

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061779

Luminaire Tested: S125RDR-S850D840-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061779  
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: S125RDR-S850D840-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

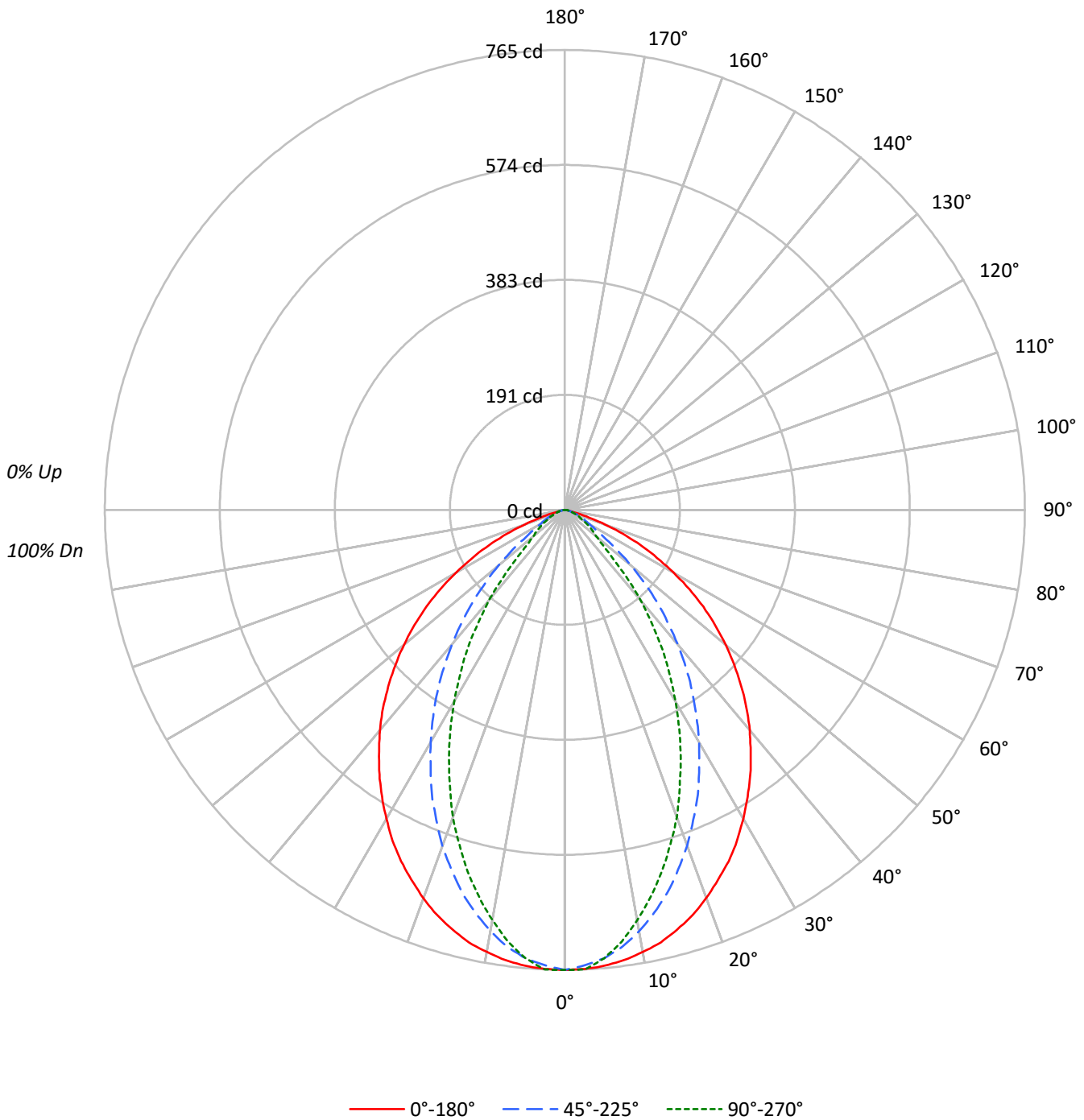
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1106.7 lumens  
Efficiency: N/A  
Efficacy: 42.9 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): 25.8  
Input Voltage (V): 120  
Input Current (Ain): 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°	5269	5269	5269
5°	5262	5175	5175
10°	5221	4977	4847
15°	5150	4700	4443
20°	5037	4360	3990
25°	4898	3975	3465
30°	4716	3548	2923
35°	4520	3106	2370
40°	4300	2622	1757
45°	4043	2102	1060
50°	3739	1541	729
55°	3373	946	607
60°	2866	643	482
65°	2266	490	380
70°	1429	352	314
75°	466	258	258
80°	155	194	230
85°	79	150	150

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4043 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.8	6.4
10°-20°	186.9	16.9
20°-30°	245.9	22.2
30°-40°	241.6	21.8
40°-50°	182.8	16.5
50°-60°	110.8	10.0
60°-70°	52.3	4.7
70°-80°	13.7	1.2
80°-90°	2.0	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°	503.6	45.5
0°-40°	745.2	67.3
0°-60°	1038.7	93.9
0°-90°	1106.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1106.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	765	765	765	765	765	
5°	761	759	749	750	749	72
15°	722	703	659	634	623	203
25°	645	596	523	474	456	296
35°	538	466	370	304	282	336
45°	415	327	216	137	109	320
55°	281	192	79	54	51	250
65°	139	71	30	25	23	137
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°	765.3	765.3	765.3	765.3	765.3
2.5°	764.3	764.3	758.5	765.3	765.3
5°	761.4	759.4	748.8	749.7	748.8
7.5°	755.6	751.7	733.2	728.3	724.4
10°	746.8	739.0	711.8	700.1	693.3
12.5°	737.1	723.5	686.5	670.0	659.3
15°	722.5	703.0	659.3	634.0	623.3
17.5°	706.9	678.7	627.2	597.1	583.4
20°	687.5	654.4	595.1	558.2	544.5
22.5°	666.1	627.2	558.2	517.3	498.8
25°	644.7	596.1	523.2	474.5	456.1
27.5°	620.4	565.0	483.3	432.7	412.3
30°	593.2	533.9	446.3	393.8	367.6
32.5°	565.9	501.8	407.4	350.1	323.8
35°	537.7	465.8	369.5	304.4	282.0
37.5°	507.6	431.7	330.6	262.5	236.3
40°	478.4	397.7	291.7	219.8	195.5
42.5°	447.3	363.7	252.8	178.0	150.7
45°	415.2	326.7	215.9	137.1	108.9
47.5°	382.2	293.7	178.9	101.1	81.7
50°	349.1	258.7	143.9	74.9	68.1
52.5°	315.1	224.6	108.9	62.2	59.3
55°	281.0	192.5	78.8	53.5	50.6
57.5°	246.0	157.5	59.3	45.7	42.8
60°	208.1	126.4	46.7	37.9	35.0
62.5°	173.1	99.2	37.9	31.1	29.2
65°	139.1	71.0	30.1	25.3	23.3
67.5°	104.0	47.6	23.3	19.4	19.4
70°	71.0	31.1	17.5	15.6	15.6
72.5°	42.8	18.5	12.6	12.6	12.6
75°	17.5	11.7	9.7	9.7	9.7
77.5°	5.8	6.8	6.8	7.8	7.8
80°	3.9	3.9	4.9	5.8	5.8
82.5°	1.9	2.9	2.9	3.9	3.9
85°	1.0	1.0	1.9	1.9	1.9
87.5°	0.0	0.0	0.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)