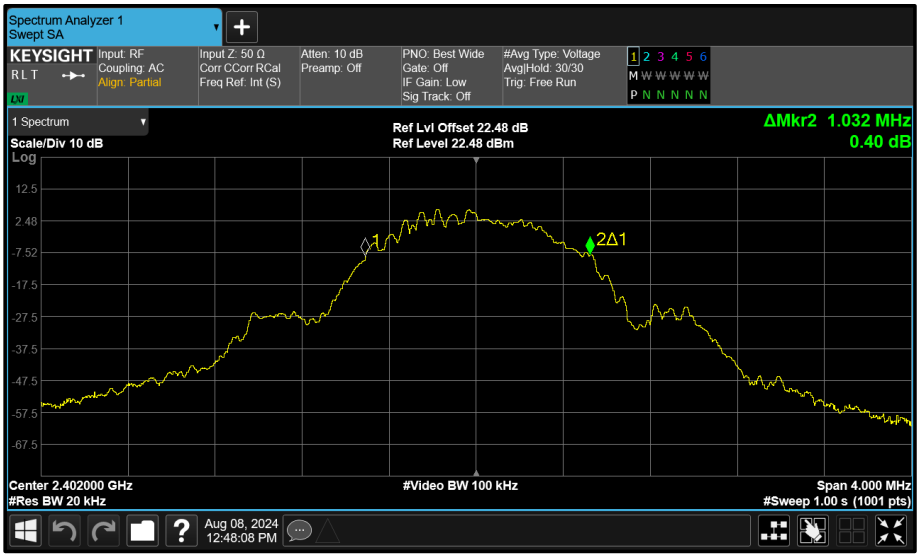

Figure 163 - Core 1 (B) 2402 MHz (CH37) 99% Bandwidth

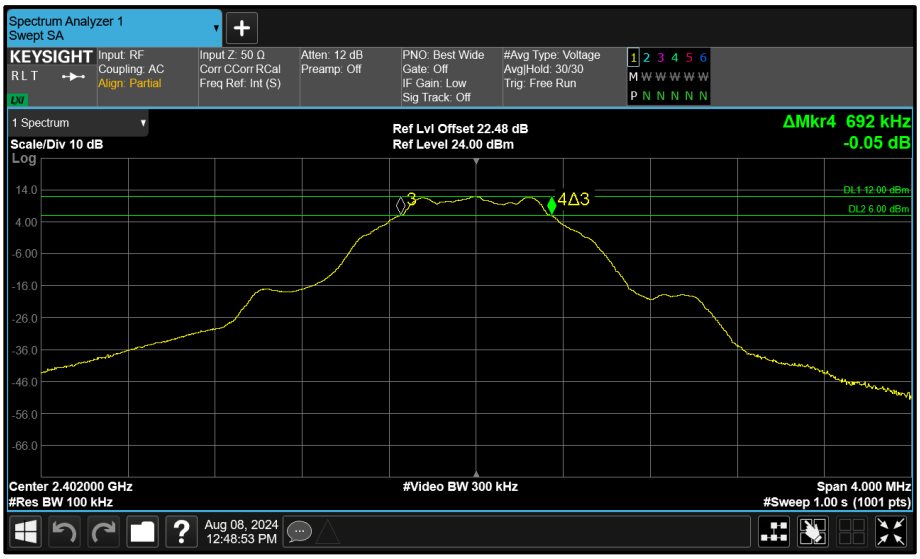

Figure 164 - Core 1 (B) 2402 MHz (CH37) 6 dB Bandwidth

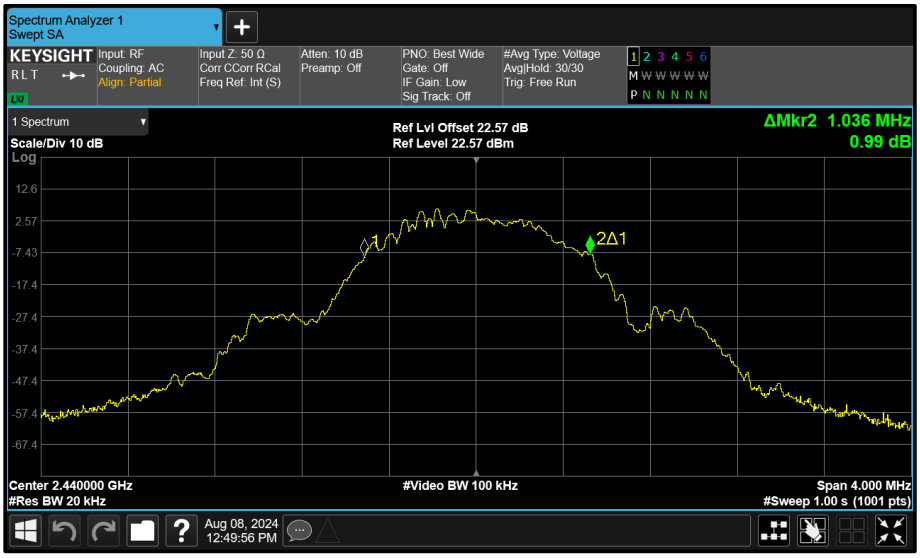

Figure 165 - Core 0 (A) 2440 MHz (CH17) 99% Bandwidth

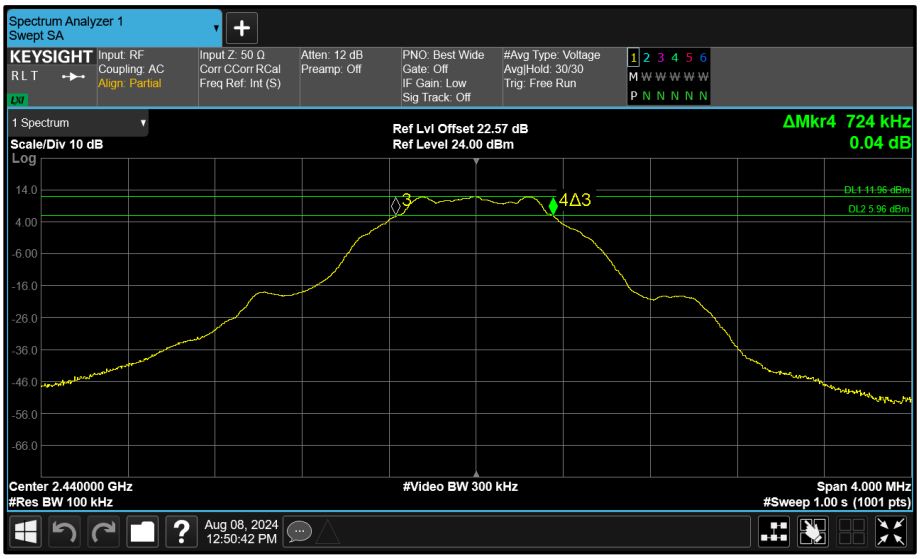

Figure 166 - Core 0 (A) 2440 MHz (CH17) 6 dB Bandwidth

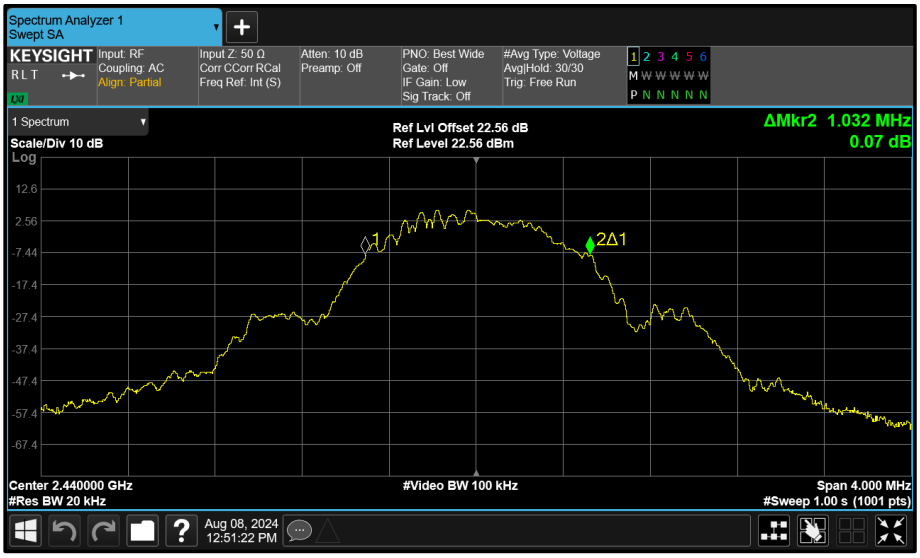

Figure 167 - Core 1 (B) 2440 MHz (CH17) 99% Bandwidth

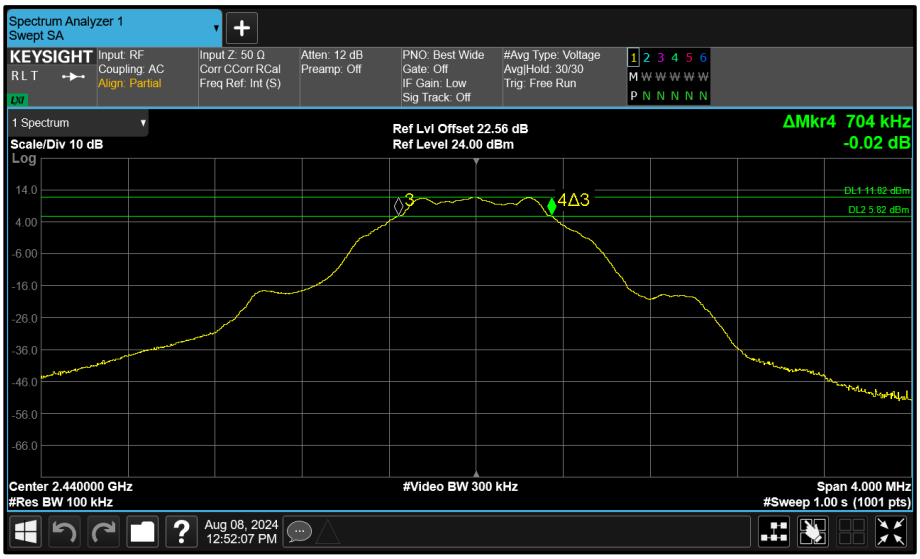

Figure 168 - Core 1 (B) 2440 MHz (CH17) 6 dB Bandwidth

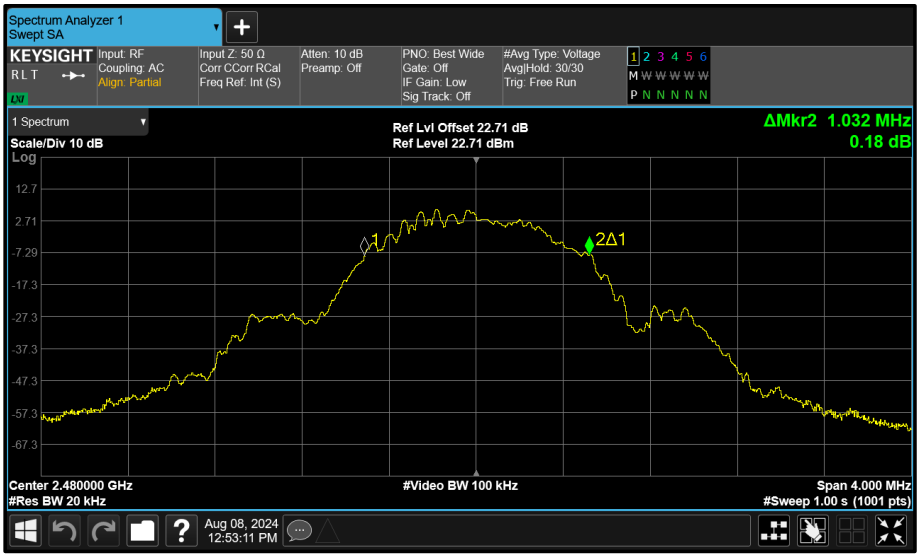

Figure 169 - Core 0 (A) 2480 MHz (CH39) 99% Bandwidth

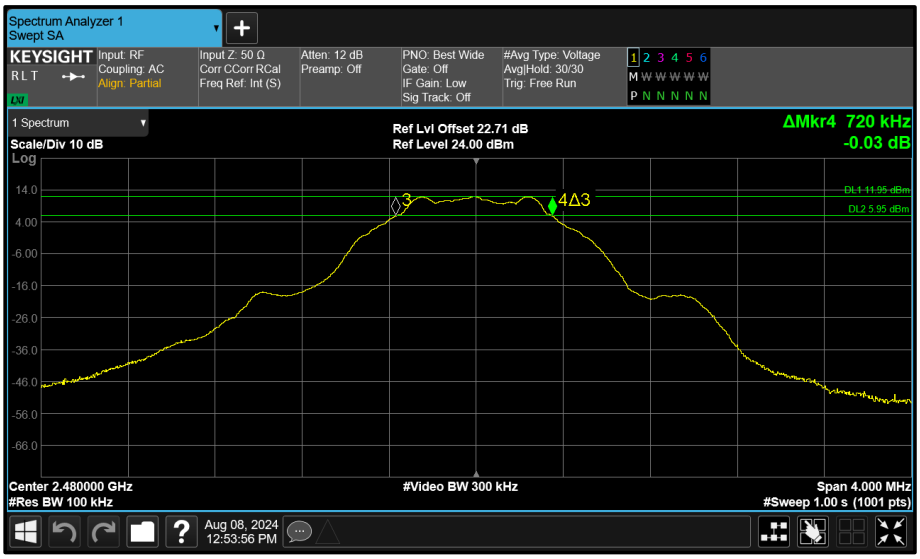

Figure 170 - Core 0 (A) 2480 MHz (CH39) 6 dB Bandwidth

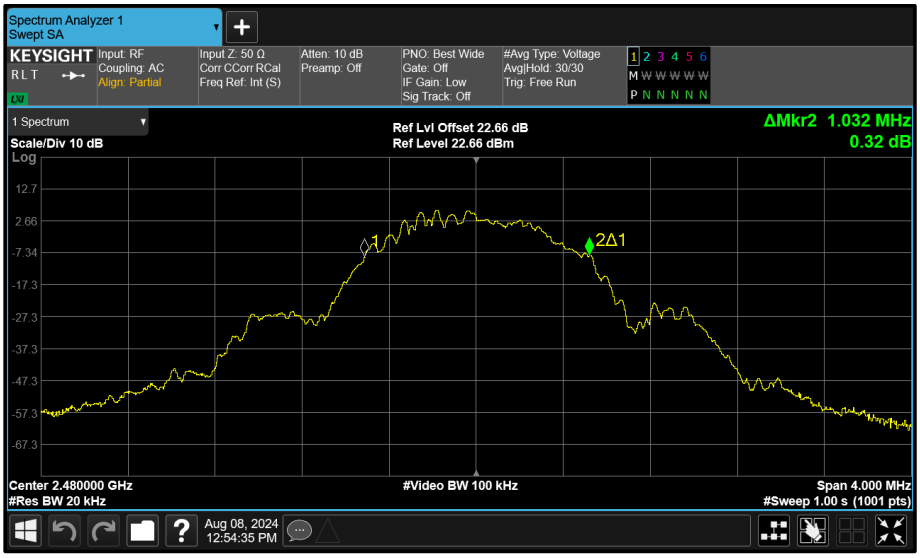

Figure 171 - Core 1 (B) 2480 MHz (CH39) 99% Bandwidth

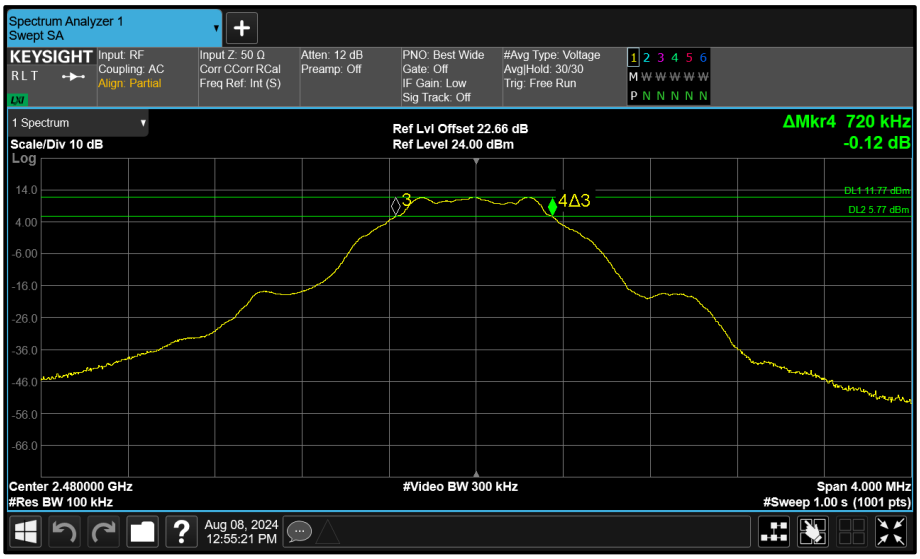

Figure 172 - Core 1 (B) 2480 MHz (CH39) 6 dB Bandwidth

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (a)(2) RSS-247 5.2 a)	Test Method(s):	C63.10 6.9.3 C63.10 11.8.1
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA GFSK (LE 2M)	Duty Cycle (%):	-
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	-

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2402	1.248	1.184	-	-	≥500.0
2440	1.256	1.248	-	-	≥500.0
2480	1.248	1.256	-	-	≥500.0

Table 47 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2402	2.080	2.080	-	-	-
2440	2.080	2.080	-	-	-
2480	2.072	2.072	-	-	-

