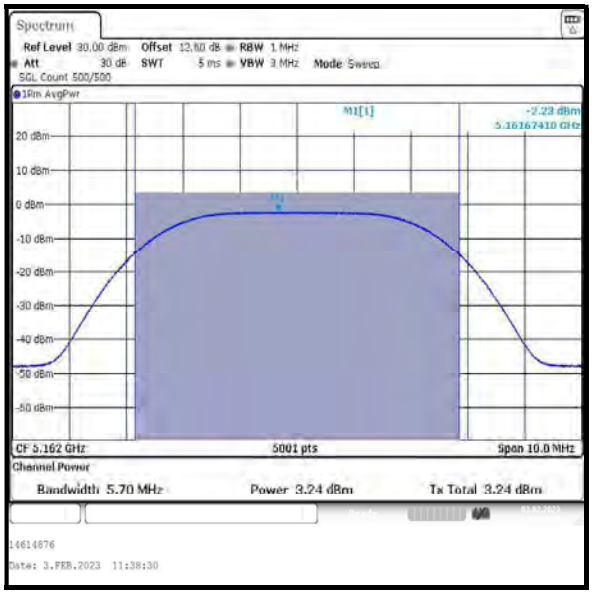
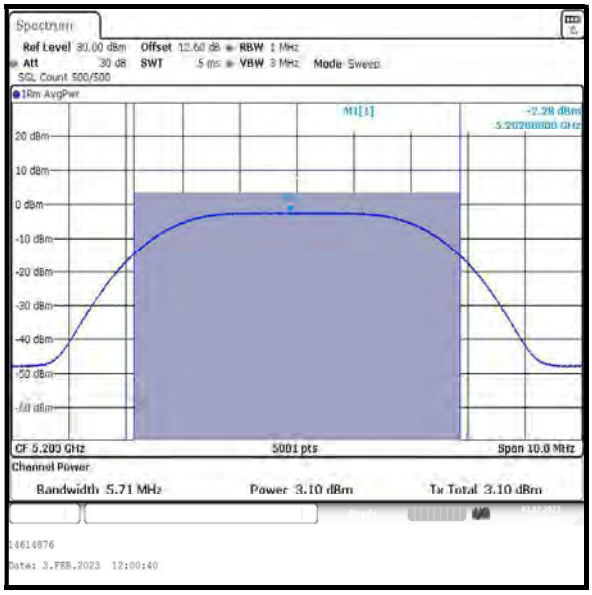
Transmitter Maximum Conducted Output Power (5.15-5.25 GHz band) (continued)

Results: 8DH5 / SISO / Core 1 / iPA

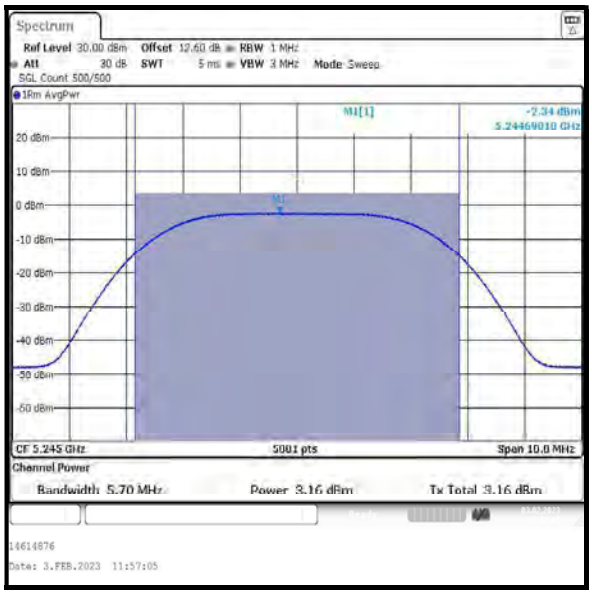
Channel	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5162	3.2	23.1	19.9	Complied
Middle	5203	3.1	23.1	20.0	Complied
Top	5245	3.2	23.1	19.9	Complied



Bottom Channel



Middle Channel

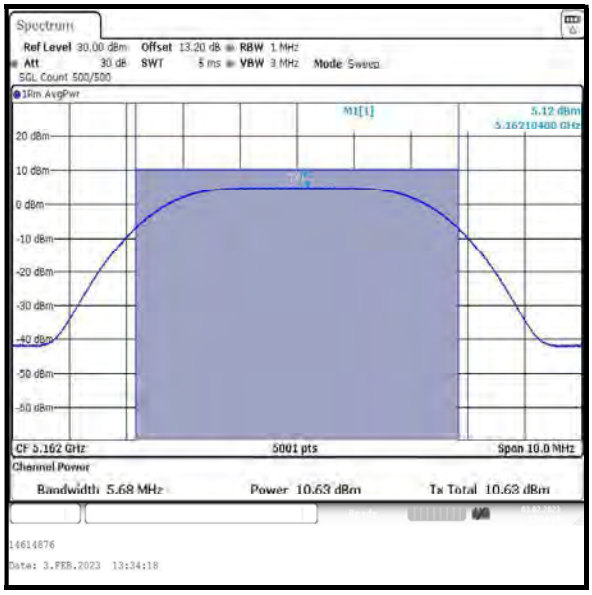


Top Channel

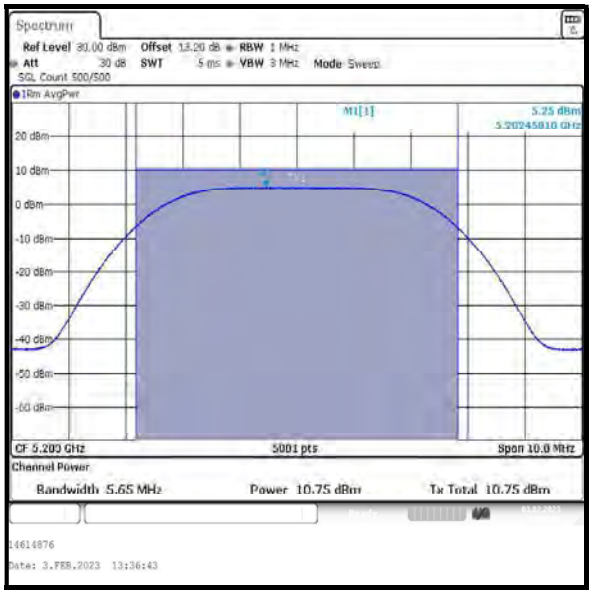
Transmitter Maximum Conducted Output Power (5.15-5.25 GHz band) (continued)

Results: 8DH5 / SISO / Core 1 / ePA

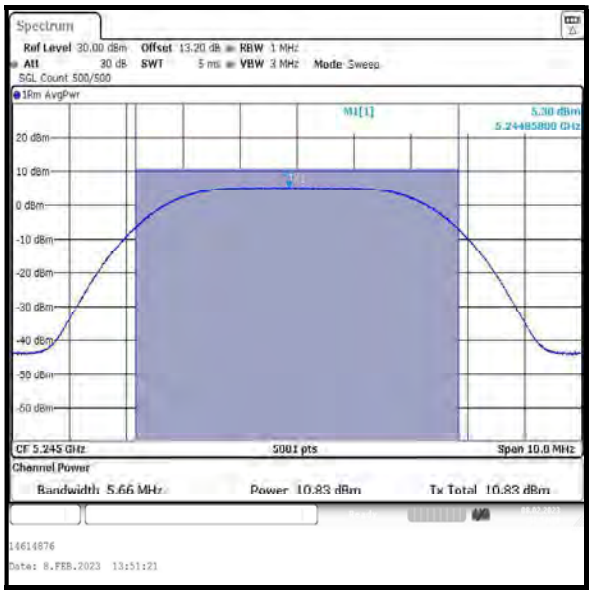
Channel	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5162	10.6	23.1	12.5	Complied
Middle	5203	10.8	23.1	12.3	Complied
Top	5245	10.8	23.1	12.3	Complied



Bottom Channel



Middle Channel



Top Channel

Transmitter Maximum Conducted Output Power (5.15-5.25 GHz band) (continued)

Results: DH5 / Beamforming / Core 0 + Core 1 / iPA

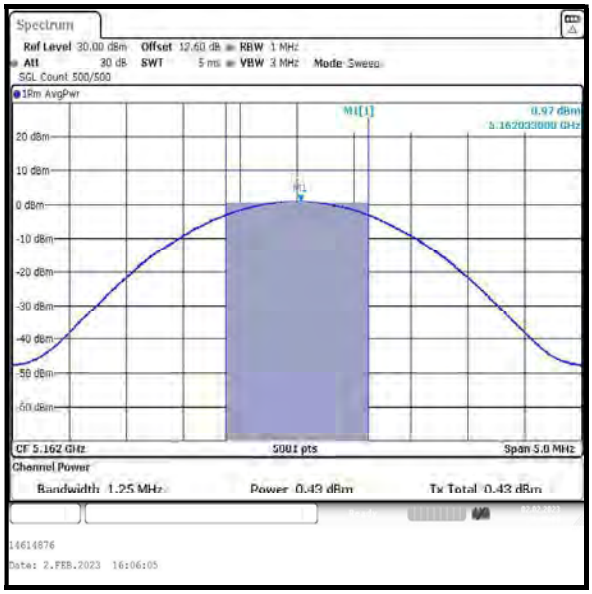
Channel	Frequency (MHz)	Core 0			Core 1		
		Conducted Power (dBm)	Duty Cycle correction factor (dB)	Corrected Conducted Power (dBm)	Conducted Power (dBm)	Duty Cycle correction factor (dB)	Corrected Conducted Power (dBm)
Bottom	5162	0.4	1.1	1.5	0.4	1.1	1.5
Middle	5203	0.3	1.1	1.4	0.1	1.1	1.2
Top	5245	0.1	1.1	1.2	0.1	1.1	1.2

Channel	Frequency (MHz)	Corrected Conducted Power Core 0 (dBm)	Corrected Conducted Power Core 1 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5162	1.5	1.5	4.5	18.6	14.1	Complied
Middle	5203	1.4	1.2	4.3	18.6	14.3	Complied
Top	5245	1.2	1.2	4.2	18.6	14.4	Complied

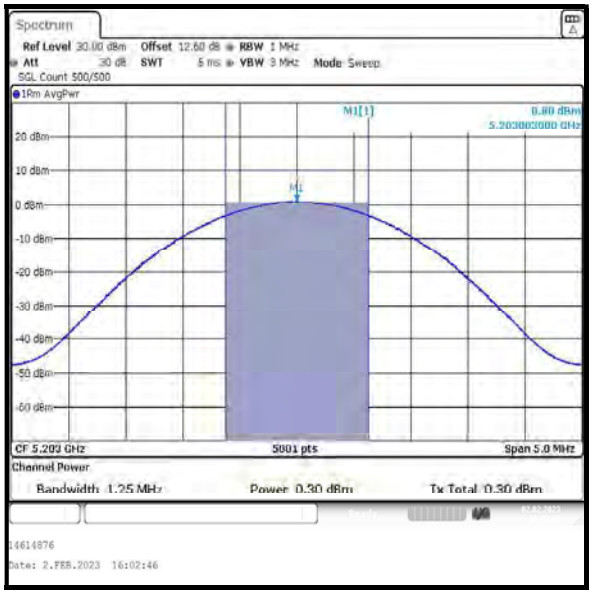
Transmitter Maximum Conducted Output Power (5.15-5.25 GHz band) (continued)

Results: DH5 / Beamforming / Core 0 + Core 1 / iPA

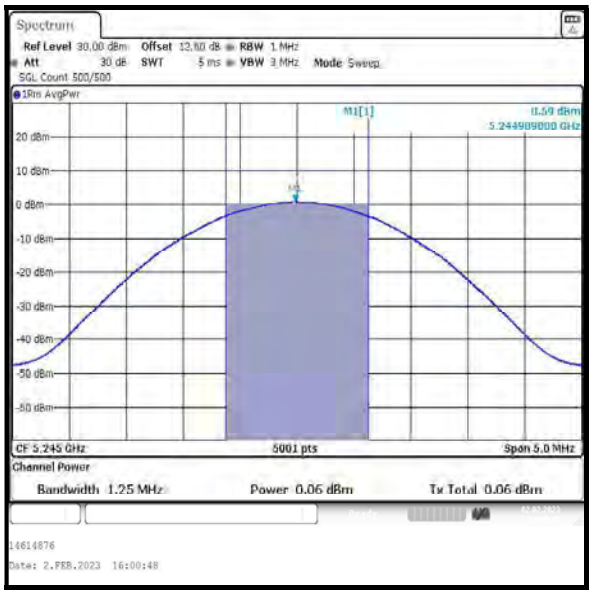
Results: Core 0



Bottom Channel



Middle Channel

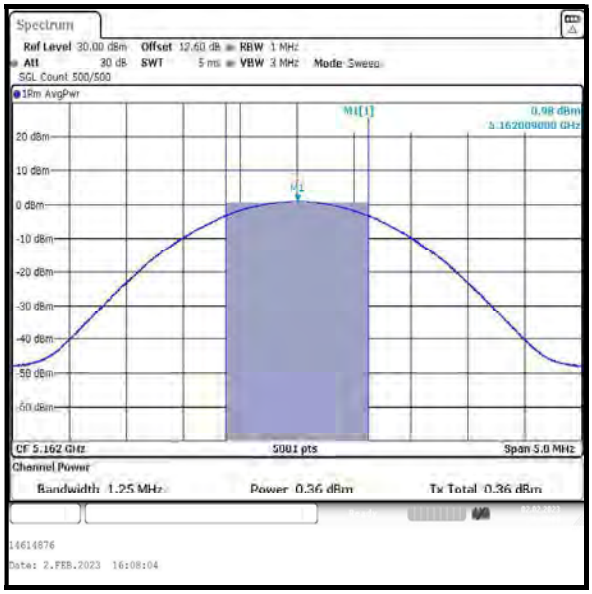


Top Channel

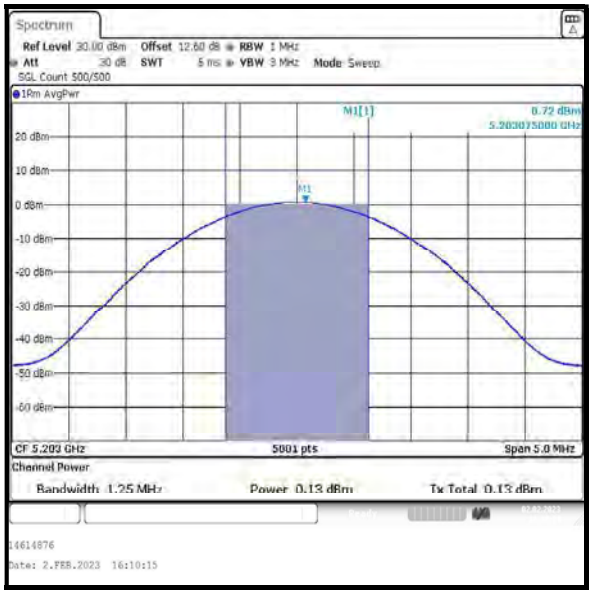
Transmitter Maximum Conducted Output Power (5.15-5.25 GHz band) (continued)

Results: DH5 / Beamforming / Core 0 + Core 1 / iPA

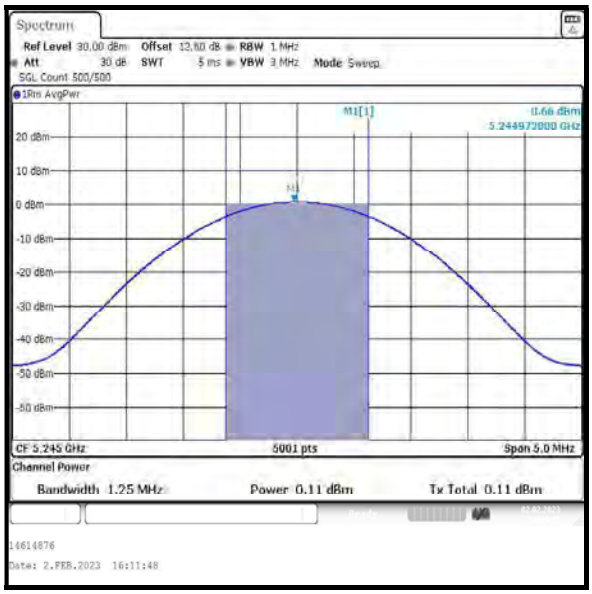
Results: Core 1



Bottom Channel



Middle Channel



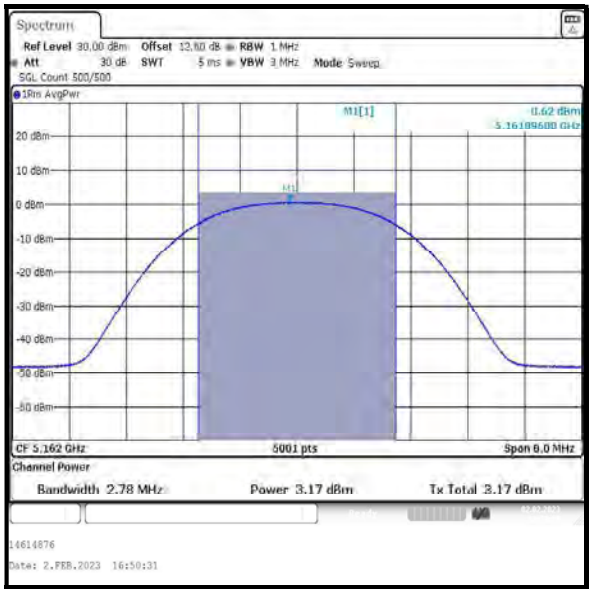
Top Channel

Transmitter Maximum Conducted Output Power (5.15-5.25 GHz band) (continued)

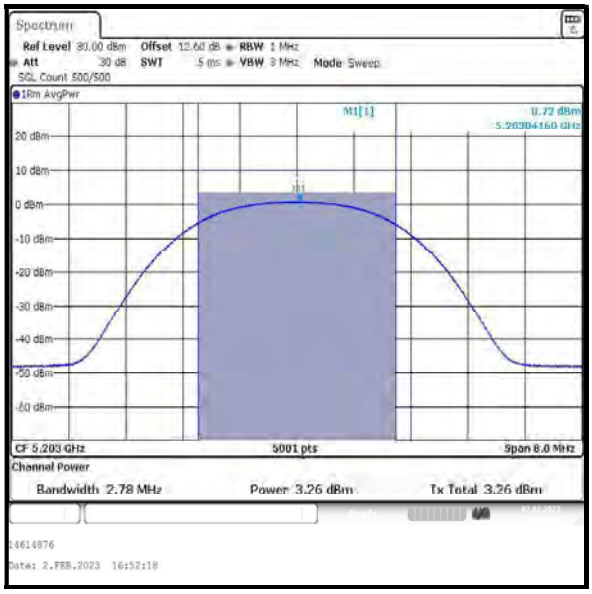
Results: 4DH5 / Beamforming / Core 0 + Core 1 / iPA

Channel	Frequency (MHz)	Conducted Power Core 0 (dBm)	Conducted Power Core 1 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5162	3.2	3.3	6.3	18.6	12.3	Complied
Middle	5203	3.3	3.3	6.3	18.6	12.3	Complied
Top	5245	3.4	3.4	6.4	18.6	12.2	Complied

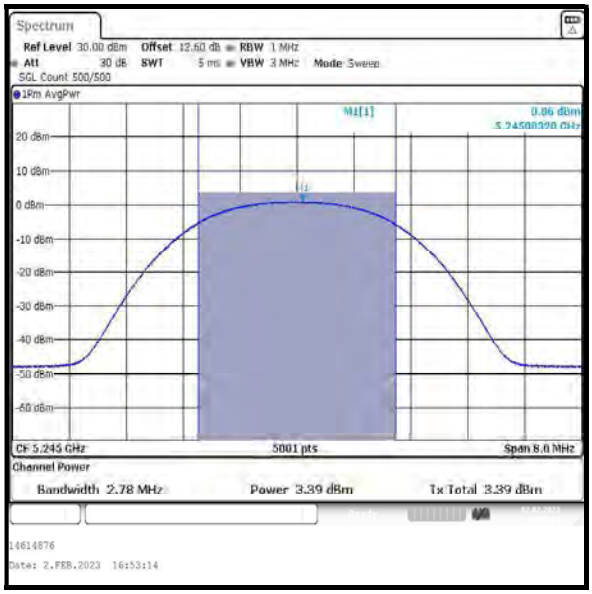
Results: Core 0



Bottom Channel



Middle Channel

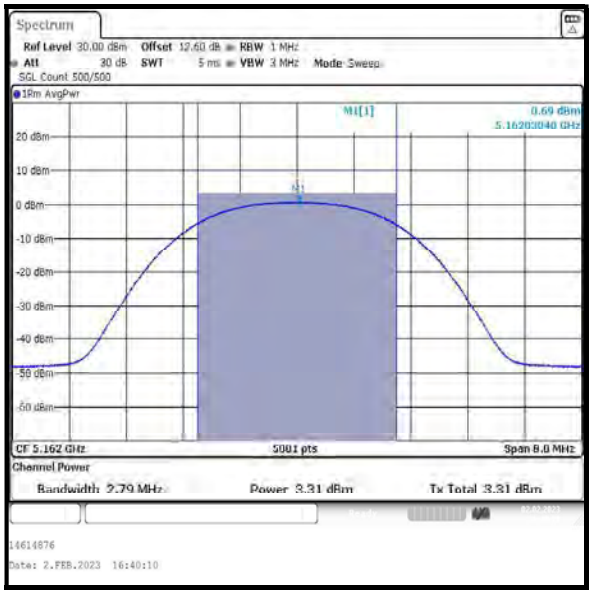


Top Channel

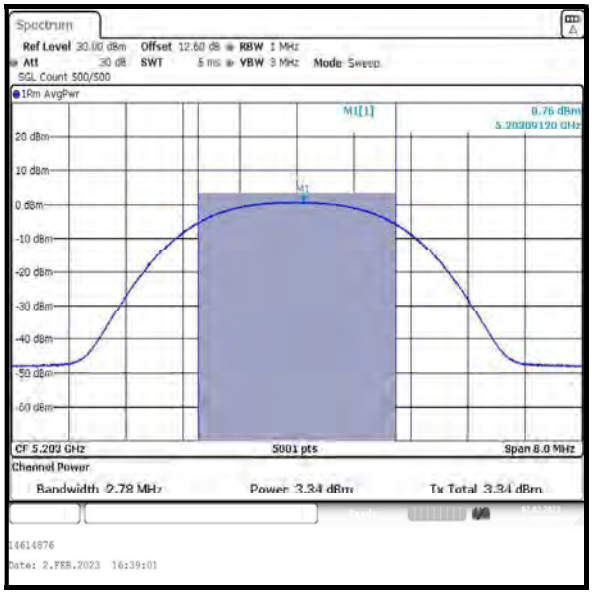
Transmitter Maximum Conducted Output Power (5.15-5.25 GHz band) (continued)

Results: 4DH5 / Beamforming / Core 0 + Core 1 / iPA

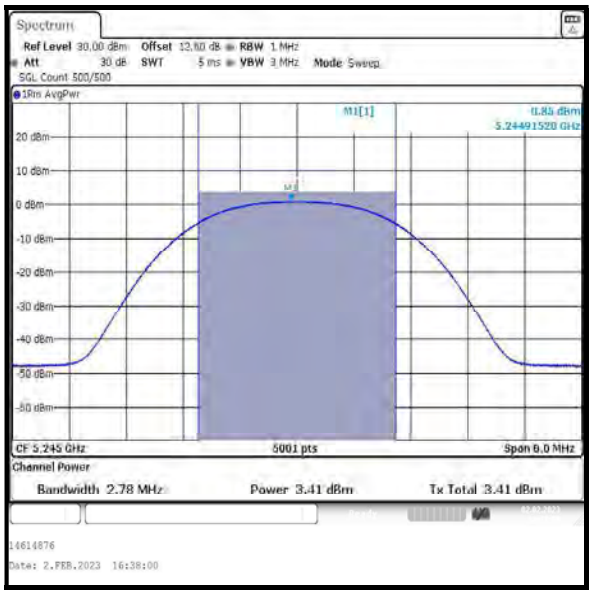
Results: Core 1



Bottom Channel



Middle Channel



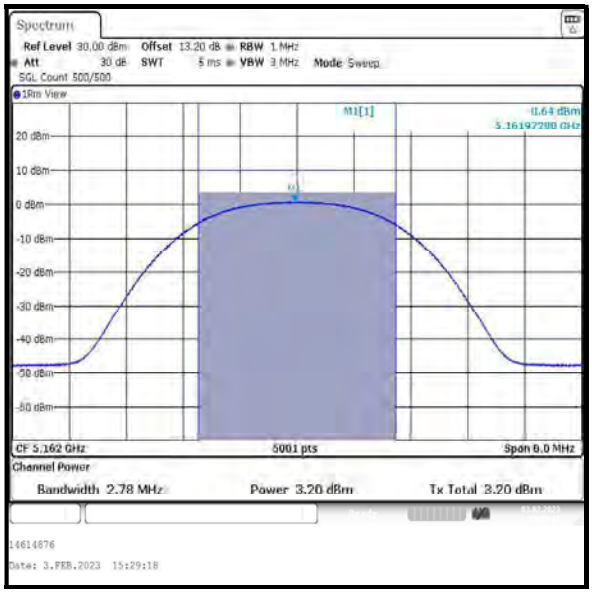
Top Channel

Transmitter Maximum Conducted Output Power (5.15-5.25 GHz band) (continued)

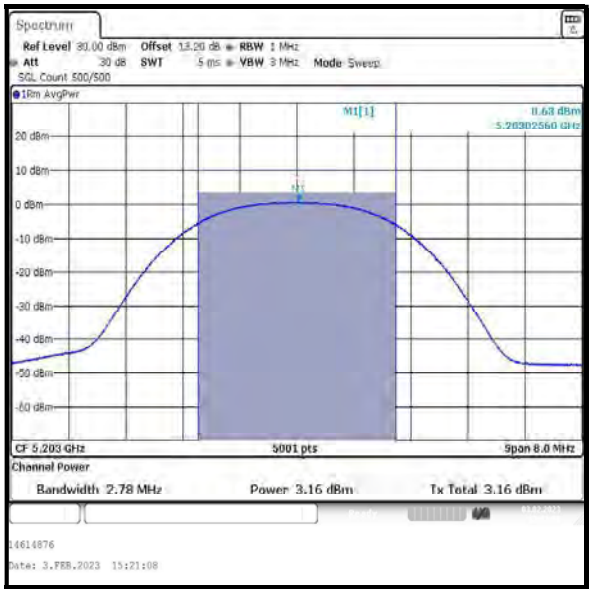
Results: 4DH5 / Beamforming / Core 0 + Core 1 / ePA

Channel	Frequency (MHz)	Conducted Power Core 0 (dBm)	Conducted Power Core 1 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5162	3.2	3.5	6.4	18.6	12.2	Complied
Middle	5203	3.2	3.3	6.3	18.6	12.3	Complied
Top	5245	3.3	3.2	6.3	18.6	12.3	Complied

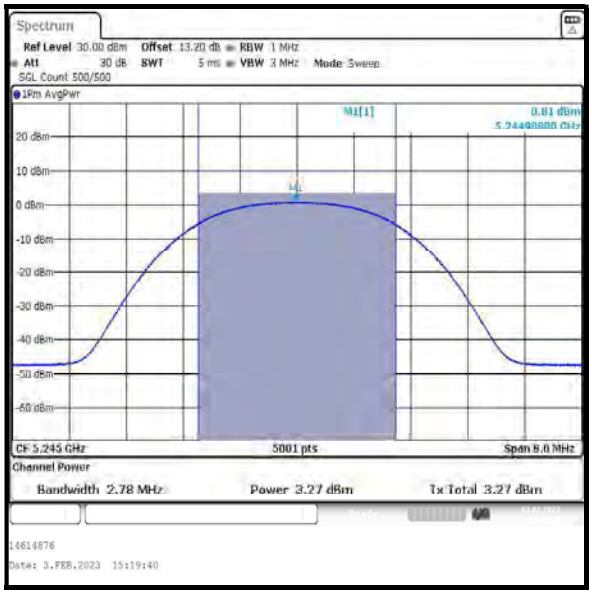
Results: Core 0



Bottom Channel



Middle Channel

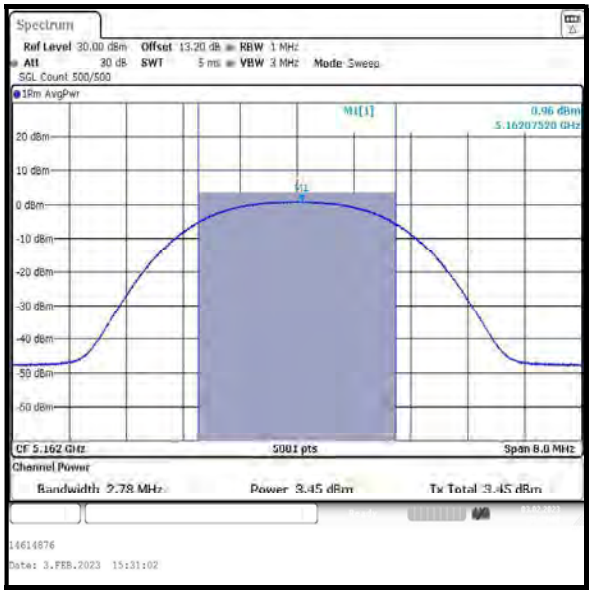


Top Channel

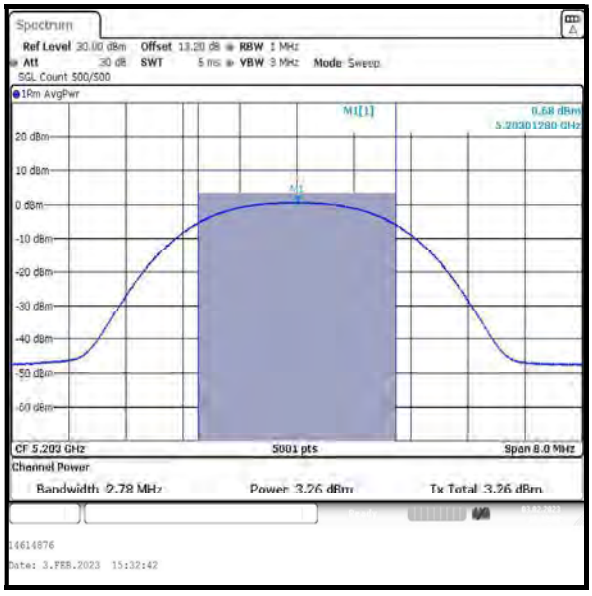
Transmitter Maximum Conducted Output Power (5.15-5.25 GHz band) (continued)

Results: 4DH5 / Beamforming / Core 0 + Core 1 / ePA

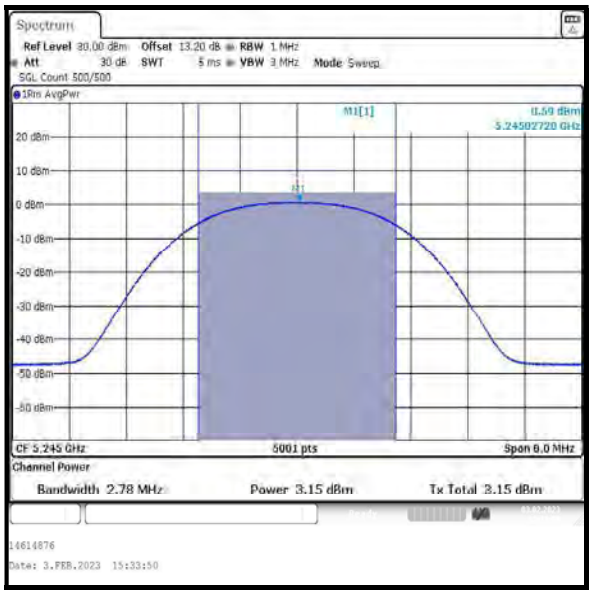
Results: Core 1



Bottom Channel



Middle Channel



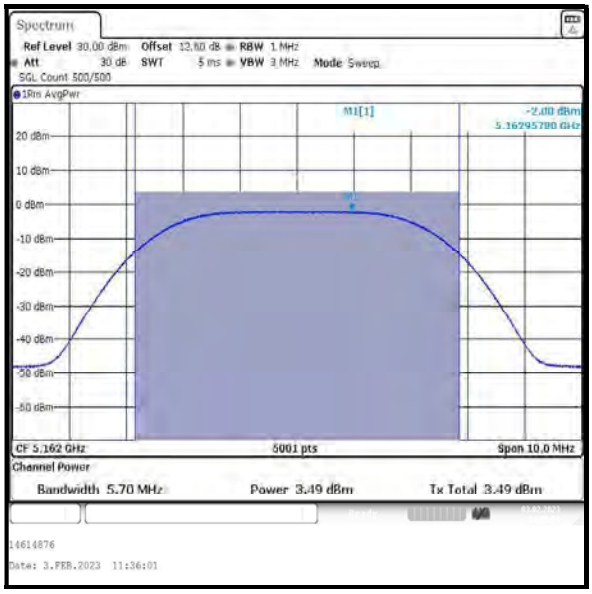
Top Channel

Transmitter Maximum Conducted Output Power (5.15-5.25 GHz band) (continued)

