

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: P1061438

Luminaire Tested: S125RDRP-S1090D830-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061438  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-86)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S1090D830-X4F0-XX-UDD-SVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

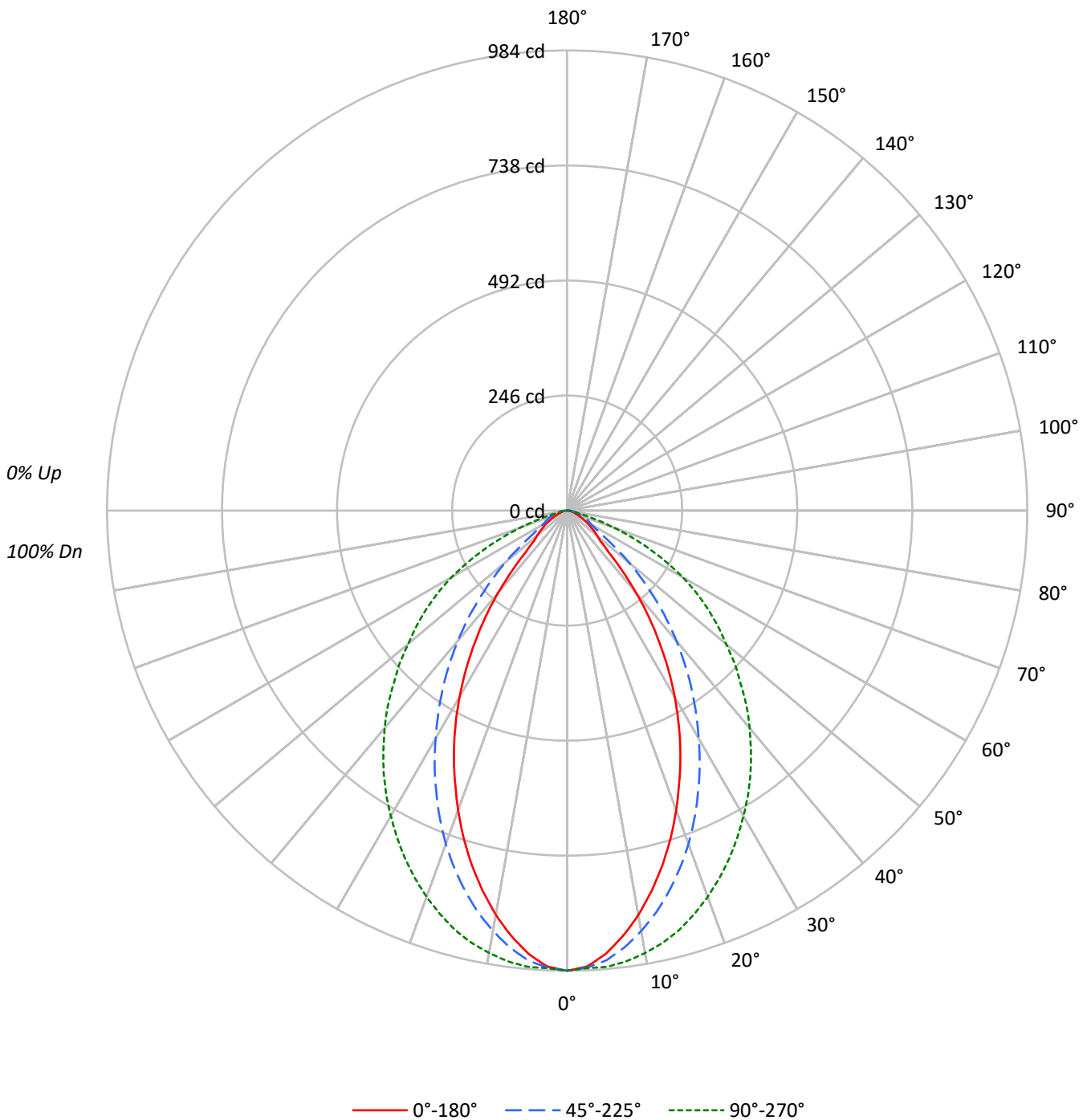
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1420.6 lumens  
Efficiency: N/A  
Efficacy: 40.6 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02  
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	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89					89			
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	87	80	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	63					63			
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56					56			
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51					51			
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46					46			
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42					42			
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39					39			
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	47	41	38	36					36			

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

	0°	45°	90°
0°	6774	6774	6774
5°	6574	6671	6768
10°	6136	6381	6715
15°	5599	6006	6613
20°	4994	5558	6439
25°	4353	5036	6233
30°	3656	4472	5994
35°	2884	3894	5748
40°	2066	3273	5455
45°	1216	2569	5114
50°	900	1850	4751
55°	756	1121	4413
60°	610	819	3937
65°	476	780	3156
70°	399	729	2138
75°	372	652	931
80°	369	646	603
85°	458	829	648

