

**MODIFICATION OF APPLICATION
FOR
CONSTRUCTION PERMIT
FILL IN FM BOOSTER
AT SADDLE PEAK
TO SERVE
LAS FLORES CANYON, CA
FOR
GOLD COAST BROADCASTING, LLC**

MARCH 2009

**BY:
BEEM CO.
ARCADIA, CA
(626) 446-3468**

ENGINEERING STATEMENT OF JOEL T. SAXBERG

This minor modification of construction permit application for a new booster at Saddle Peak was prepared for Gold Coast Broadcasting, LLC, by Joel T. Saxberg of Arcadia, California. Gold Coast proposes to serve the area of Las Flores Canyon, near Malibu, California. The proposed ERP is 74 watts and the antenna center of radiation will be 3 meters above ground level. The proposed antennas are (2) Kathrein-Scala CA5CP-FM Yagis oriented at 85° with a 1/4 wavelength offset. The official pattern from Kathrein-Scala is attached to this application.

RADIOFREQUENCY ELECTROMAGNETIC FIELDS - It is proposed to mount the two horizontally stacked antennas at 3 meters above ground on an existing pole. Radiofrequency electromagnetic fields at two meters above ground below the array will be less than the general public maximum permissible exposure limit of 0.2 mW/cm². A tabulation of the power density calculations is shown below. The highest power density is shown at 0.63 mW/cm² which is 315% of the maximum permissible level for the General Public or 63% of the MPE level for occupational workers. The area in the main lobe out to 5 meters will be fenced so that the general public will not have access to RF levels in excess of FCC guideline limits.

Dist.	Slant Dist.	Rel. Field	S
m	m		mW/cm²
0	1.0	.111	0.0617
.5	1.1	.146	0.0850
1.0	1.4	.412	0.425
1.5	1.8	.641	0.631
2	2.2	.762	0.582
2.5	2.7	.837	0.484
3	3.2	.865	0.392
3.5	3.6	.905	0.309
4	4.1	.922	0.250
4.5	4.6	.937	0.207
5	5.1	.945	0.172
6	6.1	.952	0.122

7	7.1	.964	0.093
8	8.1	.970	0.072
9	9.1	.976	0.058
10	10.0	.976	0.047

UNATTENDED OPERATION - Applicant certifies that unattended operation is proposed and that it will comply with the requirements of 47 C.F.R. §74.1234.

§74.1204 - The proposed booster site meets the I.F. requirements specified in this rule section. In addition, the proposed operation meets the 6 db contour requirement for first adjacent facilities.

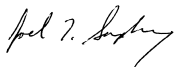
MULTIPLE TRANSLATORS - Applicant certifies that it does not have any interest in an application or an authorization for a FM translator station that serves substantially the same area and rebroadcasts the same signal as the proposed FM translator/booster station.

