

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: P1060300

Luminaire Tested: S124RDR-S1195D830-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060300
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-S1195D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

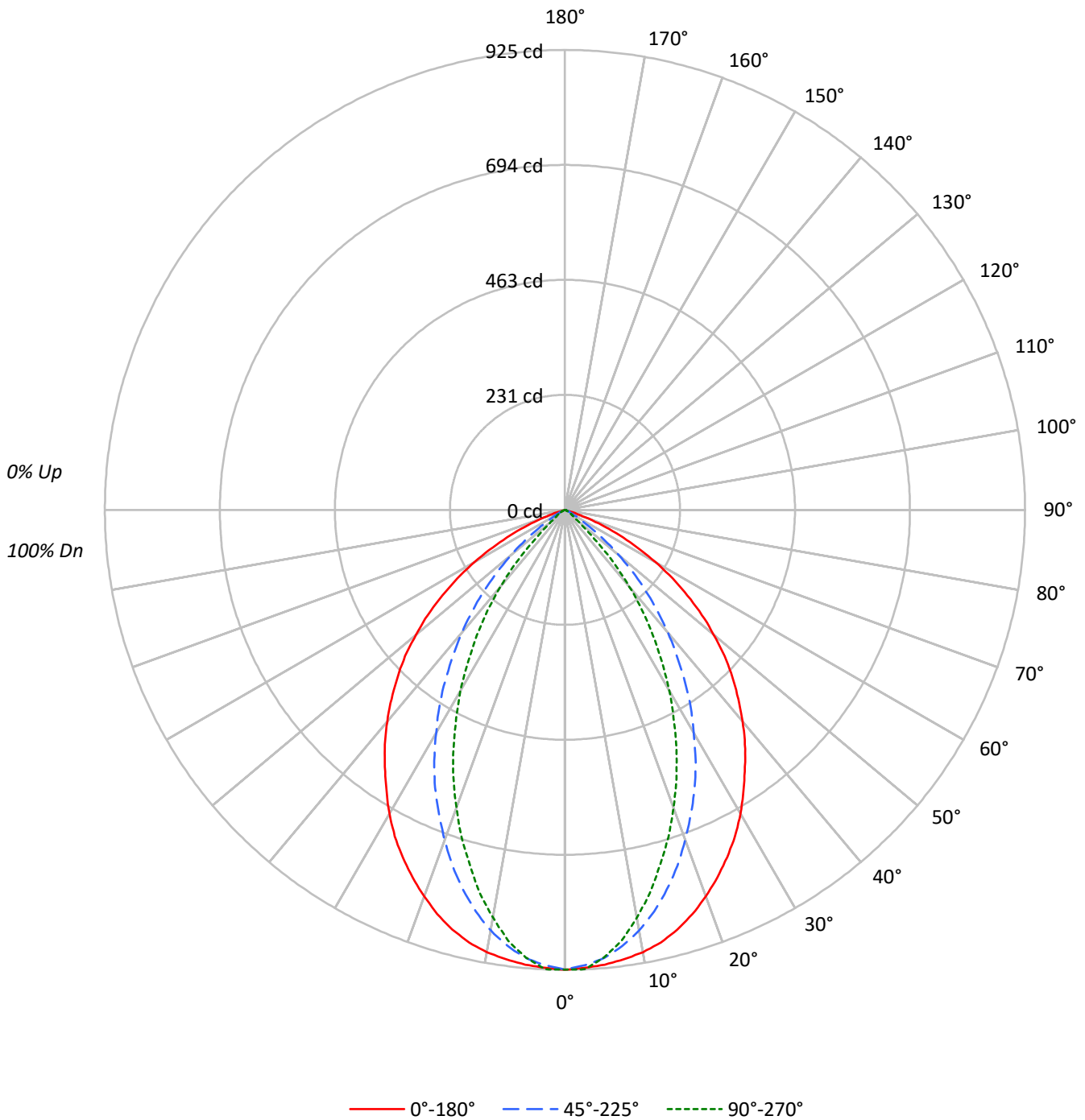
Lumens per Lamp: N/A
Luminaire Lumens: 1207.6 lumens
Efficiency: N/A
Efficacy: 28.9 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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-S1195D830-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7964	7964	7964
5°	7936	7821	7809
10°	7899	7514	7280
15°	7792	7053	6588
20°	7581	6479	5842
25°	7326	5866	5041
30°	7016	5143	4172
35°	6631	4411	3245
40°	6250	3621	2268
45°	5794	2783	1123
50°	5227	1880	376
55°	4514	962	261
60°	3613	344	184
65°	2478	192	82
70°	1110	101	68
75°	0	43	43
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5794 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.4	7.1
10°-20°	223.9	18.5
20°-30°	289.8	24.0
30°-40°	275.4	22.8
40°-50°	195.0	16.1
50°-60°	100.1	8.3
60°-70°	35.0	2.9
70°-80°	3.0	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°	599.1	49.6
0°-40°	874.4	72.4
0°-60°	1169.6	96.9
0°-90°	1207.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1207.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	925	925	925	925	925	
5°	918	920	905	905	903	87
15°	874	847	791	754	739	246
25°	771	711	617	552	531	355
35°	631	539	420	338	309	395
45°	476	366	228	131	92	366
55°	301	198	64	19	17	269
65°	122	59	9	5	4	121
75°	0	1	1	1	1	10
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	924.8	924.8	924.8	924.8	924.8
2.5°	922.1	924.8	916.8	923.5	924.8
5°	918.1	919.5	904.8	904.8	903.4
7.5°	911.4	908.8	884.7	875.4	874.0
10°	903.4	894.1	859.3	839.3	832.6
12.5°	891.4	874.0	827.3	797.8	789.8
15°	874.0	847.3	791.2	753.7	739.0
17.5°	852.6	817.9	751.1	705.6	690.9
20°	827.3	783.1	707.0	656.2	637.5
22.5°	800.5	749.7	661.5	604.1	585.4
25°	771.1	711.0	617.4	551.9	530.6
27.5°	740.4	669.6	569.3	501.2	473.1
30°	705.6	628.1	517.2	446.4	419.6
32.5°	668.2	582.7	470.4	394.2	362.2
35°	630.8	538.6	419.6	338.1	308.7
37.5°	594.7	497.2	368.9	283.3	255.3
40°	556.0	451.7	322.1	233.9	201.8
42.5°	515.9	407.6	274.0	183.1	148.3
45°	475.8	366.2	228.5	131.0	92.2
47.5°	435.7	322.1	184.4	82.9	49.4
50°	390.2	279.3	140.3	44.1	28.1
52.5°	347.5	239.2	100.2	25.4	21.4
55°	300.7	197.8	64.1	18.7	17.4
57.5°	256.6	157.7	36.1	14.7	13.4
60°	209.8	121.6	20.0	12.0	10.7
62.5°	163.0	88.2	13.4	8.0	6.7
65°	121.6	58.8	9.4	5.3	4.0
67.5°	80.2	33.4	6.7	2.7	2.7
70°	44.1	16.0	4.0	2.7	2.7
72.5°	16.0	5.3	2.7	1.3	1.3
75°	0.0	1.3	1.3	1.3	1.3
77.5°	0.0	0.0	0.0	0.0	1.3
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)