

## IES Report

# ZipTwo® | 707 | Square 3554, Single Side Diffuse | 90 CRI | HO

707-Z2-4-48-XX-XX-X-0-Z-HO-359-JA-X-BL-0

	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	86	88	90	91
Total Lumens, 4' rail length (1219mm)	3367	3473	3544	3579
Lumens per foot (305mm)	842	868	886	895
Input Power (W), 4' rail length (1219mm)	39.6	39.6	39.6	39.6
Watts per foot (305mm)	9.9	9.9	9.9	9.9
CRI	95	95	95	95

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\_HO\_359\_JA\_BL.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] L082011210 (SOURCE REPORT FOR REFERENCE)

[TESTLAB] REPORT BASED ON DATA FROM NVLAP ACCREDITED LAB

[ISSUE DATE] 9/9/2020

[MANUFAC] Vode Lighting

[LUMCAT] 707-Z2-48-Z-HO-359-JA-BL

[LUMINAIRE] ZipTwo LED, 48", 3500K, 90 CRI, zipper board,

[MORE] square 3554, single side diffuse black lens, high output

[TEST PROCEDURE] IESNA:LM-79-08

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3544
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	90
Total Luminaire Watts	39.55
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	Circular
Luminous Length (0-180)	0.00 ft
Luminous Width (90-270)	3.99 ft (Diameter)
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4	3	20
55	5	4	18
65	9	6	16
75	16	11	15
85	50	36	37

