

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: P1057921

Luminaire Tested: S122RDRP-S290D930-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057921
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S290D930-X4F0-XX-UDD-WVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

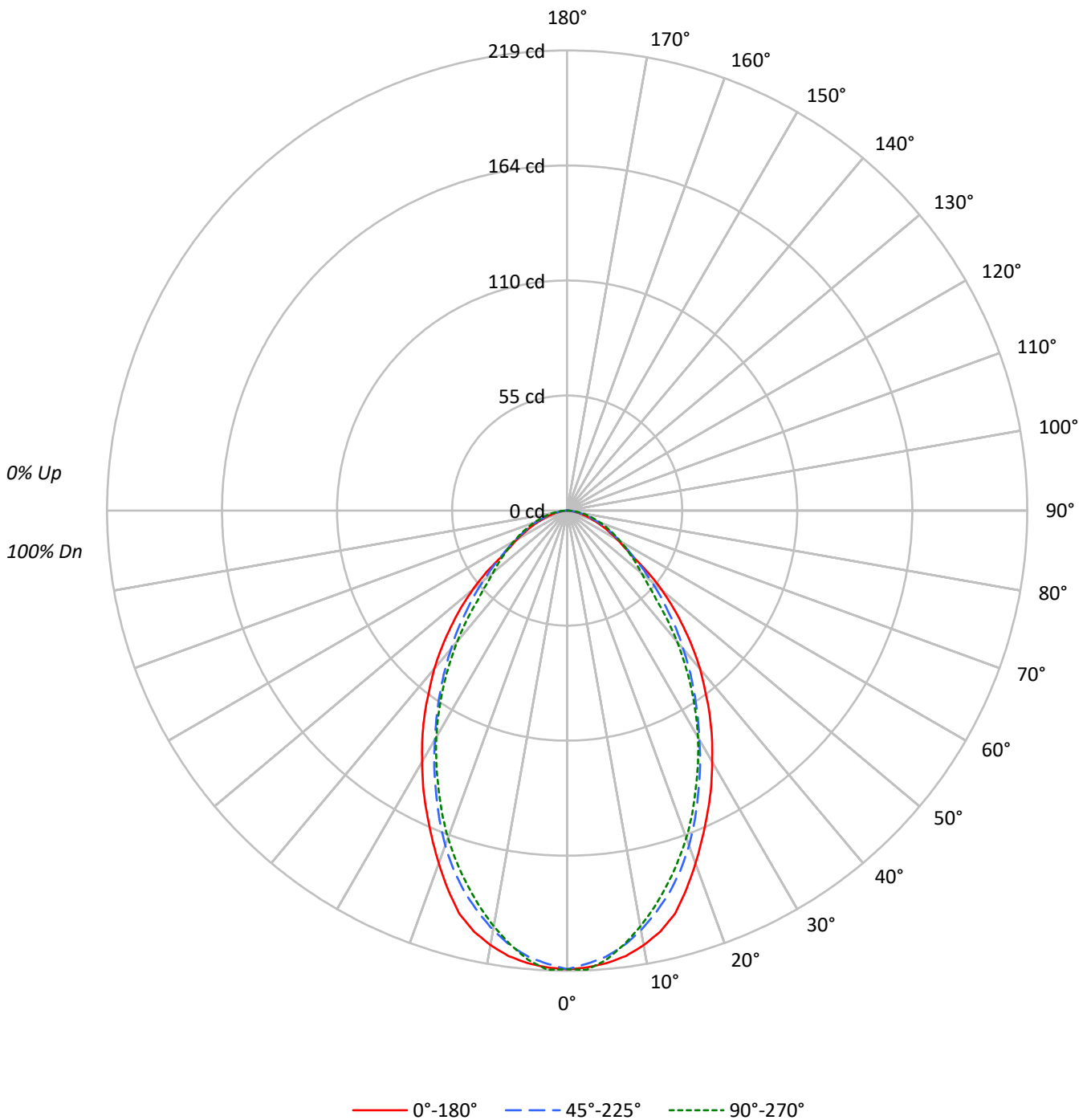
Lumens per Lamp: N/A
Luminaire Lumens: 331.5 lumens
Efficiency: N/A
Efficacy: 26.5 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4028	4028	4028
5°	4005	3947	3973
10°	3935	3798	3764
15°	3792	3593	3519
20°	3509	3330	3256
25°	3221	3007	2952
30°	2940	2680	2653
35°	2663	2372	2318
40°	2370	2069	1958
45°	2041	1777	1568
50°	1688	1496	1318
55°	1219	1242	1184
60°	1015	1067	1078
65°	865	926	987
70°	712	825	901
75°	592	692	820
80°	446	553	744
85°	148	296	656

