

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: P1062130

Luminaire Tested: S125RDR-H610D930-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

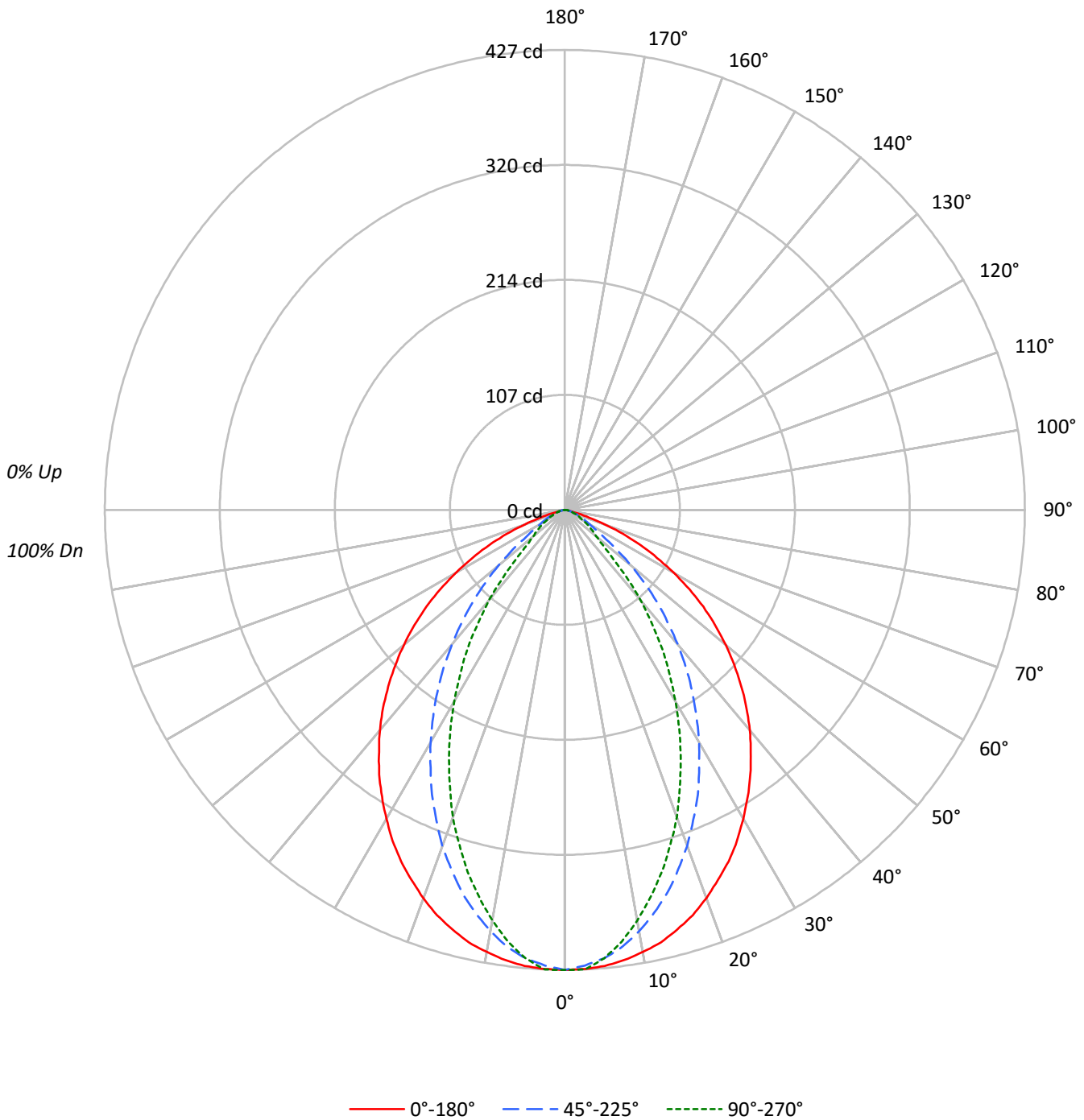
Test Method: LM-79-2019  
Report Number: P1062130  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H610D930-X4F0-XX-UDD-SVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 617.8 lumens  
Efficiency: N/A  
Efficacy: 35.5 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°	2941	2941	2941
5°	2937	2889	2889
10°	2915	2778	2706
15°	2875	2623	2481
20°	2812	2434	2227
25°	2734	2218	1934
30°	2632	1981	1631
35°	2523	1734	1323
40°	2401	1463	981
45°	2257	1173	592
50°	2088	860	407
55°	1883	528	339
60°	1600	359	269
65°	1264	274	212
70°	797	197	175
75°	261	144	144
80°	87	107	131
85°	39	87	87

