

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: P1061828

Luminaire Tested: S125RDRP-S850D940-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061828  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S850D940-X4F0-XX-UDD-WVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

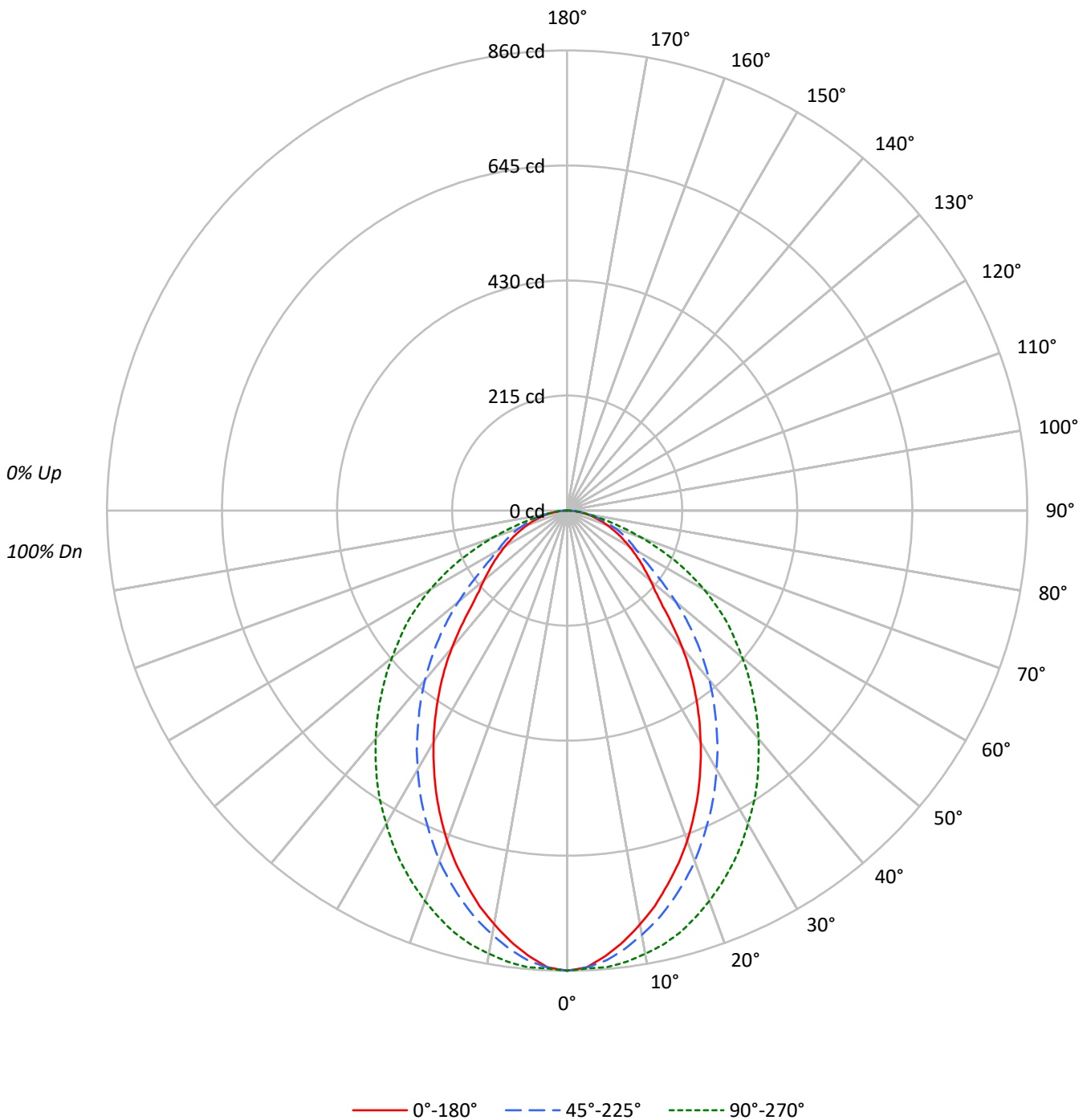
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1612.0 lumens  
Efficiency: N/A  
Efficacy: 62.5 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 25.8  
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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	48	59	52	47	58	52	47	56	51	46	44
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30

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

	0°	45°	90°
0°	5921	5921	5921
5°	5771	5831	5919
10°	5489	5627	5880
15°	5161	5388	5817
20°	4809	5111	5690
25°	4405	4784	5547
30°	3968	4439	5374
35°	3509	4079	5205
40°	3011	3714	5003
45°	2460	3304	4793
50°	2181	2834	4573
55°	2000	2352	4383
60°	1845	2082	4082
65°	1722	2001	3638
70°	1608	1902	2975
75°	1484	1782	2195
80°	1396	1669	1602
85°	1288	1627	1359

