

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: P645180

Luminaire Tested: OMN4DIP-SR4F0-75D75U835-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645180
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-SR4F0-75D75U835-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 750 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 750 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

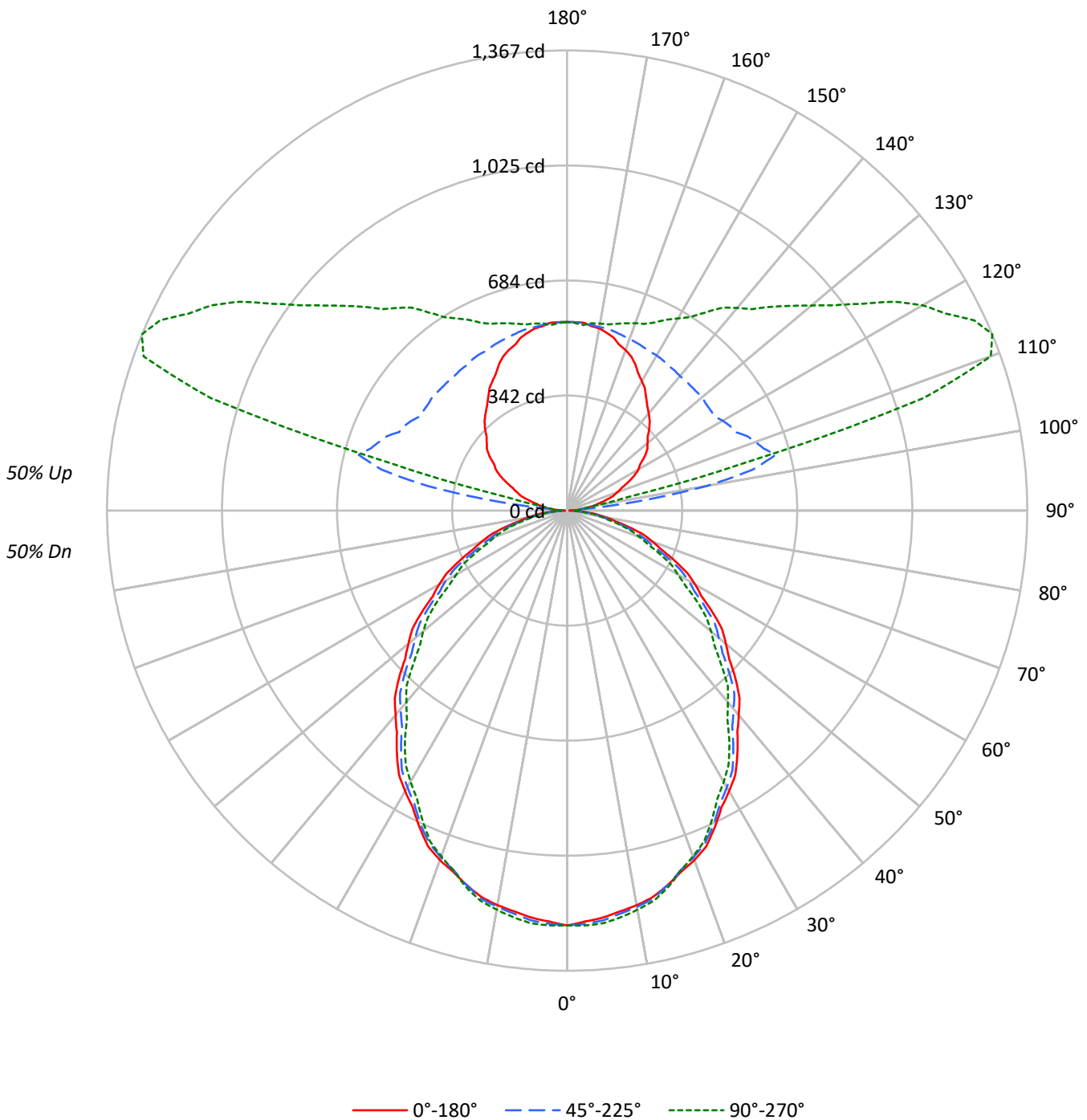
Lumens per Lamp: N/A
Luminaire Lumens: 6017.2 lumens
Efficiency: N/A
Efficacy: 141.2 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 42.6
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50				
1	98	93	90	86	90	86	83	80	73	71	68	61	59	58	49	48	47	42				
2	89	82	76	70	82	76	70	66	64	60	57	53	51	48	44	42	40	35				
3	81	72	65	59	75	67	60	55	57	52	48	47	44	41	39	36	34	30				
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	35	32	30	26				
5	68	57	49	43	63	53	46	40	45	40	35	38	34	31	31	28	26	23				
6	63	51	43	37	58	47	40	35	41	35	31	34	30	27	28	25	23	20				
7	58	46	38	33	54	43	36	31	37	31	27	31	27	24	26	23	20	18				
8	54	42	34	29	50	39	32	27	34	28	24	29	24	21	24	21	18	16				
9	50	38	31	26	47	36	29	24	31	26	22	26	22	19	22	19	16	14				
10	47	35	28	23	44	33	26	22	29	23	20	24	20	17	21	17	15	13				

