

**IES Report**

**BoxRail® | 107 | Black Baffle | 80 CRI | LO**

107-BX-XX-4-48-XX-XX-XX-XX-X-X-Z-LO-35-BB-X-XX-X

	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	28	30	30	31
Total Lumens, 4' rail length (1219mm)	418	440	440	449
Lumens per foot (305mm)	105	110	110	112
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	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](http://vode.com).



**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : VODE\_107\_BX\_LO\_35\_BB.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST] L071704207 (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-LO-35-BB  
[LUMINAIRE] BoxRail LED, 48", 3500K, 80 CRI, zipper board,  
[MORE] black baffle, low output  
[TEST PROCEDURE] IESNA:LM-79-08

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	439
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	29
Total Luminaire Watts	14.95
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.30
Spacing Criterion (90-270)	0.64
Spacing Criterion (Diagonal)	0.84
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	494	1409	593
55	543	380	274
65	550	231	125
75	568	264	66
85	588	461	78

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>	509.111	509.111	509.111	509.111	509.111	509.111	509.111	509.111	509.111	509.111
<b>5</b>	509.612	509.046	508.120	506.574	504.615	502.285	499.836	497.217	494.644	492.119
<b>10</b>	504.662	503.093	499.004	493.098	486.024	478.844	471.546	463.610	455.327	447.662
<b>15</b>	494.084	490.750	482.272	471.398	459.103	445.261	431.496	417.360	402.935	389.878
<b>20</b>	479.334	473.776	460.595	444.010	424.487	404.256	383.288	364.154	347.398	333.214
<b>25</b>	462.678	454.082	435.485	411.578	384.485	356.979	334.146	313.768	293.165	271.754
<b>30</b>	441.951	430.688	406.433	376.036	342.035	314.258	288.882	259.364	228.595	202.777
<b>35</b>	414.617	399.577	369.517	331.893	297.991	267.789	233.174	195.550	171.566	143.889
<b>40</b>	214.925	216.766	224.601	229.846	228.643	206.647	172.451	142.320	106.507	70.110
<b>45</b>	9.995	10.290	10.732	11.487	17.564	31.795	49.383	57.737	39.559	28.538
<b>50</b>	9.210	9.086	8.673	8.207	7.741	7.546	7.935	9.381	11.859	13.889
<b>55</b>	8.915	8.673	8.012	7.251	6.466	5.758	5.269	5.145	5.463	6.248
<b>60</b>	8.673	8.254	7.469	6.543	5.611	4.850	4.289	3.918	3.699	3.676
<b>65</b>	6.661	6.443	5.876	5.339	4.679	4.165	3.699	3.333	3.015	2.791
<b>70</b>	5.339	5.192	4.826	4.384	3.971	3.552	3.210	2.867	2.596	2.301
<b>75</b>	4.213	4.089	3.823	3.552	3.280	3.015	2.720	2.448	2.207	1.959
<b>80</b>	3.381	3.310	3.062	2.844	2.620	2.401	2.207	2.012	1.811	1.617
<b>85</b>	1.469	1.493	1.493	1.445	1.445	1.422	1.398	1.322	1.251	1.150
<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

	<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>	509.111	509.111	509.111	509.111	509.111	509.111	509.111	509.111	509.111
<b>5</b>	489.670	487.440	485.434	483.741	482.295	481.074	480.313	479.800	479.629
<b>10</b>	440.482	433.921	427.844	422.381	417.921	414.174	411.484	409.961	409.371
<b>15</b>	378.214	368.366	359.988	352.596	346.814	342.159	338.878	337.037	336.424
<b>20</b>	320.234	307.030	294.292	282.704	273.176	265.116	259.216	255.564	254.367
<b>25</b>	250.614	231.020	215.539	203.857	194.617	187.225	181.513	177.914	176.811
<b>30</b>	183.301	165.418	146.585	128.726	113.050	100.577	91.568	86.105	84.217
<b>35</b>	113.929	85.296	63.030	48.162	40.049	33.140	29.642	27.972	27.435
<b>40</b>	44.976	32.727	26.432	23.470	21.582	20.137	19.057	18.373	18.125
<b>45</b>	23.346	20.650	18.349	16.361	14.844	13.647	12.762	12.178	12.001
<b>50</b>	14.307	13.422	12.077	10.803	9.676	8.820	8.160	7.694	7.546
<b>55</b>	7.180	7.570	7.298	6.691	6.053	5.463	4.974	4.631	4.508
<b>60</b>	3.870	4.118	4.165	3.994	3.699	3.357	3.038	2.767	2.643
<b>65</b>	2.620	2.549	2.525	2.472	2.277	2.059	1.835	1.664	1.516
<b>70</b>	2.083	1.888	1.764	1.640	1.493	1.375	1.174	1.003	0.885
<b>75</b>	1.717	1.516	1.375	1.198	1.056	0.932	0.785	0.614	0.490
<b>80</b>	1.398	1.251	1.080	0.909	0.761	0.661	0.537	0.389	0.295
<b>85</b>	1.056	0.909	0.785	0.661	0.566	0.466	0.366	0.271	0.195
<b>90</b>	0.000	0.000	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	158.18	N.A.	36.00
0-30	290.76	N.A.	66.20
0-40	395.96	N.A.	90.20
0-60	432.40	N.A.	98.40
0-80	438.19	N.A.	99.80
0-90	439.21	N.A.	100.00
10-90	393.42	N.A.	89.60
20-40	237.77	N.A.	54.10
20-50	268.14	N.A.	61.10
40-70	39.94	N.A.	9.10
60-80	5.79	N.A.	1.30
70-80	2.30	N.A.	0.50
80-90	1.02	N.A.	0.20
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	439.21	N.A.	100.00

