

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: P1062158

Luminaire Tested: S125RDR-H610D950-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062158
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-H610D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

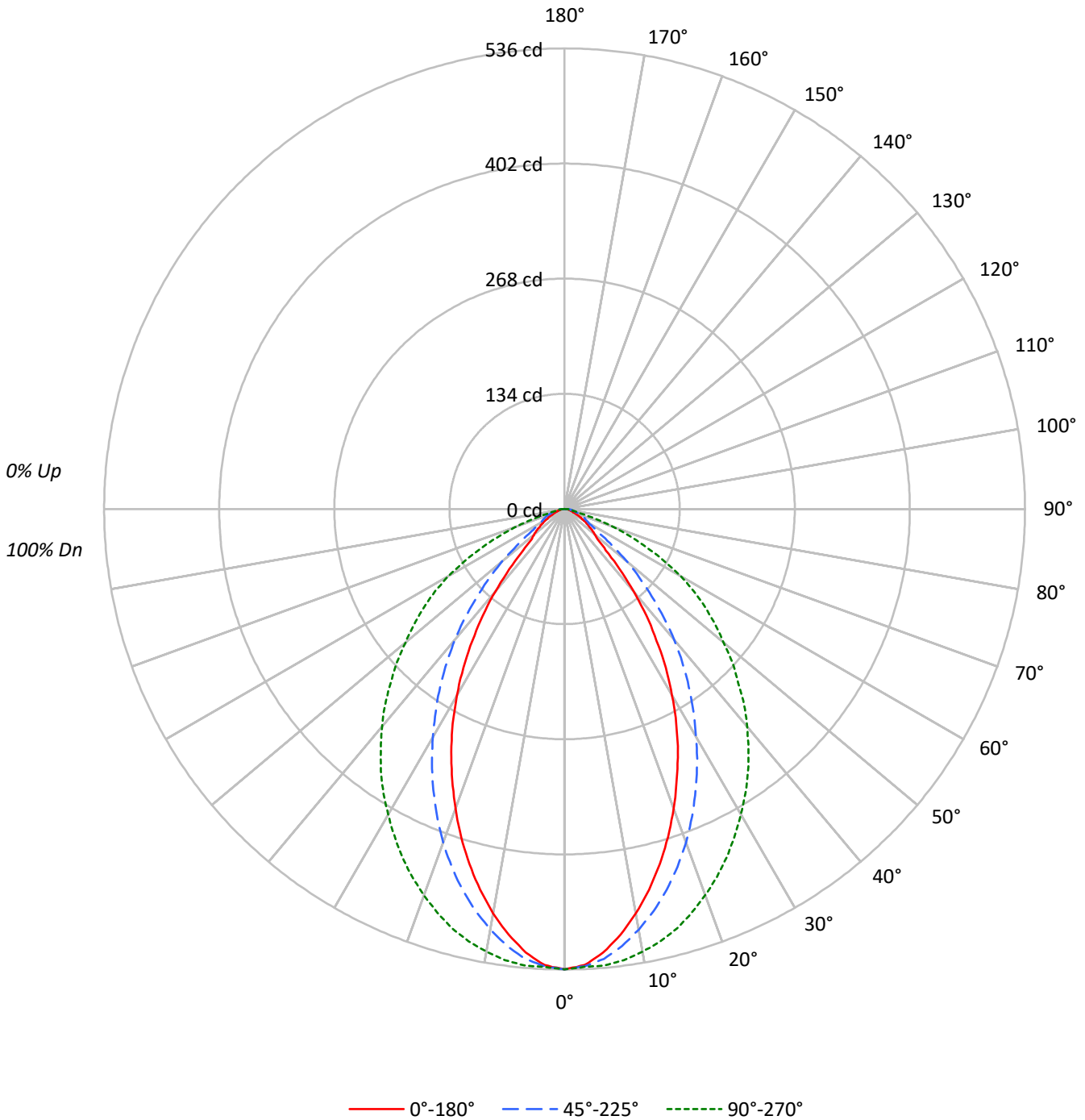
Lumens per Lamp: N/A
Luminaire Lumens: 773.7 lumens
Efficiency: N/A
Efficacy: 44.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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°	3689	3689	3689
5°	3580	3633	3686
10°	3342	3475	3657
15°	3049	3271	3602
20°	2720	3027	3507
25°	2371	2743	3394
30°	1991	2436	3264
35°	1571	2121	3131
40°	1125	1782	2971
45°	662	1398	2785
50°	491	1008	2587
55°	412	610	2403
60°	333	446	2144
65°	259	425	1719
70°	217	397	1164
75°	202	354	508
80°	202	353	329
85°	253	450	348

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2785 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.4	6.4
10°-20°	129.7	16.8
20°-30°	169.5	21.9
30°-40°	165.0	21.3
40°-50°	123.3	15.9
50°-60°	76.5	9.9
60°-70°	40.2	5.2
70°-80°	14.6	1.9
80°-90°	5.5	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°	348.6	45.1
0°-40°	513.6	66.4
0°-60°	713.3	92.2
0°-90°	773.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	773.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	536	536	536	536	536	
5°	518	525	526	529	533	48
15°	428	440	459	487	505	119
25°	312	328	361	410	447	143
35°	187	207	252	320	372	116
45°	68	89	144	224	286	57
55°	34	36	51	132	200	31
65°	16	17	26	56	106	17
75°	8	9	13	15	19	8
85°	3	6	6	6	4	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	535.8	535.8	535.8	535.8	535.8
2.5°	531.4	535.8	532.6	532.6	533.3
5°	518.0	525.0	525.6	528.8	533.3
7.5°	499.6	507.9	512.9	522.5	529.5
10°	478.0	487.5	497.0	512.9	523.1
12.5°	453.8	465.3	479.2	500.9	515.5
15°	427.8	440.5	458.9	486.9	505.3
17.5°	400.4	413.8	436.7	470.4	492.6
20°	371.2	385.8	413.1	451.3	478.6
22.5°	341.3	357.8	387.7	430.9	463.4
25°	312.1	328.0	361.0	410.0	446.8
27.5°	281.6	298.1	334.3	388.4	429.0
30°	250.4	268.2	306.4	366.1	410.6
32.5°	219.3	237.7	279.0	343.2	392.2
35°	186.9	207.2	252.3	319.7	372.5
37.5°	156.4	178.0	225.0	295.6	351.5
40°	125.2	147.5	198.3	272.0	330.5
42.5°	94.7	117.6	171.0	247.9	309.5
45°	68.0	89.0	143.6	224.4	286.0
47.5°	52.1	64.2	118.2	200.2	265.0
50°	45.8	49.6	94.1	176.7	241.5
52.5°	40.0	42.6	69.9	153.8	221.2
55°	34.3	36.2	50.8	132.2	200.2
57.5°	29.2	31.1	38.8	112.5	178.6
60°	24.2	26.1	32.4	92.8	155.7
62.5°	20.3	21.0	29.2	74.4	130.3
65°	15.9	17.2	26.1	55.9	105.5
67.5°	13.3	14.0	22.9	40.0	81.4
70°	10.8	11.4	19.7	28.0	57.8
72.5°	9.5	9.5	16.5	20.3	36.9
75°	7.6	8.9	13.3	14.6	19.1
77.5°	6.4	8.9	11.4	10.8	10.2
80°	5.1	8.3	8.9	8.9	8.3
82.5°	4.4	7.0	7.6	7.0	6.4
85°	3.2	5.7	5.7	5.7	4.4
87.5°	2.5	5.1	4.4	4.4	3.2
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	4.31	5.66	4.68	5.98	6.29	14.03	15.38	14.39	15.69	16.00
	3H	5.15	6.35	5.53	6.68	7.04	14.94	16.14	15.32	16.47	16.83
	4H	5.51	6.63	5.91	6.98	7.36	15.04	16.15	15.44	16.50	16.89
	6H	5.89	6.92	6.30	7.29	7.68	15.02	16.05	15.44	16.42	16.81
	8H	6.07	7.04	6.50	7.43	7.84	15.01	15.98	15.44	16.37	16.78
	12H	6.23	7.16	6.66	7.54	7.97	15.00	15.93	15.43	16.31	16.74
4H	2H	5.15	6.26	5.55	6.61	7.00	13.88	14.99	14.28	15.34	15.73
	3H	6.20	7.12	6.62	7.52	7.92	14.87	15.78	15.28	16.18	16.59
	4H	6.66	7.48	7.09	7.89	8.34	15.00	15.81	15.43	16.23	16.67
	6H	7.22	7.93	7.68	8.37	8.84	15.03	15.73	15.49	16.18	16.65
	8H	7.48	8.14	7.95	8.58	9.06	15.03	15.69	15.50	16.13	16.61
	12H	7.72	8.30	8.21	8.79	9.26	15.04	15.62	15.52	16.10	16.58
8H	4H	7.21	7.87	7.68	8.32	8.79	14.92	15.58	15.39	16.03	16.50
	6H	8.00	8.54	8.50	9.03	9.51	14.98	15.52	15.48	16.02	16.50
	8H	8.41	8.90	8.93	9.41	9.90	15.01	15.49	15.53	16.01	16.50
	12H	8.83	9.26	9.34	9.75	10.32	15.06	15.49	15.58	15.98	16.56
12H	4H	7.27	7.86	7.76	8.34	8.81	14.89	15.47	15.37	15.95	16.43
	6H	8.14	8.62	8.66	9.14	9.63	14.95	15.43	15.47	15.95	16.44
	8H	8.67	9.09	9.18	9.59	10.16	15.01	15.44	15.53	15.93	16.50