

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: P644505

Luminaire Tested: OMN4DIP-SR4F0-100D100U935-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644505
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-SR4F0-100D100U935-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, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

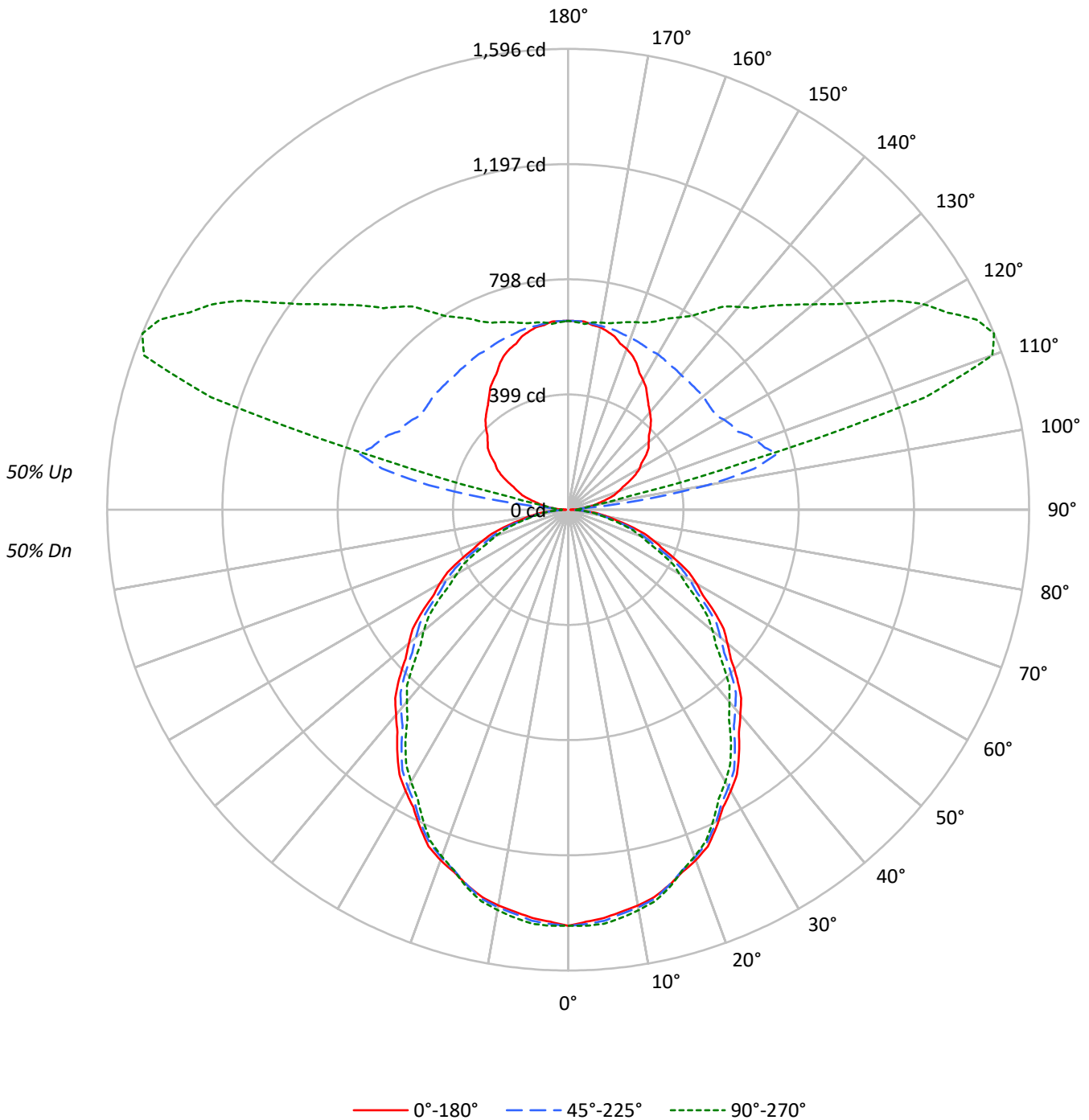
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7028.8 lumens
Efficiency: N/A
Efficacy: 119.3 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: P644505
CATALOG NUMBER: OMN4DIP-SR4F0-100D100U935-FLLOOB-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P644505

