Educational Media Foundation
5700 W Oaks Blvd
Rocklin, CA 95765

Compliance with Special Operating Conditions

The KLVR Construction Permit (File Number 0000107231) contains several Special Operating Conditions summarized as follows:

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.*

2. *This is a Section 73.215 contour protection grant as requested by this applicant.*

3. *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.*

4. *BEFORE PROGRAM TESTS ARE AUTHORIZED, permittee must submit an affidavit from a licensed surveyor to establish that the FM directional antenna system has been oriented at the proper azimuth.*

5. *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.*

6. *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)).*

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:*
   0.8 kilowatt
   Principal minima and their associated field strength limits:
   140 degrees True: 0.135 kilowatt.

EMF complies with, or agrees to, these conditions as follows:

1. 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.

2. EMF recognizes KLVR as a 73.215 contour protection facility

3. A complete Proof of Performance is contained in Exhibit 1-A

4. The directional antenna system has been oriented at the correct azimuth as certified by a licensed surveyor as seen in Exhibit 1-B.

5. The installation of the directional antenna system was done under the supervision of a qualified engineer with the signed affidavit certification in Exhibit 1-C.

6. Community of License coverage using the measured directional pattern is seen in Exhibit 1-D.

7. The measured relative field strengths of the horizontal and vertical patterns are seen on page 7 of Exhibit 1-A and abide by the principle minima values as listed.

ELECTRONICS RESEARCH, INC. ERI®

Electronics Research, Inc. 7777 Gardner Rd. Chandler, IN 47610 Phone (812) 925-6000 Fax (812) 925-4030 http://www.eriinc.com/

Directional Antenna System for KLVR, Middletown, California

July 8, 2020

Electronics Research Inc. is providing a custom fabricated antenna system that is specially designed to meet the FCC requirements and the general needs of radio station KLVR.

The antenna is the ERI model LP-2E-DA-HW configuration. The circular polarized system consists of two half-wavelength spaced bays using one driven circular polarized radiating element per bay, one horizontal parasitic element per bay and two vertical parasitic elements interleaved between the bays. The antenna was mounted on the North 315 degrees East tower face with bracketry to provide an antenna orientation of North 315 degrees East. The antenna was tested on a 18" Lambda tower, which is the structure the station plans to use to support the array. All tests were performed on a frequency of 91.9 megahertz, which is the center of the FM broadcast channel assigned to KLVR.

Pattern measurements were made on a sixty-acre antenna pattern range that is owned and operated by Electronics Research, Inc. The tests were performed under the direction of Thomas B. Silliman, president of Electronics Research, Inc. Mr. Silliman has the Bachelor of Electrical Engineering and the Master of Electrical Engineering degrees from Cornell University and is a registered professional engineer in the states of Indiana, Maryland and Minnesota.

Directional Antenna System
for
KLVR, Middletown, California

DESCRIPTION OF THE TEST PROCEDURE

The test antenna consisted of a full-scale model of the complete circular polarized system with the associated horizontal and vertical parasitic elements. The elements and brackets that were used in this test are electrically equivalent to those that will be supplied with the antenna. A section of 1 5/8 inch o.d. rigid coaxial line was used to feed the test antenna, and a section of 1 5/8 inch o.d. rigid outer conductor only was attached above the test antenna. The lines were properly grounded during all tests.

The power distribution and phase relationship to the antenna elements was adjusted in order to achieve the directional radiation patterns for both horizontal and vertical polarization components.

The proof-of-performance was accomplished using a 18" Lambda tower with identical dimension and configuration including all braces, ladders, conduits, coaxial lines and other appurtenances that are included in the actual aperture at which the antenna will be installed. The structure was erected vertically on a turntable mounted on a non-metallic building with the antenna centered vertically on the structure, making the center of radiation of the test approximately 30 feet above ground. The turntable is equipped with a motor drive and a US Digital angle position indicator. The resolution of this angle position indicator is one-hundredth of a degree.

