

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: P1057943

Luminaire Tested: S122RDRP-S290D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057943
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-S290D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

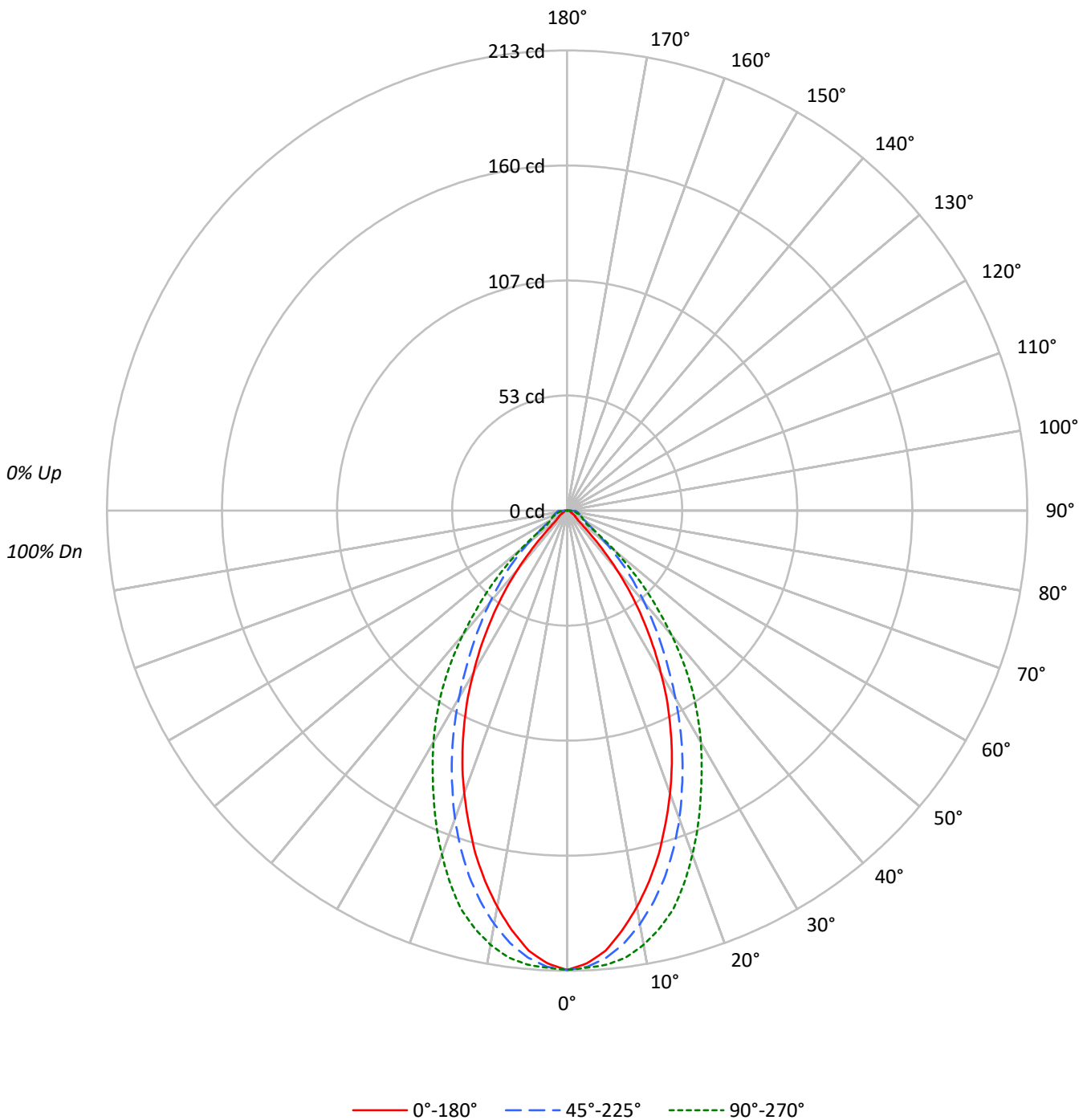
Lumens per Lamp: N/A
Luminaire Lumens: 229.2 lumens
Efficiency: N/A
Efficacy: 18.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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	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°	3923	3923	3923
5°	3788	3847	3908
10°	3489	3641	3824
15°	3137	3347	3641
20°	2735	2983	3328
25°	2313	2571	2977
30°	1849	2135	2638
35°	1367	1717	2266
40°	862	1344	1807
45°	339	1010	1328
50°	175	677	818
55°	145	444	367
60°	107	362	332
65°	87	336	336
70°	86	351	329
75°	114	406	349
80°	170	521	393
85°	254	868	508

