

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: P644835

Luminaire Tested: OMN4DIP-SR4F0-125D75U935-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P644835  
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-SR4F0-125D75U935-FLLOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - FLAT FROSTED LENS - 1250 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 750 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

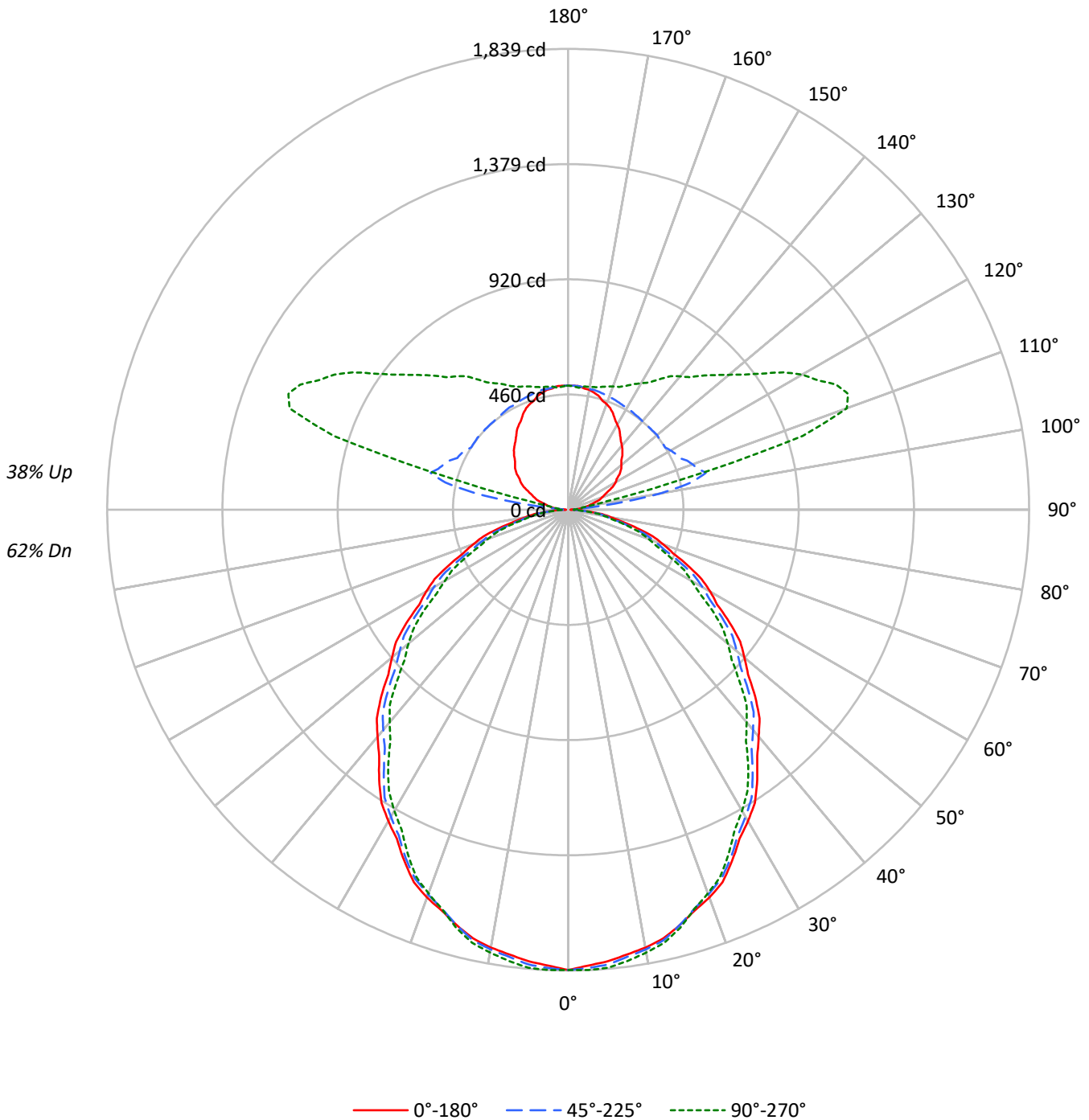
Lumens per Lamp: N/A  
Luminaire Lumens: 7141.0 lumens  
Efficiency: N/A  
Efficacy: 117.5 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 60.8  
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68	62
1	101	96	92	89	94	90	87	84	79	77	74	69	67	66	60	58	57	53
2	92	84	78	73	86	79	74	69	70	65	62	61	58	55	53	50	48	44
3	84	74	67	61	78	70	63	58	62	56	52	54	50	47	47	44	41	38
4	77	66	58	52	72	62	55	49	55	49	45	48	44	40	42	39	36	33
5	71	59	51	44	66	55	48	43	49	43	39	43	39	35	38	34	31	28
6	65	53	45	39	61	50	43	37	44	38	34	39	34	31	35	31	28	25
7	60	48	40	34	56	45	38	33	40	34	30	36	31	27	32	28	25	22
8	56	44	36	30	53	41	34	29	37	31	27	33	28	24	29	25	22	20
9	52	40	32	27	49	38	31	26	34	28	24	30	26	22	27	23	20	18
10	49	37	29	24	46	35	28	24	31	26	22	28	23	20	25	21	18	16

