TUV SUD Limited Digitally signed by TUV SUD Limited Date: 2024.12.16 08:10:50 Z

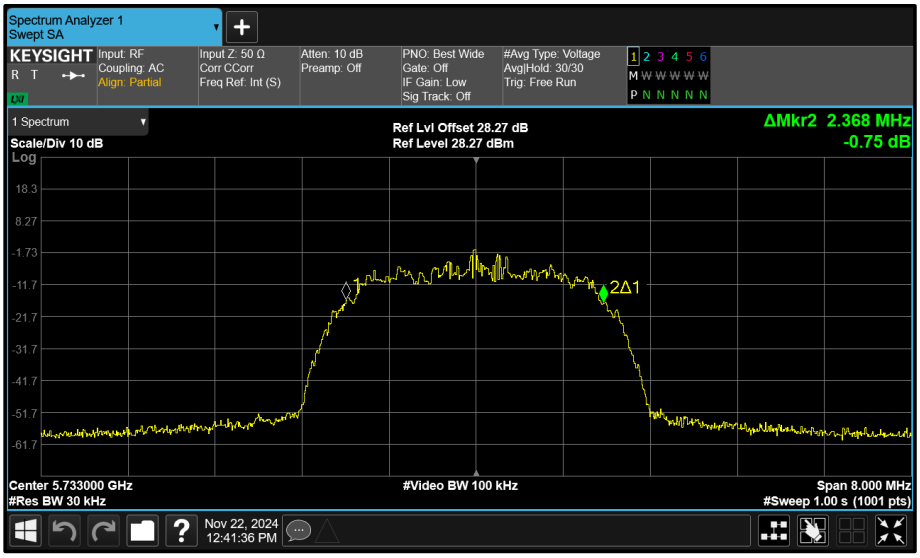

Figure 142 - Core 0 (A) 5733 MHz (CH8) 99% Bandwidth

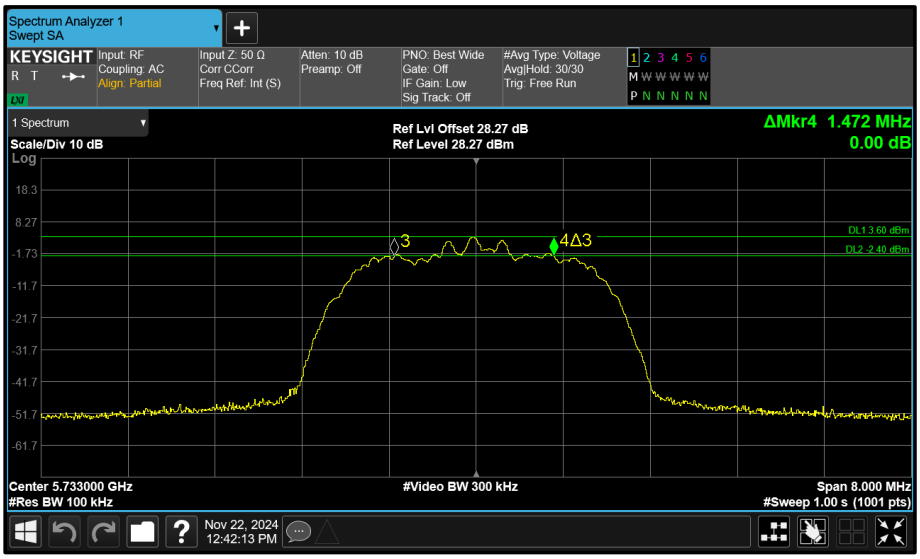

Figure 143 - Core 0 (A) 5733 MHz (CH8) 6 dB Bandwidth

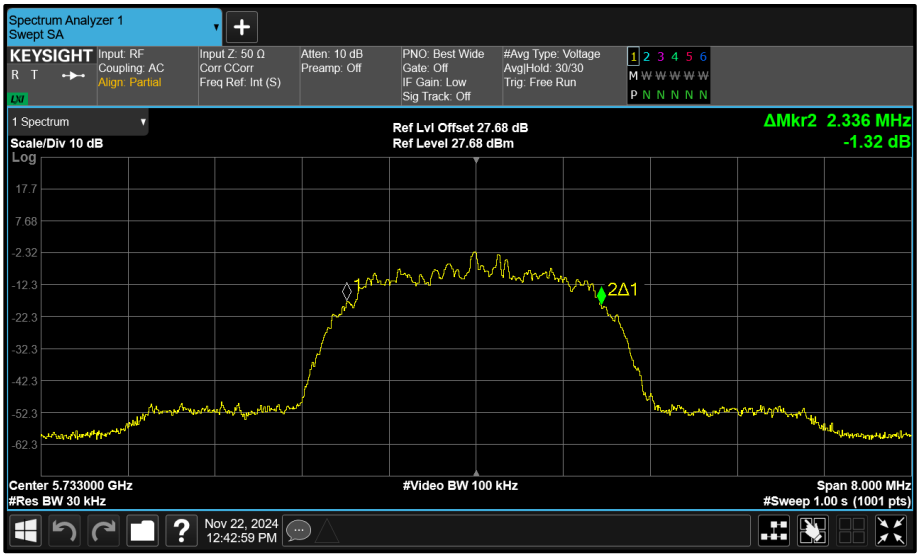

Figure 144 - Core 1 (B) 5733 MHz (CH8) 99% Bandwidth

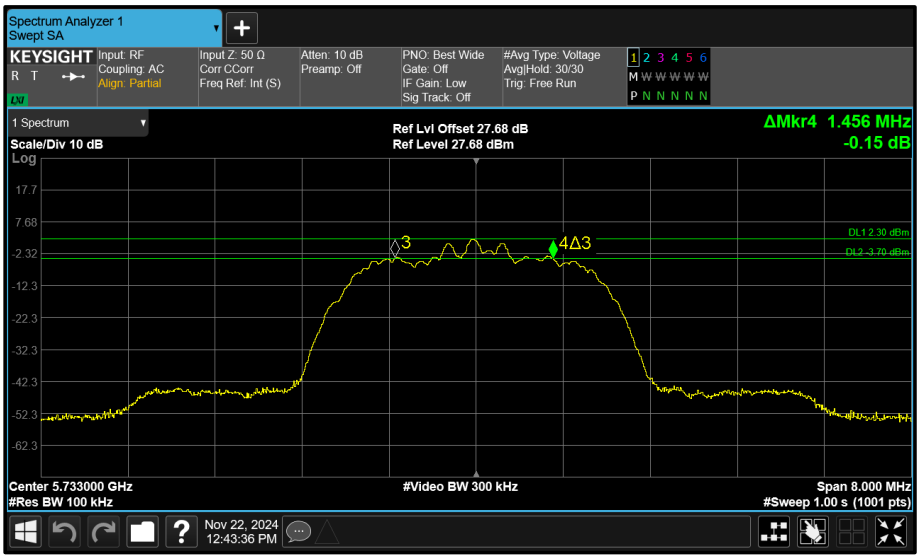

Figure 145 - Core 1 (B) 5733 MHz (CH8) 6 dB Bandwidth

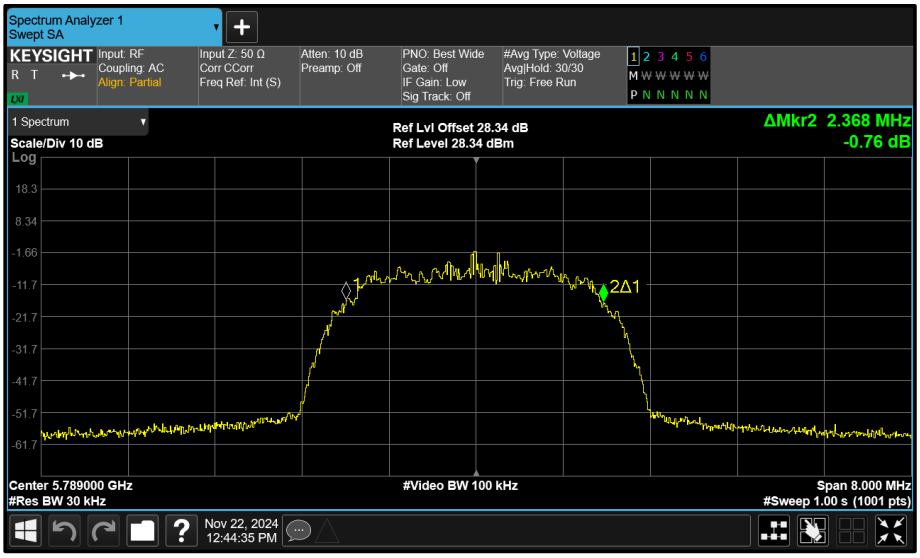

Figure 146 - Core 0 (A) 5789 MHz (CH64) 99% Bandwidth

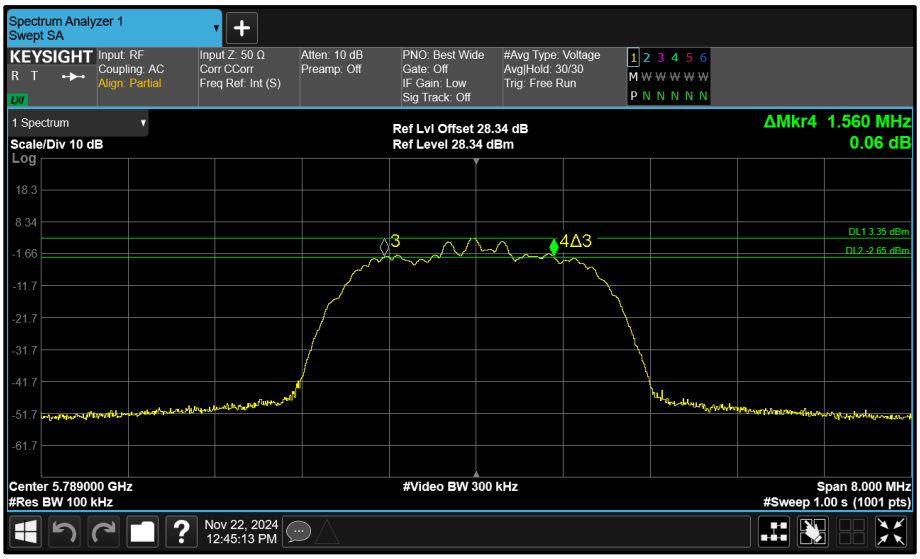

Figure 147 - Core 0 (A) 5789 MHz (CH64) 6 dB Bandwidth

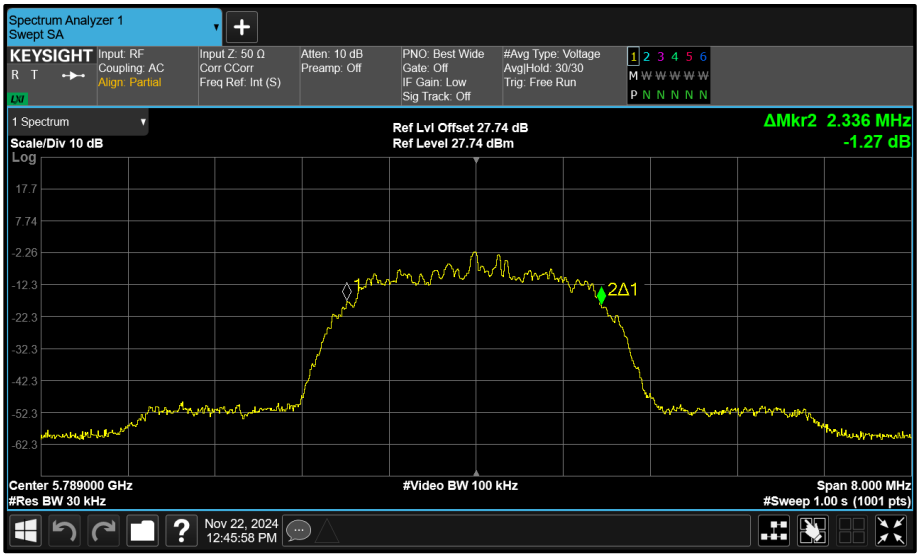

Figure 148 - Core 1 (B) 5789 MHz (CH64) 99% Bandwidth

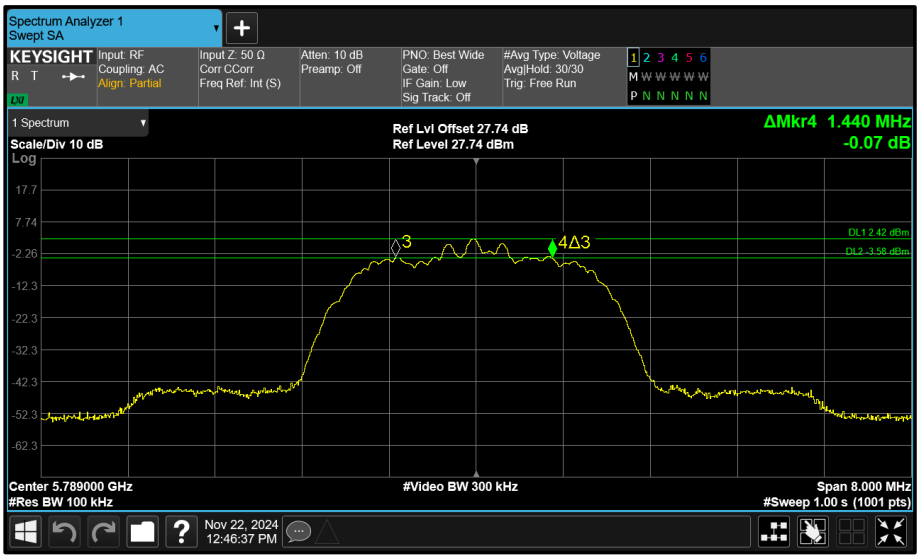

Figure 149 - Core 1 (B) 5789 MHz (CH64) 6 dB Bandwidth

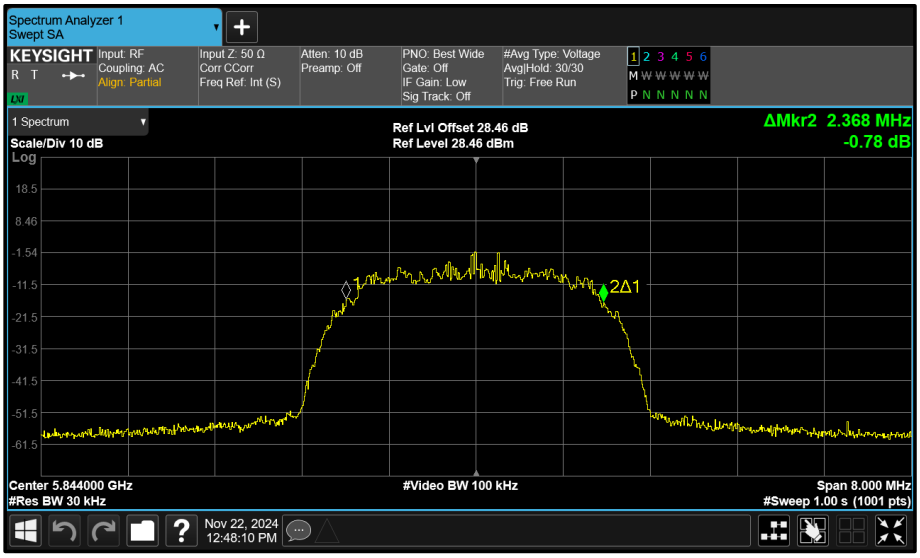

Figure 150 - Core 0 (A) 5844 MHz (CH119) 99% Bandwidth

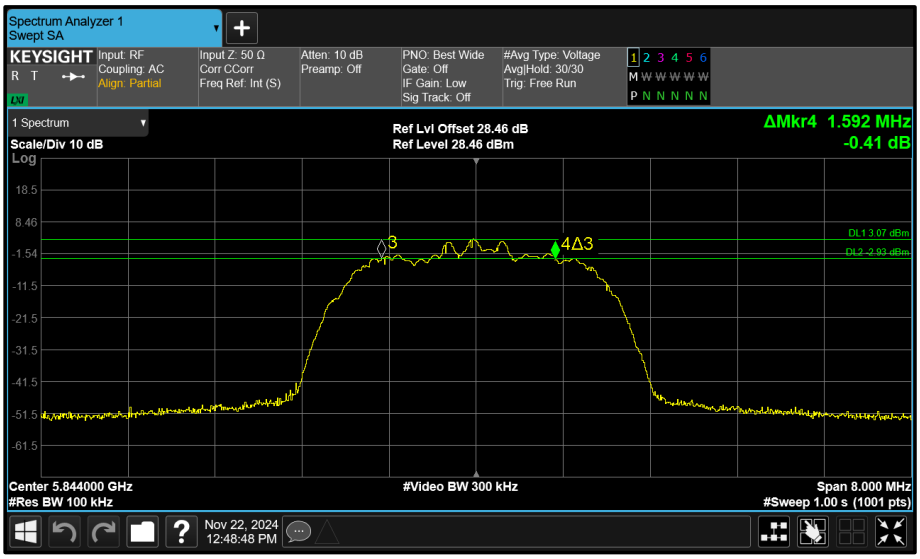

Figure 151 - Core 0 (A) 5844 MHz (CH119) 6 dB Bandwidth

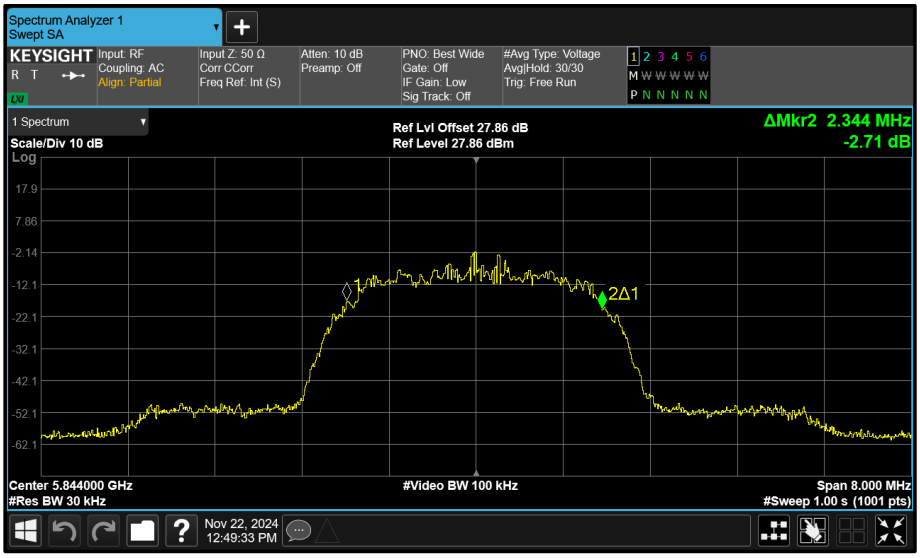

Figure 152 - Core 1 (B) 5844 MHz (CH119) 99% Bandwidth

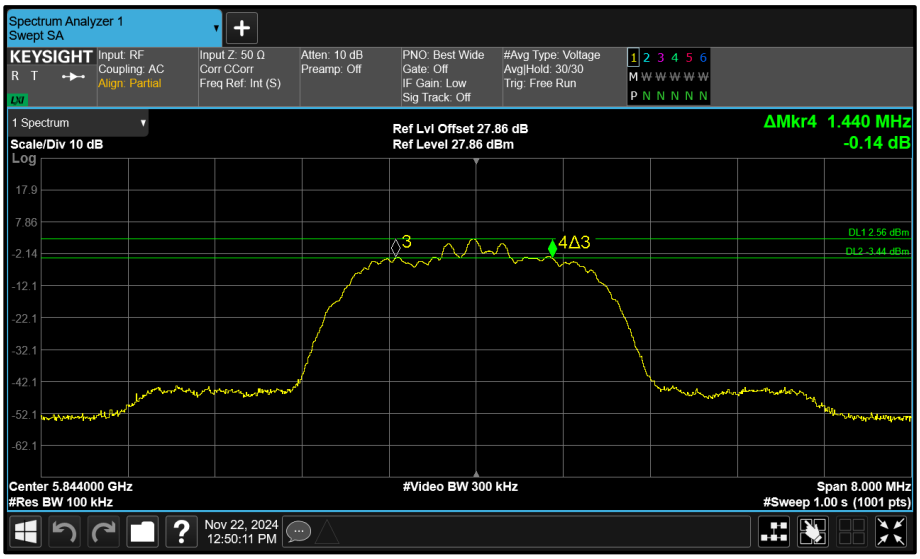

Figure 153 - Core 1 (B) 5844 MHz (CH119) 6 dB Bandwidth

Test Configuration			
Frequency Range:	5.725-5.850 GHz	Band:	U-NII-3
Limit Clause(s):	15.407(e) RSS-247 6.2.4.2	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	1.020	-	-	≥500.0
5789	1.020	1.020	-	-	≥500.0
5844	1.005	1.020	-	-	≥500.0

Table 53 - 6 dB Bandwidth Results

Test Frequency (MHz)	99% Bandwidth (MHz)				Limit (kHz)
	A	B	C	D	
5733	4.695	4.635	-	-	-
5789	4.710	4.635	-	-	-
5844	4.695	4.635	-	-	-

