

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: P644251

Luminaire Tested: CRQ4DIP-SR4F0-125D100U935-FLLFLL-1DUDD-WW

Issue Date: 2/20/2023



Test Information

Test Method: LM-79-2019
Report Number: P644251
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-SR4F0-125D100U935-FLLFLL-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - CURVED FROSTED LENS - 1250 LUMENS PER FOOT
UPLIGHT - CURVED FROSTED LENS - 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

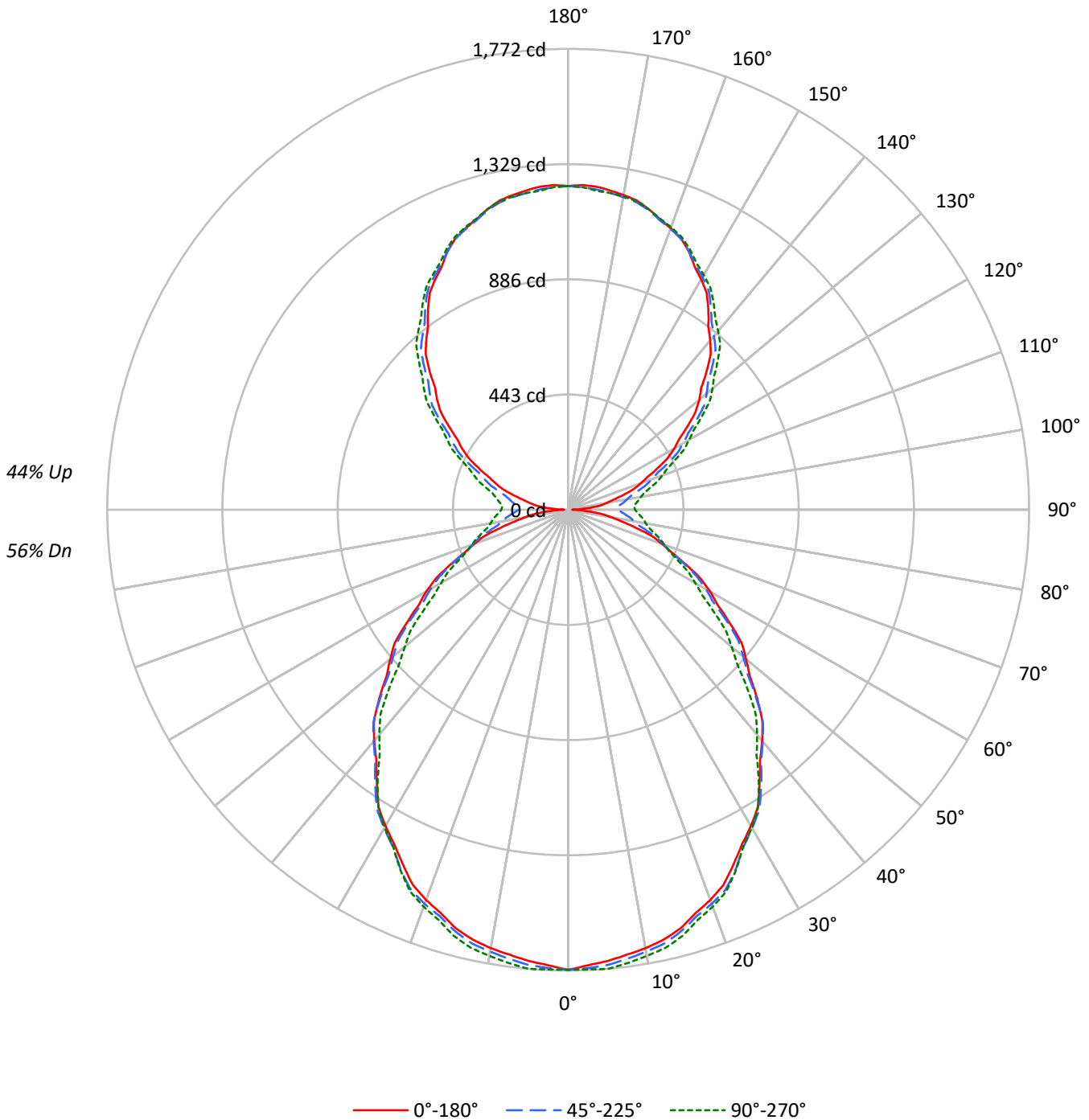
Lumens per Lamp: N/A
Luminaire Lumens: 8235.9 lumens
Efficiency: N/A
Efficacy: 119.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.33')
CIE Type: General Diffuse

