

RF HAZARD STATEMENT  
SECOND FILING WINDOW  
APPLICATION FOR CONSTRUCTION PERMIT  
TV STATION KTFN  
EL PASO, TEXAS  
CHANNEL 20 1000 KW (MAX-DA) 524 m

With respect to the potential for human exposure to radio frequency (RF) energy, calculations prepared in accordance with FCC Bulletin OET-65 (Edition 97-01) indicate that the proposal will not result in human exposure to RF energy at ground level in excess of FCC standards. Power density calculations were conducted at 2-m above ground<sup>1</sup> based on the following conservative assumptions, with the following results:

| Call Sign | Channel | Total ERP (kW) <sup>2</sup> | Distance (m) | Relative Field Factor <sup>3</sup> | FCC Limit <sup>4</sup> (uW/cm <sup>2</sup> ) | Percentage of Limit |
|-----------|---------|-----------------------------|--------------|------------------------------------|--|---------------------|
| KTFN      | 20      | 1046                        | 56           | 0.1                                | 339.3  | 32.8%               |

As indicated above, the calculated power density at a point 2 meters above ground level is 32.8% of the FCC's recommended limit an uncontrolled environment. However, due to the large number of other broadcast emitters in the area, RF measurements will be taken to ensure that the level is within recommended limits.

Public access to the transmitting site is restricted and appropriately marked with RFR warning signs. Furthermore, as this is a multi-user site, a protocol is in effect in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that appropriate measures are taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure.

<sup>1</sup> The radiation center is located 58 m above ground level.

<sup>2</sup> Horizontally polarized ERP 1000 kW, vertically polarized ERP 46 kW.

<sup>3</sup> This is a conservative assumption for the maximum relative field at steep downward angles. See attached vertical relative field pattern.

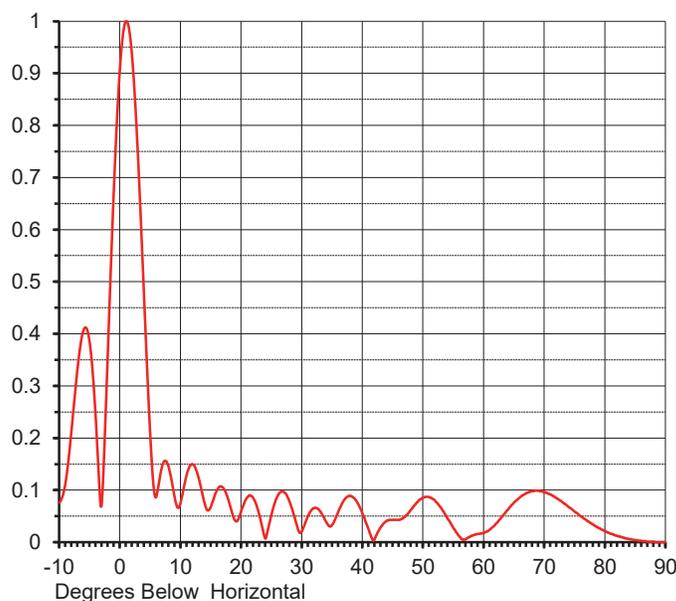
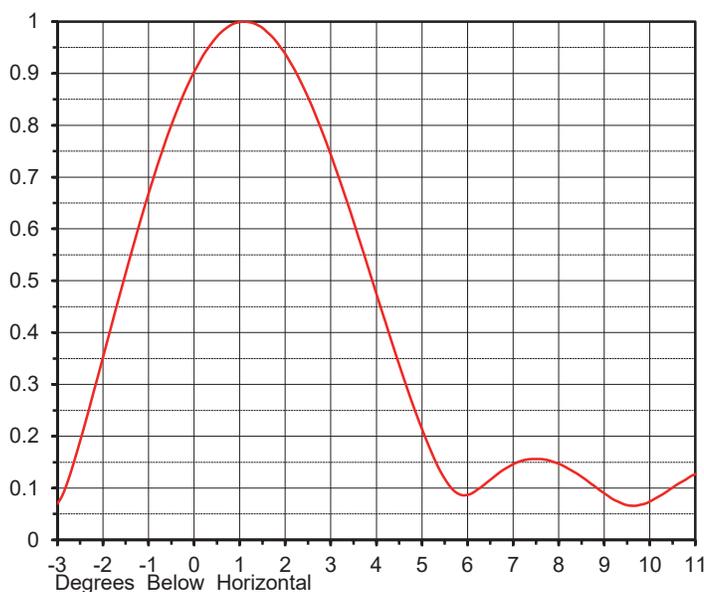
<sup>4</sup> For general population/uncontrolled environments

