

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: P1033884

Luminaire Tested: S124RDIW-B1020D470UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033884
REPORT IS A COMBINATION OF REPORTS P999954 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D470UB27-4F0-XX-W2A-F
Description: Define 4 Regressed Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

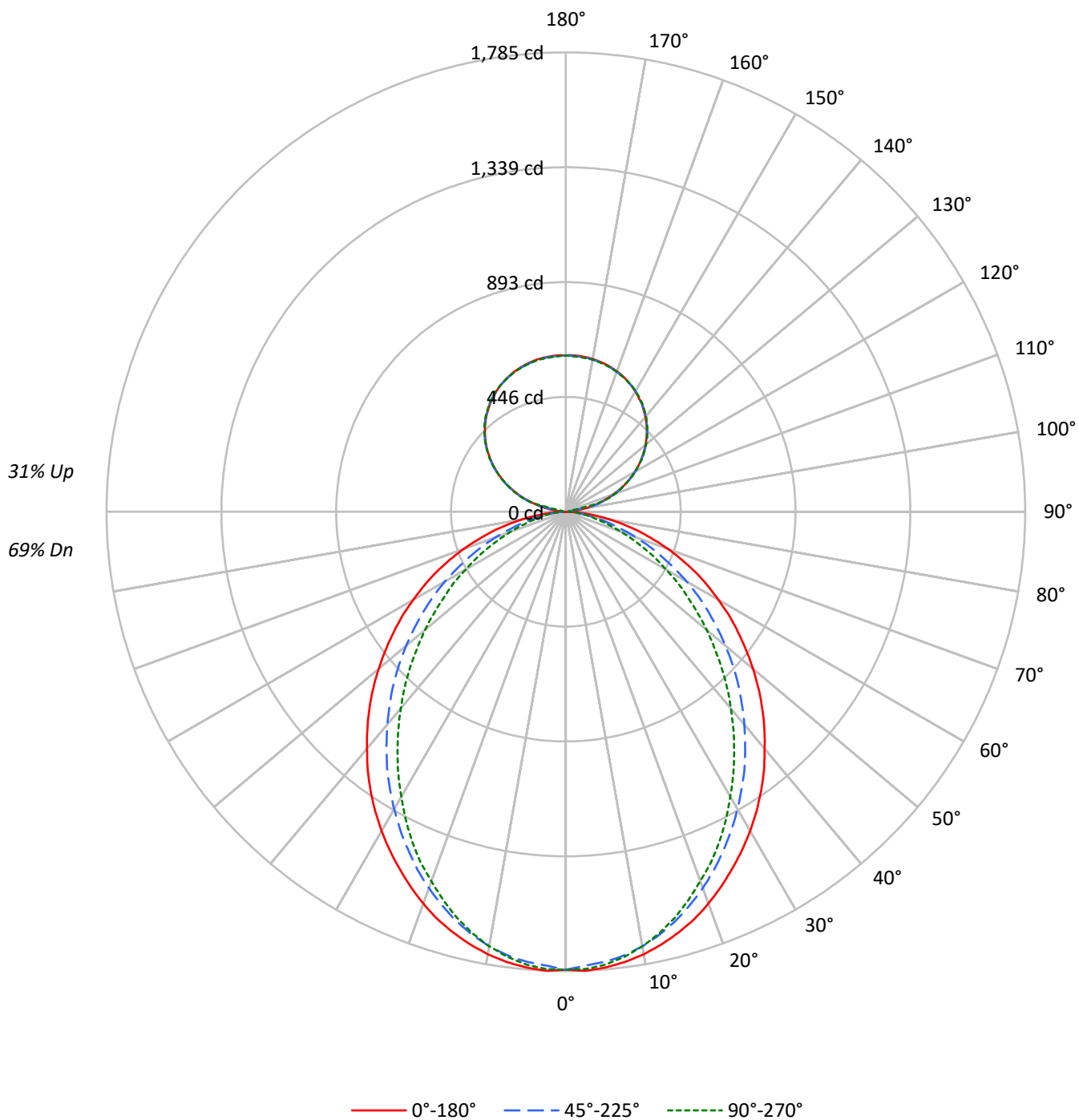
Lumens per Lamp: N/A
Luminaire Lumens: 5993.0 lumens
Efficiency: N/A
Efficacy: 99.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 60
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	112	112	112	112	105	105	105	105	94	94	94	83	83	83	73	73	73
1	102	98	94	91	97	93	89	86	83	80	78	74	72	70	65	64	63
2	94	86	80	75	88	82	76	71	73	69	65	65	62	59	58	56	53
3	86	76	69	63	81	72	66	60	65	60	55	58	54	50	52	49	46
4	79	68	60	53	74	64	57	51	58	52	47	52	47	44	46	43	40
5	72	60	52	46	68	58	50	45	52	46	41	47	42	38	42	38	35
6	67	54	46	40	63	52	44	39	47	41	36	42	37	34	38	34	31
7	62	49	41	36	58	47	40	34	43	37	32	39	34	30	35	31	28
8	58	45	37	32	54	43	36	31	39	33	29	36	31	27	32	28	25
9	54	41	34	29	51	40	32	28	36	30	26	33	28	24	30	26	23
10	50	38	31	26	48	36	30	25	33	28	24	30	26	22	28	24	21

