

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: P1061961

Luminaire Tested: S125RDR-H1270D927-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061961  
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-H1270D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

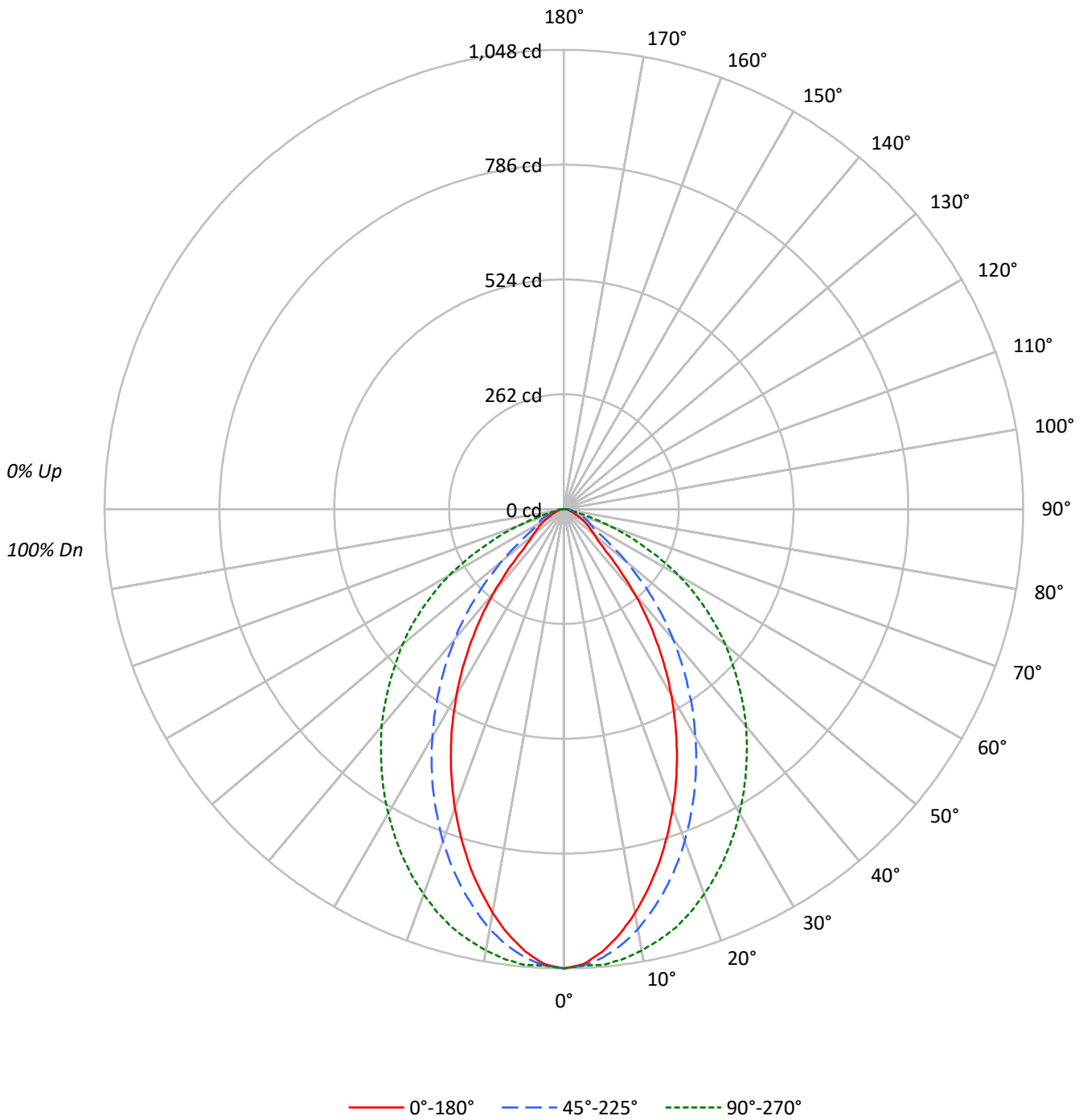
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1518.1 lumens  
Efficiency: N/A  
Efficacy: 41.6 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): 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

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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				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°	7216	7216	7216
5°	7005	7097	7213
10°	6541	6805	7148
15°	5971	6391	7042
20°	5321	5909	6855
25°	4636	5364	6634
30°	3896	4773	6375
35°	3099	4147	6095
40°	2233	3484	5816
45°	1323	2765	5477
50°	978	1969	5153
55°	829	1217	4720
60°	675	982	4156
65°	526	907	3284
70°	449	785	2196
75°	415	681	889
80°	440	706	619
85°	529	1059	703

