

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: P1025993

Luminaire Tested: S124RDIP-B1020D365UB27-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025993
REPORT IS A COMBINATION OF REPORTS P998903 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-F1
Description: Define 4 Regressed Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

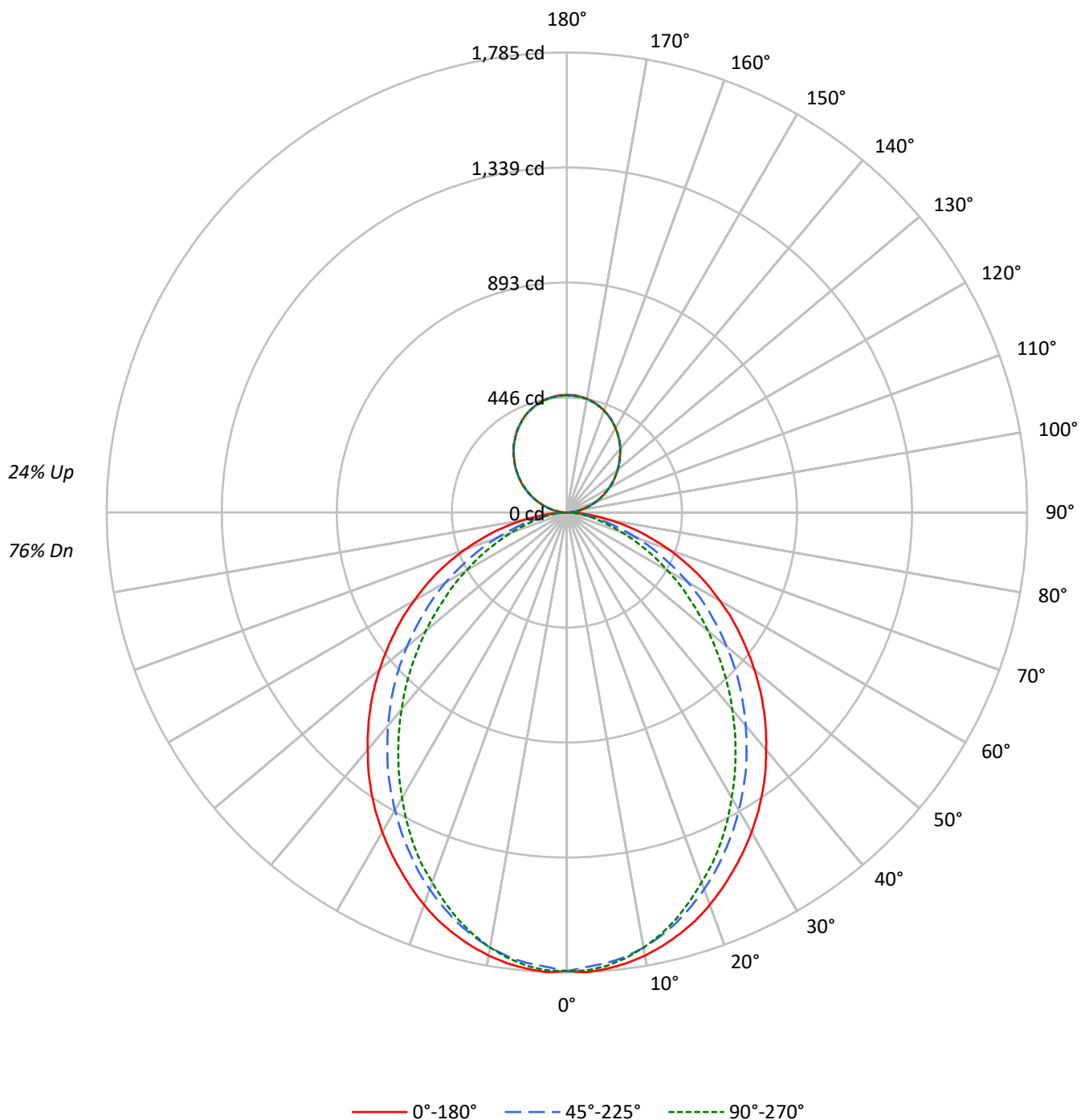
Lumens per Lamp: N/A
Luminaire Lumens: 5377.0 lumens
Efficiency: N/A
Efficacy: 95.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	108	108	108	108	98	98	98	89	89	89	80	80	80
1	104	100	96	92	99	95	92	89	87	84	82	79	77	75	72	70	69
2	95	88	81	76	90	84	78	74	77	72	68	70	66	63	64	61	59
3	87	77	70	64	83	74	67	62	68	62	58	62	58	54	57	53	50
4	80	69	61	55	76	66	59	53	61	55	50	56	51	47	51	47	44
5	74	62	53	47	70	59	52	46	55	48	43	50	45	41	46	42	38
6	68	56	47	41	65	54	46	40	49	43	38	46	40	36	42	38	34
7	63	51	42	37	60	49	41	36	45	39	34	42	36	32	39	34	30
8	59	46	38	33	56	44	37	32	41	35	30	38	33	29	35	31	27
9	55	42	35	29	52	41	34	29	38	32	27	35	30	26	33	28	25
10	52	39	32	27	49	38	31	26	35	29	25	33	28	24	31	26	23

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	3.1
10°-20°	466.6	8.7
20°-30°	673.6	12.5
30°-40°	763.5	14.2
40°-50°	737.1	13.7
50°-60°	612.8	11.4
60°-70°	423.0	7.9
70°-80°	213.7	4.0
80°-90°	55.2	1.0
90°-100°	29.7	0.6
100°-110°	88.9	1.7
110°-120°	151.1	2.8
120°-130°	199.3	3.7
130°-140°	223.8	4.2
140°-150°	220.0	4.1
150°-160°	185.0	3.4
160°-170°	123.1	2.3
170°-180°	43.1	0.8
0°-30°	1307.6	24.3
0°-40°	2071.0	38.5
0°-60°	3421.0	63.6
0°-90°	4113.0	76.5
90°-120°	269.7	5.0
90°-150°	912.8	17.0
90°-180°	1264.0	23.5
0°-180°	5377.0	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	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°	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°	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)