

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: P1033941

Luminaire Tested: S124RDIW-B1195D1050UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033941
REPORT IS A COMBINATION OF REPORTS P1000081 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1195D1050UB50-4F0-XX-W2A-F1
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

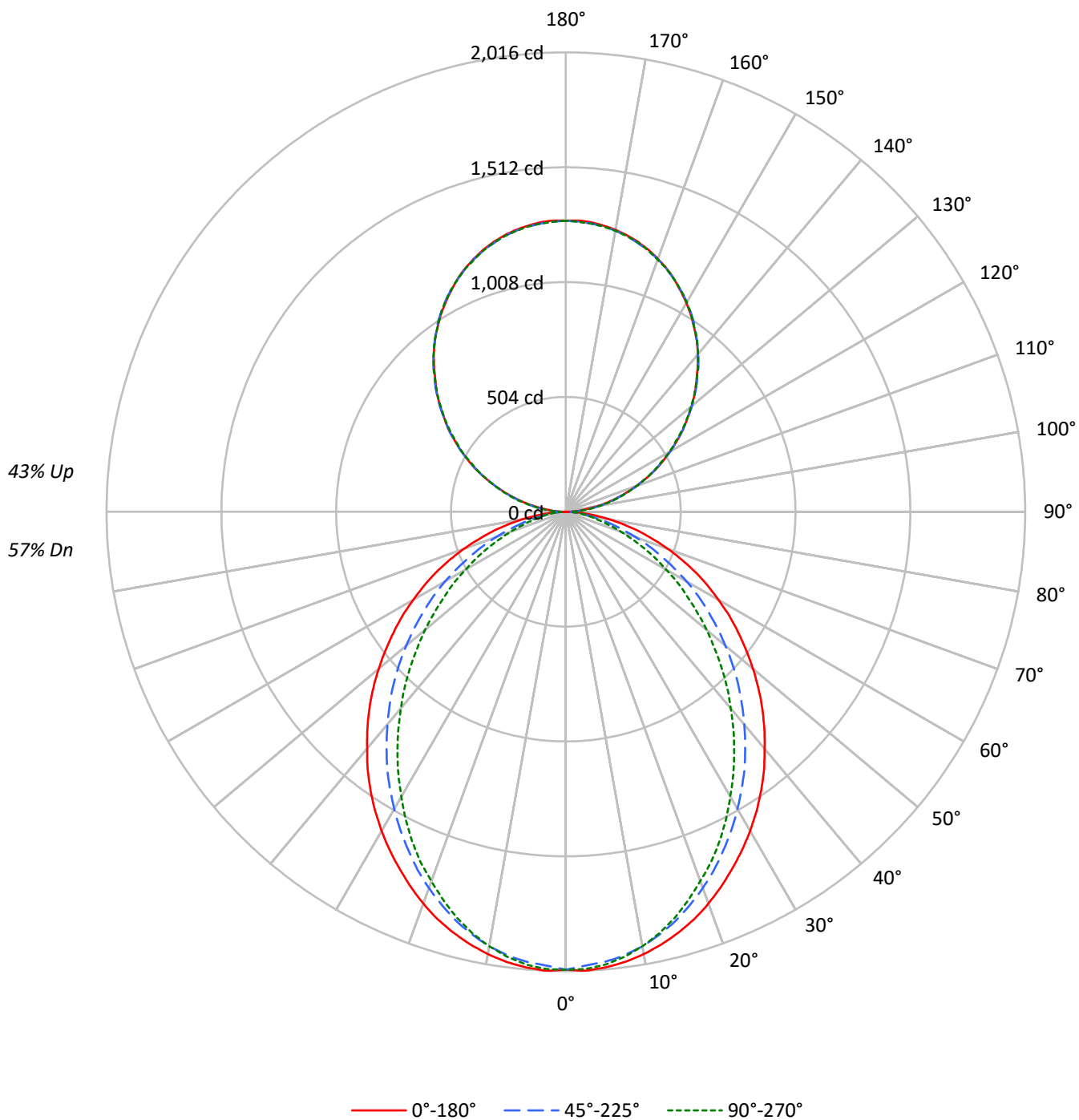
Lumens per Lamp: N/A
Luminaire Lumens: 8191.0 lumens
Efficiency: N/A
Efficacy: 88.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 92.8
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	101	101	101	101	87	87	87	74	74	74	62	62	62
1	100	95	92	88	93	89	86	83	77	74	72	66	64	62	56	54	53
2	91	84	78	72	84	78	73	68	68	64	60	58	55	53	49	47	45
3	83	74	67	61	77	69	63	57	60	55	51	52	48	45	44	41	39
4	76	65	58	52	71	61	54	49	53	48	44	46	42	39	39	36	34
5	70	59	50	44	65	55	48	42	48	42	38	42	37	34	36	32	30
6	65	53	45	39	60	49	42	37	43	38	33	38	33	30	32	29	26
7	60	48	40	34	56	45	38	33	39	34	29	34	30	26	30	26	23
8	56	43	36	30	52	41	34	29	36	30	26	32	27	24	27	24	21
9	52	40	32	27	48	37	31	26	33	28	24	29	25	21	25	22	19
10	49	36	29	24	45	34	28	23	31	25	21	27	22	19	23	20	17

