

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: P644271

Luminaire Tested: CRQ4DIP-SR4F0-125D150U840-FLLFLL-1DUDD-WW

Issue Date: 2/20/2023



Test Information

Test Method: LM-79-2019
Report Number: P644271
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2206-689-28, G2-2206-689-14)
Test Lab: INNOVATION CENTER
Issue Date: 2/20/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: CRQ4DIP-SR4F0-125D150U840-FLLFLL-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - CURVED FROSTED LENS - 1250 LUMENS PER FOOT
UPLIGHT - CURVED FROSTED LENS - 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

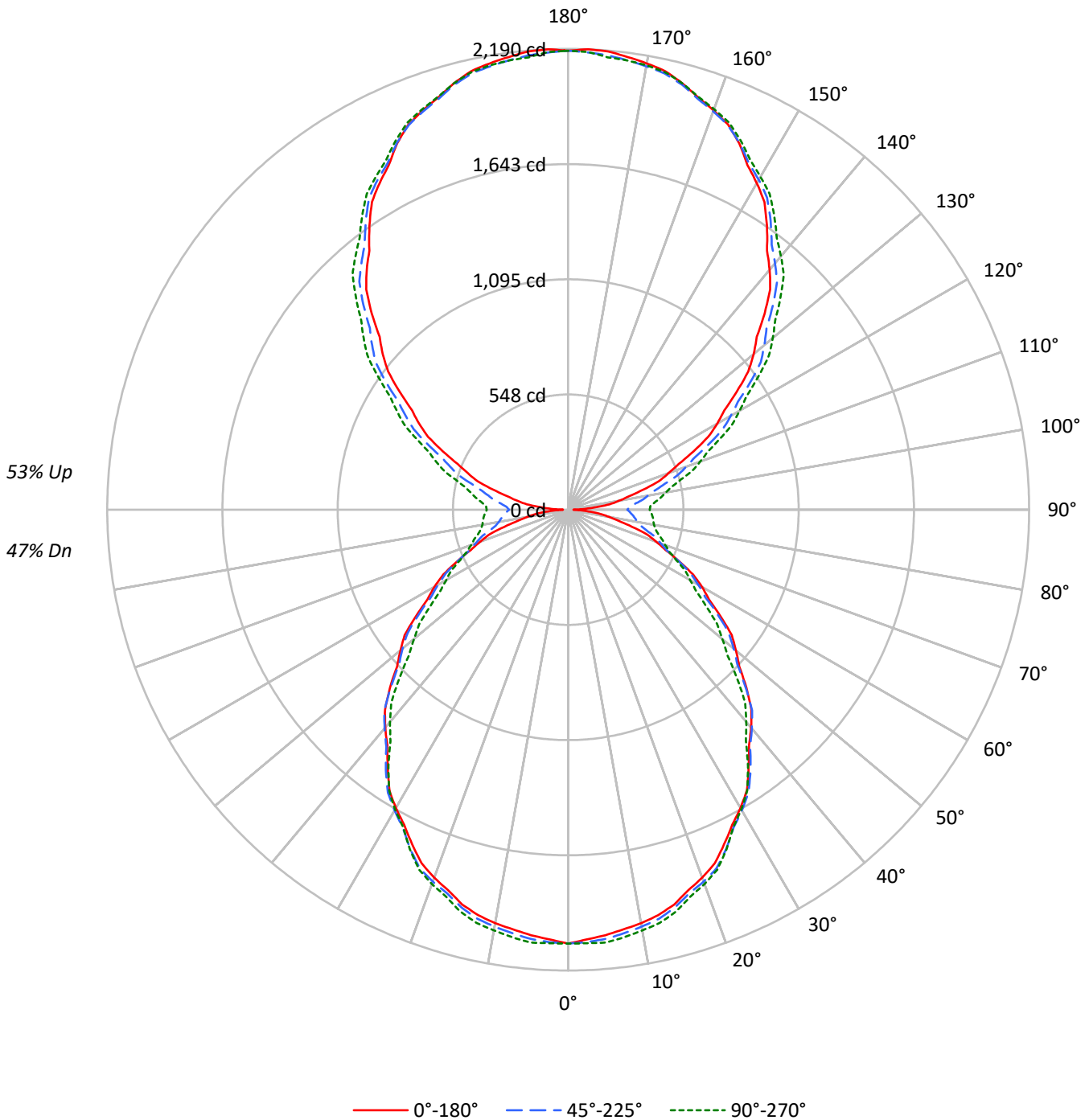
Lumens per Lamp: N/A
Luminaire Lumens: 11757.2 lumens
Efficiency: N/A
Efficacy: 132.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.33')
CIE Type: General Diffuse

