

## IES Report

# ZipTwo® | 707 | Square, Side Diffuse | 90 CRI | LO

707-Z2-4-48-XX-XX-X-0-Z-LO-359-S9-X-WH-0

	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	74	77	78	79
Total Lumens, 4' rail length (1219mm)	1100	1135	1158	1170
Lumens per foot (305mm)	275	284	290	292
Input Power (W), 4' rail length (1219mm)	14.9	14.9	14.9	14.9
Watts per foot (305mm)	3.8	3.8	3.8	3.8
CRI	94	94	94	94

Due to the large number of options in Vode's product offering, most Vode IES reports are factored reports prepared from source reports. Source reports are the IES test reports prepared for Vode by an NVLAP accredited photometric test laboratory. Factored reports are based on data from the Vode source reports.

If the data above is in black, it is directly from a Vode source report. If it is in grey, it is factored from Vode source reports. Reference details on Vode source reports can be found on the [IES File Finder](#) page on [vode.com](#).



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : VODE\_707\_Z2\_LO\_359\_S9.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] L121911537 (SOURCE REPORT FOR REFERENCE)

[TESTLAB] REPORT BASED ON DATA FROM NVLAP ACCREDITED LAB

[ISSUE DATE] 12/23/2019

[MANUFAC] Vode Lighting

[LUMCAT] 707-Z2-48-Z-LO-359-S9-AL

[LUMINAIRE] ZipTwo LED, 48", 3500K, 90 CRI, zipper board, square side diffuse lens,

[MORE] low output, clear anodized finish

[TEST PROCEDURE] IESNA:LM-79-08

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1158
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	78
Total Luminaire Watts	14.89
Ballast Factor	1.00
CIE Type	General Diffuse
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	0.11 ft
Luminous Width (90-270)	3.98 ft
Luminous Height	0.08 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	3480	3579	4248
55	2755	2950	4042
65	1937	2206	3775
75	1129	1402	3524
85	337	513	2723

**IES INDOOR REPORT**  
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**CANDELA TABULATION**

	<u>0</u>	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>	<u>30</u>	<u>35</u>	<u>40</u>	<u>45</u>
<b>0</b>	178.335	178.335	178.335	178.335	178.335	178.335	178.335	178.335	178.335	178.335
<b>5</b>	185.375	185.325	185.275	184.985	184.750	184.465	184.135	183.760	183.345	182.890
<b>10</b>	193.590	193.460	193.085	192.650	192.100	191.440	190.680	189.585	188.430	187.210
<b>15</b>	201.805	201.575	200.970	200.280	199.340	197.920	196.370	194.715	192.965	190.915
<b>20</b>	208.345	208.010	207.270	206.290	204.635	202.860	200.885	198.460	196.045	193.285
<b>25</b>	211.530	210.990	210.330	208.730	206.940	204.745	202.285	199.950	196.380	192.765
<b>30</b>	209.810	209.225	208.415	206.790	204.840	202.545	200.085	196.815	193.225	189.410
<b>35</b>	202.730	202.140	201.135	199.835	197.800	195.610	193.115	189.390	186.060	181.980
<b>40</b>	190.155	189.685	188.630	187.280	185.810	184.135	181.135	178.055	174.095	170.335
<b>45</b>	173.055	172.830	172.065	171.225	169.665	168.305	165.780	163.975	159.980	157.480
<b>50</b>	153.650	153.285	152.555	151.730	150.530	149.075	147.340	145.210	142.600	139.535
<b>55</b>	131.145	130.835	130.585	130.180	129.430	128.170	126.745	124.915	123.190	120.895
<b>60</b>	108.010	107.820	107.750	107.495	107.130	106.290	105.160	104.025	102.600	100.620
<b>65</b>	85.290	85.275	85.440	85.275	85.025	84.600	84.000	83.125	82.115	80.975
<b>70</b>	63.790	63.930	64.160	64.180	64.215	63.920	63.600	63.135	62.445	61.480
<b>75</b>	44.175	44.460	44.760	44.980	44.995	45.005	44.770	44.480	44.270	43.920
<b>80</b>	26.655	27.085	27.520	27.800	27.845	27.855	27.900	27.850	27.485	27.145
<b>85</b>	11.150	11.985	12.420	12.710	12.835	12.825	12.880	12.910	12.920	12.810
<b>90</b>	2.425	2.220	2.140	2.095	2.055	1.970	1.845	1.760	1.635	1.550
<b>95</b>	11.150	11.985	12.420	12.710	12.835	12.825	12.880	12.910	12.920	12.810
<b>100</b>	26.655	27.085	27.520	27.800	27.845	27.855	27.900	27.850	27.485	27.145
<b>105</b>	44.175	44.460	44.760	44.980	44.995	45.005	44.770	44.480	44.270	43.920
<b>110</b>	63.790	63.930	64.160	64.180	64.215	63.920	63.600	63.135	62.445	61.480
<b>115</b>	85.290	85.275	85.440	85.275	85.025	84.600	84.000	83.125	82.115	80.975
<b>120</b>	108.010	107.820	107.750	107.495	107.130	106.290	105.160	104.025	102.600	100.620
<b>125</b>	131.145	130.835	130.585	130.180	129.430	128.170	126.745	124.915	123.190	120.895
<b>130</b>	153.650	153.285	152.555	151.730	150.530	149.075	147.340	145.210	142.600	139.535
<b>135</b>	173.055	172.830	172.065	171.225	169.665	168.305	165.780	163.975	159.980	157.480
<b>140</b>	190.155	189.685	188.630	187.280	185.810	184.135	181.135	178.055	174.095	170.335
<b>145</b>	202.730	202.140	201.135	199.835	197.800	195.610	193.115	189.390	186.060	181.980
<b>150</b>	209.810	209.225	208.415	206.790	204.840	202.545	200.085	196.815	193.225	189.410
<b>155</b>	211.530	210.990	210.330	208.730	206.940	204.745	202.285	199.950	196.380	192.765
<b>160</b>	208.345	208.010	207.270	206.290	204.635	202.860	200.885	198.460	196.045	193.285
<b>165</b>	201.805	201.575	200.970	200.280	199.340	197.920	196.370	194.715	192.965	190.915
<b>170</b>	193.590	193.460	193.085	192.650	192.100	191.440	190.680	189.585	188.430	187.210
<b>175</b>	185.375	185.325	185.275	184.985	184.750	184.465	184.135	183.760	183.345	182.890
<b>180</b>	178.000	178.000	178.000	178.000	178.000	178.000	178.000	178.000	178.000	178.000

