

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: P1035079

Luminaire Tested: S125DIW-B1090D770UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1035079
REPORT IS A COMBINATION OF REPORTS P1003038 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DIW-B1090D770UB40-4F0-XX-W2A-F1
Description: Define 5 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

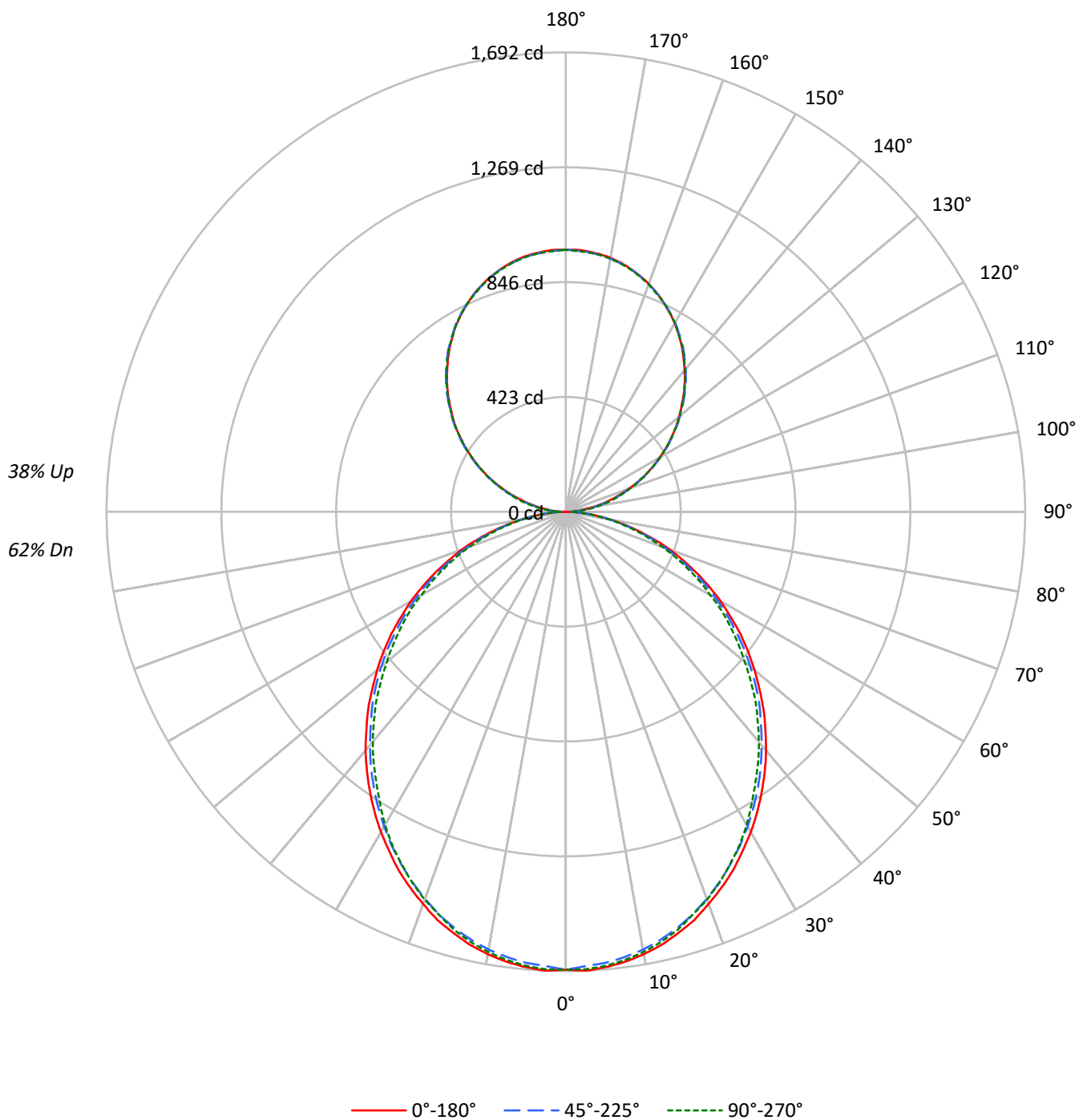
Lumens per Lamp: N/A
Luminaire Lumens: 7084.0 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 70
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: P1035079