ENGINEERING CERTIFICATION

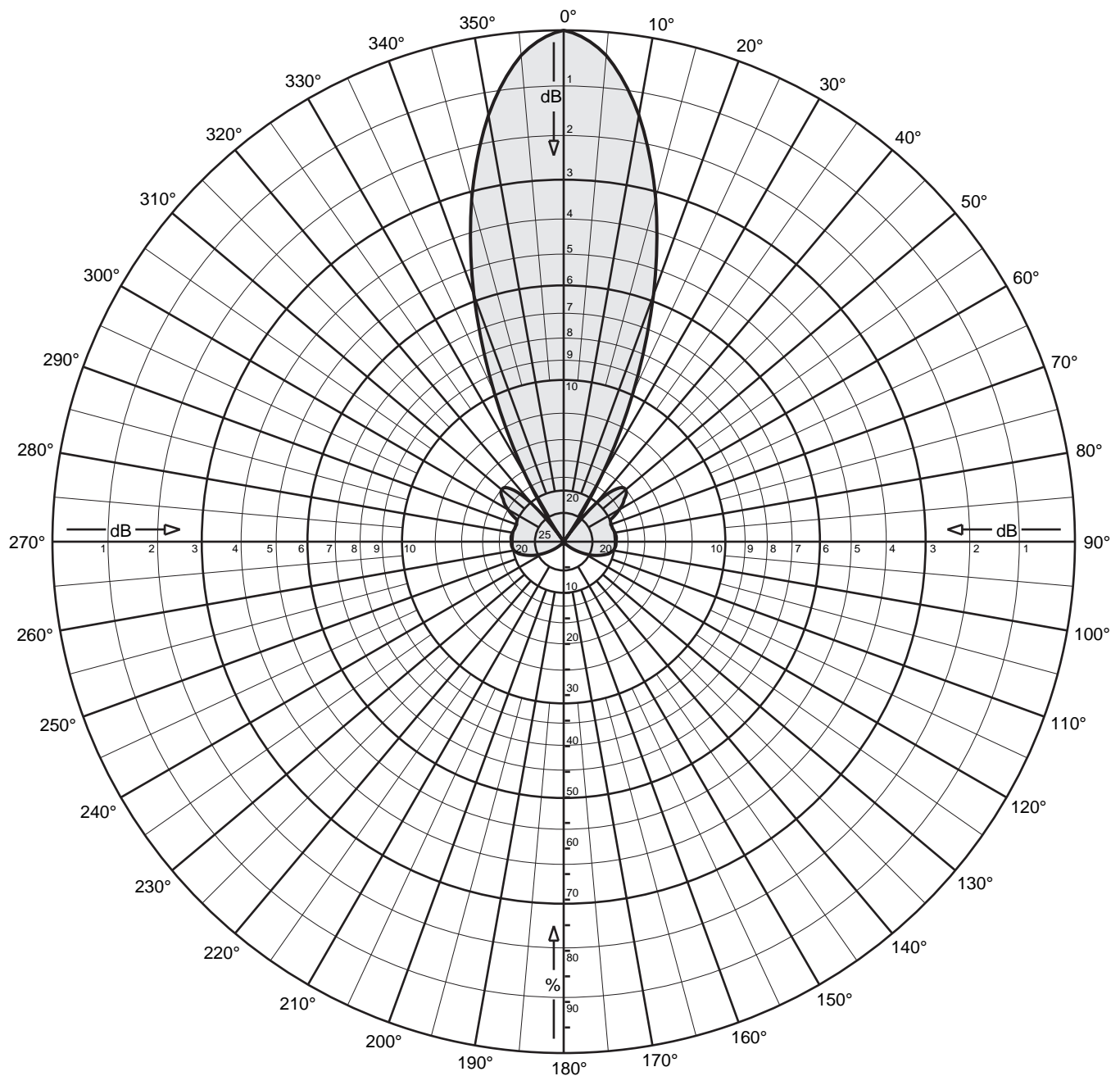
JOEL T. SAXBERG deposes and says:

- 1. That he is President of Broadcast Engineering and Equipment Maintenance Company, "BEEM CO.", radio engineering consultants. BEEM CO. maintains offices at: 2322 S. Second Avenue, Arcadia, CA 91006. Telephone (626) 446-3468**
- 2. That he was graduated from California State University at Los Angeles, February 1966, with a Bachelor of Science degree in Electronic Engineering. He received a MS degree in Electronic Engineering Technology in August 1996.**
- 3. That he has submitted many applications to the Federal Communications Commission for broadcast and auxiliary broadcast construction permits and licenses.**
- 4. That his experience in broadcast engineering is a matter of record and he has spent over forty years working in the field of radio engineering.**
- 5. That the attached report was prepared by him or under his direction and supervision. That he believes the facts stated therein to be both true and accurate. Statements that are based on information supplied by others are also believed to be true and accurate.**
- 6. That he has performed field work on AM and FM broadcast transmitting systems throughout this country and continues to provide technical consulting services on a daily basis to broadcasters.**
- 7. That he declares under penalty of perjury the foregoing is true and correct.**

