

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: P1061849

Luminaire Tested: S125RDRP-H1090D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061849  
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: S125RDRP-H1090D835-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

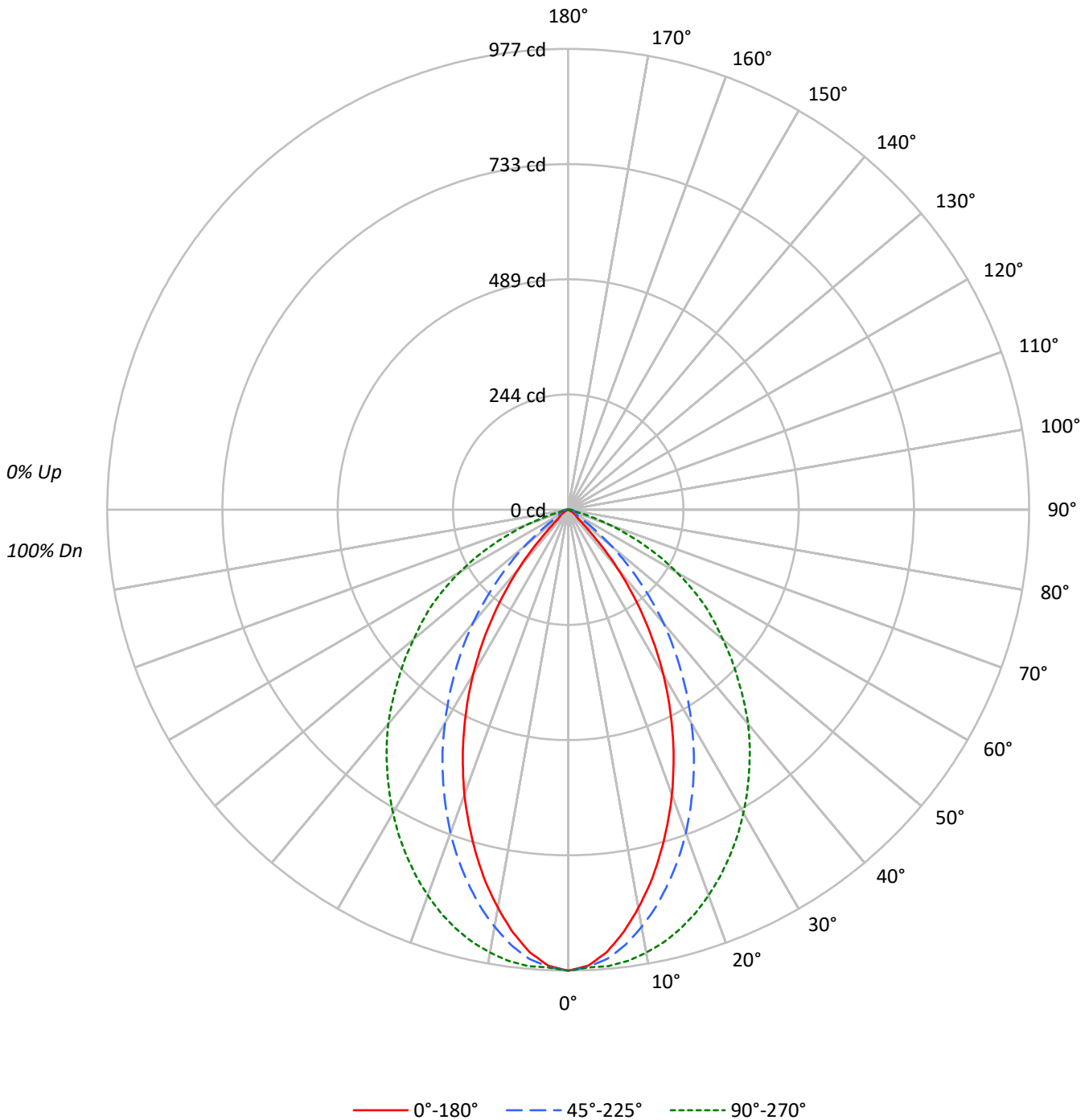
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1256.9 lumens  
Efficiency: N/A  
Efficacy: 40.3 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): 31.2  
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	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°	6729	6729	6729
5°	6505	6605	6713
10°	5991	6277	6664
15°	5379	5842	6554
20°	4709	5344	6376
25°	3977	4772	6154
30°	3206	4152	5904
35°	2357	3500	5625
40°	1471	2823	5333
45°	551	2062	4957
50°	258	1290	4577
55°	187	534	4233
60°	132	282	3663
65°	78	334	2902
70°	72	389	1842
75°	96	383	577
80°	143	476	428
85°	284	758	569

