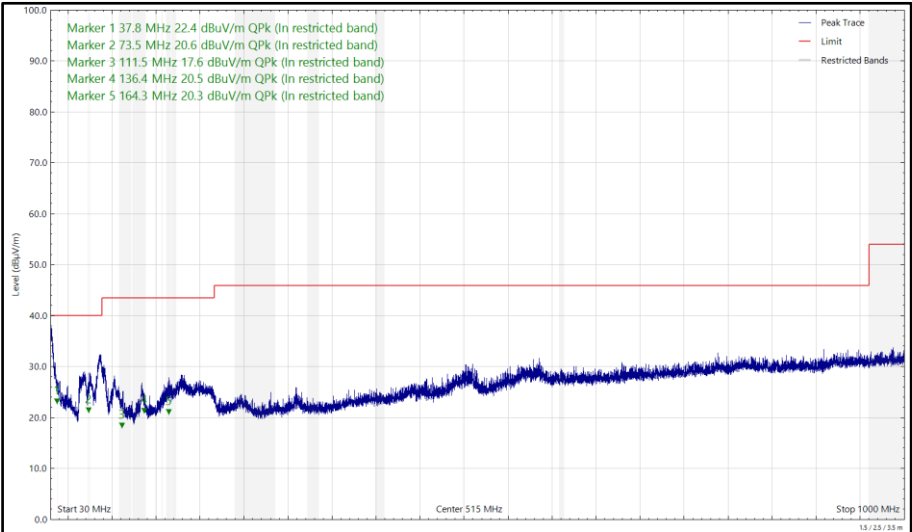


Figure 124 - 2441 MHz, DH5, iPA, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

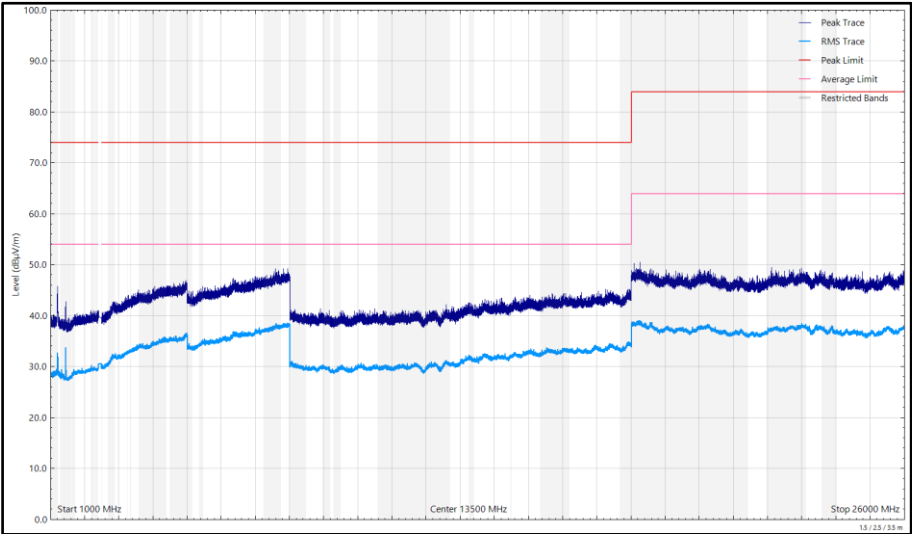


Figure 125 - 2441 MHz, DH5, iPA, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical



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

Table 84 - 2480 MHz, DH5, iPA, Core 0 + Core 1, 1 GHz to 18 GHz

*No emissions found within 20 dB of the limit.

