EXHIBIT A

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of the licensee of full-power digital television station KLEI-DT (previously KWHM-DT), Channel 21 in Wailuku, Hawaii, in support of its request for Special Temporary Authority to extend operation with a temporary antenna at a new site while a new permanent site is secured.

It is proposed to utilize the temporary Jampro directional, horizontally-polarized wide-band panel antenna, which is mounted at the 12.2-meter level of an existing 29-meter pole. The proposed effective radiated power for the facility is 2.1 kW. Exhibit B-1 is a map upon which the predicted service contours for the temporary facility are plotted. As shown, the community of Wailuku is completely encompassed by the proposed 48 dBu city-grade service contour. Exhibit B-2 is a map on which the licensed main KLEI-DT noise-limited service contour is plotted in relation to that proposed for the temporary facility. From this map, it is clear that the service contour for the proposed temporary facility will lie completely within that of the present main KLEI-DT facility.

Elevation and azimuth pattern information for the proposed antenna is provided in Exhibit C. Since the facility proposed herein specifies a service contour no greater at any azimuth than that authorized to the main KLEI-DT facility, no interference study is included herein. A power density calculation appears as Exhibit D.

Since no change in the overall height or location of the existing pole is proposed herein, the Federal Aviation Administration has not been notified of this application. In addition, due to the diminutive size of the structure and its proximity to the nearest airport runway, no

EXHIBIT A

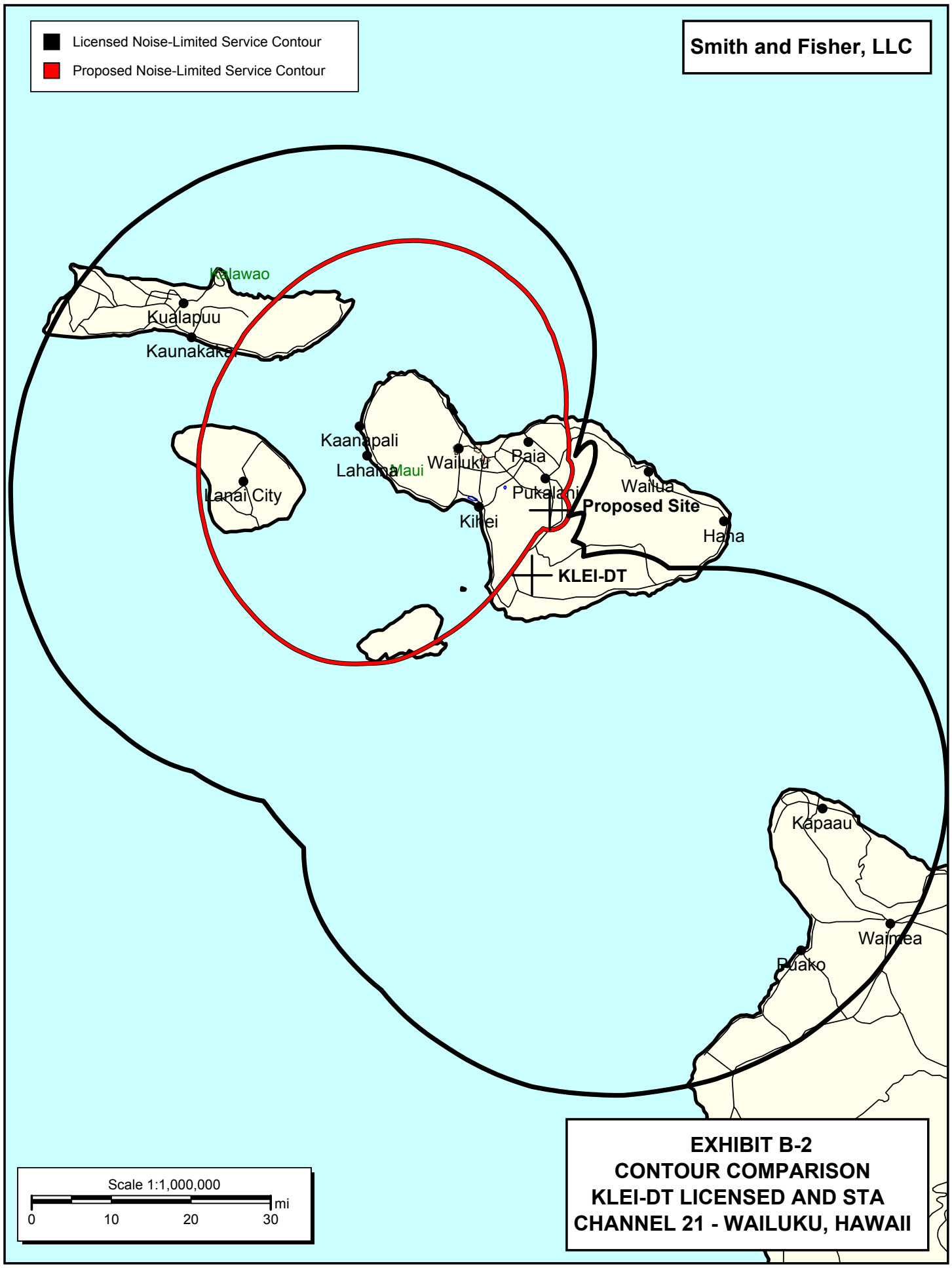
FCC antenna structure registration is required for this pole. This conclusion is supported by the Commission's TOWAIR software.