Table 48 - 99% Bandwidth Results

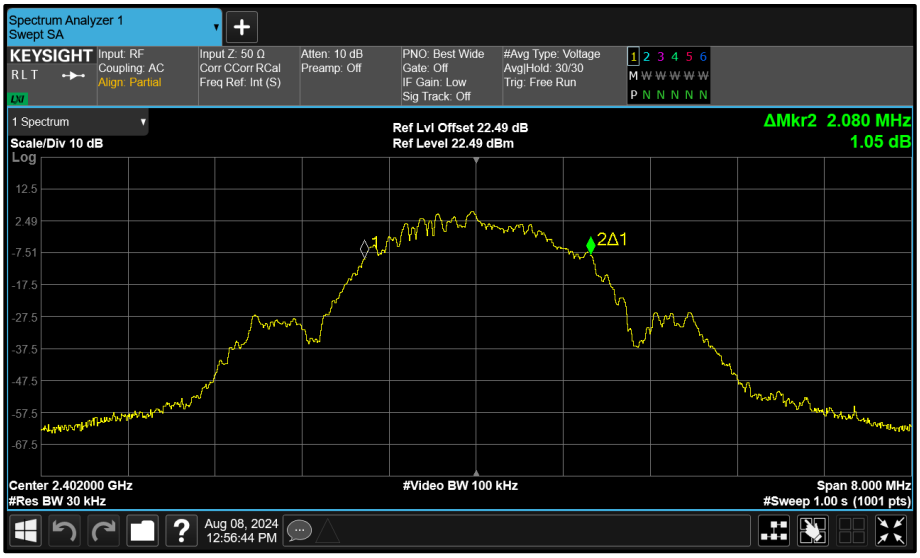

Figure 173 - Core 0 (A) 2402 MHz (CH37) 99% Bandwidth

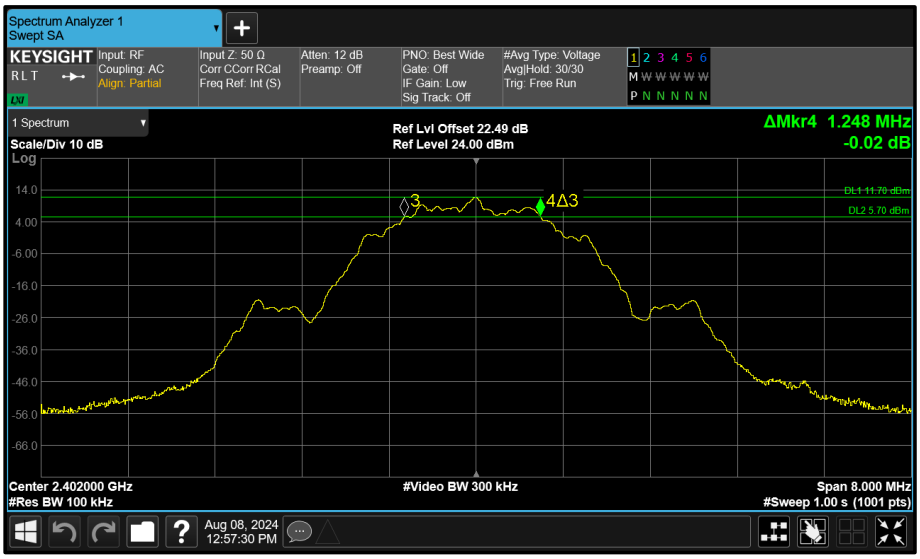

Figure 174 - Core 0 (A) 2402 MHz (CH37) 6 dB Bandwidth

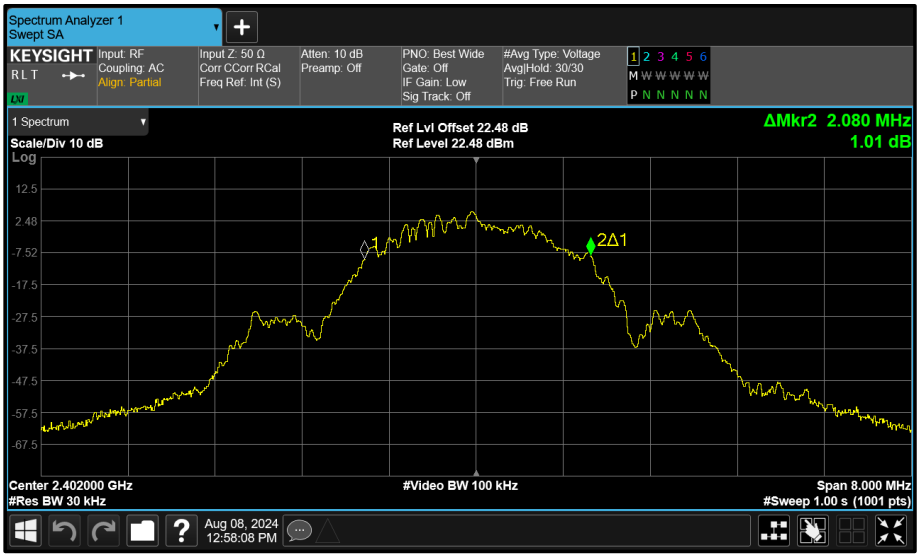

Figure 175 - Core 1 (B) 2402 MHz (CH37) 99% Bandwidth

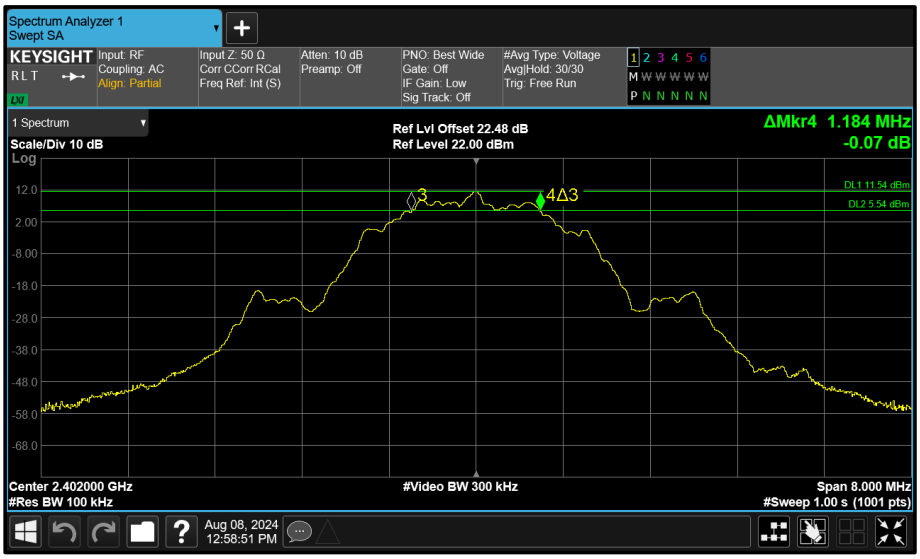

Figure 176 - Core 1 (B) 2402 MHz (CH37) 6 dB Bandwidth

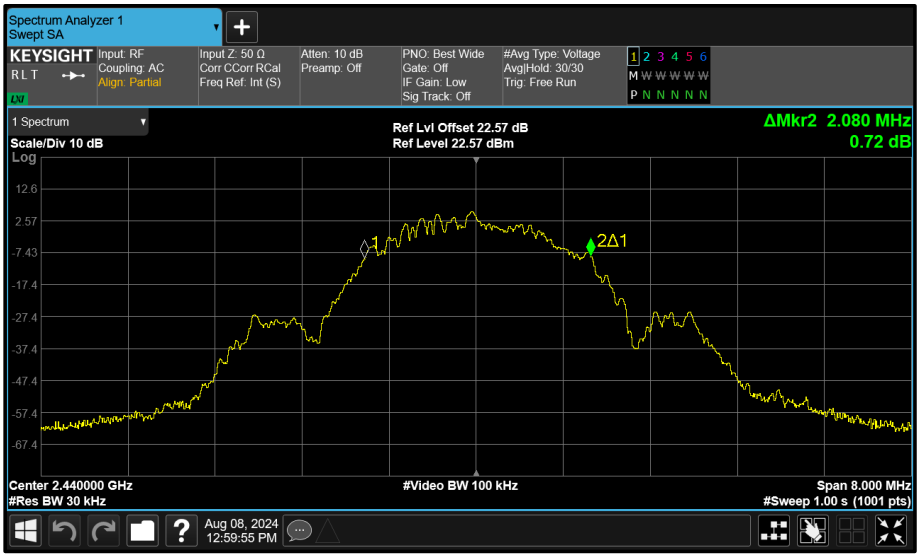

Figure 177 - Core 0 (A) 2440 MHz (CH17) 99% Bandwidth

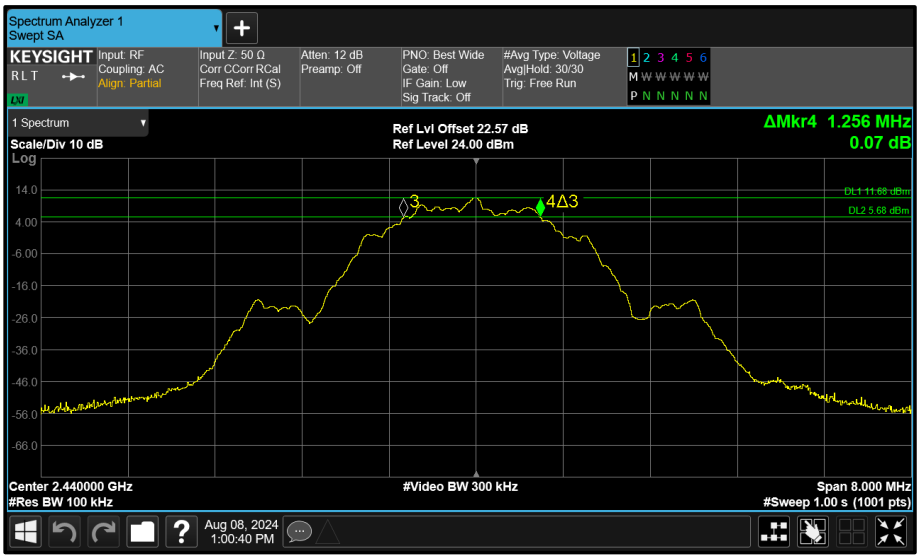

Figure 178 - Core 0 (A) 2440 MHz (CH17) 6 dB Bandwidth

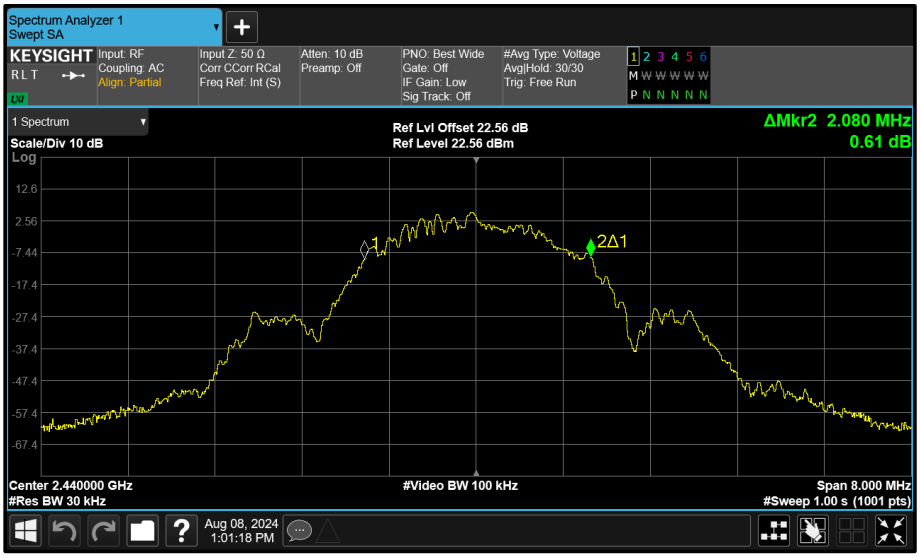

Figure 179 - Core 1 (B) 2440 MHz (CH17) 99% Bandwidth

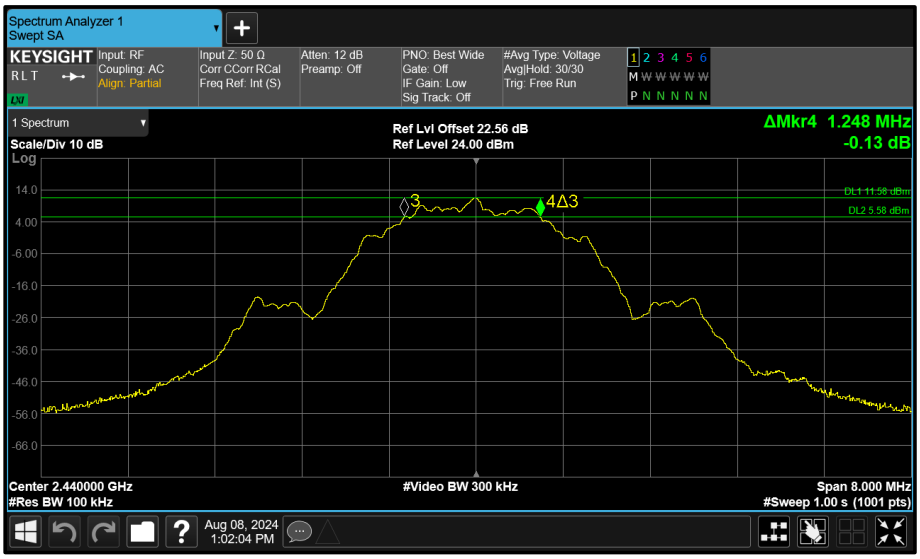

Figure 180 - Core 1 (B) 2440 MHz (CH17) 6 dB Bandwidth

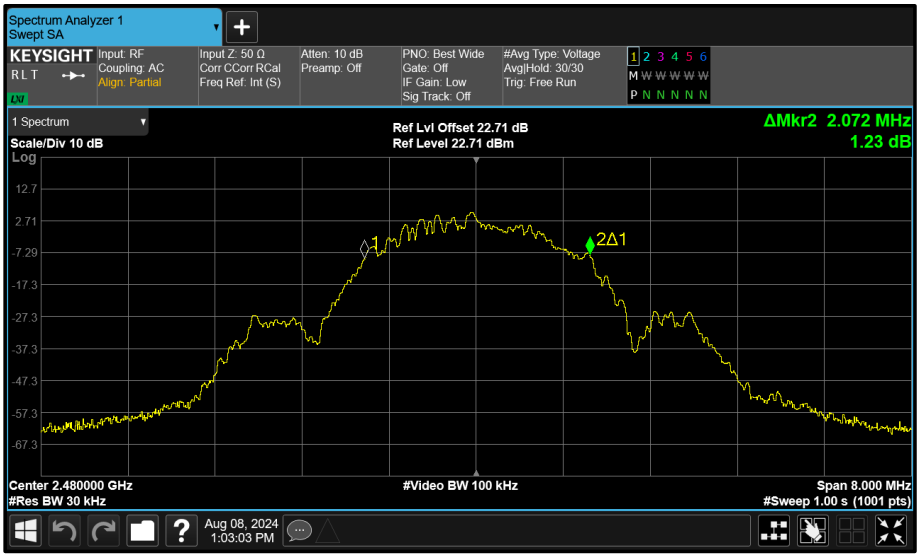

Figure 181 - Core 0 (A) 2480 MHz (CH39) 99% Bandwidth

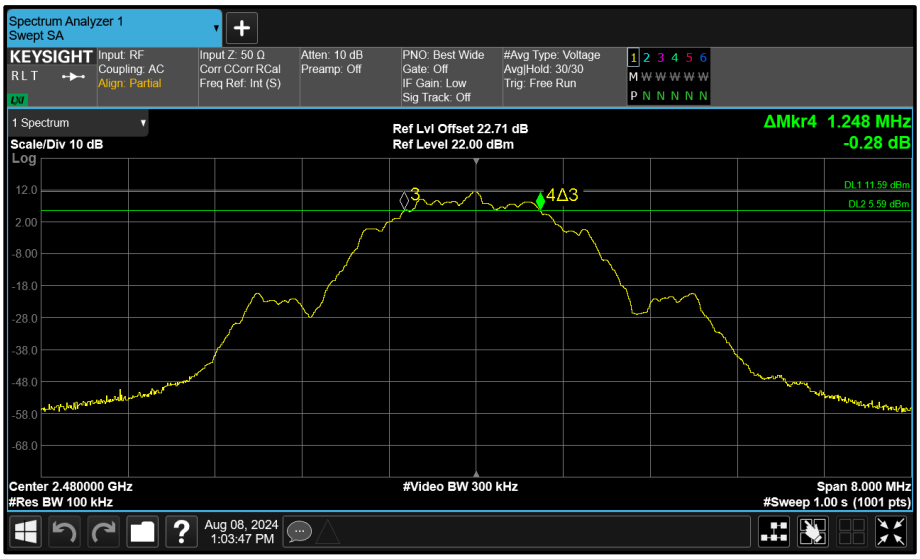

Figure 182 - Core 0 (A) 2480 MHz (CH39) 6 dB Bandwidth

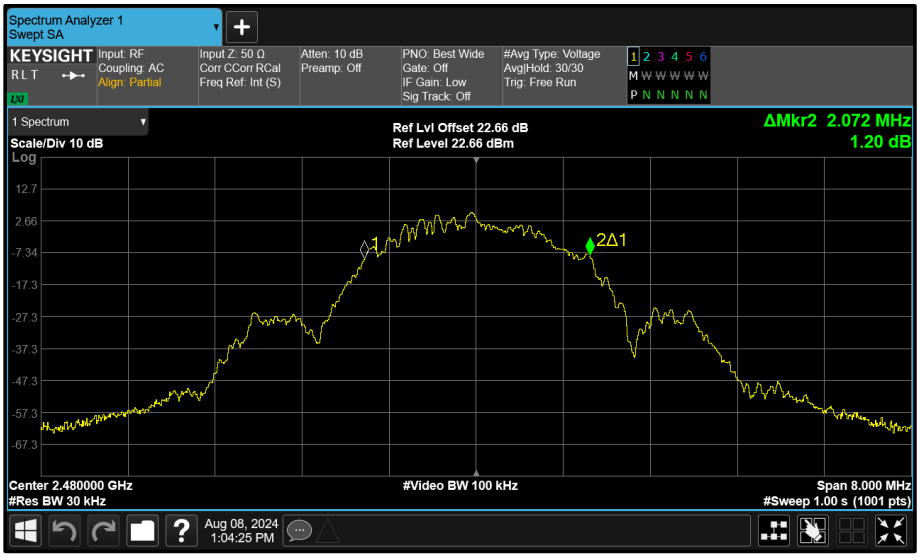

Figure 183 - Core 1 (B) 2480 MHz (CH39) 99% Bandwidth

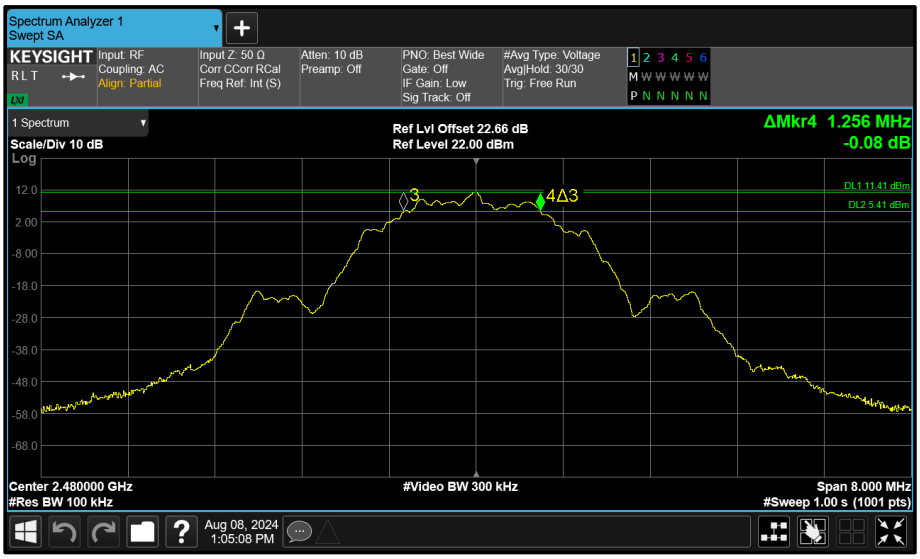

Figure 184 - Core 1 (B) 2480 MHz (CH39) 6 dB Bandwidth

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (a)(2) RSS-247 5.2 a)	Test Method(s):	C63.10 6.9.3 C63.10 11.8.1
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA π/4 DQPSK (4-DH5)	Duty Cycle (%):	-
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	-

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2404	1.912	1.904	-	-	≥500.0
2441	1.896	1.896	-	-	≥500.0
2476	1.880	1.904	-	-	≥500.0

Table 49 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2404	2.344	2.328	-	-	-
2441	2.344	2.328	-	-	-
2476	2.344	2.328	-	-	-

