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ENGINEERING REPORT

K287BQ, Houston, TX, Minor Change Application

ENGINEERING STATEMENT

All contour non-overlap protection requirements are met with the exception of KAMA-FM, Deer Park, TX 285C2 and KHCB-FM, Houston, TX 289C. Protection to KAMA-FM and KHCB-FM are discussed below.

PROTECTION TO KAMA-FM AND KHCB-FM

KAMA-FM (14 kilometers at 86 degrees True) and KHCB-FM (20 kilometers at 185 degrees True) are second adjacent-channel stations to the proposed channel 287D facility. The 60 dBu F50,50 service contours of both stations extend well beyond the proposed 287D transmitter site. Using the well-established *Living Way Ministries* Methodology, no actual interference to any population is predicted to exist to KAMA-FM or KHCB-FM. Note that a rule waiver of Section 74.1204 for this second/third adjacent-channel protection using the well-established *Living Way Ministries* Methodology is respectfully requested if such a rule waiver is deemed necessary for protection to any station.

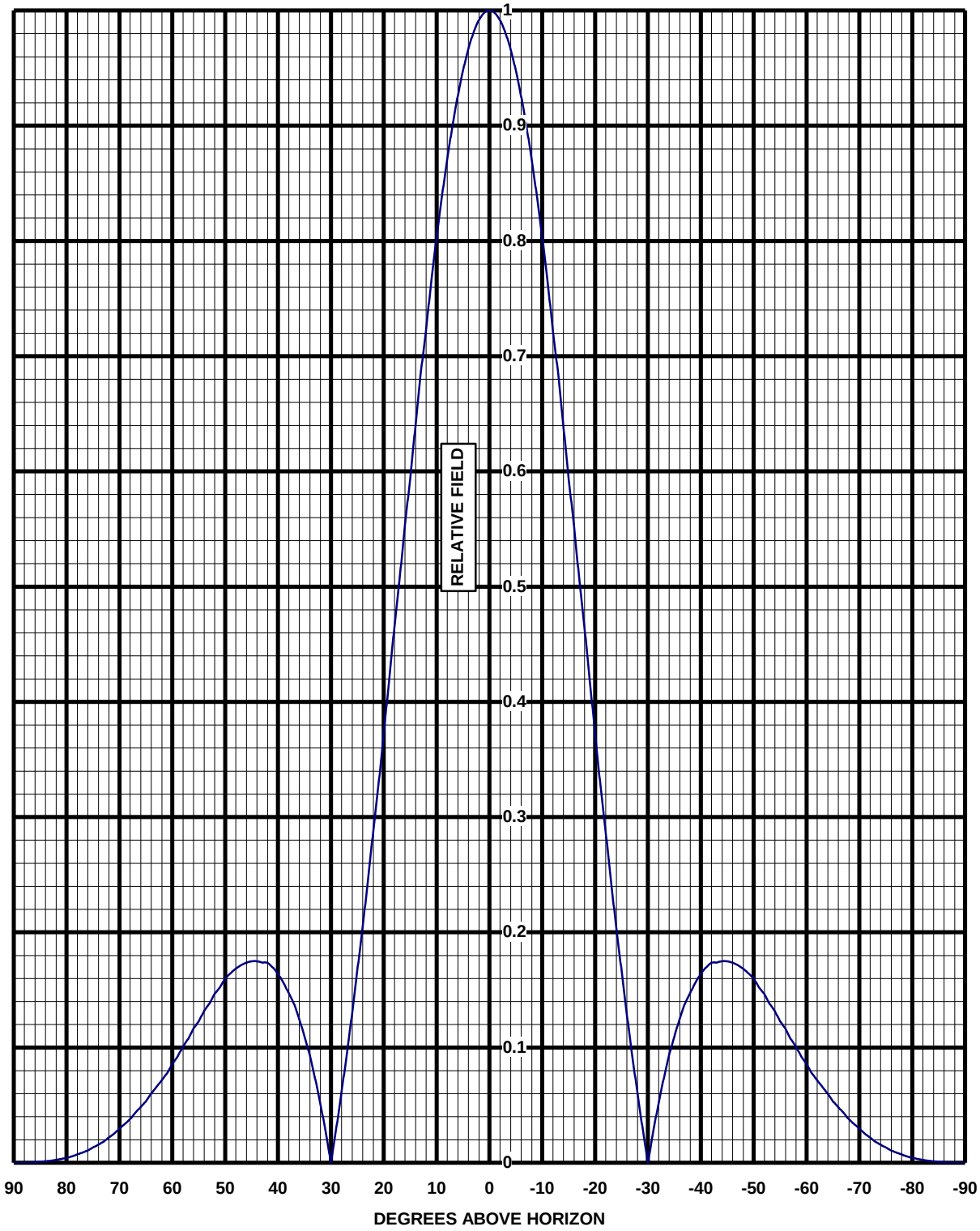
The F50,50 signal strength from KAMA-FM at the proposed 287D transmitter site is greater than 84.5 dBu (the “desired” signal for KAMA-FM). The F50,50 signal strength from KHCB-FM at the proposed 287D transmitter site is greater than 92 dBu (the “desired” signal for KHCB-FM). The second/third adjacent-channel protection of Section 74.1204 is an undesired-to-desired (“U/D”) dB signal strength ratio of 40:1. Therefore, predicted interference to both KAMA-FM and KHCB-FM from the proposed 287D facility is a signal of greater than or equal to 124.5 dBu.

