

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: P644427

Luminaire Tested: CRQ4DIP-SR4F0-75D25U840-FLLFLL-1DUDD-WW

Issue Date: 2/20/2023



Test Information

Test Method: LM-79-2019
Report Number: P644427
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-SR4F0-75D25U840-FLLFLL-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - CURVED FROSTED LENS - 750 LUMENS PER FOOT
UPLIGHT - CURVED FROSTED LENS - 250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

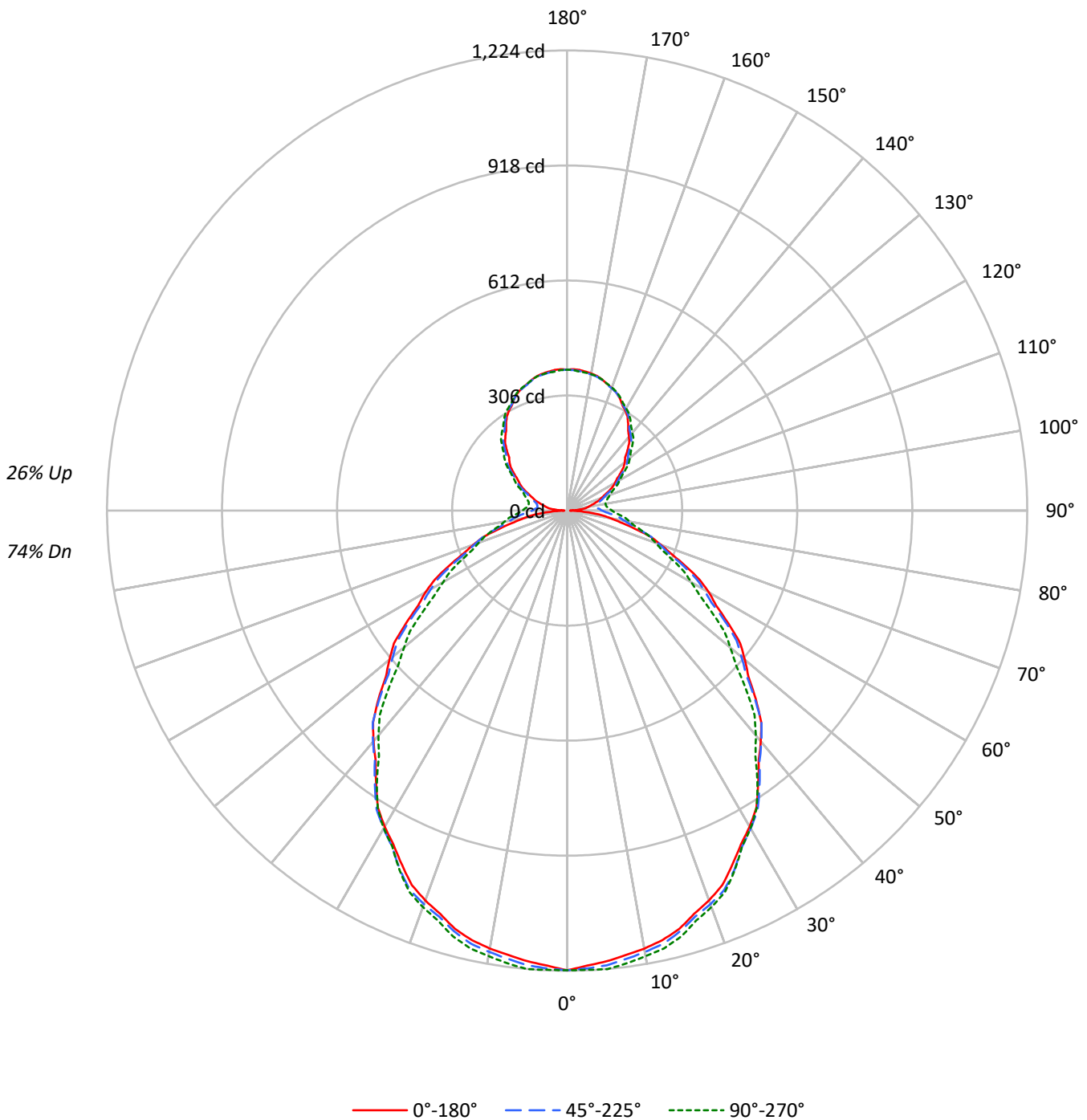
Lumens per Lamp: N/A
Luminaire Lumens: 4259.0 lumens
Efficiency: N/A
Efficacy: 141.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.33')
CIE Type: Semi-Direct

