

**IES Report**

**DoubleBox™ | 107 | 120° Batwing, up | 85° Asymmetric, down | 90 CRI | HO**

107-DB-XX-4-48-XX-XX-XX-XX-X-X-Z-HO-359-G1A1-X-BL-X

	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	66	68	70	71
Total Lumens, 4' rail length (1219mm)	6470	6674	6810	6946
Lumens per foot (305mm)	1617	1668	1703	1737
Lumens per foot UP (305mm)	1146	1182	1206	1230
Lumens per foot DOWN (305mm)	472	487	497	507
Input Power (W), 4' rail length (1219mm)	98.44	98.44	98.44	98.44
Watts per foot (305mm)	24.7	24.7	24.7	24.7
CRI	96	96	96	96

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\_107\_DB\_HO\_359\_G1A1\_BL.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
 [TEST] L011800109 (SOURCE REPORT FOR REFERENCE)  
 [TESTLAB] REPORT BASED ON DATA PRODUCED BY NVLAP ACCREDITED LAB  
 [ISSUEDATE] 1/12/2018  
 [MANUFAC] Vode Lighting  
 [LUMCAT] 107-DB-48-Z-HO-359-G1A1-BL  
 [LUMINAIRE] DoubleBox LED, 48", 3500K, 90 CRI, zipper board,  
 [MORE] 120° batwing lens up with white polycarbonate reflectors/85° black asymmetric lens down, high output  
 [TEST PROCEDURE] IESNA:LM-79-08

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	6810
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	69
Total Luminaire Watts	98.44
Ballast Factor	1.00
CIE Type	Semi-Indirect
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)	0.08 ft
Luminous Width (90-270)	3.77 ft
Luminous Height	0.21 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	14230	15906	17762
55	8339	9368	10984
65	3843	4690	7217
75	676	1612	4770
85	17	57	2208

