ALFA Receiver
System Temperature and Power Levels to WAPP
Conversion to 275MHz
By : Bill Sisk

Component	Noise Figure dB	Noise Temp K	Gain dB	BW Device MHz	BW Min MHz	Tsys K	Total Gain dB	Power Density dBm/ MHz	Pno dBm	Po1 dBm	IP3 dBm	
						26.00						
LNA		3	40	1000	1,000.0	29.00	40	-84.0	-54.0			
1225-1525MHz BPF	3	289	-3	300	300.0	29.03	37	-87.0	-62.2			
Post Amp1	1.6	129	23	10000	300.0	29.05	60	-64.0	-39.2	6.4	16	MGA 86576
Mixer	19	22,746	15	500	300.0	29.08	75	-49.0	-24.2	8	18	Agilent IAM-82008
LPF	1	75	-1	700	300.0	29.08	74	-50.0	-25.2			Coilcraft P7LP-507
IF1 Amp	3.6	374	12.5	1000	300.0	29.08	86.5	-37.5	-12.7	17.5	30	MCL MAV-11
Fiber Optic Link	44	7,284,181	-3.5	1500	300.0	29.09	83	-41.0	-16.2	10	26	Fiber Span AC231
Power Splitter	3.5	359	-3.5	1000	300.0	29.09	79.5	-44.5	-19.7			MaCom T-1000 45dB isolation at 100-500MH
Start of WAPP												
Cable Loss	0.5	35	-0.5	500	300.0	29.09	79	-45.0	-20.2			
Switch 1	1.5	120	-1.5	2000	300.0	29.06	77.5	-46.5	-21.7	20		MCL ZASWA-2-50DR
15dB Step Atten.	20	28,710	-20	500	300.0	29.06	57.5	-66.5	-41.7	15		MCL ZSAT-31R5 7dB Loss
WAPP Amp 1	3.5	359	20	500	300.0	29.06	77.5	-46.5	-21.7	16	30	MCL ZFL500HLN
Switch 2	1.5	120	-1.5	2000	300.0	29.06	76	-48.0	-23.2	20		MCL ZASWA-2-50DR
250-300MHz BPF	1	75	-1	50	50.0	29.06	75	-49.0	-32.0			FSY BE275-46-8SS
6dB	6	865	-6	500	50.0	29.06	69	-55.0	-38.0			
WAPP Amp 2	3.5	359	20	500	50.0	29.06	89	-35.0	-18.0	16	30	MCL ZFL500HLN