

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: P1060278

Luminaire Tested: S124RDRP-S1020D935-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060278
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-74)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S1020D935-X4F0-XX-UDD-SVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

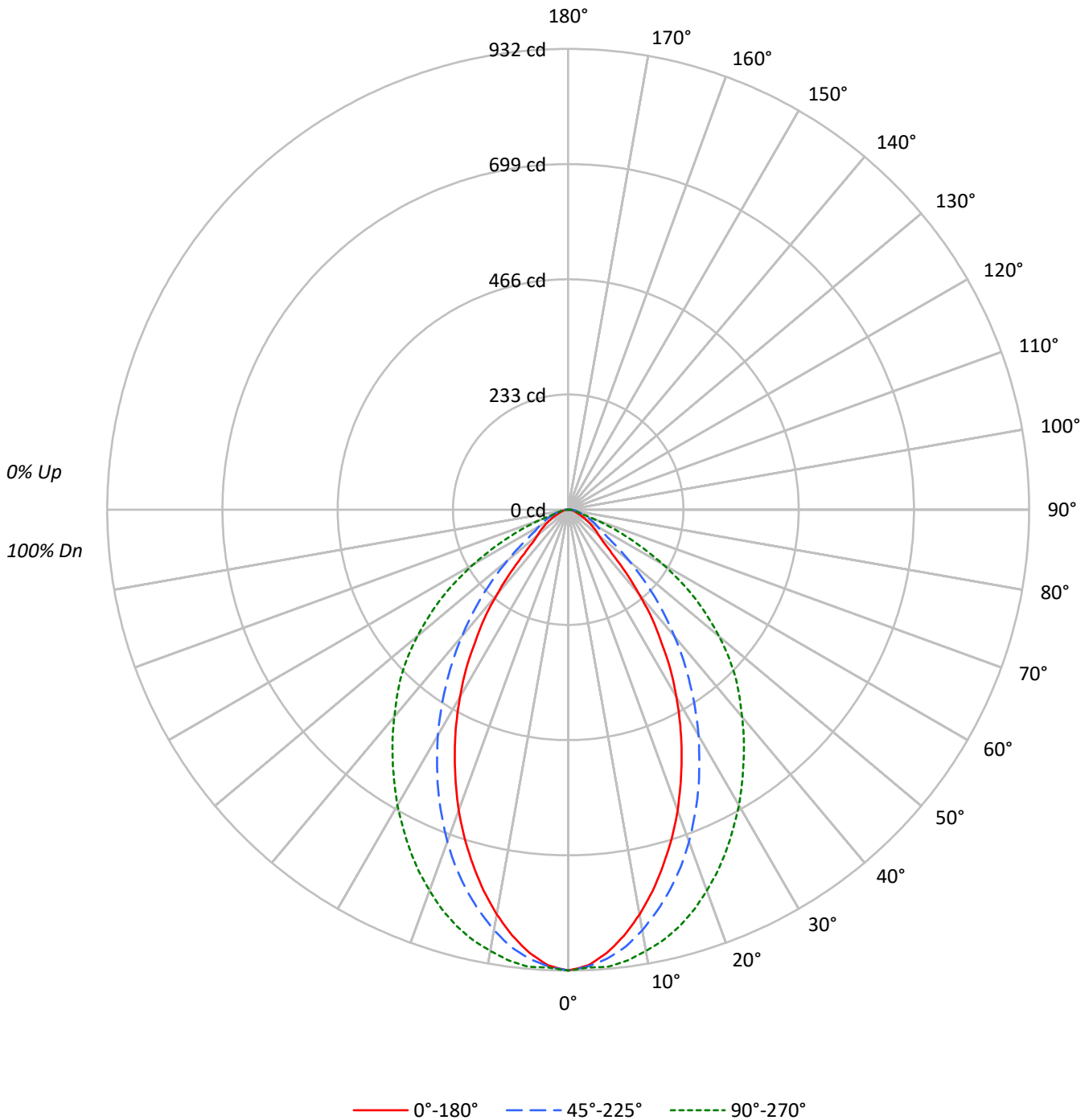
Lumens per Lamp: N/A
Luminaire Lumens: 1319.1 lumens
Efficiency: N/A
Efficacy: 37.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89					89			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70					70			
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63					63			
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57					57			
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51					51			
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47					47			
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43					43			
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39					39			
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8026	8026	8026
5°	7777	7876	8020
10°	7266	7549	7922
15°	6628	7093	7770
20°	5926	6547	7510
25°	5154	5916	7203
30°	4349	5239	6865
35°	3460	4510	6503
40°	2517	3758	6145
45°	1522	2968	5821
50°	1088	2149	5329
55°	922	1453	4705
60°	753	1183	3803
65°	595	1062	2736
70°	499	891	1443
75°	449	832	729
80°	466	828	724
85°	613	1235	820

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5821 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.8	6.5
10°-20°	224.9	17.0
20°-30°	291.6	22.1
30°-40°	280.7	21.3
40°-50°	208.8	15.8
50°-60°	128.4	9.7
60°-70°	63.1	4.8
70°-80°	24.6	1.9
80°-90°	11.2	0.9
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°	602.3	45.7
0°-40°	883.0	66.9
0°-60°	1220.2	92.5
0°-90°	1319.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1319.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	932	932	932	932	932	
5°	900	913	911	920	928	84
15°	744	768	796	844	872	208
25°	542	572	623	701	758	248
35°	329	360	429	536	619	206
45°	125	155	244	376	478	104
55°	61	64	97	221	313	55
65°	29	31	52	83	134	30
75°	14	24	25	23	22	15
85°	6	12	12	12	8	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	932.0	932.0	932.0	932.0	932.0
2.5°	922.6	933.0	924.7	925.8	926.8
5°	899.7	913.3	911.2	919.5	927.8
7.5°	868.5	884.1	891.4	908.0	919.5
10°	831.0	848.7	863.3	890.3	906.0
12.5°	789.3	810.2	831.0	867.4	891.4
15°	743.5	767.5	795.6	843.5	871.6
17.5°	696.7	720.6	757.1	812.2	847.7
20°	646.7	672.7	714.4	775.8	819.5
22.5°	594.6	622.7	668.5	738.3	790.4
25°	542.5	571.7	622.7	700.8	758.1
27.5°	490.5	518.6	573.8	661.3	723.7
30°	437.4	466.5	526.9	618.6	690.4
32.5°	386.3	413.4	478.0	577.9	654.0
35°	329.1	360.3	429.0	536.3	618.6
37.5°	280.1	308.2	382.2	494.6	583.2
40°	223.9	255.1	334.3	454.0	546.7
42.5°	171.8	203.1	288.5	413.4	512.3
45°	125.0	155.2	243.7	375.9	478.0
47.5°	94.8	112.5	199.9	339.5	439.4
50°	81.2	86.4	160.4	299.9	397.8
52.5°	71.9	73.9	125.0	260.3	356.1
55°	61.4	63.5	96.8	220.8	313.4
57.5°	52.1	53.1	78.1	183.3	267.6
60°	43.7	44.8	68.7	146.8	220.8
62.5°	36.4	37.5	61.4	113.5	176.0
65°	29.2	31.2	52.1	83.3	134.3
67.5°	24.0	28.1	43.7	58.3	93.7
70°	19.8	27.1	35.4	40.6	57.3
72.5°	16.7	25.0	30.2	29.2	28.1
75°	13.5	24.0	25.0	22.9	21.9
77.5°	11.5	20.8	20.8	18.7	17.7
80°	9.4	16.7	16.7	16.7	14.6
82.5°	8.3	13.5	14.6	14.6	11.5
85°	6.2	11.5	12.5	12.5	8.3
87.5°	4.2	10.4	11.5	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	7.02	8.36	7.39	8.67	8.99	16.19	17.53	16.55	17.84	18.16
	3H	8.13	9.32	8.51	9.65	10.02	16.70	17.89	17.08	18.22	18.58
	4H	8.65	9.76	9.05	10.11	10.49	16.72	17.83	17.12	18.18	18.56
	6H	9.09	10.11	9.50	10.48	10.87	16.73	17.75	17.14	18.12	18.51
	8H	9.28	10.24	9.71	10.63	11.04	16.73	17.70	17.16	18.09	18.49
	12H	9.46	10.38	9.89	10.76	11.19	16.73	17.66	17.17	18.04	18.47
4H	2H	8.17	9.28	8.57	9.63	10.01	16.08	17.19	16.48	17.54	17.92
	3H	9.51	10.42	9.92	10.82	11.22	16.67	17.58	17.08	17.98	18.39
	4H	10.24	11.06	10.68	11.48	11.92	16.73	17.54	17.16	17.96	18.40
	6H	10.85	11.56	11.32	12.00	12.47	16.80	17.51	17.27	17.95	18.42
	8H	11.10	11.75	11.56	12.20	12.67	16.83	17.49	17.30	17.94	18.41
	12H	11.33	11.91	11.82	12.39	12.87	16.88	17.46	17.36	17.94	18.41
8H	4H	10.71	11.37	11.18	11.81	12.28	16.69	17.34	17.16	17.79	18.26
	6H	11.56	12.10	12.06	12.59	13.08	16.81	17.35	17.32	17.85	18.33
	8H	11.97	12.45	12.49	12.96	13.46	16.90	17.38	17.42	17.90	18.39
	12H	12.39	12.82	12.90	13.31	13.88	17.02	17.45	17.53	17.94	18.51
12H	4H	10.76	11.34	11.25	11.83	12.30	16.66	17.24	17.15	17.72	18.20
	6H	11.69	12.18	12.21	12.69	13.18	16.80	17.28	17.32	17.79	18.29
	8H	12.21	12.64	12.73	13.14	13.71	16.93	17.36	17.44	17.85	18.42