

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: P1026029

Luminaire Tested: S124RDIP-B1020D590UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026029
REPORT IS A COMBINATION OF REPORTS P998959 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D590UB30-4F0-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

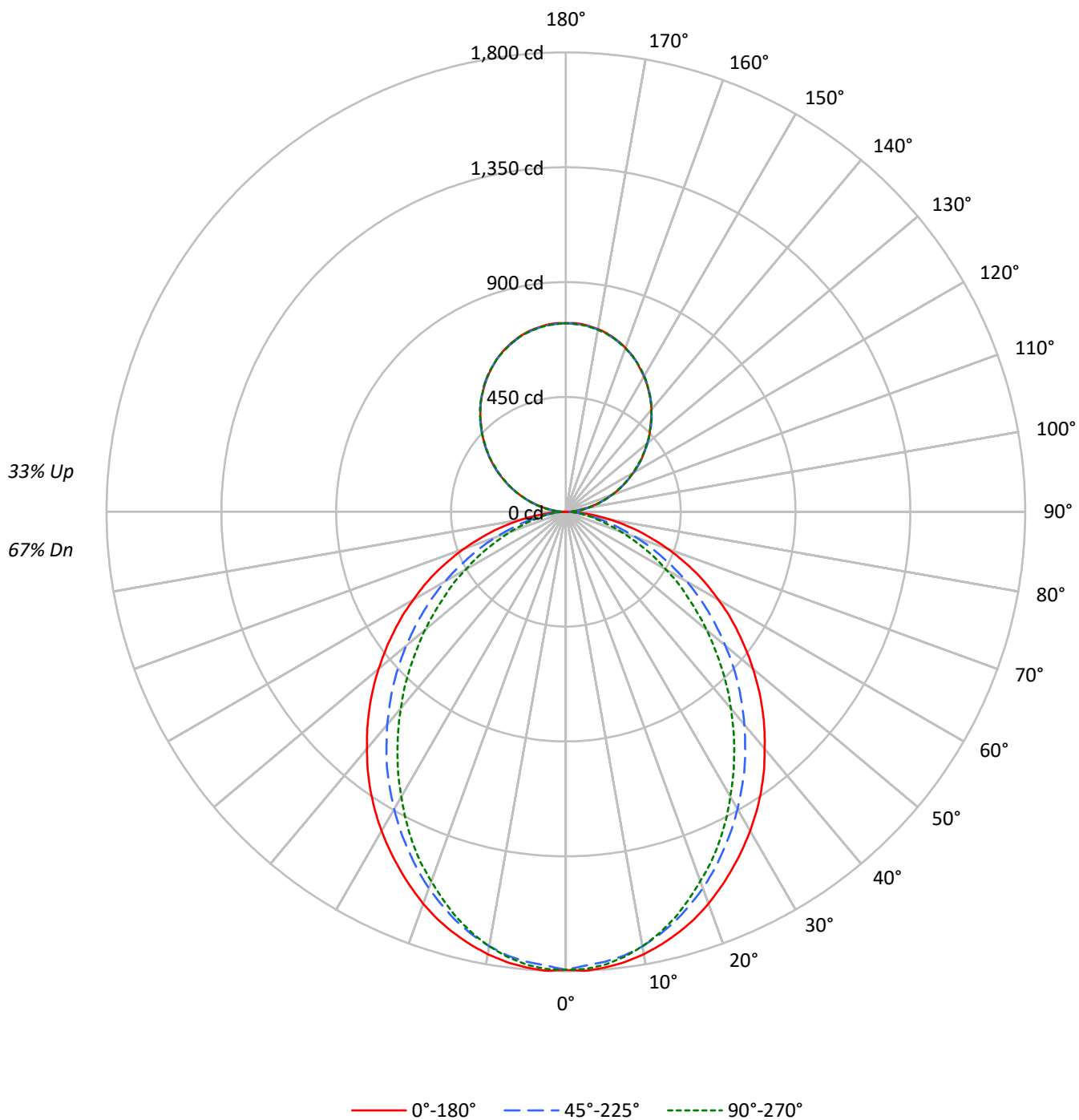
Lumens per Lamp: N/A
Luminaire Lumens: 6199.0 lumens
Efficiency: N/A
Efficacy: 99.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 62.2
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: P1026029

