

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: P1059040

Luminaire Tested: S123RDRP-S1000D927-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059040
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S1000D927-X4F0-XX-UDD-BVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

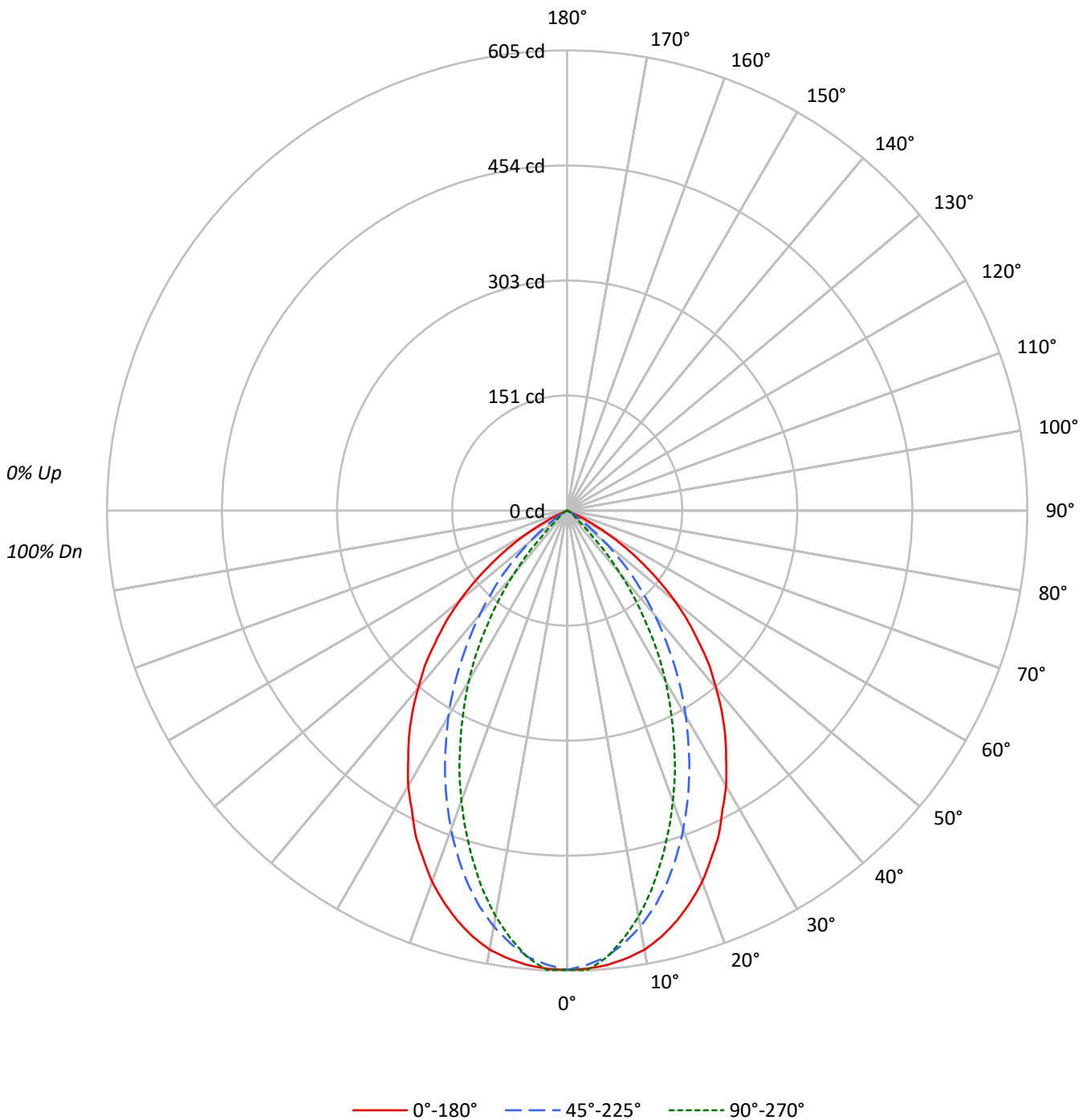
Lumens per Lamp: N/A
Luminaire Lumens: 688.9 lumens
Efficiency: N/A
Efficacy: 19.7 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	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					100			
1	113	110	107	104	110	107	105	103	103	101	100	100	98	97	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	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78					76				
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71					69				
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65					63				
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60					58				
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55					53				
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51					49				
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47					46				
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44					42				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7089	7089	7089
5°	7070	6945	6956
10°	6990	6619	6457
15°	6783	6157	5802
20°	6488	5576	5078
25°	6109	4925	4295
30°	5668	4232	3506
35°	5198	3498	2606
40°	4665	2742	1669
45°	4069	2003	694
50°	3374	1189	267
55°	2487	497	199
60°	1508	183	115
65°	406	108	53
70°	0	34	34
75°	0	0	45
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4069 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.6	8.1
10°-20°	143.4	20.8
20°-30°	178.8	25.9
30°-40°	159.8	23.2
40°-50°	100.9	14.6
50°-60°	42.2	6.1
60°-70°	7.9	1.2
70°-80°	0.3	0.0
80°-90°	0.0	0.0
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°	377.8	54.8
0°-40°	537.6	78.0
0°-60°	680.7	98.8
0°-90°	688.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	688.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	604	604	604	604	604	
5°	600	599	589	591	590	57
15°	558	544	506	485	477	157
25°	472	434	380	347	332	216
35°	363	310	244	200	182	226
45°	245	191	121	64	42	189
55°	122	84	24	10	10	109
65°	15	11	4	2	2	21
