



Test Configuration			
Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause(s):	-	Test Method(s):	C63.10 6.9.3 C63.10 12.5.1
Additional Reference(s):	-		

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

Test Frequency (MHz)	26 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
5162	1.252	1.248	-	-	≥500.0
5204	1.244	1.248	-	-	≥500.0
5245	1.252	1.252	-	-	≥500.0

Table 31 - 26 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
5162	1.000	1.004	-	-	-
5204	0.992	1.000	-	-	-
5245	1.000	1.000	-	-	-

Table 32 - 99% Bandwidth Results

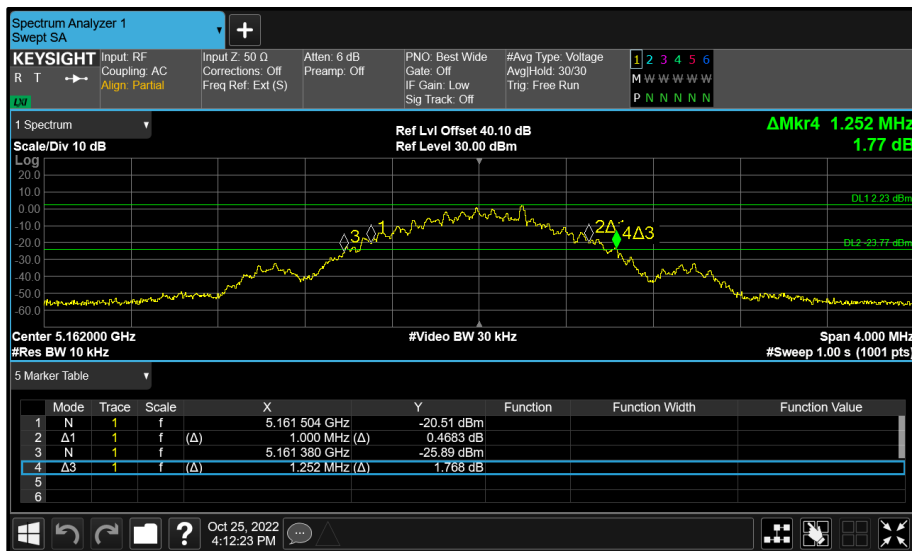


Figure 78 - Core 0 (A) 5162 MHz (CH12) 26 dB and 99% Bandwidth

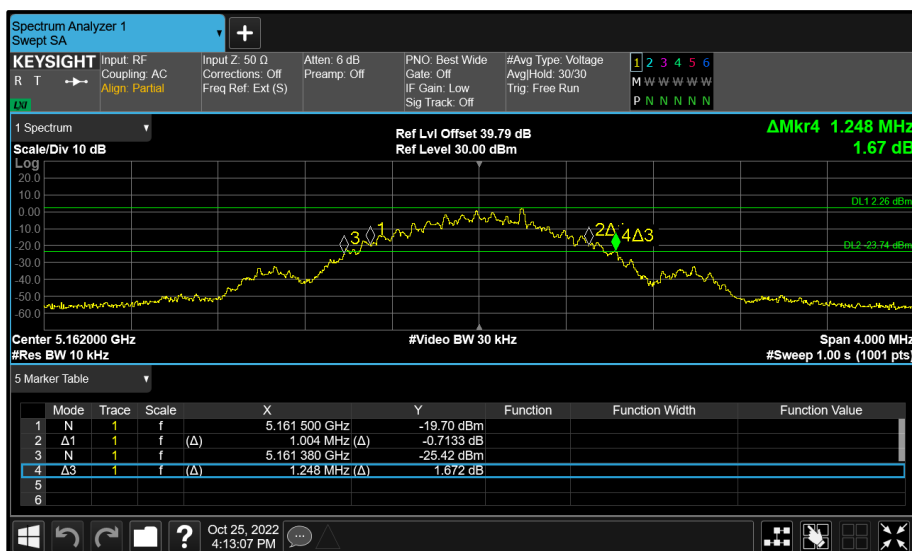


Figure 79 - Core 1 (B) 5162 MHz (CH12) 26 dB and 99% Bandwidth

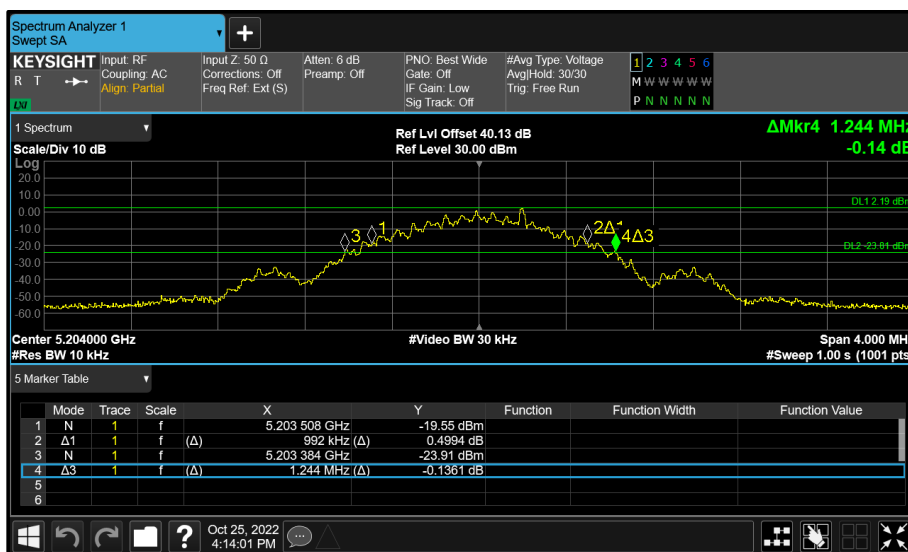


Figure 80 - Core 0 (A) 5204 MHz (CH54) 26 dB and 99% Bandwidth

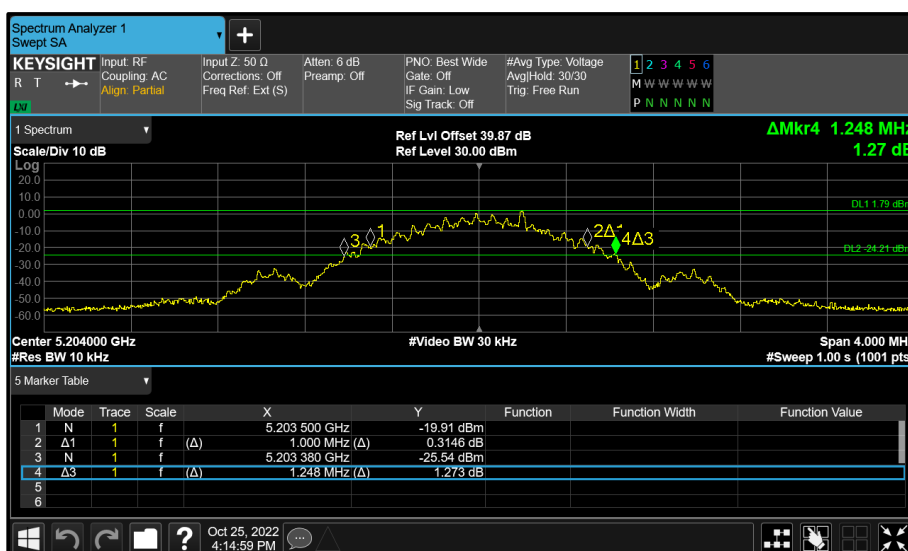


Figure 81 - Core 1 (B) 5204 MHz (CH54) 26 dB and 99% Bandwidth

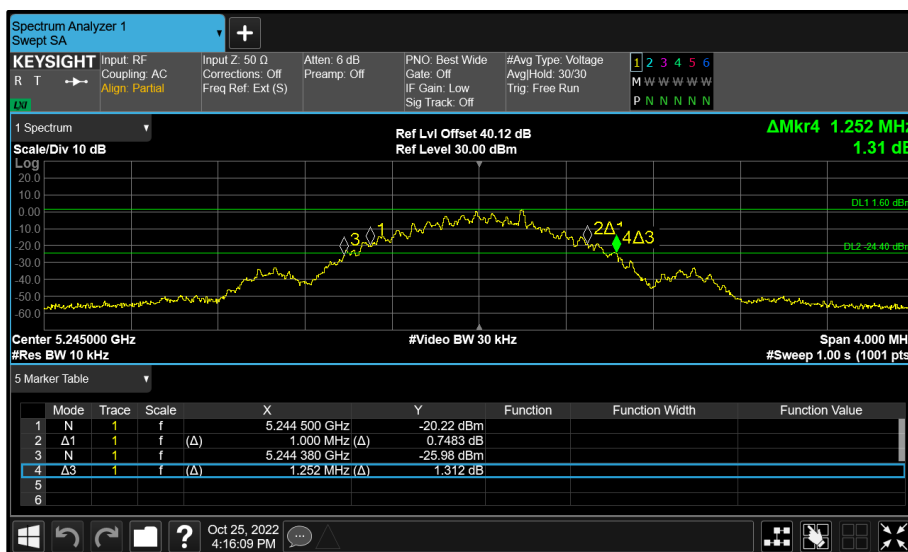


Figure 82 - Core 0 (A) 5245 MHz (CH95) 26 dB and 99% Bandwidth

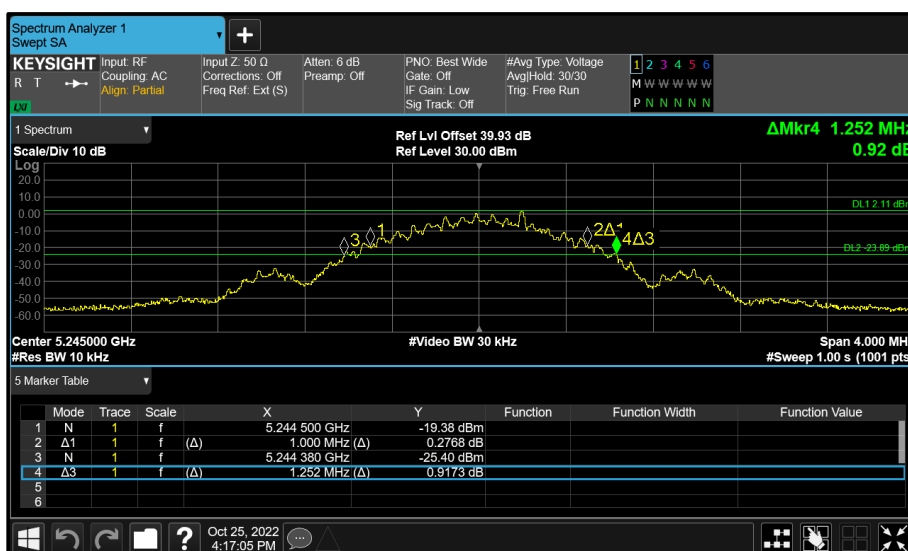


Figure 83 - Core 1 (B) 5245 MHz (CH95) 26 dB and 99% Bandwidth



Test Configuration			
Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause(s):	-	Test Method(s):	C63.10 6.9.3 C63.10 12.5.1
Additional Reference(s):	-		

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

Test Frequency (MHz)	26 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
5162	-	2.776	-	-	≥ 500.0
5204	-	2.768	-	-	≥ 500.0
5245	-	2.776	-	-	≥ 500.0

Table 33 - 26 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
5162	-	2.328	-	-	-
5204	-	2.336	-	-	-
5245	-	2.336	-	-	-

Table 34 - 99% Bandwidth Results

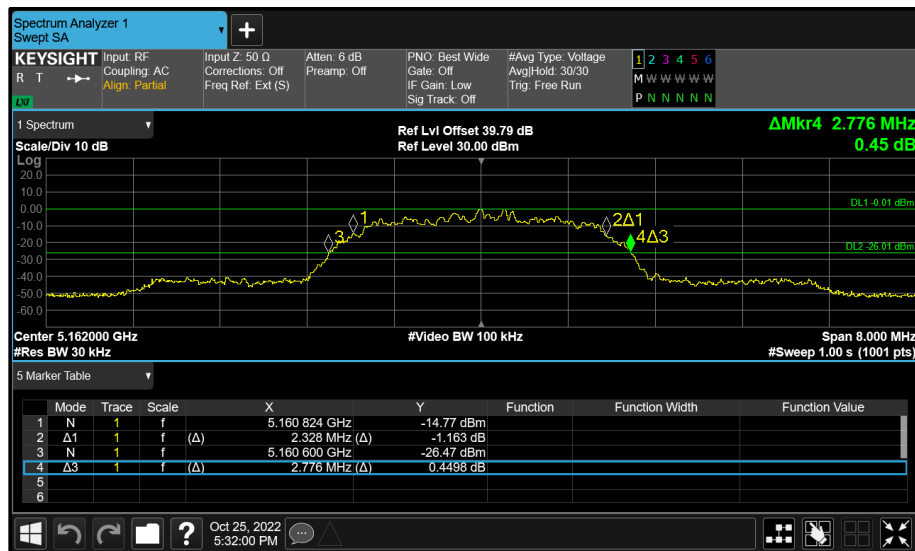


Figure 84 - Core 1 (B) 5162 MHz (CH12) 26 dB and 99% Bandwidth

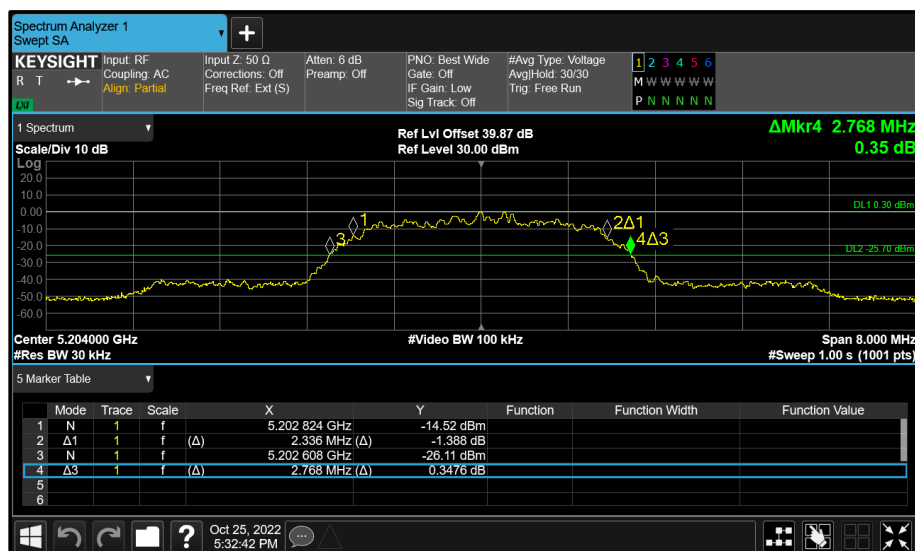


Figure 85 - Core 1 (B) 5204 MHz (CH54) 26 dB and 99% Bandwidth

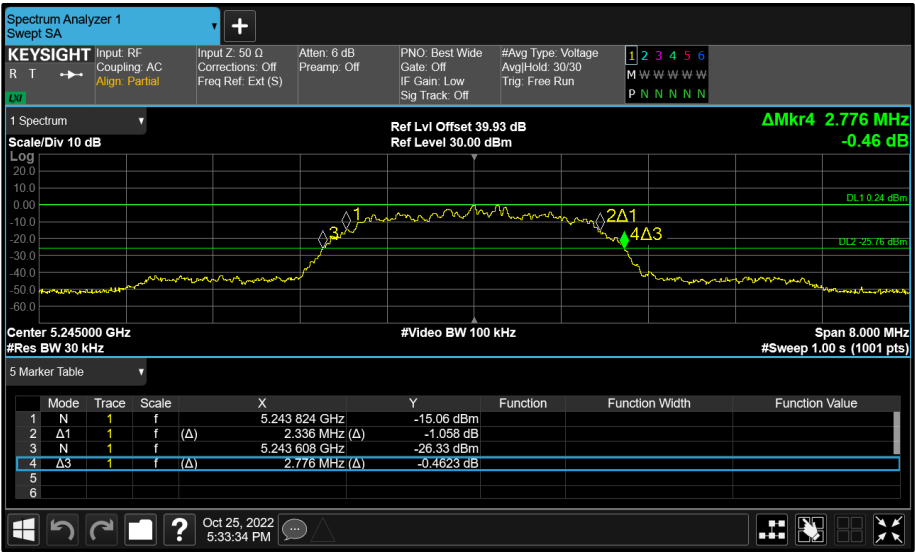


Figure 86 - Core 1 (B) 5245 MHz (CH95) 26 dB and 99% Bandwidth



Test Configuration			
Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause(s):	-	Test Method(s):	C63.10 6.9.3 C63.10 12.5.1
Additional Reference(s):	-		

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

Test Frequency (MHz)	26 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
5162	-	5.310	-	-	≥ 500.0
5204	-	5.325	-	-	≥ 500.0
5245	-	5.310	-	-	≥ 500.0

Table 35 - 26 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
5162	-	4.650	-	-	-
5204	-	4.650	-	-	-
5245	-	4.650	-	-	-

