

FCC 15.247 (d) / RSS-247 5.5. Band-edge emissions compliance (Transmitter)

SPECIFICATION:

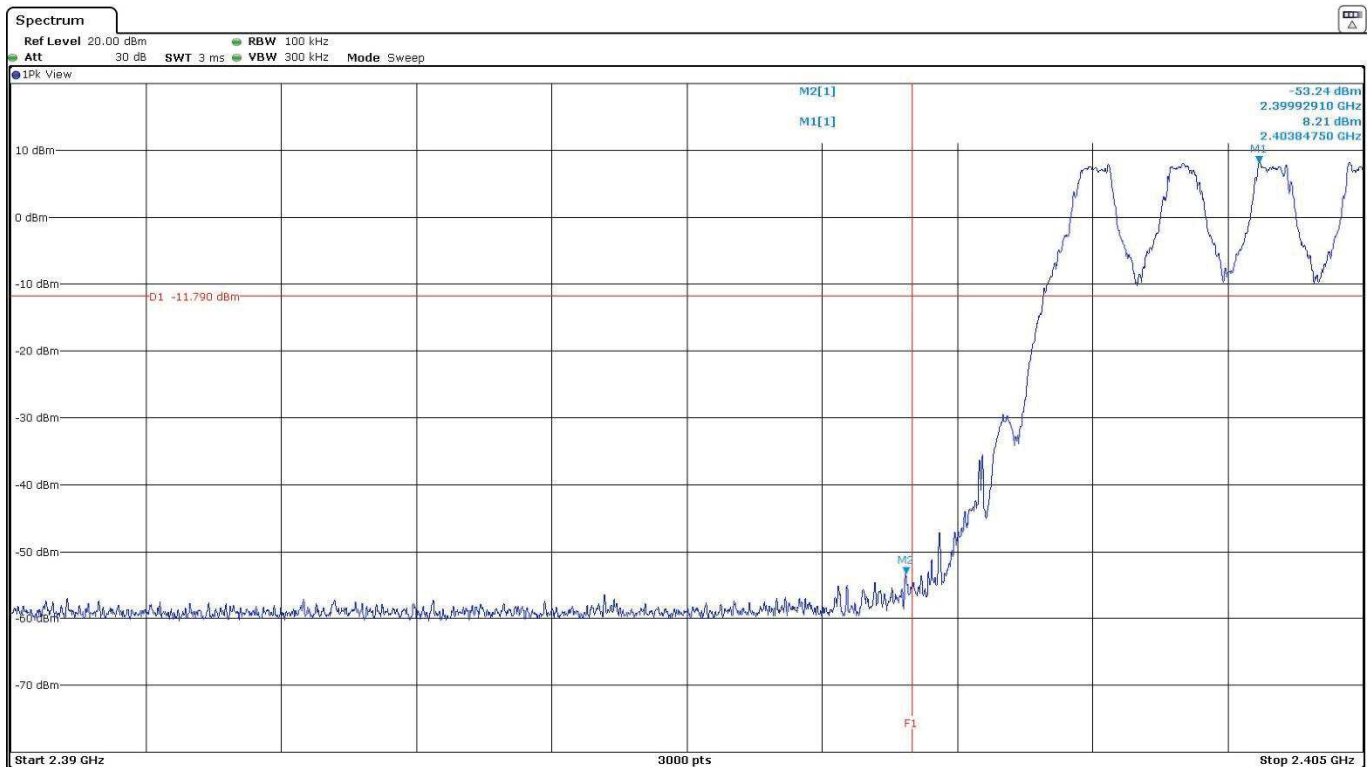
Emissions outside the frequency band in which the intentional radiator is operating shall be at least 20 dB below the highest level of the desired power.

RESULTS:

Radiated measurements were used to show compliance with the limits in the restricted bands 2.31-2.39 GHz and 2.4835-2.5 GHz.

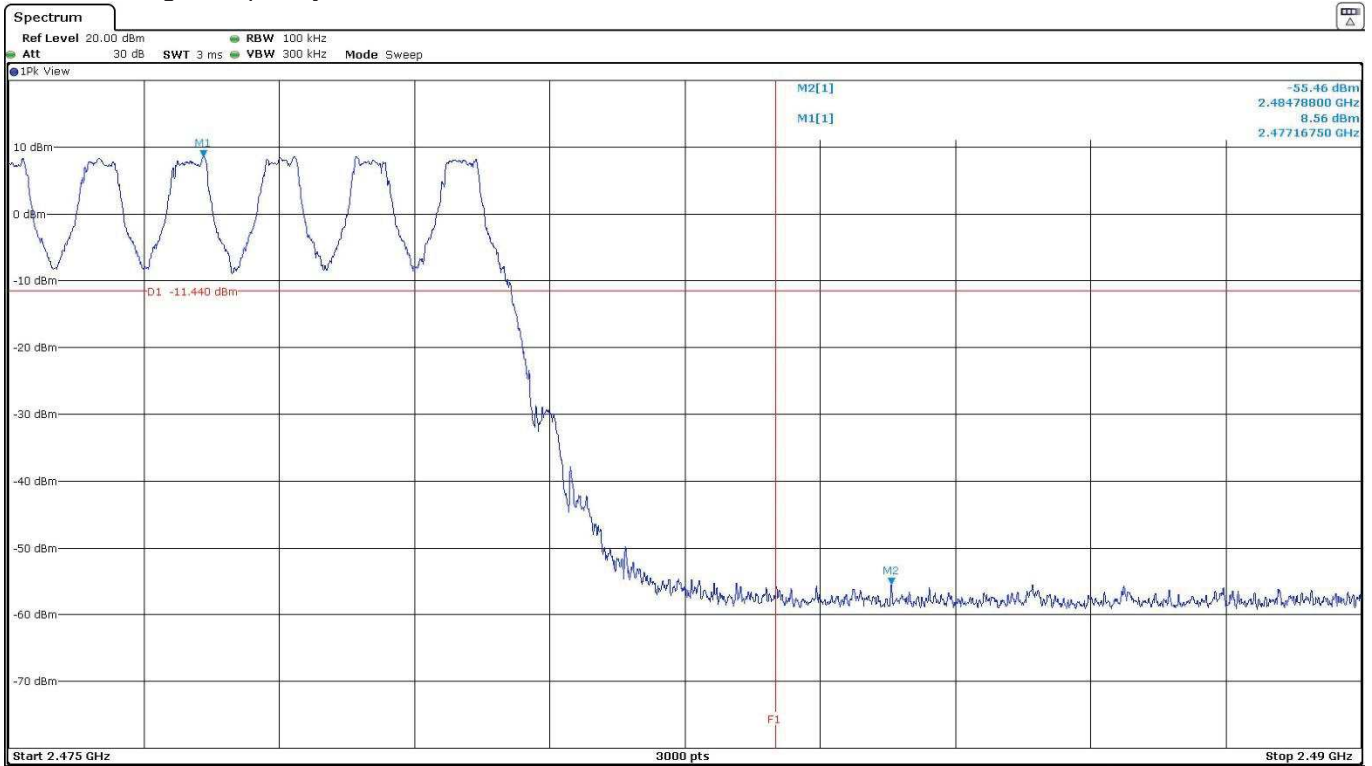
Measurement uncertainty (dB)	<±2.77
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- **GFSK – Band-edge emissions compliance:**
 - ❖ HOPPING ON:
 - Low Frequency Section 2402 MHz:



