

W293BI FMOverlap Study

REFERENCE CH# 294D - 106.7 MHz, Pwr= 0.25 kW DA, HAAT= 169.6 M, COR= 366 M DISPLAY DATES
 32 40 03.0 N. Average Protected F(50-50)= 16.8 km DATA 07-17-17
 85 33 01.0 W. Standard Directional SEARCH 07-17-17

CH CITY	CALL	TYPE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap	*OUT* in km)
291C1 Alexander City	WSTH-FM	LIC	CN AL	35.8 215.9	12.5 BLH19950410KB	32 45 30.0 85 28 20.0	86.000 319	10.3 544	73.7 Cc Licenses, Llc	-7.9	-61.7*
294D Auburn	W293BI	CP	DC AL	124.0 304.1	20.4 BPFT20160127ADM	32 33 54.0 85 22 13.0	0.165	43.5 332	12.9 Auburn Network, Inc.	-38.5*	-42.5
294C1 Enterprise	WKMX	LIC	NCX AL	181.2 1.2	151.6 BLH20161107AAP	31 18 02.0 85 35 05.0	100.000 214	163.0 293	64.8 Gulf South Communications,	-24.5*	43.2
297C0 Columbus	WCGQ	LIC	C GA	115.6 295.9	51.5 BMLH20070118ABW	32 28 00.0 85 03 20.0	100.000 308	10.0 418	71.9 Pmb Broadcasting, Llc	25.8	-21.4*
293D Auburn	W293BI	LIC	DC AL	150.5 330.5	11.2 BLFT20110131APO	32 34 47.0 85 29 29.0	0.250 61	11.5 232	8.1 Auburn Network, Inc.	-15.5*	-19.8
294C Gainesville	WYAY	LIC	NCX GA	49.7 230.7	208.4 BLH20051115ADU	33 52 02.0 83 49 44.0	77.000 505	184.7 772	84.2 Radio License Holdings Llc	11.9	84.3
240A Tuskegee	WQSI«	LIC	CN AL	185.9 5.9	21.9 BLH19920803KD	32 28 17.0 85 34 28.0	4.300 115	27.2 233	25.6 New World Communications,	9.5R	12.4M

Terrain database is NGDC 30 SEC, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM
 Contour distances are on direct line to and from reference station. Reference Zone= , Co to 3rd adjacent.
 Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
 "*"affixed to 'IN' or 'OUT' values = site inside protected contour.
 « = Station meets FCC minimum distance spacing for its class.

W293BI Proposed

Latitude: 32-40-03 N
Longitude: 085-33-01 W
ERP: 0.25 kW
Channel: 294
Frequency: 106.7 MHz
AMSL Height: 366.0 m
Elevation: 223.0 m
Horiz. Pattern: Directional
Vert. Pattern: No

WKMX

BLH20161107AAP
Latitude: 31-18-02 N
Longitude: 085-35-05 W
ERP: 100.00 kW
Channel: 294
Frequency: 106.7 MHz
AMSL Height: 293.3 m
Elevation: 110.3 m
Horiz. Pattern: Omni
Vert. Pattern: No