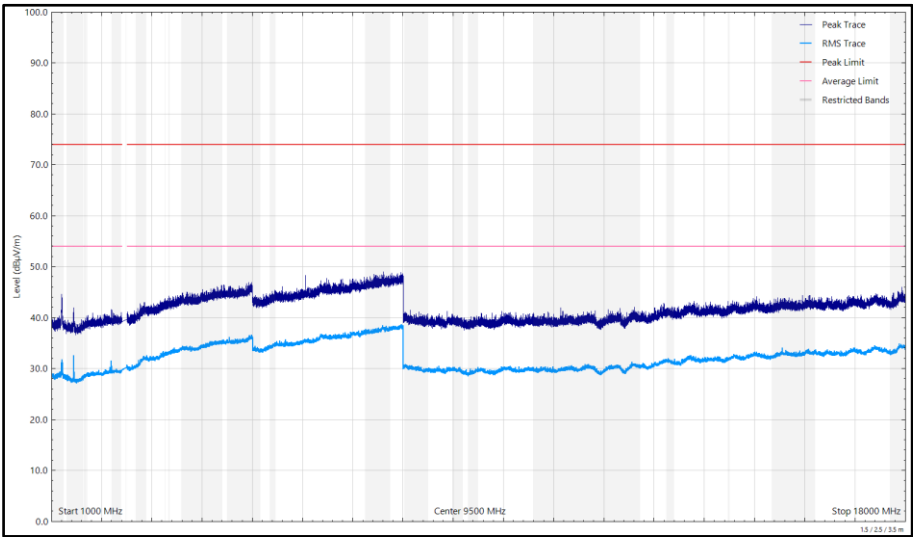


Figure 126 - 2480 MHz, DH5, iPA, Core 0 + Core 1, 1 GHz to 18 GHz, Horizontal

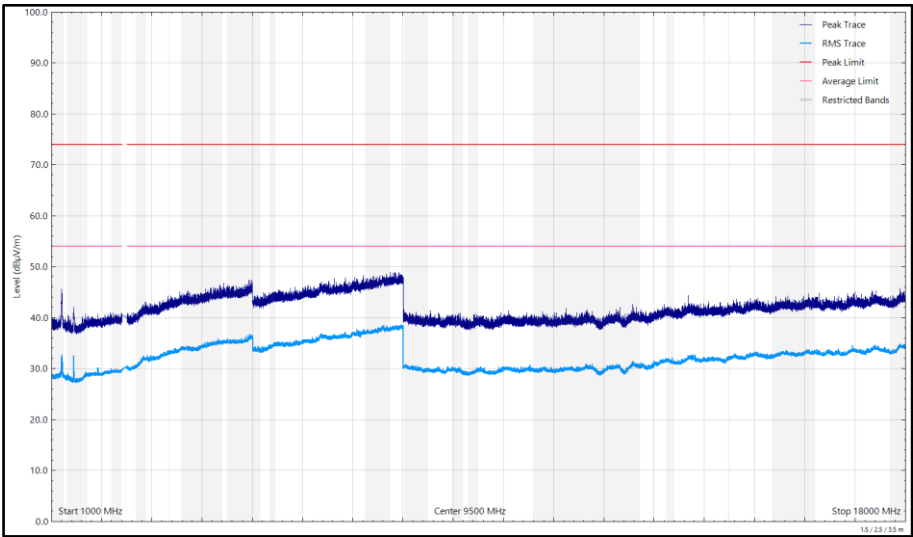


Figure 127 - 2480 MHz, DH5, iPA, Core 0 + Core 1, 1 GHz to 18 GHz, Vertical



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

Table 85 - 2402 MHz, DH5, iPA, Core 2, 1 GHz to 18 GHz

*No emissions found within 20 dB of the limit.

