

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: P644490

Luminaire Tested: OMN4DIP-SR4F0-100D100U835-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644490
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-SR4F0-100D100U835-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

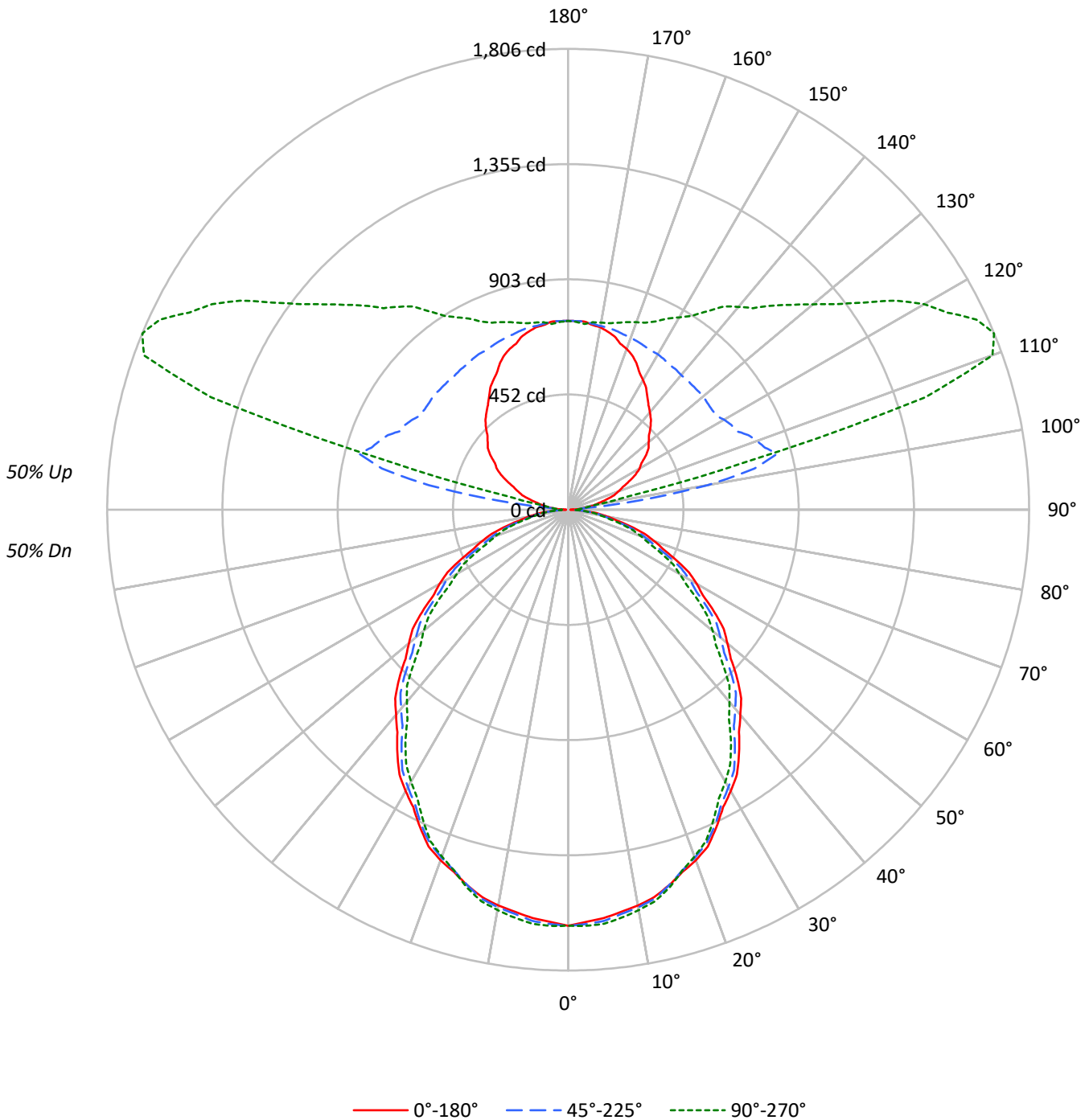
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7954.3 lumens
Efficiency: N/A
Efficacy: 135.0 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): 58.9
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

