



ENGINEERING STATEMENT
OF
BENJAMIN L. PIDEK, P.E.
IN SUPPORT OF "FLASHCUT" APPLICATION
FOR
K11EV
GRANTS, NM

Background

KOAT Hearst-Argyle Television, Inc. (KOAT) is the licensee of television translator station K11EV, Ch. 11, (BLTTV-527, Facility ID 53916) at Grants, NM. KOAT now proposes to "flashcut" K11EV to digital operation.

Site and Tower

The site will remain the same as that of the licensed facility as will the height of the antenna radiation center and, therefore, notification to the FAA is not required. The antenna will be located on a registered tower (ASR#1216858) with an overall height of 22.9m AGL. The site is located within the Mexican Border zone and coordination with Mexico is requested if necessary.

Antenna and Power

KOAT is proposing to use a Scala DRV-1/2HW directional antenna (specifications and dBk table attached hereto) for the facility with a horizontally polarized ERP of 0.3 kW (no vertical polarization component).



Interference

An interference study was conducted using the proposed parameters with software that emulates that used by the Commission. The results of the OET-69 analysis indicate that there are no domestic full-service DTV or Class A stations predicted to receive more than the allowable 0.5% new interference from the proposed K11EV facility and, also, there are no analog or digital LPTV or translator stations predicted to receive more than the allowable 2% interference.

Environmental/RFR

This report addresses only the conditions specified in 47CFR1.1307 that deal with Radio Frequency Radiation (RFR). Any other non-RFR conditions that might require the preparation of an EA are beyond the scope of this report; however, since the structure is existing and registered, such conditions should not be an issue requiring further consideration as there will be no increase in height or change in width of the tower structure.

The location of the proposed facility is a multi-user site on a steep hill top. Calculations based on the parameters of the existing facilities located at the site show that it is possible that RFR levels at some ground level areas on the summit of the hill may already exceed MPE limits for the general public without consideration for the additional RFR contributed by the proposed facility (but do not exceed the limits for occupational exposure); however, the location, specifically the summit of the hill, is considered a "remote" area as access to the site is impeded by the rugged terrain and lack of roads, making it highly improbable that the general public can get near the site. The site is located on private land (a cattle ranch) and is 3 miles from the nearest property line (which is enclosed with a cattle fence). The entire base of the hill is enclosed by a cattle fence and each tower on the hill is enclosed by a locked fence. Appropriate signage warning of potential RFR hazards is posted on the fences enclosing each tower and on the cattle fence at the base of the hill. Given that the nature of the location is "remote", it is assumed that the site is currently "in compliance"



with FCC guidelines for human exposure to RFR (as defined in OET-65) and there is no significant effect on the environment with regard to exposure of the general public.

The maximum ground level RFR contributed by the proposed facility is calculated to be 0.008957 mW/cm² which is less than 5% of the limit (0.2 mW/cm²) for maximum permissible exposure (MPE) in public areas at Ch. 11 (201 MHz). The site will therefore remain "in compliance" with FCC guidelines for human exposure to RFR.

