

Figure 159 - Core 0 (A) 2441 MHz (CH39) 99% Bandwidth

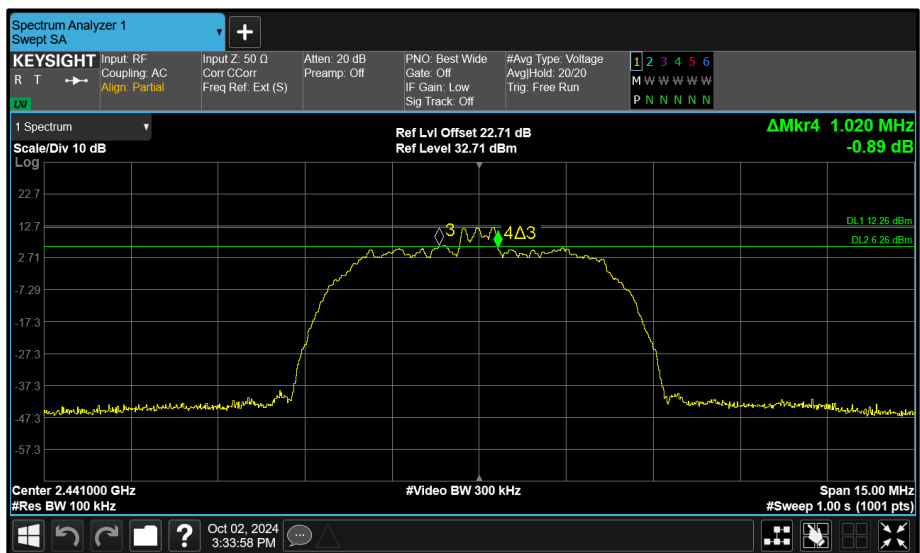


Figure 160 - Core 0 (A) 2441 MHz (CH39) 6 dB Bandwidth

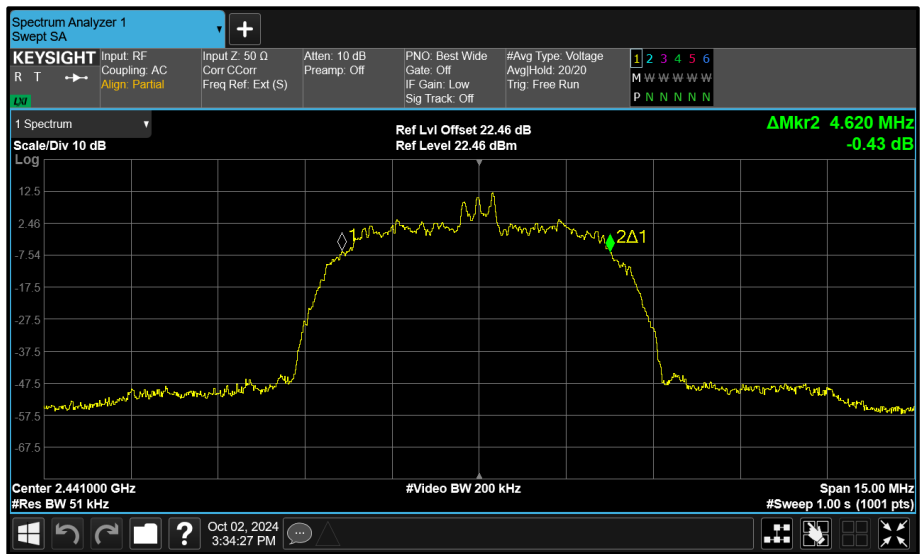


Figure 161 - Core 1 (B) 2441 MHz (CH39) 99% Bandwidth

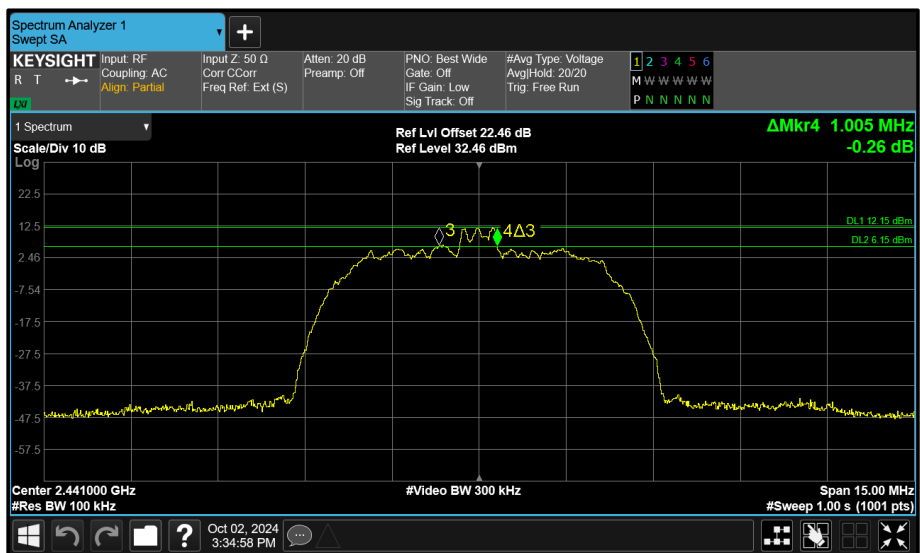


Figure 162 - Core 1 (B) 2441 MHz (CH39) 6 dB Bandwidth

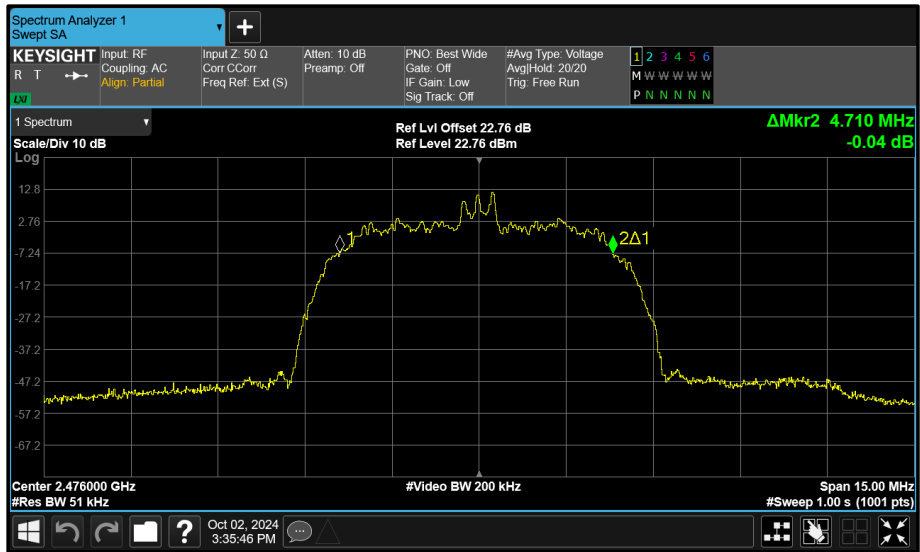


Figure 163 - Core 0 (A) 2476 MHz (CH74) 99% Bandwidth

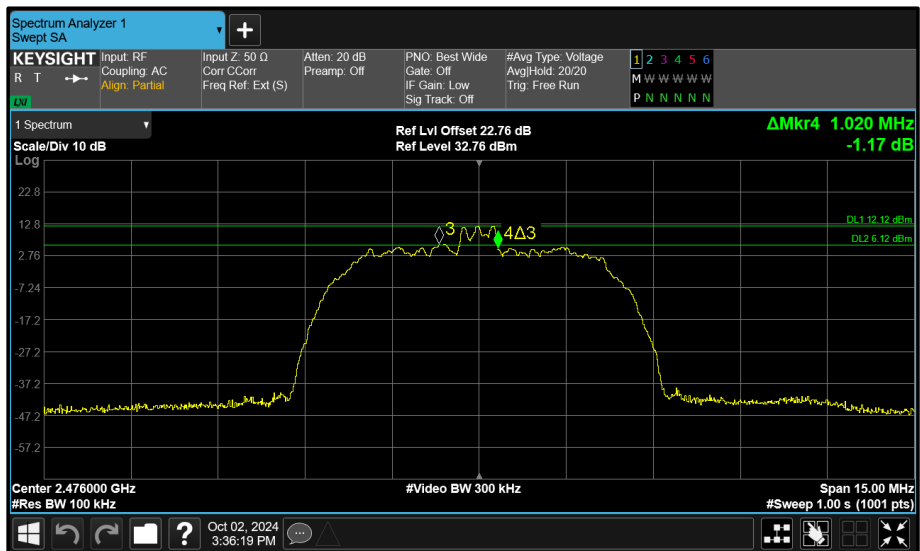


Figure 164 - Core 0 (A) 2476 MHz (CH74) 6 dB Bandwidth

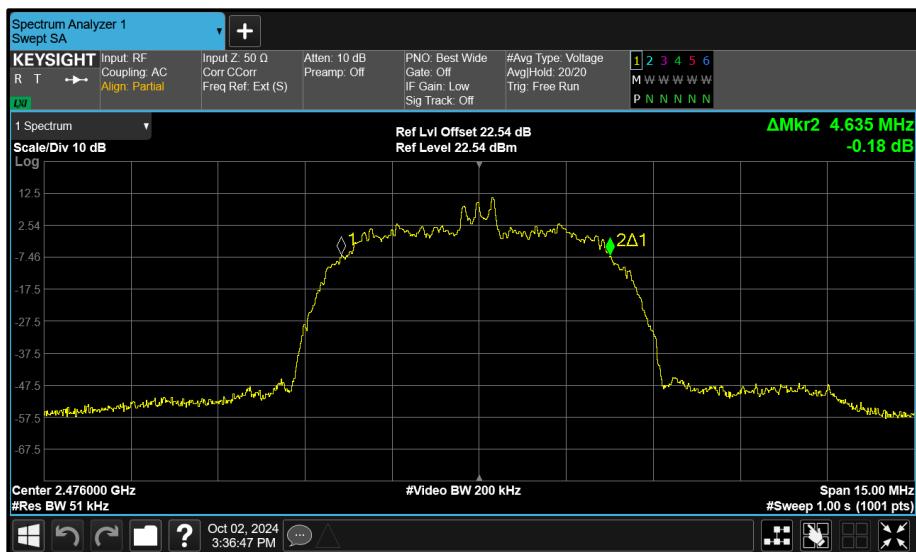


Figure 165 - Core 1 (B) 2476 MHz (CH74) 99% Bandwidth

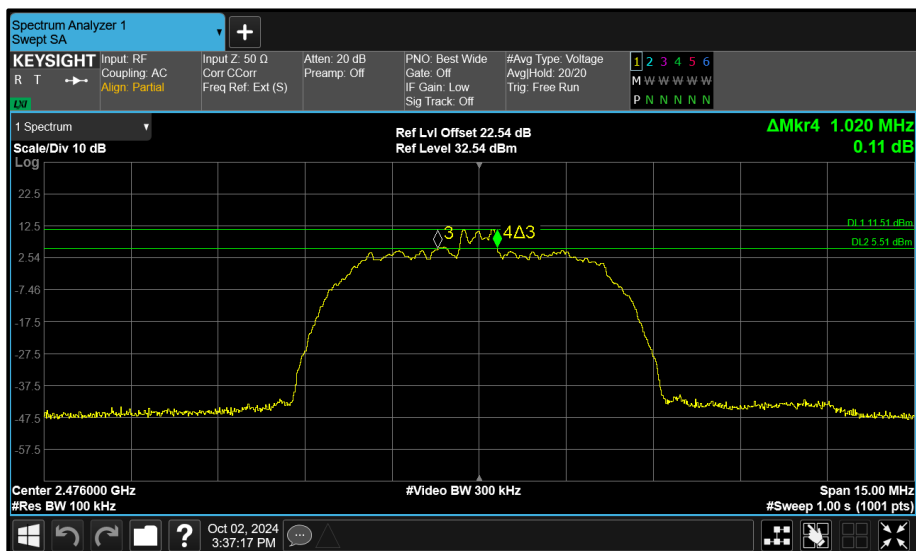


Figure 166 - Core 1 (B) 2476 MHz (CH74) 6 dB Bandwidth



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (a)(2)	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	0.728	0.696	-	-	≥500.0
2440	0.728	0.728	-	-	≥500.0
2480	0.728	0.728	-	-	≥500.0

Table 45 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2402	1.040	1.040	-	-	-
2440	1.044	1.040	-	-	-
2480	1.040	1.036	-	-	-