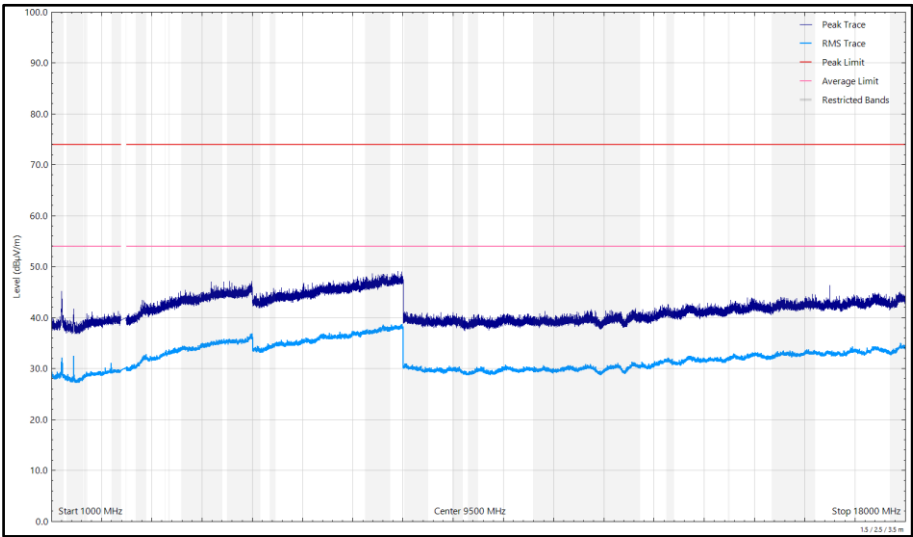


Figure 128 - 2402 MHz, DH5, iPA, Core 2, 1 GHz to 18 GHz, Horizontal

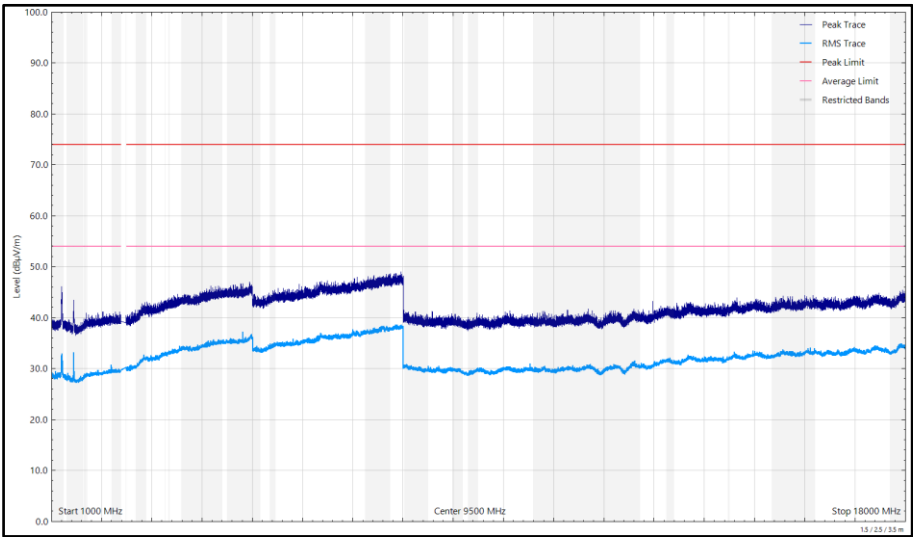


Figure 129 - 2402 MHz, DH5, iPA, Core 2, 1 GHz to 18 GHz, Vertical

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
37.532	23.28	40.00	-16.72	Q-Peak	33	100	Vertical
73.090	24.75	40.00	-15.25	Q-Peak	289	106	Vertical
73.261	18.03	40.00	-21.97	Q-Peak	357	398	Horizontal
110.157	18.27	43.50	-25.23	Q-Peak	181	119	Vertical
135.170	19.60	43.50	-23.90	Q-Peak	244	322	Vertical
171.837	20.88	43.50	-22.62	Q-Peak	190	110	Vertical
250.437	21.85	46.00	-24.15	Q-Peak	147	100	Horizontal
4882.307	32.82	54.00	-21.18	CISPR Avg	353	334	Vertical

Table 86 - 2441 MHz, DH5, iPA, Core 2, 30 MHz to 26 GHz

No other emissions found within 20 dB of the limit.

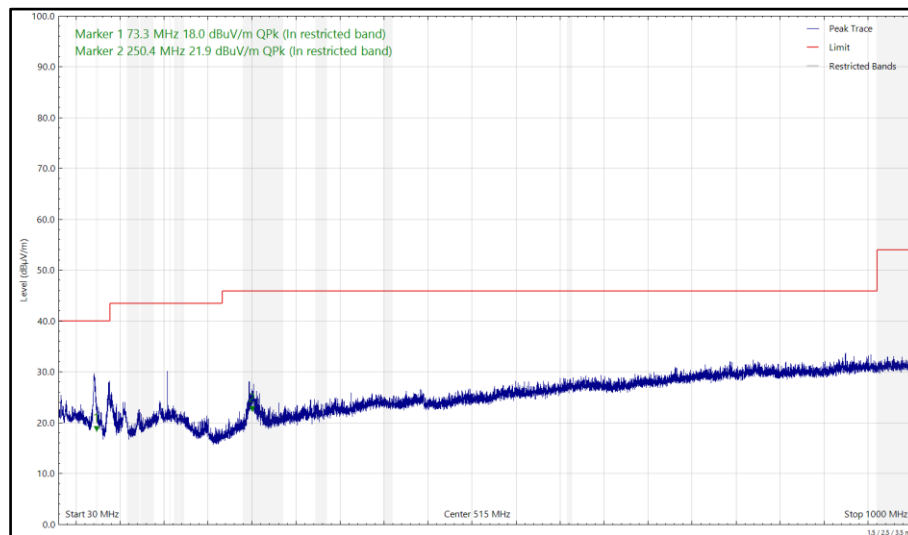


Figure 130 - 2441 MHz, DH5, iPA, Core 2, 30 MHz to 1 GHz, Horizontal (Peak)

