

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: P1062154

Luminaire Tested: S125RDR-H610D950-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062154  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H610D950-X4F0-XX-UDD-BVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

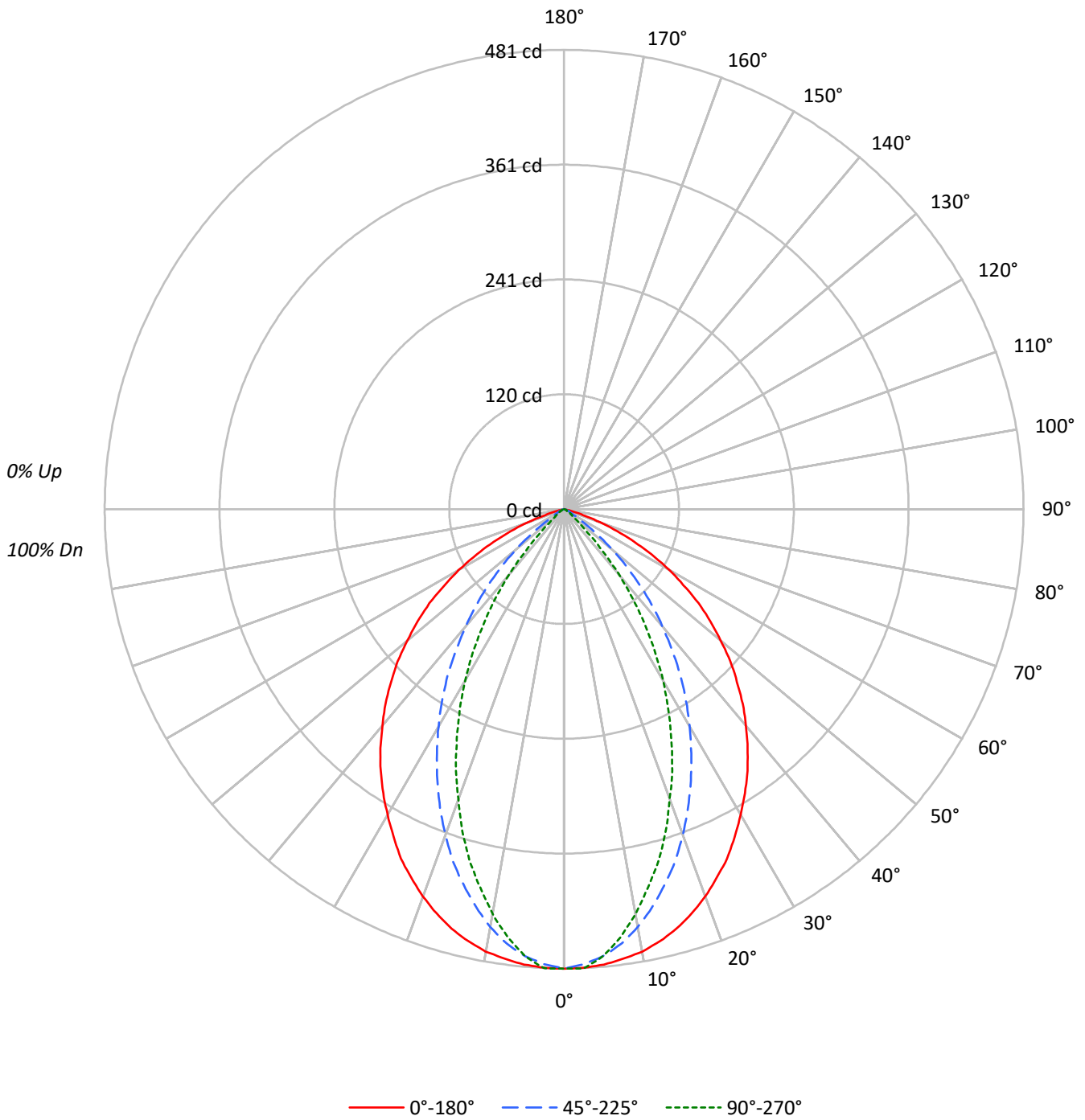
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 621.9 lumens  
Efficiency: N/A  
Efficacy: 35.7 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97  
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				
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91				
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82				
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73				
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66				
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54				
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50				
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42				
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3315	3315	3315
5°	3310	3248	3248
10°	3290	3108	3011
15°	3242	2902	2721
20°	3165	2662	2369
25°	3068	2384	2017
30°	2938	2090	1647
35°	2813	1783	1233
40°	2660	1439	799
45°	2493	1089	347
50°	2292	694	130
55°	2066	305	91
60°	1749	131	61
65°	1325	83	31
70°	805	38	12
75°	170	16	16
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2493 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.4	7.1
10°-20°	115.7	18.6
20°-30°	148.5	23.9
30°-40°	139.8	22.5
40°-50°	97.8	15.7
50°-60°	52.2	8.4
60°-70°	20.8	3.3
70°-80°	2.7	0.4
80°-90°	0.0	0.0
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°	308.6	49.6
0°-40°	448.4	72.1
0°-60°	598.4	96.2
0°-90°	621.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	621.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	481	481	481	481	481	
5°	479	478	470	471	470	45
15°	455	440	407	388	382	128
25°	404	368	314	280	266	185
35°	335	281	212	164	147	209
45°	256	192	112	54	36	197
55°	172	105	25	9	8	153
65°	81	32	5	2	2	81
75°	6	2	1	1	1	12
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	481.4	481.4	481.4	481.4	481.4
2.5°	480.8	481.4	477.0	480.8	481.4
