TUV SUD Limited Digitally signed by TUV SUD Limited Date: 2024.10.16 10:35:29 +01'00'

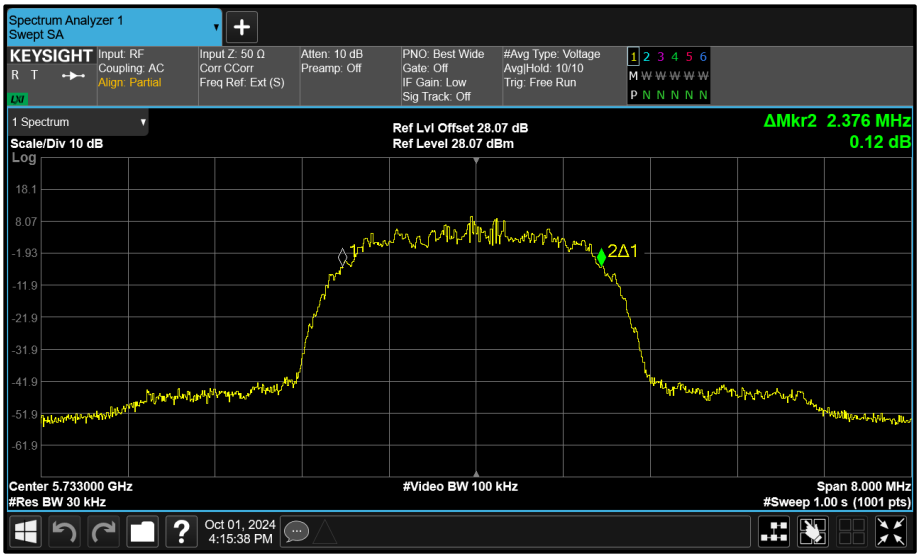

Figure 142 - Core 0 (A) 5733 MHz (CH8) 99% Bandwidth

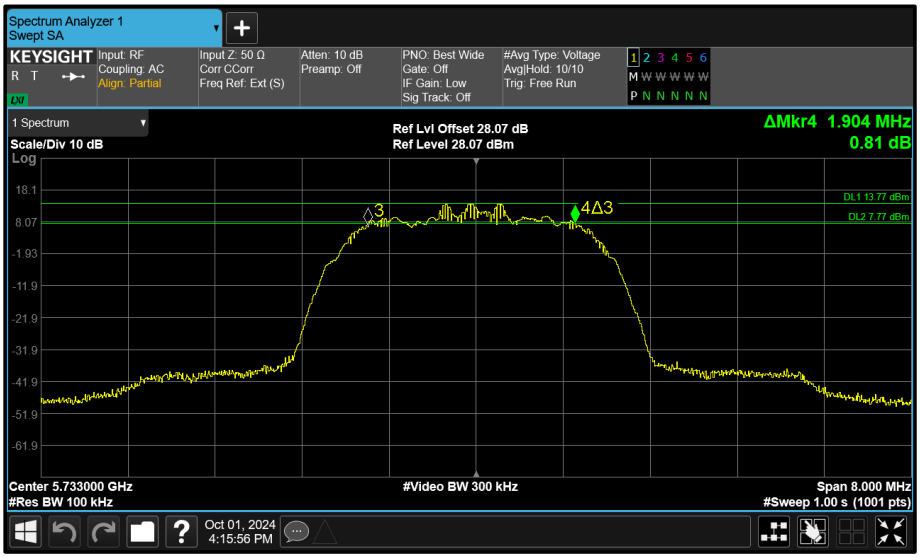

Figure 143 - Core 0 (A) 5733 MHz (CH8) 6 dB Bandwidth

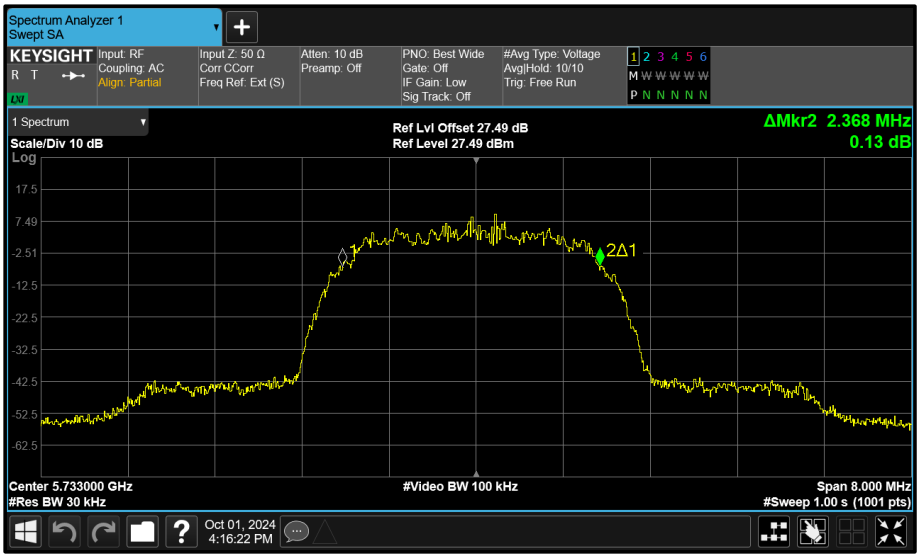

Figure 144 - Core 1 (B) 5733 MHz (CH8) 99% Bandwidth

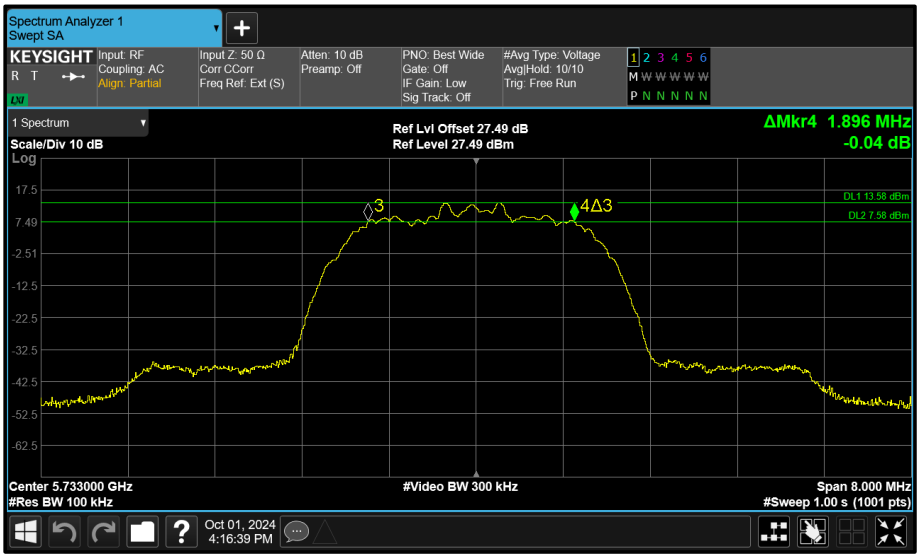

Figure 145 - Core 1 (B) 5733 MHz (CH8) 6 dB Bandwidth

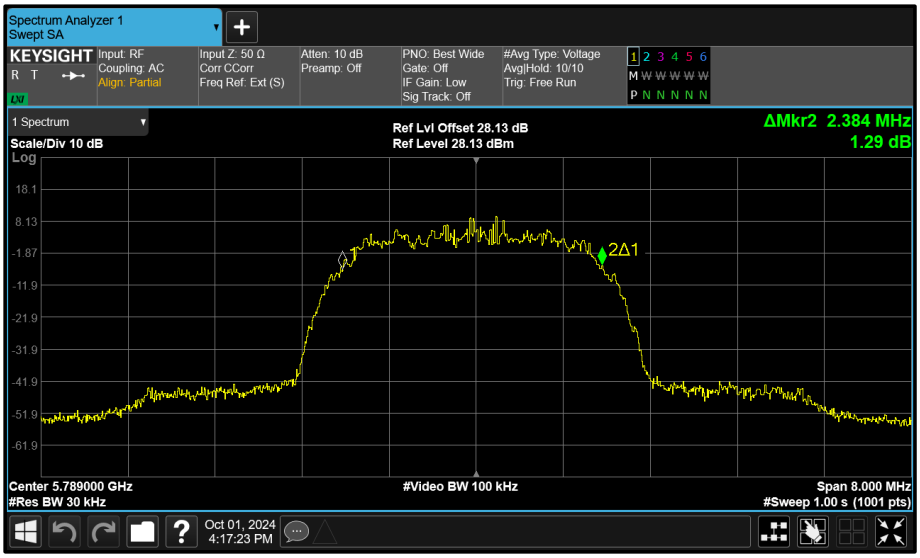

Figure 146 - Core 0 (A) 5789 MHz (CH64) 99% Bandwidth

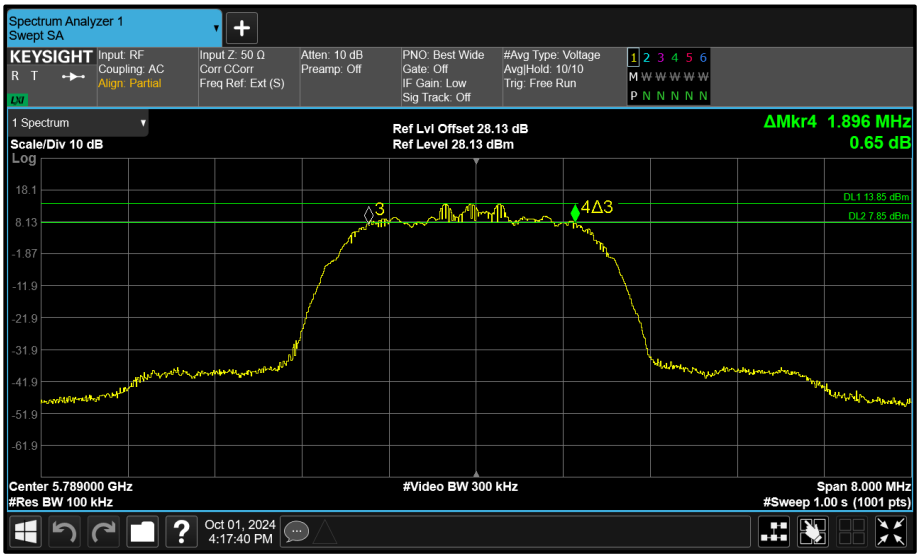

Figure 147 - Core 0 (A) 5789 MHz (CH64) 6 dB Bandwidth

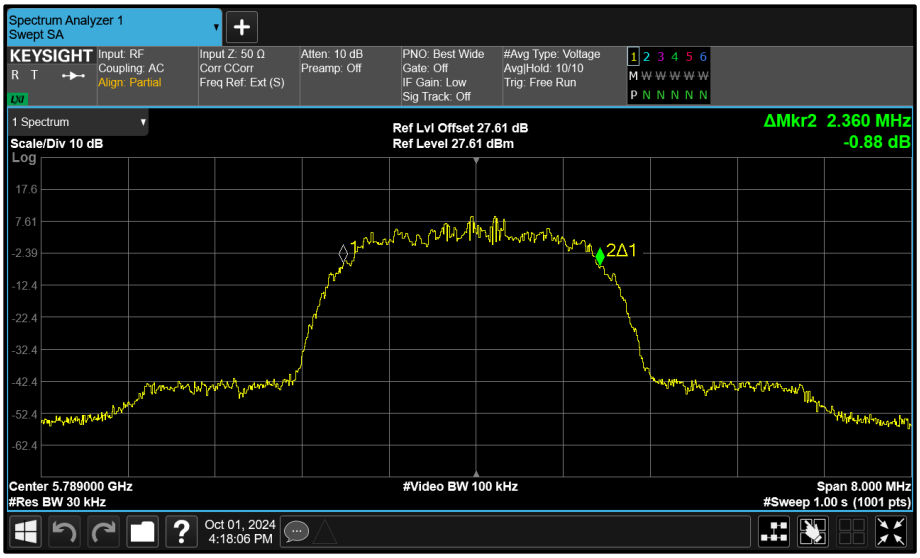

Figure 148 - Core 1 (B) 5789 MHz (CH64) 99% Bandwidth

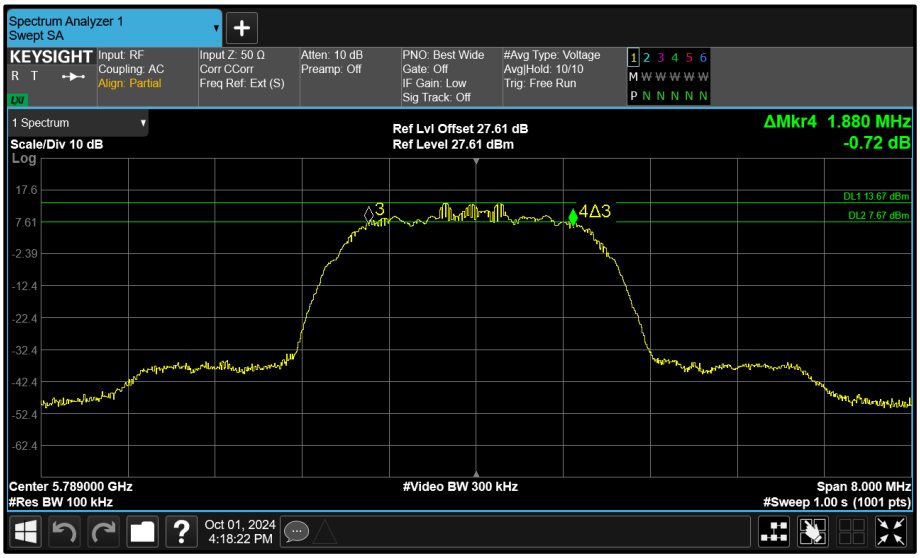

Figure 149 - Core 1 (B) 5789 MHz (CH64) 6 dB Bandwidth

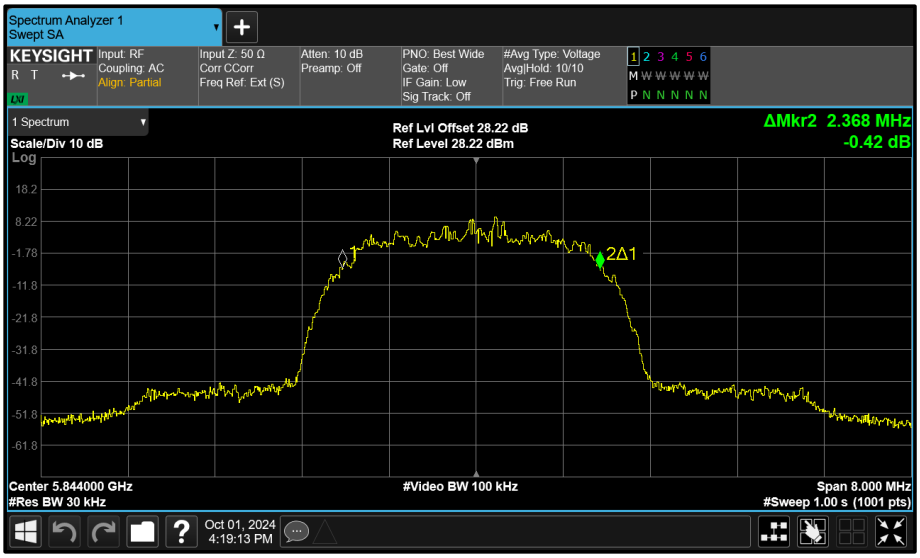

Figure 150 - Core 0 (A) 5844 MHz (CH119) 99% Bandwidth

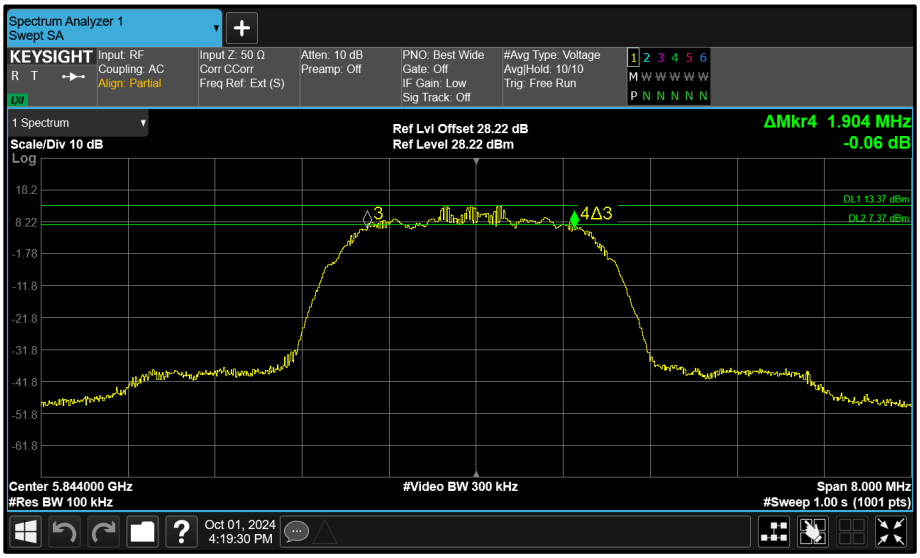

Figure 151 - Core 0 (A) 5844 MHz (CH119) 6 dB Bandwidth

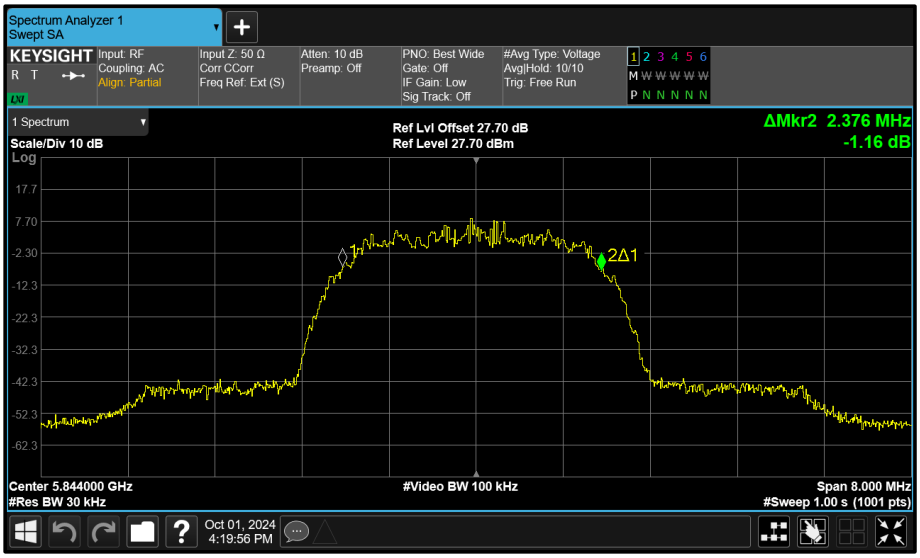

Figure 152 - Core 1 (B) 5844 MHz (CH119) 99% Bandwidth

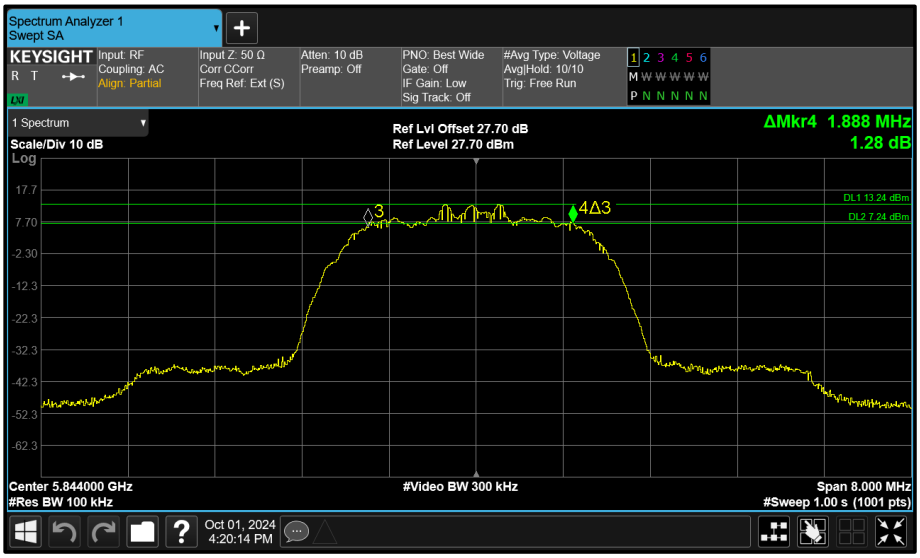

Figure 153 - Core 1 (B) 5844 MHz (CH119) 6 dB Bandwidth

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

DUT Configuration			
Mode:	ePA π/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	1.020	0.975	-	-	≥500.0
5789	0.960	0.960	-	-	≥500.0
5844	1.005	1.005	-	-	≥500.0

