

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: P644466

Luminaire Tested: CRQ4DP-SR4F0-125D835-FLL-1DUDD-WW

Issue Date: 2/20/2023



Test Information

Test Method: LM-79-2019
Report Number: P644466
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2206-689-14)
Test Lab: INNOVATION CENTER
Issue Date: 2/20/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: CRQ4DP-SR4F0-125D835-FLL-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - CURVED FROSTED LENS - 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

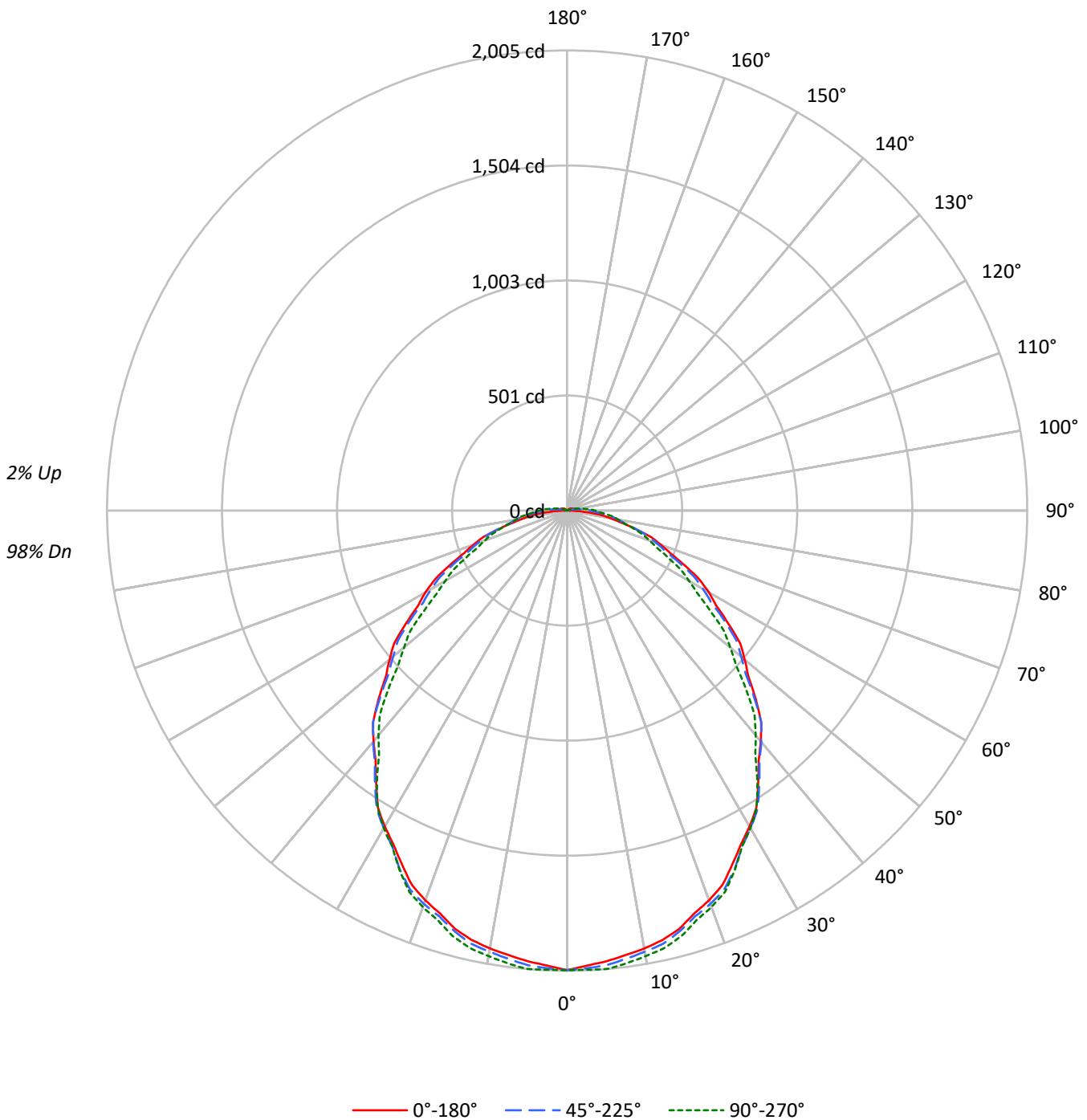
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5162.1 lumens
Efficiency: N/A
Efficacy: 129.1 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: 0.02')
CIE Type: Direct

Input Watts (W): 40
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				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	119	119	119	119	116	116	116	116	110	110	110	105	105	105	100	100	100	98
1	108	103	99	95	105	101	97	93	96	93	90	92	89	87	88	86	84	82
2	99	91	84	78	96	88	82	77	85	79	75	81	77	73	78	74	71	69
3	90	80	72	65	88	78	71	65	75	69	63	72	67	62	69	65	61	58
4	83	71	62	56	80	70	62	55	67	60	54	64	58	53	62	57	53	50
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	56	50	46	44
6	71	58	49	43	69	57	48	42	55	47	42	53	46	41	51	45	41	39
7	66	52	44	38	64	51	43	38	50	42	37	48	42	37	47	41	36	34
8	61	48	40	34	60	47	39	34	46	38	33	44	38	33	43	37	33	31
9	57	44	36	31	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	32329	32329	32329
5°	31931	31915	32077
10°	31727	31382	31485
15°	31479	30809	30858
20°	30981	30130	29951
25°	30242	29229	28772
30°	29526	28004	27416
35°	28471	26698	25778
40°	27513	25367	23931
45°	26377	23726	21900
50°	25172	21970	19766
55°	23908	20352	17638
60°	22768	18550	15731
65°	21323	16685	14060
70°	20082	15054	12764
75°	18617	13741	11878
80°	17268	12770	11364
85°	16132	12730	11390