Input Watts (W): 88.6
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: P644271

CATALOG NUMBER: CRQ4DIP-SR4F0-125D150U840-FLLFLL-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P644271

CATALOG NUMBER: CRQ4DIP-SR4F0-125D150U840-FLLFLL-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	106	106	106	106	98	98	98	98	81	81	81	67	67	67	53	53	53	47				47
1	96	92	88	84	88	84	81	77	70	68	65	58	56	54	46	44	43				38	
2	88	80	74	68	80	74	68	63	61	57	54	50	47	45	40	38	36				31	
3	80	70	63	57	73	65	58	53	54	49	45	45	41	38	36	33	31				27	
4	73	62	54	48	67	57	50	45	48	43	39	40	36	33	32	29	27				23	
5	67	55	47	41	61	51	44	39	43	38	33	36	31	28	29	26	23				20	
6	62	50	42	36	57	46	39	33	39	33	29	32	28	25	26	23	21				18	
7	57	45	37	31	52	42	34	29	35	30	26	29	25	22	24	21	18				16	
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	16				14	
9	49	37	30	25	45	35	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°	33293	33293	33293
5°	32663	29395	28483
10°	32234	26184	24605
15°	31762	23449	21521
20°	31034	21037	18824
25°	30067	18762	16404
30°	29115	16625	14238
35°	27826	14649	12221
40°	26622	12787	10360
45°	25229	10992	8646
50°	23756	9355	7092
55°	22200	7860	5838
60°	20710	6493	4839
65°	18880	5322	4087
70°	17117	4372	3564
75°	14965	3720	3261
80°	12502	3323	3116
85°	9118	3203	3132

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 25229 cd/sqm



TEST NUMBER: P644271

CATALOG NUMBER: CRQ4DIP-SR4F0-125D150U840-FLLFLL-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.7	1.7
10°-20°	552.6	4.7
20°-30°	816.1	6.9
30°-40°	939.2	8.0
40°-50°	911.5	7.8
50°-60°	769.0	6.5
60°-70°	579.2	4.9
70°-80°	408.9	3.5
80°-90°	304.4	2.6
90°-100°	324.0	2.8
100°-110°	498.2	4.2
110°-120°	727.3	6.2
120°-130°	938.9	8.0
130°-140°	1061.2	9.0
140°-150°	1048.4	8.9
150°-160°	886.8	7.5
160°-170°	590.4	5.0
170°-180°	206.5	1.8
0°-30°	1563.4	13.3
0°-40°	2502.6	21.3
0°-60°	4183.1	35.6
0°-90°	5475.7	46.6
90°-120°	1549.5	13.2
90°-150°	4597.9	39.1
90°-180°	6282.0	53.4
0°-180°	11757.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2062	2062	2062	2062	2062	
5°	2030	2067	2047	2051	2065	193
15°	1943	1976	1957	1963	1978	546
25°	1753	1786	1777	1768	1780	808
35°	1494	1524	1510	1488	1488	936
45°	1197	1215	1191	1153	1136	923
55°	882	903	867	816	800	791
65°	582	599	579	569	566	579
75°	314	333	388	430	442	336
85°	96	170	308	383	403	102
90°	25	134	281	361	387	22
95°	133	178	318	397	413	133
105°	370	384	475	543	555	394
115°	657	682	738	782	793	653
125°	977	1010	1056	1093	1102	876
135°	1320	1349	1375	1410	1426	1017
145°	1646	1666	1676	1688	1706	1028
155°	1922	1933	1924	1927	1938	882
165°	2098	2107	2091	2084	2098	591
175°	2186	2195	2167	2158	2158	207
180°	2181	2181	2181	2181	2181	



