

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: P1061580

Luminaire Tested: S125RDRP-S1270D940-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061580  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S1270D940-X4F0-XX-UDD-BVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

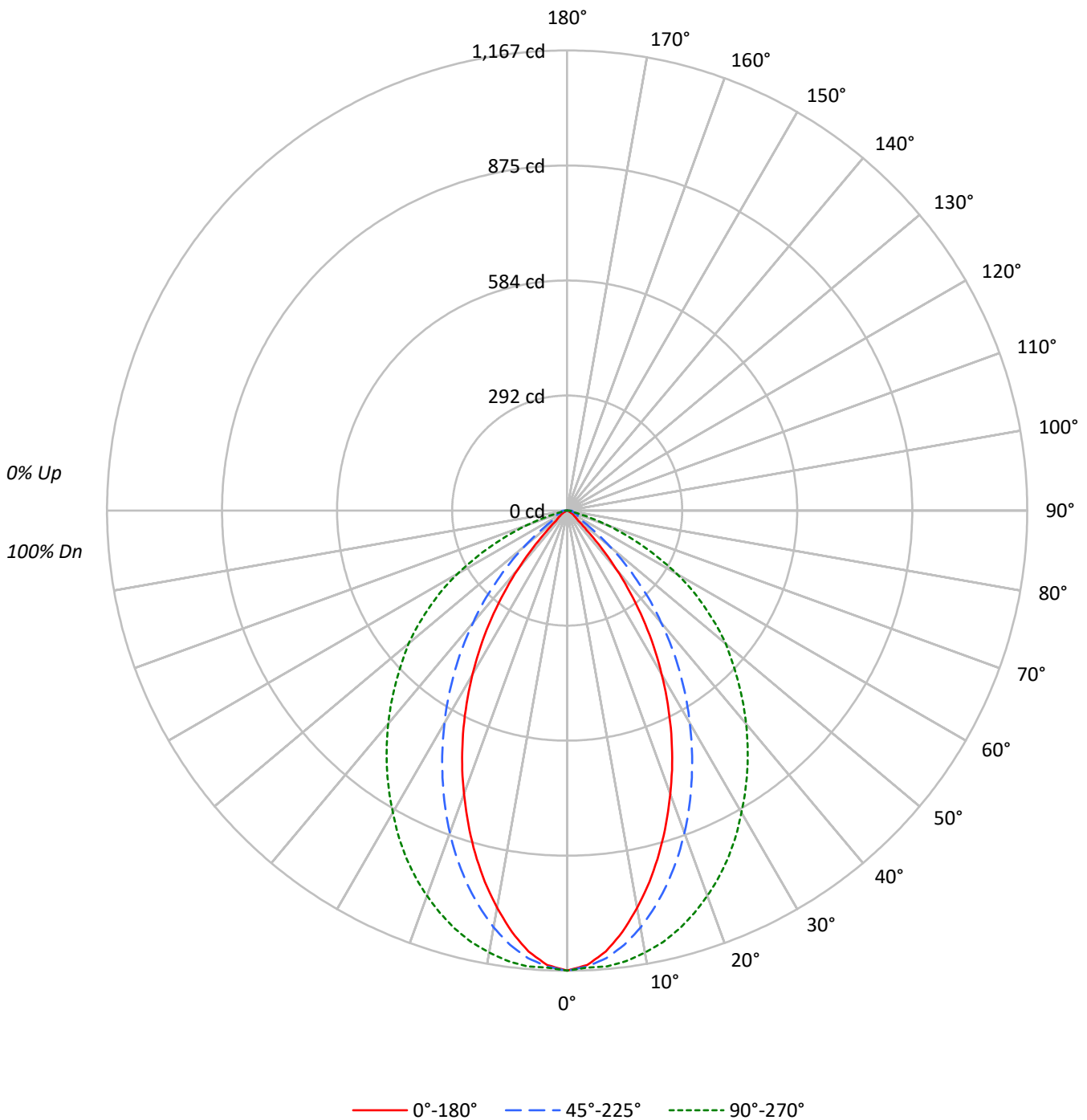
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1509.4 lumens  
Efficiency: N/A  
Efficacy: 36.1 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 41.8  
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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38

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

	0°	45°	90°
0°	8032	8032	8032
5°	7758	7875	8018
10°	7150	7504	7957
15°	6422	6986	7826
20°	5604	6373	7617
25°	4747	5682	7356
30°	3813	4947	7028
35°	2822	4173	6701
40°	1747	3332	6349
45°	682	2436	5970
50°	319	1527	5624
55°	233	653	5104
60°	161	464	4427
65°	106	485	3442
70°	105	443	2166
75°	138	450	689
80°	206	515	464
85°	308	1027	719

