

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: P1062139

Luminaire Tested: S125RDR-H610D935-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062139  
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-H610D935-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: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

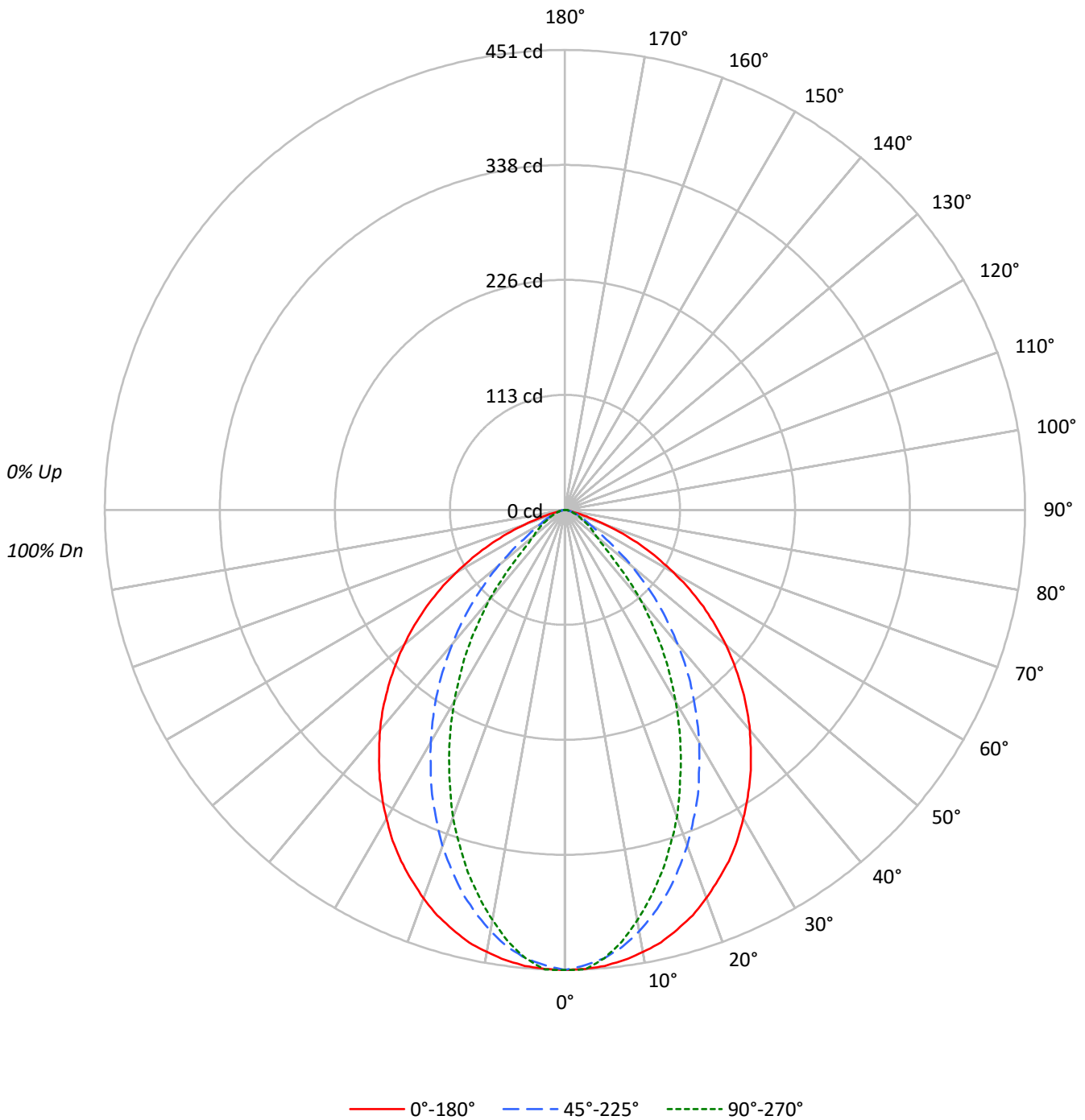
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 652.5 lumens  
Efficiency: N/A  
Efficacy: 37.5 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	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°	3107	3107	3107
5°	3103	3051	3051
10°	3078	2934	2857
15°	3036	2771	2620
20°	2970	2570	2352
25°	2888	2343	2043
30°	2780	2092	1723
35°	2664	1831	1397
40°	2535	1546	1035
45°	2384	1240	625
50°	2204	908	430
55°	1989	557	358
60°	1690	379	284
65°	1336	290	225
70°	841	207	185
75°	274	152	152
80°	91	115	135
85°	47	87	87

