

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



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061942

Luminaire Tested: S125RDRP-H1270D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061942  
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: S125RDRP-H1270D840-X4F0-XX-UDD-SVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

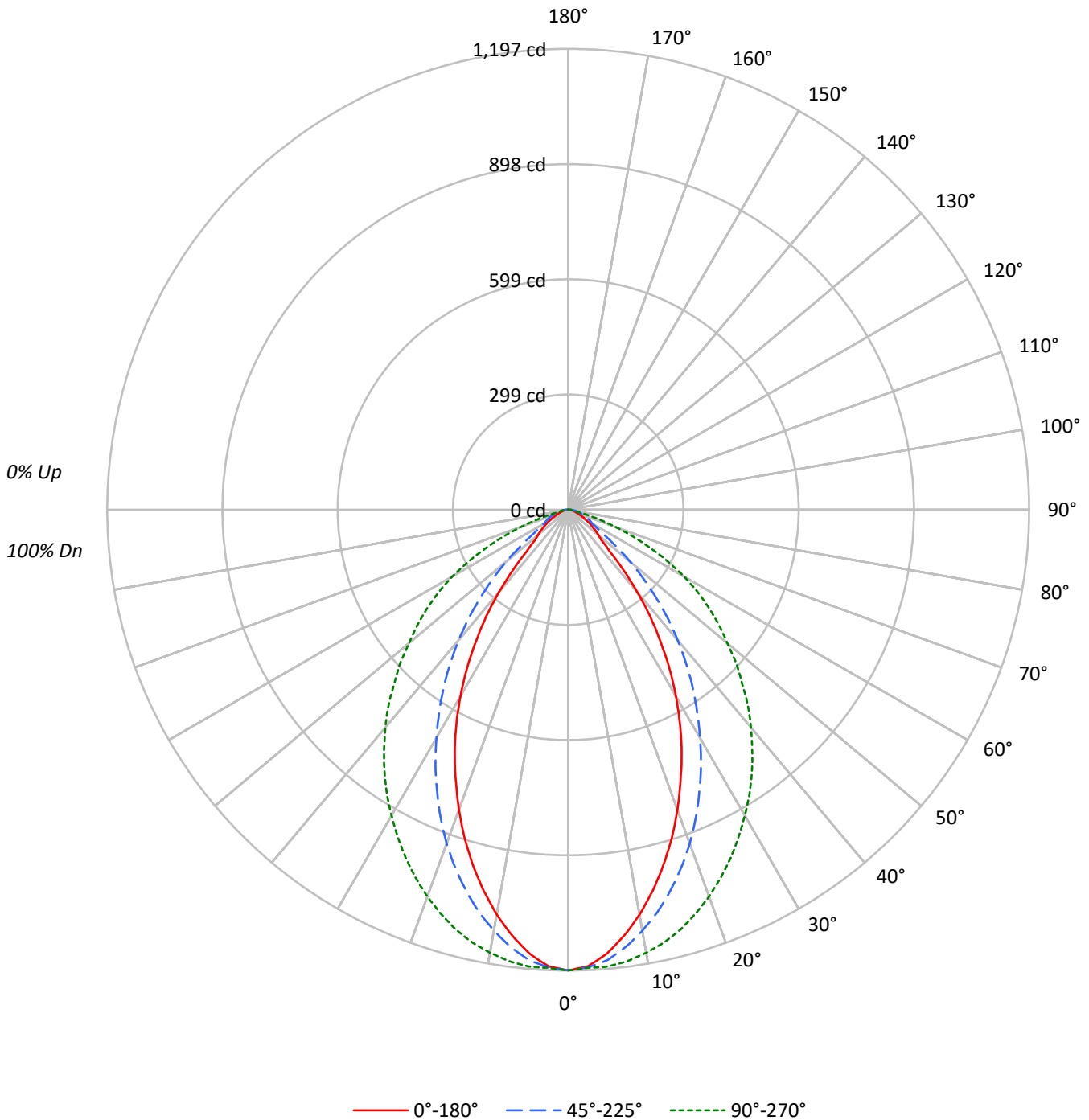
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1728.0 lumens  
Efficiency: N/A  
Efficacy: 47.3 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 (A<sub>in</sub>): 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79
3	96	88	81	76	94	87	80	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	63
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	47	41	38	36

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

	0°	45°	90°
0°	8240	8240	8240
5°	7997	8114	8232
10°	7463	7761	8168
15°	6810	7306	8045
20°	6074	6761	7833
25°	5295	6125	7582
30°	4447	5440	7291
35°	3508	4737	6992
40°	2514	3981	6635
45°	1479	3124	6220
50°	1095	2250	5778
55°	921	1364	5368
60°	742	997	4789
65°	578	948	3840
70°	485	886	2601
75°	452	793	1133
80°	452	789	734
85°	561	1011	782

