

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: P1025992

Luminaire Tested: S124RDIP-B1020D365UB27-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025992
REPORT IS A COMBINATION OF REPORTS P998902 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D365UB27-4F0-XX-W2A-F
Description: Define 4 Regressed Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

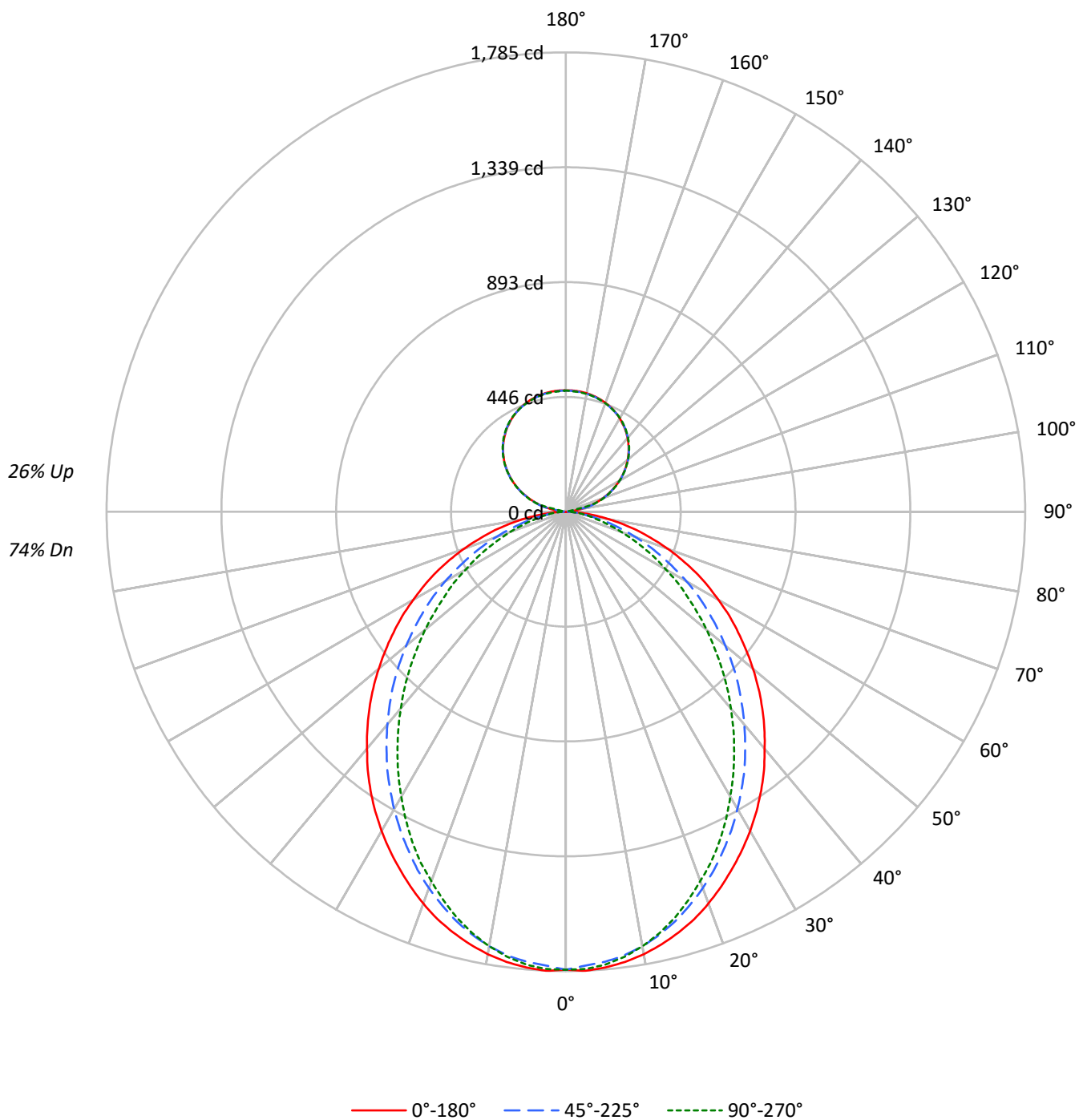
Lumens per Lamp: N/A
Luminaire Lumens: 5571.0 lumens
Efficiency: N/A
Efficacy: 99.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	113	113	113	113	107	107	107	107	97	97	97	87	87	87	78	78	78
1	104	99	95	92	98	94	91	88	85	83	80	77	75	73	70	68	67
2	95	87	81	76	90	83	78	73	75	71	67	68	65	62	62	59	57
3	87	77	70	64	82	73	67	61	67	61	57	61	56	53	55	52	49
4	79	68	60	54	75	65	58	52	60	54	49	54	50	46	49	46	42
5	73	61	53	47	69	59	51	45	54	47	43	49	44	40	45	41	37
6	68	55	47	41	64	53	45	40	49	42	38	45	39	35	41	36	33
7	63	50	42	36	60	48	41	35	44	38	33	41	35	31	37	33	29
8	58	46	38	32	55	44	37	32	41	34	30	37	32	28	34	30	27
9	55	42	34	29	52	40	33	28	37	31	27	35	29	25	32	27	24
10	51	39	31	26	49	37	30	26	35	29	24	32	27	23	30	25	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14512	14512	14512
5°	14513	14081	14082
10°	14391	13636	13474
15°	14192	13083	12757
20°	13933	12452	11939
25°	13610	11772	11140
30°	13293	11077	10243
35°	12945	10374	9366
40°	12531	9616	8466
45°	12142	8865	7573
50°	11701	8044	6668
55°	11223	7203	5733
60°	10692	6309	4810
65°	10182	5286	3920
70°	9455	4207	2996
75°	8521	3060	2095
80°	7119	1880	1506
85°	5356	1081	828

