

IES Report

RaceRail® | 107 | Diffuse, round | 80 CRI | SO

107-RR-XX-4-48-XX-XX-XX-XX-X-X-Z-SO-35-2-X-XX-X

	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	145	150	153	153
Total Lumens, 4' rail length (1219mm)	3459	3568	3641	3641
Lumens per foot (305mm)	865	892	910	910
Input Power (W), 4' rail length (1219mm)	23.9	23.9	23.9	23.9
Watts per foot (305mm)	6.0	6.0	6.0	6.0
CRI	82	82	82	82

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_SO_35_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-SO-35-2-AL
[LUMINAIRE] RaceRail LED, 48", 3500K, 80 CRI, zipper board, round diffuse lens,
[MORE] standard 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	3642
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	152
Total Luminaire Watts	23.92
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	36498	39301	44006
55	29191	32894	37827
65	21312	26135	30842
75	15446	19982	23569
85	12483	16683	17589

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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	1329.36	1329.36	1329.36	1329.36	1329.36	1329.36	1329.36	1329.36	1329.36	1329.36
5	1325.88	1325.88	1325.88	1325.88	1325.88	1325.88	1325.88	1325.88	1325.88	1325.88
10	1309.64	1309.64	1309.64	1309.64	1309.64	1309.64	1309.64	1308.48	1308.48	1308.48
15	1280.64	1281.80	1280.64	1280.64	1280.64	1279.48	1279.48	1279.48	1279.48	1278.32
20	1241.20	1241.20	1241.20	1241.20	1240.04	1238.88	1237.72	1237.72	1236.56	1235.40
25	1189.00	1189.00	1189.00	1187.84	1186.68	1185.52	1184.36	1183.20	1182.04	1179.72
30	1124.04	1124.04	1124.04	1122.88	1121.72	1120.56	1118.24	1115.92	1113.60	1111.28
35	1044.00	1044.00	1044.00	1044.00	1042.84	1042.84	1040.52	1038.20	1034.72	1031.24
40	944.24	944.24	945.40	946.56	946.56	947.72	947.72	946.56	944.24	940.76
45	829.40	830.56	831.72	832.88	835.20	837.52	839.84	841.00	839.84	837.52
50	711.08	711.08	712.24	714.56	718.04	720.36	723.84	725.00	726.16	725.00
55	589.28	589.28	591.60	595.08	598.56	603.20	607.84	610.16	611.32	610.16
60	469.80	470.96	473.28	477.92	482.56	488.36	494.16	498.80	501.12	501.12
65	363.08	364.24	366.56	370.04	375.84	381.64	387.44	393.24	396.72	397.88
70	276.08	276.08	278.40	281.88	286.52	291.16	296.96	301.60	303.92	305.08
75	206.48	206.48	208.80	211.12	214.60	219.24	222.72	226.20	228.52	228.52
80	155.44	155.44	156.60	158.92	161.24	164.72	167.04	169.36	170.52	169.36
85	116.00	116.00	117.16	118.32	120.64	121.80	124.12	124.12	124.12	121.80
90	88.16	88.16	88.16	89.32	90.48	90.48	91.64	91.64	90.48	87.00
95	67.28	67.28	67.28	67.28	67.28	68.44	67.28	67.28	64.96	61.48
100	51.04	51.04	51.04	51.04	51.04	51.04	49.88	48.72	46.40	42.92
105	39.44	39.44	39.44	39.44	38.28	38.28	37.12	35.96	33.64	30.16
110	30.16	30.16	30.16	30.16	29.00	29.00	27.84	25.52	23.20	20.88
115	23.20	23.20	23.20	23.20	22.04	20.88	19.72	18.56	16.24	13.92
120	17.40	17.40	17.40	17.40	16.24	15.08	15.08	12.76	11.60	10.44
125	12.76	12.76	12.76	12.76	11.60	11.60	10.44	9.28	8.12	6.96
130	9.28	9.28	9.28	9.28	9.28	9.28	8.12	8.12	6.96	5.80
135	8.12	8.12	8.12	8.12	6.96	6.96	6.96	5.80	5.80	4.64
140	6.96	6.96	6.96	6.96	5.80	5.80	5.80	4.64	4.64	4.64
145	5.80	5.80	5.80	5.80	5.80	4.64	4.64	0.00	0.00	0.00
150	4.64	4.64	4.64	4.64	4.64	4.64	0.00	0.00	0.00	0.00
155	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Vert. Angles **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	1329.36	1329.36	1329.36	1329.36	1329.36	1329.36	1329.36	1329.36	1329.36
5	1325.88	1325.88	1325.88	1325.88	1325.88	1325.88	1325.88	1325.88	1327.04
10	1308.48	1308.48	1308.48	1308.48	1308.48	1308.48	1308.48	1308.48	1308.48
15	1277.16	1277.16	1276.00	1276.00	1274.84	1276.00	1274.84	1274.84	1276.00
20	1234.24	1233.08	1230.76	1230.76	1229.60	1228.44	1228.44	1227.28	1228.44
25	1177.40	1175.08	1172.76	1170.44	1169.28	1166.96	1166.96	1166.96	1166.96
30	1107.80	1104.32	1100.84	1097.36	1095.04	1091.56	1090.40	1089.24	1089.24
35	1027.76	1021.96	1017.32	1011.52	1006.88	1003.40	999.92	998.76	998.76
40	934.96	928.00	921.04	914.08	907.12	902.48	897.84	895.52	894.36
45	831.72	824.76	815.48	807.36	799.24	791.12	785.32	781.84	781.84
50	720.36	714.56	705.28	694.84	684.40	675.12	668.16	663.52	663.52
55	606.68	600.88	592.76	581.16	570.72	560.28	552.16	547.52	546.36
60	497.64	490.68	481.40	472.12	460.52	448.92	439.64	435.00	432.68