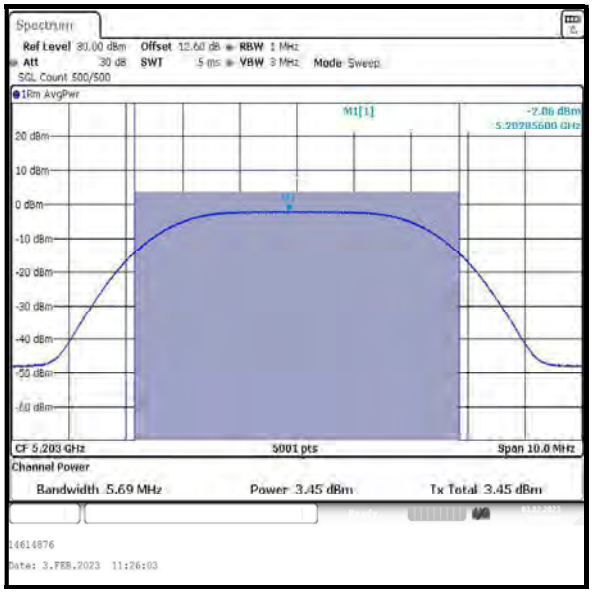
Results: 8DH5 / Beamforming / Core 0 + Core 1 / iPA

Channel	Frequency (MHz)	Conducted Power Core 0 (dBm)	Conducted Power Core 1 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5162	3.5	3.1	6.3	18.6	12.3	Complied
Middle	5203	3.5	3.0	6.3	18.6	12.3	Complied
Top	5245	3.1	3.2	6.2	18.6	12.4	Complied

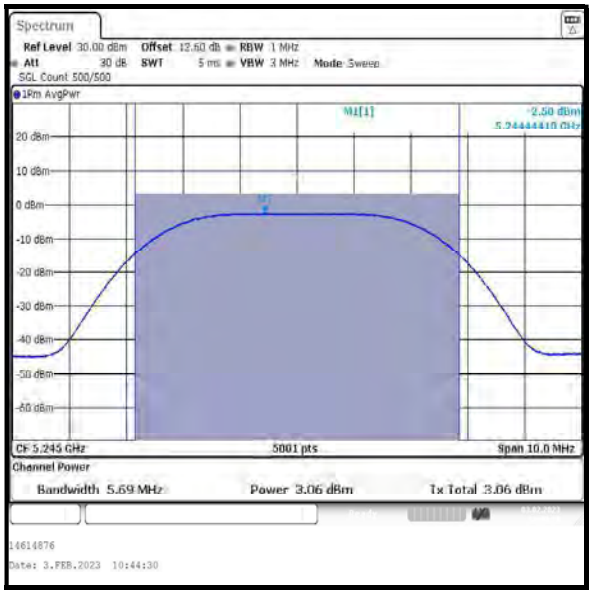
Results: Core 0



Bottom Channel



Middle Channel

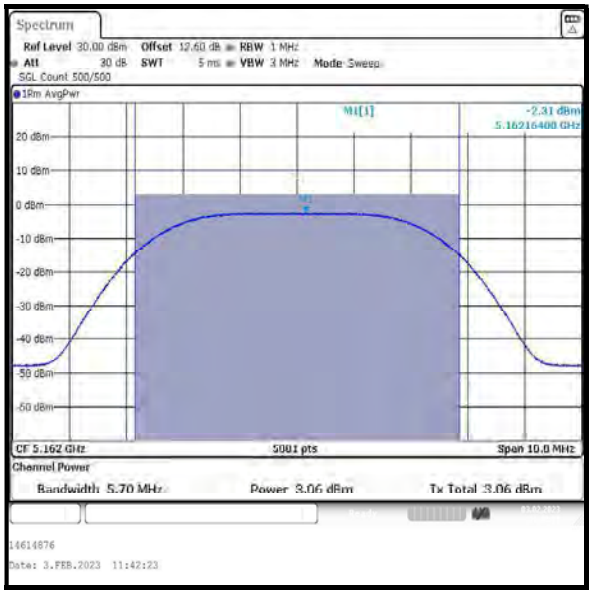


Top Channel

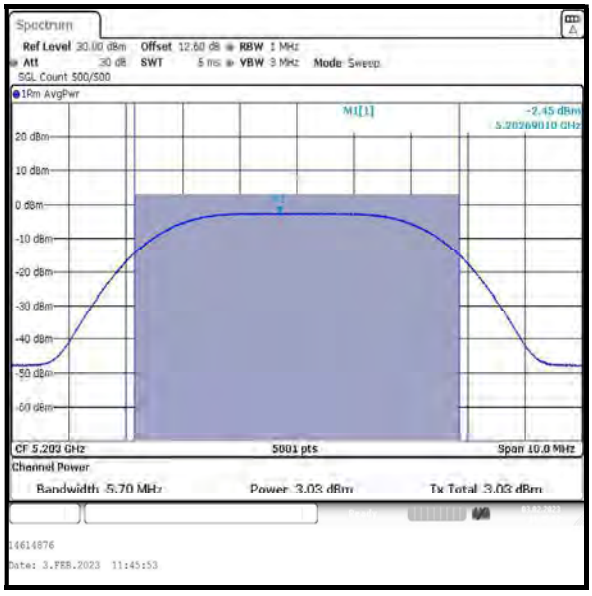
Transmitter Maximum Conducted Output Power (5.15-5.25 GHz band) (continued)

Results: 8DH5 / Beamforming / Core 0 + Core 1 / iPA

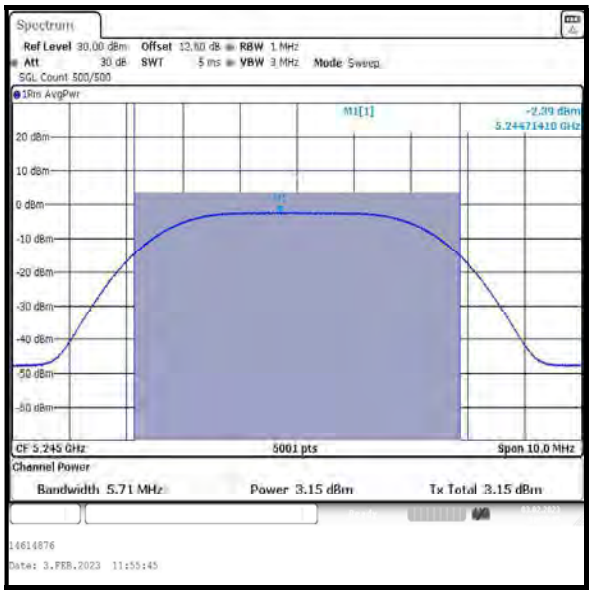
Results: Core 1



Bottom Channel



Middle Channel



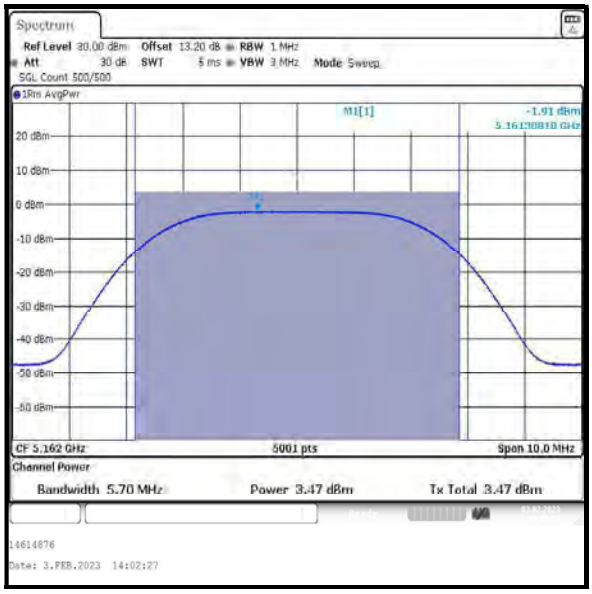
Top Channel

Transmitter Maximum Conducted Output Power (5.15-5.25 GHz band) (continued)

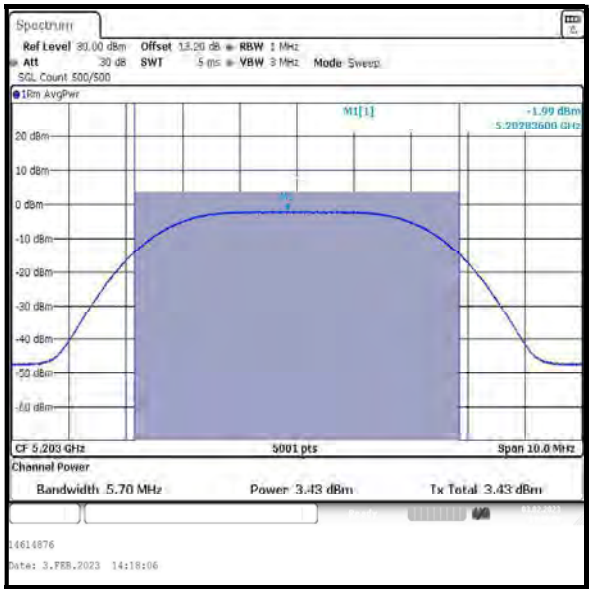
Results: 8DH5 / Beamforming / Core 0 + Core 1 / ePA

Channel	Frequency (MHz)	Conducted Power Core 0 (dBm)	Conducted Power Core 1 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5162	3.5	3.1	6.3	18.6	12.3	Complied
Middle	5203	3.4	3.1	6.3	18.6	12.3	Complied
Top	5245	3.2	3.1	6.2	18.6	12.4	Complied

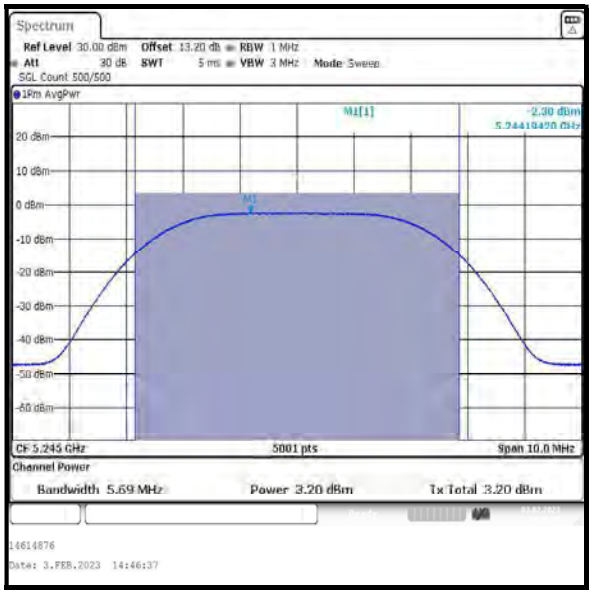
Results: Core 0



Bottom Channel



Middle Channel

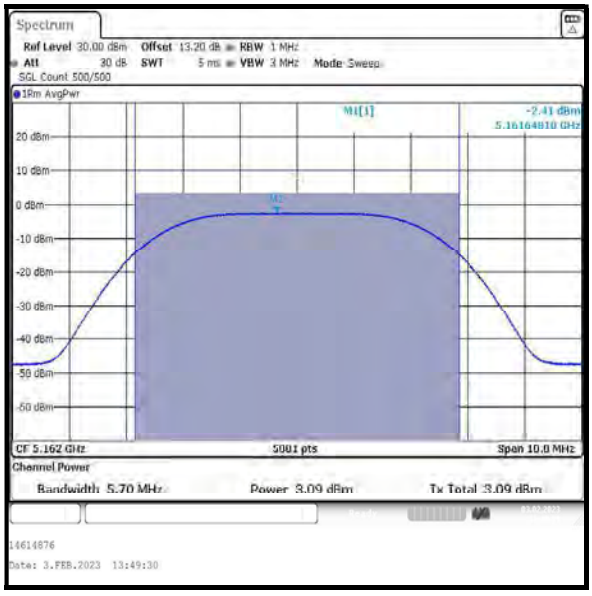


Top Channel

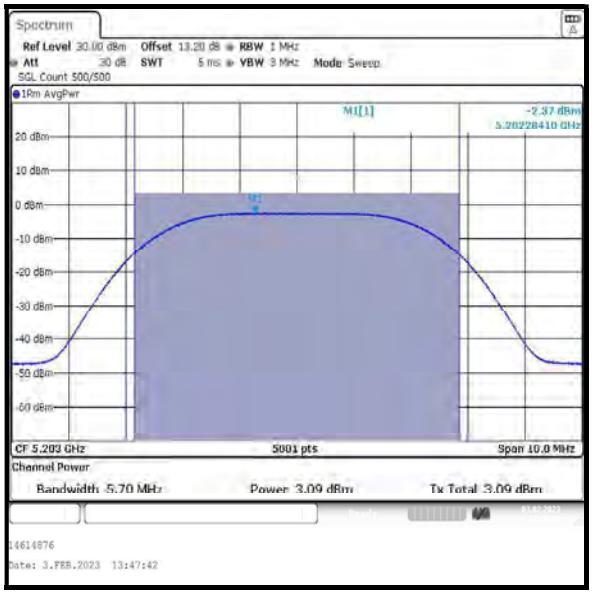
Transmitter Maximum Conducted Output Power (5.15-5.25 GHz band) (continued)

Results: 8DH5 / Beamforming / Core 0 + Core 1 / ePA

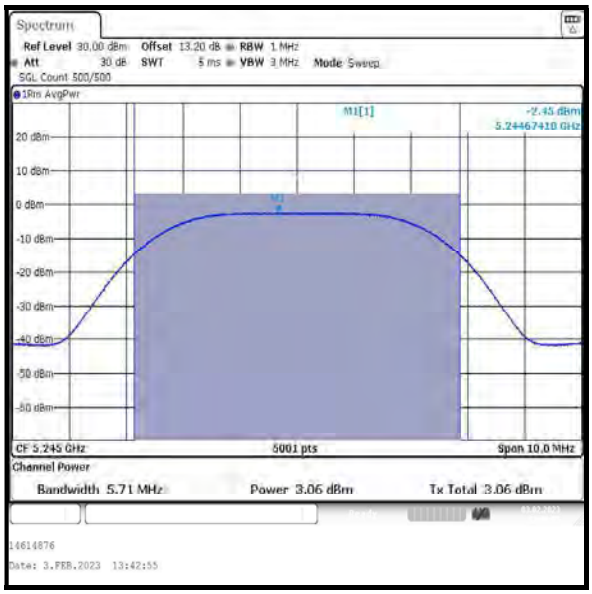
Results: Core 1



Bottom Channel



Middle Channel



Top Channel

Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band)

4.4.2 5.725-5.85 GHz band

Test Summary:

Test Engineers:	Jose Bayona & Luis Pazos Perez	**Test Dates:**	31 January 2023 to 08 February 2023
Test Sample Serial Number:	CQCHHKN7YM		

FCC Reference:	Part 15.407(a)(3)(i)
Test Method Used:	KDB 789033 D02 Section II.E.2.b) and II.E.2.d)

Environmental Conditions:

Temperature (°C):	20 to 23
Relative Humidity (%):	32 to 41

Note(s):

1. For conducted power tests where the duty cycle is >98%, the measurements were performed using a signal analyser in accordance with FCC KDB 789033 II.E.2.b) Method SA-1. Where the duty cycle is <98%, the measurements were performed in accordance with FCC KDB 789033 II.E.2.d) Method SA-2. The signal analyser's integration function was used to integrate across the 26 dB emission bandwidth. The resolution bandwidth was set to 1 MHz and video bandwidth 3 MHz. An RMS detector was used and sweep time was set to auto and 500 traces performed. The span was set to encompass the entire 26 dB emission bandwidth. The channel power results are recorded in the tables below.
2. For DH5 where the EUT was transmitting at <98% duty cycle, the calculated duty cycle in Section 4.1 was added to the measured power in order to compute the average power during the actual transmission time.
3. The FCC Part 15.407(a)(3)(i) limit shall not exceed 1 W (30.0 dBm).
4. For Beamforming modes, conducted power was measured on both ports and then combined using the measure-and-sum method stated in FCC KDB 662911 D01 Section E)1).
5. For details on antenna gains refer to Section 3.4 of this test report.
6. For all modes of operation, the antenna gain is > 6 dBi. In accordance with Part 15.407(a)(3)(i), the limit was reduced by the amount in dB the antenna gain exceeds 6 dBi. Therefore the limit of 30 dBm has been reduced by using the following calculations:

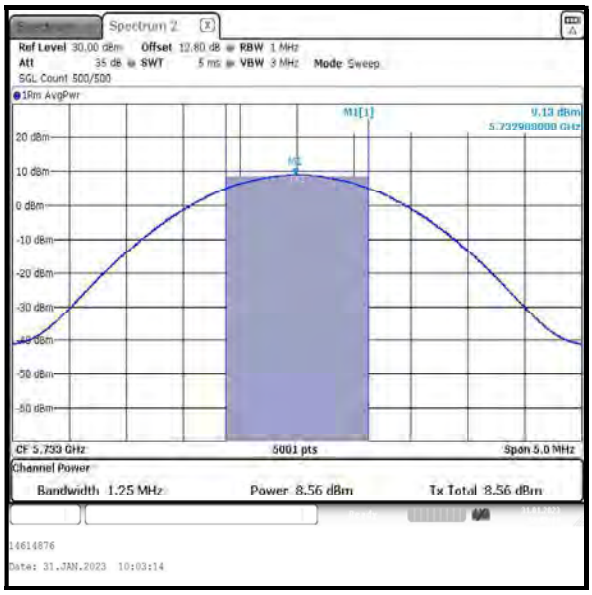
SISO / Core 0: 30 dBm – 2.4 dB = 27.6 dBm
SISO / Core 1: 30 dBm – 3.2 dB = 26.8 dBm
Beamforming / Core 0 + Core 1: 30 dBm – 5.8 dB = 24.2 dBm

7. The signal analyser was connected to the RF port on the EUT using an RF suitable attenuation and RF cable. An RF level offset was entered on the signal analyser to compensate for the loss of the attenuator and RF cable.

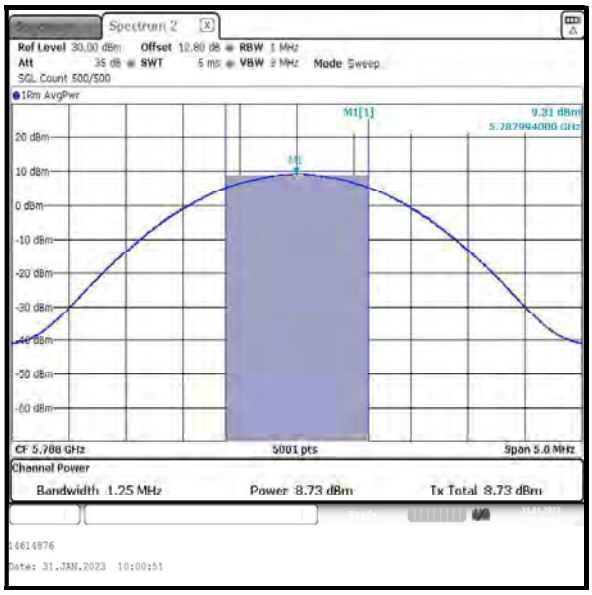
Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Results: DH5 / SISO / Core 0 / iPA

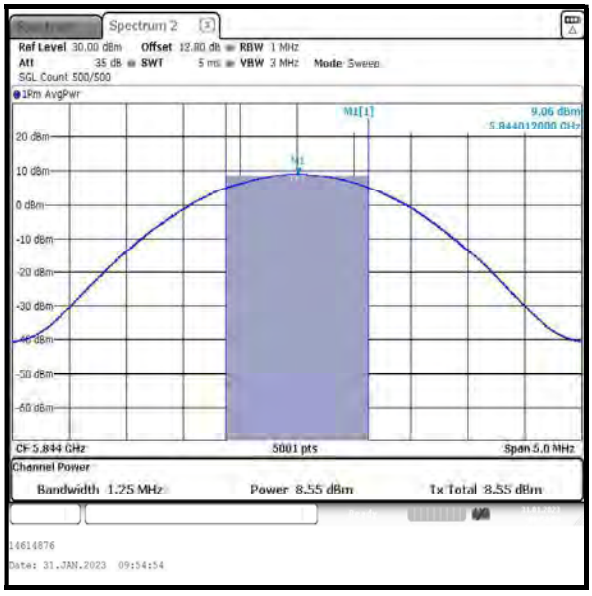
Channel	Frequency (MHz)	Conducted Power (dBm)	Duty cycle correction factor (dB)	Corrected Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5733	8.6	1.1	9.7	27.6	17.9	Complied
Middle	5788	8.7	1.1	9.8	27.6	17.8	Complied
Top	5844	8.6	1.1	9.7	27.6	17.9	Complied



Bottom Channel



Middle Channel

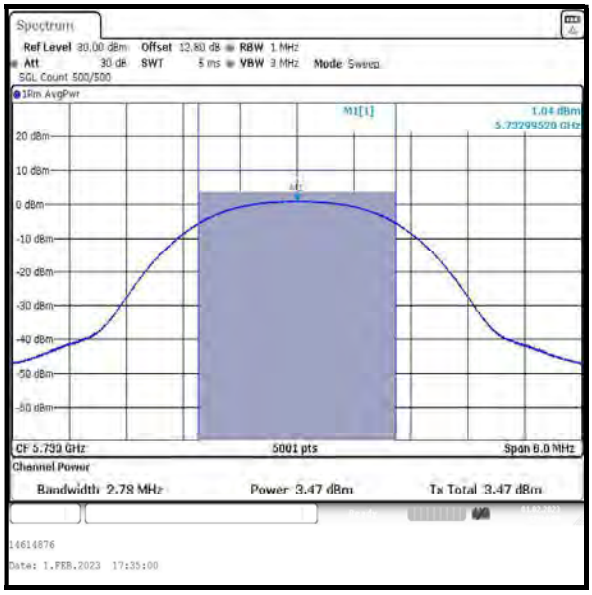


Top Channel

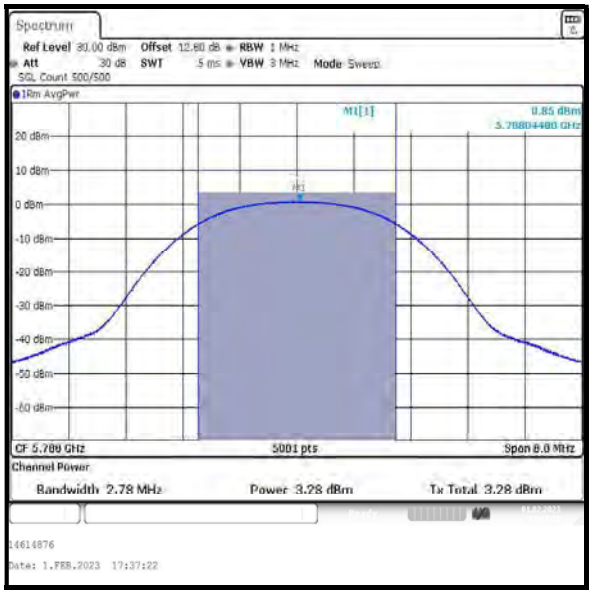
Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Results: 4DH5 / SISO / Core 0 / iPA

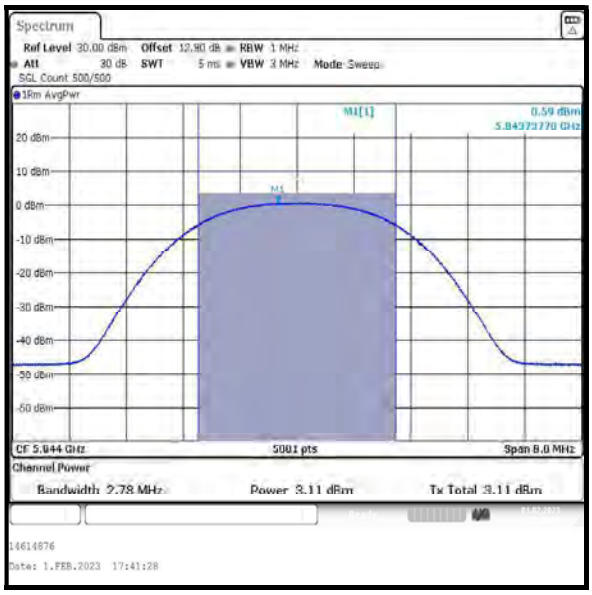
Channel	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5733	3.5	27.6	24.1	Complied
Middle	5788	3.3	27.6	24.3	Complied
Top	5844	3.1	27.6	24.5	Complied



Bottom Channel



Middle Channel

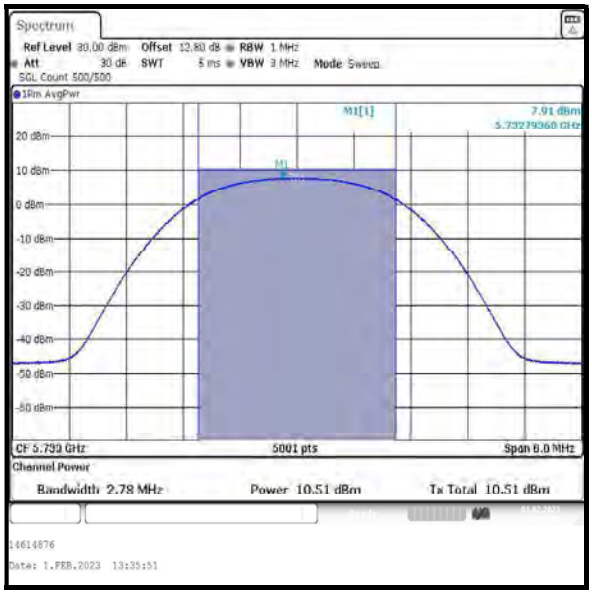


Top Channel

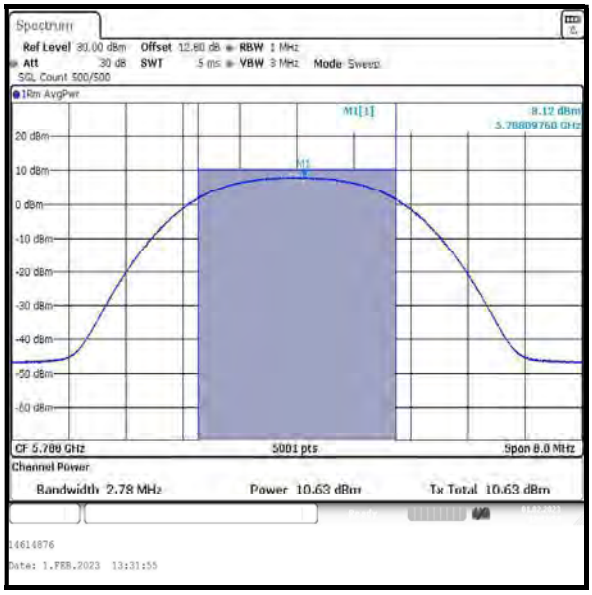
Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Results: 4DH5 / SISO / Core 0 / ePA

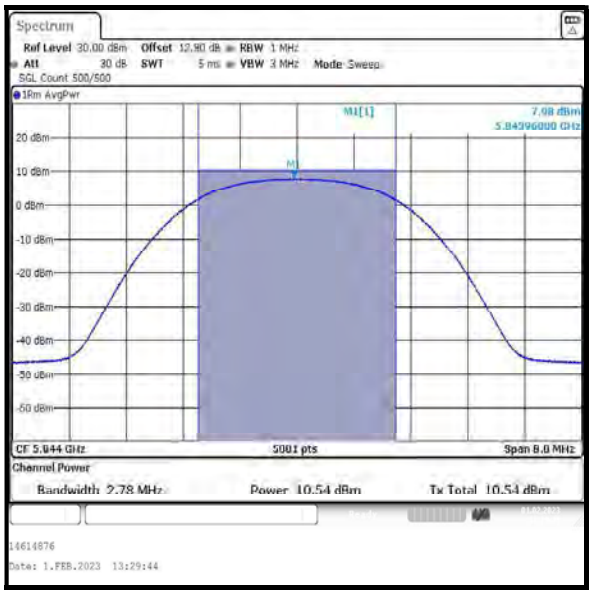
Channel	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5733	10.5	27.6	17.1	Complied
Middle	5788	10.6	27.6	17.0	Complied
Top	5844	10.5	27.6	17.1	Complied



Bottom Channel



Middle Channel

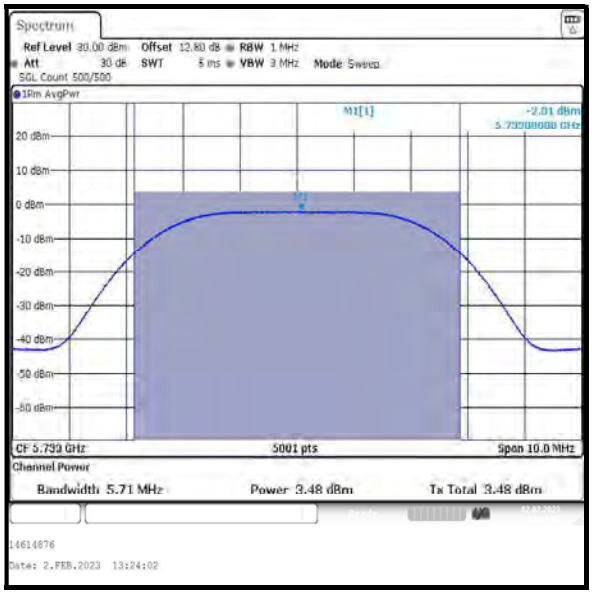


Top Channel

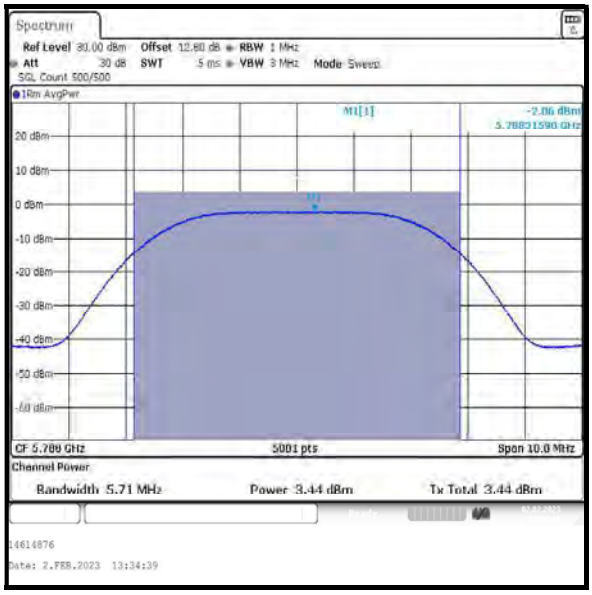
Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Results: 8DH5 / SISO / Core 0 / iPA

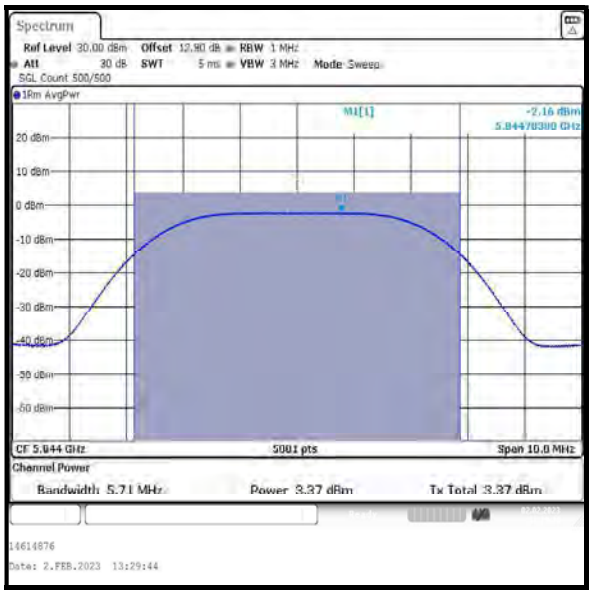
Channel	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5733	3.5	27.6	24.1	Complied
Middle	5788	3.4	27.6	24.2	Complied
Top	5844	3.4	27.6	24.2	Complied



