

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: P1059251

Luminaire Tested: S123RDRP-S560D830-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059251
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-S560D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

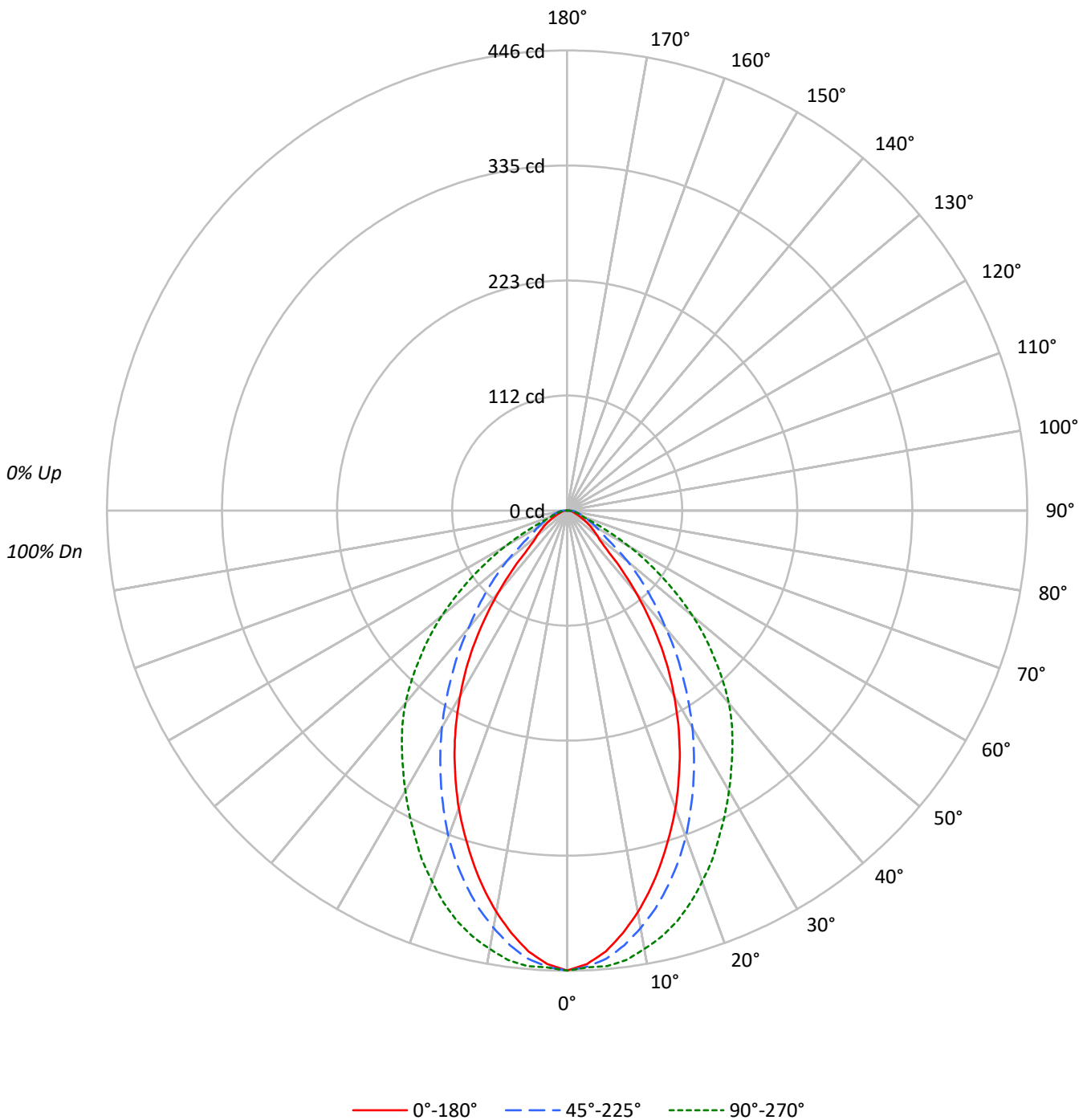
Lumens per Lamp: N/A
Luminaire Lumens: 597.0 lumens
Efficiency: N/A
Efficacy: 30.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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													100															
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89													89															
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79													79															
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71													71															
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64													64															
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58													58															
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52													52															
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48													48															
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44													44															
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40													40															
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37													37															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5235	5235	5235
5°	5056	5139	5224
10°	4710	4896	5145
15°	4288	4581	5007
20°	3839	4204	4781
25°	3348	3752	4519
30°	2815	3291	4253
35°	2239	2790	4002
40°	1596	2275	3740
45°	952	1827	3349
50°	701	1390	2901
55°	586	946	2305
60°	474	780	1620
65°	381	670	867
70°	312	580	536
75°	295	563	504
80°	311	615	487
85°	445	876	620

