

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: P644400

Luminaire Tested: CRQ4DIP-SR4F0-75D125U830-FLLOOB-1DUDD-WW

Issue Date: 2/20/2023



Test Information

Test Method: LM-79-2019
Report Number: P644400
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-SR4F0-75D125U830-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - CURVED FROSTED LENS - 750 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

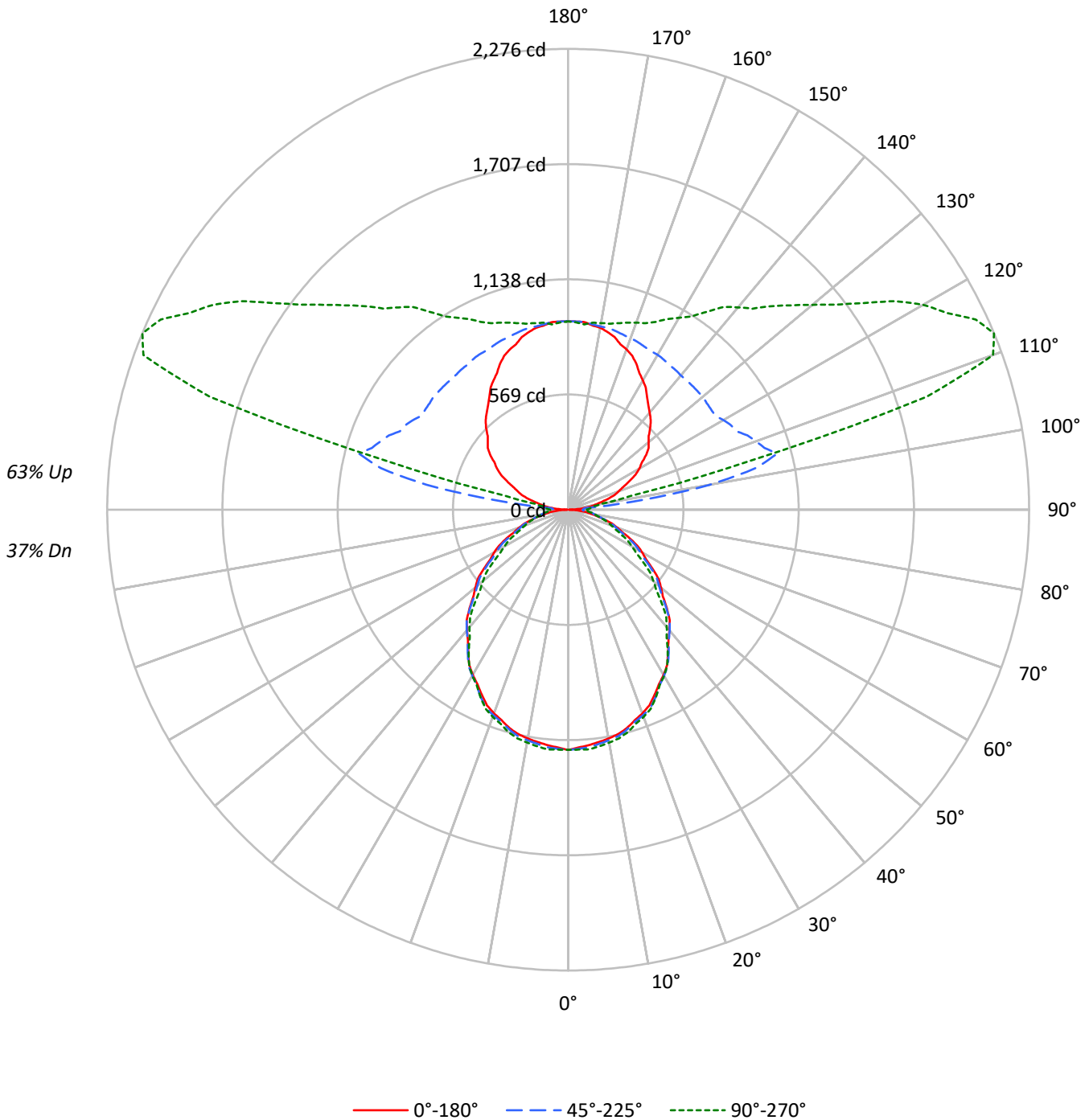
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8056.9 lumens
Efficiency: N/A
Efficacy: 134.3 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-Indirect