Table 46 - 99% Bandwidth Results

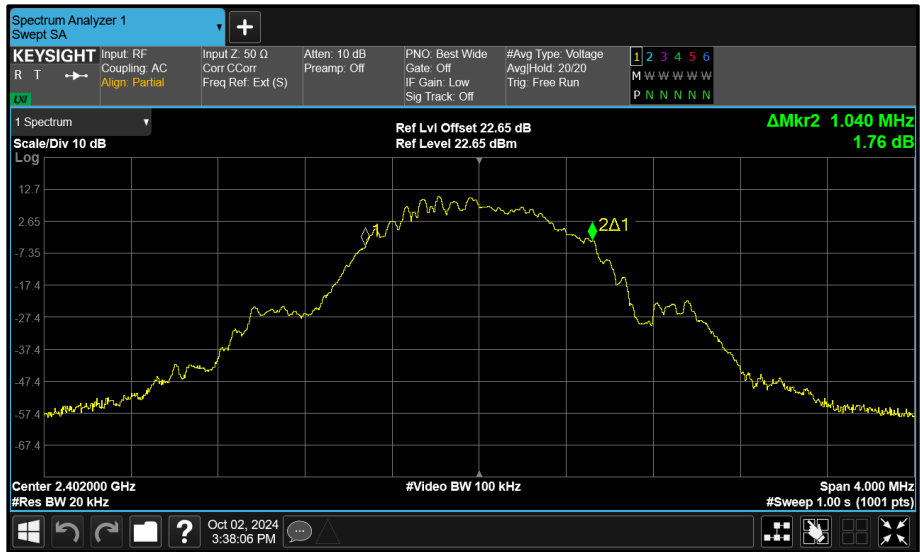


Figure 167 - Core 0 (A) 2402 MHz (CH37) 99% Bandwidth

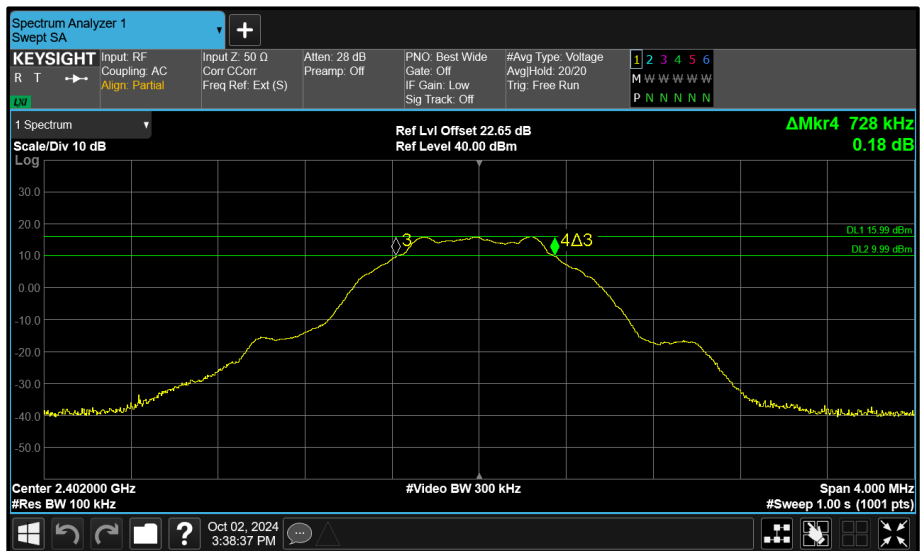


Figure 168 - Core 0 (A) 2402 MHz (CH37) 6 dB Bandwidth

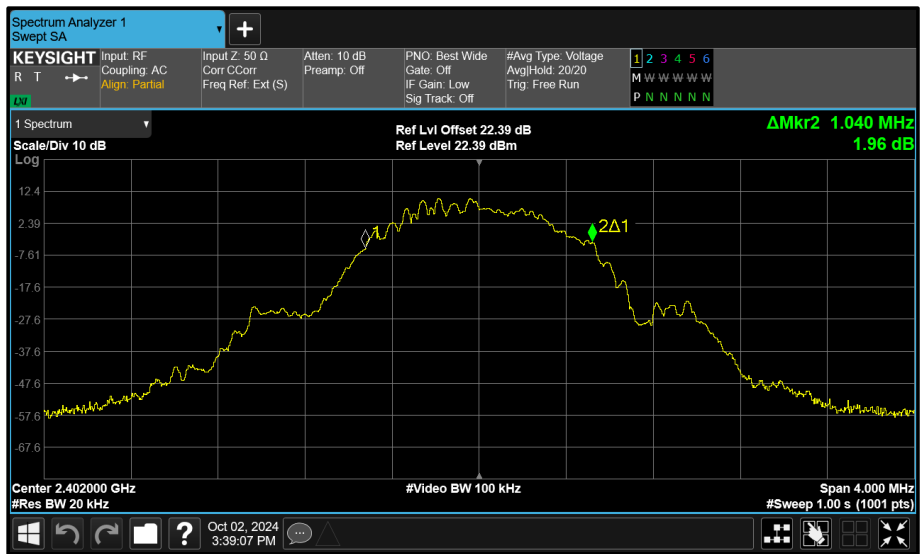


Figure 169 - Core 1 (B) 2402 MHz (CH37) 99% Bandwidth

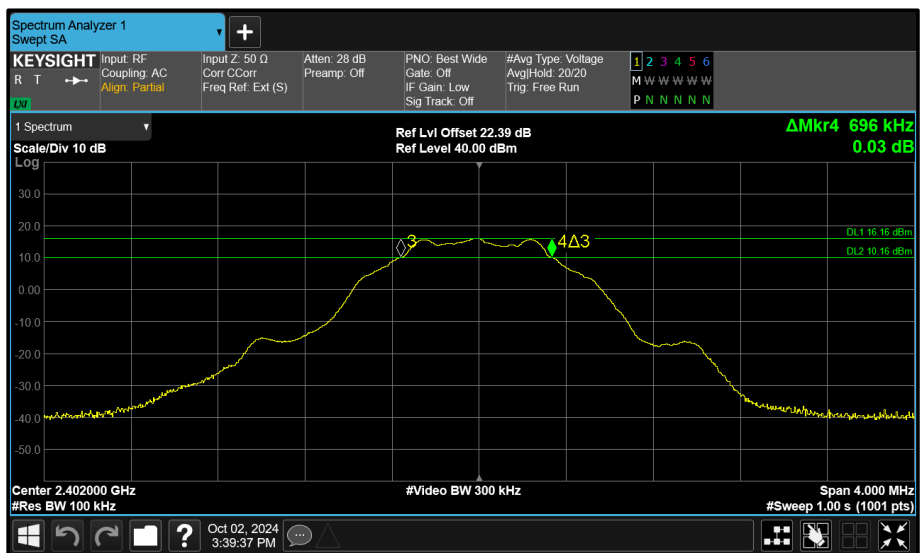


Figure 170 - Core 1 (B) 2402 MHz (CH37) 6 dB Bandwidth

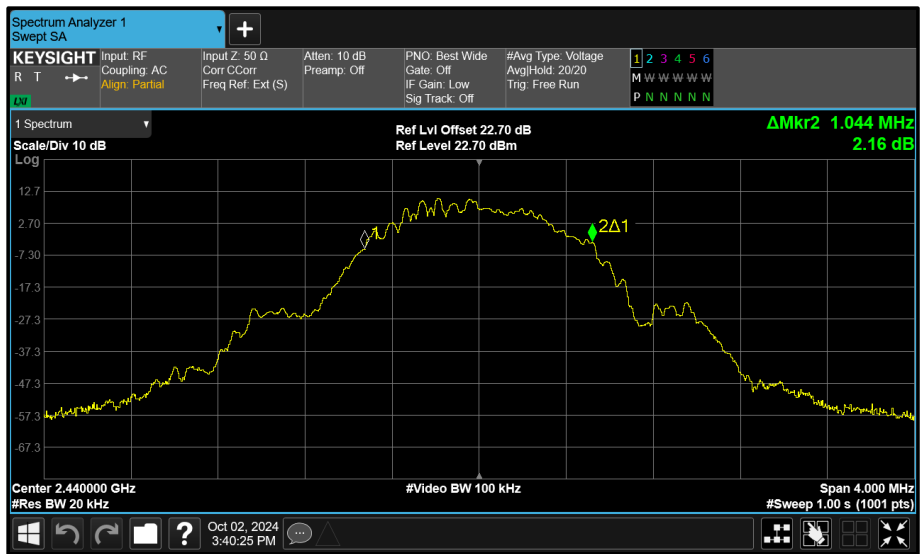


Figure 171 - Core 0 (A) 2440 MHz (CH17) 99% Bandwidth

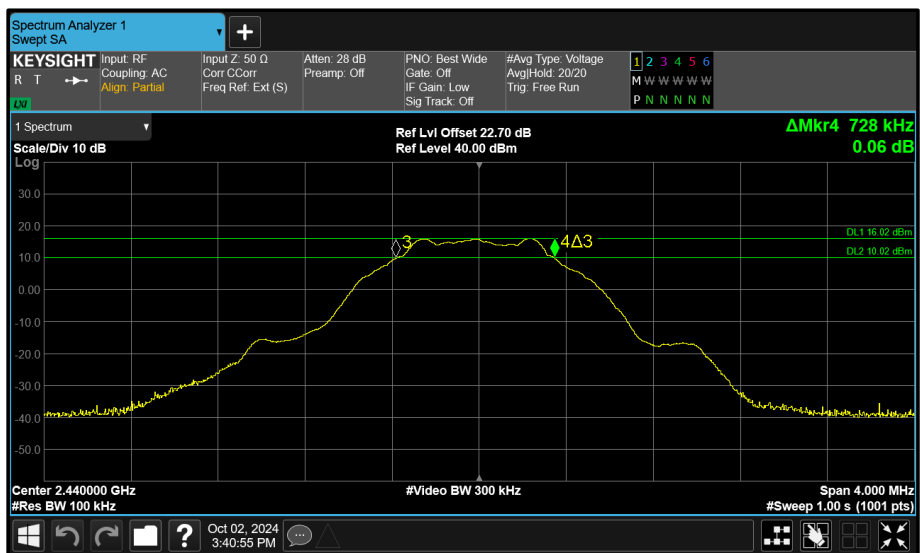


Figure 172 - Core 0 (A) 2440 MHz (CH17) 6 dB Bandwidth

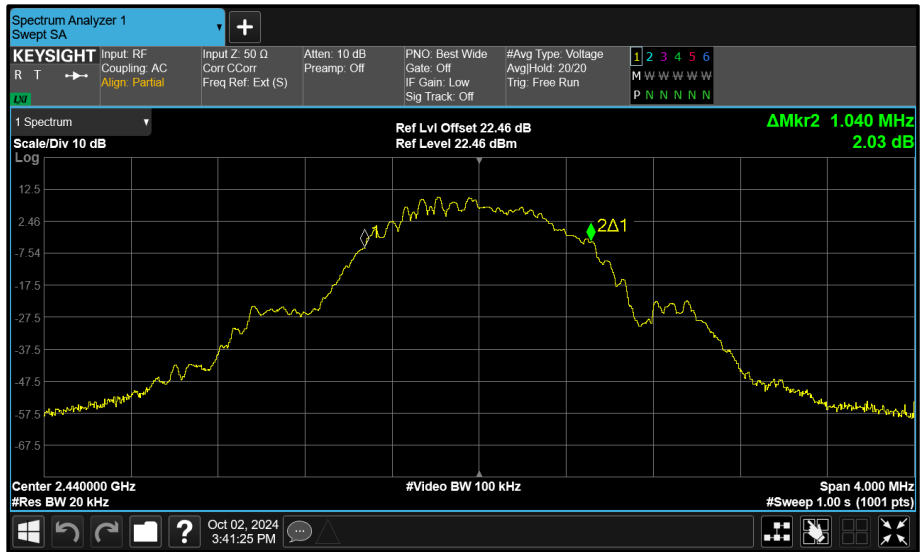


Figure 173 - Core 1 (B) 2440 MHz (CH17) 99% Bandwidth

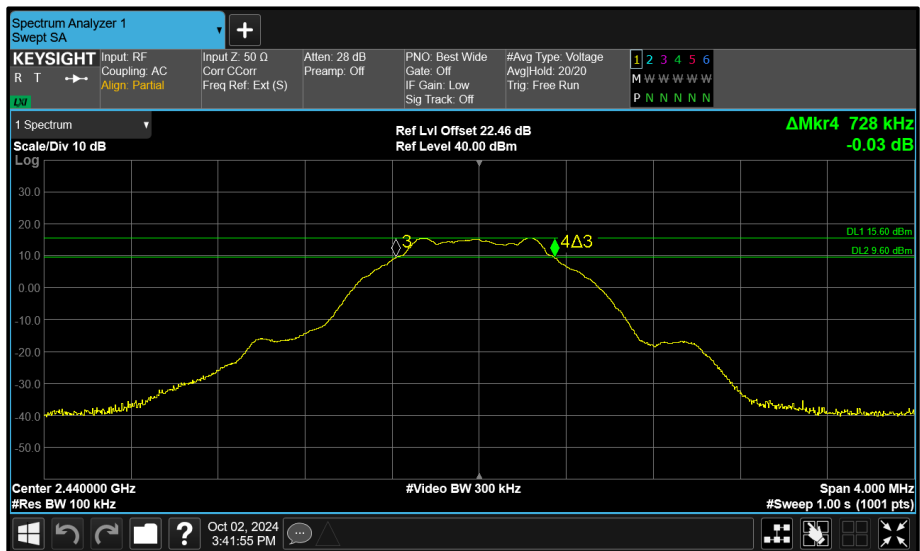


Figure 174 - Core 1 (B) 2440 MHz (CH17) 6 dB Bandwidth

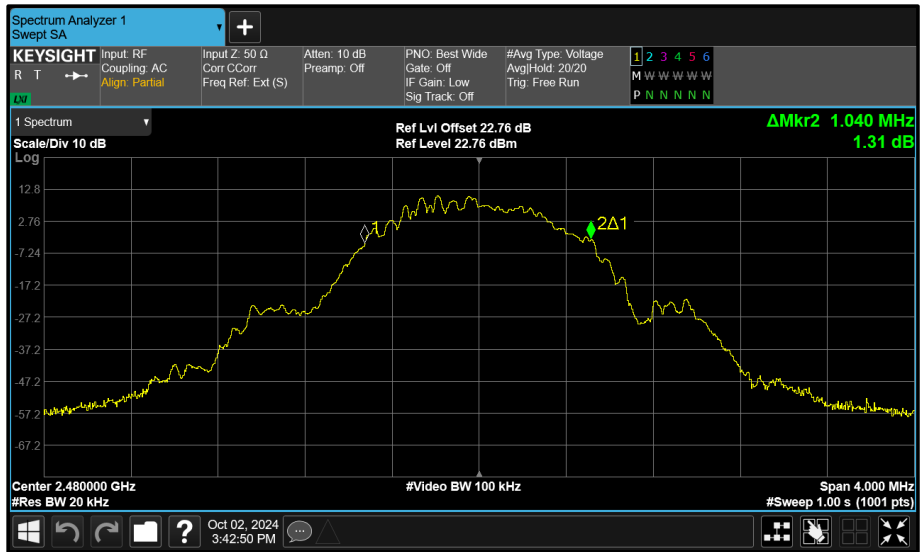


Figure 175 - Core 0 (A) 2480 MHz (CH39) 99% Bandwidth

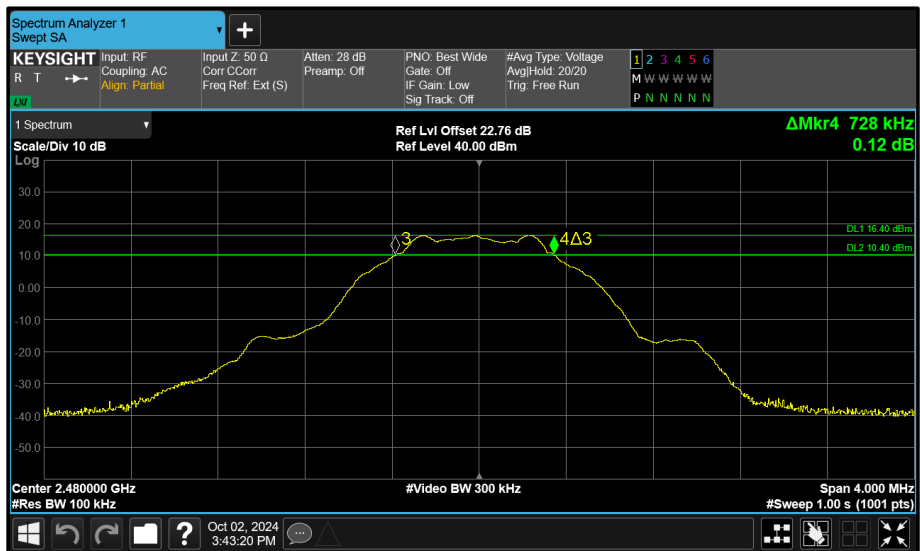


Figure 176 - Core 0 (A) 2480 MHz (CH39) 6 dB Bandwidth

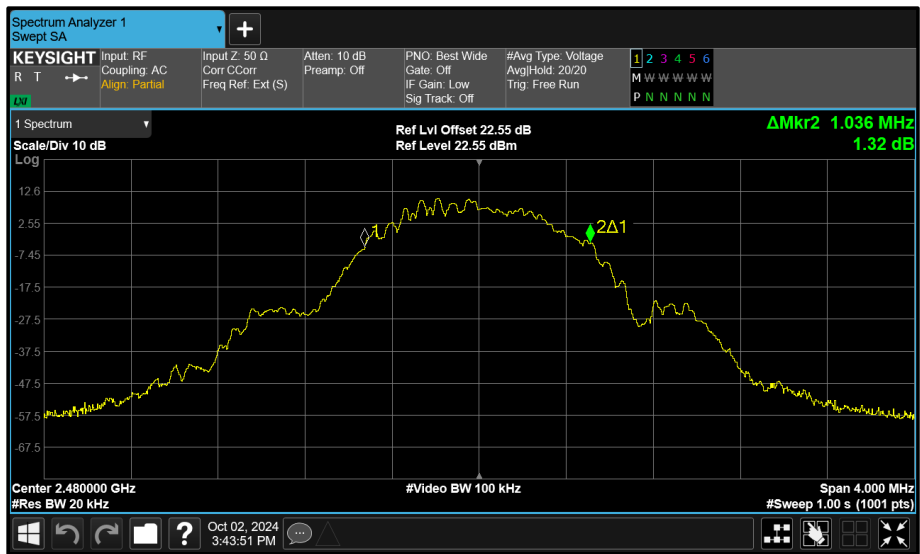


Figure 177 - Core 1 (B) 2480 MHz (CH39) 99% Bandwidth

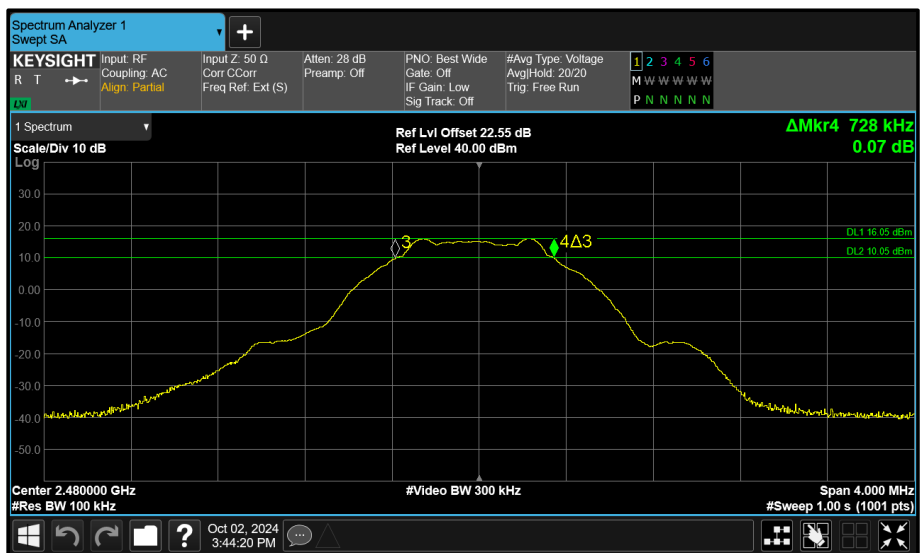


Figure 178 - Core 1 (B) 2480 MHz (CH39) 6 dB Bandwidth



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (a)(2)	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	1.264	1.160	-	-	≥500.0
2440	1.264	1.264	-	-	≥500.0
2480	1.264	1.384	-	-	≥500.0