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5970 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.0	7.1
10°-20°	277.2	18.4
20°-30°	353.1	23.4
30°-40°	328.6	21.8
40°-50°	226.2	15.0
50°-60°	128.0	8.5
60°-70°	60.5	4.0
70°-80°	18.9	1.3
80°-90°	9.9	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°	737.2	48.8
0°-40°	1065.9	70.6
0°-60°	1420.1	94.1
0°-90°	1509.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1509.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1167	1167	1167	1167	1167	
5°	1122	1138	1139	1150	1160	104
15°	901	931	980	1054	1098	251
25°	625	665	748	874	968	285
35°	336	382	496	666	797	208
45°	70	112	250	452	613	66
55°	19	22	54	260	425	18
65°	6	8	30	93	211	7
75°	5	12	17	18	26	6
85°	4	10	13	12	9	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1166.6	1166.6	1166.6	1166.6	1166.6
2.5°	1153.7	1165.3	1157.5	1158.8	1160.1
5°	1122.5	1138.1	1139.4	1149.8	1160.1
7.5°	1077.2	1096.6	1110.9	1135.5	1152.4
10°	1022.7	1046.1	1073.3	1113.5	1138.1
12.5°	964.4	991.6	1029.2	1086.2	1121.2
15°	900.9	930.7	980.0	1053.8	1097.9
17.5°	833.5	867.2	926.8	1015.0	1070.7
20°	764.8	801.1	869.8	970.9	1039.6
22.5°	696.1	733.7	810.1	922.9	1005.9
25°	624.8	665.0	747.9	873.7	968.3
27.5°	552.2	593.7	685.7	823.1	928.1
30°	479.6	523.7	622.2	771.3	884.0
32.5°	408.3	452.4	560.0	719.4	841.3
35°	335.7	382.4	496.5	666.3	797.2
37.5°	263.1	313.7	434.2	611.8	751.8
40°	194.4	242.4	370.7	558.7	706.4
42.5°	129.6	176.3	313.7	505.5	659.8
45°	70.0	111.5	250.2	452.4	613.1
47.5°	37.6	59.6	195.7	400.5	567.8
50°	29.8	33.7	142.6	352.6	525.0
52.5°	24.6	27.2	93.3	307.2	475.7
55°	19.4	22.0	54.4	260.5	425.2
57.5°	15.6	18.1	35.0	216.5	375.9
60°	11.7	14.3	33.7	173.7	321.5
62.5°	9.1	10.4	31.1	133.5	264.4
65°	6.5	7.8	29.8	93.3	211.3
67.5°	5.2	6.5	27.2	59.6	158.1
70°	5.2	5.2	22.0	38.9	107.6
72.5°	5.2	9.1	19.4	25.9	64.8
75°	5.2	11.7	16.9	18.1	25.9
77.5°	5.2	13.0	14.3	14.3	14.3
80°	5.2	11.7	13.0	13.0	11.7
82.5°	5.2	10.4	11.7	13.0	10.4
85°	3.9	10.4	13.0	11.7	9.1
87.5°	3.9	10.4	11.7	10.4	6.5
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	0.00	0.00	0.00	0.00	0.10	16.48	17.78	16.85	18.09	18.40
	3H	0.00	0.00	0.00	0.12	0.49	17.20	18.35	17.58	18.68	19.04
	4H	0.00	0.62	0.00	0.97	1.36	17.23	18.29	17.63	18.64	19.02
	6H	0.83	1.80	1.24	2.17	2.57	17.18	18.15	17.59	18.52	18.92
	8H	1.47	2.39	1.90	2.78	3.19	17.15	18.08	17.59	18.47	18.87
	12H	2.06	2.94	2.50	3.33	3.76	17.14	18.02	17.57	18.40	18.83
4H	2H	0.99	2.05	1.39	2.40	2.79	16.28	17.34	16.68	17.69	18.07
	3H	1.80	2.67	2.22	3.07	3.48	17.03	17.90	17.44	18.30	18.71
	4H	2.82	3.59	3.25	4.01	4.46	17.06	17.83	17.50	18.25	18.70
	6H	4.10	4.77	4.57	5.22	5.68	17.04	17.71	17.50	18.15	18.62
	8H	4.68	5.31	5.15	5.75	6.23	17.02	17.65	17.49	18.09	18.57
	12H	5.25	5.80	5.74	6.28	6.76	17.03	17.58	17.52	18.06	18.54
8H	4H	4.23	4.86	4.70	5.30	5.78	16.94	17.57	17.41	18.01	18.49
	6H	5.80	6.31	6.30	6.81	7.29	16.93	17.44	17.44	17.94	18.42
	8H	6.60	7.05	7.12	7.57	8.06	16.95	17.40	17.47	17.92	18.41
	12H	7.44	7.84	7.95	8.34	8.91	17.01	17.41	17.52	17.91	18.48
12H	4H	4.46	5.01	4.94	5.49	5.96	16.90	17.45	17.39	17.93	18.41
	6H	6.17	6.63	6.70	7.15	7.64	16.89	17.34	17.41	17.86	18.35
	8H	7.17	7.57	7.68	8.06	8.64	16.94	17.34	17.45	17.83	18.41