

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	99	102	105	107
Total Lumens, 4' rail length (1219mm)	1477	1524	1555	1586
Lumens per foot (305mm)	369	381	389	396
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](#).



IES INDOOR REPORT
PHOTOMETRIC FILENAME : VODE_107_RR_LO_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-LO-35-2
 [LUMINAIRE] RaceRail LED, 48", 3500K, 80 CRI, zipper board,
 [MORE] round diffuse lens, low output
 [TEST PROCEDURE] IESNA:LM-79-08

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1551
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	104
Total Luminaire Watts	14.95
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	14244	14612	15557
55	11706	12458	13223
65	9123	10174	10854
75	7119	8319	8711
85	6282	7602	6950

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	562.86	562.86	562.86	562.86	562.86	562.86	562.86	562.86	562.86	562.86
5	561.09	561.68	561.09	561.09	561.09	561.09	561.09	561.09	561.09	561.09
10	554.60	554.60	554.60	554.60	554.60	554.01	554.01	554.01	553.42	553.42
15	543.39	543.39	543.39	542.80	542.80	542.21	541.62	541.03	540.44	539.85
20	526.28	526.28	526.28	525.69	525.10	524.51	523.92	522.74	522.15	520.97
25	504.45	503.86	503.86	503.27	502.68	501.50	500.32	499.14	497.96	496.19
30	476.13	476.13	475.54	474.95	474.36	473.18	472.00	470.23	467.87	466.10
35	442.50	442.50	441.91	441.32	440.14	438.96	437.78	435.42	433.06	430.70
40	403.56	403.56	402.97	402.38	401.79	400.61	398.84	396.48	394.12	391.17
45	358.72	358.72	358.72	358.13	358.13	356.95	355.77	354.00	351.05	347.51
50	309.75	309.75	309.75	310.34	310.34	309.75	309.16	307.98	305.62	302.08
55	259.60	259.60	260.19	260.78	261.37	261.96	261.96	260.78	259.01	256.06
60	211.81	211.81	212.40	213.58	214.76	215.35	215.94	215.35	214.17	211.22
65	168.74	168.74	169.33	170.51	171.69	172.87	174.05	174.05	172.28	169.92
70	131.57	132.16	132.75	133.93	135.11	136.29	136.88	136.88	136.29	133.93
75	101.48	102.07	102.66	103.25	104.43	105.61	106.20	106.20	105.02	102.66
80	79.06	79.06	79.65	80.24	80.83	81.42	82.01	81.42	80.24	77.88
85	60.18	60.77	60.77	61.36	61.36	61.95	61.95	61.36	60.18	57.82
90	46.61	46.61	46.61	46.61	47.20	46.61	46.61	45.43	44.25	41.89
95	35.99	35.40	35.99	35.99	35.40	35.40	34.81	33.63	31.86	29.50
100	27.73	27.73	27.73	27.14	27.14	26.55	25.96	24.78	23.01	20.65
105	21.24	21.24	21.24	20.65	20.65	20.06	18.88	17.70	16.52	14.16
110	16.52	15.93	15.93	15.93	15.34	14.75	13.57	12.98	11.21	10.03
115	12.39	12.39	11.80	11.80	11.21	10.62	10.03	8.85	7.67	6.49
120	8.85	8.85	8.85	8.85	8.26	7.67	7.08	5.90	5.31	4.13
125	6.49	6.49	6.49	5.90	5.90	5.31	4.72	4.13	2.95	2.36
130	4.72	4.72	4.13	4.13	3.54	3.54	2.95	2.36	1.77	1.18
135	2.95	2.95	2.36	2.36	2.36	1.77	1.77	1.18	1.18	1.18
140	1.77	1.77	1.77	1.77	1.77	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	562.86	562.86	562.86	562.86	562.86	562.86	562.86	562.86	562.86
5	561.09	561.09	561.09	561.09	561.09	560.50	560.50	560.50	560.50
10	552.83	552.83	552.83	552.24	552.24	552.24	552.24	551.65	551.65
15	539.26	538.67	538.08	537.49	537.49	536.90	536.90	536.31	536.31
20	519.79	518.61	517.43	516.84	515.66	515.07	514.48	513.89	513.89
25	495.01	493.24	491.47	489.70	488.52	486.75	486.16	485.57	485.57
30	463.74	461.38	459.02	456.66	454.30	452.53	451.35	450.17	450.17
35	427.75	424.21	421.26	417.72	414.77	412.41	410.64	409.46	408.87
40	387.04	383.50	379.37	375.24	371.70	368.16	365.80	364.03	363.44
45	343.38	338.66	333.94	328.63	324.50	320.37	317.42	315.65	315.06
50	297.36	292.64	286.74	281.43	276.71	271.99	268.45	266.68	266.09
55	251.93	246.62	240.72	234.23	228.92	224.20	220.66	218.89	217.71
60	207.09	202.37	196.47	190.57	184.67	179.95	175.82	174.05	172.87

