

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P1062029

Luminaire Tested: S125RDR-H375D850-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062029  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H375D850-X4F0-XX-UDD-BVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

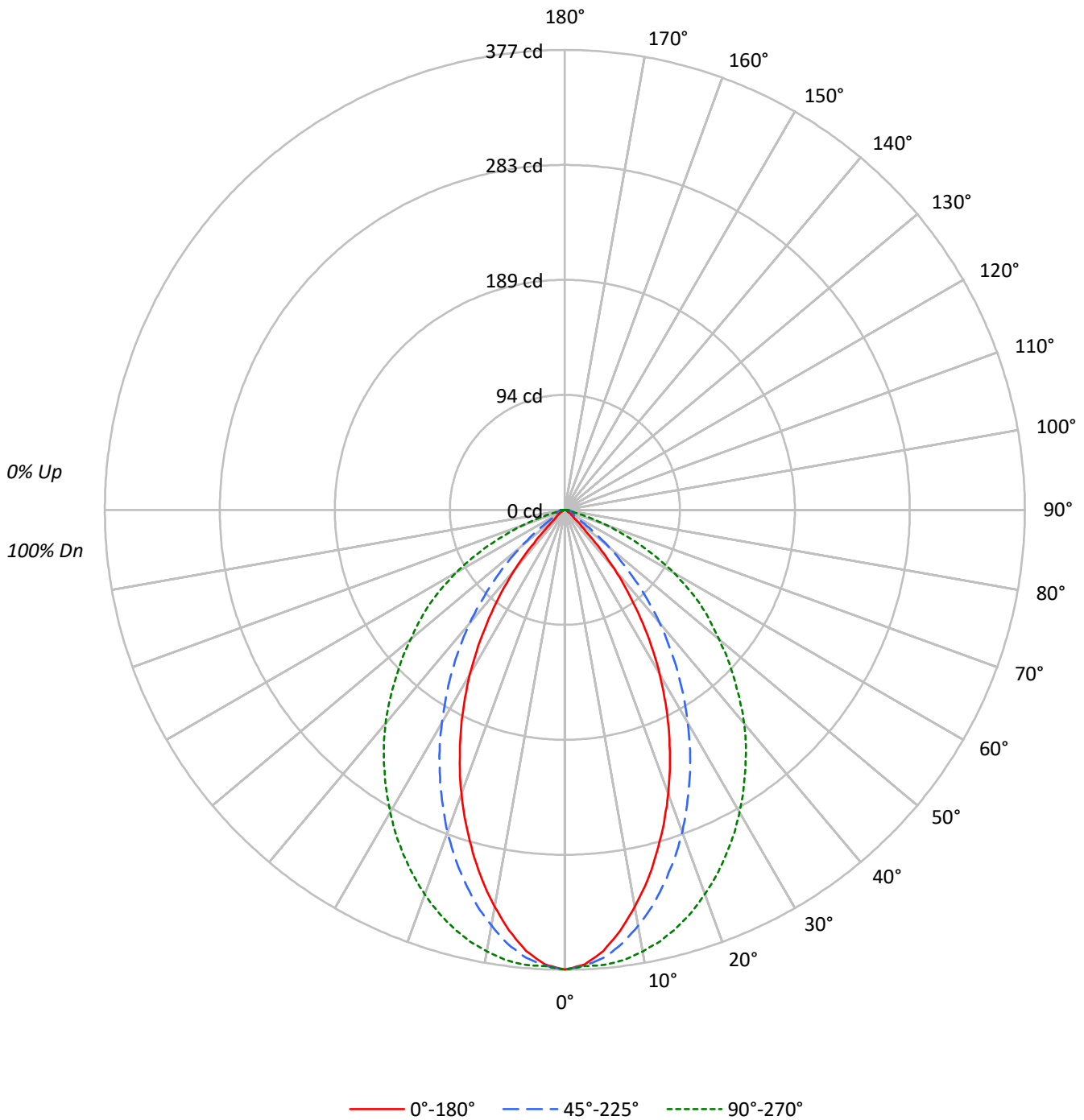
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 484.7 lumens  
Efficiency: N/A  
Efficacy: 41.4 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 11.7  
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				100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				81
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				65
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59				59
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54				54
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49				49
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45				45
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42				42
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39				39

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

	0°	45°	90°
0°	2594	2594	2594
5°	2508	2547	2588
10°	2310	2420	2569
15°	2074	2252	2527
20°	1816	2060	2458
25°	1534	1840	2373
30°	1236	1601	2276
35°	909	1350	2169
40°	567	1088	2056
45°	212	796	1911
50°	100	497	1764
55°	72	206	1633
60°	51	109	1413
65°	31	129	1119
70°	28	149	711
75°	37	149	223
80°	56	182	167
85°	111	292	221

