How do I find the Spurious Free Dynamic Range (SFDR) for an SDG function generator?

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If the SFDR is not listed directly in the specifications, you can find it by selecting the largest value between the harmonic and non-harmonic spurious data from the specification sheet at the frequency of interest.

For example, here is the SDG6X generator specs for harmonic and non-harmonic distortion:

Harmonic distortion			-65	dBc	0 dBm, 0~1 MHz (included)
			-60	dBc	0 dBm, 1~60 MHz (included)
			-50	dBc	0 dBm, 60~100 MHz (included)
			-40	dBc	0 dBm, 100~200 MHz (included)
			-30	dBc	0 dBm, 200~300 MHz (included)
			-28	dBc	0 dBm, above 300 MHz
Total Harmonic Distortion			0.075	%	0 dBm, 10 Hz ~ 20 kHz
Non-harmonic spurious			-60	dBc	0 dBm, ≤350 MHz
			-55	dBc	0 dBm, >350 MHz

If the signal of interest was 500 kHz, then the Non-Harmonic spur spec of – 60dBc (which is the worst) would be the reported SFDR.

If the signal was 100 MHz, then it would be the harmonic distortion spec of -50dBc, which is the worst.

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