

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: P1033445

Luminaire Tested: S124DIW-B350D1560UB27-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033445
REPORT IS A COMBINATION OF REPORTS P997414 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1560UB27-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

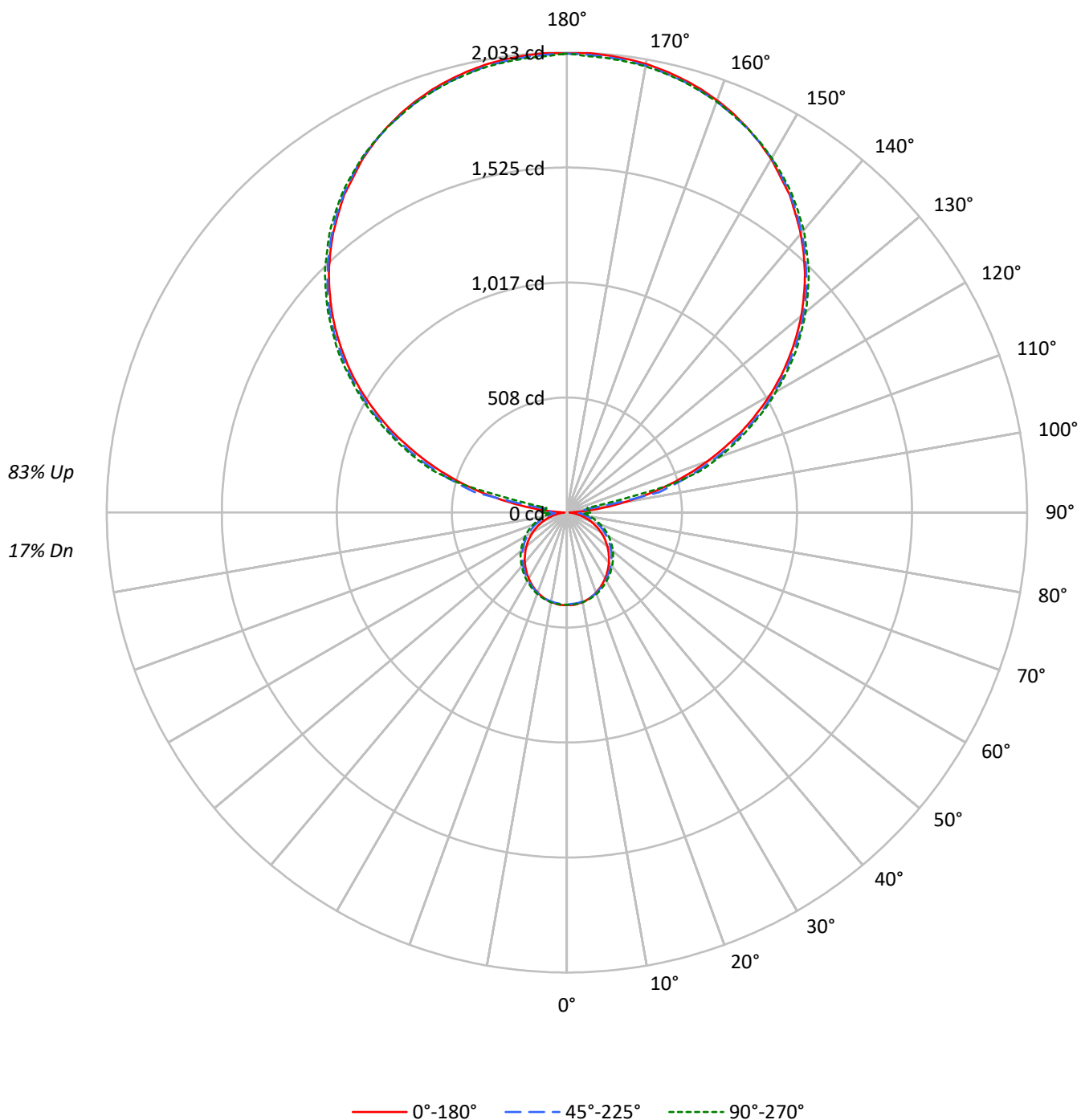
Lumens per Lamp: N/A
Luminaire Lumens: 7671.1 lumens
Efficiency: N/A
Efficacy: 117.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	99	99	99	99	87	87	87	87	65	65	65	44	44	44	26	26	26
1	90	86	82	78	79	75	72	69	56	54	52	38	37	36	22	21	21
2	82	75	69	64	72	66	61	57	49	46	43	33	31	30	19	18	17
3	74	65	58	53	65	58	52	47	43	39	36	29	27	25	17	16	15
4	68	58	50	44	59	51	44	40	38	34	30	26	23	21	15	14	12
5	62	51	43	38	54	45	38	34	34	29	26	23	20	18	13	12	11
6	57	45	38	32	50	40	34	29	30	26	22	21	18	16	12	10	9
7	53	41	33	28	46	36	30	25	27	23	19	19	16	14	11	9	8
8	49	37	29	24	42	33	26	22	25	20	17	17	14	12	10	8	7
9	45	33	26	21	39	30	23	19	22	18	15	16	13	11	9	8	6
10	42	30	24	19	37	27	21	17	20	16	13	14	11	10	8	7	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3327	3327	3327
5°	3336	3240	3246
10°	3314	3176	3168
15°	3283	3105	3079
20°	3238	3027	2993
25°	3186	2942	2900
30°	3130	2857	2805
35°	3066	2770	2720
40°	3015	2687	2633
45°	2940	2609	2555
50°	2877	2520	2474
55°	2810	2435	2380
60°	2707	2328	2292
65°	2593	2214	2186
70°	2456	2082	2062
75°	2265	1937	1946
80°	2048	1789	1822
85°	1761	1640	1723

