

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: P1062104

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062104
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-86)
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-S
Description: DEFINE 5 SILVER 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

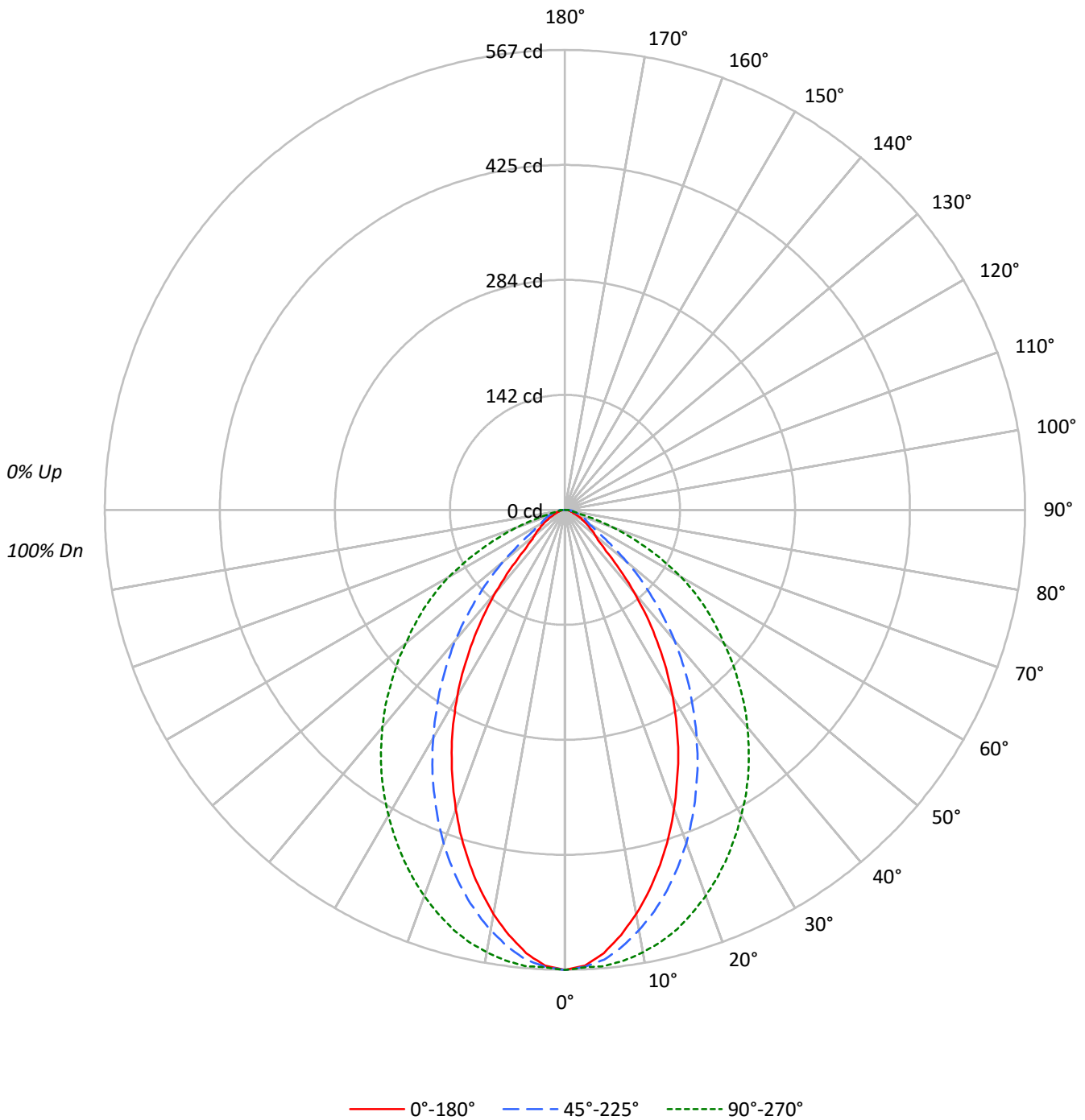
Lumens per Lamp: N/A
Luminaire Lumens: 819.0 lumens
Efficiency: N/A
Efficacy: 47.1 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79				79
3	96	88	81	76	94	87	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	63				63
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56				56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	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	41	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	47	41	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3905	3905	3905
5°	3790	3846	3902
10°	3538	3679	3871
15°	3228	3463	3813
20°	2879	3204	3712
25°	2510	2904	3593
30°	2108	2578	3455
35°	1663	2245	3314
40°	1191	1887	3145
45°	701	1481	2948
50°	518	1067	2739
55°	436	646	2544
60°	353	472	2269
65°	274	450	1820
70°	229	421	1232
75°	215	375	537
80°	214	373	345
85°	269	482	371