Table 54 - 99% Bandwidth Results

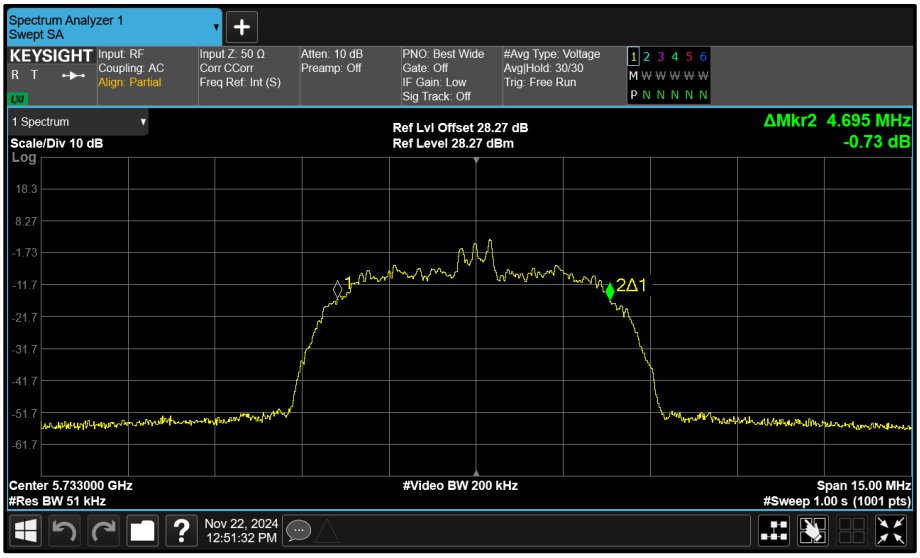

Figure 154 - Core 0 (A) 5733 MHz (CH8) 99% Bandwidth

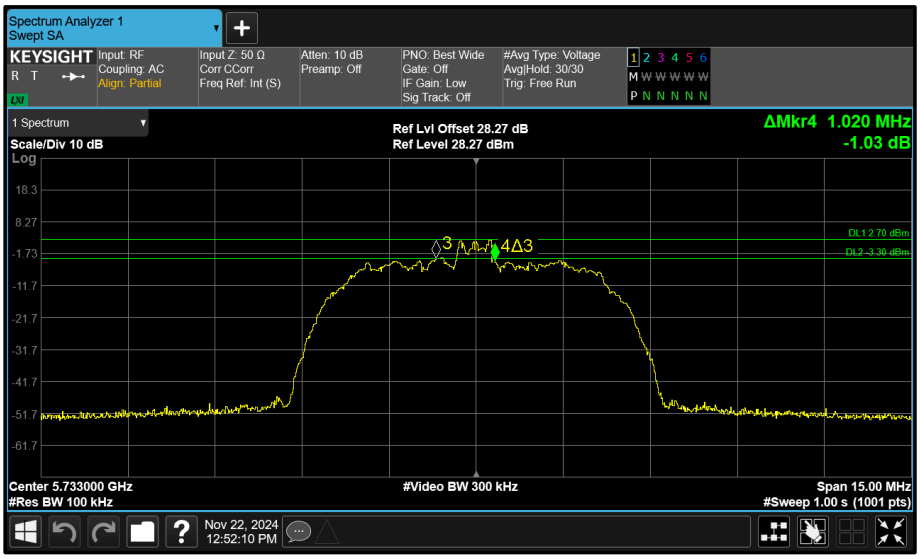

Figure 155 - Core 0 (A) 5733 MHz (CH8) 6 dB Bandwidth

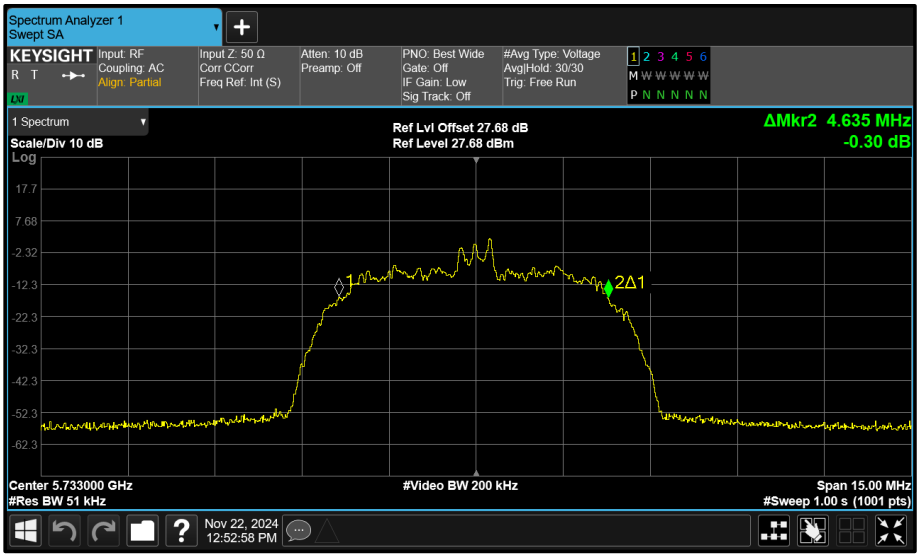

Figure 156 - Core 1 (B) 5733 MHz (CH8) 99% Bandwidth

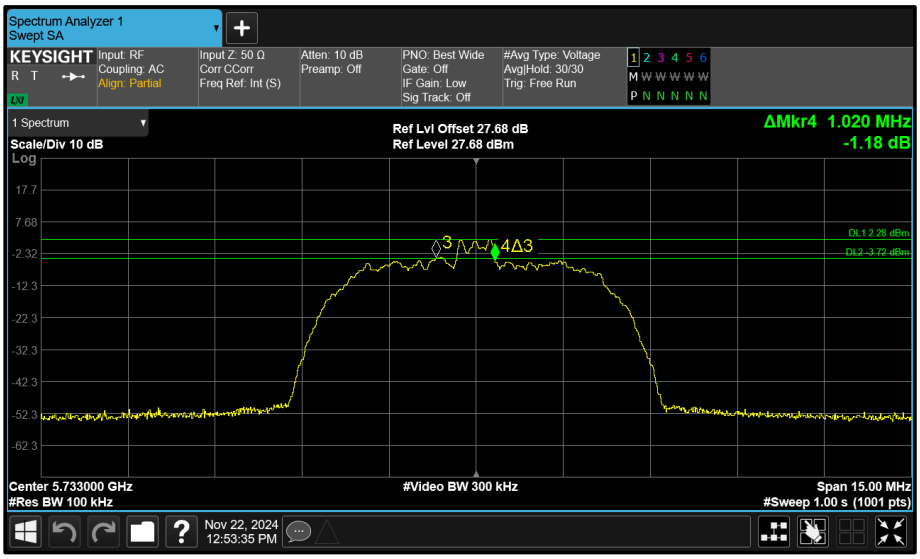

Figure 157 - Core 1 (B) 5733 MHz (CH8) 6 dB Bandwidth

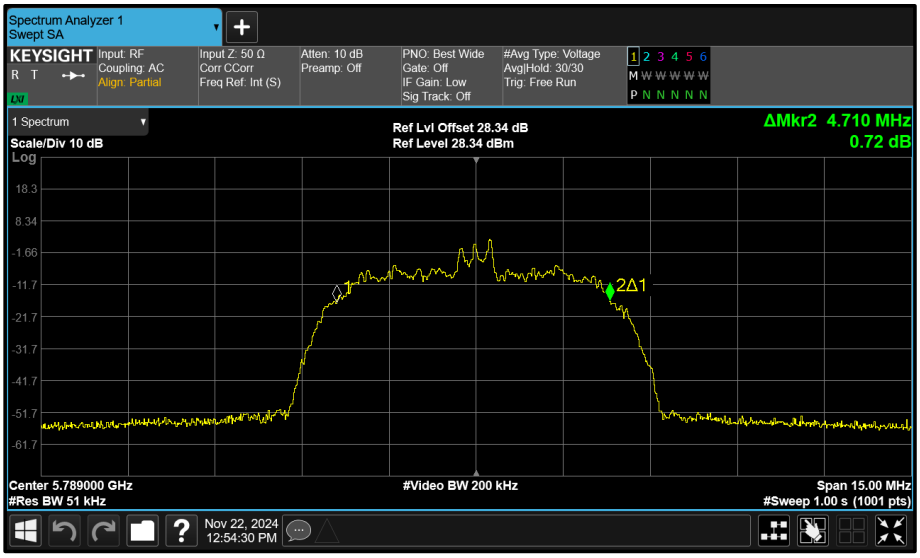

Figure 158 - Core 0 (A) 5789 MHz (CH64) 99% Bandwidth

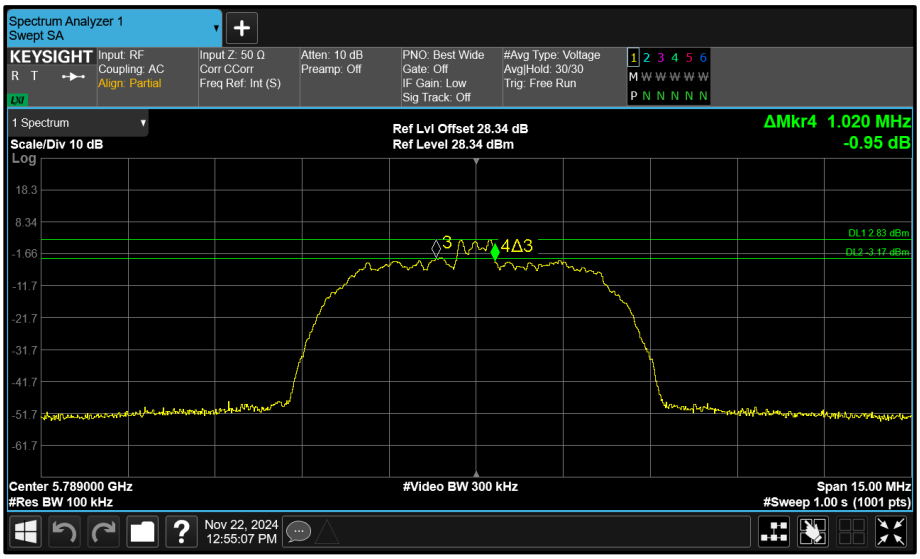

Figure 159 - Core 0 (A) 5789 MHz (CH64) 6 dB Bandwidth

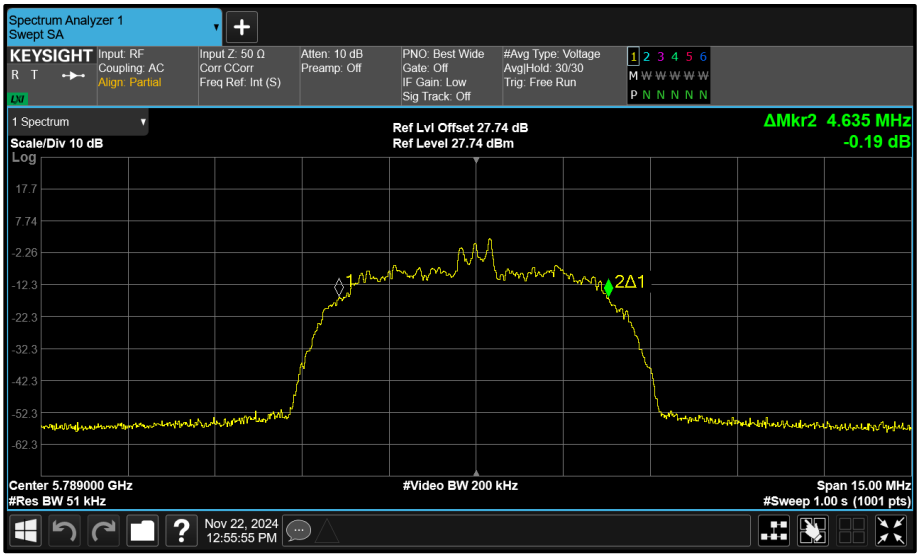

Figure 160 - Core 1 (B) 5789 MHz (CH64) 99% Bandwidth

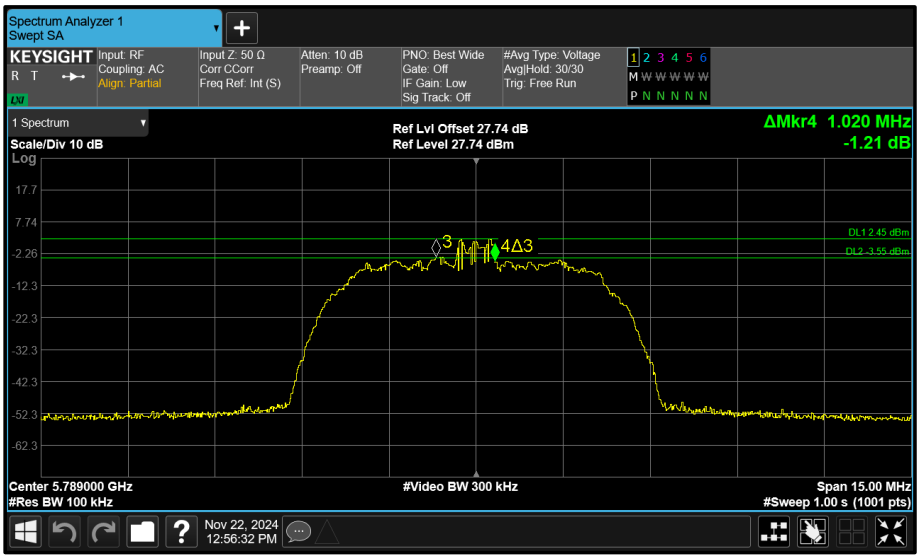

Figure 161 - Core 1 (B) 5789 MHz (CH64) 6 dB Bandwidth

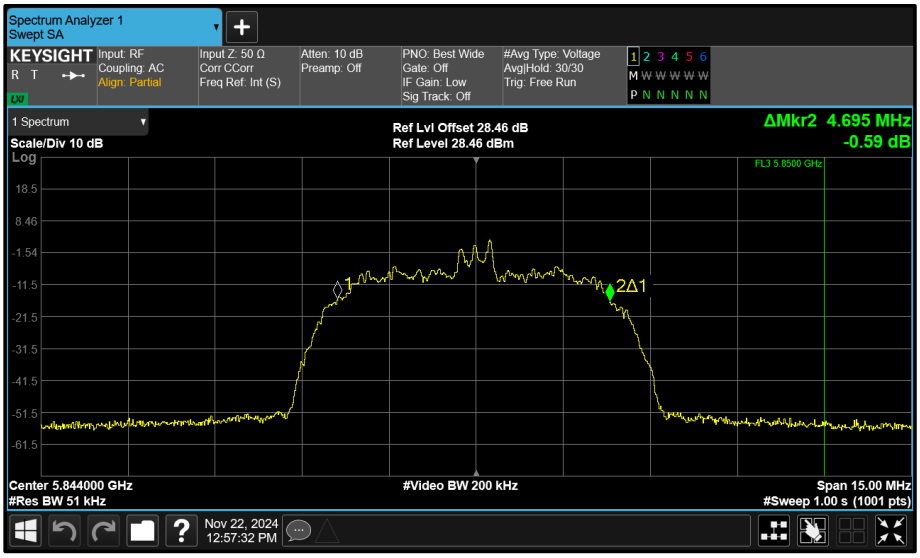

Figure 162 - Core 0 (A) 5844 MHz (CH119) 99% Bandwidth

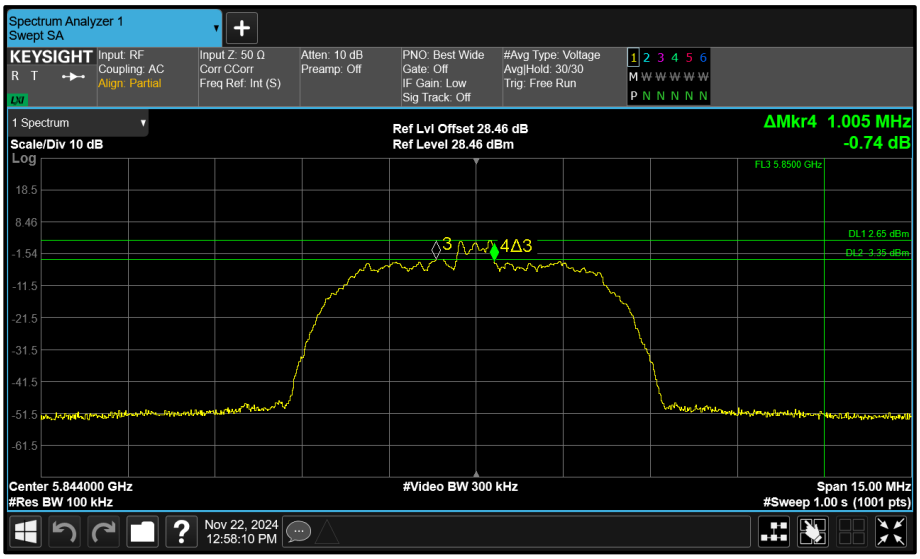

Figure 163 - Core 0 (A) 5844 MHz (CH119) 6 dB Bandwidth

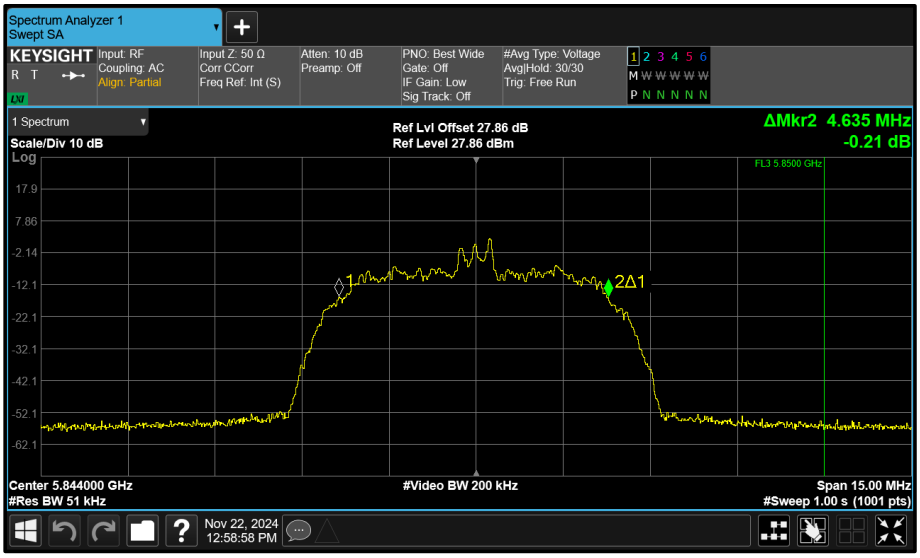

Figure 164 - Core 1 (B) 5844 MHz (CH119) 99% Bandwidth

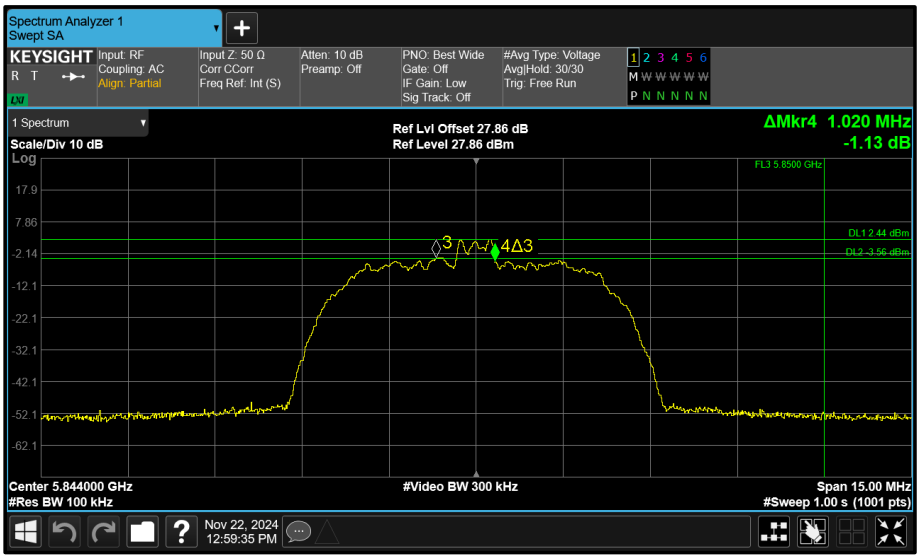

Figure 165 - Core 1 (B) 5844 MHz (CH119) 6 dB Bandwidth

<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.

<u>ISED RSS-247, Limit Clause 6.2.1.1, 6.2.2.1, 6.2.3.1, 6.2.4.1 and 6.2.5.2</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: The minimum 6 dB bandwidth shall be at least 500 kHz.
5850 MHz to 5895 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 Chamber 18 and RF Laboratory 14.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Hygrometer	Rotronic	I-1000	3068	12	19-Nov-2025
AC Programmable Power Supply	iTech	IT7324	5225	-	O/P Mon
MXA Signal Analyser	Keysight Technologies	N9020B	5529	24	13-Dec-2024
Digital Multimeter	Fluke	115	6145	12	06-Jun-2025
MXA Signal Analyser	Keysight Technologies	N9020B	6419	24	28-Feb-2025
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6426	12	07-Feb-2025
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6517	12	22-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
AC Programmable Power Supply	iTech	IT7324	6665	-	O/P Mon
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6752	12	06-Feb-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6753	12	06-Feb-2025

Table 55

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

A3240, S/N: CR2LTQRPHQ - Modification State 0
A3240, S/N: GVGH0F77DG - Modification State 0

2.3.3 Date of Test

21-November-2024 to 22-November-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	21.3 - 22.3 °C
Relative Humidity	46.7 - 53.5 %

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 (%):	76.7
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	4.41

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5162	9.96	-	-	-	-	24.00	-14.04
5204	9.73	-	-	-	-	24.00	-14.27
5245	9.81	-	-	-	-	24.00	-14.19

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

DUT Configuration			
Mode:	iPA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.1
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	4.41

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5162	3.20	-	-	-	-	24.00	-20.80
5204	3.16	-	-	-	-	24.00	-20.84
5245	3.17	-	-	-	-	24.00	-20.83

Table 57 - 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):	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):	4.41

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5162	3.03	-	-	-	-	24.00	-20.97
5204	3.17	-	-	-	-	24.00	-20.83
5245	3.21	-	-	-	-	24.00	-20.79

Table 58 - 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 6.2.4.2	Test Method(s):	C63.10 12.4.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA GFSK (DH5)	Duty Cycle (%):	76.7
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	4.77

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5733	9.75	-	-	-	-	30.00	-20.25
5789	9.56	-	-	-	-	30.00	-20.44
5844	9.52	-	-	-	-	30.00	-20.48

Table 59 - 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 6.2.4.2	Test Method(s):	C63.10 12.4.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	iPA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.1
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	4.77

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5733	3.20	-	-	-	-	30.00	-26.80
5789	3.15	-	-	-	-	30.00	-26.85
5844	3.06	-	-	-	-	30.00	-26.94

Table 60 - 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 6.2.4.2	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):	4.77

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5733	3.11	-	-	-	-	30.00	-26.89
5789	3.13	-	-	-	-	30.00	-26.87
5844	3.11	-	-	-	-	30.00	-26.89

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

DUT Configuration			
Mode:	ePA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.1
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	4.41

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5162	11.98	-	-	-	-	24.00	-12.02
5204	11.59	-	-	-	-	24.00	-12.41
5245	11.92	-	-	-	-	24.00	-12.08

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):	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):	4.41

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5162	13.68	-	-	-	-	24.00	-10.32
5204	13.97	-	-	-	-	24.00	-10.03
5245	13.61	-	-	-	-	24.00	-10.39

Table 63 - 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 6.2.4.2	Test Method(s):	C63.10 12.4.3.2
Additional Reference(s):	-		

DUT Configuration			
Mode:	ePA π/4 DQPSK (4-DH5)	Duty Cycle (%):	78.1
Antenna Configuration:	SISO	DCCF (dB):	-
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	4.77

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5733	13.80	-	-	-	-	30.00	-16.20
5789	13.66	-	-	-	-	30.00	-16.34
5844	13.55	-	-	-	-	30.00	-16.45