Table 50 - 99% Bandwidth Results

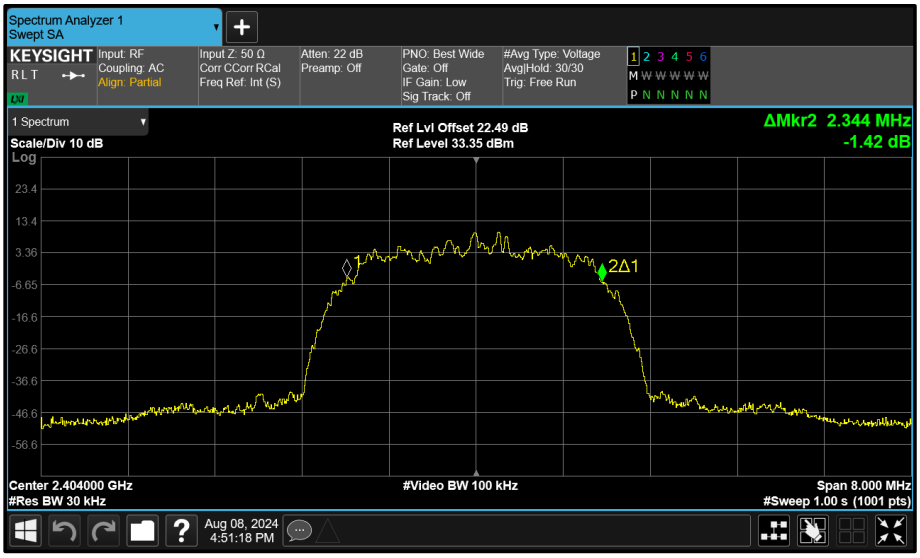

Figure 185 - Core 0 (A) 2404 MHz (CH2) 99% Bandwidth

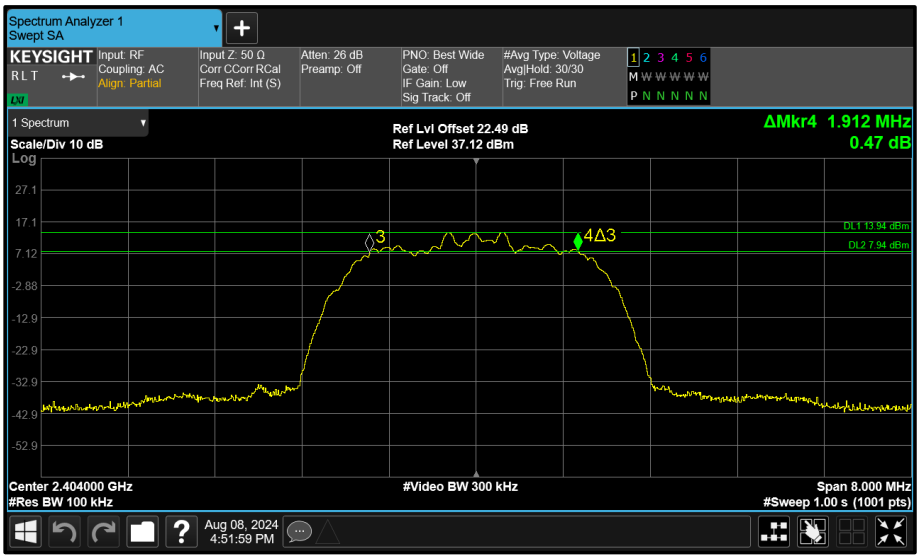

Figure 186 - Core 0 (A) 2404 MHz (CH2) 6 dB Bandwidth

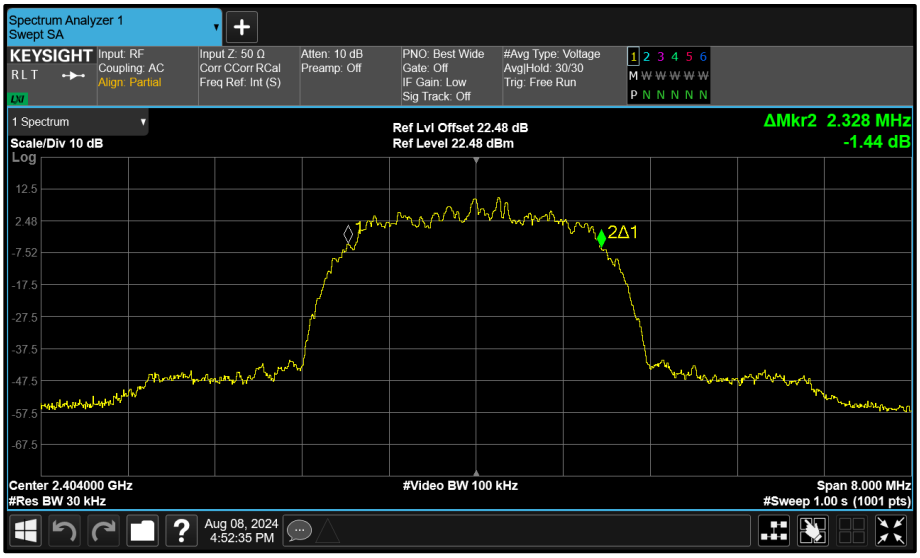

Figure 187 - Core 1 (B) 2404 MHz (CH2) 99% Bandwidth

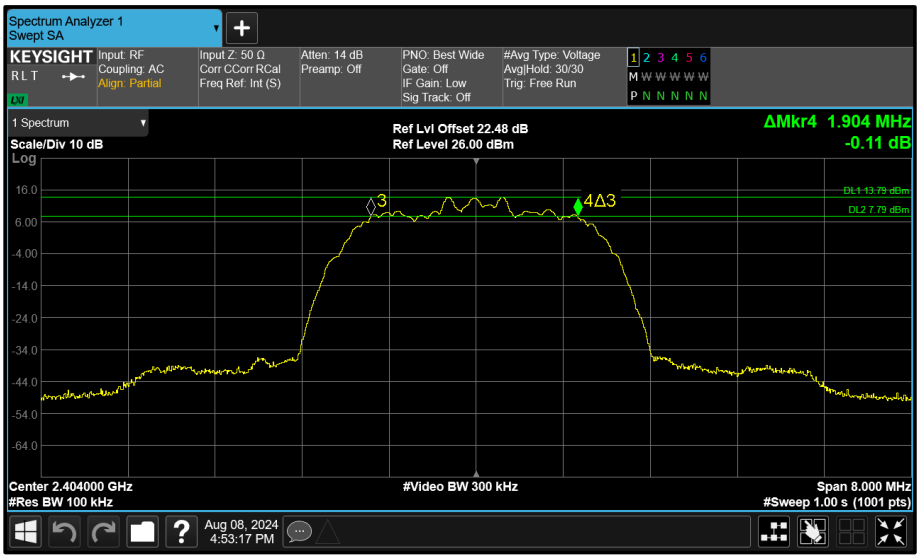

Figure 188 - Core 1 (B) 2404 MHz (CH2) 6 dB Bandwidth

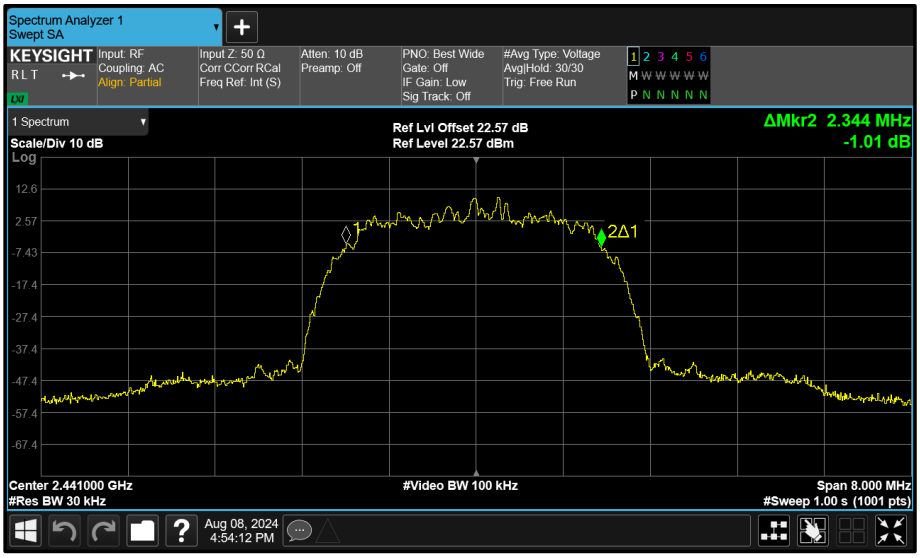

Figure 189 - Core 0 (A) 2441 MHz (CH39) 99% Bandwidth

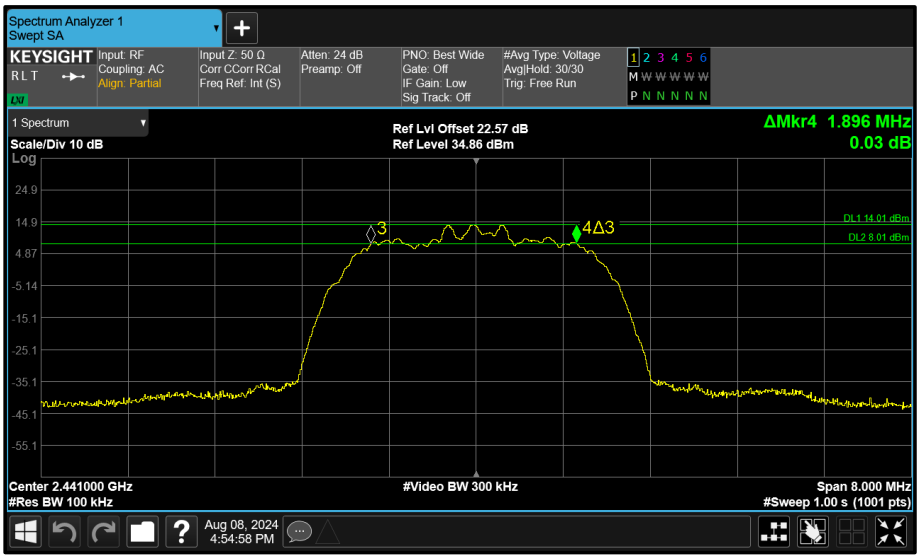

Figure 190 - Core 0 (A) 2441 MHz (CH39) 6 dB Bandwidth

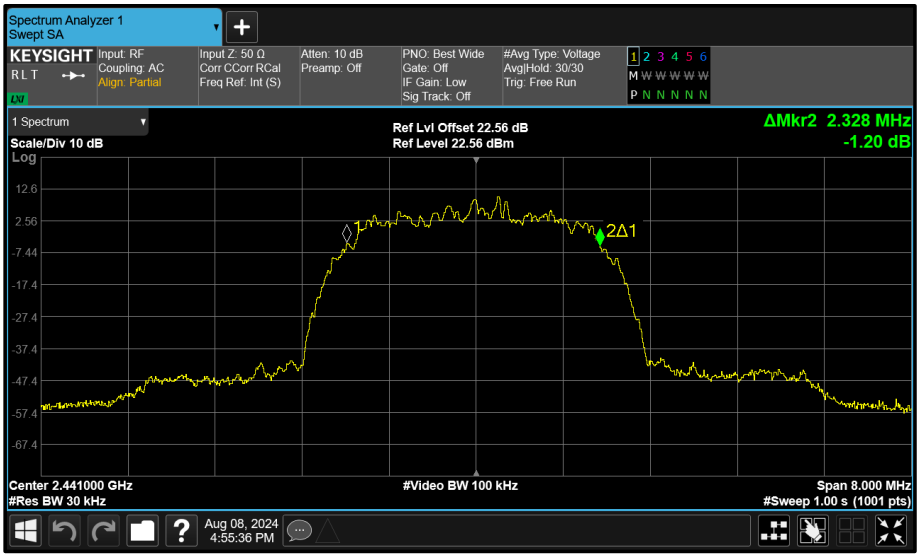

Figure 191 - Core 1 (B) 2441 MHz (CH39) 99% Bandwidth

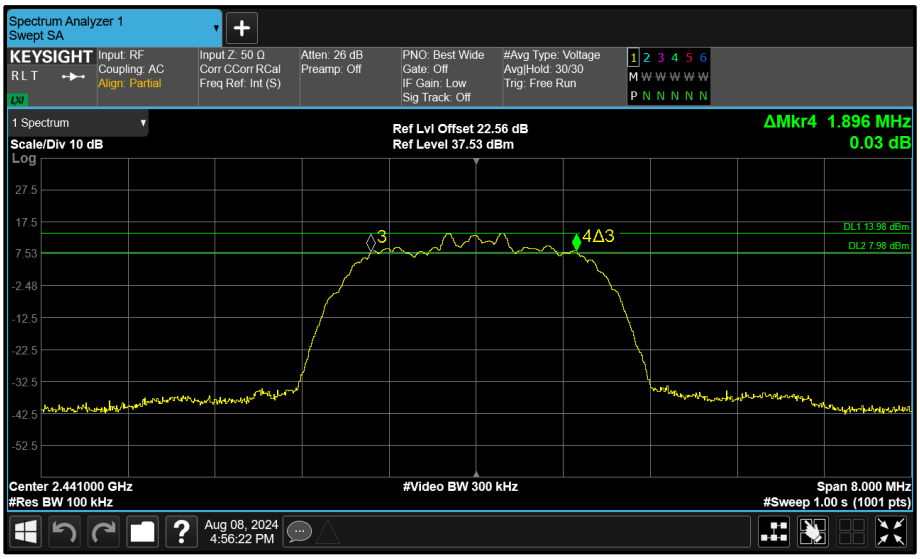

Figure 192 - Core 1 (B) 2441 MHz (CH39) 6 dB Bandwidth

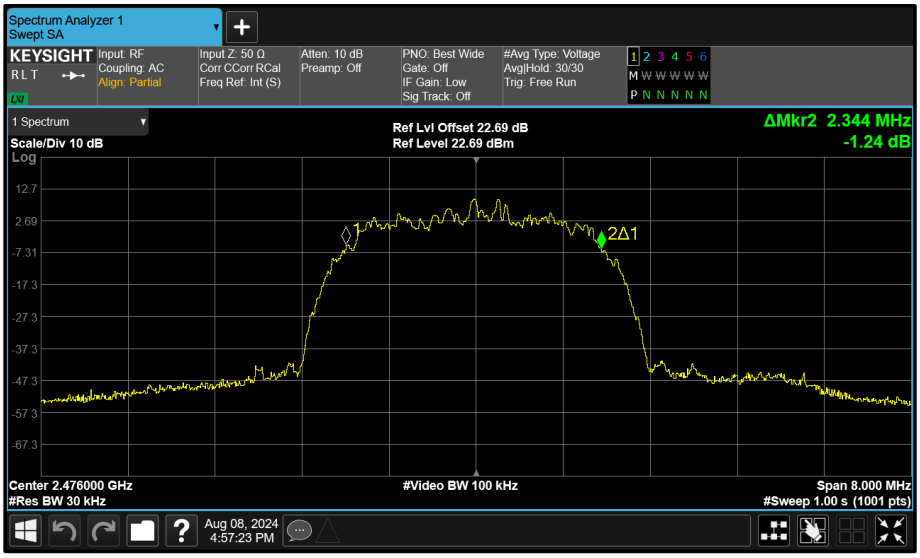

Figure 193 - Core 0 (A) 2476 MHz (CH74) 99% Bandwidth

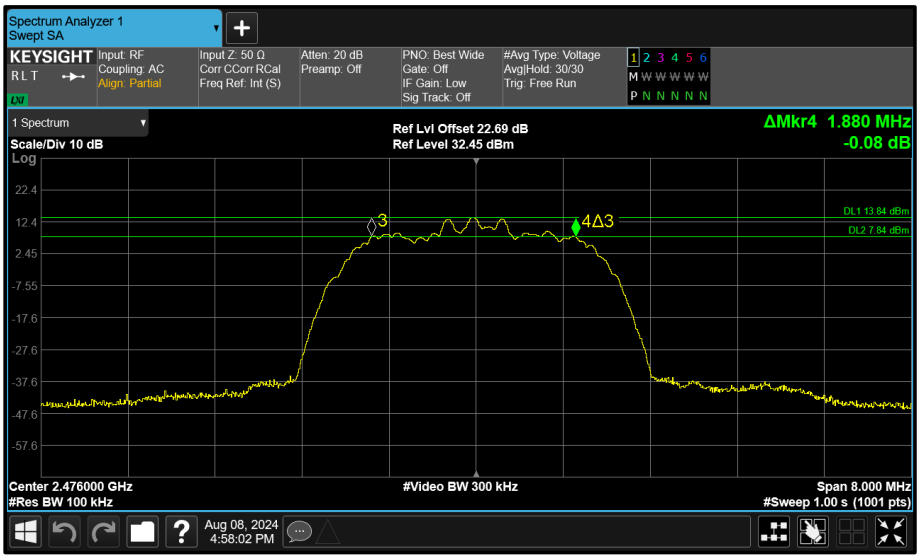

Figure 194 - Core 0 (A) 2476 MHz (CH74) 6 dB Bandwidth

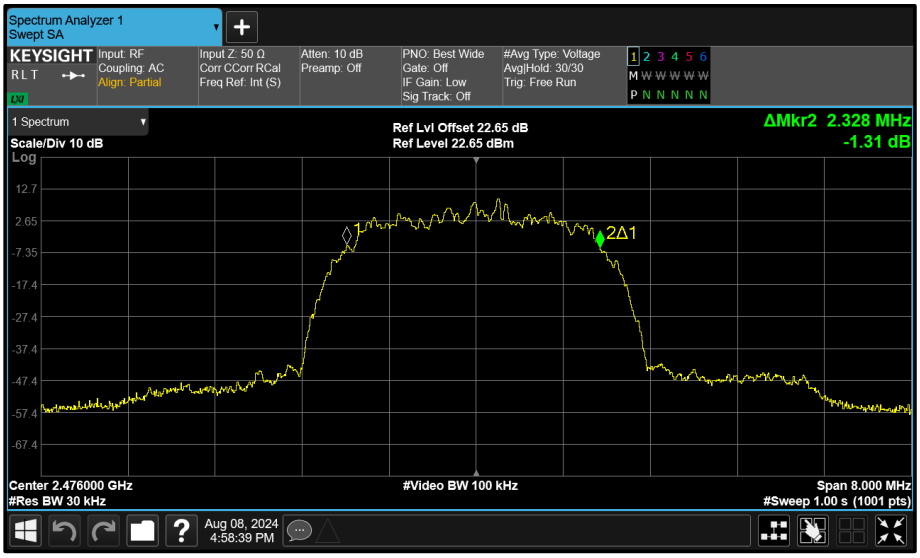

Figure 195 - Core 1 (B) 2476 MHz (CH74) 99% Bandwidth

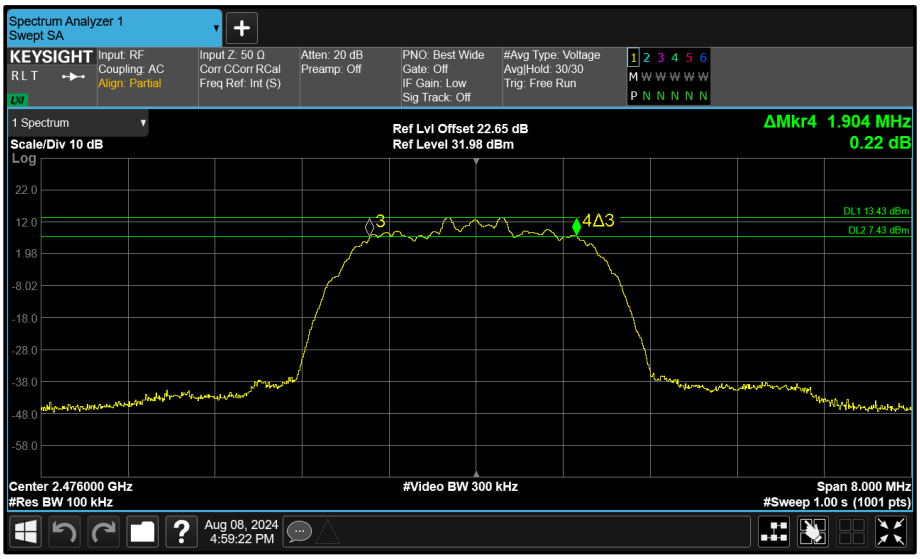

Figure 196 - Core 1 (B) 2476 MHz (CH74) 6 dB Bandwidth

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (a)(2) RSS-247 5.2 a)	Test Method(s):	C63.10 6.9.3 C63.10 11.8.1
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA π/4 DQPSK (8-DH5)	Duty Cycle (%):	-
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	-

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2404	1.020	1.020	-	-	≥500.0
2441	0.660	1.035	-	-	≥500.0
2476	0.675	1.035	-	-	≥500.0

Table 51 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2404	4.710	4.620	-	-	-
2441	4.710	4.635	-	-	-
2476	4.695	4.635	-	-	-