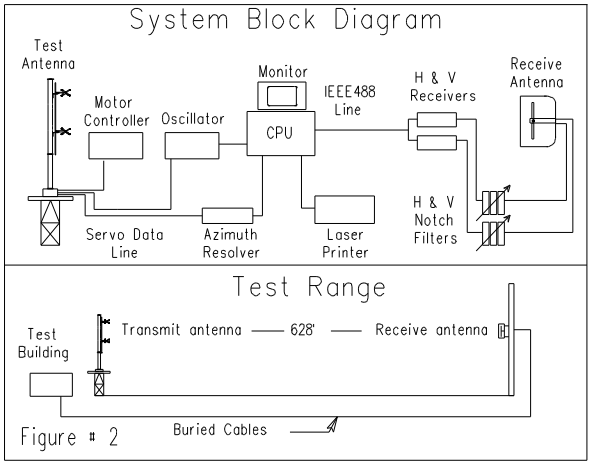


Figure # 2

The antenna under test was operated in the transmitting mode and fed from a HP8657D signal generator. The frequency of the signal source was set at 91.9 MHz and was constantly monitored by a Rohde & Schwarz ESVD measuring receiver.

Directional Antenna System
for
KLVR, Middletown, California

A broadband horizontal and vertical dipole system, located approximately 628 feet from the test antenna, was used to receive the emitted test signals. The dipole system was mounted at the same height above terrain as the center of the antenna under test. The signals received by the dipole system were fed to the test building by way of two buried Heliax cables to a Rohde & Schwarz measuring receiver. This data was interfaced to a laser jet printer by means of a computer system. Relative field strength was plotted as a function of azimuth.

The measurements were performed by rotating the test antenna in a counter-clockwise direction and plotting the received signal on polar co-ordinated graph paper in a clockwise direction. Both horizontal and vertical components were recorded separately.

CONCLUSIONS

The circular polarized system consists of two half-wavelength spaced bays using one driven circular polarized radiating element per bay, one horizontal parasitic element per bay and two vertical parasitic elements interleaved between the bays. The power distribution and phase relationship will be fixed when the antenna is manufactured. Proper maintenance of the elements should be all that is required to maintain the pattern in adjustment.

The LP-2E-DA-HW array is to be mounted on the North 315 degrees East tower face of the 18" Lambda tower at a bearing of North 315 degrees East. Blue prints provided with the antenna will show the proper antenna orientation alignment. The antenna alignment procedure should be directed by a licensed surveyor as prescribed by the FCC.

Figure #1 represents the measured individual horizontal and vertical components, the composite maximum of either the horizontal or vertical component at any azimuth and the FCC filed envelope pattern. The horizontal plane relative field list for the composite pattern and the individual H & V components are shown as Figure #1 & 1A respectively. The actual measured pattern does not exceed the authorized FCC composite pattern at any azimuth. A calculated vertical plane relative field pattern is shown on Figure #3 attached. The power in the maximum will reach .800 kilowatts (-.969 dBk).

Directional Antenna System
for
KLVR, Middletown, California

The RMS of the vertically polarized horizontal plane component does not exceed the RMS of the horizontally polarized horizontal plane component.

The composite horizontal and vertical maximum relative field pattern obtained from the measured data as shown on Figure #1 has an RMS that is greater that 85% of the filed composite pattern.

The clear vertical length of the structure required to support the antenna is 20 feet 5 inches.

The directional antenna should not be mounted on the top of an antenna tower that includes a top-mounted platform larger than the cross-sectional area of the tower in the horizontal plane. No obstructions other than those that are specified by the blue prints supplied with the antenna are to be mounted within 75 ft. horizontally of the system. The vertical distance to the nearest obstruction should be a minimum of 10 ft. from the directional antenna. Metallic guy wires should be a minimum distance of forty feet horizontally from the antenna.

