

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061769

Luminaire Tested: S125RDRP-S850D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061769
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D835-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

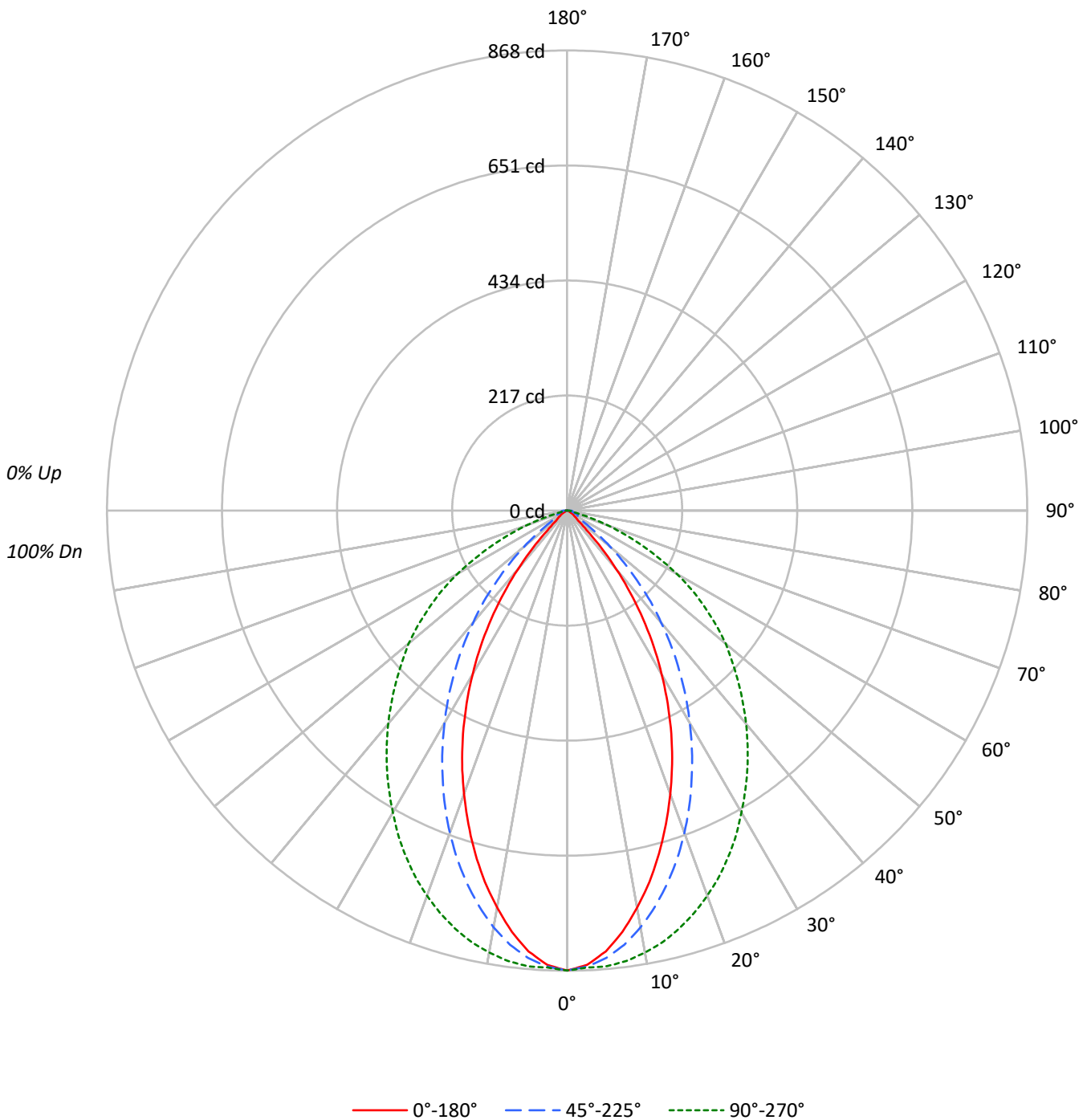
Lumens per Lamp: N/A
Luminaire Lumens: 1122.3 lumens
Efficiency: N/A
Efficacy: 43.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (A_{in}): 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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5973	5973	5973
5°	5769	5855	5963
10°	5317	5580	5917
15°	4775	5194	5819
20°	4167	4739	5664
25°	3530	4225	5470
30°	2835	3679	5227
35°	2098	3103	4983
40°	1300	2478	4721
45°	506	1811	4439
50°	238	1135	4182
55°	174	486	3794
60°	120	346	3291
65°	78	362	2559
70°	79	330	1610
75°	104	333	513
80°	155	381	345
85°	229	758	529

