

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: P1060424

Luminaire Tested: S124RDRP-S350D927-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060424
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S350D927-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

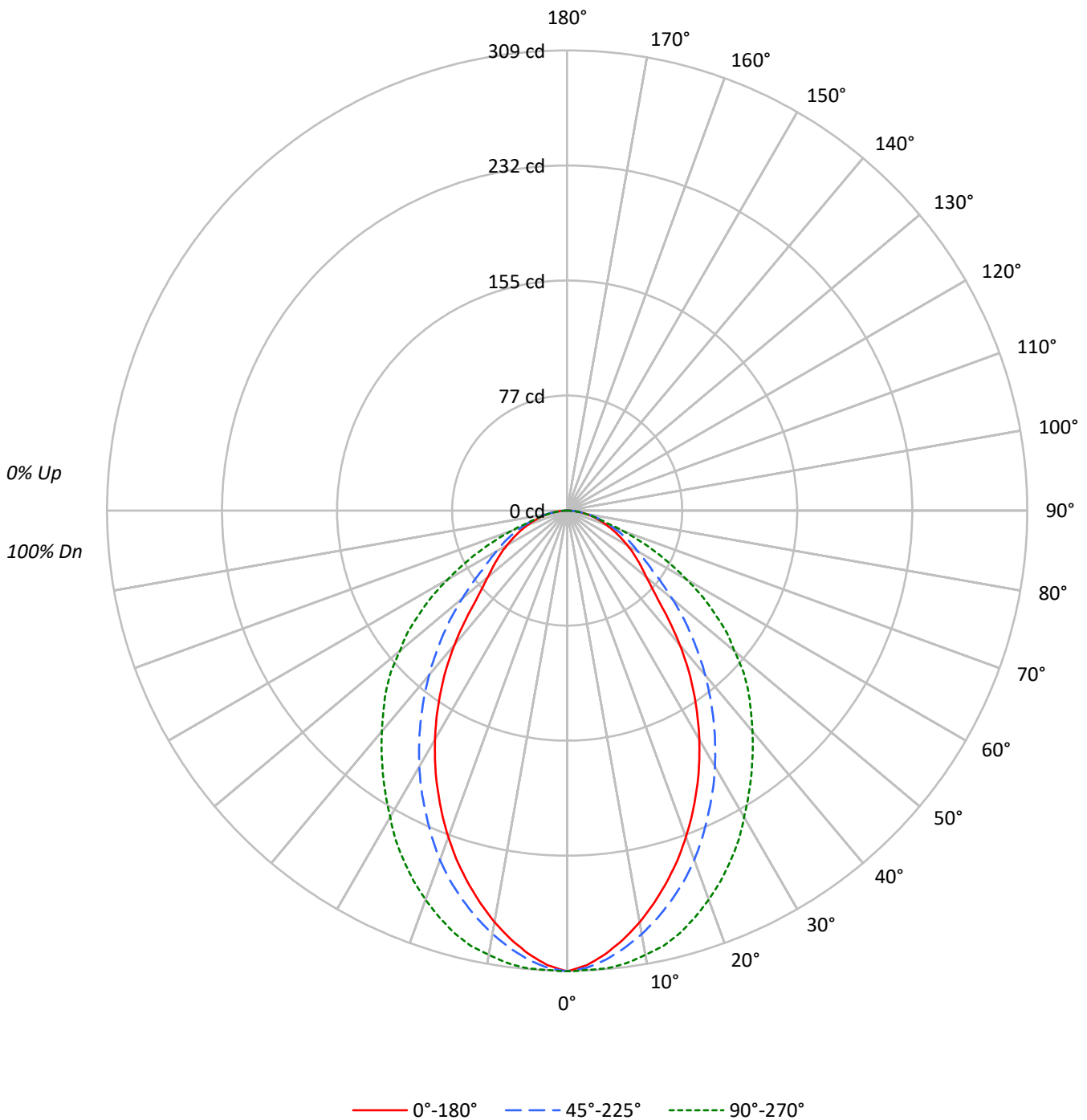
Lumens per Lamp: N/A
Luminaire Lumens: 563.3 lumens
Efficiency: N/A
Efficacy: 45.1 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89					87				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77					75				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67					65				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59					57				
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52					50				
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47					45				
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42					41				
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39					37				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35					34				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32					31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2664	2664	2664
5°	2582	2616	2667
10°	2454	2524	2649
15°	2302	2414	2617
20°	2137	2288	2548
25°	1957	2133	2466
30°	1764	1974	2364
35°	1555	1801	2267
40°	1323	1622	2176
45°	1074	1433	2097
50°	930	1234	1964
55°	862	1046	1821
60°	804	944	1598
65°	754	886	1328
70°	702	816	1005
75°	669	755	722
80°	625	689	610
85°	573	642	484

