

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: P1033753

Luminaire Tested: S124DIW-B795D1560UB35-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033753
REPORT IS A COMBINATION OF REPORTS P998116 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D1560UB35-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

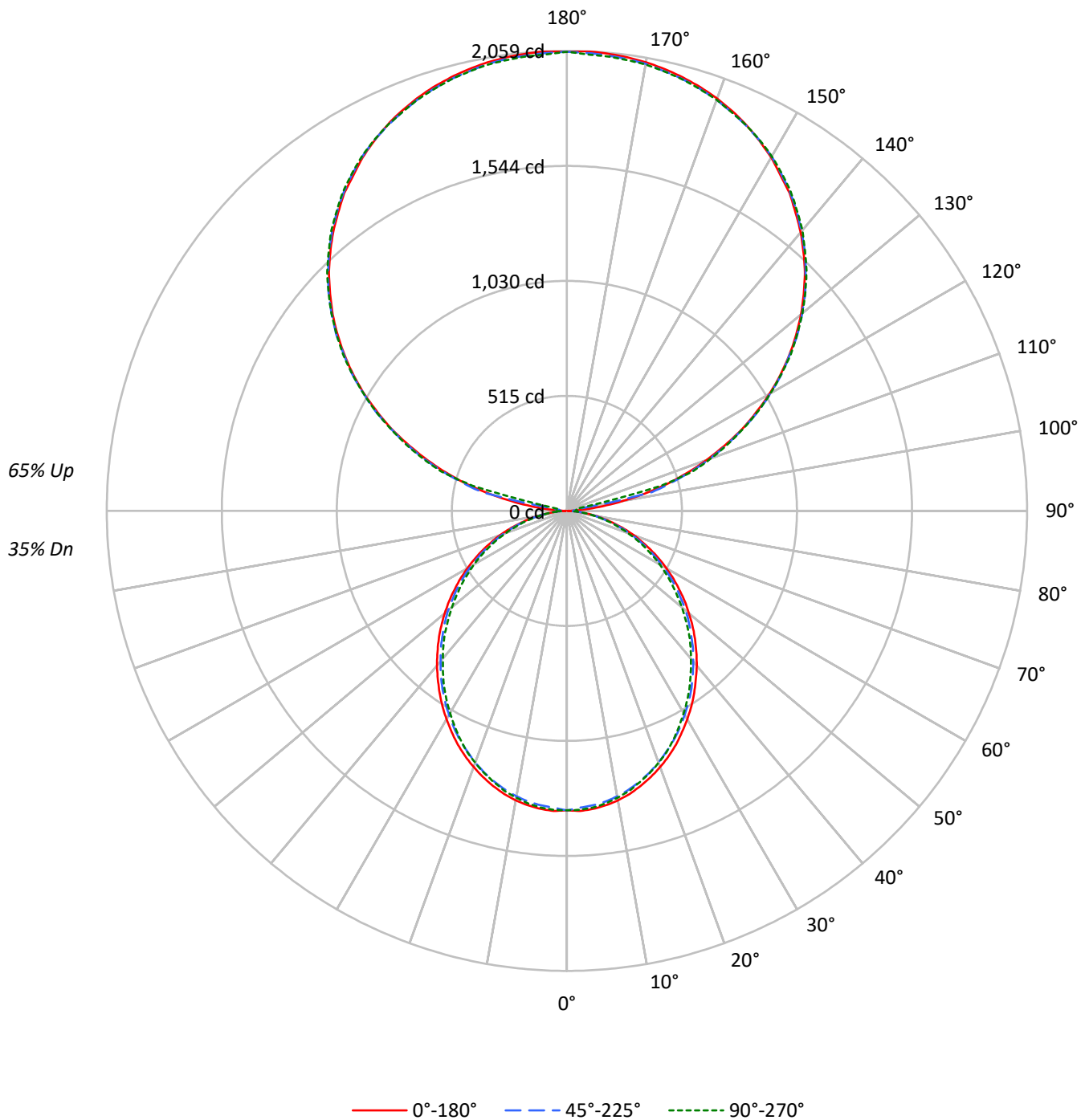
Lumens per Lamp: N/A
Luminaire Lumens: 9802.0 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 88.1
Input Voltage (V):
Input Current (A_{in}): 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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42
1	94	90	86	83	85	82	78	76	66	63	61	51	50	48	37	37	36
2	86	79	73	68	77	71	66	62	58	54	51	45	42	40	33	31	30
3	78	69	62	56	71	63	57	52	51	46	43	40	37	34	29	27	26
4	72	61	53	48	64	56	49	44	45	40	36	35	32	29	26	24	22
5	66	54	46	41	59	49	43	37	40	35	31	32	28	25	23	21	19
6	60	49	41	35	54	44	37	32	36	31	27	28	25	22	21	19	17
7	56	44	36	31	50	40	33	28	33	28	24	26	22	19	19	17	15
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	15	13
9	48	36	29	24	43	33	27	22	27	22	19	22	18	15	16	14	12
10	45	33	26	21	41	30	24	20	25	20	17	20	16	14	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10929	10929	10929
5°	10938	10615	10627
10°	10845	10320	10247
15°	10690	9969	9820
20°	10491	9591	9376
25°	10268	9190	8898
30°	9998	8757	8374
35°	9719	8314	7867
40°	9427	7837	7328
45°	9122	7359	6824
50°	8785	6895	6266
55°	8417	6353	5711
60°	8041	5760	5134
65°	7611	5148	4484
70°	7117	4409	3786
75°	6374	3555	3032
80°	5433	2570	2133
85°	4221	1430	1149

