

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: P1025009

Luminaire Tested: S124DIP-B1020D810UB35-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025009
REPORT IS A COMBINATION OF REPORTS P995399 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D810UB35-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

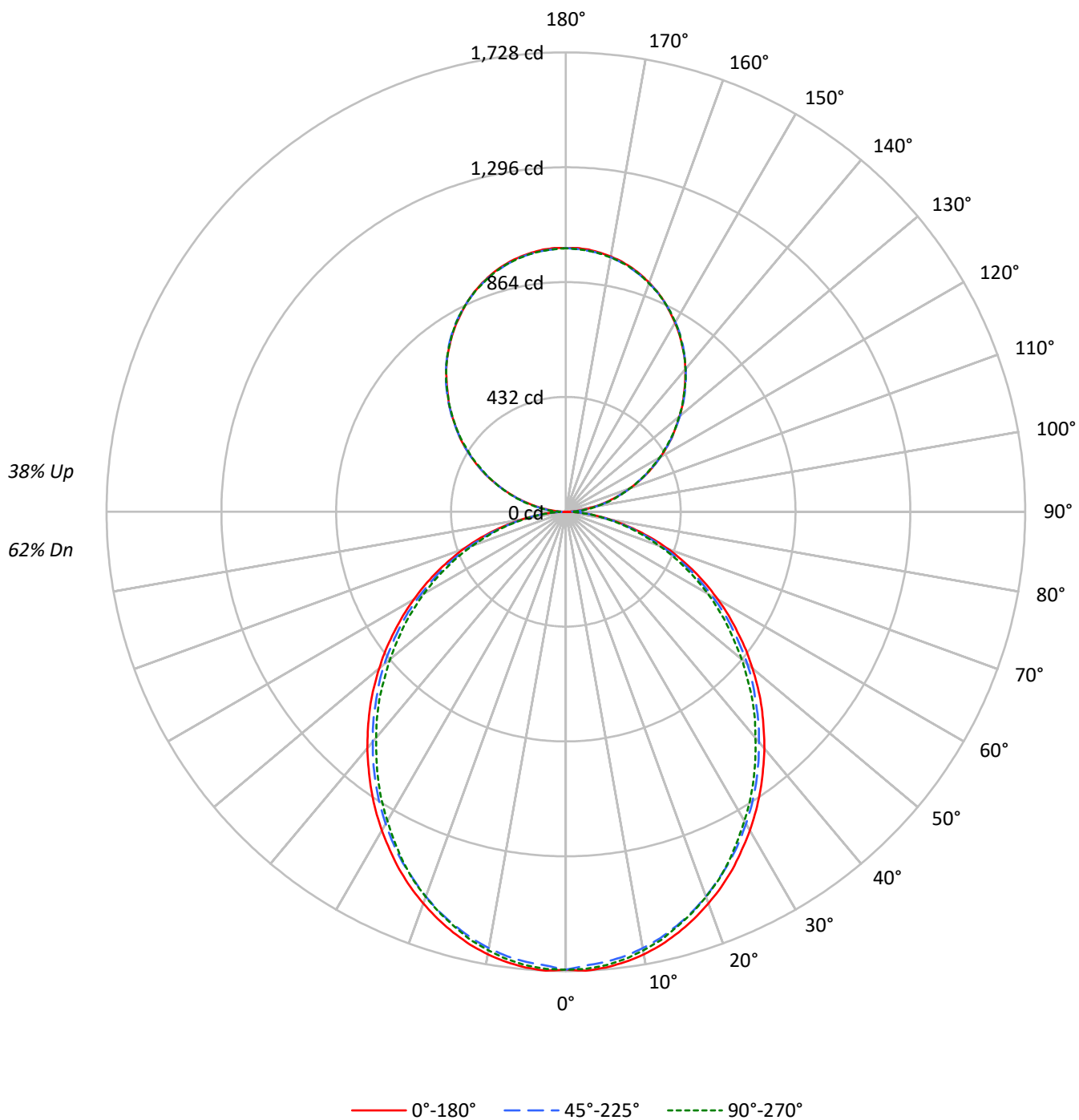
Lumens per Lamp: N/A
Luminaire Lumens: 7174.0 lumens
Efficiency: N/A
Efficacy: 105.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	103	103	103	103	90	90	90	78	78	78	67	67	67
1	100	96	92	88	94	90	86	83	79	76	74	68	67	65	59	58	56
2	91	84	77	72	85	79	73	68	69	65	61	60	57	54	52	50	47
3	83	74	66	60	78	69	63	57	61	56	51	53	49	46	46	43	40
4	76	65	57	51	71	61	54	49	54	48	44	47	43	39	41	38	35
5	70	58	50	44	65	55	47	42	49	43	38	43	38	34	37	33	30
6	65	52	44	38	60	49	42	36	44	38	33	39	34	30	34	30	27
7	60	47	39	33	56	45	37	32	40	34	29	35	30	27	31	27	24
8	56	43	35	30	52	41	33	28	36	30	26	32	27	24	28	24	21
9	52	39	32	27	48	37	30	25	33	27	23	30	25	21	26	22	19
10	48	36	29	24	45	34	28	23	31	25	21	27	23	19	24	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14045	14045	14045
5°	14058	13642	13658
10°	13938	13262	13170
15°	13739	12812	12620
20°	13483	12326	12049
25°	13196	11811	11436
30°	12849	11254	10762
35°	12491	10685	10110
40°	12116	10073	9418
45°	11723	9457	8771
50°	11289	8861	8053
55°	10818	8165	7341
60°	10334	7403	6598
65°	9781	6615	5762
70°	9145	5668	4866
75°	8193	4568	3897
80°	6984	3304	2741
85°	5421	1840	1476

