

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: P1036147

Luminaire Tested: S125RDIW-B850D770UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1036147
REPORT IS A COMBINATION OF REPORTS P1006979 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDIW-B850D770UB27-4F0-XX-W2A-F1
Description: Define 5 Regressed Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

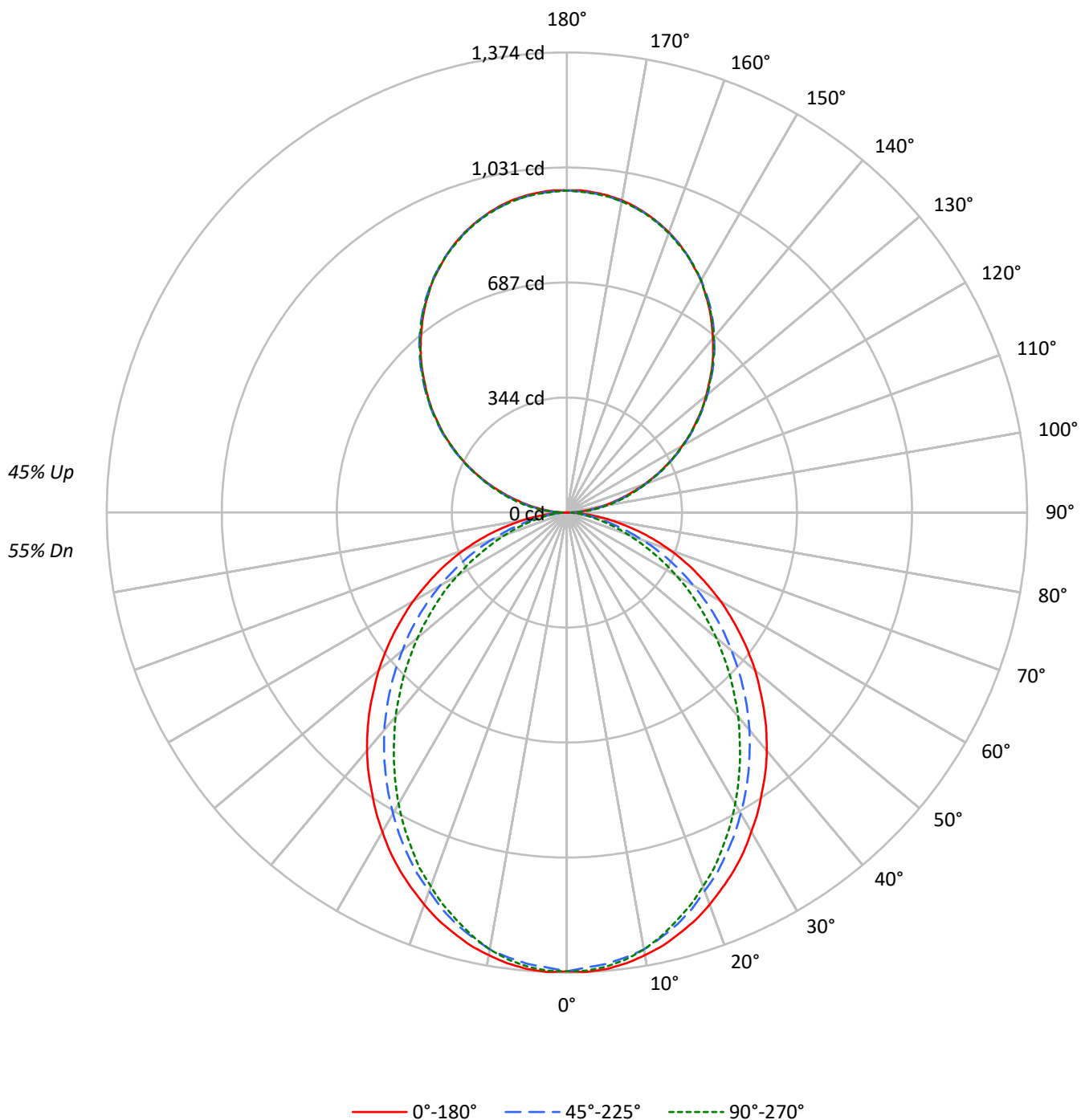
Lumens per Lamp: N/A
Luminaire Lumens: 5924.0 lumens
Efficiency: N/A
Efficacy: 100.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 59.1
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: P1036147

