

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: P1060570

Luminaire Tested: S124RDR-S795D850-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060570
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S795D850-X4F0-XX-UDD-BVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

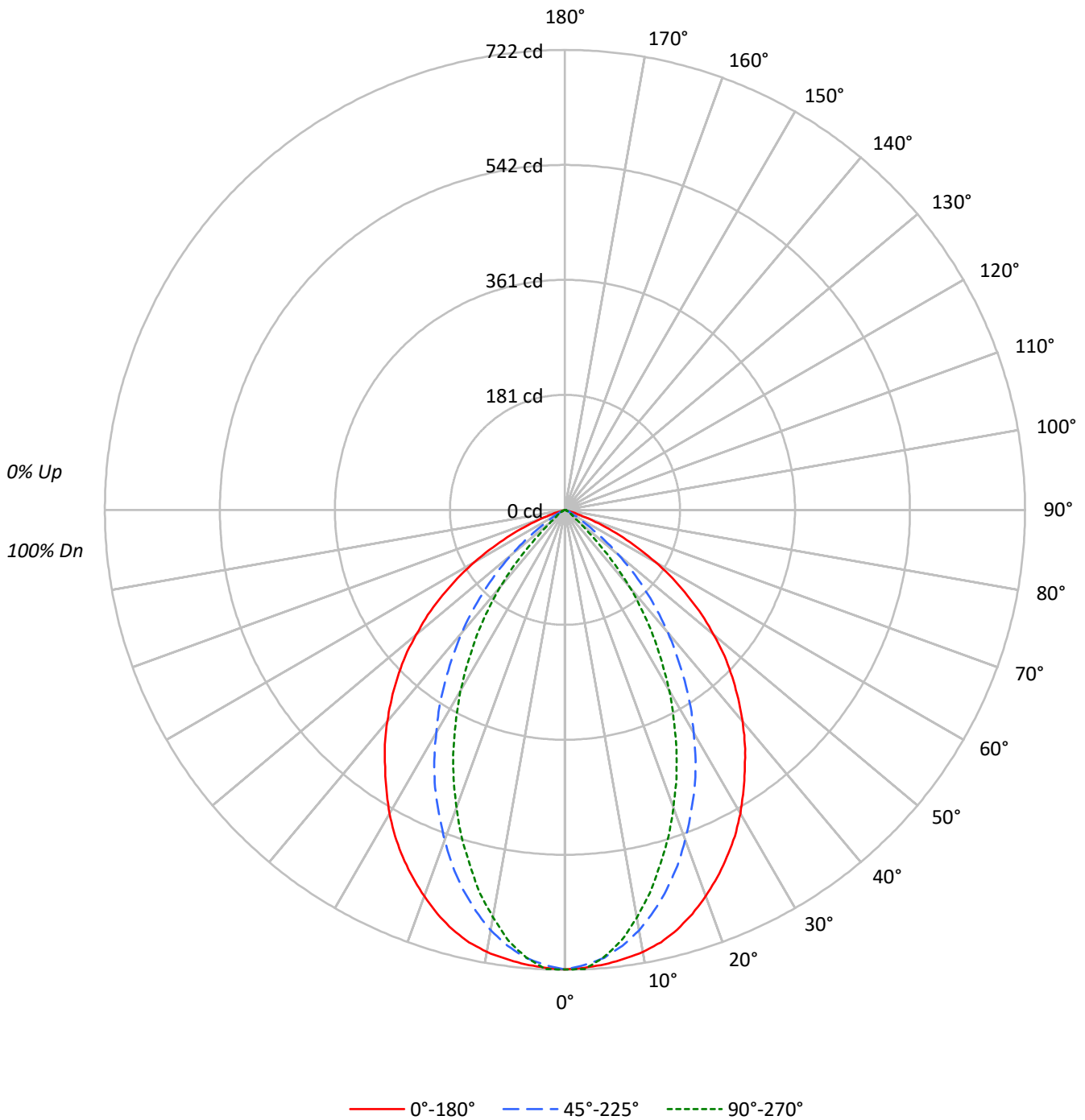
Lumens per Lamp: N/A
Luminaire Lumens: 942.1 lumens
Efficiency: N/A
Efficacy: 36.5 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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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CATALOG NUMBER: S124RDR-S795D850-X4F0-XX-UDD-BVL-B

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	112	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91				91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82				82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66				66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60				60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55				55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50				50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46				46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42				42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6213	6213	6213
5°	6192	6102	6092
10°	6163	5862	5680
15°	6079	5502	5140
20°	5914	5055	4557
25°	5716	4577	3933
30°	5474	4012	3255
35°	5173	3442	2531
40°	4875	2825	1769
45°	4520	2171	876
50°	4078	1467	293
55°	3522	751	204
60°	2819	269	143
65°	1934	149	63
70°	866	78	53
75°	0	33	33
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4520 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.6	7.1
10°-20°	174.6	18.5
20°-30°	226.1	24.0
30°-40°	214.8	22.8
40°-50°	152.1	16.1
50°-60°	78.1	8.3
60°-70°	27.3	2.9
70°-80°	2.3	0.2
80°-90°	0.0	0.0
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°	467.4	49.6
0°-40°	682.2	72.4
0°-60°	912.4	96.9
0°-90°	942.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	942.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	722	722	722	722	722	
5°	716	717	706	706	705	68
15°	682	661	617	588	577	192
25°	602	555	482	431	414	277
35°	492	420	327	264	241	308
45°	371	286	178	102	72	286
55°	235	154	50	15	14	210
65°	95	46	7	4	3	94
75°	0	1	1	1	1	8
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	721.5	721.5	721.5	721.5	721.5
2.5°	719.4	721.5	715.2	720.5	721.5
5°	716.3	717.3	705.9	705.9	704.8
7.5°	711.1	709.0	690.2	682.9	681.9
10°	704.8	697.5	670.4	654.8	649.6
12.5°	695.4	681.9	645.4	622.5	616.2
15°	681.9	661.0	617.2	588.0	576.6
17.5°	665.2	638.1	586.0	550.5	539.0
20°	645.4	611.0	551.6	511.9	497.3
22.5°	624.5	584.9	516.1	471.3	456.7
25°	601.6	554.7	481.7	430.6	413.9
27.5°	577.6	522.4	444.2	391.0	369.1
30°	550.5	490.0	403.5	348.2	327.4
32.5°	521.3	454.6	367.0	307.6	282.6
35°	492.1	420.2	327.4	263.8	240.8
37.5°	464.0	387.9	287.8	221.0	199.1
40°	433.7	352.4	251.3	182.5	157.4
42.5°	402.5	318.0	213.7	142.8	115.7
45°	371.2	285.7	178.3	102.2	71.9
47.5°	339.9	251.3	143.9	64.6	38.6
50°	304.4	217.9	109.5	34.4	21.9
52.5°	271.1	186.6	78.2	19.8	16.7
55°	234.6	154.3	50.0	14.6	13.6
57.5°	200.2	123.0	28.2	11.5	10.4
60°	163.7	94.9	15.6	9.4	8.3
62.5°	127.2	68.8	10.4	6.3	5.2
65°	94.9	45.9	7.3	4.2	3.1
67.5°	62.6	26.1	5.2	2.1	2.1
70°	34.4	12.5	3.1	2.1	2.1
72.5°	12.5	4.2	2.1	1.0	1.0
75°	0.0	1.0	1.0	1.0	1.0
77.5°	0.0	0.0	0.0	0.0	1.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)