

**IES Report**

**BoxRail® | 107 | 85° Asymmetric | 80 CRI | SO**

107-BX-XX-4-48-XX-XX-XX-XX-X-X-Z-SO-35-A1-X-BL-X

	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	43	44	45	46
Total Lumens, 4' rail length (1219mm)	1021	1054	1075	1097
Lumens per foot (305mm)	255	263	269	274
Input Power (W), 4' rail length (1219mm)	24.1	24.1	24.1	24.1
Watts per foot (305mm)	6.1	6.1	6.1	6.1
CRI	85	85	85	85

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\_SO\_35\_A1-BL.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST] L071704213 (SOURCE REPORT FOR REFERENCE)  
[TESTLAB] REPORT BASED ON DATA PRODUCED BY NVLAP ACCREDITED LAB  
[ISSUEDATE] 11/1/2017  
[MANUFAC] Vode Lighting  
[LUMCAT] 107-BX-48-Z-SO-35-A1-BL  
[LUMINAIRE] BoxRail LED, 48", 3500K, 80 CRI, zipper board,  
[MORE] 85° black asymmetric lens, standard output  
[TEST PROCEDURE] IESNA:LM-79-08

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1072
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	45
Total Luminaire Watts	24.08
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	2.06
Spacing Criterion (90-270)	1.12
Spacing Criterion (Diagonal)	1.38
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.04 ft
Luminous Width (90-270)	3.83 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	64178	53848	17469
55	51922	40806	11608
65	36129	27862	8024
75	14456	16238	5927
85	0	0	3706

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>	434.382	434.382	434.382	434.382	434.382	434.382	434.382	434.382	434.382	434.382
<b>5</b>	565.562	565.173	563.214	559.981	553.798	546.847	539.496	531.165	522.351	513.040
<b>10</b>	707.245	706.171	702.643	696.660	687.256	675.597	662.275	647.572	631.312	612.691
<b>15</b>	813.657	812.383	808.170	800.913	790.234	776.523	760.062	741.146	719.682	695.586
<b>20</b>	877.141	875.678	871.371	864.315	853.931	839.912	823.251	802.978	778.670	751.530
<b>25</b>	896.741	895.372	891.750	885.578	875.772	862.745	847.063	827.074	803.073	775.248
<b>30</b>	876.952	875.879	872.645	867.253	858.627	847.063	832.561	813.657	790.435	763.484
<b>35</b>	825.221	824.336	821.587	816.784	808.560	798.565	784.948	766.823	744.179	717.924
<b>40</b>	744.875	744.084	741.642	736.934	729.582	719.588	705.876	688.034	665.603	639.737
<b>45</b>	646.498	645.613	643.159	638.852	631.701	621.211	607.204	589.858	567.910	542.434
<b>50</b>	537.738	537.148	534.988	531.165	524.793	514.315	500.108	482.467	460.908	436.317
<b>55</b>	424.269	423.974	422.310	418.983	413.295	404.079	391.253	376.455	356.561	333.433
<b>60</b>	317.267	317.078	316.193	313.939	309.726	302.576	292.475	278.669	261.618	243.092
<b>65</b>	217.521	217.427	217.226	216.447	214.194	209.981	203.220	193.414	181.177	167.749
<b>70</b>	129.729	130.024	130.709	131.393	131.499	130.414	127.570	122.484	115.522	107.392
<b>75</b>	53.301	53.796	55.460	57.808	60.652	63.000	64.570	64.475	62.811	59.873
<b>80</b>	3.528	3.729	4.307	5.098	6.466	8.626	11.564	15.387	19.210	21.854
<b>85</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<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>	434.382	434.382	434.382	434.382	434.382	434.382	434.382	434.382	434.382	434.382
<b>5</b>	502.845	492.461	481.688	471.009	460.814	450.524	439.656	429.260	418.876	408.103
<b>10</b>	592.702	571.734	549.491	527.153	504.910	481.487	457.875	435.243	412.611	389.388
<b>15</b>	667.172	638.262	606.225	572.713	539.295	503.931	468.071	433.874	399.973	365.670
<b>20</b>	719.682	685.002	645.814	604.361	561.444	517.253	470.714	425.638	382.037	338.341
<b>25</b>	741.831	703.032	661.189	615.535	565.173	513.536	458.666	407.218	354.507	304.145
<b>30</b>	730.267	691.374	648.351	600.832	547.036	489.429	429.555	375.570	318.541	265.146
<b>35</b>	686.477	648.752	605.541	556.936	504.710	435.337	389.872	331.875	274.645	223.693
<b>40</b>	609.553	573.492	532.640	486.785	433.969	385.565	331.379	276.120	224.094	179.903
<b>45</b>	512.155	478.160	440.931	401.141	358.224	311.296	263.282	217.911	175.973	138.355
<b>50</b>	401.530	378.509	345.386	310.411	274.751	236.826	198.712	163.442	131.204	102.684
<b>55</b>	308.157	282.681	255.340	227.421	199.786	172.056	143.158	117.776	94.848	74.659
<b>60</b>	222.619	202.429	182.157	161.282	140.514	120.620	101.220	83.874	68.003	54.280
<b>65</b>	152.952	138.060	123.652	109.740	95.733	82.399	69.667	58.493	48.309	39.483
<b>70</b>	98.282	88.972	79.957	70.942	62.705	54.575	46.445	39.884	33.713	28.226
<b>75</b>	55.849	51.436	46.539	42.138	37.725	33.418	28.910	25.276	21.854	18.915
<b>80</b>	22.833	22.632	21.653	20.284	18.715	17.051	15.387	13.523	12.248	10.880
<b>85</b>	0.295	1.074	2.549	4.118	5.003	5.286	5.192	4.897	4.602	4.307
<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>	434.382	434.382	434.382	434.382	434.382	434.382	434.382	434.382	434.382	434.382
<b>5</b>	398.014	388.598	379.582	371.157	364.006	357.245	351.274	345.681	341.173	337.256
<b>10</b>	368.030	347.545	328.736	311.190	294.245	279.743	266.420	254.656	244.862	235.941
<b>15</b>	334.707	305.018	278.374	254.172	231.835	212.825	195.668	181.071	169.212	158.828
<b>20</b>	299.437	262.786	231.245	202.724	178.723	157.849	140.798	126.496	114.932	105.232
<b>25</b>	260.143	221.439	186.664	157.754	134.331	115.428	99.651	88.866	78.187	70.552
<b>30</b>	219.681	180.481	147.264	121.009	99.262	86.518	71.237	61.631	54.575	49.088
<b>35</b>	179.903	142.863	113.174	91.025	73.384	61.041	51.837	44.781	39.683	36.061

