

TFD Array Feed System Losses

Device sweeps performed 11 Aug 2013

Feed line loss sweeps performed 28 Mar 2015

TFE Element Efficiency Measured Jan 2020

Freq (MHz)	TRA AN-TFD-30 Element Efficiency Loss (dB)	Element Balun to Outer J-box RG-58 Loss (dB)	Mini-Circuits ZSC-2-1W+ Combiners Loss (dB)	Outer J-box to center J-box RG-58 Loss (dB)	Mini-Circuits ZSC-2-1W+ Combiners Loss (dB)	Center J-box to gray point of entry box LMR-240 Loss (dB)	Rack panel to gray point of entry box LMR-400 Loss (dB)	Loss between TFD balun output and Hybrid Inputs (CAL PLANE) (dB)	Loss between sky side of TFD element and Hybrid Inputs (CAL PLANE) (dB)
16	-6.8	-0.33	-0.20	-0.75	-0.20	-0.94	-0.99	-3.4	-10.2
18	-5.2	-0.35	-0.21	-0.79	-0.21	-0.99	-1.04	-3.6	-8.8
20	-4.8	-0.37	-0.21	-0.84	-0.21	-1.03	-1.09	-3.8	-8.6
22	-5.0	-0.39	-0.22	-0.89	-0.22	-1.07	-1.15	-3.9	-8.9
24	-5.2	-0.40	-0.22	-0.93	-0.22	-1.11	-1.20	-4.1	-9.3
26	-5.1	-0.42	-0.23	-0.97	-0.23	-1.16	-1.24	-4.2	-9.3
28	-4.9	-0.45	-0.24	-1.00	-0.24	-1.20	-1.28	-4.4	-9.3
30	-4.7	-0.46	-0.24	-1.04	-0.24	-1.23	-1.32	-4.5	-9.2
32	-5.2	-0.46	-0.25	-1.09	-0.25	-1.27	-1.36	-4.7	-9.9