

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: P1026071

Luminaire Tested: S124RDIP-B1020D810UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026071
REPORT IS A COMBINATION OF REPORTS P999011 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D810UB40-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

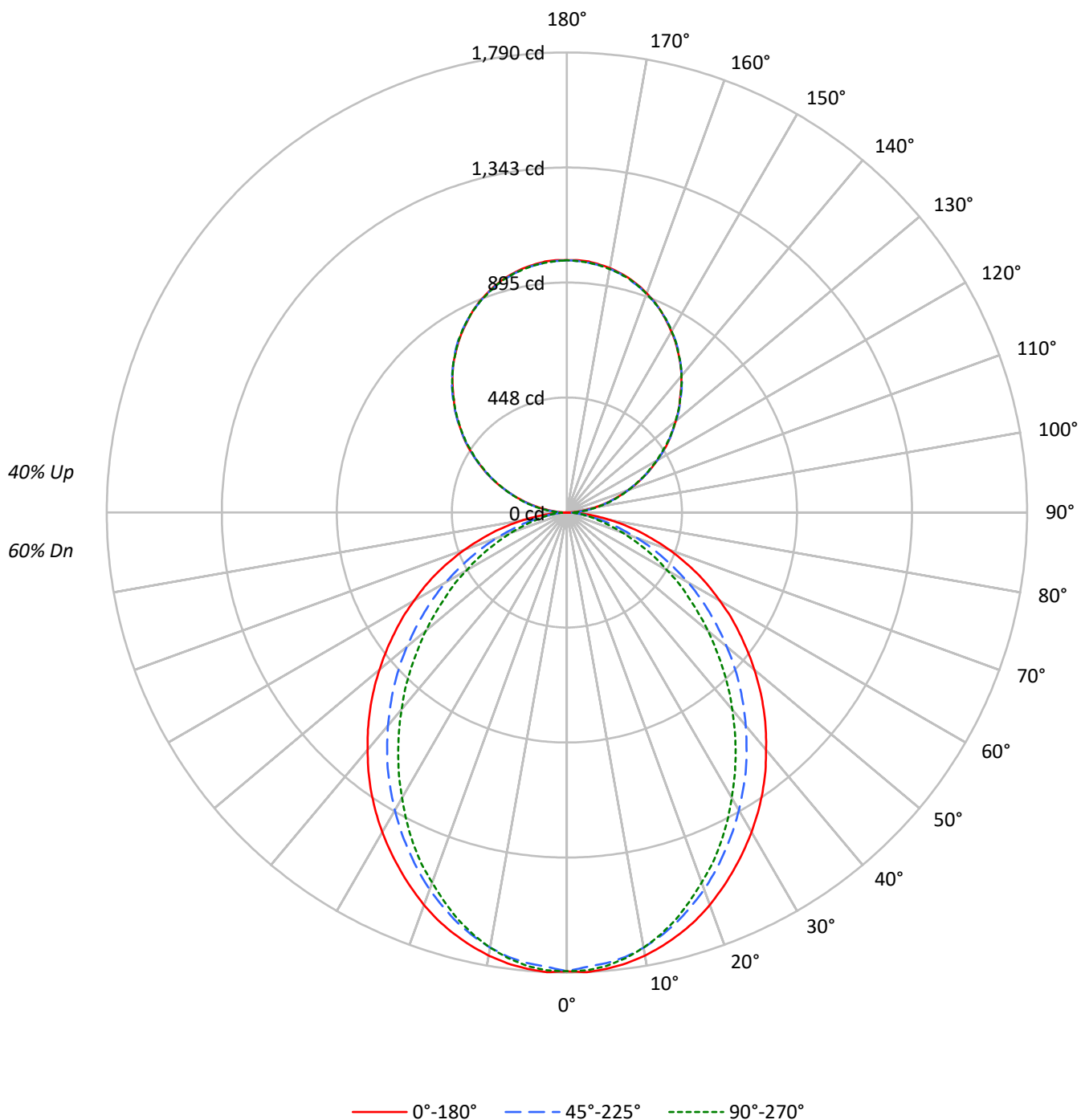
Lumens per Lamp: N/A
Luminaire Lumens: 6850.0 lumens
Efficiency: N/A
Efficacy: 100.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 67.9
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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66
1	100	96	92	89	94	90	87	84	79	76	74	68	66	65	58	57	56
2	92	84	78	73	85	79	74	69	69	65	62	60	57	55	52	50	48
3	84	74	67	61	78	70	63	58	61	56	52	54	50	46	46	43	41
4	77	66	58	52	72	62	55	50	55	49	45	48	44	40	41	38	36
5	71	59	51	45	66	56	48	43	49	43	39	43	39	35	38	34	31
6	65	53	45	39	61	50	43	38	44	39	34	39	34	31	34	30	28
7	60	48	40	35	56	45	38	33	40	35	30	36	31	27	31	27	25
8	56	44	36	31	53	41	34	29	37	31	27	33	28	25	29	25	22
9	52	40	33	28	49	38	31	26	34	28	24	30	26	22	27	23	20
10	49	37	30	25	46	35	28	24	31	26	22	28	23	20	25	21	18