Executed on December 3, 2008



Joel T. Saxberg



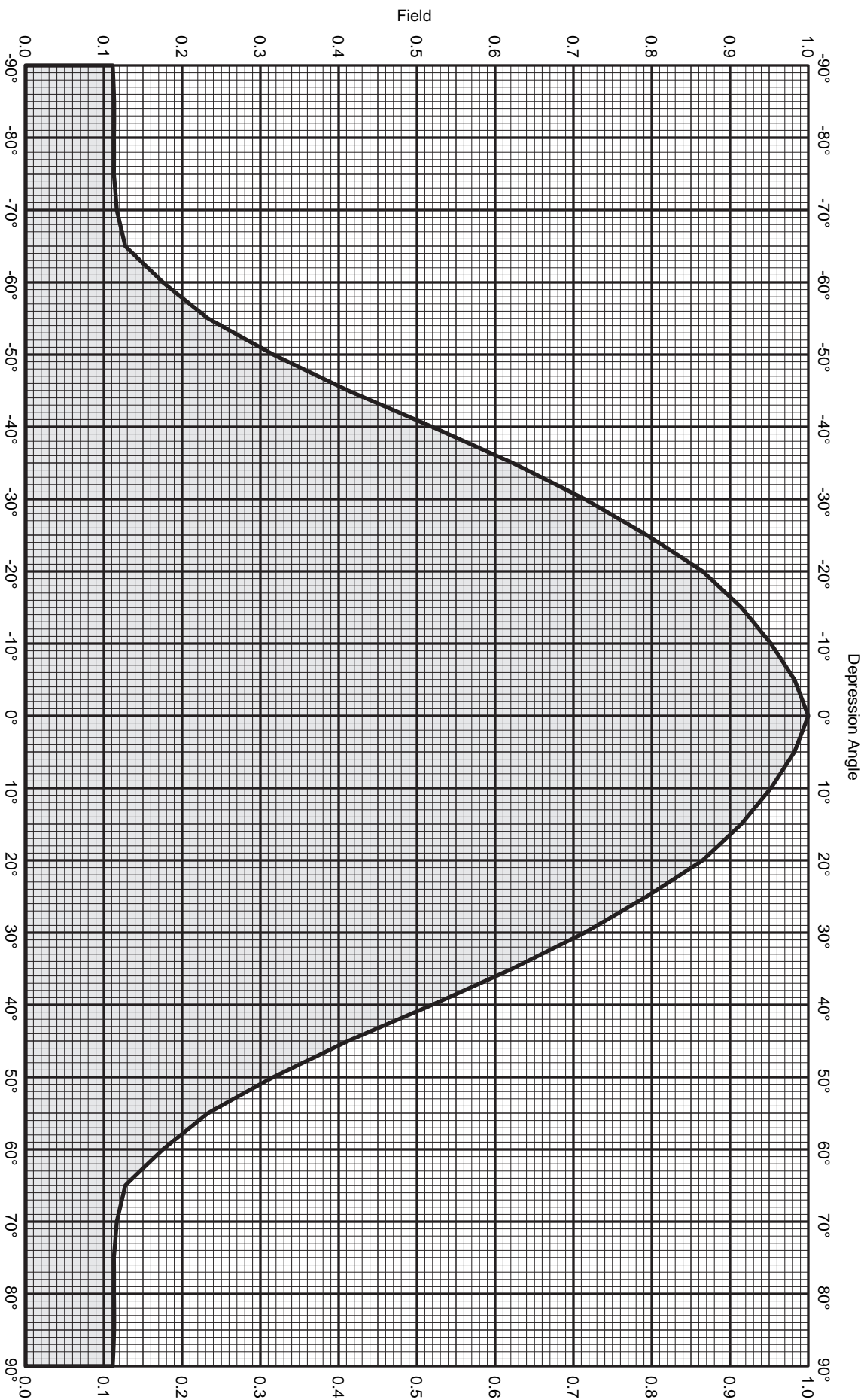
Two CA5-FM/CP/RM Yagi Antennas
 Oriented at zero deg
 with 1/4 wave offset, reduced rear lobe
 Gain: 8.5 dBd
 Circular Polarization
 Horizontal Stack
 Horizontal plane Pattern
 BEEM Co.



