

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: P644453

Luminaire Tested: CRQ4DIP-SR4F0-75D75U930-FLLFLL-1DUDD-WW

Issue Date: 2/20/2023



Test Information

Test Method: LM-79-2019
Report Number: P644453
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-SR4F0-75D75U930-FLLFLL-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - CURVED FROSTED LENS - 750 LUMENS PER FOOT
UPLIGHT - CURVED FROSTED LENS - 750 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

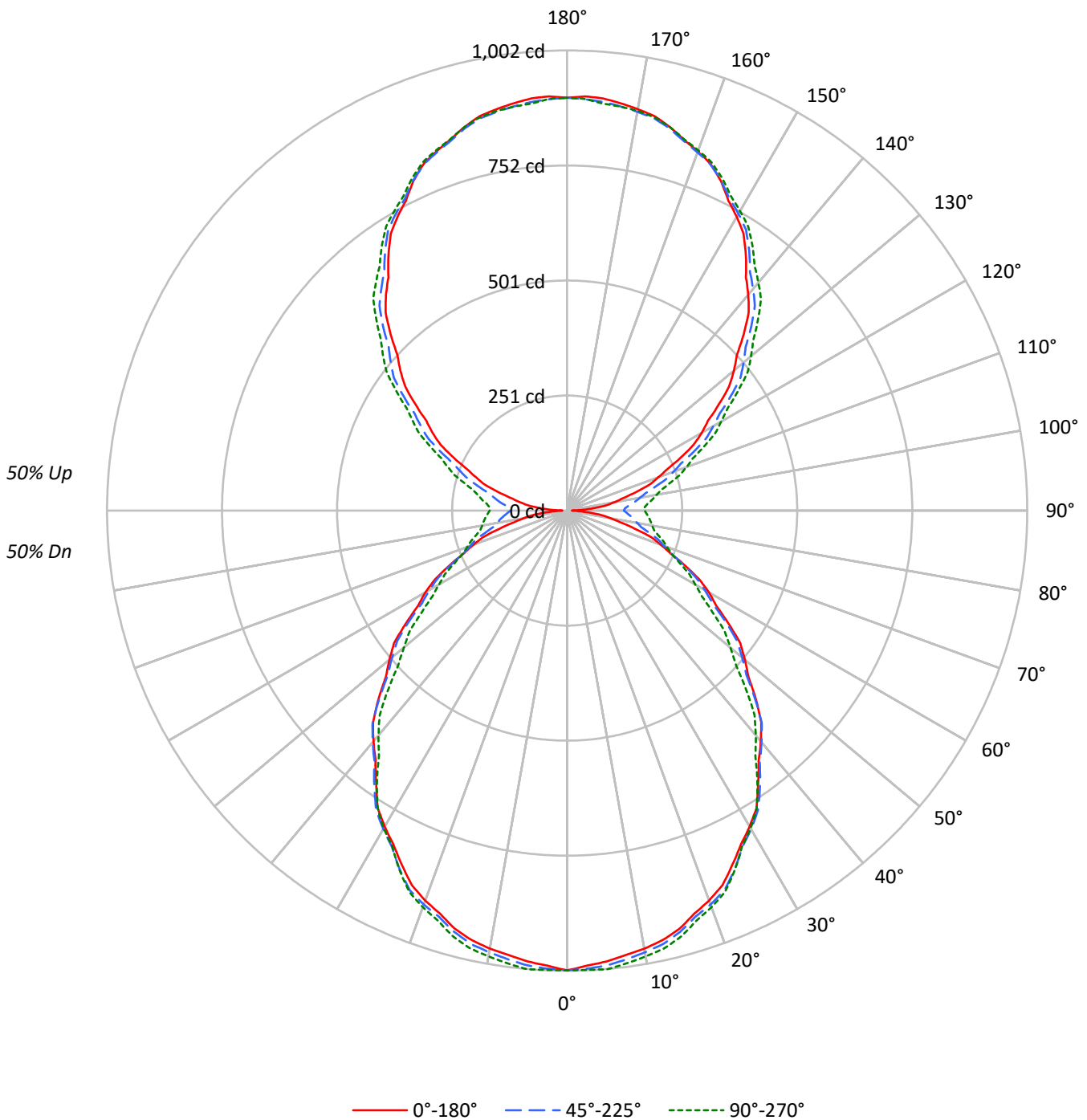
Lumens per Lamp: N/A
Luminaire Lumens: 5235.4 lumens
Efficiency: N/A
Efficacy: 122.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.33')
CIE Type: General Diffuse