Input Watts (W): 30.1
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	113	113	113	113	107	107	107	107	96	96	96	87	87	87	78	78	78	74
1	103	98	94	90	97	93	89	86	84	81	78	76	73	71	68	66	65	61
2	93	85	79	73	88	81	76	71	74	69	65	66	63	60	60	57	55	51
3	85	75	68	61	81	72	65	59	65	59	55	59	54	51	53	50	47	43
4	78	67	59	52	74	64	56	50	58	52	47	53	48	44	48	44	40	37
5	72	60	51	45	68	57	49	44	52	46	41	47	42	38	43	39	35	33
6	66	54	45	39	63	52	44	38	47	41	36	43	38	33	39	35	31	29
7	62	49	41	35	58	47	39	34	43	36	32	39	34	30	36	31	28	25
8	57	45	36	31	54	43	35	30	39	33	28	36	31	27	33	28	25	23
9	54	41	33	28	51	39	32	27	36	30	26	33	28	24	31	26	23	21
10	50	38	30	25	48	36	29	24	33	27	23	31	26	22	28	24	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19740	19740	19740
5°	19366	17430	16888
10°	19113	15512	14588
15°	18832	13891	12761
20°	18401	12462	11161
25°	17828	11124	9726
30°	17263	9838	8442
35°	16499	8656	7246
40°	15783	7573	6142
45°	14959	6508	5126
50°	14087	5520	4205
55°	13161	4643	3411
60°	12281	3814	2757
65°	11195	3066	2226
70°	10149	2437	1816
75°	8874	1935	1509
80°	7413	1534	1275
85°	5408	1250	1100

