

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: P644710

Luminaire Tested: OMN4DIP-SR4F0-125D125U930-WBMOOB-1DUDD-WW

Issue Date: 9/2/2020



**Test Information**

Test Method: LM-79-2019  
Report Number: P644710  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/2/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: OMN4DIP-SR4F0-125D125U930-WBMOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE 4-INCH DIAMETER LINEAR LED LUMINAIRE  
DOWNLIGHT - WHITE BAFFLE WITH MEDIUM OPTIC - 1250 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

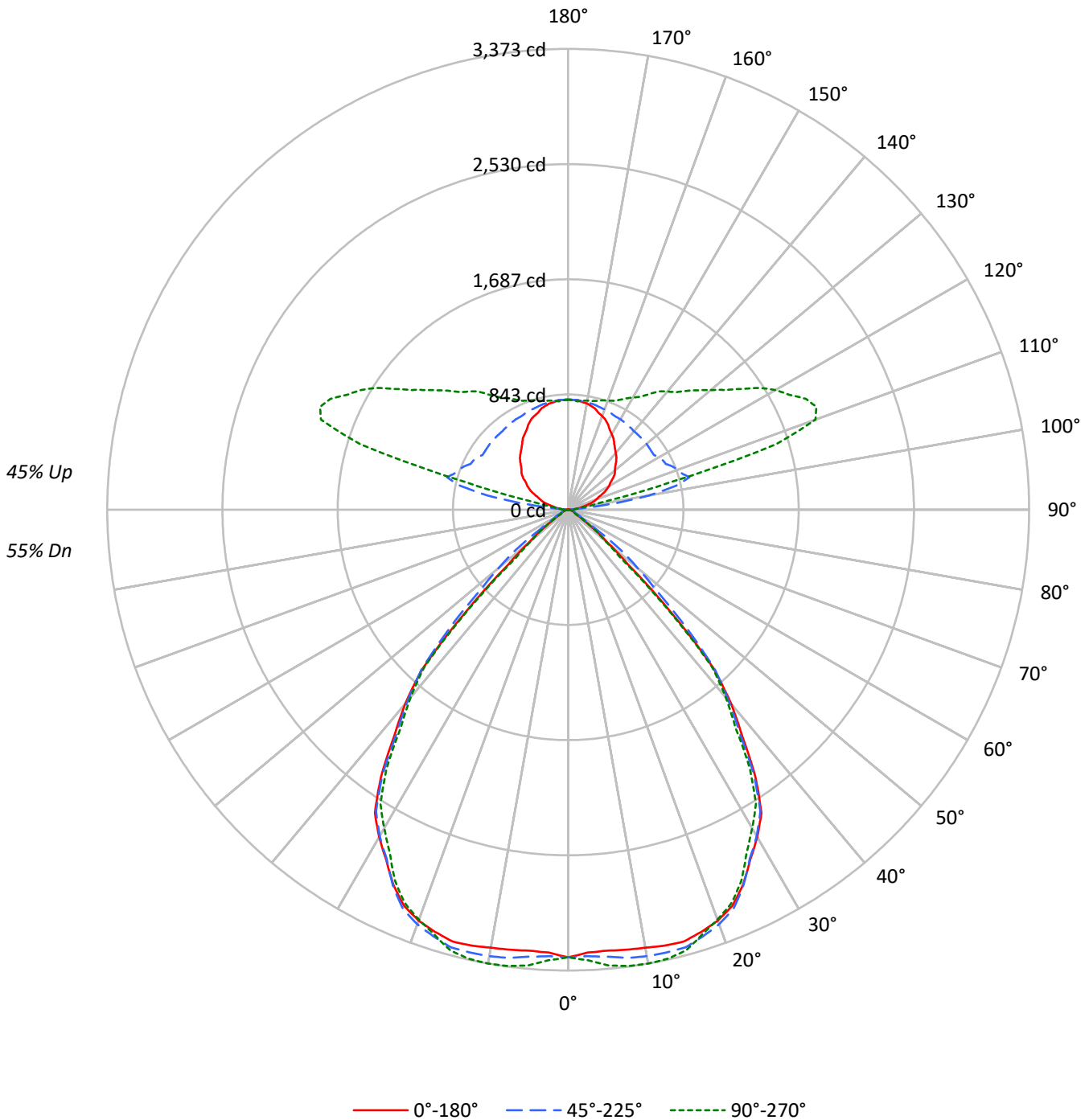
Lumens per Lamp: N/A  
Luminaire Lumens: 9596.4 lumens  
Efficiency: N/A  
Efficacy: 109.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.21 / 1.19  
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 87.7  
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									
RC	80									70									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55																			
1	101	97	94	91	94	91	88	85	78	76	75	67	66	65	57	56	55	50																			
2	94	87	82	78	87	82	77	74	71	68	65	61	59	57	52	51	50	45																			
3	87	79	73	68	81	74	68	64	65	61	57	56	53	51	48	46	45	41																			
4	80	71	64	59	75	67	61	56	59	54	51	52	48	46	45	42	40	37																			
5	75	65	57	52	70	61	55	50	54	49	45	47	44	41	41	39	37	34																			
6	70	59	52	47	65	56	49	45	49	44	41	44	40	37	38	36	33	31																			
7	65	54	47	42	61	51	45	40	46	40	37	40	37	34	36	33	30	28																			
8	61	49	42	38	57	47	41	36	42	37	33	37	33	31	33	30	28	26																			
9	57	46	39	34	53	43	37	33	39	34	30	35	31	28	31	28	26	24																			
10	53	42	35	31	50	40	34	30	36	31	28	32	28	26	29	26	24	22																			