Table 47 - 6 dB Bandwidth Results

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

Table 48 - 99% Bandwidth Results

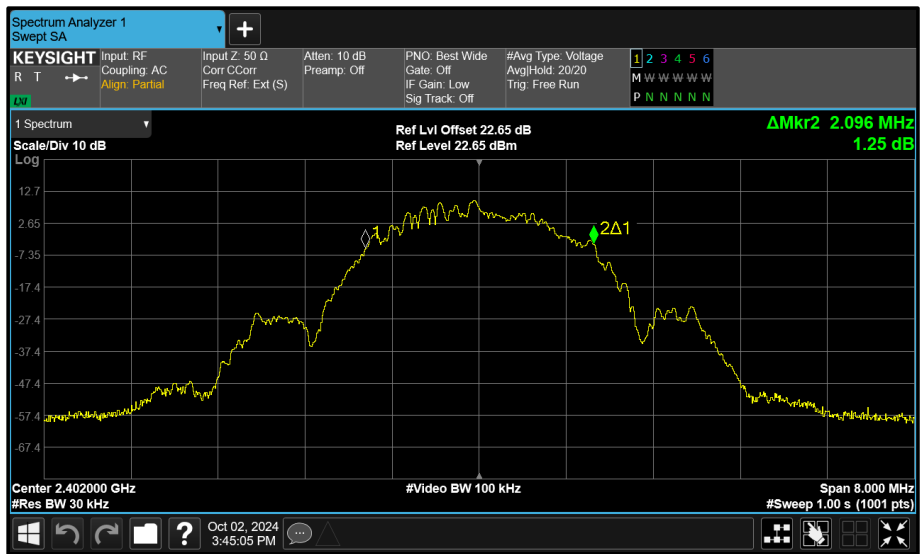


Figure 179 - Core 0 (A) 2402 MHz (CH37) 99% Bandwidth

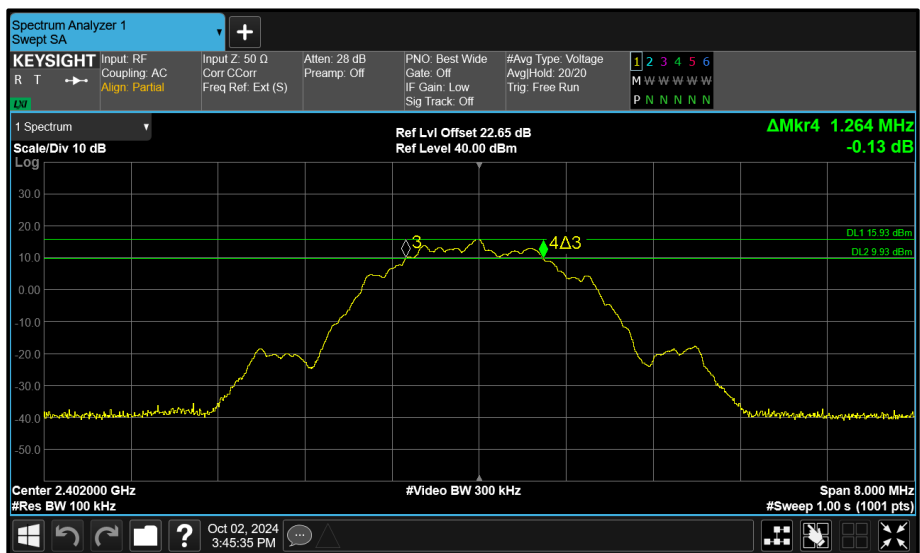


Figure 180 - Core 0 (A) 2402 MHz (CH37) 6 dB Bandwidth

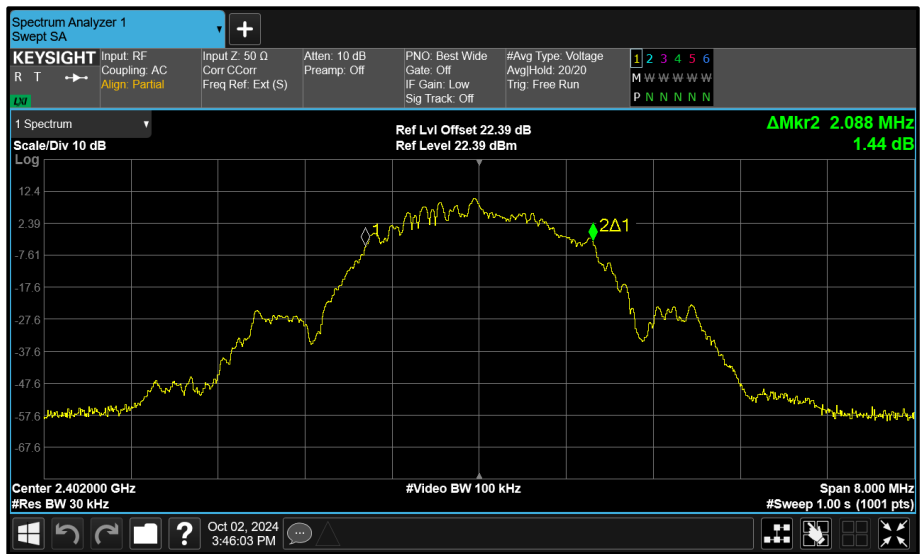


Figure 181 - Core 1 (B) 2402 MHz (CH37) 99% Bandwidth



Figure 182 - Core 1 (B) 2402 MHz (CH37) 6 dB Bandwidth

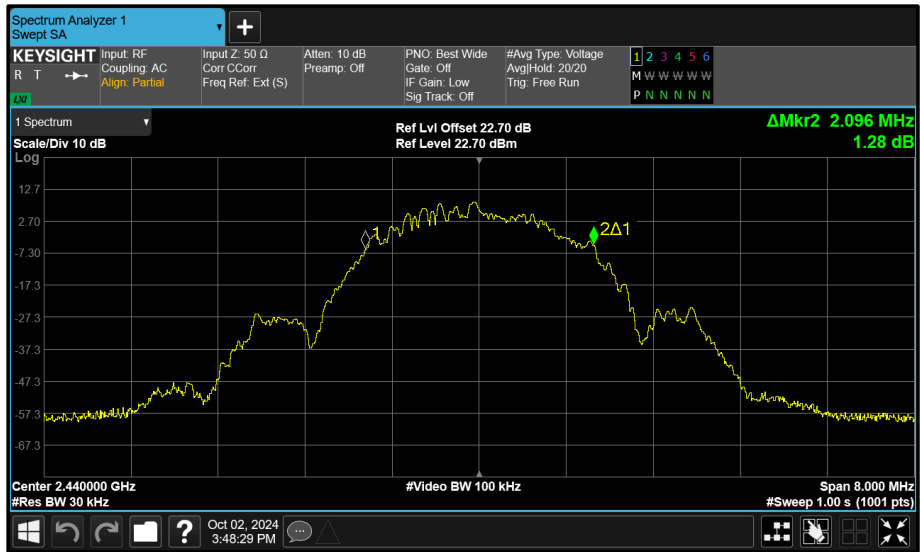


Figure 183 - Core 0 (A) 2440 MHz (CH17) 99% Bandwidth

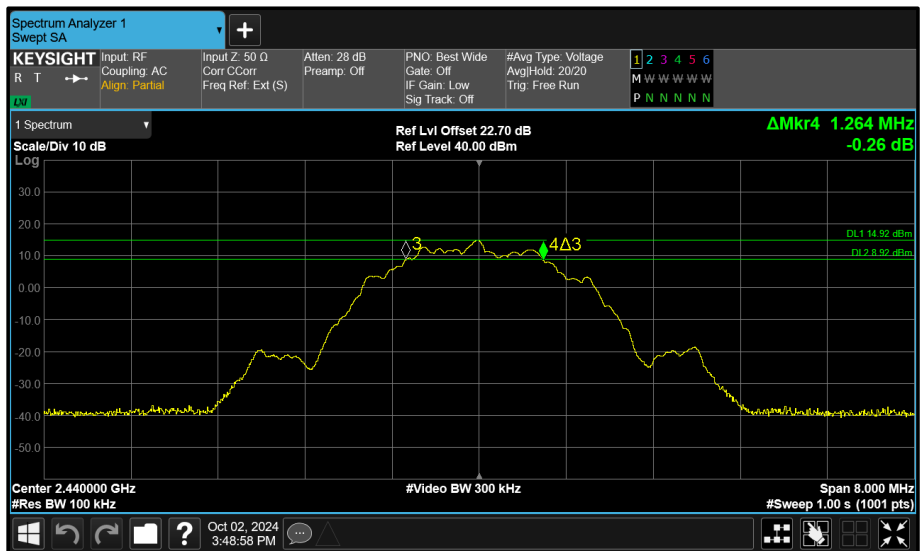


Figure 184 - Core 0 (A) 2440 MHz (CH17) 6 dB Bandwidth

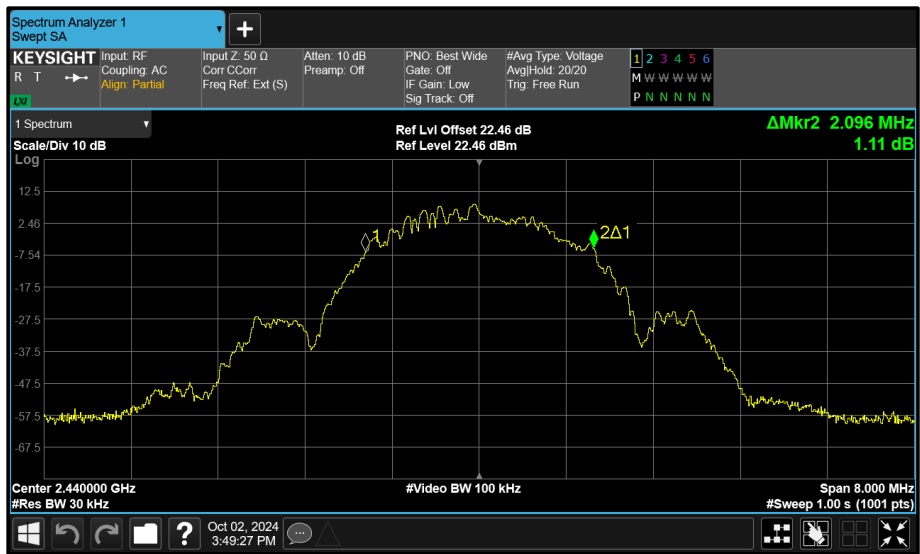


Figure 185 - Core 1 (B) 2440 MHz (CH17) 99% Bandwidth

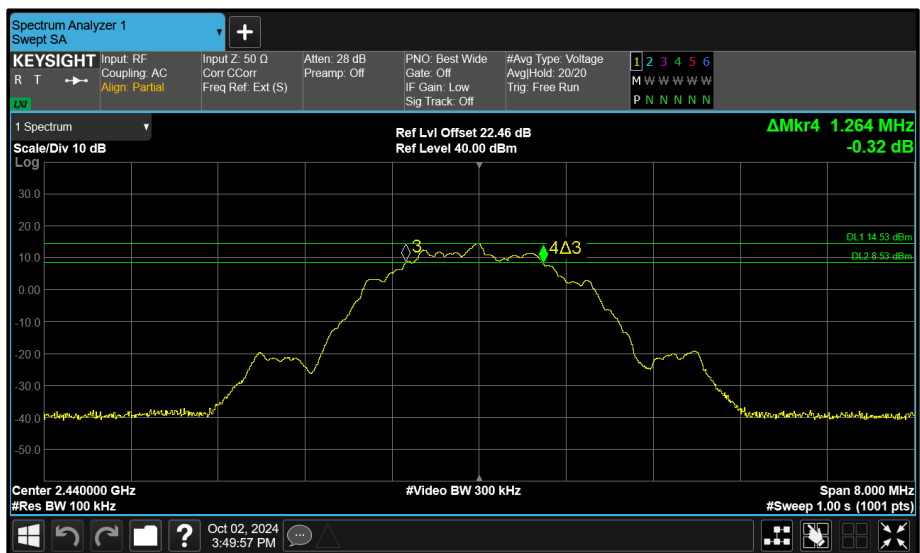


Figure 186 - Core 1 (B) 2440 MHz (CH17) 6 dB Bandwidth

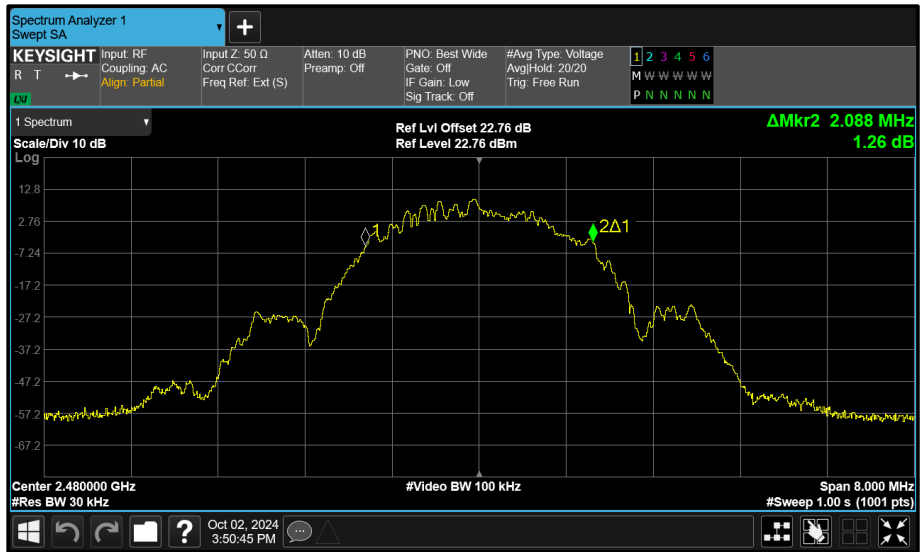


Figure 187 - Core 0 (A) 2480 MHz (CH39) 99% Bandwidth

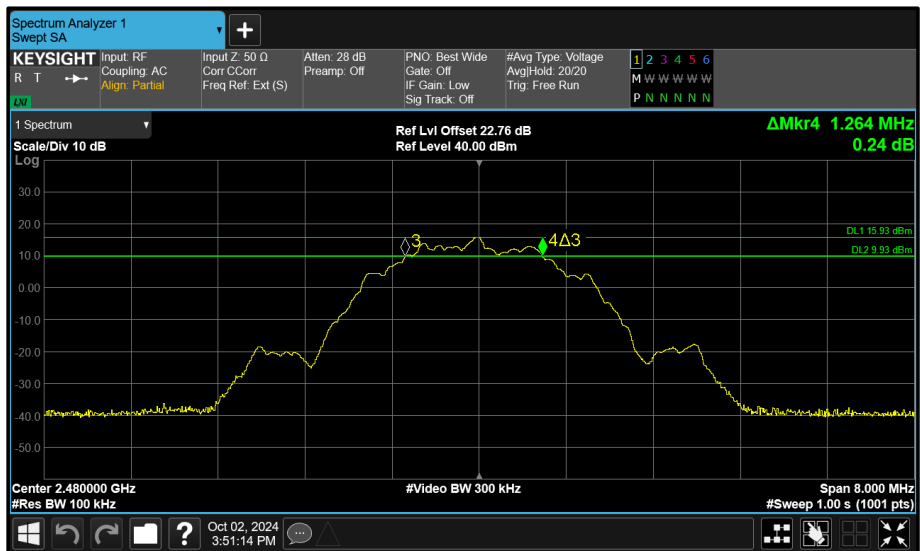


Figure 188 - Core 0 (A) 2480 MHz (CH39) 6 dB Bandwidth

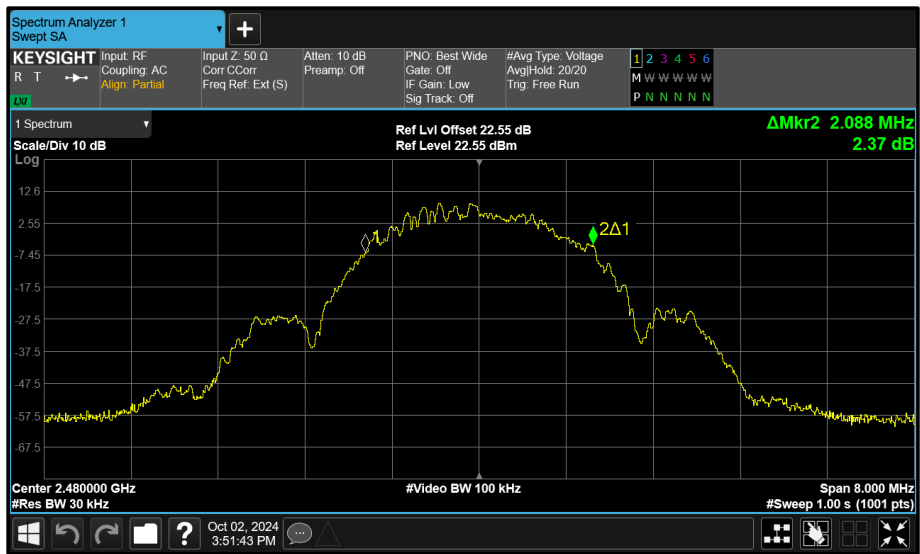


Figure 189 - Core 1 (B) 2480 MHz (CH39) 99% Bandwidth

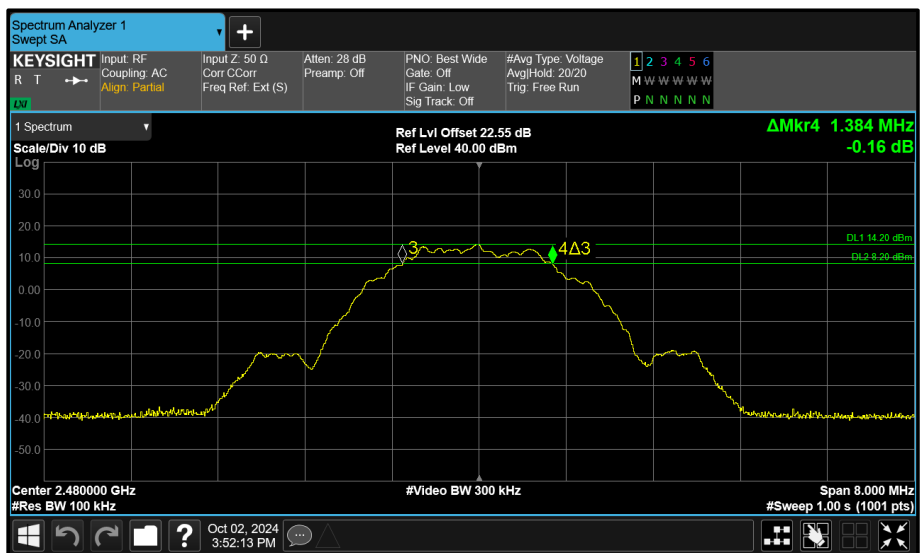


Figure 190 - Core 1 (B) 2480 MHz (CH39) 6 dB Bandwidth



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

DUT Configuration			
Mode:	iPA $\pi/4$ 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	1.896	1.904	-	-	≥ 500.0
2441	1.896	1.888	-	-	≥ 500.0
2476	1.888	1.896	-	-	≥ 500.0

Table 49 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2404	2.320	2.328	-	-	-
2441	2.312	2.312	-	-	-
2476	2.320	2.320	-	-	-