TEST NUMBER: P644490
CATALOG NUMBER: OMN4DIP-SR4F0-100D100U835-FLLOOB-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P644490

CATALOG NUMBER: OMN4DIP-SR4F0-100D100U835-FLLOOB-1DUDD-WW

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	71	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	29	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	17	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°	26329	26329	26329
5°	26034	26214	26394
10°	25825	25935	26117
15°	25478	25478	25626
20°	25122	24931	24854
25°	24465	24268	23952
30°	23743	23411	22956
35°	23002	22432	21908
40°	22118	21463	20714
45°	21379	20569	19555
50°	20451	19560	18558
55°	19674	18674	17548
60°	18771	17767	16262
65°	17799	16527	15255
70°	16862	15290	14242
75°	15777	13980	13288
80°	14440	12794	12171
85°	13561	11912	11097

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 21379 cd/sqm



TEST NUMBER: P644490

CATALOG NUMBER: OMN4DIP-SR4F0-100D100U835-FLLOOB-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.4	1.9
10°-20°	430.5	5.4
20°-30°	625.9	7.9
30°-40°	712.0	9.0
40°-50°	694.2	8.7
50°-60°	592.5	7.4
60°-70°	430.6	5.4
70°-80°	243.5	3.1
80°-90°	76.7	1.0
90°-100°	100.4	1.3
100°-110°	653.6	8.2
110°-120°	883.4	11.1
120°-130°	718.2	9.0
130°-140°	576.4	7.2
140°-150°	454.2	5.7
150°-160°	332.1	4.2
160°-170°	206.3	2.6
170°-180°	70.3	0.9
0°-30°	1209.7	15.2
0°-40°	1921.7	24.2
0°-60°	3208.4	40.3
0°-90°	3959.2	49.8
90°-120°	1637.4	20.6
90°-150°	3386.3	42.6
90°-180°	3995.0	50.2
0°-180°	7954.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1631	1631	1631	1631	1631	
5°	1606	1630	1617	1615	1628	152
15°	1524	1544	1524	1522	1533	430
25°	1373	1386	1362	1338	1344	632
35°	1167	1171	1138	1112	1112	729
45°	936	932	901	869	856	721
55°	699	697	663	632	623	624
65°	466	462	433	406	399	463
75°	253	244	224	215	213	268
85°	73	64	64	62	60	78
90°	9	16	23	25	25	11
95°	55	78	44	49	56	55
105°	155	228	847	1078	712	165
115°	263	315	728	1509	1764	262
125°	372	422	686	1196	1415	330
135°	456	506	689	985	1131	351
145°	540	585	693	858	949	339
155°	633	656	707	778	814	291
165°	703	712	726	745	759	197
175°	740	744	740	735	731	70
180°	740	740	740	740	740	

