

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: P1025970

Luminaire Tested: S124RDIP-B1020D1205UB30-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025970
REPORT IS A COMBINATION OF REPORTS P998880 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D1205UB30-4F0-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

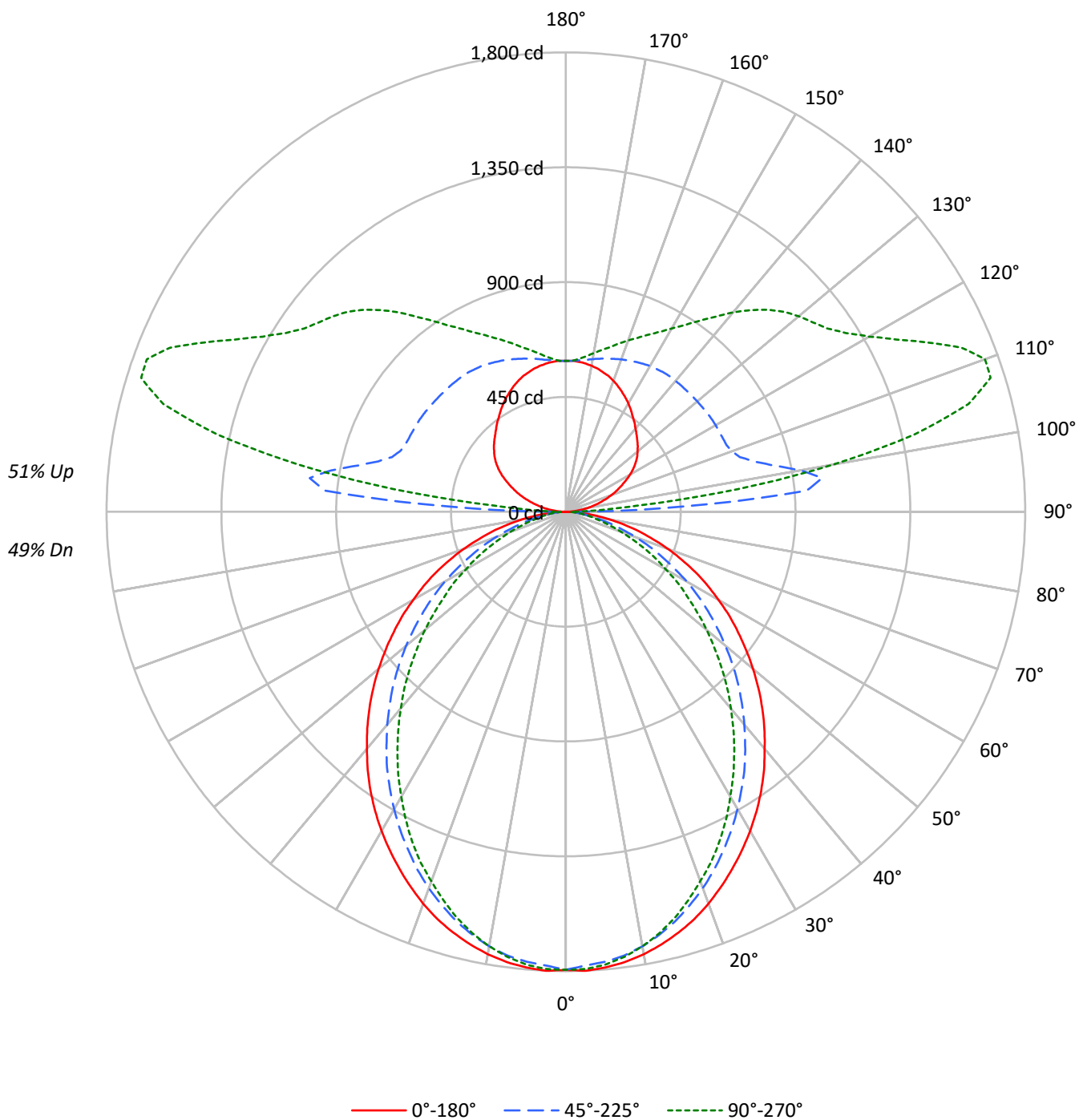
Lumens per Lamp: N/A
Luminaire Lumens: 8462.6 lumens
Efficiency: N/A
Efficacy: 103.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 81.8
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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55
1	98	94	90	86	90	86	83	80	73	71	69	61	59	58	49	48	47
2	89	82	76	71	82	76	71	66	64	60	57	54	51	48	44	42	40
3	82	72	65	59	75	67	61	56	57	52	48	48	44	41	39	36	34
4	75	64	56	50	69	59	53	47	51	45	41	43	39	36	35	32	30
5	69	57	49	43	63	53	46	41	45	40	36	38	34	31	32	29	26
6	63	51	43	38	58	48	41	36	41	35	31	35	30	27	29	26	23
7	59	46	39	33	54	43	36	31	37	32	28	32	27	24	26	23	21
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19
9	51	39	31	26	47	36	29	25	31	26	22	27	22	19	22	19	17
10	47	35	28	24	44	33	27	22	29	24	20	25	21	18	21	18	15