Verdict: PASS

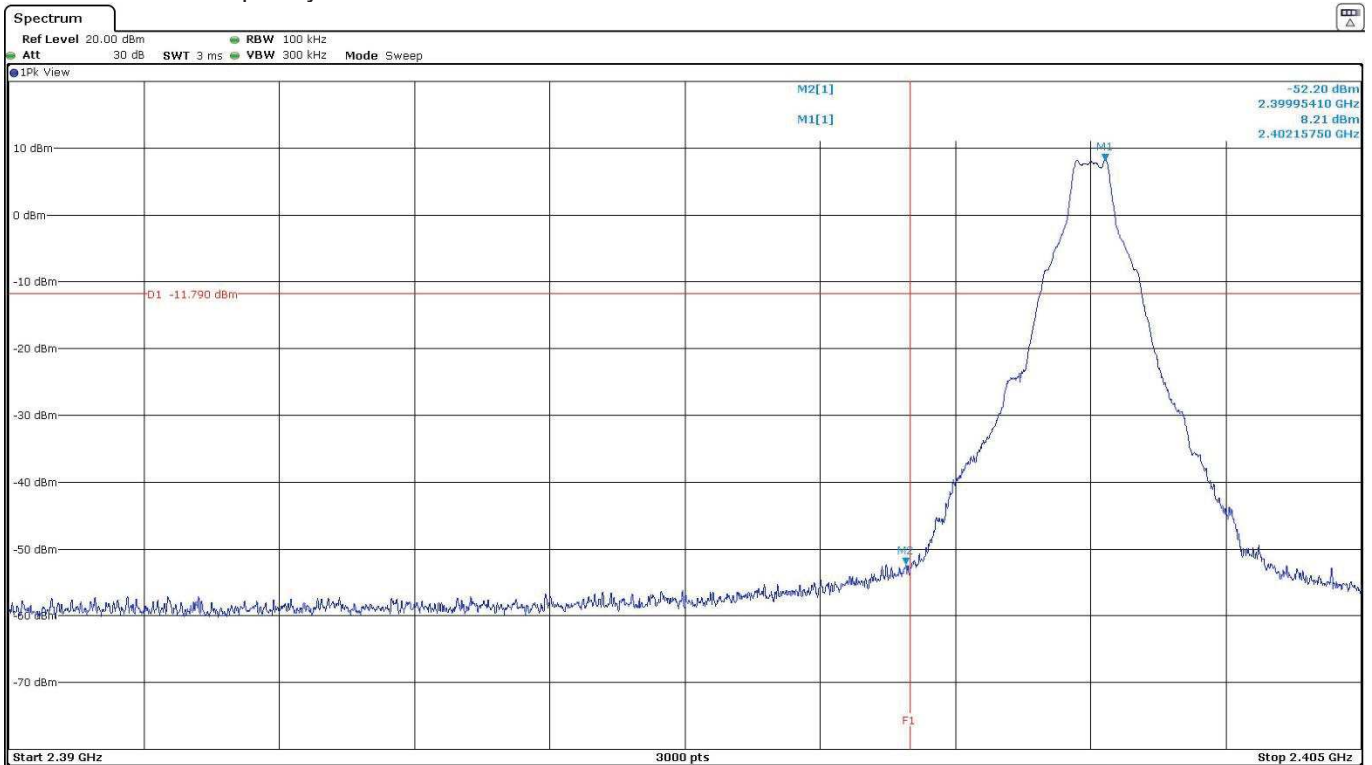
High Frequency Section 2480 MHz:



Verdict: PASS

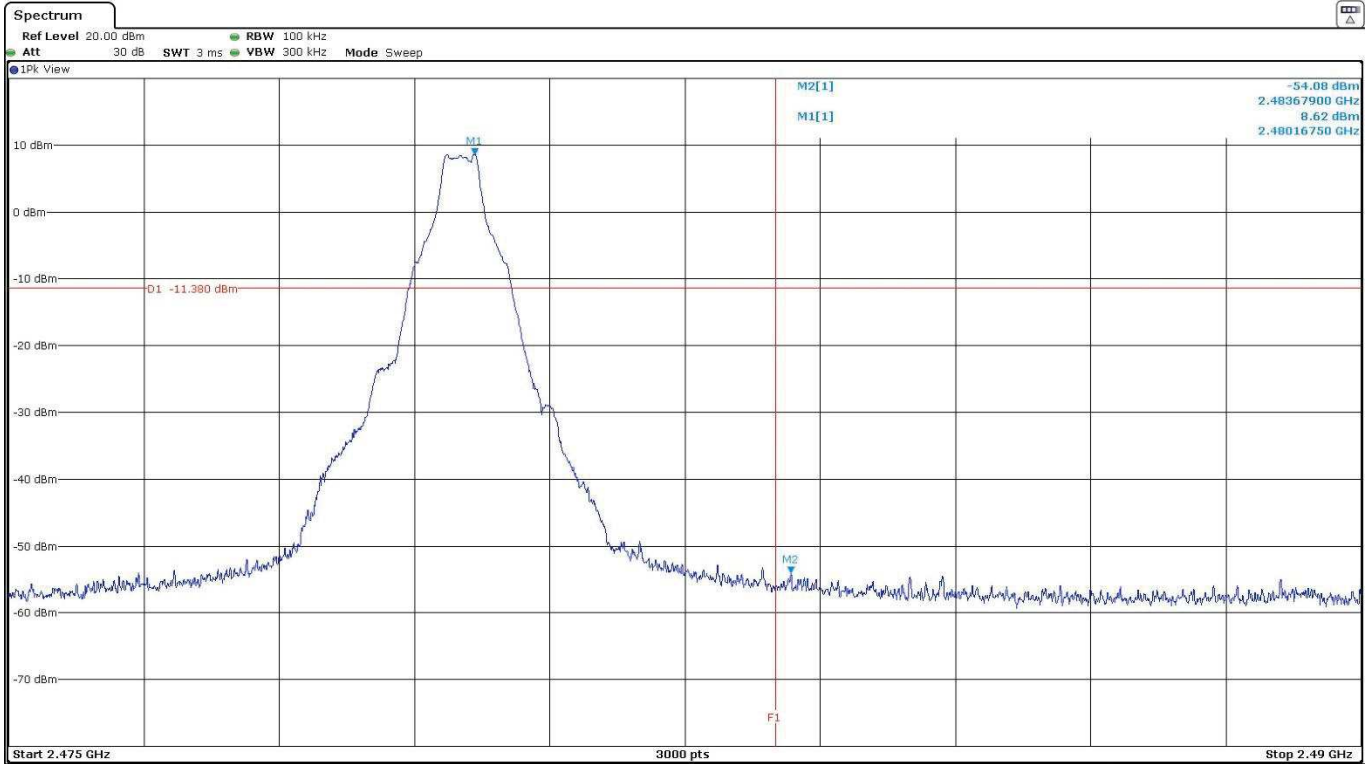
❖ HOPPING OFF:

Low Frequency Section 2402 MHz:



Verdict: PASS

High Frequency Section 2480 MHz:

