

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: P1026054

Luminaire Tested: S124RDIP-B1020D810UB27-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026054
REPORT IS A COMBINATION OF REPORTS P998984 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D810UB27-4F0-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

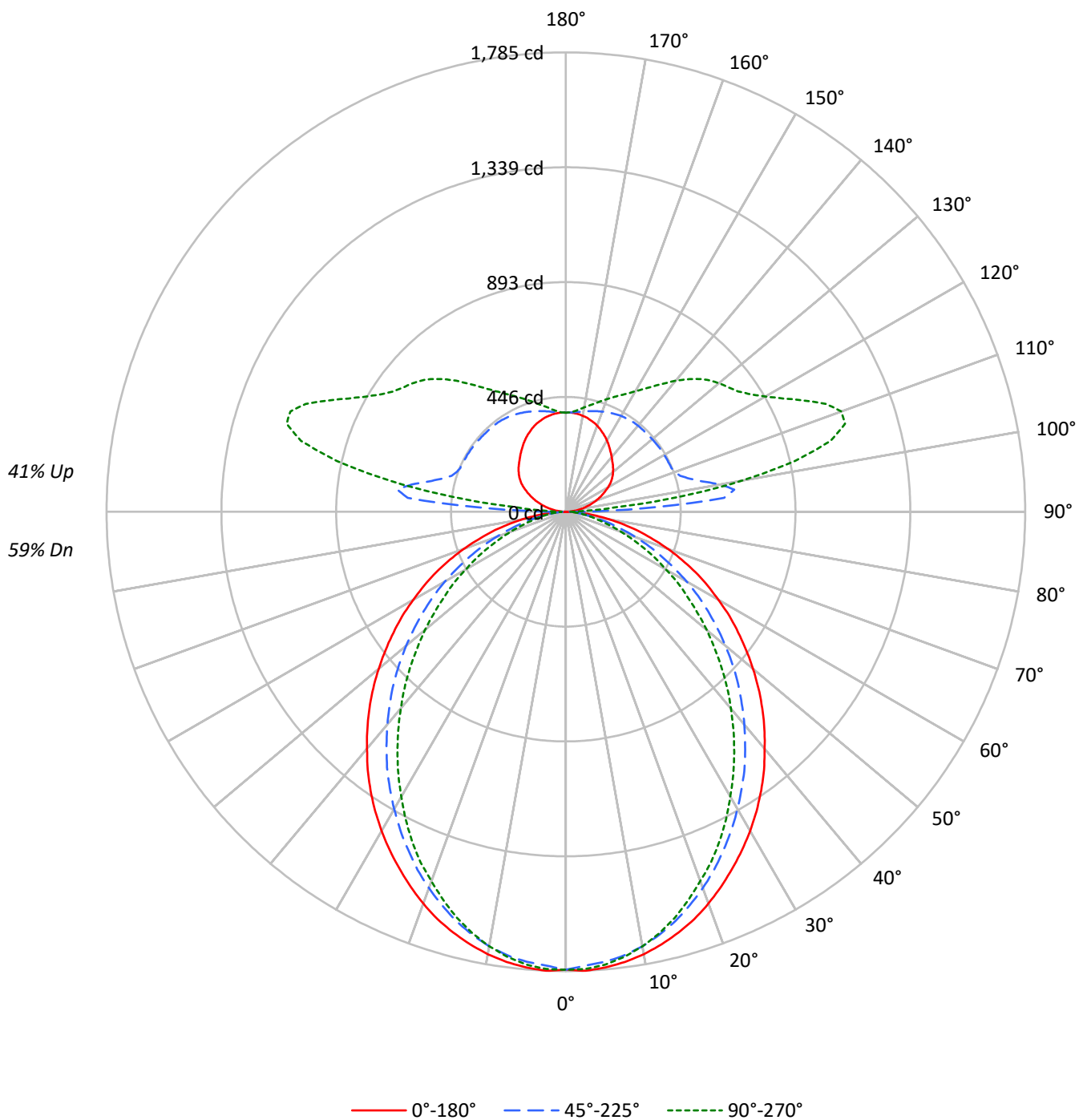
Lumens per Lamp: N/A
Luminaire Lumens: 6925.6 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	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°	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	2.4
10°-20°	466.6	6.7
20°-30°	673.6	9.7
30°-40°	763.5	11.0
40°-50°	737.1	10.6
50°-60°	612.8	8.8
60°-70°	423.0	6.1
70°-80°	213.7	3.1
80°-90°	55.7	0.8
90°-100°	286.2	4.1
100°-110°	582.2	8.4
110°-120°	518.9	7.5
120°-130°	435.9	6.3
130°-140°	363.7	5.3
140°-150°	277.8	4.0
150°-160°	195.3	2.8
160°-170°	114.8	1.7
170°-180°	37.3	0.5
0°-30°	1307.6	18.9
0°-40°	2071.0	29.9
0°-60°	3421.0	49.4
0°-90°	4113.5	59.4
90°-120°	1387.3	20.0
90°-150°	2464.7	35.6
90°-180°	2812.0	40.6
0°-180°	6925.6	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	6	14	15	16	6
95°	25	79	617	305	185	27
105°	89	128	497	1069	1065	94
115°	156	196	443	851	1023	155
125°	217	258	441	724	816	194
135°	258	307	437	643	730	200
145°	298	341	434	542	596	187
155°	338	365	422	478	499	156
165°	369	380	405	429	435	104
175°	385	385	388	394	392	37
180°	385	385	385	385	385	

