

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: P1012884

Luminaire Tested: S124DIP-B1020D365UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012884
REPORT IS A COMBINATION OF REPORTS P995260 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D365UB2750-4F0-XX-W2A-F_3500K
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

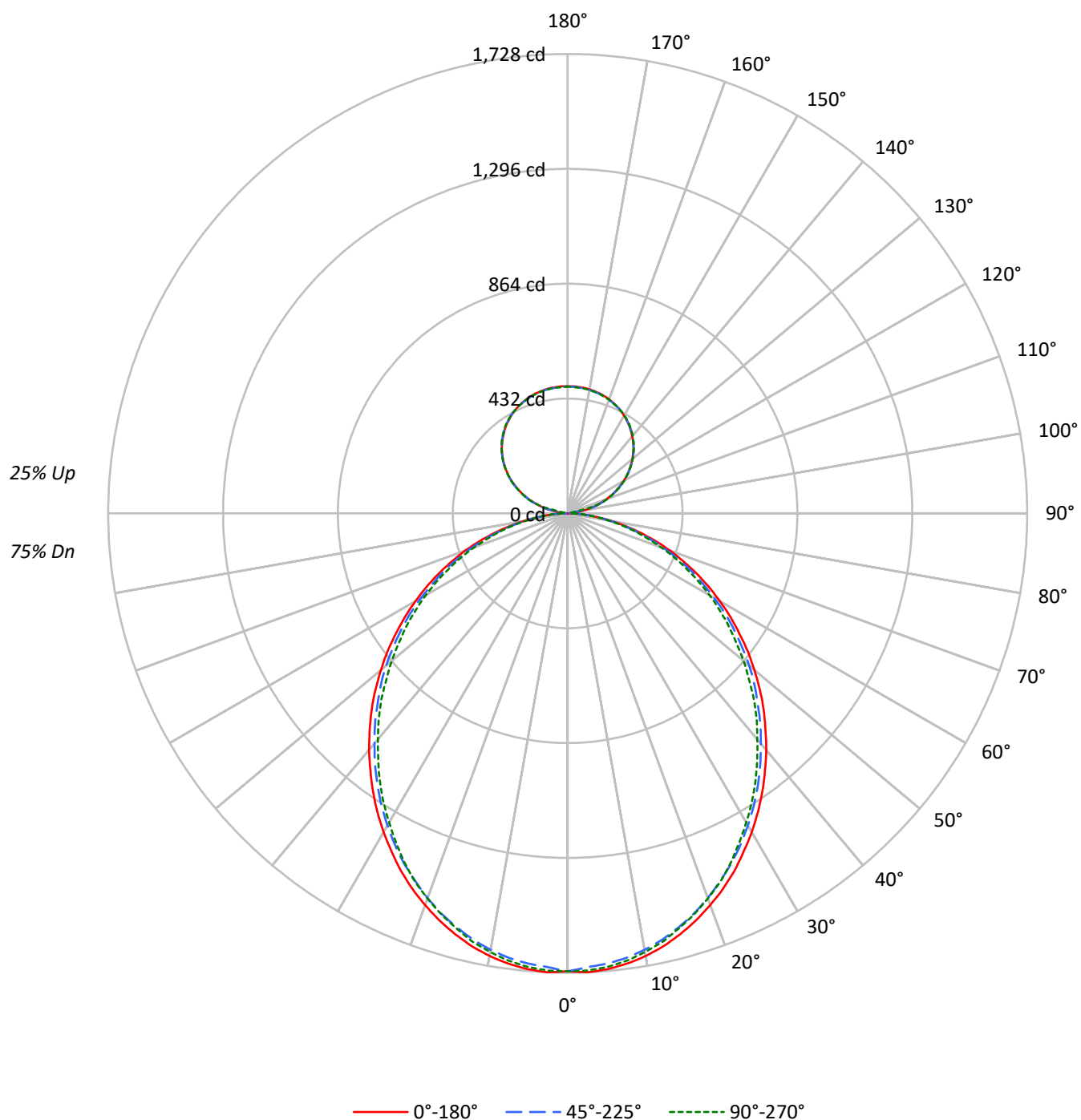
Lumens per Lamp: N/A
Luminaire Lumens: 5899.0 lumens
Efficiency: N/A
Efficacy: 105.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 56.1
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			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	113	113	113	113	108	108	108	108	97	97	97	88	88	88	79	79	79	75		
1	103	99	95	91	98	94	91	87	85	83	80	77	75	73	70	68	67	63		
2	94	86	80	74	89	82	77	72	75	70	66	68	64	61	61	59	56	53		
3	86	76	68	62	81	73	66	60	66	60	56	60	56	52	54	51	48	45		
4	79	67	59	53	75	64	57	51	59	53	48	54	49	44	49	45	41	38		
5	72	60	52	45	69	58	50	44	53	46	41	48	43	39	44	40	36	33		
6	67	54	46	40	63	52	44	38	48	41	36	44	38	34	40	35	32	29		
7	62	49	41	35	59	47	39	34	43	37	32	40	34	30	36	32	28	26		
8	58	45	37	31	55	43	35	30	40	33	29	36	31	27	34	29	25	23		
9	54	41	33	28	51	39	32	27	36	30	26	34	28	24	31	26	23	21		
10	50	38	30	25	48	36	29	25	34	28	23	31	26	22	29	24	21	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	2.8
10°-20°	457.4	7.8
20°-30°	673.1	11.4
30°-40°	782.5	13.3
40°-50°	782.4	13.3
50°-60°	684.3	11.6
60°-70°	508.0	8.6
70°-80°	288.3	4.9
80°-90°	83.5	1.4
90°-100°	15.8	0.3
100°-110°	104.3	1.8
110°-120°	199.2	3.4
120°-130°	252.9	4.3
130°-140°	270.6	4.6
140°-150°	253.0	4.3
150°-160°	204.0	3.5
160°-170°	131.6	2.2
170°-180°	45.4	0.8
0°-30°	1292.9	21.9
0°-40°	2075.4	35.2
0°-60°	3542.1	60.0
0°-90°	4422.0	75.0
90°-120°	319.4	5.4
90°-150°	1096.0	18.6
90°-180°	1477.0	25.0
0°-180°	5899.0	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°	1	5	8	10	11	6
95°	20	8	8	10	10	24
105°	108	110	111	115	102	112
115°	201	202	201	202	202	197
125°	282	284	283	284	284	252
135°	350	350	351	352	352	270
145°	403	404	404	405	406	252
155°	442	443	442	443	442	204
165°	467	465	465	468	464	132
175°	477	475	476	479	474	45
180°	477	477	477	477	477	

