

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: P1061701

Luminaire Tested: S125RDRP-S610D840-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061701  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S610D840-X4F0-XX-UDD-WVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

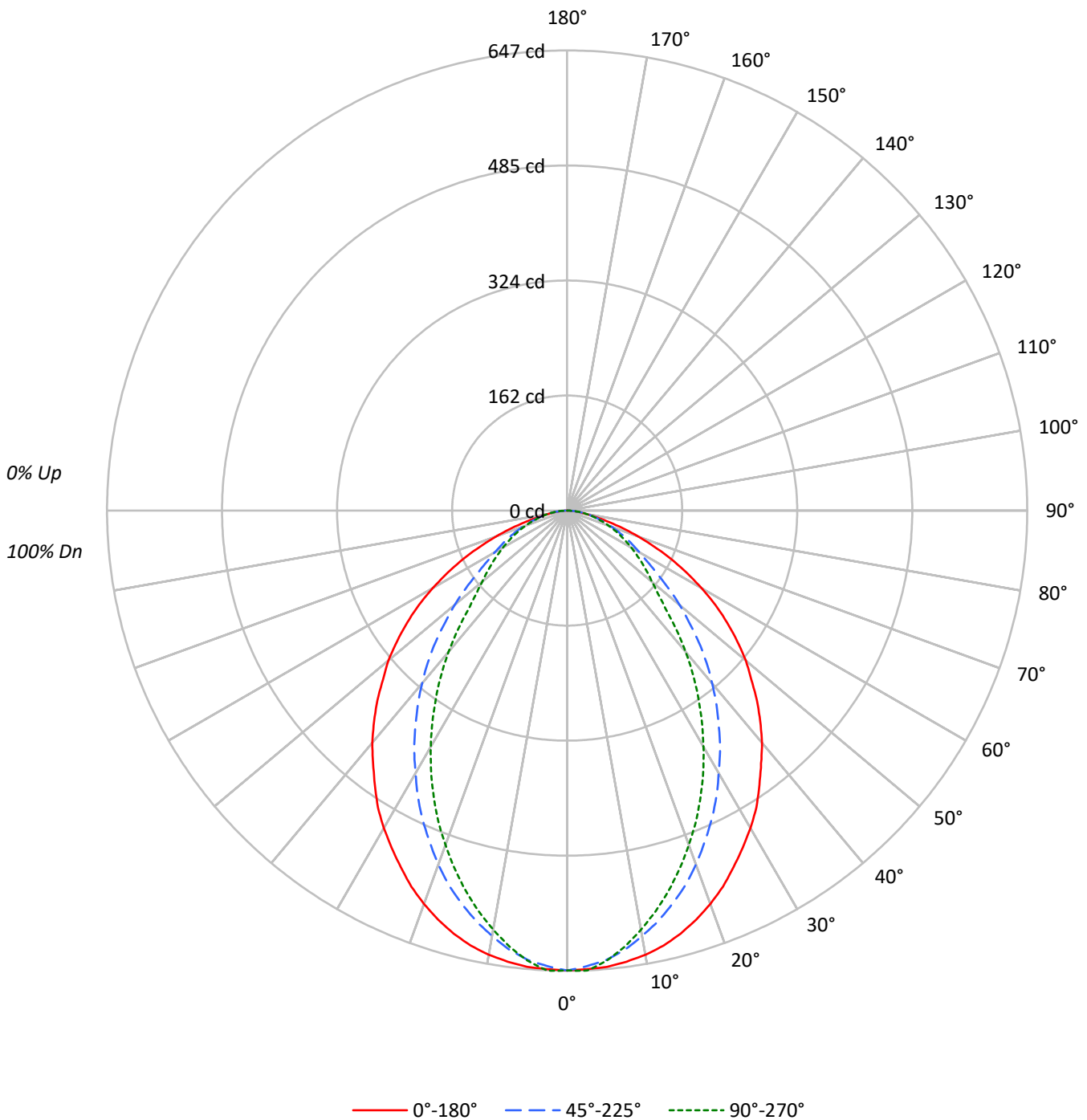
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1225.1 lumens  
Efficiency: N/A  
Efficacy: 62.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30

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

	0°	45°	90°
0°	4453	4453	4453
5°	4450	4383	4392
10°	4433	4247	4183
15°	4389	4079	3939
20°	4311	3880	3664
25°	4203	3649	3372
30°	4098	3388	3048
35°	3961	3128	2703
40°	3831	2853	2329
45°	3672	2550	1908
50°	3512	2211	1670
55°	3296	1846	1543
60°	3007	1615	1440
65°	2631	1476	1339
70°	2134	1329	1244
75°	1532	1213	1157
80°	1059	1086	1086
85°	774	940	995

