

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: P645150

Luminaire Tested: OMN4DIP-SR4F0-75D50U835-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645150
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-SR4F0-75D50U835-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 750 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

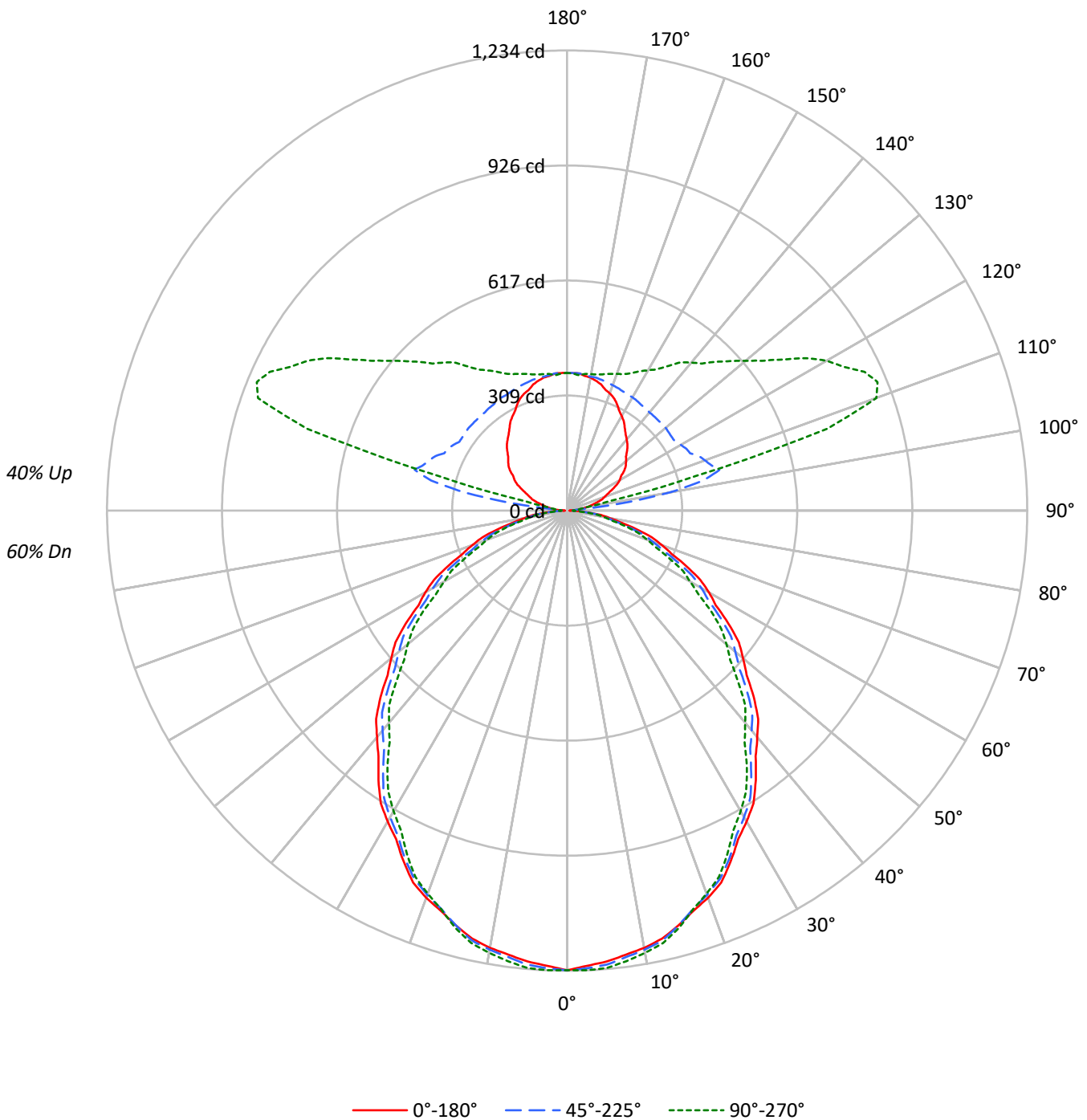
Lumens per Lamp: N/A
Luminaire Lumens: 4990.3 lumens
Efficiency: N/A
Efficacy: 137.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.4
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									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	50	30	10	0														
RCR																																						
0	110	110	110	110	102	102	102	102	89	89	89	77	77	77	65	65	65	60																				
1	100	96	92	88	93	90	86	83	78	76	73	68	66	64	58	56	55	51																				
2	91	84	78	72	85	78	73	68	69	64	61	59	56	54	51	49	47	43																				
3	83	74	66	60	78	69	63	57	61	56	51	53	49	46	45	42	40	36																				
4	76	65	57	51	71	61	54	49	54	48	44	47	43	39	41	37	35	31																				
5	70	58	50	44	65	55	48	42	48	43	38	42	38	34	37	33	30	27																				
6	65	53	44	38	60	49	42	37	44	38	33	38	34	30	33	30	27	24																				
7	60	48	39	34	56	45	38	32	40	34	29	35	30	27	31	27	24	21																				
8	56	43	35	30	52	41	34	29	36	30	26	32	27	24	28	24	21	19																				
9	52	40	32	27	49	37	31	26	33	28	24	30	25	21	26	22	19	17																				
10	49	36	29	24	45	34	28	23	31	25	21	27	23	20	24	20	18	16																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19900	19900	19900
5°	19676	19812	19948
10°	19520	19602	19739
15°	19256	19256	19368
20°	18986	18844	18785
25°	18492	18342	18104
30°	17944	17695	17350
35°	17385	16955	16559
40°	16716	16223	15656
45°	16157	15545	14780
50°	15458	14785	14026
55°	14869	14114	13264
60°	14186	13430	12290
65°	13452	12493	11530
70°	12746	11556	10768
75°	11928	10568	10044
80°	10916	9670	9196
85°	10244	9003	8392

