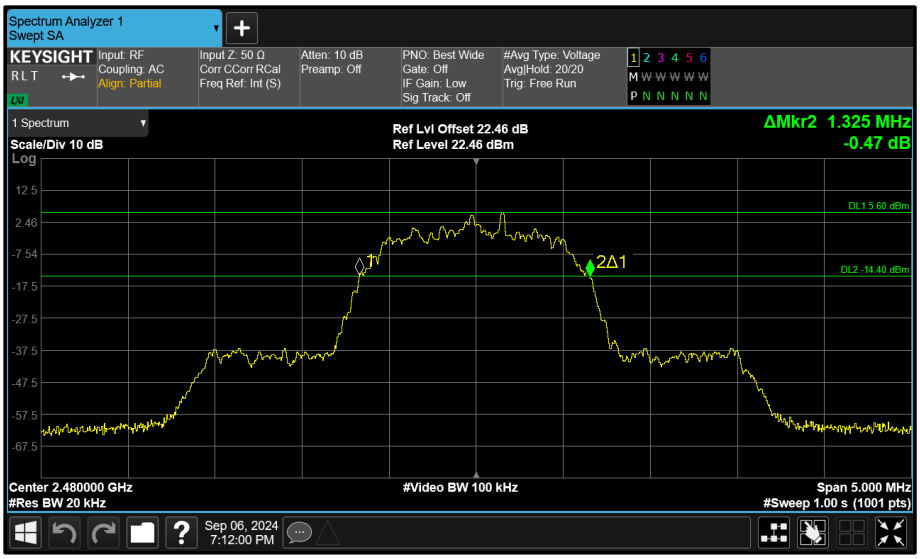

Figure 144 - Core 0 (A) 2480 MHz (CH78) 20 dB Bandwidth

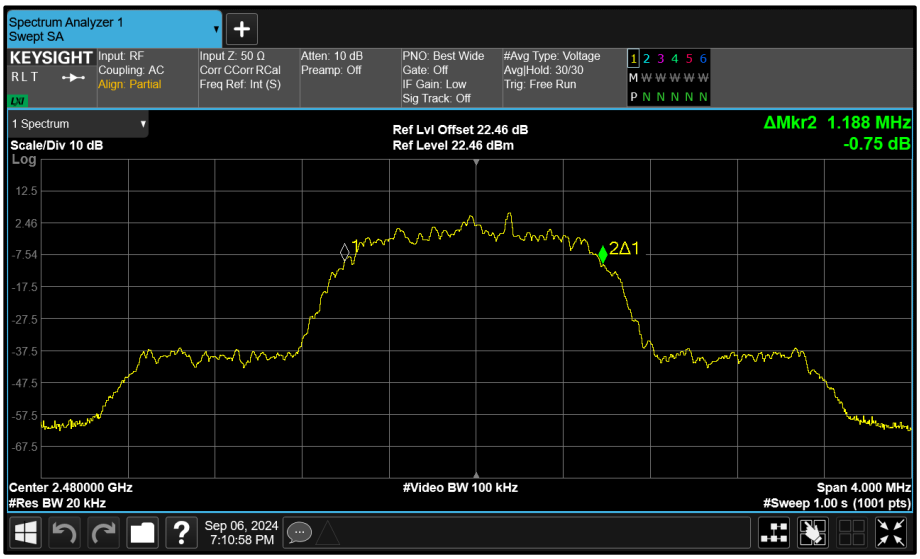

Figure 145 - Core 0 (A) 2480 MHz (CH78) 99% Bandwidth

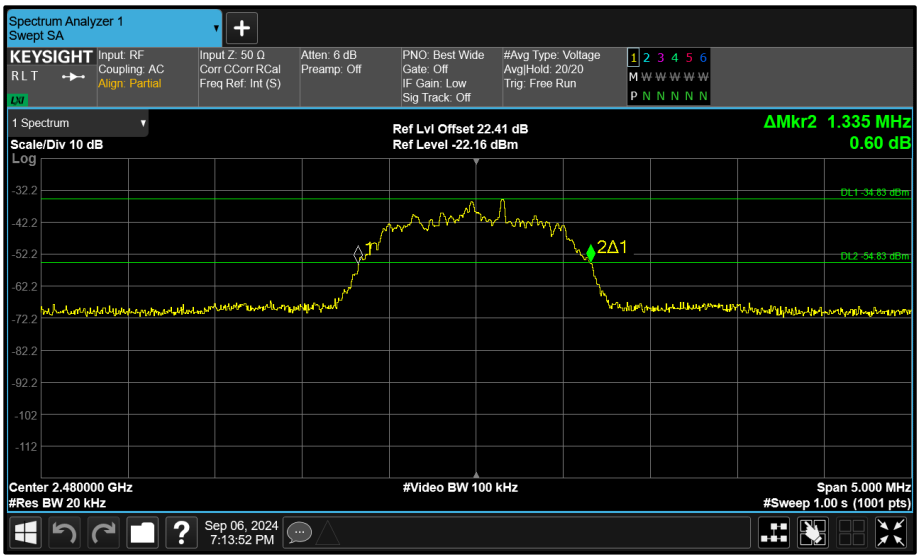

Figure 146 - Core 1 (B) 2480 MHz (CH78) 20 dB Bandwidth

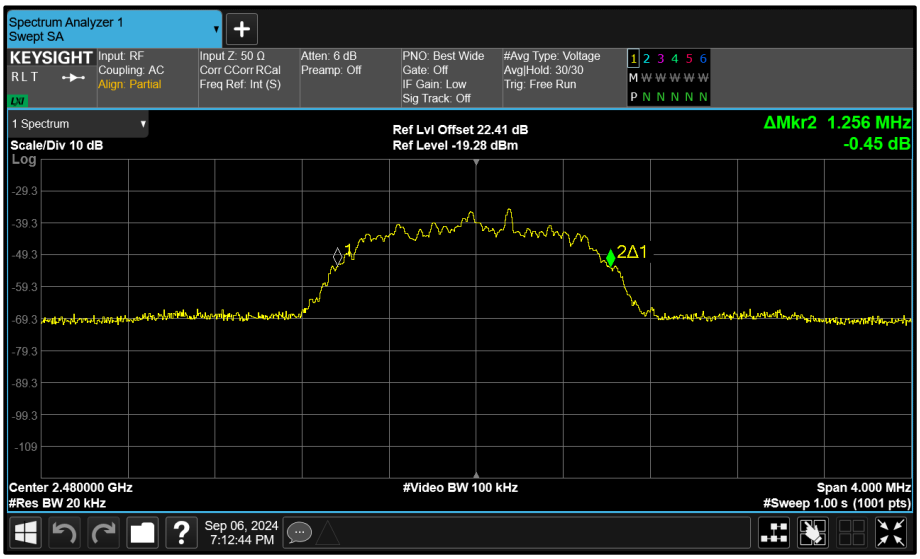

Figure 147 - Core 1 (B) 2480 MHz (CH78) 99% Bandwidth

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	FCC 15.247 (a)(1) RSS-247 5.1	Test Method(s):	C63.10 6.9.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA 8-DPSK (3-DH5)	Duty Cycle (%):	-
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	-

Test Frequency (MHz)	20 dB Bandwidth (MHz)			
	A	B	C	D
2402	1.265	1.265	-	-
2441	1.260	1.265	-	-
2480	1.260	1.265	-	-

Table 78 - 20 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2402	1.192	1.236	-	-	-
2441	1.192	1.240	-	-	-
2480	1.192	1.248	-	-	-

