

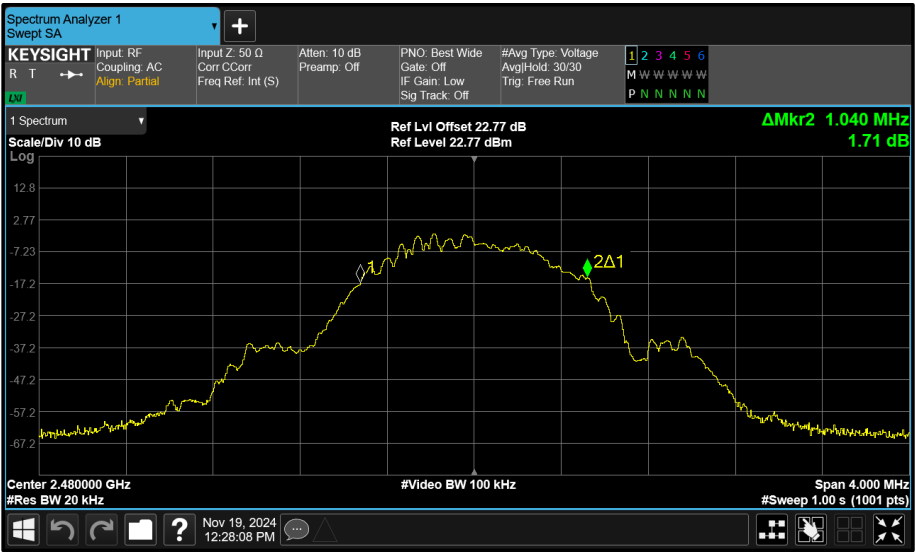


Figure 153 - Core 0 (A) 2480 MHz (CH39) 99% Bandwidth

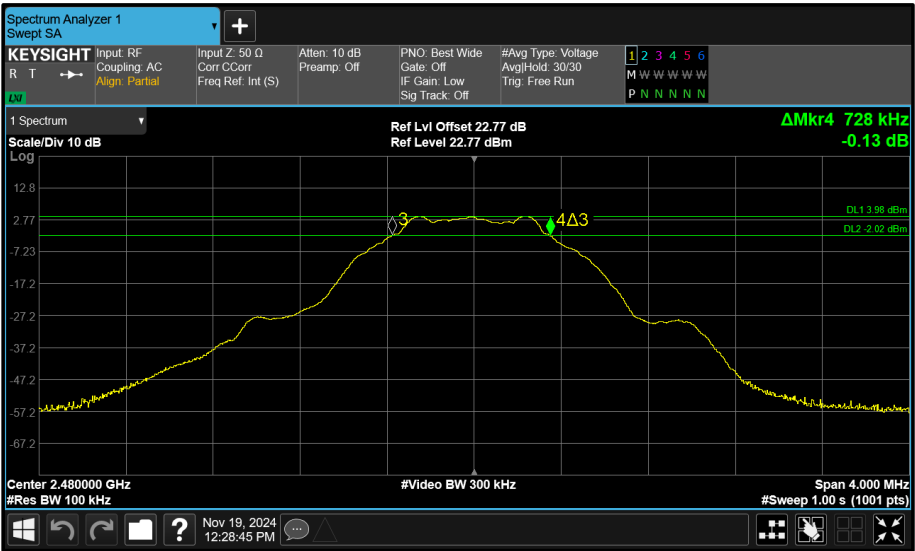


Figure 154 - Core 0 (A) 2480 MHz (CH39) 6 dB Bandwidth

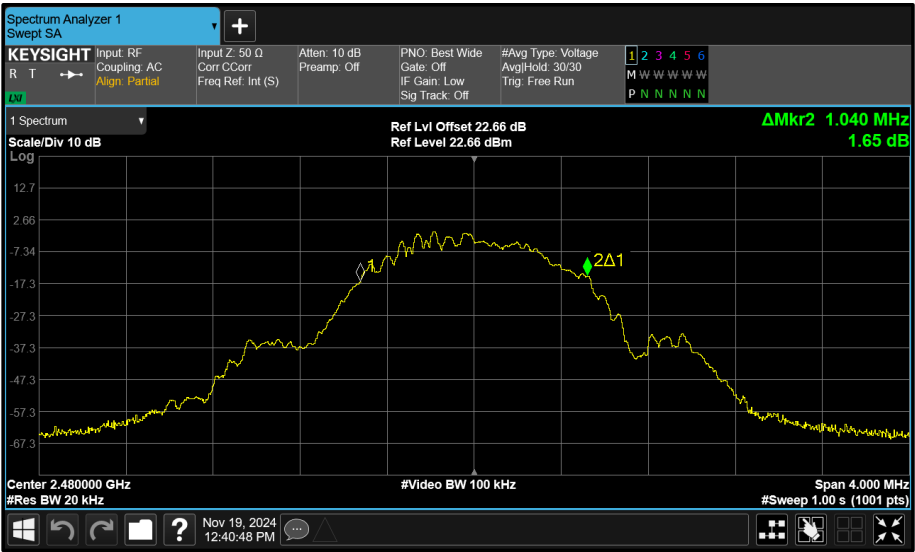


Figure 155 - Core 1 (B) 2480 MHz (CH39) 99% Bandwidth

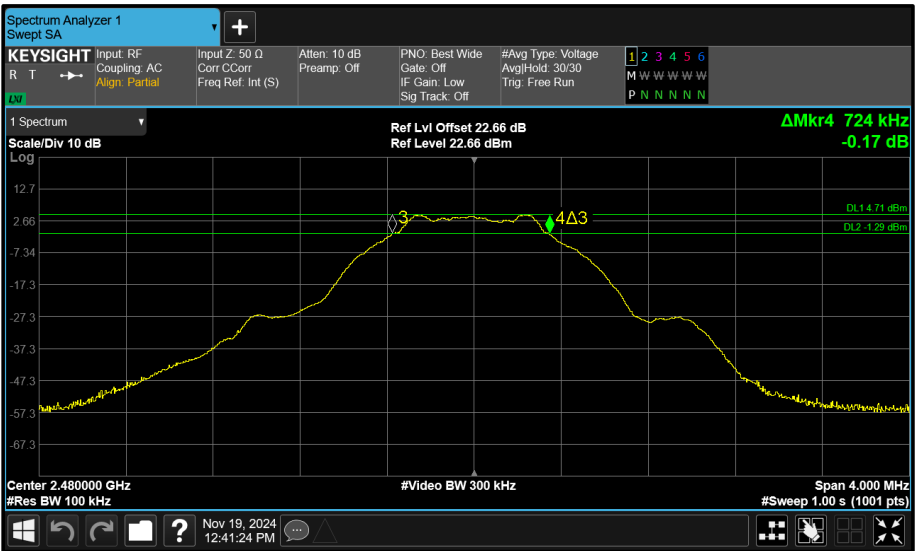


Figure 156 - Core 1 (B) 2480 MHz (CH39) 6 dB Bandwidth



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	1.272	1.256	-	-	≥500.0
2440	1.264	1.264	-	-	≥500.0
2480	1.272	1.280	-	-	≥500.0

Table 42 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2402	2.088	2.088	-	-	-
2440	2.088	2.088	-	-	-
2480	2.096	2.088	-	-	-