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1911 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.5	7.1
10°-20°	89.5	18.5
20°-30°	114.0	23.5
30°-40°	106.1	21.9
40°-50°	72.7	15.0
50°-60°	40.0	8.3
60°-70°	18.9	3.9
70°-80°	6.0	1.2
80°-90°	3.0	0.6
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°	238.0	49.1
0°-40°	344.0	71.0
0°-60°	456.7	94.2
0°-90°	484.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	484.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	377	377	377	377	377	
5°	363	368	368	371	374	34
15°	291	300	316	340	354	81
25°	202	214	242	281	312	92
35°	108	123	161	214	258	67
45°	22	37	82	145	196	21
55°	6	7	17	81	136	5
65°	2	2	8	30	69	2
75°	1	2	6	6	8	1
85°	1	3	4	3	3	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	376.8	376.8	376.8	376.8	376.8
2.5°	373.1	376.8	374.0	374.0	374.5
5°	362.9	367.5	368.5	371.2	374.5
7.5°	348.0	354.1	358.7	366.6	372.2
10°	330.4	337.8	346.2	359.2	367.5
12.5°	311.8	319.7	332.3	350.4	362.0
15°	291.0	300.2	316.0	339.7	354.5
17.5°	269.6	279.8	299.3	327.2	345.7
20°	247.8	258.5	281.2	312.3	335.5
22.5°	225.1	236.7	261.7	297.0	324.4
25°	201.9	214.4	242.2	281.2	312.3
27.5°	178.7	191.7	222.3	265.0	299.8
30°	155.5	168.9	201.4	248.3	286.3
32.5°	131.8	146.6	181.0	231.6	272.4
35°	108.1	123.4	160.6	213.5	258.0
37.5°	84.9	100.7	140.6	196.3	243.6
40°	63.1	78.9	121.1	179.1	228.8
42.5°	40.8	57.5	100.7	161.5	212.5
45°	21.8	36.7	81.7	144.8	196.3
47.5°	11.6	19.5	63.6	128.1	181.0
50°	9.3	10.7	46.4	111.4	164.7
52.5°	7.4	8.4	29.7	94.2	150.4
55°	6.0	7.0	17.2	80.7	136.0
57.5°	4.6	5.6	9.7	67.3	119.3
60°	3.7	4.2	7.9	53.8	102.6
62.5°	2.3	3.2	7.9	41.8	85.8
65°	1.9	2.3	7.9	29.7	68.7
67.5°	1.9	1.9	7.9	19.5	51.5
70°	1.4	1.4	7.4	12.5	35.3
72.5°	1.4	1.4	6.5	8.4	20.4
75°	1.4	2.3	5.6	6.0	8.4
77.5°	1.4	3.7	5.1	5.1	4.6
80°	1.4	3.7	4.6	4.2	4.2
82.5°	1.4	3.7	3.7	3.7	3.2
85°	1.4	3.2	3.7	3.2	2.8
87.5°	1.4	3.2	3.2	3.2	1.9
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	0.00	0.00	0.00	0.00	0.00	12.36	13.64	12.72	13.96	14.27
	3H	0.00	0.00	0.00	0.00	0.00	13.15	14.28	13.53	14.61	14.98
	4H	0.00	0.00	0.00	0.00	0.00	13.17	14.23	13.58	14.58	14.96
	6H	0.00	0.00	0.00	0.00	0.00	13.13	14.10	13.54	14.47	14.86
	8H	0.00	0.00	0.00	0.00	0.00	13.10	14.02	13.54	14.41	14.82
	12H	0.00	0.00	0.00	0.00	0.00	13.09	13.96	13.52	14.35	14.78
4H	2H	0.00	0.00	0.00	0.00	0.00	12.14	13.20	12.54	13.55	13.93
	3H	0.00	0.00	0.00	0.00	0.00	12.97	13.83	13.38	14.24	14.64
	4H	0.00	0.00	0.00	0.00	0.00	13.00	13.77	13.44	14.19	14.64
	6H	0.00	0.00	0.00	0.22	0.69	12.99	13.66	13.46	14.10	14.57
	8H	0.00	0.47	0.32	0.92	1.39	12.97	13.59	13.44	14.04	14.51
	12H	0.59	1.13	1.07	1.62	2.09	12.98	13.52	13.46	14.01	14.48
8H	4H	0.00	0.27	0.12	0.72	1.19	12.89	13.51	13.36	13.96	14.43
	6H	1.39	1.89	1.89	2.39	2.87	12.89	13.40	13.39	13.89	14.38
	8H	2.34	2.79	2.86	3.31	3.80	12.90	13.35	13.42	13.87	14.36
	12H	3.26	3.66	3.78	4.16	4.73	12.94	13.34	13.46	13.84	14.41
12H	4H	0.00	0.50	0.44	0.98	1.46	12.85	13.39	13.33	13.88	14.35
	6H	1.84	2.30	2.37	2.81	3.31	12.85	13.30	13.37	13.82	14.31
	8H	2.97	3.37	3.49	3.87	4.44	12.88	13.29	13.40	13.78	14.35