

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: P1013238

Luminaire Tested: S124RDIP-B1020D590UB2750-4F0-XX-W2A-F_3000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1013238
REPORT IS A COMBINATION OF REPORTS P998951 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D590UB2750-4F0-XX-W2A-F_3000K
Description: Define 4 Regressed Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589}
{m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

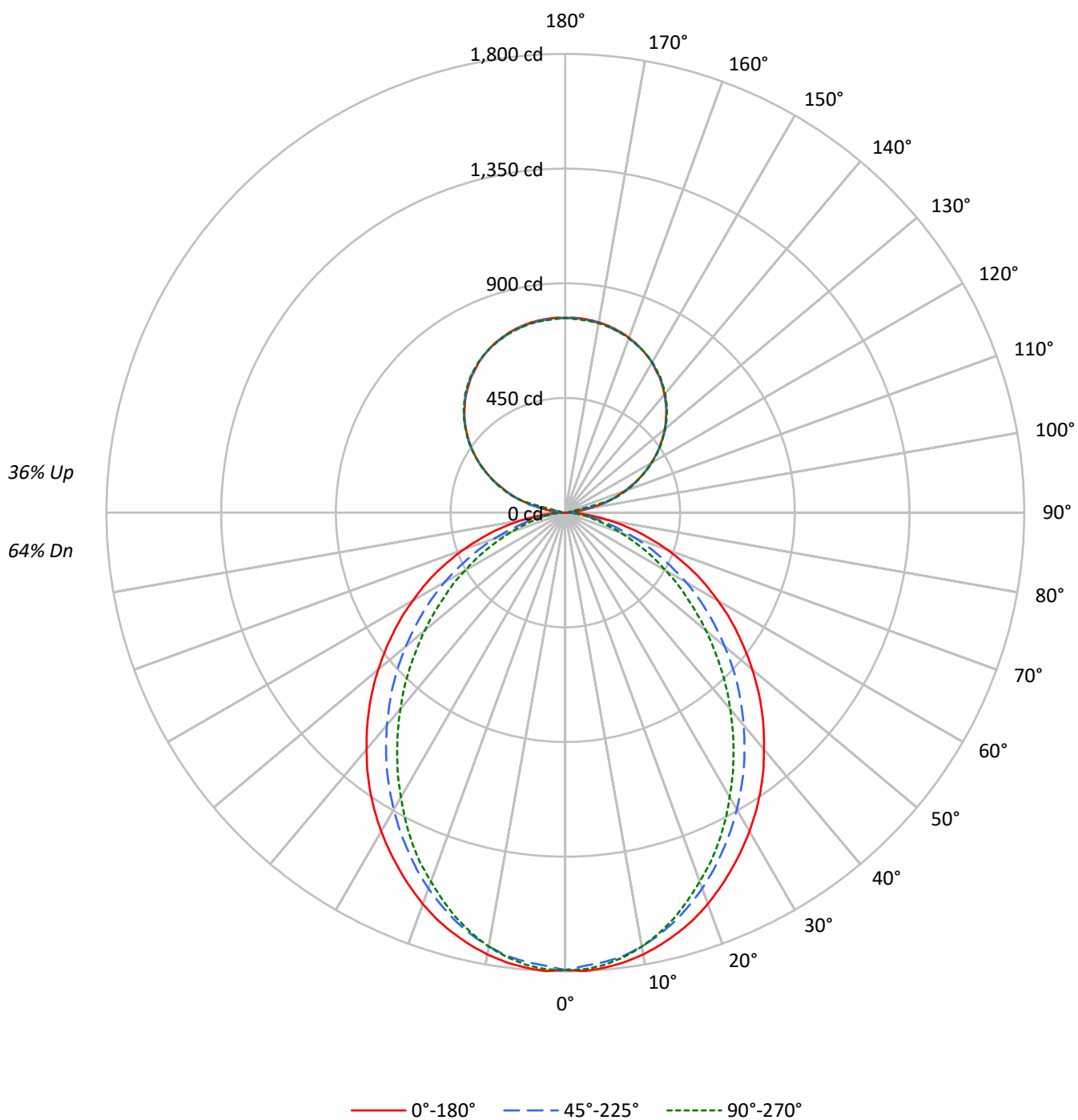
Lumens per Lamp: N/A
Luminaire Lumens: 6513.0 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