75°	0	0	0	0	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	603.7	603.7	603.7	603.7	603.7
2.5°	602.8	603.7	597.9	603.7	604.7
5°	599.8	598.9	589.2	591.1	590.1
7.5°	594.0	591.1	573.6	569.7	567.8
10°	586.2	578.5	555.1	545.4	541.5
12.5°	573.6	562.9	532.8	517.2	511.4
15°	558.0	544.4	506.5	485.1	477.3
17.5°	539.6	520.1	477.3	454.0	442.4
20°	519.2	491.9	446.2	418.0	406.4
22.5°	494.8	464.7	413.2	383.0	370.4
25°	471.5	433.6	380.1	347.1	331.5
27.5°	442.4	402.5	345.1	311.1	294.6
30°	418.0	372.4	312.1	274.2	258.6
32.5°	388.9	341.2	278.0	236.2	221.7
35°	362.6	310.1	244.0	200.3	181.8
37.5°	334.4	280.0	210.0	164.3	146.8
40°	304.3	249.9	178.9	128.3	108.9
42.5°	277.1	219.7	147.8	95.3	75.8
45°	245.0	190.6	120.6	64.2	41.8
47.5°	215.8	163.3	91.4	36.0	22.4
50°	184.7	135.1	65.1	18.5	14.6
52.5°	152.6	107.9	42.8	12.6	11.7
55°	121.5	83.6	24.3	9.7	9.7
57.5°	91.4	60.3	12.6	7.8	6.8
60°	64.2	39.9	7.8	5.8	4.9
62.5°	36.9	23.3	5.8	3.9	3.9
65°	14.6	10.7	3.9	1.9	1.9
67.5°	1.0	2.9	1.9	1.0	1.0
70°	0.0	0.0	1.0	1.0	1.0
72.5°	0.0	0.0	1.0	1.0	1.0
75°	0.0	0.0	0.0	0.0	1.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
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	12.00	13.17	12.36	13.49	13.80	0.00	0.00	0.00	0.00	0.00
	3H	11.84	12.87	12.22	13.20	13.57	0.00	0.00	0.00	0.00	0.00
	4H	11.75	12.71	12.16	13.06	13.45	0.00	0.00	0.00	0.00	0.00
	6H	11.66	12.53	12.08	12.90	13.30	0.00	0.00	0.00	0.00	0.00
	8H	11.61	12.43	12.04	12.82	13.23	0.00	0.00	0.00	0.00	0.00
	12H	11.56	12.34	11.99	12.73	13.16	0.00	0.00	0.00	0.00	0.00
4H	2H	11.76	12.71	12.16	13.06	13.45	0.00	0.00	0.00	0.00	0.00
	3H	11.59	12.36	12.01	12.77	13.17	0.00	0.00	0.00	0.00	0.00
	4H	11.49	12.17	11.92	12.59	13.04	0.00	0.00	0.00	0.00	0.00
	6H	11.39	11.98	11.86	12.42	12.90	0.00	0.00	0.00	0.00	0.00
	8H	11.33	11.87	11.80	12.32	12.79	0.00	0.00	0.00	0.00	0.00
	12H	11.27	11.75	11.76	12.23	12.71	0.00	0.00	0.00	0.00	0.00
8H	4H	11.33	11.87	11.80	12.32	12.79	0.00	0.00	0.00	0.00	0.00
	6H	11.21	11.65	11.72	12.15	12.63	0.00	0.00	0.00	0.00	0.00
	8H	11.14	11.53	11.67	12.05	12.55	0.00	0.00	0.00	0.00	0.00
	12H	11.08	11.43	11.60	11.93	12.51	0.00	0.00	0.00	0.00	0.00
12H	4H	11.27	11.75	11.76	12.23	12.71	0.00	0.00	0.00	0.00	0.00
	6H	11.14	11.53	11.67	12.05	12.55	0.00	0.00	0.00	0.00	0.00
	8H	11.08	11.43	11.60	11.93	12.51	0.00	0.00	0.00	0.00	0.00