

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: P644259

Luminaire Tested: CRQ4DIP-SR4F0-125D125U840-FLLFLL-1DUDD-WW

Issue Date: 2/20/2023



Test Information

Test Method: LM-79-2019
Report Number: P644259
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-SR4F0-125D125U840-FLLFLL-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - CURVED FROSTED LENS - 1250 LUMENS PER FOOT
UPLIGHT - CURVED FROSTED LENS - 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

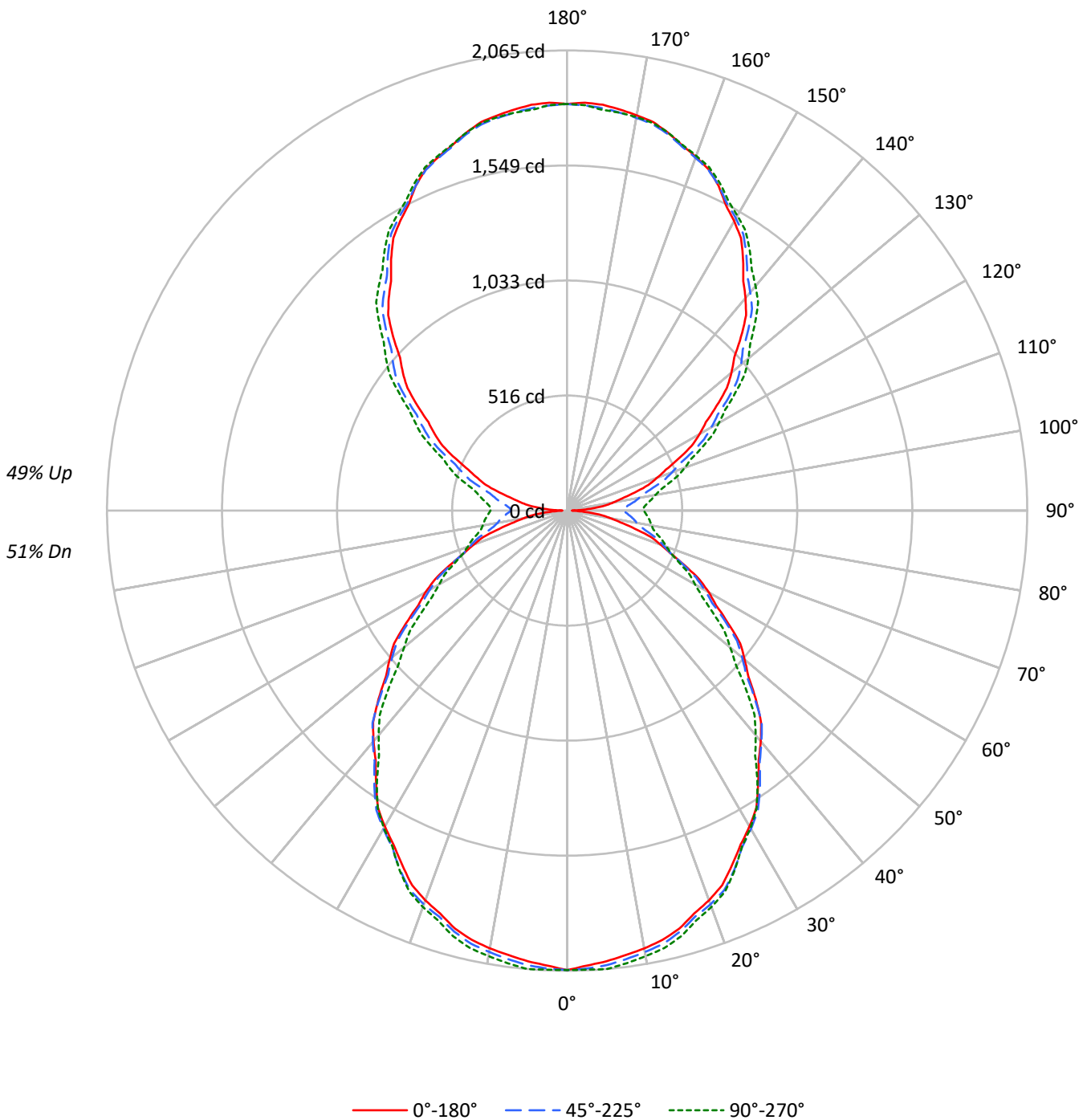
Lumens per Lamp: N/A
Luminaire Lumens: 10703.8 lumens
Efficiency: N/A
Efficacy: 136.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.33')
CIE Type: General Diffuse

