

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: P1057991

Luminaire Tested: S122RDRP-S485D927-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057991
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-S485D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

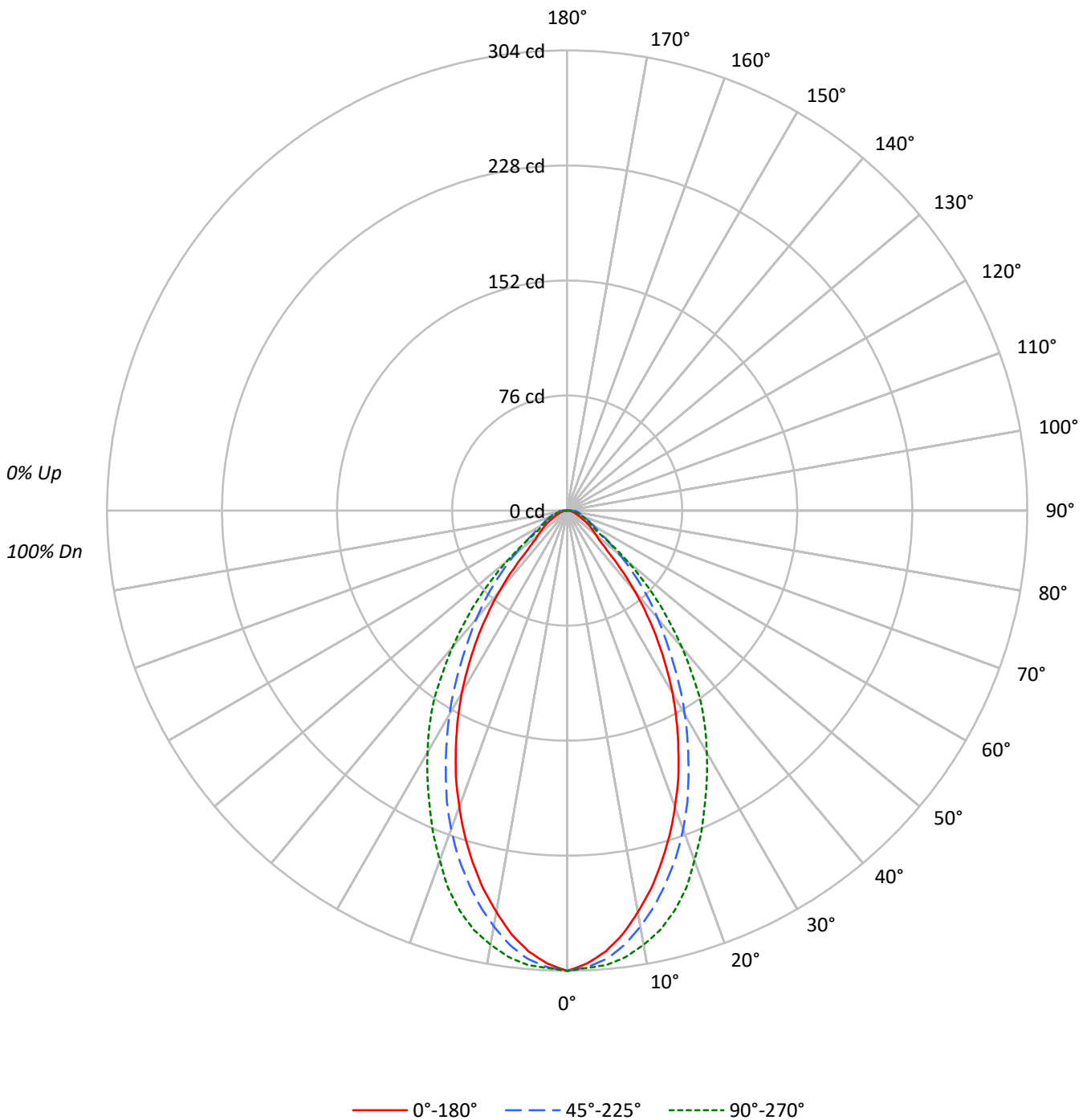
Lumens per Lamp: N/A
Luminaire Lumens: 366.9 lumens
Efficiency: N/A
Efficacy: 18.7 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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°	5611	5611	5611
5°	5414	5509	5581
10°	5046	5226	5456
15°	4598	4845	5231
20°	4088	4397	4827
25°	3541	3862	4375
30°	2966	3311	3933
35°	2338	2744	3462
40°	1677	2243	2838
45°	981	1772	2197
50°	709	1289	1481
55°	595	920	775
60°	476	745	664
65°	393	664	611
70°	334	637	577
75°	321	677	563
80°	361	839	595
85°	593	1313	826

