

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: P1025940

Luminaire Tested: S124RDIP-B1020D1035UB30-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025940
REPORT IS A COMBINATION OF REPORTS P998840 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D1035UB30-4F0-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

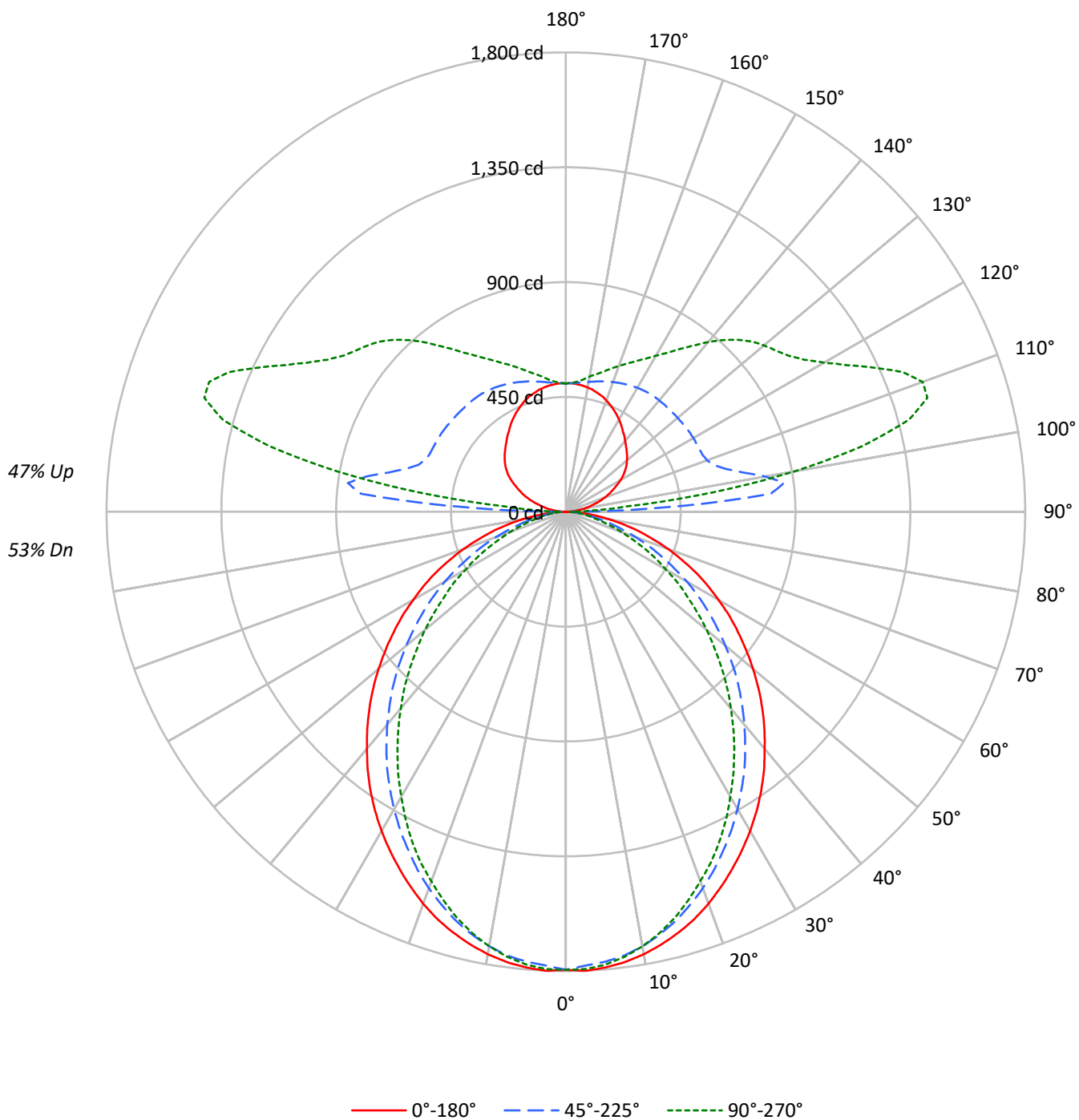
Lumens per Lamp: N/A
Luminaire Lumens: 7820.4 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 75.3
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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59
1	99	95	91	87	91	88	84	82	75	73	70	63	62	60	53	51	50
2	90	83	77	72	83	77	72	67	66	62	59	56	53	51	47	45	43
3	82	73	66	60	76	68	62	57	59	54	50	50	46	43	42	39	37
4	76	65	57	51	70	60	54	48	52	47	43	44	40	37	37	34	32
5	69	58	50	44	64	54	47	42	47	41	37	40	36	32	34	30	28
6	64	52	44	38	59	49	41	36	42	37	32	36	32	28	31	27	25
7	59	47	39	34	55	44	37	32	38	33	29	33	29	25	28	25	22
8	55	43	35	30	51	40	33	28	35	29	26	30	26	23	26	22	20
9	51	39	32	27	48	37	30	25	32	27	23	28	24	20	24	20	18
10	48	36	29	24	45	34	27	23	30	24	21	26	22	19	22	19	16

