

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: P1025969

Luminaire Tested: S124RDIP-B1020D1205UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025969
REPORT IS A COMBINATION OF REPORTS P998879 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-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

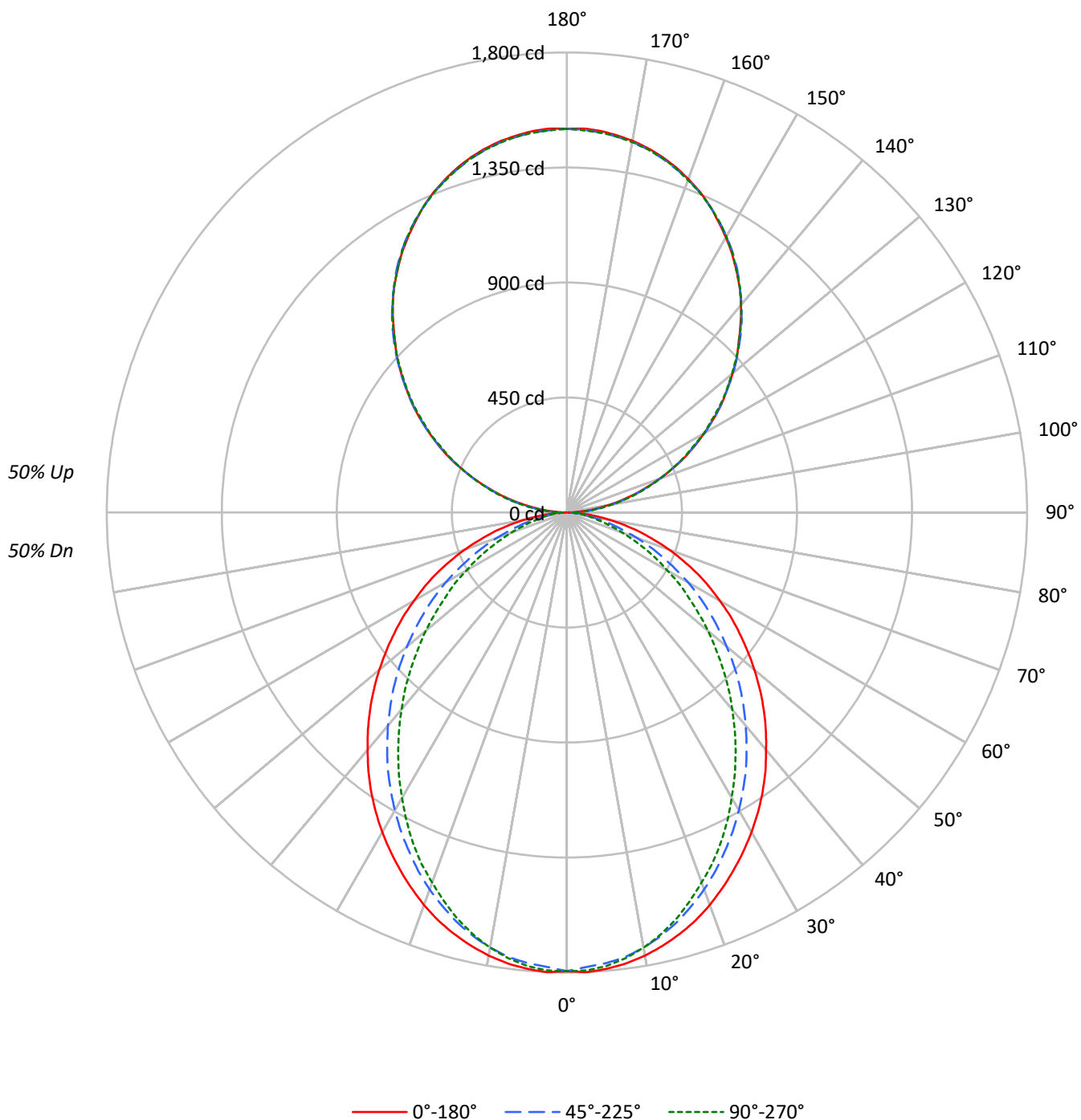
Lumens per Lamp: N/A
Luminaire Lumens: 8316.0 lumens
Efficiency: N/A
Efficacy: 101.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	56	56	56
1	98	94	90	87	90	87	83	81	73	71	69	61	60	58	50	49	48	48	48	43
2	89	82	76	71	82	76	71	67	65	61	58	54	51	49	44	42	41	41	41	36
3	82	72	65	60	75	67	61	56	57	53	49	48	45	42	39	37	35	35	35	31
4	75	64	57	51	69	60	53	48	51	46	42	43	39	36	35	33	30	30	30	27
5	69	57	49	43	63	53	46	41	46	40	36	39	34	31	32	29	27	27	27	23
6	63	52	44	38	58	48	41	36	41	36	32	35	31	27	29	26	23	23	23	21
7	59	47	39	33	54	43	36	31	37	32	28	32	28	24	27	23	21	21	21	18
8	55	42	35	29	50	40	33	28	34	29	25	29	25	22	25	21	19	19	19	16
9	51	39	31	26	47	36	30	25	31	26	22	27	23	20	23	19	17	17	17	15
10	48	36	28	24	44	33	27	22	29	24	20	25	21	18	21	18	16	16	16	14