Table 52 - 99% Bandwidth Results

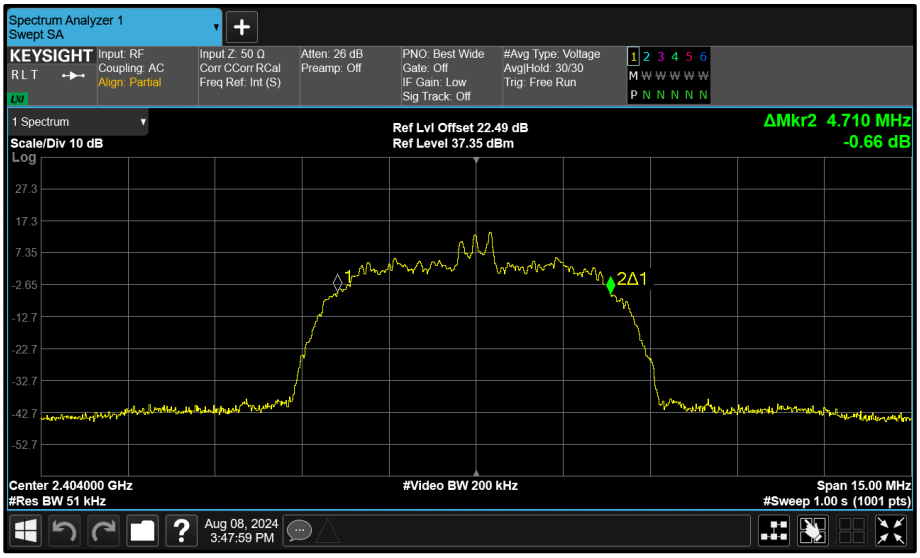

Figure 197 - Core 0 (A) 2404 MHz (CH2) 99% Bandwidth

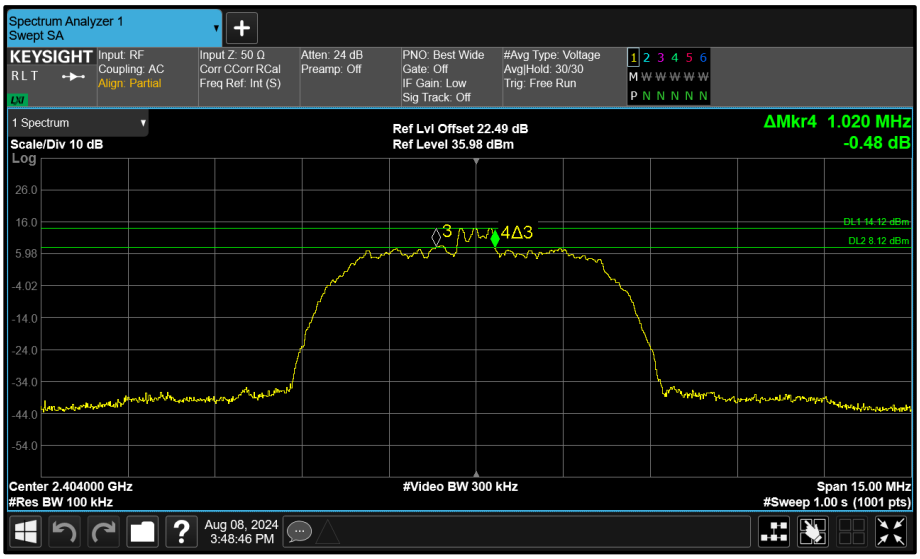

Figure 198 - Core 0 (A) 2404 MHz (CH2) 6 dB Bandwidth

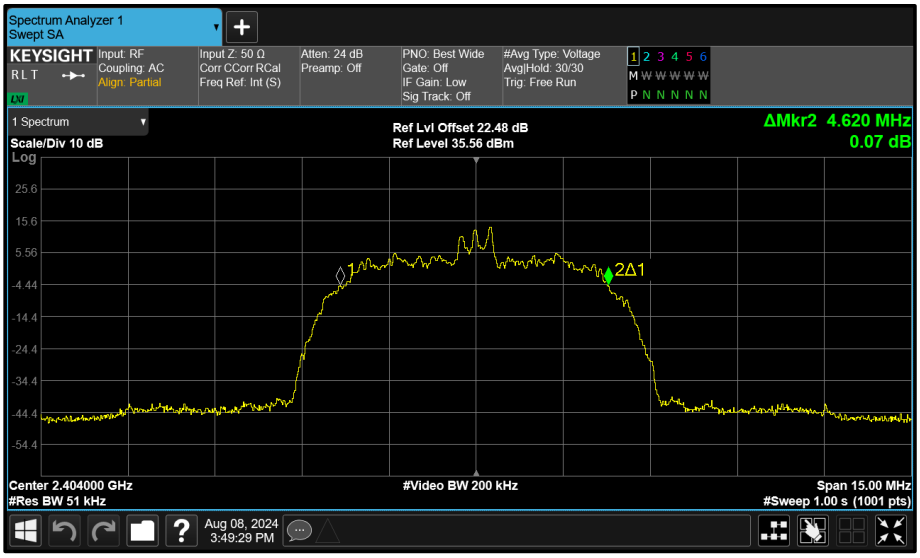

Figure 199 - Core 1 (B) 2404 MHz (CH2) 99% Bandwidth

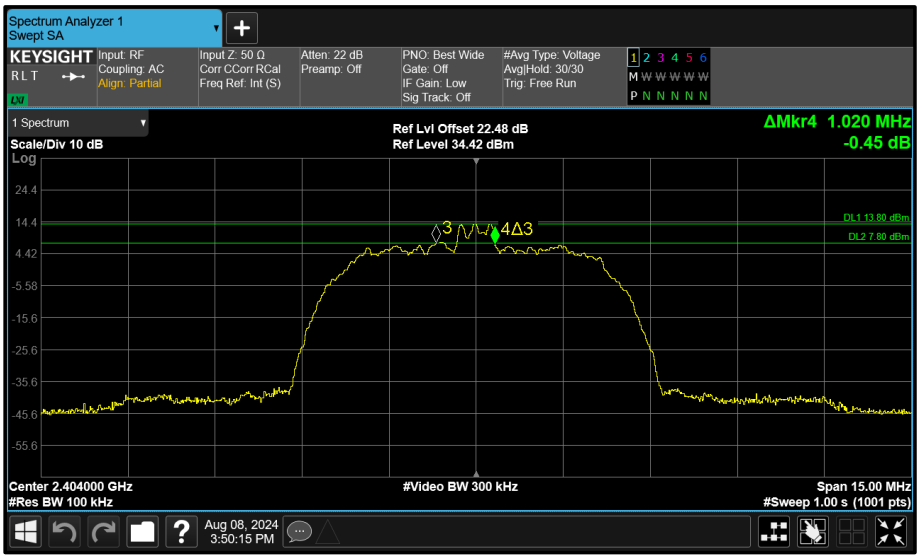

Figure 200 - Core 1 (B) 2404 MHz (CH2) 6 dB Bandwidth

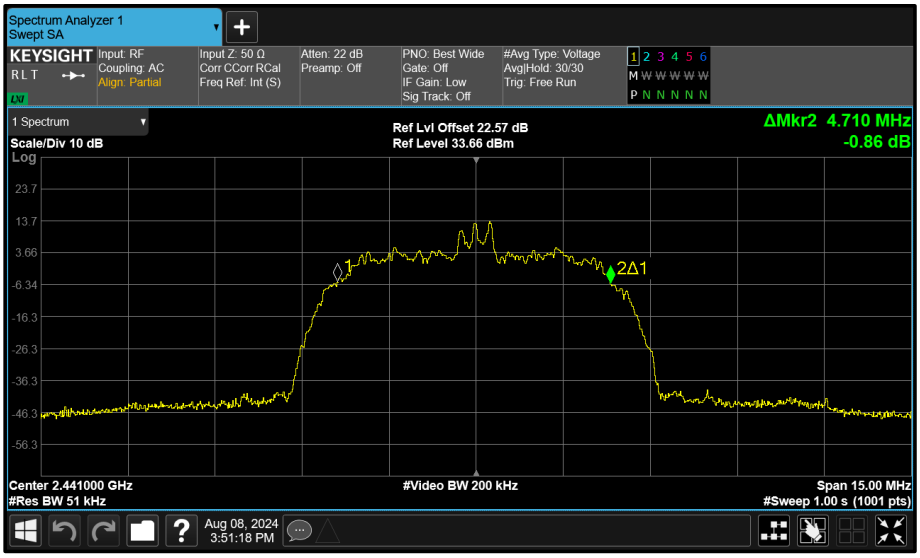

Figure 201 - Core 0 (A) 2441 MHz (CH39) 99% Bandwidth

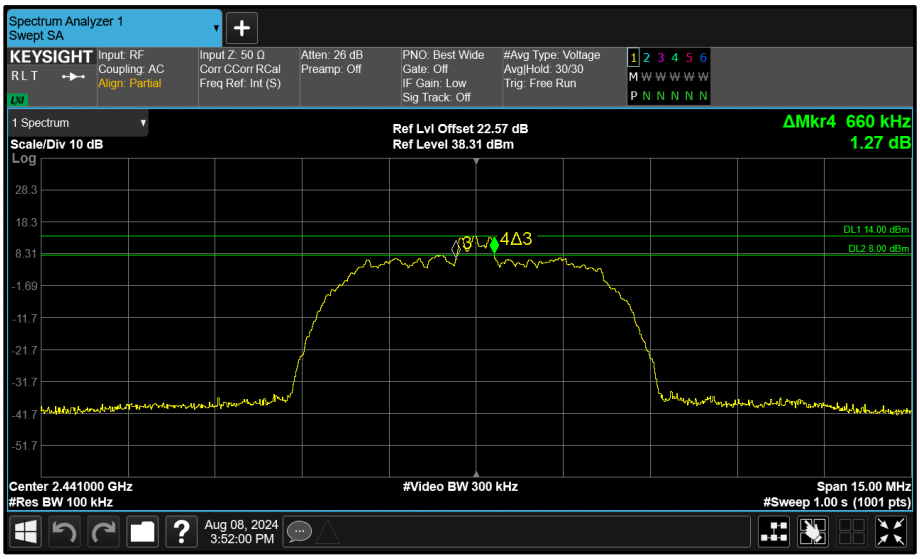

Figure 202 - Core 0 (A) 2441 MHz (CH39) 6 dB Bandwidth

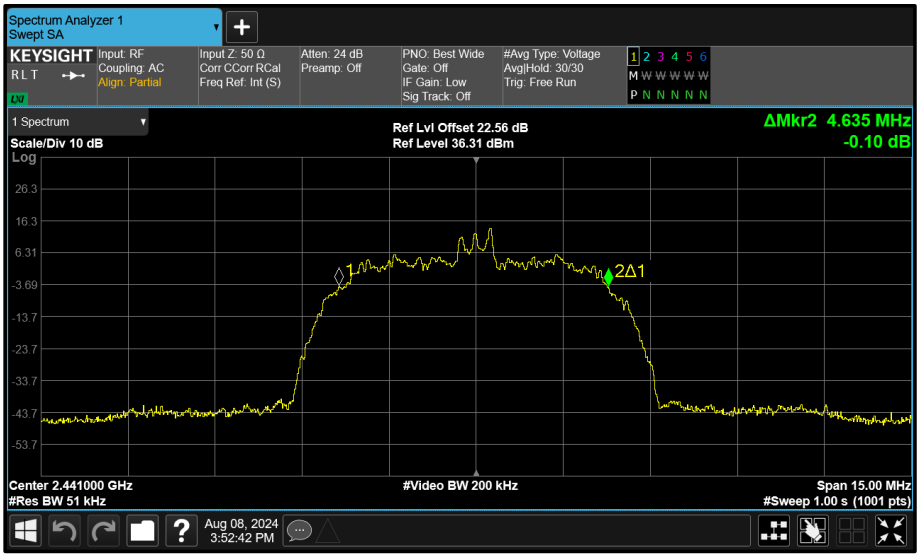

Figure 203 - Core 1 (B) 2441 MHz (CH39) 99% Bandwidth

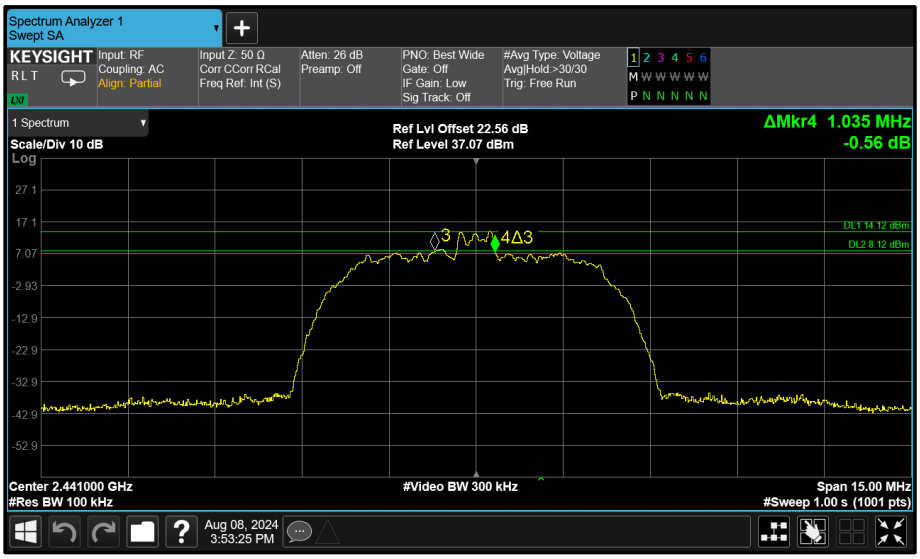

Figure 204 - Core 1 (B) 2441 MHz (CH39) 6 dB Bandwidth

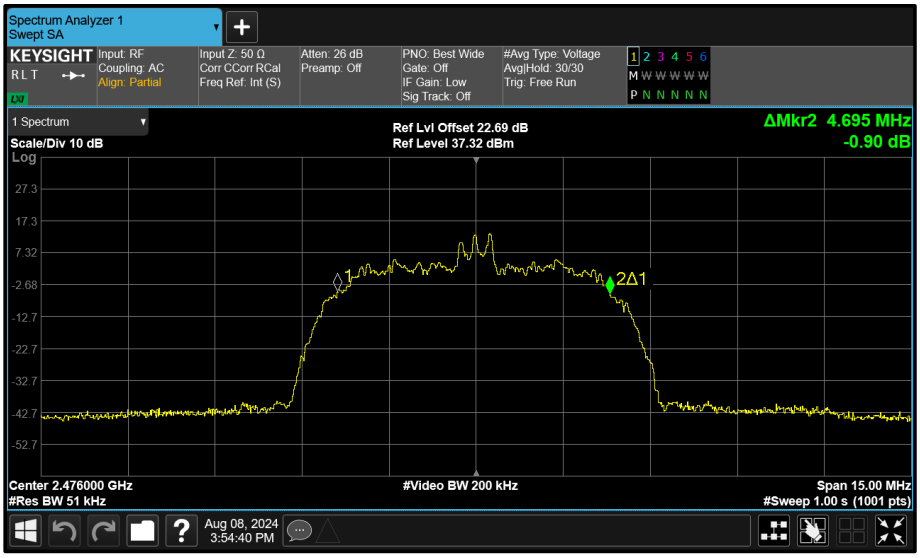

Figure 205 - Core 0 (A) 2476 MHz (CH74) 99% Bandwidth

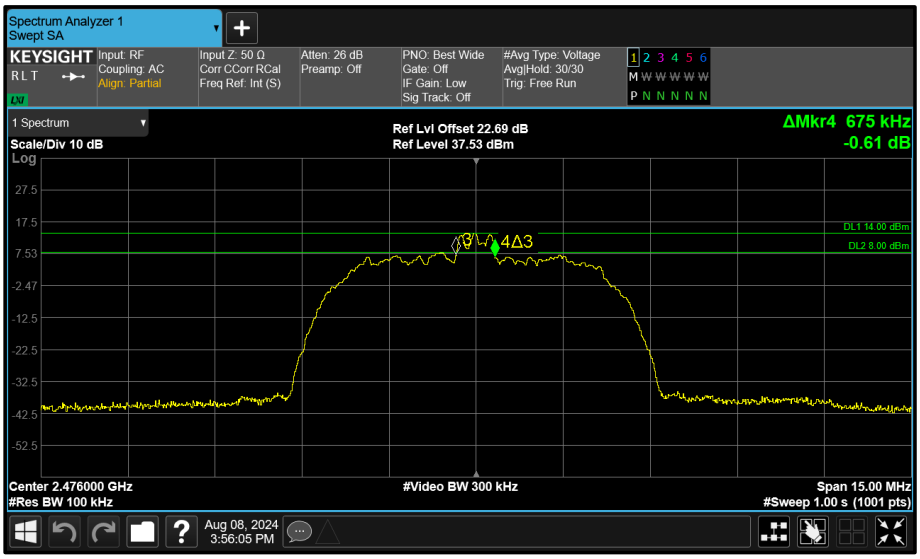

Figure 206 - Core 0 (A) 2476 MHz (CH74) 6 dB Bandwidth

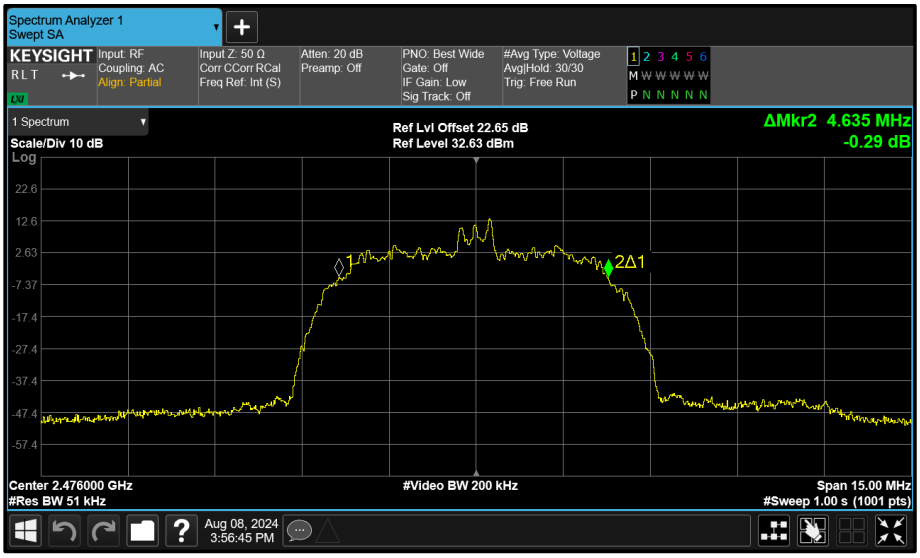

Figure 207 - Core 1 (B) 2476 MHz (CH74) 99% Bandwidth

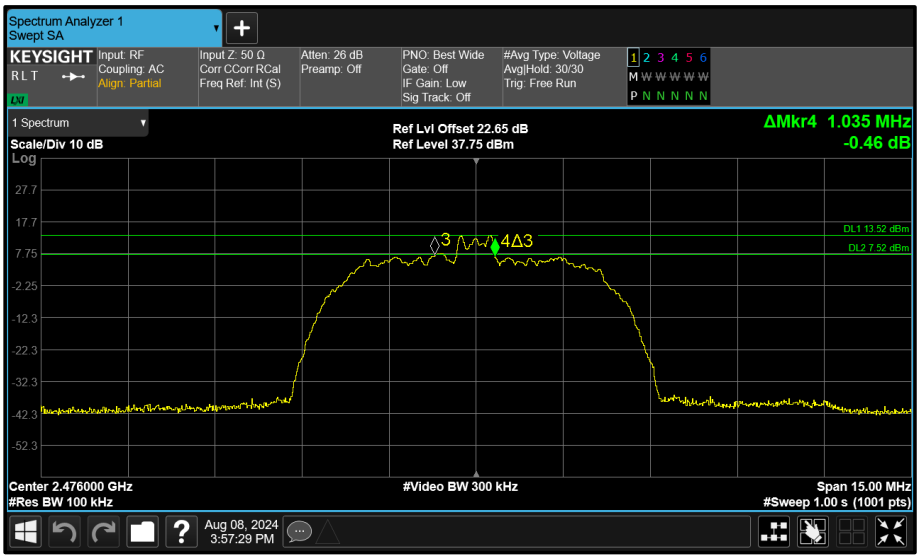

Figure 208 - Core 1 (B) 2476 MHz (CH74) 6 dB Bandwidth

FCC 47 CFR Part 15, Limit Clause 15.247(a)(2) and ISED RSS-247, Clause 5.2(a)

The minimum 6 dB Bandwidth shall be at least 500 kHz.

2.2.7 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 14.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Hygrometer	Rotronic	I-1000	3068	12	07-Nov-2024
1500VA AC Power Supply	iTech	IT7324	5907	-	O/P Mon
MXA Signal Analyser	Keysight Technologies	N9020B	5919	24	18-Mar-2026
Digital Multimeter	Fluke	115	6145	12	06-Jun-2025
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6519	12	08-Feb-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6520	12	09-Feb-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6521	12	09-Feb-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6522	12	09-Feb-2025

Table 53

O/P Mon - Output Monitored using calibrated equipment

2.3 Maximum Conducted Output Power

2.3.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.247 (b)
ISED RSS-247, Clause 5.4
ISED RSS-GEN, Clause 6.12

2.3.2 Equipment Under Test and Modification State

A3238, S/N: G76H79FX4L - Modification State 0

2.3.3 Date of Test

26-July-2024 to 02-August-2024

2.3.4 Test Method

The test was performed in accordance with ANSI C63.10 clause 11.9.1.2 Method PKPM1.

MIMO output port summing was performed in accordance with KDB 662911 D01. Directional Gain was calculated in accordance with clause F)2)f)(ii) using the calculations from F)2)f)(i) with worst-case individual gain and an array gain of zero.

2.3.5 Environmental Conditions

Ambient Temperature	20.3 - 22.5 °C
Relative Humidity	57.5 - 60.8 %

2.3.6 Test Results

2.4 GHz Bluetooth LE/HDR

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.1
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	1.80

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2404	8.99	-	-	-	-	30.00	-21.01
2441	8.83	-	-	-	-	30.00	-21.17
2476	9.07	-	-	-	-	30.00	-20.93

Table 54 - 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	∑					
2404	8.99	-	-	-	-	30.00	-21.01	10.79	36.00	-25.21
2441	8.83	-	-	-	-	30.00	-21.17	10.63	36.00	-25.37
2476	9.07	-	-	-	-	30.00	-20.93	10.87	36.00	-25.13

Table 55 - 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)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA π/4 DQPSK (8-DH5)	Duty Cycle (%):	78.2
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	1.80

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2404	9.07	-	-	-	-	30.00	-20.93
2441	9.21	-	-	-	-	30.00	-20.79
2476	9.25	-	-	-	-	30.00	-20.75

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	∑					
2404	9.07	-	-	-	-	30.00	-20.93	10.87	36.00	-25.13
2441	9.21	-	-	-	-	30.00	-20.79	11.01	36.00	-24.99
2476	9.25	-	-	-	-	30.00	-20.75	11.05	36.00	-24.95

Table 57 - 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)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA GFSK (LE 1M)	Duty Cycle (%):	60.5
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	1.80

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2402	8.86	-	-	-	-	30.00	-21.14
2440	8.63	-	-	-	-	30.00	-21.37
2480	8.66	-	-	-	-	30.00	-21.34

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	∑					
2402	8.86	-	-	-	-	30.00	-21.14	10.66	36.00	-25.34
2440	8.63	-	-	-	-	30.00	-21.37	10.43	36.00	-25.57
2480	8.66	-	-	-	-	30.00	-21.34	10.46	36.00	-25.54

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)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA GFSK (LE 2M)	Duty Cycle (%):	31.4
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	1.80

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2402	9.15	-	-	-	-	30.00	-20.85
2440	8.80	-	-	-	-	30.00	-21.20
2480	8.78	-	-	-	-	30.00	-21.22

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	∑					
2402	9.15	-	-	-	-	30.00	-20.85	10.95	36.00	-25.05
2440	8.80	-	-	-	-	30.00	-21.20	10.60	36.00	-25.40
2480	8.78	-	-	-	-	30.00	-21.22	10.58	36.00	-25.42

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)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.2
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	C (Core 2)	Peak Antenna Gain (dBi):	0.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2404	-	-	9.02	-	-	30.00	-20.98
2441	-	-	8.97	-	-	30.00	-21.03
2476	-	-	8.91	-	-	30.00	-21.09

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	∑					
2404	-	-	9.02	-	-	30.00	-20.98	9.22	36.00	-26.78
2441	-	-	8.97	-	-	30.00	-21.03	9.17	36.00	-26.83
2476	-	-	8.91	-	-	30.00	-21.09	9.11	36.00	-26.89

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)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA π/4 DQPSK (8-DH5)	Duty Cycle (%):	78.3
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	C (Core 2)	Peak Antenna Gain (dBi):	0.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2404	-	-	8.99	-	-	30.00	-21.01
2441	-	-	9.04	-	-	30.00	-20.96
2476	-	-	9.14	-	-	30.00	-20.86

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	∑					
2404	-	-	8.99	-	-	30.00	-21.01	9.19	36.00	-26.81
2441	-	-	9.04	-	-	30.00	-20.96	9.24	36.00	-26.76
2476	-	-	9.14	-	-	30.00	-20.86	9.34	36.00	-26.66

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)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA GFSK (LE 1M)	Duty Cycle (%):	60.8
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	C (Core 2)	Peak Antenna Gain (dBi):	0.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2402	-	-	8.11	-	-	30.00	-21.89
2440	-	-	8.64	-	-	30.00	-21.36
2480	-	-	9.32	-	-	30.00	-20.68

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	∑					
2402	-	-	8.11	-	-	30.00	-21.89	8.31	36.00	-27.69
2440	-	-	8.64	-	-	30.00	-21.36	8.84	36.00	-27.16
2480	-	-	9.32	-	-	30.00	-20.68	9.52	36.00	-26.48

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)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA GFSK (LE 2M)	Duty Cycle (%):	31.5
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	C (Core 2)	Peak Antenna Gain (dBi):	0.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2402	-	-	8.37	-	-	30.00	-21.63
2440	-	-	8.74	-	-	30.00	-21.26
2480	-	-	9.40	-	-	30.00	-20.60

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	∑					
2402	-	-	8.37	-	-	30.00	-21.63	8.57	36.00	-27.43
2440	-	-	8.74	-	-	30.00	-21.26	8.94	36.00	-27.06
2480	-	-	9.40	-	-	30.00	-20.60	9.60	36.00	-26.40