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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>	23.670	23.670	23.670	23.670	23.670	23.670	23.670	23.670	23.670	23.670
<b>5</b>	1.515	1.515	1.635	1.635	1.635	1.635	1.635	1.890	1.890	1.890
<b>10</b>	0.750	0.885	1.005	1.005	1.005	1.125	1.125	1.260	1.380	1.515
<b>15</b>	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005
<b>20</b>	1.005	1.260	1.260	1.125	1.125	1.125	1.125	1.125	1.125	1.125
<b>25</b>	1.515	1.515	1.380	1.380	1.380	1.380	1.380	1.380	1.380	1.260
<b>30</b>	1.755	1.755	1.755	1.755	1.755	1.635	1.635	1.635	1.380	1.380
<b>35</b>	2.265	2.145	2.145	2.145	2.145	1.890	1.890	1.890	1.755	1.635
<b>40</b>	2.520	2.520	2.520	2.520	2.385	2.385	2.145	2.145	2.010	1.890
<b>45</b>	3.015	2.895	2.895	2.895	2.760	2.640	2.640	2.385	2.265	2.145
<b>50</b>	3.270	3.270	3.270	3.150	3.150	2.895	2.895	2.640	2.520	2.265
<b>55</b>	3.525	3.525	3.525	3.525	3.390	3.390	3.150	2.895	2.895	2.640
<b>60</b>	3.780	3.900	3.780	3.780	3.645	3.645	3.390	3.270	3.015	2.760
<b>65</b>	4.275	4.155	4.155	4.020	3.900	3.900	3.645	3.390	3.270	3.015
<b>70</b>	4.530	4.395	4.395	4.275	4.155	4.155	3.900	3.645	3.525	3.270
<b>75</b>	4.785	4.650	4.650	4.530	4.395	4.275	4.155	3.900	3.645	3.390
<b>80</b>	4.785	4.785	4.785	4.785	4.650	4.395	4.395	4.155	3.780	3.525
<b>85</b>	5.025	5.025	5.025	4.905	4.785	4.650	4.395	4.155	3.900	3.645
<b>90</b>	5.280	5.280	5.160	5.025	4.905	4.785	4.650	4.395	4.155	3.780
<b>95</b>	5.280	5.280	5.280	5.160	5.025	4.905	4.650	4.395	4.155	3.780
<b>100</b>	5.280	5.280	5.280	5.280	5.160	4.905	4.650	4.530	4.275	4.020
<b>105</b>	5.535	5.535	5.535	5.400	5.280	5.160	4.905	4.650	4.395	4.020
<b>110</b>	5.790	5.655	5.535	5.535	5.400	5.160	5.025	4.785	4.530	4.275
<b>115</b>	5.790	5.790	5.655	5.535	5.400	5.280	5.160	4.905	4.530	4.275
<b>120</b>	5.790	5.655	5.655	5.535	5.400	5.280	5.160	4.905	4.650	4.275
<b>125</b>	5.790	5.655	5.535	5.400	5.400	5.160	5.025	4.905	4.650	4.395
<b>130</b>	5.535	5.535	5.400	5.400	5.160	5.160	4.905	4.785	4.530	4.155
<b>135</b>	5.280	5.280	5.280	5.160	5.160	4.905	4.785	4.650	4.530	4.275
<b>140</b>	5.025	5.025	5.025	4.905	4.905	4.650	4.530	4.650	4.530	4.275
<b>145</b>	4.785	4.785	4.785	4.650	4.395	4.530	4.650	4.650	4.395	4.395
<b>150</b>	4.530	4.530	4.395	4.155	4.275	4.395	4.530	4.530	4.650	4.395
<b>155</b>	4.020	4.155	4.020	4.020	4.155	4.395	4.530	4.650	4.395	4.395
<b>160</b>	3.780	3.780	3.525	3.645	3.900	4.395	4.395	4.275	4.155	4.155
<b>165</b>	3.270	3.150	3.270	3.525	4.020	4.020	4.020	3.780	3.900	3.900
<b>170</b>	3.015	3.015	3.150	3.780	4.020	4.020	4.275	4.650	5.160	5.655
<b>175</b>	4.785	5.400	5.910	6.540	6.660	6.795	7.035	7.170	7.290	7.290
<b>180</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**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>	23.670	23.670	23.670	23.670	23.670	23.670	23.670	23.670	23.670	23.670
<b>5</b>	1.890	2.010	2.265	3.270	5.160	8.055	12.450	17.475	23.130	29.295
<b>10</b>	1.515	1.635	1.755	1.755	1.890	2.010	3.900	11.190	22.890	36.465
<b>15</b>	1.005	1.260	1.380	1.515	1.755	1.755	2.010	6.030	22.380	43.125
<b>20</b>	1.125	1.005	1.125	1.260	1.515	1.635	1.755	3.015	21.375	49.410
<b>25</b>	1.125	1.125	1.125	1.125	1.260	1.515	1.755	1.890	20.370	55.455
<b>30</b>	1.380	1.380	1.125	1.125	1.125	1.260	1.515	1.755	19.365	61.110
<b>35</b>	1.515	1.380	1.380	1.380	1.125	1.125	1.380	1.755	18.105	66.135
<b>40</b>	1.755	1.635	1.515	1.380	1.260	1.125	1.260	1.635	18.105	68.910
<b>45</b>	2.010	1.755	1.635	1.515	1.380	1.125	1.125	1.515	16.845	72.675
<b>50</b>	2.145	2.010	1.755	1.515	1.380	1.260	1.125	1.380	15.210	75.570
<b>55</b>	2.265	2.010	1.890	1.755	1.515	1.380	1.125	1.260	11.700	79.965
<b>60</b>	2.520	2.265	2.010	1.755	1.515	1.380	1.260	1.125	9.930	81.600

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**CANDELA TABULATION - (Cont.)**

