

## **EXHIBIT 1 – TECHNICAL STATEMENT**

MARANATHA CHURCH OF LAREDO, INC  
K17OS – D  
FACILITY ID: 182825  
LAREDO, TX  
CHANNEL 17  
BNPDTL – 20090825CBO

This application is to modify the current CP ERP from 1.0 kw to 0.100 kw. Also applicant is changing the antenna from Scala SL 7 to a Scala CA7- 490 or similar.

The current CP authorizes 1.0 KW ERP and Mexico has concurred, therefore we believe that Mexican notification isn't required for the request of reduced ERP of 0.100 kw.

**Exhibit 1** – This Narrative and other supporting exhibits.

### **Proposed changes are:**

New ERP – 0.1 kW

New Antenna:

**Exhibit 2– Community Coverage.**

**Exhibit 3 – New Antenna Pattern and tabulations.**

Scala CA7-490 directional

### **Radio Frequency Exposure**

Controlled maximum exposure

$$S = F/300$$

$$S = 1.63 \text{ mW/cm}^2$$

The formula to determine the uncontrolled public access is:

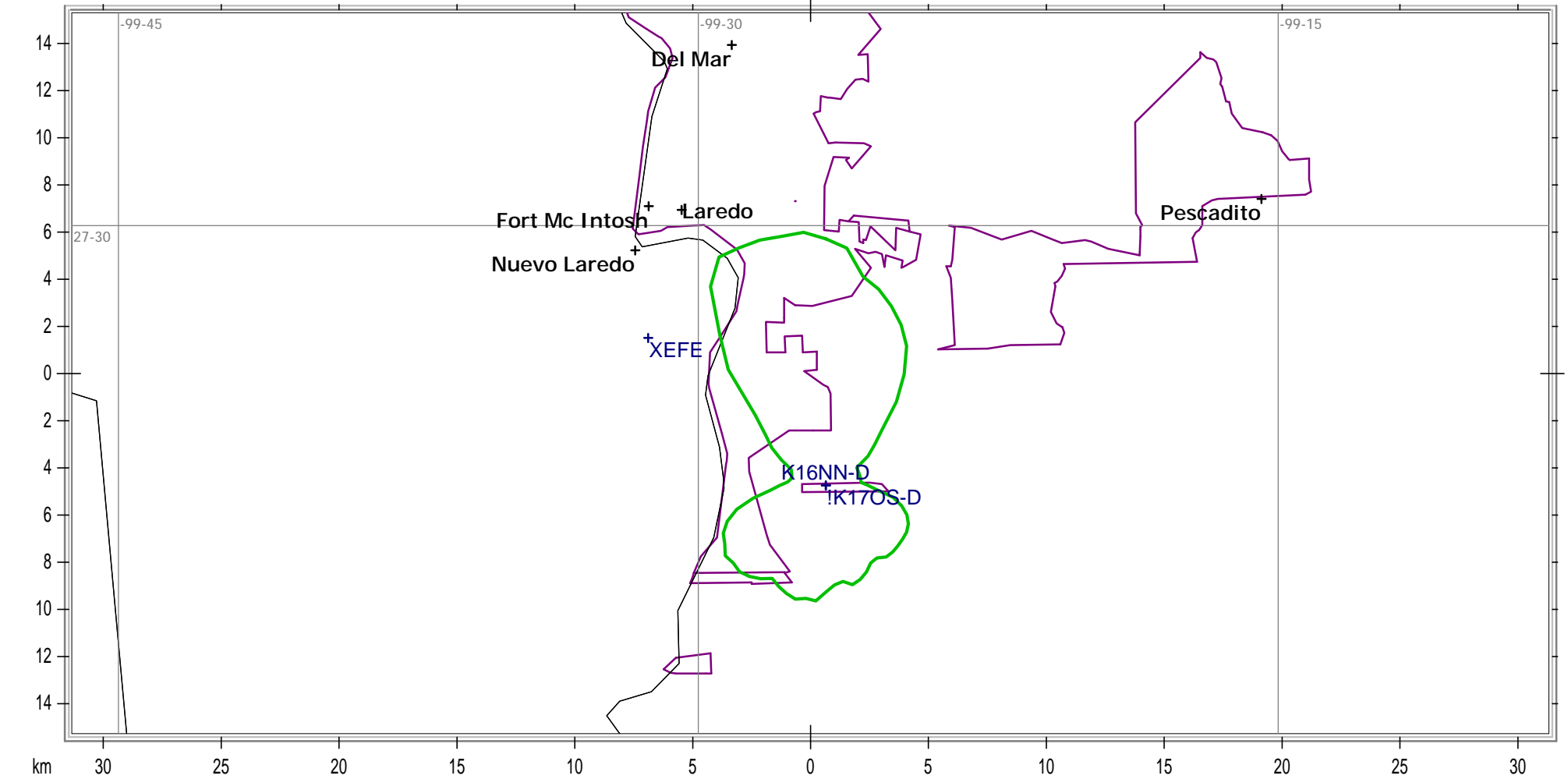
$$S = F/1500$$

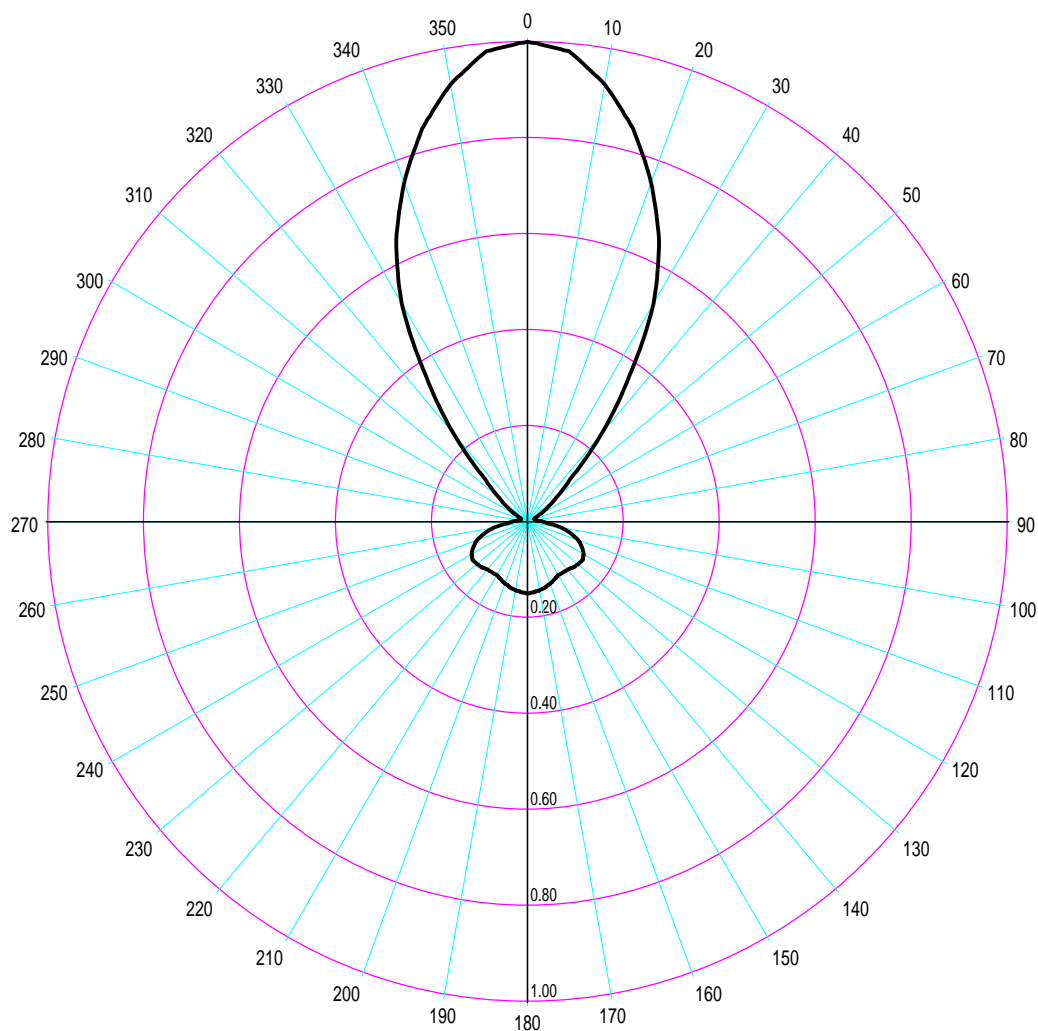
F is the frequency of the UHF channel of operation.

