

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: P1061446

Luminaire Tested: S125RDRP-S1090D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061446  
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-S1090D835-X4F0-XX-UDD-SVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

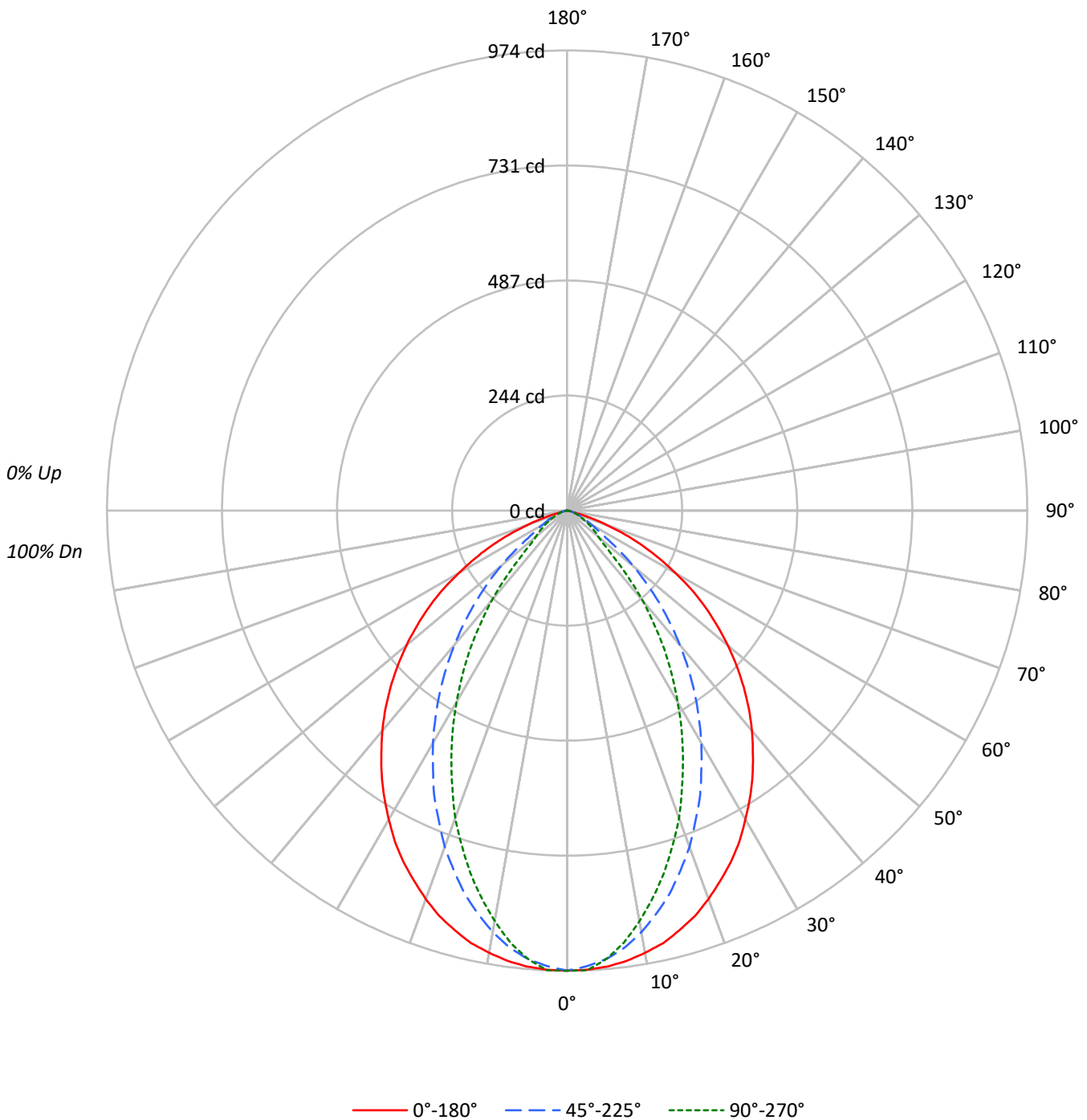
Lumens per Lamp: N/A  
Luminaire Lumens: 1408.4 lumens  
Efficiency: N/A  
Efficacy: 40.2 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 35  
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	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°	6705	6705	6705
5°	6697	6585	6585
10°	6644	6333	6169
15°	6554	5980	5654
20°	6410	5549	5077
25°	6233	5057	4409
30°	6001	4516	3718
35°	5752	3952	3016
40°	5472	3336	2235
45°	5145	2675	1350
50°	4758	1961	928
55°	4293	1203	772
60°	3646	818	613
65°	2882	626	484
70°	1818	449	399
75°	593	330	330
80°	194	246	293
85°	95	197	197