Table 36 - 99% Bandwidth Results

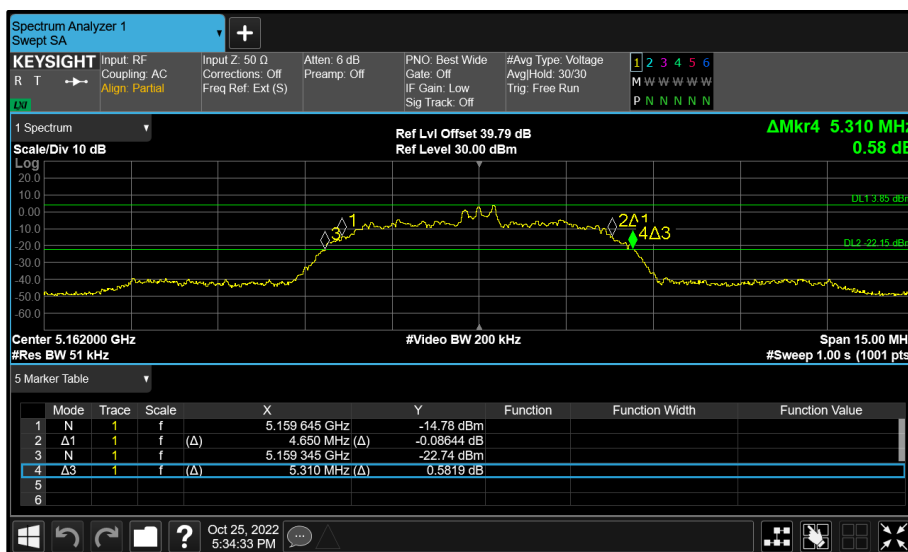


Figure 87 - Core 1 (B) 5162 MHz (CH12) 26 dB and 99% Bandwidth

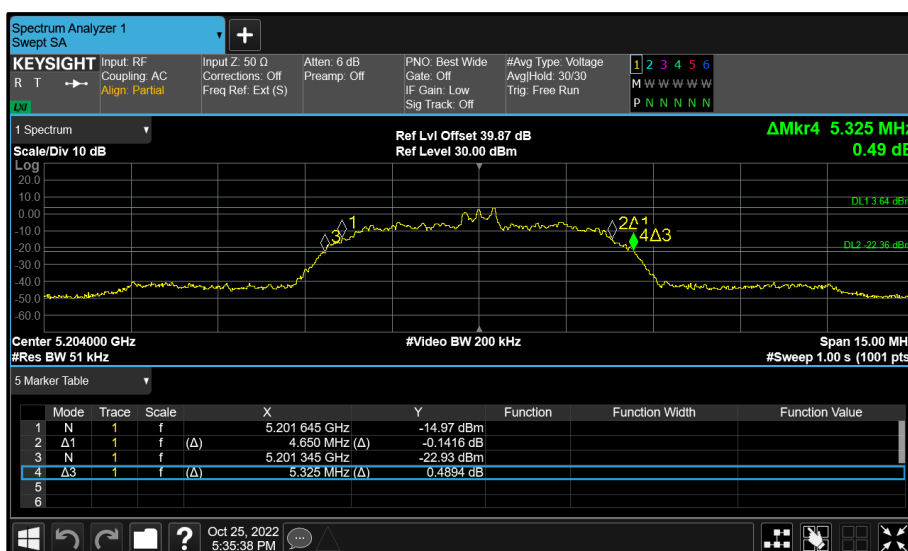


Figure 88 - Core 1 (B) 5204 MHz (CH54) 26 dB and 99% Bandwidth

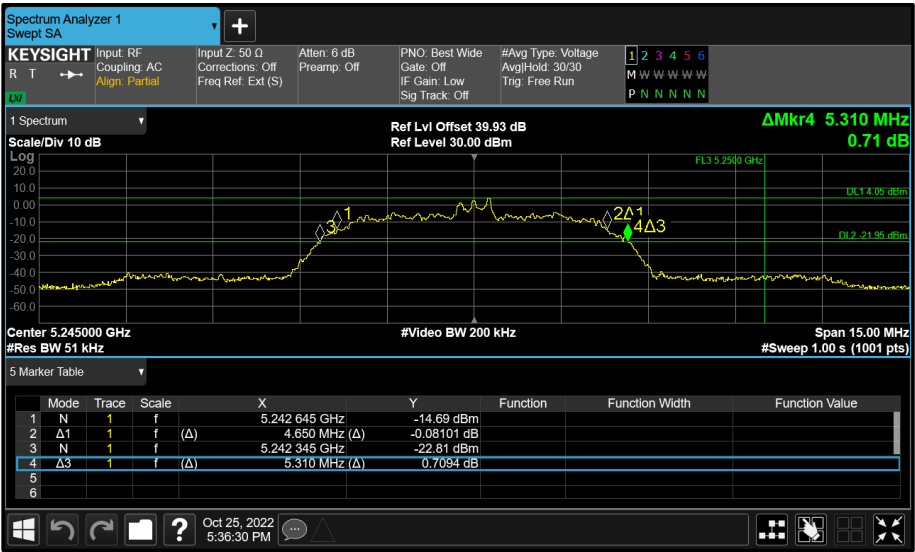


Figure 89 - Core 1 (B) 5245 MHz (CH95) 26 dB and 99% Bandwidth



Test Configuration			
Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause(s):	-	Test Method(s):	C63.10 6.9.3 C63.10 12.5.1
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)	26 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
5162	2.752	2.776	-	-	≥ 500.0
5204	2.744	2.784	-	-	≥ 500.0
5245	2.736	2.776	-	-	≥ 500.0

Table 37 - 26 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
5162	2.320	2.328	-	-	-
5204	2.320	2.328	-	-	-
5245	2.320	2.336	-	-	-

Table 38 - 99% Bandwidth Results

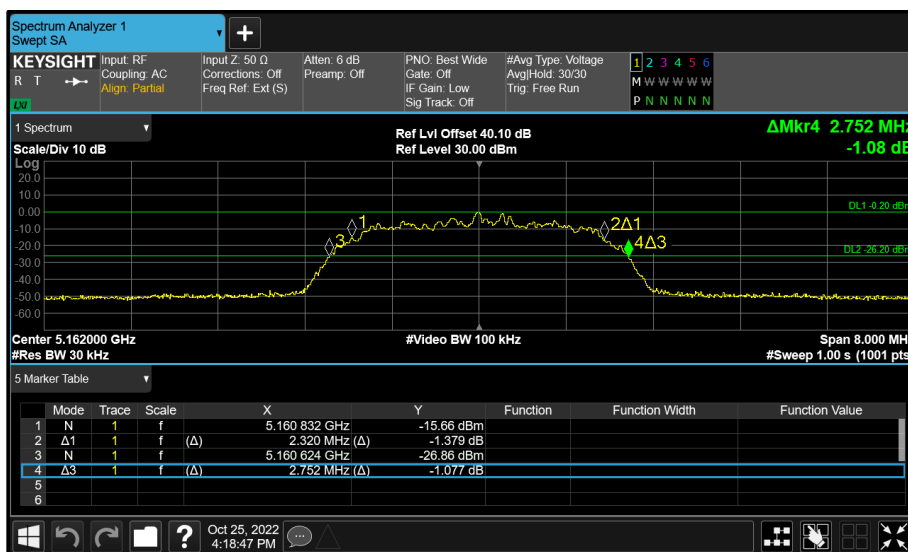


Figure 90 - Core 0 (A) 5162 MHz (CH12) 26 dB and 99% Bandwidth

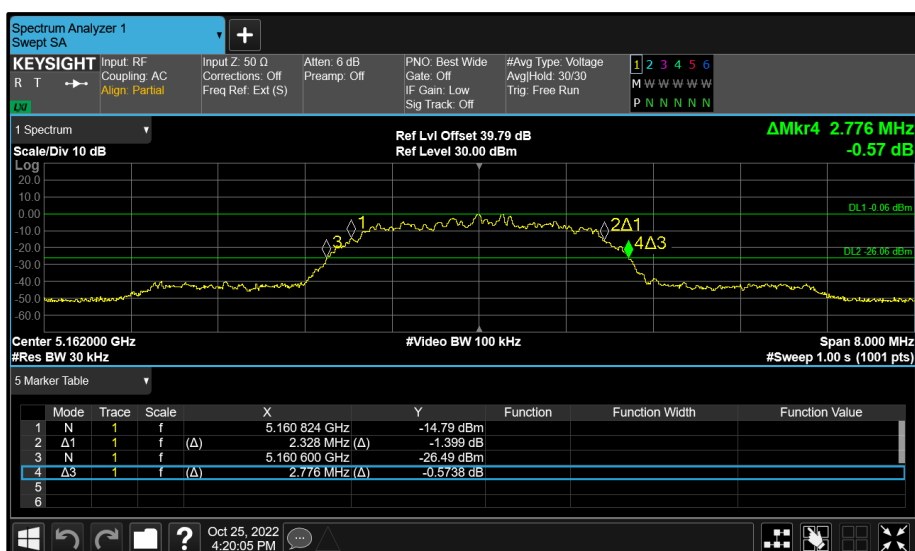


Figure 91 - Core 1 (B) 5162 MHz (CH12) 26 dB and 99% Bandwidth

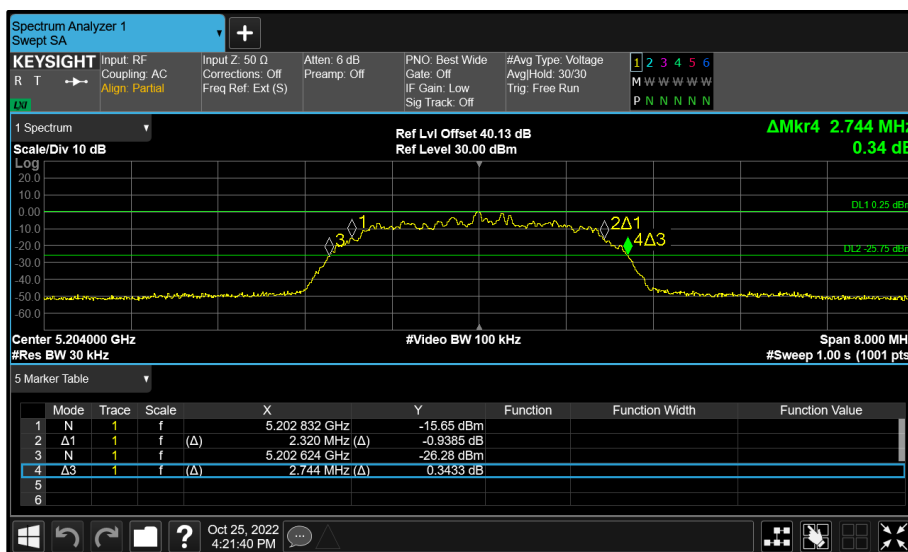


Figure 92 - Core 0 (A) 5204 MHz (CH54) 26 dB and 99% Bandwidth

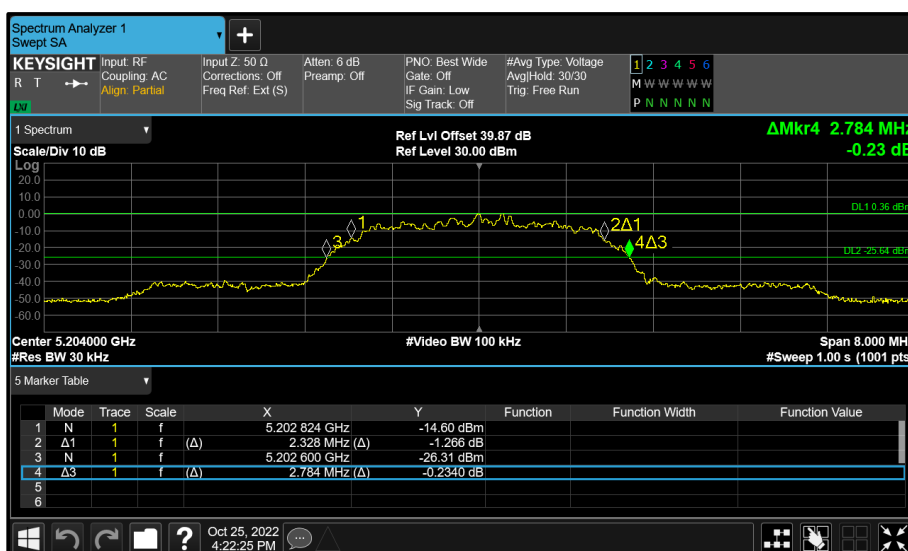


Figure 93 - Core 1 (B) 5204 MHz (CH54) 26 dB and 99% Bandwidth

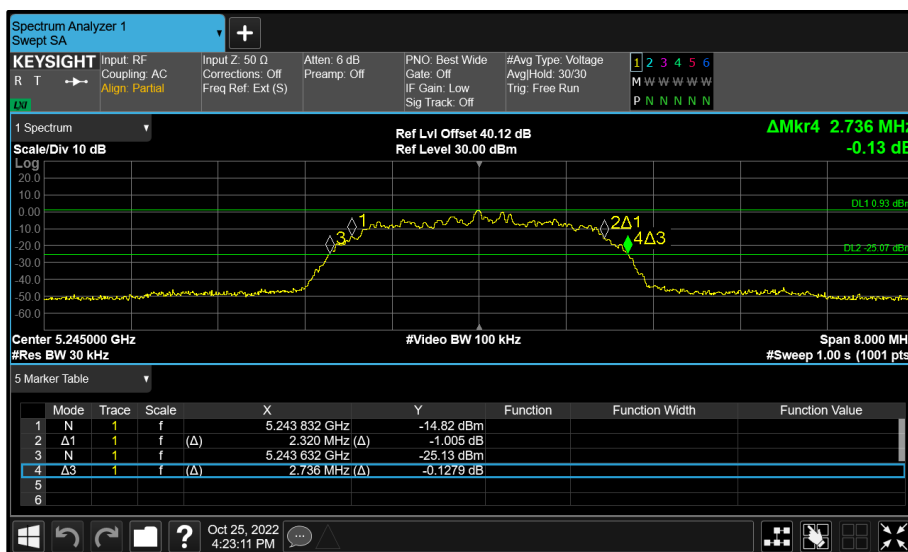


Figure 94 - Core 0 (A) 5245 MHz (CH95) 26 dB and 99% Bandwidth

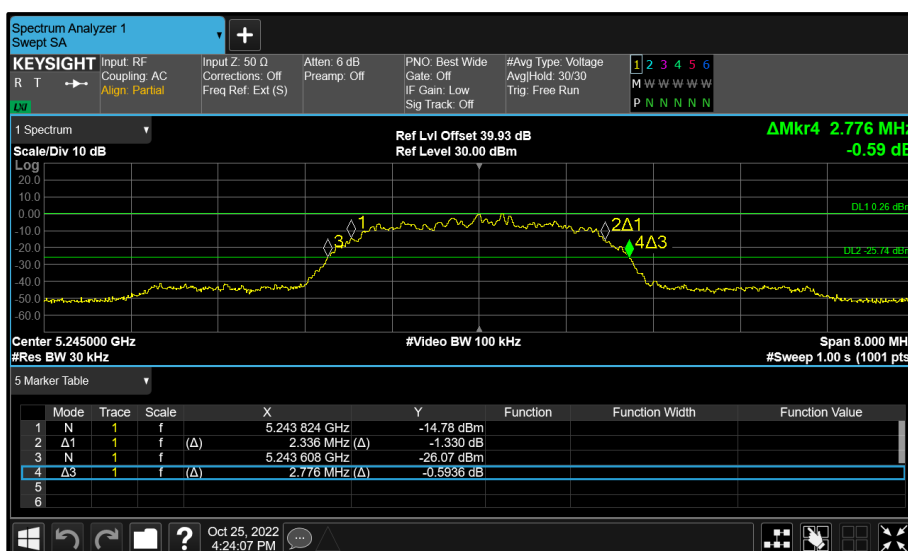


Figure 95 - Core 1 (B) 5245 MHz (CH95) 26 dB and 99% Bandwidth



Test Configuration			
Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause(s):	-	Test Method(s):	C63.10 6.9.3 C63.10 12.5.1
Additional Reference(s):	-		

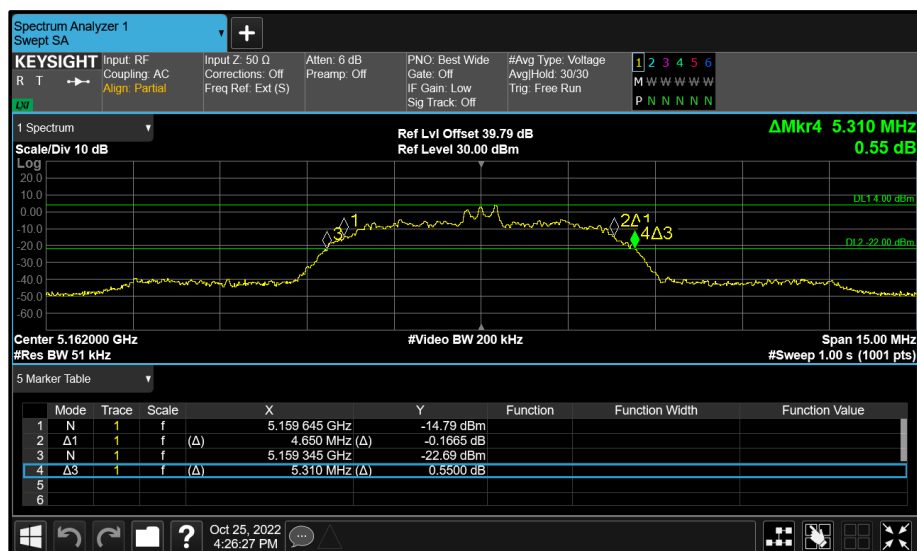
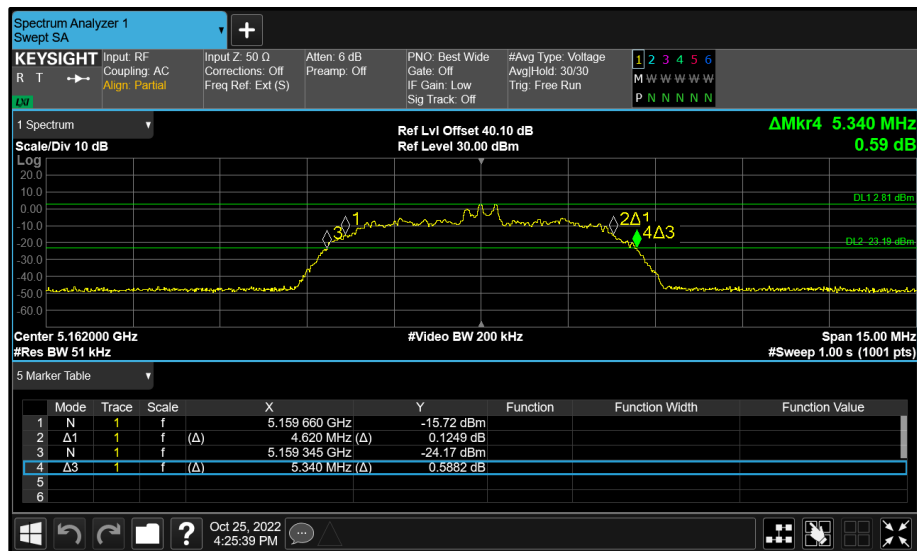
DUT Configuration			
Mode:	iPA $\pi/4$ DQPSK (8-DH5)	Duty Cycle (%):	-
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	-

Test Frequency (MHz)	26 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
5162	5.340	5.310	-	-	≥ 500.0
5204	5.310	5.325	-	-	≥ 500.0
5245	5.340	5.325	-	-	≥ 500.0

Table 39 - 26 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
5162	4.620	4.650	-	-	-
5204	4.620	4.650	-	-	-
5245	4.620	4.650	-	-	-

