

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: P1025999

Luminaire Tested: S124RDIP-B1020D365UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025999
REPORT IS A COMBINATION OF REPORTS P998919 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D365UB30-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589}
{m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

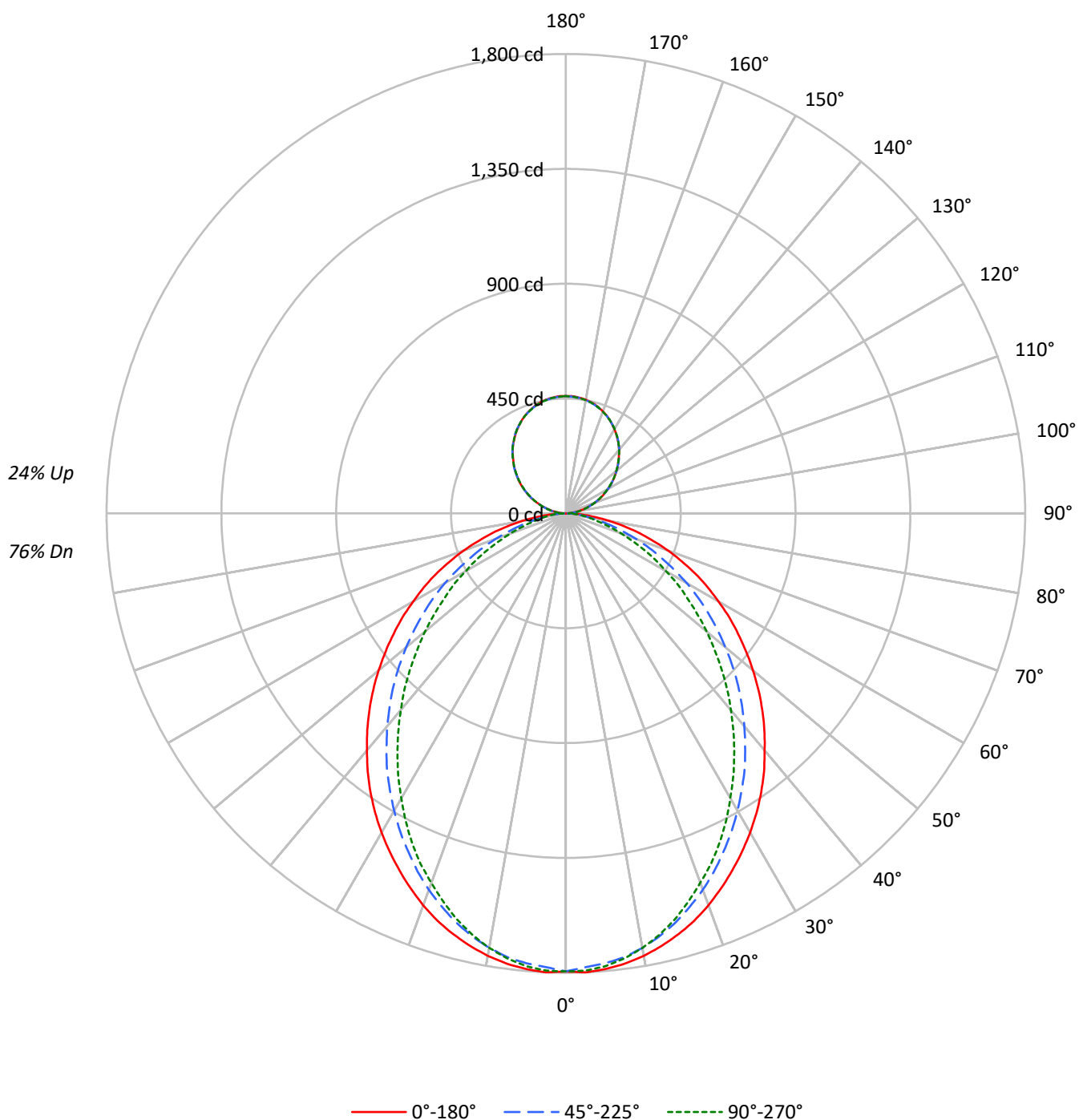
Lumens per Lamp: N/A
Luminaire Lumens: 5423.0 lumens
Efficiency: N/A
Efficacy: 96.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 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°	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	3.1
10°-20°	470.6	8.7
20°-30°	679.4	12.5
30°-40°	769.9	14.2
40°-50°	743.4	13.7
50°-60°	618.1	11.4
60°-70°	426.6	7.9
70°-80°	215.6	4.0
80°-90°	55.7	1.0
90°-100°	30.0	0.6
100°-110°	89.7	1.7
110°-120°	152.4	2.8
120°-130°	201.0	3.7
130°-140°	225.8	4.2
140°-150°	221.9	4.1
150°-160°	186.6	3.4
160°-170°	124.2	2.3
170°-180°	43.5	0.8
0°-30°	1318.7	24.3
0°-40°	2088.6	38.5
0°-60°	3450.1	63.6
0°-90°	4148.0	76.5
90°-120°	272.1	5.0
90°-150°	920.8	17.0
90°-180°	1275.0	23.5
0°-180°	5423.0	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°	1	5	8	10	11	6
95°	21	24	27	28	28	23
105°	83	83	85	86	87	88
115°	155	155	154	154	154	153
125°	226	226	225	225	224	201
135°	291	293	293	292	291	225
145°	354	355	355	355	354	221
155°	405	405	405	406	405	186
165°	441	440	439	441	440	124
175°	459	457	457	459	457	44
180°	460	460	460	460	460	

