

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P1061925

Luminaire Tested: S125RDR-H1270D830-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061925  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H1270D830-X4F0-XX-UDD-SVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

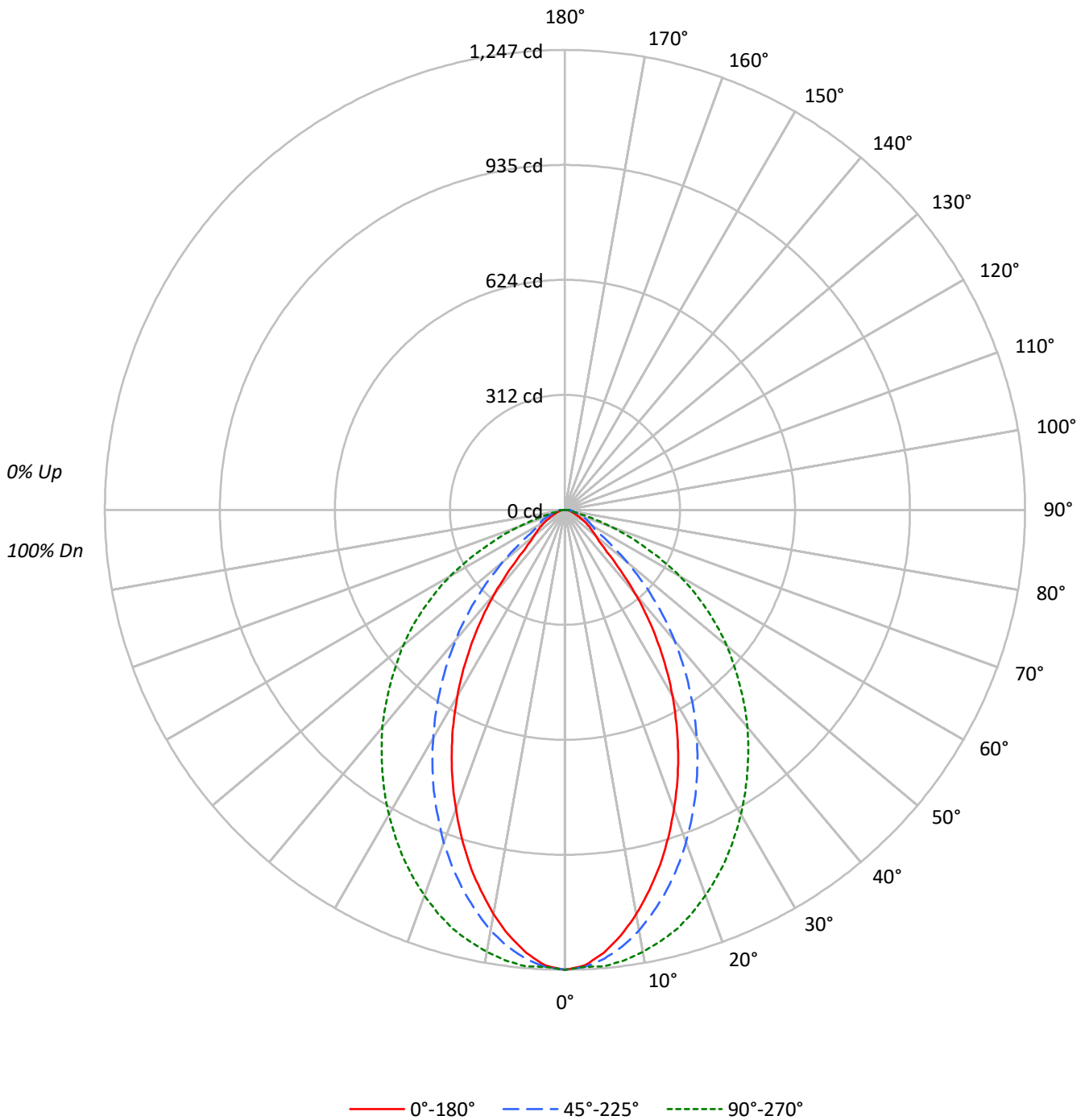
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1806.3 lumens  
Efficiency: N/A  
Efficacy: 49.5 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): 36.5  
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: P1061925

CATALOG NUMBER: S125RDR-H1270D830-X4F0-XX-UDD-SVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1061925

CATALOG NUMBER: S125RDR-H1270D830-X4F0-XX-UDD-SVL-W

**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	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89				89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79
3	96	88	81	76	94	86	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	62				62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56				56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	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	40	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36				36

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

	0°	45°	90°
0°	8586	8586	8586
5°	8335	8445	8582
10°	7782	8098	8505
15°	7103	7604	8378
20°	6331	7030	8156
25°	5517	6383	7893
30°	4636	5679	7585
35°	3687	4935	7251
40°	2656	4145	6920
45°	1575	3290	6516
50°	1164	2343	6132
55°	987	1448	5615
60°	803	1168	4945
65°	626	1080	3908
70°	533	934	2615
75°	495	811	1059
80°	527	841	737
85°	632	1256	837