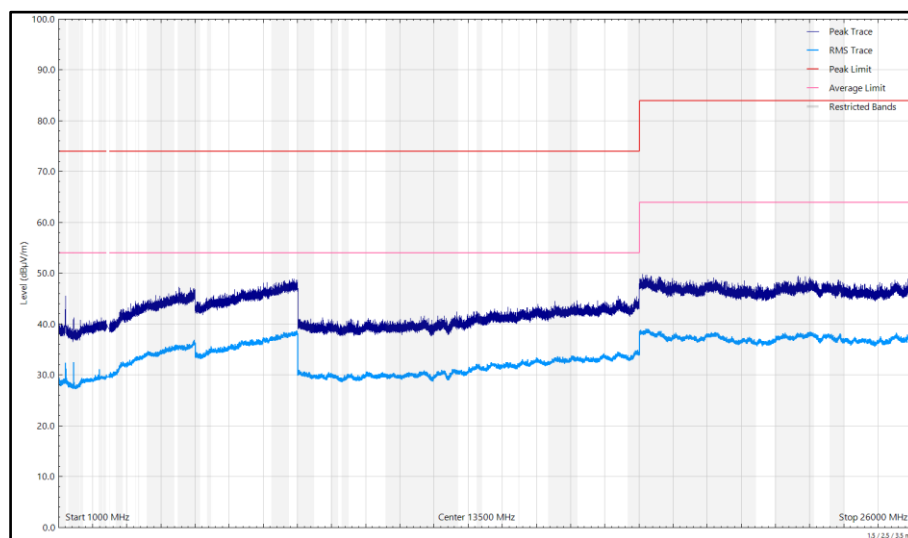


Figure 131 - 2441 MHz, DH5, iPA, Core 2, 1 GHz to 26 GHz, Horizontal

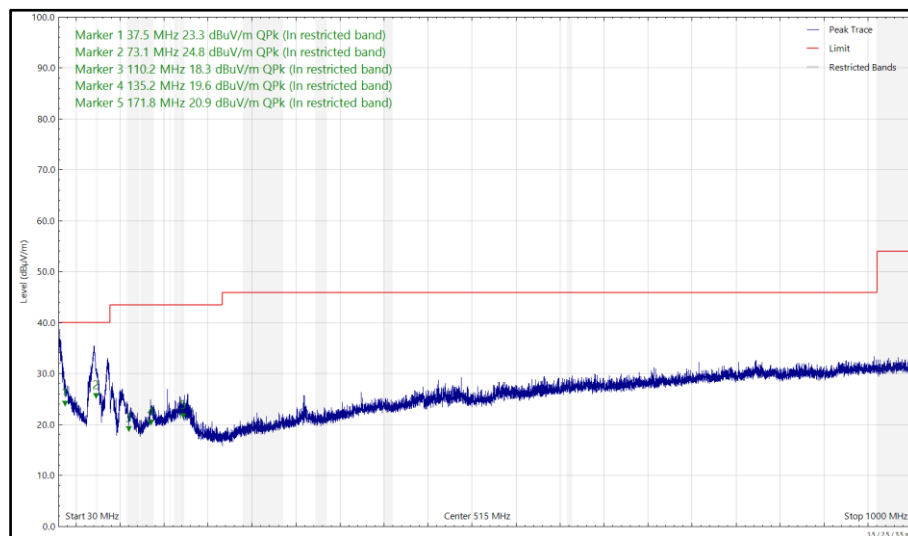


Figure 132 - 2441 MHz, DH5, iPA, Core 2, 30 MHz to 1 GHz, Vertical (Peak)

