

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: P644764

Luminaire Tested: OMN4DIP-SR4F0-125D25U840-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644764
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-SR4F0-125D25U840-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 1250 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

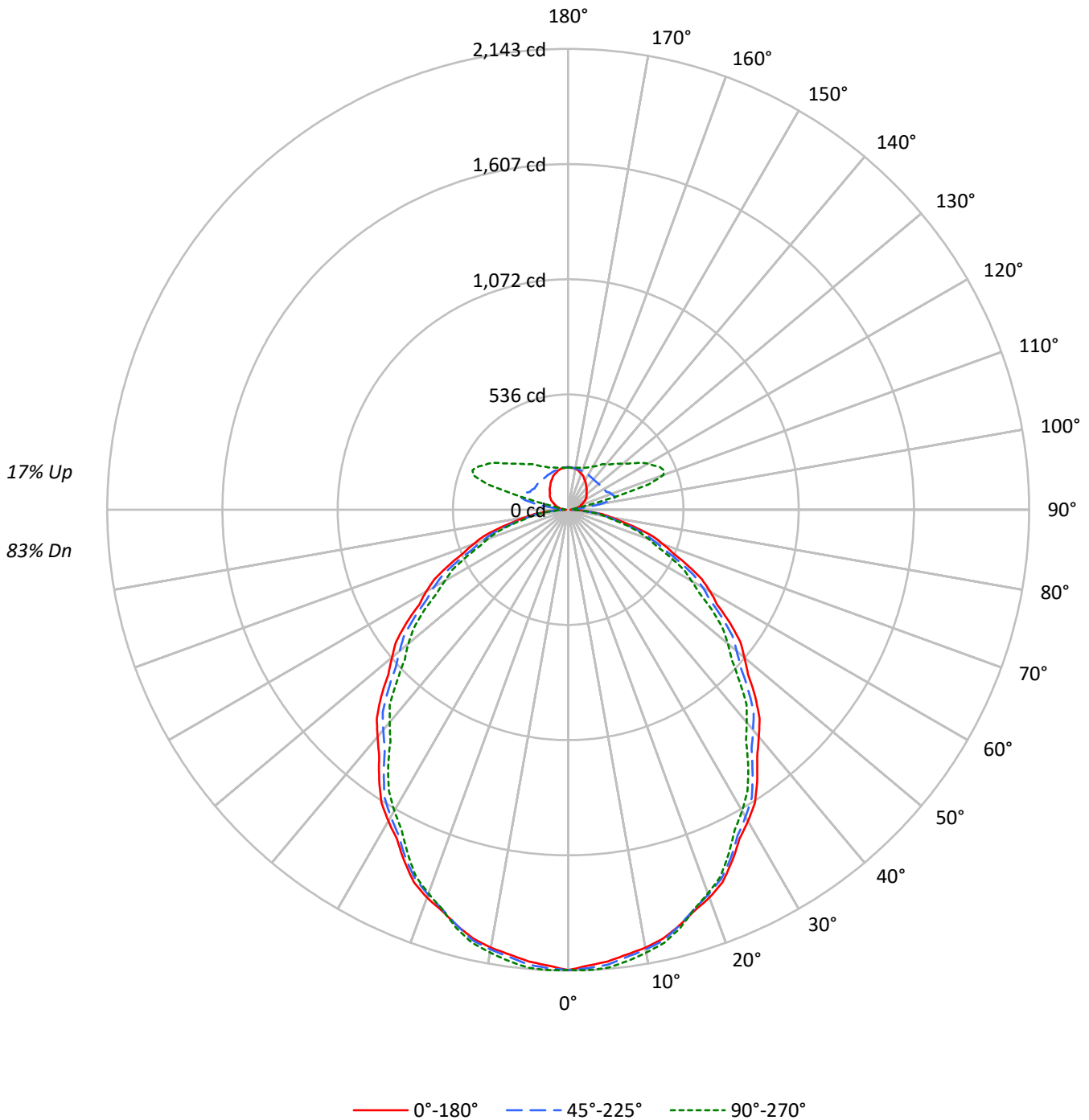
Lumens per Lamp: N/A
Luminaire Lumens: 6280.2 lumens
Efficiency: N/A
Efficacy: 130.0 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 48.3
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: P644764

CATALOG NUMBER: OMN4DIP-SR4F0-125D25U840-FLLOOB-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P644764

CATALOG NUMBER: OMN4DIP-SR4F0-125D25U840-FLLOOB-1DUDD-WW

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									70									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	115	115	115	115	110	110	110	110	102	102	102	94	94	94	86	86	86	83																			
1	105	101	97	93	101	97	93	90	89	87	84	83	80	78	76	75	73	70																			
2	96	88	82	76	92	85	79	74	79	74	70	73	69	66	67	64	62	59																			
3	88	78	70	64	84	75	68	62	70	64	59	65	60	56	60	56	53	50																			
4	81	69	61	54	77	67	59	53	62	56	51	58	52	48	54	49	46	43																			
5	74	62	53	47	71	60	52	46	56	49	44	52	46	42	49	44	40	38																			
6	69	56	47	41	66	54	46	40	51	44	39	47	41	37	44	39	35	33																			
7	64	51	42	36	61	49	41	36	46	39	34	43	37	33	40	35	32	29																			
8	59	46	38	33	57	45	37	32	42	36	31	40	34	30	37	32	28	26																			
9	55	43	35	29	53	41	34	29	39	32	28	37	31	27	34	29	26	24																			
10	52	39	32	27	50	38	31	26	36	30	25	34	28	24	32	27	24	22																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	34563	34563	34563
5°	34175	34412	34647
10°	33901	34046	34283
15°	33446	33446	33640
20°	32977	32727	32627
25°	32117	31857	31442
30°	31167	30732	30136
35°	30194	29449	28759
40°	29036	28176	27193
45°	28065	27001	25670
50°	26849	25679	24360
55°	25824	24513	23037
60°	24642	23324	21348
65°	23366	21696	20027
70°	22135	20073	18699
75°	20711	18353	17442
80°	18959	16792	15974
85°	17803	15654	14561

