10 GHz	July 29 2000 SDMG/SBMS Picnic					Range Feet	220		Path Loss dB	89
NB 10368										
Call	Dish size "	Output dBm	ERP PwrMtr dBm	Atten. Value dB	MDS Gen dBm	Calc Ant Gain dB	Calc ERP dBm	Meas ERP dBm	Meas minus Calc ERP dB	
W6OYJ	30	24	-40	30	-93	35	59	46	-13	
KE6IDA	30	-2.5	-44	10	-87	35	33	22	-10	
K6VLM	36	24	-38	30	-87	37	61	48	-13	
W6SYA	24	7	-40	20	-90	33	40	36	-4	
KE6HPZ	27	26	-38	30	-90	34	60	48	-12	
WB6DNX1	36	20	-34	30	-98	37	57	52	-5	
WA6CDR	72	39	-33	50	-111	43	82	73	-9	
W6AT	24	27	-34	30	-90	33	60	52	-8	
WB6DNX2	36	20	-42	40	-95	37	57	54	-3	
K6VLM2	36	24	-36	30	-93	37	61	50	-11	
NB	Known Ant dB									
WA6CGR	17	27	-40	20	-77	17	44	36	-8	
WB 10280 Tx	Known Ant dB	Out	dBm	Atten	MDS	Gain	ERP	ERP	Delta	
K6RRA	17	10	-52	10	-19	17	27	6	-21	
24 GHz WB										
	Dish Size									95
WB6DNX	24	17	-22	10	-20	41	58	53	-5	
WA6QYR	18	12	-21	10	-36	38	50	54	4	
W6OYJ	15	7	-22	0	-29	37	44	43	-1	
WB frequency is 10280 MHz, IF is 57 MHz with 10.5 dB cable loss & amp gain of 46 db										
NB frequency is 10368 MHz, IF is 145 MHz with 18 dB cable loss & amp gain of 46 dB										
Ant gain Calc assumes 64% efficiency =7+20*LOG(size inches/12)+20*LOG(freq in GHz)										
Measured ERP = Power meter reading+Attenuator + Pathloss +Cable & Mixer loss-Amp & Horn gain										
Path Loss = -37.5+20*LOG(Dist in feet)+20*LOG(Freq MHz)										
(Spreadsheet revised - new data added - 6 Aug 2000)										
Note: N6IZW and W6OYJ believe an intermittent instrumentation error occurred during these test										
causing as much as a 9 dB low reading of the 10 GHz ERP Pwr Mtr. This has not occurred										
in previous tests, however part of the instrumentation system and cabling were not the same as										
in the previous tests. Also, we suspect that the MDS Gen dBm readings below about -95 dBm										
may be affected by attenuator cable leakage.										
WA6CDR also has pointed out that his 72 inch dish was tested at a distance only about 30% of										
its far field distance (758 feet) at 10.368 GHz. Thus the ERP and MDS calculations are invalid										
but we do know he has a very high performance station.										