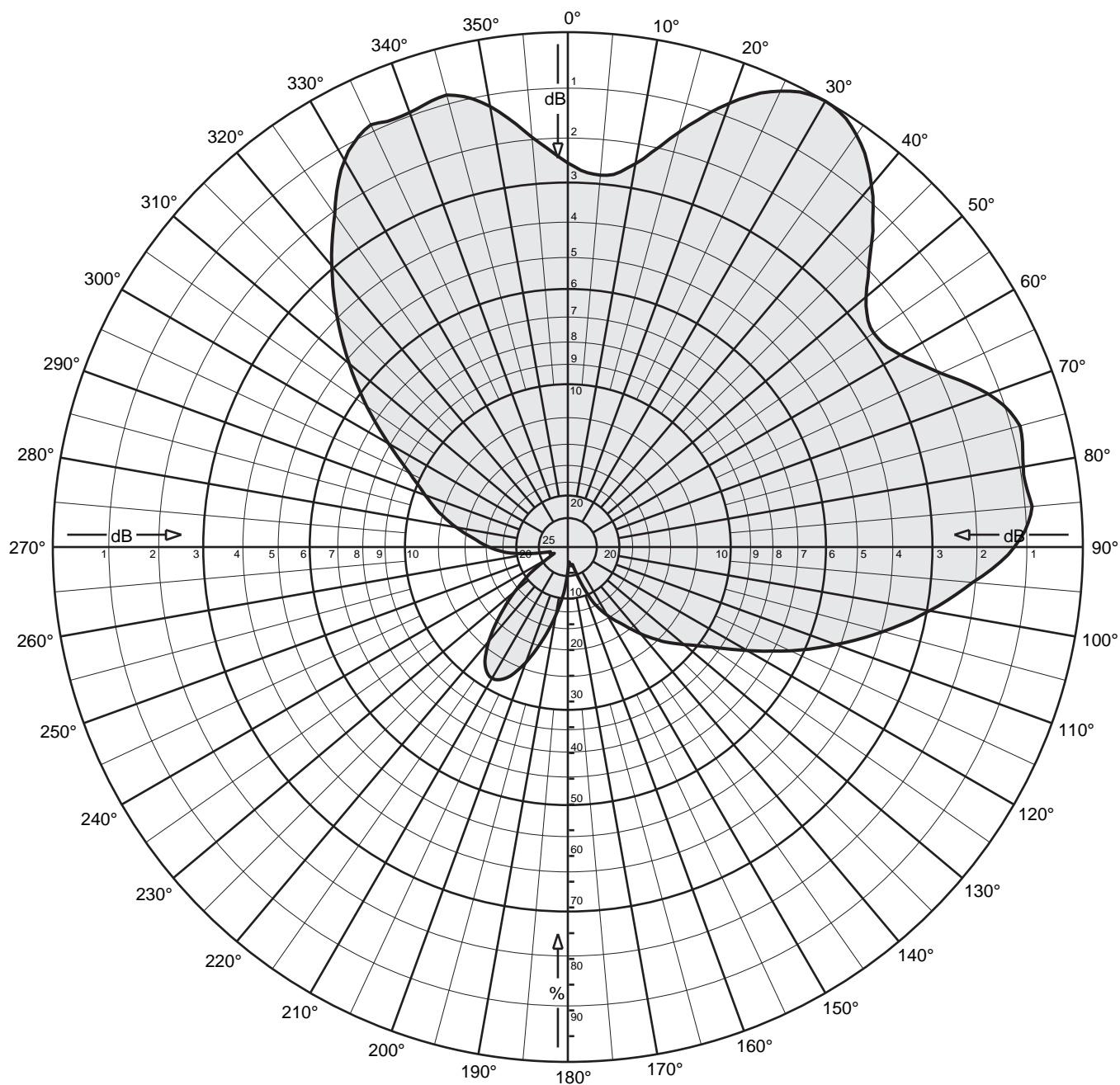
KOAT agrees to comply with the Commission's requirements regarding power adjustments or cessation of operation as may be necessary to ensure a compliant environment for worker access. Workers will be trained on RFR issues and encouraged to wear personal RFR monitors when on the site or the structure.

Certification

I hereby certify that the foregoing report or statement was prepared by me but may include work performed by others under my supervision or direction. The statements of fact contained therein are believed to be true and correct based on personal knowledge, information and belief unless otherwise stated; with respect to facts not known of my own personal knowledge, I believe them to be true and correct based on their origin from sources known to me to be generally reliable and accurate. I have prepared this document with due care and in accordance with applicable standards of professional practice.

Benjamin L. Pidek, P.E.

