Spurious emissions TX 410.0 MHz, 25 kHz, 4FSK, 19200bps

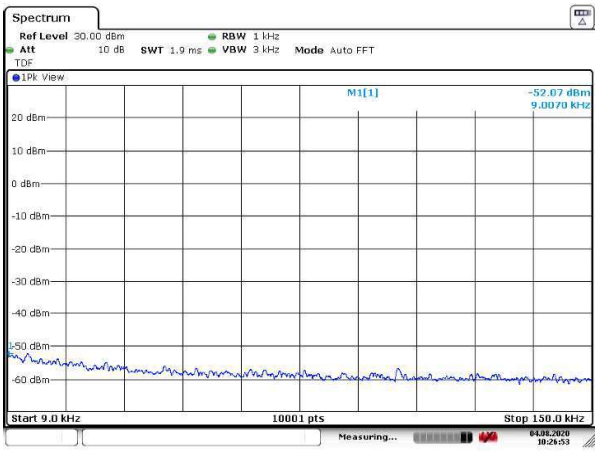


Figure 96: 9 – 150 kHz

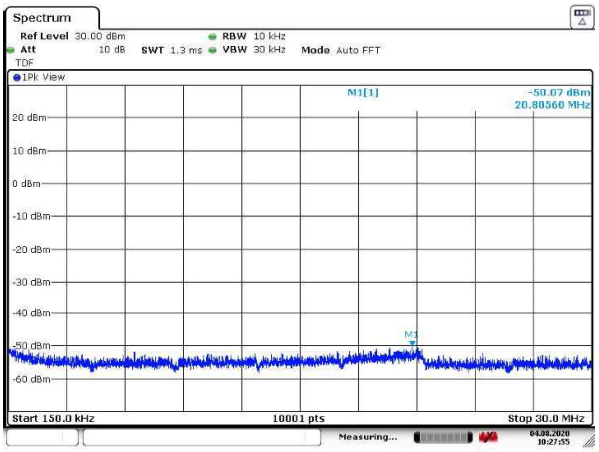


Figure 97: 150 kHz – 30 MHz

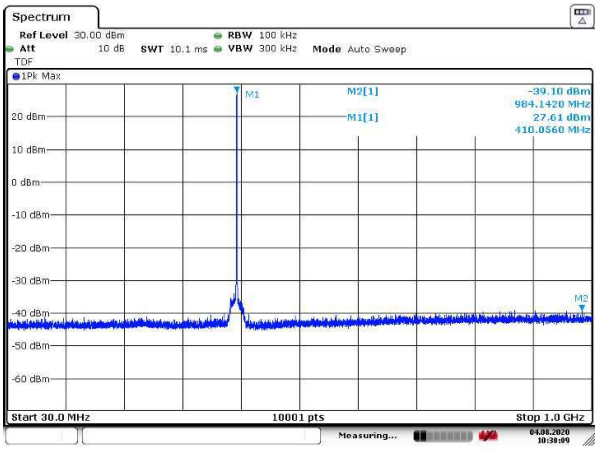


Figure 98: 30 – 1000 MHz

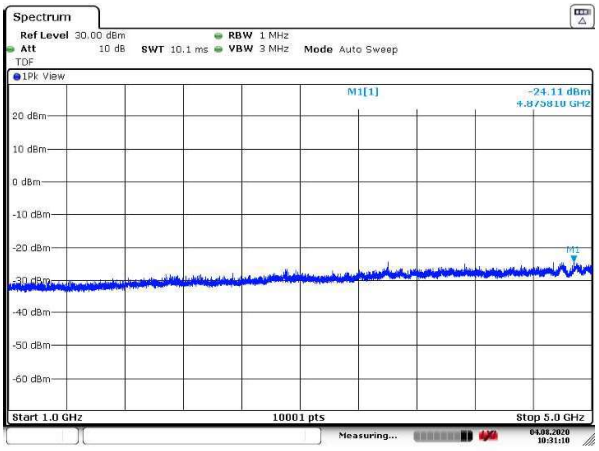


Figure 99: 1 – 5 GHz

Spurious emissions TX 429.5 MHz, 12.5 kHz, GMSK, 4800bps

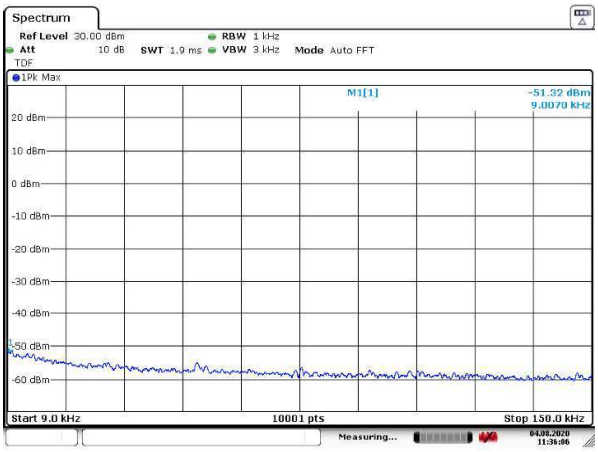


Figure 100: 9 – 150 kHz

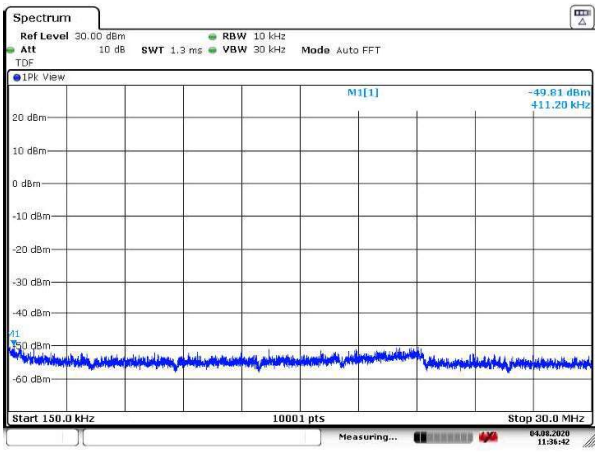


Figure 101: 150 kHz – 30 MHz

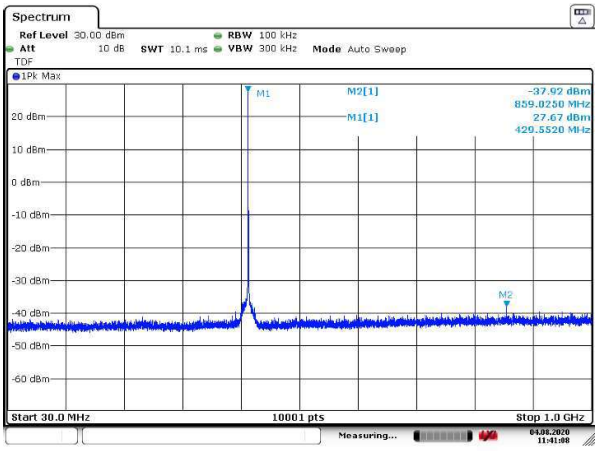


Figure 102: 30 – 1000 MHz

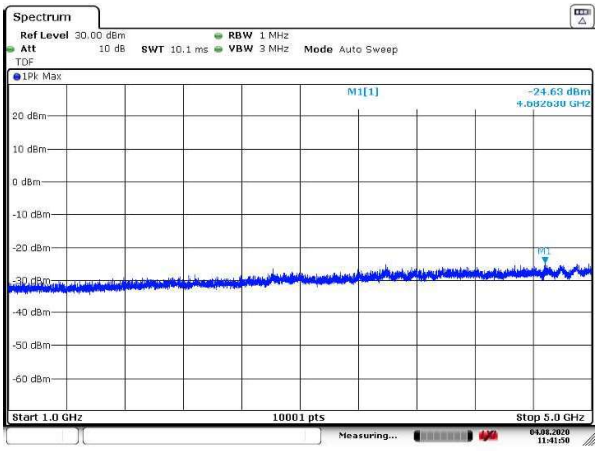


Figure 103: 1 – 5 GHz

Spurious emissions TX 429.5 MHz, 12.5 kHz, GMSK, 8000

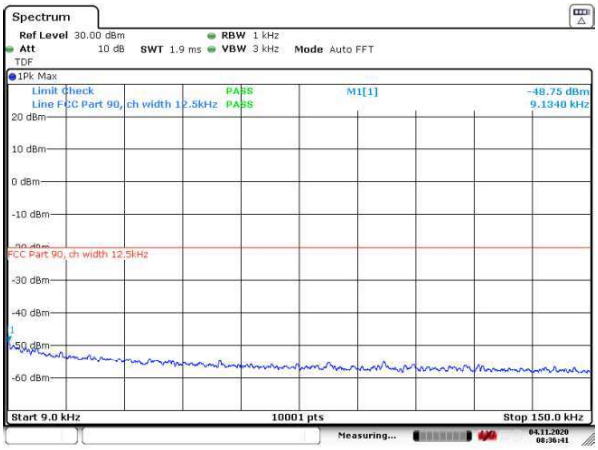


Figure 104: 9 – 150 kHz

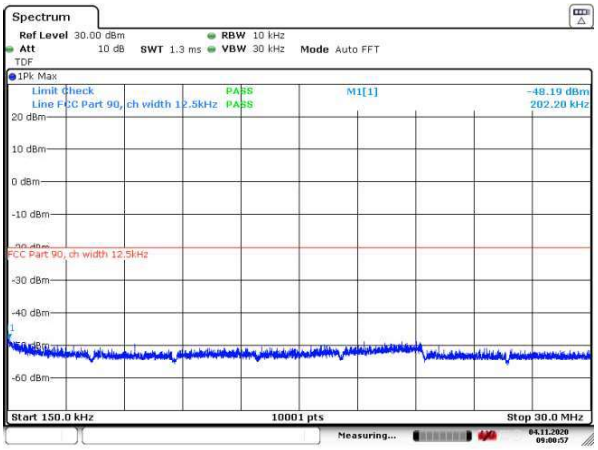


Figure 105: 150 kHz – 30 MHz

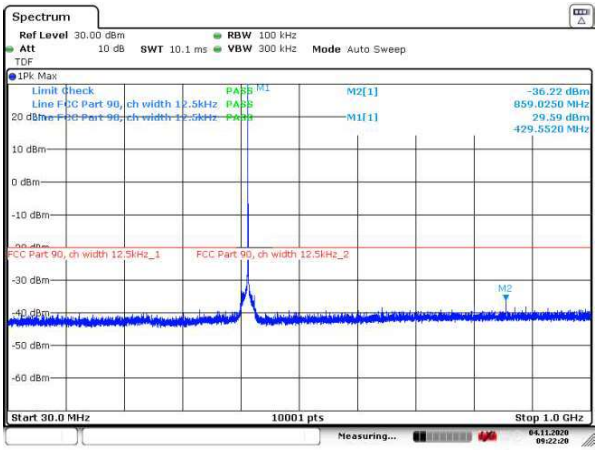


Figure 106: 30 – 1000 MHz

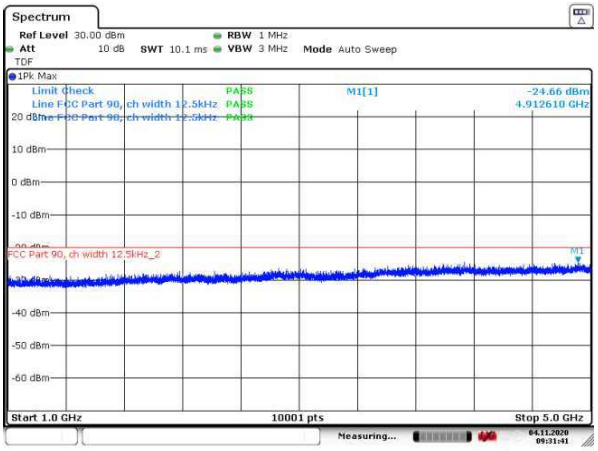


Figure 107: 1 – 5 GHz

Spurious emissions TX 429.5 MHz, 12.5 kHz, 4FSK, 9600bps

