

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P644751

Luminaire Tested: OMN4DIP-SR4F0-125D150U940-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644751
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-19)
Test Lab: INNOVATION CENTER
Issue Date: 2/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-125D150U940-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 1250 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

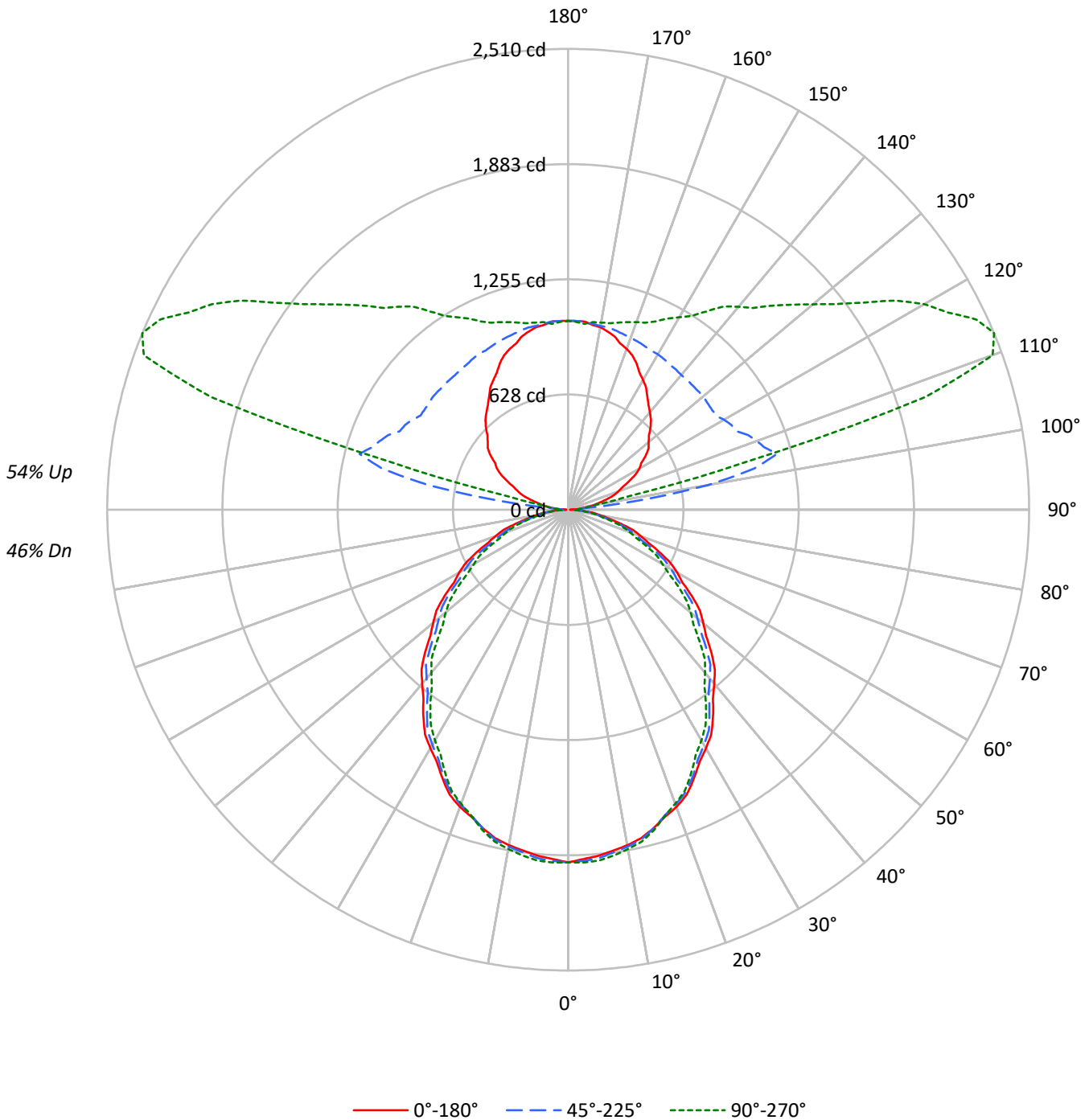
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10214.0 lumens
Efficiency: N/A
Efficacy: 115.3 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 88.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	50	30	10	0	
RCR																						
0	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46				46
1	97	93	89	85	89	85	82	79	71	69	67	58	56	55	46	45	44	39				39
2	88	81	75	70	81	74	69	65	62	58	55	51	48	46	41	39	37	32				32
3	81	71	64	58	74	66	59	54	55	50	47	45	42	39	36	34	32	28				28
4	74	63	55	49	67	58	51	46	49	44	40	40	37	34	32	30	28	24				24
5	68	56	48	42	62	52	45	40	44	38	34	36	32	29	29	26	24	21				21
6	62	50	42	37	57	47	40	34	40	34	30	33	29	26	27	24	21	18				18
7	58	46	38	32	53	42	35	30	36	30	26	30	26	23	24	21	19	16				16
8	54	41	34	28	49	38	32	27	33	27	23	27	23	20	22	19	17	15				15
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	15	13				13
10	47	35	27	23	43	32	26	21	28	22	19	23	19	16	19	16	14	12				12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	31018	31018	31018
5°	30669	30882	31092
10°	30424	30554	30767
15°	30014	30014	30190
20°	29594	29369	29280
25°	28823	28589	28217
30°	27971	27579	27044
35°	27098	26428	25811
40°	26057	25286	24405
45°	25186	24231	23037
50°	24094	23044	21863
55°	23175	21999	20673
60°	22113	20931	19159
65°	20970	19473	17975
70°	19865	18014	16782
75°	18590	16469	15652
80°	17015	15063	14338
85°	15987	14042	13079