Table 79 - 99% Bandwidth Results

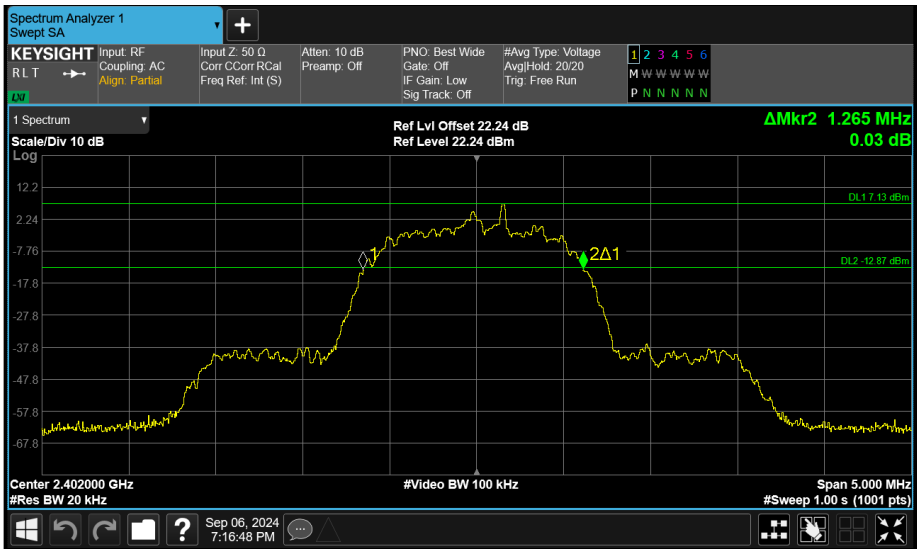

Figure 148 - Core 0 (A) 2402 MHz (CH0) 20 dB Bandwidth

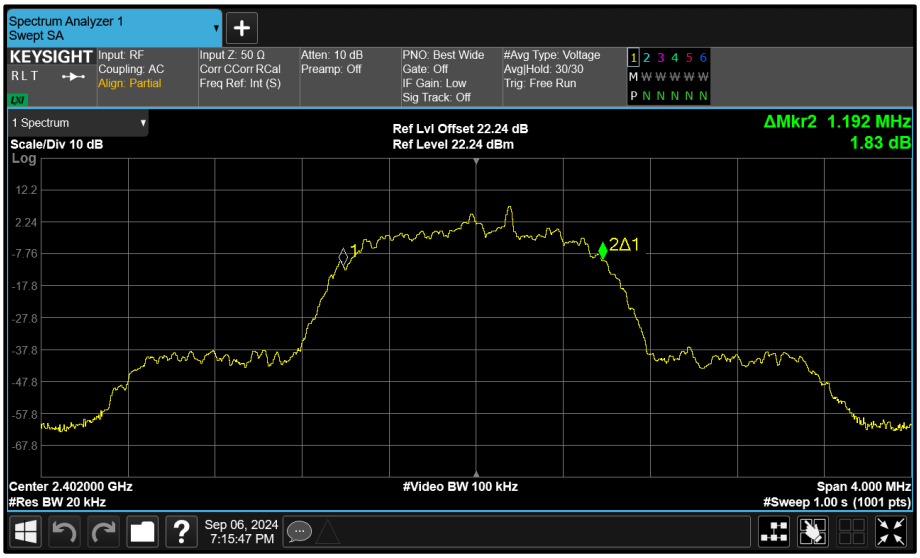

Figure 149 - Core 0 (A) 2402 MHz (CH0) 99% Bandwidth

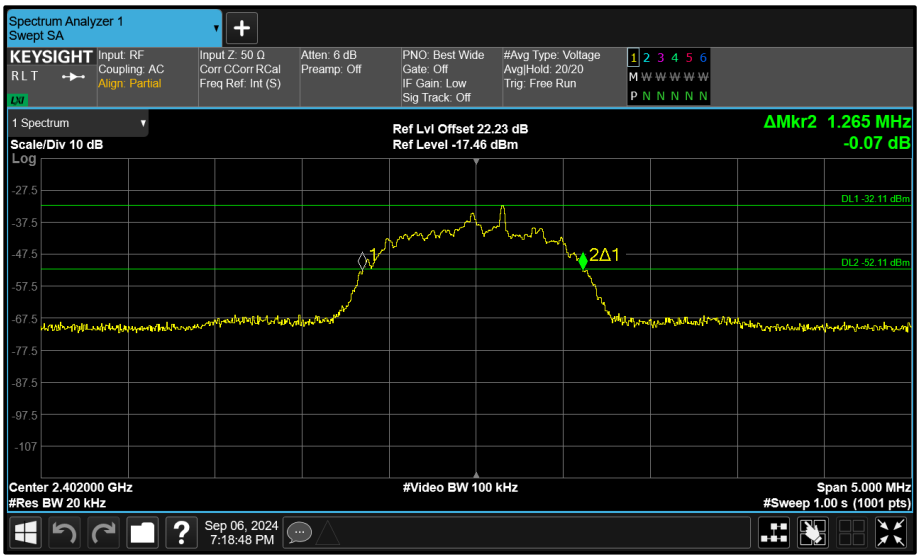

Figure 150 - Core 1 (B) 2402 MHz (CH0) 20 dB Bandwidth

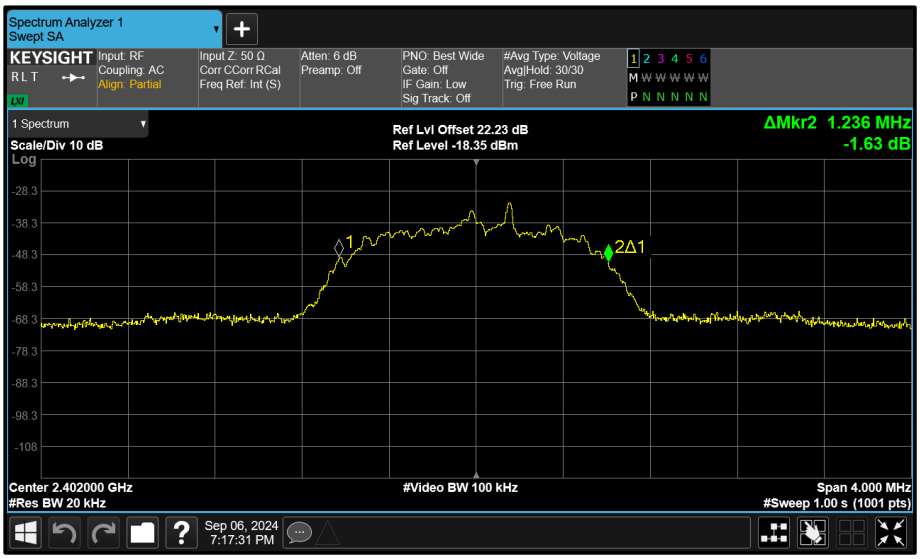

Figure 151 - Core 1 (B) 2402 MHz (CH0) 99% Bandwidth

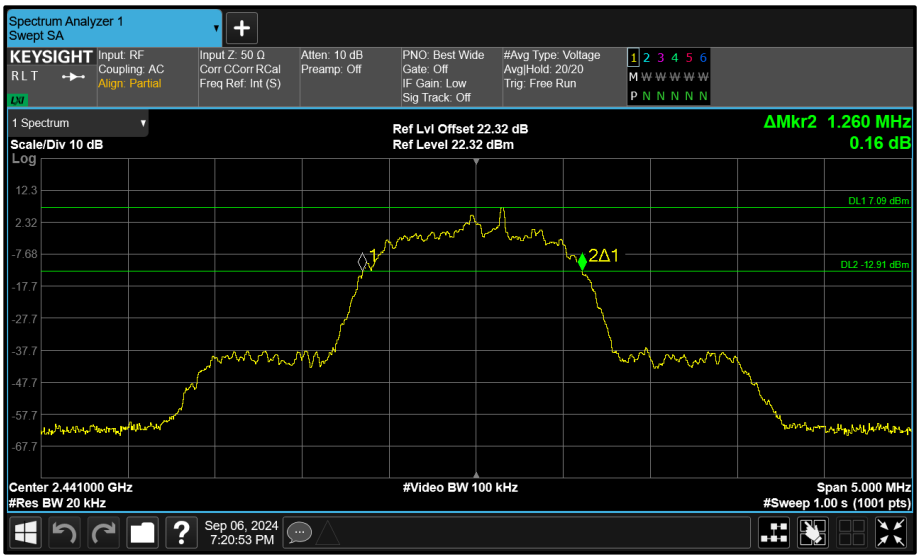

Figure 152 - Core 0 (A) 2441 MHz (CH39) 20 dB Bandwidth

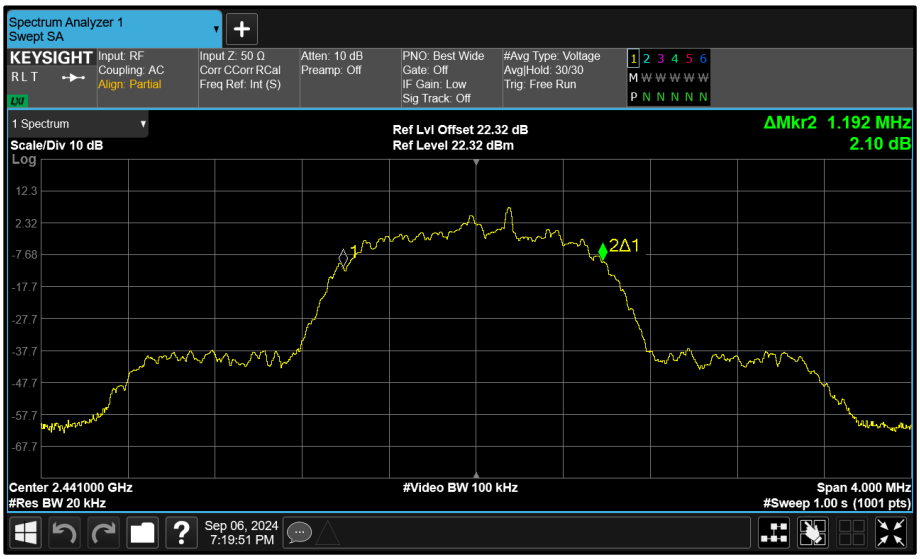

Figure 153 - Core 0 (A) 2441 MHz (CH39) 99% Bandwidth

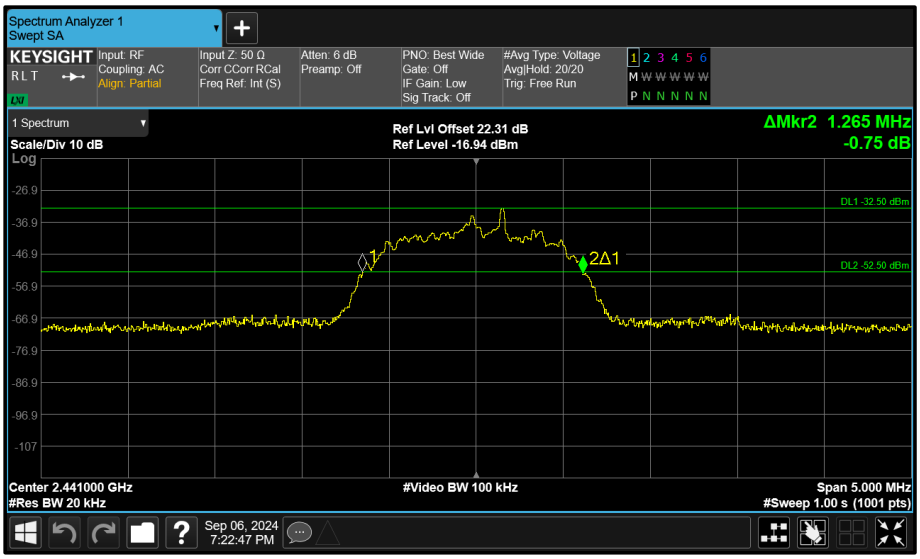

Figure 154 - Core 1 (B) 2441 MHz (CH39) 20 dB Bandwidth

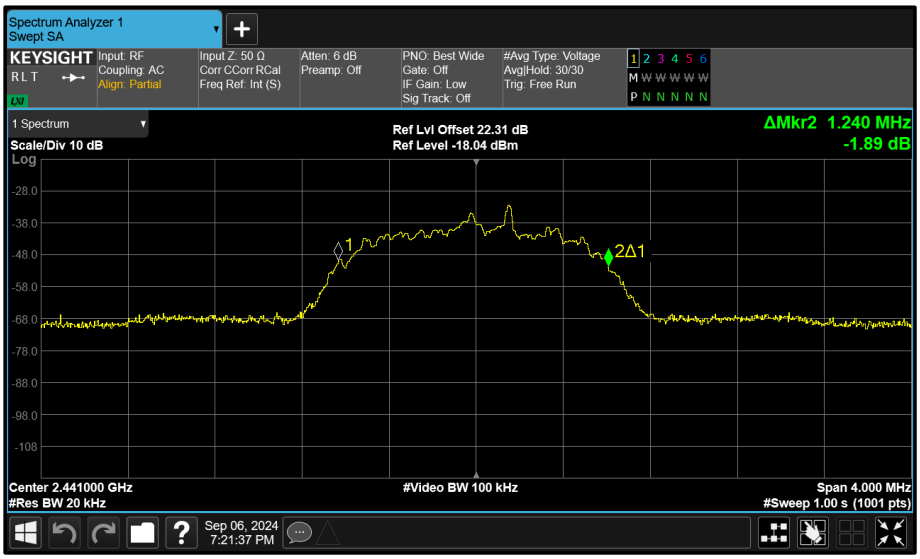

Figure 155 - Core 1 (B) 2441 MHz (CH39) 99% Bandwidth

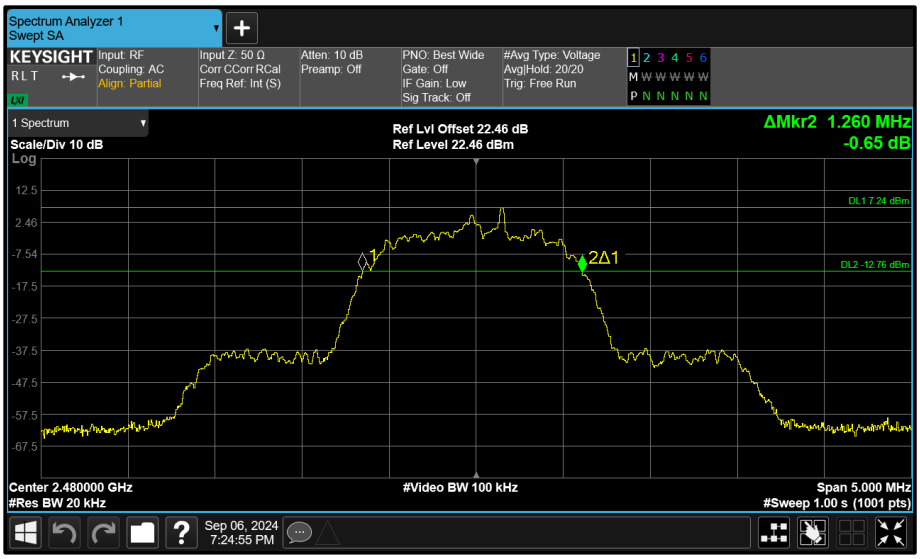

Figure 156 - Core 0 (A) 2480 MHz (CH78) 20 dB Bandwidth

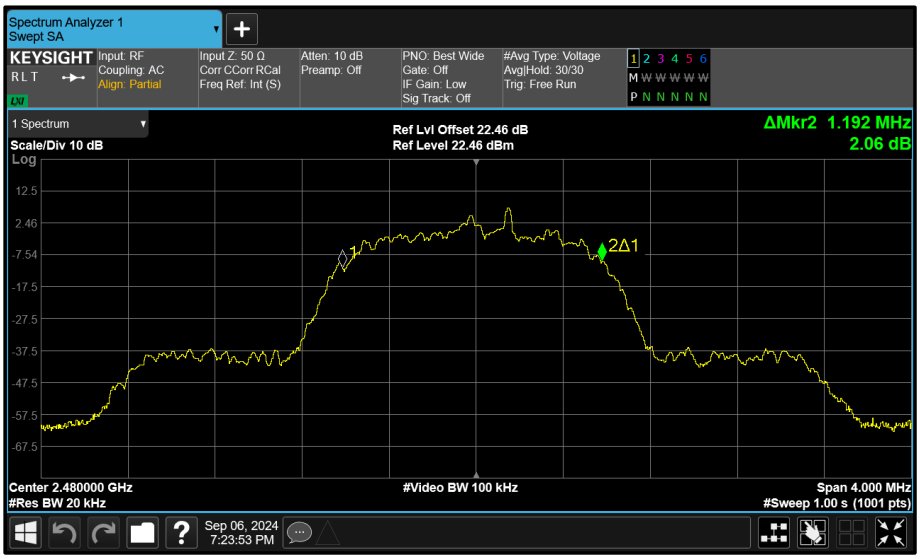

Figure 157 - Core 0 (A) 2480 MHz (CH78) 99% Bandwidth

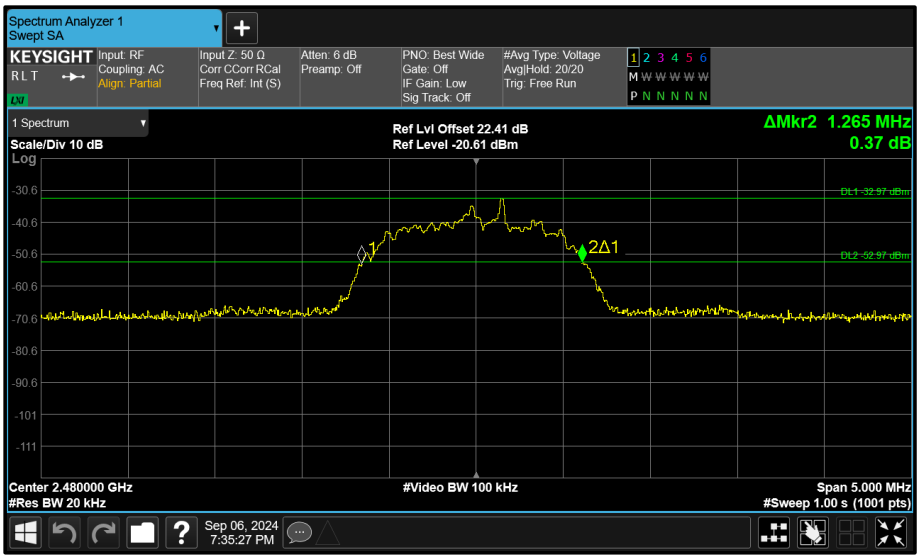

Figure 158 - Core 1 (B) 2480 MHz (CH78) 20 dB Bandwidth

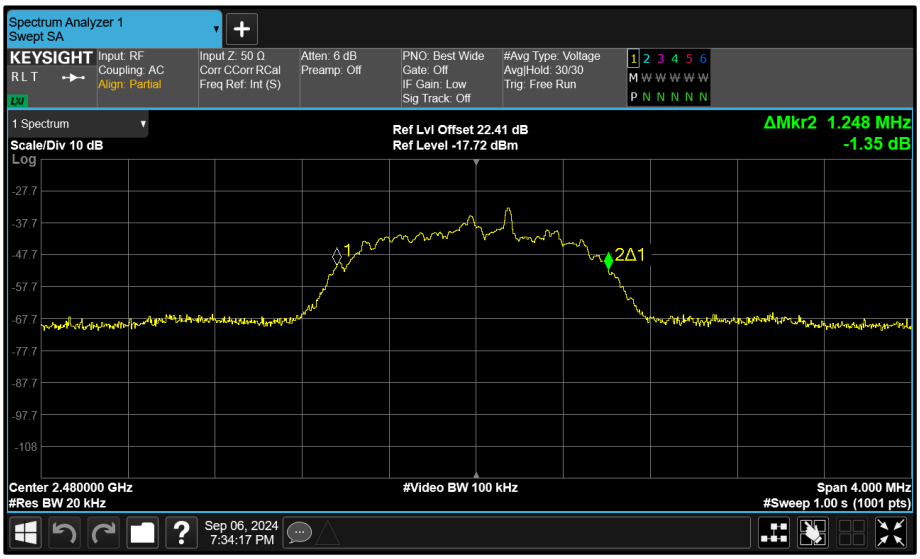

Figure 159 - Core 1 (B) 2480 MHz (CH78) 99% Bandwidth

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	FCC 15.247 (a)(1) RSS-247 5.1	Test Method(s):	C63.10 6.9.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA π/4 DQPSK (2-DH5)	Duty Cycle (%):	-
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	-

Test Frequency (MHz)	20 dB Bandwidth (MHz)			
	A	B	C	D
2402	1.330	1.330	-	-
2441	1.325	1.325	-	-
2480	1.330	1.330	-	-

Table 80 - 20 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2402	1.192	1.184	-	-	-
2441	1.196	1.184	-	-	-
2480	1.196	1.184	-	-	-

