

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058323

Luminaire Tested: S122RDR-H290D930-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058323
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: S122RDR-H290D930-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

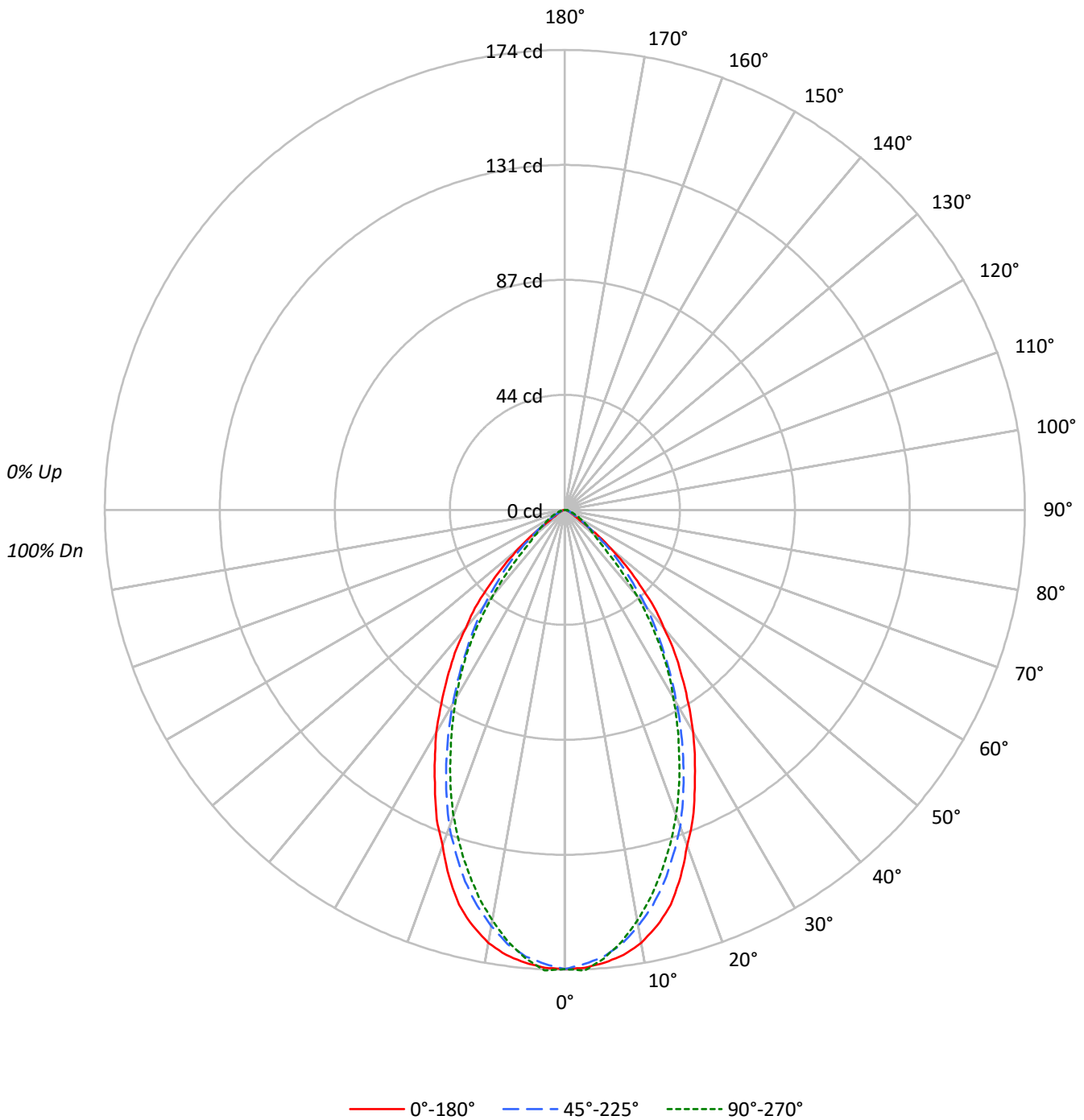
Lumens per Lamp: N/A
Luminaire Lumens: 186.8 lumens
Efficiency: N/A
Efficacy: 16.0 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
Input Voltage (V): 120
Input Current (Ain): 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	81	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°	3205	3205	3205
5°	3186	3141	3154
10°	3118	2996	2957
15°	2955	2781	2703
20°	2655	2506	2417
25°	2366	2160	2083
30°	2069	1803	1751
35°	1741	1460	1415
40°	1404	1154	1019
45°	1049	832	605
50°	657	537	399
55°	222	290	325
60°	129	181	255
65°	92	122	196
70°	76	92	151
75°	50	71	121
80°	32	74	106
85°	0	0	64

