

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: P1057882

Luminaire Tested: S122RDRP-S290D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057882
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-S290D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

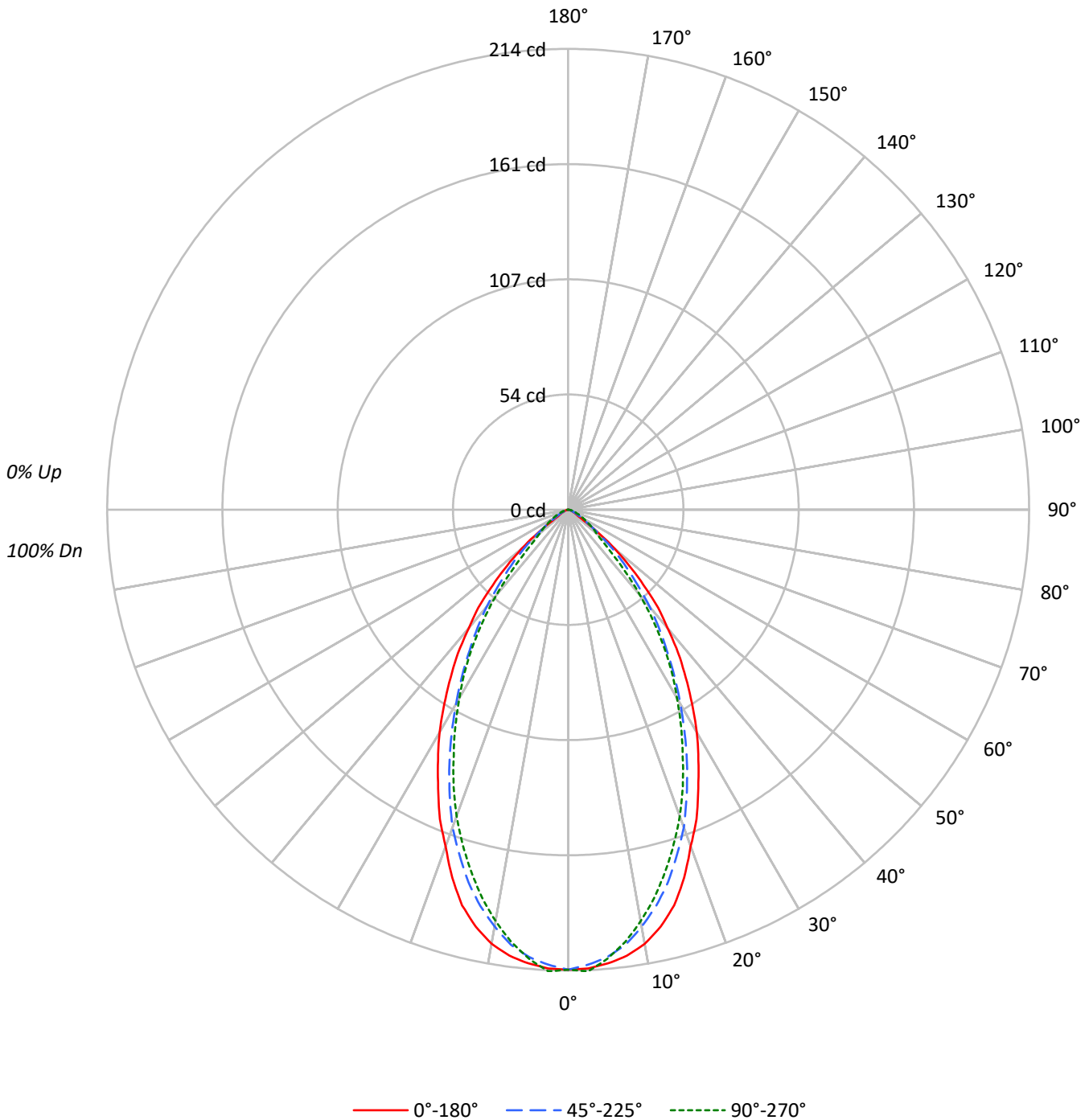
Lumens per Lamp: N/A
Luminaire Lumens: 229.7 lumens
Efficiency: N/A
Efficacy: 18.4 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3941	3941	3941
5°	3918	3862	3877
10°	3835	3684	3635
15°	3633	3421	3324
20°	3266	3081	2973
25°	2907	2657	2561
30°	2544	2216	2152
35°	2142	1795	1739
40°	1725	1416	1253
45°	1292	1023	746
50°	807	660	491
55°	273	357	399
60°	159	221	314
65°	114	148	240
70°	92	113	183
75°	64	93	150
80°	43	96	138
85°	0	0	85

