

7/9/2017		50 MHz and Up ERP results				Range		400		ft
10 GHz		22"	test ant height	63"	ideal rig height	95	dB Path Loss			
Name	Call	Dish size "	Output dBm	Pwr Mtr dBm	Atten. Value dB	Calc Ant Gain	Calc ERP dBm	Meas ERP	Meas-Calc	
Jim M	N9JIM	18	41.8	0.9	20	30.8	72.6	73.1	0.4	
Mike L	K6ML	24	40.8	0.7	20	33.3	74.1	72.9	-1.3	
Brian K	WA6QDP	18	42.0	-0.2	20	30.8	72.8	72.0	-0.9	
Andreas	N6NU	30	39.0	-2.4	20	35.3	74.3	69.8	-4.5	
Oliver B	KB6BA	36	33.9	-3.4	20	36.9	70.8	68.8	-2.0	
Dave F	AD6A	18	39.0	-4.5	20	30.8	69.8	67.7	-2.2	
Pete M	K6TJ	20	33.0	-13.5	20	31.8	64.8	58.7	-6.1	
Brian W	K6OJM	30	27.0	-7.0	10	35.3	62.3	55.2	-7.1	
David V	KI6CLA	12" panel	32.0	-14.5	10	25.0	57.0	47.7	-9.3	
24 GHz		26"	test ant height	68"	ideal rig height	102	dB Path Loss			
Name	Call	Dish size "	Output dBm	Pwr Mtr dBm	Atten. Value dB	Calc Ant Gain	Calc ERP dBm	Couldn't measure ERP accurately		
Jim M	N9JIM	18	34.8	-16.0	0	38.2	73.0	5 above noise		
MikeL	K6ML	24	34.8	-18.0	0	40.7	75.5	3 above noise		
Brian K	WA6QDP	18	28.8	-20.8	0	38.2	67.0	0.2 above noise		
Andreas	N6NU	30	26.0	-21.0	0	42.6	68.6	in the noise		
Dave F	AD6A	18	33.0	-21.0	0	38.2	71.2	in the noise		
y = 7 + 20 * LOG(size inches / 12) + 20 * LOG(freq in GHz)										
Antenna gain + Pathloss + Cable & Mixer loss - Amp & Horn gain										
Pathloss = 20 * LOG(Dist in feet) + 20 * LOG(Freq MHz)										