

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: P645122

Luminaire Tested: OMN4DIP-SR4F0-75D25U840-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645122
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-SR4F0-75D25U840-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 750 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

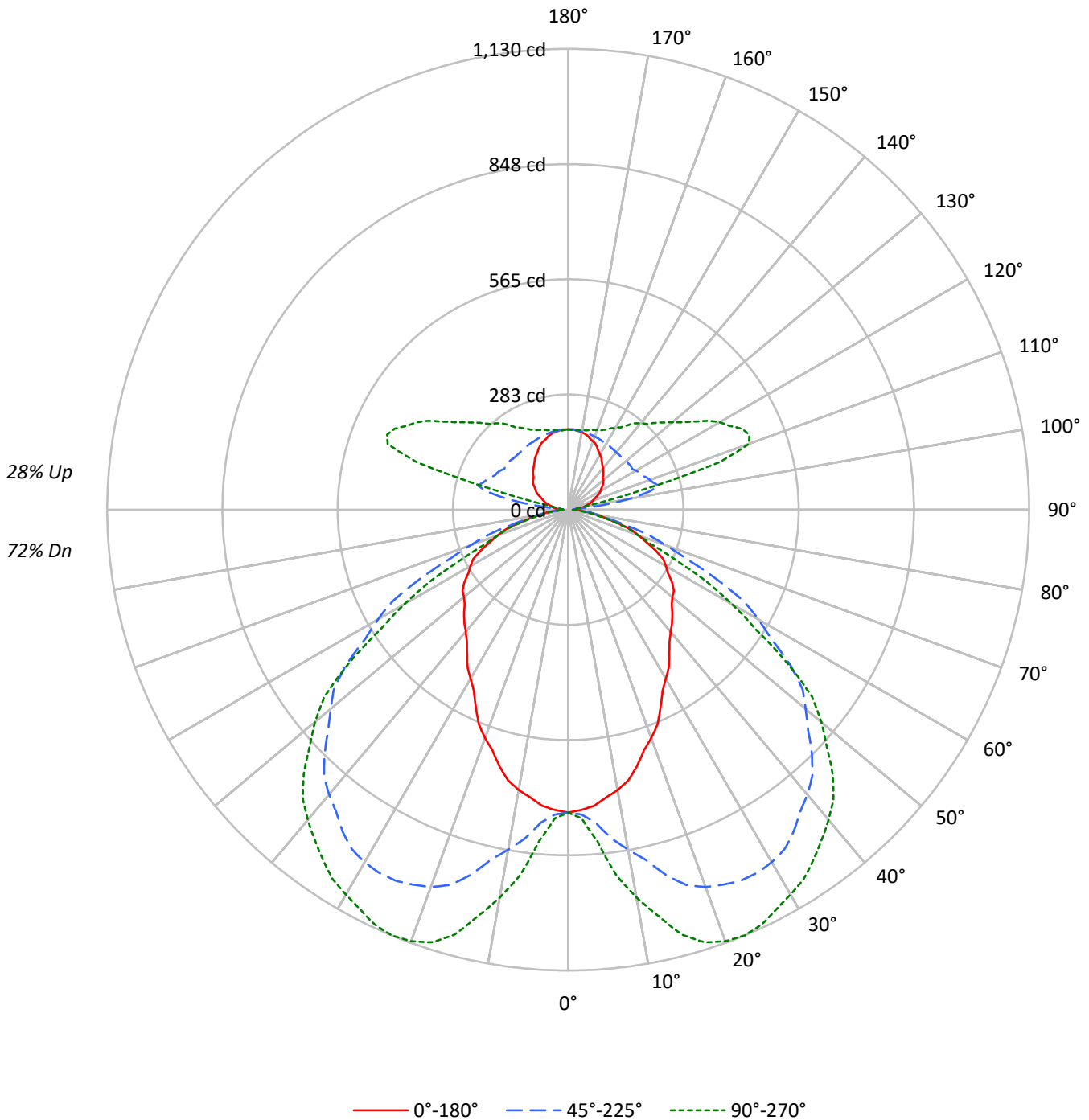
Lumens per Lamp: N/A
Luminaire Lumens: 3930.6 lumens
Efficiency: N/A
Efficacy: 130.6 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 30.1
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: P645122

CATALOG NUMBER: OMN4DIP-SR4F0-75D25U840-CLBOOB-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P645122

CATALOG NUMBER: OMN4DIP-SR4F0-75D25U840-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	0
RCR																		
0	112	112	112	112	107	107	107	107	96	96	96	86	86	86	77	77	77	72
1	103	99	95	91	98	94	90	87	84	82	79	76	74	72	68	67	65	61
2	94	86	80	74	89	82	76	71	74	70	66	67	63	60	60	57	55	51
3	85	76	68	62	81	72	65	60	65	60	55	59	54	51	53	50	47	43
4	78	67	59	52	74	64	56	50	58	52	47	52	47	43	47	43	40	37
5	72	59	51	45	68	57	49	43	52	45	40	47	41	37	42	38	35	32
6	66	53	45	39	62	51	43	37	46	40	35	42	37	33	38	34	30	28
7	61	48	40	34	58	46	38	33	42	35	31	38	33	29	35	30	27	24
8	57	44	35	30	53	42	34	29	38	32	27	35	29	25	32	27	24	21
9	53	40	32	27	50	38	31	26	35	29	24	32	27	23	29	25	21	19
10	49	36	29	24	47	35	28	23	32	26	22	29	24	20	27	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11988	11988	11988
5°	11810	12483	13211
10°	11437	13872	15826
15°	10882	15500	18041
20°	10237	16912	19345
25°	9536	17874	19996
30°	8917	18608	20314
35°	8509	18993	20660
40°	8226	19218	20927
45°	8241	19281	20936
50°	8372	19085	20343
55°	8749	18714	18472
60°	8922	17399	14999
65°	9039	15240	11018
70°	8639	11981	8559
75°	7754	8939	7218
80°	6583	7066	5783
85°	6391	5761	4798

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 20936 cd/sqm



TEST NUMBER: P645122

CATALOG NUMBER: OMN4DIP-SR4F0-75D25U840-CLBOOB-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.1	1.9
10°-20°	253.1	6.4
20°-30°	420.4	10.7
30°-40°	530.4	13.5
40°-50°	567.0	14.4
50°-60°	500.4	12.7
60°-70°	321.2	8.2
70°-80°	142.4	3.6
80°-90°	37.4	1.0
90°-100°	33.9	0.9
100°-110°	178.8	4.5
110°-120°	239.0	6.1
120°-130°	193.7	4.9
130°-140°	153.7	3.9
140°-150°	120.9	3.1
150°-160°	88.4	2.2
160°-170°	54.9	1.4
170°-180°	18.7	0.5
0°-30°	749.7	19.1
0°-40°	1280.0	32.6
0°-60°	2347.4	59.7
0°-90°	2848.4	72.5
90°-120°	451.7	11.5
90°-150°	920.1	23.4
90°-180°	1082.0	27.5
0°-180°	3930.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	742	742	742	742	742	
5°	729	751	770	796	815	68
15°	651	751	927	1039	1079	182
25°	535	726	1003	1097	1122	246
35°	432	663	964	1026	1048	271
45°	361	567	844	897	917	279
55°	311	446	665	668	656	276
65°	237	299	399	324	288	231
75°	124	138	143	122	116	133
85°	34	30	31	28	26	37
90°	12	13	13	14	11	9
95°	29	31	18	16	17	25
105°	50	69	229	288	190	54
115°	77	90	198	403	470	77
125°	103	116	187	320	377	92
135°	121	135	183	262	301	94
145°	144	156	185	228	253	90
155°	168	175	188	207	217	77
165°	187	190	193	198	202	53
175°	197	198	197	196	194	19
180°	197	197	197	197	197	



