

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: P1059309

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059309
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-S560D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

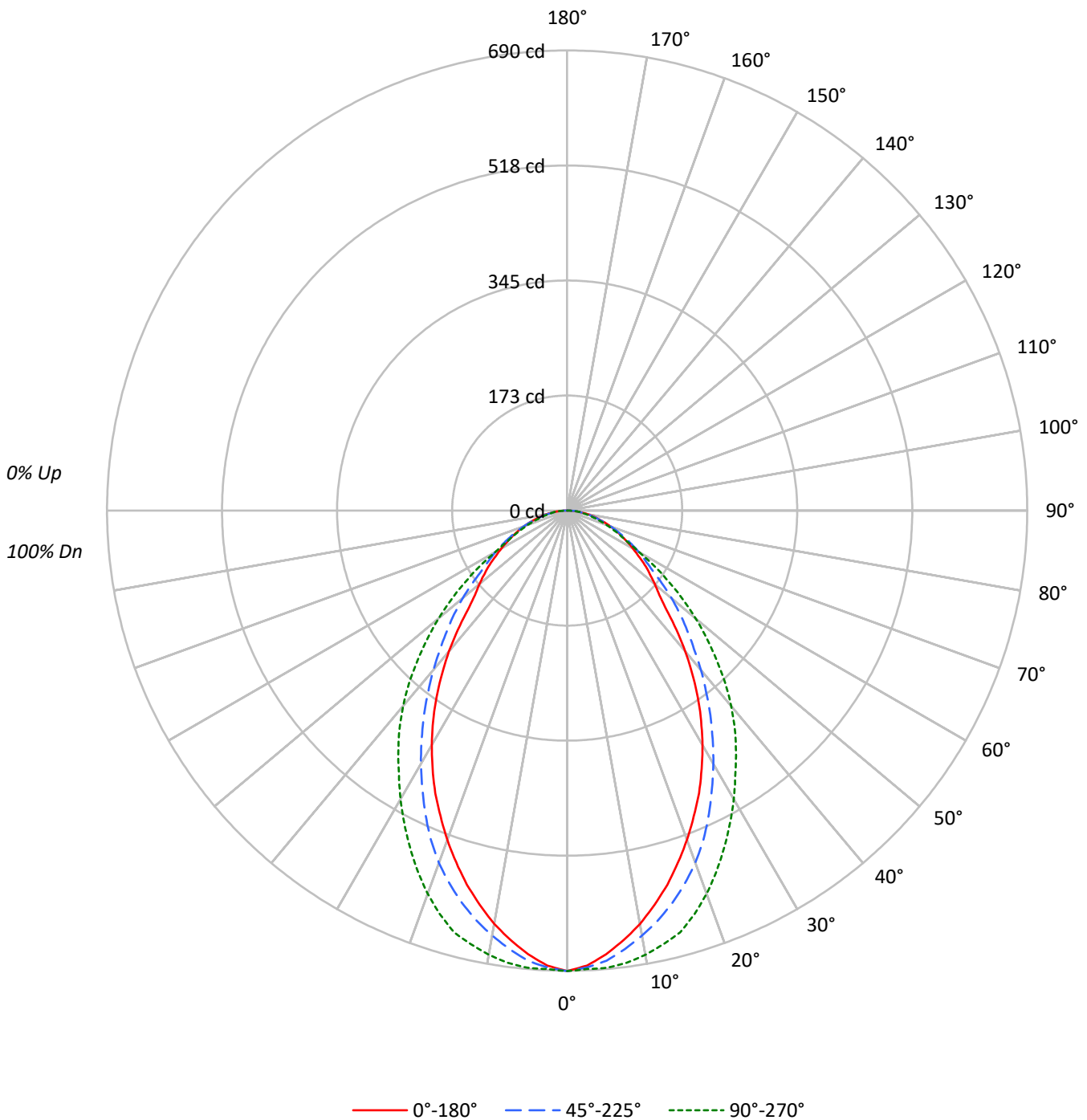
Lumens per Lamp: N/A
Luminaire Lumens: 1213.3 lumens
Efficiency: N/A
Efficacy: 61.9 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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

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	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°	8108	8108	8108
5°	7873	7985	8111
10°	7504	7716	8063
15°	7058	7405	7960
20°	6564	7024	7641
25°	6060	6513	7222
30°	5504	5946	6775
35°	4898	5367	6329
40°	4226	4783	5866
45°	3494	4233	5259
50°	3137	3734	4593
55°	2907	3188	3808
60°	2680	2903	2917
65°	2492	2626	2442
70°	2345	2386	2142
75°	2209	2128	1887
80°	2090	1927	1765
85°	2007	2156	2007

