

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: P1026030

Luminaire Tested: S124RDIP-B1020D590UB30-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026030
REPORT IS A COMBINATION OF REPORTS P998960 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D590UB30-4F0-XX-W2A-F4
Description: Define 4 Regressed Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589}
{m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

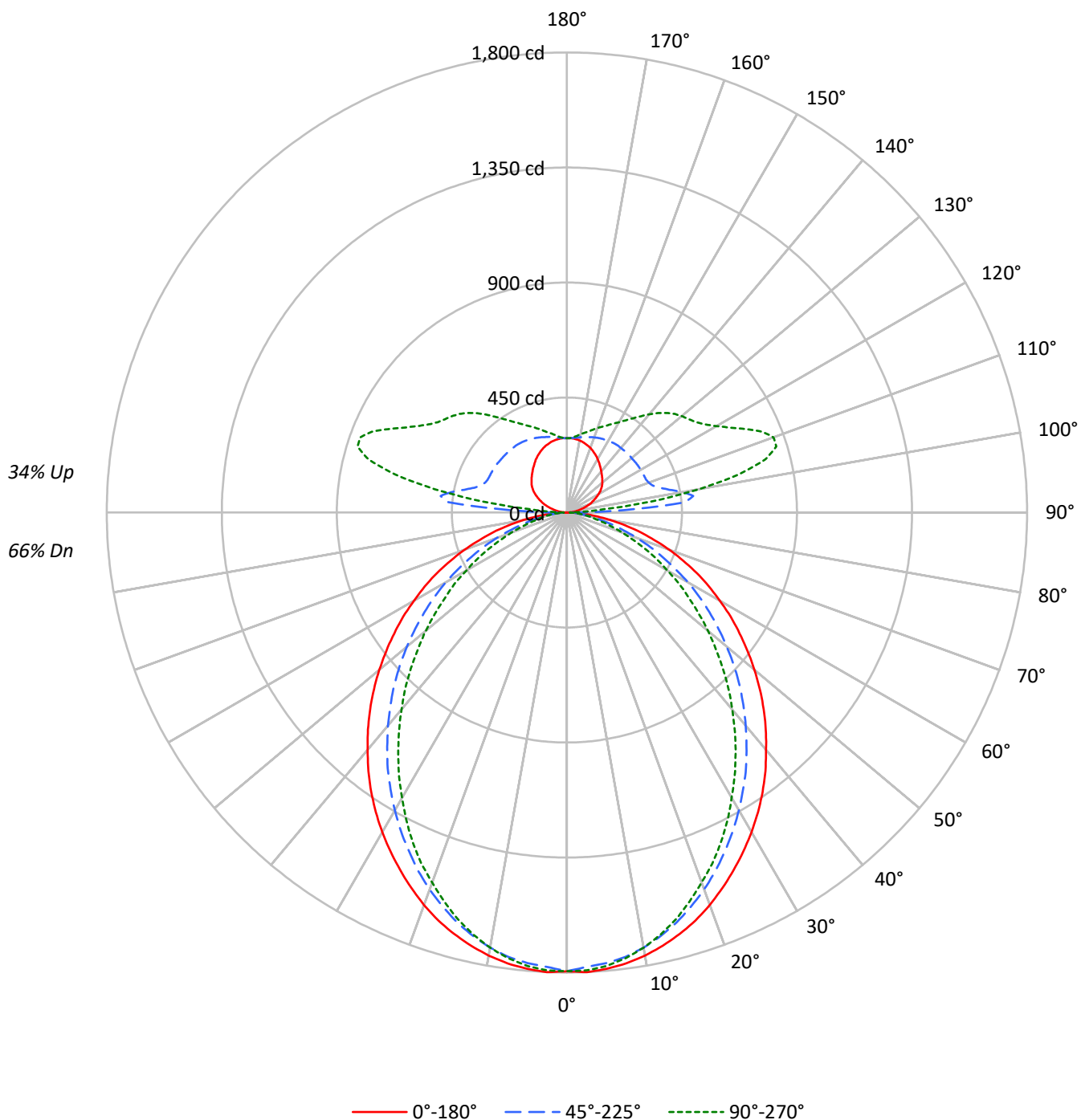
Lumens per Lamp: N/A
Luminaire Lumens: 6271.3 lumens
Efficiency: N/A
Efficacy: 100.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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: P1026030