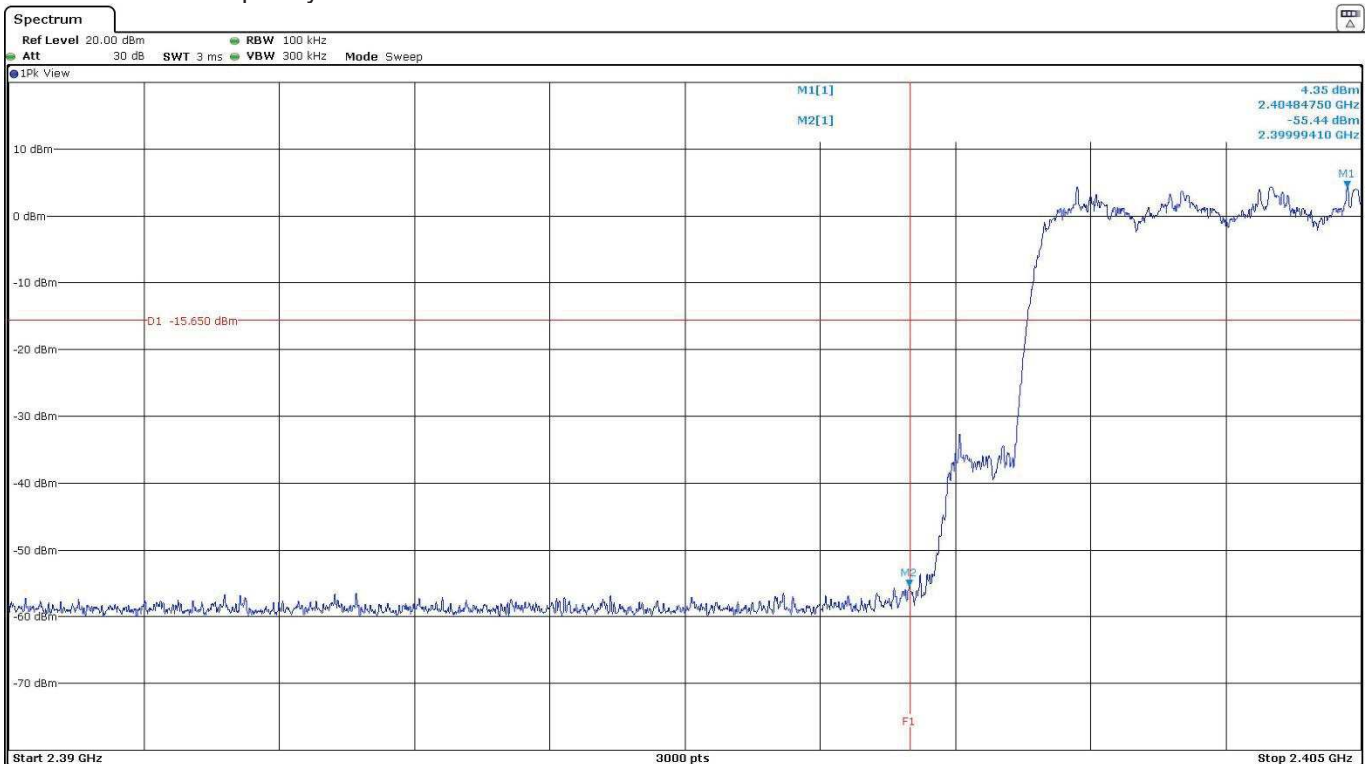


Verdict: PASS

Pi/4 DQPSK – Band-edge emissions compliance:

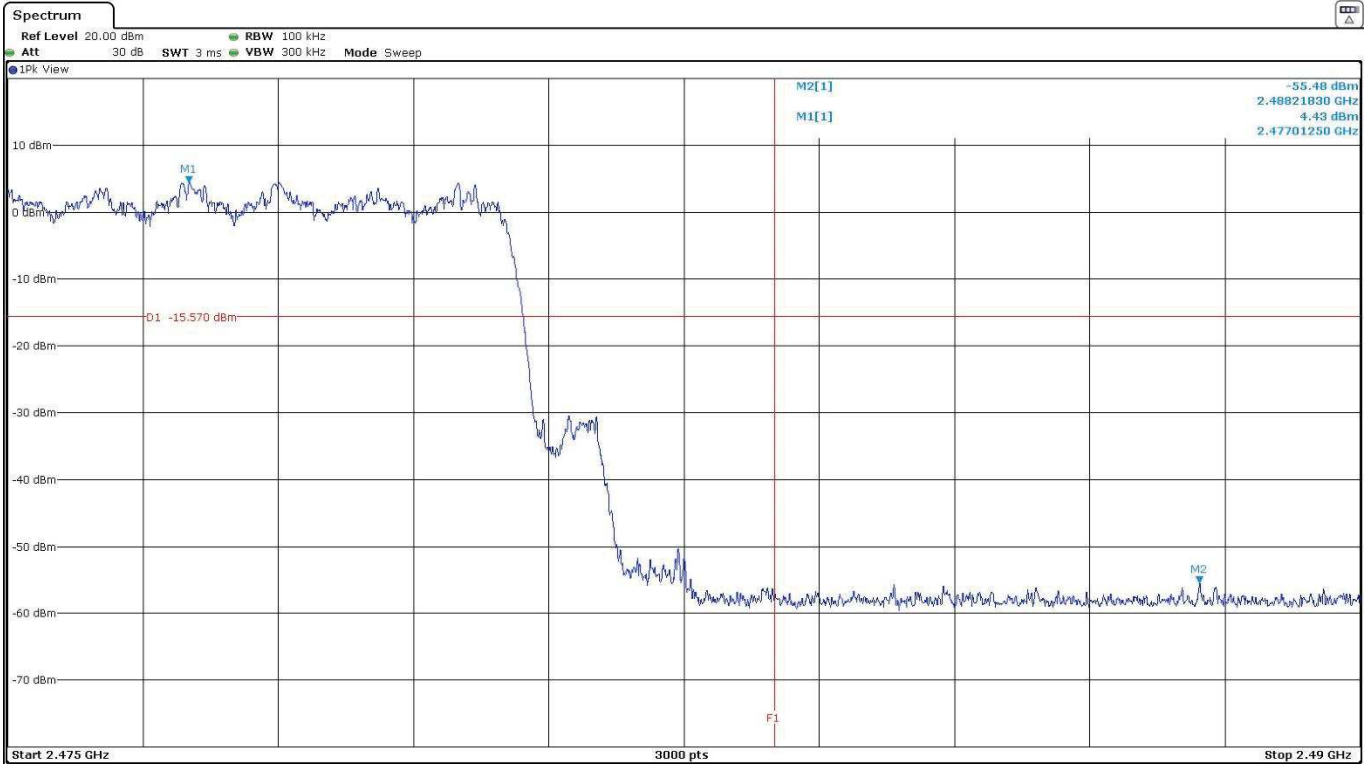
❖ HOPPING ON:

Low Frequency Section 2402 MHz:



Verdict: PASS

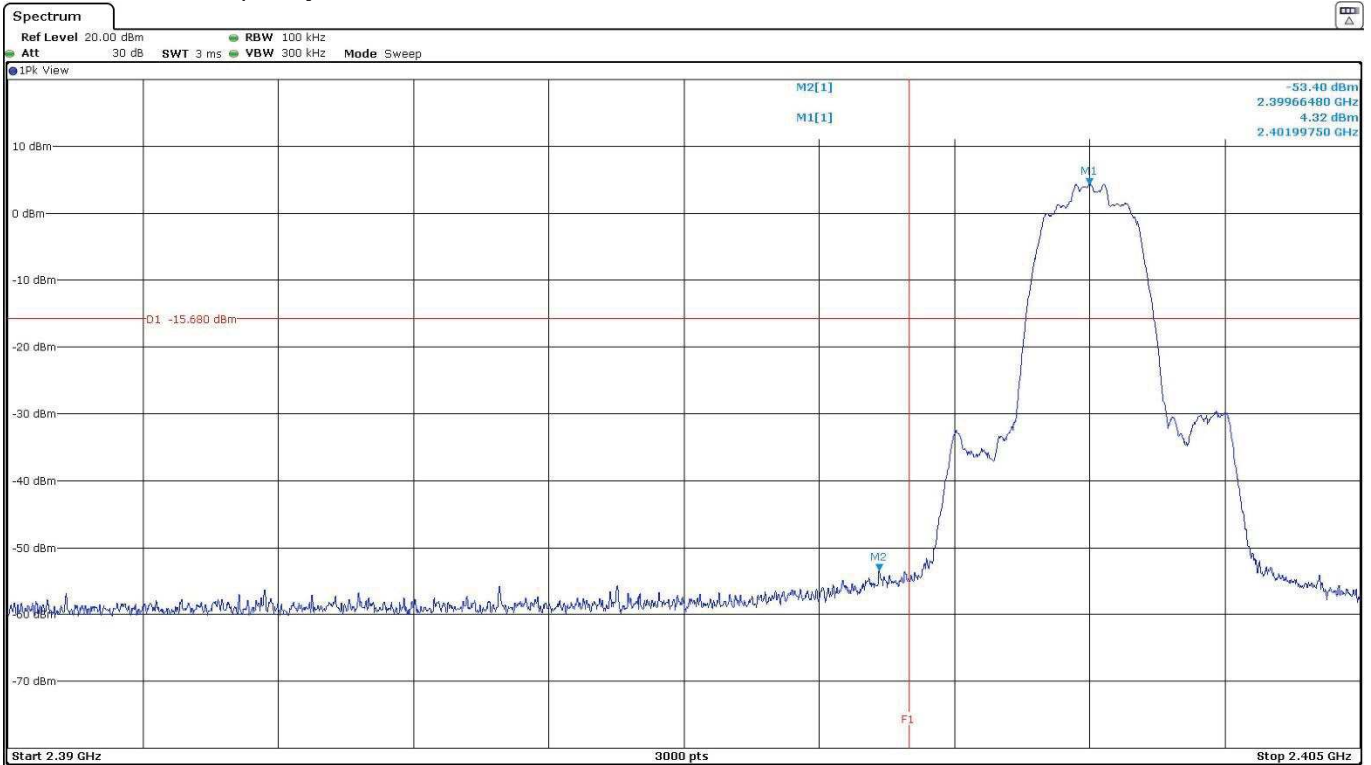
High Frequency Section 2480 MHz:



