

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: P1062133

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062133  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H610D930-X4F0-XX-UDD-WVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

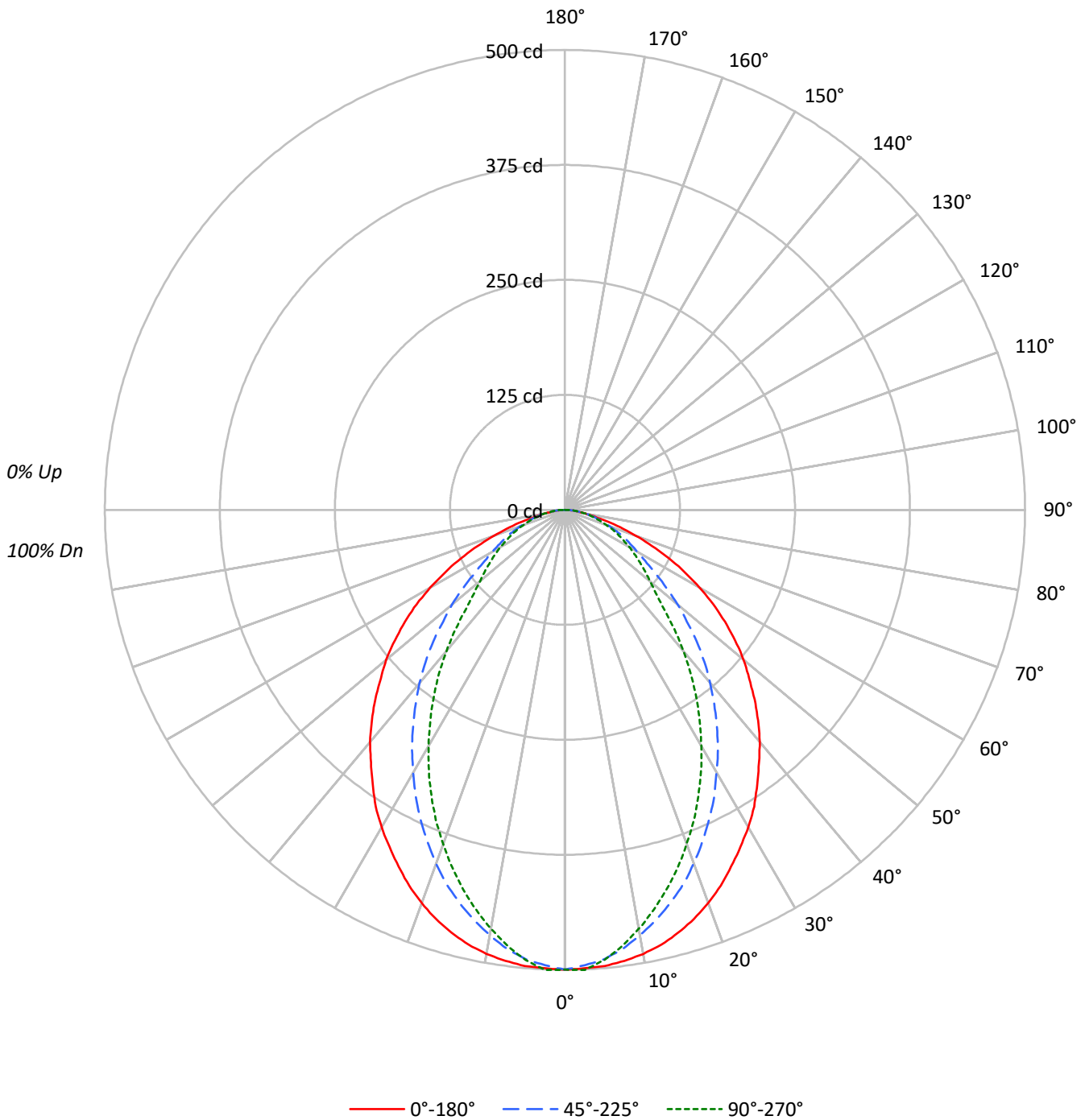
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 947.1 lumens  
Efficiency: N/A  
Efficacy: 54.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
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										
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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87																				
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75																				
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65																				
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57																				
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50																				
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45																				
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40																				
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36																				
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33																				
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30																				

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

	0°	45°	90°
0°	3442	3442	3442
5°	3441	3388	3395
10°	3427	3282	3234
15°	3393	3153	3045
20°	3333	2999	2832
25°	3249	2821	2607
30°	3167	2620	2356
35°	3061	2418	2090
40°	2962	2206	1800
45°	2838	1972	1474
50°	2715	1710	1291
55°	2547	1427	1192
60°	2324	1248	1114
65°	2033	1140	1035
70°	1651	1027	962
75°	1184	939	897
80°	817	841	841
85°	600	727	774

