# **Measurement Report**

### OCTAGON Single LNB Optima (Model OSLO) #1:

## Modifications made by OE7DBH:

26 MHz instead of 27 MHz quartz Input SMA jack instead of LNB horn Output SMA jack instead of F jack



#### Measurement equipment:

EATON 2075 gain & noise analyzer
CANFI (cheap automatic noise figure indicator)
Homemade noise source up to 12 GHz (ENR = 8.80 dB @ 10368 MHz)
35 dB attenuator, tee-bias, power supply

#### Measurement results:

 $f_{LO}$  = 9388,9 MHz (9750/27\*26)

 $f_{ln}$  = 10480 MHz

f<sub>out</sub> = 1091.1 MHz with 12V power supply (vertical input)





	EATON 2075		CANFI	
	NF	GAIN*	NF	GAIN*
10480 MHz <b>+</b>	2.8 dB	14.8 dB	2.9 dB	14.8 dB

- + CANFI: 10474/1085 MHz because of frequency gap of SDR stick between 1088-1220 MHz \* add approx. 41 dB because of additional attenuator after DUT

f<sub>out</sub> = 1091.1 MHz with 17V power supply (horizontal input)





	EATON 2075		CANFI	
	NF	GAIN*	NF	GAIN*
10480 MHz <b>+</b>	2.2 dB	15.1 dB	2.2 dB	15.2 dB

<sup>+</sup> CANFI: 10474/1085 MHz because of frequency gap of SDR stick between 1088-1220 MHz \* add approx. 41 dB because of additional attenuator after DUT

#### OCTAGON Single LNB Optima (Model OSLO) #2:

#### Modifications made by OE7DBH:

26 MHz instead of 27 MHz quartz Input SMA jack instead of LNB horn Output SMA jack instead of F jack



#### Measurement equipment:

EATON 2075 gain & noise analyzer
CANFI (cheap automatic noise figure indicator)
Homemade noise source up to 12 GHz (ENR = 8.80 dB @ 10368 MHz)
35 dB attenuator, tee-bias, power supply

#### Measurement results:

 $f_{LO}$  = 9388,9 MHz (9750/27\*26)

 $f_{ln}$  = 10480 MHz

f<sub>out</sub> = 1091.1 MHz with 12V power supply (vertical input)





	EATON 2075		CANFI	
	NF	GAIN*	NF	GAIN*
10480 MHz <b>+</b>	2.7 dB	13.8 dB	2.8 dB	13.3 dB

<sup>+</sup> CANFI: 10474/1085 MHz because of frequency gap of SDR stick between 1088-1220 MHz \* add approx. 41 dB because of additional attenuator after DUT







	EATON 2075		CANFI	
	NF	GAIN*	NF	GAIN*
10480 MHz <b>+</b>	1.6 dB	16.5 dB	1.7 dB	16.5 dB

<sup>+</sup> CANFI: 10474/1085 MHz because of frequency gap of SDR stick between 1088-1220 MHz \* add approx. 41 dB because of additional attenuator after DUT