

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: P1059046

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059046
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-28)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S1000D927-X4F0-XX-UDD-WVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

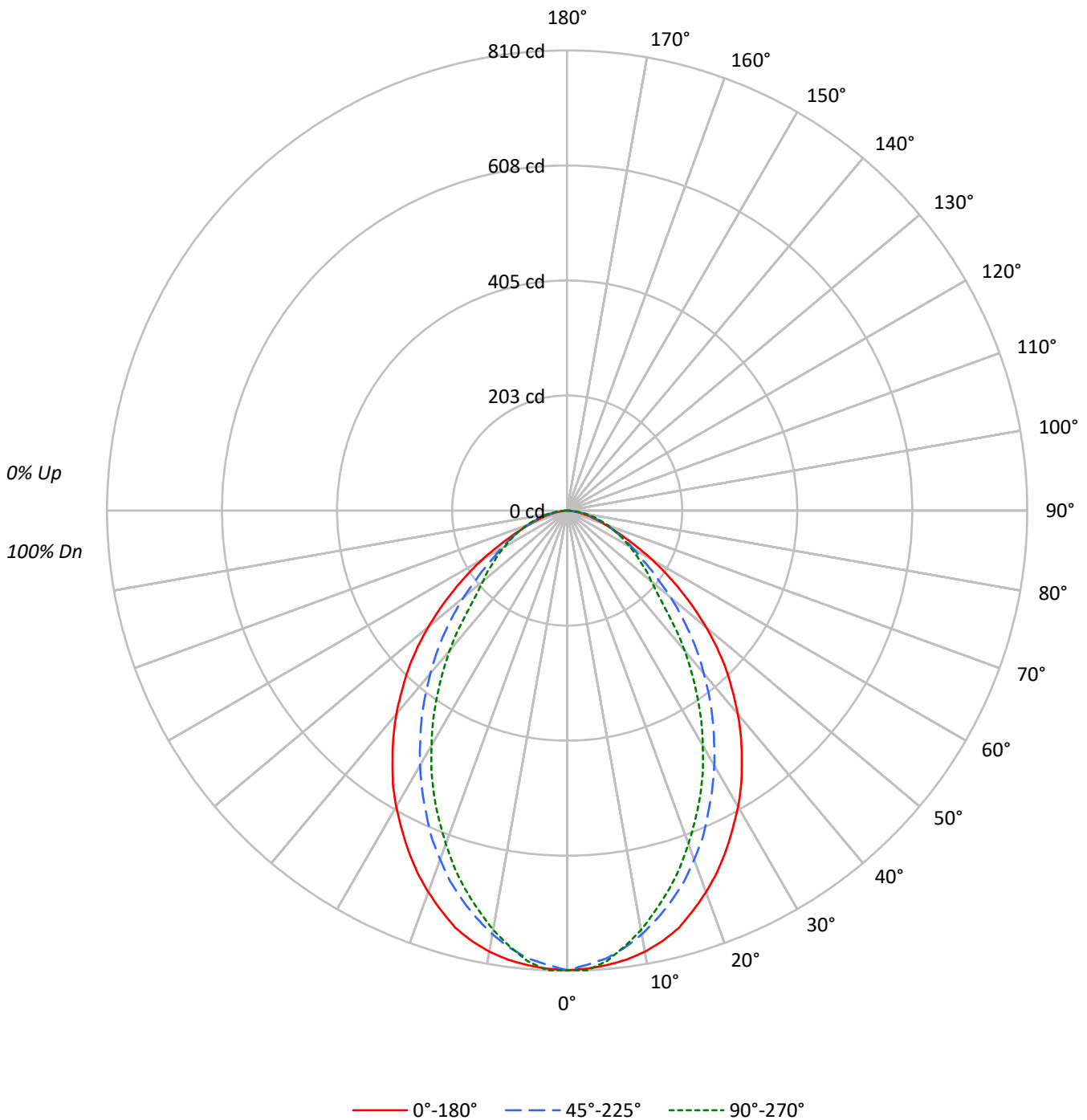
Lumens per Lamp: N/A
Luminaire Lumens: 1414.8 lumens
Efficiency: N/A
Efficacy: 40.4 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (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	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	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	88																												
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76																												
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66																												
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58																												
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52																												
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47																												
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42																												
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38																												
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35																												
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9498	9498	9498
5°	9466	9328	9386
10°	9402	9031	8938
15°	9243	8640	8404
20°	8930	8165	7800
25°	8565	7608	7180
30°	8160	7026	6473
35°	7679	6398	5728
40°	7169	5738	4933
45°	6571	5070	4052
50°	5826	4351	3517
55°	4956	3642	3224
60°	4042	3173	2992
65°	3079	2809	2781
70°	2403	2503	2602
75°	1942	2250	2427
80°	1447	1839	2238
85°	781	1186	1967

