

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: P1024901

Luminaire Tested: S124DIP-B1020D365UB27-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024901
REPORT IS A COMBINATION OF REPORTS P995246 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D365UB27-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

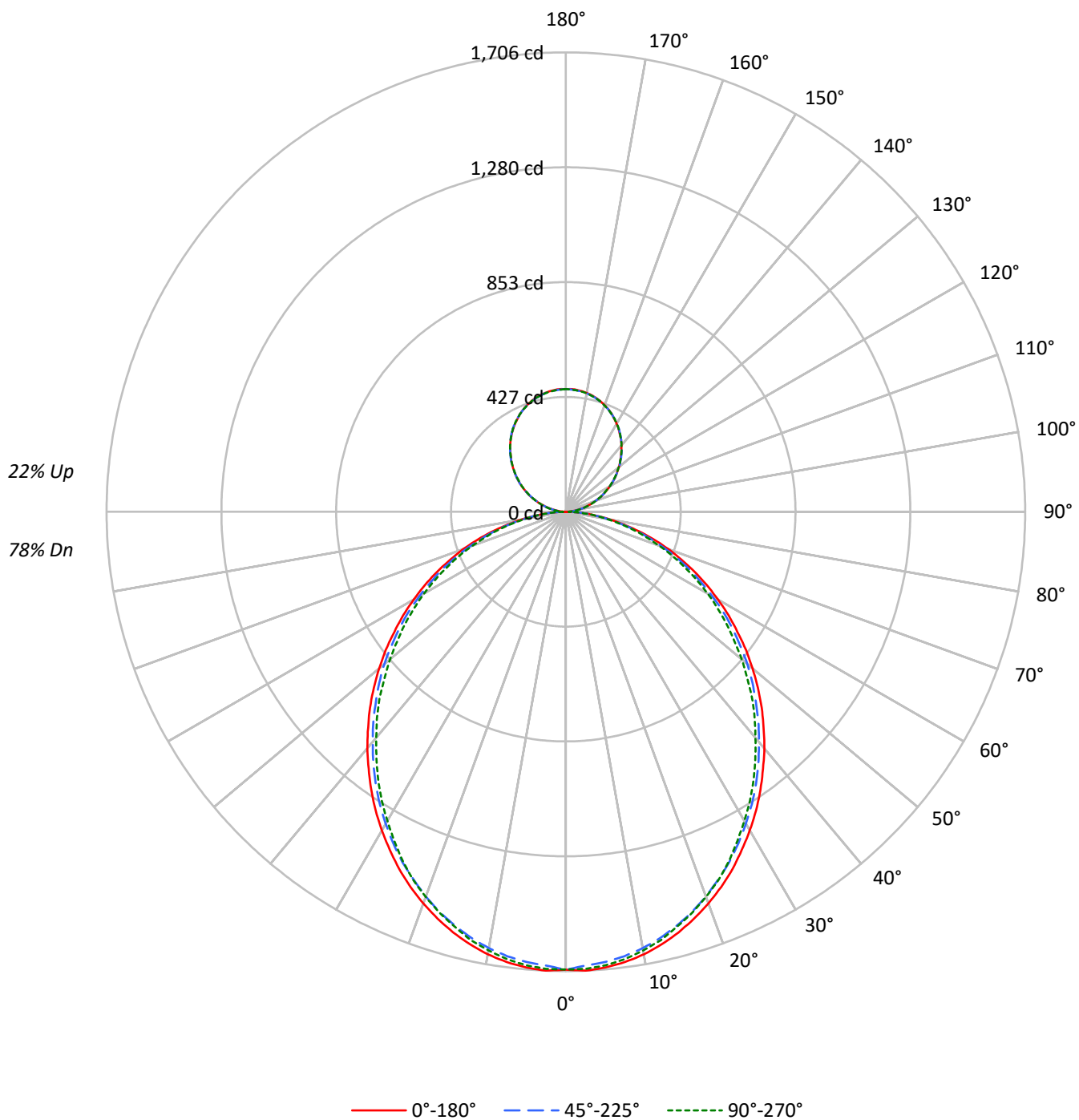
Lumens per Lamp: N/A
Luminaire Lumens: 5629.0 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	114	114	114	114	108	108	108	108	99	99	99	90	90	90	81	81	81
1	104	99	95	92	99	95	91	88	87	84	81	79	77	75	72	70	69
2	95	87	80	75	90	83	77	72	76	71	67	69	66	62	63	60	58
3	86	76	69	62	82	73	66	61	67	61	57	61	57	53	56	52	49
4	79	68	59	53	75	65	57	51	60	53	48	55	50	45	50	46	42
5	73	61	52	46	69	58	50	44	54	47	42	49	44	39	45	41	37
6	67	54	46	40	64	52	45	39	48	42	37	45	39	35	41	36	33
7	62	49	41	35	59	48	40	34	44	37	33	41	35	31	38	33	29
8	58	45	37	31	55	43	36	31	40	34	29	37	32	28	35	30	26
9	54	41	33	28	52	40	32	27	37	31	26	34	29	25	32	27	24
10	51	38	30	25	48	37	30	25	34	28	24	32	26	23	30	25	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13864	13864	13864
5°	13876	13466	13482
10°	13758	13091	13000
15°	13561	12648	12456
20°	13310	12167	11894
25°	13026	11658	11288
30°	12684	11109	10623
35°	12329	10547	9980
40°	11960	9942	9296
45°	11573	9336	8657
50°	11144	8747	7948
55°	10678	8061	7246
60°	10201	7308	6513
65°	9655	6530	5688
70°	9027	5595	4803
75°	8086	4509	3847
80°	6893	3261	2707
85°	5356	1814	1457