Bottom Channel



Middle Channel

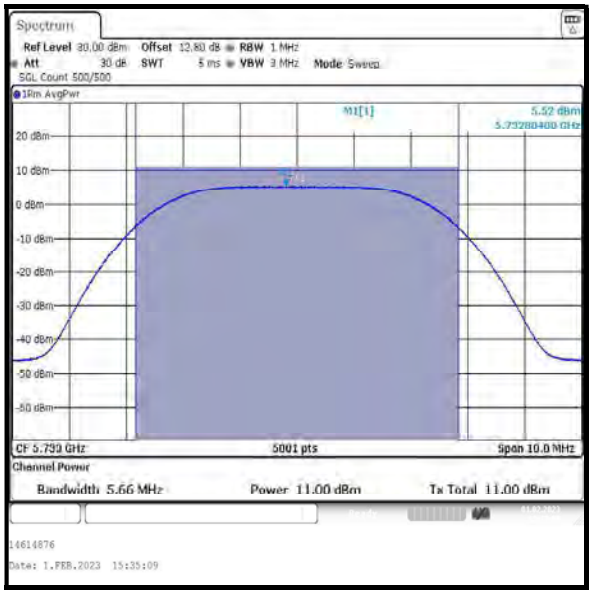


Top Channel

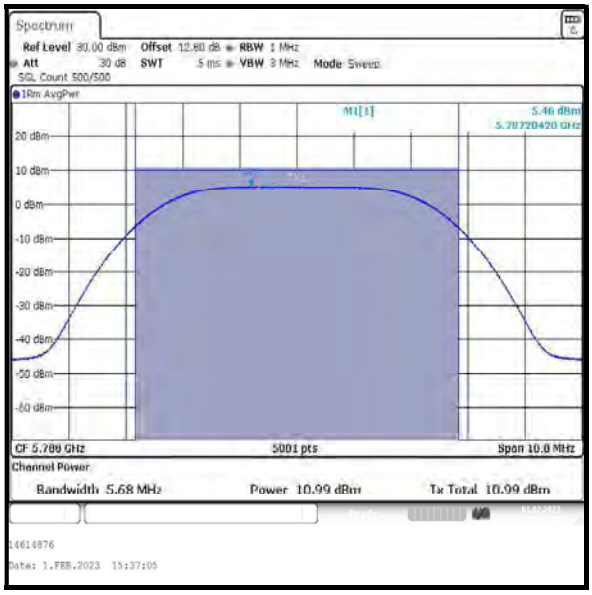
Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Results: 8DH5 / SISO / Core 0 / ePA

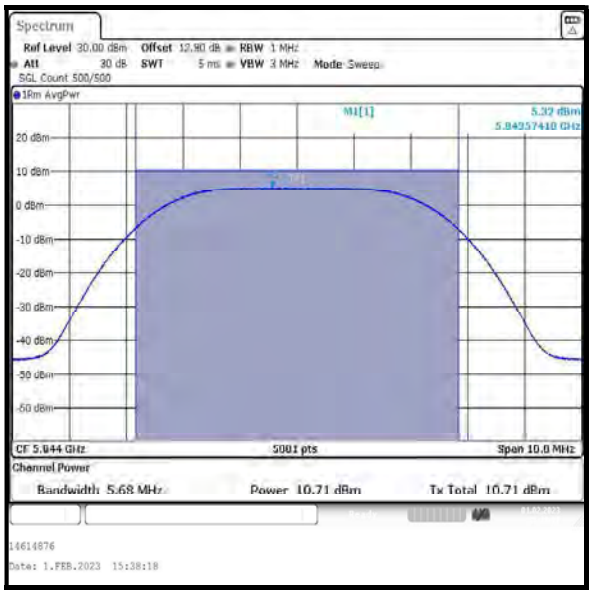
Channel	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5733	11.0	27.6	16.6	Complied
Middle	5788	11.0	27.6	16.6	Complied
Top	5844	10.7	27.6	16.9	Complied



Bottom Channel



Middle Channel

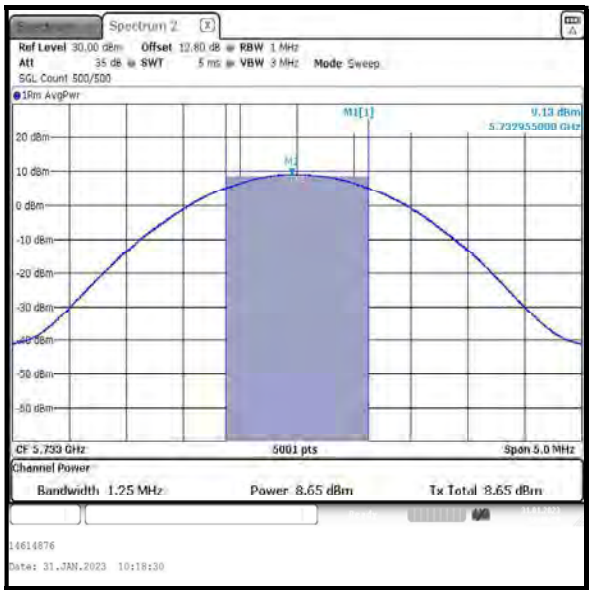


Top Channel

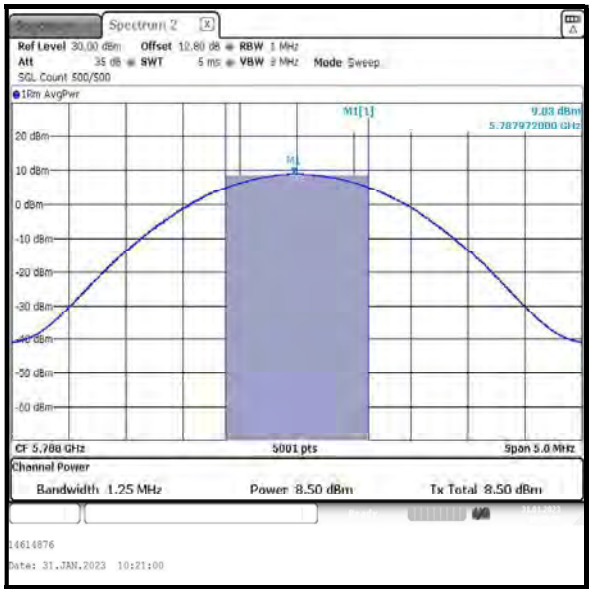
Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Results: DH5 / SISO / Core 1 / iPA

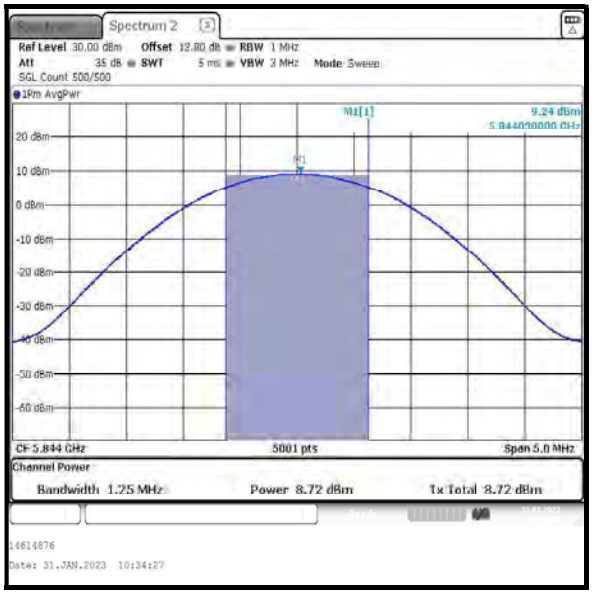
Channel	Frequency (MHz)	Conducted Power (dBm)	Duty cycle correction factor (dB)	Corrected Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5733	8.7	1.1	9.8	26.8	17.0	Complied
Middle	5788	8.5	1.1	9.6	26.8	17.2	Complied
Top	5844	8.7	1.1	9.8	26.8	17.0	Complied



Bottom Channel



Middle Channel

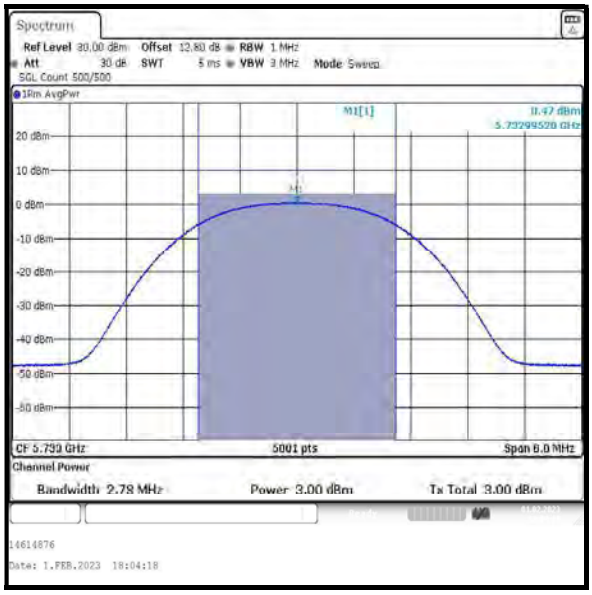


Top Channel

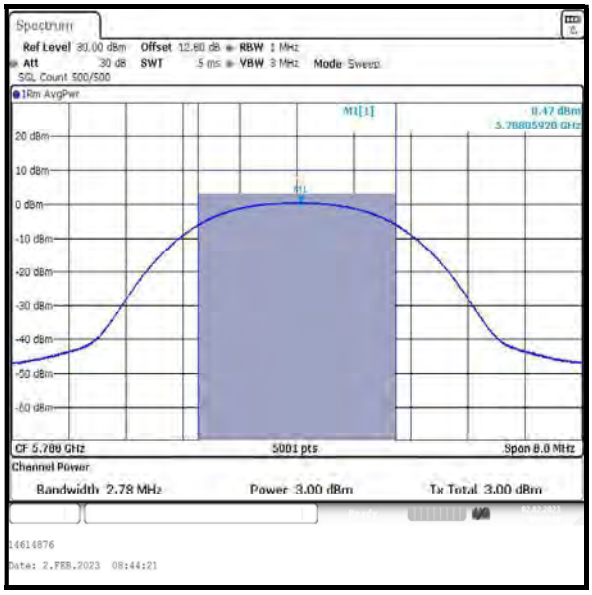
Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Results: 4DH5 / SISO / Core 1 / iPA

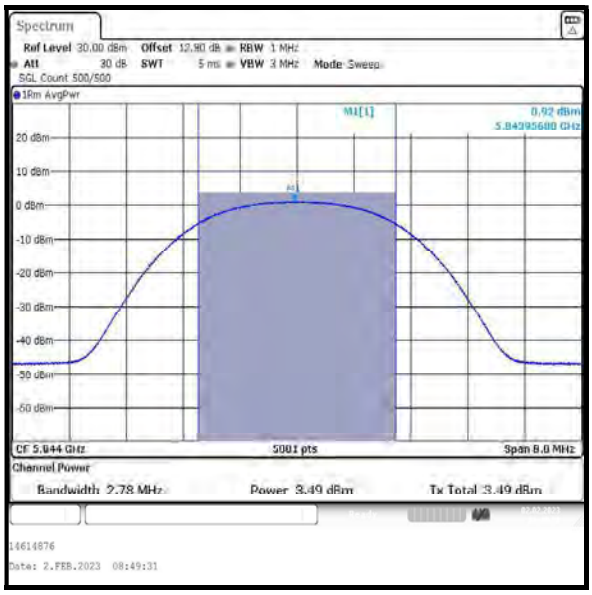
Channel	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5733	3.0	26.8	23.8	Complied
Middle	5788	3.0	26.8	23.8	Complied
Top	5844	3.5	26.8	23.3	Complied



Bottom Channel



Middle Channel

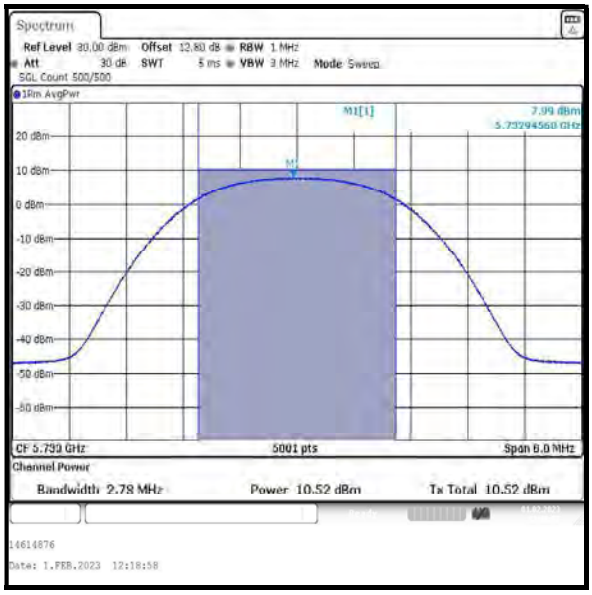


Top Channel

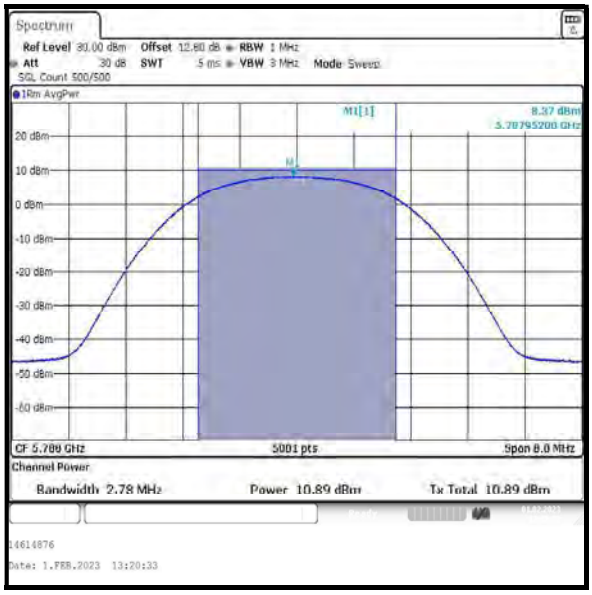
Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Results: 4DH5 / SISO / Core 1 / ePA

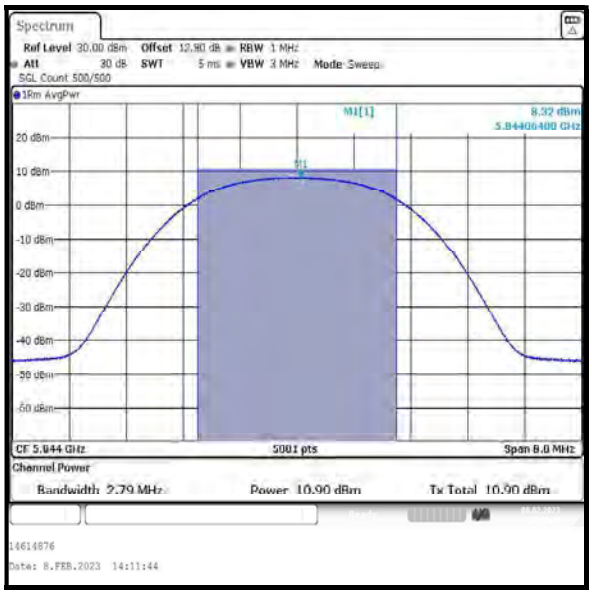
Channel	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5733	10.5	26.8	16.3	Complied
Middle	5788	10.9	26.8	15.9	Complied
Top	5844	10.9	26.8	15.9	Complied



Bottom Channel



Middle Channel

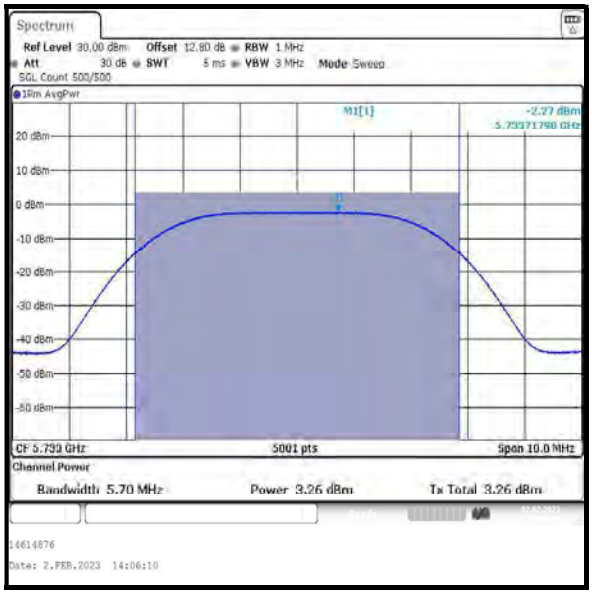


Top Channel

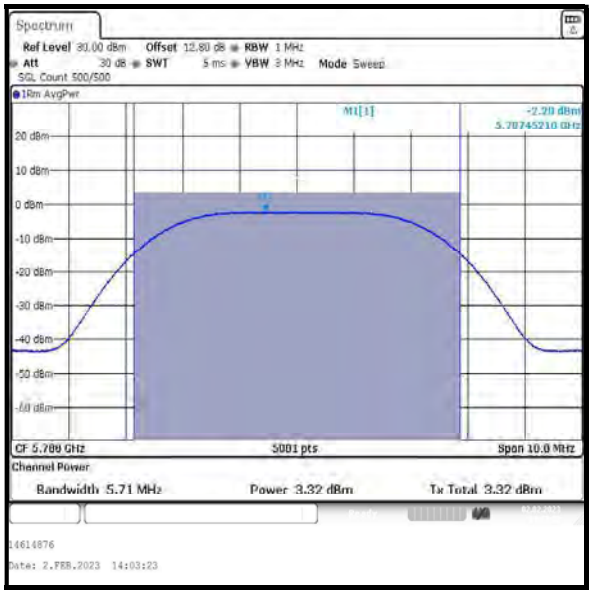
Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Results: 8DH5 / SISO / Core 1 / iPA

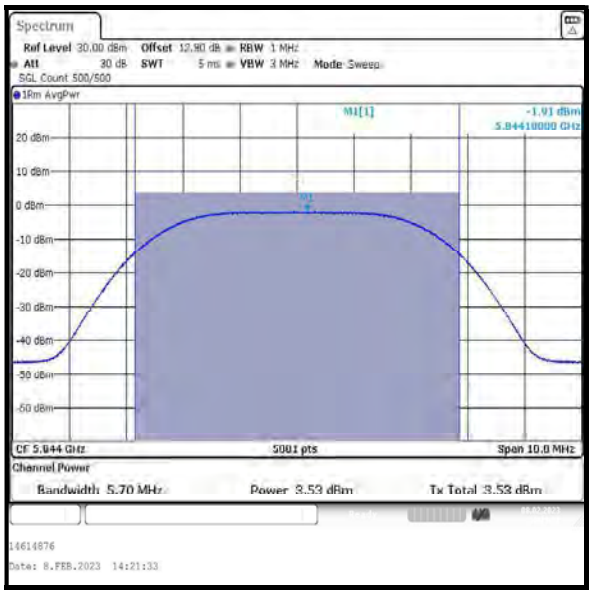
Channel	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5733	3.3	26.8	23.5	Complied
Middle	5788	3.3	26.8	23.5	Complied
Top	5844	3.5	26.8	23.3	Complied



Bottom Channel



Middle Channel

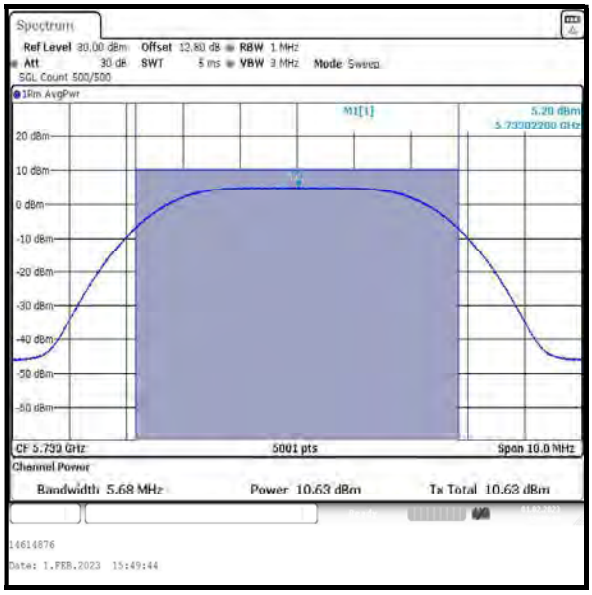


Top Channel

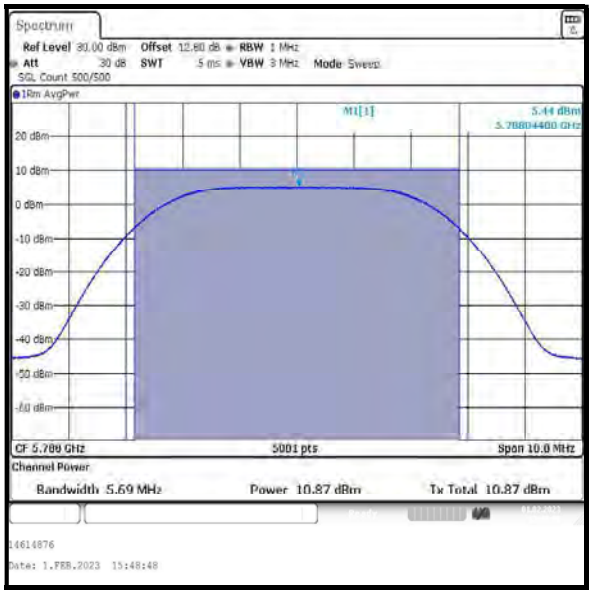
Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Results: 8DH5 / SISO / Core 1 / ePA

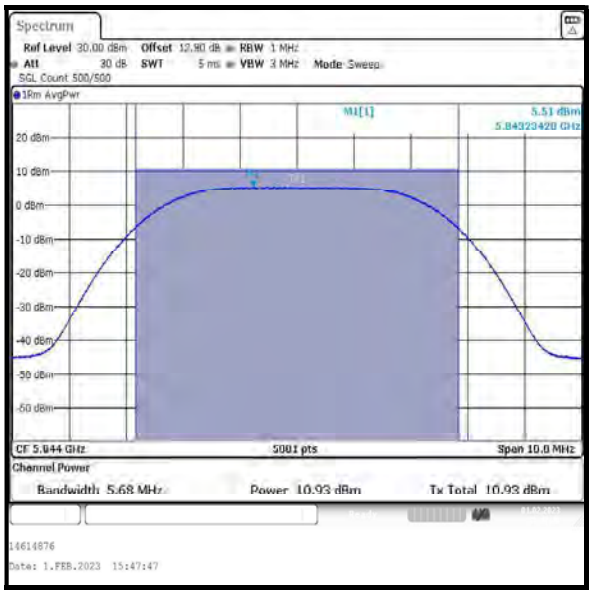
Channel	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5733	10.6	26.8	16.2	Complied
Middle	5788	10.9	26.8	15.9	Complied
Top	5844	10.9	26.8	15.9	Complied



Bottom Channel



Middle Channel



Top Channel

Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Results: DH5 / Beamforming / Core 0 + Core 1 / iPA

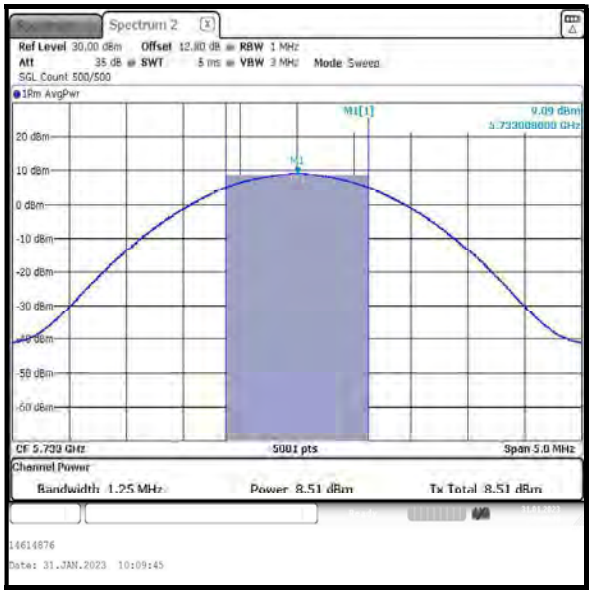
Channel	Frequency (MHz)	Core 0			Core 1		
		Conducted Power (dBm)	Duty Cycle correction factor (dB)	Corrected Conducted Power (dBm)	Conducted Power (dBm)	Duty Cycle correction factor (dB)	Corrected Conducted Power (dBm)
Bottom	5733	8.5	1.1	9.6	8.6	1.1	9.7
Middle	5788	8.7	1.1	9.8	8.5	1.1	9.6
Top	5844	8.7	1.1	9.8	8.5	1.1	9.6

Channel	Frequency (MHz)	Corrected Conducted Power Core 0 (dBm)	Corrected Conducted Power Core 1 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5733	9.6	9.7	12.7	24.2	11.5	Complied
Middle	5788	9.8	9.6	12.7	24.2	11.5	Complied
Top	5844	9.8	9.6	12.7	24.2	11.5	Complied

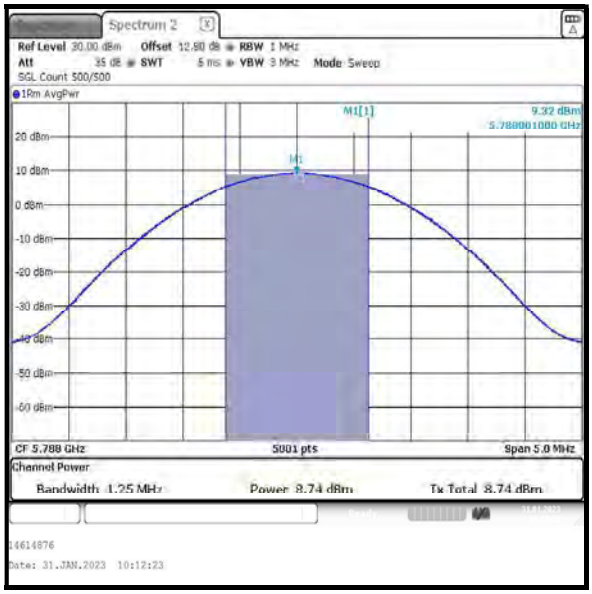
Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Results: DH5 / Beamforming / Core 0 + Core 1 / iPA

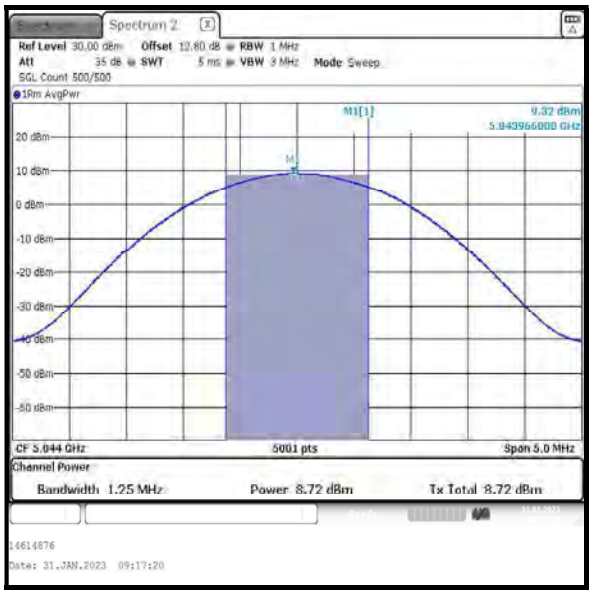
Results: Core 0



Bottom Channel



Middle Channel

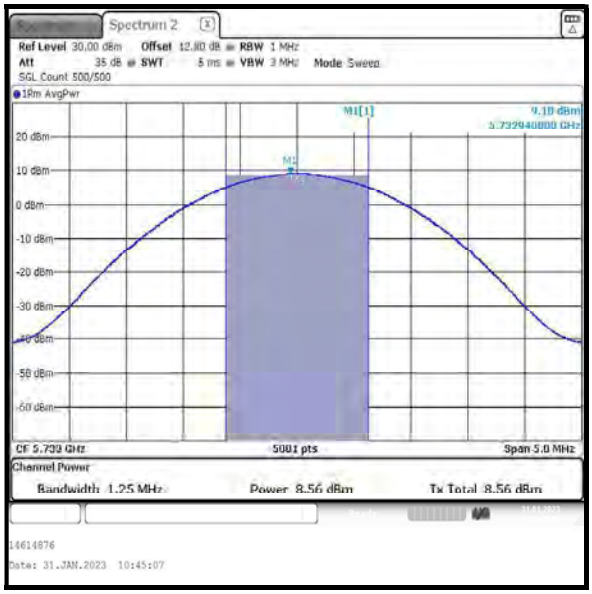


Top Channel

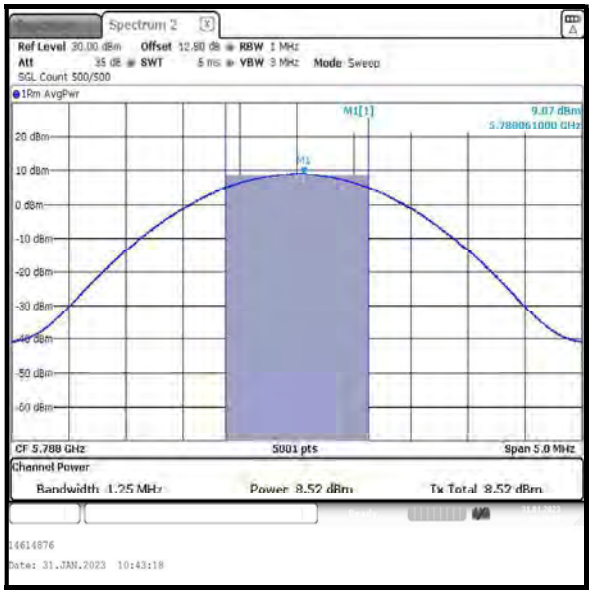
Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Results: DH5 / Beamforming / Core 0 + Core 1 / iPA

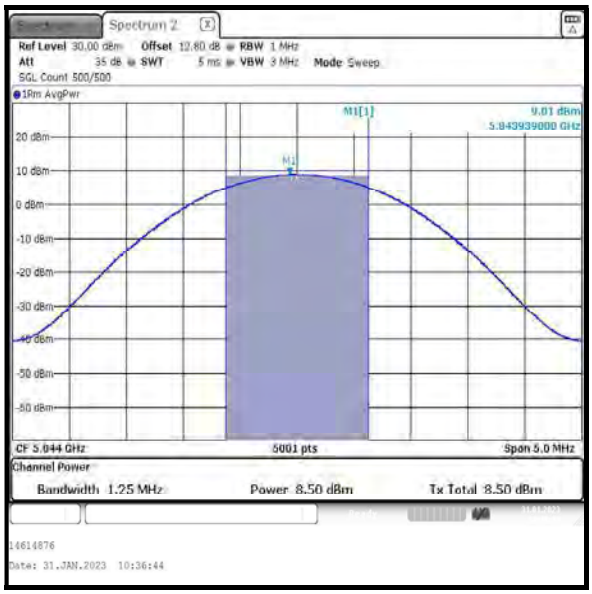
Results: Core 1



Bottom Channel



Middle Channel



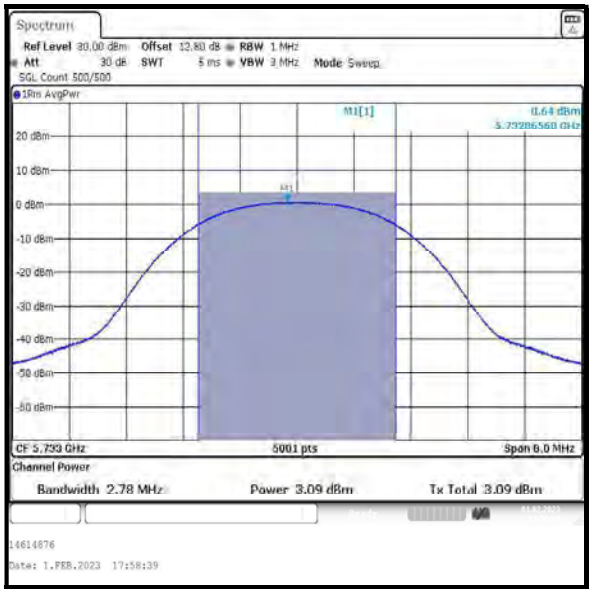
Top Channel

Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

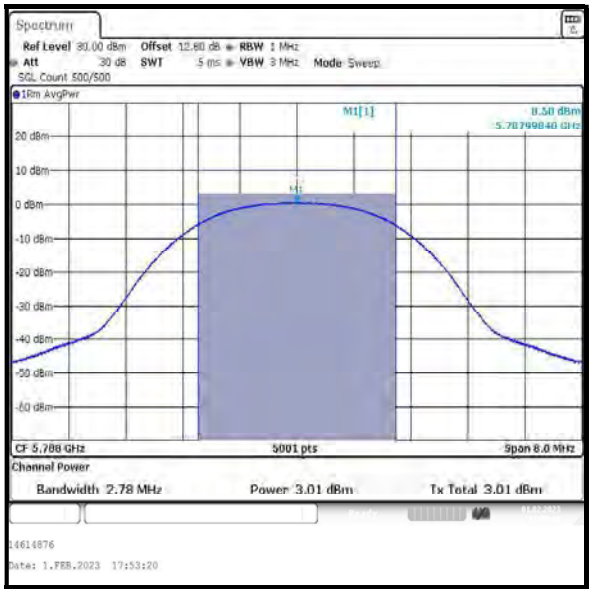
Results: 4DH5 / Beamforming / Core 0 + Core 1 / iPA