Input Watts (W): 69
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: P644251

CATALOG NUMBER: CRQ4DIP-SR4F0-125D100U935-FLLFLL-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P644251

CATALOG NUMBER: CRQ4DIP-SR4F0-125D100U935-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	0
RCR																		
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	56
1	99	94	90	86	91	87	84	80	75	72	70	64	62	60	54	52	51	46
2	90	82	75	70	83	76	71	66	66	62	58	56	53	50	47	45	43	38
3	82	72	64	58	76	67	60	55	58	53	49	50	46	42	42	39	36	33
4	75	64	56	50	69	60	52	47	52	46	42	44	40	36	37	34	31	28
5	69	57	49	43	64	53	46	40	46	40	36	40	35	32	34	30	27	24
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	31	27	24	21
7	59	46	38	32	54	43	36	31	38	32	28	33	28	25	28	24	22	19
8	55	42	34	29	51	40	32	27	35	29	25	30	25	22	26	22	19	17
9	51	38	31	26	47	36	29	25	32	26	22	28	23	20	24	20	18	15
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	28568	28568	28568
5°	28028	25224	24441
10°	27660	22459	21113
15°	27254	20113	18468
20°	26630	18044	16152
25°	25798	16099	14075
30°	24983	14252	12217
35°	23876	12550	10486
40°	22843	10966	8890
45°	21648	9426	7418
50°	20386	8009	6085
55°	19048	6733	4975
60°	17772	5547	4075
65°	16200	4506	3372
70°	14689	3646	2855
75°	12843	3007	2508
80°	10727	2553	2282
85°	7828	2306	2170

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 21648 cd/sqm



TEST NUMBER: P644251

CATALOG NUMBER: CRQ4DIP-SR4F0-125D100U935-FLLFLL-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.1	2.0
10°-20°	474.1	5.8
20°-30°	700.0	8.5
30°-40°	805.4	9.8
40°-50°	781.5	9.5
50°-60°	657.6	8.0
60°-70°	488.2	5.9
70°-80°	329.6	4.0
80°-90°	220.5	2.7
90°-100°	203.4	2.5
100°-110°	290.9	3.5
110°-120°	417.2	5.1
120°-130°	536.5	6.5
130°-140°	605.5	7.4
140°-150°	598.1	7.3
150°-160°	505.9	6.1
160°-170°	336.8	4.1
170°-180°	117.8	1.4
0°-30°	1341.2	16.3
0°-40°	2146.5	26.1
0°-60°	3585.6	43.5
0°-90°	4623.9	56.1
90°-120°	911.5	11.1
90°-150°	2651.5	32.2
90°-180°	3612.0	43.9
0°-180°	8235.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1769	1769	1769	1769	1769	
5°	1742	1774	1757	1760	1772	165
15°	1667	1694	1678	1685	1697	469
25°	1504	1532	1524	1517	1527	693
35°	1282	1306	1294	1277	1277	803
45°	1027	1041	1021	989	975	792
55°	757	772	742	698	682	679
65°	500	510	490	473	467	497
75°	270	280	313	335	340	289
85°	82	131	222	268	280	87
90°	17	93	190	241	257	16
95°	84	109	199	250	260	83
105°	219	223	275	317	326	234
115°	381	392	422	448	454	378
125°	561	578	603	624	629	502
135°	753	770	784	804	814	581
145°	939	951	956	963	973	587
155°	1096	1103	1098	1099	1106	503
165°	1197	1202	1193	1189	1197	337
175°	1247	1252	1236	1231	1231	118
180°	1244	1244	1244	1244	1244	