Input Watts (W): 42.6
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: P644453

CATALOG NUMBER: CRQ4DIP-SR4F0-75D75U930-FLLFLL-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P644453

CATALOG NUMBER: CRQ4DIP-SR4F0-75D75U930-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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	57	57	57	50				
1	97	93	88	85	89	86	82	79	72	70	67	60	58	56	49	48	46	41				
2	88	81	74	69	81	75	69	64	63	59	55	53	50	47	43	41	39	34				
3	81	71	63	57	74	66	59	54	56	51	47	47	43	40	38	35	33	29				
4	74	63	55	49	68	58	51	46	50	44	40	42	37	34	34	31	29	25				
5	68	56	48	42	62	52	45	39	44	39	34	37	33	30	31	28	25	22				
6	62	50	42	36	57	47	39	34	40	34	30	34	29	26	28	25	22	19				
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	26	22	20	17				
8	54	41	33	28	49	38	31	27	33	28	24	28	24	21	23	20	18	15				
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14				
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16162	16162	16162
5°	15857	14271	13828
10°	15649	12709	11945
15°	15420	11382	10448
20°	15067	10211	9138
25°	14597	9108	7963
30°	14134	8068	6913
35°	13508	7106	5933
40°	12923	6206	5030
45°	12248	5335	4197
50°	11534	4537	3443
55°	10777	3813	2825
60°	10054	3146	2330
65°	9166	2568	1950
70°	8309	2096	1679
75°	7266	1759	1509
80°	6068	1537	1412
85°	4431	1441	1388

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12248 cd/sqm



TEST NUMBER: P644453

CATALOG NUMBER: CRQ4DIP-SR4F0-75D75U930-FLLFLL-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.5	1.8
10°-20°	268.3	5.1
20°-30°	396.1	7.6
30°-40°	455.8	8.7
40°-50°	442.3	8.4
50°-60°	372.8	7.1
60°-70°	279.0	5.3
70°-80°	193.1	3.7
80°-90°	137.4	2.6
90°-100°	138.3	2.6
100°-110°	207.0	4.0
110°-120°	300.3	5.7
120°-130°	387.2	7.4
130°-140°	437.4	8.4
140°-150°	432.1	8.3
150°-160°	365.5	7.0
160°-170°	243.3	4.6
170°-180°	85.1	1.6
0°-30°	758.9	14.5
0°-40°	1214.7	23.2
0°-60°	2029.8	38.8
0°-90°	2639.3	50.4
90°-120°	645.6	12.3
90°-150°	1902.3	36.3
90°-180°	2596.0	49.6
0°-180°	5235.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1001	1001	1001	1001	1001	
5°	986	1004	994	996	1002	94
15°	943	959	950	953	960	265
25°	851	867	862	858	864	392
35°	725	739	732	722	722	454
45°	581	589	578	560	551	448
55°	428	438	420	396	387	384
65°	283	290	280	272	270	281
75°	153	160	183	200	205	163
85°	47	79	139	170	179	49
90°	11	60	123	158	169	10
95°	57	75	136	170	176	57
105°	154	159	197	226	231	165
115°	272	282	304	323	327	270
125°	404	417	436	450	454	362
135°	544	556	567	581	588	419
145°	678	687	691	696	703	424
155°	792	797	793	794	799	364
165°	864	868	862	859	864	244
175°	901	904	893	889	889	85
180°	899	899	899	899	899	