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	2.3
10°-20°	527.0	6.4
20°-30°	760.8	9.3
30°-40°	862.2	10.5
40°-50°	832.5	10.2
50°-60°	692.1	8.4
60°-70°	477.7	5.8
70°-80°	241.4	2.9
80°-90°	64.0	0.8
90°-100°	83.3	1.0
100°-110°	249.4	3.0
110°-120°	423.7	5.2
120°-130°	558.7	6.8
130°-140°	627.6	7.7
140°-150°	616.8	7.5
150°-160°	518.8	6.3
160°-170°	345.2	4.2
170°-180°	120.9	1.5
0°-30°	1476.7	18.0
0°-40°	2339.0	28.6
0°-60°	3863.6	47.2
0°-90°	4646.7	56.7
90°-120°	756.3	9.2
90°-150°	2559.4	31.2
90°-180°	3544.0	43.3
0°-180°	8191.0	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°	3	14	22	28	30	9
95°	59	68	75	78	78	64
105°	230	231	235	238	241	244
115°	431	431	429	428	427	425
125°	627	627	626	624	622	559
135°	809	815	815	813	810	626
145°	983	987	988	987	984	615
155°	1126	1126	1125	1129	1125	518
165°	1226	1223	1221	1227	1223	346
175°	1275	1270	1270	1276	1270	121
180°	1277	1277	1277	1277	1277	

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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°	3.0	13.8	21.7	27.7	29.6
92.5°	25.7	38.5	43.5	46.4	47.4
95°	59.3	68.2	75.1	78.0	78.0
97.5°	94.8	102.7	110.6	114.6	114.6
100°	138.3	142.3	151.2	153.1	153.1
102.5°	183.8	184.7	192.6	195.6	196.6
105°	230.2	231.2	235.1	238.1	241.1
107.5°	278.6	279.6	280.6	284.5	283.5
110°	328.0	330.0	329.0	327.0	330.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	379.4	379.4	377.4	377.4	377.4
115°	430.7	430.7	428.8	427.8	426.8
117.5°	479.1	479.1	478.2	475.2	472.2
120°	527.6	531.5	528.5	523.6	525.6
122.5°	577.9	578.9	577.9	575.0	570.0
125°	627.3	627.3	626.3	624.4	622.4
127.5°	671.8	674.8	672.8	670.8	669.8
130°	719.2	722.2	722.2	720.2	716.2
132.5°	767.6	769.6	768.6	766.6	765.6
135°	809.1	815.0	815.0	813.1	810.1
137.5°	855.5	858.5	860.5	857.5	858.5
140°	902.0	903.9	903.9	903.0	902.0
142.5°	944.5	946.4	945.4	945.4	945.4
145°	983.0	986.9	987.9	986.9	984.0
147.5°	1022.5	1027.4	1026.5	1025.5	1024.5
150°	1058.1	1062.0	1062.0	1062.0	1061.0
152.5°	1091.7	1093.6	1094.6	1097.6	1094.6
155°	1126.2	1126.2	1125.2	1129.2	1125.2
157.5°	1155.9	1153.9	1153.9	1156.9	1153.9
160°	1181.6	1180.6	1179.6	1182.5	1177.6
162.5°	1205.3	1202.3	1201.3	1207.2	1202.3
165°	1226.0	1223.0	1221.1	1227.0	1223.0
167.5°	1242.8	1238.9	1238.9	1244.8	1238.9
170°	1256.6	1251.7	1252.7	1258.6	1251.7
172.5°	1266.5	1262.6	1262.6	1269.5	1262.6
175°	1275.4	1270.5	1269.5	1276.4	1269.5
177.5°	1279.4	1274.4	1274.4	1281.3	1273.4
180°	1277.4	1277.4	1277.4	1277.4	1277.4

(END OF REPORT)