

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: P1059467

Luminaire Tested: S123RDR-H1000D935-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059467
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-H1000D935-X4F0-XX-UDD-SVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

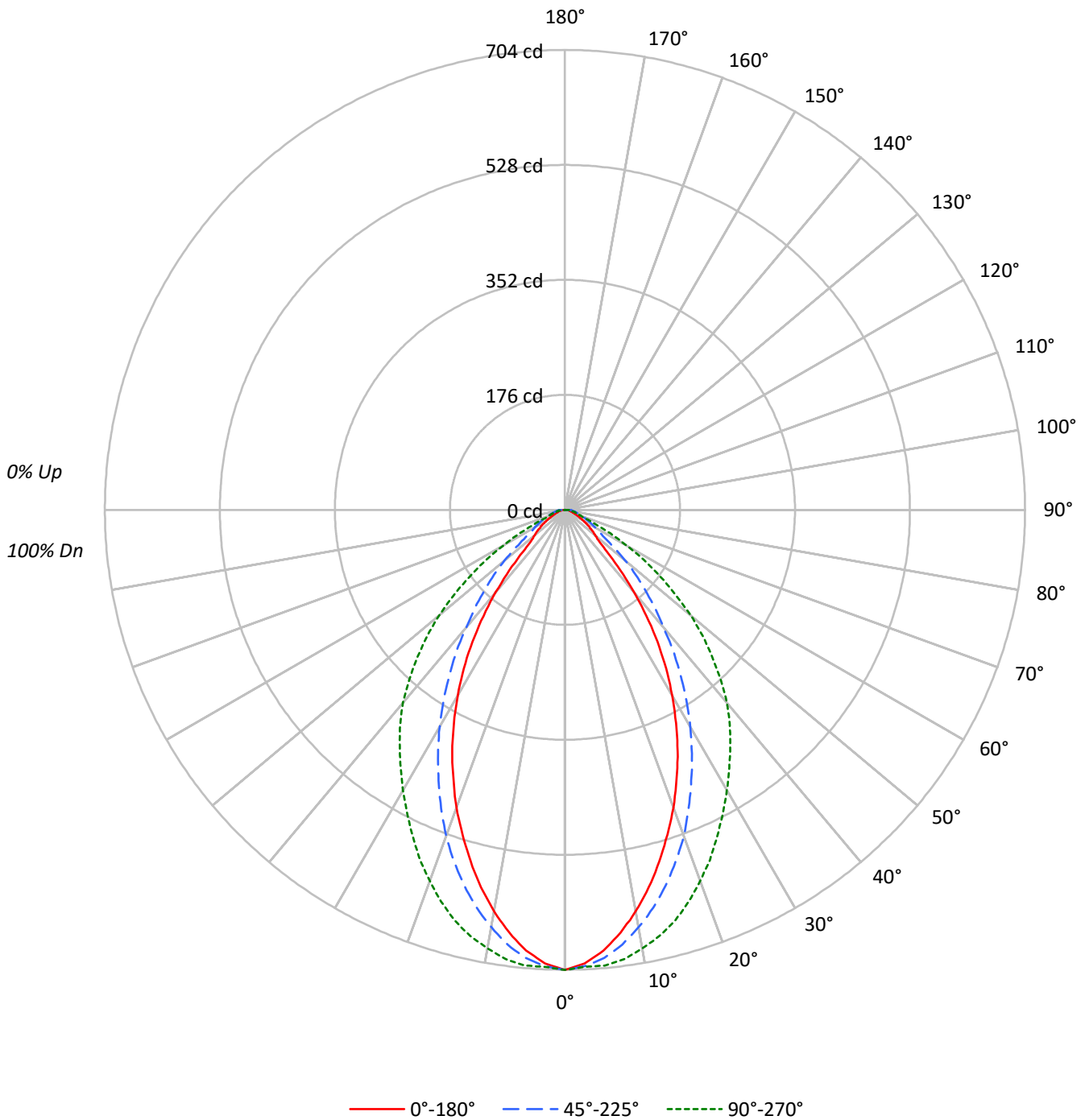
Lumens per Lamp: N/A
Luminaire Lumens: 943.1 lumens
Efficiency: N/A
Efficacy: 30.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79				79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71				71
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64				64
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58				58
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52				52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48				48
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44				44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40				40
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37				37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8269	8269	8269
5°	7986	8119	8252
10°	7440	7735	8127
15°	6774	7236	7912
20°	6063	6642	7554
25°	5287	5928	7139
30°	4446	5200	6718
35°	3536	4407	6322
40°	2522	3593	5909
45°	1503	2885	5292
50°	1109	2198	4582
55°	925	1494	3642
60°	749	1231	2560
65°	600	1056	1370
70°	494	917	848
75°	467	885	794
80°	487	974	764
85°	687	1388	970

