

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: P644267

Luminaire Tested: CRQ4DIP-SR4F0-125D150U830-FLLFLL-1DUDD-WW

Issue Date: 2/20/2023



Test Information

Test Method: LM-79-2019
Report Number: P644267
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-SR4F0-125D150U830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

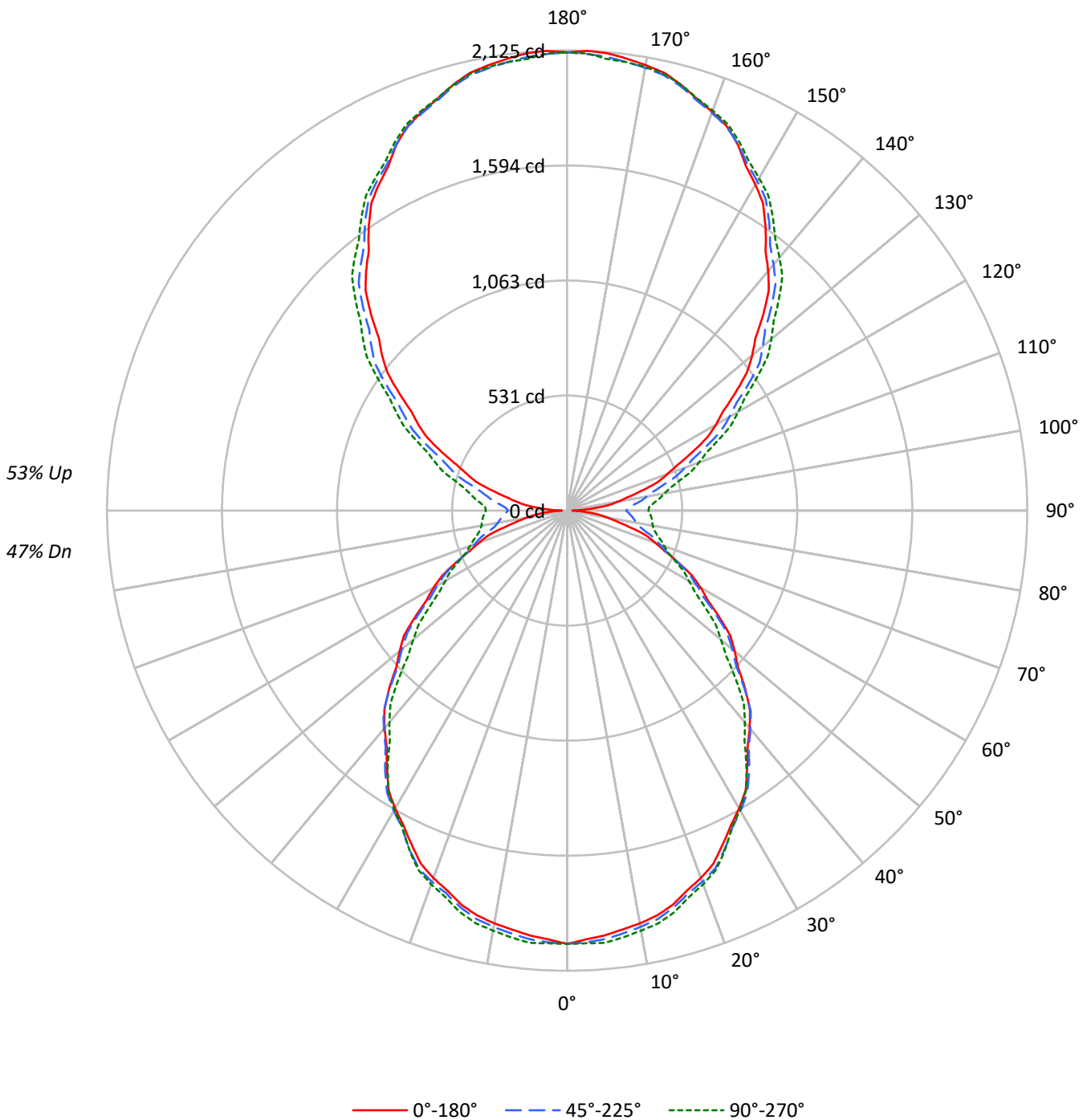
Lumens per Lamp: N/A
Luminaire Lumens: 11406.6 lumens
Efficiency: N/A
Efficacy: 128.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.33')
CIE Type: General Diffuse