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CANDELA TABULATION - (Cont.)

65	166.38	161.66	155.76	149.86	143.96	138.65	135.11	132.75	132.16
70	130.39	125.67	120.36	113.87	108.56	103.25	99.12	96.76	96.17
75	99.71	94.99	89.68	83.78	77.88	72.57	68.44	66.08	65.49
80	74.93	70.21	64.90	59.00	53.10	47.79	43.07	40.71	39.53
85	54.28	50.15	44.84	39.53	33.63	27.73	23.01	19.47	18.29
90	38.35	34.81	30.09	24.78	19.47	14.16	9.44	5.31	1.77
95	26.55	23.01	19.47	14.75	10.62	6.49	2.95	0.59	0.00
100	18.29	15.34	11.80	8.85	5.31	2.95	0.59	0.00	0.00
105	12.39	10.03	7.08	4.72	2.36	1.18	0.00	0.00	0.00
110	8.26	5.90	4.13	2.36	1.18	0.59	0.00	0.00	0.00
115	5.31	3.54	2.36	1.18	0.59	0.00	0.00	0.00	0.00
120	2.95	1.77	1.18	0.59	0.00	0.00	0.00	0.00	0.00
125	1.77	1.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	1.18	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	205.54	N.A.	13.30
0-30	433.62	N.A.	28.00
0-40	701.11	N.A.	45.20
0-60	1186.32	N.A.	76.50
0-80	1445.89	N.A.	93.20
0-90	1500.52	N.A.	96.80
10-90	1447.22	N.A.	93.30
20-40	495.56	N.A.	32.00
20-50	759.30	N.A.	49.00
40-70	644.88	N.A.	41.60
60-80	259.58	N.A.	16.70
70-80	99.91	N.A.	6.40
80-90	54.62	N.A.	3.50
90-110	40.30	N.A.	2.60
90-120	46.56	N.A.	3.00
90-130	49.17	N.A.	3.20
90-150	50.09	N.A.	3.20
90-180	50.09	N.A.	3.20
110-180	9.79	N.A.	0.60
0-180	1550.6	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	53.30
10-20	152.24
20-30	228.08
30-40	267.49
40-50	263.73
50-60	221.48
60-70	159.67
70-80	99.91
80-90	54.62
90-100	27.01
100-110	13.29
110-120	6.26
120-130	2.62
130-140	0.84
140-150	0.07
150-160	0.00
160-170	0.00
170-180	0.00

