

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P644666

Luminaire Tested: OMN4DIP-SR4F0-125D100U830-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P644666  
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-SR4F0-125D100U830-FLLOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - FLAT FROSTED LENS - 1250 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

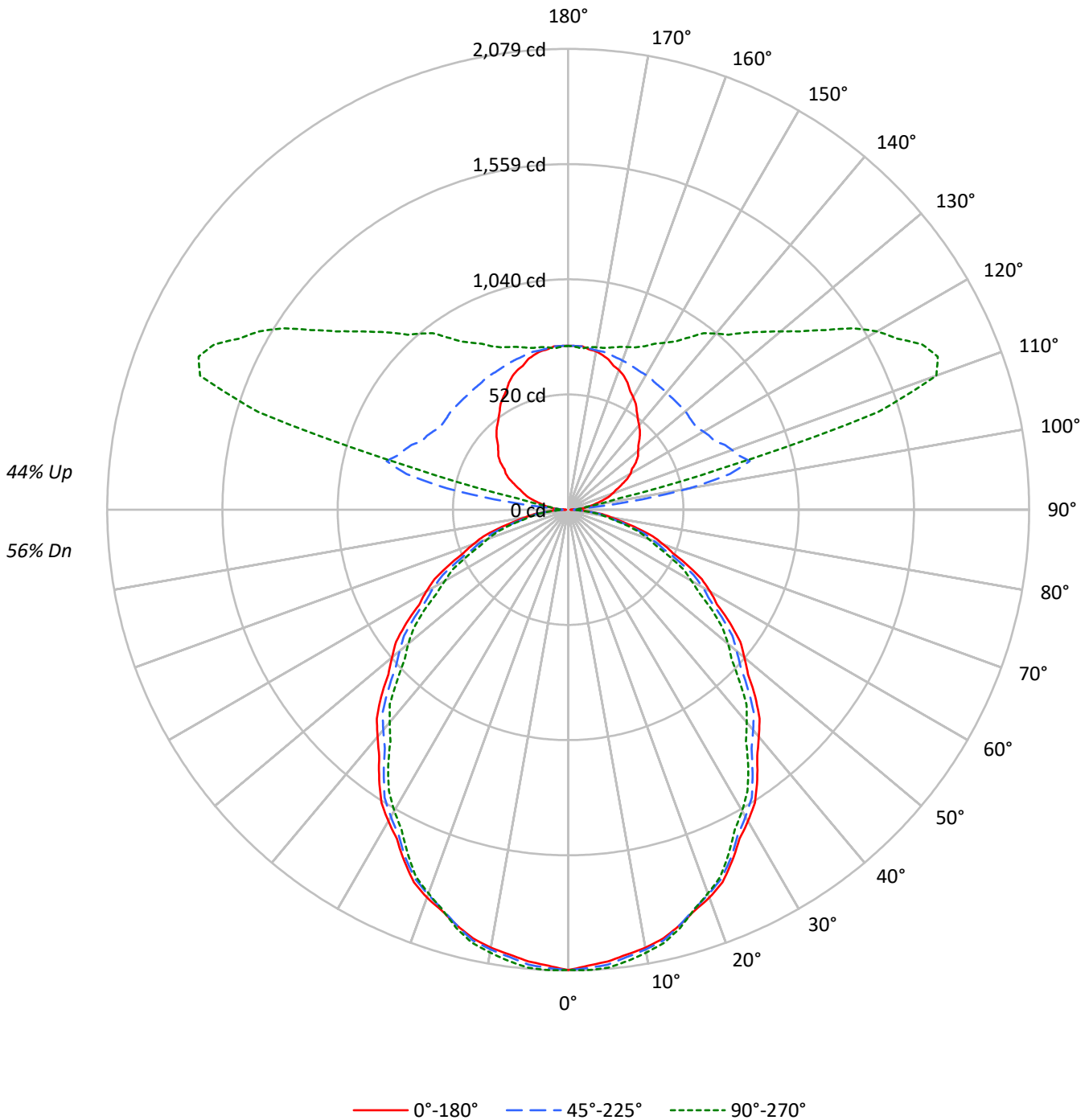
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9038.8 lumens  
Efficiency: N/A  
Efficacy: 131.0 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): 69  
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	109	109	109	109	101	101	101	101	87	87	87	73	73	73	61	61	61	56
1	99	95	91	87	92	88	85	82	76	74	71	65	63	61	54	53	52	47
2	90	83	77	72	84	77	72	67	67	63	59	57	54	51	48	46	44	40
3	83	73	66	60	76	68	62	56	59	54	50	51	47	44	43	40	38	34
4	76	65	57	51	70	61	53	48	53	47	43	45	41	38	38	35	32	29
5	69	58	50	44	64	54	47	41	47	41	37	41	36	33	35	31	28	25
6	64	52	44	38	59	49	41	36	43	37	32	37	32	29	31	28	25	22
7	59	47	39	33	55	44	37	32	39	33	29	34	29	25	29	25	22	20
8	55	43	35	30	51	40	33	28	35	30	25	31	26	23	26	23	20	18
9	51	39	32	26	48	37	30	25	32	27	23	28	24	21	24	21	18	16
10	48	36	29	24	45	34	27	23	30	24	21	26	22	19	23	19	17	15

