

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: P1061438

Luminaire Tested: S125RDR-S1090D830-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061438  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-86)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S1090D830-X4F0-XX-UDD-SVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

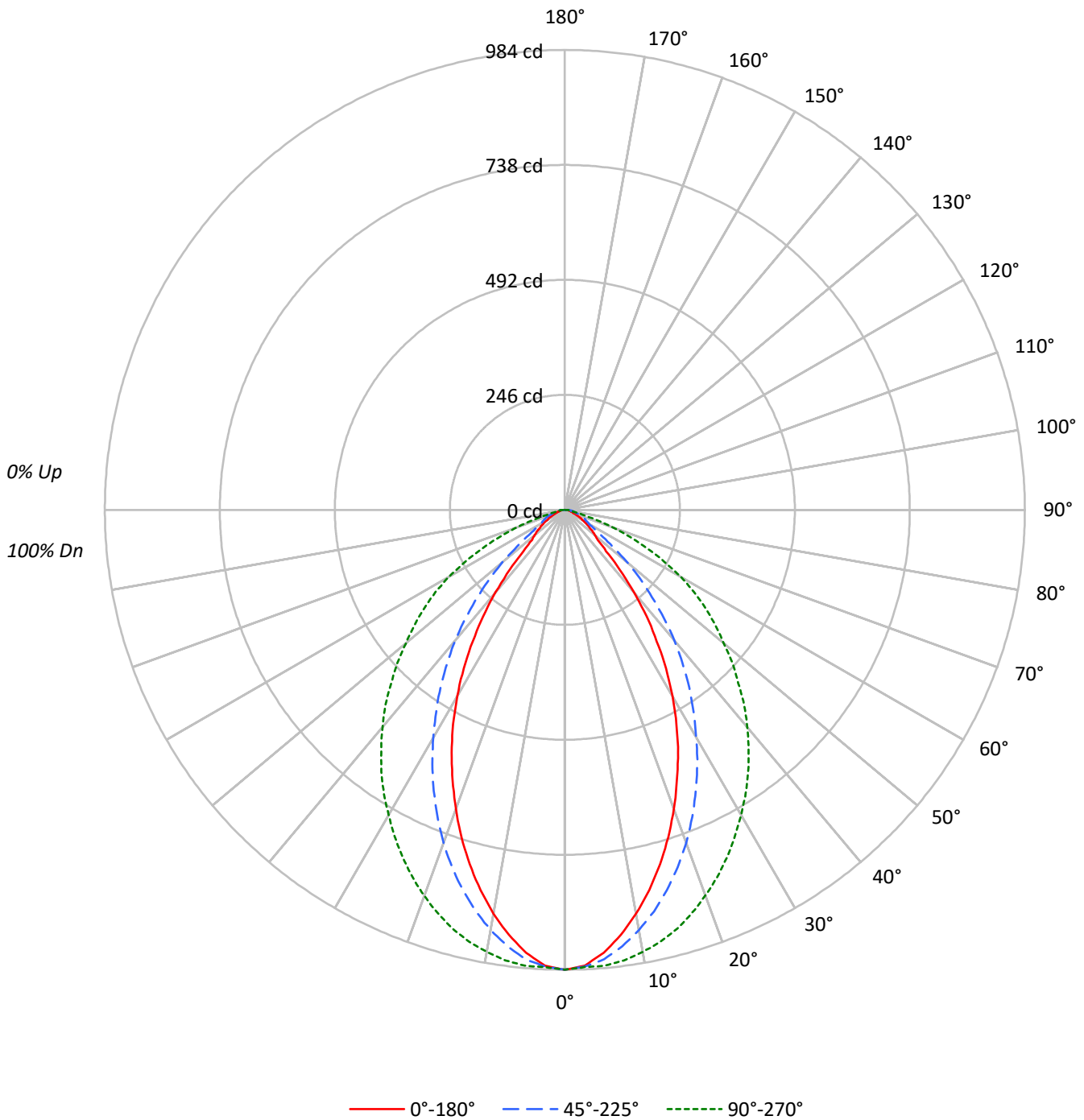
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1420.6 lumens  
Efficiency: N/A  
Efficacy: 40.6 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 35  
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: P1061438

