

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: P1060961

Luminaire Tested: S124RDR-H795D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060961
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-H795D835-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

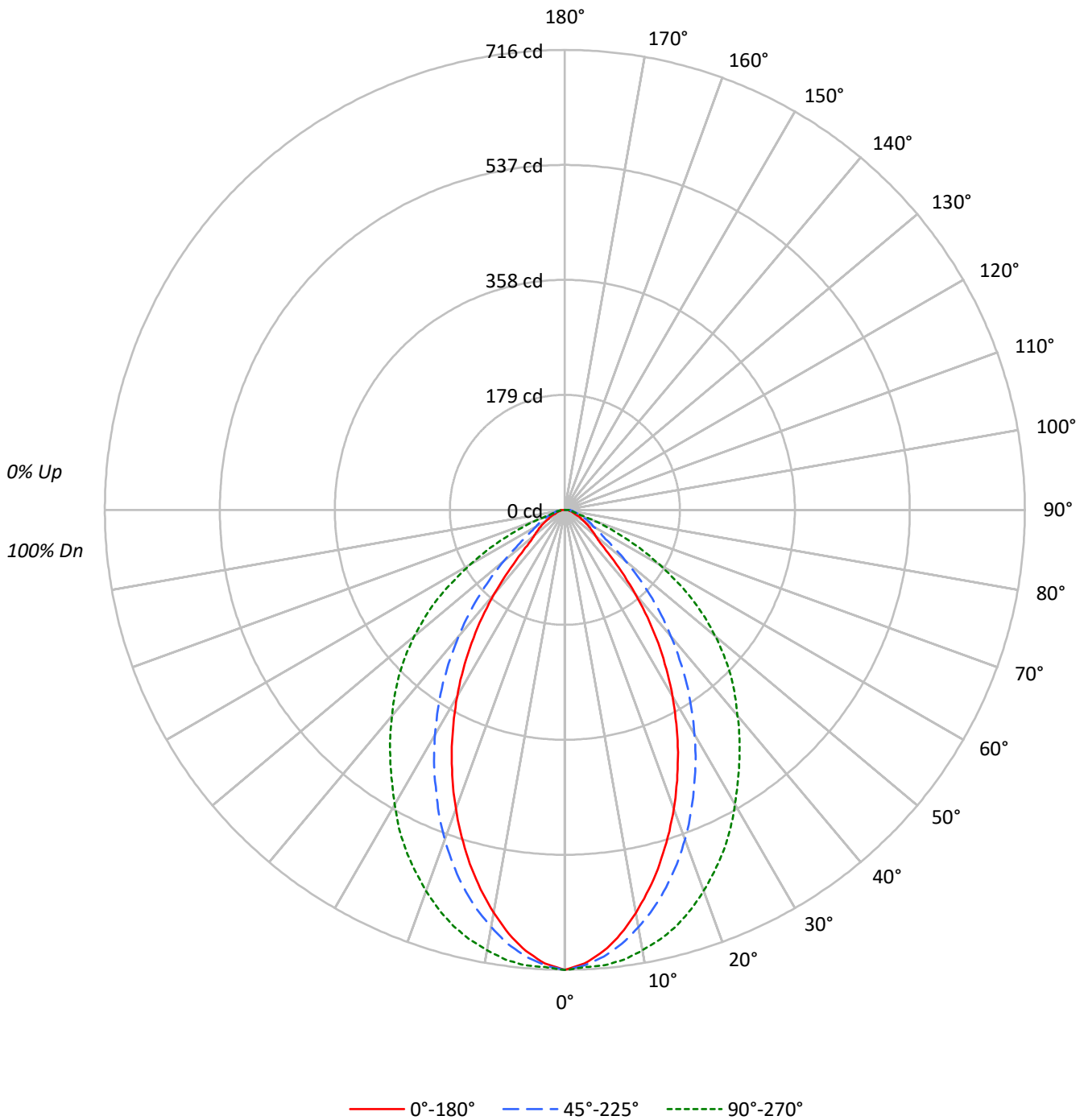
Lumens per Lamp: N/A
Luminaire Lumens: 1007.1 lumens
Efficiency: N/A
Efficacy: 42.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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	46	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°	6167	6167	6167
5°	5963	6034	6152
10°	5569	5768	6088
15°	5085	5426	5979
20°	4542	5010	5787
25°	3956	4520	5558
30°	3334	4014	5264
35°	2663	3477	4981
40°	1915	2889	4702
45°	1154	2275	4450
50°	831	1648	4090
55°	698	1108	3626
60°	565	878	2919
65°	446	799	2099
70°	390	665	1123
75°	363	606	546
80°	362	635	496
85°	543	899	632

