

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: P1061851

Luminaire Tested: S125RDRP-H1090D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061851  
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-H1090D835-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, 80 CRI LEDS  
Ballast/Driver: -

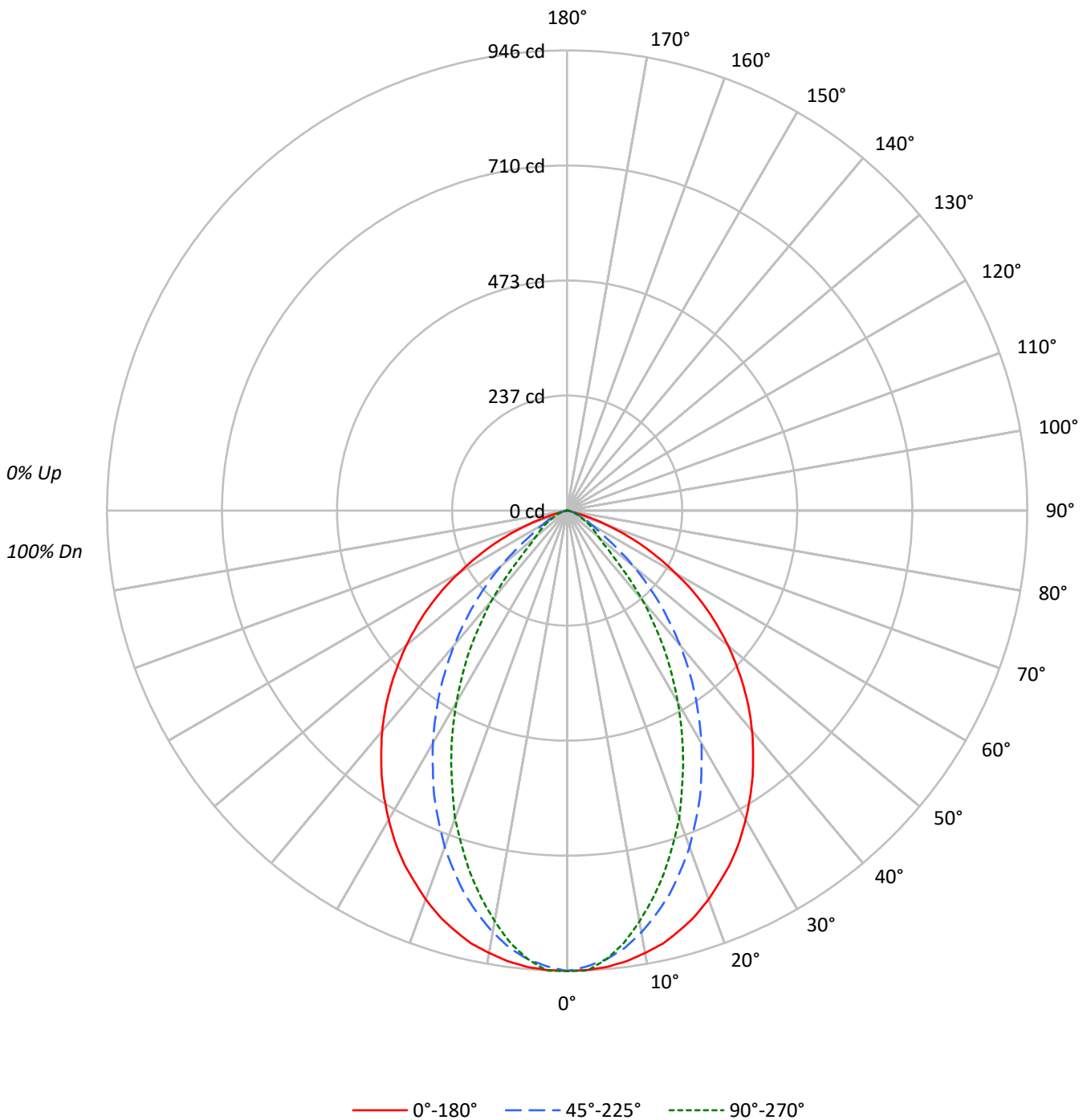
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1368.7 lumens  
Efficiency: N/A  
Efficacy: 43.9 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): 31.2  
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	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					100			
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90					90			
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80					80			
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71					71			
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63					63			
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57					57			
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52					52			
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47					47			
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43					43			
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39					39			
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36					36			

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

	0°	45°	90°
0°	6516	6516	6516
5°	6508	6399	6399
10°	6457	6154	5994
15°	6369	5812	5494
20°	6230	5392	4934
25°	6057	4915	4285
30°	5832	4389	3614
35°	5590	3841	2931
40°	5317	3243	2172
45°	5000	2600	1312
50°	4624	1907	902
55°	4171	1169	750
60°	3543	795	596
65°	2802	608	471
70°	1768	435	387
75°	575	319	319
80°	190	238	285
85°	95	190	190

