

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: P1057926

Luminaire Tested: S122RDRP-S290D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057926
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S290D935-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

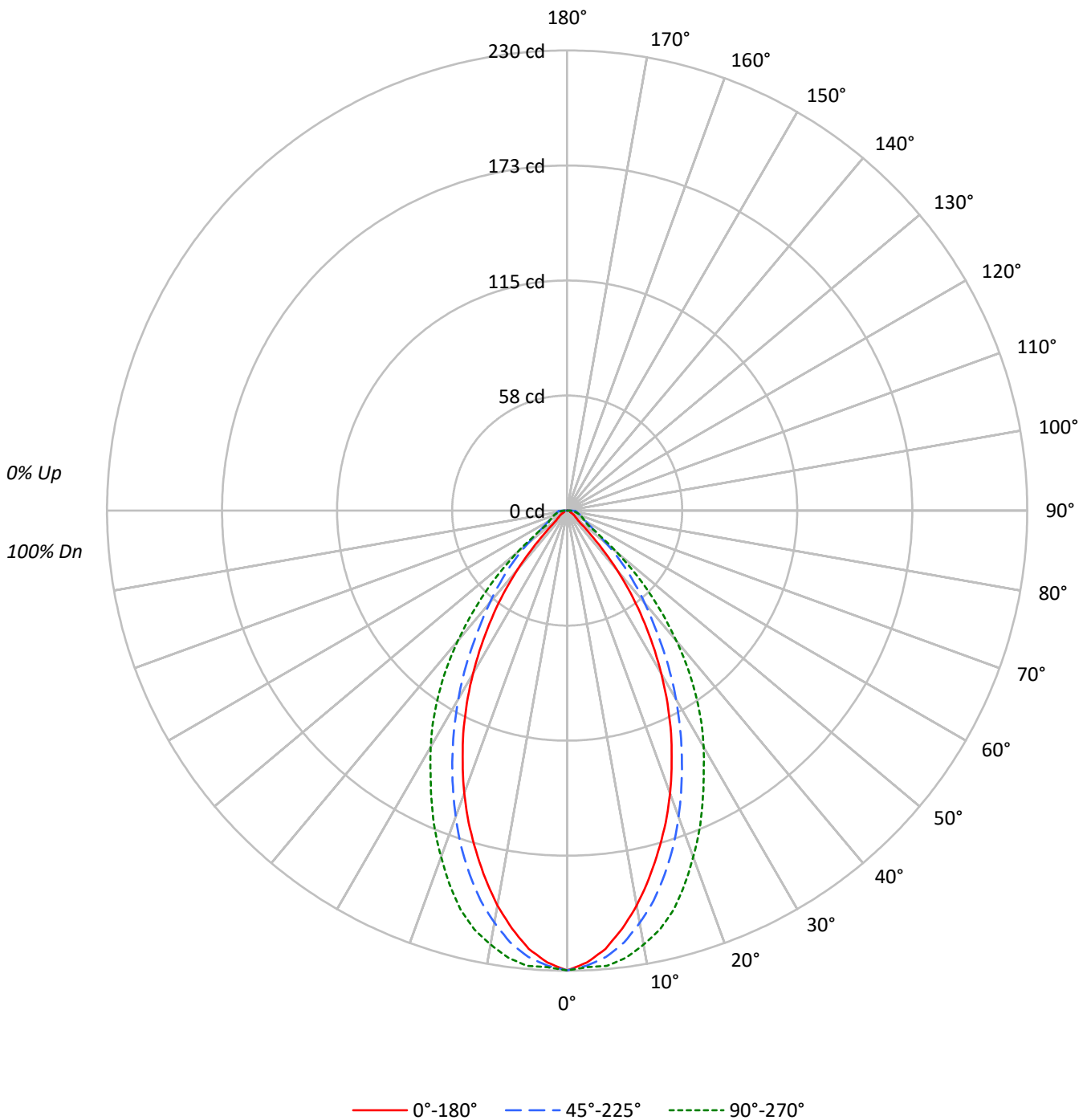
Lumens per Lamp: N/A
Luminaire Lumens: 250.1 lumens
Efficiency: N/A
Efficacy: 20.0 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	76	81	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	67	64	71	66	63					61				
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58					56				
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54					52				
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50					48				
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46					45				
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43					42				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4240	4240	4240
5°	4073	4147	4231
10°	3755	3920	4128
15°	3364	3597	3941
20°	2953	3199	3617
25°	2500	2763	3264
30°	2005	2318	2906
35°	1482	1856	2518
40°	930	1453	2045
45°	365	1093	1516
50°	181	738	930
55°	142	486	415
60°	107	395	380
65°	79	371	371
70°	97	378	378
75°	107	421	392
80°	159	542	425
85°	318	932	614