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.

KEVIN T. FISHER

February 28, 2019

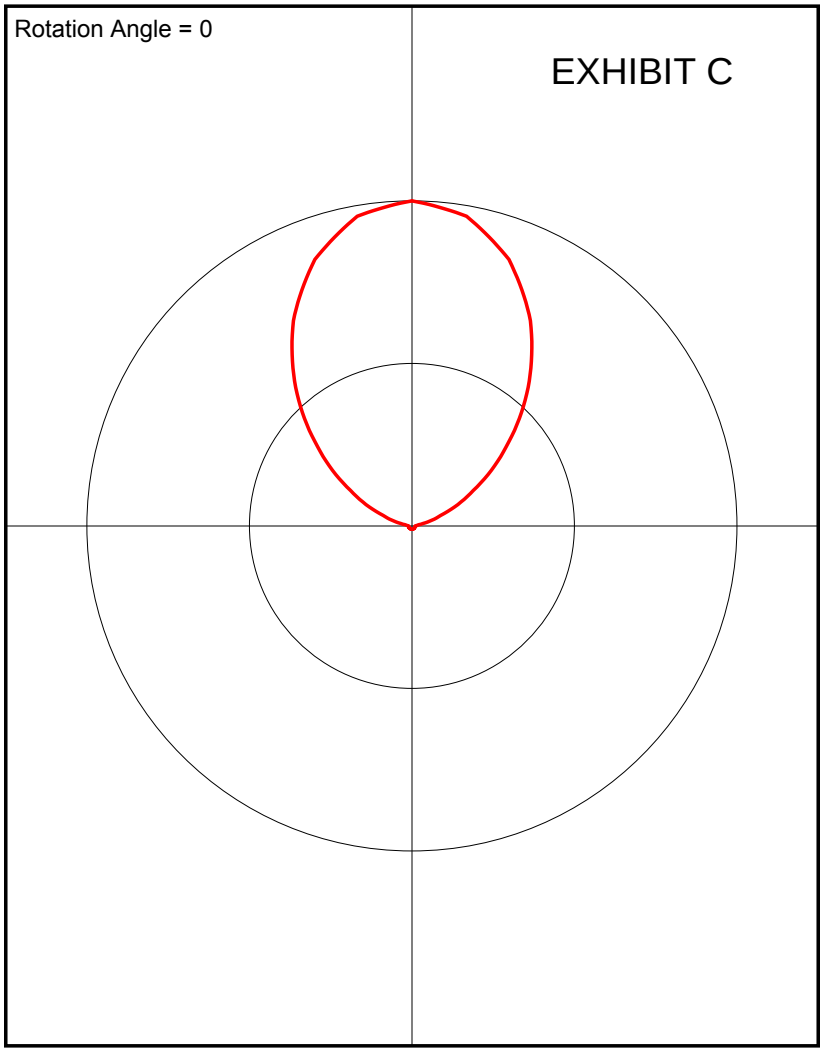

CONTOUR POPULATION
2015 U.S. CENSUS DATA
48 DBU : 142,015 (61,198 HH)
N/L SERVICE: 149,054 (64,508 HH)
Smith and Fisher, LLC
Noise-Limited
Service Contour
48 dBu City-Grade
Coverage Contour
Kalawao
alapuu
aunakakai
Kaanapali
Lahaina
Maui
Wailuku
Waikapu
Paia
Makawao
Pukalani
Kihei
Lanai City
Proposed Site
KLEI-DT
Scale 1:500,000
mi
0
4
8
12
EXHIBIT B-1
PREDICTED SERVICE CONTOURS
KLEI-DT STA FACILITY
CHANNEL 21 - WAILUKU, HAWAII