Channel	Frequency (MHz)	Conducted Power Core 0 (dBm)	Conducted Power Core 1 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5733	3.1	3.1	6.1	24.2	18.1	Complied
Middle	5788	3.0	3.0	6.0	24.2	18.2	Complied
Top	5844	3.0	3.5	6.3	24.2	17.9	Complied

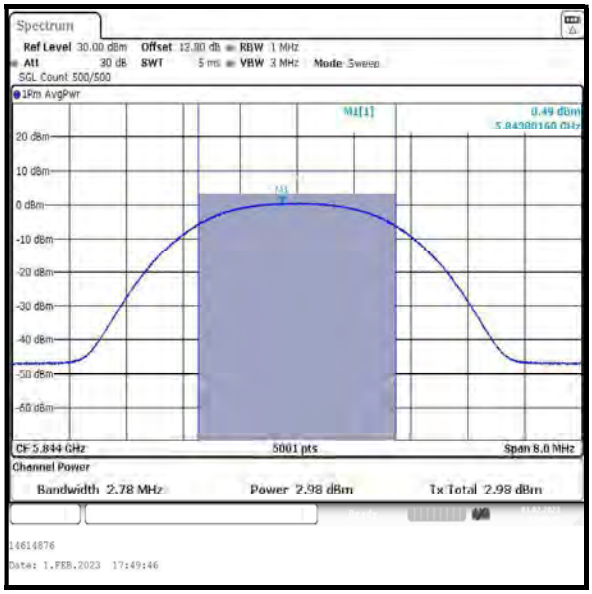
Results: Core 0



Bottom Channel



Middle Channel

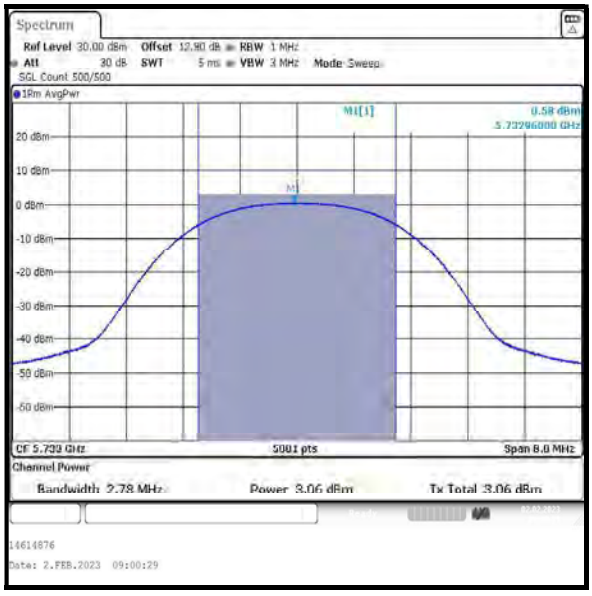


Top Channel

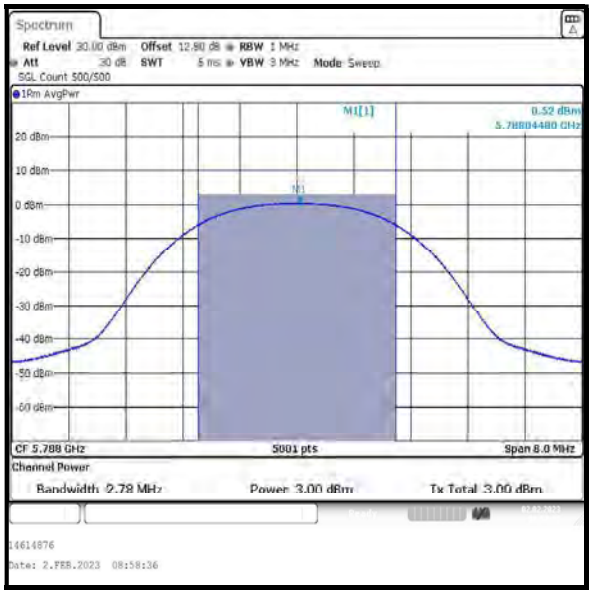
Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Results: 4DH5 / Beamforming / Core 0 + Core 1 / iPA

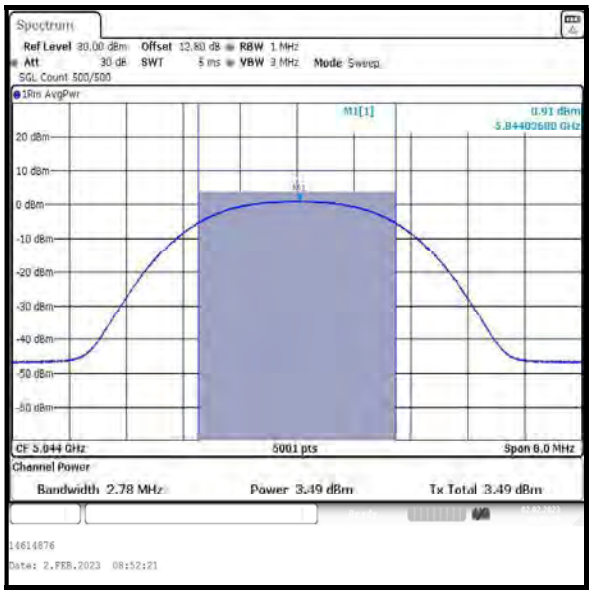
Results: Core 1



Bottom Channel



Middle Channel



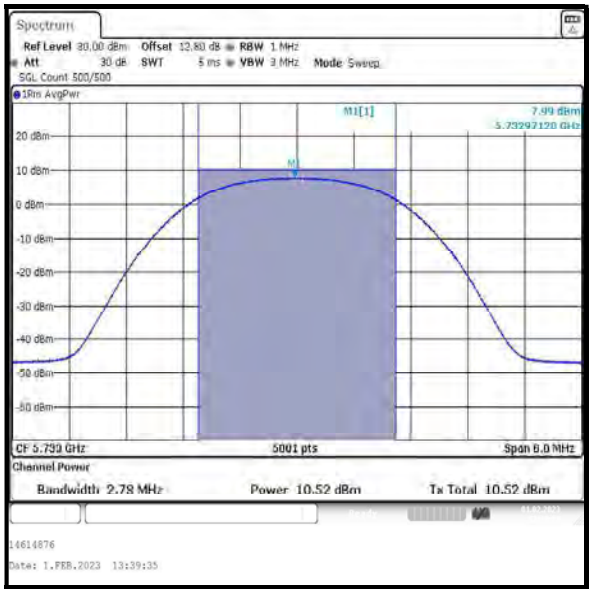
Top Channel

Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

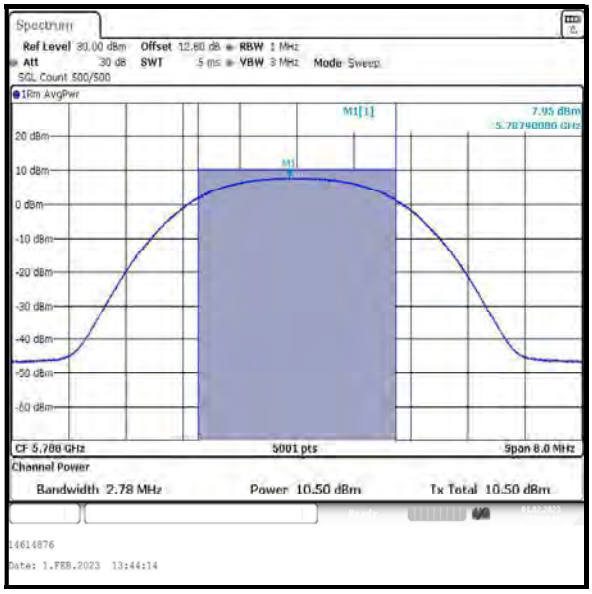
Results: 4DH5 / Beamforming / Core 0 + Core 1 / ePA

Channel	Frequency (MHz)	Conducted Power Core 0 (dBm)	Conducted Power Core 1 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5733	10.5	10.5	13.5	24.2	10.7	Complied
Middle	5788	10.5	10.8	13.7	24.2	10.5	Complied
Top	5844	10.5	10.7	13.6	24.2	10.6	Complied

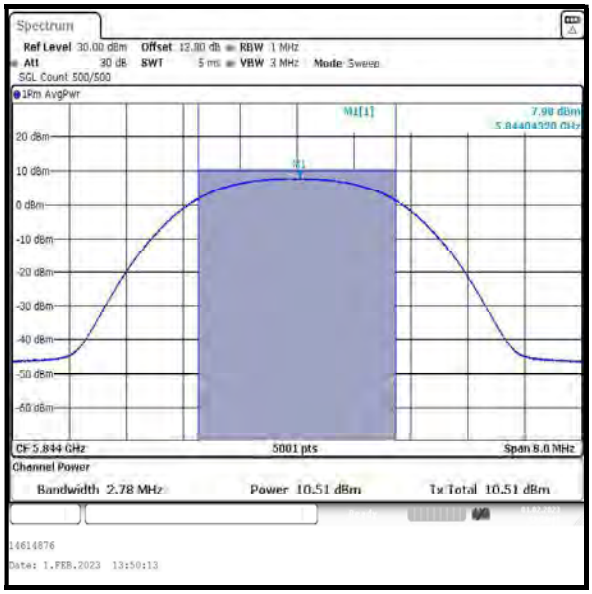
Results: Core 0



Bottom Channel



Middle Channel

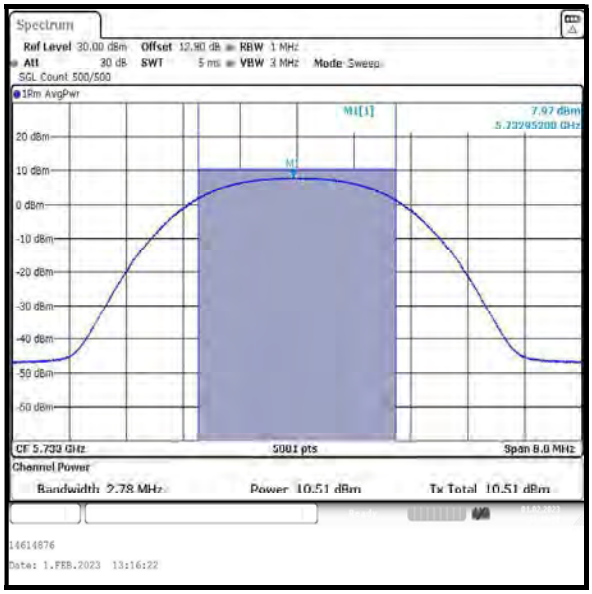


Top Channel

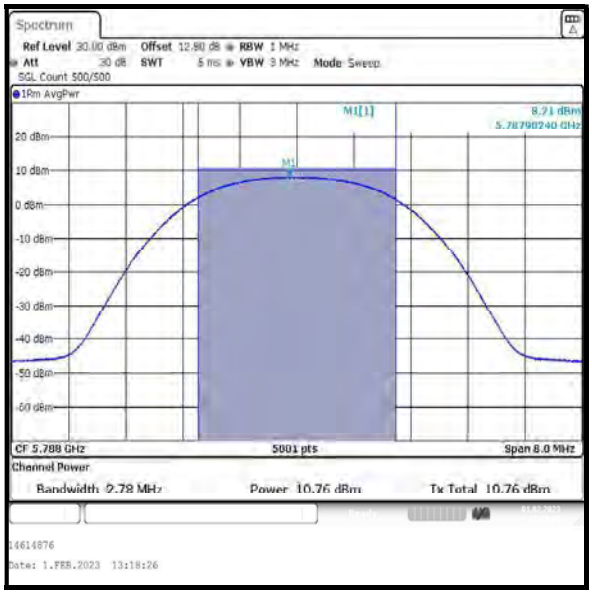
Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Results: 4DH5 / Beamforming / Core 0 + Core 1 / ePA

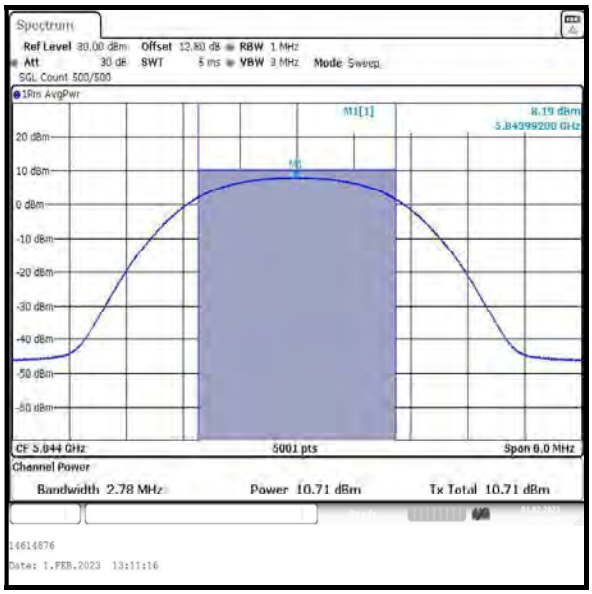
Results: Core 1



Bottom Channel



Middle Channel



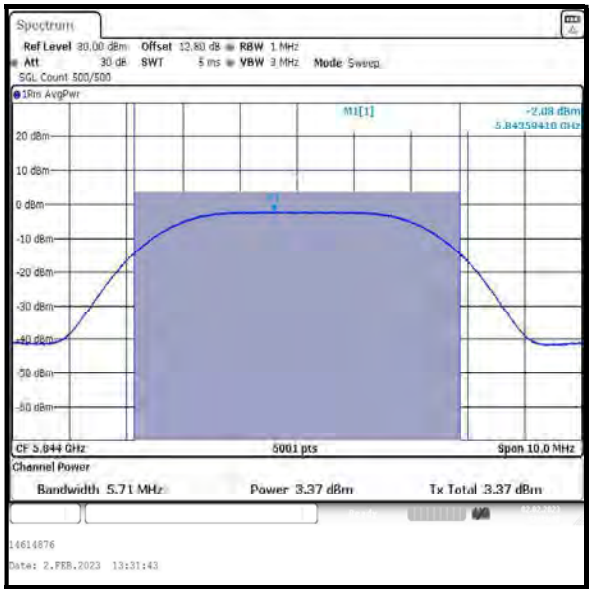
Top Channel

Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

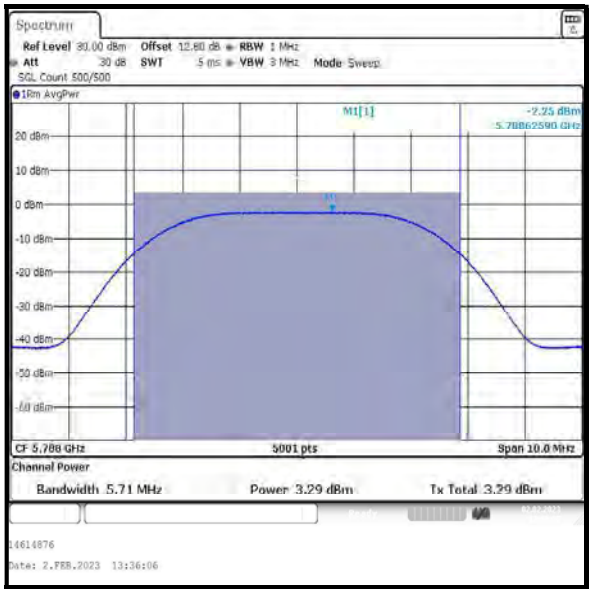
Results: 8DH5 / Beamforming / Core 0 + Core 1 / iPA

Channel	Frequency (MHz)	Conducted Power Core 0 (dBm)	Conducted Power Core 1 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5733	3.4	3.3	6.4	24.2	17.8	Complied
Middle	5788	3.3	3.0	6.2	24.2	18.0	Complied
Top	5844	3.4	3.5	6.5	24.2	17.7	Complied

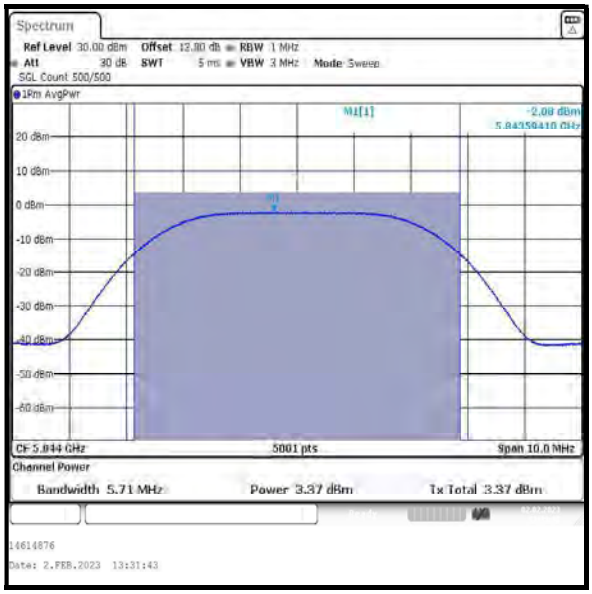
Results: Core 0



Bottom Channel



Middle Channel

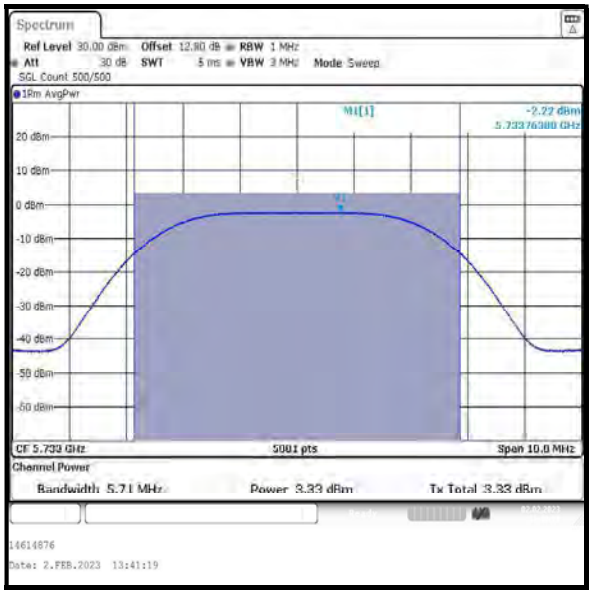


Top Channel

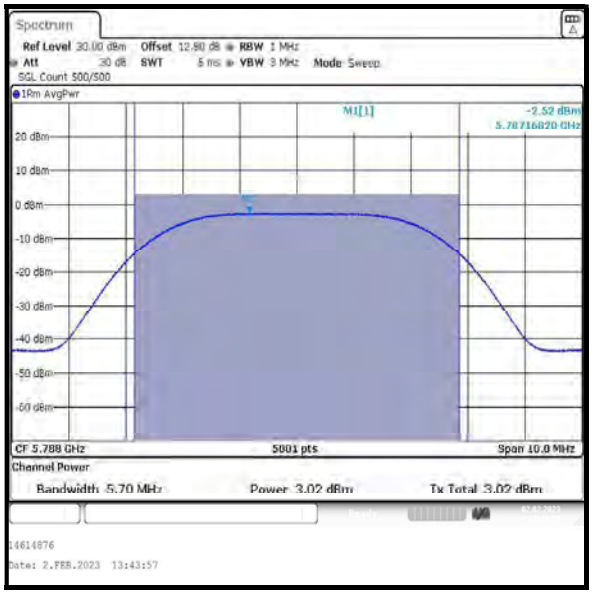
Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Results: 8DH5 / Beamforming / Core 0 + Core 1 / iPA

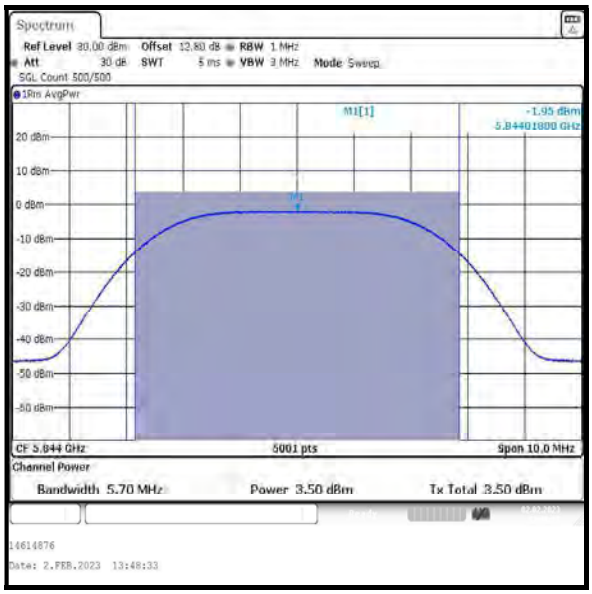
Results: Core 1



Bottom Channel



Middle Channel



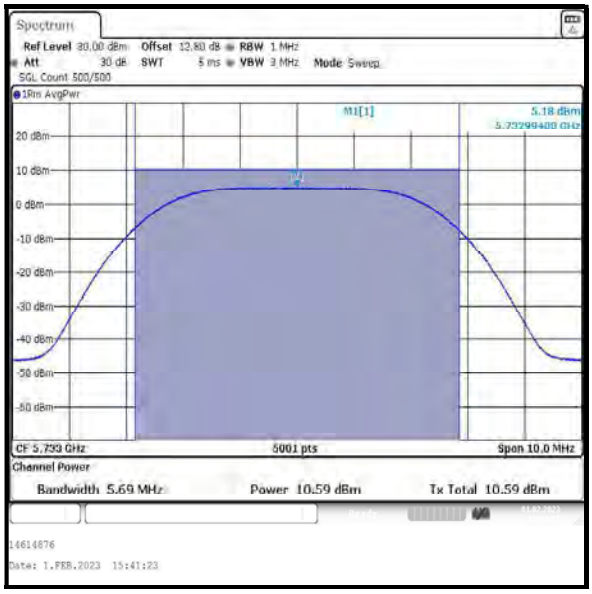
Top Channel

Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

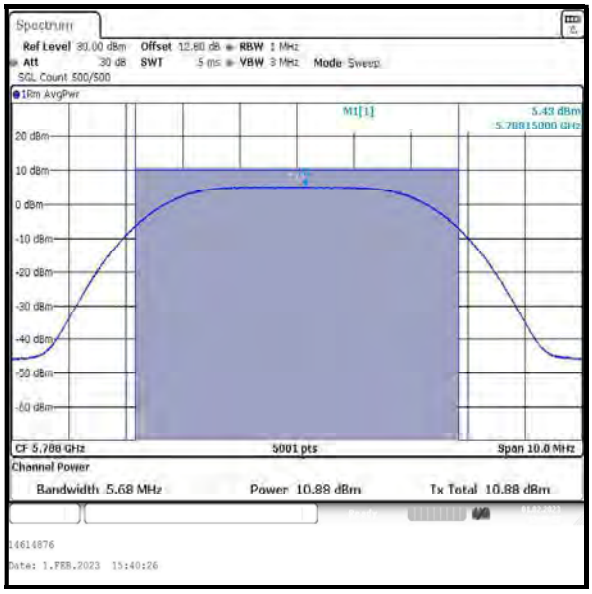
Results: 8DH5 / Beamforming / Core 0 + Core 1 / ePA

Channel	Frequency (MHz)	Conducted Power Core 0 (dBm)	Conducted Power Core 1 (dBm)	Combined Conducted Power (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	5733	10.6	10.7	13.7	24.2	10.5	Complied
Middle	5788	10.9	10.8	13.9	24.2	10.3	Complied
Top	5844	10.8	11.0	13.9	24.2	10.3	Complied

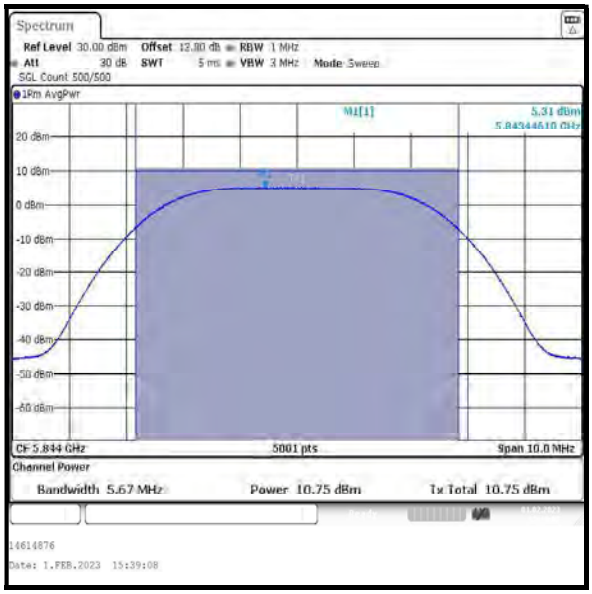
Results: Core 0



Bottom Channel



Middle Channel

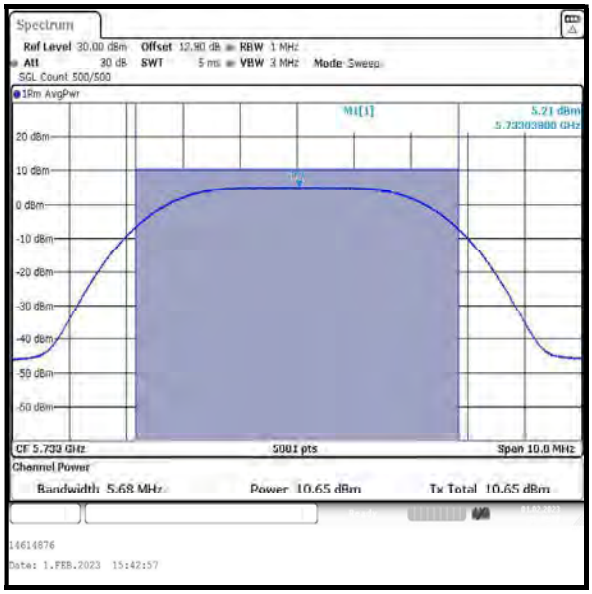


Top Channel

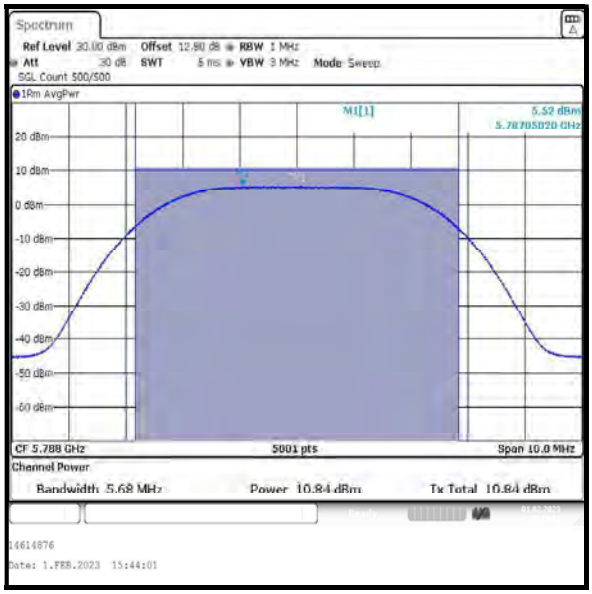
Transmitter Maximum Conducted Output Power (5.725-5.85 GHz band) (continued)

Results: 8DH5 / Beamforming / Core 0 + Core 1 / ePA

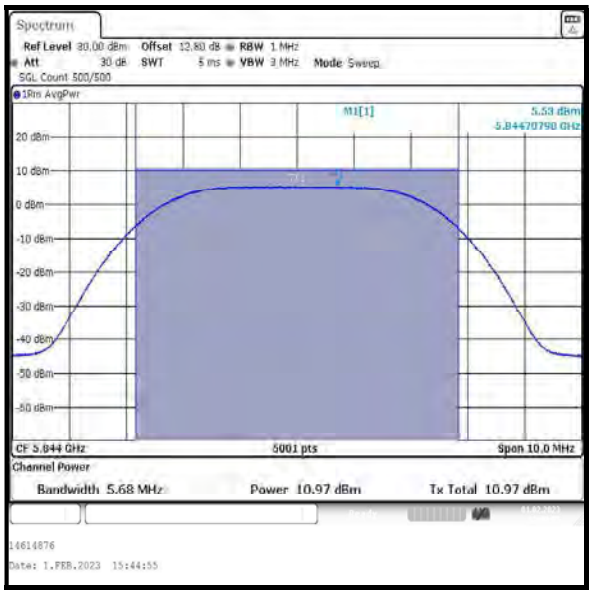
Results: Core 1



Bottom Channel



Middle Channel



Top Channel

4.5 Transmitter Maximum Power Spectral Density

4.5.1 5.15-5.25 GHz band

Test Summary:

Test Engineers:	Jose Bayona & Luis Pazos Perez	**Test Dates:**	02 February 2023 to 08 February 2023
Test Sample Serial Number:	CQCHHKN7YM		

FCC Reference:	Part 15.407(a)(1)(iv)
Test Method Used:	KDB 789033 D02 Section II.F. referencing II.E.2.b) and II.E.2.d)

Environmental Conditions:

Temperature (°C):	23
Relative Humidity (%):	35 to 38

Note(s):

1. Transmitter Maximum Power Spectral Density tests in all bands were performed using a signal analyser in accordance with KDB 789033 II. F referencing II.E.2.b) Method SA-1 and II.E.2.d) Method SA-2.
2. For DH5 where the EUT was transmitting at <98% duty cycle, the calculated duty cycle in Section 4.1 was added to the measured maximum power spectral density in order to compute the average maximum power spectral density during the actual transmission time.
3. FCC Part 15.407(a)(1)(iv) limit for PSD is <11 dBm/MHz.
4. For Beamforming modes, PSD was measured on both ports and then combined using the *measure and sum spectral maxima across the outputs* technique, stated in FCC KDB 662911 D01 Section E)2)b).
5. For details on antenna gains refer to Section 3.4 of this test report.
6. For all modes of operation, the antenna gain is > 6 dBi. In accordance with Part 15.407(a)(1)(iv), the limit was reduced by the amount in dB the antenna gain exceeds 6 dBi. Therefore the limit of 11 dBm/MHz has been reduced by using the following calculations:

   SISO / Core 0: 11 dBm – 3.7 dB = 7.3 dBm
   SISO / Core 1: 11 dBm – 0.9 dB = 10.1 dBm
   Beamforming / Core 0 + Core 1: 11 dBm – 5.4 dB = 5.6 dBm

7. The signal analyser was connected to the RF port on the EUT using suitable attenuation and RF cable. An RF level offset was entered on the signal analyser to compensate for the loss of the attenuator and RF cable.
8. As the power spectral density test uses the same test method as the output power test, before the power is integrated across the 26 dB bandwidth, the conducted power spectral density plots are located in the conducted output power section 4.4 of this test report. The peak spectral density was measured by placing a marker on the peak of the signal and the results entered in the tables below.

