

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: P1060551

Luminaire Tested: S124RDR-S795D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060551
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-S795D830-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, 80 CRI LEDS
Ballast/Driver: -

Summary

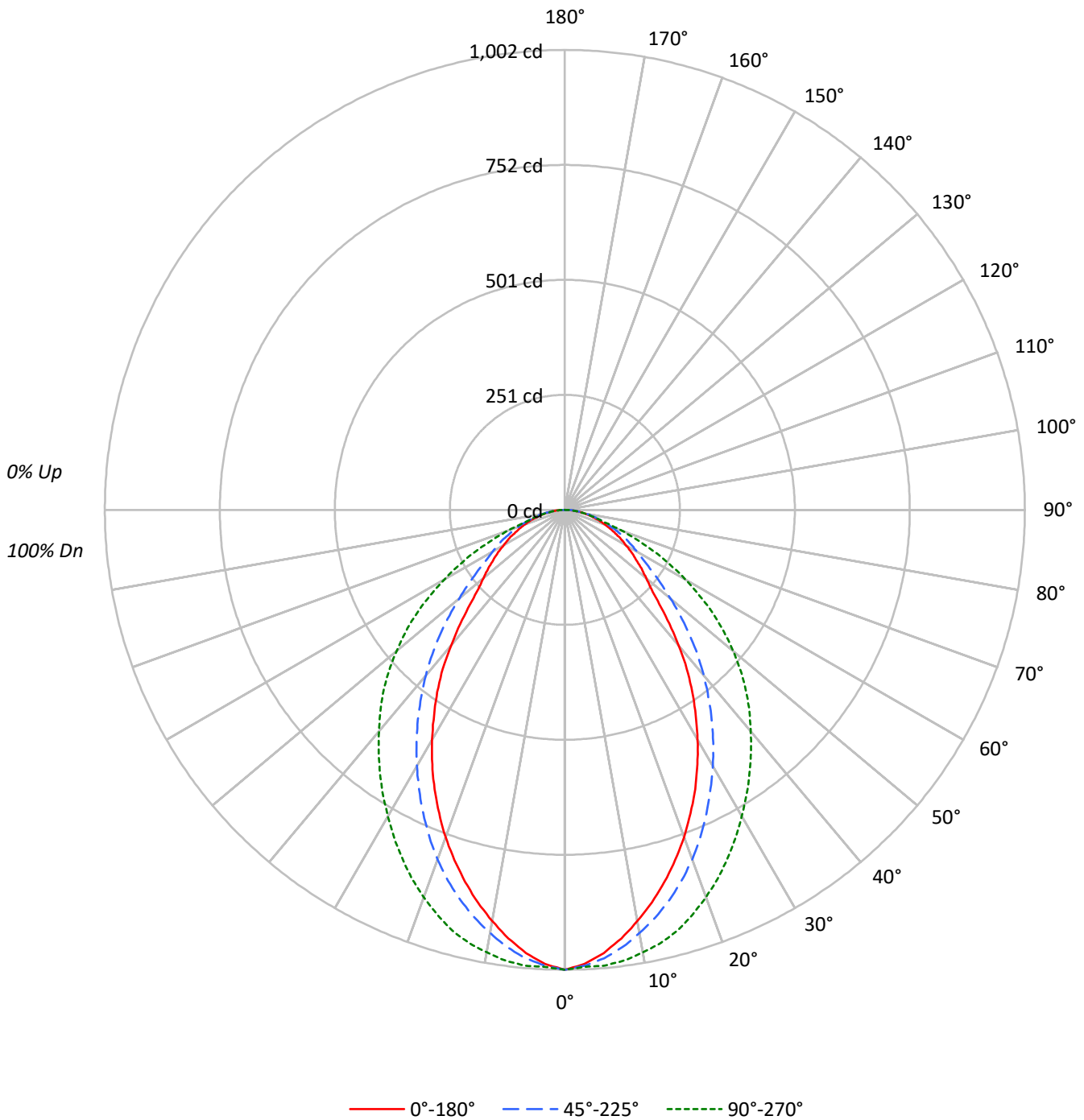
Lumens per Lamp: N/A
Luminaire Lumens: 1838.7 lumens
Efficiency: N/A
Efficacy: 71.3 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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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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				
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°	8628	8628	8628
5°	8378	8477	8615
10°	7955	8188	8560
15°	7479	7842	8458
20°	6956	7427	8232
25°	6378	6934	7962
30°	5749	6410	7662
35°	5090	5864	7373
40°	4326	5293	7077
45°	3543	4676	6803
50°	3100	4015	6404
55°	2849	3462	5924
60°	2642	3116	5224
65°	2476	2928	4373
70°	2321	2679	3283
75°	2183	2449	2389
80°	2023	2241	2023
85°	1838	2193	1749

