

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: P1060596

Luminaire Tested: S124RDR-S795D930-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060596
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S795D930-X4F0-XX-UDD-WVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

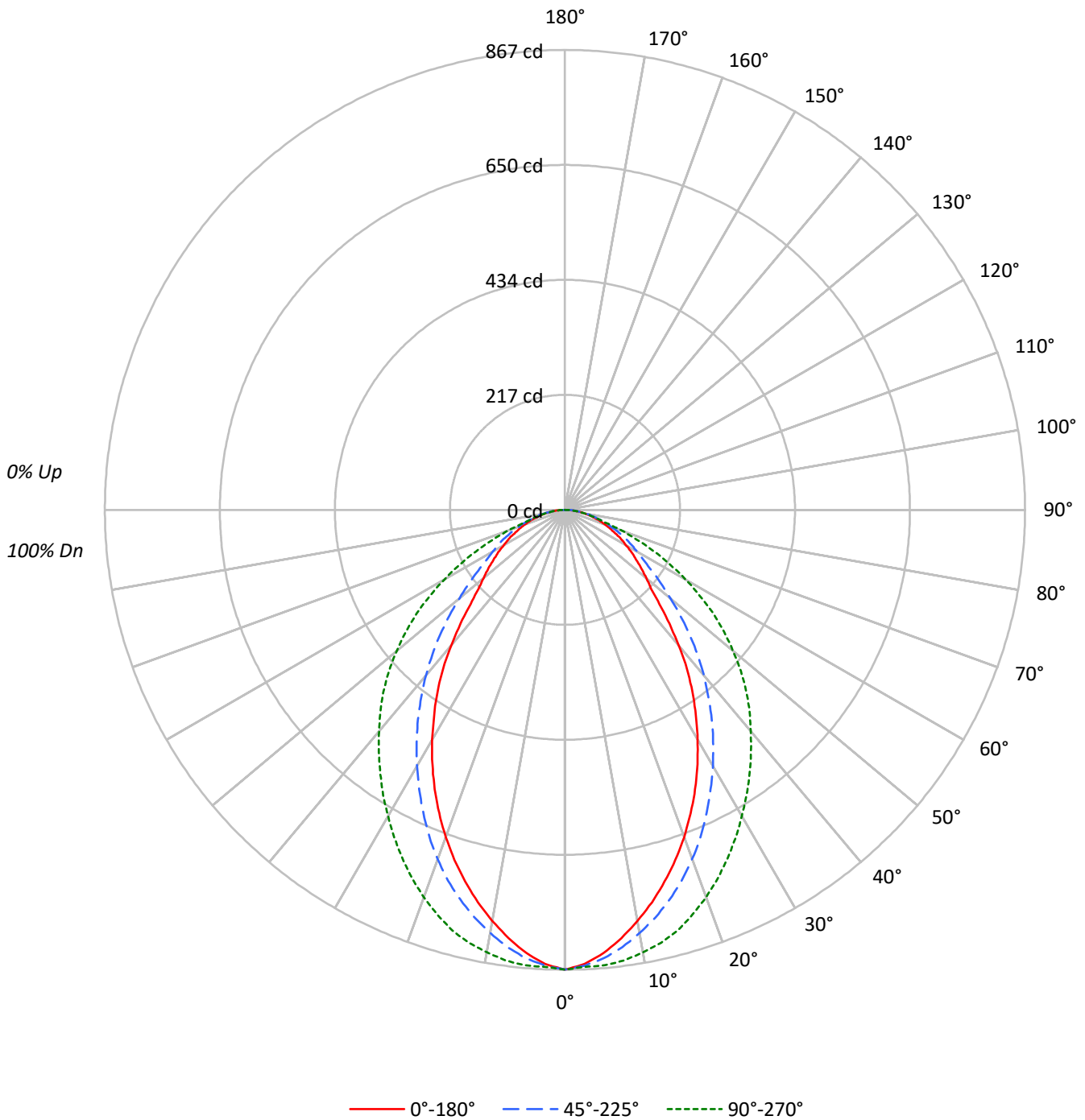
Lumens per Lamp: N/A
Luminaire Lumens: 1590.4 lumens
Efficiency: N/A
Efficacy: 61.6 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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-S795D930-X4F0-XX-UDD-WVL-W