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 25186 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.7	1.8
10°-20°	507.1	5.0
20°-30°	737.3	7.2
30°-40°	838.7	8.2
40°-50°	817.8	8.0
50°-60°	698.1	6.8
60°-70°	507.3	5.0
70°-80°	286.9	2.8
80°-90°	90.6	0.9
90°-100°	137.6	1.3
100°-110°	907.5	8.9
110°-120°	1227.4	12.0
120°-130°	998.1	9.8
130°-140°	801.2	7.8
140°-150°	631.5	6.2
150°-160°	461.7	4.5
160°-170°	286.8	2.8
170°-180°	97.8	1.0
0°-30°	1425.2	14.0
0°-40°	2263.9	22.2
0°-60°	3779.8	37.0
0°-90°	4664.6	45.7
90°-120°	2272.5	22.2
90°-150°	4703.2	46.0
90°-180°	5549.0	54.3
0°-180°	10214.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1921	1921	1921	1921	1921	
5°	1892	1920	1905	1903	1918	179
15°	1796	1819	1796	1793	1806	506
25°	1618	1633	1605	1576	1584	744
35°	1375	1380	1341	1310	1310	858
45°	1103	1098	1061	1024	1009	849
55°	823	821	782	745	734	735
65°	549	544	510	478	470	545
75°	298	288	264	254	251	316
85°	86	76	76	73	71	92
90°	10	19	29	32	32	13
95°	73	107	60	66	76	74
105°	214	316	1176	1498	990	226
115°	364	437	1012	2098	2452	362
125°	516	586	954	1663	1967	458
135°	634	704	958	1370	1572	488
145°	750	814	964	1193	1320	471
155°	880	912	983	1082	1132	404
165°	977	990	1009	1036	1055	274
175°	1029	1035	1029	1022	1016	97
180°	1029	1029	1029	1029	1029	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1921.1	1921.1	1921.1	1921.1	1921.1
2.5°	1904.3	1928.9	1914.8	1915.0	1923.1
5°	1892.3	1920.4	1905.4	1903.1	1918.4
7.5°	1872.4	1900.0	1882.4	1879.7	1899.6
10°	1855.7	1881.3	1863.6	1858.7	1876.6
12.5°	1832.7	1858.3	1840.6	1833.6	1851.5
15°	1795.6	1818.6	1795.6	1793.3	1806.1
17.5°	1753.8	1773.7	1747.0	1738.3	1748.0
20°	1722.4	1740.3	1709.3	1696.5	1704.1
22.5°	1682.7	1700.6	1667.5	1648.4	1658.1
25°	1617.9	1633.2	1604.8	1576.2	1583.9
27.5°	1548.3	1560.1	1531.6	1502.4	1505.0
30°	1500.3	1507.9	1479.3	1448.0	1450.6
32.5°	1450.1	1455.7	1425.0	1391.5	1392.0
35°	1374.8	1379.9	1340.8	1309.5	1309.5
37.5°	1294.8	1297.9	1256.1	1222.1	1218.5
40°	1236.3	1241.4	1199.7	1165.5	1157.9
42.5°	1181.9	1182.9	1145.3	1111.1	1101.4
45°	1103.0	1097.9	1061.2	1024.2	1008.9
