Annex C- 15.209 Band Edges

Note: below measurements are in units of dBuV/m at 3meters. These measurements are performed conducted in lieu of radiated as permitted by ANSI C63.10-2020. The following formula was used in making such conversions:

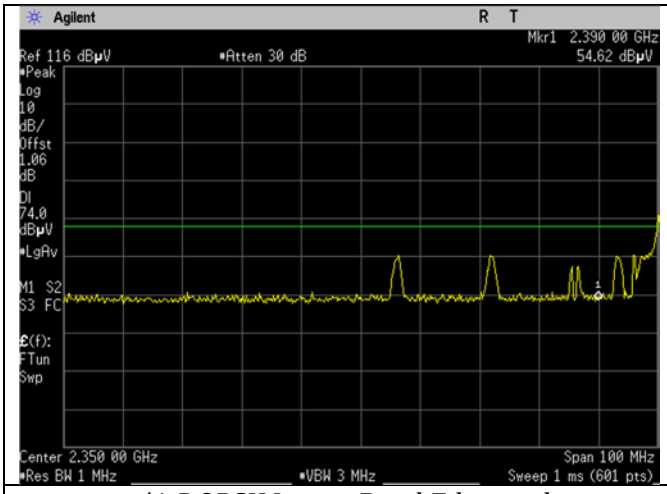
Above 1GHz: E[dBμV/m] = EIRP[dBm] - 20 log (d[m]) + 104.77, where E is field strength and d is

distance at which the field strength limit is specified in the applicable requirements. E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 m. Straight conversion between E[dBuV/m] and EIRP[dBm} = 107. Thus offset for dBuV/m at 3meters is 95.2-107+antenna gain. 2dBi antenna gain to be assumed if actual is less than 2dBi.

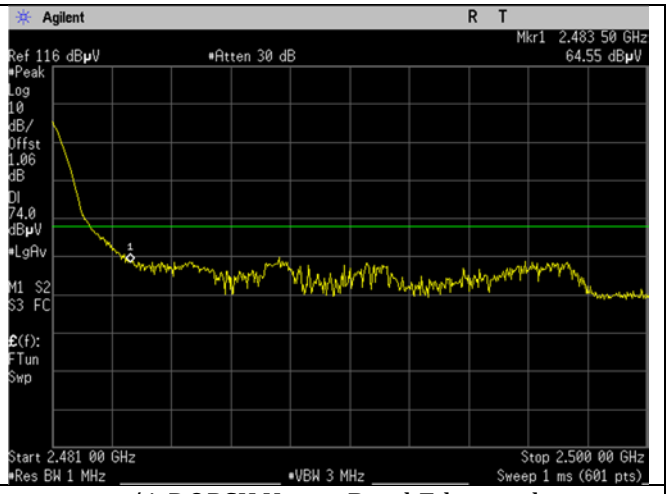
Note: cable loss is also included into offset.

Naming Convention

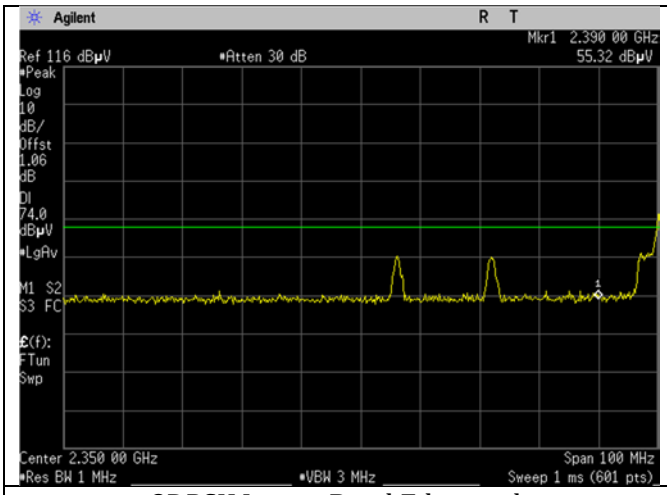
Modulation (GFSK, π/4-DQPSK, 8DPSK) Range (Lower Band Edge, Upper Band Edge) Measurement (peak, average)