John F. X. Browne, P.E.
March 28, 2011



DRV-1/2 HW Band-III Panel Array

CH: 11

Oriented at 30 degrees

Gain: 4.5 dBd (x 2.82)

Horizontal Polarization

Horizontal plane Pattern



DRV-1/2 HW Band-III Panel Array

CH: 11

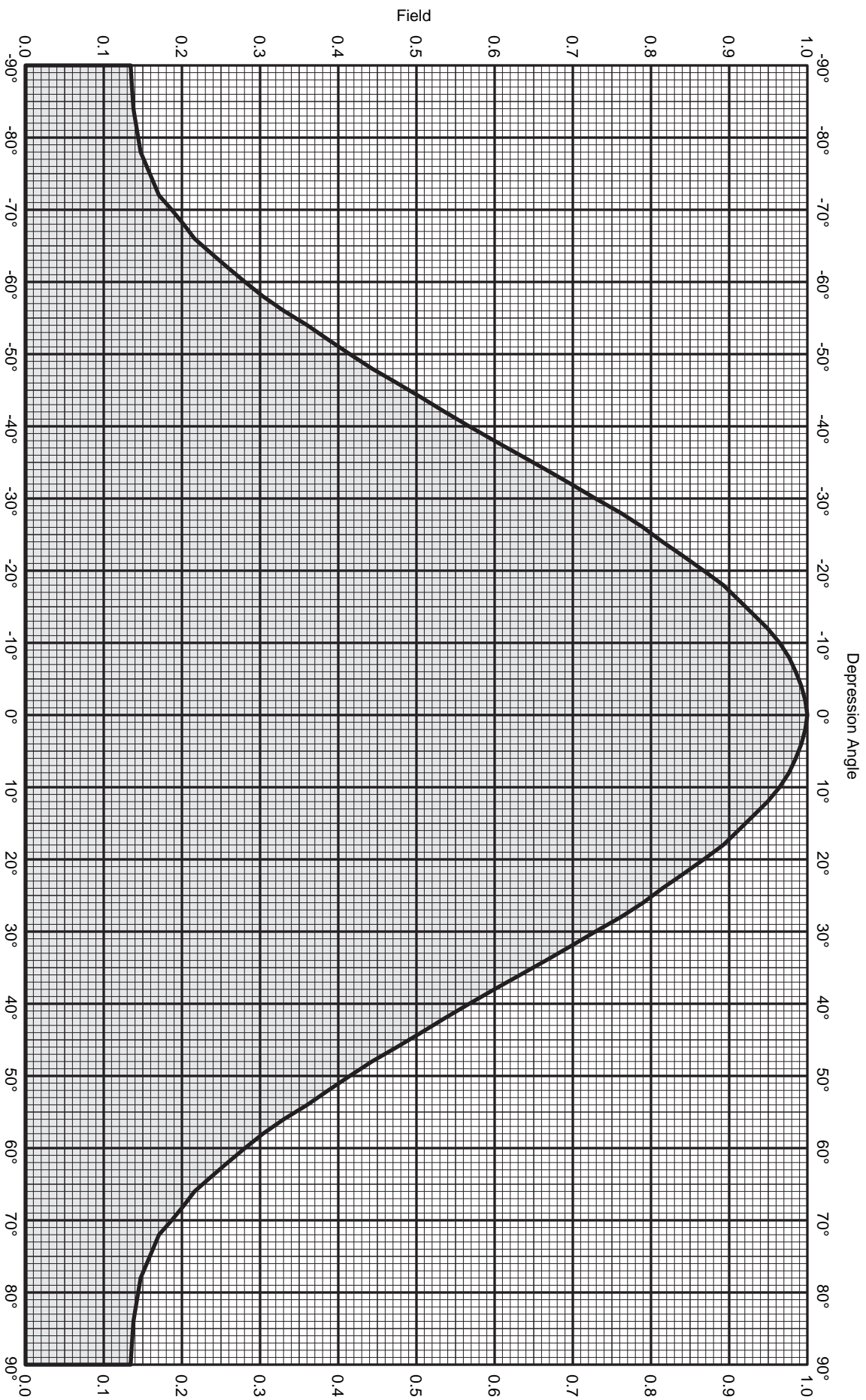
Oriented at 30 degrees

Gain: 4.5 dBd (x 2.82)

