

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1062121

Luminaire Tested: S125RDRP-H610D927-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1062121  
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: S125RDRP-H610D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

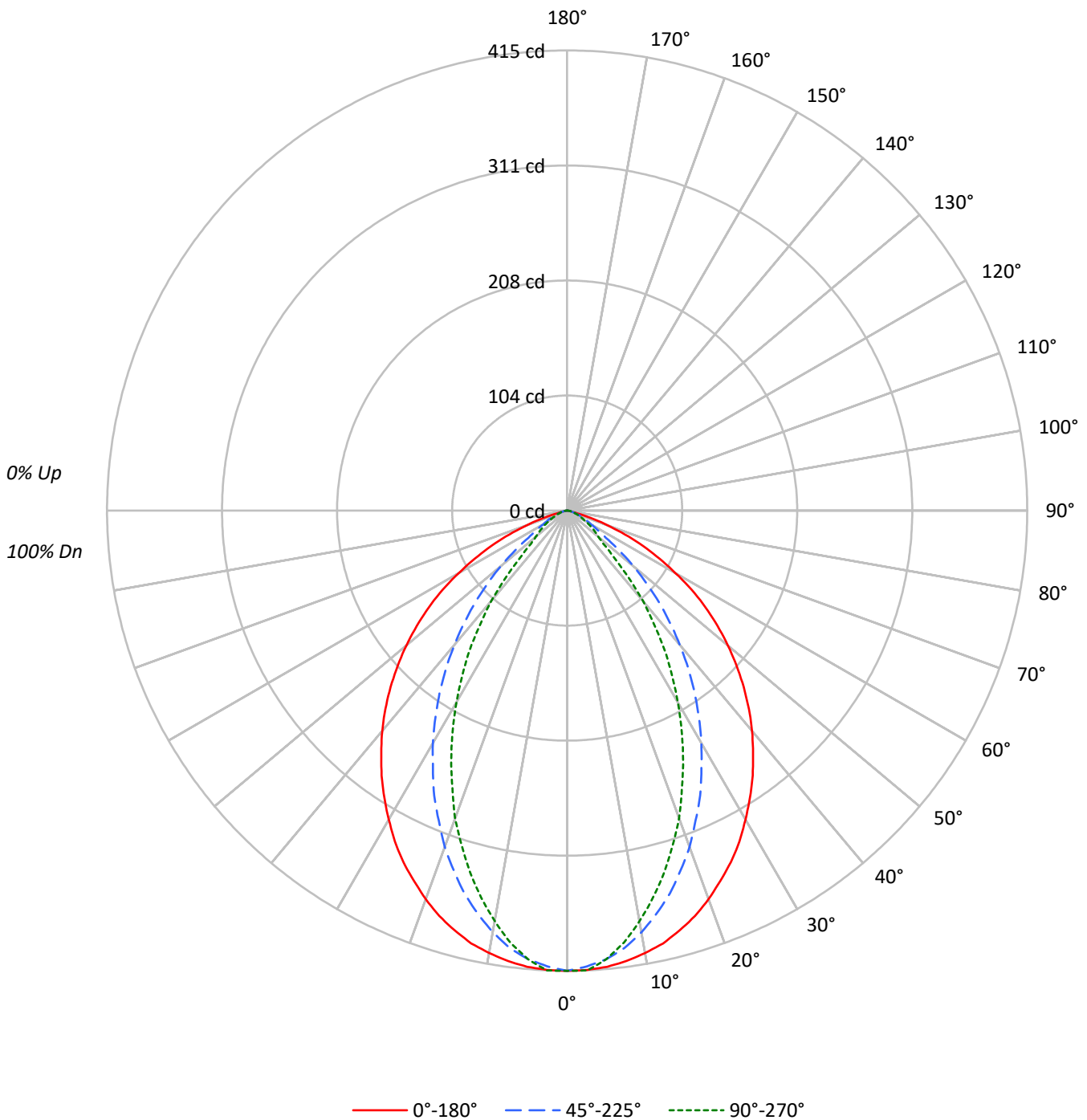
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 600.3 lumens  
Efficiency: N/A  
Efficacy: 34.5 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 (A<sub>in</sub>): 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°	2858	2858	2858
5°	2854	2807	2807
10°	2832	2699	2629
15°	2794	2549	2410
20°	2732	2365	2164
25°	2657	2156	1880
30°	2558	1925	1585
35°	2452	1684	1286
40°	2332	1422	953
45°	2193	1140	575
50°	2028	837	395
55°	1829	513	329
60°	1555	348	262
65°	1228	267	207
70°	775	191	169
75°	253	141	141
80°	83	103	127
85°	39	87	87

