

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: P644495

Luminaire Tested: OMN4DIP-SR4F0-100D100U930-BBMOOB-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P644495
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-23)
Test Lab: INNOVATION CENTER
Issue Date: 9/2/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-100D100U930-BBMOOB-1DUDD-WW
Description: NEO-RAY CIRQUE 4-INCH DIAMETER LINEAR LED LUMINAIRE
DOWNLIGHT - BLACK BAFFLE WITH MEDIUM OPTIC - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

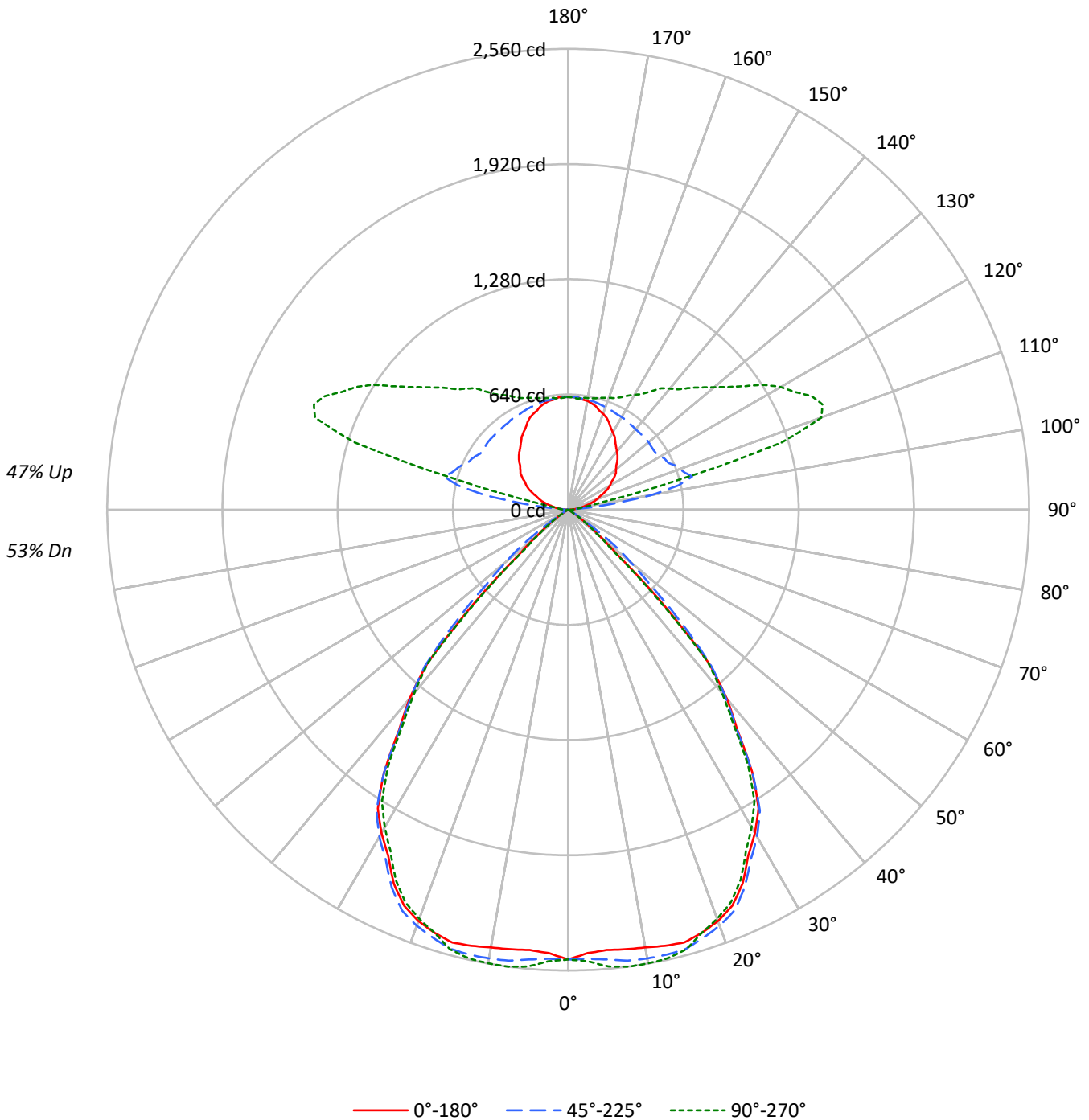
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7202.3 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.18
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 67.1
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	50	30	10	0	
RCR																						
0	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59	53				
1	101	97	94	91	93	90	88	85	78	76	74	66	65	64	55	55	54	49				
2	93	87	82	78	87	82	77	74	71	68	65	61	59	57	52	50	49	45				
3	87	79	73	68	81	74	69	64	65	61	57	56	53	51	48	46	44	41				
4	81	71	65	60	75	67	61	57	59	55	51	51	48	46	44	42	40	37				
5	75	65	58	53	70	61	55	50	54	49	46	47	44	41	41	39	37	34				
6	70	59	52	47	65	56	50	45	50	45	41	44	40	37	38	35	33	31				
7	65	54	47	42	61	51	45	40	46	41	37	40	37	34	35	33	31	28				
8	61	50	43	38	57	47	41	37	42	37	34	37	34	31	33	30	28	26				
9	57	46	39	34	53	43	37	33	39	34	31	35	31	28	31	28	26	24				
10	53	42	36	31	50	40	34	30	36	31	28	32	29	26	29	26	24	22				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	32270	32270	32270
5°	31837	32520	33026
10°	32385	33203	33561
15°	33278	33773	33825
20°	33430	33805	33243
25°	32660	33021	32298
30°	30922	31271	30368
35°	28109	28109	27524
40°	23119	22888	22394
45°	13823	16245	13181
50°	4467	9053	4194
55°	1581	3031	1581
60°	101	858	52
65°	61	61	0
70°	76	0	0
75°	0	0	0
80°	0	0	0