Two CA5-FM/CP/RM Yagi Antennas
 Oriented at zero deg
 with 1/4 wave offset, reduced rear lobe
 Gain: 8.5 dBd

Circular Polarization
 Horizontal Stack
 Horizontal plane Pattern
 BEEM Co.

Angle	Field	Rel.dB	dBd	PwrMult	Angle	Field	Rel.dB	dBd	PwrMult
0	1.000	0.00	8.50	7.08	180	0.010	-40.00	-31.50	0.00
5	0.955	-0.40	8.10	6.45	185	0.010	-40.00	-31.50	0.00
10	0.847	-1.44	7.06	5.08	190	0.010	-40.00	-31.50	0.00
15	0.695	-3.16	5.34	3.42	195	0.010	-40.00	-31.50	0.00
20	0.514	-5.78	2.72	1.87	200	0.010	-40.00	-31.50	0.00
25	0.321	-9.88	-1.38	0.73	205	0.010	-40.00	-31.50	0.00
30	0.145	-16.78	-8.28	0.15	210	0.010	-40.00	-31.50	0.00
35	0.010	-40.00	-31.50	0.00	215	0.010	-40.00	-31.50	0.00
40	0.096	-20.35	-11.85	0.07	220	0.010	-40.00	-31.50	0.00
45	0.146	-16.72	-8.22	0.15	225	0.010	-40.00	-31.50	0.00
50	0.158	-16.03	-7.53	0.18	230	0.019	-34.26	-25.76	0.00
55	0.144	-16.81	-8.31	0.15	235	0.032	-30.02	-21.52	0.01
60	0.125	-18.03	-9.53	0.11	240	0.047	-26.60	-18.10	0.02
65	0.100	-19.98	-11.48	0.07	245	0.063	-24.01	-15.51	0.03
70	0.098	-20.19	-11.69	0.07	250	0.077	-22.22	-13.72	0.04
75	0.099	-20.10	-11.60	0.07	255	0.091	-20.82	-12.32	0.06
80	0.102	-19.86	-11.36	0.07	260	0.099	-20.13	-11.63	0.07
85	0.103	-19.72	-11.22	0.08	265	0.102	-19.82	-11.32	0.07
90	0.102	-19.82	-11.32	0.07	270	0.102	-19.82	-11.32	0.07
95	0.102	-19.82	-11.32	0.07	275	0.103	-19.72	-11.22	0.08
100	0.099	-20.13	-11.63	0.07	280	0.102	-19.86	-11.36	0.07
105	0.091	-20.82	-12.32	0.06	285	0.099	-20.10	-11.60	0.07
110	0.077	-22.22	-13.72	0.04	290	0.098	-20.19	-11.69	0.07
115	0.063	-24.01	-15.51	0.03	295	0.100	-19.98	-11.48	0.07
120	0.047	-26.60	-18.10	0.02	300	0.125	-18.03	-9.53	0.11
125	0.032	-30.02	-21.52	0.01	305	0.144	-16.81	-8.31	0.15
130	0.019	-34.26	-25.76	0.00	310	0.158	-16.03	-7.53	0.18
135	0.010	-40.00	-31.50	0.00	315	0.146	-16.72	-8.22	0.15
140	0.010	-40.00	-31.50	0.00	320	0.096	-20.35	-11.85	0.07
145	0.010	-40.00	-31.50	0.00	325	0.010	-40.00	-31.50	0.00
150	0.010	-40.00	-31.50	0.00	330	0.145	-16.78	-8.28	0.15
155	0.010	-40.00	-31.50	0.00	335	0.321	-9.88	-1.38	0.73
160	0.010	-40.00	-31.50	0.00	340	0.514	-5.78	2.72	1.87
165	0.010	-40.00	-31.50	0.00	345	0.695	-3.16	5.34	3.42
170	0.010	-40.00	-31.50	0.00	350	0.847	-1.44	7.06	5.08
175	0.010	-40.00	-31.50	0.00	355	0.955	-0.40	8.10	6.45