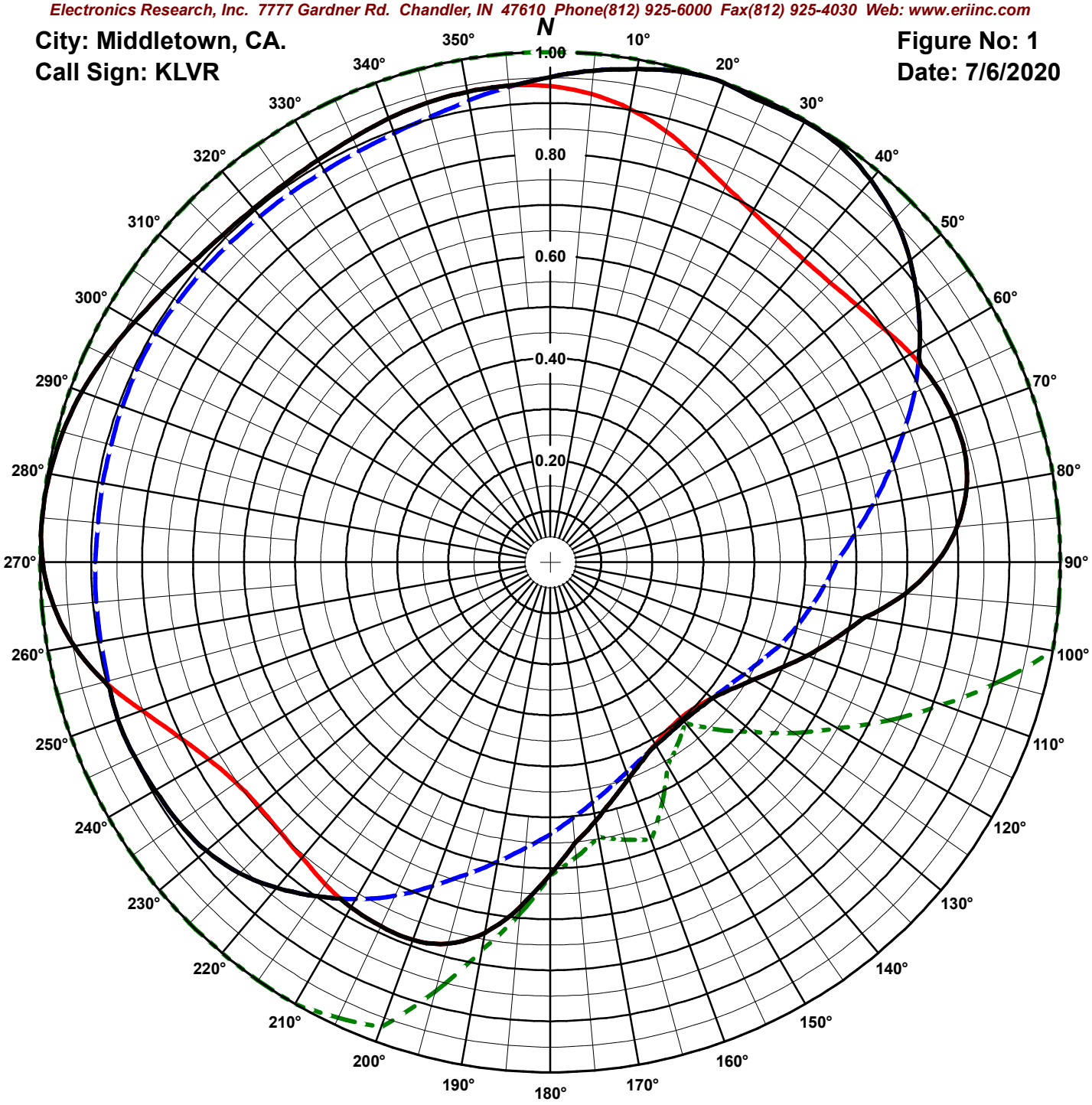
ELECTRONICS RESEARCH, INC.

ERI® Horizontal Plane Relative Field Pattern

Electronics Research, Inc. 7777 Gardner Rd. Chandler, IN 47610 Phone(812) 925-6000 Fax(812) 925-4030 Web: www.eriinc.com

City: Middletown, CA.
Call Sign: KLVR

Figure No: 1
Date: 7/6/2020



Antenna Orientation: 315° True

Frequency: 91.9 MHz
Antenna Type: LP-2E-DA-HW

Antenna Mounting: 20" Radome
Tower Type: 18" Lambda

HORIZONTAL	VERTICAL	COMPOSITE	FCC ENVELOPE
RMS: .786	RMS: .782	RMS: .823	RMS: .917
Maximum: 1 @ 274°	Maximum: 1 @ 19°	Maximum: 1 @ 19°	Maximum: 1 @ 0°
Minimum: .398 @ 140°	Minimum: .406 @ 140°	Minimum: .406 @ 140°	Minimum: .411 @ 140°

Measured patterns of the horizontal and vertical components.

