

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



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: P1062201

Luminaire Tested: S125RDR-H850D927-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062201
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: S125RDR-H850D927-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

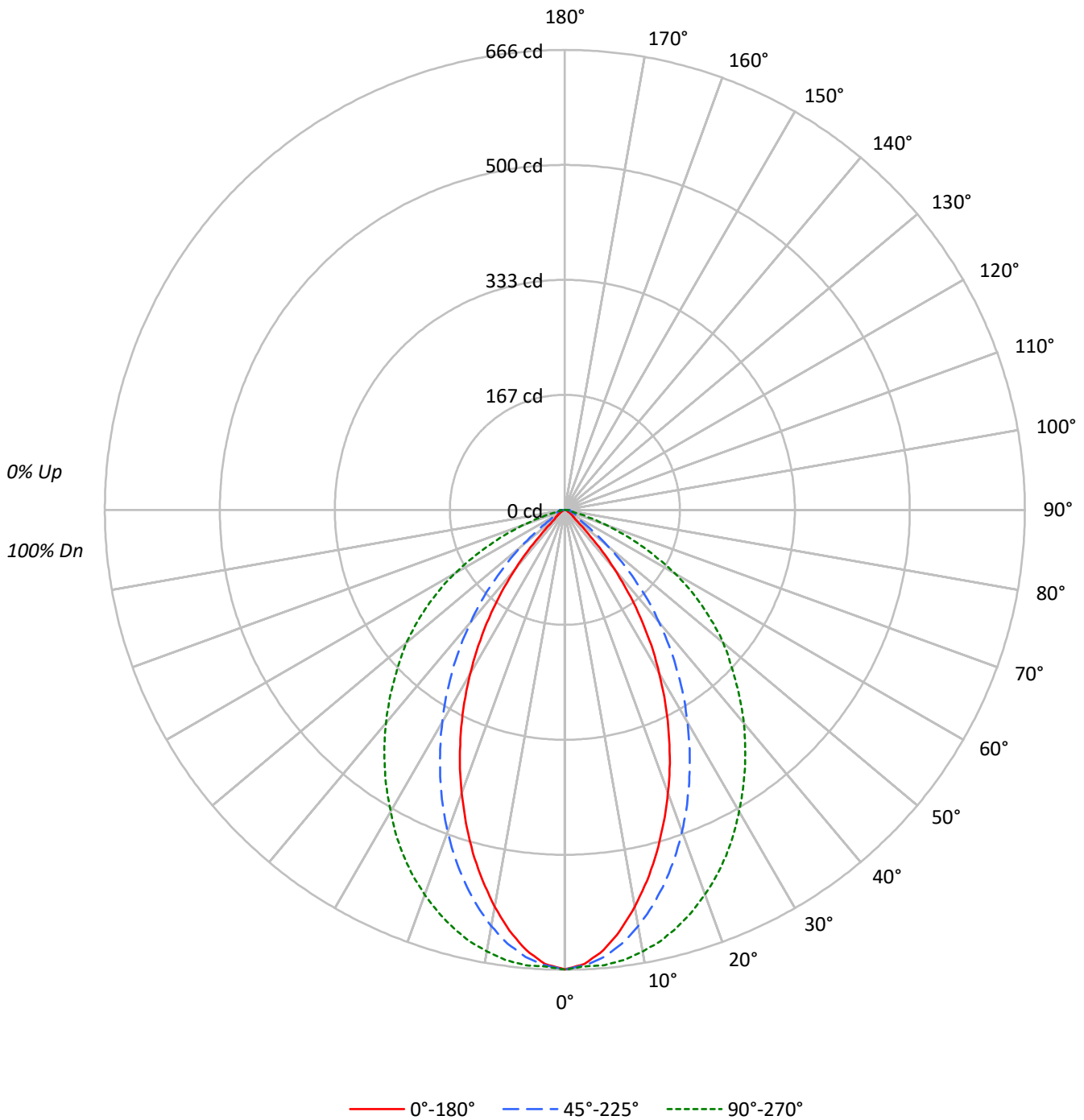
Lumens per Lamp: N/A
Luminaire Lumens: 861.0 lumens
Efficiency: N/A
Efficacy: 36.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
Input Voltage (V): 120
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	0
RW	70	50	30	10	70	50	30	10	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°	4582	4582	4582
5°	4425	4492	4574
10°	4079	4280	4539
15°	3663	3985	4464
20°	3196	3635	4345
25°	2708	3241	4196
30°	2175	2822	4009
35°	1610	2380	3822
40°	997	1901	3622
45°	389	1389	3405
50°	182	871	3208
55°	133	373	2911
60°	92	264	2526
65°	60	277	1963
70°	60	254	1236
75°	80	255	394
80°	119	293	266
85°	174	585	411

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3405 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.0	7.1
10°-20°	158.1	18.4
20°-30°	201.4	23.4
30°-40°	187.5	21.8
40°-50°	129.0	15.0
50°-60°	73.0	8.5
60°-70°	34.5	4.0
70°-80°	10.8	1.3
80°-90°	5.6	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°	420.5	48.8
0°-40°	608.0	70.6
0°-60°	810.1	94.1
0°-90°	861.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	861.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	666	666	666	666	666	
5°	640	649	650	656	662	59
15°	514	531	559	601	626	143
25°	356	379	427	498	552	162
35°	192	218	283	380	455	118
45°	40	64	143	258	350	38
55°	11	13	31	149	242	10
65°	4	4	17	53	120	4
75°	3	7	10	10	15	3
85°	2	6	7	7	5	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	665.5	665.5	665.5	665.5	665.5
2.5°	658.1	664.7	660.3	661.0	661.8
5°	640.3	649.2	649.9	655.9	661.8
7.5°	614.4	625.5	633.7	647.7	657.3
10°	583.4	596.7	612.2	635.1	649.2
12.5°	550.1	565.6	587.1	619.6	639.6
15°	513.9	530.9	559.0	601.1	626.3
17.5°	475.4	494.7	528.7	579.0	610.7
20°	436.2	457.0	496.1	553.8	593.0
22.5°	397.1	418.5	462.1	526.5	573.8
25°	356.4	379.3	426.6	498.4	552.3
27.5°	315.0	338.6	391.1	469.5	529.4
30°	273.6	298.7	354.9	439.9	504.3
32.5°	232.9	258.1	319.4	410.4	479.9
35°	191.5	218.1	283.2	380.1	454.7
37.5°	150.1	178.9	247.7	349.0	428.9
40°	110.9	138.3	211.5	318.7	403.0
42.5°	73.9	100.6	178.9	288.4	376.4
45°	39.9	63.6	142.7	258.1	349.7
47.5°	21.4	34.0	111.6	228.5	323.9
50°	17.0	19.2	81.3	201.1	299.5
52.5°	14.0	15.5	53.2	175.2	271.4
55°	11.1	12.6	31.1	148.6	242.5
57.5°	8.9	10.4	20.0	123.5	214.4
60°	6.7	8.1	19.2	99.1	183.4
62.5°	5.2	5.9	17.7	76.2	150.8
65°	3.7	4.4	17.0	53.2	120.5
67.5°	3.0	3.7	15.5	34.0	90.2
70°	3.0	3.0	12.6	22.2	61.4
72.5°	3.0	5.2	11.1	14.8	37.0
75°	3.0	6.7	9.6	10.4	14.8
77.5°	3.0	7.4	8.1	8.1	8.1
80°	3.0	6.7	7.4	7.4	6.7
82.5°	3.0	5.9	6.7	7.4	5.9
85°	2.2	5.9	7.4	6.7	5.2
87.5°	2.2	5.9	6.7	5.9	3.7
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	14.53	15.82	14.90	16.14	16.45
	3H	0.00	0.00	0.00	0.00	0.00	15.25	16.40	15.63	16.73	17.09
	4H	0.00	0.00	0.00	0.00	0.00	15.28	16.34	15.68	16.69	17.07
	6H	0.00	0.00	0.00	0.26	0.66	15.23	16.20	15.64	16.57	16.97
	8H	0.00	0.49	0.00	0.88	1.28	15.20	16.13	15.64	16.52	16.92
	12H	0.15	1.03	0.58	1.41	1.84	15.19	16.07	15.62	16.45	16.88
4H	2H	0.00	0.12	0.00	0.47	0.85	14.32	15.39	14.73	15.74	16.12
	3H	0.00	0.74	0.28	1.14	1.55	15.08	15.95	15.49	16.35	16.76
	4H	0.89	1.66	1.32	2.08	2.53	15.11	15.89	15.55	16.31	16.75
	6H	2.17	2.84	2.64	3.29	3.76	15.09	15.76	15.55	16.20	16.67
	8H	2.76	3.38	3.23	3.83	4.30	15.07	15.70	15.54	16.14	16.62
	12H	3.31	3.86	3.80	4.35	4.82	15.08	15.63	15.57	16.11	16.59
8H	4H	2.29	2.92	2.76	3.36	3.84	14.99	15.62	15.46	16.06	16.54
	6H	3.86	4.37	4.37	4.87	5.35	14.98	15.49	15.49	15.99	16.47
	8H	4.66	5.11	5.18	5.63	6.12	15.00	15.45	15.52	15.97	16.46
	12H	5.49	5.89	6.00	6.39	6.96	15.06	15.46	15.57	15.96	16.53
12H	4H	2.51	3.06	3.00	3.55	4.02	14.95	15.50	15.44	15.98	16.46
	6H	4.23	4.69	4.76	5.21	5.70	14.94	15.39	15.46	15.91	16.40
	8H	5.22	5.62	5.74	6.12	6.69	14.99	15.39	15.50	15.88	16.46