Licensed Noise-Limited Service Contour
Proposed Noise-Limited Service Contour
Smith and Fisher, LLC
Kalawao
Kualapuu
Kaunakakai
Kaanapali
Lahaina
Maui
Wailuku
Paia
Lanai City
Pukalani
Kihei
Wailua
Proposed Site
Hana
KLEI-DT
Kapaau
Waimea
Puako
Scale 1:1,000,000
mi
0
10
20
30
EXHIBIT B-2
CONTOUR COMPARISON
KLEI-DT LICENSED AND STA
CHANNEL 21 - WAILUKU, HAWAII

Antenna Pattern

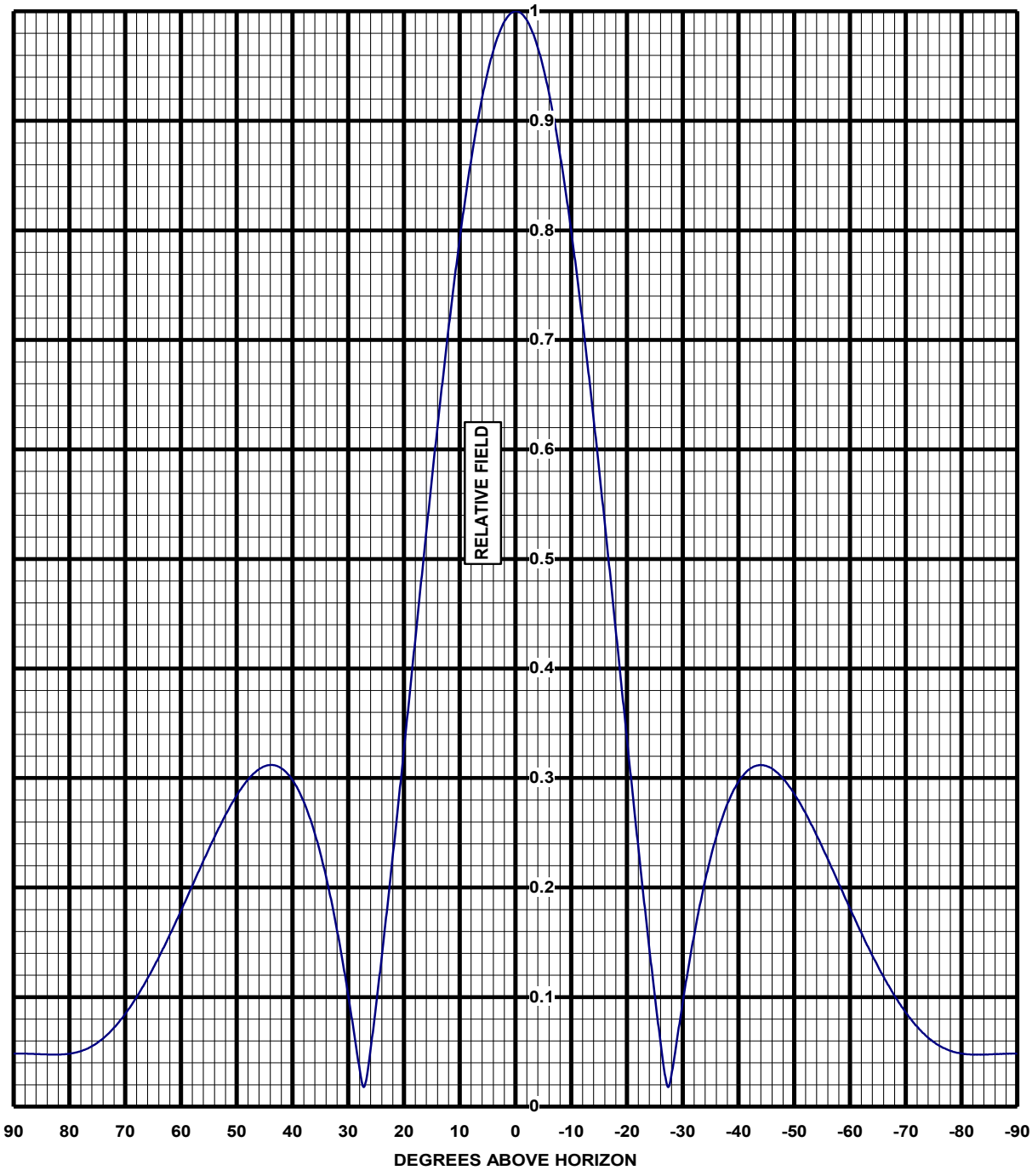
Pre-Rotation Antenna Pattern....

