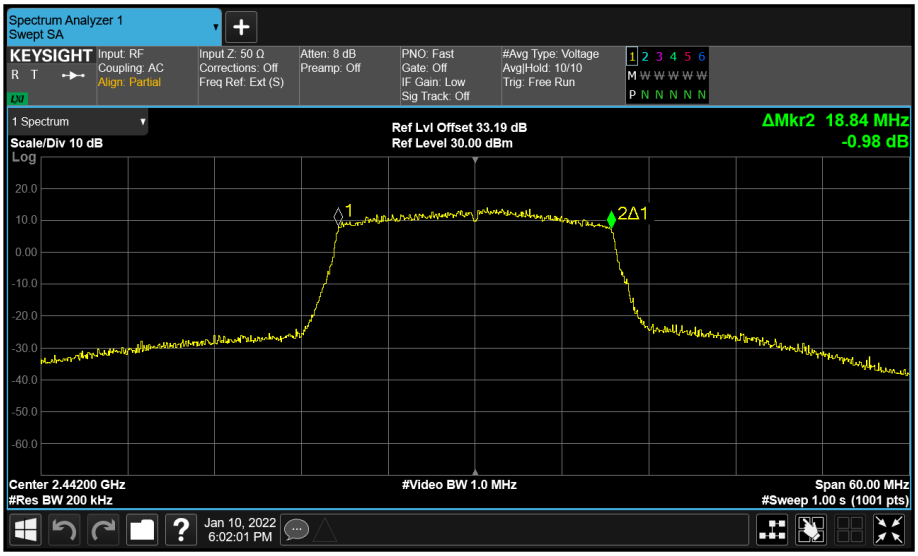

Figure 75 - Core 1 (B) 2442 MHz (CH7) 99% Bandwidth

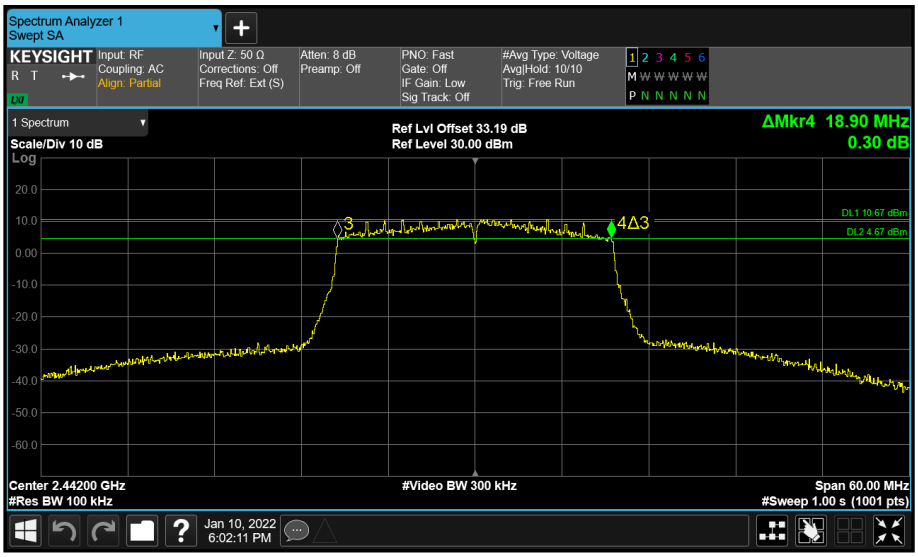

Figure 76 - Core 1 (B) 2442 MHz (CH7) 6 dB Bandwidth

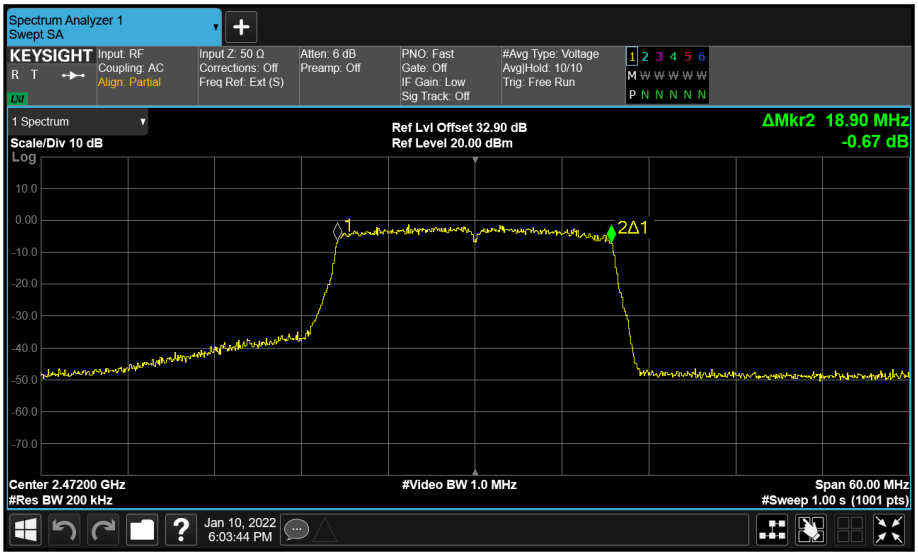

Figure 77 - Core 0 (A) 2472 MHz (CH13) 99% Bandwidth

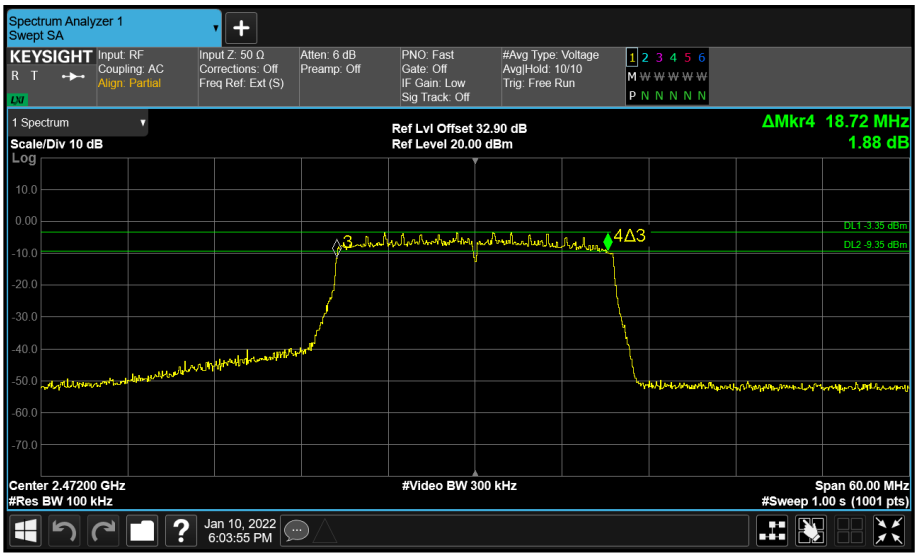

Figure 78 - Core 0 (A) 2472 MHz (CH13) 6 dB Bandwidth

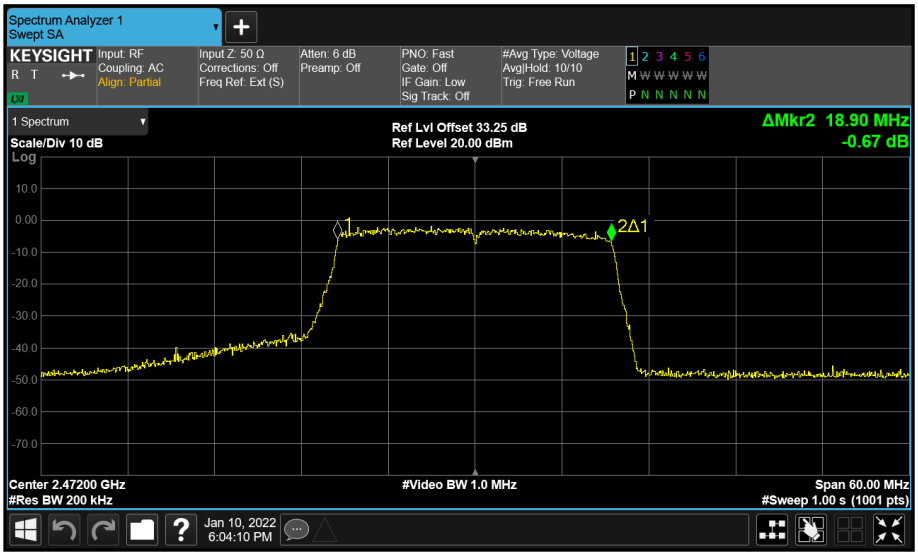

Figure 79 - Core 1 (B) 2472 MHz (CH13) 99% Bandwidth

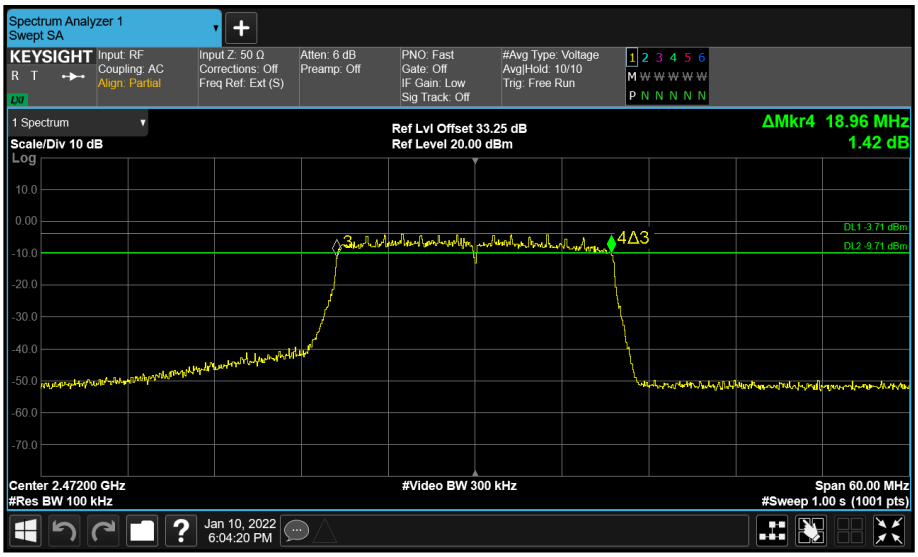

Figure 80 - Core 1 (B) 2472 MHz (CH13) 6 dB Bandwidth

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:	802.11ax HE20 RU26	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	6 dB Bandwidth (MHz)					Limit (kHz)
	A	B	C	D	Minimum	
2412	2.160	-	-	-	2.160	≥500.0
2442	2.160	-	-	-	2.160	≥500.0
2472	15.840	-	-	-	15.840	≥500.0

Table 23 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)					Limit (kHz)
	A	B	C	D	Minimum	
2412	18.420	-	-	-	18.420	-
2442	18.360	-	-	-	18.360	-
2472	18.600	-	-	-	18.600	-

