

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: P1026024

Luminaire Tested: S124RDIP-B1020D590UB27-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026024
REPORT IS A COMBINATION OF REPORTS P998944 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D590UB27-4F0-XX-W2A-F4
Description: Define 4 Regressed Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

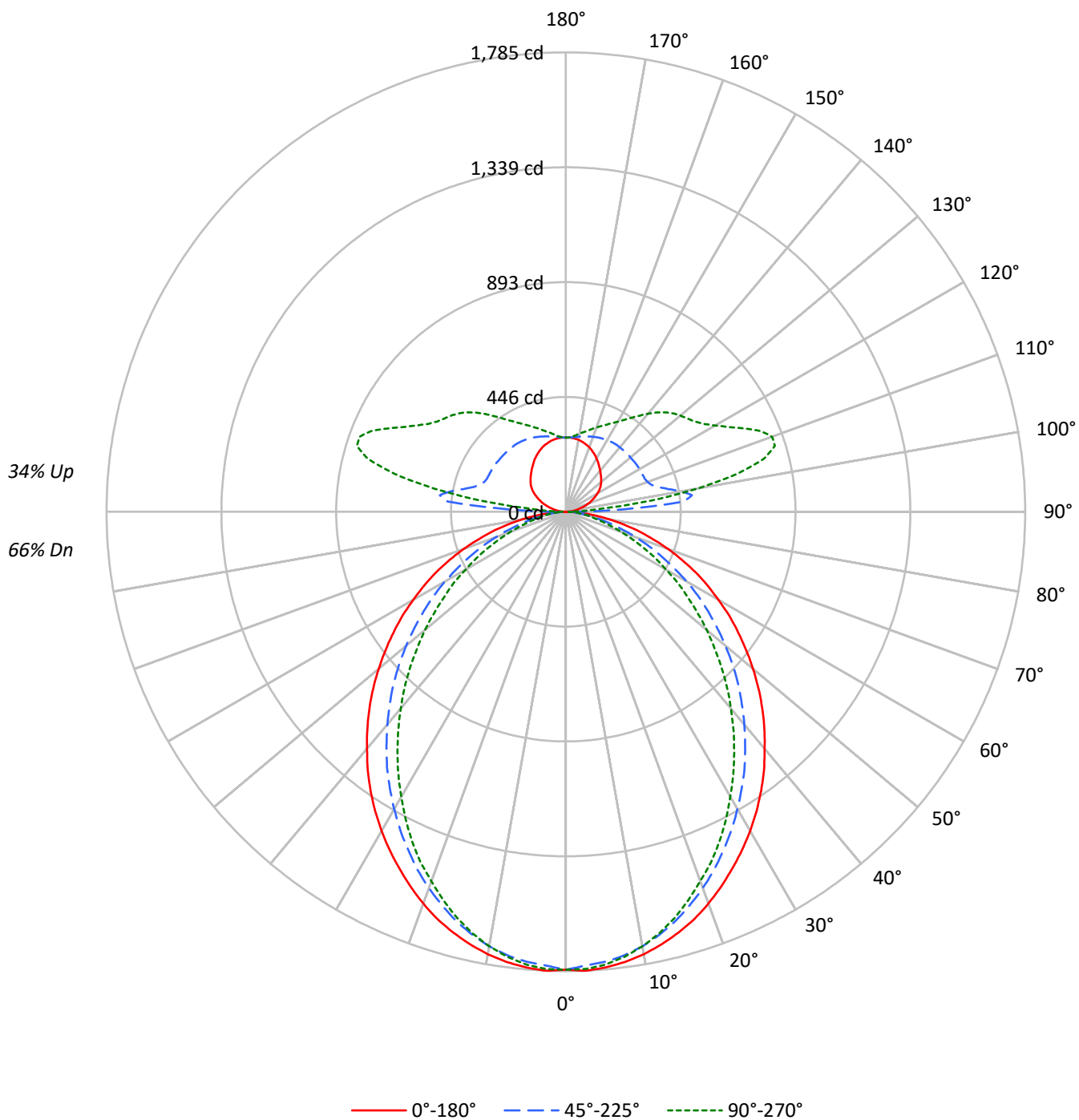
Lumens per Lamp: N/A
Luminaire Lumens: 6218.2 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

