

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: P1057828

Luminaire Tested: S122RDRP-S1005D927-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057828
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-S1005D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

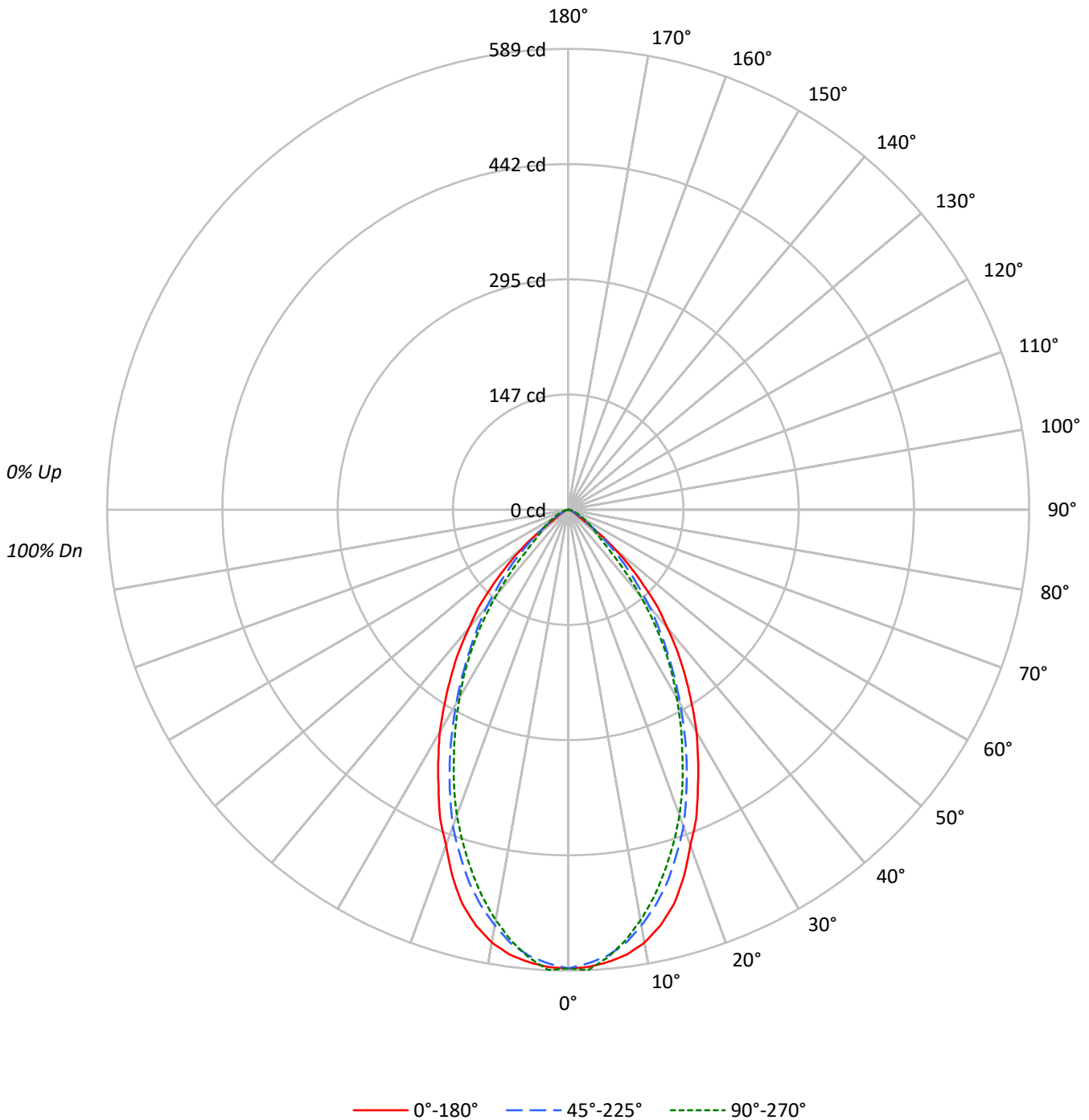
Lumens per Lamp: N/A
Luminaire Lumens: 630.6 lumens
Efficiency: N/A
Efficacy: 15.1 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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°	10819	10819	10819
5°	10753	10601	10643
10°	10525	10109	9978
15°	9972	9389	9122
20°	8962	8458	8159
25°	7983	7291	7028
30°	6982	6085	5911
35°	5879	4929	4771
40°	4736	3890	3440
45°	3544	2811	2046
50°	2216	1814	1343
55°	753	978	1091
60°	432	605	864
65°	306	410	664
70°	254	318	507
75°	164	250	421
80°	128	244	372
85°	0	0	254