Table 69 - 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)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.1
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	1.80

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2404	17.84	-	-	-	-	30.00	-12.16
2441	18.11	-	-	-	-	30.00	-11.89
2476	18.03	-	-	-	-	30.00	-11.97

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	∑					
2404	17.84	-	-	-	-	30.00	-12.16	19.64	36.00	-16.36
2441	18.11	-	-	-	-	30.00	-11.89	19.91	36.00	-16.09
2476	18.03	-	-	-	-	30.00	-11.97	19.83	36.00	-16.17

Table 71 - 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)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA π/4 DQPSK (8-DH5)	Duty Cycle (%):	78.2
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	1.80

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2404	18.29	-	-	-	-	30.00	-11.71
2441	18.01	-	-	-	-	30.00	-11.99
2476	18.20	-	-	-	-	30.00	-11.80

Table 72 - 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	∑					
2404	18.29	-	-	-	-	30.00	-11.71	20.09	36.00	-15.91
2441	18.01	-	-	-	-	30.00	-11.99	19.81	36.00	-16.19
2476	18.20	-	-	-	-	30.00	-11.80	20.00	36.00	-16.00

Table 73 - 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)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA GFSK (LE 1M)	Duty Cycle (%):	60.5
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	1.80

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2402	13.98	-	-	-	-	30.00	-16.02
2440	13.53	-	-	-	-	30.00	-16.47
2480	13.53	-	-	-	-	30.00	-16.47

Table 74 - 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	∑					
2402	13.98	-	-	-	-	30.00	-16.02	15.78	36.00	-20.22
2440	13.53	-	-	-	-	30.00	-16.47	15.33	36.00	-20.67
2480	13.53	-	-	-	-	30.00	-16.47	15.33	36.00	-20.67

Table 75 - 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)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA GFSK (LE 2M)	Duty Cycle (%):	31.4
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	1.80

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2402	13.71	-	-	-	-	30.00	-16.29
2440	13.56	-	-	-	-	30.00	-16.44
2480	13.50	-	-	-	-	30.00	-16.50

Table 76 - 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	∑					
2402	13.71	-	-	-	-	30.00	-16.29	15.51	36.00	-20.49
2440	13.56	-	-	-	-	30.00	-16.44	15.36	36.00	-20.64
2480	13.50	-	-	-	-	30.00	-16.50	15.30	36.00	-20.70

Table 77 - 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)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	iPA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.1
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	4.47

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2404	8.83	9.04	-	-	11.95	30.00	-18.05
2441	8.93	8.93	-	-	11.94	30.00	-18.06
2476	8.98	8.87	-	-	11.93	30.00	-18.07

Table 78 - 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	∑					
2404	8.83	9.04	-	-	11.95	30.00	-18.05	16.39	36.00	-19.61
2441	8.93	8.93	-	-	11.94	30.00	-18.06	16.41	36.00	-19.59
2476	8.98	8.87	-	-	11.93	30.00	-18.07	16.42	36.00	-19.58

Table 79 - 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)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	iPA π/4 DQPSK (8-DH5)	Duty Cycle (%):	78.2
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	4.47

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2404	8.90	9.06	-	-	11.99	30.00	-18.01
2441	9.14	9.04	-	-	12.10	30.00	-17.90
2476	9.43	9.02	-	-	12.24	30.00	-17.76

Table 80 - 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	∑					
2404	8.90	9.06	-	-	11.99	30.00	-18.01	16.46	36.00	-19.54
2441	9.14	9.04	-	-	12.10	30.00	-17.90	16.57	36.00	-19.43
2476	9.43	9.02	-	-	12.24	30.00	-17.76	16.71	36.00	-19.29

Table 81 - 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)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	iPA GFSK (LE 1M)	Duty Cycle (%):	60.5
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	4.47

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2402	13.77	13.44	-	-	16.62	30.00	-13.38
2440	13.77	13.51	-	-	16.65	30.00	-13.35
2480	13.69	13.53	-	-	16.62	30.00	-13.38

Table 82 - 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	∑					
2402	13.77	13.44	-	-	16.62	30.00	-13.38	21.08	36.00	-14.92
2440	13.77	13.51	-	-	16.65	30.00	-13.35	21.12	36.00	-14.88
2480	13.69	13.53	-	-	16.62	30.00	-13.38	21.09	36.00	-14.91

Table 83 - 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)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	iPA GFSK (LE 2M)	Duty Cycle (%):	31.3
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	4.47

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2402	13.76	13.55	-	-	16.67	30.00	-13.33
2440	13.81	13.69	-	-	16.76	30.00	-13.24
2480	13.77	13.64	-	-	16.72	30.00	-13.28

Table 84 - 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	∑					
2402	13.76	13.55	-	-	16.67	30.00	-13.33	21.14	36.00	-14.86
2440	13.81	13.69	-	-	16.76	30.00	-13.24	21.23	36.00	-14.77
2480	13.77	13.64	-	-	16.72	30.00	-13.28	21.18	36.00	-14.82

Table 85 - 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)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	ePA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.1
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	4.47

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2404	17.94	18.14	-	-	21.05	30.00	-8.95
2441	17.66	18.00	-	-	20.84	30.00	-9.16
2476	18.09	18.12	-	-	21.11	30.00	-8.89

Table 86 - 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	∑					
2404	17.94	18.14	-	-	21.05	30.00	-8.95	25.52	36.00	-10.48
2441	17.66	18.00	-	-	20.84	30.00	-9.16	25.31	36.00	-10.69
2476	18.09	18.12	-	-	21.11	30.00	-8.89	25.58	36.00	-10.42

Table 87 - 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)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	ePA π/4 DQPSK (8-DH5)	Duty Cycle (%):	78.2
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	4.47

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2404	18.26	18.25	-	-	21.27	30.00	-8.73
2441	18.19	18.13	-	-	21.17	30.00	-8.83
2476	18.03	18.27	-	-	21.16	30.00	-8.84

Table 88 - 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	∑					
2404	18.26	18.25	-	-	21.27	30.00	-8.73	25.73	36.00	-10.27
2441	18.19	18.13	-	-	21.17	30.00	-8.83	25.64	36.00	-10.36
2476	18.03	18.27	-	-	21.16	30.00	-8.84	25.63	36.00	-10.37

Table 89 - ISED Maximum Conducted (peak) Output Power Results

FCC 47 CFR Part 15, Limit Clause 15.247 (b)(3)

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt.

ISED RSS-247, Limit Clause 5.4 (d)

For DTSs employing digital modulation techniques operating in the bands 902-928 MHz and 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1 W. The e.i.r.p. shall not exceed 4 W, except as provided in section 5.4(e) of the specification.

2.3.7 Test Location and Test Equipment Used

This test was carried out in RF Chamber 18.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Hygrometer	Rotronic	I-1000	3068	12	07-Nov-2024
AC Programmable Power Supply	iTech	IT7324	5225	-	O/P Mon
USB Power Sensor	Boonton	RTP5008	5820	12	07-Feb-2025
USB Power Sensor	Boonton	RTP5008	5821	12	07-Feb-2025
USB Power Sensor	Boonton	RTP5008	5822	12	08-Feb-2025
Digital Multimeter	Fluke	115	6145	12	06-Jun-2025
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6426	12	07-Feb-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6752	12	06-Feb-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6753	12	06-Feb-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6754	0	06-Feb-2025

Table 90

O/P Mon - Output Monitored using calibrated equipment

2.4 Authorised Band Edges

2.4.1 Specification Reference

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

2.4.2 Equipment Under Test and Modification State

A3238, S/N: NQMK2V7Q9C - Modification State 0
A3238, S/N: N4N7KFP797 - Modification State 0

2.4.3 Date of Test

07-June-2024 to 12-June-2024

2.4.4 Test Method

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

2.4.5 Environmental Conditions

Ambient Temperature	22.1 - 23.7 °C
Relative Humidity	39.6 - 46.6 %

2.4.6 Test Results

iPA - Core 0 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	HDR4	2404	2400	-51.86
Static	HDR8	2404	2400	-42.41
Static	LE1M	2402	2400	-59.40
Static	LE2M	2402	2400	-31.73
Hopping	HDR4	Hopping	2400	-42.64
Hopping	HDR8	Hopping	2400	-40.53

Table 91 - SISO Authorised Band Edge Results

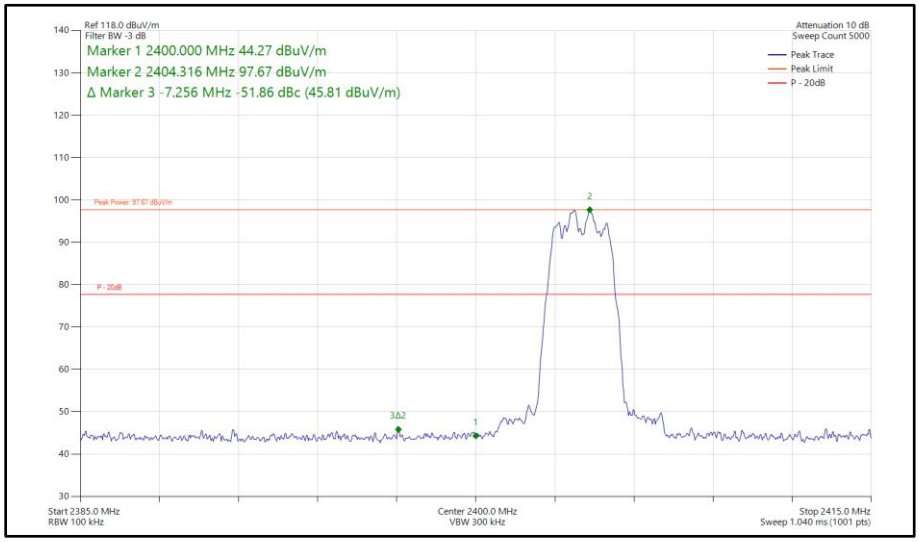

Figure 209 - Bluetooth HDR4, SISO, Core 0 - 2404 MHz Band Edge Frequency 2400 MHz

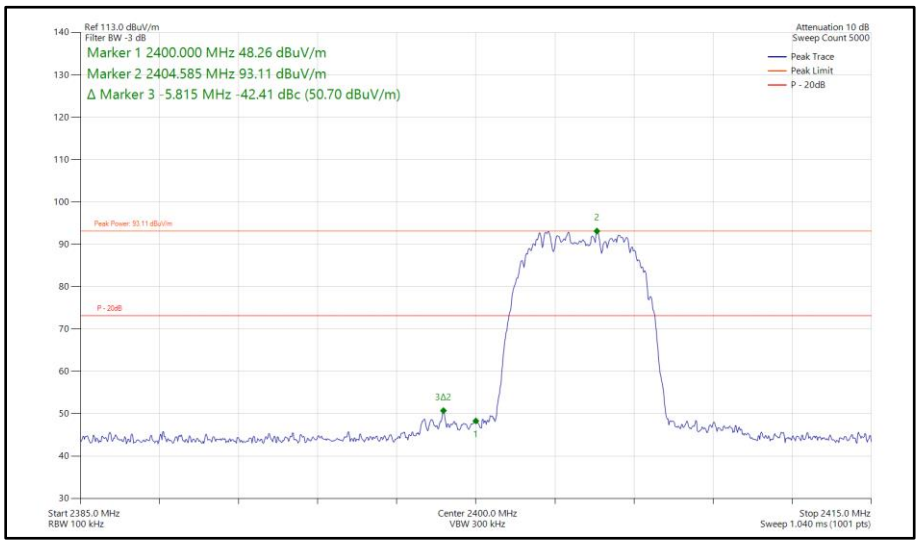

Figure 210 - Bluetooth HDR8, SISO, Core 0 - 2404 MHz
Band Edge Frequency 2400 MHz

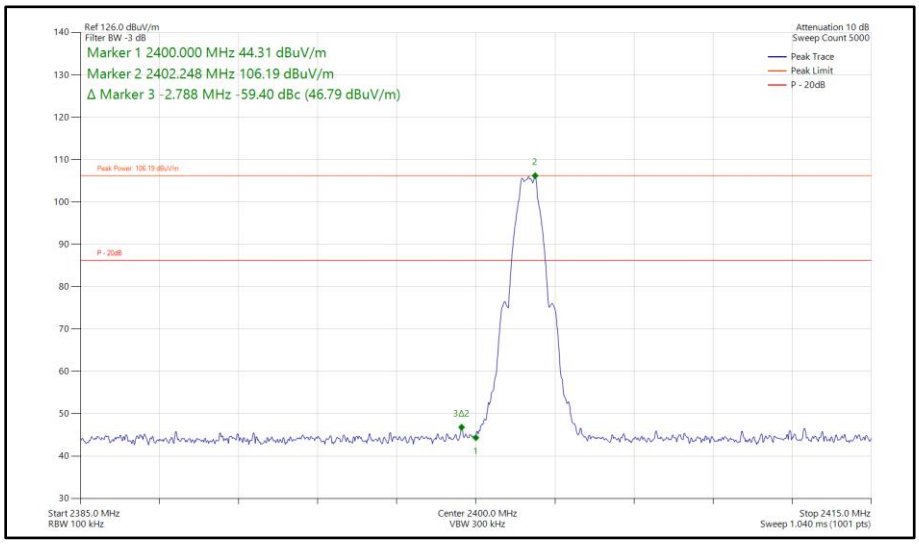

Figure 211 - Bluetooth LE1M, SISO, Core 0 - 2402 MHz
Band Edge Frequency 2400 MHz

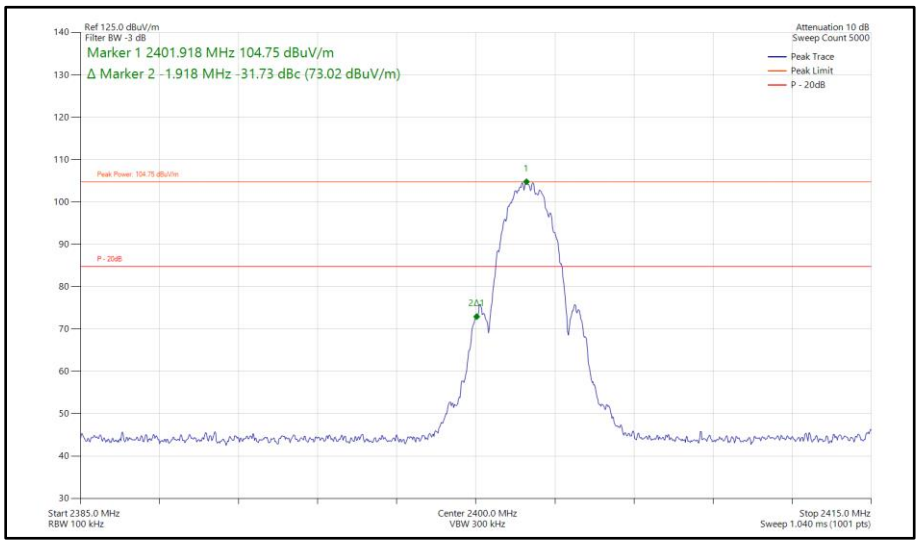

Figure 212 - Bluetooth LE2M, SISO, Core 0 - 2402 MHz
Band Edge Frequency 2400 MHz

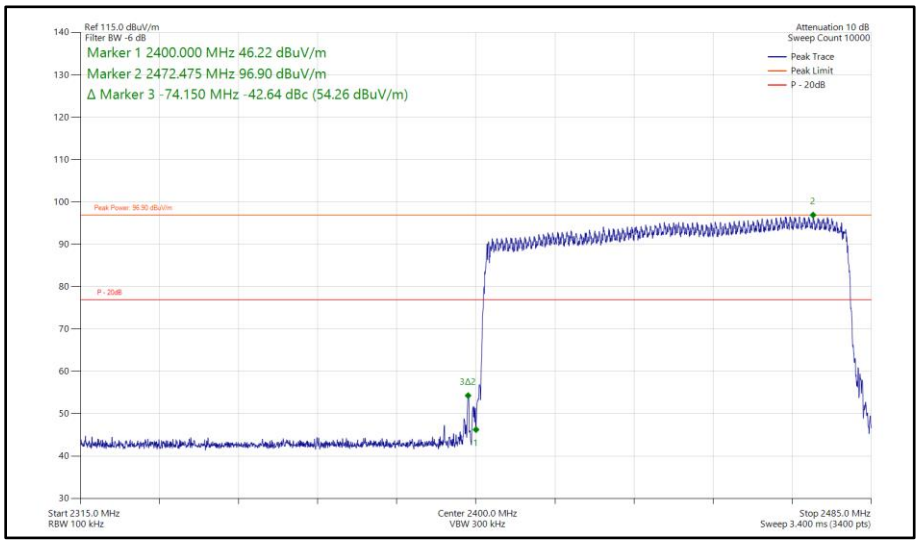

Figure 213 - Bluetooth HDR4, SISO, Core 0 - Hopping
Band Edge Frequency 2400 MHz

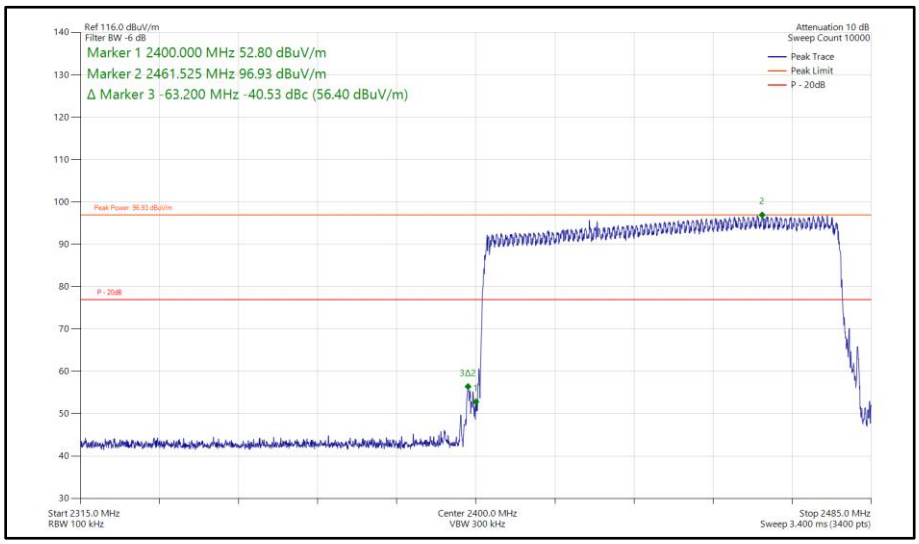

Figure 214 - Bluetooth HDR8, SISO, Core 0 - Hopping Band Edge Frequency 2400 MHz

iPA - Core 1 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	HDR4	2404	2400	-49.47
Static	HDR8	2404	2400	-41.46
Static	LE1M	2402	2400	-58.07
Static	LE2M	2402	2400	-30.18
Hopping	HDR4	Hopping	2400	-54.61
Hopping	HDR8	Hopping	2400	-55.25

Table 92 - SISO Authorised Band Edge Results

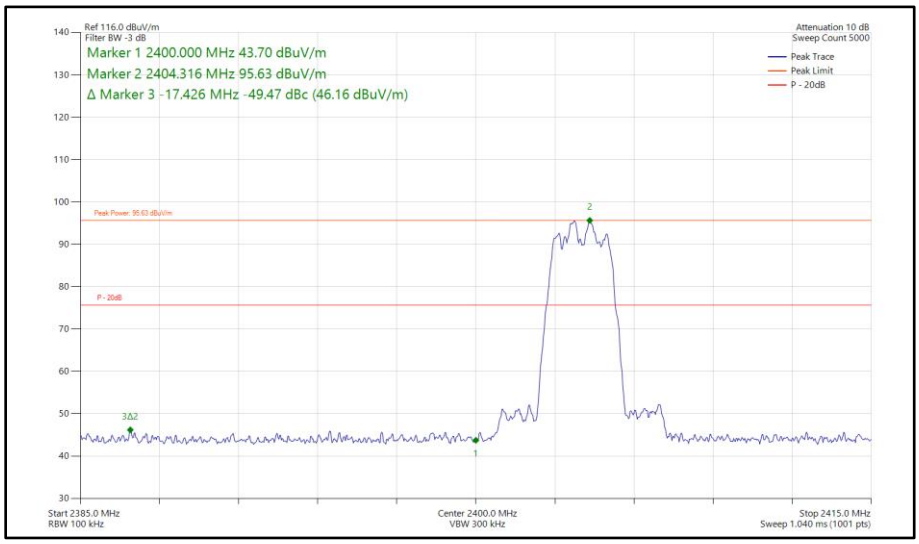

Figure 215 - Bluetooth HDR4, SISO, Core 1 - 2404 MHz Band Edge Frequency 2400 MHz

