

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: P1060232

Luminaire Tested: S124RDRP-S1020D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060232
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: S124RDRP-S1020D835-X4F0-XX-UDD-SVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

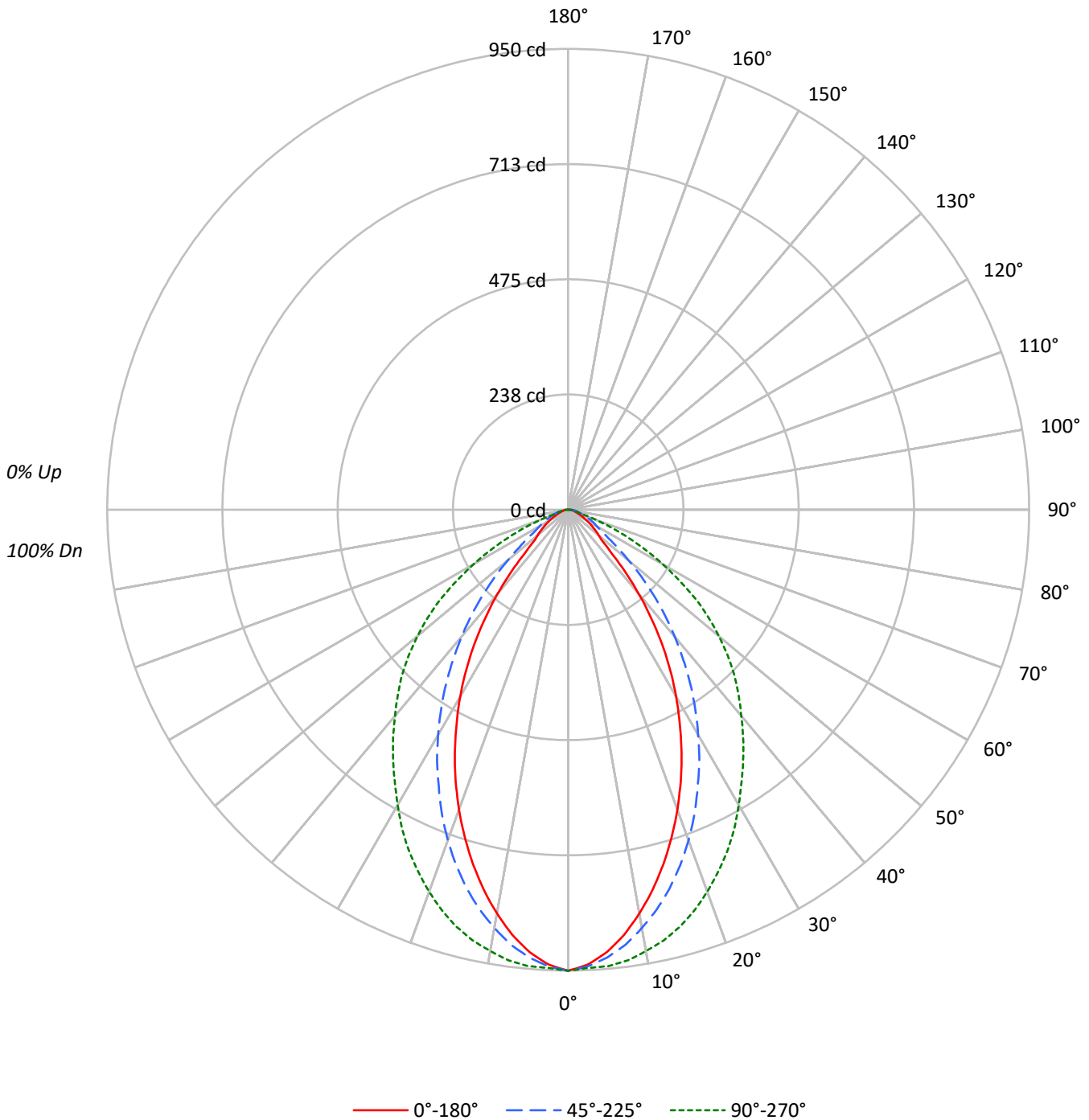
Lumens per Lamp: N/A
Luminaire Lumens: 1336.5 lumens
Efficiency: N/A
Efficacy: 38.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1060232

CATALOG NUMBER: S124RDRP-S1020D835-X4F0-XX-UDD-SVL-S

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	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°	8185	8185	8185
5°	7913	8007	8163
10°	7391	7655	8079
15°	6749	7201	7934
20°	6028	6648	7679
25°	5250	5997	7376
30°	4425	5327	6986
35°	3534	4615	6610
40°	2542	3833	6239
45°	1532	3019	5905
50°	1101	2186	5427
55°	926	1470	4810
60°	749	1166	3873
65°	591	1060	2783
70°	519	884	1493
75°	482	805	725
80°	481	838	660
85°	721	1196	840