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2948 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.3	6.4
10°-20°	137.3	16.8
20°-30°	179.4	21.9
30°-40°	174.7	21.3
40°-50°	130.5	15.9
50°-60°	81.0	9.9
60°-70°	42.5	5.2
70°-80°	15.5	1.9
80°-90°	5.9	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°	369.0	45.1
0°-40°	543.6	66.4
0°-60°	755.1	92.2
0°-90°	819.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	819.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	567	567	567	567	567	
5°	548	556	556	560	564	51
15°	453	466	486	515	535	126
25°	330	347	382	434	473	151
35°	198	219	267	338	394	123
45°	72	94	152	238	303	61
55°	36	38	54	140	212	33
65°	17	18	28	59	112	18
75°	8	9	14	16	20	9
85°	3	6	6	6	5	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	567.2	567.2	567.2	567.2	567.2
2.5°	562.5	567.2	563.8	563.8	564.5
5°	548.4	555.8	556.4	559.8	564.5
7.5°	528.8	537.6	543.0	553.1	560.5
10°	506.0	516.1	526.2	543.0	553.7
12.5°	480.4	492.5	507.3	530.2	545.7
15°	452.8	466.3	485.8	515.4	534.9
17.5°	423.9	438.0	462.2	497.9	521.4
20°	392.9	408.4	437.3	477.7	506.6
22.5°	361.3	378.8	410.4	456.2	490.5
25°	330.4	347.2	382.2	434.0	473.0
27.5°	298.1	315.6	353.9	411.1	454.2
30°	265.1	283.9	324.3	387.5	434.6
32.5°	232.1	251.6	295.4	363.3	415.1
35°	197.8	219.3	267.1	338.4	394.3
37.5°	165.5	188.4	238.2	312.9	372.1
40°	132.5	156.1	209.9	288.0	349.9
42.5°	100.3	124.5	181.0	262.4	327.7
45°	72.0	94.2	152.1	237.5	302.8
47.5°	55.2	68.0	125.1	211.9	280.6
50°	48.4	52.5	99.6	187.0	255.7
52.5°	42.4	45.1	74.0	162.8	234.1
55°	36.3	38.4	53.8	139.9	211.9
57.5°	31.0	33.0	41.0	119.1	189.1
60°	25.6	27.6	34.3	98.2	164.8
62.5°	21.5	22.2	31.0	78.7	137.9
65°	16.8	18.2	27.6	59.2	111.7
67.5°	14.1	14.8	24.2	42.4	86.1
70°	11.4	12.1	20.9	29.6	61.2
72.5°	10.1	10.1	17.5	21.5	39.0
75°	8.1	9.4	14.1	15.5	20.2
77.5°	6.7	9.4	12.1	11.4	10.8
80°	5.4	8.7	9.4	9.4	8.7
82.5°	4.7	7.4	8.1	7.4	6.7
85°	3.4	6.1	6.1	6.1	4.7
87.5°	2.7	5.4	4.7	4.7	3.4
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	4.53	5.88	4.89	6.19	6.50	14.23	15.57	14.59	15.89	16.20
	3H	5.36	6.56	5.74	6.89	7.25	15.14	16.33	15.52	16.66	17.03
	4H	5.72	6.84	6.12	7.19	7.57	15.23	16.35	15.64	16.70	17.08
	6H	6.09	7.12	6.51	7.49	7.88	15.22	16.25	15.63	16.62	17.01
	8H	6.27	7.25	6.70	7.64	8.04	15.21	16.18	15.64	16.57	16.98
	12H	6.44	7.37	6.87	7.75	8.18	15.19	16.12	15.63	16.51	16.94
4H	2H	5.36	6.47	5.76	6.82	7.21	14.08	15.19	14.48	15.54	15.93
	3H	6.41	7.32	6.82	7.73	8.13	15.06	15.98	15.48	16.38	16.79
	4H	6.86	7.68	7.30	8.10	8.54	15.19	16.01	15.63	16.43	16.87
	6H	7.42	8.12	7.88	8.57	9.04	15.23	15.93	15.69	16.38	16.84
	8H	7.68	8.34	8.15	8.78	9.25	15.23	15.88	15.69	16.33	16.80
	12H	7.92	8.51	8.41	8.99	9.46	15.23	15.82	15.72	16.30	16.77
8H	4H	7.42	8.08	7.89	8.52	8.99	15.12	15.78	15.59	16.22	16.69
	6H	8.19	8.73	8.69	9.23	9.71	15.18	15.72	15.68	16.21	16.69
	8H	8.61	9.09	9.13	9.61	10.10	15.21	15.69	15.73	16.20	16.70
	12H	9.03	9.46	9.54	9.95	10.52	15.26	15.69	15.77	16.18	16.75
12H	4H	7.48	8.06	7.96	8.54	9.02	15.08	15.67	15.57	16.15	16.62
	6H	8.34	8.82	8.86	9.34	9.83	15.14	15.63	15.66	16.14	16.63
	8H	8.86	9.29	9.38	9.79	10.36	15.21	15.64	15.72	16.13	16.70