**Vert. Angles**      **Horizontal Angles**

	<u>50</u>	<u>55</u>	<u>60</u>	<u>65</u>	<u>70</u>	<u>75</u>	<u>80</u>	<u>85</u>	<u>90</u>	<u>95</u>
<b>0</b>	178.335	178.335	178.335	178.335	178.335	178.335	178.335	178.335	178.335	178.335
<b>5</b>	182.405	181.885	181.335	180.765	180.180	179.575	178.965	178.345	177.730	177.260
<b>10</b>	185.940	184.620	183.295	182.045	180.810	179.575	178.345	177.125	175.925	175.010
<b>15</b>	188.765	186.595	184.430	182.285	180.160	178.270	176.435	174.655	172.930	171.590
<b>20</b>	190.220	187.040	183.980	181.015	178.160	175.420	173.030	170.775	168.635	167.110
<b>25</b>	189.315	185.450	181.480	177.755	174.185	170.820	167.865	165.450	163.250	161.305
<b>30</b>	185.265	181.015	176.610	172.325	168.655	165.020	161.765	158.780	156.060	153.880
<b>35</b>	177.635	173.580	168.755	164.540	160.590	156.740	153.030	149.825	147.050	144.960
<b>40</b>	167.165	163.165	158.775	154.235	149.985	146.245	142.455	139.220	136.465	134.545
<b>45</b>	153.255	149.575	145.300	140.990	137.165	133.635	130.150	127.180	124.750	122.900
<b>50</b>	136.630	133.575	129.775	125.930	122.455	119.185	116.180	113.575	111.610	109.960
<b>55</b>	118.130	115.495	112.480	109.445	106.345	103.680	101.335	99.155	97.090	96.135
<b>60</b>	98.650	96.565	94.470	92.040	89.605	87.515	85.755	84.115	82.610	81.790

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**CANDELA TABULATION - (Cont.)**

