

Engineering Exhibit 16      WVQM      (Previously known as WKCG)  
Environmental Protection Act  
Blueberry Broadcasting, LLC.  
P.O. Box 2600  
Kennebunkport Maine 04046  
October 16, 2009

The facilities were evaluated in terms of potential radio frequency radiation Exposure at ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radio frequency Radiation." This project combines WVQM into the existing WABK Dielectric DCR-M6 antenna system, with element spacing of 0.8333 wavelengths at the WVQM Frequency, mounted with its center of radiation 48 meters above ground level. This System operates with an effective radiated power of 41 kilowatts in both the Horizontal and vertical planes. At 2 meters above ground, at 22.8 meters from the base of the tower, this antenna system will contribute worst case, 12.7 microwatts per square centimeter, or 1.27 percent of the allowable ANSI limit for controlled exposure, and 6.35 percent of the allowable limit for uncontrolled exposure. At the frequency of WABK the element spacing is 0.860 wavelengths, operating with an effective radiated power of 50 kilowatts in both the horizontal and vertical planes. At 2 meters above ground, at 25.2 meters from The base of the tower, this frequency will contribute worst case, 17.85 microwatts per Square centimeter or 1.78 percent of the allowable ANSI limit for controlled exposure, And 8.90 percent of the allowable limit for uncontrolled exposure. The base if the tower is enclosed with a twenty by twenty foot eight foot high fence that is locked and clearly marked with approved warning signs. There are no known non-exempt radiators within 1 km of this site. The applicant will reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower for maintenance or inspection. It is therefore believed that this antenna system is in compliance with OET Bulletin Number 65 as required by the Federal Communications Commission.



