

IES Report

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

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

	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	106	109	112	114
Total Lumens, 4' rail length (1219mm)	2547	2627	2681	2734
Lumens per foot (305mm)	637	657	670	684
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	96	96	96	96

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_359_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-359-2
 [LUMINAIRE] RaceRail LED, 48", 3500K, 90 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	2681
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	111
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	24625	25261	26895
55	20237	21537	22860
65	15771	17589	18765
75	12308	14381	15060
85	10861	13143	12016

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CANDELA TABULATION

	0	5	10	15	20	25	30	35	40	45
0	973.08	973.08	973.08	973.08	973.08	973.08	973.08	973.08	973.08	973.08
5	970.02	971.04	970.02	970.02	970.02	970.02	970.02	970.02	970.02	970.02
10	958.80	958.80	958.80	958.80	958.80	957.78	957.78	957.78	956.76	956.76
15	939.42	939.42	939.42	938.40	938.40	937.38	936.36	935.34	934.32	933.30
20	909.84	909.84	909.84	908.82	907.80	906.78	905.76	903.72	902.70	900.66
25	872.10	871.08	871.08	870.06	869.04	867.00	864.96	862.92	860.88	857.82
30	823.14	823.14	822.12	821.10	820.08	818.04	816.00	812.94	808.86	805.80
35	765.00	765.00	763.98	762.96	760.92	758.88	756.84	752.76	748.68	744.60
40	697.68	697.68	696.66	695.64	694.62	692.58	689.52	685.44	681.36	676.26
45	620.16	620.16	620.16	619.14	619.14	617.10	615.06	612.00	606.90	600.78
50	535.50	535.50	535.50	536.52	536.52	535.50	534.48	532.44	528.36	522.24
55	448.80	448.80	449.82	450.84	451.86	452.88	452.88	450.84	447.78	442.68
60	366.18	366.18	367.20	369.24	371.28	372.30	373.32	372.30	370.26	365.16
65	291.72	291.72	292.74	294.78	296.82	298.86	300.90	300.90	297.84	293.76
70	227.46	228.48	229.50	231.54	233.58	235.62	236.64	236.64	235.62	231.54
75	175.44	176.46	177.48	178.50	180.54	182.58	183.60	183.60	181.56	177.48
80	136.68	136.68	137.70	138.72	139.74	140.76	141.78	140.76	138.72	134.64
85	104.04	105.06	105.06	106.08	106.08	107.10	107.10	106.08	104.04	99.96
90	80.58	80.58	80.58	80.58	81.60	80.58	80.58	78.54	76.50	72.42
95	62.22	61.20	62.22	62.22	61.20	61.20	60.18	58.14	55.08	51.00
100	47.94	47.94	47.94	46.92	46.92	45.90	44.88	42.84	39.78	35.70
105	36.72	36.72	36.72	35.70	35.70	34.68	32.64	30.60	28.56	24.48
110	28.56	27.54	27.54	27.54	26.52	25.50	23.46	22.44	19.38	17.34
115	21.42	21.42	20.40	20.40	19.38	18.36	17.34	15.30	13.26	11.22
120	15.30	15.30	15.30	15.30	14.28	13.26	12.24	10.20	9.18	7.14
125	11.22	11.22	11.22	10.20	10.20	9.18	8.16	7.14	5.10	4.08
130	8.16	8.16	7.14	7.14	6.12	6.12	5.10	4.08	3.06	2.04
135	5.10	5.10	4.08	4.08	4.08	3.06	3.06	2.04	2.04	2.04
140	3.06	3.06	3.06	3.06	3.06	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**

	50	55	60	65	70	75	80	85	90
0	973.08	973.08	973.08	973.08	973.08	973.08	973.08	973.08	973.08
5	970.02	970.02	970.02	970.02	970.02	969.00	969.00	969.00	969.00
10	955.74	955.74	955.74	954.72	954.72	954.72	954.72	953.70	953.70
15	932.28	931.26	930.24	929.22	929.22	928.20	928.20	927.18	927.18
20	898.62	896.58	894.54	893.52	891.48	890.46	889.44	888.42	888.42
25	855.78	852.72	849.66	846.60	844.56	841.50	840.48	839.46	839.46
30	801.72	797.64	793.56	789.48	785.40	782.34	780.30	778.26	778.26
35	739.50	733.38	728.28	722.16	717.06	712.98	709.92	707.88	706.86
40	669.12	663.00	655.86	648.72	642.60	636.48	632.40	629.34	628.32
45	593.64	585.48	577.32	568.14	561.00	553.86	548.76	545.70	544.68
50	514.08	505.92	495.72	486.54	478.38	470.22	464.10	461.04	460.02
55	435.54	426.36	416.16	404.94	395.76	387.60	381.48	378.42	376.38
60	358.02	349.86	339.66	329.46	319.26	311.10	303.96	300.90	298.86

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CANDELA TABULATION - (Cont.)

