

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: P644901

Luminaire Tested: OMN4DIP-SR4F0-50D125U940-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644901
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-SR4F0-50D125U940-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

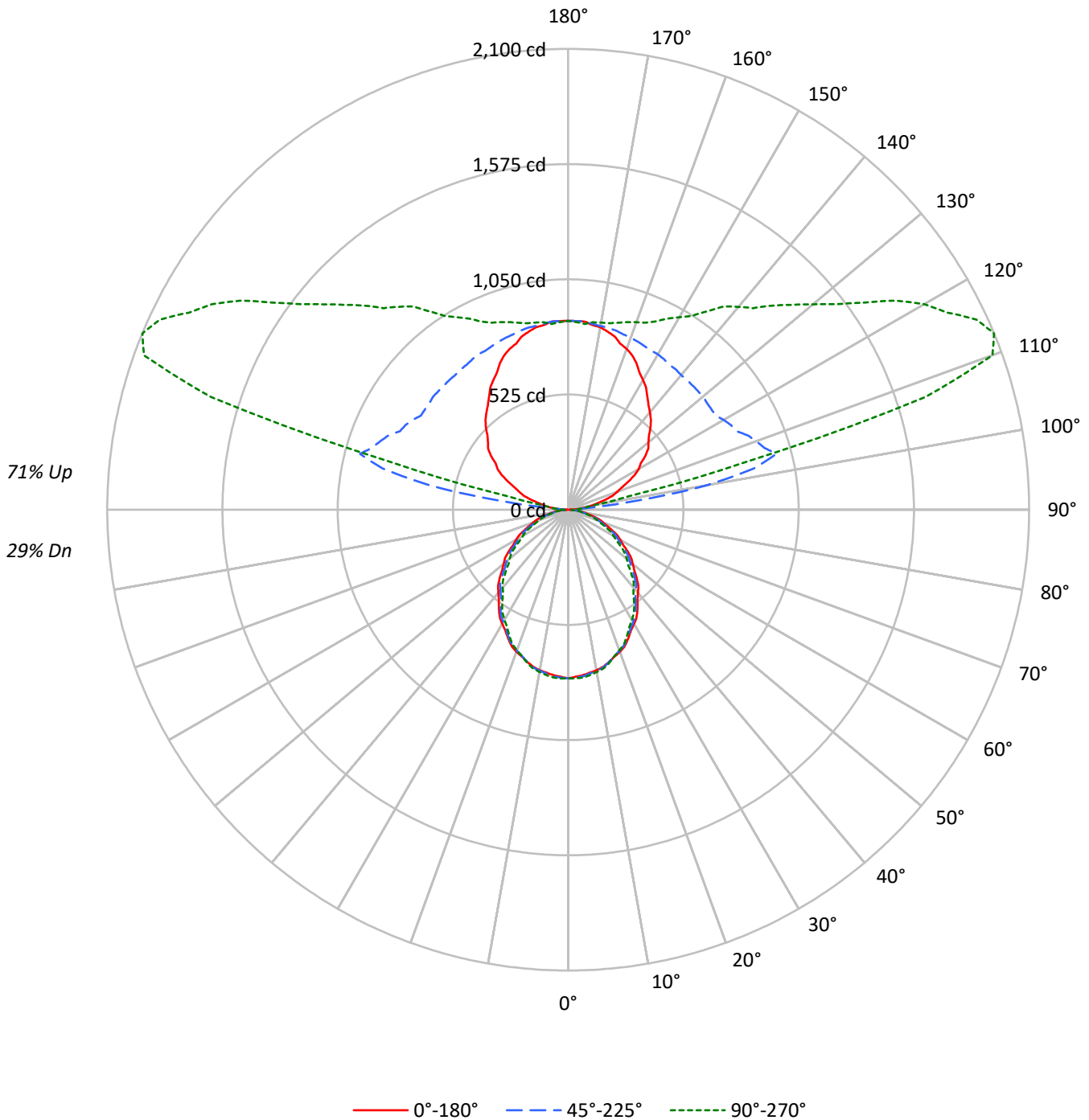
Lumens per Lamp: N/A
Luminaire Lumens: 6499.0 lumens
Efficiency: N/A
Efficacy: 123.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 52.5
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										
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	50	30	10	0														
RCR																																						
0	102	102	102	102	91	91	91	91	72	72	72	53	53	53	37	37	37	29																				
1	93	89	85	82	83	80	77	74	63	60	59	47	46	44	32	32	31	24																				
2	85	78	72	67	76	70	65	61	55	51	49	41	39	37	29	27	26	20																				
3	77	68	61	56	69	61	55	51	48	44	41	36	34	31	25	24	22	17																				
4	71	60	53	47	63	54	48	43	43	38	35	32	29	27	23	21	19	15																				
5	65	54	46	40	58	48	42	37	38	34	30	29	26	23	20	18	17	13																				
6	60	48	40	35	53	43	37	32	34	30	26	26	23	20	19	16	15	11																				
7	55	43	36	30	49	39	32	28	31	26	23	24	20	18	17	15	13	10																				
8	51	39	32	27	46	35	29	24	28	24	20	22	18	16	16	13	12	9																				
9	47	36	28	24	42	32	26	22	26	21	18	20	17	14	14	12	11	8																				
10	44	33	26	21	40	30	23	19	24	19	16	18	15	13	13	11	10	8																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12411	12411	12411
5°	12272	12357	12443
10°	12175	12226	12311
15°	12010	12010	12080
20°	11842	11753	11716
25°	11533	11441	11291
30°	11192	11037	10821
35°	10843	10575	10328
40°	10427	10117	9765
45°	10076	9695	9218
50°	9640	9221	8749
55°	9272	8802	8273
60°	8848	8376	7666
65°	8390	7790	7194
70°	7950	7209	6713
75°	7436	6588	6263
80°	6806	6025	5737
85°	6391	5613	5224

