

IES Report

RaceRail® | 107 | Diffuse, round | 90 CRI | LO

107-RR-XX-4-48-XX-XX-XX-XX-X-X-Z-LO-359-2-X-XX-X

	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	109	112	114	115
Total Lumens, 4' rail length (1219mm)	1491	1538	1570	1585
Lumens per foot (305mm)	373	385	392	396
Input Power (W), 4' rail length (1219mm)	13.8	13.8	13.8	13.8
Watts per foot (305mm)	3.5	3.5	3.5	3.5
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_107_RR_LO_359_2.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] L121911517 (SOURCE REPORT FOR REFERENCE)
[TESTLAB] REPORT BASED ON DATA FROM NVLAP ACCREDITED LAB
[ISSUE DATE] 12/23/2019
[MANUFAC] Vode Lighting
[LUMCAT] 107-RR-48-Z-LO-359-2-AL
[LUMINAIRE] RaceRail LED, 48", 3500K, 90 CRI, zipper board, round diffuse lens,
[MORE] low 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	1570
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	114
Total Luminaire Watts	13.82
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.36
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	0.07 ft
Luminous Width (90-270)	3.84 ft
Luminous Height	0.02 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	15732	16940	18968
55	12582	14179	16305
65	9186	11265	13294
75	6658	8613	10159
85	5380	7191	7582

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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>
0	573.0	573.0	573.0	573.0	573.0	573.0	573.0	573.0	573.0	573.0
5	571.5	571.5	571.5	571.5	571.5	571.5	571.5	571.5	571.5	571.5
10	564.5	564.5	564.5	564.5	564.5	564.5	564.0	564.0	564.0	564.0
15	552.0	552.5	552.0	552.0	552.0	551.5	551.5	551.5	551.5	551.0
20	535.0	535.0	535.0	535.0	534.5	534.0	533.5	533.5	533.0	532.5
25	512.5	512.5	512.5	512.0	511.5	511.0	510.5	510.0	509.5	508.5
30	484.5	484.5	484.5	484.0	483.5	483.0	482.0	481.0	480.0	479.0
35	450.0	450.0	450.0	450.0	449.5	449.5	448.5	447.5	446.0	444.5
40	407.0	407.0	407.5	408.0	408.0	408.5	408.5	408.0	407.0	405.5
45	357.5	358.0	358.5	359.0	360.0	361.0	362.0	362.5	362.0	361.0
50	306.5	306.5	307.0	308.0	309.5	310.5	312.0	312.5	313.0	312.5
55	254.0	254.0	255.0	256.5	258.0	260.0	262.0	263.0	263.5	263.0
60	202.5	203.0	204.0	206.0	208.0	210.5	213.0	215.0	216.0	216.0
65	156.5	157.0	158.0	159.5	162.0	164.5	167.0	169.5	171.0	171.5
70	119.0	119.0	120.0	121.5	123.5	125.5	128.0	130.0	131.0	131.5
75	89.0	89.0	90.0	91.0	92.5	94.5	96.0	97.5	98.5	98.5
80	67.0	67.0	67.5	68.5	69.5	71.0	72.0	73.0	73.5	73.0
85	50.0	50.0	50.5	51.0	52.0	52.5	53.5	53.5	53.5	52.5
90	38.0	38.0	38.0	38.5	39.0	39.0	39.5	39.5	39.0	37.5
95	29.0	29.0	29.0	29.0	29.0	29.5	29.0	29.0	28.0	26.5
100	22.0	22.0	22.0	22.0	22.0	22.0	21.5	21.0	20.0	18.5
105	17.0	17.0	17.0	17.0	16.5	16.5	16.0	15.5	14.5	13.0
110	13.0	13.0	13.0	13.0	12.5	12.5	12.0	11.0	10.0	9.0
115	10.0	10.0	10.0	10.0	9.5	9.0	8.5	8.0	7.0	6.0
120	7.5	7.5	7.5	7.5	7.0	6.5	6.5	5.5	5.0	4.5
125	5.5	5.5	5.5	5.5	5.0	5.0	4.5	4.0	3.5	3.0
130	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	3.0	2.5
135	3.5	3.5	3.5	3.5	3.0	3.0	3.0	2.5	2.5	2.0
140	3.0	3.0	3.0	3.0	2.5	2.5	2.5	2.0	2.0	2.0
145	2.5	2.5	2.5	2.5	2.5	2.0	2.0	0.0	0.0	0.0
150	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0
155	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Vert. 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>
0	573.0	573.0	573.0	573.0	573.0	573.0	573.0	573.0	573.0
5	571.5	571.5	571.5	571.5	571.5	571.5	571.5	571.5	572.0
10	564.0	564.0	564.0	564.0	564.0	564.0	564.0	564.0	564.0
15	550.5	550.5	550.0	550.0	549.5	550.0	549.5	549.5	550.0
20	532.0	531.5	530.5	530.5	530.0	529.5	529.5	529.0	529.5
25	507.5	506.5	505.5	504.5	504.0	503.0	503.0	503.0	503.0
30	477.5	476.0	474.5	473.0	472.0	470.5	470.0	469.5	469.5
35	443.0	440.5	438.5	436.0	434.0	432.5	431.0	430.5	430.5
40	403.0	400.0	397.0	394.0	391.0	389.0	387.0	386.0	385.5
45	358.5	355.5	351.5	348.0	344.5	341.0	338.5	337.0	337.0
50	310.5	308.0	304.0	299.5	295.0	291.0	288.0	286.0	286.0
55	261.5	259.0	255.5	250.5	246.0	241.5	238.0	236.0	235.5
60	214.5	211.5	207.5	203.5	198.5	193.5	189.5	187.5	186.5