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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°	1.1	5.0	7.8	10.0	10.7
92.5°	9.2	13.9	15.6	16.7	17.1
95°	21.3	24.5	27.0	28.1	28.1
97.5°	34.1	37.0	39.8	41.2	41.2
100°	49.8	51.2	54.4	55.1	55.1
102.5°	66.1	66.5	69.3	70.4	70.7
105°	82.8	83.2	84.6	85.7	86.7
107.5°	100.2	100.6	100.9	102.4	102.0
110°	118.0	118.7	118.3	117.6	118.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	136.5	136.5	135.8	135.8	135.8
115°	155.0	155.0	154.2	153.9	153.5
117.5°	172.4	172.4	172.0	170.9	169.9
120°	189.8	191.2	190.1	188.4	189.1
122.5°	207.9	208.3	207.9	206.8	205.1
125°	225.7	225.7	225.3	224.6	223.9
127.5°	241.7	242.7	242.0	241.3	241.0
130°	258.7	259.8	259.8	259.1	257.7
132.5°	276.1	276.9	276.5	275.8	275.4
135°	291.1	293.2	293.2	292.5	291.4
137.5°	307.8	308.8	309.5	308.5	308.8
140°	324.5	325.2	325.2	324.8	324.5
142.5°	339.8	340.5	340.1	340.1	340.1
145°	353.6	355.0	355.4	355.0	354.0
147.5°	367.8	369.6	369.3	368.9	368.5
150°	380.6	382.1	382.1	382.1	381.7
152.5°	392.7	393.4	393.8	394.8	393.8
155°	405.2	405.2	404.8	406.2	404.8
157.5°	415.8	415.1	415.1	416.2	415.1
160°	425.1	424.7	424.3	425.4	423.6
162.5°	433.6	432.5	432.2	434.3	432.5
165°	441.0	440.0	439.3	441.4	440.0
167.5°	447.1	445.7	445.7	447.8	445.7
170°	452.1	450.3	450.6	452.8	450.3
172.5°	455.6	454.2	454.2	456.7	454.2
175°	458.8	457.0	456.7	459.2	456.7
177.5°	460.2	458.5	458.5	460.9	458.1
180°	459.5	459.5	459.5	459.5	459.5

(END OF REPORT)