

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: P1061894

Luminaire Tested: S125RDR-H1090D935-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061894  
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-H1090D935-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, 90 CRI LEDS  
Ballast/Driver: -

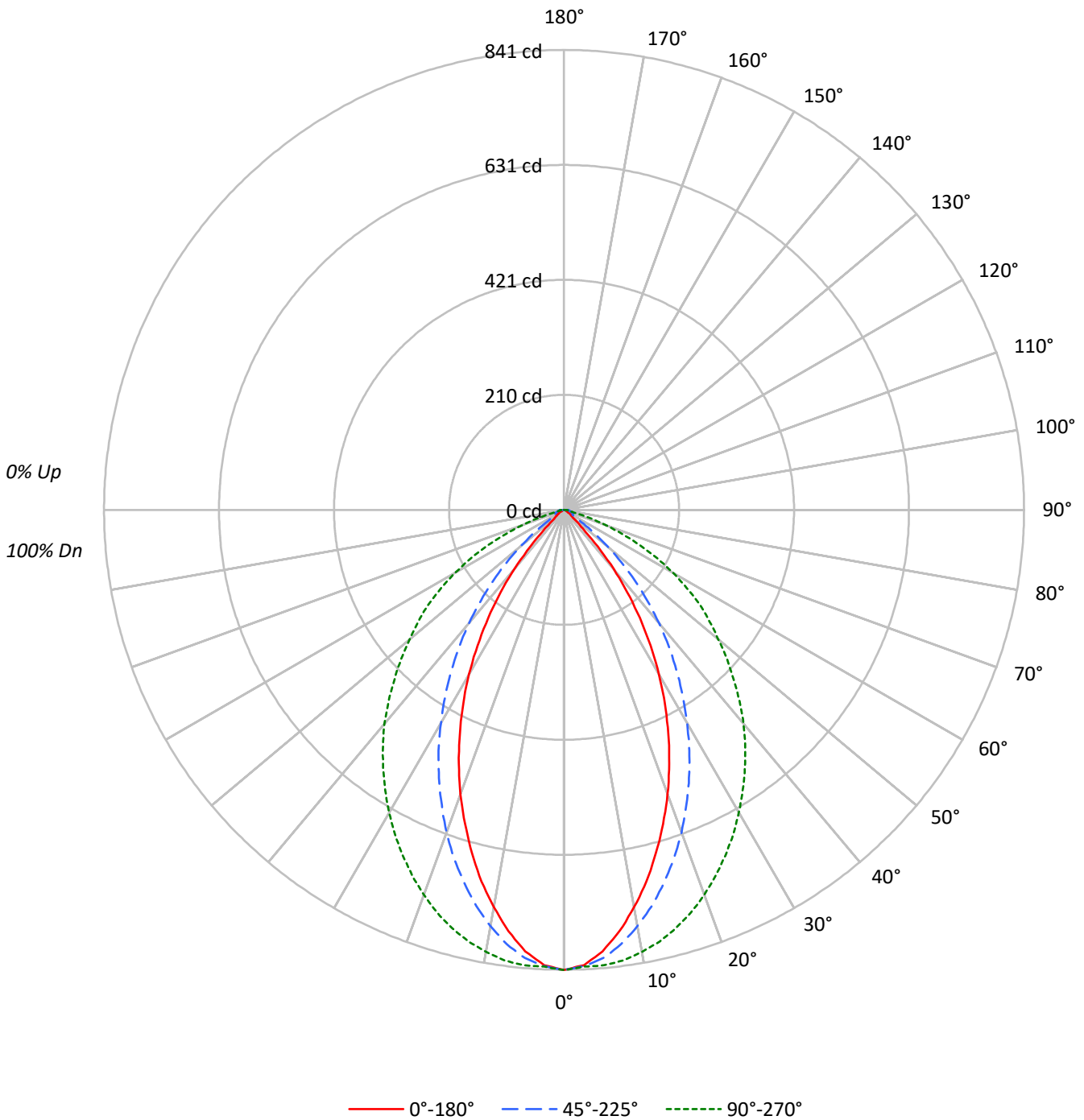
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1082.3 lumens  
Efficiency: N/A  
Efficacy: 34.7 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 (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°	5793	5793	5793
5°	5600	5687	5779
10°	5158	5404	5738
15°	4631	5030	5643
20°	4055	4601	5489
25°	3425	4109	5298
30°	2760	3575	5083
35°	2029	3013	4843
40°	1266	2431	4592
45°	474	1776	4268
50°	222	1110	3941
55°	162	460	3644
60°	114	242	3153
65°	67	287	2499
70°	62	334	1586
75°	82	330	497
80°	123	412	369
85°	245	656	490