Azimuth (deg)	Relative Field
0.0	1.0
10.0	0.967
20.0	0.872
30.0	0.729
40.0	0.556
50.0	0.378
60.0	0.218
70.0	0.094
80.0	0.021
90.0	0.01
100.0	0.01
110.0	0.01
120.0	0.01
130.0	0.01
140.0	0.01
150.0	0.01
160.0	0.01
170.0	0.01
180.0	0.01
190.0	0.01
200.0	0.01
210.0	0.01
220.0	0.01
230.0	0.01
240.0	0.01
250.0	0.01
260.0	0.01
270.0	0.01
280.0	0.021
290.0	0.094
300.0	0.218
310.0	0.378
320.0	0.556
330.0	0.729
340.0	0.872
350.0	0.967



JAMPRO ANTENNAS, INC.

COMPUTED ELEVATION PATTERN



Model: JUHD

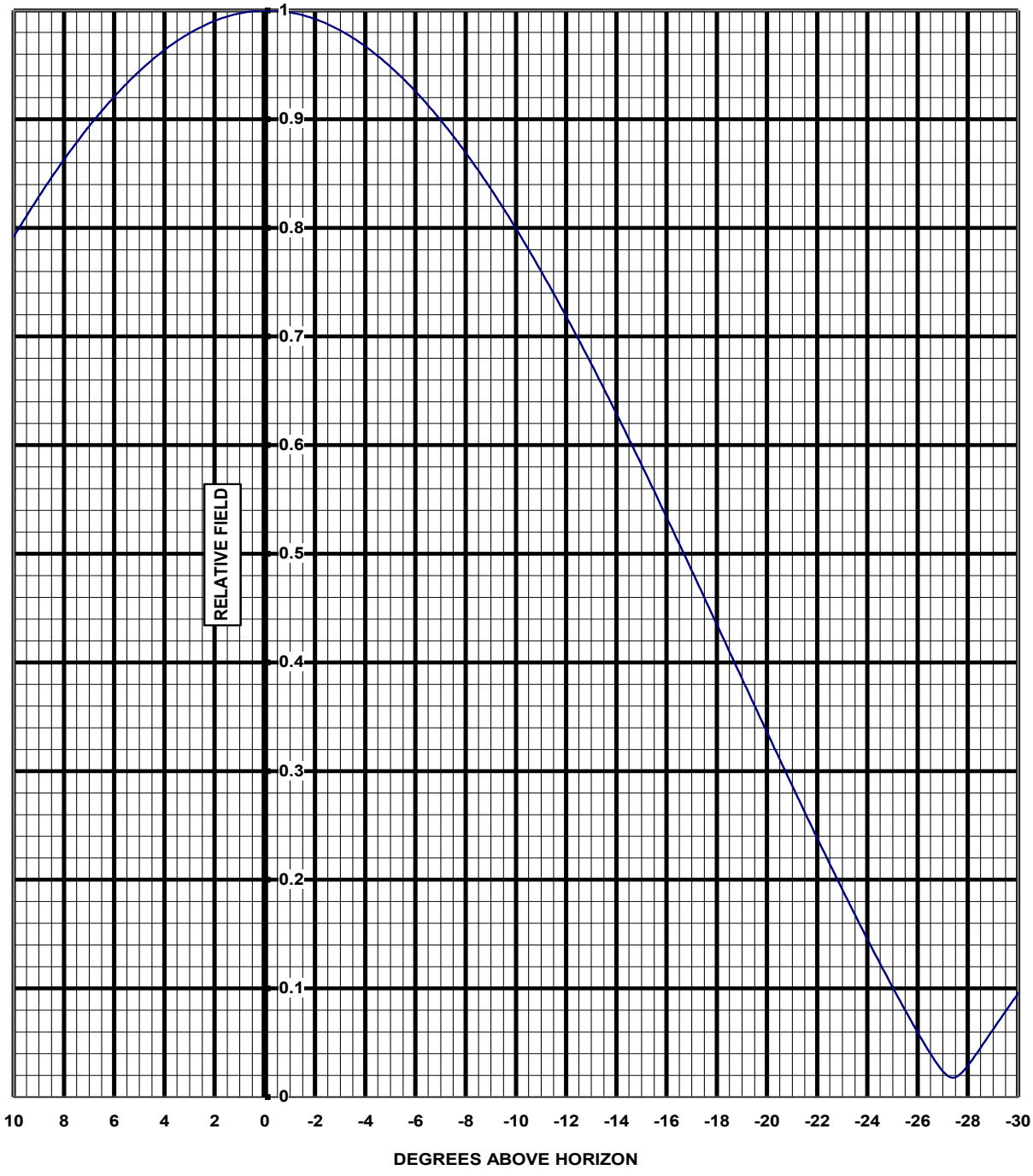
Bays: 1

Description: UHF Panel Antenna

-0 ° Beam Tilt, 0% Null Fill

JAMPRO ANTENNAS, INC.

ELEVATION PATTERN



Bays: 1

Model: JUHD
Description: UHF Panel Antenna
-0 ° Beam Tilt, 0% Null Fill

Elevation Pattern Tabulation

ELEVATION PATTERN TABULATION

RELATIVE FIELD VS ELEVATION ANGLE

ELEVATION ANGLE	RELATIVE FIELD	ELEVATION ANGLE	RELATIVE FIELD	ELEVATION ANGLE	RELATIVE FIELD
10	0.792	-26	0.059	-61	0.170
9	0.829	-27	0.024	-62	0.159
8	0.863	-28	0.029	-63	0.148
7	0.893	-29	0.062	-64	0.138
6	0.921	-30	0.095	-65	0.128
5	0.944	-31	0.127	-66	0.119
4	0.964	-32	0.156	-67	0.110
3	0.979	-33	0.182	-68	0.101
2	0.990	-34	0.206	-69	0.093
1	0.997	-35	0.227	-70	0.086
0	1.000	-36	0.246	-71	0.079
-1	0.998	-37	0.262	-72	0.073
-2	0.992	-38	0.276	-73	0.068
-3	0.982	-39	0.288	-74	0.063
-4	0.967	-40	0.297	-75	0.059
-5	0.948	-41	0.303	-76	0.056
-6	0.926	-42	0.308	-77	0.053
