

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: P1007214

Luminaire Tested: S125RDR-B850DB35-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1007214
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-B850DB35-4F0-XX-W2A-F
Description: Define 5 Regressed Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

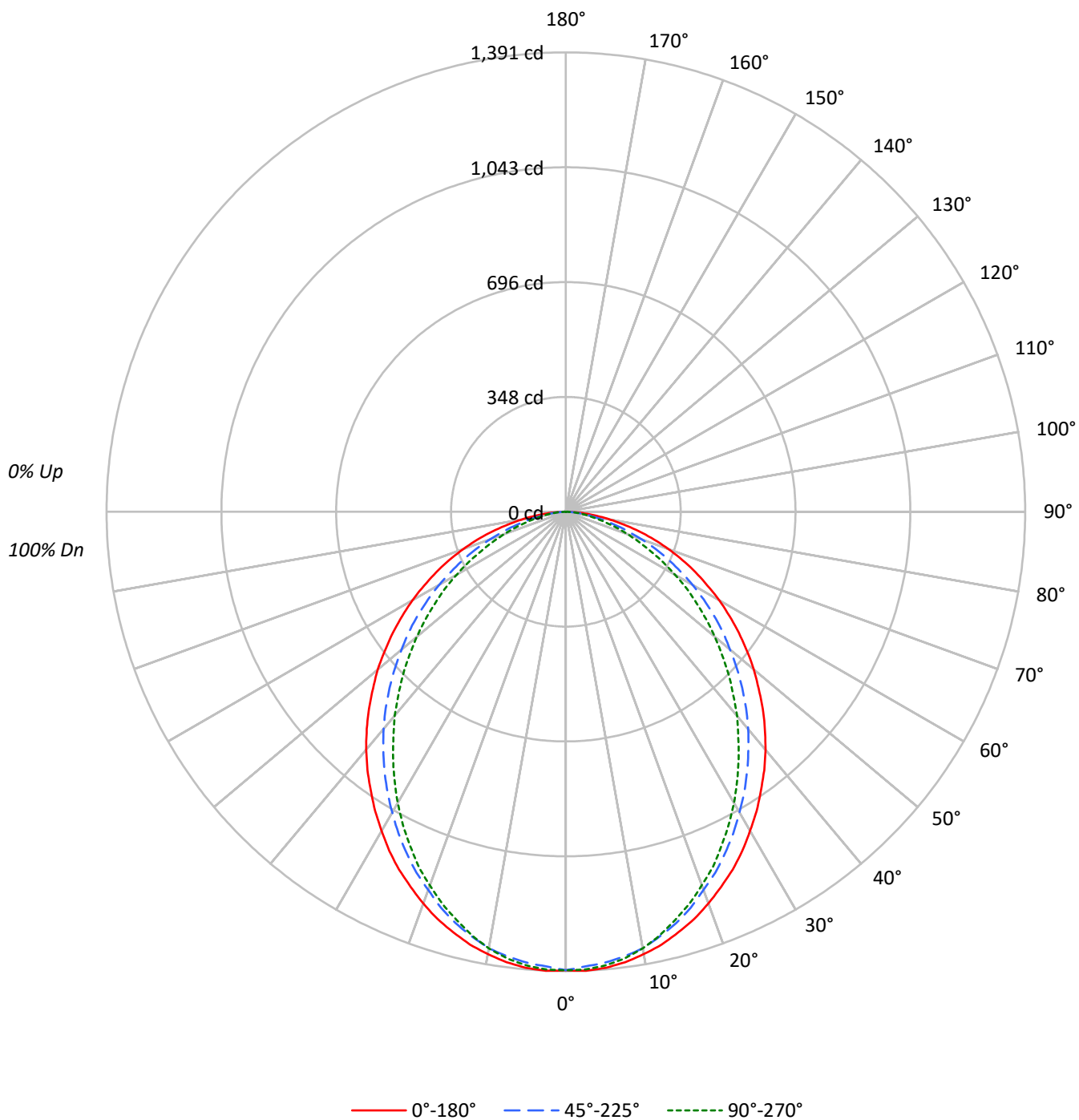
Lumens per Lamp: N/A
Luminaire Lumens: 3280.0 lumens
Efficiency: N/A
Efficacy: 91.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