<b>65</b>	2.760	2.520	2.265	2.010	1.755	1.515	1.260	1.125	8.055	82.365
<b>70</b>	2.895	2.520	2.265	2.010	1.755	1.515	1.260	1.125	6.285	82.605
<b>75</b>	3.015	2.760	2.520	2.145	1.755	1.515	1.380	1.125	4.650	82.110
<b>80</b>	3.270	2.895	2.520	2.265	1.890	1.755	1.515	1.260	5.025	78.465
<b>85</b>	3.270	3.015	2.640	2.265	2.010	1.755	1.515	1.260	3.780	76.695
<b>90</b>	3.525	3.015	2.760	2.385	2.010	1.755	1.515	1.260	2.520	74.430
<b>95</b>	3.525	3.150	2.760	2.385	2.145	1.755	1.515	1.380	1.890	74.310
<b>100</b>	3.645	3.270	2.895	2.520	2.145	1.890	1.635	1.380	1.755	71.550
<b>105</b>	3.780	3.390	3.015	2.640	2.265	2.010	1.755	1.515	2.010	66.645
<b>110</b>	3.900	3.525	3.150	2.640	2.385	2.010	1.755	1.635	2.145	58.725
<b>115</b>	4.020	3.525	3.150	2.760	2.520	2.265	2.010	1.635	2.520	48.540
<b>120</b>	4.020	3.645	3.270	3.015	2.640	2.385	2.145	1.890	3.015	37.470
<b>125</b>	4.020	3.645	3.270	3.015	2.640	2.385	2.145	2.385	3.270	29.805
<b>130</b>	3.900	3.645	3.390	3.150	2.760	2.520	2.265	2.895	3.525	24.270
<b>135</b>	4.155	3.780	3.525	3.270	2.895	2.640	2.385	3.270	3.780	21.630
<b>140</b>	4.020	3.900	3.645	3.390	3.015	2.640	2.895	3.645	4.020	18.360
<b>145</b>	4.275	4.020	3.645	3.270	3.015	2.760	3.525	4.020	4.395	15.465
<b>150</b>	4.275	4.020	3.780	3.390	3.150	3.645	4.275	4.530	5.025	13.575
<b>155</b>	4.155	3.900	3.780	3.390	3.645	4.650	5.160	5.400	5.790	11.700
<b>160</b>	3.900	3.780	3.780	4.155	5.025	5.655	5.910	5.910	6.420	10.065
<b>165</b>	4.155	4.530	5.025	5.790	6.165	6.285	6.420	6.660	6.915	8.925
<b>170</b>	6.165	6.540	6.660	6.795	6.915	7.035	7.170	7.170	7.545	8.550
<b>175</b>	7.170	7.170	7.290	7.290	7.425	7.425	7.665	7.665	8.055	8.430
<b>180</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**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>	23.670	23.670	23.670	23.670	23.670	23.670	23.670	23.670	23.670	23.670
<b>5</b>	34.830	40.740	46.395	51.810	57.465	62.490	67.395	72.045	76.200	79.965
<b>10</b>	49.290	62.745	75.690	89.025	101.595	113.535	124.860	136.305	146.355	155.655
<b>15</b>	63.375	84.750	105.375	126.360	146.490	165.975	184.455	203.310	219.405	234.750
