

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: P1062147

Luminaire Tested: S125RDR-H610D940-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062147
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H610D940-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

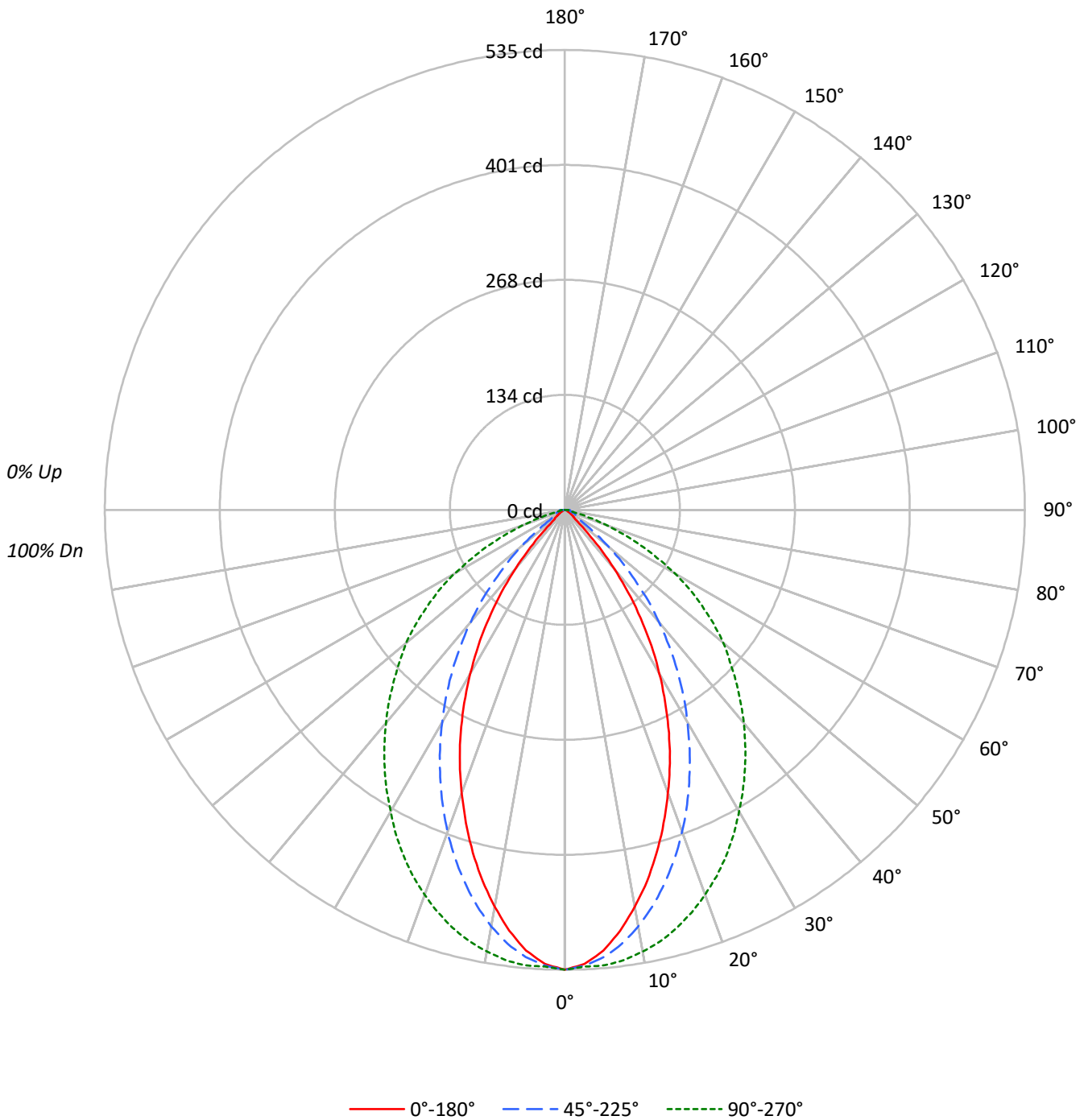
Lumens per Lamp: N/A
Luminaire Lumens: 692.0 lumens
Efficiency: N/A
Efficacy: 39.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80				80
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65				65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59				59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53				53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49				49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45				45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41				41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38				38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3683	3683	3683
5°	3557	3611	3676
10°	3278	3440	3648
15°	2944	3203	3588
20°	2569	2922	3492
25°	2176	2605	3372
30°	1748	2268	3222
35°	1294	1913	3072
40°	801	1528	2911
45°	313	1117	2737
50°	147	701	2578
55°	107	300	2340
60°	73	213	2030
65°	49	223	1579
70°	48	203	992
75°	64	205	317
80°	95	234	210
85°	142	466	332