Table 54 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
5733	4.785	4.695	-	-	-
5789	4.755	4.725	-	-	-
5844	4.785	4.680	-	-	-

Table 55 - 99% Bandwidth Results

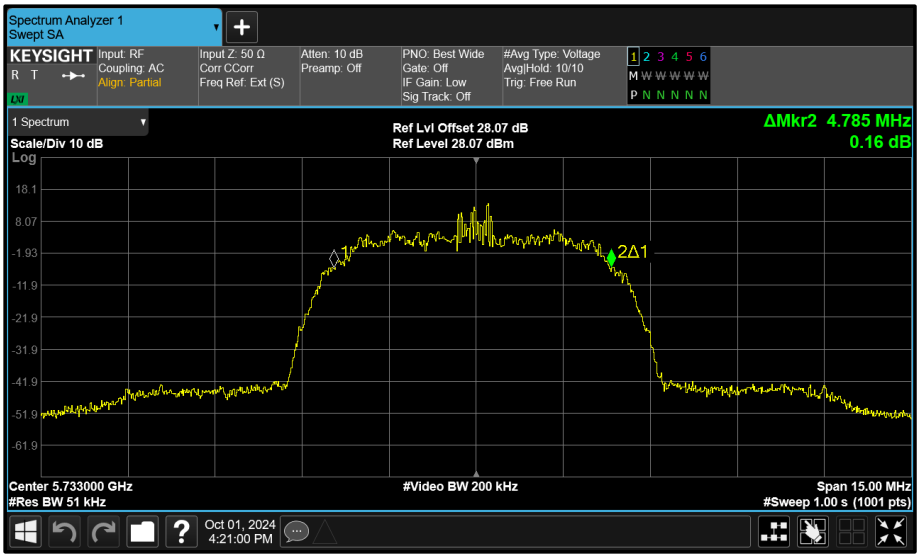

Figure 154 - Core 0 (A) 5733 MHz (CH8) 99% Bandwidth

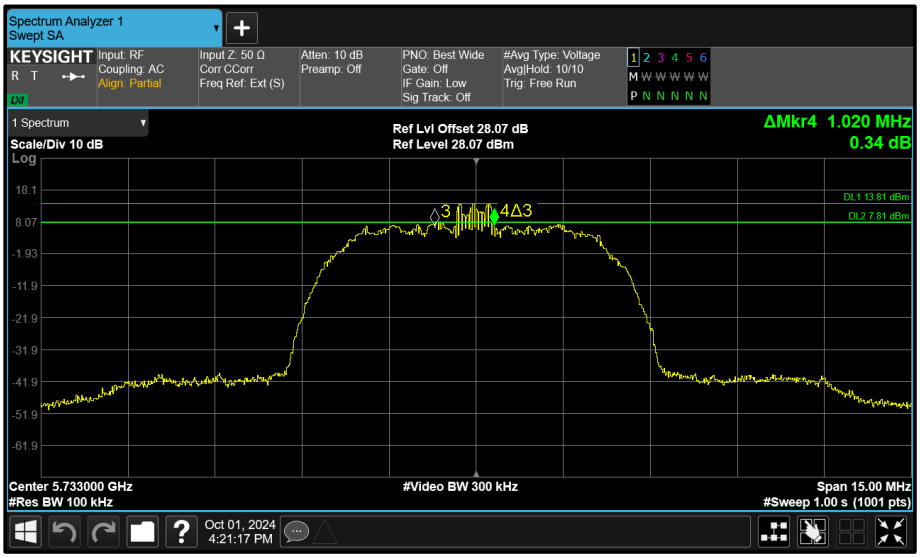

Figure 155 - Core 0 (A) 5733 MHz (CH8) 6 dB Bandwidth

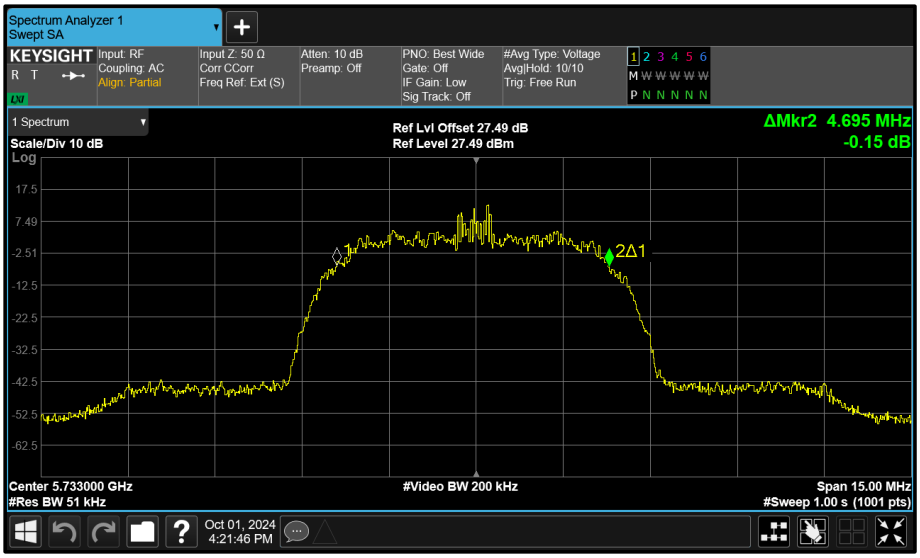

Figure 156 - Core 1 (B) 5733 MHz (CH8) 99% Bandwidth

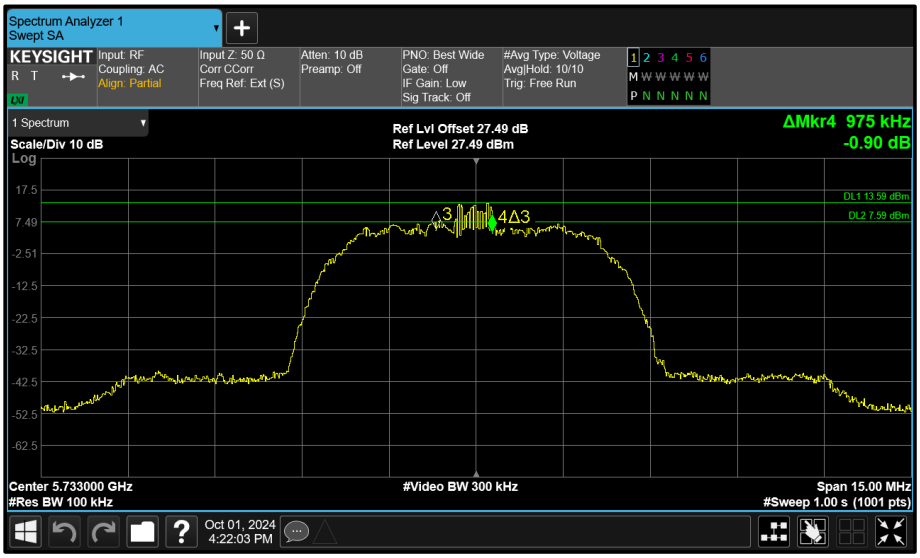

Figure 157 - Core 1 (B) 5733 MHz (CH8) 6 dB Bandwidth

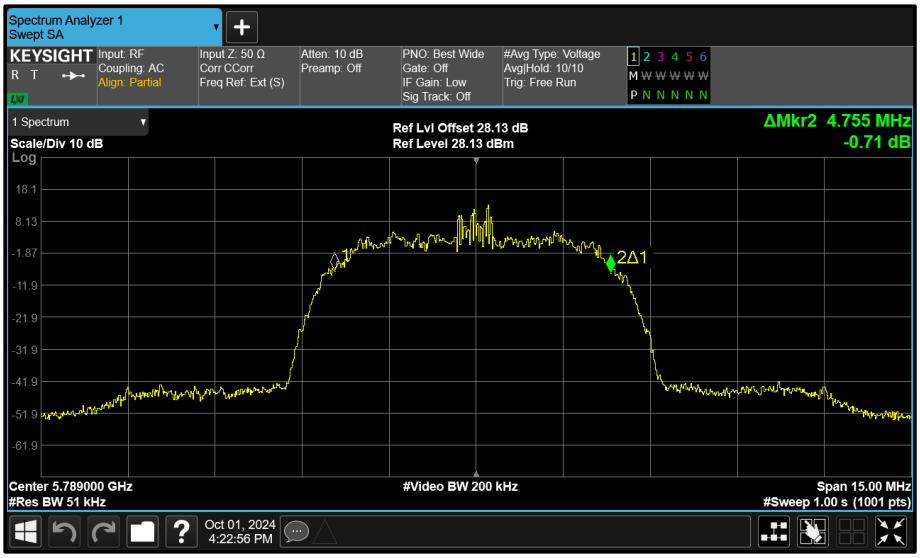

Figure 158 - Core 0 (A) 5789 MHz (CH64) 99% Bandwidth

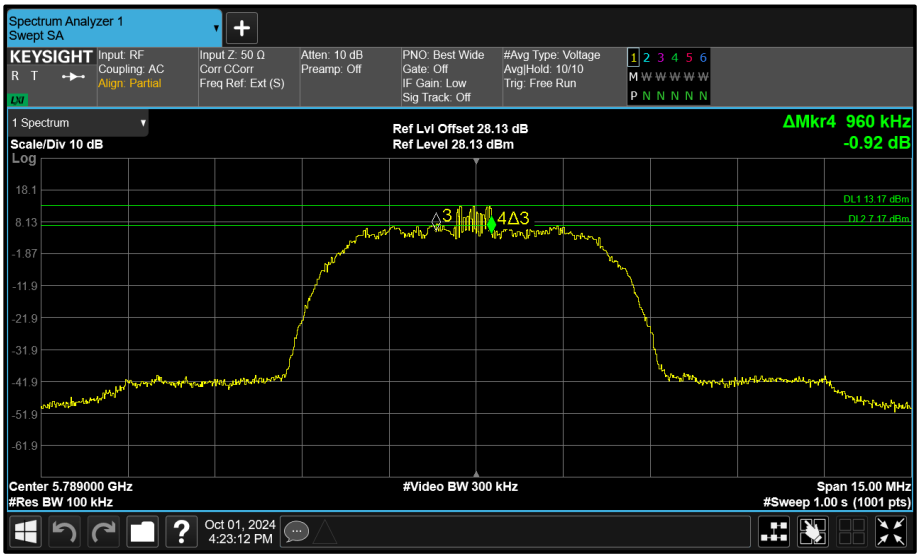

Figure 159 - Core 0 (A) 5789 MHz (CH64) 6 dB Bandwidth

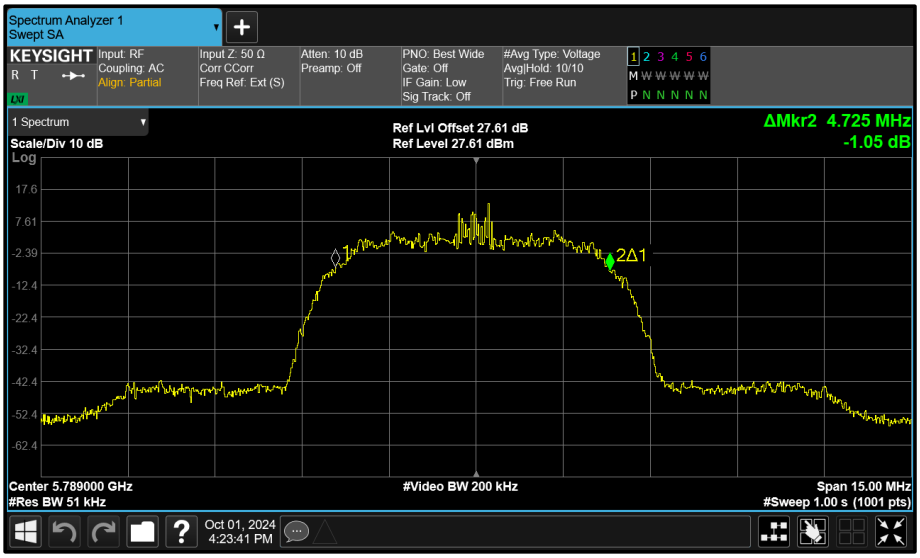

Figure 160 - Core 1 (B) 5789 MHz (CH64) 99% Bandwidth

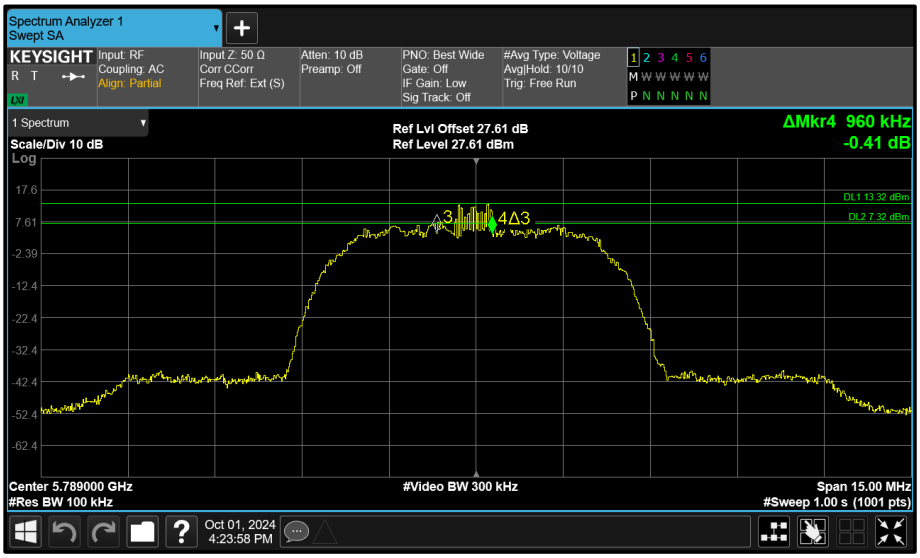

Figure 161 - Core 1 (B) 5789 MHz (CH64) 6 dB Bandwidth

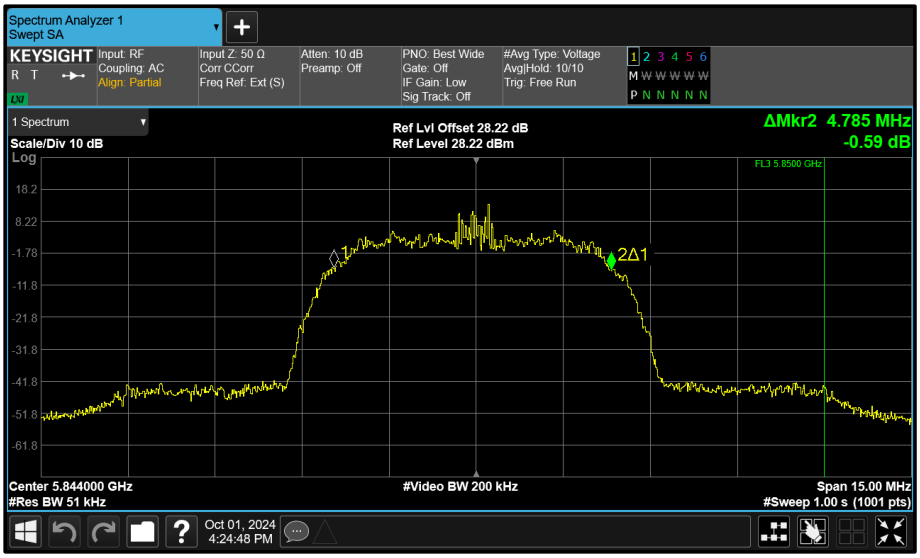

Figure 162 - Core 0 (A) 5844 MHz (CH119) 99% Bandwidth

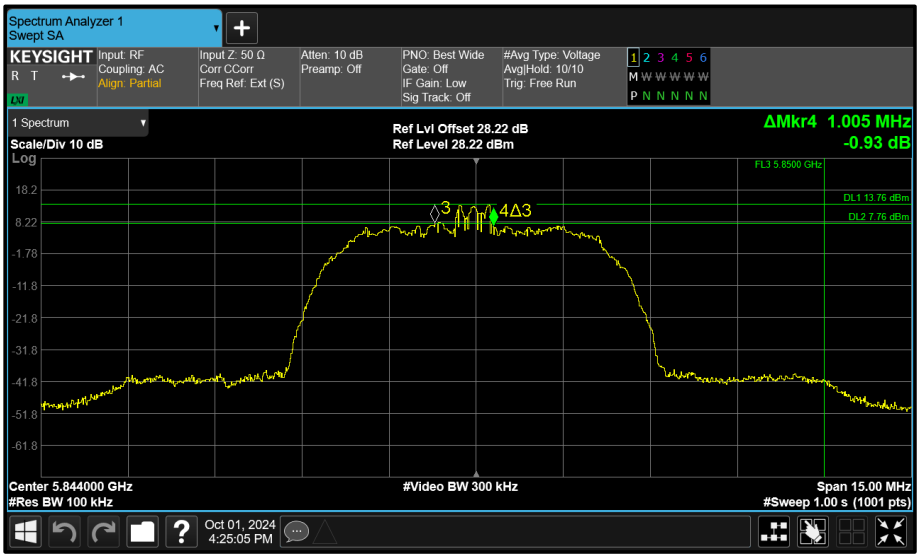

Figure 163 - Core 0 (A) 5844 MHz (CH119) 6 dB Bandwidth

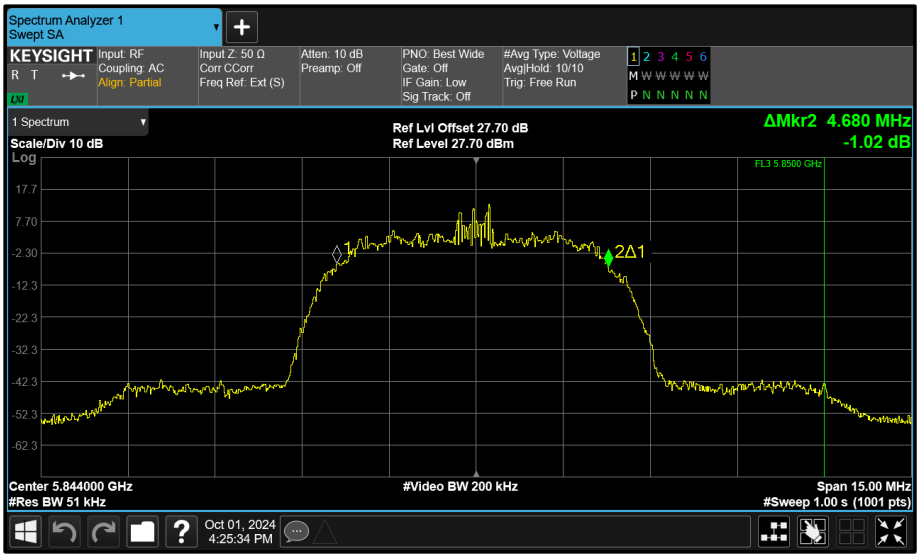

Figure 164 - Core 1 (B) 5844 MHz (CH119) 99% Bandwidth

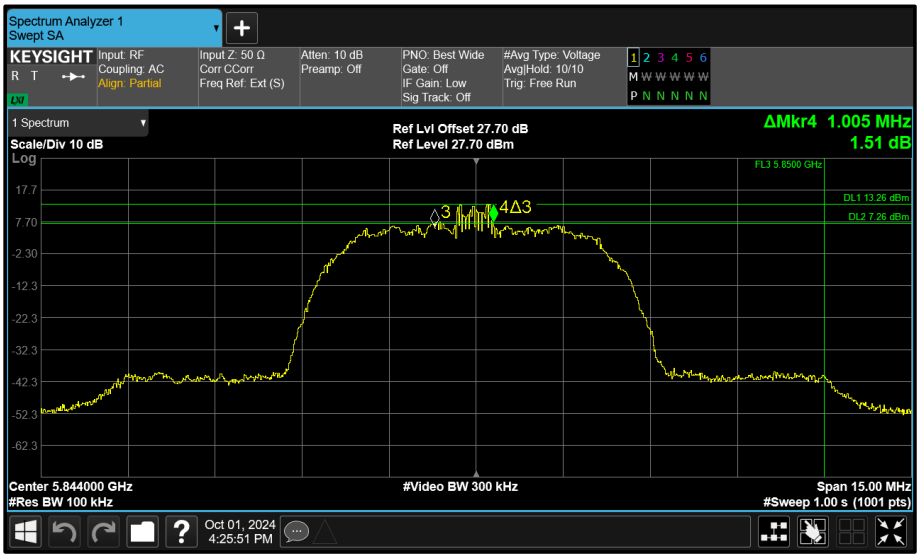

Figure 165 - Core 1 (B) 5844 MHz (CH119) 6 dB Bandwidth

<u>FCC Part 15E, Limit Clause 15.407</u>

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.

2.2.7 Test Location and Test Equipment Used

This test was carried out in SAR Chamber 2.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
True RMS Multimeter	Fluke	79 Series III	411	12	12-Jan-2025
Hygrometer	Rotronic	Hygropalm 0	3028	12	12-Aug-2025
1 MHz / 10 MHz reference	Quartzlock	E10-X	4973	12	03-Sep-2025
AC Programmable Power Supply	iTech	IT7324	5226	-	O/P Mon
MXA Signal Analyser	Keysight Technologies	N9020B	5528	24	18-Sep-2025
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6350	12	02-Aug-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6638	12	02-Aug-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6639	12	02-Aug-2025

Table 56

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)

2.3.2 Equipment Under Test and Modification State

A3403, S/N: M7J9X1XPGD - Modification State 0
A3403, S/N: GD6T7RH2K2 - Modification State 0

2.3.3 Date of Test

01-October-2024 to 03-October-2024

2.3.4 Test Method

The test was performed in accordance with ANSI C63.10 2020 clause 12.4.3.2 (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 and 2TX MIMO modes the EUT was tested on the ports with the highest antenna gain combinations which would result in the highest EIRP output power.

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

2.3.5 Environmental Conditions

Ambient Temperature	20.4 - 21.8 °C
Relative Humidity	45.4 - 53.1 %

2.3.6 Test Results

Narrowband

Test Configuration			
Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause(s):	15.407 (a)(1)(iv)	Test Method(s):	C63.10 12.4.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA GFSK (DH5)	Duty Cycle (%):	76.9
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.70

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5162	9.51	-	-	-	-	24.00	-14.49
5204	9.65	-	-	-	-	24.00	-14.35
5245	9.99	-	-	-	-	24.00	-14.01

Table 57 - 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):	C63.10 12.4.3.2
Additional Reference(s):	-		

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

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5162	4.02	-	-	-	-	24.00	-19.98
5204	4.32	-	-	-	-	24.00	-19.68
5245	4.43	-	-	-	-	24.00	-19.57

Table 58 - 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):	C63.10 12.4.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA π/4 DQPSK (8-DH5)	Duty Cycle (%):	78.3
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.70

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5162	4.16	-	-	-	-	24.00	-19.84
5204	4.17	-	-	-	-	24.00	-19.83
5245	4.44	-	-	-	-	24.00	-19.56

Table 59 - 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):	C63.10 12.4.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.4
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.70

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5162	11.56	-	-	-	-	24.00	-12.44
5204	11.65	-	-	-	-	24.00	-12.35
5245	11.89	-	-	-	-	24.00	-12.11

Table 60 - 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):	C63.10 12.4.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA π/4 DQPSK (8-DH5)	Duty Cycle (%):	78.4
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.70

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5162	13.76	-	-	-	-	24.00	-10.24
5204	13.73	-	-	-	-	24.00	-10.27
5245	13.86	-	-	-	-	24.00	-10.14

Table 61 - 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)(i)	Test Method(s):	C63.10 12.4.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA GFSK (DH5)	Duty Cycle (%):	76.8
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.90

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5733	10.83	-	-	-	-	30.00	-19.17
5789	10.51	-	-	-	-	30.00	-19.49
5844	10.93	-	-	-	-	30.00	-19.07

Table 62 - 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)(i)	Test Method(s):	C63.10 12.4.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.4
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.90

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5733	4.27	-	-	-	-	30.00	-25.73
5789	4.39	-	-	-	-	30.00	-25.61
5844	4.25	-	-	-	-	30.00	-25.75

Table 63 - 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)(i)	Test Method(s):	C63.10 12.4.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA π/4 DQPSK (8-DH5)	Duty Cycle (%):	78.2
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.90

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5733	4.29	-	-	-	-	30.00	-25.71
5789	4.40	-	-	-	-	30.00	-25.60
5844	4.26	-	-	-	-	30.00	-25.74

Table 64 - 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)(i)	Test Method(s):	C63.10 12.4.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.5
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.90

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5733	14.95	-	-	-	-	30.00	-15.05
5789	14.66	-	-	-	-	30.00	-15.34
5844	14.94	-	-	-	-	30.00	-15.06

Table 65 - 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)(i)	Test Method(s):	C63.10 12.4.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA π/4 DQPSK (8-DH5)	Duty Cycle (%):	78.2
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.90

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5733	14.80	-	-	-	-	30.00	-15.20
5789	14.93	-	-	-	-	30.00	-15.07
5844	14.94	-	-	-	-	30.00	-15.06

Table 66 - 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):	C63.10 12.4.3.2
Additional Reference(s):	662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	iPA GFSK (DH5)	Duty Cycle (%):	76.9
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	7.59

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5162	5.02	4.40	-	-	7.73	22.41	-14.68
5204	5.25	4.33	-	-	7.82	22.41	-14.58
5245	4.31	5.15	-	-	7.76	22.41	-14.64

Table 67 - 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):	C63.10 12.4.3.2
Additional Reference(s):	662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	iPA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.6
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	7.59

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5162	4.16	3.51	-	-	6.86	22.41	-15.55
5204	4.20	3.44	-	-	6.85	22.41	-15.56
5245	4.14	3.52	-	-	6.85	22.41	-15.56

Table 68 - 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):	C63.10 12.4.3.2
Additional Reference(s):	662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	iPA π/4 DQPSK (8-DH5)	Duty Cycle (%):	78.5
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	7.59

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5162	4.24	3.21	-	-	6.77	22.41	-15.64
5204	4.25	3.37	-	-	6.84	22.41	-15.57
5245	4.12	3.56	-	-	6.86	22.41	-15.55

Table 69 - 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):	C63.10 12.4.3.2
Additional Reference(s):	662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	ePA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.3
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	7.59

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5162	7.29	6.75	-	-	10.04	22.41	-12.37
5204	7.22	6.29	-	-	9.79	22.41	-12.61
5245	7.45	6.53	-	-	10.03	22.41	-12.38

Table 70 - 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):	C63.10 12.4.3.2
Additional Reference(s):	662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	ePA π/4 DQPSK (8-DH5)	Duty Cycle (%):	78.7
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	7.59

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5162	9.28	8.65	-	-	11.98	22.41	-10.42
5204	9.04	8.34	-	-	11.72	22.41	-10.69
5245	9.39	8.49	-	-	11.97	22.41	-10.43

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)(i)	Test Method(s):	C63.10 12.4.3.2
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):	8.42

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5733	10.65	9.96	-	-	13.33	27.58	-14.24
5789	10.66	10.00	-	-	13.35	27.58	-14.22
5844	10.97	10.62	-	-	13.81	27.58	-13.77

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)(i)	Test Method(s):	C63.10 12.4.3.2