Table 81 - 99% Bandwidth Results

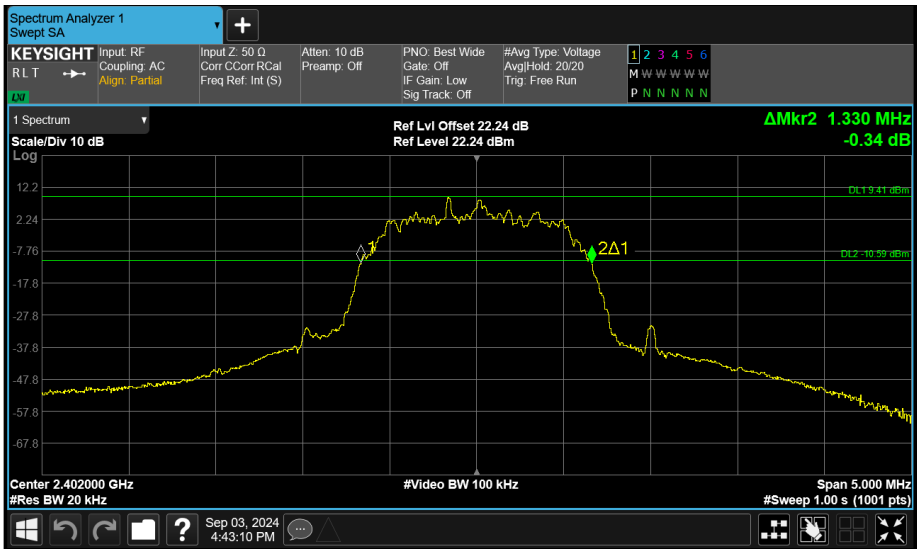

Figure 160 - Core 0 (A) 2402 MHz (CH0) 20 dB Bandwidth

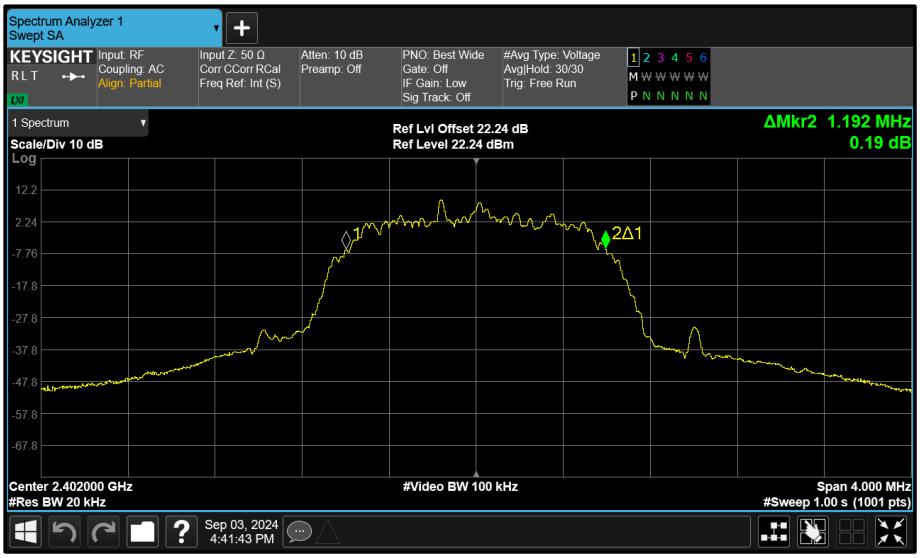

Figure 161 - Core 0 (A) 2402 MHz (CH0) 99% Bandwidth

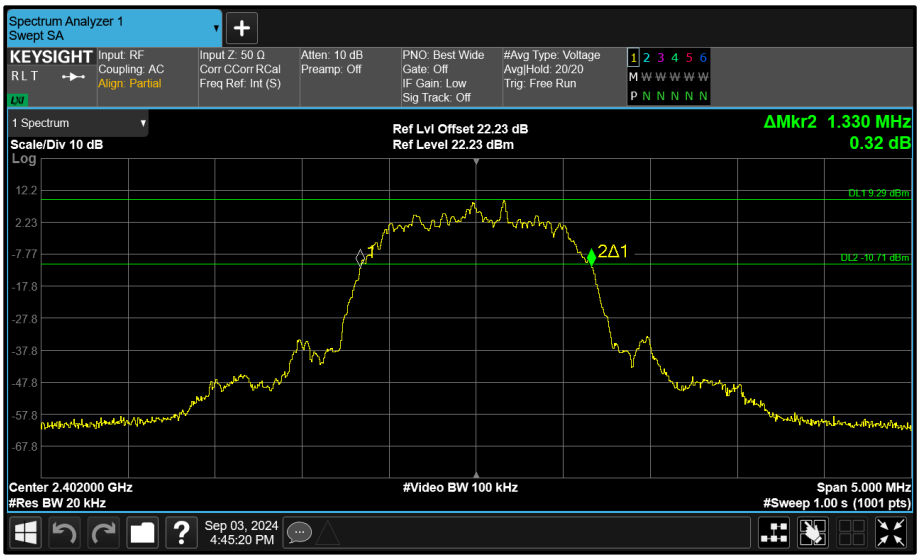

Figure 162 - Core 1 (B) 2402 MHz (CH0) 20 dB Bandwidth

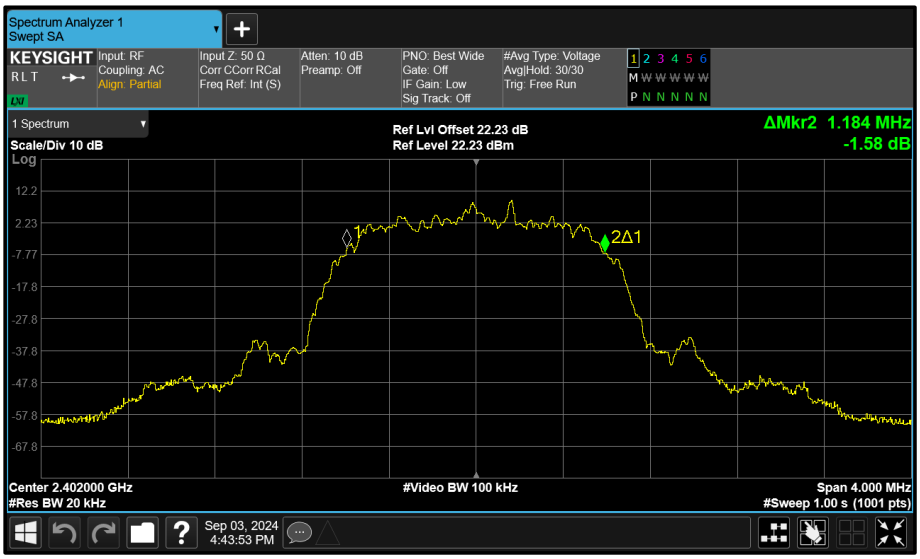

Figure 163 - Core 1 (B) 2402 MHz (CH0) 99% Bandwidth

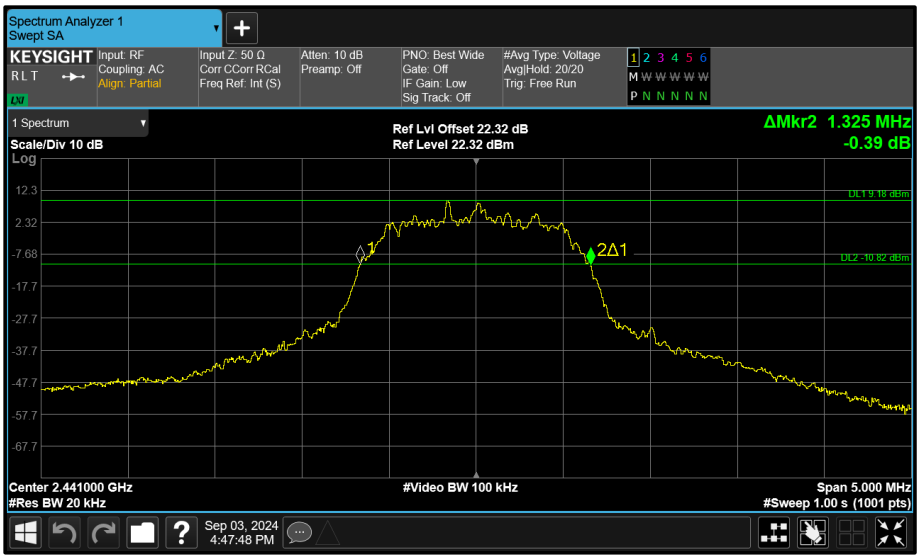

Figure 164 - Core 0 (A) 2441 MHz (CH39) 20 dB Bandwidth

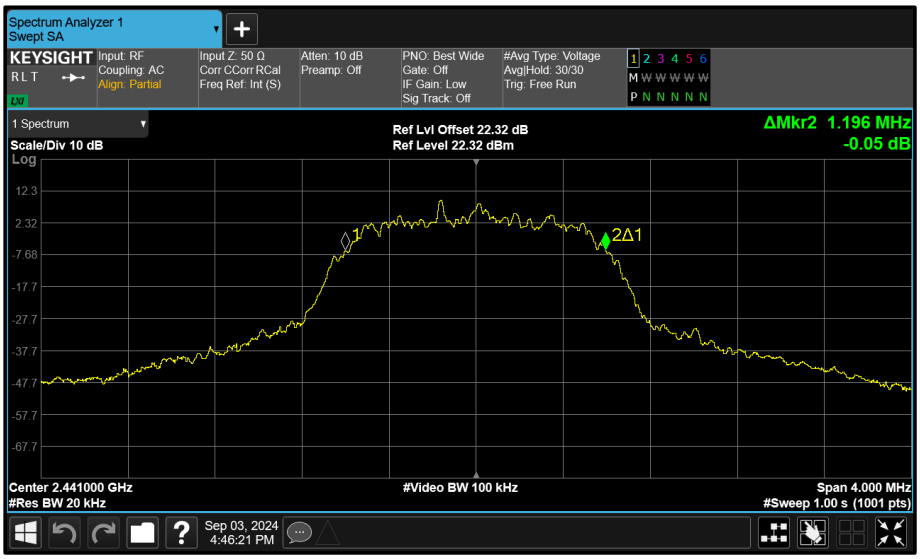

Figure 165 - Core 0 (A) 2441 MHz (CH39) 99% Bandwidth

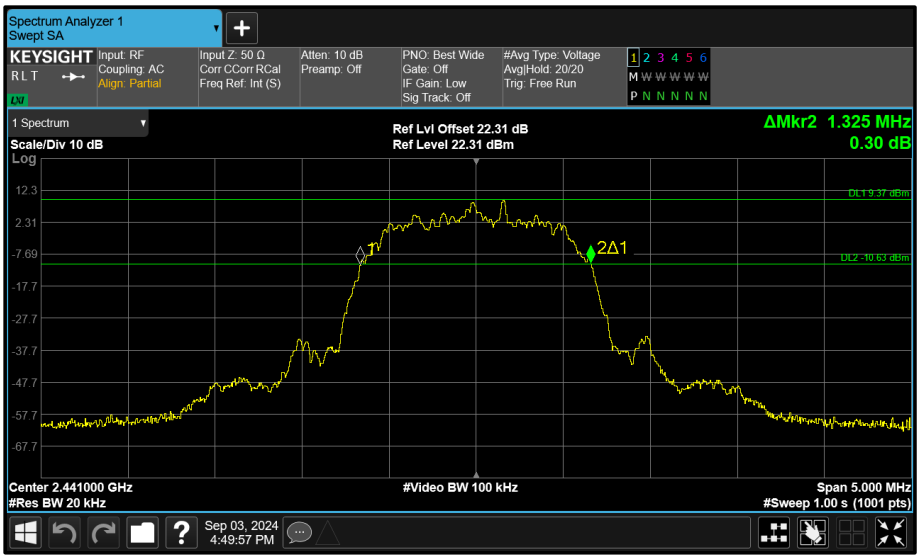

Figure 166 - Core 1 (B) 2441 MHz (CH39) 20 dB Bandwidth

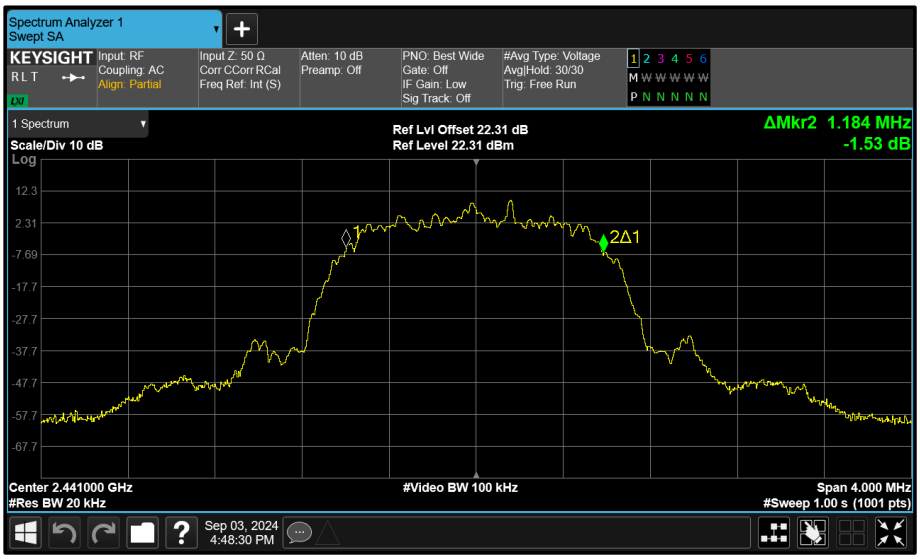

Figure 167 - Core 1 (B) 2441 MHz (CH39) 99% Bandwidth

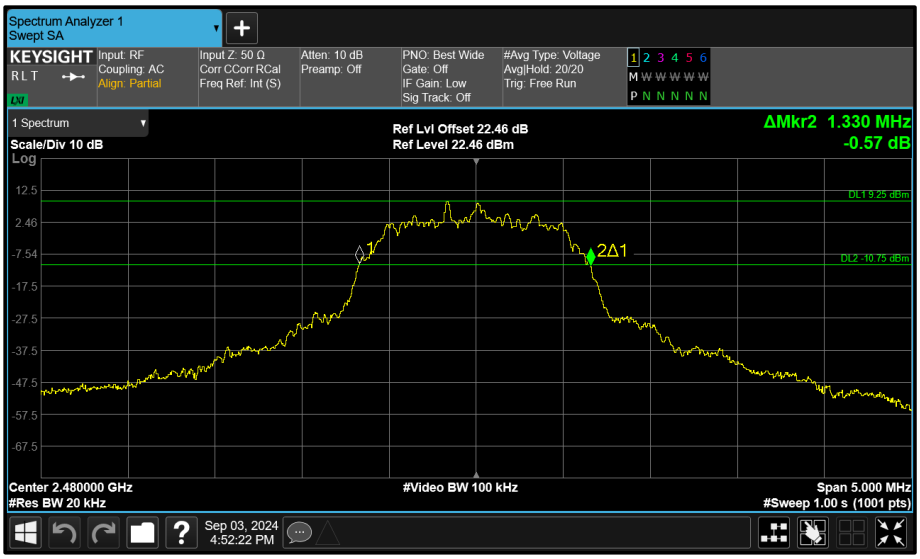

Figure 168 - Core 0 (A) 2480 MHz (CH78) 20 dB Bandwidth

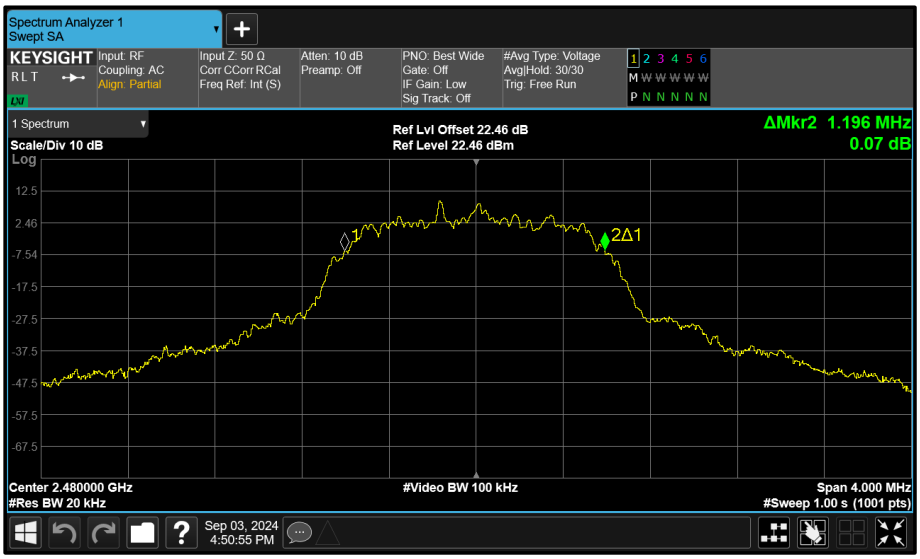

Figure 169 - Core 0 (A) 2480 MHz (CH78) 99% Bandwidth

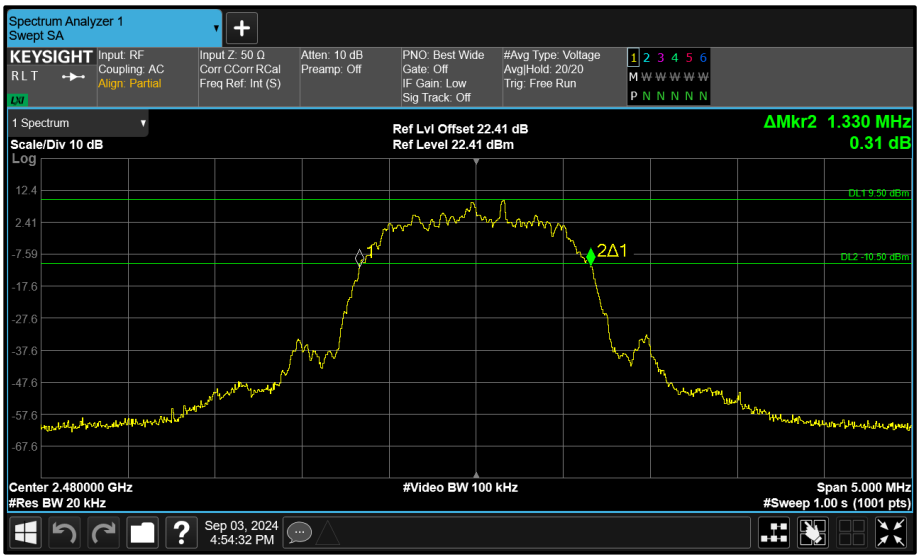

Figure 170 - Core 1 (B) 2480 MHz (CH78) 20 dB Bandwidth

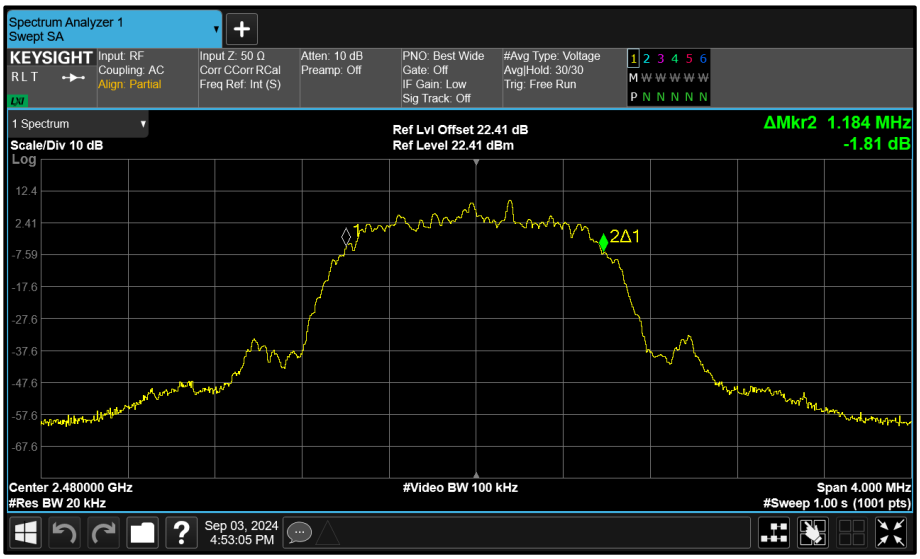

Figure 171 - Core 1 (B) 2480 MHz (CH78) 99% Bandwidth

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	FCC 15.247 (a)(1) RSS-247 5.1	Test Method(s):	C63.10 6.9.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA 8-DPSK (3-DH5)	Duty Cycle (%):	-
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	-

Test Frequency (MHz)	20 dB Bandwidth (MHz)			
	A	B	C	D
2402	1.260	1.260	-	-
2441	1.260	1.260	-	-
2480	1.260	1.260	-	-

Table 82 - 20 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
2402	1.180	1.184	-	-	-
2441	1.196	1.188	-	-	-
2480	1.196	1.188	-	-	-

