

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: P1033593

Luminaire Tested: S124DIW-B575D1560UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033593
REPORT IS A COMBINATION OF REPORTS P997745 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-D1
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

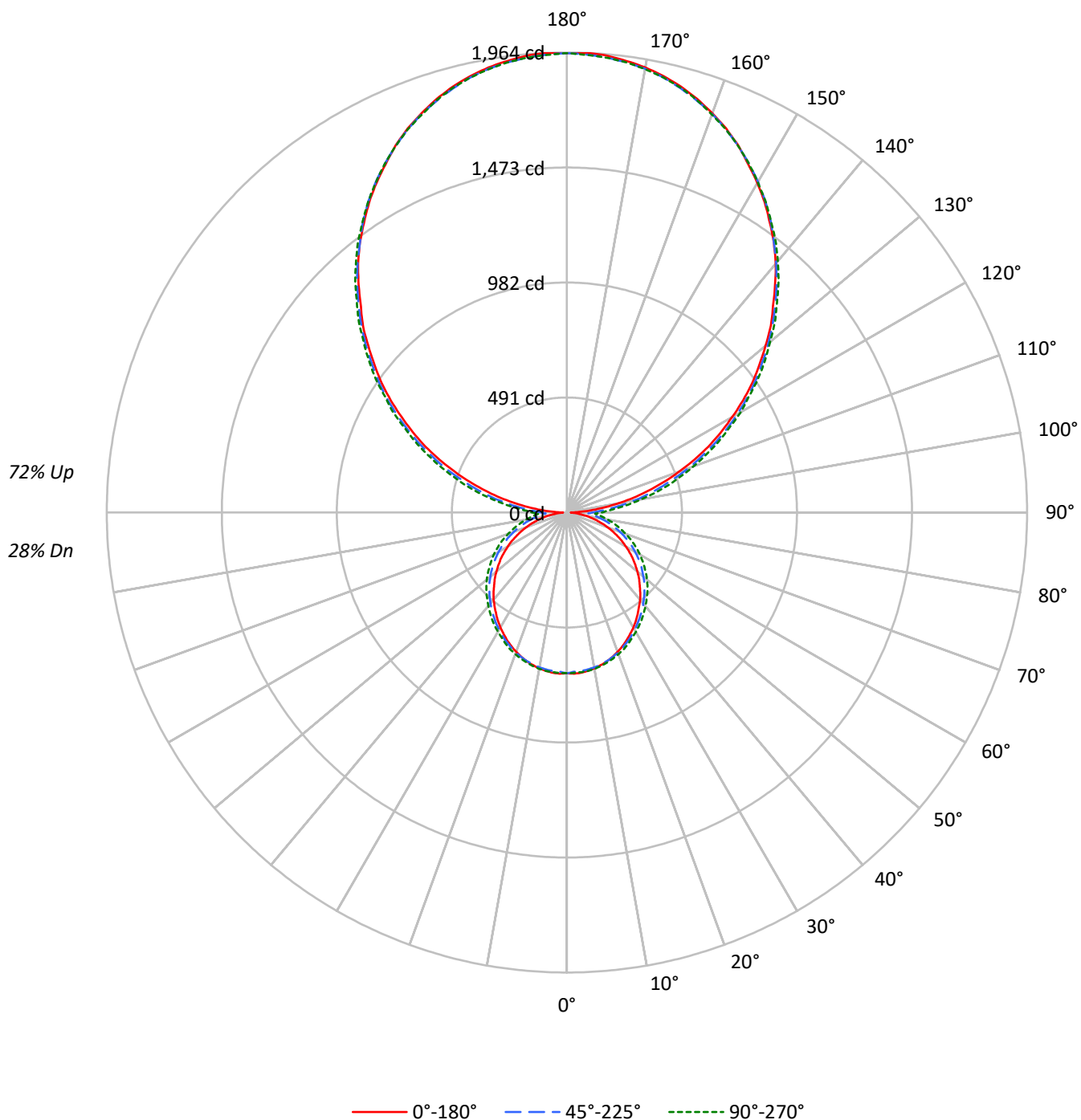
Lumens per Lamp: N/A
Luminaire Lumens: 7785.0 lumens
Efficiency: N/A
Efficacy: 102.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 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: P1033593

