

### **Compliance with Special Operating Conditions**

The KLTU Construction Permit (File Number 0000124679) contains several Special Operating Conditions summarized as follows:

1. Further modification of Station KVCC(FM), Tucson, Arizona (Facility ID No. 81952) will not be construed as a per se modification of KL TU's facility. (See Educational Information Corporation, 6 FCC Red. 2207 (1991)).
2. BEFORE PROGRAM TESTS ARE AUTHORIZED, permittee shall submit the results of a complete proof-of-performance to establish the horizontal plane radiation patterns for both the horizontally and vertically polarized radiation components. This proof-of-performance may be accomplished using the complete full size antenna, or individual bays therefrom, mounted on a supporting structure of identical dimensions and configuration as the proposed structure, including all braces, ladders, conduits, coaxial lines, and other appurtenances; or using a carefully manufactured scale model of the entire antenna, or individual bays therefrom, mounted on an equally scaled model of the proposed supporting structure, including all appurtenances. Engineering exhibits should include a description of the antenna testing facilities and equipment employed, including appropriate photographs or sketches and a description of the testing procedures, including scale factor, measurements frequency, and equipment calibration.
3. BEFORE PROGRAM TESTS ARE AUTHORIZED, permittee must submit a certification executed by a licensed surveyor showing that the FM directional antenna system has been oriented at the azimuth(s) specified in the directional antenna proof of performance. This certification must include a description of the method used by the surveyor to determine the azimuth(s) of the installed directional antenna system and the accuracy of that determination.
4. BEFORE PROGRAM TESTS ARE AUTHORIZED, permittee/licensee shall submit an affidavit that the installation of the directional antenna system was overseen by a qualified engineer. This affidavit shall include a certification by the engineer that the antenna was installed pursuant to the manufacturer's instructions and list the qualifications of the certifying engineer.
5. BEFORE PROGRAM TESTS ARE AUTHORIZED, the permittee must submit an exhibit demonstrating that the measured directional antenna pattern complies with the appropriate community coverage provisions of 47 C.F.R. Sections 73.315 or 73.515 (See 47 C.F.R. Section 73.316(c)(2)(ix)(B)).
6. The RMS of the composite measured relative field horizontal plane directional antenna pattern must encompass at least 85% of the RMS of the composite relative field horizontal plane directional antenna pattern authorized by this construction permit.

7. The relative field strength of neither the measured horizontally nor vertically polarized radiation component shall exceed at any azimuth the value indicated on the composite radiation pattern authorized by this construction permit. A relative field strength of 1.0 on the composite radiation pattern herein authorized corresponds to the following effective radiated power:  
16.0 kilowatts  
Principal minima and their associated field strength limits:  
80 degrees True: 14.138 kilowatts: 170 degrees True: 2.676 kilowatts
8. If no changes are made to the existing tower and appurtenances or the existing Shively 6810-4-SS-DA, 4 section, 0.5 wavelength spaced directional antenna as authorized in License File No. BLED-20120716ADD, the exhibits required by Conditions 3, 4 and 5 regarding the directional antenna do not need to be submitted.
9. THE AUTOMATIC PROGRAM TEST PROVISIONS OF 47 C.F.R. § 73.1620 DO NOT APPLY IN THIS CASE. A FORMAL REQUEST FOR PROGRAM TEST AUTHORITY MUST BE FILED WITH THE FCC FORM 302-FM, APPLICATION FOR LICENSE, BEFORE PROGRAM TESTS WILL BE AUTHORIZED. This request must contain documentation which demonstrates compliance with the following special operating condition:
10. The permittee/licensee must, upon completion of construction and during the equipment test period, make proper radiofrequency electromagnetic (RF) field strength measurements throughout the transmitter site area, including on the roof and inside all nearby buildings, to determine if there are any areas that exceed the FCC guidelines for human exposure to RF fields. Any areas, including on the roof or inside a building, found to exceed the recommended guidelines must be clearly marked with appropriate visual warning signs which describe the nature of the hazard. Furthermore, access to these areas must be restricted. If necessary, a fence must be erected at such distances and in such a manner as to prevent the exposure of humans to RF fields in excess of the FCC Guidelines (OET Bulletin No. 65, Edition 97-01, August 1997). The fence must be a type which will preclude casual or inadvertent access, and must include warning signs at appropriate intervals which describe the nature of the hazard. Any areas within the fence found to exceed the recommended guidelines must be clearly marked with appropriate visual warning signs.
11. 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.

Educational Media Foundation (EMF) complies with, or agrees to, these conditions as follows:

1. EMF acknowledges and agrees with this statement regarding further modifications of KVCC(F) Tucson, AZ.
2. A complete Proof of Performance is contained in Exhibit 1-A
3. Since no changes were made to the existing tower and appurtenances or the existing Shively 6810-4-SS-DA, 4 section, 0.5 wavelength spaced directional antenna as authorized in License File No. BLED-20120716ADD, this exhibit does not need to be submitted.
4. Since no changes were made to the existing tower and appurtenances or the existing Shively 6810-4-SS-DA, 4 section, 0.5 wavelength spaced directional antenna as authorized in License File No. BLED-20120716ADD, this exhibit does not need to be submitted.

**Educational Media Foundation**

5700 W Oaks Blvd  
Rocklin, CA 95765

*Exhibit 1  
Mammoth, AZ*

5. Since no changes were made to the existing tower and appurtenances or the existing Shively 6810-4-SS-DA, 4 section, 0.5 wavelength spaced directional antenna as authorized in License File No. BLED-20120716ADD, this exhibit does not need to be submitted.
6. The RMS of the composite measured relative field horizontal plane directional antenna pattern encompasses 87.7% of the composite relative field horizontal plane directional antenna pattern authorized by this construction permit. This figure is greater than the required 85%.  
Antenna Proof Composite RMS = .737. FCC Composite RMS = .84.  $.737/.84 = .877$
7. The measured relative field strengths of the horizontal and vertical patterns are seen in Exhibit 1-A and abide by the principle minima values as listed.
8. No changes have been made to the existing Shively 6810-4-SS-DA, 4 section, 0.5 wavelength spaced directional antenna as authorized in License File No. BLED-20120716ADD, therefore, the exhibits required by Conditions 3, 4 and 5 regarding the directional antenna do not need to be submitted.
9. A formal request for automatic test authority has been included with the license application.
10. RF Measurements have been done to determine the RF Fields in and around the immediate area of the tower and associated buildings. Measurements were done before and after testing the newly installed antenna system. These measurements are seen in Exhibit 1-B.
11. EMF in coordination with other users of the site, agrees to 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.

