

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: P1061770

Luminaire Tested: S125RDR-S850D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061770  
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-S850D835-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

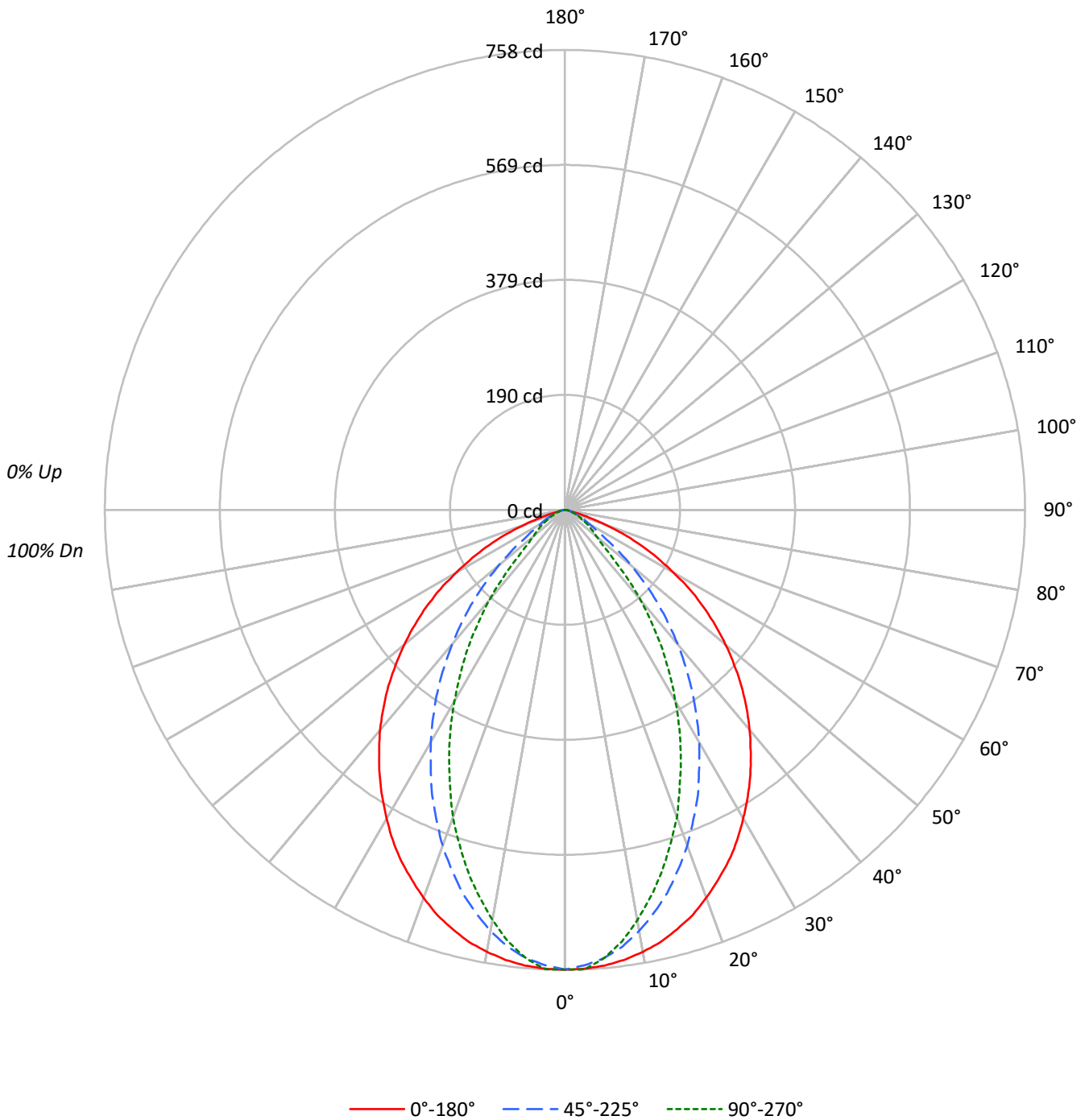
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1096.0 lumens  
Efficiency: N/A  
Efficacy: 42.5 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	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°	5218	5218	5218
5°	5211	5124	5124
10°	5170	4928	4800
15°	5099	4653	4399
20°	4988	4318	3951
25°	4850	3935	3431
30°	4670	3514	2894
35°	4476	3076	2347
40°	4258	2597	1739
45°	4004	2082	1050
50°	3703	1526	722
55°	3341	936	601
60°	2838	636	478
65°	2243	487	376
70°	1415	348	310
75°	460	255	255
80°	155	190	230
85°	79	150	150

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4004 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.1	6.4
10°-20°	185.1	16.9
20°-30°	243.5	22.2
30°-40°	239.2	21.8
40°-50°	181.0	16.5
50°-60°	109.7	10.0
60°-70°	51.8	4.7
70°-80°	13.5	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°	498.6	45.5
0°-40°	737.9	67.3
0°-60°	1028.6	93.9
0°-90°	1096.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1096.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	758	758	758	758	758	
5°	754	752	741	742	741	72
15°	715	696	653	628	617	202
25°	638	590	518	470	452	293
35°	532	461	366	301	279	332
45°	411	324	214	136	108	317
55°	278	191	78	53	50	248
65°	138	70	30	25	23	136
75°	17	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°	757.8	757.8	757.8	757.8	757.8
2.5°	756.8	756.8	751.1	757.8	757.8
5°	754.0	752.0	741.4	742.4	741.4
7.5°	748.2	744.3	726.0	721.2	717.4
10°	739.5	731.8	704.8	693.3	686.6
12.5°	729.9	716.4	679.8	663.4	652.8
15°	715.4	696.2	652.8	627.8	617.2
17.5°	700.0	672.1	621.1	591.2	577.7
20°	680.8	648.0	589.3	552.7	539.2
22.5°	659.6	621.1	552.7	512.3	494.0
25°	638.4	590.3	518.0	469.9	451.6
27.5°	614.3	559.4	478.6	428.5	408.3
30°	587.4	528.6	442.0	390.0	364.0
32.5°	560.4	496.9	403.5	346.6	320.6
35°	532.5	461.2	365.9	301.4	279.2
37.5°	502.6	427.5	327.4	260.0	234.0
40°	473.7	393.8	288.9	217.6	193.5
42.5°	442.9	360.1	250.4	176.2	149.3
45°	411.2	323.5	213.8	135.8	107.8
47.5°	378.4	290.8	177.2	100.1	80.9
50°	345.7	256.1	142.5	74.1	67.4
52.5°	312.0	222.4	107.8	61.6	58.7
55°	278.3	190.7	78.0	53.0	50.1
57.5°	243.6	156.0	58.7	45.3	42.4
60°	206.1	125.2	46.2	37.6	34.7
62.5°	171.4	98.2	37.6	30.8	28.9
65°	137.7	70.3	29.9	25.0	23.1
67.5°	103.0	47.2	23.1	19.3	19.3
70°	70.3	30.8	17.3	15.4	15.4
72.5°	42.4	18.3	12.5	12.5	12.5
75°	17.3	11.6	9.6	9.6	9.6
77.5°	5.8	6.7	6.7	7.7	7.7
80°	3.9	3.9	4.8	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)