Transmitter Maximum Power Spectral Density (5.15-5.25 GHz band) (continued)

Results: DH5 / SISO / Core 0 / iPA

Channel	Frequency (MHz)	PSD (dBm /MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	Limit (dBm /MHz)	Margin (dB)	Result
Bottom	5162	5.5	1.1	6.6	7.3	0.7	Complied
Middle	5203	5.4	1.1	6.5	7.3	0.8	Complied
Top	5245	5.1	1.1	6.2	7.3	1.1	Complied

Results: 4DH5 / SISO / Core 0 / iPA

Channel	Frequency (MHz)	PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5162	0.9	7.3	6.4	Complied
Middle	5203	0.9	7.3	6.4	Complied
Top	5245	0.8	7.3	6.5	Complied

Results: 4DH5 / SISO / Core 0 / ePA

Channel	Frequency (MHz)	PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5162	5.1	7.3	2.2	Complied
Middle	5203	5.2	7.3	2.1	Complied
Top	5245	5.4	7.3	1.9	Complied

Results: 8DH5 / SISO / Core 0 / iPA

Channel	Frequency (MHz)	PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5162	-2.0	7.3	9.3	Complied
Middle	5203	-2.6	7.3	9.9	Complied
Top	5245	-2.2	7.3	9.5	Complied

Results: 8DH5 / SISO / Core 0 / ePA

Channel	Frequency (MHz)	PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5162	2.5	7.3	4.8	Complied
Middle	5203	2.2	7.3	5.1	Complied
Top	5245	2.4	7.3	4.9	Complied

Transmitter Maximum Power Spectral Density (5.15-5.25 GHz band) (continued)

Results: DH5 / SISO / Core 1 / iPA

Channel	Frequency (MHz)	PSD (dBm /MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm /MHz)	Limit (dBm /MHz)	Margin (dB)	Result
Bottom	5162	8.3	1.1	9.4	10.1	0.7	Complied
Middle	5203	8.1	1.1	9.2	10.1	0.9	Complied
Top	5245	8.4	1.1	9.5	10.1	0.6	Complied

Results: 4DH5 / SISO / Core 1 / iPA

Channel	Frequency (MHz)	PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5162	0.7	10.1	9.4	Complied
Middle	5203	0.8	10.1	9.3	Complied
Top	5245	0.7	10.1	9.4	Complied

Results: 4DH5 / SISO / Core 1 / ePA

Channel	Frequency (MHz)	PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5162	8.0	10.1	2.1	Complied
Middle	5203	8.4	10.1	1.7	Complied
Top	5245	8.1	10.1	2.0	Complied

Results: 8DH5 / SISO / Core 1 / iPA

Channel	Frequency (MHz)	PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5162	-2.2	10.1	12.3	Complied
Middle	5203	-2.3	10.1	12.4	Complied
Top	5245	-2.3	10.1	12.4	Complied

Results: 8DH5 / SISO / Core 1 / ePA

Channel	Frequency (MHz)	PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5162	5.1	10.1	5.0	Complied
Middle	5203	5.3	10.1	4.8	Complied
Top	5245	5.3	10.1	4.8	Complied

Transmitter Maximum Power Spectral Density (5.15-5.25 GHz band) (continued)

Results: DH5 / Beamforming / Core 0 + Core 1 / iPA

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm /MHz)	Duty Cycle correction factor (dB)	Corrected PSD (dBm /MHz)	PSD (dBm /MHz)	Duty Cycle correction factor (dB)	Corrected PSD (dBm /MHz)
Bottom	5162	1.0	1.1	2.1	1.0	1.1	2.1
Middle	5203	0.8	1.1	1.9	0.7	1.1	1.8
Top	5245	0.6	1.1	1.7	0.7	1.1	1.8

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm /MHz)	Corrected PSD Core 1 (dBm /MHz)	Combined PSD (dBm /MHz)	Limit (dBm/MHz)	Margin (dB)	Result
Bottom	5162	2.1	2.1	5.1	5.6	0.5	Complied
Middle	5203	1.9	1.8	4.9	5.6	0.7	Complied
Top	5245	1.7	1.8	4.8	5.6	0.8	Complied

Results: 4DH5 / Beamforming / Core 0 + Core 1 / iPA

Channel	Frequency (MHz)	PSD Core 0 (dBm / 1 MHz)	PSD Core 1 (dBm / 1 MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5162	0.6	0.7	3.7	5.6	1.9	Complied
Middle	5203	0.7	0.8	3.8	5.6	1.8	Complied
Top	5245	0.9	0.9	3.9	5.6	1.7	Complied

Results: 4DH5 / Beamforming / Core 0 + Core 1 / ePA

Channel	Frequency (MHz)	PSD Core 0 (dBm / 1 MHz)	PSD Core 1 (dBm / 1 MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5162	0.6	1.0	3.8	5.6	1.8	Complied
Middle	5203	0.6	0.7	3.7	5.6	1.9	Complied
Top	5245	0.8	0.6	3.7	5.6	1.9	Complied

Results: 8DH5 / Beamforming / Core 0 + Core 1 / iPA

Channel	Frequency (MHz)	PSD Core 0 (dBm / 1 MHz)	PSD Core 1 (dBm / 1 MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5162	-2.0	-2.3	0.9	5.6	4.7	Complied
Middle	5203	-2.1	-2.4	0.8	5.6	4.8	Complied
Top	5245	-2.5	-2.4	0.6	5.6	5.0	Complied

Transmitter Maximum Power Spectral Density (5.15-5.25 GHz band) (continued)

Results: 8DH5 / Beamforming / Core 0 + Core 1 / ePA

Channel	Frequency (MHz)	PSD Core 0 (dBm / 1 MHz)	PSD Core 1 (dBm / 1 MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5162	-1.9	-2.4	0.9	5.6	4.7	Complied
Middle	5203	-2.0	-2.4	0.8	5.6	4.8	Complied
Top	5245	-2.3	-2.4	0.7	5.6	4.9	Complied

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band)

4.5.2 5.725-5.85 GHz band

Test Summary:

Test Engineers:	Jose Bayona & Luis Pazos Perez	**Test Dates:**	31 January 2023 to 08 February 2023
Test Sample Serial Number:	CQCHHKN7YM		

FCC Reference:	Part 15.407(a)(3)(i)
Test Method Used:	KDB 789033 D02 Section II.F. referencing II.E.2.b) and II.E.2.d)

Environmental Conditions:

Temperature (°C):	20 to 23
Relative Humidity (%):	32 to 41

Note(s):

1. Transmitter Maximum Power Spectral Density tests in all bands were performed using a signal analyser in accordance with KDB 789033 II. F referencing II.E.2.b) Method SA-1 and II.E.2.d) Method SA-2.
2. For DH5 where the EUT was transmitting at <98% duty cycle, the calculated duty cycle in Section 4.1 was added to the measured maximum power spectral density in order to compute the average maximum power spectral density during the actual transmission time.
3. FCC Part 15.407(a)(3)(i) limit for PSD in the 5.725-5.85 GHz operating band is <30 dBm/500 kHz.
4. In accordance with ANSI C63.10 Section 4.1.4.1, use of bandwidths greater than those specified can produce higher readings. Compliance against the applicable limits is shown using a 1 MHz resolution bandwidth. This was deemed worst case.
5. For Beamforming modes, PSD was measured on both ports and then combined using the *measure and sum spectral maxima across the outputs* technique, stated in FCC KDB 662911 D01 Section E)2)b).
6. For details on antenna gains refer to Section 3.4 of this test report.
8. For all modes of operation, the antenna gain is > 6 dBi. In accordance with Part 15.407(a)(3)(i), the limit was reduced by the amount in dB the antenna gain exceeds 6 dBi. Therefore the limit of 30 dBm/500 kHz has been reduced by using the following calculations:

SISO / Core 0: 30 dBm – 2.4 dB = 27.6 dBm
SISO / Core 1: 30 dBm – 3.2 dB = 26.8 dBm
Beamforming / Core 0 + Core 1: 30 dBm – 5.8 dB = 24.2 dBm

7. The signal analyser was connected to the RF port on the EUT using suitable attenuation and RF cable. An RF level offset was entered on the signal analyser to compensate for the loss of the attenuator and RF cable.
8. As the power spectral density test uses the same test method as the output power test, before the power is integrated across the 26 dB bandwidth, the conducted power spectral density plots are located in the conducted output power section 4.4 of this test report. The peak spectral density was measured by placing a marker on the peak of the signal and the results entered in the tables below.

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band) (continued)

Results: DH5 / SISO / Core 0 / iPA

Channel	Frequency (MHz)	PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5733	9.1	1.1	10.2	27.6	17.4	Complied
Middle	5788	9.3	1.1	10.4	27.6	17.2	Complied
Top	5844	9.1	1.1	10.2	27.6	17.4	Complied

Results: 4DH5 / SISO / Core 0 / iPA

Channel	Frequency (MHz)	PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5733	1.0	27.6	26.6	Complied
Middle	5788	0.9	27.6	26.7	Complied
Top	5844	0.6	27.6	27.0	Complied

Results: 4DH5 / SISO / Core 0 / ePA

Channel	Frequency (MHz)	PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5733	7.9	27.6	19.7	Complied
Middle	5788	8.1	27.6	19.5	Complied
Top	5844	8.0	27.6	19.6	Complied

Results: 8DH5 / SISO / Core 0 / iPA

Channel	Frequency (MHz)	PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5733	-2.0	27.6	29.6	Complied
Middle	5788	-2.1	27.6	29.7	Complied
Top	5844	-2.2	27.6	29.8	Complied

Results: 8DH5 / SISO / Core 0 / ePA

Channel	Frequency (MHz)	PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5733	5.5	27.6	22.1	Complied
Middle	5788	5.5	27.6	22.1	Complied
Top	5844	5.3	27.6	22.3	Complied

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band) (continued)

Results: DH5 / SISO / Core 1 / iPA

Channel	Frequency (MHz)	PSD (dBm / 1 MHz)	Duty cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5733	9.1	1.1	10.2	26.8	16.6	Complied
Middle	5788	9.0	1.1	10.1	26.8	16.7	Complied
Top	5844	9.2	1.1	10.3	26.8	16.5	Complied

Results: 4DH5 / SISO / Core 1 / iPA

Channel	Frequency (MHz)	PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5733	0.5	26.8	26.3	Complied
Middle	5788	0.5	26.8	26.3	Complied
Top	5844	0.9	26.8	25.9	Complied

Results: 4DH5 / SISO / Core 1 / ePA

Channel	Frequency (MHz)	PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5733	8.0	26.8	18.8	Complied
Middle	5788	8.4	26.8	18.4	Complied
Top	5844	8.3	26.8	18.5	Complied

Results: 8DH5 / SISO / Core 1 / iPA

Channel	Frequency (MHz)	PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5733	-2.3	26.8	29.1	Complied
Middle	5788	-2.2	26.8	29.0	Complied
Top	5844	-1.9	26.8	28.7	Complied

Results: 8DH5 / SISO / Core 1 / ePA

Channel	Frequency (MHz)	PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5733	5.2	26.8	21.6	Complied
Middle	5788	5.4	26.8	21.4	Complied
Top	5844	5.5	26.8	21.3	Complied

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band) (continued)

Results: DH5 / Beamforming / Core 0 + Core 1 / iPA

Channel	Frequency (MHz)	Core 0			Core 1		
		PSD (dBm / 1 MHz)	Duty Cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)	PSD (dBm / 1 MHz)	Duty Cycle correction factor (dB)	Corrected PSD (dBm / 1 MHz)
Bottom	5733	9.1	1.1	10.2	9.1	1.1	10.2
Middle	5788	9.3	1.1	10.4	9.1	1.1	10.2
Top	5844	9.3	1.1	10.4	9.0	1.1	10.1

Channel	Frequency (MHz)	Corrected PSD Core 0 (dBm / 1 MHz)	Corrected PSD Core 1 (dBm / 1 MHz)	PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5733	10.2	10.2	13.2	24.2	11.0	Complied
Middle	5788	10.4	10.2	13.3	24.2	10.9	Complied
Top	5844	10.4	10.1	13.3	24.2	10.9	Complied

Results: 4DH5 / Beamforming / Core 0 + Core 1 / iPA

Channel	Frequency (MHz)	PSD Core 0 (dBm / 1 MHz)	PSD Core 1 (dBm / 1 MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5733	0.6	0.6	3.6	24.2	20.6	Complied
Middle	5788	0.5	0.5	3.5	24.2	20.7	Complied
Top	5844	0.5	0.9	3.7	24.2	20.5	Complied

Results: 4DH5 / Beamforming / Core 0 + Core 1 / ePA

Channel	Frequency (MHz)	PSD Core 0 (dBm / 1 MHz)	PSD Core 1 (dBm / 1 MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5733	8.0	8.0	11.0	24.2	13.2	Complied
Middle	5788	8.0	8.2	11.1	24.2	13.1	Complied
Top	5844	8.0	8.2	11.1	24.2	13.1	Complied

Results: 8DH5 / Beamforming / Core 0 + Core 1 / iPA

Channel	Frequency (MHz)	PSD Core 0 (dBm / 1 MHz)	PSD Core 1 (dBm / 1 MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5733	-2.1	-2.2	0.9	24.2	23.3	Complied
Middle	5788	-2.2	-2.5	0.7	24.2	23.5	Complied
Top	5844	-2.1	-1.9	1.0	24.2	23.2	Complied

Transmitter Maximum Power Spectral Density (5.725-5.85 GHz band) (continued)

Results: 8DH5 / Beamforming / Core 0 + Core 1 / ePA

Channel	Frequency (MHz)	PSD Core 0 (dBm / 1 MHz)	PSD Core 1 (dBm / 1 MHz)	Combined PSD (dBm / 1 MHz)	Limit (dBm / 500 kHz)	Margin (dB)	Result
Bottom	5733	5.2	5.2	8.2	24.2	16.0	Complied
Middle	5788	5.4	5.5	8.5	24.2	15.7	Complied
Top	5844	5.3	5.5	8.4	24.2	15.8	Complied

5 Radiated Test Results

5.1 Transmitter Out of Band Radiated Emissions <1 GHz

Test Summary:

Test Engineers:	Nick Steele & Rob English	**Test Dates:**	20 December 2022 & 13 January 2023
Test Sample Serial Number:	FQP20QF2CT		

FCC Reference:	Parts 15.407(b)(1),(9),(10) & 15.209(a)
Test Method Used:	KDB 789033 II.G. & ANSI C63.10 Sections 6.3, 6.4 and 6.5
Frequency Range:	9 kHz to 1000 MHz

Environmental Conditions:

Temperature (°C):	22 to 23
Relative Humidity (%):	39 to 43

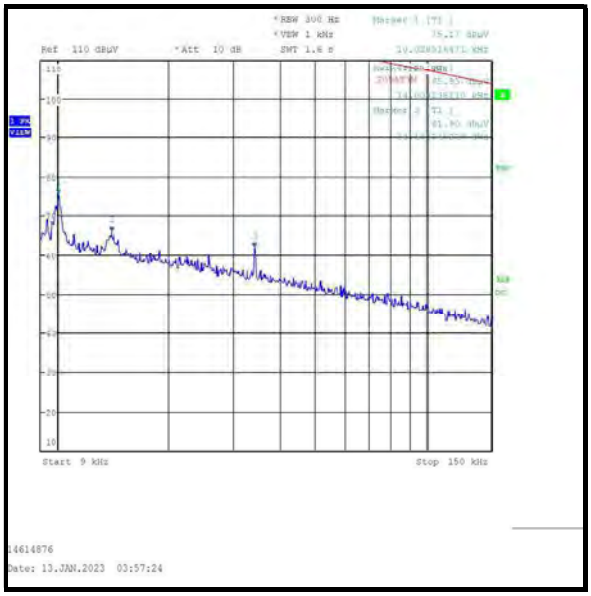
Note(s):

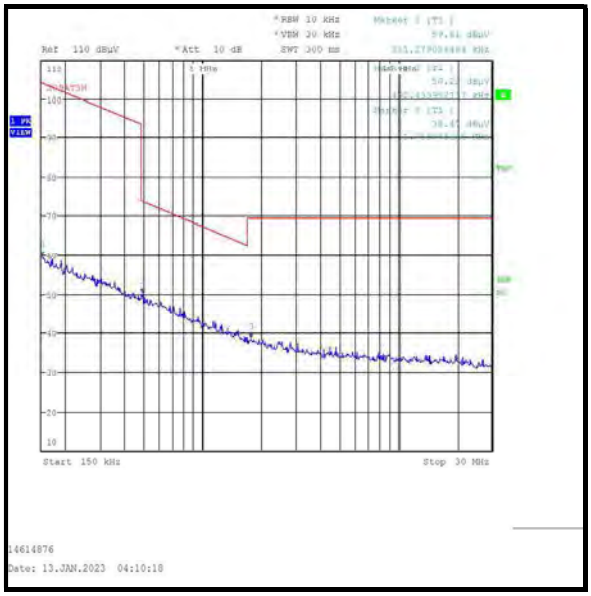
1. The final measured value, for the given emission in the field strength result tables, incorporates the calibrated antenna factor and cable loss.
2. Pre-scans were performed with the EUT transmitting in the band 5.725 to 5.85 GHz band with a data rate of 4DH5 / Beamforming / Core 0 + Core 1 / ePA on middle channel in this band as it produced the highest power spectral density and was therefore deemed worst case.
3. The preliminary scans showed similar emission levels below 1 GHz, for each channel of operation. Therefore final radiated emissions measurements were performed with the EUT set to the middle channel only.
4. All other emissions shown on the pre-scan were investigated and found to be ambient, or >20 dB below the applicable limit or below the measurement system noise floor.
5. Measurements below 30 MHz were performed in a semi-anechoic chamber (Asset Number K0001) at 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. The limit was extrapolated to 3 metres in accordance with ANSI C63.10 clause 6.4.3 using the method described in clause 6.4.4.2. ANSI C63.10 clause 5.2 states an alternative test site that can demonstrate equivalence to an open area test site may be used for measurements below 30 MHz. Therefore, measurements were performed in a semi-anechoic chamber. The correlation data between semi-anechoic chamber and an open field test site is available upon request.
6. Measurements below 1 GHz were performed in a semi-anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
7. Pre-scans were performed and markers placed on the highest measured levels. The test receiver was configured as follows: For 9 kHz to 150 kHz, the resolution bandwidth was set to 300 Hz and video bandwidth 1 kHz. A peak detector was used and trace mode was Max Hold. For 150 kHz to 30 MHz, the resolution bandwidth was set to 10 kHz and video bandwidth 30 kHz, trace mode was Max Hold. For 30 MHz to 1 GHz, the resolution bandwidth was set to 120 kHz and video bandwidth 500 kHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold.
8. Final measurements > 30 MHz were performed on the marker frequencies and the results entered into the table below. The test receiver resolution bandwidth was set to 120 kHz, using a CISPR quasi-peak detector and span wide enough to see the whole emission.

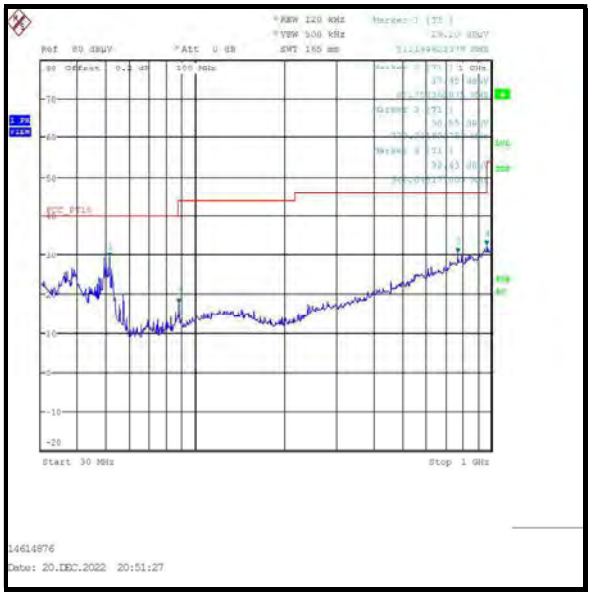
Transmitter Out of Band Radiated Emissions <1 GHz (continued)

Results: Quasi-Peak / Middle Channel / 4DH5 / Beamforming / Core 0 + Core 1 / ePA

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
38.200	Vertical	21.2	40.0	18.8	Complied







Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

5.2 Transmitter Out of Band Radiated Emissions >1 GHz

5.2.1 5.15-5.25 GHz band

Transmitter Out of Band Radiated Emissions (5.15-5.25 GHz band operation)

Test Summary:

Test Engineers:	Nick Steele & Vi Van	**Test Dates:**	21 December 2022 to 15 January 2023
Test Sample Serial Numbers:	FQP20QF2CT & C2QY43Q3QM		

FCC Reference:	Part 15.407(b)(1),(10) & 15.209(a)
Test Method Used:	KDB 789033 II.G. & ANSI C63.10 Sections 6.3 and 6.6
Frequency Range:	1 GHz to 40 GHz

Environmental Conditions:

Temperature (°C):	22 to 24
Relative Humidity (%):	37 to 43

Transmitter Out of Band Radiated Emissions (5.15-5.25 GHz band operation) (continued)

Note(s):

1. FCC Part 15.407(b)(1) states for transmitters operating in the band 5.15 to 5.25 GHz: all emissions outside of the 5.15 to 5.35 GHz band will not exceed -27 dBm/MHz. Part(b)(10) states the provisions of 15.205 apply e.g. restricted bands of operation.
2. Pre-scans were performed with the EUT transmitting in the band 5.15 to 5.25 GHz band with a data rate of 4DH5 / Beamforming / Core 0 + Core 1 / ePA on middle channel in this band as it produced the highest power spectral density and was therefore deemed worst case.
3. The final measured value, for the given emission in the field strength result tables, incorporates the calibrated antenna factor and cable loss.
4. All other emissions shown on the pre-scan plots were investigated and found to be ambient, or 20 dB below the applicable limit or below the measurement system noise floor.
5. Appropriate RF filters and attenuators were used during pre-scans and final measurements. Insertion losses were entered on the spectrum analyser as RF levels offsets.
6. The emission shown on the 1 GHz to 6 GHz plot at approximately 5203 MHz is the EUT fundamental.
7. Measurements were performed across the two restricted bands (4.5 to 5.15 GHz & 5.35 to 5.46 GHz) closest to the band of operation with the EUT transmitting on the bottom channel in the 5.15 to 5.25 GHz band. The 4.5 to 5.15 GHz plot is included in this section of the test report. For the EUT transmitting on the top channel in the 5.15 to 5.25 GHz band, these plots were included as part of upper band edge measurements and can be found in section 5.3.1 of this test report.
8. Pre-scans above 1 GHz were performed in a fully anechoic chamber (Asset Number K0001/K0017) at a distance of 3 metres. The EUT was placed at a height of 1.5 metres above the test chamber floor in the centre of the chamber turntable. All measurement antennas were placed at a fixed height of 1.5 metres above the test chamber floor, in line with the EUT. Final measurements above 1 GHz were performed in a semi-anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 1.5 m above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
9. Pre-scans were performed and a marker placed on the highest measured level of the appropriate plot. The test receiver resolution bandwidth was set to 1 MHz and video bandwidth 3 MHz. The sweep time was set to auto. Peak and average measurements were performed with their own appropriate detectors during the pre-scan measurements.
10. Final measurements were performed on the marker frequencies and the results entered into the table below. The test receiver resolution bandwidth was set to 1 MHz and video bandwidth 3 MHz. The sweep time was set to auto, with and span wide enough to see the whole emission. Peak measurement were performed a with a peak detector and max hold enable. Average measurements were performed a with a RMS detector and trace average over 300 sweeps.

Transmitter Out of Band Radiated Emissions (5.15-5.25 GHz band operation) (continued)

Results: Bottom Channel / EIRP

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5592.000	Vertical	-33.7	-27.0	6.7	Complied
6022.048	Vertical	-42.8	-27.0	15.8	Complied

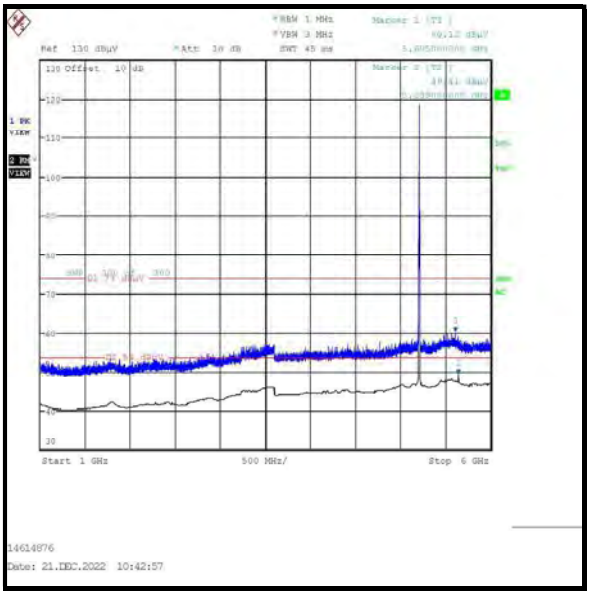
Results: Middle Channel / EIRP

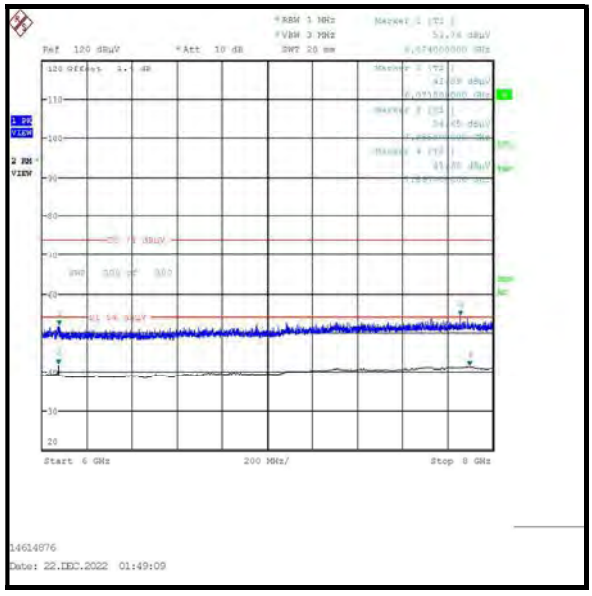
Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5638.058	Vertical	-34.0	-27.0	7.0	Complied
6071.657	Vertical	-43.0	-27.0	16.0	Complied

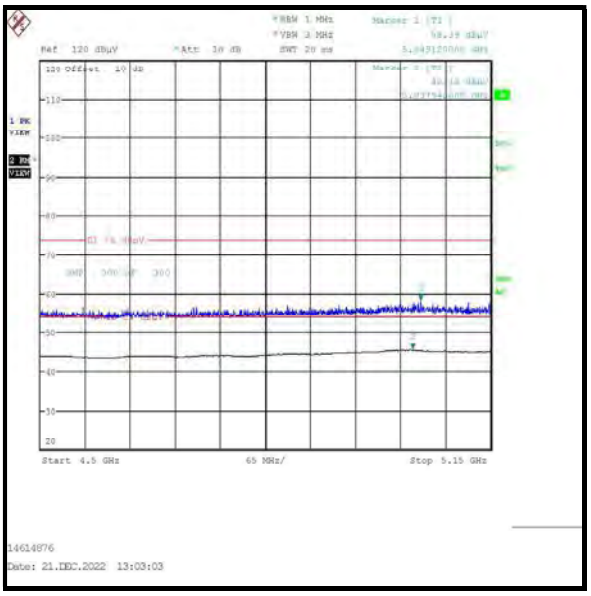
Results: Top Channel / EIRP

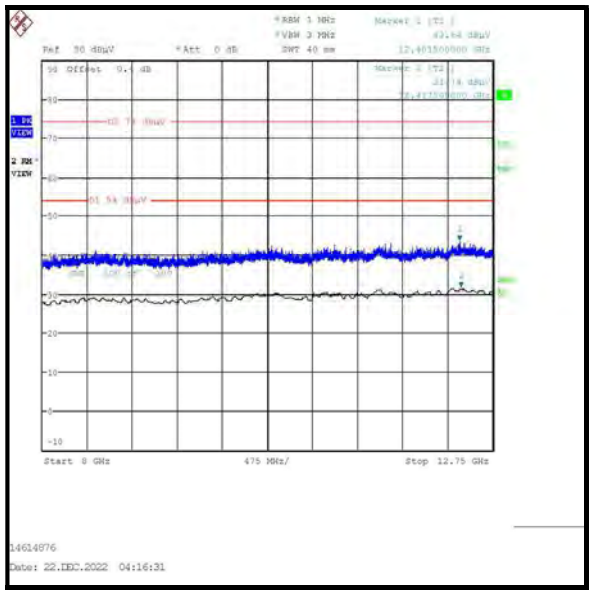
Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5681.519	Vertical	-34.8	-27.0	7.8	Complied
6119.321	Vertical	-43.3	-27.0	16.3	Complied

Transmitter Out of Band Radiated Emissions (5.15-5.25 GHz band operation) (continued)



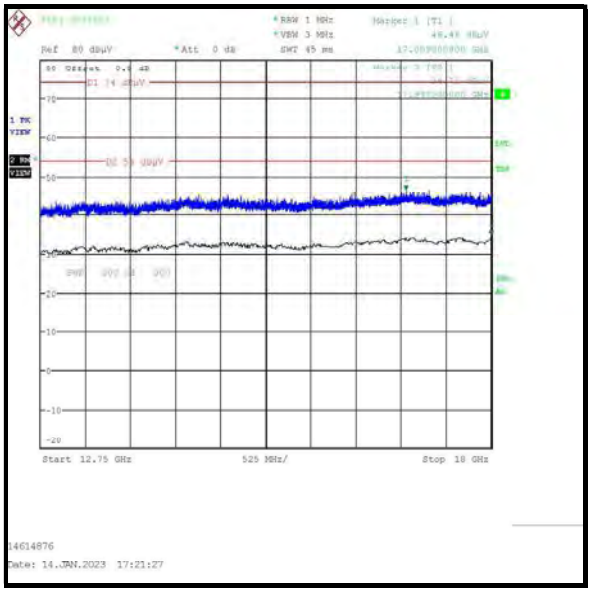


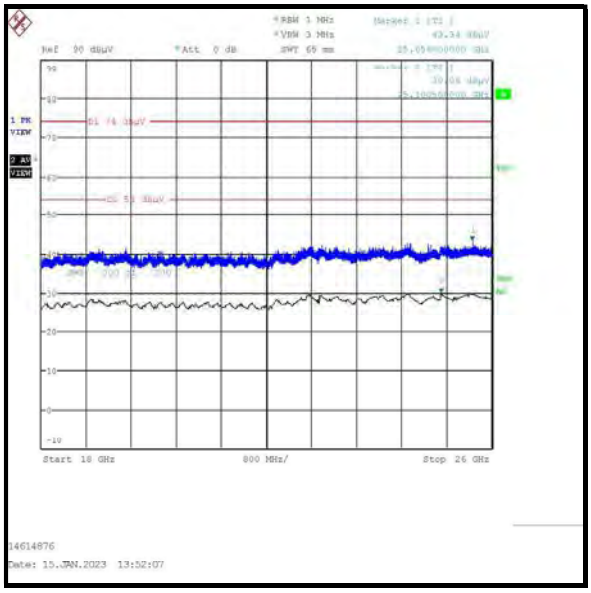


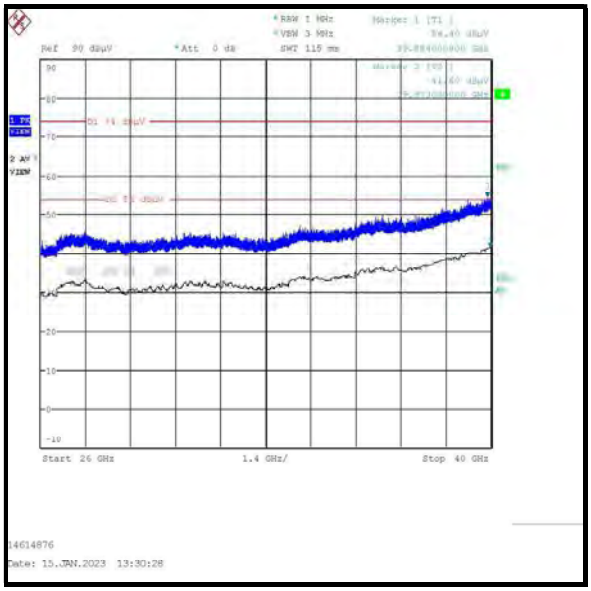


Restricted Band 4.5 GHz to 5.15 GHz

Transmitter Out of Band Radiated Emissions (5.15-5.25 GHz band operation) (continued)







Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

5.2.2 5.725-5.85 GHz band

Transmitter Out of Band Radiated Emissions (5.725-5.85 GHz band operation)

Test Summary:

Test Engineers:	John Ferdinand, Nick Steele & Vi Van	**Test Dates:**	21 December 2022 to 15 January 2023
Test Sample Serial Numbers:	FQP20QF2CT & C2QY43Q3QM		

FCC Reference:	Part 15.407(b)(4)(i),(10) & 15.209(a)
Test Method Used:	KDB 789033 II.G. & ANSI C63.10 Sections 6.3 and 6.6
Frequency Range:	1 GHz to 40 GHz

Environmental Conditions:

Temperature (°C):	22 to 24
Relative Humidity (%):	37 to 43

Transmitter Out of Band Radiated Emissions (5.725-5.85 GHz band operation) (continued)

Note(s):

1. FCC Part 15.407(b)(4)(i) states for transmitters operating in the band 5.725 to 5.85 GHz: 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. Part(b)(10) states the provisions of 15.205 apply e.g. restricted bands of operation.
2. Pre-scans were performed with the EUT transmitting in the band 5.725 to 5.85 GHz band with a data rate of 4DH5 / Beamforming / Core 0 + Core 1 / ePAon middle channel in this band as it produced the highest power spectral density and was therefore deemed worst case.
3. The final measured value, for the given emission in the field strength result tables, incorporates the calibrated antenna factor and cable loss.
4. All other emissions shown on the pre-scan plot were investigated and found to be ambient or >20 dB below the applicable limit or below the measurement system noise floor.
5. Appropriate RF filters and attenuators were used during pre-scans and final measurements. Insertion losses were entered on the spectrum analyser as RF levels offsets.
6. The emission shown on the 1 GHz to 6 GHz plot at approximately 5788 MHz is the EUT fundamental.
7. Pre-scans above 1 GHz were performed in a fully anechoic chamber (Asset Number K0001/K0017) at a distance of 3 metres. The EUT was placed at a height of 1.5 metres above the test chamber floor in the centre of the chamber turntable. All measurement antennas were placed at a fixed height of 1.5 metres above the test chamber floor, in line with the EUT. Final measurements above 1 GHz were performed in a semi-anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 1.5 m above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
8. Pre-scans were performed and a marker placed on the highest measured level of the appropriate plot. The test receiver resolution bandwidth was set to 1 MHz and video bandwidth 3 MHz. The sweep time was set to auto. Peak and average measurements were performed with their own appropriate detectors during the pre-scan measurements.
9. Final measurements were performed on the marker frequencies and the results entered into the table below. The test receiver resolution bandwidth was set to 1 MHz and video bandwidth 3 MHz. The sweep time was set to auto, with and span wide enough to see the whole emission. Peak measurement were performed a with a peak detector and max hold enable. Average measurements were performed a with a RMS detector and trace average over 300 sweeps.