5°	478.9	477.6	470.0	471.3	470.0
7.5°	475.1	471.9	459.2	454.8	452.2
10°	470.6	463.6	444.6	435.1	430.6
12.5°	463.6	453.5	426.8	412.2	405.8
15°	454.8	440.1	407.1	388.1	381.7
17.5°	444.0	424.9	386.8	363.3	353.8
20°	431.9	406.5	363.3	335.3	323.3
22.5°	417.9	388.7	339.2	308.0	296.0
25°	403.9	368.4	313.8	279.5	265.5
27.5°	386.8	347.4	288.4	251.5	236.3
30°	369.6	326.5	262.9	222.9	207.1
32.5°	352.5	304.2	237.5	193.1	177.2
35°	334.7	281.4	212.1	163.9	146.7
37.5°	315.7	258.5	184.8	135.9	118.1
40°	296.0	236.3	160.1	108.6	88.9
42.5°	276.9	214.0	135.3	81.9	60.3
45°	256.0	191.8	111.8	54.0	35.6
47.5°	236.3	170.2	87.6	31.1	18.4
50°	214.0	148.0	64.8	16.5	12.1
52.5°	193.1	126.4	43.2	10.8	9.5
55°	172.1	105.4	25.4	8.9	7.6
57.5°	148.0	85.1	14.0	7.0	5.7
60°	127.0	66.7	9.5	5.1	4.4
62.5°	102.9	48.9	7.0	3.8	3.2
65°	81.3	32.4	5.1	2.5	1.9
67.5°	60.3	19.1	3.2	1.3	1.3
70°	40.0	10.2	1.9	0.6	0.6
72.5°	21.0	4.4	1.3	0.6	0.6
75°	6.4	1.9	0.6	0.6	0.6
77.5°	0.0	0.6	0.0	0.0	0.6
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	13.11	14.37	13.47	14.68	15.00	0.00	0.00	0.00	0.00	0.00
	3H	13.69	14.80	14.07	15.13	15.50	0.00	0.00	0.00	0.00	0.00
	4H	13.66	14.69	14.06	15.04	15.42	0.00	0.00	0.00	0.00	0.00
	6H	13.57	14.52	13.99	14.89	15.28	0.00	0.00	0.00	0.00	0.00
	8H	13.52	14.42	13.96	14.81	15.21	0.00	0.00	0.00	0.00	0.00
	12H	13.48	14.33	13.91	14.71	15.14	0.00	0.00	0.00	0.00	0.00
4H	2H	12.88	13.91	13.28	14.26	14.65	0.00	0.00	0.00	0.00	0.00
	3H	13.47	14.31	13.89	14.71	15.12	0.00	0.00	0.00	0.00	0.00
	4H	13.42	14.16	13.86	14.59	15.03	0.00	0.00	0.00	0.00	0.00
	6H	13.34	13.97	13.80	14.42	14.89	0.00	0.00	0.00	0.00	0.00
	8H	13.28	13.87	13.75	14.32	14.79	0.00	0.00	0.00	0.00	0.00
	12H	13.22	13.75	13.71	14.23	14.71	0.00	0.00	0.00	0.00	0.00
8H	4H	13.28	13.87	13.75	14.32	14.79	0.00	0.00	0.00	0.00	0.00
	6H	13.17	13.65	13.67	14.15	14.63	0.00	0.00	0.00	0.00	0.00
	8H	13.10	13.53	13.63	14.05	14.54	0.00	0.00	0.00	0.00	0.00
	12H	13.05	13.43	13.57	13.93	14.50	0.00	0.00	0.00	0.00	0.00
12H	4H	13.22	13.75	13.71	14.23	14.71	0.00	0.00	0.00	0.00	0.00
	6H	13.10	13.53	13.63	14.05	14.54	0.00	0.00	0.00	0.00	0.00
	8H	13.05	13.43	13.57	13.93	14.50	0.00	0.00	0.00	0.00	0.00