Table 83 - 99% Bandwidth Results

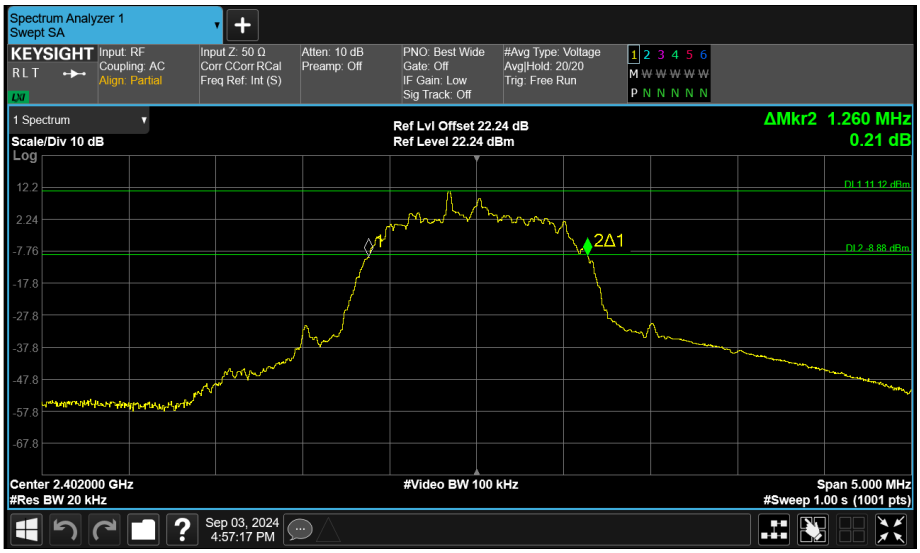

Figure 172 - Core 0 (A) 2402 MHz (CH0) 20 dB Bandwidth

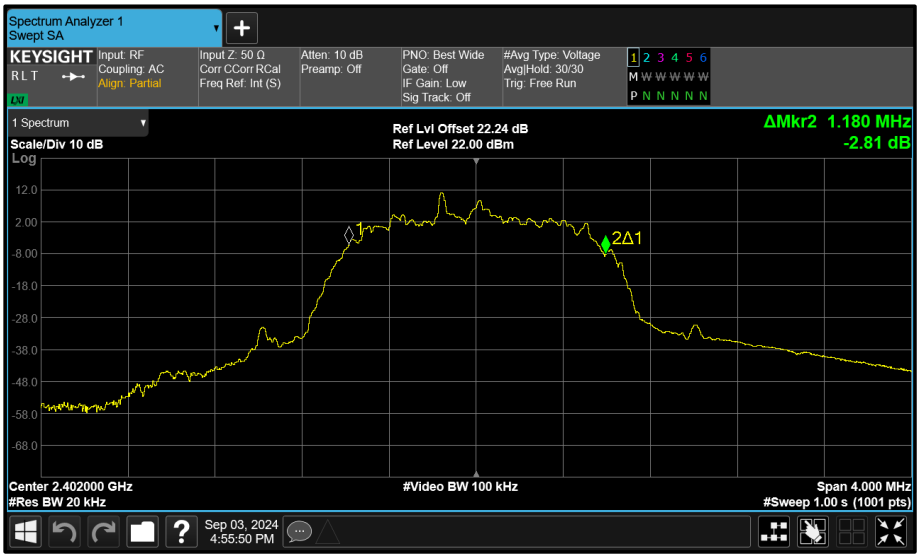

Figure 173 - Core 0 (A) 2402 MHz (CH0) 99% Bandwidth

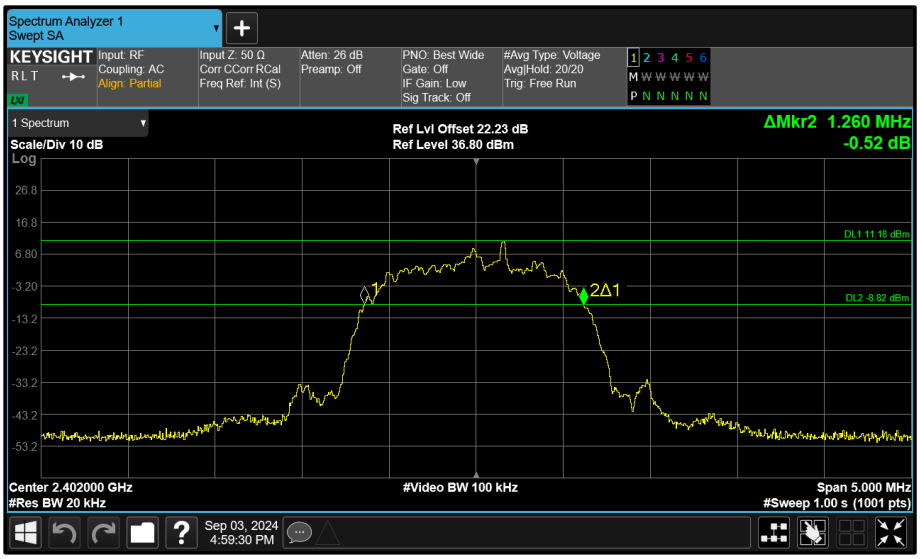

Figure 174 - Core 1 (B) 2402 MHz (CH0) 20 dB Bandwidth

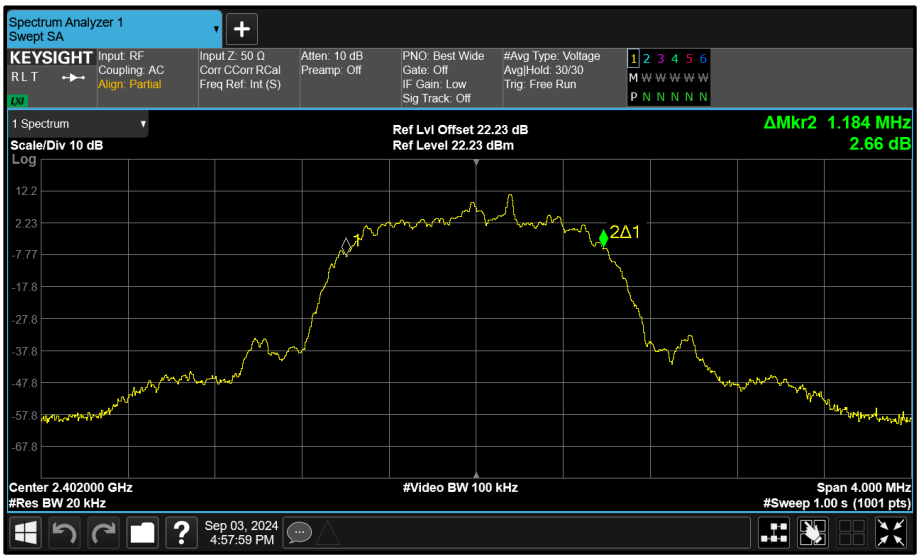

Figure 175 - Core 1 (B) 2402 MHz (CH0) 99% Bandwidth

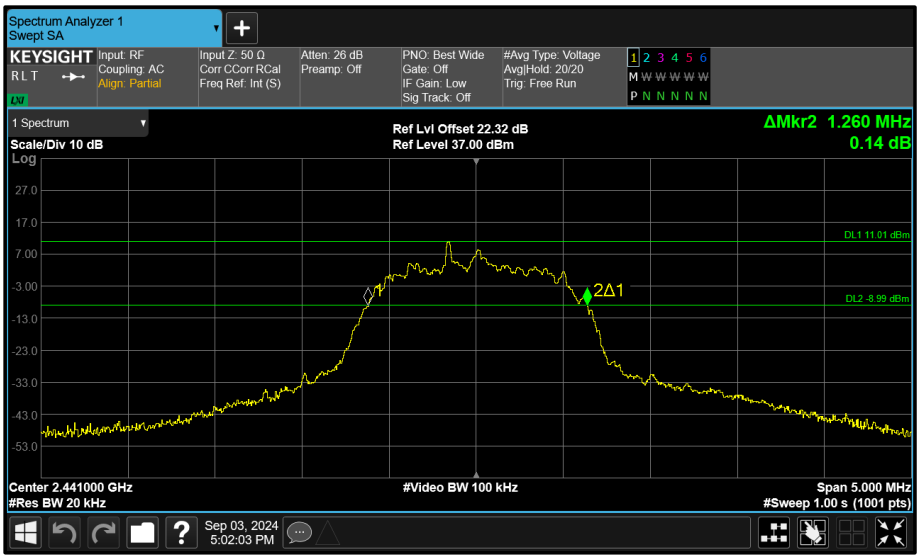

Figure 176 - Core 0 (A) 2441 MHz (CH39) 20 dB Bandwidth

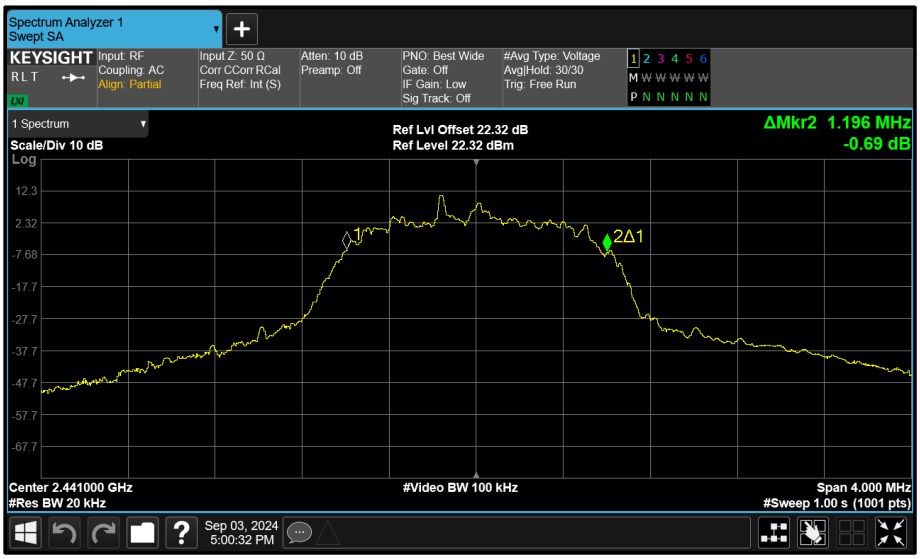

Figure 177 - Core 0 (A) 2441 MHz (CH39) 99% Bandwidth

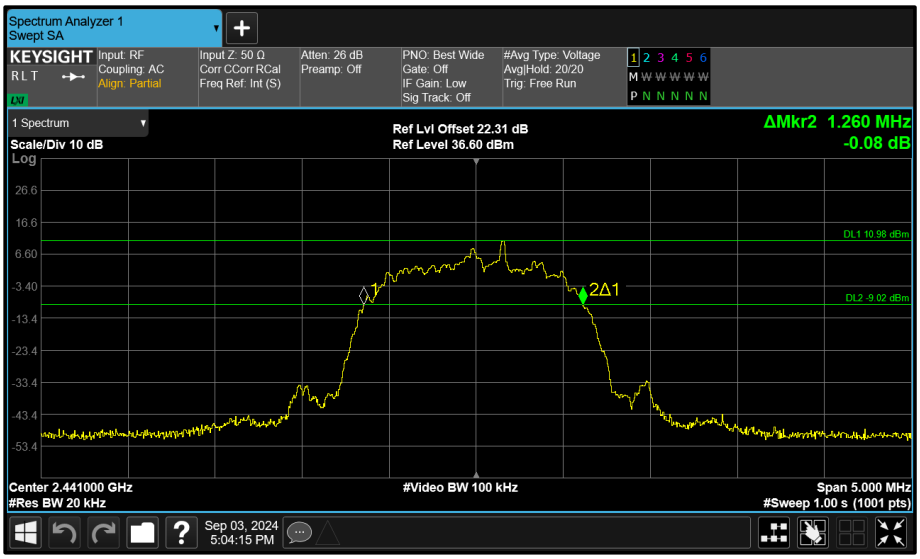

Figure 178 - Core 1 (B) 2441 MHz (CH39) 20 dB Bandwidth

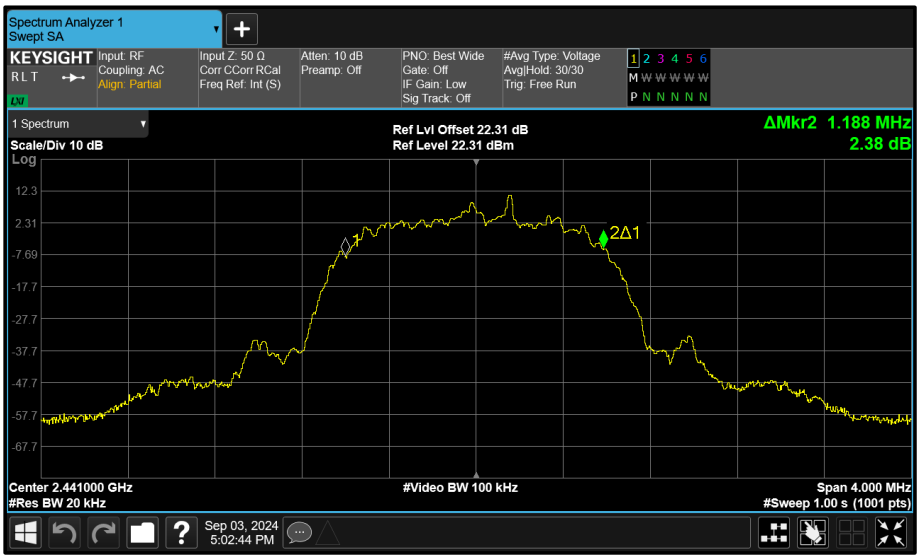

Figure 179 - Core 1 (B) 2441 MHz (CH39) 99% Bandwidth

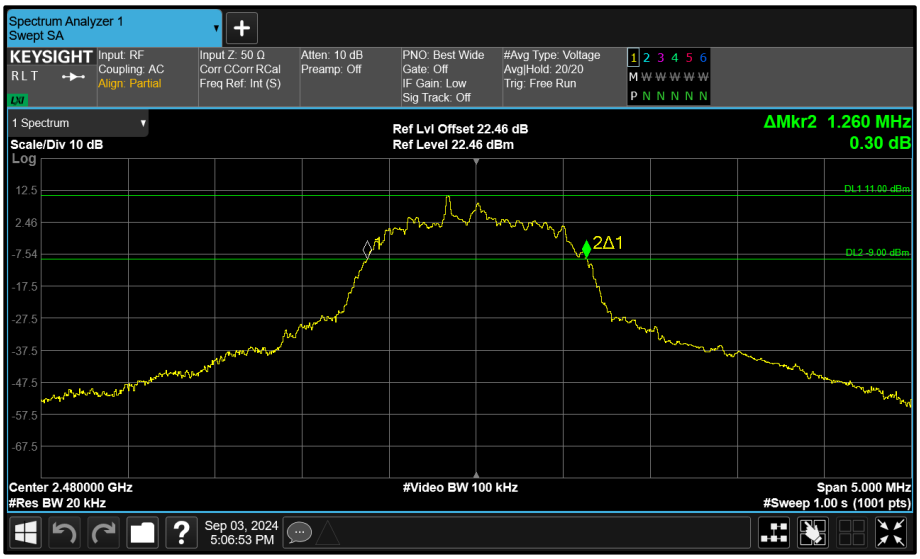

Figure 180 - Core 0 (A) 2480 MHz (CH78) 20 dB Bandwidth

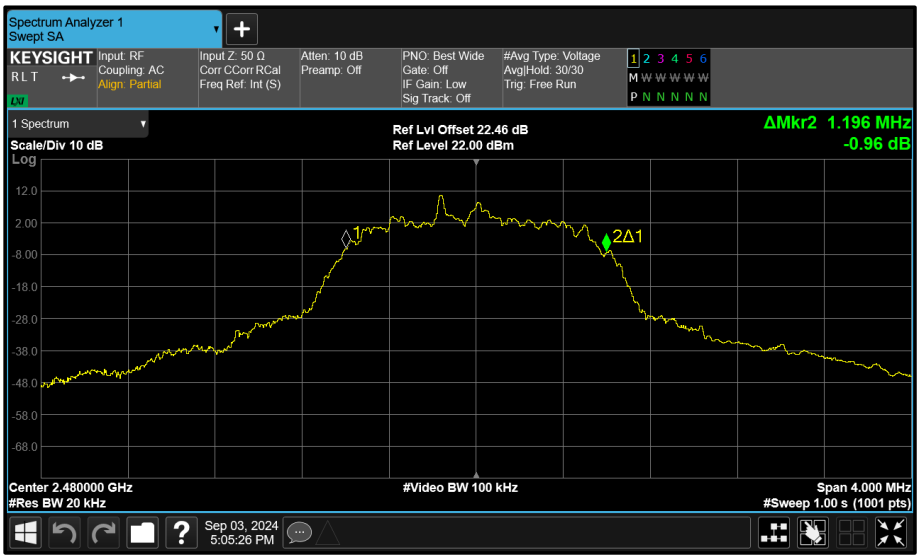

Figure 181 - Core 0 (A) 2480 MHz (CH78) 99% Bandwidth

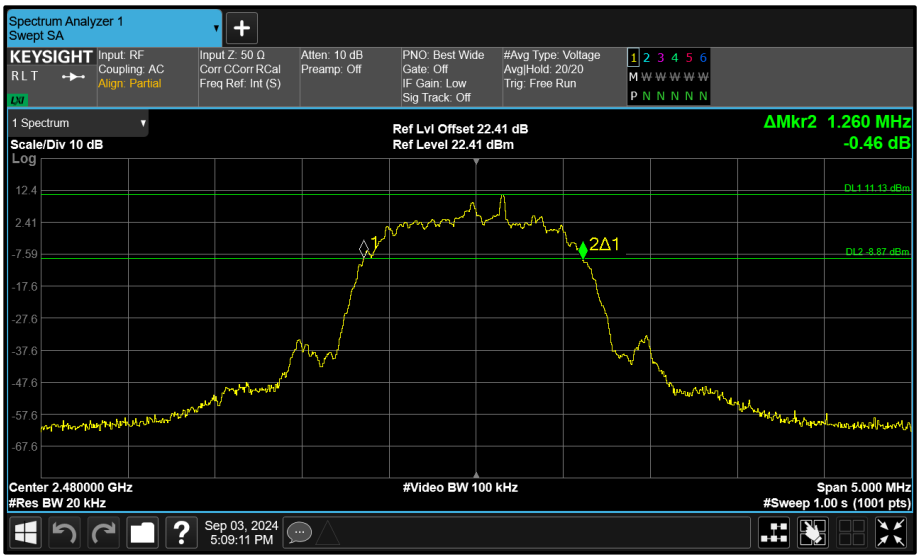

Figure 182 - Core 1 (B) 2480 MHz (CH78) 20 dB Bandwidth

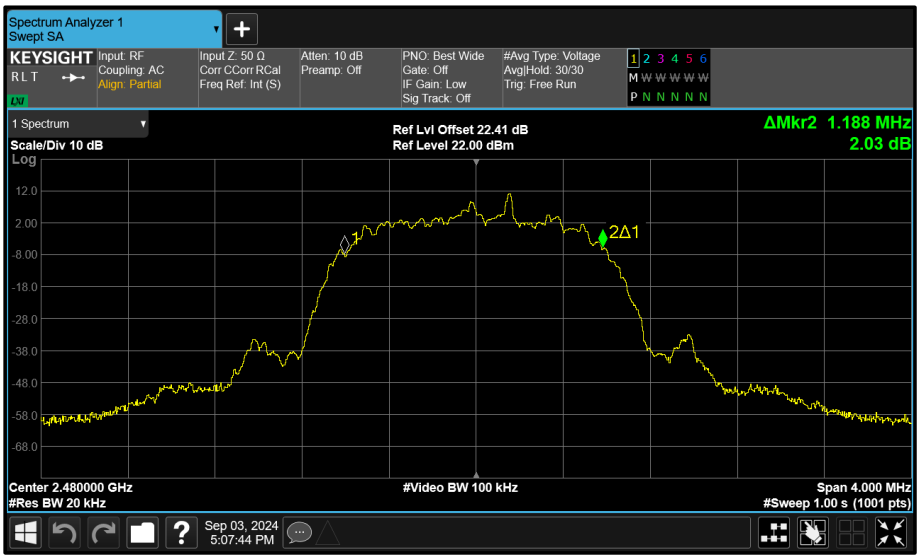

Figure 183 - Core 1 (B) 2480 MHz (CH78) 99% Bandwidth

FCC 47 CFR Part 15 Limit Clause

None specified.

2.5.7 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 14 and RF Chamber 18.

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
MXA Signal Analyser	Keysight Technologies	N9020B	6419	24	28-Feb-2025
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6517	12	22-Feb-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
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6526	12	22-Feb-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6527	12	05-Mar-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6528	12	22-Feb-2025
AC Programmable Power Supply	iTech	IT7324	6665	-	O/P Mon

Table 84

O/P Mon - Output Monitored using calibrated equipment

2.6 Maximum Conducted Output Power

2.6.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.247 (b)

2.6.2 Equipment Under Test and Modification State

A3186, S/N: LXXD3YHT0L - Modification State 0

2.6.3 Date of Test

13-September-2024

2.6.4 Test Method

The test was performed in accordance with ANSI C63.10 clause 7.8.5 using a power meter.

MIMO output port summing was performed in accordance with KDB 662911 D01. 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.