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5905 cd/sqm

TEST NUMBER: P1060232

CATALOG NUMBER: S124RDRP-S1020D835-X4F0-XX-UDD-SVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.3	6.5
10°-20°	228.6	17.1
20°-30°	296.6	22.2
30°-40°	285.1	21.3
40°-50°	211.6	15.8
50°-60°	129.6	9.7
60°-70°	62.9	4.7
70°-80°	24.0	1.8
80°-90°	10.8	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°	612.5	45.8
0°-40°	897.6	67.2
0°-60°	1238.8	92.7
0°-90°	1336.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1336.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	950	950	950	950	950	
5°	915	929	926	935	944	85
15°	757	779	808	856	890	211
25°	553	580	631	712	776	253
35°	336	366	439	543	629	208
45°	126	157	248	378	485	104
55°	62	64	98	221	320	55
65°	29	31	52	82	137	30
75°	14	23	24	22	22	15
85°	7	12	12	11	8	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	950.5	950.5	950.5	950.5	950.5
2.5°	938.4	949.2	942.0	944.4	945.6
5°	915.4	928.7	926.3	934.7	944.4
7.5°	883.9	899.7	904.5	921.4	937.2
10°	845.3	864.6	875.5	903.3	923.9
12.5°	802.9	823.5	844.0	881.5	909.3
15°	757.0	778.7	807.8	856.1	890.0
17.5°	708.6	732.8	767.9	825.9	865.8
20°	657.8	683.2	725.5	789.6	838.0
22.5°	605.8	632.4	679.6	750.9	807.8
25°	552.6	580.4	631.2	712.2	776.3
27.5°	498.2	527.2	585.3	671.1	741.3
30°	445.0	472.8	535.7	628.8	702.6
32.5°	390.6	419.6	487.3	585.3	665.1
35°	336.2	366.4	439.0	542.9	628.8
37.5°	280.5	313.2	389.4	501.8	592.5
40°	226.1	257.6	341.0	459.5	555.0
42.5°	172.9	206.8	295.1	417.2	520.0
45°	125.8	157.2	247.9	378.5	484.9
47.5°	94.3	113.7	204.4	342.2	446.2
50°	82.2	85.9	163.2	302.3	405.1
52.5°	71.3	73.8	127.0	258.8	364.0
55°	61.7	64.1	97.9	221.3	320.4
57.5°	52.0	54.4	78.6	185.0	270.9
60°	43.5	46.0	67.7	147.5	224.9
62.5°	36.3	37.5	60.5	112.5	180.2
65°	29.0	31.4	52.0	82.2	136.6
67.5°	24.2	26.6	42.3	56.8	95.5
70°	20.6	26.6	35.1	39.9	59.3
72.5°	16.9	24.2	29.0	27.8	27.8
75°	14.5	23.0	24.2	21.8	21.8
77.5°	12.1	20.6	19.3	18.1	16.9
80°	9.7	16.9	16.9	14.5	13.3
82.5°	8.5	13.3	13.3	13.3	10.9
85°	7.3	12.1	12.1	10.9	8.5
87.5°	4.8	9.7	10.9	9.7	6.0
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	7.12	8.45	7.48	8.77	9.08	16.22	17.56	16.58	17.87	18.18
	3H	8.16	9.35	8.54	9.68	10.04	16.72	17.91	17.10	18.24	18.60
	4H	8.68	9.78	9.08	10.13	10.52	16.73	17.84	17.13	18.19	18.57
	6H	9.13	10.15	9.54	10.52	10.91	16.73	17.75	17.14	18.12	18.51
	8H	9.32	10.28	9.75	10.67	11.08	16.73	17.69	17.16	18.08	18.49
	12H	9.54	10.46	9.97	10.84	11.27	16.73	17.65	17.16	18.03	18.46
4H	2H	8.21	9.32	8.61	9.67	10.05	16.11	17.21	16.51	17.56	17.95
	3H	9.48	10.39	9.90	10.79	11.20	16.68	17.59	17.10	17.99	18.40
	4H	10.19	11.00	10.62	11.42	11.86	16.73	17.54	17.17	17.96	18.40
	6H	10.82	11.52	11.28	11.97	12.43	16.78	17.48	17.25	17.93	18.39
	8H	11.07	11.72	11.53	12.17	12.64	16.80	17.45	17.27	17.90	18.37
	12H	11.34	11.92	11.83	12.40	12.88	16.83	17.41	17.32	17.89	18.37
8H	4H	10.61	11.27	11.08	11.71	12.19	16.68	17.33	17.15	17.78	18.25
	6H	11.49	12.03	11.99	12.52	13.00	16.77	17.31	17.27	17.80	18.28
	8H	11.90	12.38	12.42	12.89	13.39	16.83	17.31	17.35	17.83	18.32
	12H	12.38	12.80	12.89	13.30	13.87	16.93	17.36	17.45	17.85	18.42
12H	4H	10.66	11.24	11.14	11.72	12.19	16.65	17.23	17.14	17.71	18.19
	6H	11.60	12.09	12.12	12.60	13.09	16.75	17.23	17.27	17.75	18.24
	8H	12.12	12.55	12.64	13.04	13.61	16.86	17.28	17.37	17.78	18.35