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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°	1.1	5.0	7.9	10.0	10.7
92.5°	5.4	4.6	7.5	9.6	9.6
95°	19.6	7.5	7.9	10.0	10.4
97.5°	37.5	45.3	7.9	9.6	10.0
100°	58.6	65.0	15.7	9.6	10.0
102.5°	82.1	86.4	90.7	10.4	10.4
105°	107.5	109.6	111.4	114.6	101.7
107.5°	130.7	131.7	134.2	136.0	137.4
110°	154.2	155.3	157.4	158.2	159.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	177.1	179.2	179.9	179.6	181.0
115°	200.6	201.7	201.4	202.1	202.1
117.5°	221.7	223.1	224.2	223.8	223.8
120°	243.1	244.6	244.2	244.9	244.2
122.5°	263.1	263.8	264.5	264.9	264.2
125°	282.0	283.5	282.8	283.8	284.2
127.5°	300.2	300.6	302.4	302.0	301.7
130°	317.7	318.1	319.2	319.5	319.5
132.5°	333.8	334.5	335.9	336.3	335.9
135°	349.9	349.5	350.9	351.7	352.4
137.5°	364.2	364.2	365.9	366.7	366.3
140°	378.1	378.8	379.5	380.6	380.9
142.5°	390.6	392.0	392.4	393.1	393.1
145°	403.4	404.5	404.5	404.9	405.6
147.5°	413.4	415.6	415.2	415.6	415.9
150°	424.5	425.9	425.6	425.6	425.9
152.5°	433.8	434.8	434.1	434.8	434.5
155°	442.3	442.7	441.6	443.1	442.0
157.5°	449.8	449.8	448.4	450.2	448.4
160°	456.3	455.2	454.8	457.0	454.8
162.5°	462.0	460.5	460.2	462.3	459.8
165°	466.6	464.8	464.8	467.7	464.5
167.5°	470.5	468.8	468.4	471.6	468.0
170°	473.8	471.6	472.0	474.8	471.3
172.5°	475.9	473.8	474.1	477.0	473.0
175°	477.3	475.2	475.5	478.8	474.5
177.5°	478.4	475.9	476.6	479.5	475.2
180°	477.3	477.3	477.3	477.3	477.3

(END OF REPORT)