

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: P1059323

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059323
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: S123RDRP-S560D950-X4F0-XX-UDD-SVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

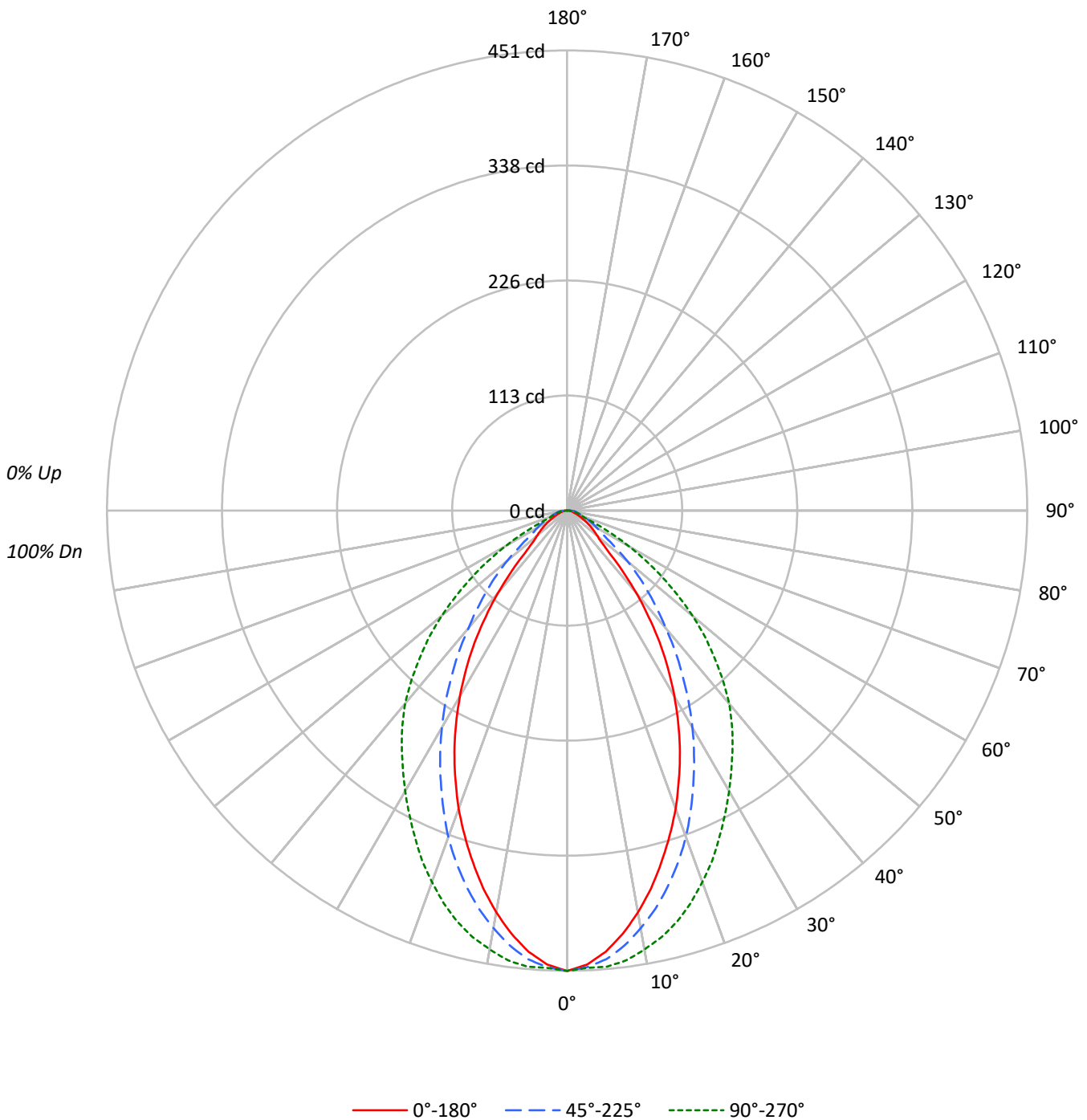
Lumens per Lamp: N/A
Luminaire Lumens: 604.3 lumens
Efficiency: N/A
Efficacy: 30.8 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	5298	5298	5298
5°	5117	5202	5288
10°	4767	4955	5207
15°	4340	4637	5068
20°	3885	4255	4840
25°	3388	3798	4574
30°	2849	3331	4305
35°	2266	2823	4051
40°	1616	2302	3786
45°	963	1848	3391
50°	711	1408	2936
55°	594	958	2334
60°	479	789	1639
65°	383	678	878
70°	316	587	542
75°	299	567	508
80°	311	622	487
85°	445	889	620