Proposal Number

Revision

Date

16 Oct 2009

Call Letters

WCKG

Channel 267

Location

Augusta, ME

Customer

Blueberry Broadcasting

Antenna Type

DCR-M6C

**ELEVATION PATTERN**

RMS Gain at Main Lobe

**2.85 (4.55 dB)**

Beam Tilt

**0.00 Degrees**

RMS Gain at Horizontal

**2.85 (4.55 dB)**

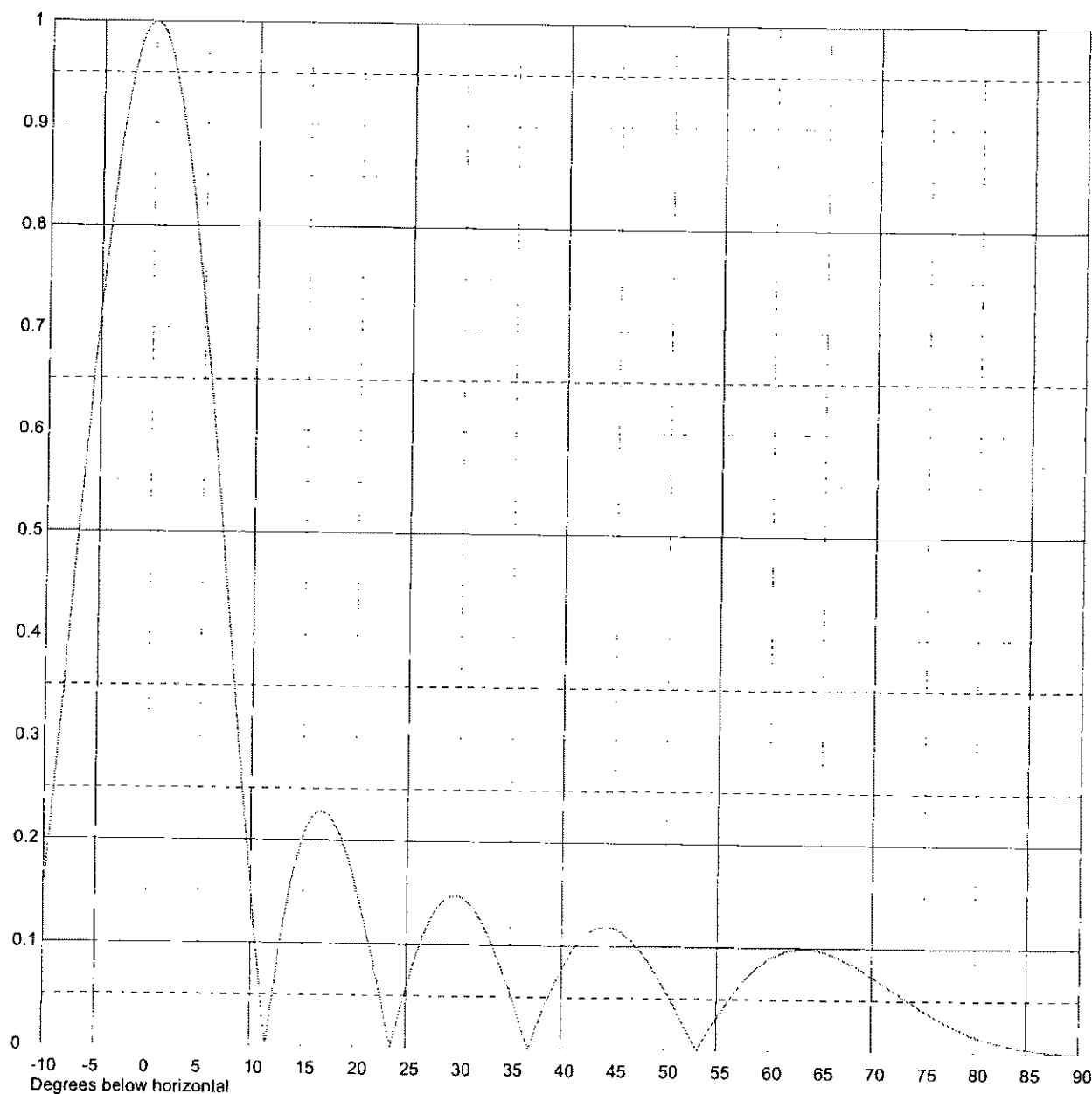
Frequency

**101.30 MHz**

Calculated / Measured

**Calculated**

Drawing #

**FC06M8300057000-90**

Remarks:



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### TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #

FC06M8300057000-90

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.150	2.4	0.930	10.6	0.088	30.5	0.144	51.0	0.040	71.5	0.063
-9.5	0.205	2.6	0.919	10.8	0.069	31.0	0.140	51.5	0.031	72.0	0.060
-9.0	0.261	2.8	0.906	11.0	0.049	31.5	0.134	52.0	0.021	72.5	0.056
-8.5	0.319	3.0	0.893	11.5	0.004	32.0	0.126	52.5	0.012	73.0	0.053
-8.0	0.378	3.2	0.878	12.0	0.039	32.5	0.116	53.0	0.003	73.5	0.050
-7.5	0.437	3.4	0.863	12.5	0.077	33.0	0.106	53.5	0.006	74.0	0.047
-7.0	0.496	3.6	0.848	13.0	0.111	33.5	0.094	54.0	0.015	74.5	0.044
-6.5	0.555	3.8	0.831	13.5	0.141	34.0	0.082	54.5	0.023	75.0	0.041
-6.0	0.612	4.0	0.814	14.0	0.166	34.5	0.068	55.0	0.032	75.5	0.038
-5.5	0.667	4.2	0.796	14.5	0.187	35.0	0.054	55.5	0.039	76.0	0.035
-5.0	0.719	4.4	0.778	15.0	0.204	35.5	0.040	56.0	0.047	76.5	0.032
-4.5	0.768	4.6	0.759	15.5	0.216	36.0	0.026	56.5	0.054	77.0	0.029
-4.0	0.814	4.8	0.739	16.0	0.224	36.5	0.011	57.0	0.060	77.5	0.027
-3.5	0.856	5.0	0.719	16.5	0.227	37.0	0.003	57.5	0.066	78.0	0.024
-3.0	0.893	5.2	0.698	17.0	0.227	37.5	0.017	58.0	0.072	78.5	0.022
-2.8	0.906	5.4	0.677	17.5	0.223	38.0	0.031	58.5	0.077	79.0	0.020
-2.6	0.919	5.6	0.656	18.0	0.215	38.5	0.043	59.0	0.082	79.5	0.018
-2.4	0.930	5.8	0.634	18.5	0.205	39.0	0.056	59.5	0.085	80.0	0.016
-2.2	0.941	6.0	0.612	19.0	0.191	39.5	0.067	60.0	0.089	80.5	0.014
-2.0	0.951	6.2	0.589	19.5	0.175	40.0	0.077	60.5	0.092	81.0	0.012
-1.8	0.960	6.4	0.566	20.0	0.157	40.5	0.086	61.0	0.094	81.5	0.011
-1.6	0.969	6.6	0.543	20.5	0.138	41.0	0.095	61.5	0.096	82.0	0.009
-1.4	0.976	6.8	0.520	21.0	0.117	41.5	0.102	62.0	0.098	82.5	0.008
-1.2	0.982	7.0	0.496	21.5	0.095	42.0	0.107	62.5	0.099	83.0	0.007
-1.0	0.988	7.2	0.473	22.0	0.072	42.5	0.112	63.0	0.099	83.5	0.006
-0.8	0.992	7.4	0.449	22.5	0.049	43.0	0.115	63.5	0.099	84.0	0.005
-0.6	0.996	7.6	0.425	23.0	0.026	43.5	0.118	64.0	0.099	84.5	0.004
-0.4	0.998	7.8	0.402	23.5	0.004	44.0	0.119	64.5	0.098	85.0	0.003
-0.2	1.000	8.0	0.378	24.0	0.018	44.5	0.119	65.0	0.097	85.5	0.003
0.0	1.000	8.2	0.354	24.5	0.038	45.0	0.117	65.5	0.096	86.0	0.002
0.2	1.000	8.4	0.331	25.0	0.058	45.5	0.115	66.0	0.094	86.5	0.002
0.4	0.998	8.6	0.308	25.5	0.075	46.0	0.112	66.5	0.092	87.0	0.001
0.6	0.996	8.8	0.284	26.0	0.091	46.5	0.108	67.0	0.090	87.5	0.001
0.8	0.992	9.0	0.261	26.5	0.106	47.0	0.102	67.5	0.087	88.0	0.001
1.0	0.988	9.2	0.239	27.0	0.118	47.5	0.096	68.0	0.085	88.5	0.000
1.2	0.982	9.4	0.216	27.5	0.128	48.0	0.090	68.5	0.082	89.0	0.000
1.4	0.976	9.6	0.194	28.0	0.136	48.5	0.083	69.0	0.079	89.5	0.000
1.6	0.969	9.8	0.172	28.5	0.142	49.0	0.075	69.5	0.076	90.0	0.000
1.8	0.960	10.0	0.150	29.0	0.146	49.5	0.067	70.0	0.073		
2.0	0.951	10.2	0.129	29.5	0.147	50.0	0.058	70.5	0.070		
2.2	0.941	10.4	0.109	30.0	0.147	50.5	0.049	71.0	0.066		

Remarks:



Proposal Number

Revision

Date

**16 Oct 2009**

Call Letters

**WABK**

Channel

**282**

Location

**Augusta, ME**

Customer

**Blueberry Broadcasting**

Antenna Type

**DCR-M6C****ELEVATION PATTERN**

RMS Gain at Main Lobe

**2.85 (4.55 dB)**

Beam Tilt

**0.00 Degrees**

RMS Gain at Horizontal

**2.85 (4.55 dB)**

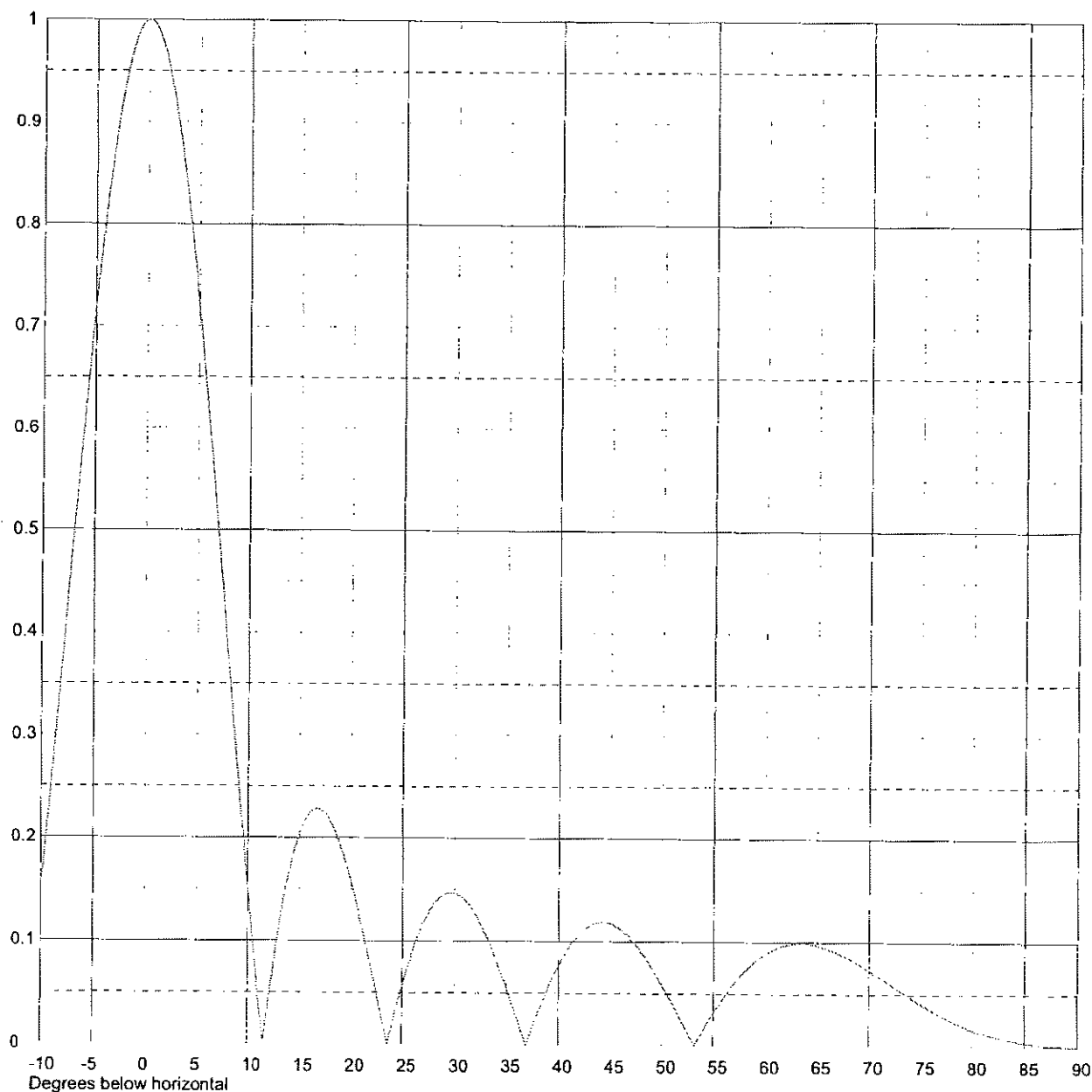
Frequency

**104.30 MHz**

Calculated / Measured

**Calculated**

Drawing #

**FC06M8300057000-90**

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-8.0	0.378	3.2	0.878	12.0	0.039	32.5	0.116	53.0	0.003	73.5	0.050
-7.5	0.437	3.4	0.863	12.5	0.077	33.0	0.106	53.5	0.006	74.0	0.047
-7.0	0.496	3.6	0.848	13.0	0.111	33.5	0.094	54.0	0.015	74.5	0.044
-6.5	0.555	3.8	0.831	13.5	0.141	34.0	0.082	54.5	0.023	75.0	0.041
-6.0	0.612	4.0	0.814	14.0	0.166	34.5	0.068	55.0	0.032	75.5	0.038
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-2.4	0.930	5.8	0.634	18.5	0.205	39.0	0.056	59.5	0.085	80.0	0.016
-2.2	0.941	6.0	0.612	19.0	0.191	39.5	0.067	60.0	0.089	80.5	0.014
-2.0	0.951	6.2	0.589	19.5	0.175	40.0	0.077	60.5	0.092	81.0	0.012
-1.8	0.960	6.4	0.566	20.0	0.157	40.5	0.086	61.0	0.094	81.5	0.011
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1.6	0.969	9.8	0.172	28.5	0.142	49.0	0.075	69.5	0.076	90.0	0.000
1.8	0.960	10.0	0.150	29.0	0.146	49.5	0.067	70.0	0.073		
2.0	0.951	10.2	0.129	29.5	0.147	50.0	0.058	70.5	0.070		
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Remarks: