

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: P645174

Luminaire Tested: OMN4DIP-SR4F0-75D75U830-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645174
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-20)
Test Lab: INNOVATION CENTER
Issue Date: 2/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-75D75U830-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 750 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 750 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

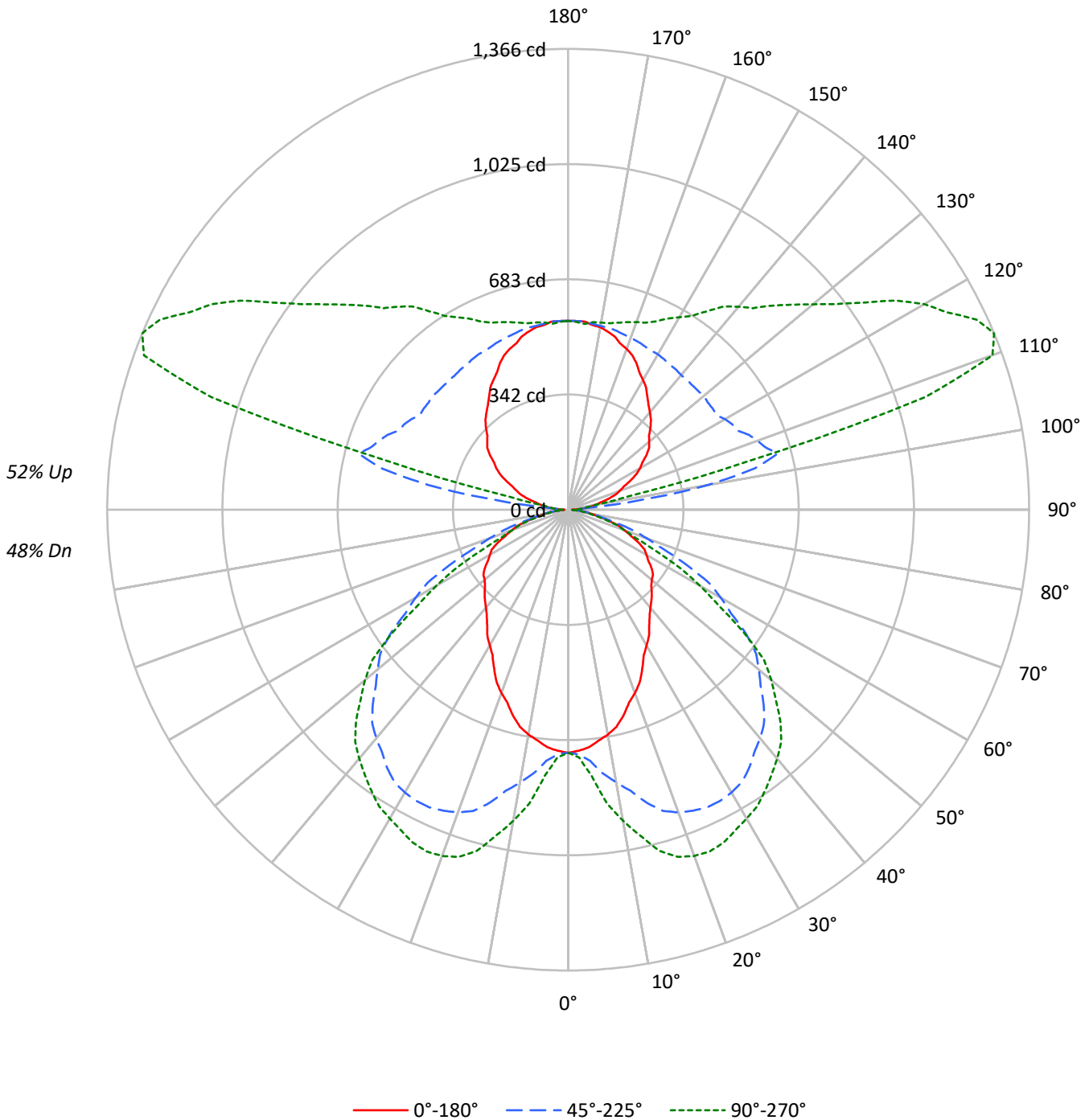
Lumens per Lamp: N/A
Luminaire Lumens: 5794.5 lumens
Efficiency: N/A
Efficacy: 136.0 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