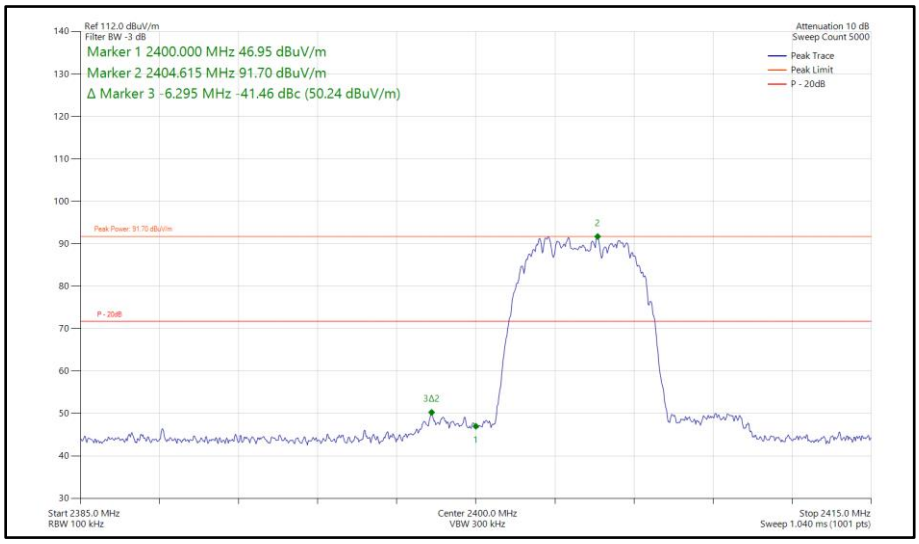

Figure 216 - Bluetooth HDR8, SISO, Core 1 - 2404 MHz Band Edge Frequency 2400 MHz

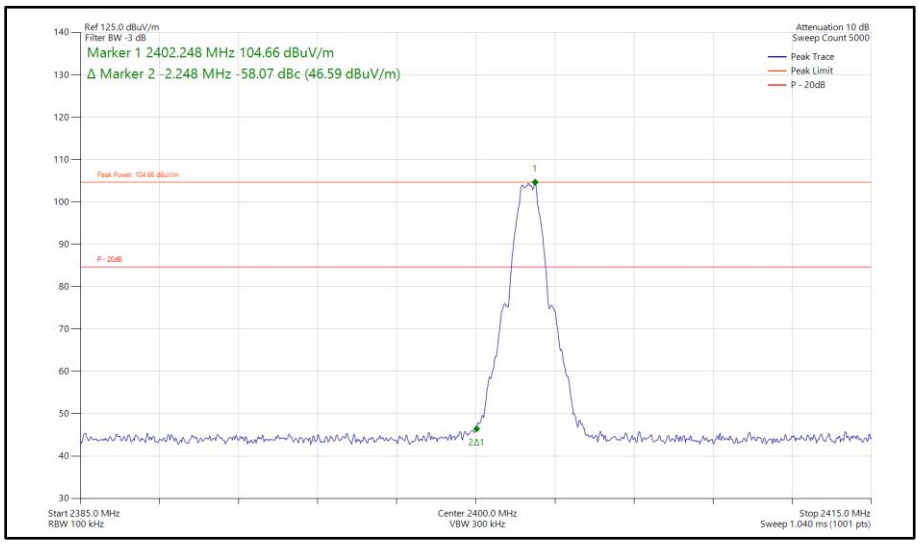

Figure 217 - Bluetooth LE1M, SISO, Core 1 - 2402 MHz Band Edge Frequency 2400 MHz

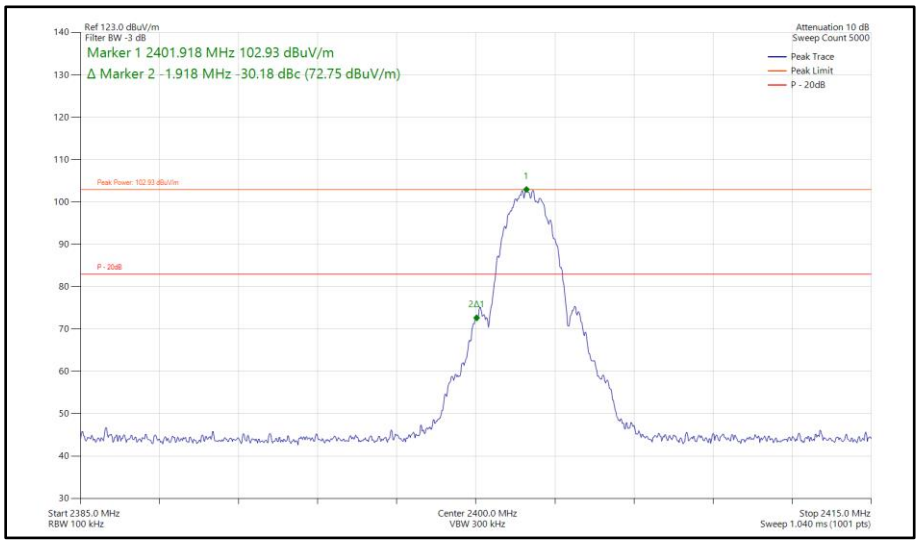

Figure 218 - Bluetooth LE2M, SISO, Core 1 - 2402 MHz Band Edge Frequency 2400 MHz

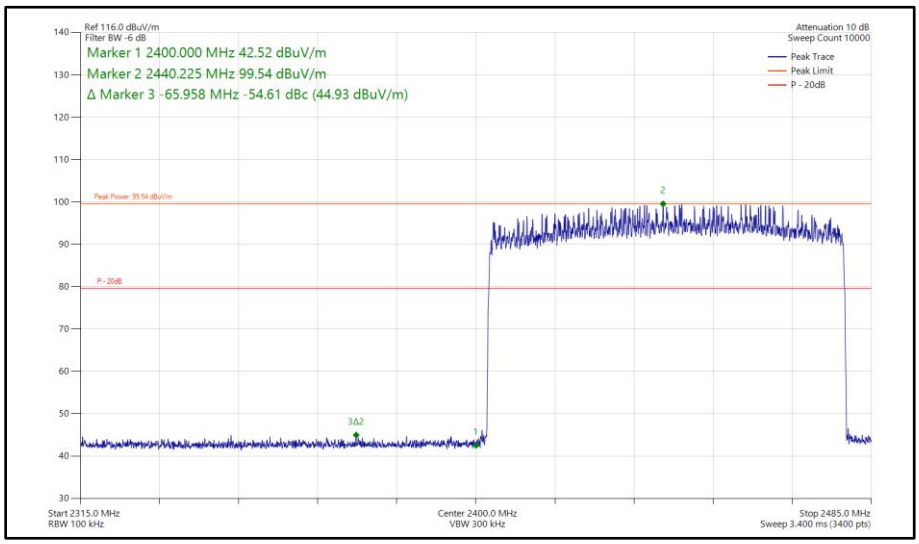

Figure 219 - Bluetooth HDR4, SISO, Core 1 - Hopping Band Edge Frequency 2400 MHz

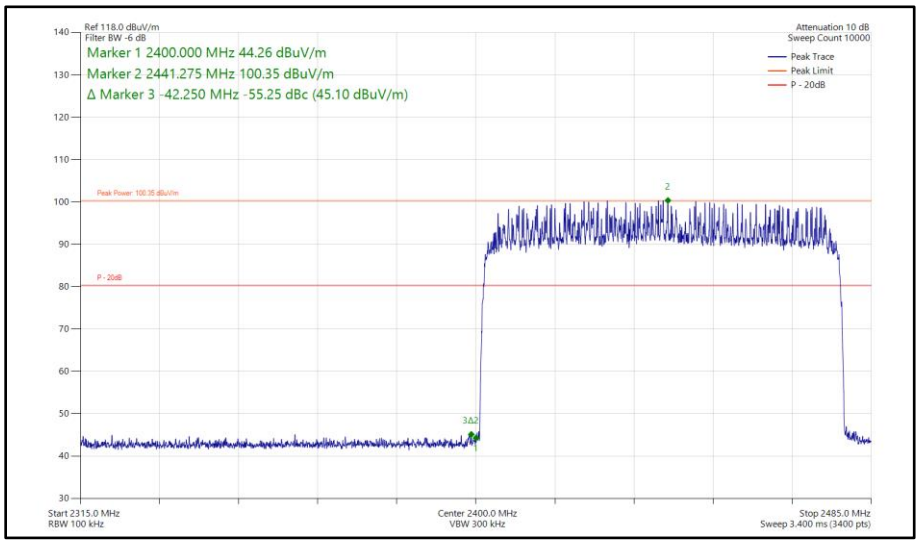

Figure 220 - Bluetooth HDR8, SISO, Core 1 - Hopping Band Edge Frequency 2400 MHz

iPA - Core 2 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	HDR4	2404	2400	-48.82
Static	HDR8	2404	2400	-41.22
Static	LE1M	2402	2400	-59.69
Static	LE2M	2402	2400	-31.12
Hopping	HDR4	Hopping	2400	-51.63
Hopping	HDR8	Hopping	2400	-50.70

Table 93 - SISO Authorised Band Edge Results

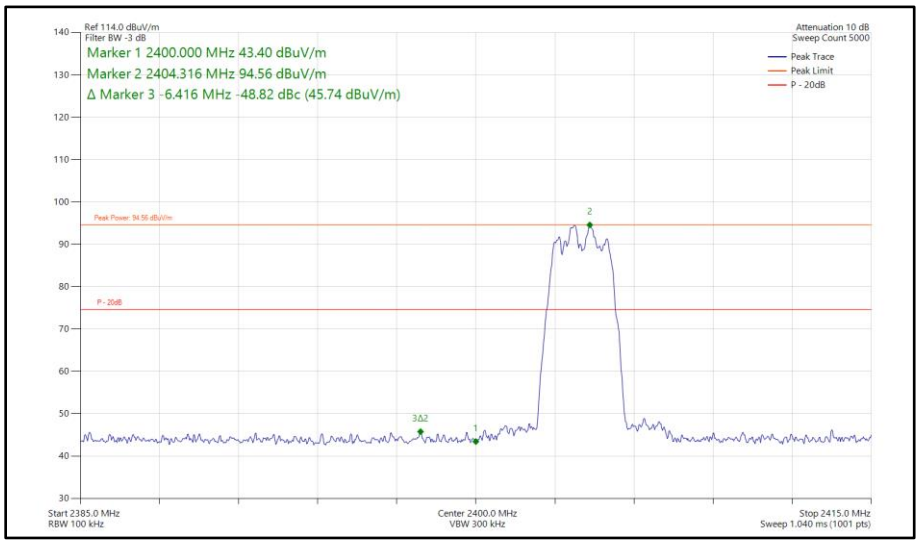

Figure 221 - Bluetooth HDR4, SISO, Core 2 - 2404 MHz Band Edge Frequency 2400 MHz

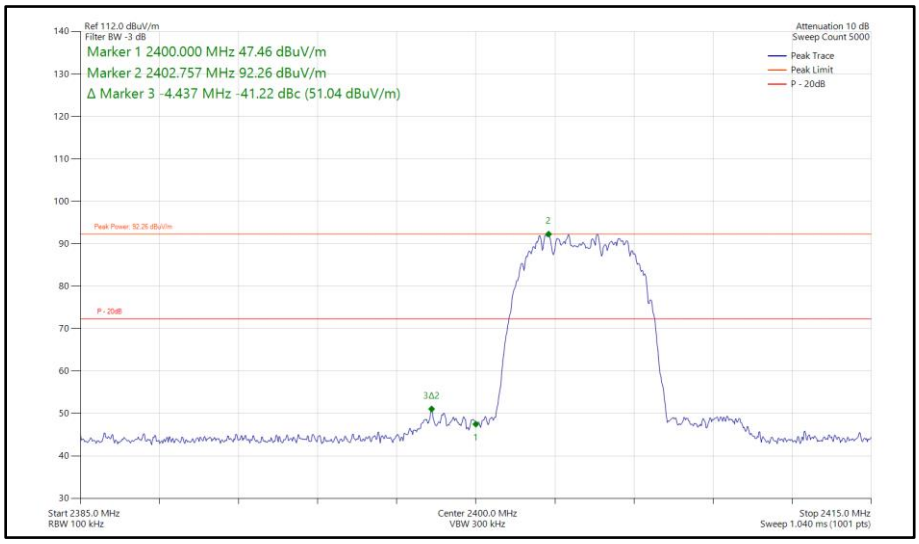

Figure 222 - Bluetooth HDR8, SISO, Core 2 - 2404 MHz Band Edge Frequency 2400 MHz

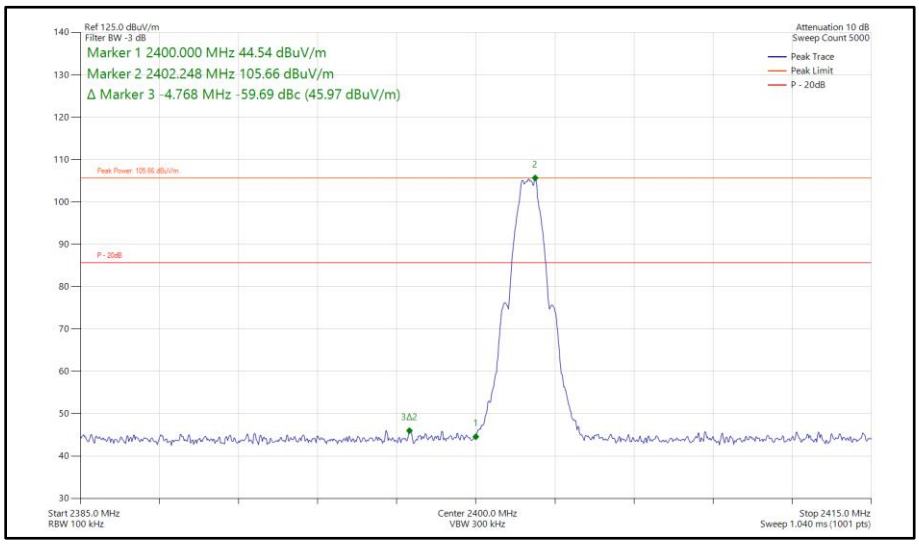

Figure 223 - Bluetooth LE1M, SISO, Core 2 - 2402 MHz Band Edge Frequency 2400 MHz

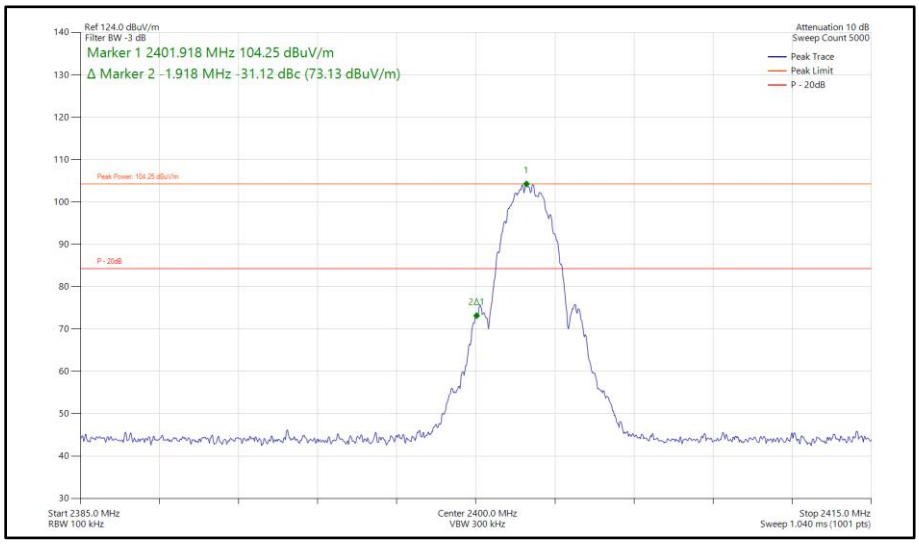

Figure 224 - Bluetooth LE2M, SISO, Core 2 - 2402 MHz Band Edge Frequency 2400 MHz

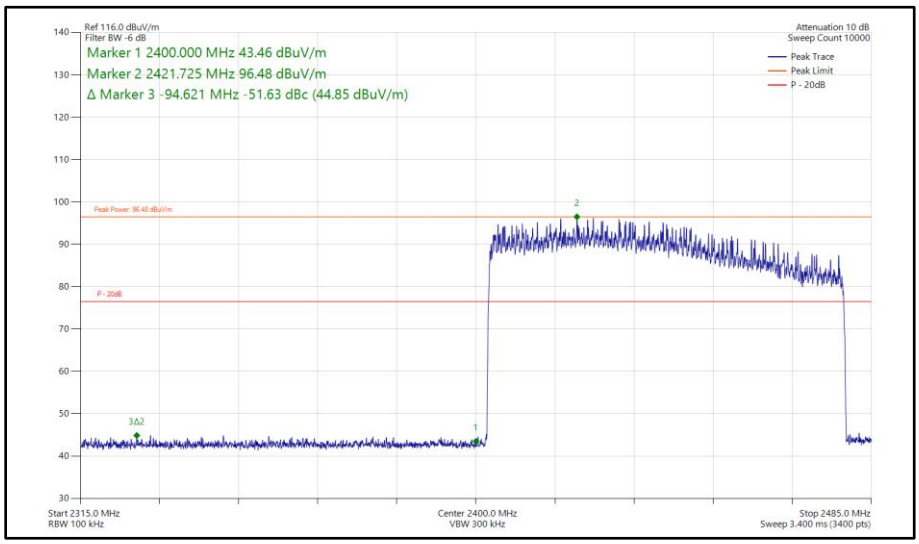

Figure 225 - Bluetooth HDR4, SISO, Core 2 - Hopping Band Edge Frequency 2400 MHz

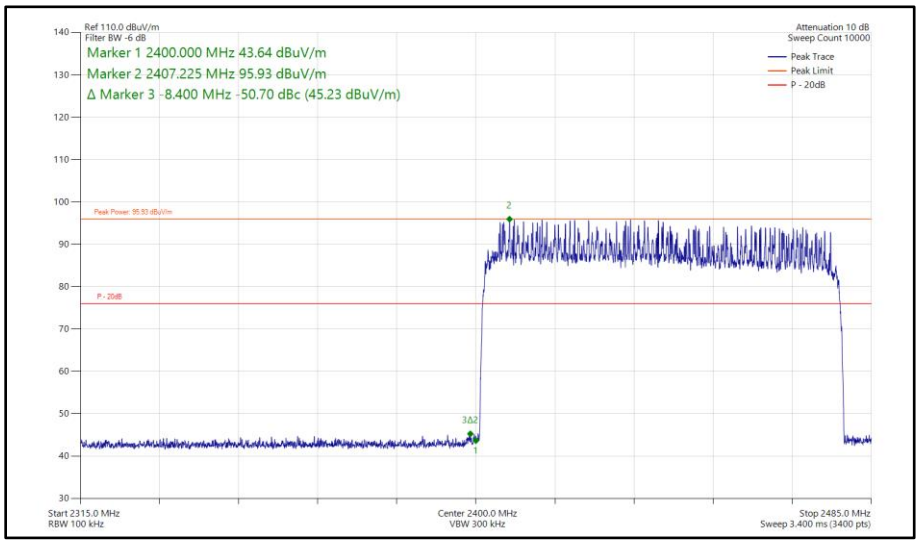

Figure 226 - Bluetooth HDR8, SISO, Core 2 - Hopping Band Edge Frequency 2400 MHz

iPA - Core 0-1 (MIMO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	HDR4	2404	2400	-54.49
Static	HDR8	2404	2400	-43.52
Static	LE1M	2402	2400	-62.75
Static	LE2M	2402	2400	-31.97
Hopping	HDR4	Hopping	2400	-58.27
Hopping	HDR8	Hopping	2400	-53.80

Table 94 - MIMO Authorised Band Edge Results

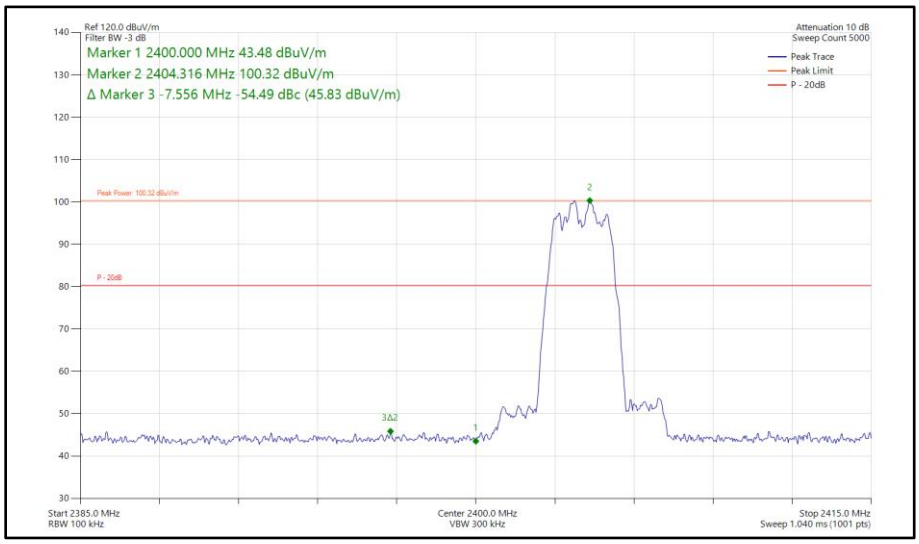

Figure 227 - Bluetooth HDR4, MIMO, Core 0-1 - 2404 MHz Band Edge Frequency 2400 MHz

