

IES Report

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

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

	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	126	130	132	132
Total Lumens, 4' rail length (1219mm)	1730	1784	1821	1821
Lumens per foot (305mm)	432	446	455	455
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	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_LO_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-LO-35-2-AL
[LUMINAIRE] RaceRail LED, 48", 3500K, 80 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	1821
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	132
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	18249	19650	22003
55	14595	16447	18914
65	10656	13068	15421
75	7723	9991	11784
85	6241	8341	8795

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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	664.68	664.68	664.68	664.68	664.68	664.68	664.68	664.68	664.68	664.68
5	662.94	662.94	662.94	662.94	662.94	662.94	662.94	662.94	662.94	662.94
10	654.82	654.82	654.82	654.82	654.82	654.82	654.24	654.24	654.24	654.24
15	640.32	640.90	640.32	640.32	640.32	639.74	639.74	639.74	639.74	639.16
20	620.60	620.60	620.60	620.60	620.02	619.44	618.86	618.86	618.28	617.70
25	594.50	594.50	594.50	593.92	593.34	592.76	592.18	591.60	591.02	589.86
30	562.02	562.02	562.02	561.44	560.86	560.28	559.12	557.96	556.80	555.64
35	522.00	522.00	522.00	522.00	521.42	521.42	520.26	519.10	517.36	515.62
40	472.12	472.12	472.70	473.28	473.28	473.86	473.86	473.28	472.12	470.38
45	414.70	415.28	415.86	416.44	417.60	418.76	419.92	420.50	419.92	418.76
50	355.54	355.54	356.12	357.28	359.02	360.18	361.92	362.50	363.08	362.50
55	294.64	294.64	295.80	297.54	299.28	301.60	303.92	305.08	305.66	305.08
60	234.90	235.48	236.64	238.96	241.28	244.18	247.08	249.40	250.56	250.56
65	181.54	182.12	183.28	185.02	187.92	190.82	193.72	196.62	198.36	198.94
70	138.04	138.04	139.20	140.94	143.26	145.58	148.48	150.80	151.96	152.54
75	103.24	103.24	104.40	105.56	107.30	109.62	111.36	113.10	114.26	114.26
80	77.72	77.72	78.30	79.46	80.62	82.36	83.52	84.68	85.26	84.68
85	58.00	58.00	58.58	59.16	60.32	60.90	62.06	62.06	62.06	60.90
90	44.08	44.08	44.08	44.66	45.24	45.24	45.82	45.82	45.24	43.50
95	33.64	33.64	33.64	33.64	33.64	34.22	33.64	33.64	32.48	30.74
100	25.52	25.52	25.52	25.52	25.52	25.52	24.94	24.36	23.20	21.46
105	19.72	19.72	19.72	19.72	19.14	19.14	18.56	17.98	16.82	15.08
110	15.08	15.08	15.08	15.08	14.50	14.50	13.92	12.76	11.60	10.44
115	11.60	11.60	11.60	11.60	11.02	10.44	9.86	9.28	8.12	6.96
120	8.70	8.70	8.70	8.70	8.12	7.54	7.54	6.38	5.80	5.22
125	6.38	6.38	6.38	6.38	5.80	5.80	5.22	4.64	4.06	3.48
130	4.64	4.64	4.64	4.64	4.64	4.64	4.06	4.06	3.48	2.90
135	4.06	4.06	4.06	4.06	3.48	3.48	3.48	2.90	2.90	2.32
140	3.48	3.48	3.48	3.48	2.90	2.90	2.90	2.32	2.32	2.32
145	2.90	2.90	2.90	2.90	2.90	2.32	2.32	0.00	0.00	0.00
150	2.32	2.32	2.32	2.32	2.32	2.32	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	664.68	664.68	664.68	664.68	664.68	664.68	664.68	664.68	664.68
5	662.94	662.94	662.94	662.94	662.94	662.94	662.94	662.94	663.52
10	654.24	654.24	654.24	654.24	654.24	654.24	654.24	654.24	654.24
15	638.58	638.58	638.00	638.00	637.42	638.00	637.42	637.42	638.00
20	617.12	616.54	615.38	615.38	614.80	614.22	614.22	613.64	614.22
25	588.70	587.54	586.38	585.22	584.64	583.48	583.48	583.48	583.48
30	553.90	552.16	550.42	548.68	547.52	545.78	545.20	544.62	544.62
35	513.88	510.98	508.66	505.76	503.44	501.70	499.96	499.38	499.38
40	467.48	464.00	460.52	457.04	453.56	451.24	448.92	447.76	447.18
45	415.86	412.38	407.74	403.68	399.62	395.56	392.66	390.92	390.92
50	360.18	357.28	352.64	347.42	342.20	337.56	334.08	331.76	331.76
55	303.34	300.44	296.38	290.58	285.36	280.14	276.08	273.76	273.18
60	248.82	245.34	240.70	236.06	230.26	224.46	219.82	217.50	216.34

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CANDELA TABULATION - (Cont.)