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>	1000.901	1000.901	1000.901	1000.901	1000.901	1000.901	1000.901	1000.901	1000.901	1000.901
<b>5</b>	1262.151	1261.543	1260.916	1251.397	1243.949	1234.639	1223.562	1210.813	1196.449	1180.622
<b>10</b>	1463.152	1461.442	1453.595	1444.304	1432.163	1417.248	1399.692	1376.892	1352.135	1325.478
<b>15</b>	1579.584	1576.715	1568.469	1558.988	1546.106	1526.992	1505.921	1483.083	1458.649	1429.655
<b>20</b>	1616.501	1612.777	1606.735	1598.432	1583.175	1567.557	1550.248	1527.429	1505.256	1468.111
<b>25</b>	1589.065	1584.201	1580.572	1569.552	1558.589	1544.054	1527.695	1514.015	1479.302	1442.803
<b>30</b>	1500.715	1496.649	1493.533	1485.021	1475.806	1464.710	1452.930	1431.574	1404.613	1372.009
<b>35</b>	1370.394	1366.442	1362.623	1359.203	1349.931	1339.880	1327.587	1304.046	1282.424	1248.528
<b>40</b>	1209.141	1206.937	1202.491	1197.665	1192.782	1185.049	1166.429	1147.942	1123.736	1089.346
<b>45</b>	1022.979	1023.283	1021.193	1018.419	1012.700	1004.283	988.323	972.591	942.514	913.349
<b>50</b>	828.932	828.191	828.210	826.633	821.503	815.689	804.612	784.833	747.916	709.707
<b>55</b>	637.070	637.488	639.977	640.338	629.603	633.821	624.549	608.247	585.219	558.657
<b>60</b>	460.693	461.453	464.455	466.070	466.241	463.486	456.361	446.481	430.141	405.080
<b>65</b>	301.967	304.323	308.389	311.600	313.918	314.488	311.657	305.311	295.507	281.542
<b>70</b>	165.984	168.929	173.926	177.840	183.787	187.568	188.955	187.967	184.015	178.505
<b>75</b>	53.010	57.836	65.645	67.260	74.024	81.054	86.260	90.478	96.596	94.487
<b>80</b>	3.477	8.816	7.296	9.120	11.020	13.129	15.143	20.520	22.591	28.880
<b>85</b>	1.254	1.805	1.938	2.014	2.033	2.052	1.900	1.919	2.223	3.154
<b>90</b>	1.748	1.900	1.900	1.900	1.729	1.729	1.729	1.729	1.729	1.729
<b>95</b>	48.279	77.824	81.130	87.153	92.302	96.634	99.313	110.713	102.790	93.499
<b>100</b>	240.749	252.225	257.944	263.378	266.475	267.482	267.216	264.404	252.890	239.495
<b>105</b>	436.392	445.151	451.858	455.354	458.565	461.168	458.090	448.286	435.138	410.153
<b>110</b>	649.059	656.241	662.302	665.342	668.705	666.121	662.226	648.831	624.435	586.226
<b>115</b>	872.461	876.299	880.517	881.771	881.391	877.952	866.115	845.975	817.855	770.906
<b>120</b>	1089.555	1090.600	1093.241	1092.633	1090.714	1079.048	1062.822	1043.898	995.163	936.320
<b>125</b>	1290.556	1290.233	1289.226	1284.457	1278.985	1260.441	1241.764	1201.199	1151.761	1089.536
<b>130</b>	1459.998	1458.611	1454.697	1443.924	1431.422	1410.579	1379.628	1336.688	1277.370	1203.650
<b>135</b>	1593.150	1590.528	1582.586	1568.545	1549.773	1526.631	1484.090	1440.371	1369.273	1297.852
<b>140</b>	1686.250	1681.386	1669.720	1651.822	1629.155	1601.016	1554.181	1498.739	1433.474	1352.781
<b>145</b>	1734.833	1728.430	1714.693	1694.040	1664.514	1629.288	1586.747	1524.807	1460.131	1384.321
<b>150</b>	1731.052	1724.383	1711.311	1685.433	1653.836	1616.216	1573.124	1518.024	1454.203	1384.435
<b>155</b>	1672.361	1665.483	1654.292	1629.459	1599.287	1562.769	1520.760	1476.053	1419.338	1360.419
<b>160</b>	1565.391	1561.439	1549.108	1533.053	1506.662	1476.566	1442.233	1402.295	1360.495	1319.740
<b>165</b>	1431.612	1428.990	1420.383	1410.351	1396.272	1374.384	1350.482	1324.832	1297.662	1267.946
<b>170</b>	1302.545	1300.816	1296.313	1291.164	1284.742	1277.085	1268.231	1255.045	1241.308	1226.944
<b>175</b>	1210.718	1209.996	1209.274	1207.165	1205.417	1203.384	1201.104	1198.596	1195.879	1192.972
<b>180</b>	1168.500	1168.500	1168.500	1168.500	1168.500	1168.500	1168.500	1168.500	1168.500	1168.500

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>	1000.901	1000.901	1000.901	1000.901	1000.901	1000.901	1000.901	1000.901	1000.901	1000.901
<b>5</b>	1163.427	1145.016	1125.522	1105.078	1083.874	1062.024	1039.680	1017.127	994.422	970.064
<b>10</b>	1297.168	1267.414	1237.166	1194.530	1151.685	1107.947	1063.620	1018.932	974.396	926.744
<b>15</b>	1392.225	1344.592	1295.800	1246.191	1196.050	1132.400	1067.762	1003.105	939.360	870.371
<b>20</b>	1424.164	1378.127	1331.197	1263.766	1197.019	1131.184	1048.572	965.694	884.925	798.722
<b>25</b>	1408.337	1358.424	1298.650	1241.270	1162.743	1083.494	998.925	902.538	810.312	713.450
<b>30</b>	1330.646	1285.103	1231.789	1160.311	1092.595	1003.941	921.367	816.202	718.010	616.531
<b>35</b>	1208.020	1167.246	1108.707	1045.570	971.660	890.226	801.591	704.539	608.513	511.917
<b>40</b>	1051.023	1003.713	949.620	889.808	815.309	738.701	658.882	574.883	486.723	402.591
<b>45</b>	871.340	827.640	774.459	716.813	657.533	593.997	520.011	445.132	371.868	302.727
<b>50</b>	692.113	653.334	604.333	553.166	503.519	446.386	385.624	325.660	269.952	220.609
<b>55</b>	525.958	488.984	449.749	407.436	364.629	319.979	275.519	232.503	190.741	160.759
<b>60</b>	379.677	350.740	320.359	288.363	255.550	222.927	191.425	162.830	146.566	113.563