**S.O. 29346**  
**Report of Test 6810-4-SS-DA**  
**for**  
**Good News Radio Broadcasting, Inc.**  
**KLTU 88.1 MHz Mammoth, AZ**

**OBJECTIVE:**

The objective of this test was to demonstrate the directional characteristics of a 6810-4-SS-DA to meet the needs of KLTU and to comply with the requirements of the FCC construction permit, file number BPED-20090824AGF. This test characterizes only the radiation characteristics of the antenna when mounted on the tower as described. It does not represent or imply any guarantee of specific coverage which can be influenced by factors beyond the scope of this test.

**RESULTS:**

The following Figures are the results of the measurements from our pattern range:

- Figure 1A - Measured Azimuth Pattern with the FCC Composite
- Figure 1B - Measured Composite Azimuth Pattern with the FCC Composite
- Figure 1C - Tabulation of the Horizontal Polarization for the Measured Azimuth Pattern
- Figure 1D - Tabulation of the Vertical Polarization for the Measured Azimuth Pattern
- Figure 1E - Tabulation of the Measured Composite Azimuth Pattern
- Figure 1F - Tabulation of the FCC Composite

The calculated elevation pattern of the antenna is shown in Figure 3.

Construction permit file number BPED-20090824AGF indicates that the Horizontal radiation component shall not exceed 16.0 kW at any azimuth and is restricted to the following values at the azimuths specified:

170 Degrees T: 2.7 kW

From Figure 1A, the maximum radiation of the Horizontal component occurs at 023 Degrees T to 031 Degrees T. At the restricted azimuth of 170 Degrees T the Horizontal component is 12.146 dB down from the maximum of 16.0 kW, or 0.976 kW.

The R.M.S. of the Horizontal component is 0.705. The total Horizontal power gain is 2.830. The R.M.S. of the Vertical component is 0.657. The total Vertical power gain is 2.745. See Figure 4 for calculations. The R.M.S. of the FCC composite pattern is 0.843. The R.M.S. of the measured composite pattern is 0.737. Eighty-five percent (85%) of the original authorized FCC composite pattern is 0.716. Therefore this pattern complies with the FCC requirement of 73.316(c)(2)(ix)(A).

#### **METHOD OF DIRECTIONALIZATION:**

One bay of the 6810-4-SS-DA was mounted on a tower of precise scale to the 42 inch tower at the KLTU site. The spacing of the antenna to the tower was varied to achieve the vertical pattern shown in Figure 1A. A horizontal parasitic element was placed directly under the bay. The position of this horizontal parasitic element was changed until the horizontal pattern shown in Figure 1A was achieved. See Figure 2 for mechanical details.

#### **METHOD OF MEASUREMENT:**

As allowed by the construction permit, file number BPED-20090824AGF, a single level of the 6810-4-SS-DA was set up on the Shively Labs scale model antenna pattern measuring range. A scale of 4.5:1 was used.

#### **SUPERVISION:**

Mr. Surette was graduated from Lowell Technological Institute, Lowell, Massachusetts in 1973 with the degree of Bachelor of Science in Electrical Engineering. He has been directly involved with design and development of broadcast antennas, filter systems and RF transmission components since 1974. As an RF Engineer for six years with the original Shively Labs in Raymond, ME and for a short period of time with Dielectric Communications. He is currently an Associate Member of the AFCCE and a Senior Member of IEEE.

Test Report 6810-4-SS-DA

KLTU

Page Three

He has authored a chapter on filters and combining systems for the latest edition of the CRC Electronics Handbook and for the 9<sup>th</sup> and 10<sup>th</sup> Editions of the NAB Handbook.

**EQUIPMENT:**

The scale model pattern range consists of a wooden rotating pedestal equipped with a position indicator. The scale model bay is placed on the top of this pedestal and is used in the transmission mode at approximately 20 feet above ground level. The receiving corner reflector is spaced 50 feet away from the rotating pedestal at the same level above ground as the transmitting model. The transmitting and receiving signals are carried to a control building by means of RG-9/U double shielded coax cable.

The control building is equipped with:

Hewlett Packard Model 8753 Network Analyzer

PC Based Controller

Hewlett Packard 7550A Graphics Plotter

All testing is carried out in strict accordance with approved procedures under our ISO9001:2008.

**TEST PROCEDURES:**

The receiving antenna system is mounted so that the horizontal and vertical azimuth patterns are measured independently. The network analyzer was set to 396.45 MHz Calibrated pads are used to check the linearity of the measuring system. For example, 6 dB padding yields a scale reading of 50 from an unpadding reading of 100 in voltage. From the recorded patterns, the R.M.S. values are calculated and recorded as shown in Figure 1A.