Additional Reference(s):	662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	iPA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.4
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	8.42

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5733	4.36	3.91	-	-	7.15	27.58	-20.43
5789	4.29	4.33	-	-	7.32	27.58	-20.25
5844	4.33	4.19	-	-	7.27	27.58	-20.31

Table 73 - 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)(i)	Test Method(s):	C63.10 12.4.3.2
Additional Reference(s):	662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	iPA π/4 DQPSK (8-DH5)	Duty Cycle (%):	78.2
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	8.42

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5733	4.37	3.83	-	-	7.12	27.58	-20.46
5789	4.30	4.27	-	-	7.29	27.58	-20.28
5844	4.32	4.15	-	-	7.25	27.58	-20.33

Table 74 - 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)(i)	Test Method(s):	C63.10 12.4.3.2
Additional Reference(s):	662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	ePA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.1
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	8.42

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5733	14.81	14.27	-	-	17.56	27.58	-10.02
5789	14.98	14.70	-	-	17.85	27.58	-9.72
5844	14.56	14.22	-	-	17.40	27.58	-10.17

Table 75 - 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)(i)	Test Method(s):	C63.10 12.4.3.2
Additional Reference(s):	662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1)		

DUT Configuration			
Mode:	ePA π/4 DQPSK (8-DH5)	Duty Cycle (%):	78.2
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	8.42

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5733	14.89	13.97	-	-	17.47	27.58	-10.11
5789	14.58	14.13	-	-	17.37	27.58	-10.20
5844	14.72	14.19	-	-	17.47	27.58	-10.10

Table 76 - Maximum Conducted (average) Output Power Results

FCC 47 CFR Part 15E, Limit Clause 15.407(a)

Condition of Operation	Frequency Range (MHz)			
	5150-5250	5250-5350	5470-5725	5725-5850
Max Conducted TX Power	30 dBm (1W) for master device 24 dBm (250 mW) for client device	24 dBm (250 mW) or 11 dBm + 10 Log B, whichever is lower (B = 26 dB emission BW)		30 dBm (1 W)
Max EIRP	4W (36 dBm) with 6 dBi antenna 200 W (53 dBm) for fixed P-t-P application with 23 dBi antenna Additional rule for outdoor operation: Max_EIRP < 125 mW (21 dBm) at any elevation angle > 30° from horizon.	1 W (30 dBm) with 6 dBi antenna		4 W (36 dBm) with 6 dBi antenna. No EIRP limit for fixed P-t-P application (i.e., no antenna gain limit)

Table 77

2.3.7 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 14 and SAR Chamber 2.

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
USB Power Sensors, 50MHz to 8GHz	Boonton	RTP5008	5921	12	05-Feb-2025
USB Power Sensors, 50MHz to 8GHz	Boonton	RTP5008	5922	12	05-Feb-2025
Digital Multimeter	Fluke	115	6145	12	06-Jun-2025
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6517	12	22-Feb-2025
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6518	12	16-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	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	6529	12	16-Feb-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6530	12	16-Feb-2025
USB Wideband Power Sensor	Boonton	RTP5008	6585	12	20-Feb-2025
USB Wideband Power Sensor	Boonton	RTP5008	6586	12	20-Feb-2025
USB Wideband Power Sensor	Boonton	RTP5008	6587	12	13-Feb-2025
USB Wideband Power Sensor	Boonton	RTP5008	6588	12	13-Feb-2025
AC Programmable Power Supply	iTech	IT7324	6662	-	O/P Mon
AC Programmable Power Supply	iTech	IT7324	6665	-	O/P Mon

Table 78

O/P Mon - Output Monitored using calibrated equipment

2.4 Maximum Conducted Power Spectral Density

2.4.1 Specification Reference

FCC 47 CFR Part 15E, Clause 15.407 (a)

2.4.2 Equipment Under Test and Modification State

A3403, S/N: M7J9X1XPGD - Modification State 0
A3403, S/N: GD6T7RH2K2 - Modification State 0

2.4.3 Date of Test

01-October-2024 to 03-October-2024

2.4.4 Test Method

The test was performed in accordance with ANSI C63.10 2020 clause 12.6.

Where the EUT duty cycle was < 98 % and repeatable within 2 %, the spectrum analyser was set to trace (power) averaging and a duty cycle correction was added as calculated in the result tables below (Method SA-2).

Results for the U-NII-3 band were measured in a narrower bandwidth and integrated over 500 kHz using the spectrum analysers channel power integration function.

The output power was verified as being the same from each transmit core (within negligible tolerances), but the antenna gains were not identical. Therefore, the modes reported for SISO or 2TX MIMO operation are those giving the highest EIRP and/or lowest conducted limit based on the combination of antennas giving highest total directional gain.

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

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

2.4.5 Environmental Conditions

Ambient Temperature	20.4 - 21.8 °C
Relative Humidity	45.4 - 53.1 %

2.4.6 Test Results

Narrowband

Test Configuration			
Frequency Range:	5.150-5.250 GHz	Band:	U-NII-1
Limit Clause(s):	15.407 (a)(1)(iv)	Test Method(s):	C63.10 12.4.2.4 C63.10 12.6
Additional Reference(s):	-		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	iPA GFSK (DH5)	Duty Cycle (%):	76.9
Antenna Configuration:	SISO	DCCF (dB):	1.14
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.70

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / MHz)	Margin (dB)
	A	B	C	D	∑		
5162	8.93	-	-	-	-	11.00	-2.07
5204	9.20	-	-	-	-	11.00	-1.80
5245	9.16	-	-	-	-	11.00	-1.84

Table 79 - Maximum Power Spectral Density 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):	C63.10 12.4.2.4 C63.10 12.6
Additional Reference(s):	-		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	iPA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.2
Antenna Configuration:	SISO	DCCF (dB):	1.07
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.70

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / MHz)	Margin (dB)
	A	B	C	D	∑		
5162	0.79	-	-	-	-	11.00	-10.21
5204	0.99	-	-	-	-	11.00	-10.01
5245	1.38	-	-	-	-	11.00	-9.62

Table 80 - Maximum Power Spectral Density 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):	C63.10 12.4.2.4 C63.10 12.6
Additional Reference(s):	-		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	iPA π/4 DQPSK (8-DH5)	Duty Cycle (%):	78.3
Antenna Configuration:	SISO	DCCF (dB):	1.06
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.70

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / MHz)	Margin (dB)
	A	B	C	D	∑		
5162	-0.21	-	-	-	-	11.00	-11.21
5204	-1.55	-	-	-	-	11.00	-12.55
5245	-1.33	-	-	-	-	11.00	-12.33

Table 81 - Maximum Power Spectral Density 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):	C63.10 12.4.2.4 C63.10 12.6
Additional Reference(s):	-		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	ePA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.4
Antenna Configuration:	SISO	DCCF (dB):	1.06
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.70

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / MHz)	Margin (dB)
	A	B	C	D	∑		
5162	9.08	-	-	-	-	11.00	-1.92
5204	9.45	-	-	-	-	11.00	-1.55
5245	8.44	-	-	-	-	11.00	-2.56

Table 82 - Maximum Power Spectral Density 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):	C63.10 12.4.2.4 C63.10 12.6
Additional Reference(s):	-		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	ePA π/4 DQPSK (8-DH5)	Duty Cycle (%):	78.4
Antenna Configuration:	SISO	DCCF (dB):	1.06
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.70

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / MHz)	Margin (dB)
	A	B	C	D	∑		
5162	8.81	-	-	-	-	11.00	-2.19
5204	8.63	-	-	-	-	11.00	-2.37
5245	7.82	-	-	-	-	11.00	-3.18

Table 83 - Maximum Power Spectral Density Results

Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407 (a)(3)(i)	Test Method(s):	C63.10 12.4.2.4 C63.10 12.6
Additional Reference(s):	-		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	iPA GFSK (DH5)	Duty Cycle (%):	76.8
Antenna Configuration:	SISO	DCCF (dB):	1.15
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.90

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / 500 kHz)	Margin (dB)
	A	B	C	D	∑		
5733	9.94	-	-	-	-	30.00	-20.06
5789	9.03	-	-	-	-	30.00	-20.97
5844	8.91	-	-	-	-	30.00	-21.09

Table 84 - Maximum Power Spectral Density Results

Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407 (a)(3)(i)	Test Method(s):	C63.10 12.4.2.4 C63.10 12.6
Additional Reference(s):	-		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	iPA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.4
Antenna Configuration:	SISO	DCCF (dB):	1.05
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.90

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / 500 kHz)	Margin (dB)
	A	B	C	D	∑		
5733	-1.66	-	-	-	-	30.00	-31.66
5789	-1.05	-	-	-	-	30.00	-31.05
5844	-0.09	-	-	-	-	30.00	-30.09

Table 85 - Maximum Power Spectral Density Results

Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407 (a)(3)(i)	Test Method(s):	C63.10 12.4.2.4 C63.10 12.6
Additional Reference(s):	-		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	iPA π/4 DQPSK (8-DH5)	Duty Cycle (%):	78.2
Antenna Configuration:	SISO	DCCF (dB):	1.07
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.90

