

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: P1033320

Luminaire Tested: S124DIW-B1195D1560UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033320
REPORT IS A COMBINATION OF REPORTS P997142 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D1560UB50-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

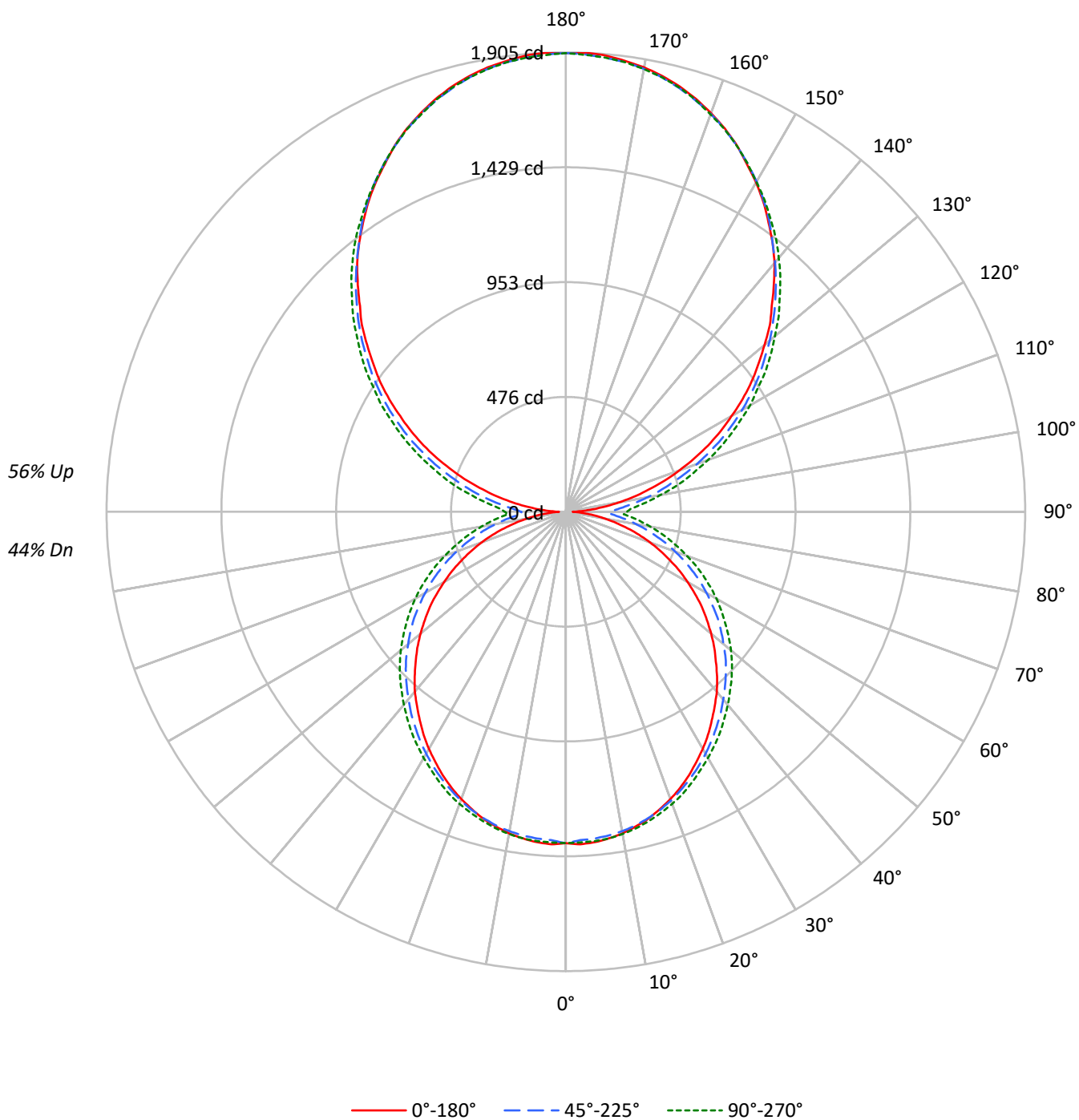
Lumens per Lamp: N/A
Luminaire Lumens: 9967.0 lumens
Efficiency: N/A
Efficacy: 87.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 113.5
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	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50
1	95	91	87	83	87	83	79	76	69	66	64	55	53	52	43	42	41
2	87	79	72	67	79	72	66	62	59	55	52	48	45	42	37	35	33
3	79	69	61	55	71	63	56	51	52	47	43	42	38	35	33	30	28
4	72	61	53	46	65	56	49	43	46	41	36	37	33	30	29	26	24
5	66	54	46	39	60	49	42	37	41	36	31	33	29	26	26	23	21
6	60	48	40	34	55	44	37	32	37	31	27	30	26	23	24	20	18
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	21	18	16
8	52	39	31	26	47	36	29	24	30	25	21	25	21	18	20	17	14
9	48	36	28	23	44	33	26	22	28	22	19	23	19	16	18	15	13
10	45	33	25	21	41	30	24	19	25	20	17	21	17	14	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11205	11205	11205
5°	11236	10913	10933
10°	11163	10699	10668
15°	11059	10457	10369
20°	10904	10196	10078
25°	10729	9908	9765
30°	10541	9622	9446
35°	10327	9330	9162
40°	10156	9050	8867
45°	9903	8787	8607
50°	9686	8488	8332
55°	9463	8201	8017
60°	9117	7842	7719
65°	8735	7456	7361
70°	8272	7013	6947
75°	7628	6522	6553
80°	6897	6023	6141
85°	5938	5520	5806