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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89				87	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77				75	
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67				65	
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59				57	
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52				50	
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47				45	
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42				40	
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38				37	
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35				33	
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32				31	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7463	7463	7463
5°	7247	7333	7452
10°	6882	7083	7404
15°	6469	6783	7316
20°	6017	6425	7120
25°	5516	5998	6887
30°	4973	5544	6627
35°	4403	5072	6378
40°	3742	4578	6122
45°	3064	4044	5884
50°	2682	3474	5538
55°	2464	2994	5124
60°	2285	2695	4517
65°	2141	2533	3782
70°	2009	2316	2840
75°	1890	2119	2066
80°	1751	1939	1751
85°	1591	1897	1512

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5884 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.1	5.0
10°-20°	215.5	13.6
20°-30°	294.6	18.5
30°-40°	309.6	19.5
40°-50°	268.7	16.9
50°-60°	202.7	12.7
60°-70°	131.4	8.3
70°-80°	67.4	4.2
80°-90°	20.4	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°	590.2	37.1
0°-40°	899.8	56.6
0°-60°	1371.2	86.2
0°-90°	1590.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1590.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	867	867	867	867	867	
5°	838	850	848	855	862	78
15°	726	743	761	795	821	203
25°	581	601	631	680	725	266
35°	419	442	482	547	607	260
45°	252	275	332	415	483	198
55°	164	169	199	283	341	148
65°	105	107	124	150	186	105
75°	57	64	64	64	62	60
85°	16	20	19	18	15	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	866.7	866.7	866.7	866.7	866.7
2.5°	856.8	867.5	859.8	861.4	862.1
5°	838.4	849.9	848.3	855.2	862.1
7.5°	814.6	828.4	831.5	845.3	856.8
10°	787.0	802.3	810.0	832.2	846.8
12.5°	757.8	773.2	787.0	815.4	836.1
15°	725.6	743.3	760.9	795.4	820.7
17.5°	691.9	710.3	732.5	770.1	800.0
20°	656.6	675.0	701.1	741.7	777.0
22.5°	619.0	639.7	667.3	711.0	752.5
25°	580.6	601.4	631.3	679.6	724.8
27.5°	540.8	562.2	594.4	648.1	696.5
30°	500.1	523.1	557.6	614.4	666.5
32.5°	458.7	483.2	520.0	580.6	637.4
35°	418.8	441.8	482.5	546.9	606.7
37.5°	377.4	400.4	444.1	513.9	576.0
40°	332.9	358.2	407.3	479.4	544.6
42.5°	291.5	316.8	369.7	446.4	514.7
45°	251.6	275.4	332.1	415.0	483.2
47.5°	220.9	237.8	294.5	384.3	449.5
50°	200.2	207.9	259.3	350.5	413.4
52.5°	181.8	187.9	227.0	316.8	378.1
55°	164.1	168.7	199.4	283.0	341.3
57.5°	148.8	151.1	174.9	249.3	301.4
60°	132.7	135.8	156.5	214.8	262.3
62.5°	119.7	121.2	140.4	181.8	223.2
65°	105.1	107.4	124.3	150.3	185.6
67.5°	92.0	95.9	107.4	122.7	146.5
70°	79.8	85.1	92.0	99.7	112.8
72.5°	68.3	74.4	78.2	81.3	79.0
75°	56.8	63.7	63.7	64.4	62.1
77.5°	46.0	52.2	51.4	50.6	47.6
80°	35.3	40.7	39.1	38.4	35.3
82.5°	26.1	29.9	28.4	27.6	23.8
85°	16.1	19.9	19.2	18.4	15.3
87.5°	7.7	11.5	10.7	10.0	6.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)