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

65	261.117	238.906	217.911	195.757	174.933	157.909	140.239	111.492	95.760	80.180
70	166.022	153.672	140.296	126.844	113.544	100.871	88.255	75.867	66.424	56.658
75	91.504	87.894	81.035	74.879	67.697	59.926	53.580	48.070	41.819	37.050
80	33.839	35.188	35.283	33.801	32.262	29.811	27.094	25.327	23.028	21.071
85	4.465	5.434	5.643	5.757	7.410	8.588	8.360	9.025	8.835	8.398
90	1.729	1.425	1.577	1.577	1.425	1.425	1.577	1.425	1.577	2.052
95	89.547	79.857	67.830	59.698	54.834	50.274	44.878	46.284	45.448	42.826
100	222.984	198.550	176.130	162.032	151.392	146.091	142.386	140.068	141.835	137.883
105	380.285	343.710	304.988	275.937	254.334	238.013	230.755	228.684	223.877	222.927
110	546.630	496.375	443.422	401.622	371.849	348.992	337.193	329.726	327.218	326.116
115	702.829	644.347	583.794	527.820	485.773	456.209	439.299	431.224	424.878	423.662
120	866.951	792.547	713.583	636.804	591.489	562.058	540.113	524.951	520.163	521.246
125	1003.067	915.173	827.298	738.796	687.572	653.486	630.059	615.239	608.209	608.228
130	1119.727	1023.340	931.285	849.015	784.149	740.145	710.600	693.291	686.451	685.330
135	1202.548	1108.346	1015.132	934.857	868.737	820.325	788.880	768.740	758.404	761.463
140	1267.072	1173.554	1085.793	1006.145	943.312	893.076	859.560	837.995	826.082	829.521
145	1300.949	1219.534	1137.891	1065.520	1004.720	958.284	924.236	904.628	891.556	894.558
150	1312.102	1239.503	1169.602	1108.859	1052.467	1015.664	982.376	966.226	953.553	955.738
155	1301.120	1243.284	1188.982	1136.485	1097.706	1063.126	1036.507	1021.041	1008.311	1010.990
160	1277.199	1233.328	1191.110	1159.608	1129.113	1099.682	1084.083	1069.966	1057.692	1061.492
165	1240.206	1216.532	1192.858	1169.355	1146.118	1133.445	1122.083	1111.196	1101.392	1104.147
170	1212.124	1196.924	1181.800	1173.326	1165.175	1157.233	1149.538	1142.090	1135.155	1136.941
175	1189.875	1186.664	1183.320	1179.881	1176.366	1172.813	1169.165	1165.650	1162.135	1162.952
180	1168.500	1168.500	1168.500	1168.500	1168.500	1168.500	1168.500	1168.500	1168.500	1168.500

**Vert. Horizontal Angles**

**Angles**

	<u>100</u>	<u>105</u>	<u>110</u>	<u>115</u>	<u>120</u>	<u>125</u>	<u>130</u>	<u>135</u>	<u>140</u>	<u>145</u>
0	1000.901	1000.901	1000.901	1000.901	1000.901	1000.901	1000.901	1000.901	1000.901	1000.901
5	945.934	922.279	899.156	876.774	855.323	834.955	815.822	798.076	781.831	767.239
10	879.852	833.815	789.013	745.750	704.330	670.206	638.343	608.817	581.875	557.726
15	802.864	736.668	676.552	619.742	568.727	520.163	474.354	438.444	410.039	383.420
20	714.894	636.614	565.250	499.282	435.537	389.766	347.928	307.857	272.593	252.491
25	619.875	535.572	458.052	385.719	333.735	282.948	242.573	214.415	187.834	165.357
30	519.194	436.829	355.585	298.034	242.250	204.839	172.729	146.699	131.100	115.539
35	421.325	341.810	274.626	220.153	179.797	147.193	124.469	106.799	93.651	85.120
40	326.458	257.393	205.960	161.424	131.879	109.231	92.017	81.168	71.725	66.310
45	242.858	190.418	150.822	121.429	98.021	83.182	72.466	63.669	59.223	54.853
50	177.137	140.296	110.865	91.637	77.140	66.234	58.900	54.283	50.597	48.222
55	129.827	104.272	85.120	70.794	61.503	55.119	50.464	47.063	44.878	43.130
60	93.518	78.052	66.063	57.038	50.597	46.398	43.662	41.040	39.121	37.829
65	68.267	58.653	51.395	45.980	41.876	38.988	36.632	34.637	33.820	33.212
70	49.495	43.548	39.197	35.720	33.250	31.293	29.868	28.880	28.519	28.348
75	33.326	30.571	27.588	25.954	25.042	24.016	23.256	22.496	22.268	22.325
80	19.399	17.822	17.423	16.872	16.454	16.074	15.561	15.580	15.846	15.884
85	8.284	8.056	8.569	8.778	8.056	7.619	7.239	6.954	6.973	6.973
90	1.900	1.729	1.729	1.729	2.052	2.052	2.052	2.052	2.052	2.204
95	45.182	48.184	52.231	58.634	62.985	67.887	74.936	81.415	75.867	74.955
100	140.923	142.899	148.599	157.282	171.437	184.623	201.970	213.028	215.099	220.286
105	227.905	232.826	240.350	258.628	286.387	314.621	340.138	360.658	375.193	382.280
110	329.650	339.492	353.305	378.404	415.967	458.071	496.489	528.276	552.881	552.330
115	428.982	441.655	462.935	496.983	547.257	608.494	667.337	705.318	731.196	744.990
120	527.991	540.626	564.376	602.794	660.421	739.024	813.599	870.010	915.629	946.447
125	615.258	631.256	658.730	703.855	776.093	856.387	939.626	1024.974	1085.204	1126.909
130	693.994	713.431	746.301	802.864	875.102	958.398	1049.522	1132.628	1205.208	1263.158
135	771.799	791.559	829.844	885.533	955.586	1040.155	1129.056	1221.377	1291.411	1359.260

