

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: P1007218

Luminaire Tested: S125RDR-B850DB50-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1007218
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-B850DB50-4F0-XX-W2A-F
Description: Define 5 Regressed Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

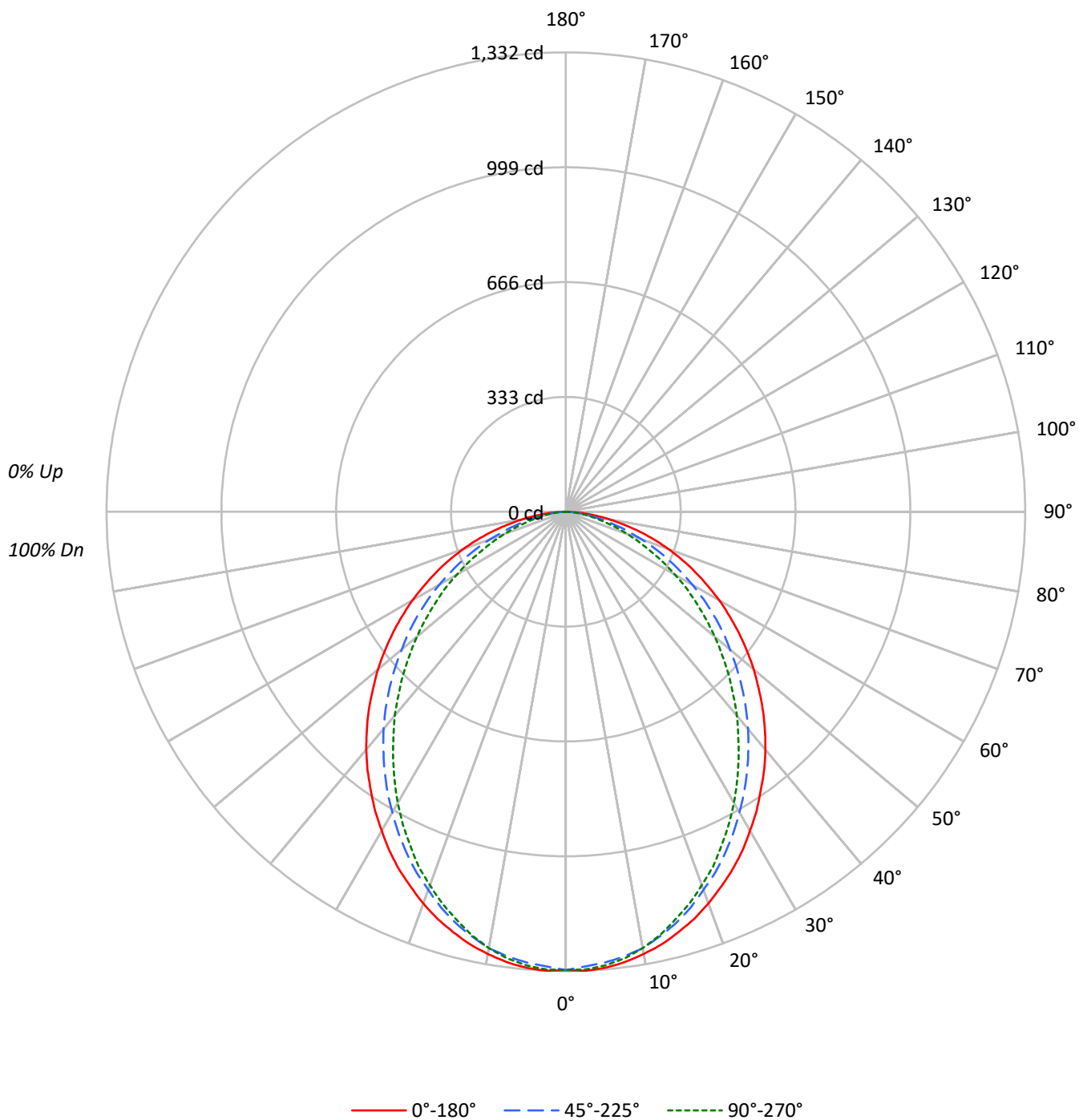
Lumens per Lamp: N/A
Luminaire Lumens: 3140.0 lumens
Efficiency: N/A
Efficacy: 87.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35.9
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: P1007218

CATALOG NUMBER: S125RDR-B850DB50-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1007218