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4957 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.6	7.1
10°-20°	232.0	18.5
20°-30°	295.5	23.5
30°-40°	275.1	21.9
40°-50°	188.5	15.0
50°-60°	103.8	8.3
60°-70°	49.1	3.9
70°-80°	15.4	1.2
80°-90°	7.9	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°	617.2	49.1
0°-40°	892.2	71.0
0°-60°	1184.5	94.2
0°-90°	1256.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1256.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	977	977	977	977	977	
5°	941	953	956	963	971	87
15°	755	779	820	881	920	210
25°	524	556	628	729	810	239
35°	280	320	416	554	669	174
45°	57	95	212	376	509	54
55°	16	18	44	209	353	14
65°	5	6	20	77	178	5
75°	4	6	14	16	22	4
85°	4	8	10	8	7	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	977.3	977.3	977.3	977.3	977.3
2.5°	967.6	977.3	970.1	970.1	971.3
5°	941.2	953.2	955.6	962.8	971.3
7.5°	902.7	918.3	930.3	950.8	965.2
10°	856.9	876.2	897.8	931.5	953.2
12.5°	808.8	829.2	861.7	908.7	938.8
15°	754.6	778.7	819.6	881.0	919.5
17.5°	699.3	725.7	776.3	848.5	896.6
20°	642.7	670.4	729.3	810.0	870.2
22.5°	583.7	613.8	678.8	770.3	841.3
25°	523.5	556.0	628.2	729.3	810.0
27.5°	463.4	497.1	576.5	687.2	777.5
30°	403.2	438.1	522.3	643.9	742.6
32.5°	341.8	380.3	469.4	600.6	706.5
35°	280.4	320.1	416.4	553.6	669.2
37.5°	220.2	261.2	364.7	509.1	631.9
40°	163.7	204.6	314.1	464.6	593.3
42.5°	105.9	149.2	261.2	418.8	551.2
45°	56.6	95.1	211.8	375.5	509.1
47.5°	30.1	50.5	164.9	332.2	469.4
50°	24.1	27.7	120.4	288.8	427.3
52.5°	19.3	21.7	77.0	244.3	389.9
55°	15.6	18.1	44.5	209.4	352.6
57.5°	12.0	14.4	25.3	174.5	309.3
60°	9.6	10.8	20.5	139.6	266.0
62.5°	6.0	8.4	20.5	108.3	222.7
65°	4.8	6.0	20.5	77.0	178.1
67.5°	4.8	4.8	20.5	50.5	133.6
70°	3.6	3.6	19.3	32.5	91.5
72.5°	3.6	3.6	16.8	21.7	53.0
75°	3.6	6.0	14.4	15.6	21.7
77.5°	3.6	9.6	13.2	13.2	12.0
80°	3.6	9.6	12.0	10.8	10.8
82.5°	3.6	9.6	9.6	9.6	8.4
85°	3.6	8.4	9.6	8.4	7.2
87.5°	3.6	8.4	8.4	8.4	4.8
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	15.67	16.95	16.03	17.27	17.58
	3H	0.00	0.00	0.00	0.00	0.00	16.46	17.59	16.84	17.92	18.29
	4H	0.00	0.00	0.00	0.00	0.00	16.48	17.54	16.88	17.89	18.27
	6H	0.00	0.31	0.00	0.68	1.07	16.44	17.41	16.85	17.78	18.17
	8H	0.02	0.93	0.45	1.33	1.73	16.41	17.33	16.85	17.72	18.13
	12H	0.76	1.64	1.20	2.02	2.45	16.40	17.27	16.83	17.66	18.09
4H	2H	0.00	0.50	0.00	0.86	1.24	15.45	16.51	15.85	16.86	17.24
	3H	0.32	1.18	0.73	1.58	1.99	16.28	17.14	16.69	17.55	17.95
	4H	0.91	1.68	1.35	2.10	2.55	16.31	17.08	16.75	17.50	17.95
	6H	2.40	3.07	2.87	3.51	3.98	16.30	16.96	16.76	17.41	17.88
	8H	3.14	3.76	3.61	4.21	4.68	16.28	16.90	16.75	17.35	17.82
	12H	3.88	4.43	4.37	4.91	5.39	16.29	16.83	16.77	17.32	17.79
8H	4H	2.95	3.57	3.42	4.02	4.49	16.20	16.82	16.67	17.27	17.74
	6H	4.69	5.20	5.19	5.69	6.18	16.20	16.71	16.70	17.20	17.68
	8H	5.64	6.10	6.16	6.61	7.10	16.21	16.66	16.73	17.18	17.67
	12H	6.57	6.98	7.09	7.47	8.04	16.25	16.65	16.77	17.15	17.72
12H	4H	3.25	3.80	3.74	4.28	4.75	16.16	16.70	16.64	17.19	17.66
	6H	5.15	5.60	5.67	6.12	6.61	16.16	16.61	16.68	17.13	17.62
	8H	6.28	6.68	6.79	7.17	7.75	16.19	16.60	16.71	17.09	17.66