

## IES Report

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

707-Z2-4-48-XX-XX-X-0-Z-LO-359-A1-X-WH-0

	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	55	57	58	58
Total Lumens, 4' rail length (1219mm)	812	838	855	864
Lumens per foot (305mm)	203	209	214	216
Input Power (W), 4' rail length (1219mm)	14.9	14.9	14.9	14.9
Watts per foot (305mm)	3.8	3.8	3.8	3.8
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\_LO\_359\_A1.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] L121911525 (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-LO-359-A1-AL

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

[MORE] low output, clear anodized finish

[TEST PROCEDURE] IESNA:LM-79-08

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	855
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	57
Total Luminaire Watts	14.89
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	2.40
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.60
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	49255	38140	12368
55	46171	33737	10523
65	40033	28116	9091
75	33866	23343	7678
85	33978	21407	5328

**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>	241.435	241.435	241.435	241.435	241.435	241.435	241.435	241.435	241.435	241.435
<b>5</b>	301.430	301.305	300.510	299.295	297.620	295.520	292.925	289.865	286.385	282.740
<b>10</b>	377.795	377.040	375.115	372.305	368.325	363.295	357.175	349.965	341.875	333.370
<b>15</b>	450.640	449.715	446.950	442.715	436.725	428.800	419.455	408.140	395.690	382.195
<b>20</b>	512.000	510.740	507.555	502.105	494.560	484.755	472.770	458.350	441.755	423.900
<b>25</b>	554.830	553.325	549.845	543.935	535.680	524.570	511.075	494.520	475.785	453.990
<b>30</b>	576.625	575.450	571.680	565.520	557.265	545.150	530.270	512.795	492.510	468.160
<b>35</b>	576.710	575.660	572.100	565.940	557.305	545.275	529.725	511.200	489.700	463.755
<b>40</b>	555.755	554.580	551.310	545.445	536.560	524.530	508.605	489.405	466.775	440.495
<b>45</b>	515.600	514.430	511.160	505.375	496.950	484.755	468.365	448.835	425.700	399.255
<b>50</b>	459.270	458.265	455.205	449.840	441.375	429.345	413.840	393.930	370.585	345.060
<b>55</b>	392.045	391.250	388.775	383.830	375.700	364.385	349.800	330.980	309.605	286.470
<b>60</b>	320.795	319.915	317.695	313.420	306.125	296.025	283.075	266.645	248.245	228.715
<b>65</b>	250.465	249.840	248.035	244.305	238.145	229.845	219.115	205.790	191.160	175.905
<b>70</b>	185.755	185.295	183.575	180.685	175.905	169.365	161.195	151.805	140.825	129.510
<b>75</b>	129.760	129.340	128.085	125.820	122.260	117.440	111.400	104.530	97.070	89.440
<b>80</b>	81.730	81.350	80.430	78.835	76.240	72.970	68.945	64.505	59.725	54.905
<b>85</b>	43.840	43.630	42.960	41.870	40.195	38.140	35.750	33.155	30.430	27.620
<b>90</b>	18.020	17.895	17.520	16.850	15.970	14.880	13.705	12.320	10.980	9.680
<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>	241.435	241.435	241.435	241.435	241.435	241.435	241.435	241.435	241.435	241.435
<b>5</b>	278.675	274.275	269.870	265.220	260.360	255.580	250.635	245.690	240.700	235.755
<b>10</b>	323.855	313.965	303.320	292.335	281.525	270.625	259.395	248.370	237.850	227.165
<b>15</b>	366.900	351.140	334.415	316.855	299.715	282.485	264.590	248.245	232.400	216.600
<b>20</b>	403.655	382.785	359.815	336.220	312.955	289.740	265.765	244.180	223.725	203.610
<b>25</b>	429.765	404.285	376.410	347.450	318.950	290.535	261.490	235.420	211.235	188.060
<b>30</b>	440.955	412.290	380.605	347.535	314.885	281.815	250.045	221.210	194.765	170.120
<b>35</b>	434.460	403.405	369.415	333.830	299.170	264.215	231.060	201.305	174.815	150.380
<b>40</b>	409.315	377.420	342.380	306.545	272.010	237.640	205.455	177.245	152.390	129.845
<b>45</b>	368.280	336.680	303.110	269.035	236.760	205.535	176.490	151.345	129.465	109.975
<b>50</b>	316.350	287.515	258.010	226.910	199.080	172.805	147.865	126.950	108.550	92.460
<b>55</b>	261.320	235.380	210.480	186.255	162.535	141.830	121.670	104.485	89.355	76.280
<b>60</b>	208.135	187.265	167.355	146.775	130.640	113.415	97.695	84.285	72.255	61.905