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CANDELA TABULATION - (Cont.)

65	395.56	388.60	380.48	368.88	357.28	345.68	336.40	330.60	329.44
70	303.92	298.12	290.00	278.40	265.64	254.04	243.60	237.80	235.48
75	226.20	220.40	212.28	201.84	189.08	176.32	165.88	158.92	155.44
80	165.88	160.08	150.80	139.20	126.44	113.68	102.08	93.96	91.64
85	118.32	111.36	102.08	91.64	78.88	64.96	53.36	44.08	40.60
90	82.36	76.56	67.28	56.84	45.24	33.64	22.04	11.60	4.64
95	56.84	51.04	42.92	33.64	24.36	15.08	6.96	2.32	1.16
100	38.28	33.64	26.68	19.72	13.92	6.96	2.32	1.16	0.00
105	26.68	22.04	17.40	11.60	6.96	3.48	1.16	0.00	0.00
110	17.40	13.92	10.44	6.96	4.64	2.32	0.00	0.00	0.00
115	11.60	9.28	6.96	4.64	3.48	0.00	0.00	0.00	0.00
120	8.12	6.96	4.64	3.48	2.32	0.00	0.00	0.00	0.00
125	6.96	5.80	4.64	3.48	0.00	0.00	0.00	0.00	0.00
130	4.64	4.64	3.48	3.48	0.00	0.00	0.00	0.00	0.00
135	4.64	3.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	3.48	3.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	486.55	N.A.	13.40
0-30	1029.08	N.A.	28.30
0-40	1669.73	N.A.	45.90
0-60	2829.36	N.A.	77.70
0-80	3421.71	N.A.	94.00
0-90	3536.19	N.A.	97.10
10-90	3410.2	N.A.	93.60
20-40	1183.18	N.A.	32.50
20-50	1815.44	N.A.	49.90
40-70	1530.61	N.A.	42.00
60-80	592.35	N.A.	16.30
70-80	221.37	N.A.	6.10
80-90	114.49	N.A.	3.10
90-110	81.12	N.A.	2.20
90-120	94.14	N.A.	2.60
90-130	100.53	N.A.	2.80
90-150	105.25	N.A.	2.90
90-180	105.43	N.A.	2.90
110-180	24.31	N.A.	0.70
0-180	3641.62	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	126.00
10-20	360.55
20-30	542.53
30-40	640.65
40-50	632.26
50-60	527.38
60-70	370.98
70-80	221.37
80-90	114.49
90-100	54.48
100-110	26.64
110-120	13.02
120-130	6.39
130-140	3.31
140-150	1.41
150-160	0.18
160-170	0.00
170-180	0.00