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 1692 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.0	8.4
10°-20°	53.1	21.2
20°-30°	63.5	25.4
30°-40°	53.4	21.4
40°-50°	30.4	12.2
50°-60°	12.0	4.8
60°-70°	7.6	3.0
70°-80°	5.6	2.2
80°-90°	3.6	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°	137.5	55.0
0°-40°	191.0	76.4
0°-60°	233.4	93.3
0°-90°	250.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	250.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	230	230	230	230	230	
5°	220	225	224	226	228	20
15°	176	182	188	199	206	49
25°	123	128	136	150	160	56
35°	66	72	82	100	112	41
45°	14	25	42	53	58	13
55°	4	10	15	15	13	4
65°	2	8	8	8	8	2
75°	2	6	6	6	6	2
85°	2	4	4	4	3	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	229.8	229.8	229.8	229.8	229.8
2.5°	226.1	230.2	227.6	228.0	228.4
5°	219.9	224.7	223.9	226.5	228.4
7.5°	210.7	215.8	217.7	222.1	225.4
10°	200.4	206.3	209.2	216.2	220.3
12.5°	188.6	195.3	199.7	208.5	214.4
15°	176.1	182.4	188.3	199.3	206.3
17.5°	163.6	169.9	176.1	188.3	195.6
20°	150.4	156.3	162.9	175.8	184.2
22.5°	136.4	142.7	149.3	162.5	172.8
25°	122.8	128.3	135.7	149.7	160.3
27.5°	108.5	114.0	122.1	136.4	147.8
30°	94.1	99.7	108.8	123.6	136.4
32.5°	79.8	85.7	95.6	111.8	124.7
35°	65.8	71.7	82.4	100.0	111.8
37.5°	52.2	58.8	70.6	87.9	98.9
40°	38.6	46.3	60.3	75.7	84.9
42.5°	25.7	35.3	50.7	63.6	71.3
45°	14.0	24.6	41.9	52.6	58.1
47.5°	7.7	15.8	33.5	41.9	45.2
50°	6.3	11.0	25.7	32.0	32.4
52.5°	5.1	9.9	19.1	22.8	21.0
55°	4.4	9.6	15.1	15.4	12.9
57.5°	3.7	9.2	12.5	11.0	11.0
60°	2.9	9.2	10.7	9.9	10.3
62.5°	2.2	9.2	9.6	8.8	9.2
65°	1.8	8.5	8.5	8.1	8.5
67.5°	1.8	7.7	7.7	7.4	7.7
70°	1.8	7.4	7.0	7.0	7.0
72.5°	1.5	6.6	6.6	6.3	6.3
75°	1.5	5.9	5.9	5.5	5.5
77.5°	1.5	5.5	5.5	5.1	4.8
80°	1.5	4.8	5.1	4.8	4.0
82.5°	1.5	4.4	4.8	4.4	3.3
85°	1.5	4.0	4.4	4.0	2.9
87.5°	1.1	4.0	4.0	3.3	2.2
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	2.72	3.94	3.08	4.25	4.57	4.72	5.94	5.08	6.25	6.56
	3H	4.25	5.34	4.63	5.67	6.03	6.70	7.79	7.08	8.12	8.49
	4H	4.81	5.83	5.22	6.18	6.56	7.62	8.63	8.03	8.98	9.37
	6H	5.38	6.31	5.80	6.68	7.08	8.50	9.43	8.92	9.80	10.20
	8H	5.68	6.56	6.11	6.95	7.36	8.90	9.78	9.33	10.17	10.58
	12H	6.05	6.89	6.48	7.27	7.70	9.34	10.18	9.77	10.56	10.99
4H	2H	3.91	4.93	4.32	5.28	5.66	5.35	6.36	5.75	6.71	7.10
	3H	6.10	6.94	6.52	7.34	7.75	7.60	8.44	8.02	8.84	9.25
	4H	7.16	7.91	7.60	8.33	8.78	8.67	9.42	9.11	9.84	10.29
	6H	8.06	8.71	8.53	9.16	9.63	9.78	10.42	10.24	10.87	11.34
	8H	8.45	9.06	8.92	9.50	9.98	10.30	10.90	10.77	11.35	11.82
	12H	8.87	9.41	9.36	9.89	10.37	10.86	11.40	11.35	11.88	12.36
8H	4H	7.96	8.56	8.43	9.01	9.48	9.16	9.77	9.63	10.22	10.69
	6H	9.34	9.84	9.85	10.34	10.82	10.55	11.05	11.06	11.55	12.03
	8H	10.06	10.51	10.58	11.02	11.52	11.29	11.74	11.81	12.25	12.75
	12H	10.81	11.20	11.32	11.70	12.27	12.11	12.50	12.63	13.00	13.57
12H	4H	8.12	8.65	8.61	9.14	9.61	9.26	9.80	9.75	10.28	10.76
	6H	9.67	10.12	10.20	10.63	11.13	10.77	11.22	11.30	11.73	12.23
	8H	10.59	10.98	11.10	11.48	12.05	11.66	12.05	12.17	12.54	13.12