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4793 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.6	4.9
10°-20°	214.3	13.3
20°-30°	294.6	18.3
30°-40°	312.2	19.4
40°-50°	272.5	16.9
50°-60°	207.0	12.8
60°-70°	138.7	8.6
70°-80°	71.5	4.4
80°-90°	21.4	1.3
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°	588.5	36.5
0°-40°	900.7	55.9
0°-60°	1380.3	85.6
0°-90°	1612.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1612.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	860	860	860	860	860	
5°	835	844	844	850	856	78
15°	724	738	756	789	816	203
25°	580	598	630	682	730	266
35°	418	442	485	554	619	260
45°	253	278	339	420	492	199
55°	167	172	196	288	365	149
65°	106	108	123	164	223	105
75°	56	59	67	71	82	60
85°	16	21	21	19	17	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	859.9	859.9	859.9	859.9	859.9
2.5°	853.9	859.9	854.7	854.7	856.4
5°	835.0	843.6	843.6	849.6	856.4
7.5°	811.8	821.2	826.4	840.1	850.4
10°	785.1	795.4	804.9	825.5	841.0
12.5°	756.8	768.0	782.6	809.2	830.7
15°	724.1	737.9	755.9	789.4	816.1
17.5°	691.5	705.3	727.6	767.1	797.2
20°	656.3	670.9	697.5	740.5	776.5
22.5°	618.5	634.8	663.2	712.1	754.2
25°	579.8	597.9	629.7	682.1	730.2
27.5°	539.5	560.9	595.3	651.1	704.4
30°	499.1	520.6	558.4	619.3	676.0
32.5°	458.7	481.9	523.1	587.6	648.6
35°	417.5	441.5	485.3	554.1	619.3
37.5°	377.1	401.2	450.1	521.4	587.6
40°	335.0	359.9	413.2	487.9	556.6
42.5°	292.1	318.7	376.2	453.6	524.9
45°	252.6	277.5	339.3	420.1	492.2
47.5°	223.3	239.7	302.4	385.7	460.4
50°	203.6	212.2	264.6	352.2	426.9
52.5°	183.8	190.7	229.4	317.8	395.1
55°	166.6	171.8	195.9	287.8	365.1
57.5°	149.5	154.6	170.1	257.7	329.9
60°	134.0	138.3	151.2	225.9	296.4
62.5°	119.4	122.8	136.6	195.9	260.3
65°	105.7	108.2	122.8	164.1	223.3
67.5°	91.9	94.5	109.1	134.0	183.8
70°	79.9	80.7	94.5	109.1	147.8
72.5°	67.9	68.7	79.9	88.5	113.4
75°	55.8	59.3	67.0	71.3	82.5
77.5°	45.5	49.8	54.1	55.8	55.8
80°	35.2	40.4	42.1	42.1	40.4
82.5°	25.8	30.1	30.9	29.2	27.5
85°	16.3	20.6	20.6	18.9	17.2
87.5°	7.7	11.2	11.2	10.3	7.7
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	12.79	14.28	13.15	14.60	14.91	16.71	18.21	17.08	18.52	18.84
	3H	14.36	15.70	14.73	16.03	16.39	18.14	19.48	18.51	19.81	20.17
	4H	14.97	16.23	15.37	16.58	16.96	18.55	19.81	18.95	20.16	20.54
	6H	15.46	16.63	15.88	16.99	17.39	18.77	19.93	19.18	20.30	20.69
	8H	15.64	16.75	16.07	17.14	17.54	18.83	19.93	19.25	20.32	20.72
	12H	15.76	16.82	16.19	17.20	17.63	18.86	19.92	19.29	20.30	20.73
4H	2H	13.52	14.78	13.92	15.13	15.51	16.84	18.10	17.24	18.45	18.83
	3H	15.30	16.35	15.71	16.75	17.15	18.45	19.49	18.86	19.89	20.30
	4H	16.04	16.98	16.47	17.39	17.83	18.98	19.92	19.41	20.33	20.77
	6H	16.67	17.49	17.13	17.93	18.39	19.32	20.14	19.78	20.58	21.04
	8H	16.90	17.67	17.36	18.11	18.58	19.42	20.18	19.88	20.63	21.09
	12H	17.07	17.76	17.56	18.24	18.71	19.49	20.17	19.97	20.65	21.12
8H	4H	16.44	17.20	16.90	17.65	18.11	19.08	19.85	19.55	20.29	20.76
	6H	17.22	17.86	17.72	18.35	18.82	19.52	20.15	20.02	20.64	21.12
	8H	17.55	18.12	18.06	18.63	19.11	19.68	20.25	20.19	20.76	21.25
	12H	17.82	18.32	18.33	18.82	19.38	19.82	20.32	20.33	20.81	21.37
12H	4H	16.48	17.16	16.96	17.64	18.11	19.08	19.77	19.57	20.24	20.72
	6H	17.31	17.87	17.82	18.38	18.87	19.54	20.11	20.05	20.62	21.10
	8H	17.70	18.20	18.21	18.70	19.26	19.75	20.25	20.26	20.74	21.31