

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: P1059629

Luminaire Tested: S123RDR-H340D935-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059629
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-H340D935-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

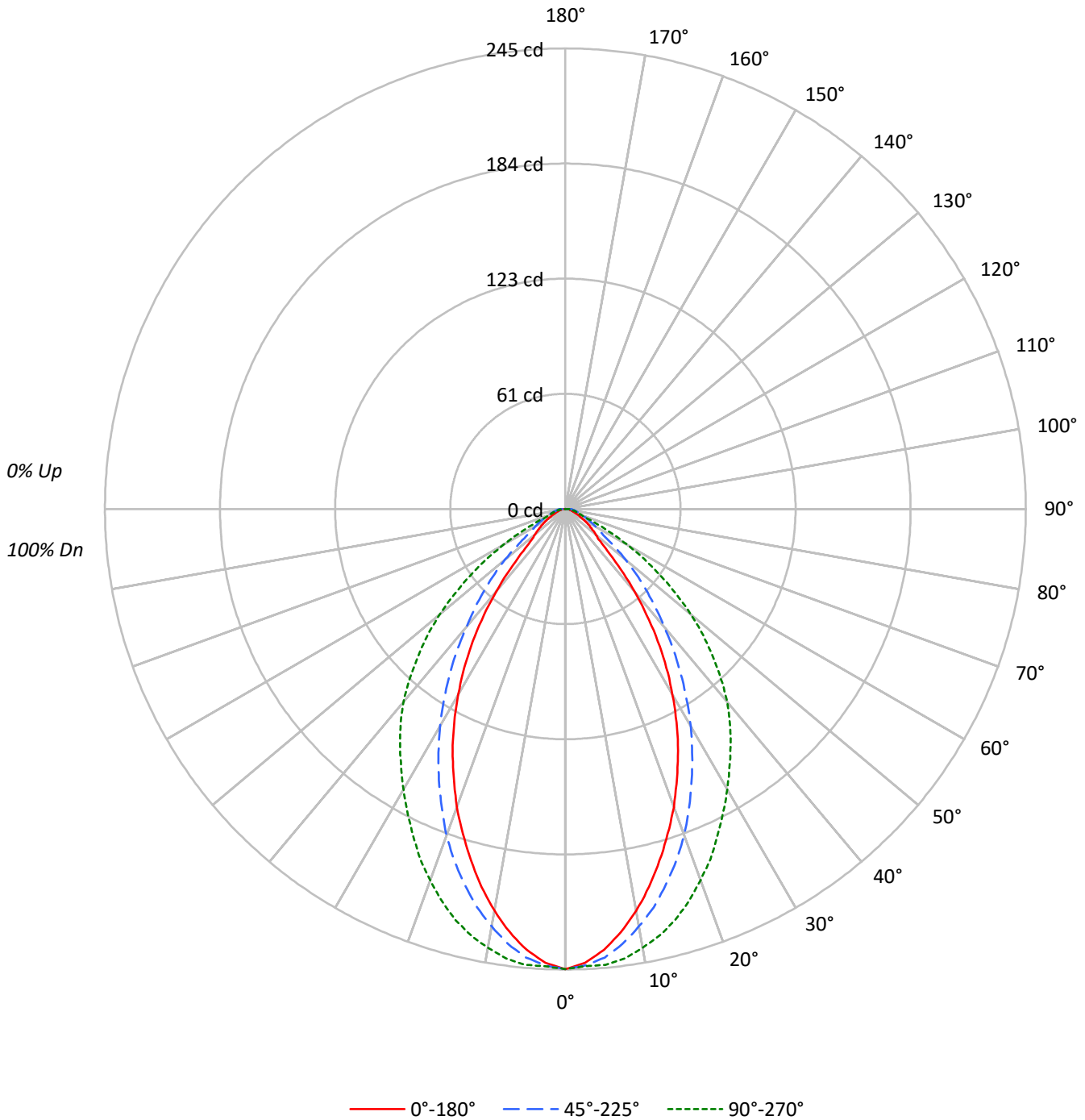
Lumens per Lamp: N/A
Luminaire Lumens: 327.9 lumens
Efficiency: N/A
Efficacy: 28.0 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1059629

CATALOG NUMBER: S123RDR-H340D935-X4F0-XX-UDD-SVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1059629

CATALOG NUMBER: S123RDR-H340D935-X4F0-XX-UDD-SVL-S

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				
1	111	108	105	102	109	106	103	100	101	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	91	81	74	69	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	61	69	64	60	68	63	59	58				
6	79	68	61	56	78	67	60	55	66	60	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	56	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	50	43	39	49	43	39	48	43	39	37				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2875	2875	2875
5°	2776	2823	2869
10°	2587	2689	2826
15°	2355	2515	2750
20°	2108	2309	2627
25°	1839	2061	2482
30°	1546	1807	2336
35°	1230	1532	2198
40°	877	1249	2054
45°	523	1003	1840
50°	385	764	1593
55°	321	520	1265
60°	261	427	890
65°	208	367	478
70°	172	319	295
75°	163	309	277
80°	169	338	264
85°	243	485	337