CATALOG NUMBER: OMN4DIP-SR4F0-100D100U935-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°	23266	23266	23266
5°	23005	23164	23323
10°	22820	22917	23077
15°	22514	22514	22644
20°	22199	22031	21962
25°	21618	21444	21166
30°	20980	20687	20286
35°	20325	19823	19360
40°	19545	18967	18305
45°	18890	18176	17278
50°	18073	17284	16397
55°	17385	16501	15508
60°	16585	15700	14370
65°	15729	14606	13482
70°	14899	13511	12585
75°	13943	12352	11740
80°	12757	11306	10758
85°	11986	10541	9800

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 18890 cd/sqm



TEST NUMBER: P644505

CATALOG NUMBER: OMN4DIP-SR4F0-100D100U935-FLLOOB-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.5	1.9
10°-20°	380.4	5.4
20°-30°	553.1	7.9
30°-40°	629.1	9.0
40°-50°	613.4	8.7
50°-60°	523.6	7.4
60°-70°	380.5	5.4
70°-80°	215.2	3.1
80°-90°	67.7	1.0
90°-100°	88.8	1.3
100°-110°	577.6	8.2
110°-120°	780.6	11.1
120°-130°	634.7	9.0
130°-140°	509.3	7.2
140°-150°	401.4	5.7
150°-160°	293.5	4.2
160°-170°	182.3	2.6
170°-180°	62.2	0.9
0°-30°	1069.0	15.2
0°-40°	1698.1	24.2
0°-60°	2835.1	40.3
0°-90°	3498.6	49.8
90°-120°	1446.9	20.6
90°-150°	2992.3	42.6
90°-180°	3530.0	50.2
0°-180°	7028.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1441	1441	1441	1441	1441	
5°	1419	1440	1429	1428	1439	135
15°	1347	1364	1347	1345	1355	380
25°	1214	1225	1204	1182	1188	558
35°	1031	1035	1006	982	982	644
45°	827	824	796	768	757	637
55°	618	616	586	559	551	551
65°	412	408	382	359	353	409
75°	224	216	198	190	188	237
85°	65	57	57	55	53	69
90°	8	14	20	22	22	9
95°	49	69	39	43	49	49
105°	137	202	748	953	629	146
115°	232	278	644	1334	1559	231
125°	329	373	606	1057	1250	292
135°	403	447	609	871	999	310
145°	477	517	613	758	839	300
155°	559	579	625	688	720	257
165°	621	629	642	658	670	174
175°	654	658	654	650	646	62
180°	654	654	654	654	654	

