

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: P1033998

Luminaire Tested: S124RDIW-B1195D470UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033998
REPORT IS A COMBINATION OF REPORTS P1000212 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1195D470UB50-4F0-XX-W2A-F
Description: Define 4 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

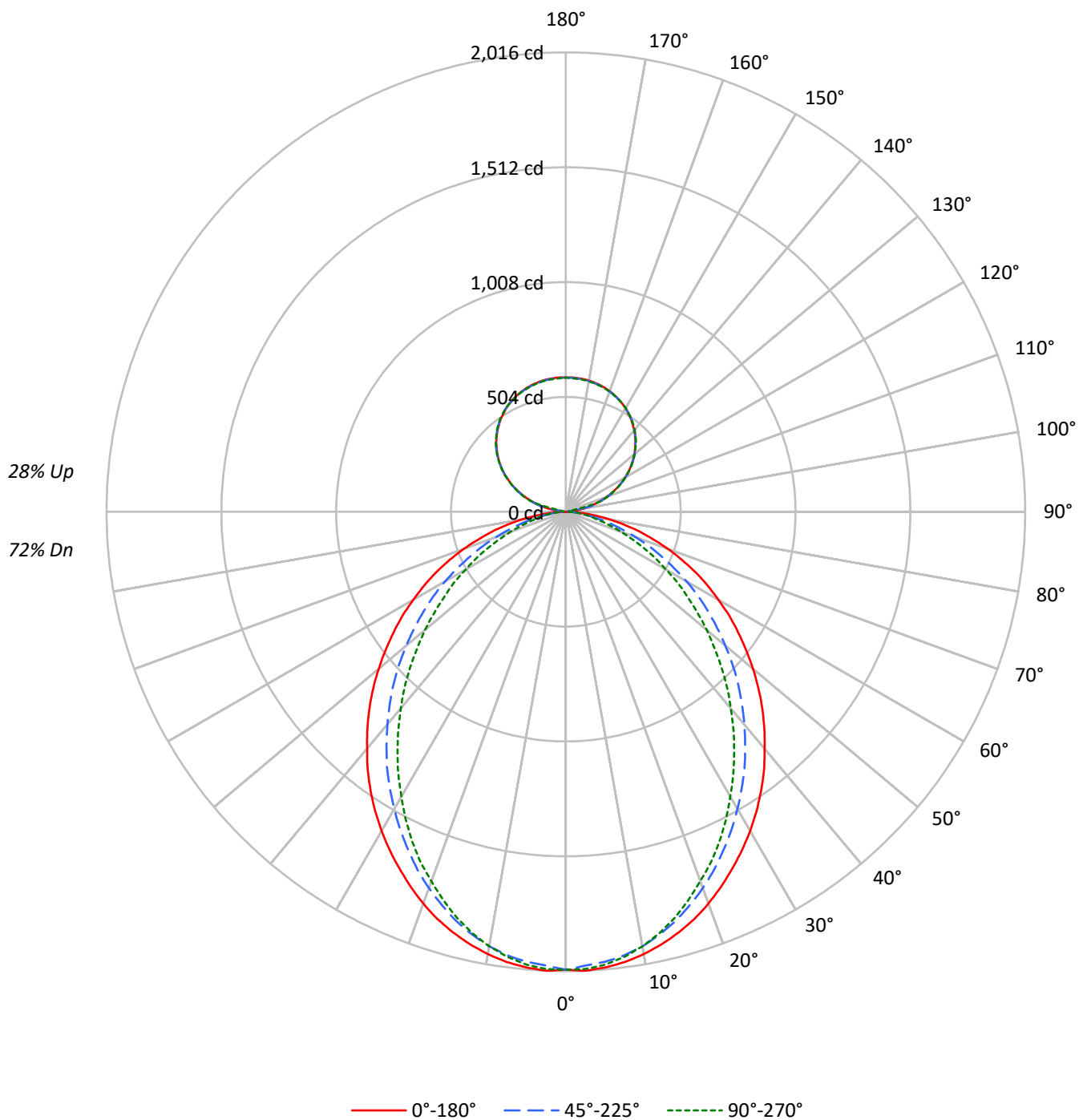
Lumens per Lamp: N/A
Luminaire Lumens: 6468.0 lumens
Efficiency: N/A
Efficacy: 86.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 74.5
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	106	106	106	106	95	95	95	85	85	85	76	76	76
1	103	99	95	91	98	94	90	87	84	82	79	76	74	72	68	67	65
2	94	87	81	75	89	82	77	72	74	70	66	67	64	61	60	58	55
3	86	77	69	63	81	73	66	61	66	61	56	60	55	52	54	50	48
4	79	68	60	54	75	65	58	52	59	53	48	53	49	45	48	44	41
5	73	61	53	47	69	58	51	45	53	47	42	48	43	39	44	40	36
6	67	55	47	41	64	53	45	40	48	42	37	44	39	35	40	35	32
7	62	50	42	36	59	48	40	35	44	37	33	40	35	31	36	32	29
8	58	46	38	32	55	44	36	31	40	34	29	37	31	28	34	29	26
9	54	42	34	29	51	40	33	28	37	31	27	34	29	25	31	27	23
10	51	38	31	26	48	37	30	25	34	28	24	31	26	23	29	25	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16390	16390	16390
5°	16391	15903	15905
10°	16252	15401	15218
15°	16029	14776	14408
20°	15735	14064	13484
25°	15370	13295	12581
30°	15013	12511	11568
35°	14620	11716	10578
40°	14151	10860	9561
45°	13713	10012	8554
50°	13213	9085	7530
55°	12675	8135	6475
60°	12077	7126	5432
65°	11499	5969	4428
70°	10677	4752	3384
75°	9625	3457	2367
80°	8037	2121	1701
85°	6047	1222	935