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2097 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.6	5.1
10°-20°	76.8	13.6
20°-30°	104.9	18.6
30°-40°	109.9	19.5
40°-50°	95.1	16.9
50°-60°	71.4	12.7
60°-70°	46.1	8.2
70°-80°	23.6	4.2
80°-90°	7.1	1.3
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°	210.2	37.3
0°-40°	320.1	56.8
0°-60°	486.6	86.4
0°-90°	563.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	563.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	309	309	309	309	309	
5°	299	303	303	305	308	28
15°	258	265	271	283	294	72
25°	206	214	224	242	260	95
35°	148	156	171	194	216	92
45°	88	97	118	147	172	70
55°	57	59	70	100	121	52
65°	37	38	44	52	65	37
75°	20	22	23	22	22	21
85°	6	7	6	6	5	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	309.4	309.4	309.4	309.4	309.4
2.5°	305.5	309.4	307.2	307.8	308.8
5°	298.7	303.3	302.6	304.9	308.5
7.5°	290.3	295.2	296.1	301.3	306.5
10°	280.6	286.1	288.7	296.5	302.9
12.5°	269.9	275.7	280.2	290.0	299.4
15°	258.2	264.7	270.8	283.2	293.5
17.5°	246.2	252.7	260.8	274.4	286.1
20°	233.2	240.3	249.7	264.0	278.0
22.5°	219.9	227.4	237.4	253.0	269.2
25°	206.0	213.7	224.5	242.0	259.5
27.5°	192.0	199.8	211.8	230.3	249.4
30°	177.4	185.5	198.5	218.6	237.7
32.5°	162.8	171.6	184.9	206.3	226.7
35°	147.9	156.3	171.3	194.0	215.7
37.5°	133.0	141.7	157.6	182.0	204.7
40°	117.7	126.8	144.3	170.0	193.6
42.5°	102.5	112.2	130.7	157.6	182.6
45°	88.2	97.3	117.7	146.6	172.2
47.5°	77.5	83.7	104.8	135.9	160.6
50°	69.4	72.7	92.1	124.2	146.6
52.5°	63.2	65.5	80.4	111.6	135.3
55°	57.4	59.4	69.7	99.6	121.3
57.5°	52.2	53.2	61.6	87.9	108.0
60°	46.7	47.7	54.8	75.2	92.8
62.5°	41.8	42.5	49.3	63.2	78.8
65°	37.0	37.6	43.5	52.5	65.2
67.5°	32.4	33.4	37.9	42.8	51.9
70°	27.9	29.8	32.4	34.7	39.9
72.5°	24.0	25.9	27.2	27.9	28.2
75°	20.1	22.4	22.7	22.4	21.7
77.5°	16.2	18.2	18.2	17.5	16.9
80°	12.6	14.3	13.9	13.3	12.3
82.5°	9.4	10.4	10.1	9.4	8.4
85°	5.8	6.8	6.5	6.2	4.9
87.5°	2.9	3.9	3.6	3.2	1.9
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	9.84	11.32	10.20	11.63	11.95	13.61	15.09	13.98	15.41	15.72
	3H	11.49	12.82	11.87	13.15	13.51	14.72	16.05	15.10	16.38	16.74
	4H	12.16	13.41	12.56	13.76	14.14	15.01	16.26	15.41	16.61	16.99
	6H	12.67	13.82	13.09	14.19	14.58	15.21	16.36	15.62	16.73	17.12
	8H	12.85	13.95	13.28	14.34	14.74	15.26	16.36	15.69	16.75	17.15
	12H	12.98	14.03	13.41	14.41	14.84	15.29	16.34	15.72	16.72	17.15
4H	2H	10.62	11.87	11.02	12.22	12.60	13.77	15.02	14.17	15.36	15.74
	3H	12.48	13.51	12.89	13.91	14.31	15.08	16.11	15.49	16.51	16.92
	4H	13.29	14.22	13.72	14.64	15.07	15.49	16.42	15.92	16.83	17.27
	6H	13.94	14.74	14.39	15.19	15.65	15.81	16.61	16.26	17.06	17.52
	8H	14.17	14.92	14.63	15.36	15.83	15.90	16.65	16.36	17.10	17.56
	12H	14.33	15.01	14.82	15.49	15.96	15.96	16.63	16.44	17.11	17.58
8H	4H	13.64	14.39	14.10	14.84	15.31	15.62	16.38	16.09	16.82	17.29
	6H	14.43	15.06	14.93	15.55	16.03	16.03	16.66	16.53	17.15	17.63
	8H	14.75	15.31	15.27	15.82	16.31	16.18	16.74	16.70	17.25	17.74
	12H	15.02	15.51	15.53	16.00	16.57	16.31	16.80	16.82	17.30	17.86
12H	4H	13.67	14.34	14.15	14.82	15.29	15.63	16.30	16.11	16.78	17.25
	6H	14.49	15.05	15.01	15.57	16.05	16.06	16.62	16.57	17.13	17.62
	8H	14.88	15.38	15.39	15.87	16.43	16.26	16.75	16.77	17.24	17.81