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5477 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.6	6.4
10°-20°	253.7	16.7
20°-30°	331.6	21.8
30°-40°	323.0	21.3
40°-50°	242.3	16.0
50°-60°	151.9	10.0
60°-70°	79.1	5.2
70°-80°	28.6	1.9
80°-90°	11.3	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°	681.9	44.9
0°-40°	1004.9	66.2
0°-60°	1399.1	92.2
0°-90°	1518.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1518.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1048	1048	1048	1048	1048	
5°	1014	1027	1027	1035	1044	94
15°	838	862	897	952	988	234
25°	610	644	706	802	873	279
35°	369	408	493	625	725	229
45°	136	176	284	439	562	114
55°	69	72	101	265	393	62
65°	32	34	56	107	202	33
75°	16	21	26	27	33	17
85°	7	11	13	12	9	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1048.1	1048.1	1048.1	1048.1	1048.1
2.5°	1039.1	1049.2	1042.5	1042.5	1042.5
5°	1013.5	1026.9	1026.9	1034.7	1043.6
7.5°	977.9	993.5	1003.5	1022.4	1035.8
10°	935.6	954.5	973.4	1004.6	1022.4
12.5°	887.7	910.0	936.7	980.1	1006.8
15°	837.6	862.1	896.6	952.3	987.9
17.5°	783.0	811.9	853.1	920.0	963.4
20°	726.2	755.1	806.4	882.1	935.6
22.5°	669.4	700.6	756.3	842.0	905.5
25°	610.3	643.8	706.1	801.9	873.2
27.5°	550.2	584.7	653.8	760.7	837.6
30°	490.1	525.7	600.3	716.2	801.9
32.5°	429.9	467.8	546.9	670.5	764.0
35°	368.7	407.6	493.4	624.8	725.1
37.5°	309.6	348.6	439.9	578.0	686.1
40°	248.4	290.7	387.6	531.3	647.1
42.5°	188.2	231.7	335.2	484.5	604.8
45°	135.9	176.0	284.0	438.8	562.5
47.5°	104.7	127.0	231.7	392.0	521.2
50°	91.3	98.0	183.8	348.6	481.1
52.5°	79.1	83.5	138.1	308.5	437.7
55°	69.1	72.4	101.4	265.1	393.2
57.5°	57.9	62.4	80.2	222.8	347.5
60°	49.0	51.2	71.3	183.8	301.8
62.5°	40.1	42.3	63.5	144.8	250.6
65°	32.3	34.5	55.7	106.9	201.6
67.5°	26.7	27.8	46.8	75.7	154.8
70°	22.3	23.4	39.0	52.3	109.1
72.5°	18.9	22.3	31.2	37.9	69.1
75°	15.6	21.2	25.6	26.7	33.4
77.5°	13.4	20.0	21.2	21.2	18.9
80°	11.1	16.7	17.8	16.7	15.6
82.5°	8.9	13.4	14.5	14.5	12.3
85°	6.7	11.1	13.4	12.3	8.9
87.5°	4.5	10.0	11.1	10.0	6.7
90°	0.0	0.0	0.0	0.0	0.0

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**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	6.79	8.14	7.15	8.45	8.77	16.40	17.75	16.76	18.06	18.38
	3H	7.64	8.84	8.02	9.17	9.54	17.24	18.44	17.62	18.77	19.13
	4H	8.07	9.19	8.47	9.54	9.92	17.31	18.43	17.72	18.78	19.17
	6H	8.49	9.52	8.91	9.89	10.29	17.30	18.32	17.71	18.69	19.09
	8H	8.67	9.65	9.10	10.04	10.44	17.28	18.26	17.71	18.65	19.05
	12H	8.84	9.77	9.27	10.15	10.58	17.27	18.20	17.70	18.59	19.02
4H	2H	7.75	8.87	8.15	9.22	9.60	16.26	17.38	16.66	17.73	18.11
	3H	8.80	9.72	9.21	10.12	10.52	17.17	18.09	17.58	18.49	18.89
	4H	9.36	10.18	9.80	10.60	11.04	17.27	18.09	17.71	18.51	18.95
	6H	9.96	10.67	10.42	11.12	11.58	17.30	18.01	17.76	18.45	18.92
	8H	10.20	10.86	10.67	11.31	11.78	17.30	17.96	17.77	18.41	18.88
	12H	10.43	11.01	10.91	11.49	11.97	17.31	17.90	17.80	18.38	18.85
8H	4H	9.84	10.50	10.30	10.94	11.41	17.20	17.86	17.67	18.30	18.78
	6H	10.65	11.19	11.15	11.68	12.16	17.25	17.79	17.75	18.29	18.77
	8H	11.03	11.51	11.55	12.03	12.52	17.28	17.77	17.81	18.29	18.78
	12H	11.42	11.85	11.93	12.34	12.91	17.35	17.78	17.86	18.27	18.84
12H	4H	9.89	10.47	10.37	10.95	11.43	17.16	17.75	17.65	18.23	18.71
	6H	10.77	11.26	11.29	11.77	12.26	17.22	17.70	17.74	18.22	18.71
	8H	11.26	11.69	11.77	12.18	12.75	17.29	17.72	17.80	18.21	18.78