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / 500 kHz)	Margin (dB)
	A	B	C	D	∑		
5733	-2.53	-	-	-	-	30.00	-32.53
5789	-4.07	-	-	-	-	30.00	-34.07
5844	-2.46	-	-	-	-	30.00	-32.46

Table 86 - Maximum Power Spectral Density Results

Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407 (a)(3)(i)	Test Method(s):	C63.10 12.4.2.4 C63.10 12.6
Additional Reference(s):	-		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	ePA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.5
Antenna Configuration:	SISO	DCCF (dB):	1.05
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.90

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / 500 kHz)	Margin (dB)
	A	B	C	D	∑		
5733	10.84	-	-	-	-	30.00	-19.16
5789	9.45	-	-	-	-	30.00	-20.55
5844	9.68	-	-	-	-	30.00	-20.32

Table 87 - Maximum Power Spectral Density Results

Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407 (a)(3)(i)	Test Method(s):	C63.10 12.4.2.4 C63.10 12.6
Additional Reference(s):	-		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	ePA π/4 DQPSK (8-DH5)	Duty Cycle (%):	78.2
Antenna Configuration:	SISO	DCCF (dB):	1.07
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	5.90

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / 500 kHz)	Margin (dB)
	A	B	C	D	∑		
5733	7.12	-	-	-	-	30.00	-22.88
5789	6.66	-	-	-	-	30.00	-23.34
5844	7.96	-	-	-	-	30.00	-22.04

Table 88 - Maximum Power Spectral Density 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):	C63.10 12.4.2.4 C63.10 12.6
Additional Reference(s):	662911 D01 v02r01 E)2)b)		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	iPA GFSK (DH5)	Duty Cycle (%):	76.9
Antenna Configuration:	Beamforming	DCCF (dB):	1.14
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	7.59

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / MHz)	Margin (dB)
	A	B	C	D	∑		
5162	4.99	3.77	-	-	7.43	9.41	-1.97
5204	4.69	3.95	-	-	7.35	9.41	-2.06
5245	3.86	4.19	-	-	7.04	9.41	-2.37

Table 89 - Maximum Power Spectral Density 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):	C63.10 12.4.2.4 C63.10 12.6
Additional Reference(s):	662911 D01 v02r01 E)2)b)		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	iPA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.6
Antenna Configuration:	Beamforming	DCCF (dB):	1.05
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	7.59

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / MHz)	Margin (dB)
	A	B	C	D	∑		
5162	0.71	0.18	-	-	3.46	9.41	-5.95
5204	2.01	1.46	-	-	4.76	9.41	-4.65
5245	1.80	1.21	-	-	4.53	9.41	-4.88

Table 90 - Maximum Power Spectral Density 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):	C63.10 12.4.2.4 C63.10 12.6
Additional Reference(s):	662911 D01 v02r01 E)2)b)		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	iPA π/4 DQPSK (8-DH5)	Duty Cycle (%):	78.5
Antenna Configuration:	Beamforming	DCCF (dB):	1.05
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	7.59

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / MHz)	Margin (dB)
	A	B	C	D	∑		
5162	-1.44	-1.54	-	-	1.52	9.41	-7.89
5204	-1.24	-1.33	-	-	1.72	9.41	-7.68
5245	-1.23	-1.18	-	-	1.81	9.41	-7.60

Table 91 - Maximum Power Spectral Density 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):	C63.10 12.4.2.4 C63.10 12.6
Additional Reference(s):	662911 D01 v02r01 E)2)b)		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	ePA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.3
Antenna Configuration:	Beamforming	DCCF (dB):	1.06
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	7.59

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / MHz)	Margin (dB)
	A	B	C	D	∑		
5162	4.36	3.66	-	-	7.03	9.41	-2.37
5204	5.08	3.76	-	-	7.48	9.41	-1.93
5245	4.59	4.20	-	-	7.41	9.41	-2.00

Table 92 - Maximum Power Spectral Density 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):	C63.10 12.4.2.4 C63.10 12.6
Additional Reference(s):	662911 D01 v02r01 E)2)b)		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	ePA π/4 DQPSK (8-DH5)	Duty Cycle (%):	78.7
Antenna Configuration:	Beamforming	DCCF (dB):	1.04
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	7.59

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / MHz)	Margin (dB)
	A	B	C	D	∑		
5162	3.71	2.70	-	-	6.24	9.41	-3.16
5204	4.11	3.70	-	-	6.92	9.41	-2.49
5245	4.03	4.13	-	-	7.09	9.41	-2.32

Table 93 - Maximum Power Spectral Density Results

Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407 (a)(3)(i)	Test Method(s):	C63.10 12.4.2.4 C63.10 12.6
Additional Reference(s):	662911 D01 v02r01 E)2)b)		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	iPA GFSK (DH5)	Duty Cycle (%):	76.7
Antenna Configuration:	Beamforming	DCCF (dB):	1.15
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	8.42

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / 500 kHz)	Margin (dB)
	A	B	C	D	∑		
5733	9.37	9.13	-	-	12.26	27.58	-15.32
5789	9.20	9.28	-	-	12.25	27.58	-15.32
5844	9.68	9.15	-	-	12.43	27.58	-15.14

Table 94 - Maximum Power Spectral Density Results

Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407 (a)(3)(i)	Test Method(s):	C63.10 12.4.2.4 C63.10 12.6
Additional Reference(s):	662911 D01 v02r01 E)2)b)		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	iPA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.4
Antenna Configuration:	Beamforming	DCCF (dB):	1.06
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	8.42

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / 500 kHz)	Margin (dB)
	A	B	C	D	∑		
5733	-0.73	-0.56	-	-	2.36	27.58	-25.21
5789	-1.33	-0.36	-	-	2.19	27.58	-25.39
5844	-1.16	-0.73	-	-	2.07	27.58	-25.51

Table 95 - Maximum Power Spectral Density Results

Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407 (a)(3)(i)	Test Method(s):	C63.10 12.4.2.4 C63.10 12.6
Additional Reference(s):	662911 D01 v02r01 E)2)b)		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	iPA π/4 DQPSK (8-DH5)	Duty Cycle (%):	78.2
Antenna Configuration:	Beamforming	DCCF (dB):	1.07
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	8.42

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / 500 kHz)	Margin (dB)
	A	B	C	D	∑		
5733	-3.83	-3.86	-	-	-0.83	27.58	-28.41
5789	-2.85	-3.78	-	-	-0.28	27.58	-27.86
5844	-3.10	-3.14	-	-	-0.11	27.58	-27.69

Table 96 - Maximum Power Spectral Density Results

Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407 (a)(3)(i)	Test Method(s):	C63.10 12.4.2.4 C63.10 12.6
Additional Reference(s):	662911 D01 v02r01 E)2)b)		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	ePA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.1
Antenna Configuration:	Beamforming	DCCF (dB):	1.07
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	8.42

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / 500 kHz)	Margin (dB)
	A	B	C	D	∑		
5733	10.30	9.11	-	-	12.76	27.58	-14.82
5789	9.58	8.59	-	-	12.12	27.58	-15.45
5844	9.39	9.52	-	-	12.46	27.58	-15.11

Table 97 - Maximum Power Spectral Density Results

Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407 (a)(3)(i)	Test Method(s):	C63.10 12.4.2.4 C63.10 12.6
Additional Reference(s):	662911 D01 v02r01 E)2)b)		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	ePA π/4 DQPSK (8-DH5)	Duty Cycle (%):	78.2
Antenna Configuration:	Beamforming	DCCF (dB):	1.07
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	8.42

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / 500 kHz)	Margin (dB)
	A	B	C	D	∑		
5733	6.82	6.37	-	-	9.61	27.58	-17.96
5789	6.52	6.97	-	-	9.76	27.58	-17.82
5844	7.72	6.06	-	-	9.98	27.58	-17.59

Table 98 - Maximum Power Spectral Density Results

FCC 47 CFR Part 15E, Limit Clause 15.407(a)

Condition of Operation	Frequency Range (MHz)			
	5150-5250	5250-5350	5470-5725	5725-5850
Max Conducted Power Spectral Density	17 dBm/MHz for master device 11 dBm/MHz for mobile/portable client device	11 dBm/MHz		30 dBm/500 kHz

Table 99

2.4.7 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 14 and SAR Chamber 2.

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
USB Power Sensors, 50MHz to 8GHz	Boonton	RTP5008	5921	12	05-Feb-2025
USB Power Sensors, 50MHz to 8GHz	Boonton	RTP5008	5922	12	05-Feb-2025
Digital Multimeter	Fluke	115	6145	12	06-Jun-2025
MXA Signal Analyser	Keysight Technologies	N9020B	6417	24	26-Feb-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	6518	12	16-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	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	6529	12	16-Feb-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6530	12	16-Feb-2025
USB Wideband Power Sensor	Boonton	RTP5008	6585	12	20-Feb-2025
USB Wideband Power Sensor	Boonton	RTP5008	6586	12	20-Feb-2025
AC Programmable Power Supply	iTech	IT7324	6662	-	O/P Mon
AC Programmable Power Supply	iTech	IT7324	6665	-	O/P Mon

Table 100

O/P Mon - Output Monitored using calibrated equipment

2.5 Authorised Band Edges

2.5.1 Specification Reference

FCC 47 CFR Part 15E, Clause 15.407 (b)

2.5.2 Equipment Under Test and Modification State

A3403, S/N: JF4T7PYJ66 - Modification State 0

2.5.3 Date of Test

04-September-2024 to 09-September-2024

2.5.4 Test Method

The test was performed in accordance with ANSI C63.10, clause 6.6.

Field Strength (dBµV/m at 3 m) = EIRP (dBm) + 95.2 dB

Authorised band edge measurements were performed, with the device operating in SISO and MIMO configurations, across the various modes supported by the device.

The measurements displayed within this report, have been limited to those modes which have been shown to be worst case.

Further measurements are held on file by TÜV SÜD and are available if required.

2.5.5 Environmental Conditions

Ambient Temperature	21.4 - 23.9 °C
Relative Humidity	45.6 - 52.5 %

2.5.6 Test Results

Narrowband

iPA - Core 0 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBµV/m)
Static	DH5	5733	5725	56.03
Static	HDR4	5733	5725	56.39
Static	HDR8	5733	5725	56.22
Hopping	DH5	5733-5811	5725	56.69
Hopping	HDR4	5733-5811	5725	56.19
Hopping	HDR8	5733-5811	5725	56.73
Static	DH5	5844	5850	57.06
Static	HDR4	5844	5850	56.11
Static	HDR8	5844	5850	56.64
Hopping	DH5	5766-5844	5850	55.76
Hopping	HDR4	5766-5844	5850	56.51
Hopping	HDR8	5766-5844	5850	56.75

Table 101 - SISO Authorised Band Edge Results

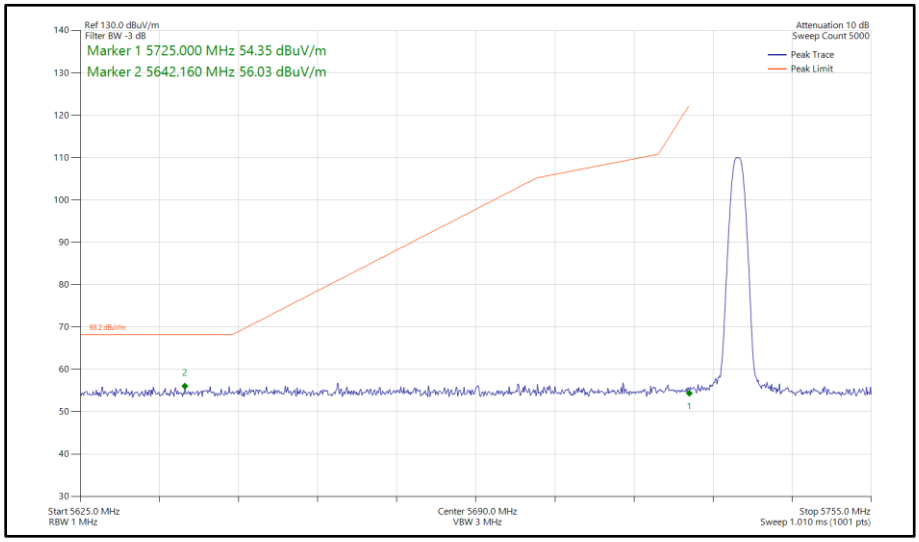

Figure 166 - Bluetooth DH5, SISO, Core 0 - 5733 MHz
Band Edge Frequency 5725 MHz

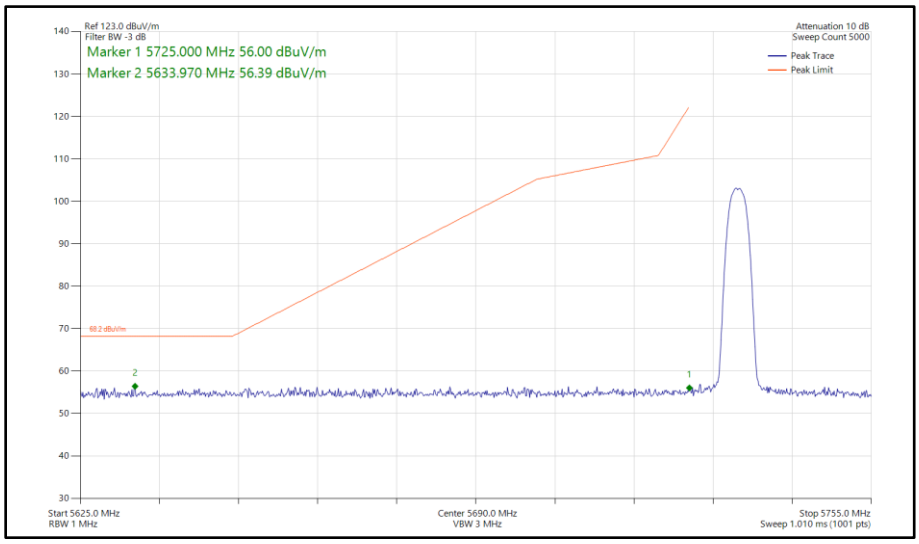

Figure 167 - Bluetooth HDR4, SISO, Core 0 - 5733 MHz
Band Edge Frequency 5725 MHz

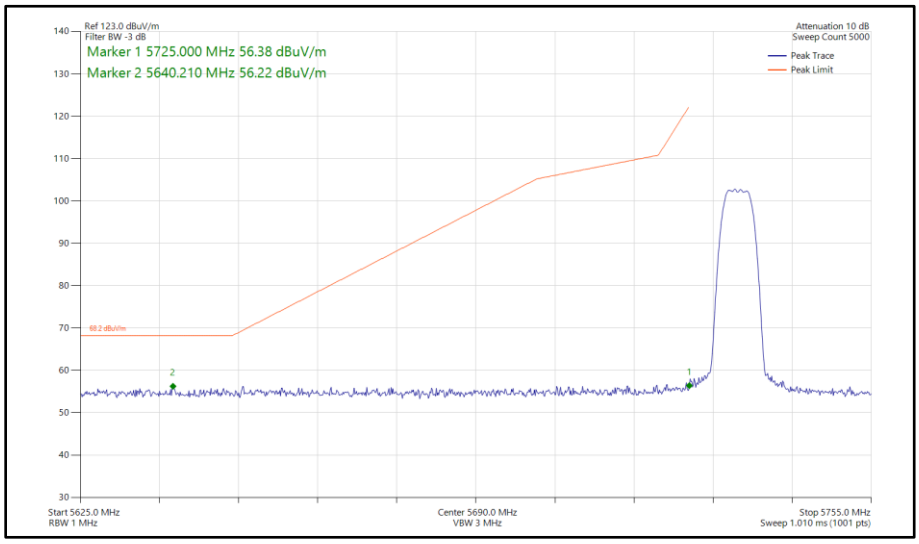

Figure 168 - Bluetooth HDR8, SISO, Core 0 - 5733 MHz
Band Edge Frequency 5725 MHz

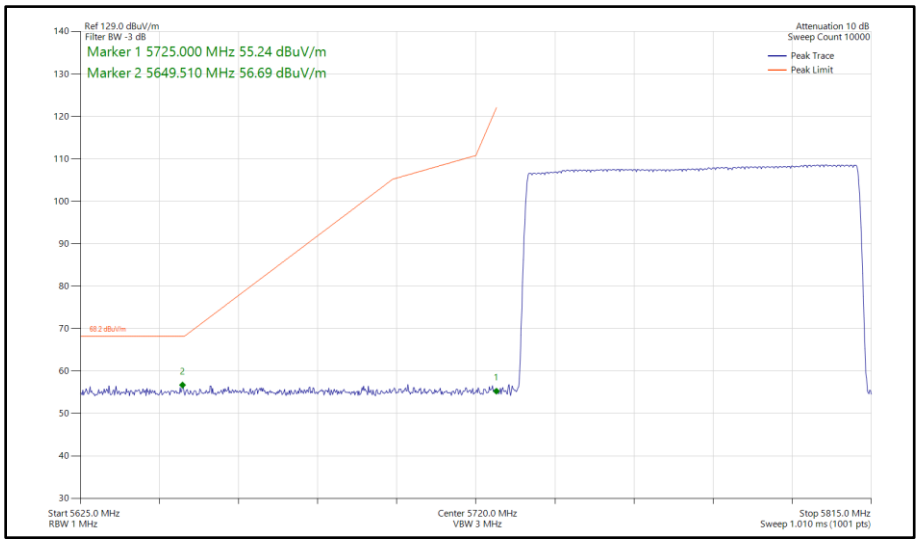

Figure 169 - Bluetooth DH5, SISO, Core 0 - 5733-5811 MHz Band Edge Frequency 5725 MHz

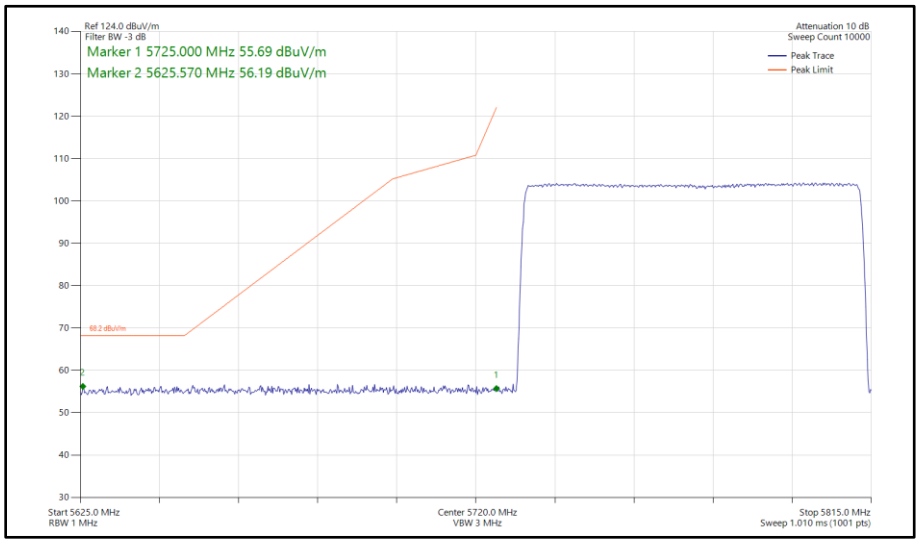

Figure 170 - Bluetooth HDR4, SISO, Core 0 - 5733-5811 MHz Band Edge Frequency 5725 MHz