KATHREIN SCALA DIVISION

Post Office Box 4580
Medford, OR 97501 (USA)
Phone: (541) 779-6500
Fax: (541) 779-3991
<http://www.kathrein-scala.com>

Two CA5-FW/CP/RM Yagi Antennas

Oriented at zero deg

with 1/4 wave offset, reduced rear lobe

Gain: 8.5 dBd

Circular Polarization

Horizontal Stack

Vertical plane Pattern

BEEH Co.



Two CA5-FM/CP/RM Yagi Antennas
 Oriented at zero deg
 with 1/4 wave offset, reduced rear lobe
 Gain: 8.5 dBd

Circular Polarization
 Horizontal Stack
 Vertical plane Pattern
 BEEM Co.

Angle	Field	Rel.dB	dBd	PwrMult	Angle	Field	Rel.dB	dBd	PwrMult
-90	0.111	-19.07	-10.57	0.09	-45	0.412	-7.70	0.80	1.20
-89	0.112	-19.04	-10.54	0.09	-44	0.434	-7.26	1.24	1.33
-88	0.112	-19.01	-10.51	0.09	-43	0.455	-6.84	1.66	1.47
-87	0.112	-18.98	-10.48	0.09	-42	0.476	-6.44	2.06	1.61
-86	0.113	-18.95	-10.45	0.09	-41	0.498	-6.06	2.44	1.76
-85	0.113	-18.93	-10.43	0.09	-40	0.519	-5.69	2.81	1.91
-84	0.113	-18.93	-10.43	0.09	-39	0.540	-5.35	3.15	2.06
-83	0.113	-18.93	-10.43	0.09	-38	0.560	-5.03	3.47	2.22
-82	0.113	-18.93	-10.43	0.09	-37	0.581	-4.72	3.78	2.39
-81	0.113	-18.94	-10.44	0.09	-36	0.602	-4.42	4.08	2.56
-80	0.113	-18.95	-10.45	0.09	-35	0.622	-4.12	4.38	2.74
-79	0.113	-18.94	-10.44	0.09	-34	0.641	-3.87	4.63	2.90
-78	0.113	-18.94	-10.44	0.09	-33	0.659	-3.62	4.88	3.07
-77	0.113	-18.94	-10.44	0.09	-32	0.677	-3.38	5.12	3.25
-76	0.113	-18.95	-10.45	0.09	-31	0.696	-3.15	5.35	3.43
-75	0.113	-18.96	-10.46	0.09	-30	0.714	-2.92	5.58	3.61
-74	0.114	-18.89	-10.39	0.09	-29	0.730	-2.73	5.77	3.78
