

IES Report

**BoxRail® | 107 | 85° Asymmetric | 90 CRI | LO**

107-BX-XX-4-48-XX-XX-XX-XX-X-X-Z-LO-359-A1-X-AL / WH-X

	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	57	59	60	61
Total Lumens, 4' rail length (1219mm)	841	867	885	903
Lumens per foot (305mm)	210	217	221	226
Input Power (W), 4' rail length (1219mm)	15.0	15.0	15.0	15.0
Watts per foot (305mm)	3.8	3.8	3.8	3.8
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\_BX\_LO\_359\_A1.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST] L071704225 (SOURCE REPORT FOR REFERENCE)  
[TESTLAB] REPORT BASED ON DATA PRODUCED BY NVLAP ACCREDITED LAB  
[ISSUEDATE] 11/1/2017  
[MANUFAC] Vode Lighting  
[LUMCAT] 707-Z2-48-Z-LO-359-A1-AL  
[LUMINAIRE] ZipTwo LED, 48", 3500K, 90 CRI, zipper board,  
[MORE] 85° white asymmetric lens, low output  
[TEST PROCEDURE] IESNA:LM-79-08

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	885
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	59
Total Luminaire Watts	14.95
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.94
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.36
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.06 ft
Luminous Width (90-270)	4.02 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	28048	24534	11065
55	25584	21265	8440
65	21748	17384	6625
75	17683	13744	5231
85	15382	10963	3402

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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>	341.042	341.042	341.042	341.042	341.042	341.042	341.042	341.042	341.042	341.042
<b>5</b>	406.465	406.210	405.404	404.262	402.568	400.365	397.866	394.776	391.303	387.534
<b>10</b>	470.495	469.985	468.629	466.599	463.462	459.525	454.910	449.106	442.415	435.178
<b>15</b>	514.452	513.901	512.417	509.964	506.236	501.493	495.567	488.279	479.854	470.368
<b>20</b>	539.269	538.759	537.234	534.653	530.925	525.886	519.833	512.081	502.763	492.175
<b>25</b>	548.163	547.653	546.169	543.757	539.947	534.908	528.640	520.761	511.147	500.009
<b>30</b>	542.400	541.849	540.498	538.081	534.439	529.319	523.051	514.789	504.752	493.109
<b>35</b>	522.923	522.413	521.271	518.981	515.467	510.388	503.778	495.016	484.174	471.765
<b>40</b>	489.972	489.636	488.575	486.458	483.072	477.946	470.919	461.642	449.958	436.529
<b>45</b>	444.832	444.705	443.812	441.951	438.773	433.398	426.197	416.328	403.670	389.099
<b>50</b>	389.946	389.778	389.099	387.238	384.101	378.935	371.356	361.024	347.769	332.775
<b>55</b>	329.134	329.052	328.328	326.762	323.758	318.760	311.263	300.844	288.354	273.574
<b>60</b>	266.460	266.373	265.781	264.466	261.798	256.974	250.068	240.837	229.571	216.740
<b>65</b>	206.152	206.111	205.688	204.500	202.256	198.191	192.433	184.431	175.618	164.781
<b>70</b>	151.694	151.608	151.225	150.338	148.517	145.299	140.765	134.625	127.260	119.340
<b>75</b>	102.653	102.612	102.229	101.510	100.154	97.782	94.523	90.244	85.165	79.784
<b>80</b>	61.404	61.363	61.067	60.517	59.502	57.890	55.814	53.065	49.888	46.624
<b>85</b>	30.070	29.983	29.728	29.264	28.545	27.611	26.341	24.817	23.123	21.430
<b>90</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**

	<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>	341.042	341.042	341.042	341.042	341.042	341.042	341.042	341.042	341.042	341.042
<b>5</b>	383.255	378.558	373.728	368.602	363.355	357.464	351.747	346.030	340.144	334.091
<b>10</b>	426.834	417.517	407.776	397.229	386.095	373.641	361.447	349.080	336.039	323.034
<b>15</b>	459.189	446.694	433.184	418.450	402.441	384.188	366.149	347.514	327.864	308.382
<b>20</b>	479.471	464.860	448.810	430.940	411.289	388.339	365.175	340.991	315.415	290.006
<b>25</b>	486.504	470.791	453.176	433.230	410.953	384.443	357.337	328.629	297.922	267.770
<b>30</b>	479.007	462.448	444.067	422.892	398.927	370.214	340.440	308.637	274.502	241.516
<b>35</b>	456.817	439.498	420.439	398.713	373.983	345.479	313.890	280.689	245.412	211.318
<b>40</b>	420.439	402.313	382.622	360.810	335.616	308.509	277.720	245.494	211.318	178.923
<b>45</b>	372.586	353.359	333.494	312.196	288.267	262.222	234.738	205.601	175.491	146.186
<b>50</b>	316.093	297.498	278.062	257.479	236.558	213.522	186.844	165.709	140.133	116.882
<b>55</b>	257.693	240.669	223.094	205.096	186.079	168.376	148.430	128.658	108.584	91.137
<b>60</b>	202.087	185.951	173.716	158.977	144.412	129.081	113.536	98.292	83.640	70.258
<b>65</b>	153.428	142.208	130.687	119.294	108.202	96.936	84.869	73.644	62.801	52.810
<b>70</b>	110.869	102.653	94.268	86.052	78.004	69.916	61.491	53.402	45.441	39.173
<b>75</b>	74.067	68.518	63.102	57.385	52.045	46.670	40.994	35.613	30.365	25.750
<b>80</b>	43.151	39.805	36.378	33.160	29.983	26.765	23.460	20.242	17.192	14.652
<b>85</b>	19.564	17.830	16.050	14.397	12.745	11.098	9.486	7.920	6.650	5.676
<b>90</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**

