

## IES Report

# RaceRail® | 107 | 120° FlyWing™ | 80 CRI | HO

107-RR-XX-4-48-XX-XX-XX-XX-X-X-Z-HO-35-G2-X-XX-X

	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	115	119	121	121
Total Lumens, 4' rail length (1219mm)	5630	5808	5927	5927
Lumens per foot (305mm)	1408	1452	1482	1482
Input Power (W), 4' rail length (1219mm)	49.1	49.1	49.1	49.1
Watts per foot (305mm)	12.3	12.3	12.3	12.3
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\_HO\_35\_G2.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] L121911516 (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-HO-35-G2-AL

[LUMINAIRE] RaceRail LED, 48", 3500K, 80 CRI, zipper board, 120° flywing lens,

[MORE] high 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	5917
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	121
Total Luminaire Watts	49.06
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.64
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.56
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.07 ft
Luminous Width (90-270)	3.84 ft
Luminous Height	0.00 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	99632	89319	63311
55	92291	85860	61097
65	75014	74420	56772
75	36717	51268	45181
85	4827	7029	20490

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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>
<b>0</b>	1821.446	1821.446	1821.446	1821.446	1821.446	1821.446	1821.446	1821.446	1821.446	1821.446
<b>5</b>	1838.408	1838.870	1838.232	1837.682	1836.384	1834.822	1833.150	1831.324	1829.014	1826.528
<b>10</b>	1898.534	1898.534	1895.762	1891.802	1885.620	1878.514	1870.044	1860.452	1850.134	1839.794
<b>15</b>	1983.366	1982.156	1977.008	1968.054	1955.140	1939.564	1921.216	1901.482	1879.350	1856.492
<b>20</b>	2062.654	2060.344	2052.600	2040.170	2021.360	1998.766	1971.750	1939.938	1905.530	1869.582
<b>25</b>	2106.544	2104.608	2096.138	2081.464	2060.542	2033.526	2000.504	1961.520	1916.882	1868.196
<b>30</b>	2099.724	2096.952	2089.208	2074.930	2054.646	2027.432	1992.584	1950.630	1901.020	1845.140
<b>35</b>	2036.848	2035.264	2028.356	2016.652	1998.018	1973.862	1941.038	1900.470	1850.574	1792.208
<b>40</b>	1921.392	1920.578	1915.496	1906.366	1892.528	1872.354	1844.678	1807.608	1759.956	1703.064
<b>45</b>	1760.968	1759.582	1756.348	1750.826	1740.772	1725.460	1703.614	1672.726	1631.234	1578.676
<b>50</b>	1557.732	1557.182	1556.082	1552.848	1548.514	1538.548	1522.884	1499.190	1465.442	1420.166
<b>55</b>	1323.168	1323.344	1324.092	1324.092	1322.970	1318.548	1309.418	1292.830	1267.376	1230.966
<b>60</b>	1065.174	1065.636	1068.034	1070.432	1072.918	1073.182	1070.146	1060.752	1043.680	1016.576
<b>65</b>	792.418	793.254	796.576	801.636	807.554	811.888	813.824	811.602	802.846	786.148
<b>70</b>	514.888	515.900	521.334	529.078	538.846	548.262	555.720	560.252	559.504	552.508
<b>75</b>	237.534	239.096	246.004	257.268	272.470	289.168	305.030	318.934	328.064	331.672
<b>80</b>	46.464	46.750	48.972	52.734	59.202	68.420	81.422	98.296	116.908	133.980
<b>85</b>	10.516	10.516	10.604	10.890	11.242	11.528	11.990	12.826	13.640	15.312
<b>90</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**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>
<b>0</b>	1821.446	1821.446	1821.446	1821.446	1821.446	1821.446	1821.446	1821.446	1821.446
<b>5</b>	1823.756	1821.534	1819.048	1816.936	1814.802	1813.702	1812.954	1811.854	1810.578
<b>10</b>	1828.816	1818.124	1809.192	1801.074	1792.670	1786.224	1782.726	1780.240	1777.556
<b>15</b>	1833.150	1811.018	1788.996	1769.526	1753.488	1740.486	1730.432	1724.998	1722.424
<b>20</b>	1831.126	1793.330	1757.822	1724.910	1698.070	1676.312	1660.274	1650.858	1647.536
<b>25</b>	1817.024	1763.916	1714.020	1666.918	1628.176	1596.826	1574.430	1561.340	1556.808
<b>30</b>	1783.364	1718.178	1655.302	1595.176	1545.654	1505.724	1477.696	1461.108	1454.640
<b>35</b>	1723.986	1652.530	1579.028	1509.134	1452.352	1405.316	1371.766	1352.384	1346.026
<b>40</b>	1634.094	1559.954	1482.954	1408.176	1346.576	1296.614	1260.842	1240.734	1233.364
<b>45</b>	1514.392	1441.000	1362.526	1290.608	1227.996	1178.760	1144.462	1125.102	1119.008
<b>50</b>	1361.624	1294.854	1223.860	1154.890	1099.296	1054.658	1023.770	1006.346	1000.450
<b>55</b>	1181.730	1124.464	1063.964	1005.334	957.836	920.040	894.872	880.946	875.952
<b>60</b>	979.242	934.692	887.304	841.302	804.320	775.918	757.020	746.878	743.732
<b>65</b>	761.442	730.180	698.192	666.754	641.564	622.116	609.312	602.008	599.720
<b>70</b>	540.056	522.808	504.548	486.574	471.812	460.306	452.540	448.316	446.842
<b>75</b>	330.374	325.314	318.582	311.190	304.656	299.112	295.438	293.040	292.292
<b>80</b>	146.432	153.164	155.738	156.024	155.188	153.714	152.504	151.492	150.854
<b>85</b>	18.172	23.430	30.514	38.720	43.714	45.562	45.738	45.276	44.638
<b>90</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	700.12	N.A.	11.80
0-30	1552.09	N.A.	26.20
0-40	2636.91	N.A.	44.60
0-60	4824.41	N.A.	81.50
0-80	5872.98	N.A.	99.30
0-90	5916.57	N.A.	100.00
10-90	5741.85	N.A.	97.00
20-40	1936.79	N.A.	32.70
20-50	3092.52	N.A.	52.30
40-70	2914.95	N.A.	49.30
60-80	1048.58	N.A.	17.70
70-80	321.12	N.A.	5.40
80-90	43.59	N.A.	0.70
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	5916.57	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	174.72
10-20	525.40
20-30	851.96
30-40	1084.83
40-50	1155.72
50-60	1031.77
60-70	727.45
70-80	321.12
80-90	43.59
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

