

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: P1059241

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059241
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-S340D950-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

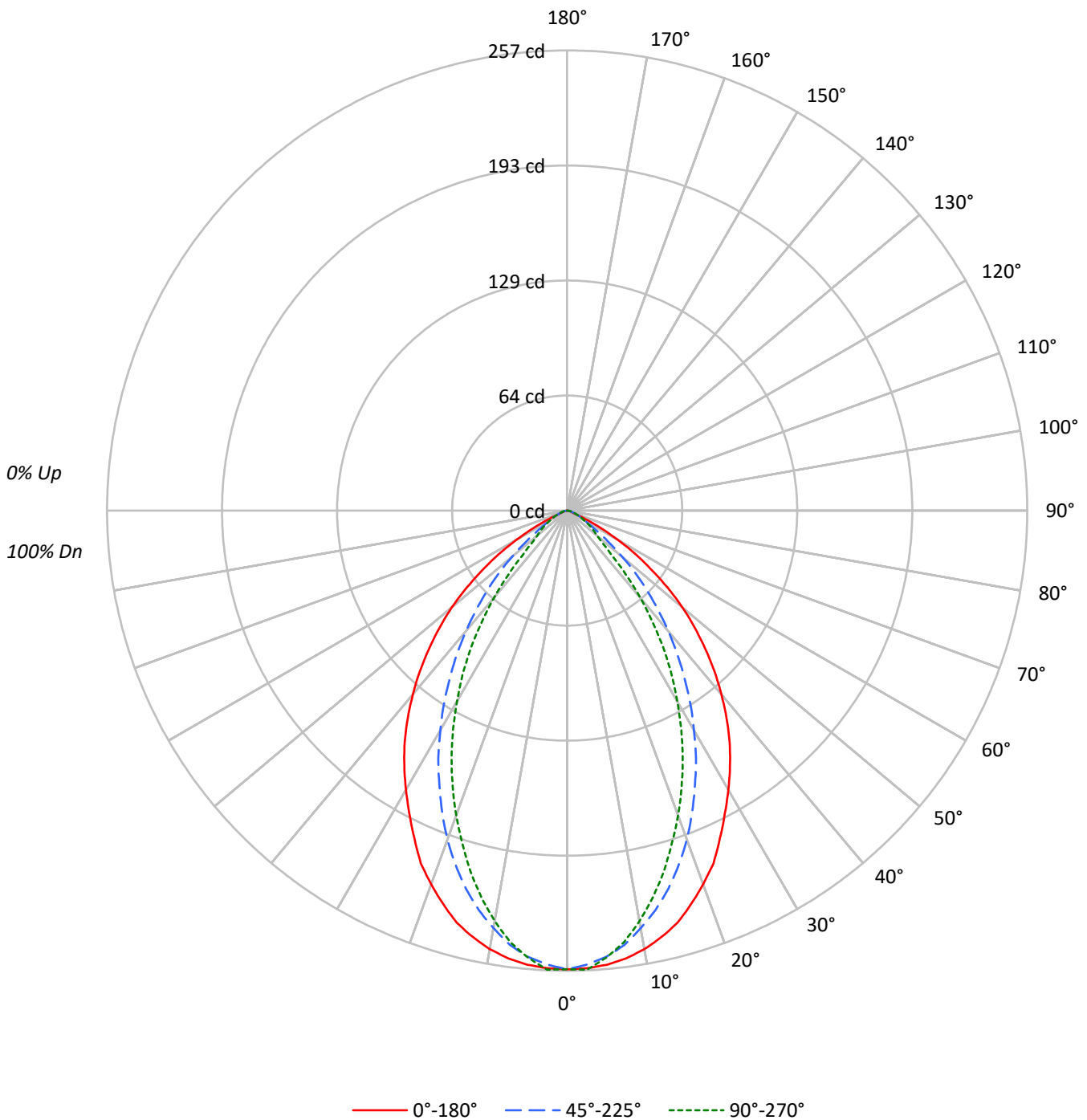
Lumens per Lamp: N/A
Luminaire Lumens: 330.8 lumens
Efficiency: N/A
Efficacy: 26.5 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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	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°	3008	3008	3008
5°	3001	2949	2954
10°	2965	2824	2776
15°	2897	2656	2536
20°	2775	2443	2264
25°	2616	2188	1978
30°	2441	1920	1666
35°	2268	1637	1342
40°	2054	1349	973
45°	1812	1048	586
50°	1536	733	398
55°	1169	438	334
60°	763	279	261
65°	320	208	208
70°	110	151	165
75°	91	109	127
80°	54	81	108
85°	54	54	108

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1812 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.7	7.2
10°-20°	61.9	18.7
20°-30°	79.4	24.0
30°-40°	74.5	22.5
40°-50°	52.0	15.7
50°-60°	26.9	8.1
60°-70°	9.2	2.8
70°-80°	2.6	0.8
80°-90°	0.6	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°	165.0	49.9
0°-40°	239.5	72.4
0°-60°	318.4	96.3
0°-90°	330.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	330.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	256	256	256	256	256	
5°	255	254	250	251	251	24
15°	238	232	218	211	209	67
25°	202	189	169	157	153	93
35°	158	139	114	100	94	99
45°	109	89	63	44	35	84
55°	57	43	21	17	16	51
65°	12	10	8	7	8	14
75°	2	2	2	3	3	2
85°	0	0	0	0	1	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	256.2	256.2	256.2	256.2	256.2
2.5°	255.8	256.2	253.8	256.2	256.6
5°	254.6	254.2	250.2	251.4	250.6
7.5°	252.2	251.0	244.7	243.1	243.1
10°	248.7	246.3	236.8	234.0	232.8
12.5°	243.9	240.7	228.4	223.3	221.3
15°	238.3	232.4	218.5	211.4	208.6
17.5°	230.4	222.5	207.4	199.1	194.7
20°	222.1	212.2	195.5	185.6	181.2
22.5°	213.4	201.5	182.4	171.7	167.0
25°	201.9	189.2	168.9	157.4	152.7
27.5°	190.8	177.3	155.9	142.8	138.0
30°	180.0	164.2	141.6	128.9	122.9
32.5°	169.3	151.5	128.1	114.2	108.7
35°	158.2	138.8	114.2	99.5	93.6
37.5°	146.3	126.5	101.1	85.3	78.1
40°	134.0	113.4	88.0	70.2	63.5
42.5°	121.8	101.5	75.0	56.7	48.8
45°	109.1	89.2	63.1	43.6	35.3
47.5°	96.4	76.9	51.6	31.7	26.6
50°	84.1	65.4	40.1	23.4	21.8
52.5°	70.6	54.3	30.1	19.4	19.0
55°	57.1	42.8	21.4	16.7	16.3
57.5°	45.2	33.3	15.5	13.9	13.5
60°	32.5	23.8	11.9	11.5	11.1
62.5°	21.4	16.3	9.5	9.1	9.1
65°	11.5	9.9	7.5	7.1	7.5
67.5°	4.8	5.6	5.6	5.9	5.9
70°	3.2	3.6	4.4	4.8	4.8
72.5°	2.4	2.8	3.2	3.6	3.6
75°	2.0	2.0	2.4	2.8	2.8
77.5°	1.2	1.6	1.6	2.0	2.4
80°	0.8	1.2	1.2	1.6	1.6
82.5°	0.4	0.8	0.8	1.2	1.2
85°	0.4	0.4	0.4	0.4	0.8
87.5°	0.0	0.0	0.0	0.0	0.4
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	10.16	11.42	10.52	11.73	12.04	3.67	4.93	4.04	5.25	5.56
	3H	10.11	11.22	10.49	11.55	11.92	4.44	5.55	4.82	5.88	6.25
	4H	10.06	11.09	10.46	11.44	11.83	4.65	5.68	5.05	6.03	6.42
	6H	9.99	10.93	10.40	11.30	11.70	4.80	5.74	5.21	6.11	6.51
	8H	9.95	10.84	10.38	11.23	11.64	4.83	5.73	5.27	6.12	6.52
	12H	9.90	10.75	10.34	11.14	11.57	4.85	5.70	5.29	6.09	6.52
4H	2H	10.00	11.03	10.41	11.38	11.77	3.92	4.95	4.33	5.31	5.69
	3H	9.99	10.83	10.40	11.23	11.63	4.83	5.67	5.25	6.07	6.48
	4H	9.94	10.68	10.38	11.10	11.55	5.11	5.85	5.55	6.27	6.72
	6H	9.88	10.52	10.35	10.97	11.44	5.33	5.97	5.80	6.42	6.89
	8H	9.83	10.43	10.30	10.87	11.35	5.39	5.99	5.87	6.44	6.91
	12H	9.79	10.31	10.27	10.79	11.27	5.43	5.96	5.92	6.44	6.92
8H	4H	9.83	10.42	10.30	10.87	11.34	5.10	5.69	5.57	6.14	6.61
	6H	9.76	10.25	10.27	10.75	11.23	5.37	5.85	5.88	6.35	6.84
	8H	9.71	10.15	10.24	10.67	11.16	5.48	5.92	6.00	6.43	6.93
	12H	9.68	10.06	10.19	10.56	11.13	5.55	5.94	6.07	6.44	7.01
12H	4H	9.78	10.30	10.27	10.79	11.26	5.06	5.58	5.55	6.07	6.54
	6H	9.71	10.14	10.23	10.66	11.15	5.33	5.77	5.86	6.28	6.78
	8H	9.68	10.06	10.19	10.56	11.13	5.47	5.86	5.99	6.35	6.93