

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: P1058006

Luminaire Tested: S122RDRP-S485D935-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058006  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S485D935-X4F0-XX-UDD-BVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

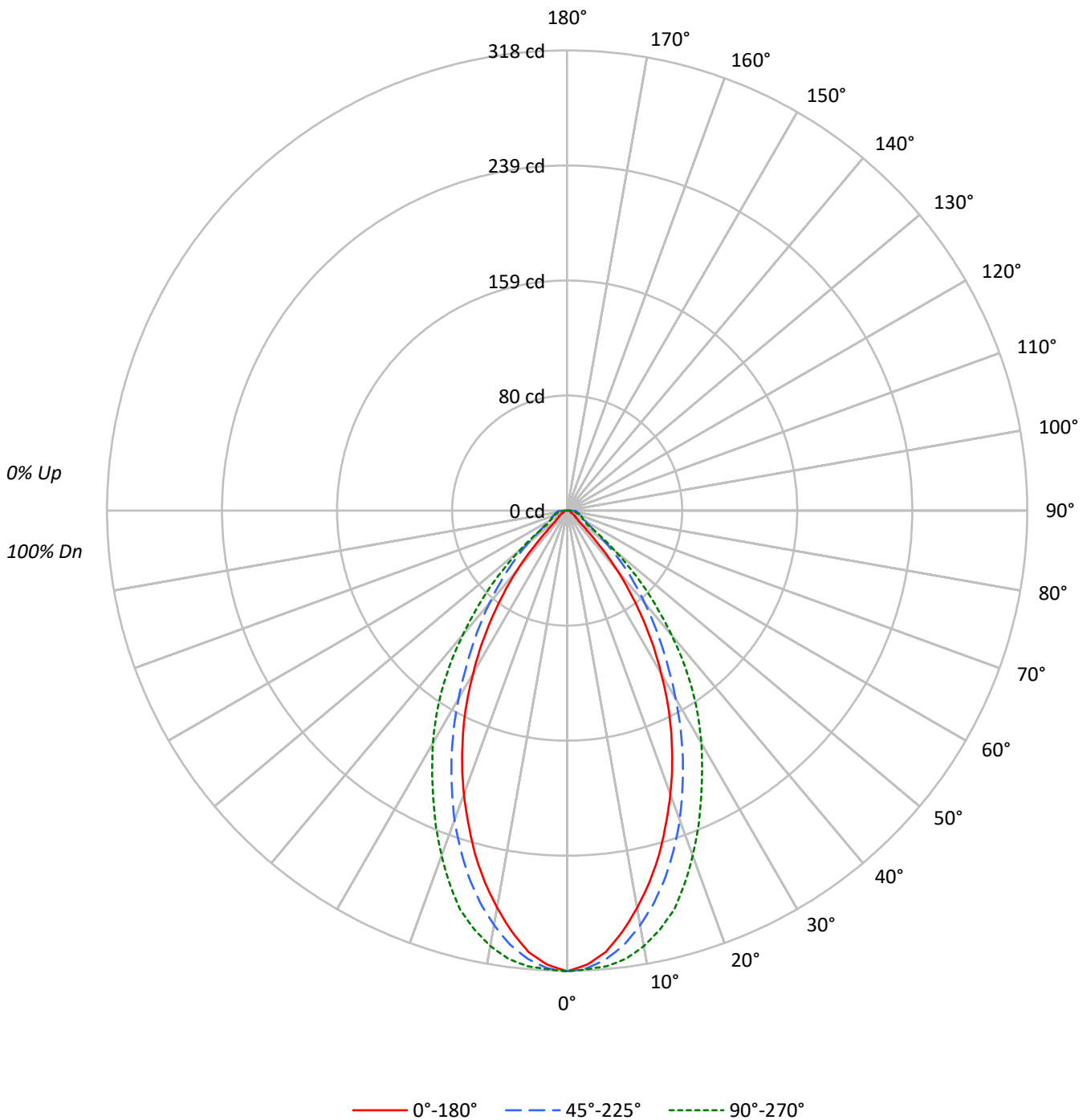
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 343.2 lumens  
Efficiency: N/A  
Efficacy: 17.5 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
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	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	97	98	96	95	95	93	92					90				
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83					81				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75					74				
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69					67				
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63					61				
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58					57				
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54					52				
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50					48				
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47					45				
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44					42				

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

	0°	45°	90°
0°	5875	5875	5875
5°	5672	5762	5853
10°	5222	5451	5726
15°	4696	5011	5454
20°	4096	4467	4982
25°	3465	3850	4459
30°	2768	3196	3950
35°	2048	2570	3395
40°	1294	2014	2703
45°	509	1511	1988
50°	261	1016	1226
55°	216	666	550
60°	159	539	495
65°	131	506	506
70°	129	529	491
75°	171	606	520
80°	255	776	584
85°	381	1291	783

