

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: P644456

Luminaire Tested: CRQ4DIP-SR4F0-75D75U935-FLLOOB-1DUDD-WW

Issue Date: 2/20/2023



Test Information

Test Method: LM-79-2019
Report Number: P644456
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-14)
Test Lab: INNOVATION CENTER
Issue Date: 2/20/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: CRQ4DIP-SR4F0-75D75U935-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - CURVED FROSTED LENS - 750 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 750 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

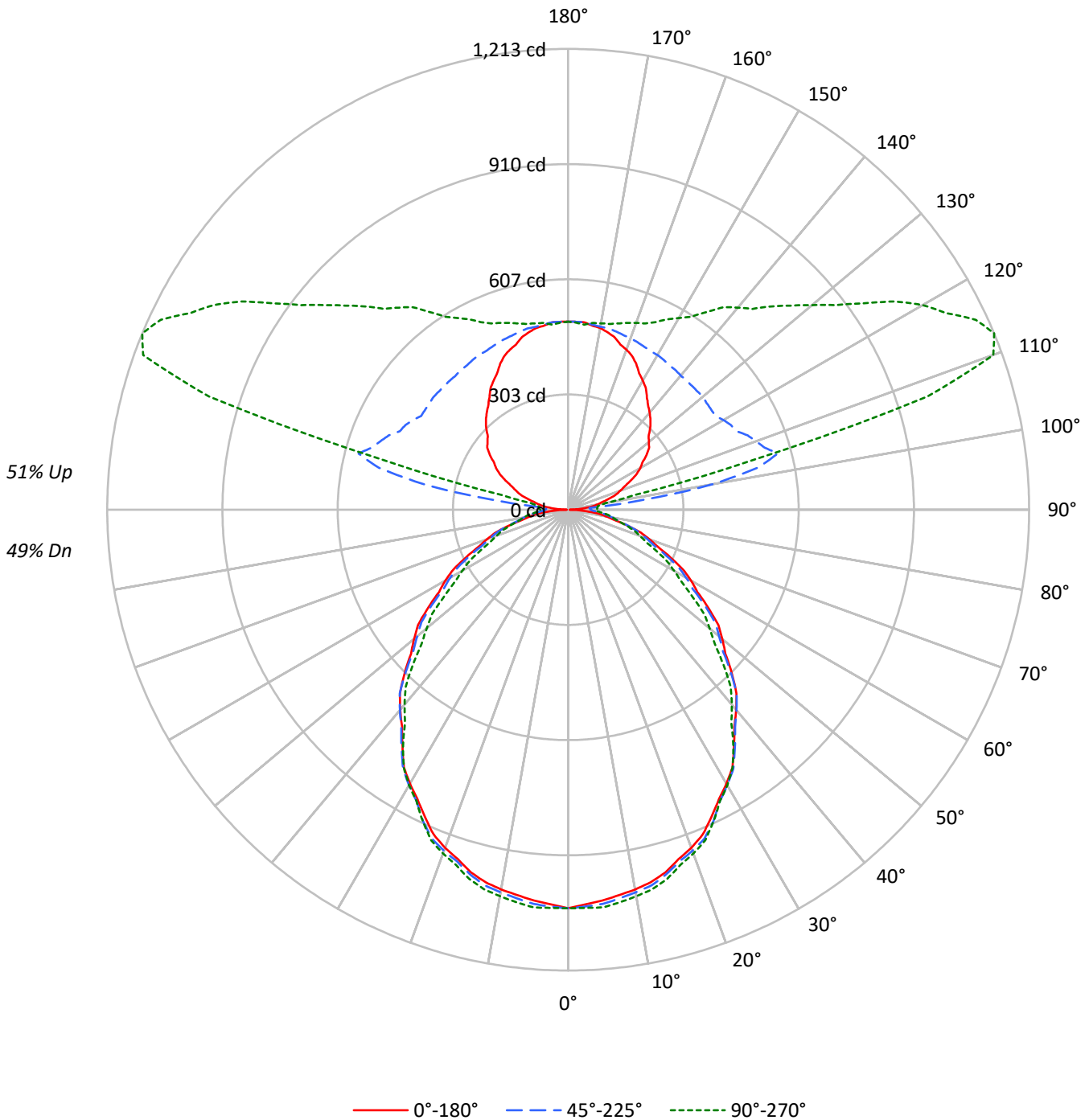
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5365.2 lumens
Efficiency: N/A
Efficacy: 125.9 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

