

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: P1062148

Luminaire Tested: S125RDR-H610D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062148  
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-H610D940-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

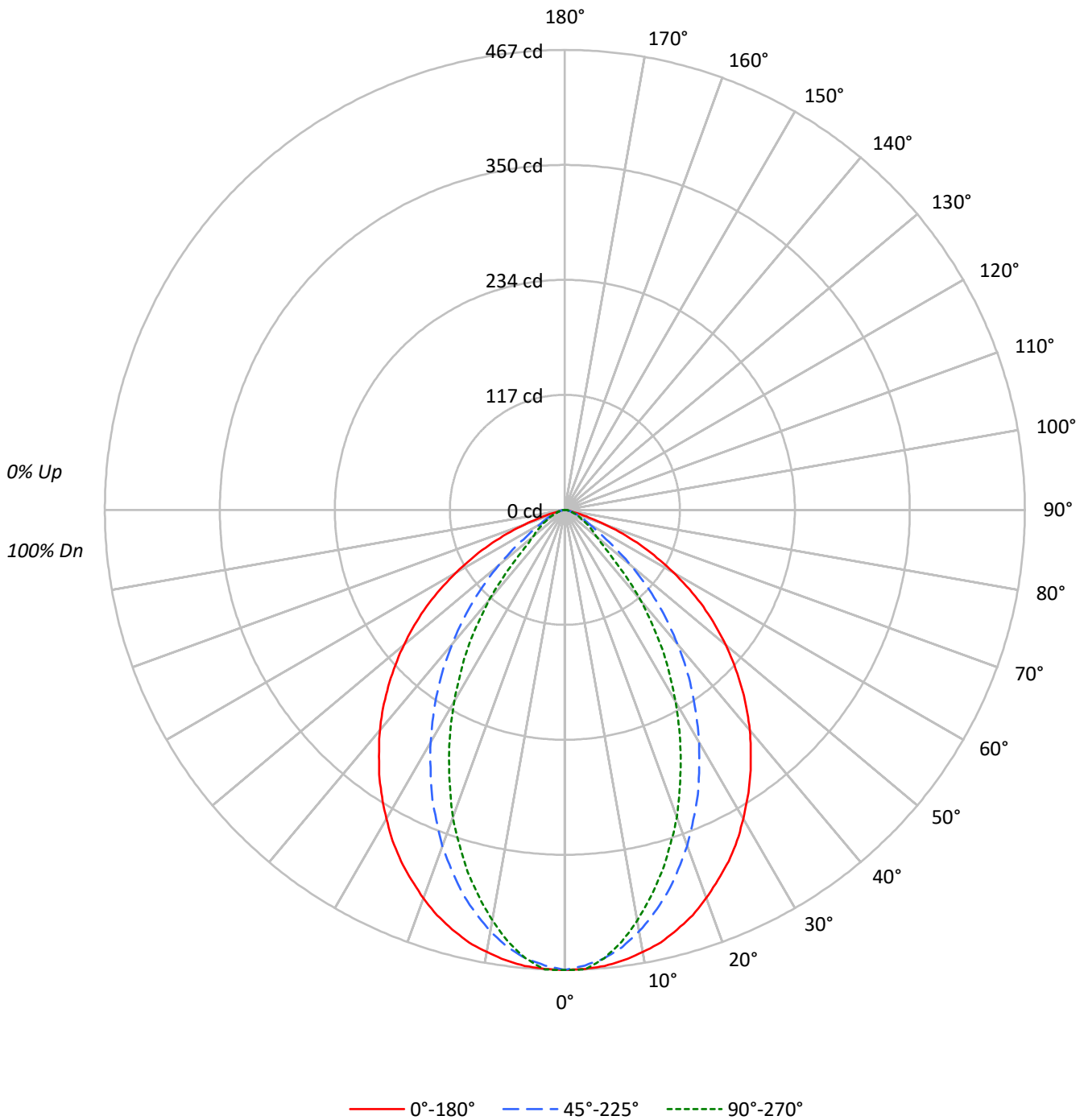
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 675.7 lumens  
Efficiency: N/A  
Efficacy: 38.8 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°	3217	3217	3217
5°	3213	3160	3160
10°	3188	3038	2959
15°	3144	2869	2713
20°	3075	2662	2436
25°	2990	2426	2115
30°	2880	2166	1784
35°	2759	1896	1447
40°	2625	1601	1072
45°	2468	1283	648
50°	2283	942	446
55°	2060	577	371
60°	1750	392	295
65°	1383	300	231
70°	872	215	191
75°	285	157	157
80°	95	119	143
85°	47	95	95