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3544 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.0	8.6
10°-20°	138.3	21.9
20°-30°	166.6	26.4
30°-40°	142.3	22.6
40°-50°	83.4	13.2
50°-60°	30.2	4.8
60°-70°	10.7	1.7
70°-80°	4.3	0.7
80°-90°	0.8	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°	359.0	56.9
0°-40°	501.3	79.5
0°-60°	614.8	97.5
0°-90°	630.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	630.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	586	586	586	586	586	
5°	580	582	572	575	575	55
15°	522	514	492	482	478	145
25°	392	376	358	352	345	180
35°	261	241	219	216	212	163
45°	136	122	108	90	78	105
55°	23	33	30	32	34	29
65°	7	8	9	13	15	8
75°	2	4	4	5	6	3
85°	0	0	0	1	1	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	586.3	586.3	586.3	586.3	586.3
2.5°	585.1	586.3	580.5	586.3	588.7
5°	580.5	581.6	572.3	574.6	574.6
7.5°	573.4	572.3	559.4	557.1	555.9
10°	561.7	558.2	539.5	536.0	532.5
12.5°	544.2	537.2	517.3	511.4	506.7
15°	522.0	513.8	491.5	482.2	477.5
17.5°	491.5	482.2	461.1	451.7	447.1
20°	456.4	447.1	430.7	420.1	415.5
22.5°	427.2	411.9	394.4	387.4	381.5
25°	392.1	375.7	358.1	352.3	345.2
27.5°	359.3	339.4	321.8	317.2	311.3
30°	327.7	306.6	285.6	285.6	277.4
32.5°	293.7	273.8	251.6	250.4	245.8
35°	261.0	241.1	218.8	216.5	211.8
37.5°	230.5	210.7	189.6	182.6	176.7
40°	196.6	179.1	161.5	149.8	142.8
42.5°	169.7	149.8	132.2	118.2	108.8
45°	135.8	121.7	107.7	90.1	78.4
47.5°	105.3	96.0	84.3	64.4	58.5
50°	77.2	72.6	63.2	48.0	46.8
52.5°	49.2	51.5	45.6	37.4	41.0
55°	23.4	32.8	30.4	31.6	33.9
57.5°	15.2	16.4	22.2	25.7	28.1
60°	11.7	11.7	16.4	21.1	23.4
62.5°	9.4	9.4	12.9	17.6	18.7
65°	7.0	8.2	9.4	12.9	15.2
67.5°	5.9	5.9	7.0	10.5	11.7
70°	4.7	4.7	5.9	8.2	9.4
72.5°	3.5	3.5	4.7	7.0	7.0
75°	2.3	3.5	3.5	4.7	5.9
77.5°	2.3	2.3	2.3	3.5	4.7
80°	1.2	1.2	2.3	2.3	3.5
82.5°	1.2	1.2	1.2	1.2	2.3
85°	0.0	0.0	0.0	1.2	1.2
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	4.16	5.32	4.53	5.64	5.95	7.54	8.71	7.91	9.02	9.34
	3H	4.69	5.71	5.07	6.04	6.41	8.28	9.30	8.66	9.63	10.00
	4H	4.82	5.77	5.22	6.12	6.51	8.49	9.44	8.90	9.79	10.18
	6H	4.89	5.76	5.31	6.13	6.52	8.65	9.51	9.06	9.89	10.28
	8H	4.90	5.71	5.33	6.11	6.51	8.68	9.49	9.11	9.88	10.29
	12H	4.86	5.64	5.30	6.03	6.46	8.68	9.46	9.11	9.84	10.27
4H	2H	4.47	5.42	4.88	5.77	6.16	7.51	8.46	7.92	8.81	9.20
	3H	5.14	5.91	5.55	6.31	6.72	8.39	9.16	8.81	9.57	9.97
	4H	5.37	6.06	5.81	6.48	6.93	8.68	9.36	9.11	9.78	10.23
	6H	5.49	6.08	5.96	6.53	7.00	8.90	9.48	9.37	9.93	10.40
	8H	5.51	6.06	5.98	6.51	6.98	8.94	9.49	9.42	9.94	10.41
	12H	5.48	5.95	5.97	6.44	6.92	8.96	9.44	9.45	9.93	10.40
8H	4H	5.48	6.02	5.95	6.47	6.95	8.60	9.15	9.08	9.60	10.07
	6H	5.64	6.08	6.15	6.58	7.07	8.86	9.30	9.37	9.80	10.29
	8H	5.69	6.09	6.22	6.61	7.10	8.92	9.32	9.45	9.84	10.33
	12H	5.67	6.02	6.19	6.52	7.09	8.99	9.33	9.50	9.83	10.41
12H	4H	5.46	5.94	5.95	6.43	6.90	8.56	9.03	9.05	9.52	10.00
	6H	5.64	6.04	6.17	6.55	7.05	8.81	9.21	9.34	9.73	10.22
	8H	5.72	6.07	6.24	6.56	7.14	8.90	9.25	9.42	9.74	10.32