Transmitter Out of Band Radiated Emissions (5.725-5.85 GHz band operation) (continued)

Results: Bottom Channel / EIRP

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5323.465	Vertical	-34.7	-27.0	7.7	Complied
6142.688	Vertical	-38.4	-27.0	11.4	Complied

Results: Middle Channel / EIRP

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
6203.024	Vertical	-39.5	-27.0	12.5	Complied

Results: Middle Channel / Field Strength / Peak

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5374.478	Vertical	61.0	74.0	13.0	Complied

Results: Middle Channel / Field Strength / Average

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5375.433	Vertical	50.9	54.0	3.1	Complied

Results: Top Channel / EIRP / 4DH5

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
6261.072	Vertical	-38.3	-27.0	11.3	Complied

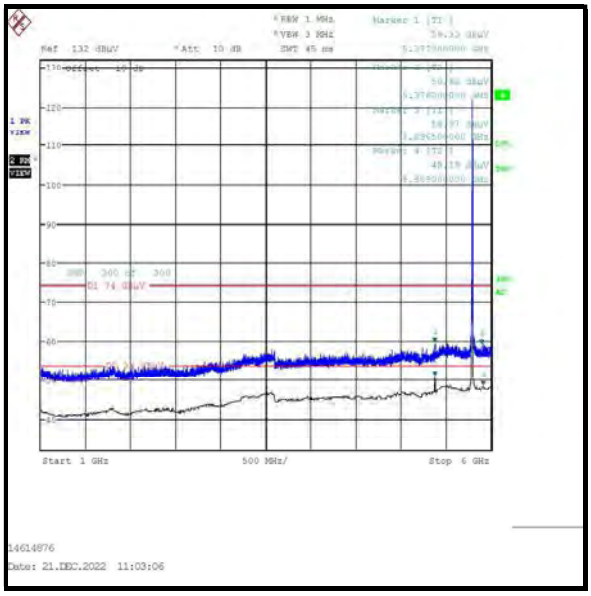
Results: Top Channel / Field Strength / Peak

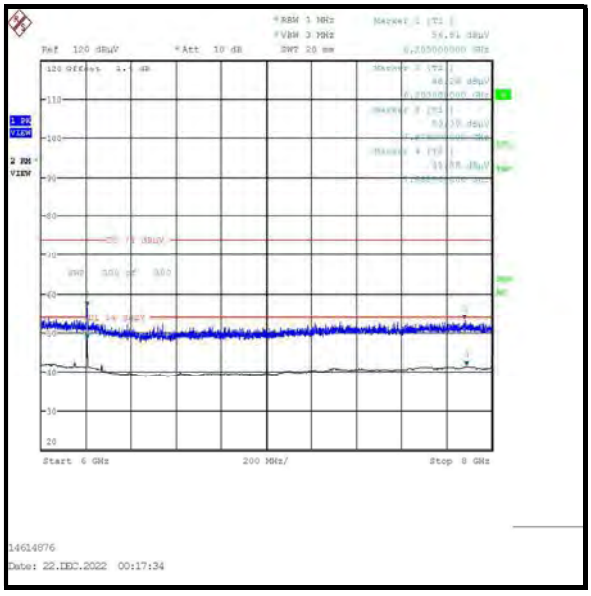
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5426.361	Vertical	61.0	74.0	13.0	Complied

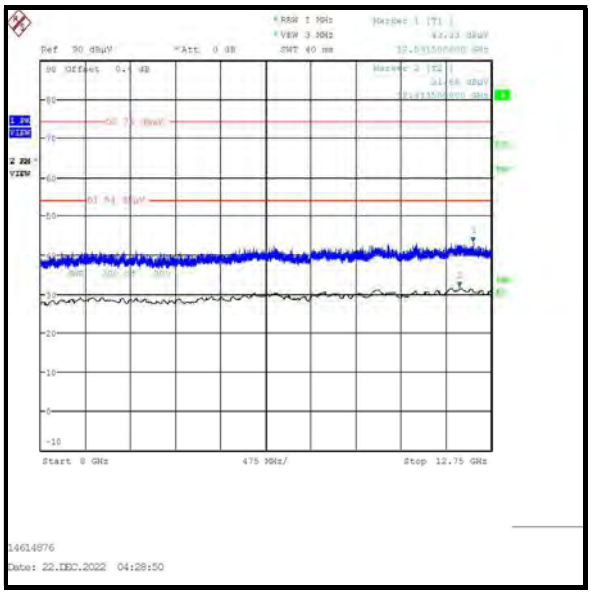
Results: Top Channel / Field Strength / Average

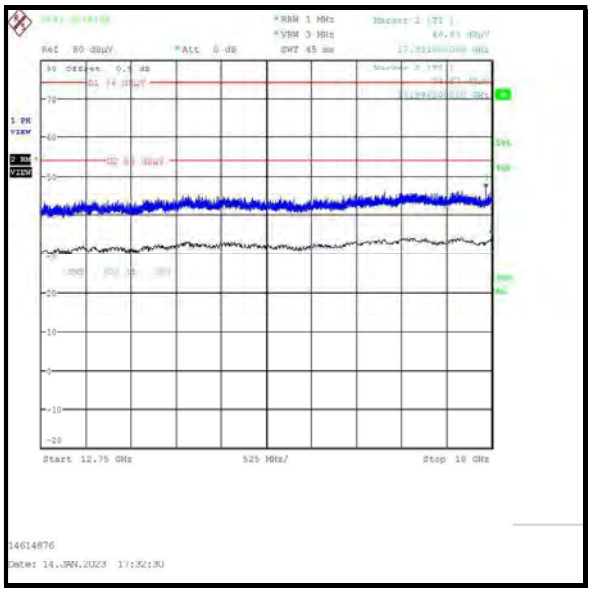
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5426.601	Vertical	51.0	54.0	3.0	Complied

Transmitter Out of Band Radiated Emissions (5.725-5.85 GHz band operation) (continued)

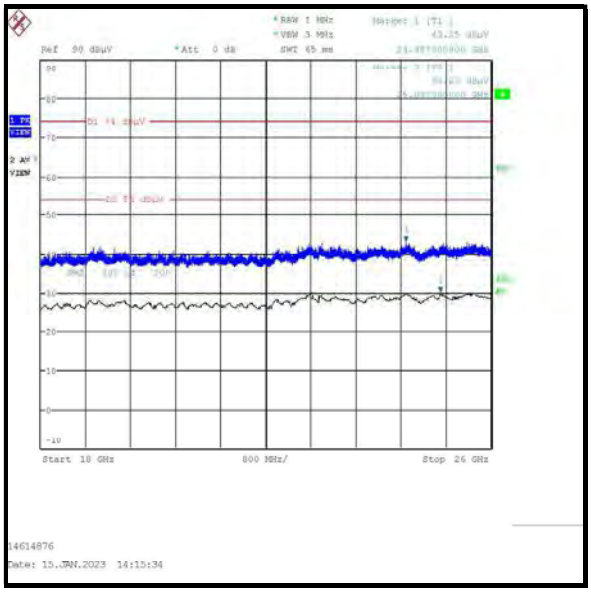


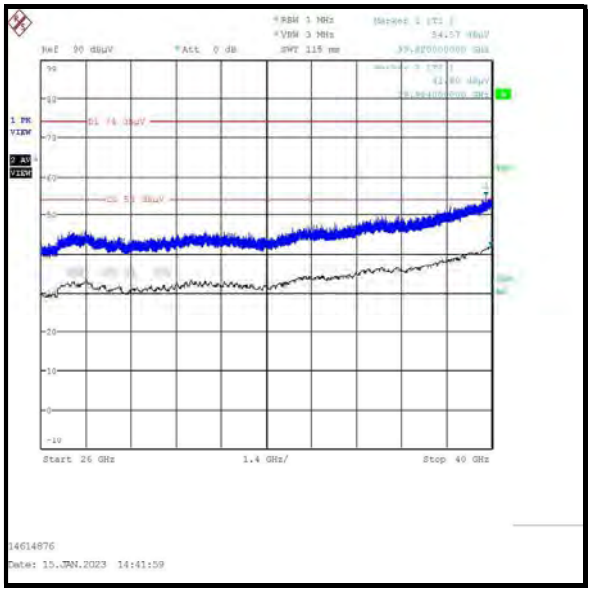






Transmitter Out of Band Radiated Emissions (5.725-5.85 GHz band operation) (continued)





Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

5.3 Transmitter Band Edge Radiated Emissions

5.3.1 5.15-5.25 GHz band

Test Summary:

Test Engineers:	Andrew Harding & John Ferdinand	**Test Dates:**	21 November 2022 to 24 November 2022
Test Sample Serial Number:	FQP20QF2CT		

FCC Reference:	Parts 15.407(b)(1),(10), 15.205 & 15.209(a)
Test Method Used:	ANSI C63.10 Section 6.10 & KDB 789033 II.G.

Environmental Conditions:

Temperature (°C):	21 to 23
Relative Humidity (%):	38 to 41

Note(s):

1. Lower band edge measurements were performed with the EUT transmitting on the bottom channel. Upper band edge measurements were performed with the EUT transmitting on the top channel.
2. In addition, the lower and upper band edges were performed with the EUT configured in hopping mode. It was set to hop across the 79 channels closest to the applicable band edge. These plots are archived on the UL IT server and available for inspection if required.
3. For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. However, there are restricted bands of operation below the lower band edge at 4.5-5.15 GHz and also above the upper band edge at 5.35-5.46 GHz therefore the provisions of FCC Part 15.205 apply. Tests for at 4.5-5.15 GHz restricted band were performed and are included in section 5.2.1 of this test report.
4. Field strength measurements using peak and average detectors were performed in the restricted bands below 5.15 GHz and above 5.35 GHz. Field strength and EIRP results were found to be compliant with the restricted band limits and Part 15.407 out-of-band limits.

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

Results: Static / DH5 / SISO / Core 0 / iPA

Results: Lower Band Edge / Peak

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5148.600	59.6	74.0	14.4	Complied
5150	58.6	74.0	15.4	Complied

Results: Upper Band Edge / Peak

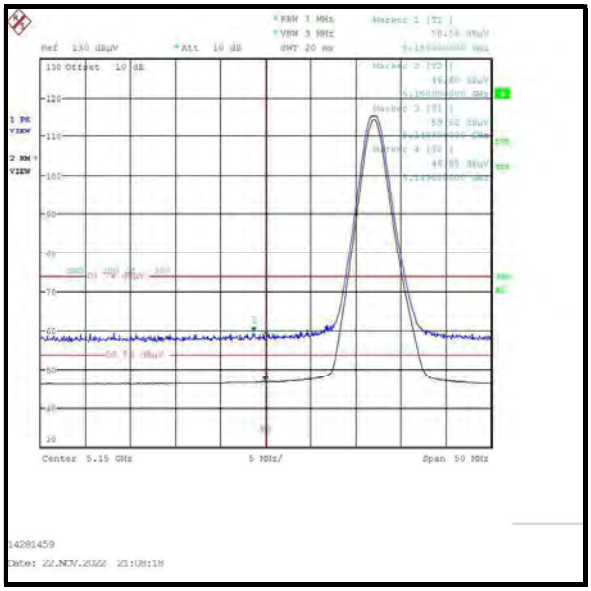
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	58.0	74.0	16.0	Complied
5446.360	58.9	74.0	15.1	Complied

Results: Lower Band Edge / Average

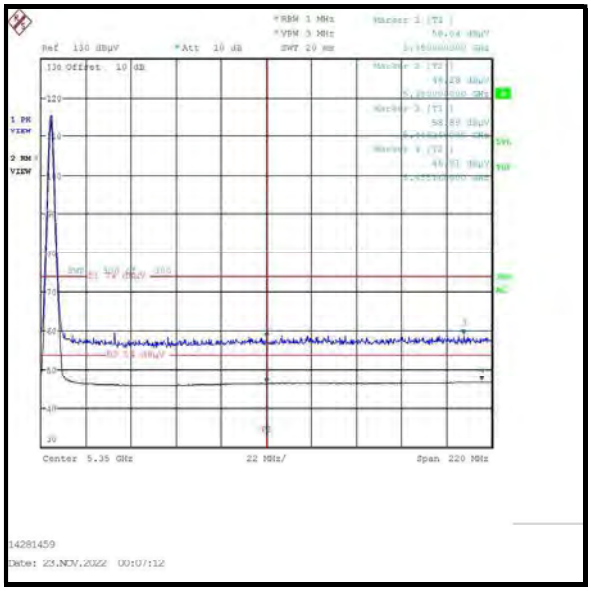
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5149.800	46.9	54.0	7.1	Complied
5150	46.8	54.0	7.2	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	46.3	54.0	7.7	Complied
5455.160	46.8	54.0	7.2	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

Results: Static / 4DH5 / SISO / Core 0 / iPA

Results: Lower Band Edge / Peak

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5149.200	59.5	74.0	14.5	Complied
5150	57.4	74.0	16.6	Complied

Results: Upper Band Edge / Peak

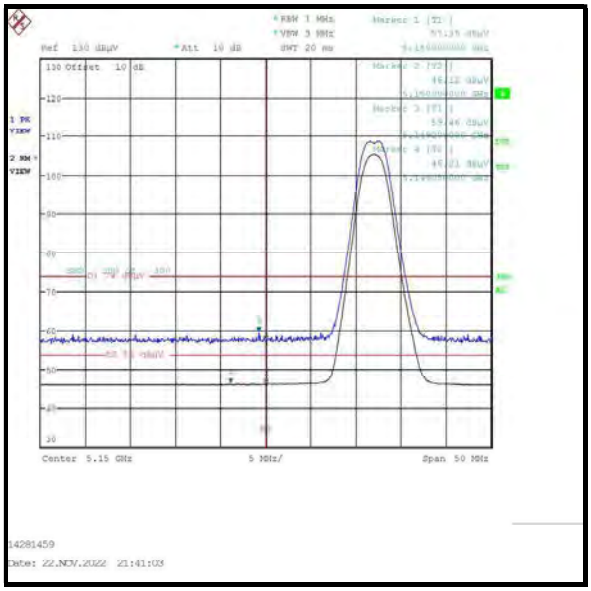
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	57.2	74.0	16.8	Complied
5422.820	59.2	74.0	14.8	Complied

Results: Lower Band Edge / Average

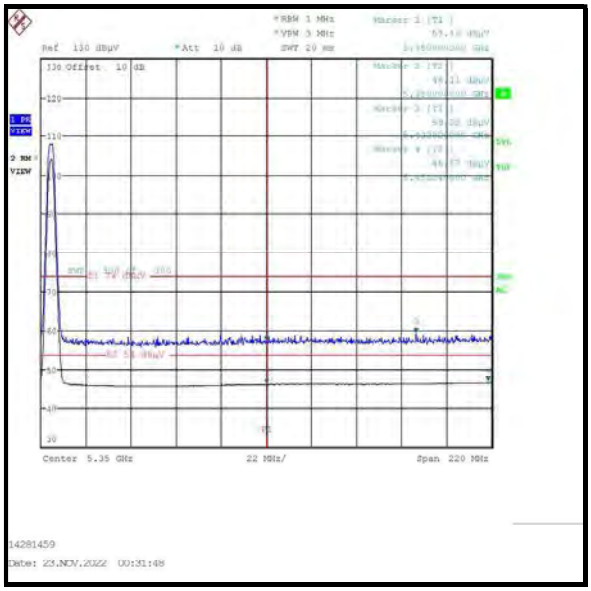
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5146.050	46.2	54.0	7.8	Complied
5150	46.1	54.0	7.9	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	46.1	54.0	7.9	Complied
5458.240	46.7	54.0	7.3	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

Results: Static / 4DH5 / SISO / Core 0 / ePA

Results: Lower Band Edge / Peak

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5148.950	59.5	74.0	14.5	Complied
5150	57.8	74.0	16.2	Complied

Results: Upper Band Edge / Peak

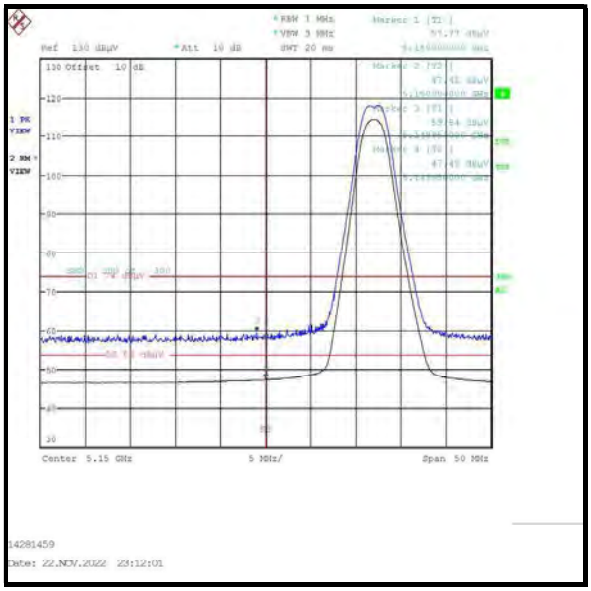
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	57.3	74.0	16.7	Complied
5400.820	59.8	74.0	14.2	Complied

Results: Lower Band Edge / Average

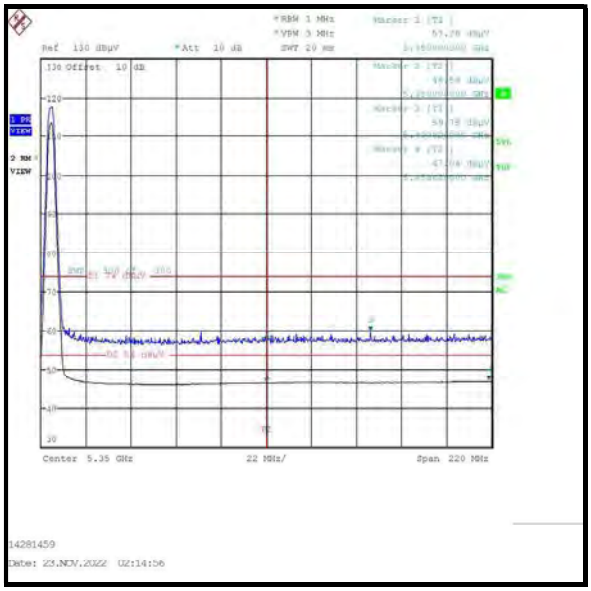
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5149.950	47.5	54.0	6.5	Complied
5150	47.4	54.0	6.6	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	46.5	54.0	7.5	Complied
5458.680	47.0	54.0	7.0	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

Results: Static / 8DH5 / SISO / Core 0 / iPA

Results: Lower Band Edge / Peak

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5140.900	59.5	74.0	14.5	Complied
5150	57.9	74.0	16.1	Complied

Results: Upper Band Edge / Peak

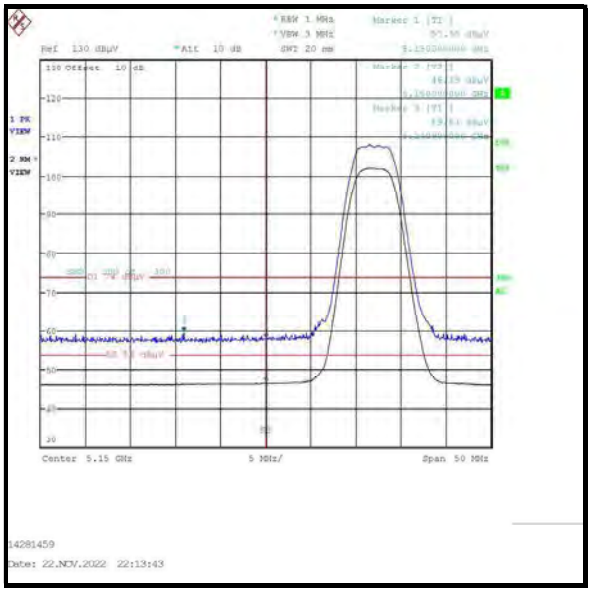
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	58.0	74.0	16.0	Complied
5450.540	59.0	74.0	15.0	Complied

Results: Lower Band Edge / Average

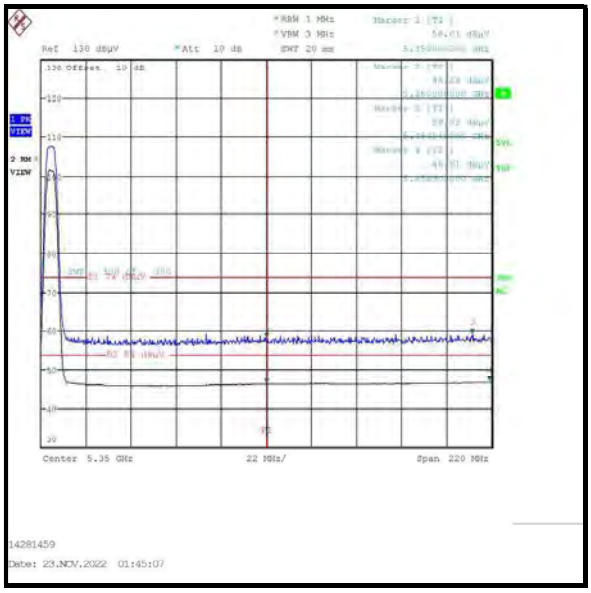
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5150	46.4	54.0	7.6	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	46.2	54.0	7.8	Complied
5458.900	46.8	54.0	7.2	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

Results: Static / 8DH5 / SISO / Core 0 / ePA

Results: Lower Band Edge / Peak

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5149.550	60.5	74.0	13.5	Complied
5150	59.7	74.0	14.3	Complied

Results: Upper Band Edge / Peak

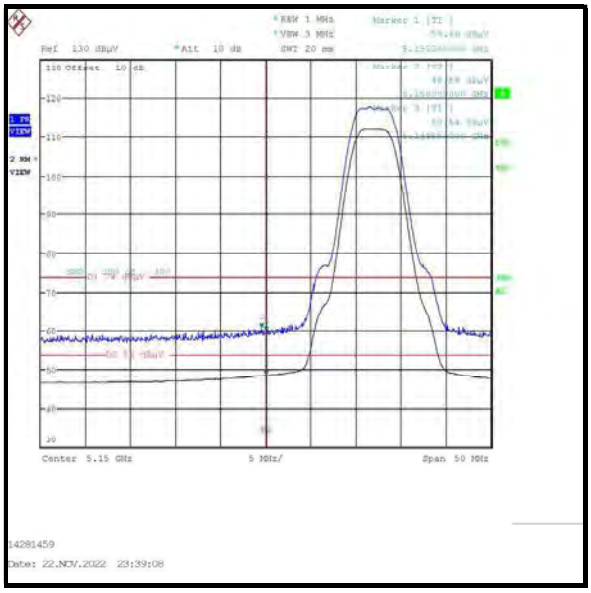
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	57.8	74.0	16.2	Complied
5362.760	59.5	74.0	14.5	Complied

Results: Lower Band Edge / Average

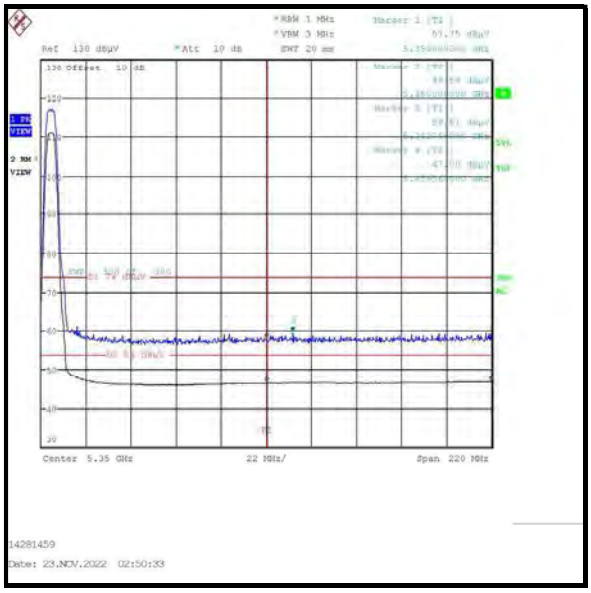
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5150	48.6	54.0	5.4	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	46.5	54.0	7.5	Complied
5459.560	47.0	54.0	7.0	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

Results: Static / DH5 / SISO / Core 1 / iPA

Results: Lower Band Edge / Peak

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5132.350	59.5	74.0	14.5	Complied
5150	57.2	74.0	16.8	Complied

Results: Upper Band Edge / Peak

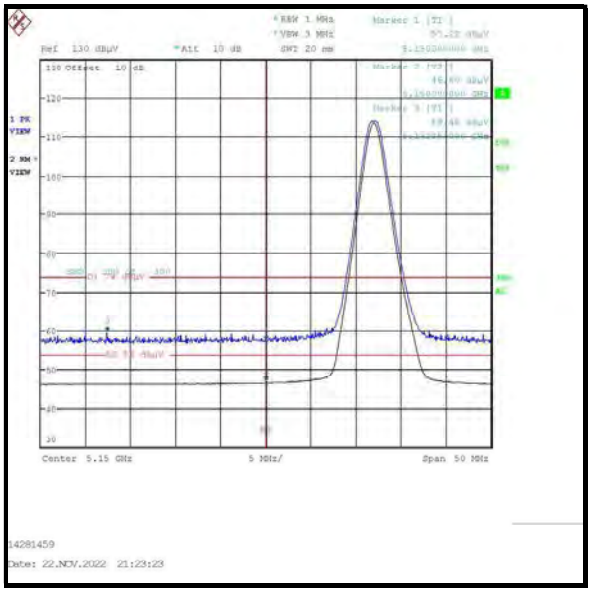
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	56.6	74.0	17.4	Complied
5454.500	58.8	74.0	15.2	Complied

Results: Lower Band Edge / Average

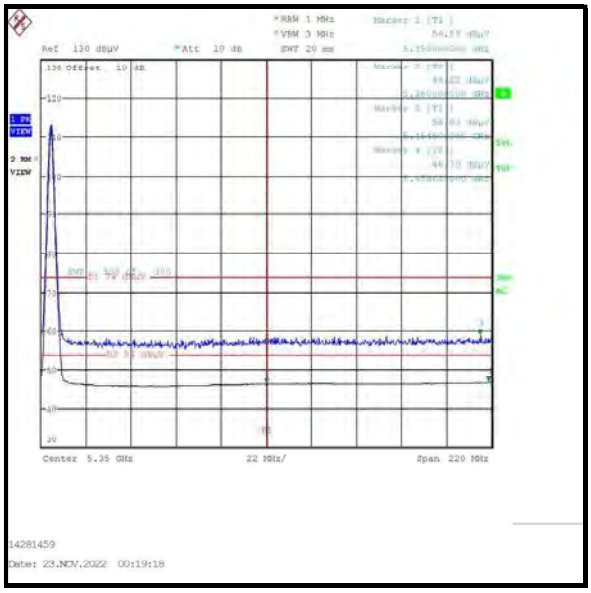
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5150	46.6	54.0	7.4	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	46.2	54.0	7.8	Complied
5458.680	46.7	54.0	7.3	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

Results: Static / 4DH5 / SISO / Core 1 / iPA

Results: Lower Band Edge / Peak

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5139.100	58.8	74.0	15.2	Complied
5150	57.5	74.0	16.5	Complied

Results: Upper Band Edge / Peak

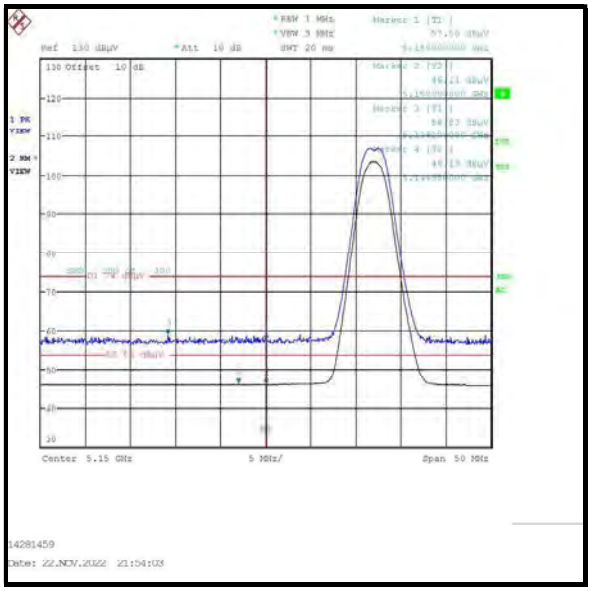
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	57.7	74.0	16.3	Complied
5447.240	59.1	74.0	14.9	Complied

Results: Lower Band Edge / Average

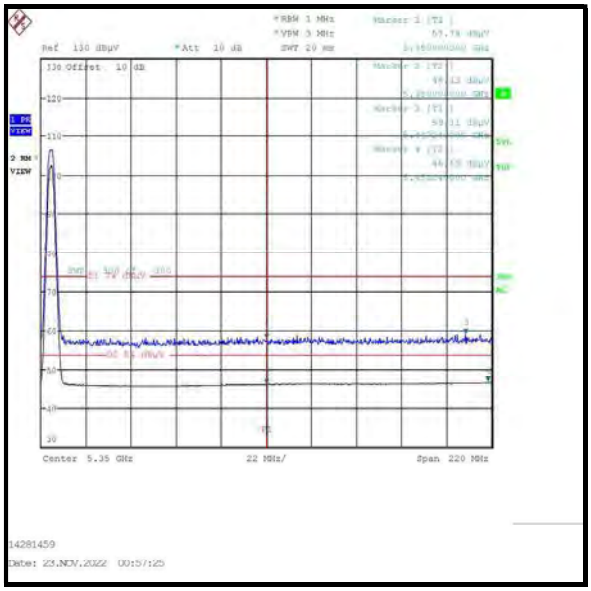
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5146.950	46.2	54.0	7.8	Complied
5150	46.1	54.0	7.9	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	46.1	54.0	7.9	Complied
5458.240	46.7	54.0	7.3	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

