

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: P644448

Luminaire Tested: CRQ4DIP-SR4F0-75D75U830-FLLOOB-1DUDD-WW

Issue Date: 2/20/2023



Test Information

Test Method: LM-79-2019
Report Number: P644448
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-SR4F0-75D75U830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

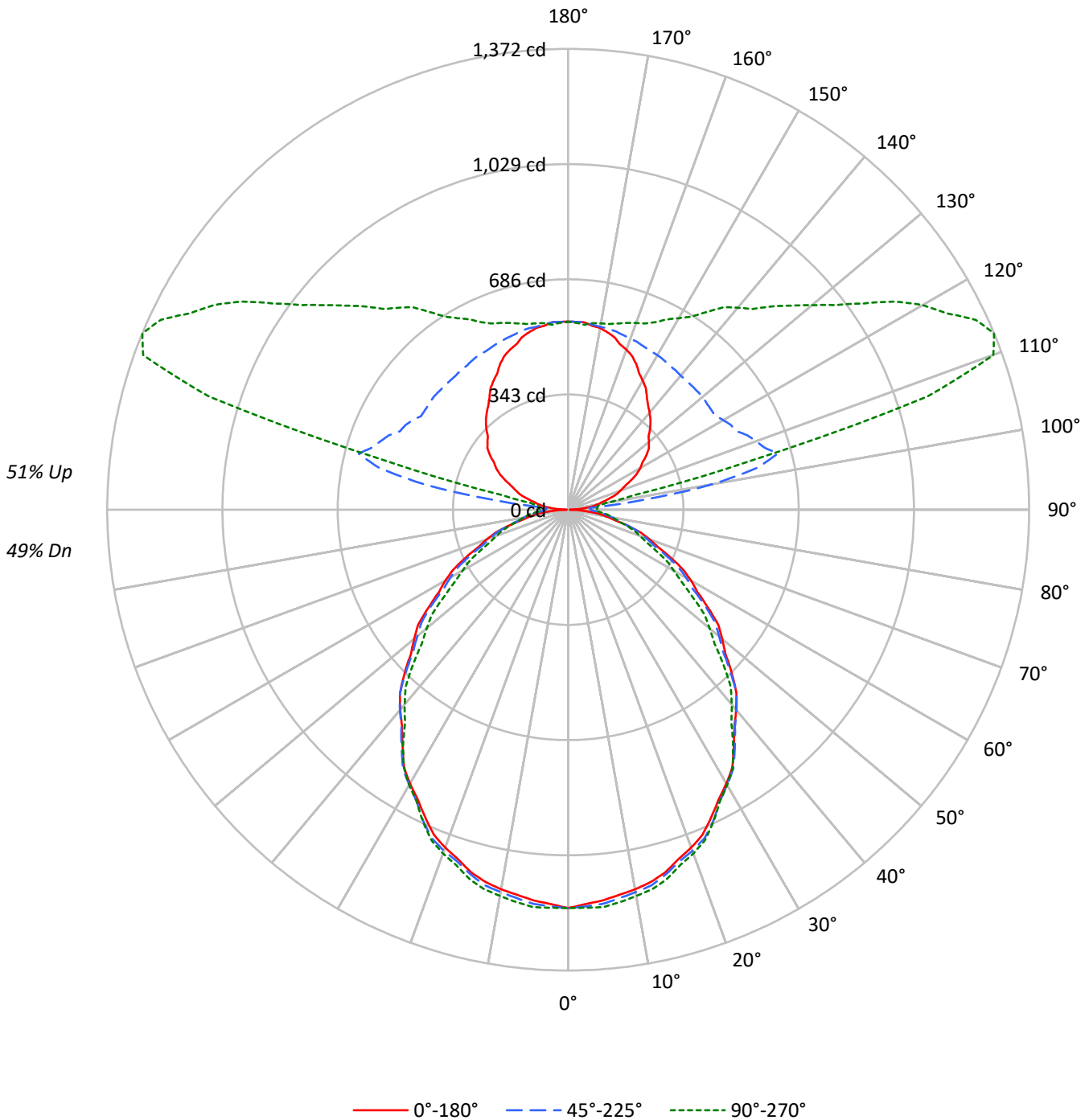
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6066.1 lumens
Efficiency: N/A
Efficacy: 142.4 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	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°	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	1.8
10°-20°	317.7	5.2
20°-30°	469.0	7.7
30°-40°	539.2	8.9
40°-50°	523.0	8.6
50°-60°	437.9	7.2
60°-70°	315.5	5.2
70°-80°	192.7	3.2
80°-90°	94.9	1.6
90°-100°	105.9	1.7
100°-110°	503.9	8.3
110°-120°	670.5	11.1
120°-130°	543.8	9.0
130°-140°	436.1	7.2
140°-150°	343.6	5.7
150°-160°	251.2	4.1
160°-170°	156.1	2.6
170°-180°	53.2	0.9
0°-30°	898.6	14.8
0°-40°	1437.8	23.7
0°-60°	2398.7	39.5
0°-90°	3001.8	49.5
90°-120°	1280.2	21.1
90°-150°	2603.8	42.9
90°-180°	3064.0	50.5
0°-180°	6066.1	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	36	67	81	83	7
95°	45	67	63	79	87	46
105°	126	175	646	829	557	133
115°	205	240	553	1145	1338	204
125°	285	319	519	905	1070	253
135°	345	383	521	745	856	266
145°	408	443	525	649	718	257
155°	479	496	535	589	616	220
165°	532	538	549	564	574	149
175°	560	563	560	556	553	53
180°	560	560	560	560	560	



