

## IES Report

# ZipTwo® | 707 | Micro 3508, 85° Asymmetric | 90 CRI | HO

707-Z2-4-48-XX-XX-X-0-Z-HO-359-A1-X-BL-0

	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	35	36	37	37
Total Lumens, 4' rail length (1219mm)	1355	1398	1427	1441
Lumens per foot (305mm)	339	349	357	360
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	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\_HO\_359\_A1\_BL.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] L121911529 (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-HO-359-A1-BL

[LUMINAIRE] ZipTwo LED, 48", 3500K, 90 CRI, zipper board, micro 3508, 85° asymmetric black lens,

[MORE] high output, black anodized finish

[TEST PROCEDURE] IESNA:LM-79-08

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1427
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	36
Total Luminaire Watts	39.55
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	3.08
Spacing Criterion (90-270)	1.14
Spacing Criterion (Diagonal)	1.86
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.04 ft
Luminous Width (90-270)	3.98 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	114446	75203	11303
55	106230	61837	8055
65	93010	47047	6653
75	81844	37543	5743
85	92575	37713	4092

**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>	271.530	271.530	271.530	271.530	271.530	271.530	271.530	271.530	271.530	271.530
<b>5</b>	411.405	410.280	408.765	406.005	401.985	396.450	390.165	382.995	375.195	366.900
<b>10</b>	603.540	602.025	596.865	588.945	577.500	563.670	547.455	528.345	507.345	487.230
<b>15</b>	828.105	825.075	816.285	802.200	782.460	758.190	729.525	695.700	659.355	619.245
<b>20</b>	1047.135	1042.860	1030.905	1012.425	986.025	951.195	909.570	862.935	810.750	754.170
<b>25</b>	1220.895	1215.870	1202.670	1179.660	1148.100	1108.365	1061.085	1002.870	935.475	863.685
<b>30</b>	1320.735	1316.205	1302.000	1280.115	1247.550	1203.795	1151.745	1087.245	1013.565	932.715
<b>35</b>	1345.125	1339.965	1327.140	1303.635	1270.935	1226.310	1173.120	1105.095	1027.635	942.270
<b>40</b>	1296.840	1292.565	1279.995	1257.105	1221.405	1177.770	1123.080	1053.915	975.465	888.585
<b>45</b>	1198.020	1192.860	1180.785	1155.015	1120.305	1075.170	1019.085	950.190	871.860	787.230
<b>50</b>	1059.195	1054.050	1039.845	1015.830	980.235	934.350	876.000	809.745	736.695	656.340
<b>55</b>	902.025	898.515	883.920	859.665	825.465	779.055	722.865	660.240	593.355	525.075
<b>60</b>	739.335	735.300	721.470	698.715	666.525	623.145	572.985	517.650	459.315	398.460
<b>65</b>	581.910	578.640	566.310	546.705	516.780	481.320	438.450	390.285	340.875	294.345
<b>70</b>	440.580	437.565	427.500	410.910	386.640	355.575	321.255	283.665	245.820	210.990
<b>75</b>	313.590	310.950	303.150	290.205	271.590	248.460	223.185	195.525	168.480	143.850
<b>80</b>	205.455	203.700	197.910	188.850	175.785	159.690	142.455	124.095	106.245	90.285
<b>85</b>	119.445	118.440	114.675	108.630	100.470	90.405	79.845	68.520	58.095	48.660
<b>90</b>	55.575	54.825	52.680	49.290	44.895	39.615	34.200	28.665	23.520	19.110
<b>95</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>100</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>105</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>110</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>115</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>120</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>125</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>130</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>135</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>140</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>145</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>150</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>155</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>160</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>165</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>170</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>175</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<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>	271.530	271.530	271.530	271.530	271.530	271.530	271.530	271.530	271.530	271.530
<b>5</b>	357.090	347.280	337.470	326.280	315.975	305.415	294.480	284.295	273.600	261.525
<b>10</b>	463.590	438.945	413.175	387.525	362.745	337.605	314.085	291.330	269.070	247.065
<b>15</b>	578.265	534.630	489.750	448.500	407.265	366.270	329.055	292.590	259.515	228.840
<b>20</b>	690.540	628.935	564.435	497.790	444.345	387.015	334.200	287.685	246.450	208.095
<b>25</b>	785.220	706.005	622.890	540.795	468.120	396.945	330.555	274.860	226.710	182.445
<b>30</b>	842.055	749.895	652.440	556.515	470.505	389.655	316.095	254.610	201.300	156.420
<b>35</b>	846.585	744.735	642.885	527.595	450.885	362.625	286.170	224.190	172.005	129.255
<b>40</b>	796.155	691.170	590.955	495.270	400.350	315.855	246.450	188.730	141.330	105.375
<b>45</b>	697.965	602.775	509.355	417.690	335.715	261.150	200.925	151.890	118.320	83.115
<b>50</b>	574.860	492.765	410.910	334.080	266.310	206.340	156.420	119.955	88.020	65.130
<b>55</b>	453.150	382.860	316.230	255.615	203.445	157.170	119.580	90.780	68.400	51.420
<b>60</b>	340.245	286.680	236.010	190.740	152.145	119.325	91.920	69.780	53.565	40.740