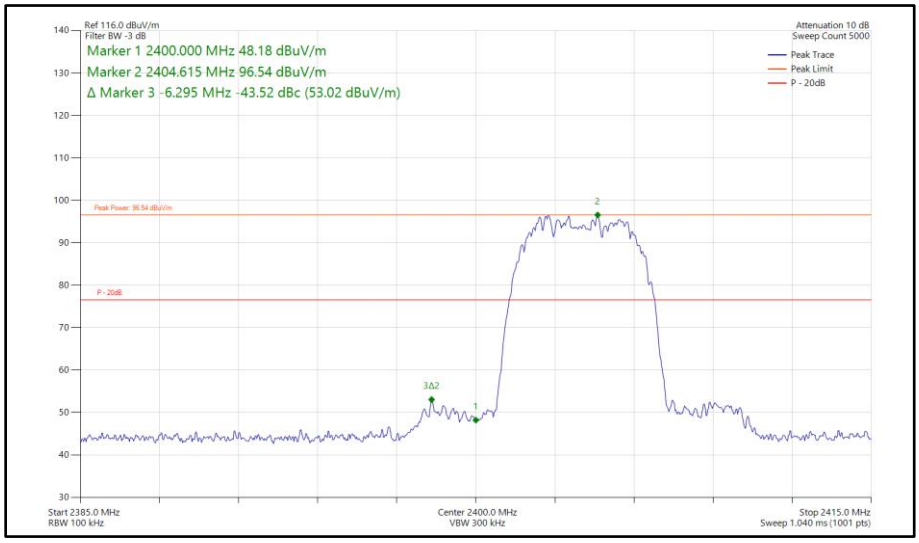

Figure 228 - Bluetooth HDR8, MIMO, Core 0-1 - 2404 MHz Band Edge Frequency 2400 MHz

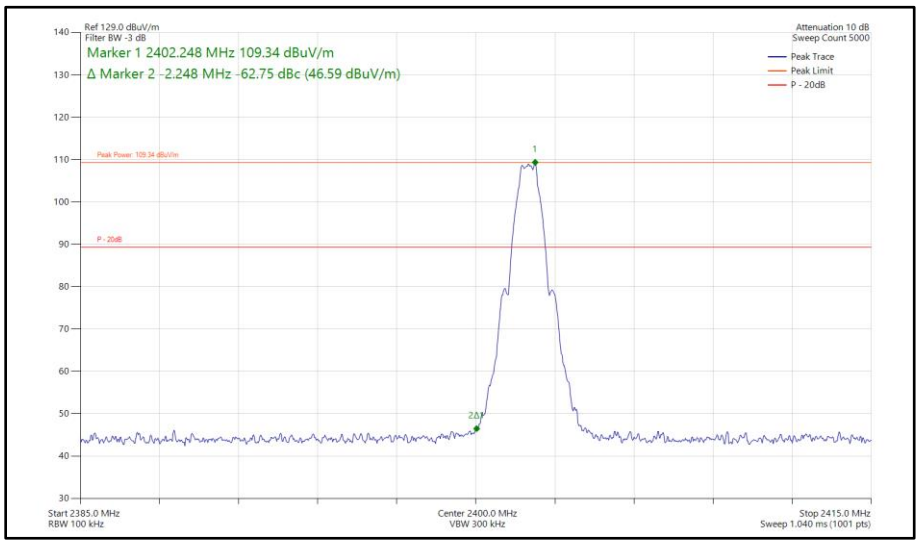

Figure 229 - Bluetooth LE1M, MIMO, Core 0-1 - 2402 MHz Band Edge Frequency 2400 MHz

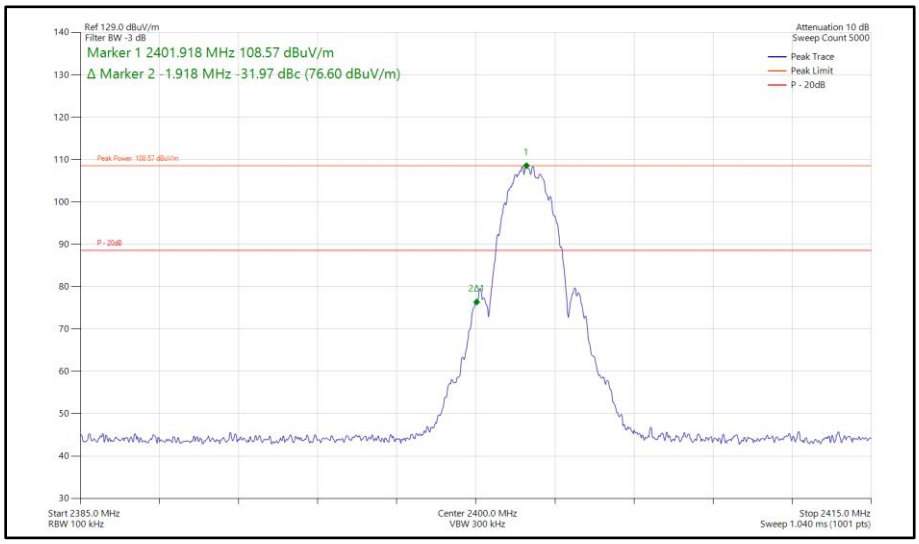

Figure 230 - Bluetooth LE2M, MIMO, Core 0-1 - 2402 MHz Band Edge Frequency 2400 MHz

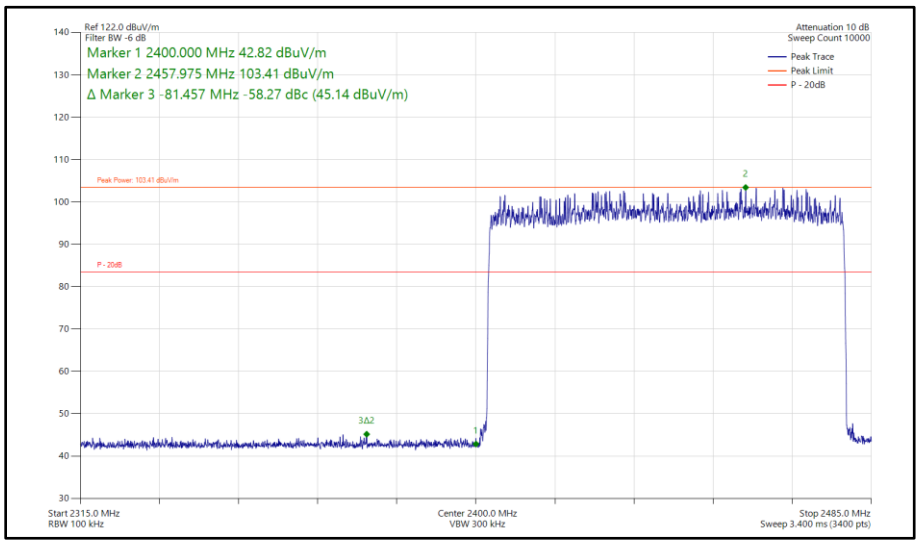

Figure 231 - Bluetooth HDR4, MIMO, Core 0-1 - Hopping Band Edge Frequency 2400 MHz

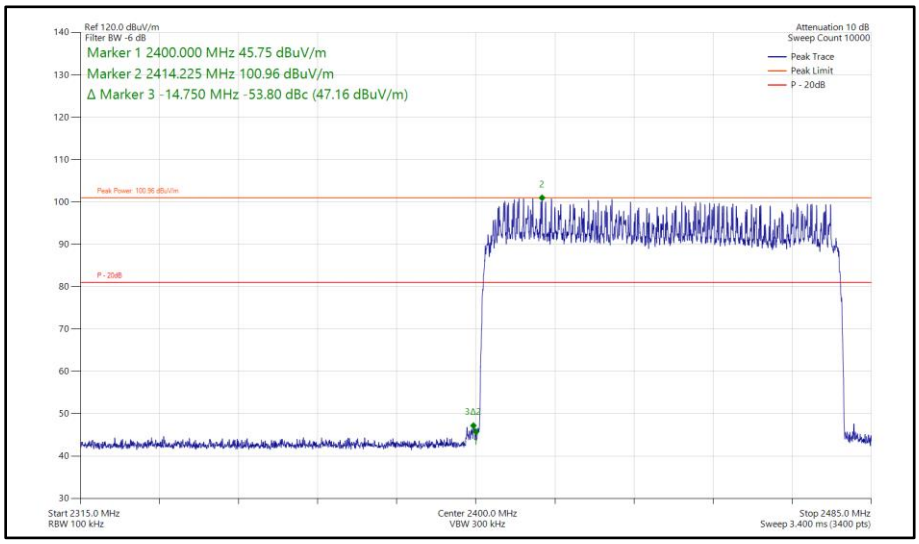

Figure 232 - Bluetooth HDR8, MIMO, Core 0-1 - Hopping Band Edge Frequency 2400 MHz

ePA - Core 0 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	HDR4	2404	2400	-56.78
Static	HDR8	2404	2400	-42.21
Static	LE1M	2402	2400	-63.35
Static	LE2M	2402	2400	-34.24
Hopping	HDR4	Hopping	2400	-48.36
Hopping	HDR8	Hopping	2400	-42.93

Table 95 - SISO Authorised Band Edge Results

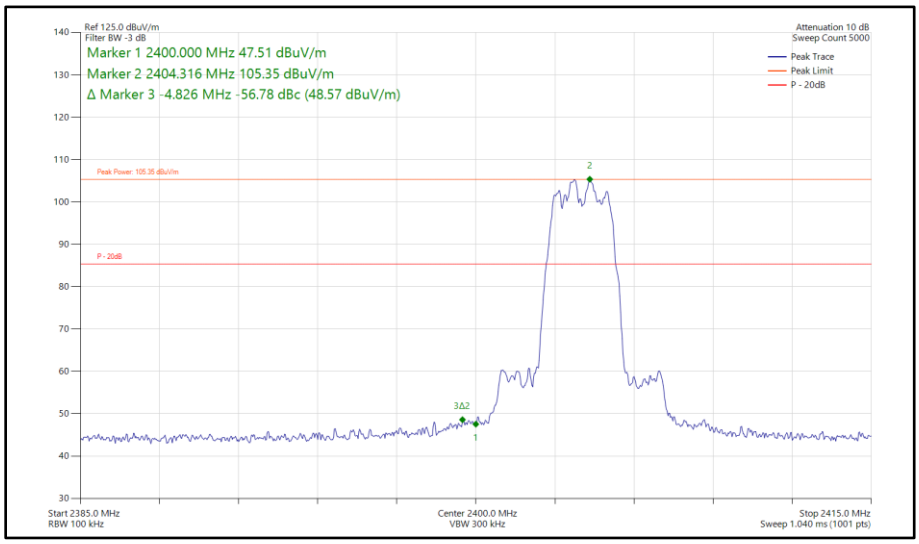

Figure 233 - Bluetooth HDR4, SISO, Core 0 - 2404 MHz Band Edge Frequency 2400 MHz

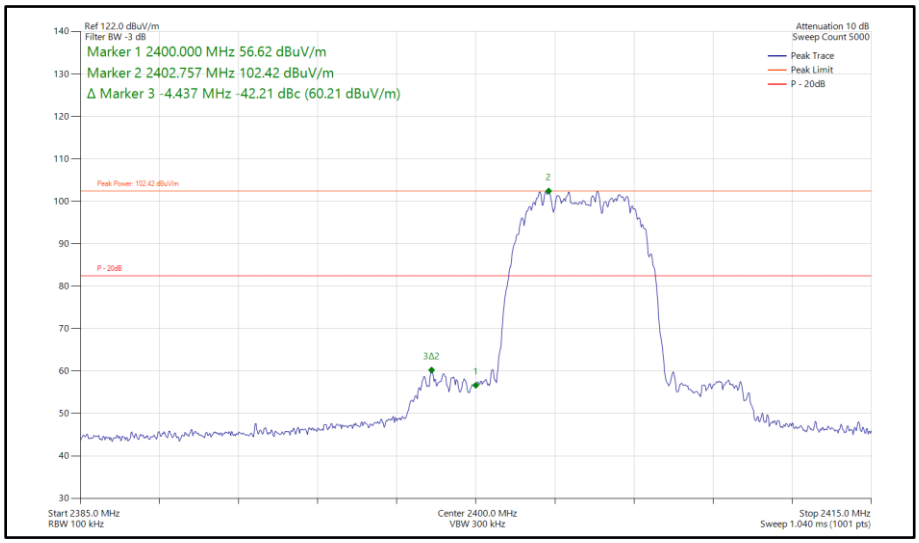

Figure 234 - Bluetooth HDR8, SISO, Core 0 - 2404 MHz Band Edge Frequency 2400 MHz

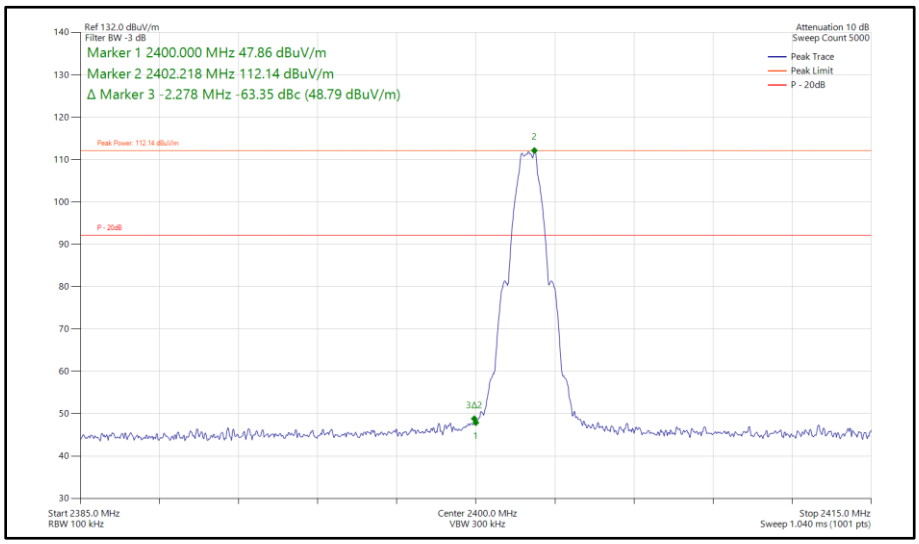

Figure 235 - Bluetooth LE1M, SISO, Core 0 - 2402 MHz Band Edge Frequency 2400 MHz

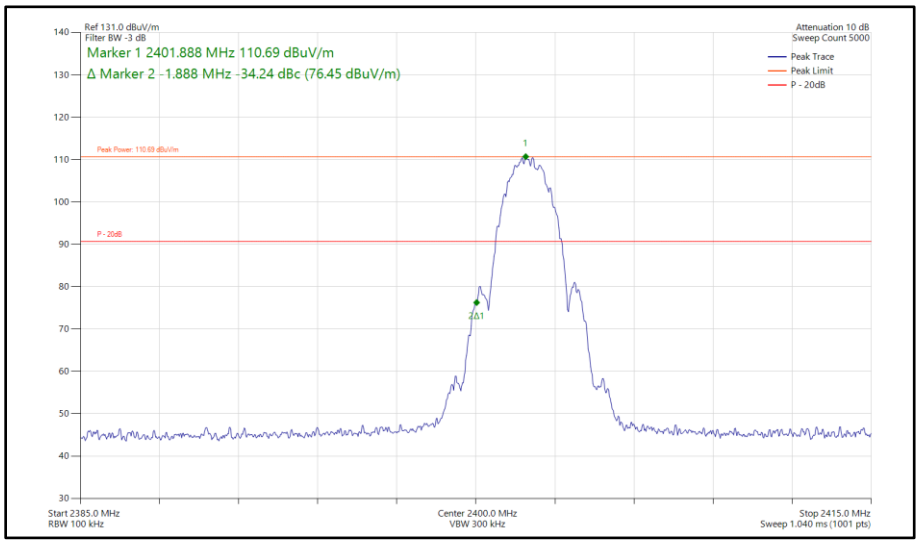

Figure 236 - Bluetooth LE2M, SISO, Core 0 - 2402 MHz Band Edge Frequency 2400 MHz

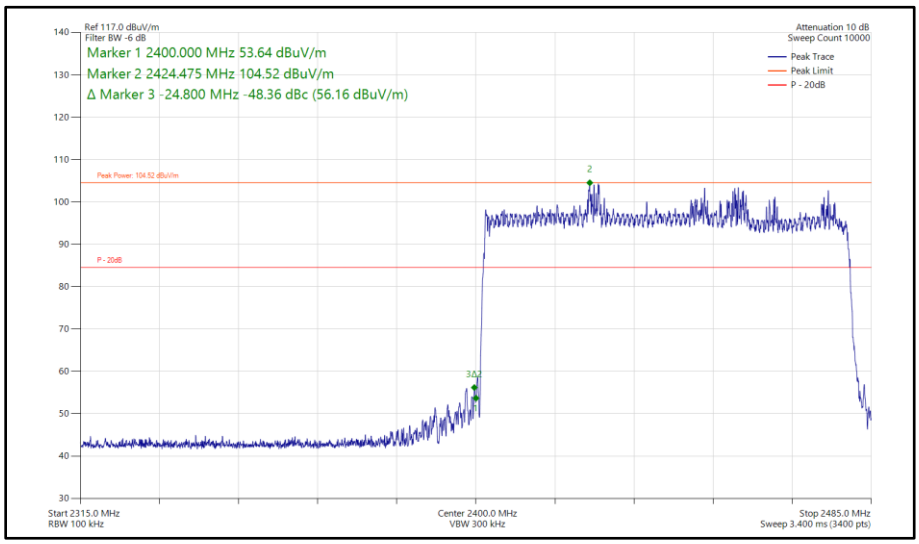

Figure 237 - Bluetooth HDR4, SISO, Core 0 - Hopping Band Edge Frequency 2400 MHz

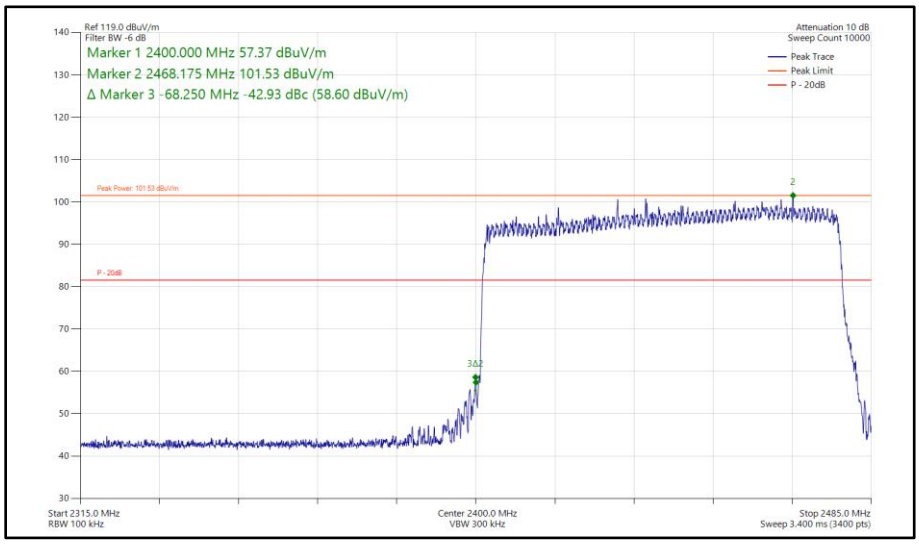

Figure 238 - Bluetooth HDR8, SISO, Core 0 - Hopping Band Edge Frequency 2400 MHz

ePA - Core 1 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	HDR4	2404	2400	-56.18
Static	HDR8	2404	2400	-41.72
Static	LE1M	2402	2400	-62.45
Static	LE2M	2402	2400	-34.28
Hopping	HDR4	Hopping	2400	-61.93
Hopping	HDR8	Hopping	2400	-52.59

Table 96 - SISO Authorised Band Edge Results

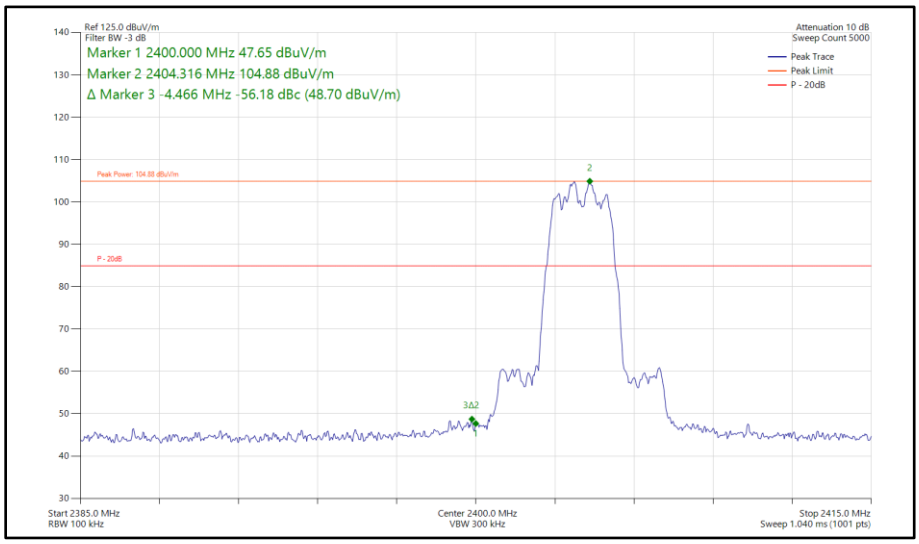

Figure 239 - Bluetooth HDR4, SISO, Core 1 - 2404 MHz Band Edge Frequency 2400 MHz