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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	83	83	83		69	69	69		56	56	56	49
1	97	93	89	86	90	86	83	79	73	70	68		60	58	57		49	48	47	41
2	89	81	75	70	82	75	70	65	64	60	56		53	50	48		43	41	39	35
3	81	72	64	58	74	66	60	55	56	51	47		47	43	40		38	36	34	29
4	74	63	55	49	68	59	52	46	50	45	40		42	38	35		34	31	29	25
5	68	57	48	42	63	52	45	40	45	39	35		38	33	30		31	28	25	22
6	63	51	43	37	58	47	40	35	40	35	31		34	30	26		28	25	22	19
7	58	46	38	32	53	43	36	31	37	31	27		31	27	23		26	22	20	17
8	54	42	34	29	50	39	32	27	33	28	24		28	24	21		24	20	18	16
9	50	38	31	26	46	36	29	24	31	25	21		26	22	19		22	19	16	14
10	47	35	28	23	43	33	26	22	28	23	19		24	20	17		20	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16939	16939	16939
5°	16618	14956	14492
10°	16400	13306	12518
15°	16159	11916	10950
20°	15789	10689	9577
25°	15297	9546	8345
30°	14812	8435	7244
35°	14156	7418	6218
40°	13543	6494	5270
45°	12836	5582	4399
50°	12087	4727	3608
55°	11295	3978	2910
60°	10537	3260	2326
65°	9604	2600	1841
70°	8708	2037	1454
75°	7613	1565	1147
80°	6364	1164	893
85°	4640	846	679

