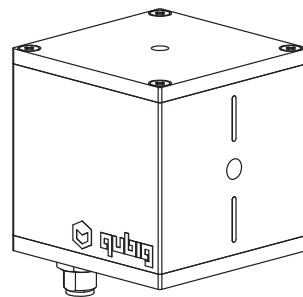


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Test Data Sheet

EO-K39L3

S/N F9164

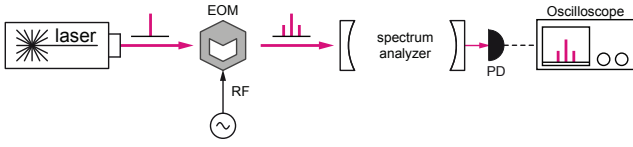
High-Q, resonant electro-optic modulator

Parameter	Value	Unit
Resonance Frequency	341-508	MHz
Bandwidth	1.3	MHz
Q factor	~300	
EO crystal	LiNbO ₃	
Optical Damage Threshold	1	W/mm ²
AR coating	650-1100	nm
Modulation at 767 nm	0.17	rad/Vpeak

Modulation Performance:

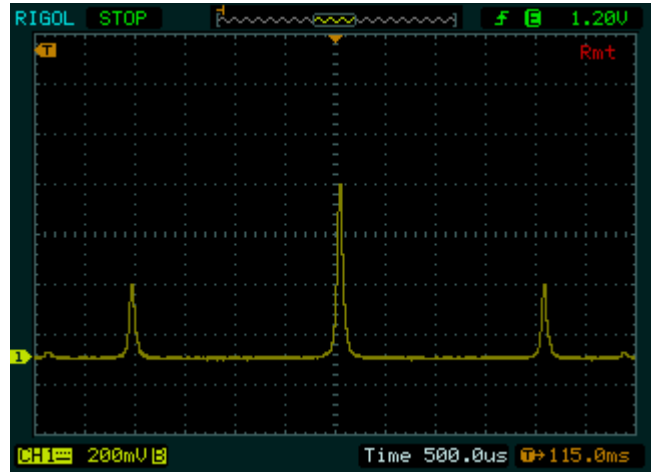
Measured Modulation:

Test setup



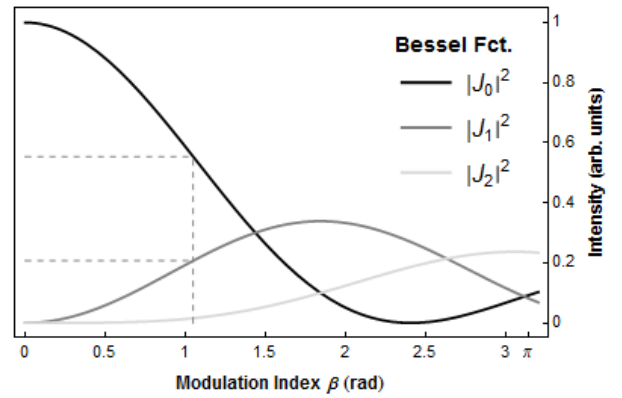
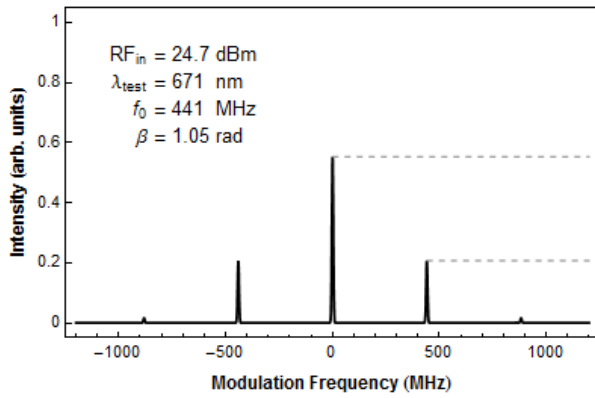
Parameters

