

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: P1062096

Luminaire Tested: S125RDR-H610D835-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062096
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H610D835-X4F0-XX-UDD-SVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

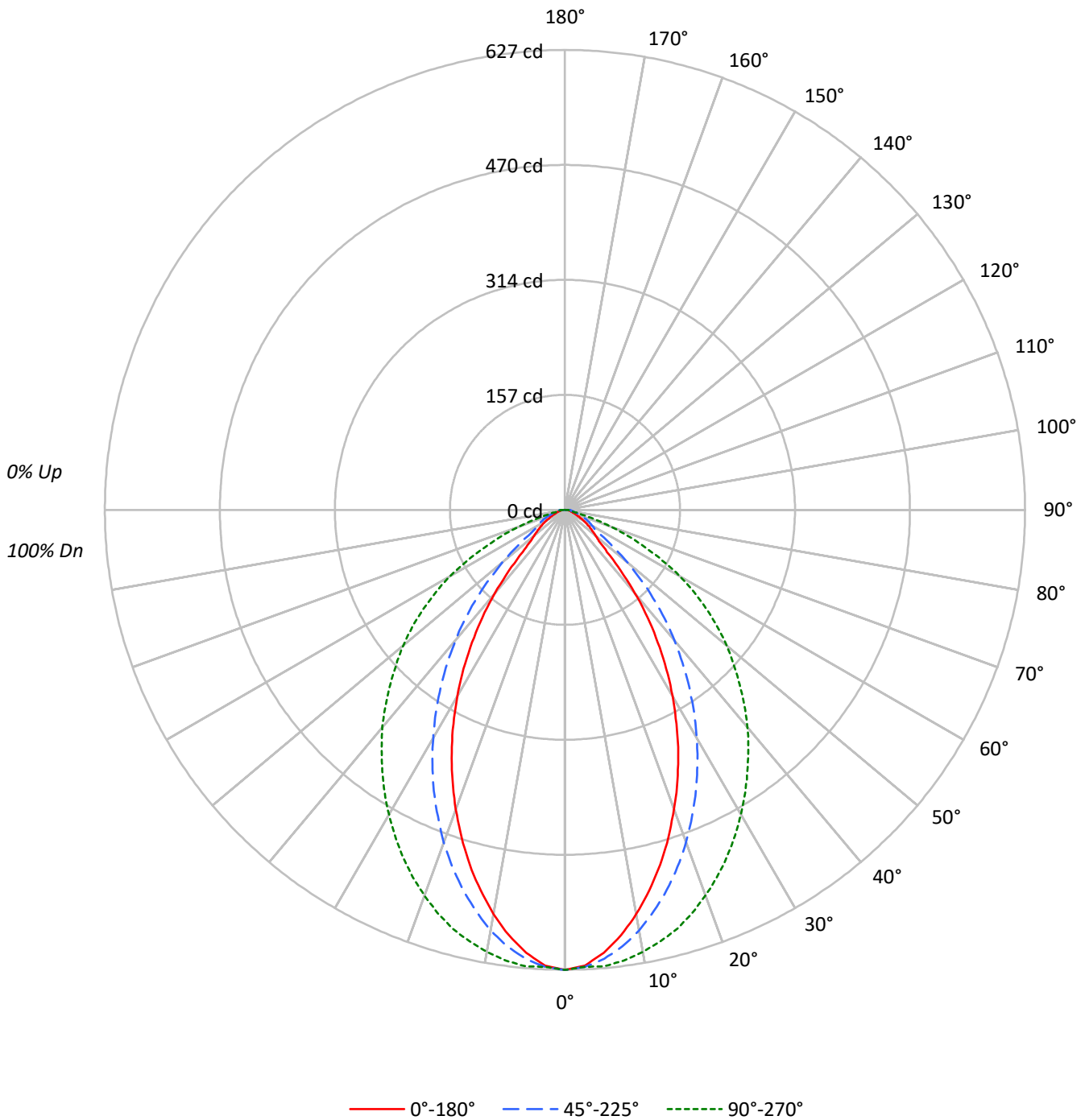
Lumens per Lamp: N/A
Luminaire Lumens: 908.3 lumens
Efficiency: N/A
Efficacy: 52.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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				100
1	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89				89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62				62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56				56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4318	4318	4318
5°	4191	4246	4316
10°	3913	4072	4277
15°	3572	3824	4213
20°	3184	3535	4101
25°	2774	3210	3969
30°	2331	2856	3815
35°	1854	2481	3646
40°	1336	2084	3480
45°	792	1654	3277
50°	585	1178	3084
55°	496	727	2823
60°	403	587	2487
65°	314	543	1965
70°	268	469	1315
75°	247	407	532
80°	266	424	369
85°	316	632	419