Table 50 - 99% Bandwidth Results

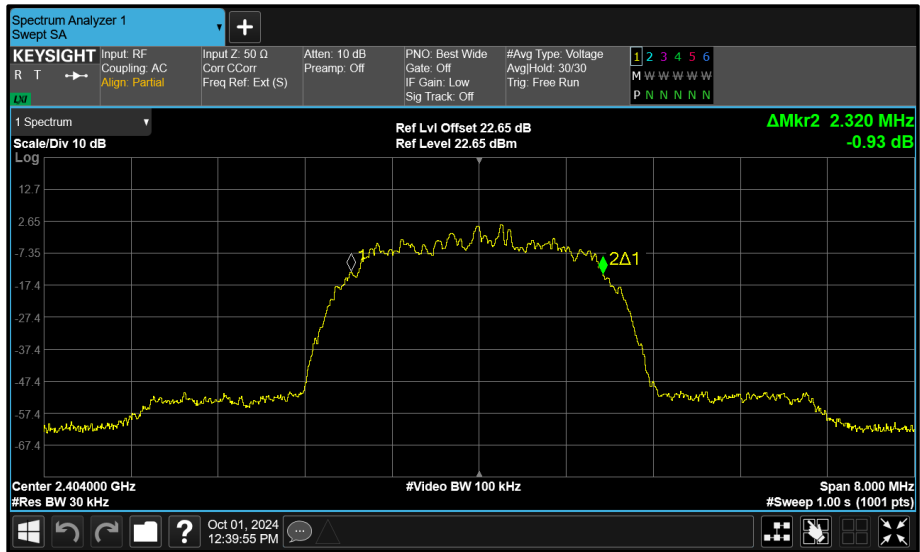


Figure 191 - Core 0 (A) 2404 MHz (CH2) 99% Bandwidth

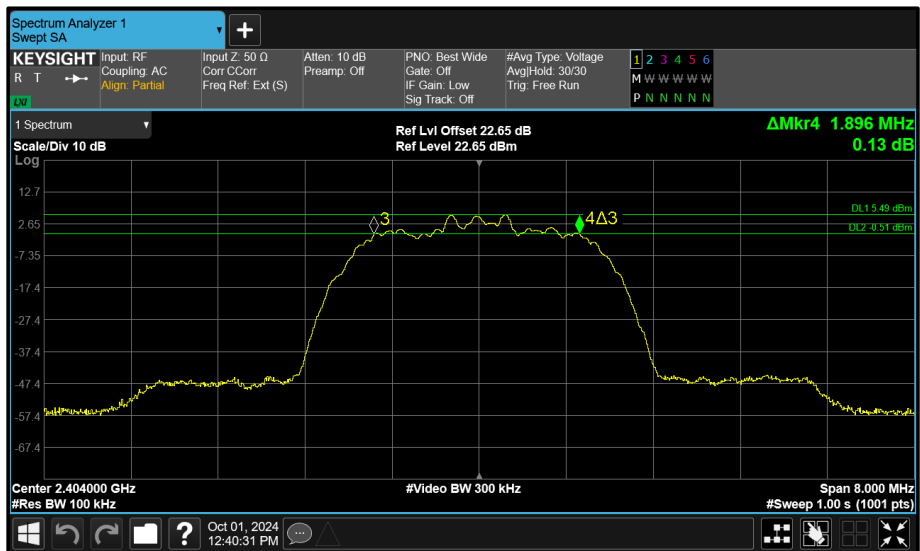


Figure 192 - Core 0 (A) 2404 MHz (CH2) 6 dB Bandwidth

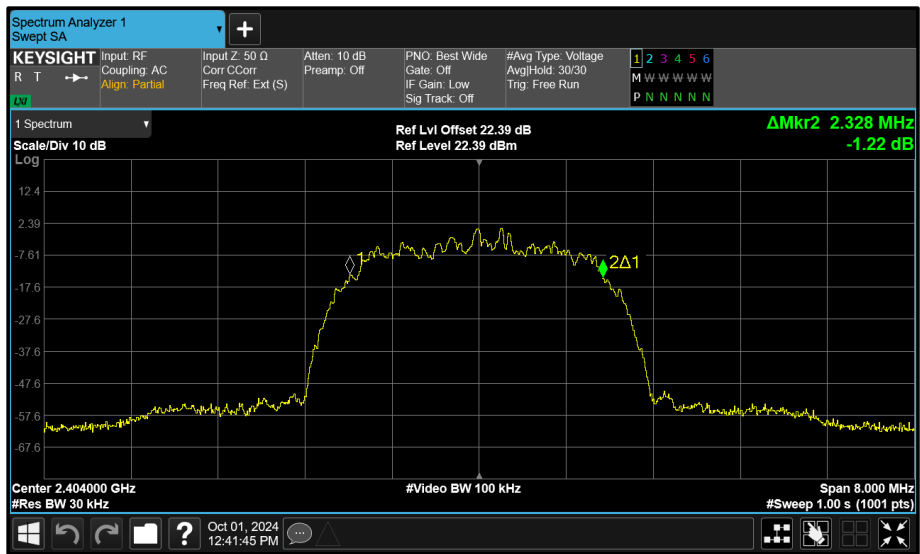


Figure 193 - Core 1 (B) 2404 MHz (CH2) 99% Bandwidth

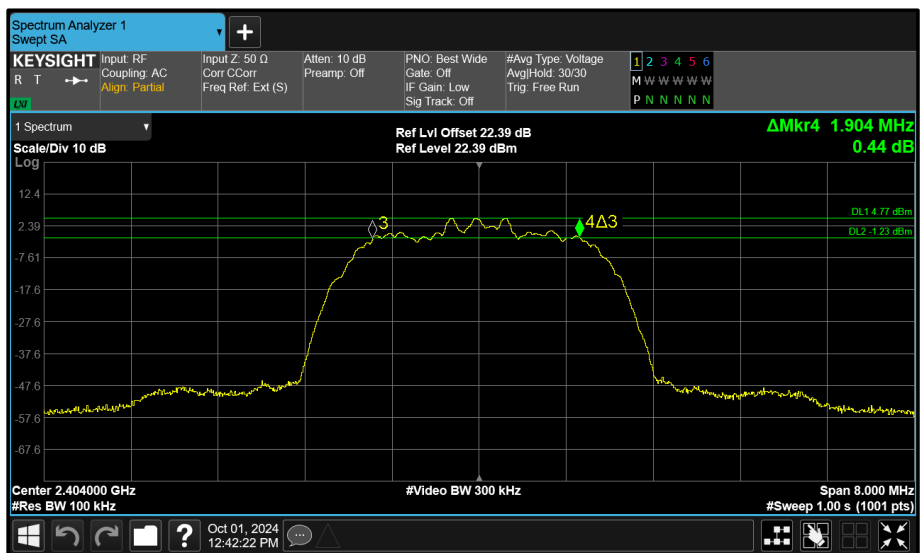


Figure 194 - Core 1 (B) 2404 MHz (CH2) 6 dB Bandwidth

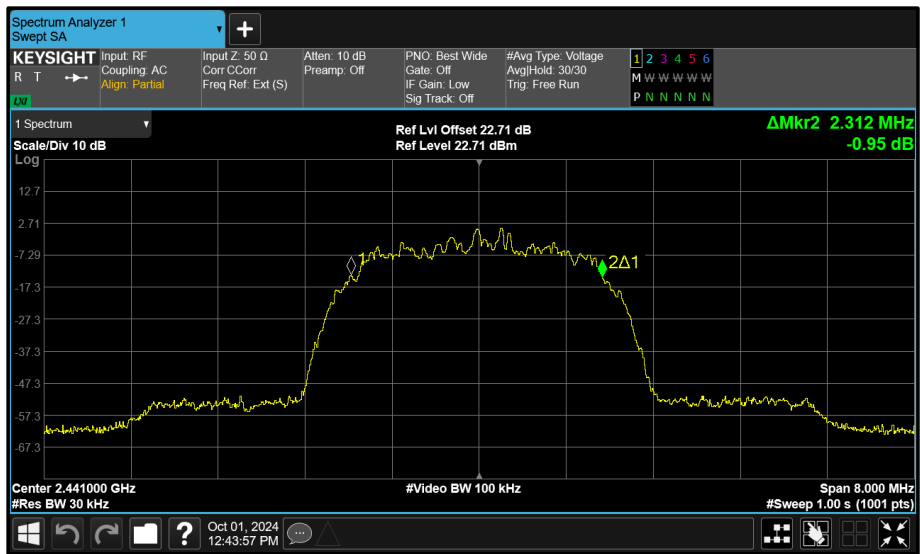


Figure 195 - Core 0 (A) 2441 MHz (CH39) 99% Bandwidth

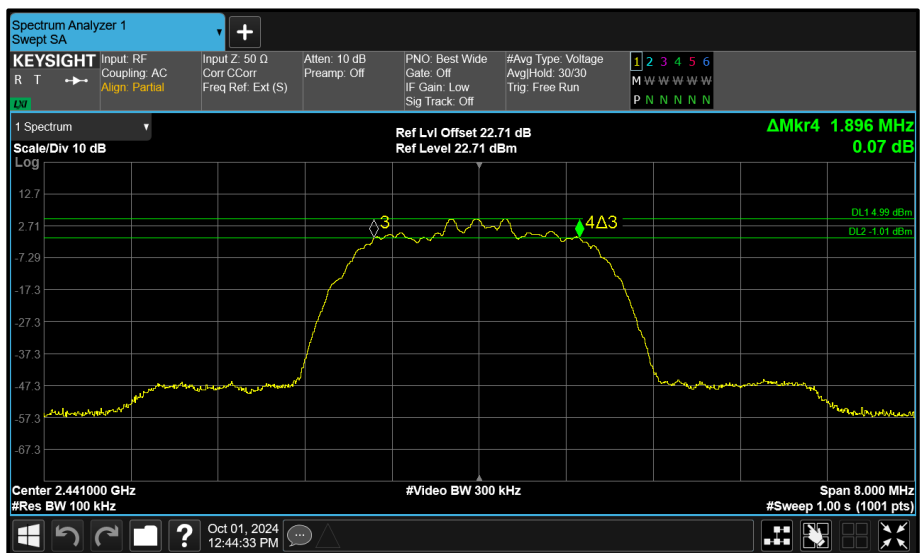


Figure 196 - Core 0 (A) 2441 MHz (CH39) 6 dB Bandwidth

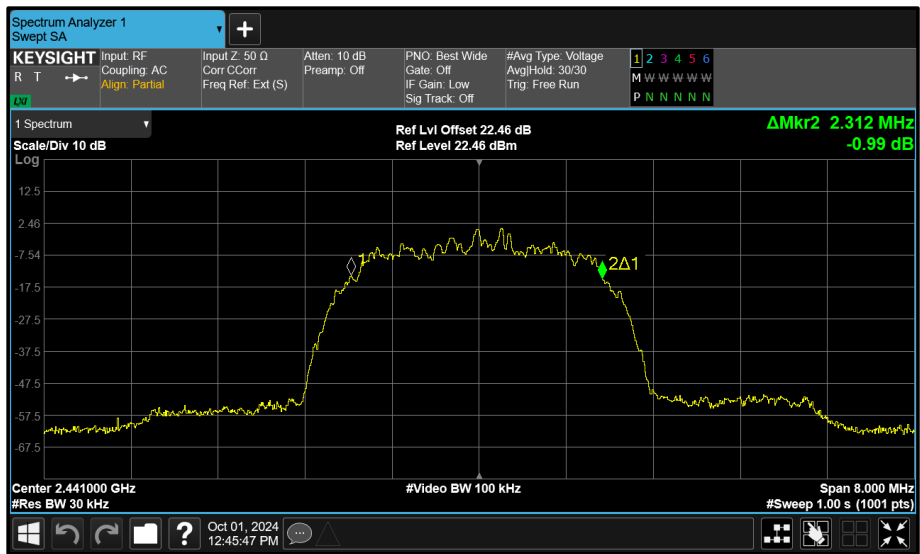


Figure 197 - Core 1 (B) 2441 MHz (CH39) 99% Bandwidth

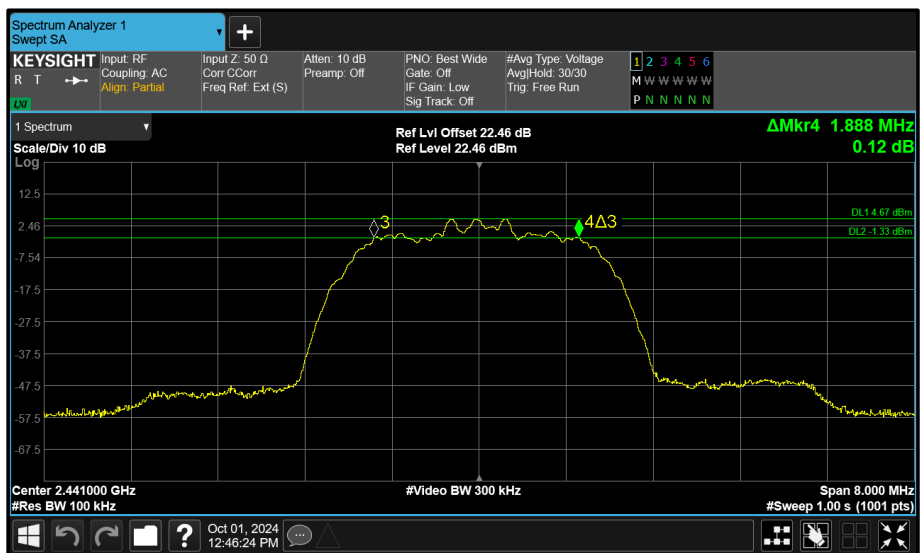


Figure 198 - Core 1 (B) 2441 MHz (CH39) 6 dB Bandwidth

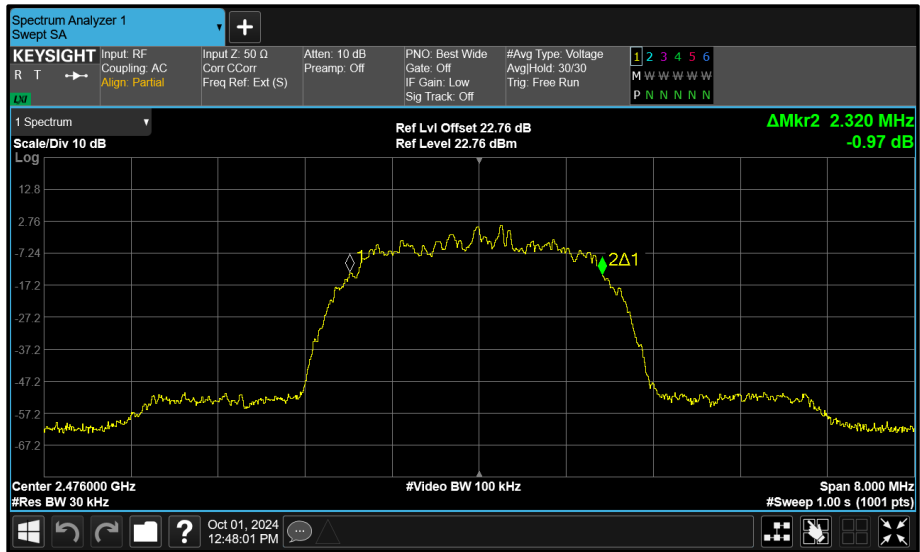


Figure 199 - Core 0 (A) 2476 MHz (CH74) 99% Bandwidth

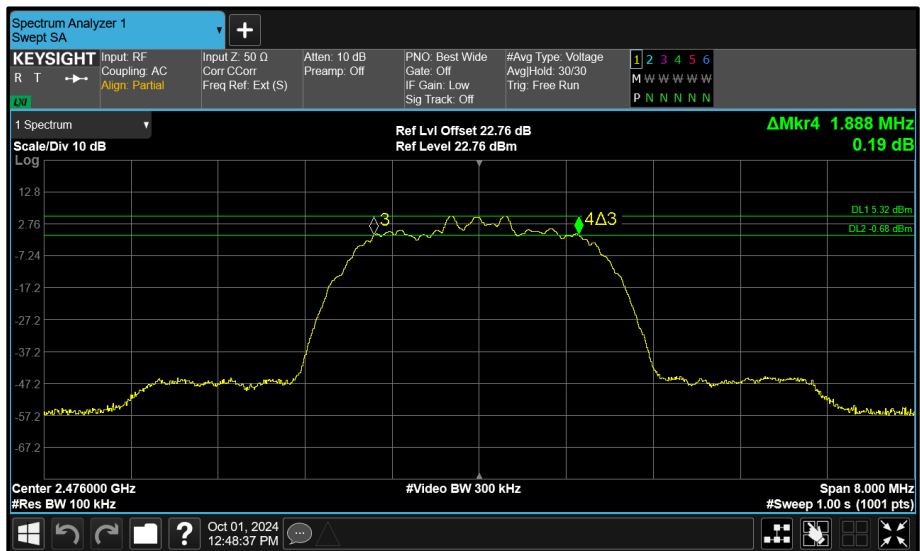


Figure 200 - Core 0 (A) 2476 MHz (CH74) 6 dB Bandwidth

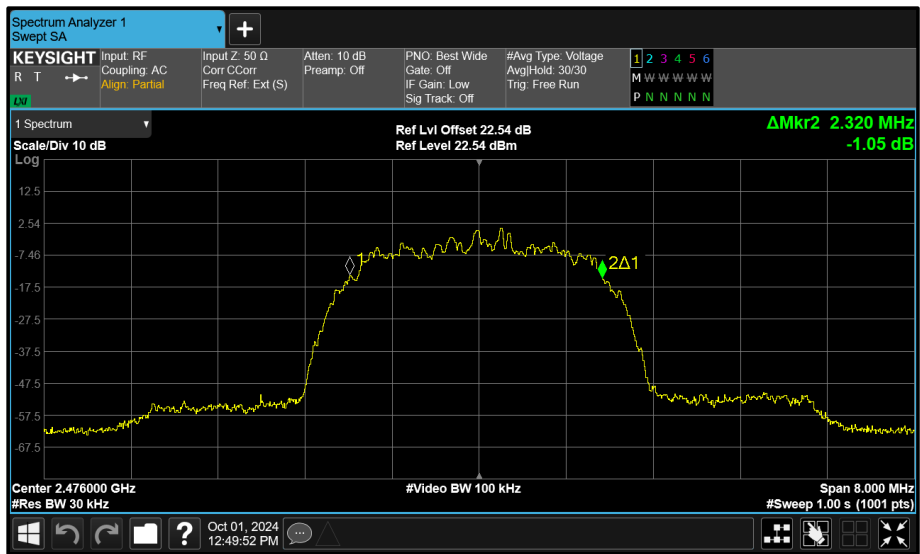


Figure 201 - Core 1 (B) 2476 MHz (CH74) 99% Bandwidth

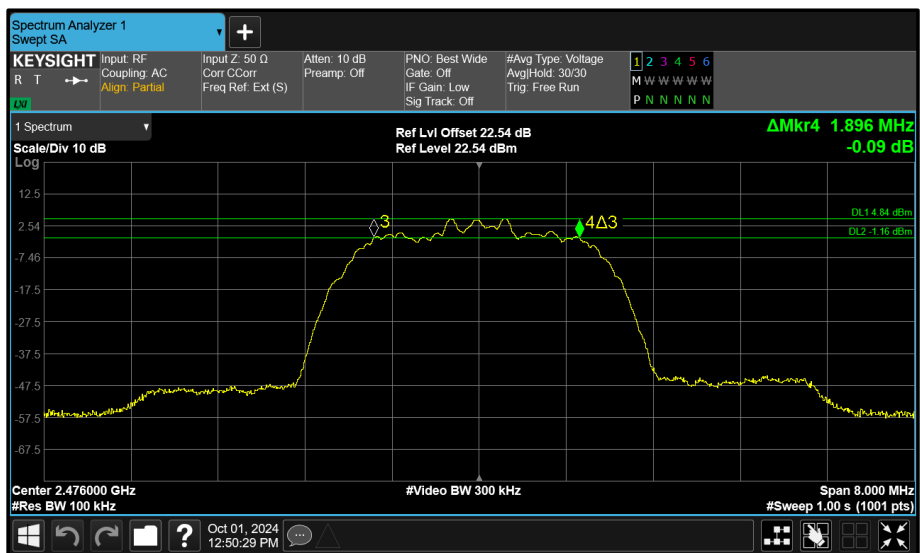


Figure 202 - Core 1 (B) 2476 MHz (CH74) 6 dB Bandwidth



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

DUT Configuration			
Mode:	iPA $\pi/4$ 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	1.035	1.005	-	-	≥ 500.0
2441	1.005	1.020	-	-	≥ 500.0
2476	1.020	1.020	-	-	≥ 500.0