Table 24 - 99% Bandwidth Results

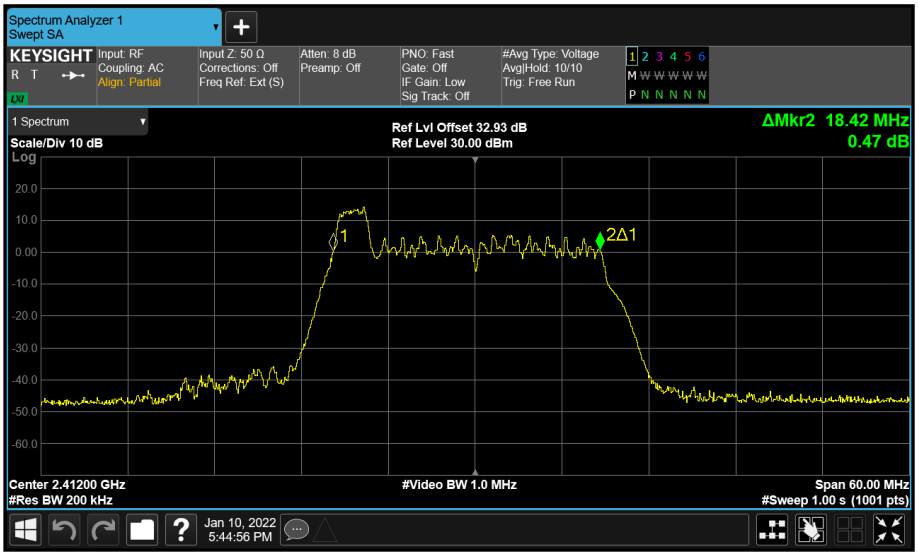

Figure 81 - Core 0 (A) 2412 MHz (CH1) 99% Bandwidth

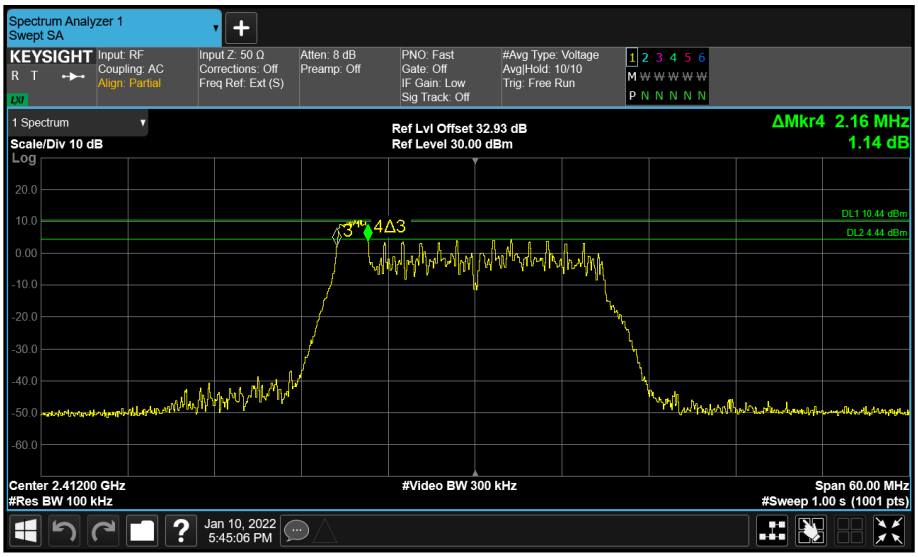

Figure 82 - Core 0 (A) 2412 MHz (CH1) 6 dB Bandwidth

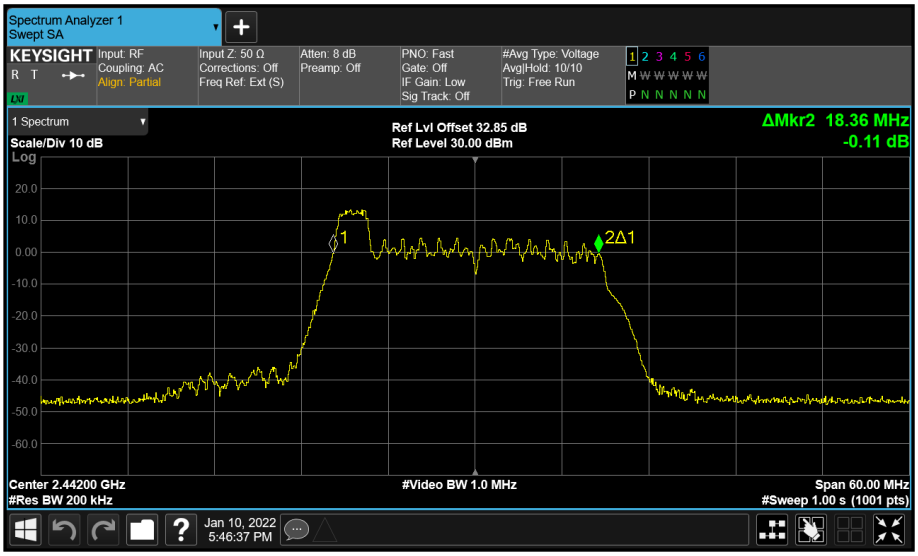

Figure 83 - Core 0 (A) 2442 MHz (CH7) 99% Bandwidth

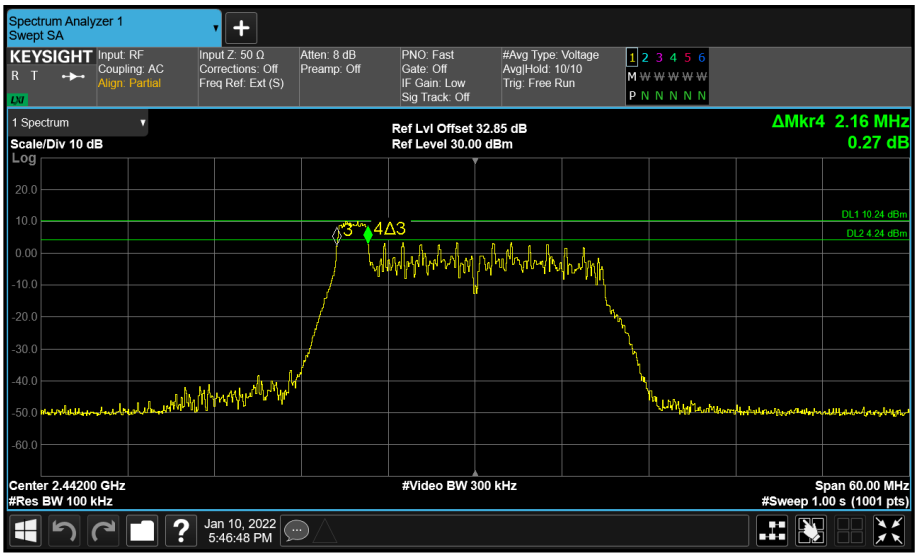

Figure 84 - Core 0 (A) 2442 MHz (CH7) 6 dB Bandwidth

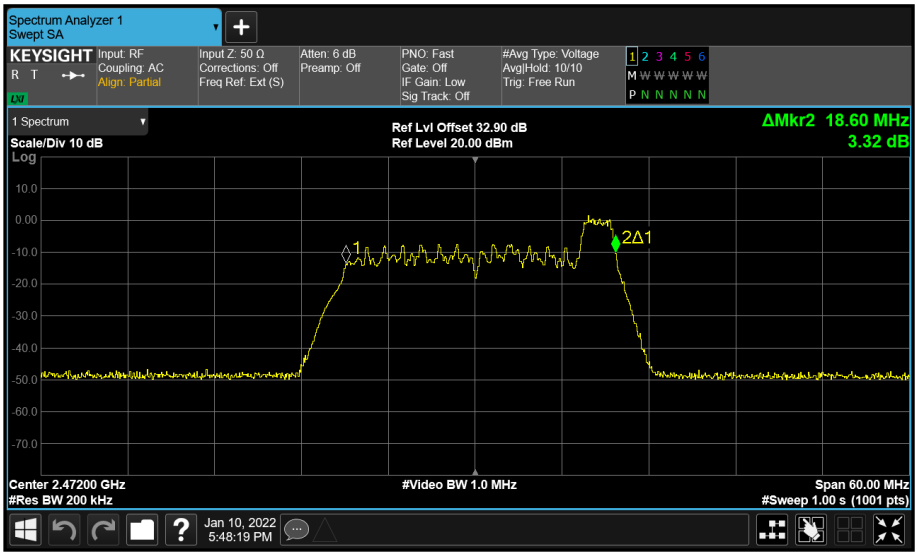

Figure 85 - Core 0 (A) 2472 MHz (CH13) 99% Bandwidth

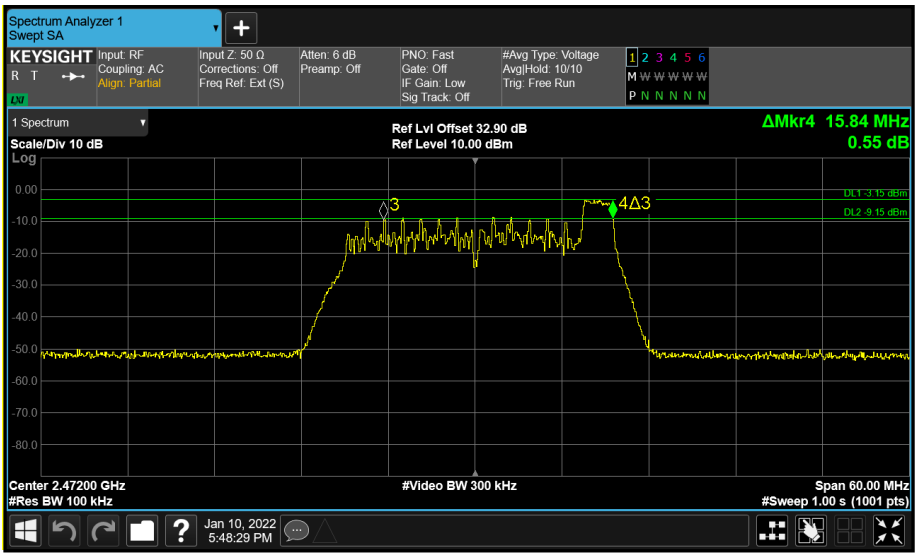

Figure 86 - Core 0 (A) 2472 MHz (CH13) 6 dB Bandwidth

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:	802.11ax HE20 RU26	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain(s):	0+1

Test Frequency (MHz)	6 dB Bandwidth (MHz)					Limit (kHz)
	A	B	C	D	Minimum	
2412	2.160	14.640	-	-	2.160	≥500.0
2442	2.160	2.160	-	-	2.160	≥500.0
2472	15.840	14.580	-	-	14.580	≥500.0

Table 25 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)					Limit (kHz)
	A	B	C	D	Minimum	
2412	18.420	18.300	-	-	18.300	-
2442	18.360	18.300	-	-	18.300	-
2472	18.660	18.360	-	-	18.360	-