2.6.5 Environmental Conditions

Ambient Temperature	21.1 °C
Relative Humidity	42.4 %

2.6.6 Test Results

2.4 GHz Bluetooth BDR/EDR

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(1) RSS-247 5.4 b)	Test Method(s):	C63.10 7.8.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA GFSK (DH5)	Duty Cycle (%):	76.8
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	∑		
2402	-	13.24	-	-	-	29.70	-16.46
2441	-	13.18	-	-	-	29.70	-16.52
2480	-	13.00	-	-	-	29.70	-16.70

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	∑					
2402	-	13.24	-	-	-	30.00	-16.76	19.54	36.00	-16.46
2441	-	13.18	-	-	-	30.00	-16.82	19.48	36.00	-16.52
2480	-	13.00	-	-	-	30.00	-17.00	19.30	36.00	-16.70

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)(1) RSS-247 5.4 b)	Test Method(s):	C63.10 7.8.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA GFSK (DH5)	Duty Cycle (%):	76.8
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	C (Core 2)	Peak Antenna Gain (dBi):	5.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2402	-	-	13.49	-	-	30.00	-16.51
2441	-	-	13.45	-	-	30.00	-16.55
2480	-	-	13.37	-	-	30.00	-16.63

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	∑					
2402	-	-	13.49	-	-	30.00	-16.51	18.69	36.00	-17.31
2441	-	-	13.45	-	-	30.00	-16.55	18.65	36.00	-17.35
2480	-	-	13.37	-	-	30.00	-16.63	18.57	36.00	-17.43

Table 88 - ISED Maximum Conducted (peak) Output Power Results

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(1) RSS-247 5.4 b)	Test Method(s):	C63.10 7.8.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA π/4 DQPSK (2-DH5)	Duty Cycle (%):	77.1
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	∑		
2402	-	11.71	-	-	-	29.70	-17.99
2441	-	11.65	-	-	-	29.70	-18.05
2480	-	11.50	-	-	-	29.70	-18.20

Table 89 - 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	-	11.71	-	-	-	30.00	-18.29	18.01	36.00	-17.99
2441	-	11.65	-	-	-	30.00	-18.35	17.95	36.00	-18.05
2480	-	11.50	-	-	-	30.00	-18.50	17.80	36.00	-18.20

Table 90 - ISED Maximum Conducted (peak) Output Power Results

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(1) RSS-247 5.4 b)	Test Method(s):	C63.10 7.8.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA π/4 DQPSK (2-DH5)	Duty Cycle (%):	76.8
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	C (Core 2)	Peak Antenna Gain (dBi):	5.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2402	-	-	11.60	-	-	30.00	-18.40
2441	-	-	11.96	-	-	30.00	-18.04
2480	-	-	11.61	-	-	30.00	-18.39

Table 91 - 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	-	-	11.60	-	-	30.00	-18.40	16.80	36.00	-19.20
2441	-	-	11.96	-	-	30.00	-18.04	17.16	36.00	-18.84
2480	-	-	11.61	-	-	30.00	-18.39	16.81	36.00	-19.19

Table 92 - ISED Maximum Conducted (peak) Output Power Results

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(1) RSS-247 5.4 b)	Test Method(s):	C63.10 7.8.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA 8-DPSK (3-DH5)	Duty Cycle (%):	76.9
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	∑		
2402	-	12.06	-	-	-	29.70	-17.64
2441	-	12.01	-	-	-	29.70	-17.69
2480	-	11.85	-	-	-	29.70	-17.85

Table 93 - 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	-	12.06	-	-	-	30.00	-17.94	18.36	36.00	-17.64
2441	-	12.01	-	-	-	30.00	-17.99	18.31	36.00	-17.69
2480	-	11.85	-	-	-	30.00	-18.15	18.15	36.00	-17.85

Table 94 - ISED Maximum Conducted (peak) Output Power Results

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(1) RSS-247 5.4 b)	Test Method(s):	C63.10 7.8.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA 8-DPSK (3-DH5)	Duty Cycle (%):	77.2
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	C (Core 2)	Peak Antenna Gain (dBi):	5.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2402	-	-	12.05	-	-	30.00	-17.95
2441	-	-	12.33	-	-	30.00	-17.67
2480	-	-	12.01	-	-	30.00	-17.99

Table 95 - 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	-	-	12.05	-	-	30.00	-17.95	17.25	36.00	-18.75
2441	-	-	12.33	-	-	30.00	-17.67	17.53	36.00	-18.47
2480	-	-	12.01	-	-	30.00	-17.99	17.21	36.00	-18.79

Table 96 - ISED Maximum Conducted (peak) Output Power Results

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(1) RSS-247 5.4 b)	Test Method(s):	C63.10 7.8.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA π/4 DQPSK (2-DH5)	Duty Cycle (%):	76.8
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	∑		
2402	-	19.22	-	-	-	29.70	-10.48
2441	-	18.92	-	-	-	29.70	-10.78
2480	-	18.84	-	-	-	29.70	-10.86

Table 97 - 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	-	19.22	-	-	-	30.00	-10.78	25.52	36.00	-10.48
2441	-	18.92	-	-	-	30.00	-11.08	25.22	36.00	-10.78
2480	-	18.84	-	-	-	30.00	-11.16	25.14	36.00	-10.86

Table 98 - ISED Maximum Conducted (peak) Output Power Results

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(1) RSS-247 5.4 b)	Test Method(s):	C63.10 7.8.5
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA 8-DPSK (3-DH5)	Duty Cycle (%):	76.9
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	∑		
2402	-	19.80	-	-	-	29.70	-9.90
2441	-	19.53	-	-	-	29.70	-10.17
2480	-	19.51	-	-	-	29.70	-10.19

Table 99 - 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	-	19.80	-	-	-	30.00	-10.20	26.10	36.00	-9.90
2441	-	19.53	-	-	-	30.00	-10.47	25.83	36.00	-10.17
2480	-	19.51	-	-	-	30.00	-10.49	25.81	36.00	-10.19

Table 100 - ISED Maximum Conducted (peak) Output Power Results

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(1) RSS-247 5.4 b)	Test Method(s):	C63.10 7.8.5
Additional Reference(s):	662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	iPA GFSK (DH5)	Duty Cycle (%):	76.7
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	∑		
2402	13.82	13.27	-	-	16.56	28.06	-11.50
2441	13.88	13.16	-	-	16.55	28.06	-11.51
2480	13.70	12.99	-	-	16.37	28.06	-11.69

Table 101 - 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	13.82	13.27	-	-	16.56	30.00	-13.44	24.50	36.00	-11.50
2441	13.88	13.16	-	-	16.55	30.00	-13.45	24.49	36.00	-11.51
2480	13.70	12.99	-	-	16.37	30.00	-13.63	24.31	36.00	-11.69

Table 102 - ISED Maximum Conducted (peak) Output Power Results

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(1) RSS-247 5.4 b)	Test Method(s):	C63.10 7.8.5
Additional Reference(s):	662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	iPA π/4 DQPSK (2-DH5)	Duty Cycle (%):	76.8
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	∑		
2402	12.17	11.63	-	-	14.92	28.06	-13.14
2441	11.72	11.17	-	-	14.47	28.06	-13.59
2480	11.76	11.15	-	-	14.48	28.06	-13.59

Table 103 - 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	12.17	11.63	-	-	14.92	30.00	-15.08	22.86	36.00	-13.14
2441	11.72	11.17	-	-	14.47	30.00	-15.53	22.41	36.00	-13.59
2480	11.76	11.15	-	-	14.48	30.00	-15.52	22.41	36.00	-13.59

Table 104 - ISED Maximum Conducted (peak) Output Power Results

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(1) RSS-247 5.4 b)	Test Method(s):	C63.10 7.8.5
Additional Reference(s):	662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	iPA 8-DPSK (3-DH5)	Duty Cycle (%):	76.9
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	∑		
2402	12.55	11.99	-	-	15.29	28.06	-12.77
2441	12.11	11.61	-	-	14.87	28.06	-13.19
2480	12.12	11.54	-	-	14.85	28.06	-13.21

Table 105 - 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	12.55	11.99	-	-	15.29	30.00	-14.71	23.23	36.00	-12.77
2441	12.11	11.61	-	-	14.87	30.00	-15.13	22.81	36.00	-13.19
2480	12.12	11.54	-	-	14.85	30.00	-15.15	22.79	36.00	-13.21

Table 106 - ISED Maximum Conducted (peak) Output Power Results

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(1) RSS-247 5.4 b)	Test Method(s):	C63.10 7.8.5
Additional Reference(s):	662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	ePA π/4 DQPSK (2-DH5)	Duty Cycle (%):	77.2
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	∑		
2402	16.28	16.09	-	-	19.20	28.06	-8.86
2441	16.23	15.77	-	-	19.02	28.06	-9.04
2480	15.94	15.75	-	-	18.86	28.06	-9.20

Table 107 - 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	16.28	16.09	-	-	19.20	30.00	-10.80	27.14	36.00	-8.86
2441	16.23	15.77	-	-	19.02	30.00	-10.98	26.96	36.00	-9.04
2480	15.94	15.75	-	-	18.86	30.00	-11.14	26.80	36.00	-9.20

Table 108 - ISED Maximum Conducted (peak) Output Power Results

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (b)(1) RSS-247 5.4 b)	Test Method(s):	C63.10 7.8.5
Additional Reference(s):	662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	ePA 8-DPSK (3-DH5)	Duty Cycle (%):	76.9
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	∑		
2402	16.63	16.52	-	-	19.58	28.06	-8.48
2441	16.75	16.36	-	-	19.57	28.06	-8.49
2480	16.48	16.51	-	-	19.51	28.06	-8.55

Table 109 - 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	16.63	16.52	-	-	19.58	30.00	-10.42	27.52	36.00	-8.48
2441	16.75	16.36	-	-	19.57	30.00	-10.43	27.51	36.00	-8.49
2480	16.48	16.51	-	-	19.51	30.00	-10.49	27.45	36.00	-8.55

Table 110 - ISED Maximum Conducted (peak) Output Power Results

FCC 47 CFR Part 15, Limit Clause 15.247 (b)(1)

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

2.6.7 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
Digital Multimeter	Fluke	115	6145	12	06-Jun-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
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6531	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
USB Wideband Power Sensor	Boonton	RTP5008	6589	12	13-Feb-2025
AC Programmable Power Supply	iTech	IT7324	6662	-	O/P Mon

Table 111

O/P Mon - Output Monitored using calibrated equipment

2.7 Authorised Band Edges

2.7.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.247 (d)

2.7.2 Equipment Under Test and Modification State

A3186, S/N: GX4WD79J45 - Modification State 0
A3186, S/N: FXGL43TXWC - Modification State 0

2.7.3 Date of Test

17-July-2024 to 29-July-2024

2.7.4 Test Method

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

2.7.5 Environmental Conditions

Ambient Temperature	22.5 - 24.6 °C
Relative Humidity	42.4 - 56.4 %

2.7.6 Test Results

2.4 GHz Bluetooth BDR/EDR

iPA - Core 0 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-65.04
Static	2-DH5	2402	2400	-60.13
Static	3-DH5	2402	2400	-60.27
Hopping	DH5	Hopping	2400	-66.84
Hopping	2-DH5	Hopping	2400	-63.32
Hopping	3-DH5	Hopping	2400	-63.47

Table 112 - SISO Authorised Band Edge Results

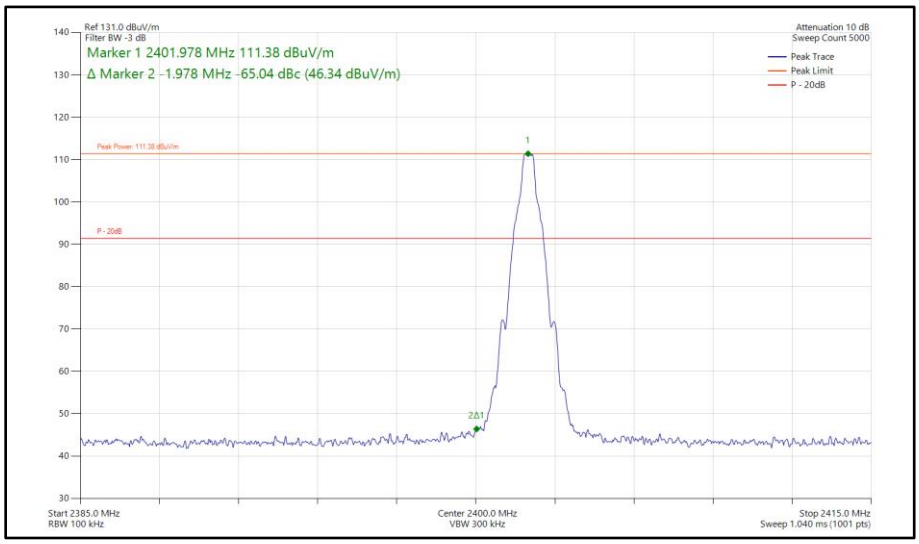

Figure 184 - Bluetooth DH5, SISO, Core 0 - 2402 MHz Band Edge Frequency 2400 MHz

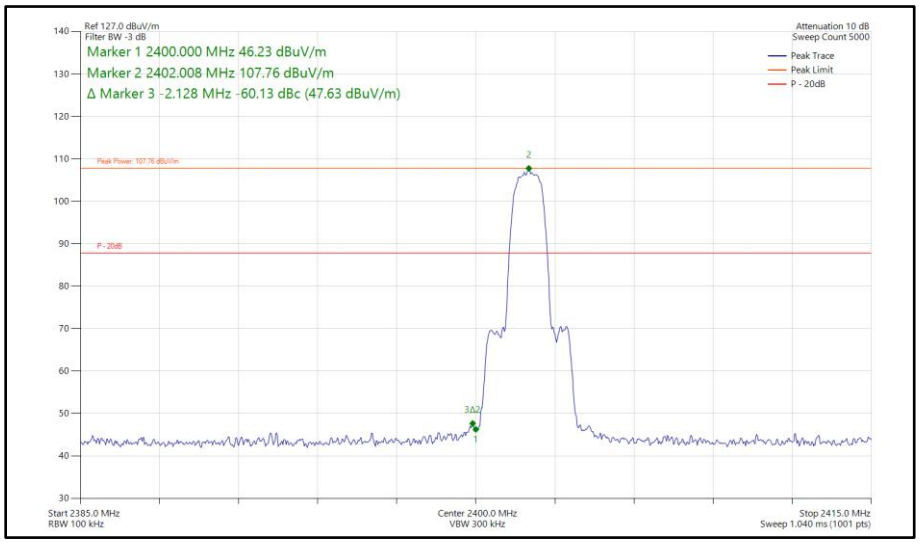

Figure 185 - Bluetooth 2-DH5, SISO, Core 0 - 2402 MHz Band Edge Frequency 2400 MHz

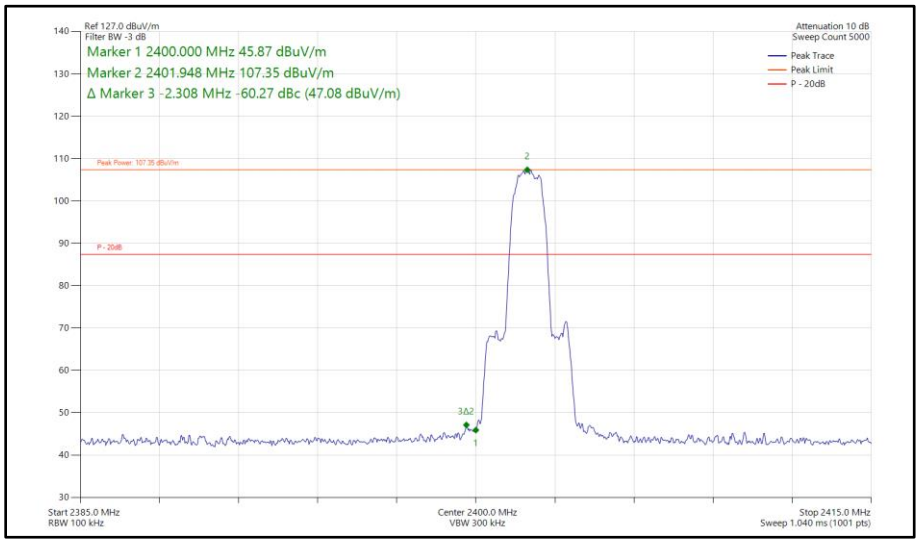

Figure 186 - Bluetooth 3-DH5, SISO, Core 0 - 2402 MHz Band Edge Frequency 2400 MHz

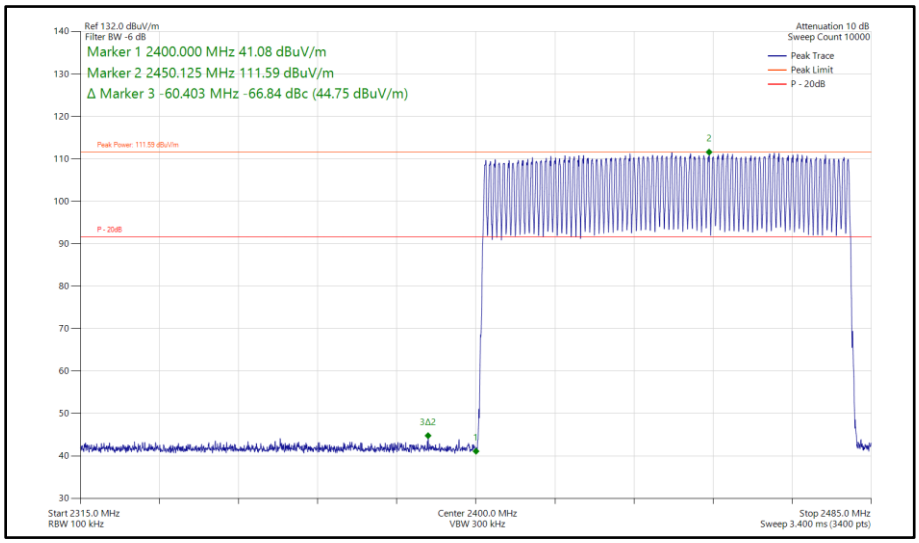

Figure 187 - Bluetooth DH5, SISO, Core 0 - Hopping Band Edge Frequency 2400 MHz

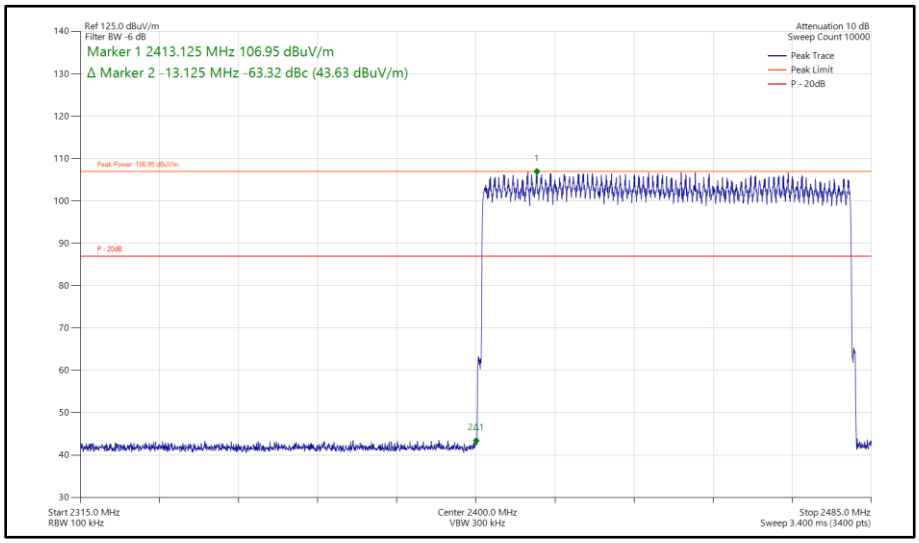

Figure 188 - Bluetooth 2-DH5, SISO, Core 0 - Hopping Band Edge Frequency 2400 MHz

