

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: P1061957

Luminaire Tested: S125RDR-H1270D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061957  
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-H1270D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

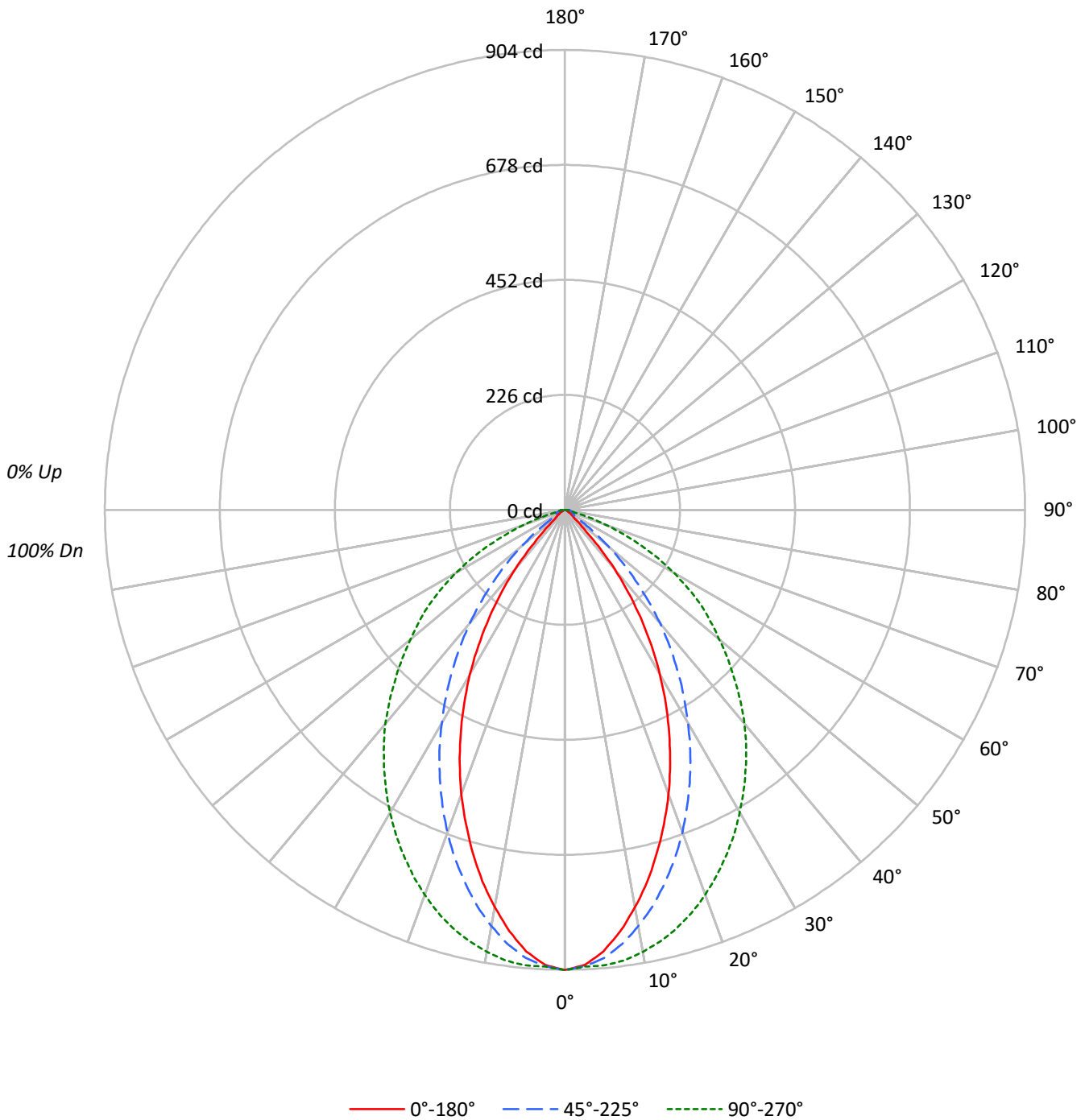
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1163.2 lumens  
Efficiency: N/A  
Efficacy: 31.9 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): 36.5  
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	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	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39

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

	0°	45°	90°
0°	6227	6227	6227
5°	6020	6112	6212
10°	5544	5809	6167
15°	4978	5407	6065
20°	4358	4945	5901
25°	3681	4417	5695
30°	2966	3843	5464
35°	2181	3239	5205
40°	1362	2613	4935
45°	509	1908	4587
50°	239	1193	4235
55°	174	495	3917
60°	123	260	3389
65°	73	308	2685
70°	66	358	1703
75°	88	356	532
80°	131	440	397
85°	261	703	529