CATALOG NUMBER: S125RDR-S1090D830-X4F0-XX-UDD-SVL-S

### Luminous Intensity Polar Plot





TEST NUMBER: P1061438

CATALOG NUMBER: S125RDR-S1090D830-X4F0-XX-UDD-SVL-S

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									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	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	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89													89															
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79													79															
3	96	88	81	76	94	87	80	76	84	79	74	81	77	73	79	75	72	70													70															
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	63													63															
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56													56															
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51													51															
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46													46															
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42													42															
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39													39															
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	47	41	38	36													36															

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

	0°	45°	90°
0°	6774	6774	6774
5°	6574	6671	6768
10°	6136	6381	6715
15°	5599	6006	6613
20°	4994	5558	6439
25°	4353	5036	6233
30°	3656	4472	5994
35°	2884	3894	5748
40°	2066	3273	5455
45°	1216	2569	5114
50°	900	1850	4751
55°	756	1121	4413
60°	610	819	3937
65°	476	780	3156
70°	399	729	2138
75°	372	652	931
80°	369	646	603
85°	458	829	648

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5114 cd/sqm



TEST NUMBER: P1061438

CATALOG NUMBER: S125RDR-S1090D830-X4F0-XX-UDD-SVL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.6	6.4
10°-20°	238.2	16.8
20°-30°	311.2	21.9
30°-40°	303.0	21.3
40°-50°	226.4	15.9
50°-60°	140.4	9.9
60°-70°	73.8	5.2
70°-80°	26.9	1.9
80°-90°	10.1	0.7
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°	640.0	45.1
0°-40°	943.0	66.4
0°-60°	1309.8	92.2
0°-90°	1420.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1420.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	984	984	984	984	984	
5°	951	964	965	971	979	88
15°	786	809	843	894	928	219
25°	573	602	663	753	820	262
35°	343	380	463	587	684	214
45°	125	163	264	412	525	105
55°	63	66	93	243	368	57
65°	29	32	48	103	194	30
75°	14	16	24	27	35	15
85°	6	10	10	10	8	6
90°	0	0	0	0	0	



TEST NUMBER: P1061438

CATALOG NUMBER: S125RDR-S1090D830-X4F0-XX-UDD-SVL-S

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	983.9	983.9	983.9	983.9	983.9
2.5°	975.7	983.9	978.0	978.0	979.2
5°	951.2	964.0	965.2	971.0	979.2
7.5°	917.3	932.5	941.8	959.4	972.2
10°	877.7	895.2	912.7	941.8	960.5
12.5°	833.3	854.3	880.0	919.7	946.5
15°	785.5	808.8	842.6	894.0	927.8
17.5°	735.3	759.8	801.8	863.7	904.5
20°	681.6	708.4	758.6	828.6	878.8
22.5°	626.7	657.1	711.9	791.3	850.8
25°	573.0	602.2	662.9	752.8	820.5
27.5°	517.0	547.4	613.9	713.1	787.8
30°	459.8	492.5	562.5	672.2	753.9
32.5°	402.6	436.5	512.4	630.2	720.1
35°	343.1	380.5	463.3	587.0	683.9
37.5°	287.1	326.8	413.2	542.7	645.4
40°	229.9	270.8	364.1	499.5	606.9
42.5°	173.9	215.9	313.9	455.2	568.4
45°	124.9	163.4	263.8	412.0	525.2
47.5°	95.7	117.9	217.1	367.6	486.7
50°	84.0	91.0	172.7	324.5	443.5
52.5°	73.5	78.2	128.4	282.4	406.1
55°	63.0	66.5	93.4	242.8	367.6
57.5°	53.7	57.2	71.2	206.6	328.0
60°	44.3	47.9	59.5	170.4	285.9
62.5°	37.3	38.5	53.7	136.6	239.3
65°	29.2	31.5	47.9	102.7	193.7
67.5°	24.5	25.7	42.0	73.5	149.4
70°	19.8	21.0	36.2	51.4	106.2
72.5°	17.5	17.5	30.3	37.3	67.7
75°	14.0	16.3	24.5	26.8	35.0
77.5°	11.7	16.3	21.0	19.8	18.7
80°	9.3	15.2	16.3	16.3	15.2
82.5°	8.2	12.8	14.0	12.8	11.7
85°	5.8	10.5	10.5	10.5	8.2
87.5°	4.7	9.3	8.2	8.2	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)