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4268 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.2	7.1
10°-20°	199.8	18.5
20°-30°	254.5	23.5
30°-40°	236.8	21.9
40°-50°	162.3	15.0
50°-60°	89.4	8.3
60°-70°	42.3	3.9
70°-80°	13.3	1.2
80°-90°	6.8	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°	531.4	49.1
0°-40°	768.2	71.0
0°-60°	1019.8	94.2
0°-90°	1082.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1082.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	841	841	841	841	841	
5°	810	821	823	829	836	75
15°	650	670	706	758	792	181
25°	451	479	541	628	697	206
35°	241	276	358	477	576	150
45°	49	82	182	323	438	46
55°	14	16	38	180	304	12
65°	4	5	18	66	153	5
75°	3	5	12	14	19	3
85°	3	7	8	7	6	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	841.4	841.4	841.4	841.4	841.4
2.5°	833.1	841.4	835.2	835.2	836.2
5°	810.3	820.7	822.8	829.0	836.2
7.5°	777.2	790.7	801.0	818.6	831.1
10°	737.8	754.4	773.0	802.1	820.7
12.5°	696.4	714.0	741.9	782.4	808.3
15°	649.7	670.4	705.7	758.5	791.7
17.5°	602.1	624.9	668.4	730.6	772.0
20°	553.4	577.2	628.0	697.4	749.2
22.5°	502.6	528.5	584.4	663.2	724.3
25°	450.8	478.7	540.9	628.0	697.4
27.5°	399.0	428.0	496.4	591.7	669.4
30°	347.1	377.2	449.7	554.4	639.4
32.5°	294.3	327.5	404.1	517.1	608.3
35°	241.4	275.6	358.5	476.7	576.2
37.5°	189.6	224.9	314.0	438.3	544.0
40°	140.9	176.2	270.5	400.0	510.9
42.5°	91.2	128.5	224.9	360.6	474.6
45°	48.7	81.9	182.4	323.3	438.3
47.5°	25.9	43.5	142.0	286.0	404.1
50°	20.7	23.8	103.6	248.7	367.9
52.5°	16.6	18.7	66.3	210.4	335.7
55°	13.5	15.5	38.3	180.3	303.6
57.5°	10.4	12.4	21.8	150.3	266.3
60°	8.3	9.3	17.6	120.2	229.0
62.5°	5.2	7.3	17.6	93.3	191.7
65°	4.1	5.2	17.6	66.3	153.4
67.5°	4.1	4.1	17.6	43.5	115.0
70°	3.1	3.1	16.6	28.0	78.8
72.5°	3.1	3.1	14.5	18.7	45.6
75°	3.1	5.2	12.4	13.5	18.7
77.5°	3.1	8.3	11.4	11.4	10.4
80°	3.1	8.3	10.4	9.3	9.3
82.5°	3.1	8.3	8.3	8.3	7.3
85°	3.1	7.3	8.3	7.3	6.2
87.5°	3.1	7.3	7.3	7.3	4.1
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	0.00	0.00	0.00	0.00	0.00	15.15	16.44	15.51	16.75	17.06
	3H	0.00	0.00	0.00	0.00	0.00	15.94	17.07	16.32	17.40	17.77
	4H	0.00	0.00	0.00	0.00	0.00	15.96	17.02	16.37	17.37	17.76
	6H	0.00	0.00	0.00	0.17	0.56	15.92	16.89	16.33	17.26	17.66
	8H	0.00	0.42	0.00	0.81	1.22	15.90	16.81	16.33	17.21	17.61
	12H	0.25	1.13	0.68	1.51	1.94	15.88	16.76	16.31	17.14	17.57
4H	2H	0.00	0.00	0.00	0.33	0.71	14.93	15.99	15.34	16.34	16.73
	3H	0.00	0.65	0.20	1.06	1.46	15.76	16.62	16.17	17.03	17.43
	4H	0.39	1.16	0.83	1.58	2.03	15.80	16.57	16.23	16.99	17.43
	6H	1.89	2.56	2.36	3.00	3.47	15.78	16.45	16.25	16.89	17.36
	8H	2.63	3.25	3.10	3.70	4.17	15.77	16.39	16.24	16.83	17.31
	12H	3.38	3.92	3.86	4.41	4.88	15.77	16.31	16.26	16.80	17.27
8H	4H	2.44	3.06	2.91	3.50	3.98	15.68	16.30	16.15	16.75	17.22
	6H	4.19	4.69	4.69	5.19	5.67	15.68	16.19	16.19	16.69	17.17
	8H	5.14	5.59	5.66	6.11	6.60	15.69	16.14	16.21	16.66	17.15
	12H	6.08	6.48	6.59	6.97	7.55	15.74	16.14	16.25	16.63	17.20
12H	4H	2.74	3.29	3.23	3.77	4.24	15.64	16.19	16.13	16.67	17.14
	6H	4.65	5.10	5.17	5.62	6.11	15.64	16.09	16.16	16.61	17.10
	8H	5.78	6.18	6.29	6.68	7.25	15.68	16.08	16.19	16.57	17.15