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 28065 cd/sqm



TEST NUMBER: P644764

CATALOG NUMBER: OMN4DIP-SR4F0-125D25U840-FLLOOB-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.4	3.2
10°-20°	565.1	9.0
20°-30°	821.6	13.1
30°-40°	934.6	14.9
40°-50°	911.3	14.5
50°-60°	777.9	12.4
60°-70°	565.3	9.0
70°-80°	319.7	5.1
80°-90°	98.9	1.6
90°-100°	36.6	0.6
100°-110°	179.5	2.9
110°-120°	238.6	3.8
120°-130°	193.2	3.1
130°-140°	153.7	2.4
140°-150°	120.9	1.9
150°-160°	88.4	1.4
160°-170°	54.9	0.9
170°-180°	18.7	0.3
0°-30°	1588.1	25.3
0°-40°	2522.7	40.2
0°-60°	4211.8	67.1
0°-90°	5195.6	82.7
90°-120°	454.7	7.2
90°-150°	922.5	14.7
90°-180°	1085.0	17.3
0°-180°	6280.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2141	2141	2141	2141	2141	
5°	2109	2140	2123	2121	2138	200
15°	2001	2026	2001	1998	2012	564
25°	1803	1820	1788	1756	1765	829
35°	1532	1538	1494	1459	1459	957
45°	1229	1223	1182	1141	1124	946
55°	917	915	871	830	818	819
65°	612	606	568	533	524	607
75°	332	321	294	282	280	352
85°	96	85	84	82	79	103
90°	12	16	20	18	18	12
95°	33	30	19	20	20	29
105°	53	68	230	289	190	57
115°	77	89	196	402	470	77
125°	104	117	185	318	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: P644764

CATALOG NUMBER: OMN4DIP-SR4F0-125D25U840-FLLOOB-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2140.7	2140.7	2140.7	2140.7	2140.7
2.5°	2122.0	2149.3	2133.7	2133.9	2143.0
5°	2108.6	2139.9	2123.2	2120.7	2137.7
7.5°	2086.5	2117.2	2097.5	2094.6	2116.8
10°	2067.8	2096.3	2076.6	2071.2	2091.1
12.5°	2042.2	2070.7	2050.9	2043.2	2063.2
15°	2000.9	2026.5	2000.9	1998.3	2012.5
17.5°	1954.3	1976.5	1946.7	1937.0	1947.8
20°	1919.3	1939.2	1904.7	1890.4	1898.9
22.5°	1875.0	1895.0	1858.1	1836.8	1847.7
25°	1802.8	1819.9	1788.2	1756.4	1764.9
27.5°	1725.3	1738.4	1706.7	1674.1	1677.0
30°	1671.7	1680.3	1648.4	1613.6	1616.4
32.5°	1615.8	1622.1	1587.9	1550.6	1551.2
35°	1531.9	1537.6	1494.1	1459.1	1459.1
37.5°	1442.8	1446.2	1399.7	1361.8	1357.8
40°	1377.6	1383.3	1336.8	1298.8	1290.2
42.5°	1317.0	1318.1	1276.2	1238.1	1227.3
45°	1229.1	1223.4	1182.5	1141.3	1124.2
47.5°	1134.1	1134.1	1087.5	1046.4	1030.4
50°	1068.9	1068.9	1022.3	981.2	969.8
52.5°	1008.3	1006.0	961.7	920.6	904.6
55°	917.4	914.6	870.8	829.8	818.4
57.5°	821.3	821.3	780.5	736.6	724.0
60°	763.1	763.1	722.3	678.2	661.1
62.5°	700.2	697.9	657.0	617.8	607.5
65°	611.6	605.9	567.9	532.8	524.2
67.5°	527.2	521.5	481.1	453.0	447.4
70°	468.9	463.2	425.2	401.8	396.1
72.5°	413.0	405.0	371.6	352.9	347.2
75°	332.0	320.6	294.2	282.4	279.6
77.5°	255.1	235.8	224.8	216.6	213.8
80°	203.9	186.8	180.6	174.7	171.8
82.5°	159.6	142.5	141.0	137.4	134.6
85°	96.1	84.7	84.5	81.5	78.6
87.5°	41.9	35.9	36.6	36.3	36.3
90°	11.6	15.7	20.0	18.3	18.3
92.5°	23.9	18.9	18.3	19.9	18.6
95°	33.2	30.3	18.6	19.9	19.5
97.5°	38.0	47.1	81.0	26.7	21.5
100°	43.9	56.0	152.0	45.9	31.4
102.5°	47.5	60.6	203.6	116.4	62.8
105°	53.0	67.9	230.1	289.3	189.6
107.5°	61.3	71.7	219.9	419.8	390.5
110°	64.9	76.6	214.0	441.0	470.8



TEST NUMBER: P644764

CATALOG NUMBER: OMN4DIP-SR4F0-125D25U840-FLLOOB-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	70.9	82.6	208.0	428.6	480.7
115°	76.9	88.6	196.2	401.8	469.6
117.5°	86.1	97.5	194.0	375.8	445.6
120°	93.0	103.5	190.0	356.0	428.7
122.5°	95.6	109.3	185.1	339.0	405.9
125°	103.7	117.0	185.1	318.5	376.7
127.5°	108.0	123.8	185.3	294.7	352.1
130°	111.9	126.5	186.3	278.8	333.3
132.5°	114.6	129.1	184.0	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)