Table 51 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2404	4.650	4.635	-	-	-
2441	4.635	4.635	-	-	-
2476	4.635	4.635	-	-	-

Table 52 - 99% Bandwidth Results

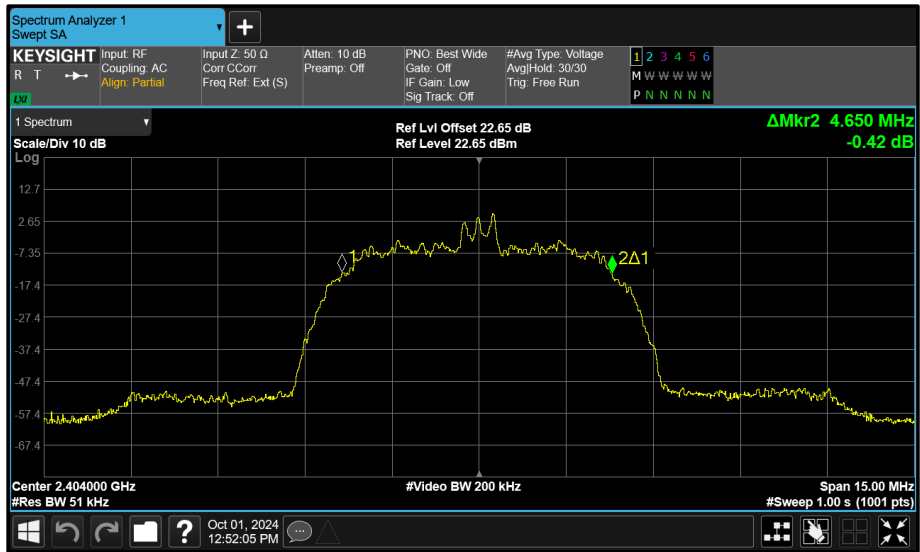


Figure 203 - Core 0 (A) 2404 MHz (CH2) 99% Bandwidth

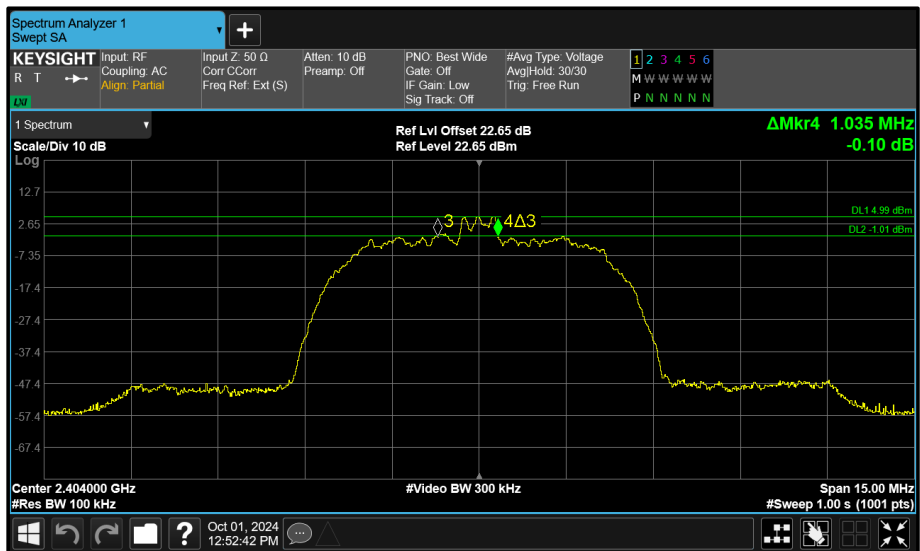


Figure 204 - Core 0 (A) 2404 MHz (CH2) 6 dB Bandwidth

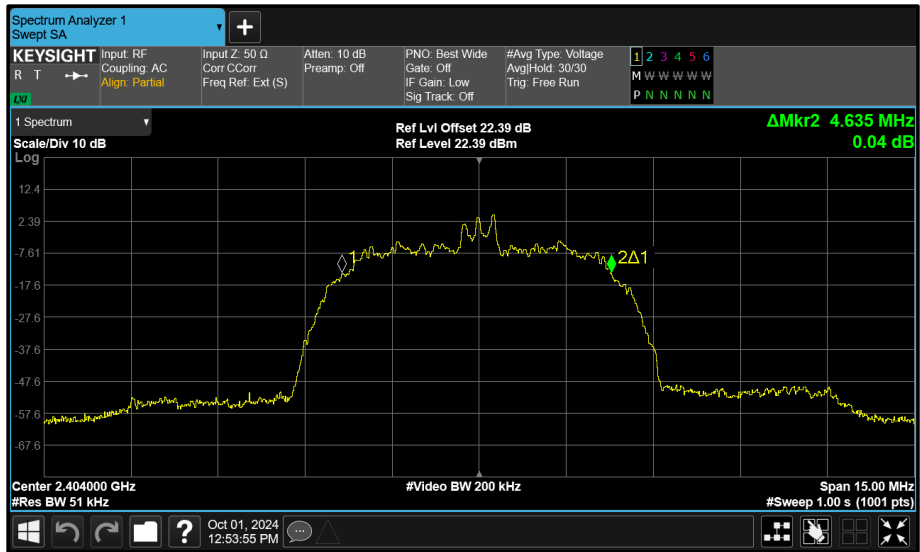


Figure 205 - Core 1 (B) 2404 MHz (CH2) 99% Bandwidth

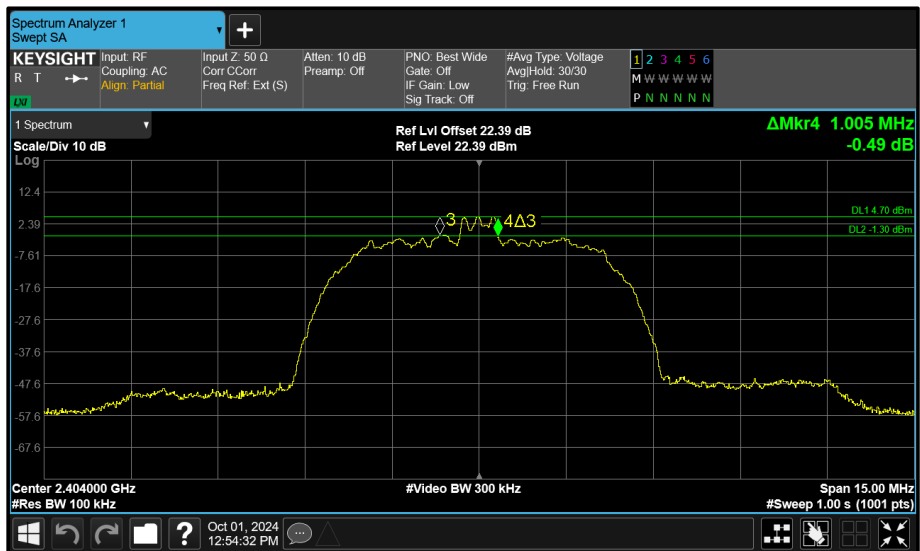


Figure 206 - Core 1 (B) 2404 MHz (CH2) 6 dB Bandwidth

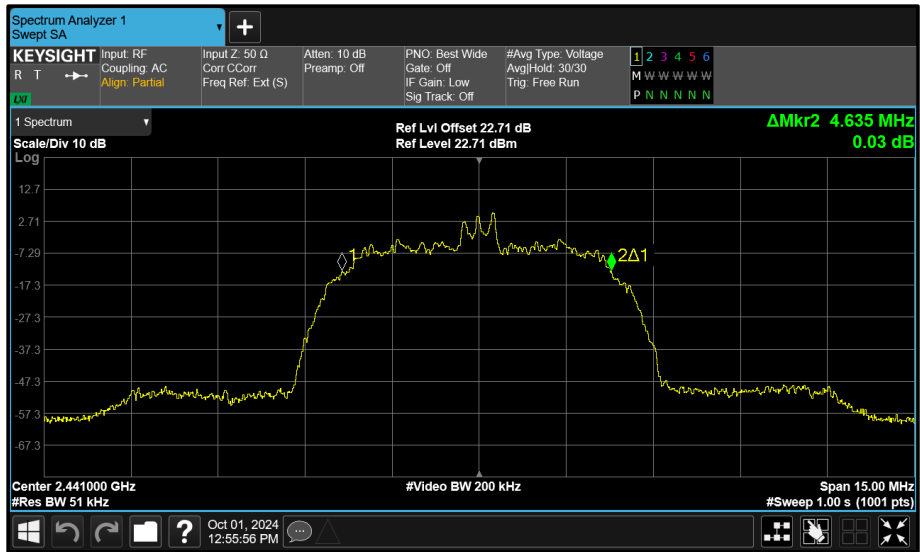


Figure 207 - Core 0 (A) 2441 MHz (CH39) 99% Bandwidth

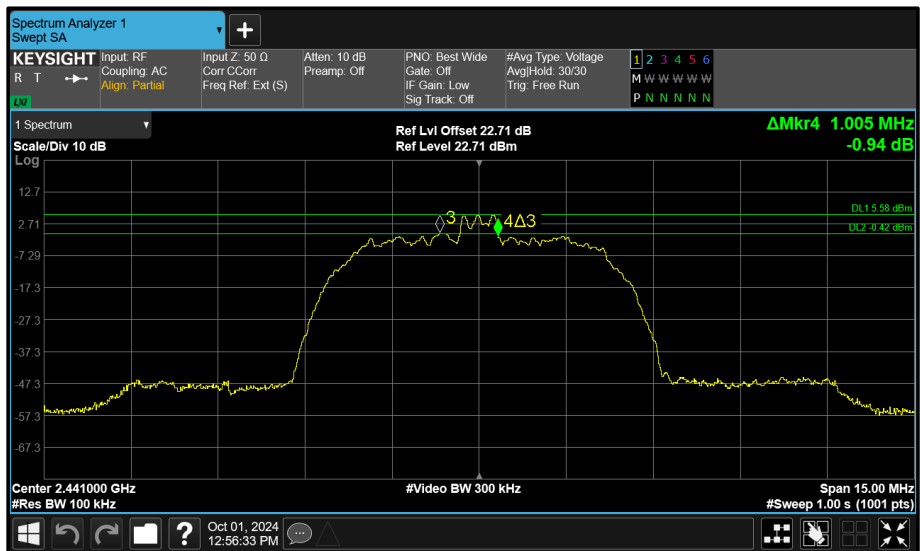


Figure 208 - Core 0 (A) 2441 MHz (CH39) 6 dB Bandwidth

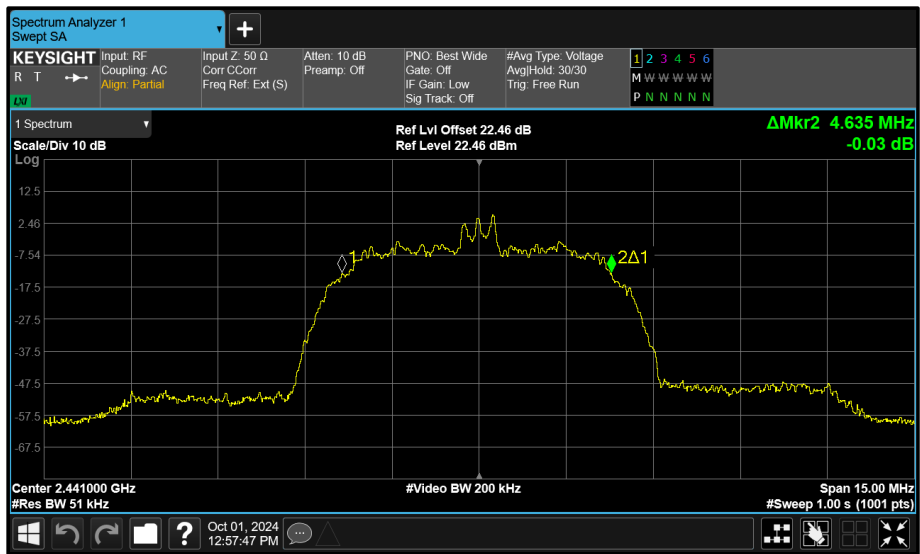


Figure 209 - Core 1 (B) 2441 MHz (CH39) 99% Bandwidth

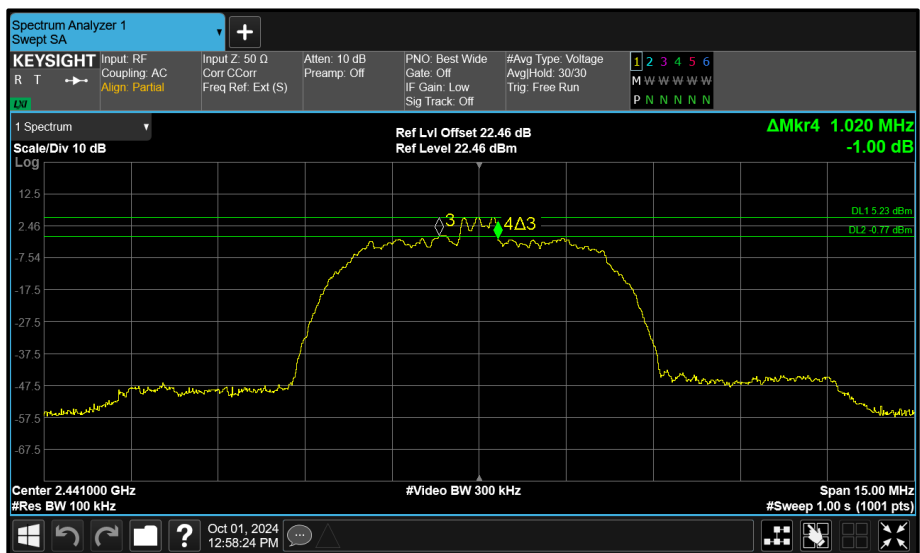


Figure 210 - Core 1 (B) 2441 MHz (CH39) 6 dB Bandwidth

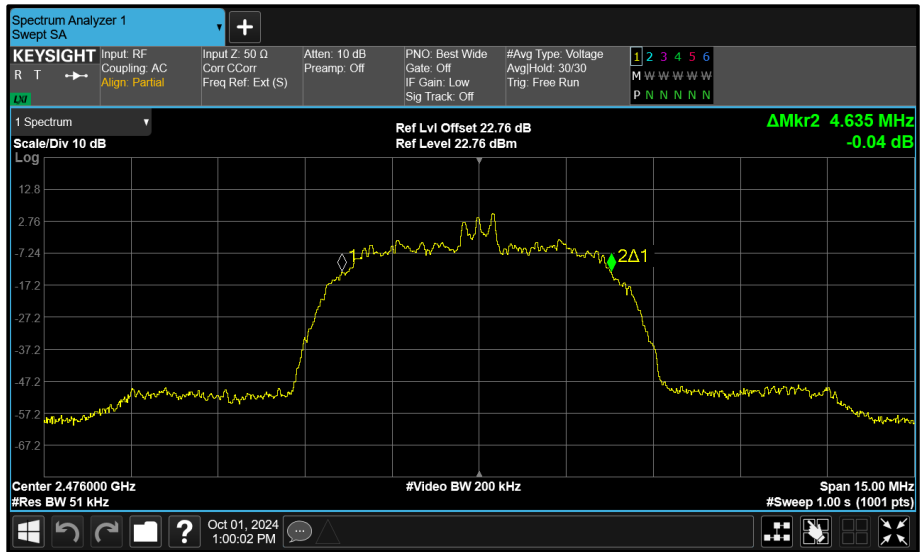


Figure 211 - Core 0 (A) 2476 MHz (CH74) 99% Bandwidth

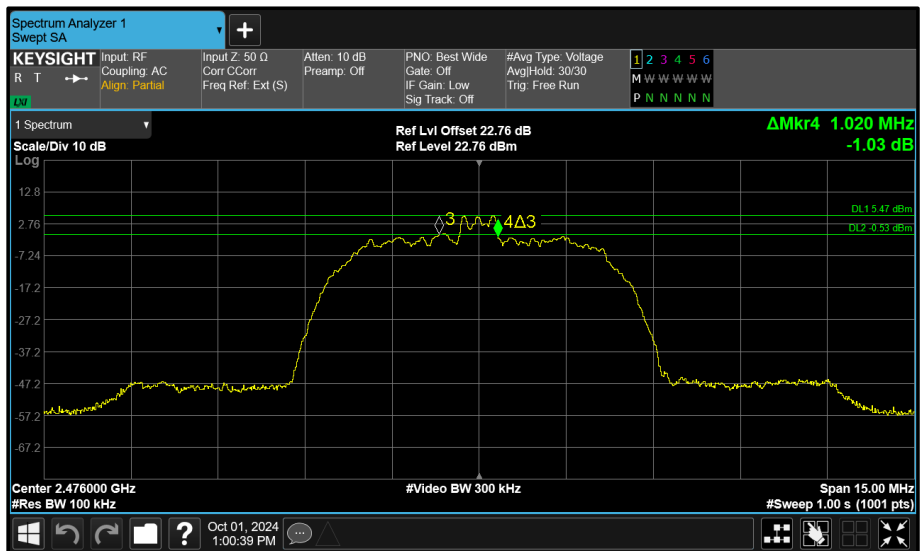


Figure 212 - Core 0 (A) 2476 MHz (CH74) 6 dB Bandwidth

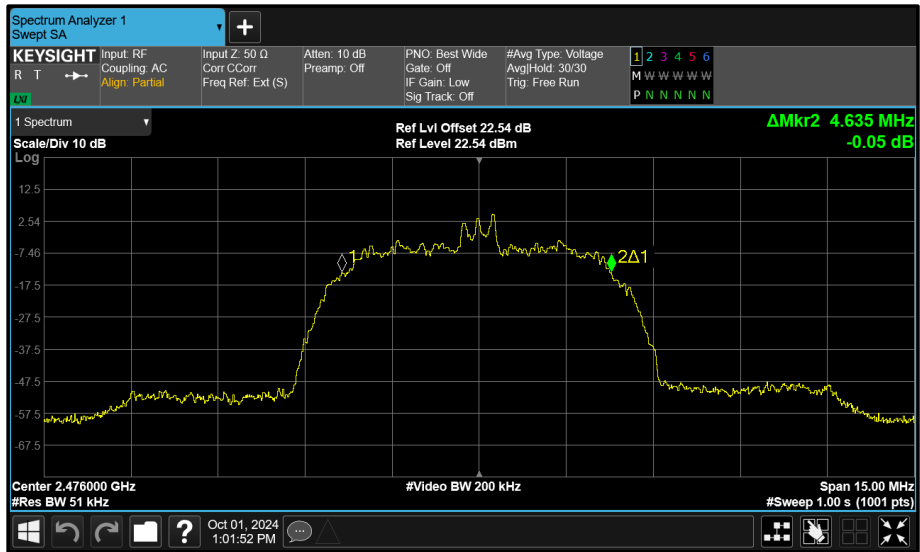


Figure 213 - Core 1 (B) 2476 MHz (CH74) 99% Bandwidth

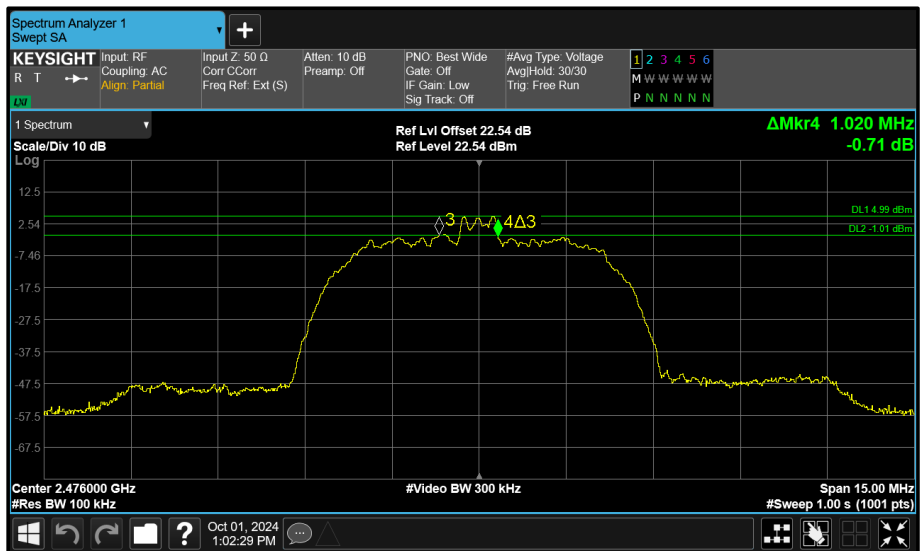


Figure 214 - Core 1 (B) 2476 MHz (CH74) 6 dB Bandwidth



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

DUT Configuration			
Mode:	iPA 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	0.700	-	-	≥500.0
2440	0.728	0.724	-	-	≥500.0
2480	0.728	0.724	-	-	≥500.0

Table 53 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2402	1.040	1.036	-	-	-
2440	1.036	1.036	-	-	-
2480	1.040	1.036	-	-	-

