

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: P1057946

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057946
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-S290D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

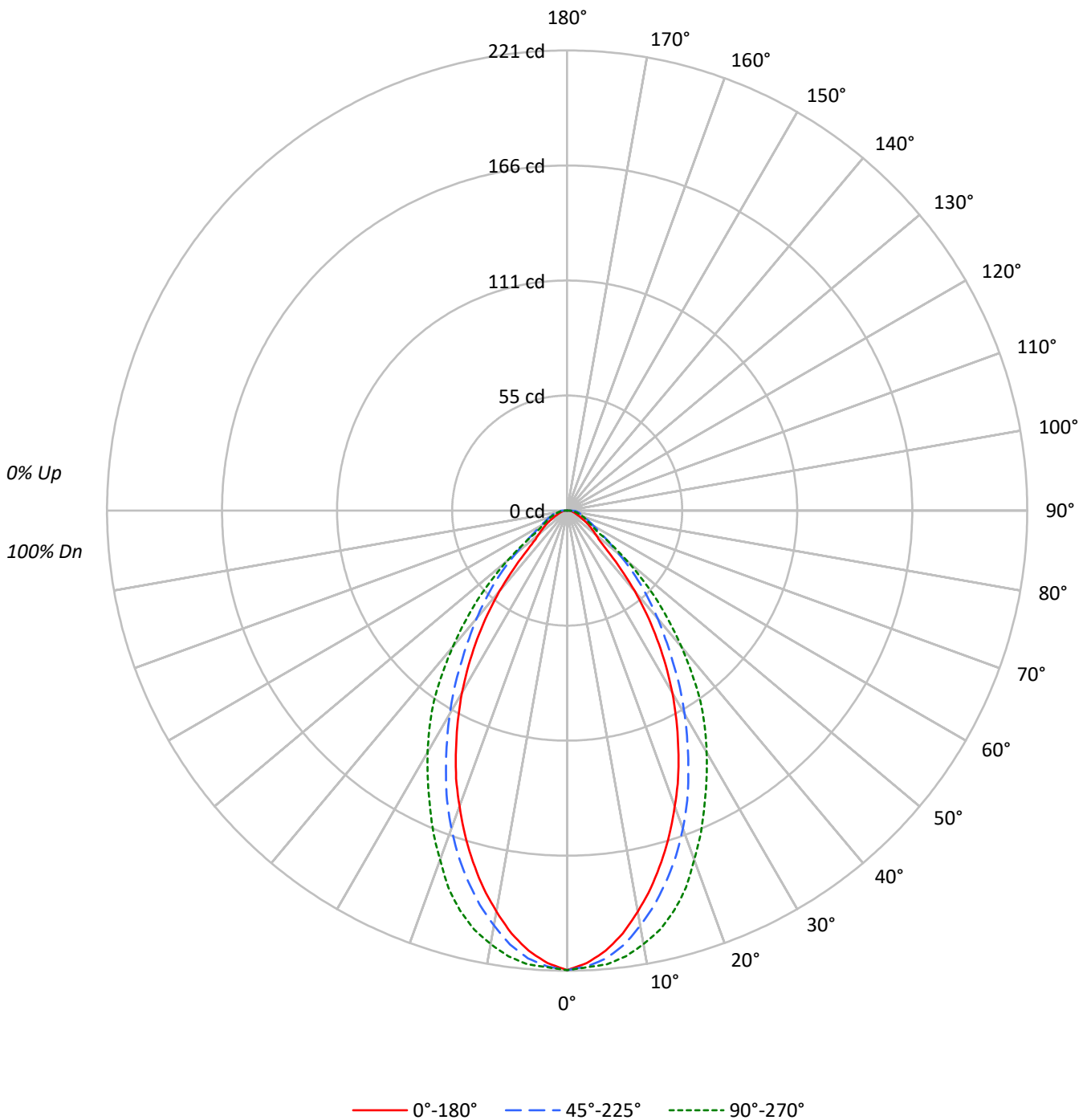
Lumens per Lamp: N/A
Luminaire Lumens: 266.3 lumens
Efficiency: N/A
Efficacy: 21.3 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	4072	4072	4072
5°	3931	3999	4051
10°	3663	3792	3961
15°	3337	3517	3798
20°	2967	3191	3503
25°	2571	2804	3176
30°	2152	2403	2855
35°	1696	1991	2514
40°	1216	1628	2060
45°	712	1287	1594
50°	514	936	1077
55°	431	669	563
60°	347	543	480
65°	284	480	445
70°	243	464	415
75°	235	492	406
80°	255	606	436
85°	423	953	614

