

**FEEDHORN TESTS - OCT. 7, 2013 - KL7UW**

DESCRIPTION:	MEASUREMENT:	No. 1	No. 2	Ygnd/cs <sup>2</sup>	Ygnd/cs <sup>3</sup>	Ysun/cs	Loss <sup>5</sup>	Y50/cs	VK3UM
		DBm	DBm	DB	DB	DB	DB	DB	DB
W2IMU FEED	Sfu = 101								
	Cold sky	-62.7	-64.55						
	Ground (nearby shed)	-57.2	-58.4						7.36 <sup>1</sup>
	LNA INTO 50-ohm Load <sup>4</sup>							-57.7	
	LNA direct			5.5					
	LNA+Relay				6.15				
	Sun Noise (LNA direct)	-46.6				16.1	0.14		16.33 <sup>1</sup>
	Sun Noise (LNA+Relay)		-48.65			15.9	0.18		

Notes:

1- VK3UM EME Calc for W2IMU Horn on dish:  $f/D = 0.50$

2- Column No. 1 shows measurements taken with LNA directly connected to feedhorn

[N-elbow-N barrel-NM/sma-LNA-sma/NF]

3- Column No. 2 shows measurements taken with Relay connected to feedhorn before LNA

[N-elbow-relay-NM/sma-LNA-sma/NF]

4- 50-ohm load on Tx port of relay

5- Loss between feedhorn and LNA (est. from VK3UM EME Calc.)