CATALOG NUMBER: S125DIW-B1090D770UB40-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1035079

CATALOG NUMBER: S125DIW-B1090D770UB40-4F0-XX-W2A-F1

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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67
1	100	96	92	88	94	90	87	83	79	76	74	69	67	65	59	58	57
2	91	84	77	72	85	79	73	68	69	65	61	60	57	54	52	50	48
3	83	74	66	60	78	69	63	57	61	56	51	53	49	46	46	43	40
4	76	65	57	51	71	61	54	49	54	48	44	47	43	39	41	38	35
5	70	58	50	44	65	55	47	42	49	42	38	43	38	34	37	33	30
6	65	52	44	38	60	49	42	36	44	38	33	39	34	30	34	30	27
7	60	47	39	33	56	45	37	32	40	34	29	35	30	26	31	27	24
8	56	43	35	30	52	41	33	28	36	30	26	32	27	24	28	24	21
9	52	39	32	26	48	37	30	25	33	27	23	30	25	21	26	22	19
10	48	36	29	24	45	34	27	23	31	25	21	27	23	19	24	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10807	10807	10807
5°	10807	10556	10576
10°	10717	10314	10281
15°	10577	10024	9935
20°	10387	9689	9537
25°	10183	9322	9111
30°	9936	8941	8662
35°	9673	8542	8159
40°	9401	8119	7711
45°	9107	7707	7237
50°	8783	7240	6683
55°	8462	6724	6174
60°	8081	6181	5582
65°	7623	5553	4969
70°	7157	4830	4262
75°	6376	3977	3446
80°	5432	2971	2535
85°	4197	1756	1397

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9107 cd/sqm

TEST NUMBER: P1035079

CATALOG NUMBER: S125DIW-B1090D770UB40-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.2	2.2
10°-20°	449.6	6.3
20°-30°	663.7	9.4
30°-40°	774.4	10.9
40°-50°	777.7	11.0
50°-60°	682.7	9.6
60°-70°	508.5	7.2
70°-80°	290.4	4.1
80°-90°	85.3	1.2
90°-100°	64.2	0.9
100°-110°	190.6	2.7
110°-120°	323.2	4.6
120°-130°	425.5	6.0
130°-140°	476.8	6.7
140°-150°	467.4	6.6
150°-160°	392.6	5.5
160°-170°	261.0	3.7
170°-180°	91.3	1.3
0°-30°	1272.4	18.0
0°-40°	2046.8	28.9
0°-60°	3507.2	49.5
0°-90°	4391.5	62.0
90°-120°	578.0	8.2
90°-150°	1947.6	27.5
90°-180°	2692.0	38.0
0°-180°	7084.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1687	1687	1687	1687	1687	
5°	1684	1681	1668	1680	1679	160
15°	1605	1601	1587	1593	1593	453
25°	1457	1450	1433	1436	1432	670
35°	1258	1253	1234	1228	1217	787
45°	1030	1025	1009	993	989	794
55°	785	781	762	750	741	700
65°	530	527	512	500	495	525
75°	282	279	272	268	263	300
85°	73	75	75	73	71	80
90°	1	7	12	16	18	8
95°	49	50	58	63	65	51
105°	171	175	179	184	186	183
115°	324	327	328	327	327	320
125°	472	477	478	476	475	423
135°	614	619	619	619	616	473
145°	744	747	749	749	747	465
155°	851	851	852	855	851	392
165°	926	924	925	928	923	261
175°	962	960	960	964	959	91
180°	965	965	965	965	965	