Respectfully submitted by:

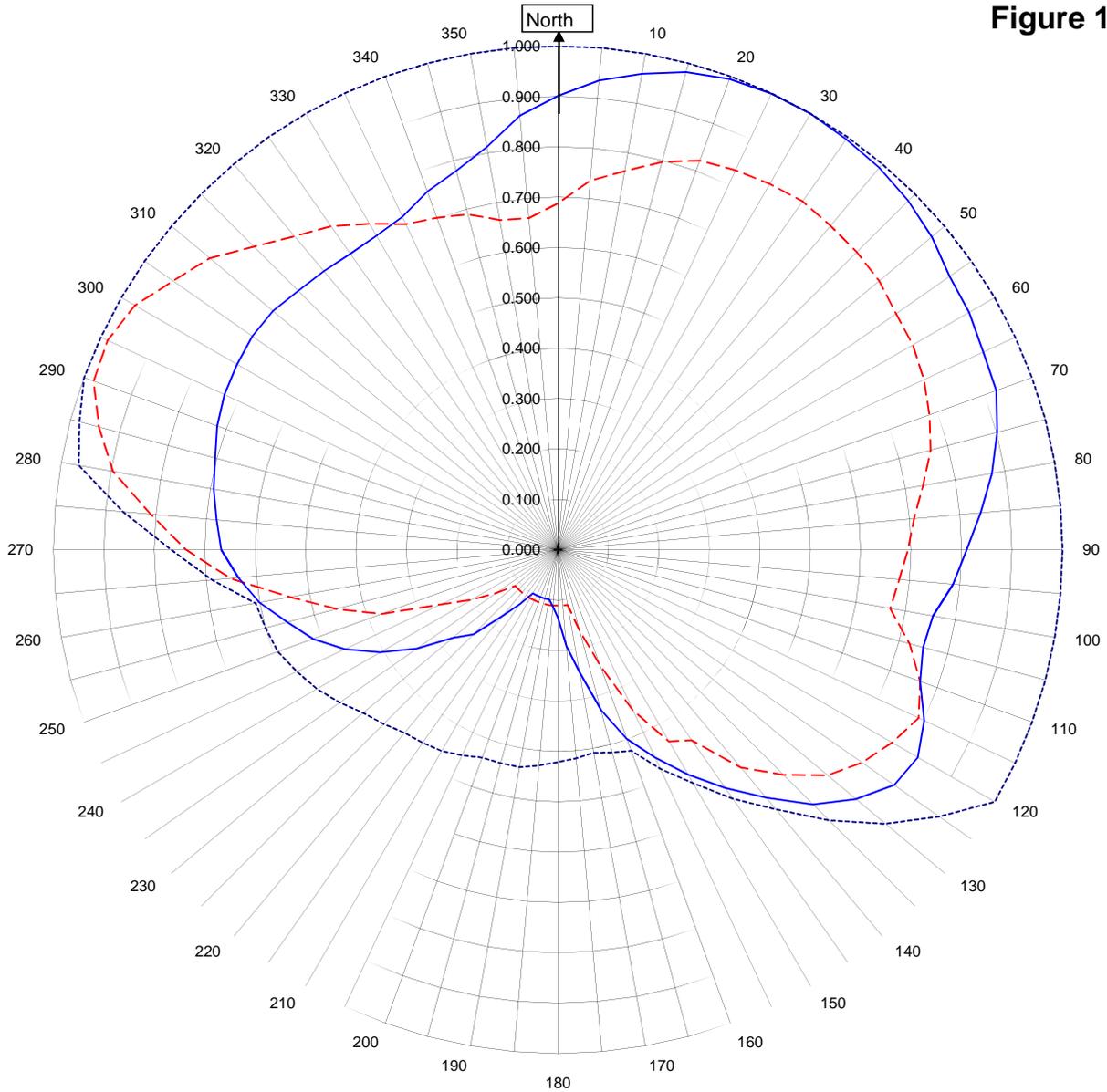


Robert A. Surette  
Director of Sales Engineering  
S/O 29346  
October 31, 2011

# Shively Labs

Shively Labs, a division of Howell Laboratories, Inc. Bridgton, ME (207)647-3327

Figure 1A



## KLTU MAMMOTH, AZ

29346

October 25, 2011

— Horizontal RMS	0.705
- - - Vertical RMS	0.657
H/V Composite RMS	0.737
..... FCC Composite RMS	0.843

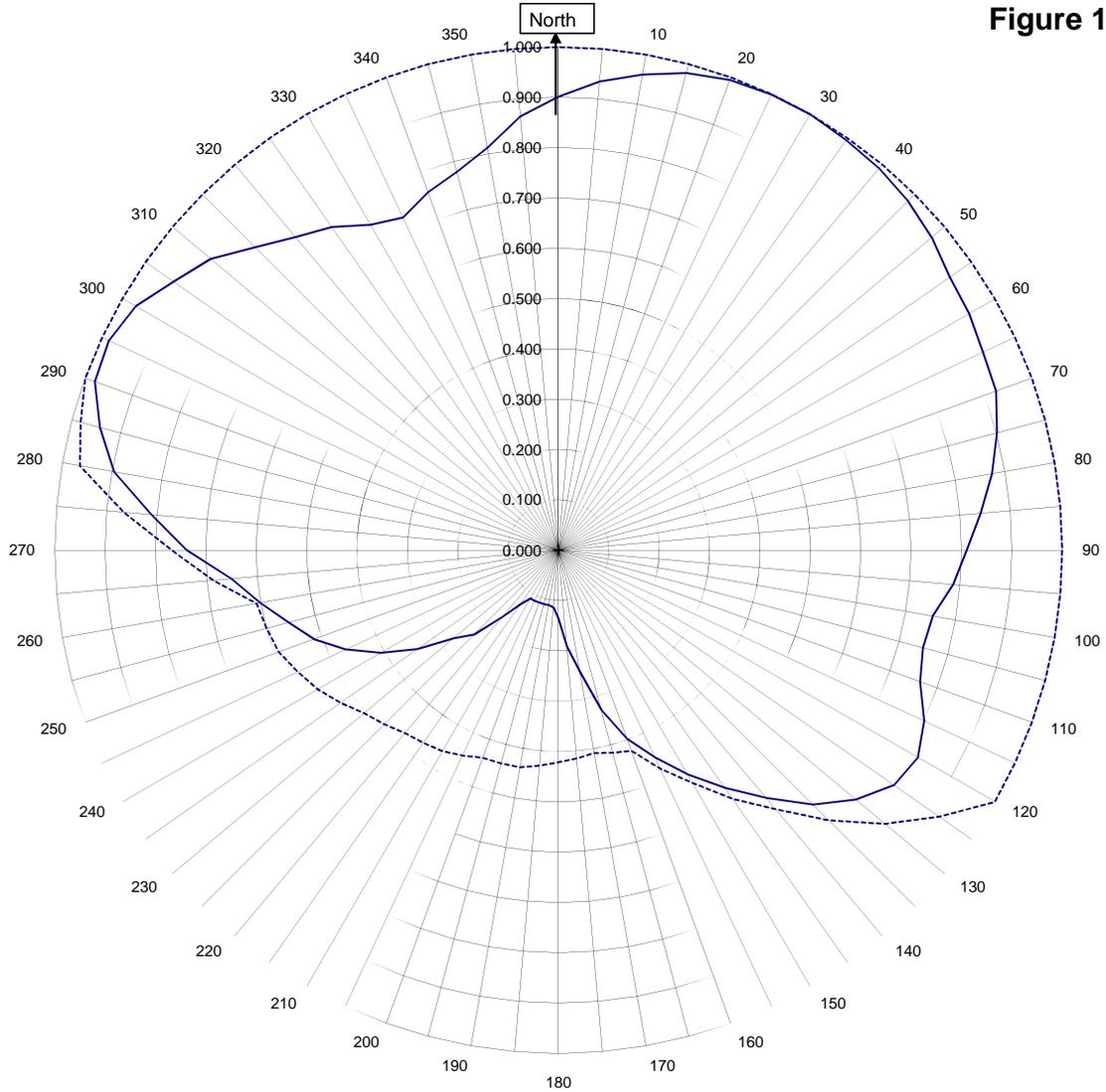
Frequency	88.1 / 396.45 MHz
Plot	Relative Field
Scale	4.5 : 1
	See Figure 2 for Mechanical Details