65	287.64	279.48	269.28	259.08	248.88	239.70	233.58	229.50	228.48
70	225.42	217.26	208.08	196.86	187.68	178.50	171.36	167.28	166.26
75	172.38	164.22	155.04	144.84	134.64	125.46	118.32	114.24	113.22
80	129.54	121.38	112.20	102.00	91.80	82.62	74.46	70.38	68.34
85	93.84	86.70	77.52	68.34	58.14	47.94	39.78	33.66	31.62
90	66.30	60.18	52.02	42.84	33.66	24.48	16.32	9.18	3.06
95	45.90	39.78	33.66	25.50	18.36	11.22	5.10	1.02	0.00
100	31.62	26.52	20.40	15.30	9.18	5.10	1.02	0.00	0.00
105	21.42	17.34	12.24	8.16	4.08	2.04	0.00	0.00	0.00
110	14.28	10.20	7.14	4.08	2.04	1.02	0.00	0.00	0.00
115	9.18	6.12	4.08	2.04	1.02	0.00	0.00	0.00	0.00
120	5.10	3.06	2.04	1.02	0.00	0.00	0.00	0.00	0.00
125	3.06	2.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	2.04	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	355.34	N.A.	13.30
0-30	749.65	N.A.	28.00
0-40	1212.08	N.A.	45.20
0-60	2050.92	N.A.	76.50
0-80	2499.68	N.A.	93.20
0-90	2594.11	N.A.	96.80
10-90	2501.97	N.A.	93.30
20-40	856.74	N.A.	32.00
20-50	1312.68	N.A.	49.00
40-70	1114.87	N.A.	41.60
60-80	448.76	N.A.	16.70
70-80	172.72	N.A.	6.40
80-90	94.43	N.A.	3.50
90-110	69.67	N.A.	2.60
90-120	80.49	N.A.	3.00
90-130	85.01	N.A.	3.20
90-150	86.59	N.A.	3.20
90-180	86.59	N.A.	3.20
110-180	16.92	N.A.	0.60
0-180	2680.7	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	92.14
10-20	263.20
20-30	394.31
30-40	462.43
40-50	455.94
50-60	382.90
60-70	276.03
70-80	172.72
80-90	94.43
90-100	46.69
100-110	22.98
110-120	10.82
120-130	4.52
130-140	1.45
140-150	0.13
150-160	0.00
160-170	0.00
170-180	0.00

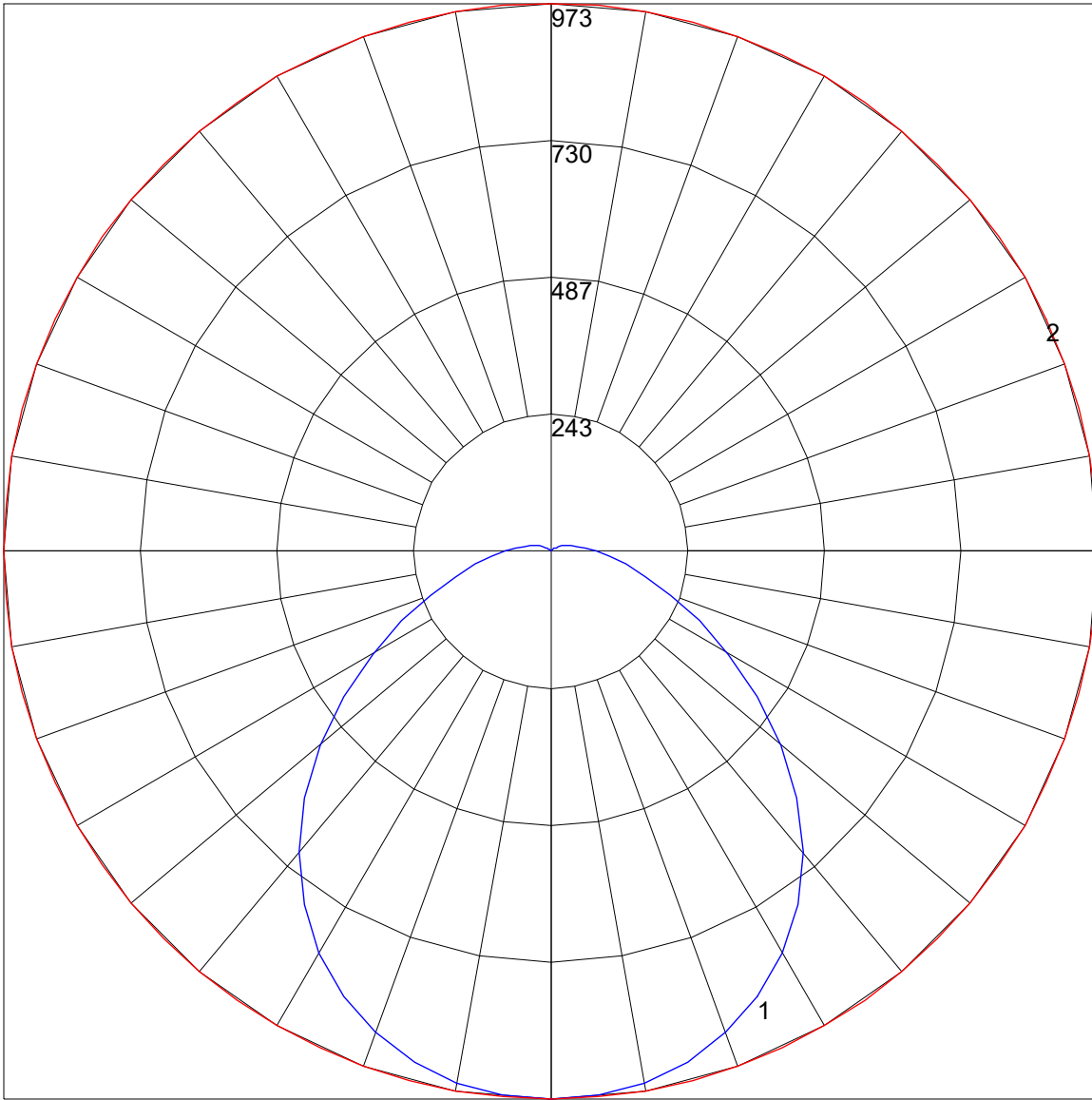
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	42
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 = 973.08 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.)