

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: P1060306

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060306  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-37)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S1195D830-X4F0-XX-UDD-WVL-B  
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

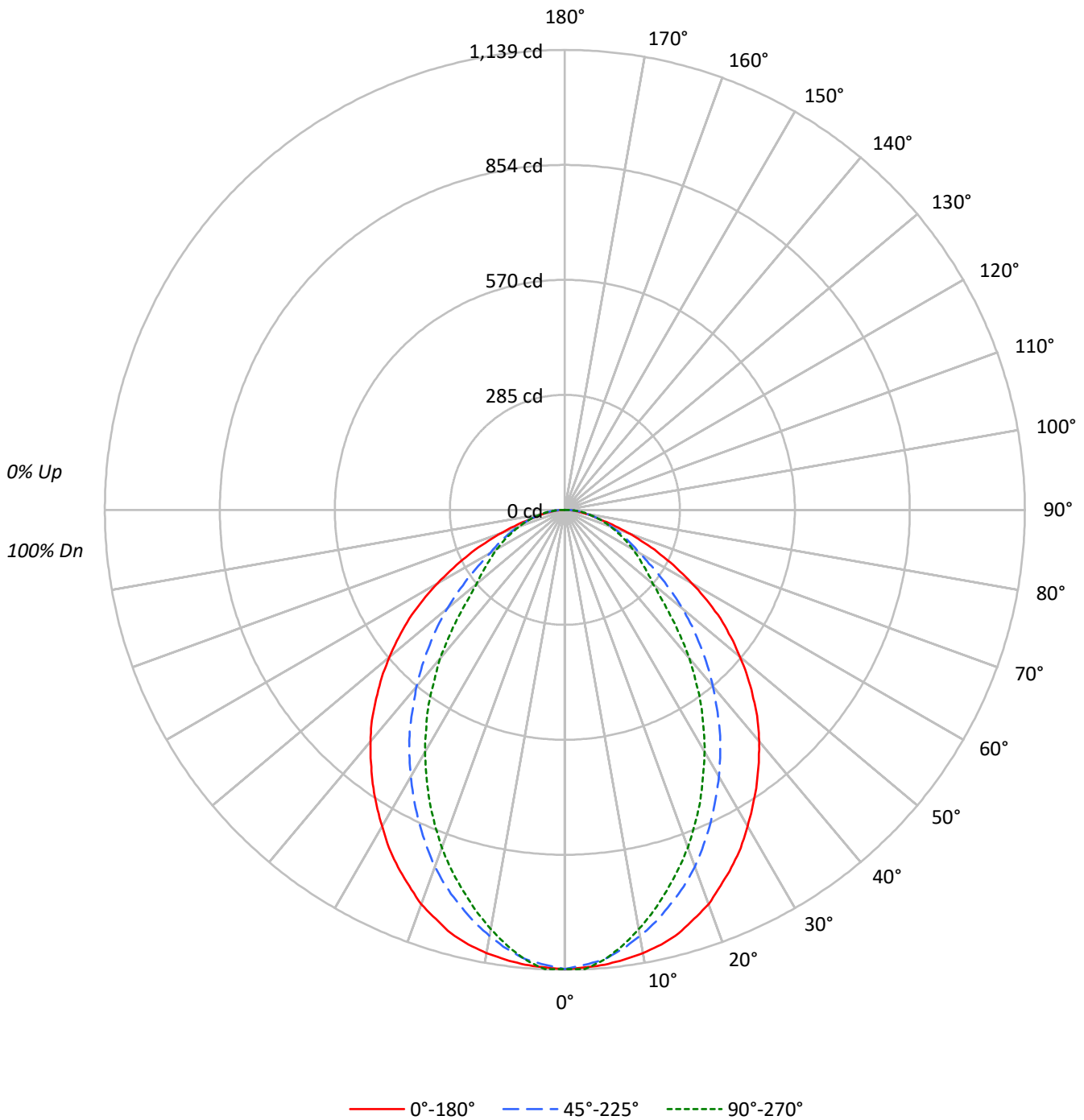
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2192.9 lumens  
Efficiency: N/A  
Efficacy: 52.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12  
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

TEST NUMBER: P1060306

CATALOG NUMBER: S124RDR-S1195D830-X4F0-XX-UDD-WVL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1060306

