

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Offset 1.2dB = Temporary antenna connector loss 0.2dB+ Cable loss 1.0dB

1 Duty Cycle and Antenna Gain

PHY	Modulation Type	Frequency (MHz)	Duty Cycle	Correction Factor(dB)	Antenna Gain(dBi)
LE 1M	GFSK (LE 1Mbps)	2402	62.90%	2.01	-2.50
LE 2M	GFSK (LE 2Mbps)	2402	33.33%	4.77	-2.50

Note: Correction Factor= $10 \cdot \log(1/\text{Duty Cycle})$

2 Conducted Power

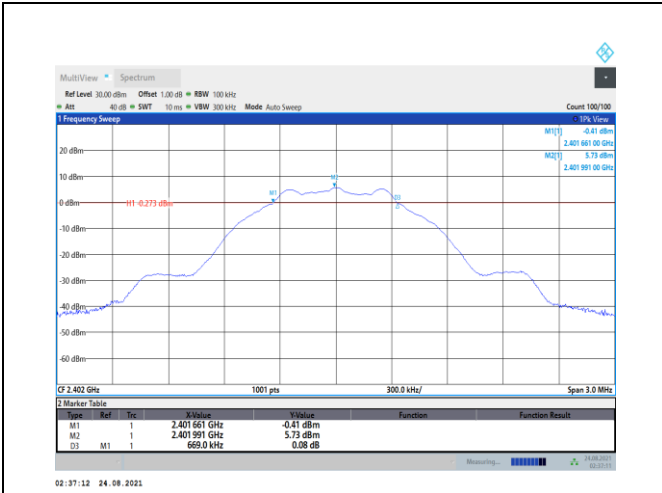
PHY	Modulation type	Conducted Peak Power(dBm)		
		2402MHz	2440MHz	2480MHz
LE 1M	GFSK (LE 1Mbps)	6.08	6.60	8.03
LE 2M	GFSK (LE 2Mbps)	6.21	6.79	8.20

Test on the worst case:

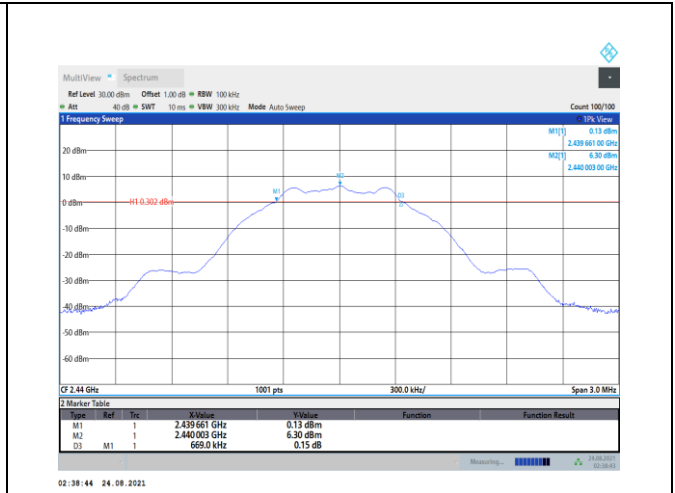
PHY	Modulation type	Conducted Peak Power(dBm)		
		2402MHz	2440MHz	2480MHz
LE 2M	GFSK (LE 2Mbps)	--	--	7.96

3 Occupied Bandwidth 6dB Bandwidth Modulation type: GFSK (LE 1Mbps)

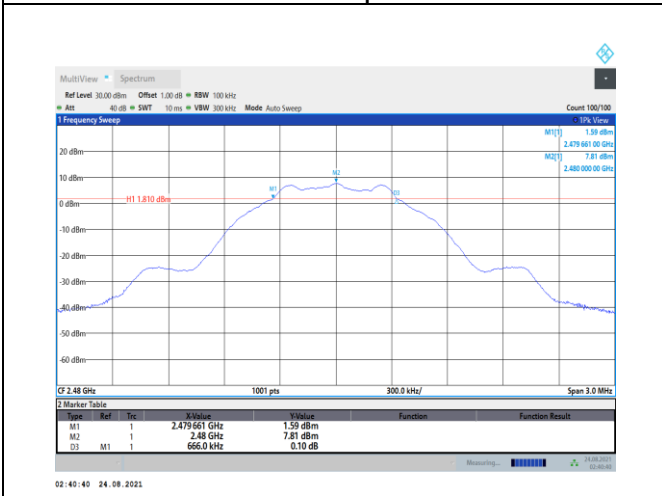
Carrier frequency (MHz)	6dB Bandwidth(kHz)
2402	669.0
2440	669.0
2480	666.0