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11573 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.3	2.8
10°-20°	451.5	8.0
20°-30°	664.5	11.8
30°-40°	772.4	13.7
40°-50°	772.3	13.7
50°-60°	675.5	12.0
60°-70°	501.5	8.9
70°-80°	284.5	5.1
80°-90°	82.5	1.5
90°-100°	29.7	0.5
100°-110°	88.9	1.6
110°-120°	151.1	2.7
120°-130°	199.3	3.5
130°-140°	223.8	4.0
140°-150°	220.0	3.9
150°-160°	185.0	3.3
160°-170°	123.1	2.2
170°-180°	43.1	0.8
0°-30°	1276.2	22.7
0°-40°	2048.6	36.4
0°-60°	3496.5	62.1
0°-90°	4365.0	77.5
90°-120°	269.7	4.8
90°-150°	912.8	16.2
90°-180°	1264.0	22.5
0°-180°	5629.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1700	1700	1700	1700	1700	
5°	1699	1693	1678	1693	1691	161
15°	1617	1612	1591	1599	1595	456
25°	1465	1455	1436	1437	1432	674
35°	1260	1251	1232	1222	1215	788
45°	1029	1019	997	982	978	793
55°	778	774	755	738	730	697
65°	527	520	507	493	486	522
75°	281	274	267	262	260	298
85°	74	74	71	71	70	79
90°	1	5	8	10	11	6
95°	21	24	27	28	28	23
105°	82	82	84	85	86	87
115°	154	154	153	153	152	152
125°	224	224	223	223	222	199
135°	289	291	291	290	289	223
145°	351	352	352	352	351	219
155°	402	402	401	403	401	185
165°	437	436	436	438	436	123
175°	455	453	453	455	453	43
180°	456	456	456	456	456	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1700.2	1700.2	1700.2	1700.2	1700.2
2.5°	1705.7	1701.6	1686.6	1700.2	1698.9
5°	1698.9	1693.4	1678.4	1693.4	1690.7
7.5°	1686.6	1681.2	1664.8	1677.1	1675.7
10°	1668.9	1663.5	1645.7	1656.6	1653.9
12.5°	1645.7	1640.3	1621.2	1633.5	1629.4
15°	1617.1	1611.7	1591.3	1599.4	1595.3
17.5°	1584.4	1577.6	1558.6	1564.0	1561.3
20°	1547.7	1540.8	1520.4	1524.5	1521.8
22.5°	1508.1	1498.6	1478.2	1486.3	1480.9
25°	1464.6	1455.0	1435.9	1437.3	1431.9
27.5°	1415.5	1406.0	1388.3	1385.5	1378.7
30°	1366.5	1355.6	1337.8	1332.4	1325.6
32.5°	1314.7	1305.2	1286.1	1279.3	1272.5
35°	1260.2	1250.7	1231.6	1222.0	1215.2
37.5°	1203.0	1194.8	1174.4	1164.8	1155.3
40°	1147.1	1136.2	1115.8	1102.2	1095.3
42.5°	1087.2	1081.7	1058.6	1042.2	1038.1