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

	0°	45°	90°
0°	33532	33532	33532
5°	33156	33386	33614
10°	32891	33029	33262
15°	32448	32448	32637
20°	31995	31751	31654
25°	31158	30907	30505
30°	30238	29817	29237
35°	29296	28570	27902
40°	28169	27335	26382
45°	27227	26195	24905
50°	26048	24912	23634
55°	25056	23783	22351
60°	23906	22627	20712
65°	22670	21051	19431
70°	21475	19473	18142
75°	20093	17804	16924
80°	18391	16290	15500
85°	17266	15172	14135

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 27227 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	195.4	2.2
10°-20°	548.2	6.1
20°-30°	797.1	8.8
30°-40°	906.7	10.0
40°-50°	884.1	9.8
50°-60°	754.7	8.3
60°-70°	548.4	6.1
70°-80°	310.1	3.4
80°-90°	97.2	1.1
90°-100°	102.9	1.1
100°-110°	654.4	7.2
110°-120°	883.5	9.8
120°-130°	718.1	7.9
130°-140°	575.9	6.4
140°-150°	453.8	5.0
150°-160°	331.8	3.7
160°-170°	206.1	2.3
170°-180°	70.3	0.8
0°-30°	1540.7	17.0
0°-40°	2447.5	27.1
0°-60°	4086.2	45.2
0°-90°	5041.9	55.8
90°-120°	1640.9	18.2
90°-150°	3388.7	37.5
90°-180°	3997.0	44.2
0°-180°	9038.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2077	2077	2077	2077	2077	
5°	2046	2076	2060	2057	2074	194
15°	1941	1966	1941	1939	1952	547
25°	1749	1766	1735	1704	1712	805
35°	1486	1492	1450	1416	1416	928
45°	1192	1187	1147	1107	1091	918
55°	890	887	845	805	794	794
65°	593	588	551	517	509	589
75°	322	311	285	274	271	342
85°	93	82	82	79	76	100
90°	11	19	26	28	28	13
95°	60	81	46	50	57	59
105°	158	230	847	1078	711	168
115°	264	316	728	1508	1762	263
125°	373	423	686	1195	1414	331
135°	456	506	688	984	1130	351
145°	539	585	693	858	949	339
155°	632	655	707	777	814	290
165°	702	711	725	744	758	197
175°	739	744	739	735	730	70
180°	739	739	739	739	739	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2076.8	2076.8	2076.8	2076.8	2076.8
2.5°	2058.7	2085.2	2070.0	2070.2	2079.1
5°	2045.7	2076.1	2059.9	2057.4	2074.0
7.5°	2024.2	2054.1	2035.0	2032.1	2053.6
10°	2006.2	2033.8	2014.6	2009.4	2028.8
12.5°	1981.3	2008.9	1989.8	1982.3	2001.6
15°	1941.2	1966.0	1941.2	1938.7	1952.5
17.5°	1896.0	1917.5	1888.6	1879.3	1889.8
20°	1862.1	1881.4	1847.9	1834.0	1842.3
22.5°	1819.1	1838.5	1802.7	1782.1	1792.6
25°	1749.0	1765.6	1734.9	1704.0	1712.3
27.5°	1673.9	1686.6	1655.8	1624.2	1627.0