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**CANDELA TABULATION - (Cont.)**

<b>65</b>	248.955	209.220	171.750	139.065	115.935	88.650	69.030	53.685	41.625	32.310
<b>70</b>	177.795	148.245	122.850	100.470	80.730	64.635	50.805	40.230	31.560	24.765
<b>75</b>	120.960	100.590	83.370	68.025	55.320	44.505	35.205	27.915	22.005	17.475
<b>80</b>	75.570	62.610	51.810	42.255	33.945	27.165	21.375	16.845	13.080	10.185
<b>85</b>	40.230	32.820	26.655	21.120	16.725	12.825	9.675	7.170	5.280	3.900
<b>90</b>	15.090	11.820	8.805	6.540	4.530	3.015	1.635	0.885	0.510	0.255
<b>95</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>100</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>105</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>110</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>115</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>120</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>125</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>130</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>135</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>140</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>145</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>150</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>155</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>160</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>165</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>170</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>175</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<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>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>	271.530	271.530	271.530	271.530	271.530	271.530	271.530	271.530	271.530	271.530
<b>5</b>	251.970	242.790	234.000	226.080	217.905	210.990	204.570	198.285	193.260	188.475
<b>10</b>	228.345	210.735	194.385	180.060	166.230	154.785	144.600	135.540	127.755	121.215
<b>15</b>	202.560	178.665	157.680	139.950	124.230	111.405	100.590	91.410	83.610	77.460
<b>20</b>	176.415	148.125	129.630	107.760	91.920	79.710	69.915	61.995	55.575	50.550
<b>25</b>	148.740	126.120	99.075	81.600	67.905	57.585	49.170	42.870	38.220	34.455
<b>30</b>	126.615	97.200	76.200	61.365	50.295	42.000	35.580	30.810	27.405	24.765
<b>35</b>	99.075	76.200	58.965	46.770	37.725	31.305	26.655	23.265	20.745	18.735
<b>40</b>	79.095	59.475	45.645	36.210	29.040	24.390	21.000	18.360	16.605	15.090
<b>45</b>	61.995	46.650	35.955	28.800	23.385	19.740	17.220	15.090	13.710	12.570
<b>50</b>	49.035	37.215	29.175	23.760	19.485	16.725	14.580	12.945	11.700	10.815
<b>55</b>	38.985	30.300	24.390	19.995	16.605	14.340	12.705	11.190	10.185	9.300
<b>60</b>	31.815	25.155	20.490	17.100	14.460	12.450	10.935	9.675	8.805	8.055
<b>65</b>	25.770	20.745	16.980	14.085	12.075	10.440	9.060	8.055	7.290	6.540
<b>70</b>	19.860	16.215	13.335	11.190	9.435	8.175	7.035	6.285	5.535	5.025
<b>75</b>	13.950	11.310	9.435	7.920	6.540	5.790	5.025	4.530	4.155	3.525
<b>80</b>	8.175	6.540	5.400	4.530	3.780	3.270	2.895	2.520	2.265	2.010
<b>85</b>	3.015	2.520	2.145	1.755	1.515	1.260	1.125	1.125	1.005	1.005
<b>90</b>	0.255	0.255	0.255	0.255	0.255	0.255	0.255	0.375	0.510	0.510
<b>95</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>100</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>105</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>110</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>115</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>120</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>125</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>130</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>135</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : VODE\_707\_Z2\_HO\_359\_A1\_BL.IES**

