

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	123	127	129	132
Total Lumens, 4' rail length (1219mm)	2954	3047	3110	3172
Lumens per foot (305mm)	739	762	777	793
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_RR_SO_35_2.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] L071704216 (SOURCE REPORT FOR REFERENCE)
[TESTLAB] REPORT BASED ON DATA PRODUCED BY NVLAP ACCREDITED LAB
[ISSUEDATE] 11/1/2017
[MANUFAC] Vode Lighting
[LUMCAT] 107-RR-48-Z-SO-35-2
[LUMINAIRE] RaceRail LED, 48", 3500K, 80 CRI, zipper board,
[MORE] round diffuse lens, standard output
[TEST PROCEDURE] IESNA:LM-79-08

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3101
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	129
Total Luminaire Watts	24.11
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.34
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	0.08 ft
Luminous Width (90-270)	3.83 ft
Luminous Height	0.02 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	28488	29223	31114
55	23411	24915	26446
65	18245	20348	21708
75	14238	16637	17422
85	12565	15204	13901

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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	1125.72	1125.72	1125.72	1125.72	1125.72	1125.72	1125.72	1125.72	1125.72	1125.72
5	1122.18	1123.36	1122.18	1122.18	1122.18	1122.18	1122.18	1122.18	1122.18	1122.18
10	1109.20	1109.20	1109.20	1109.20	1109.20	1108.02	1108.02	1108.02	1106.84	1106.84
15	1086.78	1086.78	1086.78	1085.60	1085.60	1084.42	1083.24	1082.06	1080.88	1079.70
20	1052.56	1052.56	1052.56	1051.38	1050.20	1049.02	1047.84	1045.48	1044.30	1041.94
25	1008.90	1007.72	1007.72	1006.54	1005.36	1003.00	1000.64	998.28	995.92	992.38
30	952.26	952.26	951.08	949.90	948.72	946.36	944.00	940.46	935.74	932.20
35	885.00	885.00	883.82	882.64	880.28	877.92	875.56	870.84	866.12	861.40
40	807.12	807.12	805.94	804.76	803.58	801.22	797.68	792.96	788.24	782.34
45	717.44	717.44	717.44	716.26	716.26	713.90	711.54	708.00	702.10	695.02
50	619.50	619.50	619.50	620.68	620.68	619.50	618.32	615.96	611.24	604.16
55	519.20	519.20	520.38	521.56	522.74	523.92	523.92	521.56	518.02	512.12
60	423.62	423.62	424.80	427.16	429.52	430.70	431.88	430.70	428.34	422.44
65	337.48	337.48	338.66	341.02	343.38	345.74	348.10	348.10	344.56	339.84
70	263.14	264.32	265.50	267.86	270.22	272.58	273.76	273.76	272.58	267.86
75	202.96	204.14	205.32	206.50	208.86	211.22	212.40	212.40	210.04	205.32
80	158.12	158.12	159.30	160.48	161.66	162.84	164.02	162.84	160.48	155.76
85	120.36	121.54	121.54	122.72	122.72	123.90	123.90	122.72	120.36	115.64
90	93.22	93.22	93.22	93.22	94.40	93.22	93.22	90.86	88.50	83.78
95	71.98	70.80	71.98	71.98	70.80	70.80	69.62	67.26	63.72	59.00
100	55.46	55.46	55.46	54.28	54.28	53.10	51.92	49.56	46.02	41.30
105	42.48	42.48	42.48	41.30	41.30	40.12	37.76	35.40	33.04	28.32
110	33.04	31.86	31.86	31.86	30.68	29.50	27.14	25.96	22.42	20.06
115	24.78	24.78	23.60	23.60	22.42	21.24	20.06	17.70	15.34	12.98
120	17.70	17.70	17.70	17.70	16.52	15.34	14.16	11.80	10.62	8.26
125	12.98	12.98	12.98	11.80	11.80	10.62	9.44	8.26	5.90	4.72
130	9.44	9.44	8.26	8.26	7.08	7.08	5.90	4.72	3.54	2.36
135	5.90	5.90	4.72	4.72	4.72	3.54	3.54	2.36	2.36	2.36
140	3.54	3.54	3.54	3.54	3.54	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	0.00
150	0.00	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	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	1125.72	1125.72	1125.72	1125.72	1125.72	1125.72	1125.72	1125.72	1125.72
5	1122.18	1122.18	1122.18	1122.18	1122.18	1121.00	1121.00	1121.00	1121.00
10	1105.66	1105.66	1105.66	1104.48	1104.48	1104.48	1104.48	1103.30	1103.30
15	1078.52	1077.34	1076.16	1074.98	1074.98	1073.80	1073.80	1072.62	1072.62
20	1039.58	1037.22	1034.86	1033.68	1031.32	1030.14	1028.96	1027.78	1027.78
25	990.02	986.48	982.94	979.40	977.04	973.50	972.32	971.14	971.14
30	927.48	922.76	918.04	913.32	908.60	905.06	902.70	900.34	900.34
35	855.50	848.42	842.52	835.44	829.54	824.82	821.28	818.92	817.74
40	774.08	767.00	758.74	750.48	743.40	736.32	731.60	728.06	726.88
45	686.76	677.32	667.88	657.26	649.00	640.74	634.84	631.30	630.12
50	594.72	585.28	573.48	562.86	553.42	543.98	536.90	533.36	532.18
55	503.86	493.24	481.44	468.46	457.84	448.40	441.32	437.78	435.42
60	414.18	404.74	392.94	381.14	369.34	359.90	351.64	348.10	345.74