Table 26 - 99% Bandwidth Results

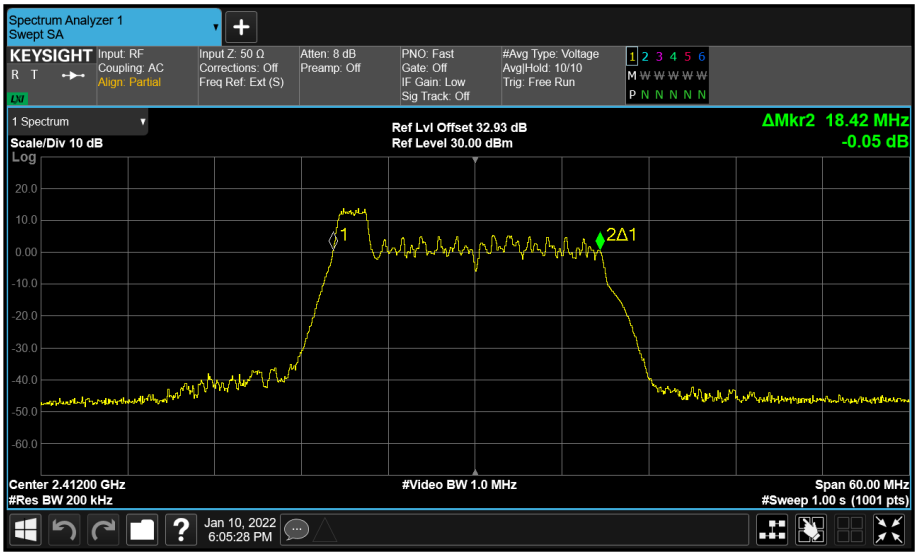

Figure 87 - Core 0 (A) 2412 MHz (CH1) 99% Bandwidth

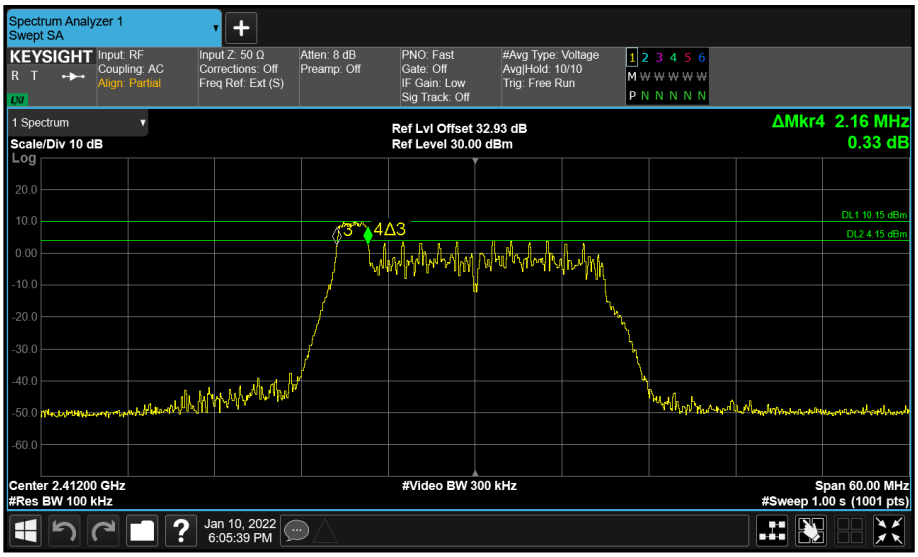

Figure 88 - Core 0 (A) 2412 MHz (CH1) 6 dB Bandwidth

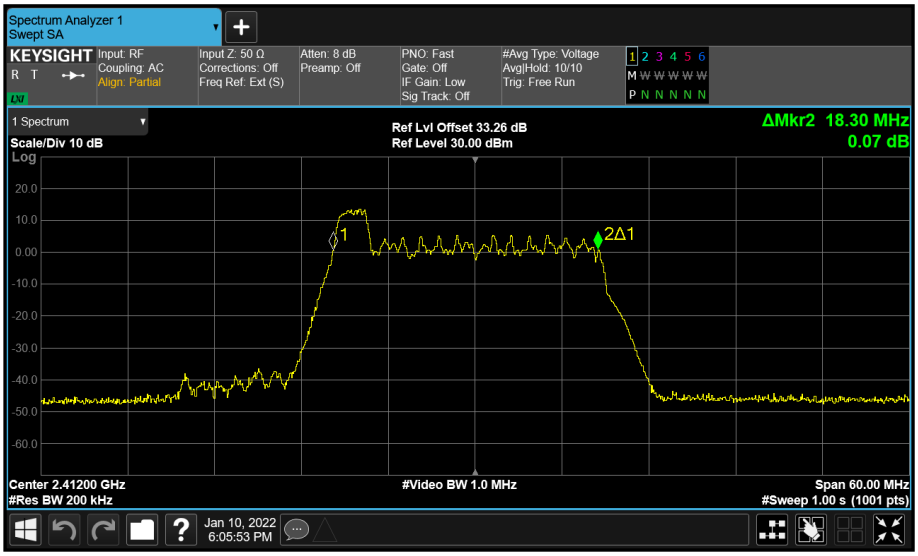

Figure 89 - Core 1 (B) 2412 MHz (CH1) 99% Bandwidth

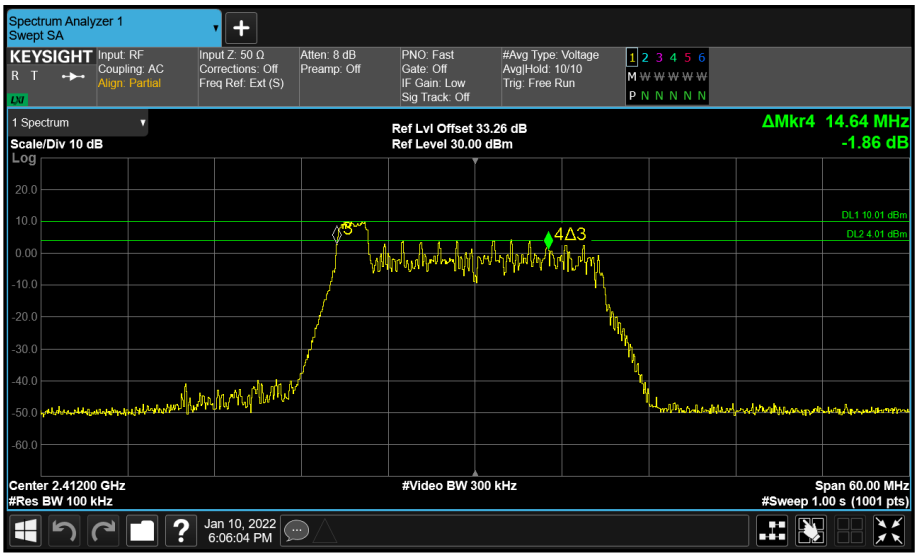

Figure 90 - Core 1 (B) 2412 MHz (CH1) 6 dB Bandwidth

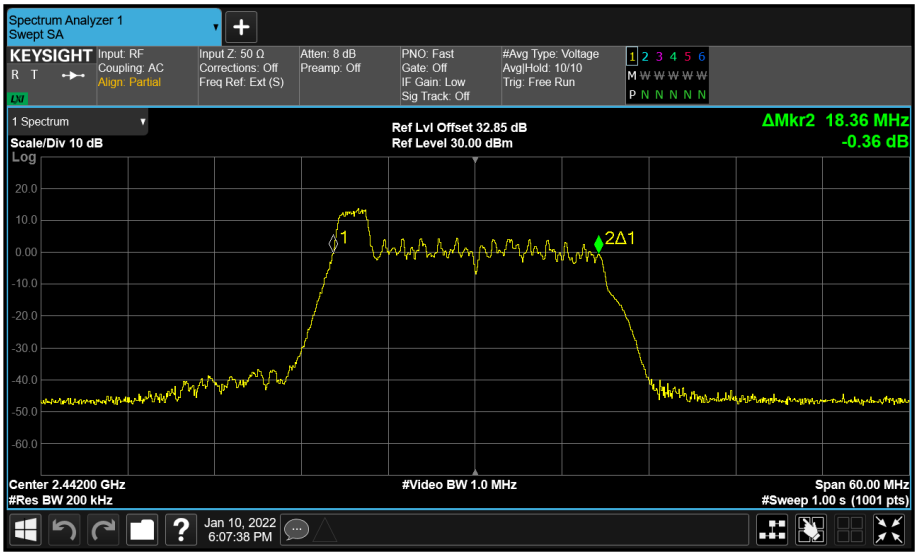

Figure 91 - Core 0 (A) 2442 MHz (CH7) 99% Bandwidth

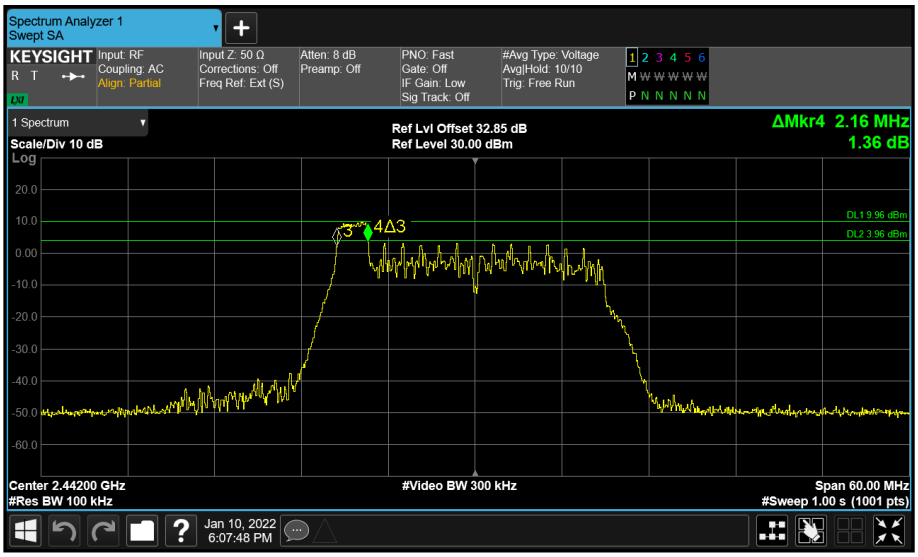

Figure 92 - Core 0 (A) 2442 MHz (CH7) 6 dB Bandwidth

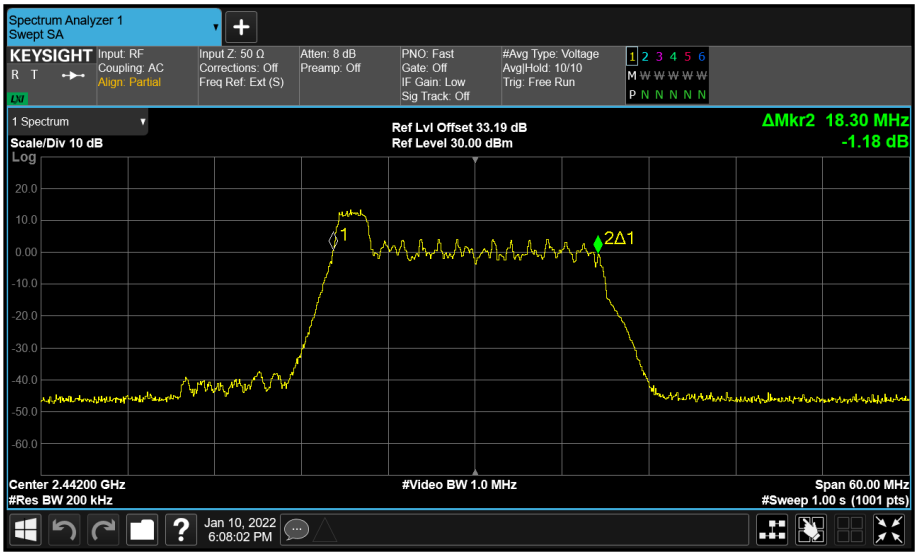

Figure 93 - Core 1 (B) 2442 MHz (CH7) 99% Bandwidth

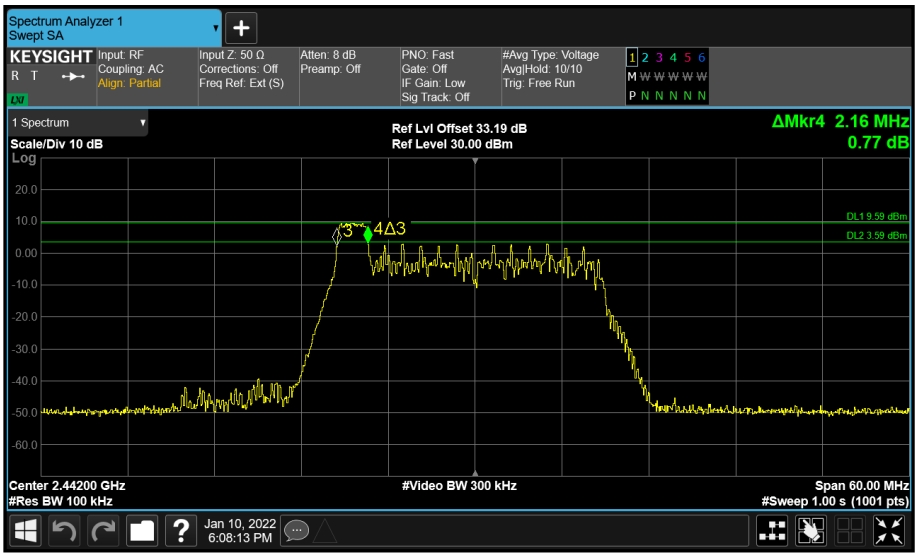

Figure 94 - Core 1 (B) 2442 MHz (CH7) 6 dB Bandwidth

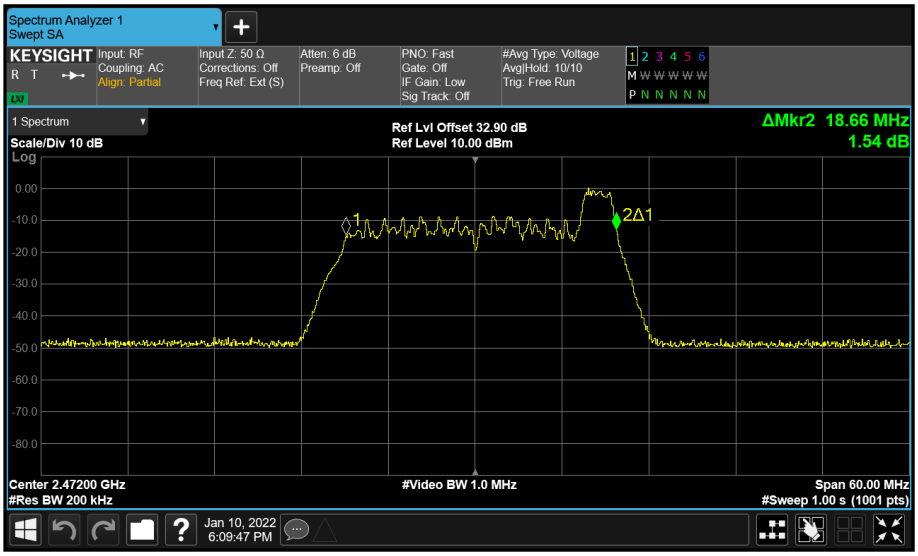

Figure 95 - Core 0 (A) 2472 MHz (CH13) 99% Bandwidth

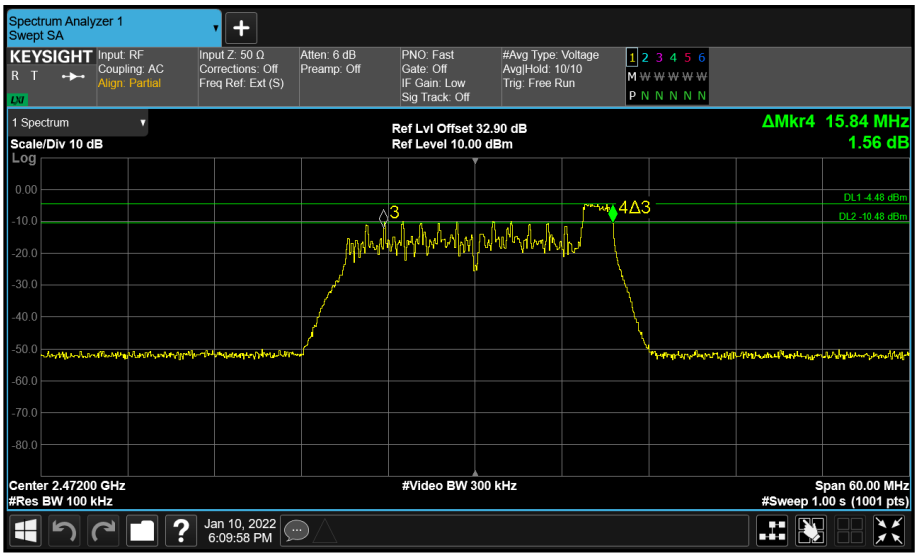

Figure 96 - Core 0 (A) 2472 MHz (CH13) 6 dB Bandwidth

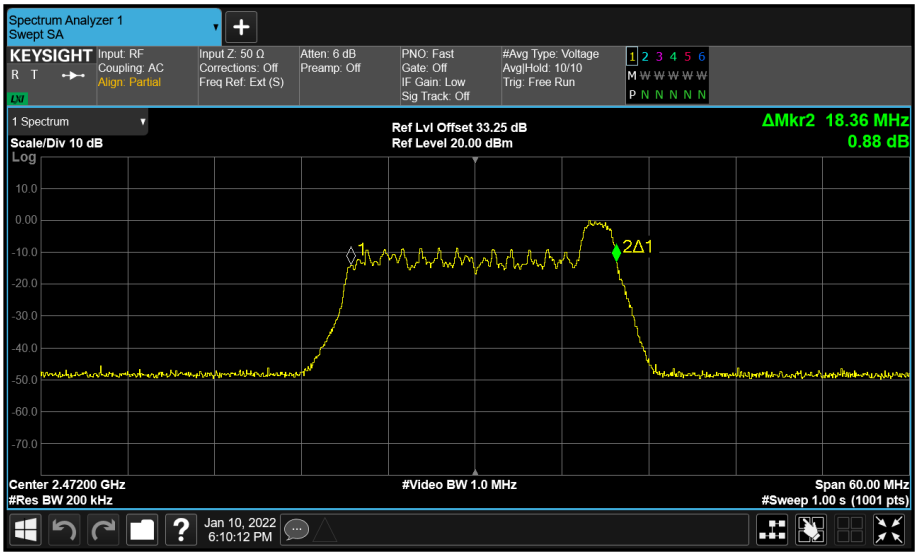

Figure 97 - Core 1 (B) 2472 MHz (CH13) 99% Bandwidth

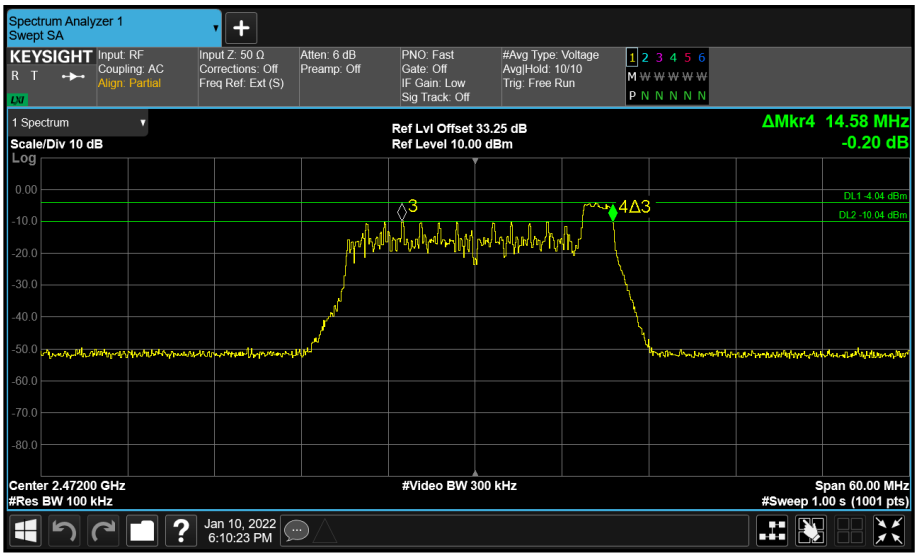

Figure 98 - Core 1 (B) 2472 MHz (CH13) 6 dB Bandwidth

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:	802.11ax HE20 RU52	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	6 dB Bandwidth (MHz)					Limit (kHz)
	A	B	C	D	Minimum	
2412	17.100	-	-	-	17.100	≥500.0
2442	14.580	-	-	-	14.580	≥500.0
2472	17.100	-	-	-	17.100	≥500.0

Table 27 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)					Limit (kHz)
	A	B	C	D	Minimum	
2412	18.180	-	-	-	18.180	-
2442	18.180	-	-	-	18.180	-
2472	18.540	-	-	-	18.540	-

