

## IES Report

DoubleBox™ | 107 | Wide Batwing, up | 85° Asymmetric, down | 90 CRI | LO

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

	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	69	71	73	73
Total Lumens, 4' rail length (1219mm)	1890	1949	1989	2009
Lumens per foot (305mm)	472	487	497	502
Lumens per foot UP (305mm)	320	330	337	340
Lumens per foot DOWN (305mm)	152	157	160	162
Input Power (W), 4' rail length (1219mm)	27.6	27.6	27.6	27.6
Watts per foot (305mm)	6.9	6.9	6.9	6.9
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\_107\_DB\_LO\_359\_G1A1\_BL.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] L022010902 / L121911514 (SOURCE REPORTS FOR REFERENCE)

[TESTLAB] REPORT BASED ON DATA FROM NVLAP ACCREDITED LAB

[ISSUEDATE] 3/18/20

[MANUFAC] Vode Lighting

[LUMCAT] 107-DB-48-Z-LO-359-G1A1-BL

[LUMINAIRE] DoubleBox LED, 48", 3500K, 90 CRI, zipper board, wide batwing lens up /

[MORE] 85° asymmetric lens down, low 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	1989
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	72
Total Luminaire Watts	27.64
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)	0.07 ft
Luminous Width (90-270)	3.84 ft
Luminous Height	0.21 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4454	4408	6696
55	2683	2468	4013
65	1280	1200	2518
75	288	443	1614
85	0	2	710

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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>	393.060	393.060	393.060	393.060	393.060	393.060	393.060	393.060	393.060	393.060
<b>5</b>	428.510	428.845	428.845	427.880	425.995	424.275	421.885	419.540	416.985	414.005
<b>10</b>	466.230	466.270	466.270	464.175	461.620	458.685	455.290	451.350	446.700	441.755
<b>15</b>	481.990	481.655	481.235	479.015	476.415	473.145	468.995	464.425	458.645	452.400
<b>20</b>	480.230	479.975	479.265	477.255	474.360	470.800	466.440	461.160	454.915	447.745
<b>25</b>	466.480	465.895	464.680	462.665	459.440	455.290	450.640	444.520	437.185	429.010
<b>30</b>	440.580	440.245	438.905	436.390	432.575	427.920	421.805	414.425	405.665	396.155
<b>35</b>	407.135	406.630	404.785	401.725	397.245	391.290	384.040	374.945	364.385	353.065
<b>40</b>	364.215	363.545	361.410	358.015	352.690	345.480	336.720	326.285	314.550	301.685
<b>45</b>	314.925	314.215	311.910	308.265	302.730	294.850	284.750	273.140	260.485	246.190
<b>50</b>	259.605	258.975	257.130	253.735	248.285	240.490	230.810	218.990	205.705	192.250
<b>55</b>	203.275	202.855	201.220	198.540	193.760	186.930	178.295	168.360	156.500	144.515
<b>60</b>	149.880	149.585	148.580	146.650	143.340	138.100	131.395	123.055	113.625	104.150
<b>65</b>	100.505	100.380	100.000	99.205	97.445	94.345	90.070	84.455	78.000	71.420
<b>70</b>	57.925	58.005	58.260	58.595	58.470	57.630	55.870	53.145	49.665	45.895
<b>75</b>	22.715	22.885	23.595	24.730	26.030	27.115	27.830	27.870	27.160	25.945
<b>80</b>	1.845	1.885	2.095	2.515	3.185	4.190	5.535	7.210	8.800	9.975
<b>85</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.085
<b>90</b>	2.440	2.440	2.440	2.440	2.440	2.440	2.440	2.440	2.440	2.440
<b>95</b>	11.360	13.975	13.185	13.485	13.940	14.705	15.085	18.115	19.845	21.180
<b>100</b>	43.880	46.055	47.140	49.385	52.275	55.355	58.905	61.905	65.915	66.265
<b>105</b>	105.325	98.105	104.990	107.740	110.880	116.010	119.900	123.180	126.285	125.490
<b>110</b>	196.360	189.900	190.550	194.700	201.410	201.770	208.755	203.610	198.460	186.135
<b>115</b>	314.090	312.800	301.720	296.015	293.335	291.705	283.705	272.480	258.235	240.600
<b>120</b>	399.715	397.215	391.710	381.355	371.845	358.540	344.415	328.385	303.710	277.875
<b>125</b>	455.415	452.505	445.750	437.215	426.545	406.415	388.250	361.930	335.550	305.845
<b>130</b>	479.225	476.655	469.290	458.145	444.570	426.500	403.545	378.640	350.155	320.870
<b>135</b>	478.970	476.805	469.920	459.085	444.100	426.735	404.785	382.030	355.725	329.455
<b>140</b>	463.465	461.255	455.010	445.300	432.395	416.355	397.405	376.775	354.715	332.045
<b>145</b>	438.985	437.015	432.025	424.310	413.375	400.065	384.545	366.920	348.635	329.980
<b>150</b>	410.485	408.705	405.055	398.765	390.375	379.775	367.315	353.800	340.000	324.995
<b>155</b>	380.895	379.600	377.185	372.375	366.305	358.540	349.405	339.595	329.405	319.095
<b>160</b>	353.065	352.380	350.400	347.685	343.365	338.440	332.780	325.975	318.835	312.440
<b>165</b>	329.220	328.715	327.465	325.990	323.990	321.005	317.690	314.065	310.160	305.640
<b>170</b>	311.405	311.130	310.525	309.850	309.015	308.035	306.910	305.130	303.285	301.360
<b>175</b>	300.720	300.590	300.485	300.170	299.935	299.680	299.405	299.110	298.800	298.475
<b>180</b>	297.000	297.000	297.000	297.000	297.000	297.000	297.000	297.000	297.000	297.000

