

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: P1033583

Luminaire Tested: S124DIW-B575D1340UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033583
REPORT IS A COMBINATION OF REPORTS P997730 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D1340UB40-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

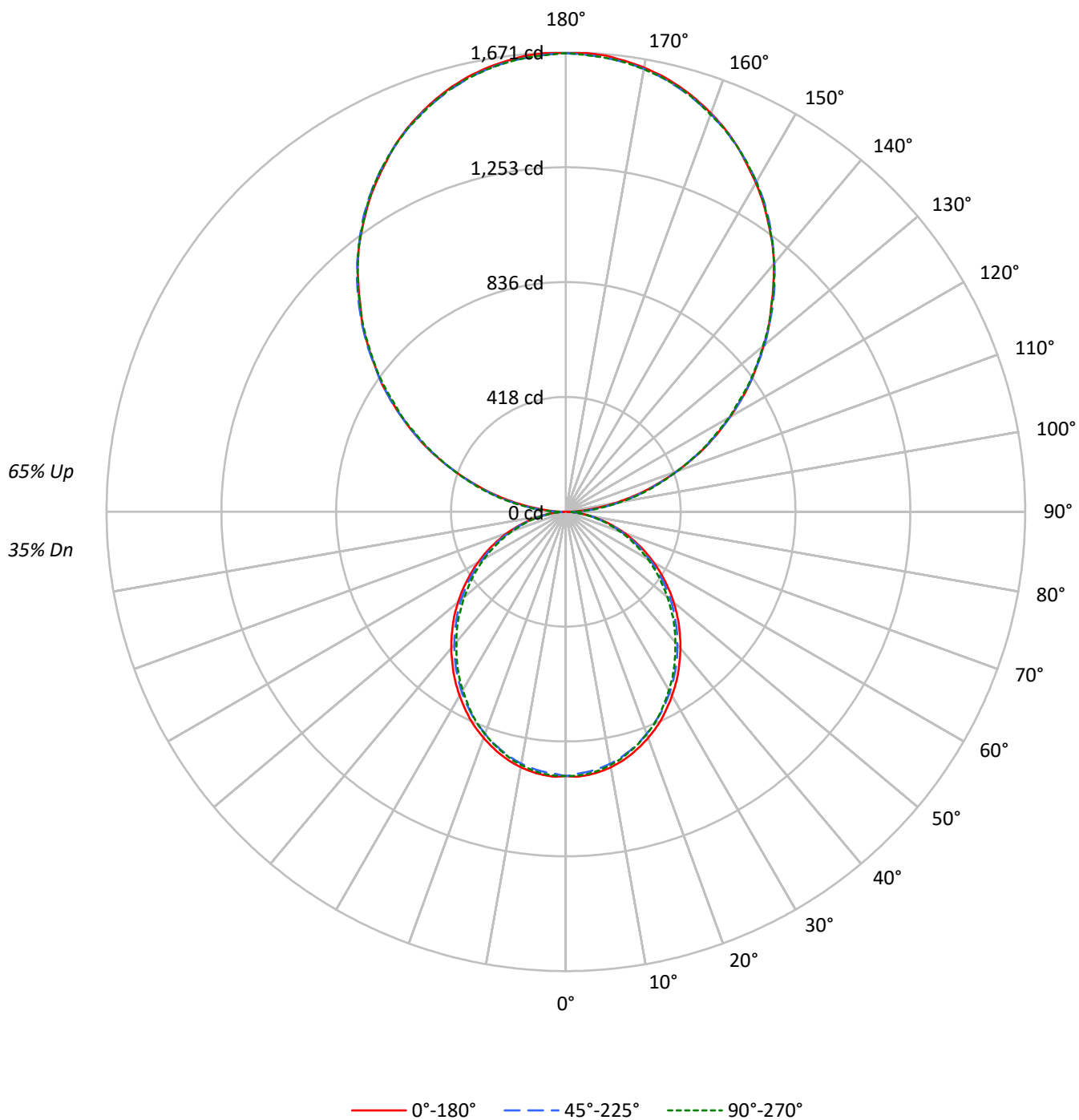
Lumens per Lamp: N/A
Luminaire Lumens: 7100.0 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 66.1
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: P1033583