Antenna Model	6810-4-SS-DA
Pattern Type	Directional Azimuth

# Shively Labs

Shively Labs, a division of Howell Laboratories, Inc. Bridgton, ME (207)647-3327

**Figure 1B**



## KLTU MAMMOTH, AZ

29346  
October 25, 2011

———H/V Composite RMS	0.737
.....FCC Composite RMS	0.843

Frequency	88.1 / 396.45 mHz
Plot	Relative Field
Scale	4.5 : 1
See Figure 2 for Mechanical Details	

Antenna Model	6810-4-SS-DA
Pattern Type	Directional H/V Composite

Figure 1C

Tabulation of Horizontal Azimuth Pattern  
KLTU MAMMOTH, AZ

Azimuth	Rel Field	Azimuth	Rel Field
0	0.901	180	0.135
10	0.960	190	0.100
20	0.995	200	0.100
30	1.000	210	0.100
40	0.990	220	0.171
45	0.981	225	0.237
50	0.967	230	0.272
60	0.941	240	0.407
70	0.925	250	0.517
80	0.874	260	0.601
90	0.810	270	0.668
100	0.755	280	0.693
110	0.764	290	0.719
120	0.823	300	0.735
130	0.770	310	0.738
135	0.715	315	0.728
140	0.642	320	0.722
150	0.515	330	0.720
160	0.400	340	0.757
170	0.247	350	0.812

Figure 1D

Tabulation of Vertical Azimuth Pattern  
KLTU MAMMOTH, AZ

Azimuth	Rel Field	Azimuth	Rel Field
0	0.688	180	0.111
10	0.764	190	0.111
20	0.822	200	0.111
30	0.839	210	0.111
40	0.840	220	0.111
45	0.837	225	0.111
50	0.831	230	0.111
60	0.812	240	0.198
70	0.784	250	0.373
80	0.735	260	0.539
90	0.694	270	0.738
100	0.669	280	0.896
110	0.764	290	0.980
120	0.765	300	0.969
130	0.697	310	0.901
135	0.632	315	0.851
140	0.564	320	0.813
150	0.439	330	0.747
160	0.245	340	0.702
170	0.111	350	0.665

Figure 1E

Tabulation of Composite Azimuth Pattern  
KLTU MAMMOTH, AZ

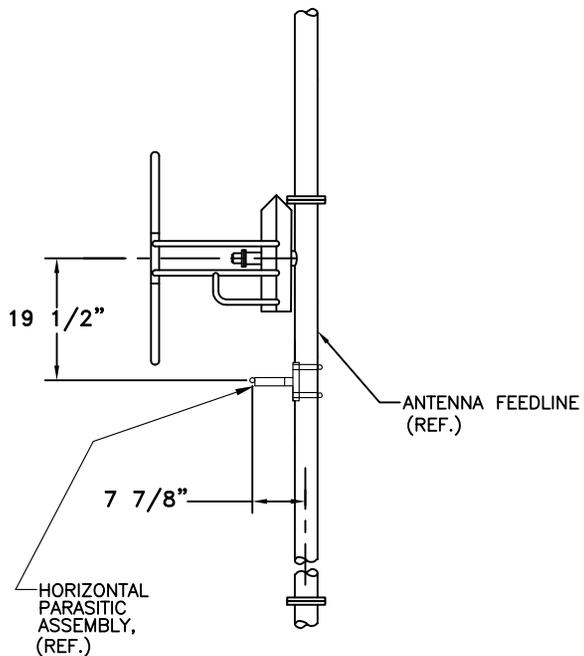
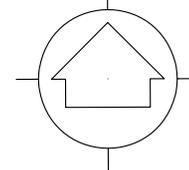
Azimuth	Rel Field	Azimuth	Rel Field
0	0.901	180	0.135
10	0.960	190	0.111
20	0.995	200	0.111
30	1.000	210	0.111
40	0.990	220	0.171
45	0.981	225	0.237
50	0.967	230	0.272
60	0.941	240	0.407
70	0.925	250	0.517
80	0.874	260	0.601
90	0.810	270	0.738
100	0.755	280	0.896
110	0.764	290	0.980
120	0.823	300	0.969
130	0.770	310	0.901
135	0.715	315	0.851
140	0.642	320	0.813
150	0.515	330	0.747
160	0.400	340	0.757
170	0.247	350	0.812