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	2.0
10°-20°	470.6	5.6
20°-30°	679.4	8.0
30°-40°	769.9	9.1
40°-50°	743.4	8.8
50°-60°	618.1	7.3
60°-70°	426.6	5.0
70°-80°	215.6	2.5
80°-90°	57.0	0.7
90°-100°	439.0	5.2
100°-110°	893.0	10.6
110°-120°	795.9	9.4
120°-130°	668.6	7.9
130°-140°	557.9	6.6
140°-150°	426.1	5.0
150°-160°	299.5	3.5
160°-170°	176.2	2.1
170°-180°	57.3	0.7
0°-30°	1318.7	15.6
0°-40°	2088.6	24.7
0°-60°	3450.1	40.8
0°-90°	4149.3	49.0
90°-120°	2127.9	25.1
90°-150°	3780.4	44.7
90°-180°	4313.0	51.0
0°-180°	8462.6	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	9	21	23	24	7
95°	38	121	946	469	283	42
105°	136	197	762	1640	1634	145
115°	239	300	679	1305	1569	237
125°	333	396	676	1111	1252	297
135°	396	471	670	986	1119	306
145°	456	523	666	831	914	286
155°	519	560	648	734	765	239
165°	566	583	621	658	668	160
175°	590	591	596	604	602	56
180°	591	591	591	591	591	

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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°	1.2	9.3	20.9	23.2	24.4
92.5°	16.3	89.4	455.2	150.4	105.7
95°	38.3	120.8	946.4	468.6	283.3
97.5°	63.9	133.5	1012.5	956.8	680.4
100°	88.2	151.0	933.6	1323.8	1064.8
102.5°	111.5	171.9	834.9	1553.6	1399.2
105°	135.9	196.8	761.7	1640.2	1633.8
107.5°	162.6	222.4	714.1	1614.0	1745.2
110°	189.3	247.9	692.1	1521.2	1747.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	214.8	273.5	681.6	1407.4	1679.1
115°	239.2	300.2	679.3	1305.2	1568.7
117.5°	264.7	325.2	678.1	1225.0	1460.8
120°	290.3	349.6	678.1	1171.0	1372.5
122.5°	313.5	373.3	677.0	1135.6	1302.8
125°	333.3	396.0	675.8	1110.6	1251.7
127.5°	351.8	416.8	673.5	1086.8	1219.2
130°	366.9	437.2	672.3	1058.4	1191.4
132.5°	382.0	454.6	671.2	1024.8	1160.0
135°	396.0	471.4	670.0	985.8	1119.4
137.5°	409.9	486.0	670.0	944.0	1071.8
140°	425.0	499.3	668.8	903.4	1019.5
142.5°	441.2	511.5	668.8	865.6	963.8
145°	456.3	522.6	666.5	831.4	913.8
147.5°	473.8	533.0	663.0	803.0	867.4
150°	490.0	542.8	659.5	776.8	829.1
152.5°	505.1	552.2	653.7	754.8	794.2
155°	519.0	560.3	647.9	733.8	765.2
157.5°	533.0	567.8	642.1	714.1	738.5
160°	545.8	574.2	635.2	694.4	714.1
162.5°	557.4	579.4	628.2	675.2	690.9
165°	565.5	582.9	621.2	657.8	667.7
167.5°	574.8	585.8	614.3	642.8	649.1
170°	580.6	588.2	607.3	627.6	631.7
172.5°	586.4	589.8	600.3	614.2	614.3
175°	589.9	591.0	595.7	603.8	601.5
177.5°	592.2	591.0	592.2	596.2	592.2
180°	591.0	591.0	591.0	591.0	591.0

(END OF REPORT)