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 87.5°  
 Luminance: 2581 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.1	8.5
10°-20°	73.6	21.4
20°-30°	87.4	25.5
30°-40°	72.7	21.2
40°-50°	40.6	11.8
50°-60°	16.4	4.8
60°-70°	10.5	3.1
70°-80°	7.8	2.3
80°-90°	5.0	1.5
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°	190.1	55.4
0°-40°	262.8	76.6
0°-60°	319.8	93.2
0°-90°	343.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	343.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	318	318	318	318	318	
5°	306	312	311	314	316	28
15°	246	253	262	276	286	68
25°	170	177	189	204	219	78
35°	91	99	114	133	151	56
45°	20	33	58	68	76	18
55°	7	14	21	20	17	6
65°	3	12	12	11	12	3
75°	2	8	8	8	7	3
85°	2	6	6	6	4	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	318.4	318.4	318.4	318.4	318.4
2.5°	314.1	319.0	316.6	316.6	317.2
5°	306.2	311.7	311.1	313.5	316.0
7.5°	293.4	299.5	302.5	308.0	312.3
10°	278.7	285.5	290.9	299.5	305.6
12.5°	262.9	269.6	277.5	288.5	296.4
15°	245.8	253.1	262.3	275.7	285.5
17.5°	226.9	234.8	245.2	259.8	270.2
20°	208.6	216.5	227.5	242.2	253.7
22.5°	189.7	196.4	208.0	222.6	236.7
25°	170.2	176.9	189.1	203.7	219.0
27.5°	150.7	157.4	169.6	184.8	201.9
30°	129.9	137.2	150.0	167.1	185.4
32.5°	110.4	117.7	131.1	150.0	168.3
35°	90.9	99.4	114.1	133.0	150.7
37.5°	72.0	81.7	98.2	115.9	131.7
40°	53.7	64.0	83.6	98.8	112.2
42.5°	35.4	47.6	70.1	83.0	93.3
45°	19.5	32.9	57.9	67.7	76.2
47.5°	11.0	21.3	45.7	53.7	58.6
50°	9.1	15.9	35.4	40.9	42.7
52.5°	7.3	14.6	26.8	29.9	28.7
55°	6.7	14.0	20.7	20.1	17.1
57.5°	5.5	14.0	16.5	14.6	14.6
60°	4.3	13.4	14.6	12.8	13.4
62.5°	3.7	12.8	13.4	12.2	12.2
65°	3.0	12.2	11.6	11.0	11.6
67.5°	2.4	11.0	11.0	10.4	10.4
70°	2.4	10.4	9.8	9.1	9.1
72.5°	2.4	9.1	9.1	8.5	8.5
75°	2.4	8.5	8.5	7.9	7.3
77.5°	2.4	7.3	7.9	7.3	6.7
80°	2.4	6.7	7.3	6.7	5.5
82.5°	2.4	6.1	6.7	6.1	4.9
85°	1.8	5.5	6.1	5.5	3.7
87.5°	1.8	5.5	6.1	4.9	3.0
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	4.51	5.73	4.87	6.04	6.35	5.58	6.79	5.94	7.11	7.42
	3H	5.84	6.92	6.22	7.26	7.62	7.61	8.70	7.99	9.03	9.39
	4H	6.41	7.42	6.81	7.77	8.15	8.56	9.57	8.97	9.93	10.31
	6H	6.96	7.89	7.38	8.27	8.66	9.51	10.44	9.93	10.81	11.21
	8H	7.29	8.16	7.72	8.56	8.96	9.97	10.85	10.40	11.24	11.64
	12H	7.59	8.43	8.02	8.81	9.24	10.40	11.24	10.83	11.62	12.05
4H	2H	5.47	6.49	5.88	6.84	7.22	6.26	7.27	6.66	7.62	8.00
	3H	7.50	8.34	7.92	8.74	9.15	8.54	9.38	8.96	9.78	10.18
	4H	8.57	9.32	9.01	9.74	10.19	9.69	10.43	10.12	10.85	11.30
	6H	9.44	10.09	9.91	10.54	11.00	10.86	11.51	11.32	11.95	12.42
	8H	9.85	10.45	10.32	10.90	11.37	11.42	12.03	11.90	12.48	12.95
	12H	10.23	10.76	10.71	11.24	11.72	11.98	12.51	12.46	13.00	13.47
8H	4H	9.34	9.95	9.81	10.40	10.87	10.24	10.84	10.71	11.29	11.76
	6H	10.68	11.18	11.18	11.67	12.16	11.69	12.19	12.20	12.69	13.17
	8H	11.40	11.84	11.92	12.36	12.85	12.46	12.91	12.99	13.42	13.92
	12H	12.09	12.48	12.61	12.98	13.55	13.26	13.65	13.77	14.15	14.72
12H	4H	9.50	10.03	9.99	10.52	10.99	10.34	10.88	10.83	11.36	11.84
	6H	11.00	11.45	11.53	11.97	12.46	11.92	12.37	12.44	12.88	13.38
	8H	11.91	12.30	12.42	12.80	13.37	12.83	13.22	13.35	13.72	14.29