

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: P1033995

Luminaire Tested: S124RDIW-B1195D470UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033995
REPORT IS A COMBINATION OF REPORTS P1000207 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1195D470UB40-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

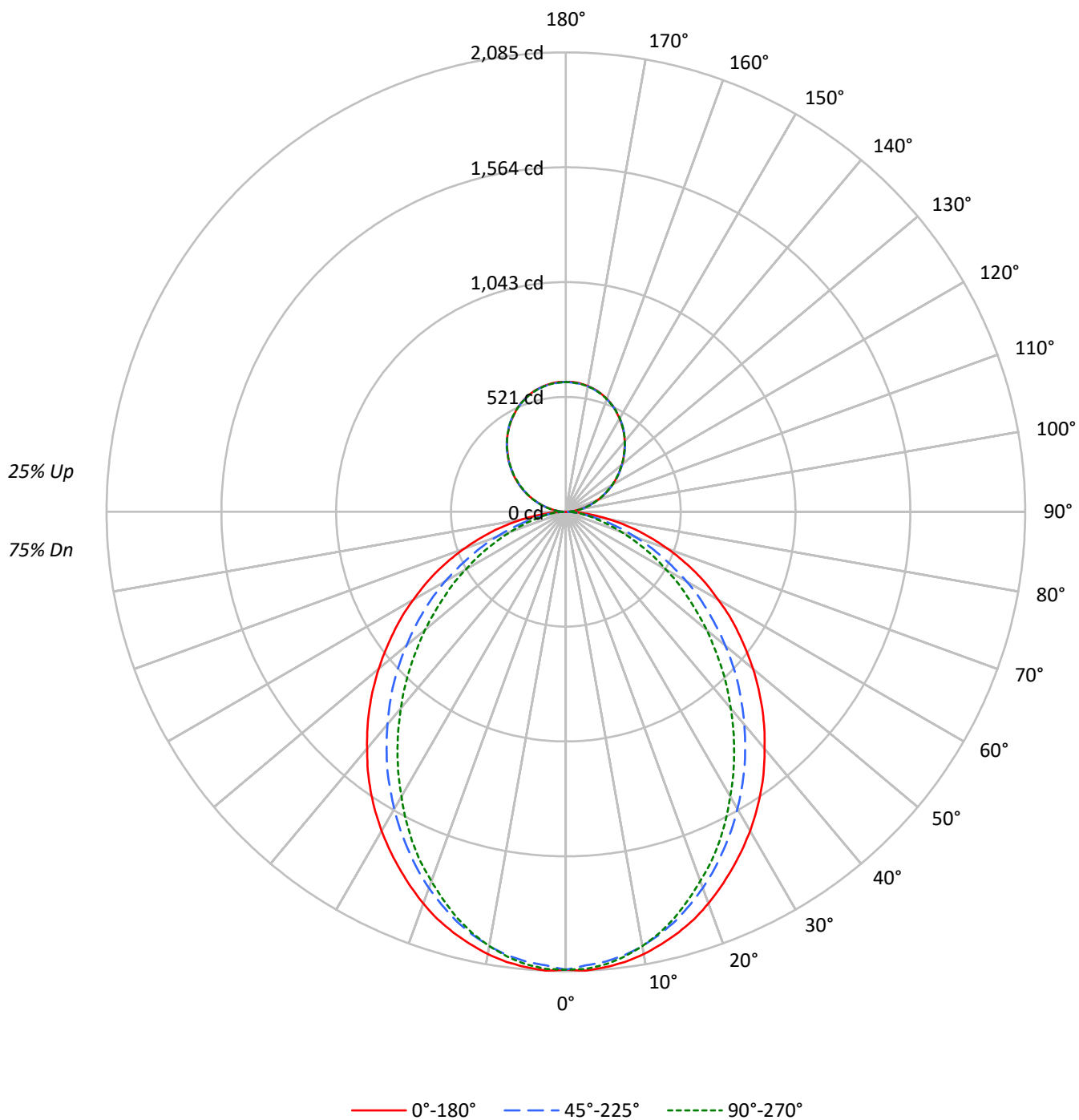
Lumens per Lamp: N/A
Luminaire Lumens: 6438.0 lumens
Efficiency: N/A
Efficacy: 86.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	113	113	113	113	107	107	107	107	97	97	97	87	87	87	79	79	79
1	104	99	96	92	98	95	91	88	86	83	81	78	76	74	70	69	67
2	95	87	81	76	90	83	78	73	76	71	68	69	65	62	62	60	57
3	87	77	70	64	82	74	67	62	67	62	57	61	57	53	56	52	49
4	80	69	61	54	75	66	58	53	60	54	49	55	50	46	50	46	43
5	73	61	53	47	70	59	51	46	54	48	43	49	44	40	45	41	38
6	68	55	47	41	64	53	46	40	49	42	38	45	40	35	41	37	33
7	63	50	42	36	60	48	41	35	45	38	33	41	36	32	38	33	30
8	59	46	38	33	56	44	37	32	41	34	30	38	32	28	35	30	27
9	55	42	34	29	52	41	33	29	38	31	27	35	29	26	32	28	24
10	51	39	31	26	49	37	31	26	35	29	25	32	27	23	30	25	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16947	16947	16947
5°	16949	16444	16445
10°	16805	15925	15736
15°	16574	15279	14898
20°	16271	14542	13943
25°	15893	13747	13009
30°	15524	12937	11962
35°	15117	12115	10938
40°	14633	11230	9886
45°	14180	10353	8844
50°	13663	9394	7786
55°	13106	8412	6695
60°	12487	7368	5616
65°	11891	6172	4579
70°	11041	4913	3498
75°	9951	3573	2447
80°	8312	2194	1758
85°	6251	1263	966