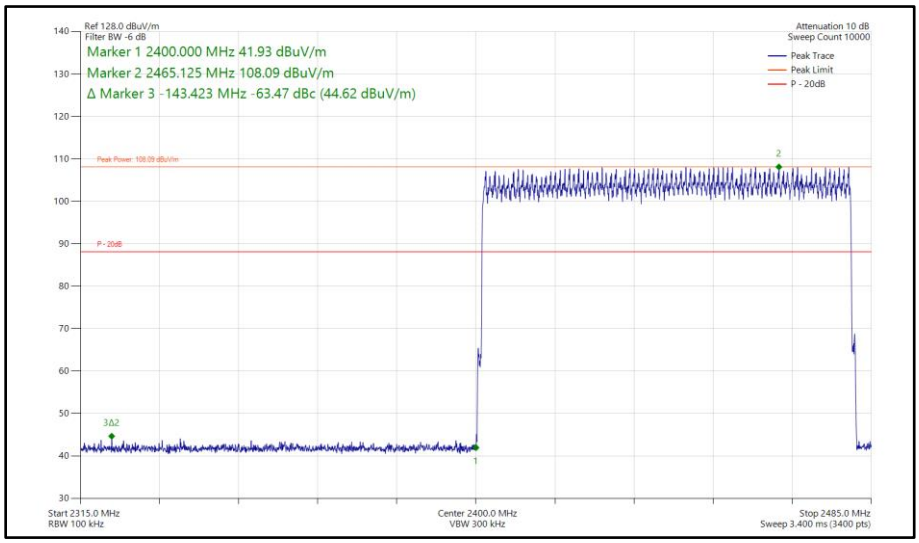

Figure 189 - Bluetooth 3-DH5, SISO, Core 0 - Hopping Band Edge Frequency 2400 MHz

iPA - Core 1 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-66.05
Static	2-DH5	2402	2400	-56.06
Static	3-DH5	2402	2400	-56.70
Hopping	DH5	Hopping	2400	-67.78
Hopping	2-DH5	Hopping	2400	-62.86
Hopping	3-DH5	Hopping	2400	-62.72

Table 113 - SISO Authorised Band Edge Results

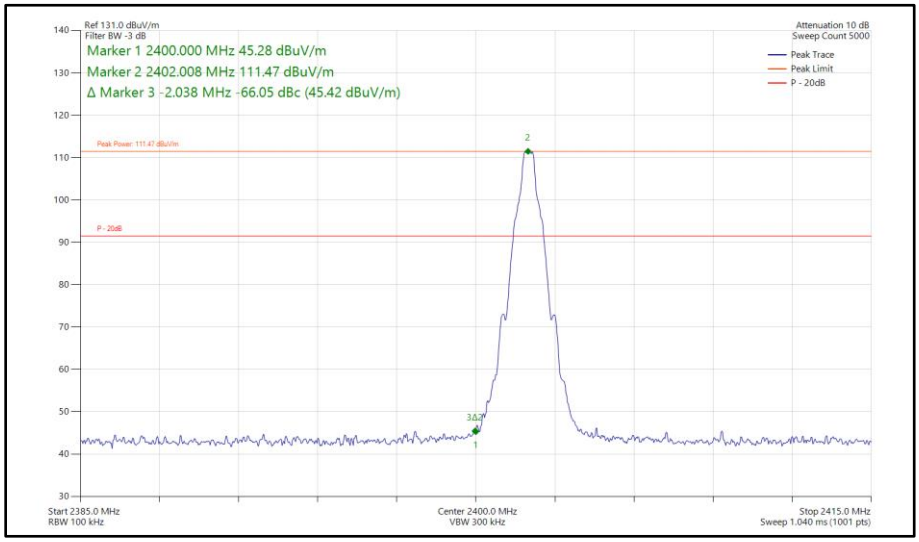

Figure 190 - Bluetooth DH5, SISO, Core 1 - 2402 MHz Band Edge Frequency 2400 MHz

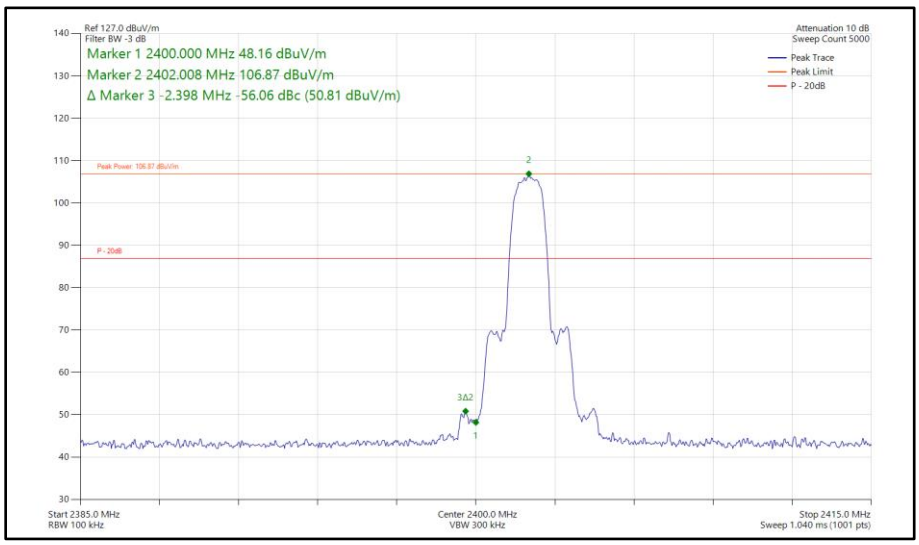

Figure 191 - Bluetooth 2-DH5, SISO, Core 1 - 2402 MHz Band Edge Frequency 2400 MHz

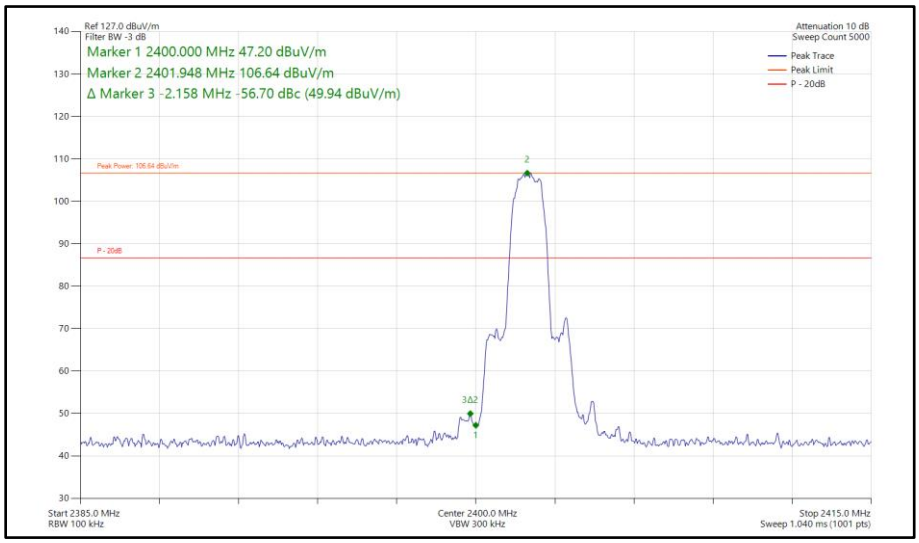

Figure 192 - Bluetooth 3-DH5, SISO, Core 1 - 2402 MHz Band Edge Frequency 2400 MHz

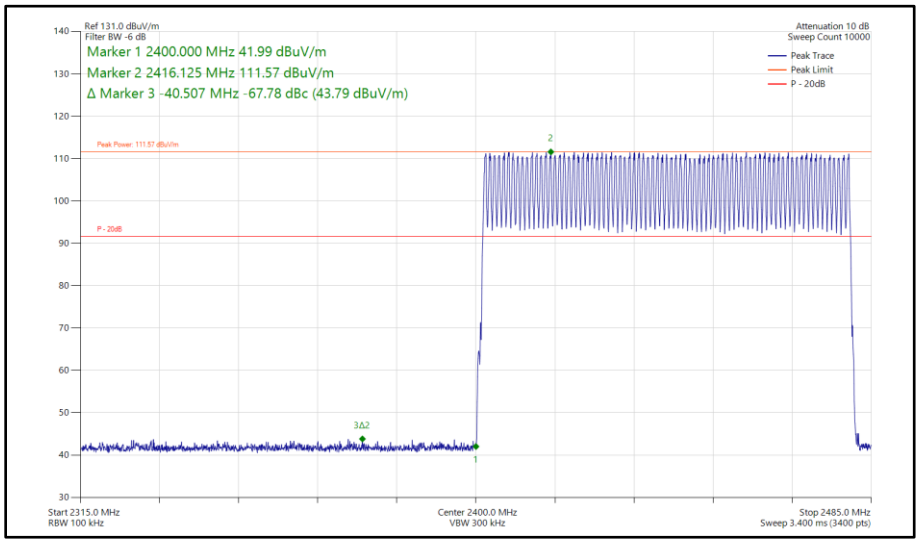

Figure 193 - Bluetooth DH5, SISO, Core 1 - Hopping Band Edge Frequency 2400 MHz

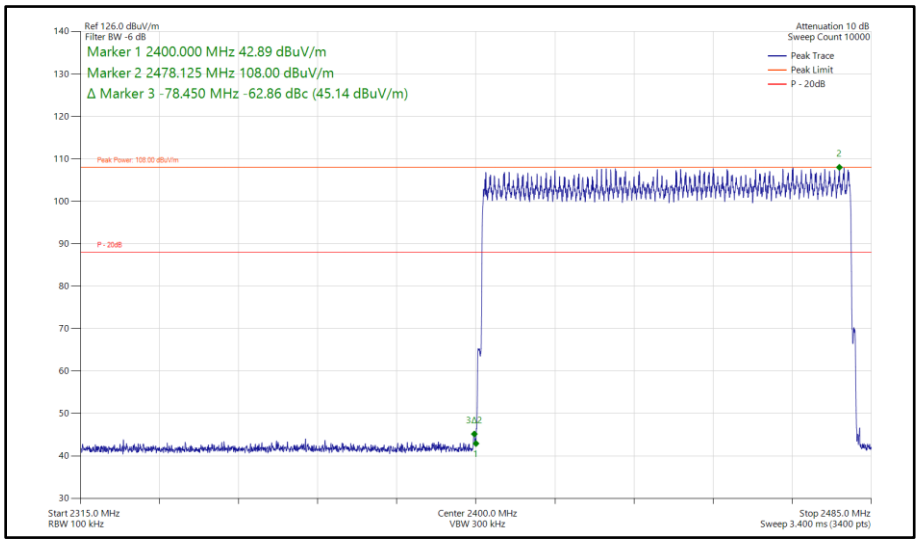

Figure 194 - Bluetooth 2-DH5, SISO, Core 1 - Hopping Band Edge Frequency 2400 MHz

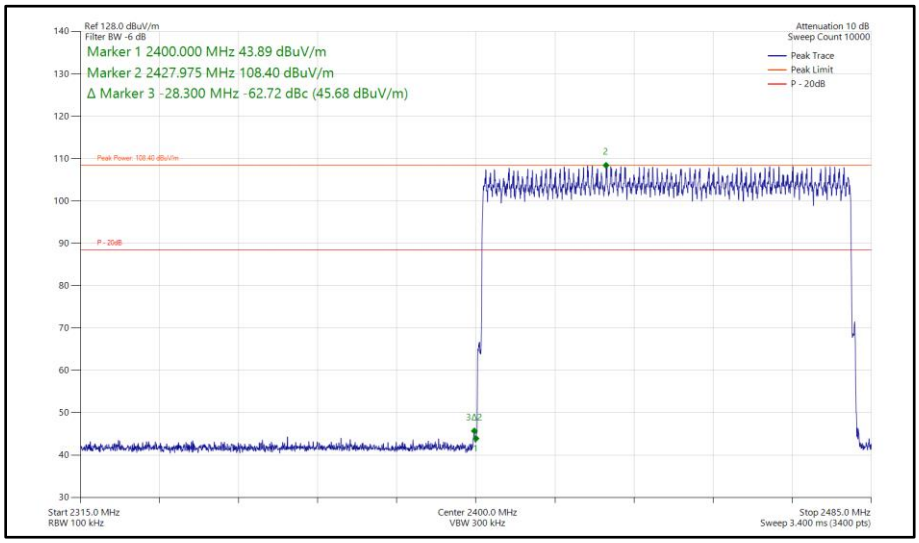

Figure 195 - Bluetooth 3-DH5, SISO, Core 1 - Hopping Band Edge Frequency 2400 MHz

iPA - Core 2 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-65.62
Static	2-DH5	2402	2400	-58.52
Static	3-DH5	2402	2400	-59.78
Hopping	DH5	Hopping	2400	-69.89
Hopping	2-DH5	Hopping	2400	-65.20
Hopping	3-DH5	Hopping	2400	-65.66

Table 114 - SISO Authorised Band Edge Results

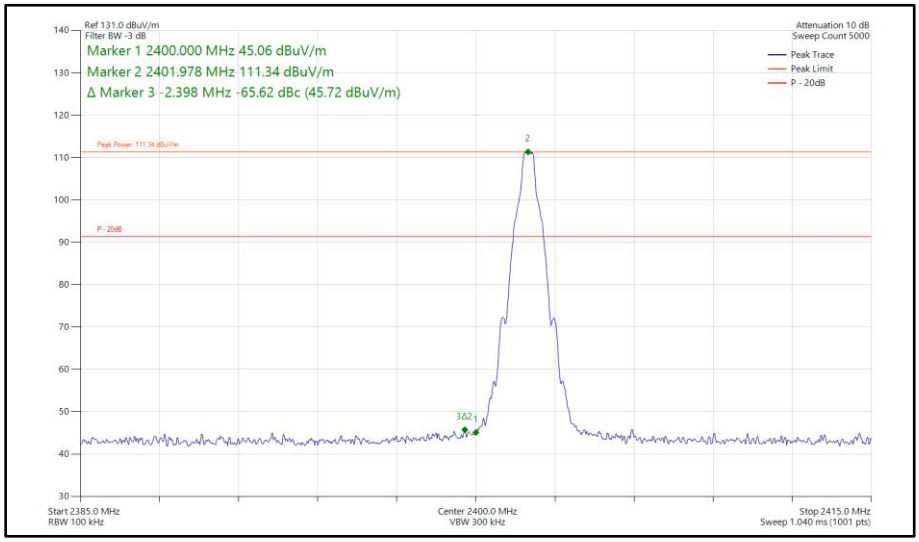

Figure 196 - Bluetooth DH5, SISO, Core 2 - 2402 MHz Band Edge Frequency 2400 MHz

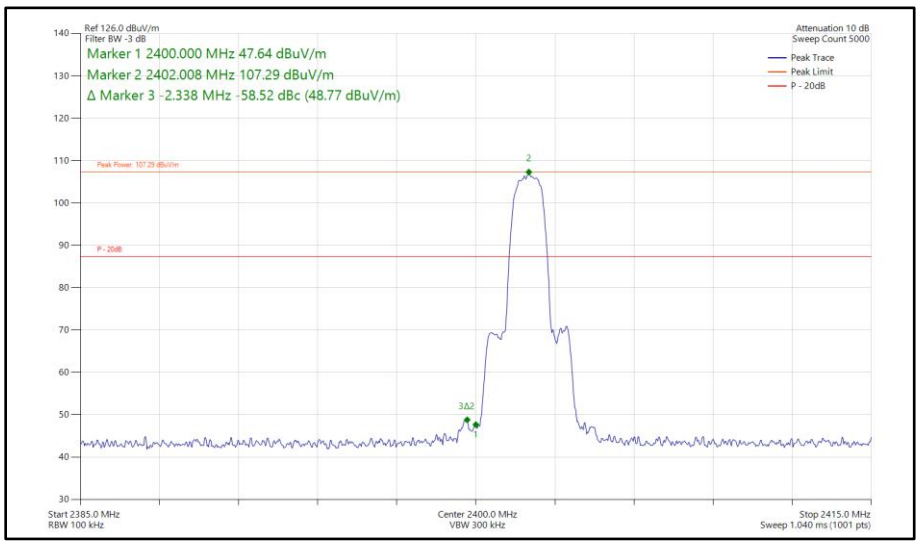

Figure 197 - Bluetooth 2-DH5, SISO, Core 2 - 2402 MHz Band Edge Frequency 2400 MHz