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**CANDELA TABULATION - (Cont.)**

<b>140</b>	840.503	861.270	901.550	953.648	1023.834	1103.539	1190.122	1273.684	1353.674	1416.032
<b>145</b>	904.001	928.131	963.908	1012.871	1075.856	1149.044	1223.847	1301.576	1374.099	1438.433
<b>150</b>	961.153	986.176	1014.182	1059.535	1109.315	1171.084	1236.235	1301.367	1366.157	1427.166
<b>155</b>	1016.405	1033.999	1060.029	1090.106	1134.110	1180.261	1230.535	1283.089	1336.137	1388.368
<b>160</b>	1067.116	1073.405	1095.901	1118.682	1142.603	1178.019	1215.297	1251.359	1285.882	1322.742
<b>165</b>	1107.985	1112.298	1117.124	1135.364	1153.091	1171.198	1189.552	1212.276	1237.052	1259.054
<b>170</b>	1139.278	1141.900	1144.883	1148.170	1151.761	1163.218	1174.675	1185.885	1196.734	1207.146
<b>175</b>	1163.807	1164.814	1165.802	1166.847	1167.911	1168.994	1170.115	1171.236	1172.376	1173.497
<b>180</b>	1168.500	1168.500	1168.500	1168.500	1168.500	1168.500	1168.500	1168.500	1168.500	1168.500

