

**LICENSE CERTIFICATIONS
RE: UPDATE ANTENNA TECHNICAL DATA
WIVD-LD NEWCOMERSTOWN, OH**

Image Video Teleproductions, Inc. (the “Applicant”) is seeking to update the antenna model number and polarization that is concurrently reflected on WIVD-LD’s construction permit (CP). The antenna model number was originally specified in the underlying CP application as “PSI UHF Slot”.¹ Although the new antenna was manufactured by PSI and it is a UHF slot radiator, the correct model number is PSILPD16ACA-26-EP. The CP also indicates the polarization is “horizontal”, but the correct polarization of the installed antenna is “elliptical”. Aside from these corrections, there is no change in the antenna type, directive pattern or manufacturer.

A plot of the horizontal and vertical relative field patterns are depicted in [Figure 1](#). As stated above, the directive antenna pattern authorized in the underlying CP application is unchanged and it concludes to apply to horizontal polarization. [Figure 2](#) contains a tabulation of both the horizontal and vertical patterns in 10 degree increments along with the calculated effective radiated power (ERP) values for each polarization. This tabulation further indicates the margin by which the vertical ERP is below the corresponding horizontal ERP limit in every direction.

Respectfully submitted,

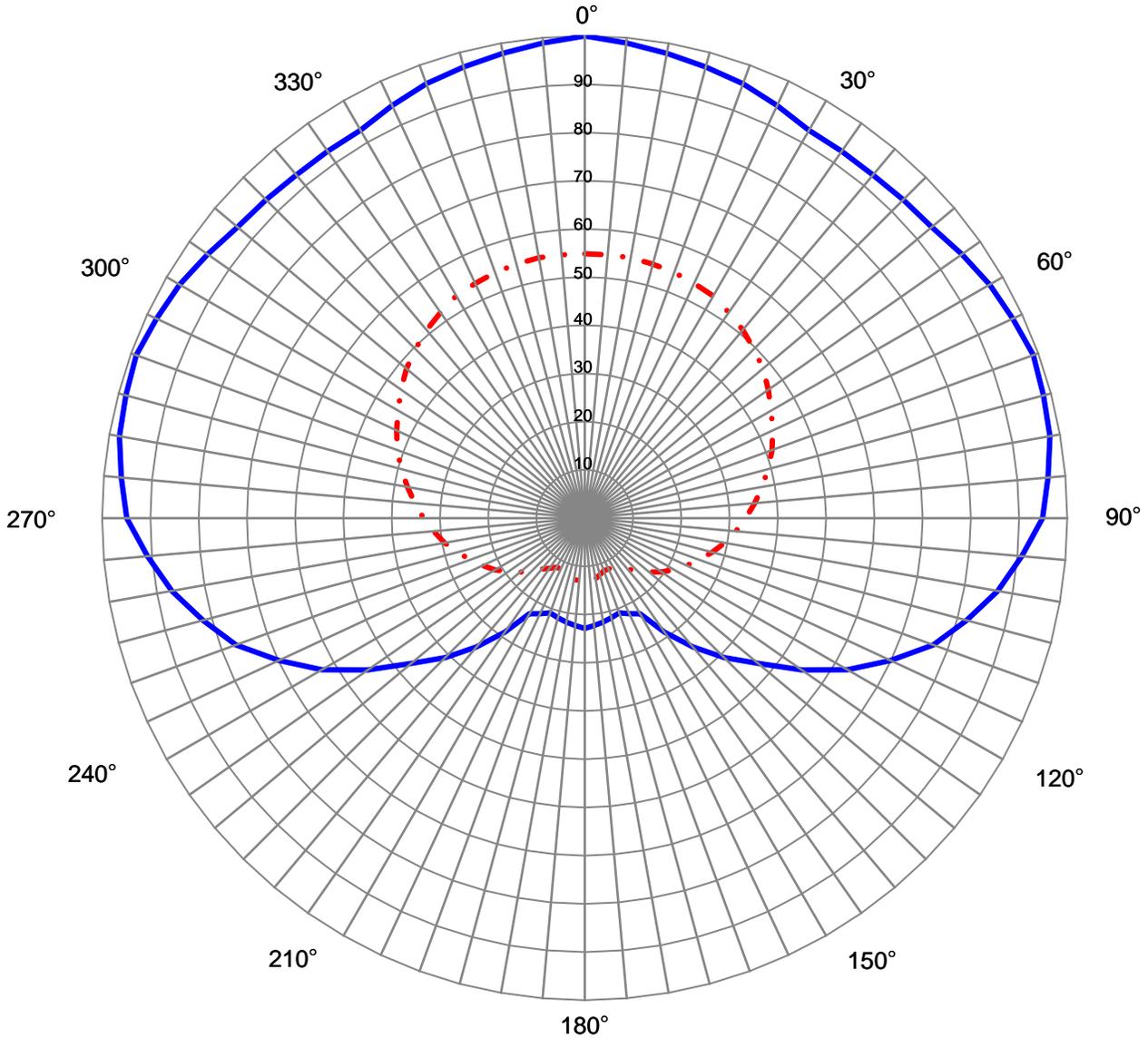
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September 2, 2022