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1292 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.7	8.6
10°-20°	50.4	21.9
20°-30°	60.7	26.4
30°-40°	51.8	22.6
40°-50°	30.4	13.2
50°-60°	11.0	4.8
60°-70°	3.9	1.7
70°-80°	1.6	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°	130.8	56.9
0°-40°	182.6	79.5
0°-60°	224.0	97.5
0°-90°	229.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	229.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	214	214	214	214	214	
5°	212	212	208	209	209	20
15°	190	187	179	176	174	53
25°	143	137	130	128	126	66
35°	95	88	80	79	77	59
45°	50	44	39	33	29	38
55°	8	12	11	12	12	11
65°	3	3	3	5	6	3
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°	213.6	213.6	213.6	213.6	213.6
2.5°	213.2	213.6	211.5	213.6	214.5
5°	211.5	211.9	208.5	209.3	209.3
7.5°	208.9	208.5	203.8	202.9	202.5
10°	204.7	203.4	196.6	195.3	194.0
12.5°	198.3	195.7	188.5	186.3	184.6
15°	190.2	187.2	179.1	175.7	174.0
17.5°	179.1	175.7	168.0	164.6	162.9
20°	166.3	162.9	156.9	153.1	151.4
22.5°	155.6	150.1	143.7	141.1	139.0
25°	142.8	136.9	130.5	128.3	125.8
27.5°	130.9	123.6	117.2	115.5	113.4
30°	119.4	111.7	104.0	104.0	101.0
32.5°	107.0	99.8	91.7	91.2	89.5
35°	95.1	87.8	79.7	78.9	77.2
37.5°	84.0	76.7	69.1	66.5	64.4
40°	71.6	65.2	58.8	54.6	52.0
42.5°	61.8	54.6	48.2	43.1	39.7
45°	49.5	44.3	39.2	32.8	28.6
47.5°	38.4	35.0	30.7	23.4	21.3
50°	28.1	26.4	23.0	17.5	17.1
52.5°	17.9	18.8	16.6	13.6	14.9
55°	8.5	11.9	11.1	11.5	12.4
57.5°	5.5	6.0	8.1	9.4	10.2
60°	4.3	4.3	6.0	7.7	8.5
62.5°	3.4	3.4	4.7	6.4	6.8
65°	2.6	3.0	3.4	4.7	5.5
67.5°	2.1	2.1	2.6	3.8	4.3
70°	1.7	1.7	2.1	3.0	3.4
72.5°	1.3	1.3	1.7	2.6	2.6
75°	0.9	1.3	1.3	1.7	2.1
77.5°	0.9	0.9	0.9	1.3	1.7
80°	0.4	0.4	0.9	0.9	1.3
82.5°	0.4	0.4	0.4	0.4	0.9
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	0.67	1.83	1.04	2.15	2.46	4.05	5.22	4.42	5.53	5.84
	3H	1.17	2.20	1.56	2.53	2.90	4.78	5.80	5.16	6.13	6.50
	4H	1.32	2.27	1.73	2.62	3.01	5.00	5.94	5.40	6.30	6.68
	6H	1.41	2.27	1.82	2.65	3.04	5.15	6.02	5.57	6.39	6.79
	8H	1.40	2.22	1.84	2.61	3.02	5.19	6.00	5.62	6.40	6.80
	12H	1.37	2.15	1.80	2.53	2.96	5.19	5.97	5.62	6.35	6.78
4H	2H	0.97	1.92	1.38	2.27	2.66	4.02	4.97	4.42	5.32	5.71
	3H	1.62	2.39	2.03	2.79	3.20	4.89	5.66	5.31	6.07	6.47
	4H	1.88	2.56	2.31	2.98	3.43	5.17	5.86	5.61	6.28	6.72
	6H	2.00	2.59	2.47	3.04	3.51	5.41	5.99	5.87	6.44	6.91
	8H	2.01	2.56	2.48	3.01	3.48	5.46	6.00	5.93	6.45	6.93
	12H	1.97	2.45	2.46	2.94	3.41	5.48	5.95	5.97	6.44	6.92
8H	4H	1.99	2.54	2.46	2.99	3.46	5.11	5.65	5.58	6.10	6.58
	6H	2.17	2.61	2.67	3.11	3.59	5.38	5.82	5.89	6.32	6.81
	8H	2.20	2.59	2.72	3.11	3.61	5.45	5.84	5.97	6.36	6.86
	12H	2.17	2.52	2.69	3.01	3.59	5.50	5.85	6.02	6.34	6.92
12H	4H	1.98	2.46	2.47	2.94	3.42	5.06	5.54	5.55	6.02	6.50
	6H	2.17	2.56	2.69	3.08	3.58	5.33	5.73	5.86	6.24	6.74
	8H	2.22	2.57	2.74	3.07	3.64	5.42	5.77	5.94	6.26	6.84