

frequency in MHz 525.250 - 573.250
 down-tilt in ' 1.4
 max / mean in dB 3.74 3.78

4 Bays of 3 Each Kathrein K723147 Broadband Panel Antennas

SCALA Medford Oregon	Channel - 31 DTV and 23 NTSC	Typ. Nr.
MB 17.6.2 14:52	Redtronix	Bl.

simulation with typical exactness of +/- 8% of max signal

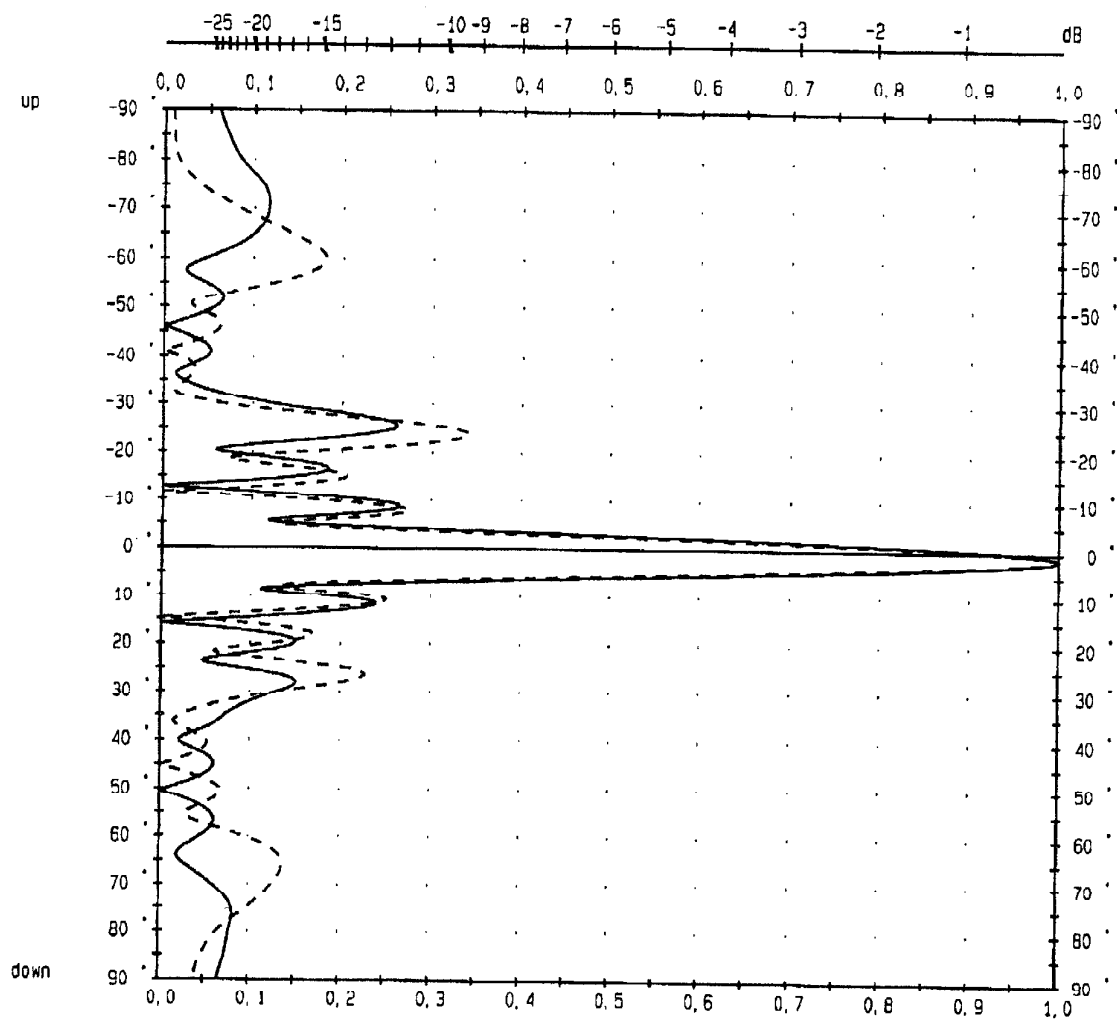
Azimuth Radiation Pattern in % and dB at downtilt: .0

f1= 525.250MHz			f2= 573.250MHz								
azimut	%	dB	%	dB	%	dB	%	dB	%	dB	
0.	77.5	-2.2	80.3	-1.9							
10.	85.9	-1.3	92.4	-.7							
20.	71.1	-3.0	72.6	-2.8							
30.	75.1	-2.5	70.1	-3.1							
40.	95.6	-.4	92.2	-.7							
50.	97.9	-.2	97.6	-.2							
60.	77.8	-2.2	77.1	-2.3							
70.	60.2	-4.4	59.0	-4.6							
80.	66.1	-3.6	66.1	-3.6							
90.	73.1	-2.7	73.6	-2.7							
100.	73.6	-2.7	69.6	-3.2							
110.	69.6	-3.1	64.3	-3.8							
120.	57.2	-4.9	54.0	-5.4							
130.	36.3	-8.8	36.0	-8.9							
140.	20.1	-14.0	18.3	-14.8							
150.	17.3	-15.3	15.9	-15.9							
160.	5.4	-25.3	6.2	-24.2							
170.	7.4	-22.6	6.4	-23.9							
180.	8.9	-21.0	6.3	-24.0							
190.	14.1	-17.0	16.2	-15.8							
200.	10.9	-19.3	10.7	-19.4							
210.	10.7	-19.4	11.7	-18.7							
220.	21.4	-13.4	20.7	-13.7							
230.	26.5	-11.5	27.1	-11.3							
240.	38.5	-8.3	44.0	-7.1							
250.	54.2	-5.3	59.1	-4.6							
260.	68.3	-3.3	68.9	-3.2							
270.	85.9	-1.3	83.1	-1.6							
280.	95.0	-.4	95.1	-.4							
290.	94.1	-.5	99.1	-.1							
300.	72.9	-2.7	75.9	-2.4							
310.	63.9	-3.9	58.2	-4.7							
320.	83.8	-1.5	83.6	-1.6							
330.	97.0	-.3	98.8	-.1							
340.	87.8	-1.1	84.1	-1.5							
350.	69.1	-3.2	64.9	-3.7							
360.	77.5	-2.2	80.3	-1.9							

maximum fieldstrength was found at:
 azimuth 46. 288.
 downtilt 0. 0.

4 Bays of 3 Each Kathrein K723147 Broadband Panel Antennas

S C A L A Medford Oregon MB 17.6. 2 14: 53	Channel - 31 DTV and 23 NTSC	Typ Nr.
	Redtronix	Bl.:



frequency in MHz 525.250 573.250
 azimuth in 46.0
 omni-dir in dBd 9.48 9.43

4 Bays of 3 Each Kathrein K723147 Broadband Panel Antennas

SCALA Medford Oregon	Channel - 31 DTV and 23 NTSC	Typ Nr.
MB 17.6. 2 14: 51	Redtronix	81.

EXHIBIT 41

(Page 3 of 3)