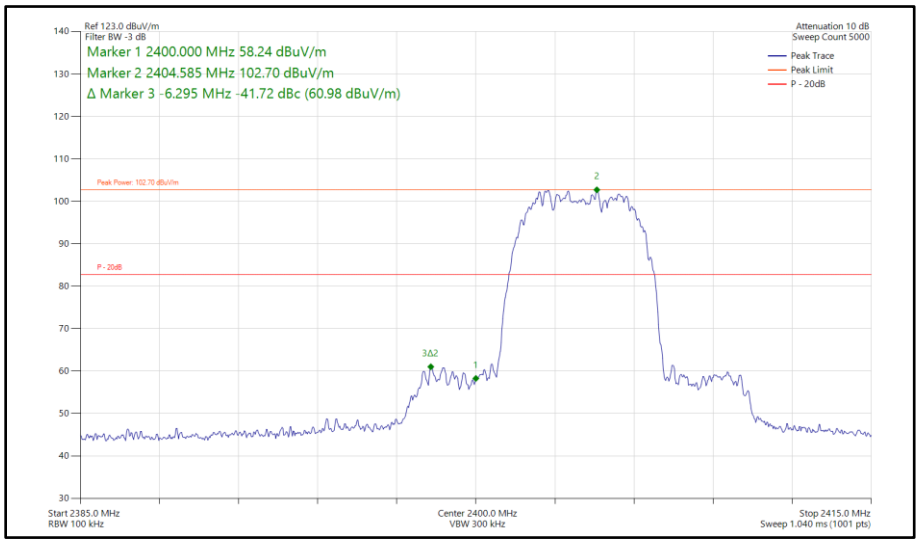

Figure 240 - Bluetooth HDR8, SISO, Core 1 - 2404 MHz Band Edge Frequency 2400 MHz

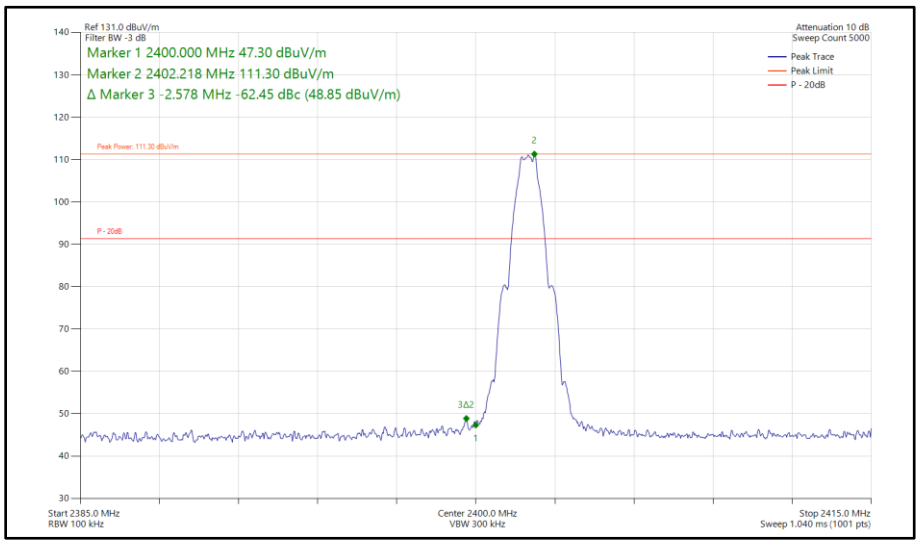

Figure 241 - Bluetooth LE1M, SISO, Core 1 - 2402 MHz Band Edge Frequency 2400 MHz

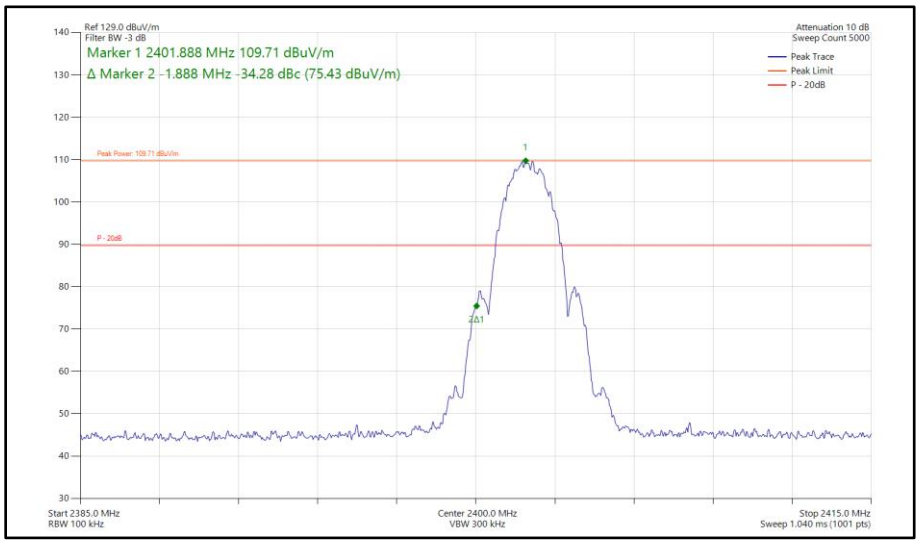

Figure 242 - Bluetooth LE2M, SISO, Core 1 - 2402 MHz Band Edge Frequency 2400 MHz

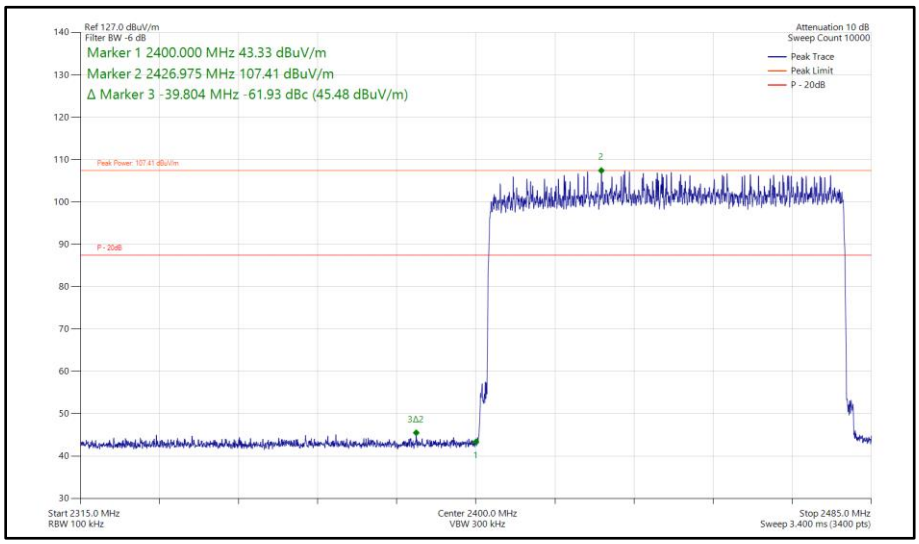

Figure 243 - Bluetooth HDR4, SISO, Core 1 - Hopping Band Edge Frequency 2400 MHz

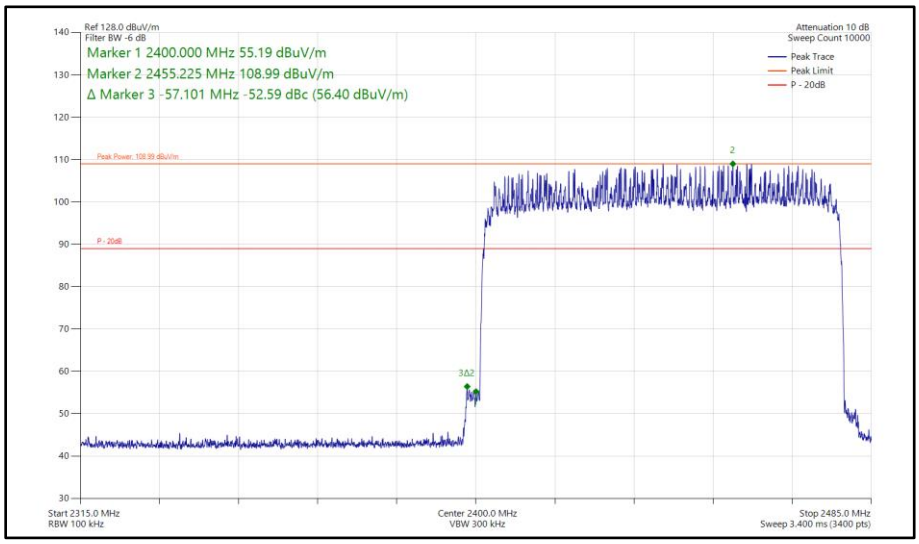

Figure 244 - Bluetooth HDR8, SISO, Core 1 - Hopping Band Edge Frequency 2400 MHz

ePA - Core 0-1 (MIMO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	HDR4	2404	2400	-58.75
Static	HDR8	2404	2400	-43.86
Hopping	HDR4	Hopping	2400	-65.77
Hopping	HDR8	Hopping	2400	-53.72

Table 97 - MIMO Authorised Band Edge Results

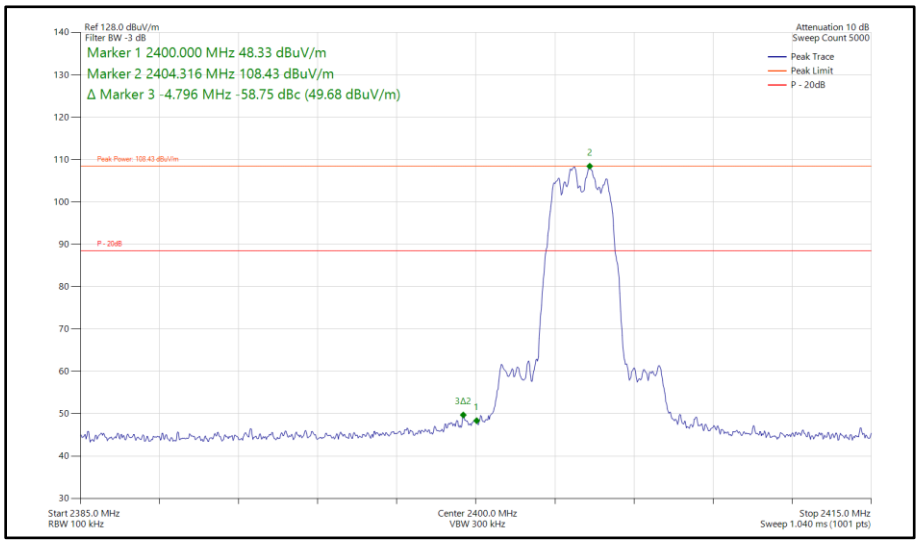

Figure 245 - Bluetooth HDR4, MIMO, Core 0-1 - 2404 MHz Band Edge Frequency 2400 MHz

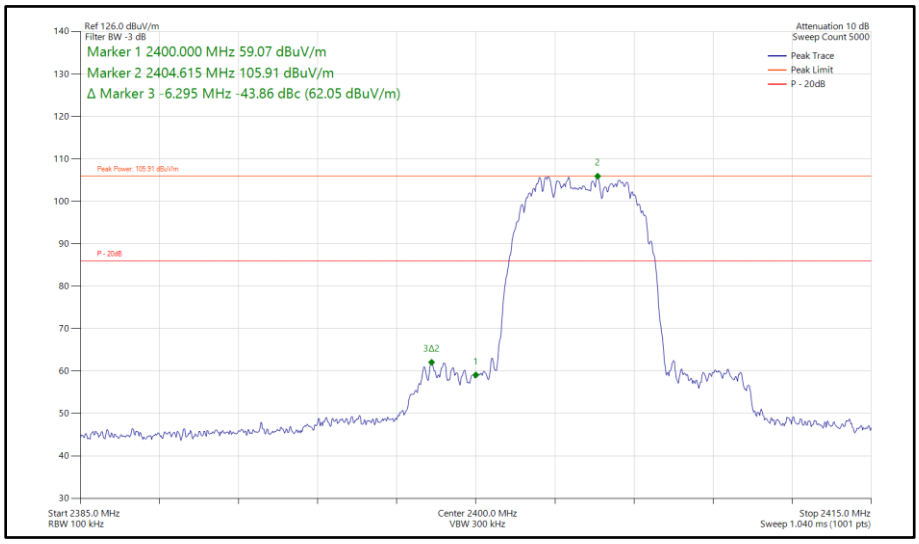

Figure 246 - Bluetooth HDR8, MIMO, Core 0-1 - 2404 MHz Band Edge Frequency 2400 MHz

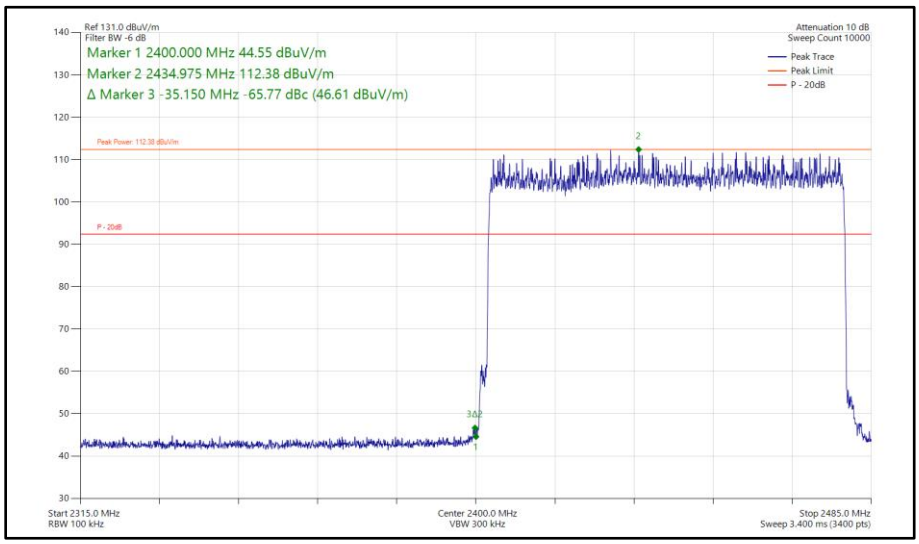

Figure 247 - Bluetooth HDR4, MIMO, Core 0-1 - Hopping Band Edge Frequency 2400 MHz

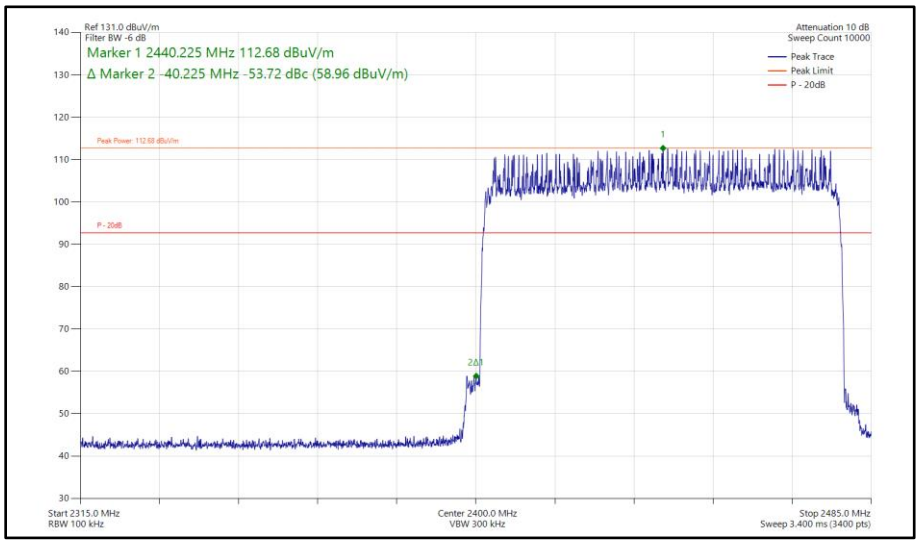

Figure 248 - Bluetooth HDR8, MIMO, Core 0-1 - Hopping Band Edge Frequency 2400 MHz

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 5.5

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

2.4.7 Test Location and Test Equipment Used

This test was carried out in RF Chamber 14 and RF Chamber 15.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Emissions Software	TUV SUD	EmX V3.2.0	5125	-	Software
EMI Test Receiver	Rohde & Schwarz	ESW44	5911	12	11-Sep-2024
EMI Test Receiver	Rohde & Schwarz	ESW44	5912	12	05-Jul-2024
1500W (300V 12A) AC Power Supply	iTech	IT7324	5955	-	O/P Mon
1500W (300V 12A) AC Power Supply	iTech	IT7324	5956	-	O/P Mon
5m Semi-Anechoic Chamber (Dual-Axis)	Albatross Projects	RF Chamber 14	5958	36	26-Apr-2025
Compact Antenna Mast	Maturo Gmbh	CAM4.0-P	5959	-	TU
Mast & Turntable Controller	Maturo Gmbh	FCU3.0	5960	-	TU
Tilt Antenna Mast	Maturo Gmbh	BAM4.5-P	5961	-	TU
Turntable	Maturo Gmbh	TT1.5SI	5962	-	TU
5m Semi-Anechoic Chamber (Dual-Axis), Chamber 15	Albatross Projects	RF Chamber 15	5963	36	28-Apr-2025
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
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/A	5996	12	20-May-2025
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/A	5997	12	14-Sep-2024
Cable (SMA to SMA 4.5m)	Junkosha	MWX221-04500AMSAMS/A	6002	12	14-Sep-2024
Cable (SMA to SMA 3m)	Junkosha	MWX221-03000AMSAMS/A	6021	12	14-Sep-2024
Horn Antenna (1-10 GHz)	Schwarzbeck	BBHA9120B	6141	12	05-May-2025
Horn Antenna (1-10 GHz)	Schwarzbeck	BBHA9120B	6142	12	05-May-2025
Digital Multimeter	Fluke	115	6145	12	06-Jun-2025
Digital Multimeter	Fluke	115	6147	12	06-Jun-2025
Humidity & Temperature meter	R.S Components	1364	6149	12	07-Jul-2024
SAC Switch Unit	TUV SUD	TUV_SSU_001	6190	12	22-Dec-2024
Cable (SMA to SMA 3m)	Junkosha	MWX221-03000AMSAMS/A	6316	12	04-Feb-2025
Humidity and Temperature Meter	R.S Components	1364	6486	12	04-Jun-2025
1m Cable	Junkosha	MWX241-01000AMSAMS/B	6740	12	01-Feb-2025
1m Cable	Junkosha	MWX241-01000AMSAMS/B	6741	12	01-Feb-2025
6.5m Cable	Junkosha	MWX221-06500AMSAMS/B	6744	12	01-Feb-2025

Table 98

TU - Traceability Unscheduled
O/P Mon - Output Monitored using calibrated equipment

2.5 Spurious Radiated Emissions

2.5.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.209 and 15.247 (d)
ISED RSS-247, Clause 3.3 and 5.5
ISED RSS-GEN, Clause 6.13 and 8.9

2.5.2 Equipment Under Test and Modification State

A3238, S/N: NQMK2V7Q9C - Modification State 0
A3238, S/N: V4KFHR9J44 - Modification State 0

2.5.3 Date of Test

14-June-2024 to 27-June-2024

2.5.4 Test Method

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

For frequencies > 1 GHz, plots for average measurements were taken in accordance with ANSI C63.10, clause 11.12.2.5.1.

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

Ports on the EUT were terminated with loads as described in ANSI C63.4 clause 6.2.4. 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.

In the 30 MHz to 1 GHz range pre-scans were only performed on the mid channel (2440 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 10 dB of the limits shown on the plots, further investigation was carried out and reported in results tables.

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

Above 18 GHz, the measurement distance was reduced to 1 m. The limit line was increased by 20*LOG(3/1) = 9.54 dB.

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

Radiated spurious emissions tests have been conducted in DH5 (high power) mode as this represents worst case with respect to Power and PSD.

2.5.5 Example Test Setup Diagram

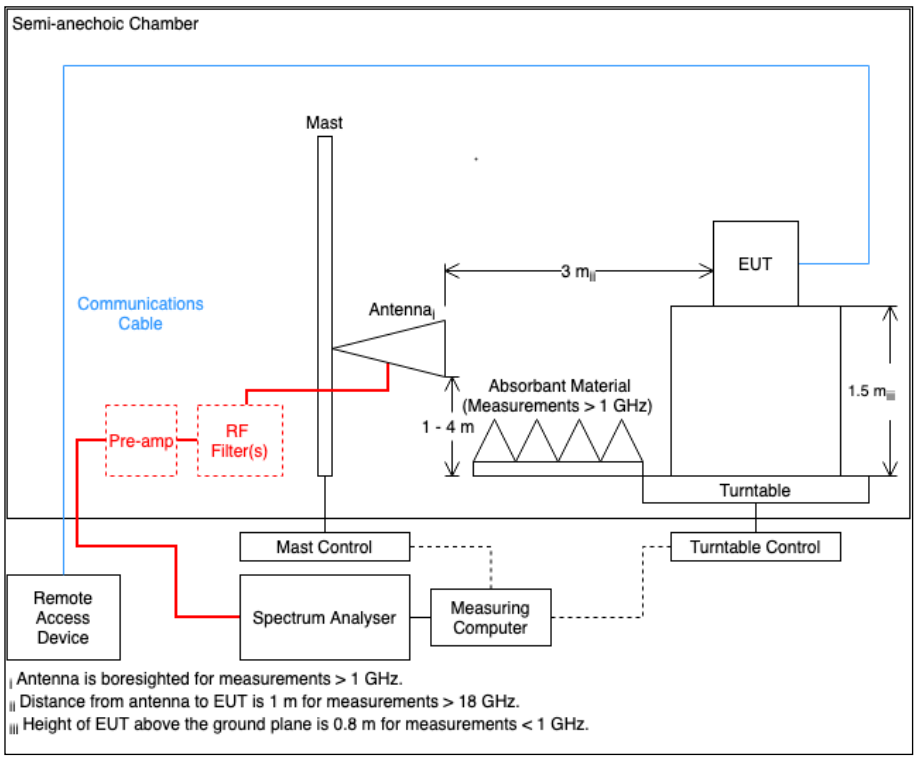

Figure 249

2.5.6 Environmental Conditions

Ambient Temperature	21.6 - 23.1 °C
Relative Humidity	37.2 - 45.7 %