

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: P1057918

Luminaire Tested: S122RDRP-S290D930-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1057918  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S290D930-X4F0-XX-UDD-SVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

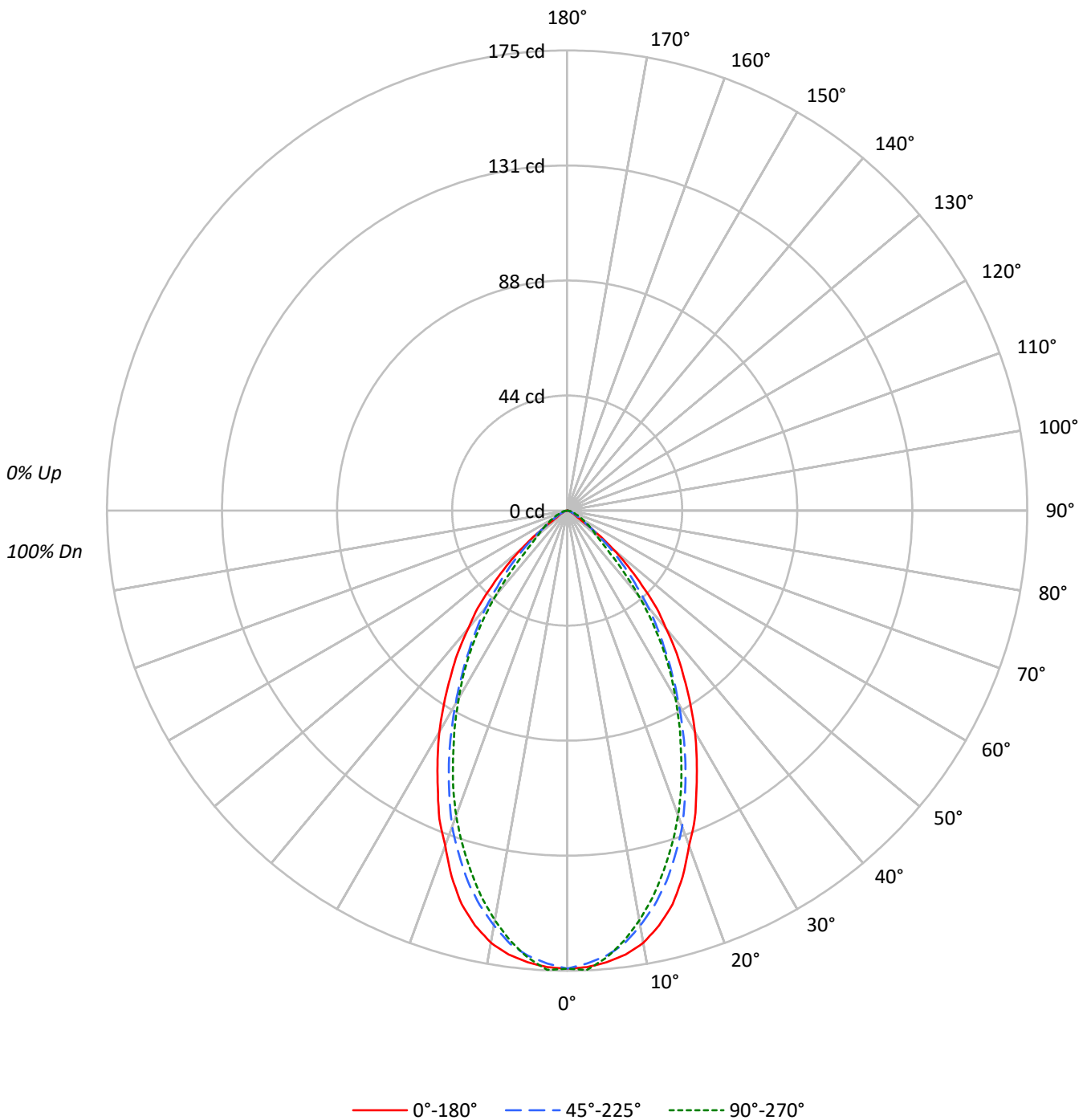
Lumens per Lamp: N/A  
Luminaire Lumens: 187.3 lumens  
Efficiency: N/A  
Efficacy: 15.0 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 12.5  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	81	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44

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

	0°	45°	90°
0°	3214	3214	3214
5°	3193	3149	3162
10°	3127	3002	2964
15°	2961	2789	2709
20°	2663	2512	2423
25°	2370	2166	2087
30°	2073	1807	1756
35°	1746	1464	1417
40°	1407	1156	1021
45°	1052	835	608
50°	657	540	399
55°	225	290	325
60°	129	181	258
65°	92	122	196
70°	76	92	151
75°	50	71	121
80°	32	74	106
85°	0	0	64

