

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: P1033460

Luminaire Tested: S124DIW-B350D1560UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033460
REPORT IS A COMBINATION OF REPORTS P997457 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-F1
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

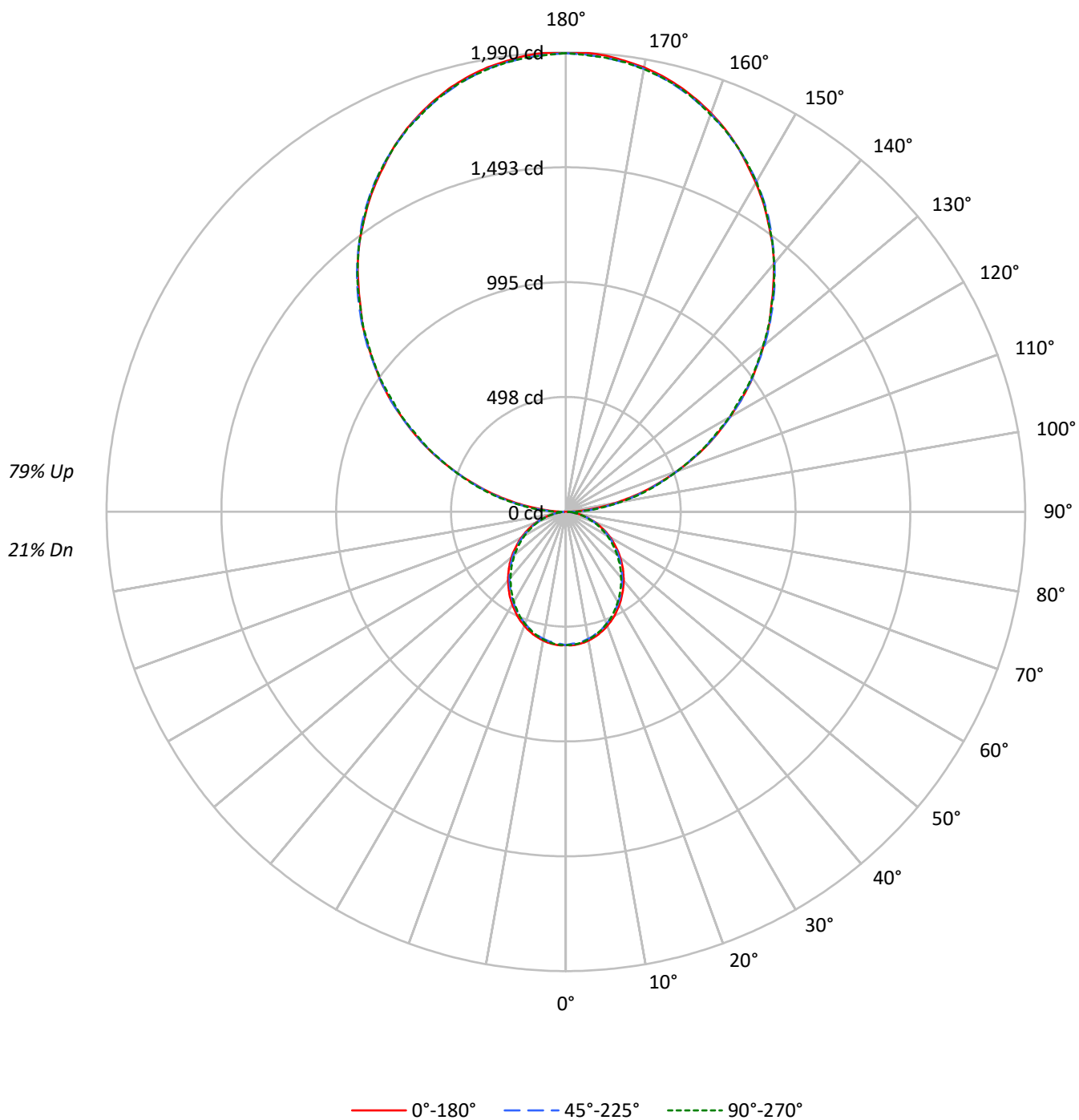
Lumens per Lamp: N/A
Luminaire Lumens: 6999.0 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4708	4708	4708
5°	4712	4573	4579
10°	4673	4446	4415
15°	4606	4295	4230
20°	4520	4132	4039
25°	4424	3959	3834
30°	4307	3772	3608
35°	4187	3581	3389
40°	4062	3376	3157
45°	3930	3171	2940
50°	3784	2971	2699
55°	3627	2737	2461
60°	3464	2482	2212
65°	3278	2218	1932
70°	3065	1900	1631
75°	2746	1532	1307
80°	2340	1107	919
85°	1819	618	495

