

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: P1057973

Luminaire Tested: S122RDRP-S485D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057973
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-S485D840-X4F0-XX-UDD-SVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

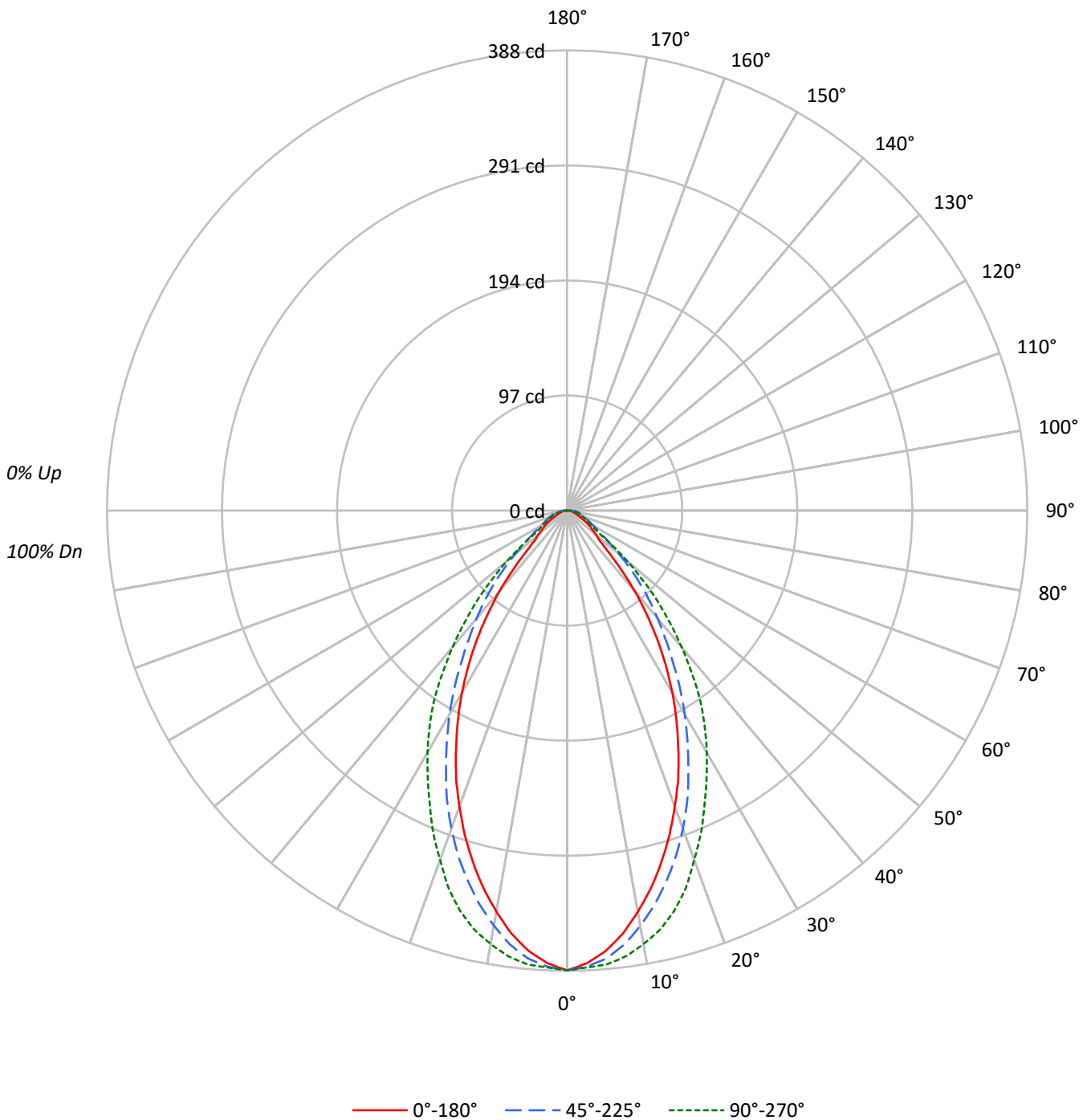
Lumens per Lamp: N/A
Luminaire Lumens: 467.7 lumens
Efficiency: N/A
Efficacy: 23.9 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (A_{in}): 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	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°	7154	7154	7154
5°	6904	7022	7115
10°	6432	6661	6955
15°	5863	6176	6669
20°	5212	5604	6152
25°	4514	4923	5579
30°	3780	4221	5014
35°	2980	3496	4415
40°	2137	2859	3618
45°	1250	2260	2800
50°	904	1642	1889
55°	759	1174	991
60°	609	952	845
65°	498	843	782
70°	426	809	734
75°	406	870	713
80°	457	1063	765
85°	762	1673	1059