Figure 1F

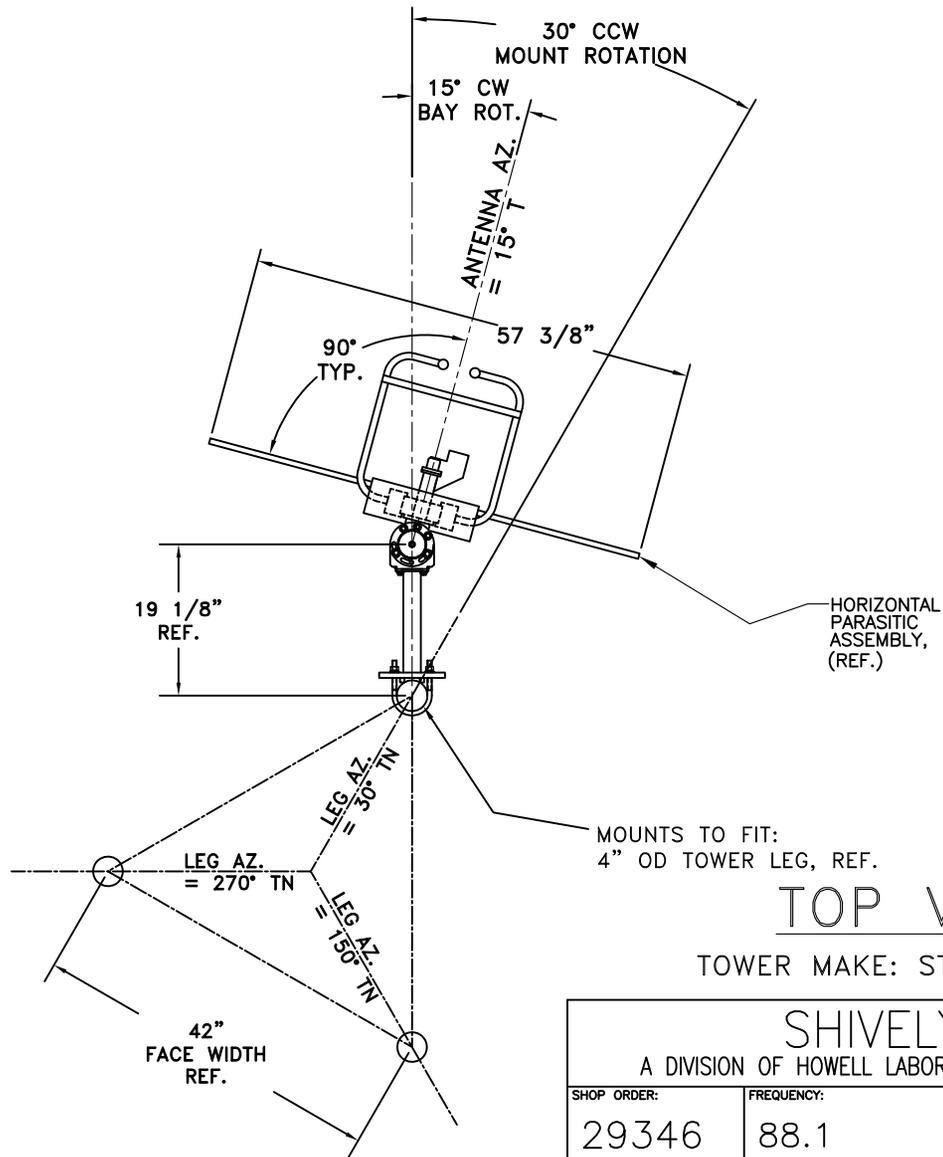
Tabulation of FCC Directional Composite  
KLTU MAMMOTH, AZ

Azimuth	Rel Field	Azimuth	Rel Field
0	1.000	180	0.421
10	1.000	190	0.438
20	1.000	200	0.439
30	1.000	210	0.461
40	1.000	220	0.474
50	1.000	230	0.504
60	1.000	240	0.552
70	1.000	250	0.591
80	1.000	260	0.609
90	1.000	270	0.767
100	1.000	280	0.965
110	1.000	290	1.000
120	1.000	300	1.000
130	0.846	310	1.000
140	0.672	320	1.000
150	0.534	330	1.000
160	0.424	340	1.000
170	0.409	350	1.000

TRUE NORTH



SIDE VIEW



TOP VIEW

TOWER MAKE: STAINLESS 42"

ANTENNA HEADING 15° TRUE NORTH

<b>SHIVELY LABS</b>			
A DIVISION OF HOWELL LABORATORIES INC., BRIDGTON, MAINE			
SHOP ORDER:	FREQUENCY:	SCALE:	DRAWN BY:
29346	88.1	N.T.S.	ASP
TITLE:			APPROVED BY:
MODEL-6810-4-SS-DIRECTIONAL ANTENNA			DAB
DATE:	FIGURE 2		
10/28/11			

