

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: P1060718

Luminaire Tested: S124RDR-H1195D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060718
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-H1195D835-X4F0-XX-UDD-SVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

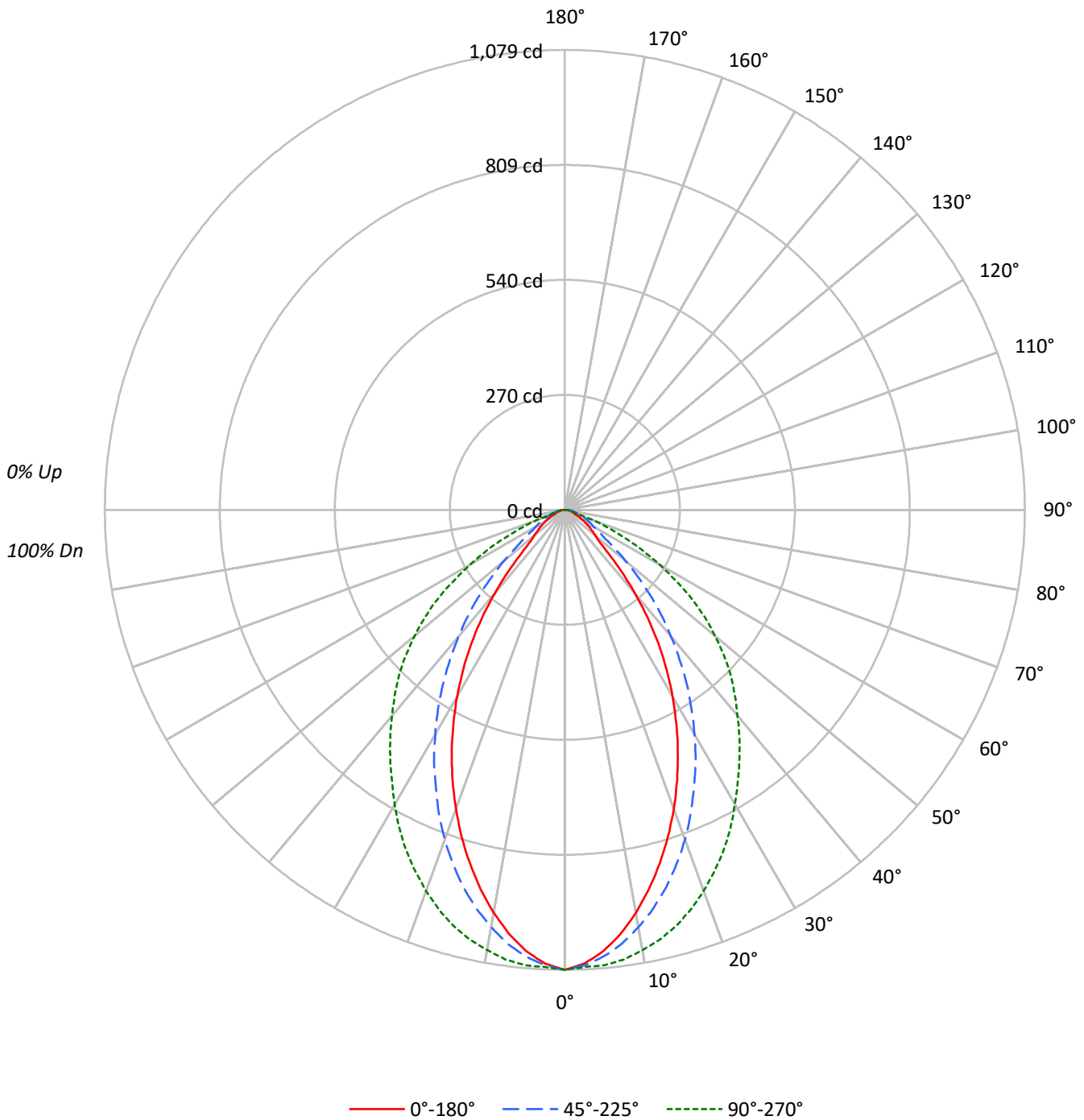
Lumens per Lamp: N/A
Luminaire Lumens: 1517.2 lumens
Efficiency: N/A
Efficacy: 41.6 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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				100
1	111	108	105	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	67	75	70	66	73	68	65	63				63
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57				57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51				51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	49	47				47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43				43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9291	9291	9291
5°	8983	9090	9267
10°	8391	8691	9171
15°	7661	8175	9008
20°	6844	7548	8717
25°	5961	6809	8374
30°	5023	6047	7931
35°	4011	5238	7505
40°	2886	4351	7083
45°	1739	3427	6704
50°	1250	2482	6161
55°	1051	1669	5462
60°	851	1324	4397
65°	670	1202	3160
70°	587	1002	1694
75°	549	915	822
80°	545	952	749
85°	810	1354	948

