

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: P1061473

Luminaire Tested: S125RDRP-S1090D927-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061473  
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-S1090D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

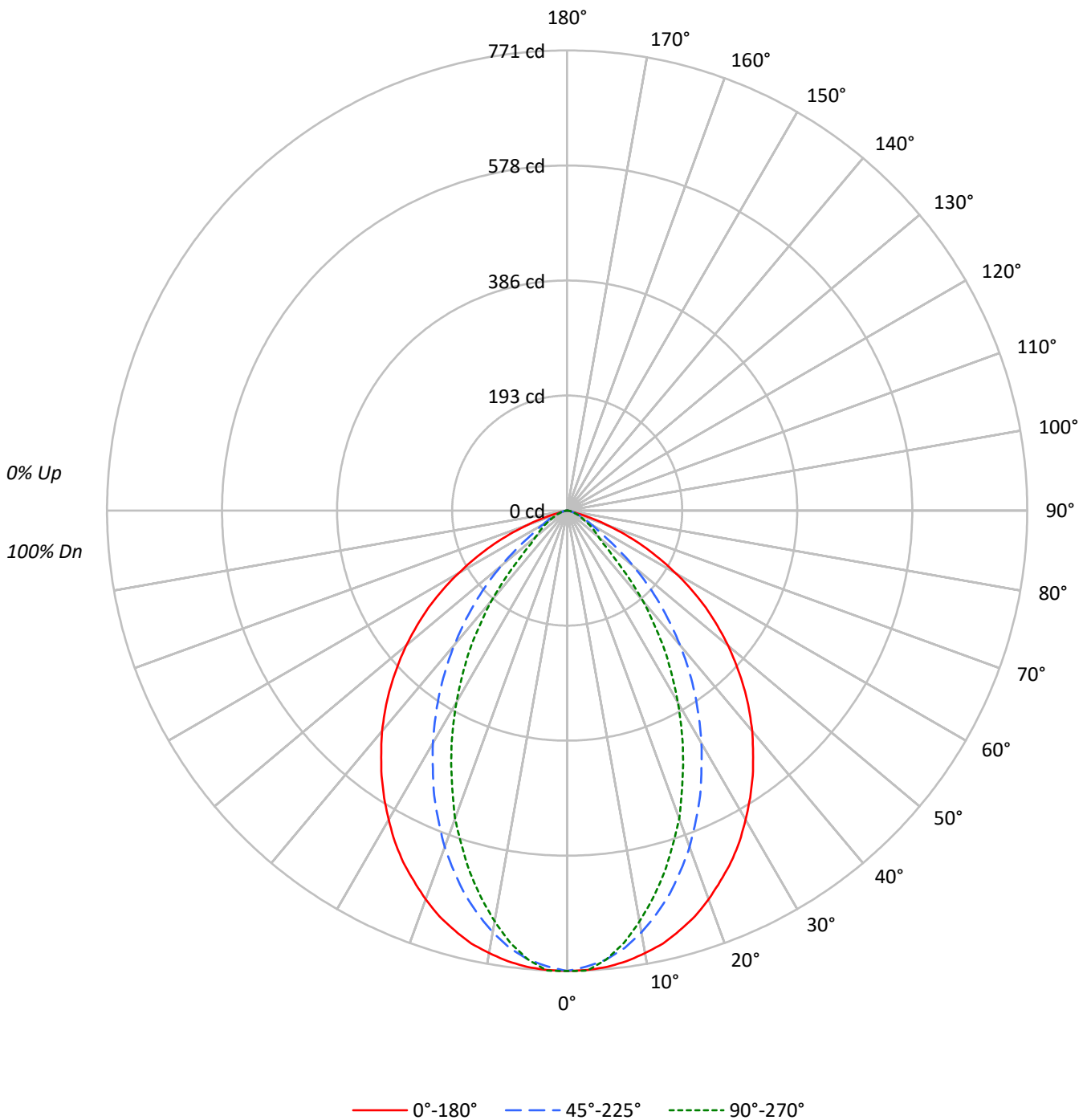
Lumens per Lamp: N/A  
Luminaire Lumens: 1115.7 lumens  
Efficiency: N/A  
Efficacy: 31.9 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	5311	5311	5311
5°	5305	5217	5217
10°	5263	5016	4886
15°	5191	4737	4479
20°	5078	4396	4022
25°	4937	4007	3492
30°	4754	3577	2946
35°	4557	3131	2390
40°	4335	2643	1771
45°	4076	2119	1069
50°	3769	1554	735
55°	3401	953	612
60°	2889	649	486
65°	2284	495	383
70°	1441	354	316
75°	468	261	261
80°	155	194	234
85°	79	158	158