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	5.7
20°-30°	679.4	8.2
30°-40°	769.9	9.3
40°-50°	743.4	8.9
50°-60°	618.1	7.4
60°-70°	426.6	5.1
70°-80°	215.6	2.6
80°-90°	57.9	0.7
90°-100°	97.9	1.2
100°-110°	293.1	3.5
110°-120°	498.0	6.0
120°-130°	656.7	7.9
130°-140°	737.6	8.9
140°-150°	725.0	8.7
150°-160°	609.8	7.3
160°-170°	405.7	4.9
170°-180°	142.1	1.7
0°-30°	1318.7	15.9
0°-40°	2088.6	25.1
0°-60°	3450.1	41.5
0°-90°	4150.2	49.9
90°-120°	889.0	10.7
90°-150°	3008.3	36.2
90°-180°	4166.0	50.1
0°-180°	8316.0	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°	4	16	26	32	35	9
95°	70	80	88	92	92	75
105°	271	272	276	280	283	287
115°	506	506	504	503	502	499
125°	737	737	736	734	732	657
135°	951	958	958	956	952	736
145°	1155	1160	1161	1160	1156	723
155°	1324	1324	1323	1327	1323	609
165°	1441	1438	1435	1442	1438	406
175°	1499	1493	1492	1500	1492	142
180°	1501	1501	1501	1501	1501	

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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°	3.5	16.3	25.5	32.5	34.8
92.5°	30.2	45.3	51.1	54.6	55.7
95°	69.7	80.1	88.2	91.7	91.7
97.5°	111.5	120.8	130.1	134.7	134.7
100°	162.6	167.2	177.7	180.0	180.0
102.5°	216.0	217.1	226.4	229.9	231.1
105°	270.6	271.7	276.4	279.8	283.3
107.5°	327.4	328.6	329.8	334.4	333.3
110°	385.5	387.8	386.7	384.3	387.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	445.9	445.9	443.6	443.6	443.6
115°	506.3	506.3	503.9	502.8	501.6
117.5°	563.2	563.2	562.0	558.5	555.0
120°	620.1	624.7	621.2	615.4	617.7
122.5°	679.3	680.4	679.3	675.8	670.0
125°	737.3	737.3	736.2	733.9	731.5
127.5°	789.6	793.1	790.8	788.4	787.3
130°	845.3	848.8	848.8	846.5	841.8
132.5°	902.2	904.5	903.4	901.1	899.9
135°	951.0	958.0	958.0	955.6	952.2
137.5°	1005.6	1009.1	1011.4	1007.9	1009.1
140°	1060.1	1062.5	1062.5	1061.3	1060.1
142.5°	1110.1	1112.4	1111.2	1111.2	1111.2
145°	1155.4	1160.0	1161.2	1160.0	1156.5
147.5°	1201.8	1207.6	1206.4	1205.3	1204.1
150°	1243.6	1248.3	1248.3	1248.3	1247.1
152.5°	1283.1	1285.4	1286.6	1290.1	1286.6
155°	1323.7	1323.7	1322.6	1327.2	1322.6
157.5°	1358.6	1356.2	1356.2	1359.7	1356.2
160°	1388.8	1387.6	1386.4	1389.9	1384.1
162.5°	1416.6	1413.1	1412.0	1418.9	1413.1
165°	1441.0	1437.5	1435.2	1442.2	1437.5
167.5°	1460.7	1456.1	1456.1	1463.1	1456.1
170°	1477.0	1471.2	1472.4	1479.3	1471.2
172.5°	1488.6	1484.0	1484.0	1492.1	1484.0
175°	1499.1	1493.3	1492.1	1500.2	1492.1
177.5°	1503.7	1497.9	1497.9	1506.0	1496.7
180°	1501.4	1501.4	1501.4	1501.4	1501.4

(END OF REPORT)