

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: P1026059

Luminaire Tested: S124RDIP-B1020D810UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026059
REPORT IS A COMBINATION OF REPORTS P998999 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D810UB30-4F0-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

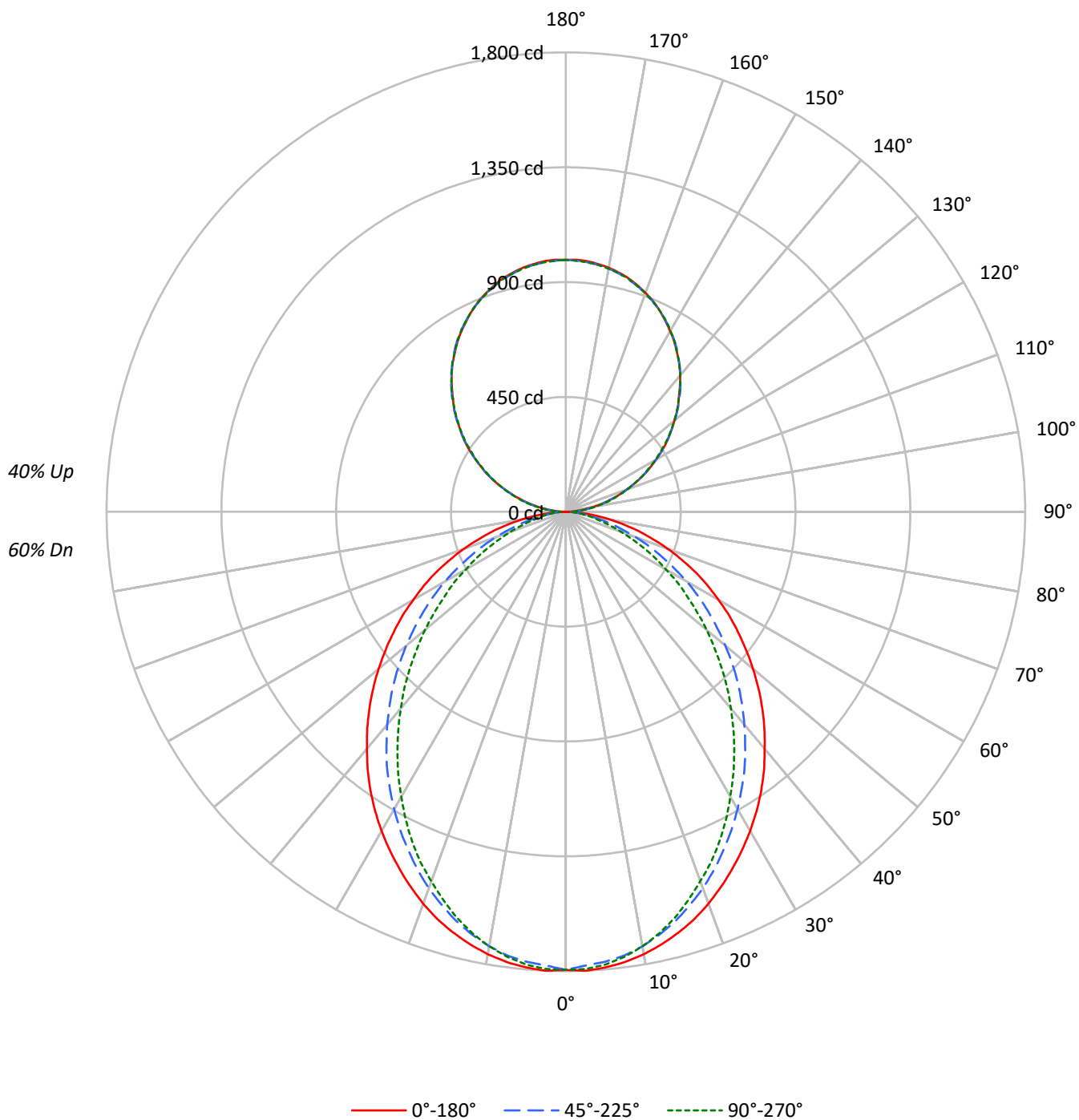
Lumens per Lamp: N/A
Luminaire Lumens: 6888.0 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 67.9
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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66
1	100	96	92	89	94	90	87	84	79	76	74	68	66	65	58	57	56
2	92	84	78	73	86	79	74	69	69	65	62	60	57	55	52	50	48
3	84	74	67	61	78	70	63	58	61	56	52	54	50	46	46	43	41
4	77	66	58	52	72	62	55	50	55	49	45	48	44	40	41	38	36
5	71	59	51	45	66	56	48	43	49	43	39	43	39	35	38	34	31
6	65	53	45	39	61	50	43	38	44	39	34	39	34	31	34	30	28
7	60	48	40	35	56	45	38	33	40	35	30	36	31	27	31	27	25
8	56	44	36	31	53	41	34	29	37	31	27	33	28	25	29	25	22
9	52	40	33	28	49	38	31	26	34	28	24	30	26	22	27	23	20
10	49	37	30	25	46	35	28	24	31	26	22	28	23	20	25	21	18