30°	1621.9	1630.2	1599.3	1565.4	1568.2
32.5°	1567.6	1573.7	1540.5	1504.4	1504.9
35°	1486.3	1491.8	1449.5	1415.6	1415.6
37.5°	1399.8	1403.1	1358.0	1321.2	1317.3
40°	1336.5	1342.0	1296.9	1260.0	1251.7
42.5°	1277.7	1278.8	1238.2	1201.2	1190.7
45°	1192.4	1186.9	1147.2	1107.3	1090.7
47.5°	1100.3	1100.3	1055.1	1015.2	999.7
50°	1037.0	1037.0	991.8	952.0	940.9
52.5°	978.2	976.0	933.0	893.1	877.6
55°	890.1	887.3	844.9	805.0	794.0
57.5°	796.8	796.8	757.3	714.6	702.4
60°	740.3	740.3	700.7	658.0	641.4
62.5°	679.3	677.1	637.5	599.4	589.4
65°	593.4	587.8	551.0	516.9	508.6
67.5°	511.4	505.9	466.8	439.5	434.0
70°	454.9	449.4	412.5	389.8	384.3
72.5°	400.7	392.9	360.5	342.3	336.8
75°	322.1	311.1	285.4	274.0	271.3
77.5°	247.5	228.7	218.1	210.2	207.4
80°	197.8	181.2	175.2	169.5	166.7
82.5°	154.8	138.3	136.8	133.3	130.5
85°	93.2	82.2	81.9	79.1	76.3
87.5°	40.7	35.5	36.9	37.3	37.3
90°	11.3	18.6	26.3	28.1	28.1
92.5°	31.5	30.0	32.9	40.7	42.2
95°	59.8	80.6	45.7	50.5	56.8
97.5°	85.8	143.9	281.3	85.7	72.6
100°	108.1	177.1	554.3	164.3	109.8
102.5°	128.2	200.8	747.8	429.0	234.0
105°	158.3	230.0	847.3	1077.9	711.4
107.5°	191.2	244.4	809.1	1567.5	1465.6
110°	211.2	263.0	786.8	1646.9	1766.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	233.6	285.4	764.5	1600.5	1804.1
115°	264.2	316.0	728.2	1507.7	1762.3
117.5°	298.6	349.5	719.8	1410.2	1672.1
120°	324.7	371.9	704.9	1336.0	1608.8
122.5°	341.0	394.1	686.3	1272.3	1523.3
125°	373.0	423.0	686.3	1195.3	1413.5
127.5°	397.1	450.3	687.3	1106.0	1321.5
130°	412.0	466.6	691.0	1046.2	1250.8
132.5°	428.3	482.9	688.7	1019.3	1187.6
135°	455.7	505.7	688.2	984.4	1129.9
137.5°	478.9	532.6	688.2	945.8	1070.4
140°	497.5	547.5	688.2	923.2	1036.9
142.5°	516.1	562.5	691.9	897.0	1003.4
145°	539.4	584.8	692.8	857.6	948.6
147.5°	567.3	607.3	698.4	829.3	899.3
150°	585.9	622.3	702.1	810.4	869.5
152.5°	604.5	637.2	702.1	795.3	843.5
155°	632.4	655.1	706.8	777.3	813.7
157.5°	654.7	676.5	712.4	766.0	792.3
160°	669.6	687.8	716.1	758.4	781.2
162.5°	680.7	698.9	719.8	754.6	770.0
165°	702.1	711.2	725.4	744.3	757.9
167.5°	714.2	722.4	730.0	739.5	747.7
170°	725.4	729.9	730.0	739.4	744.0
172.5°	729.1	737.3	733.7	735.7	740.3
175°	739.3	743.9	739.3	734.6	730.0
177.5°	739.3	743.0	739.3	739.2	735.6
180°	739.3	739.3	739.3	739.3	739.3

(END OF REPORT)