

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: P1057937

Luminaire Tested: S122RDRP-S290D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057937
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-S290D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

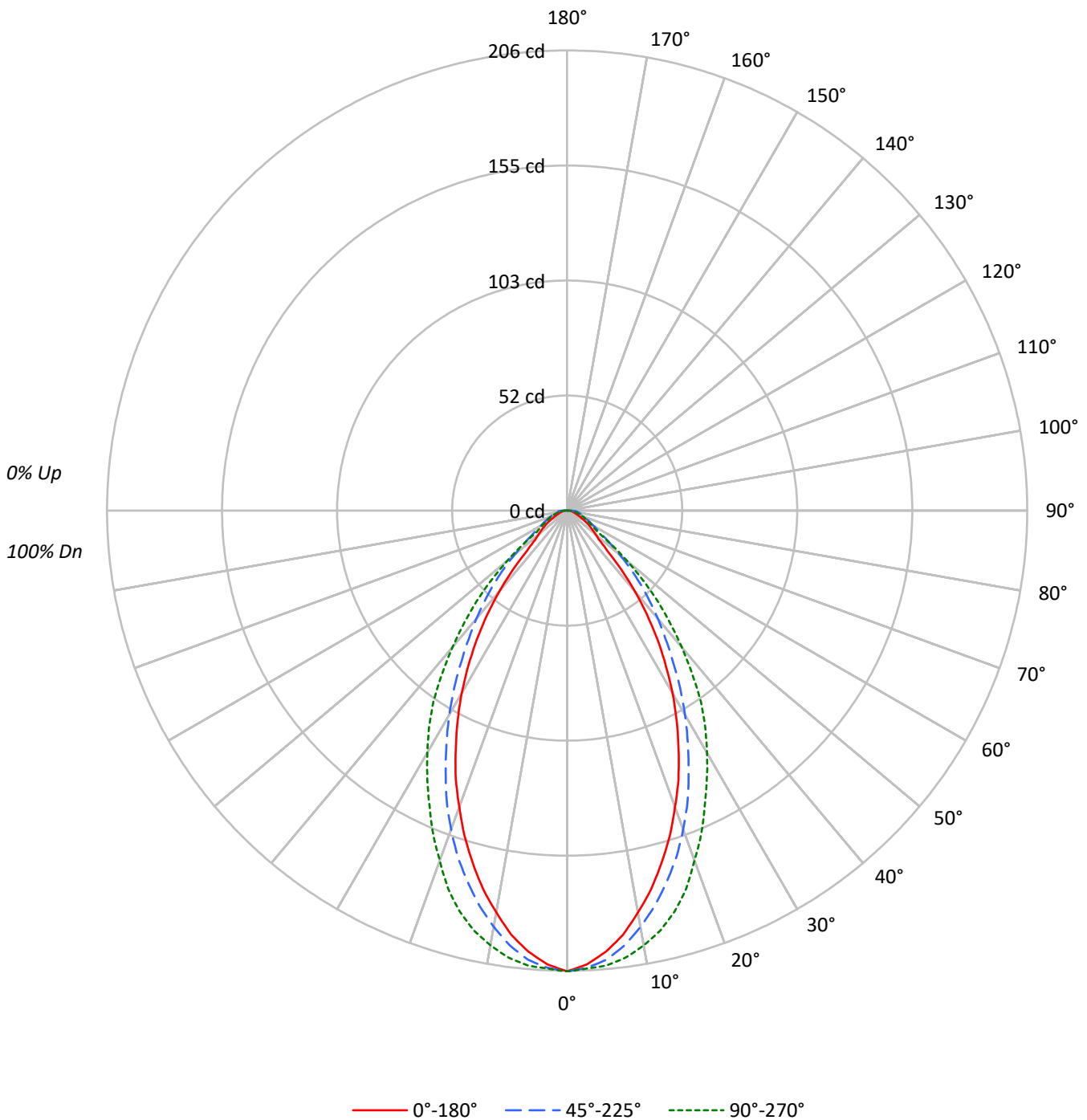
Lumens per Lamp: N/A
Luminaire Lumens: 248.9 lumens
Efficiency: N/A
Efficacy: 19.9 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				65
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59				59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50				50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				46
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42				42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3807	3807	3807
5°	3673	3738	3786
10°	3423	3545	3702
15°	3120	3288	3549
20°	2773	2983	3273
25°	2402	2620	2968
30°	2011	2248	2668
35°	1586	1861	2349
40°	1137	1522	1925
45°	665	1203	1490
50°	482	876	1005
55°	405	624	528
60°	325	506	450
65°	266	450	415
70°	227	432	388
75°	214	463	378
80°	244	563	404
85°	402	889	572