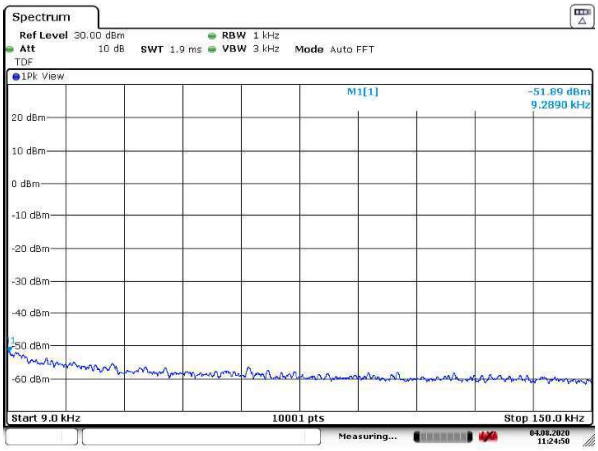


Figure 108: 9 – 150 kHz

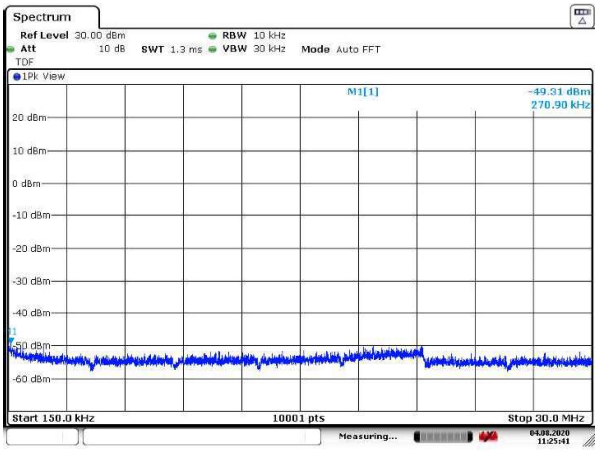


Figure 109: 150 kHz – 30 MHz

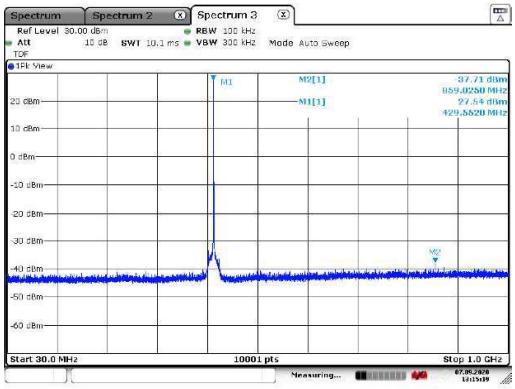


Figure 110: 30 – 1000 MHz

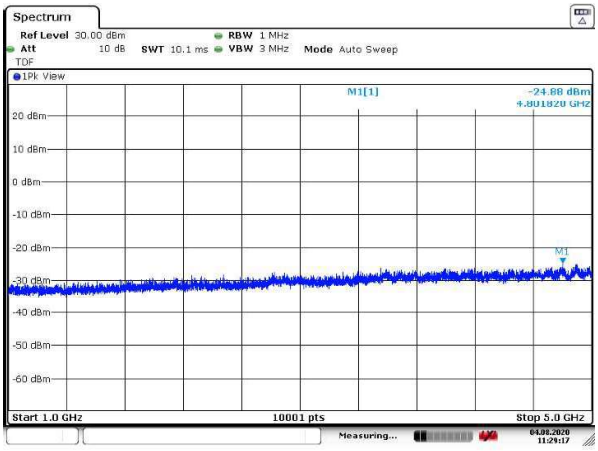


Figure 111: 1 – 5 GHz

Spurious emissions TX 429.5 MHz, 25 kHz, GMSK, 9600bps

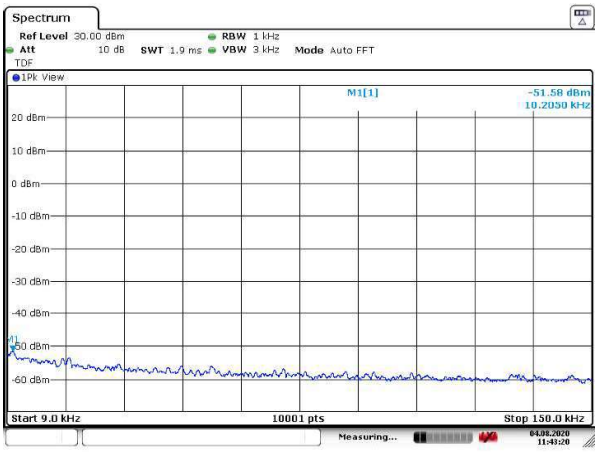


Figure 112: 9 – 150 kHz

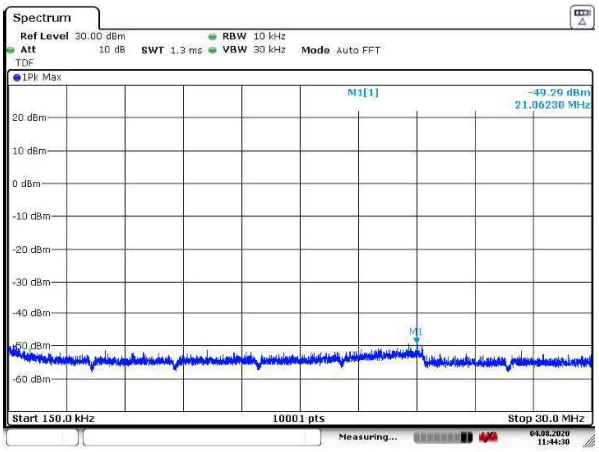


Figure 113: 150 kHz – 30 MHz

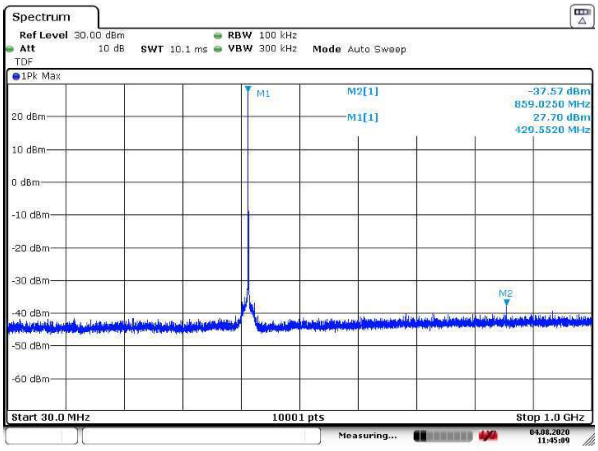


Figure 114: 30 – 1000 MHz

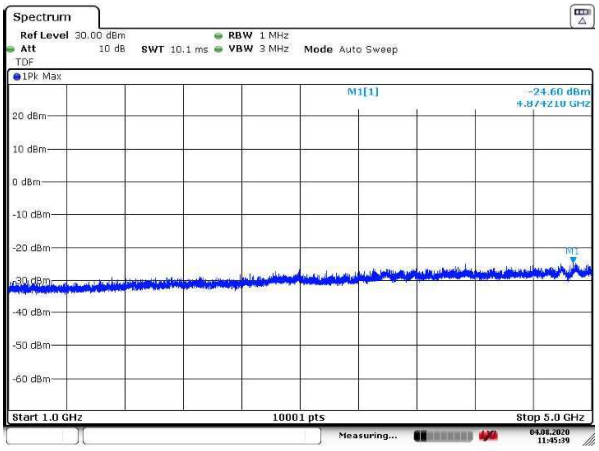


Figure 115: 1 – 5 GHz

Spurious emissions TX 429.5 MHz, 25 kHz, GMSK, 16000bps

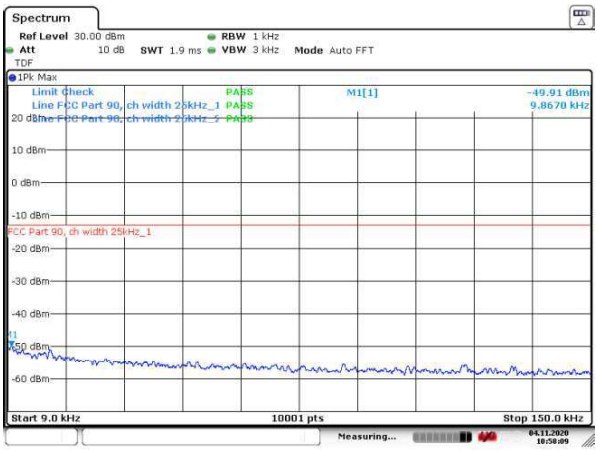


Figure 116: 9 – 150 kHz

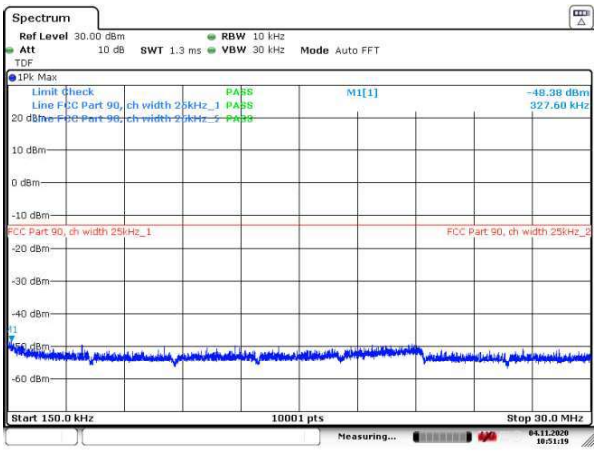


Figure 117: 150 kHz – 30 MHz

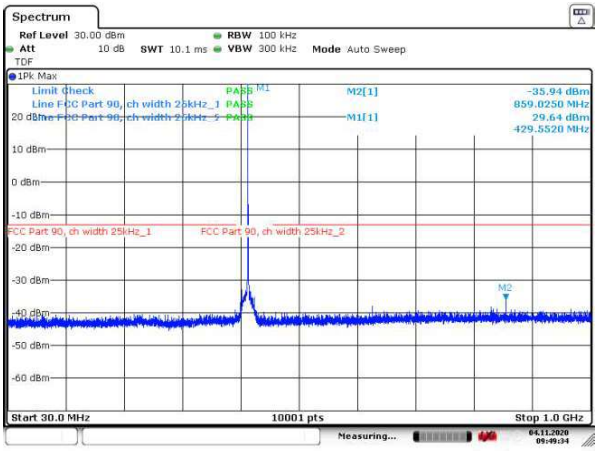


Figure 118: 30 – 1000 MHz

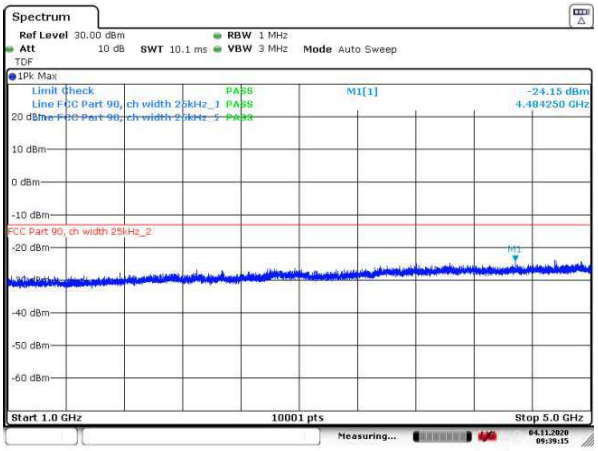


Figure 119: 1 – 5 GHz

Spurious emissions TX 429.5 MHz, 25 kHz, 4FSK, 19200bps

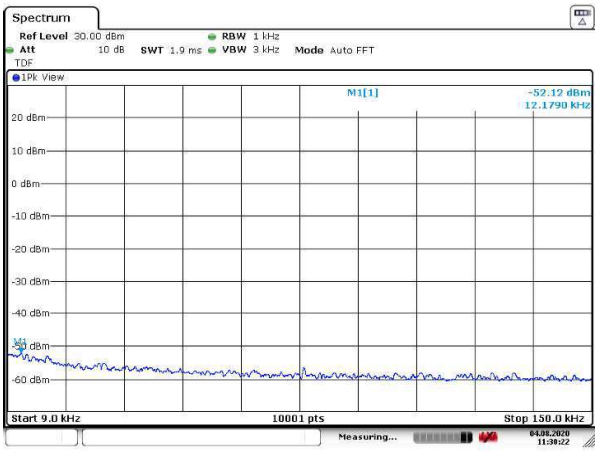