Table 43 - 99% Bandwidth Results

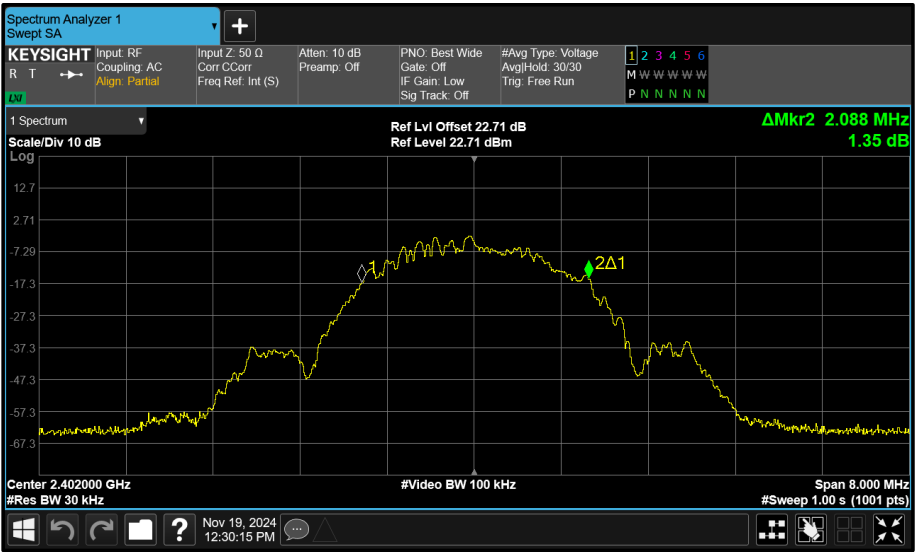


Figure 157 - Core 0 (A) 2402 MHz (CH37) 99% Bandwidth

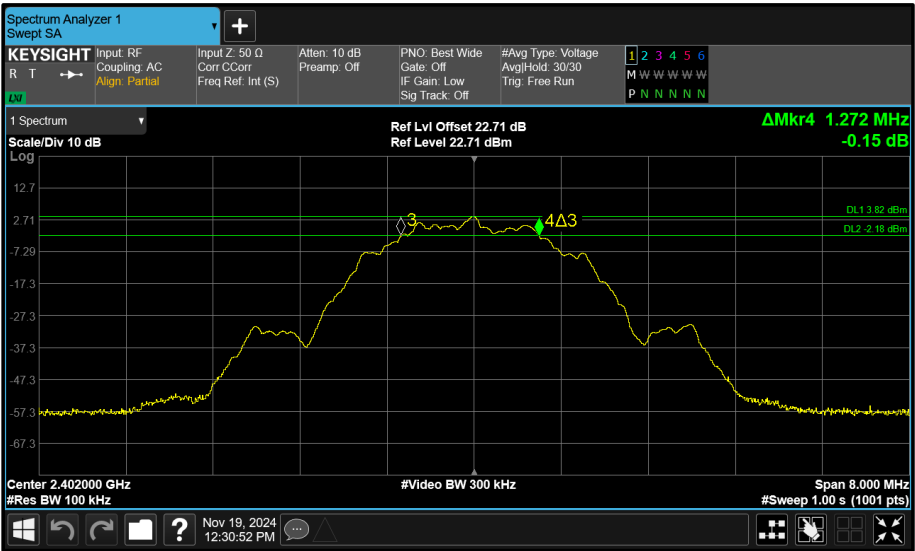


Figure 158 - Core 0 (A) 2402 MHz (CH37) 6 dB Bandwidth

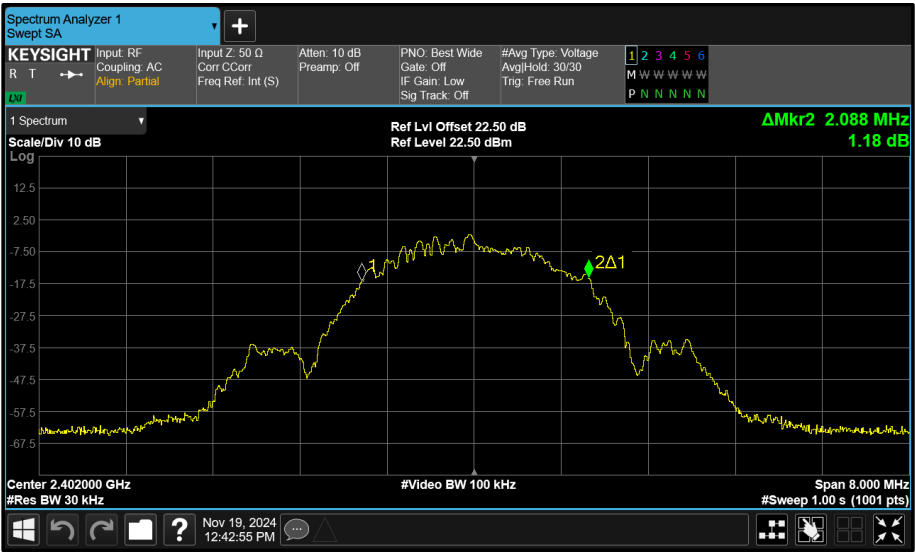


Figure 159 - Core 1 (B) 2402 MHz (CH37) 99% Bandwidth

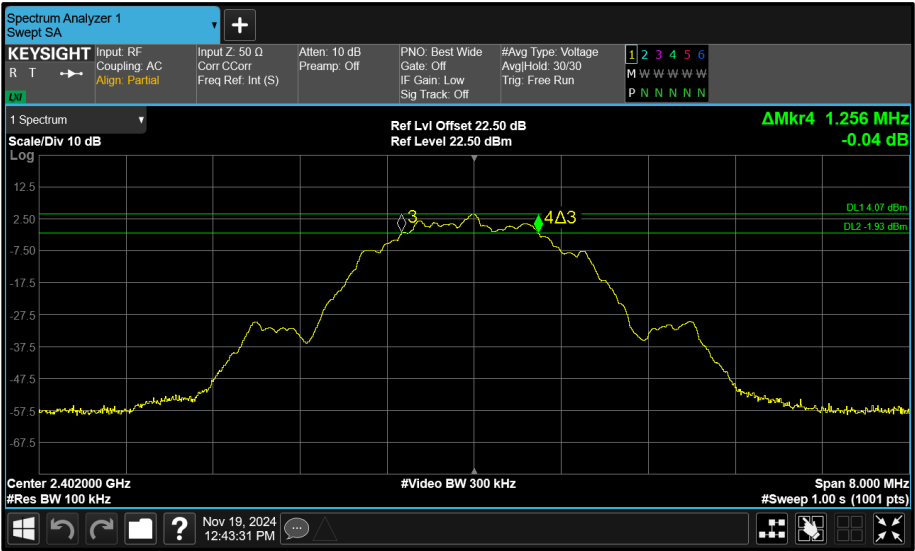


Figure 160 - Core 1 (B) 2402 MHz (CH37) 6 dB Bandwidth

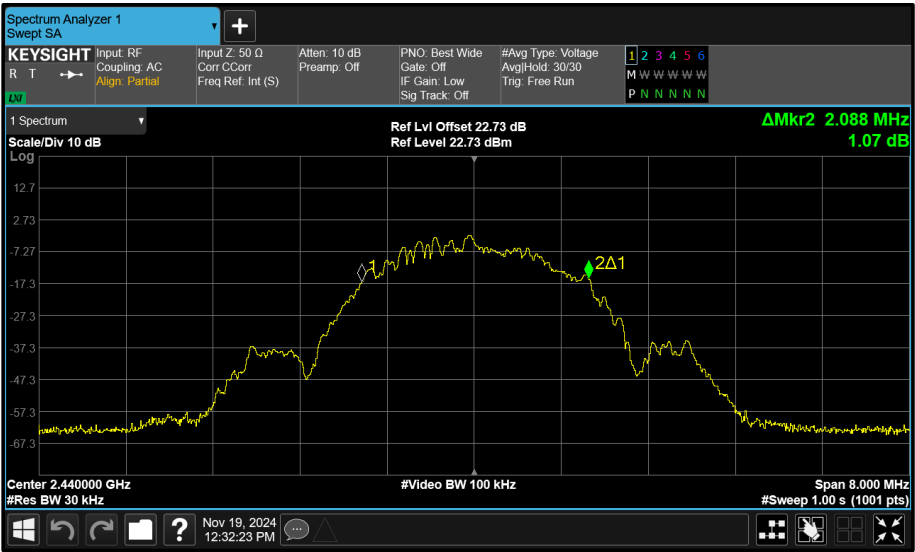


Figure 161 - Core 0 (A) 2440 MHz (CH17) 99% Bandwidth

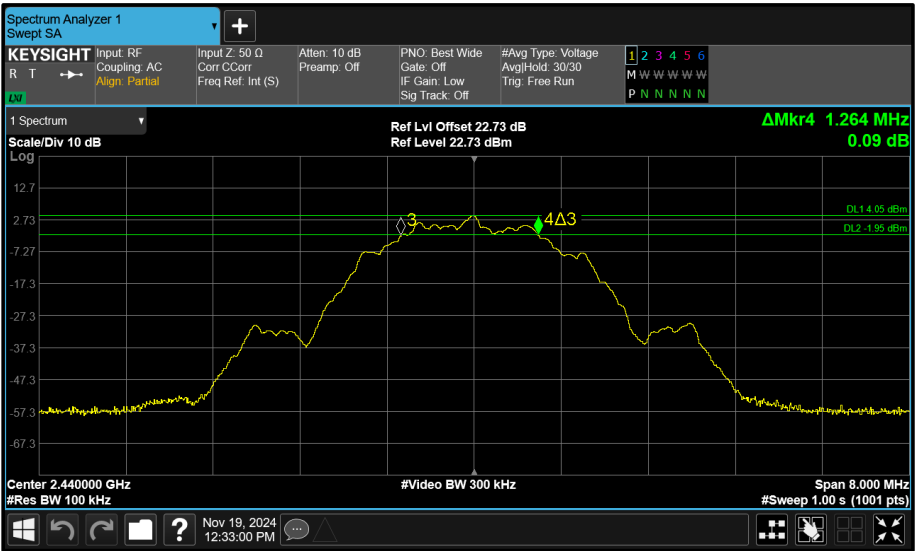


Figure 162 - Core 0 (A) 2440 MHz (CH17) 6 dB Bandwidth

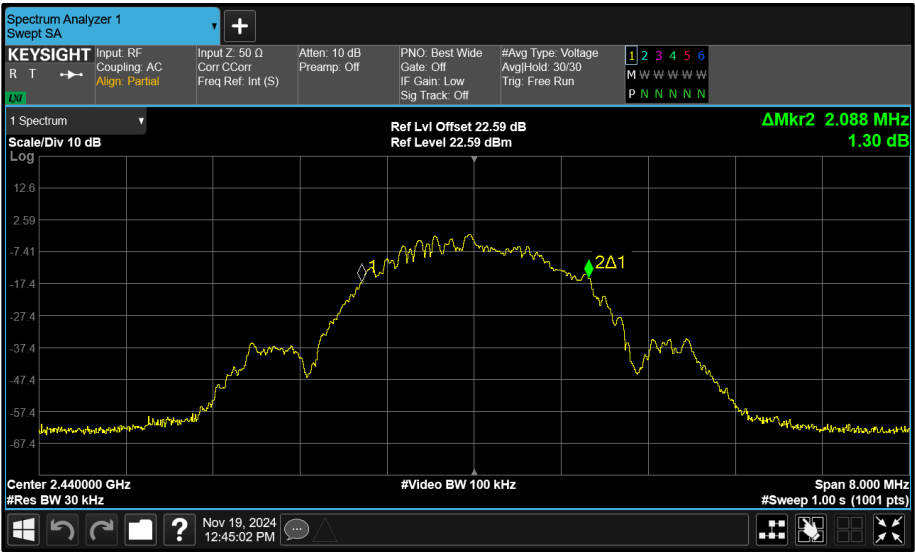


Figure 163 - Core 1 (B) 2440 MHz (CH17) 99% Bandwidth

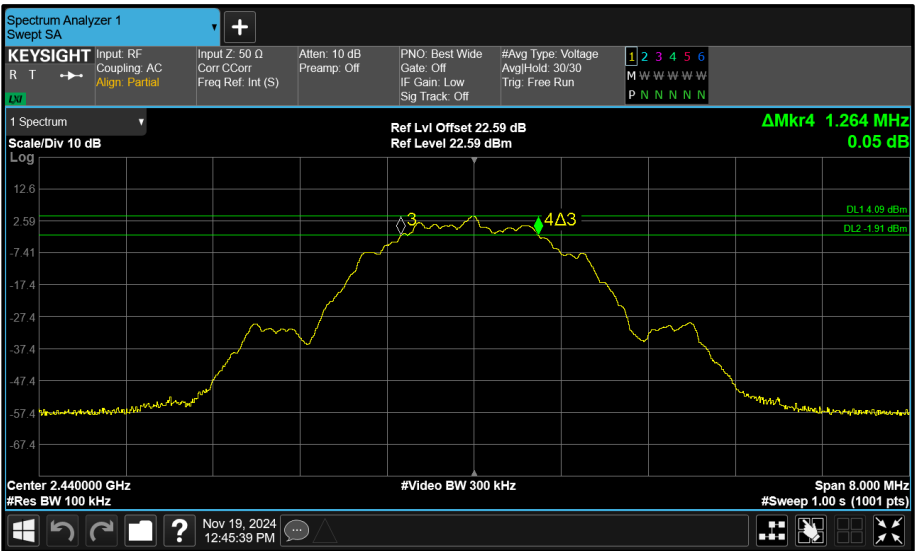


Figure 164 - Core 1 (B) 2440 MHz (CH17) 6 dB Bandwidth

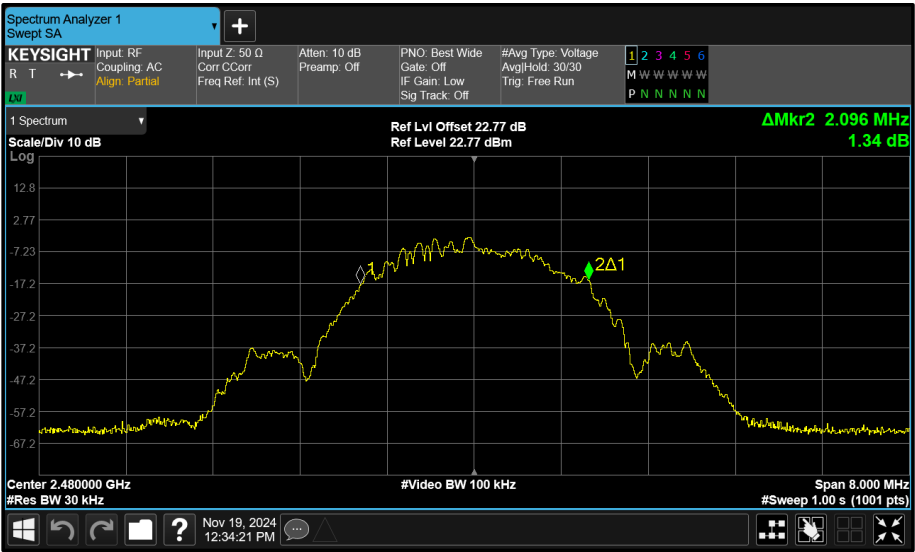


Figure 165 - Core 0 (A) 2480 MHz (CH39) 99% Bandwidth

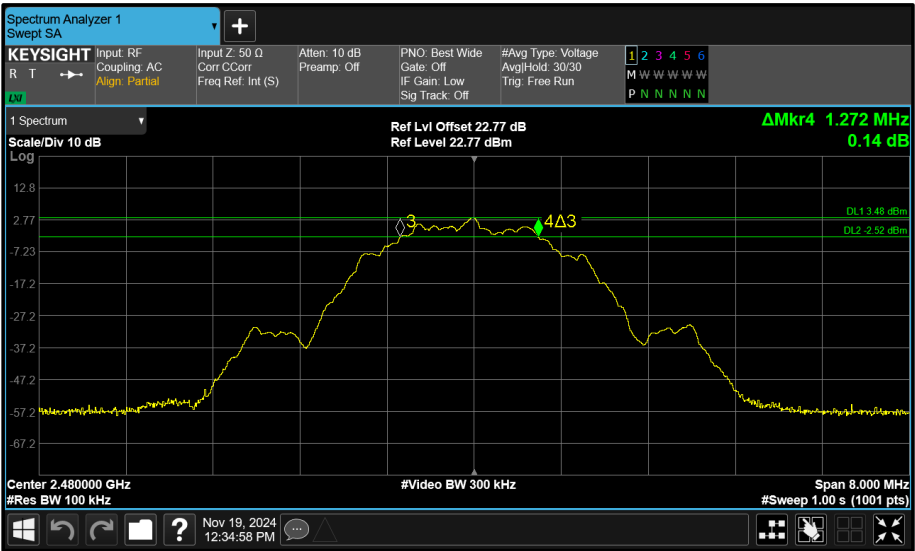


Figure 166 - Core 0 (A) 2480 MHz (CH39) 6 dB Bandwidth

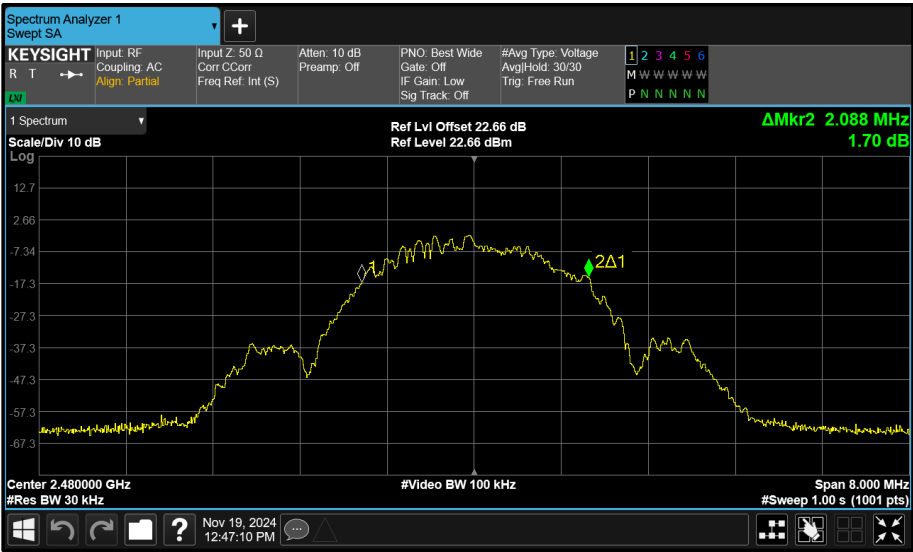


Figure 167 - Core 1 (B) 2480 MHz (CH39) 99% Bandwidth

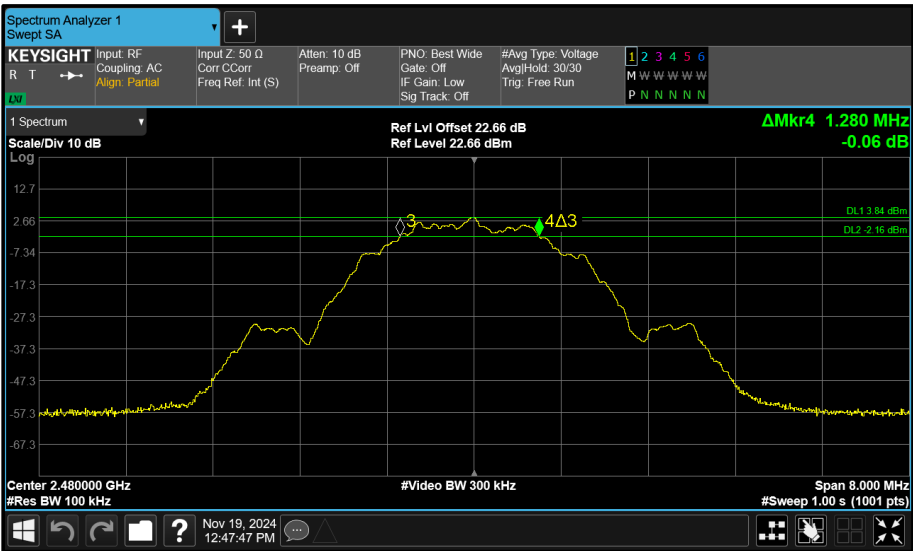


Figure 168 - Core 1 (B) 2480 MHz (CH39) 6 dB Bandwidth



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 $\pi/4$ 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	1.888	-	-	≥ 500.0
2441	1.880	1.896	-	-	≥ 500.0
2476	1.912	1.904	-	-	≥ 500.0

Table 44 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2404	2.344	2.320	-	-	-
2441	2.336	2.328	-	-	-
2476	2.344	2.328	-	-	-