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: P644267

CATALOG NUMBER: CRQ4DIP-SR4F0-125D150U830-FLLFLL-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P644267

CATALOG NUMBER: CRQ4DIP-SR4F0-125D150U830-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°	32300	32300	32300
5°	31688	28519	27633
10°	31273	25403	23870
15°	30815	22749	20880
20°	30109	20409	18263
25°	29170	18202	15914
30°	28247	16129	13813
35°	26995	14211	11856
40°	25828	12405	10051
45°	24477	10665	8388
50°	23048	9076	6880
55°	21536	7626	5663
60°	20092	6299	4695
65°	18316	5163	3965
70°	16606	4241	3458
75°	14523	3610	3163
80°	12129	3223	3023
85°	8843	3107	3038

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 24477 cd/sqm



TEST NUMBER: P644267

CATALOG NUMBER: CRQ4DIP-SR4F0-125D150U830-FLLFLL-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.9	1.7
10°-20°	536.1	4.7
20°-30°	791.7	6.9
30°-40°	911.2	8.0
40°-50°	884.3	7.8
50°-60°	746.1	6.5
60°-70°	562.0	4.9
70°-80°	396.7	3.5
80°-90°	295.4	2.6
90°-100°	314.4	2.8
100°-110°	483.3	4.2
110°-120°	705.6	6.2
120°-130°	910.9	8.0
130°-140°	1029.5	9.0
140°-150°	1017.1	8.9
150°-160°	860.3	7.5
160°-170°	572.8	5.0
170°-180°	200.3	1.8
0°-30°	1516.8	13.3
0°-40°	2427.9	21.3
0°-60°	4058.3	35.6
0°-90°	5312.4	46.6
90°-120°	1503.3	13.2
90°-150°	4460.8	39.1
90°-180°	6094.0	53.4
0°-180°	11406.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2000	2000	2000	2000	2000	
5°	1969	2005	1986	1990	2003	187
15°	1885	1917	1898	1905	1919	530
25°	1701	1733	1724	1715	1726	784
35°	1450	1478	1465	1444	1444	908
45°	1161	1179	1155	1119	1102	895
55°	856	876	841	792	776	768
65°	565	581	562	552	549	562
75°	305	323	376	417	429	326
85°	93	165	299	372	391	99
90°	24	130	272	351	375	22
95°	129	173	309	385	401	129
105°	358	373	461	527	539	382
115°	638	662	716	758	769	633
125°	948	980	1025	1060	1069	850
135°	1280	1309	1334	1368	1384	987
145°	1597	1617	1626	1638	1656	998
155°	1864	1875	1867	1869	1880	856
165°	2035	2044	2028	2022	2035	574
175°	2120	2129	2102	2094	2094	201
180°	2116	2116	2116	2116	2116	