**Vert. 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>	1000.901	1000.901	1000.901	1000.901	1000.901	1000.901	1000.901
<b>5</b>	754.395	743.394	734.350	727.301	722.342	719.511	718.808
<b>10</b>	536.598	517.370	501.486	489.098	480.339	475.266	473.936
<b>15</b>	359.917	339.777	323.190	309.472	299.535	293.759	292.182
<b>20</b>	234.593	218.177	204.402	193.705	185.535	180.614	179.227
<b>25</b>	153.064	142.367	133.133	125.495	120.042	116.489	115.482
<b>30</b>	104.348	97.945	92.340	87.647	84.170	81.985	81.415
<b>35</b>	76.798	72.694	69.483	66.766	64.676	63.441	63.118
<b>40</b>	61.864	58.330	56.487	54.891	53.694	52.934	52.687
<b>45</b>	52.497	50.027	48.868	48.032	47.367	46.797	46.702
<b>50</b>	46.474	45.315	44.270	43.662	43.263	42.921	42.921
<b>55</b>	42.161	41.268	40.736	40.375	39.976	39.729	39.767
<b>60</b>	37.107	36.708	36.765	36.898	37.145	37.050	37.240
<b>65</b>	32.851	32.737	32.642	32.870	33.098	33.877	34.086
<b>70</b>	28.728	28.899	28.861	28.690	28.044	28.633	29.355
<b>75</b>	22.610	23.218	23.978	24.472	24.130	22.762	24.605
<b>80</b>	16.359	16.720	17.309	17.841	18.430	17.613	18.620
<b>85</b>	7.144	7.372	7.505	7.904	8.322	8.797	8.208
<b>90</b>	2.204	2.204	2.204	2.204	2.052	2.052	1.824
<b>95</b>	71.174	69.673	69.008	69.939	71.972	77.501	69.730
<b>100</b>	218.937	221.312	224.599	228.114	231.040	227.715	272.935
<b>105</b>	385.320	391.837	399.342	405.669	404.871	406.923	461.320
<b>110</b>	570.855	581.267	582.749	578.759	587.480	637.697	658.844
<b>115</b>	758.803	766.099	772.464	788.196	822.852	862.543	863.949
<b>120</b>	959.956	976.619	998.431	1026.912	1051.745	1058.547	1060.846
<b>125</b>	1172.528	1189.932	1215.145	1227.153	1234.392	1239.788	1243.854
<b>130</b>	1308.036	1339.994	1362.623	1376.740	1388.007	1397.184	1400.680
<b>135</b>	1404.879	1449.092	1474.191	1493.951	1509.987	1521.539	1524.370
<b>140</b>	1471.227	1519.468	1547.170	1570.464	1589.901	1604.151	1609.243
<b>145</b>	1501.038	1543.389	1577.969	1607.495	1629.459	1644.260	1650.587
<b>150</b>	1481.544	1525.035	1562.446	1593.454	1618.553	1631.606	1638.275
<b>155</b>	1429.788	1469.175	1503.717	1531.970	1555.055	1565.809	1572.326
<b>160</b>	1357.835	1387.817	1414.417	1438.091	1453.044	1462.829	1468.833
<b>165</b>	1279.707	1298.821	1316.225	1327.834	1336.346	1342.559	1346.416
<b>170</b>	1217.178	1223.771	1229.547	1234.487	1238.534	1241.669	1243.854
<b>175</b>	1174.599	1175.701	1176.746	1177.753	1178.722	1179.615	1180.432
<b>180</b>	1168.500	1168.500	1168.500	1168.500	1168.500	1168.500	1168.500

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : VODE\_107\_DB\_HO\_359\_G1A1\_BL.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	357.01	N.A.	5.20
0-30	737.74	N.A.	10.80
0-40	1154.46	N.A.	17.00
0-60	1774.54	N.A.	26.10
0-80	1976.79	N.A.	29.00
0-90	1986.03	N.A.	29.20
10-90	1892.12	N.A.	27.80
20-40	797.45	N.A.	11.70
20-50	1160.63	N.A.	17.00
40-70	766.41	N.A.	11.30
60-80	202.25	N.A.	3.00
70-80	55.91	N.A.	0.80
80-90	9.24	N.A.	0.10
90-110	467.72	N.A.	6.90
90-120	1134.96	N.A.	16.70
90-130	2008.02	N.A.	29.50
90-150	3748.85	N.A.	55.00
90-180	4824.00	N.A.	70.80
110-180	4356.29	N.A.	64.00
0-180	6810.03	N.A.	100.00

Total Luminaire Efficiency = N.A.%

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	93.90
10-20	263.11
20-30	380.72
30-40	416.73
40-50	363.18
50-60	256.89
60-70	146.34
70-80	55.91
80-90	9.24
90-100	94.71
100-110	373.00
110-120	667.24
120-130	873.06
130-140	921.34
140-150	819.49
150-160	607.82
160-170	353.86
170-180	113.47

