

## IES Report

# ZipTwo® | 707 | Square, Side Diffuse | 90 CRI | SO

707-Z2-4-48-XX-XX-X-0-Z-SO-359-S9-X-WH-0

	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	85	87	89	90
Total Lumens, 4' rail length (1219mm)	2200	2270	2316	2339
Lumens per foot (305mm)	550	567	579	585
Input Power (W), 4' rail length (1219mm)	26.1	26.1	26.1	26.1
Watts per foot (305mm)	6.6	6.6	6.6	6.6
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\_SO\_359\_S9.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] L121911537 (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-SO-359-S9-AL

[LUMINAIRE] ZipTwo LED, 48", 3500K, 90 CRI, zipper board, square side diffuse lens,

[MORE] standard 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	2316
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	89
Total Luminaire Watts	26.11
Ballast Factor	1.00
CIE Type	General Diffuse
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)	0.11 ft
Luminous Width (90-270)	3.98 ft
Luminous Height	0.08 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	6961	7158	8496
55	5510	5901	8084
65	3873	4412	7550
75	2258	2805	7049
85	675	1026	5445

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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>	356.67	356.67	356.67	356.67	356.67	356.67	356.67	356.67	356.67	356.67
<b>5</b>	370.75	370.65	370.55	369.97	369.50	368.93	368.27	367.52	366.69	365.78
<b>10</b>	387.18	386.92	386.17	385.30	384.20	382.88	381.36	379.17	376.86	374.42
<b>15</b>	403.61	403.15	401.94	400.56	398.68	395.84	392.74	389.43	385.93	381.83
<b>20</b>	416.69	416.02	414.54	412.58	409.27	405.72	401.77	396.92	392.09	386.57
<b>25</b>	423.06	421.98	420.66	417.46	413.88	409.49	404.57	399.90	392.76	385.53
<b>30</b>	419.62	418.45	416.83	413.58	409.68	405.09	400.17	393.63	386.45	378.82
<b>35</b>	405.46	404.28	402.27	399.67	395.60	391.22	386.23	378.78	372.12	363.96
<b>40</b>	380.31	379.37	377.26	374.56	371.62	368.27	362.27	356.11	348.19	340.67
<b>45</b>	346.11	345.66	344.13	342.45	339.33	336.61	331.56	327.95	319.96	314.96
<b>50</b>	307.30	306.57	305.11	303.46	301.06	298.15	294.68	290.42	285.20	279.07
<b>55</b>	262.29	261.67	261.17	260.36	258.86	256.34	253.49	249.83	246.38	241.79
<b>60</b>	216.02	215.64	215.50	214.99	214.26	212.58	210.32	208.05	205.20	201.24
<b>65</b>	170.58	170.55	170.88	170.55	170.05	169.20	168.00	166.25	164.23	161.95
<b>70</b>	127.58	127.86	128.32	128.36	128.43	127.84	127.20	126.27	124.89	122.96
<b>75</b>	88.35	88.92	89.52	89.96	89.99	90.01	89.54	88.96	88.54	87.84
<b>80</b>	53.31	54.17	55.04	55.60	55.69	55.71	55.80	55.70	54.97	54.29
<b>85</b>	22.30	23.97	24.84	25.42	25.67	25.65	25.76	25.82	25.84	25.62
<b>90</b>	4.85	4.44	4.28	4.19	4.11	3.94	3.69	3.52	3.27	3.10
<b>95</b>	22.30	23.97	24.84	25.42	25.67	25.65	25.76	25.82	25.84	25.62
<b>100</b>	53.31	54.17	55.04	55.60	55.69	55.71	55.80	55.70	54.97	54.29
<b>105</b>	88.35	88.92	89.52	89.96	89.99	90.01	89.54	88.96	88.54	87.84
<b>110</b>	127.58	127.86	128.32	128.36	128.43	127.84	127.20	126.27	124.89	122.96
<b>115</b>	170.58	170.55	170.88	170.55	170.05	169.20	168.00	166.25	164.23	161.95
<b>120</b>	216.02	215.64	215.50	214.99	214.26	212.58	210.32	208.05	205.20	201.24
<b>125</b>	262.29	261.67	261.17	260.36	258.86	256.34	253.49	249.83	246.38	241.79
<b>130</b>	307.30	306.57	305.11	303.46	301.06	298.15	294.68	290.42	285.20	279.07
<b>135</b>	346.11	345.66	344.13	342.45	339.33	336.61	331.56	327.95	319.96	314.96
<b>140</b>	380.31	379.37	377.26	374.56	371.62	368.27	362.27	356.11	348.19	340.67
<b>145</b>	405.46	404.28	402.27	399.67	395.60	391.22	386.23	378.78	372.12	363.96
<b>150</b>	419.62	418.45	416.83	413.58	409.68	405.09	400.17	393.63	386.45	378.82
<b>155</b>	423.06	421.98	420.66	417.46	413.88	409.49	404.57	399.90	392.76	385.53
<b>160</b>	416.69	416.02	414.54	412.58	409.27	405.72	401.77	396.92	392.09	386.57
<b>165</b>	403.61	403.15	401.94	400.56	398.68	395.84	392.74	389.43	385.93	381.83
<b>170</b>	387.18	386.92	386.17	385.30	384.20	382.88	381.36	379.17	376.86	374.42
<b>175</b>	370.75	370.65	370.55	369.97	369.50	368.93	368.27	367.52	366.69	365.78
<b>180</b>	356.00	356.00	356.00	356.00	356.00	356.00	356.00	356.00	356.00	356.00