TEST NUMBER: P1035079

CATALOG NUMBER: S125DIW-B1090D770UB40-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1686.7	1686.7	1686.7	1686.7	1686.7
2.5°	1692.0	1688.0	1674.7	1688.0	1686.7
5°	1684.0	1681.3	1668.0	1680.0	1678.7
7.5°	1672.0	1669.3	1654.6	1666.7	1665.3
10°	1654.6	1652.0	1637.3	1648.0	1646.6
12.5°	1633.3	1628.0	1614.6	1622.6	1622.6
15°	1605.3	1601.3	1586.6	1593.3	1593.3
17.5°	1575.9	1569.2	1554.6	1562.6	1555.9
20°	1537.2	1534.6	1517.2	1526.5	1519.9
22.5°	1498.5	1493.2	1477.2	1482.5	1478.5
25°	1457.2	1450.5	1433.1	1435.8	1431.8
27.5°	1409.1	1405.1	1387.8	1389.1	1385.1
30°	1362.4	1358.4	1338.4	1335.7	1331.7
32.5°	1311.7	1305.0	1287.7	1282.4	1274.3
35°	1258.3	1253.0	1234.3	1227.6	1217.0
37.5°	1203.6	1197.0	1179.6	1170.3	1163.6
40°	1147.6	1140.9	1122.2	1110.2	1106.2
42.5°	1087.5	1082.2	1063.5	1052.8	1046.2
45°	1030.2	1024.8	1008.8	992.8	988.8
47.5°	967.4	968.8	948.8	932.7	923.4
50°	907.4	903.4	887.4	870.0	860.7
52.5°	846.0	843.3	826.0	811.3	800.6
55°	784.6	780.6	761.9	749.9	740.6
57.5°	719.2	717.9	701.9	685.9	681.9
60°	657.9	652.5	637.8	624.5	615.2
62.5°	593.8	589.8	577.8	563.1	556.4
65°	529.8	527.1	512.4	500.4	495.1
67.5°	467.0	461.7	451.0	440.4	437.7
70°	408.3	401.7	389.6	381.6	376.3
72.5°	344.3	340.3	333.6	324.3	318.9
75°	281.6	278.9	272.2	268.2	262.9
77.5°	222.8	221.5	217.5	214.8	210.8
80°	168.1	168.1	165.5	164.1	161.5
82.5°	120.1	117.4	117.4	114.8	114.8
85°	73.4	74.7	74.7	73.4	70.7
87.5°	36.0	36.0	34.7	34.7	32.0
90°	0.8	6.8	12.0	15.8	18.0
92.5°	22.5	26.3	33.0	38.3	39.8
95°	48.8	50.3	57.8	63.1	64.6
97.5°	75.1	75.8	86.3	90.8	91.6
100°	105.1	105.1	114.9	121.6	123.1
102.5°	137.4	141.1	144.9	152.4	154.7
105°	171.2	174.9	179.4	183.9	186.2
107.5°	208.0	211.7	215.5	217.7	217.7
110°	246.3	250.0	252.3	254.5	253.8

TEST NUMBER: P1035079

CATALOG NUMBER: S125DIW-B1090D770UB40-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	285.3	286.8	289.8	290.5	289.0
115°	323.6	326.6	328.1	327.3	326.6
117.5°	362.6	363.4	364.9	365.6	362.6
120°	398.7	402.4	403.2	403.2	400.2
122.5°	437.7	438.4	440.7	439.9	437.7
125°	472.2	476.7	477.5	476.0	475.2
127.5°	510.5	512.8	513.5	512.8	511.3
130°	544.3	548.1	549.6	548.8	547.3
132.5°	578.1	584.8	584.1	583.3	581.1
135°	614.1	618.6	619.4	619.4	616.4
137.5°	647.9	652.4	653.9	654.7	650.9
140°	680.2	683.9	686.2	687.7	683.9
142.5°	712.5	715.5	718.5	719.2	715.5
145°	744.0	747.0	749.3	749.3	747.0
147.5°	773.3	775.5	777.0	779.3	773.3
150°	802.6	801.8	804.8	804.8	803.3
152.5°	826.6	828.1	828.8	831.1	828.1
155°	851.4	851.4	852.1	855.1	851.4
157.5°	873.9	872.4	873.1	876.1	870.9
160°	893.4	891.2	891.9	894.9	891.2
162.5°	910.7	909.2	909.2	912.9	908.4
165°	925.7	924.2	924.9	927.9	923.4
167.5°	939.2	936.2	936.2	940.7	936.2
170°	949.7	946.7	946.7	951.2	946.0
172.5°	957.2	954.2	954.2	958.7	954.2
175°	962.5	959.5	959.5	964.0	958.7
177.5°	966.2	963.2	962.5	967.0	961.7
180°	964.7	964.7	964.7	964.7	964.7

(END OF REPORT)