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

	0°	45°	90°
0°	29657	29657	29657
5°	29324	29527	29729
10°	29091	29214	29419
15°	28699	28699	28866
20°	28297	28082	27996
25°	27558	27335	26981
30°	26744	26371	25859
35°	25909	25269	24677
40°	24915	24177	23334
45°	24080	23167	22028
50°	23039	22034	20904
55°	22159	21033	19767
60°	21145	20014	18319
65°	20050	18617	17184
70°	18996	17226	16046
75°	17773	15745	14966
80°	16262	14403	13705
85°	15283	13431	12505

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 24080 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	172.8	2.4
10°-20°	484.9	6.8
20°-30°	705.0	9.9
30°-40°	802.0	11.2
40°-50°	781.9	10.9
50°-60°	667.5	9.3
60°-70°	485.0	6.8
70°-80°	274.3	3.8
80°-90°	85.6	1.2
90°-100°	71.5	1.0
100°-110°	439.7	6.2
110°-120°	592.5	8.3
120°-130°	481.4	6.7
130°-140°	385.7	5.4
140°-150°	303.9	4.3
150°-160°	222.2	3.1
160°-170°	138.0	1.9
170°-180°	47.1	0.7
0°-30°	1362.7	19.1
0°-40°	2164.7	30.3
0°-60°	3614.1	50.6
0°-90°	4459.0	62.4
90°-120°	1103.7	15.5
90°-150°	2274.7	31.9
90°-180°	2682.0	37.6
0°-180°	7141.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1837	1837	1837	1837	1837	
5°	1809	1836	1822	1820	1834	172
15°	1717	1739	1717	1715	1727	484
25°	1547	1562	1534	1507	1514	712
35°	1314	1319	1282	1252	1252	821
45°	1055	1050	1015	979	965	812
55°	787	785	747	712	702	703
65°	525	520	487	457	450	521
75°	285	275	252	242	240	302
85°	82	73	72	70	68	88
90°	10	16	21	22	22	11
95°	45	56	32	36	39	43
105°	109	156	569	722	476	116
115°	179	213	488	1010	1180	178
125°	251	284	460	800	947	223
135°	305	339	461	659	757	235
145°	361	392	464	574	635	227
155°	424	439	473	521	545	194
165°	470	476	486	498	508	132
175°	495	498	495	492	489	47
180°	495	495	495	495	495	