Table 40 - 99% Bandwidth Results



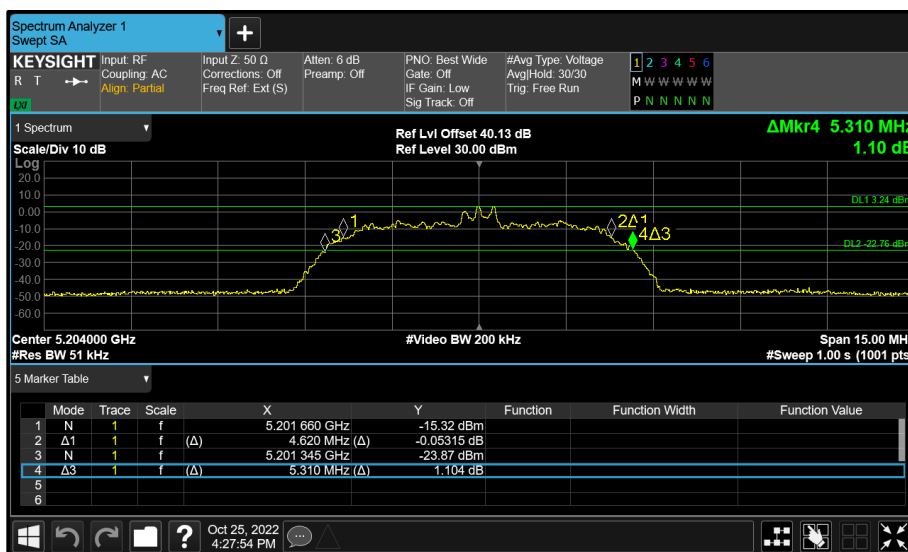


Figure 98 - Core 0 (A) 5204 MHz (CH54) 26 dB and 99% Bandwidth

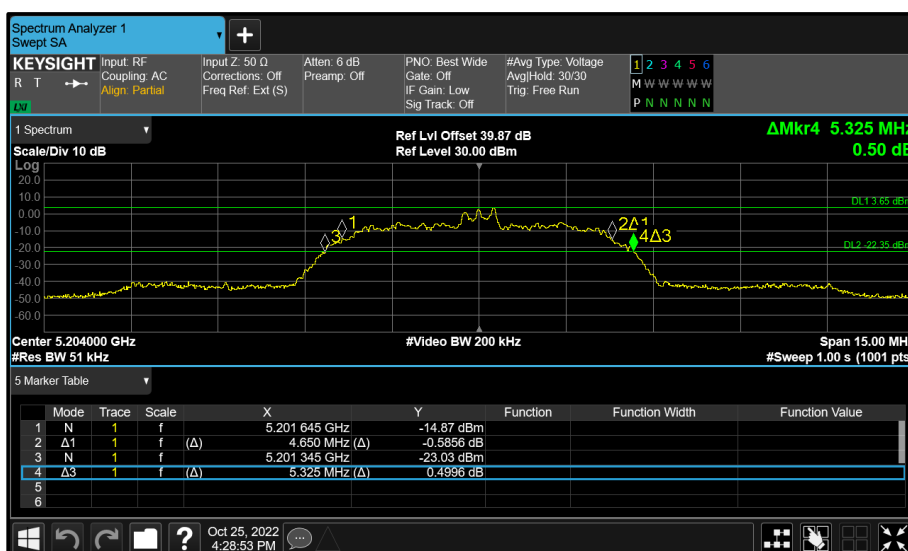


Figure 99 - Core 1 (B) 5204 MHz (CH54) 26 dB and 99% Bandwidth

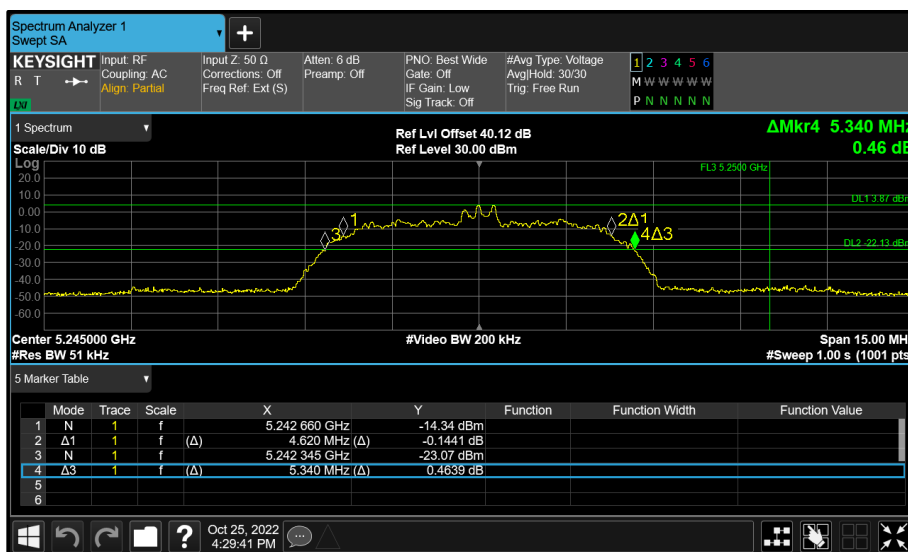


Figure 100 - Core 0 (A) 5245 MHz (CH95) 26 dB and 99% Bandwidth

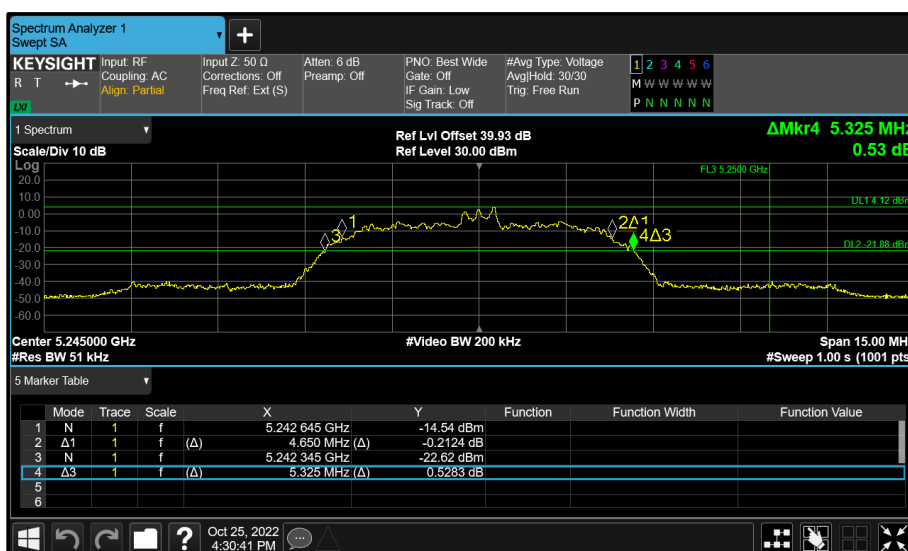


Figure 101 - Core 1 (B) 5245 MHz (CH95) 26 dB and 99% Bandwidth



Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407(e) RSS-247 6.2.4.1	Test Method(s):	C63.10 6.9.3 789033 D02 v02r01 II.C.2.
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA GFSK (DH5)	Duty Cycle (%):	-
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	B (Core 1)	Peak Antenna Gain (dBi):	-

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
5733	-	0.568	-	-	≥500.0
5789	-	0.564	-	-	≥500.0
5844	-	0.572	-	-	≥500.0

Table 41 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
5733	-	0.988	-	-	-
5789	-	0.988	-	-	-
5844	-	0.988	-	-	-

Table 42 - 99% Bandwidth Results

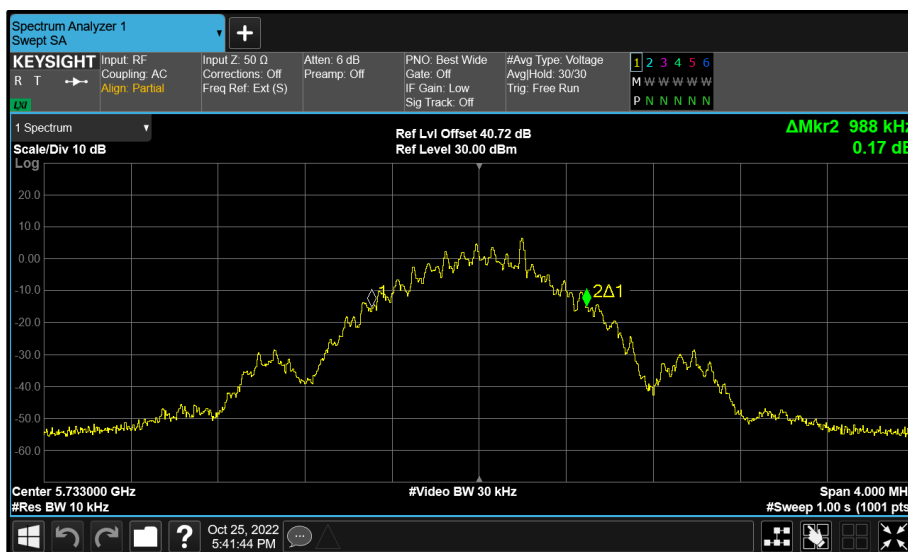


Figure 102 - Core 1 (B) 5733 MHz (CH8) 99% Bandwidth

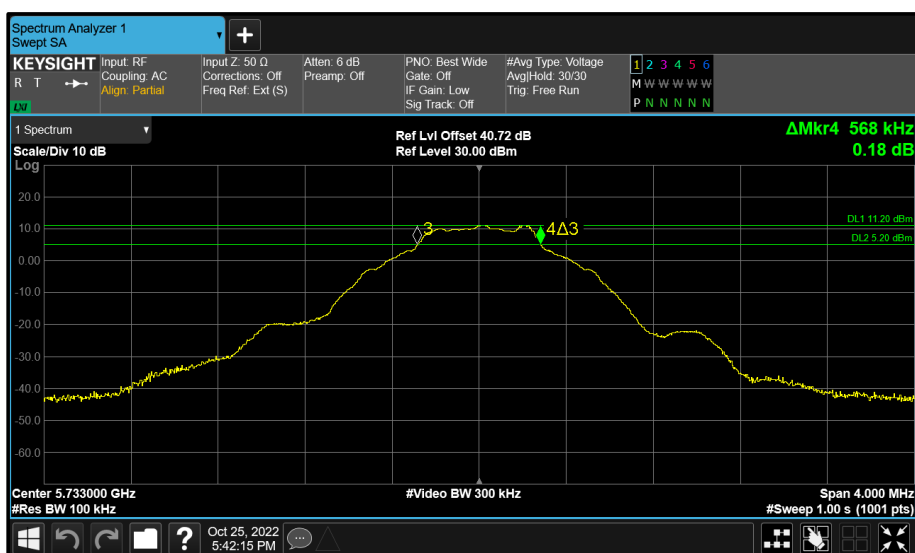


Figure 103 - Core 1 (B) 5733 MHz (CH8) 6 dB Bandwidth

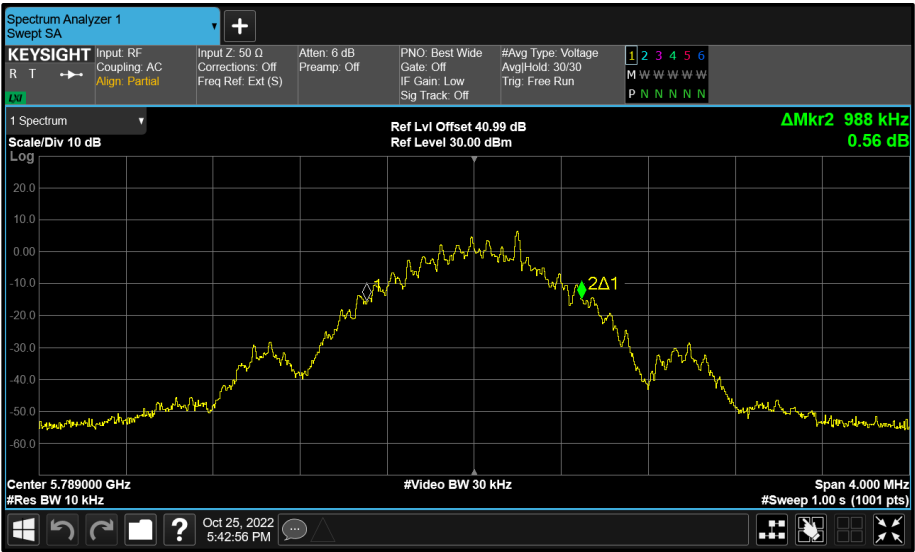


Figure 104 - Core 1 (B) 5789 MHz (CH64) 99% Bandwidth

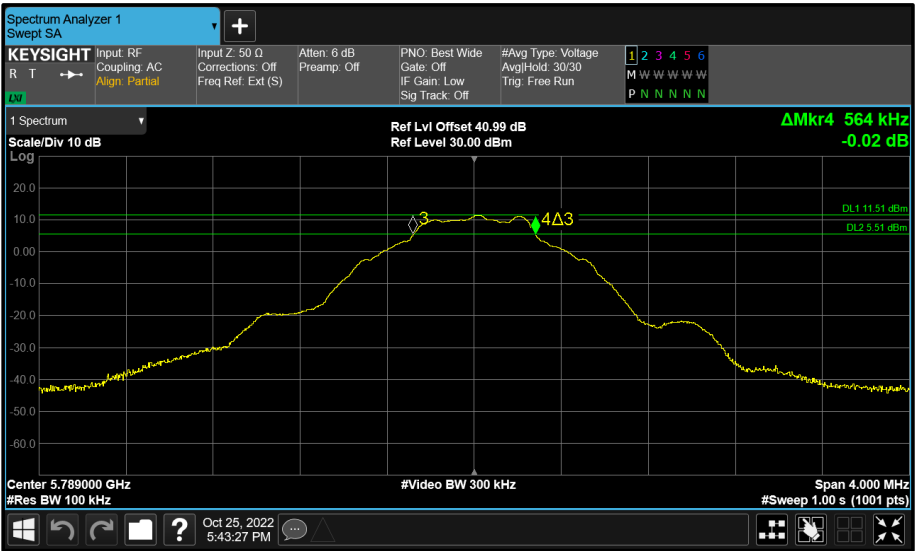


Figure 105 - Core 1 (B) 5789 MHz (CH64) 6 dB Bandwidth

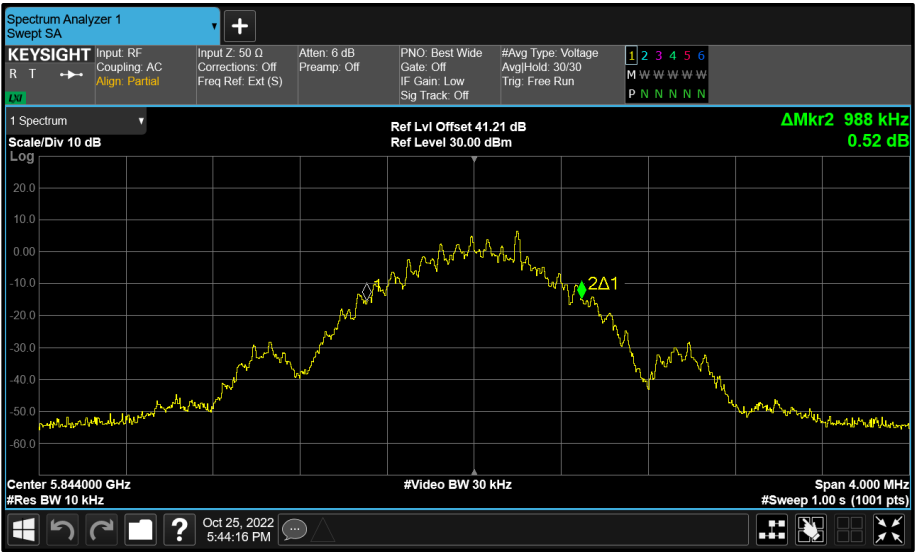


Figure 106 - Core 1 (B) 5844 MHz (CH119) 99% Bandwidth

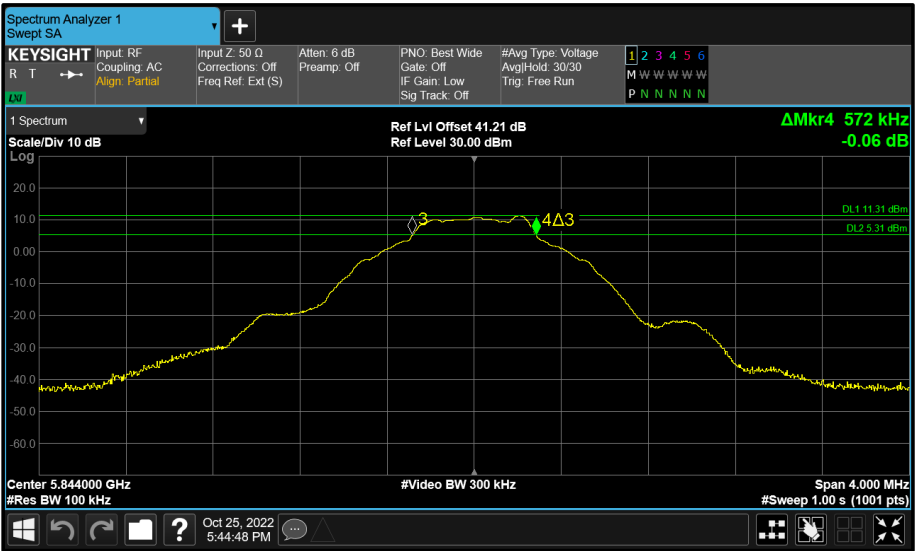


Figure 107 - Core 1 (B) 5844 MHz (CH119) 6 dB Bandwidth



Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407(e) RSS-247 6.2.4.1	Test Method(s):	C63.10 6.9.3 789033 D02 v02r01 II.C.2.
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA GFSK (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	
5733	0.572	0.560	-	-	≥500.0
5789	0.568	0.564	-	-	≥500.0
5844	0.568	0.572	-	-	≥500.0

Table 43 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
5733	0.988	0.992	-	-	-
5789	0.988	0.988	-	-	-
5844	0.988	0.988	-	-	-