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1840 cd/sqm



TEST NUMBER: P1059629

CATALOG NUMBER: S123RDR-H340D935-X4F0-XX-UDD-SVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.5	6.9
10°-20°	58.4	17.8
20°-30°	74.5	22.7
30°-40°	70.1	21.4
40°-50°	50.4	15.4
50°-60°	28.9	8.8
60°-70°	13.2	4.0
70°-80°	6.6	2.0
80°-90°	3.2	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°	155.4	47.4
0°-40°	225.6	68.8
0°-60°	304.8	93.0
0°-90°	327.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	327.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	245	245	245	245	245	
5°	236	240	240	241	243	22
15°	194	200	207	218	226	54
25°	142	148	159	176	192	65
35°	86	92	107	131	153	53
45°	32	38	60	89	111	26
55°	16	16	25	47	62	14
65°	8	10	13	15	17	8
75°	4	7	7	6	6	4
85°	2	4	4	3	2	2
90°	0	0	0	0	0	



TEST NUMBER: P1059629

CATALOG NUMBER: S123RDR-H340D935-X4F0-XX-UDD-SVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	244.8	244.8	244.8	244.8	244.8
2.5°	241.6	245.2	243.0	243.0	243.4
5°	235.5	240.2	239.5	241.3	243.4
7.5°	227.0	232.0	233.4	237.7	241.3
10°	217.0	222.7	225.5	232.3	237.0
12.5°	205.9	212.3	217.0	225.5	232.3
15°	193.7	200.5	206.9	218.0	226.2
17.5°	181.2	188.0	196.2	209.1	218.7
20°	168.7	175.5	184.8	198.4	210.2
22.5°	155.1	161.9	171.9	187.3	201.6
25°	141.9	148.3	159.1	176.2	191.6
27.5°	128.0	134.4	146.2	164.8	181.9
30°	114.0	120.5	133.3	153.3	172.3
32.5°	100.1	106.2	120.1	142.3	162.6
35°	85.8	91.9	106.9	131.2	153.3
37.5°	71.1	77.2	94.7	121.2	144.0
40°	57.2	64.0	81.5	111.2	134.0
42.5°	43.6	50.8	70.8	100.4	122.6
45°	31.5	38.2	60.4	89.0	110.8
47.5°	23.9	27.5	51.1	77.6	99.4
50°	21.1	21.4	41.8	67.2	87.2
52.5°	18.2	18.6	32.5	57.2	74.3
55°	15.7	16.1	25.4	46.8	61.8
57.5°	13.2	13.9	20.7	37.2	49.7
60°	11.1	12.5	18.2	28.2	37.9
62.5°	8.9	11.4	15.7	20.7	27.2
65°	7.5	10.4	13.2	14.7	17.2
67.5°	6.1	9.7	11.1	10.4	10.4
70°	5.0	8.6	9.3	8.6	8.6
72.5°	4.3	8.2	7.9	7.1	7.1
75°	3.6	7.1	6.8	6.1	6.1
77.5°	3.2	6.1	5.7	5.4	5.0
80°	2.5	5.0	5.0	4.6	3.9
82.5°	2.1	4.3	4.3	3.9	3.2
85°	1.8	3.6	3.6	3.2	2.5
87.5°	1.4	3.2	3.2	2.9	1.8
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1059629
 CATALOG NUMBER: S123RDR-H340D935-X4F0-XX-UDD-SVL-S

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	3.64	4.95	4.00	5.27	5.58	10.88	12.20	11.25	12.51	12.83
	3H	5.05	6.22	5.43	6.55	6.91	11.12	12.29	11.50	12.62	12.98
	4H	5.61	6.70	6.01	7.05	7.44	11.23	12.31	11.63	12.67	13.05
	6H	6.07	7.07	6.49	7.44	7.84	11.33	12.33	11.75	12.70	13.10
	8H	6.25	7.20	6.68	7.59	8.00	11.38	12.33	11.81	12.72	13.12
	12H	6.44	7.35	6.88	7.73	8.16	11.43	12.34	11.86	12.72	13.15
4H	2H	4.71	5.80	5.11	6.15	6.53	10.84	11.93	11.24	12.28	12.66
	3H	6.41	7.31	6.83	7.71	8.11	11.21	12.10	11.62	12.51	12.91
	4H	7.24	8.04	7.68	8.46	8.90	11.39	12.19	11.83	12.61	13.06
	6H	7.90	8.59	8.37	9.04	9.51	11.62	12.31	12.08	12.75	13.22
	8H	8.15	8.80	8.62	9.25	9.72	11.71	12.36	12.18	12.81	13.28
	12H	8.41	8.98	8.90	9.47	9.94	11.83	12.40	12.32	12.88	13.36
8H	4H	7.68	8.33	8.15	8.77	9.24	11.44	12.09	11.91	12.53	13.00
	6H	8.63	9.16	9.14	9.66	10.14	11.77	12.30	12.27	12.80	13.28
	8H	9.10	9.57	9.62	10.09	10.58	11.96	12.43	12.48	12.95	13.44
	12H	9.58	10.00	10.09	10.50	11.07	12.19	12.61	12.70	13.10	13.67
12H	4H	7.74	8.31	8.23	8.79	9.27	11.43	12.00	11.92	12.49	12.96
	6H	8.78	9.26	9.30	9.77	10.27	11.80	12.27	12.32	12.79	13.28
	8H	9.37	9.80	9.89	10.29	10.86	12.05	12.47	12.57	12.97	13.54