**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>	393.060	393.060	393.060	393.060	393.060	393.060	393.060	393.060	393.060	393.060
<b>5</b>	411.075	407.425	403.655	400.975	395.985	390.870	386.430	403.865	399.005	394.185
<b>10</b>	436.010	429.555	422.555	415.895	407.010	397.785	388.355	399.590	389.575	378.885
<b>15</b>	444.980	436.555	427.125	417.320	405.835	392.630	379.515	385.170	371.090	356.045
<b>20</b>	439.365	429.765	419.080	407.760	393.850	378.550	362.455	362.705	345.105	325.155
<b>25</b>	419.540	408.645	396.570	384.040	369.205	351.600	333.495	329.050	308.935	287.560
<b>30</b>	385.550	373.480	360.065	345.860	330.350	312.750	294.095	286.385	264.840	243.260
<b>35</b>	340.830	327.205	312.830	297.575	281.985	264.635	245.730	236.215	216.310	195.605
<b>40</b>	287.390	272.680	257.845	242.840	227.750	211.780	195.015	185.585	168.530	150.130
<b>45</b>	231.440	217.145	202.645	188.520	174.310	161.865	147.740	138.730	124.815	109.515
<b>50</b>	178.250	165.635	152.560	140.320	129.045	118.190	107.170	99.375	88.810	77.620
<b>55</b>	132.400	121.295	110.440	100.965	91.915	83.655	77.200	69.785	62.030	53.900
<b>60</b>	94.720	85.880	78.040	71.000	64.630	58.550	52.895	48.700	43.295	37.765

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**CANDELA TABULATION - (Cont.)**

