

Fig. 1: Oscilloscope trace

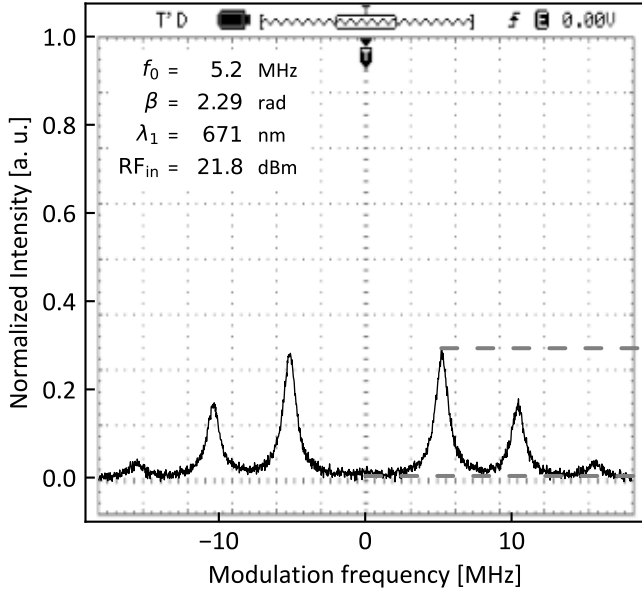


Fig. 2: Carrier/sideband ratio

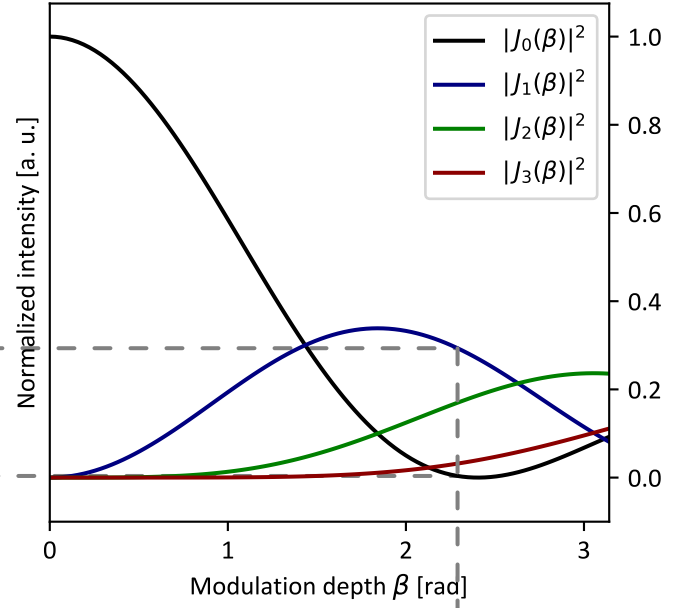


Table 1: Expected modulation

	unit	λ_1	λ_2
λ	nm	671	1550
P	dBm	14.6	21.9
P	mW	28.9	154
U	V_{pp}	3.4	7.8
U_π	V_{pp}	4.7	10.8
β/U	rad/ V_{pp}	0.67	0.29

Fig. 1: Recorded oscilloscope trace retrieved from a test setup as illustrated below.

Fig. 2: Squared absolute values of first-kind Bessel functions vs. modulation depth. Vertical lines reveal the ratio between the carrier $|J_0|^2$ and the i th sideband $|J_i|^2$ at a specific β .

Fig. 3: Dependency between RF amplitude and modulation depth for different wavelengths. Points on the curve allow to retrieve either the required RF amplitude for a specific/desired β or the max. achievable modulation depth for a given/available RF power.

Table 1: Expected RF-amplitude/-power values and conversion factors for the required wavelength at the reference modulation depth of 1 rad. Note: Experimentally recorded modulation depth displayed in Fig.1 might vary from the respective values ($\beta = 1$ rad) provided in the table.

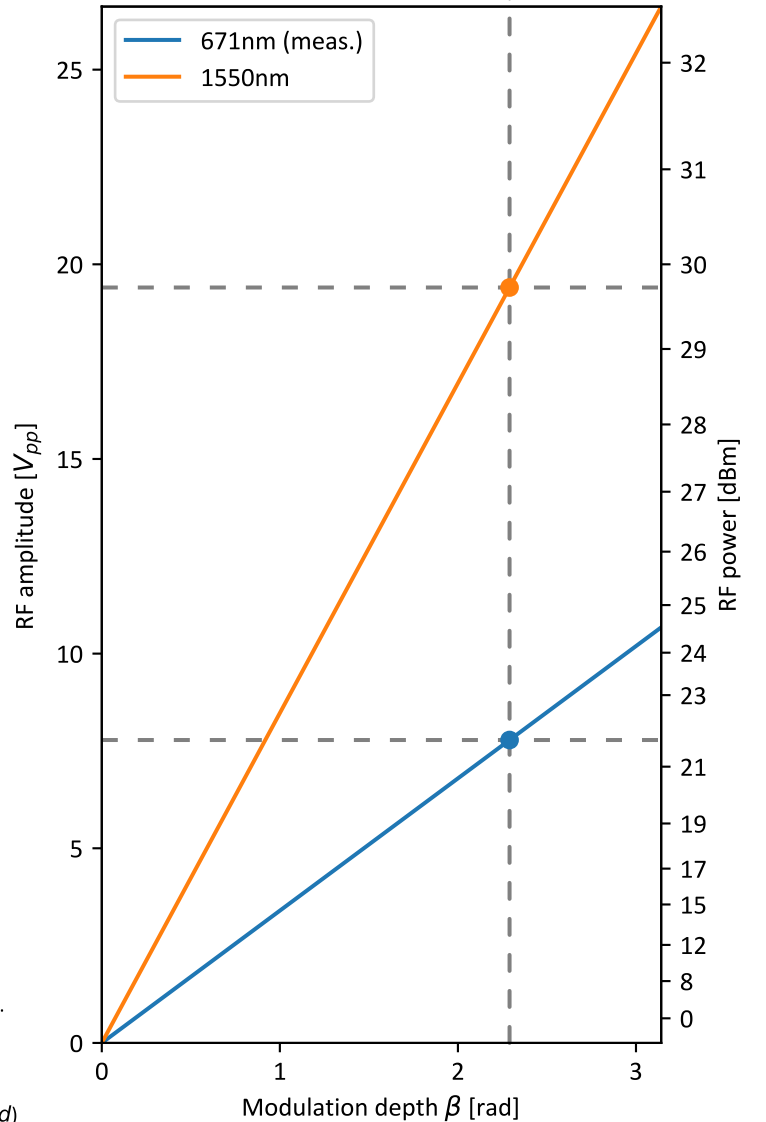


Fig. 3: RF signal amplitudes vs. modulation depth