**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>	356.67	356.67	356.67	356.67	356.67	356.67	356.67	356.67	356.67	356.67
<b>5</b>	364.81	363.77	362.67	361.53	360.36	359.15	357.93	356.69	355.46	354.52
<b>10</b>	371.88	369.24	366.59	364.09	361.62	359.15	356.69	354.25	351.85	350.02
<b>15</b>	377.53	373.19	368.86	364.57	360.32	356.54	352.87	349.31	345.86	343.18
<b>20</b>	380.44	374.08	367.96	362.03	356.32	350.84	346.06	341.55	337.27	334.22
<b>25</b>	378.63	370.90	362.96	355.51	348.37	341.64	335.73	330.90	326.50	322.61
<b>30</b>	370.53	362.03	353.22	344.65	337.31	330.04	323.53	317.56	312.12	307.76
<b>35</b>	355.27	347.16	337.51	329.08	321.18	313.48	306.06	299.65	294.10	289.92
<b>40</b>	334.33	326.33	317.55	308.47	299.97	292.49	284.91	278.44	272.93	269.09
<b>45</b>	306.51	299.15	290.60	281.98	274.33	267.27	260.30	254.36	249.50	245.80
<b>50</b>	273.26	267.15	259.55	251.86	244.91	238.37	232.36	227.15	223.22	219.92
<b>55</b>	236.26	230.99	224.96	218.89	212.69	207.36	202.67	198.31	194.18	192.27
<b>60</b>	197.30	193.13	188.94	184.08	179.21	175.03	171.51	168.23	165.22	163.58

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**CANDELA TABULATION - (Cont.)**