CATALOG NUMBER: S125RDR-B850DB50-4F0-XX-W2A-F

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	105	101	97	107	103	99	96	99	96	93		95	92	90		91
2	100	92	86	80	98	90	84	79	87	82	78		84	79	76		81
3	92	82	74	68	89	80	73	67	77	71	66		74	69	65		72
4	84	73	64	58	82	71	64	57	69	62	57		67	61	56		64
5	78	65	57	50	76	64	56	50	62	55	49		60	54	49		58
6	72	59	50	44	70	58	50	44	56	49	44		55	48	43		53
7	67	54	45	39	65	53	45	39	51	44	39		50	43	39		49
8	62	49	41	35	61	48	41	35	47	40	35		46	39	35		45
9	58	45	37	32	57	45	37	32	44	37	32		42	36	31		41
10	55	42	34	29	54	41	34	29	40	34	29		39	33	29		39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8515	8515	8515
5°	8535	8438	8490
10°	8470	8359	8359
15°	8370	8190	8123
20°	8241	7953	7857
25°	8090	7721	7550
30°	7901	7449	7211
35°	7710	7169	6831
40°	7531	6876	6456
45°	7312	6548	6048
50°	7094	6193	5623
55°	6840	5853	5169
60°	6585	5441	4682
65°	6286	4961	4124
70°	5942	4363	3554
75°	5466	3679	2958
80°	4815	2889	2483
85°	4058	2360	2213

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7312 cd/sqm

TEST NUMBER: P1007218

CATALOG NUMBER: S125RDR-B850DB50-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.1	4.0
10°-20°	349.6	11.1
20°-30°	506.9	16.1
30°-40°	577.5	18.4
40°-50°	562.8	17.9
50°-60°	473.7	15.1
60°-70°	331.9	10.6
70°-80°	170.2	5.4
80°-90°	42.5	1.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	981.5	31.3
0°-40°	1559.0	49.6
0°-60°	2595.5	82.7
0°-90°	3140.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3140.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1329	1329	1329	1329	1329	
5°	1327	1323	1312	1322	1320	126
15°	1262	1256	1235	1234	1225	356
25°	1144	1129	1092	1079	1068	527
35°	986	962	916	887	873	617
45°	807	778	723	683	668	622
55°	612	580	524	479	463	548
65°	415	380	327	287	272	411
75°	221	191	149	126	120	233
85°	55	37	32	31	30	64
90°	0	0	0	0	0	



TEST NUMBER: P1007218

CATALOG NUMBER: S125RDR-B850DB50-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1329.0	1329.0	1329.0	1329.0	1329.0
2.5°	1332.0	1329.0	1319.0	1329.0	1328.0
5°	1327.0	1323.0	1312.0	1322.0	1320.0
7.5°	1317.0	1313.0	1299.9	1307.9	1305.9
10°	1301.9	1298.9	1284.9	1287.9	1284.9
12.5°	1284.9	1280.8	1260.8	1262.8	1257.8
15°	1261.8	1255.7	1234.7	1233.7	1224.6
17.5°	1237.7	1228.6	1203.5	1198.5	1191.5
20°	1208.6	1198.5	1166.4	1161.4	1152.4
22.5°	1176.4	1166.4	1132.3	1121.2	1114.2
25°	1144.3	1129.3	1092.1	1079.1	1068.0
27.5°	1108.2	1090.1	1051.0	1033.9	1022.9
30°	1068.0	1049.0	1006.8	983.7	974.7
32.5°	1028.9	1005.8	962.6	936.5	924.5
35°	985.7	961.6	916.5	887.4	873.3
37.5°	944.6	915.5	869.3	835.2	821.1
40°	900.4	870.3	822.1	784.0	771.9
42.5°	854.2	823.1	772.9	736.8	717.7
45°	807.0	777.9	722.7	682.6	667.5
47.5°	757.9	727.7	672.5	631.4	614.3
50°	711.7	678.6	621.3	579.2	564.1
52.5°	661.5	627.4	574.2	528.0	512.9
55°	612.3	580.2	524.0	478.8	462.7
57.5°	562.1	528.0	473.8	429.6	415.6
60°	513.9	478.8	424.6	380.4	365.4
62.5°	462.7	429.6	374.4	334.3	319.2
65°	414.6	380.4	327.2	287.1	272.0
67.5°	366.4	332.3	281.1	242.9	230.9
70°	317.2	283.1	232.9	201.8	189.7
72.5°	269.0	235.9	189.7	161.6	154.6
75°	220.8	190.7	148.6	126.5	119.5
77.5°	171.6	147.6	112.4	95.4	89.3
80°	130.5	106.4	78.3	69.3	67.3
82.5°	90.3	69.3	52.2	49.2	48.2
85°	55.2	37.1	32.1	31.1	30.1
87.5°	23.1	16.1	15.1	15.1	14.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)