Table 44 - 99% Bandwidth Results

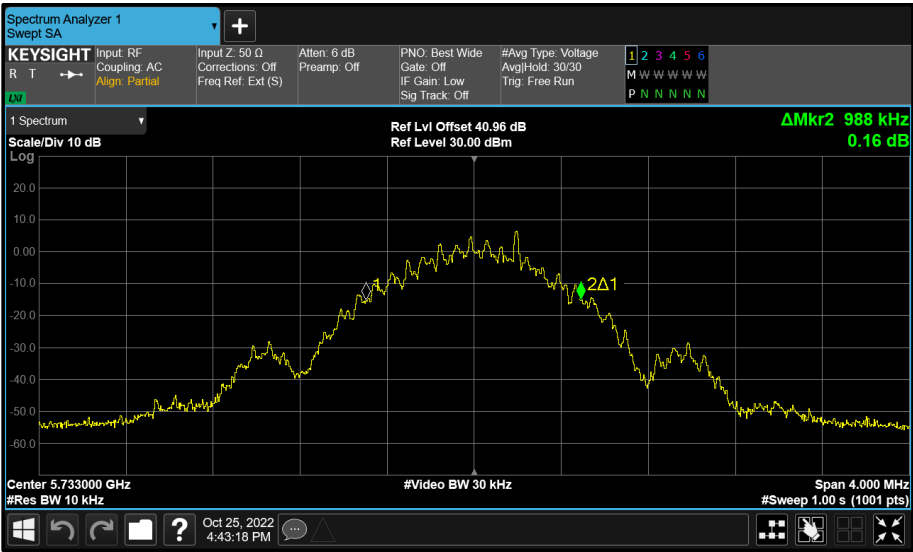


Figure 108 - Core 0 (A) 5733 MHz (CH8) 99% Bandwidth

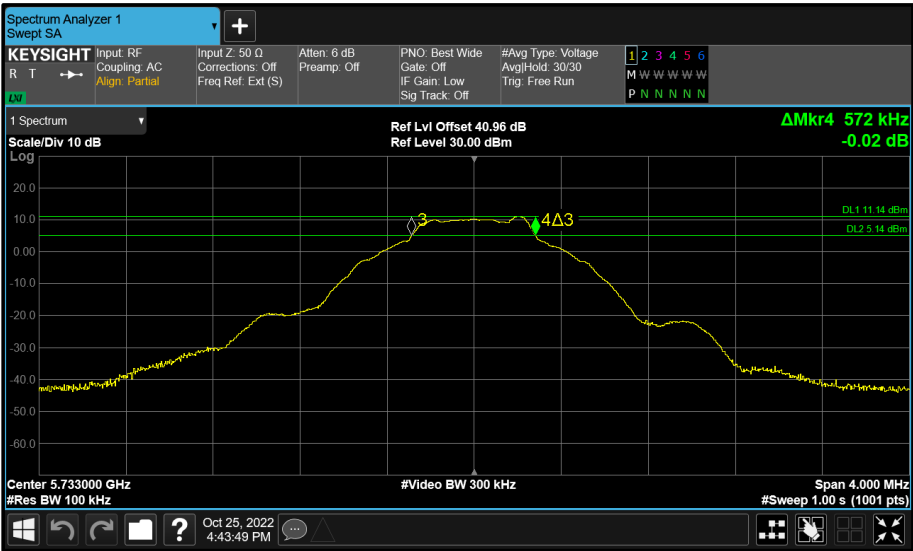


Figure 109 - Core 0 (A) 5733 MHz (CH8) 6 dB Bandwidth

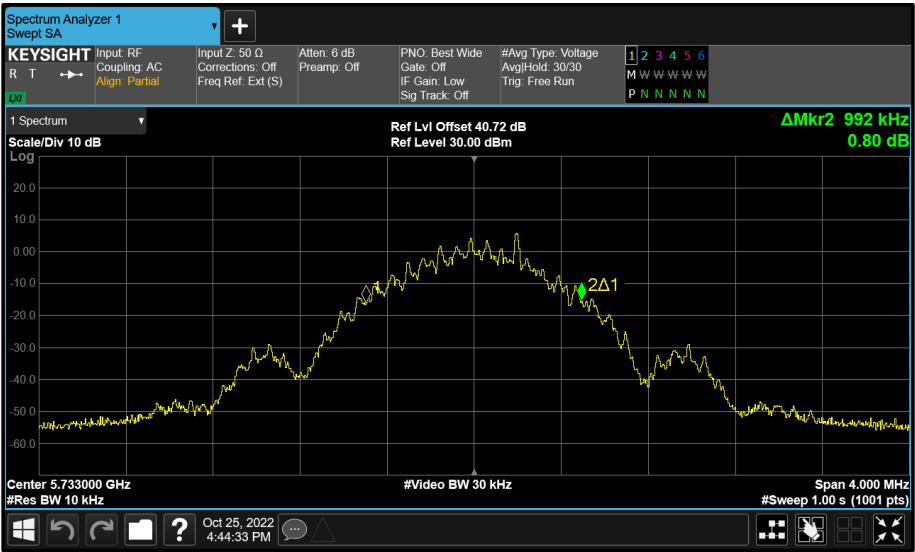


Figure 110 - Core 1 (B) 5733 MHz (CH8) 99% Bandwidth

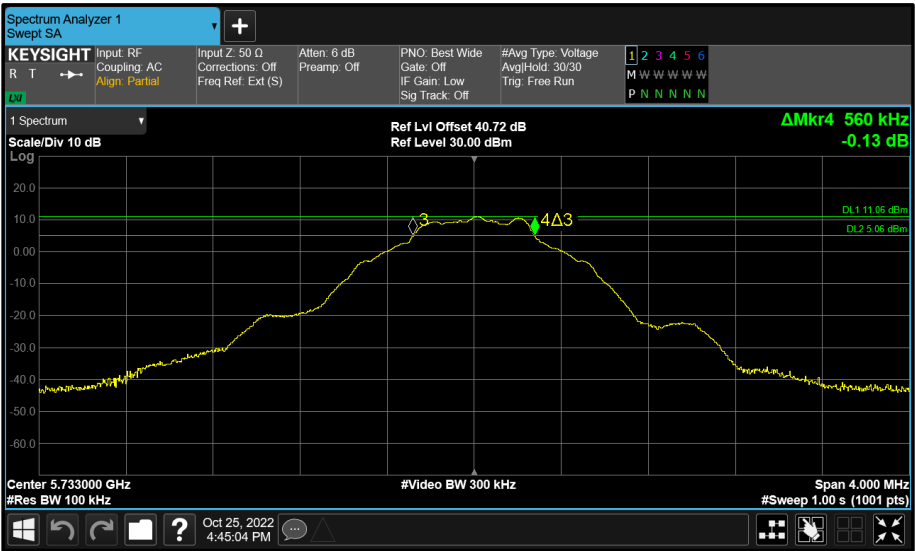


Figure 111 - Core 1 (B) 5733 MHz (CH8) 6 dB Bandwidth

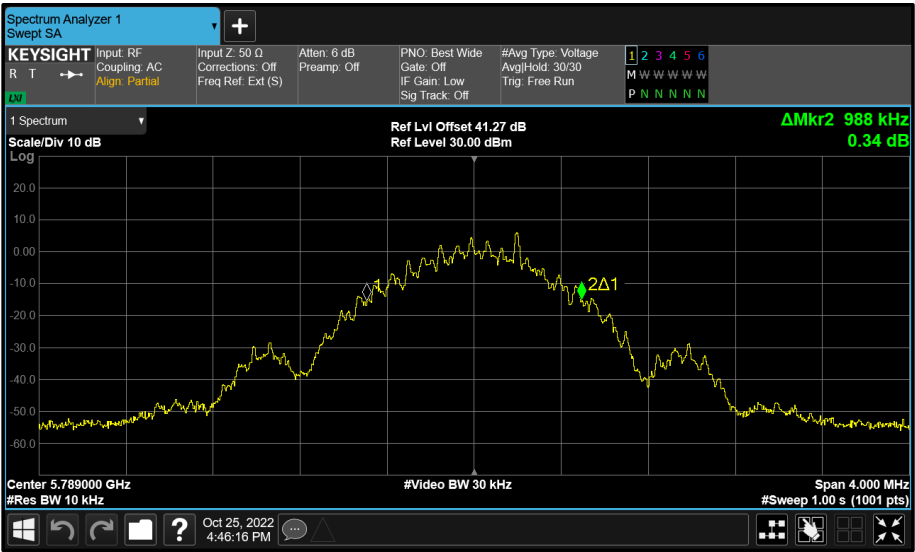


Figure 112 - Core 0 (A) 5789 MHz (CH64) 99% Bandwidth

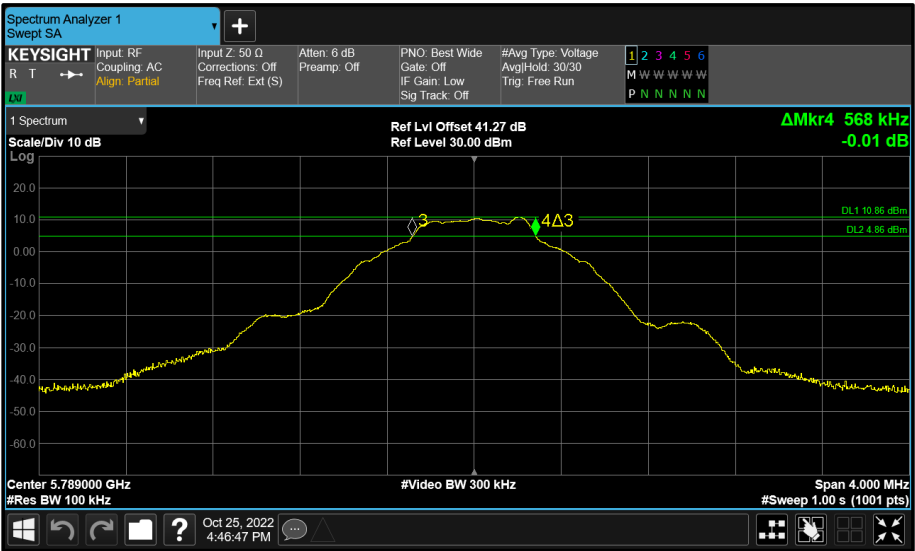


Figure 113 - Core 0 (A) 5789 MHz (CH64) 6 dB Bandwidth

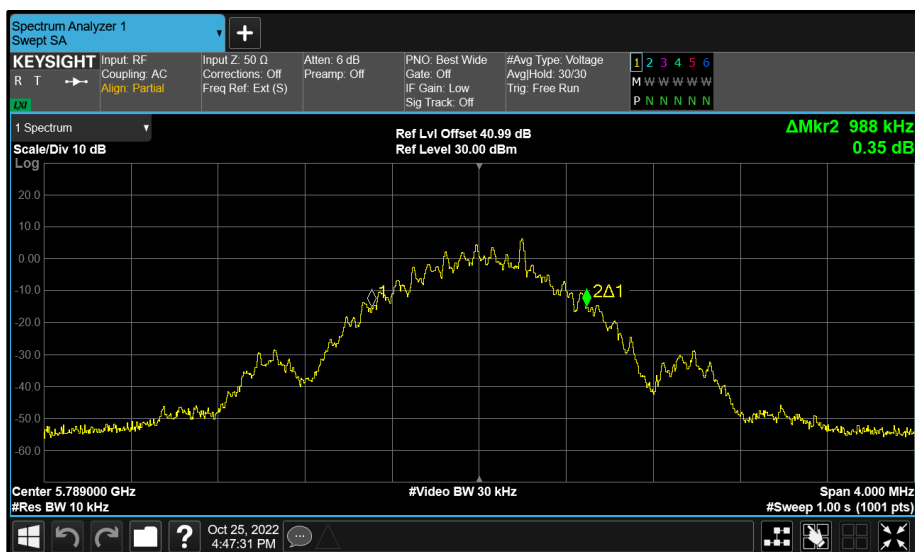


Figure 114 - Core 1 (B) 5789 MHz (CH64) 99% Bandwidth

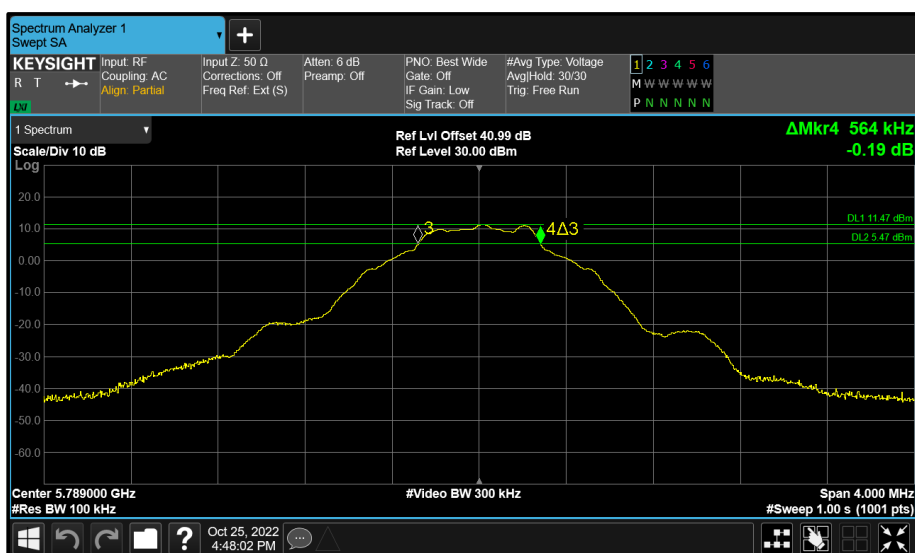


Figure 115 - Core 1 (B) 5789 MHz (CH64) 6 dB Bandwidth

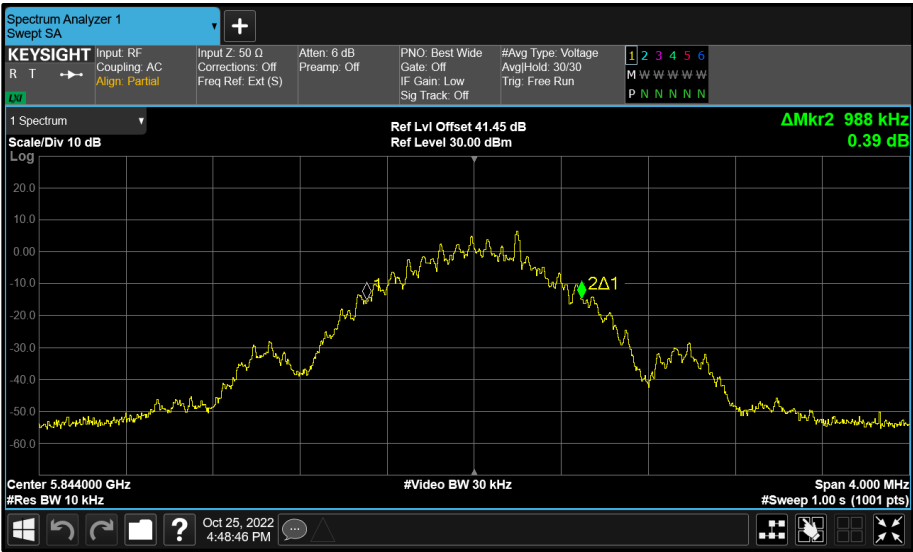


Figure 116 - Core 0 (A) 5844 MHz (CH119) 99% Bandwidth

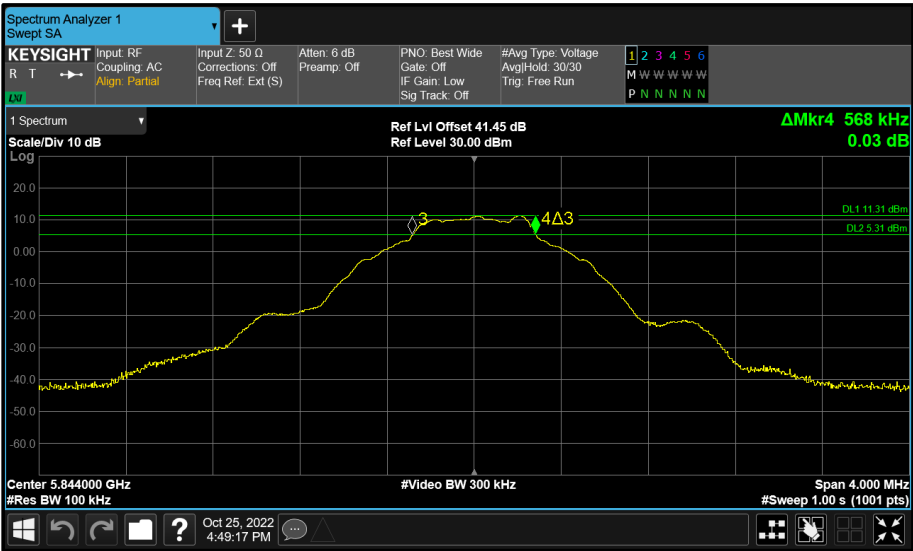


Figure 117 - Core 0 (A) 5844 MHz (CH119) 6 dB Bandwidth

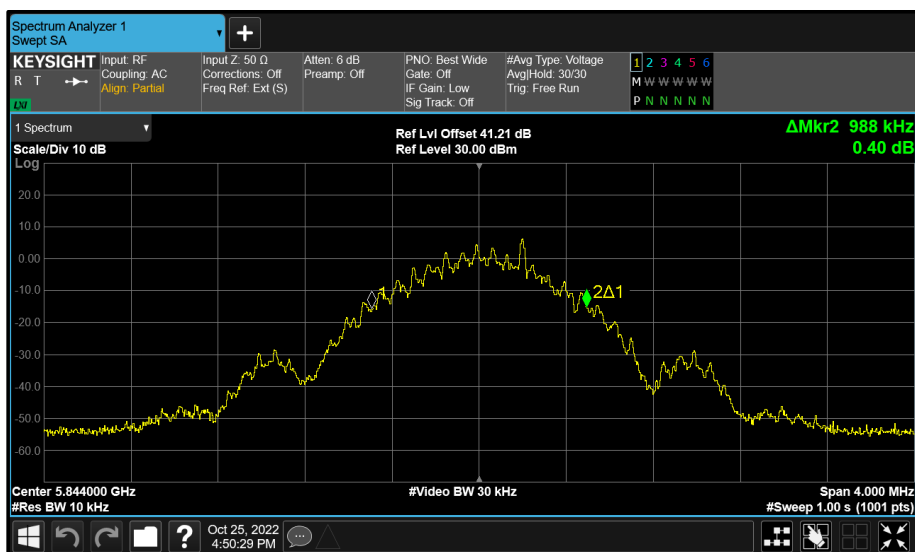


Figure 118 - Core 1 (B) 5844 MHz (CH119) 99% Bandwidth

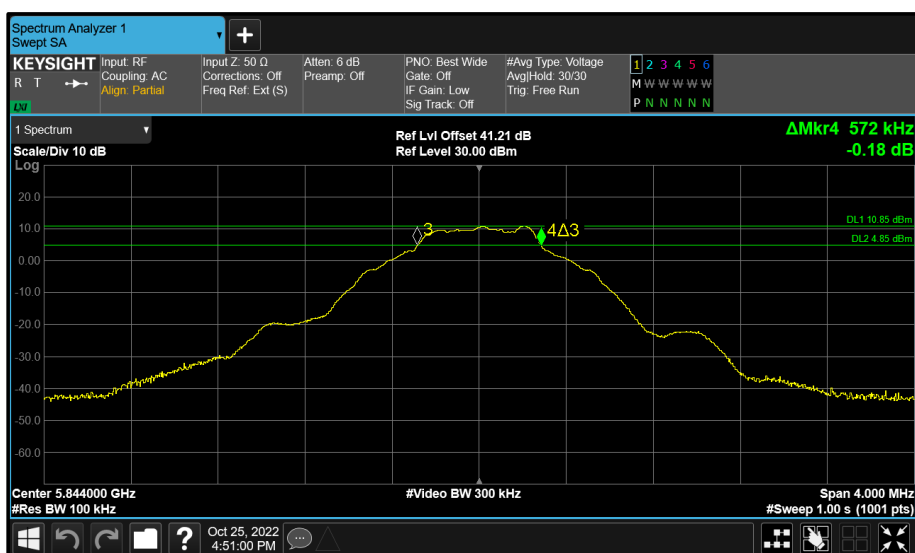


Figure 119 - Core 1 (B) 5844 MHz (CH119) 6 dB Bandwidth



Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407(e) RSS-247 6.2.4.1	Test Method(s):	C63.10 6.9.3 789033 D02 v02r01 II.C.2.
Additional Reference(s):	-		