Input Watts (W): 60
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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	44	44	44	37
1	95	90	87	83	86	82	79	76	67	64	62	52	51	49	39	38	37	31
2	86	79	73	68	78	72	67	62	58	55	52	46	43	41	34	33	31	26
3	79	69	62	57	71	63	57	52	51	47	43	41	38	35	31	28	27	22
4	72	61	54	48	65	56	49	44	46	41	37	36	33	30	27	25	23	19
5	66	55	47	41	60	50	43	38	41	36	32	32	29	26	25	22	20	17
6	61	49	41	35	55	45	38	33	37	32	28	29	26	23	22	20	18	15
7	56	44	36	31	51	40	34	29	33	28	24	27	23	20	20	18	16	13
8	52	40	33	27	47	37	30	25	30	25	22	24	21	18	19	16	14	12
9	48	37	29	24	44	34	27	23	28	23	19	22	19	16	17	15	13	11
10	45	33	26	22	41	31	24	20	26	21	17	21	17	14	16	13	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19151	19151	19151
5°	18789	16910	16384
10°	18542	15045	14153
15°	18270	13472	12380
20°	17852	12086	10829
25°	17294	10792	9436
30°	16747	9537	8190
35°	16005	8388	7030
40°	15314	7343	5959
45°	14514	6311	4973
50°	13666	5345	4079
55°	12769	4497	3290
60°	11914	3686	2629
65°	10861	2939	2082
70°	9845	2304	1644
75°	8608	1769	1296
80°	7192	1316	1009
85°	5247	956	767