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

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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	87	87	85
2	100	92	86	80	98	90	84	79	87	82	78	84	79	76	81	77	74	74	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	64	64	61
4	84	73	64	58	82	71	64	57	69	62	57	67	61	56	64	59	55	55	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	48	48	46
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	43	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	38	38	36
8	62	49	41	35	61	48	41	35	47	40	35	46	39	35	45	39	34	34	34	33
9	58	45	37	32	57	45	37	32	44	37	32	42	36	31	41	36	31	31	31	29
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	29	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8895	8895	8895
5°	8915	8814	8868
10°	8848	8732	8732
15°	8742	8555	8485
20°	8607	8307	8207
25°	8450	8065	7887
30°	8254	7781	7532
35°	8054	7488	7135
40°	7866	7183	6744
45°	7638	6841	6318
50°	7410	6470	5874
55°	7145	6114	5400
60°	6880	5683	4891
65°	6564	5182	4309
70°	6206	4558	3713
75°	5711	3842	3089
80°	5029	3018	2594
85°	4242	2470	2316

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7638 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.7	4.0
10°-20°	365.1	11.1
20°-30°	529.4	16.1
30°-40°	603.2	18.4
40°-50°	587.9	17.9
50°-60°	494.8	15.1
60°-70°	346.7	10.6
70°-80°	177.7	5.4
80°-90°	44.3	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°	1025.3	31.3
0°-40°	1628.5	49.6
0°-60°	2711.2	82.7
0°-90°	3280.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3280.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1388	1388	1388	1388	1388	
5°	1386	1382	1370	1381	1379	131
15°	1318	1312	1290	1289	1279	372
25°	1195	1180	1141	1127	1116	550
35°	1030	1004	957	927	912	645
45°	843	813	755	713	697	650
55°	640	606	547	500	483	572
65°	433	397	342	300	284	429
75°	231	199	155	132	125	244
85°	58	39	34	32	32	66
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1388.3	1388.3	1388.3	1388.3	1388.3
2.5°	1391.4	1388.3	1377.8	1388.3	1387.2
5°	1386.2	1382.0	1370.4	1380.9	1378.8
7.5°	1375.7	1371.5	1357.9	1366.3	1364.2
10°	1360.0	1356.8	1342.1	1345.3	1342.1
12.5°	1342.1	1337.9	1317.0	1319.1	1313.8
15°	1318.0	1311.7	1289.7	1288.7	1279.2
17.5°	1292.9	1283.4	1257.2	1252.0	1244.6
20°	1262.4	1252.0	1218.4	1213.2	1203.7
22.5°	1228.9	1218.4	1182.8	1171.2	1163.9
25°	1195.3	1179.6	1140.8	1127.2	1115.7
27.5°	1157.6	1138.7	1097.8	1080.0	1068.5
30°	1115.7	1095.7	1051.7	1027.6	1018.1
32.5°	1074.8	1050.6	1005.6	978.3	965.7
35°	1029.7	1004.5	957.3	926.9	912.2
37.5°	986.7	956.3	908.0	872.4	857.7
40°	940.5	909.1	858.8	818.9	806.3
42.5°	892.3	859.8	807.4	769.6	749.7
45°	843.0	812.6	755.0	713.0	697.3
47.5°	791.7	760.2	702.5	659.5	641.7
50°	743.4	708.8	649.1	605.0	589.3
52.5°	691.0	655.3	599.8	551.5	535.8
55°	639.6	606.1	547.3	500.2	483.4
57.5°	587.2	551.5	494.9	448.8	434.1
60°	536.9	500.2	443.5	397.4	381.7
62.5°	483.4	448.8	391.1	349.2	333.4
65°	433.0	397.4	341.8	299.9	284.2
67.5°	382.7	347.1	293.6	253.7	241.2
70°	331.3	295.7	243.3	210.8	198.2
72.5°	281.0	246.4	198.2	168.8	161.5
75°	230.7	199.2	155.2	132.1	124.8
77.5°	179.3	154.1	117.4	99.6	93.3
80°	136.3	111.1	81.8	72.3	70.3
82.5°	94.4	72.3	54.5	51.4	50.3
85°	57.7	38.8	33.6	32.5	31.5
87.5°	24.1	16.8	15.7	15.7	14.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)