

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: P1059246

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059246
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S340D950-X4F0-XX-UDD-WVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

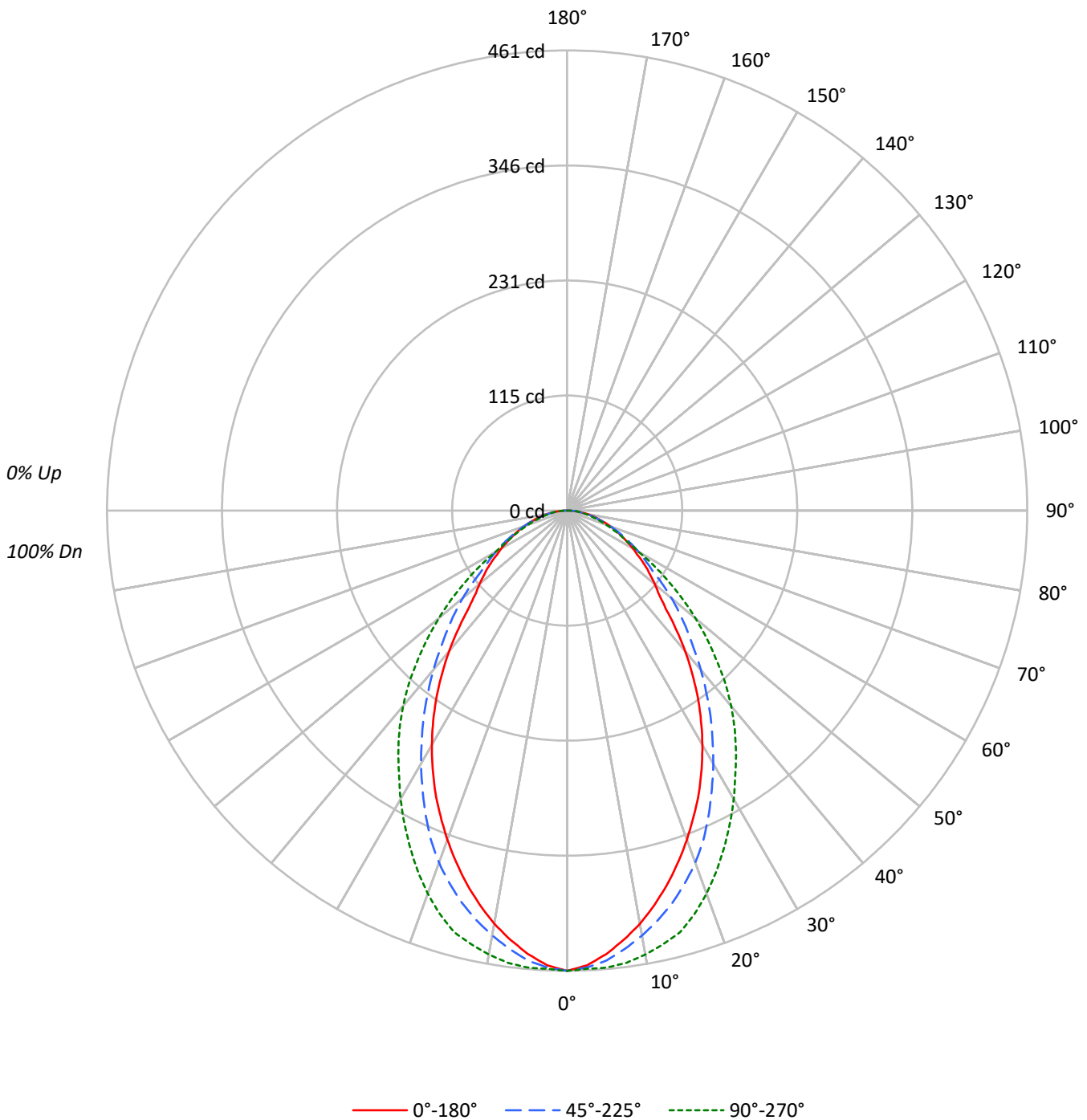
Lumens per Lamp: N/A
Luminaire Lumens: 810.3 lumens
Efficiency: N/A
Efficacy: 64.8 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1059246

CATALOG NUMBER: S123RDRP-S340D950-X4F0-XX-UDD-WVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1059246

CATALOG NUMBER: S123RDRP-S340D950-X4F0-XX-UDD-WVL-W

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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5414	5414	5414
5°	5258	5333	5416
10°	5011	5153	5385
15°	4713	4945	5316
20°	4384	4691	5103
25°	4046	4349	4822
30°	3674	3971	4525
35°	3271	3584	4227
40°	2822	3193	3918
45°	2333	2826	3512
50°	2095	2494	3067
55°	1941	2129	2543
60°	1790	1938	1947
65°	1664	1753	1631
70°	1566	1593	1432
75°	1475	1425	1261
80°	1393	1285	1183
85°	1334	1442	1334

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3512 cd/sqm



TEST NUMBER: P1059246

CATALOG NUMBER: S123RDRP-S340D950-X4F0-XX-UDD-WVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.7	5.3
10°-20°	115.1	14.2
20°-30°	155.7	19.2
30°-40°	160.0	19.7
40°-50°	134.3	16.6
50°-60°	96.3	11.9
60°-70°	61.3	7.6
70°-80°	33.7	4.2
80°-90°	11.2	1.4
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°	313.4	38.7
0°-40°	473.4	58.4
0°-60°	704.1	86.9
0°-90°	810.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	810.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	461	461	461	461	461	
5°	446	454	452	456	460	42
15°	388	398	407	424	437	109
25°	312	324	336	354	372	143
35°	228	240	250	272	295	142
45°	140	153	170	195	212	111
55°	95	97	104	118	124	85
65°	60	64	63	60	59	60
75°	32	36	31	29	28	35
85°	10	10	11	11	10	11
90°	0	0	0	0	0	



TEST NUMBER: P1059246

CATALOG NUMBER: S123RDRP-S340D950-X4F0-XX-UDD-WVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	461.1	461.1	461.1	461.1	461.1
2.5°	456.0	462.3	458.0	458.4	459.5
5°	446.1	454.0	452.4	455.6	459.5
7.5°	433.8	442.5	442.9	450.4	456.8
10°	420.3	429.4	432.2	443.7	451.6
12.5°	404.4	414.3	420.3	434.5	444.9
15°	387.7	398.4	406.8	424.2	437.3
17.5°	369.5	381.0	391.7	410.3	423.8
20°	350.8	363.1	375.4	392.9	408.4
22.5°	331.4	344.1	356.8	373.8	390.9
25°	312.3	324.2	335.7	354.0	372.2
27.5°	291.7	304.0	313.9	334.1	353.2
30°	271.0	283.3	292.9	313.9	333.7
32.5°	249.6	262.3	271.0	292.9	313.5
35°	228.2	240.5	250.0	272.2	294.9
37.5°	205.6	219.1	228.6	253.6	275.8
40°	184.1	196.8	208.3	234.5	255.6
42.5°	161.9	175.0	188.1	215.1	234.5
45°	140.5	152.8	170.2	194.9	211.5
47.5°	125.0	132.9	153.2	173.8	189.7
50°	114.7	117.9	136.5	154.8	167.9
52.5°	104.4	106.8	119.5	136.1	146.0
55°	94.8	96.8	104.0	117.9	124.2
57.5°	84.5	86.5	92.5	100.4	104.0
60°	76.2	77.8	82.5	83.7	82.9
62.5°	67.9	70.2	72.6	69.8	68.7
65°	59.9	63.5	63.1	59.5	58.7
67.5°	52.8	56.4	54.4	50.8	49.6
70°	45.6	49.2	46.4	42.9	41.7
72.5°	38.9	42.9	38.5	35.3	34.5
75°	32.5	35.7	31.4	29.0	27.8
77.5°	26.6	29.0	25.0	23.0	22.2
80°	20.6	22.2	19.0	17.9	17.5
82.5°	15.1	15.9	13.9	14.7	14.3
85°	9.9	10.3	10.7	11.1	9.9
87.5°	4.8	6.7	6.7	6.3	5.2
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1059246
 CATALOG NUMBER: S123RDRP-S340D950-X4F0-XX-UDD-WVL-W

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	13.05	14.52	13.42	14.83	15.14	14.12	15.59	14.49	15.90	16.21
	3H	14.75	16.06	15.13	16.39	16.75	15.21	16.52	15.59	16.85	17.21
	4H	15.40	16.63	15.80	16.98	17.36	15.61	16.84	16.01	17.19	17.57
	6H	15.91	17.04	16.32	17.41	17.80	15.92	17.05	16.33	17.42	17.81
	8H	16.08	17.16	16.51	17.55	17.95	16.06	17.13	16.48	17.52	17.93
	12H	16.21	17.24	16.64	17.62	18.05	16.18	17.21	16.61	17.59	18.02
4H	2H	13.65	14.88	14.05	15.23	15.61	14.53	15.75	14.93	16.10	16.48
	3H	15.58	16.60	15.99	17.00	17.40	15.85	16.86	16.26	17.26	17.67
	4H	16.39	17.31	16.83	17.73	18.17	16.36	17.28	16.80	17.70	18.14
	6H	17.04	17.84	17.50	18.28	18.74	16.80	17.59	17.26	18.04	18.50
	8H	17.26	18.01	17.73	18.45	18.92	16.99	17.73	17.45	18.18	18.65
	12H	17.44	18.10	17.92	18.58	19.05	17.17	17.83	17.65	18.31	18.79
8H	4H	16.63	17.38	17.10	17.82	18.29	16.61	17.35	17.08	17.80	18.27
	6H	17.42	18.03	17.92	18.53	19.00	17.16	17.77	17.66	18.27	18.74
	8H	17.73	18.29	18.25	18.80	19.29	17.44	17.99	17.95	18.50	18.99
	12H	18.00	18.49	18.51	18.98	19.55	17.73	18.22	18.24	18.71	19.28
12H	4H	16.64	17.31	17.13	17.79	18.26	16.64	17.30	17.12	17.78	18.25
	6H	17.45	18.01	17.97	18.52	19.01	17.21	17.76	17.73	18.28	18.76
	8H	17.83	18.32	18.34	18.81	19.38	17.55	18.04	18.06	18.53	19.10