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5259 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.0	5.3
10°-20°	172.3	14.2
20°-30°	233.1	19.2
30°-40°	239.5	19.7
40°-50°	201.2	16.6
50°-60°	144.2	11.9
60°-70°	91.8	7.6
70°-80°	50.5	4.2
80°-90°	16.8	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°	469.3	38.7
0°-40°	708.8	58.4
0°-60°	1054.2	86.9
0°-90°	1213.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1213.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	690	690	690	690	690	
5°	668	680	677	682	688	63
15°	581	597	609	635	655	163
25°	468	486	503	530	557	214
35°	342	360	374	408	442	213
45°	210	229	255	292	317	166
55°	142	145	156	176	186	127
65°	90	95	94	89	88	89
75°	49	54	47	43	42	52
85°	15	15	16	17	15	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	690.5	690.5	690.5	690.5	690.5
2.5°	682.8	692.3	685.7	686.3	688.1
5°	667.9	679.8	677.4	682.2	688.1
7.5°	649.5	662.6	663.2	674.4	684.0
10°	629.3	643.0	647.1	664.3	676.2
12.5°	605.5	620.4	629.3	650.7	666.1
15°	580.6	596.6	609.1	635.2	654.8
17.5°	553.2	570.5	586.5	614.4	634.6
20°	525.3	543.7	562.1	588.3	611.5
22.5°	496.2	515.2	534.2	559.8	585.3
25°	467.7	485.5	502.7	530.1	557.4
27.5°	436.8	455.2	470.0	500.3	528.9
30°	405.9	424.3	438.5	470.0	499.7
32.5°	373.8	392.8	405.9	438.5	469.4
35°	341.7	360.1	374.4	407.6	441.5
37.5°	307.8	328.0	342.3	379.7	413.0
40°	275.7	294.7	312.0	351.2	382.7
42.5°	242.4	262.1	281.7	322.1	351.2
45°	210.4	228.8	254.9	291.8	316.7
47.5°	187.2	199.1	229.4	260.3	284.0
50°	171.7	176.5	204.4	231.7	251.4
52.5°	156.3	159.8	178.9	203.8	218.7
55°	142.0	145.0	155.7	176.5	186.0
57.5°	126.6	129.5	138.5	150.3	155.7
60°	114.1	116.5	123.6	125.4	124.2
62.5°	101.6	105.2	108.7	104.6	102.8
65°	89.7	95.1	94.5	89.1	87.9
67.5°	79.0	84.4	81.4	76.1	74.3
70°	68.3	73.7	69.5	64.2	62.4
72.5°	58.2	64.2	57.6	52.9	51.7
75°	48.7	53.5	46.9	43.4	41.6
77.5°	39.8	43.4	37.4	34.5	33.3
80°	30.9	33.3	28.5	26.7	26.1
82.5°	22.6	23.8	20.8	22.0	21.4
85°	14.9	15.4	16.0	16.6	14.9
87.5°	7.1	10.1	10.1	9.5	7.7
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	14.45	15.92	14.82	16.23	16.55	15.52	16.99	15.89	17.30	17.62
	3H	16.15	17.46	16.53	17.79	18.15	16.61	17.92	16.99	18.25	18.61
	4H	16.81	18.03	17.21	18.38	18.76	17.01	18.24	17.41	18.59	18.97
	6H	17.31	18.44	17.72	18.81	19.20	17.32	18.46	17.73	18.82	19.22
	8H	17.48	18.56	17.91	18.95	19.35	17.46	18.53	17.88	18.92	19.33
	12H	17.61	18.64	18.04	19.02	19.45	17.58	18.61	18.01	18.99	19.42
4H	2H	15.06	16.28	15.46	16.63	17.01	15.93	17.16	16.33	17.51	17.88
	3H	16.98	18.00	17.40	18.40	18.81	17.25	18.27	17.66	18.67	19.07
	4H	17.80	18.71	18.23	19.13	19.57	17.77	18.68	18.20	19.10	19.54
	6H	18.44	19.24	18.90	19.68	20.15	18.20	19.00	18.66	19.44	19.90
	8H	18.67	19.41	19.13	19.86	20.32	18.39	19.13	18.85	19.58	20.05
	12H	18.84	19.50	19.32	19.98	20.46	18.57	19.24	19.06	19.72	20.19
8H	4H	18.03	18.78	18.50	19.22	19.69	18.01	18.76	18.48	19.20	19.67
	6H	18.82	19.44	19.32	19.93	20.41	18.56	19.17	19.06	19.67	20.15
	8H	19.14	19.69	19.65	20.20	20.69	18.84	19.39	19.35	19.90	20.39
	12H	19.40	19.89	19.91	20.39	20.95	19.13	19.62	19.64	20.11	20.68
12H	4H	18.05	18.71	18.53	19.19	19.66	18.04	18.70	18.52	19.18	19.65
	6H	18.86	19.41	19.37	19.92	20.41	18.61	19.17	19.13	19.68	20.17
	8H	19.23	19.72	19.74	20.21	20.78	18.95	19.44	19.46	19.93	20.50