

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: P1032654

Luminaire Tested: S124DIW-B350D1560UB2750-4F0-XX-W2A-F1_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032654
REPORT IS A COMBINATION OF REPORTS P997434 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1560UB2750-4F0-XX-W2A-F1_5000K
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

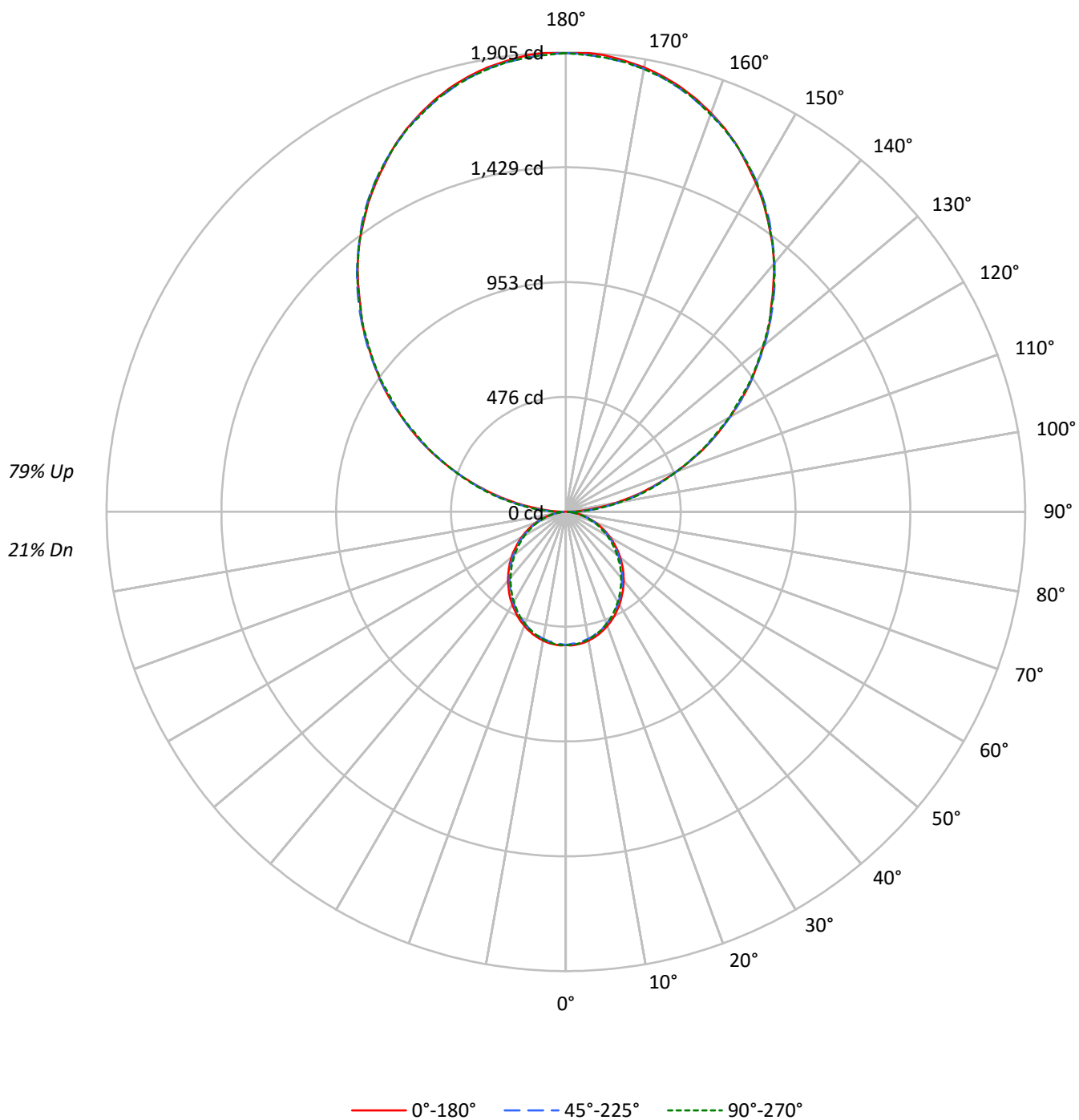
Lumens per Lamp: N/A
Luminaire Lumens: 6701.0 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 65.2
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	50	30	10
RCR																				
0	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30	21		
1	91	87	83	80	81	77	74	71	59	57	55	42	41	39	26	26	25	18		
2	83	76	70	65	73	67	63	59	51	48	45	37	35	33	23	22	21	15		
3	76	67	60	54	67	59	53	49	45	41	38	32	30	28	20	19	18	13		
4	69	59	51	46	61	52	46	41	40	36	32	29	26	24	18	17	15	11		
5	63	52	45	39	56	47	40	35	36	31	28	26	23	20	16	15	13	9		
6	58	47	39	33	51	42	35	30	32	27	24	23	20	18	15	13	12	8		
7	54	42	34	29	47	37	31	26	29	24	21	21	18	16	13	12	10	7		
8	50	38	31	26	44	34	28	23	26	22	18	19	16	14	12	11	9	7		
9	46	34	27	23	41	31	25	20	24	19	16	17	14	12	11	10	8	6		
10	43	31	25	20	38	28	22	18	22	18	15	16	13	11	10	9	7	5		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4509	4509	4509
5°	4512	4379	4384
10°	4474	4257	4227
15°	4409	4112	4050
20°	4327	3956	3867
25°	4235	3791	3671
30°	4124	3612	3454
35°	4009	3430	3245
40°	3889	3233	3023
45°	3763	3036	2815
50°	3623	2844	2585
55°	3472	2621	2356
60°	3317	2376	2118
65°	3139	2124	1849
70°	2936	1819	1563
75°	2631	1466	1251
80°	2242	1061	879
85°	1739	589	474