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	2.2
10°-20°	470.6	6.0
20°-30°	679.4	8.7
30°-40°	769.9	9.8
40°-50°	743.4	9.5
50°-60°	618.1	7.9
60°-70°	426.6	5.5
70°-80°	215.6	2.8
80°-90°	56.7	0.7
90°-100°	373.7	4.8
100°-110°	760.0	9.7
110°-120°	677.5	8.7
120°-130°	569.1	7.3
130°-140°	474.9	6.1
140°-150°	362.7	4.6
150°-160°	254.9	3.3
160°-170°	149.9	1.9
170°-180°	48.8	0.6
0°-30°	1318.7	16.9
0°-40°	2088.6	26.7
0°-60°	3450.1	44.1
0°-90°	4148.9	53.1
90°-120°	1811.2	23.2
90°-150°	3217.8	41.1
90°-180°	3671.0	46.9
0°-180°	7820.4	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	8	18	20	21	6
95°	33	103	806	399	241	36
105°	116	168	648	1396	1391	123
115°	204	255	578	1111	1335	202
125°	284	337	575	945	1066	253
135°	337	401	570	839	953	260
145°	388	445	567	708	778	244
155°	442	477	552	625	651	204
165°	481	496	529	560	568	136
175°	502	503	507	514	512	48
180°	503	503	503	503	503	

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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°	1.0	7.9	17.8	19.8	20.8
92.5°	13.8	76.2	387.4	128.0	89.9
95°	32.6	102.8	805.5	398.8	241.2
97.5°	54.4	113.7	861.8	814.4	579.2
100°	75.1	128.5	794.6	1126.8	906.3
102.5°	94.9	146.3	710.6	1322.4	1191.0
105°	115.6	167.6	648.4	1396.0	1390.6
107.5°	138.4	189.2	607.8	1373.8	1485.5
110°	161.1	211.0	589.1	1294.8	1487.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	182.8	232.8	580.2	1197.9	1429.2
115°	203.6	255.4	578.2	1111.0	1335.3
117.5°	225.3	276.8	577.2	1042.7	1243.4
120°	247.1	297.5	577.2	996.8	1168.2
122.5°	266.9	317.8	576.2	966.6	1108.9
125°	283.7	337.0	575.2	945.4	1065.5
127.5°	299.5	354.8	573.2	925.1	1037.8
130°	312.3	372.1	572.3	900.9	1014.1
132.5°	325.2	387.0	571.3	872.2	987.4
135°	337.0	401.2	570.3	839.1	952.8
137.5°	348.9	413.6	570.3	803.6	912.3
140°	361.7	425.0	569.3	769.0	867.8
142.5°	375.6	435.4	569.3	736.8	820.3
145°	388.4	444.8	567.3	707.6	777.8
147.5°	403.3	453.6	564.4	683.4	738.3
150°	417.1	462.0	561.4	661.2	705.7
152.5°	429.9	470.0	556.4	642.4	676.0
155°	441.8	476.9	551.5	624.7	651.3
157.5°	453.7	483.3	546.6	607.8	628.6
160°	464.5	488.8	540.6	591.0	607.8
162.5°	474.4	493.2	534.7	574.8	588.1
165°	481.3	496.2	528.8	559.9	568.3
167.5°	489.2	498.6	522.8	547.0	552.5
170°	494.2	500.6	516.9	534.2	537.7
172.5°	499.1	502.1	511.0	522.8	522.8
175°	502.1	503.1	507.0	513.9	512.0
177.5°	504.1	503.1	504.1	507.5	504.1
180°	503.1	503.1	503.1	503.1	503.1

(END OF REPORT)