CATALOG NUMBER: S124RDIP-B1020D590UB30-4F0-XX-W2A-F4

Luminous Intensity Polar Plot



TEST NUMBER: P1026030

CATALOG NUMBER: S124RDIP-B1020D590UB30-4F0-XX-W2A-F4

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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71
1	102	97	94	90	96	92	89	86	82	79	77	72	70	68	63	62	61
2	93	86	79	74	87	81	75	71	72	68	64	64	61	58	56	54	52
3	85	76	68	62	80	71	65	60	64	59	54	57	53	49	50	47	44
4	78	67	59	53	73	64	56	51	57	51	47	51	46	43	45	41	38
5	72	60	52	46	67	57	50	44	51	45	41	46	41	37	41	37	34
6	66	54	46	40	62	51	44	39	46	40	36	41	37	33	37	33	30
7	61	49	41	35	58	47	39	34	42	36	32	38	33	29	34	30	27
8	57	45	37	31	54	43	35	30	39	33	28	35	30	26	31	27	24
9	53	41	33	28	50	39	32	27	35	30	25	32	27	24	29	25	22
10	50	38	30	26	47	36	29	25	33	27	23	30	25	21	27	23	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14636	14636	14636
5°	14637	14200	14202
10°	14513	13752	13589
15°	14313	13195	12865
20°	14052	12559	12040
25°	13726	11872	11235
30°	13406	11172	10330
35°	13055	10462	9446
40°	12638	9698	8537
45°	12245	8941	7638
50°	11800	8113	6725
55°	11318	7265	5782
60°	10785	6364	4850
65°	10268	5329	3954
70°	9535	4242	3021
75°	8593	3087	2113
80°	7177	1894	1520
85°	5399	1092	836

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12245 cd/sqm

TEST NUMBER: P1026030

CATALOG NUMBER: S124RDIP-B1020D590UB30-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.8	2.7
10°-20°	470.6	7.5
20°-30°	679.4	10.8
30°-40°	769.9	12.3
40°-50°	743.4	11.9
50°-60°	618.1	9.9
60°-70°	426.6	6.8
70°-80°	215.6	3.4
80°-90°	55.9	0.9
90°-100°	216.1	3.4
100°-110°	439.5	7.0
110°-120°	391.8	6.2
120°-130°	329.1	5.2
130°-140°	274.6	4.4
140°-150°	209.7	3.3
150°-160°	147.4	2.4
160°-170°	86.7	1.4
170°-180°	28.2	0.4
0°-30°	1318.7	21.0
0°-40°	2088.6	33.3
0°-60°	3450.1	55.0
0°-90°	4148.1	66.1
90°-120°	1047.4	16.7
90°-150°	1860.8	29.7
90°-180°	2123.0	33.9
0°-180°	6271.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1795	1795	1795	1795	1795	
5°	1792	1786	1770	1784	1781	170
15°	1707	1694	1660	1657	1648	481
25°	1543	1518	1462	1439	1425	711
35°	1334	1290	1222	1175	1150	834
45°	1088	1038	955	888	863	839
55°	824	770	680	609	583	738
65°	561	502	414	355	338	554
75°	298	247	183	151	143	315
85°	74	47	43	40	40	81
90°	1	5	10	11	12	6
95°	19	59	466	231	140	21
105°	67	97	375	807	804	71
115°	118	148	334	642	772	117
125°	164	195	333	547	616	146
135°	195	232	330	485	551	151
145°	225	257	328	409	450	141
155°	256	276	319	361	377	118
165°	278	287	306	324	329	79
175°	290	291	293	297	296	28
180°	291	291	291	291	291	

