

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: P1062141

Luminaire Tested: S125RDR-H610D935-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062141
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-H610D935-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, 90 CRI LEDS
Ballast/Driver: -

Summary

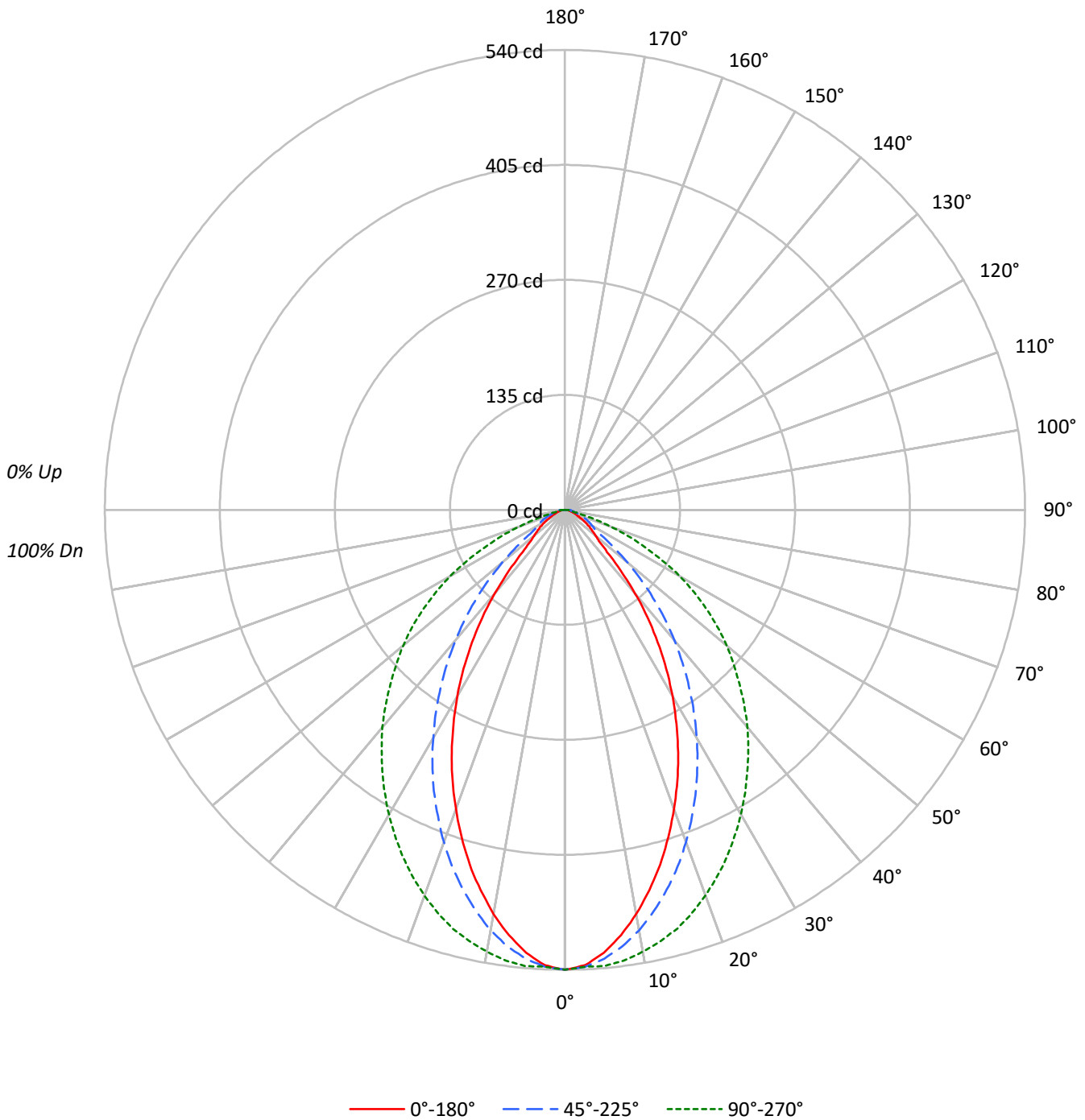
Lumens per Lamp: N/A
Luminaire Lumens: 782.0 lumens
Efficiency: N/A
Efficacy: 44.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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°	3717	3717	3717
5°	3609	3656	3716
10°	3369	3506	3682
15°	3076	3292	3628
20°	2741	3044	3531
25°	2389	2764	3417
30°	2007	2458	3284
35°	1596	2137	3139
40°	1150	1795	2996
45°	682	1425	2821
50°	503	1014	2655
55°	427	627	2431
60°	347	505	2141
65°	270	468	1691
70°	232	405	1131
75°	213	351	458
80°	226	365	317
85°	269	545	363

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2821 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.8	6.4
10°-20°	130.7	16.7
20°-30°	170.8	21.8
30°-40°	166.4	21.3
40°-50°	124.8	16.0
50°-60°	78.2	10.0
60°-70°	40.7	5.2
70°-80°	14.7	1.9
80°-90°	5.8	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°	351.3	44.9
0°-40°	517.7	66.2
0°-60°	720.7	92.2
0°-90°	782.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	782.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	540	540	540	540	540	
5°	522	529	529	533	538	49
15°	432	444	462	490	509	120
25°	314	332	364	413	450	144
35°	190	210	254	322	374	118
45°	70	91	146	226	290	59
55°	36	37	52	137	202	32
65°	17	18	29	55	104	17
75°	8	11	13	14	17	9
85°	3	6	7	6	5	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	539.9	539.9	539.9	539.9	539.9
2.5°	535.3	540.5	537.0	537.0	537.0
5°	522.1	529.0	529.0	533.0	537.6
7.5°	503.7	511.8	516.9	526.7	533.6
10°	481.9	491.7	501.4	517.5	526.7
12.5°	457.3	468.7	482.5	504.9	518.7
15°	431.5	444.1	461.9	490.5	508.9
17.5°	403.3	418.3	439.5	473.9	496.3
20°	374.1	389.0	415.4	454.4	481.9
22.5°	344.8	360.9	389.6	433.7	466.5
25°	314.4	331.6	363.8	413.1	449.8
27.5°	283.4	301.2	336.8	391.9	431.5
30°	252.4	270.8	309.2	368.9	413.1
32.5°	221.5	241.0	281.7	345.4	393.6
35°	189.9	210.0	254.2	321.9	373.5
37.5°	159.5	179.6	226.6	297.8	353.4
40°	127.9	149.7	199.7	273.7	333.3
42.5°	97.0	119.3	172.7	249.6	311.5
45°	70.0	90.7	146.3	226.1	289.7
47.5°	53.9	65.4	119.3	202.0	268.5
50°	47.0	50.5	94.7	179.6	247.9
52.5°	40.7	43.0	71.1	158.9	225.5
55°	35.6	37.3	52.2	136.6	202.5
57.5°	29.8	32.1	41.3	114.7	179.0
60°	25.2	26.4	36.7	94.7	155.5
62.5°	20.7	21.8	32.7	74.6	129.1
65°	16.6	17.8	28.7	55.1	103.8
67.5°	13.8	14.3	24.1	39.0	79.7
70°	11.5	12.0	20.1	27.0	56.2
72.5°	9.8	11.5	16.1	19.5	35.6
75°	8.0	10.9	13.2	13.8	17.2
77.5°	6.9	10.3	10.9	10.9	9.8
80°	5.7	8.6	9.2	8.6	8.0
82.5°	4.6	6.9	7.5	7.5	6.3
85°	3.4	5.7	6.9	6.3	4.6
87.5°	2.3	5.2	5.7	5.2	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	4.47	5.83	4.84	6.14	6.45	14.09	15.44	14.45	15.75	16.07
	3H	5.33	6.53	5.71	6.86	7.23	14.93	16.13	15.31	16.46	16.82
	4H	5.76	6.87	6.16	7.23	7.61	15.01	16.13	15.41	16.48	16.86
	6H	6.18	7.21	6.60	7.58	7.98	14.99	16.02	15.40	16.39	16.78
	8H	6.36	7.34	6.79	7.73	8.13	14.98	15.95	15.41	16.34	16.75
	12H	6.52	7.45	6.95	7.84	8.27	14.96	15.90	15.40	16.28	16.71
4H	2H	5.44	6.56	5.84	6.91	7.29	13.95	15.07	14.36	15.42	15.81
	3H	6.49	7.41	6.90	7.81	8.21	14.86	15.78	15.28	16.18	16.59
	4H	7.05	7.87	7.49	8.29	8.73	14.97	15.79	15.40	16.20	16.65
	6H	7.65	8.36	8.11	8.81	9.27	14.99	15.70	15.46	16.15	16.61
	8H	7.89	8.55	8.36	9.00	9.47	14.99	15.66	15.46	16.10	16.57
	12H	8.11	8.70	8.60	9.18	9.66	15.01	15.59	15.49	16.07	16.55
8H	4H	7.53	8.19	7.99	8.63	9.10	14.89	15.55	15.36	16.00	16.47
	6H	8.34	8.88	8.84	9.38	9.86	14.95	15.49	15.45	15.98	16.46
	8H	8.72	9.21	9.24	9.72	10.21	14.98	15.47	15.50	15.98	16.47
	12H	9.11	9.54	9.62	10.03	10.60	15.04	15.47	15.56	15.97	16.54
12H	4H	7.58	8.16	8.06	8.65	9.12	14.86	15.44	15.34	15.93	16.40
	6H	8.46	8.95	8.98	9.46	9.95	14.91	15.40	15.43	15.91	16.41
	8H	8.95	9.38	9.47	9.88	10.45	14.98	15.41	15.50	15.91	16.48