Table 45 - 99% Bandwidth Results

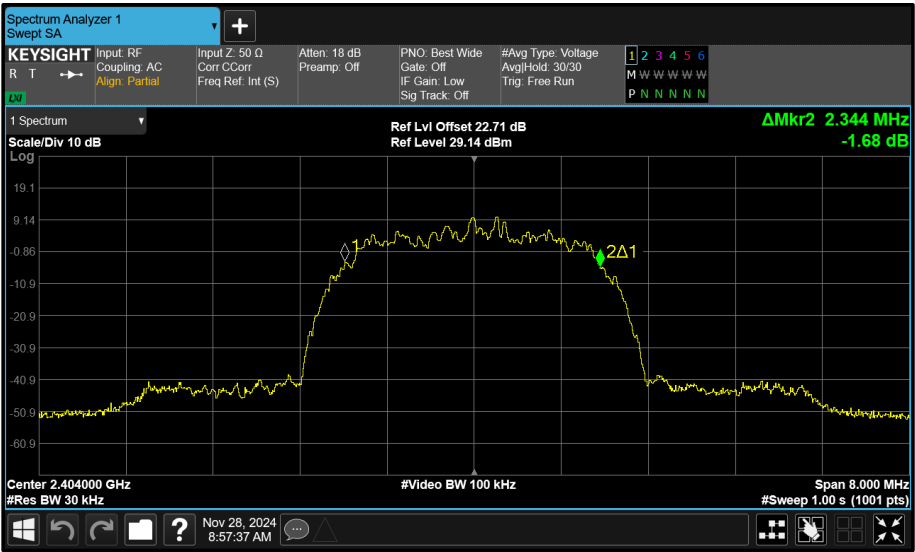


Figure 169 - Core 0 (A) 2404 MHz (CH2) 99% Bandwidth

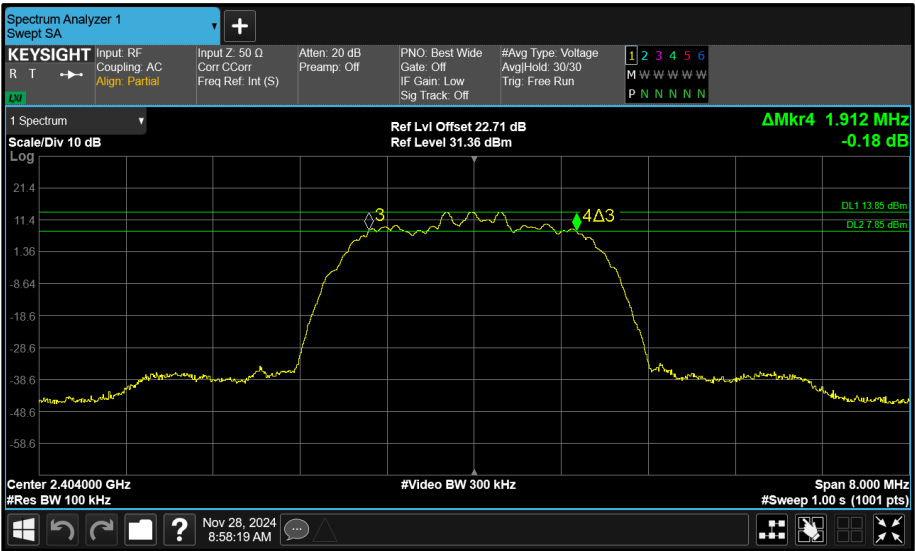


Figure 170 - Core 0 (A) 2404 MHz (CH2) 6 dB Bandwidth



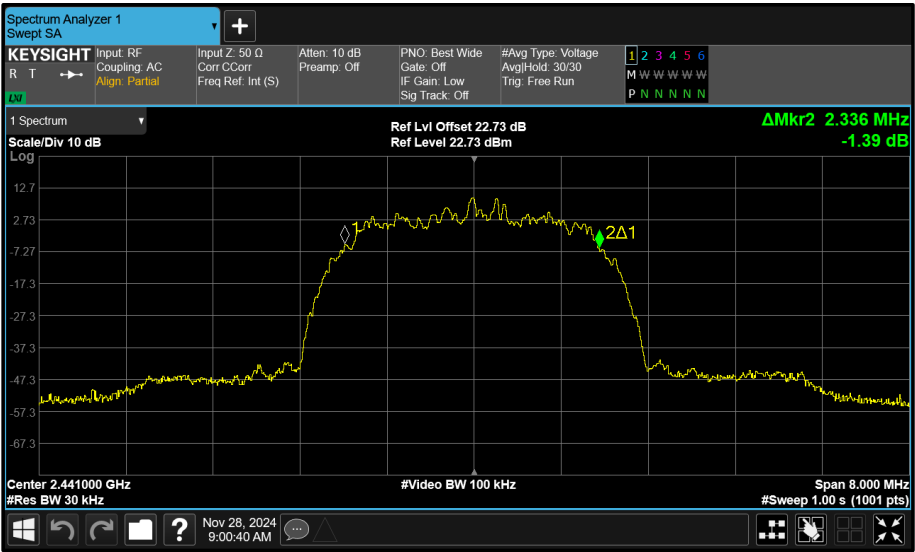


Figure 173 - Core 0 (A) 2441 MHz (CH39) 99% Bandwidth

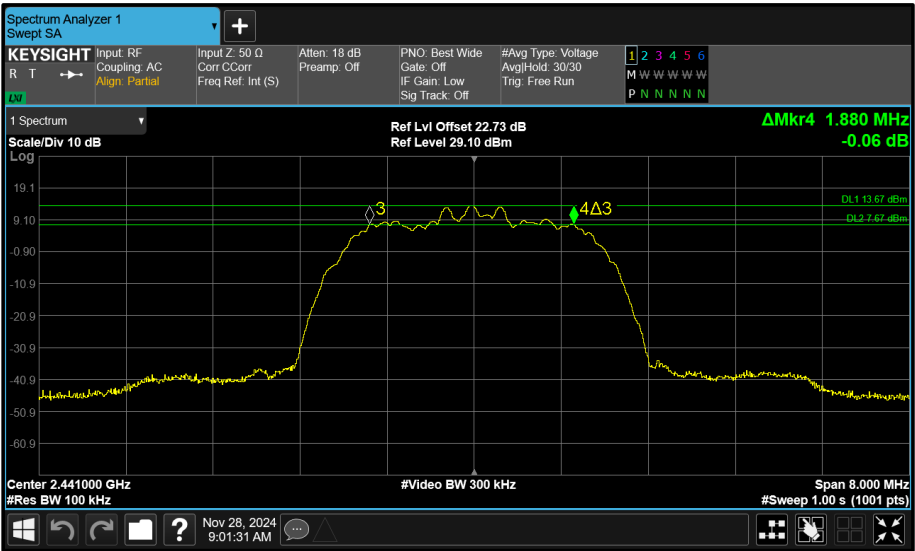


Figure 174 - Core 0 (A) 2441 MHz (CH39) 6 dB Bandwidth

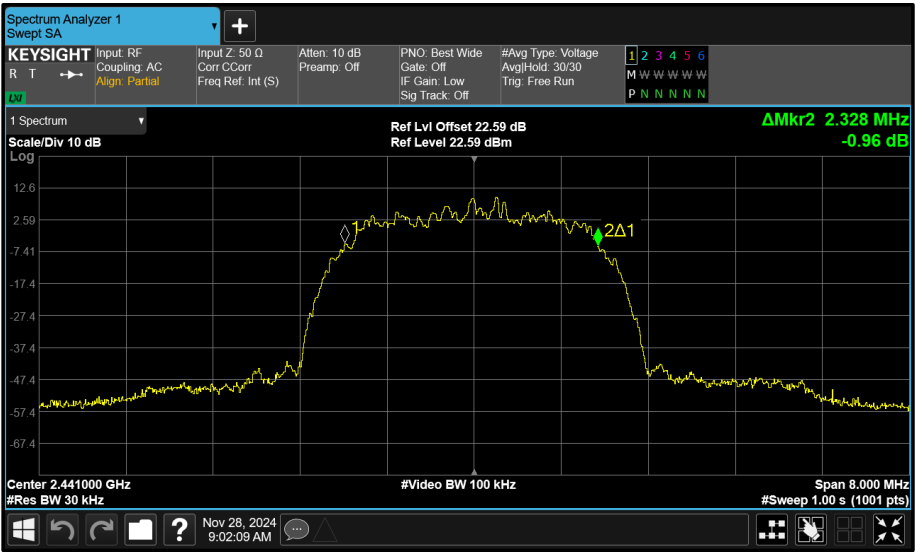


Figure 175 - Core 1 (B) 2441 MHz (CH39) 99% Bandwidth

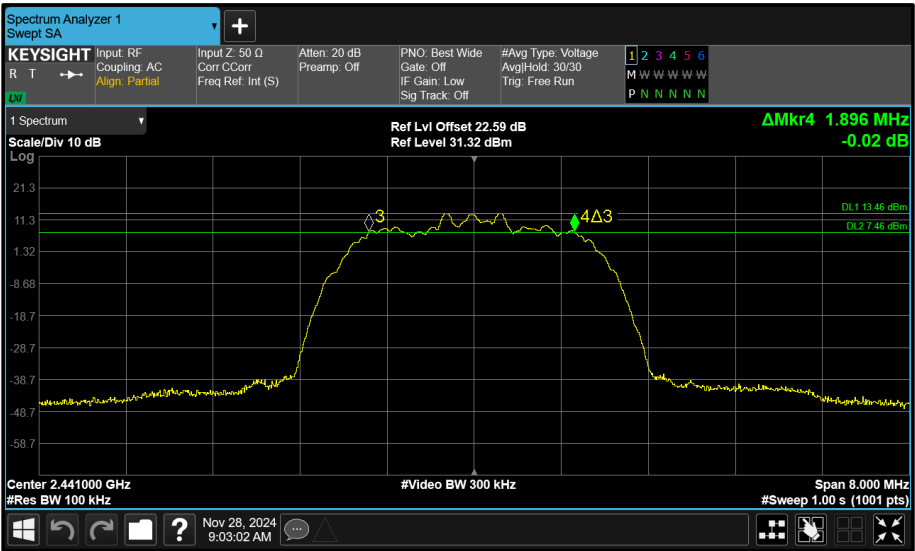


Figure 176 - Core 1 (B) 2441 MHz (CH39) 6 dB Bandwidth

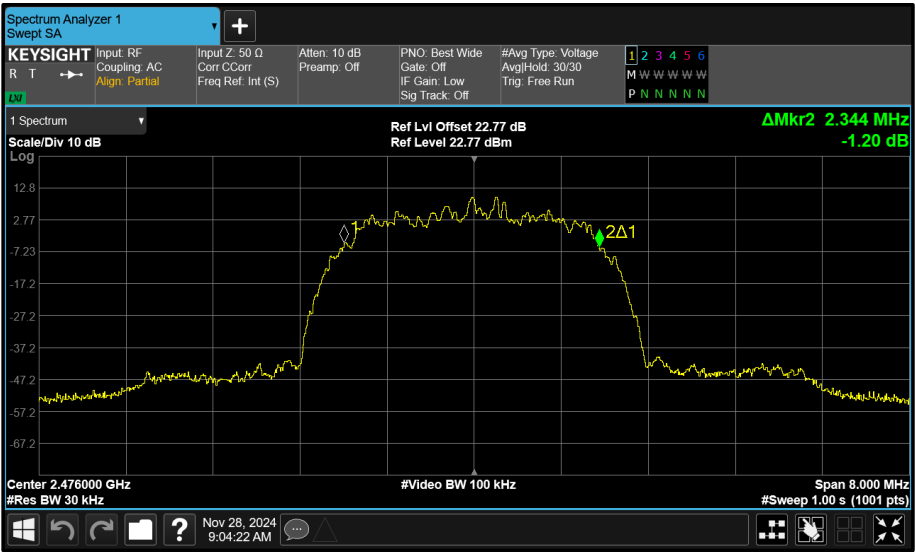


Figure 177 - Core 0 (A) 2476 MHz (CH74) 99% Bandwidth

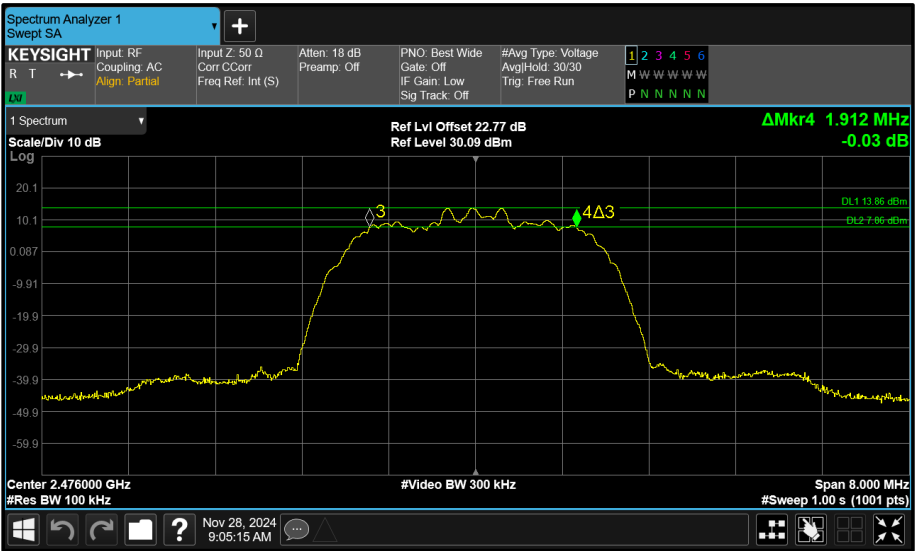


Figure 178 - Core 0 (A) 2476 MHz (CH74) 6 dB Bandwidth

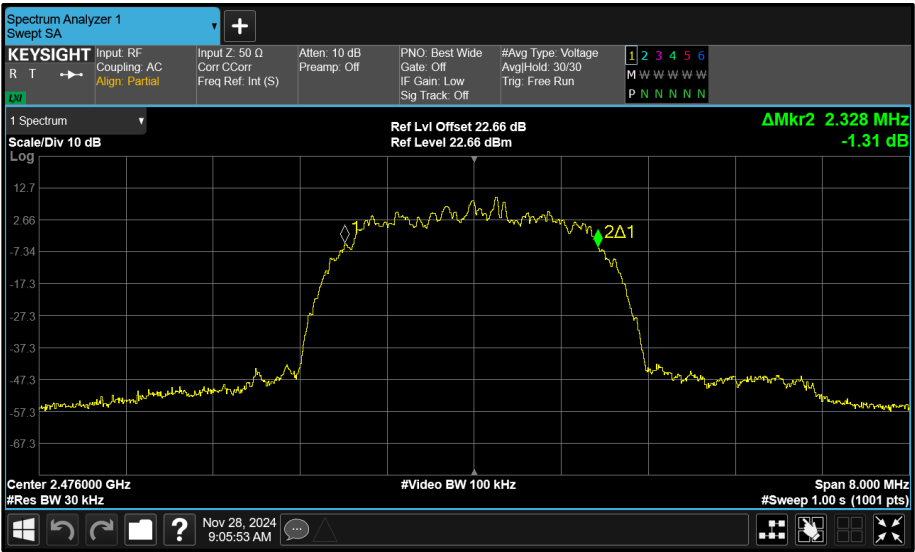


Figure 179 - Core 1 (B) 2476 MHz (CH74) 99% Bandwidth

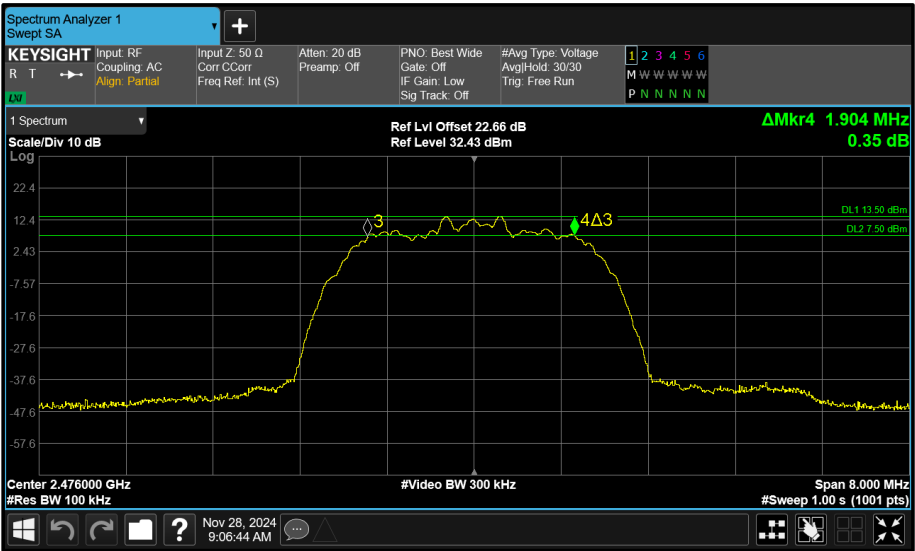


Figure 180 - Core 1 (B) 2476 MHz (CH74) 6 dB Bandwidth



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 $\pi/4$ 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	0.660	-	-	≥ 500.0
2441	0.675	1.020	-	-	≥ 500.0
2476	0.675	1.035	-	-	≥ 500.0