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	2.5
10°-20°	467.9	6.8
20°-30°	675.6	9.9
30°-40°	765.7	11.2
40°-50°	739.3	10.8
50°-60°	614.6	9.0
60°-70°	424.2	6.2
70°-80°	214.4	3.1
80°-90°	56.5	0.8
90°-100°	64.0	0.9
100°-110°	191.7	2.8
110°-120°	325.6	4.8
120°-130°	429.4	6.3
130°-140°	482.3	7.0
140°-150°	474.0	6.9
150°-160°	398.7	5.8
160°-170°	265.3	3.9
170°-180°	92.9	1.4
0°-30°	1311.4	19.1
0°-40°	2077.1	30.3
0°-60°	3431.0	50.1
0°-90°	4126.1	60.2
90°-120°	581.3	8.5
90°-150°	1967.0	28.7
90°-180°	2724.0	39.8
0°-180°	6850.0	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°	2	11	17	21	23	8
95°	46	52	58	60	60	49
105°	177	178	181	183	185	188
115°	331	331	330	329	328	326
125°	482	482	481	480	478	430
135°	622	626	626	625	623	481
145°	756	758	759	758	756	473
155°	866	866	865	868	865	398
165°	942	940	938	943	940	266
175°	980	976	976	981	976	93
180°	982	982	982	982	982	

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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°	2.3	10.6	16.7	21.3	22.8
92.5°	19.7	29.6	33.4	35.7	36.4
95°	45.6	52.4	57.7	60.0	60.0
97.5°	72.9	79.0	85.0	88.1	88.1
100°	106.3	109.3	116.2	117.7	117.7
102.5°	141.2	142.0	148.1	150.3	151.1
105°	176.9	177.7	180.7	183.0	185.3
107.5°	214.1	214.9	215.6	218.7	217.9
110°	252.1	253.6	252.8	251.3	253.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	291.6	291.6	290.0	290.0	290.0
115°	331.0	331.0	329.5	328.8	328.0
117.5°	368.2	368.2	367.5	365.2	362.9
120°	405.4	408.5	406.2	402.4	403.9
122.5°	444.2	444.9	444.2	441.9	438.1
125°	482.1	482.1	481.4	479.8	478.3
127.5°	516.3	518.6	517.1	515.5	514.8
130°	552.7	555.0	555.0	553.5	550.5
132.5°	589.9	591.5	590.7	589.2	588.4
135°	621.8	626.4	626.4	624.9	622.6
137.5°	657.5	659.8	661.3	659.0	659.8
140°	693.2	694.7	694.7	694.0	693.2
142.5°	725.8	727.4	726.6	726.6	726.6
145°	755.5	758.5	759.3	758.5	756.2
147.5°	785.8	789.6	788.9	788.1	787.3
150°	813.2	816.2	816.2	816.2	815.4
152.5°	839.0	840.5	841.3	843.5	841.3
155°	865.6	865.6	864.8	867.8	864.8
157.5°	888.3	886.8	886.8	889.1	886.8
160°	908.1	907.3	906.5	908.8	905.0
162.5°	926.3	924.0	923.3	927.8	924.0
165°	942.2	940.0	938.4	943.0	940.0
167.5°	955.1	952.1	952.1	956.7	952.1
170°	965.8	962.0	962.7	967.3	962.0
172.5°	973.4	970.3	970.3	975.6	970.3
175°	980.2	976.4	975.6	981.0	975.6
177.5°	983.2	979.4	979.4	984.8	978.7
180°	981.7	981.7	981.7	981.7	981.7

(END OF REPORT)