ERI® Horizontal Plane Relative Field Pattern

Electronics Research, Inc. 7777 Gardner Rd. Chandler, IN 47610 Phone(812) 925-6000 Fax(812) 925-4030 Web: www.eriinc.com

Figure# 1 **Date: 7/6/2020**
Station: KLVR **Antenna: LP-2E-DA-HW**
Location: Middletown, CA. **Antenna Orientation: 315° True**
Frequency: 91.9 MHz **Number of Bays: 2**

Azimuth	Envelope			Polarization	Azimuth	Envelope			Polarization
	Field	kW	dBk	Maximum		Field	kW	dBk	Maximum
0°	0.951	0.723	-1.407	Vertical	180°	0.612	0.300	-5.228	Horizontal
5°	0.967	0.748	-1.259	Vertical	185°	0.678	0.368	-4.347	Horizontal
10°	0.981	0.771	-1.132	Vertical	190°	0.737	0.435	-3.616	Horizontal
15°	0.995	0.792	-1.012	Vertical	195°	0.774	0.479	-3.195	Horizontal
20°	1.000	0.799	-0.973	Vertical	200°	0.788	0.496	-3.042	Horizontal
25°	0.994	0.790	-1.023	Vertical	205°	0.787	0.496	-3.047	Horizontal
30°	0.998	0.796	-0.989	Vertical	210°	0.781	0.488	-3.116	Horizontal
35°	0.994	0.790	-1.025	Vertical	215°	0.799	0.511	-2.917	Vertical
40°	0.978	0.765	-1.166	Vertical	220°	0.833	0.556	-2.551	Vertical
45°	0.954	0.729	-1.375	Vertical	225°	0.862	0.594	-2.263	Vertical
50°	0.921	0.678	-1.686	Vertical	230°	0.880	0.620	-2.079	Vertical
55°	0.880	0.620	-2.075	Vertical	235°	0.889	0.632	-1.991	Vertical
60°	0.836	0.559	-2.525	Vertical	240°	0.894	0.640	-1.941	Vertical
65°	0.831	0.552	-2.578	Horizontal	245°	0.899	0.647	-1.891	Vertical
70°	0.839	0.563	-2.492	Horizontal	250°	0.902	0.650	-1.868	Vertical
75°	0.841	0.566	-2.474	Horizontal	255°	0.904	0.654	-1.843	Horizontal
80°	0.829	0.549	-2.602	Horizontal	260°	0.947	0.718	-1.441	Horizontal
85°	0.801	0.513	-2.898	Horizontal	265°	0.977	0.764	-1.168	Horizontal
90°	0.758	0.459	-3.378	Horizontal	270°	0.995	0.792	-1.013	Horizontal
95°	0.699	0.391	-4.076	Horizontal	275°	1.000	0.800	-0.971	Horizontal
100°	0.625	0.313	-5.045	Horizontal	280°	0.996	0.794	-1.001	Horizontal
105°	0.578	0.267	-5.728	Horizontal	285°	0.989	0.782	-1.069	Horizontal
110°	0.536	0.230	-6.382	Horizontal	290°	0.977	0.763	-1.175	Horizontal
115°	0.495	0.196	-7.082	Horizontal	295°	0.960	0.737	-1.323	Horizontal
120°	0.461	0.170	-7.703	Horizontal	300°	0.941	0.708	-1.498	Horizontal
125°	0.434	0.151	-8.222	Horizontal	305°	0.925	0.685	-1.642	Horizontal
130°	0.415	0.138	-8.617	Horizontal	310°	0.914	0.669	-1.748	Horizontal
135°	0.408	0.133	-8.753	Vertical	315°	0.907	0.659	-1.814	Horizontal
140°	0.406	0.132	-8.803	Vertical	320°	0.905	0.655	-1.839	Horizontal
145°	0.408	0.133	-8.753	Vertical	325°	0.906	0.657	-1.824	Horizontal
150°	0.414	0.137	-8.621	Vertical	330°	0.910	0.663	-1.785	Horizontal
155°	0.428	0.147	-8.335	Horizontal	335°	0.917	0.673	-1.722	Horizontal
160°	0.451	0.163	-7.891	Horizontal	340°	0.926	0.685	-1.641	Horizontal
165°	0.479	0.184	-7.354	Horizontal	345°	0.932	0.695	-1.579	Horizontal
170°	0.514	0.212	-6.743	Horizontal	350°	0.936	0.701	-1.541	Horizontal
175°	0.553	0.245	-6.108	Horizontal	355°	0.938	0.704	-1.527	Horizontal