<b>65</b>	159.00	155.82	152.27	148.48	145.24	142.38	138.94	136.60	135.50	133.38
<b>70</b>	120.79	118.92	116.60	114.16	112.06	110.18	107.80	106.27	105.45	104.20
<b>75</b>	85.91	85.41	84.64	84.22	83.75	82.06	81.06	80.56	79.84	79.75
<b>80</b>	53.95	54.11	53.13	51.80	51.35	50.28	49.14	49.03	48.66	48.20
<b>85</b>	24.90	25.27	24.94	23.99	24.40	24.13	23.19	23.82	23.76	23.19
<b>90</b>	2.85	2.60	2.26	2.26	1.93	1.59	2.10	1.68	1.17	2.26
<b>95</b>	24.90	25.27	24.94	23.99	24.40	24.13	23.19	23.82	23.76	23.19
<b>100</b>	53.95	54.11	53.13	51.80	51.35	50.28	49.14	49.03	48.66	48.20
<b>105</b>	85.91	85.41	84.64	84.22	83.75	82.06	81.06	80.56	79.84	79.75
<b>110</b>	120.79	118.92	116.60	114.16	112.06	110.18	107.80	106.27	105.45	104.20
<b>115</b>	159.00	155.82	152.27	148.48	145.24	142.38	138.94	136.60	135.50	133.38
<b>120</b>	197.30	193.13	188.94	184.08	179.21	175.03	171.51	168.23	165.22	163.58
<b>125</b>	236.26	230.99	224.96	218.89	212.69	207.36	202.67	198.31	194.18	192.27
<b>130</b>	273.26	267.15	259.55	251.86	244.91	238.37	232.36	227.15	223.22	219.92
<b>135</b>	306.51	299.15	290.60	281.98	274.33	267.27	260.30	254.36	249.50	245.80
<b>140</b>	334.33	326.33	317.55	308.47	299.97	292.49	284.91	278.44	272.93	269.09
<b>145</b>	355.27	347.16	337.51	329.08	321.18	313.48	306.06	299.65	294.10	289.92
<b>150</b>	370.53	362.03	353.22	344.65	337.31	330.04	323.53	317.56	312.12	307.76
<b>155</b>	378.63	370.90	362.96	355.51	348.37	341.64	335.73	330.90	326.50	322.61
<b>160</b>	380.44	374.08	367.96	362.03	356.32	350.84	346.06	341.55	337.27	334.22
<b>165</b>	377.53	373.19	368.86	364.57	360.32	356.54	352.87	349.31	345.86	343.18
<b>170</b>	371.88	369.24	366.59	364.09	361.62	359.15	356.69	354.25	351.85	350.02
<b>175</b>	364.81	363.77	362.67	361.53	360.36	359.15	357.93	356.69	355.46	354.52
<b>180</b>	356.00	356.00	356.00	356.00	356.00	356.00	356.00	356.00	356.00	356.00

**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>	356.67	356.67	356.67	356.67	356.67	356.67	356.67	356.67	356.67	356.67
<b>5</b>	353.59	352.68	351.81	350.97	350.17	349.42	348.73	348.09	347.52	347.02