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2838 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.5	4.9
10°-20°	125.7	13.3
20°-30°	173.8	18.3
30°-40°	185.1	19.5
40°-50°	162.6	17.2
50°-60°	123.3	13.0
60°-70°	80.1	8.5
70°-80°	39.7	4.2
80°-90°	10.4	1.1
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°	346.0	36.5
0°-40°	531.1	56.1
0°-60°	817.0	86.3
0°-90°	947.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	947.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	500	500	500	500	500	
5°	498	497	490	492	491	47
15°	476	465	442	432	427	134
25°	428	404	371	352	343	197
35°	364	331	288	262	249	228
45°	292	251	202	166	151	225
55°	212	170	119	103	99	189
65°	125	93	70	65	64	123
75°	44	39	35	34	34	50
85°	8	9	9	9	10	9
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	499.9	499.9	499.9	499.9	499.9
2.5°	498.8	499.9	495.6	499.4	500.5
5°	497.8	496.7	490.2	491.8	491.2
7.5°	494.5	492.3	481.5	480.4	478.2
10°	490.2	484.7	469.5	465.7	462.5
12.5°	484.2	475.5	457.0	449.4	445.6
15°	476.0	465.2	442.4	432.1	427.2
17.5°	466.3	451.1	427.2	413.1	407.7
20°	454.9	437.0	409.3	393.0	386.5
22.5°	442.4	421.2	390.3	372.9	365.9
25°	427.7	404.4	371.3	352.3	343.1
27.5°	413.1	387.0	351.2	330.0	320.3
30°	398.4	368.6	329.5	306.7	296.4
32.5°	382.7	349.6	309.4	284.4	272.5
35°	364.2	330.6	287.7	261.6	248.6
37.5°	346.3	310.5	266.5	237.2	224.7
40°	329.5	291.5	245.4	213.3	200.3
42.5°	310.5	271.4	224.2	190.5	175.9
45°	291.5	250.8	202.5	166.1	151.4
47.5°	271.4	231.2	179.7	143.8	134.1
50°	253.5	211.2	159.6	127.0	120.5
52.5°	232.9	191.6	139.0	114.0	109.6
55°	212.2	170.4	118.9	102.6	99.3
57.5°	191.1	151.4	103.1	92.8	89.6
60°	168.8	131.9	90.6	82.5	80.9
62.5°	146.6	111.8	79.8	73.8	71.7
65°	124.8	92.8	70.0	64.6	63.5
67.5°	102.6	75.5	60.3	56.5	55.9
70°	82.0	61.3	51.0	48.9	47.8
72.5°	63.0	48.9	42.9	41.3	40.7
75°	44.5	39.1	35.3	34.2	33.7
77.5°	29.9	29.9	28.2	27.1	27.7
80°	20.6	21.7	21.2	21.2	21.2
82.5°	13.6	14.7	15.2	15.2	15.2
85°	7.6	8.7	9.2	9.2	9.8
87.5°	2.7	3.3	3.8	4.3	4.3
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	14.85	16.34	15.21	16.65	16.97	11.09	12.58	11.45	12.89	13.21
	3H	16.16	17.49	16.54	17.82	18.19	12.67	14.01	13.05	14.34	14.70
	4H	16.53	17.78	16.93	18.13	18.51	13.28	14.53	13.68	14.88	15.26
	6H	16.70	17.86	17.12	18.23	18.62	13.75	14.90	14.16	15.27	15.66
	8H	16.74	17.84	17.17	18.23	18.63	13.91	15.01	14.34	15.40	15.80
	12H	16.75	17.81	17.18	18.19	18.62	14.02	15.07	14.45	15.46	15.89
4H	2H	14.96	16.21	15.36	16.56	16.94	11.75	13.00	12.15	13.35	13.73
	3H	16.45	17.48	16.86	17.88	18.29	13.53	14.57	13.94	14.97	15.37
	4H	16.92	17.86	17.36	18.27	18.71	14.25	15.18	14.68	15.60	16.04
	6H	17.21	18.02	17.67	18.46	18.92	14.84	15.65	15.30	16.09	16.56
	8H	17.28	18.03	17.74	18.48	18.95	15.05	15.80	15.51	16.25	16.72
	12H	17.32	17.99	17.80	18.47	18.94	15.20	15.88	15.68	16.36	16.83
8H	4H	17.01	17.76	17.47	18.21	18.67	14.56	15.32	15.03	15.76	16.23
	6H	17.37	17.99	17.87	18.49	18.96	15.27	15.89	15.77	16.39	16.86
	8H	17.49	18.05	18.00	18.56	19.05	15.55	16.11	16.06	16.62	17.11
	12H	17.57	18.07	18.08	18.56	19.13	15.78	16.27	16.29	16.77	17.33
12H	4H	17.00	17.67	17.48	18.15	18.63	14.59	15.26	15.07	15.74	16.21
	6H	17.37	17.93	17.89	18.44	18.93	15.32	15.88	15.84	16.39	16.88
	8H	17.53	18.03	18.04	18.52	19.09	15.66	16.15	16.17	16.64	17.21