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2800 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.5	7.6
10°-20°	91.0	19.5
20°-30°	111.9	23.9
30°-40°	98.9	21.1
40°-50°	63.1	13.5
50°-60°	30.8	6.6
60°-70°	18.3	3.9
70°-80°	11.7	2.5
80°-90°	6.5	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°	238.4	51.0
0°-40°	337.3	72.1
0°-60°	431.2	92.2
0°-90°	467.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	467.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	388	388	388	388	388	
5°	373	380	379	380	384	35
15°	307	315	323	338	349	86
25°	222	230	242	257	274	101
35°	132	140	155	177	196	82
45°	48	62	87	97	107	40
55°	24	32	36	34	31	21
65°	11	22	19	18	18	11
75°	6	13	12	11	10	6
85°	4	7	8	7	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	387.7	387.7	387.7	387.7	387.7
2.5°	382.0	389.1	384.8	384.8	385.5
5°	372.7	380.5	379.1	380.5	384.1
7.5°	359.8	367.7	369.1	374.8	379.1
10°	343.3	351.2	355.5	364.8	371.2
12.5°	326.2	334.0	340.5	352.6	361.9
15°	306.9	315.4	323.3	337.6	349.1
17.5°	286.8	295.4	305.4	319.7	333.3
20°	265.4	273.2	285.4	299.0	313.3
22.5°	244.6	251.8	264.7	277.5	294.7
25°	221.7	229.6	241.8	256.8	274.0
27.5°	199.6	207.4	219.6	236.8	254.6
30°	177.4	184.5	198.1	216.0	235.3
32.5°	154.5	161.7	176.7	196.0	216.0
35°	132.3	139.5	155.2	176.7	196.0
37.5°	110.2	118.0	135.9	155.9	172.4
40°	88.7	98.0	118.7	135.9	150.2
42.5°	67.2	80.1	102.3	116.6	128.0
45°	47.9	61.5	86.6	97.3	107.3
47.5°	36.5	47.2	71.5	79.4	85.8
50°	31.5	38.6	57.2	62.9	65.8
52.5°	27.2	34.3	45.8	47.9	46.5
55°	23.6	31.5	36.5	34.3	30.8
57.5°	20.0	29.3	30.0	25.8	26.5
60°	16.5	26.5	25.8	22.2	22.9
62.5°	13.6	24.3	22.2	20.0	20.0
65°	11.4	21.5	19.3	17.9	17.9
67.5°	9.3	19.3	17.2	15.7	15.7
70°	7.9	17.2	15.0	13.6	13.6
72.5°	7.2	15.0	13.6	12.2	12.2
75°	5.7	12.9	12.2	10.7	10.0
77.5°	5.0	10.7	10.7	10.0	8.6
80°	4.3	9.3	10.0	8.6	7.2
82.5°	4.3	8.6	8.6	7.9	5.7
85°	3.6	7.2	7.9	7.2	5.0
87.5°	2.1	6.4	6.4	5.7	3.6
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	8.86	10.14	9.22	10.45	10.77	8.40	9.68	8.77	9.99	10.31
	3H	10.04	11.18	10.42	11.51	11.87	9.96	11.09	10.34	11.42	11.79
	4H	10.47	11.53	10.87	11.88	12.27	10.64	11.70	11.04	12.05	12.44
	6H	10.81	11.79	11.23	12.16	12.55	11.29	12.27	11.70	12.64	13.03
	8H	11.01	11.94	11.44	12.33	12.73	11.58	12.50	12.01	12.89	13.30
	12H	11.23	12.12	11.66	12.50	12.93	11.89	12.78	12.33	13.16	13.59
4H	2H	9.36	10.42	9.76	10.77	11.16	9.00	10.06	9.40	10.41	10.79
	3H	11.01	11.89	11.42	12.29	12.69	10.79	11.67	11.21	12.07	12.48
	4H	11.78	12.56	12.21	12.98	13.42	11.63	12.42	12.07	12.84	13.28
	6H	12.38	13.06	12.84	13.50	13.97	12.49	13.17	12.95	13.62	14.08
	8H	12.68	13.31	13.15	13.76	14.23	12.88	13.52	13.35	13.96	14.44
	12H	12.99	13.56	13.48	14.04	14.51	13.32	13.88	13.80	14.36	14.84
8H	4H	12.19	12.83	12.66	13.28	13.75	12.09	12.73	12.56	13.17	13.64
	6H	13.14	13.66	13.64	14.16	14.64	13.20	13.72	13.70	14.22	14.70
	8H	13.69	14.16	14.21	14.68	15.17	13.78	14.25	14.30	14.77	15.26
	12H	14.26	14.68	14.78	15.17	15.74	14.45	14.87	14.97	15.36	15.93
12H	4H	12.26	12.83	12.75	13.31	13.78	12.17	12.73	12.66	13.22	13.69
	6H	13.32	13.79	13.85	14.31	14.80	13.39	13.86	13.91	14.37	14.86
	8H	14.02	14.44	14.54	14.93	15.50	14.10	14.51	14.61	15.01	15.58