

## IES Report

# ZipTwo® | 707 | Micro 3508, 85° Asymmetric | 80 CRI | HO

707-Z2-4-48-XX-XX-X-0-Z-HO-35-A1-X-BL-0

	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	40	42	42	42
Total Lumens, 4' rail length (1219mm)	1572	1622	1655	1655
Lumens per foot (305mm)	393	405	414	414
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	82	82	82	82

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\_35\_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-35-A1-BL

[LUMINAIRE] ZipTwo LED, 48", 3500K, 80 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	1655
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	42
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	132757	87236	13111
55	123227	71731	9344
65	107891	54574	7718
75	94939	43550	6662
85	107386	43748	4747

**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>	314.975	314.975	314.975	314.975	314.975	314.975	314.975	314.975	314.975	314.975
<b>5</b>	477.230	475.925	474.167	470.966	466.303	459.882	452.591	444.274	435.226	425.604
<b>10</b>	700.106	698.349	692.363	683.176	669.900	653.857	635.048	612.880	588.520	565.187
<b>15</b>	960.602	957.087	946.891	930.552	907.654	879.500	846.249	807.012	764.852	718.324
<b>20</b>	1214.677	1209.718	1195.850	1174.413	1143.789	1103.386	1055.101	1001.005	940.470	874.837
<b>25</b>	1416.238	1410.409	1395.097	1368.406	1331.796	1285.703	1230.859	1163.329	1085.151	1001.875
<b>30</b>	1532.053	1526.798	1510.320	1484.933	1447.158	1396.402	1336.024	1261.204	1175.735	1081.949
<b>35</b>	1560.345	1554.359	1539.482	1512.217	1474.285	1422.520	1360.819	1281.910	1192.057	1093.033
<b>40</b>	1504.334	1499.375	1484.794	1458.242	1416.830	1366.213	1302.773	1222.541	1131.539	1030.759
<b>45</b>	1389.703	1383.718	1369.711	1339.817	1299.554	1247.197	1182.139	1102.220	1011.358	913.187
<b>50</b>	1228.666	1222.698	1206.220	1178.363	1137.073	1083.846	1016.160	939.304	854.566	761.354
<b>55</b>	1046.349	1042.277	1025.347	997.211	957.539	903.704	838.523	765.878	688.292	609.087
<b>60</b>	857.629	852.948	836.905	810.509	773.169	722.848	664.663	600.474	532.805	462.214
<b>65</b>	675.016	671.222	656.920	634.178	599.465	558.331	508.602	452.731	395.415	341.440
<b>70</b>	511.073	507.575	495.900	476.656	448.502	412.467	372.656	329.051	285.151	244.748
<b>75</b>	363.764	360.702	351.654	336.638	315.044	288.214	258.895	226.809	195.437	166.866
<b>80</b>	238.328	236.292	229.576	219.066	203.911	185.240	165.248	143.950	123.244	104.731
<b>85</b>	138.556	137.390	133.023	126.011	116.545	104.870	92.620	79.483	67.390	56.446
<b>90</b>	64.467	63.597	61.109	57.176	52.078	45.953	39.672	33.251	27.283	22.168
<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>	314.975	314.975	314.975	314.975	314.975	314.975	314.975	314.975	314.975	314.975
<b>5</b>	414.224	402.845	391.465	378.485	366.531	354.281	341.597	329.782	317.376	303.369
<b>10</b>	537.764	509.176	479.283	449.529	420.784	391.622	364.339	337.943	312.121	286.595
<b>15</b>	670.787	620.171	568.110	520.260	472.427	424.873	381.704	339.404	301.037	265.454
<b>20</b>	801.026	729.565	654.745	577.436	515.440	448.937	387.672	333.715	285.882	241.390
<b>25</b>	910.855	818.966	722.552	627.322	543.019	460.456	383.444	318.838	262.984	211.636
<b>30</b>	976.784	869.878	756.830	645.557	545.786	452.000	366.670	295.348	233.508	181.447
<b>35</b>	982.039	863.893	745.747	612.010	523.027	420.645	331.957	260.060	199.526	149.936
<b>40</b>	923.540	801.757	685.508	574.513	464.406	366.392	285.882	218.927	163.943	122.235
<b>45</b>	809.639	699.219	590.852	484.520	389.429	302.934	233.073	176.192	137.251	96.413
<b>50</b>	666.838	571.607	476.656	387.533	308.920	239.354	181.447	139.148	102.103	75.551
<b>55</b>	525.654	444.118	366.827	296.513	235.996	182.317	138.713	105.305	79.344	59.647
<b>60</b>	394.684	332.549	273.772	221.258	176.488	138.417	106.627	80.945	62.135	47.258

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**CANDELA TABULATION - (Cont.)**