<b>65</b>	79.500	77.910	76.135	74.240	72.620	71.190	69.470	68.300	67.750	66.690
<b>70</b>	60.395	59.460	58.300	57.080	56.030	55.090	53.900	53.135	52.725	52.100
<b>75</b>	42.955	42.705	42.320	42.110	41.875	41.030	40.530	40.280	39.920	39.875
<b>80</b>	26.975	27.055	26.565	25.900	25.675	25.140	24.570	24.515	24.330	24.100
<b>85</b>	12.450	12.635	12.470	11.995	12.200	12.065	11.595	11.910	11.880	11.595
<b>90</b>	1.425	1.300	1.130	1.130	0.965	0.795	1.050	0.840	0.585	1.130
<b>95</b>	12.450	12.635	12.470	11.995	12.200	12.065	11.595	11.910	11.880	11.595
<b>100</b>	26.975	27.055	26.565	25.900	25.675	25.140	24.570	24.515	24.330	24.100
<b>105</b>	42.955	42.705	42.320	42.110	41.875	41.030	40.530	40.280	39.920	39.875
<b>110</b>	60.395	59.460	58.300	57.080	56.030	55.090	53.900	53.135	52.725	52.100
<b>115</b>	79.500	77.910	76.135	74.240	72.620	71.190	69.470	68.300	67.750	66.690
<b>120</b>	98.650	96.565	94.470	92.040	89.605	87.515	85.755	84.115	82.610	81.790
<b>125</b>	118.130	115.495	112.480	109.445	106.345	103.680	101.335	99.155	97.090	96.135
<b>130</b>	136.630	133.575	129.775	125.930	122.455	119.185	116.180	113.575	111.610	109.960
<b>135</b>	153.255	149.575	145.300	140.990	137.165	133.635	130.150	127.180	124.750	122.900
<b>140</b>	167.165	163.165	158.775	154.235	149.985	146.245	142.455	139.220	136.465	134.545
<b>145</b>	177.635	173.580	168.755	164.540	160.590	156.740	153.030	149.825	147.050	144.960
<b>150</b>	185.265	181.015	176.610	172.325	168.655	165.020	161.765	158.780	156.060	153.880
<b>155</b>	189.315	185.450	181.480	177.755	174.185	170.820	167.865	165.450	163.250	161.305
<b>160</b>	190.220	187.040	183.980	181.015	178.160	175.420	173.030	170.775	168.635	167.110
<b>165</b>	188.765	186.595	184.430	182.285	180.160	178.270	176.435	174.655	172.930	171.590
<b>170</b>	185.940	184.620	183.295	182.045	180.810	179.575	178.345	177.125	175.925	175.010
<b>175</b>	182.405	181.885	181.335	180.765	180.180	179.575	178.965	178.345	177.730	177.260
<b>180</b>	178.000	178.000	178.000	178.000	178.000	178.000	178.000	178.000	178.000	178.000

