

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: P644700

Luminaire Tested: OMN4DIP-SR4F0-125D125U835-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

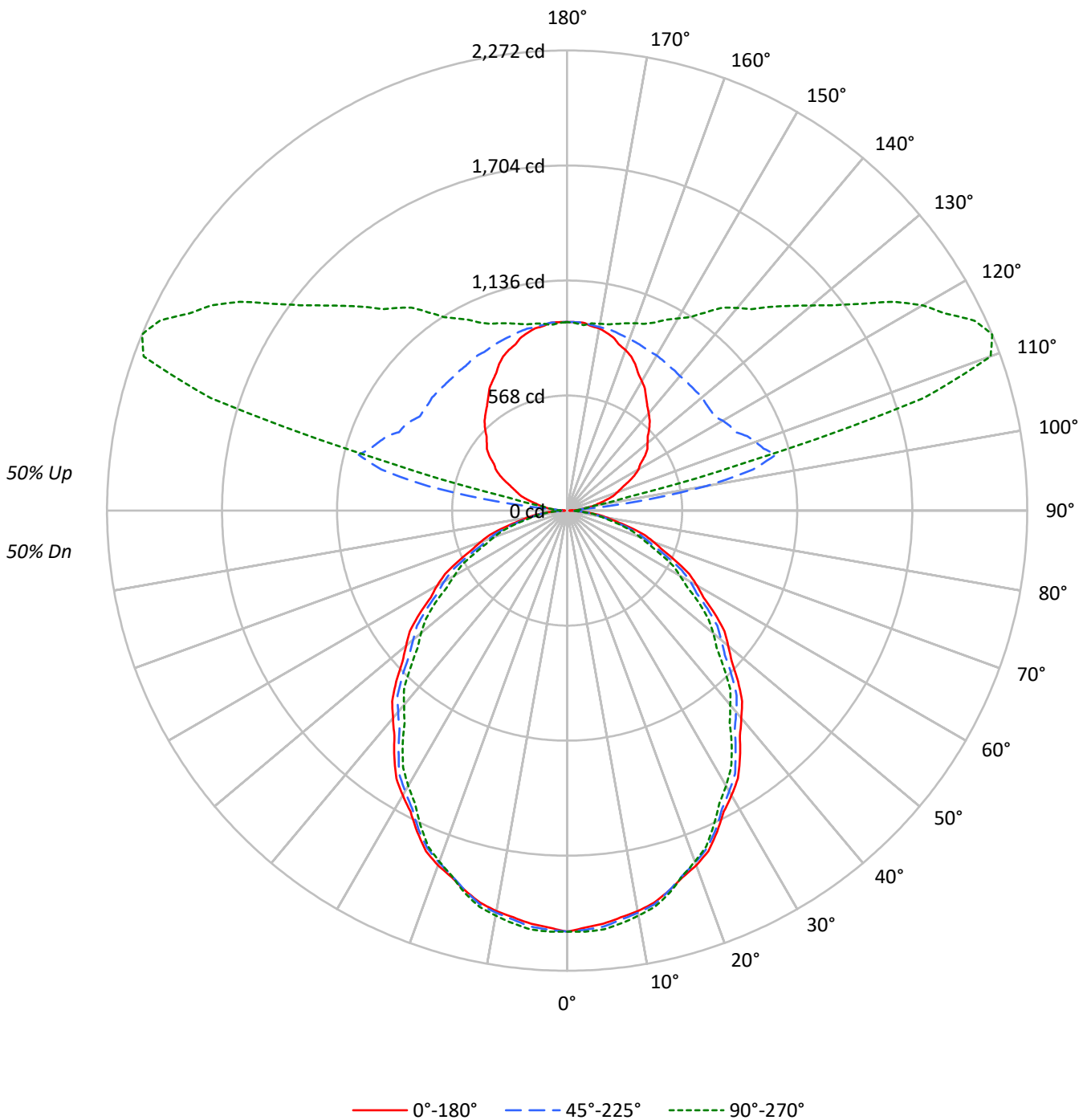
Test Method: LM-79-2019  
Report Number: P644700  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/16/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: OMN4DIP-SR4F0-125D125U835-FLLOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - FLAT FROSTED LENS - 1250 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10073.7 lumens  
Efficiency: N/A  
Efficacy: 128.8 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): 78.2  
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50				
1	98	94	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48	42				
2	89	82	76	71	82	76	70	66	64	60	57	54	51	48	44	42	40	36				
3	81	72	65	59	75	67	60	55	57	52	48	48	44	41	39	37	34	30				
4	75	64	56	50	69	59	52	47	51	45	41	42	38	35	35	32	30	26				
5	68	57	49	43	63	53	46	40	45	40	35	38	34	31	32	28	26	23				
6	63	51	43	37	58	48	40	35	41	35	31	35	30	27	29	25	23	20				
7	58	46	38	33	54	43	36	31	37	31	27	31	27	24	26	23	20	18				
8	54	42	34	29	50	39	32	27	34	28	24	29	24	21	24	21	18	16				
9	50	38	31	26	47	36	29	24	31	26	22	27	22	19	22	19	17	14				
10	47	35	28	23	44	33	26	22	29	23	20	25	20	17	21	17	15	13				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	33562	33562	33562
5°	33187	33415	33645
10°	32921	33060	33292
15°	32476	32476	32665
20°	32022	31780	31682
25°	31187	30936	30533
30°	30266	29843	29263
35°	29321	28596	27928
40°	28195	27360	26407
45°	27252	26218	24928
50°	26070	24935	23657
55°	25078	23803	22370
60°	23928	22649	20731
65°	22690	21070	19450
70°	21493	19492	18156
75°	20112	17817	16937
80°	18410	16299	15518
85°	17284	15191	14153