The proposed Jampro JLLP four bay (halfwave spaced) antenna has a relative field of less than 0.175 at all toward angles greater that 25 degrees from the horizontal plane (See Figure EE1). The 124.5 dBu signal based on free space loss extends only 6 meters from the antenna at any downward angle below 25 degrees. By adjusting for the vertical plane downward relative field values of the proposed antenna, the 124.5 dBu interfering signal (using a free space field determination) does not exist at any point where the public has access within the building. (The nearest floor with public access is at least 60 feet, or 18.3 meters, below the bottom bay of the proposed antenna.)

Therefore, pursuant to Section 74.1204(d) of the FCC Rules, KAMA-FM and KHCB-FM are adequately protected by the proposed facility.

JAMPRO ANTENNAS, INC.

COMPUTED ELEVATION PATTERN FIGURE EE1 (1 of 3)

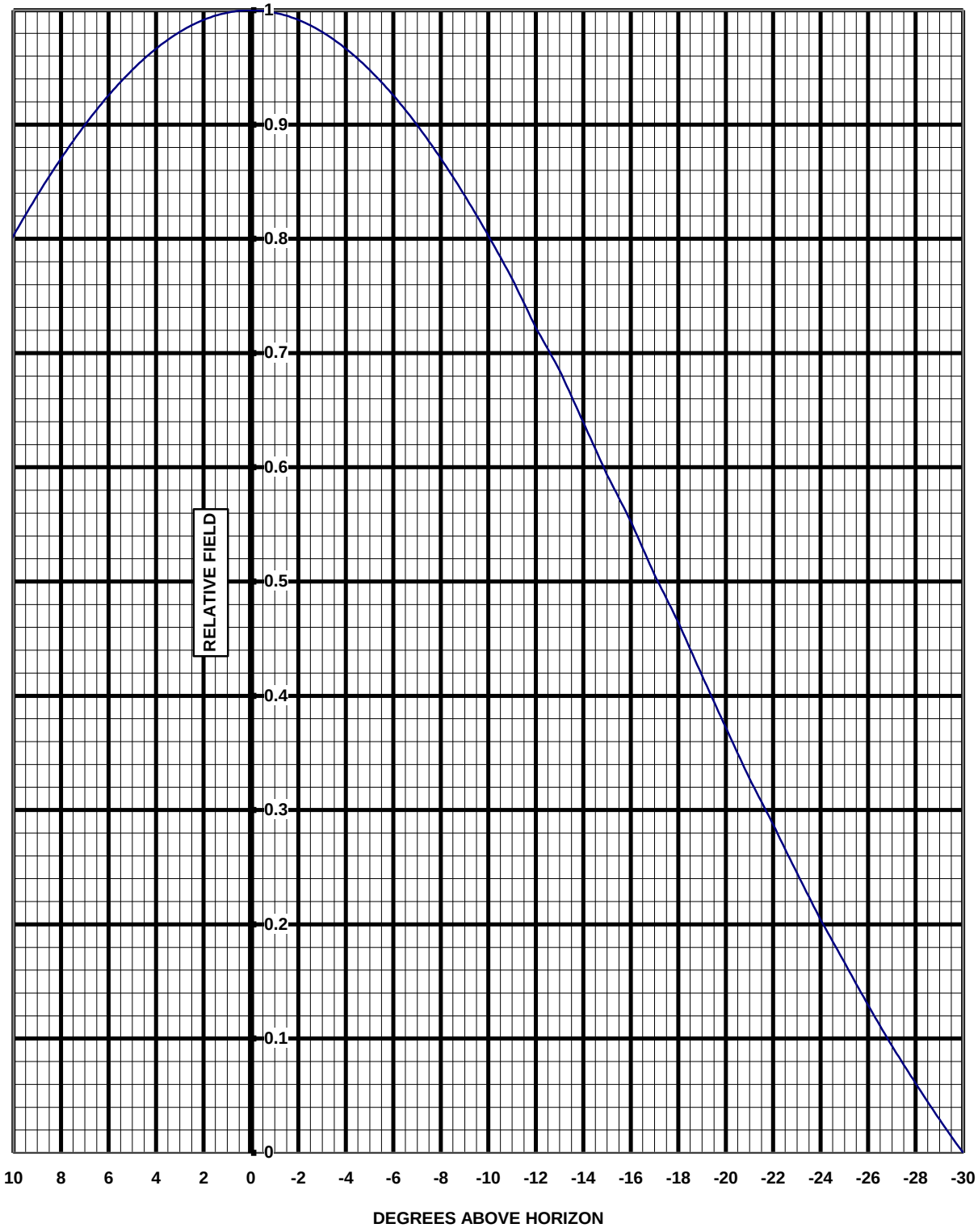


Model: JLLP-4 RFR.5
Description: FM Sidemount Antenna
-0° Beam Tilt, 0% Null Fill

Frequency: 105.3 MHz

FIGURE EE1 (2 of 3)

COMPUTED ELEVATION PATTERN



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Elevation Pattern Tabulation

FIGURE EE1 (3 of 3)