Horizontal Polarization

Horizontal plane Pattern

Angle	Field	Rel.dB	dBd	PwrMult	Angle	Field	Rel.dB	dBd	PwrMult
0	0.746	-2.55	1.95	1.57	180	0.048	-26.38	-21.88	0.01
5	0.725	-2.79	1.71	1.48	185	0.090	-20.92	-16.42	0.02
10	0.756	-2.43	2.07	1.61	190	0.134	-17.46	-12.96	0.05
15	0.834	-1.58	2.92	1.96	195	0.185	-14.66	-10.16	0.10
20	0.917	-0.75	3.75	2.37	200	0.239	-12.43	-7.93	0.16
25	0.977	-0.20	4.30	2.69	205	0.280	-11.06	-6.56	0.22
30	1.000	0.00	4.50	2.82	210	0.294	-10.63	-6.13	0.24
35	0.977	-0.20	4.30	2.69	215	0.280	-11.06	-6.56	0.22
40	0.917	-0.75	3.75	2.37	220	0.239	-12.43	-7.93	0.16
45	0.834	-1.58	2.92	1.96	225	0.185	-14.66	-10.16	0.10
50	0.756	-2.43	2.07	1.61	230	0.134	-17.46	-12.96	0.05
55	0.725	-2.79	1.71	1.48	235	0.091	-20.82	-16.32	0.02
60	0.746	-2.55	1.95	1.57	240	0.048	-26.38	-21.88	0.01
65	0.799	-1.95	2.55	1.80	245	0.029	-30.75	-26.25	0.00
70	0.869	-1.22	3.28	2.13	250	0.037	-28.64	-24.14	0.00
75	0.909	-0.83	3.67	2.33	255	0.035	-29.12	-24.62	0.00
80	0.898	-0.93	3.57	2.27	260	0.073	-22.73	-18.23	0.02
85	0.905	-0.87	3.63	2.31	265	0.121	-18.34	-13.84	0.04
90	0.867	-1.24	3.26	2.12	270	0.153	-16.31	-11.81	0.07
95	0.789	-2.06	2.44	1.75	275	0.182	-14.80	-10.30	0.09
100	0.713	-2.94	1.56	1.43	280	0.220	-13.15	-8.65	0.14
105	0.634	-3.96	0.54	1.13	285	0.259	-11.73	-7.23	0.19
110	0.554	-5.13	-0.63	0.87	290	0.295	-10.60	-6.10	0.25
115	0.477	-6.43	-1.93	0.64	295	0.338	-9.42	-4.92	0.32
120	0.402	-7.92	-3.42	0.46	300	0.402	-7.92	-3.42	0.46
125	0.338	-9.42	-4.92	0.32	305	0.477	-6.43	-1.93	0.64
130	0.295	-10.60	-6.10	0.25	310	0.554	-5.13	-0.63	0.87
135	0.259	-11.73	-7.23	0.19	315	0.634	-3.96	0.54	1.13
140	0.220	-13.15	-8.65	0.14	320	0.713	-2.94	1.56	1.43
145	0.182	-14.80	-10.30	0.09	325	0.789	-2.06	2.44	1.75
150	0.153	-16.31	-11.81	0.07	330	0.867	-1.24	3.26	2.12
155	0.121	-18.34	-13.84	0.04	335	0.905	-0.87	3.63	2.31
160	0.073	-22.73	-18.23	0.02	340	0.898	-0.93	3.57	2.27
165	0.035	-29.12	-24.62	0.00	345	0.909	-0.83	3.67	2.33
170	0.037	-28.64	-24.14	0.00	350	0.869	-1.22	3.28	2.13
175	0.029	-30.75	-26.25	0.00	355	0.799	-1.95	2.55	1.80



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DRV-1/2 HW Band-III Panel array Array

