

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: P644524

Luminaire Tested: OMN4DIP-SR4F0-100D125U840-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644524
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-SR4F0-100D125U840-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

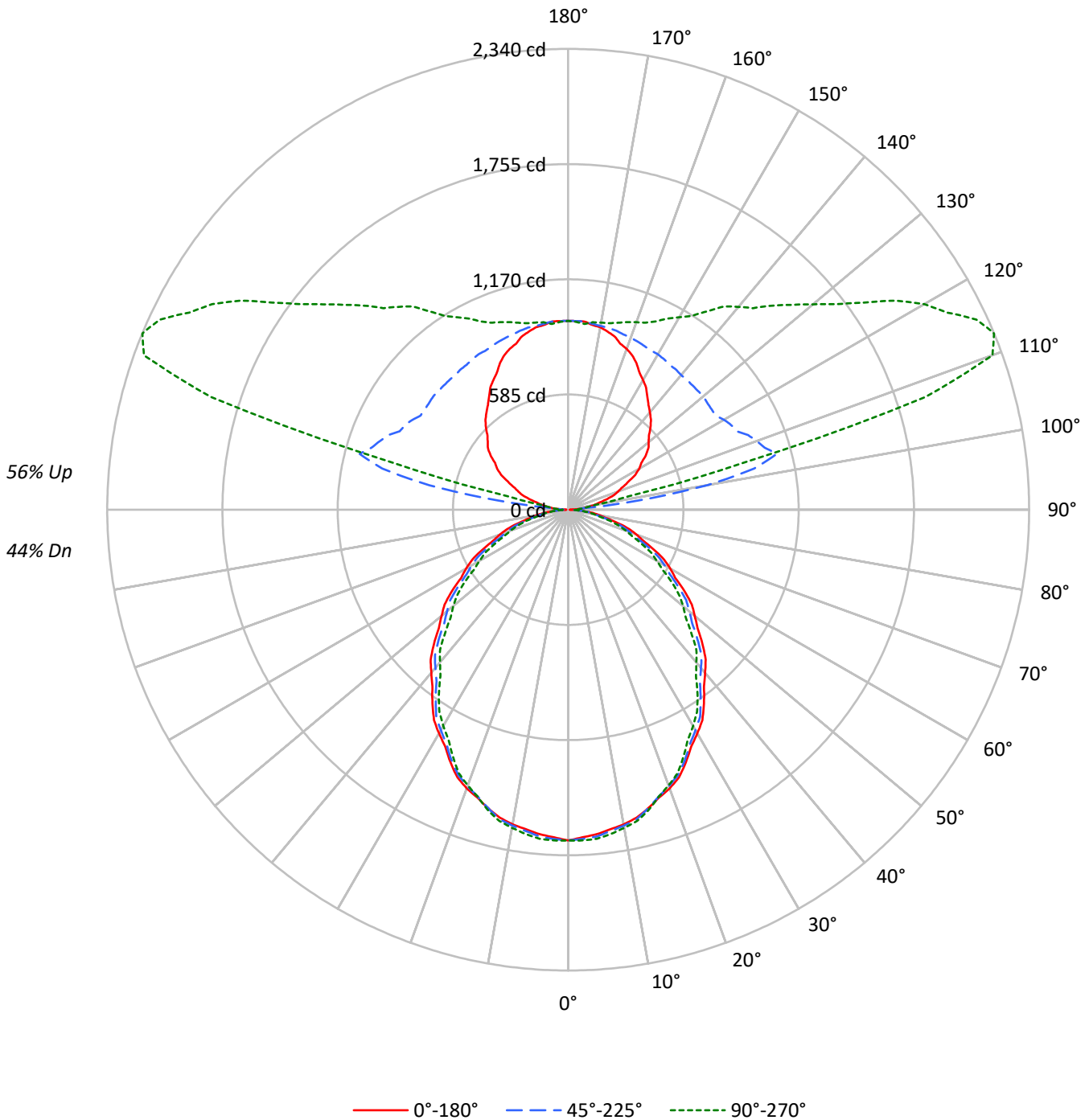
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9248.8 lumens
Efficiency: N/A
Efficacy: 135.8 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): 68.1
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	0
RCR																				
0	106	106	106	106	97	97	97	97	80	80	80		65	65	65		51	51	51	44
1	97	92	88	85	88	85	81	78	70	68	66		57	55	54		45	44	43	37
2	88	81	75	69	80	74	69	64	62	58	55		50	48	45		40	38	36	31
3	80	71	64	58	73	65	59	54	54	50	46		44	41	38		35	33	31	27
4	73	63	55	49	67	58	51	46	48	43	39		40	36	33		31	29	27	23
5	67	56	48	42	61	52	45	39	43	38	34		36	32	29		28	26	23	20
6	62	50	42	36	57	46	39	34	39	34	30		32	28	25		26	23	21	18
7	57	45	37	32	52	42	35	30	35	30	26		29	25	22		24	21	18	16
8	53	41	34	28	49	38	31	27	32	27	23		27	23	20		22	19	16	14
9	50	38	30	25	45	35	28	24	30	24	21		25	21	18		20	17	15	13
10	46	34	27	23	42	32	26	21	27	22	19		23	19	16		19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27114	27114	27114
5°	26810	26995	27180
10°	26596	26707	26896
15°	26236	26236	26390
20°	25871	25673	25596
25°	25196	24991	24667
30°	24449	24110	23640
35°	23688	23103	22563
40°	22778	22103	21332
45°	22016	21181	20137
50°	21062	20142	19110
55°	20259	19229	18072
60°	19330	18296	16746
65°	18330	17020	15713
70°	17363	15748	14667
75°	16251	14398	13681
80°	14868	13175	12534
85°	13968	12282	11430