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	2.8
10°-20°	466.6	7.8
20°-30°	673.6	11.2
30°-40°	763.5	12.7
40°-50°	737.1	12.3
50°-60°	612.8	10.2
60°-70°	423.0	7.1
70°-80°	213.7	3.6
80°-90°	55.5	0.9
90°-100°	20.2	0.3
100°-110°	132.8	2.2
110°-120°	253.6	4.2
120°-130°	321.9	5.4
130°-140°	344.4	5.7
140°-150°	322.0	5.4
150°-160°	259.7	4.3
160°-170°	167.5	2.8
170°-180°	57.7	1.0
0°-30°	1307.6	21.8
0°-40°	2071.0	34.6
0°-60°	3421.0	57.1
0°-90°	4113.3	68.6
90°-120°	406.6	6.8
90°-150°	1394.9	23.3
90°-180°	1880.0	31.4
0°-180°	5993.0	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°	1	6	10	13	14	6
95°	25	10	10	13	13	31
105°	137	140	142	146	130	143
115°	255	257	256	257	257	251
125°	359	361	360	361	362	321
135°	445	445	447	448	448	343
145°	513	515	515	515	516	321
155°	563	563	562	564	562	260
165°	594	592	592	595	591	168
175°	608	605	605	609	604	58
180°	608	608	608	608	608	

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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°	1.4	6.4	10.0	12.7	13.6
92.5°	6.8	5.9	9.5	12.3	12.3
95°	25.0	9.5	10.0	12.7	13.2
97.5°	47.7	57.7	10.0	12.3	12.7
100°	74.5	82.7	20.0	12.3	12.7
102.5°	104.5	110.0	115.4	13.2	13.2
105°	136.8	139.5	141.8	145.8	129.5
107.5°	166.3	167.7	170.8	173.1	174.9
110°	196.3	197.6	200.4	201.3	202.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	225.4	228.1	229.0	228.5	230.4
115°	255.3	256.7	256.3	257.2	257.2
117.5°	282.2	284.0	285.3	284.9	284.9
120°	309.4	311.2	310.8	311.7	310.8
122.5°	334.9	335.8	336.7	337.1	336.2
125°	358.9	360.8	359.9	361.2	361.7
127.5°	382.1	382.6	384.8	384.4	383.9
130°	404.4	404.8	406.2	406.7	406.7
132.5°	424.8	425.7	427.6	428.0	427.6
135°	445.3	444.8	446.6	447.5	448.5
137.5°	463.4	463.4	465.7	466.6	466.2
140°	481.2	482.1	483.0	484.3	484.8
142.5°	497.1	498.9	499.3	500.2	500.2
145°	513.4	514.8	514.8	515.2	516.2
147.5°	526.1	528.9	528.4	528.9	529.3
150°	540.2	542.0	541.6	541.6	542.0
152.5°	552.0	553.4	552.5	553.4	553.0
155°	562.9	563.4	562.0	563.9	562.5
157.5°	572.5	572.5	570.7	572.9	570.7
160°	580.7	579.3	578.9	581.6	578.9
162.5°	587.9	586.1	585.7	588.4	585.2
165°	593.8	591.6	591.6	595.2	591.1
167.5°	598.8	596.6	596.1	600.2	595.7
170°	602.9	600.2	600.7	604.3	599.8
172.5°	605.7	602.9	603.4	607.0	602.0
175°	607.5	604.8	605.2	609.3	603.8
177.5°	608.8	605.7	606.6	610.2	604.8
180°	607.5	607.5	607.5	607.5	607.5

(END OF REPORT)