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2041 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.2	6.1
10°-20°	53.1	16.0
20°-30°	68.8	20.7
30°-40°	67.5	20.3
40°-50°	53.1	16.0
50°-60°	34.8	10.5
60°-70°	21.2	6.4
70°-80°	10.6	3.2
80°-90°	2.3	0.7
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°	142.1	42.9
0°-40°	209.6	63.2
0°-60°	297.5	89.7
0°-90°	331.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	331.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	218	218	218	218	218	
5°	216	216	213	214	214	20
15°	198	196	188	186	184	55
25°	158	153	148	147	145	73
35°	118	112	105	105	103	74
45°	78	73	68	63	60	60
55°	38	40	39	37	37	36
65°	20	20	21	22	23	20
75°	8	9	10	11	12	9
85°	1	1	1	2	3	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	218.3	218.3	218.3	218.3	218.3
2.5°	217.6	218.0	215.9	218.0	218.7
5°	216.2	216.2	213.1	214.5	214.5
7.5°	213.8	213.4	208.6	208.6	208.2
10°	210.0	208.6	202.7	201.6	200.9
12.5°	205.1	202.7	195.7	194.0	192.9
15°	198.5	195.7	188.1	185.6	184.2
17.5°	188.8	186.0	179.4	176.6	175.2
20°	178.7	174.5	169.6	167.2	165.8
22.5°	168.3	163.4	158.9	157.1	155.7
25°	158.2	153.0	147.7	147.0	145.0
27.5°	148.4	142.2	137.0	136.6	134.9
30°	138.0	131.4	125.8	126.2	124.5
32.5°	128.3	122.0	115.4	115.8	113.7
35°	118.2	111.6	105.3	105.0	102.9
37.5°	107.8	101.5	95.6	94.2	92.1
40°	98.4	92.1	85.9	83.4	81.3
42.5°	88.3	82.7	77.2	73.4	70.6
45°	78.2	73.4	68.1	63.3	60.1
47.5°	68.5	64.7	60.1	54.2	52.1
50°	58.8	56.0	52.1	46.9	45.9
52.5°	48.7	47.6	45.2	41.7	41.4
55°	37.9	40.0	38.6	37.2	36.8
57.5°	32.0	32.3	33.4	33.0	33.0
60°	27.5	27.5	28.9	29.2	29.2
62.5°	23.3	23.6	25.0	25.7	25.7
65°	19.8	20.2	21.2	22.2	22.6
67.5°	16.3	17.0	18.1	19.1	19.5
70°	13.2	13.9	15.3	16.3	16.7
72.5°	10.8	11.1	12.5	13.6	13.9
75°	8.3	8.7	9.7	11.1	11.5
77.5°	5.9	6.6	7.6	8.7	9.4
80°	4.2	4.5	5.2	6.6	7.0
82.5°	2.4	2.8	3.5	4.5	4.9
85°	0.7	1.0	1.4	2.4	3.1
87.5°	0.0	0.0	0.0	0.7	1.4
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	10.96	12.36	11.33	12.67	12.98	11.14	12.53	11.50	12.85	13.16
	3H	12.09	13.34	12.47	13.66	14.03	12.60	13.84	12.98	14.17	14.54
	4H	12.44	13.60	12.84	13.95	14.34	13.14	14.31	13.54	14.66	15.04
	6H	12.63	13.70	13.04	14.07	14.46	13.56	14.63	13.97	15.00	15.39
	8H	12.65	13.67	13.08	14.06	14.46	13.69	14.70	14.12	15.09	15.50
	12H	12.64	13.61	13.07	13.99	14.42	13.77	14.74	14.20	15.12	15.55
4H	2H	11.42	12.58	11.82	12.93	13.31	11.57	12.73	11.97	13.08	13.46
	3H	12.76	13.71	13.17	14.12	14.52	13.24	14.20	13.65	14.60	15.00
	4H	13.20	14.06	13.63	14.48	14.92	13.90	14.76	14.34	15.18	15.62
	6H	13.47	14.22	13.93	14.66	15.12	14.44	15.18	14.90	15.63	16.09
	8H	13.52	14.21	13.98	14.66	15.13	14.61	15.31	15.08	15.75	16.22
	12H	13.51	14.13	13.99	14.61	15.08	14.73	15.35	15.22	15.83	16.30
8H	4H	13.41	14.11	13.88	14.55	15.02	14.05	14.75	14.52	15.19	15.66
	6H	13.76	14.33	14.26	14.82	15.30	14.69	15.25	15.19	15.75	16.23
	8H	13.84	14.35	14.36	14.86	15.35	14.92	15.43	15.44	15.94	16.43
	12H	13.85	14.30	14.37	14.80	15.37	15.10	15.55	15.62	16.05	16.62
12H	4H	13.42	14.04	13.91	14.52	14.99	14.04	14.65	14.52	15.13	15.61
	6H	13.78	14.29	14.30	14.81	15.30	14.68	15.19	15.20	15.70	16.19
	8H	13.90	14.35	14.41	14.84	15.41	14.96	15.41	15.47	15.90	16.47