W293BI and WKMX Protected & Interfering Contours

W293BI Proposed

F(50,10) 40 dBu

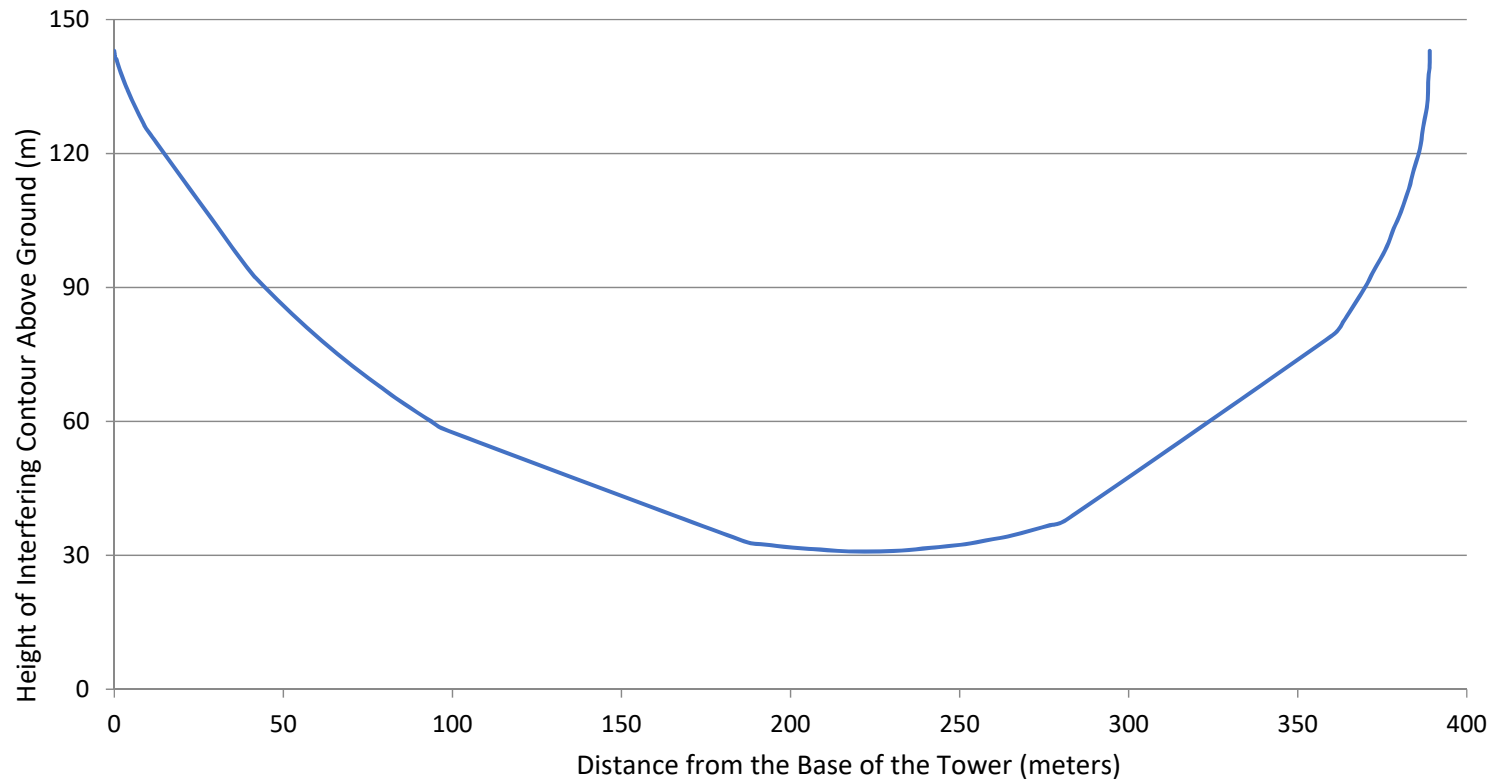
F(50,50) 60 dBu

WKMX

Scale 1:800,000

0 10 20 30 km

**Height Above Ground (meters) of W293BI 3rd-Adjacent Interfering Contour on Channel 294
to WCGQ's Licensed Facility (using a Dielectric DCRH antenna)**



Received Signal Level from WQSI at the W242AX tower: 69.1 dBu

Interfering Contour: 109.1 dBu

Contour's Lowest AGL: 30.9 meters (220.1 meters from the tower)

Proposal Number **0**
 Date **27-Jan-16**
 Call Letters **W254AY**
 Location **Auburn, AL**
 Customer **Auburn Network**
 Antenna Type **DCRH**
 Frequency **106.70 MHz**
 Drawing #: **28**

