

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: P1026072

Luminaire Tested: S124RDIP-B1020D810UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026072
REPORT IS A COMBINATION OF REPORTS P999012 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-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

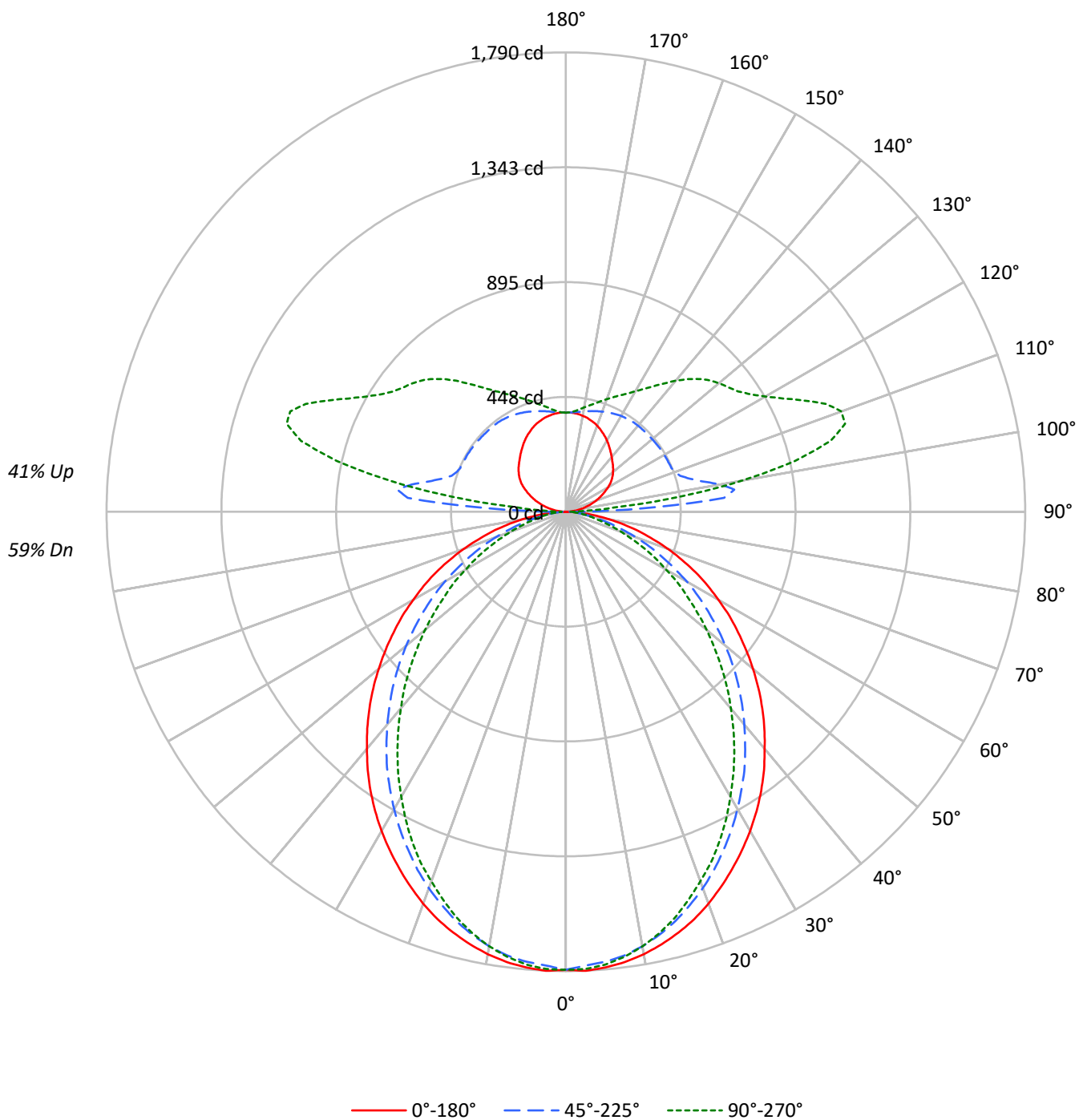
Lumens per Lamp: N/A
Luminaire Lumens: 6945.6 lumens
Efficiency: N/A
Efficacy: 102.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65
1	100	96	92	89	93	90	86	83	78	76	74	68	66	64	58	57	55
2	92	84	78	73	85	79	74	69	69	65	61	60	57	54	51	49	47
3	84	74	67	61	78	70	63	58	61	56	52	53	49	46	46	43	40
4	77	66	58	52	71	62	55	50	54	49	45	47	43	40	41	38	35
5	71	59	51	45	66	55	48	43	49	43	39	43	38	35	37	34	31
6	65	53	45	39	61	50	43	37	44	38	34	39	34	31	34	30	27
7	60	48	40	34	56	45	38	33	40	34	30	35	31	27	31	27	24
8	56	44	36	31	52	41	34	29	37	31	27	32	28	24	28	25	22
9	52	40	33	27	49	38	31	26	34	28	24	30	25	22	26	23	20
10	49	37	30	25	46	35	28	24	31	26	22	28	23	20	24	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	2.4
10°-20°	467.9	6.7
20°-30°	675.6	9.7
30°-40°	765.7	11.0
40°-50°	739.3	10.6
50°-60°	614.6	8.8
60°-70°	424.2	6.1
70°-80°	214.4	3.1
80°-90°	55.9	0.8
90°-100°	287.0	4.1
100°-110°	583.8	8.4
110°-120°	520.4	7.5
120°-130°	437.1	6.3
130°-140°	364.8	5.3
140°-150°	278.6	4.0
150°-160°	195.8	2.8
160°-170°	115.2	1.7
170°-180°	37.4	0.5
0°-30°	1311.4	18.9
0°-40°	2077.1	29.9
0°-60°	3431.0	49.4
0°-90°	4125.5	59.4
90°-120°	1391.3	20.0
90°-150°	2471.7	35.6
90°-180°	2820.0	40.6
0°-180°	6945.6	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	6	14	15	16	6
95°	25	79	619	306	185	27
105°	89	129	498	1072	1068	95
115°	156	196	444	853	1026	155
125°	218	259	442	726	818	194
135°	259	308	438	645	732	200
145°	298	342	436	544	598	187
155°	339	366	424	480	500	157
165°	370	381	406	430	436	104
175°	386	386	390	395	393	37
180°	386	386	386	386	386	