<b>20</b>	77.205	106.380	135.675	163.965	191.745	218.910	245.820	271.590	294.975	317.100
<b>25</b>	90.285	130.140	163.965	200.040	235.875	270.585	306.165	339.990	370.665	400.350
<b>30</b>	102.975	145.725	190.485	235.875	279.765	323.400	367.395	409.770	448.500	485.475
<b>35</b>	122.085	164.085	216.270	268.200	323.775	375.705	426.750	477.675	522.315	566.820
<b>40</b>	128.130	180.810	240.405	299.760	363.750	423.855	482.955	540.030	595.860	646.530
<b>45</b>	131.895	195.765	262.035	328.680	400.725	468.240	532.875	601.650	663.000	720.465
<b>50</b>	139.575	211.230	281.520	354.570	433.665	503.700	579.645	653.325	723.480	786.855
<b>55</b>	147.990	222.555	298.380	377.205	462.330	540.795	620.010	699.720	773.025	844.065
<b>60</b>	153.015	231.735	311.820	397.950	483.210	566.190	653.070	737.820	815.145	890.835
<b>65</b>	156.540	238.515	324.900	412.290	501.555	587.940	676.080	766.860	847.845	926.295
<b>70</b>	158.805	240.780	329.805	422.730	508.485	606.555	697.080	787.110	870.600	951.075
<b>75</b>	159.810	243.420	334.335	426.495	513.765	616.230	708.015	799.305	883.800	964.905
<b>80</b>	157.050	244.185	335.970	428.640	516.780	620.130	712.290	803.835	890.595	969.180
<b>85</b>	155.535	243.045	334.830	427.500	515.640	618.495	710.160	803.955	887.325	965.145
<b>90</b>	153.015	239.775	330.945	423.105	513.135	611.835	702.360	791.880	876.765	953.460
<b>95</b>	152.010	237.765	325.035	415.560	506.850	601.020	689.790	777.555	858.030	935.220
<b>100</b>	147.735	231.480	316.725	405.255	497.280	583.290	672.180	758.070	835.770	910.965
<b>105</b>	142.335	223.935	309.180	394.680	481.065	564.180	650.430	732.795	807.975	880.410
<b>110</b>	136.170	212.250	296.490	378.840	461.700	535.005	626.295	703.110	775.290	844.440
<b>115</b>	127.620	201.810	279.765	357.840	441.705	511.995	593.355	668.415	737.190	802.320
<b>120</b>	119.580	188.610	263.160	337.230	415.935	489.360	558.390	629.055	695.445	755.040
<b>125</b>	90.525	165.840	236.505	304.905	379.845	451.650	512.880	587.445	647.160	702.615
<b>130</b>	74.055	138.555	208.470	269.835	336.090	399.210	463.470	528.840	593.100	645.150
<b>135</b>	59.595	121.710	176.025	235.500	293.715	348.915	404.370	462.075	516.645	575.250