Table 46 - 6 dB Bandwidth Results

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

Table 47 - 99% Bandwidth Results

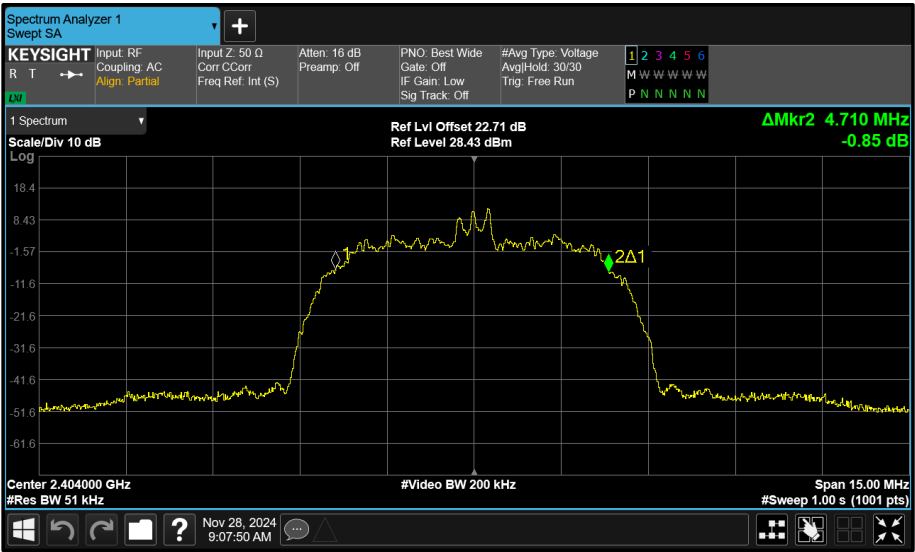


Figure 181 - Core 0 (A) 2404 MHz (CH2) 99% Bandwidth

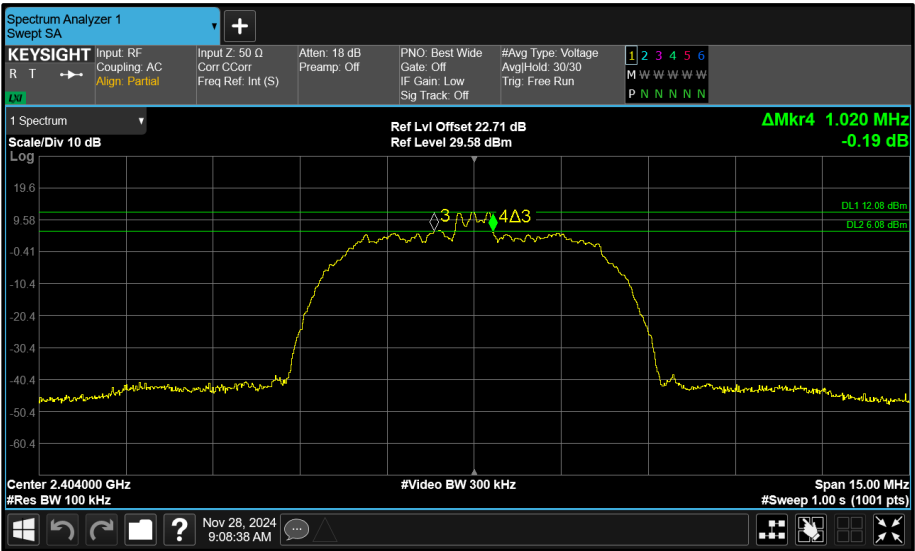


Figure 182 - Core 0 (A) 2404 MHz (CH2) 6 dB Bandwidth

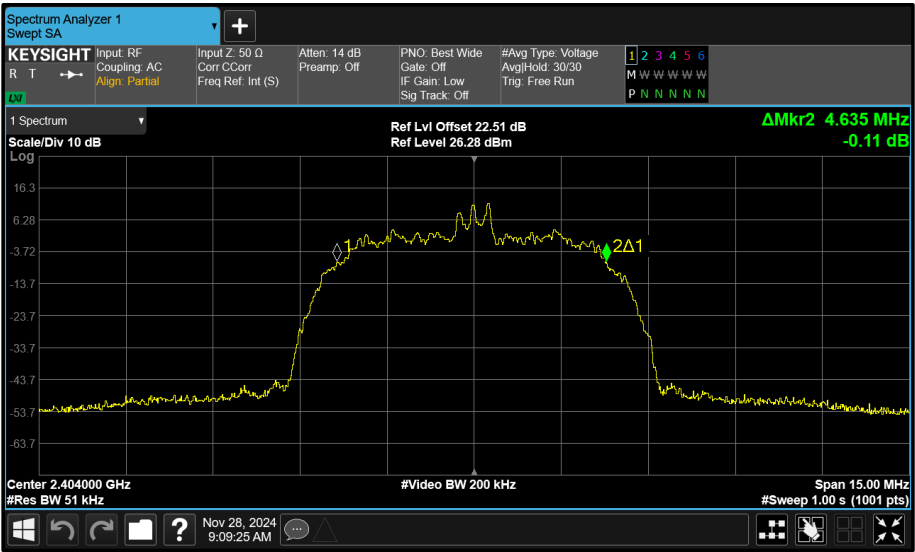


Figure 183 - Core 1 (B) 2404 MHz (CH2) 99% Bandwidth

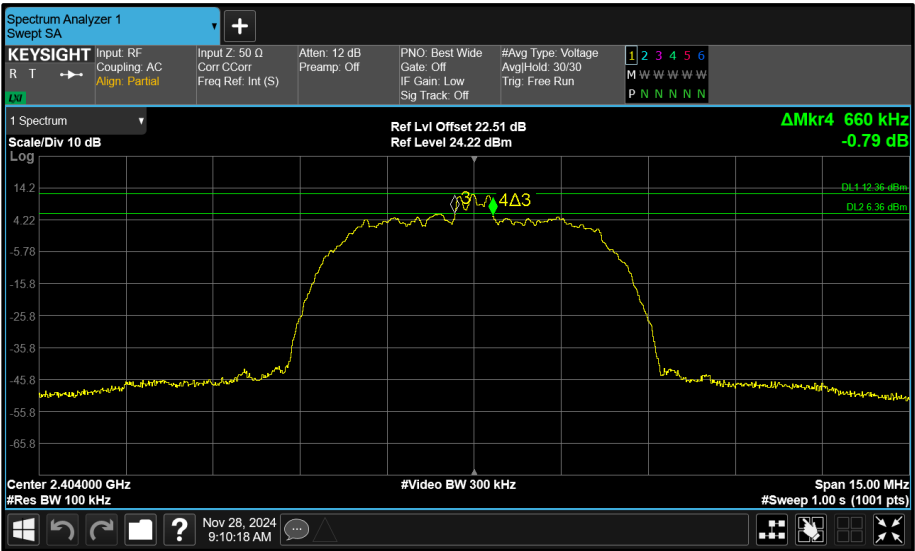


Figure 184 - Core 1 (B) 2404 MHz (CH2) 6 dB Bandwidth

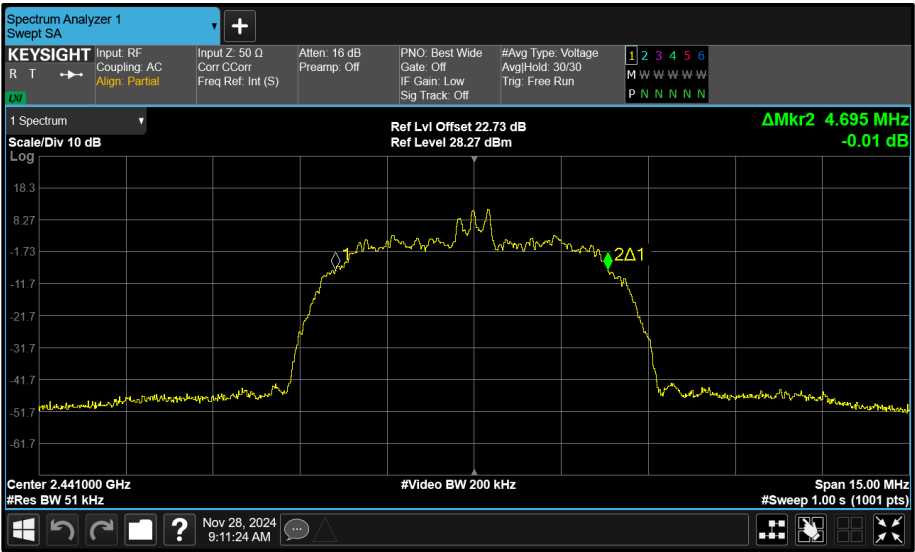


Figure 185 - Core 0 (A) 2441 MHz (CH39) 99% Bandwidth

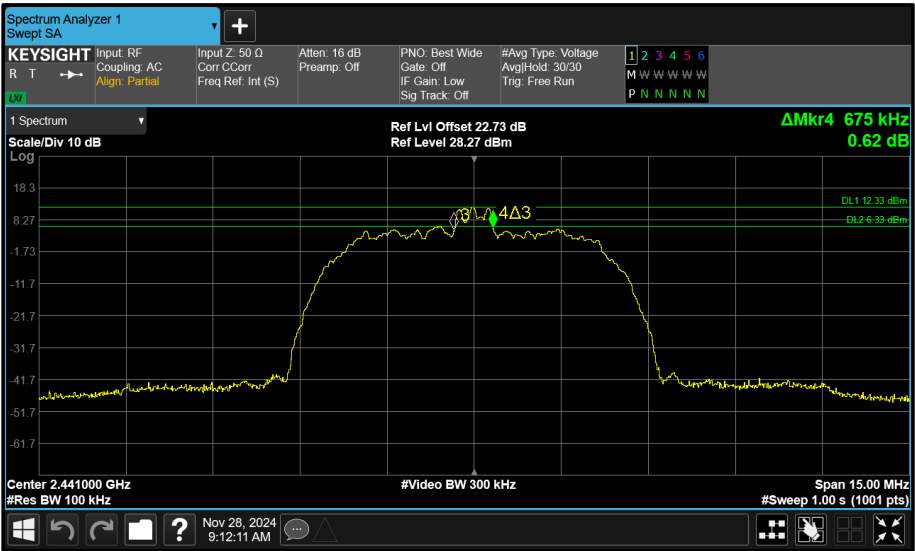


Figure 186 - Core 0 (A) 2441 MHz (CH39) 6 dB Bandwidth

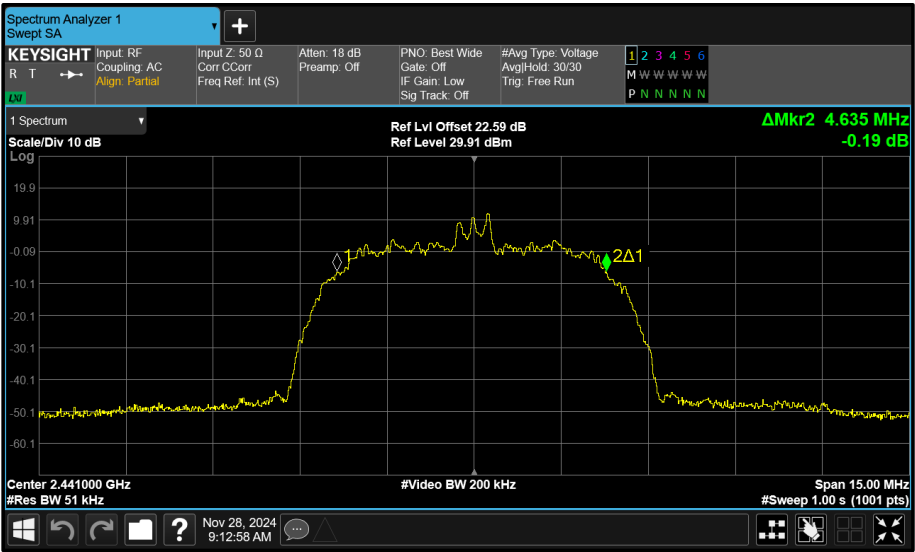


Figure 187 - Core 1 (B) 2441 MHz (CH39) 99% Bandwidth

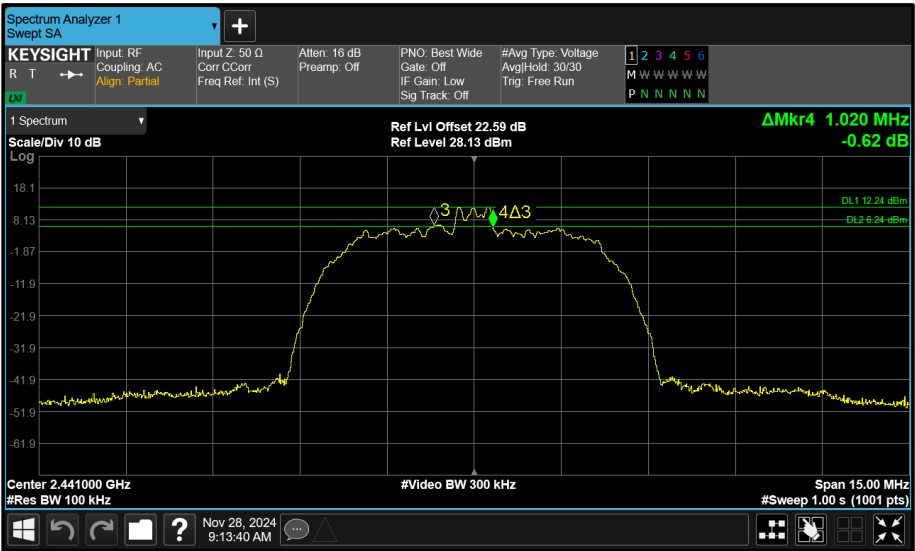


Figure 188 - Core 1 (B) 2441 MHz (CH39) 6 dB Bandwidth

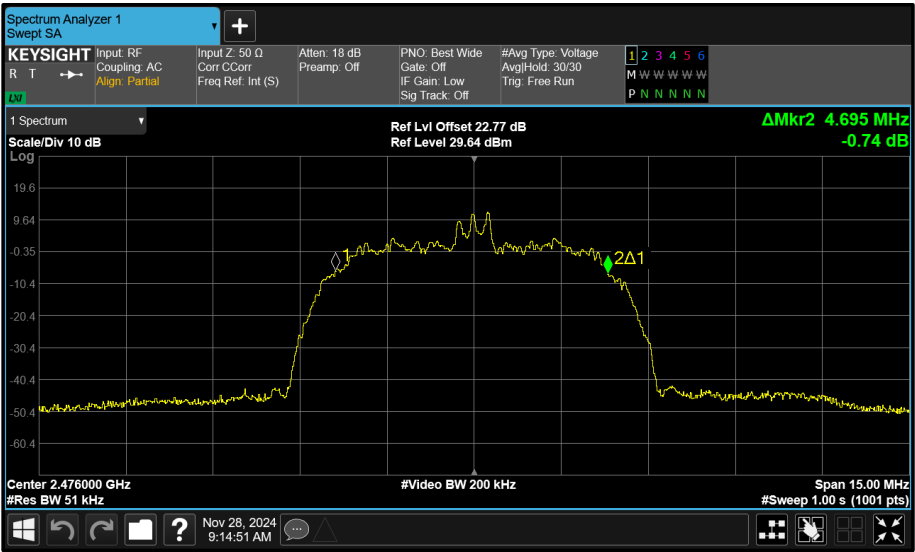


Figure 189 - Core 0 (A) 2476 MHz (CH74) 99% Bandwidth

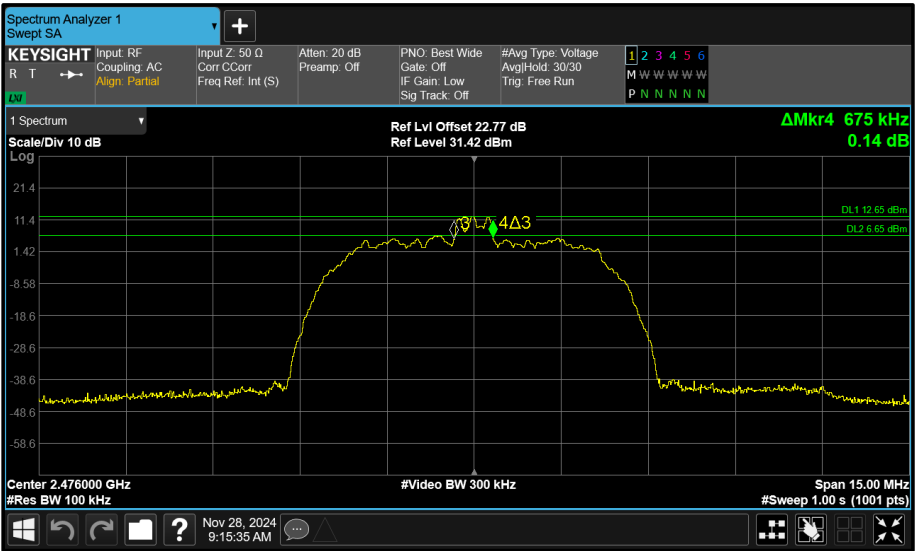


Figure 190 - Core 0 (A) 2476 MHz (CH74) 6 dB Bandwidth





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 GFSK (LE 1M)	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	0.724	0.728	-	-	≥500.0
2440	0.728	0.732	-	-	≥500.0
2480	0.728	0.728	-	-	≥500.0

Table 48 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2402	1.040	1.040	-	-	-
2440	1.040	1.044	-	-	-
2480	1.040	1.044	-	-	-