<b>65</b>	288.788	242.695	199.230	161.315	134.485	102.834	80.075	62.275	48.285	37.480
<b>70</b>	206.242	171.964	142.506	116.545	93.647	74.977	58.934	46.667	36.610	28.727
<b>75</b>	140.314	116.684	96.709	78.909	64.171	51.626	40.838	32.381	25.526	20.271
<b>80</b>	87.661	72.628	60.100	49.016	39.376	31.511	24.795	19.540	15.173	11.815
<b>85</b>	46.667	38.071	30.920	24.499	19.401	14.877	11.223	8.317	6.125	4.524
<b>90</b>	17.504	13.711	10.214	7.586	5.255	3.497	1.897	1.027	0.592	0.296
<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>	314.975	314.975	314.975	314.975	314.975	314.975	314.975	314.975	314.975	314.975
<b>5</b>	292.285	281.636	271.440	262.253	252.770	244.748	237.301	230.011	224.182	218.631
<b>10</b>	264.880	244.453	225.487	208.870	192.827	179.551	167.736	157.226	148.196	140.609
<b>15</b>	234.970	207.251	182.909	162.342	144.107	129.230	116.684	106.036	96.988	89.854
<b>20</b>	204.641	171.825	150.371	125.002	106.627	92.464	81.101	71.914	64.467	58.638
<b>25</b>	172.538	146.299	114.927	94.656	78.770	66.799	57.037	49.729	44.335	39.968
<b>30</b>	146.873	112.752	88.392	71.183	58.342	48.720	41.273	35.740	31.790	28.727
<b>35</b>	114.927	88.392	68.399	54.253	43.761	36.314	30.920	26.987	24.064	21.733
<b>40</b>	91.750	68.991	52.948	42.004	33.686	28.292	24.360	21.298	19.262	17.504
<b>45</b>	71.914	54.114	41.708	33.408	27.127	22.898	19.975	17.504	15.904	14.581
<b>50</b>	56.881	43.169	33.843	27.562	22.603	19.401	16.913	15.016	13.572	12.545
<b>55</b>	45.223	35.148	28.292	23.194	19.262	16.634	14.738	12.980	11.815	10.788
<b>60</b>	36.905	29.180	23.768	19.836	16.774	14.442	12.685	11.223	10.214	9.344
<b>65</b>	29.893	24.064	19.697	16.339	14.007	12.110	10.510	9.344	8.456	7.586
<b>70</b>	23.038	18.809	15.469	12.980	10.945	9.483	8.161	7.291	6.421	5.829
<b>75</b>	16.182	13.120	10.945	9.187	7.586	6.716	5.829	5.255	4.820	4.089
<b>80</b>	9.483	7.586	6.264	5.255	4.385	3.793	3.358	2.923	2.627	2.332
<b>85</b>	3.497	2.923	2.488	2.036	1.757	1.462	1.305	1.305	1.166	1.166
<b>90</b>	0.296	0.296	0.296	0.296	0.296	0.296	0.296	0.435	0.592	0.592
<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\_35\_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>	314.975	314.975	314.975	314.975	314.975	314.975	314.975
<b>5</b>	214.264	210.035	206.816	204.485	202.449	201.283	200.987
<b>10</b>	134.189	128.934	124.706	121.348	119.016	117.850	117.276
<b>15</b>	84.007	79.205	75.551	72.628	70.888	69.722	69.130
<b>20</b>	53.975	50.321	47.693	45.658	44.335	43.604	43.169
<b>25</b>	36.470	34.139	32.086	30.781	29.754	29.319	29.180
<b>30</b>	26.396	24.656	23.194	22.324	21.593	21.298	21.298
<b>35</b>	20.132	18.809	17.939	17.209	16.774	16.634	16.339
<b>40</b>	16.182	15.312	14.581	14.007	13.711	13.572	13.415
<b>45</b>	13.711	12.841	12.250	11.954	11.675	11.380	11.380
<b>50</b>	11.675	11.084	10.510	10.214	9.918	9.918	9.918
<b>55</b>	10.057	9.483	9.048	8.752	8.456	8.456	8.161
<b>60</b>	8.456	8.021	7.586	7.291	6.995	6.995	6.995
<b>65</b>	6.995	6.421	6.125	5.829	5.690	5.551	5.551
<b>70</b>	5.255	4.959	4.663	4.385	4.385	4.089	4.089
<b>75</b>	3.793	3.497	3.202	3.202	2.923	2.923	2.923
<b>80</b>	2.192	2.036	1.897	1.757	1.757	1.757	1.757
<b>85</b>	1.027	1.027	0.870	0.870	0.870	0.870	0.870
<b>90</b>	0.592	0.592	0.592	0.592	0.592	0.592	0.592
<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\_35\_A1\_BL.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	150.05	N.A.	9.10
0-30	383.71	N.A.	23.20
0-40	709.40	N.A.	42.90
0-60	1322.65	N.A.	79.90
0-80	1612.12	N.A.	97.40
0-90	1650.95	N.A.	99.80
10-90	1618.65	N.A.	97.80
20-40	559.34	N.A.	33.80
20-50	897.07	N.A.	54.20
40-70	799.63	N.A.	48.30
60-80	289.46	N.A.	17.50
70-80	103.09	N.A.	6.20
80-90	38.83	N.A.	2.30
90-110	3.83	N.A.	0.20
90-120	3.83	N.A.	0.20
90-130	3.83	N.A.	0.20
90-150	3.83	N.A.	0.20
90-180	3.83	N.A.	0.20
110-180	0.00	N.A.	0.00
0-180	1654.78	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	32.30
10-20	117.75
20-30	233.66
30-40	325.69
40-50	337.73
50-60	275.53
60-70	186.38
70-80	103.09
80-90	38.83
90-100	3.83
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