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 26377 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.0	3.7
10°-20°	536.3	10.4
20°-30°	791.7	15.3
30°-40°	910.2	17.6
40°-50°	882.9	17.1
50°-60°	739.1	14.3
60°-70°	532.5	10.3
70°-80°	325.4	6.3
80°-90°	158.1	3.1
90°-100°	62.6	1.2
100°-110°	22.7	0.4
110°-120°	7.9	0.2
120°-130°	3.3	0.1
130°-140°	0.4	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1517.0	29.4
0°-40°	2427.2	47.0
0°-60°	4049.3	78.4
0°-90°	5065.3	98.1
90°-120°	93.1	1.8
90°-150°	96.8	1.9
90°-180°	97.0	1.9
0°-180°	5162.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2002	2002	2002	2002	2002	
5°	1971	2007	1988	1991	2005	187
15°	1886	1914	1898	1906	1920	531
25°	1702	1730	1725	1717	1728	784
35°	1451	1473	1459	1445	1445	908
45°	1162	1173	1154	1120	1103	896
55°	857	868	837	786	761	768
65°	566	568	540	500	486	563
75°	305	305	311	302	297	327
85°	93	113	156	167	167	99
90°	8	56	102	119	122	11
95°	28	26	59	79	82	24
105°	28	12	14	26	31	30
115°	20	9	6	6	6	19
125°	11	6	3	0	0	10
135°	0	0	0	0	0	1
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2002.3	2002.3	2002.3	2002.3	2002.3
2.5°	1984.2	2013.0	1995.5	2000.1	2002.3
5°	1971.2	2007.2	1988.2	1991.3	2005.1
7.5°	1953.1	1986.3	1969.5	1973.3	1989.3
10°	1937.3	1970.4	1951.4	1957.4	1971.2
12.5°	1916.9	1947.9	1933.3	1939.3	1953.1
15°	1886.4	1914.0	1897.7	1906.5	1920.3
17.5°	1841.1	1871.0	1853.6	1858.4	1872.2
20°	1807.2	1834.8	1824.1	1824.5	1838.3
22.5°	1766.4	1796.3	1787.9	1781.5	1797.6
25°	1702.5	1730.2	1725.2	1716.9	1728.0
27.5°	1639.2	1659.6	1649.9	1641.6	1649.9
30°	1589.4	1614.3	1597.9	1589.6	1597.9
32.5°	1535.1	1560.0	1543.6	1532.9	1536.8
35°	1450.8	1472.9	1459.3	1445.2	1445.2
37.5°	1371.1	1385.5	1376.2	1352.3	1346.2
40°	1312.2	1328.8	1315.1	1286.6	1278.3
42.5°	1251.2	1267.8	1251.7	1220.9	1208.2
45°	1162.4	1173.4	1153.9	1119.6	1103.0
47.5°	1070.7	1082.3	1055.5	1017.7	997.8
50°	1009.6	1023.5	989.8	949.7	927.6
52.5°	950.8	960.2	928.8	881.9	862.0
55°	856.9	868.0	837.1	785.7	760.8
57.5°	769.2	779.8	743.2	694.1	674.8
60°	712.7	721.0	684.4	633.1	613.7
62.5°	649.3	657.6	623.3	578.8	559.4
65°	565.6	568.4	540.2	500.3	486.4
67.5°	487.0	487.0	463.2	433.6	422.5
70°	432.7	432.7	415.7	392.9	381.8
72.5°	382.9	380.7	370.5	354.4	345.6
75°	305.4	305.4	311.1	302.5	297.0
77.5°	237.6	233.1	257.4	256.2	253.4
80°	192.3	192.3	223.4	229.0	226.2
82.5°	151.6	156.0	196.3	204.1	201.4
85°	93.3	112.7	155.5	166.9	166.9
87.5°	42.4	76.2	122.2	136.9	137.4
90°	8.5	55.5	101.8	118.8	121.6
92.5°	17.5	42.4	83.7	100.8	105.8
95°	28.3	25.5	59.4	79.3	82.0
97.5°	33.9	16.8	43.0	59.5	62.8
100°	33.9	14.6	33.9	48.2	53.7
102.5°	31.7	12.3	24.9	39.1	42.4
105°	28.3	11.7	14.1	25.6	31.1
107.5°	24.9	8.8	7.9	15.9	18.7
110°	22.6	8.8	5.7	11.4	14.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	22.6	8.8	5.7	6.9	9.6
115°	19.8	8.7	5.7	5.7	5.7
117.5°	16.4	8.7	5.1	2.3	2.3
120°	14.1	8.6	2.8	0.0	0.0
122.5°	14.1	6.4	2.8	0.0	0.0
125°	11.3	5.8	2.8	0.0	0.0
127.5°	7.9	5.7	2.8	0.0	0.0
130°	5.7	5.7	2.8	0.0	0.0
132.5°	1.1	1.1	0.6	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)