

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: P1058009

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058009
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-S485D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

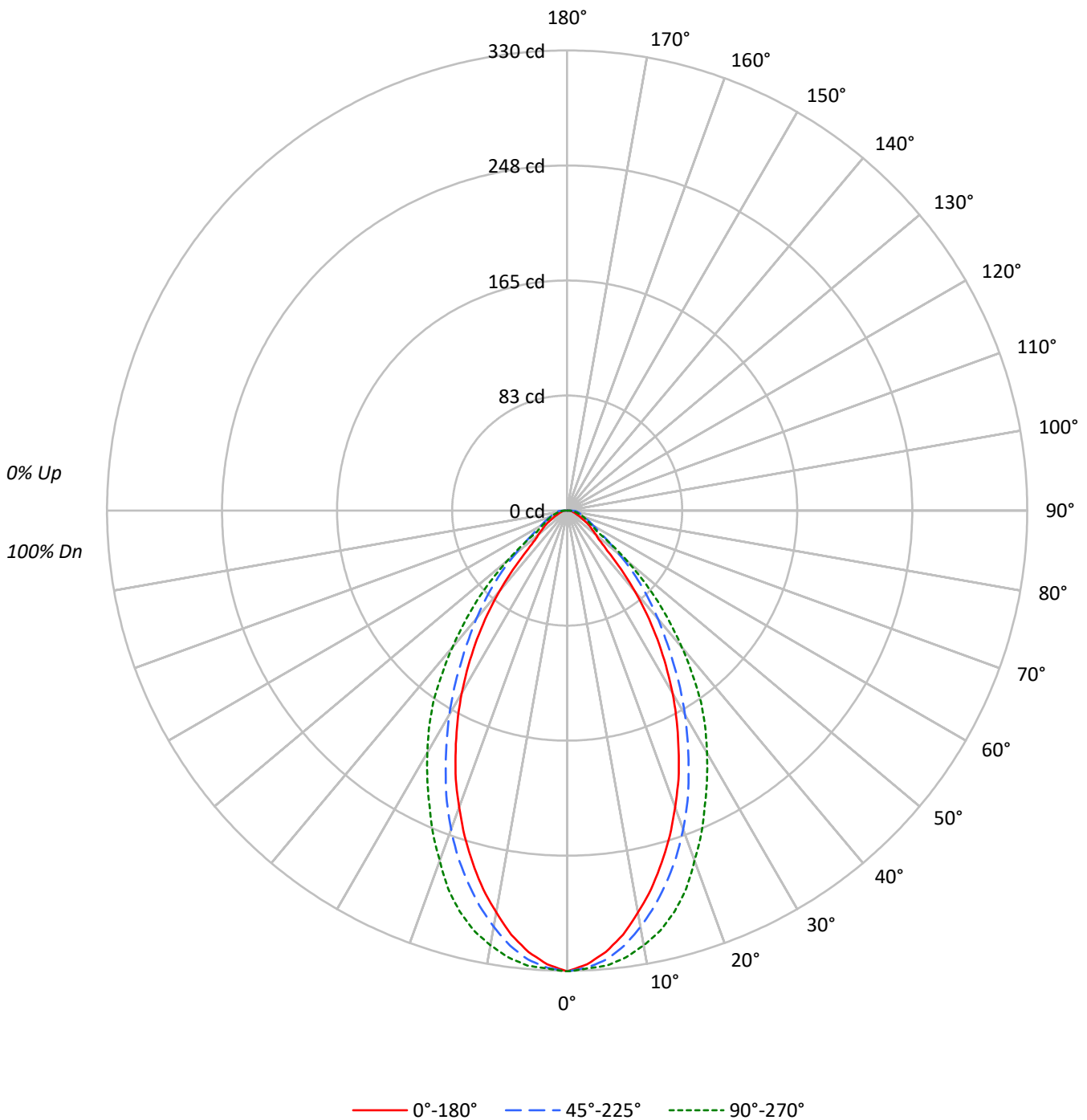
Lumens per Lamp: N/A
Luminaire Lumens: 398.7 lumens
Efficiency: N/A
Efficacy: 20.3 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	6099	6099	6099
5°	5885	5987	6066
10°	5484	5679	5930
15°	4997	5267	5685
20°	4444	4778	5245
25°	3850	4196	4756
30°	3222	3599	4274
35°	2541	2980	3764
40°	1821	2438	3086
45°	1067	1926	2388
50°	769	1401	1610
55°	647	1001	843
60°	517	812	720
65°	428	720	664
70°	361	691	626
75°	349	741	606
80°	393	903	648
85°	635	1419	910