**Vert.  
Angles**

**Horizontal Angles**

	<b>100</b>	<b>105</b>	<b>110</b>	<b>115</b>	<b>120</b>	<b>125</b>	<b>130</b>	<b>135</b>	<b>140</b>	<b>145</b>
<b>0</b>	178.335	178.335	178.335	178.335	178.335	178.335	178.335	178.335	178.335	178.335
<b>5</b>	176.795	176.340	175.905	175.485	175.085	174.710	174.365	174.045	173.760	173.510
<b>10</b>	174.125	173.280	172.480	171.730	171.035	170.640	170.295	169.995	169.735	169.525
<b>15</b>	170.325	169.145	168.135	167.515	167.040	166.660	166.375	166.255	166.210	166.045
<b>20</b>	165.695	164.455	163.465	162.710	162.150	161.975	161.990	162.030	162.025	162.025
<b>25</b>	159.565	158.230	157.230	156.520	156.355	156.425	156.535	156.480	156.660	157.040
<b>30</b>	151.975	150.750	149.795	149.450	149.435	149.500	149.585	149.820	150.220	150.565
<b>35</b>	143.230	141.940	141.220	141.090	141.125	141.410	141.490	141.905	142.370	142.720
<b>40</b>	132.945	131.660	131.225	131.200	131.325	131.675	132.100	132.545	133.050	133.540
<b>45</b>	121.450	120.450	120.180	120.060	120.225	120.595	121.050	121.805	122.165	122.890
<b>50</b>	108.680	108.005	108.030	107.915	108.200	108.645	109.135	109.620	110.180	110.735
<b>55</b>	95.275	94.700	94.570	94.705	95.110	95.560	96.045	96.735	97.020	96.890
<b>60</b>	81.160	80.800	80.760	80.955	81.275	81.850	82.210	81.770	81.245	80.400
<b>65</b>	66.245	66.470	66.560	66.740	67.090	67.470	67.445	66.110	64.930	64.030
<b>70</b>	51.890	52.015	52.290	52.430	52.660	52.520	51.790	50.825	50.015	49.445
<b>75</b>	40.140	38.185	38.185	38.315	38.635	38.330	37.555	36.795	36.180	35.650
<b>80</b>	24.450	24.590	24.795	24.990	25.060	24.175	23.500	22.835	22.035	21.165
<b>85</b>	12.105	12.235	11.985	11.325	10.450	9.425	9.140	8.945	8.680	8.580
<b>90</b>	1.005	1.090	1.215	1.340	1.465	1.760	1.970	2.055	2.180	2.265
<b>95</b>	12.105	12.235	11.985	11.325	10.450	9.425	9.140	8.945	8.680	8.580
<b>100</b>	24.450	24.590	24.795	24.990	25.060	24.175	23.500	22.835	22.035	21.165
<b>105</b>	40.140	38.185	38.185	38.315	38.635	38.330	37.555	36.795	36.180	35.650
<b>110</b>	51.890	52.015	52.290	52.430	52.660	52.520	51.790	50.825	50.015	49.445
<b>115</b>	66.245	66.470	66.560	66.740	67.090	67.470	67.445	66.110	64.930	64.030
<b>120</b>	81.160	80.800	80.760	80.955	81.275	81.850	82.210	81.770	81.245	80.400
<b>125</b>	95.275	94.700	94.570	94.705	95.110	95.560	96.045	96.735	97.020	96.890
<b>130</b>	108.680	108.005	108.030	107.915	108.200	108.645	109.135	109.620	110.180	110.735
<b>135</b>	121.450	120.450	120.180	120.060	120.225	120.595	121.050	121.805	122.165	122.890

**IES INDOOR REPORT**  
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**CANDELA TABULATION - (Cont.)**

<b>140</b>	132.945	131.660	131.225	131.200	131.325	131.675	132.100	132.545	133.050	133.540
<b>145</b>	143.230	141.940	141.220	141.090	141.125	141.410	141.490	141.905	142.370	142.720
<b>150</b>	151.975	150.750	149.795	149.450	149.435	149.500	149.585	149.820	150.220	150.565
<b>155</b>	159.565	158.230	157.230	156.520	156.355	156.425	156.535	156.480	156.660	157.040
<b>160</b>	165.695	164.455	163.465	162.710	162.150	161.975	161.990	162.030	162.025	162.025
<b>165</b>	170.325	169.145	168.135	167.515	167.040	166.660	166.375	166.255	166.210	166.045
<b>170</b>	174.125	173.280	172.480	171.730	171.035	170.640	170.295	169.995	169.735	169.525
<b>175</b>	176.795	176.340	175.905	175.485	175.085	174.710	174.365	174.045	173.760	173.510
<b>180</b>	178.000	178.000	178.000	178.000	178.000	178.000	178.000	178.000	178.000	178.000