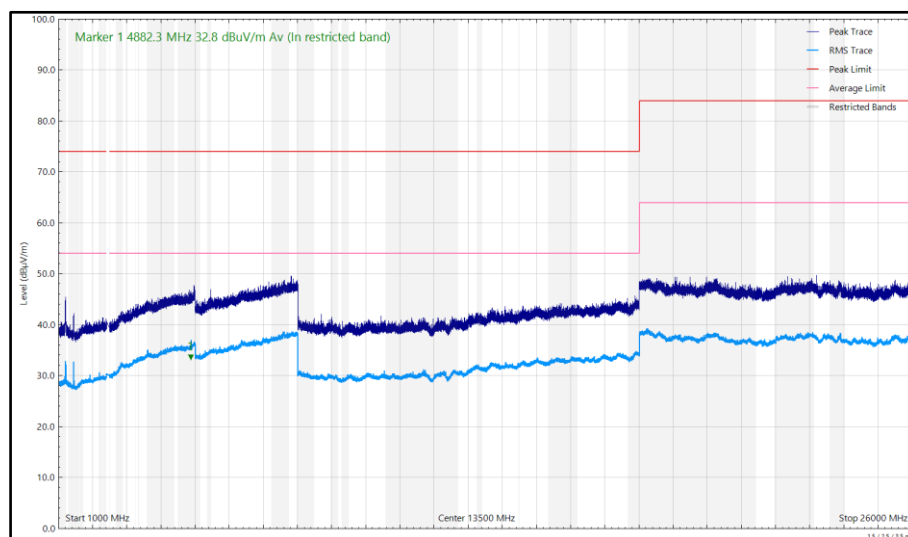


Figure 133 - 2441 MHz, DH5, iPA, Core 2, 1 GHz to 26 GHz, Vertical

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4959.893	33.54	54.00	-20.46	CISPR Avg	0	119	Vertical

Table 87 - 2480 MHz, DH5, iPA, Core 2, 1 GHz to 18 GHz

No other emissions found within 20 dB of the limit.