$$F = 489.250 \text{ MHz}$$

$$S = 0.325 \text{ mW/cm}^2, 19.9\% \text{ of controlled maximum exposure.}$$

Applicant will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radio frequency electromagnetic fields in excess of FCC guidelines. Proper signage will be posted.





Azim	Rel.FS	ERP [W]	dBk
0.0	1.000	100.000	-10.000
5.0	0.984	96.826	-10.140
10.0	0.925	85.563	-10.677
15.0	0.848	71.910	-11.432
20.0	0.752	56.550	-12.476
25.0	0.648	41.990	-13.768
30.0	0.525	27.563	-15.597
35.0	0.368	13.542	-18.683
40.0	0.240	5.760	-22.396
45.0	0.125	1.562	-28.062
50.0	0.078	0.608	-32.158
55.0	0.050	0.250	-36.021
60.0	0.026	0.068	-41.701
65.0	0.015	0.022	-46.478
70.0	0.015	0.022	-46.478
75.0	0.015	0.022	-46.478
80.0	0.018	0.032	-44.895
85.0	0.022	0.048	-43.152
90.0	0.032	0.102	-39.897
95.0	0.042	0.176	-37.535
100.0	0.071	0.504	-32.975
105.0	0.092	0.846	-30.724
110.0	0.112	1.254	-29.016
115.0	0.125	1.562	-28.062
120.0	0.135	1.823	-27.393
125.0	0.140	1.960	-27.077
130.0	0.138	1.904	-27.202
135.0	0.135	1.823	-27.393
140.0	0.130	1.690	-27.721
145.0	0.129	1.664	-27.788
150.0	0.128	1.638	-27.856
155.0	0.132	1.742	-27.589
160.0	0.138	1.904	-27.202
165.0	0.142	2.016	-26.954
170.0	0.145	2.102	-26.773
175.0	0.148	2.190	-26.595
180.0	0.150	2.250	-26.478

Azim	Rel.FS	ERP [W]	dBk
185.0	0.148	2.190	-26.595
190.0	0.145	2.102	-26.773
195.0	0.142	2.016	-26.954
200.0	0.138	1.904	-27.202
205.0	0.132	1.742	-27.589
210.0	0.128	1.638	-27.856
215.0	0.129	1.664	-27.788
220.0	0.130	1.690	-27.721
225.0	0.135	1.823	-27.393
230.0	0.138	1.904	-27.202
235.0	0.140	1.960	-27.077
240.0	0.135	1.823	-27.393
245.0	0.125	1.562	-28.062
250.0	0.112	1.254	-29.016
255.0	0.092	0.846	-30.724
260.0	0.071	0.504	-32.975
265.0	0.042	0.176	-37.535
270.0	0.032	0.102	-39.897
275.0	0.022	0.048	-43.152
280.0	0.018	0.032	-44.895
285.0	0.015	0.022	-46.478
290.0	0.015	0.022	-46.478
295.0	0.015	0.022	-46.478
300.0	0.026	0.068	-41.701
305.0	0.050	0.250	-36.021
310.0	0.078	0.608	-32.158
315.0	0.125	1.562	-28.062
320.0	0.240	5.760	-22.396
325.0	0.368	13.542	-18.683
330.0	0.525	27.563	-15.597
335.0	0.648	41.990	-13.768
340.0	0.752	56.550	-12.476
345.0	0.848	71.910	-11.432
350.0	0.925	85.563	-10.677
355.0	0.984	96.826	-10.140