TEST NUMBER: P644453

CATALOG NUMBER: CRQ4DIP-SR4F0-75D75U930-FLLFLL-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1001.0	1001.0	1001.0	1001.0	1001.0
2.5°	992.0	1006.4	998.4	999.9	1001.0
5°	985.5	1003.5	994.0	995.5	1002.5
7.5°	976.4	993.8	985.6	986.5	994.5
10°	968.5	985.1	976.5	978.6	985.5
12.5°	958.3	975.3	966.7	969.5	976.4
15°	943.1	958.8	949.7	953.1	960.0
17.5°	920.4	936.3	927.6	929.1	936.0
20°	903.5	918.2	912.9	912.1	919.0
22.5°	883.1	899.0	894.8	890.7	898.7
25°	851.2	866.9	862.5	858.4	863.9
27.5°	819.5	833.1	826.0	820.7	824.9
30°	794.6	808.9	800.8	794.7	798.9
32.5°	767.5	782.5	773.6	766.4	768.3
35°	725.3	739.2	732.4	722.5	722.5
37.5°	685.5	696.4	689.0	676.1	673.0
40°	656.0	668.1	658.4	643.2	639.1
42.5°	625.5	637.5	627.5	610.4	604.0
45°	581.1	589.4	577.8	559.7	551.4
47.5°	535.3	544.7	529.0	508.8	498.8
50°	504.8	514.5	497.7	474.8	463.8
52.5°	475.4	483.6	466.4	441.7	432.5
55°	428.4	437.7	420.4	395.7	387.0
57.5°	384.6	393.6	374.6	355.7	348.0
60°	356.3	364.2	346.0	329.0	322.1
62.5°	324.6	333.3	317.0	305.7	300.3
65°	282.8	289.8	279.6	272.2	269.9
67.5°	243.5	249.1	244.8	245.7	246.0
70°	216.3	221.9	224.1	230.0	231.0
72.5°	191.4	196.7	206.8	216.9	219.0
75°	152.7	160.2	183.2	200.1	204.8
77.5°	118.8	126.6	164.7	187.2	193.5
80°	96.1	109.2	154.6	180.5	187.5
82.5°	75.8	94.0	147.2	176.5	183.5
85°	46.7	78.7	138.8	170.4	178.8
87.5°	22.5	66.8	130.5	163.9	173.5
90°	10.9	59.6	123.4	157.9	168.6
92.5°	28.4	63.1	126.6	160.3	169.1
95°	57.1	75.3	135.6	169.5	176.5
97.5°	84.7	94.2	149.5	180.8	187.7
100°	103.8	110.0	161.1	191.2	197.7
102.5°	124.0	128.0	174.8	203.4	210.3
105°	154.4	159.2	197.0	225.6	231.2
107.5°	188.2	193.6	225.1	251.7	257.0
110°	210.7	218.8	246.2	270.1	276.2



TEST NUMBER: P644453

CATALOG NUMBER: CRQ4DIP-SR4F0-75D75U930-FLLFLL-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	235.9	243.9	268.3	290.0	296.0
115°	272.3	281.7	304.4	322.6	327.3
117.5°	310.3	321.0	341.5	358.1	362.6
120°	338.2	348.5	367.8	383.7	387.4
122.5°	363.4	374.8	394.5	410.4	414.1
125°	403.6	416.7	435.6	450.5	454.2
127.5°	444.8	458.1	475.5	490.6	495.4
130°	474.2	486.3	501.4	517.3	522.9
132.5°	501.0	513.1	527.0	543.3	549.6
135°	543.9	556.0	566.8	581.3	587.8
137.5°	585.3	597.1	605.3	616.8	625.0
140°	613.6	623.8	629.8	640.4	647.9
142.5°	639.5	649.8	654.2	663.3	670.8
145°	678.4	686.8	690.8	695.8	703.3
147.5°	714.9	723.1	724.8	729.1	733.8
150°	738.6	746.0	746.2	748.2	752.9
152.5°	760.7	767.4	765.3	766.5	772.0
155°	792.0	796.7	792.9	794.0	798.7
157.5°	816.8	821.5	815.7	817.5	821.2
160°	832.1	836.7	830.2	831.2	834.9
162.5°	846.6	849.7	843.9	842.7	847.9
165°	864.5	868.2	861.6	858.9	864.5
167.5°	879.8	883.5	874.8	871.9	877.5
170°	887.4	891.1	881.7	878.0	883.6
172.5°	894.3	898.0	887.8	883.3	887.4
175°	900.8	904.5	893.1	889.3	889.3
177.5°	902.7	904.9	896.6	892.9	897.3
180°	898.9	898.9	898.9	898.9	898.9

(END OF REPORT)