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**CANDELA TABULATION - (Cont.)**

<b>40</b>	141.777	109.941	87.886	68.298	54.776	45.560	38.999	33.901	30.574	28.025
<b>45</b>	107.581	86.128	64.664	51.637	41.843	35.376	30.763	27.435	24.981	23.128
<b>50</b>	82.010	61.726	48.899	39.778	33.123	28.414	25.181	22.927	21.264	20.084
<b>55</b>	58.894	46.645	37.819	31.553	26.951	23.907	21.559	19.989	18.809	17.936
<b>60</b>	43.990	35.955	29.889	25.476	22.538	20.284	18.715	17.641	16.850	16.260
<b>65</b>	32.721	27.435	23.517	20.768	18.715	17.240	16.166	15.482	14.998	14.502
<b>70</b>	24.001	20.674	18.231	16.461	15.187	14.302	13.723	13.228	12.838	12.638
<b>75</b>	16.367	14.597	13.228	12.343	11.658	11.175	10.773	10.585	10.384	10.195
<b>80</b>	9.700	8.921	8.425	8.130	7.741	7.741	7.540	7.540	7.446	7.351
<b>85</b>	4.213	4.213	4.118	4.118	4.024	3.729	3.528	3.139	3.033	2.844
<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**

	<u>150</u>	<u>155</u>	<u>160</u>	<u>165</u>	<u>170</u>	<u>175</u>	<u>180</u>
<b>0</b>	434.382	434.382	434.382	434.382	434.382	434.382	434.382
<b>5</b>	334.318	332.264	330.601	330.011	330.011	329.031	328.441
<b>10</b>	228.601	222.914	218.406	215.374	213.804	211.739	211.055
<b>15</b>	150.403	143.842	138.449	134.732	132.667	130.614	129.930
<b>20</b>	97.598	92.500	87.698	84.559	82.600	81.031	80.547
<b>25</b>	64.770	60.451	57.124	54.776	53.301	52.321	51.932
<b>30</b>	44.970	41.937	39.683	38.208	37.135	36.450	36.250
<b>35</b>	33.123	31.164	29.689	28.709	28.025	27.529	27.435
<b>40</b>	26.255	24.792	23.812	23.128	22.739	22.337	22.337
<b>45</b>	21.948	20.969	20.284	19.895	19.600	19.305	19.210
<b>50</b>	19.210	18.514	18.030	17.735	17.440	17.346	17.240
<b>55</b>	17.346	16.957	16.555	16.367	16.166	16.166	16.072
<b>60</b>	15.777	15.482	15.281	15.187	14.998	14.998	14.892
<b>65</b>	14.302	14.007	13.818	13.723	13.723	13.617	13.523
<b>70</b>	12.449	12.343	12.154	12.154	12.048	11.953	11.953
<b>75</b>	10.195	9.995	9.995	9.995	9.995	9.995	9.995
<b>80</b>	7.446	7.351	7.351	7.351	7.257	7.257	7.257
<b>85</b>	2.749	2.749	2.749	2.643	2.643	2.749	2.749
<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	164.80	N.A.	15.40
0-30	358.82	N.A.	33.50
0-40	586.36	N.A.	54.70
0-60	945.88	N.A.	88.20
0-80	1067.91	N.A.	99.60
0-90	1072.33	N.A.	100.00
10-90	1031.02	N.A.	96.10
20-40	421.56	N.A.	39.30
20-50	629.75	N.A.	58.70
40-70	447.36	N.A.	41.70
60-80	122.03	N.A.	11.40
70-80	34.19	N.A.	3.20
80-90	4.42	N.A.	0.40
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	1072.33	N.A.	100.00