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5000 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.5	6.4
10°-20°	231.2	16.9
20°-30°	304.0	22.2
30°-40°	298.8	21.8
40°-50°	226.0	16.5
50°-60°	137.0	10.0
60°-70°	64.7	4.7
70°-80°	16.9	1.2
80°-90°	2.5	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°	622.7	45.5
0°-40°	921.5	67.3
0°-60°	1284.6	93.9
0°-90°	1368.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1368.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	946	946	946	946	946	
5°	942	939	926	927	926	89
15°	894	869	815	784	771	252
25°	797	737	647	587	564	366
35°	665	576	457	376	349	415
45°	514	404	267	170	135	395
55°	348	238	97	66	62	309
65°	172	88	37	31	29	169
75°	22	14	12	12	12	34
85°	1	1	2	2	2	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	946.4	946.4	946.4	946.4	946.4
2.5°	945.2	945.2	938.0	946.4	946.4
5°	941.6	939.2	925.9	927.1	925.9
7.5°	934.4	929.5	906.7	900.7	895.9
10°	923.5	913.9	880.2	865.8	857.4
12.5°	911.5	894.7	849.0	828.5	815.3
15°	893.5	869.4	815.3	784.0	770.8
17.5°	874.2	839.4	775.6	738.3	721.5
20°	850.2	809.3	735.9	690.2	673.4
22.5°	823.7	775.6	690.2	639.7	616.9
25°	797.3	737.1	647.0	586.8	564.0
27.5°	767.2	698.7	597.7	535.1	509.9
30°	733.5	660.2	552.0	487.0	454.6
32.5°	699.9	620.5	503.9	432.9	400.4
35°	665.0	576.0	457.0	376.4	348.7
37.5°	627.7	533.9	408.9	324.7	292.2
40°	591.6	491.8	360.8	271.8	241.7
42.5°	553.2	449.7	312.7	220.1	186.4
45°	513.5	404.0	267.0	169.6	134.7
47.5°	472.6	363.2	221.3	125.1	101.0
50°	431.7	319.9	178.0	92.6	84.2
52.5°	389.6	277.8	134.7	77.0	73.4
55°	347.5	238.1	97.4	66.1	62.5
57.5°	304.2	194.8	73.4	56.5	52.9
60°	257.3	156.3	57.7	46.9	43.3
62.5°	214.0	122.7	46.9	38.5	36.1
65°	172.0	87.8	37.3	31.3	28.9
67.5°	128.7	58.9	28.9	24.1	24.1
70°	87.8	38.5	21.6	19.2	19.2
72.5°	52.9	22.8	15.6	15.6	15.6
75°	21.6	14.4	12.0	12.0	12.0
77.5°	7.2	8.4	8.4	9.6	9.6
80°	4.8	4.8	6.0	7.2	7.2
82.5°	2.4	3.6	3.6	4.8	4.8
85°	1.2	1.2	2.4	2.4	2.4
87.5°	0.0	0.0	0.0	1.2	1.2
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	15.84	17.17	16.21	17.48	17.80	6.49	7.83	6.86	8.14	8.45
	3H	16.55	17.72	16.93	18.05	18.42	7.28	8.45	7.66	8.78	9.15
	4H	16.56	17.66	16.97	18.01	18.39	7.52	8.62	7.93	8.97	9.35
	6H	16.49	17.50	16.91	17.87	18.26	7.70	8.71	8.12	9.08	9.47
	8H	16.45	17.40	16.88	17.80	18.20	7.75	8.70	8.18	9.09	9.49
	12H	16.41	17.32	16.84	17.70	18.13	7.75	8.66	8.19	9.05	9.48
4H	2H	15.67	16.77	16.07	17.12	17.50	6.98	8.08	7.39	8.43	8.81
	3H	16.42	17.31	16.83	17.71	18.12	7.89	8.78	8.30	9.19	9.59
	4H	16.44	17.23	16.87	17.65	18.09	8.20	9.00	8.64	9.42	9.86
	6H	16.37	17.06	16.84	17.50	17.97	8.46	9.14	8.92	9.59	10.06
	8H	16.32	16.96	16.79	17.41	17.88	8.53	9.16	9.00	9.61	10.08
	12H	16.28	16.84	16.77	17.32	17.80	8.55	9.11	9.04	9.60	10.07
8H	4H	16.32	16.96	16.79	17.40	17.87	8.31	8.95	8.78	9.40	9.87
	6H	16.24	16.76	16.75	17.26	17.74	8.63	9.15	9.13	9.65	10.13
	8H	16.19	16.66	16.71	17.17	17.66	8.74	9.20	9.26	9.72	10.21
	12H	16.15	16.56	16.66	17.05	17.63	8.80	9.21	9.31	9.70	10.28
12H	4H	16.27	16.84	16.76	17.32	17.79	8.29	8.85	8.77	9.33	9.81
	6H	16.18	16.65	16.71	17.17	17.66	8.60	9.07	9.12	9.58	10.08
	8H	16.15	16.56	16.67	17.06	17.63	8.74	9.15	9.26	9.65	10.22