	<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>
<b>0</b>	341.042	341.042	341.042	341.042	341.042	341.042	341.042	341.042	341.042	341.042
<b>5</b>	328.287	322.315	316.557	311.263	305.674	300.803	296.188	291.868	287.971	284.289
<b>10</b>	310.075	297.794	285.513	274.125	262.645	252.950	243.673	235.033	227.582	220.764
<b>15</b>	288.905	270.733	253.031	236.813	221.019	207.595	195.524	184.554	175.282	167.280
<b>20</b>	265.822	242.107	220.172	200.818	182.565	167.785	154.826	143.478	134.161	125.904
<b>25</b>	238.466	212.165	187.899	167.489	148.854	134.120	121.880	111.506	103.331	96.553
<b>30</b>	209.794	182.182	157.748	137.720	120.268	107.059	96.553	88.000	81.605	76.439
<b>35</b>	179.474	152.750	129.754	111.756	97.063	85.884	77.668	71.145	66.402	62.674

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**CANDELA TABULATION - (Cont.)**

<b>40</b>	149.364	125.266	105.279	90.244	78.259	69.834	63.648	58.823	55.437	52.810
<b>45</b>	121.497	101.255	84.997	73.180	63.862	57.553	52.979	49.465	47.007	45.018
<b>50</b>	97.063	80.677	68.141	59.160	52.214	47.557	44.125	41.585	39.724	38.367
<b>55</b>	76.230	63.821	54.504	47.726	42.605	39.173	36.587	34.598	33.201	32.099
<b>60</b>	58.864	49.801	43.110	38.286	34.389	31.763	29.774	28.249	27.188	26.301
<b>65</b>	44.763	39.637	33.543	29.855	27.061	25.072	23.547	22.358	21.512	20.833
<b>70</b>	32.818	28.376	24.776	22.190	20.288	18.804	17.661	16.815	16.177	15.667
<b>75</b>	22.149	19.268	17.024	15.244	13.933	12.959	12.240	11.602	11.179	10.843
<b>80</b>	12.704	11.138	9.909	8.935	8.216	7.665	7.242	6.905	6.650	6.436
<b>85</b>	4.998	4.488	4.065	3.728	3.473	3.259	3.136	3.009	2.963	2.922
<b>90</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>150</u>	<u>155</u>	<u>160</u>	<u>165</u>	<u>170</u>	<u>175</u>	<u>180</u>
<b>0</b>	341.042	341.042	341.042	341.042	341.042	341.042	341.042
<b>5</b>	281.153	278.613	276.451	274.717	273.487	272.682	272.386
<b>10</b>	214.960	210.049	206.152	202.980	200.818	199.461	198.956
<b>15</b>	160.415	154.872	150.465	146.951	144.534	143.096	142.632
<b>20</b>	119.595	114.510	110.486	107.314	105.279	103.923	103.586
<b>25</b>	91.137	87.067	84.063	81.692	80.126	79.152	78.851
<b>30</b>	72.461	69.538	67.335	65.642	64.540	63.949	63.694
<b>35</b>	59.925	57.890	56.365	55.264	54.463	54.040	53.953
<b>40</b>	50.862	49.465	48.363	47.557	47.093	46.752	46.583
<b>45</b>	43.579	42.559	41.968	41.417	41.035	40.780	40.739
<b>50</b>	37.312	36.506	35.914	35.445	35.236	35.022	34.981
<b>55</b>	31.294	30.702	30.238	29.896	29.687	29.560	29.560
<b>60</b>	25.622	25.199	24.817	24.562	24.352	24.266	24.225
<b>65</b>	20.288	19.946	19.650	19.436	19.314	19.227	19.140
<b>70</b>	15.290	14.994	14.739	14.571	14.443	14.397	14.397
<b>75</b>	10.547	10.333	10.205	10.078	9.996	9.909	9.909
<b>80</b>	6.309	6.181	6.100	6.054	6.013	5.972	5.931
<b>85</b>	2.922	2.881	2.881	2.881	2.836	2.836	2.881
<b>90</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	124.84	N.A.	14.10
0-30	265.58	N.A.	30.00
0-40	433.45	N.A.	49.00
0-60	732.33	N.A.	82.70
0-80	871.34	N.A.	98.50
0-90	885.03	N.A.	100.00
10-90	852.75	N.A.	96.40
20-40	308.61	N.A.	34.90
20-50	473.46	N.A.	53.50
40-70	389.77	N.A.	44.00
60-80	139.01	N.A.	15.70
70-80	48.12	N.A.	5.40
80-90	13.69	N.A.	1.50
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	885.03	N.A.	100.00

