

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: P1033592

Luminaire Tested: S124DIW-B575D1560UB27-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033592
REPORT IS A COMBINATION OF REPORTS P997744 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D1560UB27-4F0-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

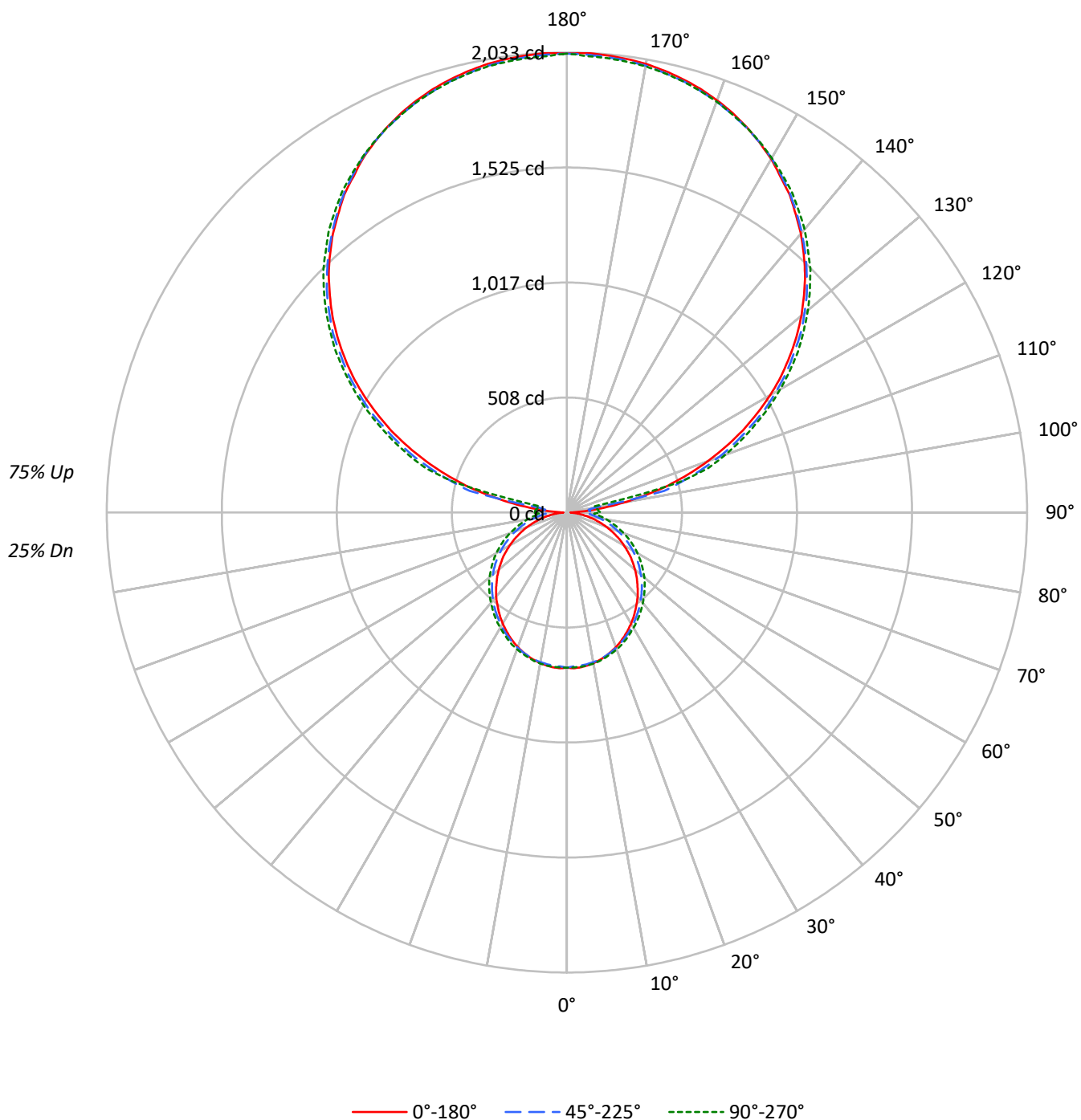
Lumens per Lamp: N/A
Luminaire Lumens: 8619.1 lumens
Efficiency: N/A
Efficacy: 113.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 76.2
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: P1033592

CATALOG NUMBER: S124DIW-B575D1560UB27-4F0-XX-W2A-D

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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	33	33	33
1	92	87	83	80	81	78	75	72	60	58	56	44	42	41	29	28	27
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22
3	76	66	59	54	67	59	53	48	46	42	38	33	31	28	22	20	19
4	69	59	51	45	61	52	46	41	40	36	32	30	26	24	19	17	16
5	63	52	44	38	56	46	40	35	36	31	27	26	23	21	17	15	14
6	58	46	38	33	51	41	35	30	32	27	24	24	20	18	16	14	12
7	54	42	34	28	47	37	31	26	29	24	21	21	18	16	14	12	11
8	50	38	30	25	44	34	27	23	26	22	18	19	16	14	13	11	9
9	46	34	27	22	41	31	24	20	24	19	16	18	15	12	12	10	8
10	43	31	24	19	38	28	22	18	22	17	14	16	13	11	11	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5594	5594	5594
5°	5610	5448	5458
10°	5574	5341	5326
15°	5521	5220	5177
20°	5444	5090	5032
25°	5357	4946	4875
30°	5263	4804	4716
35°	5156	4658	4574
40°	5070	4518	4427
45°	4944	4387	4297
50°	4836	4238	4161
55°	4725	4094	4002
60°	4552	3915	3854
65°	4362	3723	3675
70°	4130	3502	3469
75°	3807	3256	3272
80°	3442	3008	3066
85°	2962	2757	2899