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6220 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.3	6.4
10°-20°	289.7	16.8
20°-30°	378.6	21.9
30°-40°	368.5	21.3
40°-50°	275.4	15.9
50°-60°	170.8	9.9
60°-70°	89.7	5.2
70°-80°	32.7	1.9
80°-90°	12.3	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°	778.5	45.1
0°-40°	1147.0	66.4
0°-60°	1593.2	92.2
0°-90°	1728.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1728.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1197	1197	1197	1197	1197	
5°	1157	1173	1174	1181	1191	108
15°	955	984	1025	1087	1129	267
25°	697	732	806	916	998	318
35°	417	463	564	714	832	260
45°	152	199	321	501	639	128
55°	77	81	114	295	447	69
65°	36	38	58	125	236	37
75°	17	20	30	33	43	19
85°	7	13	13	13	10	8
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1196.7	1196.7	1196.7	1196.7	1196.7
2.5°	1186.8	1196.7	1189.6	1189.6	1191.0
5°	1157.0	1172.6	1174.0	1181.1	1191.0
7.5°	1115.8	1134.3	1145.6	1166.9	1182.5
10°	1067.5	1088.8	1110.1	1145.6	1168.3
12.5°	1013.6	1039.1	1070.4	1118.6	1151.3
15°	955.4	983.8	1024.9	1087.4	1128.6
17.5°	894.3	924.2	975.3	1050.5	1100.2
20°	829.0	861.7	922.7	1007.9	1069.0
22.5°	762.3	799.2	866.0	962.5	1034.9
25°	697.0	732.5	806.3	915.6	998.0
27.5°	628.9	665.8	746.7	867.4	958.2
30°	559.3	599.1	684.2	817.7	917.1
32.5°	489.8	530.9	623.2	766.6	875.9
35°	417.4	462.8	563.6	714.1	831.9
37.5°	349.2	397.5	502.5	660.1	785.0
40°	279.7	329.3	442.9	607.6	738.2
42.5°	211.5	262.6	381.9	553.6	691.3
45°	151.9	198.7	320.8	501.1	638.8
47.5°	116.4	143.4	264.0	447.2	592.0
50°	102.2	110.7	210.1	394.6	539.4
52.5°	89.4	95.1	156.2	343.5	494.0
55°	76.7	80.9	113.6	295.3	447.2
57.5°	65.3	69.6	86.6	251.3	398.9
60°	53.9	58.2	72.4	207.3	347.8
62.5°	45.4	46.8	65.3	166.1	291.0
65°	35.5	38.3	58.2	124.9	235.7
67.5°	29.8	31.2	51.1	89.4	181.7
70°	24.1	25.6	44.0	62.5	129.2
72.5°	21.3	21.3	36.9	45.4	82.3
75°	17.0	19.9	29.8	32.7	42.6
77.5°	14.2	19.9	25.6	24.1	22.7
80°	11.4	18.5	19.9	19.9	18.5
82.5°	9.9	15.6	17.0	15.6	14.2
85°	7.1	12.8	12.8	12.8	9.9
87.5°	5.7	11.4	9.9	9.9	7.1
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	7.12	8.47	7.48	8.78	9.09	16.82	18.17	17.18	18.48	18.80
	3H	7.95	9.15	8.33	9.48	9.85	17.73	18.93	18.11	19.26	19.62
	4H	8.31	9.43	8.72	9.78	10.16	17.83	18.95	18.23	19.30	19.68
	6H	8.69	9.72	9.10	10.08	10.48	17.81	18.84	18.23	19.21	19.60
	8H	8.87	9.84	9.30	10.23	10.64	17.80	18.78	18.23	19.17	19.57
	12H	9.03	9.96	9.46	10.34	10.77	17.79	18.72	18.22	19.10	19.53
4H	2H	7.95	9.06	8.35	9.41	9.80	16.67	17.79	17.07	18.14	18.52
	3H	9.00	9.92	9.41	10.32	10.72	17.66	18.57	18.07	18.98	19.38
	4H	9.46	10.28	9.89	10.69	11.14	17.79	18.61	18.22	19.02	19.47
	6H	10.02	10.72	10.48	11.17	11.63	17.82	18.53	18.28	18.97	19.44
	8H	10.28	10.94	10.74	11.38	11.85	17.82	18.48	18.29	18.93	19.40
	12H	10.52	11.10	11.00	11.58	12.06	17.83	18.41	18.31	18.89	19.37
8H	4H	10.01	10.67	10.48	11.12	11.59	17.71	18.37	18.18	18.82	19.29
	6H	10.79	11.33	11.30	11.83	12.31	17.77	18.31	18.27	18.81	19.29
	8H	11.21	11.69	11.73	12.21	12.70	17.80	18.29	18.32	18.80	19.29
	12H	11.63	12.05	12.14	12.55	13.12	17.85	18.28	18.37	18.78	19.35
12H	4H	10.07	10.66	10.56	11.14	11.61	17.68	18.26	18.16	18.74	19.22
	6H	10.94	11.42	11.46	11.94	12.43	17.74	18.22	18.26	18.74	19.23
	8H	11.46	11.89	11.98	12.39	12.96	17.80	18.23	18.32	18.73	19.30