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2193 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.4	6.4
10°-20°	101.4	16.9
20°-30°	133.4	22.2
30°-40°	131.0	21.8
40°-50°	99.1	16.5
50°-60°	60.1	10.0
60°-70°	28.4	4.7
70°-80°	7.4	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°	273.1	45.5
0°-40°	404.2	67.3
0°-60°	563.4	93.9
0°-90°	600.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	600.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	415	415	415	415	415	
5°	413	412	406	407	406	39
15°	392	381	358	344	338	110
25°	350	323	284	257	247	161
35°	292	253	200	165	153	182
45°	225	177	117	74	59	173
55°	152	104	43	29	27	136
65°	75	38	16	14	13	74
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°	415.1	415.1	415.1	415.1	415.1
2.5°	414.6	414.6	411.4	415.1	415.1
5°	413.0	411.9	406.1	406.7	406.1
7.5°	409.8	407.7	397.7	395.0	392.9
10°	405.1	400.9	386.1	379.8	376.1
12.5°	399.8	392.4	372.4	363.4	357.6
15°	391.9	381.3	357.6	343.9	338.1
17.5°	383.4	368.1	340.2	323.8	316.5
20°	372.9	355.0	322.8	302.7	295.4
22.5°	361.3	340.2	302.7	280.6	270.6
25°	349.7	323.3	283.8	257.4	247.4
27.5°	336.5	306.4	262.1	234.7	223.6
30°	321.7	289.6	242.1	213.6	199.4
32.5°	307.0	272.2	221.0	189.9	175.6
35°	291.7	252.6	200.4	165.1	153.0
37.5°	275.3	234.2	179.3	142.4	128.2
40°	259.5	215.7	158.2	119.2	106.0
42.5°	242.6	197.3	137.1	96.5	81.8
45°	225.2	177.2	117.1	74.4	59.1
47.5°	207.3	159.3	97.0	54.9	44.3
50°	189.3	140.3	78.1	40.6	36.9
52.5°	170.9	121.8	59.1	33.8	32.2
55°	152.4	104.4	42.7	29.0	27.4
57.5°	133.4	85.4	32.2	24.8	23.2
60°	112.9	68.6	25.3	20.6	19.0
62.5°	93.9	53.8	20.6	16.9	15.8
65°	75.4	38.5	16.4	13.7	12.7
67.5°	56.4	25.8	12.7	10.5	10.5
70°	38.5	16.9	9.5	8.4	8.4
72.5°	23.2	10.0	6.9	6.9	6.9
75°	9.5	6.3	5.3	5.3	5.3
77.5°	3.2	3.7	3.7	4.2	4.2
80°	2.1	2.1	2.6	3.2	3.2
82.5°	1.1	1.6	1.6	2.1	2.1
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	12.97	14.31	13.34	14.62	14.93	3.64	4.97	4.00	5.28	5.60
	3H	13.68	14.86	14.06	15.19	15.55	4.41	5.59	4.79	5.92	6.28
	4H	13.70	14.79	14.10	15.14	15.53	4.66	5.76	5.06	6.11	6.49
	6H	13.63	14.63	14.04	15.00	15.40	4.84	5.85	5.26	6.22	6.61
	8H	13.59	14.54	14.02	14.93	15.33	4.89	5.84	5.32	6.23	6.63
	12H	13.55	14.45	13.98	14.84	15.27	4.90	5.80	5.33	6.19	6.62
4H	2H	12.81	13.90	13.21	14.25	14.64	4.13	5.22	4.53	5.57	5.96
	3H	13.55	14.44	13.96	14.85	15.25	5.03	5.92	5.44	6.32	6.73
	4H	13.57	14.36	14.00	14.78	15.23	5.34	6.14	5.78	6.56	7.00
	6H	13.51	14.19	13.97	14.64	15.11	5.60	6.29	6.07	6.73	7.20
	8H	13.46	14.10	13.93	14.54	15.01	5.67	6.31	6.14	6.76	7.23
	12H	13.41	13.98	13.90	14.46	14.93	5.70	6.26	6.18	6.74	7.22
8H	4H	13.45	14.09	13.92	14.54	15.01	5.46	6.09	5.93	6.54	7.01
	6H	13.38	13.90	13.88	14.39	14.88	5.78	6.30	6.28	6.79	7.27
	8H	13.32	13.79	13.85	14.31	14.80	5.88	6.35	6.40	6.86	7.35
	12H	13.28	13.69	13.80	14.19	14.76	5.95	6.36	6.46	6.85	7.43
12H	4H	13.41	13.97	13.90	14.45	14.93	5.43	5.99	5.91	6.47	6.95
	6H	13.32	13.79	13.84	14.30	14.79	5.75	6.21	6.27	6.73	7.22
	8H	13.29	13.70	13.80	14.19	14.76	5.89	6.30	6.40	6.79	7.36