Table 54 - 99% Bandwidth Results

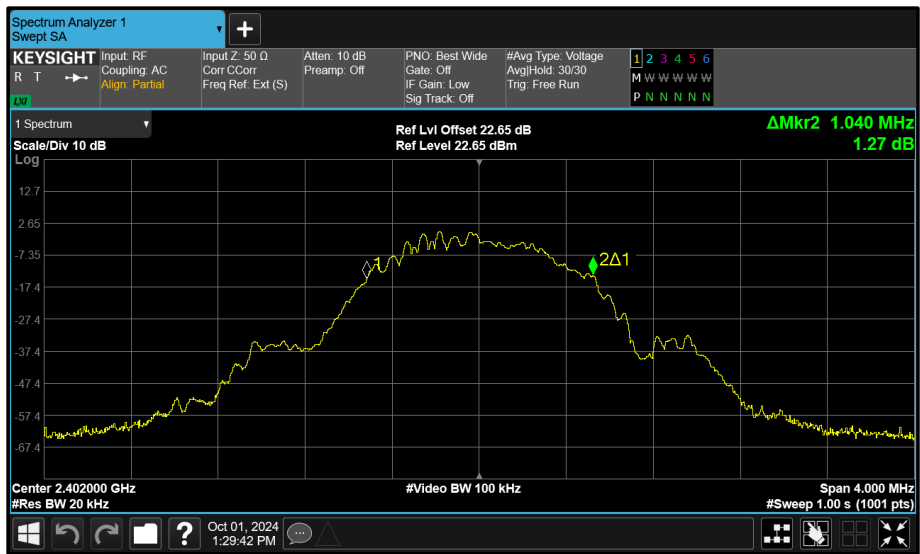


Figure 215 - Core 0 (A) 2402 MHz (CH37) 99% Bandwidth

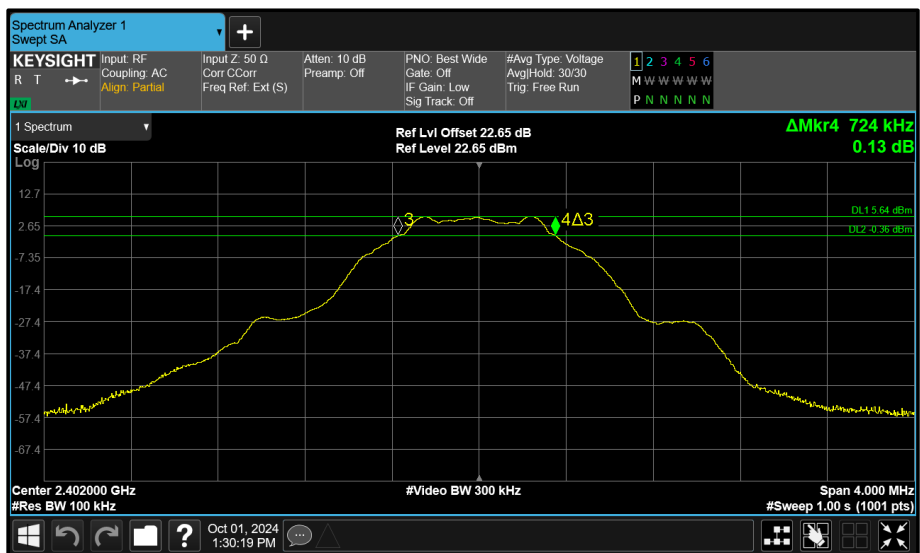


Figure 216 - Core 0 (A) 2402 MHz (CH37) 6 dB Bandwidth

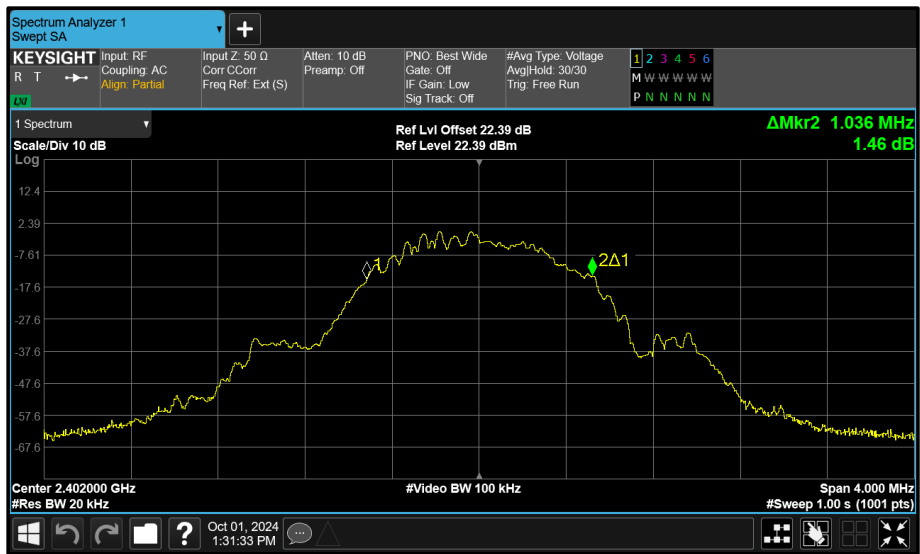


Figure 217 - Core 1 (B) 2402 MHz (CH37) 99% Bandwidth

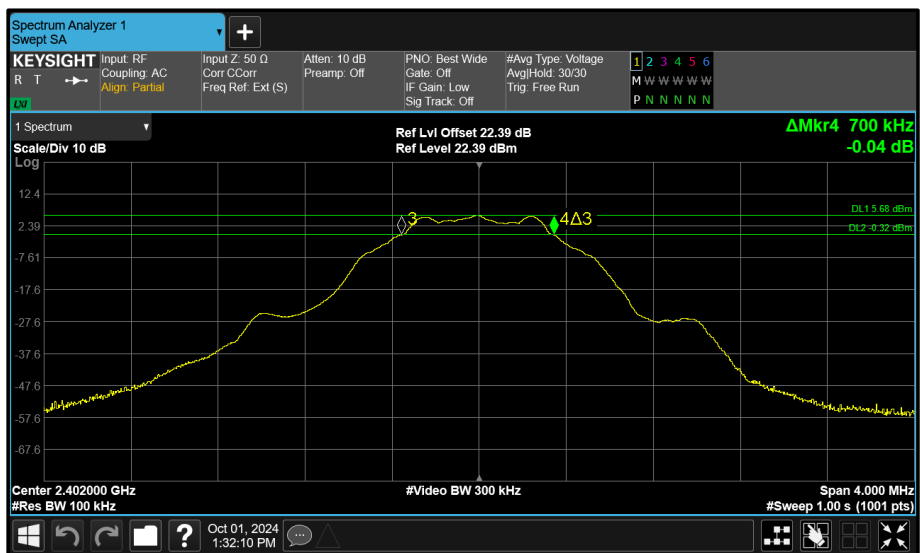


Figure 218 - Core 1 (B) 2402 MHz (CH37) 6 dB Bandwidth

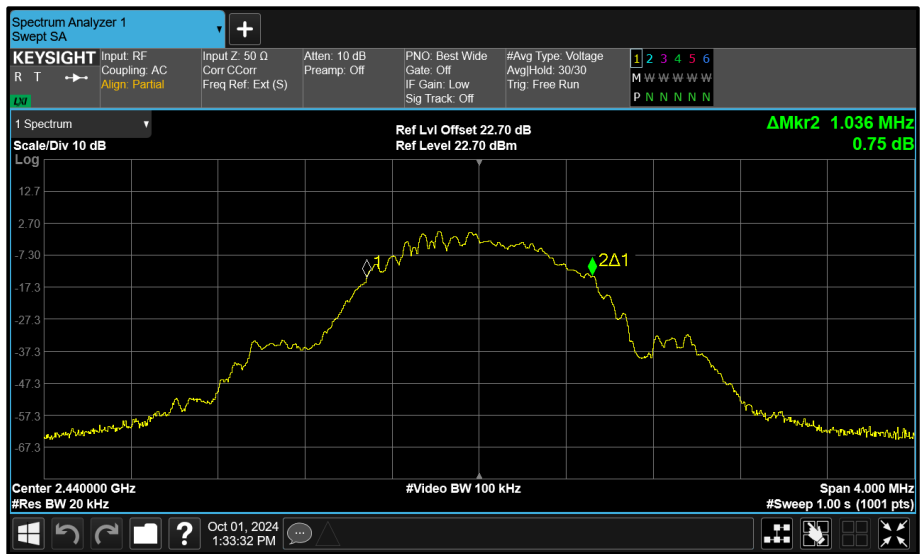


Figure 219 - Core 0 (A) 2440 MHz (CH17) 99% Bandwidth

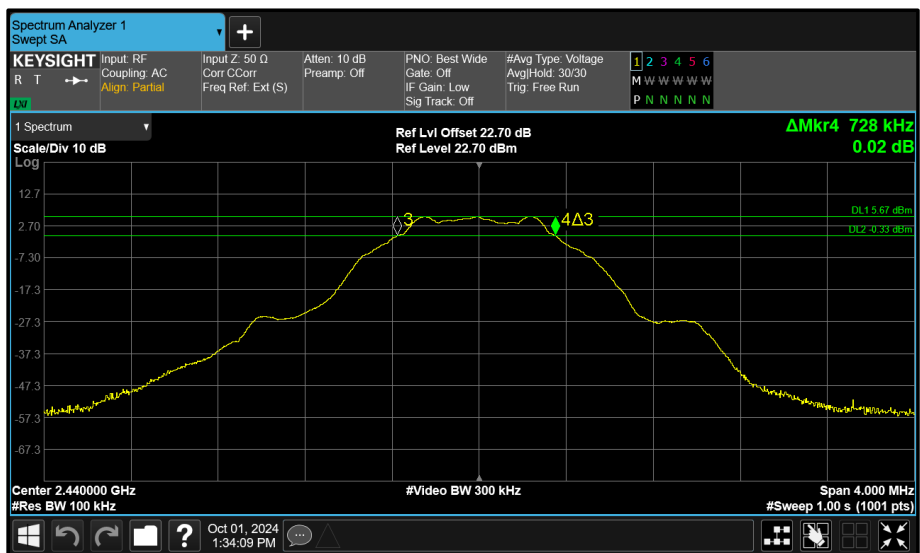


Figure 220 - Core 0 (A) 2440 MHz (CH17) 6 dB Bandwidth

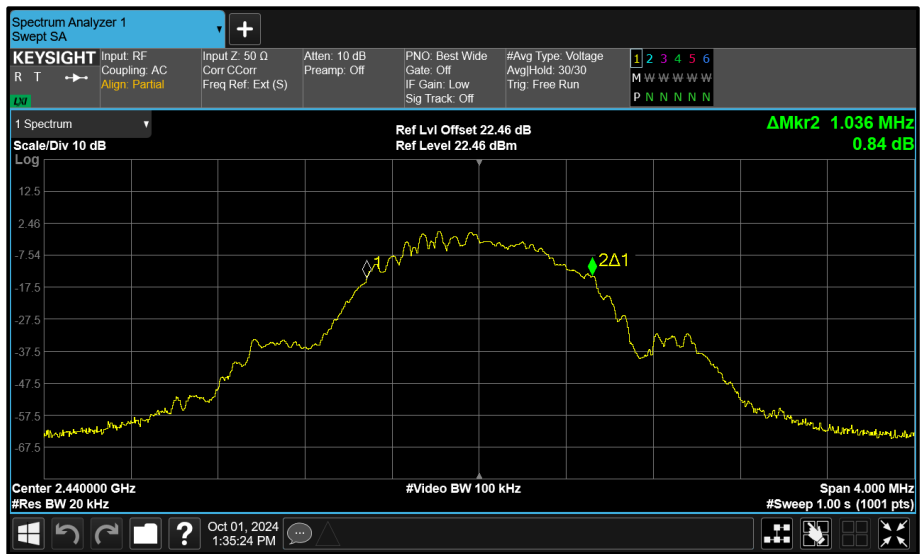


Figure 221 - Core 1 (B) 2440 MHz (CH17) 99% Bandwidth

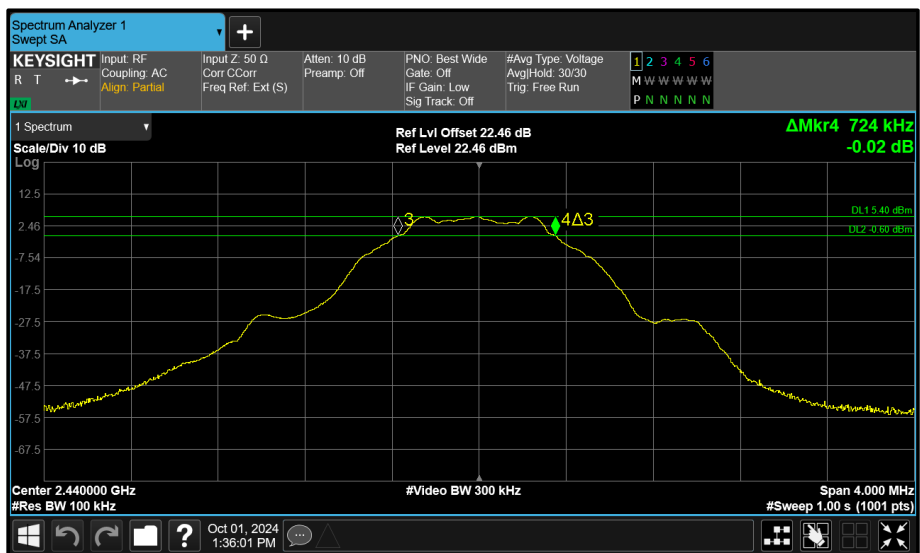


Figure 222 - Core 1 (B) 2440 MHz (CH17) 6 dB Bandwidth

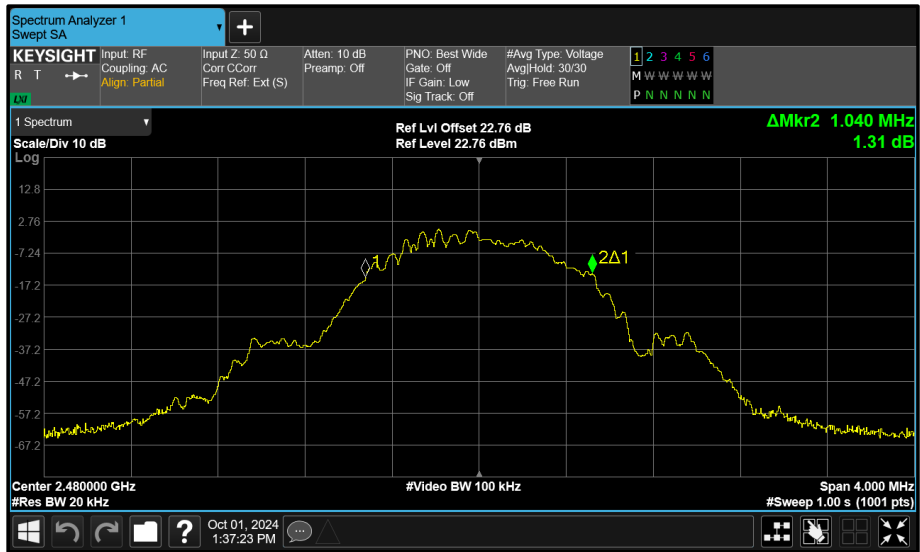


Figure 223 - Core 0 (A) 2480 MHz (CH39) 99% Bandwidth

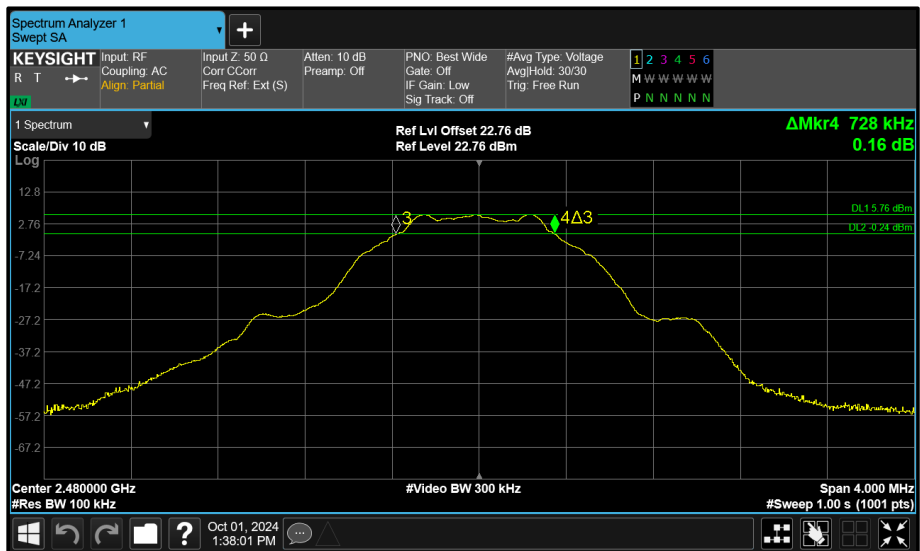


Figure 224 - Core 0 (A) 2480 MHz (CH39) 6 dB Bandwidth

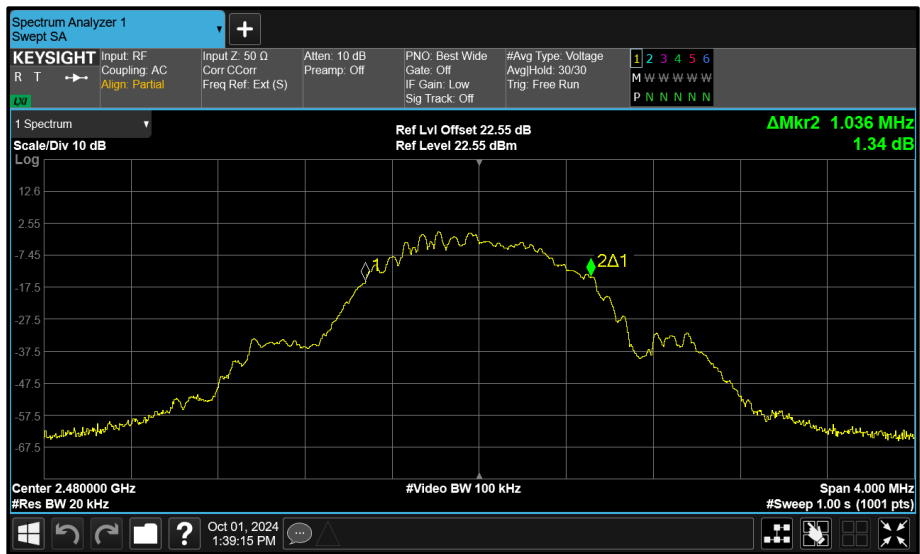


Figure 225 - Core 1 (B) 2480 MHz (CH39) 99% Bandwidth

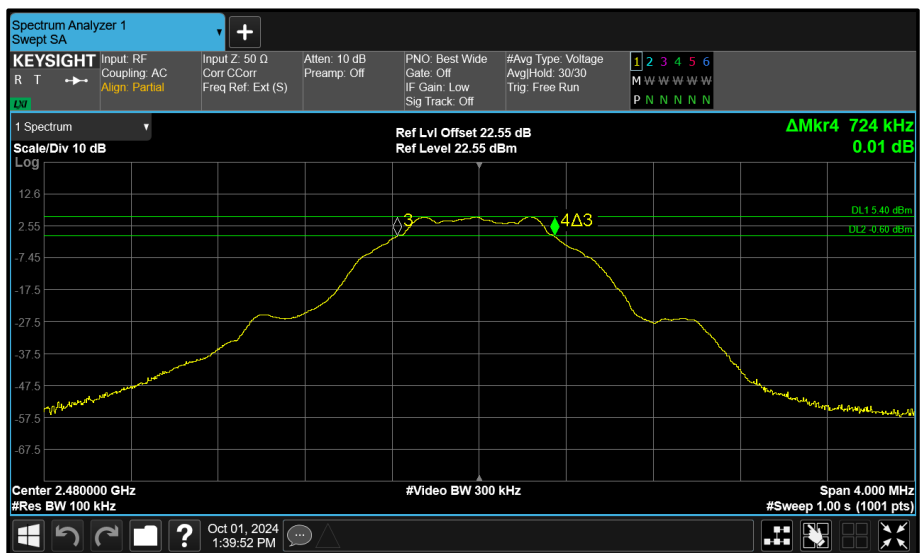


Figure 226 - Core 1 (B) 2480 MHz (CH39) 6 dB Bandwidth



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (a)(2)	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	1.280	1.264	-	-	≥500.0
2440	1.264	1.264	-	-	≥500.0
2480	1.264	1.272	-	-	≥500.0

Table 55 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2402	2.088	2.088	-	-	-
2440	2.088	2.080	-	-	-
2480	2.088	2.080	-	-	-

