

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: P1033458

Luminaire Tested: S124DIW-B350D1560UB35-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033458
REPORT IS A COMBINATION OF REPORTS P997454 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1560UB35-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

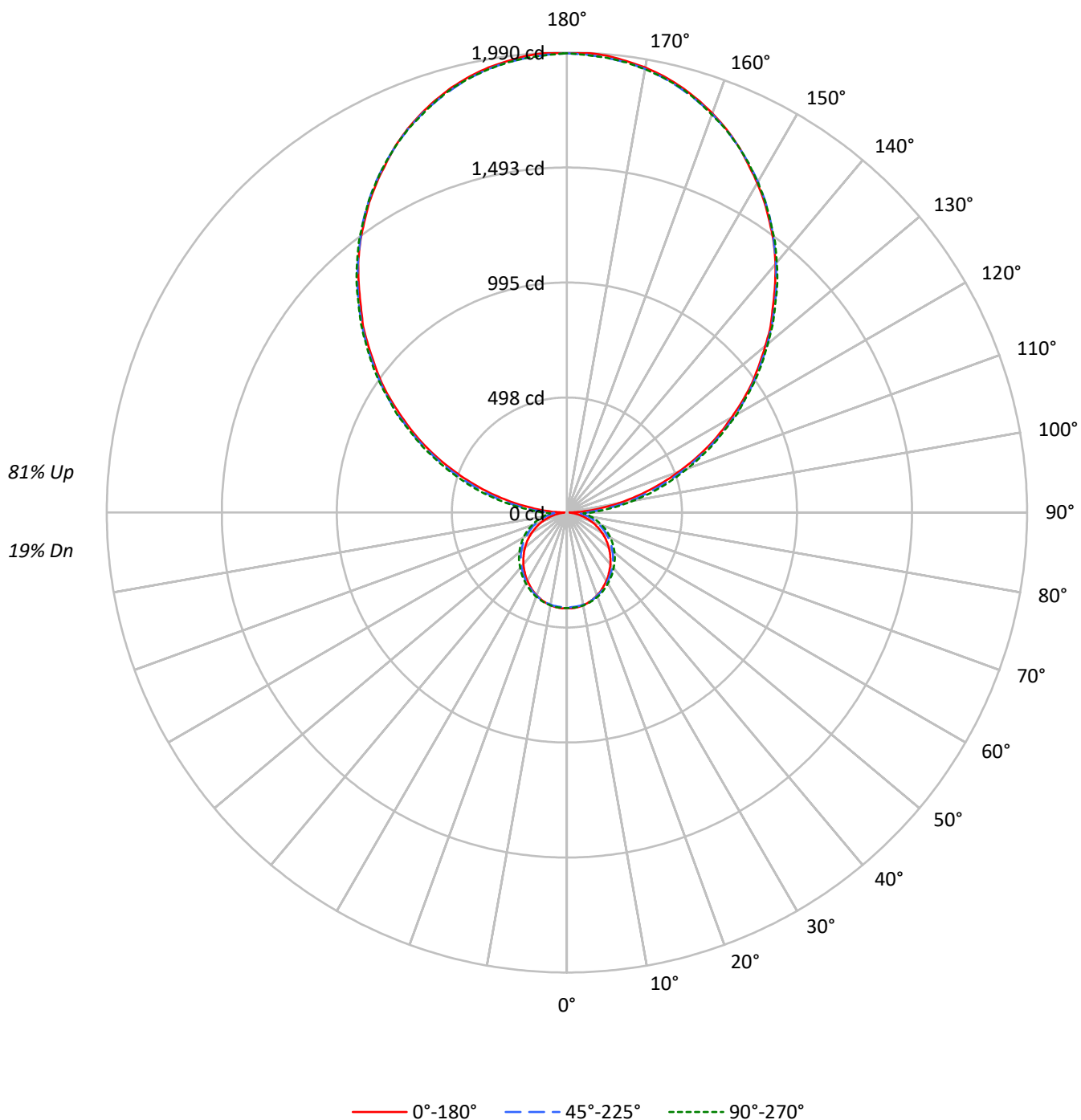
Lumens per Lamp: N/A
Luminaire Lumens: 6926.0 lumens
Efficiency: N/A
Efficacy: 106.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 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