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**CANDELA TABULATION - (Cont.)**

<b>140</b>	48.405	93.165	145.095	198.030	254.235	301.395	347.910	396.825	443.850	484.455
<b>145</b>	39.225	71.790	115.935	158.055	207.840	260.655	300.255	335.835	373.695	413.925
<b>150</b>	34.200	58.215	90.030	127.875	162.705	206.715	253.365	286.170	312.705	339.105
<b>155</b>	28.170	48.405	71.295	96.060	127.500	155.655	186.975	226.200	252.105	274.350
<b>160</b>	22.380	39.105	56.955	74.685	91.410	111.780	136.920	158.805	182.190	200.550
<b>165</b>	16.215	27.915	42.630	55.455	68.910	80.340	92.295	103.740	115.305	132.150
<b>170</b>	11.445	17.610	26.400	35.835	44.505	52.680	59.355	67.020	73.935	78.330
<b>175</b>	9.180	10.440	12.945	16.215	19.995	24.645	28.665	32.190	35.085	37.845
<b>180</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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

	<b>150</b>	<b>155</b>	<b>160</b>	<b>165</b>	<b>170</b>	<b>175</b>	<b>180</b>
<b>0</b>	23.670	23.670	23.670	23.670	23.670	23.670	23.670
<b>5</b>	83.370	86.250	88.650	90.660	91.920	92.550	92.790
<b>10</b>	163.965	170.880	176.790	181.440	184.575	186.345	186.840
<b>15</b>	248.460	259.890	269.955	277.755	283.155	286.305	287.430
<b>20</b>	336.855	353.700	368.280	379.845	387.645	392.550	394.065
<b>25</b>	426.750	449.250	468.615	484.080	494.640	500.430	502.185
<b>30</b>	516.900	545.445	569.340	589.320	603.030	611.460	614.340
<b>35</b>	607.560	641.760	670.800	694.815	711.660	722.730	726.000
<b>40</b>	693.690	734.055	768.375	796.035	816.150	829.110	833.130
<b>45</b>	772.395	818.415	859.905	891.345	913.980	928.695	933.210
<b>50</b>	846.330	897.135	942.135	976.590	1002.120	1018.965	1023.750
<b>55</b>	908.700	964.020	1012.800	1049.775	1077.690	1094.910	1100.940
<b>60</b>	959.745	1018.080	1069.140	1110.120	1138.800	1156.770	1162.305
<b>65</b>	997.845	1058.190	1111.515	1153.500	1183.305	1201.665	1207.815
<b>70</b>	1023.990	1085.610	1138.410	1182.795	1212.855	1231.965	1237.995
<b>75</b>	1038.075	1100.565	1153.500	1196.880	1227.810	1247.685	1253.595
<b>80</b>	1039.845	1104.345	1156.770	1200.150	1230.585	1250.190	1256.100
<b>85</b>	1034.805	1096.920	1151.865	1192.980	1222.905	1242.270	1248.060
<b>90</b>	1023.990	1084.350	1136.775	1177.275	1206.570	1225.545	1231.455
<b>95</b>	1004.880	1063.230	1114.395	1153.875	1182.555	1201.155	1206.810
<b>100</b>	978.225	1035.180	1085.235	1124.205	1151.745	1169.100	1174.620
<b>105</b>	945.405	1000.980	1048.515	1086.360	1113.135	1129.620	1135.140
<b>110</b>	906.555	959.490	1005.885	1041.345	1066.875	1082.970	1088.370
<b>115</b>	861.300	911.340	953.835	988.410	1013.565	1028.520	1033.305
<b>120</b>	810.000	857.145	896.625	929.445	952.200	967.035	971.940
<b>125</b>	752.280	795.405	834.630	863.685	885.180	898.755	902.790
<b>130</b>	692.055	731.910	766.365	792.510	812.010	824.445	828.345
<b>135</b>	625.785	661.620	692.805	716.445	734.055	745.245	748.635
<b>140</b>	542.430	587.685	615.600	637.350	652.320	661.620	664.890
<b>145</b>	454.920	491.250	535.380	554.370	567.570	575.370	578.130
<b>150</b>	371.430	404.370	441.210	473.265	484.455	491.130	493.395
<b>155</b>	291.330	315.345	342.135	375.945	395.685	401.100	403.110
<b>160</b>	215.760	226.200	245.445	268.950	300.000	307.545	309.315
<b>165</b>	144.345	152.265	156.165	168.360	185.205	207.585	208.470
<b>170</b>	82.365	85.620	85.125	83.115	90.030	105.615	120.210
<b>175</b>	39.480	40.230	40.620	37.845	34.830	35.340	50.040
<b>180</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : VODE\_707\_Z2\_HO\_359\_JA\_BL.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	31.84	N.A.	0.90
0-30	105.62	N.A.	3.00
0-40	245.37	N.A.	6.90
0-60	755.10	N.A.	21.30
0-80	1501.94	N.A.	42.40
0-90	1906.35	N.A.	53.80
10-90	1902.06	N.A.	53.70
20-40	213.53	N.A.	6.00
20-50	430.38	N.A.	12.10
40-70	864.17	N.A.	24.40
60-80	746.84	N.A.	21.10
70-80	392.40	N.A.	11.10
80-90	404.41	N.A.	11.40
90-110	750.54	N.A.	21.20
90-120	1056.82	N.A.	29.80
90-130	1297.54	N.A.	36.60
90-150	1568.95	N.A.	44.30
90-180	1637.65	N.A.	46.20
110-180	887.11	N.A.	25.00
0-180	3543.99	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	4.29
10-20	27.55
20-30	73.78
30-40	139.75
40-50	216.85
50-60	292.89
60-70	354.44
70-80	392.40
80-90	404.41
90-100	392.19
100-110	358.35
110-120	306.28
120-130	240.72
130-140	168.86
140-150	102.56
150-160	50.50
160-170	16.21
170-180	1.98