85°	296	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 16245 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	240.3	3.3
10°-20°	711.2	9.9
20°-30°	1052.5	14.6
30°-40°	1087.9	15.1
40°-50°	633.0	8.8
50°-60°	107.2	1.5
60°-70°	4.2	0.1
70°-80°	0.6	0.0
80°-90°	2.0	0.0
90°-100°	77.0	1.1
100°-110°	548.6	7.6
110°-120°	744.7	10.3
120°-130°	606.1	8.4
130°-140°	487.5	6.8
140°-150°	384.3	5.3
150°-160°	281.0	3.9
160°-170°	174.6	2.4
170°-180°	59.5	0.8
0°-30°	2004.0	27.8
0°-40°	3091.9	42.9
0°-60°	3832.1	53.2
0°-90°	3839.0	53.3
90°-120°	1370.3	19.0
90°-150°	2848.3	39.5
90°-180°	3363.0	46.7
0°-180°	7202.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2498	2498	2498	2498	2498	
5°	2455	2520	2508	2515	2547	235
15°	2489	2576	2526	2512	2530	700
25°	2292	2368	2317	2247	2266	1047
35°	1783	1811	1783	1738	1746	1092
45°	757	881	889	859	722	585
55°	70	82	135	76	70	77
65°	2	2	2	0	0	2
75°	0	2	0	0	0	1
85°	2	2	0	0	0	1
90°	0	4	8	12	12	2
95°	32	58	32	36	43	35
105°	122	188	713	910	602	129
115°	217	263	614	1277	1492	215
125°	311	353	579	1012	1197	276
135°	386	428	583	834	957	297
145°	457	495	587	726	803	287
155°	536	555	599	658	689	246
165°	595	602	614	630	642	167
175°	626	630	626	622	618	59
180°	626	626	626	626	626	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2498.3	2498.3	2498.3	2498.3	2498.3
2.5°	2465.6	2514.4	2496.8	2498.6	2510.8
5°	2455.4	2520.2	2508.1	2514.7	2547.1
7.5°	2462.8	2528.4	2526.8	2528.7	2560.3
10°	2469.1	2537.7	2531.5	2530.2	2558.8
12.5°	2481.5	2556.3	2531.5	2528.5	2552.5
15°	2488.6	2576.3	2525.6	2512.4	2529.5
17.5°	2464.8	2562.4	2493.6	2458.3	2465.2
20°	2432.0	2531.2	2459.3	2406.9	2418.4
22.5°	2380.5	2475.1	2410.9	2346.1	2360.6
25°	2291.6	2367.9	2316.9	2247.2	2266.2
27.5°	2165.2	2225.5	2193.3	2125.7	2137.5
30°	2073.2	2122.7	2096.6	2030.4	2036.1
32.5°	1967.1	2009.0	1981.1	1924.1	1923.8
35°	1782.6	1811.2	1782.6	1737.9	1745.5
37.5°	1541.1	1562.9	1533.7	1506.9	1510.7
40°	1371.1	1388.2	1357.4	1332.0	1328.1