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14959 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.4	2.7
10°-20°	327.5	7.7
20°-30°	483.5	11.4
30°-40°	556.1	13.1
40°-50°	539.5	12.7
50°-60°	452.7	10.6
60°-70°	330.5	7.8
70°-80°	211.4	5.0
80°-90°	120.9	2.8
90°-100°	82.8	1.9
100°-110°	95.5	2.2
110°-120°	128.4	3.0
120°-130°	162.8	3.8
130°-140°	182.6	4.3
140°-150°	180.2	4.2
150°-160°	152.4	3.6
160°-170°	101.5	2.4
170°-180°	35.5	0.8
0°-30°	926.5	21.8
0°-40°	1482.6	34.8
0°-60°	2474.7	58.1
0°-90°	3137.4	73.7
90°-120°	306.7	7.2
90°-150°	832.2	19.5
90°-180°	1122.0	26.3
0°-180°	4259.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1223	1223	1223	1223	1223	
5°	1204	1226	1214	1216	1224	114
15°	1152	1170	1159	1164	1172	324
25°	1040	1057	1053	1048	1055	479
35°	886	900	892	882	882	555
45°	710	718	705	684	674	547
55°	523	532	512	481	467	469
65°	345	349	334	315	308	344
75°	186	190	202	205	205	199
85°	57	78	120	138	142	60
90°	8	47	92	114	119	8
95°	35	42	80	103	107	33
105°	76	71	88	104	109	81
115°	122	121	129	137	139	120
125°	173	176	183	188	189	155
135°	227	232	236	242	245	175
145°	283	286	288	290	293	177
155°	330	332	331	331	333	152
165°	360	362	359	358	360	102
175°	376	377	372	371	371	36
180°	375	375	375	375	375	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1222.6	1222.6	1222.6	1222.6	1222.6
2.5°	1211.5	1229.1	1218.8	1221.2	1222.6
5°	1203.6	1225.5	1214.0	1215.9	1224.3
7.5°	1192.5	1213.1	1203.0	1204.9	1214.7
10°	1182.9	1203.1	1191.9	1195.2	1203.6
12.5°	1170.4	1190.0	1180.5	1184.1	1192.5
15°	1151.8	1169.5	1159.1	1164.1	1172.5
17.5°	1124.2	1142.8	1132.2	1134.7	1143.2
20°	1103.4	1120.7	1114.2	1114.0	1122.4
22.5°	1078.6	1097.2	1092.1	1087.8	1097.6
25°	1039.6	1057.2	1053.4	1048.3	1055.1
27.5°	1000.9	1014.8	1007.9	1002.4	1007.4
30°	970.5	986.5	976.5	970.6	975.7
32.5°	937.3	953.6	943.3	936.0	938.4
35°	885.9	900.5	892.2	882.4	882.4
37.5°	837.2	847.5	840.7	825.7	822.0
40°	801.2	812.9	803.4	785.6	780.5
42.5°	763.9	775.6	765.0	745.5	737.7
45°	709.7	717.6	704.9	683.6	673.5
47.5°	653.8	662.3	645.0	621.4	609.2
50°	616.5	626.1	605.6	579.9	566.4
52.5°	580.6	587.8	568.0	538.8	527.0
55°	523.2	531.5	511.9	480.9	467.3
57.5°	469.7	477.7	455.1	427.4	416.5
60°	435.2	441.8	419.5	391.7	381.1
62.5°	396.5	403.4	382.8	360.2	350.2
65°	345.4	349.4	333.8	314.7	308.2
67.5°	297.4	299.7	288.3	276.8	272.5
70°	264.2	266.5	260.6	253.9	249.8
72.5°	233.8	235.1	235.2	233.0	230.3
75°	186.5	189.6	201.5	205.1	204.8
77.5°	145.1	146.6	172.2	181.1	182.6
80°	117.4	122.9	154.3	167.4	169.2
82.5°	92.6	102.0	140.3	155.7	157.5
85°	57.0	78.1	120.4	138.2	141.7
87.5°	26.5	58.5	103.6	123.4	127.6
90°	8.0	47.2	92.4	113.6	119.2
92.5°	18.9	43.4	86.4	107.4	113.0
95°	35.2	41.7	80.4	102.6	106.6
97.5°	49.0	46.1	79.6	99.3	103.5
100°	56.9	51.7	80.8	99.1	104.0
102.5°	64.5	58.3	82.9	100.6	104.8
105°	75.8	71.1	87.8	104.4	108.9
107.5°	88.5	84.3	97.1	111.4	114.7
110°	97.0	94.8	104.9	117.2	120.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	107.5	105.3	114.2	123.7	127.3
115°	121.5	121.0	129.2	136.8	138.7
117.5°	136.0	137.3	144.4	150.2	152.1
120°	146.7	148.8	154.5	160.0	161.6
122.5°	157.2	158.9	165.7	171.1	172.7
125°	172.8	176.1	182.8	187.9	189.4
127.5°	188.7	193.3	199.4	204.6	206.6
130°	200.0	205.1	210.2	215.7	218.1
132.5°	209.4	214.4	220.0	226.6	229.2
135°	226.8	231.9	236.4	242.4	245.1
137.5°	244.1	249.0	252.4	257.2	260.6
140°	255.9	260.1	262.6	267.1	270.2
142.5°	266.7	271.0	272.8	276.6	279.7
145°	282.9	286.4	288.1	290.2	293.3
147.5°	298.1	301.5	302.3	304.1	306.0
150°	308.0	311.1	311.2	312.0	314.0
152.5°	317.2	320.0	319.1	319.7	321.9
155°	330.3	332.2	330.7	331.1	333.1
157.5°	340.6	342.6	340.1	340.9	342.4
160°	347.0	348.9	346.2	346.6	348.2
162.5°	353.0	354.4	351.9	351.4	353.6
165°	360.5	362.1	359.3	358.2	360.5
167.5°	366.9	368.4	364.8	363.6	365.9
170°	370.1	371.6	367.7	366.1	368.5
172.5°	372.9	374.5	370.2	368.4	370.1
175°	375.6	377.2	372.5	370.9	370.9
177.5°	376.4	377.4	373.9	372.3	374.2
180°	374.8	374.8	374.8	374.8	374.8

(END OF REPORT)