

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: P1060467

Luminaire Tested: S124RDRP-S575D830-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060467
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-S575D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

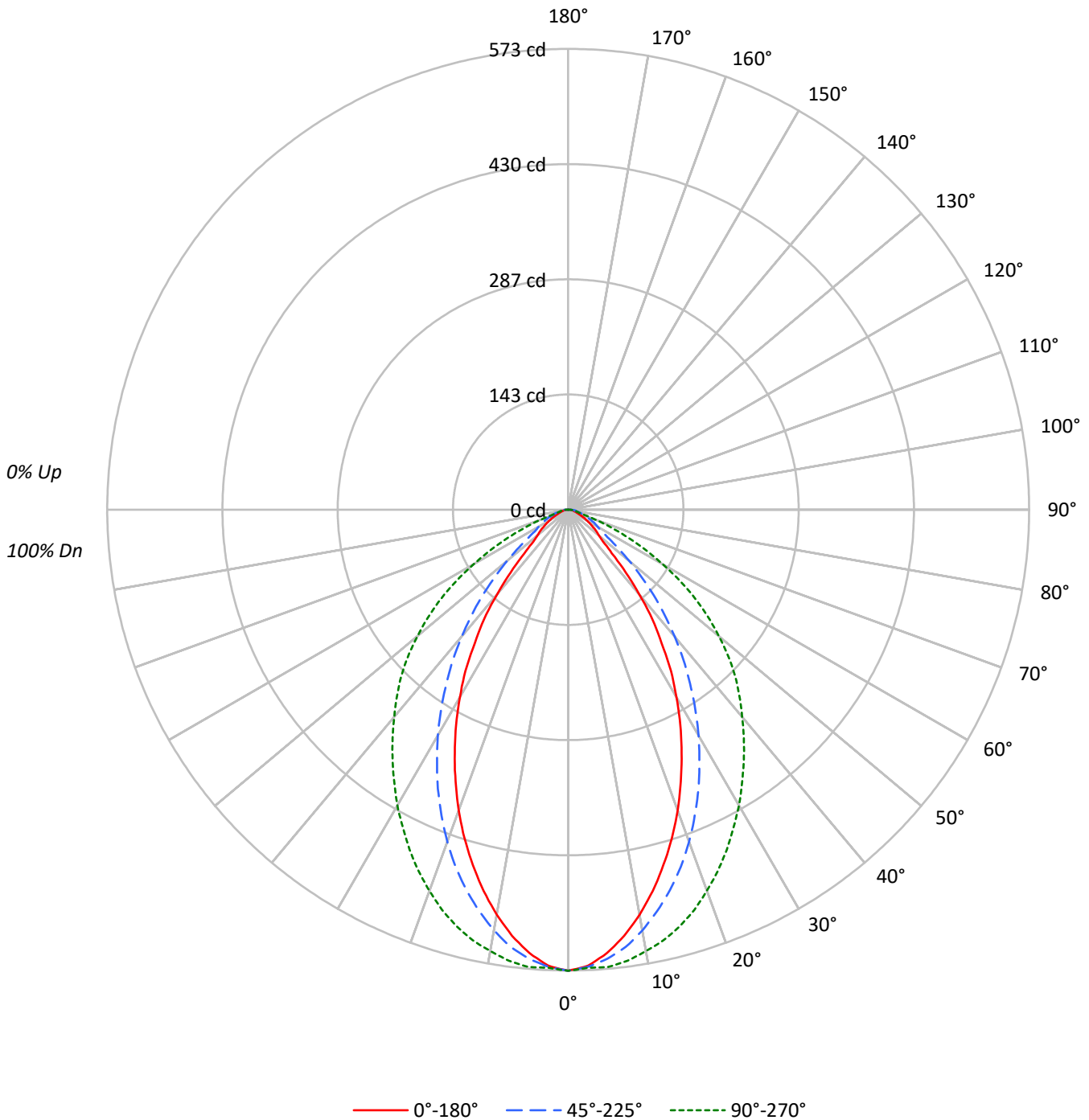
Lumens per Lamp: N/A
Luminaire Lumens: 811.4 lumens
Efficiency: N/A
Efficacy: 41.4 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	4937	4937	4937
5°	4784	4845	4934
10°	4470	4644	4873
15°	4078	4363	4780
20°	3645	4027	4620
25°	3172	3640	4431
30°	2676	3223	4223
35°	2128	2774	4000
40°	1548	2311	3780
45°	936	1825	3580
50°	670	1322	3278
55°	567	895	2895
60°	463	729	2339
65°	365	652	1683
70°	307	549	886
75°	276	512	449
80°	288	506	446
85°	375	761	504

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3580 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.8	6.5
10°-20°	138.3	17.0
20°-30°	179.4	22.1
30°-40°	172.7	21.3
40°-50°	128.5	15.8
50°-60°	79.0	9.7
60°-70°	38.8	4.8
70°-80°	15.1	1.9
80°-90°	6.9	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°	370.5	45.7
0°-40°	543.2	66.9
0°-60°	750.6	92.5
0°-90°	811.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	811.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	573	573	573	573	573	
5°	554	562	560	566	571	51
15°	457	472	489	519	536	128
25°	334	352	383	431	466	153
35°	202	222	264	330	380	127
45°	77	95	150	231	294	64
55°	38	39	60	136	193	34
65°	18	19	32	51	83	18
75°	8	15	15	14	14	9
85°	4	7	8	8	5	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	573.3	573.3	573.3	573.3	573.3
2.5°	567.6	574.0	568.9	569.5	570.1
5°	553.5	561.8	560.5	565.7	570.8
7.5°	534.3	543.9	548.4	558.6	565.7
10°	511.2	522.1	531.1	547.7	557.3
12.5°	485.6	498.4	511.2	533.6	548.4
15°	457.4	472.1	489.4	518.9	536.2
17.5°	428.6	443.3	465.7	499.7	521.5
20°	397.8	413.8	439.5	477.2	504.2
22.5°	365.8	383.1	411.3	454.2	486.2
25°	333.8	351.7	383.1	431.1	466.4
27.5°	301.7	319.0	353.0	406.8	445.2
30°	269.1	287.0	324.1	380.5	424.7
32.5°	237.7	254.3	294.0	355.5	402.3
35°	202.4	221.6	263.9	329.9	380.5
37.5°	172.3	189.6	235.1	304.3	358.7
40°	137.7	156.9	205.6	279.3	336.3
42.5°	105.7	124.9	177.4	254.3	315.2
45°	76.9	95.4	149.9	231.3	294.0
47.5°	58.3	69.2	123.0	208.8	270.3
50°	50.0	53.2	98.7	184.5	244.7
52.5°	44.2	45.5	76.9	160.2	219.1
55°	37.8	39.1	59.6	135.8	192.8
57.5°	32.0	32.7	48.0	112.7	164.6
60°	26.9	27.5	42.3	90.3	135.8
62.5°	22.4	23.1	37.8	69.8	108.3
65°	17.9	19.2	32.0	51.2	82.6
67.5°	14.7	17.3	26.9	35.9	57.7
70°	12.2	16.7	21.8	25.0	35.2
72.5°	10.2	15.4	18.6	17.9	17.3
75°	8.3	14.7	15.4	14.1	13.5
77.5°	7.0	12.8	12.8	11.5	10.9
80°	5.8	10.2	10.2	10.2	9.0
82.5°	5.1	8.3	9.0	9.0	7.0
85°	3.8	7.0	7.7	7.7	5.1
87.5°	2.6	6.4	7.0	6.4	3.8
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	5.34	6.68	5.70	6.99	7.31	14.50	15.84	14.86	16.15	16.47
	3H	6.45	7.64	6.83	7.97	8.33	15.01	16.20	15.39	16.53	16.89
	4H	6.96	8.07	7.36	8.42	8.80	15.03	16.14	15.43	16.49	16.87
	6H	7.39	8.41	7.81	8.78	9.18	15.04	16.06	15.45	16.43	16.82
	8H	7.58	8.55	8.01	8.94	9.34	15.04	16.01	15.47	16.40	16.80
	12H	7.76	8.69	8.19	9.07	9.50	15.04	15.97	15.48	16.35	16.78
4H	2H	6.48	7.59	6.88	7.94	8.32	14.39	15.50	14.79	15.85	16.23
	3H	7.82	8.73	8.23	9.13	9.54	14.98	15.89	15.39	16.29	16.70
	4H	8.55	9.36	8.99	9.78	10.23	15.04	15.85	15.47	16.27	16.71
	6H	9.16	9.86	9.62	10.31	10.77	15.11	15.82	15.58	16.26	16.73
	8H	9.40	10.06	9.87	10.50	10.97	15.14	15.80	15.61	16.25	16.72
	12H	9.63	10.21	10.12	10.70	11.17	15.19	15.77	15.67	16.25	16.72
8H	4H	9.02	9.68	9.49	10.12	10.59	15.00	15.65	15.47	16.10	16.57
	6H	9.86	10.40	10.37	10.90	11.38	15.12	15.66	15.63	16.16	16.64
	8H	10.27	10.75	10.79	11.27	11.76	15.21	15.69	15.73	16.21	16.70
	12H	10.69	11.11	11.20	11.61	12.18	15.33	15.76	15.84	16.25	16.82
12H	4H	9.07	9.65	9.56	10.14	10.61	14.97	15.55	15.46	16.03	16.51
	6H	10.00	10.48	10.52	10.99	11.49	15.11	15.59	15.63	16.10	16.60
	8H	10.52	10.94	11.03	11.44	12.01	15.24	15.67	15.75	16.16	16.73