CH: 11

Oriented at 30 degrees

Gain: 4.5 dBi (x 2.82)

Horizontal Polarization

Vertical plane Pattern



DRV-1/2 HW Band-III Panel array Array

CH: 11

Oriented at 30 degrees

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Horizontal Polarization

Vertical plane Pattern

Angle	Field	Rel.dB	dBd	PwrMult	Angle	Field	Rel.dB	dBd	PwrMult
-90	0.134	-17.43	-12.93	0.05	-45	0.491	-6.19	-1.69	0.68
-89	0.135	-17.39	-12.89	0.05	-44	0.506	-5.92	-1.42	0.72
-88	0.136	-17.36	-12.86	0.05	-43	0.521	-5.66	-1.16	0.77
-87	0.136	-17.32	-12.82	0.05	-42	0.536	-5.41	-0.91	0.81
-86	0.137	-17.28	-12.78	0.05	-41	0.552	-5.16	-0.66	0.86
-85	0.137	-17.24	-12.74	0.05	-40	0.567	-4.92	-0.42	0.91
-84	0.138	-17.20	-12.70	0.05	-39	0.584	-4.68	-0.18	0.96
-83	0.140	-17.11	-12.61	0.05	-38	0.600	-4.44	0.06	1.01
-82	0.141	-17.01	-12.51	0.06	-37	0.616	-4.21	0.29	1.07
-81	0.143	-16.92	-12.42	0.06	-36	0.633	-3.98	0.52	1.13
-80	0.144	-16.83	-12.33	0.06	-35	0.649	-3.75	0.75	1.19
-79	0.146	-16.74	-12.24	0.06	-34	0.666	-3.54	0.96	1.25
-78	0.147	-16.64	-12.14	0.06	-33	0.682	-3.33	1.17	1.31
-77	0.151	-16.41	-11.91	0.06	-32	0.698	-3.13	1.37	1.37
-76	0.155	-16.19	-11.69	0.07	-31	0.713	-2.93	1.57	1.43
-75	0.159	-15.97	-11.47	0.07	-30	0.729	-2.75	1.75	1.50
-74	0.163	-15.76	-11.26	0.07	-29	0.745	-2.56	1.94	1.56
-73	0.167	-15.56	-11.06	0.08	-28	0.761	-2.37	2.13	1.63
-72	0.171	-15.36	-10.86	0.08	-27	0.776	-2.21	2.29	1.70
-71	0.179	-14.95	-10.45	0.09	-26	0.790	-2.05	2.45	1.76
-70	0.187	-14.56	-10.06	0.10	-25	0.802	-1.91	2.59	1.81
-69	0.195	-14.22	-9.72	0.11	-24	0.815	-1.78	2.72	1.87
-68	0.202	-13.89	-9.39	0.12	-23	0.828	-1.64	2.86	1.93
-67	0.209	-13.59	-9.09	0.12	-22	0.842	-1.50	3.00	2.00
-66	0.216	-13.31	-8.81	0.13	-21	0.854	-1.37	3.13	2.06
-65	0.227	-12.89	-8.39	0.14	-20	0.867	-1.24	3.26	2.12
-64	0.237	-12.50	-8.00	0.16	-19	0.880	-1.11	3.39	2.18
-63	0.248	-12.12	-7.62	0.17	-18	0.892	-0.99	3.51	2.24
-62	0.259	-11.75	-7.25	0.19	-17	0.902	-0.90	3.60	2.29
-61	0.270	-11.38	-6.88	0.20	-16	0.912	-0.80	3.70	2.34
-60	0.281	-11.04	-6.54	0.22	-15	0.921	-0.72	3.78	2.39
-59	0.292	-10.69	-6.19	0.24	-14	0.930	-0.63	3.87	2.44
-58	0.304	-10.35	-5.85	0.26	-13	0.940	-0.54	3.96	2.49
-57	0.317	-9.98	-5.48	0.28	-12	0.949	-0.45	4.05	2.54
-56	0.330	-9.62	-5.12	0.31	-11	0.957	-0.38	4.12	2.58
-55	0.345	-9.23	-4.73	0.34	-10	0.964	-0.31	4.19	2.62
-54	0.360	-8.86	-4.36	0.37	-9	0.971	-0.26	4.24	2.65
-53	0.374	-8.55	-4.05	0.39	-8	0.977	-0.21	4.29	2.69
-52	0.387	-8.24	-3.74	0.42	-7	0.981	-0.17	4.33	2.71
-51	0.401	-7.94	-3.44	0.45	-6	0.985	-0.13	4.37	2.74
-50	0.415	-7.64	-3.14	0.48	-5	0.989	-0.10	4.40	2.76
-49	0.429	-7.35	-2.85	0.52	-4	0.992	-0.07	4.43	2.78
-48	0.443	-7.07	-2.57	0.55	-3	0.995	-0.04	4.46	2.79
-47	0.459	-6.76	-2.26	0.59	-2	0.997	-0.02	4.48	2.80
-46	0.475	-6.47	-1.97	0.64	-1	0.999	-0.01	4.49	2.81
					0	1.000	0.00	4.50	2.82