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13713 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.0	2.9
10°-20°	527.0	8.1
20°-30°	760.8	11.8
30°-40°	862.2	13.3
40°-50°	832.5	12.9
50°-60°	692.1	10.7
60°-70°	477.7	7.4
70°-80°	241.4	3.7
80°-90°	62.5	1.0
90°-100°	19.6	0.3
100°-110°	128.8	2.0
110°-120°	245.9	3.8
120°-130°	312.2	4.8
130°-140°	333.9	5.2
140°-150°	312.3	4.8
150°-160°	251.8	3.9
160°-170°	162.4	2.5
170°-180°	56.0	0.9
0°-30°	1476.7	22.8
0°-40°	2339.0	36.2
0°-60°	3863.6	59.7
0°-90°	4645.2	71.8
90°-120°	394.2	6.1
90°-150°	1352.6	20.9
90°-180°	1823.0	28.2
0°-180°	6468.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2010	2010	2010	2010	2010	
5°	2007	2001	1982	1998	1994	190
15°	1911	1898	1859	1856	1845	539
25°	1728	1700	1637	1611	1596	796
35°	1494	1445	1368	1316	1288	934
45°	1219	1162	1070	994	966	940
55°	923	862	762	682	652	826
65°	628	562	463	397	379	620
75°	334	277	205	169	160	352
85°	83	52	48	45	45	91
90°	1	6	10	12	13	6
95°	24	9	10	12	13	30
105°	133	135	138	141	126	139
115°	248	249	248	249	249	244
125°	348	350	349	350	351	311
135°	432	431	433	434	435	333
145°	498	499	499	500	500	311
155°	546	546	545	547	545	252
165°	576	574	574	577	573	163
175°	589	586	587	591	586	56
180°	589	589	589	589	589	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2009.9	2009.9	2009.9	2009.9	2009.9
2.5°	2016.0	2009.9	1992.9	2009.9	2008.3
5°	2006.8	2000.6	1982.2	1997.6	1994.5
7.5°	1992.9	1986.8	1963.7	1974.5	1969.8
10°	1971.4	1963.7	1936.0	1942.1	1936.0
12.5°	1943.7	1934.5	1900.6	1903.7	1894.4
15°	1911.4	1897.5	1859.0	1856.0	1845.2
17.5°	1874.4	1854.4	1809.8	1802.1	1786.7
20°	1829.8	1809.8	1757.5	1745.2	1725.2
22.5°	1780.6	1757.5	1700.5	1680.5	1665.1
25°	1728.2	1700.5	1637.4	1611.3	1595.9
27.5°	1674.4	1640.5	1574.3	1543.6	1522.0
30°	1617.4	1579.0	1506.6	1468.2	1443.5
32.5°	1557.4	1512.8	1437.4	1391.2	1368.1
35°	1494.3	1445.1	1368.1	1315.8	1288.1
37.5°	1428.1	1377.4	1292.7	1235.8	1208.1
40°	1357.3	1306.6	1218.8	1154.2	1126.5
42.5°	1289.6	1235.8	1143.4	1077.3	1048.0
