

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: P1057883

Luminaire Tested: S122RDRP-S290D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057883
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-S290D835-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, 80 CRI LEDS
Ballast/Driver: -

Summary

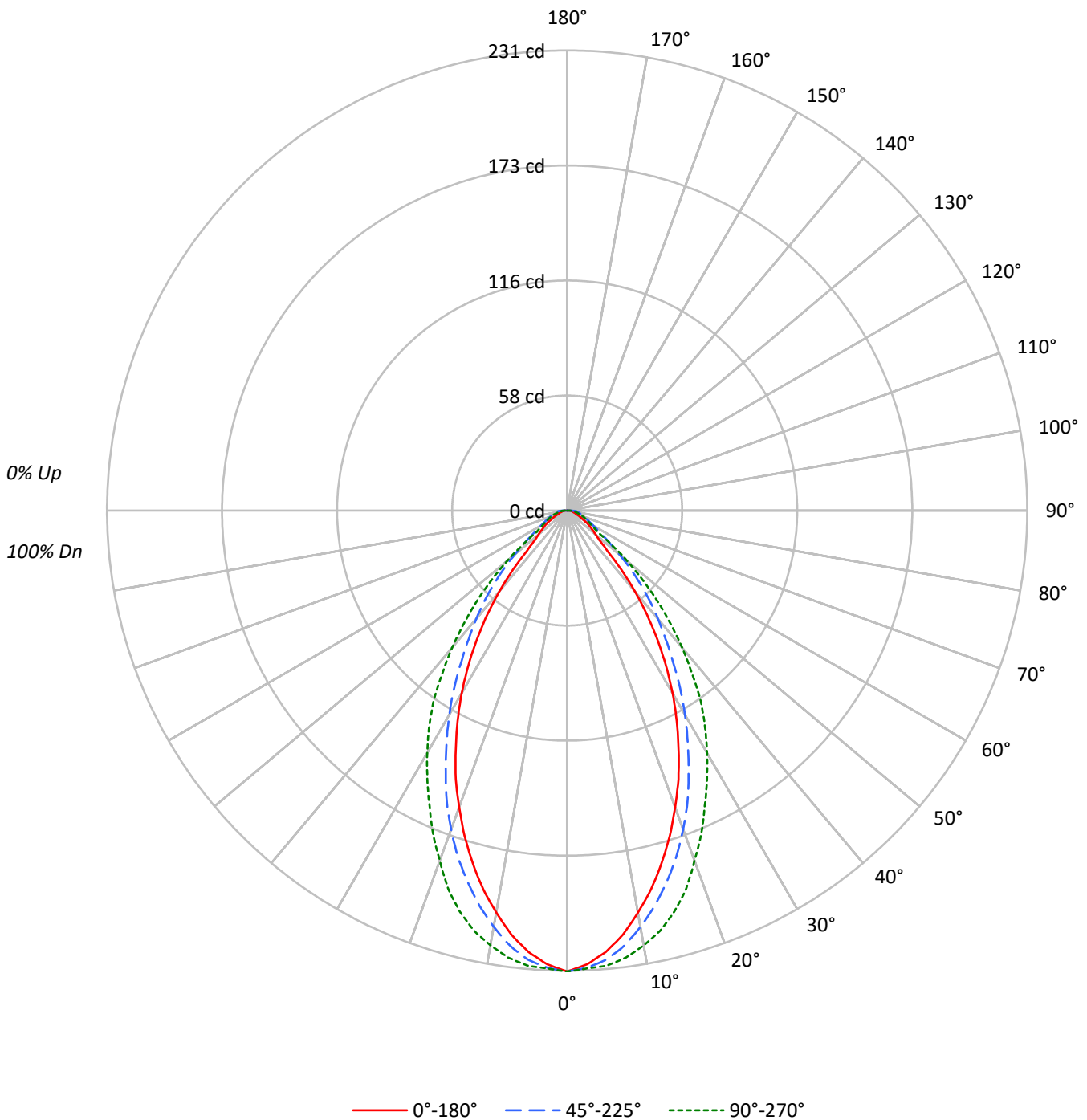
Lumens per Lamp: N/A
Luminaire Lumens: 279.2 lumens
Efficiency: N/A
Efficacy: 22.3 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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°	4270	4270	4270
5°	4120	4192	4247
10°	3839	3976	4152
15°	3500	3687	3979
20°	3110	3344	3672
25°	2694	2938	3329
30°	2256	2521	2994
35°	1780	2086	2636
40°	1274	1708	2161
45°	746	1349	1670
50°	540	982	1128
55°	454	701	592
60°	362	568	506
65°	297	502	467
70°	254	486	437
75°	242	520	428
80°	276	638	457
85°	445	995	635