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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	50	30	10
RCR																				
0	110	110	110	110	104	104	104	104	91	91	91	79	79	79	69	69	69	64		
1	101	97	93	90	95	91	88	85	80	78	76	70	69	67	61	60	59	54		
2	92	85	79	74	87	80	75	70	71	67	63	62	59	56	54	52	50	46		
3	85	75	68	62	79	71	64	59	63	58	53	55	51	48	48	45	43	39		
4	78	67	59	53	73	63	56	50	56	50	46	50	45	42	44	40	37	34		
5	71	60	52	45	67	56	49	44	50	44	40	45	40	36	39	36	33	30		
6	66	54	46	40	62	51	43	38	46	39	35	41	36	32	36	32	29	26		
7	61	49	41	35	57	46	39	34	41	35	31	37	32	28	33	29	26	23		
8	57	44	37	31	53	42	35	30	38	32	28	34	29	25	30	26	23	21		
9	53	41	33	28	50	39	32	27	35	29	25	31	26	23	28	24	21	19		
10	50	37	30	25	47	36	29	24	32	27	23	29	24	21	26	22	19	17		

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.8	2.6
10°-20°	470.6	7.2
20°-30°	679.4	10.4
30°-40°	769.9	11.8
40°-50°	743.4	11.4
50°-60°	618.1	9.5
60°-70°	426.6	6.5
70°-80°	215.6	3.3
80°-90°	56.3	0.9
90°-100°	25.4	0.4
100°-110°	167.0	2.6
110°-120°	319.0	4.9
120°-130°	404.9	6.2
130°-140°	433.2	6.7
140°-150°	405.0	6.2
150°-160°	326.6	5.0
160°-170°	210.7	3.2
170°-180°	72.6	1.1
0°-30°	1318.7	20.2
0°-40°	2088.6	32.1
0°-60°	3450.1	53.0
0°-90°	4148.6	63.7
90°-120°	511.4	7.9
90°-150°	1754.5	26.9
90°-180°	2364.0	36.3
0°-180°	6513.0	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°	2	8	13	16	17	6
95°	31	12	13	16	17	39
105°	172	176	178	184	163	180
115°	321	323	322	324	324	316
125°	452	454	453	454	455	403
135°	560	560	562	563	564	432
145°	646	648	648	648	649	404
155°	708	709	707	709	708	327
165°	747	744	744	749	744	211
175°	764	761	761	766	760	73
180°	764	764	764	764	764	

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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°	1.7	8.0	12.6	16.0	17.1
92.5°	8.6	7.4	12.0	15.4	15.4
95°	31.4	12.0	12.6	16.0	16.6
97.5°	60.0	72.6	12.6	15.4	16.0
100°	93.7	104.0	25.1	15.4	16.0
102.5°	131.4	138.3	145.2	16.6	16.6
105°	172.0	175.5	178.3	183.5	162.9
107.5°	209.2	210.9	214.9	217.7	220.0
110°	246.9	248.6	252.0	253.2	254.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.5	286.9	288.0	287.5	289.8
115°	321.2	322.9	322.3	323.5	323.5
117.5°	354.9	357.2	358.9	358.3	358.3
120°	389.2	391.5	390.9	392.1	390.9
122.5°	421.2	422.3	423.5	424.1	422.9
125°	451.5	453.8	452.6	454.4	454.9
127.5°	480.6	481.2	484.1	483.5	482.9
130°	508.6	509.2	510.9	511.5	511.5
132.5°	534.4	535.5	537.8	538.4	537.8
135°	560.1	559.5	561.8	562.9	564.1
137.5°	582.9	582.9	585.8	586.9	586.4
140°	605.2	606.4	607.5	609.2	609.8
142.5°	625.2	627.5	628.1	629.2	629.2
145°	645.8	647.5	647.5	648.1	649.2
147.5°	661.8	665.2	664.7	665.2	665.8
150°	679.5	681.8	681.2	681.2	681.8
152.5°	694.4	696.1	695.0	696.1	695.5
155°	708.1	708.7	707.0	709.2	707.5
157.5°	720.1	720.1	717.8	720.7	717.8
160°	730.4	728.7	728.1	731.5	728.1
162.5°	739.5	737.2	736.7	740.1	736.1
165°	747.0	744.1	744.1	748.7	743.5
167.5°	753.3	750.4	749.8	755.0	749.2
170°	758.4	755.0	755.5	760.1	754.4
172.5°	761.8	758.4	759.0	763.5	757.3
175°	764.1	760.7	761.3	766.4	759.5
177.5°	765.8	761.8	763.0	767.5	760.7
180°	764.1	764.1	764.1	764.1	764.1

(END OF REPORT)