TEST NUMBER: P1026030

CATALOG NUMBER: S124RDIP-B1020D590UB30-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1794.8	1794.8	1794.8	1794.8	1794.8
2.5°	1800.3	1794.8	1779.7	1794.8	1793.4
5°	1792.0	1786.5	1770.0	1783.8	1781.0
7.5°	1779.7	1774.2	1753.5	1763.2	1759.0
10°	1760.4	1753.5	1728.8	1734.3	1728.8
12.5°	1735.7	1727.4	1697.2	1699.9	1691.7
15°	1706.8	1694.4	1660.1	1657.3	1647.7
17.5°	1673.8	1656.0	1616.1	1609.2	1595.5
20°	1634.0	1616.1	1569.4	1558.4	1540.5
22.5°	1590.0	1569.4	1518.5	1500.7	1486.9
25°	1543.3	1518.5	1462.2	1438.8	1425.1
27.5°	1495.2	1464.9	1405.9	1378.4	1359.1
30°	1444.3	1410.0	1345.4	1311.0	1289.0
32.5°	1390.7	1350.9	1283.5	1242.3	1221.7
35°	1334.4	1290.4	1221.7	1175.0	1150.2
37.5°	1275.3	1230.0	1154.4	1103.5	1078.8
40°	1212.1	1166.7	1088.4	1030.7	1005.9
42.5°	1151.6	1103.5	1021.1	962.0	935.9
45°	1088.4	1037.6	955.1	887.8	863.0
47.5°	1023.8	971.6	886.4	816.3	788.8
50°	957.9	904.3	816.3	747.6	721.5
52.5°	890.5	838.3	747.6	677.5	650.0
55°	824.5	769.6	680.3	608.8	582.7
57.5°	760.0	702.2	614.3	541.5	522.2
60°	689.9	634.9	547.0	475.5	453.5
62.5°	626.7	568.9	478.2	413.6	397.2
65°	560.7	501.6	413.6	354.6	338.1
67.5°	492.0	435.6	353.2	301.0	281.7
70°	427.4	369.7	291.3	246.0	232.2
72.5°	358.7	307.8	235.0	197.9	185.5
75°	298.2	247.4	182.8	151.2	142.9
77.5°	235.0	191.0	136.1	114.1	111.3
80°	174.5	134.7	93.4	89.3	88.0
82.5°	122.3	86.6	67.3	64.6	63.2
85°	74.2	46.7	42.6	39.9	39.9
87.5°	31.6	20.6	19.2	17.9	19.2
90°	0.6	4.6	10.3	11.4	12.0
92.5°	8.0	44.0	224.0	74.1	52.0
95°	18.9	59.4	465.8	230.6	139.5
97.5°	31.4	65.7	498.4	471.0	334.9
100°	43.4	74.3	459.5	651.6	524.1
102.5°	54.9	84.6	410.9	764.8	688.7
105°	66.9	96.9	374.9	807.3	804.2
107.5°	80.0	109.4	351.5	794.5	859.0
110°	93.2	122.0	340.6	748.8	860.2

TEST NUMBER: P1026030

CATALOG NUMBER: S124RDIP-B1020D590UB30-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	105.7	134.6	335.5	692.8	826.5
115°	117.7	147.8	334.4	642.4	772.2
117.5°	130.3	160.0	333.8	603.0	719.0
120°	142.9	172.0	333.8	576.4	675.6
122.5°	154.3	183.8	333.2	559.0	641.3
125°	164.0	194.9	332.6	546.7	616.1
127.5°	173.2	205.2	331.5	535.0	600.1
130°	180.6	215.2	330.9	521.0	586.4
132.5°	188.0	223.8	330.4	504.4	571.0
135°	194.9	232.0	329.8	485.2	551.0
137.5°	201.8	239.2	329.8	464.6	527.5
140°	209.2	245.8	329.2	444.7	501.8
142.5°	217.2	251.8	329.2	426.1	474.4
145°	224.6	257.2	328.1	409.2	449.8
147.5°	233.2	262.4	326.4	395.2	427.0
150°	241.2	267.2	324.6	382.4	408.1
152.5°	248.6	271.8	321.8	371.5	390.9
155°	255.5	275.8	318.9	361.2	376.7
157.5°	262.3	279.5	316.1	351.5	363.5
160°	268.6	282.6	312.6	341.8	351.5
162.5°	274.3	285.2	309.2	332.4	340.1
165°	278.3	286.9	305.8	323.8	328.6
167.5°	282.9	288.4	302.4	316.4	319.5
170°	285.8	289.5	298.9	309.0	310.9
172.5°	288.6	290.4	295.5	302.4	302.4
175°	290.4	290.9	293.2	297.2	296.1
177.5°	291.5	290.9	291.5	293.5	291.5
180°	290.9	290.9	290.9	290.9	290.9

(END OF REPORT)