65	197.78	194.30	190.24	184.44	178.64	172.84	168.20	165.30	164.72
70	151.96	149.06	145.00	139.20	132.82	127.02	121.80	118.90	117.74
75	113.10	110.20	106.14	100.92	94.54	88.16	82.94	79.46	77.72
80	82.94	80.04	75.40	69.60	63.22	56.84	51.04	46.98	45.82
85	59.16	55.68	51.04	45.82	39.44	32.48	26.68	22.04	20.30
90	41.18	38.28	33.64	28.42	22.62	16.82	11.02	5.80	2.32
95	28.42	25.52	21.46	16.82	12.18	7.54	3.48	1.16	0.58
100	19.14	16.82	13.34	9.86	6.96	3.48	1.16	0.58	0.00
105	13.34	11.02	8.70	5.80	3.48	1.74	0.58	0.00	0.00
110	8.70	6.96	5.22	3.48	2.32	1.16	0.00	0.00	0.00
115	5.80	4.64	3.48	2.32	1.74	0.00	0.00	0.00	0.00
120	4.06	3.48	2.32	1.74	1.16	0.00	0.00	0.00	0.00
125	3.48	2.90	2.32	1.74	0.00	0.00	0.00	0.00	0.00
130	2.32	2.32	1.74	1.74	0.00	0.00	0.00	0.00	0.00
135	2.32	1.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	1.74	1.74	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	243.27	N.A.	13.40
0-30	514.54	N.A.	28.30
0-40	834.86	N.A.	45.90
0-60	1414.68	N.A.	77.70
0-80	1710.85	N.A.	94.00
0-90	1768.1	N.A.	97.10
10-90	1705.1	N.A.	93.60
20-40	591.59	N.A.	32.50
20-50	907.72	N.A.	49.90
40-70	765.31	N.A.	42.00
60-80	296.17	N.A.	16.30
70-80	110.68	N.A.	6.10
80-90	57.24	N.A.	3.10
90-110	40.56	N.A.	2.20
90-120	47.07	N.A.	2.60
90-130	50.27	N.A.	2.80
90-150	52.62	N.A.	2.90
90-180	52.71	N.A.	2.90
110-180	12.15	N.A.	0.70
0-180	1820.81	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	63.00
10-20	180.28
20-30	271.27
30-40	320.32
40-50	316.13
50-60	263.69
60-70	185.49
70-80	110.68
80-90	57.24
90-100	27.24
100-110	13.32
110-120	6.51
120-130	3.20
130-140	1.65
140-150	0.70
150-160	0.09
160-170	0.00
170-180	0.00

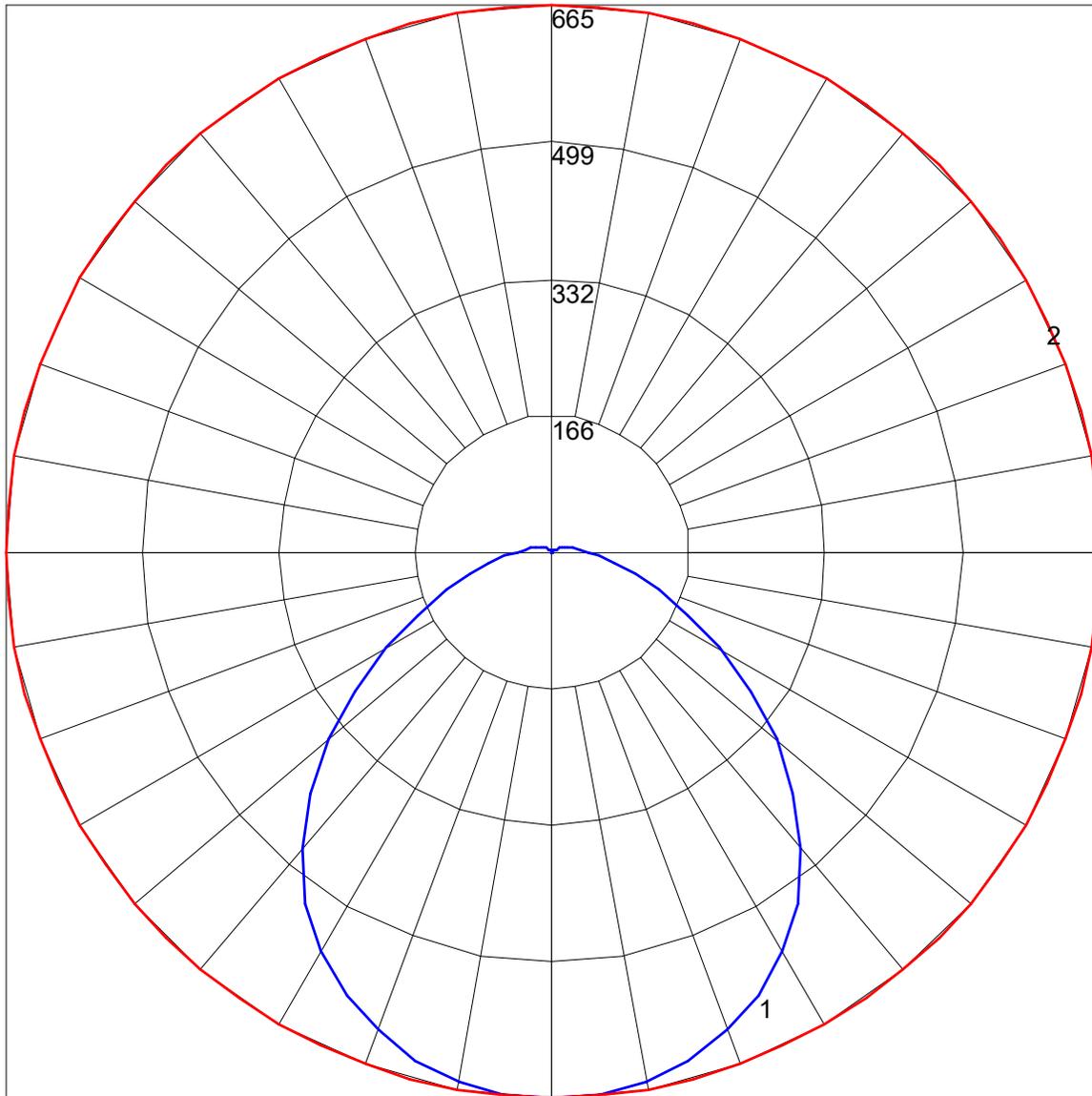
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	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 = 664.68 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.)