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16157 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.9	2.3
10°-20°	325.3	6.5
20°-30°	473.1	9.5
30°-40°	538.1	10.8
40°-50°	524.7	10.5
50°-60°	447.9	9.0
60°-70°	325.5	6.5
70°-80°	184.1	3.7
80°-90°	57.5	1.2
90°-100°	52.5	1.1
100°-110°	327.4	6.6
110°-120°	441.6	8.8
120°-130°	358.8	7.2
130°-140°	287.6	5.8
140°-150°	226.6	4.5
150°-160°	165.7	3.3
160°-170°	102.9	2.1
170°-180°	35.1	0.7
0°-30°	914.3	18.3
0°-40°	1452.4	29.1
0°-60°	2425.0	48.6
0°-90°	2992.0	60.0
90°-120°	821.6	16.5
90°-150°	1694.6	34.0
90°-180°	1998.0	40.0
0°-180°	4990.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1232	1232	1232	1232	1232	
5°	1214	1232	1222	1221	1231	115
15°	1152	1167	1152	1150	1159	325
25°	1038	1048	1030	1011	1016	478
35°	882	885	860	840	840	551
45°	708	704	681	657	647	545
55°	528	527	501	478	471	471
65°	352	349	327	307	302	350
75°	191	185	169	163	161	203
85°	55	49	49	47	45	59
90°	7	11	15	15	15	8
95°	32	41	24	26	29	31
105°	80	116	424	538	355	85
115°	133	158	364	753	880	132
125°	187	212	343	597	706	166
135°	228	252	344	492	564	175
145°	269	292	346	428	474	169
155°	316	327	353	388	406	145
165°	351	355	362	372	378	98
175°	369	372	369	367	365	35
180°	369	369	369	369	369	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1232.5	1232.5	1232.5	1232.5	1232.5
2.5°	1221.8	1237.5	1228.5	1228.6	1233.8
5°	1214.0	1232.1	1222.4	1221.0	1230.8
7.5°	1201.3	1219.0	1207.7	1205.9	1218.7
10°	1190.6	1207.0	1195.6	1192.5	1204.0
12.5°	1175.8	1192.2	1180.8	1176.4	1187.9
15°	1152.0	1166.7	1152.0	1150.5	1158.7
17.5°	1125.2	1138.0	1120.8	1115.2	1121.5
20°	1105.0	1116.5	1096.7	1088.4	1093.3
22.5°	1079.6	1091.0	1069.8	1057.6	1063.8
25°	1038.0	1047.8	1029.6	1011.3	1016.2
27.5°	993.4	1000.9	982.6	963.9	965.5
30°	962.5	967.4	949.1	929.0	930.6
32.5°	930.3	933.9	914.2	892.8	893.1
35°	882.0	885.3	860.2	840.1	840.1
37.5°	830.7	832.7	805.9	784.0	781.7
40°	793.1	796.4	769.7	747.8	742.8
42.5°	758.3	758.9	734.8	712.9	706.6