CATALOG NUMBER: S125RDIW-B850D770UB27-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1036147

CATALOG NUMBER: S125RDIW-B850D770UB27-4F0-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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60
1	99	95	91	88	92	88	85	82	76	73	71	64	63	61	54	53	52
2	90	83	77	72	84	77	72	68	67	63	59	57	54	51	48	46	44
3	83	73	66	60	76	68	62	57	59	54	50	50	47	44	42	40	37
4	76	65	57	51	70	61	54	48	53	47	43	45	41	38	38	35	32
5	70	58	50	44	64	54	47	42	47	41	37	41	36	33	34	31	28
6	64	52	44	38	59	49	42	36	43	37	33	37	32	29	31	28	25
7	59	47	39	34	55	44	37	32	39	33	29	33	29	26	29	25	22
8	55	43	35	30	51	40	33	28	35	30	26	31	26	23	26	23	20
9	51	39	32	27	48	37	30	25	32	27	23	28	24	21	24	21	18
10	48	36	29	24	45	34	27	23	30	25	21	26	22	19	23	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8781	8781	8781
5°	8782	8562	8576
10°	8697	8347	8273
15°	8573	8044	7874
20°	8421	7681	7456
25°	8246	7326	7008
30°	8033	6936	6537
35°	7814	6540	6038
40°	7606	6133	5549
45°	7357	5694	5038
50°	7104	5227	4517
55°	6810	4768	3978
60°	6510	4244	3419
65°	6151	3656	2815
70°	5734	2976	2215
75°	5156	2238	1615
80°	4350	1449	1089
85°	3253	778	614

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7357 cd/sqm

TEST NUMBER: P1036147

CATALOG NUMBER: S125RDIW-B850D770UB27-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.0	2.2
10°-20°	360.5	6.1
20°-30°	522.7	8.8
30°-40°	595.5	10.1
40°-50°	580.4	9.8
50°-60°	488.5	8.2
60°-70°	342.3	5.8
70°-80°	175.5	3.0
80°-90°	45.3	0.8
90°-100°	64.0	1.1
100°-110°	190.0	3.2
110°-120°	322.3	5.4
120°-130°	424.2	7.2
130°-140°	475.4	8.0
140°-150°	466.0	7.9
150°-160°	391.4	6.6
160°-170°	260.2	4.4
170°-180°	91.1	1.5
0°-30°	1012.1	17.1
0°-40°	1607.6	27.1
0°-60°	2676.5	45.2
0°-90°	3239.5	54.7
90°-120°	576.3	9.7
90°-150°	1941.9	32.8
90°-180°	2685.0	45.3
0°-180°	5924.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1370	1370	1370	1370	1370	
5°	1368	1364	1353	1363	1361	130
15°	1301	1295	1273	1272	1263	367
25°	1180	1164	1126	1113	1101	543
35°	1016	992	945	915	901	637
45°	832	802	745	704	688	642
55°	631	598	540	494	477	565
65°	428	392	337	296	280	423
75°	228	197	153	130	123	241
85°	57	38	33	32	31	62
90°	1	7	12	16	18	7
95°	49	50	58	63	64	51
105°	171	174	179	183	186	182
115°	323	326	327	326	326	319
125°	471	475	476	475	474	422
135°	612	617	618	618	614	472
145°	742	745	747	747	745	464
155°	849	849	850	853	849	391
165°	923	921	922	925	921	260
175°	960	957	957	961	956	91
180°	962	962	962	962	962	