Input Watts (W): 78.2
Input Voltage (V): 120
Input Current (A_{in}): 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				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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47	41
2	88	81	74	69	81	75	69	64	63	59	56	53	50	47	43	41	39	34
3	81	71	64	58	74	66	59	54	56	51	47	47	43	40	38	36	33	29
4	74	63	55	49	68	58	51	46	50	44	40	42	38	34	34	31	29	25
5	68	56	48	42	62	52	45	39	45	39	34	37	33	30	31	28	25	22
6	63	50	42	36	58	47	40	34	40	34	30	34	29	26	28	25	22	19
7	58	45	37	32	53	42	35	30	36	31	27	31	26	23	26	22	20	17
8	54	41	34	28	49	39	32	27	33	28	24	28	24	21	24	20	18	15
9	50	38	30	25	46	35	28	24	31	25	21	26	22	19	22	18	16	14
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	33293	33293	33293
5°	32663	29395	28483
10°	32234	26178	24605
15°	31762	23445	21521
20°	31034	21033	18824
25°	30067	18762	16404
30°	29115	16617	14238
35°	27826	14637	12221
40°	26622	12783	10360
45°	25229	10989	8646
50°	23756	9345	7092
55°	22200	7854	5818
60°	20710	6479	4796
65°	18880	5287	4010
70°	17117	4313	3449
75°	14965	3615	3096
80°	12502	3153	2894
85°	9118	2950	2838

MAXIMUM LUMINANCE 45°-90°:

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.7	1.8
10°-20°	552.6	5.2
20°-30°	816.0	7.6
30°-40°	938.9	8.8
40°-50°	911.2	8.5
50°-60°	767.7	7.2
60°-70°	574.2	5.4
70°-80°	396.8	3.7
80°-90°	281.3	2.6
90°-100°	281.6	2.6
100°-110°	420.5	3.9
110°-120°	609.7	5.7
120°-130°	785.9	7.3
130°-140°	887.7	8.3
140°-150°	876.9	8.2
150°-160°	741.7	6.9
160°-170°	493.8	4.6
170°-180°	172.7	1.6
0°-30°	1563.2	14.6
0°-40°	2502.1	23.4
0°-60°	4181.0	39.1
0°-90°	5433.2	50.8
90°-120°	1311.7	12.3
90°-150°	3862.2	36.1
90°-180°	5271.0	49.2
0°-180°	10703.8	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	1975	1956	1963	1978	546
25°	1753	1786	1777	1768	1780	808
35°	1494	1522	1509	1488	1488	936
45°	1197	1214	1190	1153	1136	923
55°	882	901	866	815	797	791
65°	582	597	576	560	555	579
75°	314	330	376	411	420	336
85°	96	162	284	348	366	102
90°	22	122	252	322	344	20
95°	116	153	276	345	360	115
105°	314	323	400	458	470	334
115°	553	572	618	655	664	549
125°	819	846	884	914	922	734
135°	1104	1128	1150	1180	1193	851
145°	1377	1394	1402	1412	1427	860
155°	1607	1617	1609	1612	1621	738
165°	1755	1762	1749	1743	1755	495
175°	1828	1836	1813	1805	1805	174
180°	1824	1824	1824	1824	1824	

