

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: P1057941

Luminaire Tested: S122RDRP-S290D940-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057941
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S290D940-X4F0-XX-UDD-WVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

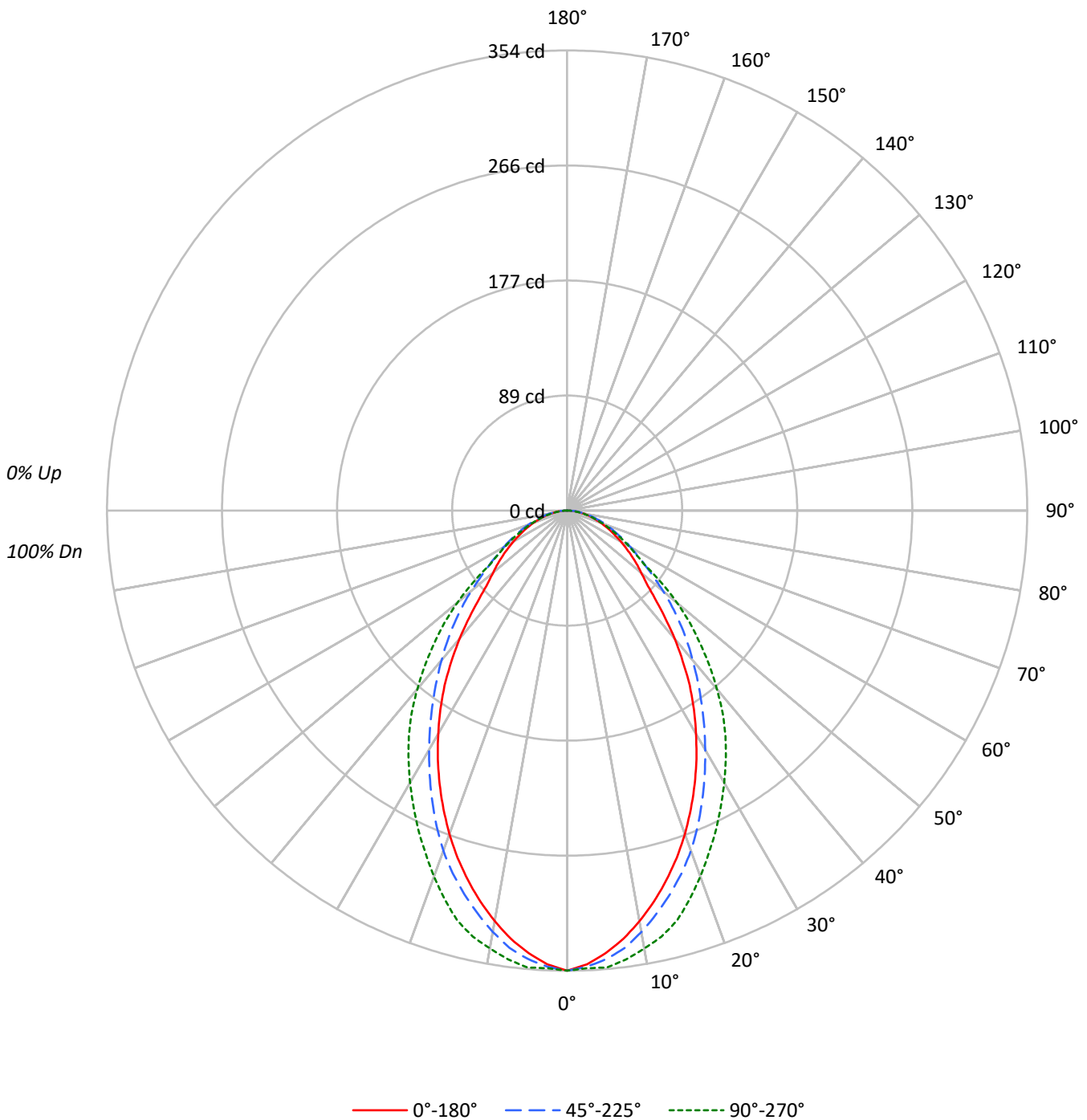
Lumens per Lamp: N/A
Luminaire Lumens: 576.9 lumens
Efficiency: N/A
Efficacy: 46.2 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1057941

CATALOG NUMBER: S122RDRP-S290D940-X4F0-XX-UDD-WVL-W

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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	39	35	46	39	35	45	39	35	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6530	6530	6530
5°	6329	6414	6533
10°	6011	6166	6410
15°	5626	5836	6237
20°	5200	5469	5881
25°	4726	5004	5516
30°	4223	4523	5148
35°	3703	4055	4782
40°	3098	3620	4317
45°	2482	3207	3773
50°	2130	2764	3166
55°	1946	2352	2339
60°	1768	2078	2037
65°	1611	1860	1777
70°	1478	1705	1581
75°	1383	1576	1383
80°	1296	1456	1211
85°	1291	1524	1037