RF input power	RF_{in}	24.7	dBm
Test wavelength	λ_{test}	671	nm
Resonance frequency	f_0	441	MHz

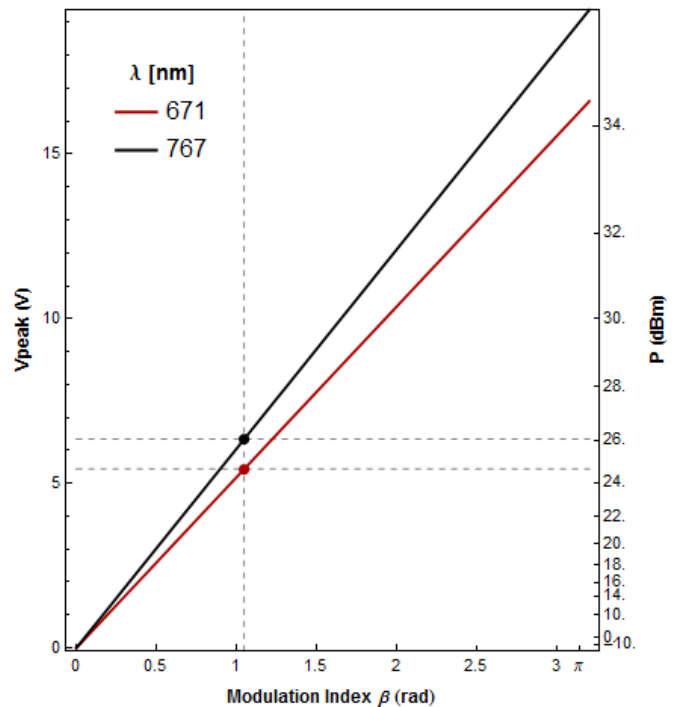


Oscilloscope screenshot

Numbers & Conversions:

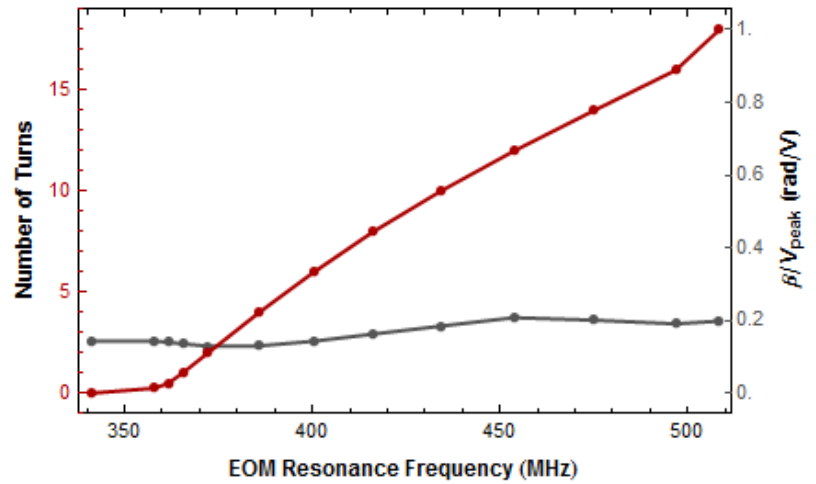


$\beta=1.05\text{rad}$	unit	λ_1	λ_2
λ	nm	671	767
V_{peak}	V	5.4	6.3
V_{rms}	V	3.8	4.5
P	dBm	24.7	26.
P	mW	295	402
V_{π}	V	16.3	19.
β/V_{peak}	rad/V	0.19	0.17