Table 28 - 99% Bandwidth Results

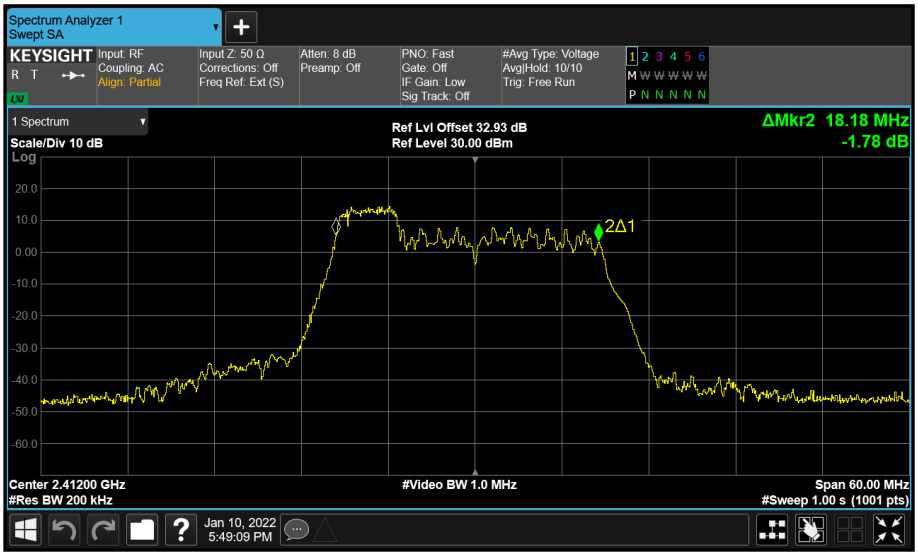

Figure 99 - Core 0 (A) 2412 MHz (CH1) 99% Bandwidth

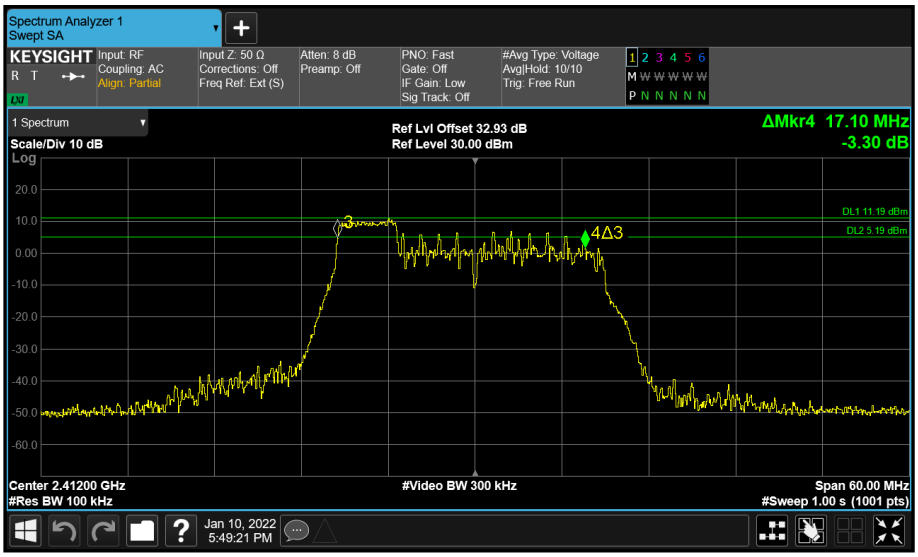

Figure 100 - Core 0 (A) 2412 MHz (CH1) 6 dB Bandwidth

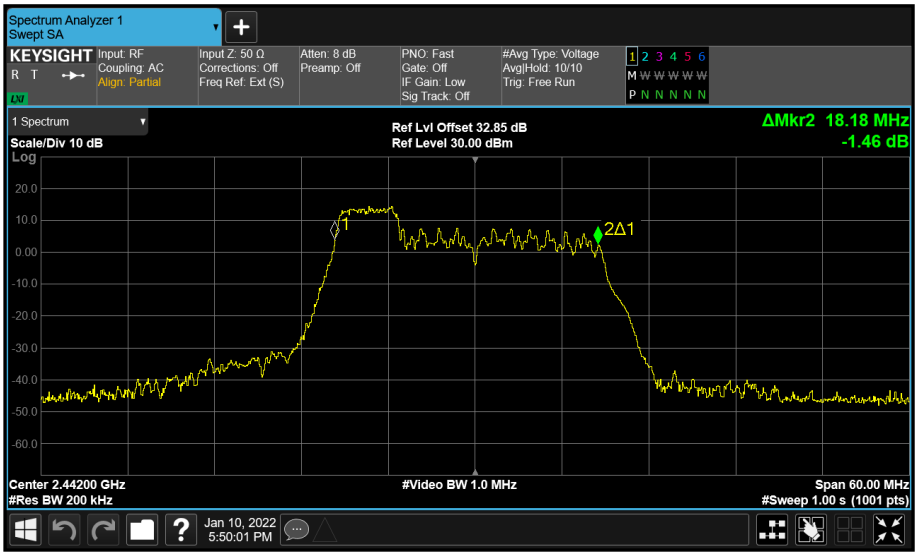

Figure 101 - Core 0 (A) 2442 MHz (CH7) 99% Bandwidth

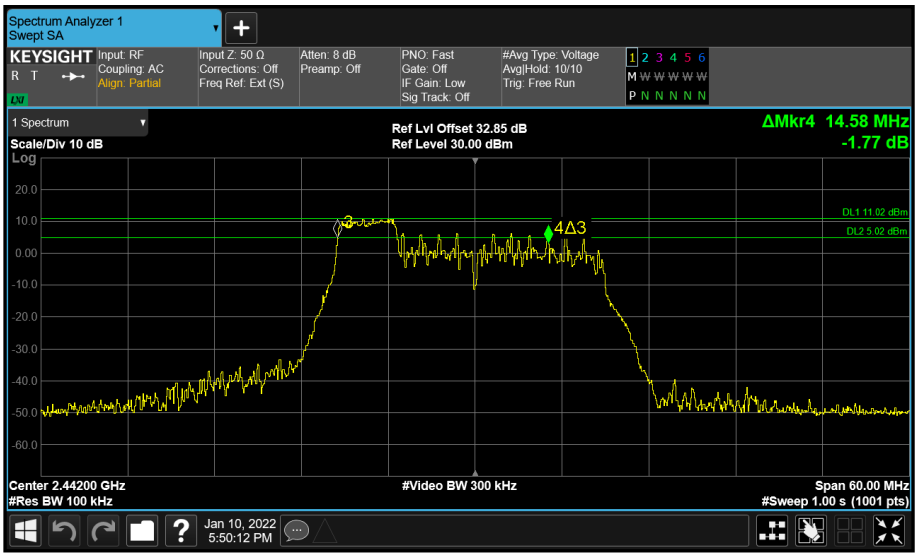

Figure 102 - Core 0 (A) 2442 MHz (CH7) 6 dB Bandwidth

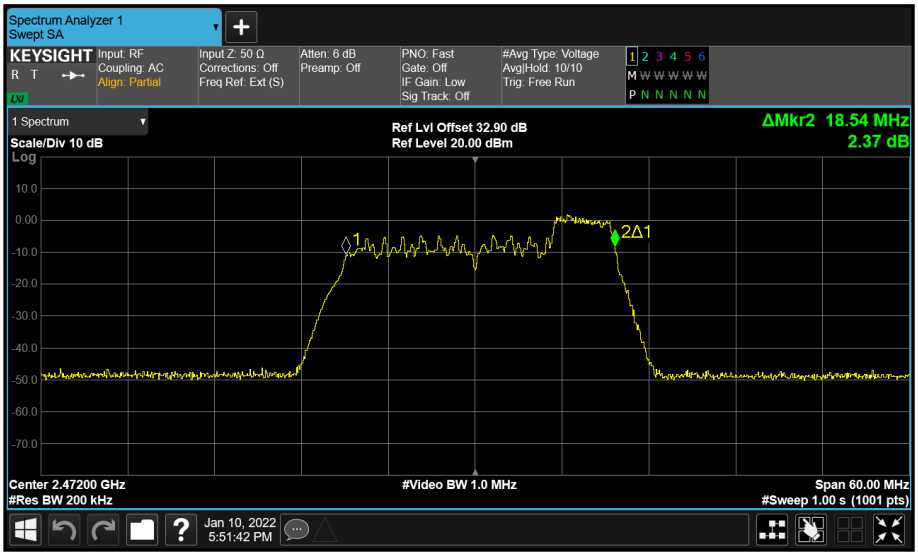

Figure 103 - Core 0 (A) 2472 MHz (CH13) 99% Bandwidth

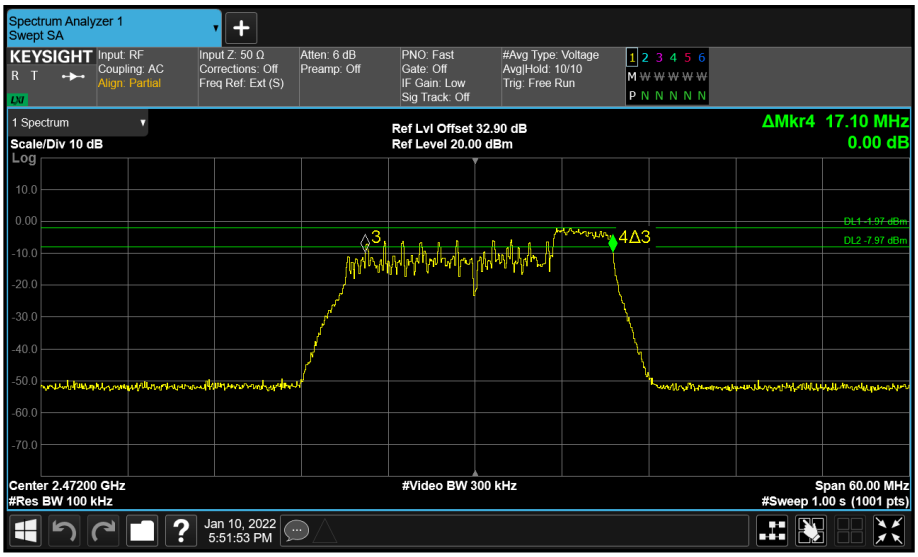

Figure 104 - Core 0 (A) 2472 MHz (CH13) 6 dB Bandwidth

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:	802.11ax HE20 RU52	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain(s):	0+1

Test Frequency (MHz)	6 dB Bandwidth (MHz)					Limit (kHz)
	A	B	C	D	Minimum	
2412	17.100	17.040	-	-	17.040	≥500.0
2442	14.580	17.100	-	-	14.580	≥500.0
2472	17.100	17.100	-	-	17.100	≥500.0

Table 29 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)					Limit (kHz)
	A	B	C	D	Minimum	
2412	18.240	18.180	-	-	18.180	-
2442	18.180	18.120	-	-	18.120	-
2472	18.540	18.240	-	-	18.240	-