Results: Static / 4DH5 / SISO / Core 1 / ePA

Results: Lower Band Edge / Peak

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5127.650	59.1	74.0	14.9	Complied
5150	58.7	74.0	15.3	Complied

Results: Upper Band Edge / Peak

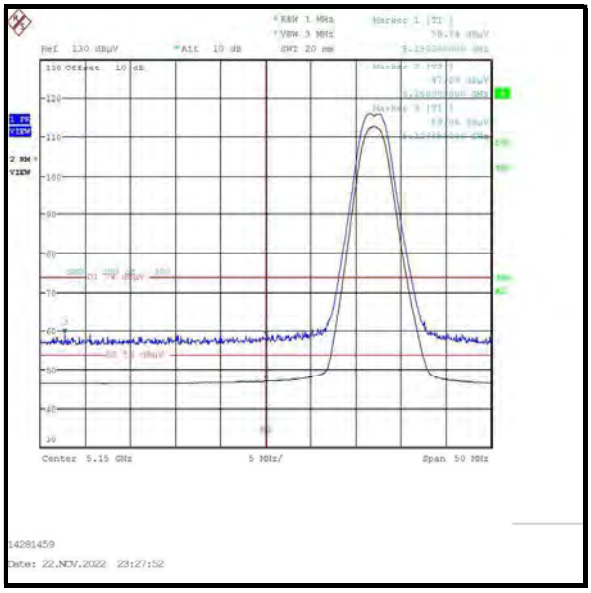
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	57.5	74.0	16.5	Complied
5358.360	59.5	74.0	14.5	Complied

Results: Lower Band Edge / Average

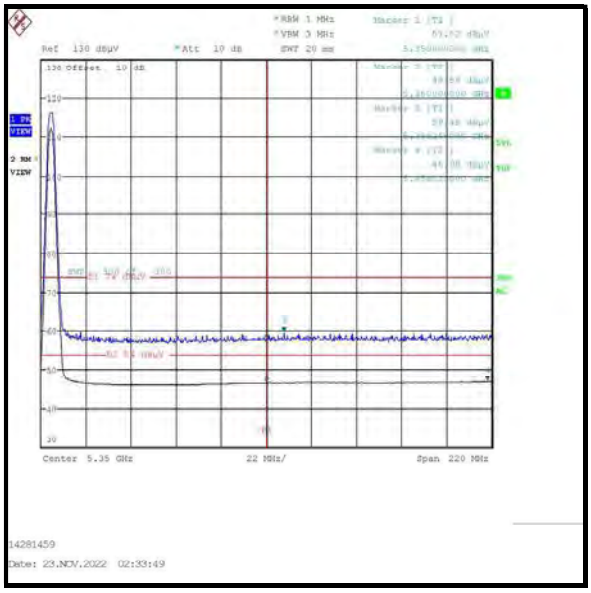
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5150	47.1	54.0	6.9	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	46.6	54.0	7.4	Complied
5458.020	47.0	54.0	7.0	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

Results: Static / 8DH5 / SISO / Core 1 / iPA

Results: Lower Band Edge / Peak

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5142.800	59.1	74.0	14.9	Complied
5150	57.7	74.0	16.3	Complied

Results: Upper Band Edge / Peak

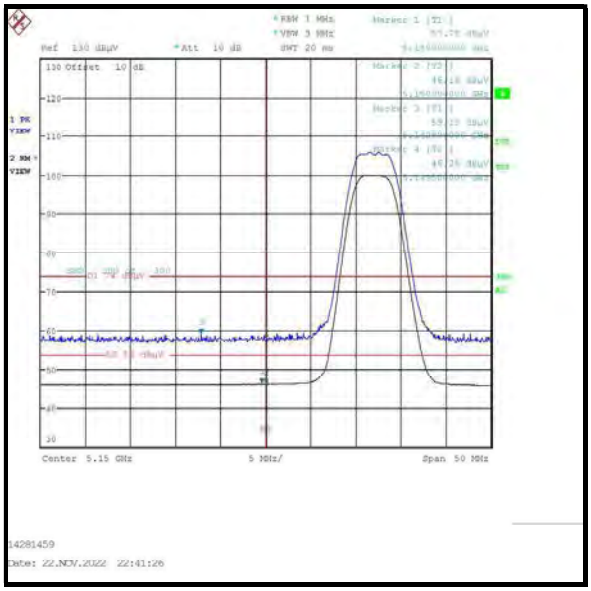
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	57.4	74.0	16.6	Complied
5441.740	59.3	74.0	14.7	Complied

Results: Lower Band Edge / Average

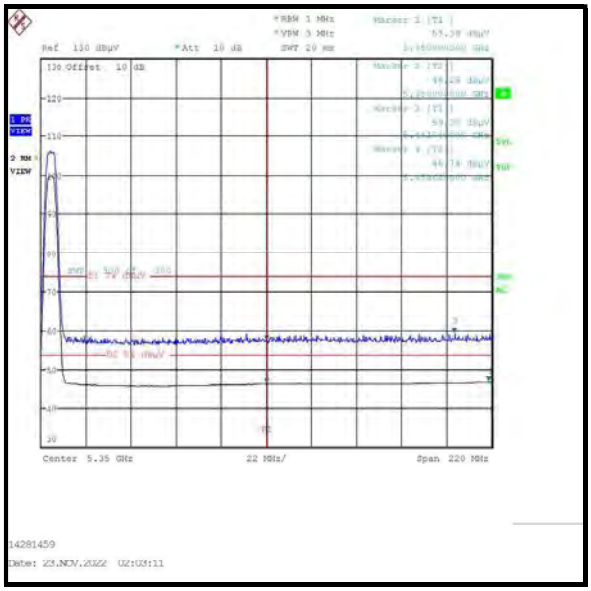
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5149.500	46.3	54.0	7.7	Complied
5150	46.2	54.0	7.8	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	46.3	54.0	7.7	Complied
5458.680	46.7	54.0	7.3	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

Results: Static / 8DH5 / SISO / Core 1 / ePA

Results: Lower Band Edge / Peak

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5146.700	60.1	74.0	13.9	Complied
5150	58.8	74.0	15.2	Complied

Results: Upper Band Edge / Peak

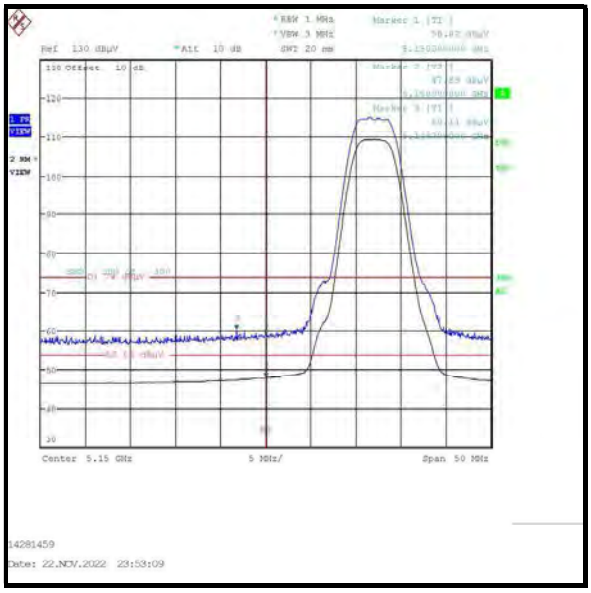
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	57.7	74.0	16.3	Complied
5369.360	59.3	74.0	14.7	Complied

Results: Lower Band Edge / Average

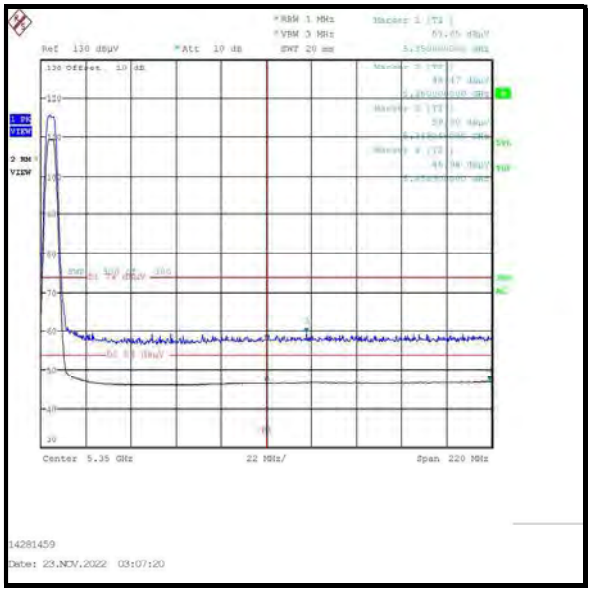
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5150	47.9	54.0	6.1	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	46.5	54.0	7.5	Complied
5458.900	46.9	54.0	7.1	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

Results: Static / DH5 / Beamforming / Core 0 + Core 1 / iPA

Results: Lower Band Edge / Peak

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5131.400	60.0	74.0	14.0	Complied
5150	59.3	74.0	14.7	Complied

Results: Upper Band Edge / Peak

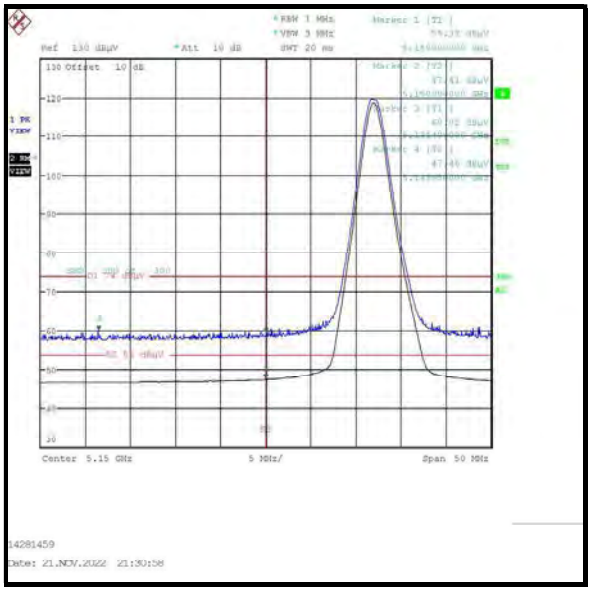
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	57.6	74.0	16.4	Complied
5406.320	60.3	74.0	13.7	Complied

Results: Lower Band Edge / Average

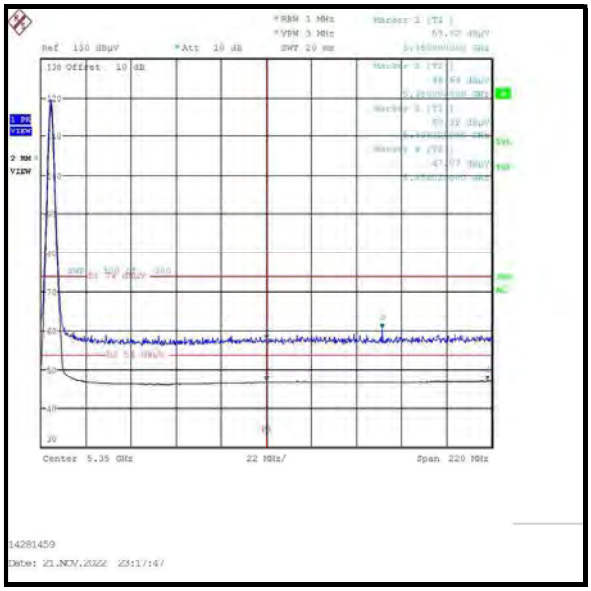
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5149.950	47.5	54.0	6.5	Complied
5150	47.4	54.0	6.6	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	46.6	54.0	7.4	Complied
5458.020	47.1	54.0	6.9	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

Results: Static / 4DH5 / Beamforming / Core 0 + Core 1 / iPA

Results: Lower Band Edge / Peak

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5149.600	59.4	74.0	14.6	Complied
5150	57.7	74.0	16.3	Complied

Results: Upper Band Edge / Peak

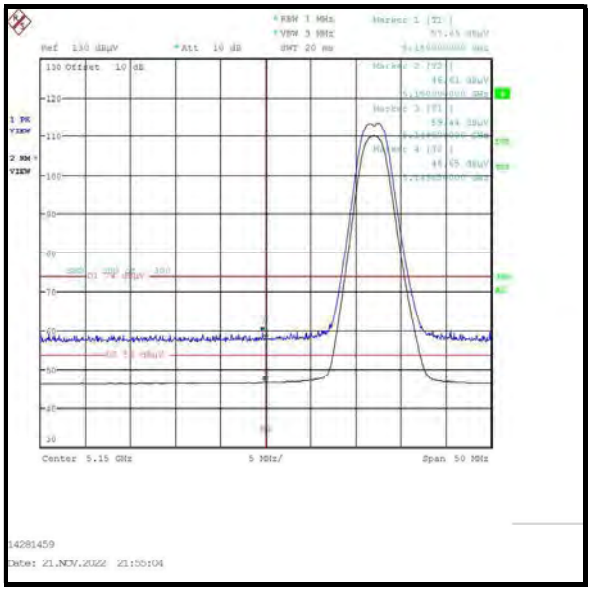
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	57.2	74.0	16.8	Complied
5444.820	59.3	74.0	14.7	Complied

Results: Lower Band Edge / Average

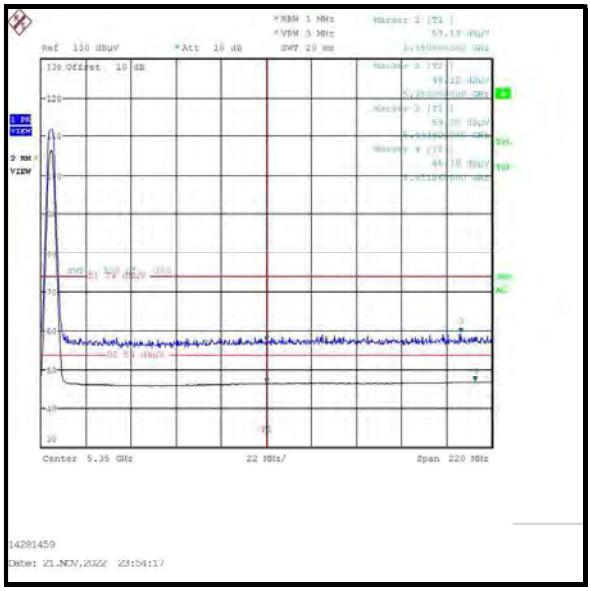
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5149.850	46.7	54.0	7.3	Complied
5150	46.6	54.0	7.4	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	46.3	54.0	7.7	Complied
5451.860	46.8	54.0	7.2	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

Results: Static / 4DH5 / Beamforming / Core 0 + Core 1 / ePA

Results: Lower Band Edge / Peak

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5149.450	62.0	74.0	12.0	Complied
5150	60.5	74.0	13.5	Complied

Results: Upper Band Edge / Peak

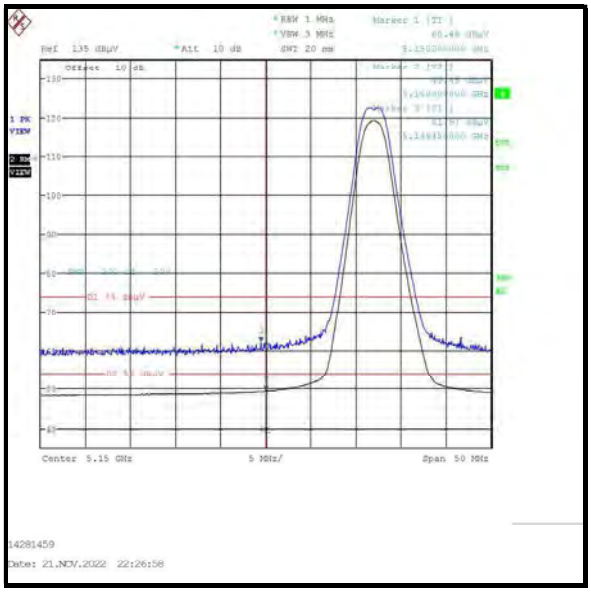
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	59.6	74.0	14.4	Complied
5450.760	61.2	74.0	12.8	Complied

Results: Lower Band Edge / Average

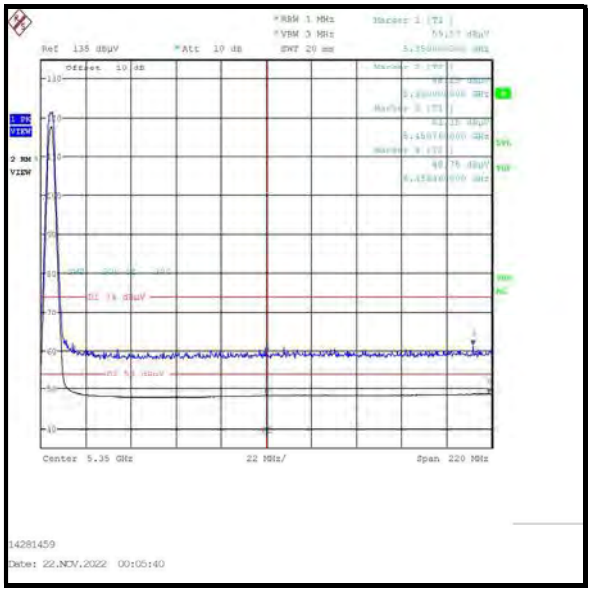
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5150	49.5	54.0	4.5	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	48.3	54.0	5.7	Complied
5458.460	48.8	54.0	5.2	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

Results: Static / 8DH5 / Beamforming / Core 0 + Core 1 / iPA

Results: Lower Band Edge / Peak

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5144.900	59.8	74.0	14.2	Complied
5150	58.4	74.0	15.6	Complied

Results: Upper Band Edge / Peak

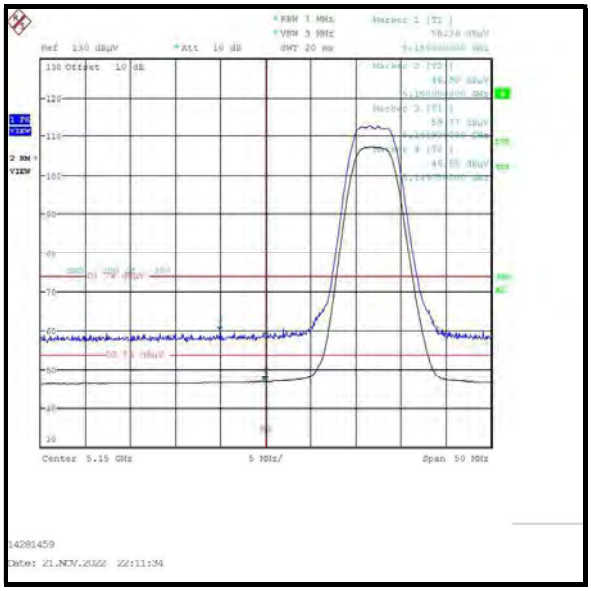
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	58.3	74.0	15.7	Complied
5392.020	59.0	74.0	15.0	Complied

Results: Lower Band Edge / Average

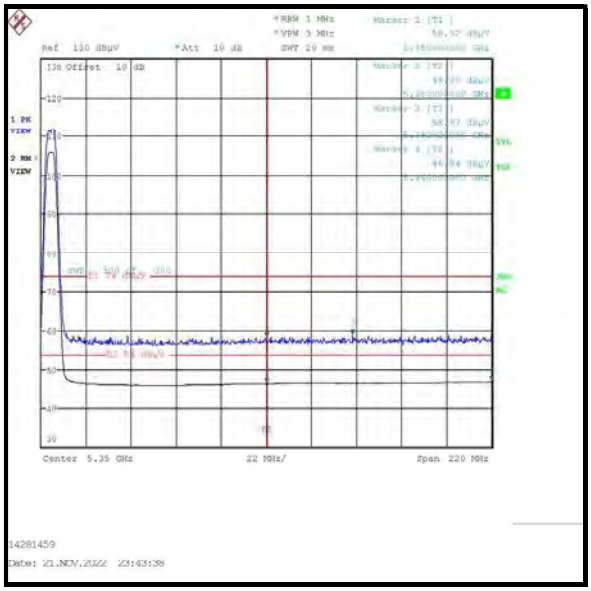
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5149.750	47.0	54.0	7.0	Complied
5150	46.9	54.0	7.1	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	46.3	54.0	7.7	Complied
5460.000	46.8	54.0	7.2	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

Results: Static / 8DH5 / Beamforming / Core 0 + Core 1 / ePA

Results: Lower Band Edge / Peak

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5148.000	62.6	74.0	11.4	Complied
5150	62.0	74.0	12.0	Complied

Results: Upper Band Edge / Peak

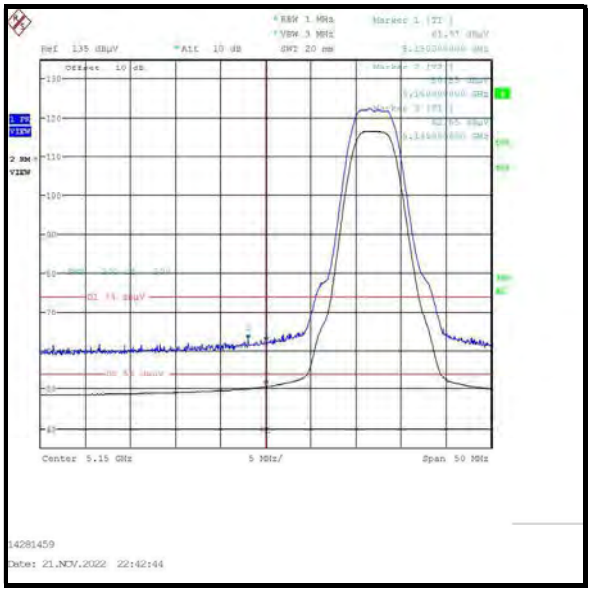
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	59.6	74.0	14.4	Complied
5447.900	61.2	74.0	12.8	Complied

Results: Lower Band Edge / Average

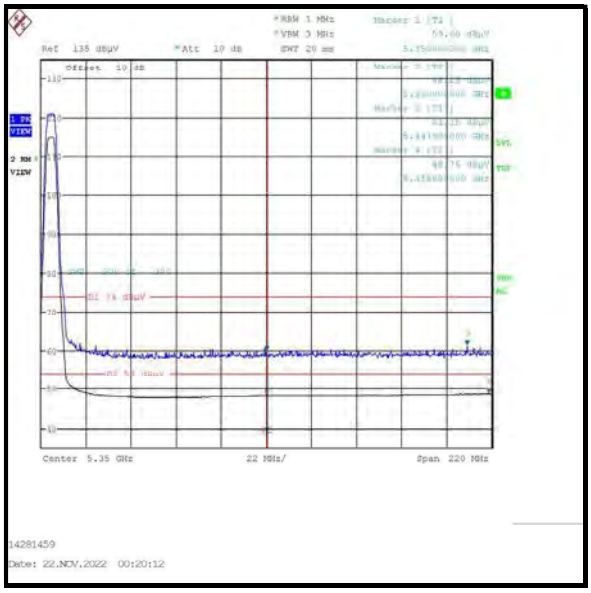
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5150	50.6	54.0	3.4	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5350	48.3	54.0	5.7	Complied
5458.680	48.8	54.0	5.2	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band)

5.3.2 5.725-5.85 GHz band

Test Summary:

Test Engineers:	Andrew Harding & John Ferdinand	**Test Dates:**	22 November 2022 & 23 November 2022
Test Sample Serial Number:	FQP20QF2CT		

FCC Reference:	Parts 15.407(b)(4)(i),(10), 15.205 & 15.209(a)
Test Method Used:	ANSI C63.10 Section 6.10 & KDB 789033 II.G.

Environmental Conditions:

Temperature (°C):	22 to 23
Relative Humidity (%):	38 to 40

Note(s):

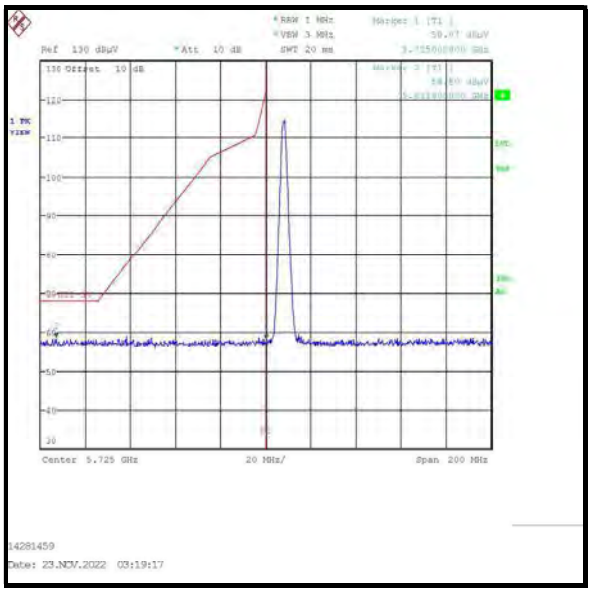
1. Lower band edge measurements were performed with the EUT transmitting on the bottom channel. Upper band edge measurements were performed with the EUT transmitting on the top channel.
2. In addition, the lower and upper band edges were performed with the EUT configured in hopping mode. It was set to hop across the 79 channels closest to the applicable band edge. These plots are archived on the UL IT server and available for inspection if required.
3. For completeness, results are also shown as EIRP in dBm and also as field strength in dBµV/m. Measured field strength was converted to EIRP in accordance with KDB 789033 G.2.c)(iii) using a conversion factor of 95.2.

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)

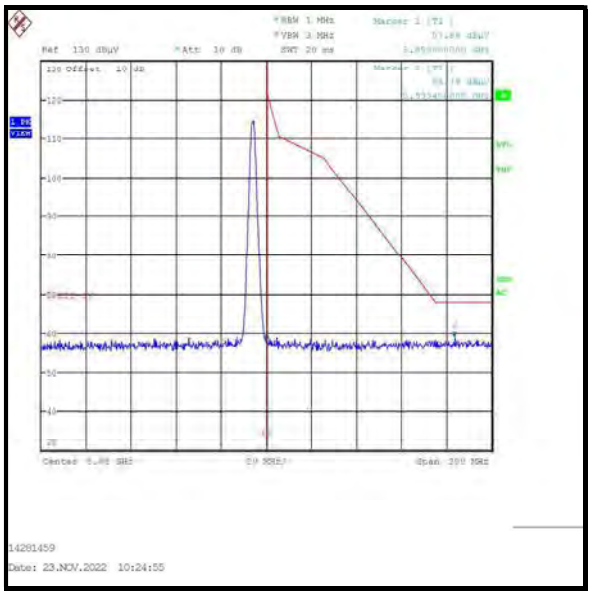
Results: Static / DH5 / SISO / Core 0 / iPA

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5631.800	-36.7	-27.0	9.7	Complied
5725	-37.1	27.0	64.1	Complied
5850	-37.3	27.0	64.3	Complied
5933.400	-36.4	-27.0	9.4	Complied

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5631.800	58.5	68.2	9.7	Complied
5725	58.1	122.2	64.1	Complied
5850	57.9	122.2	64.3	Complied
5933.400	58.8	68.2	9.4	Complied



Lower Band Edge



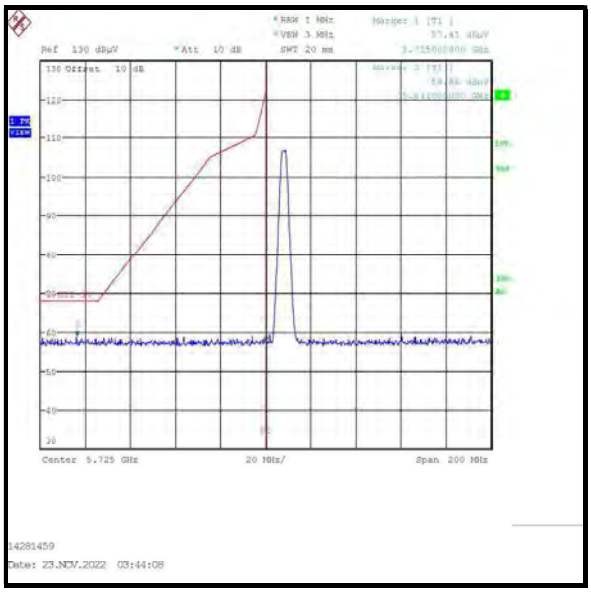
Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)

Results: Static / 4DH5 / SISO / Core 0 / iPA

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5641.000	-36.3	-27.0	9.3	Complied
5725	-37.8	27.0	64.8	Complied
5850	-37.9	27.0	64.9	Complied
5943.800	-36.4	-27.0	9.4	Complied

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5641.000	58.9	68.2	9.3	Complied
5725	57.4	122.2	64.8	Complied
5850	57.3	122.2	64.9	Complied
5943.800	58.8	68.2	9.4	Complied



Lower Band Edge

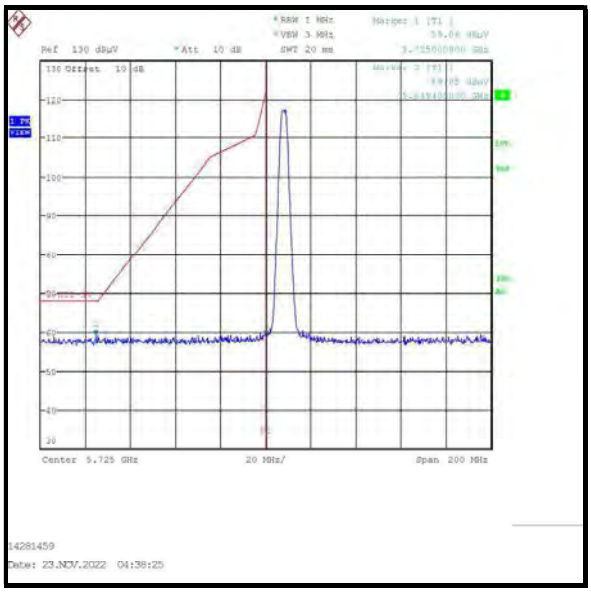
Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)

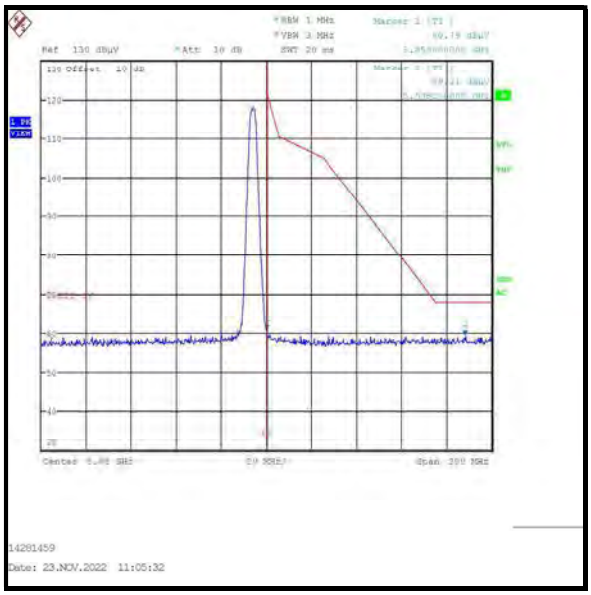
Results: Static / 4DH5 / SISO / Core 0 / ePA

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5649.400	-36.1	-27.0	9.1	Complied
5725	-36.1	27.0	63.1	Complied
5850	-34.4	27.0	61.4	Complied
5938.200	-35.9	-27.0	8.9	Complied

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5649.400	59.1	68.2	9.1	Complied
5725	59.1	122.2	63.1	Complied
5850	60.8	122.2	61.4	Complied
5938.200	59.3	68.2	8.9	Complied



Lower Band Edge



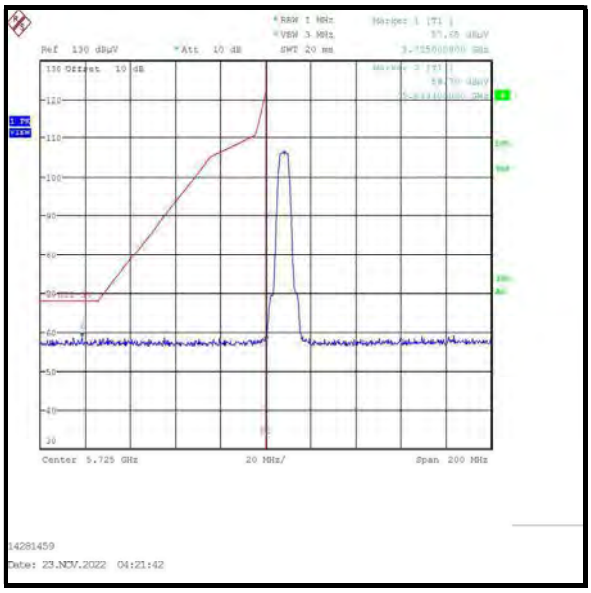
Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)