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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	2056.6	2059.7	2062.0
5°	2030.0	2067.0	2047.4	2050.7	2064.9
7.5°	2011.3	2047.0	2030.2	2032.1	2048.6
10°	1995.0	2029.2	2011.5	2015.7	2030.0
12.5°	1974.0	2009.0	1991.3	1997.1	2011.3
15°	1942.6	1974.9	1956.2	1963.3	1977.5
17.5°	1896.0	1928.6	1910.7	1913.8	1928.0
20°	1861.0	1891.4	1880.5	1878.8	1893.1
22.5°	1819.1	1851.8	1843.2	1834.6	1851.1
25°	1753.3	1785.6	1776.6	1768.1	1779.5
27.5°	1688.0	1715.9	1701.4	1690.6	1699.1
30°	1636.8	1666.2	1649.4	1637.0	1645.5
32.5°	1580.9	1611.8	1593.5	1578.6	1582.6
35°	1494.1	1522.5	1508.6	1488.3	1488.3
37.5°	1411.9	1434.3	1419.1	1392.6	1386.3
40°	1351.4	1376.0	1356.2	1325.0	1316.4
42.5°	1288.5	1313.1	1292.5	1257.3	1244.2
45°	1197.0	1214.1	1190.2	1152.9	1135.9
47.5°	1102.6	1121.8	1089.6	1048.0	1027.5
50°	1039.7	1059.7	1025.2	978.1	955.3
52.5°	979.2	996.0	960.7	909.8	890.8
55°	882.5	901.4	866.0	815.1	797.0
57.5°	792.2	810.6	771.6	732.4	716.6
60°	733.9	750.1	712.6	677.2	663.0
62.5°	668.7	686.3	652.7	629.1	617.9
65°	582.5	596.7	575.6	559.9	555.2
67.5°	501.5	512.9	503.8	505.3	505.6
70°	445.6	457.0	461.1	472.7	474.5
72.5°	394.3	404.9	425.3	445.5	449.6
75°	314.5	329.7	376.5	410.6	420.1
77.5°	244.6	260.5	338.2	383.8	396.5
80°	198.0	224.6	317.2	369.9	384.1
82.5°	156.1	193.2	301.7	361.3	375.5
85°	96.1	161.5	284.1	348.5	365.5
87.5°	46.4	136.8	266.8	334.7	354.2
90°	22.3	121.8	252.0	322.3	344.1
92.5°	58.0	128.6	258.2	326.8	344.8
95°	116.3	153.2	276.1	345.3	359.5
97.5°	172.5	191.5	304.2	367.9	381.9
100°	211.2	223.4	327.4	388.7	402.0
102.5°	252.2	259.9	355.2	413.5	427.5
105°	313.8	323.2	400.0	458.3	469.7
107.5°	382.4	393.1	457.1	511.2	522.0
110°	428.1	444.1	499.7	548.4	560.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	479.2	495.2	544.6	588.6	601.0
115°	553.0	571.9	617.8	654.8	664.3
117.5°	630.0	651.6	693.1	726.8	735.9
120°	686.6	707.4	746.6	778.7	786.3
122.5°	737.7	760.8	800.8	832.9	840.5
125°	819.2	845.7	884.1	914.3	921.8
127.5°	902.9	929.8	965.0	995.7	1005.5
130°	962.5	987.1	1017.7	1049.9	1061.3
132.5°	1016.7	1041.4	1069.6	1102.6	1115.5
135°	1103.9	1128.5	1150.4	1179.7	1193.0
137.5°	1187.9	1211.8	1228.6	1251.8	1268.5
140°	1245.3	1266.1	1278.2	1299.8	1315.0
142.5°	1297.9	1318.8	1327.8	1346.3	1361.5
145°	1376.9	1394.0	1402.1	1412.1	1427.3
147.5°	1450.9	1467.6	1471.1	1479.8	1489.3
150°	1499.0	1514.1	1514.4	1518.5	1528.0
152.5°	1543.9	1557.5	1553.2	1555.8	1566.7
155°	1607.4	1616.9	1609.3	1611.5	1621.0
157.5°	1657.8	1667.2	1655.4	1659.1	1666.7
160°	1688.7	1698.2	1684.9	1687.0	1694.6
162.5°	1718.2	1724.6	1712.8	1710.3	1720.9
165°	1754.6	1762.2	1748.8	1743.2	1754.6
167.5°	1785.6	1793.1	1775.5	1769.6	1780.9
170°	1801.1	1808.6	1789.4	1782.0	1793.3
172.5°	1815.0	1822.6	1801.8	1792.7	1801.1
175°	1828.2	1835.8	1812.7	1804.9	1804.9
177.5°	1832.1	1836.6	1819.7	1812.1	1821.2
180°	1824.3	1824.3	1824.3	1824.3	1824.3

(END OF REPORT)