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9903 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	1.3
10°-20°	373.1	3.7
20°-30°	564.1	5.7
30°-40°	682.4	6.8
40°-50°	721.4	7.2
50°-60°	678.9	6.8
60°-70°	563.4	5.7
70°-80°	395.4	4.0
80°-90°	227.0	2.3
90°-100°	256.7	2.6
100°-110°	469.6	4.7
110°-120°	696.8	7.0
120°-130°	869.2	8.7
130°-140°	950.6	9.5
140°-150°	921.7	9.2
150°-160°	772.6	7.8
160°-170°	514.0	5.2
170°-180°	180.0	1.8
0°-30°	1067.3	10.7
0°-40°	1749.7	17.6
0°-60°	3150.1	31.6
0°-90°	4335.8	43.5
90°-120°	1423.2	14.3
90°-150°	4164.7	41.8
90°-180°	5631.0	56.5
0°-180°	9967.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1374	1374	1374	1374	1374	
5°	1376	1371	1360	1373	1371	131
15°	1319	1320	1316	1330	1328	372
25°	1206	1216	1220	1237	1239	556
35°	1056	1074	1090	1111	1116	661
45°	880	909	939	965	972	680
55°	689	722	768	799	808	614
65°	477	526	579	617	629	473
75°	265	322	386	429	443	281
85°	82	146	215	262	277	85
90°	29	107	185	238	253	23
95°	108	172	246	292	306	112
105°	357	389	452	494	511	379
115°	651	664	711	743	752	642
125°	940	939	976	1002	1008	839
135°	1208	1217	1228	1249	1254	935
145°	1465	1470	1471	1479	1481	917
155°	1677	1677	1676	1682	1676	772
165°	1826	1821	1818	1827	1821	515
175°	1899	1892	1890	1901	1890	180
180°	1902	1902	1902	1902	1902	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1374.1	1374.1	1374.1	1374.1	1374.1
2.5°	1380.3	1375.7	1363.4	1374.1	1372.6
5°	1375.7	1371.1	1360.3	1372.6	1371.1
7.5°	1366.4	1363.4	1354.1	1368.0	1366.4
10°	1354.1	1352.6	1344.9	1358.8	1357.2
12.5°	1337.2	1337.2	1332.6	1344.9	1344.9
15°	1318.7	1320.3	1315.7	1329.5	1328.0
17.5°	1294.1	1298.7	1297.2	1311.0	1309.5
20°	1268.0	1272.6	1274.1	1289.5	1289.5
22.5°	1238.7	1244.9	1248.0	1263.3	1266.4
25°	1206.4	1215.6	1220.3	1237.2	1238.7
27.5°	1171.0	1184.9	1191.0	1206.4	1207.9
30°	1135.6	1147.9	1158.7	1175.6	1178.7
32.5°	1097.2	1112.5	1124.9	1144.9	1147.9
35°	1055.6	1074.1	1089.5	1111.0	1115.6
37.5°	1014.1	1035.6	1054.1	1075.6	1080.2
40°	974.1	994.1	1015.6	1038.7	1044.8
42.5°	927.9	951.0	977.1	1003.3	1007.9
45°	880.2	909.4	938.7	964.8	972.5
