

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: P1061893

Luminaire Tested: S125RDRP-H1090D935-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061893  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-H1090D935-X4F0-XX-UDD-BVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

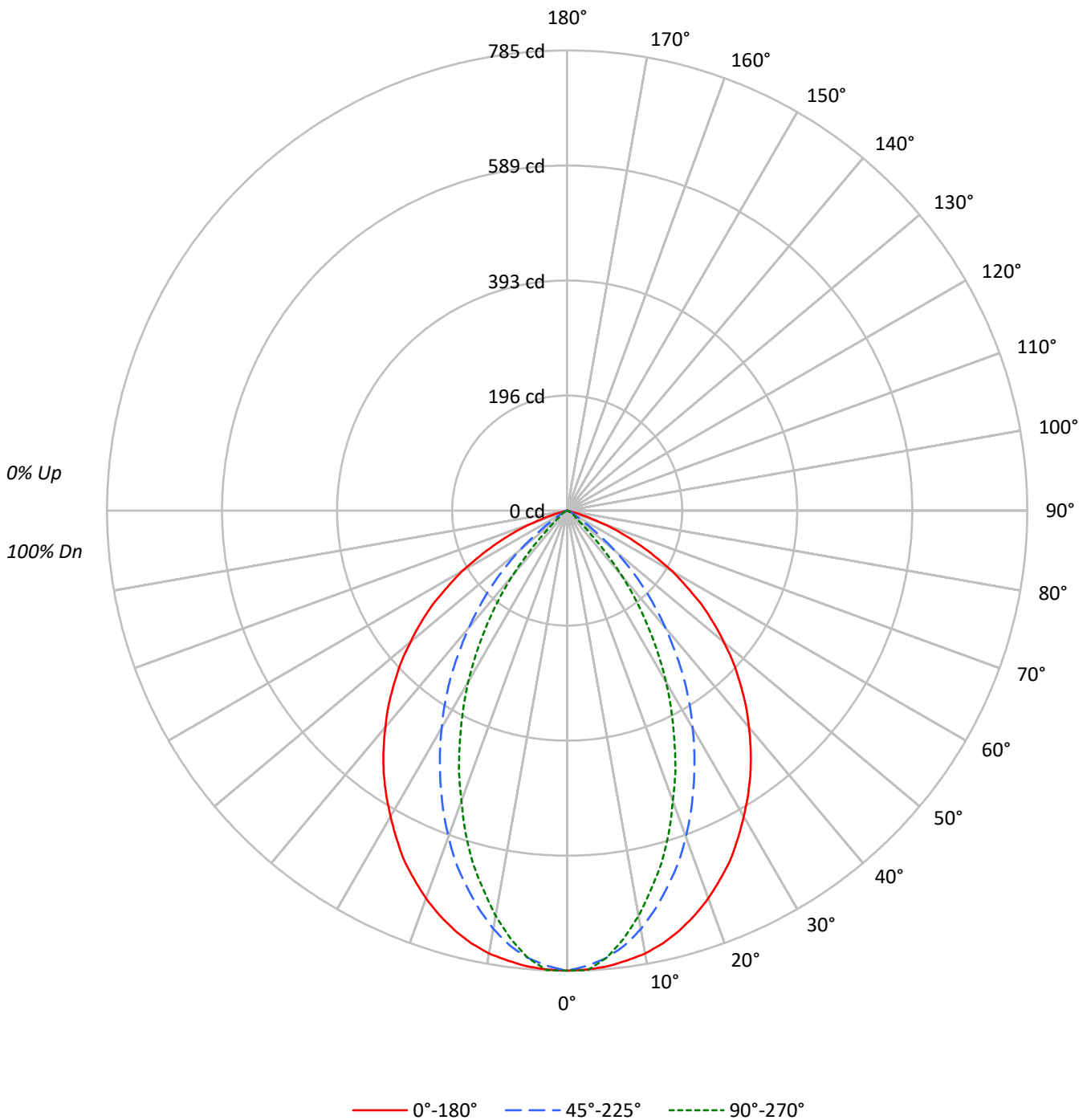
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1013.8 lumens  
Efficiency: N/A  
Efficacy: 32.5 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 31.2  
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	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