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14180 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.4	3.0
10°-20°	544.9	8.5
20°-30°	786.7	12.2
30°-40°	891.6	13.8
40°-50°	860.8	13.4
50°-60°	715.7	11.1
60°-70°	494.0	7.7
70°-80°	249.6	3.9
80°-90°	64.6	1.0
90°-100°	38.4	0.6
100°-110°	115.0	1.8
110°-120°	195.4	3.0
120°-130°	257.7	4.0
130°-140°	289.5	4.5
140°-150°	284.5	4.4
150°-160°	239.3	3.7
160°-170°	159.2	2.5
170°-180°	55.7	0.9
0°-30°	1527.0	23.7
0°-40°	2418.5	37.6
0°-60°	3995.0	62.1
0°-90°	4803.2	74.6
90°-120°	348.8	5.4
90°-150°	1180.5	18.3
90°-180°	1635.0	25.4
0°-180°	6438.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2078	2078	2078	2078	2078	
5°	2075	2069	2050	2066	2062	197
15°	1976	1962	1922	1919	1908	557
25°	1787	1758	1693	1666	1650	823
35°	1545	1494	1415	1361	1332	966
45°	1260	1201	1106	1028	999	972
55°	955	891	788	705	675	854
65°	649	581	479	411	392	641
75°	345	286	212	175	166	364
85°	86	54	49	46	46	94
90°	1	6	10	13	14	7
95°	27	31	35	36	36	30
105°	106	107	108	110	111	113
115°	199	199	198	197	197	196
125°	289	289	289	288	287	258
135°	373	376	376	375	374	289
145°	453	455	456	455	454	284
155°	520	520	519	521	519	239
165°	566	564	563	566	564	159
175°	588	586	586	589	586	56
180°	589	589	589	589	589	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2078.2	2078.2	2078.2	2078.2	2078.2
2.5°	2084.6	2078.2	2060.7	2078.2	2076.7
5°	2075.1	2068.7	2049.6	2065.5	2062.3
7.5°	2060.7	2054.4	2030.5	2041.6	2036.9
10°	2038.5	2030.5	2001.9	2008.2	2001.9
12.5°	2009.8	2000.3	1965.3	1968.4	1958.9
15°	1976.4	1962.1	1922.3	1919.1	1908.0
17.5°	1938.2	1917.5	1871.4	1863.4	1847.5
20°	1892.1	1871.4	1817.3	1804.5	1783.9
22.5°	1841.1	1817.3	1758.4	1737.7	1721.8
25°	1787.0	1758.4	1693.1	1666.1	1650.2
27.5°	1731.3	1696.3	1627.9	1596.1	1573.8
30°	1672.5	1632.7	1557.9	1518.1	1492.6
32.5°	1610.4	1564.3	1486.3	1438.5	1414.7
35°	1545.2	1494.2	1414.7	1360.6	1331.9
37.5°	1476.7	1424.2	1336.7	1277.8	1249.2
40°	1403.5	1351.0	1260.3	1193.5	1164.8
42.5°	1333.5	1277.8	1182.3	1113.9	1083.7
