

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: P1057936

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057936
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
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-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

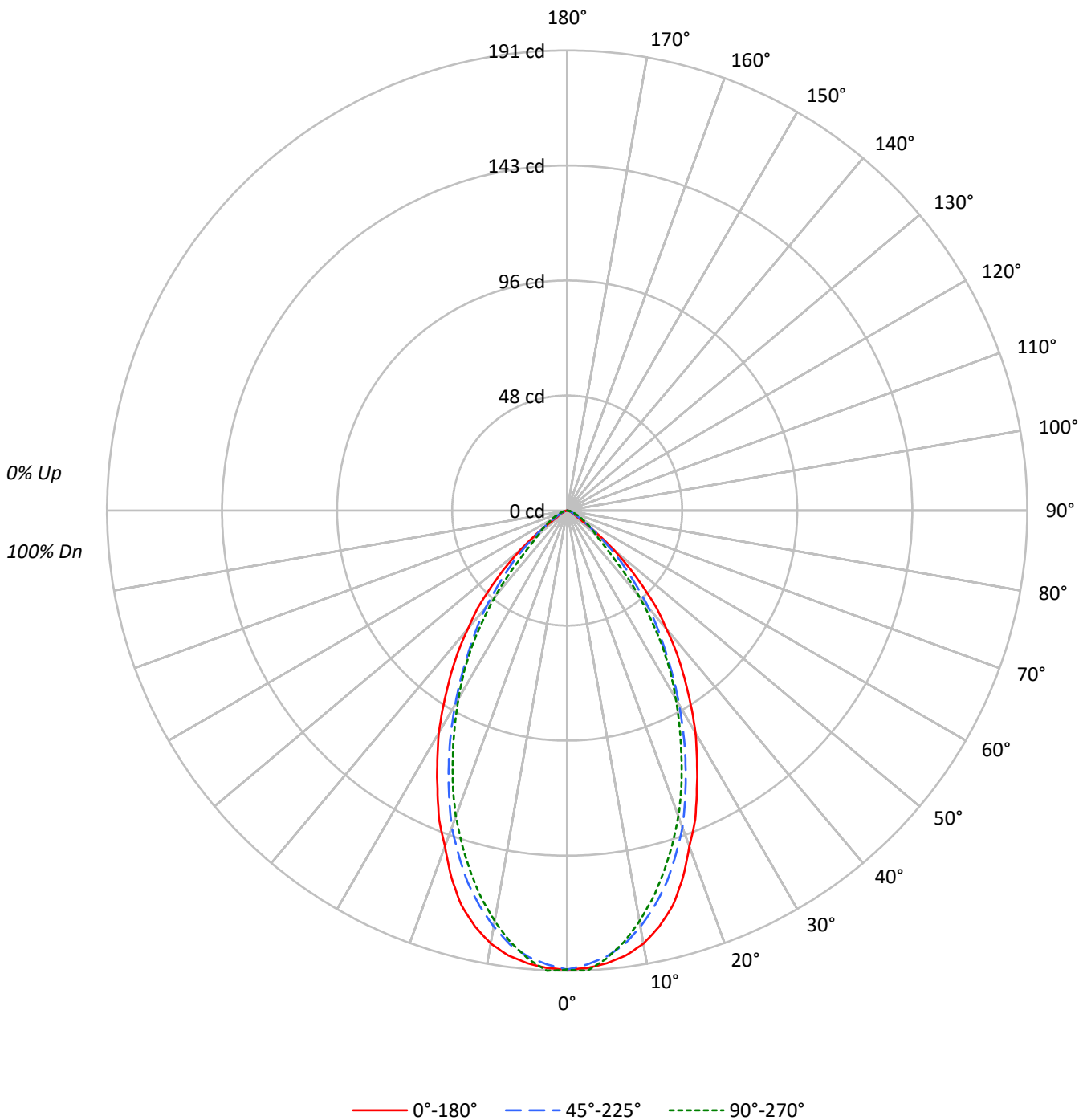
Lumens per Lamp: N/A
Luminaire Lumens: 204.9 lumens
Efficiency: N/A
Efficacy: 16.4 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92					92			
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84					84			
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76					76			
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70					70			
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64					64			
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59					59			
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54					54			
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50					50			
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47					47			
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44					44			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3515	3515	3515
5°	3493	3443	3458
10°	3420	3285	3242
15°	3240	3051	2963
20°	2912	2747	2651
25°	2594	2368	2284
30°	2269	1977	1920
35°	1910	1602	1550
40°	1539	1265	1118
45°	1151	913	665
50°	721	588	436
55°	244	318	354
60°	140	196	280
65°	100	131	214
70°	81	103	162
75°	57	78	135
80°	43	85	117
85°	0	0	85