Horizontal Polarization:
Maximum: 1.085 (0.356 dB)
Horizontal Plane: 1.085 (0.356 dB)
Maximum ERP: 0.800 kW

Vertical Polarization:
Maximum: 1.085 (0.356 dB)
Horizontal Plane: 1.085 (0.356 dB)
Maximum ERP: 0.800 kW

Total Input Power: 0.737 kW
Reference: KLVR1M.FIG
This list shows the the maximum azimuth values of either the horizontal or vertical components.

ERI® Horizontal Plane Relative Field Pattern

Electronics Research, Inc. 7777 Gardner Rd. Chandler, IN 47610 Phone(812) 925-6000 Fax(812) 925-4030 Web: www.eriinc.com

Figure# 1A **Date: 7/6/2020**
Station: KLVR **Antenna: LP-2E-DA-HW**
Location: Middletown, CA. **Antenna Orientation: 315° True**
Frequency: 91.9 MHz **Number of Bays: 2**

Azimuth	Horizontal			Vertical			Azimuth	Horizontal			Vertical		
	Field	kW	dBk	Field	kW	dBk		Field	kW	dBk	Field	kW	dBk
0°	0.933	0.697	-1.568	0.951	0.723	-1.407	180°	0.612	0.300	-5.228	0.533	0.228	-6.428
5°	0.921	0.679	-1.680	0.967	0.748	-1.259	185°	0.678	0.368	-4.347	0.563	0.253	-5.963
10°	0.902	0.651	-1.864	0.981	0.771	-1.132	190°	0.737	0.435	-3.616	0.597	0.285	-5.457
15°	0.875	0.613	-2.126	0.995	0.792	-1.012	195°	0.774	0.479	-3.195	0.634	0.321	-4.931
20°	0.842	0.567	-2.461	1.000	0.799	-0.973	200°	0.788	0.496	-3.042	0.676	0.365	-4.372
25°	0.814	0.530	-2.758	0.994	0.790	-1.023	205°	0.787	0.496	-3.047	0.721	0.416	-3.805
30°	0.793	0.503	-2.983	0.998	0.796	-0.989	210°	0.781	0.488	-3.116	0.762	0.465	-3.325
35°	0.780	0.486	-3.131	0.994	0.790	-1.025	215°	0.770	0.474	-3.243	0.799	0.511	-2.917
40°	0.774	0.479	-3.198	0.978	0.765	-1.166	220°	0.756	0.458	-3.393	0.833	0.556	-2.551
45°	0.776	0.481	-3.175	0.954	0.729	-1.375	225°	0.748	0.448	-3.488	0.862	0.594	-2.263
50°	0.784	0.492	-3.083	0.921	0.678	-1.686	230°	0.745	0.444	-3.524	0.880	0.620	-2.079
55°	0.798	0.510	-2.927	0.880	0.620	-2.075	235°	0.753	0.453	-3.437	0.889	0.632	-1.991
60°	0.817	0.534	-2.728	0.836	0.559	-2.525	240°	0.773	0.478	-3.207	0.894	0.640	-1.941
65°	0.831	0.552	-2.578	0.788	0.496	-3.043	245°	0.806	0.519	-2.847	0.899	0.647	-1.891
70°	0.839	0.563	-2.492	0.736	0.434	-3.628	250°	0.851	0.579	-2.371	0.902	0.650	-1.868
75°	0.841	0.566	-2.474	0.687	0.378	-4.224	255°	0.904	0.654	-1.843	0.897	0.644	-1.912
80°	0.829	0.549	-2.602	0.641	0.329	-4.834	260°	0.947	0.718	-1.441	0.895	0.640	-1.937
85°	0.801	0.513	-2.898	0.598	0.286	-5.437	265°	0.977	0.764	-1.168	0.893	0.638	-1.951
90°	0.758	0.459	-3.378	0.561	0.252	-5.992	270°	0.995	0.792	-1.013	0.892	0.636	-1.966
95°	0.699	0.391	-4.076	0.539	0.232	-6.337	275°	1.000	0.800	-0.971	0.889	0.633	-1.986
100°	0.625	0.313	-5.045	0.518	0.215	-6.683	280°	0.996	0.794	-1.001	0.890	0.634	-1.977
105°	0.578	0.267	-5.728	0.498	0.198	-7.028	285°	0.989	0.782	-1.069	0.891	0.635	-1.972
110°	0.536	0.230	-6.382	0.478	0.183	-7.374	290°	0.977	0.763	-1.175	0.892	0.637	-1.959
115°	0.495	0.196	-7.082	0.457	0.167	-7.780	295°	0.960	0.737	-1.323	0.894	0.639	-1.945
120°	0.461	0.170	-7.703	0.439	0.154	-8.128	300°	0.941	0.708	-1.498	0.894	0.639	-1.943
125°	0.434	0.151	-8.222	0.425	0.144	-8.411	305°	0.925	0.685	-1.642	0.891	0.635	-1.971
130°	0.415	0.138	-8.617	0.414	0.137	-8.621	310°	0.914	0.669	-1.748	0.888	0.631	-1.998
135°	0.403	0.130	-8.869	0.408	0.133	-8.753	315°	0.907	0.659	-1.814	0.886	0.628	-2.020
140°	0.398	0.127	-8.966	0.406	0.132	-8.803	320°	0.905	0.655	-1.839	0.885	0.626	-2.033
145°	0.402	0.129	-8.884	0.408	0.133	-8.753	325°	0.906	0.657	-1.824	0.884	0.626	-2.036
150°	0.412	0.136	-8.671	0.414	0.137	-8.621	330°	0.910	0.663	-1.785	0.885	0.627	-2.030
155°	0.428	0.147	-8.335	0.424	0.144	-8.412	335°	0.917	0.673	-1.722	0.889	0.632	-1.995
160°	0.451	0.163	-7.891	0.438	0.154	-8.130	340°	0.926	0.685	-1.641	0.895	0.640	-1.937
165°	0.479	0.184	-7.354	0.456	0.167	-7.783	345°	0.932	0.695	-1.579	0.904	0.654	-1.844
170°	0.514	0.212	-6.743	0.478	0.183	-7.378	350°	0.936	0.701	-1.541	0.919	0.676	-1.703
175°	0.553	0.245	-6.108	0.504	0.203	-6.923	355°	0.938	0.704	-1.527	0.935	0.700	-1.550