45°	1260.3	1201.4	1106.0	1028.0	999.3
47.5°	1185.5	1125.1	1026.4	945.2	913.4
50°	1109.1	1047.1	945.2	865.7	835.4
52.5°	1031.2	970.7	865.7	784.5	752.7
55°	954.8	891.1	787.7	704.9	674.7
57.5°	880.0	813.2	711.3	627.0	604.7
60°	798.8	735.2	633.3	550.6	525.1
62.5°	725.6	658.8	553.8	479.0	459.9
65°	649.3	580.8	479.0	410.6	391.5
67.5°	569.7	504.4	409.0	348.5	326.2
70°	494.9	428.1	337.4	284.8	268.9
72.5°	415.3	356.5	272.1	229.1	214.8
75°	345.3	286.4	211.6	175.0	165.5
77.5°	272.1	221.2	157.5	132.1	128.9
80°	202.1	155.9	108.2	103.4	101.8
82.5°	141.6	100.3	78.0	74.8	73.2
85°	85.9	54.1	49.3	46.1	46.1
87.5°	36.6	23.9	22.3	20.7	22.3
90°	1.4	6.4	10.0	12.8	13.7
92.5°	11.8	17.8	20.0	21.4	21.9
95°	27.3	31.4	34.6	36.0	36.0
97.5°	43.7	47.4	51.0	52.9	52.9
100°	63.8	65.6	69.7	70.6	70.6
102.5°	84.8	85.2	88.9	90.2	90.7
105°	106.2	106.6	108.4	109.8	111.2
107.5°	128.5	129.0	129.4	131.2	130.8
110°	151.3	152.2	151.7	150.8	152.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	175.0	175.0	174.1	174.1	174.1
115°	198.7	198.7	197.8	197.3	196.8
117.5°	221.0	221.0	220.5	219.2	217.8
120°	243.3	245.1	243.8	241.5	242.4
122.5°	266.6	267.0	266.6	265.2	262.9
125°	289.3	289.3	288.9	288.0	287.1
127.5°	309.9	311.2	310.3	309.4	308.9
130°	331.7	333.1	333.1	332.2	330.4
132.5°	354.1	355.0	354.5	353.6	353.1
135°	373.2	375.9	375.9	375.0	373.6
137.5°	394.6	396.0	396.9	395.5	396.0
140°	416.0	416.9	416.9	416.5	416.0
142.5°	435.6	436.5	436.1	436.1	436.1
145°	453.4	455.2	455.7	455.2	453.8
147.5°	471.6	473.9	473.4	473.0	472.5
150°	488.0	489.8	489.8	489.8	489.4
152.5°	503.5	504.4	504.9	506.2	504.9
155°	519.5	519.5	519.0	520.8	519.0
157.5°	533.1	532.2	532.2	533.6	532.2
160°	545.0	544.5	544.1	545.4	543.2
162.5°	555.9	554.5	554.1	556.8	554.5
165°	565.5	564.1	563.2	565.9	564.1
167.5°	573.2	571.4	571.4	574.1	571.4
170°	579.6	577.3	577.8	580.5	577.3
172.5°	584.2	582.3	582.3	585.5	582.3
175°	588.3	586.0	585.5	588.7	585.5
177.5°	590.1	587.8	587.8	591.0	587.4
180°	589.2	589.2	589.2	589.2	589.2

(END OF REPORT)