TEST NUMBER: P645122

CATALOG NUMBER: OMN4DIP-SR4F0-75D25U840-CLBOOB-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	742.5	742.5	742.5	742.5	742.5
2.5°	737.0	747.8	748.1	752.3	757.7
5°	728.7	750.7	770.2	796.5	815.1
7.5°	711.5	750.6	813.0	874.1	904.5
10°	697.6	751.7	846.1	928.2	965.3
12.5°	679.7	751.3	879.3	978.0	1020.6
15°	651.0	750.6	927.3	1038.7	1079.3
17.5°	617.9	747.5	965.0	1076.6	1112.1
20°	595.8	744.3	984.3	1090.4	1125.9
22.5°	570.9	737.0	995.3	1097.3	1130.0
25°	535.3	726.1	1003.3	1097.1	1122.4
27.5°	500.4	710.5	1003.6	1083.2	1104.8
30°	478.3	697.8	998.1	1069.4	1089.6
32.5°	459.0	683.9	987.1	1052.8	1074.4
35°	431.7	663.0	963.6	1026.2	1048.2
37.5°	408.2	639.2	933.9	994.9	1020.6
40°	390.3	619.9	911.8	972.7	992.9
42.5°	376.4	599.3	885.5	945.0	962.5
45°	360.9	566.9	844.4	896.7	916.9
47.5°	344.3	533.4	797.1	846.4	859.6
50°	333.3	508.9	759.8	804.8	809.9
52.5°	326.4	483.1	723.9	752.2	753.2
55°	310.8	445.9	664.8	668.0	656.2
57.5°	290.1	402.6	589.9	573.0	544.6
60°	276.3	372.5	538.8	505.0	464.5
62.5°	262.5	343.9	484.9	430.3	383.0
65°	236.6	299.0	398.9	323.8	288.4
67.5°	206.5	249.8	313.2	242.3	218.6
70°	183.0	216.8	253.8	198.2	181.3
72.5°	160.9	183.9	205.5	163.8	155.1
75°	124.3	137.8	143.3	122.5	115.7
77.5°	91.5	92.2	99.5	86.3	82.9
80°	70.8	67.4	76.0	65.5	62.2
82.5°	54.2	49.5	55.3	47.6	45.6
85°	34.5	29.5	31.1	27.6	25.9
87.5°	20.4	16.6	16.4	15.2	13.2
90°	12.1	13.3	12.8	14.0	10.6
92.5°	19.2	16.4	14.4	15.2	12.8
95°	28.9	30.6	18.5	16.3	17.1
97.5°	34.5	47.1	79.4	24.9	20.3
100°	39.1	54.6	151.4	46.5	30.2
102.5°	43.6	61.5	202.9	115.6	62.5
105°	50.5	69.4	229.4	288.2	189.6
107.5°	59.1	71.5	219.3	418.6	390.5
110°	63.6	76.5	213.3	439.8	470.8

TEST NUMBER: P645122

CATALOG NUMBER: OMN4DIP-SR4F0-75D25U840-CLBOOB-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	69.6	82.4	207.4	427.4	480.7
115°	76.8	89.6	198.5	403.4	469.6
117.5°	85.6	98.5	196.2	377.5	445.6
120°	91.2	104.5	192.3	357.7	428.7
122.5°	96.1	109.1	185.9	340.7	405.9
125°	103.1	116.4	187.3	320.2	376.7
127.5°	108.5	123.4	185.8	296.1	352.1
130°	112.5	127.0	186.8	278.8	333.3
132.5°	114.7	129.2	184.1	271.6	316.4
135°	121.4	134.8	183.4	262.3	301.1
137.5°	127.6	141.9	183.4	252.0	285.2
140°	132.6	145.9	183.4	246.0	276.3
142.5°	137.5	149.9	184.4	239.0	267.4
145°	143.7	155.8	184.6	228.5	252.8
147.5°	151.2	161.8	186.1	221.0	239.6
150°	156.1	165.8	187.1	216.0	231.7
152.5°	161.1	169.8	187.1	211.9	224.8
155°	168.5	174.6	188.3	207.1	216.8
157.5°	174.5	180.3	189.8	204.1	211.1
160°	178.4	183.3	190.8	202.1	208.2
162.5°	181.4	186.2	191.8	201.1	205.2
165°	187.1	189.5	193.3	198.3	202.0
167.5°	190.3	192.5	194.5	197.1	199.2
170°	193.3	194.5	194.5	197.0	198.2
172.5°	194.3	196.5	195.5	196.0	197.3
175°	197.0	198.2	197.0	195.7	194.5
177.5°	197.0	198.0	197.0	197.0	196.0
180°	197.0	197.0	197.0	197.0	197.0

(END OF REPORT)