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	1.9
10°-20°	325.3	5.4
20°-30°	473.1	7.9
30°-40°	538.1	8.9
40°-50°	524.7	8.7
50°-60°	447.9	7.4
60°-70°	325.5	5.4
70°-80°	184.1	3.1
80°-90°	57.9	1.0
90°-100°	76.0	1.3
100°-110°	494.9	8.2
110°-120°	668.8	11.1
120°-130°	543.8	9.0
130°-140°	436.4	7.3
140°-150°	343.9	5.7
150°-160°	251.5	4.2
160°-170°	156.2	2.6
170°-180°	53.3	0.9
0°-30°	914.3	15.2
0°-40°	1452.4	24.1
0°-60°	2425.0	40.3
0°-90°	2992.4	49.7
90°-120°	1239.7	20.6
90°-150°	2563.8	42.6
90°-180°	3025.0	50.3
0°-180°	6017.2	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	12	17	19	19	8
95°	42	59	33	37	42	42
105°	118	173	641	816	539	125
115°	199	238	551	1143	1336	198
125°	282	320	520	906	1071	250
135°	345	383	522	746	856	266
145°	409	443	525	650	719	257
155°	479	496	536	589	617	220
165°	532	539	550	564	574	149
175°	560	564	560	557	553	53
180°	560	560	560	560	560	

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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	21.2	22.2	22.6	22.6
90°	6.7	11.8	17.1	19.0	19.0
92.5°	20.5	20.4	22.9	28.9	30.4
95°	41.6	59.2	33.2	36.9	42.1
97.5°	61.8	107.2	211.9	64.1	54.5
100°	78.7	132.3	419.2	124.1	82.7
102.5°	94.3	150.7	565.7	324.6	177.2
105°	117.6	172.9	641.2	816.4	539.1
107.5°	142.7	183.8	612.3	1187.4	1110.7
110°	158.2	197.9	595.3	1247.6	1339.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	175.1	214.8	578.4	1212.4	1367.2
115°	198.8	238.5	551.4	1142.6	1335.5
117.5°	224.9	263.9	545.0	1068.7	1267.1
120°	244.6	280.9	533.8	1012.5	1219.2
122.5°	257.4	297.7	519.7	964.2	1154.4
125°	281.7	319.6	519.7	905.8	1071.2
127.5°	300.5	340.4	520.4	838.1	1001.5
130°	311.8	353.1	523.2	792.8	947.9
132.5°	324.5	365.9	521.9	772.5	900.0
135°	345.3	383.2	521.5	746.0	856.3
137.5°	362.9	403.6	521.5	716.8	811.2
140°	377.0	414.9	521.5	699.7	785.8
142.5°	391.1	426.3	524.3	679.8	760.4
145°	408.8	443.2	525.0	649.9	718.8
147.5°	429.9	460.2	529.3	628.4	681.5
150°	444.0	471.6	532.1	614.2	658.9
152.5°	458.1	482.9	532.1	602.7	639.2
155°	479.2	496.5	535.6	589.1	616.7
157.5°	496.1	512.7	539.8	580.5	600.4
160°	507.4	521.2	542.7	574.8	592.0
162.5°	515.9	529.7	545.5	571.8	583.5
165°	532.1	539.0	549.7	564.0	574.4
167.5°	541.2	547.5	553.2	560.4	566.6
170°	549.7	553.2	553.2	560.4	563.8
172.5°	552.5	558.7	556.0	557.5	561.0
175°	560.3	563.7	560.3	556.7	553.2
177.5°	560.3	563.0	560.3	560.2	557.5
180°	560.3	560.3	560.3	560.3	560.3

(END OF REPORT)