

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: P1060280

Luminaire Tested: S124RDRP-S1020D935-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060280
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-S1020D935-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

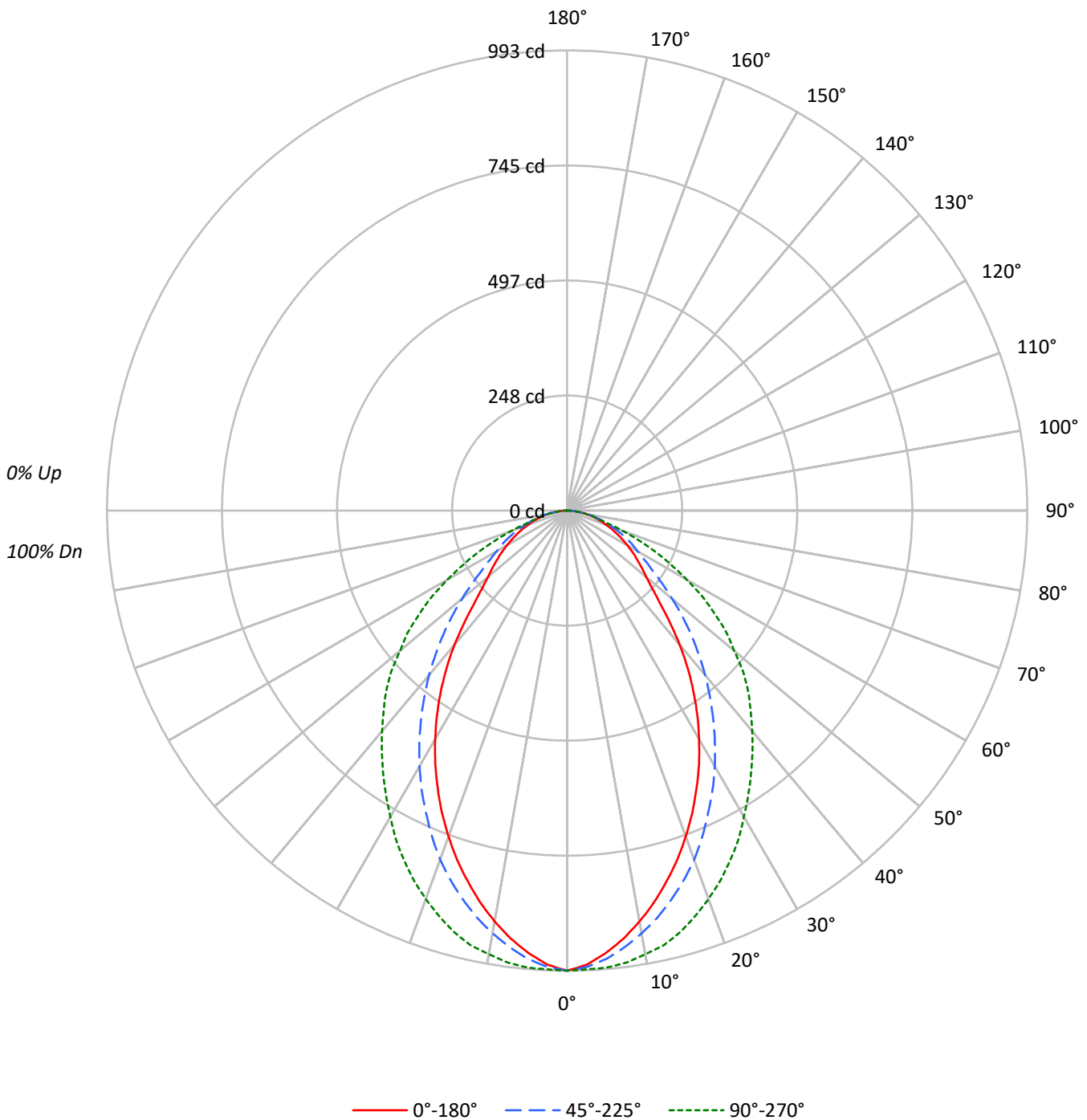
Lumens per Lamp: N/A
Luminaire Lumens: 1807.7 lumens
Efficiency: N/A
Efficacy: 51.6 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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°	8550	8550	8550
5°	8286	8394	8556
10°	7872	8100	8500
15°	7386	7748	8397
20°	6857	7344	8174
25°	6279	6843	7911
30°	5661	6334	7586
35°	4989	5776	7276
40°	4247	5207	6985
45°	3448	4601	6731
50°	2983	3960	6302
55°	2765	3360	5845
60°	2582	3029	5127
65°	2419	2842	4263
70°	2253	2621	3223
75°	2146	2425	2319
80°	2013	2222	1964
85°	1848	2055	1541

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6731 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.7	5.1
10°-20°	246.4	13.6
20°-30°	336.5	18.6
30°-40°	352.5	19.5
40°-50°	305.1	16.9
50°-60°	229.3	12.7
60°-70°	147.8	8.2
70°-80°	75.8	4.2
80°-90°	22.6	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°	674.5	37.3
0°-40°	1027.0	56.8
0°-60°	1561.4	86.4
0°-90°	1807.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1807.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	993	993	993	993	993	
5°	959	973	971	978	990	90
15°	828	849	869	909	942	232
25°	661	686	720	776	833	303
35°	475	502	550	622	692	296
45°	283	312	378	470	553	223
55°	184	190	224	320	389	166
65°	119	121	140	169	209	118
75°	64	72	73	72	70	68
85°	19	22	21	20	16	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	992.9	992.9	992.9	992.9	992.9
2.5°	980.4	992.9	985.6	987.7	990.8
5°	958.6	973.2	971.1	978.4	989.8
7.5°	931.5	947.1	950.3	966.9	983.6
10°	900.3	918.0	926.3	951.3	972.1
12.5°	865.9	884.7	899.3	930.5	960.7
15°	828.5	849.3	869.1	908.6	941.9
17.5°	790.0	810.8	836.8	880.5	918.0
20°	748.3	771.2	801.4	847.2	892.0
22.5°	705.7	729.6	761.9	811.8	863.9
25°	660.9	685.9	720.2	776.4	832.6
27.5°	616.2	641.1	679.6	739.0	800.4
30°	569.3	595.3	637.0	701.5	762.9
32.5°	522.5	550.6	593.3	662.0	727.5
35°	474.6	501.7	549.5	622.4	692.1
37.5°	426.7	454.8	505.8	583.9	656.7
40°	377.8	407.0	463.2	545.4	621.4
42.5°	328.9	360.1	419.4	505.8	586.0
45°	283.1	312.2	377.8	470.4	552.7
47.5°	248.8	268.5	336.2	436.1	515.2
50°	222.7	233.1	295.6	398.6	470.4
52.5°	203.0	210.2	258.1	358.0	434.0
55°	184.2	190.5	223.8	319.5	389.3
57.5°	167.6	170.7	197.8	282.1	346.6
60°	149.9	153.0	175.9	241.5	297.7
62.5°	134.3	136.3	158.2	203.0	252.9
65°	118.7	120.7	139.5	168.6	209.2
67.5°	104.1	107.2	121.8	137.4	166.5
70°	89.5	95.8	104.1	111.4	128.0
72.5°	77.0	83.3	87.4	89.5	90.5
75°	64.5	71.8	72.9	71.8	69.7
77.5°	52.0	58.3	58.3	56.2	54.1
80°	40.6	45.8	44.8	42.7	39.6
82.5°	30.2	33.3	32.3	30.2	27.1
85°	18.7	21.9	20.8	19.8	15.6
87.5°	9.4	12.5	11.4	10.4	6.2
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	13.89	15.37	14.25	15.69	16.00	17.66	19.15	18.03	19.46	19.77
	3H	15.54	16.87	15.92	17.20	17.56	18.78	20.11	19.15	20.43	20.80
	4H	16.21	17.46	16.61	17.81	18.19	19.07	20.31	19.47	20.66	21.04
	6H	16.73	17.88	17.14	18.24	18.64	19.26	20.41	19.68	20.78	21.17
	8H	16.91	18.00	17.34	18.39	18.79	19.32	20.41	19.74	20.80	21.20
	12H	17.03	18.08	17.46	18.46	18.89	19.34	20.39	19.77	20.77	21.20
4H	2H	14.67	15.92	15.07	16.27	16.65	17.82	19.07	18.22	19.42	19.80
	3H	16.53	17.57	16.94	17.97	18.37	19.13	20.17	19.54	20.57	20.97
	4H	17.34	18.27	17.77	18.69	19.13	19.54	20.47	19.97	20.89	21.33
	6H	17.99	18.80	18.45	19.24	19.70	19.86	20.66	20.31	21.11	21.57
	8H	18.22	18.97	18.68	19.42	19.88	19.95	20.70	20.41	21.15	21.62
	12H	18.39	19.06	18.87	19.54	20.01	20.01	20.68	20.49	21.16	21.63
8H	4H	17.69	18.45	18.16	18.89	19.36	19.67	20.43	20.14	20.87	21.34
	6H	18.48	19.11	18.98	19.60	20.08	20.09	20.71	20.58	21.20	21.68
	8H	18.81	19.36	19.32	19.87	20.36	20.24	20.80	20.75	21.31	21.80
	12H	19.07	19.56	19.58	20.06	20.62	20.36	20.86	20.87	21.35	21.91
12H	4H	17.72	18.39	18.20	18.87	19.34	19.68	20.35	20.16	20.83	21.30
	6H	18.55	19.11	19.06	19.62	20.11	20.11	20.67	20.62	21.18	21.67
	8H	18.93	19.43	19.44	19.92	20.49	20.31	20.80	20.82	21.30	21.86