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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°	0.8	6.1	13.6	15.1	15.9
92.5°	10.6	58.3	296.8	98.0	68.9
95°	25.0	78.7	617.0	305.4	184.7
97.5°	41.6	87.1	660.1	623.8	443.6
100°	57.5	98.4	608.7	863.0	694.2
102.5°	72.7	112.0	544.3	1013.0	912.2
105°	88.6	128.3	496.6	1069.3	1065.2
107.5°	106.0	145.0	465.6	1052.3	1137.8
110°	123.4	161.6	451.2	991.8	1139.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	140.1	178.3	444.4	917.6	1094.7
115°	156.0	195.7	442.9	851.0	1022.8
117.5°	172.6	212.0	442.1	798.7	952.4
120°	189.3	227.9	442.1	763.5	894.8
122.5°	204.4	243.4	441.4	740.4	849.4
125°	217.3	258.2	440.6	724.1	816.1
127.5°	229.4	271.8	439.1	708.6	794.9
130°	239.2	285.0	438.3	690.0	776.7
132.5°	249.1	296.4	437.6	668.1	756.3
135°	258.2	307.4	436.8	642.8	729.8
137.5°	267.2	316.8	436.8	615.5	698.7
140°	277.1	325.5	436.1	589.0	664.7
142.5°	287.7	333.5	436.1	564.4	628.3
145°	297.5	340.6	434.5	542.0	595.8
147.5°	308.9	347.5	432.3	523.5	565.5
150°	319.5	353.9	430.0	506.4	540.5
152.5°	329.3	360.0	426.2	492.1	517.8
155°	338.4	365.3	422.4	478.4	498.9
157.5°	347.5	370.2	418.6	465.6	481.5
160°	355.8	374.4	414.1	452.7	465.6
162.5°	363.4	377.8	409.6	440.2	450.4
165°	368.7	380.0	405.0	428.9	435.3
167.5°	374.7	381.9	400.5	419.0	423.2
170°	378.5	383.5	395.9	409.2	411.8
172.5°	382.3	384.6	391.4	400.4	400.5
175°	384.6	385.3	388.4	393.7	392.1
177.5°	386.1	385.3	386.1	388.8	386.1
180°	385.3	385.3	385.3	385.3	385.3

(END OF REPORT)