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12142 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.3	3.0
10°-20°	466.6	8.4
20°-30°	673.6	12.1
30°-40°	763.5	13.7
40°-50°	737.1	13.2
50°-60°	612.8	11.0
60°-70°	423.0	7.6
70°-80°	213.7	3.8
80°-90°	55.2	1.0
90°-100°	15.7	0.3
100°-110°	103.0	1.8
110°-120°	196.7	3.5
120°-130°	249.7	4.5
130°-140°	267.1	4.8
140°-150°	249.8	4.5
150°-160°	201.4	3.6
160°-170°	129.9	2.3
170°-180°	44.8	0.8
0°-30°	1307.6	23.5
0°-40°	2071.0	37.2
0°-60°	3421.0	61.4
0°-90°	4113.0	73.8
90°-120°	315.4	5.7
90°-150°	1081.9	19.4
90°-180°	1458.0	26.2
0°-180°	5571.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1780	1780	1780	1780	1780	
5°	1777	1771	1755	1769	1766	169
15°	1692	1680	1646	1643	1634	477
25°	1530	1506	1450	1427	1413	705
35°	1323	1280	1211	1165	1140	827
45°	1079	1029	947	880	856	832
55°	818	763	674	604	578	731
65°	556	497	410	352	335	549
75°	296	245	181	150	142	312
85°	74	46	42	40	40	81
90°	1	5	8	10	11	5
95°	19	7	8	10	10	24
105°	106	108	110	113	100	111
115°	198	199	199	200	200	195
125°	278	280	279	280	280	249
135°	345	345	346	347	348	266
145°	398	399	399	400	400	249
155°	437	437	436	437	436	201
165°	461	459	459	462	458	130
175°	471	469	469	473	468	45
180°	471	471	471	471	471	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1779.6	1779.6	1779.6	1779.6	1779.6
2.5°	1785.1	1779.6	1764.6	1779.6	1778.3
5°	1776.9	1771.4	1755.1	1768.7	1766.0
7.5°	1764.6	1759.2	1738.7	1748.3	1744.2
10°	1745.6	1738.7	1714.2	1719.7	1714.2
12.5°	1721.0	1712.8	1682.9	1685.6	1677.4
15°	1692.4	1680.1	1646.1	1643.4	1633.8
17.5°	1659.7	1642.0	1602.5	1595.7	1582.0
20°	1620.2	1602.5	1556.1	1545.2	1527.5
22.5°	1576.6	1556.1	1505.7	1488.0	1474.4
25°	1530.3	1505.7	1449.9	1426.7	1413.1
27.5°	1482.6	1452.6	1394.0	1366.7	1347.7
30°	1432.1	1398.1	1334.0	1300.0	1278.2
32.5°	1379.0	1339.5	1272.7	1231.8	1211.4
35°	1323.1	1279.5	1211.4	1165.1	1140.5
37.5°	1264.5	1219.6	1144.6	1094.2	1069.7
40°	1201.9	1156.9	1079.2	1022.0	997.5