42.5°	1158.9	1206.5	1176.4	1141.8	1147.2
45°	756.7	880.7	889.3	858.9	721.6
47.5°	381.5	516.9	619.0	469.7	336.6
50°	222.3	304.3	450.5	248.7	208.7
52.5°	145.9	180.6	314.8	157.2	138.5
55°	70.2	81.7	134.6	75.9	70.2
57.5°	24.2	37.2	59.7	38.0	26.9
60°	3.9	15.3	33.2	11.5	2.0
62.5°	2.3	4.6	20.7	2.3	0.4
65°	2.0	2.0	2.0	0.0	0.0
67.5°	2.0	2.0	0.0	0.0	0.0
70°	2.0	2.0	0.0	0.0	0.0
72.5°	2.0	2.0	0.0	0.0	0.0
75°	0.0	1.9	0.0	0.0	0.0
77.5°	0.0	1.9	0.0	0.0	0.0
80°	0.0	1.9	0.0	0.0	0.0
82.5°	0.0	1.9	0.0	0.0	0.0
85°	2.0	2.0	0.0	0.0	0.0
87.5°	1.6	2.3	1.6	2.4	2.4
90°	0.0	3.9	7.9	11.8	11.8
92.5°	9.5	13.3	17.3	24.5	27.6
95°	31.5	58.5	31.5	35.6	43.3
97.5°	55.9	112.1	231.5	68.3	59.1
100°	74.8	140.3	464.7	136.8	90.6
102.5°	93.7	162.3	628.5	360.9	197.7
105°	122.1	187.5	712.8	910.5	602.5
107.5°	150.4	199.7	680.5	1325.2	1241.2
110°	169.3	215.5	661.6	1392.4	1496.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	188.2	234.4	642.7	1353.1	1527.9
115°	216.6	262.8	614.3	1276.8	1492.5
117.5°	245.7	291.2	607.2	1194.3	1416.1
120°	267.8	310.1	594.6	1131.5	1362.5
122.5°	283.5	329.0	578.9	1077.5	1290.0
125°	311.1	353.4	578.9	1012.3	1197.1
127.5°	333.9	377.1	579.7	936.6	1119.1
130°	346.5	392.7	582.8	886.0	1059.3
132.5°	362.3	408.5	582.8	863.3	1005.7
135°	385.9	428.3	582.8	833.7	956.9
137.5°	405.6	451.0	582.8	801.0	906.5
140°	421.4	463.7	582.8	781.9	878.1
142.5°	437.1	476.4	586.0	759.7	849.8
145°	456.8	495.3	586.7	726.3	803.3
147.5°	480.4	514.3	591.5	702.3	761.6
150°	496.2	527.0	594.6	686.3	736.4
152.5°	511.9	539.6	594.6	673.5	714.3
155°	535.6	554.8	598.6	658.3	689.1
157.5°	554.5	572.9	603.3	648.7	671.0
160°	567.1	582.5	606.4	642.3	661.6
162.5°	576.5	591.9	609.6	639.0	652.1
165°	594.6	602.3	614.3	630.3	641.9
167.5°	604.9	611.8	618.2	626.3	633.2
170°	614.3	618.2	618.2	626.2	630.1
172.5°	617.5	624.4	621.4	623.1	626.9
175°	626.1	630.0	626.1	622.1	618.2
177.5°	626.1	629.2	626.1	626.1	623.0
180°	626.1	626.1	626.1	626.1	626.1

(END OF REPORT)