

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: P1059303

Luminaire Tested: S123RDRP-S560D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059303
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-66)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S560D935-X4F0-XX-UDD-BVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

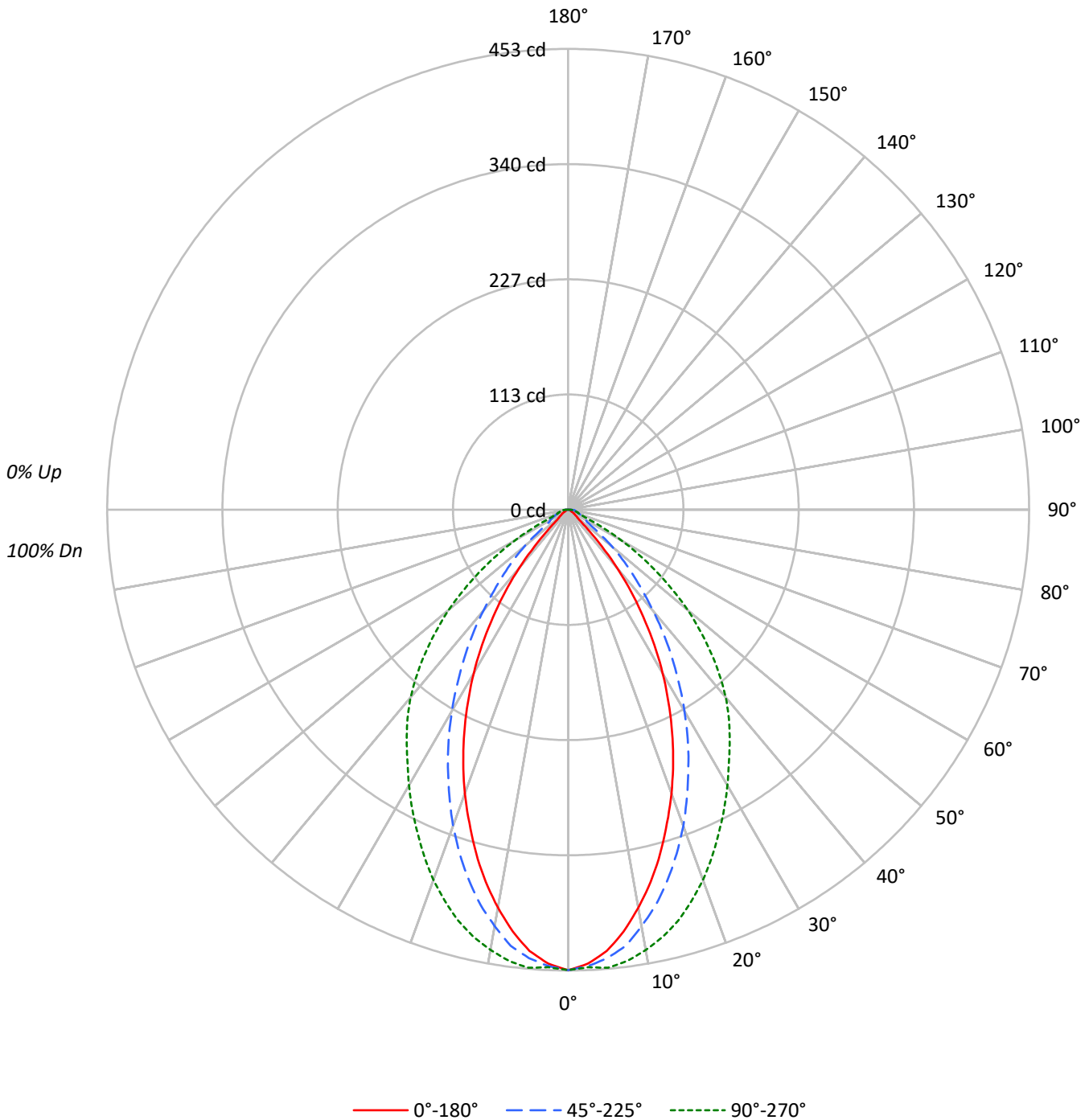
Lumens per Lamp: N/A
Luminaire Lumens: 543.4 lumens
Efficiency: N/A
Efficacy: 27.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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: P1059303

CATALOG NUMBER: S123RDRP-S560D935-X4F0-XX-UDD-BVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1059303

CATALOG NUMBER: S123RDRP-S560D935-X4F0-XX-UDD-BVL-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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	50
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5315	5315	5315
5°	5132	5216	5328
10°	4737	4957	5240
15°	4251	4584	5083
20°	3709	4132	4838
25°	3129	3621	4539
30°	2517	3097	4241
35°	1842	2549	3965
40°	1148	1988	3693
45°	435	1481	3290
50°	206	1021	2802
55°	158	561	2168
60°	113	474	1426
65°	83	414	595
70°	82	388	388
75°	109	404	404
80°	162	480	440
85°	323	795	647