CATALOG NUMBER: S124RDIP-B1020D590UB30-4F0-XX-W2A-F1

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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72
1	102	98	94	90	96	92	89	86	82	79	77	73	71	69	64	63	61
2	93	86	80	74	88	81	76	71	72	68	64	64	61	58	57	54	52
3	85	76	68	62	80	72	65	60	64	59	55	57	53	50	51	47	45
4	78	67	59	53	73	64	57	51	57	51	47	51	47	43	45	42	39
5	72	60	52	46	68	57	50	44	51	45	41	46	41	37	41	37	34
6	66	54	46	40	62	52	44	39	47	40	36	42	37	33	37	33	30
7	62	49	41	35	58	47	39	34	42	36	32	38	33	29	34	30	27
8	57	45	37	32	54	43	36	30	39	33	28	35	30	26	32	27	24
9	53	41	33	28	50	39	32	27	36	30	26	32	27	24	29	25	22
10	50	38	30	26	47	36	29	25	33	27	23	30	25	22	27	23	20

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: P1026029

CATALOG NUMBER: S124RDIP-B1020D590UB30-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.8	2.7
10°-20°	470.6	7.6
20°-30°	679.4	11.0
30°-40°	769.9	12.4
40°-50°	743.4	12.0
50°-60°	618.1	10.0
60°-70°	426.6	6.9
70°-80°	215.6	3.5
80°-90°	56.3	0.9
90°-100°	48.2	0.8
100°-110°	144.3	2.3
110°-120°	245.1	4.0
120°-130°	323.2	5.2
130°-140°	363.1	5.9
140°-150°	356.8	5.8
150°-160°	300.1	4.8
160°-170°	199.7	3.2
170°-180°	69.9	1.1
0°-30°	1318.7	21.3
0°-40°	2088.6	33.7
0°-60°	3450.1	55.7
0°-90°	4148.6	66.9
90°-120°	437.5	7.1
90°-150°	1480.7	23.9
90°-180°	2050.0	33.1
0°-180°	6199.0	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	8	13	16	17	7
95°	34	39	43	45	45	37
105°	133	134	136	138	140	141
115°	249	249	248	248	247	246
125°	363	363	362	361	360	323
135°	468	472	472	470	469	362
145°	569	571	572	571	569	356
155°	652	652	651	653	651	300
165°	709	708	706	710	708	200
175°	738	735	734	738	734	70
180°	739	739	739	739	739	



TEST NUMBER: P1026029

CATALOG NUMBER: S124RDIP-B1020D590UB30-4F0-XX-W2A-F1

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°	1.7	8.0	12.6	16.0	17.1
92.5°	14.9	22.3	25.1	26.9	27.4
95°	34.3	39.4	43.4	45.2	45.2
97.5°	54.9	59.4	64.0	66.3	66.3
100°	80.0	82.3	87.4	88.6	88.6
102.5°	106.3	106.9	111.4	113.2	113.7
105°	133.2	133.7	136.0	137.7	139.5
107.5°	161.2	161.7	162.3	164.6	164.0
110°	189.7	190.9	190.3	189.2	190.9

TEST NUMBER: P1026029

CATALOG NUMBER: S124RDIP-B1020D590UB30-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	219.5	219.5	218.3	218.3	218.3
115°	249.2	249.2	248.0	247.5	246.9
117.5°	277.2	277.2	276.6	274.9	273.2
120°	305.2	307.5	305.8	302.9	304.1
122.5°	334.3	334.9	334.3	332.6	329.8
125°	362.9	362.9	362.3	361.2	360.1
127.5°	388.6	390.4	389.2	388.1	387.5
130°	416.1	417.8	417.8	416.6	414.4
132.5°	444.1	445.2	444.7	443.5	442.9
135°	468.1	471.5	471.5	470.4	468.7
137.5°	494.9	496.7	497.8	496.1	496.7
140°	521.8	522.9	522.9	522.4	521.8
142.5°	546.4	547.5	547.0	547.0	547.0
145°	568.7	571.0	571.5	571.0	569.2
147.5°	591.5	594.4	593.8	593.2	592.7
150°	612.1	614.4	614.4	614.4	613.8
152.5°	631.5	632.7	633.3	635.0	633.3
155°	651.5	651.5	651.0	653.3	651.0
157.5°	668.7	667.5	667.5	669.3	667.5
160°	683.5	683.0	682.4	684.1	681.3
162.5°	697.3	695.6	695.0	698.4	695.6
165°	709.3	707.6	706.4	709.8	707.6
167.5°	719.0	716.7	716.7	720.1	716.7
170°	727.0	724.1	724.7	728.1	724.1
172.5°	732.7	730.4	730.4	734.4	730.4
175°	737.8	735.0	734.4	738.4	734.4
177.5°	740.1	737.3	737.3	741.3	736.7
180°	739.0	739.0	739.0	739.0	739.0

(END OF REPORT)