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11723 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.3	2.3
10°-20°	457.4	6.4
20°-30°	673.1	9.4
30°-40°	782.5	10.9
40°-50°	782.4	10.9
50°-60°	684.3	9.5
60°-70°	508.0	7.1
70°-80°	288.3	4.0
80°-90°	84.7	1.2
90°-100°	64.6	0.9
100°-110°	193.6	2.7
110°-120°	328.8	4.6
120°-130°	433.7	6.0
130°-140°	487.1	6.8
140°-150°	478.7	6.7
150°-160°	402.7	5.6
160°-170°	267.9	3.7
170°-180°	93.8	1.3
0°-30°	1292.9	18.0
0°-40°	2075.4	28.9
0°-60°	3542.1	49.4
0°-90°	4423.1	61.7
90°-120°	587.0	8.2
90°-150°	1986.5	27.7
90°-180°	2751.0	38.3
0°-180°	7174.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1722	1722	1722	1722	1722	
5°	1721	1716	1700	1716	1713	163
15°	1638	1633	1612	1620	1616	462
25°	1484	1474	1455	1456	1451	683
35°	1277	1267	1248	1238	1231	798
45°	1042	1032	1010	995	991	803
55°	788	784	765	748	740	706
65°	534	527	513	500	493	529
75°	284	277	270	265	264	302
85°	74	74	72	72	70	80
90°	2	11	17	22	23	8
95°	46	53	58	61	61	50
105°	179	179	182	185	187	189
115°	334	334	333	332	331	330
125°	487	487	486	485	483	434
135°	628	633	633	631	629	486
145°	763	766	767	766	764	478
155°	874	874	873	876	873	402
165°	952	949	948	952	949	268
175°	990	986	985	991	985	94
180°	991	991	991	991	991	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1722.4	1722.4	1722.4	1722.4	1722.4
2.5°	1728.0	1723.8	1708.6	1722.4	1721.1
5°	1721.1	1715.5	1700.4	1715.5	1712.8
7.5°	1708.6	1703.1	1686.6	1699.0	1697.6
10°	1690.7	1685.2	1667.2	1678.3	1675.5
12.5°	1667.2	1661.7	1642.4	1654.8	1650.7
15°	1638.3	1632.7	1612.0	1620.3	1616.2
17.5°	1605.1	1598.2	1578.9	1584.4	1581.7
20°	1567.9	1561.0	1540.3	1544.4	1541.6
22.5°	1527.8	1518.2	1497.5	1505.8	1500.2
25°	1483.7	1474.0	1454.7	1456.1	1450.6
27.5°	1434.0	1424.3	1406.4	1403.6	1396.7
30°	1384.3	1373.3	1355.3	1349.8	1342.9
32.5°	1331.9	1322.2	1302.9	1296.0	1289.1
35°	1276.7	1267.0	1247.7	1238.0	1231.1
37.5°	1218.7	1210.4	1189.7	1180.0	1170.4
40°	1162.1	1151.1	1130.4	1116.6	1109.7
42.5°	1101.4	1095.9	1072.4	1055.8	1051.7