Figure 120: 9 – 150 kHz

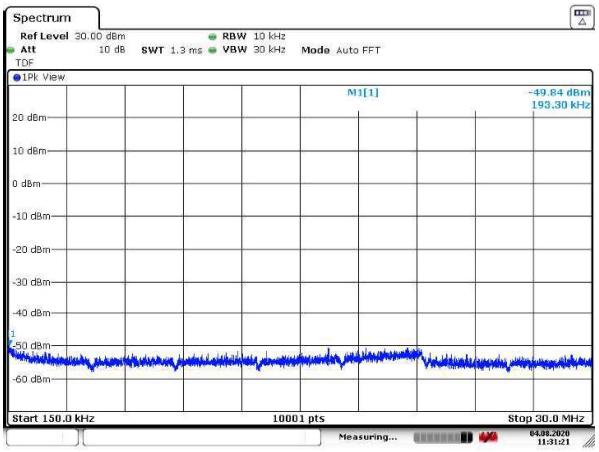


Figure 121: 150 kHz – 30 MHz

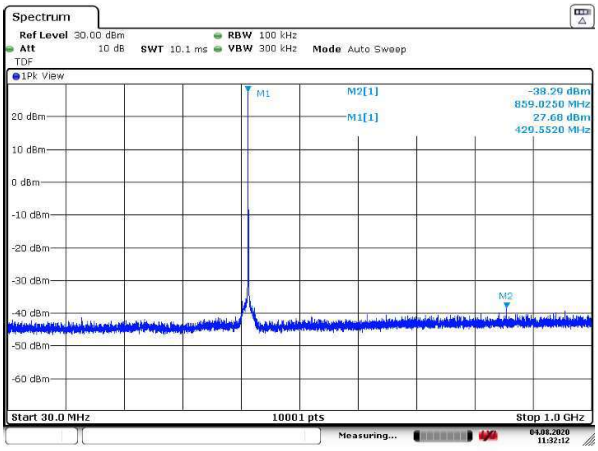


Figure 122: 30 – 1000 MHz

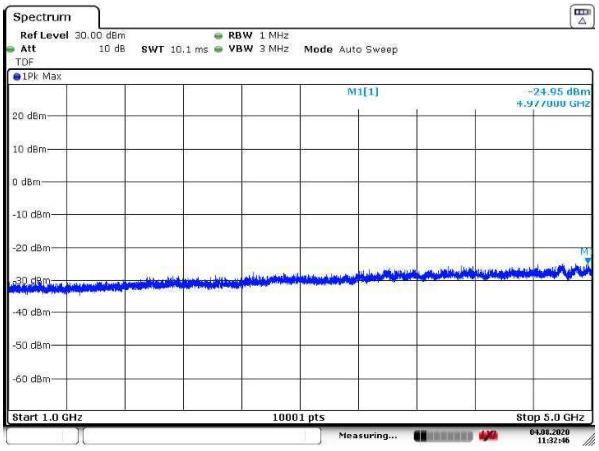


Figure 123: 1 – 5 GHz

Spurious emissions TX 450.5 MHz, 12.5 kHz, GMSK, 4800bps

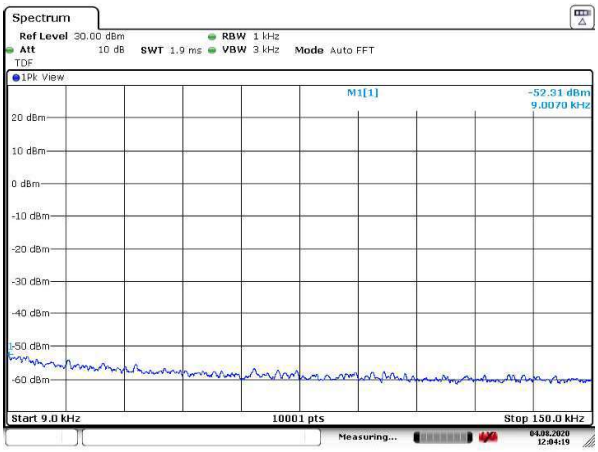


Figure 124: 9 – 150 kHz

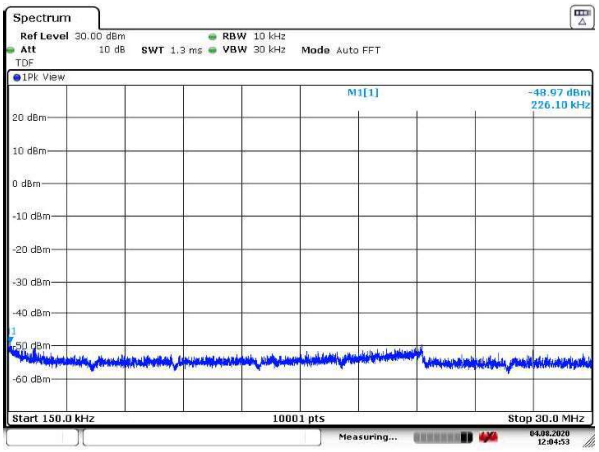


Figure 125: 150 kHz – 30 MHz

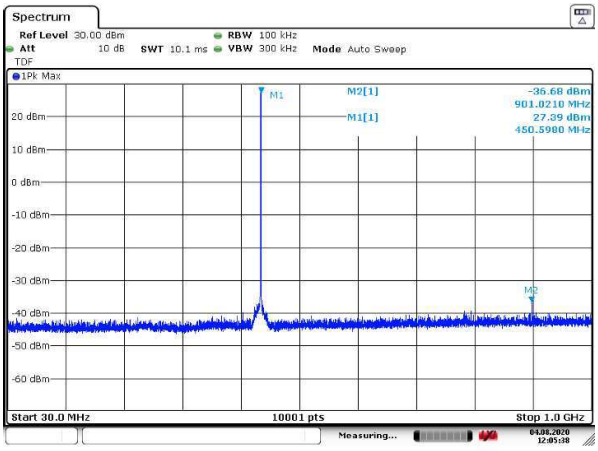


Figure 126: 30 – 1000 MHz

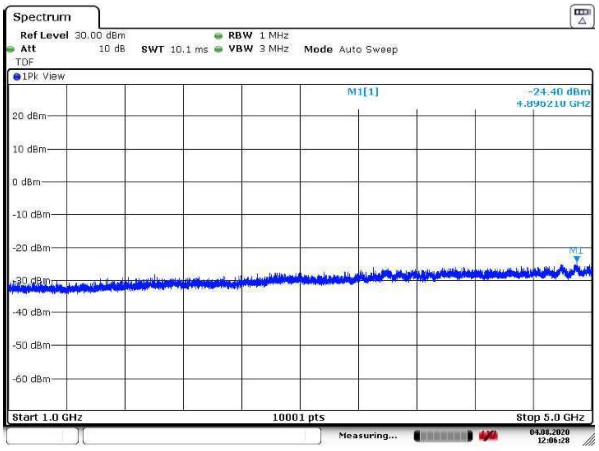


Figure 127: 1 – 5 GHz

Spurious emissions TX 450.5 MHz, 12.5 kHz, GMSK, 8000bps

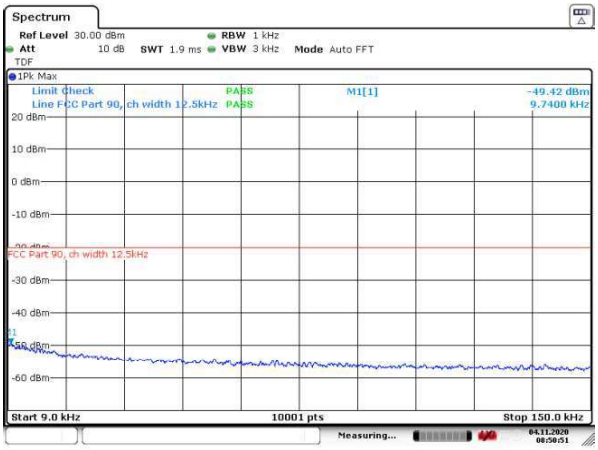


Figure 128: 9 – 150 kHz

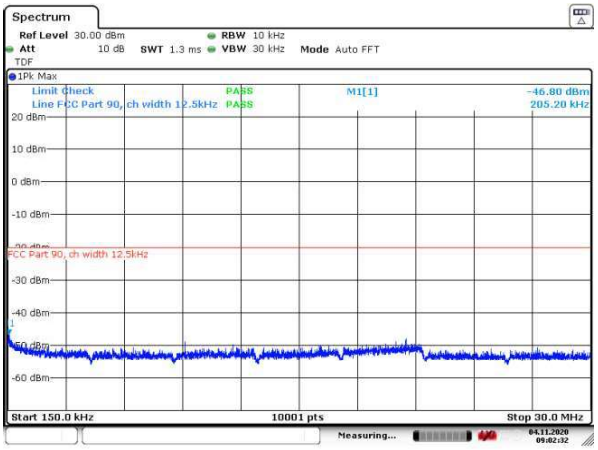


Figure 129: 150 kHz – 30 MHz

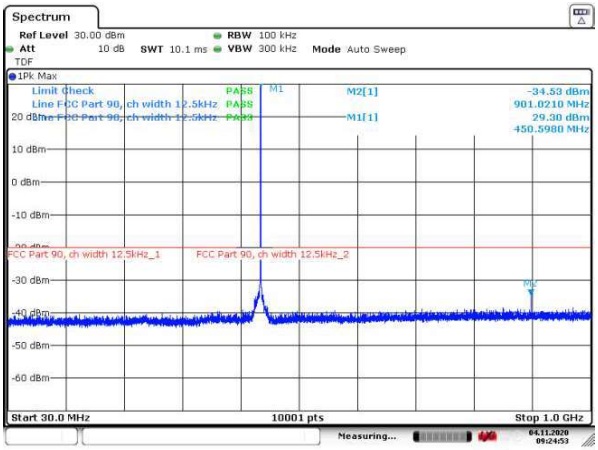


Figure 130: 30 – 1000 MHz

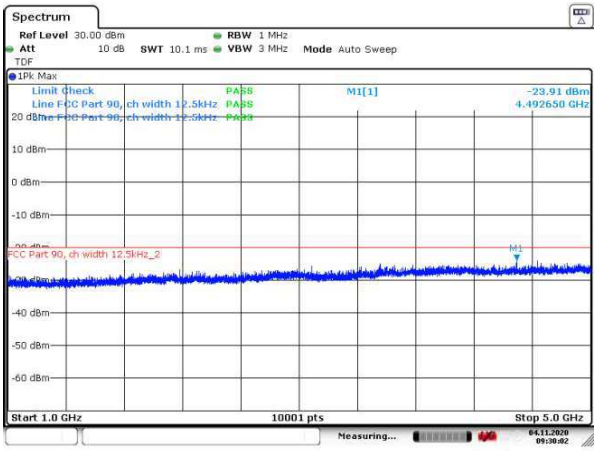


Figure 131: 1 – 5 GHz

Spurious emissions TX 450.5 MHz, 12.5 kHz, 4FSK, 9600bps

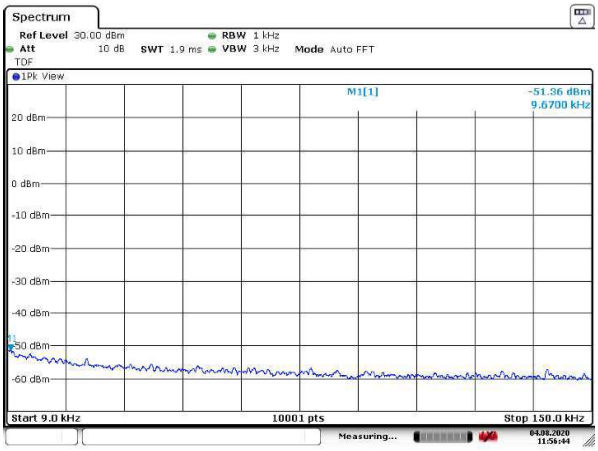


Figure 132: 9 – 150 kHz