Table 49 - 99% Bandwidth Results

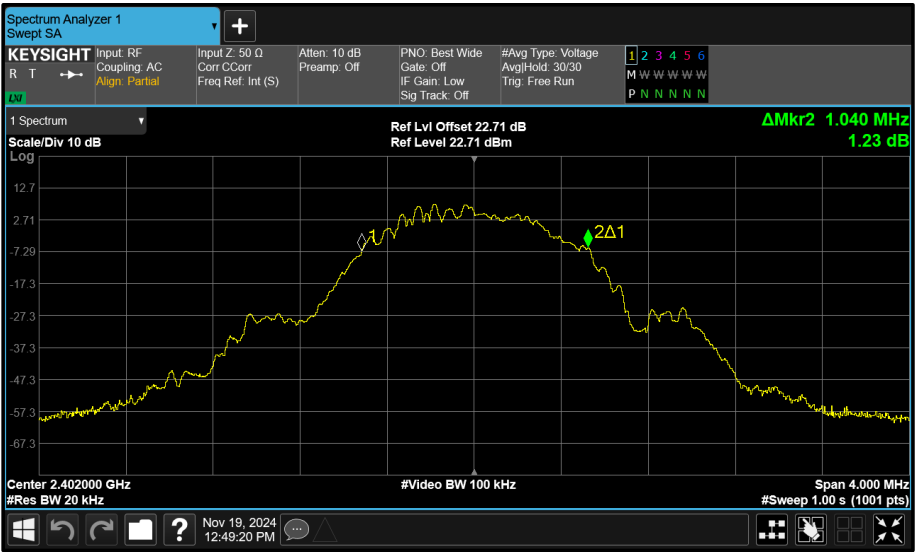


Figure 193 - Core 0 (A) 2402 MHz (CH37) 99% Bandwidth

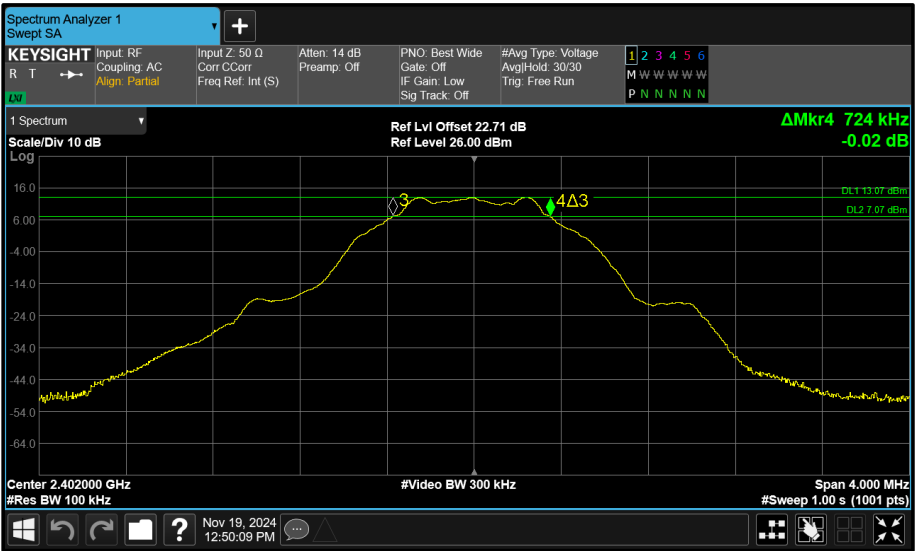


Figure 194 - Core 0 (A) 2402 MHz (CH37) 6 dB Bandwidth

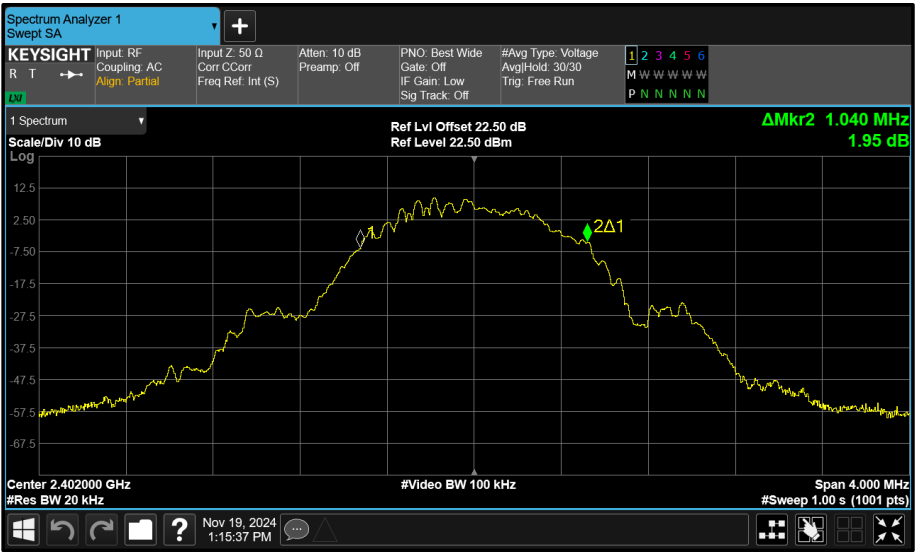


Figure 195 - Core 1 (B) 2402 MHz (CH37) 99% Bandwidth

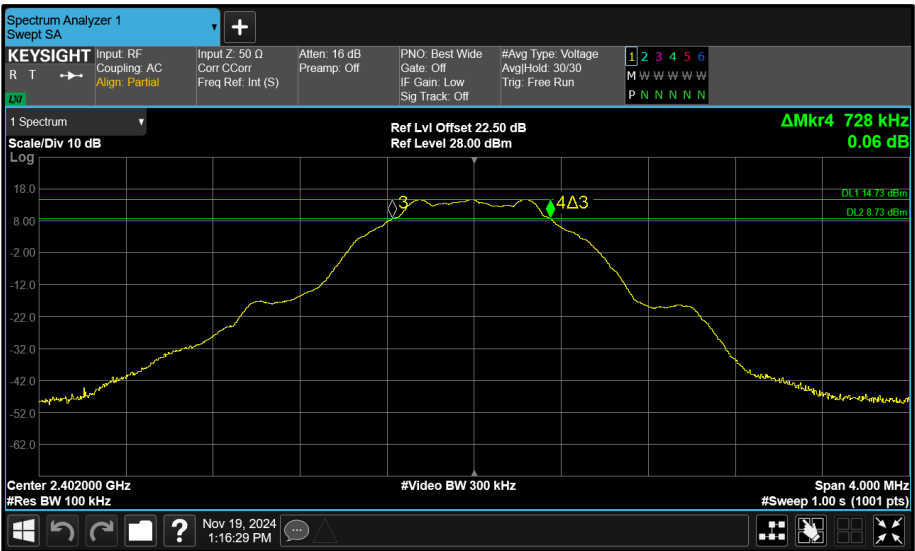


Figure 196 - Core 1 (B) 2402 MHz (CH37) 6 dB Bandwidth

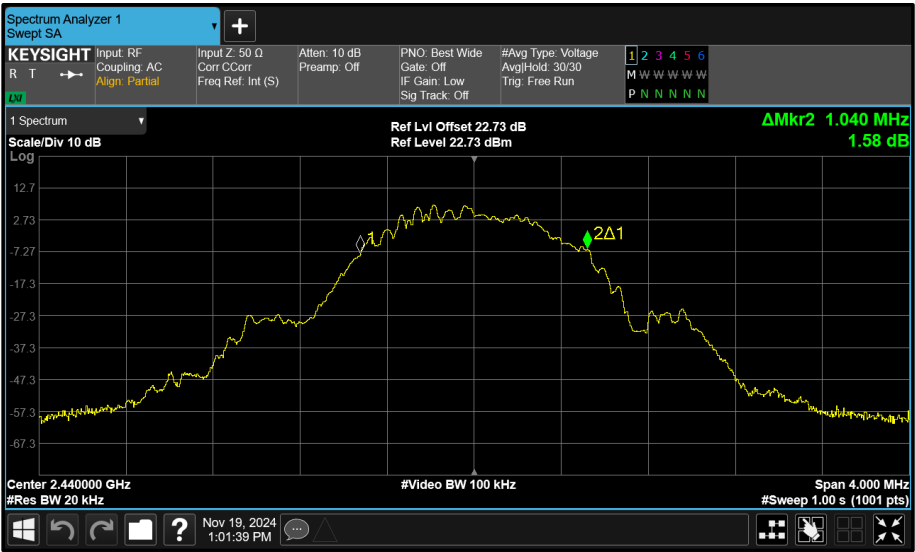


Figure 197 - Core 0 (A) 2440 MHz (CH17) 99% Bandwidth

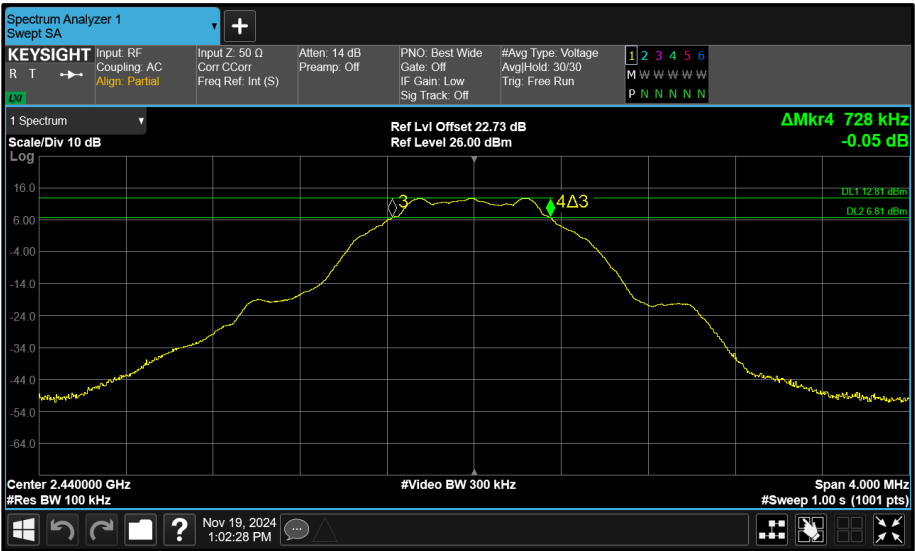


Figure 198 - Core 0 (A) 2440 MHz (CH17) 6 dB Bandwidth

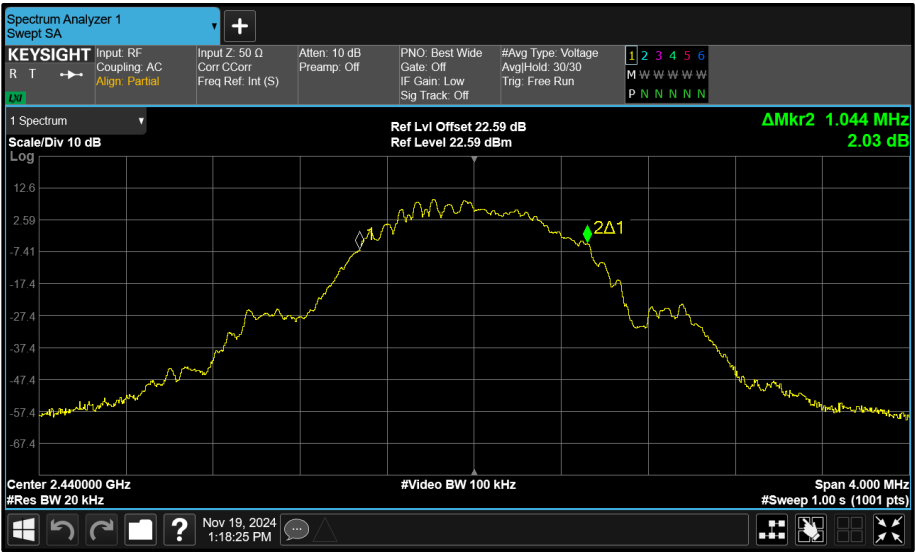


Figure 199 - Core 1 (B) 2440 MHz (CH17) 99% Bandwidth

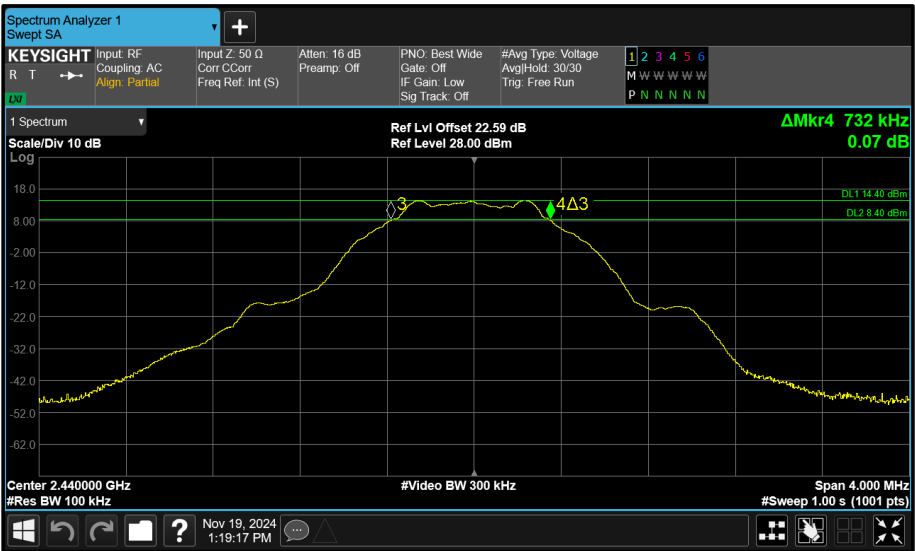


Figure 200 - Core 1 (B) 2440 MHz (CH17) 6 dB Bandwidth

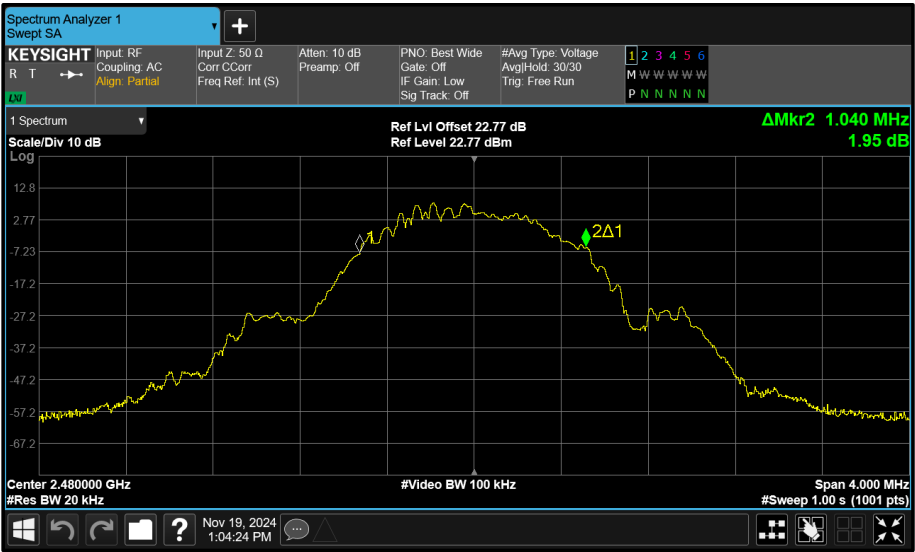


Figure 201 - Core 0 (A) 2480 MHz (CH39) 99% Bandwidth

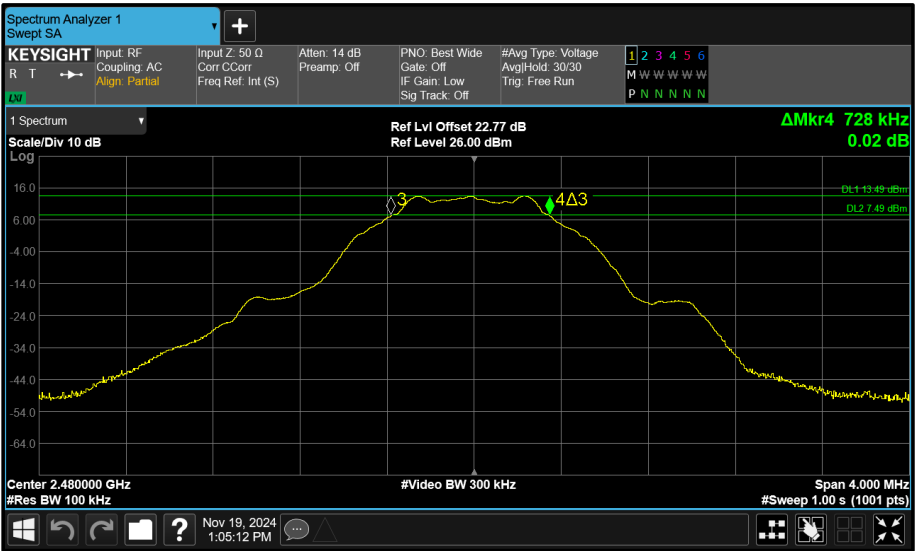


Figure 202 - Core 0 (A) 2480 MHz (CH39) 6 dB Bandwidth

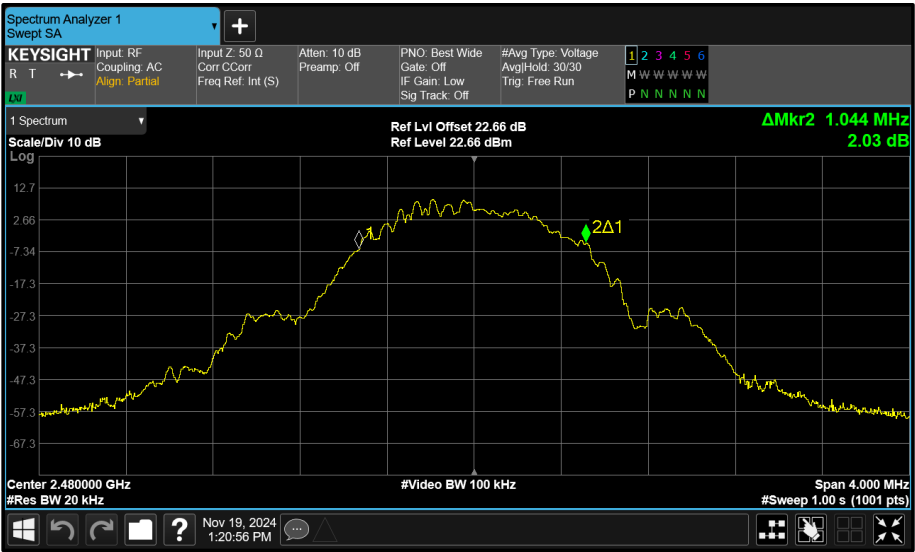


Figure 203 - Core 1 (B) 2480 MHz (CH39) 99% Bandwidth

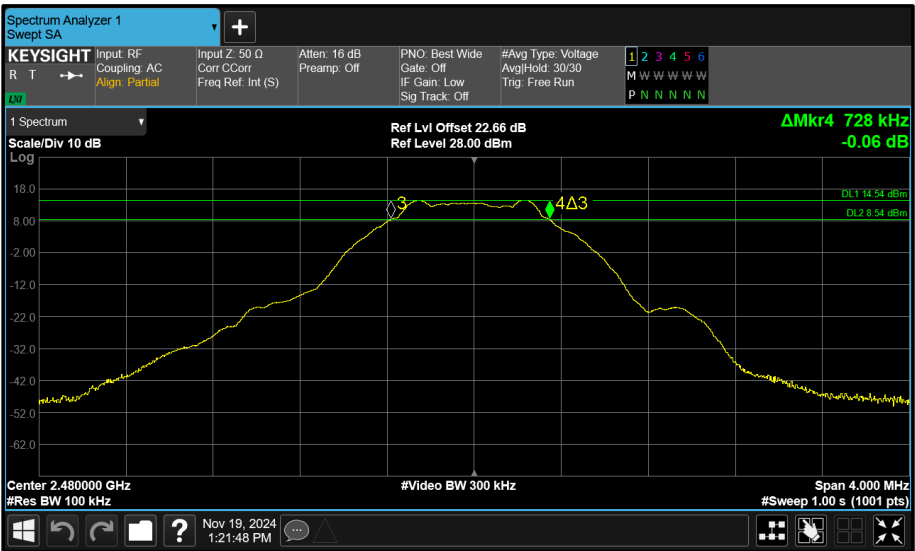


Figure 204 - Core 1 (B) 2480 MHz (CH39) 6 dB Bandwidth



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 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	1.280	1.160	-	-	≥500.0
2440	1.264	1.272	-	-	≥500.0
2480	1.272	1.400	-	-	≥500.0

Table 50 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2402	2.088	2.096	-	-	-
2440	2.096	2.096	-	-	-
2480	2.088	2.096	-	-	-