Modulation: 1Mbps 2402MHz



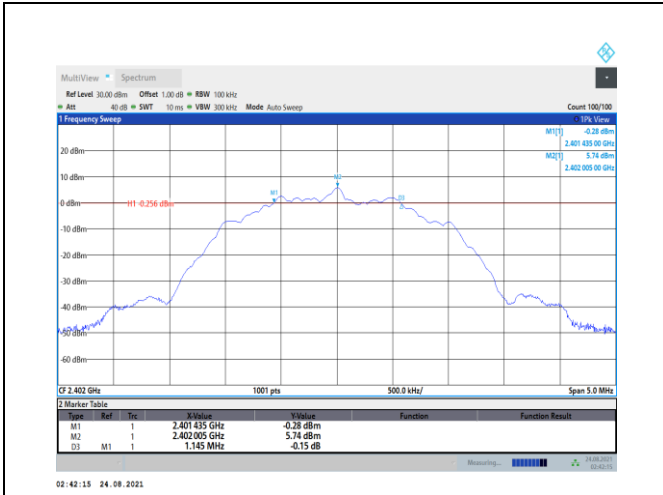
Modulation: 1Mbps 2440MHz



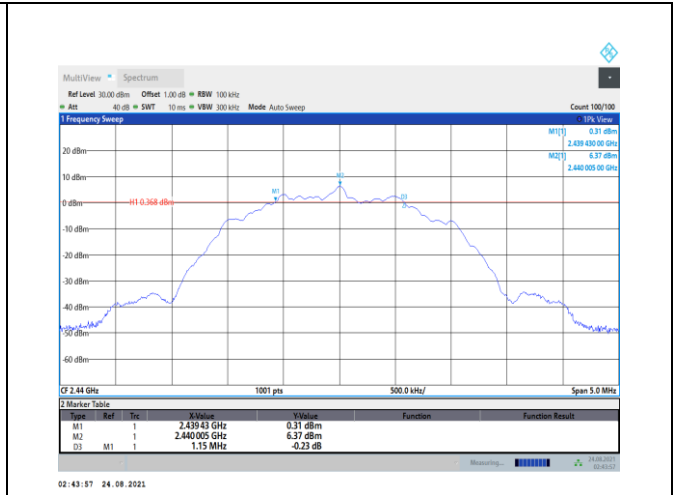
Modulation: 1Mbps 2480MHz

Modulation type: GFSK (LE 2Mbps)

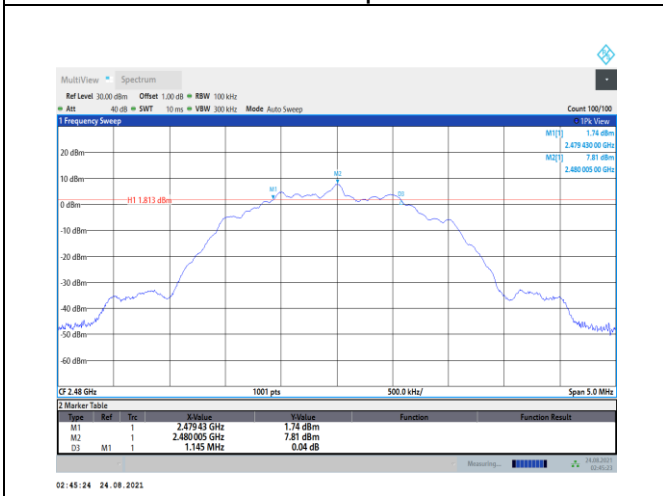
Carrier frequency (MHz)	6dB Bandwidth(kHz)
2402	1145.0
2440	1150.0
2480	1145.0



