

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: P1061509

Luminaire Tested: S125RDRP-S1090D950-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061509  
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-S1090D950-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: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

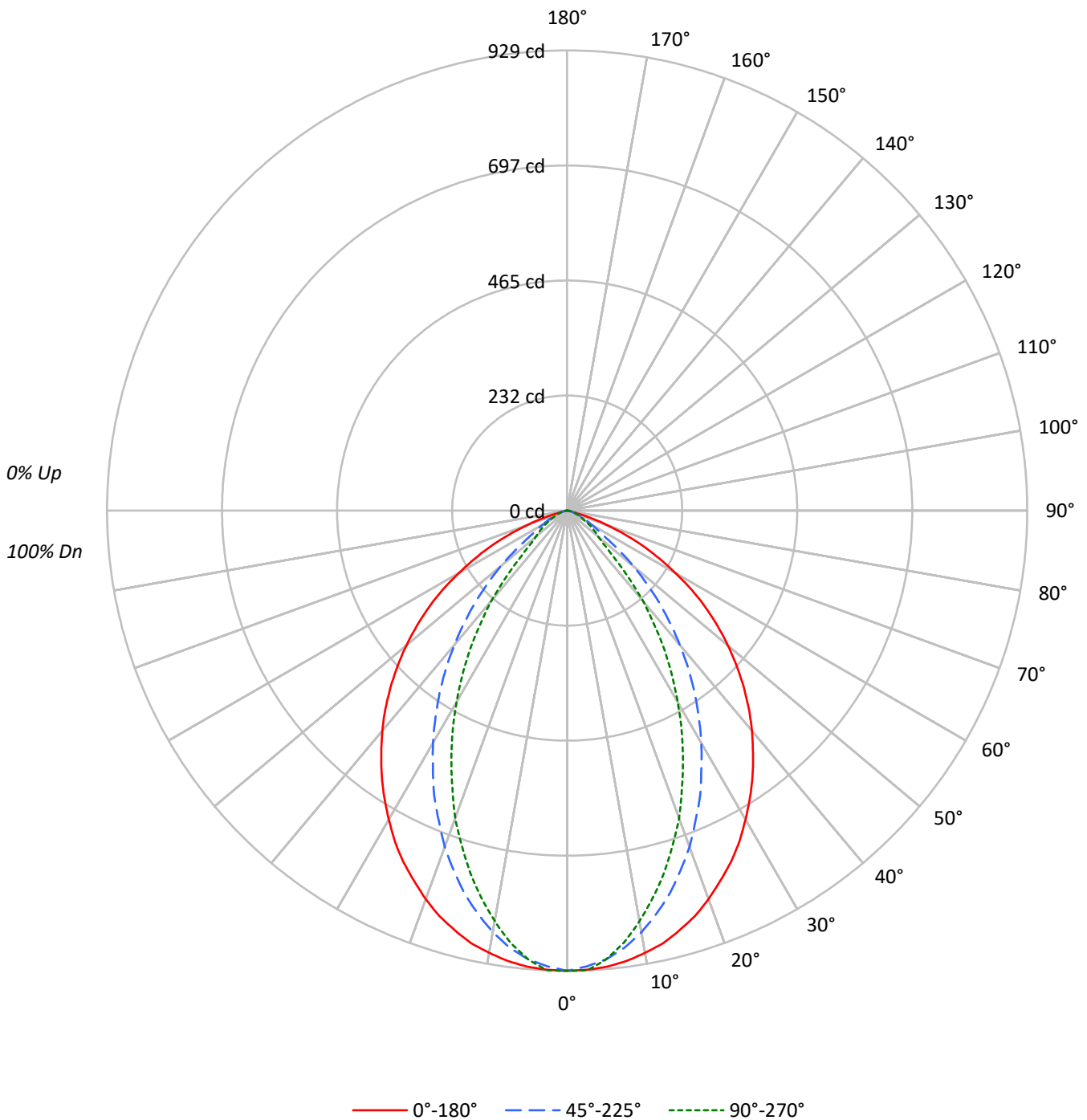
Lumens per Lamp: N/A  
Luminaire Lumens: 1343.6 lumens  
Efficiency: N/A  
Efficacy: 38.4 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct

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	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°	6396	6396	6396
5°	6388	6283	6283
10°	6338	6041	5885
15°	6252	5705	5394
20°	6115	5294	4844
25°	5946	4825	4206
30°	5725	4308	3547
35°	5487	3771	2877
40°	5220	3183	2133
45°	4909	2552	1287
50°	4540	1871	885
55°	4096	1148	737
60°	3478	781	585
65°	2750	596	461
70°	1735	427	380
75°	564	314	314
80°	186	234	282
85°	95	190	190