45°	1218.8	1161.9	1069.6	994.2	966.5
47.5°	1146.5	1088.0	992.6	914.1	883.4
50°	1072.6	1012.6	914.1	837.2	807.9
52.5°	997.2	938.8	837.2	758.7	727.9
55°	923.4	861.8	761.8	681.8	652.5
57.5°	851.0	786.4	687.9	606.3	584.8
60°	772.6	711.0	612.5	532.5	507.9
62.5°	701.8	637.1	535.6	463.2	444.8
65°	627.9	561.7	463.2	397.0	378.6
67.5°	550.9	487.8	395.5	337.0	315.5
70°	478.6	414.0	326.3	275.5	260.1
72.5°	401.7	344.7	263.2	221.6	207.8
75°	334.0	277.0	204.7	169.3	160.1
77.5°	263.2	213.9	152.4	127.7	124.7
80°	195.4	150.8	104.6	100.0	98.5
82.5°	137.0	97.0	75.4	72.3	70.8
85°	83.1	52.3	47.7	44.6	44.6
87.5°	35.4	23.1	21.5	20.0	21.5
90°	1.3	6.2	9.7	12.3	13.2
92.5°	6.6	5.7	9.3	11.9	11.9
95°	24.2	9.3	9.7	12.3	12.8
97.5°	46.3	56.0	9.7	11.9	12.3
100°	72.3	80.2	19.4	11.9	12.3
102.5°	101.3	106.6	111.9	12.8	12.8
105°	132.6	135.3	137.5	141.4	125.6
107.5°	161.3	162.6	165.7	167.9	169.6
110°	190.3	191.7	194.3	195.2	196.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	218.5	221.2	222.1	221.6	223.4
115°	247.6	248.9	248.5	249.4	249.4
117.5°	273.6	275.4	276.7	276.2	276.2
120°	300.0	301.8	301.4	302.2	301.4
122.5°	324.7	325.6	326.5	326.9	326.0
125°	348.1	349.8	348.9	350.3	350.7
127.5°	370.5	371.0	373.2	372.7	372.3
130°	392.1	392.6	393.9	394.3	394.3
132.5°	412.0	412.8	414.6	415.0	414.6
135°	431.8	431.3	433.1	434.0	434.9
137.5°	449.4	449.4	451.6	452.5	452.0
140°	466.6	467.5	468.3	469.7	470.1
142.5°	482.0	483.8	484.2	485.1	485.1
145°	497.9	499.2	499.2	499.6	500.5
147.5°	510.2	512.8	512.4	512.8	513.3
150°	523.9	525.6	525.2	525.2	525.6
152.5°	535.3	536.6	535.8	536.6	536.2
155°	545.9	546.3	545.0	546.8	545.4
157.5°	555.1	555.1	553.4	555.6	553.4
160°	563.1	561.8	561.3	564.0	561.3
162.5°	570.1	568.4	567.9	570.6	567.5
165°	575.9	573.6	573.6	577.2	573.2
167.5°	580.7	578.5	578.1	582.0	577.6
170°	584.7	582.0	582.5	586.0	581.6
172.5°	587.3	584.7	585.1	588.6	583.8
175°	589.1	586.4	586.9	590.8	585.5
177.5°	590.4	587.3	588.2	591.7	586.4
180°	589.1	589.1	589.1	589.1	589.1

(END OF REPORT)