

Name of Licensee: LONG COMMUNICATIONS, LLC.

Station Location: HICKORY, NC

Frequency (kHz): 1290

Station Class: B

Antenna Coordinates:

Day

Latitude: N 35 Deg 43 Min 35 Sec

Longitude: W 81 Deg 18 Min 02 Sec

Night

Latitude: N 35 Deg 43 Min 35 Sec

Longitude: W 81 Deg 18 Min 02 Sec

Transmitter(s): Type Accepted. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's Rules.

Nominal Power (kW): Day: 50.0 Night: 1.0

Antenna Input Power (kW): Day: 52.6 Night: 1.1

Antenna Mode: Day: DA Night: DA

(DA=Directional Antenna, ND=Non-directional Antenna; CH=Critical Hours)

Current (amperes): Day: 32.4 Night: 4.65

Resistance (ohms): Day: 50 Night: 50

Antenna Registration Number(s):

Day:

Tower No.	ASRN	Overall Height (m)
1	1019099	
2	1019102	
3	None	60.4

Night:

Tower No.	ASRN	Overall Height (m)
1	1019099	
2	1019100	
3	1019101	
4	1019102	

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Day: 2190 Night: 321.9

Standard RMS (mV/m/km): Day: 2301

Augmented RMS (mV/m/km): Night: 338.6

Q Factor: Day: Night:

Theoretical Parameters:

Day Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	1.0000	0.000	0.0000	0.000	0	96.8
2	0.8810	-127.700	135.0000	267.000	0	96.8
3	0.9110	-32.400	124.4000	301.500	0	92.0

* Tower Reference Switch

0 = Spacing and orientation from reference tower

1 = Spacing and orientation from previous tower

Theoretical Parameters:

Night Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	1.0000	0.000	0.0000	0.000	0	96.8
2	0.8000	68.000	135.0000	357.000	0	96.8
3	0.7200	248.000	190.9000	312.000	0	96.8
4	0.9000	180.000	135.0000	267.000	0	96.8

* Tower Reference Switch

0 = Spacing and orientation from reference tower

1 = Spacing and orientation from previous tower

Augmentation Parameters:

Aug No.	Central Azimuth (Deg. T)	Span (Deg.)	Radiation at Central Azimuth (mV/m @ 1 km)
1	41.0	10.0	103.00
2	41.0	68.0	86.90
3	169.0	10.0	98.17
4	177.0	10.0	32.99
5	183.0	10.0	77.81
6	300.0	10.0	193.12
7	332.0	12.0	55.52

Day Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	0	1
4	-127.8	0.879
5	-32.7	0.954

Night Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	179.7	0.9
2	-68.5	0.72
3	69.1	0.805
4	0	1

Antenna Monitor: POTOMAC INSTRUMENTS 1901

Sampling System Approved Under Section 73.68 of the Rules.

Monitoring Points:

Day Operation:

Radial (Deg. T)	Distance From Transmitter (kM)	Maximum Field Strength (mV/m)
87.5	5.2	37.55

Night Operation:

Radial (Deg. T)	Distance From Transmitter (kM)	Maximum Field Strength (mV/m)
41	2.6	30.7
169	7.7	2.1
177	7.6	0.93
183	7.5	2.1
332	6.8	2.1

Special operating conditions or restrictions:

- 1 The permittee/licensee must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.

Special operating conditions or restrictions:

2 Location of Monitoring Points

Direction of 41 degrees true North. From the transmitter driveway go North to the end of road, turn right and drive 0.15 mile to Sweetwater Church Road, turn left and drive 0.1 miles to Highway 70-A, turn left and drive 0.1 mile to road on right. Turn right and drive 0.73 miles to the end at crossroad (12th Avenue, N.E.) Turn right and drive 0.45 mile to road on right between a church and cemetery. Turn right and drive 0.4 mile to Spencer Driveway on right leading to green shingled house. Turn right in driveway and go approximately 100 feet to measuring location.

Direction of 169 degrees true North. From the transmitter driveway drive North to end of road and right 0.15 mile to Sweetwater Church Road. Turn right and drive approximately 2.9 miles to U.S. 64 and 70. Turn right and drive 0.7 mile to crossroad. Turn left on road to Startown and drive approximately 3.5 mile to a road on right leading to Brookford and Catawba Country Club. Turn right and drive 0.9 mile (200 feet beyond driveway to house on right side of road) to a point where a drainage ditch leaves the road on the left side. The measuring point is on the right side of the road.

Direction of 177 degrees true North. From measuring point #2(169 degrees) continue down the road and drive 0.3 mile beyond a road on the right leading to Jerusalem Church to a position on the road between a house and barn on the right side of the road.

Direction of 183 degrees true North. From measuring point #3(177 degrees) continue on the road and drive 0.2 mile beyond the crossroad at the bottom of the hill to a point approximately half-way between the driveway on the left to a farmhouse and the road on the left to Catawba Country Club. The measuring location is approximately 20 feet in the field on the right side of the road.

Direction of 332 degrees true North. To reach this point travel Northward on State Road No. 127 a distance of 2.75 miles beyond the north city limits of Hickory to a point where a road turns left from this highway. There is a large stone house on the left which sets well back from the road and a nursery sign at the intersection. Turn left and drive approximately 0.85 mile to a bridge. Proceed 0.35 mile beyond this bridge to a point beyond a house on the right to a small tree and telephone pole on the right at the curve in the road. The measuring location is approximately 10 feet into the field opposite the tree.

Direction of 87.5 degrees true North. The monitor point is located at the end of Yorkland Road near mailbox #3443.

3 Ground system consists of 120 equally spaced, buried, copper radialss about the base of each tower, each 58.1 meters in length except where intersecting radials are shortened and bonded to a transverse copper strap midway between adjacent towers.

*** END OF AUTHORIZATION ***