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

TEST NUMBER: P645174

CATALOG NUMBER: OMN4DIP-SR4F0-75D75U830-CLBOOB-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P645174

CATALOG NUMBER: OMN4DIP-SR4F0-75D75U830-CLBOOB-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	98	98	98	98	82	82	82	67	67	67	54	54	54	48				48
1	97	93	89	86	89	86	83	80	72	70	68	60	58	56	48	47	46				40	
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	42	40	39				34	
3	81	71	64	58	74	66	60	54	56	51	47	46	43	40	37	35	33				29	
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28				24	
5	68	56	48	42	62	52	45	39	44	38	34	37	32	29	30	27	24				21	
6	62	50	42	36	57	46	39	34	39	34	30	33	29	25	27	24	21				18	
7	57	45	37	31	53	42	35	30	36	30	26	30	25	22	24	21	19				16	
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	17				14	
9	49	37	30	24	45	34	28	23	29	24	20	25	21	18	20	17	15				13	
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	13				11	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11631	11631	11631
5°	11459	12110	12817
10°	11096	13459	15354
15°	10557	15039	17503
20°	9931	16407	18768
25°	9253	17341	19400
30°	8652	18053	19708
35°	8255	18425	20044
40°	7980	18645	20303
45°	7994	18705	20313
50°	8121	18515	19736
55°	8490	18156	17920
60°	8657	16879	14554
65°	8768	14785	10690
70°	8384	11627	8304
75°	7523	8677	6999
80°	6388	6853	5607
85°	6206	5595	4650

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 20313 cd/sqm



TEST NUMBER: P645174

CATALOG NUMBER: OMN4DIP-SR4F0-75D75U830-CLBOOB-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.9	1.3
10°-20°	245.5	4.2
20°-30°	407.9	7.0
30°-40°	514.6	8.9
40°-50°	550.1	9.5
50°-60°	485.5	8.4
60°-70°	311.6	5.4
70°-80°	138.2	2.4
80°-90°	37.1	0.6
90°-100°	78.2	1.4
100°-110°	496.5	8.6
110°-120°	670.4	11.6
120°-130°	544.8	9.4
130°-140°	436.1	7.5
140°-150°	343.6	5.9
150°-160°	251.2	4.3
160°-170°	156.1	2.7
170°-180°	53.2	0.9
0°-30°	727.3	12.6
0°-40°	1241.9	21.4
0°-60°	2277.4	39.3
0°-90°	2764.3	47.7
90°-120°	1245.1	21.5
90°-150°	2569.7	44.3
90°-180°	3030.0	52.3
0°-180°	5794.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	720	720	720	720	720	
5°	707	728	747	773	791	66
15°	632	728	900	1008	1047	177
25°	519	704	973	1064	1089	239
35°	419	643	935	996	1017	263
45°	350	550	819	870	890	271
55°	302	433	645	648	637	268
65°	230	290	387	314	280	225
75°	121	134	139	119	112	129
85°	34	29	30	27	25	35
90°	12	15	17	20	17	9
95°	47	64	36	37	42	45
105°	121	178	642	816	539	128
115°	202	242	554	1143	1334	201
125°	283	321	523	907	1070	252
135°	345	383	521	745	856	266
145°	408	443	525	649	718	257
155°	479	496	535	589	616	220
165°	532	538	549	564	574	149
175°	560	563	560	556	553	53
180°	560	560	560	560	560	