Verdict: PASS

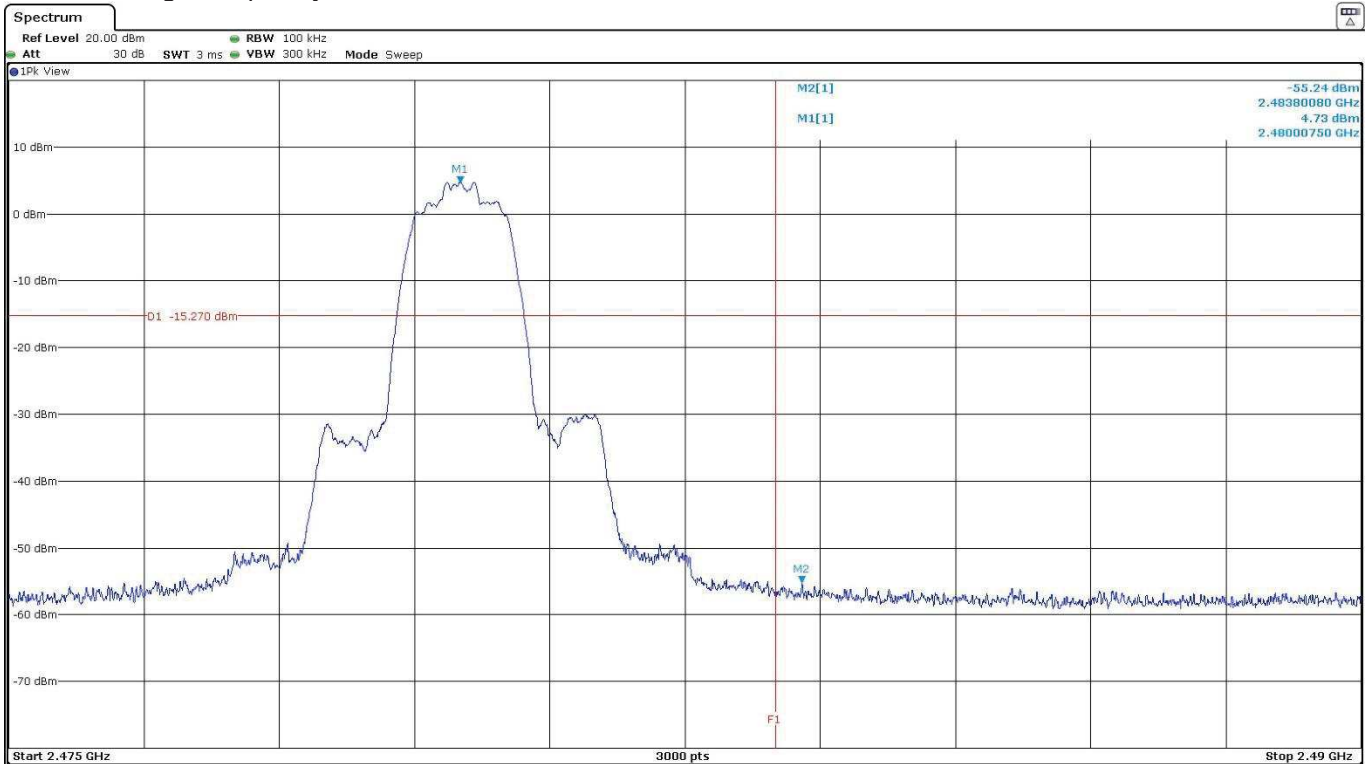
❖ HOPPING OFF:

Low Frequency Section 2402 MHz:



Verdict: PASS

High Frequency Section 2480 MHz:

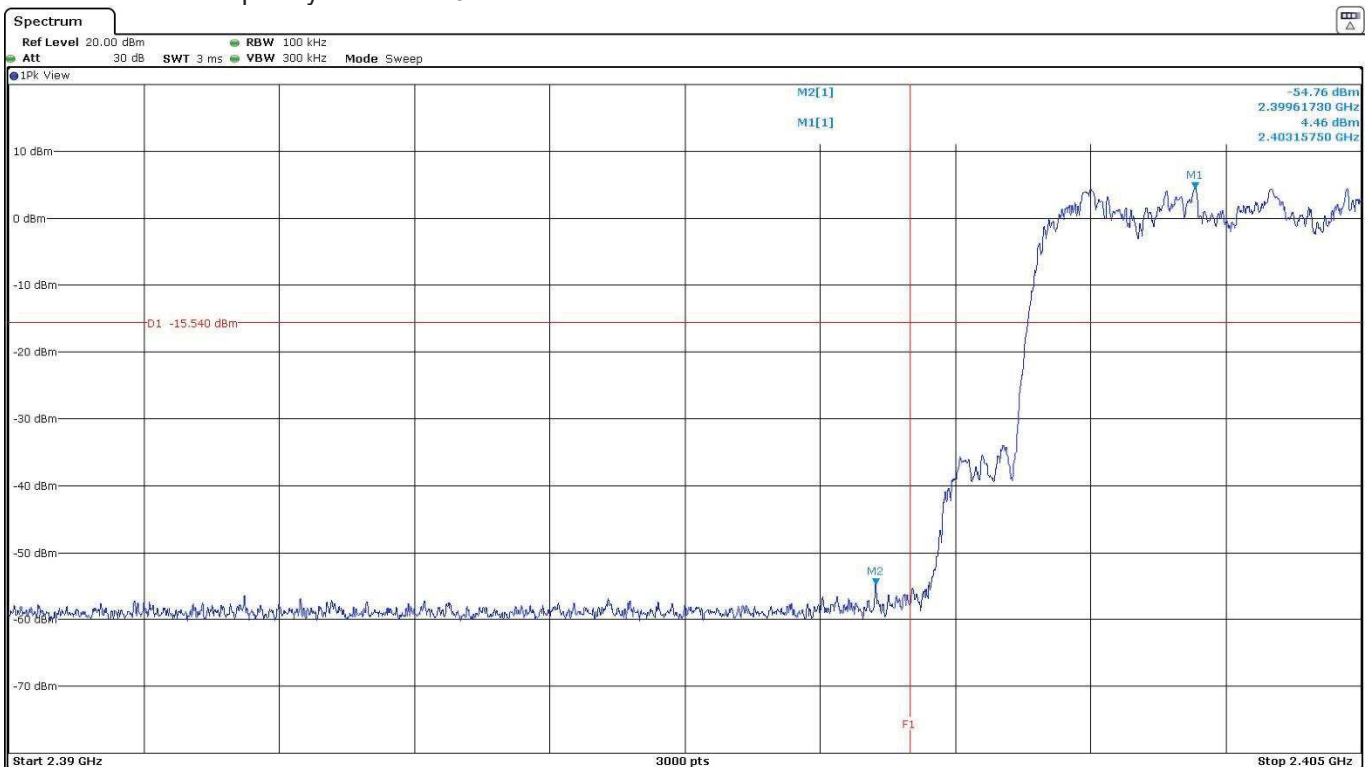


Verdict: PASS

8DPSK – Band-edge emissions compliance:

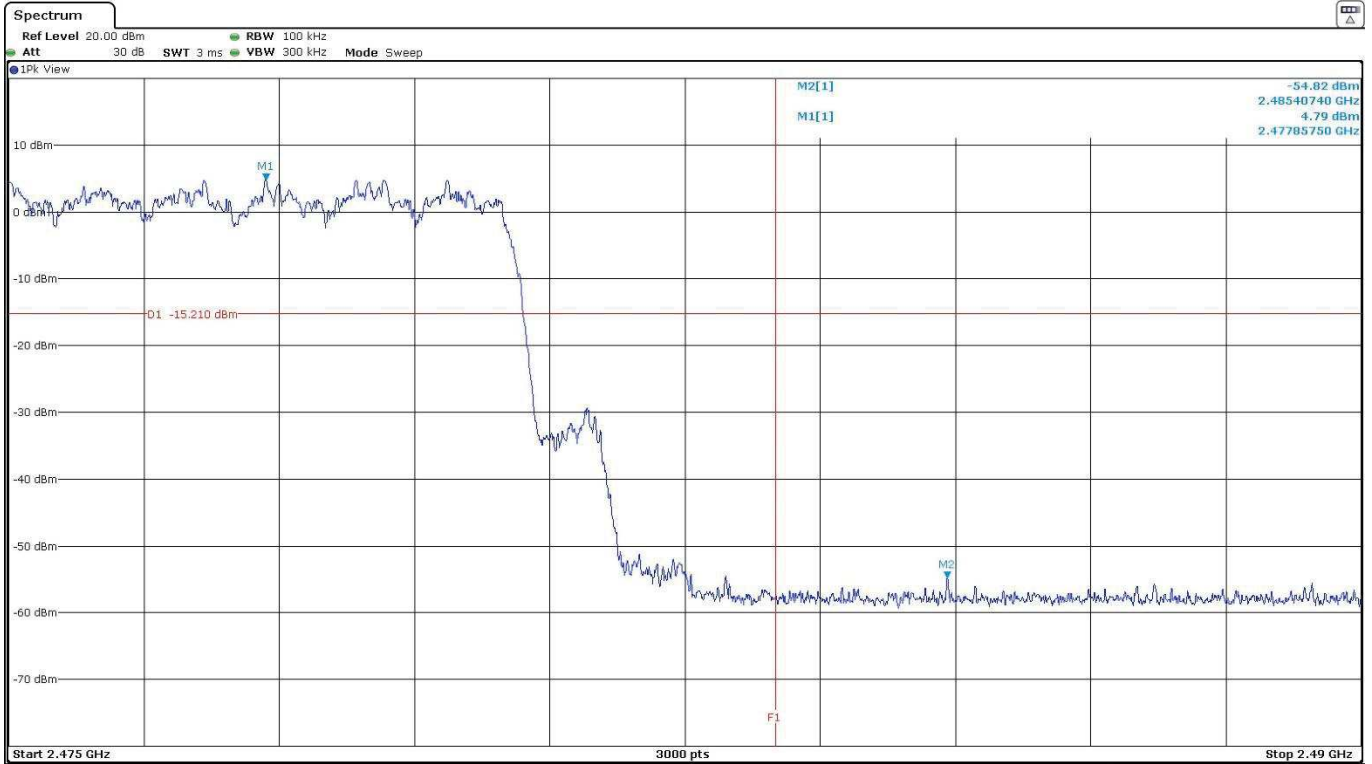
❖ HOPPING ON:

Low Frequency Section 2402 MHz:



Verdict: PASS

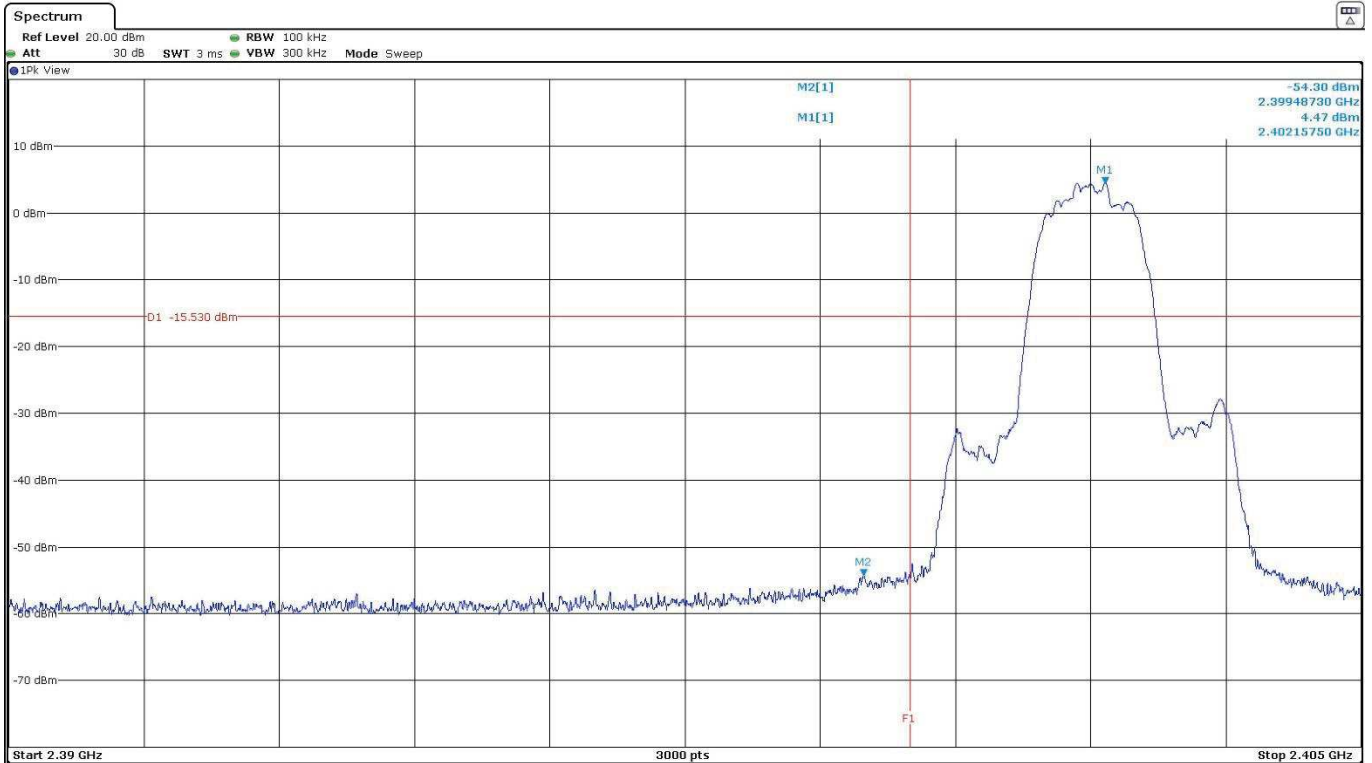
High Frequency Section 2480 MHz:



Verdict: PASS

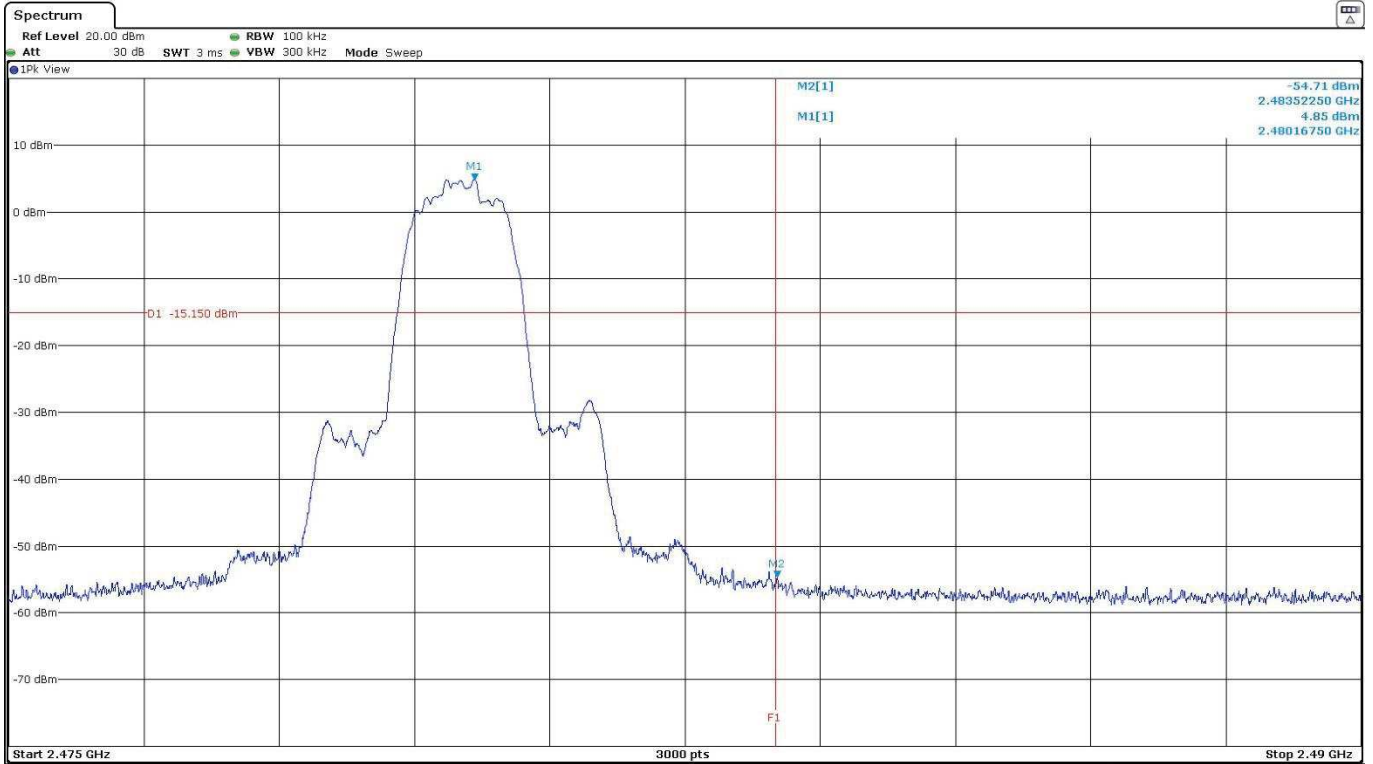
❖ HOPPING OFF:

Low Frequency Section 2402 MHz:



Verdict: PASS

High Frequency Section 2480 MHz:



Verdict: PASS

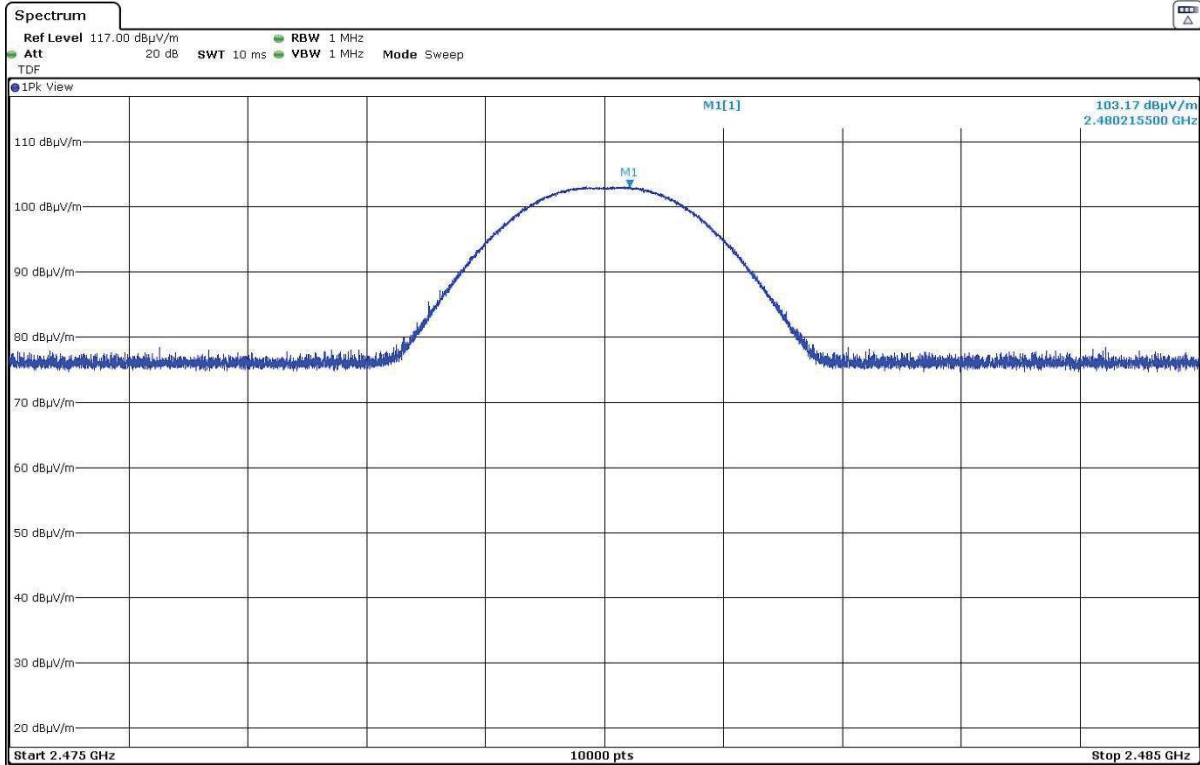
BAND-EDGE COMPLIANCE OF RADIATED EMISSIONS:

- **GFSK:**

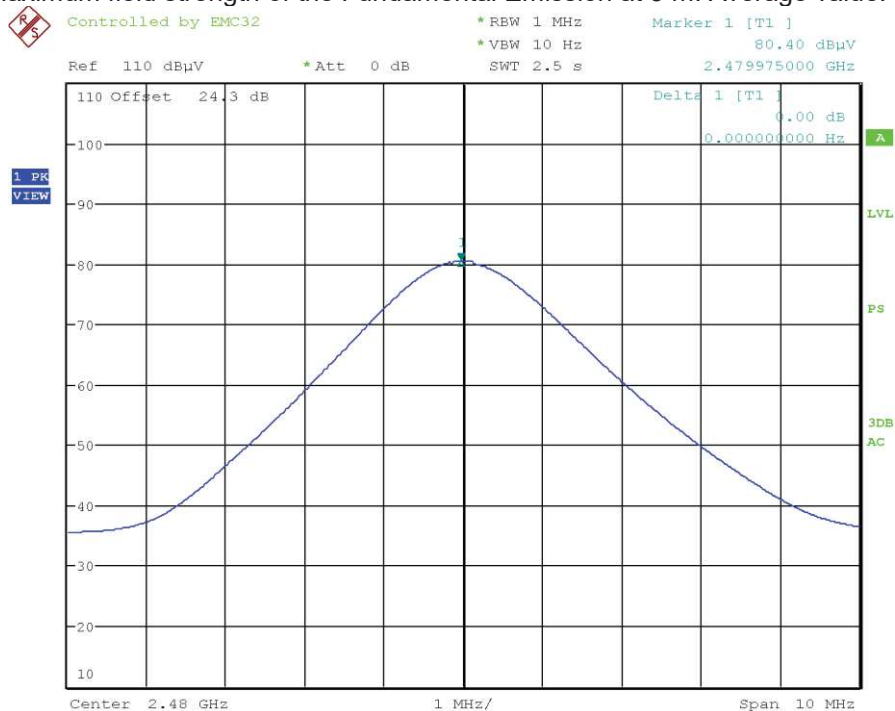
- **High Channel (2480 MHz):**

- 1. Maximum field strength of the Fundamental Emission at 3 m. Peak and Average values:**