Total Luminaire Efficiency = N.A.%

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	41.31
10-20	123.48
20-30	194.02
30-40	227.54
40-50	208.19
50-60	151.33
60-70	87.84
70-80	34.19
80-90	4.42
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

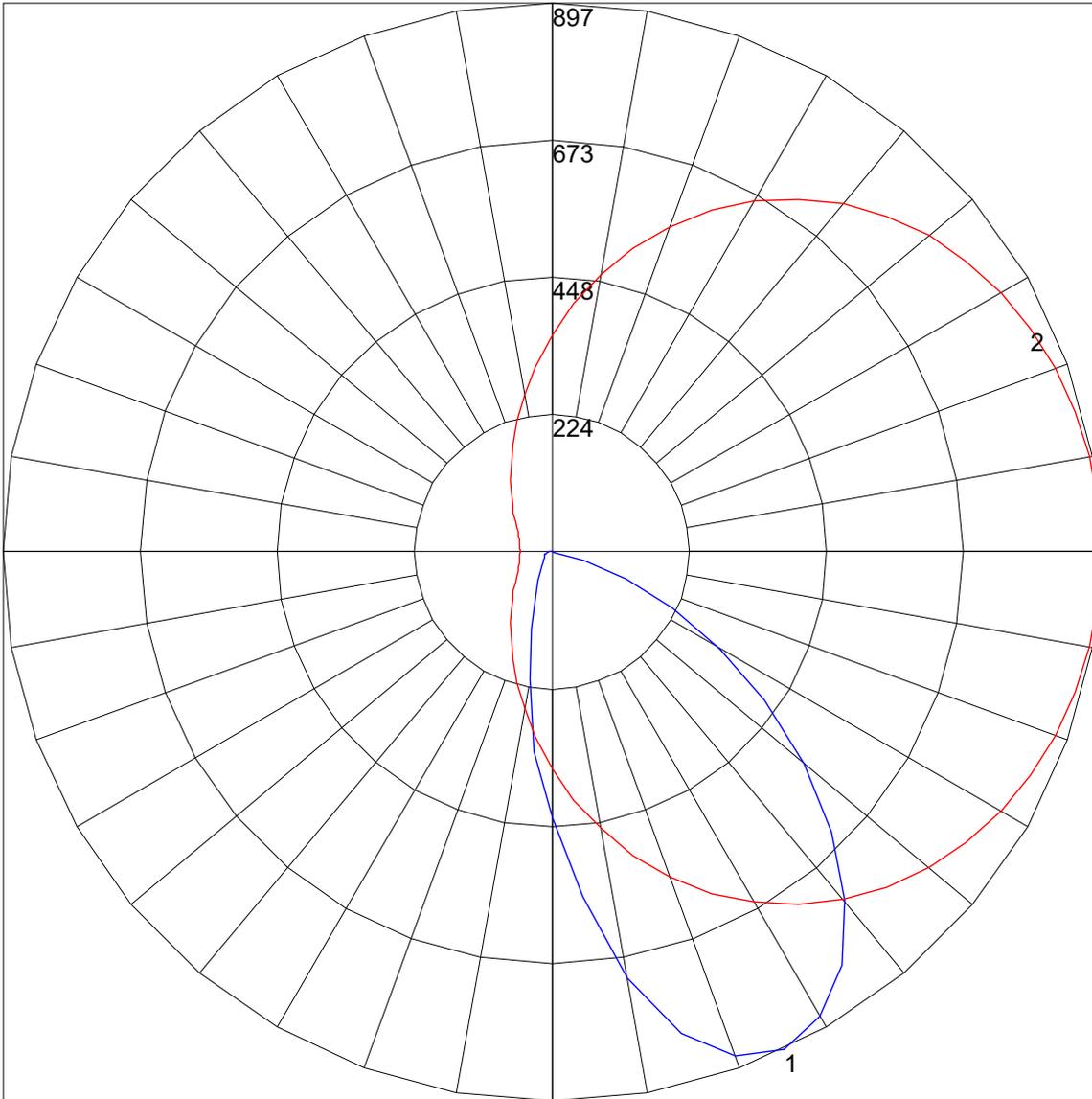
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**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

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	111	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	94	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	53	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	61	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	47	42	54	47	41	52	46	41	51	45	41	39
8	64	51	43	38	63	51	43	38	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	59	47	39	34	45	39	34	44	38	34	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29

POLAR GRAPH



Maximum Candela = 896.741 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.)