

**IES Report**

**BoxRail® | 107 | 120° FlyWing™ | 90 CRI | HO**

107-BX-XX-4-48-XX-XX-XX-XX-X-X-Z-HO-359-G2-X-XX-X

	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	90	93	94	96
Total Lumens, 4' rail length (1219mm)	4390	4529	4621	4714
Lumens per foot (305mm)	1098	1132	1155	1178
Input Power (W), 4' rail length (1219mm)	49.2	49.2	49.2	49.2
Watts per foot (305mm)	12.4	12.4	12.4	12.4
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.

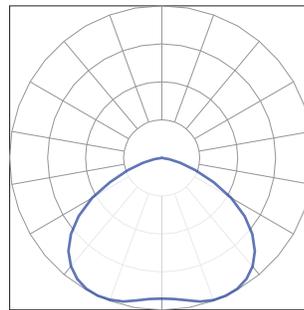
If the data above is in black, it is directly from a Vode source report. If it is in grey, it is factored from Vode source reports. Reference details on Vode source reports can be found on the [IES File Finder](#) page on [vode.com](#).

# BoxRail® | 107

107-BX-X-4-48-X-X-X-X-X-Z-HO-359-G2-X-X-X

The performance data in black text is confirmed through third party testing (see the following Light Laboratory report for details). The performance data in grey text is calculated by Vode, for reference only.

Technical Support: (707) 996-9898



## Details

Rail Type / Length	BoxRail, 48"
LED Type	Zipper Board
Lumen Output	High Output
Color Temperature	3500K, 90+ CRI
Optics	120° Flywing Lens

## Performance Summary

	2700K	3000K	3500K	4000K
Color Temperature	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	90	93	94	96
Total Lumens, 4' rail (1219mm)	4390	4529	4621	4714
Lumens per foot (305mm)	1098	1132	1155	1178
Input Power (W), 4' rail (1219mm)	49.2	49.2	49.2	49.2
Watts per foot (305mm)	12.4	12.4	12.4	12.4
CRI	-	-	96	-

© 2017 Vode Lighting LLC. All rights reserved. The Vode logo and Vode, are either registered trademarks or trademarks of Vode Lighting LLC in the United States and/or other countries. All other brand or product names are trademarks or registered trademarks of their respective owners. No part of the above drawing, design, arrangements or ideas thereon shall be duplicated or used for any purpose whatsoever without the express permission of Vode Lighting LLC. Due to ongoing innovation, specifications may change without notice.



**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : VODE\_107\_BX\_HO\_359\_G2.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
 [TEST] L071704204 (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-HO-359-G2  
 [LUMINAIRE] BoxRail LED, 48", 3500K, 90 CRI, zipper board,  
 [MORE] 120° flywing lens, high output  
 [TEST PROCEDURE] IESNA:LM-79-08

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4626
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	94
Total Luminaire Watts	49.22
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.58
Spacing Criterion (90-270)	1.14
Spacing Criterion (Diagonal)	1.52
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.08 ft
Luminous Width (90-270)	3.85 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	69488	60942	39739
55	65847	58640	37753
65	50440	48684	36599
75	28186	32520	32271
85	4127	8425	18007

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : VODE\_107\_BX\_HO\_359\_G2.IES**