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

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
5733	-	1.568	-	-	≥ 500.0
5789	-	1.568	-	-	≥ 500.0
5844	-	1.592	-	-	≥ 500.0

Table 45 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
5733	-	2.320	-	-	-
5789	-	2.320	-	-	-
5844	-	2.320	-	-	-

Table 46 - 99% Bandwidth Results

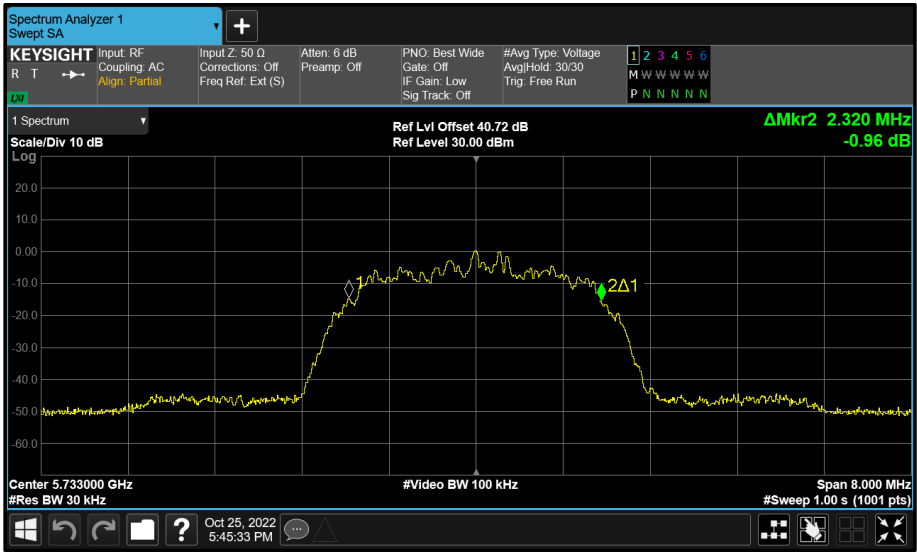


Figure 120 - Core 1 (B) 5733 MHz (CH8) 99% Bandwidth

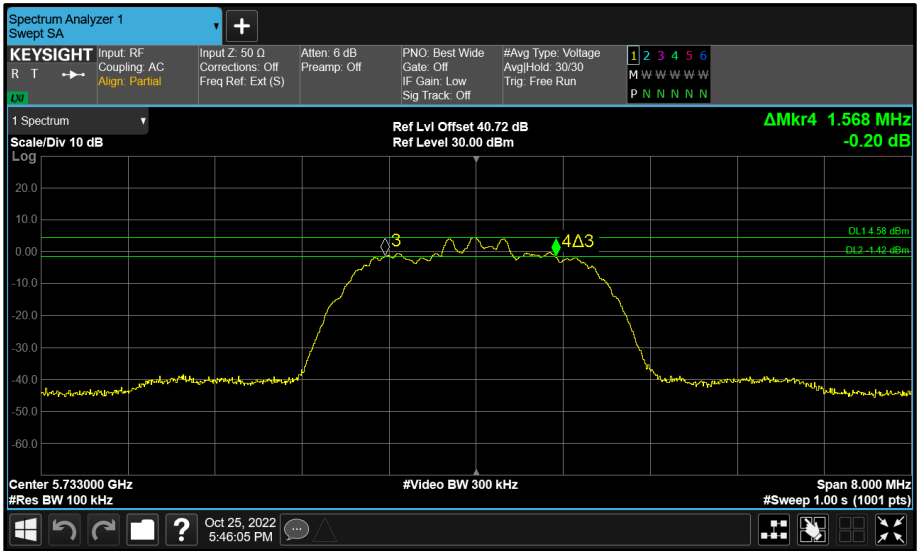


Figure 121 - Core 1 (B) 5733 MHz (CH8) 6 dB Bandwidth

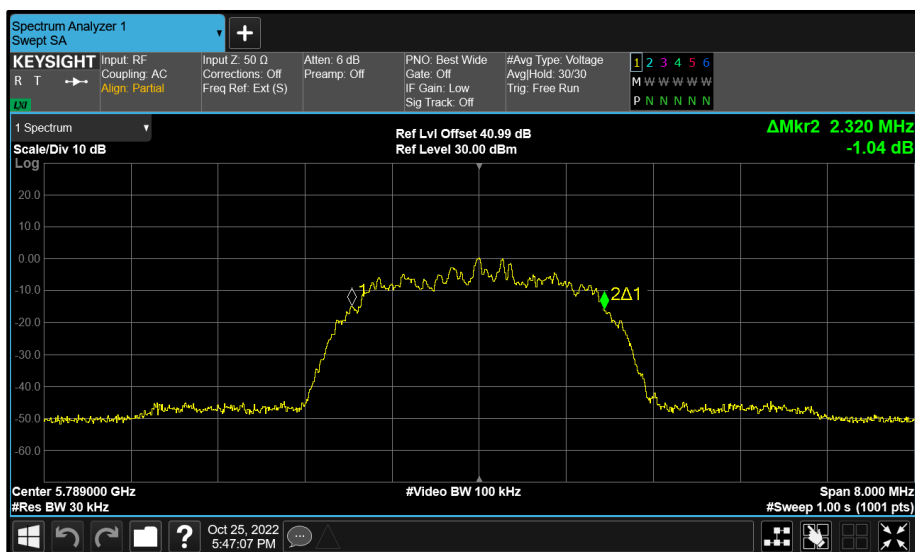


Figure 122 - Core 1 (B) 5789 MHz (CH64) 99% Bandwidth

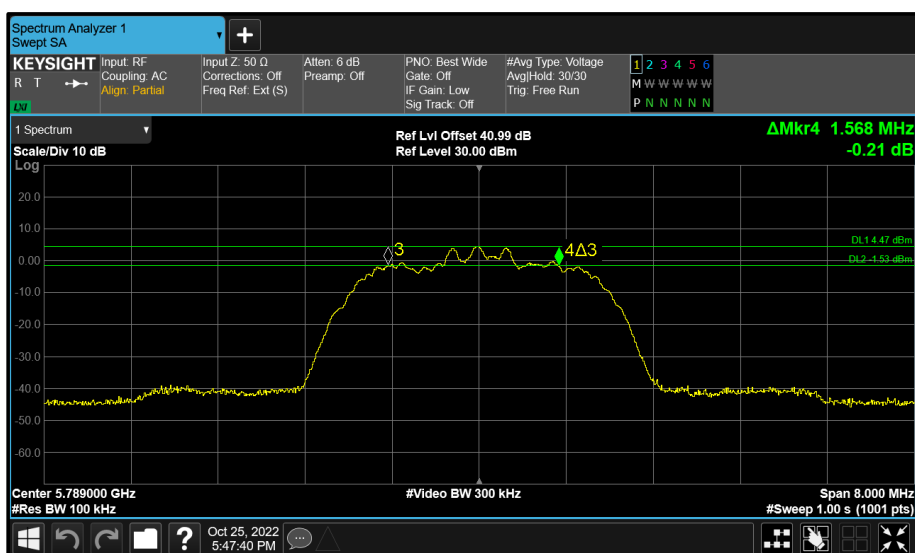


Figure 123 - Core 1 (B) 5789 MHz (CH64) 6 dB Bandwidth

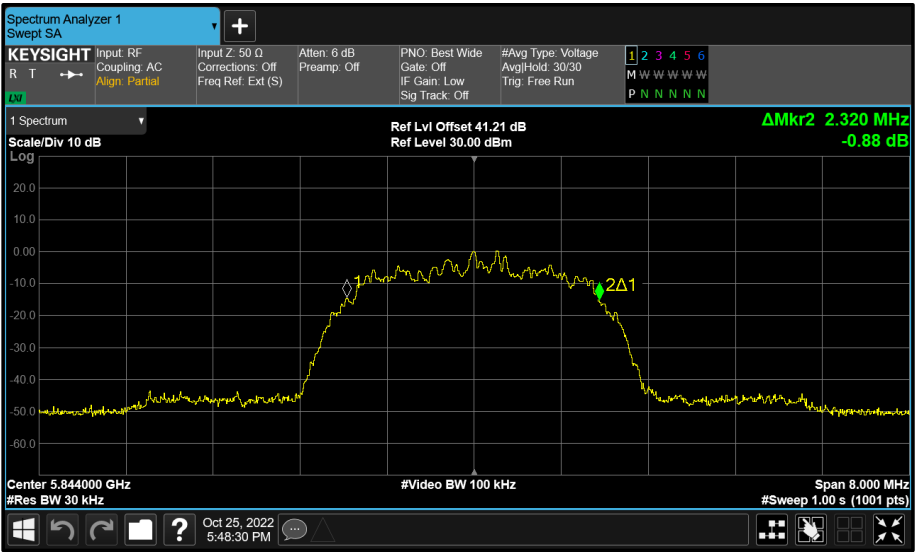


Figure 124 - Core 1 (B) 5844 MHz (CH119) 99% Bandwidth

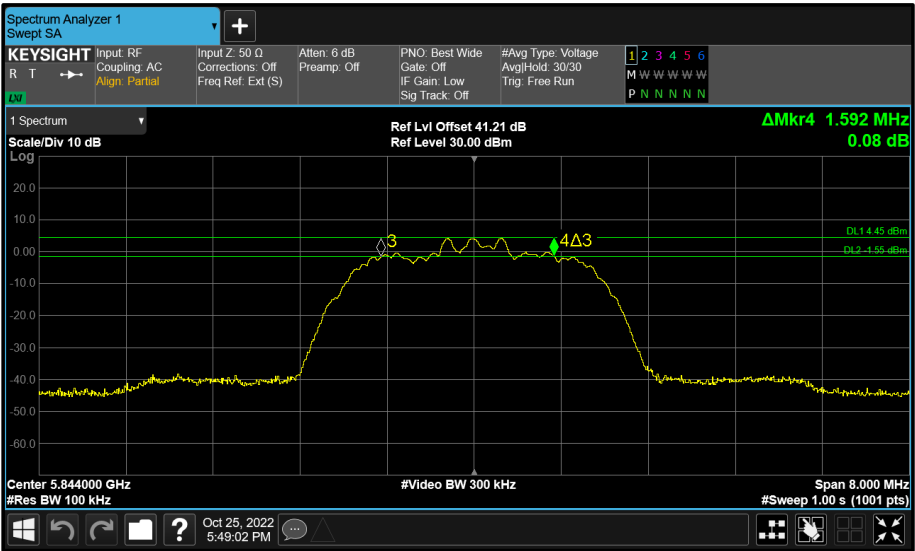


Figure 125 - Core 1 (B) 5844 MHz (CH119) 6 dB Bandwidth



Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407(e) RSS-247 6.2.4.1	Test Method(s):	C63.10 6.9.3 789033 D02 v02r01 II.C.2.
Additional Reference(s):	-		

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

Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
5733	-	0.675	-	-	≥ 500.0
5789	-	0.675	-	-	≥ 500.0
5844	-	0.930	-	-	≥ 500.0

Table 47 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
5733	-	4.635	-	-	-
5789	-	4.635	-	-	-
5844	-	4.635	-	-	-