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3277 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.8	6.4
10°-20°	151.8	16.7
20°-30°	198.4	21.8
30°-40°	193.3	21.3
40°-50°	145.0	16.0
50°-60°	90.9	10.0
60°-70°	47.3	5.2
70°-80°	17.1	1.9
80°-90°	6.8	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°	408.0	44.9
0°-40°	601.2	66.2
0°-60°	837.1	92.2
0°-90°	908.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	908.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	627	627	627	627	627	
5°	606	614	614	619	624	56
15°	501	516	536	570	591	140
25°	365	385	422	480	522	167
35°	221	244	295	374	434	137
45°	81	105	170	262	336	68
55°	41	43	61	159	235	37
65°	19	21	33	64	121	20
75°	9	13	15	16	20	10
85°	4	7	8	7	5	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	627.1	627.1	627.1	627.1	627.1
2.5°	621.7	627.7	623.7	623.7	623.7
5°	606.4	614.4	614.4	619.1	624.4
7.5°	585.1	594.4	600.4	611.7	619.7
10°	559.7	571.1	582.4	601.1	611.7
12.5°	531.1	544.4	560.4	586.4	602.4
15°	501.1	515.8	536.4	569.7	591.1
17.5°	468.5	485.8	510.4	550.4	576.4
20°	434.5	451.8	482.4	527.8	559.7
22.5°	400.5	419.1	452.5	503.8	541.8
25°	365.2	385.2	422.5	479.8	522.4
27.5°	329.2	349.8	391.2	455.1	501.1
30°	293.2	314.5	359.2	428.5	479.8
32.5°	257.2	279.9	327.2	401.2	457.1
35°	220.6	243.9	295.2	373.8	433.8
37.5°	185.2	208.6	263.2	345.8	410.5
40°	148.6	173.9	231.9	317.9	387.2
42.5°	112.6	138.6	200.6	289.9	361.8
45°	81.3	105.3	169.9	262.5	336.5
47.5°	62.6	76.0	138.6	234.6	311.9
50°	54.6	58.6	110.0	208.6	287.9
52.5°	47.3	50.0	82.6	184.6	261.9
55°	41.3	43.3	60.6	158.6	235.2
57.5°	34.7	37.3	48.0	133.3	207.9
60°	29.3	30.7	42.6	110.0	180.6
62.5°	24.0	25.3	38.0	86.6	149.9
65°	19.3	20.7	33.3	64.0	120.6
67.5°	16.0	16.7	28.0	45.3	92.6
70°	13.3	14.0	23.3	31.3	65.3
72.5°	11.3	13.3	18.7	22.7	41.3
75°	9.3	12.7	15.3	16.0	20.0
77.5°	8.0	12.0	12.7	12.7	11.3
80°	6.7	10.0	10.7	10.0	9.3
82.5°	5.3	8.0	8.7	8.7	7.3
85°	4.0	6.7	8.0	7.3	5.3
87.5°	2.7	6.0	6.7	6.0	4.0
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	5.00	6.35	5.36	6.66	6.98	14.61	15.96	14.98	16.28	16.59
	3H	5.86	7.06	6.24	7.39	7.75	15.45	16.65	15.83	16.98	17.35
	4H	6.28	7.40	6.68	7.75	8.13	15.53	16.65	15.93	17.00	17.38
	6H	6.71	7.74	7.12	8.11	8.50	15.51	16.54	15.92	16.91	17.30
	8H	6.89	7.86	7.32	8.25	8.66	15.50	16.47	15.93	16.86	17.27
	12H	7.05	7.98	7.48	8.37	8.80	15.49	16.42	15.92	16.80	17.23
4H	2H	5.96	7.08	6.36	7.43	7.81	14.48	15.60	14.88	15.95	16.33
	3H	7.01	7.93	7.43	8.33	8.74	15.39	16.30	15.80	16.71	17.11
	4H	7.58	8.40	8.01	8.82	9.26	15.49	16.31	15.92	16.73	17.17
	6H	8.18	8.89	8.64	9.33	9.80	15.52	16.22	15.98	16.67	17.13
	8H	8.42	9.08	8.88	9.52	9.99	15.52	16.18	15.98	16.62	17.09
	12H	8.64	9.23	9.13	9.71	10.18	15.53	16.11	16.01	16.60	17.07
8H	4H	8.05	8.71	8.52	9.16	9.63	15.41	16.07	15.88	16.52	16.99
	6H	8.87	9.41	9.37	9.90	10.38	15.47	16.01	15.97	16.50	16.99
	8H	9.24	9.73	9.77	10.25	10.74	15.50	15.99	16.02	16.50	16.99
	12H	9.64	10.07	10.15	10.56	11.13	15.56	15.99	16.08	16.49	17.06
12H	4H	8.10	8.69	8.59	9.17	9.64	15.38	15.96	15.87	16.45	16.92
	6H	8.99	9.48	9.51	9.99	10.48	15.43	15.92	15.96	16.44	16.93
	8H	9.48	9.91	9.99	10.40	10.97	15.51	15.94	16.02	16.43	17.00