

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: P1033452

Luminaire Tested: S124DIW-B350D1560UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033452
REPORT IS A COMBINATION OF REPORTS P997445 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1560UB30-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

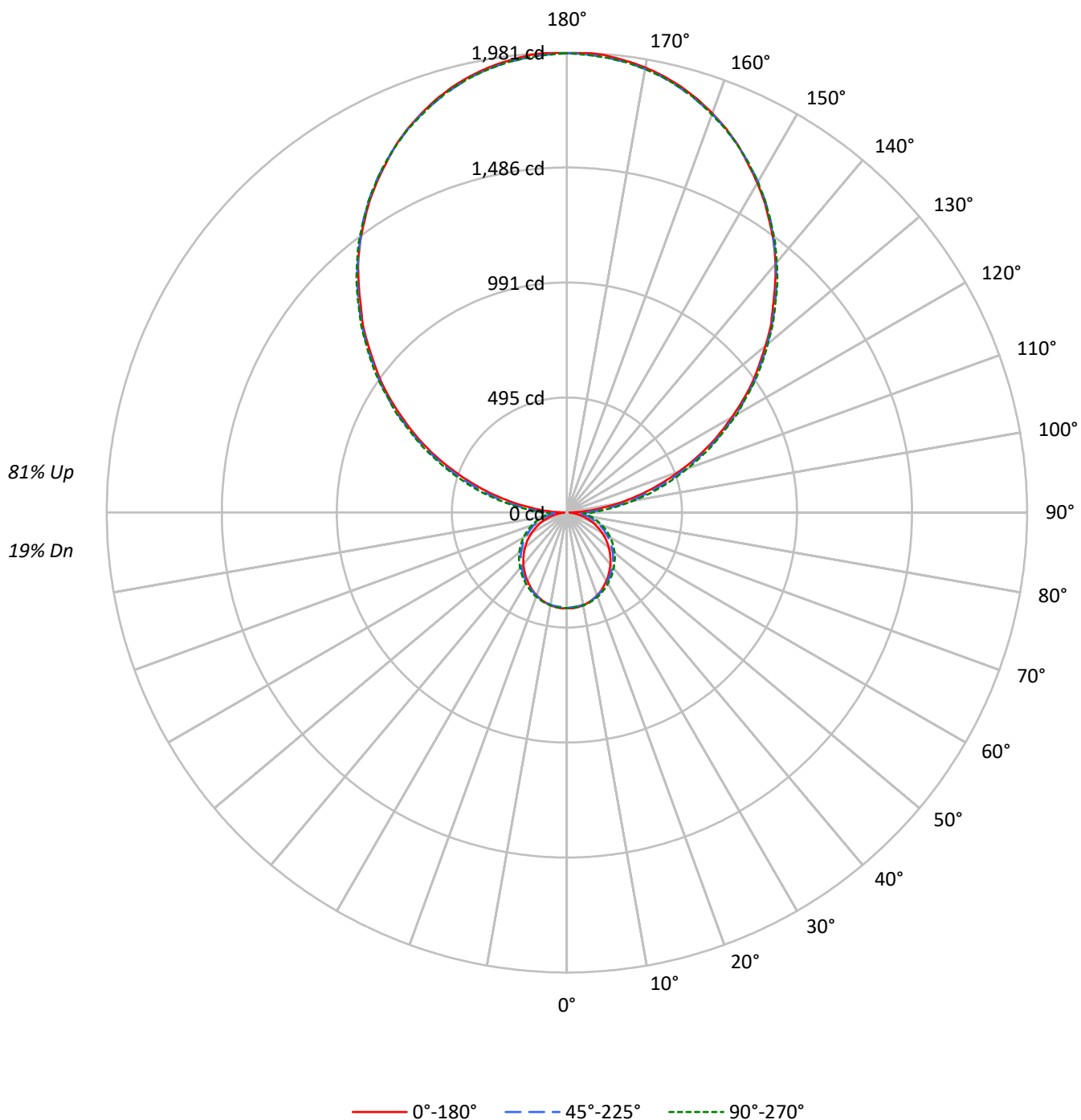
Lumens per Lamp: N/A
Luminaire Lumens: 6896.0 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3356	3356	3356
5°	3365	3268	3274
10°	3343	3204	3194
15°	3312	3132	3105
20°	3265	3054	3018
25°	3213	2967	2925
30°	3157	2881	2829
35°	3093	2794	2744
40°	3041	2710	2656
45°	2966	2631	2577
50°	2901	2542	2495
55°	2833	2455	2400
60°	2729	2348	2311
65°	2617	2233	2205
70°	2479	2100	2080
75°	2285	1954	1962
80°	2065	1803	1838
85°	1776	1653	1738

MAXIMUM LUMINANCE 45°-90°:

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.0	0.6
10°-20°	111.7	1.6
20°-30°	168.9	2.4
30°-40°	204.4	3.0
40°-50°	216.0	3.1
50°-60°	203.3	2.9
60°-70°	168.7	2.4
70°-80°	118.4	1.7
80°-90°	71.0	1.0
90°-100°	168.7	2.4
100°-110°	415.6	6.0
110°-120°	675.9	9.8
120°-130°	876.4	12.7
130°-140°	976.7	14.2
140°-150°	956.2	13.9
150°-160°	803.4	11.7
160°-170°	534.5	7.8
170°-180°	187.2	2.7
0°-30°	319.6	4.6
0°-40°	524.0	7.6
0°-60°	943.3	13.7
0°-90°	1301.4	18.9
90°-120°	1260.2	18.3
90°-150°	4069.5	59.0
90°-180°	5595.0	81.1
0°-180°	6896.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	412	412	412	412	412	
5°	412	411	407	411	411	39
15°	395	395	394	398	398	111
25°	361	364	365	370	371	166
35°	316	322	326	333	334	198
45°	264	272	281	289	291	204
55°	206	216	230	239	242	184
65°	143	158	173	185	188	142
75°	79	96	116	129	133	84
85°	24	44	64	78	83	25
90°	12	47	79	102	109	12
95°	98	127	156	173	178	104
105°	361	371	394	411	419	383
115°	670	674	686	694	696	661
125°	973	973	983	989	988	868
135°	1254	1263	1266	1271	1269	970
145°	1523	1528	1530	1531	1528	953
155°	1744	1744	1743	1749	1743	803
165°	1899	1894	1891	1900	1894	535
175°	1975	1968	1966	1977	1966	188
180°	1978	1978	1978	1978	1978	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	411.5	411.5	411.5	411.5	411.5
2.5°	413.4	412.0	408.3	411.5	411.0
5°	412.0	410.6	407.4	411.0	410.6
7.5°	409.2	408.3	405.5	409.7	409.2
10°	405.5	405.1	402.8	406.9	406.4
12.5°	400.4	400.4	399.1	402.8	402.8
15°	394.9	395.4	394.0	398.1	397.7
17.5°	387.5	388.9	388.5	392.6	392.2
20°	379.7	381.1	381.6	386.2	386.2
22.5°	371.0	372.8	373.7	378.3	379.3
25°	361.3	364.0	365.4	370.5	371.0
27.5°	350.7	354.8	356.7	361.3	361.7
30°	340.1	343.8	347.0	352.1	353.0
32.5°	328.6	333.2	336.9	342.8	343.8
35°	316.1	321.6	326.3	332.7	334.1
37.5°	303.7	310.1	315.7	322.1	323.5
40°	291.7	297.7	304.1	311.1	312.9
42.5°	277.9	284.8	292.6	300.5	301.8
45°	263.6	272.3	281.1	288.9	291.2
47.5°	250.2	259.0	269.1	277.0	279.7
50°	235.5	245.6	255.8	265.0	267.7
52.5°	220.7	230.9	242.8	252.1	254.8
55°	206.4	216.1	229.9	239.2	241.9
57.5°	190.3	202.3	215.7	226.7	229.0
60°	174.6	186.6	201.8	212.4	216.1
62.5°	159.4	172.8	188.0	198.6	202.3
65°	142.9	157.6	173.3	184.8	188.5
67.5°	127.2	142.9	159.4	171.0	174.6
70°	111.1	126.7	144.2	156.7	159.9
72.5°	95.4	111.5	130.4	142.4	146.1
75°	79.3	96.3	115.7	128.6	132.7
77.5°	64.1	82.0	102.3	115.2	119.8
80°	50.2	68.7	88.9	102.8	106.4
82.5°	36.4	55.8	76.0	90.3	94.5
85°	24.4	43.8	64.5	78.3	82.9
87.5°	15.2	34.1	54.4	67.7	71.9
90°	12.0	47.2	79.3	101.8	108.6
92.5°	46.7	82.7	110.2	127.7	132.8
95°	97.8	126.8	156.4	173.4	177.6
97.5°	152.4	178.0	209.2	227.3	231.4
100°	219.3	237.4	269.1	284.6	287.8
102.5°	289.7	301.3	331.0	347.6	352.9
105°	360.6	371.4	394.5	410.6	418.9
107.5°	435.5	445.0	462.6	480.2	482.0
110°	511.6	521.1	535.8	543.3	551.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	590.7	596.3	608.4	618.5	622.2
115°	669.8	673.9	685.7	694.3	695.9
117.5°	744.8	747.5	759.9	764.9	764.0
120°	819.3	826.8	835.6	837.2	843.9
122.5°	897.3	898.8	909.7	914.4	910.0
125°	973.3	972.9	982.9	988.6	988.3
127.5°	1042.2	1046.3	1052.5	1057.7	1059.4
130°	1115.2	1119.3	1126.7	1131.9	1128.6
132.5°	1190.2	1192.7	1196.8	1201.5	1202.8
135°	1253.9	1263.1	1266.3	1270.6	1268.8
137.5°	1325.8	1330.0	1334.9	1337.2	1341.0
140°	1397.7	1400.4	1400.8	1405.3	1406.0
142.5°	1463.1	1466.2	1464.1	1469.2	1471.0
145°	1522.8	1528.4	1529.9	1531.2	1528.4
147.5°	1584.0	1591.1	1589.6	1588.6	1588.8
150°	1639.1	1644.7	1644.7	1644.7	1643.1
152.5°	1690.6	1693.6	1695.2	1699.8	1695.2
155°	1744.1	1744.1	1742.6	1748.7	1742.6
157.5°	1790.0	1787.0	1787.0	1791.5	1787.0
160°	1829.8	1828.3	1826.7	1831.3	1823.7
162.5°	1866.5	1861.9	1860.4	1869.6	1861.9
165°	1898.6	1894.1	1891.0	1900.2	1894.1
167.5°	1924.7	1918.5	1918.5	1927.7	1918.5
170°	1946.1	1938.4	1939.9	1949.1	1938.4
172.5°	1961.4	1955.2	1955.2	1966.0	1955.2
175°	1975.1	1967.5	1966.0	1976.7	1966.0
177.5°	1981.3	1973.6	1973.6	1984.3	1972.1
180°	1978.2	1978.2	1978.2	1978.2	1978.2

(END OF REPORT)