Table 64 - 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 6.2.4.2	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):	4.77

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5733	13.99	-	-	-	-	30.00	-16.01
5789	14.00	-	-	-	-	30.00	-16.00
5844	13.73	-	-	-	-	30.00	-16.27

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):	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):	6.49

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5162	6.17	5.69	-	-	8.95	23.51	-14.57
5204	6.07	5.72	-	-	8.91	23.51	-14.60
5245	6.26	5.58	-	-	8.94	23.51	-14.57

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):	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 (%):	78.1
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	6.49

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5162	2.57	3.07	-	-	5.84	23.51	-17.68
5204	3.17	3.00	-	-	6.10	23.51	-17.42
5245	3.22	2.76	-	-	6.01	23.51	-17.51

Table 67 - 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):	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):	6.49

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5162	3.05	3.16	-	-	6.12	23.51	-17.40
5204	3.19	2.96	-	-	6.09	23.51	-17.42
5245	3.43	3.18	-	-	6.32	23.51	-17.20

Table 68 - 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 6.2.4.2	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):	7.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5733	9.79	9.17	-	-	12.50	28.80	-16.30
5789	9.76	8.70	-	-	12.27	28.80	-16.53
5844	9.73	9.69	-	-	12.72	28.80	-16.08

Table 69 - 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 6.2.4.2	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 (%):	78.1
Antenna Configuration:	Beamforming	DCCF (dB):	-
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	7.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5733	3.18	1.62	-	-	5.48	28.80	-23.32
5789	3.10	1.64	-	-	5.44	28.80	-23.36
5844	3.00	1.63	-	-	5.38	28.80	-23.42

Table 70 - 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 6.2.4.2	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):	7.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5733	3.23	2.60	-	-	5.93	28.80	-22.86
5789	3.40	2.99	-	-	6.21	28.80	-22.59
5844	3.13	2.79	-	-	5.98	28.80	-22.82

Table 71 - 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):	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):	6.49

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5162	8.13	7.65	-	-	10.90	23.51	-12.61
5204	8.35	8.04	-	-	11.21	23.51	-12.31
5245	8.10	7.61	-	-	10.87	23.51	-12.64

Table 72 - 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):	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):	6.49

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5162	10.21	9.41	-	-	12.84	23.51	-10.68
5204	10.27	9.42	-	-	12.88	23.51	-10.64
5245	10.45	9.48	-	-	13.00	23.51	-10.51

Table 73 - 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 6.2.4.2	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):	7.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5733	13.69	12.81	-	-	16.28	28.80	-12.52
5789	13.90	13.37	-	-	16.65	28.80	-12.15
5844	13.86	13.48	-	-	16.68	28.80	-12.12

Table 74 - 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 6.2.4.2	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):	7.20

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)
	A	B	C	D	∑		
5733	13.99	12.88	-	-	16.48	28.80	-12.32
5789	13.93	13.34	-	-	16.65	28.80	-12.14
5844	13.94	13.48	-	-	16.73	28.80	-12.07

Table 75 - FCC 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 76

ISED RSS-247, Limit Clause 6.2.1.1, 6.2.2.1, 6.2.3.1, 6.2.4.1 and 6.2.5.2

Device	Frequency Range (MHz)				
	5150-5250	5250-5350	5470-5725	5725-5850	5850-5895
OEM installed in vehicles	30 mW or 1.76 + 10 $\log_{10}$B, dBm (EIRP); whichever is less	30 mW or 1.76 + 10 $\log_{10}$B, dBm (EIRP)); whichever is less	-	-	-
Other	200 mW or 10 + 10$\log_{10}$B dBm (EIRP); whichever is less	250 mW or 11 + 10 $\log_{10}$B); whichever is less 1.0 W or 17 + 10$\log_{10}$B dBm EIRP; whichever is less	250 mW or 11 + 10 $\log_{10}$B); whichever is less 1.0 W or 17 + 10$\log_{10}$B dBm EIRP; whichever is less	1W 4W EIRP	Fixed Outdoor Access Point: 4 W EIRP Fixed Outdoor Client: 1 W EIRP Indoor Access Point: 4 W EIRP Indoor subordinate: 4 W EIRP Indoor Client: 1 W EIRP

Table 77

2.3.7 Test Location and Test Equipment Used

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

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Hygrometer	Rotronic	I-1000	3068	12	19-Nov-2025
AC Programmable Power Supply	iTech	IT7324	5225	-	O/P Mon
USB Power Sensor	Boonton	RTP5008	5820	12	07-Feb-2025
USB Power Sensor	Boonton	RTP5008	5821	12	07-Feb-2025
Digital Multimeter	Fluke	115	6145	12	06-Jun-2025
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6426	12	07-Feb-2025
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6517	12	22-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
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	6665	-	O/P Mon
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6752	12	06-Feb-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6753	12	06-Feb-2025

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)
ISED RSS-247, Clause 6.2

2.4.2 Equipment Under Test and Modification State

A3240, S/N: CR2LTQRPHQ - Modification State 0
A3240, S/N: GVGH0F77DG - Modification State 0

2.4.3 Date of Test

21-November-2024 to 22-November-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). Where the duty cycle was = 98 % the spectrum analyser was set to trace (power) averaging and no duty cycle correction made (Method SA-1). In all other cases the spectrum analyser trace was set to max hold (Method SA-3).

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 it was calculated in accordance with clause F)2)d)(i).