TEST NUMBER: P644505

CATALOG NUMBER: OMN4DIP-SR4F0-100D100U935-FLLOOB-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1441.0	1441.0	1441.0	1441.0	1441.0
2.5°	1428.4	1446.8	1436.3	1436.4	1442.5
5°	1419.4	1440.5	1429.2	1427.5	1439.0
7.5°	1404.5	1425.2	1411.9	1409.9	1424.9
10°	1391.9	1411.1	1397.8	1394.2	1407.6
12.5°	1374.7	1393.9	1380.6	1375.4	1388.8
15°	1346.9	1364.1	1346.9	1345.1	1354.7
17.5°	1315.5	1330.4	1310.4	1303.9	1311.2
20°	1292.0	1305.4	1282.2	1272.5	1278.2
22.5°	1262.2	1275.6	1250.8	1236.4	1243.7
25°	1213.5	1225.0	1203.7	1182.3	1188.1
27.5°	1161.4	1170.2	1148.8	1126.9	1128.8
30°	1125.3	1131.1	1109.6	1086.2	1088.1
32.5°	1087.7	1091.9	1068.9	1043.8	1044.2
35°	1031.2	1035.0	1005.7	982.2	982.2
37.5°	971.2	973.5	942.2	916.7	914.0
40°	927.3	931.1	899.9	874.2	868.5
42.5°	886.5	887.3	859.1	833.4	826.1
45°	827.3	823.5	796.0	768.2	756.7
47.5°	763.4	763.4	732.0	704.4	693.6
50°	719.5	719.5	688.1	660.5	652.8
52.5°	678.7	677.2	647.4	619.7	608.9
55°	617.6	615.6	586.2	558.6	550.9
57.5°	552.9	552.9	525.4	495.8	487.4
60°	513.6	513.6	486.2	456.5	445.0
62.5°	471.3	469.8	442.3	415.9	409.0
65°	411.7	407.9	382.3	358.6	352.9
67.5°	354.8	351.0	323.9	305.0	301.1
70°	315.6	311.8	286.2	270.5	266.6
72.5°	278.0	272.6	250.2	237.5	233.7
75°	223.5	215.8	198.0	190.1	188.2
77.5°	171.7	158.7	151.3	145.8	143.9
80°	137.2	125.7	121.6	117.6	115.7
82.5°	107.4	95.9	94.9	92.5	90.6
85°	64.7	57.0	56.9	54.9	52.9
87.5°	28.2	24.8	26.0	26.4	26.4
90°	7.8	13.8	20.0	22.1	22.1
92.5°	24.0	23.8	26.7	33.8	35.5
95°	48.6	69.1	38.8	43.0	49.2
97.5°	72.1	125.1	247.3	74.8	63.6
100°	91.9	154.5	489.2	144.8	96.5
102.5°	110.0	175.9	660.3	378.9	206.8
105°	137.3	201.8	748.3	952.8	629.2
107.5°	166.5	214.5	714.6	1385.9	1296.3
110°	184.7	231.0	694.8	1456.1	1562.8



TEST NUMBER: P644505

CATALOG NUMBER: OMN4DIP-SR4F0-100D100U935-FLLOOB-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	204.4	250.8	675.1	1415.0	1595.7
115°	232.1	278.4	643.5	1333.5	1558.7
117.5°	262.5	308.0	636.1	1247.3	1478.9
120°	285.5	327.9	623.0	1181.7	1422.9
122.5°	300.4	347.5	606.5	1125.3	1347.3
125°	328.8	373.0	606.5	1057.2	1250.2
127.5°	350.7	397.3	607.3	978.2	1168.8
130°	363.9	412.1	610.6	925.3	1106.3
132.5°	378.7	427.0	609.0	901.6	1050.3
135°	403.0	447.3	608.7	870.7	999.3
137.5°	423.6	471.0	608.7	836.5	946.7
140°	440.0	484.3	608.7	816.6	917.1
142.5°	456.5	497.5	611.9	793.4	887.5
145°	477.1	517.3	612.8	758.5	839.0
147.5°	501.7	537.1	617.7	733.4	795.4
150°	518.2	550.4	621.0	716.8	769.0
152.5°	534.6	563.6	621.0	703.4	746.0
155°	559.3	579.4	625.1	687.5	719.7
157.5°	579.0	598.3	630.0	677.5	700.8
160°	592.2	608.3	633.3	670.8	690.9
162.5°	602.1	618.2	636.6	667.4	681.0
165°	621.0	629.0	641.6	658.3	670.3
167.5°	631.7	638.9	645.7	654.1	661.3
170°	641.6	645.6	645.7	654.0	658.0
172.5°	644.8	652.1	649.0	650.7	654.7
175°	653.9	657.9	653.9	649.7	645.7
177.5°	653.9	657.1	653.9	653.8	650.6
180°	653.9	653.9	653.9	653.9	653.9

(END OF REPORT)