**CANDELA TABULATION**

	<b>0</b>	<b>5</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>25</b>	<b>30</b>	<b>35</b>	<b>40</b>	<b>45</b>
<b>0</b>	1501.754	1501.754	1501.754	1501.754	1501.754	1501.754	1501.754	1501.754	1501.754	1501.754
<b>5</b>	1512.172	1511.920	1511.590	1510.872	1509.824	1508.699	1507.244	1505.809	1504.024	1502.336
<b>10</b>	1545.676	1545.268	1543.406	1540.593	1536.655	1531.339	1525.616	1518.923	1511.512	1503.791
<b>15</b>	1586.260	1585.058	1581.682	1576.269	1568.471	1558.790	1547.208	1533.822	1519.175	1503.384
<b>20</b>	1613.808	1612.450	1608.008	1600.772	1590.373	1577.162	1561.060	1541.970	1520.048	1496.128
<b>25</b>	1623.644	1621.937	1616.544	1607.853	1595.534	1579.412	1559.450	1536.325	1508.466	1477.776
<b>30</b>	1612.838	1610.918	1604.710	1595.126	1581.352	1563.155	1540.748	1514.015	1481.714	1443.942
<b>35</b>	1576.754	1574.737	1568.548	1558.635	1544.550	1525.538	1501.521	1472.382	1436.861	1395.694
<b>40</b>	1510.232	1508.466	1502.976	1493.722	1480.356	1461.906	1437.909	1407.780	1370.726	1326.747
<b>45</b>	1407.295	1405.918	1401.417	1393.832	1382.560	1365.896	1344.459	1315.553	1279.217	1234.209
<b>50</b>	1265.055	1264.162	1261.349	1256.266	1248.138	1235.722	1217.369	1191.432	1157.850	1113.793
<b>55</b>	1081.725	1081.492	1080.522	1078.427	1074.236	1066.185	1053.129	1032.352	1002.883	963.326
<b>60</b>	857.965	858.528	860.138	861.748	862.233	859.827	852.979	838.875	816.333	784.517
<b>65</b>	610.537	611.507	614.476	618.666	622.856	625.999	626.077	620.761	608.597	589.275
<b>70</b>	382.762	383.887	387.108	392.249	398.379	404.509	409.165	410.873	407.730	400.319
<b>75</b>	208.938	209.908	212.566	216.659	222.072	228.028	233.751	238.329	240.599	241.064
<b>80</b>	82.004	82.566	84.487	87.552	91.743	97.136	102.781	108.407	113.335	117.913
<b>85</b>	10.301	10.476	10.631	10.883	11.271	11.834	12.882	14.589	17.150	21.030
<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**

	<b>50</b>	<b>55</b>	<b>60</b>	<b>65</b>	<b>70</b>	<b>75</b>	<b>80</b>	<b>85</b>	<b>90</b>
<b>0</b>	1501.754	1501.754	1501.754	1501.754	1501.754	1501.754	1501.754	1501.754	1501.754
<b>5</b>	1500.803	1499.038	1497.350	1495.818	1494.595	1493.645	1492.752	1492.345	1492.190
<b>10</b>	1495.973	1488.232	1481.074	1473.993	1468.270	1463.109	1459.656	1457.386	1456.416
<b>15</b>	1486.622	1469.802	1453.370	1437.579	1424.038	1412.533	1403.997	1398.682	1396.819
<b>20</b>	1469.880	1442.642	1415.424	1388.691	1365.333	1345.118	1329.734	1320.539	1317.241
<b>25</b>	1442.739	1405.763	1367.428	1328.997	1295.416	1265.210	1242.570	1228.233	1223.480
<b>30</b>	1401.825	1355.905	1307.890	1258.614	1214.382	1175.155	1145.124	1126.345	1120.059
<b>35</b>	1346.399	1293.243	1235.974	1176.940	1124.172	1077.457	1042.420	1020.343	1012.932
<b>40</b>	1273.746	1214.304	1151.002	1085.430	1027.036	976.460	938.436	914.923	906.950
<b>45</b>	1178.783	1117.168	1051.034	983.949	925.302	873.601	835.733	812.627	804.809
<b>50</b>	1059.492	999.178	936.186	872.631	818.273	772.353	736.831	716.209	708.954
<b>55</b>	914.671	860.468	805.139	751.808	707.440	670.309	642.683	625.766	620.199
<b>60</b>	745.212	702.843	662.006	624.156	593.058	567.450	548.360	536.992	533.054
<b>65</b>	564.133	538.040	514.042	492.624	475.707	461.604	451.302	445.017	442.999
<b>70</b>	389.921	379.774	370.501	362.373	356.572	351.994	348.599	346.018	345.048
<b>75</b>	240.832	240.191	239.784	239.551	239.706	239.784	239.939	239.706	239.221
<b>80</b>	121.793	124.839	127.419	129.282	130.814	132.017	132.909	133.472	133.550
<b>85</b>	26.578	32.534	37.461	41.070	42.932	43.980	44.542	44.872	44.950
<b>90</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : VODE\_107\_BX\_HO\_359\_G2.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	566.78	N.A.	12.30
0-30	1235.47	N.A.	26.70
0-40	2075.62	N.A.	44.90
0-60	3776.72	N.A.	81.60
0-80	4581.26	N.A.	99.00
0-90	4625.86	N.A.	100.00
10-90	4482.45	N.A.	96.90
20-40	1508.84	N.A.	32.60
20-50	2406.63	N.A.	52.00
40-70	2252.82	N.A.	48.70
60-80	804.54	N.A.	17.40
70-80	252.82	N.A.	5.50
80-90	44.60	N.A.	1.00
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	4625.86	N.A.	100.00