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3349 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.9	6.9
10°-20°	106.4	17.8
20°-30°	135.7	22.7
30°-40°	127.7	21.4
40°-50°	91.7	15.4
50°-60°	52.6	8.8
60°-70°	24.1	4.0
70°-80°	12.1	2.0
80°-90°	5.9	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°	283.0	47.4
0°-40°	410.7	68.8
0°-60°	555.0	93.0
0°-90°	597.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	597.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	446	446	446	446	446	
5°	429	437	436	439	443	40
15°	353	365	377	397	412	99
25°	258	270	290	321	349	118
35°	156	167	195	239	279	97
45°	57	70	110	162	202	48
55°	29	29	46	85	113	26
65°	14	19	24	27	31	14
75°	6	13	12	11	11	7
85°	3	6	6	6	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	445.8	445.8	445.8	445.8	445.8
2.5°	439.9	446.4	442.5	442.5	443.2
5°	428.9	437.3	436.0	439.3	443.2
7.5°	413.2	422.3	424.9	432.8	439.3
10°	395.0	405.4	410.6	423.0	431.5
12.5°	374.8	386.6	395.0	410.6	423.0
15°	352.7	365.1	376.8	397.0	411.9
17.5°	329.9	342.3	357.3	380.7	398.3
20°	307.2	319.5	336.4	361.2	382.6
22.5°	282.4	294.8	313.0	341.0	367.0
25°	258.4	270.1	289.6	320.8	348.8
27.5°	233.0	244.7	266.2	300.0	331.2
30°	207.6	219.3	242.7	279.2	313.7
32.5°	182.2	193.3	218.7	259.0	296.1
35°	156.2	167.2	194.6	238.8	279.2
37.5°	129.5	140.6	172.5	220.6	262.3
40°	104.1	116.5	148.4	202.4	244.0
42.5°	79.4	92.4	128.9	182.9	223.2
45°	57.3	69.6	110.0	162.0	201.7
47.5°	43.6	50.1	93.1	141.2	180.9
50°	38.4	39.0	76.1	122.3	158.8
52.5°	33.2	33.8	59.2	104.1	135.4
55°	28.6	29.3	46.2	85.3	112.6
57.5°	24.1	25.4	37.7	67.7	90.5
60°	20.2	22.8	33.2	51.4	69.0
62.5°	16.3	20.8	28.6	37.7	49.5
65°	13.7	18.9	24.1	26.7	31.2
67.5°	11.1	17.6	20.2	18.9	18.9
70°	9.1	15.6	16.9	15.6	15.6
72.5°	7.8	15.0	14.3	13.0	13.0
75°	6.5	13.0	12.4	11.1	11.1
77.5°	5.9	11.1	10.4	9.8	9.1
80°	4.6	9.1	9.1	8.5	7.2
82.5°	3.9	7.8	7.8	7.2	5.9
85°	3.3	6.5	6.5	5.9	4.6
87.5°	2.6	5.9	5.9	5.2	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	5.74	7.06	6.11	7.37	7.69	12.96	14.28	13.33	14.59	14.91
	3H	7.14	8.31	7.52	8.64	9.01	13.20	14.37	13.58	14.70	15.06
	4H	7.70	8.79	8.10	9.14	9.52	13.30	14.39	13.71	14.74	15.13
	6H	8.17	9.17	8.58	9.54	9.93	13.41	14.41	13.83	14.78	15.18
	8H	8.35	9.30	8.78	9.69	10.10	13.46	14.41	13.89	14.80	15.21
	12H	8.54	9.45	8.98	9.84	10.27	13.51	14.42	13.95	14.80	15.23
4H	2H	6.81	7.90	7.22	8.25	8.64	12.92	14.01	13.32	14.36	14.75
	3H	8.50	9.40	8.92	9.80	10.20	13.29	14.18	13.70	14.59	14.99
	4H	9.33	10.13	9.77	10.55	11.00	13.47	14.27	13.91	14.69	15.14
	6H	10.00	10.69	10.46	11.13	11.60	13.70	14.39	14.16	14.84	15.30
	8H	10.25	10.90	10.72	11.34	11.82	13.80	14.45	14.27	14.89	15.36
	12H	10.51	11.08	11.00	11.56	12.04	13.92	14.49	14.41	14.97	15.45
8H	4H	9.77	10.42	10.24	10.86	11.33	13.52	14.17	13.99	14.61	15.08
	6H	10.72	11.25	11.23	11.75	12.23	13.85	14.38	14.36	14.88	15.36
	8H	11.19	11.66	11.71	12.18	12.67	14.05	14.52	14.57	15.04	15.53
	12H	11.67	12.09	12.18	12.59	13.16	14.28	14.71	14.80	15.20	15.77
12H	4H	9.83	10.40	10.32	10.88	11.36	13.51	14.08	14.00	14.57	15.04
	6H	10.87	11.35	11.39	11.86	12.36	13.88	14.36	14.40	14.87	15.36
	8H	11.46	11.89	11.98	12.38	12.95	14.14	14.57	14.66	15.06	15.63