Modulation: 2Mbps 2402MHz



Modulation: 2Mbps 2440MHz

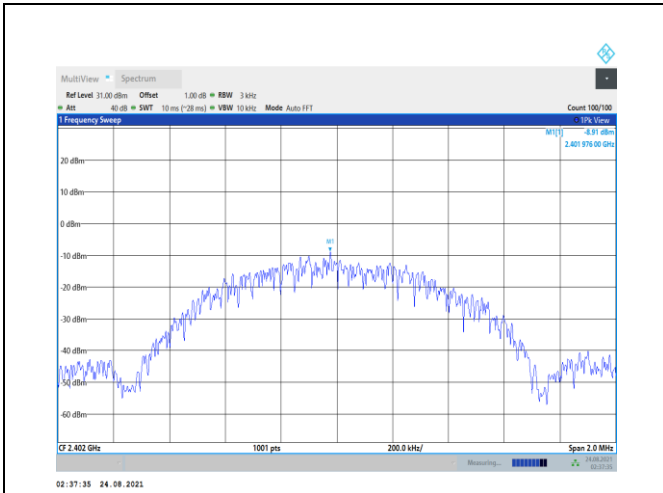


Modulation: 2Mbps 2480MHz

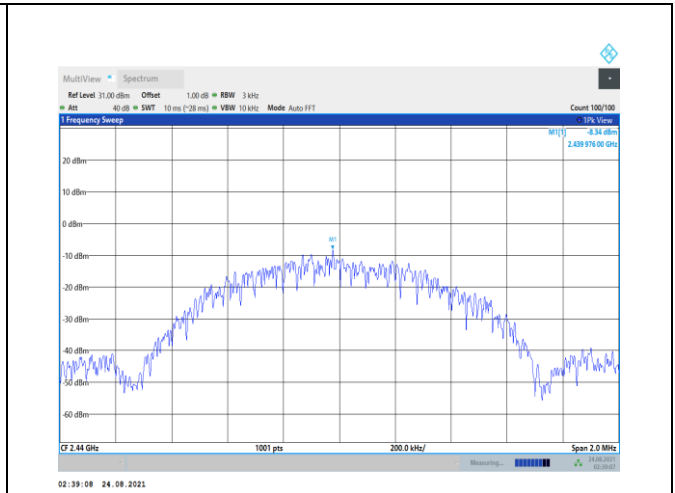
4 Transmitter Power Spectral Density

Modulation type: GFSK(LE 1Mbps)

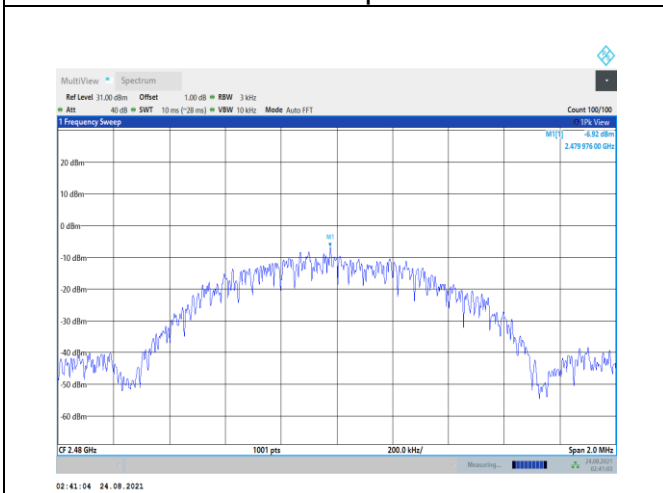
Carrier frequency (MHz)	Channel No.	Power Density (dBm/3kHz)
2402	0	-8.91
2440	19	-8.34
2480	39	-6.92