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1594 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.2	7.6
10°-20°	51.8	19.5
20°-30°	63.7	23.9
30°-40°	56.3	21.1
40°-50°	35.9	13.5
50°-60°	17.5	6.6
60°-70°	10.4	3.9
70°-80°	6.7	2.5
80°-90°	3.7	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°	135.7	51.0
0°-40°	192.0	72.1
0°-60°	245.5	92.2
0°-90°	266.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	266.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	221	221	221	221	221	
5°	212	217	216	217	219	20
15°	175	180	184	192	199	49
25°	126	131	138	146	156	58
35°	75	79	88	101	112	47
45°	27	35	49	55	61	23
55°	13	18	21	20	18	12
65°	6	12	11	10	10	7
75°	3	7	7	6	6	4
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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CATALOG NUMBER: S122RDRP-S290D950-X4F0-XX-UDD-SVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	220.7	220.7	220.7	220.7	220.7
2.5°	217.5	221.6	219.1	219.1	219.5
5°	212.2	216.7	215.9	216.7	218.7
7.5°	204.9	209.3	210.2	213.4	215.9
10°	195.5	200.0	202.4	207.7	211.4
12.5°	185.7	190.2	193.9	200.8	206.1
15°	174.7	179.6	184.1	192.2	198.8
17.5°	163.3	168.2	173.9	182.1	189.8
20°	151.1	155.6	162.5	170.2	178.4
22.5°	139.3	143.4	150.7	158.0	167.8
25°	126.3	130.7	137.7	146.2	156.0
27.5°	113.6	118.1	125.0	134.8	145.0
30°	101.0	105.1	112.8	123.0	134.0
32.5°	88.0	92.0	100.6	111.6	123.0
35°	75.3	79.4	88.4	100.6	111.6
37.5°	62.7	67.2	77.4	88.8	98.2
40°	50.5	55.8	67.6	77.4	85.5
42.5°	38.3	45.6	58.2	66.4	72.9
45°	27.3	35.0	49.3	55.4	61.1
47.5°	20.8	26.9	40.7	45.2	48.9
50°	17.9	22.0	32.6	35.8	37.5
52.5°	15.5	19.5	26.1	27.3	26.5
55°	13.4	17.9	20.8	19.5	17.5
57.5°	11.4	16.7	17.1	14.7	15.1
60°	9.4	15.1	14.7	12.6	13.0
62.5°	7.7	13.8	12.6	11.4	11.4
65°	6.5	12.2	11.0	10.2	10.2
67.5°	5.3	11.0	9.8	9.0	9.0
70°	4.5	9.8	8.6	7.7	7.7
72.5°	4.1	8.6	7.7	6.9	6.9
75°	3.3	7.3	6.9	6.1	5.7
77.5°	2.9	6.1	6.1	5.7	4.9
80°	2.4	5.3	5.7	4.9	4.1
82.5°	2.4	4.9	4.9	4.5	3.3
85°	2.0	4.1	4.5	4.1	2.9
87.5°	1.2	3.7	3.7	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	6.91	8.19	7.27	8.50	8.82	6.45	7.73	6.81	8.04	8.35
	3H	8.09	9.23	8.47	9.56	9.92	8.01	9.14	8.39	9.47	9.84
	4H	8.52	9.58	8.92	9.93	10.32	8.68	9.75	9.09	10.10	10.48
	6H	8.87	9.84	9.28	10.21	10.61	9.34	10.31	9.75	10.68	11.08
	8H	9.06	9.98	9.49	10.37	10.78	9.63	10.55	10.06	10.95	11.35
	12H	9.27	10.15	9.70	10.54	10.97	9.95	10.84	10.39	11.22	11.65
4H	2H	7.41	8.47	7.81	8.82	9.21	7.04	8.11	7.45	8.46	8.84
	3H	9.06	9.94	9.47	10.34	10.74	8.84	9.71	9.25	10.12	10.52
	4H	9.82	10.61	10.26	11.03	11.47	9.68	10.46	10.11	10.88	11.32
	6H	10.42	11.10	10.89	11.55	12.02	10.54	11.22	11.00	11.66	12.13
	8H	10.72	11.35	11.19	11.80	12.27	10.93	11.57	11.40	12.02	12.49
	12H	11.03	11.59	11.51	12.07	12.55	11.38	11.94	11.86	12.42	12.90
8H	4H	10.24	10.87	10.71	11.32	11.79	10.13	10.77	10.60	11.21	11.69
	6H	11.19	11.71	11.69	12.21	12.69	11.24	11.77	11.75	12.26	12.74
	8H	11.73	12.20	12.25	12.72	13.21	11.83	12.30	12.35	12.82	13.31
	12H	12.29	12.71	12.81	13.20	13.78	12.51	12.93	13.03	13.42	13.99
12H	4H	10.31	10.87	10.79	11.35	11.83	10.21	10.78	10.70	11.26	11.73
	6H	11.37	11.84	11.89	12.36	12.85	11.43	11.90	11.95	12.41	12.91
	8H	12.06	12.48	12.58	12.97	13.54	12.15	12.56	12.66	13.06	13.63