Table 30 - 99% Bandwidth Results

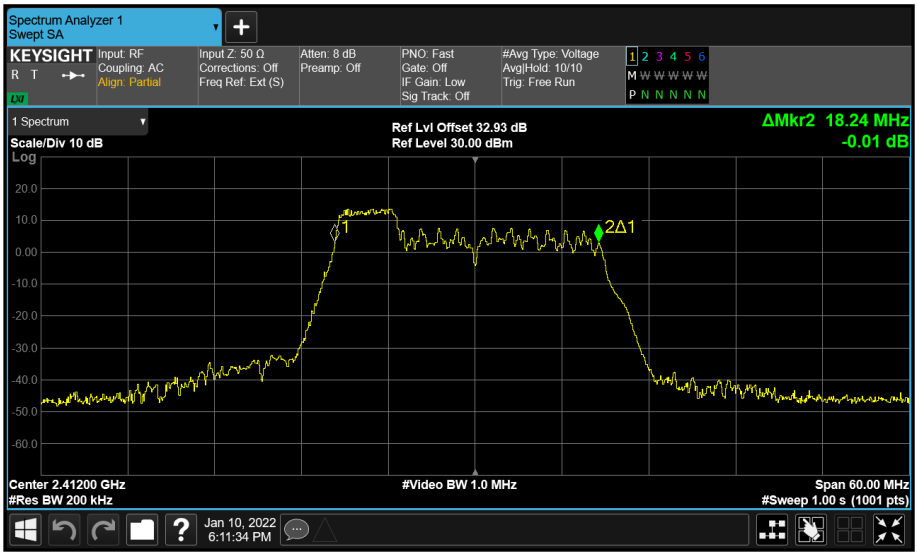

Figure 105 - Core 0 (A) 2412 MHz (CH1) 99% Bandwidth

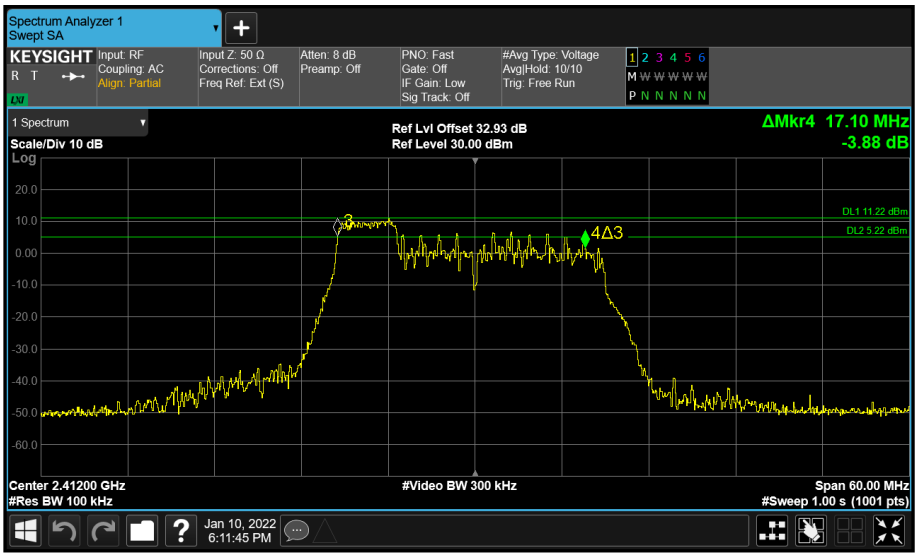

Figure 106 - Core 0 (A) 2412 MHz (CH1) 6 dB Bandwidth

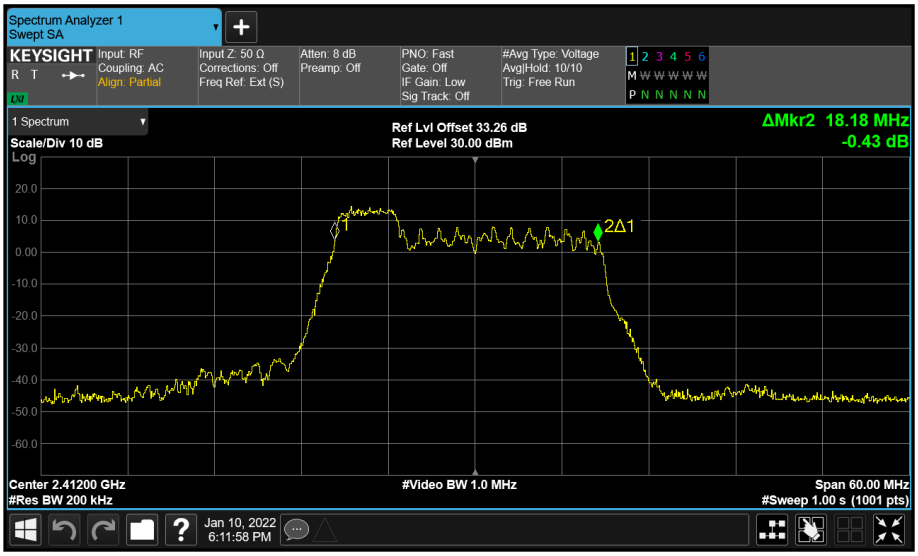

Figure 107 - Core 1 (B) 2412 MHz (CH1) 99% Bandwidth

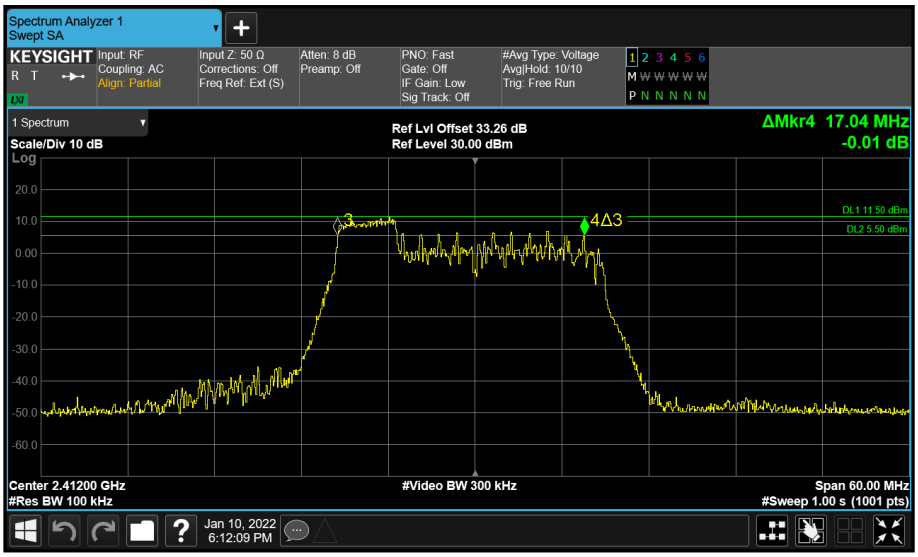

Figure 108 - Core 1 (B) 2412 MHz (CH1) 6 dB Bandwidth

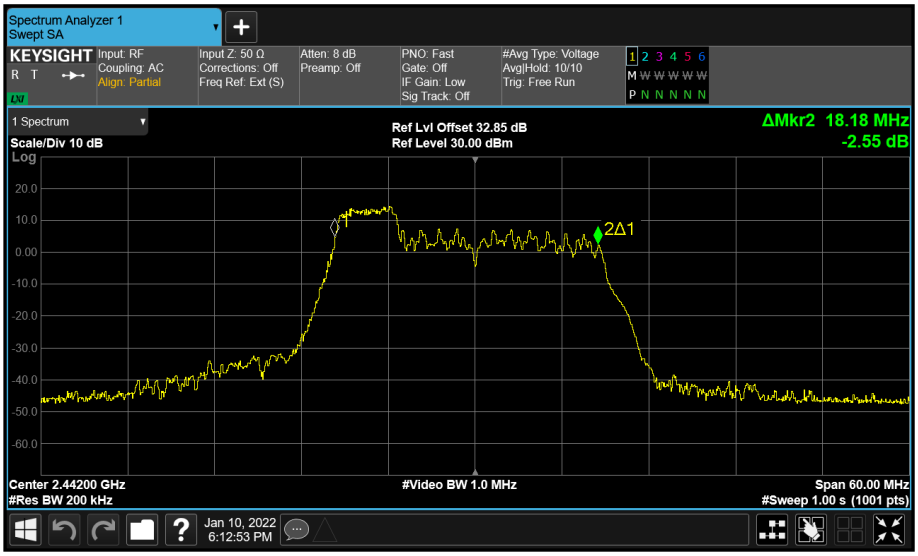

Figure 109 - Core 0 (A) 2442 MHz (CH7) 99% Bandwidth

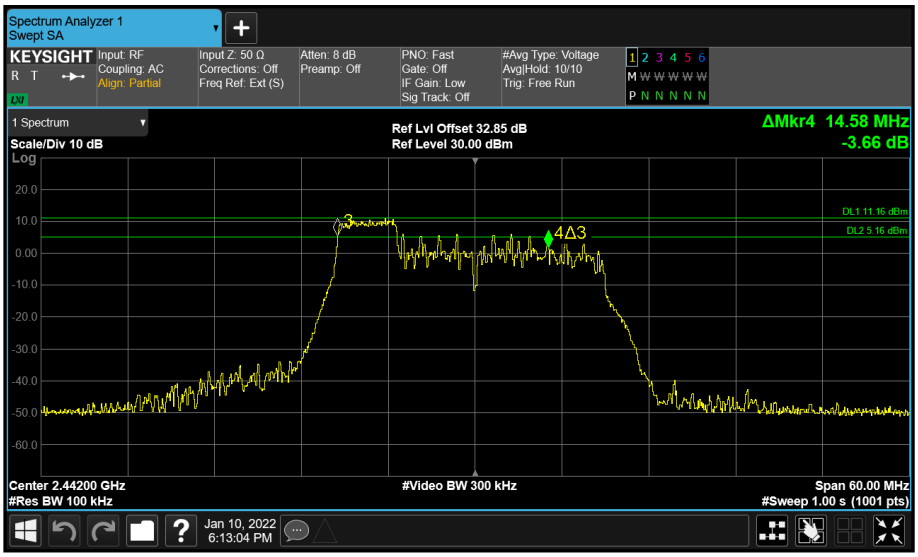

Figure 110 - Core 0 (A) 2442 MHz (CH7) 6 dB Bandwidth

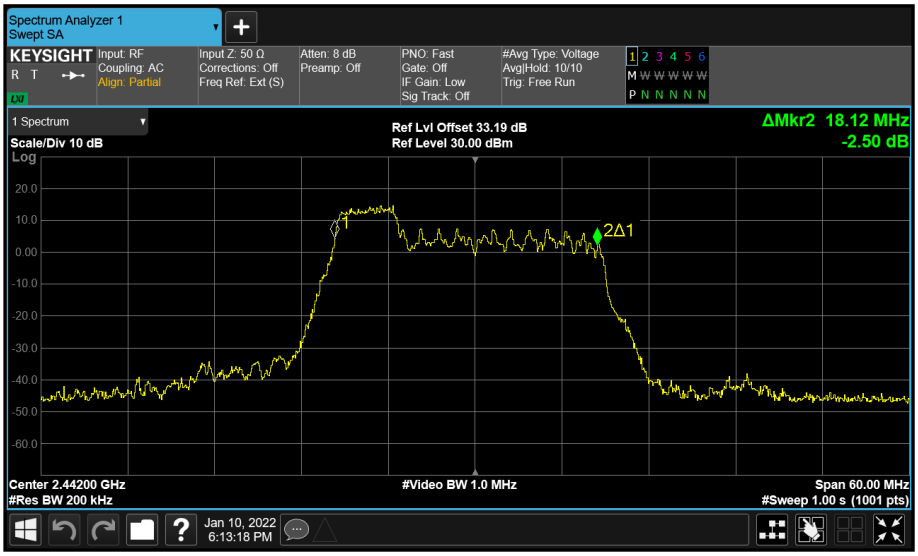

Figure 111 - Core 1 (B) 2442 MHz (CH7) 99% Bandwidth

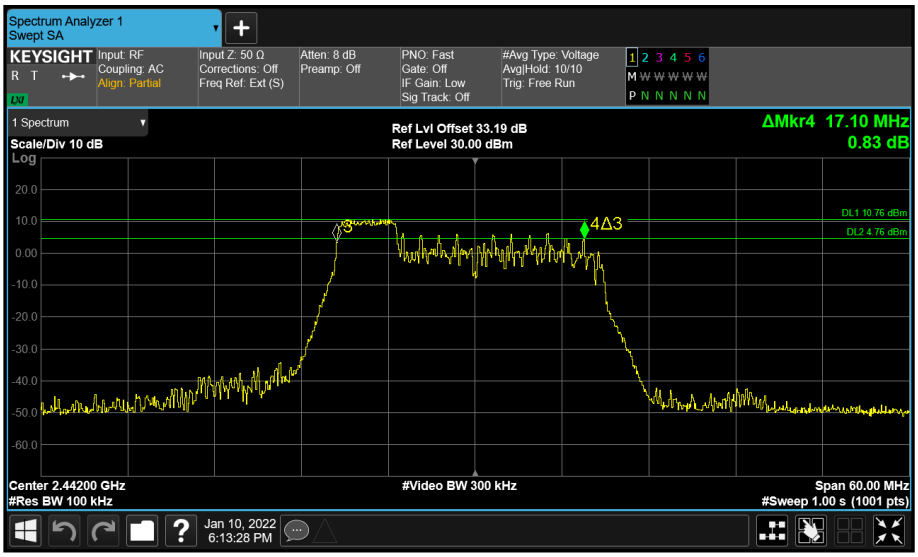

Figure 112 - Core 1 (B) 2442 MHz (CH7) 6 dB Bandwidth

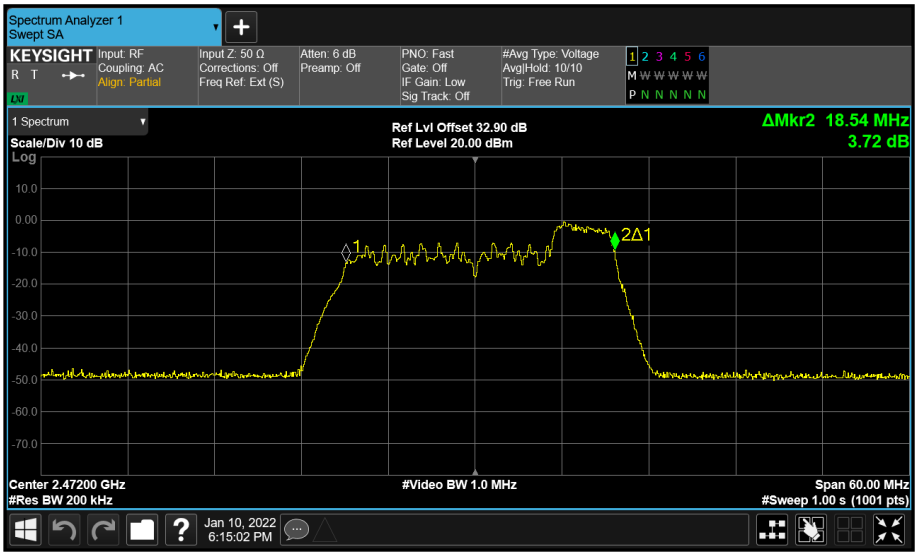

Figure 113 - Core 0 (A) 2472 MHz (CH13) 99% Bandwidth

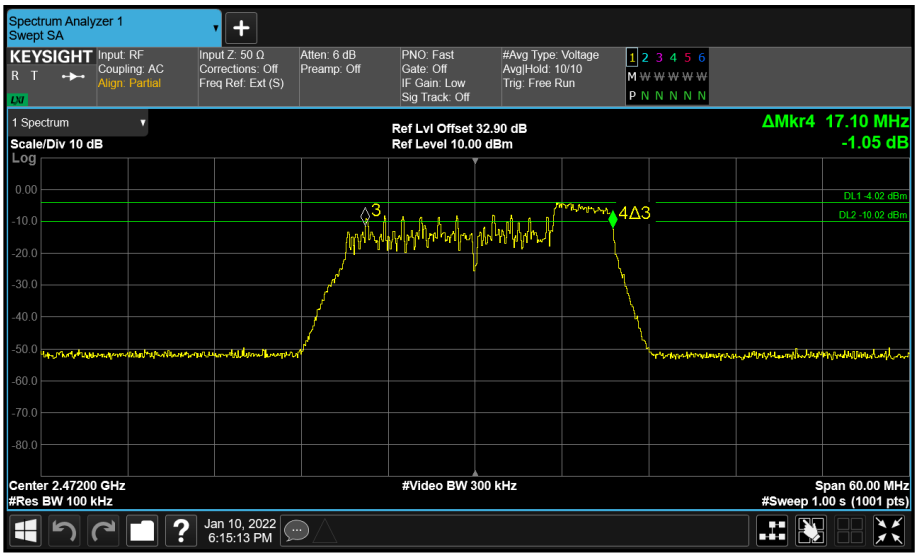

Figure 114 - Core 0 (A) 2472 MHz (CH13) 6 dB Bandwidth

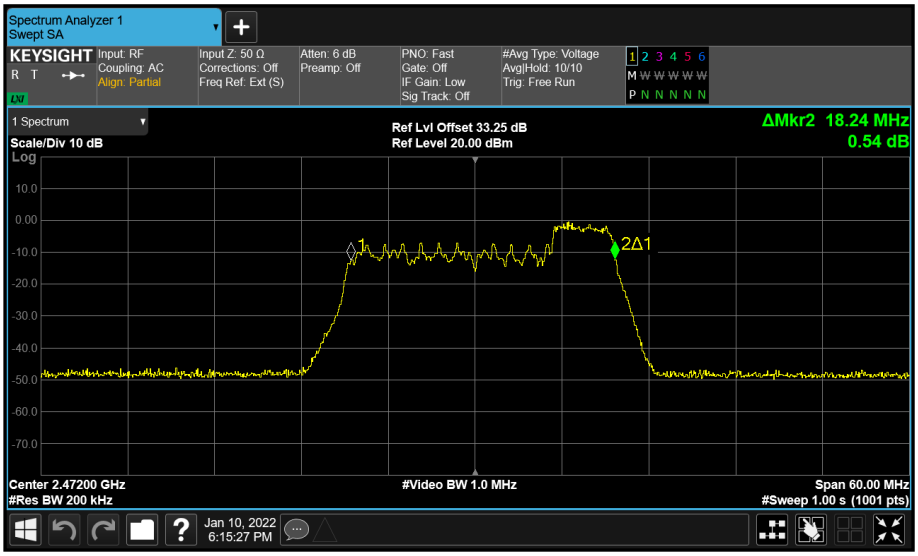

Figure 115 - Core 1 (B) 2472 MHz (CH13) 99% Bandwidth

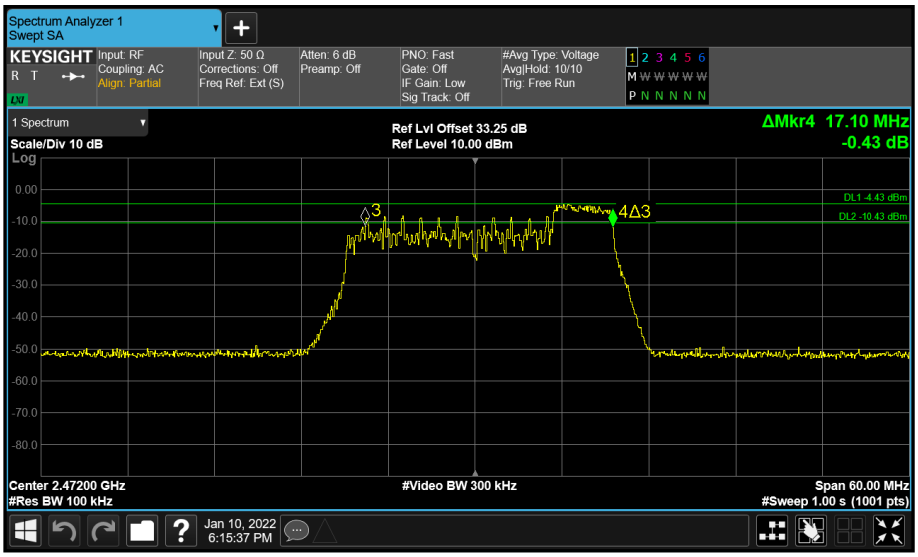

Figure 116 - Core 1 (B) 2472 MHz (CH13) 6 dB Bandwidth

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:	802.11ax HE20 RU106	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	6 dB Bandwidth (MHz)					Limit (kHz)
	A	B	C	D	Minimum	
2412	17.160	-	-	-	17.160	≥500.0
2442	17.220	-	-	-	17.220	≥500.0
2472	17.220	-	-	-	17.220	≥500.0

Table 31 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)					Limit (kHz)
	A	B	C	D	Minimum	
2412	18.180	-	-	-	18.180	-
2442	18.120	-	-	-	18.120	-
2472	18.480	-	-	-	18.480	-