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

<b>65</b>	160.400	144.555	129.550	115.050	100.840	87.930	76.490	66.095	56.875	48.995
<b>70</b>	118.275	106.750	95.685	84.915	75.105	65.595	57.170	49.455	42.500	36.925
<b>75</b>	81.475	73.640	66.180	58.805	52.055	45.515	39.400	34.115	29.420	25.440
<b>80</b>	49.960	45.055	40.360	35.750	31.520	27.370	23.515	20.075	17.060	14.755
<b>85</b>	24.940	22.215	19.530	17.015	14.670	12.405	10.225	8.425	6.875	5.910
<b>90</b>	8.385	7.085	5.825	4.610	3.565	2.515	1.635	0.920	0.545	0.505
<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>	241.435	241.435	241.435	241.435	241.435	241.435	241.435	241.435	241.435	241.435
<b>5</b>	231.020	226.450	221.925	217.815	213.625	209.940	206.585	203.315	200.425	197.910
<b>10</b>	217.440	208.220	199.335	190.995	183.615	176.745	170.500	164.800	159.935	155.620
<b>15</b>	202.560	189.485	177.290	166.265	156.665	148.035	140.490	133.490	127.830	122.970
<b>20</b>	186.175	169.995	156.205	143.505	132.905	123.810	115.805	109.055	103.735	99.080
<b>25</b>	168.485	150.925	136.130	123.220	112.745	104.070	96.900	90.700	86.045	82.400
<b>30</b>	149.835	132.065	117.605	105.325	95.770	88.100	82.020	77.035	73.345	70.245
<b>35</b>	130.725	113.960	100.755	90.195	81.855	75.440	70.330	66.305	63.370	61.025
<b>40</b>	112.075	97.280	85.920	77.035	69.995	64.755	60.645	57.505	55.200	53.480
<b>45</b>	94.765	82.275	72.800	65.510	59.725	55.535	52.265	49.835	48.075	46.690
<b>50</b>	79.845	69.490	61.695	55.535	51.090	47.570	45.055	43.210	41.910	40.825
<b>55</b>	66.095	58.005	51.345	46.565	43.335	40.405	38.310	36.755	35.585	34.705
<b>60</b>	53.815	47.445	42.875	38.600	35.625	33.360	31.685	30.430	29.505	28.710
<b>65</b>	43.880	37.845	33.825	30.850	28.460	26.700	25.355	24.310	23.470	22.885
<b>70</b>	32.355	28.585	25.650	23.385	21.585	20.245	19.195	18.315	17.730	17.185
<b>75</b>	22.255	19.655	17.730	16.220	14.920	14.040	13.285	12.700	12.240	11.905
<b>80</b>	12.910	11.400	10.355	9.515	8.800	8.300	7.880	7.545	7.295	7.085
<b>85</b>	5.195	4.650	4.275	3.940	3.730	3.520	3.395	3.270	3.225	3.145
<b>90</b>	0.505	0.420	0.375	0.335	0.335	0.295	0.250	0.250	0.250	0.250
<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\_LO\_359\_A1.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.  
Angles**

**Horizontal 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>	241.435	241.435	241.435	241.435	241.435	241.435	241.435
<b>5</b>	195.645	193.720	192.295	190.910	190.115	189.570	189.360
<b>10</b>	151.805	148.830	146.275	144.260	142.920	142.040	141.745
<b>15</b>	118.735	115.510	112.745	110.775	109.350	108.470	108.215
<b>20</b>	95.265	92.375	90.025	88.310	87.050	86.380	86.090
<b>25</b>	79.340	76.950	75.105	73.725	72.845	72.340	72.090
<b>30</b>	67.900	66.135	64.710	63.705	63.035	62.615	62.535
<b>35</b>	59.265	57.925	56.875	56.080	55.620	55.365	55.240
<b>40</b>	52.055	51.090	50.335	49.790	49.455	49.245	49.205
<b>45</b>	45.685	44.930	44.425	43.965	43.715	43.630	43.590
<b>50</b>	39.985	39.440	39.020	38.685	38.515	38.435	38.390
<b>55</b>	34.035	33.570	33.235	32.945	32.775	32.690	32.690
<b>60</b>	28.125	27.705	27.410	27.160	26.990	26.910	26.910
<b>65</b>	22.340	22.005	21.710	21.500	21.335	21.290	21.290
<b>70</b>	16.805	16.515	16.260	16.095	15.970	15.885	15.845
<b>75</b>	11.610	11.400	11.190	11.065	10.980	10.940	10.895
<b>80</b>	6.915	6.790	6.665	6.580	6.495	6.495	6.455
<b>85</b>	3.100	3.060	2.975	2.975	2.975	2.935	2.935
<b>90</b>	0.250	0.250	0.250	0.250	0.250	0.250	0.250
<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\_LO\_359\_A1.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	96.29	N.A.	11.30
0-30	219.32	N.A.	25.70
0-40	378.14	N.A.	44.20
0-60	682.88	N.A.	79.90
0-80	835.40	N.A.	97.70
0-90	853.62	N.A.	99.80
10-90	830.23	N.A.	97.10
20-40	281.85	N.A.	33.00
20-50	446.57	N.A.	52.20
40-70	403.02	N.A.	47.10
60-80	152.52	N.A.	17.80
70-80	54.23	N.A.	6.30
80-90	18.23	N.A.	2.10
90-110	1.36	N.A.	0.20
90-120	1.36	N.A.	0.20
90-130	1.36	N.A.	0.20
90-150	1.36	N.A.	0.20
90-180	1.36	N.A.	0.20
110-180	0.00	N.A.	0.00
0-180	854.99	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	23.39
10-20	72.90
20-30	123.03
30-40	158.82
40-50	164.72
50-60	140.01
60-70	98.29
70-80	54.23
80-90	18.23
90-100	1.36
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