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CANDELA TABULATION - (Cont.)

65	170.5	167.5	164.0	159.0	154.0	149.0	145.0	142.5	142.0
70	131.0	128.5	125.0	120.0	114.5	109.5	105.0	102.5	101.5
75	97.5	95.0	91.5	87.0	81.5	76.0	71.5	68.5	67.0
80	71.5	69.0	65.0	60.0	54.5	49.0	44.0	40.5	39.5
85	51.0	48.0	44.0	39.5	34.0	28.0	23.0	19.0	17.5
90	35.5	33.0	29.0	24.5	19.5	14.5	9.5	5.0	2.0
95	24.5	22.0	18.5	14.5	10.5	6.5	3.0	1.0	0.5
100	16.5	14.5	11.5	8.5	6.0	3.0	1.0	0.5	0.0
105	11.5	9.5	7.5	5.0	3.0	1.5	0.5	0.0	0.0
110	7.5	6.0	4.5	3.0	2.0	1.0	0.0	0.0	0.0
115	5.0	4.0	3.0	2.0	1.5	0.0	0.0	0.0	0.0
120	3.5	3.0	2.0	1.5	1.0	0.0	0.0	0.0	0.0
125	3.0	2.5	2.0	1.5	0.0	0.0	0.0	0.0	0.0
130	2.0	2.0	1.5	1.5	0.0	0.0	0.0	0.0	0.0
135	2.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	209.72	N.A.	13.40
0-30	443.57	N.A.	28.30
0-40	719.71	N.A.	45.90
0-60	1219.55	N.A.	77.70
0-80	1474.87	N.A.	94.00
0-90	1524.22	N.A.	97.10
10-90	1469.91	N.A.	93.60
20-40	509.99	N.A.	32.50
20-50	782.52	N.A.	49.90
40-70	659.75	N.A.	42.00
60-80	255.32	N.A.	16.30
70-80	95.42	N.A.	6.10
80-90	49.35	N.A.	3.10
90-110	34.96	N.A.	2.20
90-120	40.58	N.A.	2.60
90-130	43.33	N.A.	2.80
90-150	45.36	N.A.	2.90
90-180	45.44	N.A.	2.90
110-180	10.48	N.A.	0.70
0-180	1569.66	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	54.31
10-20	155.41
20-30	233.85
30-40	276.14
40-50	272.52
50-60	227.32
60-70	159.91
70-80	95.42
80-90	49.35
90-100	23.48
100-110	11.48
110-120	5.61
120-130	2.76
130-140	1.43
140-150	0.61
150-160	0.08
160-170	0.00
170-180	0.00