TEST NUMBER: P644251

CATALOG NUMBER: CRQ4DIP-SR4F0-125D100U935-FLLFLL-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1769.4	1769.4	1769.4	1769.4	1769.4
2.5°	1753.4	1778.8	1764.4	1767.4	1769.4
5°	1741.9	1773.6	1756.9	1759.6	1771.9
7.5°	1725.9	1756.2	1741.7	1743.7	1757.9
10°	1711.9	1741.2	1725.7	1729.6	1741.9
12.5°	1693.9	1723.3	1708.6	1713.7	1725.9
15°	1666.9	1693.9	1678.2	1684.7	1696.9
17.5°	1626.9	1654.6	1639.2	1642.2	1654.4
20°	1596.9	1622.6	1613.2	1612.2	1624.4
22.5°	1560.9	1588.6	1581.2	1574.2	1588.4
25°	1504.4	1531.5	1524.4	1517.2	1526.9
27.5°	1448.5	1471.2	1459.6	1450.6	1458.0
30°	1404.5	1429.1	1414.6	1404.7	1412.0
32.5°	1356.5	1382.1	1366.6	1354.6	1358.0
35°	1282.0	1305.5	1293.5	1277.0	1277.0
37.5°	1211.6	1229.4	1217.4	1194.9	1189.6
40°	1159.6	1179.4	1163.4	1136.9	1129.6
42.5°	1105.6	1125.4	1108.5	1078.8	1067.6
45°	1027.1	1040.8	1020.9	989.3	974.6
47.5°	946.2	961.3	934.5	899.3	881.7
50°	892.2	908.3	878.6	839.2	819.7
52.5°	840.2	853.4	823.6	780.4	763.8
55°	757.2	772.2	742.4	698.3	681.5
57.5°	679.8	694.2	661.0	625.3	611.1
60°	629.8	642.3	610.1	576.7	563.4
62.5°	573.8	587.3	558.2	534.0	522.8
65°	499.8	510.0	490.5	472.6	466.8
67.5°	430.3	438.1	427.6	423.2	421.4
70°	382.4	390.1	389.8	393.6	392.8
72.5°	338.4	345.2	357.2	368.1	369.3
75°	269.9	280.2	313.2	334.9	340.3
77.5°	209.9	220.0	277.3	308.2	316.4
80°	169.9	188.0	256.9	293.8	302.9
82.5°	134.0	160.1	241.3	283.4	292.6
85°	82.5	130.6	222.0	267.9	279.5
87.5°	39.3	107.1	204.1	253.1	266.5
90°	16.7	93.2	190.3	241.3	256.7
92.5°	42.7	95.4	191.3	241.2	254.3
95°	84.4	109.1	199.1	249.8	260.0
97.5°	123.8	133.7	215.2	261.7	271.8
100°	150.2	155.0	229.4	273.8	283.9
102.5°	177.8	179.5	246.8	289.1	299.3
105°	219.1	222.6	275.3	317.2	326.0
107.5°	265.3	269.7	313.1	351.5	359.4
110°	296.0	304.5	341.8	376.0	384.9

TEST NUMBER: P644251

CATALOG NUMBER: CRQ4DIP-SR4F0-125D100U935-FLLFLL-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	330.9	339.3	372.4	402.7	411.6
115°	380.7	391.6	422.4	447.6	454.1
117.5°	432.6	445.9	473.6	496.1	502.3
120°	470.8	484.0	509.7	531.1	536.2
122.5°	505.7	520.0	546.6	568.0	573.2
125°	560.8	577.8	603.4	623.5	628.7
127.5°	617.2	635.1	658.6	679.0	685.7
130°	657.5	674.2	694.6	716.0	723.8
132.5°	693.6	710.4	729.6	752.0	760.8
135°	752.8	769.6	784.5	804.5	813.6
137.5°	810.2	826.4	837.9	853.7	865.1
140°	849.2	863.5	871.7	886.5	896.8
142.5°	885.2	899.4	905.5	918.2	928.5
145°	939.1	950.7	956.2	963.1	973.4
147.5°	989.5	1000.9	1003.2	1009.2	1015.7
150°	1022.3	1032.6	1032.8	1035.6	1042.1
152.5°	1052.9	1062.2	1059.2	1061.0	1068.5
155°	1096.2	1102.7	1097.5	1099.0	1105.5
157.5°	1130.6	1137.0	1129.0	1131.5	1136.6
160°	1151.7	1158.2	1149.1	1150.5	1155.7
162.5°	1171.8	1176.2	1168.1	1166.4	1173.6
165°	1196.6	1201.8	1192.6	1188.9	1196.6
167.5°	1217.7	1222.9	1210.9	1206.8	1214.6
170°	1228.3	1233.5	1220.4	1215.3	1223.0
172.5°	1237.8	1243.0	1228.8	1222.6	1228.3
175°	1246.8	1252.0	1236.2	1230.9	1230.9
177.5°	1249.4	1252.5	1241.0	1235.8	1242.0
180°	1244.2	1244.2	1244.2	1244.2	1244.2

(END OF REPORT)