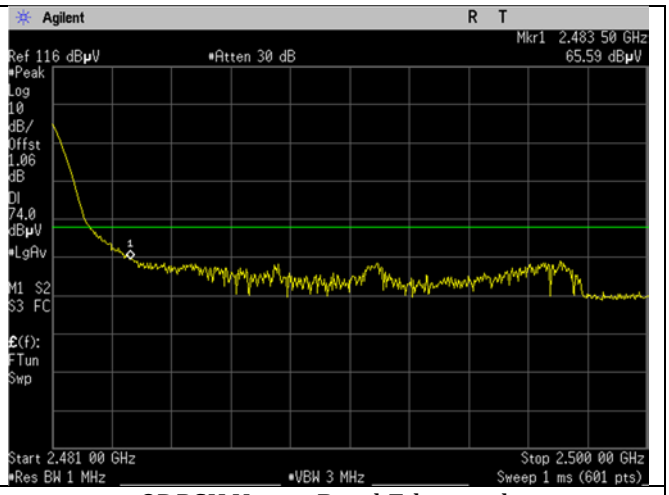
π/4-DQPSK Lower Band Edge peak



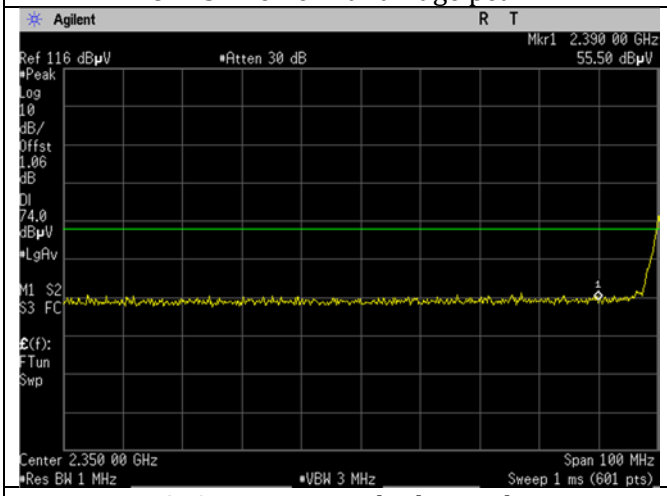
π/4-DQPSK Upper Band Edge peak



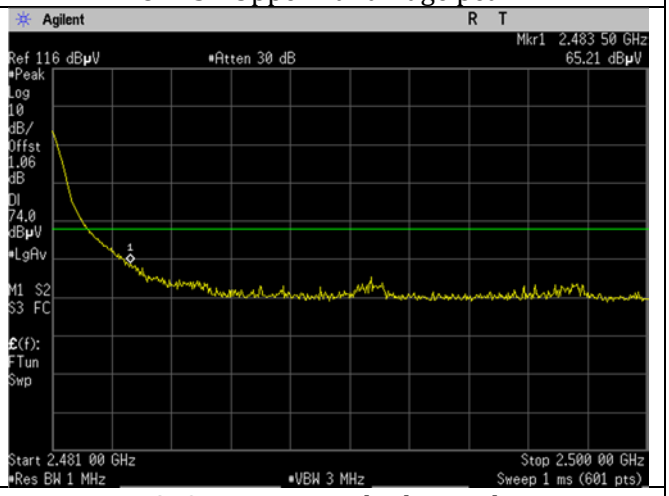
8DPSK Lower Band Edge peak



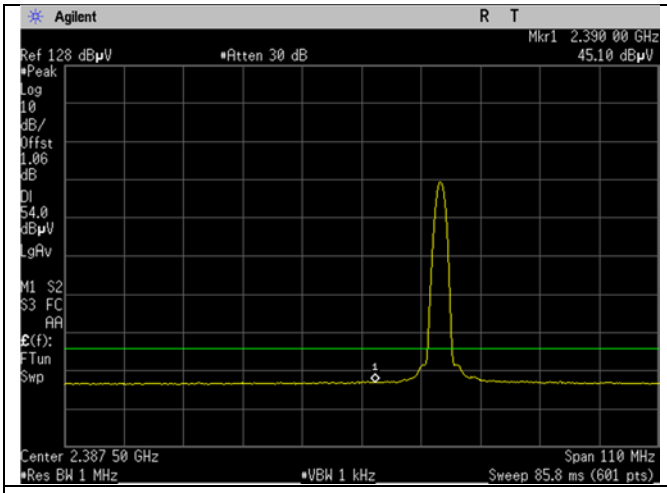
8DPSK Upper Band Edge peak



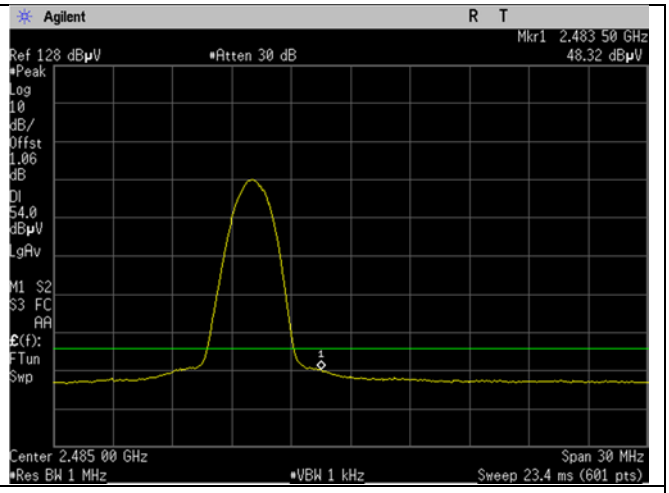
GFSK Lower Band Edge peak



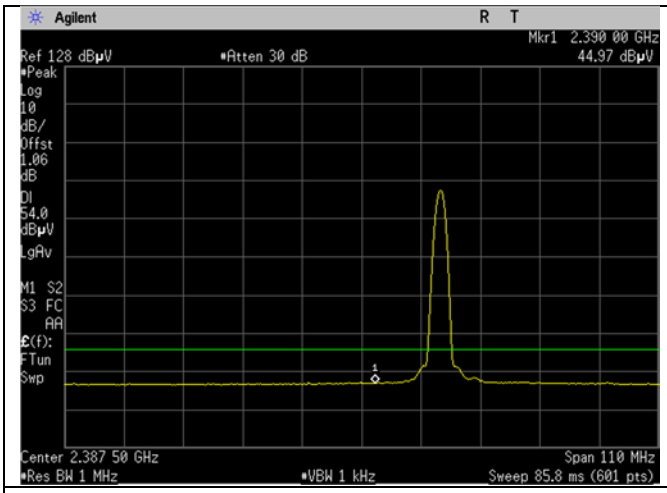
GFSK Upper Band Edge peak



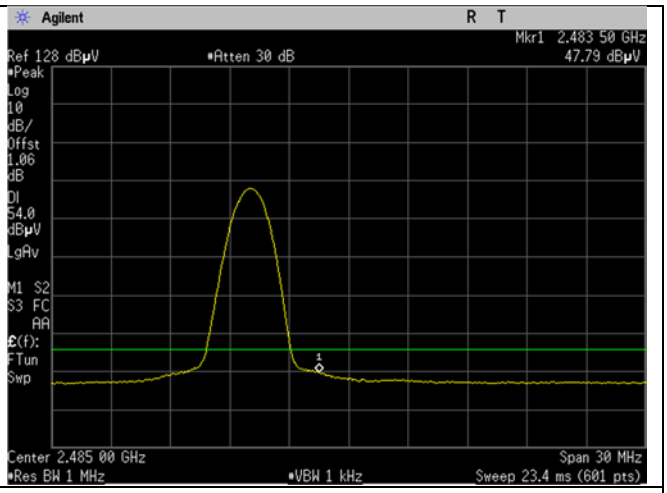
π/4-DQPSK Lower Band Edge average



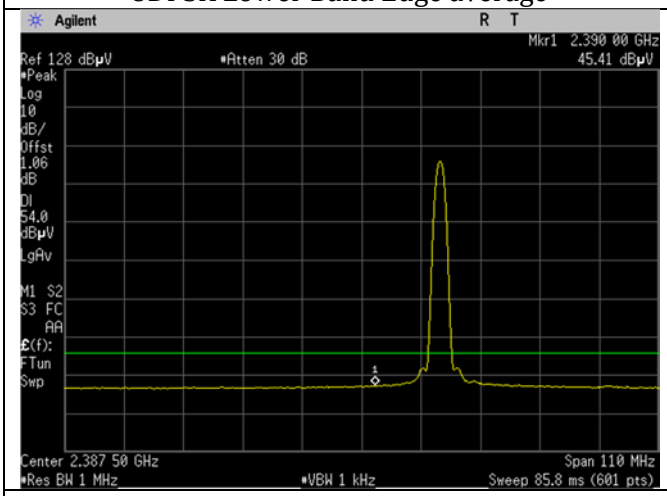
π/4-DQPSK Upper Band Edge average



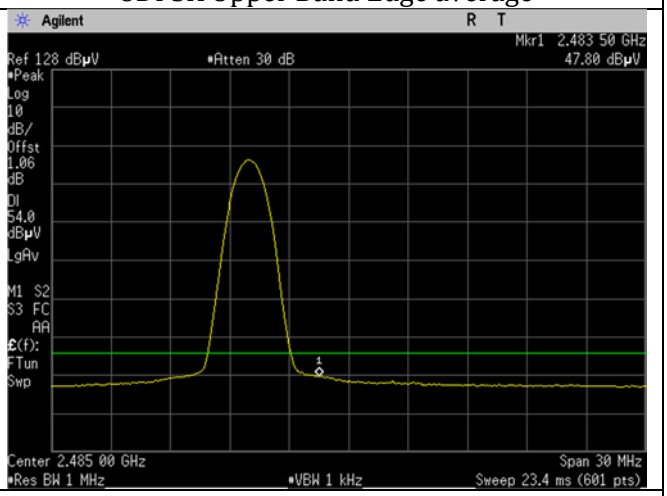
8DPSK Lower Band Edge average



8DPSK Upper Band Edge average



GFSK Lower Band Edge average



GFSK Upper Band Edge average

The below table applies an additional Duty Cycle Correction Factor (DCCF) to the above Average Band Edge measurements in order to accurately compare to the appropriate limit.

Radio	Frequency (MHz)	Configuration	BE (dBuV/m @3m)	BE Final (dBuV/m @3m)	Limit (dBuV/m @3m)	Margin (dB)
BT Classic	2402	GFSK	45.41	50.385	54	-3.615
	2480		47.8	52.775	54	-1.225
	2402	π/4-DQPSK	45.1	50.329	54	-3.671
	2480		48.32	53.549	54	-0.451
	2402	8DPSK	44.97	50.314	54	-3.686
	2480		47.79	53.134	54	-0.866

Note: BE = Corrected Band Edge average measurement prior to applying DCCF.
Note: BE Final [dBuV/m@3m] = BE [dBuV/m@3m] + DCCF [dB]