Table 48 - 99% Bandwidth Results

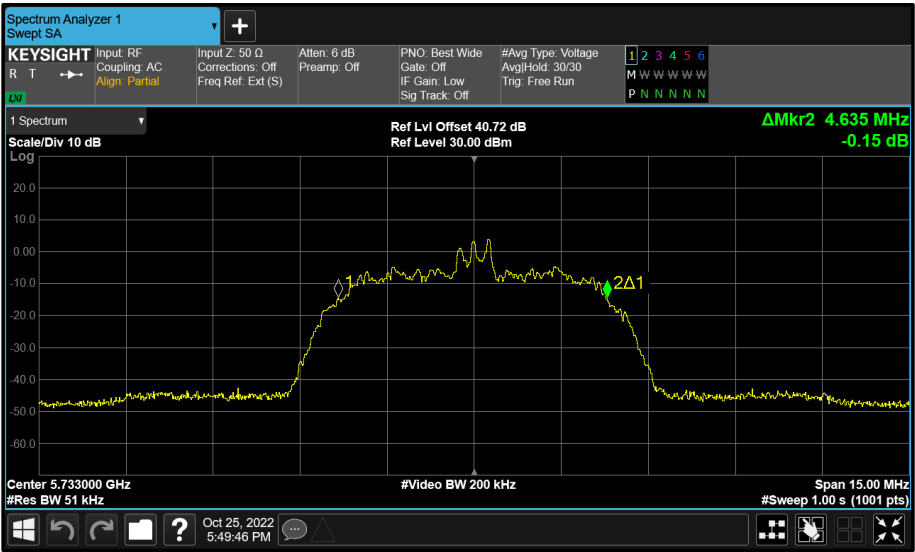


Figure 126 - Core 1 (B) 5733 MHz (CH8) 99% Bandwidth

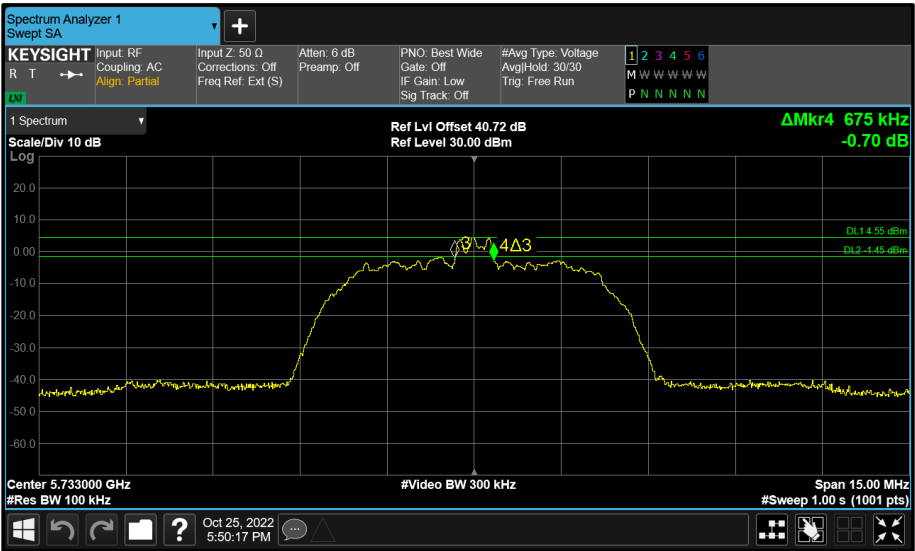


Figure 127 - Core 1 (B) 5733 MHz (CH8) 6 dB Bandwidth

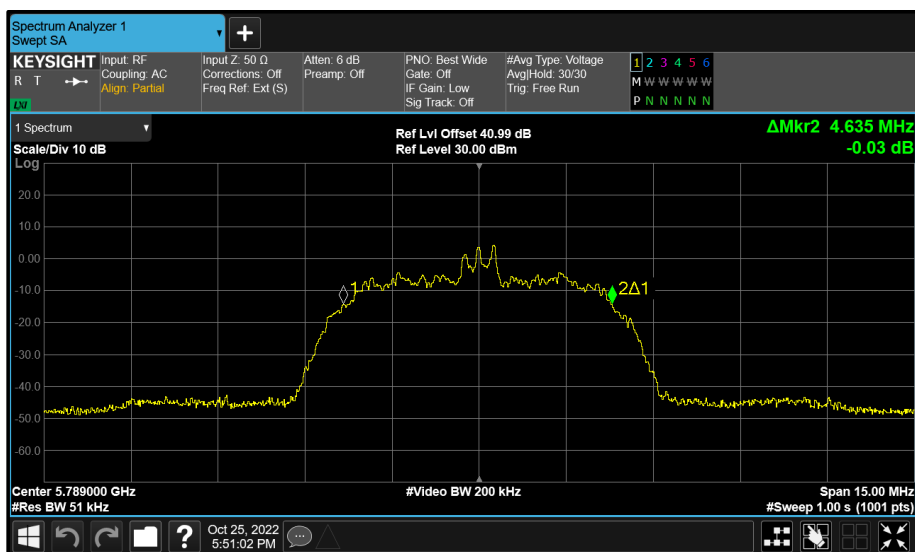


Figure 128 - Core 1 (B) 5789 MHz (CH64) 99% Bandwidth

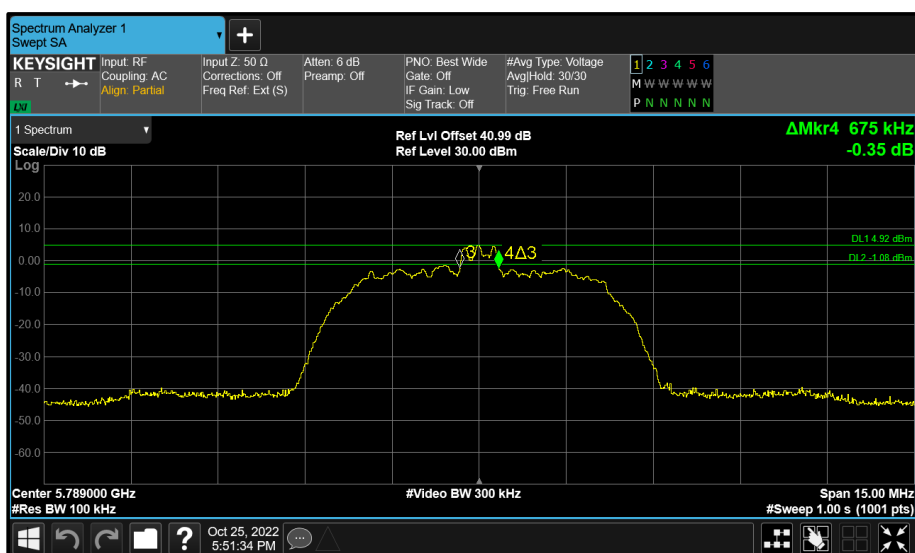


Figure 129 - Core 1 (B) 5789 MHz (CH64) 6 dB Bandwidth

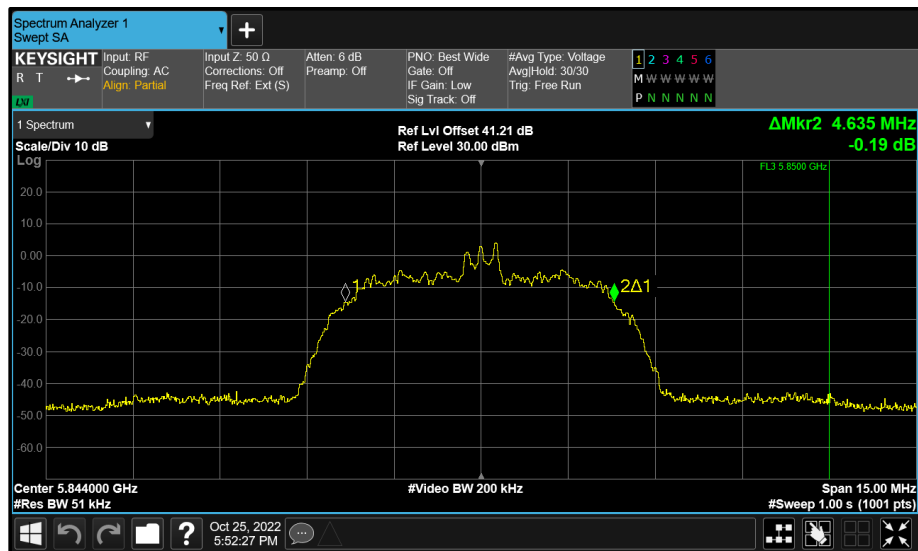


Figure 130 - Core 1 (B) 5844 MHz (CH119) 99% Bandwidth

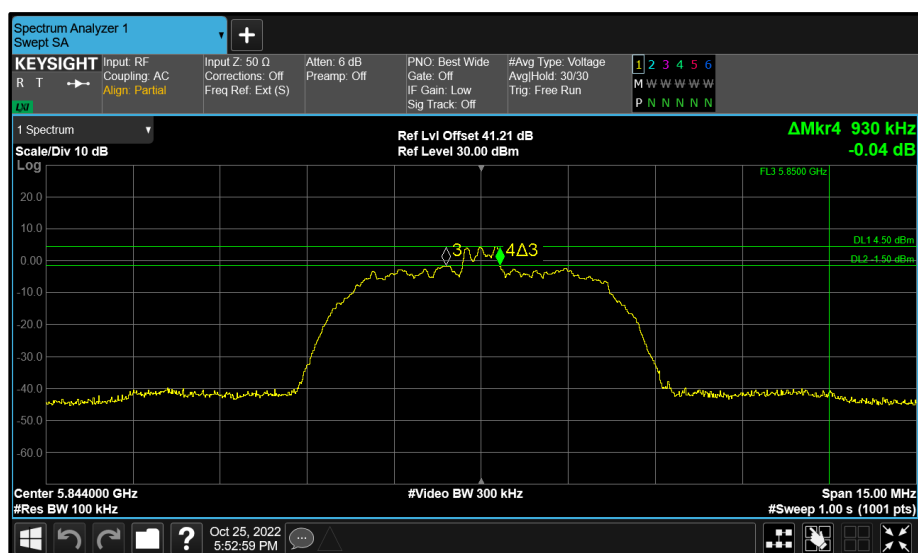


Figure 131 - Core 1 (B) 5844 MHz (CH119) 6 dB Bandwidth



Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407(e) RSS-247 6.2.4.1	Test Method(s):	C63.10 6.9.3 789033 D02 v02r01 II.C.2.
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	
5733	1.872	1.456	-	-	≥ 500.0
5789	1.688	1.544	-	-	≥ 500.0
5844	1.592	1.584	-	-	≥ 500.0

Table 49 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
5733	2.336	2.320	-	-	-
5789	2.320	2.320	-	-	-
5844	2.320	2.320	-	-	-