TEST NUMBER: P1033458

CATALOG NUMBER: S124DIW-B350D1560UB35-4F0-XX-W2A-D1

Luminous Intensity Polar Plot



TEST NUMBER: P1033458

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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
RCR																	
0	100	100	100	100	88	88	88	88	66	66	66		46	46	46		28
1	90	86	82	79	80	76	73	70	57	55	53		40	38	37		24
2	82	75	69	64	72	66	61	57	50	46	44		35	33	31		21
3	75	66	59	53	66	58	52	47	44	40	36		30	28	26		18
4	68	58	50	44	60	51	45	40	39	34	31		27	24	22		16
5	62	51	43	38	55	45	39	34	34	30	26		24	21	19		14
6	57	46	38	32	50	41	34	29	31	26	23		22	19	16		13
7	53	41	33	28	46	36	30	25	28	23	20		19	16	14		12
8	49	37	30	25	43	33	27	22	25	20	17		18	15	12		11
9	45	34	26	22	40	30	24	19	23	18	15		16	13	11		10
10	42	31	24	19	37	27	21	17	21	17	14		15	12	10		9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3370	3370	3370
5°	3379	3282	3288
10°	3358	3218	3209
15°	3326	3145	3119
20°	3279	3066	3031
25°	3227	2980	2937
30°	3170	2894	2841
35°	3106	2806	2755
40°	3054	2721	2667
45°	2978	2643	2589
50°	2913	2552	2506
55°	2846	2466	2411
60°	2742	2358	2321
65°	2628	2242	2214
70°	2488	2110	2089
75°	2294	1962	1971
80°	2073	1811	1847
85°	1783	1660	1746

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 90°
Luminance: 3914 cd/sqm

TEST NUMBER: P1033458

CATALOG NUMBER: S124DIW-B350D1560UB35-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	0.6
10°-20°	112.2	1.6
20°-30°	169.6	2.4
30°-40°	205.2	3.0
40°-50°	217.0	3.1
50°-60°	204.2	2.9
60°-70°	169.4	2.4
70°-80°	118.9	1.7
80°-90°	71.3	1.0
90°-100°	169.4	2.4
100°-110°	417.5	6.0
110°-120°	678.8	9.8
120°-130°	880.2	12.7
130°-140°	980.9	14.2
140°-150°	960.4	13.9
150°-160°	806.9	11.7
160°-170°	536.9	7.8
170°-180°	188.0	2.7
0°-30°	321.0	4.6
0°-40°	526.2	7.6
0°-60°	947.4	13.7
0°-90°	1307.0	18.9
90°-120°	1265.7	18.3
90°-150°	4087.2	59.0
90°-180°	5619.0	81.1
0°-180°	6926.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	413	413	413	413	413	
5°	414	412	409	413	412	39
15°	397	397	396	400	399	112
25°	363	366	367	372	372	167
35°	318	323	328	334	336	199
45°	265	274	282	290	292	205
55°	207	217	231	240	243	185
65°	144	158	174	186	189	142
75°	80	97	116	129	133	85
85°	24	44	65	79	83	26
90°	12	47	80	102	109	12
95°	98	127	157	174	178	105
105°	362	373	396	412	421	384
115°	673	677	689	697	699	664
125°	978	977	987	993	993	872
135°	1259	1269	1272	1276	1274	974
145°	1529	1535	1537	1538	1535	957
155°	1752	1752	1750	1756	1750	806
165°	1907	1902	1899	1908	1902	538
175°	1984	1976	1974	1985	1974	188
180°	1987	1987	1987	1987	1987	