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6704 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.1	6.5
10°-20°	259.5	17.1
20°-30°	336.8	22.2
30°-40°	323.7	21.3
40°-50°	240.2	15.8
50°-60°	147.1	9.7
60°-70°	71.5	4.7
70°-80°	27.2	1.8
80°-90°	12.2	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°	695.4	45.8
0°-40°	1019.1	67.2
0°-60°	1406.3	92.7
0°-90°	1517.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1517.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1079	1079	1079	1079	1079	
5°	1039	1054	1052	1061	1072	97
15°	859	884	917	972	1010	240
25°	627	659	717	809	881	287
35°	382	416	498	616	714	236
45°	143	178	281	430	550	118
55°	70	73	111	251	364	63
65°	33	36	59	93	155	34
75°	16	26	28	25	25	18
85°	8	14	14	12	10	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1079.0	1079.0	1079.0	1079.0	1079.0
2.5°	1065.3	1077.6	1069.4	1072.1	1073.5
5°	1039.2	1054.3	1051.6	1061.2	1072.1
7.5°	1003.5	1021.4	1026.8	1046.1	1063.9
10°	959.6	981.5	993.9	1025.5	1048.8
12.5°	911.5	934.9	958.2	1000.8	1032.3
15°	859.4	884.1	917.0	971.9	1010.4
17.5°	804.5	831.9	871.7	937.6	982.9
20°	746.8	775.6	823.7	896.4	951.3
22.5°	687.8	718.0	771.5	852.5	917.0
25°	627.4	658.9	716.6	808.6	881.3
27.5°	565.6	598.5	664.4	761.9	841.5
30°	505.2	536.8	608.1	713.9	797.6
32.5°	443.4	476.4	553.2	664.4	755.0
35°	381.6	416.0	498.3	616.4	713.9
37.5°	318.5	355.6	442.0	569.7	672.7
40°	256.7	292.4	387.1	521.7	630.1
42.5°	196.3	234.7	335.0	473.6	590.3
45°	142.8	178.5	281.4	429.7	550.5
47.5°	107.1	129.0	232.0	388.5	506.6
50°	93.3	97.5	185.3	343.2	459.9
52.5°	81.0	83.7	144.1	293.8	413.2
55°	70.0	72.8	111.2	251.2	363.8
57.5°	59.0	61.8	89.2	210.0	307.5
60°	49.4	52.2	76.9	167.5	255.3
62.5°	41.2	42.6	68.6	127.7	204.5
65°	32.9	35.7	59.0	93.3	155.1
67.5°	27.5	30.2	48.0	64.5	108.5
70°	23.3	30.2	39.8	45.3	67.3
72.5°	19.2	27.5	32.9	31.6	31.6
75°	16.5	26.1	27.5	24.7	24.7
77.5°	13.7	23.3	22.0	20.6	19.2
80°	11.0	19.2	19.2	16.5	15.1
82.5°	9.6	15.1	15.1	15.1	12.4
85°	8.2	13.7	13.7	12.4	9.6
87.5°	5.5	11.0	12.4	11.0	6.9
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	7.56	8.90	7.92	9.21	9.53	16.66	18.00	17.02	18.31	18.62
	3H	8.60	9.79	8.98	10.12	10.49	17.16	18.35	17.54	18.68	19.04
	4H	9.12	10.23	9.52	10.58	10.96	17.17	18.28	17.57	18.63	19.01
	6H	9.57	10.59	9.98	10.96	11.35	17.17	18.19	17.59	18.56	18.95
	8H	9.76	10.72	10.19	11.11	11.52	17.17	18.13	17.60	18.52	18.93
	12H	9.97	10.89	10.40	11.28	11.71	17.17	18.09	17.60	18.47	18.90
4H	2H	8.65	9.76	9.05	10.11	10.49	16.55	17.65	16.95	18.00	18.39
	3H	9.92	10.83	10.34	11.23	11.64	17.12	18.03	17.54	18.43	18.84
	4H	10.63	11.44	11.06	11.86	12.30	17.17	17.98	17.61	18.40	18.84
	6H	11.26	11.96	11.72	12.40	12.87	17.22	17.92	17.69	18.37	18.83
	8H	11.50	12.16	11.97	12.60	13.07	17.24	17.89	17.71	18.34	18.81
	12H	11.78	12.36	12.26	12.84	13.31	17.27	17.85	17.76	18.33	18.81
8H	4H	11.06	11.71	11.52	12.16	12.63	17.12	17.77	17.59	18.22	18.69
	6H	11.93	12.47	12.43	12.96	13.44	17.21	17.75	17.72	18.25	18.73
	8H	12.34	12.82	12.86	13.33	13.83	17.27	17.76	17.80	18.27	18.76
	12H	12.81	13.24	13.33	13.73	14.30	17.37	17.80	17.89	18.30	18.87
12H	4H	11.10	11.68	11.59	12.16	12.63	17.09	17.67	17.58	18.15	18.63
	6H	12.04	12.53	12.56	13.04	13.53	17.19	17.67	17.71	18.19	18.68
	8H	12.56	12.99	13.07	13.48	14.05	17.30	17.72	17.81	18.22	18.79