Modulation: 1Mbps 2402MHz



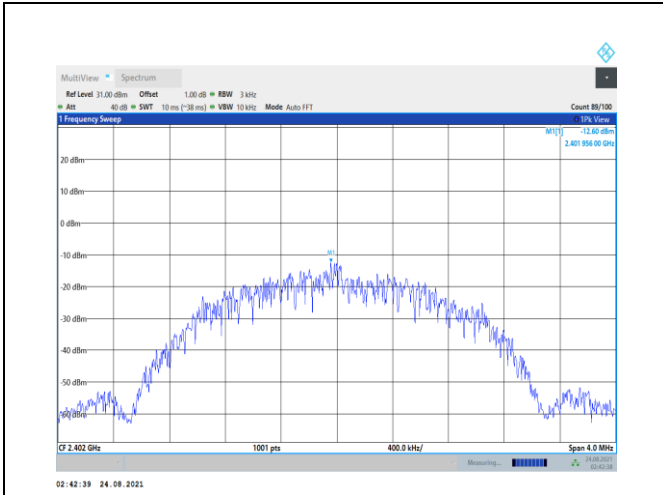
Modulation: 1Mbps 2440MHz



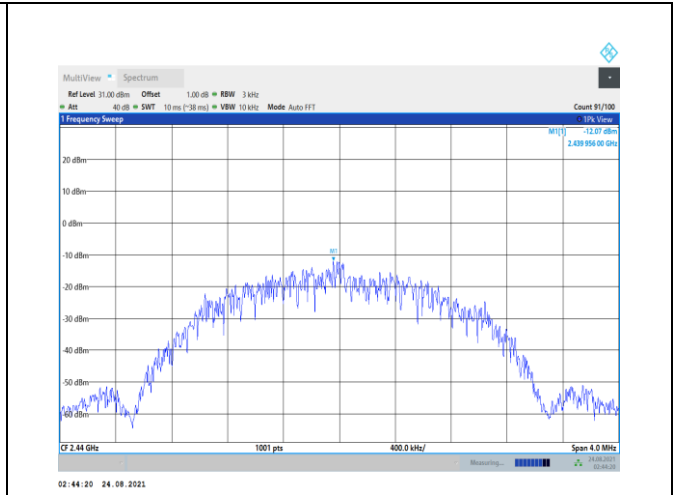
Modulation: 1Mbps 2480MHz

Modulation type:GFSK(LE 2Mbps)

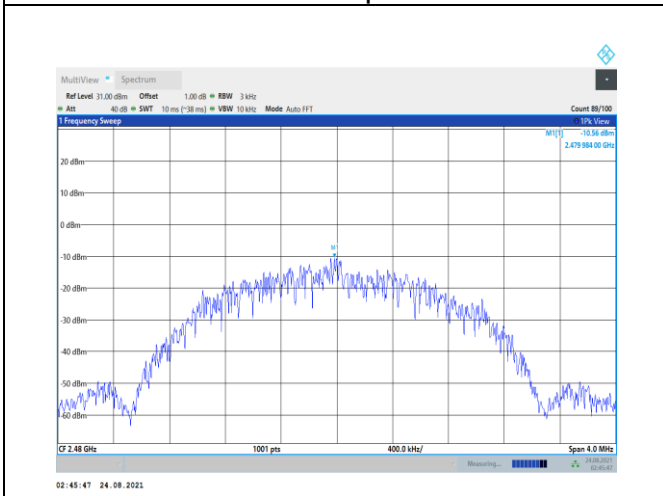
Carrier frequency (MHz)	Channel No.	Power Density (dBm/3kHz)
2402	0	-12.6
2440	19	-12.07
2480	39	-10.56