Horizontal Polarization:
Maximum: 1.085 (0.356 dB)
Horizontal Plane: 1.085 (0.356 dB)
Maximum ERP: 0.800 kW

Vertical Polarization:
Maximum: 1.085 (0.356 dB)
Horizontal Plane: 1.085 (0.356 dB)
Maximum ERP: 0.800 kW

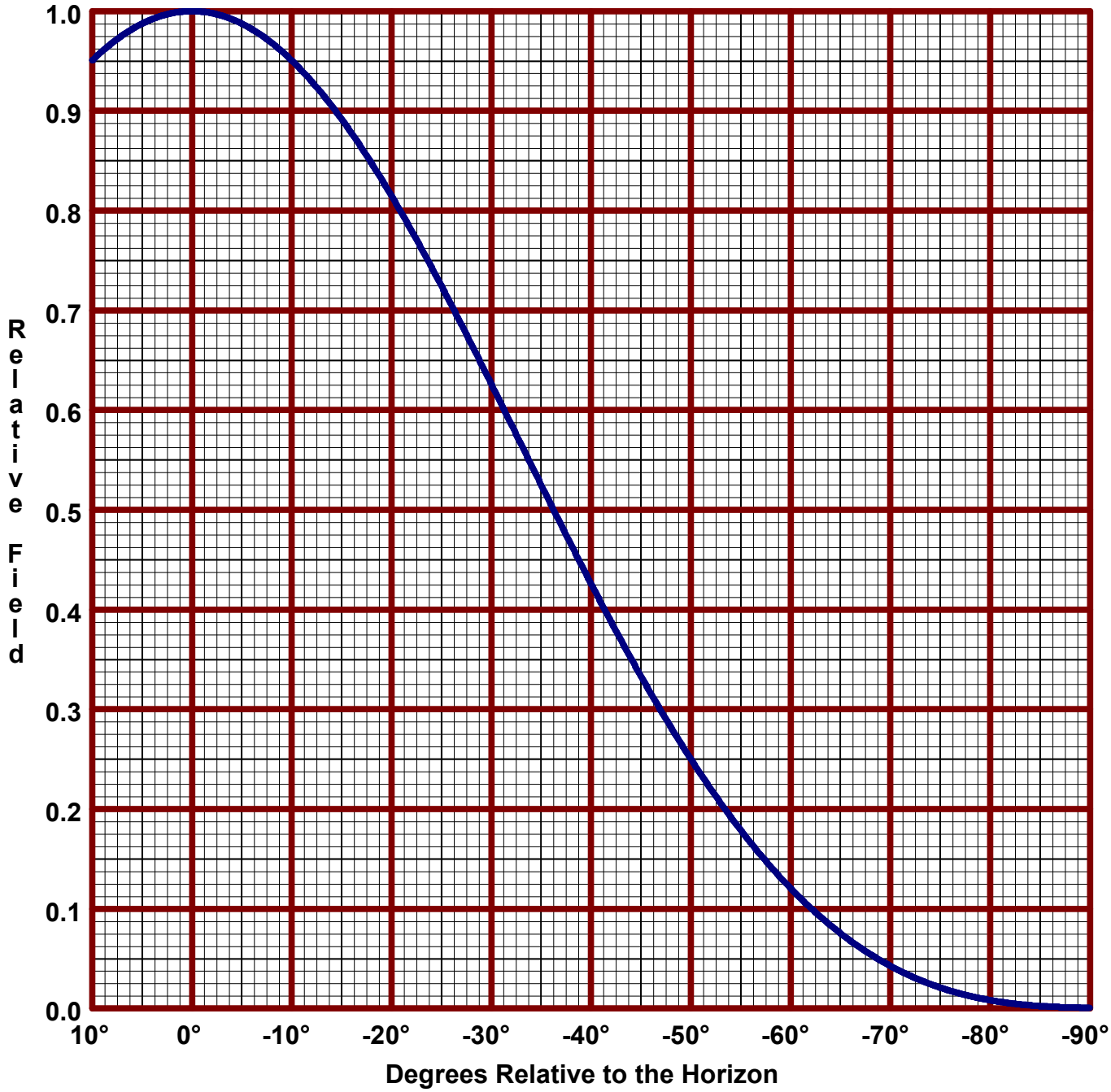
Total Input Power: 0.737 kW
Reference: KLVR1M.FIG
This list shows the azimuth values for the horizontal and vertical components.

Vertical Plane Relative Field Pattern

Electronics Research, Inc. 7777 Gardner Rd. Chandler, IN 47610 Phone(812) 925-6000 Fax(812) 925-4030 Web: www.eriinc.com

Figure No: 3
Call Sign: KLVR
Location: Middletown, CA.
Frequency: 91.9 MHz
Antenna: 2 bay LP-2E-DA-HW

Date: 7/6/2020
