

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: P1033888

Luminaire Tested: S124RDIW-B1020D470UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033888
REPORT IS A COMBINATION OF REPORTS P999974 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D470UB30-4F0-XX-W2A-F
Description: Define 4 Regressed Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589}
{m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

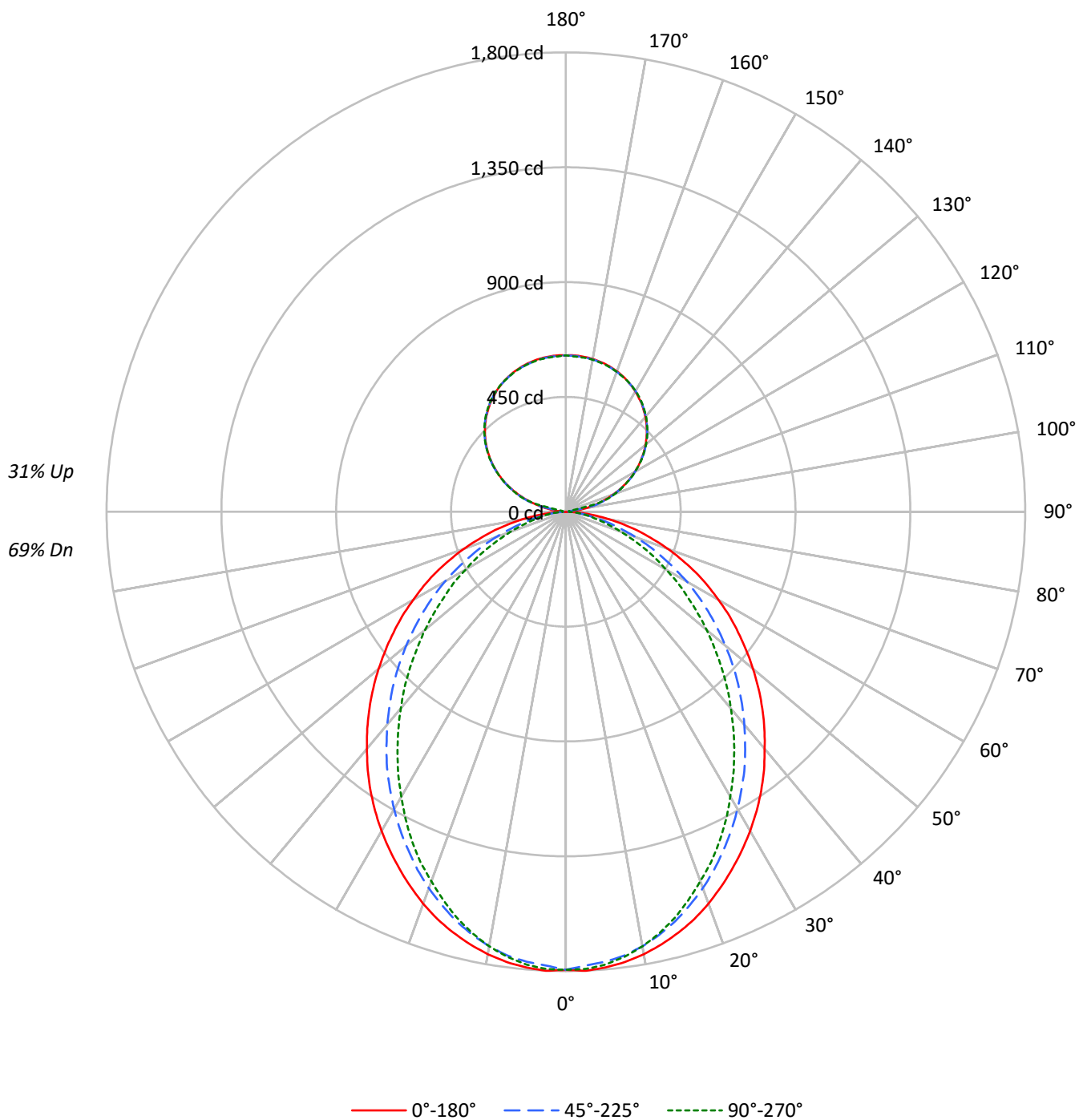
Lumens per Lamp: N/A
Luminaire Lumens: 6044.0 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 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	50	30	10
RCR																				
0	112	112	112	112	105	105	105	105	94	94	94	83	83	83	73	73	73	69		
1	102	98	94	91	97	93	89	86	83	80	78	74	72	70	65	64	63	59		
2	94	86	80	75	88	82	76	71	73	69	65	65	62	59	58	56	53	50		
3	86	76	69	63	81	72	66	60	65	60	55	58	54	50	52	49	46	42		
4	79	68	60	53	74	64	57	51	58	52	47	52	47	44	46	43	40	37		
5	72	60	52	46	68	58	50	45	52	46	41	47	42	38	42	38	35	32		
6	67	54	46	40	63	52	44	39	47	41	36	42	37	34	38	34	31	28		
7	62	49	41	36	58	47	40	34	43	37	32	39	34	30	35	31	28	25		
8	58	45	37	32	54	43	36	31	39	33	29	36	31	27	32	28	25	23		
9	54	41	34	29	51	40	32	28	36	30	26	33	28	24	30	26	23	21		
10	50	38	31	26	48	36	30	25	33	28	24	30	26	22	28	24	21	19		