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 1734 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.5	8.5
10°-20°	49.1	21.4
20°-30°	58.4	25.5
30°-40°	48.6	21.2
40°-50°	27.1	11.8
50°-60°	11.0	4.8
60°-70°	7.0	3.1
70°-80°	5.3	2.3
80°-90°	3.4	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°	126.9	55.4
0°-40°	175.5	76.6
0°-60°	213.6	93.2
0°-90°	229.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	229.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	213	213	213	213	213	
5°	204	208	208	209	211	19
15°	164	169	175	184	191	46
25°	114	118	126	136	146	52
35°	61	66	76	89	101	38
45°	13	22	39	45	51	12
55°	4	9	14	13	11	4
65°	2	8	8	7	8	2
75°	2	6	6	5	5	2
85°	1	4	4	4	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	212.6	212.6	212.6	212.6	212.6
2.5°	209.8	213.0	211.4	211.4	211.8
5°	204.5	208.2	207.7	209.4	211.0
7.5°	195.9	200.0	202.0	205.7	208.6
10°	186.2	190.6	194.3	200.0	204.1
12.5°	175.6	180.0	185.3	192.7	198.0
15°	164.2	169.0	175.2	184.1	190.6
17.5°	151.5	156.8	163.8	173.5	180.5
20°	139.3	144.6	151.9	161.7	169.5
22.5°	126.7	131.2	138.9	148.7	158.1
25°	113.6	118.1	126.3	136.1	146.2
27.5°	100.6	105.1	113.2	123.4	134.8
30°	86.8	91.7	100.2	111.6	123.8
32.5°	73.7	78.6	87.6	100.2	112.4
35°	60.7	66.4	76.2	88.8	100.6
37.5°	48.1	54.6	65.6	77.4	88.0
40°	35.8	42.8	55.8	66.0	75.0
42.5°	23.6	31.8	46.8	55.4	62.3
45°	13.0	22.0	38.7	45.2	50.9
47.5°	7.3	14.3	30.6	35.8	39.1
50°	6.1	10.6	23.6	27.3	28.5
52.5°	4.9	9.8	17.9	20.0	19.1
55°	4.5	9.4	13.8	13.4	11.4
57.5°	3.7	9.4	11.0	9.8	9.8
60°	2.9	9.0	9.8	8.6	9.0
62.5°	2.4	8.6	9.0	8.1	8.1
65°	2.0	8.1	7.7	7.3	7.7
67.5°	1.6	7.3	7.3	6.9	6.9
70°	1.6	6.9	6.5	6.1	6.1
72.5°	1.6	6.1	6.1	5.7	5.7
75°	1.6	5.7	5.7	5.3	4.9
77.5°	1.6	4.9	5.3	4.9	4.5
80°	1.6	4.5	4.9	4.5	3.7
82.5°	1.6	4.1	4.5	4.1	3.3
85°	1.2	3.7	4.1	3.7	2.4
87.5°	1.2	3.7	4.1	3.3	2.0
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	3.14	4.36	3.51	4.67	4.99	4.21	5.43	4.57	5.74	6.05
	3H	4.45	5.53	4.83	5.86	6.23	6.22	7.30	6.60	7.63	8.00
	4H	5.01	6.03	5.42	6.38	6.76	7.18	8.19	7.58	8.54	8.92
	6H	5.57	6.50	5.99	6.87	7.27	8.13	9.06	8.55	9.43	9.83
	8H	5.89	6.77	6.33	7.16	7.57	8.59	9.47	9.02	9.86	10.27
	12H	6.20	7.04	6.63	7.42	7.85	9.01	9.85	9.44	10.23	10.66
4H	2H	4.09	5.10	4.49	5.45	5.84	4.87	5.88	5.28	6.24	6.62
	3H	6.10	6.93	6.51	7.34	7.74	7.14	7.98	7.56	8.38	8.79
	4H	7.18	7.92	7.61	8.34	8.79	8.30	9.04	8.73	9.47	9.91
	6H	8.05	8.69	8.51	9.14	9.61	9.48	10.13	9.94	10.57	11.04
	8H	8.46	9.06	8.93	9.51	9.98	10.05	10.65	10.52	11.10	11.57
	12H	8.83	9.37	9.32	9.85	10.33	10.59	11.12	11.08	11.61	12.08
8H	4H	7.95	8.56	8.42	9.00	9.48	8.85	9.45	9.32	9.90	10.37
	6H	9.30	9.79	9.80	10.29	10.77	10.31	10.81	10.82	11.31	11.79
	8H	10.01	10.46	10.54	10.98	11.47	11.09	11.53	11.61	12.05	12.54
	12H	10.71	11.10	11.23	11.60	12.17	11.87	12.27	12.39	12.76	13.34
12H	4H	8.11	8.64	8.60	9.13	9.60	8.96	9.49	9.44	9.98	10.45
	6H	9.62	10.07	10.14	10.58	11.08	10.54	10.99	11.07	11.50	12.00
	8H	10.53	10.92	11.04	11.42	11.99	11.46	11.85	11.97	12.35	12.92