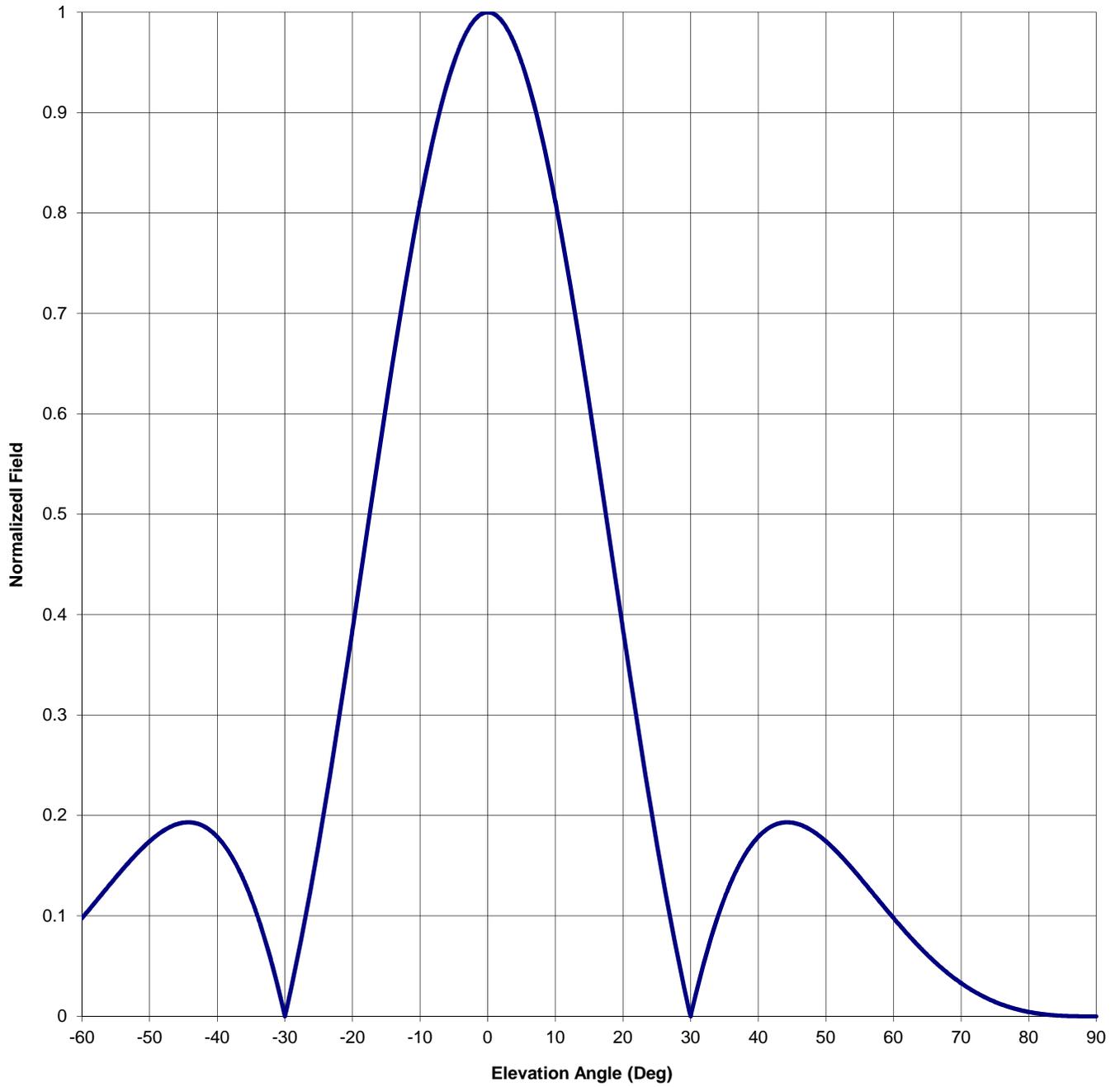
Antenna Mfg.: Shively Labs  
Antenna Type: 6810-4-SS-DA

Date: 10/25/2011

Station: KLTU  
Frequency: 88.1  
Channel #: 201

Beam Tilt	0	
Gain (Max)	2.830	4.518 dB
Gain (Horizon)	2.830	4.518 dB

Figure: Figure 3



Antenna Mfg.: Shively Labs  
 Antenna Type: 6810-4-SS-DA

Date: 10/25/2011

Station: KLTU  
 Frequency: 88.1  
 Channel #: 201

Beam Tilt 0  
 Gain (Max) 2.830  
 Gain (Horizon) 2.830

4.518 dB  
 4.518 dB

Figure: Figure 3

Angle of Depression (Deg)	Relative Field						
-90	0.000	-44	0.193	0	1.000	46	0.191
-89	0.000	-43	0.192	1	0.998	47	0.188
-88	0.000	-42	0.189	2	0.992	48	0.185
-87	0.000	-41	0.185	3	0.982	49	0.180
-86	0.000	-40	0.179	4	0.968	50	0.174
-85	0.001	-39	0.171	5	0.950	51	0.168
-84	0.001	-38	0.161	6	0.929	52	0.161
-83	0.002	-37	0.148	7	0.904	53	0.154
-82	0.002	-36	0.134	8	0.876	54	0.146
-81	0.003	-35	0.118	9	0.845	55	0.138
-80	0.004	-34	0.099	10	0.811	56	0.130
-79	0.006	-33	0.078	11	0.775	57	0.122
-78	0.008	-32	0.054	12	0.736	58	0.114
-77	0.010	-31	0.028	13	0.696	59	0.106
-76	0.012	-30	0.000	14	0.654	60	0.098
-75	0.014	-29	0.030	15	0.610	61	0.090
-74	0.017	-28	0.063	16	0.566	62	0.082
-73	0.021	-27	0.097	17	0.521	63	0.075
-72	0.024	-26	0.134	18	0.476	64	0.068
-71	0.029	-25	0.172	19	0.430	65	0.061
-70	0.033	-24	0.212	20	0.385	66	0.055
-69	0.038	-23	0.254	21	0.341	67	0.049
-68	0.043	-22	0.297	22	0.297	68	0.043
-67	0.049	-21	0.341	23	0.254	69	0.038
-66	0.055	-20	0.385	24	0.212	70	0.033
-65	0.061	-19	0.430	25	0.172	71	0.029
-64	0.068	-18	0.476	26	0.134	72	0.024
-63	0.075	-17	0.521	27	0.097	73	0.021
-62	0.082	-16	0.566	28	0.063	74	0.017
-61	0.090	-15	0.610	29	0.030	75	0.014
-60	0.098	-14	0.654	30	0.000	76	0.012
-59	0.106	-13	0.696	31	0.028	77	0.010
-58	0.114	-12	0.736	32	0.054	78	0.008
-57	0.122	-11	0.775	33	0.078	79	0.006
-56	0.130	-10	0.811	34	0.099	80	0.004
-55	0.138	-9	0.845	35	0.118	81	0.003
-54	0.146	-8	0.876	36	0.134	82	0.002
-53	0.154	-7	0.904	37	0.148	83	0.002
-52	0.161	-6	0.929	38	0.161	84	0.001
-51	0.168	-5	0.950	39	0.171	85	0.001
-50	0.174	-4	0.968	40	0.179	86	0.000
-49	0.180	-3	0.982	41	0.185	87	0.000
-48	0.185	-2	0.992	42	0.189	88	0.000
-47	0.188	-1	0.998	43	0.192	89	0.000
-46	0.191	0	1.000	44	0.193	90	0.000
-45	0.193			45	0.193		