TEST NUMBER: P1036147

CATALOG NUMBER: S125RDIW-B850D770UB27-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1370.5	1370.5	1370.5	1370.5	1370.5
2.5°	1373.6	1370.5	1360.1	1370.5	1369.5
5°	1368.4	1364.3	1352.9	1363.3	1361.2
7.5°	1358.1	1353.9	1340.5	1348.8	1346.7
10°	1342.6	1339.4	1325.0	1328.1	1325.0
12.5°	1325.0	1320.8	1300.1	1302.2	1297.0
15°	1301.1	1294.9	1273.2	1272.2	1262.8
17.5°	1276.3	1267.0	1241.1	1235.9	1228.7
20°	1246.3	1235.9	1202.8	1197.6	1188.3
22.5°	1213.2	1202.8	1167.6	1156.2	1149.0
25°	1180.0	1164.5	1126.2	1112.8	1101.4
27.5°	1142.8	1124.1	1083.8	1066.2	1054.8
30°	1101.4	1081.7	1038.2	1014.4	1005.1
32.5°	1061.0	1037.2	992.7	965.8	953.3
35°	1016.5	991.6	945.1	915.0	900.6
37.5°	974.0	944.0	896.4	861.2	846.7
40°	928.5	897.4	847.8	808.4	796.0
42.5°	880.9	848.8	797.0	759.8	740.1
45°	832.2	802.2	745.3	703.9	688.4
47.5°	781.5	750.5	693.5	651.1	633.5
50°	733.9	699.7	640.7	597.3	581.7
52.5°	682.1	646.9	592.1	544.5	528.9
55°	631.4	598.3	540.3	493.8	477.2
57.5°	579.7	544.5	488.6	443.0	428.5
60°	530.0	493.8	437.9	392.3	376.8
62.5°	477.2	443.0	386.1	344.7	329.2
65°	427.5	392.3	337.4	296.0	280.5
67.5°	377.8	342.6	289.8	250.5	238.1
70°	327.1	291.9	240.1	208.1	195.6
72.5°	277.4	243.3	195.6	166.7	159.4
75°	227.7	196.7	153.2	130.4	123.2
77.5°	177.0	152.2	115.9	98.3	92.1
80°	134.6	109.7	80.7	71.4	69.4
82.5°	93.2	71.4	53.8	50.7	49.7
85°	56.9	38.3	33.1	32.1	31.1
87.5°	23.8	16.6	15.5	15.5	14.5
90°	0.7	6.7	12.0	15.7	18.0
92.5°	22.5	26.2	32.9	38.2	39.7
95°	48.7	50.2	57.6	62.9	64.4
97.5°	74.9	75.6	86.1	90.6	91.3
100°	104.8	104.8	114.5	121.3	122.8
102.5°	137.0	140.7	144.5	152.0	154.2
105°	170.7	174.4	178.9	183.4	185.6
107.5°	207.3	211.1	214.8	217.1	217.1
110°	245.5	249.3	251.5	253.8	253.0



TEST NUMBER: P1036147

CATALOG NUMBER: S125RDIW-B850D770UB27-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	284.4	285.9	288.9	289.7	288.2
115°	322.6	325.6	327.1	326.4	325.6
117.5°	361.5	362.3	363.8	364.5	361.5
120°	397.5	401.2	402.0	402.0	399.0
122.5°	436.4	437.1	439.4	438.6	436.4
125°	470.8	475.3	476.1	474.6	473.8
127.5°	509.0	511.3	512.0	511.3	509.8
130°	542.7	546.4	547.9	547.2	545.7
132.5°	576.4	583.1	582.4	581.6	579.4
135°	612.3	616.8	617.5	617.5	614.5
137.5°	646.0	650.5	652.0	652.7	649.0
140°	678.2	681.9	684.2	685.7	681.9
142.5°	710.4	713.4	716.4	717.1	713.4
145°	741.8	744.8	747.0	747.0	744.8
147.5°	771.0	773.2	774.7	777.0	771.0
150°	800.2	799.4	802.4	802.4	800.9
152.5°	824.1	825.6	826.4	828.6	825.6
155°	848.8	848.8	849.6	852.6	848.8
157.5°	871.3	869.8	870.5	873.5	868.3
160°	890.8	888.5	889.3	892.3	888.5
162.5°	908.0	906.5	906.5	910.2	905.7
165°	922.9	921.4	922.2	925.2	920.7
167.5°	936.4	933.4	933.4	937.9	933.4
170°	946.9	943.9	943.9	948.4	943.2
172.5°	954.4	951.4	951.4	955.9	951.4
175°	959.6	956.6	956.6	961.1	955.9
177.5°	963.4	960.4	959.6	964.1	958.9
180°	961.9	961.9	961.9	961.9	961.9

(END OF REPORT)