TEST NUMBER: P1033458

CATALOG NUMBER: S124DIW-B350D1560UB35-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	413.3	413.3	413.3	413.3	413.3
2.5°	415.1	413.7	410.0	413.3	412.8
5°	413.7	412.3	409.1	412.8	412.3
7.5°	411.0	410.0	407.3	411.4	411.0
10°	407.3	406.8	404.5	408.6	408.2
12.5°	402.2	402.2	400.8	404.5	404.5
15°	396.6	397.1	395.7	399.8	399.4
17.5°	389.2	390.6	390.1	394.3	393.8
20°	381.3	382.7	383.2	387.8	387.8
22.5°	372.5	374.4	375.3	379.9	380.9
25°	362.8	365.6	367.0	372.1	372.5
27.5°	352.2	356.3	358.2	362.8	363.3
30°	341.5	345.2	348.5	353.6	354.5
32.5°	330.0	334.6	338.3	344.3	345.2
35°	317.5	323.0	327.7	334.1	335.5
37.5°	305.0	311.5	317.0	323.5	324.9
40°	292.9	299.0	305.4	312.4	314.2
42.5°	279.1	286.0	293.9	301.7	303.1
45°	264.7	273.5	282.3	290.2	292.5
47.5°	251.3	260.1	270.3	278.1	280.9
50°	236.5	246.7	256.8	266.1	268.9
52.5°	221.7	231.9	243.9	253.1	255.9
55°	207.3	217.0	230.9	240.2	243.0
57.5°	191.1	203.2	216.6	227.7	230.0
60°	175.4	187.4	202.7	213.3	217.0
62.5°	160.1	173.5	188.8	199.5	203.2
65°	143.5	158.3	174.0	185.6	189.3
67.5°	127.7	143.5	160.1	171.7	175.4
70°	111.5	127.3	144.9	157.3	160.6
72.5°	95.8	112.0	131.0	143.0	146.7
75°	79.6	96.7	116.2	129.1	133.3
77.5°	64.3	82.4	102.7	115.7	120.3
80°	50.4	69.0	89.3	103.2	106.9
82.5°	36.6	56.0	76.4	90.7	94.9
85°	24.5	44.0	64.8	78.7	83.3
87.5°	15.3	34.2	54.6	68.0	72.2
90°	12.0	47.4	79.6	102.2	109.0
92.5°	46.9	83.0	110.6	128.2	133.5
95°	98.2	127.3	157.1	174.2	178.3
97.5°	153.1	178.8	210.0	228.2	232.3
100°	220.2	238.4	270.3	285.9	289.1
102.5°	290.9	302.6	332.5	349.1	354.4
105°	362.2	373.0	396.2	412.4	420.7
107.5°	437.5	446.9	464.6	482.3	484.0
110°	513.9	523.4	538.1	545.6	553.9

TEST NUMBER: P1033458

CATALOG NUMBER: S124DIW-B350D1560UB35-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	593.3	598.9	611.1	621.2	624.9
115°	672.8	676.9	688.7	697.3	699.0
117.5°	748.1	750.9	763.1	768.3	767.4
120°	822.9	830.4	839.2	840.8	847.6
122.5°	901.2	902.8	913.7	918.4	913.9
125°	977.6	977.1	987.2	992.9	992.6
127.5°	1046.8	1050.9	1057.0	1062.4	1064.0
130°	1120.1	1124.2	1131.6	1136.9	1133.4
132.5°	1195.3	1197.9	1202.0	1206.7	1208.0
135°	1259.4	1268.6	1271.9	1276.2	1274.3
137.5°	1331.6	1335.8	1340.7	1343.1	1346.9
140°	1403.8	1406.5	1406.9	1411.4	1412.2
142.5°	1469.5	1472.6	1470.5	1475.6	1477.4
145°	1529.4	1535.1	1536.6	1537.9	1535.1
147.5°	1590.9	1598.1	1596.5	1595.5	1595.8
150°	1646.2	1651.9	1651.9	1651.9	1650.3
152.5°	1698.0	1701.0	1702.6	1707.2	1702.6
155°	1751.7	1751.7	1750.2	1756.3	1750.2
157.5°	1797.8	1794.8	1794.8	1799.4	1794.8
160°	1837.8	1836.3	1834.7	1839.3	1831.6
162.5°	1874.7	1870.1	1868.5	1877.7	1870.1
165°	1906.9	1902.3	1899.3	1908.5	1902.3
167.5°	1933.1	1926.9	1926.9	1936.1	1926.9
170°	1954.6	1946.9	1948.4	1957.6	1946.9
172.5°	1969.9	1963.8	1963.8	1974.5	1963.8
175°	1983.8	1976.1	1974.5	1985.3	1974.5
177.5°	1989.9	1982.2	1982.2	1993.0	1980.7
180°	1986.8	1986.8	1986.8	1986.8	1986.8

(END OF REPORT)