TEST NUMBER: P644271

CATALOG NUMBER: CRQ4DIP-SR4F0-125D150U840-FLLFLL-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2062.0	2062.0	2062.0	2062.0	2062.0
2.5°	2043.4	2073.0	2056.9	2059.7	2062.0
5°	2030.0	2067.0	2047.4	2050.7	2064.9
7.5°	2011.3	2047.3	2030.5	2032.1	2048.6
10°	1995.0	2029.2	2011.9	2015.7	2030.0
12.5°	1974.0	2009.6	1991.4	1997.1	2011.3
15°	1942.6	1975.6	1956.6	1963.3	1977.5
17.5°	1896.0	1929.0	1911.1	1913.8	1928.0
20°	1861.0	1891.8	1880.8	1878.8	1893.1
22.5°	1819.1	1852.1	1843.6	1834.6	1851.1
25°	1753.3	1786.3	1776.6	1768.1	1779.5
27.5°	1688.0	1717.3	1701.9	1690.6	1699.1
30°	1636.8	1666.9	1650.2	1637.0	1645.5
32.5°	1580.9	1612.8	1594.2	1578.6	1582.6
35°	1494.1	1523.7	1509.8	1488.3	1488.3
37.5°	1411.9	1435.8	1419.5	1392.6	1386.3
40°	1351.4	1377.5	1356.6	1325.0	1316.4
42.5°	1288.5	1314.6	1293.2	1257.3	1244.2
45°	1197.0	1215.2	1190.6	1152.9	1135.9
47.5°	1102.6	1123.2	1090.2	1048.0	1027.5
50°	1039.7	1060.8	1026.3	978.1	955.3
52.5°	979.2	997.4	961.5	910.1	891.4
55°	882.5	902.9	866.7	816.2	799.7
57.5°	792.2	812.1	772.8	735.8	720.8
60°	733.9	751.5	714.1	682.2	669.0
62.5°	668.7	688.1	654.9	635.6	626.1
65°	582.5	598.9	579.4	568.7	565.8
67.5°	501.5	515.1	509.0	516.7	519.4
70°	445.6	459.2	467.5	486.0	490.4
72.5°	394.3	407.5	433.9	461.2	468.0
75°	314.5	332.7	387.5	430.0	442.4
77.5°	244.6	264.5	352.5	407.3	423.0
80°	198.0	229.7	334.3	396.1	413.6
82.5°	156.1	199.6	321.1	390.8	408.3
85°	96.1	170.4	308.4	383.0	403.4
87.5°	46.9	148.2	294.4	372.6	395.8
90°	24.9	134.5	280.8	361.4	386.9
92.5°	65.8	145.3	291.8	370.4	390.9
95°	133.3	178.0	318.2	396.8	413.2
97.5°	199.3	225.6	355.0	427.8	443.9
100°	245.6	264.2	384.6	455.0	469.8
102.5°	295.2	308.3	419.7	486.5	502.6
105°	369.5	384.1	475.3	542.8	555.3
107.5°	452.1	468.2	544.8	607.9	620.3
110°	507.2	529.2	596.2	653.3	667.5



TEST NUMBER: P644271

CATALOG NUMBER: CRQ4DIP-SR4F0-125D150U840-FLLFLL-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	568.3	590.3	649.9	702.4	716.5
115°	657.1	681.9	737.5	781.7	793.0
117.5°	749.9	777.3	827.6	868.5	879.4
120°	818.0	844.0	892.0	931.0	940.0
122.5°	879.1	908.2	956.8	995.8	1004.8
125°	977.1	1009.9	1056.4	1093.0	1102.1
127.5°	1077.8	1110.4	1153.1	1190.3	1202.1
130°	1149.6	1179.0	1216.1	1255.2	1268.8
132.5°	1215.3	1244.7	1278.6	1318.2	1333.6
135°	1319.7	1349.1	1375.3	1410.4	1426.2
137.5°	1420.2	1448.7	1468.8	1496.6	1516.5
140°	1488.7	1513.6	1528.1	1554.0	1572.1
142.5°	1551.7	1576.6	1587.4	1609.5	1627.6
145°	1646.2	1666.5	1676.3	1688.3	1706.4
147.5°	1734.6	1754.5	1758.7	1769.1	1780.5
150°	1792.0	1810.1	1810.6	1815.4	1826.8
152.5°	1845.8	1862.0	1856.9	1859.9	1873.1
155°	1921.7	1933.0	1924.0	1926.6	1937.9
157.5°	1981.9	1993.2	1979.1	1983.5	1992.5
160°	2018.9	2030.3	2014.3	2016.8	2025.9
162.5°	2054.1	2061.8	2047.6	2044.7	2057.4
165°	2097.7	2106.7	2090.7	2084.1	2097.7
167.5°	2134.7	2143.8	2122.7	2115.6	2129.1
170°	2153.2	2162.3	2139.3	2130.4	2144.0
172.5°	2169.9	2178.9	2154.1	2143.3	2153.2
175°	2185.6	2194.7	2167.1	2157.9	2157.9
177.5°	2190.3	2195.7	2175.4	2166.4	2177.3
180°	2181.0	2181.0	2181.0	2181.0	2181.0

(END OF REPORT)