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2468 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.2	6.4
10°-20°	114.1	16.9
20°-30°	150.1	22.2
30°-40°	147.5	21.8
40°-50°	111.6	16.5
50°-60°	67.7	10.0
60°-70°	31.9	4.7
70°-80°	8.3	1.2
80°-90°	1.3	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°	307.4	45.5
0°-40°	454.9	67.3
0°-60°	634.2	93.9
0°-90°	675.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	675.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	467	467	467	467	467	
5°	465	464	457	458	457	44
15°	441	429	402	387	381	124
25°	394	364	319	290	278	181
35°	328	284	226	186	172	205
45°	254	200	132	84	66	195
55°	172	118	48	33	31	153
65°	85	43	18	15	14	84
75°	11	7	6	6	6	17
85°	1	1	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°	467.2	467.2	467.2	467.2	467.2
2.5°	466.6	466.6	463.1	467.2	467.2
5°	464.9	463.7	457.2	457.7	457.2
7.5°	461.3	458.9	447.7	444.7	442.3
10°	456.0	451.2	434.6	427.5	423.3
12.5°	450.0	441.7	419.2	409.1	402.5
15°	441.1	429.2	402.5	387.1	380.6
17.5°	431.6	414.4	382.9	364.5	356.2
20°	419.7	399.6	363.3	340.8	332.5
22.5°	406.7	382.9	340.8	315.8	304.6
25°	393.6	363.9	319.4	289.7	278.4
27.5°	378.8	344.9	295.1	264.2	251.7
30°	362.2	325.9	272.5	240.4	224.4
32.5°	345.5	306.4	248.8	213.7	197.7
35°	328.3	284.4	225.6	185.8	172.2
37.5°	309.9	263.6	201.9	160.3	144.3
40°	292.1	242.8	178.1	134.2	119.3
42.5°	273.1	222.0	154.4	108.6	92.0
45°	253.5	199.5	131.8	83.7	66.5
47.5°	233.3	179.3	109.2	61.7	49.9
50°	213.1	157.9	87.9	45.7	41.6
52.5°	192.4	137.1	66.5	38.0	36.2
55°	171.6	117.6	48.1	32.7	30.9
57.5°	150.2	96.2	36.2	27.9	26.1
60°	127.1	77.2	28.5	23.2	21.4
62.5°	105.7	60.6	23.2	19.0	17.8
65°	84.9	43.3	18.4	15.4	14.2
67.5°	63.5	29.1	14.2	11.9	11.9
70°	43.3	19.0	10.7	9.5	9.5
72.5°	26.1	11.3	7.7	7.7	7.7
75°	10.7	7.1	5.9	5.9	5.9
77.5°	3.6	4.2	4.2	4.7	4.7
80°	2.4	2.4	3.0	3.6	3.6
82.5°	1.2	1.8	1.8	2.4	2.4
85°	0.6	0.6	1.2	1.2	1.2
87.5°	0.0	0.0	0.0	0.6	0.6
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	13.39	14.72	13.75	15.03	15.35	4.04	5.38	4.41	5.69	6.00
	3H	14.10	15.27	14.47	15.60	15.97	4.83	6.00	5.21	6.33	6.70
	4H	14.11	15.21	14.51	15.56	15.94	5.07	6.17	5.48	6.52	6.90
	6H	14.04	15.05	14.46	15.42	15.81	5.25	6.26	5.66	6.63	7.02
	8H	14.00	14.95	14.43	15.34	15.75	5.30	6.25	5.73	6.64	7.04
	12H	13.96	14.87	14.39	15.25	15.68	5.31	6.21	5.74	6.60	7.03
4H	2H	13.22	14.32	13.62	14.67	15.05	4.53	5.63	4.93	5.98	6.36
	3H	13.97	14.86	14.38	15.26	15.67	5.44	6.33	5.85	6.74	7.14
	4H	13.98	14.78	14.42	15.20	15.64	5.75	6.54	6.18	6.96	7.41
	6H	13.92	14.61	14.39	15.05	15.52	6.01	6.69	6.47	7.14	7.61
	8H	13.87	14.51	14.34	14.96	15.43	6.08	6.71	6.55	7.16	7.63
	12H	13.83	14.39	14.31	14.87	15.35	6.10	6.67	6.59	7.15	7.62
8H	4H	13.87	14.50	14.34	14.95	15.42	5.86	6.50	6.33	6.95	7.42
	6H	13.79	14.31	14.29	14.81	15.29	6.18	6.70	6.68	7.20	7.68
	8H	13.74	14.20	14.26	14.72	15.21	6.29	6.76	6.81	7.27	7.76
	12H	13.70	14.11	14.21	14.60	15.18	6.35	6.76	6.87	7.26	7.83
12H	4H	13.82	14.39	14.31	14.87	15.34	5.83	6.40	6.32	6.88	7.35
	6H	13.73	14.20	14.26	14.72	15.21	6.15	6.62	6.67	7.13	7.63
	8H	13.70	14.11	14.22	14.61	15.18	6.30	6.71	6.81	7.20	7.77