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3773 cd/sqm

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CATALOG NUMBER: S122RDRP-S290D940-X4F0-XX-UDD-WVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.7	5.7
10°-20°	86.5	15.0
20°-30°	114.1	19.8
30°-40°	114.9	19.9
40°-50°	93.5	16.2
50°-60°	63.8	11.0
60°-70°	41.4	7.2
70°-80°	22.8	4.0
80°-90°	7.4	1.3
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°	233.2	40.4
0°-40°	348.1	60.3
0°-60°	505.3	87.6
0°-90°	576.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	576.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	354	354	354	354	354	
5°	342	348	346	349	353	32
15°	294	302	306	318	326	83
25°	232	240	246	257	271	106
35°	164	173	180	196	212	102
45°	95	107	123	134	145	75
55°	60	67	73	73	73	54
65°	37	44	43	40	41	37
75°	19	24	22	20	19	21
85°	6	8	7	6	5	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	353.9	353.9	353.9	353.9	353.9
2.5°	349.3	355.0	351.2	351.6	352.4
5°	341.7	348.2	346.3	349.3	352.7
7.5°	332.2	338.7	339.4	344.0	348.2
10°	320.8	328.0	329.1	336.0	342.1
12.5°	308.2	316.2	317.7	327.6	335.6
15°	294.5	302.1	305.5	318.1	326.5
17.5°	280.1	287.3	292.6	304.0	313.5
20°	264.8	271.7	278.5	288.8	299.5
22.5°	248.5	256.1	262.6	272.8	285.0
25°	232.1	239.7	245.8	256.8	270.9
27.5°	215.4	223.0	229.1	240.9	256.1
30°	198.2	206.2	212.3	225.6	241.6
32.5°	181.5	189.5	196.3	210.4	227.2
35°	164.4	172.8	180.0	195.6	212.3
37.5°	146.1	155.6	164.8	180.4	196.7
40°	128.6	139.3	150.3	164.8	179.2
42.5°	111.1	122.9	136.6	148.8	162.1
45°	95.1	106.9	122.9	133.6	144.6
47.5°	82.6	92.5	109.6	118.3	128.2
50°	74.2	81.0	96.3	103.1	110.3
52.5°	67.4	73.1	83.7	88.3	92.1
55°	60.5	66.6	73.1	73.4	72.7
57.5°	53.7	60.5	63.9	61.3	62.8
60°	47.9	54.8	56.3	53.7	55.2
62.5°	41.9	49.5	49.5	46.8	47.6
65°	36.9	43.8	42.6	40.3	40.7
67.5°	32.0	38.8	36.9	34.6	34.6
70°	27.4	33.9	31.6	29.3	29.3
72.5°	23.2	28.5	27.0	24.4	24.0
75°	19.4	24.0	22.1	19.8	19.4
77.5°	15.6	19.4	17.9	16.0	15.2
80°	12.2	15.6	13.7	12.2	11.4
82.5°	9.1	11.8	10.3	8.8	8.0
85°	6.1	8.0	7.2	5.7	4.9
87.5°	3.0	5.3	4.6	3.8	3.0
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	13.24	14.68	13.60	14.99	15.31	13.49	14.93	13.85	15.24	15.56
	3H	14.77	16.05	15.15	16.38	16.75	14.84	16.13	15.22	16.46	16.82
	4H	15.33	16.53	15.73	16.88	17.26	15.33	16.53	15.73	16.88	17.26
	6H	15.75	16.87	16.17	17.23	17.63	15.67	16.79	16.09	17.15	17.55
	8H	15.91	16.96	16.33	17.35	17.76	15.78	16.84	16.21	17.23	17.63
	12H	16.02	17.03	16.45	17.41	17.84	15.85	16.86	16.28	17.24	17.67
4H	2H	13.81	15.02	14.21	15.36	15.75	14.01	15.22	14.41	15.57	15.95
	3H	15.62	16.61	16.03	17.01	17.42	15.59	16.58	16.00	16.99	17.39
	4H	16.36	17.25	16.79	17.67	18.11	16.18	17.08	16.61	17.49	17.93
	6H	16.94	17.72	17.40	18.17	18.63	16.65	17.43	17.11	17.87	18.33
	8H	17.15	17.88	17.62	18.33	18.80	16.80	17.53	17.26	17.97	18.44
	12H	17.32	17.97	17.80	18.45	18.92	16.91	17.56	17.39	18.04	18.51
8H	4H	16.62	17.35	17.09	17.80	18.27	16.47	17.20	16.94	17.64	18.11
	6H	17.38	17.98	17.88	18.47	18.95	17.06	17.66	17.56	18.16	18.63
	8H	17.70	18.24	18.22	18.75	19.24	17.28	17.82	17.80	18.34	18.82
	12H	17.98	18.46	18.50	18.95	19.52	17.47	17.94	17.98	18.44	19.00
12H	4H	16.64	17.29	17.12	17.77	18.24	16.50	17.15	16.99	17.63	18.11
	6H	17.42	17.96	17.94	18.48	18.97	17.13	17.67	17.65	18.18	18.67
	8H	17.82	18.30	18.33	18.79	19.36	17.42	17.89	17.93	18.39	18.95