45°	707.6	704.3	680.8	657.1	647.3
47.5°	653.0	653.0	626.1	602.4	593.3
50°	615.4	615.4	588.6	564.9	558.4
52.5°	580.5	579.2	553.7	530.0	520.8
55°	528.2	526.6	501.4	477.8	471.2
57.5°	472.9	472.9	449.4	424.1	416.9
60°	439.3	439.3	415.9	390.5	380.6
62.5°	403.1	401.8	378.3	355.7	349.8
65°	352.1	348.9	327.0	306.8	301.8
67.5°	303.5	300.2	277.0	260.8	257.6
70°	270.0	266.7	244.8	231.3	228.1
72.5°	237.8	233.2	214.0	203.2	199.9
75°	191.2	184.6	169.4	162.6	161.0
77.5°	146.9	135.7	129.5	124.7	123.1
80°	117.4	107.5	104.0	100.6	98.9
82.5°	91.9	82.1	81.2	79.1	77.5
85°	55.3	48.8	48.6	46.9	45.3
87.5°	24.1	21.0	21.7	21.9	21.9
90°	6.7	10.6	14.7	15.4	15.4
92.5°	17.6	16.3	17.6	21.5	22.0
95°	32.0	41.3	23.6	26.0	28.9
97.5°	44.7	72.9	141.2	43.3	36.5
100°	55.9	89.5	277.3	82.3	55.1
102.5°	65.7	101.2	373.9	214.5	116.9
105°	80.4	115.7	423.6	538.5	355.3
107.5°	96.7	122.9	404.6	783.0	731.9
110°	106.6	132.2	393.4	822.7	882.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	117.7	143.3	382.3	799.5	900.9
115°	132.7	158.3	363.9	752.9	880.0
117.5°	149.9	175.1	359.7	704.2	835.0
120°	162.9	186.3	352.3	667.2	803.4
122.5°	170.9	197.3	343.0	635.4	760.7
125°	186.8	211.8	343.0	596.9	705.9
127.5°	198.6	225.3	343.5	552.3	659.9
130°	206.0	233.3	345.3	522.4	624.6
132.5°	214.0	241.2	344.0	509.0	593.0
135°	227.6	252.5	343.7	491.6	564.2
137.5°	239.2	266.0	343.7	472.3	534.5
140°	248.5	273.4	343.7	461.0	517.8
142.5°	257.7	280.9	345.5	448.0	501.1
145°	269.4	292.1	346.0	428.3	473.7
147.5°	283.3	303.3	348.8	414.1	449.1
150°	292.6	310.7	350.6	404.7	434.2
152.5°	301.9	318.2	350.6	397.1	421.2
155°	315.8	327.1	352.9	388.2	406.3
157.5°	326.9	337.8	355.7	382.5	395.7
160°	334.4	343.4	357.6	378.7	390.1
162.5°	339.9	349.0	359.4	376.8	384.5
165°	350.6	355.2	362.2	371.7	378.5
167.5°	356.7	360.7	364.6	369.3	373.4
170°	362.2	364.5	364.6	369.2	371.5
172.5°	364.1	368.2	366.4	367.4	369.7
175°	369.2	371.5	369.2	366.8	364.6
177.5°	369.2	371.0	369.2	369.2	367.3
180°	369.2	369.2	369.2	369.2	369.2

(END OF REPORT)