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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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71
1	102	97	94	90	96	92	89	86	82	79	77	72	70	68	63	62	61
2	93	86	79	74	87	81	75	71	72	68	64	64	61	58	56	54	52
3	85	76	68	62	80	71	65	60	64	59	54	57	53	49	50	47	44
4	78	67	59	53	73	64	56	51	57	51	47	51	46	43	45	41	38
5	72	60	52	46	67	57	50	44	51	45	41	46	41	37	41	37	34
6	66	54	46	40	62	51	44	39	46	40	36	41	37	33	37	33	30
7	61	49	41	35	58	47	39	34	42	36	32	38	33	29	34	30	27
8	57	45	37	31	54	43	35	30	39	33	28	35	30	26	31	27	24
9	53	41	33	28	50	39	32	27	35	30	25	32	27	24	29	25	22
10	50	38	30	26	47	36	29	25	33	27	23	30	25	21	27	23	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14512	14512	14512
5°	14513	14081	14082
10°	14391	13636	13474
15°	14192	13083	12757
20°	13933	12452	11939
25°	13610	11772	11140
30°	13293	11077	10243
35°	12945	10374	9366
40°	12531	9616	8466
45°	12142	8865	7573
50°	11701	8044	6668
55°	11223	7203	5733
60°	10692	6309	4810
65°	10182	5286	3920
70°	9455	4207	2996
75°	8521	3060	2095
80°	7119	1880	1506
85°	5356	1081	828

