

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: P1060517

Luminaire Tested: S124RDRP-S575D935-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060517
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S575D935-X4F0-XX-UDD-BVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

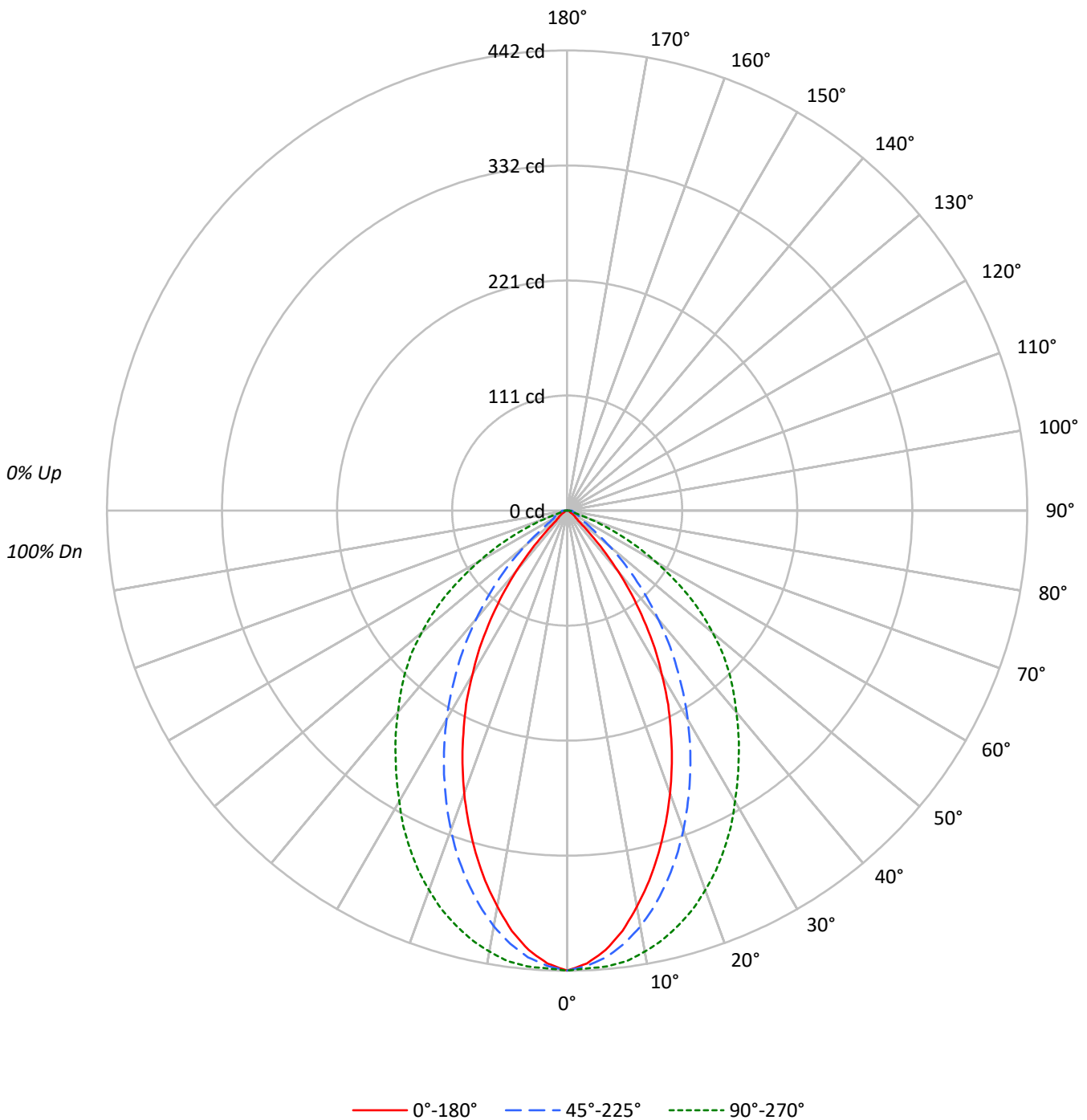
Lumens per Lamp: N/A
Luminaire Lumens: 554.5 lumens
Efficiency: N/A
Efficacy: 28.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3804	3804	3804
5°	3662	3723	3799
10°	3377	3546	3761
15°	3031	3292	3678
20°	2649	2992	3556
25°	2240	2658	3398
30°	1810	2304	3206
35°	1348	1926	3020
40°	855	1527	2842
45°	342	1119	2679
50°	149	714	2446
55°	114	369	2135
60°	81	251	1693
65°	59	251	1157
70°	58	222	531
75°	77	233	213
80°	114	263	233
85°	227	464	346