-73	0.114	-18.84	-10.34	0.09	-28	0.746	-2.54	5.96	3.94
-72	0.115	-18.78	-10.28	0.09	-27	0.762	-2.36	6.14	4.11
-71	0.116	-18.73	-10.23	0.09	-26	0.778	-2.18	6.32	4.29
-70	0.117	-18.67	-10.17	0.10	-25	0.794	-2.01	6.49	4.46
-69	0.119	-18.51	-10.01	0.10	-24	0.808	-1.85	6.65	4.62
-68	0.121	-18.35	-9.85	0.10	-23	0.822	-1.70	6.80	4.79
-67	0.123	-18.20	-9.70	0.11	-22	0.837	-1.55	6.95	4.96
-66	0.125	-18.05	-9.55	0.11	-21	0.851	-1.40	7.10	5.13
-65	0.127	-17.90	-9.40	0.11	-20	0.865	-1.26	7.24	5.30
-64	0.137	-17.28	-8.78	0.13	-19	0.875	-1.16	7.34	5.42
-63	0.146	-16.69	-8.19	0.15	-18	0.885	-1.06	7.44	5.54
-62	0.156	-16.13	-7.63	0.17	-17	0.895	-0.97	7.53	5.67
-61	0.166	-15.61	-7.11	0.19	-16	0.905	-0.87	7.63	5.79
-60	0.176	-15.11	-6.61	0.22	-15	0.914	-0.78	7.72	5.92
-59	0.187	-14.57	-6.07	0.25	-14	0.922	-0.71	7.79	6.02
-58	0.198	-14.05	-5.55	0.28	-13	0.930	-0.63	7.87	6.12
-57	0.210	-13.56	-5.06	0.31	-12	0.937	-0.56	7.94	6.22
-56	0.221	-13.10	-4.60	0.35	-11	0.945	-0.49	8.01	6.32
-55	0.233	-12.65	-4.15	0.38	-10	0.952	-0.42	8.08	6.42
-54	0.250	-12.06	-3.56	0.44	-9	0.958	-0.37	8.13	6.50
-53	0.266	-11.50	-3.00	0.50	-8	0.964	-0.32	8.18	6.58
-52	0.283	-10.97	-2.47	0.57	-7	0.970	-0.26	8.24	6.67
-51	0.300	-10.47	-1.97	0.64	-6	0.976	-0.21	8.29	6.75
-50	0.316	-9.99	-1.49	0.71	-5	0.982	-0.15	8.35	6.83
-49	0.336	-9.49	-0.99	0.80	-4	0.986	-0.12	8.38	6.88
-48	0.355	-9.00	-0.50	0.89	-3	0.989	-0.09	8.41	6.93
-47	0.374	-8.55	-0.05	0.99	-2	0.993	-0.06	8.44	6.98
-46	0.393	-8.11	0.39	1.09	-1	0.996	-0.03	8.47	7.03
					0	1.000	0.00	8.50	7.08