DRV-1/2 HW Band-III Panel array Array

Horizontal Polarization

CH: 11

Vertical plane Pattern

Oriented at 30 degrees

Gain: 4.5 dBd (x 2.82)

Angle	Field	Rel.dB	dBd	PwrMult	Angle	Field	Rel.dB	dBd	PwrMult
0	1.000	0.00	4.50	2.82	45	0.491	-6.19	-1.69	0.68
1	0.999	-0.01	4.49	2.81	46	0.475	-6.47	-1.97	0.64
2	0.997	-0.02	4.48	2.80	47	0.459	-6.76	-2.26	0.59
3	0.995	-0.04	4.46	2.79	48	0.443	-7.07	-2.57	0.55
4	0.992	-0.07	4.43	2.78	49	0.429	-7.35	-2.85	0.52
5	0.989	-0.10	4.40	2.76	50	0.415	-7.64	-3.14	0.48
6	0.985	-0.13	4.37	2.74	51	0.401	-7.94	-3.44	0.45
7	0.981	-0.17	4.33	2.71	52	0.387	-8.24	-3.74	0.42
8	0.977	-0.21	4.29	2.69	53	0.374	-8.55	-4.05	0.39
9	0.971	-0.26	4.24	2.65	54	0.360	-8.86	-4.36	0.37
10	0.964	-0.31	4.19	2.62	55	0.345	-9.23	-4.73	0.34
11	0.957	-0.38	4.12	2.58	56	0.330	-9.62	-5.12	0.31
12	0.949	-0.45	4.05	2.54	57	0.317	-9.98	-5.48	0.28
13	0.940	-0.54	3.96	2.49	58	0.304	-10.35	-5.85	0.26
14	0.930	-0.63	3.87	2.44	59	0.292	-10.69	-6.19	0.24
15	0.921	-0.72	3.78	2.39	60	0.281	-11.04	-6.54	0.22
16	0.912	-0.80	3.70	2.34	61	0.270	-11.38	-6.88	0.20
17	0.902	-0.90	3.60	2.29	62	0.259	-11.75	-7.25	0.19
18	0.892	-0.99	3.51	2.24	63	0.248	-12.12	-7.62	0.17
19	0.880	-1.11	3.39	2.18	64	0.237	-12.50	-8.00	0.16
20	0.867	-1.24	3.26	2.12	65	0.227	-12.89	-8.39	0.14
21	0.854	-1.37	3.13	2.06	66	0.216	-13.31	-8.81	0.13
22	0.842	-1.50	3.00	2.00	67	0.209	-13.59	-9.09	0.12
23	0.828	-1.64	2.86	1.93	68	0.202	-13.89	-9.39	0.12
24	0.815	-1.78	2.72	1.87	69	0.195	-14.22	-9.72	0.11
25	0.802	-1.91	2.59	1.81	70	0.187	-14.56	-10.06	0.10
26	0.790	-2.05	2.45	1.76	71	0.179	-14.95	-10.45	0.09
27	0.776	-2.21	2.29	1.70	72	0.171	-15.36	-10.86	0.08
28	0.761	-2.37	2.13	1.63	73	0.167	-15.56	-11.06	0.08
29	0.745	-2.56	1.94	1.56	74	0.163	-15.76	-11.26	0.07
30	0.729	-2.75	1.75	1.50	75	0.159	-15.97	-11.47	0.07
31	0.713	-2.93	1.57	1.43	76	0.155	-16.19	-11.69	0.07
32	0.698	-3.13	1.37	1.37	77	0.151	-16.41	-11.91	0.06
33	0.682	-3.33	1.17	1.31	78	0.147	-16.64	-12.14	0.06
34	0.666	-3.54	0.96	1.25	79	0.146	-16.74	-12.24	0.06
35	0.649	-3.75	0.75	1.19	80	0.144	-16.83	-12.33	0.06
36	0.633	-3.98	0.52	1.13	81	0.143	-16.92	-12.42	0.06
37	0.616	-4.21	0.29	1.07	82	0.141	-17.01	-12.51	0.06
38	0.600	-4.44	0.06	1.01	83	0.140	-17.11	-12.61	0.05
39	0.584	-4.68	-0.18	0.96	84	0.138	-17.20	-12.70	0.05
40	0.567	-4.92	-0.42	0.91	85	0.137	-17.24	-12.74	0.05
41	0.552	-5.16	-0.66	0.86	86	0.137	-17.28	-12.78	0.05
42	0.536	-5.41	-0.91	0.81	87	0.136	-17.32	-12.82	0.05
43	0.521	-5.66	-1.16	0.77	88	0.136	-17.36	-12.86	0.05
44	0.506	-5.92	-1.42	0.72	89	0.135	-17.39	-12.89	0.05
					90	0.134	-17.43	-12.93	0.05

