

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: P1059322

Luminaire Tested: S123RDRP-S560D950-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059322
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-S560D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

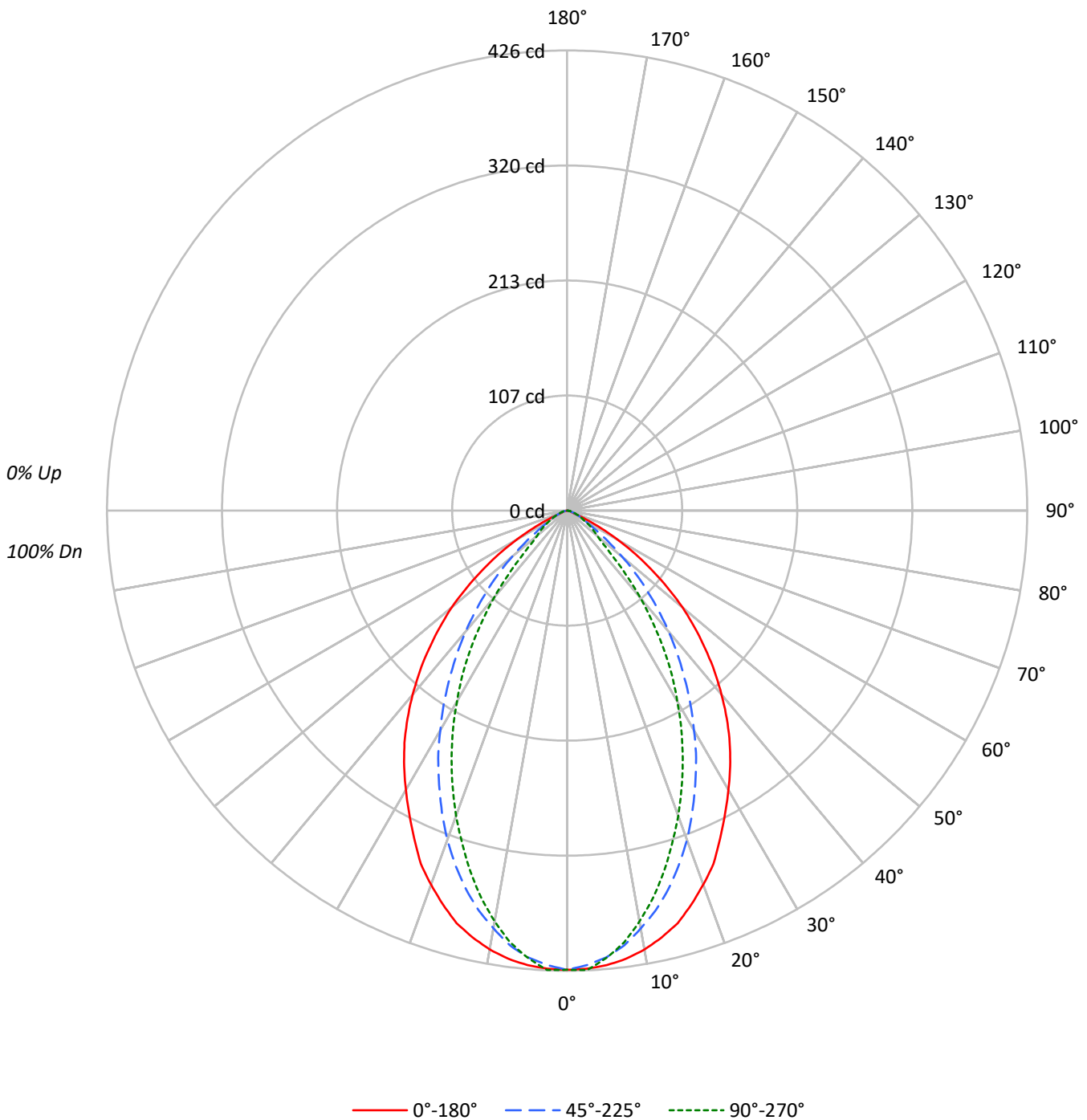
Lumens per Lamp: N/A
Luminaire Lumens: 548.7 lumens
Efficiency: N/A
Efficacy: 28.0 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	70	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	48	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°	4992	4992	4992
5°	4979	4894	4901
10°	4920	4684	4605
15°	4807	4407	4207
20°	4605	4054	3758
25°	4339	3632	3282
30°	4050	3185	2766
35°	3763	2716	2226
40°	3409	2240	1614
45°	3004	1737	973
50°	2548	1215	661
55°	1939	727	553
60°	1268	463	432
65°	531	347	347
70°	182	247	271
75°	150	177	209
80°	88	135	176
85°	94	94	175