<b>65</b>	65.050	58.675	53.270	48.450	43.965	39.860	36.800	33.280	29.715	26.110
<b>70</b>	42.080	38.180	34.785	31.730	28.960	26.445	24.560	22.295	19.990	17.645
<b>75</b>	24.310	22.505	20.830	19.195	17.685	16.260	15.255	13.955	12.575	11.190
<b>80</b>	10.520	10.480	10.100	9.640	9.010	8.425	8.045	7.505	6.830	6.120
<b>85</b>	0.295	0.840	1.720	2.515	2.765	2.810	2.765	2.685	2.515	2.345
<b>90</b>	2.440	2.440	2.440	2.440	2.440	2.440	2.440	2.440	2.440	2.440
<b>95</b>	21.495	26.595	25.975	20.845	19.390	19.520	19.135	18.425	18.820	18.425
<b>100</b>	66.160	65.885	61.020	54.355	49.815	45.795	42.195	40.820	40.990	40.820
<b>105</b>	122.045	112.555	101.560	88.595	78.890	71.685	66.515	63.895	63.495	63.895
<b>110</b>	169.025	153.670	136.890	119.665	106.715	98.010	91.720	88.540	88.395	88.540
<b>115</b>	217.335	191.615	168.530	148.705	133.620	123.295	116.180	112.385	112.075	112.385
<b>120</b>	250.220	220.910	195.520	175.165	158.815	147.655	140.840	136.445	134.665	136.445
<b>125</b>	274.320	245.225	219.455	198.130	181.050	169.330	162.285	158.025	155.915	158.025
<b>130</b>	291.730	264.505	240.150	219.175	202.210	189.475	180.895	175.455	171.380	175.455
<b>135</b>	302.965	278.425	255.835	237.070	221.485	209.655	201.840	196.980	194.975	196.980
<b>140</b>	309.200	288.360	268.810	251.450	237.875	226.720	219.270	214.730	212.620	214.730
<b>145</b>	311.655	294.340	278.185	263.680	251.815	242.485	235.490	231.830	229.720	231.830
<b>150</b>	310.905	297.345	284.210	273.395	263.225	256.400	250.140	247.560	245.815	247.560
<b>155</b>	308.540	298.440	289.195	280.190	273.705	267.970	263.690	261.465	259.855	261.465
<b>160</b>	305.685	298.545	291.645	286.710	281.950	277.370	275.365	273.665	272.385	273.665
<b>165</b>	301.445	298.005	294.560	291.140	287.765	286.230	284.950	283.785	282.865	283.785
<b>170</b>	299.375	297.350	295.345	294.385	293.505	292.685	291.930	291.220	290.620	291.220
<b>175</b>	298.140	297.795	297.440	297.085	296.730	296.375	296.015	295.680	295.355	295.680
<b>180</b>	297.000	297.000	297.000	297.000	297.000	297.000	297.000	297.000	297.000	297.000

**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>	393.060	393.060	393.060	393.060	393.060	393.060	393.060	393.060	393.060	393.060
<b>5</b>	389.655	385.045	380.685	376.245	372.180	368.535	364.720	361.535	358.305	354.995