VALIDATION OF TOTAL POWER GAIN CALCULATION

KLTU MAMMOTH, AZ  
 MODEL 6810-4-SS-DA

Elevation Gain of Antenna 1.31

Horizontal RMS value divided by the Vertical RMS value equals the Horiz. - Vert. Ratio

H RMS 0.704557 V RMS 0.657075 H/V Ratio 1.072

Elevation Gain of Horizontal Component 1.405

Elevation Gain of Vertical Component 1.222

Horizontal Azimuth Gain equals  $1/(RMS)^2$ . 2.015

Vertical Azimuth Gain equals  $1/(RMS/Max Vert)^2$ . 2.247

Max. Vertical 0.985

**\*Total Horizontal Power Gain is the Elevation Gain Times the Azimuth Gain**

Total Horizontal Power Gain = 2.830

**\*Total Vertical Power Gain is the Elevation Gain Times the Azimuth Gain**

Total Vertical Power Gain = 2.745

=====

ERP divided by Horizontal Power Gain equals Antenna Input Power

16 kW ERP Divided by H Gain 2.830 equals 5.654 kW H Antenna Input Power

Antenna Input Power times Vertical Power Gain equals Vertical ERP

5.654 kW Times V Gain 2.745 equals 15.524 kW V ERP

Maximum Value of the Vertical Component squared times the Maximum ERP equals the Vertical ERP

$(0.985)^2$  Times 16.00 Equals 15.524 kW Vertical ERP

NOTE: Calculating the ERP of the Vertical Component by two methods validates the total power gain calculations

# KLTU Composite Proof Pattern Tabulation

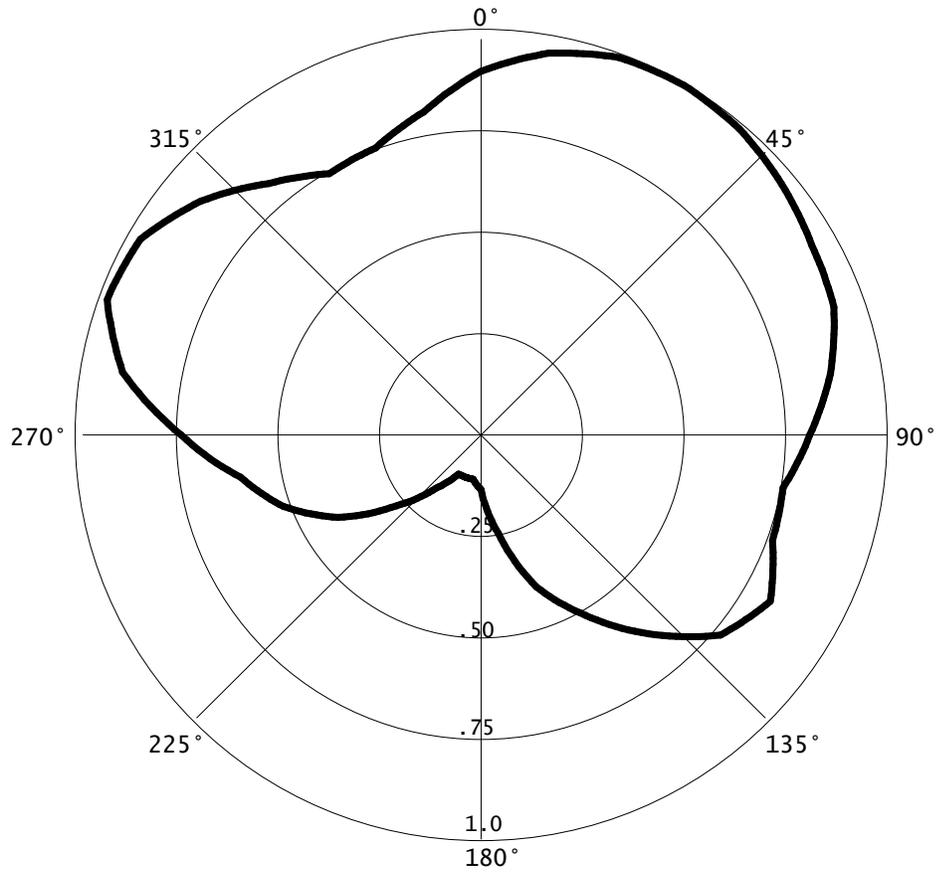
KLTU

05-05-2021

RMS(V)= .737

Graph is Relative Field

Azi	Field	dBk	kw
000	0.901	11.136	12.989
010	0.960	11.687	14.746
020	0.995	11.998	15.840
030	1.000	12.041	16.000
040	0.990	11.954	15.682
050	0.967	11.750	14.961
060	0.941	11.513	14.168
070	0.925	11.364	13.690
080	0.874	10.871	12.222
090	0.810	10.211	10.498
100	0.755	09.600	9.120
110	0.764	09.703	9.339
120	0.823	10.349	10.837
130	0.770	09.771	9.486
140	0.642	08.192	6.595
150	0.515	06.277	4.244
160	0.400	04.082	2.560
170	0.247	-00.105	0.976
180	0.135	-05.352	0.292
190	0.111	-07.052	0.197
200	0.111	-07.052	0.197
210	0.111	-07.052	0.197
220	0.171	-03.299	0.468
230	0.272	00.733	1.184
240	0.407	04.233	2.650
250	0.517	06.311	4.277
260	0.601	07.619	5.779
270	0.738	09.402	8.714
280	0.896	11.087	12.845
290	0.980	11.866	15.366
300	0.969	11.768	15.023
310	0.901	11.136	12.989
320	0.813	10.243	10.576
330	0.747	09.508	8.928
340	0.757	09.623	9.169
350	0.812	10.232	10.550



