

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: P1059243

Luminaire Tested: S123RDRP-S340D950-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059243
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S340D950-X4F0-XX-UDD-SVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

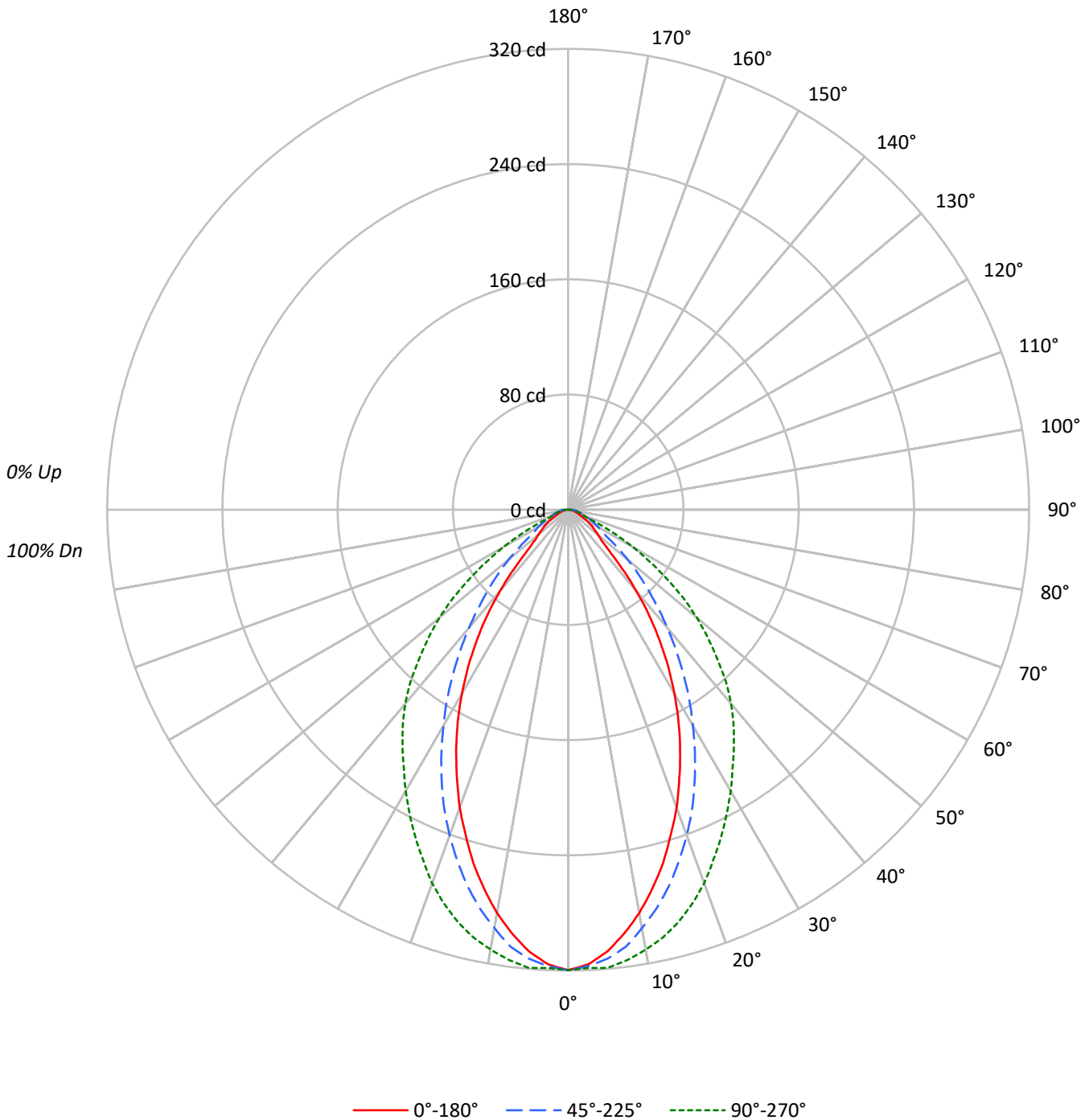
Lumens per Lamp: N/A
Luminaire Lumens: 429.1 lumens
Efficiency: N/A
Efficacy: 34.3 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3754	3754	3754
5°	3633	3688	3764
10°	3390	3517	3698
15°	3089	3287	3601
20°	2749	3007	3449
25°	2383	2691	3252
30°	1997	2347	3059
35°	1583	1998	2874
40°	1121	1643	2696
45°	659	1299	2426
50°	493	986	2126
55°	416	667	1707
60°	336	568	1212
65°	264	486	639
70°	233	422	395
75°	218	395	377
80°	216	433	379
85°	269	647	485