CATALOG NUMBER: S124RDR-S1195D830-X4F0-XX-UDD-WVL-B

**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	107	104	100	97	99	97	94	96	93	91	92	90	88	86				86
2	101	94	88	83	99	92	86	82	89	84	80	85	82	78	82	79	76	74				74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64				64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56				56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50				50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44				44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40				40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36				36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33				33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30				30

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	9793	9793	9793
5°	9773	9658	9669
10°	9746	9372	9220
15°	9686	9019	8697
20°	9528	8621	8157
25°	9282	8114	7542
30°	8997	7588	6884
35°	8710	7039	6181
40°	8413	6415	5393
45°	8040	5761	4508
50°	7590	5084	3814
55°	7062	4313	3531
60°	6260	3660	3338
65°	5336	3376	3158
70°	4172	3130	2994
75°	2845	2891	2891
80°	2450	2718	2782
85°	2114	2638	2905

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8040 cd/sqm

TEST NUMBER: P1060306

CATALOG NUMBER: S124RDR-S1195D830-X4F0-XX-UDD-WVL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.8	4.8
10°-20°	287.4	13.1
20°-30°	398.9	18.2
30°-40°	427.6	19.5
40°-50°	378.9	17.3
50°-60°	285.5	13.0
60°-70°	184.9	8.4
70°-80°	94.9	4.3
80°-90°	29.1	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°	792.1	36.1
0°-40°	1219.7	55.6
0°-60°	1884.1	85.9
0°-90°	2192.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2192.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1137	1137	1137	1137	1137	
5°	1131	1132	1117	1119	1119	107
15°	1086	1062	1012	986	976	306
25°	977	925	854	808	794	450
35°	829	754	670	609	588	518
45°	660	575	473	400	370	509
55°	470	392	287	242	235	418
65°	262	211	166	156	155	260
75°	86	90	87	87	87	101
85°	21	23	27	29	29	25
90°	0	0	0	0	0	



TEST NUMBER: P1060306

CATALOG NUMBER: S124RDR-S1195D830-X4F0-XX-UDD-WVL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1137.3	1137.3	1137.3	1137.3	1137.3
2.5°	1134.6	1138.6	1127.9	1136.0	1138.6
5°	1130.6	1132.0	1117.3	1118.6	1118.6
7.5°	1123.9	1121.3	1097.2	1090.5	1089.2
10°	1114.6	1106.6	1071.8	1058.5	1054.4
12.5°	1102.6	1087.9	1043.7	1025.0	1017.0
15°	1086.5	1062.5	1011.7	986.3	975.6
17.5°	1062.5	1031.7	978.3	946.2	934.2
20°	1039.7	998.3	940.8	900.8	890.1
22.5°	1007.7	963.6	898.1	855.3	841.9
25°	976.9	924.8	854.0	808.5	793.8
27.5°	943.5	884.7	808.5	760.4	741.7
30°	904.8	841.9	763.1	712.3	692.3
32.5°	867.3	800.5	716.3	660.2	638.8
35°	828.6	753.7	669.6	609.4	588.0
37.5°	788.5	709.6	617.4	558.6	530.6
40°	748.4	665.5	570.7	503.8	479.8
42.5°	707.0	620.1	522.5	453.0	422.3
45°	660.2	574.7	473.1	399.6	370.2
47.5°	614.8	530.6	427.7	347.5	320.7
50°	566.6	483.8	379.5	302.0	284.7
52.5°	518.5	435.7	332.8	267.3	259.3
55°	470.4	391.6	287.3	241.9	235.2
57.5°	417.0	346.1	247.2	219.2	213.8
60°	363.5	296.7	212.5	197.8	193.8
62.5°	311.4	253.9	188.4	176.4	173.7
65°	261.9	211.2	165.7	156.4	155.0
67.5°	213.8	173.7	144.3	139.0	136.3
70°	165.7	139.0	124.3	121.6	118.9
72.5°	123.0	112.3	105.6	104.2	102.9
75°	85.5	89.5	86.9	86.9	86.9
77.5°	68.2	69.5	70.8	72.2	70.8
80°	49.4	53.5	54.8	57.5	56.1
82.5°	34.7	37.4	41.4	42.8	44.1
85°	21.4	22.7	26.7	29.4	29.4
87.5°	9.4	10.7	13.4	16.0	17.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)