Table 50 - 99% Bandwidth Results

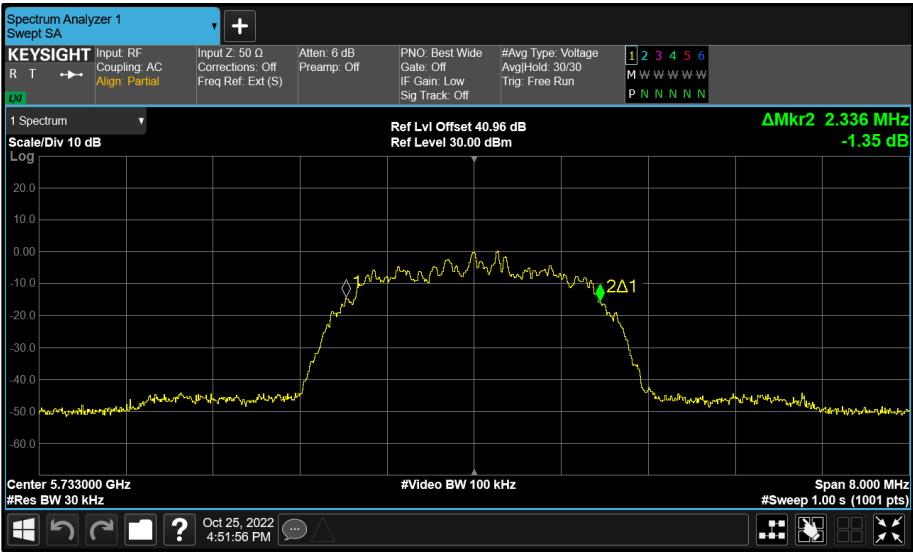


Figure 132 - Core 0 (A) 5733 MHz (CH8) 99% Bandwidth

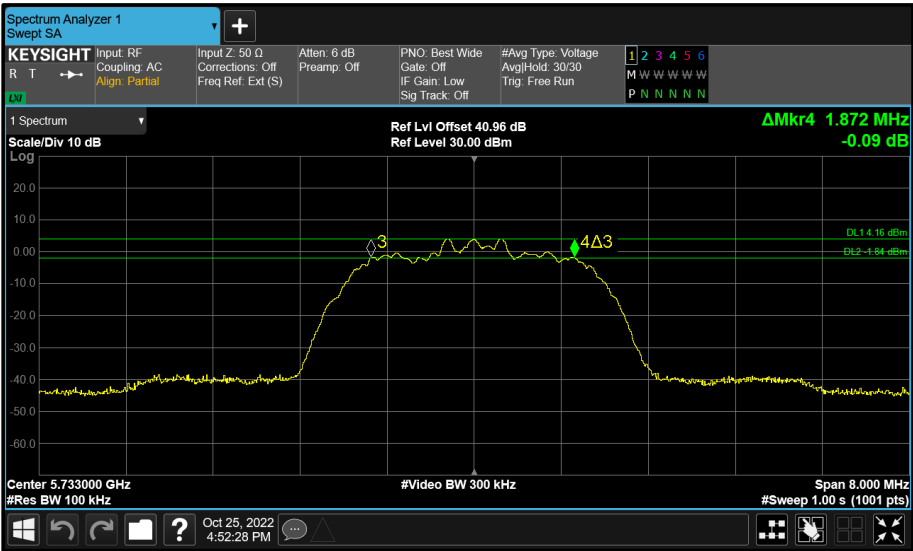


Figure 133 - Core 0 (A) 5733 MHz (CH8) 6 dB Bandwidth

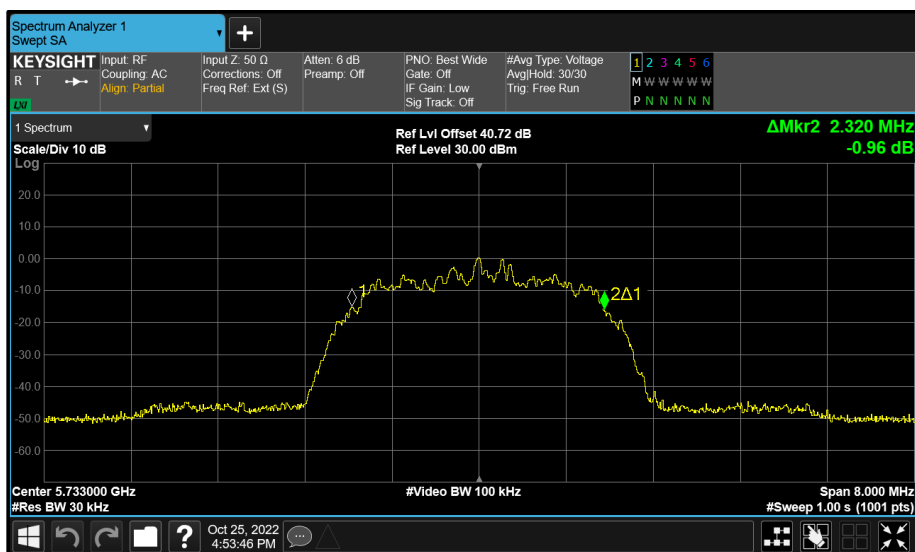


Figure 134 - Core 1 (B) 5733 MHz (CH8) 99% Bandwidth

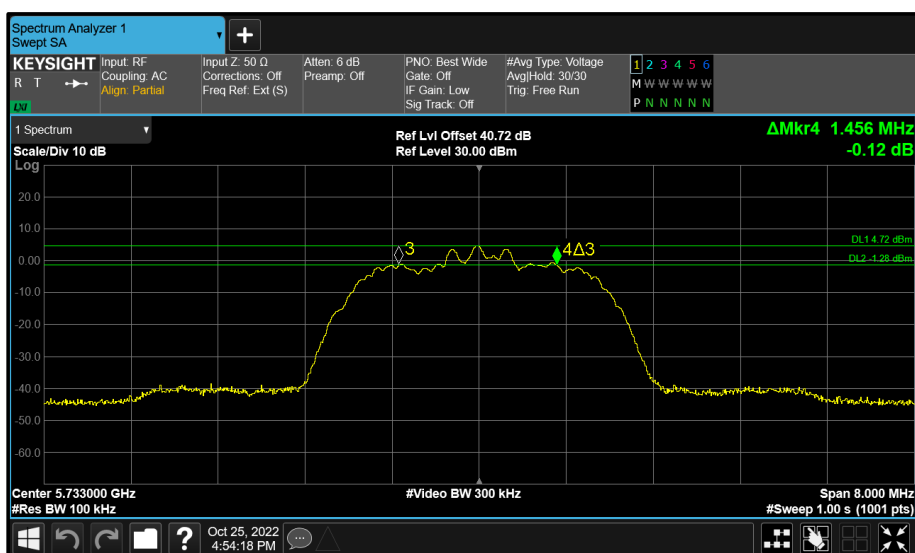


Figure 135 - Core 1 (B) 5733 MHz (CH8) 6 dB Bandwidth

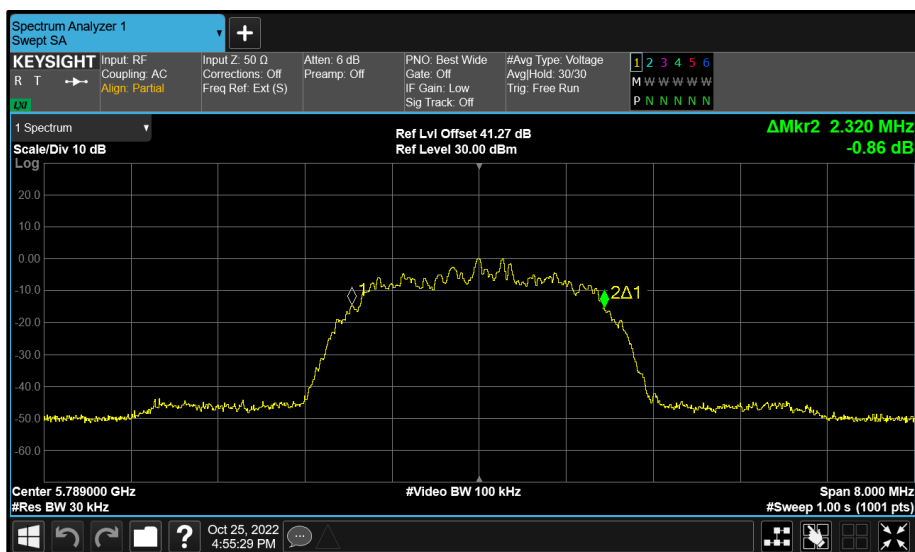


Figure 136 - Core 0 (A) 5789 MHz (CH64) 99% Bandwidth

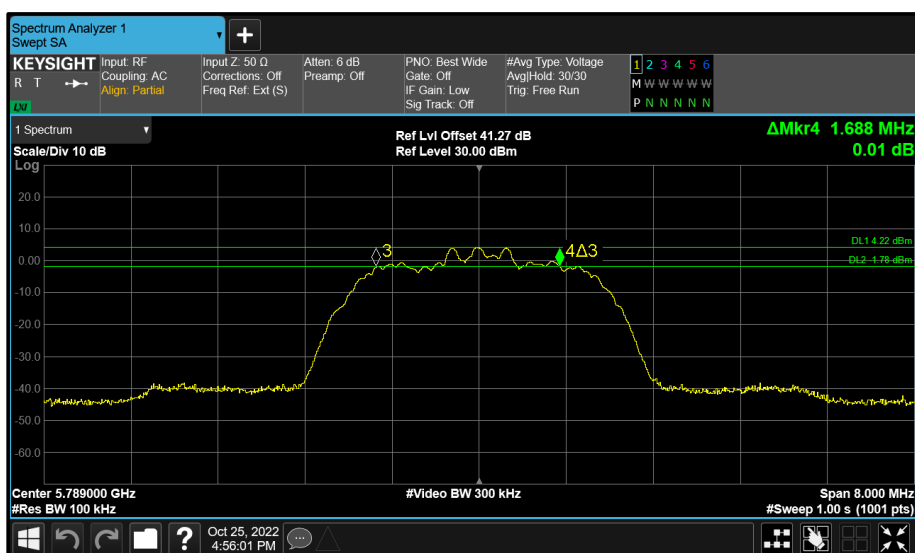


Figure 137 - Core 0 (A) 5789 MHz (CH64) 6 dB Bandwidth

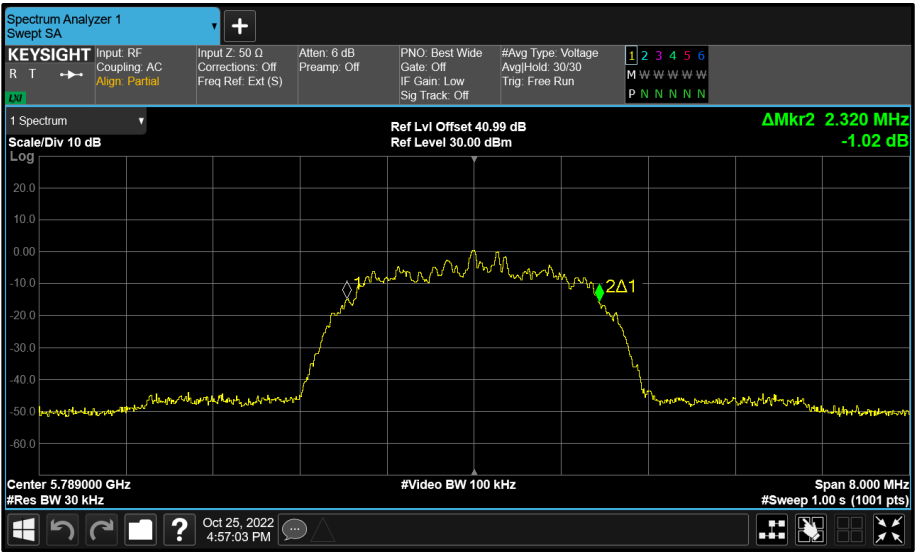


Figure 138 - Core 1 (B) 5789 MHz (CH64) 99% Bandwidth

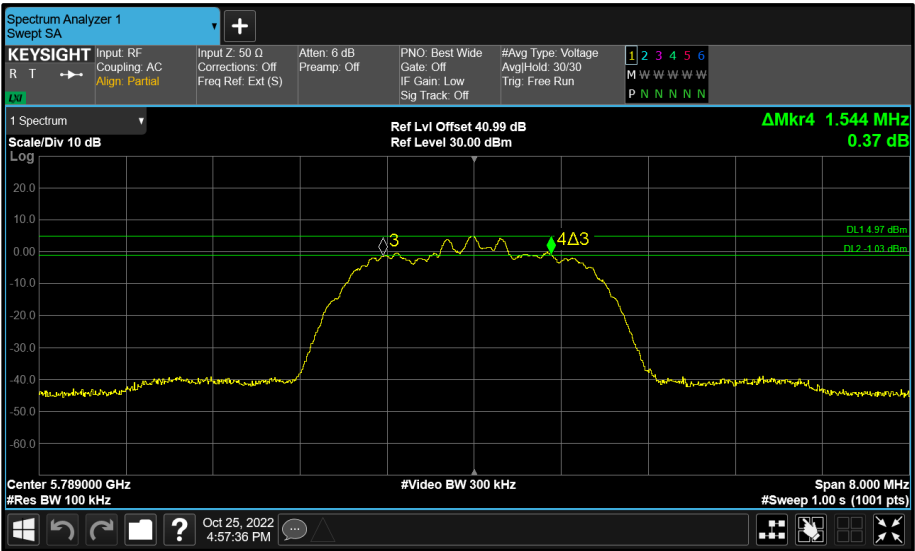


Figure 139 - Core 1 (B) 5789 MHz (CH64) 6 dB Bandwidth

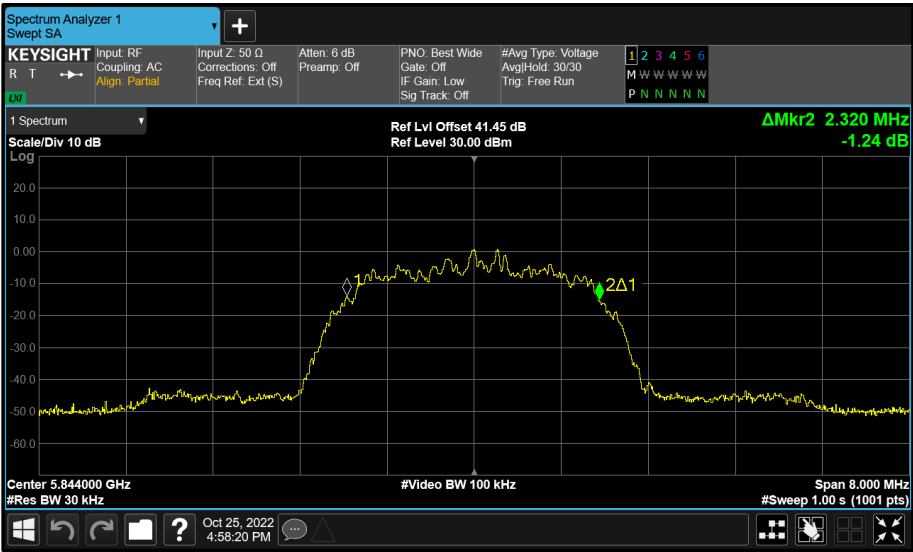


Figure 140 - Core 0 (A) 5844 MHz (CH119) 99% Bandwidth

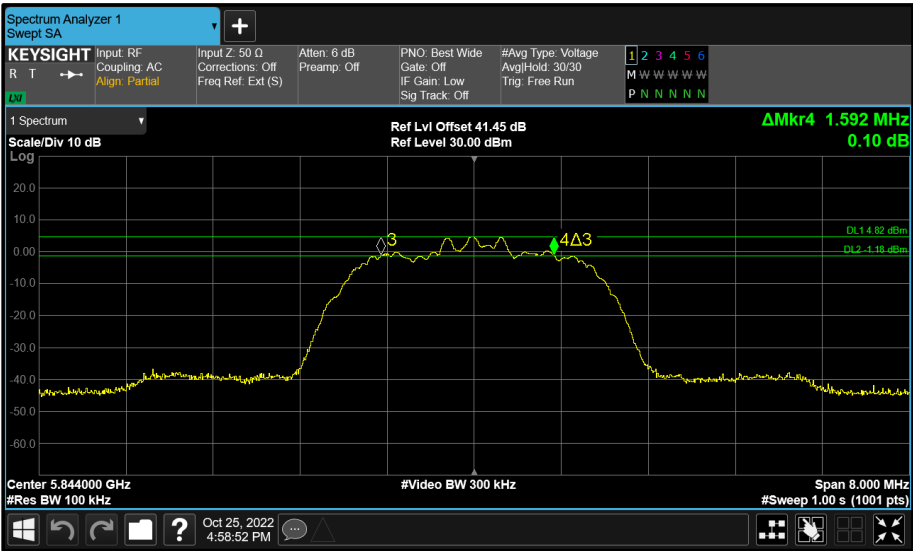


Figure 141 - Core 0 (A) 5844 MHz (CH119) 6 dB Bandwidth

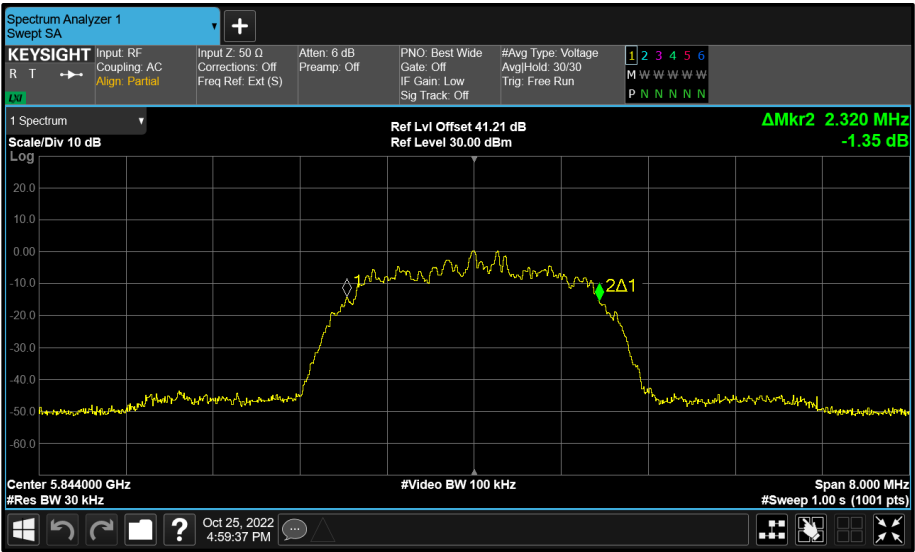


Figure 142 - Core 1 (B) 5844 MHz (CH119) 99% Bandwidth

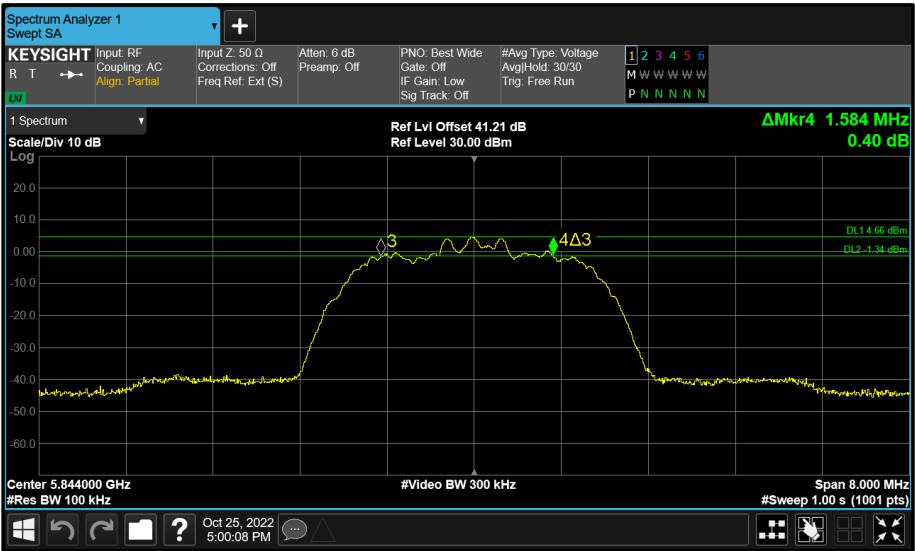


Figure 143 - Core 1 (B) 5844 MHz (CH119) 6 dB Bandwidth



Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407(e) RSS-247 6.2.4.1	Test Method(s):	C63.10 6.9.3 789033 D02 v02r01 II.C.2.
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	
5733	0.945	0.660	-	-	≥ 500.0
5789	0.945	0.660	-	-	≥ 500.0
5844	1.020	0.660	-	-	≥ 500.0

Table 51 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
5733	4.650	4.635	-	-	-
5789	4.650	4.635	-	-	-
5844	4.650	4.635	-	-	-

