

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: P1062103

Luminaire Tested: S125RDR-H610D840-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062103
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H610D840-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

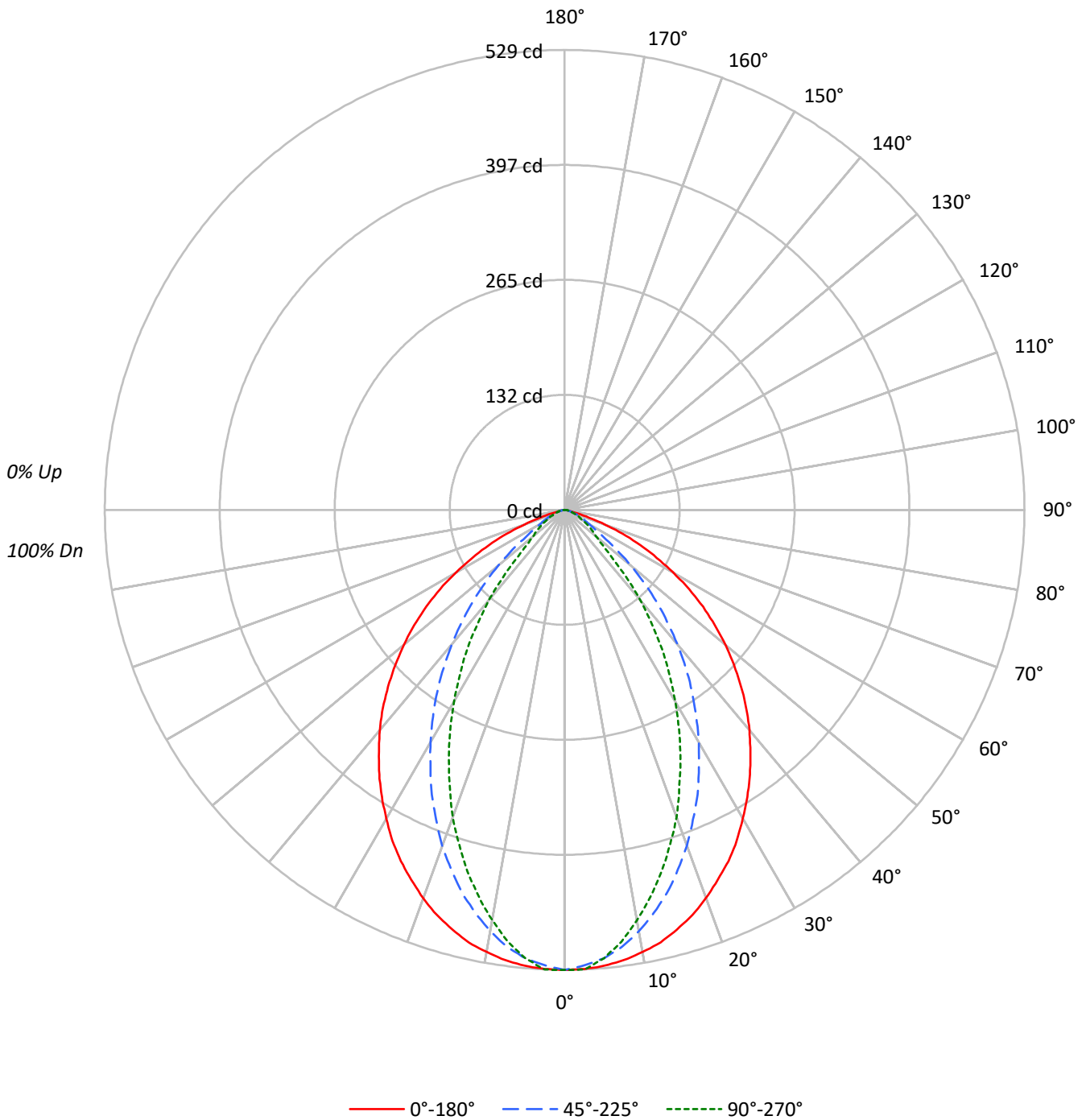
Lumens per Lamp: N/A
Luminaire Lumens: 765.2 lumens
Efficiency: N/A
Efficacy: 44.0 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	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	97	98	96	95	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3644	3644	3644
5°	3639	3578	3578
10°	3610	3441	3352
15°	3561	3250	3072
20°	3483	3015	2759
25°	3387	2748	2395
30°	3260	2453	2021
35°	3125	2148	1639
40°	2973	1813	1214
45°	2796	1454	733
50°	2586	1066	505
55°	2332	654	420
60°	1982	445	333
65°	1566	339	262
70°	988	244	217
75°	322	178	178
80°	107	135	159
85°	55	103	103