¹ See File No. 0000080067.



Relative Field Azimuth Plane Pattern



Pattern Type:	Relative Field	Type:	16-Bay Slot
Antenna Model:	PSILPD16ACA-26-EP	Orientation:	0 Degrees
Polarization:	Elliptical	Channel:	26
Gain (H-pol):	22.22 (13.47 dB)	Station:	WIVD-LD
Gain (V-pol):	6.68 (8.25 dB)	Date:	11/18/2019

FIGURE 2
VERTICAL ERP DOES NOT EXCEED
THE AUTHORIZED LIMITS

Call Sign: WIVD-LD
Channel: 26
City, State: Newcomerstown, OH
Max. ERP: 15.0 kW

Pre-rotated H-pol & V-pol patterns

Angle (°)	HORIZONTAL¹		VERTICAL		MARGIN Horizontal ERP to Vertical
	Relative Field	ERP Limit (kW)	Relative Field	ERP (kW)	
0	1.000	15.000	0.548	4.505	-10.495
10	0.979	14.377	0.548	4.505	-9.872
20	0.959	13.795	0.542	4.406	-9.389
30	0.929	12.946	0.532	4.245	-8.700
40	0.929	12.946	0.510	3.902	-9.044
50	0.939	13.226	0.482	3.485	-9.741
60	0.969	14.084	0.446	2.984	-11.101
70	0.989	14.672	0.413	2.559	-12.113
80	0.979	14.377	0.373	2.087	-12.290
90	0.949	13.509	0.334	1.673	-11.836
100	0.869	11.327	0.295	1.305	-10.022
110	0.769	8.870	0.252	0.953	-7.918
120	0.629	5.935	0.215	0.693	-5.241
130	0.469	3.299	0.175	0.459	-2.840
140	0.349	1.827	0.137	0.282	-1.545
150	0.229	0.787	0.117	0.205	-0.581
160	0.209	0.655	0.116	0.202	-0.453
170	0.219	0.719	0.128	0.246	-0.474
180	0.229	0.787	0.135	0.273	-0.513
190	0.219	0.719	0.128	0.246	-0.474
200	0.209	0.655	0.116	0.202	-0.453
210	0.229	0.787	0.117	0.205	-0.581
220	0.349	1.827	0.137	0.282	-1.545
230	0.469	3.299	0.175	0.459	-2.840
240	0.629	5.935	0.215	0.693	-5.241
250	0.769	8.870	0.252	0.953	-7.918
260	0.869	11.327	0.295	1.305	-10.022
270	0.949	13.509	0.334	1.673	-11.836
280	0.979	14.377	0.373	2.087	-12.290
290	0.989	14.672	0.413	2.559	-12.113
300	0.969	14.084	0.446	2.984	-11.101
310	0.939	13.226	0.482	3.485	-9.741
320	0.929	12.946	0.510	3.902	-9.044
330	0.929	12.946	0.532	4.245	-8.700
340	0.959	13.795	0.542	4.406	-9.389
350	0.979	14.377	0.548	4.505	-9.872

¹ Authorized antenna data from the underlying CP application (pre-rotated pattern).