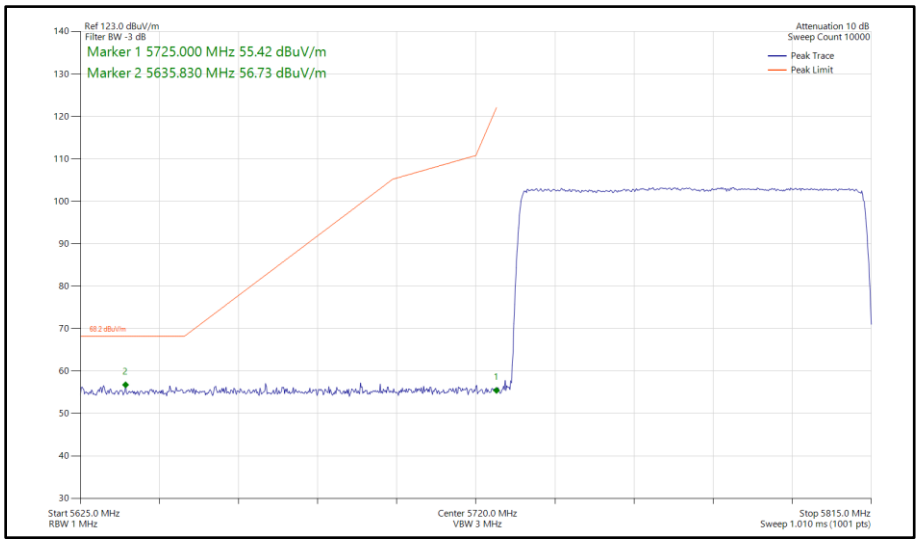

Figure 171 - Bluetooth HDR8, SISO, Core 0 - 5733-5811 MHz Band Edge Frequency 5725 MHz

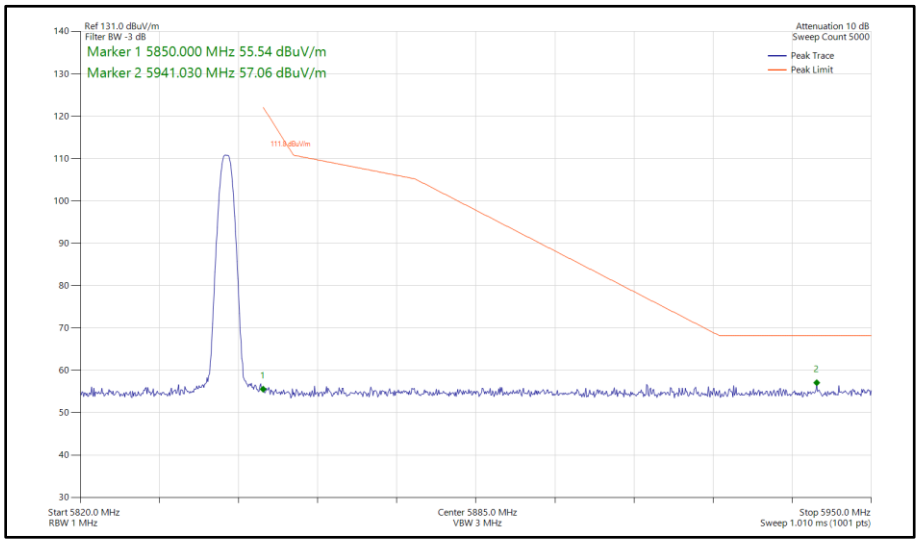

Figure 172 - Bluetooth DH5, SISO, Core 0 - 5844 MHz Band Edge Frequency 5850 MHz

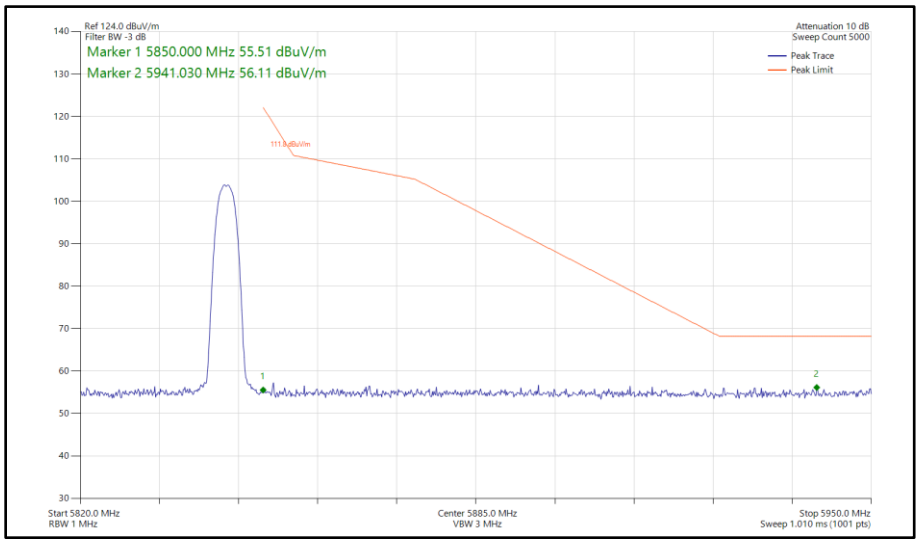

Figure 173 - Bluetooth HDR4, SISO, Core 0 - 5844 MHz Band Edge Frequency 5850 MHz

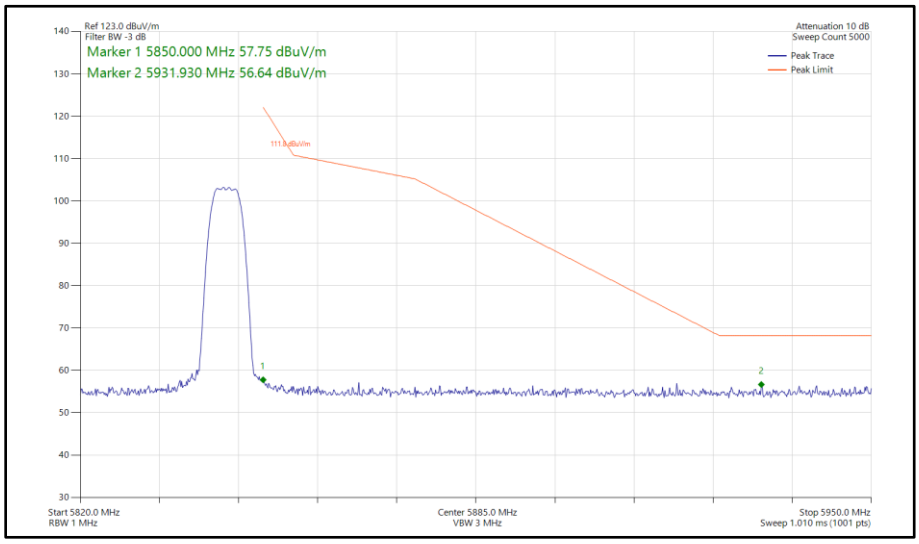

Figure 174 - Bluetooth HDR8, SISO, Core 0 - 5844 MHz Band Edge Frequency 5850 MHz

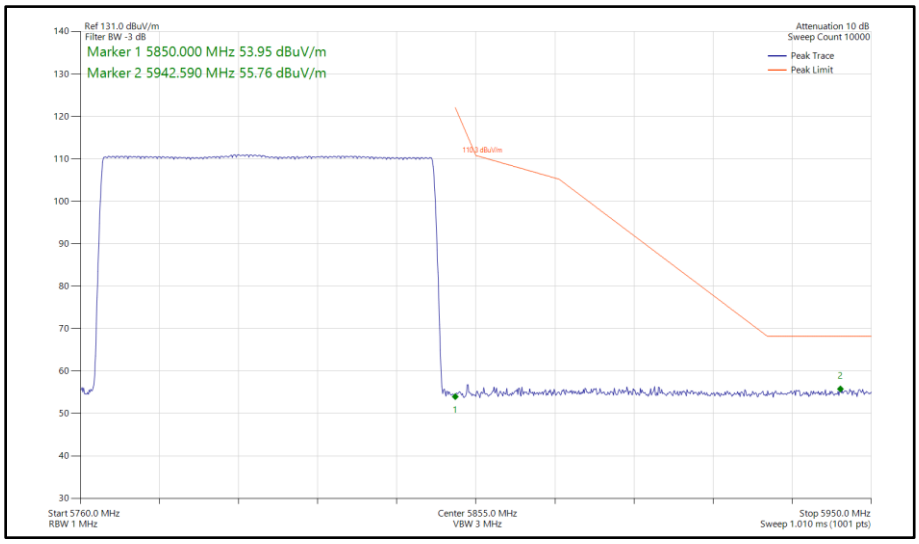

Figure 175 - Bluetooth DH5, SISO, Core 0 - 5766-5844 MHz Band Edge Frequency 5850 MHz

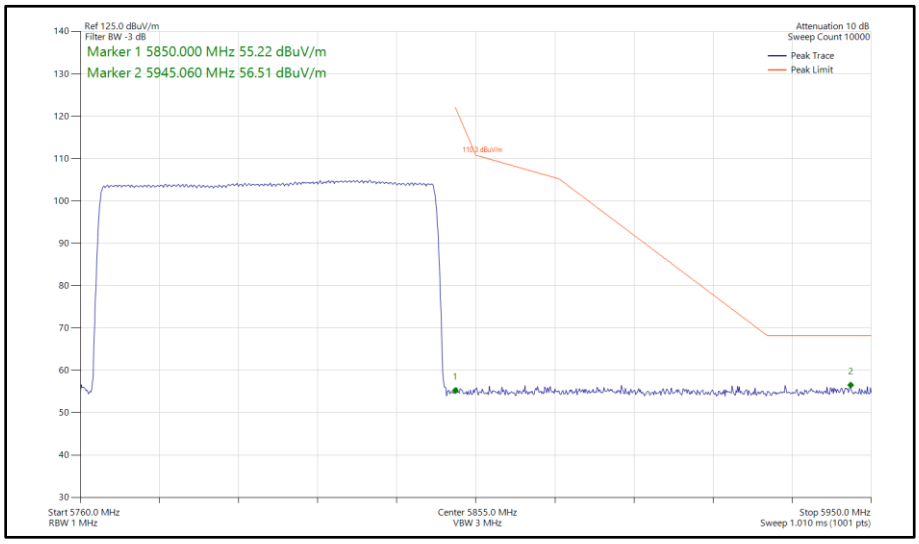

Figure 176 - Bluetooth HDR4, SISO, Core 0 - 5766-5844 MHz Band Edge Frequency 5850 MHz

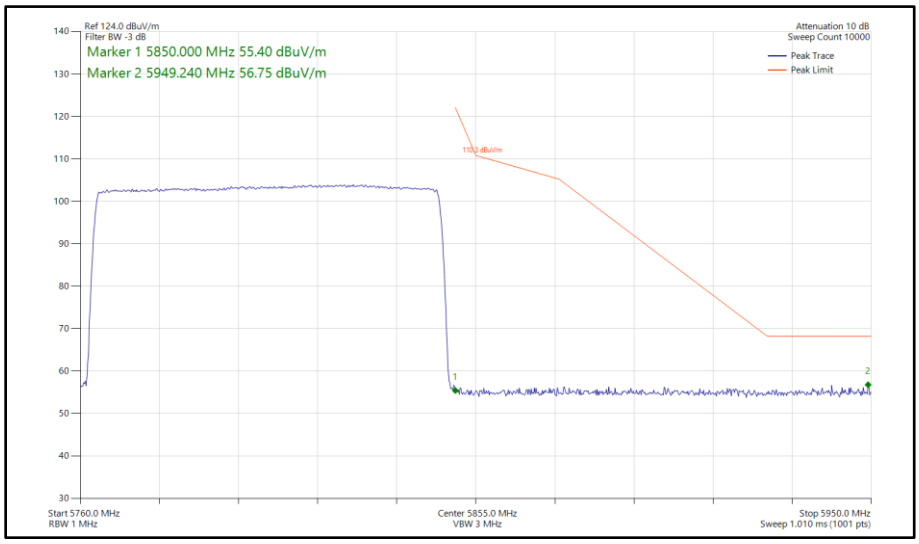

Figure 177 - Bluetooth HDR8, SISO, Core 0 - 5766-5844 MHz Band Edge Frequency 5850 MHz

iPA - Core 1 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBµV/m)
Static	DH5	5733	5725	56.44
Static	HDR4	5733	5725	56.19
Static	HDR8	5733	5725	56.21
Hopping	DH5	5733-5811	5725	56.51
Hopping	HDR4	5733-5811	5725	57.10
Hopping	HDR8	5733-5811	5725	56.75
Static	DH5	5844	5850	56.60
Static	HDR4	5844	5850	56.19
Static	HDR8	5844	5850	56.97
Hopping	DH5	5766-5844	5850	56.67
Hopping	HDR4	5766-5844	5850	56.56
Hopping	HDR8	5766-5844	5850	56.43

Table 102 - SISO Authorised Band Edge Results

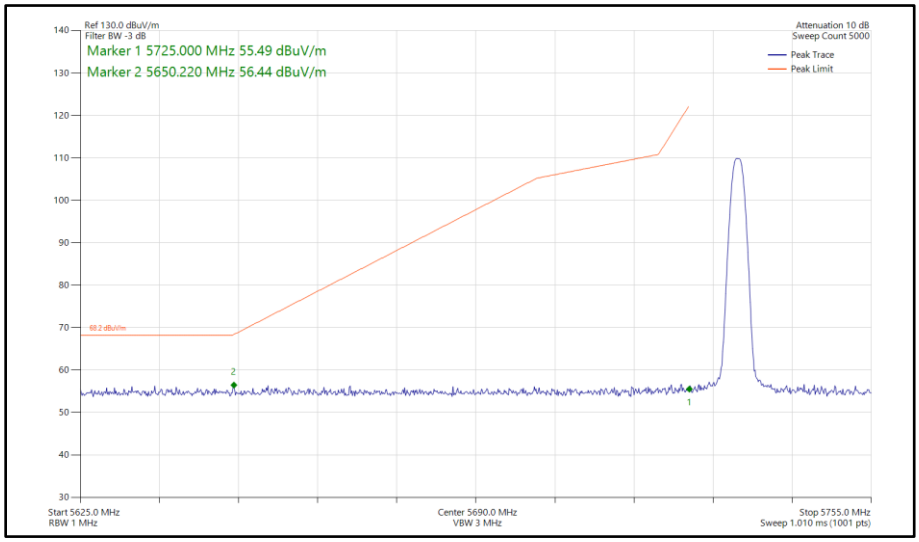

Figure 178 - Bluetooth DH5, SISO, Core 1 - 5733 MHz
Band Edge Frequency 5725 MHz

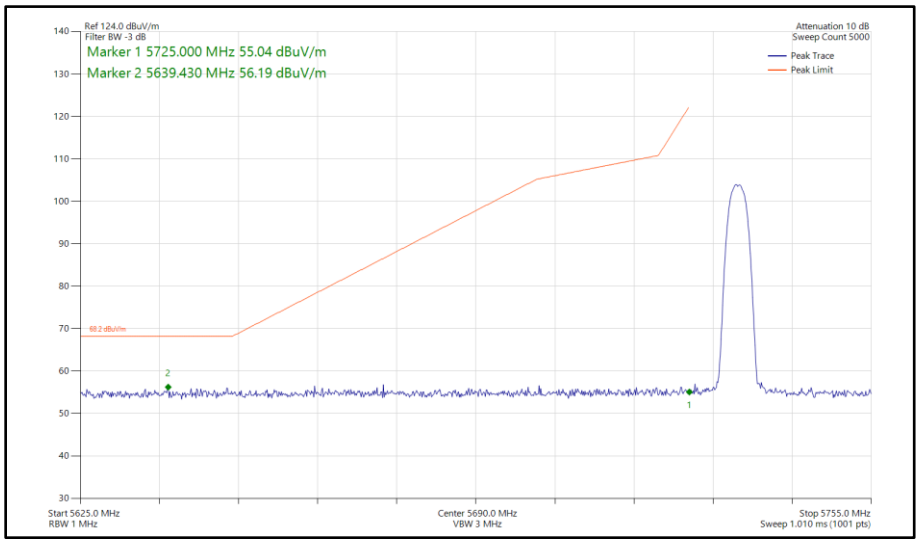

Figure 179 - Bluetooth HDR4, SISO, Core 1 - 5733 MHz Band Edge Frequency 5725 MHz

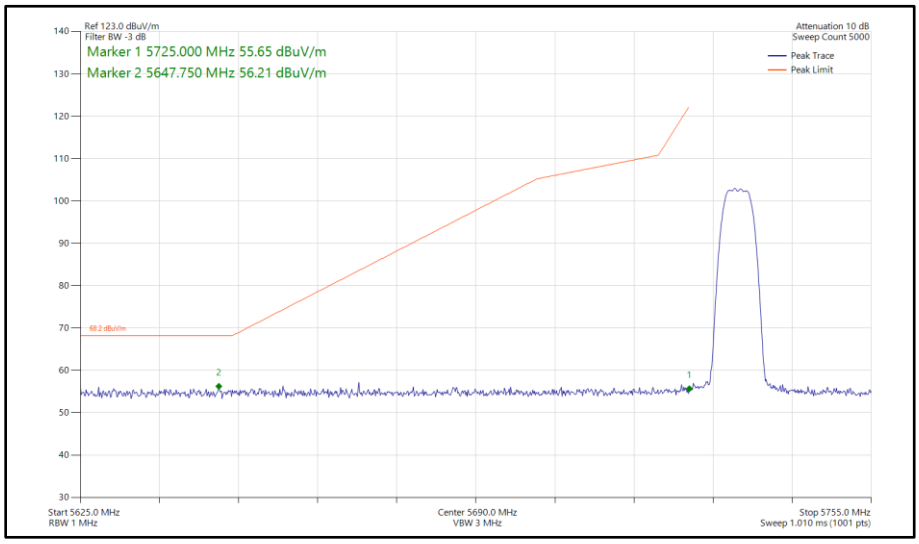

Figure 180 - Bluetooth HDR8, SISO, Core 1 - 5733 MHz Band Edge Frequency 5725 MHz