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12142 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.3	2.7
10°-20°	466.6	7.5
20°-30°	673.6	10.8
30°-40°	763.5	12.3
40°-50°	737.1	11.9
50°-60°	612.8	9.9
60°-70°	423.0	6.8
70°-80°	213.7	3.4
80°-90°	55.4	0.9
90°-100°	214.3	3.4
100°-110°	435.8	7.0
110°-120°	388.4	6.2
120°-130°	326.3	5.2
130°-140°	272.3	4.4
140°-150°	207.9	3.3
150°-160°	146.2	2.4
160°-170°	86.0	1.4
170°-180°	28.0	0.4
0°-30°	1307.6	21.0
0°-40°	2071.0	33.3
0°-60°	3421.0	55.0
0°-90°	4113.1	66.1
90°-120°	1038.5	16.7
90°-150°	1845.0	29.7
90°-180°	2105.0	33.9
0°-180°	6218.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1780	1780	1780	1780	1780	
5°	1777	1771	1755	1769	1766	169
15°	1692	1680	1646	1643	1634	477
25°	1530	1506	1450	1427	1413	705
35°	1323	1280	1211	1165	1140	827
45°	1079	1029	947	880	856	832
55°	818	763	674	604	578	731
65°	556	497	410	352	335	549
75°	296	245	181	150	142	312
85°	74	46	42	40	40	81
90°	1	4	10	11	12	6
95°	19	59	462	229	138	21
105°	66	96	372	800	797	71
115°	117	146	332	637	766	116
125°	163	193	330	542	611	145
135°	193	230	327	481	546	149
145°	223	255	325	406	446	140
155°	253	273	316	358	374	117
165°	276	284	303	321	326	78
175°	288	288	291	295	294	27
180°	288	288	288	288	288	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1779.6	1779.6	1779.6	1779.6	1779.6
2.5°	1785.1	1779.6	1764.6	1779.6	1778.3
5°	1776.9	1771.4	1755.1	1768.7	1766.0
7.5°	1764.6	1759.2	1738.7	1748.3	1744.2
10°	1745.6	1738.7	1714.2	1719.7	1714.2
12.5°	1721.0	1712.8	1682.9	1685.6	1677.4
15°	1692.4	1680.1	1646.1	1643.4	1633.8
17.5°	1659.7	1642.0	1602.5	1595.7	1582.0
20°	1620.2	1602.5	1556.1	1545.2	1527.5
22.5°	1576.6	1556.1	1505.7	1488.0	1474.4
25°	1530.3	1505.7	1449.9	1426.7	1413.1
27.5°	1482.6	1452.6	1394.0	1366.7	1347.7
30°	1432.1	1398.1	1334.0	1300.0	1278.2
32.5°	1379.0	1339.5	1272.7	1231.8	1211.4
35°	1323.1	1279.5	1211.4	1165.1	1140.5
37.5°	1264.5	1219.6	1144.6	1094.2	1069.7
40°	1201.9	1156.9	1079.2	1022.0	997.5
42.5°	1141.9	1094.2	1012.4	953.9	928.0
45°	1079.2	1028.8	947.0	880.3	855.7
47.5°	1015.2	963.4	878.9	809.4	782.2
50°	949.8	896.6	809.4	741.3	715.4
52.5°	883.0	831.2	741.3	671.8	644.5
55°	817.6	763.1	674.5	603.7	577.8
57.5°	753.5	696.3	609.1	536.9	517.8
60°	684.0	629.5	542.3	471.5	449.7
62.5°	621.4	564.1	474.2	410.2	393.8
65°	556.0	497.4	410.2	351.6	335.2
67.5°	487.8	432.0	350.2	298.4	279.3
70°	423.8	366.6	288.9	243.9	230.3
72.5°	355.7	305.2	233.0	196.2	184.0
75°	295.7	245.3	181.2	149.9	141.7
77.5°	233.0	189.4	134.9	113.1	110.4
80°	173.1	133.5	92.7	88.6	87.2
82.5°	121.3	85.8	66.8	64.0	62.7
85°	73.6	46.3	42.2	39.5	39.5
87.5°	31.3	20.4	19.1	17.7	19.1
90°	0.6	4.5	10.2	11.3	11.9
92.5°	7.9	43.6	222.1	73.4	51.6
95°	18.7	58.9	461.9	228.6	138.3
97.5°	31.2	65.2	494.2	467.0	332.1
100°	43.1	73.6	455.6	646.0	519.7
102.5°	54.4	83.9	407.5	758.2	682.9
105°	66.3	96.0	371.8	800.4	797.4
107.5°	79.3	108.5	348.5	787.7	851.8
110°	92.4	121.0	337.8	742.4	852.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	104.8	133.4	332.7	686.8	819.5
115°	116.7	146.4	331.5	637.0	765.6
117.5°	129.2	158.6	331.0	597.9	712.9
120°	141.7	170.6	331.0	571.5	669.8
122.5°	153.0	182.2	330.4	554.2	635.8
125°	162.6	193.2	329.8	542.0	610.9
127.5°	171.7	203.4	328.7	530.4	595.0
130°	179.1	213.4	328.1	516.6	581.4
132.5°	186.4	221.8	327.6	500.1	566.1
135°	193.2	230.0	327.0	481.2	546.3
137.5°	200.0	237.2	327.0	460.8	523.1
140°	207.4	243.7	326.4	440.9	497.6
142.5°	215.3	249.6	326.4	422.5	470.4
145°	222.7	255.0	325.3	405.8	446.0
147.5°	231.2	260.1	323.6	391.9	423.3
150°	239.1	264.9	321.9	379.1	404.6
152.5°	246.5	269.5	319.1	368.4	387.6
155°	253.3	273.4	316.2	358.2	373.5
157.5°	260.1	277.1	313.4	348.5	360.4
160°	266.4	280.2	310.0	338.9	348.5
162.5°	272.0	282.8	306.6	329.6	337.2
165°	276.0	284.5	303.2	321.0	325.9
167.5°	280.5	285.9	299.8	313.6	316.8
170°	283.4	287.0	296.4	306.4	308.3
172.5°	286.2	287.9	293.0	299.8	299.8
175°	287.9	288.5	290.7	294.7	293.6
177.5°	289.0	288.5	289.0	291.0	289.0
180°	288.5	288.5	288.5	288.5	288.5

(END OF REPORT)