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

	0°	45°	90°
0°	42323	42323	42323
5°	42005	42581	43413
10°	42685	43525	44238
15°	43750	44344	44641
20°	43988	44394	43886
25°	43147	43252	42725
30°	41253	41143	40148
35°	37661	37349	36572
40°	31285	30828	30245
45°	19652	22355	18749
50°	7536	13238	6991
55°	3556	5556	3612
60°	1721	2806	1529
65°	1583	1660	1433
70°	1582	1582	1397
75°	1602	1602	1352
80°	1651	1465	1287
85°	1823	1467	1097

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 22355 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	315.6	3.3
10°-20°	933.5	9.7
20°-30°	1386.7	14.5
30°-40°	1451.4	15.1
40°-50°	879.1	9.2
50°-60°	202.8	2.1
60°-70°	55.7	0.6
70°-80°	32.7	0.3
80°-90°	13.1	0.1
90°-100°	99.0	1.0
100°-110°	705.5	7.4
110°-120°	957.8	10.0
120°-130°	779.6	8.1
130°-140°	627.0	6.5
140°-150°	494.3	5.2
150°-160°	361.4	3.8
160°-170°	224.5	2.3
170°-180°	76.6	0.8
0°-30°	2635.7	27.5
0°-40°	4087.1	42.6
0°-60°	5169.1	53.9
0°-90°	5270.6	54.9
90°-120°	1762.4	18.4
90°-150°	3663.3	38.2
90°-180°	4326.0	45.1
0°-180°	9596.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3277	3277	3277	3277	3277	
5°	3240	3314	3284	3298	3348	310
15°	3272	3371	3316	3290	3338	921
25°	3027	3117	3035	2957	2998	1386
35°	2388	2425	2369	2314	2319	1468
45°	1076	1223	1224	1181	1026	826
55°	158	180	247	170	160	164
65°	52	54	54	49	47	52
75°	32	32	32	30	27	34
85°	12	12	10	10	7	12
90°	0	5	10	15	15	2
95°	40	75	40	46	56	45
105°	157	241	917	1171	775	166
115°	279	338	790	1642	1920	277
125°	400	455	744	1302	1540	356
135°	496	551	750	1072	1231	382
145°	588	637	755	934	1033	369
155°	689	714	770	847	886	316
165°	765	775	790	811	826	215
175°	805	810	805	800	795	76
180°	805	805	805	805	805	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3276.6	3276.6	3276.6	3276.6	3276.6
2.5°	3245.0	3302.9	3270.7	3273.3	3300.3
5°	3239.6	3314.4	3284.0	3297.5	3348.2
7.5°	3248.5	3326.6	3308.7	3313.4	3368.9
10°	3254.4	3336.4	3318.5	3317.3	3372.8
12.5°	3268.2	3354.1	3320.5	3313.4	3366.9
15°	3271.7	3370.6	3316.1	3290.0	3338.3
17.5°	3239.6	3348.6	3275.1	3221.2	3259.8
20°	3200.1	3311.1	3229.7	3154.1	3192.7
22.5°	3138.9	3248.0	3160.6	3079.2	3119.7
25°	3027.4	3116.7	3034.8	2956.8	2997.8
27.5°	2886.3	2949.0	2878.9	2804.9	2828.0