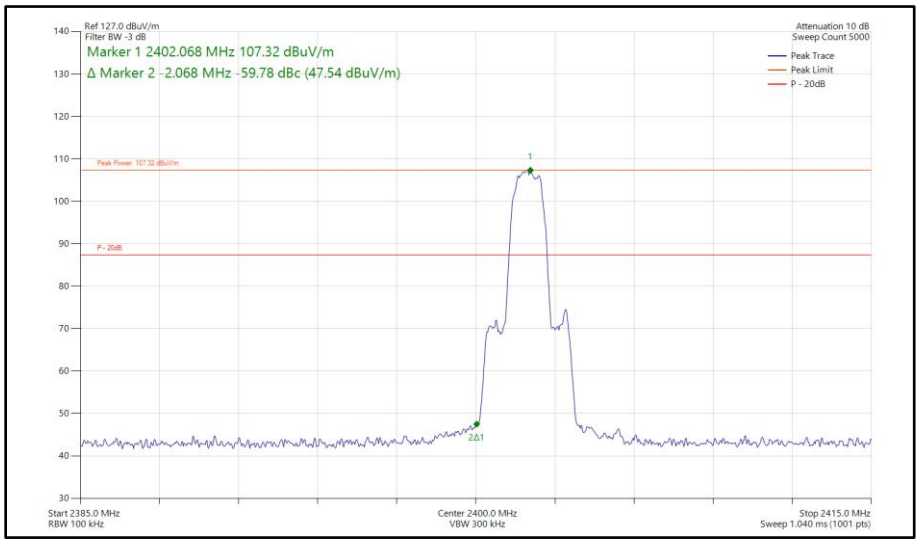

Figure 198 - Bluetooth 3-DH5, SISO, Core 2 - 2402 MHz Band Edge Frequency 2400 MHz

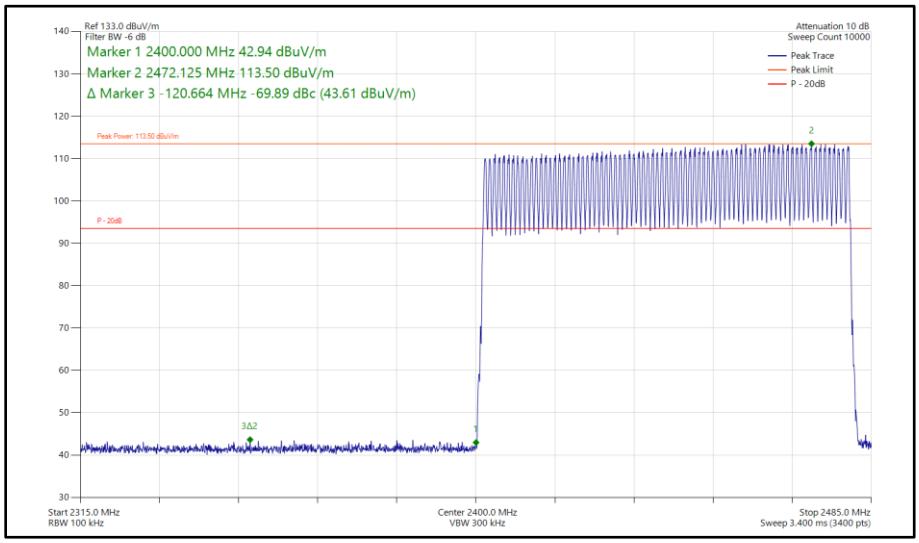

Figure 199 - Bluetooth DH5, SISO, Core 2 - Hopping Band Edge Frequency 2400 MHz

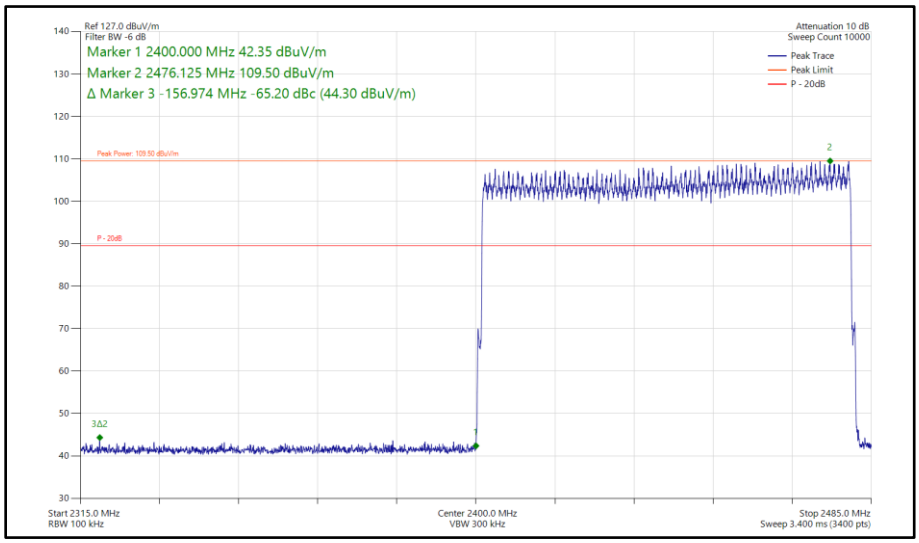

Figure 200 - Bluetooth 2-DH5, SISO, Core 2 - Hopping Band Edge Frequency 2400 MHz

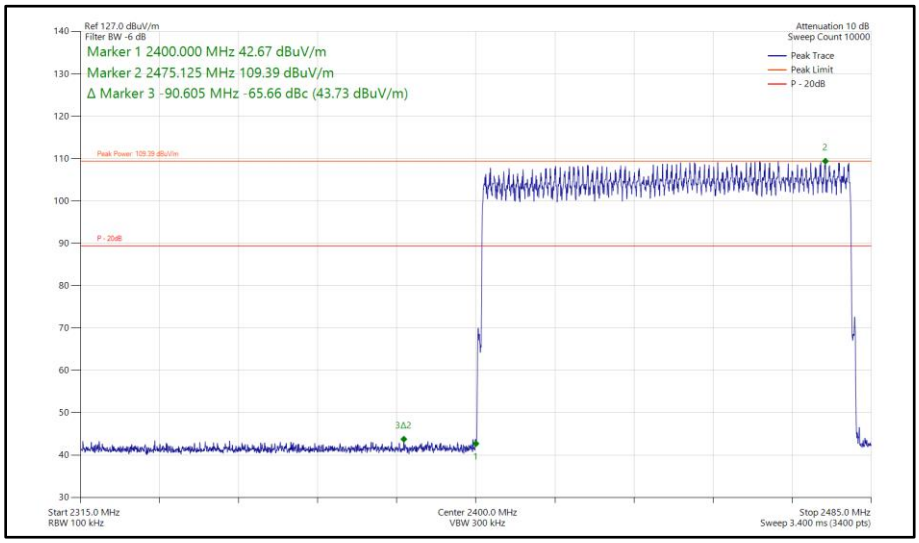

Figure 201 - Bluetooth 3-DH5, SISO, Core 2 - Hopping Band Edge Frequency 2400 MHz

iPA - Core 0 - Core 1 (MIMO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	DH5	2402	2400	-67.97
Static	2-DH5	2402	2400	-61.68
Static	3-DH5	2402	2400	-63.07
Hopping	DH5	Hopping	2400	-64.97
Hopping	2-DH5	Hopping	2400	-65.54
Hopping	3-DH5	Hopping	2400	-67.49

Table 115 - MIMO Authorised Band Edge Results

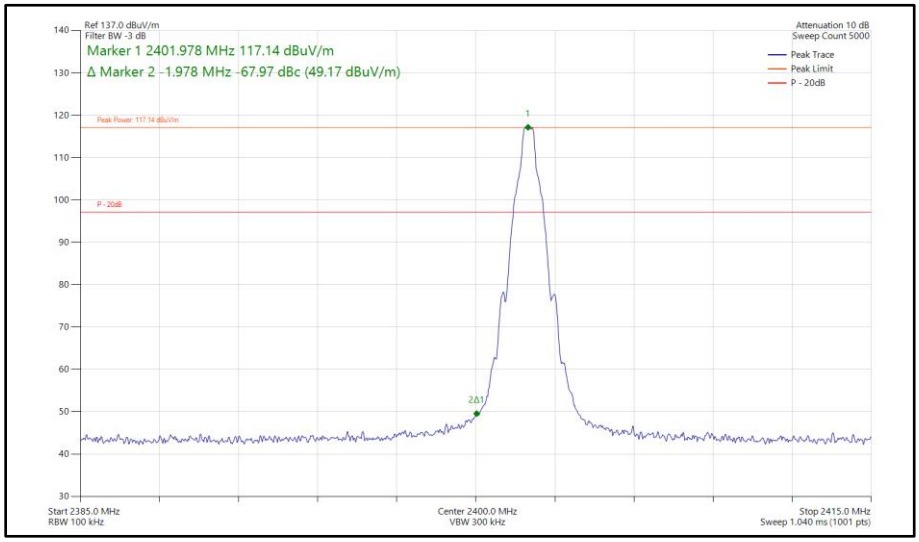

Figure 202 - Bluetooth DH5, MIMO, Core 0 - Core 1 - 2402 MHz Band Edge Frequency 2400 MHz

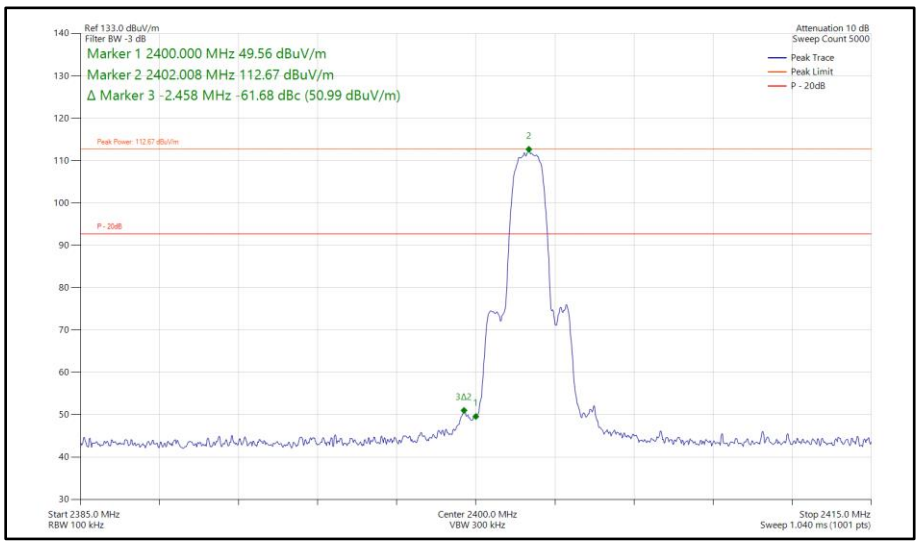

Figure 203 - Bluetooth 2-DH5, MIMO, Core 0 - Core 1 - 2402 MHz Band Edge Frequency 2400 MHz

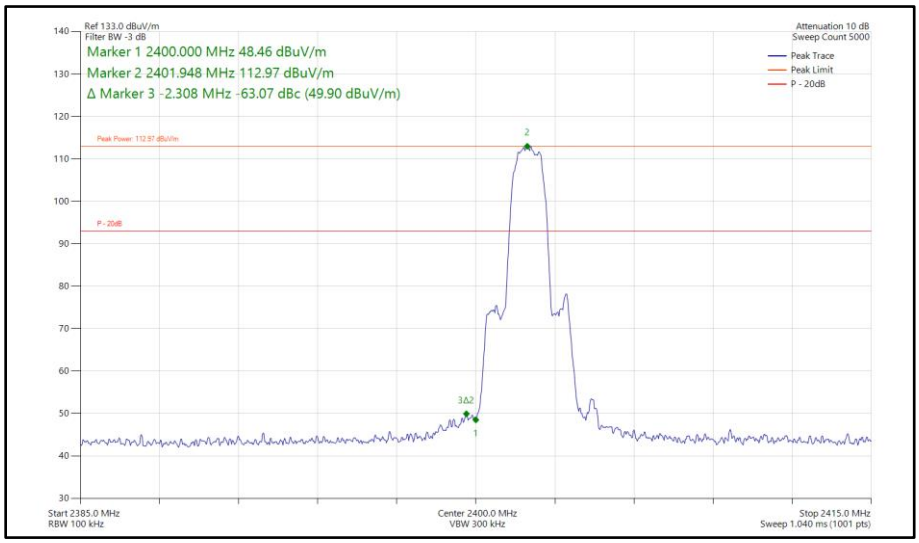

Figure 204 - Bluetooth 3-DH5, MIMO, Core 0 - Core 1 - 2402 MHz Band Edge Frequency 2400 MHz

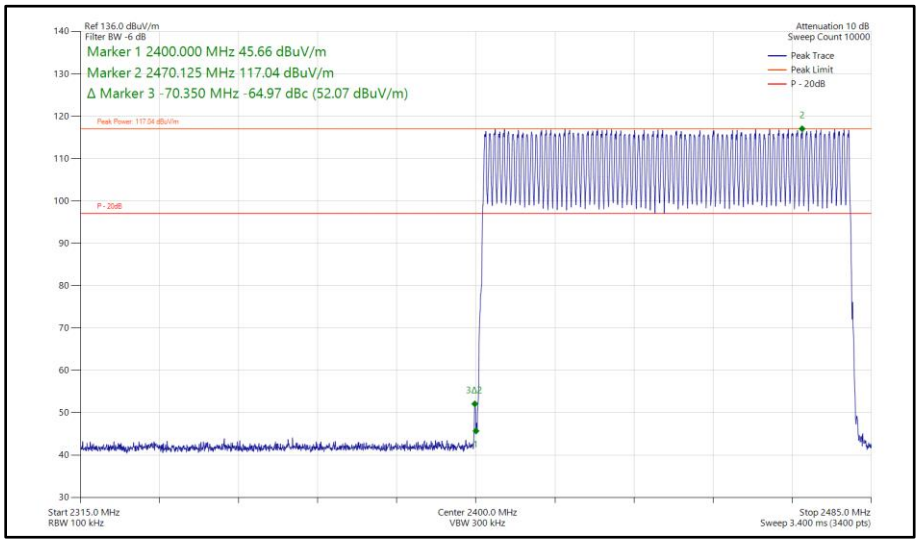

Figure 205 - Bluetooth DH5, MIMO, Core 0 - Core 1 - Hopping Band Edge Frequency 2400 MHz

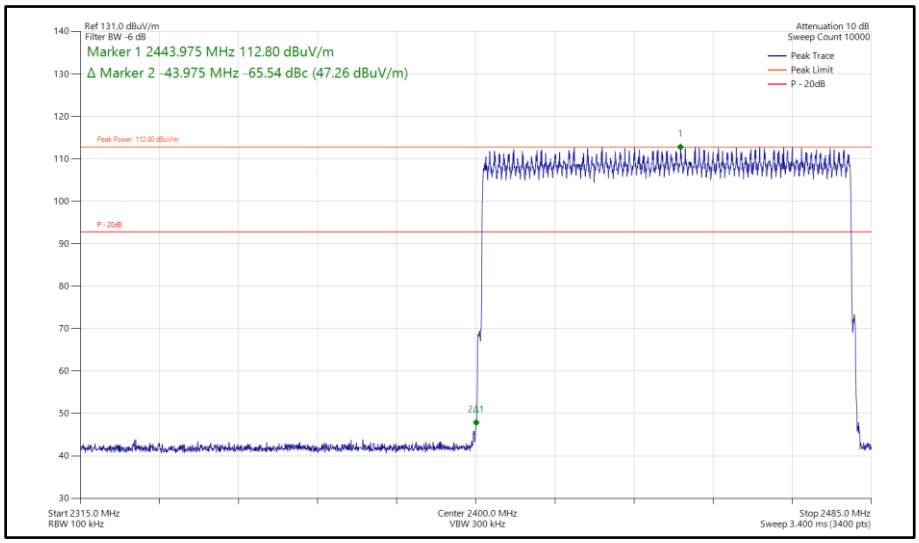

Figure 206 - Bluetooth 2-DH5, MIMO, Core 0 - Core 1 - Hopping Band Edge Frequency 2400 MHz

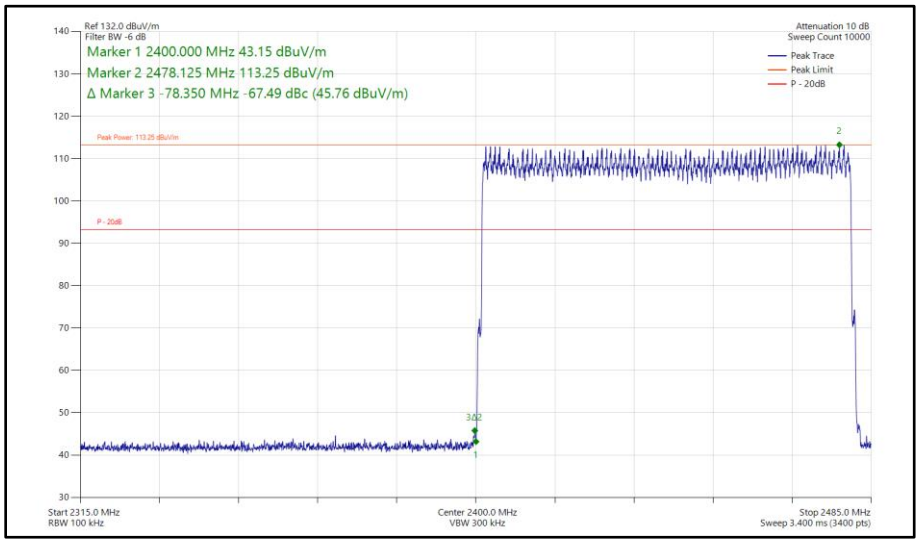

Figure 207 - Bluetooth 3-DH5, MIMO, Core 0 - Core 1 - Hopping Band Edge Frequency 2400 MHz

ePA - Core 0 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	2-DH5	2402	2400	-55.73
Static	3-DH5	2402	2400	-55.94
Hopping	2-DH5	Hopping	2400	-64.38
Hopping	3-DH5	Hopping	2400	-64.64