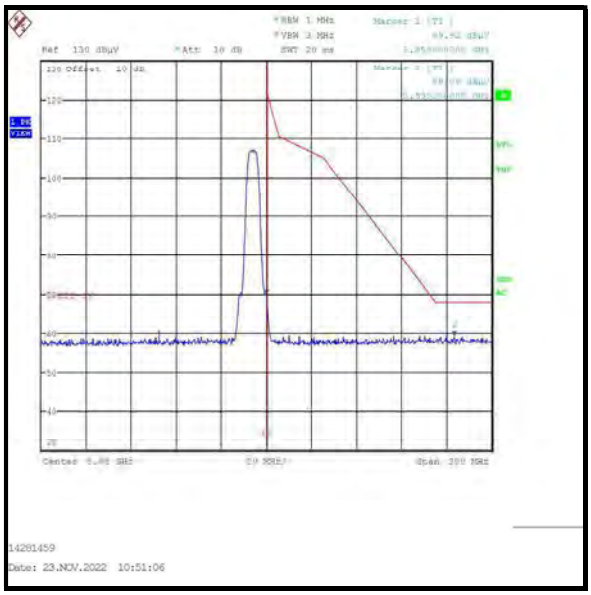
Results: Static / 8DH5 / SISO / Core 0 / iPA

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5643.400	-36.5	-27.0	9.5	Complied
5725	-37.5	27.0	64.5	Complied
5850	-25.3	27.0	52.3	Complied
5933.200	-36.1	-27.0	9.1	Complied

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5643.400	58.7	68.2	9.5	Complied
5725	57.7	122.2	64.5	Complied
5850	69.9	122.2	52.3	Complied
5933.200	59.1	68.2	9.1	Complied



Lower Band Edge



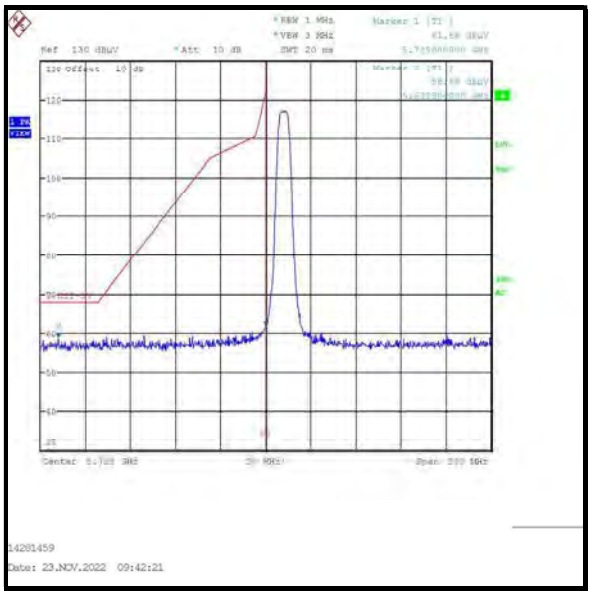
Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)

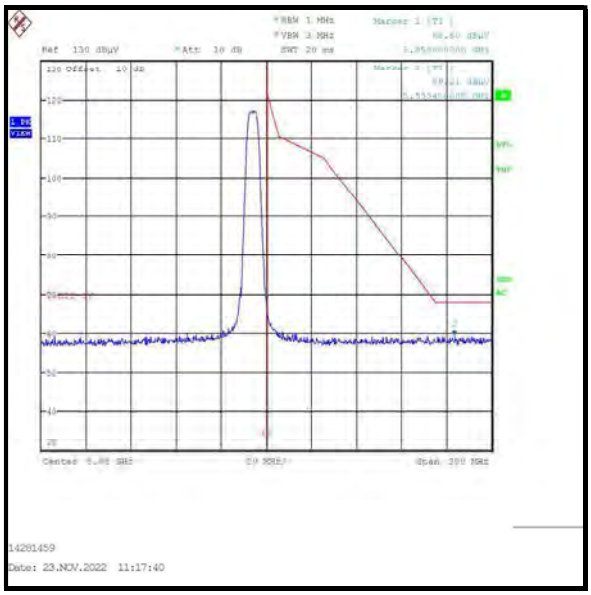
Results: Static / 8DH5 / SISO / Core 0 / ePA

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5632.800	-36.5	-27.0	9.5	Complied
5725	-33.5	27.0	60.5	Complied
5850	-26.4	27.0	53.4	Complied
5933.400	-36.0	-27.0	9.0	Complied

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5632.800	58.7	68.2	9.5	Complied
5725	61.7	122.2	60.5	Complied
5850	68.8	122.2	53.4	Complied
5933.400	59.2	68.2	9.0	Complied



Lower Band Edge



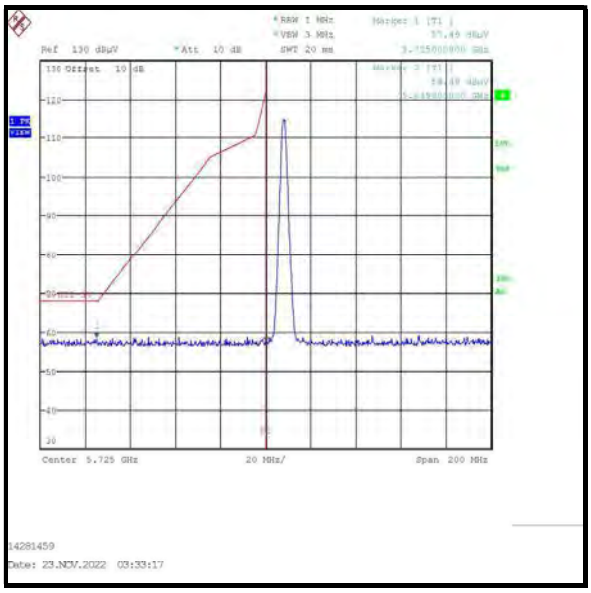
Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)

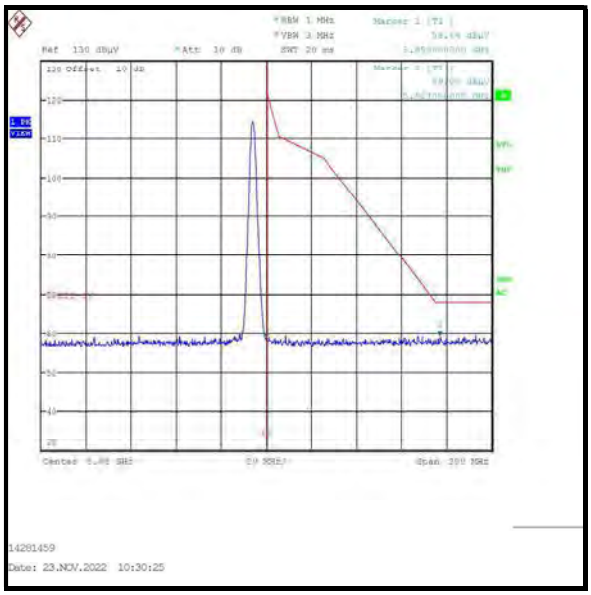
Results: Static / DH5 / SISO / Core 1 / iPA

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5649.800	-36.7	-27.0	9.7	Complied
5725	-37.7	27.0	64.7	Complied
5850	-36.5	27.0	63.5	Complied
5927.000	-36.1	-27.0	9.1	Complied

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5649.800	58.5	68.2	9.7	Complied
5725	57.5	122.2	64.7	Complied
5850	58.7	122.2	63.5	Complied
5927.000	59.1	68.2	9.1	Complied



Lower Band Edge



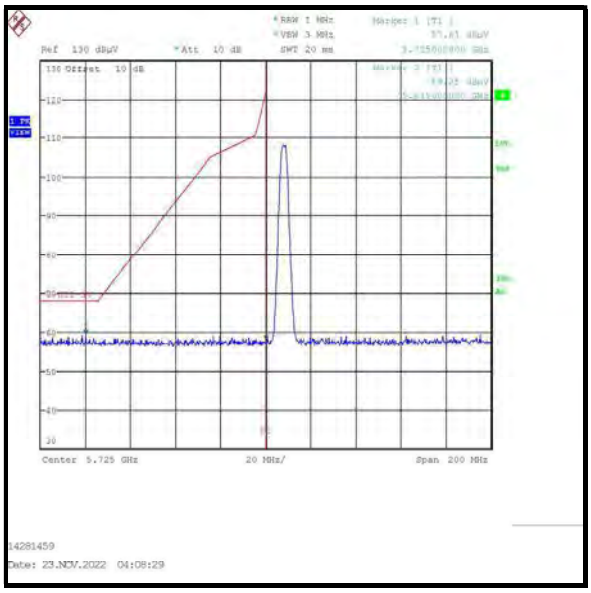
Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)

Results: Static / 4DH5 / SISO / Core 1 / iPA

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5645.000	-35.9	-27.0	8.9	Complied
5725	-37.4	27.0	64.4	Complied
5850	-36.6	27.0	63.6	Complied
5927.200	-35.9	-27.0	8.9	Complied

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5645.000	59.3	68.2	8.9	Complied
5725	57.8	122.2	64.4	Complied
5850	58.6	122.2	63.6	Complied
5927.200	59.3	68.2	8.9	Complied



Lower Band Edge

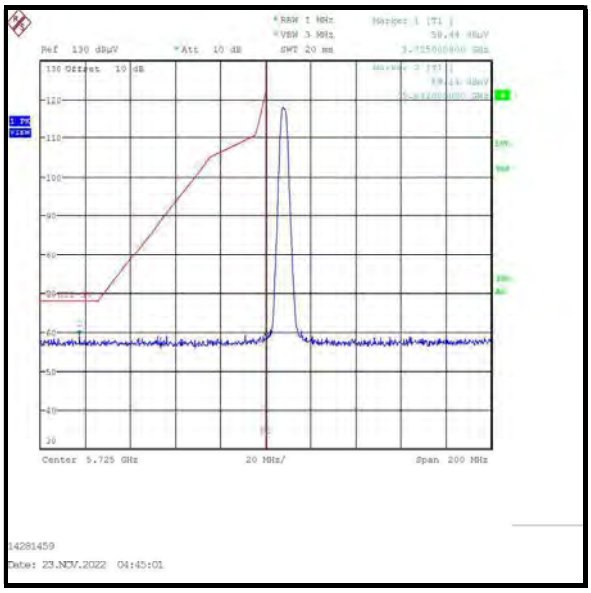
Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)

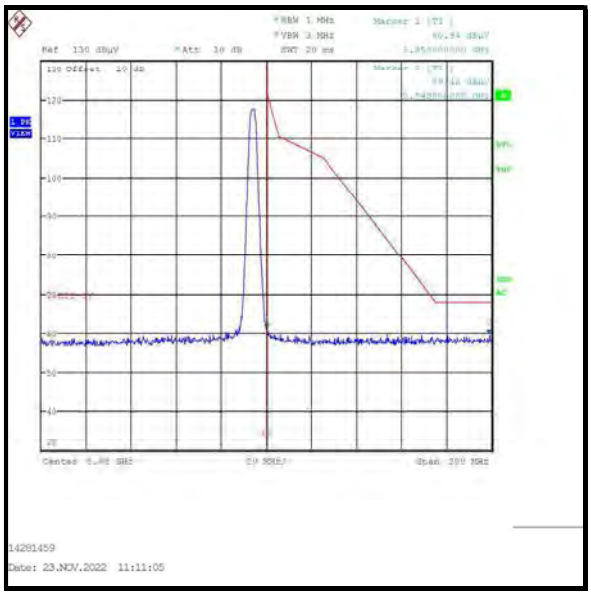
Results: Static / 4DH5 / SISO / Core 1 / ePA

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5642.000	-36.1	-27.0	9.1	Complied
5725	-36.8	27.0	63.8	Complied
5850	-34.3	27.0	61.3	Complied
5948.800	-35.8	-27.0	8.8	Complied

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5642.000	59.1	68.2	9.1	Complied
5725	58.4	122.2	63.8	Complied
5850	60.9	122.2	61.3	Complied
5948.800	59.4	68.2	8.8	Complied



Lower Band Edge



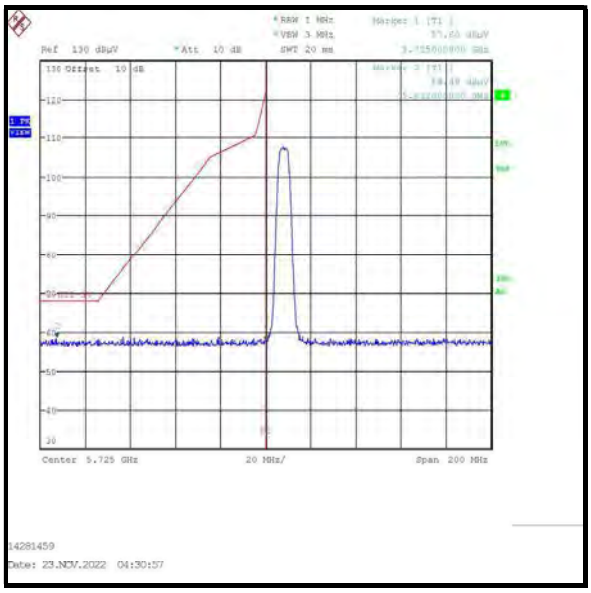
Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)

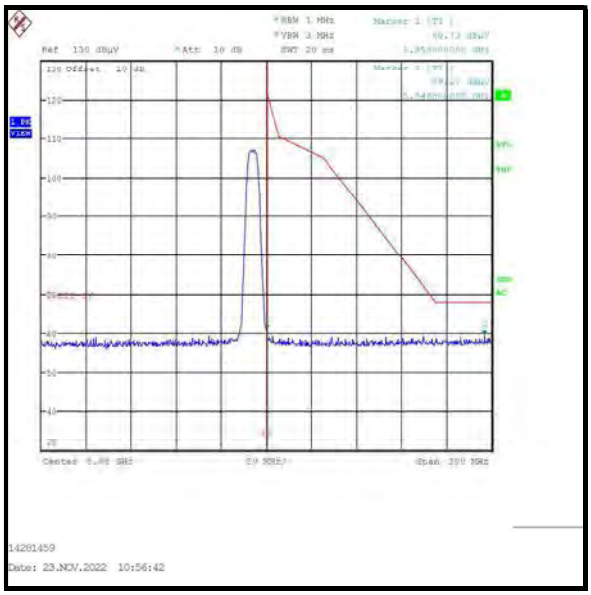
Results: Static / 8DH5 / SISO / Core 1 / iPA

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5632.000	-36.7	-27.0	9.7	Complied
5725	-37.6	27.0	64.6	Complied
5850	-34.5	27.0	61.5	Complied
5946.800	-35.9	-27.0	8.9	Complied

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5632.000	58.5	68.2	9.7	Complied
5725	57.6	122.2	64.6	Complied
5850	60.7	122.2	61.5	Complied
5946.800	59.3	68.2	8.9	Complied



Lower Band Edge



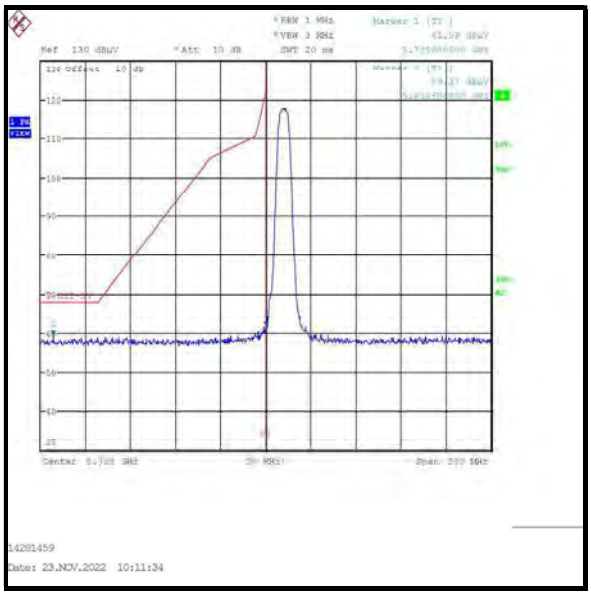
Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)

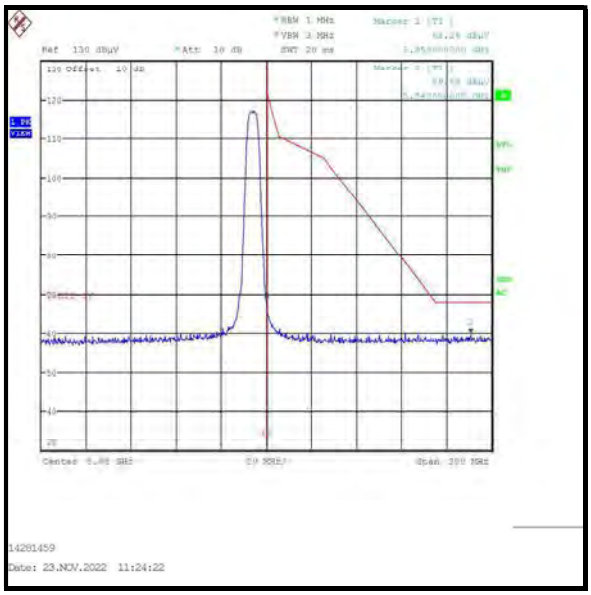
Results: Static / 8DH5 / SISO / Core 1 / ePA

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5630.600	-35.8	-27.0	8.8	Complied
5725	-33.6	27.0	60.6	Complied
5850	-26.9	27.0	53.9	Complied
5940.600	-35.5	-27.0	8.5	Complied

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5630.600	59.4	68.2	8.8	Complied
5725	61.6	122.2	60.6	Complied
5850	68.3	122.2	53.9	Complied
5940.600	59.7	68.2	8.5	Complied



Lower Band Edge



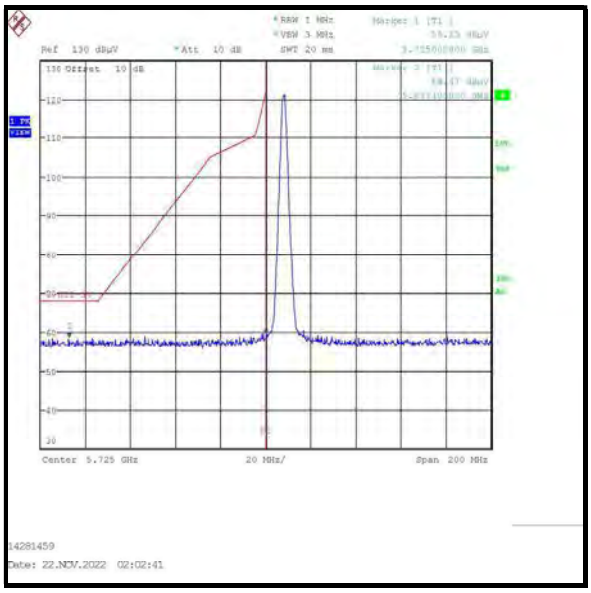
Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)

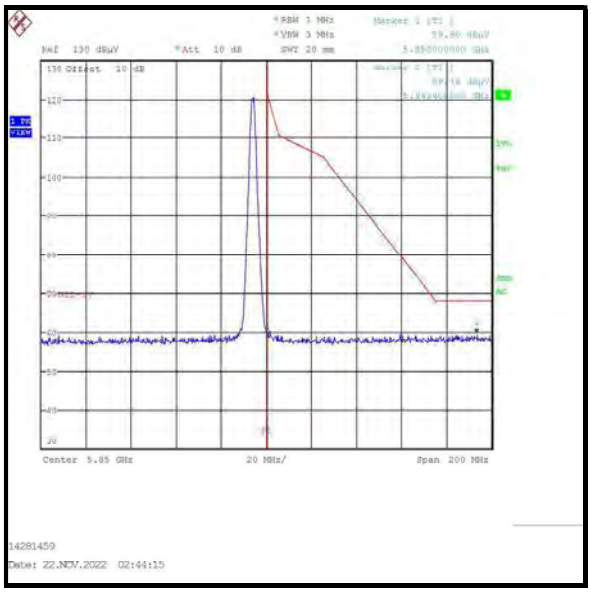
Results: Static / DH5 / Beamforming / Core 0 + Core 1 / iPA

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5637.400	-36.7	-27.0	9.7	Complied
5725	-36.0	27.0	63.0	Complied
5850	-35.3	27.0	62.3	Complied
5943.400	-35.8	-27.0	8.8	Complied

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5637.400	58.5	68.2	9.7	Complied
5725	59.2	122.2	63.0	Complied
5850	59.9	122.2	62.3	Complied
5943.400	59.4	68.2	8.8	Complied



Lower Band Edge



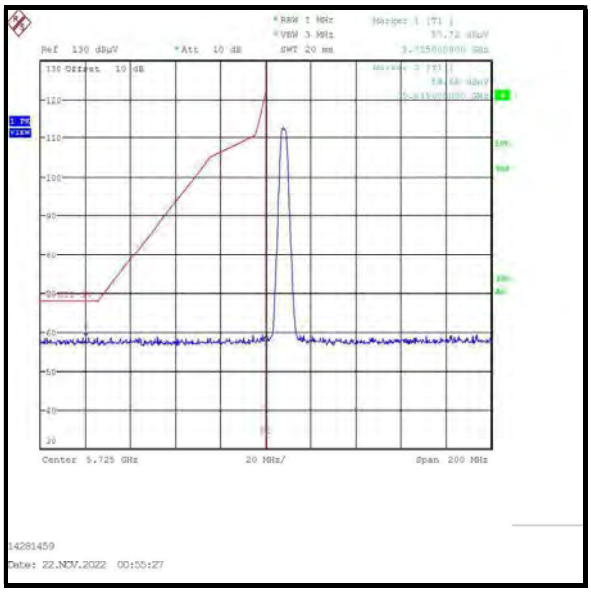
Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)

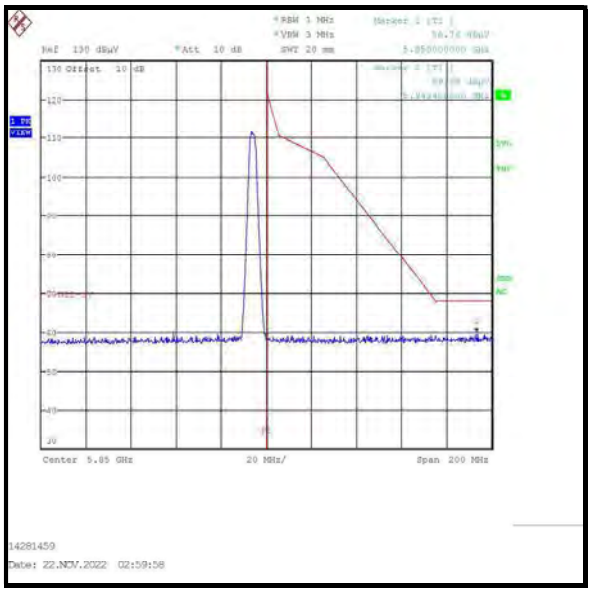
Results: Static / 4DH5 / Beamforming / Core 0 + Core 1 / iPA

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5645.000	-36.5	-27.0	9.5	Complied
5725	-37.5	27.0	64.5	Complied
5850	-36.4	27.0	63.4	Complied
5943.400	-35.5	-27.0	8.5	Complied

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5645.000	58.7	68.2	9.5	Complied
5725	57.7	122.2	64.5	Complied
5850	58.8	122.2	63.4	Complied
5943.400	59.7	68.2	8.5	Complied



Lower Band Edge



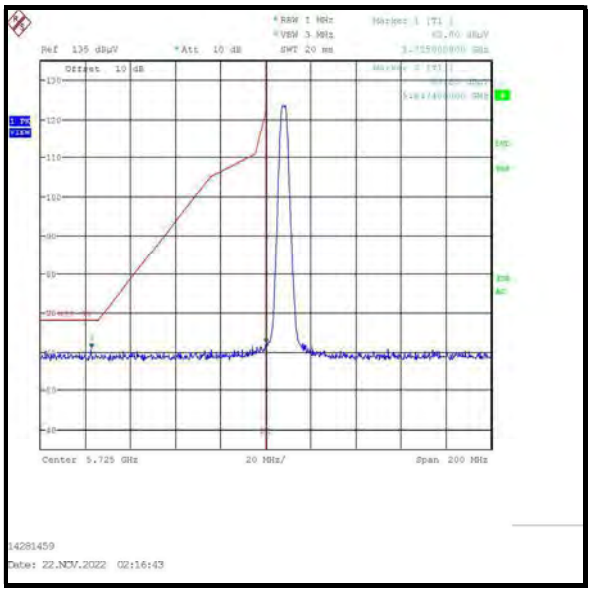
Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)

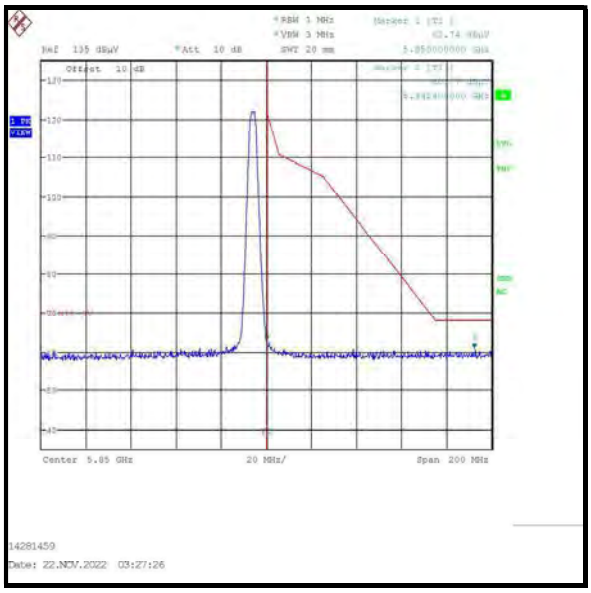
Results: Static / 4DH5 / Beamforming / Core 0 + Core 1 / ePA

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5647.400	-34.4	-27.0	7.4	Complied
5725	-33.2	27.0	60.2	Complied
5850	-32.5	27.0	59.5	Complied
5942.400	-34.4	-27.0	7.4	Complied

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5647.400	60.8	68.2	7.4	Complied
5725	62.0	122.2	60.2	Complied
5850	62.7	122.2	59.5	Complied
5942.400	60.8	68.2	7.4	Complied



Lower Band Edge



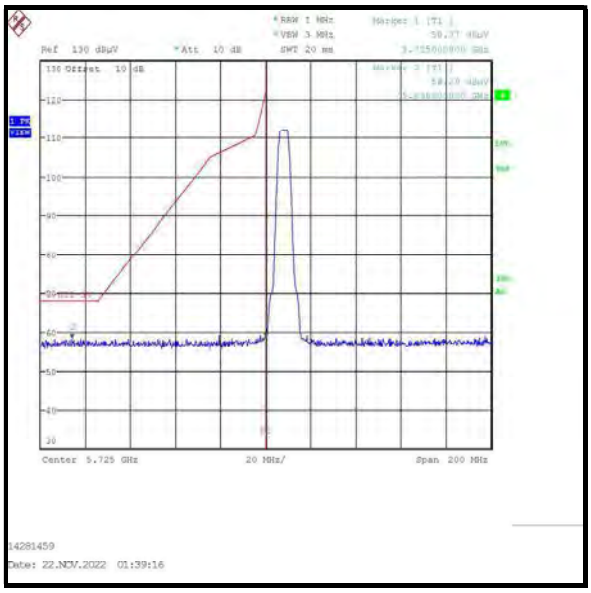
Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)

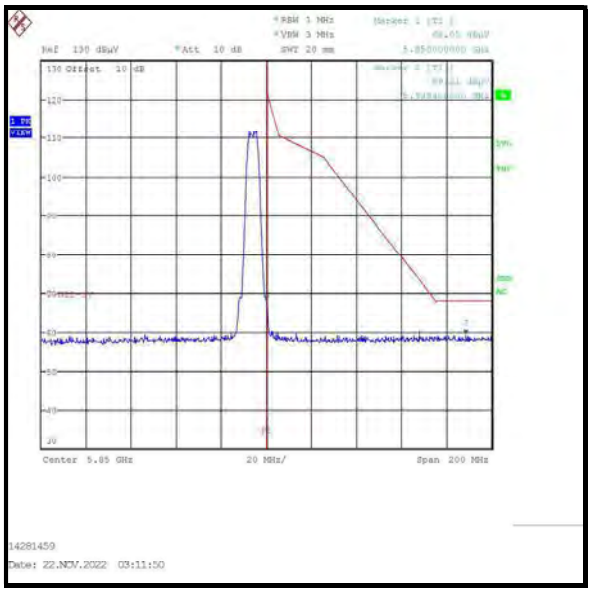
Results: Static / 8DH5 / Beamforming / Core 0 + Core 1 / iPA

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5638.800	-36.9	-27.0	9.9	Complied
5725	-36.8	27.0	63.8	Complied
5850	-27.1	27.0	54.1	Complied
5938.400	-36.0	-27.0	9.0	Complied

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5638.800	58.3	68.2	9.9	Complied
5725	58.4	122.2	63.8	Complied
5850	68.1	122.2	54.1	Complied
5938.400	59.2	68.2	9.0	Complied



Lower Band Edge



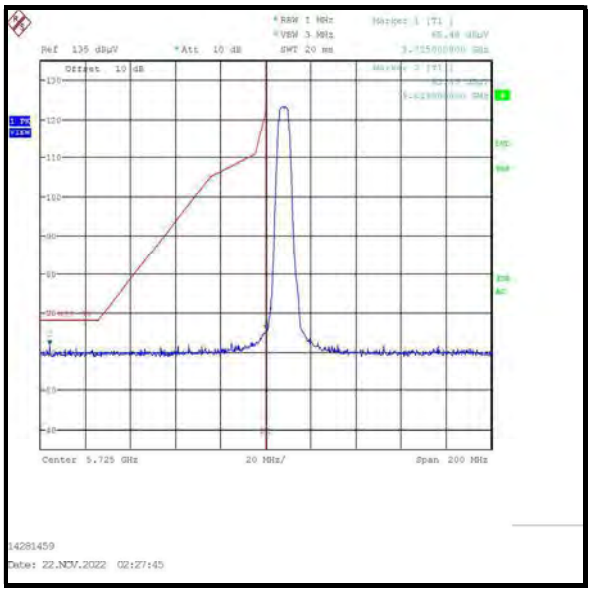
Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)

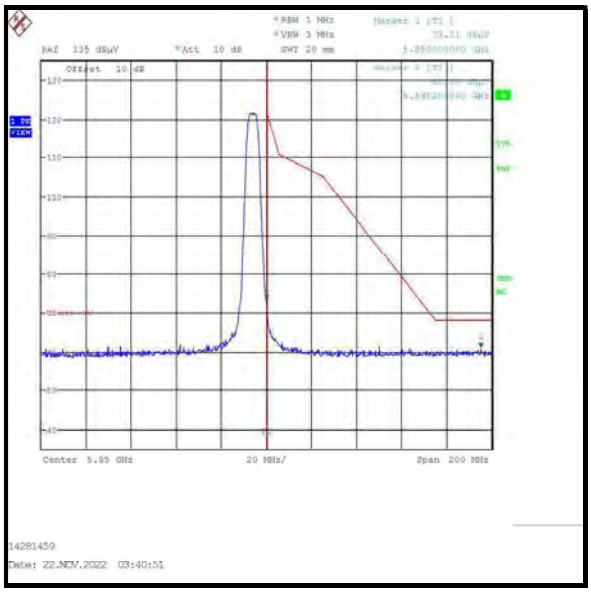
Results: Static / 8DH5 / Beamforming / Core 0 + Core 1 / ePA

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5629.000	-33.7	-27.0	6.7	Complied
5725	-29.7	27.0	56.7	Complied
5850	-22.0	27.0	49.0	Complied
5945.200	-34.3	-27.0	7.3	Complied

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
5629.000	61.5	68.2	6.7	Complied
5725	65.5	122.2	56.7	Complied
5850	73.2	122.2	49.0	Complied
5945.200	60.9	68.2	7.3	Complied



Lower Band Edge



Upper Band Edge

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