

Augmented RMS (mV/m/km) :
Q Factor: Day: Night: 10

Theoretical Parameters:
Day Directional Antenna:

| Tower | Field | Phasing | Spacing | Orientation | Tower Ref | Height |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No. | Ratio | (Deg.) | (Deg.) | (Deg.) | Switch * | (Deg.) |
| 1 | 1.0000 | 0.000 | 0.0000 | 0.000 | 0 | 73.5 |
| 2 | 0.5450 | -110.000 | 90.0000 | 212.000 | 0 | 73.5 |
| 3 | 0.3100 | -5.000 | 180.0000 | 212.000 | 0 | 73.5 |

* Tower Reference Switch
$0=$ Spacing and orientation from reference tower $1=$ Spacing and orientation from previous tower

Theoretical Parameters:
Night Directional Antenna:

| Tower | Field | Phasing | Spacing | Orientation | Tower Ref | Height |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No. | Ratio | (Deg.) | (Deg.) | (Deg.) | Switch * | (Deg.) |
| 1 | 1.0000 | 0.000 | 0.0000 | 0.000 | 0 | 73.5 |
| 2 | 1.8200 | -128.000 | 90.0000 | 212.000 | 0 | 73.5 |
| 3 | 1.0000 | 104.000 | 180.0000 | 212.000 | 0 | 73.5 |

* Tower Reference Switch
$0=$ Spacing and orientation from reference tower
$1=$ Spacing and orientation from previous tower

Day Directional Operation:

| Twr. Phase | Antenna Monitor |  |
| :--- | :--- | :--- |
| No. (Deg.) | Sample Current Ratio |  |
| 1 | 107 | 0.9 |
| 2 | 0 | 0.5 |
| 3 | 105 | 0.31 |

Night Directional Operation:

| Twr. Phase | Antenna Monitor <br> No. |  |
| :--- | :--- | :--- |
| (Deg.) | Sample Current Ratio |  |
| 1 | 128.8 | 0.58 |
| 2 | 0 | 1 |
| 3 | -126.6 | 0.479 |

Antenna Monitor: POTOMAC INSTRUMENTS AM-19 (204)
Sampling System Approved Under Section 73.68 of the Rules.
Monitoring Points:

Day Operation:

| Radial <br> $($ Deg. T) | Distance | From Transmitter Maximum <br> $(\mathrm{kM})$ |
| :--- | :---: | :---: |
| 4.5 | 8 | Field <br> $(\mathrm{mV} / \mathrm{m})$ |
| 59.5 | 3.88 | 4.8 |
| 182 | 3.52 | 24.84 |
| 241.5 | 6.39 | 212.82 |
|  |  | 120.99 |

Night Operation:
Radial Distance From Transmitter Maximum Field Strength

| $($ Deg. T) | $(\mathrm{kM})$ | $(\mathrm{mV} / \mathrm{m})$ |
| :--- | :---: | :---: |
| 35 | 4.59 | 4 |
| 64 | 6.49 | 0.91 |
| 85 | 2.95 | 8.28 |
| 104 | 4.22 | 2.42 |
| 320 | 5.33 | 2.77 |

Special operating conditions or restrictions:
1 DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM
No. and Type of Elements: Three, vertical, guyed, series-excited steel radiator of uniform cross-section, base insulated.

Ground System consists of 120 equally spaced, buried copper wire radials, each radial 72.8 meters or 238.0 feet in length (90.0 degree @ 1030 kHz ) about the base of each tower. Except where radial are shortened to the bonding strap connecting intersecting radials from adjoining towers. Copper bonding straps connect the base of adjoining towers toe ach other and to the KCWJ transmitter building.

DESCRIPTION OF AND FIELD INTENSITY MEASURED AT MONITORING POINTS:
Direction of 4.5 True North: From the intersection of East Hanna and Lake City Buckner Roads, the monitor point is on the west edge of Lake City Buckner Road in line with the center line of East Hanna Road. Distance from site is 8.0 km . The field intensity measured at this point should not exceed $4.8 \mathrm{mV} / \mathrm{m}$, Daytime.

Direction of 59.5 True North: The point is located on the west edge of SR-BB 10 feet south of a "55 MPH" sign and across from a green "Buckner 5; Higginsville 26" direction sign. Distance from site is 3.88 km . The field intensity measured at this point should not exceed 24.84 $\mathrm{mV} / \mathrm{m}$, Daytime.

Special operating conditions or restrictions:
3 Direction of 182.5 True North: From the intersection of Adams Dairy Parkway and US Route 40, turn left east on US Route 40 for 0.8 miles to the entrance of Centerline Park. Continue east on US Route 40 an additional 0.1 mile to the monitor point. The point is located on the south edge of US Route 40 . Distance from site is 3.52 km . The field intensity measured at this point should not exceed $212.82 \mathrm{mV} / \mathrm{m}$, Daytime.

Direction of 241.5 True North: The point is located 256 feet north of the intersection of Walnut Street and Woods Chapel Road and is directly south of the Burros Old Mill Park sign beside a storm drain. Distance from site is 6.39 km . The field intensity measured at this point should not exceed $120.99 \mathrm{mV} / \mathrm{m}$, Daytime.

Direction of 35 True North: From the intersection of Highway $B B$ and Oakland School Road, turn left on Oakland School Road and proceed 0.3 miles. The point is located in the center of the road between the 31907 marker near the end of the drive and S.W. Bell box number 9002 . This is point number 22 on the $N 35$ radial and it is located 2.85 miles from the site. The field intensity measured at this point should not exceed $4.0 \mathrm{mV} / \mathrm{m}$, Nighttime.

Direction of 64 True North: From the intersection of Highway $B B$ and Highway FF, turn right on Highway FF and proceed 1.78 miles to the intersection with Holloway Road. Turn left on Holloway Road and proceed 0.5 miles to a sharp left hand turn. From the turn proceed 0.22 miles to the monitor point. The point lies in the center of the road opposite the fence corner on the north side of the road. This is point number 24 on the N 64 radial and it is located 4.03 miles from the site. The field intensity measured at this point should not exceed $0.91 \mathrm{mV} / \mathrm{m}$, Nighttime.

Direction of 85 True North: The monitor point is at the north side of the driveway, on the left hand side of the street at the 1358 Rust Road Mailbox. This is point number 18 on the $N 85$ radial and it is located 1.83 miles from the site. The field intensity measured at this point should not exceed $8.28 \mathrm{mV} / \mathrm{m}$, Nighttime.

Direction of 104 True North: From the intersection of Duncan Road and Seymor Road, turn left on Seymor Road and proceed north for $300^{\prime}$ to the monitor point. The point is located in the center of the road between the first and second utility poles north of the creek crossing. This is point number 22 on the $N 104$ radial and it is located 2.62 miles from the site. The field intensity measured at this point should not exceed $2.42 \mathrm{mV} / \mathrm{m}$, Nighttime.

Direction of 320 True North: From the intersection of Highway 7 and Highway FF, turn right on Highway FF and proceed 0.19 miles to the monitor point. The point is located on the north side of the road adjacent to a sign reading "STOP AHEAD". This is point number 22 on the $N 320$ radial and it is located 3.31 miles from the site. The field intensity measured at this point should not exceed $2.77 \mathrm{mV} / \mathrm{m}$, Nighttime.