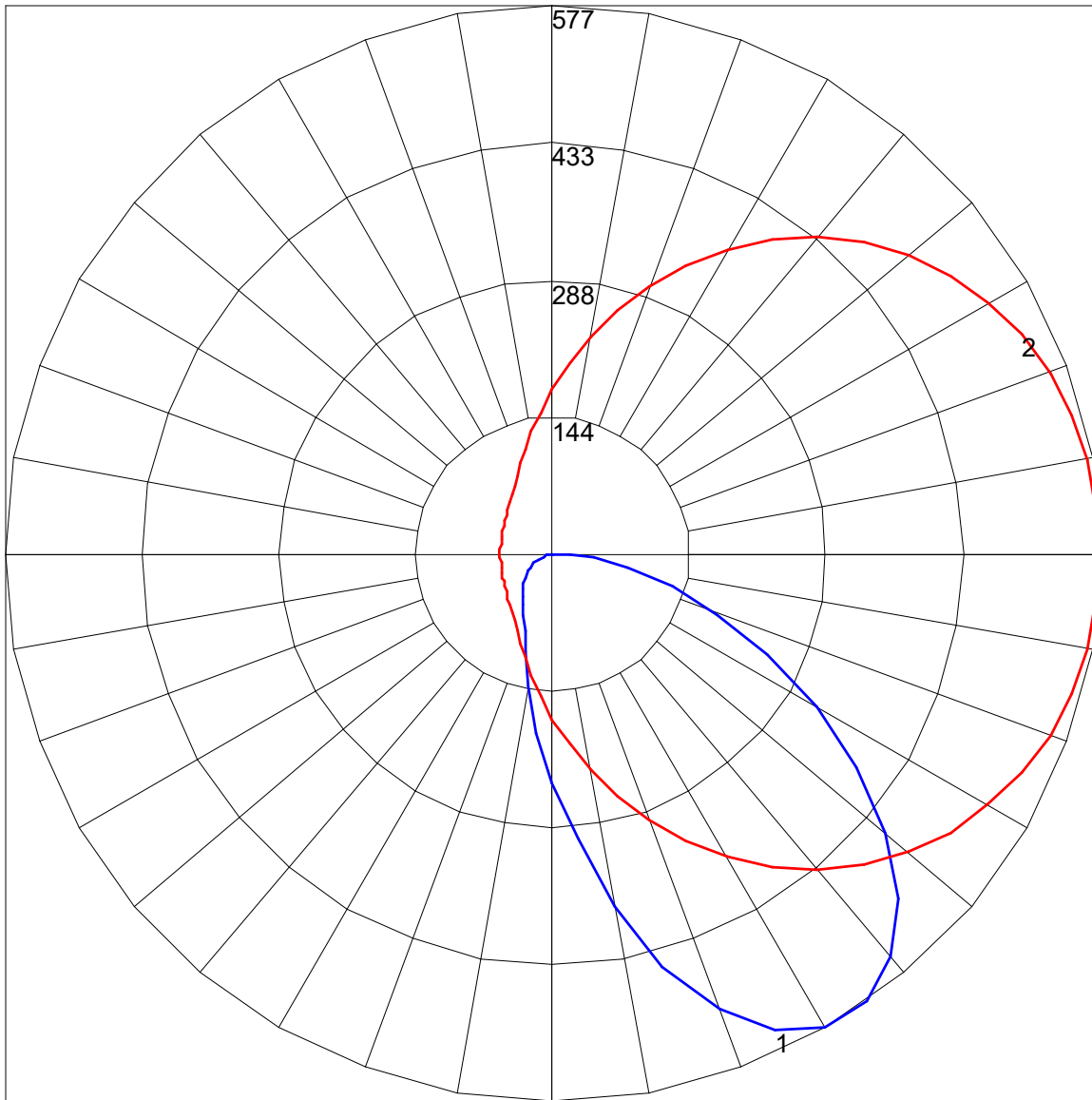
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : VODE\_707\_Z2\_LO\_359\_A1.IES**

**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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	83
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23

POLAR GRAPH



Maximum Candela = 576.71 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.)