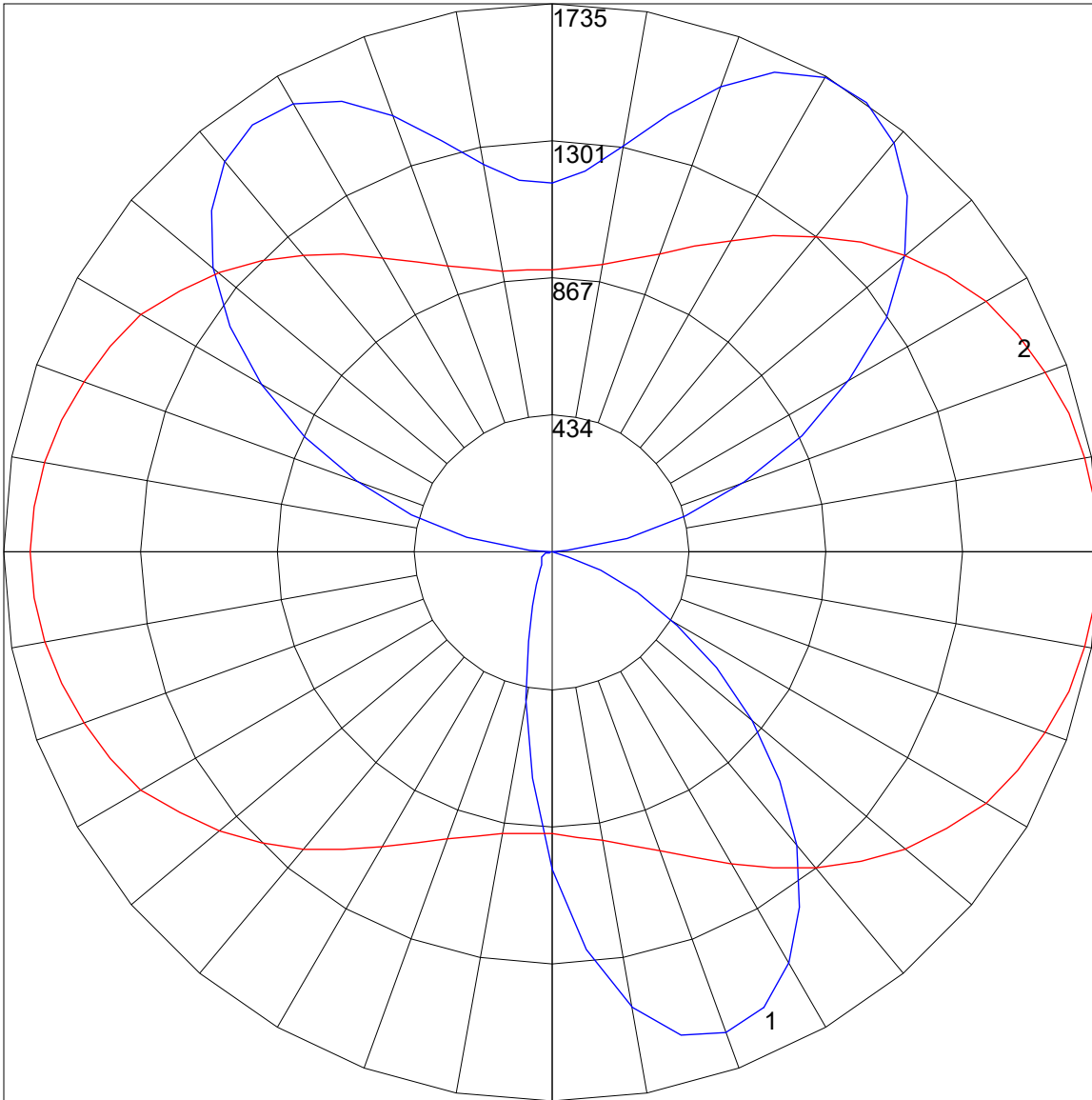
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : VODE\_107\_DB\_HO\_359\_G1A1\_BL.IES**

**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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	29
1	94	90	86	83	84	81	78	75	64	62	60	48	47	46	33	33	32	26
2	86	79	73	68	77	71	66	62	56	53	50	43	41	39	30	29	28	22
3	78	70	63	57	70	63	57	52	50	46	43	38	35	33	27	25	24	19
4	72	62	54	49	64	56	50	45	45	40	37	34	31	29	24	23	21	17
5	66	55	48	42	59	50	43	39	40	35	32	31	28	25	22	20	19	15
6	61	49	42	36	54	45	38	34	36	31	28	28	25	22	20	18	17	13
7	56	45	37	32	50	41	34	29	33	28	25	25	22	20	19	16	15	12
8	52	40	33	28	47	37	30	26	30	25	22	23	20	18	17	15	13	11
9	48	37	30	25	44	34	27	23	27	23	19	21	18	16	16	14	12	10
10	45	34	27	22	41	31	25	21	25	21	18	20	17	14	15	13	11	9

POLAR GRAPH



Maximum Candela = 1734.833 Located At Horizontal Angle = 0, Vertical Angle = 145  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (145) (Through Max. Cd.)