

**HUMAN EXPOSURE TO RADIOFREQUENCY ELECTROMAGNETIC FIELDS
COMPLIANCE STATEMENT PREPARED BY WILLIAM T. GODFEY, JR. OF THE
FIRM KESSLER AND GEHMAN ASSOCIATES, INC., TELECOMMUNICATIONS
CONSULTING ENGINEERS IN CONNECTION WITH AN APPLICATION FOR A NEW
CLASS A RESERVED CHANNEL NONCOMMERCIAL EDUCATIONAL FM BROADCAST
STATION TO SERVE KINGSLAND, GA AND THE SURROUNDING COMMUNITIES.**

ENVIRONMENTAL IMPACT


The proposed new reserved channel Noncommercial Educational FM (NCE FM) Channel 212 (90.3 MHz) broadcast station would have no significant environmental impact as defined in §1.1307 of the FCC Rules. The proposed NCE FM facility shall operate with a horizontally polarized ERP of 6.0 kW and a vertically polarized ERP of 6.0 kW (Circular polarization). Based on a standard 4-bay, full-wavelength spaced antenna designed for 90.3 MHz (see elevation pattern below) with an antenna height radiation center of 321 ft AGL at the proposed transmitter site (ASRN 1216182), it was determined that the maximum lobe of radiation would occur at 133.7 feet from the base of the tower (342.2 ft radial distance from the antenna center). At 133.7 feet from the base of the tower, the depression angle of the main lobe would be approximately 67° below the horizontal. At that point, the relative field would 0.323 and the power density six feet above the ground would be 0.00385 mW/cm². This equates to only 0.38% of the Maximum Permissible Exposure (MPE) limits for Occupational/Controlled Exposure and only 1.92% of the MPE limits for General Population/Uncontrolled Exposure authorized by the American National Standards Institute (ANSI). Since operation of the proposed new Channel 212 NCE FM broadcast facility would not exceed 5.0% of the MPE limit for Occupational/Controlled Exposure or General Population/Uncontrolled Exposure at any point on the ground, the new Channel 212 NCE FM broadcast facility would not be considered a “significant contributor” to the RF exposure environment pursuant to OET Bulletin 65, Edition 97-01. Therefore, contributions of exposure from other sources were not accounted for in this

analysis. It is safe to conclude that the emissions would be insignificant and well within the maximum allowable requirements.

If other antennas are placed on the tower in the future, the licensee will cooperate with those users by reducing or completely terminating the power to the antenna when maintenance workers are in danger from the electromagnetic radiation emanating from the antenna. It is also understood that additional antennas on the support structure could increase the overall RF exposure levels and it is the responsibility of each licensee to ensure that the total RF exposure resulting from the operation of all antennas on the support structure do not exceed the MPE level at any point on the ground.

CERTIFICATION

This technical statement was prepared by William T. Godfrey, Jr., Engineering Associate with the firm Kessler and Gehman Associates, Inc. having offices in Gainesville, Florida, and has been working with the firm in the field of radio and television broadcast consulting since 1998. Mr. Godfrey was a graduate from the University of North Florida and a Distinguished Military Graduate from the University of Florida. As a Professional in the field of Telecommunications he states under penalty of perjury that the information contained in this report is true and correct to the best of his knowledge and belief.


WILLIAM T. GODFREY, JR., CBT
Kessler and Gehman Associates, Inc.
Consulting Engineers

2 November, 2021

ELEVATION PATTERN

Exhibit No.