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4439 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.6	7.1
10°-20°	206.1	18.4
20°-30°	262.5	23.4
30°-40°	244.4	21.8
40°-50°	168.2	15.0
50°-60°	95.2	8.5
60°-70°	45.0	4.0
70°-80°	14.1	1.3
80°-90°	7.3	0.7
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°	548.2	48.8
0°-40°	792.6	70.6
0°-60°	1056.0	94.1
0°-90°	1122.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1122.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	868	868	868	868	868	
5°	835	846	847	855	863	77
15°	670	692	729	784	816	187
25°	465	494	556	650	720	212
35°	250	284	369	495	593	154
45°	52	83	186	336	456	49
55°	14	16	40	194	316	13
65°	5	6	22	69	157	5
75°	4	9	12	14	19	4
85°	3	8	10	9	7	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	867.5	867.5	867.5	867.5	867.5
2.5°	857.8	866.5	860.7	861.7	862.7
5°	834.7	846.3	847.2	854.9	862.7
7.5°	801.0	815.4	826.0	844.3	856.9
10°	760.5	777.8	798.1	828.0	846.3
12.5°	717.1	737.4	765.3	807.7	833.7
15°	669.9	692.1	728.7	783.6	816.4
17.5°	619.8	644.8	689.2	754.7	796.2
20°	568.7	595.7	646.8	721.9	773.0
22.5°	517.6	545.5	602.4	686.3	748.0
25°	464.6	494.5	556.1	649.6	720.0
27.5°	410.6	441.4	509.9	612.1	690.1
30°	356.6	389.4	462.7	573.5	657.4
32.5°	303.6	336.4	416.4	534.9	625.5
35°	249.6	284.3	369.2	495.4	592.8
37.5°	195.7	233.3	322.9	454.9	559.0
40°	144.6	180.2	275.7	415.4	525.3
42.5°	96.4	131.1	233.3	375.9	490.6
45°	52.0	82.9	186.0	336.4	455.9
47.5°	28.0	44.3	145.5	297.8	422.2
50°	22.2	25.1	106.0	262.2	390.4
52.5°	18.3	20.2	69.4	228.4	353.7
55°	14.5	16.4	40.5	193.7	316.1
57.5°	11.6	13.5	26.0	161.0	279.5
60°	8.7	10.6	25.1	129.2	239.0
62.5°	6.7	7.7	23.1	99.3	196.6
65°	4.8	5.8	22.2	69.4	157.1
67.5°	3.9	4.8	20.2	44.3	117.6
70°	3.9	3.9	16.4	28.9	80.0
72.5°	3.9	6.7	14.5	19.3	48.2
75°	3.9	8.7	12.5	13.5	19.3
77.5°	3.9	9.6	10.6	10.6	10.6
80°	3.9	8.7	9.6	9.6	8.7
82.5°	3.9	7.7	8.7	9.6	7.7
85°	2.9	7.7	9.6	8.7	6.7
87.5°	2.9	7.7	8.7	7.7	4.8
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	0.00	0.00	0.00	0.00	0.00	15.46	16.75	15.82	17.06	17.37
	3H	0.00	0.00	0.00	0.00	0.00	16.17	17.32	16.55	17.65	18.01
	4H	0.00	0.00	0.00	0.00	0.34	16.20	17.26	16.60	17.61	18.00
	6H	0.00	0.79	0.23	1.16	1.56	16.15	17.12	16.56	17.50	17.89
	8H	0.46	1.39	0.89	1.78	2.18	16.13	17.05	16.56	17.44	17.85
	12H	1.05	1.93	1.49	2.32	2.75	16.11	16.99	16.54	17.37	17.80
4H	2H	0.00	1.03	0.37	1.38	1.77	15.25	16.31	15.65	16.66	17.04
	3H	0.79	1.65	1.20	2.06	2.46	16.00	16.87	16.42	17.27	17.68
	4H	1.80	2.57	2.23	2.99	3.44	16.03	16.81	16.47	17.23	17.67
	6H	3.08	3.75	3.54	4.19	4.66	16.01	16.68	16.47	17.12	17.59
	8H	3.66	4.29	4.13	4.73	5.20	15.99	16.62	16.46	17.06	17.54
	12H	4.23	4.77	4.71	5.26	5.73	16.00	16.55	16.49	17.03	17.51
8H	4H	3.21	3.83	3.68	4.28	4.75	15.91	16.54	16.38	16.99	17.46
	6H	4.77	5.28	5.27	5.77	6.26	15.90	16.41	16.41	16.91	17.39
	8H	5.56	6.02	6.09	6.54	7.03	15.92	16.37	16.44	16.89	17.38
	12H	6.40	6.81	6.92	7.30	7.87	15.98	16.38	16.49	16.87	17.45
12H	4H	3.43	3.98	3.91	4.46	4.93	15.87	16.42	16.36	16.91	17.38
	6H	5.14	5.59	5.66	6.11	6.60	15.86	16.31	16.38	16.83	17.32
	8H	6.13	6.53	6.64	7.03	7.60	15.91	16.31	16.42	16.80	17.38