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6516 cd/sqm



TEST NUMBER: P1061925

CATALOG NUMBER: S125RDR-H1270D830-X4F0-XX-UDD-SVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.9	6.4
10°-20°	301.9	16.7
20°-30°	394.5	21.8
30°-40°	384.3	21.3
40°-50°	288.3	16.0
50°-60°	180.7	10.0
60°-70°	94.1	5.2
70°-80°	34.1	1.9
80°-90°	13.5	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°	811.3	44.9
0°-40°	1195.7	66.2
0°-60°	1664.7	92.2
0°-90°	1806.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1806.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1247	1247	1247	1247	1247	
5°	1206	1222	1222	1231	1242	112
15°	996	1026	1067	1133	1175	278
25°	726	766	840	954	1039	332
35°	439	485	587	743	863	273
45°	162	209	338	522	669	136
55°	82	86	121	315	468	73
65°	38	41	66	127	240	40
75°	19	25	30	32	40	20
85°	8	13	16	15	11	8
90°	0	0	0	0	0	

TEST NUMBER: P1061925

CATALOG NUMBER: S125RDR-H1270D830-X4F0-XX-UDD-SVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1247.0	1247.0	1247.0	1247.0	1247.0
2.5°	1236.4	1248.3	1240.4	1240.4	1240.4
5°	1205.9	1221.8	1221.8	1231.1	1241.7
7.5°	1163.5	1182.1	1194.0	1216.5	1232.4
10°	1113.1	1135.7	1158.2	1195.3	1216.5
12.5°	1056.2	1082.7	1114.5	1166.2	1198.0
15°	996.5	1025.7	1066.8	1133.0	1175.4
17.5°	931.6	966.1	1015.1	1094.6	1146.3
20°	864.0	898.5	959.4	1049.5	1113.1
22.5°	796.4	833.5	899.8	1001.8	1077.4
25°	726.2	766.0	840.2	954.1	1038.9
27.5°	654.6	695.7	777.9	905.1	996.5
30°	583.1	625.5	714.3	852.1	954.1
32.5°	511.5	556.6	650.7	797.8	909.1
35°	438.6	485.0	587.1	743.4	862.7
37.5°	368.4	414.8	523.4	687.8	816.3
40°	295.5	345.9	461.2	632.1	769.9
42.5°	224.0	275.6	398.9	576.5	719.6
45°	161.7	209.4	337.9	522.1	669.2
47.5°	124.6	151.1	275.6	466.5	620.2
50°	108.7	116.6	218.7	414.8	572.5
52.5°	94.1	99.4	164.3	367.1	520.8
55°	82.2	86.1	120.6	315.4	467.8
57.5°	68.9	74.2	95.4	265.0	413.5
60°	58.3	61.0	84.8	218.7	359.1
62.5°	47.7	50.4	75.5	172.3	298.2
65°	38.4	41.1	66.3	127.2	239.9
67.5°	31.8	33.1	55.7	90.1	184.2
70°	26.5	27.8	46.4	62.3	129.9
72.5°	22.5	26.5	37.1	45.1	82.2
75°	18.6	25.2	30.5	31.8	39.8
77.5°	15.9	23.9	25.2	25.2	22.5
80°	13.3	19.9	21.2	19.9	18.6
82.5°	10.6	15.9	17.2	17.2	14.6
85°	8.0	13.3	15.9	14.6	10.6
87.5°	5.3	11.9	13.3	11.9	8.0
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061925  
 CATALOG NUMBER: S125RDR-H1270D830-X4F0-XX-UDD-SVL-W

**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	7.39	8.74	7.75	9.05	9.37	17.00	18.35	17.36	18.66	18.98
	3H	8.24	9.44	8.62	9.77	10.14	17.84	19.04	18.22	19.37	19.73
	4H	8.67	9.79	9.07	10.14	10.52	17.92	19.04	18.32	19.39	19.77
	6H	9.10	10.13	9.51	10.50	10.89	17.90	18.93	18.31	19.30	19.69
	8H	9.28	10.25	9.71	10.64	11.05	17.89	18.86	18.32	19.25	19.66
	12H	9.44	10.37	9.87	10.76	11.19	17.87	18.81	18.31	19.19	19.62
4H	2H	8.35	9.47	8.75	9.82	10.20	16.86	17.98	17.27	18.33	18.72
	3H	9.40	10.32	9.82	10.72	11.13	17.77	18.69	18.19	19.09	19.50
	4H	9.97	10.79	10.40	11.20	11.65	17.88	18.70	18.31	19.11	19.56
	6H	10.57	11.28	11.03	11.72	12.19	17.90	18.61	18.37	19.06	19.52
	8H	10.81	11.47	11.27	11.91	12.38	17.90	18.57	18.37	19.01	19.48
	12H	11.03	11.62	11.52	12.10	12.57	17.92	18.50	18.40	18.98	19.46
8H	4H	10.44	11.10	10.91	11.55	12.02	17.80	18.46	18.27	18.91	19.38
	6H	11.25	11.79	11.75	12.29	12.77	17.86	18.40	18.36	18.89	19.37
	8H	11.63	12.12	12.15	12.63	13.13	17.89	18.37	18.41	18.89	19.38
	12H	12.03	12.46	12.54	12.95	13.52	17.95	18.38	18.47	18.88	19.45
12H	4H	10.49	11.07	10.98	11.56	12.03	17.77	18.35	18.25	18.84	19.31
	6H	11.38	11.86	11.90	12.38	12.87	17.82	18.31	18.34	18.82	19.31
	8H	11.86	12.29	12.38	12.79	13.36	17.89	18.32	18.41	18.82	19.39