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4076 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.4	6.4
10°-20°	188.4	16.9
20°-30°	247.8	22.2
30°-40°	243.5	21.8
40°-50°	184.2	16.5
50°-60°	111.7	10.0
60°-70°	52.7	4.7
70°-80°	13.8	1.2
80°-90°	2.1	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°	507.6	45.5
0°-40°	751.2	67.3
0°-60°	1047.1	93.9
0°-90°	1115.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1115.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	771	771	771	771	771	
5°	768	766	755	756	755	73
15°	728	709	665	639	628	205
25°	650	601	527	478	460	299
35°	542	470	372	307	284	338
45°	419	329	218	138	110	322
55°	283	194	79	54	51	252
65°	140	72	30	26	24	138
75°	18	12	10	10	10	27
85°	1	1	2	2	2	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	771.4	771.4	771.4	771.4	771.4
2.5°	770.5	770.5	764.6	771.4	771.4
5°	767.5	765.6	754.8	755.8	754.8
7.5°	761.6	757.7	739.1	734.2	730.3
10°	752.8	745.0	717.5	705.8	698.9
12.5°	743.0	729.3	692.1	675.4	664.6
15°	728.3	708.7	664.6	639.1	628.3
17.5°	712.6	684.2	632.3	601.9	588.1
20°	693.0	659.7	599.9	562.7	548.9
22.5°	671.5	632.3	562.7	521.5	502.9
25°	649.9	600.9	527.4	478.4	459.7
27.5°	625.4	569.5	487.2	436.2	415.6
30°	597.9	538.2	449.9	397.0	370.5
32.5°	570.5	505.8	410.7	352.9	326.4
35°	542.1	469.5	372.5	306.8	284.3
37.5°	511.7	435.2	333.3	264.7	238.2
40°	482.3	400.9	294.1	221.5	197.0
42.5°	450.9	366.6	254.9	179.4	151.9
45°	418.6	329.4	217.6	138.2	109.8
47.5°	385.2	296.0	180.4	101.9	82.3
50°	351.9	260.7	145.1	75.5	68.6
52.5°	317.6	226.4	109.8	62.7	59.8
55°	283.3	194.1	79.4	53.9	51.0
57.5°	248.0	158.8	59.8	46.1	43.1
60°	209.8	127.4	47.1	38.2	35.3
62.5°	174.5	100.0	38.2	31.4	29.4
65°	140.2	71.6	30.4	25.5	23.5
67.5°	104.9	48.0	23.5	19.6	19.6
70°	71.6	31.4	17.6	15.7	15.7
72.5°	43.1	18.6	12.7	12.7	12.7
75°	17.6	11.8	9.8	9.8	9.8
77.5°	5.9	6.9	6.9	7.8	7.8
80°	3.9	3.9	4.9	5.9	5.9
82.5°	2.0	2.9	2.9	3.9	3.9
85°	1.0	1.0	2.0	2.0	2.0
87.5°	0.0	0.0	0.0	1.0	1.0
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	15.13	16.46	15.50	16.78	17.09	5.79	7.12	6.15	7.43	7.75
	3H	15.84	17.01	16.22	17.34	17.71	6.57	7.75	6.95	8.08	8.44
	4H	15.85	16.95	16.26	17.30	17.68	6.82	7.91	7.22	8.26	8.65
	6H	15.78	16.79	16.20	17.16	17.55	7.00	8.00	7.41	8.37	8.76
	8H	15.74	16.70	16.17	17.09	17.49	7.04	7.99	7.47	8.38	8.79
	12H	15.70	16.61	16.13	16.99	17.42	7.05	7.96	7.48	8.34	8.77
4H	2H	14.96	16.06	15.36	16.41	16.79	6.28	7.37	6.68	7.72	8.11
	3H	15.71	16.60	16.12	17.00	17.41	7.18	8.07	7.59	8.48	8.88
	4H	15.73	16.52	16.16	16.94	17.38	7.49	8.29	7.93	8.71	9.15
	6H	15.67	16.35	16.13	16.80	17.26	7.75	8.44	8.22	8.88	9.35
	8H	15.61	16.25	16.08	16.70	17.17	7.82	8.46	8.29	8.90	9.37
	12H	15.57	16.13	16.06	16.62	17.09	7.84	8.41	8.33	8.89	9.36
8H	4H	15.61	16.25	16.08	16.69	17.16	7.61	8.25	8.08	8.69	9.16
	6H	15.53	16.05	16.04	16.55	17.03	7.92	8.44	8.43	8.94	9.42
	8H	15.48	15.95	16.00	16.46	16.95	8.03	8.49	8.55	9.01	9.50
	12H	15.44	15.85	15.95	16.35	16.92	8.09	8.50	8.61	9.00	9.57
12H	4H	15.57	16.13	16.05	16.61	17.09	7.58	8.14	8.06	8.62	9.10
	6H	15.48	15.94	16.00	16.46	16.95	7.89	8.36	8.42	8.88	9.37
	8H	15.44	15.85	15.96	16.35	16.92	8.03	8.44	8.55	8.94	9.51