<b>10</b>	368.950	358.850	348.625	338.900	328.970	319.955	311.575	303.320	295.815	288.775
<b>15</b>	341.250	325.865	310.485	295.940	280.980	267.440	254.615	242.335	231.520	221.465
<b>20</b>	306.375	286.680	267.020	248.580	229.595	213.165	197.785	183.405	170.920	159.725
<b>25</b>	266.185	243.805	221.505	201.180	180.430	162.745	146.945	132.400	120.245	109.180
<b>30</b>	220.750	199.000	176.785	156.330	136.715	120.080	105.575	92.670	81.940	72.925
<b>35</b>	175.485	153.860	133.530	115.385	98.115	84.120	72.255	61.905	53.855	47.360
<b>40</b>	132.315	113.625	97.195	82.400	68.735	57.965	49.080	41.660	35.665	31.350
<b>45</b>	95.310	81.140	68.610	57.505	47.445	39.565	33.950	28.290	24.395	21.290
<b>50</b>	67.185	56.960	47.905	39.775	34.115	27.870	23.555	20.035	17.435	15.380
<b>55</b>	46.480	39.565	34.620	27.745	23.345	19.740	16.850	14.545	12.865	11.525
<b>60</b>	32.610	27.955	23.640	20.075	16.935	14.585	12.660	11.150	10.015	9.135
<b>65</b>	22.760	19.615	16.805	14.460	12.405	10.855	9.640	8.635	7.880	7.250
<b>70</b>	15.550	13.540	11.780	10.270	9.055	8.045	7.210	6.580	6.035	5.615
<b>75</b>	10.015	8.845	7.795	6.960	6.205	5.615	5.115	4.735	4.400	4.110
<b>80</b>	5.535	4.990	4.485	4.110	3.730	3.480	3.185	2.975	2.810	2.685
<b>85</b>	2.180	2.010	1.885	1.800	1.675	1.595	1.510	1.300	1.215	1.090
<b>90</b>	2.440	2.440	2.440	2.440	2.440	2.440	2.440	2.440	2.440	2.440
<b>95</b>	19.135	19.520	19.390	20.845	25.975	26.595	21.495	21.180	19.845	18.115
<b>100</b>	42.195	45.795	49.815	54.355	61.020	65.885	66.160	66.265	65.915	61.905
<b>105</b>	66.515	71.685	78.890	88.595	101.560	112.555	122.045	125.490	126.285	123.180
<b>110</b>	91.720	98.010	106.715	119.665	136.890	153.670	169.025	186.135	198.460	203.610
<b>115</b>	116.180	123.295	133.620	148.705	168.530	191.615	217.335	240.600	258.235	272.480
<b>120</b>	140.840	147.655	158.815	175.165	195.520	220.910	250.220	277.875	303.710	328.385
<b>125</b>	162.285	169.330	181.050	198.130	219.455	245.225	274.320	305.845	335.550	361.930
<b>130</b>	180.895	189.475	202.210	219.175	240.150	264.505	291.730	320.870	350.155	378.640
<b>135</b>	201.840	209.655	221.485	237.070	255.835	278.425	302.965	329.455	355.725	382.030