FCC Composite Pattern Tabulation

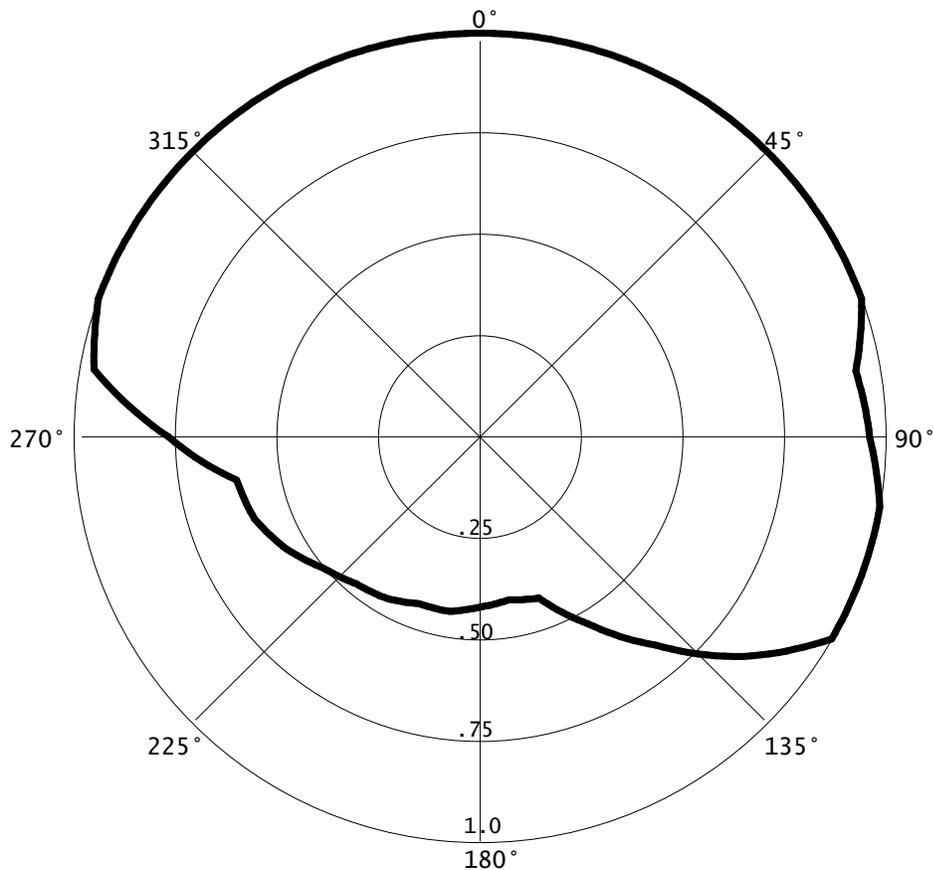
KLТУ

05-05-2021

RMS(V)= .84

Graph is Relative Field

Azi	Field	dBk	kw
000	1.000	12.041	16.000
010	1.000	12.041	16.000
020	1.000	12.041	16.000
030	1.000	12.041	16.000
040	1.000	12.041	16.000
050	1.000	12.041	16.000
060	1.000	12.041	16.000
070	1.000	12.041	16.000
080	0.940	11.504	14.138
090	0.960	11.687	14.746
100	1.000	12.041	16.000
110	1.000	12.041	16.000
120	1.000	12.041	16.000
130	0.846	10.589	11.451
140	0.672	08.589	7.225
150	0.534	06.592	4.562
160	0.424	04.589	2.876
170	0.409	04.276	2.676
180	0.421	04.527	2.836
190	0.438	04.871	3.070
200	0.439	04.890	3.084
210	0.461	05.315	3.400
220	0.474	05.557	3.595
230	0.504	06.090	4.064
240	0.552	06.880	4.875
250	0.591	07.473	5.588
260	0.609	07.734	5.934
270	0.767	09.737	9.413
280	0.965	11.732	14.900
290	1.000	12.041	16.000
300	1.000	12.041	16.000
310	1.000	12.041	16.000
320	1.000	12.041	16.000
330	1.000	12.041	16.000
340	1.000	12.041	16.000
350	1.000	12.041	16.000



### **Environmental Effects**

Educational Media Foundation (“EMF”) certifies that KLTU complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments.

On April 30, 2021, Ron Huckleby, Engineer for Educational Media Foundation, used EMF’s “shaped probe” Narda RFR measurement equipment<sup>1</sup> to evaluate radiofrequency exposure compliance at the KLTU transmitter site. KLTU was operating at its fully permitted effective radiated power of 16kw while these tests were made.

Measurements were taken at the base of the tower and at various points around the tower compound, obstacles permitting. The measurement path is seen on the map included in this exhibit.

The probe was slowly swept between 1-2 meters above the ground, as well as approximately 1 meter side-to-side, seeking, and noting, the highest overall readings. The highest overall peak reading found during these measurements is 91.4% of the uncontrolled/public exposure limits of OET-65. The meter was also set to do time averaging which resulted in a peak average of 137.95% of the uncontrolled/public exposure limits of OET-65.

These values are below the FCC limits for uncontrolled human exposure to RF fields. Therefore, no fencing or warning signs are required. In the abundance of caution, it has been noted that access to this site is limited. A locked gate and fencing with RF Warning Signs are located at the access road entrance and in many locations within the tower compound.

Based on this evaluation, KLTU fully complies with the FCC’s maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments.

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<sup>1</sup> Instrument: Narda NBM-550, Serial Number A-0227, Calibration date 05/01/2020  
Probe: Narda EA5091, Serial Number 01018 Calibration date 05/01/2020

# KLTU Mammoth, AZ

**Legend**

-  KLTU Mammoth AZ
-  RF Measurement Path
-  Yellow Marker: 100m Distance