**CANDELA TABULATION - (Cont.)**

<b>140</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>145</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>150</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>155</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>160</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>165</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>170</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>175</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<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><u>150</u></b>	<b><u>155</u></b>	<b><u>160</u></b>	<b><u>165</u></b>	<b><u>170</u></b>	<b><u>175</u></b>	<b><u>180</u></b>
<b>0</b>	271.530	271.530	271.530	271.530	271.530	271.530	271.530
<b>5</b>	184.710	181.065	178.290	176.280	174.525	173.520	173.265
<b>10</b>	115.680	111.150	107.505	104.610	102.600	101.595	101.100
<b>15</b>	72.420	68.280	65.130	62.610	61.110	60.105	59.595
<b>20</b>	46.530	43.380	41.115	39.360	38.220	37.590	37.215
<b>25</b>	31.440	29.430	27.660	26.535	25.650	25.275	25.155
<b>30</b>	22.755	21.255	19.995	19.245	18.615	18.360	18.360
<b>35</b>	17.355	16.215	15.465	14.835	14.460	14.340	14.085
<b>40</b>	13.950	13.200	12.570	12.075	11.820	11.700	11.565
<b>45</b>	11.820	11.070	10.560	10.305	10.065	9.810	9.810
<b>50</b>	10.065	9.555	9.060	8.805	8.550	8.550	8.550
<b>55</b>	8.670	8.175	7.800	7.545	7.290	7.290	7.035
<b>60</b>	7.290	6.915	6.540	6.285	6.030	6.030	6.030
<b>65</b>	6.030	5.535	5.280	5.025	4.905	4.785	4.785
<b>70</b>	4.530	4.275	4.020	3.780	3.780	3.525	3.525
<b>75</b>	3.270	3.015	2.760	2.760	2.520	2.520	2.520
<b>80</b>	1.890	1.755	1.635	1.515	1.515	1.515	1.515
<b>85</b>	0.885	0.885	0.750	0.750	0.750	0.750	0.750
<b>90</b>	0.510	0.510	0.510	0.510	0.510	0.510	0.510
<b>95</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>100</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>105</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>110</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>115</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>120</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>125</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>130</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>135</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>140</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>145</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>150</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>155</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>160</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>165</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>170</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>175</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<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\_A1\_BL.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	129.36	N.A.	9.10
0-30	330.78	N.A.	23.20
0-40	611.55	N.A.	42.90
0-60	1140.22	N.A.	79.90
0-80	1389.76	N.A.	97.40
0-90	1423.23	N.A.	99.80
10-90	1395.39	N.A.	97.80
20-40	482.19	N.A.	33.80
20-50	773.34	N.A.	54.20
40-70	689.34	N.A.	48.30
60-80	249.54	N.A.	17.50
70-80	88.87	N.A.	6.20
80-90	33.48	N.A.	2.30
90-110	3.30	N.A.	0.20
90-120	3.30	N.A.	0.20
90-130	3.30	N.A.	0.20
90-150	3.30	N.A.	0.20
90-180	3.30	N.A.	0.20
110-180	0.00	N.A.	0.00
0-180	1426.53	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	27.84
10-20	101.51
20-30	201.43
30-40	280.77
40-50	291.14
50-60	237.53
60-70	160.67
70-80	88.87
80-90	33.48
90-100	3.30
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