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1049 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.0	8.6
10°-20°	41.0	21.9
20°-30°	49.4	26.4
30°-40°	42.2	22.6
40°-50°	24.7	13.2
50°-60°	8.9	4.8
60°-70°	3.2	1.7
70°-80°	1.3	0.7
80°-90°	0.2	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°	106.4	56.9
0°-40°	148.5	79.5
0°-60°	182.2	97.5
0°-90°	186.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	186.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	174	174	174	174	174	
5°	172	172	170	170	170	16
15°	155	152	146	143	142	43
25°	116	111	106	104	102	53
35°	77	71	65	64	63	48
45°	40	36	32	27	23	31
55°	7	10	9	9	10	9
65°	2	2	3	4	4	2
75°	1	1	1	1	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°	173.7	173.7	173.7	173.7	173.7
2.5°	173.4	173.7	172.0	173.7	174.4
5°	172.0	172.3	169.6	170.3	170.3
7.5°	169.9	169.6	165.7	165.1	164.7
10°	166.4	165.4	159.9	158.8	157.8
12.5°	161.2	159.2	153.3	151.5	150.1
15°	154.7	152.2	145.6	142.9	141.5
17.5°	145.6	142.9	136.6	133.8	132.5
20°	135.2	132.5	127.6	124.5	123.1
22.5°	126.6	122.1	116.9	114.8	113.0
25°	116.2	111.3	106.1	104.4	102.3
27.5°	106.5	100.6	95.4	94.0	92.2
30°	97.1	90.9	84.6	84.6	82.2
32.5°	87.0	81.1	74.6	74.2	72.8
35°	77.3	71.4	64.8	64.2	62.8
37.5°	68.3	62.4	56.2	54.1	52.4
40°	58.3	53.1	47.9	44.4	42.3
42.5°	50.3	44.4	39.2	35.0	32.2
45°	40.2	36.1	31.9	26.7	23.2
47.5°	31.2	28.4	25.0	19.1	17.3
50°	22.9	21.5	18.7	14.2	13.9
52.5°	14.6	15.3	13.5	11.1	12.1
55°	6.9	9.7	9.0	9.4	10.1
57.5°	4.5	4.9	6.6	7.6	8.3
60°	3.5	3.5	4.9	6.2	6.9
62.5°	2.8	2.8	3.8	5.2	5.5
65°	2.1	2.4	2.8	3.8	4.5
67.5°	1.7	1.7	2.1	3.1	3.5
70°	1.4	1.4	1.7	2.4	2.8
72.5°	1.0	1.0	1.4	2.1	2.1
75°	0.7	1.0	1.0	1.4	1.7
77.5°	0.7	0.7	0.7	1.0	1.4
80°	0.3	0.3	0.7	0.7	1.0
82.5°	0.3	0.3	0.3	0.3	0.7
85°	0.0	0.0	0.0	0.3	0.3
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	0.00	1.15	0.35	1.46	1.77	3.30	4.46	3.67	4.78	5.09
	3H	0.48	1.51	0.87	1.84	2.20	4.04	5.06	4.42	5.39	5.76
	4H	0.61	1.55	1.01	1.91	2.29	4.25	5.20	4.66	5.55	5.94
	6H	0.67	1.54	1.09	1.91	2.31	4.40	5.27	4.82	5.64	6.04
	8H	0.67	1.48	1.10	1.87	2.28	4.43	5.25	4.86	5.64	6.05
	12H	0.63	1.41	1.06	1.79	2.22	4.42	5.21	4.86	5.59	6.02
4H	2H	0.29	1.24	0.70	1.59	1.98	3.27	4.22	3.68	4.57	4.96
	3H	0.93	1.70	1.34	2.10	2.51	4.15	4.92	4.57	5.33	5.73
	4H	1.15	1.83	1.59	2.25	2.70	4.44	5.12	4.87	5.54	5.99
	6H	1.26	1.84	1.72	2.29	2.76	4.65	5.24	5.12	5.69	6.16
	8H	1.25	1.80	1.72	2.25	2.72	4.69	5.24	5.17	5.69	6.16
	12H	1.21	1.69	1.70	2.17	2.65	4.71	5.18	5.19	5.67	6.14
8H	4H	1.25	1.80	1.72	2.25	2.72	4.36	4.91	4.84	5.36	5.83
	6H	1.40	1.84	1.91	2.34	2.82	4.62	5.06	5.12	5.56	6.04
	8H	1.42	1.81	1.94	2.33	2.82	4.67	5.07	5.20	5.58	6.08
	12H	1.39	1.73	1.90	2.23	2.81	4.71	5.06	5.23	5.56	6.13
12H	4H	1.23	1.71	1.72	2.20	2.67	4.32	4.79	4.81	5.28	5.76
	6H	1.39	1.79	1.92	2.31	2.80	4.56	4.96	5.09	5.48	5.97
	8H	1.43	1.78	1.95	2.28	2.85	4.64	4.99	5.16	5.48	6.06