

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: P1061481

Luminaire Tested: S125RDRP-S1090D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061481  
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-S1090D930-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: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

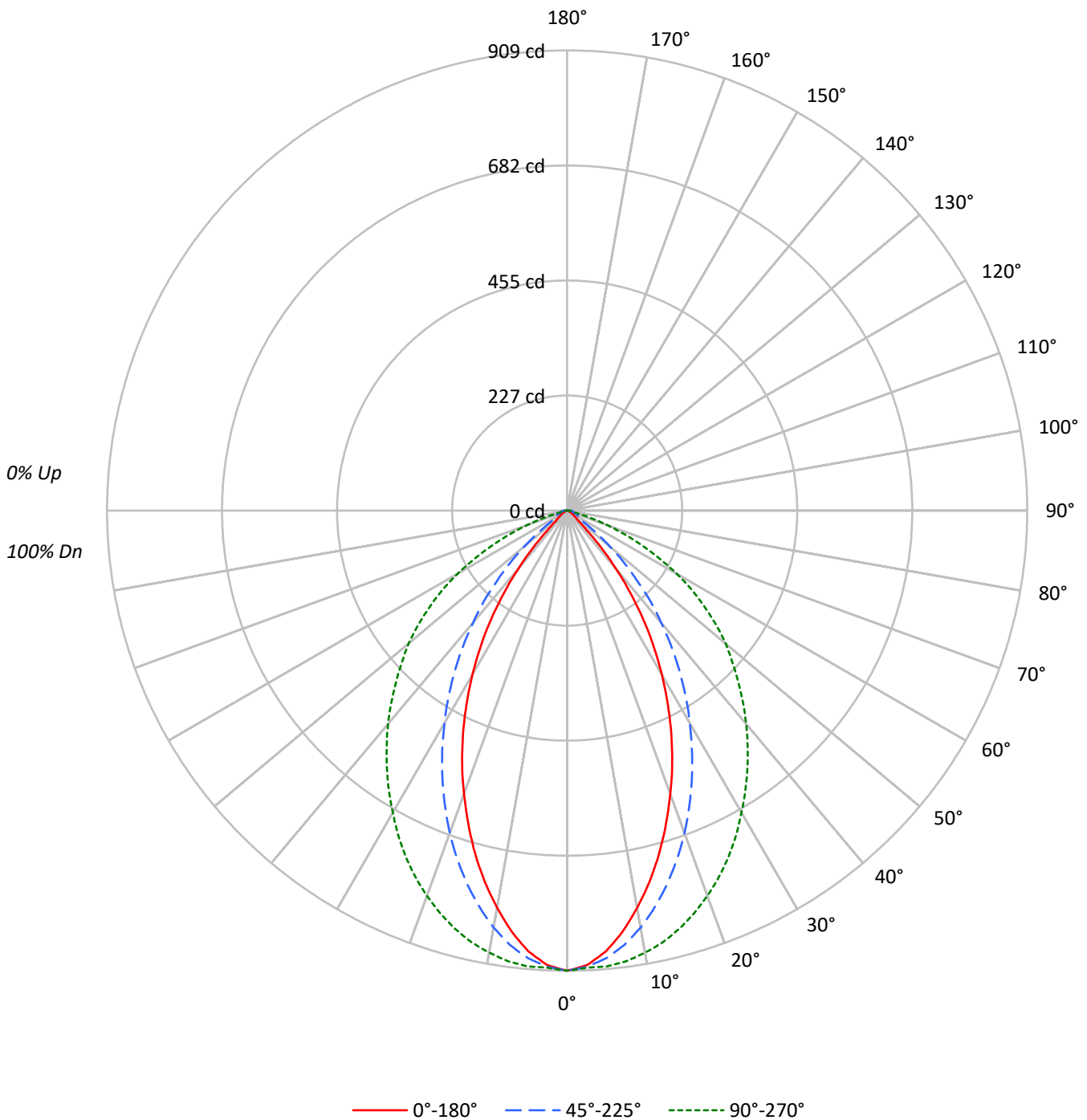
Lumens per Lamp: N/A  
Luminaire Lumens: 1175.9 lumens  
Efficiency: N/A  
Efficacy: 33.6 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 35  
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°	6258	6258	6258
5°	6044	6135	6247
10°	5571	5846	6199
15°	5003	5442	6097
20°	4365	4965	5934
25°	3697	4427	5731
30°	2970	3854	5475
35°	2199	3251	5221
40°	1362	2596	4947
45°	531	1898	4651
50°	249	1190	4381
55°	181	509	3976
60°	125	362	3448
65°	81	378	2682
70°	81	346	1687
75°	106	348	537
80°	159	400	361
85°	237	798	561