2.4.5 Environmental Conditions

Ambient Temperature	21.3 - 22.3 °C
Relative Humidity	46.7 - 53.5 %

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 (%):	76.7
Antenna Configuration:	SISO	DCCF (dB):	1.15
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	4.41

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / MHz)	Margin (dB)
	A	B	C	D	∑		
5162	9.04	-	-	-	-	11.00	-1.96
5204	8.79	-	-	-	-	11.00	-2.21
5245	9.36	-	-	-	-	11.00	-1.64

Table 79 - FCC 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 (%):	78.1
Antenna Configuration:	SISO	DCCF (dB):	1.07
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	4.41

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / MHz)	Margin (dB)
	A	B	C	D	∑		
5162	-0.01	-	-	-	-	11.00	-11.01
5204	0.41	-	-	-	-	11.00	-10.59
5245	0.19	-	-	-	-	11.00	-10.81

Table 80 - FCC 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 (%):	78.2
Antenna Configuration:	SISO	DCCF (dB):	1.07
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	4.41

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / MHz)	Margin (dB)
	A	B	C	D	∑		
5162	-2.62	-	-	-	-	11.00	-13.62
5204	-2.16	-	-	-	-	11.00	-13.16
5245	-2.40	-	-	-	-	11.00	-13.40

Table 81 - FCC 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) RSS-247 6.2.4.2	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 (%):	76.7
Antenna Configuration:	SISO	DCCF (dB):	1.15
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	4.77

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / 500 kHz)	Margin (dB)
	A	B	C	D	∑		
5733	8.64	-	-	-	-	30.00	-21.36
5789	8.17	-	-	-	-	30.00	-21.83
5844	8.27	-	-	-	-	30.00	-21.73

Table 82 - 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) RSS-247 6.2.4.2	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 (%):	78.1
Antenna Configuration:	SISO	DCCF (dB):	1.07
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	4.77

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / 500 kHz)	Margin (dB)
	A	B	C	D	∑		
5733	-1.12	-	-	-	-	30.00	-31.12
5789	-1.67	-	-	-	-	30.00	-31.67
5844	-1.99	-	-	-	-	30.00	-31.99

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) RSS-247 6.2.4.2	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):	4.77

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / 500 kHz)	Margin (dB)
	A	B	C	D	∑		
5733	-4.49	-	-	-	-	30.00	-34.49
5789	-4.62	-	-	-	-	30.00	-34.62
5844	-4.95	-	-	-	-	30.00	-34.95

Table 84 - 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 (%):	78.1
Antenna Configuration:	SISO	DCCF (dB):	1.07
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	4.41

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / MHz)	Margin (dB)
	A	B	C	D	∑		
5162	8.83	-	-	-	-	11.00	-2.17
5204	8.45	-	-	-	-	11.00	-2.55
5245	9.34	-	-	-	-	11.00	-1.66

Table 85 - FCC 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 (%):	78.2
Antenna Configuration:	SISO	DCCF (dB):	1.07
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	4.41

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / MHz)	Margin (dB)
	A	B	C	D	∑		
5162	8.21	-	-	-	-	11.00	-2.79
5204	8.30	-	-	-	-	11.00	-2.70
5245	8.08	-	-	-	-	11.00	-2.92

Table 86 - FCC 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) RSS-247 6.2.4.2	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 (%):	78.1
Antenna Configuration:	SISO	DCCF (dB):	1.07
Active Port(s):	A (Core 0)	Peak Antenna Gain (dBi):	4.77

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / 500 kHz)	Margin (dB)
	A	B	C	D	∑		
5733	8.65	-	-	-	-	30.00	-21.35
5789	8.54	-	-	-	-	30.00	-21.46
5844	8.58	-	-	-	-	30.00	-21.42

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) RSS-247 6.2.4.2	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):	4.77

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / 500 kHz)	Margin (dB)
	A	B	C	D	∑		
5733	5.79	-	-	-	-	30.00	-24.21
5789	6.81	-	-	-	-	30.00	-23.19
5844	6.29	-	-	-	-	30.00	-23.71

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 (%):	76.7
Antenna Configuration:	Beamforming	DCCF (dB):	1.15
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	6.49

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / MHz)	Margin (dB)
	A	B	C	D	∑		
5162	5.33	5.52	-	-	8.44	10.51	-2.08
5204	5.76	5.45	-	-	8.62	10.51	-1.89
5245	5.62	5.05	-	-	8.36	10.51	-2.16

Table 89 - FCC 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 (%):	78.1
Antenna Configuration:	Beamforming	DCCF (dB):	1.07
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	6.49

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / MHz)	Margin (dB)
	A	B	C	D	∑		
5162	0.06	0.43	-	-	3.26	10.51	-7.25
5204	0.41	0.38	-	-	3.40	10.51	-7.11
5245	0.11	0.36	-	-	3.25	10.51	-7.27

Table 90 - FCC 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):	6.49

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / MHz)	Margin (dB)
	A	B	C	D	∑		
5162	-2.30	-2.16	-	-	0.78	10.51	-9.74
5204	-2.36	-2.07	-	-	0.79	10.51	-9.72
5245	-1.62	-1.65	-	-	1.38	10.51	-9.14

Table 91 - FCC 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) RSS-247 6.2.4.2	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):	7.20

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / 500 kHz)	Margin (dB)
	A	B	C	D	∑		
5733	8.74	8.35	-	-	11.56	28.80	-17.24
5789	8.60	8.24	-	-	11.43	28.80	-17.37
5844	8.54	8.50	-	-	11.53	28.80	-17.27

Table 92 - 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) RSS-247 6.2.4.2	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 (%):	78.1
Antenna Configuration:	Beamforming	DCCF (dB):	1.07
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	7.20

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / 500 kHz)	Margin (dB)
	A	B	C	D	∑		
5733	-1.67	-3.45	-	-	0.54	28.80	-28.26
5789	-1.91	-3.05	-	-	0.57	28.80	-28.23
5844	-1.42	-2.69	-	-	1.00	28.80	-27.80

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) RSS-247 6.2.4.2	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):	7.20

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / 500 kHz)	Margin (dB)
	A	B	C	D	∑		
5733	-4.30	-4.52	-	-	-1.40	28.80	-30.20
5789	-4.09	-4.11	-	-	-1.09	28.80	-29.89
5844	-4.09	-5.21	-	-	-1.60	28.80	-30.40

Table 94 - 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 (%):	78.1
Antenna Configuration:	Beamforming	DCCF (dB):	1.07
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	6.49

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / MHz)	Margin (dB)
	A	B	C	D	∑		
5162	5.30	4.72	-	-	8.03	10.51	-2.48
5204	5.93	5.12	-	-	8.56	10.51	-1.96
5245	5.40	5.16	-	-	8.29	10.51	-2.22

Table 95 - FCC 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 (%):	78.2
Antenna Configuration:	Beamforming	DCCF (dB):	1.07
Active Port(s):	A+B (Core 0 + Core 1)	Peak Antenna Gain (dBi):	6.49

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / MHz)	Margin (dB)
	A	B	C	D	∑		
5162	4.93	4.11	-	-	7.55	10.51	-2.96
5204	5.28	3.81	-	-	7.62	10.51	-2.90
5245	5.00	3.68	-	-	7.40	10.51	-3.11

Table 96 - FCC 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) RSS-247 6.2.4.2	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):	7.20

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / 500 kHz)	Margin (dB)
	A	B	C	D	∑		
5733	8.25	7.23	-	-	10.78	28.80	-18.02
5789	8.77	7.53	-	-	11.21	28.80	-17.59
5844	9.14	8.57	-	-	11.87	28.80	-16.93

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) RSS-247 6.2.4.2	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):	7.20

Test Frequency (MHz)	PSD (dBm/MHz)					Limit (dBm / 500 kHz)	Margin (dB)
	A	B	C	D	∑		
5733	6.09	5.40	-	-	8.77	28.80	-20.03
5789	6.32	5.81	-	-	9.08	28.80	-19.72
5844	6.20	5.87	-	-	9.05	28.80	-19.75

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

ISED RSS-247, Limit Clause 6.2.1.1, 6.2.2.1, 6.2.3.1, 6.2.4.1 and 6.2.5.2

Device	Frequency Range (MHz)				
	5150-5250	5250-5350	5470-5725	5725-5850	5850-5895
OEM installed in vehicles	-	-	-	-	-
Other	≤10 dBm/MHz*	≤11 dBm/MHz	≤11 dBm/MHz	≤30 dBm/500kHz	Fixed Outdoor Access Point: 23 dBm/MHz* Fixed Outdoor Client: 17 dBm/MHz Indoor Access Point: 20 dBm/MHz Indoor Subordinate: 20 dBm/MHz Indoor Client: 14 dBm/MHz

Table 100

*Maximum power spectral density specified as EIRP.

2.4.7 Test Location and Test Equipment Used

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

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Hygrometer	Rotronic	I-1000	3068	12	19-Nov-2025
Network Analyser	Rohde & Schwarz	ZVA 40	3548	12	20-Feb-2025
AC Programmable Power Supply	iTech	IT7324	5225	-	O/P Mon
MXA Signal Analyser	Keysight Technologies	N9020B	5529	24	13-Dec-2024
Digital Multimeter	Fluke	115	6145	12	06-Jun-2025
MXA Signal Analyser	Keysight Technologies	N9020B	6419	24	28-Feb-2025
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6426	12	07-Feb-2025
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6517	12	22-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
AC Programmable Power Supply	iTech	IT7324	6665	-	O/P Mon
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6752	12	06-Feb-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6753	12	06-Feb-2025

Table 101

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)
ISED RSS-247, Clause 6.2

2.5.2 Equipment Under Test and Modification State

A3240, S/N: K4L392N93P - Modification State 0
A3240, S/N: H2XGP4VW6W - Modification State 0

2.5.3 Date of Test

02-October-2024 to 07-October-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	21.7 - 22.7 °C
Relative Humidity	47.1 - 50.5 %

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	54.11
Static	HDR4	5733	5725	54.90
Static	HDR8	5733	5725	54.25
Static	DH5	5844	5850	55.10
Static	HDR4	5844	5850	55.17
Static	HDR8	5844	5850	54.93

Table 102 - SISO Authorised Band Edge Results

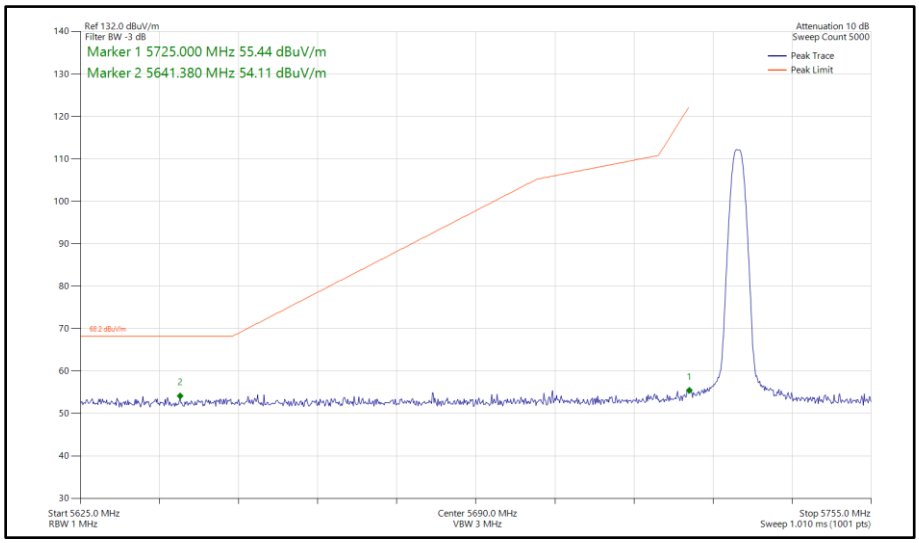

Figure 166 - Bluetooth DH5, SISO, Core 0 - 5733 MHz
Band Edge Frequency 5725 MHz

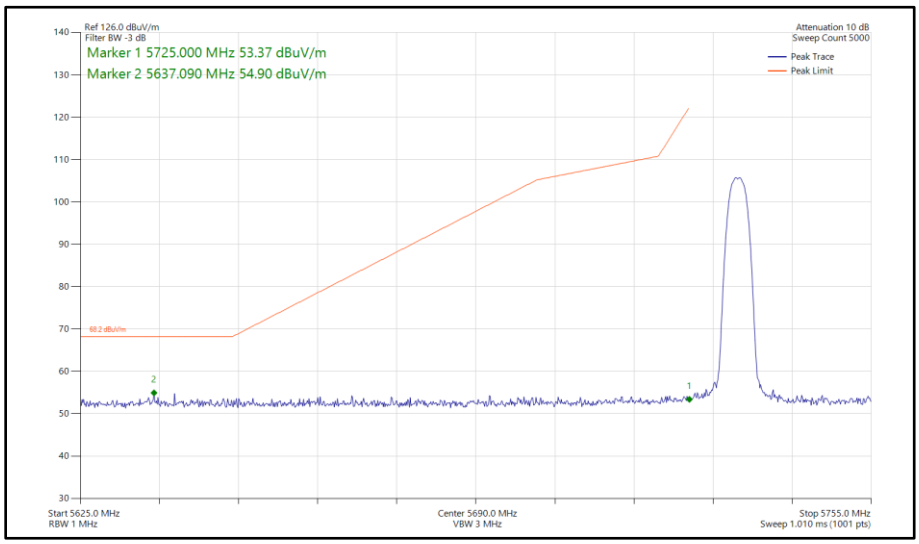

Figure 167 - Bluetooth HDR4, SISO, Core 0 - 5733 MHz Band Edge Frequency 5725 MHz

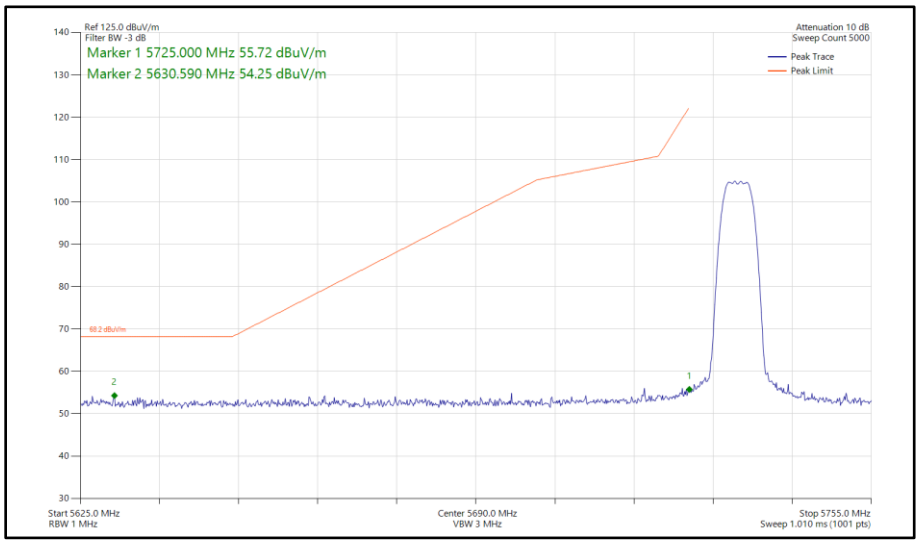

Figure 168 - Bluetooth HDR8, SISO, Core 0 - 5733 MHz Band Edge Frequency 5725 MHz

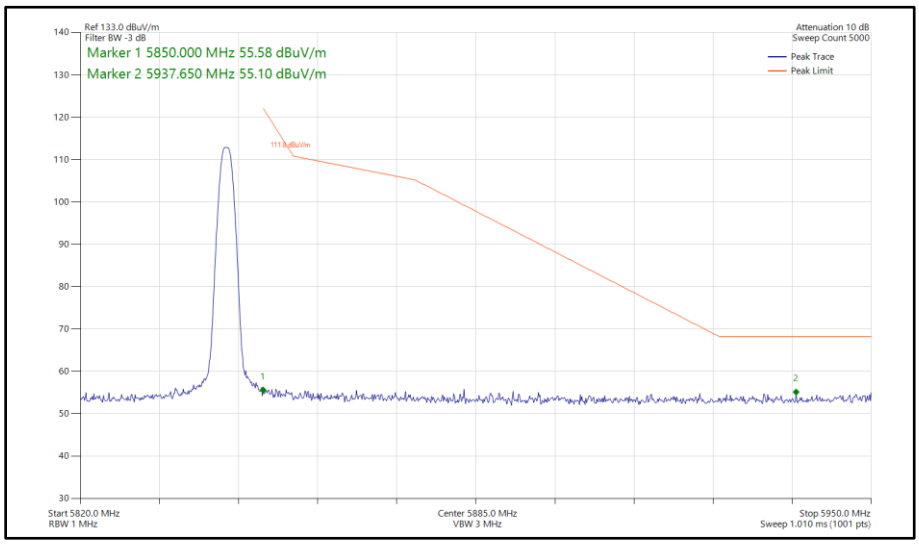

Figure 169 - Bluetooth DH5, SISO, Core 0 - 5844 MHz
Band Edge Frequency 5850 MHz

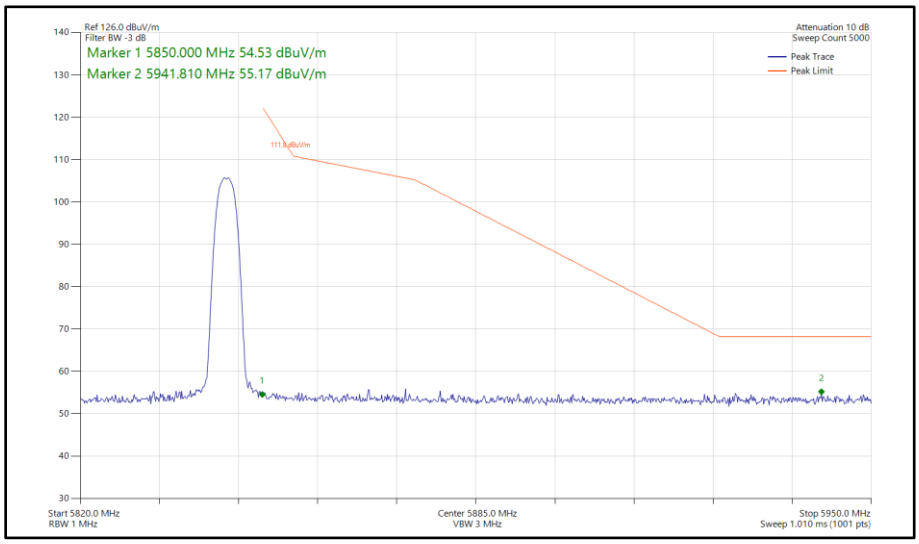

Figure 170 - Bluetooth HDR4, SISO, Core 0 - 5844 MHz
Band Edge Frequency 5850 MHz