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2679 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.4	7.3
10°-20°	104.3	18.8
20°-30°	131.7	23.8
30°-40°	121.0	21.8
40°-50°	82.5	14.9
50°-60°	44.8	8.1
60°-70°	19.0	3.4
70°-80°	6.6	1.2
80°-90°	4.2	0.8
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°	276.5	49.9
0°-40°	397.5	71.7
0°-60°	524.8	94.6
0°-90°	554.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	554.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	442	442	442	442	442	
5°	424	430	431	434	440	39
15°	340	351	369	396	413	95
25°	236	251	280	323	358	108
35°	128	145	183	240	287	80
45°	28	45	92	163	220	26
55°	8	8	25	90	142	7
65°	3	4	12	28	57	3
75°	2	6	7	6	6	2
85°	2	5	5	5	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	441.8	441.8	441.8	441.8	441.8
2.5°	435.4	440.7	437.7	438.9	440.1
5°	423.7	430.1	430.7	434.2	439.5
7.5°	407.3	414.9	419.6	428.4	436.6
10°	386.2	395.6	405.5	419.6	430.1
12.5°	364.0	373.9	388.6	408.5	422.5
15°	340.0	351.1	369.3	395.6	412.6
17.5°	314.8	327.1	348.8	379.8	401.4
20°	289.1	302.5	326.5	361.7	388.0
22.5°	262.8	276.8	303.1	342.9	373.9
25°	235.8	251.0	279.7	323.0	357.6
27.5°	210.1	224.1	255.7	303.1	341.2
30°	182.0	197.8	231.7	282.6	322.4
32.5°	156.2	171.5	207.2	261.6	304.9
35°	128.2	145.1	183.2	240.5	287.3
37.5°	101.8	118.2	159.8	220.6	270.4
40°	76.1	93.0	135.8	200.7	252.8
42.5°	50.9	69.1	112.9	180.2	236.4
45°	28.1	45.1	91.9	162.7	220.0
47.5°	14.6	24.6	72.0	145.1	202.5
50°	11.1	13.5	53.3	125.8	182.6
52.5°	9.4	9.9	36.3	106.5	162.7
55°	7.6	8.2	24.6	89.5	142.2
57.5°	5.9	6.4	17.6	73.1	119.4
60°	4.7	5.3	14.6	56.2	98.3
62.5°	3.5	4.1	14.0	41.5	77.2
65°	2.9	3.5	12.3	28.1	56.8
67.5°	2.3	3.5	10.5	18.1	38.0
70°	2.3	4.7	8.8	11.7	21.1
72.5°	2.3	5.3	7.6	7.6	7.6
75°	2.3	6.4	7.0	6.4	6.4
77.5°	2.3	5.9	5.9	5.9	5.9
80°	2.3	5.3	5.3	5.3	4.7
82.5°	2.3	4.7	5.3	5.3	4.1
85°	2.3	4.7	4.7	4.7	3.5
87.5°	1.8	4.7	4.7	4.7	2.3
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	0.00	0.00	0.00	0.00	0.00	13.08	14.36	13.45	14.67	14.99
	3H	0.00	0.00	0.00	0.00	0.00	13.44	14.56	13.82	14.90	15.26
	4H	0.00	0.00	0.00	0.00	0.00	13.40	14.45	13.81	14.80	15.19
	6H	0.00	0.27	0.00	0.64	1.04	13.38	14.34	13.79	14.71	15.11
	8H	0.00	0.90	0.42	1.29	1.69	13.37	14.28	13.80	14.67	15.08
	12H	0.78	1.65	1.21	2.03	2.46	13.37	14.24	13.80	14.62	15.05
4H	2H	0.00	0.00	0.00	0.18	0.56	12.88	13.93	13.29	14.28	14.67
	3H	0.20	1.06	0.62	1.46	1.87	13.28	14.13	13.69	14.54	14.94
	4H	1.64	2.40	2.07	2.82	3.27	13.26	14.02	13.69	14.44	14.89
	6H	2.89	3.55	3.35	4.00	4.46	13.28	13.94	13.74	14.38	14.85
	8H	3.46	4.07	3.93	4.52	4.99	13.29	13.90	13.76	14.35	14.82
	12H	4.12	4.66	4.61	5.15	5.62	13.33	13.87	13.81	14.35	14.83
8H	4H	2.72	3.34	3.19	3.79	4.26	13.16	13.77	13.63	14.22	14.69
	6H	4.35	4.85	4.85	5.35	5.83	13.21	13.71	13.71	14.21	14.69
	8H	5.18	5.63	5.70	6.15	6.64	13.27	13.72	13.79	14.24	14.73
	12H	6.14	6.54	6.65	7.03	7.61	13.39	13.79	13.90	14.28	14.85
12H	4H	2.92	3.46	3.40	3.94	4.42	13.12	13.66	13.61	14.15	14.62
	6H	4.70	5.15	5.22	5.66	6.16	13.18	13.63	13.70	14.15	14.64
	8H	5.72	6.12	6.23	6.61	7.18	13.29	13.69	13.80	14.18	14.75