Table 116 - SISO Authorised Band Edge Results

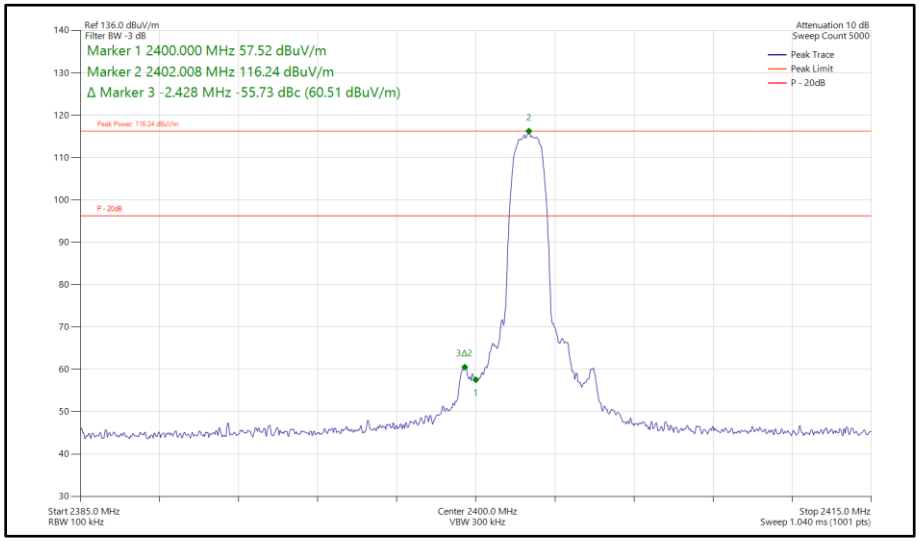

Figure 208 - Bluetooth 2-DH5, SISO, Core 0 - 2402 MHz Band Edge Frequency 2400 MHz

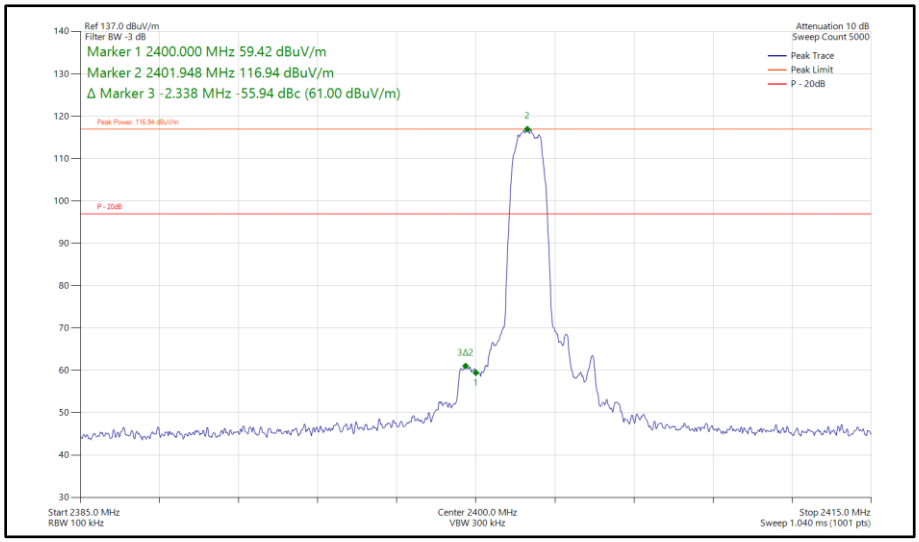

Figure 209 - Bluetooth 3-DH5, SISO, Core 0 - 2402 MHz Band Edge Frequency 2400 MHz

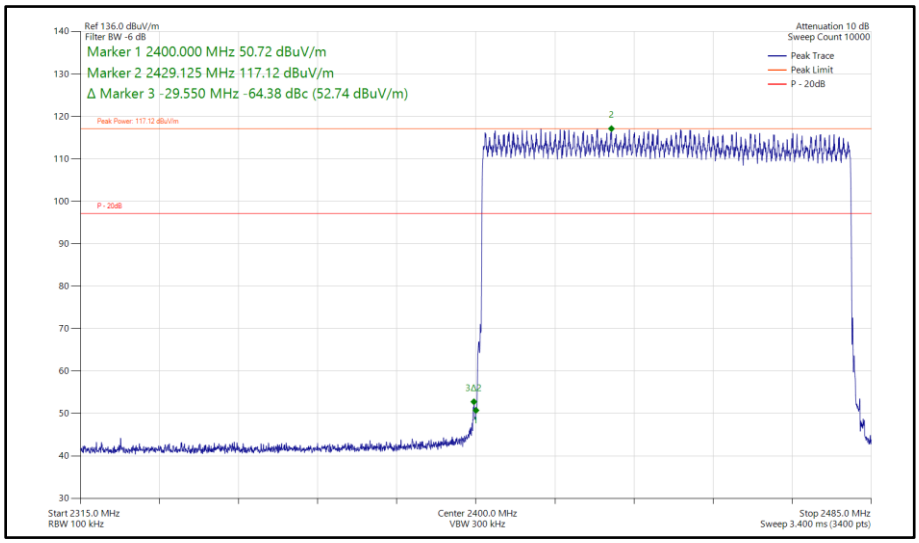

Figure 210 - Bluetooth 2-DH5, SISO, Core 0 - Hopping Band Edge Frequency 2400 MHz

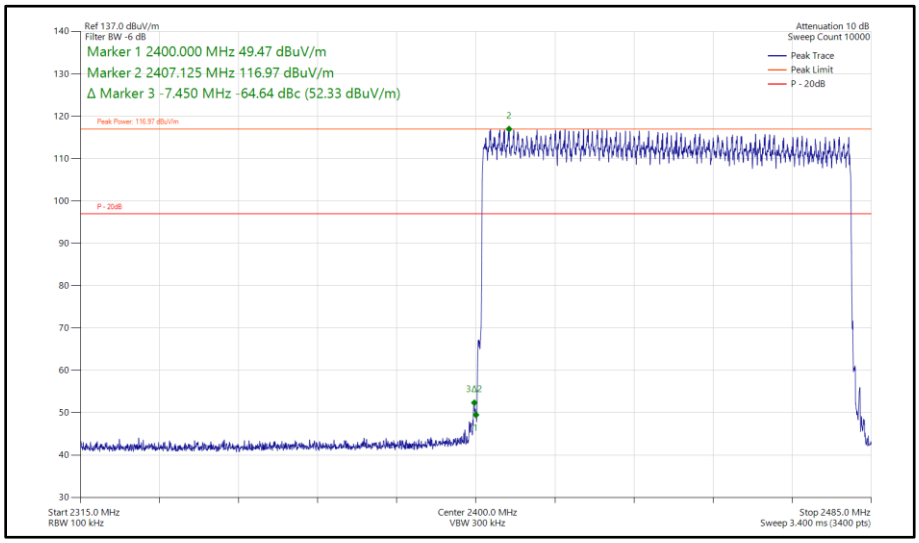

Figure 211 - Bluetooth 3-DH5, SISO, Core 0 - Hopping Band Edge Frequency 2400 MHz

ePA - Core 1 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	2-DH5	2402	2400	-62.24
Static	3-DH5	2402	2400	-61.64
Hopping	2-DH5	Hopping	2400	-66.11
Hopping	3-DH5	Hopping	2400	-66.98

Table 117 - SISO Authorised Band Edge Results

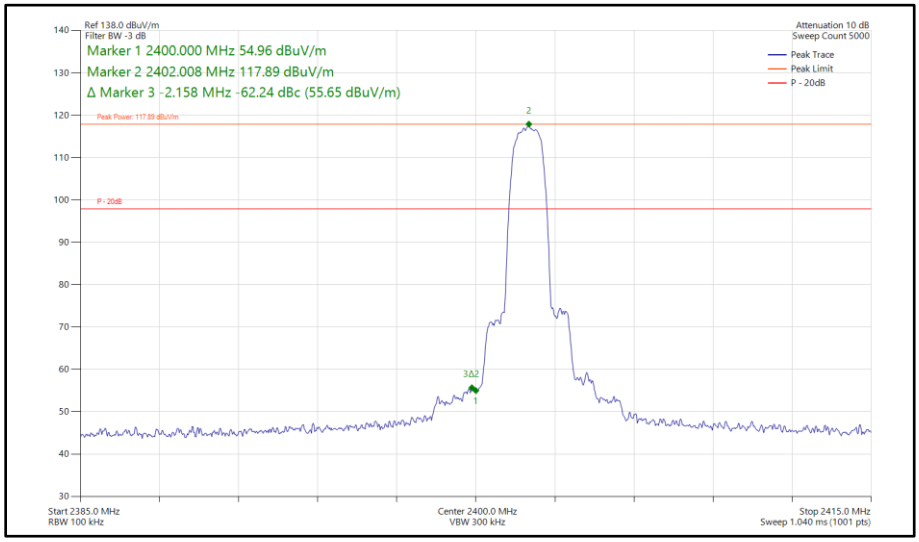

Figure 212 - Bluetooth 2-DH5, SISO, Core 1 - 2402 MHz Band Edge Frequency 2400 MHz

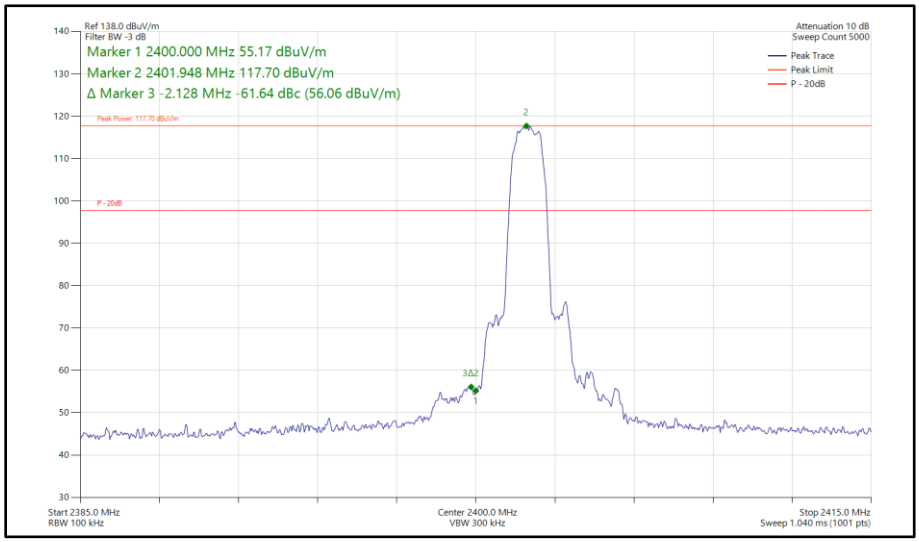

Figure 213 - Bluetooth 3-DH5, SISO, Core 1 - 2402 MHz Band Edge Frequency 2400 MHz

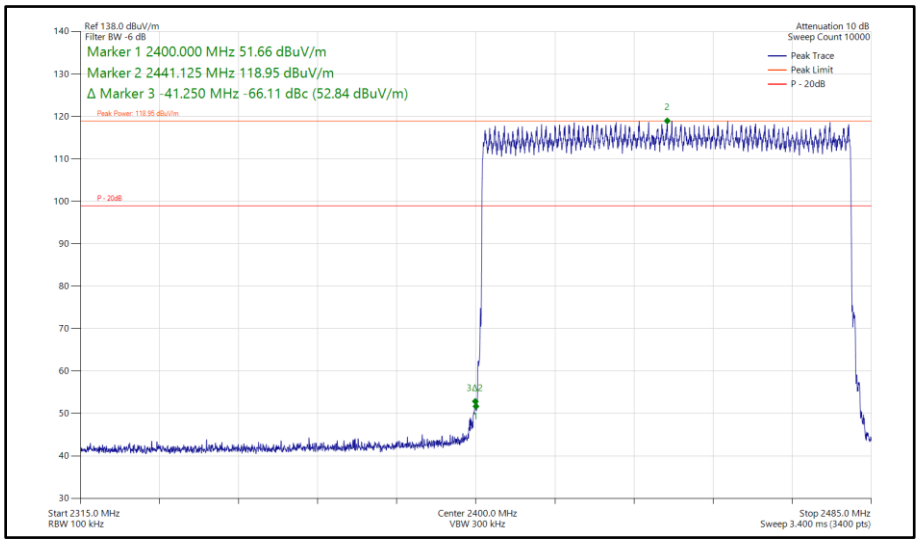

Figure 214 - Bluetooth 2-DH5, SISO, Core 1 - Hopping Band Edge Frequency 2400 MHz

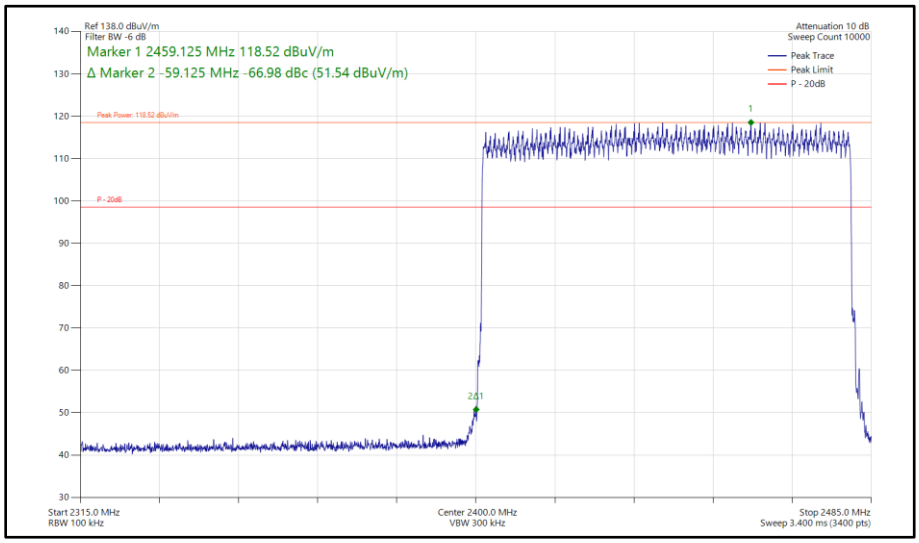

Figure 215 - Bluetooth 3-DH5, SISO, Core 1 - Hopping Band Edge Frequency 2400 MHz

ePA - Core 0 - Core 1 (MIMO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
Static	2-DH5	2402	2400	-61.29
Static	3-DH5	2402	2400	-58.21
Hopping	2-DH5	Hopping	2400	-68.42
Hopping	3-DH5	Hopping	2400	-68.76

Table 118 - MIMO Authorised Band Edge Results

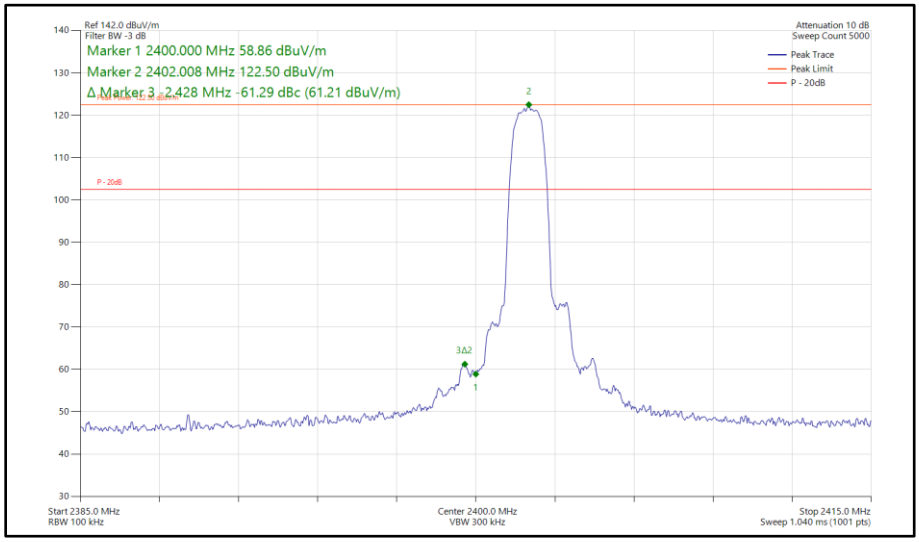

Figure 216 - Bluetooth 2-DH5, MIMO, Core 0 - Core 1 - 2402 MHz Band Edge Frequency 2400 MHz

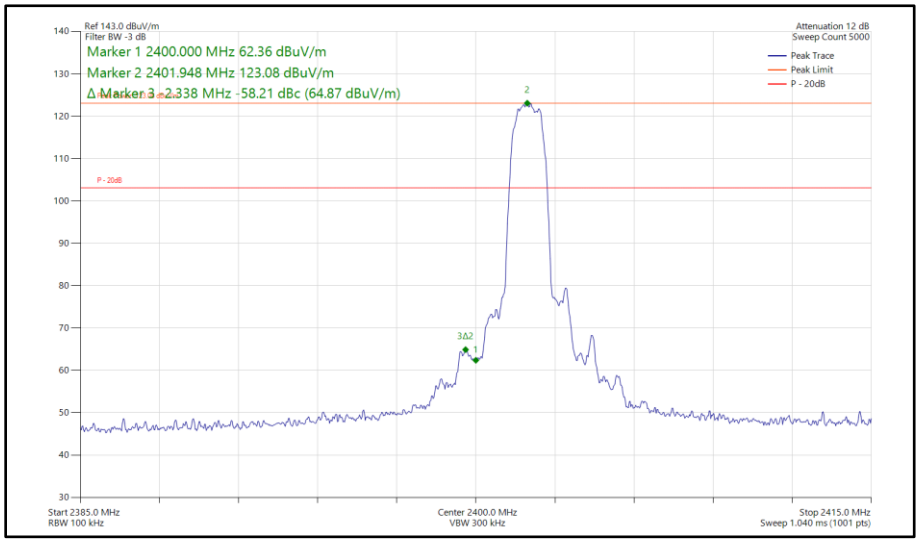

Figure 217 - Bluetooth 3-DH5, MIMO, Core 0 - Core 1 - 2402 MHz Band Edge Frequency 2400 MHz