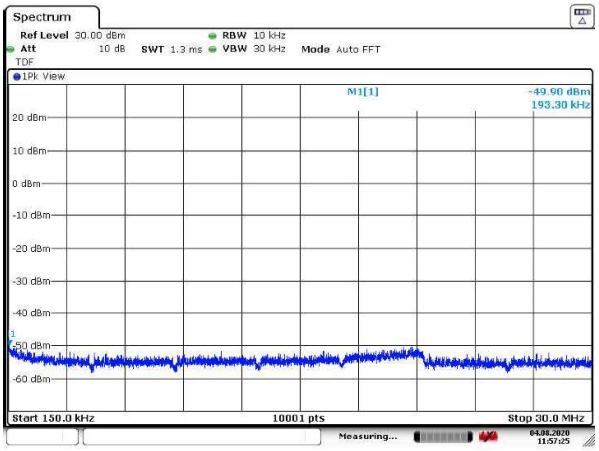


Figure 133: 150 kHz – 30 MHz

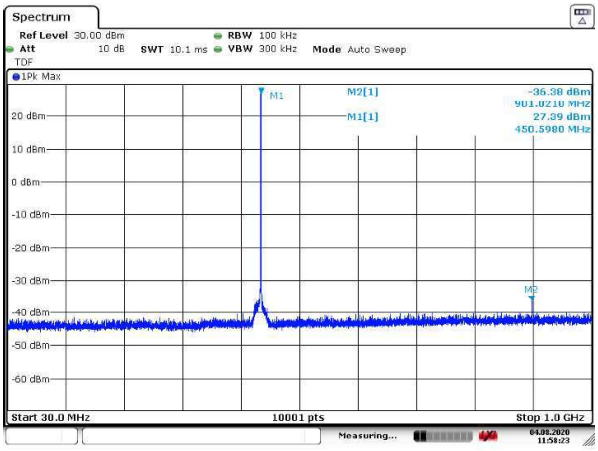


Figure 134: 30 – 1000 MHz

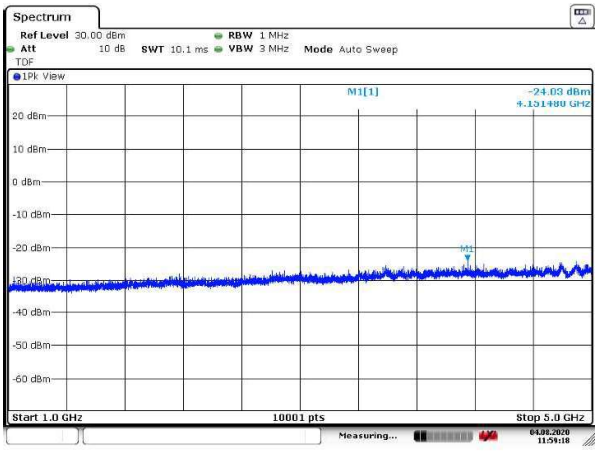


Figure 135: 1 – 5 GHz

Spurious emissions TX 450.5 MHz, 25 kHz, GMSK, 9600bps

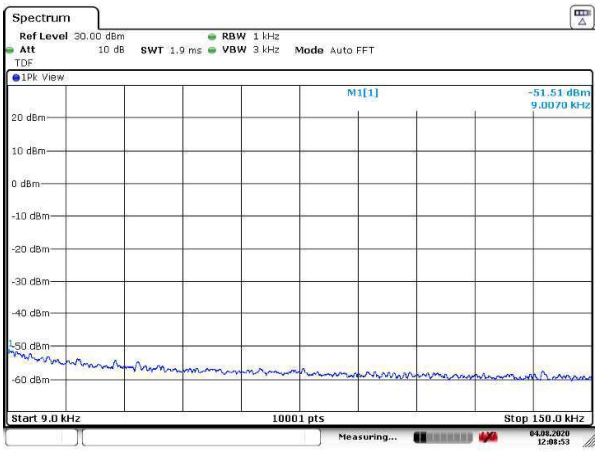


Figure 136: 9 – 150 kHz

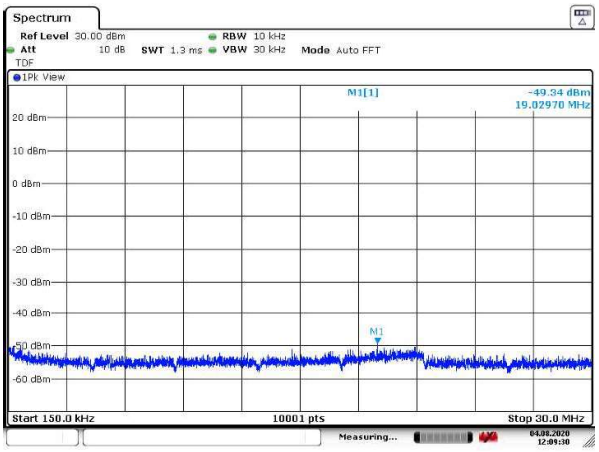


Figure 137: 150 kHz – 30 MHz

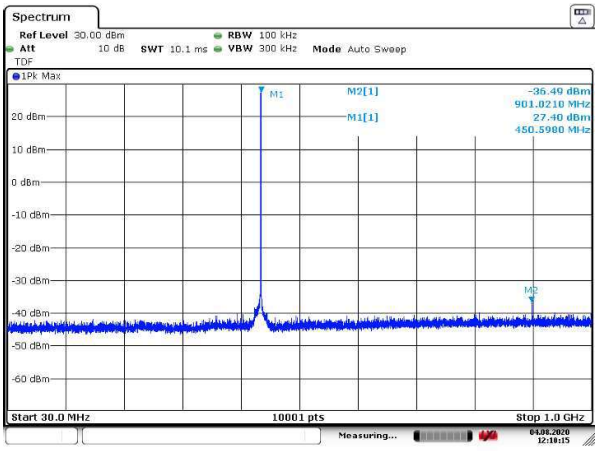


Figure 138: 30 – 1000 MHz

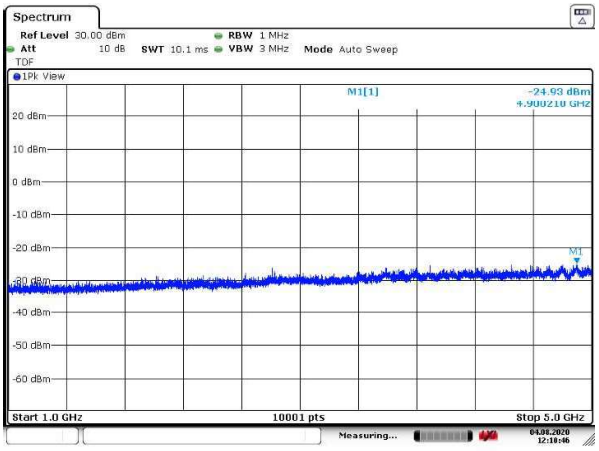


Figure 139: 1 – 5 GHz

Spurious emissions TX 450.5 MHz, 25 kHz, GMSK, 16000bps

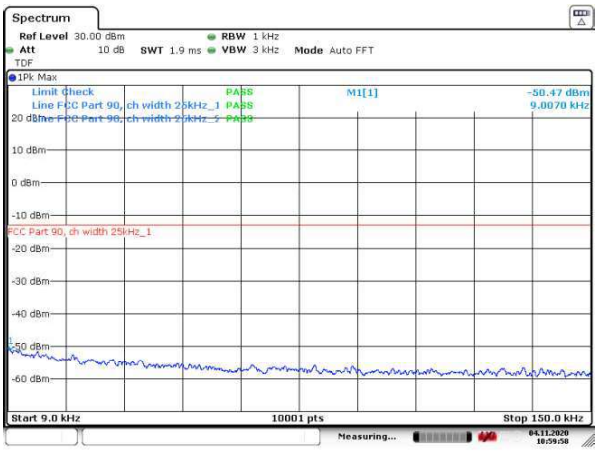


Figure 140: 9 – 150 kHz

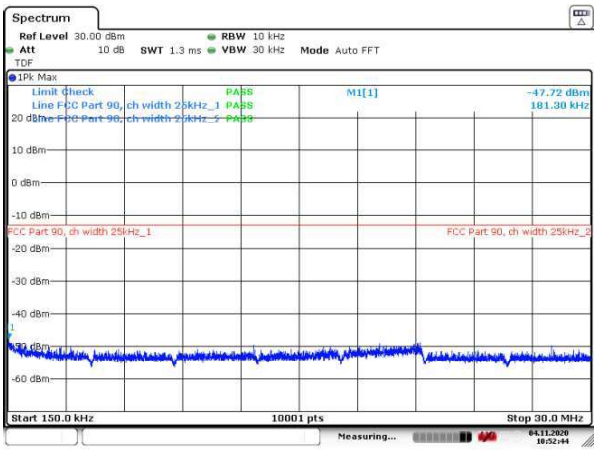


Figure 141: 150 kHz – 30 MHz

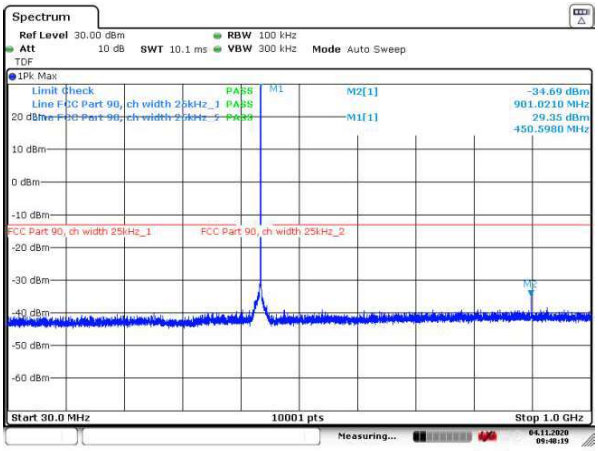


Figure 142: 30 – 1000 MHz

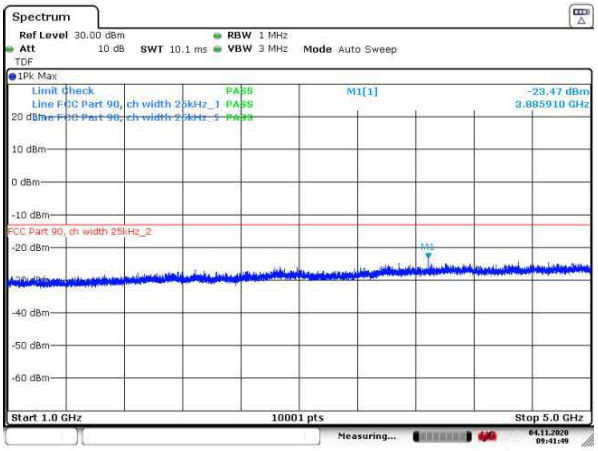


Figure 143: 1 – 5 GHz

Spurious emissions TX 450.5 MHz, 25 kHz, 4FSK, 19200bps

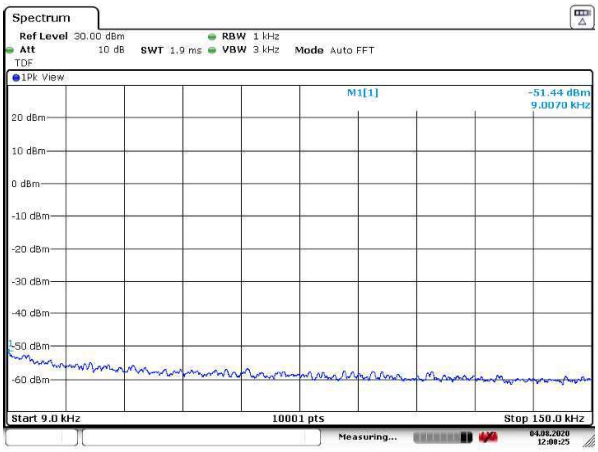


Figure 144: 9 – 150 kHz

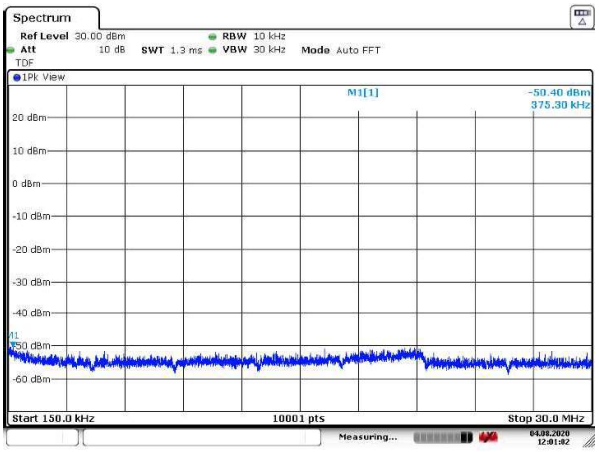