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9122 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.3	1.3
10°-20°	355.9	3.6
20°-30°	523.8	5.3
30°-40°	608.9	6.2
40°-50°	608.8	6.2
50°-60°	532.5	5.4
60°-70°	395.3	4.0
70°-80°	224.3	2.3
80°-90°	68.5	0.7
90°-100°	68.2	0.7
100°-110°	449.2	4.6
110°-120°	857.7	8.8
120°-130°	1088.8	11.1
130°-140°	1164.8	11.9
140°-150°	1089.2	11.1
150°-160°	878.3	9.0
160°-170°	566.4	5.8
170°-180°	195.2	2.0
0°-30°	1006.0	10.3
0°-40°	1614.9	16.5
0°-60°	2756.1	28.1
0°-90°	3444.2	35.1
90°-120°	1375.0	14.0
90°-150°	4717.8	48.1
90°-180°	6358.0	64.9
0°-180°	9802.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1340	1340	1340	1340	1340	
5°	1339	1335	1323	1335	1333	127
15°	1275	1270	1254	1261	1258	359
25°	1154	1147	1132	1133	1129	531
35°	993	986	971	963	958	621
45°	811	803	786	774	771	625
55°	613	610	595	582	576	549
65°	416	410	400	389	383	411
75°	221	216	210	206	205	235
85°	58	58	56	56	55	62
90°	5	22	34	43	46	8
95°	84	32	34	43	45	104
105°	463	472	480	493	438	484
115°	864	868	867	870	870	850
125°	1214	1220	1217	1222	1223	1084
135°	1506	1504	1511	1514	1517	1160
145°	1736	1741	1741	1743	1746	1085
155°	1904	1906	1901	1907	1902	878
165°	2008	2001	2001	2013	1999	568
175°	2055	2045	2047	2061	2042	196
180°	2055	2055	2055	2055	2055	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1340.2	1340.2	1340.2	1340.2	1340.2
2.5°	1344.5	1341.3	1329.5	1340.2	1339.2
5°	1339.2	1334.9	1323.1	1334.9	1332.7
7.5°	1329.5	1325.2	1312.3	1322.0	1320.9
10°	1315.5	1311.2	1297.3	1305.9	1303.7
12.5°	1297.3	1293.0	1278.0	1287.6	1284.4
15°	1274.7	1270.4	1254.3	1260.8	1257.6
17.5°	1249.0	1243.6	1228.6	1232.9	1230.7
20°	1220.0	1214.6	1198.5	1201.7	1199.6
22.5°	1188.8	1181.3	1165.2	1171.6	1167.3
25°	1154.5	1146.9	1131.9	1133.0	1128.7
27.5°	1115.8	1108.3	1094.3	1092.2	1086.8
30°	1077.1	1068.5	1054.6	1050.3	1044.9
32.5°	1036.3	1028.8	1013.8	1008.4	1003.0
35°	993.4	985.9	970.8	963.3	957.9
37.5°	948.3	941.8	925.7	918.2	910.7
40°	904.2	895.6	879.5	868.8	863.4
42.5°	857.0	852.7	834.4	821.5	818.3
45°	810.8	803.3	786.1	774.3	771.1
