

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: P1059079

Luminaire Tested: S123RDRP-S1000D950-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059079
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S1000D950-X4F0-XX-UDD-SVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

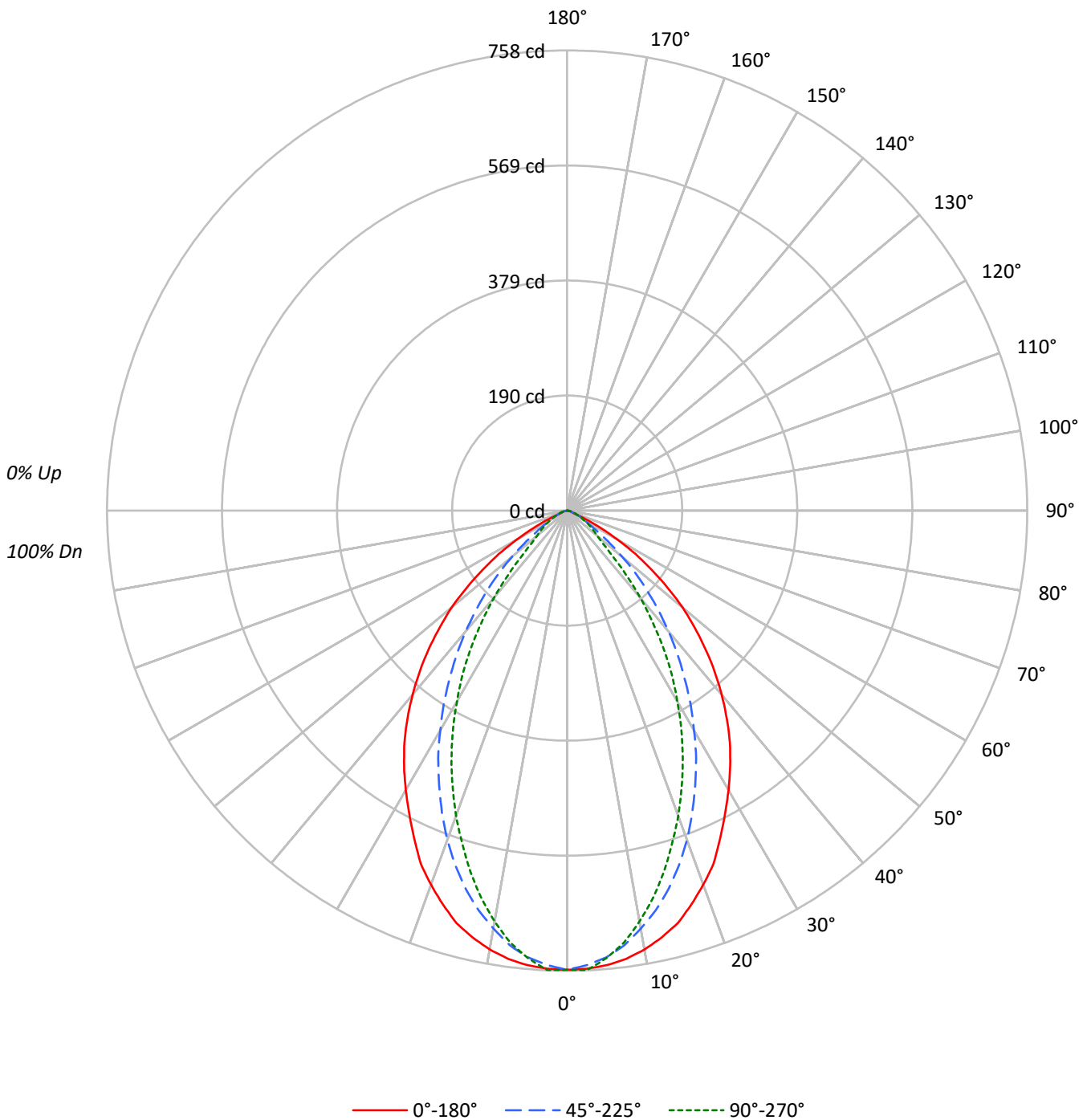
Lumens per Lamp: N/A
Luminaire Lumens: 976.5 lumens
Efficiency: N/A
Efficacy: 27.9 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8882	8882	8882
5°	8861	8708	8723
10°	8753	8335	8195
15°	8555	7843	7487
20°	8194	7213	6687
25°	7722	6463	5841
30°	7208	5668	4922
35°	6697	4834	3961
40°	6067	3984	2871
45°	5347	3092	1730
50°	4534	2161	1176
55°	3452	1294	983
60°	2255	824	770
65°	945	617	617
70°	323	443	484
75°	268	318	372
80°	156	237	318
85°	162	162	310