<b>10</b>	348.25	346.56	344.96	343.46	342.07	341.28	340.59	339.99	339.47	339.05
<b>15</b>	340.65	338.29	336.27	335.03	334.08	333.32	332.75	332.51	332.42	332.09
<b>20</b>	331.39	328.91	326.93	325.42	324.30	323.95	323.98	324.06	324.05	324.05
<b>25</b>	319.13	316.46	314.46	313.04	312.71	312.85	313.07	312.96	313.32	314.08
<b>30</b>	303.95	301.50	299.59	298.90	298.87	299.00	299.17	299.64	300.44	301.13
<b>35</b>	286.46	283.88	282.44	282.18	282.25	282.82	282.98	283.81	284.74	285.44
<b>40</b>	265.89	263.32	262.45	262.40	262.65	263.35	264.20	265.09	266.10	267.08
<b>45</b>	242.90	240.90	240.36	240.12	240.45	241.19	242.10	243.61	244.33	245.78
<b>50</b>	217.36	216.01	216.06	215.83	216.40	217.29	218.27	219.24	220.36	221.47
<b>55</b>	190.55	189.40	189.14	189.41	190.22	191.12	192.09	193.47	194.04	193.78
<b>60</b>	162.32	161.60	161.52	161.91	162.55	163.70	164.42	163.54	162.49	160.80
<b>65</b>	132.49	132.94	133.12	133.48	134.18	134.94	134.89	132.22	129.86	128.06
<b>70</b>	103.78	104.03	104.58	104.86	105.32	105.04	103.58	101.65	100.03	98.89
<b>75</b>	80.28	76.37	76.37	76.63	77.27	76.66	75.11	73.59	72.36	71.30
<b>80</b>	48.90	49.18	49.59	49.98	50.12	48.35	47.00	45.67	44.07	42.33
<b>85</b>	24.21	24.47	23.97	22.65	20.90	18.85	18.28	17.89	17.36	17.16
<b>90</b>	2.01	2.18	2.43	2.68	2.93	3.52	3.94	4.11	4.36	4.53
<b>95</b>	24.21	24.47	23.97	22.65	20.90	18.85	18.28	17.89	17.36	17.16
<b>100</b>	48.90	49.18	49.59	49.98	50.12	48.35	47.00	45.67	44.07	42.33
<b>105</b>	80.28	76.37	76.37	76.63	77.27	76.66	75.11	73.59	72.36	71.30
<b>110</b>	103.78	104.03	104.58	104.86	105.32	105.04	103.58	101.65	100.03	98.89
<b>115</b>	132.49	132.94	133.12	133.48	134.18	134.94	134.89	132.22	129.86	128.06
<b>120</b>	162.32	161.60	161.52	161.91	162.55	163.70	164.42	163.54	162.49	160.80
<b>125</b>	190.55	189.40	189.14	189.41	190.22	191.12	192.09	193.47	194.04	193.78
<b>130</b>	217.36	216.01	216.06	215.83	216.40	217.29	218.27	219.24	220.36	221.47
<b>135</b>	242.90	240.90	240.36	240.12	240.45	241.19	242.10	243.61	244.33	245.78

