

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: P1062014

Luminaire Tested: S125RDR-H375D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062014  
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: S125RDR-H375D835-X4F0-XX-UDD-SVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

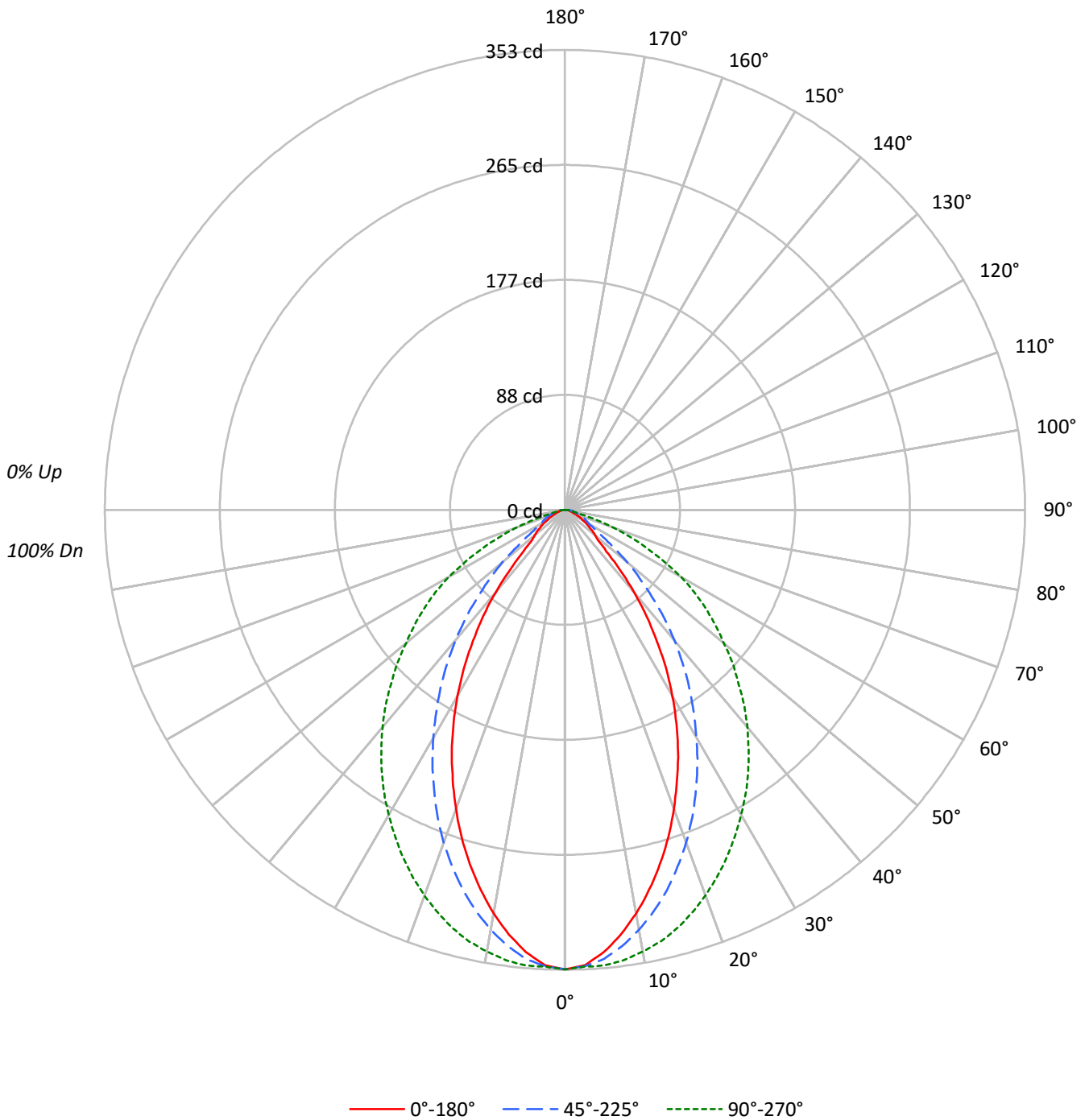
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 509.3 lumens  
Efficiency: N/A  
Efficacy: 43.5 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): 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	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°	2428	2428	2428
5°	2357	2391	2426
10°	2200	2288	2407
15°	2007	2153	2371
20°	1790	1992	2308
25°	1560	1805	2234
30°	1310	1604	2149
35°	1034	1396	2061
40°	741	1173	1956
45°	436	921	1834
50°	322	663	1703
55°	271	402	1582
60°	219	293	1411
65°	171	280	1131
70°	143	262	767
75°	133	234	335
80°	131	234	214
85°	166	300	229