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

<b>140</b>	219.270	226.720	237.875	251.450	268.810	288.360	309.200	332.045	354.715	376.775
<b>145</b>	235.490	242.485	251.815	263.680	278.185	294.340	311.655	329.980	348.635	366.920
<b>150</b>	250.140	256.400	263.225	273.395	284.210	297.345	310.905	324.995	340.000	353.800
<b>155</b>	263.690	267.970	273.705	280.190	289.195	298.440	308.540	319.095	329.405	339.595
<b>160</b>	275.365	277.370	281.950	286.710	291.645	298.545	305.685	312.440	318.835	325.975
<b>165</b>	284.950	286.230	287.765	291.140	294.560	298.005	301.445	305.640	310.160	314.065
<b>170</b>	291.930	292.685	293.505	294.385	295.345	297.350	299.375	301.360	303.285	305.130
<b>175</b>	296.015	296.375	296.730	297.085	297.440	297.795	298.140	298.475	298.800	299.110
<b>180</b>	297.000	297.000	297.000	297.000	297.000	297.000	297.000	297.000	297.000	297.000

**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>	393.060	393.060	393.060	393.060	393.060	393.060	393.060
<b>5</b>	352.315	349.465	347.660	346.950	345.940	384.210	384.835
<b>10</b>	282.530	276.870	272.260	269.620	267.565	304.240	304.785
<b>15</b>	212.705	204.990	198.790	195.185	191.875	222.510	222.970
<b>20</b>	149.920	141.705	135.165	130.935	127.540	149.920	150.130
<b>25</b>	100.630	93.340	87.595	83.865	81.015	95.140	95.310
<b>30</b>	65.970	60.230	55.700	52.850	50.630	59.220	59.180
<b>35</b>	42.205	37.930	34.785	33.025	31.475	36.420	36.465
<b>40</b>	27.745	25.105	22.970	21.710	20.790	23.680	23.720
<b>45</b>	18.945	17.225	15.885	15.045	14.500	16.220	16.180
<b>50</b>	13.875	12.740	11.820	11.275	10.895	11.945	11.905
<b>55</b>	10.520	9.765	9.180	8.800	8.550	9.220	9.220
<b>60</b>	8.425	7.880	7.505	7.210	7.000	7.420	7.460
<b>65</b>	6.790	6.370	6.075	5.870	5.700	5.995	5.950
<b>70</b>	5.280	4.990	4.780	4.610	4.485	4.695	4.695
<b>75</b>	3.900	3.690	3.565	3.435	3.355	3.480	3.435
<b>80</b>	2.555	2.430	2.305	2.305	2.220	2.265	2.265
<b>85</b>	0.965	0.920	0.880	0.840	0.795	0.840	0.840
<b>90</b>	2.440	2.440	2.440	2.440	2.440	2.440	2.440
<b>95</b>	15.085	14.705	13.940	13.485	13.185	13.975	11.360
<b>100</b>	58.905	55.355	52.275	49.385	47.140	46.055	43.880
<b>105</b>	119.900	116.010	110.880	107.740	104.990	98.105	105.325
<b>110</b>	208.755	201.770	201.410	194.700	190.550	189.900	196.360
<b>115</b>	283.705	291.705	293.335	296.015	301.720	312.800	314.090
<b>120</b>	344.415	358.540	371.845	381.355	391.710	397.215	399.715
<b>125</b>	388.250	406.415	426.545	437.215	445.750	452.505	455.415
<b>130</b>	403.545	426.500	444.570	458.145	469.290	476.655	479.225
<b>135</b>	404.785	426.735	444.100	459.085	469.920	476.805	478.970
<b>140</b>	397.405	416.355	432.395	445.300	455.010	461.255	463.465
<b>145</b>	384.545	400.065	413.375	424.310	432.025	437.015	438.985
<b>150</b>	367.315	379.775	390.375	398.765	405.055	408.705	410.485
<b>155</b>	349.405	358.540	366.305	372.375	377.185	379.600	380.895
<b>160</b>	332.780	338.440	343.365	347.685	350.400	352.380	353.065
<b>165</b>	317.690	321.005	323.990	325.990	327.465	328.715	329.220
<b>170</b>	306.910	308.035	309.015	309.850	310.525	311.130	311.405
<b>175</b>	299.405	299.680	299.935	300.170	300.485	300.590	300.720
<b>180</b>	297.000	297.000	297.000	297.000	297.000	297.000	297.000

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

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	134.90	N.A.	6.80
0-30	265.89	N.A.	13.40
0-40	398.37	N.A.	20.00
0-60	581.27	N.A.	29.20
0-80	638.17	N.A.	32.10
0-90	640.90	N.A.	32.20
10-90	604.16	N.A.	30.40
20-40	263.47	N.A.	13.20
20-50	372.28	N.A.	18.70
40-70	224.19	N.A.	11.30
60-80	56.89	N.A.	2.90
70-80	15.60	N.A.	0.80
80-90	2.73	N.A.	0.10
90-110	135.19	N.A.	6.80
90-120	350.82	N.A.	17.60
90-130	619.75	N.A.	31.20
90-150	1084.21	N.A.	54.50
90-180	1347.9	N.A.	67.80
110-180	1212.7	N.A.	61.00
0-180	1988.79	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	36.74
10-20	98.16
20-30	130.99
30-40	132.48
40-50	108.81
50-60	74.09
60-70	41.29
70-80	15.60
80-90	2.73
90-100	25.34
100-110	109.86
110-120	215.62
120-130	268.93
130-140	256.14
140-150	208.32
150-160	148.12
160-170	87.00
170-180	28.56

