

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: P1059286

Luminaire Tested: S123RDRP-S560D927-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059286
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S560D927-X4F0-XX-UDD-SVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

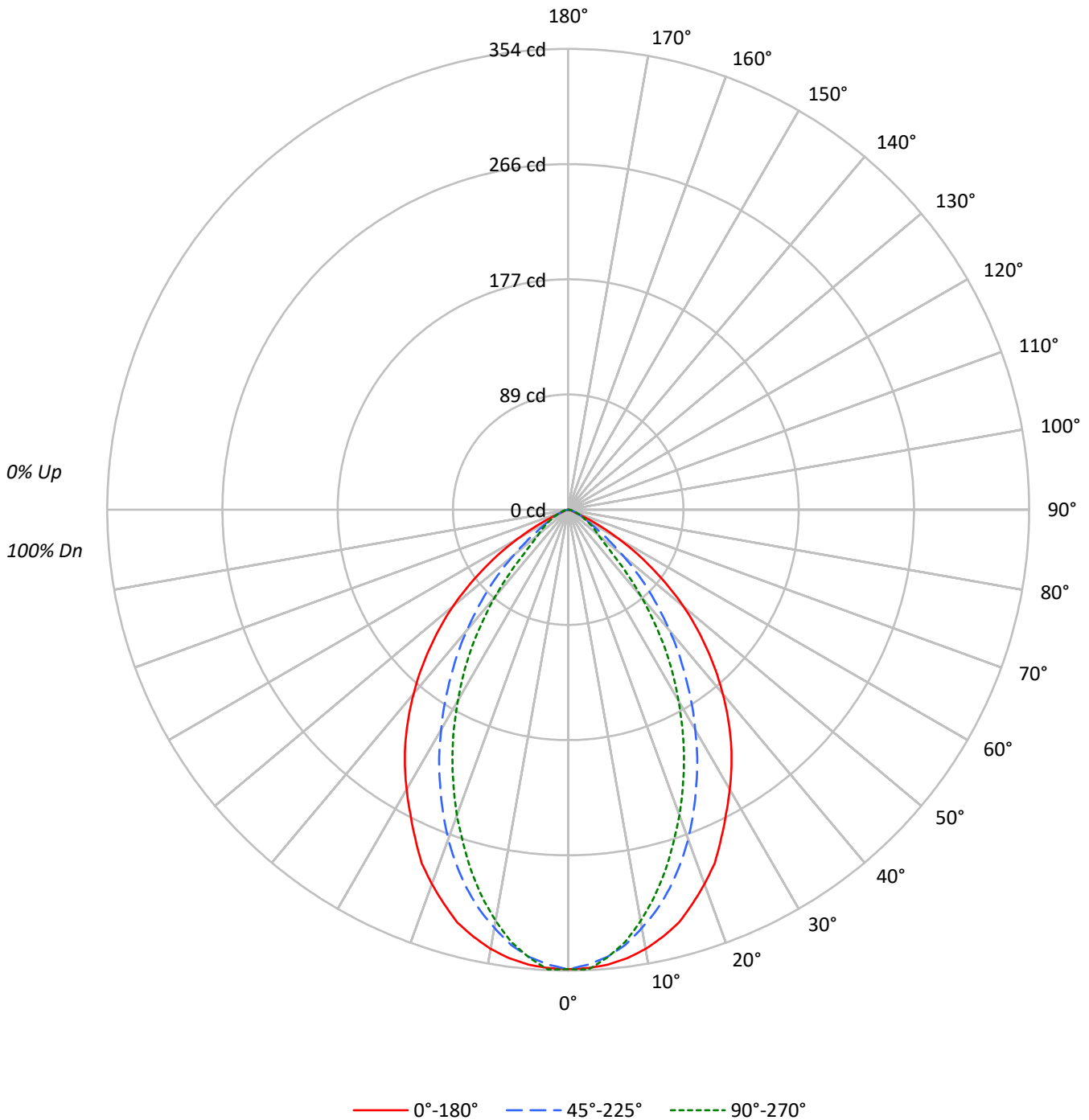
Lumens per Lamp: N/A
Luminaire Lumens: 455.6 lumens
Efficiency: N/A
Efficacy: 23.2 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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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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	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4145	4145	4145
5°	4135	4064	4070
10°	4085	3889	3824
15°	3992	3659	3494
20°	3824	3366	3120
25°	3603	3016	2726
30°	3364	2645	2297
35°	3125	2256	1848
40°	2831	1859	1340
45°	2496	1443	807
50°	2115	1008	550
55°	1611	604	459
60°	1052	385	359
65°	439	289	289
70°	151	206	227
75°	122	150	172
80°	74	108	149
85°	67	67	148