Total Luminaire Efficiency = N.A.%

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	32.28
10-20	92.56
20-30	140.74
30-40	167.87
40-50	164.85
50-60	134.03
60-70	90.90
70-80	48.12
80-90	13.69
90-100	0.00
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

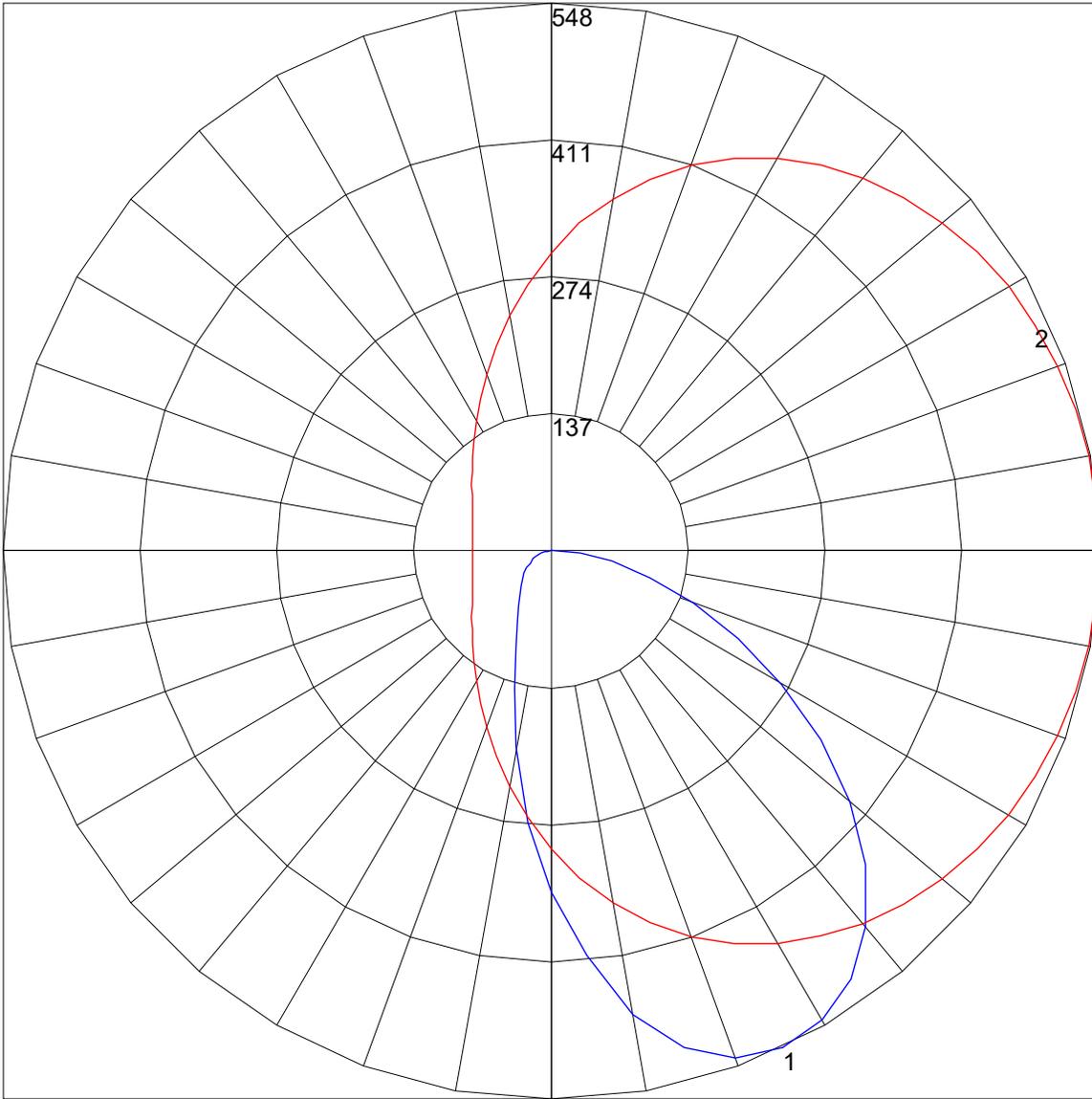
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**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

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	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	77	83	79	76	80	77	74	72
3	91	81	74	67	89	80	73	67	77	71	65	74	69	64	72	67	63	61
4	84	72	64	57	82	71	63	57	69	62	56	66	60	56	64	59	55	53
5	77	65	56	50	75	64	56	50	62	55	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38	50	43	38	48	42	38	36
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31	42	35	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

POLAR GRAPH



Maximum Candela = 548.163 Located At Horizontal Angle = 0, Vertical Angle = 25  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (25) (Through Max. Cd.)