47.5°	762.5	757.1	741.0	728.1	719.5
50°	713.1	708.8	693.7	678.7	672.3
52.5°	664.8	659.4	643.3	630.4	621.8
55°	613.2	610.0	594.9	582.1	575.6
57.5°	564.9	561.7	546.6	533.7	527.3
60°	514.4	509.0	495.1	485.4	480.0
62.5°	465.0	460.7	445.7	437.1	431.7
65°	415.6	410.2	399.5	388.8	383.4
67.5°	365.1	360.8	350.1	339.4	338.3
70°	319.0	311.4	302.8	294.3	291.0
72.5°	269.6	262.0	255.6	249.1	245.9
75°	221.2	215.9	210.5	206.2	205.1
77.5°	174.0	171.8	166.5	165.4	162.2
80°	132.1	128.9	126.7	124.6	123.5
82.5°	91.3	90.2	90.2	89.1	88.1
85°	58.0	58.0	55.8	55.8	54.8
87.5°	27.9	26.8	25.8	25.8	25.8
90°	4.6	21.5	33.8	43.0	46.1
92.5°	23.1	20.0	32.3	41.5	41.5
95°	84.5	32.3	33.8	43.0	44.6
97.5°	161.4	195.2	33.8	41.5	43.0
100°	252.0	279.7	67.6	41.5	43.0
102.5°	353.5	371.9	390.3	44.6	44.6
105°	462.6	471.8	479.5	493.3	438.0
107.5°	562.4	567.1	577.8	585.5	591.6
110°	663.9	668.5	677.7	680.8	685.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	762.2	771.4	774.5	773.0	779.1
115°	863.7	868.3	866.7	869.8	869.8
117.5°	954.3	960.5	965.1	963.5	963.5
120°	1046.5	1052.7	1051.1	1054.2	1051.1
122.5°	1132.6	1135.7	1138.7	1140.3	1137.2
125°	1214.0	1220.2	1217.1	1221.7	1223.3
127.5°	1292.4	1293.9	1301.6	1300.1	1298.6
130°	1367.7	1369.2	1373.9	1375.4	1375.4
132.5°	1436.9	1439.9	1446.1	1447.6	1446.1
135°	1506.0	1504.5	1510.6	1513.7	1516.8
137.5°	1567.5	1567.5	1575.2	1578.2	1576.7
140°	1627.4	1630.5	1633.6	1638.2	1639.7
142.5°	1681.2	1687.3	1688.9	1692.0	1692.0
145°	1736.5	1741.1	1741.1	1742.7	1745.7
147.5°	1779.6	1788.8	1787.2	1788.8	1790.3
150°	1827.2	1833.3	1831.8	1831.8	1833.3
152.5°	1867.1	1871.8	1868.7	1871.8	1870.2
155°	1904.0	1905.6	1901.0	1907.1	1902.5
157.5°	1936.3	1936.3	1930.2	1937.8	1930.2
160°	1964.0	1959.4	1957.8	1967.0	1957.8
162.5°	1988.6	1982.4	1980.9	1990.1	1979.3
165°	2008.5	2000.8	2000.8	2013.1	1999.3
167.5°	2025.4	2017.8	2016.2	2030.0	2014.7
170°	2039.3	2030.0	2031.6	2043.9	2028.5
172.5°	2048.5	2039.3	2040.8	2053.1	2036.2
175°	2054.6	2045.4	2046.9	2060.8	2042.3
177.5°	2059.2	2048.5	2051.6	2063.9	2045.4
180°	2054.6	2054.6	2054.6	2054.6	2054.6

(END OF REPORT)