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6803 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.6	5.0
10°-20°	249.2	13.6
20°-30°	340.6	18.5
30°-40°	357.9	19.5
40°-50°	310.6	16.9
50°-60°	234.3	12.7
60°-70°	151.9	8.3
70°-80°	77.9	4.2
80°-90°	23.6	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°	682.3	37.1
0°-40°	1040.3	56.6
0°-60°	1585.2	86.2
0°-90°	1838.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1838.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1002	1002	1002	1002	1002	
5°	969	982	981	989	997	91
15°	839	859	880	920	949	235
25°	671	695	730	786	838	308
35°	484	511	558	632	701	301
45°	291	318	384	480	559	229
55°	190	195	231	327	395	171
65°	122	124	144	174	215	121
75°	66	74	74	74	72	70
85°	19	23	22	21	18	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1002.0	1002.0	1002.0	1002.0	1002.0
2.5°	990.5	1002.9	994.0	995.8	996.7
5°	969.2	982.5	980.7	988.7	996.7
7.5°	941.7	957.7	961.2	977.2	990.5
10°	909.8	927.5	936.4	962.1	979.0
12.5°	876.1	893.8	909.8	942.6	966.5
15°	838.9	859.3	879.6	919.6	948.8
17.5°	799.8	821.1	846.8	890.3	924.9
20°	759.1	780.3	810.5	857.5	898.3
22.5°	715.6	739.5	771.5	822.0	869.9
25°	671.3	695.2	729.8	785.7	838.0
27.5°	625.2	650.0	687.2	749.3	805.2
30°	578.2	604.8	644.7	710.3	770.6
32.5°	530.3	558.6	601.2	671.3	736.9
35°	484.2	510.8	557.8	632.2	701.4
37.5°	436.3	462.9	513.4	594.1	665.9
40°	384.8	414.1	470.9	554.2	629.6
42.5°	337.0	366.2	427.4	516.1	595.0
45°	290.9	318.3	384.0	479.7	558.6
47.5°	255.4	274.9	340.5	444.3	519.6
50°	231.4	240.3	299.7	405.2	478.0
52.5°	210.2	217.3	262.5	366.2	437.2
55°	189.8	195.1	230.6	327.2	394.6
57.5°	172.0	174.7	202.2	288.2	348.5
60°	153.4	157.0	180.9	248.3	303.3
62.5°	138.3	140.1	162.3	210.2	258.0
65°	121.5	124.1	143.7	173.8	214.6
67.5°	106.4	110.8	124.1	141.9	169.4
70°	92.2	98.4	106.4	115.3	130.4
72.5°	78.9	86.0	90.4	94.0	91.3
75°	65.6	73.6	73.6	74.5	71.8
77.5°	53.2	60.3	59.4	58.5	55.0
80°	40.8	47.0	45.2	44.3	40.8
82.5°	30.1	34.6	32.8	31.9	27.5
85°	18.6	23.1	22.2	21.3	17.7
87.5°	8.9	13.3	12.4	11.5	8.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)