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1670 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.2	7.6
10°-20°	54.3	19.5
20°-30°	66.8	23.9
30°-40°	59.0	21.1
40°-50°	37.7	13.5
50°-60°	18.4	6.6
60°-70°	10.9	3.9
70°-80°	7.0	2.5
80°-90°	3.8	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°	142.3	51.0
0°-40°	201.3	72.1
0°-60°	257.4	92.2
0°-90°	279.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	279.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	231	231	231	231	231	
5°	222	227	226	227	229	21
15°	183	188	193	202	208	51
25°	132	137	144	153	164	61
35°	79	83	93	106	117	49
45°	29	37	52	58	64	24
55°	14	19	22	20	18	13
65°	7	13	12	11	11	7
75°	3	8	7	6	6	4
85°	2	4	5	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	231.4	231.4	231.4	231.4	231.4
2.5°	228.0	232.2	229.7	229.7	230.1
5°	222.4	227.1	226.3	227.1	229.3
7.5°	214.7	219.4	220.3	223.7	226.3
10°	204.9	209.6	212.2	217.7	221.6
12.5°	194.7	199.4	203.2	210.5	216.0
15°	183.2	188.3	193.0	201.5	208.3
17.5°	171.2	176.3	182.3	190.8	198.9
20°	158.4	163.1	170.3	178.5	187.0
22.5°	146.0	150.3	158.0	165.6	175.9
25°	132.3	137.0	144.3	153.3	163.5
27.5°	119.1	123.8	131.1	141.3	152.0
30°	105.9	110.1	118.3	128.9	140.5
32.5°	92.2	96.5	105.5	117.0	128.9
35°	79.0	83.3	92.6	105.5	117.0
37.5°	65.7	70.4	81.1	93.1	102.9
40°	52.9	58.5	70.9	81.1	89.7
42.5°	40.1	47.8	61.1	69.6	76.4
45°	28.6	36.7	51.7	58.1	64.0
47.5°	21.8	28.2	42.7	47.4	51.2
50°	18.8	23.1	34.2	37.6	39.3
52.5°	16.2	20.5	27.3	28.6	27.8
55°	14.1	18.8	21.8	20.5	18.4
57.5°	12.0	17.5	17.9	15.4	15.8
60°	9.8	15.8	15.4	13.2	13.7
62.5°	8.1	14.5	13.2	12.0	12.0
65°	6.8	12.8	11.5	10.7	10.7
67.5°	5.6	11.5	10.2	9.4	9.4
70°	4.7	10.2	9.0	8.1	8.1
72.5°	4.3	9.0	8.1	7.3	7.3
75°	3.4	7.7	7.3	6.4	6.0
77.5°	3.0	6.4	6.4	6.0	5.1
80°	2.6	5.6	6.0	5.1	4.3
82.5°	2.6	5.1	5.1	4.7	3.4
85°	2.1	4.3	4.7	4.3	3.0
87.5°	1.3	3.8	3.8	3.4	2.1
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	7.07	8.35	7.44	8.66	8.98	6.61	7.89	6.97	8.20	8.51
	3H	8.25	9.39	8.63	9.72	10.08	8.16	9.30	8.54	9.63	10.00
	4H	8.68	9.74	9.08	10.09	10.48	8.85	9.91	9.25	10.26	10.65
	6H	9.03	10.00	9.44	10.38	10.77	9.50	10.47	9.91	10.85	11.24
	8H	9.23	10.15	9.66	10.55	10.95	9.79	10.71	10.22	11.10	11.51
	12H	9.45	10.33	9.88	10.71	11.14	10.10	10.99	10.54	11.37	11.80
4H	2H	7.57	8.63	7.97	8.98	9.37	7.20	8.26	7.60	8.61	9.00
	3H	9.22	10.09	9.63	10.50	10.90	9.00	9.87	9.41	10.28	10.68
	4H	9.98	10.77	10.42	11.19	11.63	9.84	10.63	10.28	11.05	11.49
	6H	10.59	11.27	11.06	11.72	12.19	10.70	11.38	11.16	11.82	12.29
	8H	10.89	11.53	11.36	11.98	12.45	11.09	11.72	11.56	12.17	12.64
	12H	11.21	11.77	11.69	12.25	12.73	11.53	12.09	12.01	12.57	13.05
8H	4H	10.40	11.04	10.87	11.49	11.96	10.30	10.94	10.77	11.39	11.86
	6H	11.36	11.88	11.86	12.38	12.86	11.41	11.93	11.91	12.43	12.91
	8H	11.91	12.38	12.43	12.89	13.38	11.99	12.46	12.51	12.97	13.46
	12H	12.47	12.89	12.99	13.38	13.95	12.66	13.07	13.17	13.57	14.14
12H	4H	10.47	11.04	10.96	11.52	11.99	10.39	10.95	10.87	11.43	11.91
	6H	11.54	12.01	12.06	12.53	13.02	11.59	12.06	12.11	12.58	13.07
	8H	12.23	12.65	12.75	13.14	13.72	12.30	12.72	12.82	13.21	13.78