45°	1042.0	1032.4	1010.3	995.1	991.0
47.5°	979.9	973.0	952.3	935.8	924.7
50°	916.4	910.9	891.6	872.3	864.0
52.5°	854.3	847.4	826.7	810.2	799.1
55°	788.1	783.9	764.6	748.1	739.8
57.5°	726.0	721.8	702.5	685.9	677.7
60°	661.1	654.2	636.3	623.8	616.9
62.5°	597.6	592.1	572.8	561.7	554.8
65°	534.1	527.2	513.4	499.6	492.7
67.5°	469.3	463.7	449.9	436.1	434.8
70°	409.9	400.2	389.2	378.2	374.0
72.5°	346.4	336.8	328.5	320.2	316.1
75°	284.3	277.4	270.5	265.0	263.6
77.5°	223.6	220.8	213.9	212.5	208.4
80°	169.8	165.6	162.9	160.1	158.7
82.5°	117.3	115.9	115.9	114.6	113.2
85°	74.5	74.5	71.8	71.8	70.4
87.5°	35.9	34.5	33.1	33.1	33.1
90°	2.3	10.7	16.9	21.5	23.0
92.5°	19.9	29.9	33.7	36.0	36.8
95°	46.0	52.9	58.3	60.6	60.6
97.5°	73.6	79.7	85.9	88.9	88.9
100°	107.3	110.4	117.3	118.9	118.9
102.5°	142.6	143.4	149.5	151.8	152.6
105°	178.7	179.4	182.5	184.8	187.1
107.5°	216.2	217.0	217.8	220.8	220.1
110°	254.6	256.1	255.3	253.8	256.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	294.4	294.4	292.9	292.9	292.9
115°	334.3	334.3	332.8	332.0	331.2
117.5°	371.9	371.9	371.1	368.8	366.5
120°	409.5	412.5	410.2	406.4	407.9
122.5°	448.6	449.3	448.6	446.3	442.4
125°	486.9	486.9	486.1	484.6	483.1
127.5°	521.4	523.7	522.2	520.6	519.9
130°	558.2	560.5	560.5	559.0	555.9
132.5°	595.8	597.3	596.6	595.0	594.3
135°	628.0	632.6	632.6	631.1	628.8
137.5°	664.0	666.3	667.9	665.6	666.3
140°	700.1	701.6	701.6	700.8	700.1
142.5°	733.0	734.6	733.8	733.8	733.8
145°	762.9	766.0	766.8	766.0	763.7
147.5°	793.6	797.4	796.7	795.9	795.1
150°	821.2	824.3	824.3	824.3	823.5
152.5°	847.3	848.8	849.6	851.9	849.6
155°	874.1	874.1	873.4	876.4	873.4
157.5°	897.1	895.6	895.6	897.9	895.6
160°	917.1	916.3	915.5	917.8	914.0
162.5°	935.5	933.2	932.4	937.0	933.2
165°	951.6	949.3	947.7	952.3	949.3
167.5°	964.6	961.5	961.5	966.1	961.5
170°	975.3	971.5	972.3	976.9	971.5
172.5°	983.0	979.9	979.9	985.3	979.9
175°	989.9	986.1	985.3	990.7	985.3
177.5°	993.0	989.1	989.1	994.5	988.4
180°	991.4	991.4	991.4	991.4	991.4

(END OF REPORT)