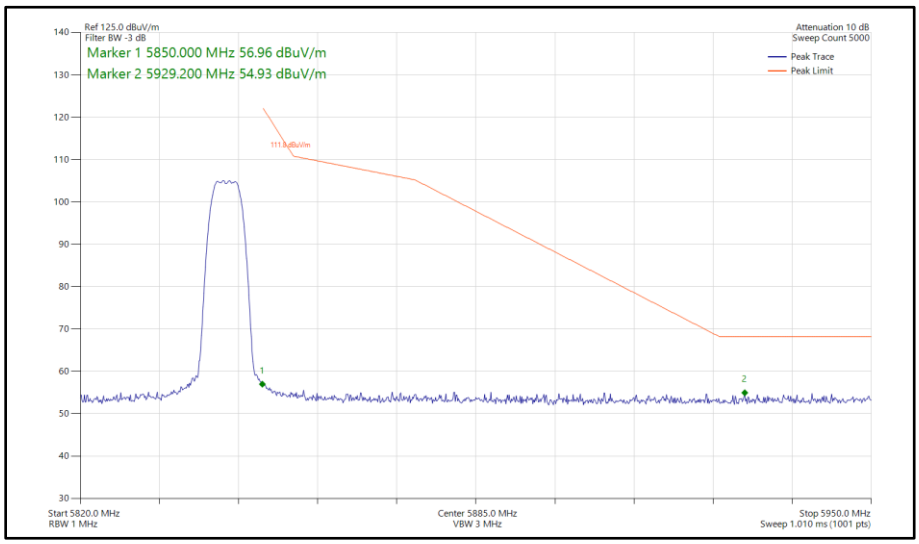

Figure 171 - Bluetooth HDR8, SISO, Core 0 - 5844 MHz
Band Edge Frequency 5850 MHz

iPA - Core 1 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBµV/m)
Static	DH5	5733	5725	54.71
Static	HDR4	5733	5725	54.72
Static	HDR8	5733	5725	54.63
Static	DH5	5844	5850	54.95
Static	HDR4	5844	5850	55.11
Static	HDR8	5844	5850	55.21

Table 103 - SISO Authorised Band Edge Results

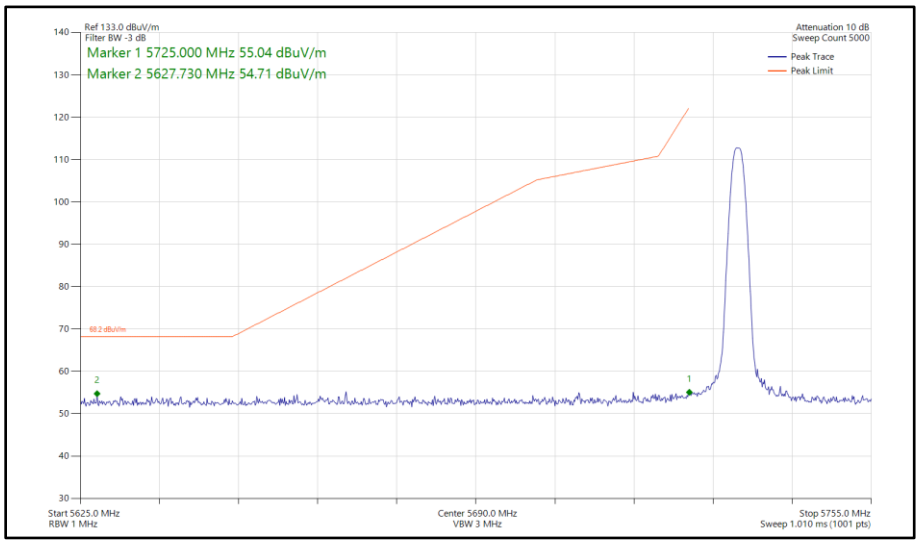

Figure 172 - Bluetooth DH5, SISO, Core 1 - 5733 MHz Band Edge Frequency 5725 MHz

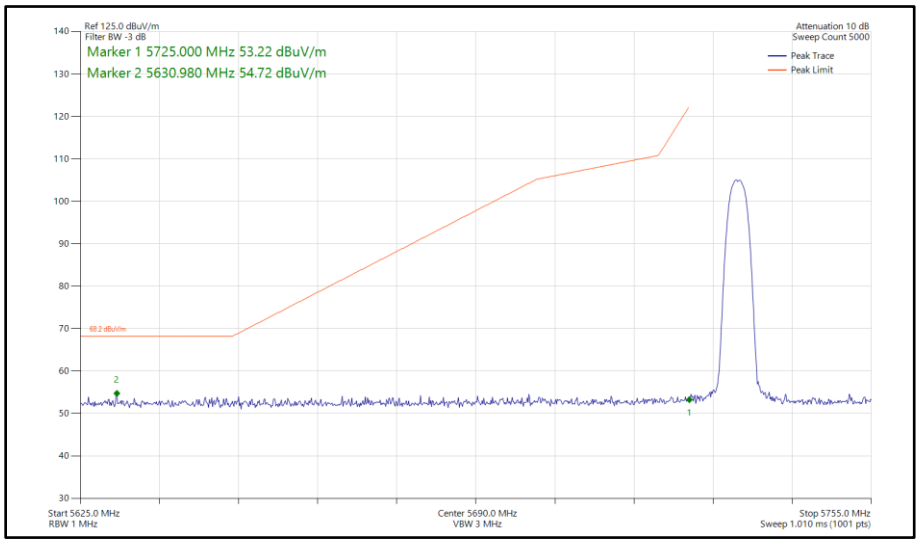

Figure 173 - Bluetooth HDR4, SISO, Core 1 - 5733 MHz Band Edge Frequency 5725 MHz

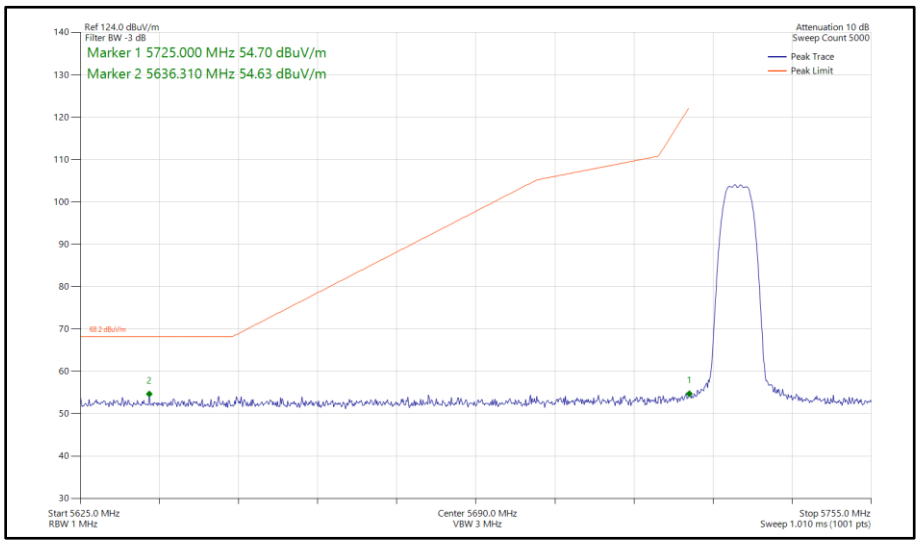

Figure 174 - Bluetooth HDR8, SISO, Core 1 - 5733 MHz
Band Edge Frequency 5725 MHz

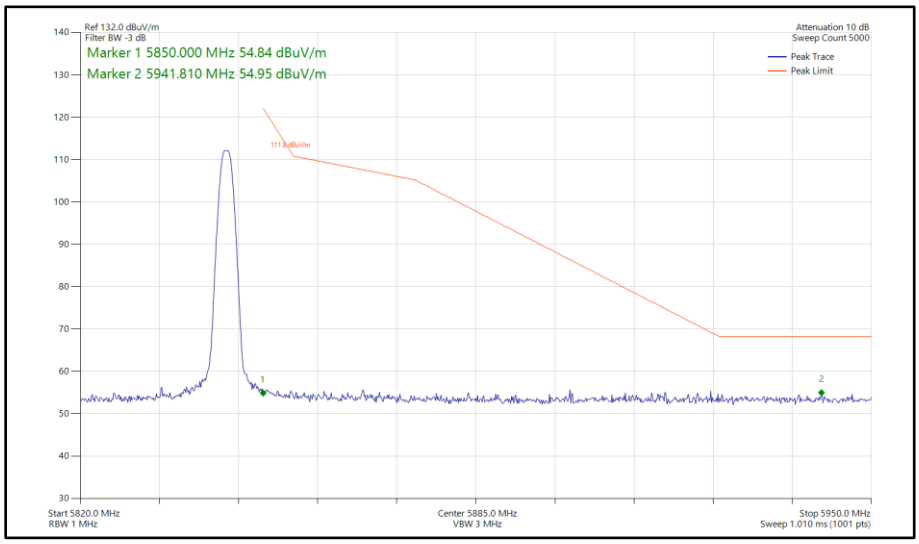

Figure 175 - Bluetooth DH5, SISO, Core 1 - 5844 MHz
Band Edge Frequency 5850 MHz

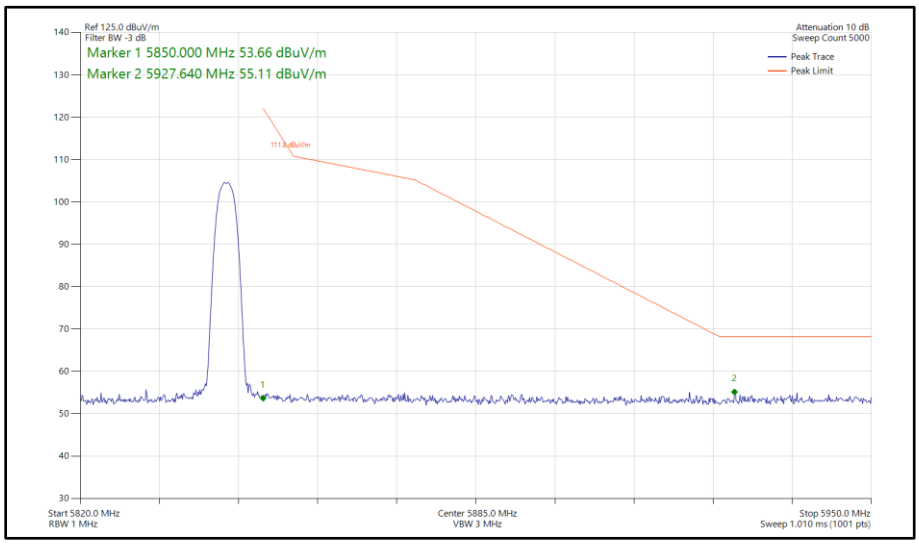

Figure 176 - Bluetooth HDR4, SISO, Core 1 - 5844 MHz Band Edge Frequency 5850 MHz

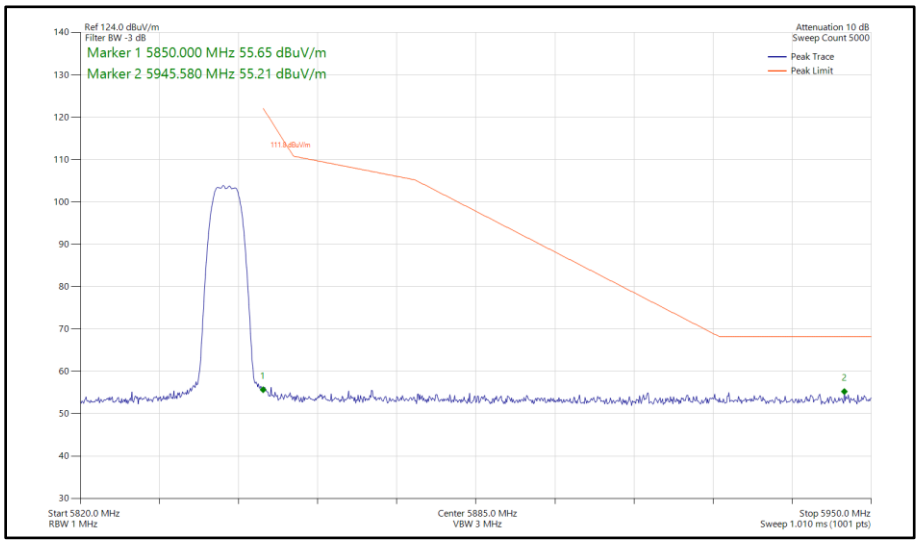

Figure 177 - Bluetooth HDR8, SISO, Core 1 - 5844 MHz Band Edge Frequency 5850 MHz

iPA - Core 0 - Core 1 (MIMO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBµV/m)
Static	DH5	5733	5725	54.32
Static	HDR4	5733	5725	54.68
Static	HDR8	5733	5725	54.71
Static	DH5	5844	5850	55.34
Static	HDR4	5844	5850	55.25
Static	HDR8	5844	5850	55.23

Table 104 - MIMO Authorised Band Edge Results

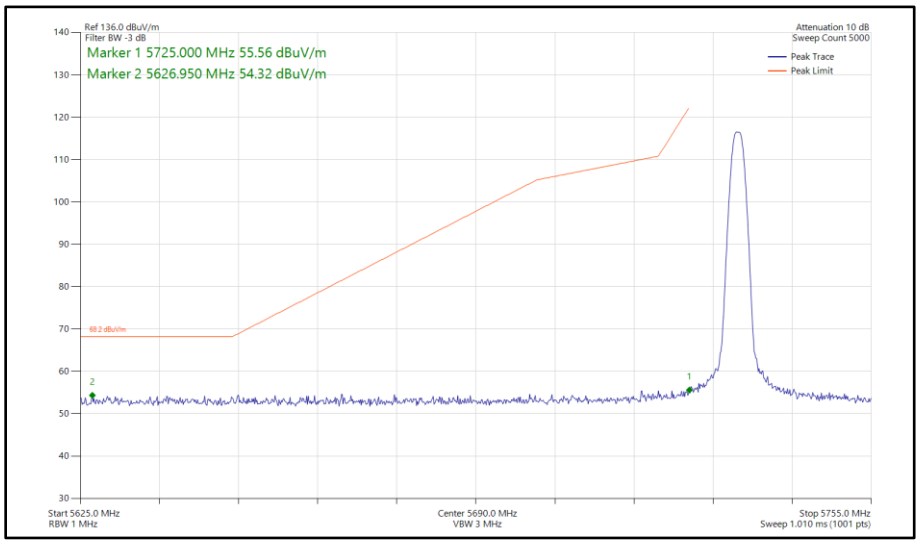

Figure 178 - Bluetooth DH5, MIMO, Core 0 - Core 1 - 5733 MHz Band Edge Frequency 5725 MHz

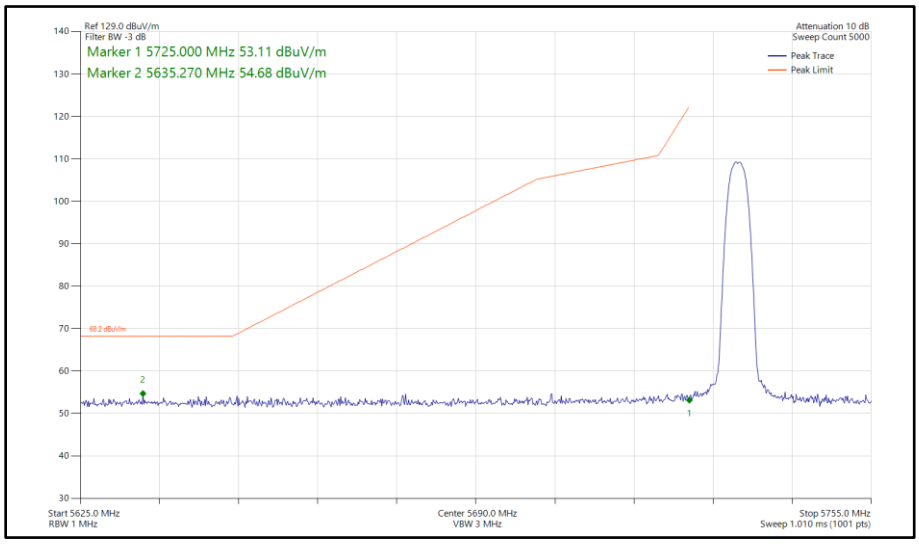

Figure 179 - Bluetooth HDR4, MIMO, Core 0 - Core 1 - 5733 MHz Band Edge Frequency 5725 MHz