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CANDELA TABULATION - (Cont.)

65	332.76	323.32	311.52	299.72	287.92	277.30	270.22	265.50	264.32
70	260.78	251.34	240.72	227.74	217.12	206.50	198.24	193.52	192.34
75	199.42	189.98	179.36	167.56	155.76	145.14	136.88	132.16	130.98
80	149.86	140.42	129.80	118.00	106.20	95.58	86.14	81.42	79.06
85	108.56	100.30	89.68	79.06	67.26	55.46	46.02	38.94	36.58
90	76.70	69.62	60.18	49.56	38.94	28.32	18.88	10.62	3.54
95	53.10	46.02	38.94	29.50	21.24	12.98	5.90	1.18	0.00
100	36.58	30.68	23.60	17.70	10.62	5.90	1.18	0.00	0.00
105	24.78	20.06	14.16	9.44	4.72	2.36	0.00	0.00	0.00
110	16.52	11.80	8.26	4.72	2.36	1.18	0.00	0.00	0.00
115	10.62	7.08	4.72	2.36	1.18	0.00	0.00	0.00	0.00
120	5.90	3.54	2.36	1.18	0.00	0.00	0.00	0.00	0.00
125	3.54	2.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	2.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	0.00	0.00	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	411.09	N.A.	13.30
0-30	867.24	N.A.	28.00
0-40	1402.21	N.A.	45.20
0-60	2372.64	N.A.	76.50
0-80	2891.79	N.A.	93.20
0-90	3001.03	N.A.	96.80
10-90	2894.44	N.A.	93.30
20-40	991.13	N.A.	32.00
20-50	1518.59	N.A.	49.00
40-70	1289.75	N.A.	41.60
60-80	519.15	N.A.	16.70
70-80	199.82	N.A.	6.40
80-90	109.25	N.A.	3.50
90-110	80.60	N.A.	2.60
90-120	93.11	N.A.	3.00
90-130	98.34	N.A.	3.20
90-150	100.17	N.A.	3.20
90-180	100.17	N.A.	3.20
110-180	19.57	N.A.	0.60
0-180	3101.2	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	106.60
10-20	304.49
20-30	456.16
30-40	534.97
40-50	527.46
50-60	442.96
60-70	319.33
70-80	199.82
80-90	109.25
90-100	54.01
100-110	26.59
110-120	12.51
120-130	5.23
130-140	1.68
140-150	0.15
150-160	0.00
160-170	0.00
170-180	0.00