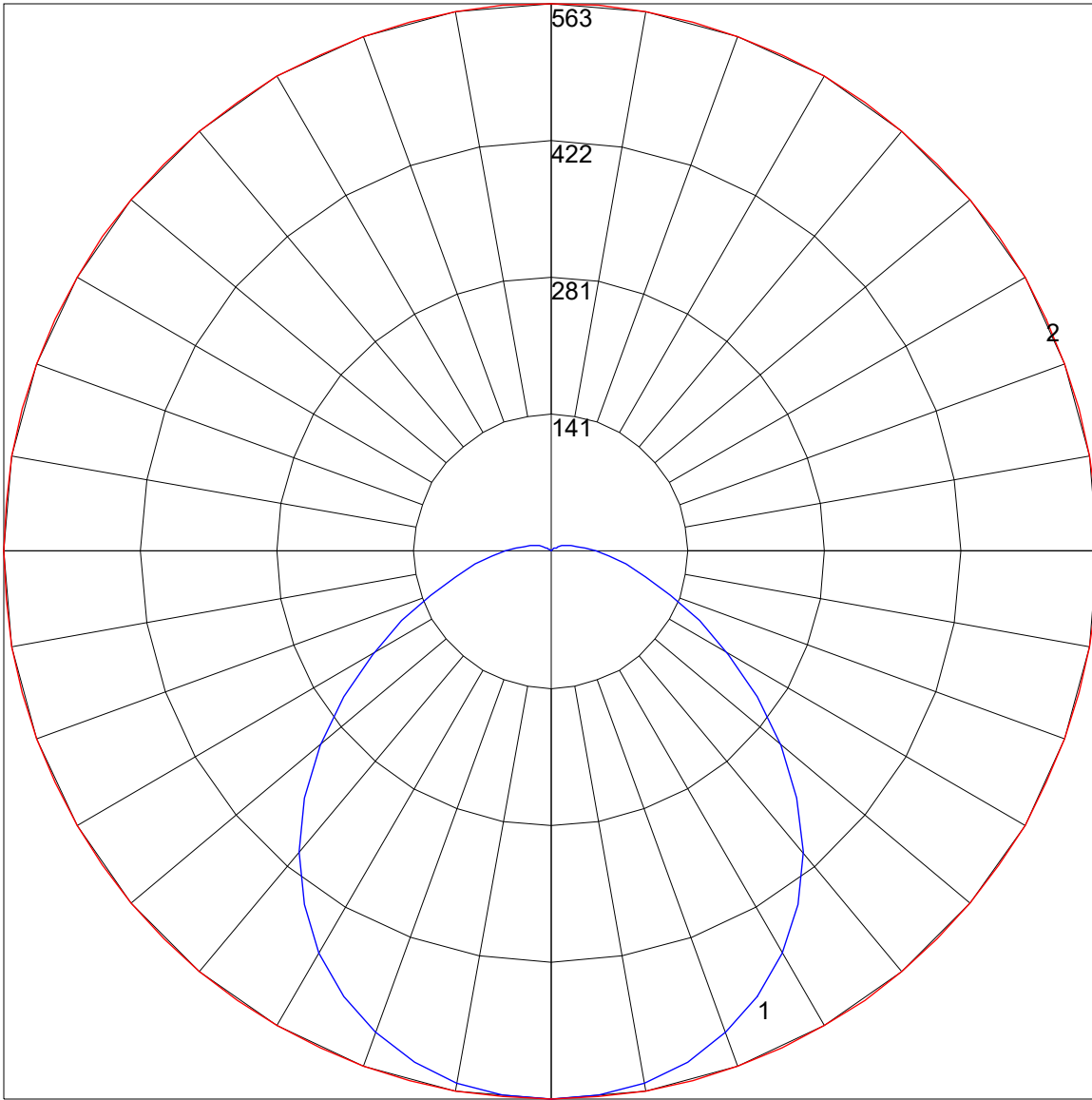
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	115	115	115	115	109	109	109	104	104	104	99	99	99	97
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	84	82	80
2	98	90	83	77	95	88	81	76	83	78	74	80	75	71	76	73	69	67
3	90	79	71	64	87	77	70	64	74	67	62	71	65	61	68	63	59	57
4	82	70	62	55	80	69	61	54	66	59	53	63	57	52	61	55	51	49
5	76	63	54	47	73	62	53	47	59	52	46	57	50	45	55	49	45	42
6	70	57	48	42	68	56	47	41	54	46	41	52	45	40	50	44	39	37
7	65	52	43	37	63	51	42	37	49	41	36	47	41	36	45	40	35	33
8	61	47	39	33	59	46	38	33	45	38	32	43	37	32	42	36	32	30
9	57	43	35	30	55	43	35	30	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	36	30	26	24

POLAR GRAPH



Maximum Candela = 562.86 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.)