Maximum field strength of the Fundamental Emission at 3 m. Peak value:

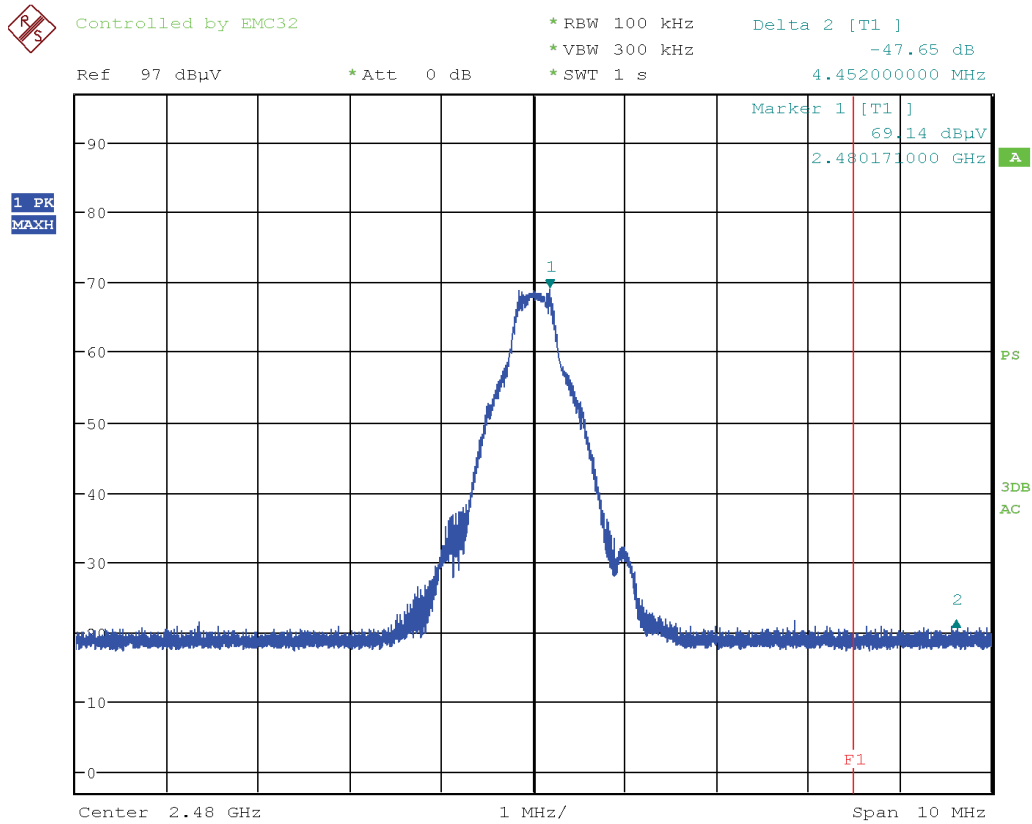


Maximum field strength of the Fundamental Emission at 3 m. Average value:

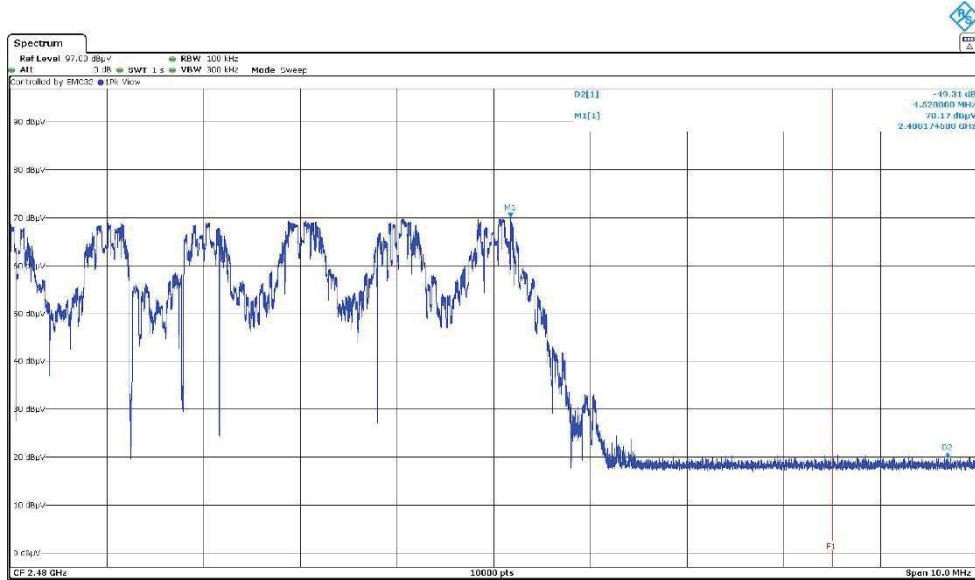


2. Marker-Delta Method:

Single carrier:



Hopping mode:



Fundamental Max. Peak value 3 m	Delta value for 3 m	Calculated value 3 m	Limit
103.17 dBµV/m	47.65 dB (single carrier) 49.31 dB (hopping mode)	55.52 dBµV/m 53.86 dBµV/m	74 dBµV/m

Fundamental Max. Average value 3 m	Delta value for 3 m	Calculated value 3 m	Limit
80.40 dBµV/m	47.65 dB (single carrier) 49.31 dB (hopping mode)	32.75 dBµV/m 31.09 dBµV/m	54 dBµV/m