H/V Power Ratio: 1
.5 Wave-length Spacing
0° Beam Tilt
0% First Null Fill



Horizontal Polarization:
Maximum: 1.085 (0.356 dB)
Horizontal Plane: 1.085 (0.356 dB)
Maximum ERP: 0.800 kW

Vertical Polarization:
Maximum: 1.085 (0.356 dB)
Horizontal Plane: 1.085 (0.356 dB)
Maximum ERP: 0.800 kW

Directional Antenna System
for
KLVR, Middletown, California

(continued)

ANTENNA SPECIFICATIONS

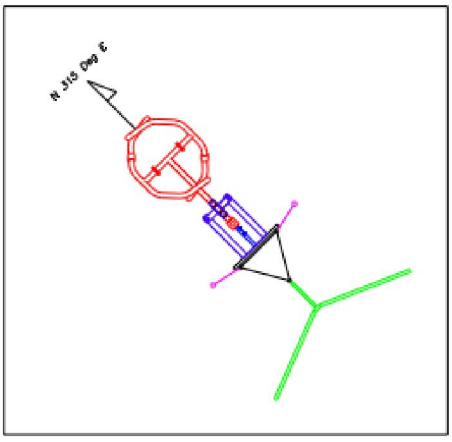
Antenna Type:	LP-2E-DA-HW
Frequency:	91.9 MHz
Number of Bays:	Two

MECHANICAL SPECIFICATIONS

Mounting:	Standard
System length:	14 ft ft 2 in
Aperture length required:	20 ft 5 in
Orientation:	315° true
Input flange to the antenna	1 5/8” female.