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 27252 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	195.5	1.9
10°-20°	548.7	5.4
20°-30°	797.9	7.9
30°-40°	907.6	9.0
40°-50°	884.9	8.8
50°-60°	755.3	7.5
60°-70°	548.9	5.4
70°-80°	310.4	3.1
80°-90°	97.7	1.0
90°-100°	126.5	1.3
100°-110°	822.4	8.2
110°-120°	1111.5	11.0
120°-130°	903.7	9.0
130°-140°	725.2	7.2
140°-150°	571.5	5.7
150°-160°	417.9	4.1
160°-170°	259.6	2.6
170°-180°	88.5	0.9
0°-30°	1542.1	15.3
0°-40°	2449.7	24.3
0°-60°	4089.9	40.6
0°-90°	5046.9	50.1
90°-120°	2060.5	20.5
90°-150°	4260.9	42.3
90°-180°	5027.0	49.9
0°-180°	10073.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2079	2079	2079	2079	2079	
5°	2048	2078	2062	2059	2076	194
15°	1943	1968	1943	1940	1954	548
25°	1751	1767	1736	1706	1714	805
35°	1488	1493	1451	1417	1417	929
45°	1194	1188	1148	1108	1092	918
55°	891	888	846	806	795	795
65°	594	588	552	517	509	590
75°	322	311	286	274	272	342
85°	93	82	82	79	76	100
90°	11	20	29	32	32	13
95°	70	98	55	61	70	69
105°	196	288	1066	1357	896	208
115°	330	396	916	1899	2219	329
125°	468	531	864	1505	1780	416
135°	574	637	867	1240	1423	442
145°	679	736	872	1080	1195	427
155°	796	825	890	979	1025	366
165°	884	896	914	937	954	248
175°	931	937	931	925	919	88
180°	931	931	931	931	931	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	2060.6	2087.1	2071.9	2072.1	2080.9
5°	2047.6	2078.0	2061.7	2059.3	2075.9
7.5°	2026.1	2055.9	2036.8	2033.9	2055.5
10°	2008.0	2035.6	2016.5	2011.2	2030.6
12.5°	1983.1	2010.7	1991.6	1984.1	2003.5
15°	1942.9	1967.8	1942.9	1940.4	1954.2
17.5°	1897.7	1919.2	1890.3	1881.0	1891.5
20°	1863.7	1883.1	1849.6	1835.6	1843.9
22.5°	1820.8	1840.1	1804.4	1783.7	1794.2
25°	1750.6	1767.2	1736.5	1705.6	1713.9
27.5°	1675.4	1688.1	1657.3	1625.7	1628.4
30°	1623.4	1631.6	1600.7	1566.9	1569.6
32.5°	1569.1	1575.1	1541.9	1505.7	1506.3
35°	1487.6	1493.1	1450.8	1416.9	1416.9
37.5°	1401.1	1404.4	1359.2	1322.3	1318.5
40°	1337.7	1343.2	1298.1	1261.2	1252.9
42.5°	1278.9	1280.0	1239.3	1202.3	1191.8
45°	1193.5	1187.9	1148.2	1108.3	1091.7