47.5°	835.6	864.8	898.7	924.8	934.0
50°	786.3	820.2	854.0	884.8	894.0
52.5°	737.1	770.9	810.9	841.7	850.9
55°	689.4	721.7	767.9	798.6	807.9
57.5°	635.5	675.5	720.2	757.1	764.8
60°	583.2	623.2	674.0	709.4	721.7
62.5°	532.4	577.0	627.8	663.2	675.5
65°	477.0	526.3	578.6	617.1	629.4
67.5°	424.7	477.0	532.4	570.9	583.2
70°	370.8	423.2	481.6	523.2	534.0
72.5°	318.5	372.4	435.5	475.5	487.8
75°	264.7	321.6	386.2	429.3	443.2
77.5°	213.9	273.9	341.6	384.7	400.1
80°	167.7	229.3	297.0	343.1	355.5
82.5°	121.6	186.2	253.9	301.6	315.5
85°	81.6	146.2	215.4	261.6	277.0
87.5°	50.8	113.9	181.6	226.2	240.1
90°	29.0	106.8	184.7	238.2	253.4
92.5°	61.4	134.3	207.8	255.3	269.1
95°	108.3	172.3	245.7	291.6	305.5
97.5°	159.7	216.1	291.0	336.9	350.7
100°	222.9	268.7	342.0	386.5	397.3
102.5°	290.5	325.9	396.2	440.6	454.4
105°	356.6	388.9	451.7	494.5	511.3
107.5°	428.7	456.3	511.7	556.0	565.3
110°	500.7	525.3	577.6	610.1	626.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	575.7	594.1	642.0	675.9	688.2
115°	650.6	664.5	710.8	743.2	752.4
117.5°	722.7	732.0	776.6	804.5	812.5
120°	793.3	803.8	844.0	867.4	882.7
122.5°	868.3	869.8	909.8	936.2	939.7
125°	940.4	938.8	975.8	1002.1	1008.4
127.5°	1006.6	1009.4	1037.3	1062.0	1071.3
130°	1075.6	1078.5	1103.1	1127.9	1131.2
132.5°	1147.7	1149.1	1166.1	1189.3	1197.0
135°	1208.0	1216.8	1227.5	1249.3	1254.1
137.5°	1277.1	1279.9	1289.1	1307.8	1316.9
140°	1346.3	1347.6	1349.2	1367.7	1374.0
142.5°	1407.9	1410.9	1407.9	1424.8	1431.0
145°	1465.3	1469.7	1471.2	1478.9	1480.7
147.5°	1524.2	1530.0	1528.5	1528.6	1533.3
150°	1577.1	1581.5	1581.5	1581.5	1580.0
152.5°	1625.6	1628.6	1630.0	1634.5	1630.0
155°	1677.1	1677.1	1675.7	1681.5	1675.7
157.5°	1721.3	1718.3	1718.3	1722.7	1718.3
160°	1759.5	1758.0	1756.6	1761.0	1753.6
162.5°	1794.8	1790.4	1788.9	1797.8	1790.4
165°	1825.7	1821.3	1818.4	1827.2	1821.3
167.5°	1850.7	1844.8	1844.8	1853.7	1844.8
170°	1871.3	1864.0	1865.4	1874.3	1864.0
172.5°	1886.0	1880.1	1880.1	1890.4	1880.1
175°	1899.3	1891.9	1890.4	1900.7	1890.4
177.5°	1905.2	1897.8	1897.8	1908.1	1896.3
180°	1902.2	1902.2	1902.2	1902.2	1902.2

(END OF REPORT)