Total Luminaire Efficiency = N.A.%

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	143.40
10-20	423.37
20-30	668.69
30-40	840.15
40-50	897.79
50-60	803.31
60-70	551.72
70-80	252.82
80-90	44.60
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

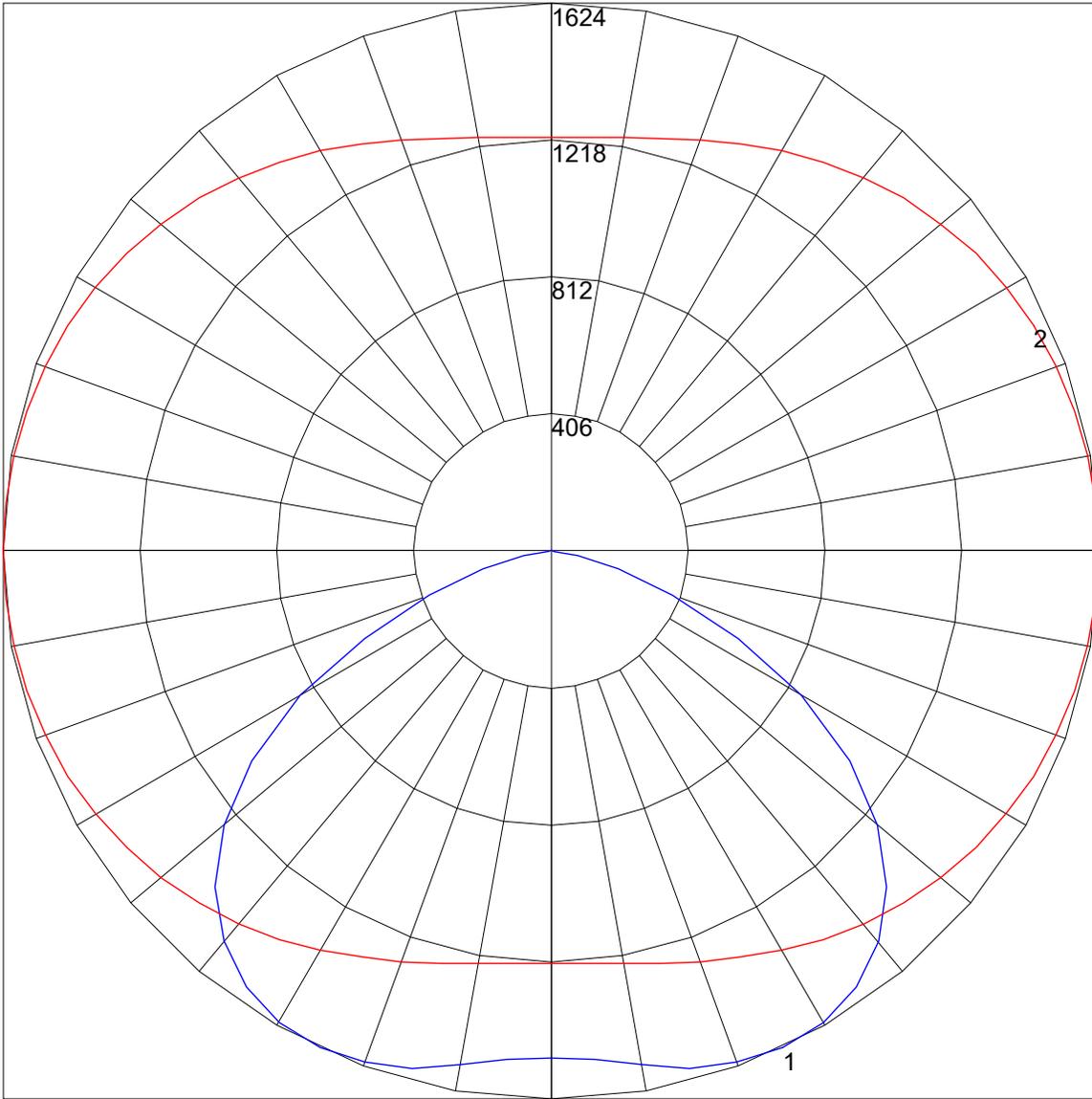
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : VODE\_107\_BX\_HO\_359\_G2.IES**

**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	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	47	41	54	47	41	52	46	41	51	45	40	38
7	65	51	43	37	63	51	42	36	49	42	36	48	41	36	46	40	36	34
8	60	47	38	32	59	46	38	32	45	37	32	44	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

POLAR GRAPH



Maximum Candela = 1623.644 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.)