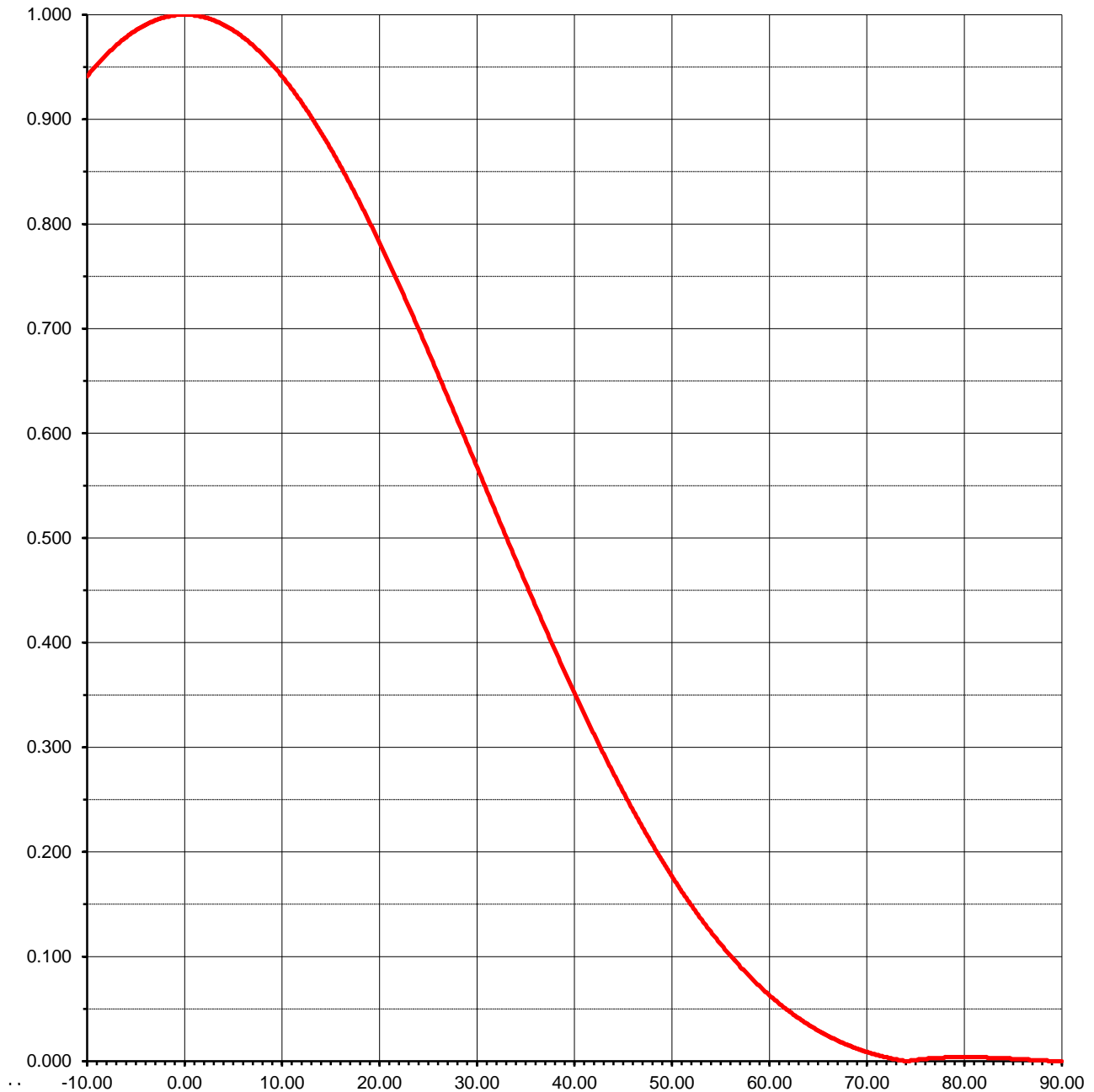
TABULATION OF ELEVATION PATTERN

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.941	10.5	0.935	31.0	0.545	51.5	0.156	72.0	0.004
-9.5	0.947	11.0	0.929	31.5	0.534	52.0	0.149	72.5	0.003
-9.0	0.952	11.5	0.923	32.0	0.523	52.5	0.142	73.0	0.002
-8.5	0.957	12.0	0.916	32.5	0.512	53.0	0.136	73.5	0.001
-8.0	0.962	12.5	0.909	33.0	0.501	53.5	0.130	74.0	0.000
-7.5	0.966	13.0	0.902	33.5	0.490	54.0	0.124	74.5	0.001
-7.0	0.971	13.5	0.895	34.0	0.479	54.5	0.118	75.0	0.001
-6.5	0.975	14.0	0.887	34.5	0.468	55.0	0.112	75.5	0.002
-6.0	0.978	14.5	0.880	35.0	0.457	55.5	0.106	76.0	0.002
-5.5	0.982	15.0	0.872	35.5	0.446	56.0	0.101	76.5	0.003
-5.0	0.985	15.5	0.864	36.0	0.435	56.5	0.096	77.0	0.003
-4.5	0.988	16.0	0.855	36.5	0.425	57.0	0.090	77.5	0.003
-4.0	0.990	16.5	0.847	37.0	0.414	57.5	0.086	78.0	0.004
-3.5	0.993	17.0	0.838	37.5	0.403	58.0	0.081	78.5	0.004
-3.0	0.995	17.5	0.829	38.0	0.393	58.5	0.076	79.0	0.004
-2.5	0.996	18.0	0.820	38.5	0.382	59.0	0.072	79.5	0.004
-2.0	0.998	18.5	0.811	39.0	0.372	59.5	0.067	80.0	0.004
-1.5	0.999	19.0	0.801	39.5	0.362	60.0	0.063	80.5	0.004
-1.0	0.999	19.5	0.792	40.0	0.352	60.5	0.059	81.0	0.004
-0.5	1.000	20.0	0.782	40.5	0.342	61.0	0.055	81.5	0.004
0.0	1.000	20.5	0.772	41.0	0.332	61.5	0.051	82.0	0.004
0.5	1.000	21.0	0.762	41.5	0.322	62.0	0.048	82.5	0.003
1.0	0.999	21.5	0.752	42.0	0.313	62.5	0.044	83.0	0.003
1.5	0.999	22.0	0.742	42.5	0.303	63.0	0.041	83.5	0.003
2.0	0.998	22.5	0.732	43.0	0.294	63.5	0.038	84.0	0.003
2.5	0.996	23.0	0.721	43.5	0.284	64.0	0.035	84.5	0.003