ELEVATION PATTERN TABULATION

RELATIVE FIELD VS ELEVATION ANGLE

ELEVATION ANGLE	RELATIVE FIELD	ELEVATION ANGLE	RELATIVE FIELD	ELEVATION ANGLE	RELATIVE FIELD
10	0.803	-26	0.129	-61	0.078
9	0.838	-27	0.094	-62	0.072
8	0.870	-28	0.061	-63	0.066
7	0.900	-29	0.029	-64	0.060
6	0.925	-30	0.000	-65	0.053
5	0.948	-31	0.027	-66	0.048
4	0.966	-32	0.051	-67	0.043
3	0.981	-33	0.073	-68	0.038
2	0.992	-34	0.093	-69	0.034
1	0.998	-35	0.110	-70	0.030
0	1.000	-36	0.125	-71	0.025
-1	0.998	-37	0.138	-72	0.022
-2	0.992	-38	0.147	-73	0.018
-3	0.981	-39	0.156	-74	0.016
-4	0.966	-40	0.164	-75	0.013
-5	0.948	-41	0.170	-76	0.011
-6	0.925	-42	0.174	-77	0.009
-7	0.900	-43	0.174	-78	0.007
-8	0.870	-44	0.175	-79	0.005
-9	0.838	-45	0.175	-80	0.004
-10	0.803	-46	0.174	-81	0.003
-11	0.765	-47	0.171	-82	0.002
-12	0.722	-48	0.168	-83	0.002
-13	0.685	-49	0.164	-84	0.001
-14	0.639	-50	0.160	-85	0.001
-15	0.593	-51	0.152	-86	0.000
-16	0.553	-52	0.147	-87	0.000
-17	0.506	-53	0.138	-88	0.000
-18	0.464	-54	0.132	-89	0.000
-19	0.418	-55	0.123	-90	0.000
-20	0.372	-56	0.116		
-21	0.328	-57	0.107		
-22	0.287	-58	0.101		
-23	0.245	-59	0.092		
-24	0.204	-60	0.086		
-25	0.167				

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