

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: P1057826

Luminaire Tested: S122RDRP-S1005D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057826
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S1005D927-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

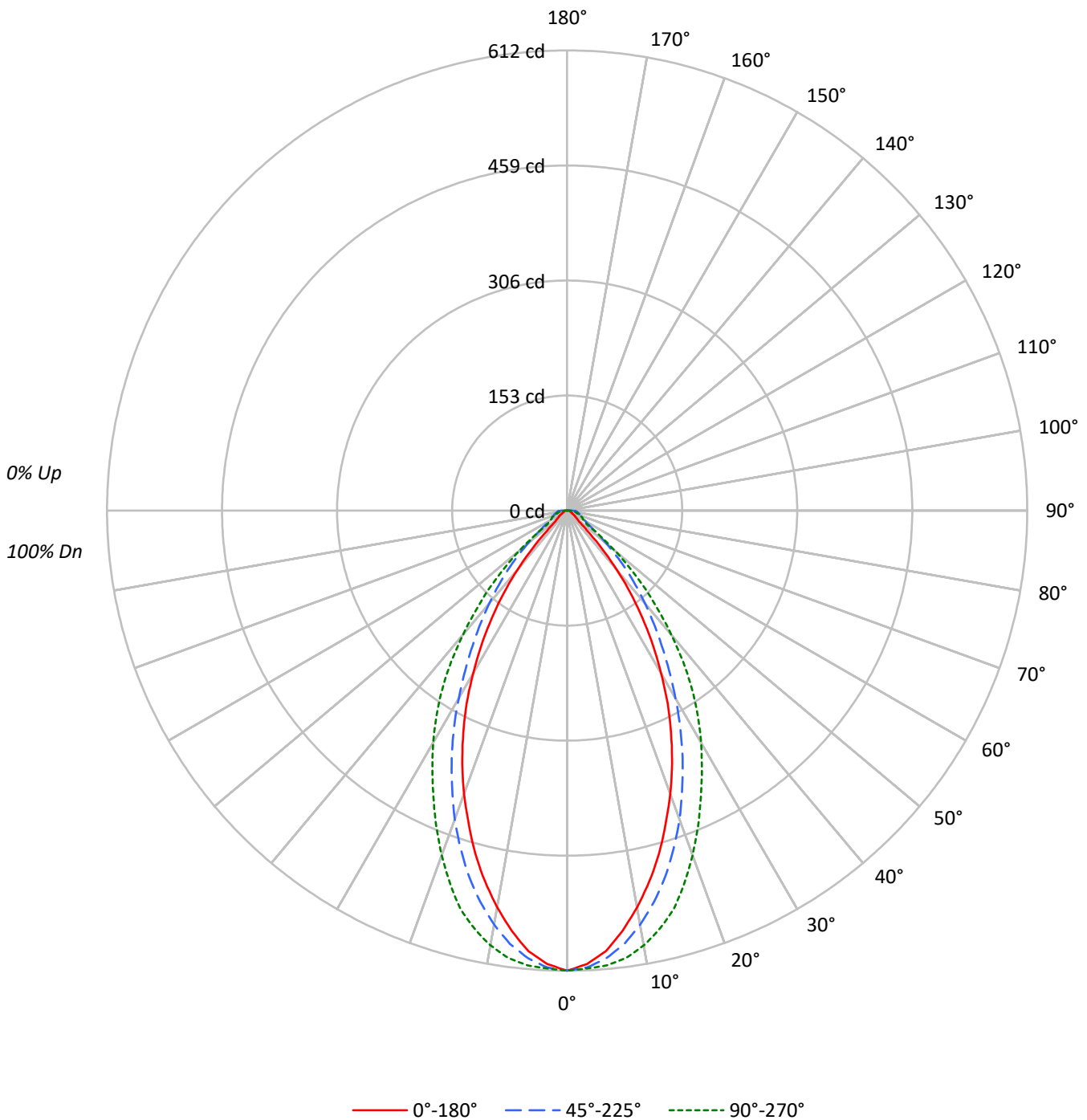
Lumens per Lamp: N/A
Luminaire Lumens: 659.5 lumens
Efficiency: N/A
Efficacy: 15.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	77	82	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	68	64	71	67	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11289	11289	11289
5°	10899	11071	11245
10°	10036	10476	11002
15°	9023	9628	10478
20°	7870	8585	9575
25°	6658	7397	8568
30°	5318	6143	7592
35°	3933	4938	6521
40°	2483	3869	5196
45°	979	2904	3823
50°	505	1952	2354
55°	415	1280	1055
60°	303	1037	952
65°	258	974	974
70°	254	1014	950
75°	335	1169	1005
80°	499	1498	1116
85°	741	2477	1482