-7	0.899	-43	0.311	-78	0.051
-8	0.869	-44	0.312	-79	0.050
-9	0.836	-45	0.311	-80	0.048
-10	0.799	-46	0.309	-81	0.048
-11	0.760	-47	0.305	-82	0.048
-12	0.719	-48	0.299	-83	0.047
-13	0.675	-49	0.293	-84	0.047
-14	0.629	-50	0.286	-85	0.048
-15	0.582	-51	0.277	-86	0.048
-16	0.534	-52	0.268	-87	0.048
-17	0.485	-53	0.258	-88	0.048
-18	0.435	-54	0.248	-89	0.048
-19	0.385	-55	0.237	-90	0.049
-20	0.336	-56	0.226		
-21	0.287	-57	0.215		
-22	0.238	-58	0.204		
-23	0.191	-59	0.192		
-24	0.145	-60	0.181		
-25	0.101				

Bays: 1

Model: JUHD
Description: UHF Panel Antenna
-0 ° Beam Tilt, 0% Null Fill

EXHIBIT D

POWER DENSITY CALCULATION

PROPOSED TEMPORARY KLEI-DT
CHANNEL 21 – WAILUKU, HAWAII

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Wailuku facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 2.1 kW, an antenna radiation center 12.2 meters above ground, and the specific elevation pattern of the proposed Jampro antenna, maximum power density two meters above ground of 0.031 mW/cm^2 is calculated to occur 11 meters west-northwest of the base of the tower. Since this is only 9.1 percent of the 0.34 mW/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 21 (512-518 MHz), a grant of this proposal may be considered a minor environmental action with respect to public exposure to non-ionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive non-ionizing radiation.