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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	45.8	73.8	83.2	83.5
90°	5.0	36.3	67.4	81.0	82.6
92.5°	18.8	37.0	65.1	81.6	87.3
95°	44.9	67.4	63.3	78.8	87.3
97.5°	70.1	110.2	232.5	96.3	90.0
100°	87.0	134.0	435.5	150.8	112.8
102.5°	102.6	152.4	576.6	345.9	201.9
105°	125.9	174.6	645.6	829.2	557.1
107.5°	149.2	183.8	613.0	1194.1	1120.7
110°	164.8	197.9	594.8	1251.6	1346.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	181.7	214.8	577.9	1213.8	1371.7
115°	205.4	240.1	552.6	1144.9	1337.7
117.5°	229.4	265.4	545.9	1069.1	1267.3
120°	247.8	282.4	533.3	1011.6	1218.1
122.5°	261.9	297.9	519.2	963.3	1153.3
125°	284.8	319.4	519.2	905.0	1070.3
127.5°	303.2	340.5	519.9	837.4	1000.5
130°	313.2	354.5	522.7	792.1	947.0
132.5°	324.6	365.9	521.4	771.8	899.2
135°	345.0	382.9	521.0	745.3	855.5
137.5°	362.6	403.2	521.0	716.1	810.4
140°	376.7	414.6	521.0	699.0	785.1
142.5°	390.8	425.9	523.9	679.2	759.7
145°	408.4	442.8	524.6	649.4	718.2
147.5°	429.5	459.8	528.8	627.9	680.9
150°	443.6	471.1	531.6	613.6	658.3
152.5°	457.7	482.5	531.6	602.1	638.6
155°	478.8	496.0	535.1	588.6	616.1
157.5°	495.7	512.2	539.4	579.9	599.9
160°	507.0	520.7	542.2	574.2	591.5
162.5°	515.4	529.2	545.0	571.3	583.0
165°	531.6	538.5	549.2	563.5	573.9
167.5°	540.8	547.0	552.7	559.9	566.1
170°	549.2	552.7	552.7	559.9	563.3
172.5°	552.0	558.2	555.5	557.0	560.5
175°	559.8	563.2	559.8	556.2	552.7
177.5°	559.8	562.5	559.8	559.7	557.0
180°	559.8	559.8	559.8	559.8	559.8

(END OF REPORT)