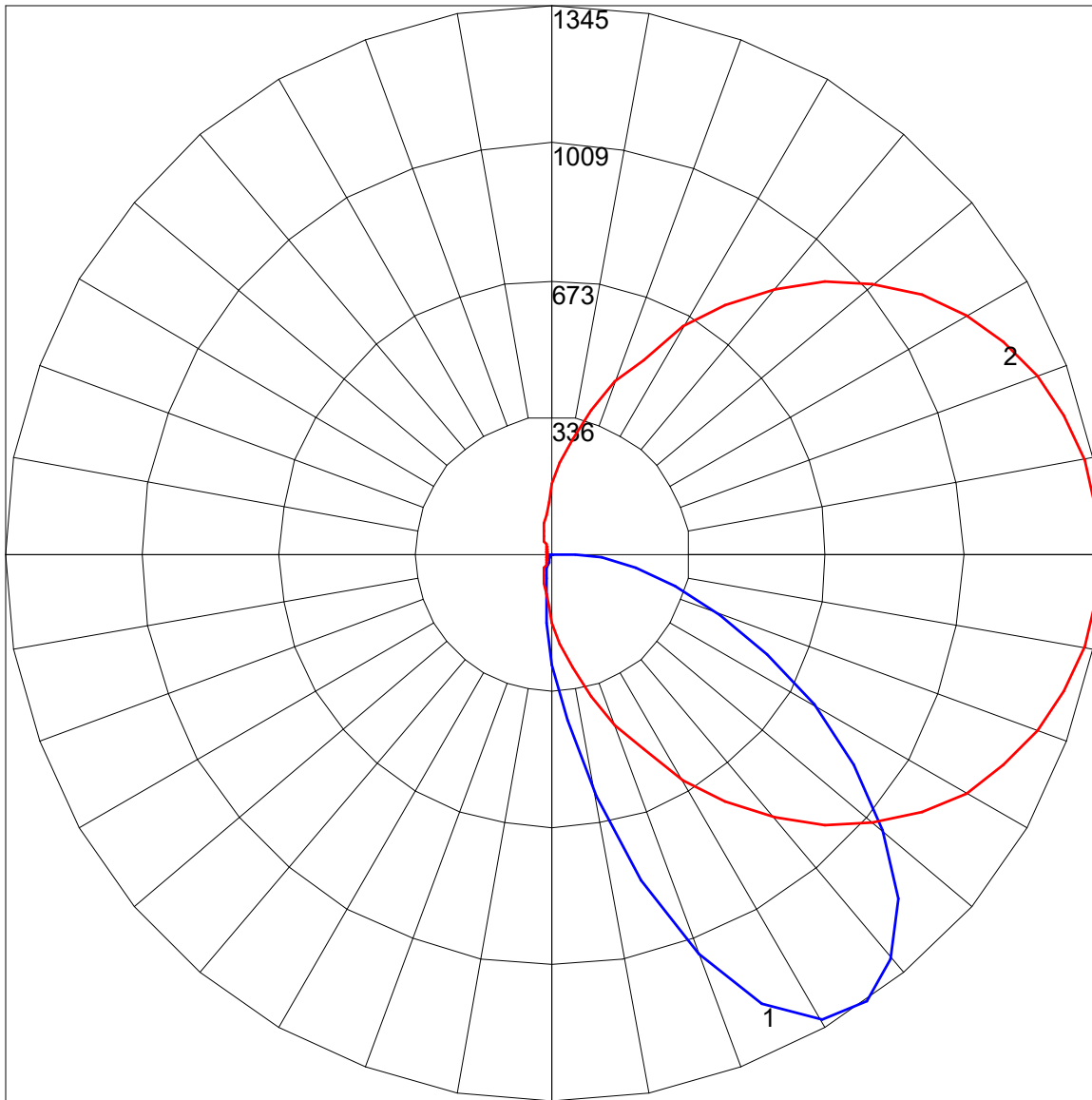
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : VODE\_707\_Z2\_HO\_359\_A1\_BL.IES**

**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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	85	79	75	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	58	51	45	56	50	44	55	49	44	42
6	69	55	46	40	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	44	38	34	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	34	30	28
9	55	41	33	27	53	41	32	27	39	32	27	38	31	27	37	31	26	25
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

POLAR GRAPH



Maximum Candela = 1345.125 Located At Horizontal Angle = 0, Vertical Angle = 35  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)  
# 2 - Horizontal Cone Through Vertical Angle (35) (Through Max. Cd.)