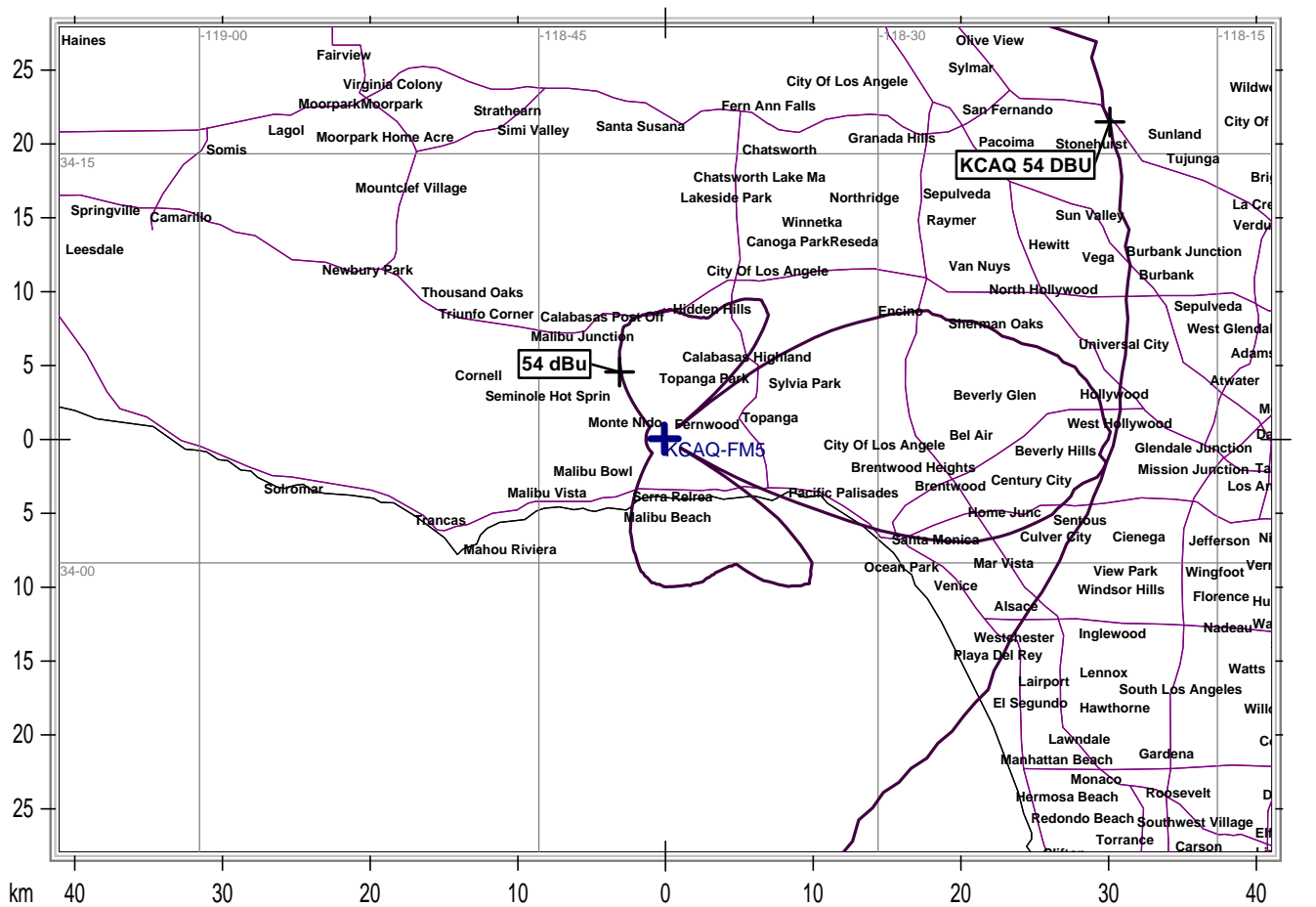


Two CA5-FM/CP/RM Yagi Antennas
 Oriented at zero deg
 with 1/4 wave offset, reduced rear lobe
 Gain: 8.5 dBd

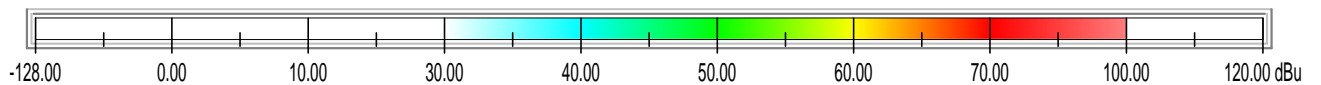
Circular Polarization
 Horizontal Stack
 Vertical plane Pattern
 BEEM Co.