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2737 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.1	7.1
10°-20°	127.1	18.4
20°-30°	161.9	23.4
30°-40°	150.7	21.8
40°-50°	103.7	15.0
50°-60°	58.7	8.5
60°-70°	27.7	4.0
70°-80°	8.7	1.3
80°-90°	4.5	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°	338.0	48.8
0°-40°	488.7	70.6
0°-60°	651.1	94.1
0°-90°	692.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	692.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	535	535	535	535	535	
5°	515	522	522	527	532	48
15°	413	427	449	483	503	115
25°	286	305	343	401	444	131
35°	154	175	228	306	366	95
45°	32	51	115	207	281	30
55°	9	10	25	120	195	8
65°	3	4	14	43	97	3
75°	2	5	8	8	12	3
85°	2	5	6	5	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	534.9	534.9	534.9	534.9	534.9
2.5°	528.9	534.3	530.7	531.3	531.9
5°	514.7	521.8	522.4	527.1	531.9
7.5°	493.9	502.8	509.3	520.6	528.3
10°	468.9	479.6	492.1	510.5	521.8
12.5°	442.2	454.6	471.9	498.0	514.1
15°	413.0	426.7	449.3	483.2	503.4
17.5°	382.1	397.6	424.9	465.3	490.9
20°	350.6	367.3	398.8	445.1	476.6
22.5°	319.1	336.4	371.4	423.1	461.2
25°	286.4	304.9	342.9	400.6	443.9
27.5°	253.2	272.2	314.4	377.4	425.5
30°	219.9	240.1	285.3	353.6	405.3
32.5°	187.2	207.4	256.7	329.8	385.7
35°	153.9	175.3	227.6	305.5	365.5
37.5°	120.6	143.8	199.1	280.5	344.7
40°	89.1	111.1	170.0	256.1	323.9
42.5°	59.4	80.8	143.8	231.8	302.5
45°	32.1	51.1	114.7	207.4	281.1
47.5°	17.2	27.3	89.7	183.6	260.3
50°	13.7	15.5	65.4	161.6	240.7
52.5°	11.3	12.5	42.8	140.8	218.1
55°	8.9	10.1	25.0	119.5	194.9
57.5°	7.1	8.3	16.0	99.2	172.3
60°	5.3	6.5	15.5	79.6	147.4
62.5°	4.2	4.8	14.3	61.2	121.2
65°	3.0	3.6	13.7	42.8	96.9
67.5°	2.4	3.0	12.5	27.3	72.5
70°	2.4	2.4	10.1	17.8	49.3
72.5°	2.4	4.2	8.9	11.9	29.7
75°	2.4	5.3	7.7	8.3	11.9
77.5°	2.4	5.9	6.5	6.5	6.5
80°	2.4	5.3	5.9	5.9	5.3
82.5°	2.4	4.8	5.3	5.9	4.8
85°	1.8	4.8	5.9	5.3	4.2
87.5°	1.8	4.8	5.3	4.8	3.0
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	0.00	0.00	0.00	0.00	0.00	13.77	15.06	14.14	15.37	15.69
	3H	0.00	0.00	0.00	0.00	0.00	14.49	15.63	14.87	15.96	16.33
	4H	0.00	0.00	0.00	0.00	0.00	14.51	15.58	14.92	15.93	16.31
	6H	0.00	0.00	0.00	0.00	0.00	14.47	15.44	14.88	15.81	16.21
	8H	0.00	0.00	0.00	0.08	0.48	14.44	15.37	14.87	15.76	16.16
	12H	0.00	0.25	0.00	0.63	1.06	14.43	15.31	14.86	15.69	16.12
4H	2H	0.00	0.00	0.00	0.00	0.08	13.56	14.63	13.97	14.98	15.36
	3H	0.00	0.00	0.00	0.38	0.78	14.32	15.19	14.73	15.59	15.99
	4H	0.10	0.88	0.54	1.30	1.74	14.35	15.12	14.78	15.54	15.99
	6H	1.37	2.04	1.84	2.49	2.96	14.33	14.99	14.79	15.44	15.91
	8H	1.96	2.59	2.43	3.04	3.51	14.31	14.93	14.78	15.38	15.85
	12H	2.54	3.09	3.02	3.57	4.05	14.32	14.87	14.80	15.35	15.83
8H	4H	1.51	2.13	1.98	2.58	3.05	14.23	14.85	14.70	15.30	15.77
	6H	3.06	3.57	3.56	4.07	4.55	14.22	14.73	14.72	15.22	15.71
	8H	3.87	4.33	4.39	4.84	5.33	14.23	14.69	14.75	15.20	15.70
	12H	4.73	5.13	5.24	5.62	6.20	14.29	14.69	14.81	15.19	15.76
12H	4H	1.73	2.28	2.21	2.76	3.23	14.19	14.74	14.68	15.22	15.70
	6H	3.43	3.89	3.95	4.40	4.89	14.17	14.63	14.70	15.15	15.64
	8H	4.43	4.84	4.95	5.33	5.90	14.22	14.62	14.74	15.12	15.69