ELECTRICAL SPECIFICATIONS
(For directional use)

Maximum horizontal ERP:	0.800 kW (.969 dBk)
Horizontal maximum power gain:	1.085 (0.356 dB)
Maximum vertical ERP:	0.800 kW (.969 dBk)
Vertical maximum power gain:	1.085 (0.356 dB)
Total input power:	0.737kW (-0.531 dBk)



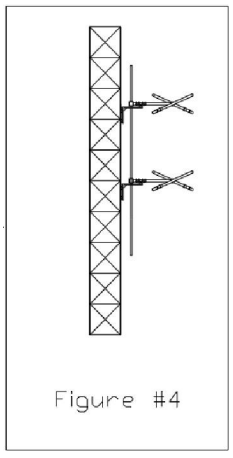


Figure #4

CINQUINI & PASSARINO, INC.
LAND SURVEYING

▲ BOUNDARY ▲ TOPOGRAPHIC ▲ CONSTRUCTION
▲ INFRASTRUCTURE ▲ LASER SCANNING ▲ RAILROAD

CPI: 9124-20

March 2, 2021

Mr. Scott Mearns
Educational Media Foundation
5700 West Oaks Blvd.
Rocklin, CA 95765

Re: Mount Saint Helena Antenna Orientation

Dear Mr. Mearns:

On February 16, 2021 we performed a series of measurements for the replacement KLVR antenna on Mount Saint Helena. This letter is to serve as certification that the replacement antenna elements are oriented within 1.0 degrees of a true north azimuth of 313.5 degrees.

Please feel free to contact me at (707) 542-6268 if you have any questions.

Very truly yours,
CINQUINI & PASSARINO, INC.

James M. Dickey, PLS 7935
Principal

PROFESSIONAL LAND SURVEYOR
JAMES M. DICKEY
No. 7935
STATE OF CALIFORNIA

Educational Media Foundation
5700 West Oaks Boulevard
Rocklin, CA 95765

Exhibit 1-C
Middletown, CA

Engineer Certification

Certification for KLVR Directional Antenna Installation

RE: Construction Permit 0000107231

April 27, 2021

This is to certify the installation of the ERI directional antenna for KLVR, model LP-2E-DA-HW was completed in accordance with the manufacturer's detailed instructions.

All work was performed by qualified personnel using good engineering practices and under my direct supervision. P&R Tower Company performed all antenna work at this site.

Certifying engineer qualifications:
Holder of FCC General Radiotelephone Operator License PG-12-34102 issued 8/5/1992
SBE certified Broadcast Engineer 1995-2001
AM/FM Chief Operator and station engineer since 1986
EMF Broadcasting Field Engineer since 2019

John Scott Mearns

John S. (Scott) Mearns
Field Engineer
EMF Broadcasting
5700 West Oaks Blvd
Rocklin, CA 95765

Overlap Population Report
KLVR Proof (220) / Middletown, CA

Overlap Area Type: Intersection
Areas Included:
KLVR Proof (220): FCC F(50-50) 60.00 dBu (FCC HAAT)
PGON: Middletown, CA

Population Database: 2010 US Census (PL)

Total Population: 1,289
Overlap Area: 4.78 sq. km (Area determined using 0.011 km cells)

Area Description	Total Population	Total Area [sq. km]	Percent Population	Percent Area
KLVR Proof (220): FCC F(50-50)	464,002	7,045	0.3 %	0.1 %
PGON: Middletown, CA	1,289	4.78	100.0 %	100.0 %

KLVR Middletown, CA
Community of License Coverage

Exhibit 1-D

KLVR Proof
BMLED20100201AAJ
Latitude: 38-40-08.70 N
Longitude: 122-37-50 W
ERP: 0.80 kW
Channel: 220
Frequency: 91.9 MHz
AMSL Height: 1345.5 m
Elevation: 1305.5 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: None