47.5°	1101.3	1101.3	1056.0	1016.1	1000.6
50°	1037.9	1037.9	992.7	952.8	941.8
52.5°	979.1	976.9	933.9	893.9	878.4
55°	890.9	888.1	845.6	805.8	794.7
57.5°	797.5	797.5	757.9	715.2	703.1
60°	741.0	741.0	701.4	658.6	642.0
62.5°	679.9	677.7	638.0	599.9	589.9
65°	593.9	588.4	551.5	517.4	509.1
67.5°	511.9	506.4	467.2	439.9	434.4
70°	455.3	449.8	412.9	390.2	384.6
72.5°	401.0	393.3	360.9	342.6	337.1
75°	322.4	311.3	285.6	274.3	271.5
77.5°	247.7	228.9	218.3	210.4	207.6
80°	198.0	181.4	175.3	169.6	166.9
82.5°	155.0	138.4	136.9	133.4	130.7
85°	93.3	82.3	82.0	79.1	76.4
87.5°	40.7	35.8	37.4	38.0	38.0
90°	11.3	19.8	28.7	31.7	31.7
92.5°	34.4	34.1	38.2	48.2	50.6
95°	69.5	98.5	55.3	61.4	70.1
97.5°	102.9	178.2	352.2	106.6	90.7
100°	131.1	220.1	696.6	206.2	137.5
102.5°	156.9	250.5	940.2	539.5	294.5
105°	195.7	287.5	1065.5	1356.7	895.9
107.5°	237.3	305.6	1017.5	1973.3	1845.7
110°	263.1	329.0	989.4	2073.3	2225.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	291.2	357.2	961.3	2014.8	2272.0
115°	330.5	396.5	916.3	1898.7	2219.3
117.5°	373.9	438.7	905.8	1775.9	2105.7
120°	406.7	466.9	887.0	1682.5	2026.1
122.5°	427.8	494.8	863.6	1602.3	1918.3
125°	468.3	531.2	863.6	1505.3	1780.1
127.5°	499.4	565.7	864.8	1392.8	1664.2
130°	518.1	586.8	869.5	1317.5	1575.2
132.5°	539.3	608.0	867.2	1283.7	1495.5
135°	573.9	636.8	866.6	1239.7	1422.9
137.5°	603.1	670.7	866.6	1191.1	1348.0
140°	626.6	689.5	866.6	1162.7	1305.8
142.5°	650.0	708.4	871.3	1129.7	1263.7
145°	679.3	736.5	872.5	1080.1	1194.6
147.5°	714.4	764.8	879.5	1044.3	1132.5
150°	737.8	783.6	884.2	1020.6	1095.0
152.5°	761.2	802.5	884.2	1001.5	1062.2
155°	796.4	825.0	890.1	978.9	1024.7
157.5°	824.5	852.0	897.1	964.6	997.8
160°	843.2	866.1	901.8	955.1	983.8
162.5°	857.3	880.2	906.5	950.2	969.7
165°	884.2	895.7	913.5	937.3	954.5
167.5°	899.4	909.7	919.3	931.3	941.6
170°	913.5	919.2	919.3	931.2	936.9
172.5°	918.2	928.5	924.0	926.5	932.2
175°	931.1	936.8	931.1	925.1	919.3
177.5°	931.1	935.6	931.1	931.0	926.4
180°	931.1	931.1	931.1	931.1	931.1

(END OF REPORT)