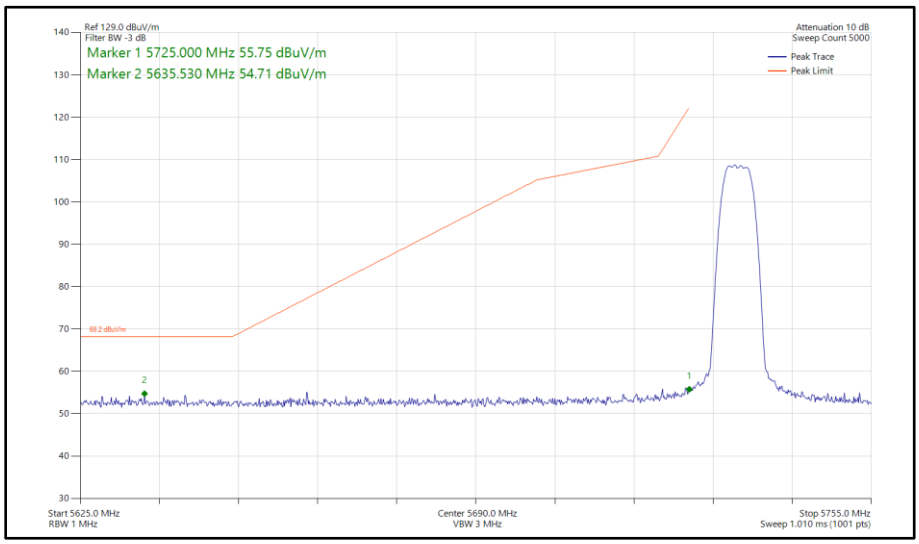

Figure 180 - Bluetooth HDR8, MIMO, Core 0 - Core 1 - 5733 MHz Band Edge Frequency 5725 MHz

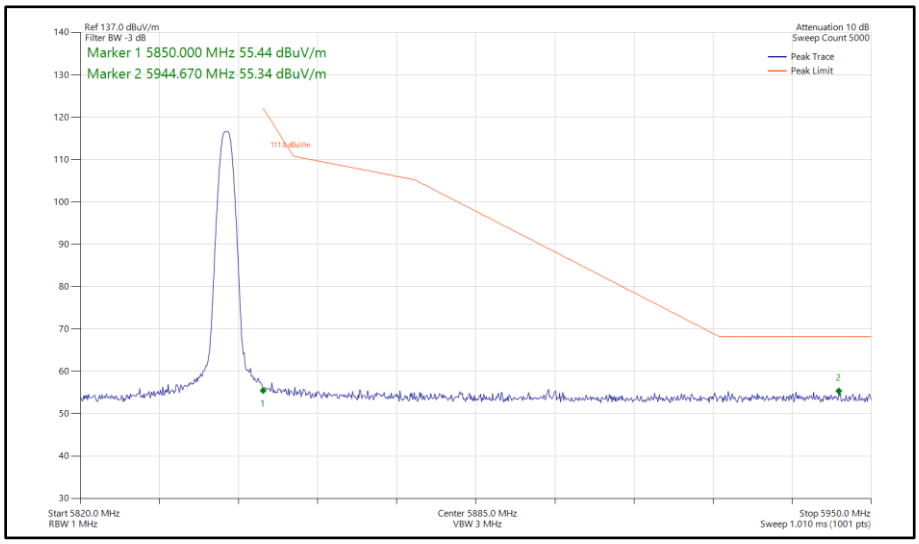

Figure 181 - Bluetooth DH5, MIMO, Core 0 - Core 1 - 5844 MHz Band Edge Frequency 5850 MHz

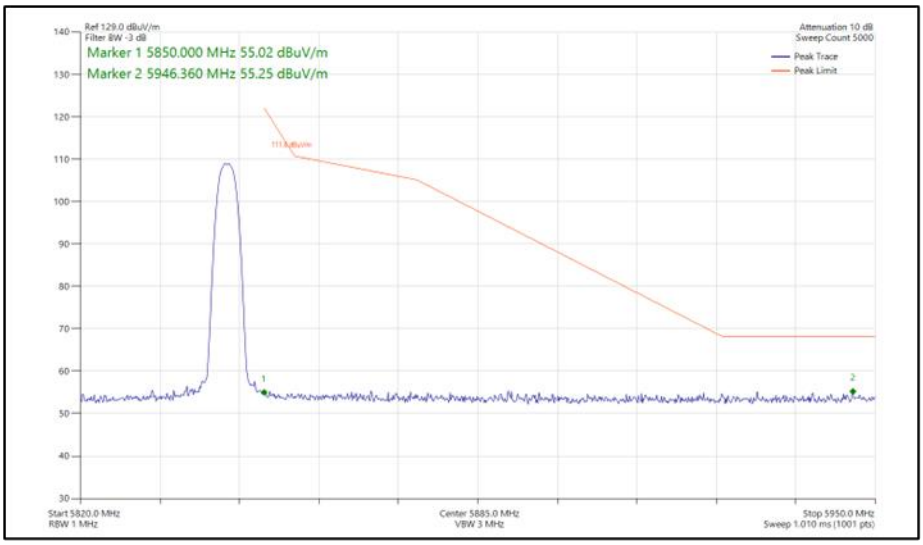

Figure 182 - Bluetooth HDR4, MIMO, Core 0 - Core 1 - 5844 MHz Band Edge Frequency 5850 MHz

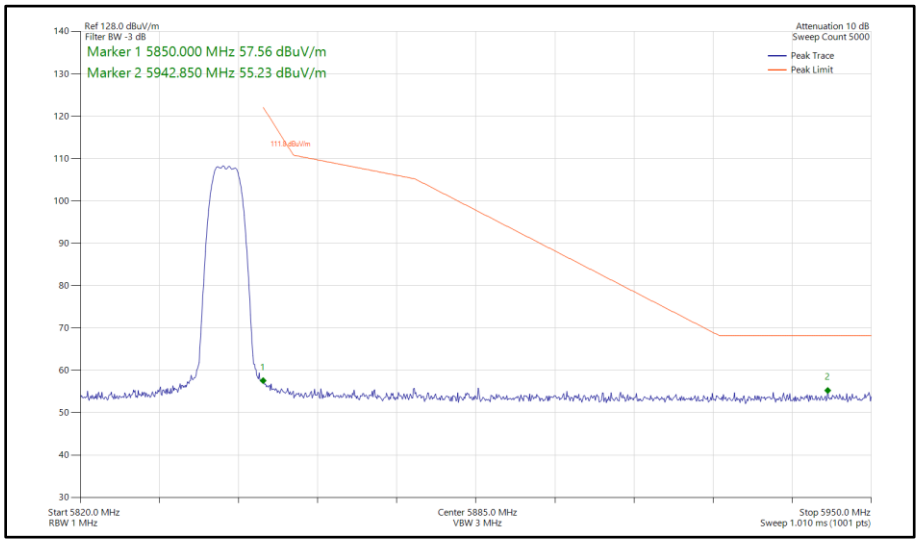

Figure 183 - Bluetooth HDR8, MIMO, Core 0 - Core 1 - 5844 MHz Band Edge Frequency 5850 MHz

ePA - Core 0 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBµV/m)
Static	HDR4	5733	5725	54.87
Static	HDR8	5733	5725	55.18
Static	HDR4	5844	5850	55.86
Static	HDR8	5844	5850	55.78

Table 105 - SISO Authorised Band Edge Results

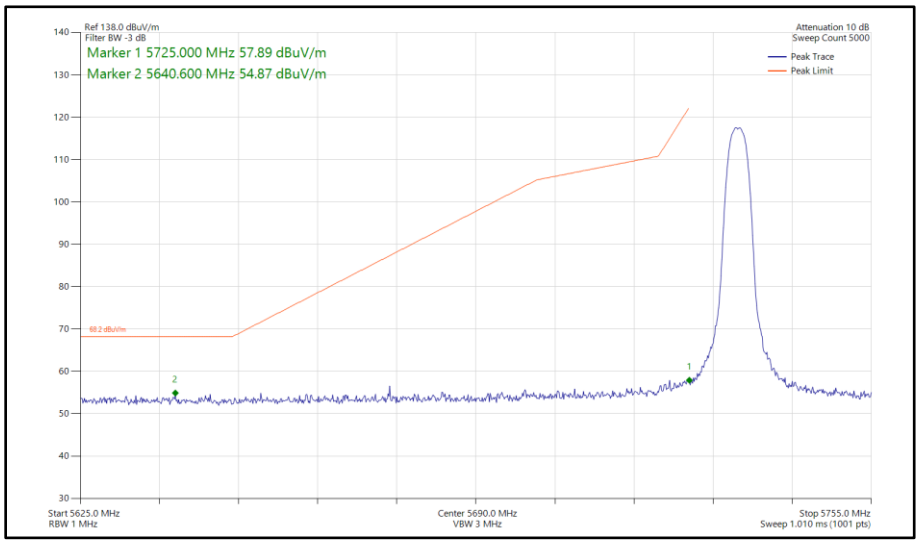

Figure 184 - Bluetooth HDR4, SISO, Core 0 - 5733 MHz Band Edge Frequency 5725 MHz

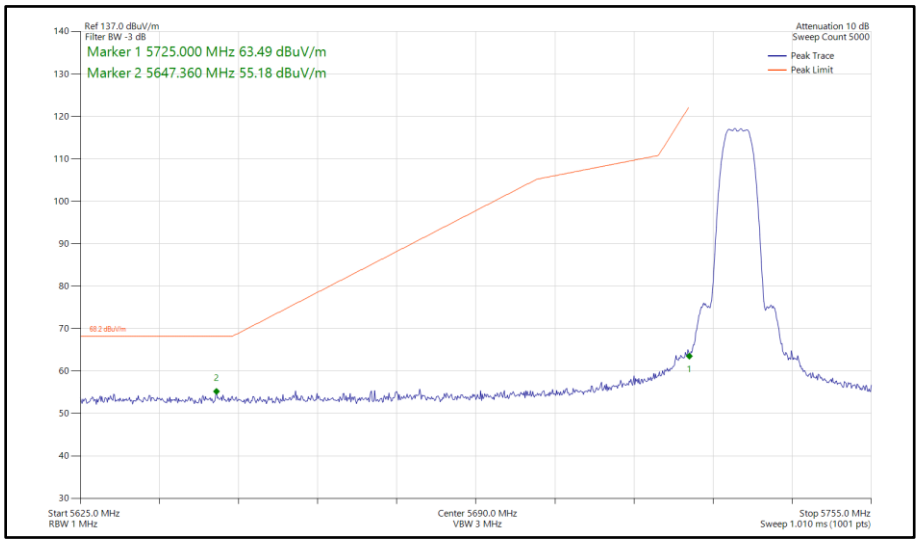

Figure 185 - Bluetooth HDR8, SISO, Core 0 - 5733 MHz Band Edge Frequency 5725 MHz

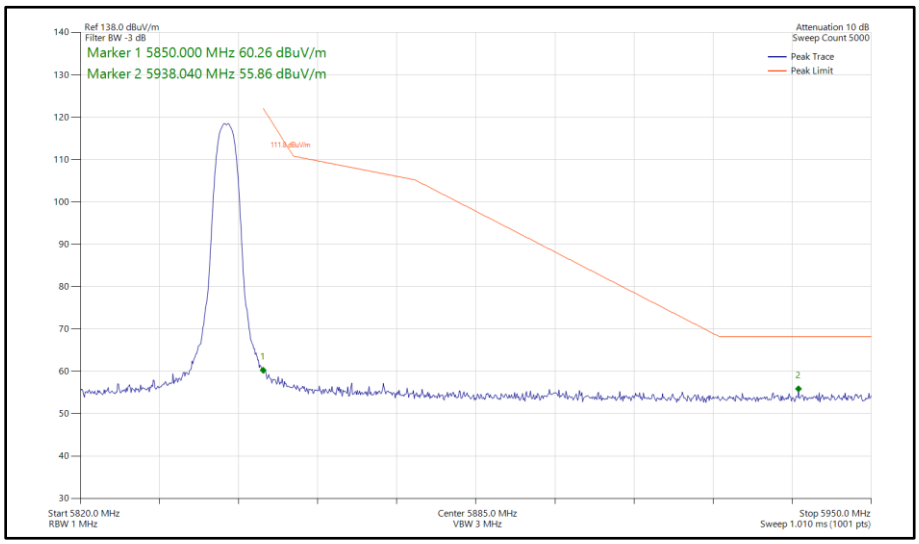

Figure 186 - Bluetooth HDR4, SISO, Core 0 - 5844 MHz Band Edge Frequency 5850 MHz

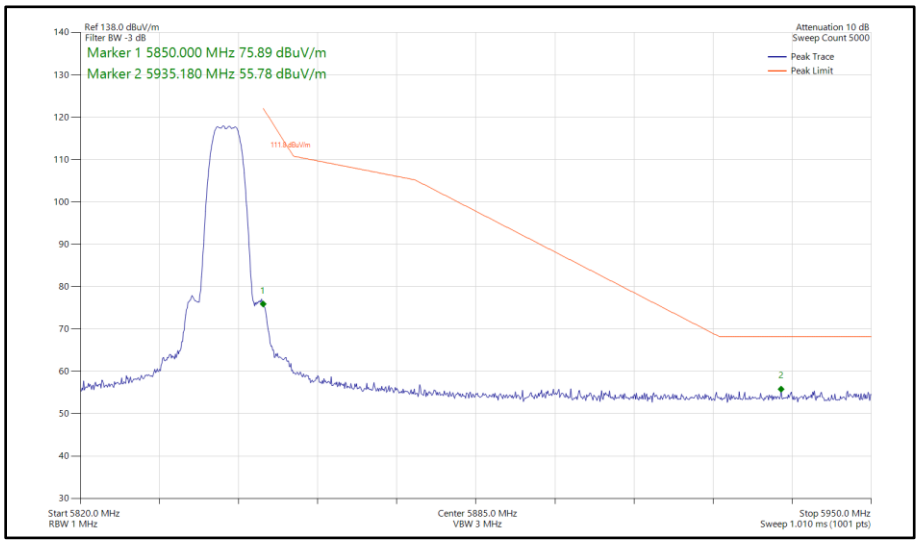

Figure 187 - Bluetooth HDR8, SISO, Core 0 - 5844 MHz Band Edge Frequency 5850 MHz

ePA - Core 1 (SISO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBµV/m)
Static	HDR4	5733	5725	55.13
Static	HDR8	5733	5725	54.91
Static	HDR4	5844	5850	55.36
Static	HDR8	5844	5850	54.83

Table 106 - SISO Authorised Band Edge Results

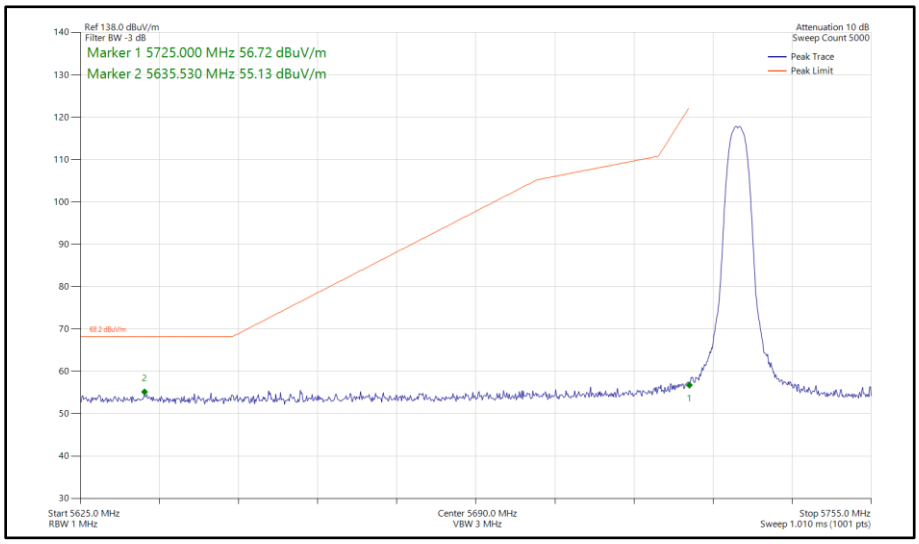

Figure 188 - Bluetooth HDR4, SISO, Core 1 - 5733 MHz Band Edge Frequency 5725 MHz

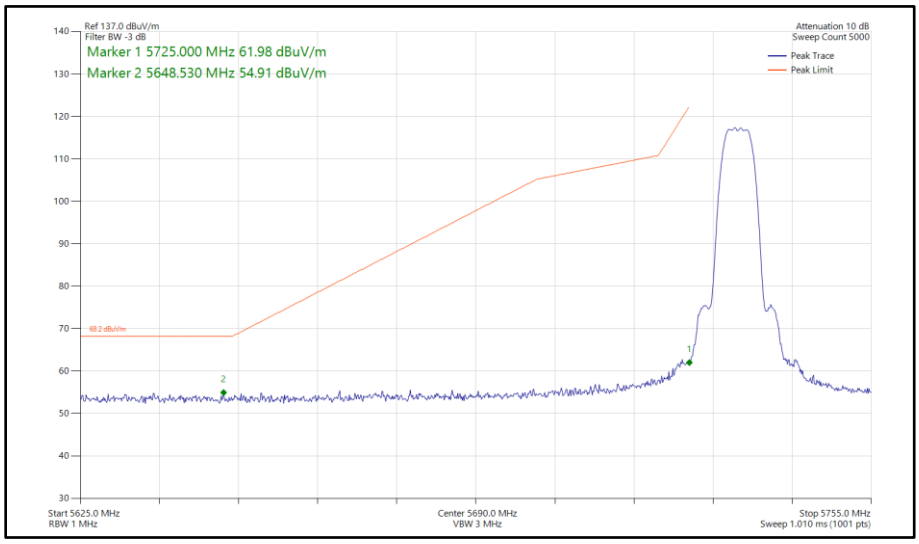

Figure 189 - Bluetooth HDR8, SISO, Core 1 - 5733 MHz Band Edge Frequency 5725 MHz