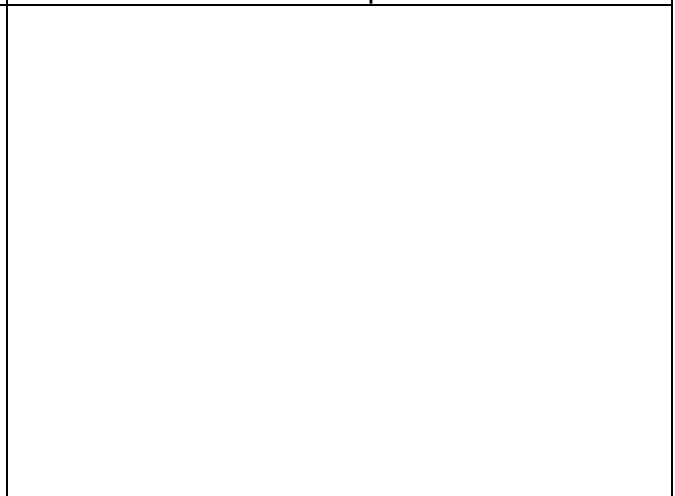
Modulation: 2Mbps 2402MHz



Modulation: 2Mbps 2440MHz

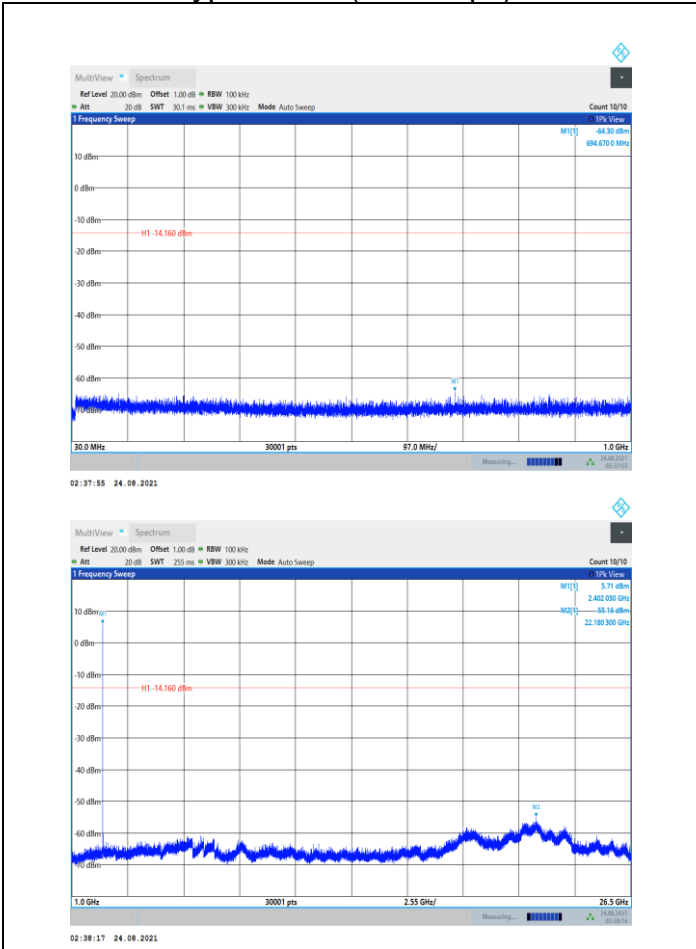


Modulation: 2Mbps 2480MHz

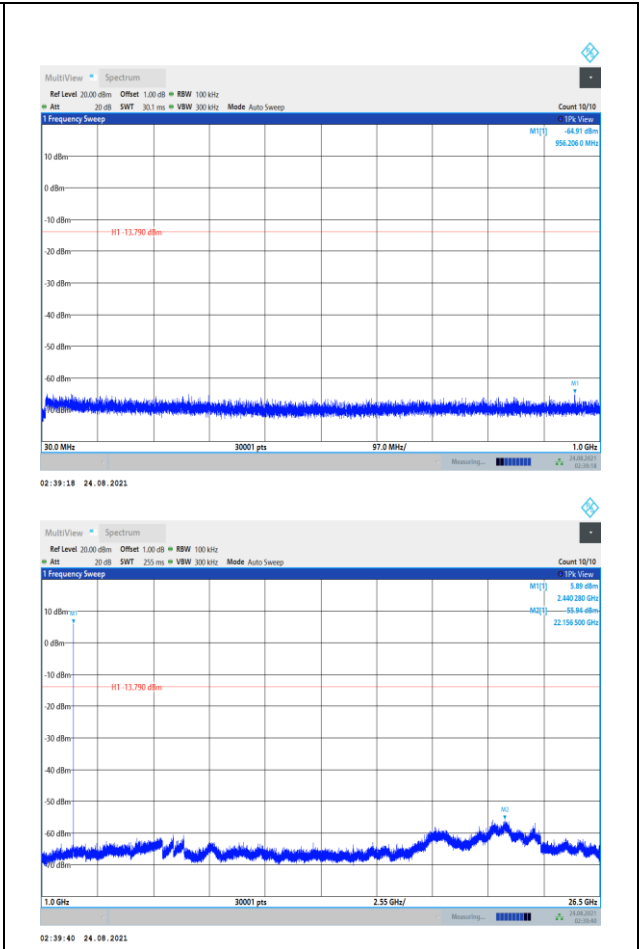


5 Conducted Out of band emission measurement

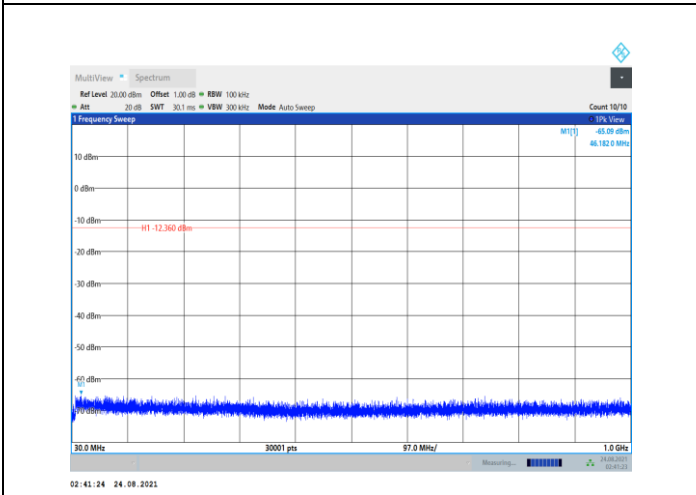
Modulation type: GFSK(LE 1Mbps)