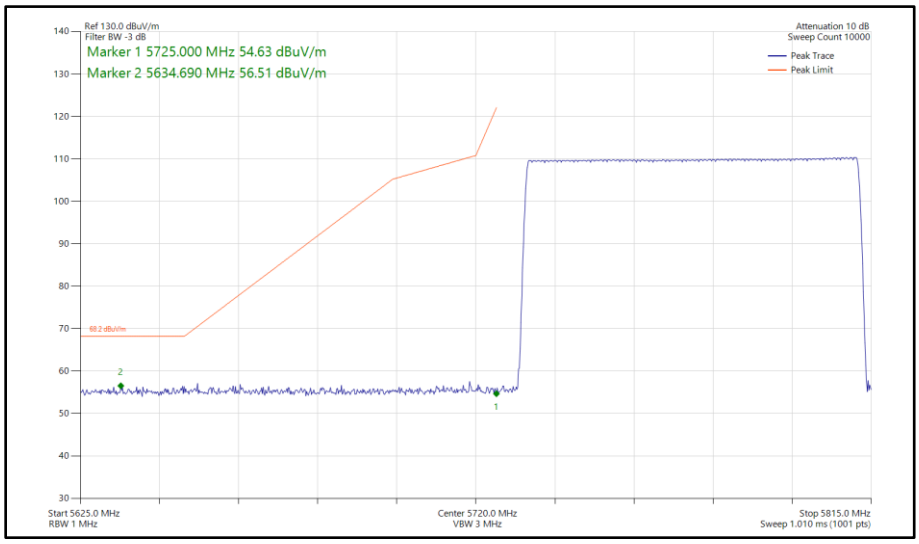

Figure 181 - Bluetooth DH5, SISO, Core 1 - 5733-5811 MHz Band Edge Frequency 5725 MHz

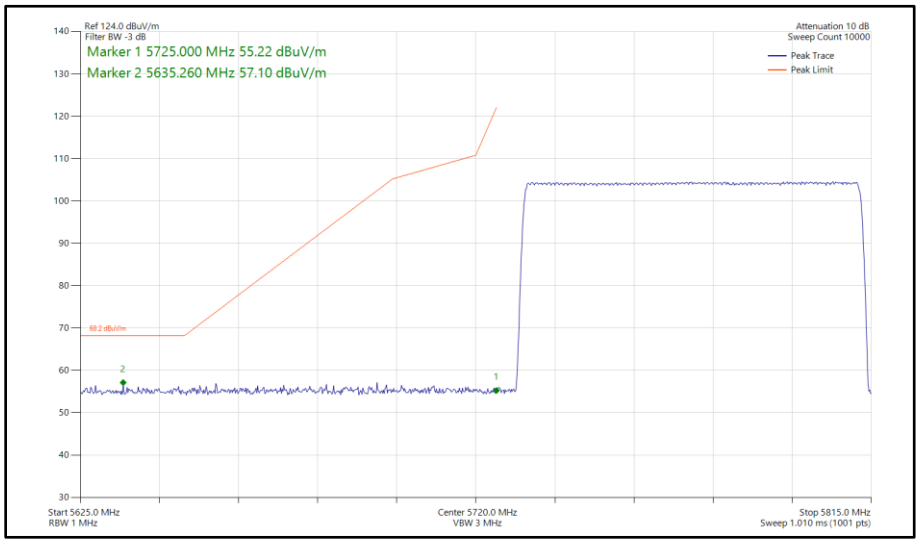

Figure 182 - Bluetooth HDR4, SISO, Core 1 - 5733-5811 MHz Band Edge Frequency 5725 MHz

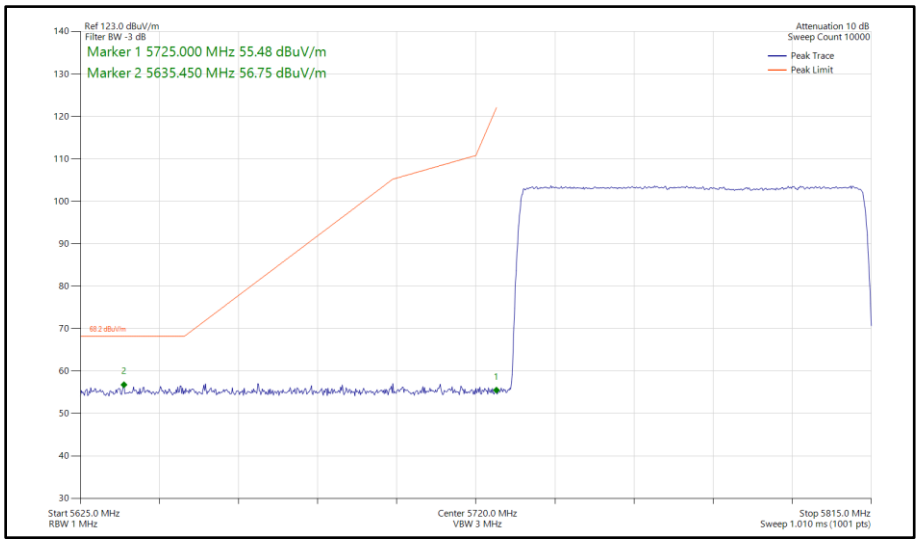

Figure 183 - Bluetooth HDR8, SISO, Core 1 - 5733-5811 MHz
Band Edge Frequency 5725 MHz

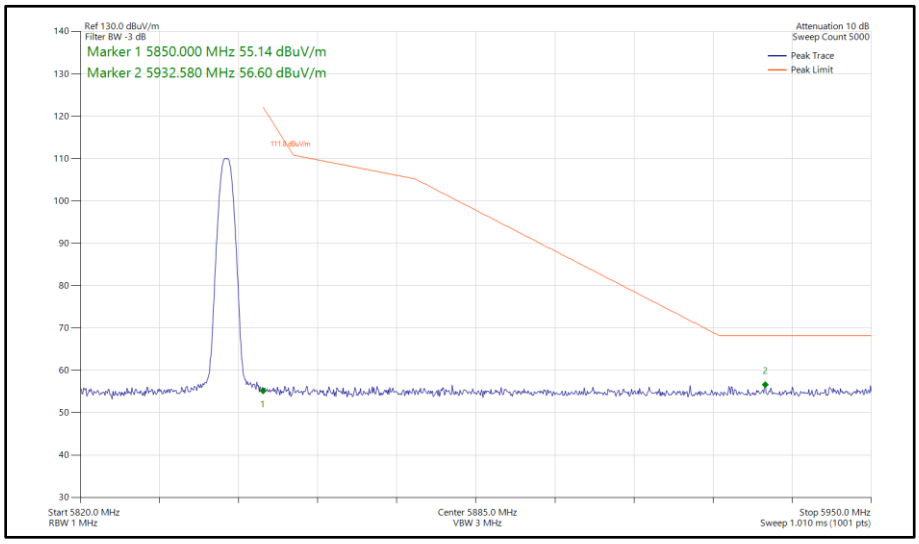

Figure 184 - Bluetooth DH5, SISO, Core 1 - 5844 MHz
Band Edge Frequency 5850 MHz

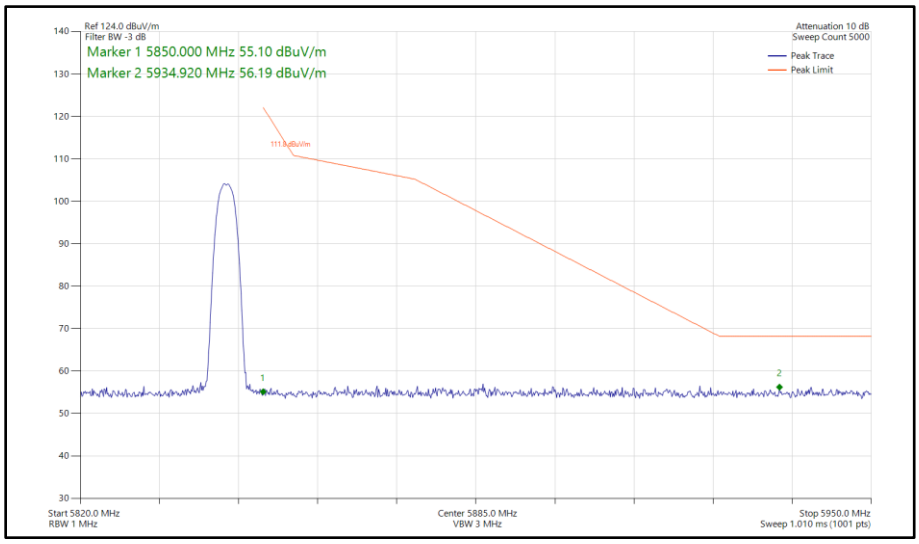

Figure 185 - Bluetooth HDR4, SISO, Core 1 - 5844 MHz Band Edge Frequency 5850 MHz

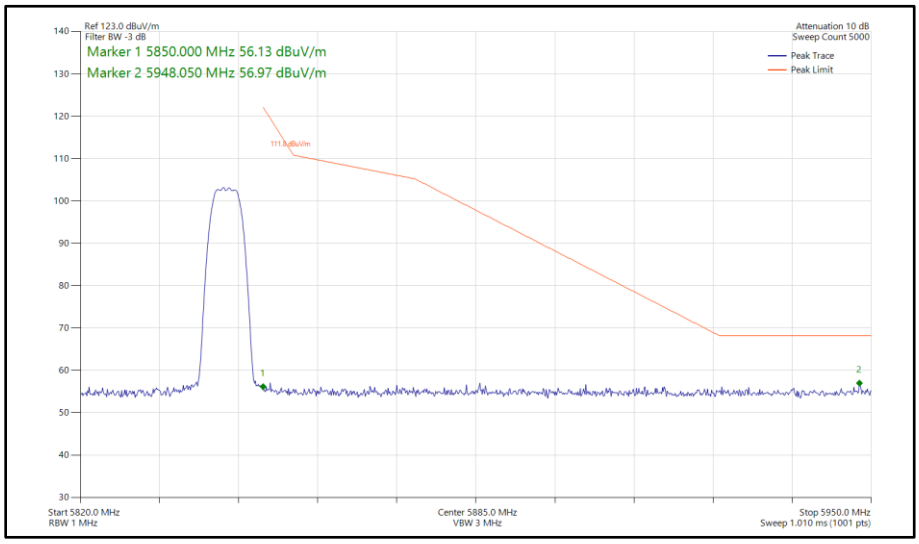

Figure 186 - Bluetooth HDR8, SISO, Core 1 - 5844 MHz Band Edge Frequency 5850 MHz

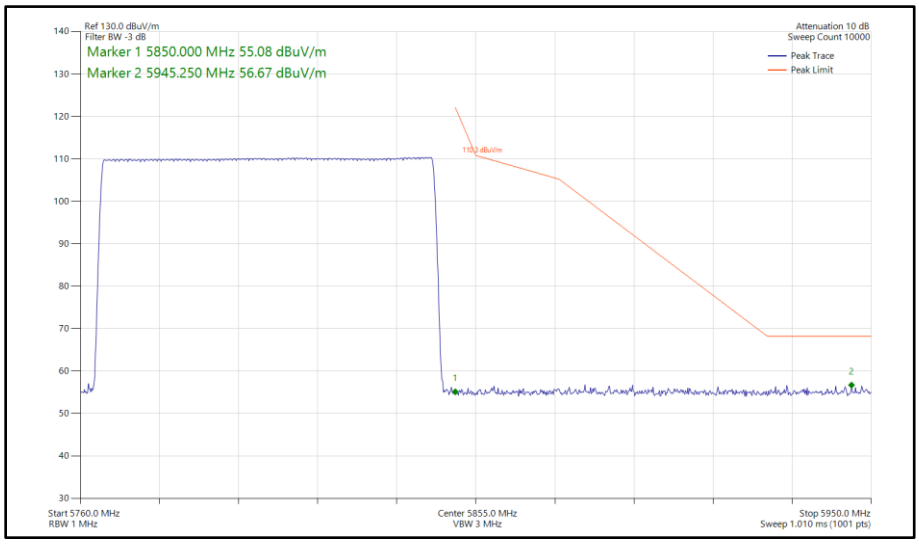

Figure 187 - Bluetooth DH5, SISO, Core 1 - 5766-5844 MHz Band Edge Frequency 5850 MHz

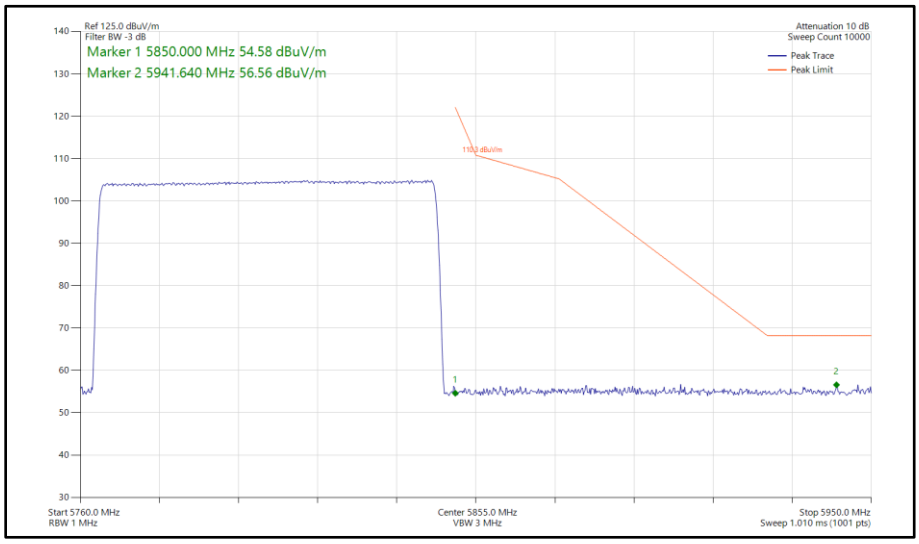

Figure 188 - Bluetooth HDR4, SISO, Core 1 - 5766-5844 MHz Band Edge Frequency 5850 MHz

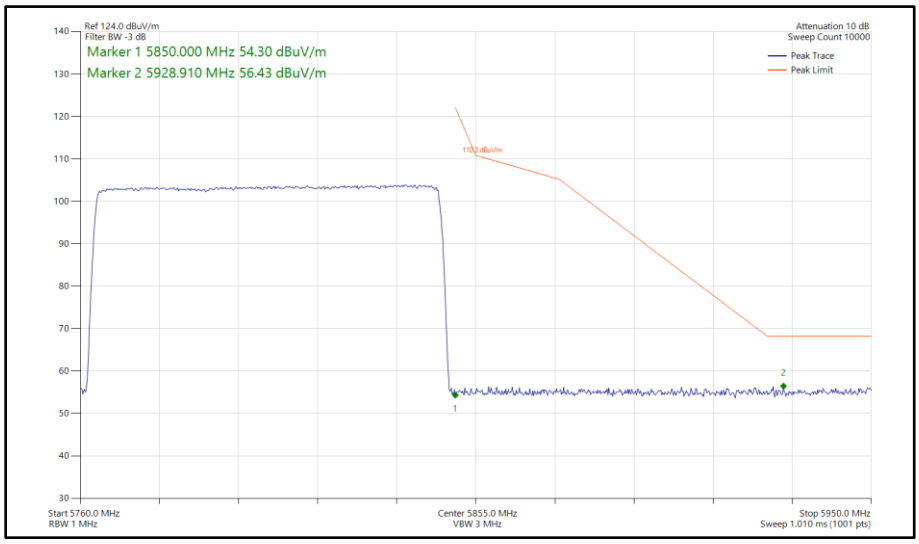

Figure 189 - Bluetooth HDR8, SISO, Core 1 - 5766-5844 MHz Band Edge Frequency 5850 MHz

iPA - Core 0 - Core 1 (MIMO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBµV/m)
Static	DH5	5733	5725	56.13
Static	HDR4	5733	5725	56.45
Static	HDR8	5733	5725	56.09
Hopping	DH5	5733-5811	5725	56.09
Hopping	HDR4	5733-5811	5725	56.34
Hopping	HDR8	5733-5811	5725	56.32
Static	DH5	5844	5850	56.62
Static	HDR4	5844	5850	57.35
Static	HDR8	5844	5850	56.80
Hopping	DH5	5766-5844	5850	56.65
Hopping	HDR4	5766-5844	5850	56.98
Hopping	HDR8	5766-5844	5850	56.86

Table 103 - MIMO Authorised Band Edge Results

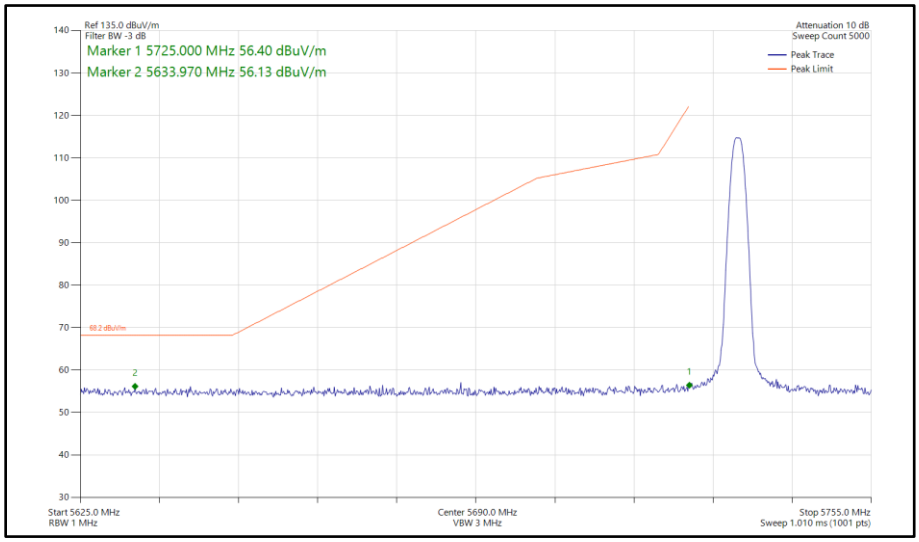

Figure 190 - Bluetooth DH5, MIMO, Core 0 - Core 1 - 5733 MHz Band Edge Frequency 5725 MHz

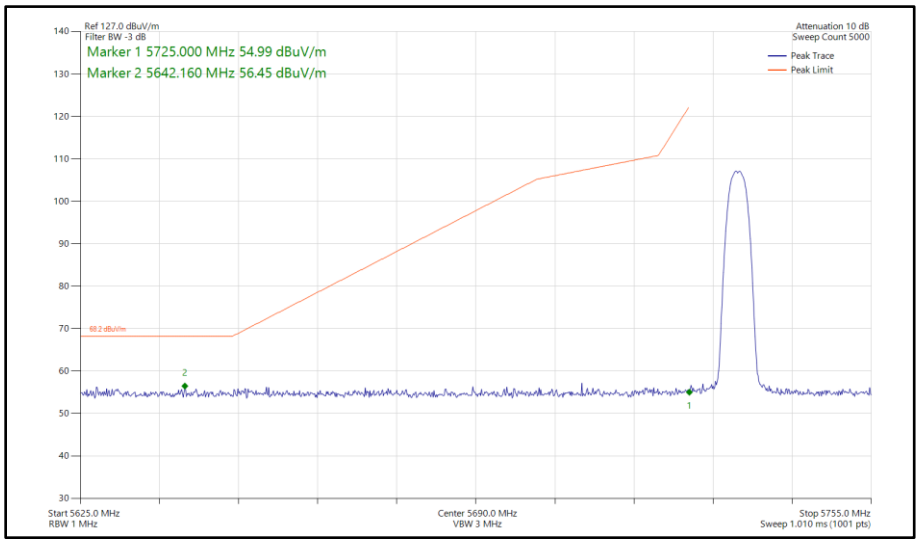

Figure 191 - Bluetooth HDR4, MIMO, Core 0 - Core 1 - 5733 MHz Band Edge Frequency 5725 MHz