Table 56 - 99% Bandwidth Results

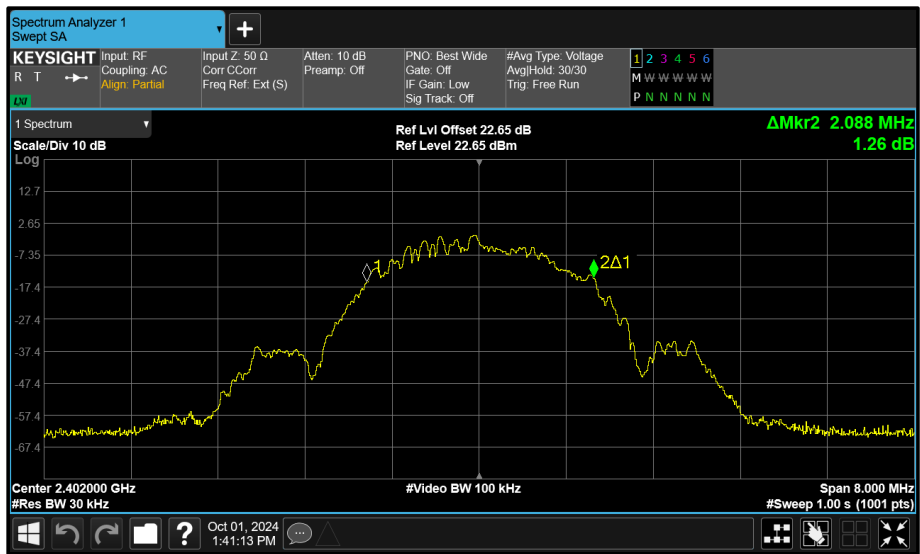


Figure 227 - Core 0 (A) 2402 MHz (CH37) 99% Bandwidth

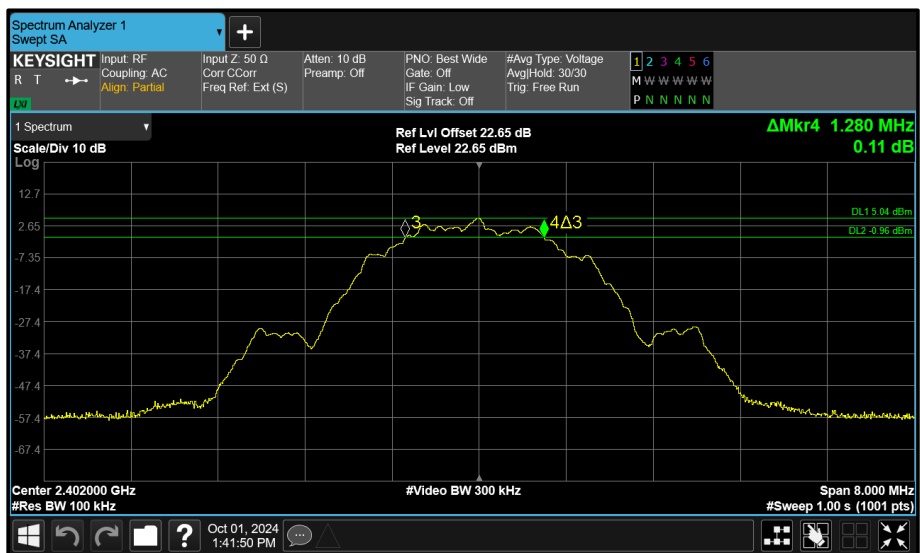


Figure 228 - Core 0 (A) 2402 MHz (CH37) 6 dB Bandwidth

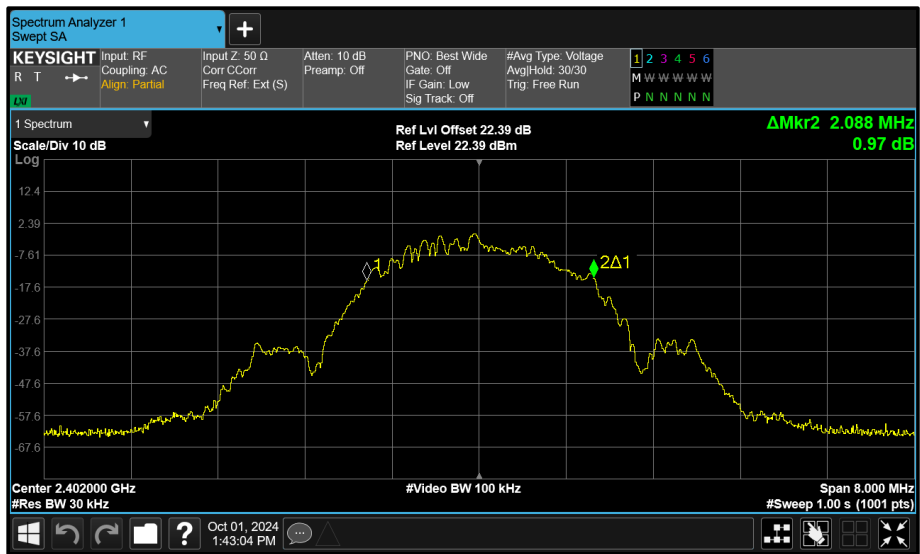


Figure 229 - Core 1 (B) 2402 MHz (CH37) 99% Bandwidth

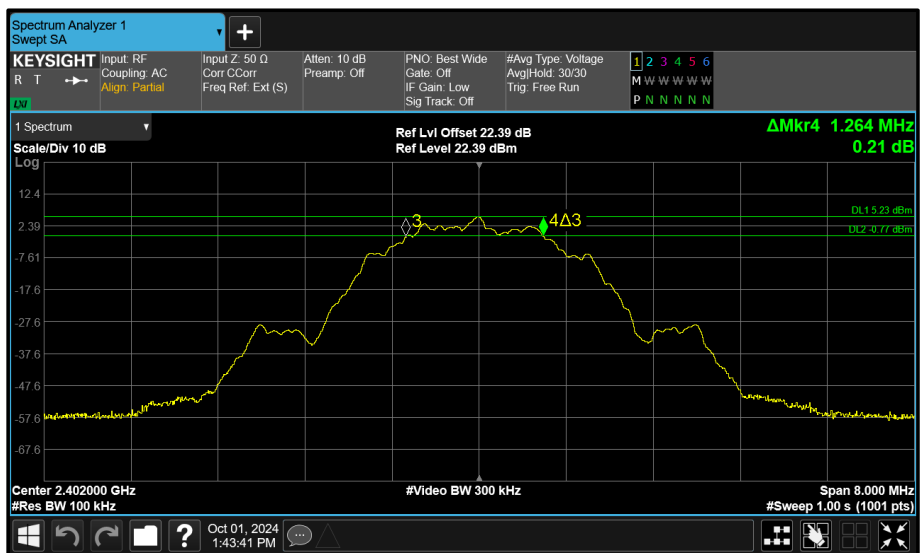


Figure 230 - Core 1 (B) 2402 MHz (CH37) 6 dB Bandwidth

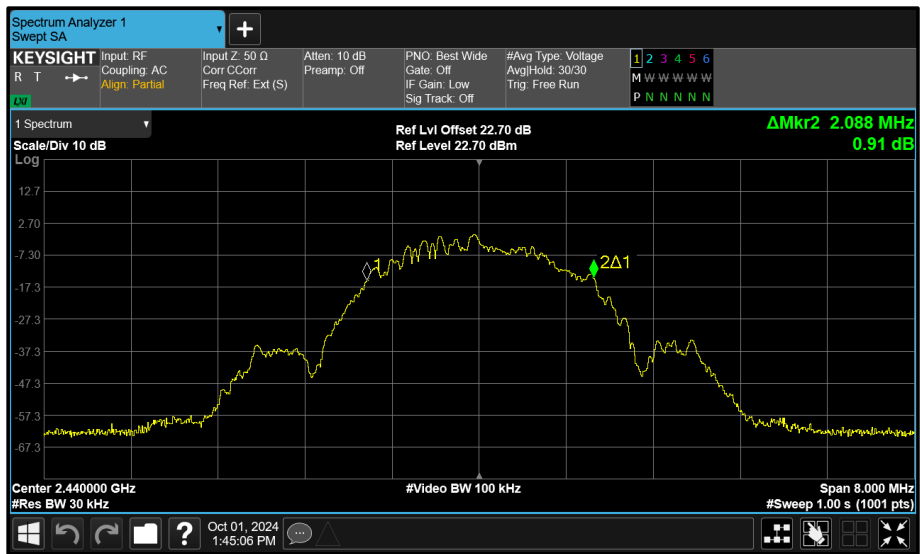


Figure 231 - Core 0 (A) 2440 MHz (CH17) 99% Bandwidth

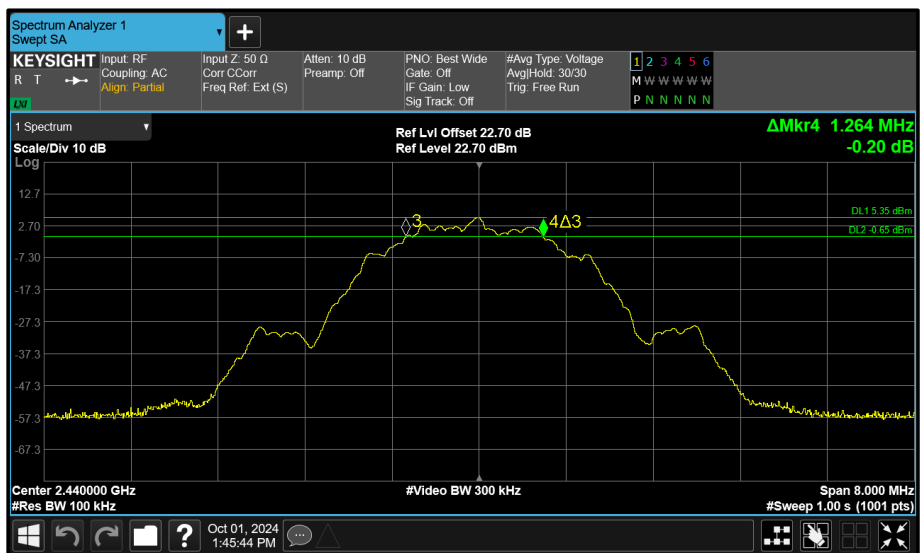


Figure 232 - Core 0 (A) 2440 MHz (CH17) 6 dB Bandwidth

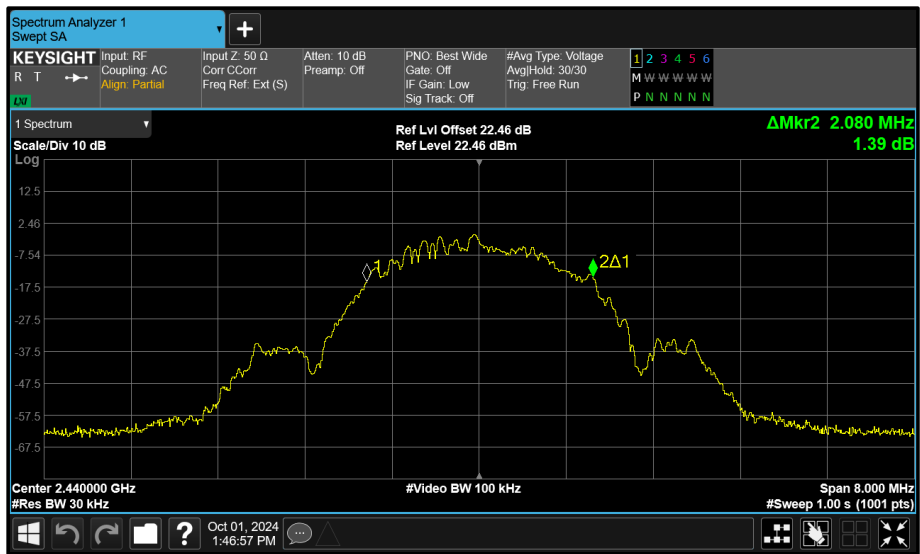


Figure 233 - Core 1 (B) 2440 MHz (CH17) 99% Bandwidth

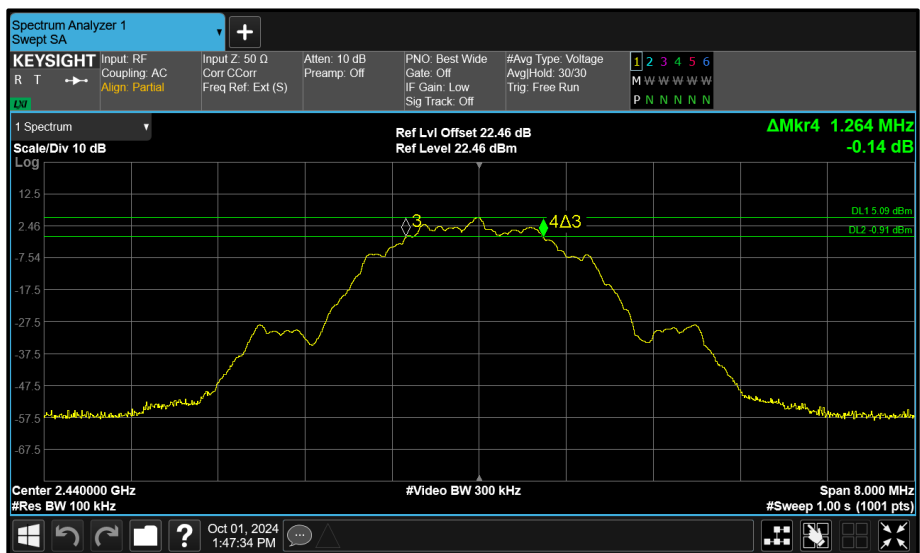


Figure 234 - Core 1 (B) 2440 MHz (CH17) 6 dB Bandwidth

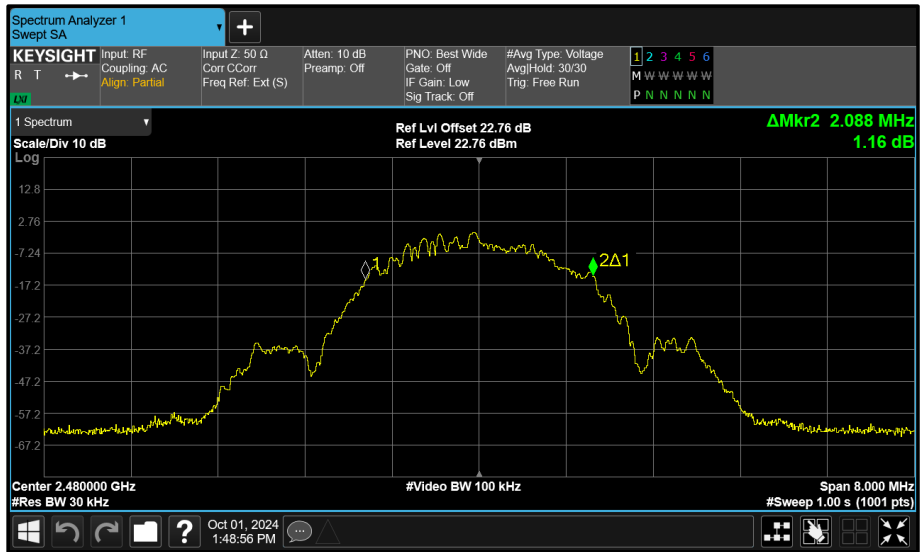


Figure 235 - Core 0 (A) 2480 MHz (CH39) 99% Bandwidth

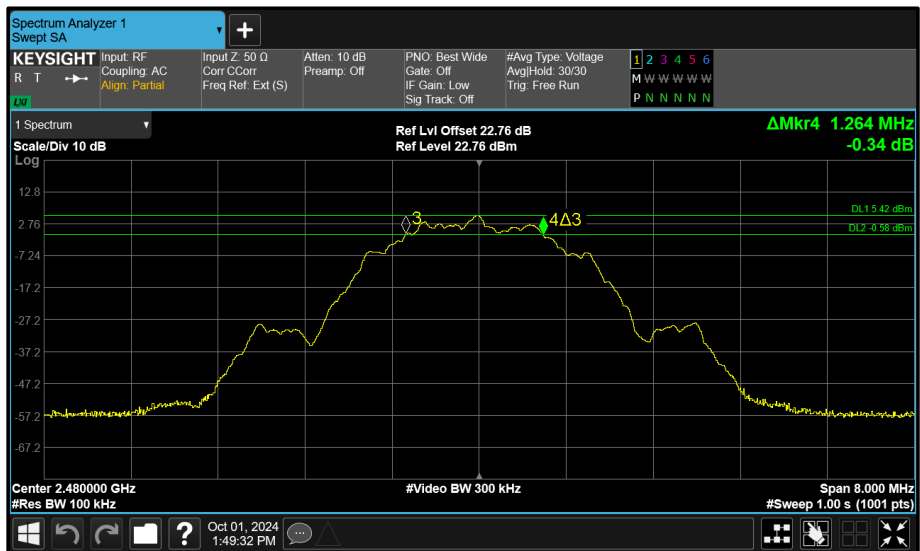


Figure 236 - Core 0 (A) 2480 MHz (CH39) 6 dB Bandwidth

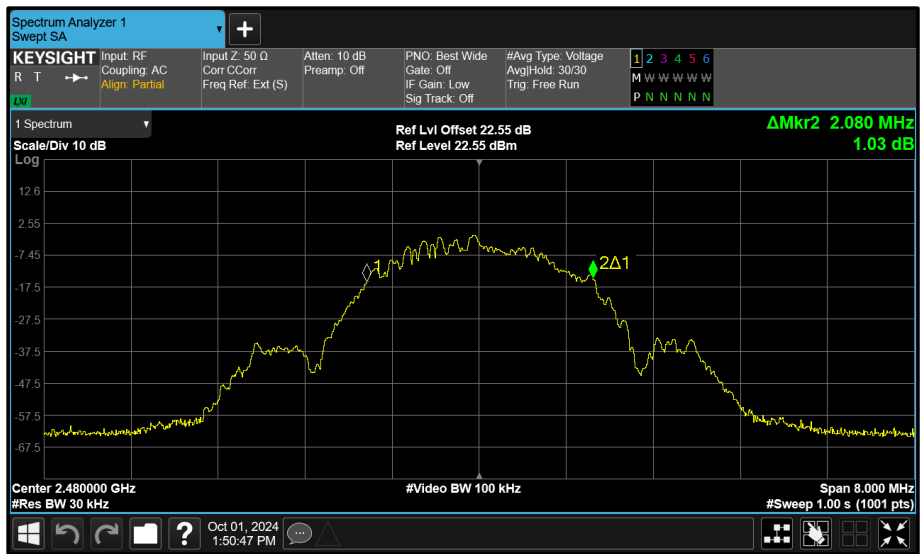


Figure 237 - Core 1 (B) 2480 MHz (CH39) 99% Bandwidth

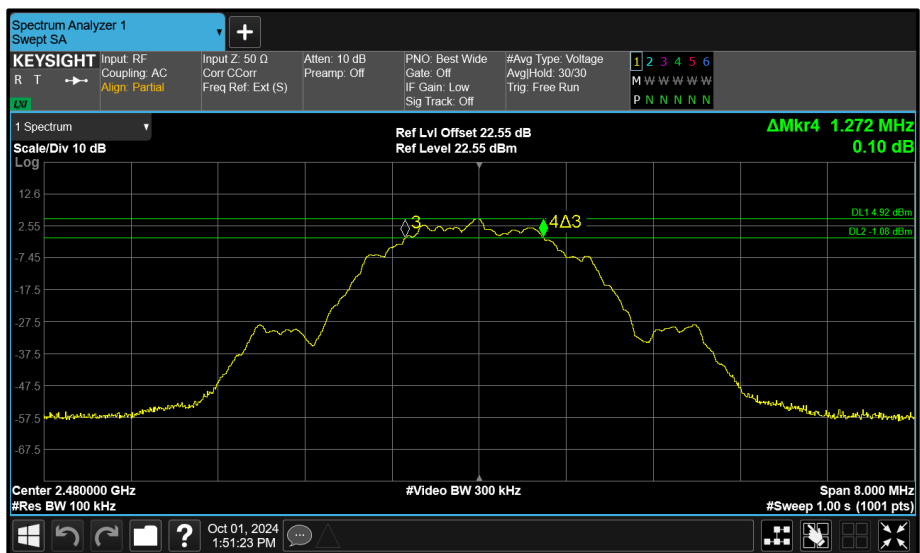


Figure 238 - Core 1 (B) 2480 MHz (CH39) 6 dB Bandwidth

FCC 47 CFR Part 15, Limit Clause 15.247(a)(2)

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 SAR Chamber 2.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
True RMS Multimeter	Fluke	79 Series III	411	12	12-Jan-2025
Hygrometer	Rotronic	Hygropalm 0	3028	12	12-Aug-2025
1 MHz / 10 MHz reference	Quartzlock	E10-X	4973	12	03-Sep-2025
AC Programmable Power Supply	iTech	IT7324	5226	-	O/P Mon
MXA Signal Analyser	Keysight Technologies	N9020B	5528	24	18-Sep-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6530	12	16-Feb-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6638	12	02-Aug-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6639	12	02-Aug-2025

Table 57

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)

2.3.2 Equipment Under Test and Modification State

A3403, S/N: M7J9X1XPGD - Modification State 0

2.3.3 Date of Test

01-October-2024 to 02-October-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. 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	21.3 - 21.8 °C
Relative Humidity	48.5 - 53.1 %



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) 15.247 (b)(4)	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):	B (Core 1)	Peak Antenna Gain (dBi):	6.30

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2404	-	18.11	-	-	-	29.70	-11.59
2441	-	17.92	-	-	-	29.70	-11.78
2476	-	18.09	-	-	-	29.70	-11.61

Table 58 - 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) 15.247 (b)(4)	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):	B (Core 1)	Peak Antenna Gain (dBi):	6.30

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2404	-	15.89	-	-	-	29.70	-13.81
2441	-	15.82	-	-	-	29.70	-13.88
2476	-	15.95	-	-	-	29.70	-13.75

Table 59 - 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)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA GFSK (LE 1M)	Duty Cycle (%):	60.6
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	3.30

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	17.47	-	-	-	-	30.00	-12.53
2440	17.34	-	-	-	-	30.00	-12.66
2480	17.20	-	-	-	-	30.00	-12.80

Table 60 - 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)	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):	3.30

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	17.31	-	-	-	-	30.00	-12.69
2440	17.18	-	-	-	-	30.00	-12.82
2480	17.44	-	-	-	-	30.00	-12.56

Table 61 - 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) 15.247 (b)(4)	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):	B (Core 1)	Peak Antenna Gain (dBi):	6.30

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2404	-	8.72	-	-	-	29.70	-20.98
2441	-	8.71	-	-	-	29.70	-20.99
2476	-	8.98	-	-	-	29.70	-20.72

Table 62 - 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) 15.247 (b)(4)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA $\pi/4$ DQPSK (8-DH5)	Duty Cycle (%):	78.2
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	B (Core 1)	Peak Antenna Gain (dBi):	6.30

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2404	-	8.84	-	-	-	29.70	-20.86
2441	-	8.74	-	-	-	29.70	-20.96
2476	-	8.91	-	-	-	29.70	-20.79

Table 63 - 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) 15.247 (b)(4)	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):	B (Core 1)	Peak Antenna Gain (dBi):	6.30

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	-	7.41	-	-	-	29.70	-22.29
2440	-	6.80	-	-	-	29.70	-22.90
2480	-	7.18	-	-	-	29.70	-22.52

Table 64 - 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) 15.247 (b)(4)	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):	6.30

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	-	7.50	-	-	-	29.70	-22.20
2440	-	7.56	-	-	-	29.70	-22.14
2480	-	7.32	-	-	-	29.70	-22.38

Table 65 - 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)	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 2)	Peak Antenna Gain (dBi):	5.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2404	8.69	-	-	-	-	30.00	-21.31
