

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1060766

Luminaire Tested: S124RDR-H1195D935-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060766
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: S124RDR-H1195D935-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

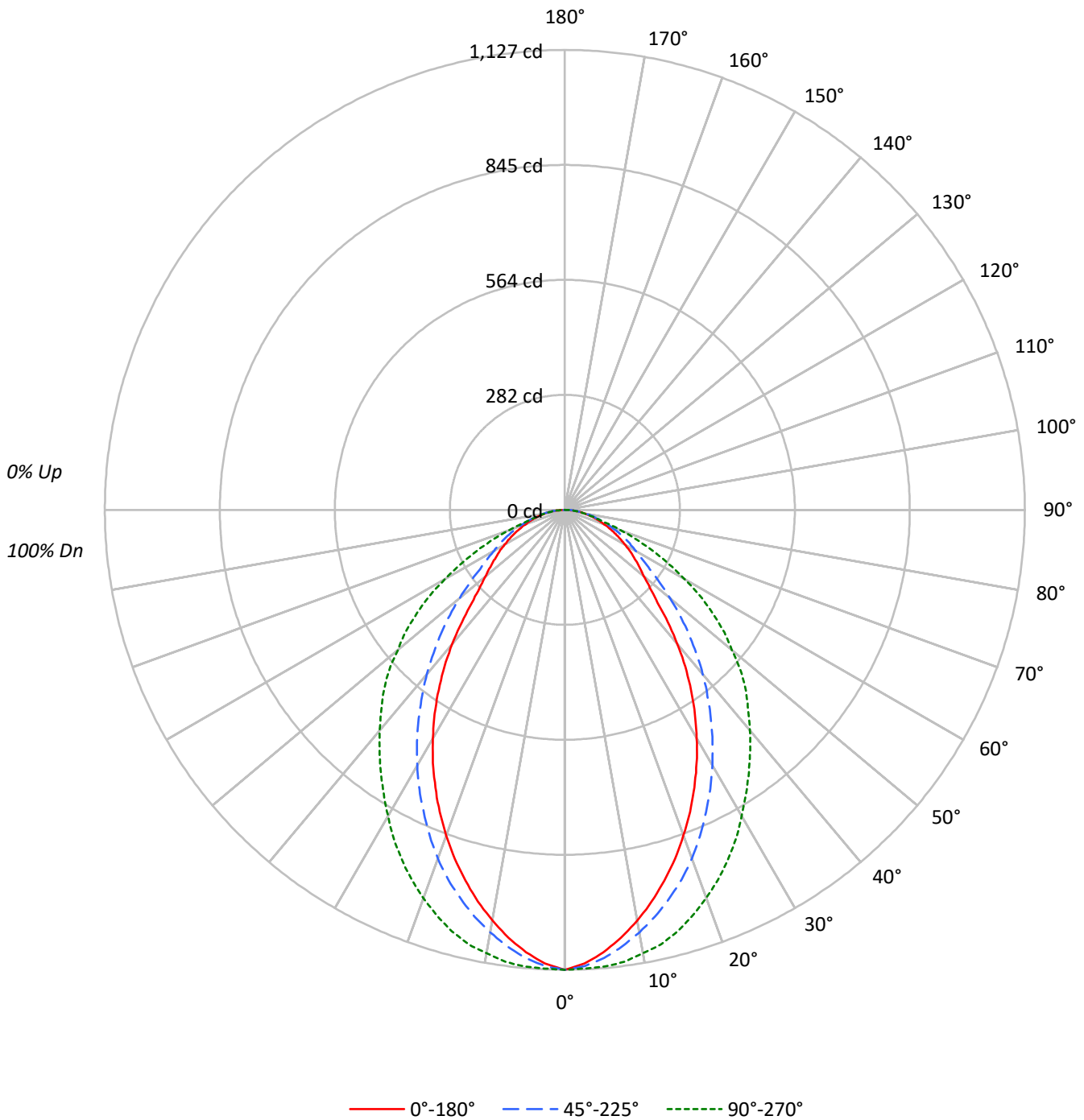
Lumens per Lamp: N/A
Luminaire Lumens: 2052.2 lumens
Efficiency: N/A
Efficacy: 56.2 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
Input Voltage (V): 120
Input Current (Ain): 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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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°	9706	9706	9706
5°	9406	9529	9713
10°	8937	9195	9650
15°	8384	8795	9533
20°	7786	8337	9279
25°	7129	7769	8982
30°	6426	7190	8612
35°	5664	6559	8261
40°	4821	5911	7929
45°	3914	5223	7640
50°	3388	4496	7155
55°	3139	3813	6634
60°	2930	3439	5819
65°	2745	3225	4839
70°	2558	2976	3658
75°	2439	2752	2635
80°	2286	2519	2227
85°	2104	2332	1749

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7640 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.1	5.1
10°-20°	279.7	13.6
20°-30°	382.0	18.6
30°-40°	400.2	19.5
40°-50°	346.4	16.9
50°-60°	260.3	12.7
60°-70°	167.8	8.2
70°-80°	86.1	4.2
80°-90°	25.7	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°	765.8	37.3
0°-40°	1166.0	56.8
0°-60°	1772.6	86.4
0°-90°	2052.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2052.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1127	1127	1127	1127	1127	
5°	1088	1105	1102	1111	1124	102
15°	940	964	987	1032	1069	264
25°	750	779	818	882	945	344
35°	539	570	624	707	786	336
45°	321	354	429	534	627	253
55°	209	216	254	363	442	188
65°	135	137	158	191	238	134
75°	73	82	83	82	79	77
85°	21	25	24	22	18	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1127.2	1127.2	1127.2	1127.2	1127.2
2.5°	1113.1	1127.2	1119.0	1121.3	1124.9
5°	1088.2	1104.8	1102.4	1110.7	1123.7
7.5°	1057.5	1075.2	1078.8	1097.7	1116.6
10°	1022.1	1042.2	1051.6	1080.0	1103.6
12.5°	983.1	1004.3	1020.9	1056.3	1090.6
15°	940.5	964.2	986.6	1031.5	1069.3
17.5°	896.8	920.5	950.0	999.6	1042.2
20°	849.6	875.6	909.8	961.8	1012.6
22.5°	801.1	828.3	864.9	921.6	980.7
25°	750.3	778.7	817.7	881.5	945.3
27.5°	699.5	727.9	771.6	838.9	908.6
30°	646.3	675.9	723.1	796.4	866.1
32.5°	593.2	625.1	673.5	751.5	825.9
35°	538.8	569.5	623.9	706.6	785.8
37.5°	484.4	516.4	574.2	662.9	745.6
40°	428.9	462.0	525.8	619.1	705.4
42.5°	373.4	408.8	476.2	574.2	665.2
45°	321.4	354.5	428.9	534.1	627.4
47.5°	282.4	304.8	381.7	495.1	584.9
50°	252.9	264.7	335.6	452.5	534.1
52.5°	230.4	238.7	293.0	406.5	492.7
55°	209.1	216.2	254.0	362.7	441.9
57.5°	190.2	193.8	224.5	320.2	393.5
60°	170.1	173.7	199.7	274.1	337.9
62.5°	152.4	154.8	179.6	230.4	287.1
65°	134.7	137.1	158.3	191.4	237.5
67.5°	118.2	121.7	138.2	156.0	189.1
70°	101.6	108.7	118.2	126.4	145.3
72.5°	87.4	94.5	99.3	101.6	102.8
75°	73.3	81.5	82.7	81.5	79.2
77.5°	59.1	66.2	66.2	63.8	61.4
80°	46.1	52.0	50.8	48.4	44.9
82.5°	34.3	37.8	36.6	34.3	30.7
85°	21.3	24.8	23.6	22.5	17.7
87.5°	10.6	14.2	13.0	11.8	7.1
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	14.33	15.81	14.69	16.13	16.44	18.10	19.59	18.47	19.90	20.21
	3H	15.98	17.31	16.36	17.64	18.00	19.22	20.55	19.59	20.87	21.24
	4H	16.65	17.90	17.05	18.25	18.63	19.51	20.75	19.91	21.10	21.48
	6H	17.17	18.32	17.58	18.68	19.08	19.70	20.85	20.12	21.22	21.61
	8H	17.35	18.44	17.78	18.83	19.24	19.76	20.85	20.18	21.24	21.64
	12H	17.48	18.52	17.91	18.90	19.33	19.78	20.83	20.21	21.21	21.64
4H	2H	15.11	16.36	15.51	16.71	17.09	18.26	19.51	18.66	19.86	20.23
	3H	16.97	18.01	17.38	18.41	18.81	19.57	20.61	19.98	21.01	21.41
	4H	17.78	18.71	18.22	19.13	19.57	19.98	20.91	20.41	21.33	21.77
	6H	18.43	19.24	18.89	19.68	20.14	20.30	21.10	20.75	21.55	22.01
	8H	18.66	19.41	19.12	19.86	20.33	20.39	21.14	20.85	21.59	22.06
	12H	18.83	19.50	19.31	19.98	20.45	20.45	21.12	20.93	21.60	22.07
8H	4H	18.13	18.89	18.60	19.33	19.80	20.11	20.87	20.58	21.31	21.78
	6H	18.93	19.55	19.42	20.04	20.52	20.53	21.15	21.02	21.64	22.12
	8H	19.25	19.81	19.76	20.32	20.80	20.68	21.24	21.19	21.75	22.24
	12H	19.51	20.01	20.02	20.50	21.06	20.80	21.30	21.31	21.79	22.35
12H	4H	18.16	18.83	18.64	19.31	19.78	20.12	20.79	20.60	21.27	21.74
	6H	18.99	19.55	19.50	20.06	20.55	20.55	21.11	21.06	21.62	22.11
	8H	19.37	19.87	19.88	20.36	20.93	20.75	21.24	21.26	21.74	22.30