

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: P1036146

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1036146
REPORT IS A COMBINATION OF REPORTS P1006978 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-F
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

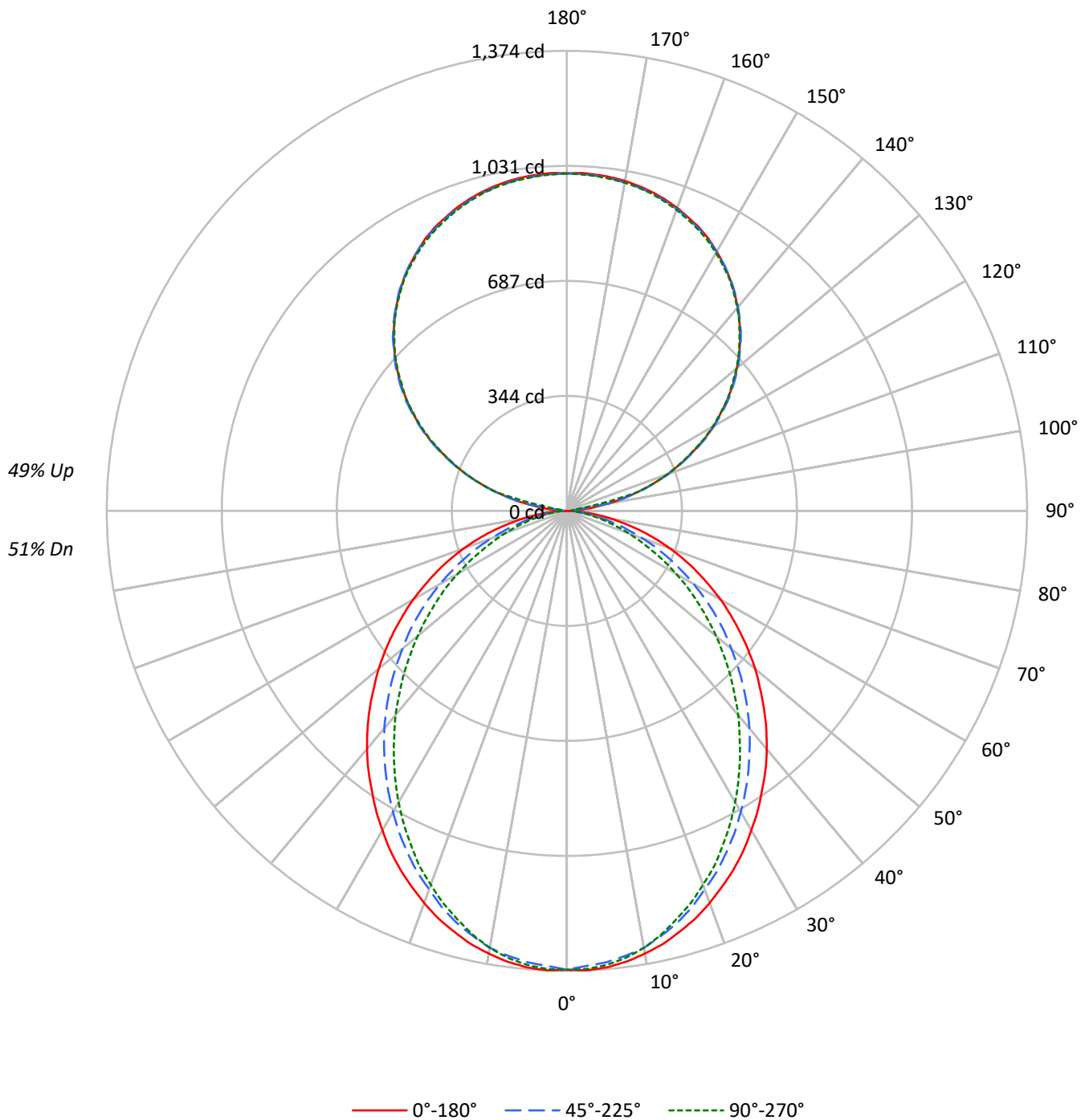
Lumens per Lamp: N/A
Luminaire Lumens: 6336.0 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P1036146