Figure 145: 150 kHz – 30 MHz

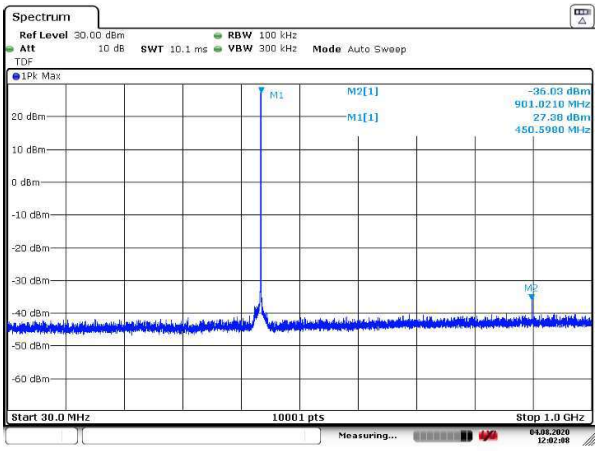


Figure 146: 30 – 1000 MHz

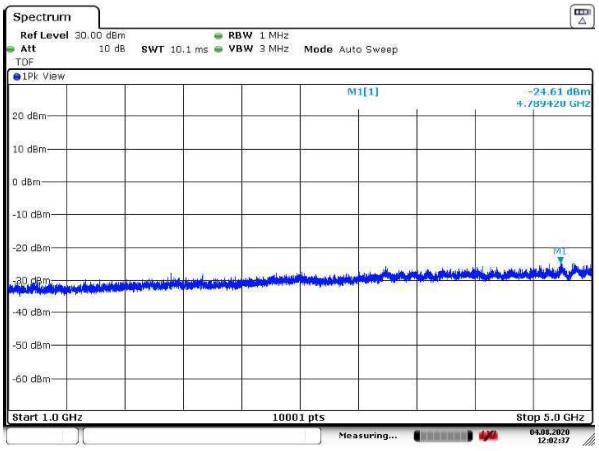


Figure 147: 1 – 5 GHz

Spurious emissions TX 469.5 MHz, 12.5 kHz, GMSK, 4800bps

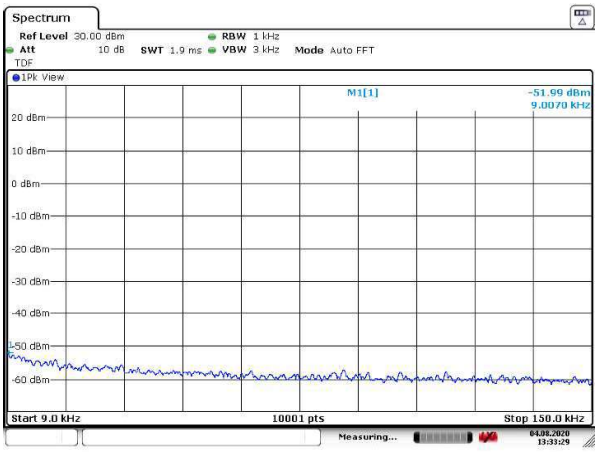


Figure 148: 9 – 150 kHz

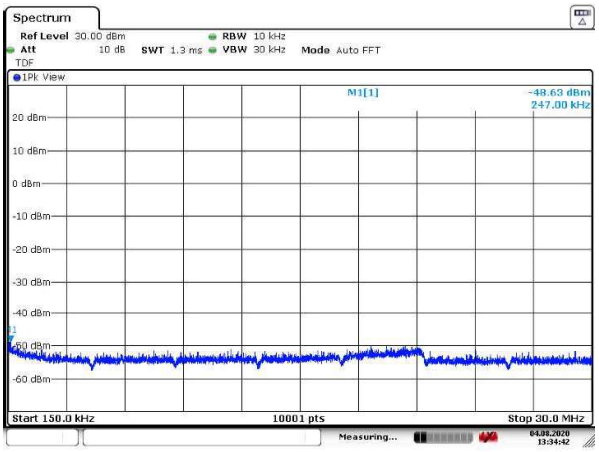


Figure 149: 150 kHz – 30 MHz

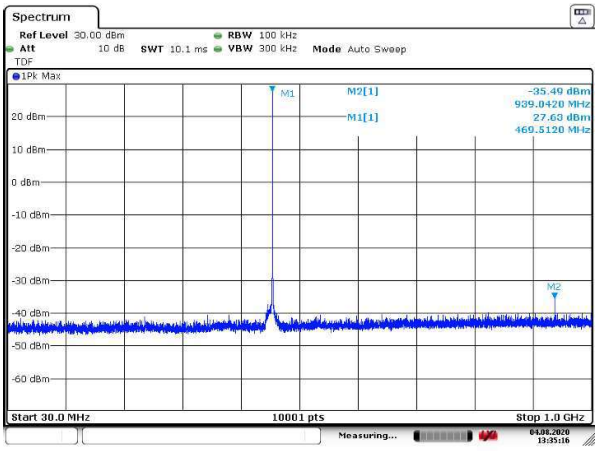


Figure 150: 30 – 1000 MHz

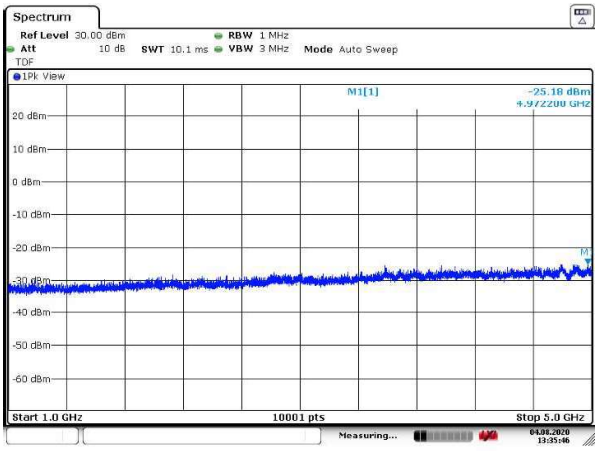


Figure 151: 1 – 5 GHz

Spurious emissions TX 469.5 MHz, 12.5 kHz, GMSK, 8000bps

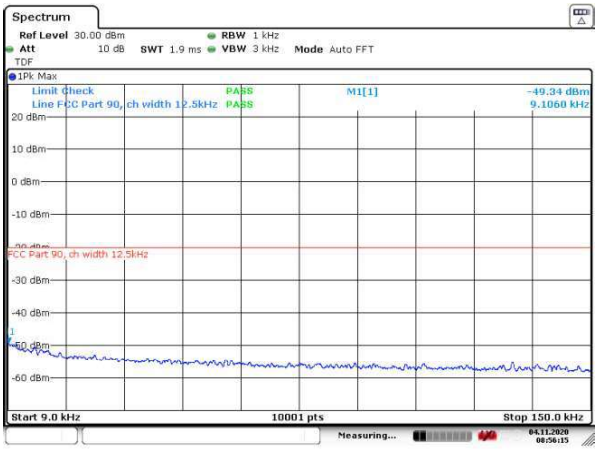


Figure 152: 9 – 150 kHz

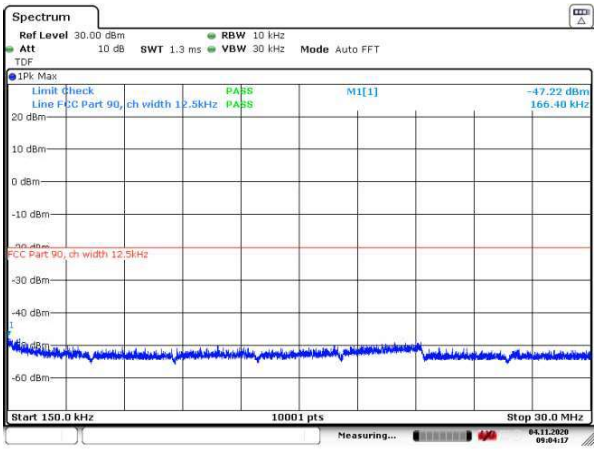


Figure 153: 150 kHz – 30 MHz

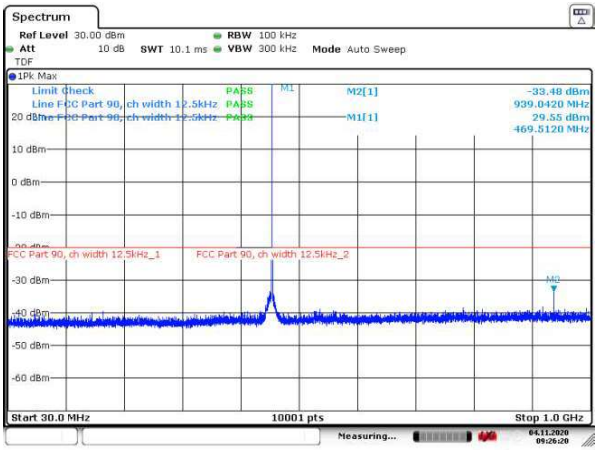


Figure 154: 30 – 1000 MHz

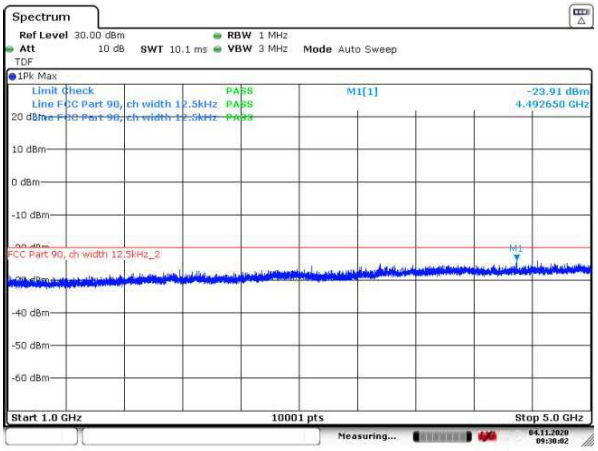


Figure 155: 1 – 5 GHz

Spurious emissions TX 469.5 MHz, 12.5 kHz, 4FSK, 9600bps

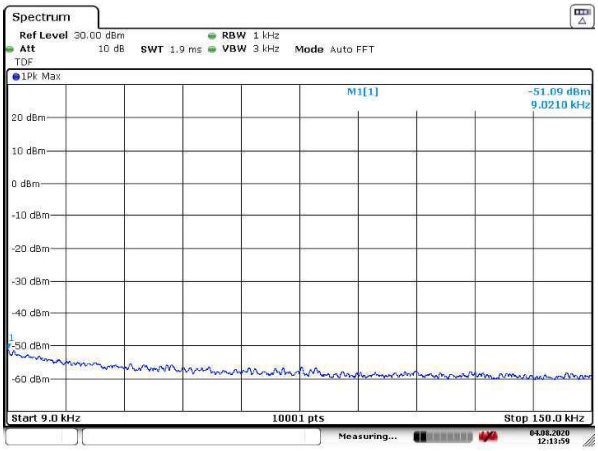


Figure 156: 9 – 150 kHz

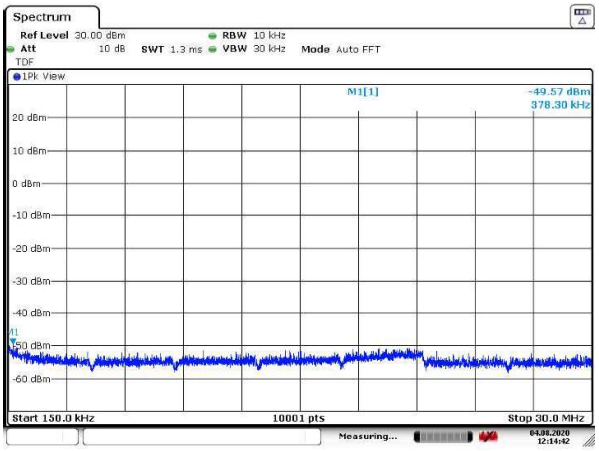


Figure 157: 150 kHz – 30 MHz