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5347 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.9	7.2
10°-20°	182.8	18.7
20°-30°	234.4	24.0
30°-40°	220.0	22.5
40°-50°	153.5	15.7
50°-60°	79.4	8.1
60°-70°	27.1	2.8
70°-80°	7.8	0.8
80°-90°	1.6	0.2
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°	487.1	49.9
0°-40°	707.1	72.4
0°-60°	940.0	96.3
0°-90°	976.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	976.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	756	756	756	756	756	
5°	752	750	739	742	740	71
15°	704	686	645	624	616	197
25°	596	558	499	465	451	274
35°	467	410	337	294	276	291
45°	322	263	186	129	104	248
55°	169	126	63	49	48	152
65°	34	29	22	21	22	40
75°	6	6	7	8	8	6
85°	1	1	1	1	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	756.4	756.4	756.4	756.4	756.4
2.5°	755.2	756.4	749.4	756.4	757.6
5°	751.7	750.5	738.8	742.3	740.0
7.5°	744.7	741.2	722.4	717.7	717.7
10°	734.1	727.1	699.0	690.8	687.3
12.5°	720.1	710.7	674.4	659.2	653.4
15°	703.7	686.1	645.2	624.1	615.9
17.5°	680.3	656.9	612.4	587.8	574.9
20°	655.7	626.4	577.2	548.0	535.1
22.5°	629.9	594.8	538.6	507.0	492.9
25°	596.0	558.5	498.8	464.8	450.8
27.5°	563.2	523.4	460.2	421.5	407.5
30°	531.6	484.7	418.0	380.5	363.0
32.5°	500.0	447.3	378.2	337.2	320.8
35°	467.2	409.8	337.2	293.9	276.3
37.5°	432.1	373.5	298.6	251.7	230.7
40°	395.8	334.9	259.9	207.2	187.3
42.5°	359.5	299.7	221.3	167.4	144.0
45°	322.0	263.4	186.2	128.8	104.2
47.5°	284.5	227.2	152.2	93.7	78.4
50°	248.2	193.2	118.3	69.1	64.4
52.5°	208.4	160.4	89.0	57.4	56.2
55°	168.6	126.5	63.2	49.2	48.0
57.5°	133.5	98.4	45.7	41.0	39.8
60°	96.0	70.3	35.1	34.0	32.8
62.5°	63.2	48.0	28.1	26.9	26.9
65°	34.0	29.3	22.2	21.1	22.2
67.5°	14.1	16.4	16.4	17.6	17.6
70°	9.4	10.5	12.9	14.1	14.1
72.5°	7.0	8.2	9.4	10.5	10.5
75°	5.9	5.9	7.0	8.2	8.2
77.5°	3.5	4.7	4.7	5.9	7.0
80°	2.3	3.5	3.5	4.7	4.7
82.5°	1.2	2.3	2.3	3.5	3.5
85°	1.2	1.2	1.2	1.2	2.3
87.5°	0.0	0.0	0.0	0.0	1.2
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	13.92	15.18	14.29	15.50	15.81	7.43	8.69	7.79	9.00	9.32
	3H	13.88	14.99	14.26	15.32	15.68	8.21	9.32	8.59	9.65	10.01
	4H	13.82	14.85	14.23	15.21	15.59	8.41	9.44	8.81	9.79	10.17
	6H	13.75	14.70	14.17	15.07	15.46	8.55	9.49	8.97	9.87	10.26
	8H	13.71	14.60	14.14	14.99	15.40	8.59	9.48	9.02	9.87	10.28
	12H	13.67	14.52	14.10	14.90	15.33	8.60	9.46	9.04	9.84	10.27
4H	2H	13.77	14.80	14.17	15.15	15.54	7.68	8.71	8.09	9.06	9.45
	3H	13.76	14.59	14.17	14.99	15.40	8.60	9.43	9.01	9.83	10.24
	4H	13.70	14.45	14.14	14.87	15.31	8.87	9.61	9.30	10.03	10.47
	6H	13.65	14.28	14.11	14.73	15.20	9.08	9.72	9.55	10.17	10.64
	8H	13.59	14.19	14.06	14.64	15.11	9.14	9.74	9.62	10.19	10.66
	12H	13.55	14.07	14.04	14.56	15.03	9.18	9.71	9.67	10.19	10.66
8H	4H	13.59	14.19	14.06	14.63	15.11	8.85	9.45	9.32	9.89	10.37
	6H	13.53	14.01	14.03	14.51	14.99	9.12	9.60	9.63	10.10	10.59
	8H	13.48	13.91	14.00	14.43	14.92	9.23	9.66	9.75	10.18	10.67
	12H	13.44	13.82	13.96	14.32	14.89	9.30	9.68	9.82	10.18	10.75
12H	4H	13.54	14.07	14.03	14.55	15.03	8.81	9.34	9.30	9.82	10.30
	6H	13.47	13.90	13.99	14.42	14.92	9.08	9.52	9.61	10.03	10.53
	8H	13.44	13.82	13.96	14.32	14.89	9.22	9.60	9.74	10.10	10.67