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1490 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.9	7.6
10°-20°	48.4	19.5
20°-30°	59.5	23.9
30°-40°	52.6	21.1
40°-50°	33.6	13.5
50°-60°	16.4	6.6
60°-70°	9.8	3.9
70°-80°	6.2	2.5
80°-90°	3.4	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°	126.9	51.0
0°-40°	179.5	72.1
0°-60°	229.5	92.2
0°-90°	248.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	248.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	206	206	206	206	206	
5°	198	202	202	202	204	18
15°	163	168	172	180	186	46
25°	118	122	129	137	146	54
35°	70	74	83	94	104	44
45°	26	33	46	52	57	21
55°	13	17	19	18	16	11
65°	6	11	10	10	10	6
75°	3	7	6	6	5	3
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	206.3	206.3	206.3	206.3	206.3
2.5°	203.3	207.1	204.8	204.8	205.2
5°	198.3	202.5	201.8	202.5	204.4
7.5°	191.5	195.7	196.4	199.5	201.8
10°	182.7	186.9	189.2	194.2	197.6
12.5°	173.6	177.8	181.2	187.7	192.6
15°	163.3	167.9	172.1	179.7	185.8
17.5°	152.7	157.2	162.6	170.2	177.4
20°	141.2	145.4	151.9	159.1	166.7
22.5°	130.2	134.0	140.9	147.7	156.8
25°	118.0	122.2	128.7	136.7	145.8
27.5°	106.2	110.4	116.9	126.0	135.5
30°	94.4	98.2	105.5	115.0	125.2
32.5°	82.2	86.0	94.0	104.3	115.0
35°	70.4	74.2	82.6	94.0	104.3
37.5°	58.6	62.8	72.3	83.0	91.7
40°	47.2	52.2	63.2	72.3	79.9
42.5°	35.8	42.6	54.4	62.1	68.1
45°	25.5	32.7	46.1	51.8	57.1
47.5°	19.4	25.1	38.1	42.3	45.7
50°	16.8	20.6	30.5	33.5	35.0
52.5°	14.5	18.3	24.4	25.5	24.7
55°	12.6	16.8	19.4	18.3	16.4
57.5°	10.7	15.6	16.0	13.7	14.1
60°	8.8	14.1	13.7	11.8	12.2
62.5°	7.2	12.9	11.8	10.7	10.7
65°	6.1	11.4	10.3	9.5	9.5
67.5°	4.9	10.3	9.1	8.4	8.4
70°	4.2	9.1	8.0	7.2	7.2
72.5°	3.8	8.0	7.2	6.5	6.5
75°	3.0	6.9	6.5	5.7	5.3
77.5°	2.7	5.7	5.7	5.3	4.6
80°	2.3	4.9	5.3	4.6	3.8
82.5°	2.3	4.6	4.6	4.2	3.0
85°	1.9	3.8	4.2	3.8	2.7
87.5°	1.1	3.4	3.4	3.0	1.9
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	6.67	7.95	7.04	8.27	8.58	6.20	7.48	6.56	7.79	8.10
	3H	7.85	8.98	8.23	9.31	9.68	7.76	8.90	8.14	9.23	9.59
	4H	8.27	9.34	8.68	9.69	10.07	8.44	9.50	8.85	9.85	10.24
	6H	8.62	9.60	9.04	9.97	10.36	9.09	10.07	9.51	10.44	10.83
	8H	8.82	9.75	9.25	10.14	10.54	9.38	10.30	9.81	10.69	11.10
	12H	9.04	9.93	9.47	10.31	10.74	9.70	10.58	10.13	10.96	11.39
4H	2H	7.18	8.24	7.58	8.59	8.98	6.80	7.86	7.20	8.21	8.60
	3H	8.82	9.69	9.23	10.10	10.50	8.60	9.47	9.01	9.88	10.28
	4H	9.59	10.37	10.02	10.79	11.23	9.44	10.22	9.87	10.64	11.09
	6H	10.19	10.87	10.65	11.31	11.78	10.30	10.98	10.76	11.42	11.89
	8H	10.49	11.13	10.96	11.57	12.04	10.68	11.32	11.15	11.77	12.24
	12H	10.80	11.37	11.29	11.85	12.32	11.12	11.68	11.61	12.17	12.64
8H	4H	10.00	10.64	10.47	11.09	11.56	9.89	10.53	10.36	10.98	11.45
	6H	10.95	11.47	11.45	11.97	12.45	11.01	11.53	11.51	12.03	12.51
	8H	11.50	11.97	12.02	12.48	12.98	11.58	12.05	12.11	12.57	13.06
	12H	12.07	12.48	12.58	12.98	13.55	12.26	12.67	12.77	13.17	13.74
12H	4H	10.07	10.64	10.56	11.12	11.59	9.98	10.54	10.46	11.02	11.50
	6H	11.13	11.60	11.65	12.12	12.61	11.19	11.66	11.71	12.18	12.67
	8H	11.83	12.25	12.35	12.74	13.31	11.90	12.32	12.42	12.81	13.38