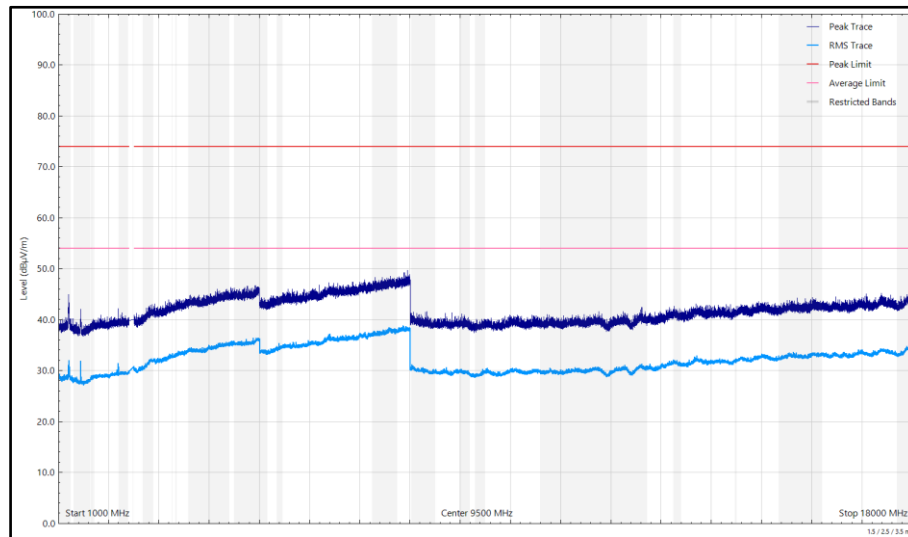


Figure 134 - 2480 MHz, DH5, iPA, Core 2, 1 GHz to 18 GHz, Horizontal

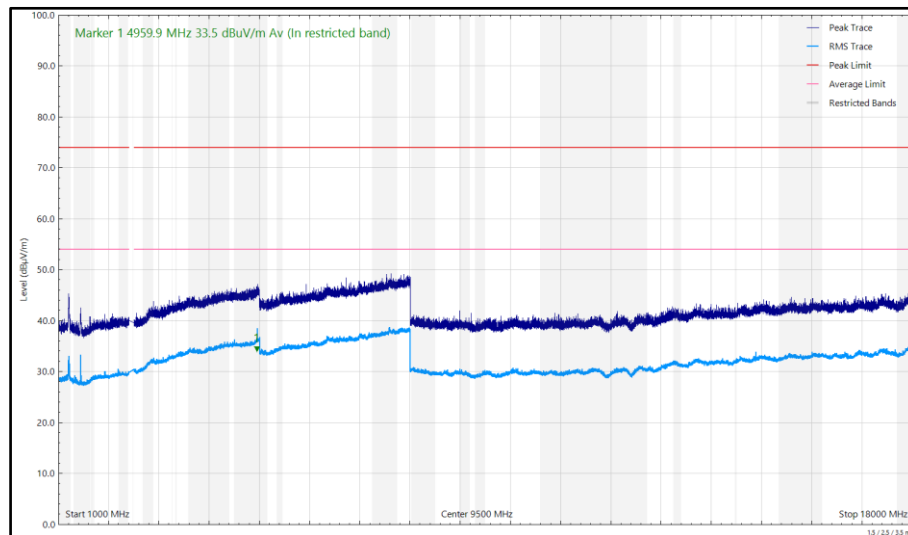


Figure 135 - 2480 MHz, DH5, iPA, Core 2, 1 GHz to 18 GHz, Vertical

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
2368.831	30.50	54.00	-23.50	CISPR Avg	20	357	Vertical
2485.243	32.63	54.00	-21.37	CISPR Avg	27	293	Vertical

Table 88 - 2402 MHz, DH5, ePA, Core 0 + Core 1, 1 GHz to 18 GHz

No other emissions found within 20 dB of the limit.

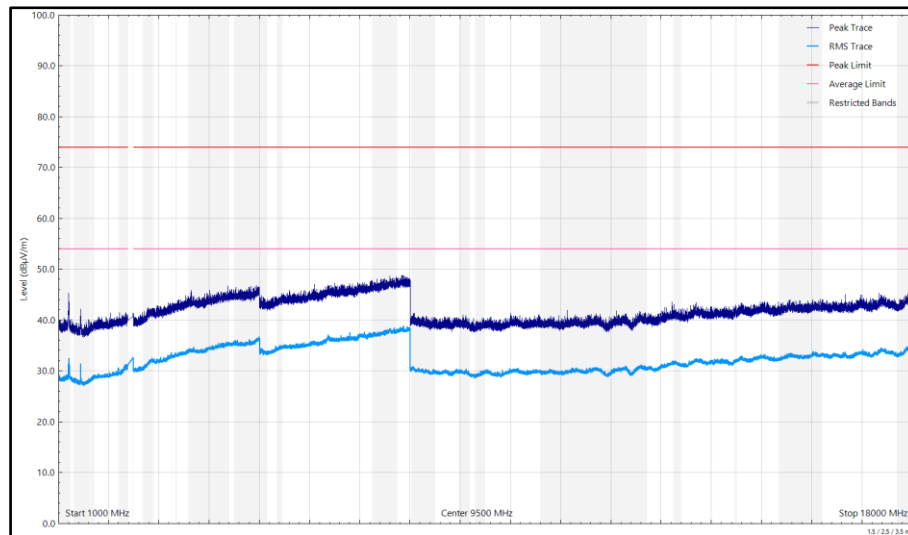


Figure 136 - 2402 MHz, DH5, ePA, Core 0 + Core 1, 1 GHz to 18 GHz, Horizontal

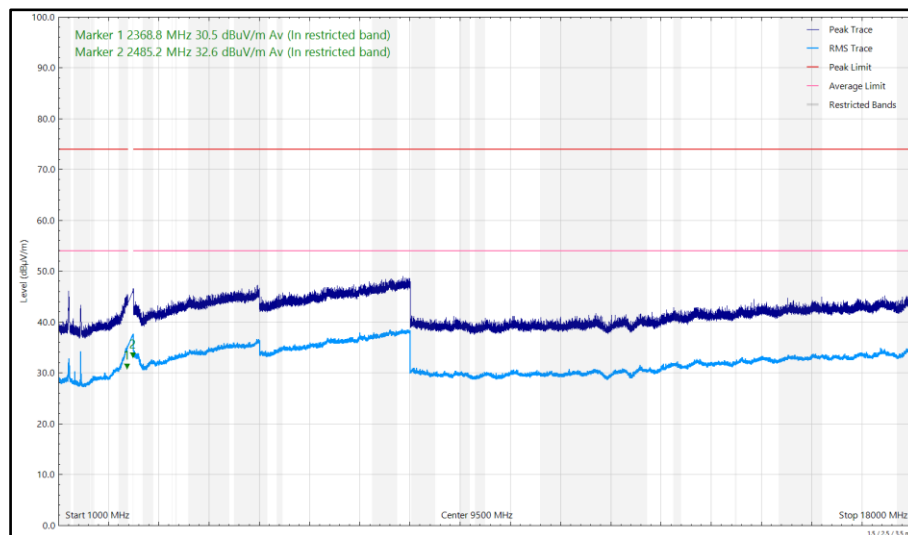


Figure 137 - 2402 MHz, DH5, ePA, Core 0 + Core 1, 1 GHz to 18 GHz, Vertical