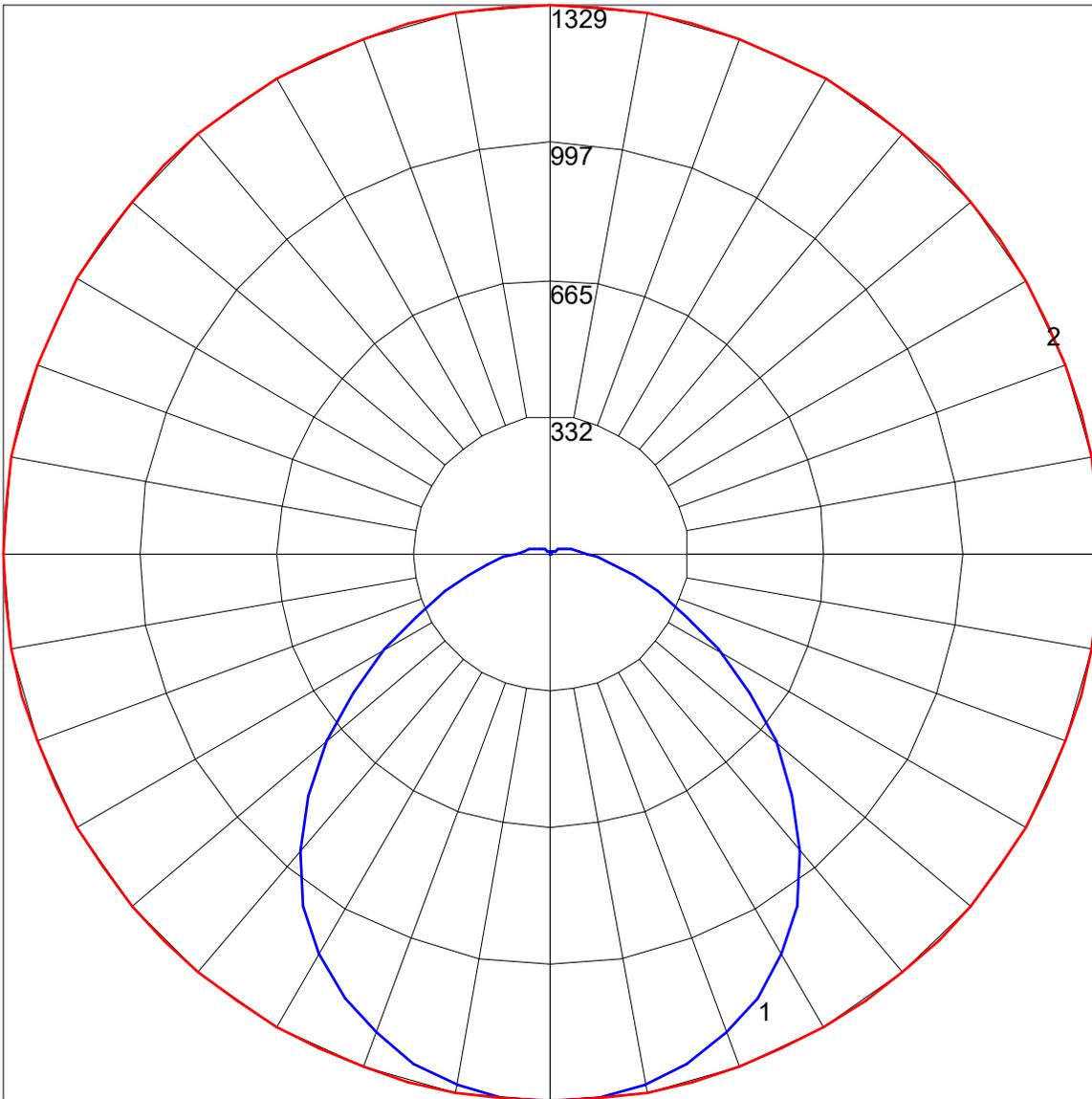
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC RW	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
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	101	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	83	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 = 1329.36 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.)