

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: P1026022

Luminaire Tested: S124RDIP-B1020D590UB27-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026022
REPORT IS A COMBINATION OF REPORTS P998942 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D590UB27-4F0-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

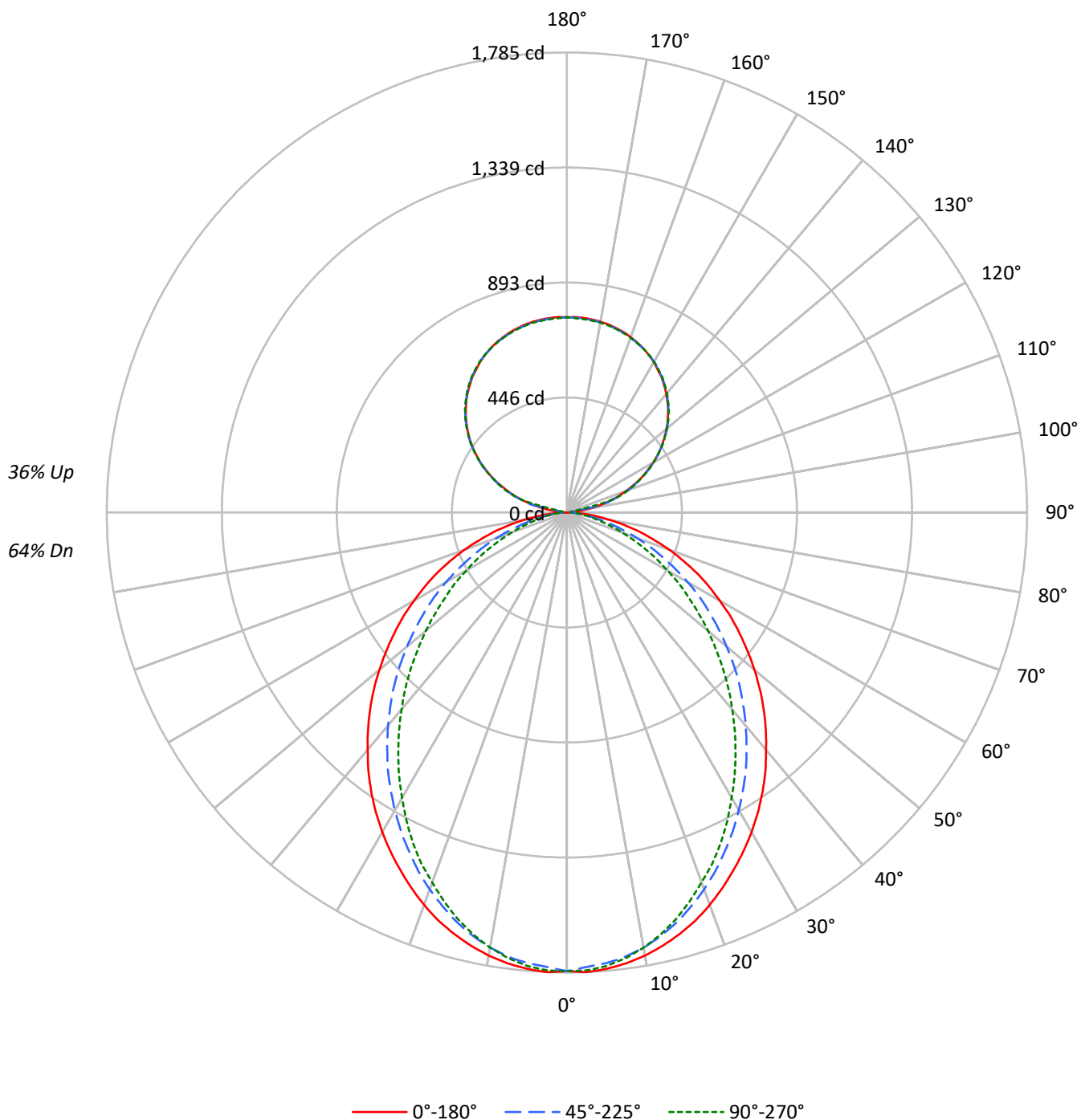
Lumens per Lamp: N/A
Luminaire Lumens: 6458.0 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 62.2
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