TEST NUMBER: P644835

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1836.8	1836.8	1836.8	1836.8	1836.8
2.5°	1820.8	1844.3	1830.8	1831.0	1838.8
5°	1809.3	1836.2	1821.8	1819.7	1834.3
7.5°	1790.4	1816.7	1799.8	1797.3	1816.3
10°	1774.4	1798.8	1781.9	1777.2	1794.4
12.5°	1752.4	1776.8	1759.9	1753.3	1770.4
15°	1716.9	1738.9	1716.9	1714.7	1726.9
17.5°	1676.9	1696.0	1670.4	1662.1	1671.4
20°	1646.9	1664.0	1634.4	1622.1	1629.4
22.5°	1608.9	1626.0	1594.4	1576.1	1585.4
25°	1546.9	1561.6	1534.4	1507.1	1514.5
27.5°	1480.5	1491.7	1464.5	1436.5	1439.0
30°	1434.5	1441.8	1414.5	1384.6	1387.0
32.5°	1386.5	1391.9	1362.5	1330.5	1331.0
35°	1314.5	1319.4	1282.0	1252.0	1252.0
37.5°	1238.1	1241.0	1201.1	1168.5	1165.1
40°	1182.1	1187.0	1147.1	1114.4	1107.1
42.5°	1130.1	1131.1	1095.1	1062.4	1053.1
45°	1054.6	1049.7	1014.6	979.3	964.7
47.5°	973.1	973.1	933.2	897.9	884.2
50°	917.2	917.2	877.2	842.0	832.2
52.5°	865.2	863.2	825.2	789.9	776.2
55°	787.2	784.8	747.2	712.0	702.2
57.5°	704.7	704.7	669.8	632.0	621.3
60°	654.8	654.8	619.8	582.0	567.3
62.5°	600.8	598.8	563.8	530.1	521.3
65°	524.8	519.9	487.3	457.2	449.8
67.5°	452.3	447.4	412.9	388.7	383.9
70°	402.4	397.5	364.9	344.8	339.9
72.5°	354.4	347.5	318.9	302.8	297.9
75°	284.9	275.1	252.4	242.4	239.9
77.5°	218.9	202.3	192.9	185.9	183.4
80°	174.9	160.3	154.9	149.9	147.4
82.5°	137.0	122.3	121.0	117.9	115.5
85°	82.5	72.7	72.5	69.9	67.5
87.5°	36.0	31.2	32.2	32.4	32.4
90°	10.0	15.5	21.2	21.8	21.8
92.5°	25.5	23.1	24.7	29.8	30.3
95°	44.9	56.4	32.4	35.6	39.2
97.5°	61.7	98.8	190.1	58.5	49.2
100°	76.7	121.1	372.4	110.7	74.1
102.5°	89.6	136.5	502.0	287.9	156.8
105°	109.0	155.9	568.6	722.4	476.4
107.5°	130.9	165.5	543.1	1050.3	981.5
110°	143.9	178.0	528.1	1103.5	1183.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	158.8	192.9	513.2	1072.4	1208.1
115°	178.8	212.8	488.2	1009.6	1180.1
117.5°	201.8	235.3	482.6	944.3	1119.7
120°	219.2	250.3	472.7	894.7	1077.4
122.5°	229.7	265.1	460.2	852.0	1020.1
125°	251.0	284.5	460.2	800.5	946.6
127.5°	266.5	302.6	460.8	740.6	884.9
130°	276.5	313.0	463.3	700.6	837.6
132.5°	287.0	323.5	461.3	682.6	795.3
135°	305.2	338.6	460.8	659.2	756.7
137.5°	320.7	356.6	460.8	633.4	716.8
140°	333.2	366.7	460.8	618.3	694.4
142.5°	345.6	376.7	463.3	600.7	672.0
145°	361.2	391.6	464.0	574.3	635.2
147.5°	379.9	406.7	467.7	555.3	602.2
150°	392.3	416.7	470.2	542.7	582.3
152.5°	404.8	426.7	470.2	532.6	564.8
155°	423.5	438.7	473.3	520.6	544.9
157.5°	438.4	453.0	477.0	512.9	530.6
160°	448.4	460.6	479.5	507.9	523.1
162.5°	455.9	468.0	482.0	505.3	515.6
165°	470.2	476.3	485.8	498.4	507.5
167.5°	478.3	483.8	488.9	495.2	500.7
170°	485.8	488.8	488.9	495.2	498.2
172.5°	488.2	493.7	491.4	492.7	495.7
175°	495.1	498.1	495.1	491.9	488.9
177.5°	495.1	497.5	495.1	495.0	492.6
180°	495.1	495.1	495.1	495.1	495.1

(END OF REPORT)