Table 51 - 99% Bandwidth Results

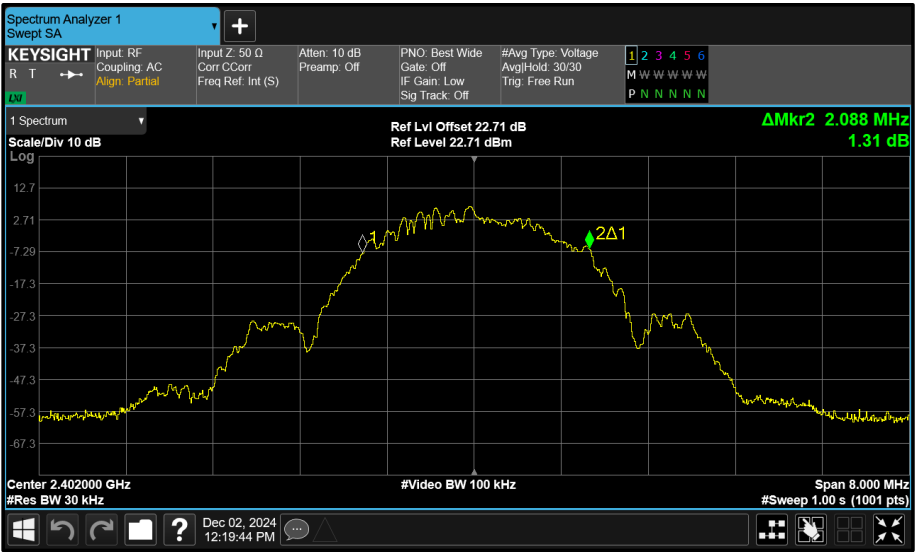


Figure 205 - Core 0 (A) 2402 MHz (CH37) 99% Bandwidth

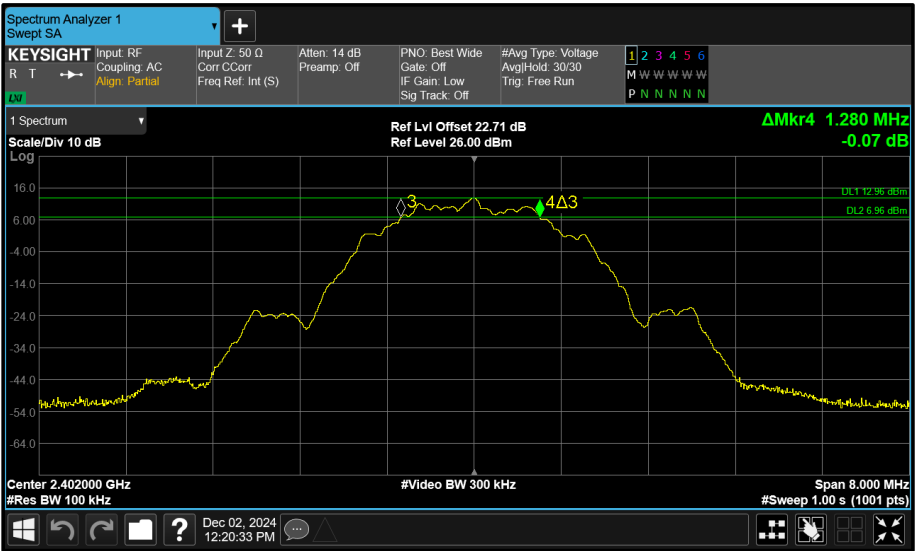


Figure 206 - Core 0 (A) 2402 MHz (CH37) 6 dB Bandwidth

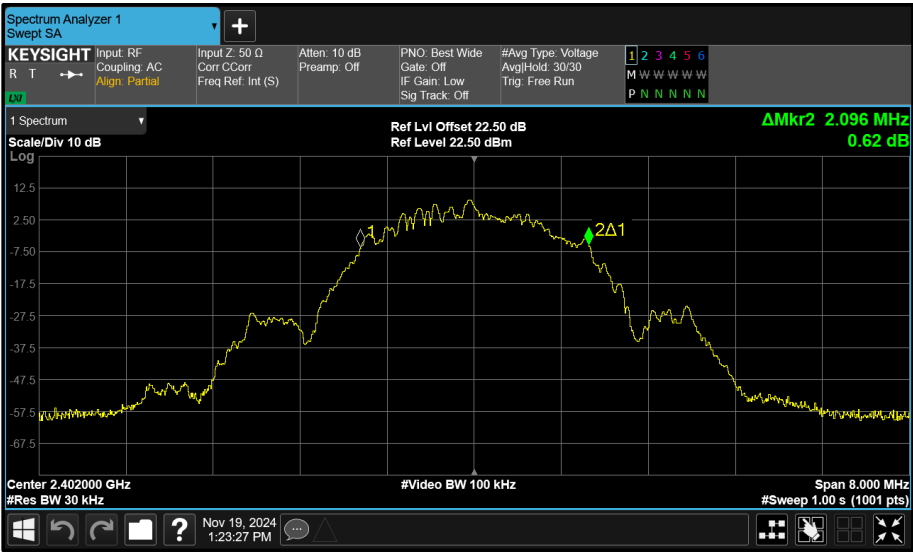


Figure 207 - Core 1 (B) 2402 MHz (CH37) 99% Bandwidth

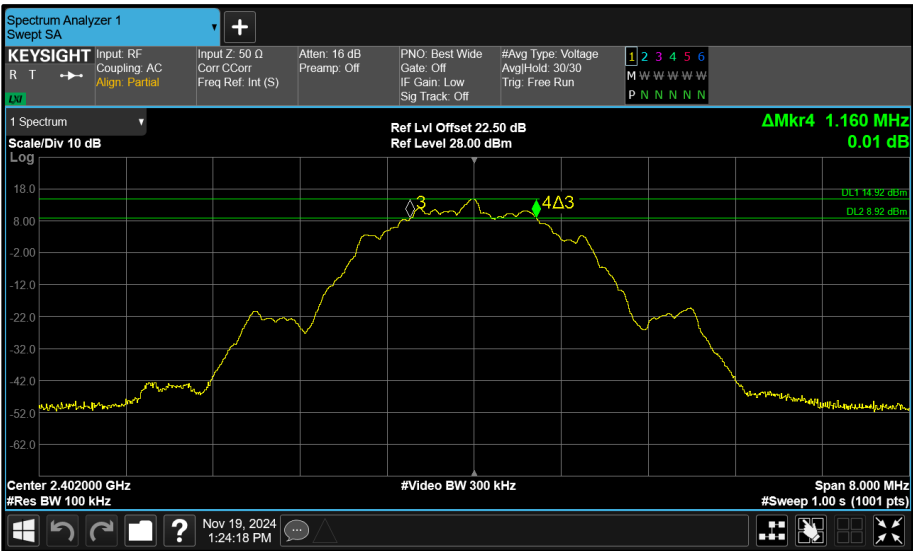


Figure 208 - Core 1 (B) 2402 MHz (CH37) 6 dB Bandwidth

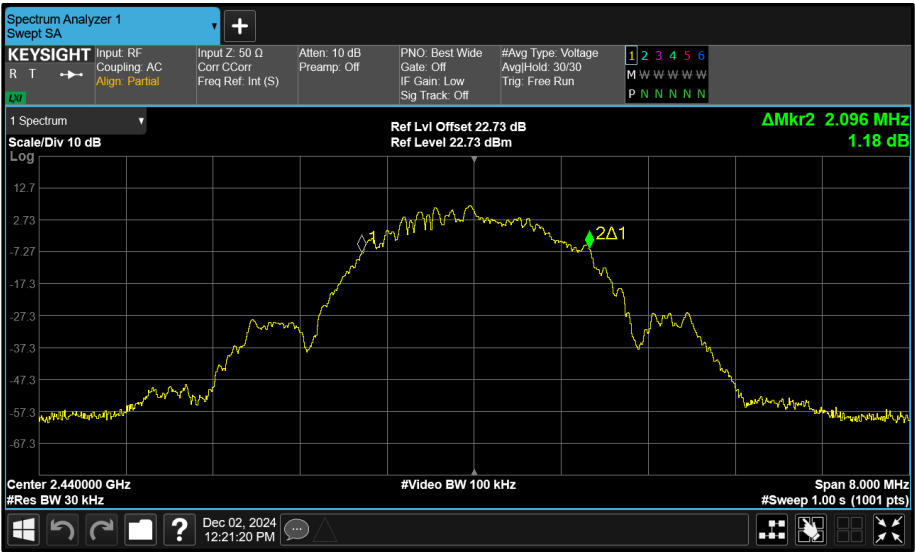


Figure 209 - Core 0 (A) 2440 MHz (CH17) 99% Bandwidth

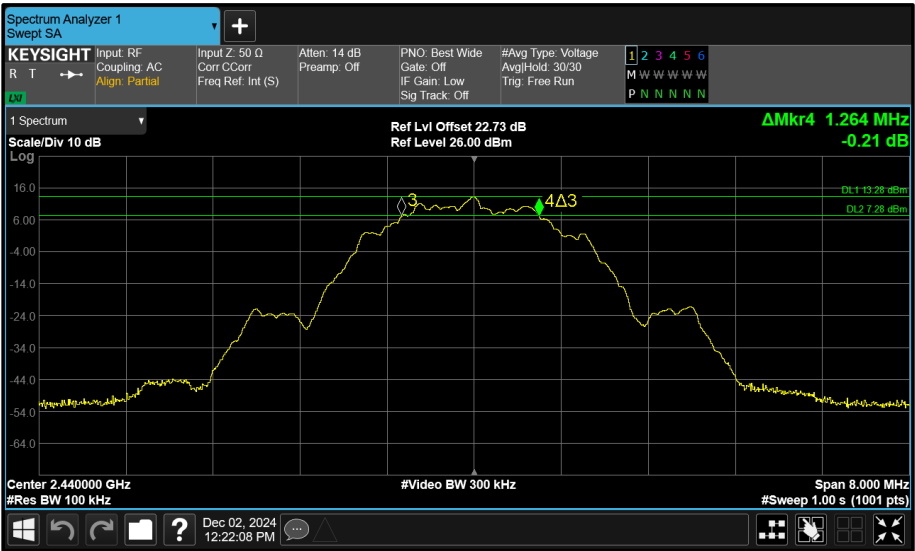


Figure 210 - Core 0 (A) 2440 MHz (CH17) 6 dB Bandwidth

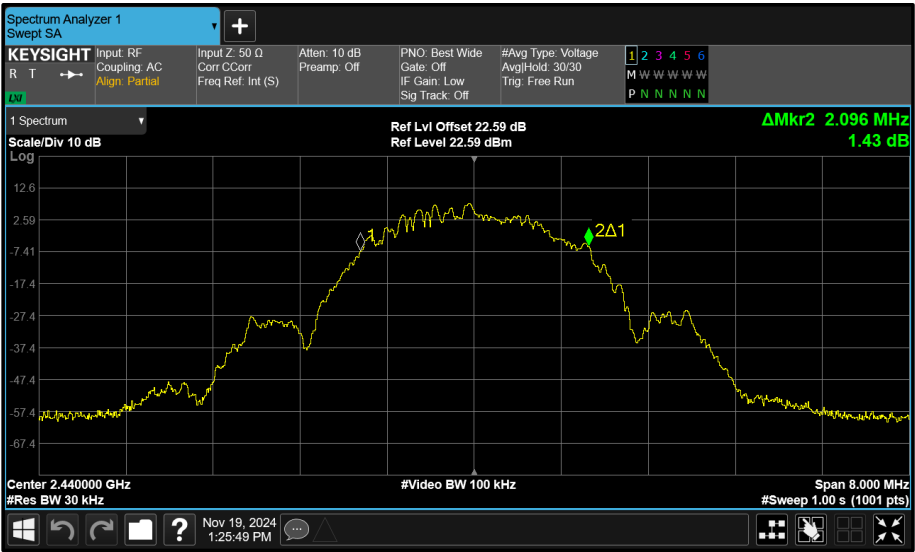


Figure 211 - Core 1 (B) 2440 MHz (CH17) 99% Bandwidth

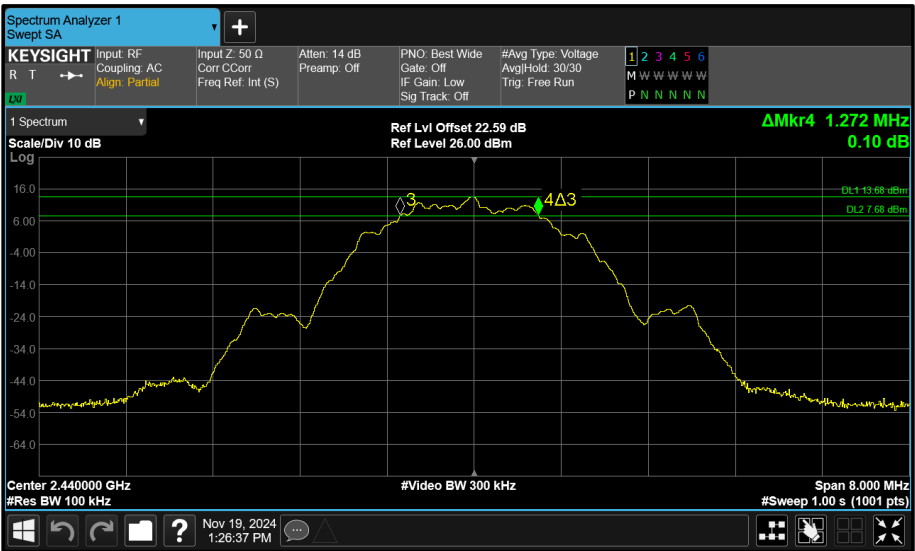


Figure 212 - Core 1 (B) 2440 MHz (CH17) 6 dB Bandwidth

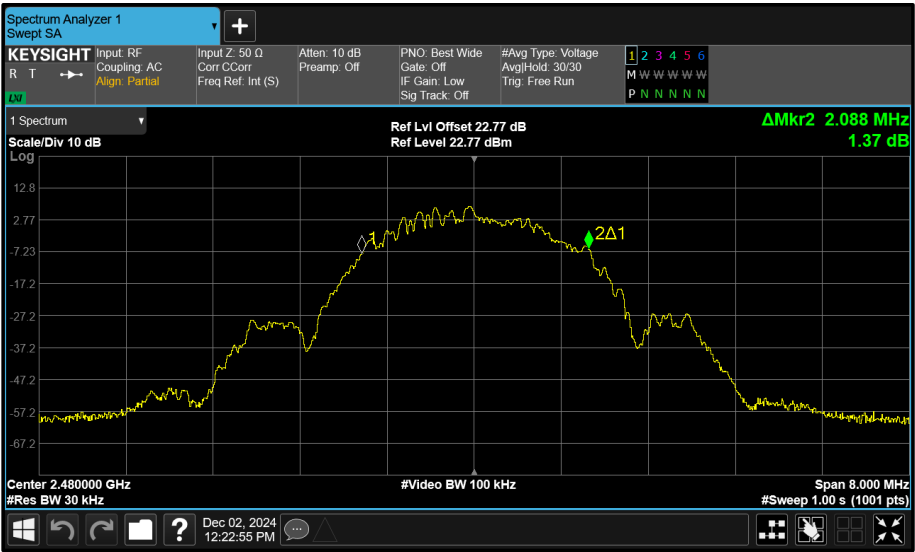


Figure 213 - Core 0 (A) 2480 MHz (CH39) 99% Bandwidth

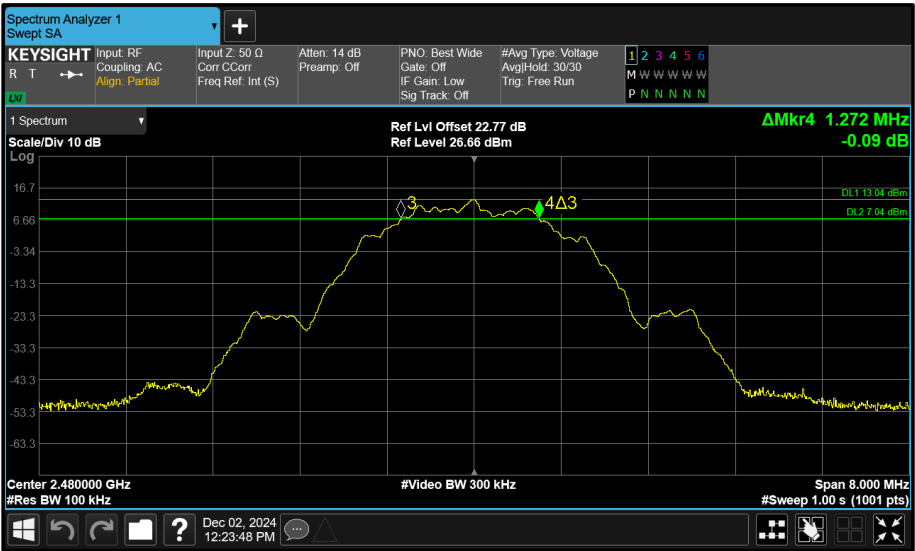


Figure 214 - Core 0 (A) 2480 MHz (CH39) 6 dB Bandwidth

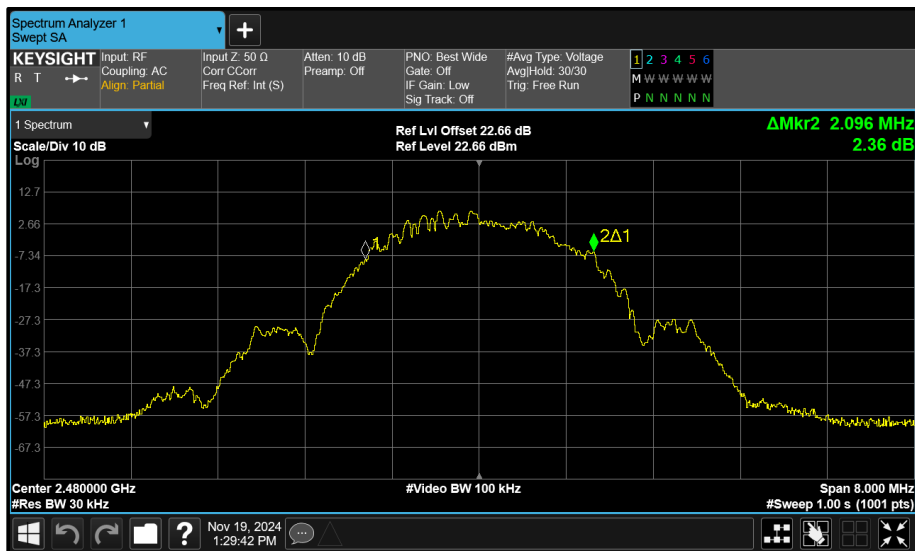


Figure 215 - Core 1 (B) 2480 MHz (CH39) 99% Bandwidth

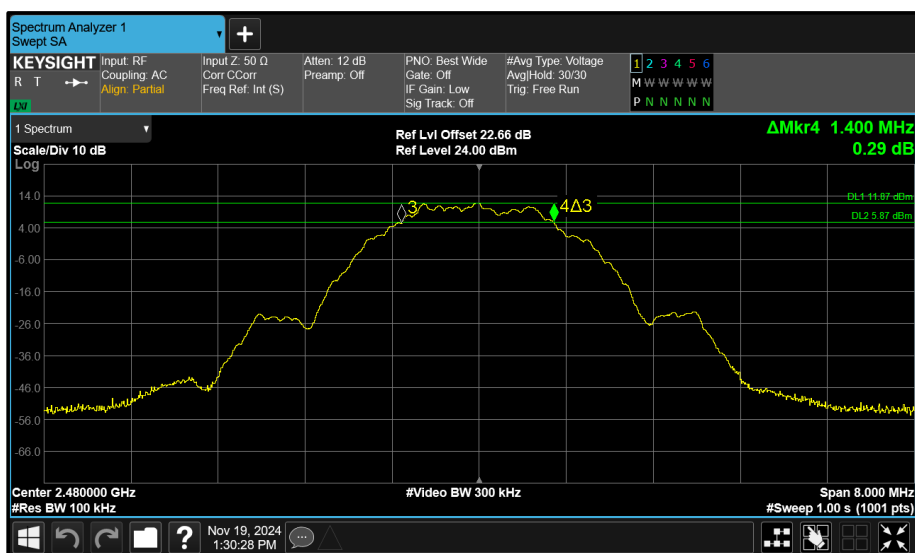


Figure 216 - Core 1 (B) 2480 MHz (CH39) 6 dB Bandwidth

FCC 47 CFR Part 15, Limit Clause 15.247(a)(2) and ISCED 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 Chamber 18 and RF Laboratory 14.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
AC Programmable Power Supply	iTech	IT7324	5225	-	O/P Mon
MXA Signal Analyser	Keysight Technologies	N9020B	5529	24	13-Dec-2024
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
Handheld Hygrometer	Fluke	971	6838	12	27-Aug-2025