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

	0°	45°	90°
0°	5404	5404	5404
5°	5395	5295	5295
10°	5364	5067	4907
15°	5284	4730	4435
20°	5158	4339	3861
25°	5002	3885	3288
30°	4790	3408	2683
35°	4586	2907	2011
40°	4336	2345	1302
45°	4062	1774	565
50°	3737	1131	211
55°	3368	497	149
60°	2852	213	99
65°	2159	135	51
70°	1313	62	20
75°	277	27	27
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4062 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.3	7.1
10°-20°	188.6	18.6
20°-30°	242.1	23.9
30°-40°	227.9	22.5
40°-50°	159.4	15.7
50°-60°	85.1	8.4
60°-70°	34.0	3.3
70°-80°	4.4	0.4
80°-90°	0.0	0.0
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°	503.0	49.6
0°-40°	731.0	72.1
0°-60°	975.5	96.2
0°-90°	1013.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1013.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	785	785	785	785	785	
5°	781	778	766	768	766	74
15°	741	718	664	633	622	209
25°	658	600	511	456	433	302
35°	546	459	346	267	239	340
45°	417	313	182	88	58	322
55°	281	172	41	14	12	249
65°	132	53	8	4	3	132
75°	10	3	1	1	1	20
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	784.8	784.8	784.8	784.8	784.8
2.5°	783.7	784.8	777.5	783.7	784.8
5°	780.6	778.5	766.1	768.2	766.1
7.5°	774.4	769.2	748.5	741.3	737.1
10°	767.2	755.8	724.7	709.2	701.9
12.5°	755.8	739.2	695.7	671.9	661.6
15°	741.3	717.5	663.6	632.6	622.2
17.5°	723.7	692.6	630.5	592.2	576.7
20°	704.0	662.6	592.2	546.6	527.0
22.5°	681.2	633.6	552.8	502.1	482.4
25°	658.4	600.5	511.4	455.5	432.8
27.5°	630.5	566.3	470.0	410.0	385.1
30°	602.5	532.1	428.6	363.4	337.5
32.5°	574.6	495.9	387.2	314.7	288.8
35°	545.6	458.6	345.8	267.1	239.2
37.5°	514.5	421.4	301.3	221.6	192.6
40°	482.4	385.1	260.9	177.0	144.9
42.5°	451.4	348.9	220.5	133.6	98.4
45°	417.2	312.7	182.2	88.0	58.0
47.5°	385.1	277.5	142.9	50.7	30.0
50°	348.9	241.2	105.6	26.9	19.7
52.5°	314.7	206.0	70.4	17.6	15.5
55°	280.6	171.9	41.4	14.5	12.4
57.5°	241.2	138.7	22.8	11.4	9.3
60°	207.1	108.7	15.5	8.3	7.2
62.5°	167.7	79.7	11.4	6.2	5.2
65°	132.5	52.8	8.3	4.1	3.1
67.5°	98.4	31.1	5.2	2.1	2.1
70°	65.2	16.6	3.1	1.0	1.0
72.5°	34.2	7.2	2.1	1.0	1.0
75°	10.4	3.1	1.0	1.0	1.0
77.5°	0.0	1.0	0.0	0.0	1.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	14.80	16.07	15.17	16.38	16.69	0.00	0.00	0.00	0.00	0.00
	3H	15.39	16.50	15.77	16.83	17.20	0.00	0.00	0.00	0.00	0.00
	4H	15.35	16.39	15.76	16.74	17.12	0.00	0.00	0.00	0.00	0.00
	6H	15.27	16.21	15.68	16.58	16.98	0.00	0.00	0.00	0.00	0.00
	8H	15.22	16.11	15.65	16.51	16.91	0.00	0.00	0.00	0.00	0.00
	12H	15.18	16.03	15.61	16.41	16.84	0.00	0.00	0.00	0.00	0.00
4H	2H	14.58	15.61	14.98	15.96	16.35	0.00	0.00	0.00	0.00	0.00
	3H	15.17	16.01	15.58	16.41	16.81	0.00	0.00	0.00	0.00	0.00
	4H	15.12	15.86	15.56	16.28	16.73	0.00	0.00	0.00	0.00	0.00
	6H	15.03	15.67	15.50	16.12	16.59	0.00	0.00	0.00	0.00	0.00
	8H	14.97	15.57	15.44	16.01	16.49	0.00	0.00	0.00	0.00	0.00
	12H	14.92	15.44	15.41	15.93	16.40	0.00	0.00	0.00	0.00	0.00
8H	4H	14.97	15.57	15.44	16.01	16.49	0.00	0.00	0.00	0.00	0.00
	6H	14.87	15.35	15.37	15.84	16.33	0.00	0.00	0.00	0.00	0.00
	8H	14.80	15.23	15.32	15.75	16.24	0.00	0.00	0.00	0.00	0.00
	12H	14.75	15.13	15.27	15.63	16.20	0.00	0.00	0.00	0.00	0.00
12H	4H	14.92	15.44	15.41	15.93	16.40	0.00	0.00	0.00	0.00	0.00
	6H	14.80	15.23	15.32	15.75	16.24	0.00	0.00	0.00	0.00	0.00
	8H	14.75	15.13	15.27	15.63	16.20	0.00	0.00	0.00	0.00	0.00