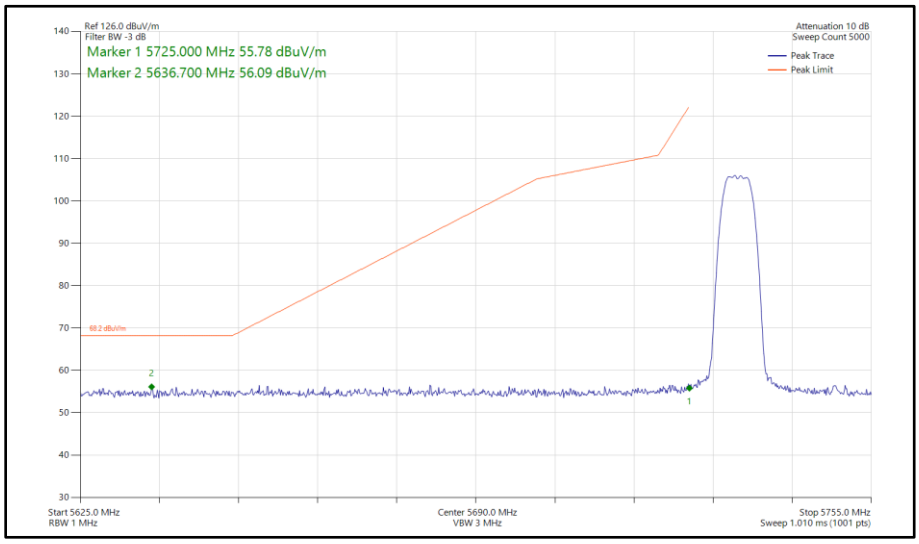

Figure 192 - Bluetooth HDR8, MIMO, Core 0 - Core 1 - 5733 MHz Band Edge Frequency 5725 MHz

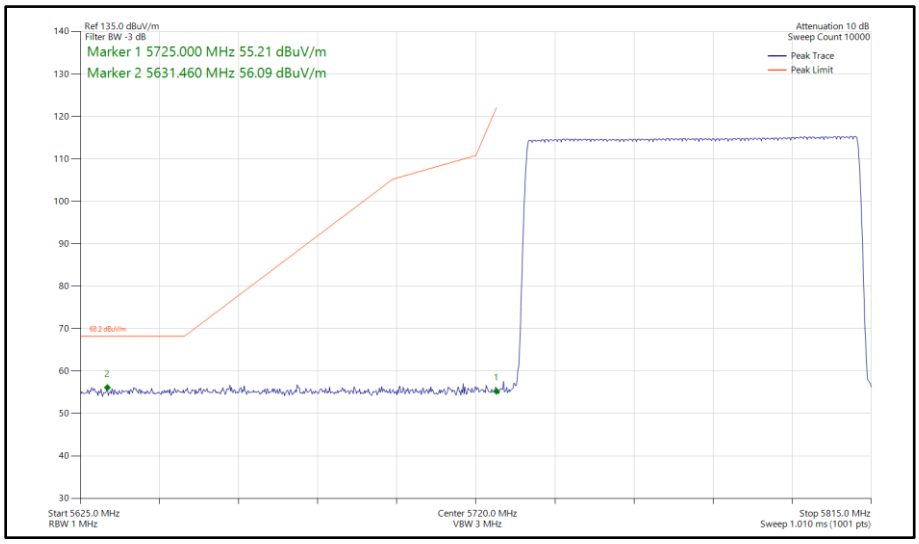

Figure 193 - Bluetooth DH5, MIMO, Core 0 - Core 1 - 5733-5811 MHz Band Edge Frequency 5725 MHz

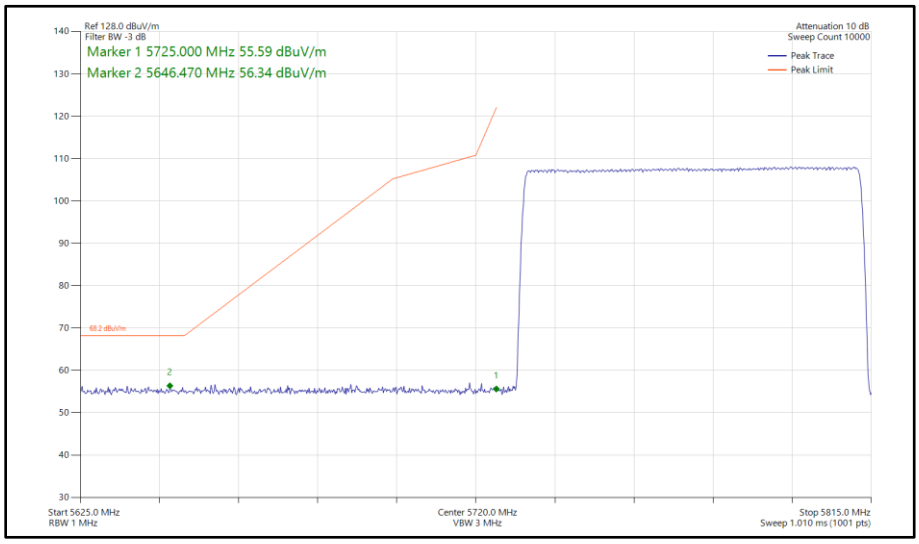

Figure 194 - Bluetooth HDR4, MIMO, Core 0 - Core 1 - 5733-5811 MHz Band Edge Frequency 5725 MHz

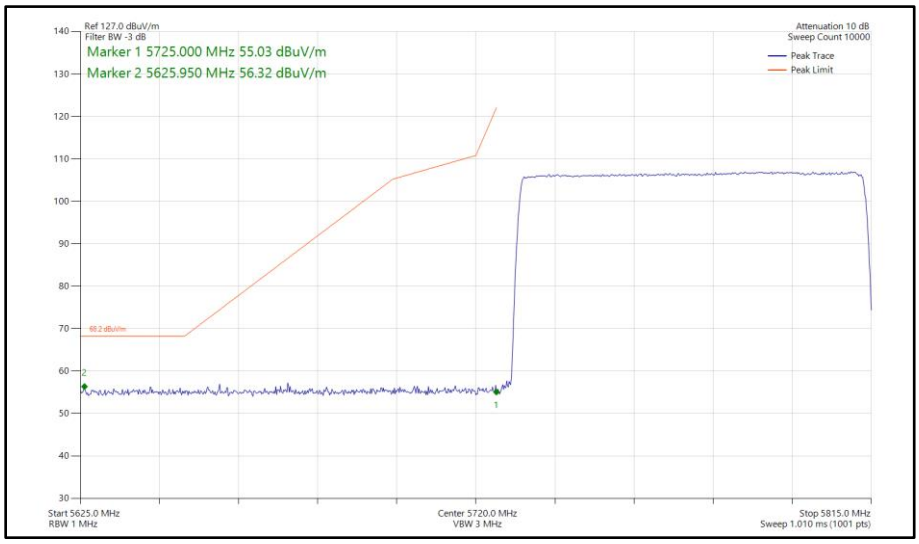

Figure 195 - Bluetooth HDR8, MIMO, Core 0 - Core 1 - 5733-5811 MHz Band Edge Frequency 5725 MHz

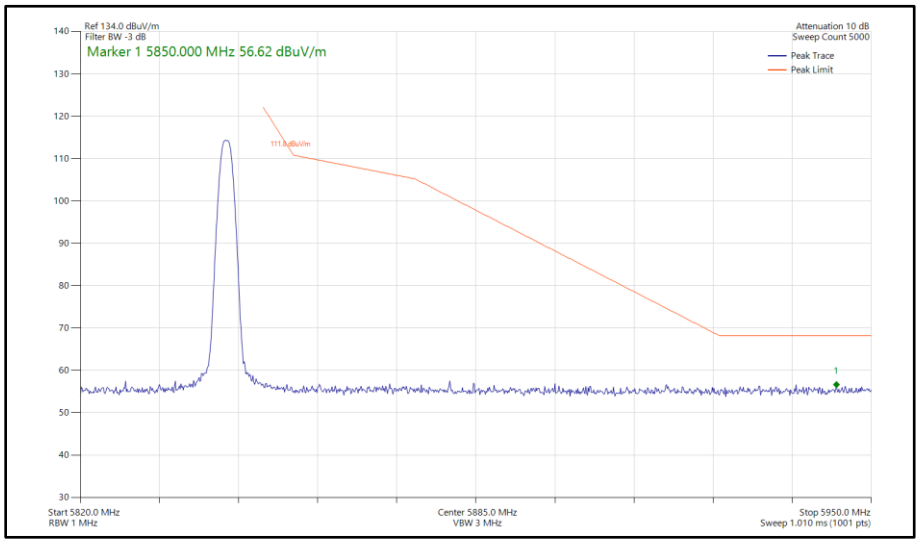

Figure 196 - Bluetooth DH5, MIMO, Core 0 - Core 1 - 5844 MHz Band Edge Frequency 5850 MHz

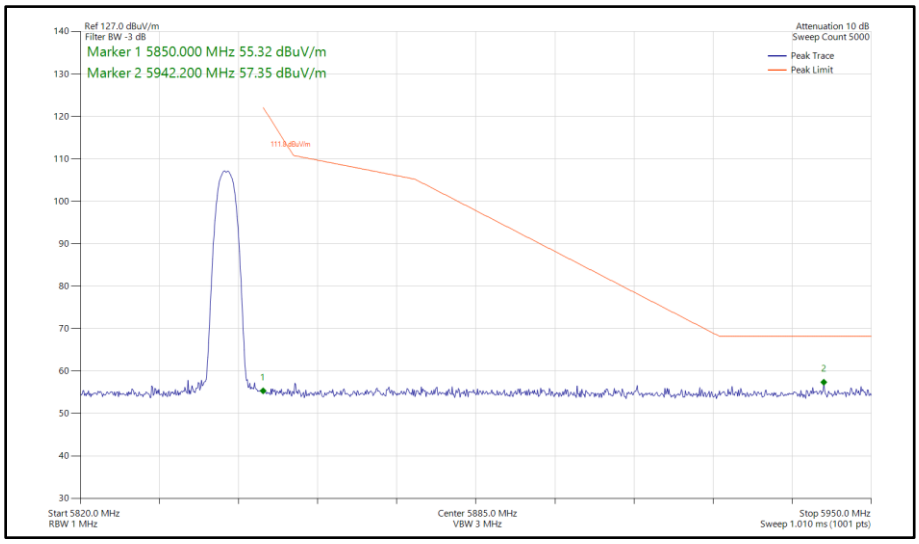

Figure 197 - Bluetooth HDR4, MIMO, Core 0 - Core 1 - 5844 MHz Band Edge Frequency 5850 MHz

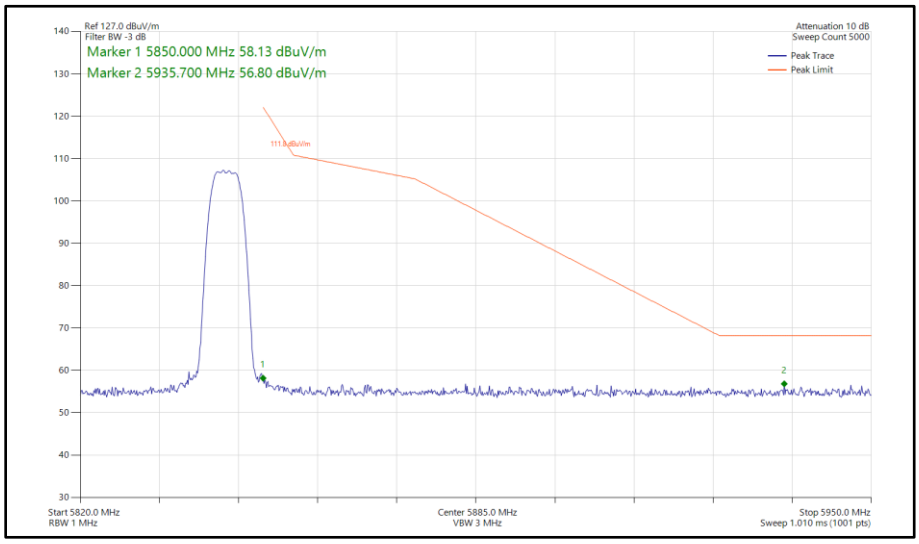

Figure 198 - Bluetooth HDR8, MIMO, Core 0 - Core 1 - 5844 MHz Band Edge Frequency 5850 MHz

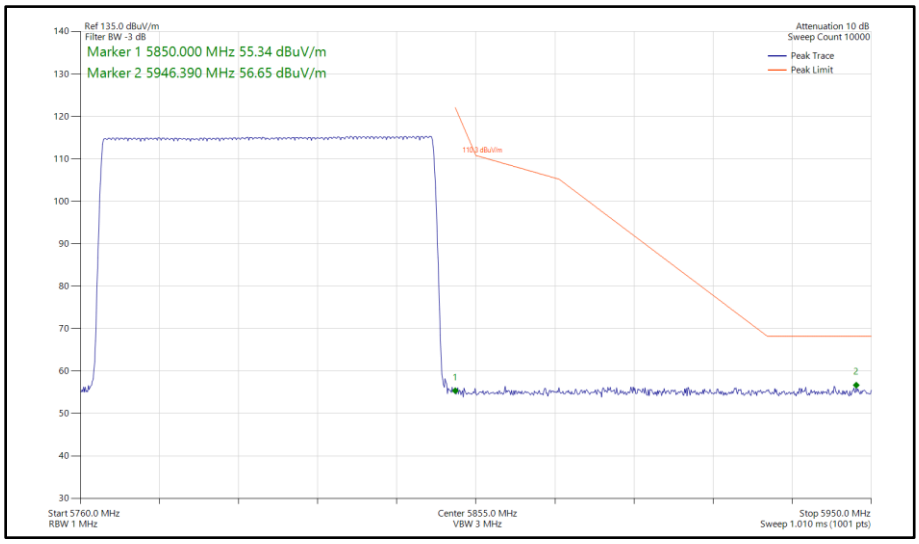

Figure 199 - Bluetooth DH5, MIMO, Core 0 - Core 1 - 5766-5844 MHz Band Edge Frequency 5850 MHz

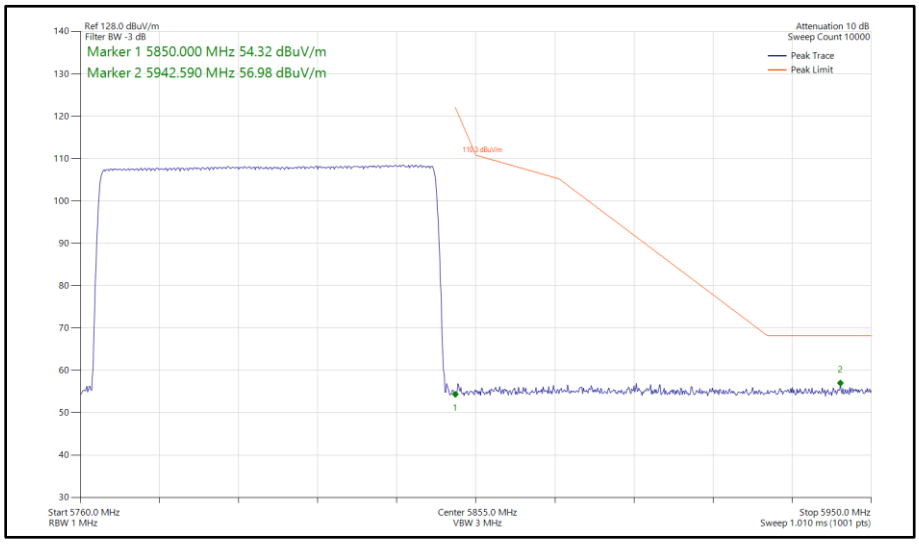

Figure 200 - Bluetooth HDR4, MIMO, Core 0 - Core 1 - 5766-5844 MHz Band Edge Frequency 5850 MHz

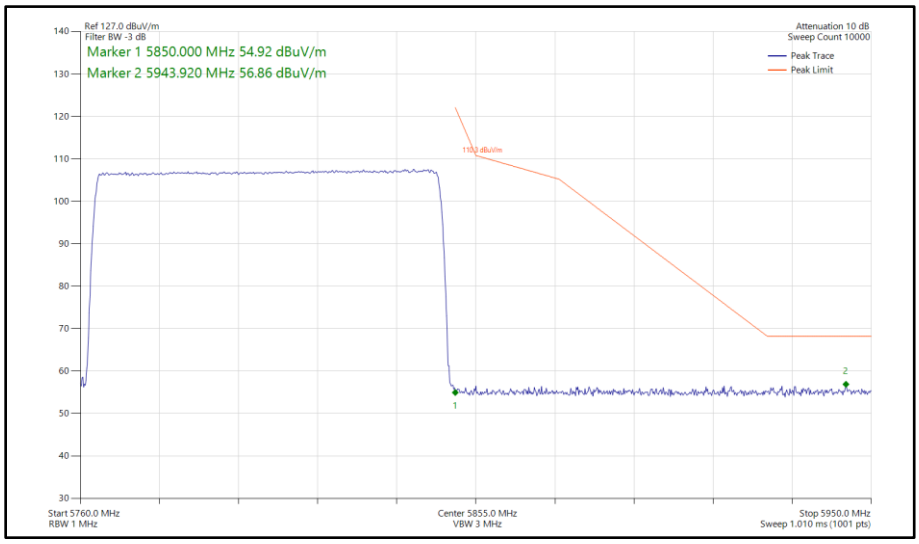

Figure 201 - Bluetooth HDR8, MIMO, Core 0 - Core 1 - 5766-5844 MHz Band Edge Frequency 5850 MHz

ePA - Core 0 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBµV/m)
Static	HDR4	5733	5725	56.27
Static	HDR8	5733	5725	56.44
Hopping	HDR4	5733-5811	5725	56.76
Hopping	HDR8	5733-5811	5725	56.96
Static	HDR4	5844	5850	56.45
Static	HDR8	5844	5850	56.33
Hopping	HDR4	5766-5844	5850	57.05
Hopping	HDR8	5766-5844	5850	57.20