TEST NUMBER: P644490

CATALOG NUMBER: OMN4DIP-SR4F0-100D100U835-FLLOOB-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1630.7	1630.7	1630.7	1630.7	1630.7
2.5°	1616.5	1637.3	1625.4	1625.5	1632.5
5°	1606.3	1630.1	1617.4	1615.4	1628.5
7.5°	1589.4	1612.8	1597.8	1595.6	1612.5
10°	1575.2	1596.9	1581.9	1577.8	1593.0
12.5°	1555.7	1577.4	1562.3	1556.5	1571.7
15°	1524.2	1543.7	1524.2	1522.2	1533.1
17.5°	1488.7	1505.6	1482.9	1475.6	1483.8
20°	1462.1	1477.2	1451.0	1440.0	1446.5
22.5°	1428.3	1443.5	1415.5	1399.2	1407.5
25°	1373.3	1386.3	1362.2	1338.0	1344.5
27.5°	1314.3	1324.3	1300.1	1275.3	1277.5
30°	1273.5	1280.0	1255.7	1229.2	1231.3
32.5°	1230.9	1235.7	1209.6	1181.2	1181.6
35°	1167.0	1171.3	1138.1	1111.5	1111.5
37.5°	1099.1	1101.7	1066.3	1037.4	1034.3
40°	1049.4	1053.7	1018.3	989.4	982.8
42.5°	1003.3	1004.1	972.2	943.2	934.9
45°	936.3	931.9	900.8	869.4	856.4
47.5°	863.9	863.9	828.4	797.1	784.9
50°	814.2	814.2	778.7	747.5	738.8
52.5°	768.1	766.3	732.6	701.2	689.1
55°	698.9	696.7	663.4	632.1	623.4
57.5°	625.6	625.6	594.6	561.1	551.5
60°	581.3	581.3	550.2	516.6	503.6
62.5°	533.4	531.6	500.5	470.6	462.8
65°	465.9	461.6	432.6	405.9	399.3
67.5°	401.6	397.2	366.5	345.1	340.8
70°	357.2	352.9	323.9	306.1	301.7
72.5°	314.6	308.5	283.1	268.8	264.5
75°	252.9	244.2	224.1	215.2	213.0
77.5°	194.4	179.6	171.3	165.0	162.8
80°	155.3	142.3	137.6	133.1	130.9
82.5°	121.6	108.6	107.4	104.7	102.5
85°	73.2	64.5	64.3	62.1	59.9
87.5°	31.9	28.1	29.4	29.9	29.9
90°	8.9	15.6	22.6	25.1	25.1
92.5°	27.1	26.9	30.2	38.2	40.1
95°	55.0	78.2	43.9	48.7	55.6
97.5°	81.6	141.5	279.9	84.7	72.0
100°	104.0	174.8	553.6	163.9	109.3
102.5°	124.5	199.0	747.2	428.8	234.1
105°	155.4	228.4	846.8	1078.3	712.1
107.5°	188.4	242.8	808.7	1568.3	1466.9
110°	209.0	261.4	786.3	1647.8	1768.5



TEST NUMBER: P644490

CATALOG NUMBER: OMN4DIP-SR4F0-100D100U835-FLLOOB-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	231.3	283.8	764.0	1601.3	1805.8
115°	262.6	315.1	728.2	1509.0	1763.9
117.5°	297.1	348.6	719.9	1411.5	1673.6
120°	323.1	371.0	705.0	1337.3	1610.3
122.5°	340.0	393.2	686.4	1273.5	1524.7
125°	372.1	422.2	686.4	1196.4	1414.8
127.5°	396.9	449.6	687.3	1107.0	1322.7
130°	411.8	466.4	691.0	1047.2	1251.9
132.5°	428.6	483.2	689.2	1020.3	1188.6
135°	456.1	506.2	688.8	985.3	1130.9
137.5°	479.4	533.1	688.8	946.7	1071.4
140°	498.0	548.0	688.8	924.1	1037.8
142.5°	516.6	563.0	692.5	897.9	1004.3
145°	539.9	585.4	693.4	858.4	949.4
147.5°	567.8	607.8	699.0	830.0	900.1
150°	586.4	622.8	702.8	811.1	870.3
152.5°	605.0	637.8	702.8	796.0	844.2
155°	632.9	655.7	707.4	778.0	814.5
157.5°	655.3	677.1	713.0	766.7	793.0
160°	670.2	688.4	716.7	759.1	781.9
162.5°	681.3	699.6	720.4	755.2	770.7
165°	702.8	711.9	726.0	745.0	758.6
167.5°	714.9	723.0	730.7	740.2	748.4
170°	726.0	730.6	730.7	740.1	744.6
172.5°	729.8	737.9	734.4	736.4	740.9
175°	740.0	744.5	740.0	735.2	730.7
177.5°	740.0	743.6	740.0	739.9	736.3
180°	740.0	740.0	740.0	740.0	740.0

(END OF REPORT)