

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: P1058351

Luminaire Tested: S122RDRP-H290D950-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058351  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-H290D950-X4F0-XX-UDD-SVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

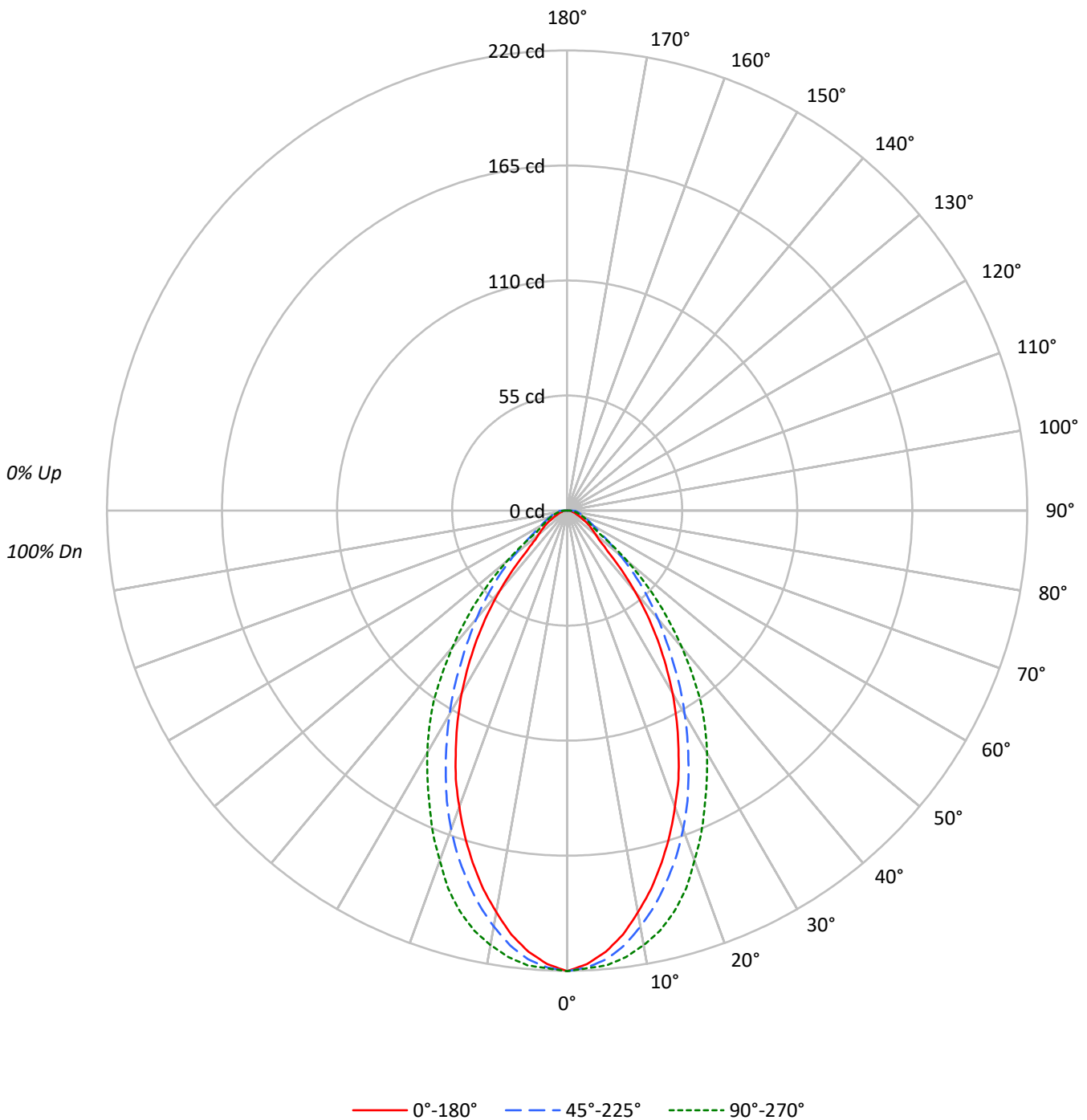
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 265.7 lumens  
Efficiency: N/A  
Efficacy: 22.7 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 0.97 / 0.94  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 11.7  
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	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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89																												
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80																												
3	97	89	83	78	95	88	82	77	85	80	76	82	78	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	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59																												
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54																												
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50																												
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46																												
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42																												
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39																												

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

	0°	45°	90°
0°	4063	4063	4063
5°	3921	3988	4042
10°	3654	3783	3952
15°	3330	3507	3788
20°	2959	3183	3495
25°	2563	2795	3168
30°	2148	2397	2849
35°	1694	1987	2507
40°	1214	1624	2055
45°	710	1284	1589
50°	514	933	1074
55°	431	666	563
60°	343	539	480
65°	284	480	445
70°	243	459	415
75°	235	492	406
80°	255	606	436
85°	423	953	593