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2388 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.3	7.6
10°-20°	77.6	19.5
20°-30°	95.4	23.9
30°-40°	84.3	21.1
40°-50°	53.8	13.5
50°-60°	26.3	6.6
60°-70°	15.6	3.9
70°-80°	10.0	2.5
80°-90°	5.5	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°	203.3	51.0
0°-40°	287.6	72.1
0°-60°	367.6	92.2
0°-90°	398.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	398.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	330	330	330	330	330	
5°	318	324	323	324	328	30
15°	262	269	276	288	298	73
25°	189	196	206	219	234	87
35°	113	119	132	151	167	70
45°	41	52	74	83	92	34
55°	20	27	31	29	26	18
65°	10	18	16	15	15	10
75°	5	11	10	9	8	5
85°	3	6	7	6	4	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	330.5	330.5	330.5	330.5	330.5
2.5°	325.7	331.8	328.1	328.1	328.7
5°	317.7	324.4	323.2	324.4	327.5
7.5°	306.8	313.5	314.7	319.6	323.2
10°	292.7	299.4	303.1	311.0	316.5
12.5°	278.1	284.8	290.3	300.7	308.6
15°	261.6	268.9	275.7	287.9	297.6
17.5°	244.6	251.9	260.4	272.6	284.2
20°	226.3	233.0	243.3	254.9	267.1
22.5°	208.6	214.7	225.6	236.6	251.3
25°	189.1	195.8	206.1	218.9	233.6
27.5°	170.2	176.9	187.2	201.9	217.1
30°	151.2	157.3	168.9	184.2	200.6
32.5°	131.7	137.8	150.6	167.1	184.2
35°	112.8	118.9	132.3	150.6	167.1
37.5°	93.9	100.6	115.9	132.9	147.0
40°	75.6	83.6	101.2	115.9	128.1
42.5°	57.3	68.3	87.2	99.4	109.2
45°	40.9	52.4	73.8	82.9	91.5
47.5°	31.1	40.3	61.0	67.7	73.2
50°	26.8	32.9	48.8	53.7	56.1
52.5°	23.2	29.3	39.0	40.9	39.6
55°	20.1	26.8	31.1	29.3	26.2
57.5°	17.1	25.0	25.6	22.0	22.6
60°	14.0	22.6	22.0	18.9	19.5
62.5°	11.6	20.7	18.9	17.1	17.1
65°	9.8	18.3	16.5	15.2	15.2
67.5°	7.9	16.5	14.6	13.4	13.4
70°	6.7	14.6	12.8	11.6	11.6
72.5°	6.1	12.8	11.6	10.4	10.4
75°	4.9	11.0	10.4	9.1	8.5
77.5°	4.3	9.1	9.1	8.5	7.3
80°	3.7	7.9	8.5	7.3	6.1
82.5°	3.7	7.3	7.3	6.7	4.9
85°	3.0	6.1	6.7	6.1	4.3
87.5°	1.8	5.5	5.5	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	8.31	9.59	8.68	9.90	10.22	7.85	9.13	8.21	9.44	9.76
	3H	9.49	10.62	9.87	10.95	11.32	9.41	10.54	9.79	10.87	11.24
	4H	9.92	10.98	10.32	11.33	11.71	10.08	11.15	10.49	11.50	11.88
	6H	10.26	11.24	10.68	11.61	12.01	10.73	11.71	11.14	12.08	12.47
	8H	10.46	11.39	10.89	11.78	12.19	11.02	11.94	11.45	12.33	12.74
	12H	10.68	11.56	11.11	11.95	12.38	11.34	12.22	11.77	12.61	13.04
4H	2H	8.82	9.88	9.22	10.23	10.61	8.45	9.51	8.85	9.86	10.24
	3H	10.46	11.33	10.87	11.74	12.14	10.24	11.12	10.66	11.52	11.93
	4H	11.22	12.01	11.66	12.43	12.87	11.08	11.86	11.51	12.28	12.73
	6H	11.82	12.51	12.29	12.95	13.42	11.93	12.61	12.39	13.06	13.52
	8H	12.13	12.76	12.60	13.21	13.68	12.32	12.96	12.79	13.40	13.88
	12H	12.44	13.00	12.92	13.48	13.96	12.76	13.32	13.25	13.81	14.28
8H	4H	11.64	12.28	12.11	12.72	13.19	11.53	12.17	12.00	12.62	13.09
	6H	12.58	13.11	13.09	13.60	14.08	12.64	13.16	13.14	13.66	14.14
	8H	13.13	13.60	13.65	14.12	14.61	13.22	13.69	13.74	14.20	14.69
	12H	13.70	14.11	14.21	14.61	15.18	13.89	14.31	14.41	14.80	15.37
12H	4H	11.71	12.27	12.20	12.76	13.23	11.62	12.18	12.10	12.66	13.14
	6H	12.77	13.24	13.29	13.75	14.24	12.82	13.29	13.34	13.81	14.30
	8H	13.46	13.88	13.98	14.37	14.94	13.53	13.95	14.05	14.44	15.01