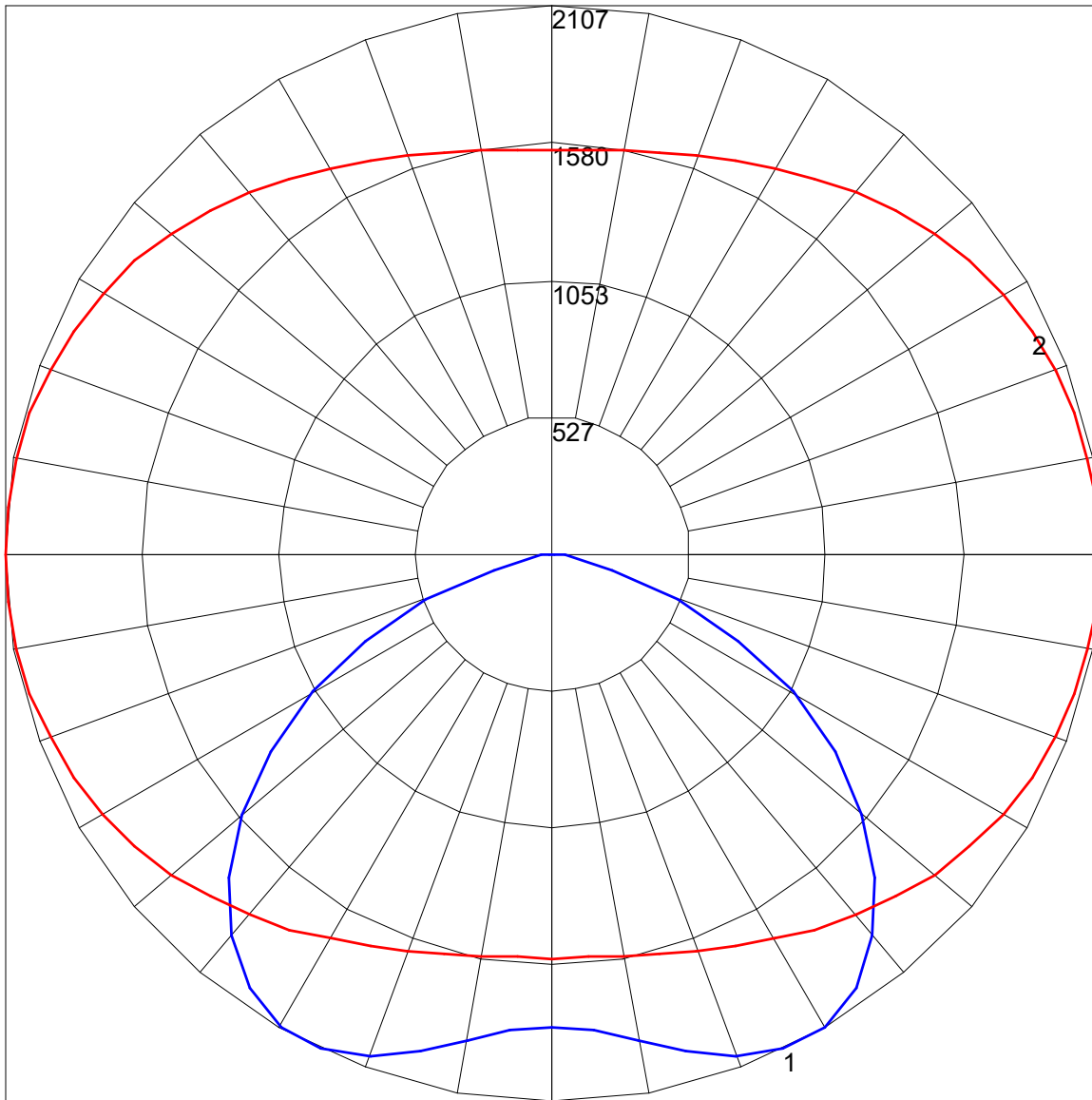
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**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	47	60	52	47	58	51	46	56	50	46	44
6	70	57	48	41	68	56	47	41	54	46	41	52	46	40	51	45	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

POLAR GRAPH



Maximum Candela = 2106.544 Located At Horizontal Angle = 0, Vertical Angle = 25  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)  
# 2 - Horizontal Cone Through Vertical Angle (25) (Through Max. Cd.)