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2796 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.9	6.4
10°-20°	129.3	16.9
20°-30°	170.0	22.2
30°-40°	167.0	21.8
40°-50°	126.4	16.5
50°-60°	76.6	10.0
60°-70°	36.2	4.7
70°-80°	9.4	1.2
80°-90°	1.4	0.2
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°	348.2	45.5
0°-40°	515.2	67.3
0°-60°	718.2	93.9
0°-90°	765.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	765.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	529	529	529	529	529	
5°	526	525	518	518	518	50
15°	500	486	456	438	431	141
25°	446	412	362	328	315	205
35°	372	322	256	210	195	232
45°	287	226	149	95	75	221
55°	194	133	54	37	35	173
65°	96	49	21	18	16	95
75°	12	8	7	7	7	19
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	529.2	529.2	529.2	529.2	529.2
2.5°	528.5	528.5	524.4	529.2	529.2
5°	526.5	525.1	517.7	518.4	517.7
7.5°	522.4	519.7	507.0	503.6	500.9
10°	516.4	511.0	492.2	484.1	479.4
12.5°	509.7	500.2	474.7	463.3	455.9
15°	499.6	486.1	455.9	438.4	431.0
17.5°	488.8	469.3	433.7	412.8	403.4
20°	475.4	452.5	411.5	385.9	376.5
22.5°	460.6	433.7	385.9	357.7	344.9
25°	445.8	412.2	361.7	328.1	315.3
27.5°	429.0	390.6	334.2	299.2	285.1
30°	410.1	369.1	308.6	272.3	254.2
32.5°	391.3	346.9	281.7	242.1	223.9
35°	371.8	322.1	255.5	210.5	195.0
37.5°	351.0	298.5	228.6	181.5	163.4
40°	330.8	275.0	201.7	152.0	135.1
42.5°	309.3	251.5	174.8	123.0	104.2
45°	287.1	225.9	149.3	94.8	75.3
47.5°	264.2	203.1	123.7	69.9	56.5
50°	241.4	178.9	99.5	51.8	47.1
52.5°	217.8	155.3	75.3	43.0	41.0
55°	194.3	133.1	54.5	37.0	35.0
57.5°	170.1	108.9	41.0	31.6	29.6
60°	143.9	87.4	32.3	26.2	24.2
62.5°	119.7	68.6	26.2	21.5	20.2
65°	96.1	49.1	20.8	17.5	16.1
67.5°	71.9	32.9	16.1	13.4	13.4
70°	49.1	21.5	12.1	10.8	10.8
72.5°	29.6	12.8	8.7	8.7	8.7
75°	12.1	8.1	6.7	6.7	6.7
77.5°	4.0	4.7	4.7	5.4	5.4
80°	2.7	2.7	3.4	4.0	4.0
82.5°	1.3	2.0	2.0	2.7	2.7
85°	0.7	0.7	1.3	1.3	1.3
87.5°	0.0	0.0	0.0	0.7	0.7
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	13.82	15.15	14.19	15.46	15.78	4.48	5.81	4.84	6.12	6.44
	3H	14.53	15.70	14.91	16.03	16.40	5.26	6.43	5.64	6.76	7.13
	4H	14.54	15.64	14.94	15.99	16.37	5.50	6.60	5.91	6.95	7.33
	6H	14.47	15.48	14.89	15.85	16.24	5.68	6.69	6.10	7.06	7.45
	8H	14.43	15.38	14.86	15.77	16.18	5.73	6.68	6.16	7.07	7.47
	12H	14.39	15.30	14.82	15.68	16.11	5.73	6.64	6.17	7.03	7.46
4H	2H	13.65	14.75	14.05	15.10	15.48	4.96	6.06	5.36	6.41	6.79
	3H	14.40	15.29	14.81	15.69	16.10	5.87	6.76	6.28	7.16	7.57
	4H	14.41	15.21	14.85	15.63	16.07	6.18	6.97	6.61	7.39	7.84
	6H	14.35	15.04	14.82	15.48	15.95	6.44	7.12	6.90	7.57	8.04
	8H	14.30	14.94	14.77	15.39	15.86	6.50	7.14	6.97	7.59	8.06
	12H	14.26	14.82	14.74	15.30	15.78	6.53	7.09	7.01	7.57	8.05
8H	4H	14.30	14.94	14.77	15.38	15.85	6.29	6.93	6.76	7.38	7.85
	6H	14.22	14.74	14.73	15.24	15.72	6.61	7.13	7.11	7.63	8.11
	8H	14.17	14.63	14.69	15.15	15.64	6.72	7.18	7.24	7.70	8.19
	12H	14.13	14.54	14.64	15.03	15.61	6.77	7.19	7.29	7.68	8.25
12H	4H	14.25	14.82	14.74	15.30	15.77	6.26	6.83	6.75	7.31	7.78
	6H	14.16	14.63	14.69	15.15	15.64	6.58	7.05	7.10	7.56	8.06
	8H	14.13	14.54	14.64	15.04	15.61	6.72	7.13	7.24	7.63	8.20