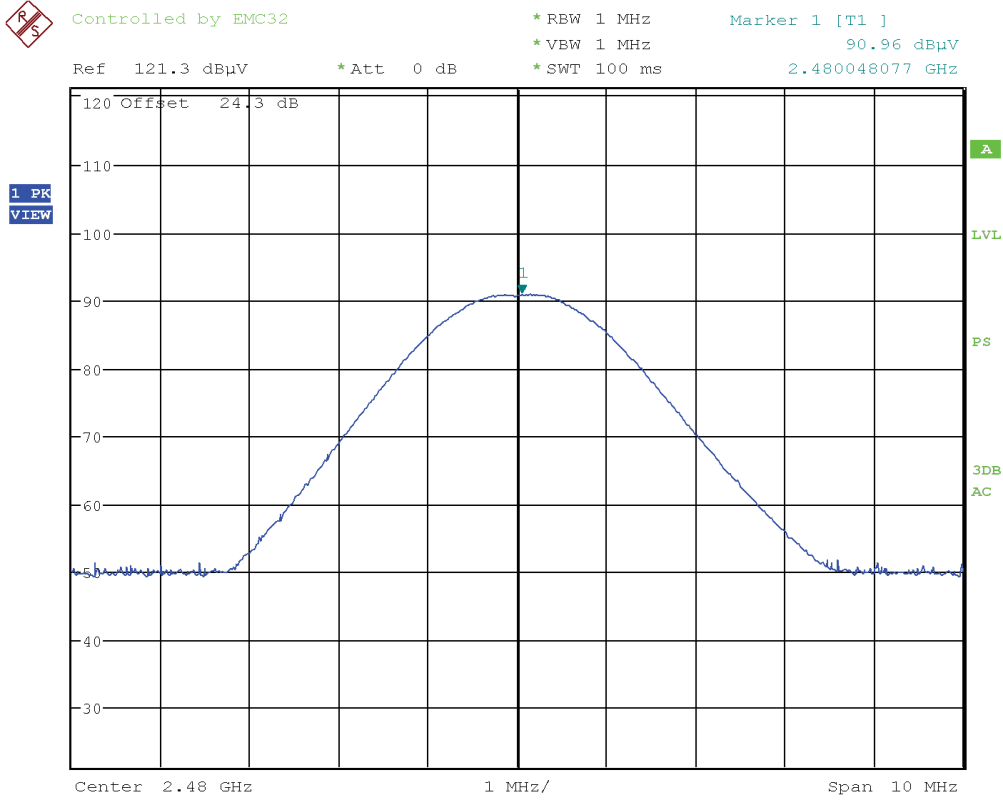
Verdict: PASS

- **Pi/4-DQPSK:**

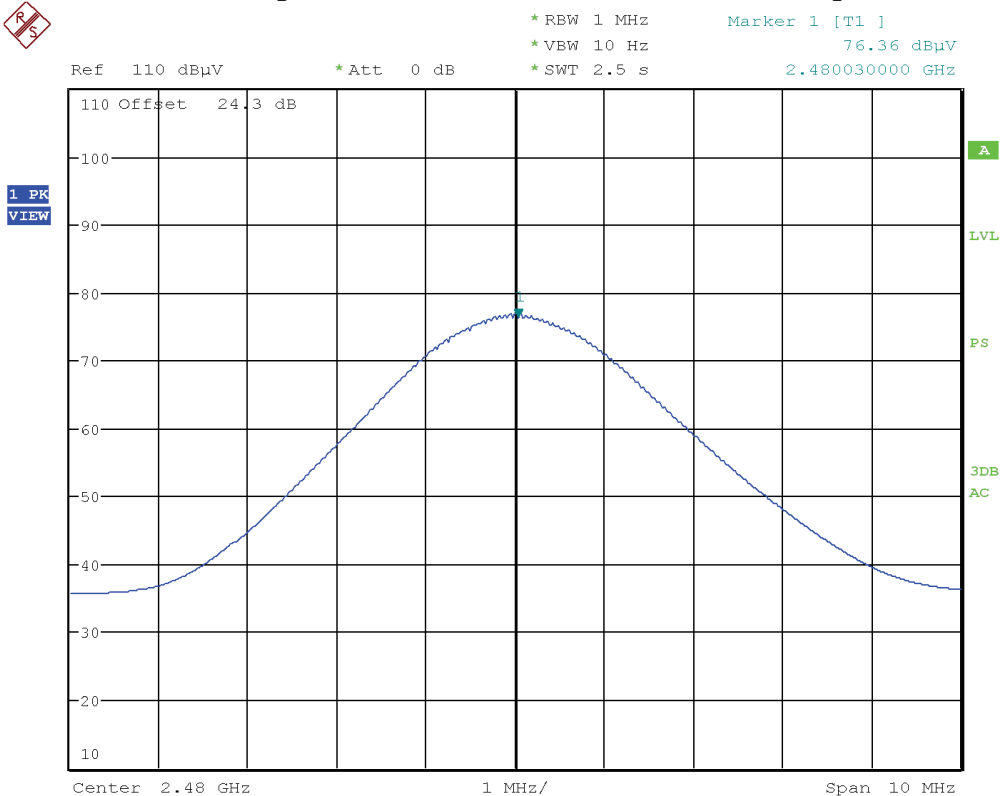
- **High Channel (2480 MHz):**

- 1. Maximum field strength of the Fundamental Emission at 3 m. Peak and Average values:**

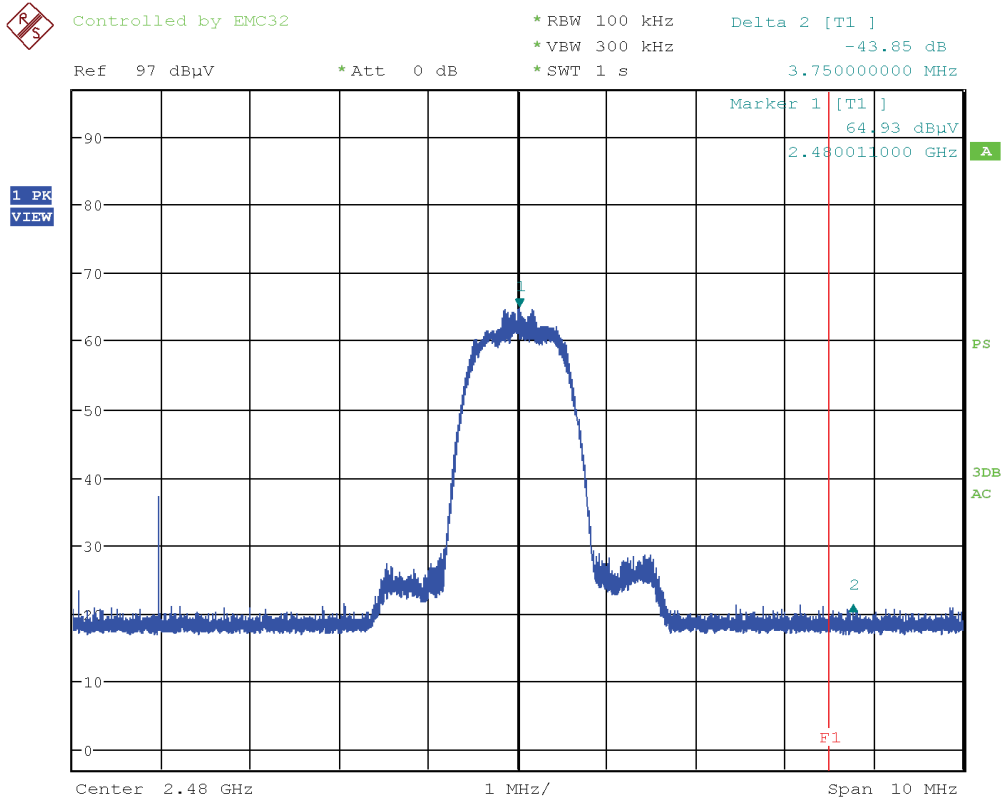
Maximum field strength of the Fundamental Emission at 3 m. Peak value:



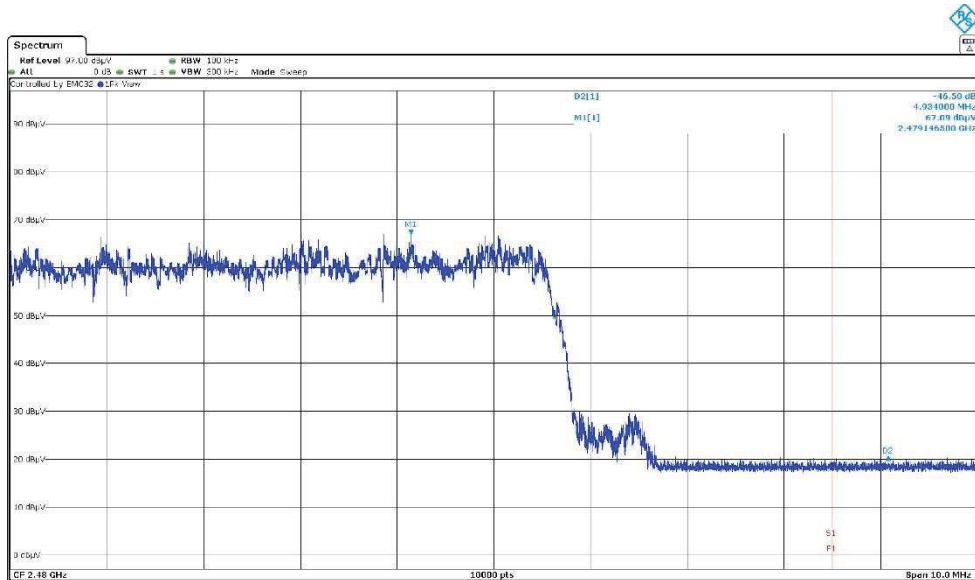
Maximum field strength of the Fundamental Emission at 3 m. Average value:



2. Marker-Delta Method:



Hopping mode:



Fundamental Max. Peak value 3 m	Delta value for 3 m	Calculated value 3 m	Limit
90.96 dBμV/m	43.85 dB (single carrier) 46.50 dB (hopping mode)	47.11 dBμV/m 44.46 dBμV/m	74 dBμV/m

Fundamental Max. Average value 3 m	Delta value for 3 m	Calculated value 3 m	Limit
76.36 dBμV/m	43.85 dB (single carrier) 46.50 dB (hopping mode)	32.51 dBμV/m 29.86 dBμV/m	54 dBμV/m

Verdict: PASS