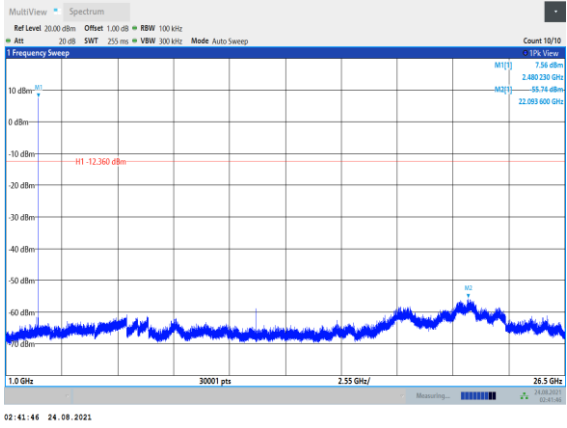


CH0



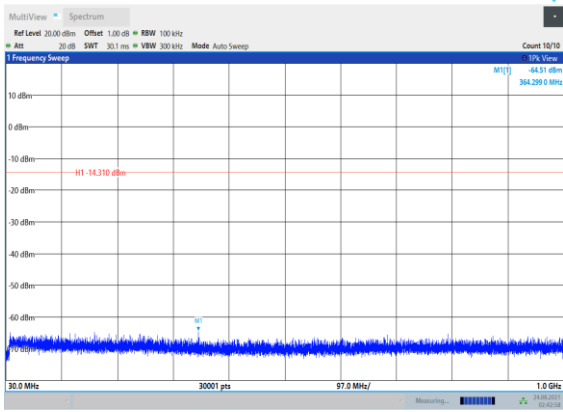
CH19



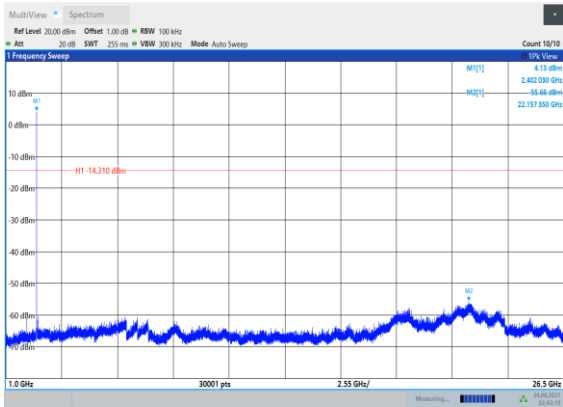


CH39

Modulation type: GFSK(LE 2Mbps)