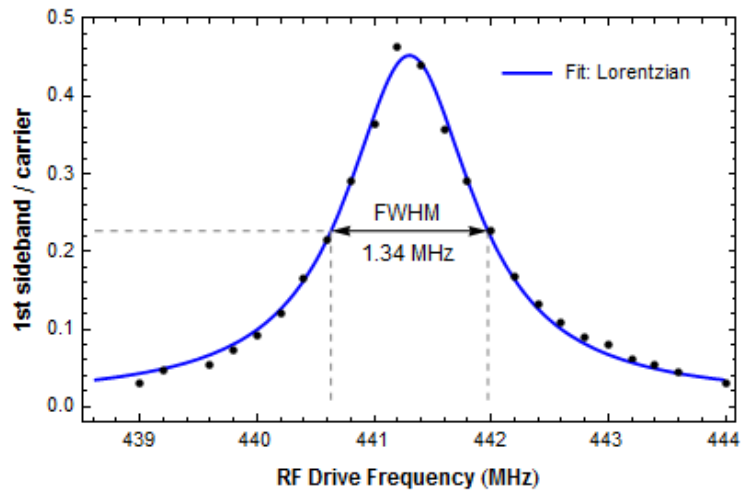
Tuning Performance:

- RF_{in} : 24.7 dBm
- ccw tuning: frequency \uparrow
- max number of turns: 18



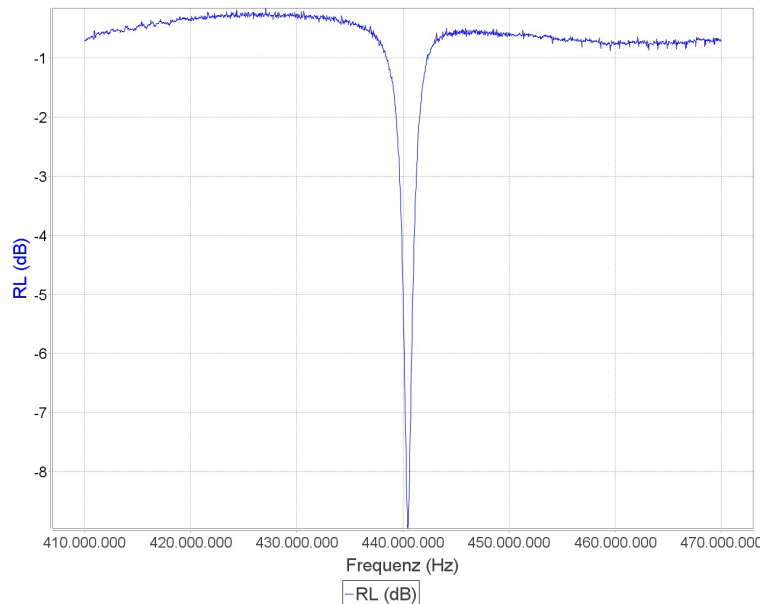
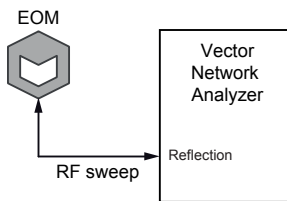
Bandwidth:

- Radio frequency tuning at a fixed resonance frequency f_0 .



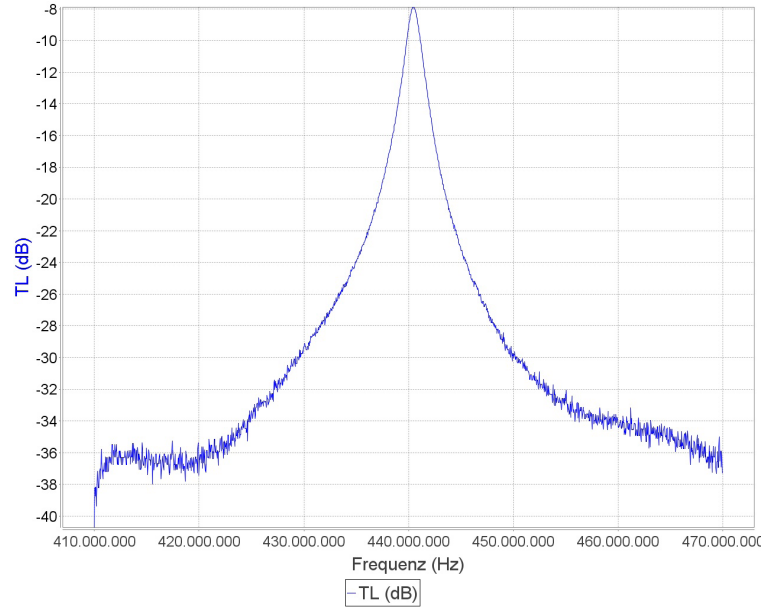
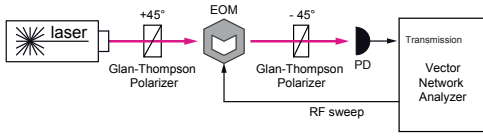
Return loss:

Test Setup

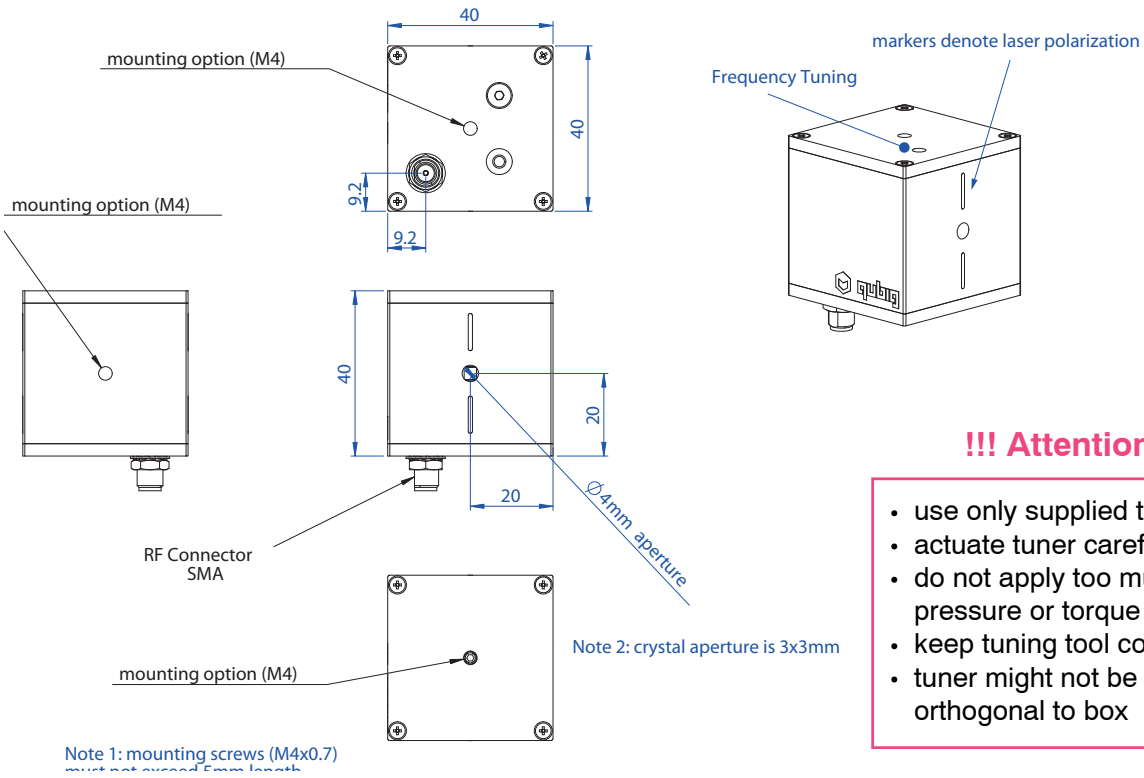


Optical modulation:

Test Setup



Package Drawing:



!!! Attention !!!

- use only supplied tuning tool
- actuate tuner carefully
- do not apply too much pressure or torque
- keep tuning tool coaxial
- tuner might not be perfectly orthogonal to box

Tested by:

Date:

___ / ___ / ___