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 90°
Luminance: 3882 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.7	0.5
10°-20°	110.8	1.4
20°-30°	167.5	2.2
30°-40°	202.6	2.6
40°-50°	214.2	2.8
50°-60°	201.6	2.6
60°-70°	167.3	2.2
70°-80°	117.4	1.5
80°-90°	70.4	0.9
90°-100°	106.7	1.4
100°-110°	472.5	6.2
110°-120°	866.2	11.3
120°-130°	1085.8	14.2
130°-140°	1154.5	15.1
140°-150°	1076.1	14.0
150°-160°	867.0	11.3
160°-170°	559.1	7.3
170°-180°	192.7	2.5
0°-30°	316.9	4.1
0°-40°	519.5	6.8
0°-60°	935.3	12.2
0°-90°	1290.3	16.8
90°-120°	1445.5	18.8
90°-150°	4761.9	62.1
90°-180°	6381.0	83.2
0°-180°	7671.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	408	408	408	408	408	
5°	408	407	404	408	407	39
15°	392	392	391	395	394	110
25°	358	361	362	367	368	165
35°	313	319	324	330	331	196
45°	261	270	279	286	289	202
55°	205	214	228	237	240	182
65°	142	156	172	183	187	140
75°	79	96	115	128	132	84
85°	24	43	64	78	82	25
90°	12	47	79	101	108	9
95°	89	53	73	95	100	108
105°	461	479	504	528	478	482
115°	855	864	877	890	893	842
125°	1200	1206	1214	1228	1232	1072
135°	1488	1486	1495	1506	1511	1146
145°	1715	1719	1719	1723	1728	1071
155°	1880	1881	1876	1882	1878	867
165°	1983	1975	1975	1987	1974	560
175°	2028	2019	2021	2034	2016	193
180°	2028	2028	2028	2028	2028	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	408.0	408.0	408.0	408.0	408.0
2.5°	409.8	408.4	404.8	408.0	407.5
5°	408.4	407.1	403.9	407.5	407.1
7.5°	405.7	404.8	402.0	406.2	405.7
10°	402.0	401.6	399.3	403.4	403.0
12.5°	397.0	397.0	395.7	399.3	399.3
15°	391.5	392.0	390.6	394.7	394.3
17.5°	384.2	385.6	385.1	389.3	388.8
20°	376.5	377.8	378.3	382.9	382.9
22.5°	367.8	369.6	370.5	375.1	376.0
25°	358.2	360.9	362.3	367.3	367.8
27.5°	347.7	351.8	353.6	358.2	358.6
30°	337.2	340.8	344.0	349.1	350.0
32.5°	325.8	330.3	334.0	339.9	340.8
35°	313.4	318.9	323.5	329.9	331.2
37.5°	301.1	307.5	313.0	319.4	320.7
40°	289.2	295.1	301.5	308.4	310.2
42.5°	275.5	282.3	290.1	297.9	299.3
45°	261.3	270.0	278.7	286.5	288.7
47.5°	248.1	256.8	266.8	274.6	277.3