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2384 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.7	6.4
10°-20°	110.2	16.9
20°-30°	144.9	22.2
30°-40°	142.4	21.8
40°-50°	107.7	16.5
50°-60°	65.3	10.0
60°-70°	30.8	4.7
70°-80°	8.1	1.2
80°-90°	1.2	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°	296.9	45.5
0°-40°	439.3	67.3
0°-60°	612.4	93.9
0°-90°	652.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	652.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	451	451	451	451	451	
5°	449	448	441	442	441	43
15°	426	414	389	374	368	120
25°	380	351	308	280	269	175
35°	317	275	218	179	166	198
45°	245	193	127	81	64	188
55°	166	114	46	32	30	147
65°	82	42	18	15	14	81
75°	10	7	6	6	6	16
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°	451.2	451.2	451.2	451.2	451.2
2.5°	450.6	450.6	447.1	451.2	451.2
5°	448.9	447.7	441.4	442.0	441.4
7.5°	445.4	443.1	432.2	429.4	427.1
10°	440.3	435.7	419.6	412.7	408.7
12.5°	434.5	426.5	404.7	395.0	388.7
15°	425.9	414.5	388.7	373.8	367.5
17.5°	416.8	400.1	369.7	352.0	344.0
20°	405.3	385.8	350.8	329.0	321.0
22.5°	392.7	369.7	329.0	305.0	294.1
25°	380.1	351.4	308.4	279.7	268.9
27.5°	365.7	333.1	284.9	255.1	243.1
30°	349.7	314.7	263.1	232.2	216.7
32.5°	333.6	295.8	240.2	206.4	190.9
35°	317.0	274.6	217.8	179.4	166.2
37.5°	299.2	254.5	194.9	154.8	139.3
40°	282.0	234.5	172.0	129.6	115.2
42.5°	263.7	214.4	149.0	104.9	88.9
45°	244.8	192.6	127.3	80.8	64.2
47.5°	225.3	173.1	105.5	59.6	48.2
50°	205.8	152.5	84.8	44.1	40.1
52.5°	185.7	132.4	64.2	36.7	35.0
55°	165.7	113.5	46.4	31.5	29.8
57.5°	145.0	92.9	35.0	26.9	25.2
60°	122.7	74.5	27.5	22.4	20.6
62.5°	102.0	58.5	22.4	18.3	17.2
65°	82.0	41.8	17.8	14.9	13.8
67.5°	61.3	28.1	13.8	11.5	11.5
70°	41.8	18.3	10.3	9.2	9.2
72.5°	25.2	10.9	7.5	7.5	7.5
75°	10.3	6.9	5.7	5.7	5.7
77.5°	3.4	4.0	4.0	4.6	4.6
80°	2.3	2.3	2.9	3.4	3.4
82.5°	1.1	1.7	1.7	2.3	2.3
85°	0.6	0.6	1.1	1.1	1.1
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	13.27	14.60	13.63	14.91	15.23	3.91	5.25	4.28	5.56	5.87
	3H	13.97	15.15	14.35	15.48	15.85	4.70	5.88	5.08	6.21	6.57
	4H	13.99	15.09	14.39	15.44	15.82	4.95	6.05	5.35	6.40	6.78
	6H	13.92	14.93	14.33	15.30	15.69	5.13	6.13	5.54	6.50	6.90
	8H	13.88	14.83	14.31	15.22	15.63	5.17	6.12	5.60	6.52	6.92
	12H	13.84	14.75	14.27	15.13	15.56	5.18	6.09	5.61	6.47	6.90
4H	2H	13.10	14.20	13.50	14.55	14.93	4.40	5.50	4.81	5.85	6.23
	3H	13.84	14.74	14.26	15.14	15.54	5.32	6.21	5.73	6.61	7.02
	4H	13.86	14.66	14.30	15.08	15.52	5.63	6.42	6.06	6.84	7.29
	6H	13.80	14.48	14.26	14.93	15.40	5.89	6.57	6.35	7.02	7.49
	8H	13.75	14.39	14.22	14.83	15.31	5.95	6.59	6.42	7.04	7.51
	12H	13.71	14.27	14.19	14.75	15.23	5.98	6.54	6.46	7.02	7.50
8H	4H	13.74	14.38	14.21	14.83	15.30	5.74	6.38	6.21	6.83	7.30
	6H	13.67	14.19	14.17	14.69	15.17	6.06	6.58	6.56	7.07	7.56
	8H	13.62	14.08	14.14	14.60	15.09	6.16	6.63	6.69	7.14	7.64
	12H	13.57	13.99	14.09	14.48	15.05	6.22	6.63	6.74	7.13	7.70
12H	4H	13.70	14.26	14.19	14.75	15.22	5.71	6.28	6.20	6.76	7.23
	6H	13.61	14.08	14.13	14.59	15.09	6.03	6.50	6.55	7.01	7.50
	8H	13.58	13.99	14.09	14.48	15.05	6.17	6.58	6.68	7.07	7.65