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4909 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.9	6.4
10°-20°	226.9	16.9
20°-30°	298.5	22.2
30°-40°	293.3	21.8
40°-50°	221.9	16.5
50°-60°	134.5	10.0
60°-70°	63.5	4.7
70°-80°	16.6	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°	611.3	45.5
0°-40°	904.6	67.3
0°-60°	1261.0	93.9
0°-90°	1343.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1343.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	929	929	929	929	929	
5°	924	922	909	910	909	88
15°	877	854	800	770	757	247
25°	783	724	635	576	554	360
35°	653	565	449	370	342	408
45°	504	397	262	166	132	388
55°	341	234	96	65	61	304
65°	169	86	37	31	28	166
75°	21	14	12	12	12	33
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°	929.0	929.0	929.0	929.0	929.0
2.5°	927.9	927.9	920.8	929.0	929.0
5°	924.3	922.0	909.0	910.1	909.0
7.5°	917.2	912.5	890.1	884.2	879.5
10°	906.6	897.2	864.1	849.9	841.7
12.5°	894.8	878.3	833.4	813.3	800.4
15°	877.1	853.5	800.4	769.7	756.7
17.5°	858.2	824.0	761.4	724.8	708.3
20°	834.6	794.5	722.5	677.6	661.1
22.5°	808.6	761.4	677.6	628.0	605.6
25°	782.7	723.6	635.1	576.1	553.6
27.5°	753.1	685.9	586.7	525.3	500.5
30°	720.1	648.1	541.8	478.1	446.2
32.5°	687.0	609.1	494.6	425.0	393.1
35°	652.8	565.4	448.6	369.5	342.3
37.5°	616.2	524.1	401.4	318.7	286.9
40°	580.8	482.8	354.1	266.8	237.3
42.5°	543.0	441.5	306.9	216.0	183.0
45°	504.1	396.6	262.1	166.4	132.2
47.5°	463.9	356.5	217.2	122.8	99.2
50°	423.8	314.0	174.7	90.9	82.6
52.5°	382.5	272.7	132.2	75.6	72.0
55°	341.2	233.7	95.6	64.9	61.4
57.5°	298.7	191.2	72.0	55.5	51.9
60°	252.6	153.5	56.7	46.0	42.5
62.5°	210.1	120.4	46.0	37.8	35.4
65°	168.8	86.2	36.6	30.7	28.3
67.5°	126.3	57.8	28.3	23.6	23.6
70°	86.2	37.8	21.2	18.9	18.9
72.5°	51.9	22.4	15.3	15.3	15.3
75°	21.2	14.2	11.8	11.8	11.8
77.5°	7.1	8.3	8.3	9.4	9.4
80°	4.7	4.7	5.9	7.1	7.1
82.5°	2.4	3.5	3.5	4.7	4.7
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	15.78	17.11	16.14	17.42	17.74	6.43	7.76	6.80	8.08	8.39
	3H	16.48	17.66	16.86	17.99	18.35	7.21	8.39	7.59	8.72	9.09
	4H	16.50	17.59	16.90	17.95	18.33	7.46	8.56	7.86	8.91	9.29
	6H	16.43	17.43	16.84	17.80	18.20	7.64	8.65	8.05	9.02	9.41
	8H	16.39	17.34	16.82	17.73	18.14	7.68	8.64	8.11	9.03	9.43
	12H	16.35	17.26	16.78	17.64	18.07	7.69	8.60	8.12	8.98	9.41
4H	2H	15.61	16.70	16.01	17.05	17.44	6.92	8.02	7.32	8.37	8.75
	3H	16.35	17.25	16.77	17.65	18.05	7.83	8.72	8.24	9.12	9.53
	4H	16.37	17.17	16.81	17.59	18.03	8.14	8.93	8.57	9.35	9.80
	6H	16.31	16.99	16.77	17.44	17.91	8.40	9.08	8.86	9.53	9.99
	8H	16.26	16.90	16.73	17.34	17.81	8.46	9.10	8.93	9.55	10.02
	12H	16.21	16.78	16.70	17.26	17.73	8.49	9.05	8.98	9.53	10.01
8H	4H	16.25	16.89	16.72	17.34	17.81	8.25	8.89	8.72	9.34	9.81
	6H	16.18	16.70	16.68	17.20	17.68	8.57	9.09	9.07	9.58	10.07
	8H	16.12	16.59	16.65	17.11	17.60	8.67	9.14	9.20	9.65	10.15
	12H	16.08	16.50	16.60	16.99	17.56	8.74	9.15	9.25	9.64	10.21
12H	4H	16.21	16.77	16.70	17.26	17.73	8.22	8.79	8.71	9.27	9.74
	6H	16.12	16.59	16.64	17.10	17.59	8.54	9.01	9.06	9.52	10.01
	8H	16.09	16.50	16.60	16.99	17.56	8.68	9.09	9.19	9.58	10.16