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**CANDELA TABULATION - (Cont.)**

<b>140</b>	265.89	263.32	262.45	262.40	262.65	263.35	264.20	265.09	266.10	267.08
<b>145</b>	286.46	283.88	282.44	282.18	282.25	282.82	282.98	283.81	284.74	285.44
<b>150</b>	303.95	301.50	299.59	298.90	298.87	299.00	299.17	299.64	300.44	301.13
<b>155</b>	319.13	316.46	314.46	313.04	312.71	312.85	313.07	312.96	313.32	314.08
<b>160</b>	331.39	328.91	326.93	325.42	324.30	323.95	323.98	324.06	324.05	324.05
<b>165</b>	340.65	338.29	336.27	335.03	334.08	333.32	332.75	332.51	332.42	332.09
<b>170</b>	348.25	346.56	344.96	343.46	342.07	341.28	340.59	339.99	339.47	339.05
<b>175</b>	353.59	352.68	351.81	350.97	350.17	349.42	348.73	348.09	347.52	347.02
<b>180</b>	356.00	356.00	356.00	356.00	356.00	356.00	356.00	356.00	356.00	356.00

**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>	356.67	356.67	356.67	356.67	356.67	356.67	356.67
<b>5</b>	346.59	346.24	345.96	345.77	345.66	345.63	345.69
<b>10</b>	338.75	338.27	337.92	337.69	337.58	337.59	337.73
<b>15</b>	331.98	332.06	332.34	332.33	332.33	332.46	332.70
<b>20</b>	324.38	324.43	324.60	325.03	325.07	325.16	325.49
<b>25</b>	314.17	314.70	315.21	315.57	316.17	316.20	316.60
<b>30</b>	302.02	302.57	303.19	303.77	304.43	304.66	305.12
<b>35</b>	286.76	287.39	288.04	288.87	289.31	289.80	290.20
<b>40</b>	267.96	269.20	269.70	270.22	270.91	271.60	271.84
<b>45</b>	246.40	247.69	248.39	249.01	249.61	250.19	250.38
<b>50</b>	222.42	223.35	224.17	224.76	225.26	225.73	226.07
<b>55</b>	195.42	195.47	197.38	198.55	199.00	199.34	199.67
<b>60</b>	159.84	160.11	162.20	166.37	170.53	171.61	171.92
<b>65</b>	127.42	126.88	127.66	129.82	135.71	142.88	143.26
<b>70</b>	99.78	100.58	100.71	100.31	100.61	109.63	114.34
<b>75</b>	70.57	71.50	72.66	73.93	73.78	72.47	84.08
<b>80</b>	41.99	42.02	42.64	43.99	44.68	44.01	51.64
<b>85</b>	18.04	18.86	20.16	21.19	22.17	23.21	22.88
<b>90</b>	5.11	5.87	6.62	7.38	7.80	7.96	0.00
<b>95</b>	18.04	18.86	20.16	21.19	22.17	23.21	22.88
<b>100</b>	41.99	42.02	42.64	43.99	44.68	44.01	51.64
<b>105</b>	70.57	71.50	72.66	73.93	73.78	72.47	84.08
<b>110</b>	99.78	100.58	100.71	100.31	100.61	109.63	114.34
<b>115</b>	127.42	126.88	127.66	129.82	135.71	142.88	143.26
<b>120</b>	159.84	160.11	162.20	166.37	170.53	171.61	171.92
<b>125</b>	195.42	195.47	197.38	198.55	199.00	199.34	199.67
<b>130</b>	222.42	223.35	224.17	224.76	225.26	225.73	226.07
<b>135</b>	246.40	247.69	248.39	249.01	249.61	250.19	250.38
<b>140</b>	267.96	269.20	269.70	270.22	270.91	271.60	271.84
<b>145</b>	286.76	287.39	288.04	288.87	289.31	289.80	290.20
<b>150</b>	302.02	302.57	303.19	303.77	304.43	304.66	305.12
<b>155</b>	314.17	314.70	315.21	315.57	316.17	316.20	316.60
<b>160</b>	324.38	324.43	324.60	325.03	325.07	325.16	325.49
<b>165</b>	331.98	332.06	332.34	332.33	332.33	332.46	332.70
<b>170</b>	338.75	338.27	337.92	337.69	337.58	337.59	337.73
<b>175</b>	346.59	346.24	345.96	345.77	345.66	345.63	345.69
<b>180</b>	356.00	356.00	356.00	356.00	356.00	356.00	356.00

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : VODE\_707\_Z2\_SO\_359\_S9.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	135.08	N.A.	5.80
0-30	295.67	N.A.	12.80
0-40	496.96	N.A.	21.50
0-60	901.46	N.A.	38.90
0-80	1131.00	N.A.	48.80
0-90	1157.99	N.A.	50.00
10-90	1123.92	N.A.	48.50
20-40	361.88	N.A.	15.60
20-50	574.56	N.A.	24.80
40-70	548.78	N.A.	23.70
60-80	229.55	N.A.	9.90
70-80	85.26	N.A.	3.70
80-90	26.99	N.A.	1.20
90-110	112.25	N.A.	4.80
90-120	256.54	N.A.	11.10
90-130	448.36	N.A.	19.40
90-150	862.32	N.A.	37.20
90-180	1157.99	N.A.	50.00
110-180	1045.73	N.A.	45.20
0-180	2315.98	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	34.08
10-20	101.00
20-30	160.59
30-40	201.29
40-50	212.68
50-60	191.82
60-70	144.28
70-80	85.26
80-90	26.99
90-100	26.99
100-110	85.26
110-120	144.28
120-130	191.82
130-140	212.68
140-150	201.29
150-160	160.59
160-170	101.00
170-180	34.07