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2197 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.9	7.6
10°-20°	71.4	19.5
20°-30°	87.7	23.9
30°-40°	77.6	21.1
40°-50°	49.5	13.5
50°-60°	24.2	6.6
60°-70°	14.4	3.9
70°-80°	9.2	2.5
80°-90°	5.1	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°	187.0	51.0
0°-40°	264.6	72.1
0°-60°	338.2	92.2
0°-90°	366.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	366.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	304	304	304	304	304	
5°	292	298	297	298	301	27
15°	241	248	254	265	274	67
25°	174	180	190	201	215	80
35°	104	109	122	139	154	64
45°	38	48	68	76	84	32
55°	18	25	29	27	24	17
65°	9	17	15	14	14	9
75°	4	10	10	8	8	5
85°	3	6	6	6	4	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	304.1	304.1	304.1	304.1	304.1
2.5°	299.6	305.2	301.9	301.9	302.4
5°	292.3	298.5	297.4	298.5	301.3
7.5°	282.2	288.4	289.5	294.0	297.4
10°	269.3	275.5	278.9	286.2	291.2
12.5°	255.9	262.0	267.1	276.6	283.9
15°	240.7	247.5	253.6	264.8	273.8
17.5°	225.0	231.7	239.6	250.8	261.5
20°	208.2	214.3	223.9	234.5	245.8
22.5°	191.9	197.5	207.6	217.7	231.2
25°	173.9	180.1	189.7	201.4	214.9
27.5°	156.6	162.7	172.3	185.7	199.8
30°	139.2	144.8	155.4	169.5	184.6
32.5°	121.2	126.8	138.6	153.7	169.5
35°	103.8	109.4	121.8	138.6	153.7
37.5°	86.4	92.6	106.6	122.3	135.2
40°	69.6	76.9	93.1	106.6	117.8
42.5°	52.7	62.8	80.2	91.5	100.4
45°	37.6	48.3	67.9	76.3	84.2
47.5°	28.6	37.0	56.1	62.3	67.3
50°	24.7	30.3	44.9	49.4	51.6
52.5°	21.3	26.9	35.9	37.6	36.5
55°	18.5	24.7	28.6	26.9	24.1
57.5°	15.7	23.0	23.6	20.2	20.8
60°	12.9	20.8	20.2	17.4	18.0
62.5°	10.7	19.1	17.4	15.7	15.7
65°	9.0	16.8	15.2	14.0	14.0
67.5°	7.3	15.2	13.5	12.3	12.3
70°	6.2	13.5	11.8	10.7	10.7
72.5°	5.6	11.8	10.7	9.5	9.5
75°	4.5	10.1	9.5	8.4	7.9
77.5°	3.9	8.4	8.4	7.9	6.7
80°	3.4	7.3	7.9	6.7	5.6
82.5°	3.4	6.7	6.7	6.2	4.5
85°	2.8	5.6	6.2	5.6	3.9
87.5°	1.7	5.1	5.1	4.5	2.8
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	8.02	9.30	8.38	9.61	9.93	7.55	8.83	7.91	9.14	9.46
	3H	9.20	10.34	9.58	10.67	11.04	9.11	10.25	9.49	10.58	10.94
	4H	9.63	10.69	10.03	11.04	11.43	9.79	10.85	10.19	11.20	11.59
	6H	9.98	10.95	10.39	11.32	11.72	10.44	11.41	10.85	11.78	12.18
	8H	10.17	11.10	10.60	11.49	11.90	10.73	11.65	11.16	12.04	12.45
	12H	10.39	11.28	10.83	11.66	12.09	11.04	11.93	11.47	12.31	12.74
4H	2H	8.53	9.59	8.93	9.94	10.32	8.15	9.21	8.56	9.56	9.95
	3H	10.18	11.05	10.59	11.46	11.86	9.95	10.82	10.36	11.23	11.63
	4H	10.94	11.72	11.37	12.14	12.59	10.79	11.57	11.22	11.99	12.44
	6H	11.54	12.22	12.00	12.67	13.13	11.64	12.32	12.11	12.77	13.24
	8H	11.84	12.48	12.31	12.92	13.39	12.03	12.67	12.50	13.12	13.59
	12H	12.15	12.72	12.64	13.20	13.67	12.47	13.03	12.96	13.52	13.99
8H	4H	11.36	11.99	11.82	12.44	12.91	11.25	11.88	11.72	12.33	12.80
	6H	12.30	12.82	12.81	13.32	13.80	12.35	12.88	12.86	13.37	13.85
	8H	12.85	13.32	13.37	13.83	14.32	12.93	13.40	13.46	13.92	14.41
	12H	13.41	13.83	13.93	14.32	14.89	13.60	14.02	14.12	14.51	15.08
12H	4H	11.43	11.99	11.91	12.47	12.95	11.33	11.89	11.82	12.38	12.85
	6H	12.49	12.96	13.01	13.47	13.96	12.54	13.01	13.06	13.52	14.01
	8H	13.18	13.59	13.69	14.09	14.66	13.25	13.67	13.77	14.16	14.73