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 22016 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.0	1.7
10°-20°	443.3	4.8
20°-30°	644.6	7.0
30°-40°	733.2	7.9
40°-50°	714.9	7.7
50°-60°	610.2	6.6
60°-70°	443.4	4.8
70°-80°	250.8	2.7
80°-90°	79.4	0.9
90°-100°	127.6	1.4
100°-110°	845.5	9.1
110°-120°	1143.8	12.4
120°-130°	930.1	10.1
130°-140°	746.7	8.1
140°-150°	588.6	6.4
150°-160°	430.4	4.7
160°-170°	267.3	2.9
170°-180°	91.2	1.0
0°-30°	1245.8	13.5
0°-40°	1979.0	21.4
0°-60°	3304.1	35.7
0°-90°	4077.7	44.1
90°-120°	2116.9	22.9
90°-150°	4382.3	47.4
90°-180°	5171.0	55.9
0°-180°	9248.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1679	1679	1679	1679	1679	
5°	1654	1679	1666	1664	1677	157
15°	1570	1590	1570	1568	1579	442
25°	1414	1428	1403	1378	1385	651
35°	1202	1206	1172	1145	1145	750
45°	964	960	928	895	882	742
55°	720	718	683	651	642	642
65°	480	475	446	418	411	476
75°	260	252	231	222	219	276
85°	75	66	66	64	62	81
90°	9	17	26	30	30	11
95°	66	99	55	61	71	68
105°	198	294	1096	1397	923	210
115°	338	407	943	1955	2286	337
125°	481	546	889	1550	1833	427
135°	591	656	892	1277	1465	455
145°	700	758	898	1112	1230	439
155°	820	850	917	1008	1055	376
165°	911	922	941	965	983	256
175°	959	965	959	953	947	91
180°	959	959	959	959	959	

