

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: P1057917

Luminaire Tested: S122RDRP-S290D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057917
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-S290D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

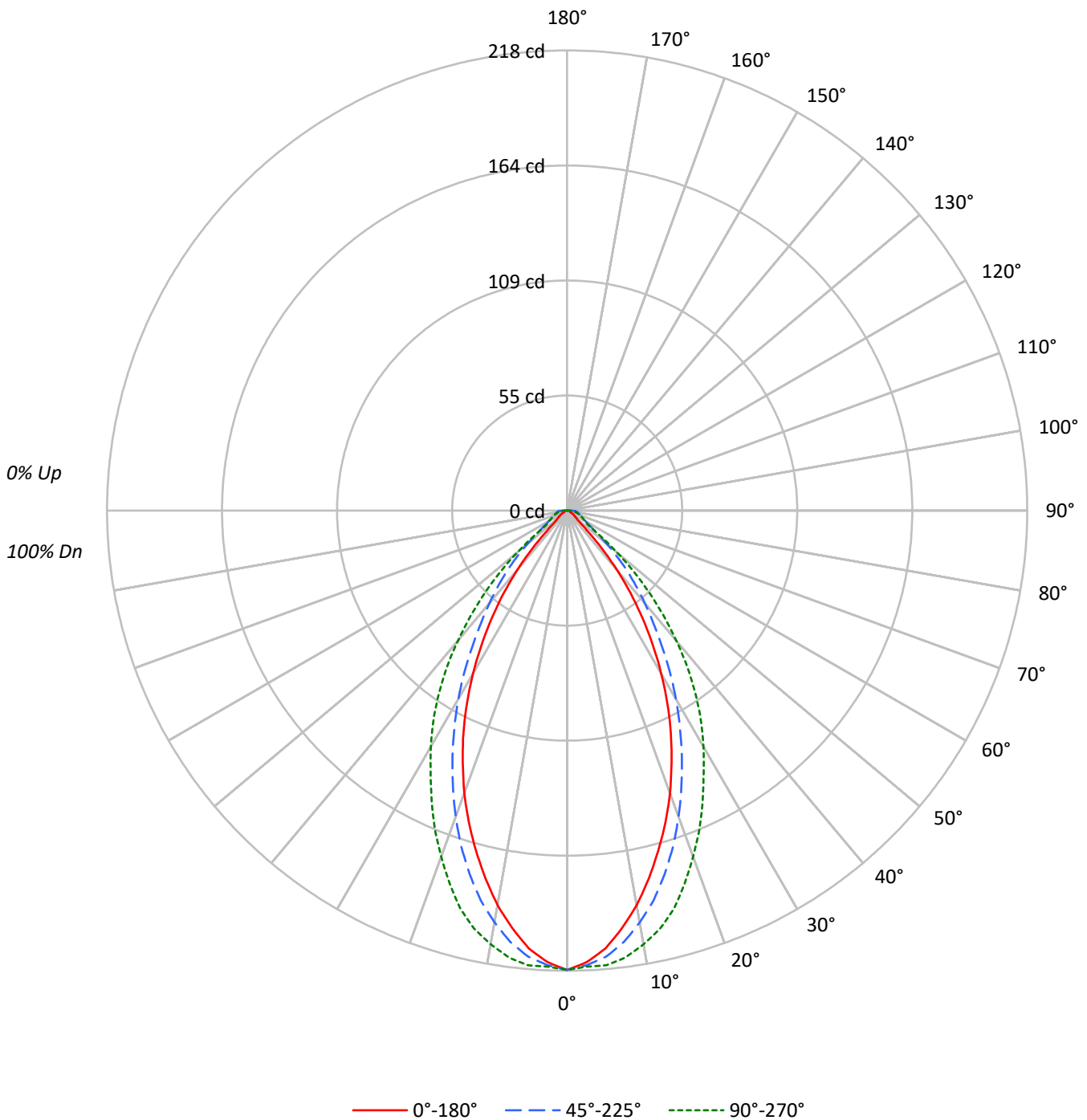
Lumens per Lamp: N/A
Luminaire Lumens: 236.9 lumens
Efficiency: N/A
Efficacy: 18.9 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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°	4015	4015	4015
5°	3856	3929	4005
10°	3556	3712	3909
15°	3186	3406	3731
20°	2796	3030	3425
25°	2368	2616	3091
30°	1898	2197	2753
35°	1403	1757	2386
40°	882	1375	1937
45°	344	1036	1435
50°	169	700	878
55°	135	460	392
60°	103	373	358
65°	74	349	349
70°	92	356	356
75°	100	399	371
80°	149	521	404
85°	296	889	593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 1608 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.9	8.4
10°-20°	50.3	21.2
20°-30°	60.1	25.4
30°-40°	50.6	21.4
40°-50°	28.8	12.2
50°-60°	11.4	4.8
60°-70°	7.2	3.0
70°-80°	5.3	2.2
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°	130.2	55.0
0°-40°	180.8	76.4
0°-60°	221.0	93.3
0°-90°	236.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	236.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	218	218	218	218	218	
5°	208	213	212	214	216	19
15°	167	173	178	189	195	47
25°	116	122	128	142	152	53
35°	62	68	78	95	106	39
45°	13	23	40	50	55	12
55°	4	9	14	15	12	4
65°	2	8	8	8	8	2
75°	1	6	6	5	5	2
85°	1	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°	217.6	217.6	217.6	217.6	217.6
2.5°	214.1	218.0	215.5	215.9	216.2
5°	208.2	212.7	212.1	214.5	216.2
7.5°	199.5	204.4	206.1	210.3	213.4
10°	189.8	195.3	198.1	204.7	208.6
12.5°	178.6	184.9	189.1	197.4	203.0
15°	166.8	172.7	178.3	188.7	195.3
17.5°	154.9	160.9	166.8	178.3	185.2
20°	142.4	148.0	154.3	166.4	174.4
22.5°	129.2	135.1	141.4	153.9	163.7