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3290 cd/sqm



TEST NUMBER: P1059303

CATALOG NUMBER: S123RDRP-S560D935-X4F0-XX-UDD-BVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.5	7.6
10°-20°	106.5	19.6
20°-30°	131.9	24.3
30°-40°	118.2	21.8
40°-50°	77.5	14.3
50°-60°	38.8	7.1
60°-70°	15.1	2.8
70°-80°	8.5	1.6
80°-90°	5.2	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°	280.0	51.5
0°-40°	398.2	73.3
0°-60°	514.5	94.7
0°-90°	543.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	543.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	453	453	453	453	453	
5°	435	442	442	447	452	40
15°	350	364	377	402	418	97
25°	242	256	280	319	350	110
35°	128	146	178	231	277	80
45°	26	42	89	153	198	25
55°	8	10	27	75	106	7
65°	3	9	15	20	21	3
75°	2	9	9	9	9	3
85°	2	6	6	6	5	2
90°	0	0	0	0	0	



TEST NUMBER: P1059303

CATALOG NUMBER: S123RDRP-S560D935-X4F0-XX-UDD-BVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	452.6	452.6	452.6	452.6	452.6
2.5°	446.7	453.2	449.0	449.6	450.2
5°	435.4	442.5	442.5	447.3	452.0
7.5°	418.1	426.4	432.4	440.7	447.3
10°	397.3	407.4	415.7	430.6	439.5
12.5°	374.7	387.2	397.9	417.5	430.0
15°	349.7	364.0	377.1	402.0	418.1
17.5°	322.9	337.2	354.5	383.6	403.2
20°	296.8	311.1	330.7	363.4	387.2
22.5°	269.4	284.3	305.1	341.4	369.3
25°	241.5	256.3	279.5	319.4	350.3
27.5°	213.5	228.4	254.6	298.0	331.9
30°	185.6	200.4	228.4	274.8	312.8
32.5°	157.6	173.7	202.8	253.4	293.8
35°	128.5	145.7	177.8	231.4	276.6
37.5°	101.7	117.8	154.0	212.3	259.3
40°	74.9	92.2	129.7	193.9	240.9
42.5°	48.8	67.2	107.6	173.7	220.1
45°	26.2	42.2	89.2	152.9	198.1
47.5°	14.3	23.2	72.0	130.8	175.5
50°	11.3	13.1	55.9	111.8	153.4
52.5°	9.5	10.7	39.8	94.0	129.1
55°	7.7	9.5	27.4	74.9	105.9
57.5°	6.5	8.3	21.4	58.3	82.7
60°	4.8	7.1	20.2	42.8	60.7
62.5°	3.6	7.7	17.8	29.7	39.8
65°	3.0	8.9	14.9	19.6	21.4
67.5°	2.4	9.5	13.1	12.5	12.5
70°	2.4	8.9	11.3	10.7	11.3
72.5°	2.4	9.5	10.1	9.5	10.1
75°	2.4	8.9	8.9	8.9	8.9
77.5°	2.4	8.3	8.3	7.7	7.7
80°	2.4	7.1	7.1	7.1	6.5
82.5°	2.4	6.5	6.5	6.5	5.4
85°	2.4	5.9	5.9	5.9	4.8
87.5°	1.8	5.4	5.9	5.4	3.6
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1059303
 CATALOG NUMBER: S123RDRP-S560D935-X4F0-XX-UDD-BVL-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	0.00	0.00	0.00	0.00	0.02	12.41	13.67	12.78	13.98	14.29
	3H	0.48	1.59	0.86	1.92	2.29	12.49	13.60	12.87	13.93	14.30
	4H	1.59	2.62	1.99	2.98	3.36	12.57	13.60	12.97	13.95	14.34
	6H	2.59	3.54	3.00	3.91	4.30	12.67	13.62	13.09	13.99	14.38
	8H	3.07	3.97	3.50	4.36	4.77	12.73	13.63	13.16	14.02	14.42
	12H	3.63	4.49	4.07	4.87	5.31	12.81	13.67	13.24	14.05	14.48
4H	2H	1.41	2.44	1.81	2.79	3.18	12.27	13.30	12.67	13.65	14.03
	3H	3.73	4.57	4.14	4.97	5.38	12.44	13.29	12.85	13.69	14.09
	4H	5.09	5.85	5.53	6.27	6.71	12.59	13.35	13.03	13.77	14.21
	6H	6.18	6.83	6.64	7.28	7.75	12.81	13.47	13.28	13.91	14.38
	8H	6.64	7.25	7.11	7.69	8.17	12.94	13.55	13.41	13.99	14.47
	12H	7.13	7.67	7.62	8.15	8.63	13.11	13.65	13.60	14.14	14.61
8H	4H	6.06	6.67	6.53	7.12	7.59	12.59	13.20	13.06	13.64	14.12
	6H	7.58	8.08	8.08	8.58	9.06	12.92	13.42	13.42	13.92	14.40
	8H	8.35	8.80	8.87	9.32	9.81	13.15	13.60	13.68	14.12	14.61
	12H	9.15	9.55	9.67	10.05	10.62	13.49	13.89	14.00	14.38	14.95
12H	4H	6.24	6.78	6.73	7.26	7.74	12.57	13.11	13.06	13.59	14.07
	6H	7.89	8.34	8.42	8.86	9.35	12.94	13.39	13.46	13.90	14.40
	8H	8.84	9.24	9.36	9.74	10.31	13.25	13.65	13.76	14.14	14.71