Table 32 - 99% Bandwidth Results

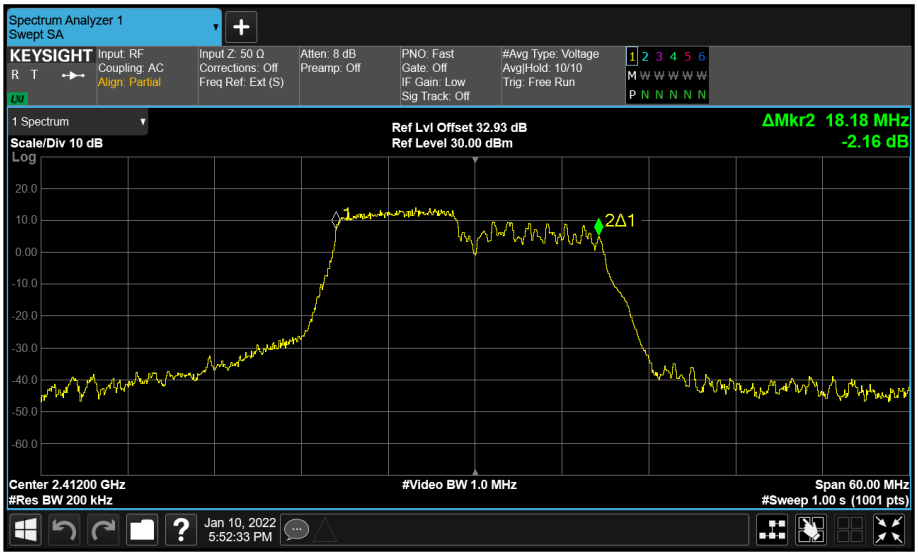

Figure 117 - Core 0 (A) 2412 MHz (CH1) 99% Bandwidth

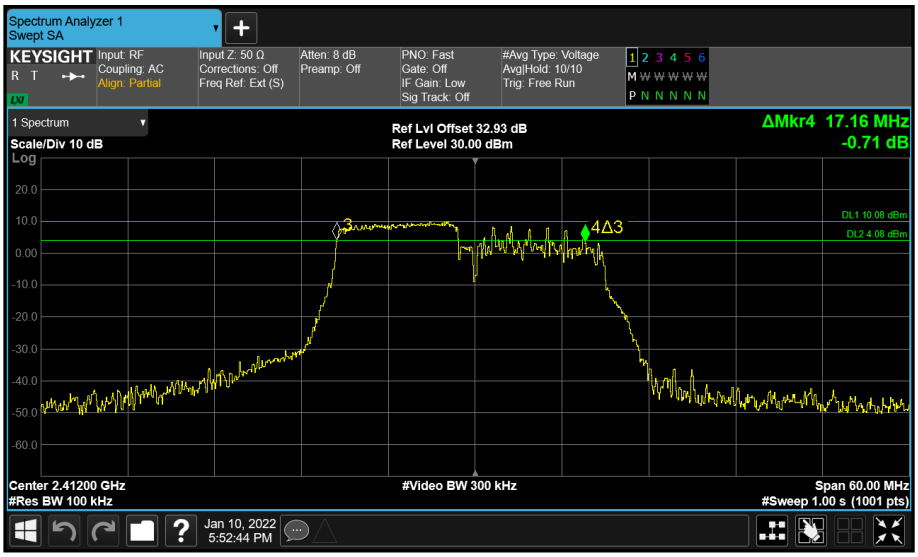

Figure 118 - Core 0 (A) 2412 MHz (CH1) 6 dB Bandwidth

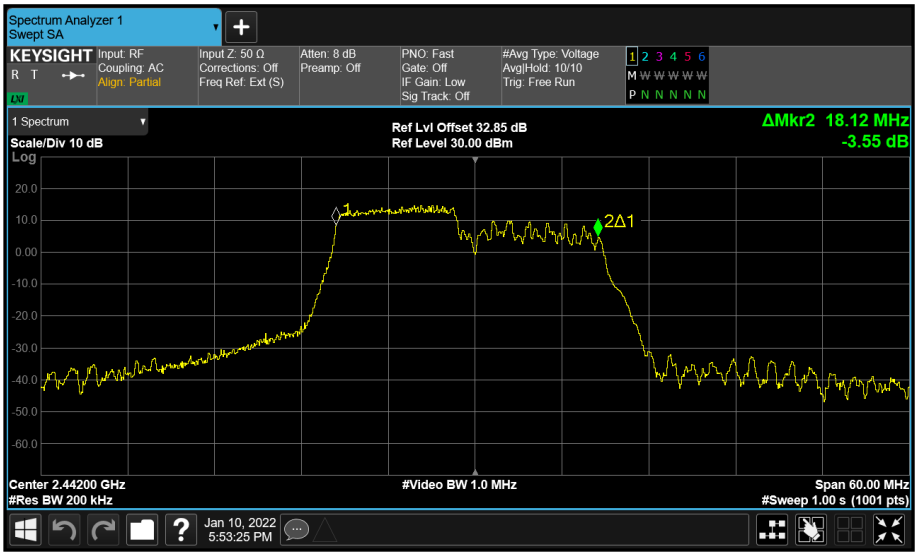

Figure 119 - Core 0 (A) 2442 MHz (CH7) 99% Bandwidth

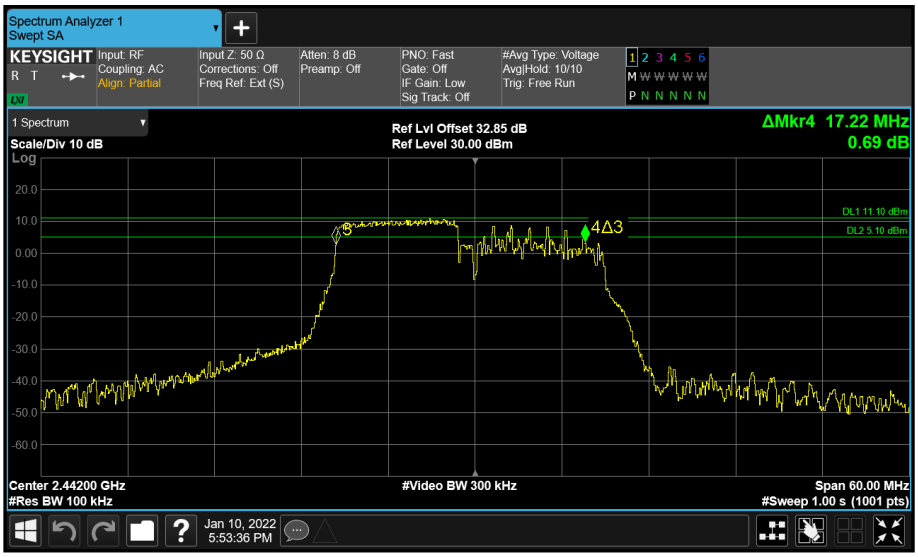

Figure 120 - Core 0 (A) 2442 MHz (CH7) 6 dB Bandwidth

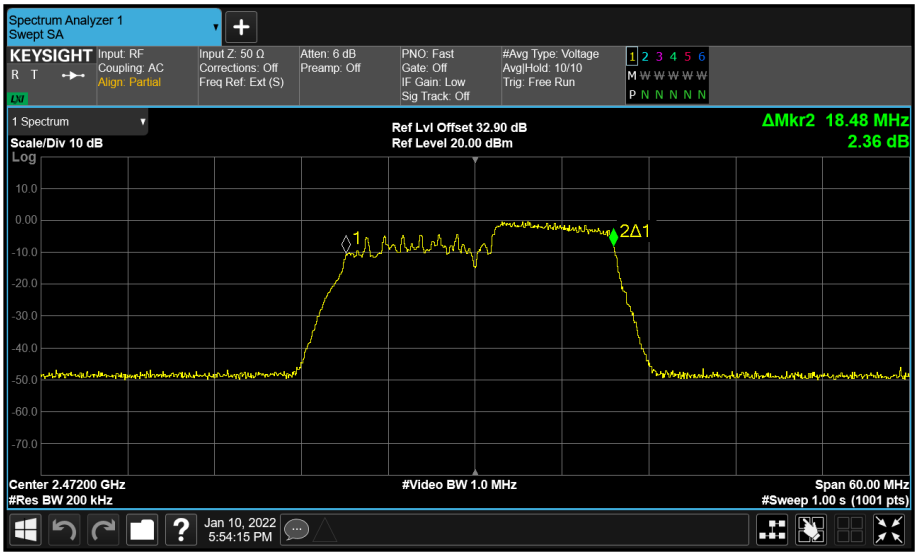

Figure 121 - Core 0 (A) 2472 MHz (CH13) 99% Bandwidth

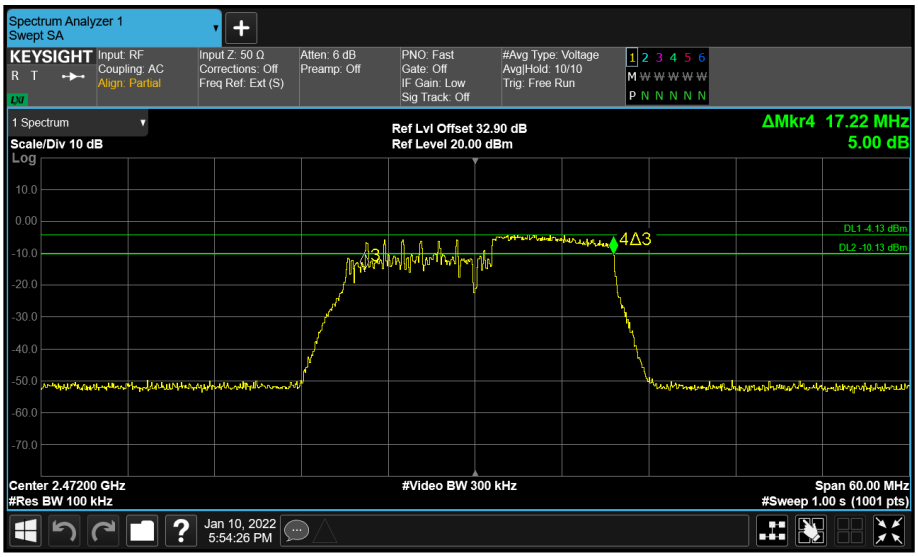

Figure 122 - Core 0 (A) 2472 MHz (CH13) 6 dB Bandwidth

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:	802.11ax HE20 RU106	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain(s):	0+1

Test Frequency (MHz)	6 dB Bandwidth (MHz)					Limit (kHz)
	A	B	C	D	Minimum	
2412	17.220	17.160	-	-	17.160	≥500.0
2442	17.220	17.220	-	-	17.220	≥500.0
2472	17.220	17.220	-	-	17.220	≥500.0

Table 33 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)					Limit (kHz)
	A	B	C	D	Minimum	
2412	18.180	18.060	-	-	18.060	-
2442	18.180	18.060	-	-	18.060	-
2472	18.420	18.240	-	-	18.240	-