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2496 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.6	7.2
10°-20°	85.3	18.7
20°-30°	109.4	24.0
30°-40°	102.7	22.5
40°-50°	71.6	15.7
50°-60°	37.0	8.1
60°-70°	12.7	2.8
70°-80°	3.6	0.8
80°-90°	0.7	0.2
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°	227.3	49.9
0°-40°	330.0	72.4
0°-60°	438.6	96.3
0°-90°	455.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	455.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	353	353	353	353	353	
5°	351	350	345	346	345	33
15°	328	320	301	291	287	92
25°	278	261	233	217	210	128
35°	218	191	157	137	129	136
45°	150	123	87	60	49	116
55°	79	59	30	23	22	71
65°	16	14	10	10	10	19
75°	3	3	3	4	4	3
85°	0	0	0	0	1	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	353.0	353.0	353.0	353.0	353.0
2.5°	352.4	353.0	349.7	353.0	353.5
5°	350.8	350.2	344.8	346.4	345.3
7.5°	347.5	345.9	337.1	334.9	334.9
10°	342.6	339.3	326.2	322.4	320.7
12.5°	336.0	331.6	314.7	307.6	304.9
15°	328.4	320.2	301.0	291.2	287.4
17.5°	317.4	306.5	285.8	274.3	268.3
20°	306.0	292.3	269.4	255.7	249.7
22.5°	293.9	277.6	251.3	236.6	230.0
25°	278.1	260.6	232.8	216.9	210.4
27.5°	262.8	244.2	214.7	196.7	190.1
30°	248.1	226.2	195.1	177.6	169.4
32.5°	233.3	208.7	176.5	157.4	149.7
35°	218.0	191.2	157.4	137.1	128.9
37.5°	201.6	174.3	139.3	117.5	107.6
40°	184.7	156.3	121.3	96.7	87.4
42.5°	167.7	139.9	103.3	78.1	67.2
45°	150.3	122.9	86.9	60.1	48.6
47.5°	132.8	106.0	71.0	43.7	36.6
50°	115.8	90.2	55.2	32.2	30.1
52.5°	97.3	74.9	41.5	26.8	26.2
55°	78.7	59.0	29.5	22.9	22.4
57.5°	62.3	45.9	21.3	19.1	18.6
60°	44.8	32.8	16.4	15.8	15.3
62.5°	29.5	22.4	13.1	12.6	12.6
65°	15.8	13.7	10.4	9.8	10.4
67.5°	6.6	7.6	7.6	8.2	8.2
70°	4.4	4.9	6.0	6.6	6.6
72.5°	3.3	3.8	4.4	4.9	4.9
75°	2.7	2.7	3.3	3.8	3.8
77.5°	1.6	2.2	2.2	2.7	3.3
80°	1.1	1.6	1.6	2.2	2.2
82.5°	0.5	1.1	1.1	1.6	1.6
85°	0.5	0.5	0.5	0.5	1.1
87.5°	0.0	0.0	0.0	0.0	0.5
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	11.27	12.53	11.64	12.85	13.16	4.77	6.03	5.14	6.34	6.66
	3H	11.23	12.34	11.61	12.67	13.03	5.55	6.66	5.93	6.99	7.36
	4H	11.17	12.20	11.58	12.55	12.94	5.75	6.78	6.16	7.13	7.52
	6H	11.10	12.05	11.52	12.42	12.81	5.90	6.84	6.31	7.21	7.61
	8H	11.06	11.95	11.49	12.34	12.75	5.93	6.82	6.36	7.21	7.62
	12H	11.02	11.87	11.45	12.25	12.68	5.95	6.80	6.38	7.18	7.61
4H	2H	11.12	12.15	11.52	12.50	12.89	5.03	6.06	5.43	6.41	6.80
	3H	11.11	11.94	11.52	12.35	12.75	5.94	6.78	6.36	7.18	7.59
	4H	11.05	11.80	11.49	12.22	12.66	6.21	6.96	6.65	7.38	7.82
	6H	11.00	11.63	11.46	12.08	12.55	6.43	7.07	6.90	7.52	7.98
	8H	10.94	11.54	11.41	11.99	12.46	6.49	7.08	6.96	7.53	8.00
	12H	10.90	11.42	11.38	11.90	12.38	6.52	7.05	7.01	7.53	8.01
8H	4H	10.94	11.54	11.41	11.98	12.46	6.20	6.79	6.67	7.24	7.71
	6H	10.88	11.36	11.38	11.86	12.34	6.47	6.95	6.97	7.45	7.93
	8H	10.82	11.26	11.35	11.78	12.27	6.57	7.00	7.09	7.52	8.01
	12H	10.79	11.17	11.30	11.67	12.24	6.64	7.02	7.15	7.52	8.09
12H	4H	10.89	11.42	11.38	11.90	12.38	6.16	6.68	6.65	7.17	7.64
	6H	10.82	11.25	11.34	11.77	12.26	6.43	6.86	6.95	7.38	7.87
	8H	10.79	11.17	11.30	11.67	12.24	6.56	6.94	7.08	7.44	8.01