42.5°	1141.9	1094.2	1012.4	953.9	928.0
45°	1079.2	1028.8	947.0	880.3	855.7
47.5°	1015.2	963.4	878.9	809.4	782.2
50°	949.8	896.6	809.4	741.3	715.4
52.5°	883.0	831.2	741.3	671.8	644.5
55°	817.6	763.1	674.5	603.7	577.8
57.5°	753.5	696.3	609.1	536.9	517.8
60°	684.0	629.5	542.3	471.5	449.7
62.5°	621.4	564.1	474.2	410.2	393.8
65°	556.0	497.4	410.2	351.6	335.2
67.5°	487.8	432.0	350.2	298.4	279.3
70°	423.8	366.6	288.9	243.9	230.3
72.5°	355.7	305.2	233.0	196.2	184.0
75°	295.7	245.3	181.2	149.9	141.7
77.5°	233.0	189.4	134.9	113.1	110.4
80°	173.1	133.5	92.7	88.6	87.2
82.5°	121.3	85.8	66.8	64.0	62.7
85°	73.6	46.3	42.2	39.5	39.5
87.5°	31.3	20.4	19.1	17.7	19.1
90°	1.1	4.9	7.8	9.9	10.6
92.5°	5.3	4.6	7.4	9.5	9.5
95°	19.4	7.4	7.8	9.9	10.2
97.5°	37.0	44.8	7.8	9.5	9.9
100°	57.8	64.1	15.5	9.5	9.9
102.5°	81.1	85.3	89.5	10.2	10.2
105°	106.1	108.2	110.0	113.1	100.4
107.5°	129.0	130.0	132.5	134.3	135.7
110°	152.2	153.3	155.4	156.1	157.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	174.8	176.9	177.6	177.3	178.7
115°	198.1	199.1	198.8	199.5	199.5
117.5°	218.9	220.3	221.3	221.0	221.0
120°	240.0	241.4	241.1	241.8	241.1
122.5°	259.7	260.4	261.1	261.5	260.8
125°	278.4	279.8	279.1	280.2	280.5
127.5°	296.4	296.7	298.5	298.1	297.8
130°	313.7	314.0	315.1	315.4	315.4
132.5°	329.5	330.2	331.6	332.0	331.6
135°	345.4	345.0	346.4	347.1	347.8
137.5°	359.5	359.5	361.2	361.9	361.6
140°	373.2	373.9	374.6	375.7	376.0
142.5°	385.6	387.0	387.3	388.0	388.0
145°	398.2	399.3	399.3	399.6	400.4
147.5°	408.1	410.2	409.9	410.2	410.6
150°	419.0	420.4	420.1	420.1	420.4
152.5°	428.2	429.3	428.5	429.3	428.9
155°	436.7	437.0	435.9	437.4	436.3
157.5°	444.1	444.1	442.6	444.4	442.6
160°	450.4	449.3	449.0	451.1	449.0
162.5°	456.0	454.6	454.3	456.4	453.9
165°	460.6	458.9	458.9	461.7	458.5
167.5°	464.5	462.7	462.4	465.6	462.0
170°	467.7	465.6	465.9	468.7	465.2
172.5°	469.8	467.7	468.0	470.8	467.0
175°	471.2	469.1	469.4	472.6	468.4
177.5°	472.2	469.8	470.5	473.3	469.1
180°	471.2	471.2	471.2	471.2	471.2

(END OF REPORT)