Table 104 - SISO Authorised Band Edge Results

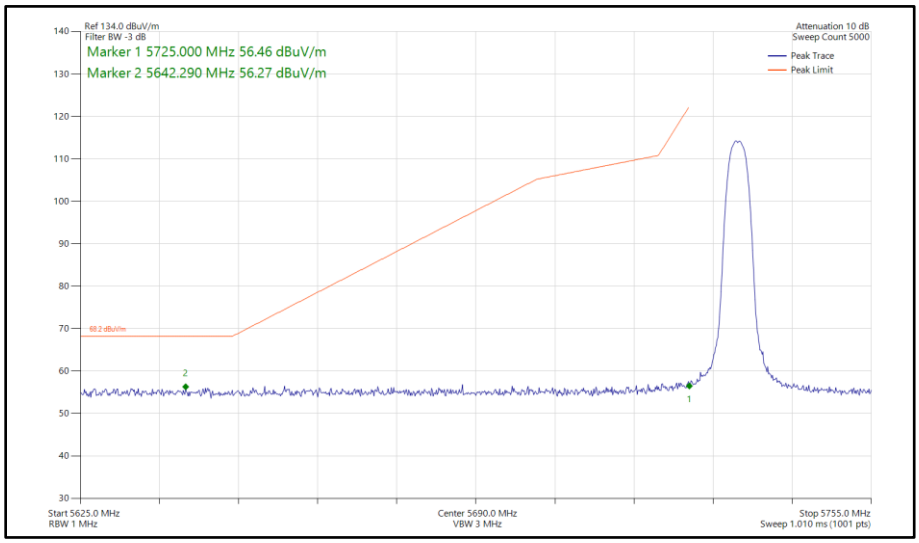

Figure 202 - Bluetooth HDR4, SISO, Core 0 - 5733 MHz Band Edge Frequency 5725 MHz

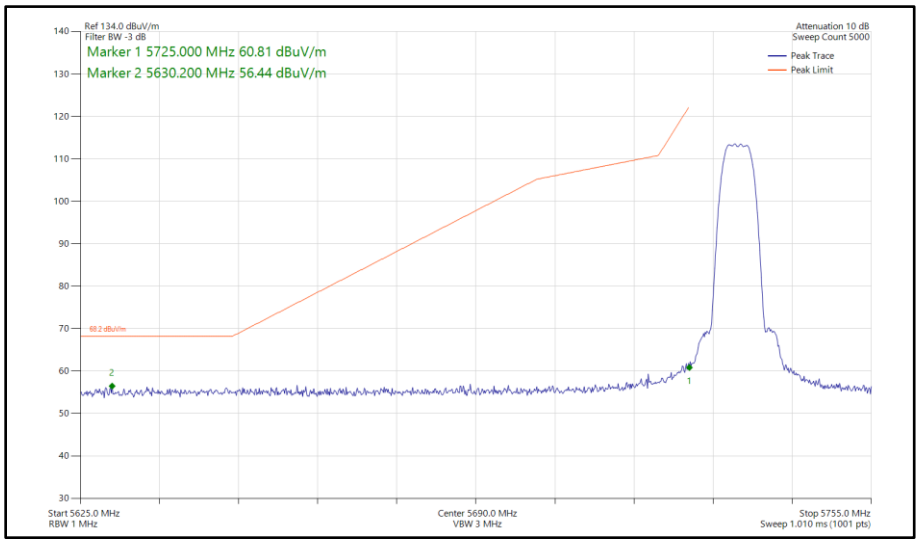

Figure 203 - Bluetooth HDR8, SISO, Core 0 - 5733 MHz
Band Edge Frequency 5725 MHz

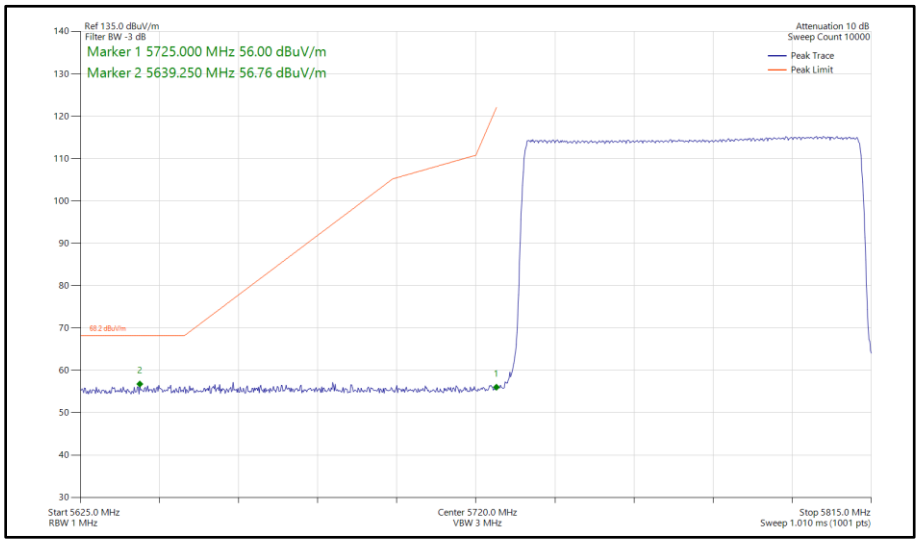

Figure 204 - Bluetooth HDR4, SISO, Core 0 - 5733-5811 MHz
Band Edge Frequency 5725 MHz

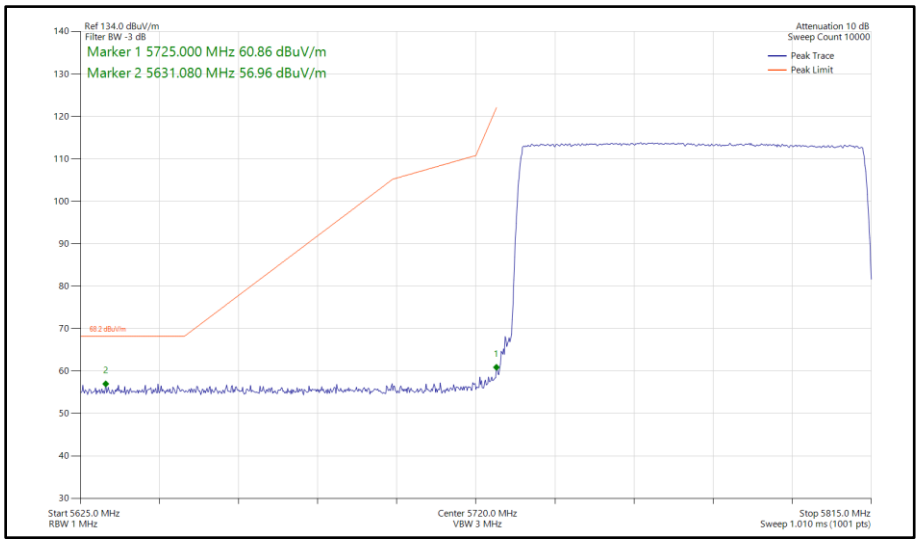

Figure 205 - Bluetooth HDR8, SISO, Core 0 - 5733-5811 MHz Band Edge Frequency 5725 MHz

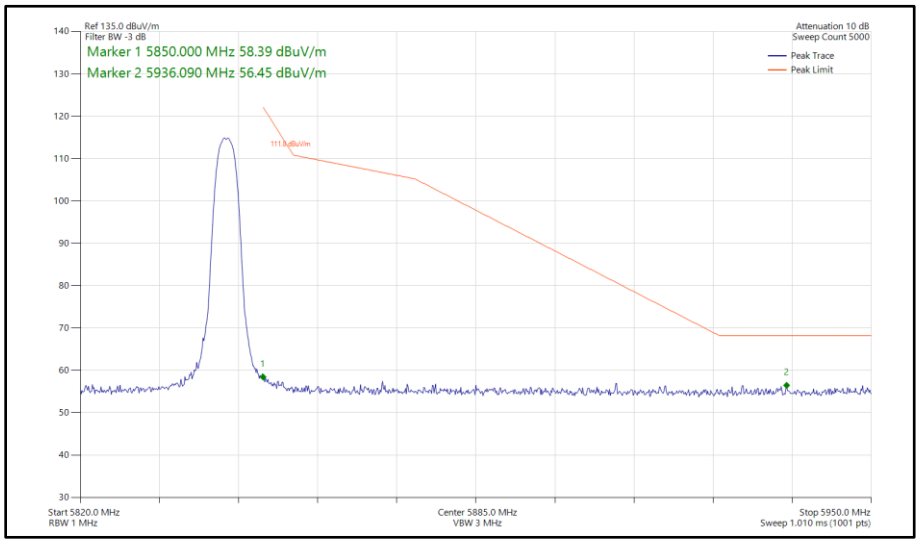

Figure 206 - Bluetooth HDR4, SISO, Core 0 - 5844 MHz Band Edge Frequency 5850 MHz

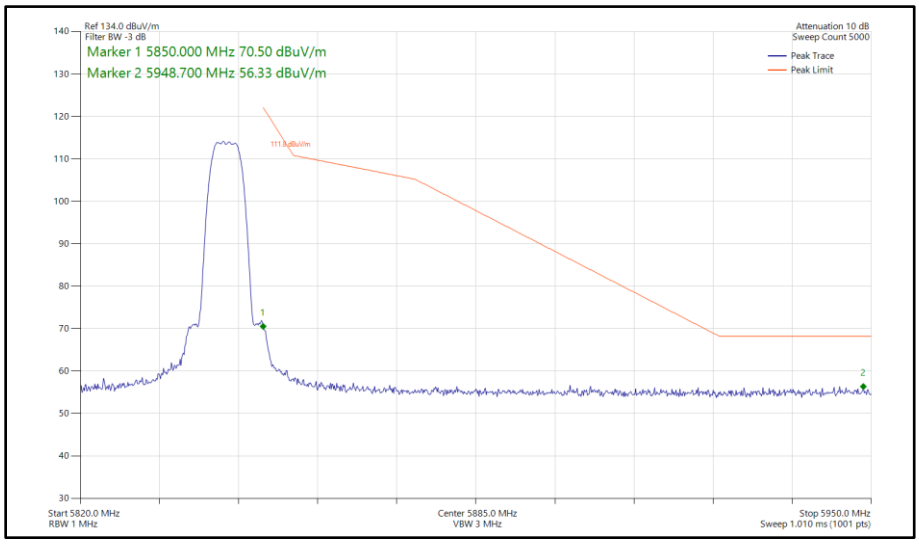

Figure 207 - Bluetooth HDR8, SISO, Core 0 - 5844 MHz
Band Edge Frequency 5850 MHz

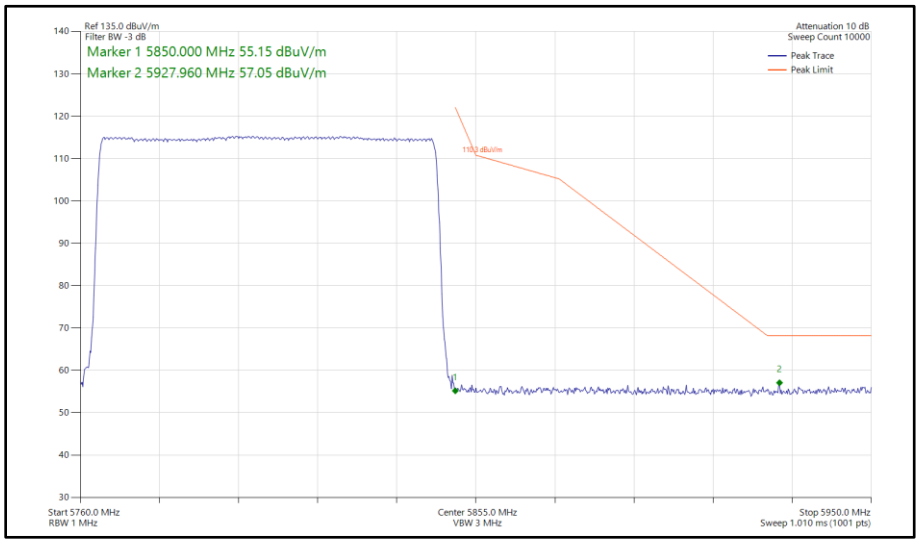

Figure 208 - Bluetooth HDR4, SISO, Core 0 - 5766-5844 MHz
Band Edge Frequency 5850 MHz

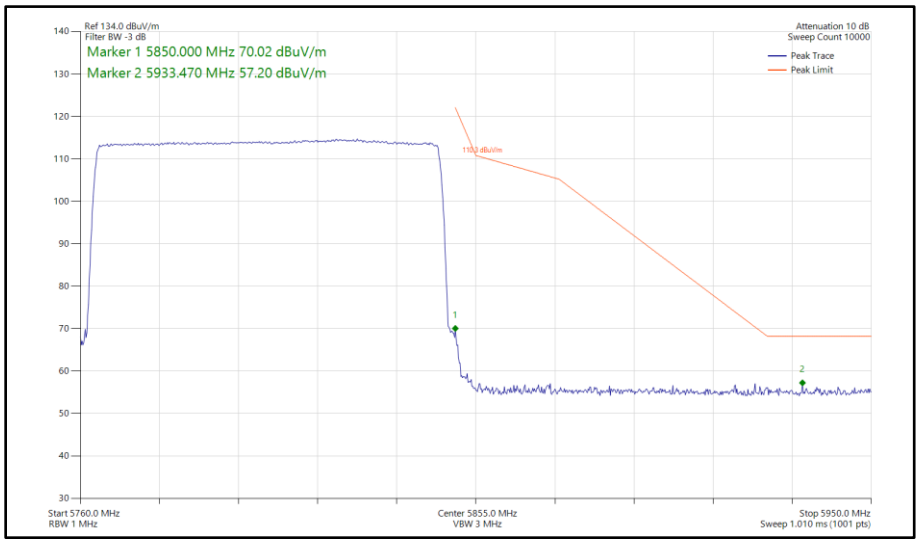

Figure 209 - Bluetooth HDR8, SISO, Core 0 - 5766-5844 MHz Band Edge Frequency 5850 MHz

ePA - Core 1 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBµV/m)
Static	HDR4	5733	5725	56.59
Static	HDR8	5733	5725	56.03
Hopping	HDR4	5733-5811	5725	57.21
Hopping	HDR8	5733-5811	5725	56.74
Static	HDR4	5844	5850	56.82
Static	HDR8	5844	5850	56.85
Hopping	HDR4	5766-5844	5850	57.33
Hopping	HDR8	5766-5844	5850	57.06

Table 105 - SISO Authorised Band Edge Results

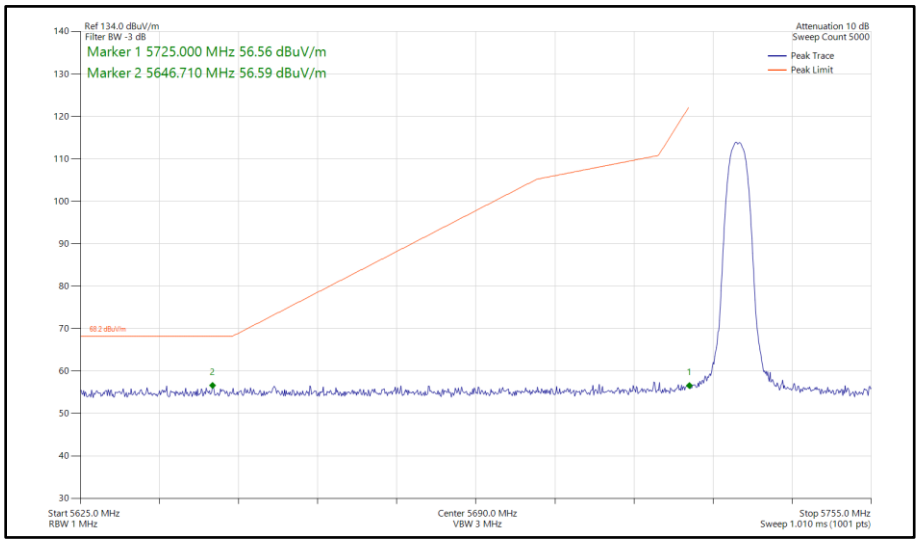

Figure 210 - Bluetooth HDR4, SISO, Core 1 - 5733 MHz Band Edge Frequency 5725 MHz

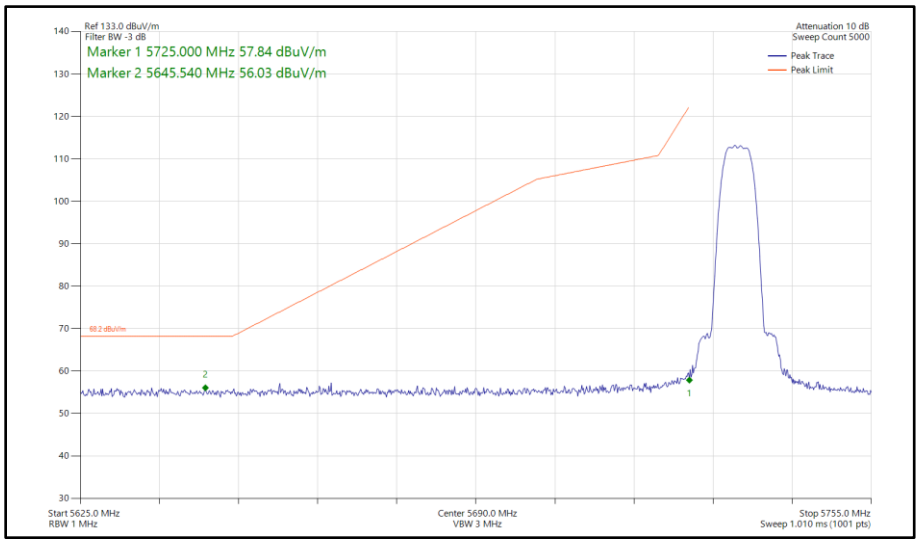

Figure 211 - Bluetooth HDR8, SISO, Core 1 - 5733 MHz
Band Edge Frequency 5725 MHz

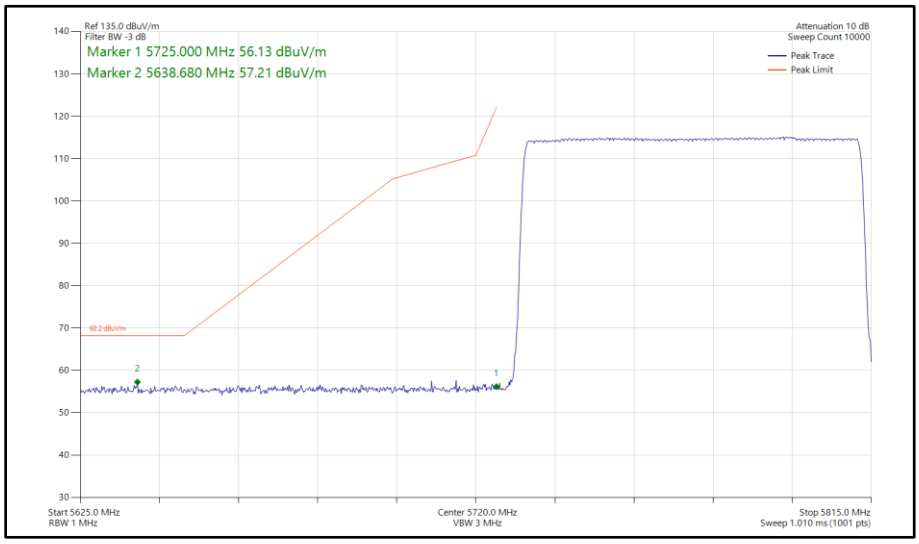

Figure 212 - Bluetooth HDR4, SISO, Core 1 - 5733-5811 MHz
Band Edge Frequency 5725 MHz