3.0	0.995	23.5	0.711	44.0	0.275	64.5	0.032	85.0	0.002
3.5	0.993	24.0	0.700	44.5	0.266	65.0	0.029	85.5	0.002
4.0	0.990	24.5	0.689	45.0	0.257	65.5	0.027	86.0	0.002
4.5	0.988	25.0	0.678	45.5	0.249	66.0	0.024	86.5	0.002
5.0	0.985	25.5	0.668	46.0	0.240	66.5	0.022	87.0	0.001
5.5	0.982	26.0	0.657	46.5	0.232	67.0	0.020	87.5	0.001
6.0	0.978	26.5	0.646	47.0	0.223	67.5	0.018	88.0	0.001
6.5	0.975	27.0	0.635	47.5	0.215	68.0	0.016	88.5	0.001
7.0	0.971	27.5	0.624	48.0	0.207	68.5	0.014	89.0	0.000
7.5	0.966	28.0	0.612	48.5	0.199	69.0	0.012	89.5	0.000
8.0	0.962	28.5	0.601	49.0	0.192	69.5	0.010	90.0	0.000
8.5	0.957	29.0	0.590	49.5	0.184	70.0	0.009		
9.0	0.952	29.5	0.579	50.0	0.177	70.5	0.007		
9.5	0.947	30.0	0.568	50.5	0.170	71.0	0.006		
10.0	0.941	30.5	0.557	51.0	0.162	71.5	0.005		

Proposal Number **0**
Date **27-Jan-16**
Call Letters **W254AY**
Location **Auburn, AL**
Customer **Auburn Network**
Antenna Type **DCRH**
Drawing # **25R**

ELEVATION PATTERN

RMS Gain at Main Lobe **0.70** **-(1.55 dB)** Beam Tilt **0.00 deg**
Per Polarization
Calculated / Measured **Calculated** Frequency **106.70 MHz**



W293BI Proposed

Latitude: 32-40-03 N
Longitude: 085-33-01 W
ERP: 0.25 kW
Channel: 294
Frequency: 106.7 MHz
AMSL Height: 366.0 m
Elevation: 223.0 m
Horiz. Pattern: Directional
Vert. Pattern: No

WGZZ

BLH20100511ACX
Latitude: 32-44-10.50 N
Longitude: 085-29-54.20 W
ERP: 4.20 kW
Channel: 232
Frequency: 94.3 MHz
AMSL Height: 338.6 m
Elevation: 234.0 m
Horiz. Pattern: Omni
Vert. Pattern: No

**W293BI and WGZZ
F(50,50) 60 dBu Contours**

F(50,50) 60 dBu

WGZZ

W293BI Proposed

F(50,50) 60 dBu