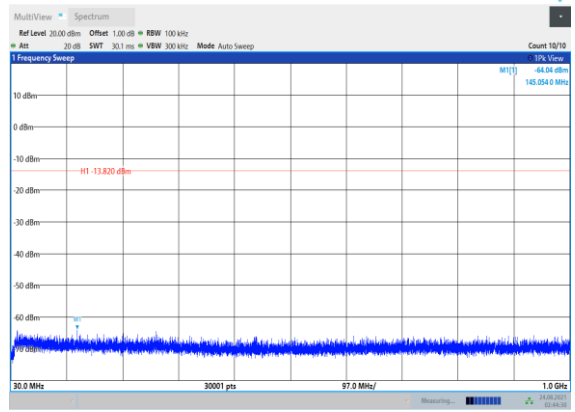


02:42:59 24.08.2021

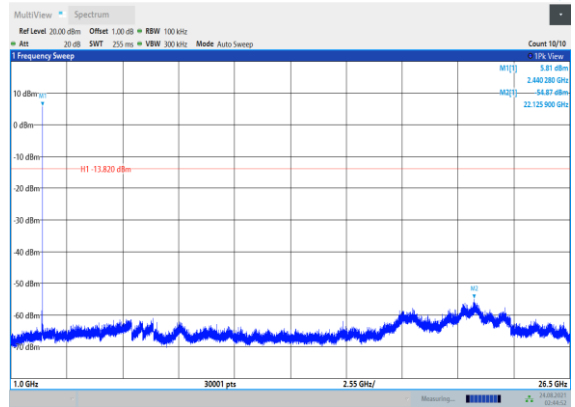


02:43:20 24.08.2021

CH0

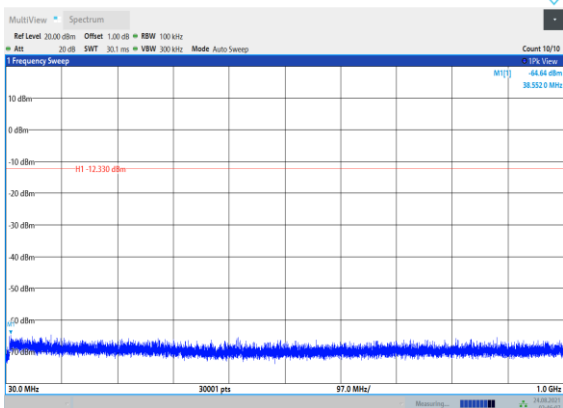


02:44:31 24.08.2021

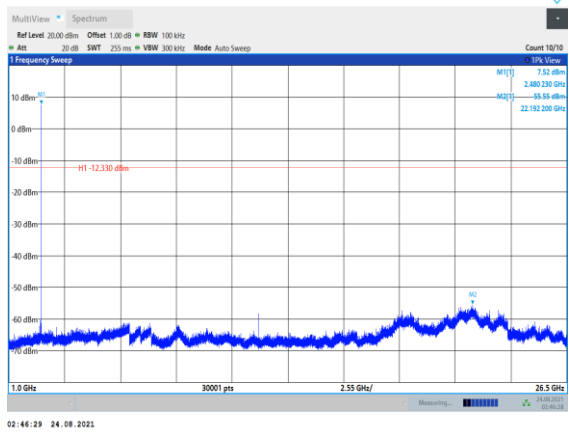


02:44:53 24.08.2021

CH19



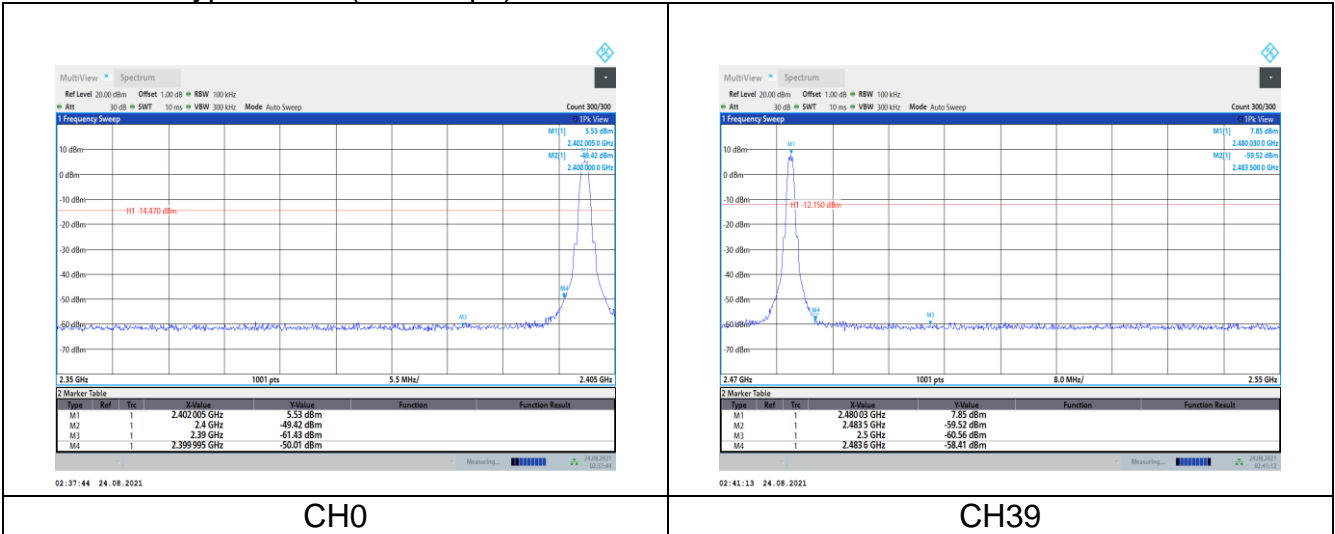
02:46:07 24.08.2021



CH39

6 Band Edge measurement

Modulation type: GFSK(LE 1Mbps)



Modulation type: GFSK(LE 2Mbps)