DIRECTIONAL ANTENNA DATA
K11EV-LD
dBk Table

Actual Bearing	Pattern Azimuth	Relative Field	ERP (dBk)	CONTOUR F(50,90) - 48 dBu
N000E	0.00	0.746	-7.77	33.5
	10.00	0.756	-7.66	
	20.00	0.917	-5.98	
	30.00	1.000	-5.23	
	40.00	0.917	-5.98	
N045E	45.00	0.834	-6.81	27.2
	50.00	0.756	-7.66	
	60.00	0.746	-7.77	
	70.00	0.869	-6.45	
	80.00	0.898	-6.16	
N090E	90.00	0.867	-6.47	30.5
	100.00	0.713	-8.17	
	110.00	0.554	-10.36	
	120.00	0.402	-13.14	
	130.00	0.295	-15.83	
N135E	135.00	0.259	-16.96	20.6
	140.00	0.220	-18.38	
	150.00	0.153	-21.53	
	160.00	0.073	-27.96	
	170.00	0.037	-33.86	
N180E	180.00	0.048	-31.60	7.2
	190.00	0.134	-22.69	
	200.00	0.239	-17.66	
	210.00	0.294	-15.86	
	220.00	0.239	-17.66	
N225E	225.00	0.185	-19.89	7.5
	230.00	0.134	-22.69	
	240.00	0.048	-31.60	
	250.00	0.037	-33.86	
	260.00	0.073	-27.96	
N270E	270.00	0.152	-21.59	6.8
	280.00	0.220	-18.38	
	290.00	0.295	-15.83	
	300.00	0.402	-13.14	
	310.00	0.554	-10.36	
N315E	315.00	0.634	-9.19	15.9
	320.00	0.713	-8.17	
	330.00	0.867	-6.47	
	340.00	0.898	-6.16	
	350.00	0.869	-6.45	

Maximum: N030E -5.23 dBk

Minima: N250E -33.86 dBk