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1052 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	16.1	8.6
10°-20°	41.1	21.9
20°-30°	49.5	26.4
30°-40°	42.3	22.6
40°-50°	24.8	13.2
50°-60°	9.0	4.8
60°-70°	3.2	1.7
70°-80°	1.3	0.7
80°-90°	0.2	0.1
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°	106.6	56.9
0°-40°	148.9	79.5
0°-60°	182.6	97.5
0°-90°	187.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	187.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	174	174	174	174	174	
5°	172	173	170	171	171	16
15°	155	153	146	143	142	43
25°	116	112	106	105	102	53
35°	78	72	65	64	63	48
45°	40	36	32	27	23	31
55°	7	10	9	9	10	9
65°	2	2	3	4	4	2
75°	1	1	1	1	2	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	174.2	174.2	174.2	174.2	174.2
2.5°	173.8	174.2	172.4	174.2	174.8
5°	172.4	172.8	170.0	170.7	170.7
7.5°	170.3	170.0	166.2	165.5	165.1
10°	166.9	165.8	160.2	159.2	158.2
12.5°	161.6	159.6	153.6	151.9	150.5
15°	155.0	152.6	146.0	143.2	141.8
17.5°	146.0	143.2	137.0	134.2	132.8
20°	135.6	132.8	127.9	124.8	123.4
22.5°	126.9	122.4	117.1	115.1	113.3
25°	116.4	111.6	106.4	104.6	102.5
27.5°	106.7	100.8	95.6	94.2	92.5
30°	97.3	91.1	84.8	84.8	82.4
32.5°	87.2	81.3	74.7	74.4	73.0
35°	77.5	71.6	65.0	64.3	62.9
37.5°	68.5	62.6	56.3	54.2	52.5
40°	58.4	53.2	48.0	44.5	42.4
42.5°	50.4	44.5	39.3	35.1	32.3
45°	40.3	36.2	32.0	26.8	23.3
47.5°	31.3	28.5	25.0	19.1	17.4
50°	22.9	21.6	18.8	14.3	13.9
52.5°	14.6	15.3	13.6	11.1	12.2
55°	7.0	9.7	9.0	9.4	10.1
57.5°	4.5	4.9	6.6	7.6	8.3
60°	3.5	3.5	4.9	6.3	7.0
62.5°	2.8	2.8	3.8	5.2	5.6
65°	2.1	2.4	2.8	3.8	4.5
67.5°	1.7	1.7	2.1	3.1	3.5
70°	1.4	1.4	1.7	2.4	2.8
72.5°	1.0	1.0	1.4	2.1	2.1
75°	0.7	1.0	1.0	1.4	1.7
77.5°	0.7	0.7	0.7	1.0	1.4
80°	0.3	0.3	0.7	0.7	1.0
82.5°	0.3	0.3	0.3	0.3	0.7
85°	0.0	0.0	0.0	0.3	0.3
87.5°	0.0	0.0	0.0	0.0	0.0
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	1.14	0.34	1.45	1.77	3.30	4.46	3.67	4.78	5.09
	3H	0.48	1.50	0.86	1.83	2.20	4.03	5.06	4.42	5.39	5.76
	4H	0.60	1.55	1.00	1.90	2.28	4.25	5.20	4.66	5.55	5.94
	6H	0.67	1.53	1.08	1.91	2.30	4.40	5.26	4.81	5.64	6.03
	8H	0.66	1.47	1.09	1.87	2.27	4.43	5.24	4.86	5.64	6.04
	12H	0.62	1.40	1.05	1.78	2.21	4.42	5.20	4.85	5.58	6.02
4H	2H	0.28	1.23	0.69	1.58	1.97	3.27	4.22	3.68	4.57	4.96
	3H	0.92	1.69	1.34	2.09	2.50	4.15	4.92	4.57	5.33	5.73
	4H	1.14	1.82	1.58	2.24	2.69	4.43	5.12	4.87	5.54	5.98
	6H	1.25	1.83	1.71	2.28	2.75	4.65	5.24	5.12	5.68	6.15
	8H	1.24	1.79	1.72	2.24	2.71	4.69	5.24	5.16	5.69	6.16
	12H	1.20	1.68	1.69	2.17	2.64	4.70	5.18	5.19	5.66	6.14
8H	4H	1.24	1.79	1.71	2.24	2.71	4.36	4.91	4.83	5.35	5.83
	6H	1.39	1.83	1.90	2.33	2.82	4.61	5.05	5.12	5.55	6.04
	8H	1.41	1.80	1.93	2.32	2.82	4.67	5.06	5.19	5.58	6.07
	12H	1.38	1.72	1.90	2.22	2.80	4.71	5.05	5.23	5.55	6.13
12H	4H	1.23	1.70	1.72	2.19	2.67	4.31	4.79	4.80	5.28	5.75
	6H	1.38	1.78	1.91	2.30	2.79	4.56	4.96	5.09	5.47	5.97
	8H	1.43	1.77	1.94	2.27	2.85	4.64	4.98	5.15	5.48	6.06