TEST NUMBER: P645174

CATALOG NUMBER: OMN4DIP-SR4F0-75D75U830-CLBOOB-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	720.4	720.4	720.4	720.4	720.4
2.5°	715.0	725.5	725.8	729.9	735.1
5°	707.0	728.3	747.2	772.7	790.8
7.5°	690.2	728.2	788.7	848.1	877.5
10°	676.8	729.3	820.9	900.5	936.5
12.5°	659.4	728.9	853.1	948.8	990.1
15°	631.6	728.2	899.7	1007.8	1047.1
17.5°	599.4	725.2	936.2	1044.5	1078.9
20°	578.0	722.1	954.9	1057.9	1092.3
22.5°	553.9	715.1	965.7	1064.6	1096.3
25°	519.4	704.5	973.4	1064.4	1089.0
27.5°	485.5	689.3	973.7	1050.9	1071.9
30°	464.1	677.0	968.3	1037.5	1057.1
32.5°	445.3	663.5	957.6	1021.4	1042.4
35°	418.8	643.3	934.8	995.6	1016.9
37.5°	396.0	620.1	906.0	965.2	990.1
40°	378.6	601.4	884.6	943.7	963.3
42.5°	365.2	581.5	859.1	916.8	933.8
45°	350.1	550.0	819.2	869.9	889.6
47.5°	334.1	517.5	773.3	821.2	834.0
50°	323.3	493.7	737.1	780.8	785.7
52.5°	316.6	468.7	702.3	729.8	730.8
55°	301.6	432.6	645.0	648.1	636.6
57.5°	281.5	390.6	572.3	555.9	528.4
60°	268.1	361.4	522.7	490.0	450.7
62.5°	254.7	333.6	470.4	417.5	371.6
65°	229.5	290.1	387.0	314.2	279.8
67.5°	200.4	242.3	303.9	235.0	212.1
70°	177.6	210.3	246.3	192.3	175.9
72.5°	156.1	178.4	199.4	159.0	150.4
75°	120.6	133.7	139.1	118.8	112.2
77.5°	88.8	89.4	96.5	83.7	80.4
80°	68.7	65.4	73.7	63.6	60.3
82.5°	52.6	48.0	53.6	46.2	44.2
85°	33.5	28.6	30.2	26.8	25.1
87.5°	19.8	16.5	16.8	16.1	14.2
90°	11.7	15.2	17.1	20.5	17.3
92.5°	24.2	23.7	24.2	29.2	28.7
95°	46.6	64.1	36.5	36.8	42.1
97.5°	66.4	111.8	213.4	64.4	54.5
100°	82.0	135.6	420.5	125.6	82.6
102.5°	97.5	155.2	566.9	324.7	177.1
105°	120.9	177.7	642.3	815.7	538.6
107.5°	145.9	187.0	613.4	1186.4	1109.7
110°	161.4	201.1	596.5	1246.5	1337.8



TEST NUMBER: P645174

CATALOG NUMBER: OMN4DIP-SR4F0-75D75U830-CLBOOB-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	178.3	218.0	579.6	1211.3	1366.0
115°	202.0	241.7	554.2	1143.2	1334.3
117.5°	227.7	267.0	547.9	1069.4	1266.0
120°	246.1	284.0	536.6	1013.2	1218.1
122.5°	260.2	299.5	521.2	965.0	1153.3
125°	283.2	321.0	522.6	906.7	1070.3
127.5°	301.9	341.8	521.6	838.7	1000.5
130°	313.2	354.5	524.4	792.1	947.0
132.5°	324.6	365.9	521.7	771.8	899.2
135°	345.0	382.9	521.0	745.3	855.5
137.5°	362.6	403.2	521.0	716.1	810.4
140°	376.7	414.6	521.0	699.0	785.1
142.5°	390.8	425.9	523.9	679.2	759.7
145°	408.4	442.8	524.6	649.4	718.2
147.5°	429.5	459.8	528.8	627.9	680.9
150°	443.6	471.1	531.6	613.6	658.3
152.5°	457.7	482.5	531.6	602.1	638.6
155°	478.8	496.0	535.1	588.6	616.1
157.5°	495.7	512.2	539.4	579.9	599.9
160°	507.0	520.7	542.2	574.2	591.5
162.5°	515.4	529.2	545.0	571.3	583.0
165°	531.6	538.5	549.2	563.5	573.9
167.5°	540.8	547.0	552.7	559.9	566.1
170°	549.2	552.7	552.7	559.9	563.3
172.5°	552.0	558.2	555.5	557.0	560.5
175°	559.8	563.2	559.8	556.2	552.7
177.5°	559.8	562.5	559.8	559.7	557.0
180°	559.8	559.8	559.8	559.8	559.8

(END OF REPORT)