Table 52

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

A3240, S/N: CR2LTQRPHQ - Modification State 0

2.3.3 Date of Test

18-November-2024 to 09-December-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. For the CDD results, the 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	22.2 - 22.3 °C
Relative Humidity	36.4 - 49.7 %



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 $\pi/4$ DQPSK (4-DH5)	Duty Cycle (%):	78.1
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.70

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2404	9.29	-	-	-	-	30.00	-20.71
2441	9.43	-	-	-	-	30.00	-20.57
2476	9.21	-	-	-	-	30.00	-20.79

Table 53 - 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					
2404	9.29	-	-	-	-	30.00	-20.71	14.99	36.00	-21.01
2441	9.43	-	-	-	-	30.00	-20.57	15.13	36.00	-20.87
2476	9.21	-	-	-	-	30.00	-20.79	14.91	36.00	-21.09

Table 54 - 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 $\pi/4$ DQPSK (8-DH5)	Duty Cycle (%):	78.5
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.70

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2404	9.41	-	-	-	-	30.00	-20.59
2441	9.85	-	-	-	-	30.00	-20.15
2476	9.70	-	-	-	-	30.00	-20.30

Table 55 - 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					
2404	9.41	-	-	-	-	30.00	-20.59	15.11	36.00	-20.89
2441	9.85	-	-	-	-	30.00	-20.15	15.55	36.00	-20.45
2476	9.70	-	-	-	-	30.00	-20.30	15.40	36.00	-20.60

Table 56 - 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)(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 (%):	60.4
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.70

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	5.53	-	-	-	-	30.00	-24.47
2440	5.63	-	-	-	-	30.00	-24.37
2480	5.30	-	-	-	-	30.00	-24.70

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	5.53	-	-	-	-	30.00	-24.47	11.23	36.00	-24.77
2440	5.63	-	-	-	-	30.00	-24.37	11.33	36.00	-24.67
2480	5.30	-	-	-	-	30.00	-24.70	11.00	36.00	-25.00

Table 58 - 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)(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 (%):	31.3
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.70

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	5.66	-	-	-	-	30.00	-24.34
2440	5.16	-	-	-	-	30.00	-24.84
2480	5.34	-	-	-	-	30.00	-24.66

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	5.66	-	-	-	-	30.00	-24.34	11.36	36.00	-24.64
2440	5.16	-	-	-	-	30.00	-24.84	10.86	36.00	-25.14
2480	5.34	-	-	-	-	30.00	-24.66	11.04	36.00	-24.96

Table 60 - 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)(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 (%):	60.4
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	B (Core 1)	Peak Antenna Gain (dBi):	4.80

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	-	5.98	-	-	-	30.00	-24.02
2440	-	5.82	-	-	-	30.00	-24.18
2480	-	5.78	-	-	-	30.00	-24.22

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	-	5.98	-	-	-	30.00	-24.02	10.78	36.00	-25.22
2440	-	5.82	-	-	-	30.00	-24.18	10.62	36.00	-25.38
2480	-	5.78	-	-	-	30.00	-24.22	10.58	36.00	-25.42

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)(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 (%):	31.3
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	B (Core 1)	Peak Antenna Gain (dBi):	4.80

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	-	5.94	-	-	-	30.00	-24.06
2440	-	5.85	-	-	-	30.00	-24.15
2480	-	5.67	-	-	-	30.00	-24.33

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	-	5.94	-	-	-	30.00	-24.06	10.74	36.00	-25.26
2440	-	5.85	-	-	-	30.00	-24.15	10.65	36.00	-25.35
2480	-	5.67	-	-	-	30.00	-24.33	10.47	36.00	-25.53

Table 64 - 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)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA $\pi/4$ DQPSK (4-DH5)	Duty Cycle (%):	78.1
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.70

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2404	17.53	-	-	-	-	30.00	-12.47
2441	17.36	-	-	-	-	30.00	-12.64
2476	17.67	-	-	-	-	30.00	-12.33

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					
2404	17.53	-	-	-	-	30.00	-12.47	23.23	36.00	-12.77
2441	17.36	-	-	-	-	30.00	-12.64	23.06	36.00	-12.94
2476	17.67	-	-	-	-	30.00	-12.33	23.37	36.00	-12.63

Table 66 - 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)(3) RSS-247 5.4 d)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA $\pi/4$ DQPSK (8-DH5)	Duty Cycle (%):	78.2
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.70

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2404	15.86	-	-	-	-	30.00	-14.14
2441	16.27	-	-	-	-	30.00	-13.73
2476	15.87	-	-	-	-	30.00	-14.13

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					
2404	15.86	-	-	-	-	30.00	-14.14	21.56	36.00	-14.44
2441	16.27	-	-	-	-	30.00	-13.73	21.97	36.00	-14.03
2476	15.87	-	-	-	-	30.00	-14.13	21.57	36.00	-14.43

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)(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):	B (Core 1)	Peak Antenna Gain (dBi):	4.80

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	-	16.30	-	-	-	30.00	-13.70
2440	-	15.71	-	-	-	30.00	-14.29
2480	-	15.85	-	-	-	30.00	-14.15

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	-	16.30	-	-	-	30.00	-13.70	21.10	36.00	-14.90
2440	-	15.71	-	-	-	30.00	-14.29	20.51	36.00	-15.49
2480	-	15.85	-	-	-	30.00	-14.15	20.65	36.00	-15.35

Table 70 - 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)(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 (%):	31.3
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	B (Core 1)	Peak Antenna Gain (dBi):	4.80

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	-	16.61	-	-	-	30.00	-13.39
2440	-	15.87	-	-	-	30.00	-14.13
2480	-	16.18	-	-	-	30.00	-13.82

Table 71 - 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	-	16.61	-	-	-	30.00	-13.39	21.41	36.00	-14.59
2440	-	15.87	-	-	-	30.00	-14.13	20.67	36.00	-15.33
2480	-	16.18	-	-	-	30.00	-13.82	20.98	36.00	-15.02

Table 72 - 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)(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 $\pi/4$ DQPSK (4-DH5)	Duty Cycle (%):	78.4
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	8.27

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2404	9.73	9.61	-	-	12.68	27.73	-15.05
2441	9.58	9.60	-	-	12.60	27.73	-15.13
2476	9.59	9.59	-	-	12.60	27.73	-15.13

Table 73 - 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					
2404	9.73	9.61	-	-	12.68	30.00	-17.32	20.95	36.00	-15.05
2441	9.58	9.60	-	-	12.60	30.00	-17.40	20.88	36.00	-15.12
2476	9.59	9.59	-	-	12.60	30.00	-17.40	20.87	36.00	-15.13

Table 74 - 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)(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 $\pi/4$ 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):	8.27

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2404	9.53	9.09	-	-	12.33	27.73	-15.40
2441	9.68	9.58	-	-	12.64	27.73	-15.09
2476	9.52	9.16	-	-	12.36	27.73	-15.37

Table 75 - 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					
2404	9.53	9.09	-	-	12.33	30.00	-17.67	20.60	36.00	-15.40
2441	9.68	9.58	-	-	12.64	30.00	-17.36	20.91	36.00	-15.09
2476	9.52	9.16	-	-	12.36	30.00	-17.64	20.63	36.00	-15.37

Table 76 - 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)(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 (%):	60.4
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A + B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	8.27

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	5.55	5.82	-	-	8.70	27.73	-19.03
2440	5.60	5.73	-	-	8.67	27.73	-19.06
2480	5.36	5.72	-	-	8.55	27.73	-19.17

Table 77 - 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	5.55	5.82	-	-	8.70	30.00	-21.30	16.97	36.00	-19.03
2440	5.60	5.73	-	-	8.67	30.00	-21.33	16.94	36.00	-19.06
2480	5.36	5.72	-	-	8.55	30.00	-21.45	16.83	36.00	-19.17

Table 78 - 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)(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 (%):	31.3
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A + B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	8.27

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	5.54	5.88	-	-	8.73	27.73	-19.00
2440	5.67	5.86	-	-	8.77	27.73	-18.95
2480	5.36	6.01	-	-	8.71	27.73	-19.02

Table 79 - 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	5.54	5.88	-	-	8.73	30.00	-21.27	17.00	36.00	-19.00
2440	5.67	5.86	-	-	8.77	30.00	-21.23	17.05	36.00	-18.95
2480	5.36	6.01	-	-	8.71	30.00	-21.29	16.98	36.00	-19.02

Table 80 - 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)(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 $\pi/4$ 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):	8.27

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2404	17.38	17.05	-	-	20.23	27.73	-7.50
2441	16.95	17.44	-	-	20.21	27.73	-7.52
2476	16.85	17.32	-	-	20.10	27.73	-7.63

Table 81 - 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					
2404	17.38	17.05	-	-	20.23	30.00	-9.77	28.50	36.00	-7.50
2441	16.95	17.44	-	-	20.21	30.00	-9.79	28.48	36.00	-7.52
2476	16.85	17.32	-	-	20.10	30.00	-9.90	28.37	36.00	-7.63

Table 82 - 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)(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 $\pi/4$ 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):	8.27

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2404	16.31	15.78	-	-	19.06	27.73	-8.67
2441	16.30	16.01	-	-	19.16	27.73	-8.57
2476	16.18	15.67	-	-	18.95	27.73	-8.78

Table 83 - 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					
2404	16.31	15.78	-	-	19.06	30.00	-10.94	27.33	36.00	-8.67
2441	16.30	16.01	-	-	19.16	30.00	-10.84	27.44	36.00	-8.56
2476	16.18	15.67	-	-	18.95	30.00	-11.05	27.22	36.00	-8.78

Table 84 - ISSED Maximum Conducted (average) 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:	Beamforming	DCCF (dB):	-
Active Port(s):	A + B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	8.27

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	14.58	16.36	-	-	18.57	27.73	-9.15
2440	14.61	15.89	-	-	18.31	27.73	-9.42
2480	14.98	15.88	-	-	18.46	27.73	-9.27

Table 85 - 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	14.58	16.36	-	-	18.57	30.00	-11.43	26.85	36.00	-9.15
2440	14.61	15.89	-	-	18.31	30.00	-11.69	26.58	36.00	-9.42
2480	14.98	15.88	-	-	18.46	30.00	-11.54	26.73	36.00	-9.27

Table 86 - 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 (%):	31.3
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A + B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	8.27

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	14.77	16.73	-	-	18.87	27.73	-8.85
2440	15.46	15.65	-	-	18.56	27.73	-9.16
2480	14.83	16.13	-	-	18.54	27.73	-9.19

Table 87 - 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	14.77	16.73	-	-	18.87	30.00	-11.13	27.15	36.00	-8.85
2440	15.46	15.65	-	-	18.56	30.00	-11.44	26.84	36.00	-9.16
2480	14.83	16.13	-	-	18.54	30.00	-11.46	26.81	36.00	-9.19

Table 88 - 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 and RF Laboratory 14.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
AC Programmable Power Supply	iTech	IT7324	5225	-	O/P Mon
USB Power Sensor	Boonton	RTP5008	5820	12	07-Feb-2025
USB Power Sensor	Boonton	RTP5008	5821	12	07-Feb-2025
Digital Multimeter	Fluke	115	6145	12	06-Jun-2025
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6426	12	07-Feb-2025
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6518	12	16-Feb-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6529	12	16-Feb-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6530	12	16-Feb-2025
USB Wideband Power Sensor	Boonton	RTP5008	6587	12	13-Feb-2025
USB Wideband Power Sensor	Boonton	RTP5008	6588	12	13-Feb-2025
AC Programmable Power Supply	iTech	IT7324	6662	-	O/P Mon
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
Handheld Hygrometer	Fluke	971	6838	12	27-Aug-2025

Table 89

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

A3240, S/N: H2XGP4VW6W - Modification State 0

2.4.3 Date of Test

01-October-2024 to 02-October-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	22.6 - 22.7 °C
Relative Humidity	41.2 - 46.7 %

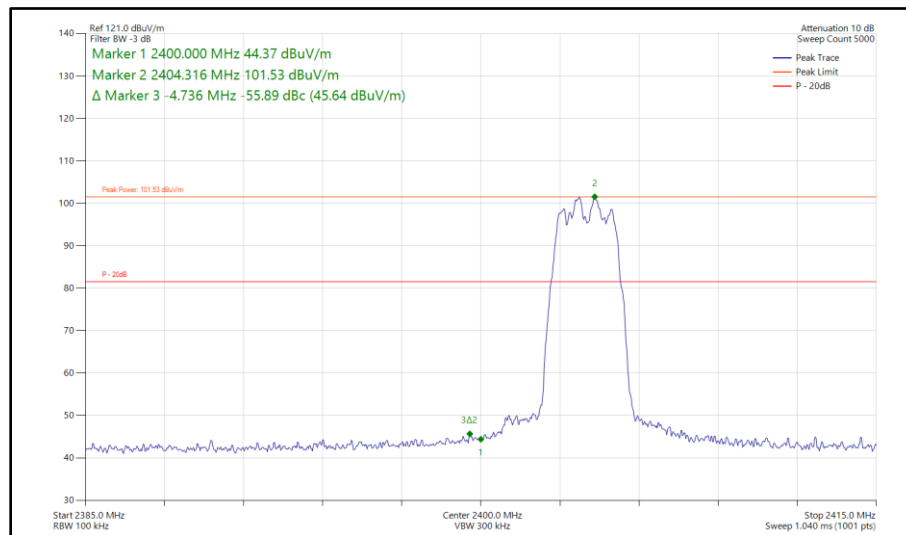
2.4.6 Test Results

2.4 GHz Bluetooth LE/HDR

iPA - Core 0 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	HDR4	2404	2400	-55.89
Static	HDR8	2404	2400	-47.21
Static	LE1M	2402	2400	-66.91
Static	LE2M	2402	2400	-34.30

Table 90 - SISO Authorised Band Edge Results



**Figure 217 - Bluetooth HDR4, SISO, Core 0 - 2404 MHz
Band Edge Frequency 2400 MHz**

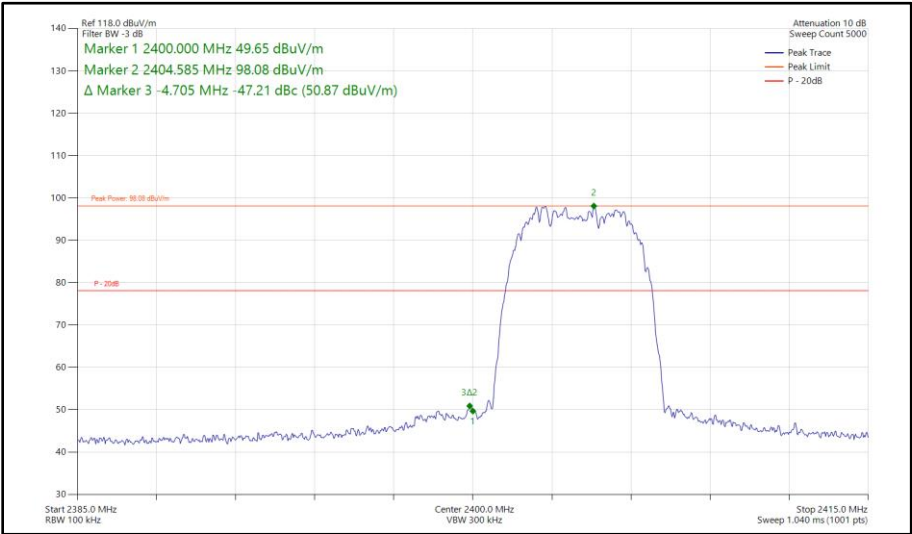


Figure 218 - Bluetooth HDR8, SISO, Core 0 - 2404 MHz
Band Edge Frequency 2400 MHz