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4587 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.9	7.1
10°-20°	214.7	18.5
20°-30°	273.5	23.5
30°-40°	254.6	21.9
40°-50°	174.4	15.0
50°-60°	96.0	8.3
60°-70°	45.5	3.9
70°-80°	14.3	1.2
80°-90°	7.3	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°	571.1	49.1
0°-40°	825.7	71.0
0°-60°	1096.1	94.2
0°-90°	1163.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1163.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	904	904	904	904	904	
5°	871	882	884	891	899	81
15°	698	721	758	815	851	195
25°	484	515	581	675	750	221
35°	260	296	385	512	619	161
45°	52	88	196	348	471	50
55°	14	17	41	194	326	13
65°	4	6	19	71	165	5
75°	3	6	13	14	20	3
85°	3	8	9	8	7	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	904.4	904.4	904.4	904.4	904.4
2.5°	895.5	904.4	897.7	897.7	898.8
5°	871.0	882.1	884.3	891.0	898.8
7.5°	835.3	849.8	860.9	879.9	893.2
10°	793.0	810.8	830.9	862.1	882.1
12.5°	748.5	767.4	797.5	840.9	868.7
15°	698.3	720.6	758.5	815.3	850.9
17.5°	647.1	671.6	718.4	785.2	829.8
20°	594.8	620.4	674.9	749.6	805.3
22.5°	540.2	568.0	628.2	712.8	778.5
25°	484.5	514.6	581.4	674.9	749.6
27.5°	428.8	460.0	533.5	636.0	719.5
30°	373.1	405.4	483.4	595.9	687.2
32.5°	316.3	352.0	434.4	555.8	653.8
35°	259.5	296.3	385.4	512.3	619.3
37.5°	203.8	241.7	337.5	471.1	584.7
40°	151.5	189.3	290.7	429.9	549.1
42.5°	98.0	138.1	241.7	387.6	510.1
45°	52.3	88.0	196.0	347.5	471.1
47.5°	27.8	46.8	152.6	307.4	434.4
50°	22.3	25.6	111.4	267.3	395.4
52.5°	17.8	20.0	71.3	226.1	360.9
55°	14.5	16.7	41.2	193.8	326.3
57.5°	11.1	13.4	23.4	161.5	286.2
60°	8.9	10.0	18.9	129.2	246.1
62.5°	5.6	7.8	18.9	100.2	206.0
65°	4.5	5.6	18.9	71.3	164.8
67.5°	4.5	4.5	18.9	46.8	123.6
70°	3.3	3.3	17.8	30.1	84.6
72.5°	3.3	3.3	15.6	20.0	49.0
75°	3.3	5.6	13.4	14.5	20.0
77.5°	3.3	8.9	12.3	12.3	11.1
80°	3.3	8.9	11.1	10.0	10.0
82.5°	3.3	8.9	8.9	8.9	7.8
85°	3.3	7.8	8.9	7.8	6.7
87.5°	3.3	7.8	7.8	7.8	4.5
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	15.40	16.68	15.76	17.00	17.31
	3H	0.00	0.00	0.00	0.00	0.00	16.19	17.32	16.57	17.65	18.02
	4H	0.00	0.00	0.00	0.00	0.00	16.21	17.27	16.62	17.62	18.01
	6H	0.00	0.05	0.00	0.42	0.81	16.17	17.14	16.58	17.51	17.90
	8H	0.00	0.66	0.18	1.05	1.46	16.14	17.06	16.58	17.45	17.86
	12H	0.48	1.36	0.92	1.74	2.18	16.13	17.00	16.56	17.39	17.82
4H	2H	0.00	0.24	0.00	0.59	0.97	15.18	16.24	15.59	16.59	16.98
	3H	0.05	0.91	0.46	1.32	1.72	16.01	16.87	16.42	17.28	17.68
	4H	0.65	1.42	1.08	1.84	2.28	16.04	16.81	16.48	17.23	17.68
	6H	2.14	2.80	2.60	3.25	3.71	16.03	16.70	16.50	17.14	17.61
	8H	2.87	3.49	3.34	3.94	4.41	16.02	16.63	16.49	17.08	17.55
	12H	3.61	4.15	4.09	4.64	5.11	16.02	16.56	16.50	17.05	17.52
8H	4H	2.69	3.31	3.16	3.76	4.23	15.93	16.55	16.40	17.00	17.47
	6H	4.43	4.94	4.93	5.43	5.92	15.93	16.44	16.43	16.93	17.42
	8H	5.38	5.83	5.90	6.35	6.84	15.94	16.39	16.46	16.91	17.40
	12H	6.31	6.71	6.83	7.21	7.78	15.98	16.38	16.50	16.88	17.45
12H	4H	2.99	3.54	3.48	4.02	4.50	15.89	16.43	16.38	16.92	17.39
	6H	4.89	5.34	5.41	5.86	6.35	15.89	16.34	16.41	16.86	17.35
	8H	6.02	6.42	6.53	6.91	7.49	15.93	16.33	16.44	16.82	17.39