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3391 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.4	6.9
10°-20°	107.7	17.8
20°-30°	137.3	22.7
30°-40°	129.2	21.4
40°-50°	92.8	15.4
50°-60°	53.2	8.8
60°-70°	24.3	4.0
70°-80°	12.2	2.0
80°-90°	6.0	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°	286.5	47.4
0°-40°	415.7	68.8
0°-60°	561.7	93.0
0°-90°	604.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	604.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	451	451	451	451	451	
5°	434	443	441	445	449	40
15°	357	370	381	402	417	100
25°	262	273	293	325	353	119
35°	158	169	197	242	283	98
45°	58	70	111	164	204	49
55°	29	30	47	86	114	26
65°	14	19	24	27	32	14
75°	7	13	12	11	11	7
85°	3	7	7	6	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	451.2	451.2	451.2	451.2	451.2
2.5°	445.3	451.9	447.9	447.9	448.6
5°	434.1	442.6	441.3	444.6	448.6
7.5°	418.3	427.5	430.1	438.0	444.6
10°	399.8	410.4	415.6	428.1	436.7
12.5°	379.4	391.3	399.8	415.6	428.1
15°	357.0	369.5	381.4	401.8	416.9
17.5°	333.9	346.5	361.6	385.3	403.1
20°	310.9	323.4	340.5	365.6	387.3
22.5°	285.9	298.4	316.8	345.1	371.5
25°	261.5	273.4	293.1	324.7	353.0
27.5°	235.8	247.7	269.4	303.6	335.3
30°	210.1	222.0	245.7	282.6	317.5
32.5°	184.4	195.6	221.3	262.2	299.7
35°	158.1	169.3	196.9	241.7	282.6
37.5°	131.1	142.3	174.5	223.3	265.4
40°	105.4	117.9	150.2	204.8	247.0
42.5°	80.4	93.5	130.4	185.1	225.9
45°	58.0	70.5	111.3	164.0	204.2
47.5°	44.1	50.7	94.2	142.9	183.1
50°	38.9	39.5	77.1	123.8	160.7
52.5°	33.6	34.3	59.9	105.4	137.0
55°	29.0	29.6	46.8	86.3	114.0
57.5°	24.4	25.7	38.2	68.5	91.6
60°	20.4	23.1	33.6	52.0	69.8
62.5°	16.5	21.1	29.0	38.2	50.1
65°	13.8	19.1	24.4	27.0	31.6
67.5°	11.2	17.8	20.4	19.1	19.1
70°	9.2	15.8	17.1	15.8	15.8
72.5°	7.9	15.1	14.5	13.2	13.2
75°	6.6	13.2	12.5	11.2	11.2
77.5°	5.9	11.2	10.5	9.9	9.2
80°	4.6	9.2	9.2	8.6	7.2
82.5°	4.0	7.9	7.9	7.2	5.9
85°	3.3	6.6	6.6	5.9	4.6
87.5°	2.6	5.9	5.9	5.3	3.3
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	5.78	7.10	6.15	7.41	7.73	13.00	14.32	13.37	14.63	14.95
	3H	7.18	8.35	7.56	8.68	9.04	13.24	14.41	13.62	14.74	15.10
	4H	7.74	8.83	8.14	9.18	9.57	13.34	14.43	13.75	14.78	15.17
	6H	8.20	9.20	8.61	9.57	9.96	13.45	14.45	13.87	14.82	15.22
	8H	8.39	9.34	8.82	9.73	10.13	13.50	14.45	13.93	14.84	15.24
	12H	8.58	9.49	9.01	9.87	10.30	13.55	14.46	13.98	14.84	15.27
4H	2H	6.86	7.95	7.26	8.30	8.68	12.96	14.05	13.37	14.40	14.79
	3H	8.54	9.44	8.96	9.84	10.24	13.33	14.22	13.74	14.63	15.03
	4H	9.38	10.18	9.81	10.60	11.04	13.51	14.31	13.95	14.73	15.18
	6H	10.03	10.72	10.50	11.17	11.64	13.74	14.43	14.20	14.87	15.34
	8H	10.29	10.94	10.76	11.38	11.85	13.84	14.48	14.30	14.93	15.40
	12H	10.55	11.12	11.03	11.60	12.08	13.95	14.52	14.44	15.01	15.48
8H	4H	9.81	10.46	10.28	10.90	11.37	13.56	14.20	14.03	14.65	15.12
	6H	10.76	11.29	11.26	11.79	12.27	13.89	14.42	14.39	14.92	15.40
	8H	11.23	11.70	11.75	12.22	12.71	14.08	14.56	14.60	15.07	15.56
	12H	11.71	12.13	12.22	12.62	13.19	14.31	14.73	14.82	15.23	15.80
12H	4H	9.87	10.44	10.36	10.93	11.40	13.55	14.12	14.04	14.61	15.08
	6H	10.91	11.38	11.43	11.90	12.39	13.92	14.40	14.44	14.91	15.40
	8H	11.50	11.92	12.02	12.42	12.99	14.18	14.60	14.69	15.09	15.66