25°	116.3	121.5	128.5	141.7	151.8
27.5°	102.7	107.9	115.6	129.2	140.0
30°	89.1	94.4	103.1	117.0	129.2
32.5°	75.6	81.1	90.5	105.9	118.0
35°	62.3	67.9	78.0	94.7	105.9
37.5°	49.4	55.7	66.9	83.2	93.7
40°	36.6	43.9	57.1	71.7	80.4
42.5°	24.4	33.4	48.1	60.2	67.6
45°	13.2	23.3	39.7	49.8	55.0
47.5°	7.3	15.0	31.7	39.7	42.8
50°	5.9	10.4	24.4	30.3	30.6
52.5°	4.9	9.4	18.1	21.6	19.8
55°	4.2	9.1	14.3	14.6	12.2
57.5°	3.5	8.7	11.8	10.4	10.4
60°	2.8	8.7	10.1	9.4	9.7
62.5°	2.1	8.7	9.1	8.4	8.7
65°	1.7	8.0	8.0	7.7	8.0
67.5°	1.7	7.3	7.3	7.0	7.3
70°	1.7	7.0	6.6	6.6	6.6
72.5°	1.4	6.3	6.3	5.9	5.9
75°	1.4	5.6	5.6	5.2	5.2
77.5°	1.4	5.2	5.2	4.9	4.5
80°	1.4	4.5	4.9	4.5	3.8
82.5°	1.4	4.2	4.5	4.2	3.1
85°	1.4	3.8	4.2	3.8	2.8
87.5°	1.0	3.8	3.8	3.1	2.1
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	2.52	3.74	2.89	4.05	4.37	4.52	5.74	4.88	6.05	6.37
	3H	4.06	5.14	4.44	5.47	5.84	6.50	7.59	6.88	7.92	8.29
	4H	4.62	5.63	5.02	5.98	6.37	7.42	8.43	7.82	8.78	9.16
	6H	5.18	6.11	5.59	6.48	6.87	8.29	9.23	8.71	9.60	9.99
	8H	5.47	6.35	5.90	6.74	7.15	8.70	9.58	9.13	9.97	10.37
	12H	5.83	6.68	6.27	7.06	7.49	9.14	9.98	9.57	10.37	10.80
4H	2H	3.71	4.72	4.11	5.07	5.45	5.14	6.15	5.55	6.51	6.89
	3H	5.91	6.74	6.32	7.15	7.55	7.40	8.23	7.81	8.64	9.04
	4H	6.97	7.72	7.41	8.14	8.58	8.47	9.21	8.90	9.63	10.08
	6H	7.86	8.51	8.32	8.95	9.42	9.57	10.22	10.04	10.67	11.14
	8H	8.25	8.85	8.72	9.30	9.77	10.09	10.70	10.57	11.15	11.62
	12H	8.67	9.20	9.15	9.69	10.16	10.67	11.21	11.16	11.69	12.17
8H	4H	7.77	8.38	8.24	8.82	9.30	8.96	9.57	9.43	10.02	10.49
	6H	9.14	9.64	9.65	10.14	10.62	10.36	10.85	10.86	11.35	11.83
	8H	9.87	10.31	10.39	10.83	11.32	11.10	11.54	11.62	12.06	12.55
	12H	10.61	11.01	11.13	11.50	12.08	11.93	12.32	12.45	12.82	13.39
12H	4H	7.93	8.47	8.42	8.95	9.43	9.06	9.60	9.55	10.08	10.56
	6H	9.47	9.92	10.00	10.44	10.93	10.58	11.02	11.10	11.54	12.03
	8H	10.39	10.79	10.91	11.28	11.86	11.46	11.86	11.98	12.35	12.92