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12836 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.0	1.8
10°-20°	281.0	5.2
20°-30°	414.8	7.7
30°-40°	476.9	8.9
40°-50°	462.6	8.6
50°-60°	387.3	7.2
60°-70°	279.0	5.2
70°-80°	170.5	3.2
80°-90°	83.9	1.6
90°-100°	93.7	1.7
100°-110°	445.6	8.3
110°-120°	593.0	11.1
120°-130°	481.0	9.0
130°-140°	385.7	7.2
140°-150°	303.9	5.7
150°-160°	222.2	4.1
160°-170°	138.0	2.6
170°-180°	47.1	0.9
0°-30°	794.8	14.8
0°-40°	1271.7	23.7
0°-60°	2121.6	39.5
0°-90°	2655.0	49.5
90°-120°	1132.3	21.1
90°-150°	2302.9	42.9
90°-180°	2710.0	50.5
0°-180°	5365.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1049	1049	1049	1049	1049	
5°	1033	1052	1042	1043	1051	98
15°	988	1003	994	999	1006	278
25°	892	906	904	900	905	411
35°	760	772	765	757	757	476
45°	609	615	605	587	578	469
55°	449	455	439	412	399	403
65°	296	298	283	262	255	295
75°	160	160	163	158	156	171
85°	49	59	82	87	87	52
90°	4	32	60	72	73	7
95°	40	60	56	70	77	40
105°	111	154	571	733	493	117
115°	182	212	489	1013	1183	180
125°	252	282	459	800	947	224
135°	305	339	461	659	757	235
145°	361	392	464	574	635	227
155°	424	439	473	521	545	194
165°	470	476	486	498	508	132
175°	495	498	495	492	489	47
180°	495	495	495	495	495	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1049.1	1049.1	1049.1	1049.1	1049.1
2.5°	1039.6	1054.7	1045.5	1047.9	1049.1
5°	1032.8	1051.6	1041.7	1043.3	1050.6
7.5°	1023.3	1040.7	1031.9	1033.9	1042.3
10°	1015.0	1032.4	1022.4	1025.5	1032.8
12.5°	1004.3	1020.6	1012.9	1016.0	1023.3
15°	988.3	1002.8	994.3	998.9	1006.1
17.5°	964.6	980.3	971.1	973.7	980.9
20°	946.8	961.3	955.7	955.9	963.1
22.5°	925.5	941.1	936.8	933.4	941.8
25°	892.0	906.5	903.9	899.6	905.3
27.5°	858.8	869.5	864.5	860.1	864.5
30°	832.7	845.8	837.2	832.8	837.2
32.5°	804.3	817.3	808.7	803.2	805.2
35°	760.1	771.7	764.6	757.2	757.2
37.5°	718.4	725.9	721.0	708.5	705.3
40°	687.5	696.2	689.0	674.1	669.7
42.5°	655.5	664.2	655.8	639.7	633.0
45°	609.0	614.8	604.6	586.6	577.9
47.5°	561.0	567.1	553.0	533.2	522.8
50°	529.0	536.2	518.6	497.6	486.0
52.5°	498.2	503.1	486.6	462.1	451.6
55°	449.0	454.8	438.6	411.6	398.6
57.5°	403.0	408.5	389.4	363.7	353.5
60°	373.4	377.7	358.6	331.7	321.5
62.5°	340.2	344.6	326.6	303.2	293.1
65°	296.3	297.8	283.0	262.1	254.9
67.5°	255.2	255.2	242.7	227.2	221.4
70°	226.7	226.7	217.8	205.8	200.0
72.5°	200.6	199.5	194.1	185.7	181.1
75°	160.0	160.0	163.0	158.5	155.6
77.5°	124.5	122.1	134.8	134.2	132.8
80°	100.8	100.8	117.1	120.0	118.5
82.5°	79.4	81.7	102.8	106.9	105.5
85°	48.9	59.0	81.5	87.4	87.4
87.5°	22.2	40.5	65.3	73.6	73.9
90°	4.4	32.1	59.6	71.6	73.1
92.5°	16.7	32.7	57.6	72.2	77.2
95°	39.7	59.6	56.0	69.7	77.2
97.5°	62.0	97.5	205.6	85.2	79.6
100°	76.9	118.6	385.2	133.4	99.8
102.5°	90.7	134.8	510.0	305.9	178.5
105°	111.3	154.4	571.0	733.4	492.7
107.5°	132.0	162.6	542.2	1056.2	991.2
110°	145.7	175.0	526.1	1107.0	1190.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	160.7	190.0	511.1	1073.5	1213.2
115°	181.6	212.4	488.7	1012.6	1183.1
117.5°	202.9	234.8	482.8	945.5	1120.9
120°	219.1	249.7	471.7	894.7	1077.4
122.5°	231.6	263.5	459.2	852.0	1020.1
125°	251.9	282.5	459.2	800.5	946.6
127.5°	268.2	301.1	459.8	740.6	884.9
130°	277.0	313.5	462.3	700.6	837.6
132.5°	287.1	323.6	461.1	682.6	795.3
135°	305.2	338.6	460.8	659.2	756.7
137.5°	320.7	356.6	460.8	633.4	716.8
140°	333.2	366.7	460.8	618.3	694.4
142.5°	345.6	376.7	463.3	600.7	672.0
145°	361.2	391.6	464.0	574.3	635.2
147.5°	379.9	406.7	467.7	555.3	602.2
150°	392.3	416.7	470.2	542.7	582.3
152.5°	404.8	426.7	470.2	532.6	564.8
155°	423.5	438.7	473.3	520.6	544.9
157.5°	438.4	453.0	477.0	512.9	530.6
160°	448.4	460.6	479.5	507.9	523.1
162.5°	455.9	468.0	482.0	505.3	515.6
165°	470.2	476.3	485.8	498.4	507.5
167.5°	478.3	483.8	488.9	495.2	500.7
170°	485.8	488.8	488.9	495.2	498.2
172.5°	488.2	493.7	491.4	492.7	495.7
175°	495.1	498.1	495.1	491.9	488.9
177.5°	495.1	497.5	495.1	495.0	492.6
180°	495.1	495.1	495.1	495.1	495.1

(END OF REPORT)