47.5°	1017.8	1017.8	975.9	939.0	924.7
50°	959.2	959.2	917.4	880.6	870.4
52.5°	904.9	902.8	863.0	826.1	811.8
55°	823.3	820.8	781.5	744.7	734.4
57.5°	737.1	737.1	700.5	661.0	649.8
60°	684.8	684.8	648.2	608.6	593.3
62.5°	628.3	626.3	589.6	554.4	545.2
65°	548.9	543.8	509.7	478.1	470.5
67.5°	473.1	468.0	431.8	406.6	401.5
70°	420.8	415.7	381.6	360.6	355.5
72.5°	370.6	363.5	333.5	316.7	311.6
75°	298.0	287.7	264.0	253.5	250.9
77.5°	229.0	211.6	201.8	194.4	191.8
80°	183.0	167.6	162.0	156.8	154.2
82.5°	143.2	127.9	126.5	123.3	120.8
85°	86.3	76.0	75.8	73.1	70.6
87.5°	37.6	33.3	35.0	35.8	35.8
90°	10.5	19.3	28.6	32.5	32.5
92.5°	34.3	35.0	40.0	51.2	54.2
95°	72.7	106.7	59.6	66.3	76.4
97.5°	110.2	194.9	387.7	116.9	99.7
100°	141.2	241.1	768.7	227.3	151.4
102.5°	170.2	275.1	1037.8	595.6	325.3
105°	213.6	316.1	1176.3	1498.5	989.9
107.5°	259.7	336.1	1123.2	2179.7	2039.3
110°	288.7	362.0	1092.1	2290.3	2458.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	319.7	393.1	1061.1	2225.6	2510.3
115°	363.7	437.0	1011.9	2097.8	2452.0
117.5°	411.6	483.6	1000.3	1962.2	2326.5
120°	447.8	514.8	979.5	1859.0	2238.5
122.5°	471.6	545.7	953.7	1770.3	2119.5
125°	516.3	585.9	953.7	1663.2	1966.8
127.5°	551.2	624.1	955.0	1538.9	1838.7
130°	572.0	647.9	960.1	1455.7	1740.4
132.5°	595.7	671.7	958.0	1418.3	1652.4
135°	634.0	703.6	957.5	1369.7	1572.2
137.5°	666.4	741.0	957.5	1316.0	1489.3
140°	692.3	761.9	957.5	1284.6	1442.8
142.5°	718.1	782.7	962.7	1248.1	1396.2
145°	750.5	813.8	964.0	1193.3	1319.8
147.5°	789.3	845.0	971.8	1153.8	1251.3
150°	815.2	865.8	976.9	1127.6	1209.8
152.5°	841.1	886.6	976.9	1106.6	1173.6
155°	879.9	911.5	983.4	1081.6	1132.2
157.5°	910.9	941.3	991.2	1065.8	1102.4
160°	931.6	957.0	996.3	1055.3	1086.9
162.5°	947.2	972.5	1001.5	1049.9	1071.4
165°	976.9	989.6	1009.3	1035.6	1054.6
167.5°	993.8	1005.1	1015.8	1029.0	1040.3
170°	1009.3	1015.6	1015.8	1028.8	1035.2
172.5°	1014.5	1025.8	1020.9	1023.7	1030.0
175°	1028.7	1035.0	1028.7	1022.1	1015.8
177.5°	1028.7	1033.8	1028.7	1028.6	1023.5
180°	1028.7	1028.7	1028.7	1028.7	1028.7

(END OF REPORT)