**Vert.  
Angles**

**Horizontal Angles**

	<u><b>150</b></u>	<u><b>155</b></u>	<u><b>160</b></u>	<u><b>165</b></u>	<u><b>170</b></u>	<u><b>175</b></u>	<u><b>180</b></u>
<b>0</b>	178.335	178.335	178.335	178.335	178.335	178.335	178.335
<b>5</b>	173.295	173.120	172.980	172.885	172.830	172.815	172.845
<b>10</b>	169.375	169.135	168.960	168.845	168.790	168.795	168.865
<b>15</b>	165.990	166.030	166.170	166.165	166.165	166.230	166.350
<b>20</b>	162.190	162.215	162.300	162.515	162.535	162.580	162.745
<b>25</b>	157.085	157.350	157.605	157.785	158.085	158.100	158.300
<b>30</b>	151.010	151.285	151.595	151.885	152.215	152.330	152.560
<b>35</b>	143.380	143.695	144.020	144.435	144.655	144.900	145.100
<b>40</b>	133.980	134.600	134.850	135.110	135.455	135.800	135.920
<b>45</b>	123.200	123.845	124.195	124.505	124.805	125.095	125.190
<b>50</b>	111.210	111.675	112.085	112.380	112.630	112.865	113.035
<b>55</b>	97.710	97.735	98.690	99.275	99.500	99.670	99.835
<b>60</b>	79.920	80.055	81.100	83.185	85.265	85.805	85.960
<b>65</b>	63.710	63.440	63.830	64.910	67.855	71.440	71.630
<b>70</b>	49.890	50.290	50.355	50.155	50.305	54.815	57.170
<b>75</b>	35.285	35.750	36.330	36.965	36.890	36.235	42.040
<b>80</b>	20.995	21.010	21.320	21.995	22.340	22.005	25.820
<b>85</b>	9.020	9.430	10.080	10.595	11.085	11.605	11.440
<b>90</b>	2.555	2.935	3.310	3.690	3.900	3.980	0.000
<b>95</b>	9.020	9.430	10.080	10.595	11.085	11.605	11.440
<b>100</b>	20.995	21.010	21.320	21.995	22.340	22.005	25.820
<b>105</b>	35.285	35.750	36.330	36.965	36.890	36.235	42.040
<b>110</b>	49.890	50.290	50.355	50.155	50.305	54.815	57.170
<b>115</b>	63.710	63.440	63.830	64.910	67.855	71.440	71.630
<b>120</b>	79.920	80.055	81.100	83.185	85.265	85.805	85.960
<b>125</b>	97.710	97.735	98.690	99.275	99.500	99.670	99.835
<b>130</b>	111.210	111.675	112.085	112.380	112.630	112.865	113.035
<b>135</b>	123.200	123.845	124.195	124.505	124.805	125.095	125.190
<b>140</b>	133.980	134.600	134.850	135.110	135.455	135.800	135.920
<b>145</b>	143.380	143.695	144.020	144.435	144.655	144.900	145.100
<b>150</b>	151.010	151.285	151.595	151.885	152.215	152.330	152.560
<b>155</b>	157.085	157.350	157.605	157.785	158.085	158.100	158.300
<b>160</b>	162.190	162.215	162.300	162.515	162.535	162.580	162.745
<b>165</b>	165.990	166.030	166.170	166.165	166.165	166.230	166.350
<b>170</b>	169.375	169.135	168.960	168.845	168.790	168.795	168.865
<b>175</b>	173.295	173.120	172.980	172.885	172.830	172.815	172.845
<b>180</b>	178.000	178.000	178.000	178.000	178.000	178.000	178.000

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : VODE\_707\_Z2\_LO\_359\_S9.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	67.54	N.A.	5.80
0-30	147.84	N.A.	12.80
0-40	248.48	N.A.	21.50
0-60	450.73	N.A.	38.90
0-80	565.50	N.A.	48.80
0-90	579.00	N.A.	50.00
10-90	561.96	N.A.	48.50
20-40	180.94	N.A.	15.60
20-50	287.28	N.A.	24.80
40-70	274.39	N.A.	23.70
60-80	114.77	N.A.	9.90
70-80	42.63	N.A.	3.70
80-90	13.50	N.A.	1.20
90-110	56.13	N.A.	4.80
90-120	128.27	N.A.	11.10
90-130	224.18	N.A.	19.40
90-150	431.16	N.A.	37.20
90-180	578.99	N.A.	50.00
110-180	522.87	N.A.	45.20
0-180	1157.99	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	17.04
10-20	50.50
20-30	80.30
30-40	100.64
40-50	106.34
50-60	95.91
60-70	72.14
70-80	42.63
80-90	13.50
90-100	13.50
100-110	42.63
110-120	72.14
120-130	95.91
130-140	106.34
140-150	100.64
150-160	80.30
160-170	50.50
170-180	17.03