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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°	0.8	6.1	13.7	15.2	15.9
92.5°	10.6	58.4	297.6	98.3	69.1
95°	25.1	79.0	618.7	306.4	185.2
97.5°	41.8	87.3	662.0	625.6	444.9
100°	57.7	98.6	610.4	865.5	696.2
102.5°	72.9	112.4	545.9	1015.8	914.8
105°	88.8	128.7	498.0	1072.4	1068.2
107.5°	106.3	145.4	466.9	1055.3	1141.1
110°	123.7	162.0	452.5	994.6	1142.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	140.5	178.8	445.6	920.2	1097.8
115°	156.4	196.2	444.1	853.4	1025.7
117.5°	173.1	212.6	443.4	801.0	955.1
120°	189.8	228.5	443.4	765.7	897.4
122.5°	205.0	244.0	442.6	742.5	851.8
125°	217.9	258.9	441.9	726.2	818.4
127.5°	230.0	272.5	440.3	710.6	797.2
130°	239.9	285.8	439.6	692.0	778.9
132.5°	249.8	297.2	438.8	670.0	758.4
135°	258.9	308.2	438.1	644.6	731.9
137.5°	268.0	317.7	438.1	617.2	700.7
140°	277.9	326.5	437.3	590.7	666.6
142.5°	288.5	334.4	437.3	566.0	630.1
145°	298.4	341.6	435.8	543.6	597.5
147.5°	309.8	348.5	433.5	525.0	567.1
150°	320.4	354.9	431.2	507.9	542.1
152.5°	330.3	361.0	427.4	493.5	519.3
155°	339.4	366.3	423.6	479.8	500.3
157.5°	348.5	371.2	419.8	466.9	482.8
160°	356.8	375.4	415.3	454.0	466.9
162.5°	364.4	378.8	410.7	441.4	451.7
165°	369.7	381.1	406.2	430.1	436.5
167.5°	375.8	383.0	401.6	420.2	424.4
170°	379.6	384.5	397.1	410.4	413.0
172.5°	383.4	385.6	392.5	401.6	401.6
175°	385.7	386.4	389.5	394.8	393.3
177.5°	387.2	386.4	387.2	389.8	387.2
180°	386.4	386.4	386.4	386.4	386.4

(END OF REPORT)