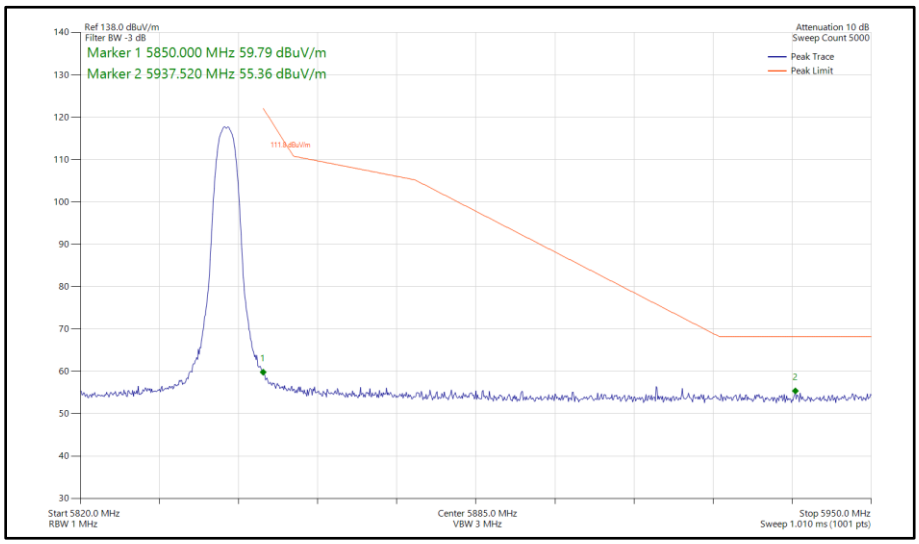

Figure 190 - Bluetooth HDR4, SISO, Core 1 - 5844 MHz Band Edge Frequency 5850 MHz

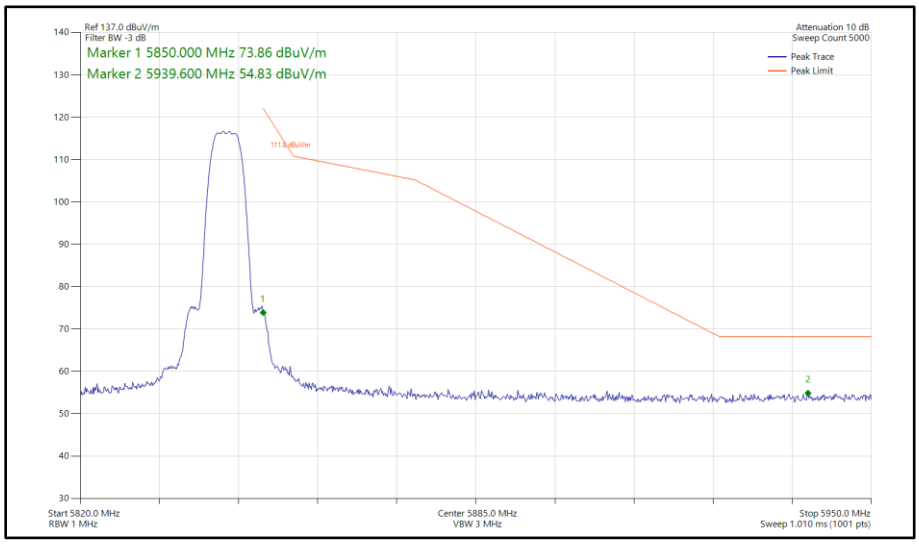

Figure 191 - Bluetooth HDR8, SISO, Core 1 - 5844 MHz Band Edge Frequency 5850 MHz

ePA - Core 0 - Core 1 (MIMO)

Mode	Packet Type	TX Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dBµV/m)
Static	HDR4	5733	5725	55.05
Static	HDR8	5733	5725	55.05
Static	HDR4	5844	5850	56.07
Static	HDR8	5844	5850	55.51

Table 107 - MIMO Authorised Band Edge Results

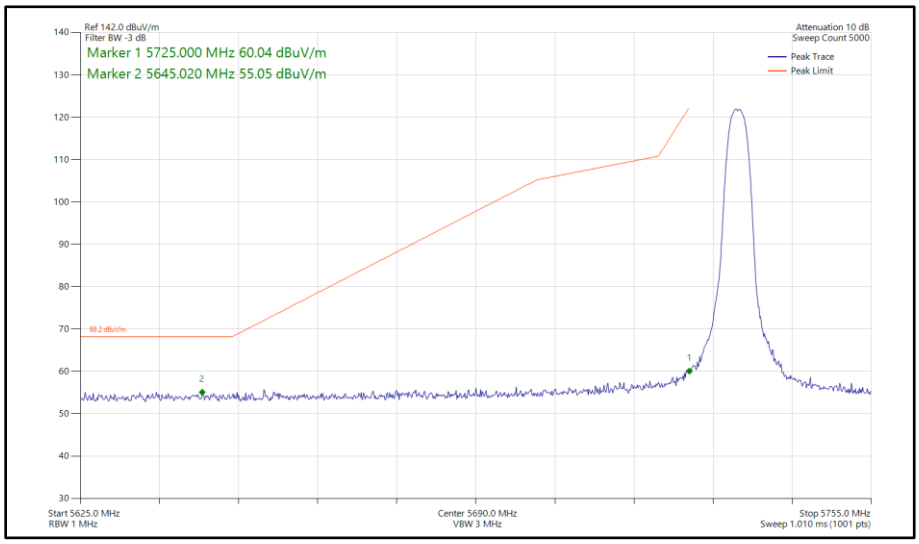

Figure 192 - Bluetooth HDR4, MIMO, Core 0 - Core 1 - 5733 MHz Band Edge Frequency 5725 MHz

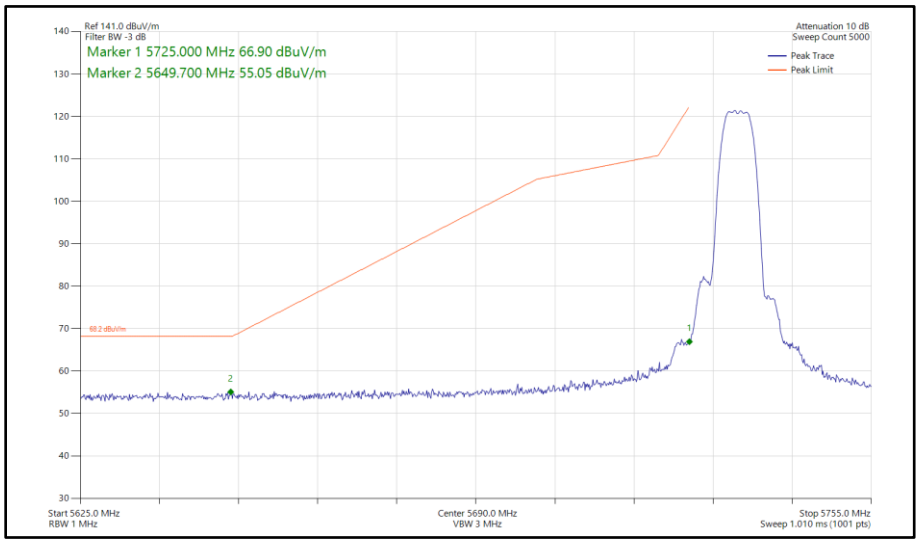

Figure 193 - Bluetooth HDR8, MIMO, Core 0 - Core 1 - 5733 MHz Band Edge Frequency 5725 MHz

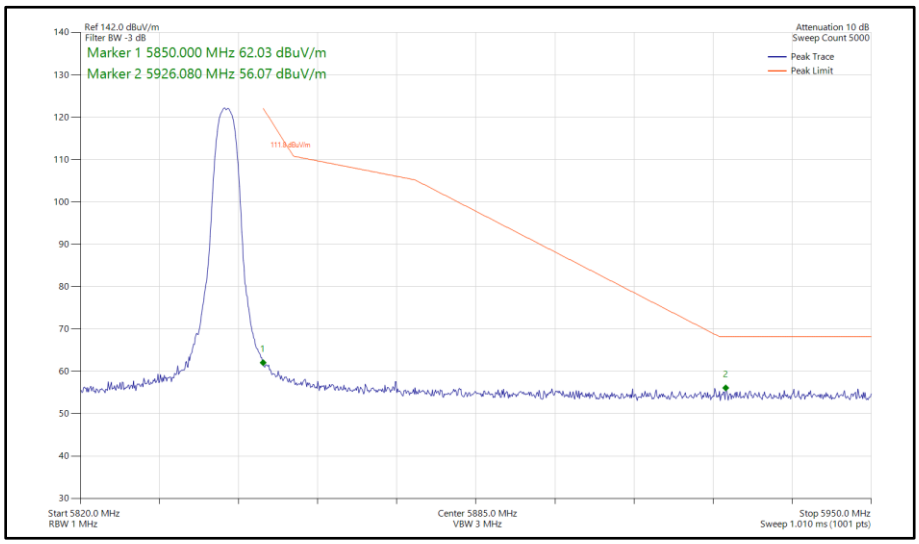

Figure 194 - Bluetooth HDR4, MIMO, Core 0 - Core 1 - 5844 MHz Band Edge Frequency 5850 MHz

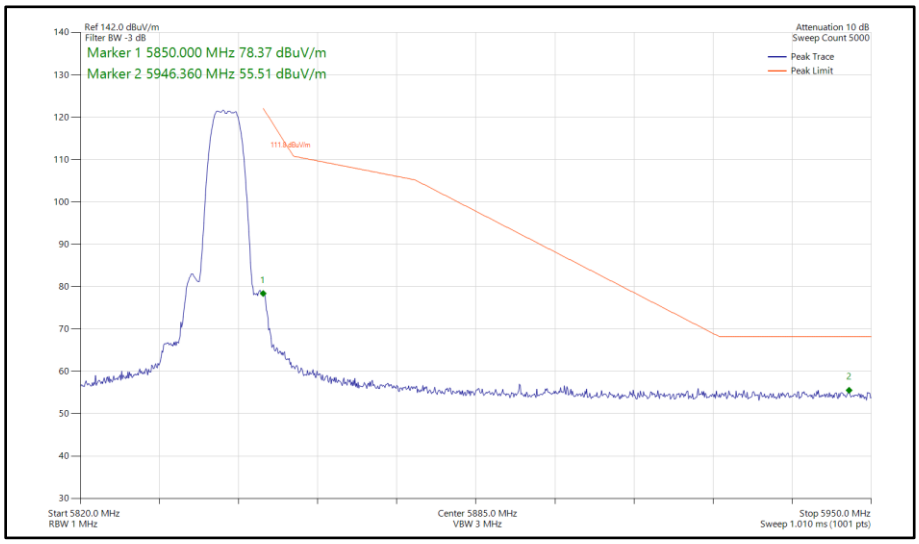

Figure 195 - Bluetooth HDR8, MIMO, Core 0 - Core 1 - 5844 MHz Band Edge Frequency 5850 MHz

FCC 47 CFR Part 15E, Limit Clause 15.407(b)(1)(2)(3)(4)

For transmitters operating in the 5.15-5.25 GHz band: ≤-27 dBm/MHz outside 5150-5350 MHz.

For transmitters operating in the 5.25-5.35 GHz band: ≤-27 dBm/MHz outside 5150-5350 MHz.

For transmitters operating in the 5.47-5.725 GHz band: ≤-27 dBm/MHz outside 5470-5725 MHz

For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

ISED RSS-247, Limit Clause 6.2.1.2, 6.2.2.2, 6.2.3.2, 6.2.4.2 and 6.2.5.3

For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. Any unwanted emissions that fall into the band 5250-5350 MHz shall be attenuated below the channel power by at least 26 dB.

For transmitters with operating frequencies in the bands 5250-5350 MHz and 5470-5725 MHz, all emissions outside the band 5250-5350 MHz and 5470-5725 MHz shall not exceed -27 dBm/MHz e.i.r.p.

Devices operating in the band 5725-5850 MHz shall have e.i.r.p. of unwanted emissions comply with the following:

a) 27 dBm/MHz at frequencies from the band edges decreasing linearly to 15.6 dBm/MHz at 5 MHz above or below the band edges;

b) 15.6 dBm/MHz at 5 MHz above or below the band edges decreasing linearly to 10 dBm/MHz at 25 MHz above or below the band edges;

c) 10 dBm/MHz at 25 MHz above or below the band edges decreasing linearly to -27 dBm/MHz at 75 MHz above or below the band edges; and

d) -27 dBm/MHz at frequencies more than 75 MHz above or below the band edges.

For the 5895 MHz band edge and above, all devices shall be measured using average detection and shall comply with the following e.i.r.p. spectral density limits:

Fixed outdoor access points and fixed outdoor client devices shall not exceed -27 dBm/MHz e.i.r.p. spectral density at or above the 5895 MHz band edge.

Indoor access points or indoor subordinate devices shall not exceed 15 dBm/MHz e.i.r.p. spectral density at the 5895 MHz band edge and shall decrease linearly to not exceed -7 dBm/MHz e.i.r.p. spectral density at or above 5925 MHz.

Client devices shall not exceed -5 dBm/MHz e.i.r.p. spectral density at the 5895 MHz band edge and shall decrease linearly to not exceed -27 dBm/MHz e.i.r.p. spectral density at or above 5925 MHz.

2.5.7 Test Location and Test Equipment Used

This test was carried out in RF Chamber 17.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Cable (18 GHz)	Rosenberger	LU7-071-1000	5102	12	21-Nov-2024
Emissions Software	TUV SUD	EmX V3.4.2	5125	-	Software
EMI Test Receiver	Rohde & Schwarz	ESW44	6294	12	06-Jan-2025
USB Spectrum Analyser	Signal Hound	SA124B	6298	-	TU
Digital Multimeter	Fluke	115	6345	12	24-Jul-2025
Humidity and Temperature Meter	R.S Components	1364	6346	12	06-Mar-2025
SAC Switch Unit	TUV SUD	TUV_SSU_004 PLC	6349	12	07-May-2025
USB Spectrum Analyser	Signal Hound	SA124B	6383	-	TU
Horn Antenna (1–10.5 GHz)	Schwarzbeck	BBHA 9120 B	6457	12	05-May-2025
AC Power Supply	iTech	IT7324	6657	-	O/P Mon
3m Semi-Anechoic Chamber	Albatross Projects	RF Chamber 17	6658	36	28-Jan-2026
Mast and Turntable Controller	Maturo Gmbh	FCU3.0	6659	-	TU
Tilt Antenna Mast	Maturo Gmbh	BAM4.5-P	6660	-	TU
Turntable	Maturo Gmbh	TT1.5SI	6661	-	TU
8m Cable	Junkosha	MWX221-08000AMSAMS/B	6748	12	01-Feb-2025
Cable Assembly	SpecTech	PE300-60	6859	-	TU
Cable Assembly	SpecTech	PE300-60	6860	-	TU

Table 108

TU - Traceability Unscheduled
O/P Mon - Output Monitored using calibrated equipment

2.6 Spurious Radiated Emissions

2.6.1 Specification Reference

FCC 47 CFR Part 15E, Clause 15.209 and 15.407 (b)
ISED RSS-247, Clause 6.2
ISED RSS-GEN, Clause 6.13 and 8.9

2.6.2 Equipment Under Test and Modification State

A3240, S/N: K4L392N93P - Modification State 0
A3240, S/N: H2XGP4VW6W - Modification State 0

2.6.3 Date of Test

10-October-2024 to 13-November-2024

2.6.4 Test Method

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

Ports on the EUT were terminated with loads as described in ANSI C63.10 clause 6.2.

Measurements were undertaken from 30 MHz to 40 GHz on Channel 5203 MHz and Channel 5788 MHz.

For the purpose of this testing, spurious emissions were limited to 1 GHz to 40 GHz on all other test channels.

The plots shown are the characterization of the EUT. The limits on the plots represent the most stringent case for restricted bands, (54/74 dBuV/m @ 3 m and 64/84 dBuV/m @ 1m) when compared to -27 dBm/MHz EIRP outside restricted bands. The limits shown have been used as a threshold to determine where further measurements are necessary. Where results are within 10dB of the limits shown on the plots, further investigation was carried out and reported in results tables.

