

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: P1025982

Luminaire Tested: S124RDIP-B1020D1205UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025982
REPORT IS A COMBINATION OF REPORTS P998892 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D1205UB40-4F0-XX-W2A-F4
Description: Define 4 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

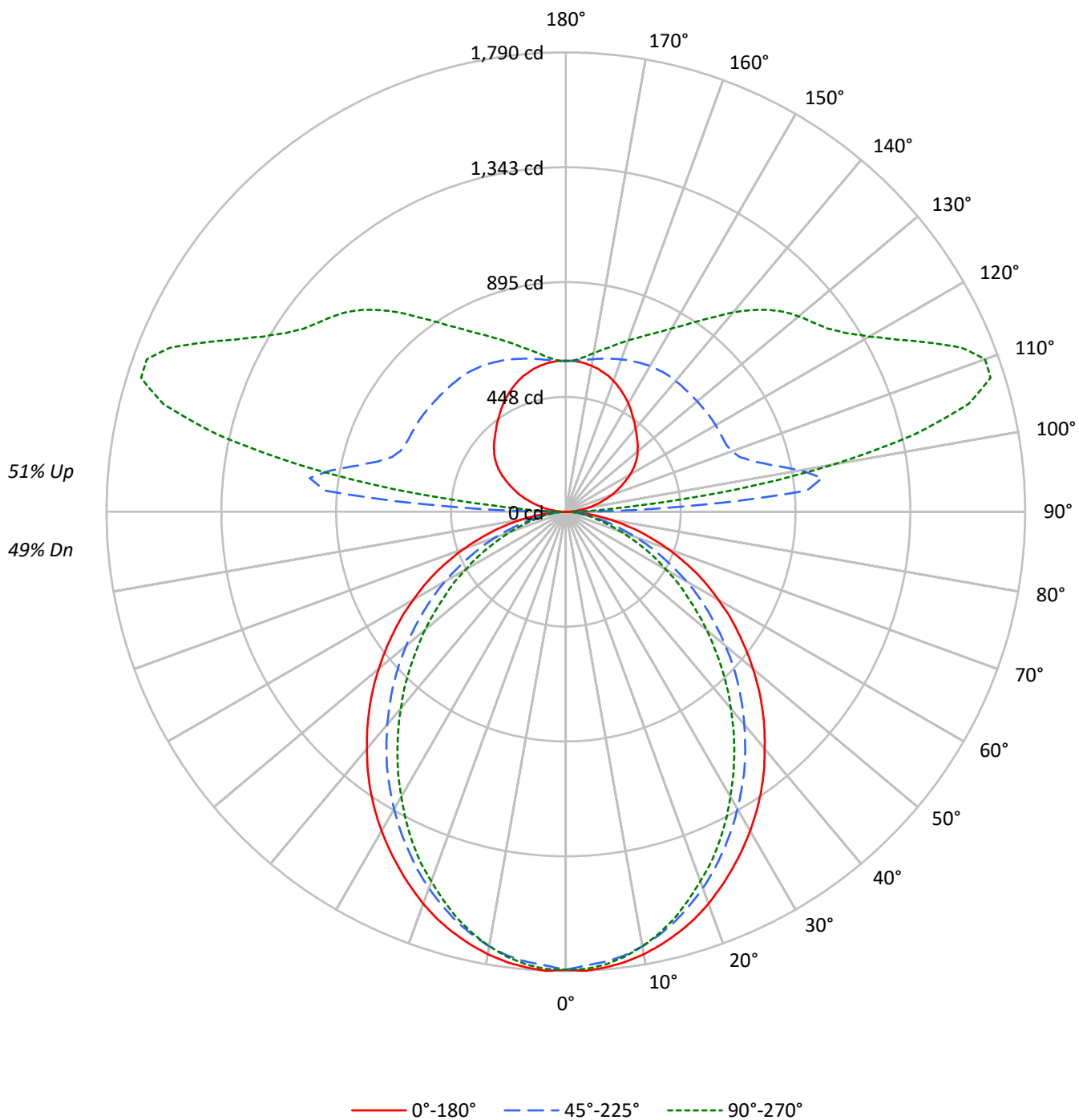
Lumens per Lamp: N/A
Luminaire Lumens: 8415.6 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 81.8
Input Voltage (V):
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55
1	98	94	90	86	90	86	83	80	73	71	69	61	59	58	49	48	47
2	89	82	76	71	82	76	71	66	64	60	57	54	51	48	44	42	40
3	82	72	65	59	75	67	61	56	57	52	48	48	44	41	39	36	34
4	75	64	56	50	69	59	53	47	51	45	41	43	39	36	35	32	30
5	69	57	49	43	63	53	46	41	45	40	36	38	34	31	32	29	26
6	63	51	43	38	58	48	41	36	41	35	31	35	30	27	29	26	23
7	59	46	39	33	54	43	36	31	37	32	28	32	27	24	26	23	21
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19
9	51	39	31	26	47	36	29	25	31	26	22	27	22	19	22	19	17
10	47	35	28	24	44	33	27	22	29	24	20	25	21	18	21	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14554	14554	14554
5°	14556	14122	14123
10°	14432	13676	13513
15°	14233	13122	12794
20°	13973	12489	11974
25°	13649	11806	11172
30°	13332	11110	10273
35°	12983	10404	9394
40°	12568	9645	8490
45°	12178	8891	7595
50°	11734	8068	6687
55°	11256	7225	5749
60°	10724	6328	4824
65°	10212	5301	3932
70°	9482	4219	3005
75°	8547	3070	2101
80°	7140	1884	1511
85°	5370	1086	830