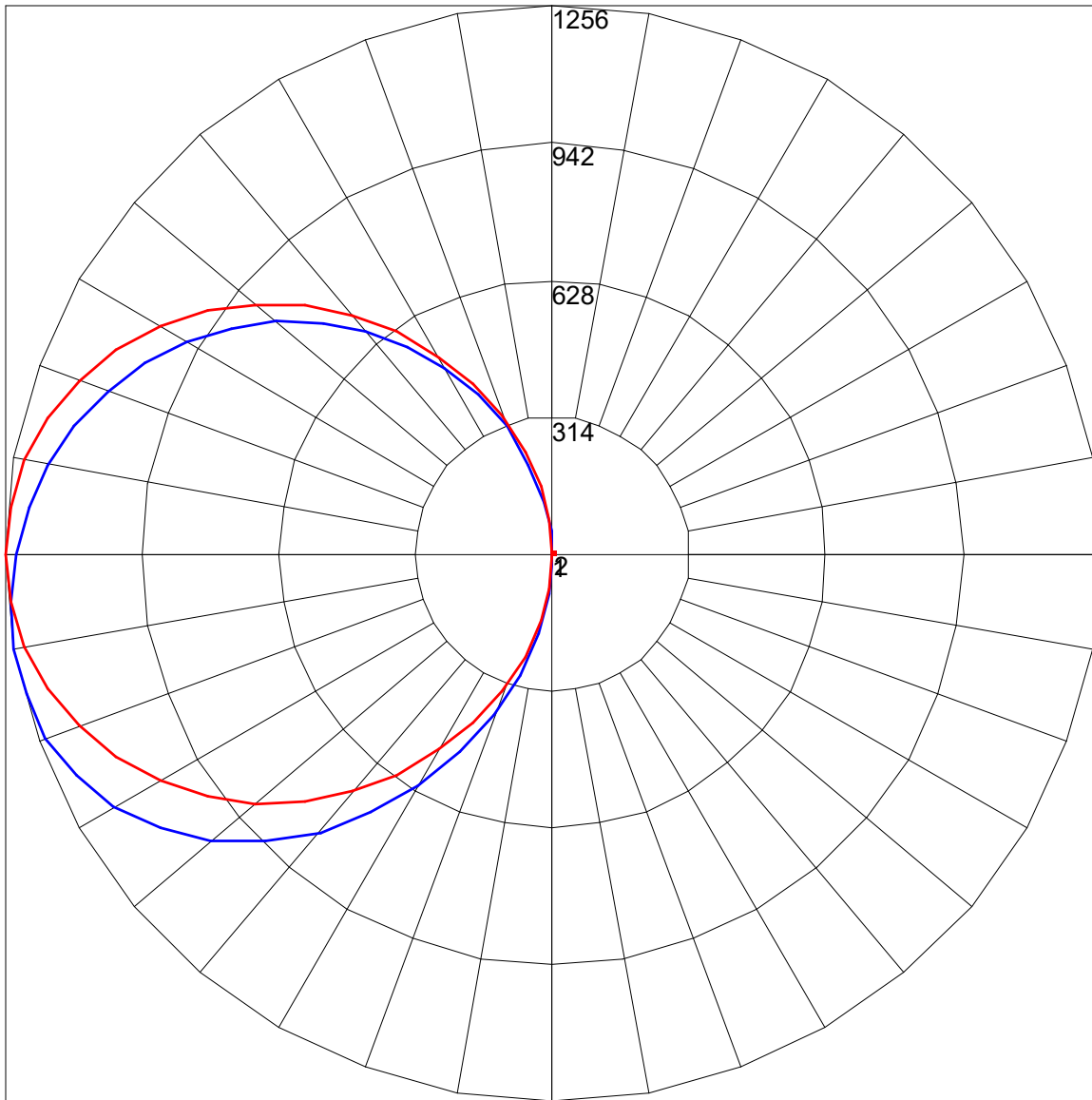
IES INDOOR REPORT  
 PHOTOMETRIC FILENAME : VODE\_707\_Z2\_HO\_359\_JA\_BL.IES

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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	60	60	60	54
1	93	86	80	74	85	79	73	68	66	62	58	54	51	48	43	41	39	33
2	82	72	63	56	75	66	58	51	54	48	43	44	40	35	35	31	28	23
3	73	61	51	44	67	56	47	40	46	39	34	37	32	27	29	25	21	17
4	66	53	43	35	60	48	39	32	40	33	27	32	26	22	25	20	17	13
5	60	46	36	29	55	42	33	27	35	28	22	28	22	18	21	17	13	10
6	55	41	31	24	50	37	29	22	31	24	19	25	19	15	19	15	11	8
7	51	36	27	21	46	33	25	19	28	21	16	22	17	12	17	13	9	6
8	47	33	24	18	43	30	22	16	25	18	13	20	15	11	15	11	8	5
9	43	30	21	15	39	27	19	14	23	16	12	18	13	9	14	10	7	4
10	40	27	19	13	37	25	17	12	21	14	10	17	12	8	13	9	6	4

POLAR GRAPH



Maximum Candela = 1256.1 Located At Horizontal Angle = 180, Vertical Angle = 80  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)  
# 2 - Horizontal Cone Through Vertical Angle (80) (Through Max. Cd.)