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3763 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.1	0.8
10°-20°	146.8	2.2
20°-30°	216.1	3.2
30°-40°	251.2	3.7
40°-50°	251.1	3.7
50°-60°	219.6	3.3
60°-70°	163.1	2.4
70°-80°	92.5	1.4
80°-90°	30.5	0.5
90°-100°	124.0	1.9
100°-110°	371.4	5.5
110°-120°	630.9	9.4
120°-130°	832.1	12.4
130°-140°	934.5	13.9
140°-150°	918.5	13.7
150°-160°	772.5	11.5
160°-170°	514.0	7.7
170°-180°	180.0	2.7
0°-30°	415.0	6.2
0°-40°	666.1	9.9
0°-60°	1136.9	17.0
0°-90°	1423.1	21.2
90°-120°	1126.3	16.8
90°-150°	3811.4	56.9
90°-180°	5278.0	78.8
0°-180°	6701.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	553	553	553	553	553	
5°	552	551	546	551	550	52
15°	526	524	517	520	519	148
25°	476	473	467	467	466	219
35°	410	407	400	397	395	256
45°	334	331	324	319	318	258
55°	253	252	245	240	237	227
65°	171	169	165	160	158	170
75°	91	89	87	85	85	97
85°	24	24	23	23	23	26
90°	4	21	32	41	44	8
95°	88	102	112	116	116	96
105°	343	344	350	354	359	363
115°	641	641	638	637	636	633
125°	934	934	933	930	927	833
135°	1205	1214	1214	1211	1206	932
145°	1464	1470	1471	1470	1465	916
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°	552.9	552.9	552.9	552.9	552.9
2.5°	554.6	553.3	548.4	552.9	552.4
5°	552.4	550.6	545.8	550.6	549.8
7.5°	548.4	546.6	541.3	545.3	544.9
10°	542.7	540.9	535.1	538.7	537.8
12.5°	535.1	533.4	527.2	531.1	529.8
15°	525.8	524.1	517.4	520.1	518.7
17.5°	515.2	513.0	506.8	508.6	507.7
20°	503.2	501.0	494.4	495.7	494.8
22.5°	490.4	487.3	480.6	483.3	481.5
25°	476.2	473.1	466.9	467.4	465.6
27.5°	460.3	457.2	451.4	450.5	448.3
30°	444.3	440.8	435.0	433.2	431.0
32.5°	427.5	424.4	418.2	416.0	413.8
35°	409.8	406.7	400.5	397.4	395.1
37.5°	391.2	388.5	381.9	378.8	375.7
40°	373.0	369.5	362.8	358.4	356.2
42.5°	353.5	351.7	344.2	338.9	337.6
45°	334.5	331.4	324.3	319.4	318.1
47.5°	314.5	312.3	305.7	300.3	296.8
50°	294.1	292.4	286.2	280.0	277.3
52.5°	274.2	272.0	265.4	260.0	256.5
55°	252.9	251.6	245.4	240.1	237.4
57.5°	233.0	231.7	225.5	220.2	217.5
60°	212.2	210.0	204.2	200.2	198.0
62.5°	191.8	190.0	183.8	180.3	178.1
65°	171.4	169.2	164.8	160.4	158.1
67.5°	150.6	148.8	144.4	140.0	139.5
70°	131.6	128.5	124.9	121.4	120.1
72.5°	111.2	108.1	105.4	102.8	101.4
75°	91.3	89.0	86.8	85.1	84.6
77.5°	71.8	70.9	68.7	68.2	66.9
80°	54.5	53.2	52.3	51.4	50.9
82.5°	37.7	37.2	37.2	36.8	36.3
85°	23.9	23.9	23.0	23.0	22.6
87.5°	11.5	11.1	10.6	10.6	10.6
90°	4.4	20.6	32.4	41.2	44.1
92.5°	38.3	57.4	64.7	69.1	70.6
95°	88.3	101.5	111.8	116.2	116.2
97.5°	141.2	153.0	164.8	170.7	170.7
100°	206.0	211.8	225.1	228.0	228.0
102.5°	273.6	275.1	286.9	291.3	292.8
105°	342.8	344.3	350.1	354.5	359.0
107.5°	414.9	416.3	417.8	423.7	422.2
110°	488.4	491.4	489.9	487.0	491.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	564.9	564.9	562.0	562.0	562.0
115°	641.4	641.4	638.5	637.0	635.5
117.5°	713.5	713.5	712.0	707.6	703.2
120°	785.6	791.5	787.1	779.7	782.7
122.5°	860.6	862.1	860.6	856.2	848.9
125°	934.2	934.2	932.7	929.8	926.8
127.5°	1000.4	1004.8	1001.9	998.9	997.4
130°	1071.0	1075.4	1075.4	1072.5	1066.6
132.5°	1143.1	1146.0	1144.6	1141.6	1140.1
135°	1204.9	1213.7	1213.7	1210.8	1206.4
137.5°	1274.0	1278.4	1281.4	1277.0	1278.4
140°	1343.2	1346.1	1346.1	1344.6	1343.2
142.5°	1406.4	1409.4	1407.9	1407.9	1407.9
145°	1463.8	1469.7	1471.2	1469.7	1465.3
147.5°	1522.7	1530.0	1528.5	1527.1	1525.6
150°	1575.6	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)