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4450 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.8	6.5
10°-20°	172.3	17.1
20°-30°	223.5	22.2
30°-40°	214.9	21.3
40°-50°	159.4	15.8
50°-60°	97.7	9.7
60°-70°	47.4	4.7
70°-80°	18.1	1.8
80°-90°	8.1	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°	461.6	45.8
0°-40°	676.4	67.2
0°-60°	933.5	92.7
0°-90°	1007.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1007.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	716	716	716	716	716	
5°	690	700	698	704	712	64
15°	570	587	609	645	671	159
25°	416	437	476	537	585	190
35°	253	276	331	409	474	157
45°	95	118	187	285	365	79
55°	46	48	74	167	242	42
65°	22	24	39	62	103	23
75°	11	17	18	16	16	12
85°	6	9	9	8	6	5
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	716.2	716.2	716.2	716.2	716.2
2.5°	707.1	715.3	709.8	711.7	712.6
5°	689.8	699.8	698.0	704.4	711.7
7.5°	666.1	678.0	681.6	694.4	706.2
10°	636.9	651.5	659.7	680.7	696.2
12.5°	605.1	620.5	636.0	664.3	685.2
15°	570.4	586.8	608.7	645.1	670.7
17.5°	534.0	552.2	578.6	622.4	652.4
20°	495.7	514.8	546.7	595.0	631.5
22.5°	456.5	476.6	512.1	565.9	608.7
25°	416.4	437.4	475.7	536.7	585.0
27.5°	375.4	397.3	441.0	505.7	558.6
30°	335.3	356.3	403.7	473.8	529.4
32.5°	294.3	316.2	367.2	441.0	501.2
35°	253.3	276.1	330.8	409.1	473.8
37.5°	211.4	236.0	293.4	378.2	446.5
40°	170.4	194.1	257.0	346.3	418.3
42.5°	130.3	155.8	222.3	314.4	391.8
45°	94.8	118.5	186.8	285.2	365.4
47.5°	71.1	85.7	154.0	257.9	336.2
50°	62.0	64.7	123.0	227.8	305.3
52.5°	53.8	55.6	95.7	195.0	274.3
55°	46.5	48.3	73.8	166.8	241.5
57.5°	39.2	41.0	59.2	139.4	204.1
60°	32.8	34.6	51.0	111.2	169.5
62.5°	27.3	28.2	45.6	84.7	135.8
65°	21.9	23.7	39.2	62.0	103.0
67.5°	18.2	20.0	31.9	42.8	72.0
70°	15.5	20.0	26.4	30.1	44.6
72.5°	12.8	18.2	21.9	21.0	21.0
75°	10.9	17.3	18.2	16.4	16.4
77.5°	9.1	15.5	14.6	13.7	12.8
80°	7.3	12.8	12.8	10.9	10.0
82.5°	6.4	10.0	10.0	10.0	8.2
85°	5.5	9.1	9.1	8.2	6.4
87.5°	3.6	7.3	8.2	7.3	4.6
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	6.13	7.47	6.50	7.78	8.10	15.23	16.57	15.60	16.88	17.20
	3H	7.18	8.36	7.55	8.69	9.06	15.73	16.92	16.11	17.25	17.62
	4H	7.69	8.80	8.09	9.15	9.53	15.75	16.86	16.15	17.21	17.59
	6H	8.14	9.16	8.56	9.53	9.92	15.75	16.76	16.16	17.13	17.53
	8H	8.33	9.30	8.76	9.69	10.09	15.74	16.71	16.17	17.10	17.50
	12H	8.55	9.47	8.98	9.85	10.28	15.74	16.66	16.18	17.05	17.48
4H	2H	7.23	8.34	7.63	8.69	9.07	15.12	16.23	15.52	16.58	16.96
	3H	8.50	9.40	8.91	9.81	10.21	15.70	16.61	16.11	17.01	17.41
	4H	9.20	10.01	9.64	10.43	10.87	15.75	16.56	16.18	16.98	17.42
	6H	9.83	10.53	10.30	10.98	11.45	15.80	16.50	16.26	16.95	17.41
	8H	10.08	10.73	10.55	11.18	11.65	15.82	16.47	16.29	16.92	17.39
	12H	10.36	10.94	10.84	11.42	11.89	15.85	16.43	16.34	16.91	17.38
8H	4H	9.63	10.28	10.10	10.73	11.20	15.70	16.35	16.17	16.80	17.27
	6H	10.51	11.04	11.01	11.54	12.02	15.79	16.33	16.29	16.82	17.30
	8H	10.92	11.40	11.44	11.91	12.40	15.85	16.33	16.37	16.85	17.34
	12H	11.39	11.82	11.91	12.31	12.89	15.95	16.38	16.46	16.87	17.44
12H	4H	9.67	10.25	10.16	10.73	11.21	15.67	16.25	16.15	16.73	17.20
	6H	10.62	11.10	11.14	11.62	12.11	15.77	16.25	16.29	16.77	17.26
	8H	11.14	11.56	11.65	12.06	12.63	15.87	16.30	16.39	16.79	17.36