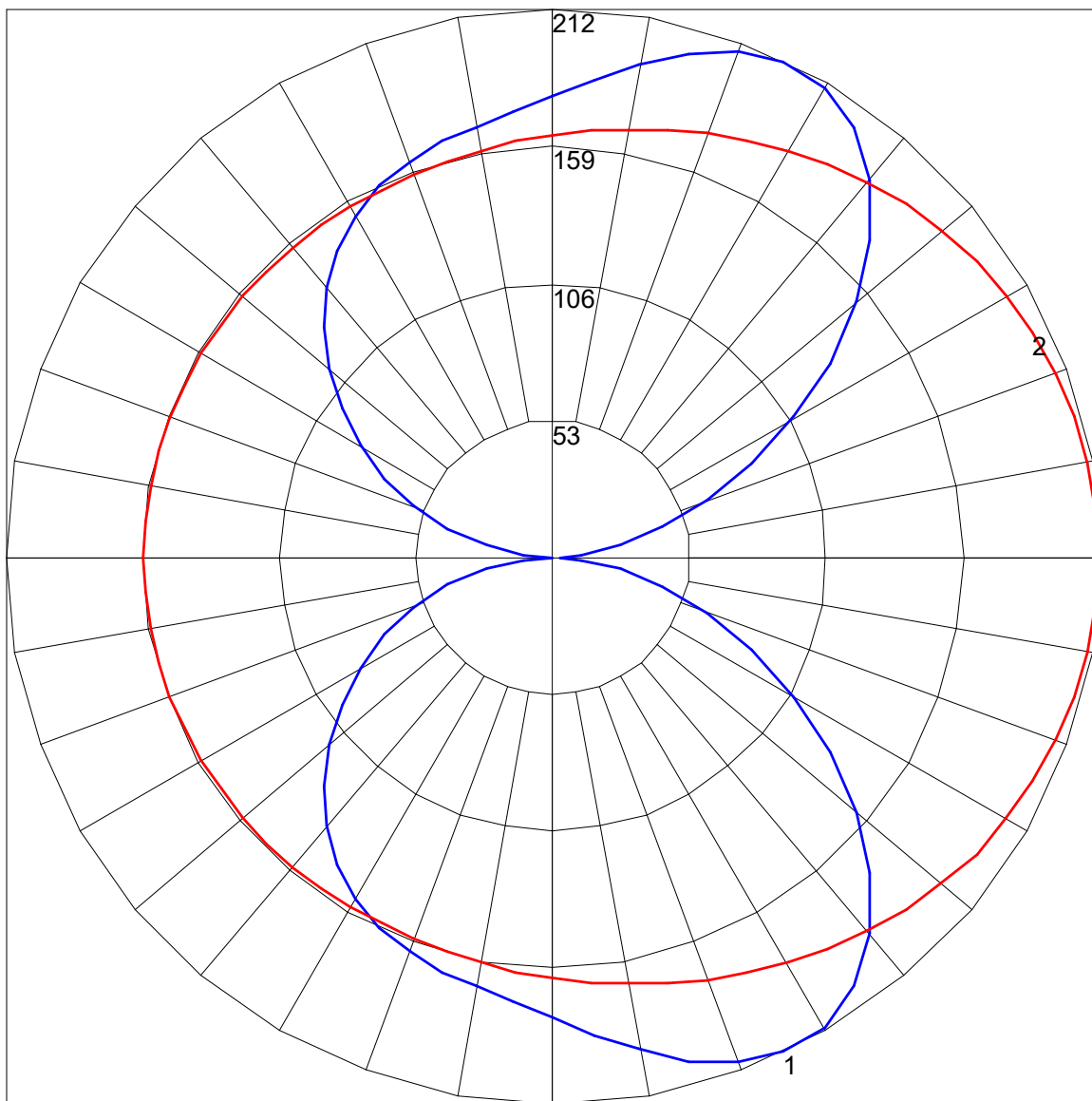
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : VODE\_707\_Z2\_LO\_359\_S9.IES**

**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	97	93	89	85	90	86	82	79	73	70	68	60	59	57	49	48	47	41
2	89	81	75	69	81	75	69	65	63	59	56	53	50	47	43	41	39	34
3	81	71	63	57	74	66	59	54	56	51	46	46	43	40	38	35	33	29
4	74	63	54	48	67	58	51	45	49	44	39	41	37	34	34	31	28	24
5	67	56	47	41	62	52	44	39	44	38	34	37	32	29	30	27	24	21
6	62	50	41	36	57	46	39	33	39	34	29	33	29	25	27	24	21	18
7	57	45	37	31	53	42	34	29	36	30	26	30	25	22	25	21	19	16
8	53	41	33	27	49	38	31	26	32	27	23	27	23	20	23	19	17	14
9	49	37	29	24	45	34	28	23	30	24	20	25	21	18	21	17	15	13
10	46	34	26	22	42	32	25	20	27	22	18	23	19	16	19	16	13	11

POLAR GRAPH



Maximum Candela = 211.53 Located At Horizontal Angle = 0, Vertical Angle = 25  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)  
# 2 - Horizontal Cone Through Vertical Angle (25) (Through Max. Cd.)