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12178 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.8	2.0
10°-20°	467.9	5.6
20°-30°	675.6	8.0
30°-40°	765.7	9.1
40°-50°	739.3	8.8
50°-60°	614.6	7.3
60°-70°	424.2	5.0
70°-80°	214.4	2.5
80°-90°	56.7	0.7
90°-100°	436.6	5.2
100°-110°	888.0	10.6
110°-120°	791.5	9.4
120°-130°	664.8	7.9
130°-140°	554.8	6.6
140°-150°	423.7	5.0
150°-160°	297.8	3.5
160°-170°	175.2	2.1
170°-180°	57.0	0.7
0°-30°	1311.4	15.6
0°-40°	2077.1	24.7
0°-60°	3431.0	40.8
0°-90°	4126.3	49.0
90°-120°	2116.0	25.1
90°-150°	3759.4	44.7
90°-180°	4289.0	51.0
0°-180°	8415.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1785	1785	1785	1785	1785	
5°	1782	1777	1760	1774	1771	169
15°	1697	1685	1651	1648	1639	478
25°	1535	1510	1454	1431	1417	707
35°	1327	1283	1215	1168	1144	829
45°	1082	1032	950	883	858	835
55°	820	765	676	605	579	734
65°	558	499	411	353	336	551
75°	297	246	182	150	142	313
85°	74	46	42	40	40	81
90°	1	9	21	23	24	7
95°	38	120	941	466	282	42
105°	135	196	758	1631	1625	144
115°	238	298	676	1298	1560	236
125°	331	394	672	1104	1245	295
135°	394	469	666	980	1113	304
145°	454	520	663	827	909	285
155°	516	557	644	730	761	238
165°	562	580	618	654	664	159
175°	587	588	592	600	598	56
180°	588	588	588	588	588	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1784.8	1784.8	1784.8	1784.8	1784.8
2.5°	1790.3	1784.8	1769.8	1784.8	1783.4
5°	1782.1	1776.6	1760.2	1773.9	1771.1
7.5°	1769.8	1764.3	1743.8	1753.4	1749.3
10°	1750.6	1743.8	1719.2	1724.7	1719.2
12.5°	1726.0	1717.8	1687.8	1690.5	1682.3
15°	1697.3	1685.0	1650.9	1648.2	1638.6
17.5°	1664.5	1646.8	1607.2	1600.3	1586.7
20°	1624.9	1607.2	1560.7	1549.8	1532.0
22.5°	1581.2	1560.7	1510.1	1492.4	1478.7
25°	1534.7	1510.1	1454.1	1430.9	1417.2
27.5°	1486.9	1456.8	1398.1	1370.7	1351.6
30°	1436.3	1402.2	1337.9	1303.8	1281.9
32.5°	1383.0	1343.4	1276.4	1235.4	1214.9
35°	1327.0	1283.3	1214.9	1168.5	1143.9
37.5°	1268.2	1223.1	1148.0	1097.4	1072.8
40°	1205.4	1160.3	1082.4	1025.0	1000.4
42.5°	1145.2	1097.4	1015.4	956.6	930.7