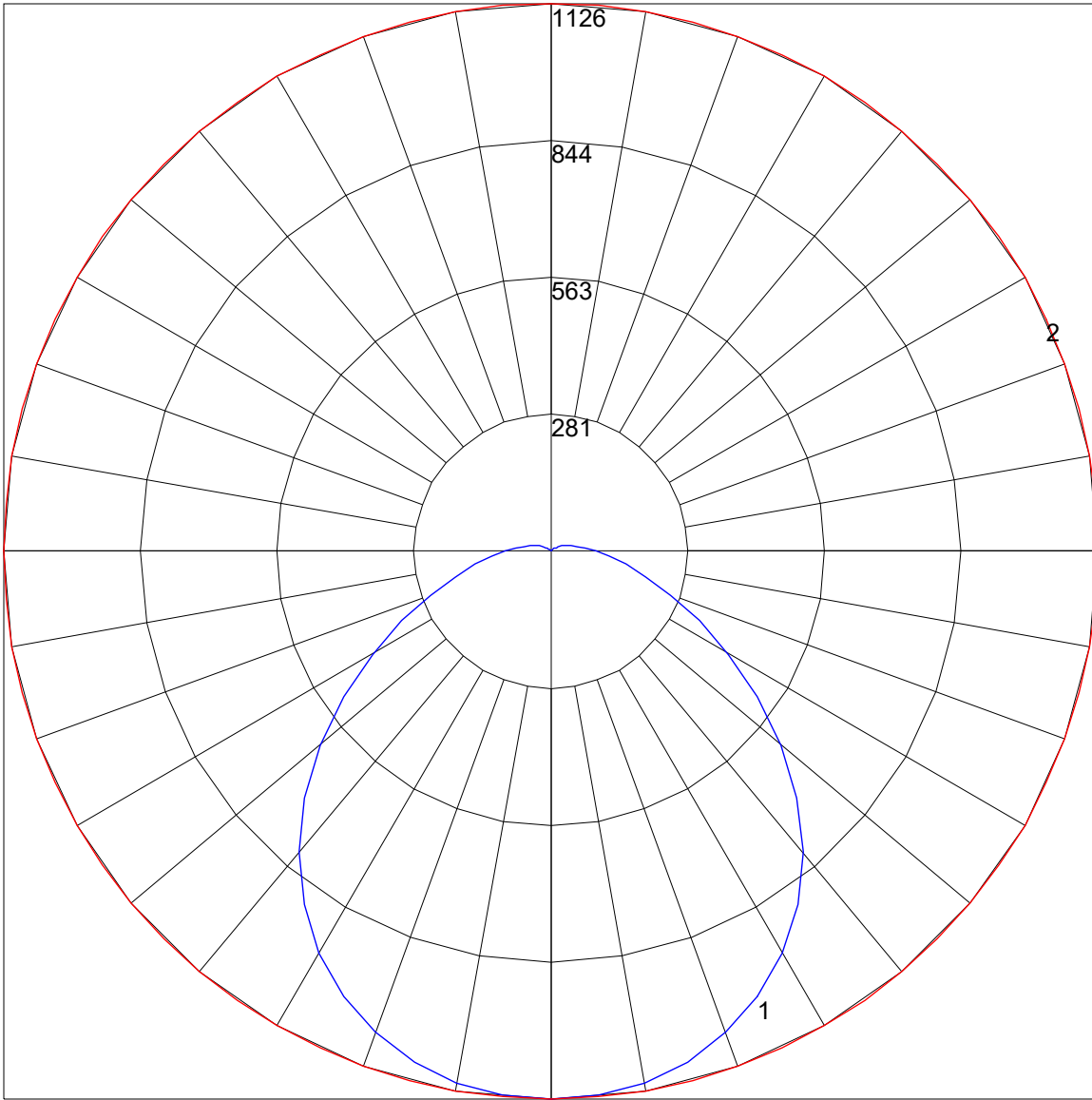
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	118	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	97
1	108	103	98	94	94	105	100	96	92	95	92	89	91	88	86	87	85	83	80
2	98	90	83	77	77	95	88	81	76	83	78	74	80	75	72	76	73	69	67
3	90	79	71	64	64	87	77	70	64	74	67	62	71	65	61	68	63	59	57
4	82	70	62	55	55	80	69	61	54	66	59	53	63	57	52	61	55	51	49
5	76	63	54	47	47	73	62	53	47	59	52	46	57	50	45	55	49	45	43
6	70	57	48	42	42	68	56	47	41	54	46	41	52	45	40	50	44	39	37
7	65	52	43	37	37	63	51	42	37	49	41	36	47	41	36	45	40	35	33
8	61	47	39	33	33	59	46	38	33	45	38	32	43	37	32	42	36	32	30
9	57	43	35	30	30	55	43	35	30	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	27	52	39	32	27	38	31	27	37	31	26	36	30	26	24

POLAR GRAPH



Maximum Candela = 1125.72 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)