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	2.5
10°-20°	470.6	6.8
20°-30°	679.4	9.9
30°-40°	769.9	11.2
40°-50°	743.4	10.8
50°-60°	618.1	9.0
60°-70°	426.6	6.2
70°-80°	215.6	3.1
80°-90°	56.8	0.8
90°-100°	64.3	0.9
100°-110°	192.7	2.8
110°-120°	327.4	4.8
120°-130°	431.8	6.3
130°-140°	485.0	7.0
140°-150°	476.7	6.9
150°-160°	400.9	5.8
160°-170°	266.7	3.9
170°-180°	93.4	1.4
0°-30°	1318.7	19.1
0°-40°	2088.6	30.3
0°-60°	3450.1	50.1
0°-90°	4149.1	60.2
90°-120°	584.5	8.5
90°-150°	1977.9	28.7
90°-180°	2739.0	39.8
0°-180°	6888.0	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	11	17	21	23	8
95°	46	53	58	60	60	50
105°	178	179	182	184	186	189
115°	333	333	331	331	330	328
125°	485	485	484	482	481	432
135°	625	630	630	628	626	484
145°	760	763	763	763	760	475
155°	870	870	870	873	870	401
165°	947	945	944	948	945	267
175°	986	982	981	986	981	94
180°	987	987	987	987	987	

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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°	2.3	10.7	16.8	21.4	22.9
92.5°	19.8	29.8	33.6	35.9	36.6
95°	45.8	52.7	58.0	60.3	60.3
97.5°	73.3	79.4	85.5	88.6	88.6
100°	106.9	109.9	116.8	118.3	118.3
102.5°	142.0	142.8	148.9	151.2	151.9
105°	177.9	178.6	181.7	184.0	186.3
107.5°	215.3	216.1	216.8	219.9	219.1
110°	253.5	255.0	254.2	252.7	255.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	293.2	293.2	291.6	291.6	291.6
115°	332.9	332.9	331.3	330.6	329.8
117.5°	370.3	370.3	369.5	367.2	364.9
120°	407.7	410.7	408.4	404.6	406.1
122.5°	446.6	447.4	446.6	444.3	440.5
125°	484.8	484.8	484.0	482.5	481.0
127.5°	519.1	521.4	519.9	518.4	517.6
130°	555.8	558.1	558.1	556.5	553.5
132.5°	593.2	594.7	594.0	592.4	591.7
135°	625.3	629.8	629.8	628.3	626.0
137.5°	661.1	663.4	664.9	662.7	663.4
140°	697.0	698.5	698.5	697.8	697.0
142.5°	729.8	731.4	730.6	730.6	730.6
145°	759.6	762.7	763.4	762.7	760.4
147.5°	790.2	794.0	793.2	792.4	791.7
150°	817.6	820.7	820.7	820.7	819.9
152.5°	843.6	845.1	845.9	848.2	845.9
155°	870.3	870.3	869.5	872.6	869.5
157.5°	893.2	891.7	891.7	894.0	891.7
160°	913.1	912.3	911.5	913.8	910.0
162.5°	931.4	929.1	928.3	932.9	929.1
165°	947.4	945.1	943.6	948.2	945.1
167.5°	960.4	957.3	957.3	961.9	957.3
170°	971.1	967.3	968.0	972.6	967.3
172.5°	978.7	975.7	975.7	981.0	975.7
175°	985.6	981.8	981.0	986.4	981.0
177.5°	988.6	984.8	984.8	990.2	984.1
180°	987.1	987.1	987.1	987.1	987.1

(END OF REPORT)