CATALOG NUMBER: S124DIW-B575D1340UB40-4F0-XX-W2A-F1

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	50	30	10
RCR																				
0	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42			35
1	94	90	86	83	85	82	78	75	66	63	61	51	49	48	37	36	36			29
2	86	79	73	68	77	71	66	62	57	54	51	45	42	40	33	31	30			24
3	78	69	62	56	70	63	57	52	51	46	43	39	36	34	29	27	25			21
4	72	61	53	47	64	55	49	44	45	40	36	35	32	29	26	24	22			18
5	66	54	46	41	59	49	42	37	40	35	31	31	28	25	23	21	19			15
6	60	49	41	35	54	44	37	32	36	31	27	28	25	22	21	19	17			14
7	56	44	36	31	50	40	33	28	33	27	24	26	22	19	19	17	15			12
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	18	15	13			11
9	48	36	29	24	43	33	27	22	27	22	19	22	18	15	16	14	12			10
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	13	11			9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7841	7841	7841
5°	7848	7615	7625
10°	7781	7404	7353
15°	7669	7153	7045
20°	7527	6880	6726
25°	7367	6594	6384
30°	7173	6283	6008
35°	6973	5965	5644
40°	6763	5623	5258
45°	6545	5280	4896
50°	6302	4947	4495
55°	6038	4558	4098
60°	5770	4133	3683
65°	5461	3693	3217
70°	5104	3164	2717
75°	4573	2550	2176
80°	3899	1844	1530
85°	3027	1028	824

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6545 cd/sqm

TEST NUMBER: P1033583

CATALOG NUMBER: S124DIW-B575D1340UB40-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	1.3
10°-20°	255.3	3.6
20°-30°	375.8	5.3
30°-40°	436.8	6.2
40°-50°	436.8	6.2
50°-60°	382.0	5.4
60°-70°	283.6	4.0
70°-80°	160.9	2.3
80°-90°	49.7	0.7
90°-100°	108.7	1.5
100°-110°	325.7	4.6
110°-120°	553.2	7.8
120°-130°	729.7	10.3
130°-140°	819.5	11.5
140°-150°	805.5	11.3
150°-160°	677.5	9.5
160°-170°	450.8	6.3
170°-180°	157.8	2.2
0°-30°	721.7	10.2
0°-40°	1158.6	16.3
0°-60°	1977.4	27.9
0°-90°	2471.6	34.8
90°-120°	987.7	13.9
90°-150°	3342.3	47.1
90°-180°	4628.0	65.2
0°-180°	7100.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	962	962	962	962	962	
5°	961	958	949	958	956	91
15°	914	912	900	904	902	258
25°	828	823	812	813	810	381
35°	713	707	696	691	687	446
45°	582	576	564	556	553	448
55°	440	438	427	418	413	394
65°	298	294	287	279	275	295
75°	159	155	151	148	147	168
85°	42	42	40	40	39	45
90°	4	18	28	36	39	8
95°	77	89	98	102	102	84
105°	301	302	307	311	315	319
115°	562	562	560	559	557	555
125°	819	819	818	815	813	730
135°	1057	1064	1064	1062	1058	817
145°	1284	1289	1290	1289	1285	804
155°	1471	1471	1469	1475	1469	677
165°	1601	1597	1595	1602	1597	451
175°	1666	1659	1658	1667	1658	158
180°	1668	1668	1668	1668	1668	