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6571 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.1	5.3
10°-20°	202.0	14.3
20°-30°	274.6	19.4
30°-40°	284.7	20.1
40°-50°	240.1	17.0
50°-60°	170.4	12.0
60°-70°	104.2	7.4
70°-80°	51.8	3.7
80°-90°	11.8	0.8
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°	551.8	39.0
0°-40°	836.5	59.1
0°-60°	1247.0	88.1
0°-90°	1414.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1414.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	809	809	809	809	809	
5°	803	803	791	796	796	76
15°	760	746	711	698	691	213
25°	661	632	587	566	554	304
35°	536	495	446	415	400	335
45°	396	354	305	264	244	304
55°	242	217	178	162	158	217
65°	111	107	101	101	100	113
75°	43	46	50	52	54	46
85°	6	7	9	13	15	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	808.9	808.9	808.9	808.9	808.9
2.5°	807.0	807.9	800.2	808.9	809.9
5°	803.1	803.1	791.4	796.3	796.3
7.5°	797.3	795.3	775.9	775.9	773.9
10°	788.5	782.7	757.4	752.5	749.6
12.5°	775.9	766.1	735.0	726.3	720.4
15°	760.3	745.7	710.7	698.1	691.3
17.5°	737.9	723.4	684.5	667.0	659.2
20°	714.6	693.2	653.4	635.9	624.2
22.5°	689.3	662.1	623.2	601.8	589.2
25°	661.1	632.0	587.2	565.9	554.2
27.5°	631.0	598.9	553.2	528.9	517.2
30°	601.8	564.9	518.2	491.0	477.4
32.5°	570.7	528.9	481.3	453.1	439.5
35°	535.7	494.9	446.3	415.2	399.6
37.5°	502.7	460.8	410.3	377.2	359.7
40°	467.7	425.8	374.3	340.3	321.8
42.5°	430.7	390.8	340.3	300.4	282.9
45°	395.7	353.9	305.3	263.5	244.0
47.5°	357.8	318.9	271.3	228.5	214.9
50°	318.9	282.9	238.2	199.3	192.5
52.5°	281.0	250.8	205.1	179.9	177.0
55°	242.1	216.8	177.9	162.4	157.5
57.5°	206.1	187.6	152.6	144.9	142.9
60°	172.1	156.5	135.1	130.3	127.4
62.5°	139.0	130.3	117.6	115.7	113.8
65°	110.8	106.9	101.1	101.1	100.1
67.5°	87.5	87.5	86.5	88.5	87.5
70°	70.0	71.0	72.9	74.9	75.8
72.5°	55.4	58.3	60.3	63.2	64.2
75°	42.8	45.7	49.6	51.5	53.5
77.5°	31.1	34.0	37.9	40.8	42.8
80°	21.4	23.3	27.2	31.1	33.1
82.5°	13.6	14.6	17.5	21.4	23.3
85°	5.8	6.8	8.8	12.6	14.6
87.5°	0.0	0.0	1.0	3.9	6.8
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	16.63	18.08	16.99	18.39	18.71	14.73	16.18	15.09	16.49	16.81
	3H	17.53	18.82	17.90	19.15	19.51	16.30	17.60	16.68	17.93	18.29
	4H	17.81	19.02	18.21	19.37	19.75	16.90	18.11	17.30	18.46	18.84
	6H	17.96	19.08	18.37	19.44	19.84	17.35	18.47	17.76	18.83	19.23
	8H	17.98	19.04	18.41	19.43	19.84	17.50	18.56	17.92	18.95	19.35
	12H	17.98	18.99	18.41	19.37	19.80	17.60	18.61	18.03	18.99	19.42
4H	2H	16.87	18.08	17.27	18.43	18.81	15.27	16.48	15.67	16.83	17.21
	3H	17.99	18.99	18.40	19.39	19.79	17.04	18.04	17.45	18.44	18.85
	4H	18.38	19.28	18.81	19.69	20.13	17.75	18.65	18.19	19.07	19.51
	6H	18.62	19.40	19.08	19.84	20.30	18.33	19.11	18.79	19.55	20.01
	8H	18.66	19.39	19.13	19.83	20.30	18.52	19.24	18.98	19.69	20.16
	12H	18.67	19.32	19.15	19.80	20.27	18.66	19.30	19.14	19.78	20.26
8H	4H	18.53	19.26	19.00	19.71	20.18	17.96	18.69	18.43	19.14	19.60
	6H	18.85	19.45	19.35	19.94	20.42	18.64	19.24	19.14	19.73	20.21
	8H	18.92	19.46	19.44	19.97	20.46	18.90	19.43	19.41	19.95	20.44
	12H	18.96	19.43	19.47	19.93	20.49	19.10	19.58	19.62	20.07	20.64
12H	4H	18.54	19.19	19.02	19.67	20.14	17.96	18.61	18.45	19.09	19.56
	6H	18.86	19.40	19.38	19.91	20.40	18.65	19.19	19.16	19.70	20.19
	8H	18.98	19.45	19.49	19.94	20.51	18.95	19.43	19.46	19.92	20.49