50°	233.5	243.5	253.6	262.7	265.4
52.5°	218.8	228.9	240.8	249.9	252.7
55°	204.7	214.3	228.0	237.1	239.9
57.5°	188.7	200.6	213.8	224.8	227.1
60°	173.2	185.0	200.1	210.6	214.3
62.5°	158.1	171.3	186.4	196.9	200.6
65°	141.6	156.3	171.8	183.2	186.9
67.5°	126.1	141.6	158.1	169.5	173.2
70°	110.1	125.6	143.0	155.3	158.5
72.5°	94.6	110.6	129.3	141.2	144.8
75°	78.6	95.5	114.7	127.5	131.6
77.5°	63.5	81.3	101.4	114.2	118.8
80°	49.8	68.1	88.2	101.9	105.5
82.5°	36.1	55.3	75.4	89.5	93.7
85°	24.2	43.4	64.0	77.7	82.2
87.5°	15.1	33.8	53.9	67.2	71.3
90°	11.9	46.8	78.6	101.0	107.6
92.5°	29.7	42.5	74.4	96.3	99.9
95°	89.3	52.9	73.1	94.6	100.2
97.5°	164.8	211.4	70.9	90.3	96.0
100°	253.8	293.0	101.4	88.1	92.8
102.5°	353.9	382.2	417.7	88.3	92.0
105°	460.7	478.9	503.5	528.5	477.5
107.5°	559.3	571.7	598.3	617.3	626.5
110°	659.0	670.0	695.0	708.5	716.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	755.6	770.2	788.3	796.8	806.6
115°	855.2	864.0	877.1	890.1	893.3
117.5°	944.7	953.6	971.8	979.9	983.5
120°	1035.3	1042.8	1054.5	1066.6	1067.3
122.5°	1120.3	1123.3	1138.7	1149.4	1149.5
125°	1200.2	1205.9	1214.2	1227.5	1231.7
127.5°	1277.5	1278.7	1295.3	1302.0	1303.7
130°	1351.5	1352.5	1364.3	1374.1	1376.9
132.5°	1419.7	1422.3	1433.8	1443.2	1444.3
135°	1487.5	1486.0	1495.3	1505.6	1511.4
137.5°	1548.2	1547.8	1557.2	1567.0	1567.8
140°	1607.3	1610.0	1613.4	1624.0	1627.7
142.5°	1660.0	1666.1	1667.1	1675.2	1677.1
145°	1714.6	1718.7	1718.7	1722.9	1727.8
147.5°	1757.1	1765.7	1764.2	1766.2	1769.5
150°	1804.1	1809.7	1808.2	1808.2	1809.7
152.5°	1843.1	1847.6	1844.6	1847.6	1846.1
155°	1879.5	1881.0	1876.5	1882.5	1878.0
157.5°	1911.3	1911.3	1905.3	1912.9	1905.3
160°	1938.7	1934.1	1932.6	1941.7	1932.6
162.5°	1962.9	1956.9	1955.3	1964.4	1953.8
165°	1982.6	1975.1	1975.1	1987.2	1973.5
167.5°	1999.3	1991.7	1990.2	2003.9	1988.7
170°	2013.0	2003.9	2005.4	2017.5	2002.4
172.5°	2022.1	2013.0	2014.5	2026.6	2009.9
175°	2028.2	2019.0	2020.6	2034.2	2016.0
177.5°	2032.7	2022.1	2025.1	2037.3	2019.0
180°	2028.2	2028.2	2028.2	2028.2	2028.2

(END OF REPORT)