TEST NUMBER: P1026022

CATALOG NUMBER: S124RDIP-B1020D590UB27-4F0-XX-W2A-F

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	110	110	110	110	104	104	104	104	91	91	91	79	79	79	69	69	69
1	101	97	93	90	95	91	88	85	80	78	76	70	69	67	61	60	59
2	92	85	79	74	87	80	75	70	71	67	63	62	59	56	54	52	50
3	85	75	68	62	79	71	64	59	63	58	53	55	51	48	48	45	43
4	78	67	59	53	73	63	56	50	56	50	46	50	45	42	44	40	37
5	71	60	52	45	67	56	49	44	50	44	40	45	40	36	39	36	33
6	66	54	46	40	62	51	43	38	46	39	35	41	36	32	36	32	29
7	61	49	41	35	57	46	39	34	41	35	31	37	32	28	33	29	26
8	57	44	37	31	53	42	35	30	38	32	28	34	29	25	30	26	23
9	53	41	33	28	50	39	32	27	35	29	25	31	26	23	28	24	21
10	50	37	30	25	47	36	29	24	32	27	23	29	24	21	26	22	19

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

TEST NUMBER: P1026022

CATALOG NUMBER: S124RDIP-B1020D590UB27-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.3	2.6
10°-20°	466.6	7.2
20°-30°	673.6	10.4
30°-40°	763.5	11.8
40°-50°	737.1	11.4
50°-60°	612.8	9.5
60°-70°	423.0	6.6
70°-80°	213.7	3.3
80°-90°	55.8	0.9
90°-100°	25.2	0.4
100°-110°	165.6	2.6
110°-120°	316.3	4.9
120°-130°	401.5	6.2
130°-140°	429.5	6.7
140°-150°	401.6	6.2
150°-160°	323.9	5.0
160°-170°	208.9	3.2
170°-180°	72.0	1.1
0°-30°	1307.6	20.2
0°-40°	2071.0	32.1
0°-60°	3421.0	53.0
0°-90°	4113.6	63.7
90°-120°	507.0	7.9
90°-150°	1739.7	26.9
90°-180°	2344.0	36.3
0°-180°	6458.0	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°	2	8	12	16	17	6
95°	31	12	12	16	16	38
105°	171	174	177	182	162	179
115°	318	320	320	321	321	313
125°	448	450	449	450	451	400
135°	555	555	557	558	559	428
145°	640	642	642	643	644	400
155°	702	703	701	703	702	324
165°	741	738	738	742	737	209
175°	758	754	755	760	753	72
180°	758	758	758	758	758	

TEST NUMBER: P1026022

CATALOG NUMBER: S124RDIP-B1020D590UB27-4F0-XX-W2A-F

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°	1.7	7.9	12.5	15.9	17.0
92.5°	8.5	7.4	11.9	15.3	15.3
95°	31.2	11.9	12.5	15.9	16.4
97.5°	59.5	72.0	12.5	15.3	15.9
100°	92.9	103.1	24.9	15.3	15.9
102.5°	130.3	137.1	143.9	16.4	16.4
105°	170.6	174.0	176.8	181.9	161.5
107.5°	207.4	209.1	213.1	215.9	218.2
110°	244.8	246.5	249.9	251.0	252.7



TEST NUMBER: P1026022

CATALOG NUMBER: S124RDIP-B1020D590UB27-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	281.1	284.5	285.6	285.0	287.3
115°	318.5	320.2	319.6	320.7	320.7
117.5°	351.9	354.2	355.9	355.3	355.3
120°	385.9	388.2	387.6	388.7	387.6
122.5°	417.6	418.8	419.9	420.5	419.3
125°	447.7	449.9	448.8	450.5	451.1
127.5°	476.6	477.1	480.0	479.4	478.8
130°	504.3	504.9	506.6	507.2	507.2
132.5°	529.8	531.0	533.2	533.8	533.2
135°	555.3	554.8	557.0	558.2	559.3
137.5°	578.0	578.0	580.8	582.0	581.4
140°	600.1	601.2	602.4	604.1	604.6
142.5°	619.9	622.2	622.8	623.9	623.9
145°	640.3	642.0	642.0	642.6	643.7
147.5°	656.2	659.6	659.0	659.6	660.2
150°	673.8	676.0	675.5	675.5	676.0
152.5°	688.5	690.2	689.1	690.2	689.6
155°	702.1	702.7	701.0	703.2	701.5
157.5°	714.0	714.0	711.7	714.6	711.7
160°	724.2	722.5	721.9	725.3	721.9
162.5°	733.3	731.0	730.4	733.8	729.9
165°	740.6	737.8	737.8	742.3	737.2
167.5°	746.9	744.0	743.5	748.6	742.9
170°	752.0	748.6	749.1	753.7	748.0
172.5°	755.4	752.0	752.5	757.1	750.8
175°	757.6	754.2	754.8	759.9	753.1
177.5°	759.3	755.4	756.5	761.0	754.2
180°	757.6	757.6	757.6	757.6	757.6

(END OF REPORT)