

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: P1026060

Luminaire Tested: S124RDIP-B1020D810UB30-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026060
REPORT IS A COMBINATION OF REPORTS P999000 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-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

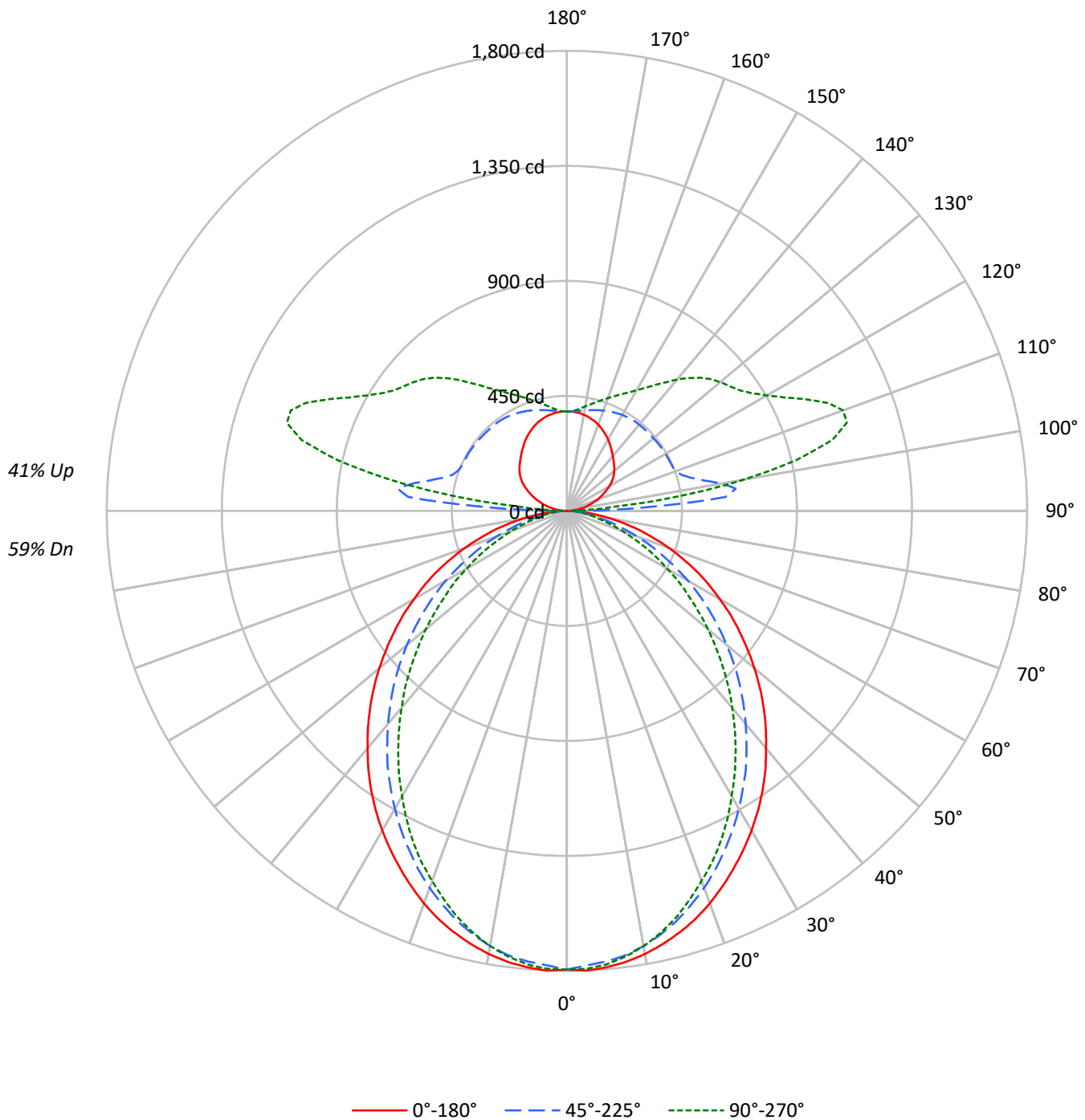
Lumens per Lamp: N/A
Luminaire Lumens: 6985.7 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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