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1151 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.6	8.6
10°-20°	44.9	21.9
20°-30°	54.1	26.4
30°-40°	46.2	22.6
40°-50°	27.1	13.2
50°-60°	9.8	4.8
60°-70°	3.5	1.7
70°-80°	1.4	0.7
80°-90°	0.3	0.1
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°	116.6	56.9
0°-40°	162.8	79.5
0°-60°	199.7	97.5
0°-90°	204.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	204.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	190	190	190	190	190	
5°	189	189	186	187	187	18
15°	170	167	160	157	155	47
25°	127	122	116	114	112	58
35°	85	78	71	70	69	53
45°	44	40	35	29	26	34
55°	8	11	10	10	11	9
65°	2	3	3	4	5	2
75°	1	1	1	2	2	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	190.5	190.5	190.5	190.5	190.5
2.5°	190.1	190.5	188.6	190.5	191.2
5°	188.6	189.0	185.9	186.7	186.7
7.5°	186.3	185.9	181.7	181.0	180.6
10°	182.5	181.3	175.3	174.1	173.0
12.5°	176.8	174.5	168.0	166.1	164.6
15°	169.6	166.9	159.7	156.6	155.1
17.5°	159.7	156.6	149.8	146.8	145.2
20°	148.3	145.2	139.9	136.5	135.0
22.5°	138.8	133.8	128.1	125.8	123.9
25°	127.4	122.0	116.3	114.4	112.2
27.5°	116.7	110.3	104.6	103.0	101.1
30°	106.5	99.6	92.8	92.8	90.1
32.5°	95.4	89.0	81.7	81.4	79.8
35°	84.8	78.3	71.1	70.3	68.8
37.5°	74.9	68.4	61.6	59.3	57.4
40°	63.9	58.2	52.5	48.7	46.4
42.5°	55.1	48.7	43.0	38.4	35.4
45°	44.1	39.5	35.0	29.3	25.5
47.5°	34.2	31.2	27.4	20.9	19.0
50°	25.1	23.6	20.5	15.6	15.2
52.5°	16.0	16.7	14.8	12.2	13.3
55°	7.6	10.6	9.9	10.3	11.0
57.5°	4.9	5.3	7.2	8.4	9.1
60°	3.8	3.8	5.3	6.8	7.6
62.5°	3.0	3.0	4.2	5.7	6.1
65°	2.3	2.7	3.0	4.2	4.9
67.5°	1.9	1.9	2.3	3.4	3.8
70°	1.5	1.5	1.9	2.7	3.0
72.5°	1.1	1.1	1.5	2.3	2.3
75°	0.8	1.1	1.1	1.5	1.9
77.5°	0.8	0.8	0.8	1.1	1.5
80°	0.4	0.4	0.8	0.8	1.1
82.5°	0.4	0.4	0.4	0.4	0.8
85°	0.0	0.0	0.0	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.0
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	0.22	1.38	0.58	1.69	2.01	3.66	4.83	4.03	5.14	5.45
	3H	0.74	1.76	1.12	2.09	2.46	4.39	5.41	4.77	5.74	6.11
	4H	0.87	1.82	1.28	2.17	2.56	4.60	5.55	5.01	5.90	6.29
	6H	0.96	1.83	1.38	2.20	2.60	4.74	5.61	5.16	5.98	6.38
	8H	0.98	1.79	1.41	2.18	2.59	4.78	5.59	5.21	5.99	6.39
	12H	0.94	1.72	1.38	2.11	2.54	4.78	5.56	5.22	5.95	6.38
4H	2H	0.52	1.47	0.92	1.82	2.21	3.62	4.57	4.03	4.92	5.31
	3H	1.18	1.94	1.59	2.35	2.75	4.50	5.26	4.91	5.67	6.08
	4H	1.41	2.09	1.85	2.51	2.96	4.77	5.46	5.21	5.88	6.33
	6H	1.55	2.14	2.02	2.59	3.06	4.99	5.58	5.46	6.02	6.49
	8H	1.58	2.12	2.05	2.57	3.05	5.04	5.59	5.51	6.04	6.51
	12H	1.55	2.02	2.04	2.51	2.99	5.07	5.55	5.56	6.03	6.51
8H	4H	1.52	2.07	1.99	2.52	2.99	4.70	5.25	5.18	5.70	6.17
	6H	1.72	2.16	2.23	2.66	3.15	4.96	5.40	5.47	5.90	6.38
	8H	1.78	2.17	2.31	2.69	3.19	5.03	5.42	5.56	5.94	6.44
	12H	1.76	2.11	2.28	2.60	3.18	5.10	5.45	5.62	5.95	6.52
12H	4H	1.51	1.99	2.00	2.47	2.95	4.66	5.13	5.15	5.62	6.10
	6H	1.72	2.12	2.25	2.64	3.13	4.91	5.31	5.44	5.83	6.32
	8H	1.81	2.16	2.33	2.65	3.23	5.01	5.35	5.52	5.85	6.43