30°	2765.9	2828.6	2758.5	2682.2	2691.8
32.5°	2631.6	2684.7	2616.3	2547.9	2555.7
35°	2388.4	2424.6	2368.6	2314.5	2319.3
37.5°	2092.3	2097.1	2059.2	2009.9	2010.9
40°	1855.4	1869.9	1828.3	1788.9	1793.7
42.5°	1573.2	1630.1	1589.4	1553.9	1554.9
45°	1075.8	1222.9	1223.8	1180.8	1026.4
47.5°	594.1	764.5	873.9	677.7	511.7
50°	375.0	483.6	658.8	396.1	347.9
52.5°	268.4	317.2	481.1	280.2	255.1
55°	157.9	179.6	246.7	170.0	160.4
57.5°	96.2	115.0	144.1	113.6	96.7
60°	66.6	83.5	108.6	76.1	59.2
62.5°	58.7	64.0	84.9	60.6	55.3
65°	51.8	54.2	54.3	49.3	46.9
67.5°	45.9	48.3	45.9	43.4	41.0
70°	41.9	44.4	41.9	39.4	37.0
72.5°	38.0	40.4	38.0	35.5	33.1
75°	32.1	32.1	32.1	29.6	27.1
77.5°	26.2	26.2	25.7	23.6	21.2
80°	22.2	22.2	19.7	19.7	17.3
82.5°	18.3	18.3	15.8	15.7	13.3
85°	12.3	12.3	9.9	9.8	7.4
87.5°	5.9	6.9	6.0	6.9	5.0
90°	0.0	5.0	10.1	15.2	15.2
92.5°	12.2	17.1	22.3	31.5	35.5
95°	40.5	75.2	40.5	45.8	55.7
97.5°	71.9	144.2	297.8	87.9	76.0
100°	96.2	180.4	597.6	175.9	116.5
102.5°	120.5	208.7	808.3	464.2	254.2
105°	157.0	241.2	916.7	1171.1	774.9
107.5°	193.5	256.9	875.2	1704.4	1596.4
110°	217.8	277.2	850.9	1790.9	1924.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	242.1	301.5	826.6	1740.3	1965.1
115°	278.6	338.0	790.1	1642.2	1919.5
117.5°	316.0	374.5	781.0	1536.0	1821.3
120°	344.4	398.9	764.8	1455.3	1752.4
122.5°	364.7	423.1	744.5	1385.8	1659.2
125°	400.1	454.6	744.5	1302.0	1539.7
127.5°	429.5	485.0	745.5	1204.7	1439.4
130°	445.7	505.1	749.6	1139.6	1362.4
132.5°	466.0	525.4	749.6	1110.3	1293.5
135°	496.3	550.8	749.6	1072.3	1230.7
137.5°	521.7	580.1	749.6	1030.2	1165.9
140°	541.9	596.4	749.6	1005.6	1129.4
142.5°	562.2	612.7	753.6	977.1	1093.0
145°	587.5	637.0	754.6	934.2	1033.2
147.5°	617.9	661.5	760.7	903.3	979.5
150°	638.2	677.8	764.8	882.7	947.1
152.5°	658.4	694.1	764.8	866.2	918.7
155°	688.8	713.6	769.8	846.7	886.3
157.5°	713.1	736.9	775.9	834.3	863.0
160°	729.3	749.1	780.0	826.1	850.9
162.5°	741.5	761.3	784.0	821.9	838.7
165°	764.8	774.7	790.1	810.7	825.6
167.5°	777.9	786.9	795.2	805.5	814.4
170°	790.1	795.1	795.2	805.4	810.4
172.5°	794.2	803.1	799.2	801.4	806.3
175°	805.3	810.2	805.3	800.1	795.2
177.5°	805.3	809.3	805.3	805.2	801.2
180°	805.3	805.3	805.3	805.3	805.3

(END OF REPORT)