TEST NUMBER: P1026060

CATALOG NUMBER: S124RDIP-B1020D810UB30-4F0-XX-W2A-F4

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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65
1	100	96	92	89	93	90	86	83	78	76	74	68	66	64	58	57	55
2	92	84	78	73	85	79	74	69	69	65	61	60	57	54	51	49	47
3	84	74	67	61	78	70	63	58	61	56	52	53	49	46	46	43	40
4	77	66	58	52	71	62	55	50	54	49	45	47	43	40	41	38	35
5	71	59	51	45	66	55	48	43	49	43	39	43	38	35	37	34	31
6	65	53	45	39	61	50	43	37	44	38	34	39	34	31	34	30	27
7	60	48	40	34	56	45	38	33	40	34	30	35	31	27	31	27	24
8	56	44	36	31	52	41	34	29	37	31	27	32	28	24	28	25	22
9	52	40	33	27	49	38	31	26	34	28	24	30	25	22	26	23	20
10	49	37	30	25	46	35	28	24	31	26	22	28	23	20	24	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

TEST NUMBER: P1026060

CATALOG NUMBER: S124RDIP-B1020D810UB30-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.8	2.4
10°-20°	470.6	6.7
20°-30°	679.4	9.7
30°-40°	769.9	11.0
40°-50°	743.4	10.6
50°-60°	618.1	8.8
60°-70°	426.6	6.1
70°-80°	215.6	3.1
80°-90°	56.2	0.8
90°-100°	288.8	4.1
100°-110°	587.3	8.4
110°-120°	523.5	7.5
120°-130°	439.8	6.3
130°-140°	367.0	5.3
140°-150°	280.3	4.0
150°-160°	197.0	2.8
160°-170°	115.9	1.7
170°-180°	37.7	0.5
0°-30°	1318.7	18.9
0°-40°	2088.6	29.9
0°-60°	3450.1	49.4
0°-90°	4148.5	59.4
90°-120°	1399.6	20.0
90°-150°	2486.6	35.6
90°-180°	2837.0	40.6
0°-180°	6985.7	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	6	14	15	16	6
95°	25	79	622	308	186	28
105°	89	129	501	1079	1075	95
115°	157	197	447	858	1032	156
125°	219	260	444	731	823	195
135°	260	310	441	648	736	201
145°	300	344	438	547	601	188
155°	341	369	426	483	503	157
165°	372	383	409	433	439	105
175°	388	389	392	397	396	37
180°	389	389	389	389	389	

TEST NUMBER: P1026060

CATALOG NUMBER: S124RDIP-B1020D810UB30-4F0-XX-W2A-F4

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°	0.8	6.1	13.7	15.3	16.0
92.5°	10.7	58.8	299.4	99.0	69.5
95°	25.2	79.4	622.5	308.2	186.4
97.5°	42.0	87.8	666.0	629.4	447.6
100°	58.0	99.3	614.1	870.8	700.4
102.5°	73.3	113.0	549.2	1022.0	920.4
105°	89.4	129.4	501.0	1078.8	1074.6
107.5°	106.9	146.2	469.7	1061.6	1148.0
110°	124.5	163.1	455.2	1000.6	1149.5



TEST NUMBER: P1026060

CATALOG NUMBER: S124RDIP-B1020D810UB30-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	141.3	179.9	448.3	925.7	1104.4
115°	157.3	197.4	446.8	858.5	1031.9
117.5°	174.1	213.9	446.0	805.8	960.8
120°	190.9	229.9	446.0	770.3	902.8
122.5°	206.2	245.6	445.3	747.0	857.0
125°	219.2	260.5	444.5	730.6	823.4
127.5°	231.4	274.2	443.0	714.9	802.0
130°	241.4	287.6	442.2	696.2	783.6
132.5°	251.3	299.0	441.5	674.0	763.0
135°	260.4	310.1	440.7	648.4	736.3
137.5°	269.6	319.6	440.7	621.0	705.0
140°	279.5	328.5	439.9	594.2	670.6
142.5°	290.2	336.4	439.9	569.4	633.9
145°	300.2	343.7	438.4	546.9	601.1
147.5°	311.6	350.5	436.1	528.2	570.5
150°	322.3	357.0	433.8	511.0	545.3
152.5°	332.2	363.2	430.0	496.4	522.4
155°	341.4	368.6	426.2	482.7	503.3
157.5°	350.6	373.5	422.4	469.7	485.8
160°	359.0	377.7	417.8	456.8	469.7
162.5°	366.6	381.2	413.2	444.2	454.4
165°	372.0	383.4	408.6	432.7	439.2
167.5°	378.1	385.3	404.0	422.8	427.0
170°	381.9	386.8	399.5	412.8	415.5
172.5°	385.7	388.0	394.9	404.0	404.0
175°	388.0	388.8	391.8	397.2	395.6
177.5°	389.5	388.8	389.5	392.2	389.5
180°	388.8	388.8	388.8	388.8	388.8

(END OF REPORT)