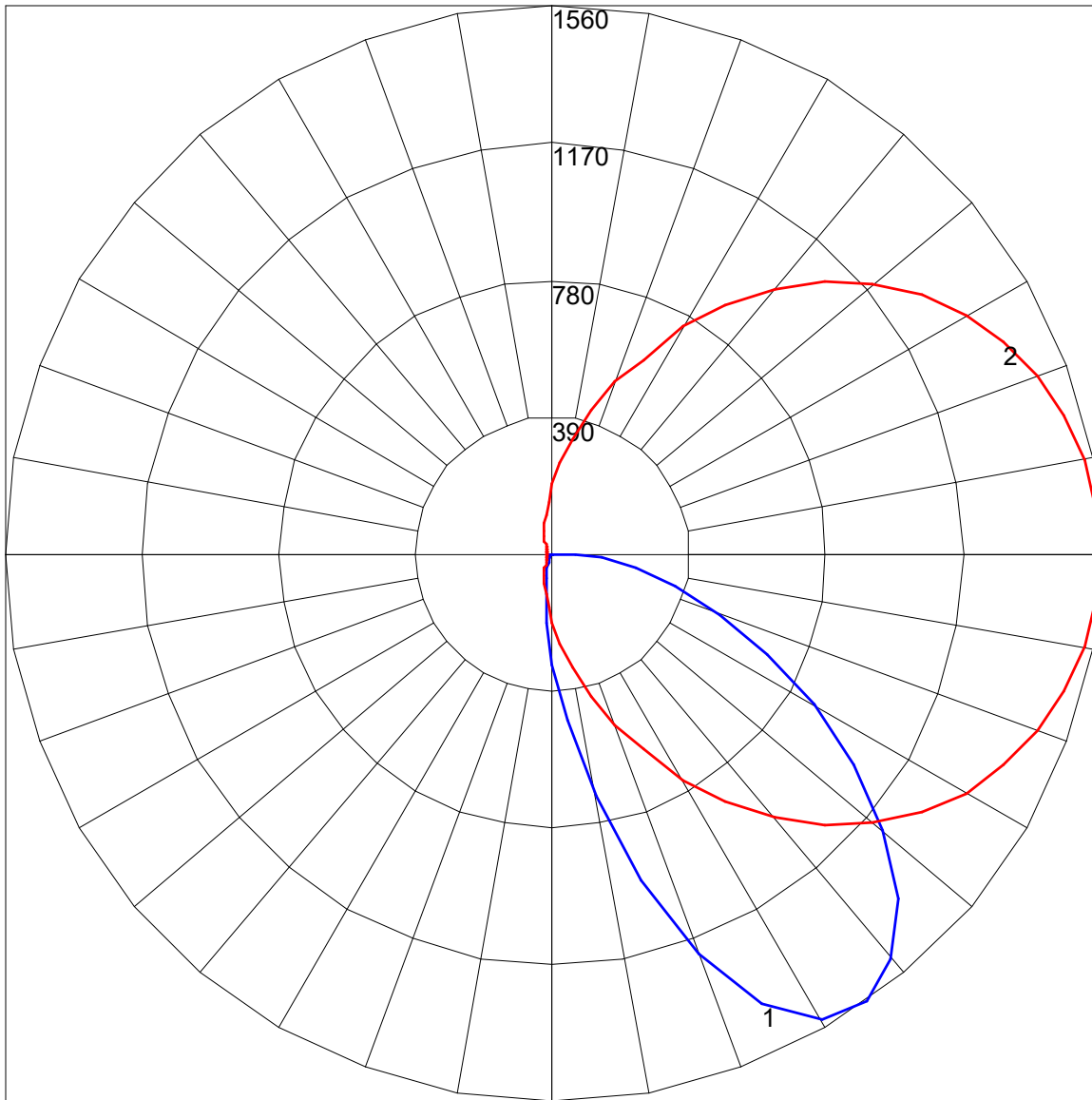
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : VODE\_707\_Z2\_HO\_35\_A1\_BL.IES**

**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 = 1560.345 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.)