Table 34 - 99% Bandwidth Results

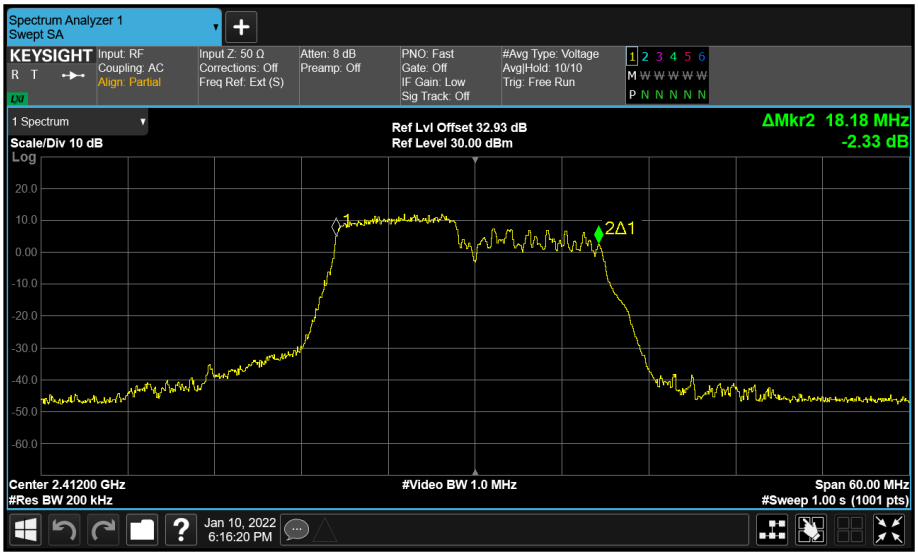

Figure 123 - Core 0 (A) 2412 MHz (CH1) 99% Bandwidth

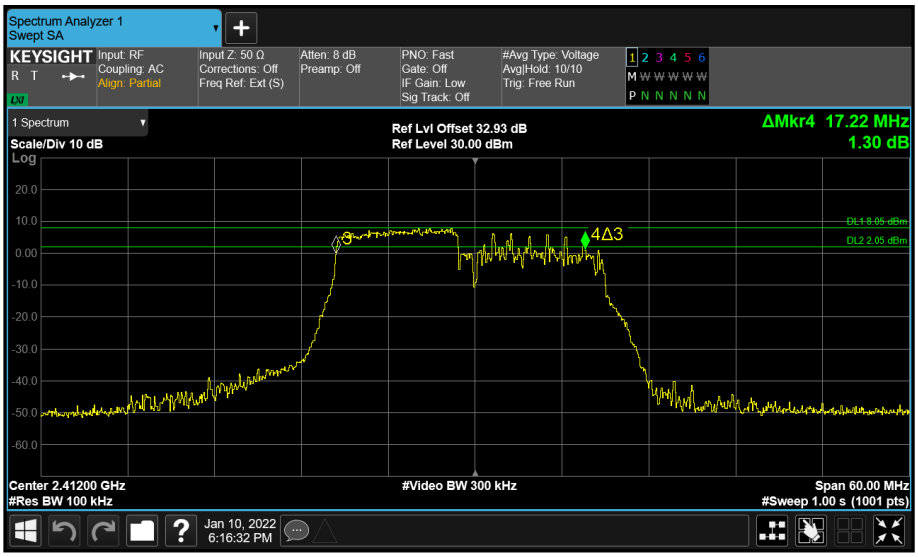

Figure 124 - Core 0 (A) 2412 MHz (CH1) 6 dB Bandwidth

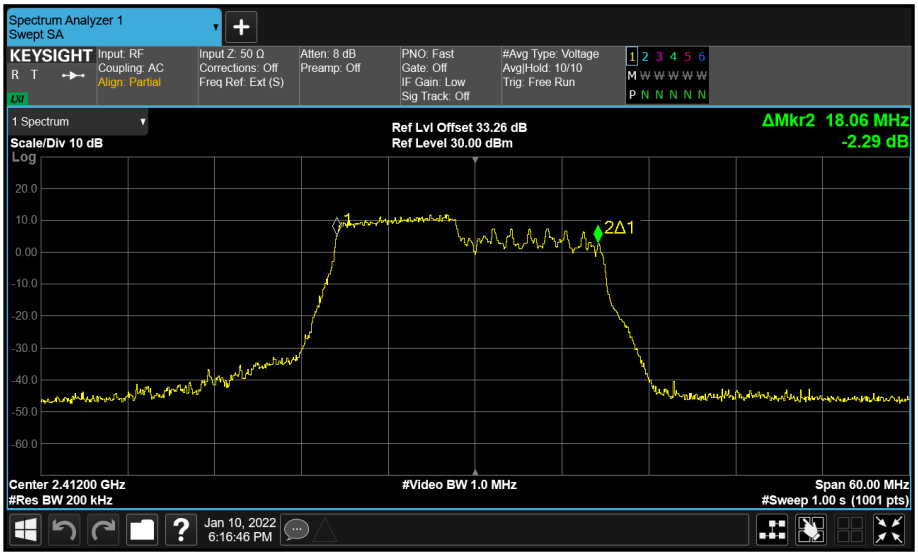

Figure 125 - Core 1 (B) 2412 MHz (CH1) 99% Bandwidth

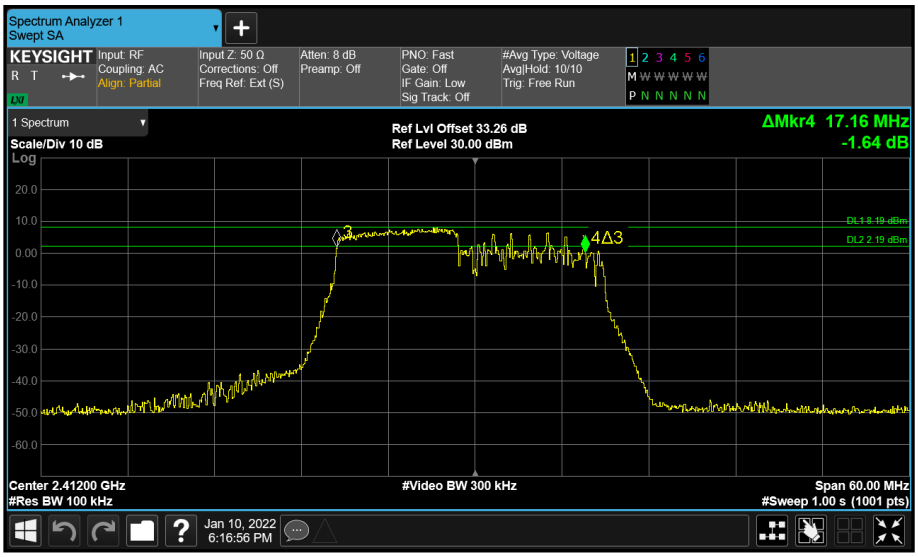

Figure 126 - Core 1 (B) 2412 MHz (CH1) 6 dB Bandwidth

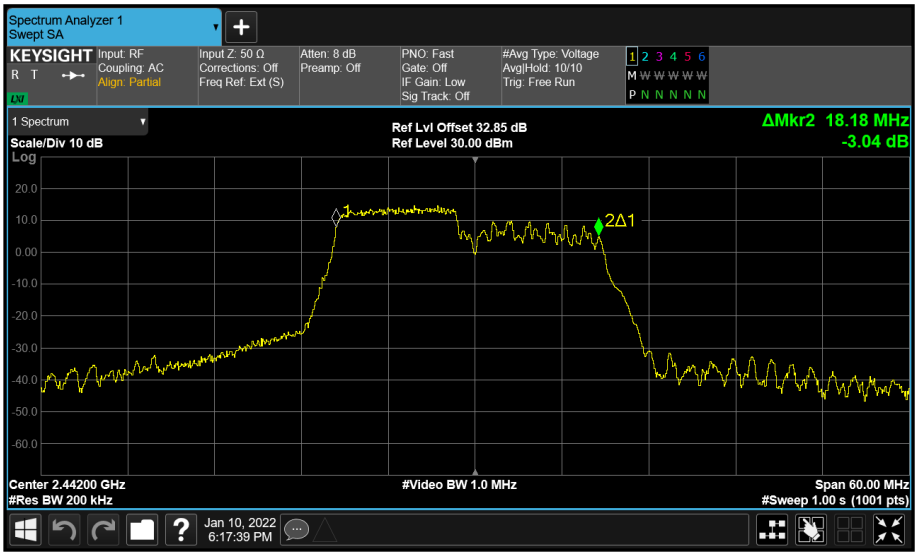

Figure 127 - Core 0 (A) 2442 MHz (CH7) 99% Bandwidth

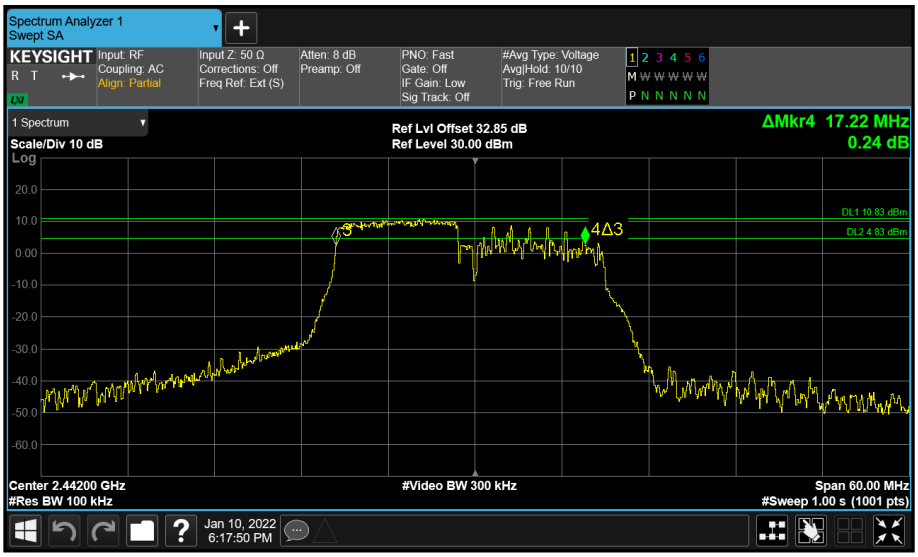

Figure 128 - Core 0 (A) 2442 MHz (CH7) 6 dB Bandwidth

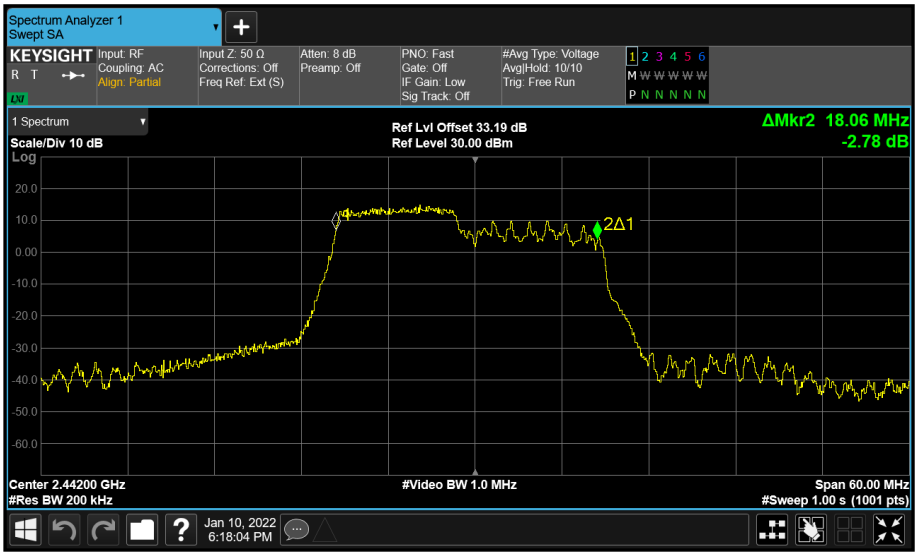

Figure 129 - Core 1 (B) 2442 MHz (CH7) 99% Bandwidth

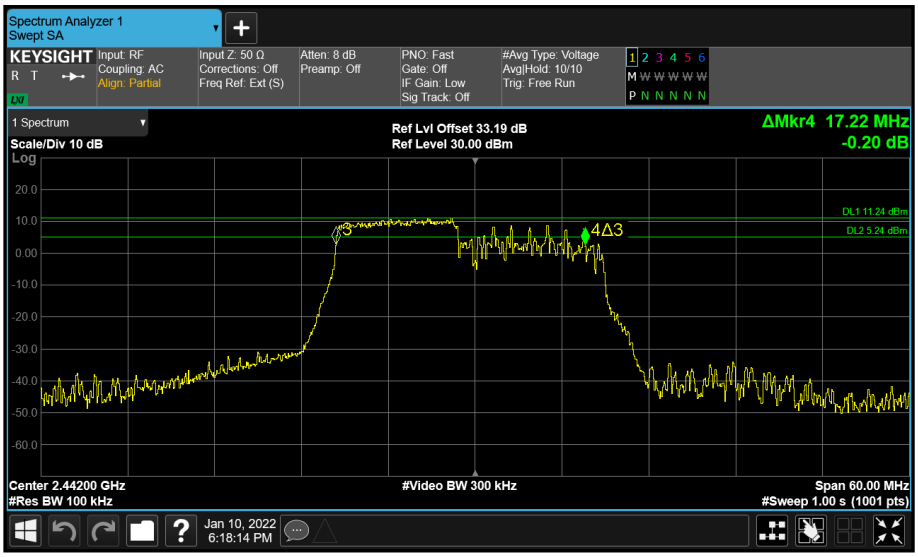

Figure 130 - Core 1 (B) 2442 MHz (CH7) 6 dB Bandwidth

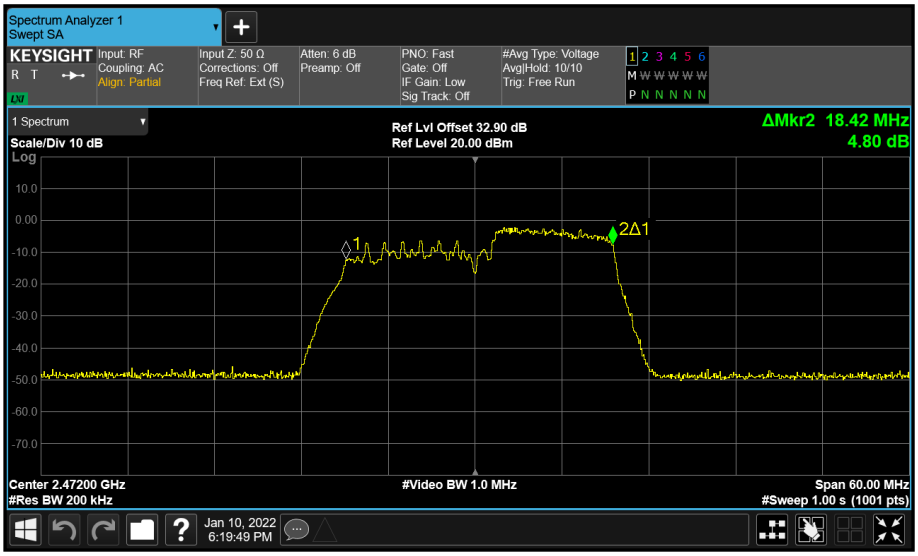

Figure 131 - Core 0 (A) 2472 MHz (CH13) 99% Bandwidth

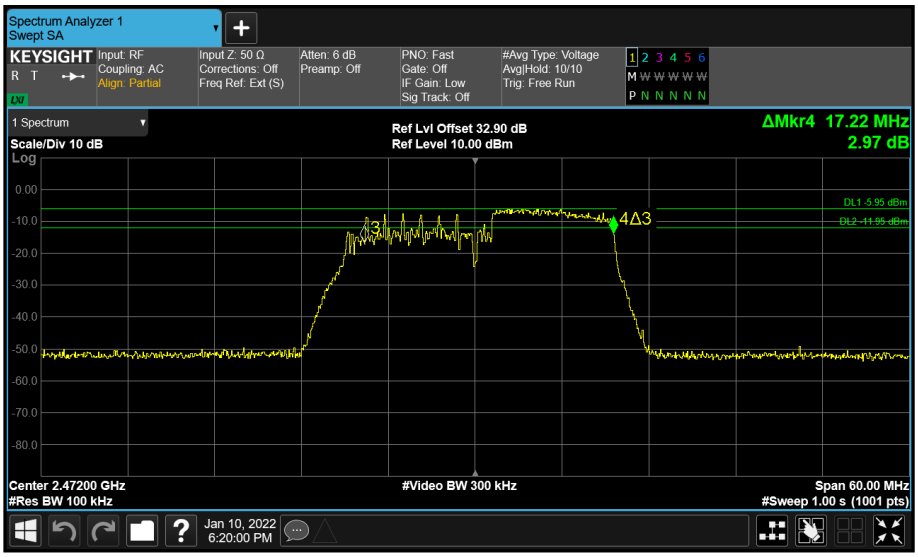

Figure 132 - Core 0 (A) 2472 MHz (CH13) 6 dB Bandwidth

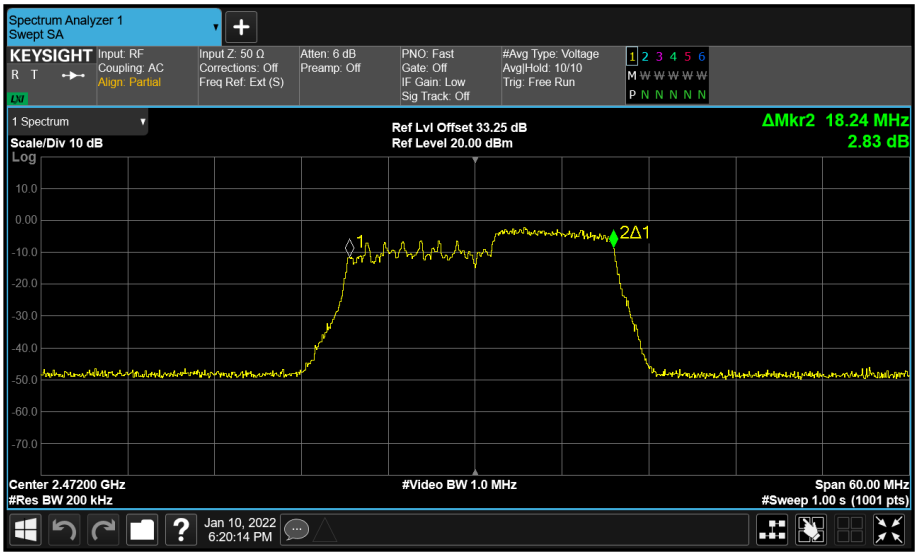

Figure 133 - Core 1 (B) 2472 MHz (CH13) 99% Bandwidth

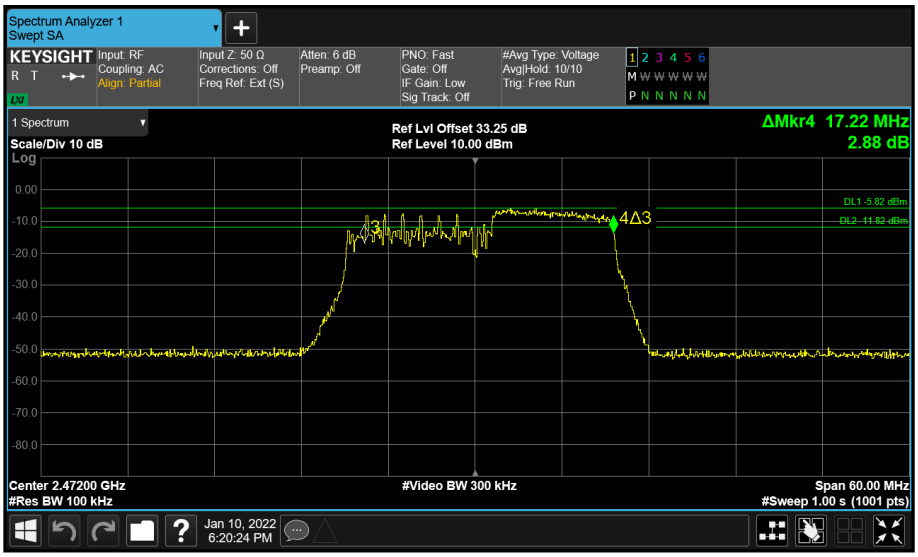

Figure 134 - Core 1 (B) 2472 MHz (CH13) 6 dB Bandwidth

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

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

2.2.1 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 1.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Multimeter	Fluke	79 Series II	3057	12	23-Aug-2022
Hygrometer	Rotronic	I-1000	3220	12	05-Nov-2022
Frequency Standard	Spectracom	SecureSync 1200-0408-0601	4393	6	03-Jan-2022
AC Programmable Power Supply	iTech	IT7324	5226	-	O/P Mon
MXA Signal Analyser	Keysight Technologies	N9020B	5529	24	04-Mar-2022
Signal Commissioning Unit	TUV SUD	SCU002	5759	12	30-Jun-2022

Table 35

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

A2615, S/N: PVW2DY4LFY - Modification State 0

2.3.3 Date of Test

10-January-2022 to 11-January-2022

2.3.4 Test Method

The test was performed in accordance with ANSI C63.10 clause 11.9.2.3.2 Method AVGPM-G

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	21.1 - 22.5 °C
Relative Humidity	33.5 - 45.1 %

2.3.6 Test Results

2.4 GHz WLAN

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 11.9.2.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	802.11b	Duty Cycle (%):	98.7
Data Rate:	1 Mbps	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	2.20
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2412	22.29	-	-	-	-	30.00	-7.71
2442	22.26	-	-	-	-	30.00	-7.74
2472	16.73	-	-	-	-	30.00	-13.27

Table 36 - FCC Maximum Conducted (average) 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	∑					
2412	22.29	-	-	-	-	30.00	-7.71	24.49	36.00	-11.51
2442	22.26	-	-	-	-	30.00	-7.74	24.46	36.00	-11.54
2472	16.73	-	-	-	-	30.00	-13.27	18.93	36.00	-17.07

Table 37 - ISED 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 11.9.2.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	802.11g	Duty Cycle (%):	97.5
Data Rate:	12 Mbps	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	2.20
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2412	20.24	-	-	-	-	30.00	-9.76
2442	22.27	-	-	-	-	30.00	-7.73
2472	9.29	-	-	-	-	30.00	-20.71

Table 38 - FCC Maximum Conducted (average) 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	∑					
2412	20.24	-	-	-	-	30.00	-9.76	22.44	36.00	-13.56
2442	22.27	-	-	-	-	30.00	-7.73	24.47	36.00	-11.53
2472	9.29	-	-	-	-	30.00	-20.71	11.49	36.00	-24.51

Table 39 - ISED 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 11.9.2.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	802.11n HT20	Duty Cycle (%):	96.4
Modulation Coding Scheme:	MCS2	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	2.20
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2412	19.73	-	-	-	-	30.00	-10.27
2442	22.27	-	-	-	-	30.00	-7.73
2472	8.92	-	-	-	-	30.00	-21.08

Table 40 - FCC Maximum Conducted (average) 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	∑					
2412	19.73	-	-	-	-	30.00	-10.27	21.93	36.00	-14.07
2442	22.27	-	-	-	-	30.00	-7.73	24.47	36.00	-11.53
2472	8.92	-	-	-	-	30.00	-21.08	11.12	36.00	-24.88

Table 41 - ISED 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 11.9.2.3.2
Additional Reference(s):	662911 D01 v02r01 F)2)f)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	802.11n HT20	Duty Cycle (%):	96.4
Modulation Coding Scheme:	MCS2	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	2.20
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain(s):	0+1

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2412	18.31	18.71	-	-	21.52	30.00	-8.48
2442	22.34	22.29	-	-	25.32	30.00	-4.68
2472	7.76	7.91	-	-	10.85	30.00	-19.15

Table 42 - FCC Maximum Conducted (average) 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	∑					
2412	18.31	18.71	-	-	21.52	30.00	-8.48	23.72	36.00	-12.28
2442	22.34	22.29	-	-	25.32	30.00	-4.68	27.52	36.00	-8.48
2472	7.76	7.91	-	-	10.85	30.00	-19.15	13.05	36.00	-22.95

Table 43 - ISED 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 11.9.2.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	802.11ax HE20 SU	Duty Cycle (%):	95.7
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	2.20
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2412	18.23	-	-	-	-	30.00	-11.77
2442	22.30	-	-	-	-	30.00	-7.70
2472	8.29	-	-	-	-	30.00	-21.71

Table 44 - FCC Maximum Conducted (average) 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	∑					
2412	18.23	-	-	-	-	30.00	-11.77	20.43	36.00	-15.57
2442	22.30	-	-	-	-	30.00	-7.70	24.50	36.00	-11.50
2472	8.29	-	-	-	-	30.00	-21.71	10.49	36.00	-25.51

Table 45 - ISED 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 11.9.2.3.2
Additional Reference(s):	662911 D01 v02r01 F)2)f)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	802.11ax HE20 SU	Duty Cycle (%):	95.6
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	2.20
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain(s):	0+1