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5145 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.1	6.4
10°-20°	237.9	16.9
20°-30°	312.9	22.2
30°-40°	307.4	21.8
40°-50°	232.6	16.5
50°-60°	141.0	10.0
60°-70°	66.6	4.7
70°-80°	17.4	1.2
80°-90°	2.6	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°	640.8	45.5
0°-40°	948.2	67.3
0°-60°	1321.8	93.9
0°-90°	1408.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1408.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	974	974	974	974	974	
5°	969	966	953	954	953	92
15°	919	895	839	807	793	259
25°	820	758	666	604	580	377
35°	684	593	470	387	359	427
45°	528	416	275	174	139	407
55°	358	245	100	68	64	318
65°	177	90	38	32	30	174
75°	22	15	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°	973.8	973.8	973.8	973.8	973.8
2.5°	972.6	972.6	965.2	973.8	973.8
5°	968.9	966.4	952.8	954.0	952.8
7.5°	961.5	956.5	933.0	926.8	921.9
10°	950.3	940.4	905.8	890.9	882.3
12.5°	937.9	920.6	873.6	852.6	839.0
15°	919.4	894.6	839.0	806.8	793.2
17.5°	899.6	863.7	798.1	759.8	742.4
20°	874.8	832.8	757.3	710.3	692.9
22.5°	847.6	798.1	710.3	658.3	634.8
25°	820.4	758.5	665.7	603.8	580.3
27.5°	789.5	718.9	615.0	550.6	524.7
30°	754.8	679.3	568.0	501.1	467.7
32.5°	720.2	638.5	518.5	445.5	412.1
35°	684.3	592.7	470.2	387.3	358.8
37.5°	645.9	549.4	420.7	334.1	300.7
40°	608.8	506.1	371.2	279.7	248.7
42.5°	569.2	462.8	321.7	226.4	191.8
45°	528.4	415.8	274.7	174.5	138.6
47.5°	486.3	373.7	227.7	128.7	103.9
50°	444.2	329.1	183.1	95.3	86.6
52.5°	400.9	285.8	138.6	79.2	75.5
55°	357.6	245.0	100.2	68.1	64.3
57.5°	313.1	200.5	75.5	58.2	54.4
60°	264.8	160.9	59.4	48.3	44.5
62.5°	220.3	126.2	48.3	39.6	37.1
65°	176.9	90.3	38.4	32.2	29.7
67.5°	132.4	60.6	29.7	24.7	24.7
70°	90.3	39.6	22.3	19.8	19.8
72.5°	54.4	23.5	16.1	16.1	16.1
75°	22.3	14.8	12.4	12.4	12.4
77.5°	7.4	8.7	8.7	9.9	9.9
80°	4.9	4.9	6.2	7.4	7.4
82.5°	2.5	3.7	3.7	4.9	4.9
85°	1.2	1.2	2.5	2.5	2.5
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	15.94	17.27	16.31	17.59	17.90	6.60	7.93	6.96	8.24	8.56
	3H	16.65	17.82	17.03	18.15	18.52	7.38	8.56	7.76	8.88	9.25
	4H	16.66	17.76	17.07	18.11	18.49	7.63	8.72	8.03	9.07	9.46
	6H	16.59	17.60	17.01	17.97	18.36	7.81	8.81	8.22	9.18	9.58
	8H	16.55	17.50	16.98	17.90	18.30	7.85	8.80	8.28	9.19	9.60
	12H	16.51	17.42	16.94	17.80	18.23	7.86	8.77	8.29	9.15	9.58
4H	2H	15.77	16.87	16.18	17.22	17.60	7.09	8.18	7.49	8.53	8.92
	3H	16.52	17.41	16.93	17.81	18.22	7.99	8.88	8.41	9.29	9.69
	4H	16.54	17.33	16.97	17.75	18.19	8.31	9.10	8.74	9.52	9.96
	6H	16.47	17.16	16.94	17.61	18.07	8.57	9.25	9.03	9.70	10.16
	8H	16.42	17.06	16.89	17.51	17.98	8.63	9.27	9.10	9.71	10.19
	12H	16.38	16.94	16.87	17.43	17.90	8.65	9.22	9.14	9.70	10.17
8H	4H	16.42	17.06	16.89	17.50	17.97	8.42	9.06	8.89	9.50	9.98
	6H	16.34	16.86	16.85	17.36	17.84	8.74	9.26	9.24	9.75	10.23
	8H	16.29	16.76	16.81	17.27	17.76	8.84	9.30	9.36	9.82	10.31
	12H	16.25	16.66	16.76	17.16	17.73	8.90	9.31	9.42	9.81	10.38
12H	4H	16.38	16.94	16.86	17.42	17.90	8.39	8.95	8.88	9.44	9.91
	6H	16.29	16.75	16.81	17.27	17.76	8.71	9.17	9.23	9.69	10.18
	8H	16.25	16.66	16.77	17.16	17.73	8.84	9.26	9.36	9.75	10.32