## ELEVATION PATTERN

Proposal No. **C-70733**  
 Date **3-May-17**  
 Call Letters **KTFN**  
 Channel **20**  
 Frequency **509 MHz**  
 Antenna Type **TFU-12DSB/VP-R BP285**

RMS Directivity at Main Lobe **12.0 ( 10.79 dB )**  
 RMS Directivity at Horizontal **10.1 ( 10.04 dB )**  
**Calculated**

Beam Tilt **1.00 deg**  
 Pattern Number **12B120100**



| Angle | Field |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| -10.0 | 0.076 | 10.0  | 0.079 | 30.0  | 0.022 | 50.0  | 0.086 | 70.0  | 0.096 |
| -9.0  | 0.117 | 11.0  | 0.132 | 31.0  | 0.051 | 51.0  | 0.086 | 71.0  | 0.091 |
| -8.0  | 0.221 | 12.0  | 0.149 | 32.0  | 0.066 | 52.0  | 0.078 | 72.0  | 0.084 |
| -7.0  | 0.339 | 13.0  | 0.120 | 33.0  | 0.059 | 53.0  | 0.064 | 73.0  | 0.076 |
| -6.0  | 0.409 | 14.0  | 0.071 | 34.0  | 0.038 | 54.0  | 0.045 | 74.0  | 0.067 |
| -5.0  | 0.379 | 15.0  | 0.070 | 35.0  | 0.034 | 55.0  | 0.026 | 75.0  | 0.058 |
| -4.0  | 0.227 | 16.0  | 0.101 | 36.0  | 0.060 | 56.0  | 0.010 | 76.0  | 0.049 |
| -3.0  | 0.084 | 17.0  | 0.104 | 37.0  | 0.082 | 57.0  | 0.006 | 77.0  | 0.041 |
| -2.0  | 0.385 | 18.0  | 0.074 | 38.0  | 0.089 | 58.0  | 0.013 | 78.0  | 0.034 |
| -1.0  | 0.696 | 19.0  | 0.041 | 39.0  | 0.078 | 59.0  | 0.016 | 79.0  | 0.027 |
| 0.0   | 0.919 | 20.0  | 0.062 | 40.0  | 0.053 | 60.0  | 0.018 | 80.0  | 0.021 |
| 1.0   | 1.000 | 21.0  | 0.087 | 41.0  | 0.023 | 61.0  | 0.025 | 81.0  | 0.016 |
| 2.0   | 0.923 | 22.0  | 0.083 | 42.0  | 0.008 | 62.0  | 0.036 | 82.0  | 0.012 |
| 3.0   | 0.718 | 23.0  | 0.049 | 43.0  | 0.030 | 63.0  | 0.050 | 83.0  | 0.009 |
| 4.0   | 0.447 | 24.0  | 0.008 | 44.0  | 0.041 | 64.0  | 0.064 | 84.0  | 0.006 |
| 5.0   | 0.192 | 25.0  | 0.056 | 45.0  | 0.043 | 65.0  | 0.077 | 85.0  | 0.004 |
| 6.0   | 0.090 | 26.0  | 0.090 | 46.0  | 0.043 | 66.0  | 0.087 | 86.0  | 0.002 |
| 7.0   | 0.150 | 27.0  | 0.096 | 47.0  | 0.050 | 67.0  | 0.094 | 87.0  | 0.001 |
| 8.0   | 0.143 | 28.0  | 0.075 | 48.0  | 0.063 | 68.0  | 0.098 | 88.0  | 0.001 |
| 9.0   | 0.084 | 29.0  | 0.037 | 49.0  | 0.077 | 69.0  | 0.099 | 89.0  | 0.000 |
|       |       |       |       |       |       |       |       | 90.0  | 0.000 |

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