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2412	17.24	17.43	-	-	20.34	30.00	-9.66
2442	22.17	22.06	-	-	25.12	30.00	-4.88
2472	7.37	7.30	-	-	10.34	30.00	-19.66

Table 46 - FCC Maximum Conducted (average) 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	∑					
2412	17.24	17.43	-	-	20.34	30.00	-9.66	22.54	36.00	-13.46
2442	22.17	22.06	-	-	25.12	30.00	-4.88	27.32	36.00	-8.68
2472	7.37	7.30	-	-	10.34	30.00	-19.66	12.54	36.00	-23.46

Table 47 - ISED 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 11.9.2.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	802.11ax HE20 RU26	Duty Cycle (%):	96.5
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	2.20
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2412	14.20	-	-	-	-	30.00	-15.80
2442	14.24	-	-	-	-	30.00	-15.76
2472	1.07	-	-	-	-	30.00	-28.93

Table 48 - FCC Maximum Conducted (average) 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	∑					
2412	14.20	-	-	-	-	30.00	-15.80	16.40	36.00	-19.60
2442	14.24	-	-	-	-	30.00	-15.76	16.44	36.00	-19.56
2472	1.07	-	-	-	-	30.00	-28.93	3.27	36.00	-32.73

Table 49 - ISED 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 11.9.2.3.2
Additional Reference(s):	662911 D01 v02r01 F)2)f)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	802.11ax HE20 RU26	Duty Cycle (%):	96.5
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	2.20
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain(s):	0+1

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2412	14.33	14.30	-	-	17.32	30.00	-12.68
2442	14.31	14.01	-	-	17.15	30.00	-12.85
2472	-0.23	0.15	-	-	2.98	30.00	-27.02

Table 50 - FCC Maximum Conducted (average) 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	∑					
2412	14.33	14.30	-	-	17.32	30.00	-12.68	19.52	36.00	-16.48
2442	14.31	14.01	-	-	17.15	30.00	-12.85	19.35	36.00	-16.65
2472	-0.23	0.15	-	-	2.98	30.00	-27.02	5.18	36.00	-30.82

Table 51 - ISED 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 11.9.2.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	802.11ax HE20 RU52	Duty Cycle (%):	96.4
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	2.20
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2412	17.31	-	-	-	-	30.00	-12.69
2442	17.43	-	-	-	-	30.00	-12.57
2472	4.08	-	-	-	-	30.00	-25.92

Table 52 - FCC Maximum Conducted (average) 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	∑					
2412	17.31	-	-	-	-	30.00	-12.69	19.51	36.00	-16.49
2442	17.43	-	-	-	-	30.00	-12.57	19.63	36.00	-16.37
2472	4.08	-	-	-	-	30.00	-25.92	6.28	36.00	-29.72

Table 53 - ISED 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 11.9.2.3.2
Additional Reference(s):	662911 D01 v02r01 F)2)f)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	802.11ax HE20 RU52	Duty Cycle (%):	96.4
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	2.20
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain(s):	0+1

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2412	17.16	17.09	-	-	20.14	30.00	-9.86
2442	17.44	17.43	-	-	20.45	30.00	-9.55
2472	1.93	1.89	-	-	4.91	30.00	-25.09

Table 54 - FCC Maximum Conducted (average) 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	∑					
2412	17.16	17.09	-	-	20.14	30.00	-9.86	22.34	36.00	-13.66
2442	17.44	17.43	-	-	20.45	30.00	-9.55	22.65	36.00	-13.35
2472	1.93	1.89	-	-	4.91	30.00	-25.09	7.11	36.00	-28.89

Table 55 - ISED 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 11.9.2.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	802.11ax HE20 RU106	Duty Cycle (%):	97.7
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	2.20
Active Port(s):	A (Core 0)	Active Chain(s):	0

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2412	19.27	-	-	-	-	30.00	-10.73
2442	20.48	-	-	-	-	30.00	-9.52
2472	5.36	-	-	-	-	30.00	-24.64

Table 56 - FCC Maximum Conducted (average) 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	∑					
2412	19.27	-	-	-	-	30.00	-10.73	21.47	36.00	-14.53
2442	20.48	-	-	-	-	30.00	-9.52	22.68	36.00	-13.32
2472	5.36	-	-	-	-	30.00	-24.64	7.56	36.00	-28.44

Table 57 - ISED 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 11.9.2.3.2
Additional Reference(s):	662911 D01 v02r01 F)2)f)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	802.11ax HE20 RU106	Duty Cycle (%):	97.8
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	2.20
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain(s):	0+1

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
2412	17.36	17.43	-	-	20.40	30.00	-9.60
2442	20.37	20.33	-	-	23.35	30.00	-6.65
2472	3.45	3.11	-	-	6.29	30.00	-23.71

Table 58 - FCC Maximum Conducted (average) 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	∑					
2412	17.36	17.43	-	-	20.40	30.00	-9.60	22.60	36.00	-13.40
2442	20.37	20.33	-	-	23.35	30.00	-6.65	25.55	36.00	-10.45
2472	3.45	3.11	-	-	6.29	30.00	-23.71	8.49	36.00	-27.51

Table 59 - ISED Maximum Conducted (average) 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 (b)

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 Laboratory 1.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Multimeter	Fluke	79 Series II	3057	12	23-Aug-2022
Hygrometer	Rotronic	I-1000	3220	12	05-Nov-2022
AC Programmable Power Supply	iTech	IT7324	5226	-	O/P Mon
Signal Commissioning Unit	TUV SUD	SCU002	5759	12	30-Jun-2022
USB Power Sensor	Boonton	RTP5008	5830	12	10-May-2022
USB Power Sensor	Boonton	RTP5008	5832	12	10-May-2022

Table 60

O/P Mon – Output Monitored using calibrated equipment

2.4 Spurious Radiated Emissions

2.4.1 Specification Reference

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

2.4.2 Equipment Under Test and Modification State

A2615, S/N: P1F4F29DL4 - Modification State 0

2.4.3 Date of Test

11-November-2021 to 16-November-2021

2.4.4 Test Method

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

For frequencies > 1 GHz, plots for average measurements were taken in accordance with ANSI C63.10, clause 11.12.2.5.2.

The EUT was placed on the non-conducting platform in a manner typical of a normal installation. Ports on the EUT were terminated with loads as described in ANSI C63.4 clause 6.2.4. One port of each type was loaded with a suitable ancillary/accessory.

In the 30 MHz to 1 GHz range pre-scans were only performed on the main radio mid channel (2437 MHz).

The plots shown are the characterization of the EUT. The limits on the plots represent the most stringent case for restricted bands, (54/74 dBuV/m @ 3 m and 64/84 dBuV/m @ 1 m) when compared to 20 dBc (Peak) and 30 dBc (Average) outside restricted bands. The limits shown have been used as a threshold to determine where further measurements are necessary. Where results are within 10 dB of the limits shown on the plots, further investigation was carried out and reported in results tables.

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

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

Spurious Radiated Emissions measurements were performed, with the device operating in MIMO 2TX and SISO modes during testing.

2.4.5 Example Test Setup Diagram

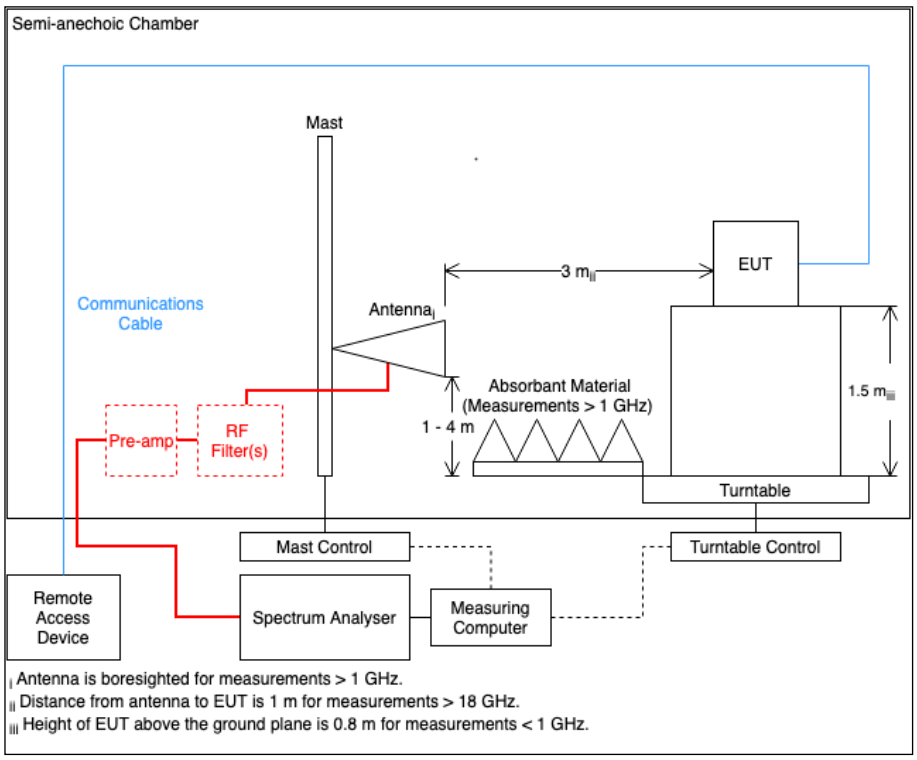

Figure 135

2.4.6 Environmental Conditions

Ambient Temperature	20.3 - 21.7 °C
Relative Humidity	38.2 - 51.1 %

2.4.7 Test Results

2.4 GHz WLAN

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

Table 61 - 2412 MHz (CH1), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz

*No emissions found within 6 dB of the limit.

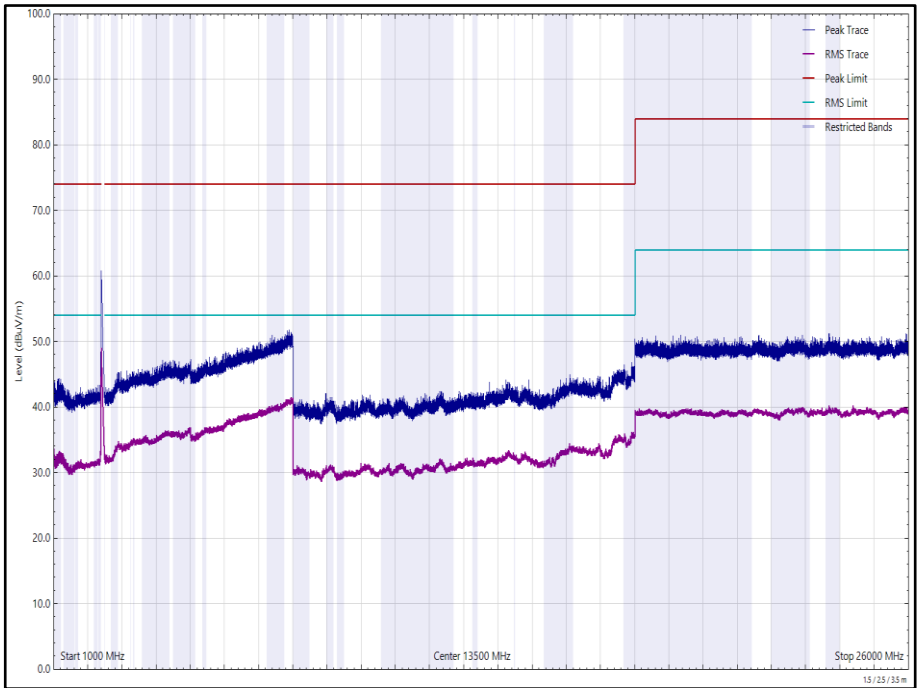

Figure 136 - 2412 MHz (CH1), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal

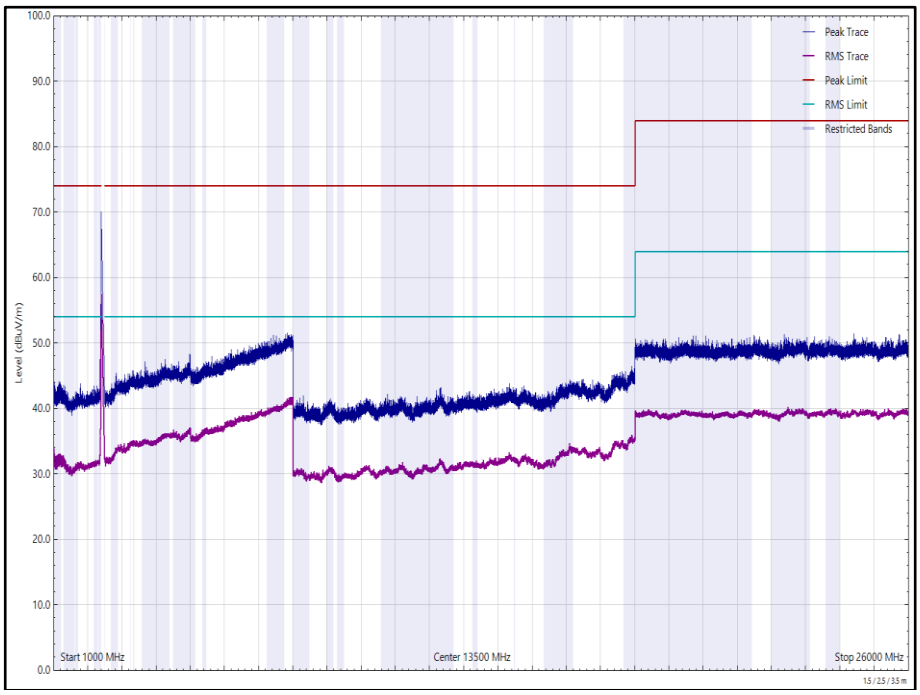

Figure 137 - 2412 MHz (CH1), HT20, CDD, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical

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

Table 62 - 2437 MHz (CH6), HT20, CDD, Core 0 + Core 1, 30 MHz to 26 GHz

*No emissions found within 6 dB of the limit.

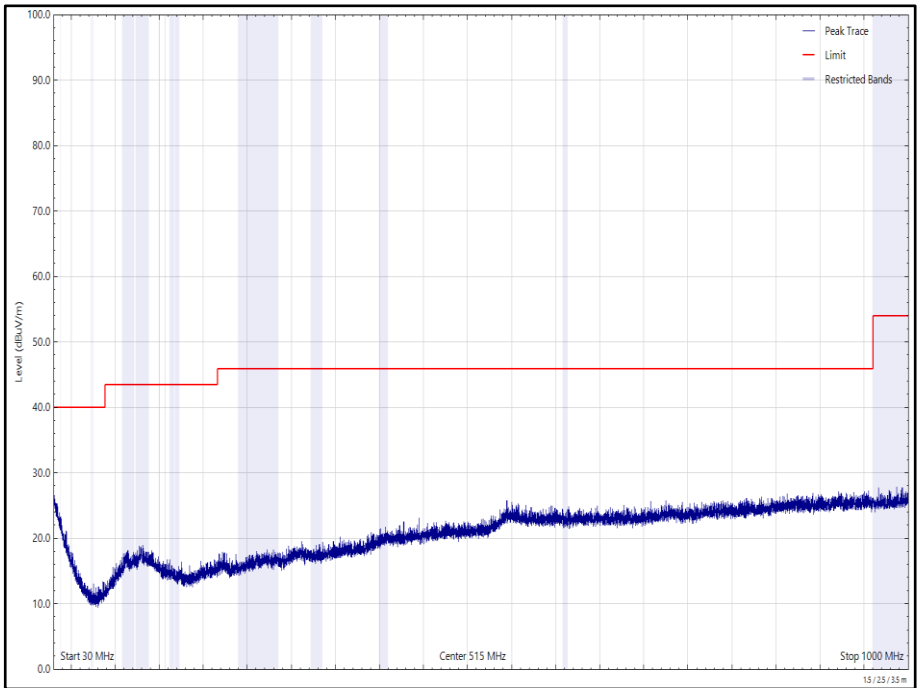

Figure 138 - 2437 MHz (CH6), HT20, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)