

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: P1024964

Luminaire Tested: S124DIP-B1020D590UB35-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024964
REPORT IS A COMBINATION OF REPORTS P995339 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D590UB35-4F0-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

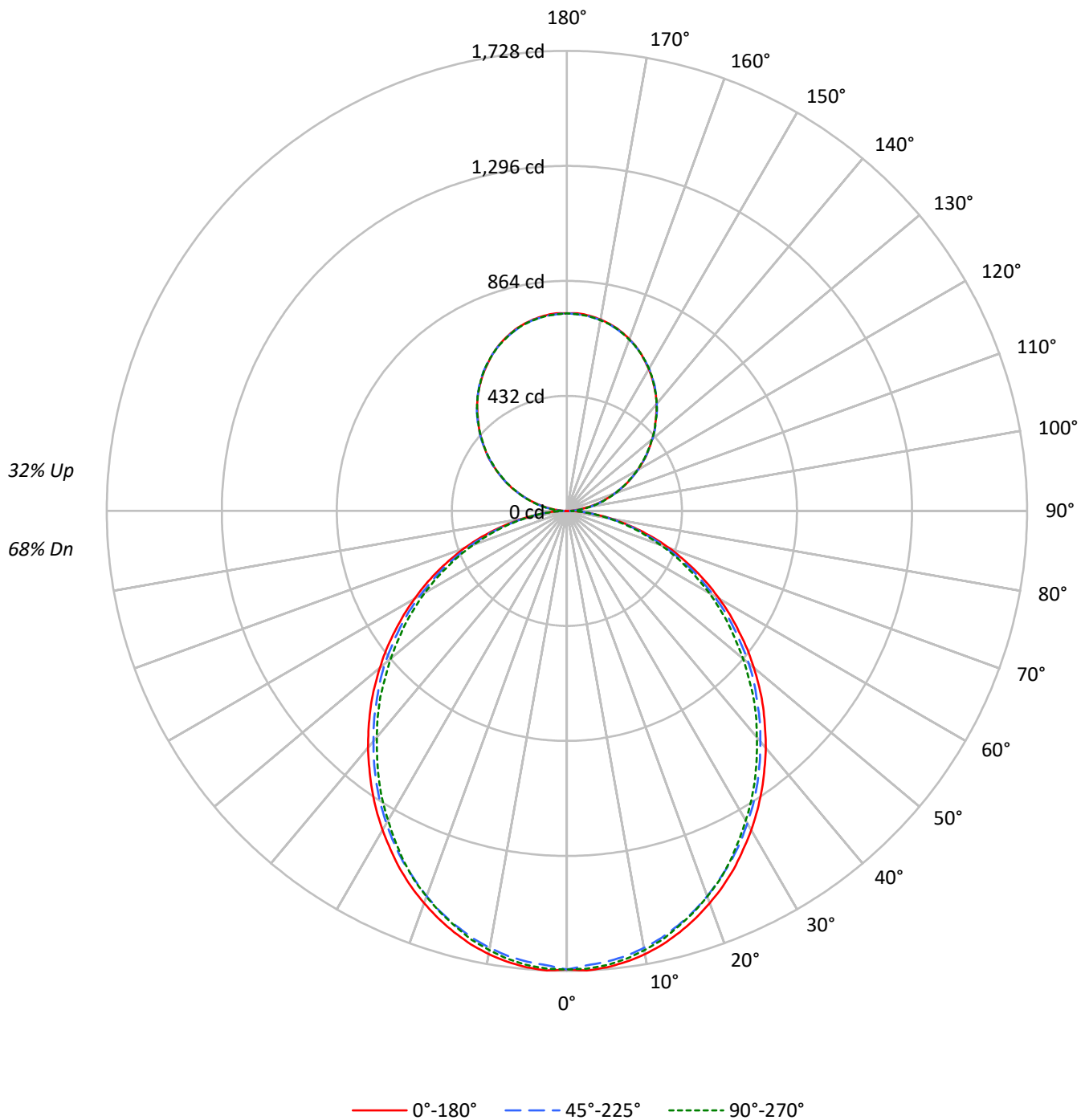
Lumens per Lamp: N/A
Luminaire Lumens: 6482.0 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 62.2
Input Voltage (V):
Input Current (A_{in}): 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	111	111	111	111	105	105	105	105	93	93	93	83	83	83	73	73	73
1	102	97	93	90	96	92	88	85	82	79	77	73	71	69	64	63	61
2	93	85	79	73	87	80	75	70	72	67	64	64	61	58	57	54	52
3	85	75	67	61	80	71	64	59	63	58	54	57	52	49	50	47	44
4	77	66	58	52	73	63	55	50	56	50	46	50	46	42	45	41	38
5	71	59	51	45	67	56	49	43	51	44	40	45	40	36	40	36	33
6	66	53	45	39	62	51	43	37	46	39	35	41	36	32	37	33	29
7	61	48	40	34	57	46	38	33	41	35	31	37	32	28	34	29	26
8	57	44	36	30	53	42	34	29	38	32	27	34	29	25	31	27	23
9	53	40	32	27	50	38	31	26	35	29	25	32	26	23	29	24	21
10	49	37	29	25	47	35	28	24	32	26	22	29	24	21	26	22	19