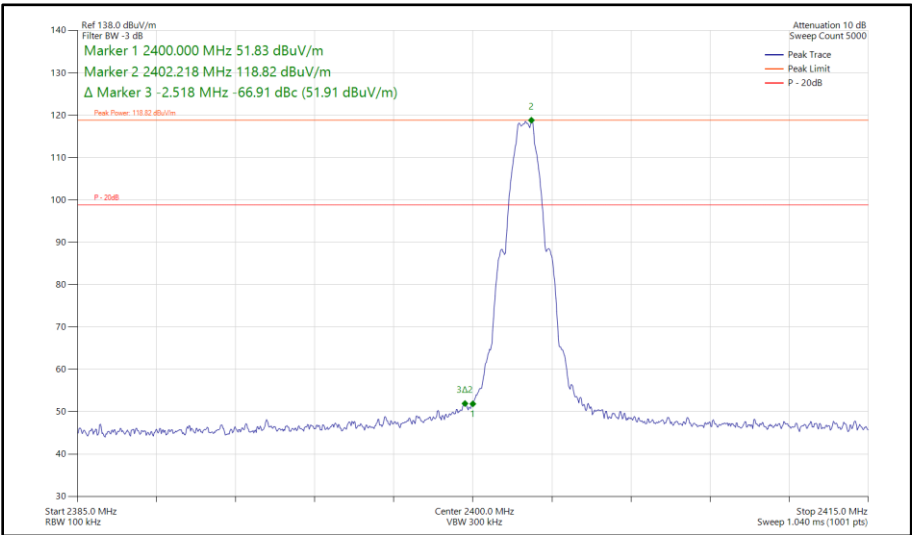


Figure 219 - Bluetooth LE1M, SISO, Core 0 - 2402 MHz
Band Edge Frequency 2400 MHz

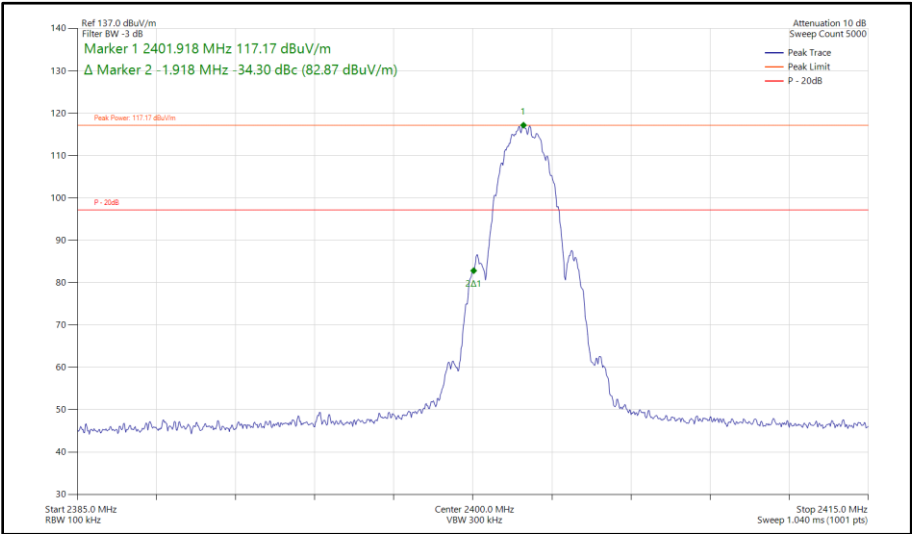
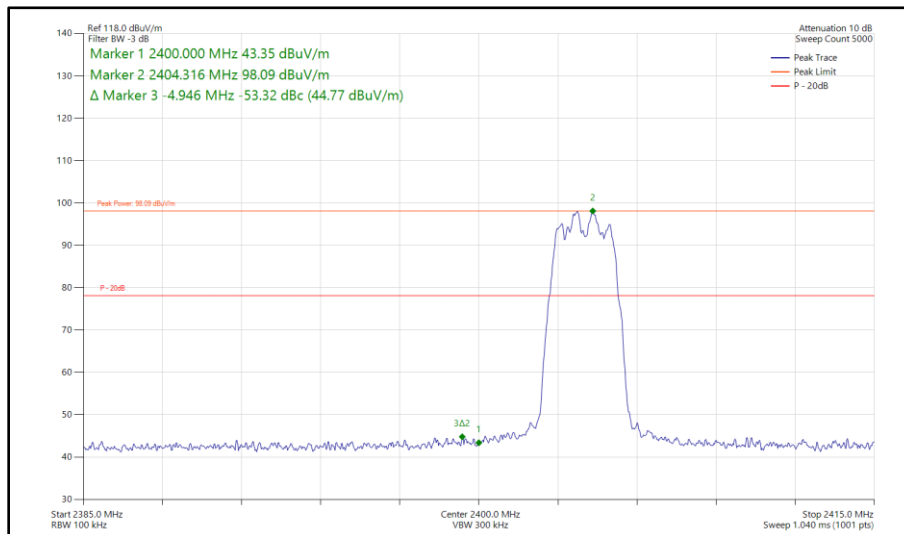


Figure 220 - Bluetooth LE2M, SISO, Core 0 - 2402 MHz
Band Edge Frequency 2400 MHz

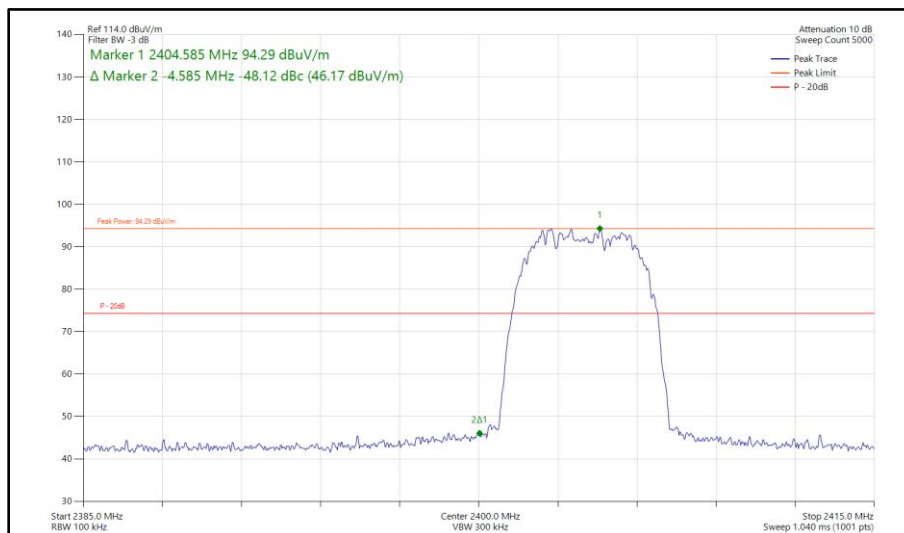
iPA - Core 1 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	HDR4	2404	2400	-53.32
Static	HDR8	2404	2400	-48.12
Static	LE1M	2402	2400	-60.96
Static	LE2M	2402	2400	-30.66

Table 91 - SISO Authorised Band Edge Results



**Figure 221 - Bluetooth HDR4, SISO, Core 1 - 2404 MHz
Band Edge Frequency 2400 MHz**



**Figure 222 - Bluetooth HDR8, SISO, Core 1 - 2404 MHz
Band Edge Frequency 2400 MHz**

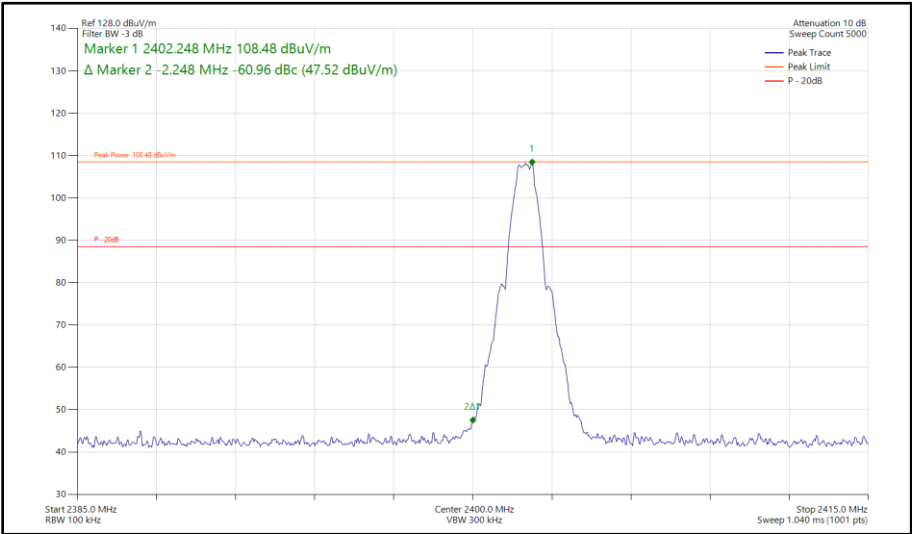


Figure 223 - Bluetooth LE1M, SISO, Core 1 - 2402 MHz
Band Edge Frequency 2400 MHz

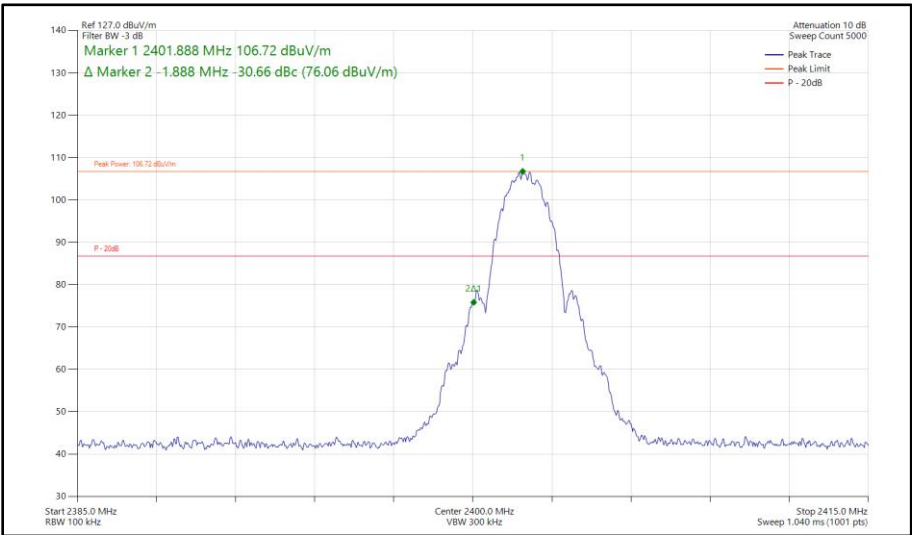


Figure 224 - Bluetooth LE2M, SISO, Core 1 - 2402 MHz
Band Edge Frequency 2400 MHz

iPA - Core 0 - Core 1 (MIMO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	HDR4	2404	2400	-59.35
Static	HDR8	2404	2400	-51.13
Static	LE1M	2402	2400	-65.65
Static	LE2M	2402	2400	-32.60

Table 92 - MIMO Authorised Band Edge Results

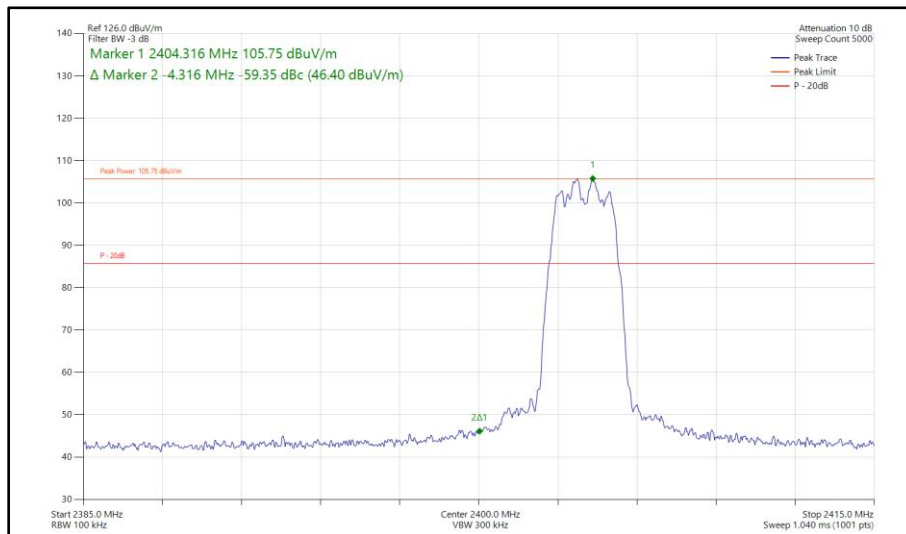


Figure 225 - Bluetooth HDR4, MIMO, Core 0 - Core 1 - 2404 MHz
Band Edge Frequency 2400 MHz

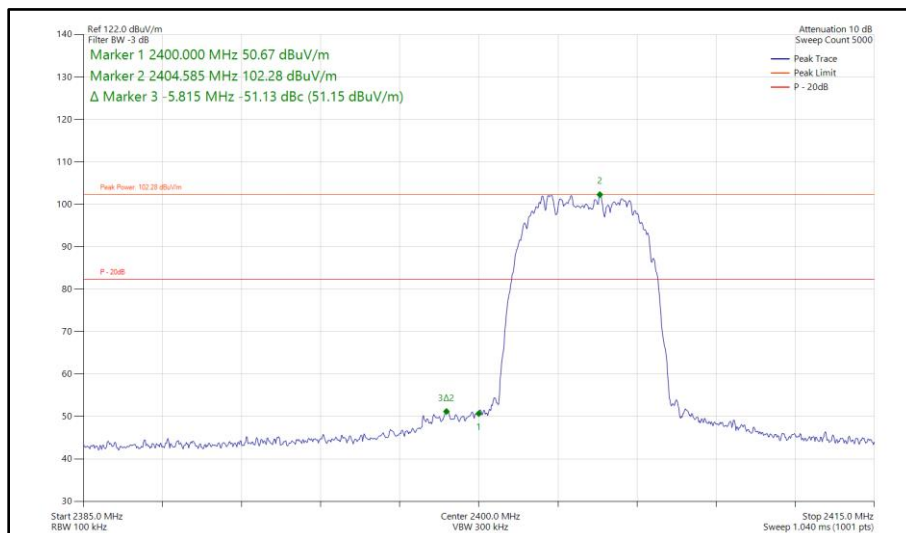


Figure 226 - Bluetooth HDR8, MIMO, Core 0 - Core 1 - 2404 MHz
Band Edge Frequency 2400 MHz

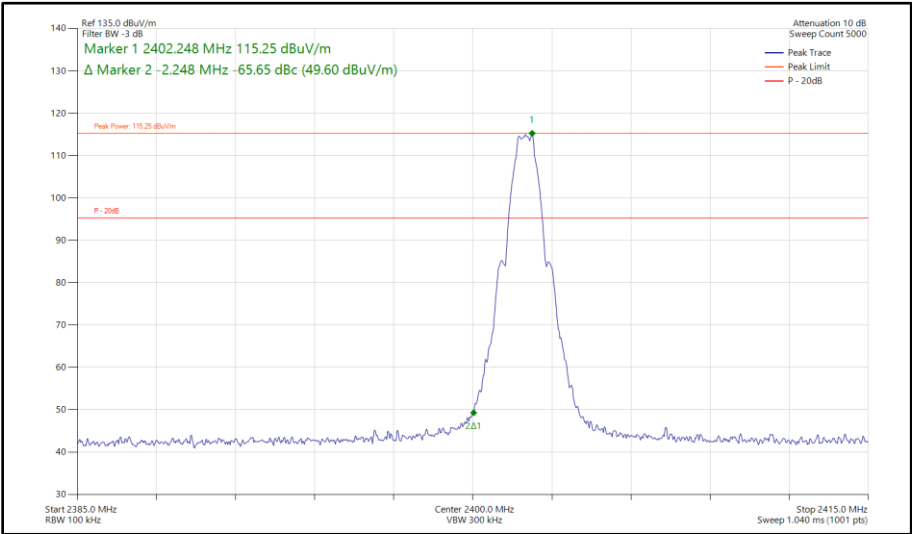


Figure 227 - Bluetooth LE1M, MIMO, Core 0 - Core 1 - 2402 MHz
Band Edge Frequency 2400 MHz

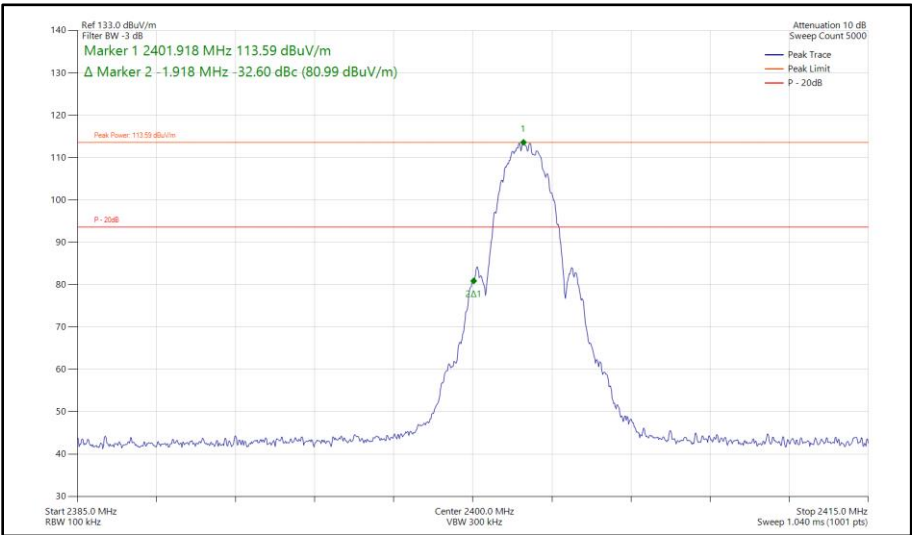


Figure 228 - Bluetooth LE2M, MIMO, Core 0 - Core 1 - 2402 MHz
Band Edge Frequency 2400 MHz