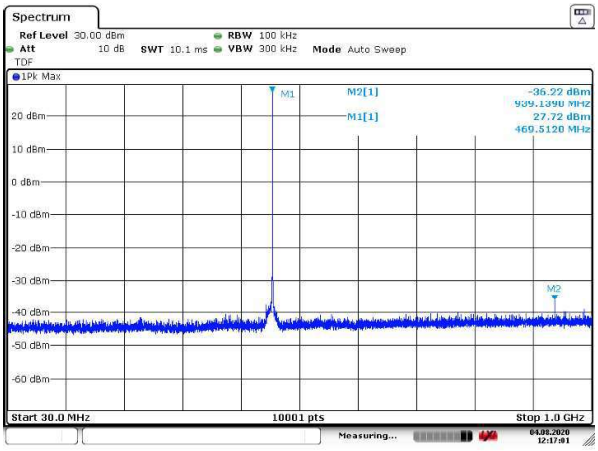


Figure 158: 30 – 1000 MHz

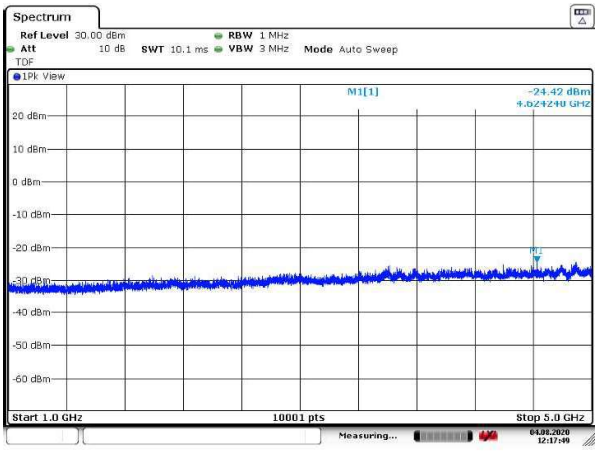


Figure 159: 1 – 5 GHz

Spurious emissions TX 469.5 MHz, 25 kHz, GMSK, 9600bps

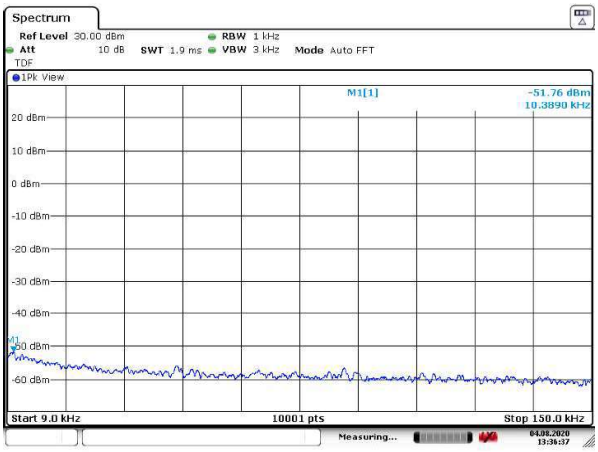


Figure 160: 9 – 150 kHz

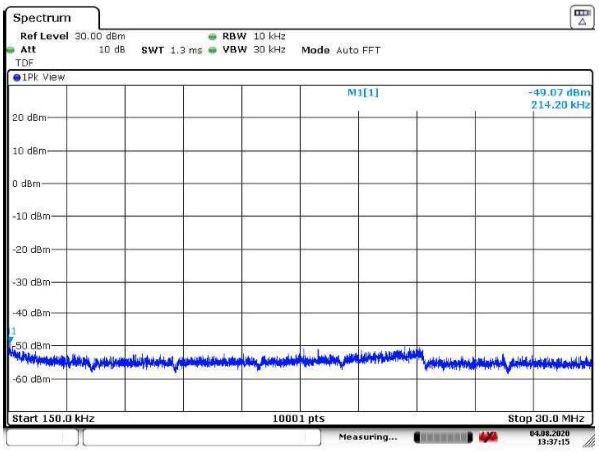


Figure 161: 150 kHz – 30 MHz

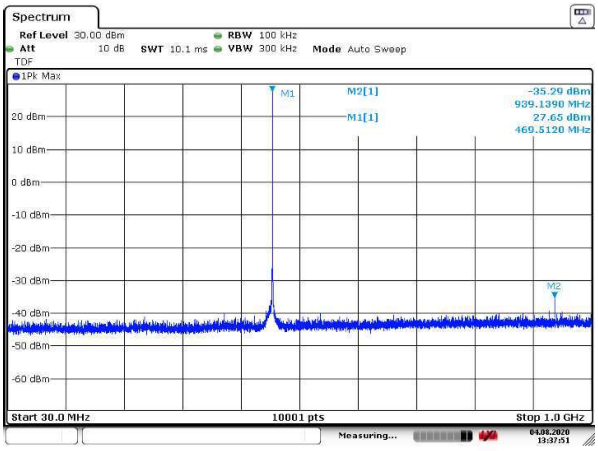


Figure 162: 30 – 1000 MHz

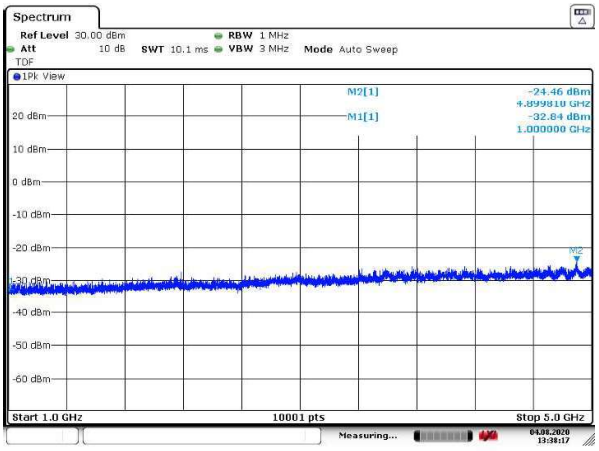


Figure 163: 1 – 5 GHz

Spurious emissions TX 469.5 MHz, 25 kHz, GMSK, 16000bps

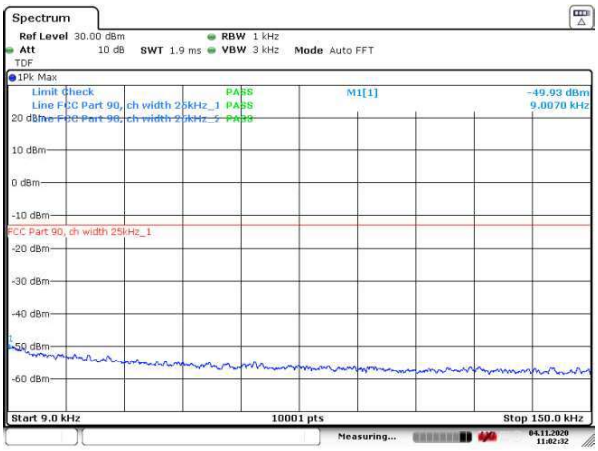


Figure 164: 9 – 150 kHz

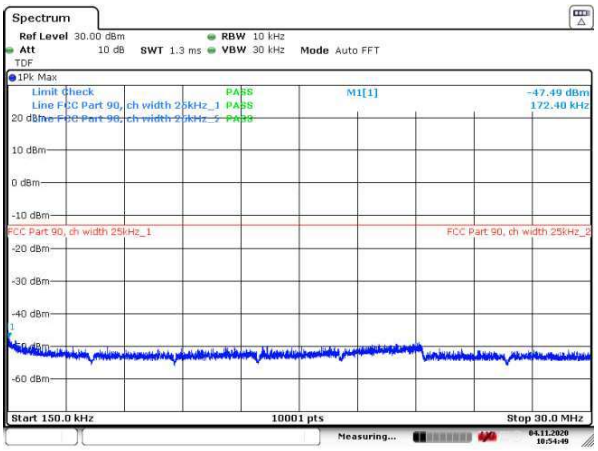


Figure 165: 150 kHz – 30 MHz

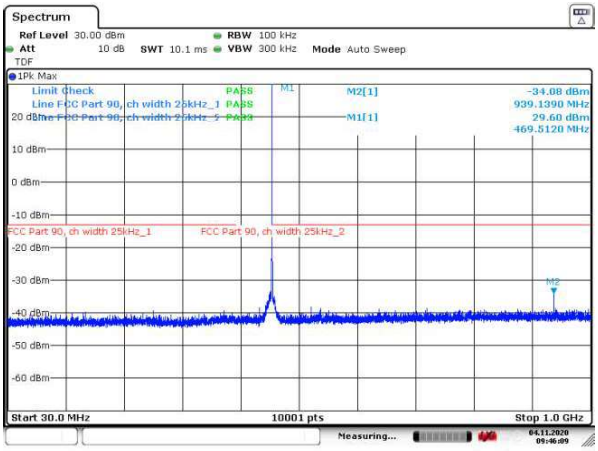


Figure 166: 30 – 1000 MHz

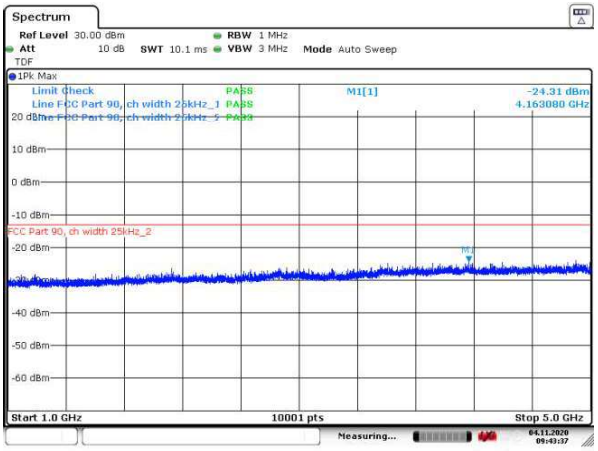


Figure 167: 1 – 5 GHz

Spurious emissions TX 469.5 MHz, 25 kHz, 4FSK, 19200bps

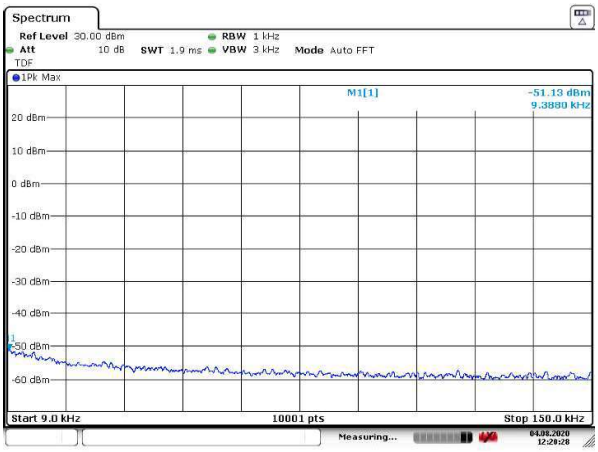


Figure 168: 9 – 150 kHz

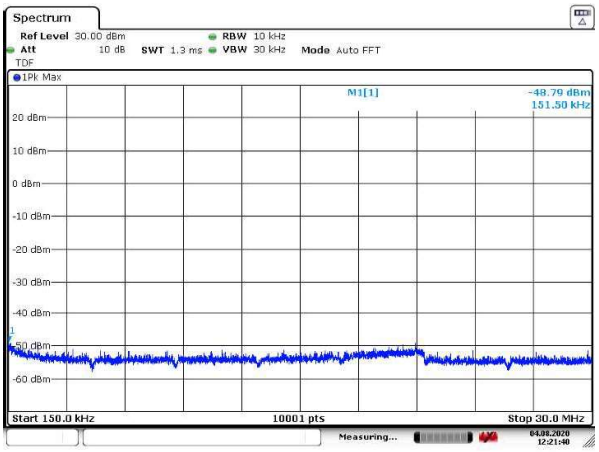


Figure 169: 150 kHz – 30 MHz

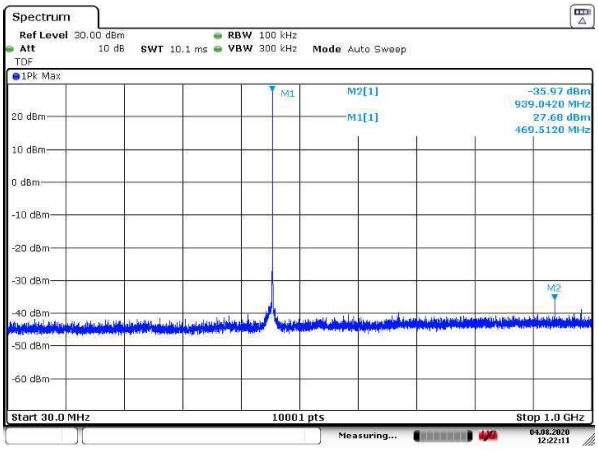