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3004 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.3	7.2
10°-20°	102.7	18.7
20°-30°	131.7	24.0
30°-40°	123.6	22.5
40°-50°	86.2	15.7
50°-60°	44.6	8.1
60°-70°	15.2	2.8
70°-80°	4.3	0.8
80°-90°	0.9	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°	273.7	49.9
0°-40°	397.4	72.4
0°-60°	528.2	96.3
0°-90°	548.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	548.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	425	425	425	425	425	
5°	422	422	415	417	416	40
15°	395	386	362	351	346	111
25°	335	314	280	261	253	154
35°	262	230	190	165	155	163
45°	181	148	105	72	59	139
55°	95	71	36	28	27	85
65°	19	16	12	12	12	23
75°	3	3	4	5	5	3
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	425.1	425.1	425.1	425.1	425.1
2.5°	424.4	425.1	421.1	425.1	425.7
5°	422.4	421.8	415.2	417.2	415.8
7.5°	418.5	416.5	406.0	403.3	403.3
10°	412.6	408.6	392.8	388.2	386.2
12.5°	404.7	399.4	379.0	370.4	367.2
15°	395.4	385.6	362.5	350.7	346.1
17.5°	382.3	369.1	344.1	330.3	323.1
20°	368.5	352.0	324.4	307.9	300.7
22.5°	354.0	334.3	302.7	284.9	277.0
25°	334.9	313.9	280.3	261.2	253.3
27.5°	316.5	294.1	258.6	236.9	229.0
30°	298.7	272.4	234.9	213.8	204.0
32.5°	281.0	251.3	212.5	189.5	180.3
35°	262.5	230.3	189.5	165.2	155.3
37.5°	242.8	209.9	167.8	141.5	129.6
40°	222.4	188.2	146.1	116.5	105.3
42.5°	202.0	168.4	124.4	94.1	80.9
45°	180.9	148.0	104.6	72.4	58.6
47.5°	159.9	127.6	85.5	52.6	44.1
50°	139.5	108.6	66.5	38.8	36.2
52.5°	117.1	90.1	50.0	32.2	31.6
55°	94.7	71.1	35.5	27.6	27.0
57.5°	75.0	55.3	25.7	23.0	22.4
60°	54.0	39.5	19.7	19.1	18.4
62.5°	35.5	27.0	15.8	15.1	15.1
65°	19.1	16.4	12.5	11.8	12.5
67.5°	7.9	9.2	9.2	9.9	9.9
70°	5.3	5.9	7.2	7.9	7.9
72.5°	3.9	4.6	5.3	5.9	5.9
75°	3.3	3.3	3.9	4.6	4.6
77.5°	2.0	2.6	2.6	3.3	3.9
80°	1.3	2.0	2.0	2.6	2.6
82.5°	0.7	1.3	1.3	2.0	2.0
85°	0.7	0.7	0.7	0.7	1.3
87.5°	0.0	0.0	0.0	0.0	0.7
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	11.92	13.18	12.29	13.49	13.81	5.42	6.68	5.78	6.99	7.31
	3H	11.87	12.98	12.25	13.31	13.68	6.20	7.31	6.58	7.64	8.00
	4H	11.82	12.85	12.22	13.20	13.59	6.40	7.43	6.80	7.78	8.17
	6H	11.75	12.69	12.17	13.07	13.46	6.54	7.48	6.95	7.85	8.25
	8H	11.71	12.60	12.14	12.99	13.40	6.58	7.47	7.01	7.86	8.26
	12H	11.67	12.52	12.10	12.90	13.33	6.59	7.44	7.03	7.83	8.26
4H	2H	11.77	12.80	12.17	13.15	13.53	5.68	6.71	6.08	7.06	7.44
	3H	11.75	12.59	12.17	12.99	13.40	6.59	7.42	7.00	7.83	8.23
	4H	11.70	12.44	12.14	12.86	13.31	6.86	7.60	7.29	8.02	8.47
	6H	11.64	12.28	12.11	12.73	13.20	7.07	7.71	7.54	8.16	8.62
	8H	11.59	12.19	12.06	12.63	13.11	7.13	7.73	7.60	8.18	8.65
	12H	11.55	12.07	12.03	12.55	13.03	7.17	7.70	7.66	8.18	8.66
8H	4H	11.59	12.18	12.06	12.63	13.10	6.84	7.44	7.31	7.88	8.36
	6H	11.52	12.01	12.03	12.51	12.99	7.11	7.59	7.61	8.09	8.57
	8H	11.47	11.91	12.00	12.43	12.92	7.22	7.65	7.74	8.17	8.66
	12H	11.44	11.82	11.95	12.32	12.89	7.29	7.68	7.81	8.17	8.75
12H	4H	11.54	12.06	12.03	12.55	13.02	6.80	7.33	7.29	7.81	8.29
	6H	11.47	11.90	11.99	12.42	12.91	7.07	7.50	7.59	8.02	8.51
	8H	11.44	11.82	11.95	12.32	12.89	7.21	7.59	7.73	8.09	8.66