TEST NUMBER: P1033583

CATALOG NUMBER: S124DIW-B575D1340UB40-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	961.5	961.5	961.5	961.5	961.5
2.5°	964.6	962.3	953.8	961.5	960.8
5°	960.8	957.7	949.2	957.7	956.2
7.5°	953.8	950.8	941.5	948.4	947.7
10°	943.8	940.7	930.7	936.9	935.4
12.5°	930.7	927.6	916.9	923.8	921.5
15°	914.5	911.5	899.9	904.5	902.2
17.5°	896.1	892.2	881.4	884.5	883.0
20°	875.3	871.4	859.8	862.2	860.6
22.5°	852.9	847.5	836.0	840.6	837.5
25°	828.3	822.9	812.1	812.8	809.8
27.5°	800.5	795.1	785.1	783.6	779.7
30°	772.8	766.6	756.6	753.5	749.7
32.5°	743.5	738.1	727.3	723.5	719.6
35°	712.7	707.3	696.5	691.1	687.3
37.5°	680.3	675.7	664.1	658.8	653.4
40°	648.7	642.6	631.0	623.3	619.5
42.5°	614.8	611.8	598.7	589.4	587.1
45°	581.7	576.3	564.0	555.5	553.2
47.5°	547.0	543.2	531.6	522.4	516.2
50°	511.6	508.5	497.7	486.9	482.3
52.5°	476.9	473.1	461.5	452.3	446.1
55°	439.9	437.6	426.8	417.6	413.0
57.5°	405.3	403.0	392.2	382.9	378.3
60°	369.1	365.2	355.2	348.3	344.4
62.5°	333.6	330.5	319.7	313.6	309.7
65°	298.2	294.3	286.6	278.9	275.1
67.5°	262.0	258.9	251.2	243.5	242.7
70°	228.8	223.4	217.3	211.1	208.8
72.5°	193.4	188.0	183.4	178.7	176.4
75°	158.7	154.9	151.0	147.9	147.2
77.5°	124.8	123.3	119.4	118.7	116.3
80°	94.8	92.5	90.9	89.4	88.6
82.5°	65.5	64.7	64.7	63.9	63.2
85°	41.6	41.6	40.1	40.1	39.3
87.5°	20.0	19.3	18.5	18.5	18.5
90°	3.9	18.1	28.4	36.1	38.7
92.5°	33.5	50.3	56.8	60.6	61.9
95°	77.4	89.0	98.0	101.9	101.9
97.5°	123.9	134.2	144.5	149.7	149.7
100°	180.6	185.8	197.4	200.0	200.0
102.5°	240.0	241.3	251.6	255.4	256.7
105°	300.6	301.9	307.0	310.9	314.8
107.5°	363.8	365.1	366.4	371.6	370.3
110°	428.3	430.9	429.6	427.0	430.9

TEST NUMBER: P1033583

CATALOG NUMBER: S124DIW-B575D1340UB40-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	495.4	495.4	492.8	492.8	492.8
115°	562.5	562.5	559.9	558.6	557.3
117.5°	625.7	625.7	624.4	620.5	616.7
120°	688.9	694.1	690.2	683.8	686.3
122.5°	754.7	756.0	754.7	750.8	744.4
125°	819.2	819.2	817.9	815.4	812.8
127.5°	877.3	881.2	878.6	876.0	874.7
130°	939.2	943.1	943.1	940.5	935.3
132.5°	1002.4	1005.0	1003.7	1001.1	999.8
135°	1056.6	1064.3	1064.3	1061.8	1057.9
137.5°	1117.2	1121.1	1123.7	1119.8	1121.1
140°	1177.9	1180.5	1180.5	1179.2	1177.9
142.5°	1233.4	1235.9	1234.6	1234.6	1234.6
145°	1283.7	1288.8	1290.1	1288.8	1285.0
147.5°	1335.3	1341.7	1340.4	1339.1	1337.9
150°	1381.7	1386.9	1386.9	1386.9	1385.6
152.5°	1425.6	1428.2	1429.5	1433.3	1429.5
155°	1470.7	1470.7	1469.4	1474.6	1469.4
157.5°	1509.4	1506.9	1506.9	1510.7	1506.9
160°	1543.0	1541.7	1540.4	1544.3	1537.8
162.5°	1573.9	1570.1	1568.8	1576.5	1570.1
165°	1601.0	1597.2	1594.6	1602.3	1597.2
167.5°	1623.0	1617.8	1617.8	1625.6	1617.8
170°	1641.0	1634.6	1635.9	1643.6	1634.6
172.5°	1653.9	1648.8	1648.8	1657.8	1648.8
175°	1665.5	1659.1	1657.8	1666.8	1657.8
177.5°	1670.7	1664.3	1664.3	1673.3	1663.0
180°	1668.1	1668.1	1668.1	1668.1	1668.1

(END OF REPORT)