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2257 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.5	6.4
10°-20°	104.3	16.9
20°-30°	137.3	22.2
30°-40°	134.9	21.8
40°-50°	102.0	16.5
50°-60°	61.9	10.0
60°-70°	29.2	4.7
70°-80°	7.6	1.2
80°-90°	1.1	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°	281.1	45.5
0°-40°	416.0	67.3
0°-60°	579.9	93.9
0°-90°	617.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	617.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	427	427	427	427	427	
5°	425	424	418	418	418	40
15°	403	392	368	354	348	114
25°	360	333	292	265	255	165
35°	300	260	206	170	157	187
45°	232	182	120	76	61	178
55°	157	108	44	30	28	140
65°	78	40	17	14	13	76
75°	10	6	5	5	5	15
85°	0	0	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°	427.2	427.2	427.2	427.2	427.2
2.5°	426.7	426.7	423.4	427.2	427.2
5°	425.0	423.9	418.0	418.5	418.0
7.5°	421.8	419.6	409.3	406.6	404.4
10°	416.9	412.5	397.3	390.8	387.0
12.5°	411.5	403.9	383.2	374.0	368.0
15°	403.3	392.5	368.0	353.9	348.0
17.5°	394.6	378.9	350.1	333.3	325.7
20°	383.8	365.3	332.2	311.6	304.0
22.5°	371.8	350.1	311.6	288.8	278.5
25°	359.9	332.8	292.0	264.9	254.6
27.5°	346.3	315.4	269.8	241.6	230.2
30°	331.1	298.0	249.2	219.8	205.2
32.5°	315.9	280.1	227.4	195.4	180.8
35°	300.2	260.0	206.3	169.9	157.4
37.5°	283.4	241.0	184.6	146.6	131.9
40°	267.1	222.0	162.8	122.7	109.1
42.5°	249.7	203.0	141.1	99.3	84.1
45°	231.8	182.4	120.5	76.5	60.8
47.5°	213.3	163.9	99.9	56.5	45.6
50°	194.9	144.4	80.3	41.8	38.0
52.5°	175.9	125.4	60.8	34.7	33.1
55°	156.9	107.5	44.0	29.9	28.2
57.5°	137.3	87.9	33.1	25.5	23.9
60°	116.2	70.6	26.1	21.2	19.5
62.5°	96.6	55.4	21.2	17.4	16.3
65°	77.6	39.6	16.8	14.1	13.0
67.5°	58.1	26.6	13.0	10.9	10.9
70°	39.6	17.4	9.8	8.7	8.7
72.5°	23.9	10.3	7.1	7.1	7.1
75°	9.8	6.5	5.4	5.4	5.4
77.5°	3.3	3.8	3.8	4.3	4.3
80°	2.2	2.2	2.7	3.3	3.3
82.5°	1.1	1.6	1.6	2.2	2.2
85°	0.5	0.5	1.1	1.1	1.1
87.5°	0.0	0.0	0.0	0.5	0.5
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	13.08	14.41	13.44	14.72	15.03	3.73	5.06	4.10	5.38	5.69
	3H	13.78	14.96	14.16	15.29	15.65	4.52	5.70	4.90	6.03	6.39
	4H	13.80	14.89	14.20	15.25	15.63	4.77	5.86	5.17	6.21	6.60
	6H	13.73	14.74	14.14	15.11	15.50	4.94	5.95	5.36	6.32	6.71
	8H	13.69	14.64	14.12	15.03	15.44	4.99	5.94	5.42	6.33	6.74
	12H	13.65	14.56	14.08	14.94	15.37	5.00	5.91	5.43	6.29	6.72
4H	2H	12.91	14.00	13.31	14.35	14.74	4.22	5.31	4.62	5.66	6.05
	3H	13.65	14.54	14.07	14.95	15.35	5.13	6.02	5.54	6.43	6.83
	4H	13.67	14.47	14.11	14.89	15.33	5.44	6.24	5.88	6.66	7.10
	6H	13.61	14.29	14.07	14.74	15.21	5.70	6.39	6.16	6.83	7.30
	8H	13.56	14.20	14.03	14.64	15.12	5.77	6.41	6.24	6.86	7.33
	12H	13.52	14.08	14.00	14.56	15.04	5.80	6.36	6.28	6.84	7.32
8H	4H	13.55	14.19	14.02	14.64	15.11	5.55	6.19	6.02	6.64	7.11
	6H	13.48	14.00	13.98	14.50	14.98	5.87	6.39	6.38	6.89	7.37
	8H	13.43	13.89	13.95	14.41	14.90	5.98	6.45	6.50	6.96	7.46
	12H	13.38	13.80	13.90	14.29	14.86	6.05	6.46	6.56	6.95	7.53
12H	4H	13.51	14.07	14.00	14.56	15.03	5.53	6.09	6.01	6.57	7.05
	6H	13.42	13.89	13.94	14.40	14.90	5.84	6.31	6.37	6.83	7.32
	8H	13.39	13.80	13.90	14.29	14.86	5.99	6.40	6.50	6.89	7.47