45°	1028.6	1019.1	997.3	982.3	978.2
47.5°	967.3	960.5	940.0	923.7	912.8
50°	904.6	899.2	880.1	861.0	852.8
52.5°	843.3	836.5	816.1	799.7	788.8
55°	777.9	773.8	754.8	738.4	730.2
57.5°	716.6	712.5	693.4	677.1	668.9
60°	652.6	645.8	628.1	615.8	609.0
62.5°	589.9	584.5	565.4	554.5	547.7
65°	527.2	520.4	506.8	493.2	486.4
67.5°	463.2	457.8	444.1	430.5	429.1
70°	404.6	395.1	384.2	373.3	369.2
72.5°	342.0	332.4	324.2	316.1	312.0
75°	280.6	273.8	267.0	261.6	260.2
77.5°	220.7	218.0	211.2	209.8	205.7
80°	167.6	163.5	160.8	158.0	156.7
82.5°	115.8	114.4	114.4	113.1	111.7
85°	73.6	73.6	70.8	70.8	69.5
87.5°	35.4	34.1	32.7	32.7	32.7
90°	1.1	4.9	7.8	9.9	10.6
92.5°	9.2	13.7	15.5	16.6	16.9
95°	21.1	24.3	26.8	27.8	27.8
97.5°	33.8	36.6	39.5	40.9	40.9
100°	49.3	50.7	53.9	54.6	54.6
102.5°	65.5	65.9	68.7	69.8	70.1
105°	82.1	82.4	83.9	84.9	86.0
107.5°	99.4	99.7	100.1	101.5	101.1
110°	117.0	117.7	117.3	116.6	117.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	135.3	135.3	134.6	134.6	134.6
115°	153.6	153.6	152.9	152.6	152.2
117.5°	170.9	170.9	170.5	169.5	168.4
120°	188.1	189.6	188.5	186.7	187.4
122.5°	206.1	206.5	206.1	205.1	203.3
125°	223.7	223.7	223.4	222.7	222.0
127.5°	239.6	240.6	239.9	239.2	238.9
130°	256.5	257.6	257.6	256.9	255.4
132.5°	273.8	274.5	274.1	273.4	273.1
135°	288.6	290.7	290.7	290.0	288.9
137.5°	305.1	306.2	306.9	305.8	306.2
140°	321.7	322.4	322.4	322.0	321.7
142.5°	336.8	337.5	337.2	337.2	337.2
145°	350.6	352.0	352.3	352.0	350.9
147.5°	364.7	366.4	366.1	365.7	365.4
150°	377.3	378.8	378.8	378.8	378.4
152.5°	389.3	390.0	390.4	391.4	390.4
155°	401.7	401.7	401.3	402.7	401.3
157.5°	412.2	411.5	411.5	412.6	411.5
160°	421.4	421.0	420.7	421.7	420.0
162.5°	429.8	428.8	428.4	430.5	428.8
165°	437.2	436.2	435.5	437.6	436.2
167.5°	443.2	441.8	441.8	443.9	441.8
170°	448.2	446.4	446.8	448.9	446.4
172.5°	451.7	450.3	450.3	452.7	450.3
175°	454.9	453.1	452.7	455.2	452.7
177.5°	456.3	454.5	454.5	457.0	454.2
180°	455.6	455.6	455.6	455.6	455.6

(END OF REPORT)