45°	1082.4	1031.8	949.8	882.8	858.2
47.5°	1018.1	966.2	881.5	811.8	784.4
50°	952.5	899.2	811.8	743.4	717.5
52.5°	885.6	833.6	743.4	673.7	646.4
55°	820.0	765.3	676.5	605.4	579.4
57.5°	755.7	698.3	610.9	538.5	519.3
60°	686.0	631.4	543.9	472.9	451.0
62.5°	623.2	565.8	475.6	411.4	395.0
65°	557.6	498.8	411.4	352.6	336.2
67.5°	489.3	433.2	351.2	299.3	280.2
70°	425.0	367.6	289.7	244.6	231.0
72.5°	356.7	306.1	233.7	196.8	184.5
75°	296.6	246.0	181.8	150.3	142.1
77.5°	233.7	190.0	135.3	113.4	110.7
80°	173.6	133.9	92.9	88.8	87.5
82.5°	121.6	86.1	67.0	64.2	62.9
85°	73.8	46.5	42.4	39.6	39.6
87.5°	31.4	20.5	19.1	17.8	19.1
90°	1.2	9.2	20.8	23.1	24.2
92.5°	16.2	88.9	452.6	149.6	105.1
95°	38.1	120.0	941.1	465.9	281.7
97.5°	63.5	132.8	1006.9	951.4	676.7
100°	87.8	150.1	928.4	1316.4	1058.9
102.5°	110.9	170.9	830.2	1545.0	1391.4
105°	135.1	195.8	757.5	1631.0	1624.7
107.5°	161.7	221.2	710.1	1605.0	1735.5
110°	188.2	246.5	688.2	1512.7	1737.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	213.6	271.9	677.8	1399.5	1669.7
115°	237.9	298.5	675.5	1297.9	1560.0
117.5°	263.3	323.4	674.3	1218.2	1452.6
120°	288.7	347.5	674.3	1164.5	1364.9
122.5°	311.8	371.2	673.2	1129.3	1295.6
125°	331.4	393.8	672.0	1104.4	1244.8
127.5°	349.9	414.6	669.7	1080.8	1212.4
130°	364.9	434.8	668.6	1052.5	1184.7
132.5°	379.9	452.1	667.4	1019.0	1153.5
135°	393.8	468.8	666.3	980.4	1113.1
137.5°	407.6	483.2	666.3	938.8	1065.8
140°	422.6	496.6	665.1	898.4	1013.8
142.5°	438.8	508.6	665.1	860.8	958.4
145°	453.8	519.6	662.8	826.8	908.8
147.5°	471.1	530.0	659.3	798.5	862.6
150°	487.3	539.8	655.9	772.5	824.5
152.5°	502.3	549.0	650.1	750.6	789.8
155°	516.2	557.2	644.3	729.8	760.9
157.5°	530.0	564.7	638.6	710.2	734.4
160°	542.7	571.0	631.6	690.5	710.1
162.5°	554.3	576.2	624.7	671.4	687.0
165°	562.3	579.7	617.8	654.2	664.0
167.5°	571.6	582.6	610.8	639.2	645.5
170°	577.4	584.8	603.9	624.1	628.2
172.5°	583.1	586.6	597.0	610.8	610.8
175°	586.6	587.7	592.4	600.4	598.1
177.5°	588.9	587.7	588.9	593.0	588.9
180°	587.7	587.7	587.7	587.7	587.7

(END OF REPORT)