TEST NUMBER: P644524

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1679.3	1679.3	1679.3	1679.3	1679.3
2.5°	1664.7	1686.1	1673.8	1674.0	1681.1
5°	1654.2	1678.7	1665.6	1663.6	1677.0
7.5°	1636.8	1660.9	1645.5	1643.1	1660.6
10°	1622.2	1644.5	1629.0	1624.8	1640.5
12.5°	1602.1	1624.4	1608.9	1602.9	1618.5
15°	1569.6	1589.7	1569.6	1567.6	1578.8
17.5°	1533.1	1550.5	1527.1	1519.6	1528.0
20°	1505.7	1521.3	1494.2	1483.0	1489.7
22.5°	1470.9	1486.6	1457.7	1441.0	1449.4
25°	1414.3	1427.7	1402.8	1377.9	1384.6
27.5°	1353.5	1363.8	1338.9	1313.3	1315.6
30°	1311.4	1318.1	1293.2	1265.8	1268.0
32.5°	1267.6	1272.5	1245.6	1216.4	1216.9
35°	1201.8	1206.2	1172.1	1144.7	1144.7
37.5°	1131.9	1134.5	1098.1	1068.3	1065.2
40°	1080.7	1085.2	1048.7	1018.8	1012.1
42.5°	1033.2	1034.1	1001.2	971.3	962.8
45°	964.2	959.7	927.6	895.3	881.9
47.5°	889.7	889.7	853.1	820.9	808.3
50°	838.5	838.5	801.9	769.8	760.8
52.5°	791.0	789.2	754.4	722.2	709.6
55°	719.7	717.5	683.1	651.0	642.0
57.5°	644.3	644.3	612.3	577.8	568.0
60°	598.6	598.6	566.6	532.0	518.6
62.5°	549.3	547.5	515.4	484.6	476.6
65°	479.8	475.3	445.5	418.0	411.3
67.5°	413.5	409.1	377.4	355.4	350.9
70°	367.8	363.4	333.6	315.2	310.7
72.5°	324.0	317.7	291.5	276.8	272.3
75°	260.5	251.5	230.8	221.6	219.3
77.5°	200.1	185.0	176.4	169.9	167.7
80°	159.9	146.5	141.7	137.0	134.8
82.5°	125.2	111.8	110.6	107.8	105.6
85°	75.4	66.5	66.3	63.9	61.7
87.5°	32.9	29.2	30.7	31.5	31.5
90°	9.1	17.3	25.8	29.5	29.5
92.5°	30.9	31.9	36.6	47.1	50.0
95°	66.5	98.9	55.1	61.3	70.9
97.5°	101.6	181.0	361.0	108.7	92.7
100°	130.6	224.1	716.1	211.7	141.0
102.5°	157.7	255.9	967.0	555.0	303.2
105°	198.4	294.1	1096.0	1396.6	922.6
107.5°	241.3	312.8	1046.6	2031.5	1900.7
110°	268.4	337.0	1017.7	2134.5	2291.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	297.4	365.9	988.7	2074.3	2339.7
115°	338.5	407.0	943.0	1955.3	2285.5
117.5°	383.1	450.5	932.2	1828.9	2168.5
120°	416.9	479.5	912.9	1732.7	2086.5
122.5°	439.2	508.3	888.7	1650.0	1975.5
125°	481.0	545.8	888.7	1550.2	1833.2
127.5°	513.7	581.5	889.9	1434.3	1713.8
130°	532.9	603.7	894.8	1356.8	1622.1
132.5°	555.2	626.0	892.9	1322.0	1540.1
135°	591.0	655.8	892.5	1276.7	1465.4
137.5°	621.1	690.7	892.5	1226.6	1388.2
140°	645.2	710.1	892.5	1197.3	1344.7
142.5°	669.4	729.5	897.3	1163.4	1301.3
145°	699.5	758.5	898.5	1112.2	1230.2
147.5°	735.7	787.6	905.7	1075.5	1166.3
150°	759.8	807.0	910.6	1051.0	1127.7
152.5°	783.9	826.4	910.6	1031.4	1093.9
155°	820.1	849.6	916.6	1008.1	1055.3
157.5°	849.1	877.4	923.8	993.4	1027.6
160°	868.4	891.9	928.7	983.6	1013.1
162.5°	882.8	906.4	933.5	978.6	998.6
165°	910.6	922.4	940.7	965.2	982.9
167.5°	926.2	936.9	946.8	959.1	969.7
170°	940.7	946.6	946.8	958.9	964.8
172.5°	945.5	956.2	951.6	954.1	960.0
175°	958.8	964.7	958.8	952.6	946.8
177.5°	958.8	963.5	958.8	958.7	954.0
180°	958.8	958.8	958.8	958.8	958.8

(END OF REPORT)