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4651 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.3	7.1
10°-20°	216.0	18.4
20°-30°	275.1	23.4
30°-40°	256.0	21.8
40°-50°	176.2	15.0
50°-60°	99.8	8.5
60°-70°	47.1	4.0
70°-80°	14.7	1.3
80°-90°	7.7	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°	574.4	48.8
0°-40°	830.4	70.6
0°-60°	1106.3	94.1
0°-90°	1175.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1175.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	909	909	909	909	909	
5°	874	887	888	896	904	81
15°	702	725	763	821	855	195
25°	487	518	583	681	754	222
35°	262	298	387	519	621	162
45°	54	87	195	352	478	51
55°	15	17	42	203	331	14
65°	5	6	23	73	165	6
75°	4	9	13	14	20	4
85°	3	8	10	9	7	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	908.9	908.9	908.9	908.9	908.9
2.5°	898.8	907.9	901.8	902.8	903.8
5°	874.5	886.6	887.7	895.7	903.8
7.5°	839.2	854.3	865.4	884.6	897.8
10°	796.8	814.9	836.2	867.5	886.6
12.5°	751.3	772.5	801.8	846.3	873.5
15°	701.8	725.1	763.4	821.0	855.3
17.5°	649.3	675.6	722.0	790.7	834.1
20°	595.8	624.1	677.6	756.4	809.9
22.5°	542.3	571.6	631.2	719.0	783.6
25°	486.7	518.1	582.7	680.6	754.4
27.5°	430.2	462.5	534.2	641.3	723.1
30°	373.6	408.0	484.7	600.9	688.7
32.5°	318.1	352.4	436.3	560.5	655.4
35°	261.6	297.9	386.8	519.1	621.1
37.5°	205.0	244.4	338.3	476.6	585.7
40°	151.5	188.8	288.8	435.2	550.4
42.5°	101.0	137.3	244.4	393.8	514.0
45°	54.5	86.8	194.9	352.4	477.7
47.5°	29.3	46.5	152.5	312.0	442.3
50°	23.2	26.3	111.1	274.7	409.0
52.5°	19.2	21.2	72.7	239.3	370.6
55°	15.1	17.2	42.4	203.0	331.2
57.5°	12.1	14.1	27.3	168.6	292.9
60°	9.1	11.1	26.3	135.3	250.4
62.5°	7.1	8.1	24.2	104.0	206.0
65°	5.0	6.1	23.2	72.7	164.6
67.5°	4.0	5.0	21.2	46.5	123.2
70°	4.0	4.0	17.2	30.3	83.8
72.5°	4.0	7.1	15.1	20.2	50.5
75°	4.0	9.1	13.1	14.1	20.2
77.5°	4.0	10.1	11.1	11.1	11.1
80°	4.0	9.1	10.1	10.1	9.1
82.5°	4.0	8.1	9.1	10.1	8.1
85°	3.0	8.1	10.1	9.1	7.1
87.5°	3.0	8.1	9.1	8.1	5.0
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	0.00	15.62	16.91	15.98	17.22	17.53
	3H	0.00	0.00	0.00	0.00	0.00	16.34	17.48	16.72	17.81	18.17
	4H	0.00	0.00	0.00	0.08	0.46	16.36	17.42	16.76	17.77	18.16
	6H	0.00	0.90	0.34	1.27	1.66	16.31	17.29	16.73	17.66	18.05
	8H	0.56	1.49	0.99	1.88	2.28	16.29	17.21	16.72	17.60	18.01
	12H	1.15	2.03	1.58	2.42	2.85	16.27	17.15	16.70	17.54	17.97
4H	2H	0.11	1.18	0.52	1.53	1.91	15.41	16.47	15.81	16.82	17.20
	3H	0.92	1.79	1.34	2.20	2.60	16.16	17.03	16.58	17.44	17.84
	4H	1.94	2.71	2.37	3.13	3.57	16.19	16.97	16.63	17.39	17.83
	6H	3.21	3.88	3.68	4.33	4.79	16.17	16.84	16.63	17.28	17.75
	8H	3.79	4.42	4.26	4.86	5.33	16.16	16.78	16.63	17.23	17.70
	12H	4.35	4.90	4.84	5.39	5.86	16.16	16.71	16.65	17.20	17.67
8H	4H	3.35	3.98	3.82	4.42	4.89	16.08	16.70	16.55	17.15	17.62
	6H	4.92	5.42	5.42	5.92	6.40	16.06	16.57	16.57	17.07	17.55
	8H	5.71	6.17	6.23	6.68	7.18	16.08	16.53	16.60	17.05	17.54
	12H	6.55	6.95	7.07	7.45	8.02	16.14	16.54	16.65	17.04	17.61
12H	4H	3.57	4.12	4.06	4.61	5.08	16.03	16.58	16.52	17.07	17.54
	6H	5.29	5.74	5.81	6.26	6.75	16.02	16.47	16.54	16.99	17.48
	8H	6.28	6.68	6.80	7.18	7.75	16.07	16.47	16.58	16.96	17.54