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2426 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.4	6.9
10°-20°	76.5	17.8
20°-30°	97.4	22.7
30°-40°	91.6	21.3
40°-50°	66.0	15.4
50°-60°	38.1	8.9
60°-70°	17.4	4.1
70°-80°	8.7	2.0
80°-90°	4.1	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°	203.2	47.4
0°-40°	294.8	68.7
0°-60°	398.9	93.0
0°-90°	429.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	429.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	320	320	320	320	320	
5°	308	313	313	316	319	29
15°	254	263	270	286	296	71
25°	184	193	208	231	251	84
35°	110	120	139	172	200	68
45°	40	50	78	118	146	34
55°	20	21	33	62	83	18
65°	10	14	18	20	23	10
75°	5	9	9	8	8	5
85°	2	4	5	4	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	319.7	319.7	319.7	319.7	319.7
2.5°	316.1	320.1	317.3	317.7	318.5
5°	308.2	313.3	312.9	316.1	319.3
7.5°	297.0	303.0	306.2	310.9	315.3
10°	284.3	291.1	295.0	303.8	310.1
12.5°	269.6	278.4	283.5	295.0	304.2
15°	254.1	263.3	270.4	285.5	296.2
17.5°	236.7	246.6	255.7	273.6	286.7
20°	220.0	229.5	240.6	260.1	276.0
22.5°	201.7	212.1	224.8	245.4	263.3
25°	183.9	193.4	207.7	230.7	251.0
27.5°	166.0	175.5	190.6	216.0	238.3
30°	147.3	157.3	173.1	201.3	225.6
32.5°	129.1	138.6	156.5	187.0	212.4
35°	110.4	119.9	139.4	171.5	200.5
37.5°	92.1	102.1	122.7	158.8	188.6
40°	73.1	83.8	107.2	145.7	175.9
42.5°	55.2	66.7	91.7	132.2	162.0
45°	39.7	49.6	78.2	117.5	146.1
47.5°	31.0	36.1	65.9	102.5	131.4
50°	27.0	27.8	54.0	88.6	116.4
52.5°	23.4	24.2	42.5	75.4	100.5
55°	20.3	21.0	32.6	61.9	83.4
57.5°	17.1	18.3	27.0	49.2	67.1
60°	14.3	15.9	24.2	37.7	51.6
62.5°	11.5	14.3	20.6	27.8	36.9
65°	9.5	13.5	17.5	19.5	23.0
67.5°	7.9	12.3	14.7	13.9	13.5
70°	6.8	11.1	12.3	11.1	11.5
72.5°	5.6	10.3	10.3	9.5	9.5
75°	4.8	9.1	8.7	8.3	8.3
77.5°	4.0	7.9	7.5	7.1	6.8
80°	3.2	6.4	6.4	6.0	5.6
82.5°	2.8	5.2	5.2	5.2	4.4
85°	2.0	4.4	4.8	4.4	3.6
87.5°	1.6	4.0	4.0	3.6	2.4
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	4.58	5.90	4.94	6.21	6.52	11.92	13.24	12.29	13.56	13.87
	3H	5.96	7.13	6.34	7.46	7.82	12.15	13.32	12.53	13.65	14.02
	4H	6.51	7.61	6.92	7.96	8.34	12.27	13.36	12.67	13.71	14.09
	6H	6.95	7.95	7.37	8.32	8.72	12.38	13.39	12.80	13.76	14.15
	8H	7.13	8.08	7.56	8.47	8.88	12.44	13.39	12.87	13.78	14.18
	12H	7.29	8.20	7.72	8.58	9.01	12.50	13.41	12.93	13.79	14.22
4H	2H	5.68	6.77	6.08	7.12	7.50	11.88	12.97	12.29	13.32	13.71
	3H	7.33	8.22	7.74	8.63	9.03	12.24	13.14	12.66	13.54	13.94
	4H	8.14	8.94	8.57	9.36	9.80	12.44	13.24	12.87	13.66	14.10
	6H	8.78	9.47	9.24	9.91	10.38	12.67	13.36	13.13	13.81	14.27
	8H	9.02	9.66	9.49	10.11	10.58	12.77	13.42	13.24	13.87	14.34
	12H	9.23	9.80	9.72	10.29	10.76	12.91	13.48	13.39	13.96	14.43
8H	4H	8.58	9.22	9.05	9.67	10.14	12.47	13.12	12.94	13.57	14.04
	6H	9.50	10.03	10.00	10.52	11.00	12.81	13.34	13.31	13.83	14.31
	8H	9.92	10.40	10.44	10.91	11.40	13.00	13.48	13.52	13.99	14.48
	12H	10.34	10.77	10.86	11.26	11.83	13.25	13.68	13.77	14.17	14.74
12H	4H	8.64	9.21	9.12	9.69	10.16	12.46	13.04	12.95	13.52	13.99
	6H	9.63	10.11	10.15	10.62	11.12	12.82	13.30	13.35	13.82	14.31
	8H	10.18	10.60	10.69	11.09	11.67	13.08	13.51	13.60	14.00	14.57