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1589 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	20.2	7.6
10°-20°	51.7	19.5
20°-30°	63.5	23.9
30°-40°	56.2	21.1
40°-50°	35.8	13.5
50°-60°	17.5	6.6
60°-70°	10.4	3.9
70°-80°	6.7	2.5
80°-90°	3.7	1.4
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°	135.4	51.0
0°-40°	191.6	72.1
0°-60°	244.9	92.2
0°-90°	265.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	265.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	220	220	220	220	220	
5°	212	216	215	216	218	20
15°	174	179	184	192	198	49
25°	126	130	137	146	156	58
35°	75	79	88	100	111	47
45°	27	35	49	55	61	23
55°	13	18	21	20	18	12
65°	6	12	11	10	10	7
75°	3	7	7	6	6	4
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°	220.2	220.2	220.2	220.2	220.2
2.5°	217.0	221.0	218.6	218.6	219.0
5°	211.7	216.1	215.3	216.1	218.2
7.5°	204.4	208.8	209.6	212.9	215.3
10°	195.0	199.5	201.9	207.2	210.9
12.5°	185.3	189.7	193.4	200.3	205.6
15°	174.3	179.2	183.6	191.8	198.3
17.5°	162.9	167.8	173.5	181.6	189.3
20°	150.7	155.2	162.1	169.8	178.0
22.5°	139.0	143.0	150.3	157.6	167.4
25°	125.9	130.4	137.3	145.9	155.6
27.5°	113.4	117.8	124.7	134.5	144.6
30°	100.8	104.8	112.5	122.7	133.7
32.5°	87.8	91.8	100.4	111.3	122.7
35°	75.2	79.2	88.2	100.4	111.3
37.5°	62.6	67.0	77.2	88.6	97.9
40°	50.4	55.7	67.4	77.2	85.3
42.5°	38.2	45.5	58.1	66.2	72.7
45°	27.2	34.9	49.2	55.3	60.9
47.5°	20.7	26.8	40.6	45.1	48.8
50°	17.9	21.9	32.5	35.8	37.4
52.5°	15.4	19.5	26.0	27.2	26.4
55°	13.4	17.9	20.7	19.5	17.5
57.5°	11.4	16.7	17.1	14.6	15.0
60°	9.3	15.0	14.6	12.6	13.0
62.5°	7.7	13.8	12.6	11.4	11.4
65°	6.5	12.2	11.0	10.2	10.2
67.5°	5.3	11.0	9.8	8.9	8.9
70°	4.5	9.8	8.5	7.7	7.7
72.5°	4.1	8.5	7.7	6.9	6.9
75°	3.3	7.3	6.9	6.1	5.7
77.5°	2.8	6.1	6.1	5.7	4.9
80°	2.4	5.3	5.7	4.9	4.1
82.5°	2.4	4.9	4.9	4.5	3.3
85°	2.0	4.1	4.5	4.1	2.8
87.5°	1.2	3.7	3.7	3.3	2.0
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	6.91	8.19	7.28	8.51	8.82	6.41	7.69	6.78	8.00	8.32
	3H	8.09	9.23	8.47	9.56	9.93	7.97	9.11	8.35	9.44	9.80
	4H	8.52	9.59	8.93	9.94	10.32	8.66	9.72	9.06	10.07	10.45
	6H	8.86	9.84	9.28	10.21	10.60	9.31	10.29	9.73	10.66	11.06
	8H	9.05	9.98	9.48	10.37	10.77	9.61	10.54	10.04	10.93	11.33
	12H	9.27	10.15	9.70	10.53	10.96	9.93	10.81	10.36	11.19	11.63
4H	2H	7.42	8.48	7.82	8.83	9.21	7.02	8.08	7.42	8.43	8.81
	3H	9.06	9.94	9.47	10.34	10.74	8.81	9.69	9.22	10.09	10.49
	4H	9.82	10.61	10.26	11.03	11.47	9.66	10.44	10.09	10.86	11.30
	6H	10.42	11.10	10.88	11.55	12.01	10.52	11.20	10.99	11.65	12.12
	8H	10.71	11.35	11.18	11.80	12.27	10.92	11.56	11.39	12.01	12.48
	12H	11.02	11.59	11.51	12.07	12.54	11.36	11.92	11.84	12.40	12.88
8H	4H	10.24	10.88	10.71	11.32	11.79	10.12	10.75	10.59	11.20	11.67
	6H	11.18	11.71	11.69	12.20	12.68	11.24	11.76	11.74	12.26	12.74
	8H	11.73	12.20	12.25	12.72	13.21	11.82	12.29	12.35	12.81	13.30
	12H	12.30	12.71	12.81	13.21	13.78	12.49	12.91	13.01	13.40	13.98
12H	4H	10.31	10.87	10.80	11.36	11.83	10.20	10.76	10.69	11.25	11.72
	6H	11.37	11.84	11.89	12.35	12.85	11.42	11.89	11.94	12.41	12.90
	8H	12.06	12.48	12.58	12.97	13.54	12.14	12.56	12.66	13.05	13.63