

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: P1060523

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060523
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-S575D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

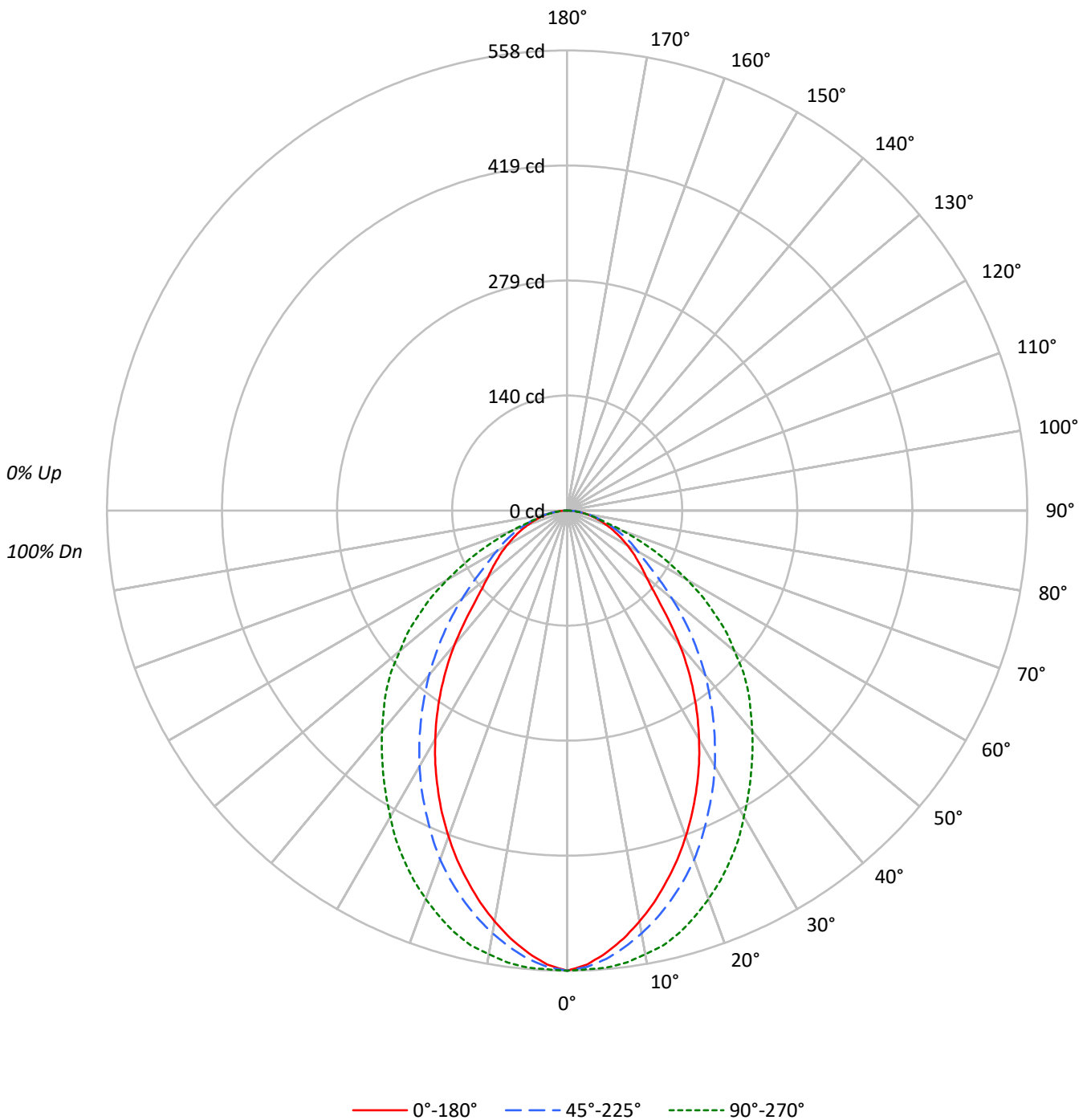
Lumens per Lamp: N/A
Luminaire Lumens: 1015.8 lumens
Efficiency: N/A
Efficacy: 51.8 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	4805	4805	4805
5°	4657	4717	4808
10°	4424	4551	4777
15°	4151	4354	4719
20°	3853	4127	4593
25°	3529	3845	4446
30°	3181	3559	4263
35°	2804	3246	4088
40°	2386	2926	3925
45°	1938	2585	3782
50°	1677	2225	3542
55°	1554	1887	3283
60°	1450	1702	2881
65°	1359	1597	2396
70°	1266	1473	1810
75°	1208	1361	1304
80°	1131	1245	1101
85°	1037	1156	869

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3782 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.5	5.1
10°-20°	138.5	13.6
20°-30°	189.1	18.6
30°-40°	198.1	19.5
40°-50°	171.5	16.9
50°-60°	128.8	12.7
60°-70°	83.1	8.2
70°-80°	42.6	4.2
80°-90°	12.7	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°	379.1	37.3
0°-40°	577.1	56.8
0°-60°	877.4	86.4
0°-90°	1015.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1015.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	558	558	558	558	558	
5°	539	547	546	550	556	50
15°	466	477	488	511	529	131
25°	371	385	405	436	468	170
35°	267	282	309	350	389	166
45°	159	176	212	264	311	125
55°	104	107	126	180	219	93
65°	67	68	78	95	118	66
75°	36	40	41	40	39	38
85°	10	12	12	11	9	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	558.0	558.0	558.0	558.0	558.0
2.5°	551.0	558.0	553.9	555.1	556.8
5°	538.7	546.9	545.7	549.8	556.2
7.5°	523.5	532.2	534.0	543.4	552.7
10°	505.9	515.9	520.5	534.6	546.3
12.5°	486.6	497.1	505.3	522.9	539.8
15°	465.6	477.3	488.4	510.6	529.3
17.5°	443.9	455.6	470.2	494.8	515.9
20°	420.5	433.4	450.4	476.1	501.2
22.5°	396.5	410.0	428.1	456.2	485.5
25°	371.4	385.4	404.7	436.3	467.9
27.5°	346.2	360.3	381.9	415.3	449.8
30°	319.9	334.6	357.9	394.2	428.7
32.5°	293.6	309.4	333.4	372.0	408.8
35°	266.7	281.9	308.8	349.8	388.9
37.5°	239.8	255.6	284.3	328.1	369.1
40°	212.3	228.7	260.3	306.5	349.2
42.5°	184.8	202.4	235.7	284.3	329.3
45°	159.1	175.5	212.3	264.4	310.6
47.5°	139.8	150.9	188.9	245.1	289.5
50°	125.2	131.0	166.1	224.0	264.4
52.5°	114.1	118.1	145.1	201.2	243.9
55°	103.5	107.0	125.7	179.6	218.7
57.5°	94.2	95.9	111.1	158.5	194.8
60°	84.2	86.0	98.8	135.7	167.3
62.5°	75.4	76.6	88.9	114.1	142.1
65°	66.7	67.8	78.4	94.8	117.6
67.5°	58.5	60.2	68.4	77.2	93.6
70°	50.3	53.8	58.5	62.6	71.9
72.5°	43.3	46.8	49.1	50.3	50.9
75°	36.3	40.4	40.9	40.4	39.2
77.5°	29.2	32.8	32.8	31.6	30.4
80°	22.8	25.7	25.1	24.0	22.2
82.5°	17.0	18.7	18.1	17.0	15.2
85°	10.5	12.3	11.7	11.1	8.8
87.5°	5.3	7.0	6.4	5.8	3.5
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	11.89	13.37	12.25	13.68	14.00	15.66	17.14	16.02	17.46	17.77
	3H	13.54	14.87	13.92	15.20	15.56	16.77	18.10	17.15	18.43	18.79
	4H	14.21	15.46	14.61	15.81	16.19	17.06	18.31	17.46	18.66	19.04
	6H	14.72	15.87	15.14	16.24	16.63	17.26	18.41	17.67	18.78	19.17
	8H	14.91	16.00	15.33	16.39	16.79	17.31	18.41	17.74	18.80	19.20
	12H	15.03	16.08	15.46	16.46	16.89	17.34	18.39	17.77	18.77	19.20
4H	2H	12.67	13.91	13.07	14.26	14.64	15.82	17.06	16.22	17.41	17.79
	3H	14.53	15.56	14.94	15.96	16.36	17.13	18.16	17.54	18.56	18.97
	4H	15.34	16.27	15.77	16.69	17.12	17.54	18.47	17.97	18.88	19.32
	6H	15.99	16.79	16.44	17.24	17.70	17.85	18.66	18.31	19.11	19.57
	8H	16.22	16.97	16.68	17.41	17.88	17.95	18.70	18.41	19.15	19.61
	12H	16.39	17.06	16.87	17.54	18.01	18.01	18.68	18.49	19.16	19.63
8H	4H	15.69	16.44	16.15	16.89	17.36	17.67	18.43	18.14	18.87	19.34
	6H	16.48	17.10	16.98	17.60	18.07	18.08	18.71	18.58	19.20	19.68
	8H	16.80	17.36	17.32	17.87	18.36	18.23	18.79	18.75	19.30	19.79
	12H	17.07	17.56	17.58	18.05	18.62	18.36	18.85	18.87	19.35	19.91
12H	4H	15.72	16.39	16.20	16.87	17.34	17.68	18.35	18.16	18.83	19.30
	6H	16.54	17.10	17.06	17.61	18.10	18.11	18.67	18.62	19.18	19.66
	8H	16.93	17.42	17.44	17.92	18.48	18.31	18.80	18.82	19.29	19.86