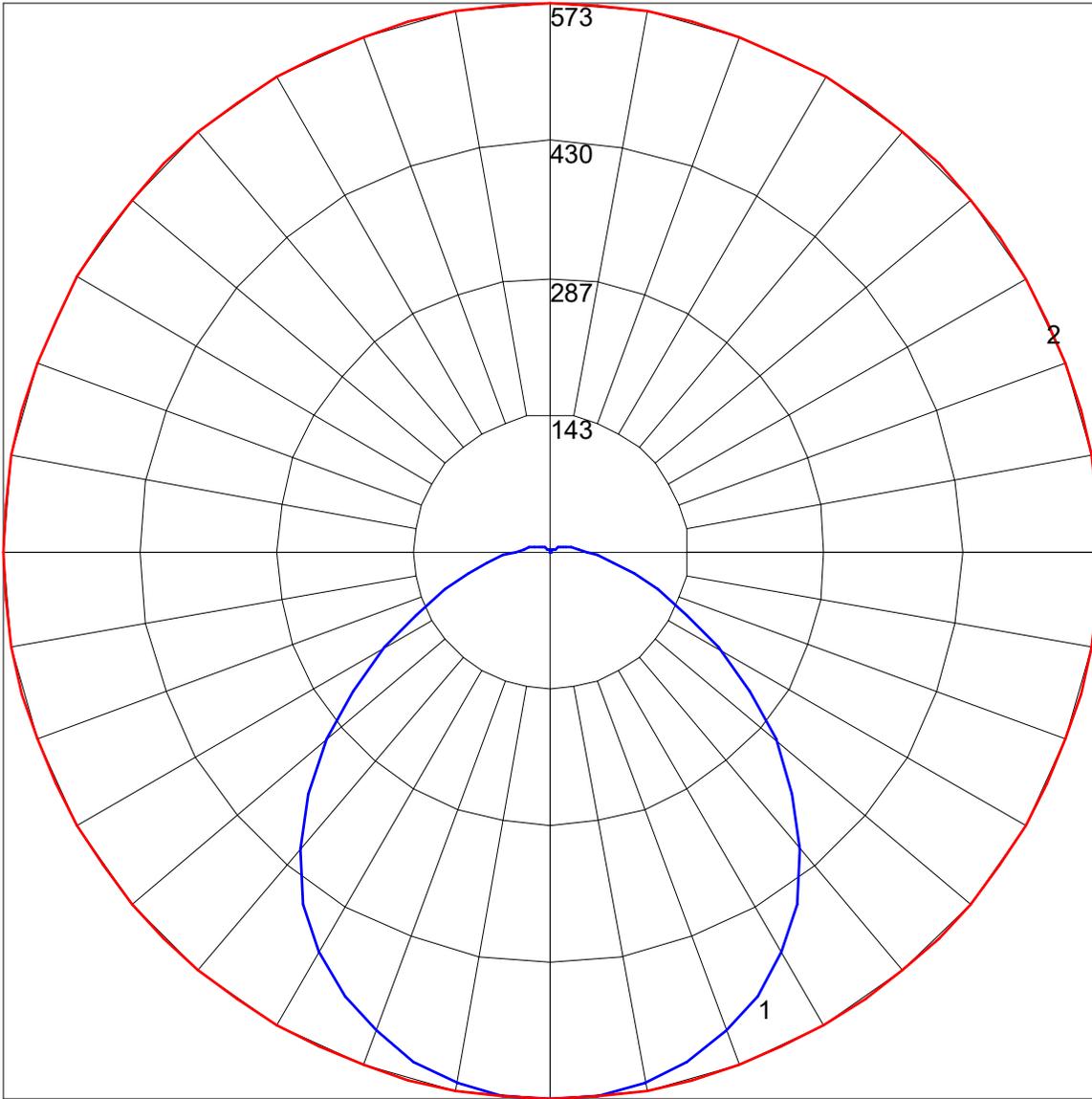
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	97
1	108	103	99	95	105	100	97	93	96	92	90	91	89	86	87	85	83	81
2	98	90	83	78	95	88	82	77	84	79	74	80	76	72	77	73	70	68
3	90	80	71	65	87	78	70	64	74	68	63	71	66	61	68	64	60	58
4	82	71	62	55	80	69	61	55	66	59	54	64	58	53	61	56	52	50
5	76	63	54	48	74	62	54	48	60	52	47	57	51	46	55	50	45	43
6	70	57	48	42	68	56	48	42	54	47	41	52	46	41	50	44	40	38
7	65	52	43	37	63	51	43	37	49	42	37	47	41	36	46	40	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	32	42	36	32	30
9	57	44	35	30	55	43	35	30	42	34	30	40	34	29	39	33	29	27
10	53	40	32	27	52	40	32	27	38	32	27	37	31	27	36	31	26	25

POLAR GRAPH



Maximum Candela = 573 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)