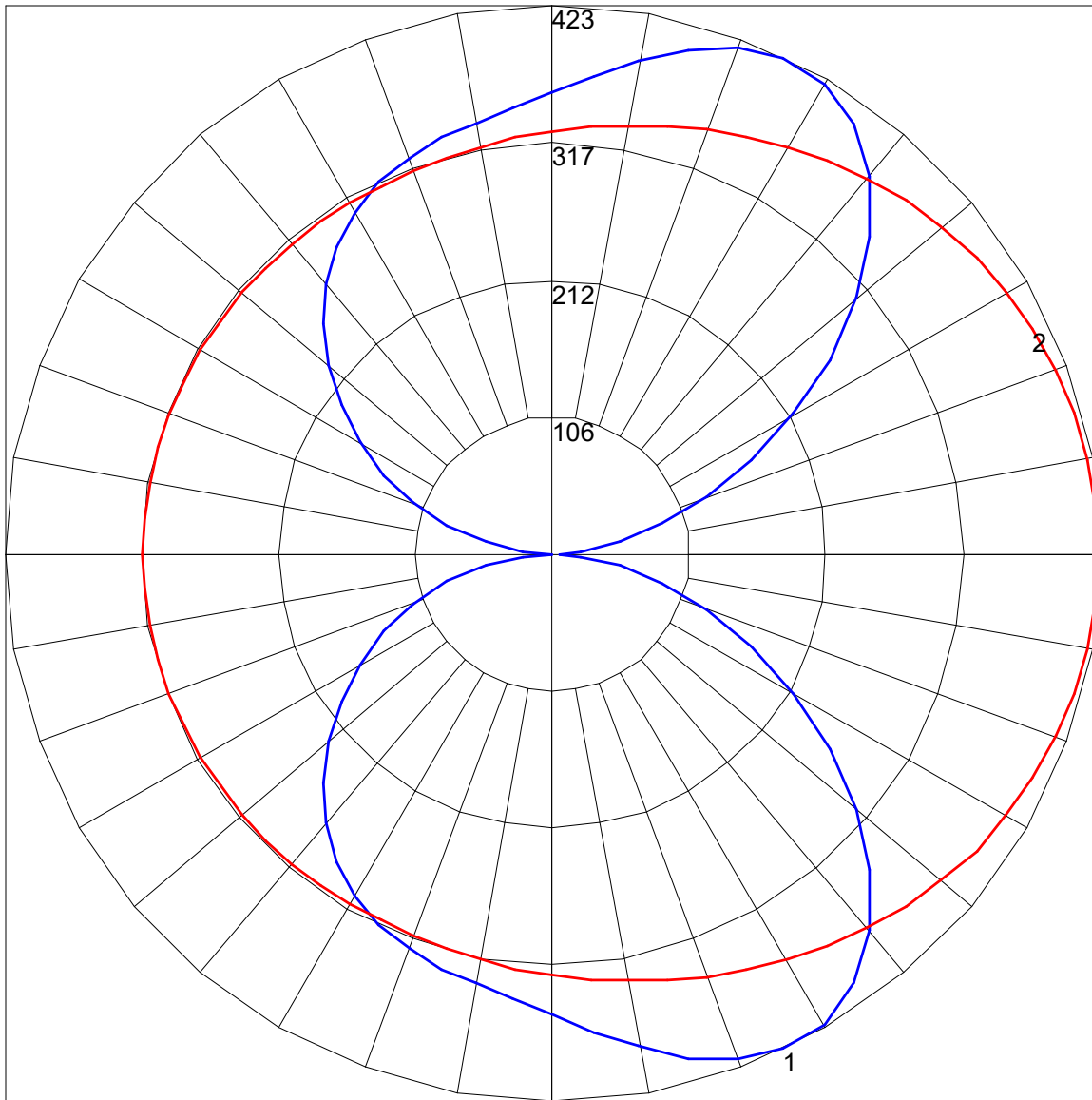
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : VODE\_707\_Z2\_SO\_359\_S9.IES**

**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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	97	93	89	85	90	86	82	79	73	70	68	60	59	57	49	48	47	41
2	89	81	75	69	81	75	69	65	63	59	56	53	50	47	43	41	39	34
3	81	71	63	57	74	66	59	54	56	51	46	46	43	40	38	35	33	29
4	74	63	54	48	67	58	51	45	49	44	39	41	37	34	34	31	28	24
5	67	56	47	41	62	52	44	39	44	38	34	37	32	29	30	27	24	21
6	62	50	41	36	57	46	39	33	39	34	29	33	29	25	27	24	21	18
7	57	45	37	31	53	42	34	29	36	30	26	30	25	22	25	21	19	16
8	53	41	33	27	49	38	31	26	32	27	23	27	23	20	23	19	17	14
9	49	37	29	24	45	34	28	23	30	24	20	25	21	18	21	17	15	13
10	46	34	26	22	42	32	25	20	27	22	18	23	19	16	19	16	13	11

POLAR GRAPH



Maximum Candela = 423.06 Located At Horizontal Angle = 0, Vertical Angle = 25  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)  
# 2 - Horizontal Cone Through Vertical Angle (25) (Through Max. Cd.)