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

EIRP was converted to field strength at 3m using the following formula:
Field Strength (dBµV/m at 3 m) = EIRP (dBm) + 95.2 dB

2.6.5 Test Setup Diagram

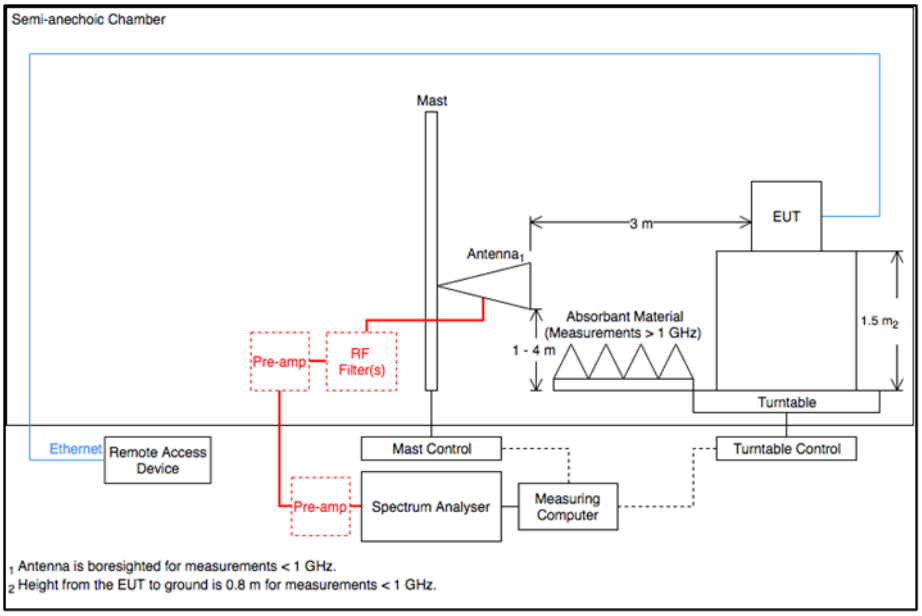

Figure 196 - Radiated Emissions Test Setup Diagram

2.6.6 Environmental Conditions

Ambient Temperature	22.3 - 22.9 °C
Relative Humidity	41.2 - 51.7 %

2.6.7 Test Results

Narrowband

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4731.925	39.01	54.00	-14.99	RMS	350	270	Vertical
5119.965	36.73	54.00	-17.27	RMS	8	162	Horizontal
5435.215	36.79	54.00	-17.21	RMS	188	180	Vertical
5441.686	36.82	54.00	-17.18	RMS	283	330	Horizontal
5509.563	49.35	68.20	-18.85	Peak	225	212	Vertical
5631.266	48.64	68.20	-19.56	Peak	106	218	Horizontal

Table 109 - 5162 MHz, DH5, iPA, Core 0 + Core 1, 1 GHz to 40 GHz

No other emissions found within 10 dB of the limit.

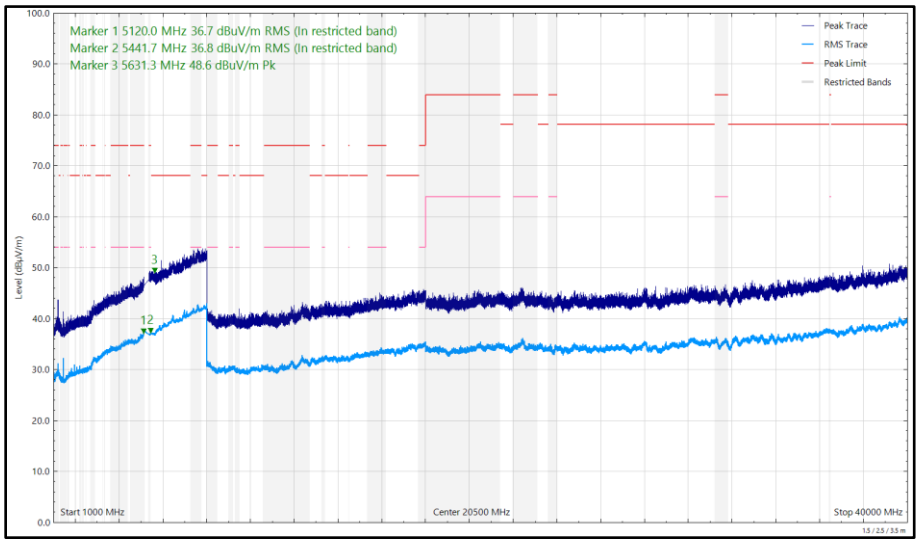

Figure 197 - 5162 MHz, DH5, iPA, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

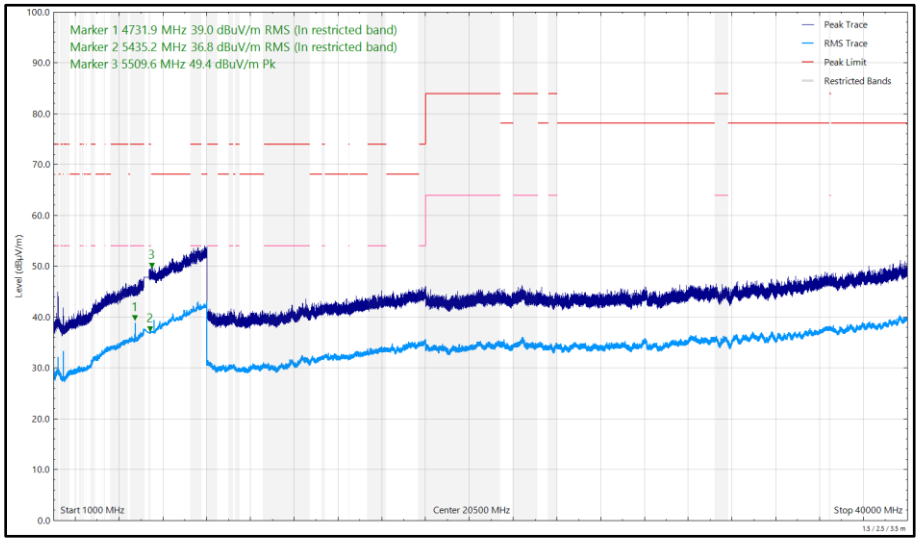

Figure 198 - 5162 MHz, DH5, iPA, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
30.241	21.47	40.00	-18.53	Q-Peak	155	398	Vertical
32.069	33.41	40.00	-6.59	Q-Peak	306	100	Vertical
84.770	27.06	40.00	-12.94	Q-Peak	175	389	Horizontal
103.531	35.57	43.50	-7.93	Q-Peak	0	300	Horizontal
108.185	33.32	43.50	-10.18	Q-Peak	2	288	Horizontal
112.067	33.55	43.50	-9.95	Q-Peak	98	100	Vertical
192.873	29.83	43.50	-13.67	Q-Peak	203	100	Vertical
225.038	27.32	46.00	-18.68	Q-Peak	314	100	Vertical
252.042	24.17	46.00	-21.83	Q-Peak	259	103	Vertical
321.933	29.30	46.00	-16.70	Q-Peak	93	103	Horizontal
326.609	29.99	46.00	-16.01	Q-Peak	85	100	Horizontal
4769.430	37.48	54.00	-16.52	RMS	339	106	Vertical
5026.267	35.52	54.00	-18.48	RMS	24	374	Horizontal
5439.714	36.82	54.00	-17.18	RMS	152	313	Vertical
5455.310	36.72	54.00	-17.28	RMS	268	187	Horizontal
5472.229	48.47	68.20	-19.73	Peak	25	370	Horizontal
5544.455	48.32	68.20	-19.88	Peak	82	311	Vertical

Table 110 - 5203 MHz, DH5, iPA, Core 0 + Core 1, 30 MHz to 40 GHz

No other emissions found within 10 dB of the limit.

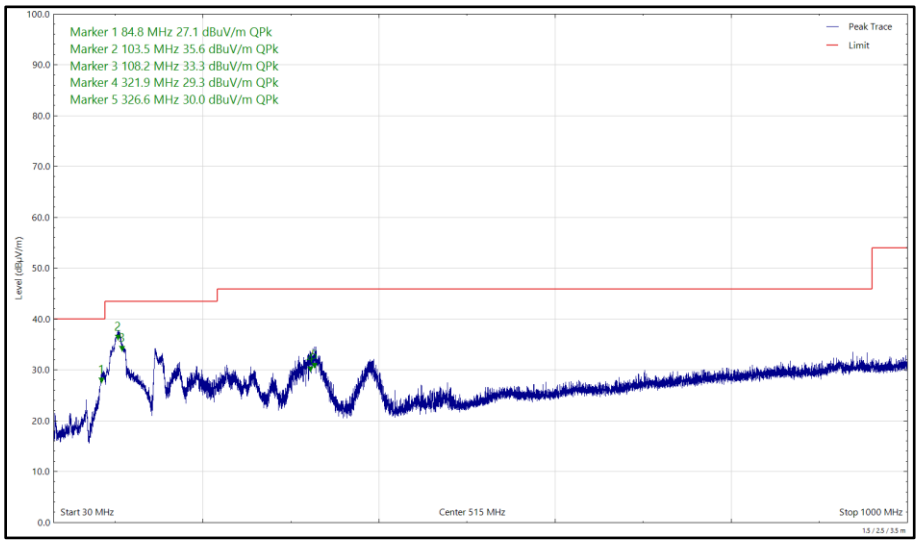

Figure 199 - 5203 MHz, DH5, iPA, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

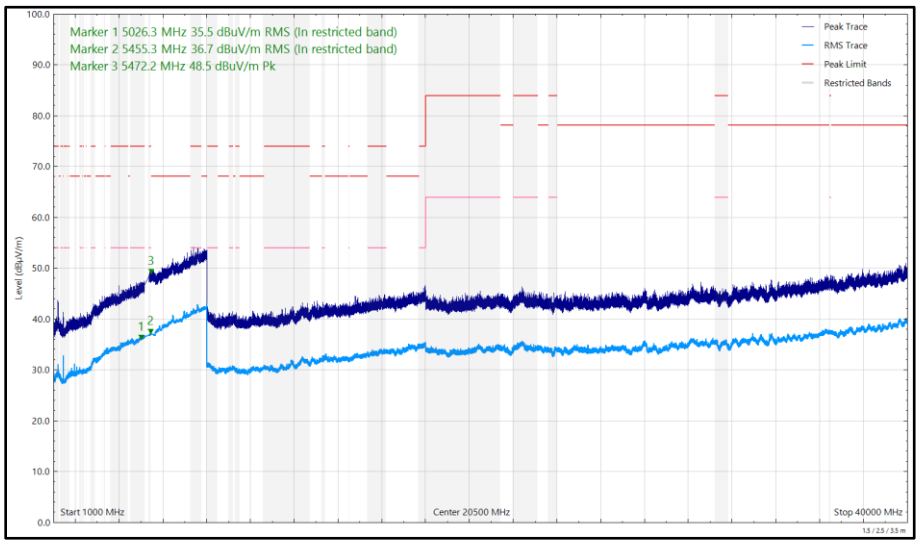

Figure 200 - 5203 MHz, DH5, iPA, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

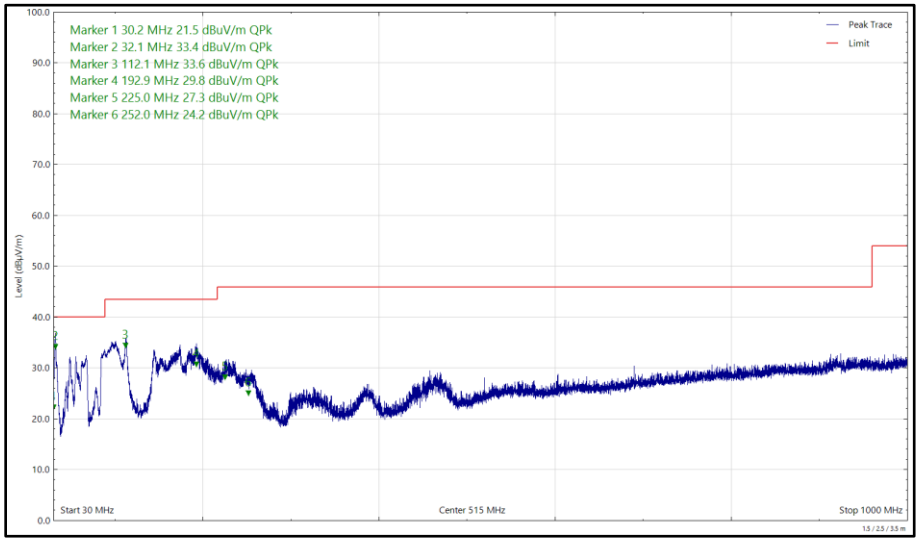

Figure 201 - 5203 MHz, DH5, iPA, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

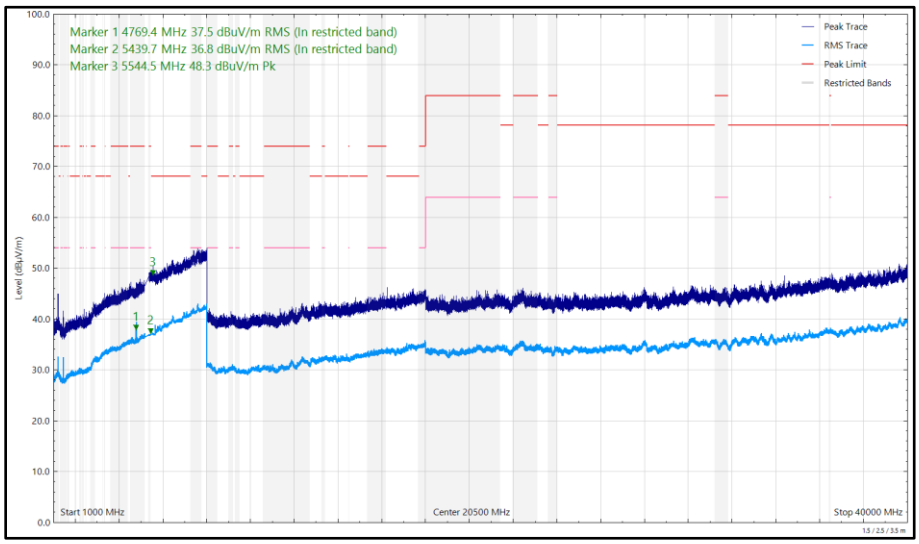

Figure 202 - 5203 MHz, DH5, iPA, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
4807.965	40.53	54.00	-13.47	RMS	341	277	Vertical
5147.936	35.63	54.00	-18.37	RMS	351	379	Horizontal
5379.424	36.69	54.00	-17.31	RMS	21	379	Vertical
5438.062	36.78	54.00	-17.22	RMS	256	111	Horizontal
5630.768	48.30	68.20	-19.90	Peak	341	238	Horizontal

Table 111 - 5245 MHz, DH5, iPA, Core 0 + Core 1, 1 GHz to 40 GHz

No other emissions found within 10 dB of the limit.

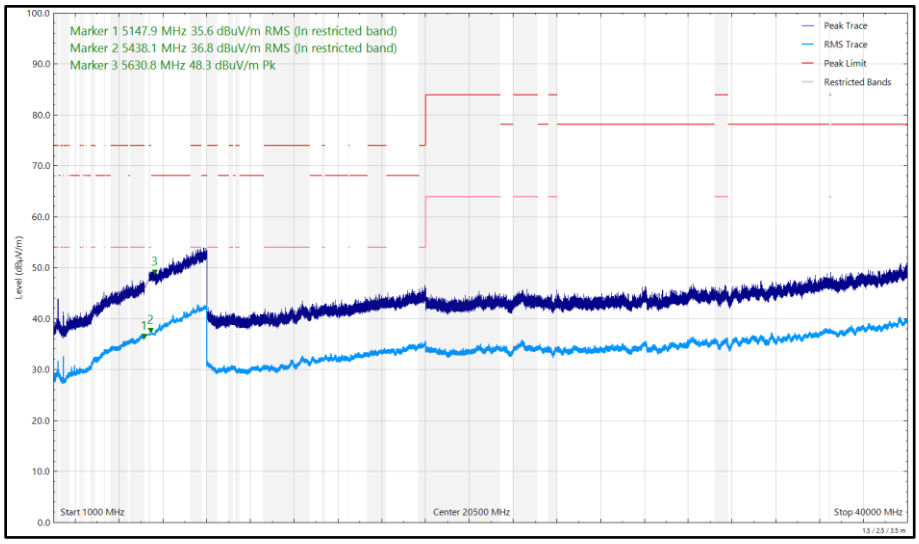

Figure 203 - 5245 MHz, DH5, iPA, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

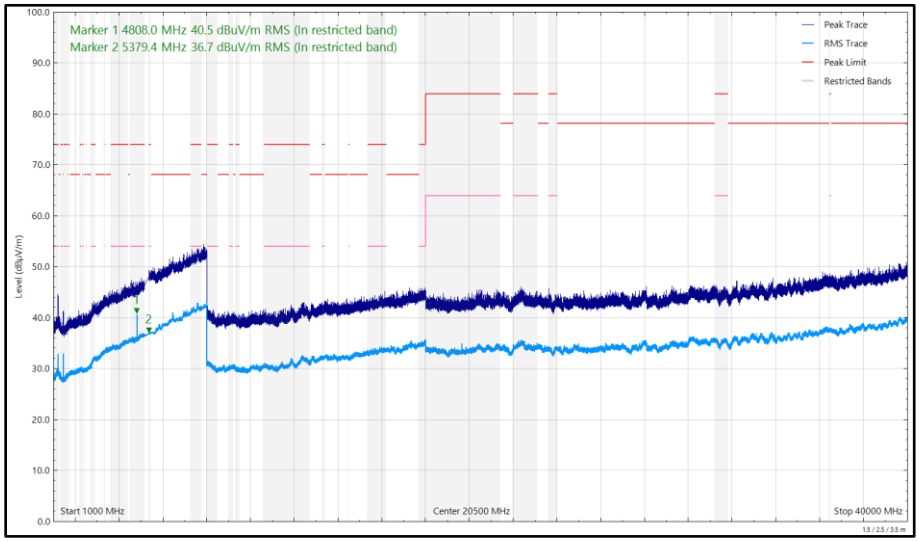

Figure 204 - 5245 MHz, DH5, iPA, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical