

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: P1055757

Luminaire Tested: S123R3DRP-H340D935-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1055757  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123R3DRP-H340D935-X4F0-XX-UDD-F-W  
Description: DEFINE 3, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

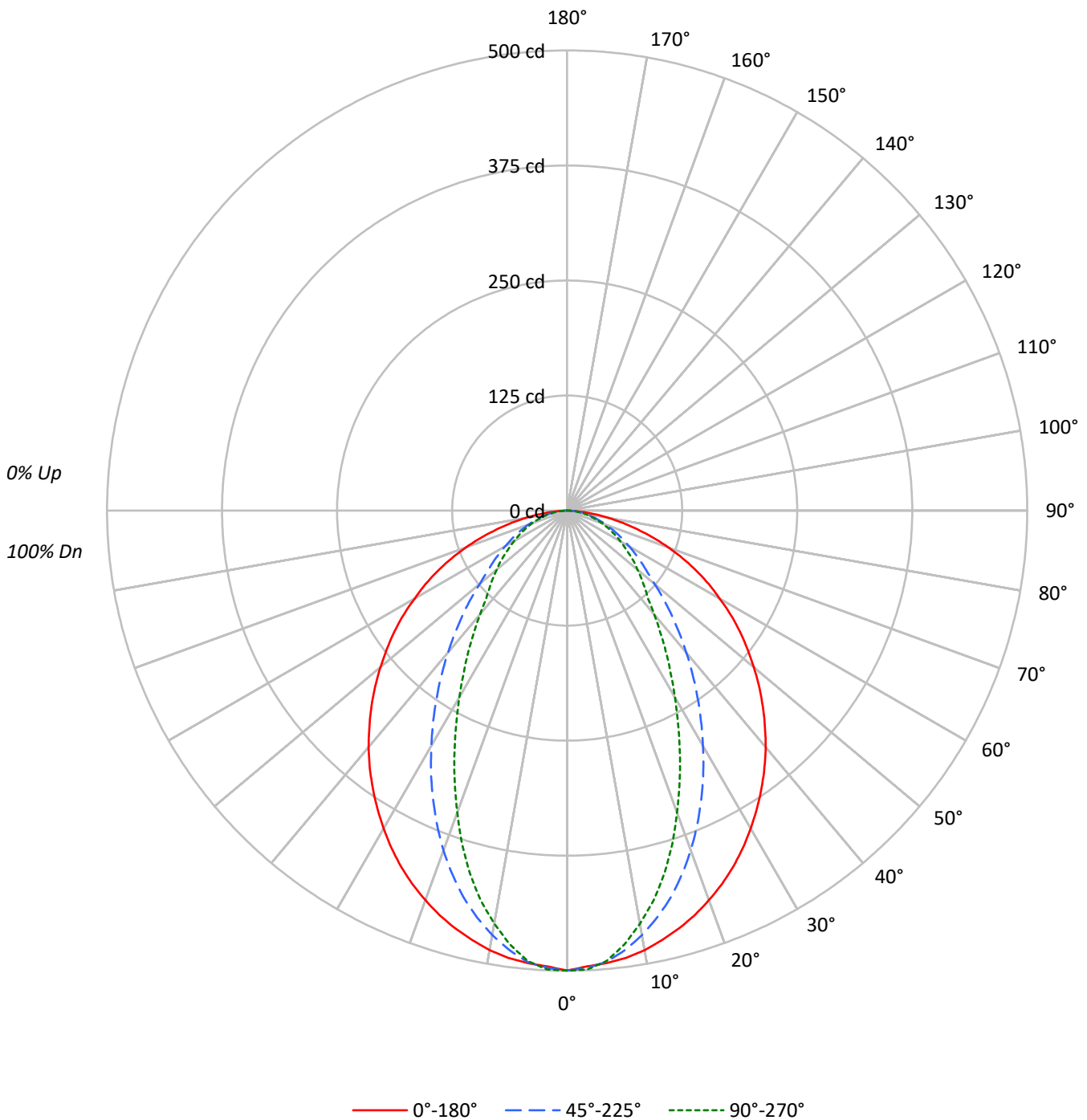
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 876.6 lumens  
Efficiency: N/A  
Efficacy: 74.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.83 / 1.02  
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 11.7  
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

TEST NUMBER: P1055757

CATALOG NUMBER: S123R3DRP-H340D935-X4F0-XX-UDD-F-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1055757

CATALOG NUMBER: S123R3DRP-H340D935-X4F0-XX-UDD-F-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	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	83	79	76	74
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57
5	80	68	60	54	78	67	60	54	65	58	53	63	57	53	62	56	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6026	6026	6026
5°	5973	5958	5945
10°	5936	5734	5579
15°	5865	5431	5095
20°	5780	5041	4480
25°	5679	4591	3854
30°	5553	4107	3258
35°	5419	3631	2751
40°	5283	3171	2312
45°	5125	2735	2039
50°	4965	2328	1872
55°	4818	2075	1728
60°	4615	1876	1613
65°	4425	1717	1515
70°	4124	1583	1424
75°	3694	1463	1342
80°	3166	1347	1243
85°	2227	1245	1190