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1834 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.5	6.4
10°-20°	85.4	16.8
20°-30°	111.6	21.9
30°-40°	108.6	21.3
40°-50°	81.2	15.9
50°-60°	50.3	9.9
60°-70°	26.4	5.2
70°-80°	9.6	1.9
80°-90°	3.6	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°	229.4	45.1
0°-40°	338.0	66.4
0°-60°	469.5	92.2
0°-90°	509.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	509.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	353	353	353	353	353	
5°	341	346	346	348	351	32
15°	282	290	302	320	333	79
25°	205	216	238	270	294	94
35°	123	136	166	210	245	77
45°	45	59	95	148	188	38
55°	23	24	34	87	132	20
65°	10	11	17	37	69	11
75°	5	6	9	10	13	5
85°	2	4	4	4	3	2
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	352.7	352.7	352.7	352.7	352.7
2.5°	349.8	352.7	350.6	350.6	351.0
5°	341.0	345.6	346.0	348.1	351.0
7.5°	328.8	334.3	337.6	343.9	348.5
10°	314.6	320.9	327.2	337.6	344.3
12.5°	298.7	306.2	315.5	329.7	339.3
15°	281.6	289.9	302.1	320.5	332.6
17.5°	263.6	272.4	287.4	309.6	324.2
20°	244.3	254.0	271.9	297.0	315.0
22.5°	224.7	235.5	255.2	283.7	305.0
25°	205.4	215.9	237.6	269.8	294.1
27.5°	185.3	196.2	220.1	255.6	282.4
30°	164.8	176.6	201.7	241.0	270.3
32.5°	144.3	156.5	183.7	225.9	258.1
35°	123.0	136.4	166.1	210.4	245.2
37.5°	102.9	117.1	148.1	194.5	231.4
40°	82.4	97.1	130.5	179.1	217.6
42.5°	62.3	77.4	112.5	163.2	203.7
45°	44.8	58.6	94.6	147.7	188.3
47.5°	34.3	42.3	77.8	131.8	174.5
50°	30.1	32.6	61.9	116.3	159.0
52.5°	26.4	28.0	46.0	101.2	145.6
55°	22.6	23.8	33.5	87.0	131.8
57.5°	19.2	20.5	25.5	74.1	117.6
60°	15.9	17.2	21.3	61.1	102.5
62.5°	13.4	13.8	19.2	48.9	85.8
65°	10.5	11.3	17.2	36.8	69.4
67.5°	8.8	9.2	15.1	26.4	53.6
70°	7.1	7.5	13.0	18.4	38.1
72.5°	6.3	6.3	10.9	13.4	24.3
75°	5.0	5.9	8.8	9.6	12.6
77.5°	4.2	5.9	7.5	7.1	6.7
80°	3.3	5.4	5.9	5.9	5.4
82.5°	2.9	4.6	5.0	4.6	4.2
85°	2.1	3.8	3.8	3.8	2.9
87.5°	1.7	3.3	2.9	2.9	2.1
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	2.87	4.22	3.23	4.53	4.84	12.58	13.93	12.94	14.24	14.55
	3H	3.71	4.90	4.09	5.23	5.60	13.49	14.69	13.87	15.02	15.38
	4H	4.07	5.18	4.47	5.53	5.92	13.59	14.71	13.99	15.06	15.44
	6H	4.44	5.47	4.85	5.84	6.23	13.57	14.60	13.99	14.97	15.36
	8H	4.62	5.59	5.05	5.98	6.38	13.56	14.53	13.99	14.93	15.33
	12H	4.78	5.71	5.21	6.09	6.52	13.55	14.48	13.98	14.86	15.29
4H	2H	3.70	4.82	4.10	5.17	5.55	12.43	13.54	12.83	13.90	14.28
	3H	4.76	5.67	5.17	6.08	6.48	13.42	14.33	13.83	14.74	15.14
	4H	5.22	6.03	5.65	6.45	6.90	13.55	14.36	13.98	14.78	15.23
	6H	5.77	6.48	6.23	6.92	7.39	13.58	14.29	14.04	14.73	15.20
	8H	6.03	6.69	6.50	7.13	7.60	13.58	14.24	14.05	14.69	15.16
	12H	6.27	6.85	6.76	7.34	7.81	13.59	14.17	14.07	14.65	15.13
8H	4H	5.77	6.43	6.24	6.88	7.35	13.47	14.13	13.94	14.58	15.05
	6H	6.55	7.09	7.05	7.58	8.06	13.53	14.07	14.03	14.57	15.05
	8H	6.96	7.44	7.48	7.96	8.45	13.56	14.04	14.08	14.56	15.05
	12H	7.38	7.81	7.89	8.30	8.87	13.61	14.04	14.13	14.54	15.11
12H	4H	5.83	6.42	6.32	6.90	7.37	13.44	14.02	13.92	14.50	14.98
	6H	6.69	7.18	7.21	7.69	8.18	13.50	13.98	14.02	14.50	14.99
	8H	7.21	7.64	7.73	8.14	8.71	13.56	13.99	14.08	14.49	15.06