CATALOG NUMBER: S124DIW-B575D1560UB27-4F0-XX-W2A-D1

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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36
1	92	88	84	80	82	79	75	72	61	59	57	45	44	43	31	30	29
2	84	76	70	65	74	68	63	59	53	50	47	39	37	35	27	25	24
3	76	67	60	54	68	60	54	49	47	42	39	35	32	29	23	22	20
4	69	59	51	45	62	53	46	41	41	37	33	31	27	25	21	19	17
5	64	52	44	38	57	47	40	35	37	32	28	27	24	21	19	16	15
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13
7	54	42	34	29	48	38	31	26	30	25	21	22	19	16	15	13	11
8	50	38	30	25	44	34	27	23	27	22	19	20	17	14	14	12	10
9	46	34	27	22	41	31	25	20	25	20	16	19	15	13	13	11	9
10	43	31	24	20	38	28	22	18	23	18	15	17	14	11	12	10	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: P1033593

CATALOG NUMBER: S124DIW-B575D1560UB27-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.0	0.8
10°-20°	186.2	2.4
20°-30°	281.6	3.6
30°-40°	340.7	4.4
40°-50°	360.2	4.6
50°-60°	339.0	4.4
60°-70°	281.3	3.6
70°-80°	197.4	2.5
80°-90°	115.5	1.5
90°-100°	194.1	2.5
100°-110°	432.0	5.5
110°-120°	683.4	8.8
120°-130°	876.4	11.3
130°-140°	971.6	12.5
140°-150°	948.6	12.2
150°-160°	796.5	10.2
160°-170°	530.0	6.8
170°-180°	185.6	2.4
0°-30°	532.8	6.8
0°-40°	873.5	11.2
0°-60°	1572.7	20.2
0°-90°	2166.8	27.8
90°-120°	1309.5	16.8
90°-150°	4106.1	52.7
90°-180°	5618.0	72.2
0°-180°	7785.0	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	15
95°	101	140	182	207	214	107
105°	360	377	412	436	446	383
115°	666	673	694	710	714	657
125°	966	966	983	995	996	862
135°	1244	1253	1258	1268	1268	962
145°	1510	1515	1517	1520	1518	945
155°	1729	1729	1728	1734	1728	796
165°	1882	1878	1875	1884	1878	531
175°	1958	1951	1949	1960	1949	186
180°	1961	1961	1961	1961	1961	

TEST NUMBER: P1033593

CATALOG NUMBER: S124DIW-B575D1560UB27-4F0-XX-W2A-D1

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°	50.9	97.6	138.1	164.3	171.9
95°	101.0	140.0	182.1	207.4	214.3
97.5°	154.8	189.3	232.9	259.0	265.9
100°	220.9	246.8	290.5	314.2	319.6
102.5°	290.6	309.0	350.3	374.8	382.6
105°	360.3	377.2	411.7	435.5	446.2
107.5°	434.6	449.3	477.7	502.9	506.7
110°	509.7	523.5	548.9	563.6	574.2

TEST NUMBER: P1033593

CATALOG NUMBER: S124DIW-B575D1560UB27-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	587.9	597.1	619.3	636.3	642.4
115°	665.9	672.8	694.4	709.8	713.7
117.5°	740.3	744.9	766.4	778.0	779.5
120°	813.8	822.2	839.9	847.7	856.9
122.5°	891.2	892.7	912.0	922.7	920.5
125°	966.3	965.5	983.2	994.7	996.3
127.5°	1034.5	1038.3	1050.7	1061.4	1065.3
130°	1106.6	1110.3	1122.6	1133.5	1132.0
132.5°	1180.9	1183.1	1190.9	1200.9	1203.9
135°	1243.8	1252.9	1258.3	1267.6	1267.6
137.5°	1315.1	1318.9	1325.0	1332.0	1337.3
140°	1386.4	1388.7	1389.4	1397.9	1400.3
142.5°	1450.9	1453.9	1451.6	1460.1	1463.1
145°	1510.1	1515.3	1516.8	1519.9	1518.5
147.5°	1570.7	1577.5	1576.0	1575.3	1576.8
150°	1625.3	1630.6	1630.6	1630.6	1629.1
152.5°	1676.1	1679.1	1680.7	1685.2	1680.7
155°	1729.2	1729.2	1727.7	1733.7	1727.7
157.5°	1774.7	1771.7	1771.7	1776.2	1771.7
160°	1814.1	1812.6	1811.1	1815.7	1808.1
162.5°	1850.5	1846.0	1844.5	1853.6	1846.0
165°	1882.4	1877.8	1874.8	1883.9	1877.8
167.5°	1908.2	1902.1	1902.1	1911.2	1902.1
170°	1929.4	1921.8	1923.4	1932.5	1921.8
172.5°	1944.6	1938.5	1938.5	1949.1	1938.5
175°	1958.2	1950.7	1949.1	1959.8	1949.1
177.5°	1964.3	1956.7	1956.7	1967.3	1955.2
180°	1961.3	1961.3	1961.3	1961.3	1961.3

(END OF REPORT)