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5292 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.7	6.9
10°-20°	168.1	17.8
20°-30°	214.3	22.7
30°-40°	201.7	21.4
40°-50°	144.9	15.4
50°-60°	83.1	8.8
60°-70°	38.0	4.0
70°-80°	19.1	2.0
80°-90°	9.3	1.0
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°	447.1	47.4
0°-40°	648.7	68.8
0°-60°	876.7	93.0
0°-90°	943.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	943.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	704	704	704	704	704	
5°	678	691	689	694	700	63
15°	557	577	595	627	651	156
25°	408	427	458	507	551	186
35°	247	264	307	377	441	153
45°	90	110	174	256	319	76
55°	45	46	73	135	178	41
65°	22	30	38	42	49	22
75°	10	21	20	18	18	11
85°	5	10	10	9	7	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	704.2	704.2	704.2	704.2	704.2
2.5°	695.0	705.2	699.1	699.1	700.1
5°	677.5	690.8	688.8	693.9	700.1
7.5°	652.8	667.2	671.3	683.6	693.9
10°	624.0	640.5	648.7	668.2	681.6
12.5°	592.2	610.7	624.0	648.7	668.2
15°	557.2	576.7	595.2	627.1	650.8
17.5°	521.2	540.7	564.4	601.4	629.2
20°	485.2	504.8	531.5	570.6	604.5
22.5°	446.2	465.7	494.5	538.7	579.8
25°	408.1	426.6	457.5	506.8	551.0
27.5°	368.0	386.5	420.5	473.9	523.3
30°	327.9	346.4	383.5	441.0	495.5
32.5°	287.9	305.3	345.4	409.2	467.8
35°	246.7	264.2	307.4	377.3	441.0
37.5°	204.6	222.1	272.4	348.5	414.3
40°	164.5	184.0	234.4	319.7	385.5
42.5°	125.4	146.0	203.6	288.9	352.6
45°	90.5	110.0	173.7	256.0	318.7
47.5°	68.9	79.2	147.0	223.1	285.8
50°	60.7	61.7	120.3	193.3	250.8
52.5°	52.4	53.5	93.6	164.5	213.8
55°	45.2	46.3	73.0	134.7	177.9
57.5°	38.0	40.1	59.6	106.9	142.9
60°	31.9	36.0	52.4	81.2	109.0
62.5°	25.7	32.9	45.2	59.6	78.1
65°	21.6	29.8	38.0	42.1	49.3
67.5°	17.5	27.8	31.9	29.8	29.8
70°	14.4	24.7	26.7	24.7	24.7
72.5°	12.3	23.6	22.6	20.6	20.6
75°	10.3	20.6	19.5	17.5	17.5
77.5°	9.3	17.5	16.4	15.4	14.4
80°	7.2	14.4	14.4	13.4	11.3
82.5°	6.2	12.3	12.3	11.3	9.3
85°	5.1	10.3	10.3	9.3	7.2
87.5°	4.1	9.3	9.3	8.2	5.1
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	7.32	8.64	7.69	8.95	9.27	14.55	15.86	14.91	16.18	16.49
	3H	8.73	9.90	9.11	10.23	10.59	14.78	15.95	15.16	16.28	16.65
	4H	9.29	10.38	9.69	10.73	11.11	14.89	15.98	15.29	16.33	16.71
	6H	9.75	10.75	10.17	11.12	11.52	15.00	16.00	15.41	16.37	16.76
	8H	9.94	10.89	10.37	11.28	11.68	15.05	15.99	15.48	16.39	16.79
	12H	10.13	11.03	10.56	11.42	11.85	15.10	16.00	15.53	16.39	16.82
4H	2H	8.40	9.49	8.80	9.84	10.22	14.51	15.60	14.91	15.95	16.33
	3H	10.09	10.98	10.50	11.38	11.79	14.88	15.77	15.29	16.17	16.58
	4H	10.92	11.72	11.36	12.14	12.58	15.06	15.86	15.50	16.28	16.72
	6H	11.58	12.27	12.05	12.72	13.19	15.28	15.97	15.75	16.42	16.89
	8H	11.84	12.48	12.31	12.93	13.40	15.38	16.03	15.85	16.48	16.95
	12H	12.09	12.66	12.58	13.15	13.62	15.50	16.07	15.99	16.56	17.03
8H	4H	11.36	12.00	11.83	12.45	12.92	15.10	15.75	15.57	16.20	16.67
	6H	12.31	12.84	12.81	13.34	13.82	15.44	15.97	15.94	16.46	16.95
	8H	12.77	13.25	13.30	13.77	14.26	15.63	16.11	16.15	16.62	17.11
	12H	13.25	13.67	13.77	14.17	14.74	15.86	16.28	16.38	16.78	17.35
12H	4H	11.42	11.99	11.90	12.47	12.95	15.10	15.67	15.58	16.15	16.63
	6H	12.46	12.93	12.98	13.45	13.94	15.46	15.94	15.99	16.46	16.95
	8H	13.05	13.47	13.56	13.97	14.54	15.72	16.15	16.24	16.64	17.21