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10076 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.3	1.1
10°-20°	202.9	3.1
20°-30°	295.1	4.5
30°-40°	335.6	5.2
40°-50°	327.2	5.0
50°-60°	279.3	4.3
60°-70°	203.0	3.1
70°-80°	114.8	1.8
80°-90°	37.3	0.6
90°-100°	110.3	1.7
100°-110°	756.3	11.6
110°-120°	1025.0	15.8
120°-130°	833.9	12.8
130°-140°	670.0	10.3
140°-150°	528.2	8.1
150°-160°	386.2	5.9
160°-170°	239.9	3.7
170°-180°	81.8	1.3
0°-30°	570.3	8.8
0°-40°	905.9	13.9
0°-60°	1512.4	23.3
0°-90°	1867.5	28.7
90°-120°	1891.6	29.1
90°-150°	3923.7	60.4
90°-180°	4632.0	71.3
0°-180°	6499.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	769	769	769	769	769	
5°	757	768	762	762	768	72
15°	718	728	718	718	723	203
25°	647	654	642	631	634	298
35°	550	552	536	524	524	343
45°	441	439	425	410	404	340
55°	329	328	313	298	294	294
65°	220	218	204	191	188	218
75°	119	115	106	101	100	127
85°	34	30	30	29	28	37
90°	4	10	17	22	22	6
95°	52	85	46	52	62	55
105°	173	261	982	1252	828	183
115°	301	363	845	1755	2051	299
125°	430	488	797	1391	1645	382
135°	530	588	801	1146	1315	408
145°	628	681	806	998	1104	394
155°	736	762	823	905	947	338
165°	817	828	844	866	882	229
175°	860	866	860	855	850	81
180°	860	860	860	860	860	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	768.7	768.7	768.7	768.7	768.7
2.5°	762.0	771.8	766.2	766.3	769.5
5°	757.2	768.4	762.4	761.5	767.7
7.5°	749.2	760.3	753.2	752.1	760.1
10°	742.6	752.8	745.7	743.8	750.9
12.5°	733.4	743.6	736.5	733.7	740.9
15°	718.5	727.7	718.5	717.6	722.7
17.5°	701.8	709.7	699.0	695.6	699.5
20°	689.2	696.4	684.0	678.8	681.9
22.5°	673.3	680.5	667.3	659.6	663.5
25°	647.4	653.5	642.2	630.7	633.8
27.5°	619.6	624.3	612.9	601.2	602.2
30°	600.3	603.4	592.0	579.4	580.4
32.5°	580.2	582.5	570.2	556.8	557.0
35°	550.1	552.2	536.5	524.0	524.0
37.5°	518.1	519.3	502.6	489.0	487.6
40°	494.7	496.7	480.0	466.4	463.3
42.5°	472.9	473.3	458.3	444.6	440.7
45°	441.3	439.3	424.6	409.8	403.7
47.5°	407.3	407.3	390.5	375.7	370.0