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5114 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.6	6.4
10°-20°	238.2	16.8
20°-30°	311.2	21.9
30°-40°	303.0	21.3
40°-50°	226.4	15.9
50°-60°	140.4	9.9
60°-70°	73.8	5.2
70°-80°	26.9	1.9
80°-90°	10.1	0.7
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°	640.0	45.1
0°-40°	943.0	66.4
0°-60°	1309.8	92.2
0°-90°	1420.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1420.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	984	984	984	984	984	
5°	951	964	965	971	979	88
15°	786	809	843	894	928	219
25°	573	602	663	753	820	262
35°	343	380	463	587	684	214
45°	125	163	264	412	525	105
55°	63	66	93	243	368	57
65°	29	32	48	103	194	30
75°	14	16	24	27	35	15
85°	6	10	10	10	8	6
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	983.9	983.9	983.9	983.9	983.9
2.5°	975.7	983.9	978.0	978.0	979.2
5°	951.2	964.0	965.2	971.0	979.2
7.5°	917.3	932.5	941.8	959.4	972.2
10°	877.7	895.2	912.7	941.8	960.5
12.5°	833.3	854.3	880.0	919.7	946.5
15°	785.5	808.8	842.6	894.0	927.8
17.5°	735.3	759.8	801.8	863.7	904.5
20°	681.6	708.4	758.6	828.6	878.8
22.5°	626.7	657.1	711.9	791.3	850.8
25°	573.0	602.2	662.9	752.8	820.5
27.5°	517.0	547.4	613.9	713.1	787.8
30°	459.8	492.5	562.5	672.2	753.9
32.5°	402.6	436.5	512.4	630.2	720.1
35°	343.1	380.5	463.3	587.0	683.9
37.5°	287.1	326.8	413.2	542.7	645.4
40°	229.9	270.8	364.1	499.5	606.9
42.5°	173.9	215.9	313.9	455.2	568.4
45°	124.9	163.4	263.8	412.0	525.2
47.5°	95.7	117.9	217.1	367.6	486.7
50°	84.0	91.0	172.7	324.5	443.5
52.5°	73.5	78.2	128.4	282.4	406.1
55°	63.0	66.5	93.4	242.8	367.6
57.5°	53.7	57.2	71.2	206.6	328.0
60°	44.3	47.9	59.5	170.4	285.9
62.5°	37.3	38.5	53.7	136.6	239.3
65°	29.2	31.5	47.9	102.7	193.7
67.5°	24.5	25.7	42.0	73.5	149.4
70°	19.8	21.0	36.2	51.4	106.2
72.5°	17.5	17.5	30.3	37.3	67.7
75°	14.0	16.3	24.5	26.8	35.0
77.5°	11.7	16.3	21.0	19.8	18.7
80°	9.3	15.2	16.3	16.3	15.2
82.5°	8.2	12.8	14.0	12.8	11.7
85°	5.8	10.5	10.5	10.5	8.2
87.5°	4.7	9.3	8.2	8.2	5.8
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	6.44	7.78	6.80	8.10	8.41	16.14	17.49	16.50	17.80	18.12
	3H	7.27	8.47	7.65	8.80	9.17	17.05	18.25	17.43	18.58	18.94
	4H	7.63	8.75	8.03	9.10	9.48	17.15	18.27	17.55	18.62	19.00
	6H	8.01	9.03	8.42	9.40	9.80	17.13	18.16	17.55	18.53	18.92
	8H	8.19	9.16	8.62	9.55	9.95	17.12	18.10	17.55	18.49	18.89
	12H	8.35	9.28	8.78	9.66	10.09	17.11	18.04	17.54	18.42	18.85
4H	2H	7.27	8.38	7.67	8.73	9.12	15.99	17.11	16.39	17.46	17.84
	3H	8.32	9.24	8.73	9.64	10.04	16.98	17.89	17.39	18.30	18.70
	4H	8.78	9.59	9.21	10.01	10.45	17.11	17.92	17.54	18.34	18.79
	6H	9.33	10.04	9.79	10.48	10.95	17.14	17.85	17.60	18.29	18.76
	8H	9.59	10.25	10.06	10.70	11.17	17.14	17.80	17.61	18.25	18.72
	12H	9.83	10.42	10.32	10.90	11.37	17.15	17.73	17.63	18.21	18.69
8H	4H	9.33	9.99	9.80	10.44	10.91	17.03	17.69	17.50	18.14	18.61
	6H	10.11	10.65	10.61	11.14	11.62	17.09	17.63	17.59	18.13	18.61
	8H	10.52	11.01	11.04	11.52	12.01	17.12	17.60	17.64	18.12	18.61
	12H	10.94	11.37	11.45	11.86	12.43	17.17	17.60	17.69	18.10	18.67
12H	4H	9.39	9.97	9.88	10.46	10.93	17.00	17.58	17.48	18.06	18.54
	6H	10.25	10.74	10.77	11.25	11.74	17.06	17.54	17.58	18.06	18.55
	8H	10.78	11.21	11.29	11.70	12.27	17.12	17.55	17.64	18.04	18.62