

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: P1033604

Luminaire Tested: S124DIW-B575D1560UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033604
REPORT IS A COMBINATION OF REPORTS P997783 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D1560UB35-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

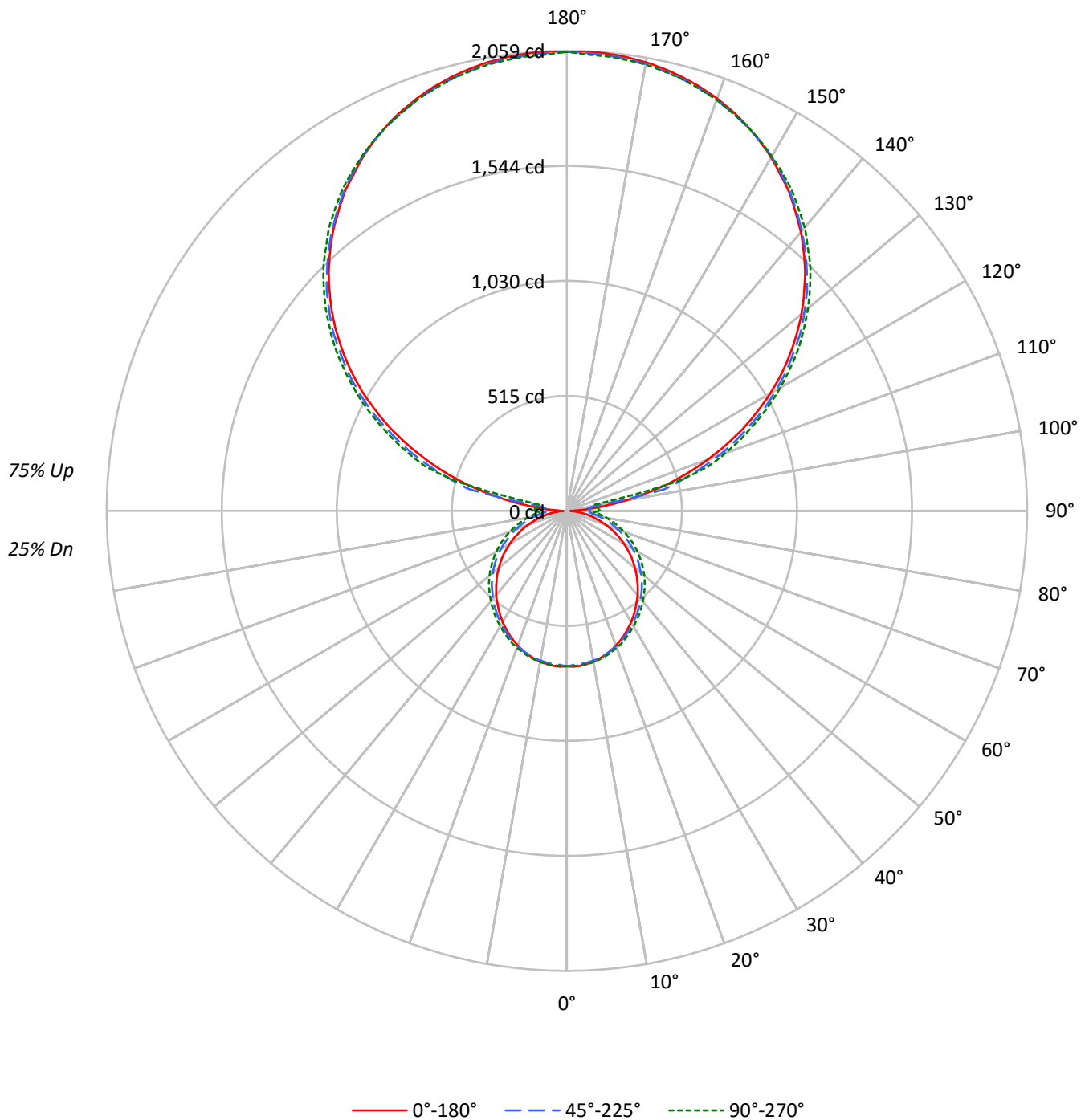
Lumens per Lamp: N/A
Luminaire Lumens: 8732.0 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 76.2
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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	33	33	33
1	92	87	83	80	81	78	75	72	60	58	56	44	42	41	29	28	27
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22
3	76	66	59	54	67	59	53	48	46	42	38	33	31	28	22	20	19
4	69	59	51	45	61	52	46	41	40	36	32	30	26	24	19	17	16
5	63	52	44	38	56	46	40	35	36	31	27	26	23	21	17	15	14
6	58	46	38	33	51	41	35	30	32	27	24	24	20	18	16	14	12
7	54	42	34	28	47	37	31	26	29	24	21	21	18	16	14	12	11
8	50	38	30	25	44	34	27	23	26	22	18	19	16	14	13	11	9
9	46	34	27	22	41	31	24	20	24	19	16	18	15	12	12	10	8
10	43	31	24	19	38	28	22	18	22	17	14	16	13	11	11	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5668	5668	5668
5°	5684	5521	5531
10°	5647	5412	5397
15°	5594	5290	5246
20°	5516	5157	5098
25°	5428	5012	4940
30°	5333	4868	4779
35°	5224	4720	4635
40°	5137	4578	4486
45°	5010	4445	4354
50°	4901	4294	4216
55°	4787	4148	4055
60°	4611	3967	3905
65°	4419	3772	3724
70°	4185	3547	3514
75°	3859	3300	3315
80°	3488	3046	3106
85°	3005	2793	2937