50°	383.8	383.8	367.1	352.4	348.3
52.5°	362.1	361.3	345.3	330.6	324.8
55°	329.4	328.4	312.7	298.0	293.9
57.5°	294.9	294.9	280.3	264.5	260.0
60°	274.0	274.0	259.4	243.5	237.4
62.5°	251.4	250.6	235.9	221.8	218.2
65°	219.6	217.6	203.9	191.3	188.3
67.5°	189.3	187.3	172.8	162.7	160.6
70°	168.4	166.3	152.7	144.3	142.2
72.5°	148.3	145.4	133.5	126.7	124.7
75°	119.2	115.1	105.6	101.4	100.4
77.5°	91.6	84.7	80.7	77.8	76.8
80°	73.2	67.1	64.8	62.7	61.7
82.5°	57.3	51.2	50.6	49.3	48.3
85°	34.5	30.4	30.3	29.3	28.2
87.5°	15.1	13.9	15.1	16.0	16.0
90°	4.2	10.5	17.1	21.5	21.5
92.5°	20.5	23.6	28.4	38.0	41.4
95°	51.7	84.6	46.4	52.1	61.6
97.5°	84.2	158.4	321.1	95.7	82.2
100°	110.1	197.0	640.7	189.0	125.5
102.5°	135.3	226.4	865.8	497.0	271.9
105°	173.0	260.9	981.6	1252.3	828.0
107.5°	211.7	277.6	937.2	1822.1	1705.8
110°	236.9	299.4	911.2	1914.6	2056.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	262.9	325.3	885.3	1860.5	2099.7
115°	300.8	363.3	845.3	1754.7	2051.0
117.5°	340.8	402.2	835.5	1641.2	1946.0
120°	371.1	428.3	818.2	1554.9	1872.4
122.5°	391.9	454.2	796.6	1480.8	1772.9
125°	429.6	487.8	796.6	1391.2	1645.1
127.5°	460.0	520.0	797.6	1287.2	1538.0
130°	477.3	540.8	802.0	1217.6	1455.7
132.5°	498.1	561.6	801.1	1186.4	1382.1
135°	530.3	588.5	800.9	1145.7	1315.0
137.5°	557.4	619.8	800.9	1100.8	1245.8
140°	579.0	637.3	800.9	1074.5	1206.8
142.5°	600.7	654.7	805.3	1044.0	1167.8
145°	627.8	680.7	806.3	998.1	1104.0
147.5°	660.2	706.8	812.8	965.1	1046.6
150°	681.9	724.2	817.2	943.2	1012.0
152.5°	703.5	741.6	817.2	925.6	981.7
155°	736.0	762.4	822.6	904.7	947.0
157.5°	762.0	787.4	829.1	891.5	922.1
160°	779.3	800.4	833.4	882.7	909.2
162.5°	792.3	813.4	837.7	878.2	896.2
165°	817.2	827.7	844.2	866.2	882.1
167.5°	831.2	840.8	849.6	860.7	870.2
170°	844.2	849.5	849.6	860.6	865.9
172.5°	848.5	858.1	854.0	856.2	861.5
175°	860.5	865.7	860.5	854.9	849.6
177.5°	860.5	864.7	860.5	860.4	856.1
180°	860.5	860.5	860.5	860.5	860.5

(END OF REPORT)