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14514 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.0	1.4
10°-20°	317.7	3.9
20°-30°	469.0	5.8
30°-40°	539.2	6.7
40°-50°	523.0	6.5
50°-60°	437.9	5.4
60°-70°	315.5	3.9
70°-80°	192.7	2.4
80°-90°	95.7	1.2
90°-100°	151.4	1.9
100°-110°	828.4	10.3
110°-120°	1111.1	13.8
120°-130°	902.5	11.2
130°-140°	724.5	9.0
140°-150°	571.0	7.1
150°-160°	417.5	5.2
160°-170°	259.3	3.2
170°-180°	88.4	1.1
0°-30°	898.6	11.2
0°-40°	1437.8	17.8
0°-60°	2398.7	29.8
0°-90°	3002.6	37.3
90°-120°	2091.0	26.0
90°-150°	4288.9	53.2
90°-180°	5054.0	62.7
0°-180°	8056.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1186	1186	1186	1186	1186	
5°	1168	1189	1178	1180	1188	111
15°	1117	1134	1124	1129	1138	314
25°	1008	1025	1022	1017	1024	465
35°	859	872	864	856	856	538
45°	689	695	684	663	653	531
55°	508	514	496	465	451	455
65°	335	337	320	296	288	333
75°	181	181	184	179	176	193
85°	55	67	92	99	99	58
90°	5	39	72	88	90	8
95°	64	102	82	100	113	67
105°	198	286	1067	1368	914	209
115°	334	396	916	1900	2221	331
125°	469	528	862	1504	1778	416
135°	573	636	866	1239	1422	442
145°	679	736	872	1079	1194	426
155°	796	824	889	978	1024	365
165°	883	895	913	936	954	248
175°	930	936	930	924	918	88
180°	930	930	930	930	930	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1186.1	1186.1	1186.1	1186.1	1186.1
2.5°	1175.4	1192.4	1182.1	1184.8	1186.1
5°	1167.7	1189.0	1177.8	1179.6	1187.8
7.5°	1157.0	1176.6	1166.7	1168.9	1178.4
10°	1147.6	1167.3	1156.0	1159.5	1167.7
12.5°	1135.5	1153.9	1145.3	1148.8	1157.0
15°	1117.4	1133.8	1124.1	1129.4	1137.5
17.5°	1090.6	1108.3	1098.0	1100.9	1109.1
20°	1070.5	1086.9	1080.6	1080.8	1089.0
22.5°	1046.4	1064.1	1059.1	1055.3	1064.8
25°	1008.5	1024.9	1021.9	1017.1	1023.6
27.5°	971.0	983.1	977.4	972.5	977.4
30°	941.5	956.3	946.6	941.6	946.6
32.5°	909.4	924.1	914.4	908.1	910.4
35°	859.4	872.5	864.5	856.1	856.1
37.5°	812.2	820.7	815.2	801.1	797.5
40°	777.4	787.2	779.0	762.2	757.2
42.5°	741.2	751.0	741.5	723.2	715.7
45°	688.6	695.1	683.5	663.2	653.4
47.5°	634.3	641.2	625.2	602.8	591.1
50°	598.1	606.3	586.4	562.6	549.5
52.5°	563.2	568.8	550.2	522.4	510.6
55°	507.6	514.2	495.9	465.4	450.7
57.5°	455.7	461.9	440.3	411.2	399.7
60°	422.2	427.1	405.4	375.0	363.5
62.5°	384.7	389.6	369.2	342.8	331.4
65°	335.1	336.7	320.0	296.3	288.2
67.5°	288.5	288.5	274.4	256.8	250.3
70°	256.3	256.3	246.3	232.7	226.2
72.5°	226.8	225.5	219.5	210.0	204.7
75°	180.9	180.9	184.3	179.2	175.9
77.5°	140.7	138.1	152.5	151.7	150.1
80°	113.9	113.9	132.4	135.7	134.0
82.5°	89.8	92.4	116.3	120.9	119.3
85°	55.3	66.8	92.1	98.8	98.8
87.5°	25.1	46.3	74.7	84.6	84.9
90°	5.0	38.6	72.0	88.0	89.6
92.5°	24.4	44.9	75.3	96.1	103.6
95°	63.6	102.0	82.0	99.9	112.9
97.5°	103.2	176.5	369.5	136.7	124.9
100°	131.3	217.0	710.5	231.8	166.4
102.5°	158.0	248.4	948.5	559.4	318.8
105°	198.1	285.5	1067.3	1367.9	913.5
107.5°	238.2	301.9	1015.6	1978.2	1855.1
110°	265.0	325.4	986.2	2075.4	2231.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	293.1	353.5	958.1	2014.3	2275.7
115°	333.5	395.6	916.0	1900.3	2220.7
117.5°	374.8	437.7	905.1	1775.7	2105.1
120°	406.2	465.9	885.1	1681.0	2024.2
122.5°	429.6	492.5	861.7	1600.8	1916.6
125°	468.9	528.5	861.7	1503.9	1778.5
127.5°	500.8	563.6	862.9	1391.5	1662.7
130°	518.2	586.8	867.5	1316.3	1573.8
132.5°	538.9	607.6	866.2	1282.5	1494.2
135°	573.3	636.3	865.9	1238.6	1421.7
137.5°	602.6	670.1	865.9	1190.0	1346.8
140°	626.0	688.9	865.9	1161.6	1304.6
142.5°	649.4	707.7	870.5	1128.7	1262.5
145°	678.6	735.9	871.7	1079.1	1193.5
147.5°	713.8	764.1	878.7	1043.4	1131.5
150°	737.2	782.9	883.4	1019.7	1094.0
152.5°	760.6	801.7	883.4	1000.6	1061.3
155°	795.7	824.3	889.3	978.1	1023.8
157.5°	823.7	851.2	896.3	963.7	996.9
160°	842.5	865.3	901.0	954.3	982.9
162.5°	856.5	879.4	905.6	949.4	968.8
165°	883.4	894.9	912.7	936.5	953.6
167.5°	898.6	908.9	918.5	930.4	940.7
170°	912.7	918.4	918.5	930.3	936.1
172.5°	917.3	927.6	923.2	925.7	931.4
175°	930.2	935.9	930.2	924.2	918.5
177.5°	930.2	934.8	930.2	930.1	925.5
180°	930.2	930.2	930.2	930.2	930.2

(END OF REPORT)