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 4949 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.0	8.5
10°-20°	141.3	21.4
20°-30°	168.0	25.5
30°-40°	139.7	21.2
40°-50°	78.0	11.8
50°-60°	31.5	4.8
60°-70°	20.2	3.1
70°-80°	15.1	2.3
80°-90°	9.6	1.5
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°	365.3	55.4
0°-40°	505.0	76.6
0°-60°	614.5	93.2
0°-90°	659.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	659.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	612	612	612	612	612	
5°	588	599	598	602	607	54
15°	472	486	504	530	548	131
25°	327	340	363	392	421	149
35°	175	191	219	256	290	108
45°	38	63	111	130	146	35
55°	13	27	40	39	33	11
65°	6	23	22	21	22	6
75°	5	16	16	15	14	5
85°	4	10	12	10	7	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	611.8	611.8	611.8	611.8	611.8
2.5°	603.6	613.0	608.3	608.3	609.5
5°	588.4	598.9	597.7	602.4	607.1
7.5°	563.7	575.5	581.3	591.9	600.1
10°	535.6	548.5	559.1	575.5	587.2
12.5°	505.1	518.0	533.3	554.4	569.6
15°	472.3	486.4	504.0	529.8	548.5
17.5°	436.0	451.2	471.2	499.3	519.2
20°	400.8	416.1	437.2	465.3	487.6
22.5°	364.5	377.4	399.7	427.8	454.7
25°	327.0	339.9	363.3	391.5	420.8
27.5°	289.5	302.4	325.8	355.1	387.9
30°	249.6	263.7	288.3	321.1	356.3
32.5°	212.1	226.2	252.0	288.3	323.5
35°	174.6	191.0	219.2	255.5	289.5
37.5°	138.3	157.1	188.7	222.7	253.2
40°	103.1	123.1	160.6	189.9	215.7
42.5°	68.0	91.4	134.8	159.4	179.3
45°	37.5	63.3	111.3	130.1	146.5
47.5°	21.1	41.0	87.9	103.1	112.5
50°	17.6	30.5	68.0	78.5	82.0
52.5°	14.1	28.1	51.6	57.4	55.1
55°	12.9	27.0	39.8	38.7	32.8
57.5°	10.5	27.0	31.6	28.1	28.1
60°	8.2	25.8	28.1	24.6	25.8
62.5°	7.0	24.6	25.8	23.4	23.4
65°	5.9	23.4	22.3	21.1	22.3
67.5°	4.7	21.1	21.1	19.9	19.9
70°	4.7	19.9	18.8	17.6	17.6
72.5°	4.7	17.6	17.6	16.4	16.4
75°	4.7	16.4	16.4	15.2	14.1
77.5°	4.7	14.1	15.2	14.1	12.9
80°	4.7	12.9	14.1	12.9	10.5
82.5°	4.7	11.7	12.9	11.7	9.4
85°	3.5	10.5	11.7	10.5	7.0
87.5°	3.5	10.5	11.7	9.4	5.9
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	6.79	8.01	7.16	8.33	8.64	7.85	9.07	8.22	9.39	9.70
	3H	8.12	9.21	8.51	9.54	9.91	9.89	10.97	10.27	11.30	11.67
	4H	8.70	9.71	9.10	10.06	10.45	10.84	11.85	11.25	12.21	12.59
	6H	9.27	10.20	9.68	10.57	10.96	11.79	12.72	12.21	13.09	13.49
	8H	9.59	10.47	10.02	10.86	11.27	12.24	13.12	12.67	13.51	13.92
	12H	9.90	10.74	10.33	11.12	11.55	12.66	13.50	13.09	13.89	14.32
4H	2H	7.76	8.77	8.16	9.12	9.51	8.54	9.55	8.94	9.90	10.28
	3H	9.78	10.62	10.20	11.02	11.43	10.82	11.65	11.23	12.06	12.46
	4H	10.86	11.61	11.30	12.03	12.47	11.97	12.72	12.40	13.14	13.58
	6H	11.74	12.38	12.20	12.83	13.30	13.14	13.79	13.60	14.23	14.70
	8H	12.15	12.75	12.62	13.20	13.67	13.70	14.31	14.17	14.75	15.23
	12H	12.52	13.06	13.01	13.54	14.02	14.24	14.78	14.73	15.26	15.74
8H	4H	11.63	12.24	12.10	12.69	13.16	12.52	13.12	12.99	13.57	14.04
	6H	12.97	13.47	13.48	13.97	14.45	13.98	14.47	14.48	14.97	15.45
	8H	13.69	14.13	14.21	14.65	15.14	14.74	15.18	15.26	15.70	16.19
	12H	14.38	14.77	14.89	15.26	15.84	15.52	15.91	16.04	16.41	16.98
12H	4H	11.79	12.32	12.28	12.81	13.28	12.63	13.16	13.11	13.65	14.12
	6H	13.30	13.74	13.82	14.26	14.75	14.20	14.65	14.73	15.17	15.66
	8H	14.20	14.59	14.71	15.08	15.66	15.11	15.50	15.62	16.00	16.57