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 5512 cd/sqm

TEST NUMBER: P1033592

CATALOG NUMBER: S124DIW-B575D1560UB27-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.0	0.8
10°-20°	186.2	2.2
20°-30°	281.6	3.3
30°-40°	340.7	4.0
40°-50°	360.2	4.2
50°-60°	339.0	3.9
60°-70°	281.3	3.3
70°-80°	197.4	2.3
80°-90°	115.5	1.3
90°-100°	133.6	1.5
100°-110°	492.4	5.7
110°-120°	879.5	10.2
120°-130°	1093.3	12.7
130°-140°	1157.8	13.4
140°-150°	1076.7	12.5
150°-160°	867.0	10.1
160°-170°	559.1	6.5
170°-180°	192.7	2.2
0°-30°	532.8	6.2
0°-40°	873.5	10.1
0°-60°	1572.7	18.2
0°-90°	2166.8	25.1
90°-120°	1505.6	17.5
90°-150°	4833.4	56.1
90°-180°	6452.0	74.9
0°-180°	8619.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	686	686	686	686	686	
5°	687	684	679	685	684	65
15°	658	659	657	664	663	186
25°	602	607	609	618	618	277
35°	527	536	544	555	557	330
45°	439	454	469	482	486	340
55°	344	360	383	399	403	307
65°	238	263	289	308	314	236
75°	132	161	193	214	221	140
85°	41	73	108	131	138	42
90°	17	64	110	141	150	13
95°	93	67	100	130	138	111
105°	464	488	524	557	508	486
115°	857	869	892	912	917	844
125°	1202	1207	1223	1242	1248	1073
135°	1488	1487	1498	1513	1521	1147
145°	1715	1719	1719	1725	1731	1072
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	

TEST NUMBER: P1033592

CATALOG NUMBER: S124DIW-B575D1560UB27-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	686.0	686.0	686.0	686.0	686.0
2.5°	689.1	686.8	680.7	686.0	685.3
5°	686.8	684.5	679.1	685.3	684.5
7.5°	682.2	680.7	676.1	683.0	682.2
10°	676.1	675.3	671.4	678.4	677.6
12.5°	667.6	667.6	665.3	671.4	671.4
15°	658.4	659.2	656.8	663.8	663.0
17.5°	646.1	648.4	647.6	654.5	653.8
20°	633.0	635.3	636.1	643.8	643.8
22.5°	618.4	621.5	623.0	630.7	632.3
25°	602.3	606.9	609.2	617.7	618.4
27.5°	584.6	591.5	594.6	602.3	603.1
30°	567.0	573.1	578.5	586.9	588.5
32.5°	547.8	555.4	561.6	571.6	573.1
35°	527.0	536.2	543.9	554.7	557.0
37.5°	506.3	517.0	526.2	537.0	539.3
40°	486.3	496.3	507.0	518.6	521.6
42.5°	463.3	474.8	487.8	500.9	503.2
45°	439.4	454.0	468.6	481.7	485.5
47.5°	417.2	431.8	448.7	461.7	466.3
50°	392.6	409.5	426.4	441.7	446.4
52.5°	368.0	384.9	404.9	420.2	424.8
55°	344.2	360.3	383.4	398.7	403.3
57.5°	317.3	337.3	359.5	378.0	381.8
60°	291.2	311.1	336.5	354.2	360.3
62.5°	265.8	288.1	313.4	331.1	337.3
65°	238.2	262.7	288.9	308.1	314.2
67.5°	212.0	238.2	265.8	285.0	291.2
70°	185.1	211.3	240.5	261.2	266.6
72.5°	159.0	185.9	217.4	237.4	243.5
75°	132.1	160.6	192.8	214.3	221.3
77.5°	106.8	136.7	170.6	192.1	199.7
80°	83.7	114.5	148.3	171.3	177.5
82.5°	60.7	93.0	126.8	150.6	157.5
85°	40.7	73.0	107.6	130.6	138.3
87.5°	25.4	56.9	90.7	112.9	119.8
90°	16.9	64.2	109.5	140.8	150.0
92.5°	34.3	58.1	103.3	134.0	140.1
95°	93.4	67.2	100.2	130.1	138.5
97.5°	168.5	224.2	96.4	124.0	132.4
100°	257.3	304.5	125.1	120.1	127.0
102.5°	357.4	392.5	439.8	118.5	124.7
105°	463.5	488.0	524.0	556.8	508.4
107.5°	562.1	579.8	617.3	644.1	655.4
110°	661.4	676.8	712.8	733.5	744.2

TEST NUMBER: P1033592

CATALOG NUMBER: S124DIW-B575D1560UB27-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	757.8	776.1	804.4	819.9	832.1
115°	857.1	868.6	891.7	911.6	917.0
117.5°	946.6	957.3	984.9	999.5	1005.6
120°	1036.8	1045.2	1066.0	1084.4	1087.5
122.5°	1121.8	1124.8	1148.7	1165.5	1167.8
125°	1201.5	1206.8	1222.9	1242.1	1248.2
127.5°	1278.8	1279.6	1302.5	1314.8	1318.7
130°	1352.4	1353.1	1369.9	1385.4	1390.0
132.5°	1420.6	1422.9	1438.2	1452.8	1455.8
135°	1488.1	1486.6	1498.1	1513.4	1521.0
137.5°	1548.8	1548.1	1558.7	1573.3	1575.6
140°	1607.9	1610.3	1614.0	1628.6	1634.0
142.5°	1660.3	1666.4	1667.1	1678.7	1681.7
145°	1714.9	1718.7	1718.7	1724.8	1730.9
147.5°	1757.4	1765.7	1764.2	1766.5	1771.0
150°	1804.4	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)