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	2.5
10°-20°	457.4	7.1
20°-30°	673.1	10.4
30°-40°	782.5	12.1
40°-50°	782.4	12.1
50°-60°	684.3	10.6
60°-70°	508.0	7.8
70°-80°	288.3	4.4
80°-90°	84.1	1.3
90°-100°	48.4	0.7
100°-110°	144.9	2.2
110°-120°	246.2	3.8
120°-130°	324.7	5.0
130°-140°	364.7	5.6
140°-150°	358.4	5.5
150°-160°	301.4	4.7
160°-170°	200.6	3.1
170°-180°	70.2	1.1
0°-30°	1292.9	19.9
0°-40°	2075.4	32.0
0°-60°	3542.1	54.6
0°-90°	4422.6	68.2
90°-120°	439.5	6.8
90°-150°	1487.2	22.9
90°-180°	2059.0	31.8
0°-180°	6482.0	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	8	13	16	17	7
95°	34	40	44	45	45	37
105°	134	134	137	138	140	142
115°	250	250	249	249	248	247
125°	364	364	364	363	362	325
135°	470	474	474	472	471	364
145°	571	574	574	574	572	358
155°	654	654	654	656	654	301
165°	712	711	710	713	711	201
175°	741	738	738	742	738	70
180°	742	742	742	742	742	

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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°	1.7	8.0	12.6	16.1	17.2
92.5°	14.9	22.4	25.3	27.0	27.6
95°	34.4	39.6	43.6	45.3	45.3
97.5°	55.1	59.7	64.3	66.6	66.6
100°	80.4	82.7	87.8	89.0	89.0
102.5°	106.8	107.3	111.9	113.7	114.2
105°	133.8	134.3	136.6	138.3	140.1
107.5°	161.9	162.5	163.0	165.3	164.7
110°	190.6	191.7	191.2	190.0	191.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	220.4	220.4	219.3	219.3	219.3
115°	250.3	250.3	249.1	248.6	248.0
117.5°	278.4	278.4	277.8	276.1	274.4
120°	306.5	308.8	307.1	304.2	305.4
122.5°	335.8	336.4	335.8	334.1	331.2
125°	364.5	364.5	363.9	362.8	361.6
127.5°	390.3	392.1	390.9	389.8	389.2
130°	417.9	419.6	419.6	418.5	416.2
132.5°	446.0	447.2	446.6	445.5	444.9
135°	470.1	473.6	473.6	472.4	470.7
137.5°	497.1	498.8	500.0	498.3	498.8
140°	524.1	525.2	525.2	524.7	524.1
142.5°	548.8	549.9	549.4	549.4	549.4
145°	571.2	573.5	574.0	573.5	571.7
147.5°	594.1	597.0	596.4	595.8	595.3
150°	614.8	617.1	617.1	617.1	616.5
152.5°	634.3	635.5	636.0	637.8	636.0
155°	654.4	654.4	653.8	656.1	653.8
157.5°	671.6	670.5	670.5	672.2	670.5
160°	686.5	686.0	685.4	687.1	684.3
162.5°	700.3	698.6	698.0	701.5	698.6
165°	712.4	710.7	709.5	713.0	710.7
167.5°	722.1	719.8	719.8	723.3	719.8
170°	730.2	727.3	727.9	731.3	727.3
172.5°	735.9	733.6	733.6	737.6	733.6
175°	741.1	738.2	737.6	741.7	737.6
177.5°	743.4	740.5	740.5	744.5	739.9
180°	742.2	742.2	742.2	742.2	742.2

(END OF REPORT)