

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: P1026052

Luminaire Tested: S124RDIP-B1020D810UB27-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026052
REPORT IS A COMBINATION OF REPORTS P998982 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D810UB27-4F0-XX-W2A-F
Description: Define 4 Regressed Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

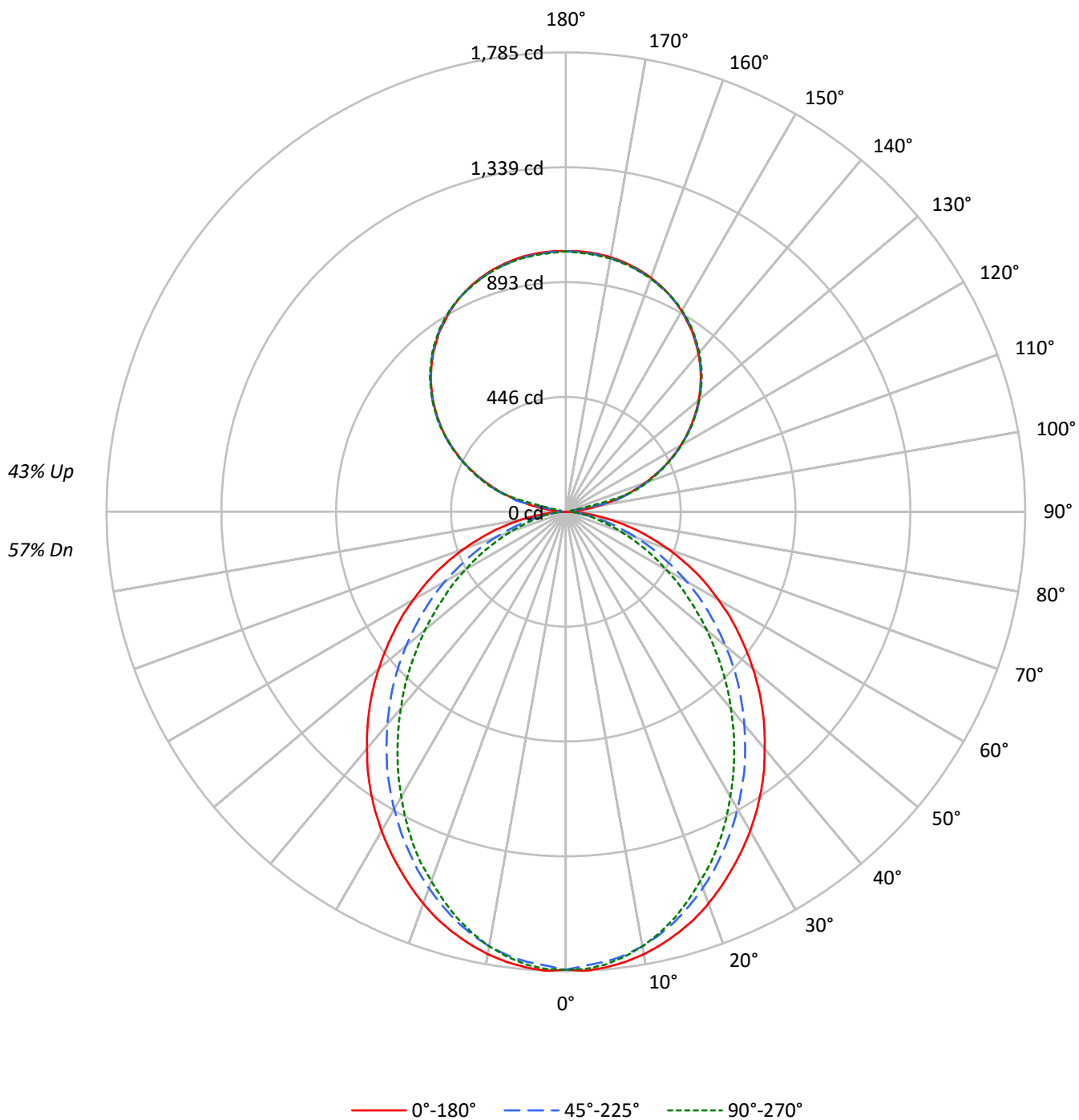
Lumens per Lamp: N/A
Luminaire Lumens: 7246.0 lumens
Efficiency: N/A
Efficacy: 106.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	100	95	92	88	93	89	86	83	77	74	72	66	64	62	56	54	53
2	91	84	78	72	84	78	73	68	68	64	60	58	55	53	49	47	45
3	83	74	67	61	77	69	63	57	60	55	51	52	48	45	44	41	39
4	76	66	58	52	71	61	54	49	54	48	44	46	42	39	39	36	34
5	70	59	50	44	65	55	48	42	48	42	38	42	37	34	36	32	30
6	65	53	45	39	60	49	42	37	43	38	33	38	33	30	32	29	26
7	60	48	40	34	56	45	38	33	39	34	29	34	30	26	30	26	23
8	56	43	36	30	52	41	34	29	36	30	26	32	27	24	27	24	21
9	52	40	32	27	48	37	31	26	33	28	24	29	25	21	25	22	19
10	49	36	29	24	45	34	28	23	31	25	21	27	23	19	23	20	17