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3930 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	0.8
10°-20°	153.3	2.2
20°-30°	225.7	3.2
30°-40°	262.3	3.7
40°-50°	262.3	3.7
50°-60°	229.4	3.3
60°-70°	170.3	2.4
70°-80°	96.6	1.4
80°-90°	31.9	0.5
90°-100°	129.5	1.9
100°-110°	387.9	5.5
110°-120°	659.0	9.4
120°-130°	869.1	12.4
130°-140°	976.1	13.9
140°-150°	959.4	13.7
150°-160°	806.9	11.5
160°-170°	536.9	7.7
170°-180°	188.0	2.7
0°-30°	433.4	6.2
0°-40°	695.7	9.9
0°-60°	1187.4	17.0
0°-90°	1486.3	21.2
90°-120°	1176.4	16.8
90°-150°	3981.0	56.9
90°-180°	5513.0	78.8
0°-180°	6999.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	577	577	577	577	577	
5°	577	575	570	575	574	55
15°	549	547	540	543	542	155
25°	497	494	488	488	486	229
35°	428	425	418	415	413	268
45°	349	346	339	334	332	269
55°	264	263	256	251	248	237
65°	179	177	172	168	165	177
75°	95	93	91	89	88	101
85°	25	25	24	24	24	27
90°	5	22	34	43	46	8
95°	92	106	117	121	121	100
105°	358	360	366	370	375	380
115°	670	670	667	665	664	661
125°	976	976	974	971	968	870
135°	1258	1268	1268	1265	1260	974
145°	1529	1535	1537	1535	1530	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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	577.4	577.4	577.4	577.4	577.4
2.5°	579.2	577.9	572.8	577.4	576.9
5°	576.9	575.1	570.0	575.1	574.2
7.5°	572.8	570.9	565.4	569.5	569.1
10°	566.8	564.9	558.9	562.6	561.7
12.5°	558.9	557.0	550.6	554.7	553.3
15°	549.2	547.3	540.4	543.2	541.8
17.5°	538.1	535.8	529.3	531.1	530.2
20°	525.6	523.3	516.3	517.7	516.8
22.5°	512.2	508.9	502.0	504.8	502.9
25°	497.4	494.1	487.6	488.1	486.3
27.5°	480.7	477.5	471.4	470.5	468.2
30°	464.0	460.3	454.3	452.5	450.2
32.5°	446.5	443.2	436.7	434.4	432.1
35°	428.0	424.7	418.2	415.0	412.7
37.5°	408.5	405.8	398.8	395.6	392.3
40°	389.6	385.9	378.9	374.3	372.0
42.5°	369.2	367.3	359.5	353.9	352.5
45°	349.3	346.1	338.7	333.6	332.2
47.5°	328.5	326.2	319.2	313.7	310.0
50°	307.2	305.4	298.9	292.4	289.6
52.5°	286.4	284.1	277.1	271.6	267.9
55°	264.2	262.8	256.3	250.8	248.0
57.5°	243.4	242.0	235.5	229.9	227.2
60°	221.6	219.3	213.3	209.1	206.8
62.5°	200.3	198.5	192.0	188.3	186.0
65°	179.0	176.7	172.1	167.5	165.2
67.5°	157.3	155.5	150.8	146.2	145.7
70°	137.4	134.2	130.5	126.8	125.4
72.5°	116.1	112.9	110.1	107.3	105.9
75°	95.3	93.0	90.7	88.8	88.4
77.5°	75.0	74.0	71.7	71.2	69.9
80°	56.9	55.5	54.6	53.7	53.2
82.5°	39.3	38.9	38.9	38.4	37.9
85°	25.0	25.0	24.1	24.1	23.6
87.5°	12.0	11.6	11.1	11.1	11.1
90°	4.6	21.5	33.8	43.0	46.1
92.5°	40.0	59.9	67.6	72.2	73.8
95°	92.2	106.0	116.8	121.4	121.4
97.5°	147.5	159.8	172.1	178.2	178.2
100°	215.1	221.3	235.1	238.2	238.2
102.5°	285.8	287.3	299.6	304.2	305.8
105°	358.0	359.6	365.7	370.3	374.9
107.5°	433.3	434.9	436.4	442.5	441.0
110°	510.2	513.2	511.7	508.6	513.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	590.1	590.1	587.0	587.0	587.0
115°	670.0	670.0	666.9	665.4	663.8
117.5°	745.3	745.3	743.7	739.1	734.5
120°	820.6	826.7	822.1	814.4	817.5
122.5°	898.9	900.5	898.9	894.3	886.6
125°	975.7	975.7	974.2	971.1	968.1
127.5°	1044.9	1049.5	1046.4	1043.4	1041.8
130°	1118.7	1123.3	1123.3	1120.2	1114.0
132.5°	1193.9	1197.0	1195.5	1192.4	1190.9
135°	1258.5	1267.7	1267.7	1264.6	1260.0
137.5°	1330.7	1335.3	1338.4	1333.8	1335.3
140°	1402.9	1406.0	1406.0	1404.5	1402.9
142.5°	1469.0	1472.1	1470.5	1470.5	1470.5
145°	1528.9	1535.1	1536.6	1535.1	1530.5
147.5°	1590.4	1598.1	1596.5	1595.0	1593.5
150°	1645.7	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)