TEST NUMBER: P644267

CATALOG NUMBER: CRQ4DIP-SR4F0-125D150U830-FLLFLL-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2000.5	2000.5	2000.5	2000.5	2000.5
2.5°	1982.4	2011.2	1995.5	1998.3	2000.5
5°	1969.4	2005.3	1986.4	1989.5	2003.3
7.5°	1951.3	1986.3	1970.0	1971.5	1987.5
10°	1935.5	1968.7	1951.9	1955.6	1969.4
12.5°	1915.2	1949.6	1932.0	1937.5	1951.3
15°	1884.7	1916.7	1898.2	1904.8	1918.6
17.5°	1839.4	1871.5	1854.1	1856.7	1870.5
20°	1805.5	1835.4	1824.7	1822.8	1836.6
22.5°	1764.9	1796.9	1788.6	1779.9	1795.9
25°	1701.0	1733.0	1723.6	1715.4	1726.4
27.5°	1637.7	1666.1	1651.1	1640.2	1648.4
30°	1588.0	1617.2	1600.9	1588.2	1596.4
32.5°	1533.7	1564.7	1546.7	1531.5	1535.4
35°	1449.5	1478.2	1464.7	1443.9	1443.9
37.5°	1369.8	1393.0	1377.2	1351.1	1345.0
40°	1311.1	1336.4	1316.1	1285.4	1277.2
42.5°	1250.0	1275.4	1254.6	1219.8	1207.1
45°	1161.3	1179.0	1155.1	1118.6	1102.0
47.5°	1069.8	1089.7	1057.6	1016.8	996.9
50°	1008.7	1029.1	995.7	948.9	926.8
52.5°	950.0	967.7	932.9	883.0	864.8
55°	856.1	876.0	840.9	791.9	775.8
57.5°	768.6	787.8	749.7	713.8	699.3
60°	712.0	729.1	692.8	661.8	649.1
62.5°	648.8	667.6	635.3	616.7	607.4
65°	565.1	581.1	562.1	551.7	548.9
67.5°	486.6	499.7	493.8	501.3	503.9
70°	432.3	445.5	453.5	471.5	475.8
72.5°	382.6	395.3	420.9	447.5	454.0
75°	305.2	322.7	376.0	417.2	429.2
77.5°	237.3	256.6	342.0	395.2	410.4
80°	192.1	222.9	324.3	384.2	401.3
82.5°	151.5	193.6	311.6	379.2	396.2
85°	93.2	165.3	299.2	371.6	391.3
87.5°	45.5	143.8	285.6	361.4	384.0
90°	24.2	130.5	272.4	350.6	375.3
92.5°	63.8	140.9	283.1	359.4	379.3
95°	129.3	172.7	308.7	385.0	400.9
97.5°	193.4	218.9	344.4	415.0	430.7
100°	238.3	256.3	373.1	441.5	455.8
102.5°	286.4	299.1	407.2	472.0	487.6
105°	358.5	372.6	461.1	526.6	538.7
107.5°	438.6	454.2	528.6	589.8	601.8
110°	492.1	513.4	578.4	633.8	647.6

TEST NUMBER: P644267

CATALOG NUMBER: CRQ4DIP-SR4F0-125D150U830-FLLFLL-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	551.4	572.7	630.6	681.4	695.2
115°	637.5	661.6	715.5	758.4	769.4
117.5°	727.5	754.1	802.9	842.6	853.1
120°	793.6	818.8	865.4	903.2	912.0
122.5°	852.9	881.2	928.3	966.1	974.9
125°	948.0	979.8	1024.9	1060.4	1069.2
127.5°	1045.7	1077.3	1118.8	1154.8	1166.2
130°	1115.3	1143.8	1179.9	1217.8	1230.9
132.5°	1179.1	1207.6	1240.5	1278.9	1293.8
135°	1280.4	1308.9	1334.3	1368.3	1383.7
137.5°	1377.8	1405.5	1425.0	1452.0	1471.3
140°	1444.3	1468.5	1482.5	1507.6	1525.2
142.5°	1505.4	1529.6	1540.0	1561.5	1579.1
145°	1597.1	1616.8	1626.3	1637.9	1655.5
147.5°	1682.9	1702.2	1706.2	1716.4	1727.4
150°	1738.6	1756.2	1756.6	1761.3	1772.3
152.5°	1790.7	1806.5	1801.5	1804.5	1817.2
155°	1864.4	1875.4	1866.6	1869.1	1880.1
157.5°	1922.8	1933.8	1920.1	1924.3	1933.1
160°	1958.7	1969.7	1954.2	1956.7	1965.5
162.5°	1992.9	2000.3	1986.6	1983.7	1996.0
165°	2035.1	2043.9	2028.4	2021.9	2035.1
167.5°	2071.0	2079.8	2059.4	2052.5	2065.6
170°	2089.0	2097.8	2075.5	2066.8	2080.0
172.5°	2105.2	2114.0	2089.9	2079.3	2089.0
175°	2120.4	2129.2	2102.5	2093.5	2093.5
177.5°	2124.9	2130.2	2110.6	2101.8	2112.4
180°	2116.0	2116.0	2116.0	2116.0	2116.0

(END OF REPORT)