Total Luminaire Efficiency = N.A.%

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	45.79
10-20	112.39
20-30	132.57
30-40	105.20
40-50	30.37
50-60	6.07
60-70	3.50
70-80	2.30
80-90	1.02
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

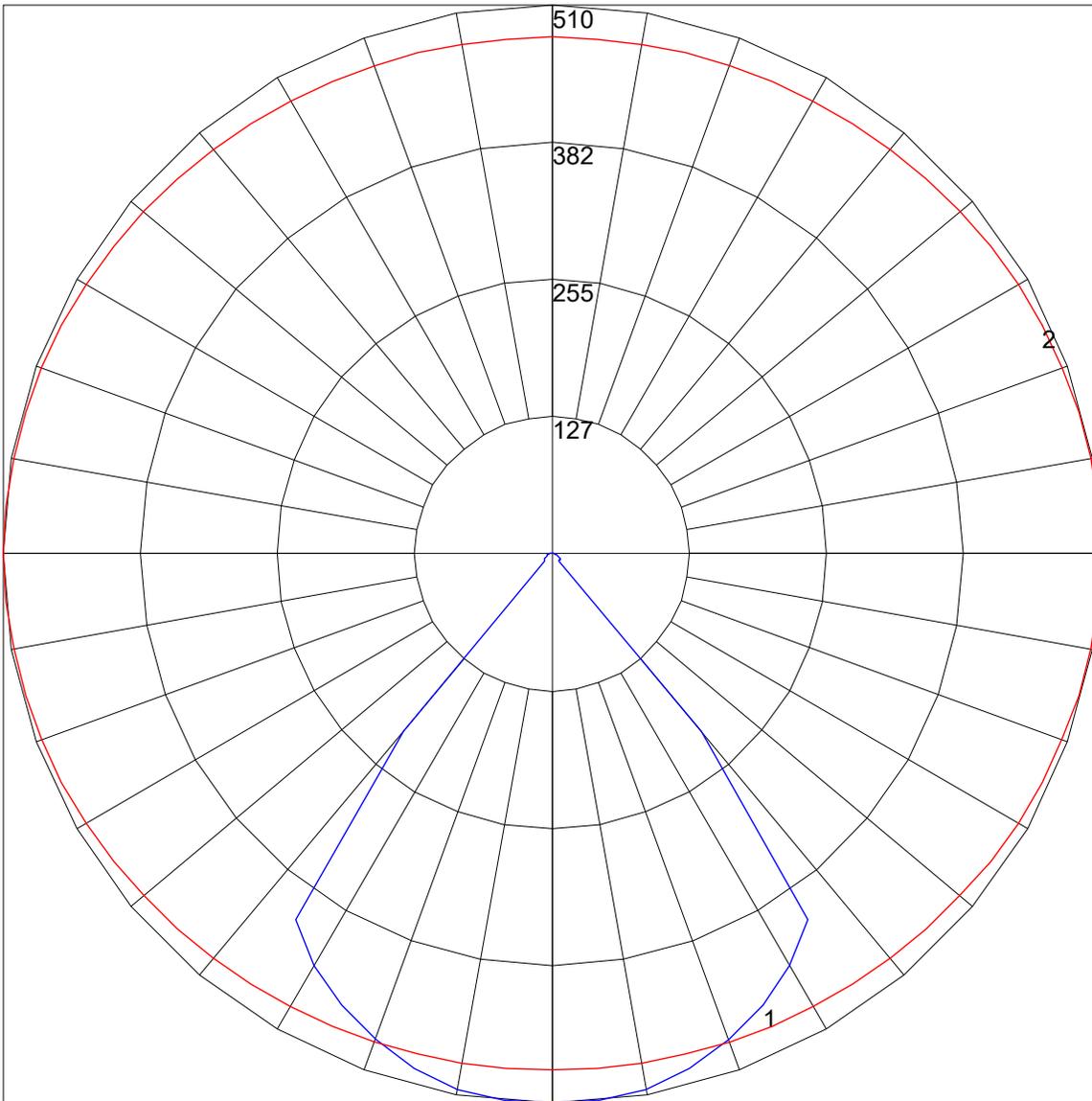
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**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

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	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93
2	107	102	98	95	105	101	97	94	97	94	91	94	92	89	92	89	88	86
3	102	95	90	86	100	94	89	85	91	87	84	89	85	82	86	84	81	80
4	96	89	83	78	95	87	82	78	85	81	77	83	79	76	81	78	75	74
5	91	83	77	72	90	82	76	72	80	75	71	78	74	71	77	73	70	68
6	87	77	71	67	85	77	71	67	75	70	66	74	69	66	72	68	65	64
7	82	73	66	62	81	72	66	62	71	65	62	69	65	61	68	64	61	59
8	78	68	62	58	77	68	62	58	67	61	57	65	61	57	65	60	57	56
9	74	64	58	54	73	64	58	54	63	58	54	62	57	54	61	57	53	52
10	71	61	55	51	70	60	55	51	59	54	51	59	54	50	58	53	50	49

POLAR GRAPH



Maximum Candela = 509.612 Located At Horizontal Angle = 0, Vertical Angle = 5  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)