Angle	Field	Rel.dB	dBd	PwrMult	Angle	Field	Rel.dB	dBd	PwrMult
0	1.000	0.00	8.50	7.08	45	0.412	-7.70	0.80	1.20
1	0.996	-0.03	8.47	7.03	46	0.393	-8.11	0.39	1.09
2	0.993	-0.06	8.44	6.98	47	0.374	-8.55	-0.05	0.99
3	0.989	-0.09	8.41	6.93	48	0.355	-9.00	-0.50	0.89
4	0.986	-0.12	8.38	6.88	49	0.336	-9.49	-0.99	0.80
5	0.982	-0.15	8.35	6.83	50	0.316	-9.99	-1.49	0.71
6	0.976	-0.21	8.29	6.75	51	0.300	-10.47	-1.97	0.64
7	0.970	-0.26	8.24	6.67	52	0.283	-10.97	-2.47	0.57
8	0.964	-0.32	8.18	6.58	53	0.266	-11.50	-3.00	0.50
9	0.958	-0.37	8.13	6.50	54	0.250	-12.06	-3.56	0.44
10	0.952	-0.42	8.08	6.42	55	0.233	-12.65	-4.15	0.38
11	0.945	-0.49	8.01	6.32	56	0.221	-13.10	-4.60	0.35
12	0.937	-0.56	7.94	6.22	57	0.210	-13.56	-5.06	0.31
13	0.930	-0.63	7.87	6.12	58	0.198	-14.05	-5.55	0.28
14	0.922	-0.71	7.79	6.02	59	0.187	-14.57	-6.07	0.25
15	0.914	-0.78	7.72	5.92	60	0.176	-15.11	-6.61	0.22
16	0.905	-0.87	7.63	5.79	61	0.166	-15.61	-7.11	0.19
17	0.895	-0.97	7.53	5.67	62	0.156	-16.13	-7.63	0.17
18	0.885	-1.06	7.44	5.54	63	0.146	-16.69	-8.19	0.15
19	0.875	-1.16	7.34	5.42	64	0.137	-17.28	-8.78	0.13
20	0.865	-1.26	7.24	5.30	65	0.127	-17.90	-9.40	0.11
21	0.851	-1.40	7.10	5.13	66	0.125	-18.05	-9.55	0.11
22	0.837	-1.55	6.95	4.96	67	0.123	-18.20	-9.70	0.11
23	0.822	-1.70	6.80	4.79	68	0.121	-18.35	-9.85	0.10
24	0.808	-1.85	6.65	4.62	69	0.119	-18.51	-10.01	0.10
25	0.794	-2.01	6.49	4.46	70	0.117	-18.67	-10.17	0.10
26	0.778	-2.18	6.32	4.29	71	0.116	-18.73	-10.23	0.09
27	0.762	-2.36	6.14	4.11	72	0.115	-18.78	-10.28	0.09
28	0.746	-2.54	5.96	3.94	73	0.114	-18.84	-10.34	0.09
29	0.730	-2.73	5.77	3.78	74	0.114	-18.89	-10.39	0.09
30	0.714	-2.92	5.58	3.61	75	0.113	-18.96	-10.46	0.09
31	0.696	-3.15	5.35	3.43	76	0.113	-18.95	-10.45	0.09
32	0.677	-3.38	5.12	3.25	77	0.113	-18.94	-10.44	0.09
33	0.659	-3.62	4.88	3.07	78	0.113	-18.94	-10.44	0.09
34	0.641	-3.87	4.63	2.90	79	0.113	-18.94	-10.44	0.09
35	0.622	-4.12	4.38	2.74	80	0.113	-18.95	-10.45	0.09
36	0.602	-4.42	4.08	2.56	81	0.113	-18.94	-10.44	0.09
37	0.581	-4.72	3.78	2.39	82	0.113	-18.93	-10.43	0.09
38	0.560	-5.03	3.47	2.22	83	0.113	-18.93	-10.43	0.09
39	0.540	-5.35	3.15	2.06	84	0.113	-18.93	-10.43	0.09
40	0.519	-5.69	2.81	1.91	85	0.113	-18.93	-10.43	0.09
41	0.498	-6.06	2.44	1.76	86	0.113	-18.95	-10.45	0.09
42	0.476	-6.44	2.06	1.61	87	0.112	-18.98	-10.48	0.09
43	0.455	-6.84	1.66	1.47	88	0.112	-19.01	-10.51	0.09
44	0.434	-7.26	1.24	1.33	89	0.112	-19.04	-10.54	0.09
					90	0.111	-19.07	-10.57	0.09

ERP = 74 WATTS



L-R PROPAGATION.



State Borders Highways Lat/Lon Grid