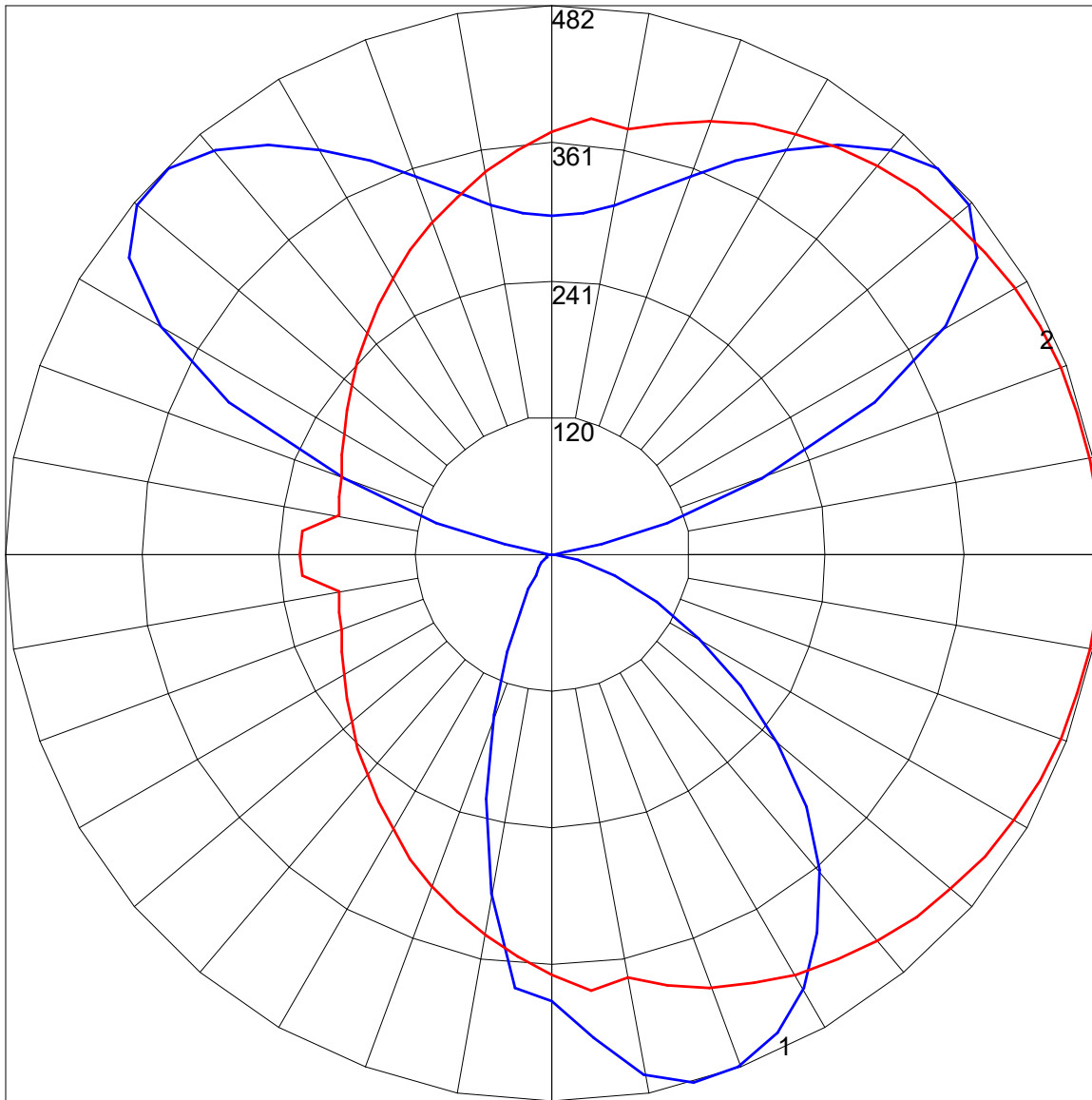
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : VODE\_107\_DB\_LO\_359\_G1A1\_BL.IES**

**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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32
1	94	91	87	84	85	82	79	76	65	63	62	50	49	48	36	36	35	29
2	87	80	74	70	78	72	68	64	58	55	52	45	43	41	33	32	30	25
3	79	71	64	59	71	64	58	54	52	48	44	40	38	35	30	28	27	22
4	73	63	56	50	66	57	51	46	46	42	38	36	33	31	27	25	24	20
5	67	56	49	43	60	51	45	40	42	37	34	33	30	27	25	23	21	17
6	62	51	43	38	56	46	40	35	38	33	30	30	27	24	22	20	19	16
7	57	46	38	33	52	42	35	31	34	30	26	27	24	22	21	19	17	14
8	53	42	35	30	48	38	32	27	31	27	23	25	22	19	19	17	15	13
9	50	38	31	26	45	35	29	25	29	24	21	23	20	18	18	16	14	12
10	46	35	28	24	42	32	26	22	27	22	19	21	18	16	17	14	13	11

POLAR GRAPH



Maximum Candela = 481.99 Located At Horizontal Angle = 0, Vertical Angle = 15  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)  
# 2 - Horizontal Cone Through Vertical Angle (15) (Through Max. Cd.)