Table 52 - 99% Bandwidth Results

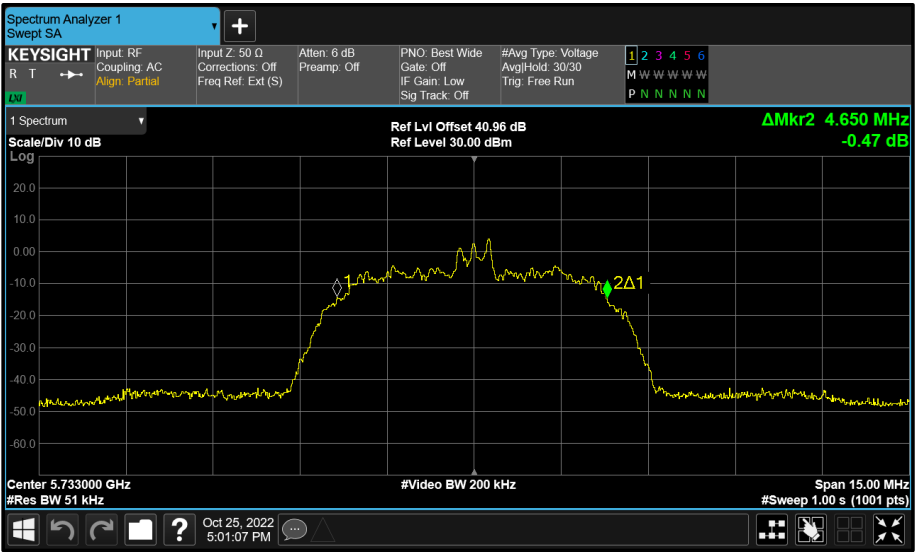


Figure 144 - Core 0 (A) 5733 MHz (CH8) 99% Bandwidth

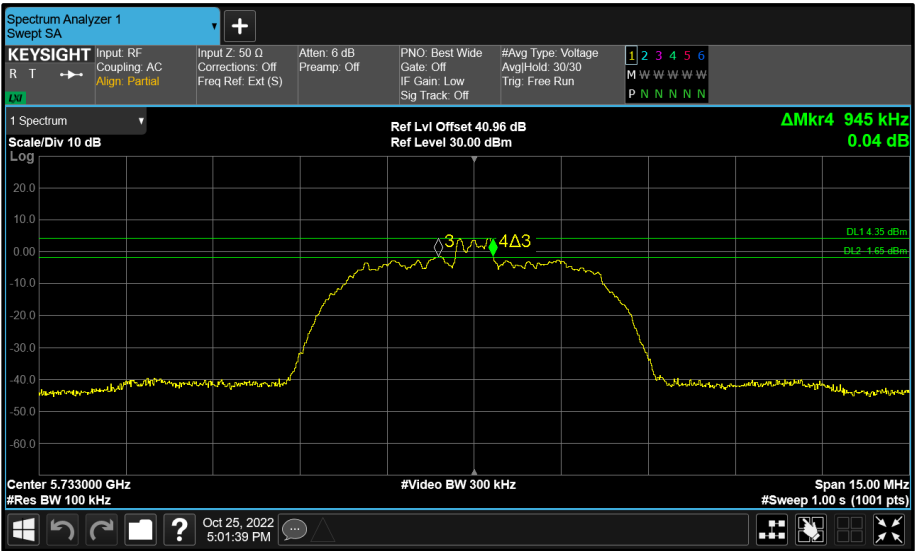


Figure 145 - Core 0 (A) 5733 MHz (CH8) 6 dB Bandwidth

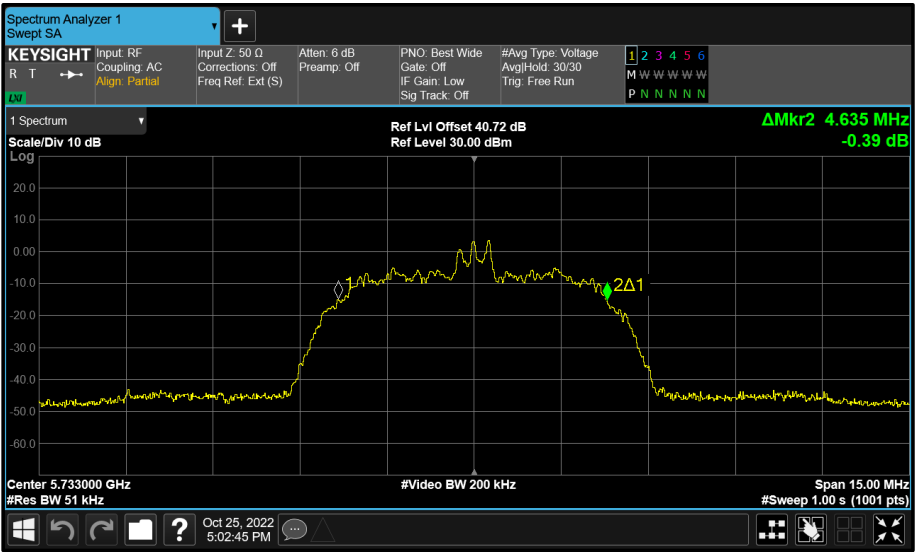


Figure 146 - Core 1 (B) 5733 MHz (CH8) 99% Bandwidth

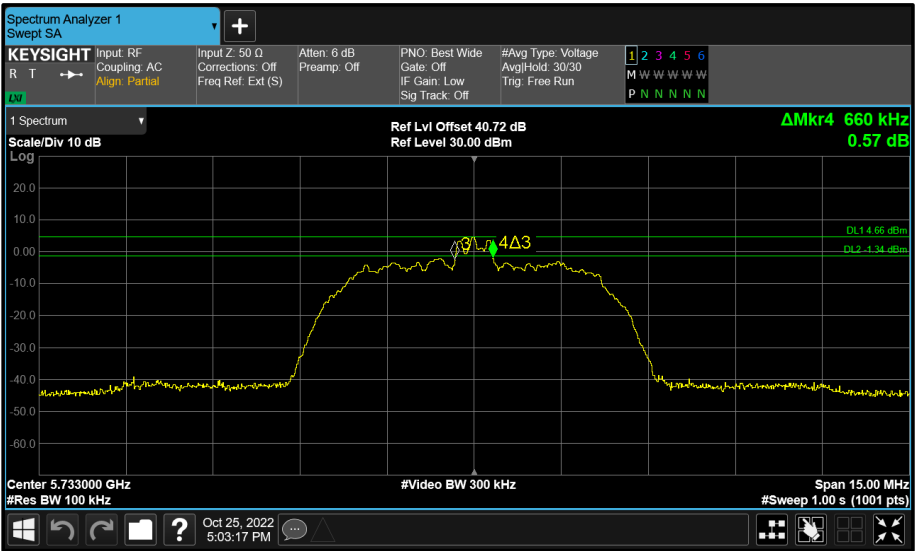


Figure 147 - Core 1 (B) 5733 MHz (CH8) 6 dB Bandwidth

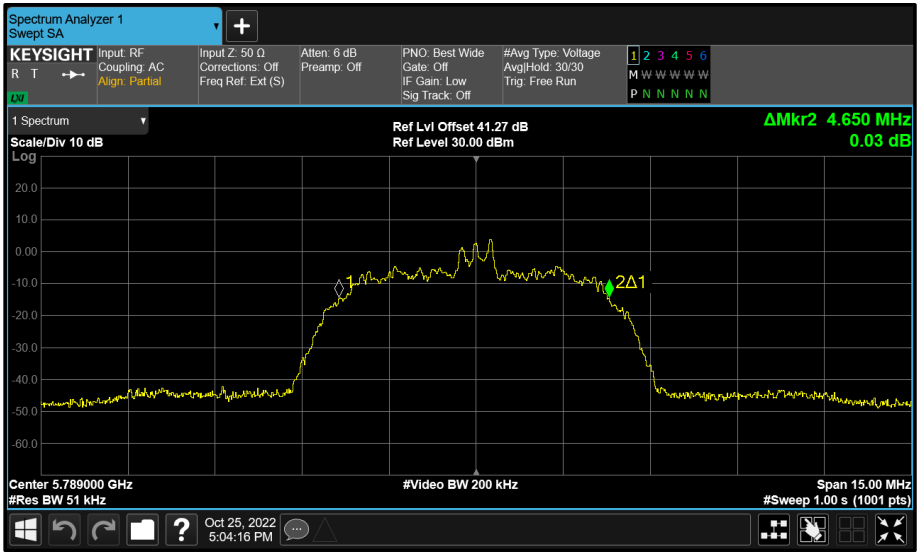


Figure 148 - Core 0 (A) 5789 MHz (CH64) 99% Bandwidth

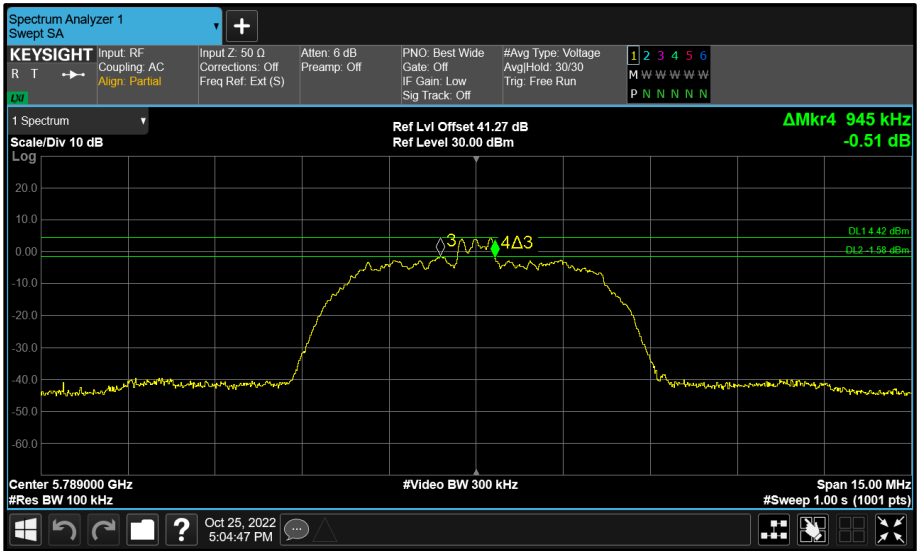


Figure 149 - Core 0 (A) 5789 MHz (CH64) 6 dB Bandwidth

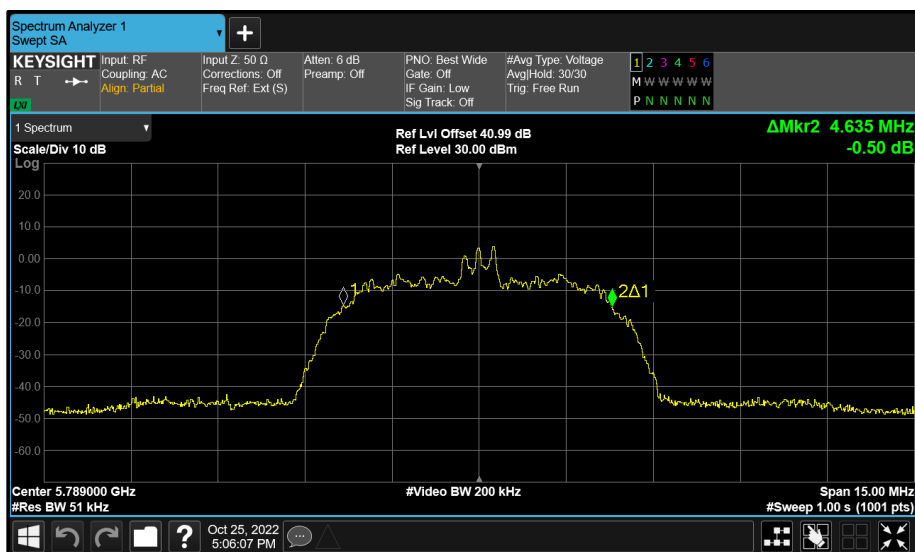


Figure 150 - Core 1 (B) 5789 MHz (CH64) 99% Bandwidth

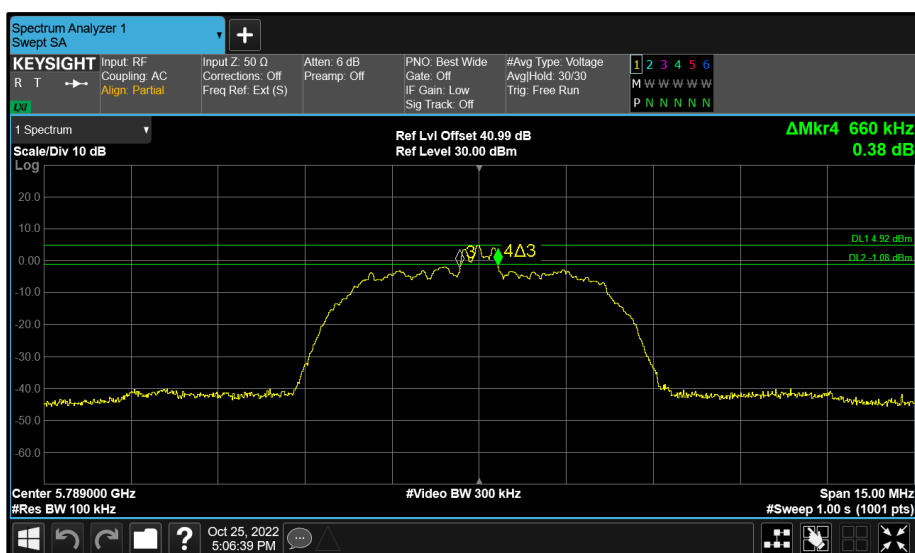


Figure 151 - Core 1 (B) 5789 MHz (CH64) 6 dB Bandwidth



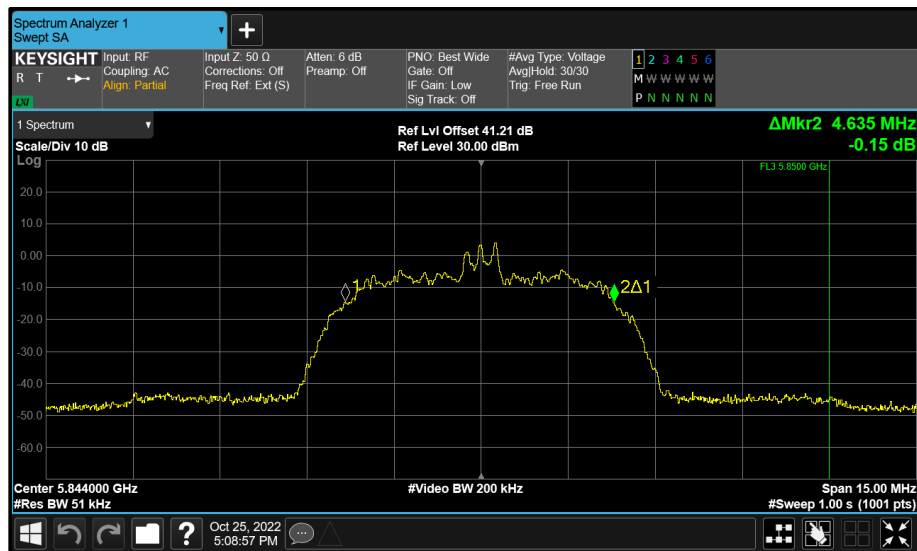


Figure 154 - Core 1 (B) 5844 MHz (CH119) 99% Bandwidth

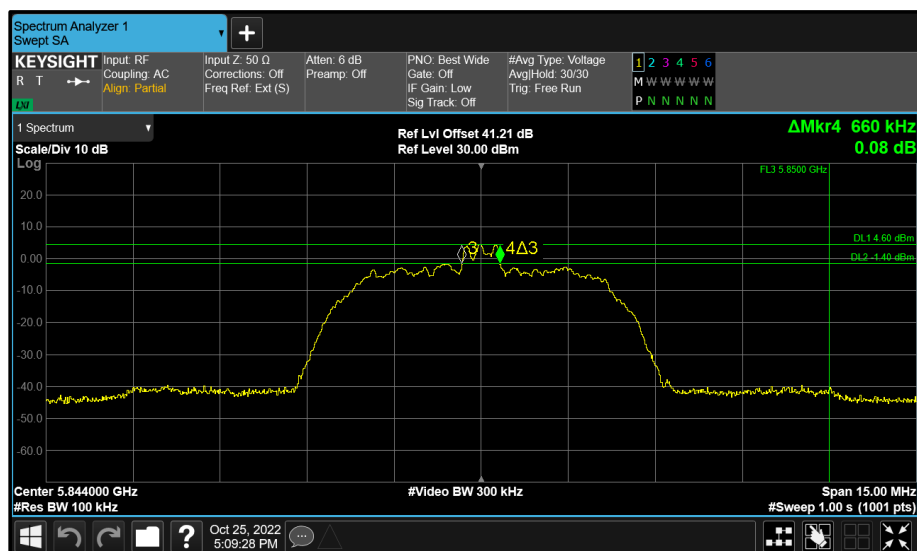


Figure 155 - Core 1 (B) 5844 MHz (CH119) 6 dB Bandwidth

FCC Part 15E, Limit Clause 15.407

5150 MHz to 5250 MHz: None specified.
5250 MHz to 5350 MHz: None specified.
5470 MHz to 5725 MHz: None specified.
5725 MHz to 5850 MHz: > 500 kHz.

ISED RSS-247, Limit Clause 6.2.1.1, 6.2.2.1, 6.2.3.1 and 6.2.4.1

5150 MHz to 5250 MHz: None specified.
5250 MHz to 5350 MHz: None specified.
5470 MHz to 5725 MHz: None specified.
5725 MHz to 5850 MHz: The minimum 6 dB bandwidth shall be at least 500 kHz.



2.2.7 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 1.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Multimeter	Fluke	79 Series III	611	12	21-Dec-2022
Hygrometer	Rotronic	I-1000	3068	12	21-Sep-2023
Hygrometer	Rotronic	I-1000	3220	12	05-Nov-2022
Network Analyser	Rohde & Schwarz	ZVA 40	3548	12	24-Feb-2023
Calibration Unit	Rohde & Schwarz	ZV-Z54	4368	12	24-Feb-2023
Frequency Standard	Spectracom	SecureSync 1200-0408-0601	4393	6	01-Feb-2023
AC Programmable Power Supply	iTech	IT7324	5225	-	O/P Mon
AC Programmable Power Supply	iTech	IT7324	5226	-	O/P Mon
Attenuator 5W 20dB DC-18GHz	Aaren	AT40A-4041-D18-20	5498	12	16-May-2023
MXA Signal Analyser	Keysight Technologies	N9020B	5528	24	21-Mar-2024
MXA Signal Analyser	Keysight Technologies	N9020B	5529	24	13-Sep-2024
Signal Conditioning Unit	TUV SUD	SPECTRUM SCU001	5546	12	06-Apr-2023
2-Way Power Divider (2 to 8 GHz)	Aaren	AT30A-TE0208-2-AF	5684	12	20-Dec-2022
2-Way Power Divider (2-8 GHz)	Aaren	AT30A-TE0208-2-AF	5685	12	20-Dec-2022
Signal Conditioning Unit	TUV SUD	SPECTRUM SCU002	5759	12	05-Jul-2023
Directional Coupler 2-8GHz	RF-Lambda	RFDC2G8G10	5765	-	O/P Mon
Directional Coupler 2-8GHz	RF-Lambda	RFDC2G8G10	5766	-	O/P Mon

Table 53

O/P Mon – Output Monitored using calibrated equipment



2.3 Maximum Conducted Output Power

2.3.1 Specification Reference

FCC 47 CFR Part 15E, Clause 15.407 (a)
ISED RSS-247, Clause 6.2

2.3.2 Equipment Under Test and Modification State

A2816, S/N: H12J4GXMVX - Modification State 0

2.3.3 Date of Test

25-October-2022 to 10-November-2022

2.3.4 Test Method

The test was performed in accordance with ANSI C63.10, clause 12.4.3.2 using method PM-G. Since the gated power meter was used for method PM-G the EUT was measured only while transmitting and hence no duty cycle correction was necessary.

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

The EUT has equal conducted powers on all ports for each mode of operation, but unequal antenna gains. Therefore, for SISO modes the EUT was tested on the port with the highest antenna gain which would result in the highest EIRP output power.

For transmit beamforming (TxBF) mode it was calculated in accordance with clause F)2)d)(i).

2.3.5 Environmental Conditions

Ambient Temperature	22.8 - 23.3 °C
Relative Humidity	44.7 - 49.8 %



2.3.6 Test Results

Narrow Band

Test Configuration			
Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause(s):	15.407 (a)(1)(iv)	Test Method(s):	Refer to Test Method
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA $\pi/4$ DQPSK (4-DH5)	Duty Cycle (%):	78.4
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	B (Core 1)	Peak Antenna Gain (dBi):	6.25

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
5162	-	11.36	-	-	-	23.75	-12.39
5204	-	11.44	-	-	-	23.75	-12.31
5245	-	11.21	-	-	-	23.75	-12.54

Table 54 - FCC Maximum Conducted (average) Output Power Results

Test Configuration			
Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause(s):	15.407 (a)(1)(iv)	Test Method(s):	Refer to Test Method
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA $\pi/4$ DQPSK (8-DH5)	Duty Cycle (%):	78.2
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	B (Core 1)	Peak Antenna Gain (dBi):	6.25

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
5162	-	11.49	-	-	-	23.75	-12.26
5204	-	11.46	-	-	-	23.75	-12.29
5245	-	11.35	-	-	-	23.75	-12.40

Table 55 - FCC Maximum Conducted (average) Output Power Results



Test Configuration			
Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause(s):	15.407 (a)(1)(iv)	Test Method(s):	Refer to Test Method
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):	6.74

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
5162	8.88	8.88	-	-	11.89	23.26	-11.38
5204	8.89	8.93	-	-	11.92	23.26	-11.35
5245	8.85	8.67	-	-	11.77	23.26	-11.49

Table 56 - FCC Maximum Conducted (average) Output Power Results

Test Configuration			
Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause(s):	15.407 (a)(1)(iv)	Test Method(s):	Refer to Test Method
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):	6.74

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
5162	9.00	8.98	-	-	12.00	23.26	-11.27
5204	8.65	9.00	-	-	11.84	23.26	-11.42
5245	8.96	8.90	-	-	11.94	23.26	-11.33

Table 57 - FCC Maximum Conducted (average) Output Power Results



Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407 (a)(3) RSS-247 6.2.4.1	Test Method(s):	Refer to Test Method
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA $\pi/4$ DQPSK (4-DH5)	Duty Cycle (%):	78.1
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	B (Core 1)	Peak Antenna Gain (dBi):	6.66

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
5733	-	14.76	-	-	-	29.34	-14.58
5789	-	14.93	-	-	-	29.34	-14.41
5844	-	14.89	-	-	-	29.34	-14.45

Table 58 - Maximum Conducted (average) Output Power Results

Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407 (a)(3) RSS-247 6.2.4.1	Test Method(s):	Refer to Test Method
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA $\pi/4$ DQPSK (8-DH5)	Duty Cycle (%):	78.2
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	B (Core 1)	Peak Antenna Gain (dBi):	6.66

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
5733	-	13.46	-	-	-	29.34	-15.88
5789	-	13.00	-	-	-	29.34	-16.34
5844	-	13.09	-	-	-	29.34	-16.25

Table 59 - Maximum Conducted (average) Output Power Results



Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407 (a)(3) RSS-247 6.2.4.1	Test Method(s):	Refer to Test Method
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):	7.25

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
5733	14.81	14.94	-	-	17.88	28.75	-10.86
5789	14.61	14.97	-	-	17.80	28.75	-10.94
5844	14.66	14.85	-	-	17.77	28.75	-10.98

Table 60 - Maximum Conducted (average) Output Power Results

Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407 (a)(3) RSS-247 6.2.4.1	Test Method(s):	Refer to Test Method
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):	7.25

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
5733	13.32	13.43	-	-	16.38	28.75	-12.36
5789	13.12	13.07	-	-	16.11	28.75	-12.64
5844	13.38	13.40	-	-	16.40	28.75	-12.34

Table 61 - Maximum Conducted (average) Output Power Results



Test Configuration			
Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause(s):	15.407 (a)(1)(iv)	Test Method(s):	Refer to Test Method
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA GFSK (DH5)	Duty Cycle (%):	76.7
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	B (Core 1)	Peak Antenna Gain (dBi):	6.25

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
5162	-	9.21	-	-	-	23.75	-14.54
5204	-	9.16	-	-	-	23.75	-14.59
5245	-	9.45	-	-	-	23.75	-14.30

Table 62 - FCC Maximum Conducted (average) Output Power Results

Test Configuration			
Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause(s):	15.407 (a)(1)(iv)	Test Method(s):	Refer to Test Method
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):	6.74

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
5162	6.94	6.72	-	-	6.94	23.26	-13.43
5204	6.92	6.87	-	-	6.92	23.26	-13.36
5245	6.56	6.98	-	-	6.98	23.26	-13.48

Table 63 - FCC Maximum Conducted (average) Output Power Results



Test Configuration			
Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause(s):	15.407 (a)(1)(iv)	Test Method(s):	Refer to Test Method
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA $\pi/4$ DQPSK (4-DH5)	Duty Cycle (%):	78.4
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	B (Core 1)	Peak Antenna Gain (dBi):	6.25

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
5162	-	3.92	-	-	-	23.75	-19.83
5204	-	4.46	-	-	-	23.75	-19.29
5245	-	4.27	-	-	-	23.75	-19.48

Table 64 - FCC Maximum Conducted (average) Output Power Results

Test Configuration			
Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause(s):	15.407 (a)(1)(iv)	Test Method(s):	Refer to Test Method
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):	6.25

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
5162	-	4.23	-	-	-	23.75	-19.52
5204	-	4.13	-	-	-	23.75	-19.62
5245	-	4.47	-	-	-	23.75	-19.28

Table 65 - FCC Maximum Conducted (average) Output Power Results



Test Configuration			
Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause(s):	15.407 (a)(1)(iv)	Test Method(s):	Refer to Test Method
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):	6.74

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
5162	3.00	4.01	-	-	4.01	23.26	-16.72
5204	3.50	4.45	-	-	4.45	23.26	-16.25
5245	4.39	4.29	-	-	4.39	23.26	-15.91

Table 66 - FCC Maximum Conducted (average) Output Power Results

Test Configuration			
Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause(s):	15.407 (a)(1)(iv)	Test Method(s):	Refer to Test Method
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):	6.74

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
5162	3.22	4.19	-	-	4.19	23.26	-16.52
5204	3.69	4.23	-	-	4.23	23.26	-16.29
5245	4.48	4.41	-	-	4.48	23.26	-15.81

Table 67 - FCC Maximum Conducted (average) Output Power Results



Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407 (a)(3) RSS-247 6.2.4.1	Test Method(s):	Refer to Test Method
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA GFSK (DH5)	Duty Cycle (%):	76.7
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	B (Core 1)	Peak Antenna Gain (dBi):	6.66

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
5733	-	10.83	-	-	-	29.34	-18.51
5789	-	10.90	-	-	-	29.34	-18.44
5844	-	11.00	-	-	-	29.34	-18.34

Table 68 - Maximum Conducted (average) Output Power Results

Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407 (a)(3) RSS-247 6.2.4.1	Test Method(s):	Refer to Test Method
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):	7.25

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
5733	11.00	10.79	-	-	13.91	28.75	-14.84
5789	10.55	10.79	-	-	13.68	28.75	-15.06
5844	10.91	10.54	-	-	13.74	28.75	-15.01

Table 69 - Maximum Conducted (average) Output Power Results



Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407 (a)(3) RSS-247 6.2.4.1	Test Method(s):	Refer to Test Method
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):	6.66

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
5733	-	4.18	-	-	-	29.34	-25.16
5789	-	4.09	-	-	-	29.34	-25.25
5844	-	4.17	-	-	-	29.34	-25.17

Table 70 - Maximum Conducted (average) Output Power Results

Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407 (a)(3) RSS-247 6.2.4.1	Test Method(s):	Refer to Test Method
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA $\pi/4$ DQPSK (8-DH5)	Duty Cycle (%):	78.5
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	B (Core 1)	Peak Antenna Gain (dBi):	6.66

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
5733	-	4.28	-	-	-	29.34	-25.06
5789	-	4.44	-	-	-	29.34	-24.90
5844	-	4.41	-	-	-	29.34	-24.93

Table 71 - Maximum Conducted (average) Output Power Results



Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407 (a)(3) RSS-247 6.2.4.1	Test Method(s):	Refer to Test Method
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):	7.25

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
5733	4.36	3.62	-	-	7.01	28.75	-21.73
5789	3.98	4.26	-	-	7.13	28.75	-21.62
5844	4.42	4.44	-	-	7.44	28.75	-21.31

Table 72 - Maximum Conducted (average) Output Power Results

Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407 (a)(3) RSS-247 6.2.4.1	Test Method(s):	Refer to Test Method
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):	7.25

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	Σ		
5733	4.47	4.16	-	-	7.33	28.75	-21.42
5789	4.46	4.02	-	-	7.26	28.75	-21.49
5844	4.17	4.25	-	-	7.22	28.75	-21.53

Table 73 - Maximum Conducted (average) Output Power Results