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5125 cd/sqm



TEST NUMBER: P1055757

CATALOG NUMBER: S123R3DRP-H340D935-X4F0-XX-UDD-F-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.3	5.3
10°-20°	122.6	14.0
20°-30°	161.5	18.4
30°-40°	163.9	18.7
40°-50°	142.5	16.3
50°-60°	111.6	12.7
60°-70°	75.8	8.7
70°-80°	41.1	4.7
80°-90°	11.3	1.3
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°	330.4	37.7
0°-40°	494.3	56.4
0°-60°	748.4	85.4
0°-90°	876.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	876.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	500	500	500	500	500	
5°	494	499	492	488	491	47
15°	470	463	435	414	408	132
25°	427	401	345	302	290	197
35°	368	324	247	200	187	230
45°	301	241	160	124	120	232
55°	229	159	99	84	82	205
65°	155	86	60	54	53	153
75°	79	40	31	29	29	85
85°	16	10	9	8	9	20
90°	0	0	0	0	0	



TEST NUMBER: P1055757

CATALOG NUMBER: S123R3DRP-H340D935-X4F0-XX-UDD-F-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	499.8	499.8	499.8	499.8	499.8
2.5°	495.7	502.1	497.2	497.6	499.1
5°	493.5	499.4	492.3	487.9	491.2
7.5°	490.1	494.6	481.5	474.4	475.5
10°	484.9	486.4	468.4	457.2	455.7
12.5°	477.8	475.1	452.7	436.3	433.7
15°	469.9	463.2	435.1	413.8	408.2
17.5°	460.9	449.7	414.6	388.4	379.8
20°	450.5	434.8	392.9	359.6	349.2
22.5°	439.3	419.1	369.4	330.1	319.3
25°	426.9	401.1	345.1	302.1	289.7
27.5°	413.5	383.2	320.4	274.4	260.6
30°	398.9	364.5	295.0	247.5	234.0
32.5°	383.9	344.7	270.7	222.4	209.3
35°	368.2	324.5	246.7	199.6	186.9
37.5°	352.2	303.9	223.6	177.9	166.0
40°	335.7	283.0	201.5	157.8	146.9
42.5°	318.1	262.1	180.2	138.7	130.5
45°	300.6	241.1	160.4	123.7	119.6
47.5°	283.0	219.8	141.7	113.3	109.5
50°	264.7	199.3	124.1	103.6	99.8
52.5°	246.7	179.1	109.5	94.2	91.6
55°	229.2	159.3	98.7	84.1	82.2
57.5°	210.8	139.8	87.9	76.3	74.0
60°	191.4	121.1	77.8	68.0	66.9
62.5°	173.8	103.6	68.8	60.9	59.8
65°	155.1	86.0	60.2	53.8	53.1
67.5°	136.1	71.4	52.3	47.1	46.7
70°	117.0	60.2	44.9	40.7	40.4
72.5°	98.3	49.7	37.8	35.1	34.4
75°	79.3	39.6	31.4	29.2	28.8
77.5°	62.1	30.7	25.0	23.6	23.2
80°	45.6	22.8	19.4	18.3	17.9
82.5°	29.9	15.7	13.8	13.1	13.1
85°	16.1	9.7	9.0	8.2	8.6
87.5°	5.6	4.1	4.1	3.7	4.1
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1055757

CATALOG NUMBER: S123R3DRP-H340D935-X4F0-XX-UDD-F-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	16.80	18.29	17.16	18.60	18.92	11.95	13.44	12.31	13.76	14.07
	3H	18.68	20.02	19.06	20.35	20.71	13.58	14.91	13.95	15.24	15.60
	4H	19.44	20.70	19.84	21.05	21.43	14.21	15.47	14.61	15.82	16.20
	6H	20.01	21.17	20.42	21.53	21.93	14.70	15.86	15.11	16.23	16.62
	8H	20.18	21.28	20.61	21.67	22.07	14.87	15.98	15.30	16.37	16.77
	12H	20.28	21.33	20.71	21.72	22.14	15.00	16.05	15.43	16.44	16.87
4H	2H	16.84	18.10	17.24	18.45	18.83	12.68	13.93	13.08	14.28	14.66
	3H	18.86	19.90	19.27	20.31	20.71	14.50	15.54	14.91	15.94	16.34
	4H	19.68	20.62	20.11	21.03	21.47	15.24	16.18	15.68	16.60	17.04
	6H	20.36	21.18	20.82	21.62	22.08	15.85	16.67	16.31	17.11	17.57
	8H	20.59	21.36	21.06	21.80	22.27	16.07	16.83	16.53	17.28	17.74
	12H	20.74	21.43	21.23	21.91	22.38	16.24	16.92	16.72	17.40	17.87
8H	4H	19.70	20.47	20.17	20.91	21.38	15.63	16.39	16.09	16.84	17.30
	6H	20.43	21.06	20.93	21.56	22.03	16.36	16.99	16.85	17.48	17.96
	8H	20.70	21.27	21.22	21.78	22.27	16.64	17.21	17.16	17.72	18.21
	12H	20.91	21.41	21.42	21.90	22.47	16.89	17.39	17.40	17.88	18.45
12H	4H	19.69	20.37	20.17	20.85	21.32	15.68	16.36	16.16	16.84	17.31
	6H	20.42	20.98	20.93	21.49	21.98	16.44	17.00	16.95	17.51	18.00
	8H	20.72	21.22	21.23	21.71	22.28	16.78	17.28	17.29	17.78	18.34