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 5578 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.9	0.8
10°-20°	188.7	2.2
20°-30°	285.3	3.3
30°-40°	345.2	4.0
40°-50°	364.9	4.2
50°-60°	343.5	3.9
60°-70°	285.0	3.3
70°-80°	200.0	2.3
80°-90°	117.0	1.3
90°-100°	135.3	1.5
100°-110°	498.9	5.7
110°-120°	891.0	10.2
120°-130°	1107.6	12.7
130°-140°	1172.9	13.4
140°-150°	1090.8	12.5
150°-160°	878.3	10.1
160°-170°	566.4	6.5
170°-180°	195.2	2.2
0°-30°	539.9	6.2
0°-40°	885.1	10.1
0°-60°	1593.5	18.2
0°-90°	2195.5	25.1
90°-120°	1525.2	17.5
90°-150°	4896.5	56.1
90°-180°	6537.0	74.9
0°-180°	8732.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	695	695	695	695	695	
5°	696	694	688	694	694	66
15°	667	668	666	673	672	188
25°	610	615	617	626	627	281
35°	534	543	551	562	564	334
45°	445	460	475	488	492	344
55°	349	365	388	404	409	311
65°	241	266	293	312	318	239
75°	134	163	195	217	224	142
85°	41	74	109	132	140	43
90°	17	65	111	143	152	13
95°	95	68	102	132	140	112
105°	470	494	531	564	515	492
115°	868	880	903	924	929	855
125°	1217	1222	1239	1258	1265	1087
135°	1508	1506	1518	1533	1541	1162
145°	1737	1741	1741	1747	1754	1086
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°	695.1	695.1	695.1	695.1	695.1
2.5°	698.2	695.9	689.7	695.1	694.4
5°	695.9	693.6	688.1	694.4	693.6
7.5°	691.2	689.7	685.0	692.0	691.2
10°	685.0	684.2	680.3	687.4	686.6
12.5°	676.5	676.5	674.1	680.3	680.3
15°	667.1	667.9	665.6	672.6	671.8
17.5°	654.7	657.0	656.2	663.2	662.4
20°	641.4	643.8	644.5	652.3	652.3
22.5°	626.6	629.7	631.3	639.1	640.6
25°	610.3	615.0	617.3	625.9	626.6
27.5°	592.4	599.4	602.5	610.3	611.1
30°	574.5	580.7	586.2	594.7	596.3
32.5°	555.0	562.8	569.0	579.1	580.7
35°	534.0	543.3	551.1	562.0	564.4
37.5°	513.0	523.9	533.2	544.1	546.5
40°	492.7	502.9	513.8	525.4	528.6
42.5°	469.4	481.1	494.3	507.5	509.9
45°	445.3	460.1	474.8	488.1	492.0
47.5°	422.7	437.5	454.6	467.8	472.5
50°	397.8	414.9	432.0	447.6	452.3
52.5°	372.9	390.0	410.2	425.8	430.5
55°	348.7	365.1	388.4	404.0	408.7
57.5°	321.5	341.7	364.3	383.0	386.9
60°	295.0	315.3	341.0	358.9	365.1
62.5°	269.3	291.9	317.6	335.5	341.7
65°	241.3	266.2	292.7	312.1	318.4
67.5°	214.8	241.3	269.3	288.8	295.0
70°	187.6	214.1	243.6	264.7	270.1
72.5°	161.1	188.4	220.3	240.5	246.8
75°	133.9	162.7	195.4	217.2	224.2
77.5°	108.2	138.6	172.8	194.6	202.4
80°	84.8	116.0	150.2	173.6	179.8
82.5°	61.5	94.2	128.4	152.6	159.6
85°	41.3	74.0	109.0	132.3	140.1
87.5°	25.7	57.6	91.9	114.4	121.4
90°	17.1	65.1	110.9	142.6	152.0
92.5°	34.8	58.9	104.7	135.7	141.9
95°	94.6	68.1	101.5	131.7	140.3
97.5°	170.7	227.1	97.6	125.6	134.1
100°	260.6	308.5	126.8	121.7	128.6
102.5°	362.1	397.6	445.6	120.1	126.3
105°	469.6	494.4	530.9	564.1	515.1
107.5°	569.4	587.3	625.3	652.4	664.0
110°	670.1	685.6	722.1	743.1	753.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	767.6	786.2	815.0	830.6	842.9
115°	868.4	880.0	903.3	923.5	929.0
117.5°	959.0	969.8	997.8	1012.5	1018.8
120°	1050.4	1058.9	1079.9	1098.6	1101.7
122.5°	1136.5	1139.6	1163.6	1180.8	1183.1
125°	1217.1	1222.5	1238.9	1258.3	1264.6
127.5°	1295.5	1296.2	1319.5	1332.0	1336.0
130°	1370.0	1370.8	1387.9	1403.4	1408.1
132.5°	1439.2	1441.5	1457.0	1471.7	1474.9
135°	1507.6	1506.1	1517.6	1533.2	1540.9
137.5°	1569.1	1568.3	1579.1	1593.8	1596.2
140°	1629.0	1631.3	1635.2	1649.9	1655.3
142.5°	1682.0	1688.1	1688.9	1700.6	1703.7
145°	1737.3	1741.1	1741.1	1747.4	1753.5
147.5°	1780.4	1788.8	1787.2	1789.6	1794.2
150°	1828.0	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)