Date

1 Nov 2021

Call Letters

NEW

Frequency

90.3 MHz

Antenna Type

DCR-M4C

Location

Kingsland, GA

Customer

GPB

RMS Gain at Main Lobe

4.2 (6.23 dB)

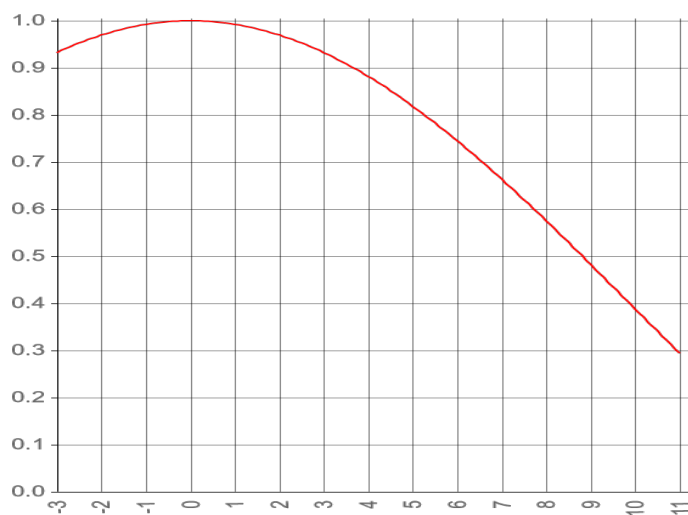
Beam Tilt

0 Degrees

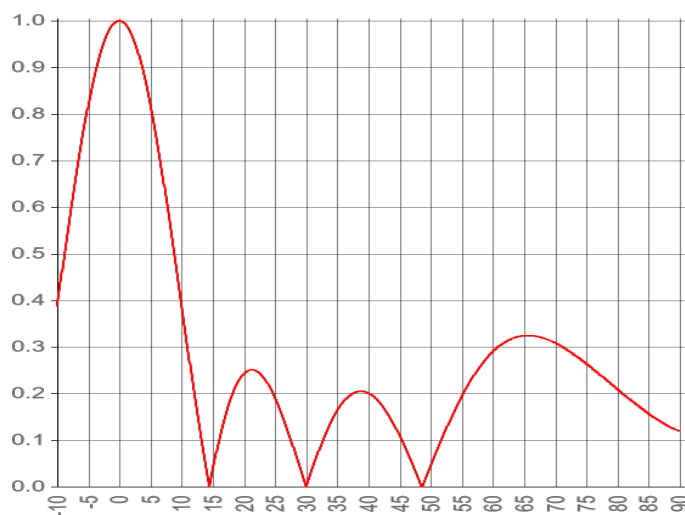
RMS Gain at Horizontal

4.2 (6.23 dB)

Drawing #

Fx04x1000042000
Calculated


Degrees below horizontal



Degrees below horizontal

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10	0.388	10	0.388	30	0.000	50	0.046	70	0.309
-9	0.482	11	0.294	31	0.040	51	0.078	71	0.301
-8	0.575	12	0.202	32	0.077	52	0.109	72	0.293
-7	0.663	13	0.116	33	0.110	53	0.139	73	0.284
-6	0.745	14	0.036	34	0.139	54	0.168	74	0.274
-5	0.818	15	0.037	35	0.164	55	0.194	75	0.264
-4	0.881	16	0.099	36	0.183	56	0.218	76	0.253
-3	0.932	17	0.152	37	0.196	57	0.240	77	0.243
-2	0.970	18	0.193	38	0.203	58	0.259	78	0.231
-1	0.992	19	0.223	39	0.205	59	0.276	79	0.220
0	1.000	20	0.242	40	0.201	60	0.290	80	0.209
1	0.992	21	0.251	41	0.191	61	0.302	81	0.198
2	0.970	22	0.248	42	0.177	62	0.311	82	0.187
3	0.932	23	0.237	43	0.158	63	0.318	83	0.177
4	0.881	24	0.217	44	0.136	64	0.322	84	0.167
5	0.818	25	0.190	45	0.110	65	0.324	85	0.157
6	0.745	26	0.158	46	0.081	66	0.324	86	0.148
7	0.663	27	0.121	47	0.051	67	0.323	87	0.139
8	0.575	28	0.082	48	0.019	68	0.319	88	0.131
9	0.482	29	0.041	49	0.013	69	0.315	89	0.125

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