2441	8.75	-	-	-	-	30.00	-21.25
2476	8.94	-	-	-	-	30.00	-21.06

Table 66 - 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)	Test Method(s):	C63.10 11.9.1.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA $\pi/4$ DQPSK (8-DH5)	Duty Cycle (%):	78.2
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 2)	Peak Antenna Gain (dBi):	5.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2404	8.92	-	-	-	-	30.00	-21.08
2441	8.97	-	-	-	-	30.00	-21.03
2476	9.00	-	-	-	-	30.00	-21.00

Table 67 - 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)	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 2)	Peak Antenna Gain (dBi):	5.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	7.30	-	-	-	-	30.00	-22.70
2440	7.00	-	-	-	-	30.00	-23.00
2480	7.06	-	-	-	-	30.00	-22.94

Table 68 - 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)	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 2)	Peak Antenna Gain (dBi):	5.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	6.77	-	-	-	-	30.00	-23.23
2440	6.96	-	-	-	-	30.00	-23.04
2480	7.04	-	-	-	-	30.00	-22.96

Table 69 - 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) 15.247 (b)(4)	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):	7.94

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2404	17.65	17.31	-	-	20.47	28.06	-7.59
2441	17.96	18.06	-	-	20.99	28.06	-7.07
2476	17.72	17.50	-	-	20.61	28.06	-7.45

Table 70 - 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) 15.247 (b)(4)	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):	7.94

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2404	16.07	15.70	-	-	18.88	28.06	-9.18
2441	16.26	15.75	-	-	19.00	28.06	-9.06
2476	16.05	15.71	-	-	18.85	28.06	-9.21

Table 71 - 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) 15.247 (b)(4)	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 GFSK (LE 1M)	Duty Cycle (%):	60.6
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	7.94

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	17.47	14.60	-	-	19.28	28.06	-8.78
2440	17.34	13.42	-	-	18.82	28.06	-9.24
2480	17.20	14.51	-	-	19.07	28.06	-8.99

Table 72 - 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) 15.247 (b)(4)	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 GFSK (LE 2M)	Duty Cycle (%):	31.4
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	7.94

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	17.31	15.47	-	-	19.50	28.06	-8.56
2440	17.18	14.17	-	-	18.94	28.06	-9.12
2480	17.44	14.26	-	-	19.15	28.06	-8.91

Table 73 - 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) 15.247 (b)(4)	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 (%):	78.1
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	7.94

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2404	9.02	8.29	-	-	11.68	28.06	-16.38
2441	8.76	7.99	-	-	11.40	28.06	-16.66
2476	8.82	8.17	-	-	11.52	28.06	-16.55

Table 74 - 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) 15.247 (b)(4)	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):	7.94

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2404	8.80	8.18	-	-	11.51	28.06	-16.55
2441	9.14	8.63	-	-	11.91	28.06	-16.15
2476	8.99	8.36	-	-	11.70	28.06	-16.36

Table 75 - 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) 15.247 (b)(4)	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):	7.94

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	6.85	6.89	-	-	9.88	28.06	-18.18
2440	7.03	6.64	-	-	9.85	28.06	-18.21
2480	7.09	6.55	-	-	9.84	28.06	-18.22

Table 76 - 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) 15.247 (b)(4)	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):	7.94

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
2402	6.93	6.86	-	-	9.91	28.06	-18.15
2440	7.03	6.52	-	-	9.80	28.06	-18.26
2480	7.12	6.54	-	-	9.85	28.06	-18.21

Table 77 - 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.



2.3.7 Test Location and Test Equipment Used

This test was carried out in SAR Chamber 2.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
True RMS Multimeter	Fluke	79 Series III	411	12	12-Jan-2025
Hygrometer	Rotronic	Hygropalm 0	3028	12	12-Aug-2025
AC Programmable Power Supply	iTech	IT7324	5226	-	O/P Mon
USB Power Sensor	Boonton	RTP5008	5833	12	26-Jul-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6530	12	16-Feb-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6638	12	02-Aug-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6639	12	02-Aug-2025

Table 78

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)

2.4.2 Equipment Under Test and Modification State

A3403, S/N: JF4T7PYJ66 - Modification State 0

2.4.3 Date of Test

04-September-2024 to 24-September-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 21.4 - 23.0 °C

Relative Humidity 46.3 - 49.0 %



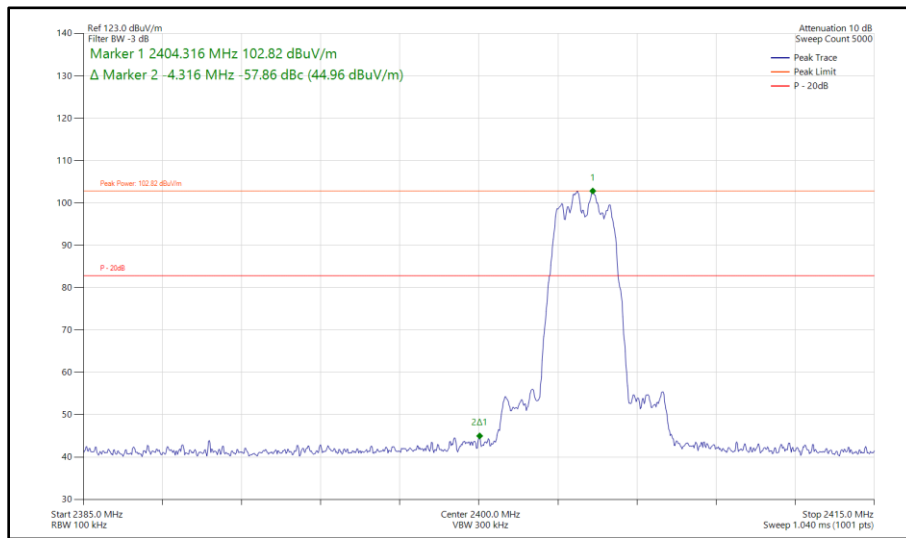
2.4.6 Test Results

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	-57.86
Static	HDR8	2404	2400	-44.73
Static	LE1M	2402	2400	-61.38
Static	LE2M	2402	2400	-34.19

Table 79 - SISO Authorised Band Edge Results



**Figure 239 - Bluetooth HDR4, SISO, Core 0 - 2404 MHz
 Band Edge Frequency 2400 MHz**