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

Luminous Intensity Polar Plot



TEST NUMBER: P1036146

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

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	57	57	51
1	98	94	90	87	91	87	84	81	74	72	69	62	60	59	51	50	49	49	49	44
2	90	82	76	71	83	76	71	67	65	61	58	55	52	49	45	43	41	41	41	37
3	82	73	65	60	75	67	61	56	58	53	49	49	45	42	40	38	35	35	35	31
4	75	64	57	51	69	60	53	48	51	46	42	43	39	36	36	33	31	31	31	27
5	69	57	49	43	63	53	46	41	46	40	36	39	35	31	32	29	27	27	27	24
6	64	52	44	38	59	48	41	36	41	36	32	35	31	28	30	26	24	24	24	21
7	59	47	39	33	54	44	36	31	38	32	28	32	28	25	27	24	21	21	21	19
8	55	42	35	29	50	40	33	28	34	29	25	29	25	22	25	22	19	19	19	17
9	51	39	31	26	47	36	30	25	32	26	22	27	23	20	23	20	17	17	17	15
10	48	36	28	24	44	33	27	22	29	24	20	25	21	18	21	18	16	16	16	14

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: P1036146

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.0	2.0
10°-20°	360.5	5.7
20°-30°	522.7	8.2
30°-40°	595.5	9.4
40°-50°	580.4	9.2
50°-60°	488.5	7.7
60°-70°	342.3	5.4
70°-80°	175.5	2.8
80°-90°	45.3	0.7
90°-100°	34.2	0.5
100°-110°	227.5	3.6
110°-120°	409.7	6.5
120°-130°	525.9	8.3
130°-140°	565.6	8.9
140°-150°	530.8	8.4
150°-160°	429.4	6.8
160°-170°	277.7	4.4
170°-180°	95.8	1.5
0°-30°	1012.1	16.0
0°-40°	1607.6	25.4
0°-60°	2676.5	42.2
0°-90°	3239.5	51.1
90°-120°	671.4	10.6
90°-150°	2293.7	36.2
90°-180°	3097.0	48.9
0°-180°	6336.0	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	5
95°	43	40	12	16	16	52
105°	220	223	223	223	222	233
115°	412	416	417	414	410	409
125°	587	592	592	589	587	524
135°	732	736	735	733	729	564
145°	848	850	850	850	846	530
155°	934	930	931	933	927	430
165°	986	981	982	986	980	278
175°	1008	1004	1004	1010	1004	96
180°	1008	1008	1008	1008	1008	

TEST NUMBER: P1036146

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

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	17.9
92.5°	14.2	7.5	12.0	15.7	16.4
95°	42.6	40.4	12.0	15.7	15.7
97.5°	80.0	84.4	13.5	14.9	15.7
100°	124.8	127.0	130.0	18.7	15.7
102.5°	170.4	173.4	174.9	176.4	113.6
105°	219.7	222.7	222.7	222.7	221.9
107.5°	270.5	270.5	272.0	272.7	269.8
110°	319.8	319.8	321.3	319.1	319.8

TEST NUMBER: P1036146

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

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	366.2	368.4	369.1	366.2	364.7
115°	412.5	416.2	417.0	414.0	409.5
117.5°	461.1	461.1	464.0	459.6	458.1
120°	505.9	505.1	507.4	505.9	502.2
122.5°	545.5	549.2	550.0	548.5	544.0
125°	586.6	591.8	591.8	588.8	586.6
127.5°	626.2	629.9	629.2	627.7	621.7
130°	662.1	665.8	666.6	664.3	660.6
132.5°	697.9	702.4	700.2	700.2	696.4
135°	731.6	736.0	734.6	733.1	728.6
137.5°	762.9	767.4	765.9	765.9	762.2
140°	793.6	795.1	794.3	795.8	791.3
142.5°	821.2	822.0	823.5	823.5	819.0
145°	848.1	849.6	849.6	850.4	845.9
147.5°	872.0	872.0	872.8	873.5	868.3
150°	894.5	893.0	894.5	896.0	890.0
152.5°	916.1	912.4	913.9	915.4	910.2
155°	934.1	929.6	931.1	933.3	927.3
157.5°	948.3	946.0	946.0	948.3	942.3
160°	963.2	958.7	959.5	962.5	956.5
162.5°	975.2	970.7	971.4	975.9	969.2
165°	985.6	981.1	981.9	986.4	980.4
167.5°	993.8	989.4	990.1	995.3	988.6
170°	1000.6	995.3	996.1	1002.1	995.3
172.5°	1005.1	999.8	1001.3	1006.6	999.8
175°	1008.0	1003.6	1004.3	1010.3	1003.6
177.5°	1010.3	1005.8	1006.6	1011.8	1005.8
180°	1008.0	1008.0	1008.0	1008.0	1008.0

(END OF REPORT)