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.8	2.8
10°-20°	470.6	7.8
20°-30°	679.4	11.2
30°-40°	769.9	12.7
40°-50°	743.4	12.3
50°-60°	618.1	10.2
60°-70°	426.6	7.1
70°-80°	215.6	3.6
80°-90°	56.0	0.9
90°-100°	20.3	0.3
100°-110°	133.9	2.2
110°-120°	255.7	4.2
120°-130°	324.6	5.4
130°-140°	347.3	5.7
140°-150°	324.8	5.4
150°-160°	261.9	4.3
160°-170°	168.9	2.8
170°-180°	58.2	1.0
0°-30°	1318.7	21.8
0°-40°	2088.6	34.6
0°-60°	3450.1	57.1
0°-90°	4148.3	68.6
90°-120°	410.0	6.8
90°-150°	1406.7	23.3
90°-180°	1896.0	31.4
0°-180°	6044.0	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°	1	6	10	13	14	6
95°	25	10	10	13	13	31
105°	138	141	143	147	131	144
115°	258	259	258	259	259	253
125°	362	364	363	364	365	323
135°	449	449	450	451	452	346
145°	518	519	519	520	520	324
155°	568	568	567	569	567	262
165°	599	597	597	600	596	169
175°	613	610	610	614	609	58
180°	613	613	613	613	613	

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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°	1.4	6.4	10.1	12.8	13.7
92.5°	6.9	6.0	9.6	12.4	12.4
95°	25.2	9.6	10.1	12.8	13.3
97.5°	48.1	58.2	10.1	12.4	12.8
100°	75.1	83.4	20.2	12.4	12.8
102.5°	105.4	110.9	116.4	13.3	13.3
105°	137.9	140.7	143.0	147.1	130.6
107.5°	167.7	169.1	172.3	174.6	176.4
110°	198.0	199.3	202.1	203.0	204.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	227.3	230.0	230.9	230.5	232.3
115°	257.5	258.9	258.4	259.4	259.4
117.5°	284.6	286.4	287.8	287.3	287.3
120°	312.0	313.9	313.4	314.3	313.4
122.5°	337.7	338.6	339.5	340.0	339.1
125°	362.0	363.8	362.9	364.3	364.7
127.5°	385.4	385.8	388.1	387.7	387.2
130°	407.8	408.3	409.7	410.1	410.1
132.5°	428.4	429.4	431.2	431.6	431.2
135°	449.1	448.6	450.4	451.3	452.3
137.5°	467.4	467.4	469.7	470.6	470.1
140°	485.3	486.2	487.1	488.5	488.9
142.5°	501.3	503.1	503.6	504.5	504.5
145°	517.8	519.2	519.2	519.6	520.5
147.5°	530.6	533.4	532.9	533.4	533.8
150°	544.8	546.7	546.2	546.2	546.7
152.5°	556.7	558.1	557.2	558.1	557.7
155°	567.7	568.2	566.8	568.7	567.3
157.5°	577.4	577.4	575.5	577.8	575.5
160°	585.6	584.2	583.8	586.5	583.8
162.5°	592.9	591.1	590.6	593.4	590.2
165°	598.9	596.6	596.6	600.3	596.1
167.5°	603.9	601.6	601.2	605.3	600.7
170°	608.1	605.3	605.8	609.4	604.9
172.5°	610.8	608.1	608.5	612.2	607.1
175°	612.6	609.9	610.4	614.5	609.0
177.5°	614.0	610.8	611.7	615.4	609.9
180°	612.6	612.6	612.6	612.6	612.6

(END OF REPORT)