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	2.3
10°-20°	466.6	6.4
20°-30°	673.6	9.3
30°-40°	763.5	10.5
40°-50°	737.1	10.2
50°-60°	612.8	8.5
60°-70°	423.0	5.8
70°-80°	213.7	2.9
80°-90°	56.4	0.8
90°-100°	33.6	0.5
100°-110°	221.3	3.1
110°-120°	422.5	5.8
120°-130°	536.4	7.4
130°-140°	573.8	7.9
140°-150°	536.5	7.4
150°-160°	432.7	6.0
160°-170°	279.0	3.9
170°-180°	96.2	1.3
0°-30°	1307.6	18.0
0°-40°	2071.0	28.6
0°-60°	3421.0	47.2
0°-90°	4114.1	56.8
90°-120°	677.4	9.3
90°-150°	2324.0	32.1
90°-180°	3132.0	43.2
0°-180°	7246.0	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°	2	11	17	21	23	6
95°	42	16	17	21	22	51
105°	228	232	236	243	216	238
115°	425	428	427	428	428	419
125°	598	601	600	602	603	534
135°	742	741	744	746	747	572
145°	855	858	858	858	860	535
155°	938	939	936	940	937	432
165°	989	986	986	992	985	280
175°	1012	1008	1008	1015	1006	96
180°	1012	1012	1012	1012	1012	

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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°	2.3	10.6	16.7	21.2	22.7
92.5°	11.4	9.8	15.9	20.4	20.4
95°	41.6	15.9	16.7	21.2	22.0
97.5°	79.5	96.1	16.7	20.4	21.2
100°	124.2	137.8	33.3	20.4	21.2
102.5°	174.1	183.2	192.3	22.0	22.0
105°	227.9	232.4	236.2	243.0	215.8
107.5°	277.1	279.3	284.6	288.4	291.5
110°	327.0	329.3	333.8	335.4	337.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	375.5	380.0	381.5	380.8	383.8
115°	425.4	427.7	427.0	428.5	428.5
117.5°	470.1	473.1	475.4	474.7	474.7
120°	515.5	518.6	517.8	519.3	517.8
122.5°	557.9	559.4	561.0	561.7	560.2
125°	598.0	601.1	599.6	601.8	602.6
127.5°	636.7	637.4	641.2	640.4	639.7
130°	673.7	674.5	676.8	677.5	677.5
132.5°	707.8	709.3	712.4	713.1	712.4
135°	741.9	741.1	744.2	745.7	747.2
137.5°	772.2	772.2	775.9	777.5	776.7
140°	801.7	803.2	804.7	807.0	807.7
142.5°	828.2	831.2	832.0	833.5	833.5
145°	855.4	857.7	857.7	858.5	860.0
147.5°	876.6	881.2	880.4	881.2	881.9
150°	900.1	903.1	902.4	902.4	903.1
152.5°	919.8	922.1	920.5	922.1	921.3
155°	937.9	938.7	936.4	939.5	937.2
157.5°	953.8	953.8	950.8	954.6	950.8
160°	967.5	965.2	964.4	969.0	964.4
162.5°	979.6	976.6	975.8	980.3	975.0
165°	989.4	985.6	985.6	991.7	984.9
167.5°	997.8	994.0	993.2	1000.0	992.5
170°	1004.6	1000.0	1000.8	1006.8	999.3
172.5°	1009.1	1004.6	1005.3	1011.4	1003.1
175°	1012.1	1007.6	1008.4	1015.2	1006.1
177.5°	1014.4	1009.1	1010.6	1016.7	1007.6
180°	1012.1	1012.1	1012.1	1012.1	1012.1

(END OF REPORT)