Figure 170: 30 – 1000 MHz

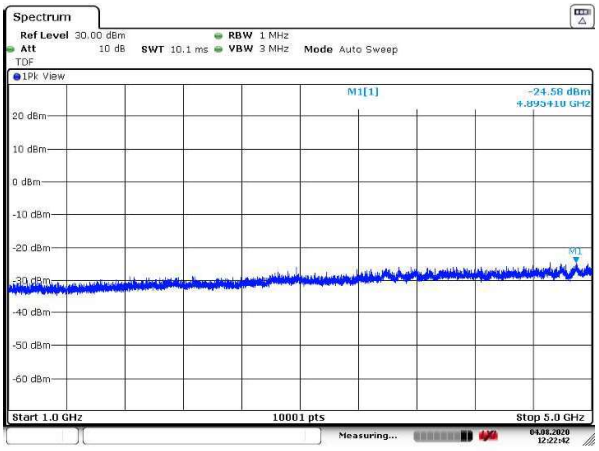


Figure 171: 1 – 5 GHz

Spurious emissions (radiated) 9 kHz – 5 GHz

Standard:	ANSI C63.26 (2015)		
Tested by:	HEM	HEM	HEM
Date:	13-16 July 2020	13 November 2020	16 November 2020
Temperature:	23 °C	21 ºC	21 ºC
Humidity:	45 %RH	35 %RH	32 %RH
Measurement uncertainty:	± 5.29 dB	Level of confidence 95.45 % (k = 2)	
Test result:	**PASS**		

FCC Rule: 90.210
RSS-119 5.8

For transmitters that are not equipped with an audio low-pass filter, the power of any emission must be attenuated below the unmodulated carrier output power (P) as follows: on any frequency removed from the center of the authorized bandwidth by more than 250 percent of the authorized bandwidth; at least 43 + 10 log (P) dB.

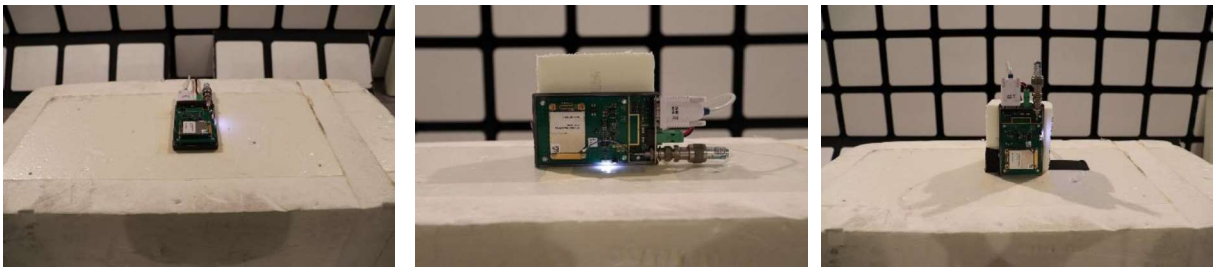
For transmitters designed to operate with a 12.5 kHz channel bandwidth, any emission must be attenuated below the power (P) of the highest emission contained within the authorized bandwidth as follows: on any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 12.5 kHz: at least 50 + 10 log (P) or 70 dB, whichever is the lesser attenuation.

Frequency Band (MHz)	Channel Bandwidth (kHz)	Authorized Bandwidth (kHz)	Limit (dBm)
406.1-430 and 450-470	12.5	11.25	-20
	25	20	-13

Test plan

The test was performed in a semi-anechoic chamber. The EUT was placed on a non-conductive 1.5 m high table standing on a turntable. The distance between the EUT and the measurement antenna was 3 m. In order to find the maximum levels of the disturbance radiation the angle of the turntable, and the height of the measuring antenna were varied during the tests. The test was performed with the measurement antenna in both horizontal and vertical polarizations.

The EUT is tested in different combinations of modulation, channel bandwidth, TX frequency, and EUT orientation. If emissions near the limit are detected with any combination, other combinations are investigated as well. The antenna connector was terminated with a 50Ω load.



Photograph 1: X-, Y-, and Z-orientations