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3672 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.1	4.9
10°-20°	162.6	13.3
20°-30°	224.8	18.3
30°-40°	239.4	19.5
40°-50°	210.3	17.2
50°-60°	159.5	13.0
60°-70°	103.6	8.5
70°-80°	51.3	4.2
80°-90°	13.4	1.1
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°	447.6	36.5
0°-40°	687.0	56.1
0°-60°	1056.8	86.3
0°-90°	1225.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1225.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	647	647	647	647	647	
5°	644	642	634	636	636	61
15°	616	602	572	559	553	173
25°	553	523	480	456	444	255
35°	471	428	372	338	322	295
45°	377	324	262	215	196	291
55°	275	220	154	133	128	245
65°	162	120	91	84	82	160
75°	58	51	46	44	44	64
85°	10	11	12	12	13	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	646.7	646.7	646.7	646.7	646.7
2.5°	645.3	646.7	641.1	646.0	647.4
5°	643.9	642.5	634.1	636.2	635.5
7.5°	639.7	636.9	622.8	621.4	618.6
10°	634.1	627.1	607.4	602.5	598.3
12.5°	626.4	615.1	591.2	581.4	576.5
15°	615.8	601.8	572.3	558.9	552.6
17.5°	603.2	583.5	552.6	534.4	527.3
20°	588.4	565.3	529.5	508.4	500.0
22.5°	572.3	544.9	504.9	482.4	473.3
25°	553.3	523.1	480.3	455.7	443.8
27.5°	534.4	500.7	454.3	426.9	414.3
30°	515.4	476.8	426.2	396.7	383.4
32.5°	495.0	452.2	400.3	367.9	352.5
35°	471.2	427.6	372.2	338.5	321.6
37.5°	448.0	401.7	344.8	306.9	290.7
40°	426.2	377.1	317.4	276.0	259.1
42.5°	401.7	351.1	290.0	246.5	227.5
45°	377.1	324.4	261.9	214.9	195.9
47.5°	351.1	299.1	232.4	186.1	173.4
50°	327.9	273.2	206.4	164.3	155.9
52.5°	301.2	247.9	179.8	147.5	141.8
55°	274.6	220.5	153.8	132.7	128.5
57.5°	247.2	195.9	133.4	120.1	115.9
60°	218.4	170.6	117.3	106.7	104.6
62.5°	189.6	144.7	103.2	95.5	92.7
65°	161.5	120.1	90.6	83.6	82.2
67.5°	132.7	97.6	77.9	73.0	72.3
70°	106.0	79.3	66.0	63.2	61.8
72.5°	81.5	63.2	55.5	53.4	52.7
75°	57.6	50.6	45.6	44.2	43.5
77.5°	38.6	38.6	36.5	35.1	35.8
80°	26.7	28.1	27.4	27.4	27.4
82.5°	17.6	19.0	19.7	19.7	19.7
85°	9.8	11.2	11.9	11.9	12.6
87.5°	3.5	4.2	4.9	5.6	5.6
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	15.74	17.23	16.11	17.55	17.86	11.99	13.48	12.35	13.79	14.11
	3H	17.05	18.39	17.43	18.72	19.08	13.57	14.90	13.95	15.23	15.59
	4H	17.42	18.68	17.82	19.02	19.40	14.17	15.42	14.57	15.77	16.15
	6H	17.60	18.75	18.01	19.12	19.51	14.64	15.80	15.05	16.16	16.56
	8H	17.64	18.74	18.06	19.13	19.53	14.80	15.90	15.23	16.29	16.69
	12H	17.65	18.70	18.08	19.08	19.51	14.91	15.97	15.34	16.35	16.78
4H	2H	15.85	17.11	16.25	17.46	17.83	12.65	13.90	13.05	14.25	14.63
	3H	17.34	18.38	17.75	18.78	19.18	14.43	15.47	14.84	15.87	16.27
	4H	17.82	18.75	18.25	19.17	19.61	15.14	16.08	15.58	16.49	16.93
	6H	18.10	18.91	18.56	19.36	19.82	15.73	16.54	16.19	16.99	17.45
	8H	18.17	18.93	18.64	19.37	19.84	15.94	16.70	16.40	17.14	17.61
	12H	18.21	18.89	18.70	19.37	19.84	16.09	16.77	16.58	17.25	17.72
8H	4H	17.90	18.66	18.36	19.10	19.57	15.46	16.21	15.92	16.66	17.12
	6H	18.26	18.89	18.76	19.38	19.86	16.16	16.79	16.66	17.28	17.76
	8H	18.38	18.94	18.89	19.45	19.94	16.44	17.00	16.96	17.51	18.00
	12H	18.47	18.96	18.98	19.45	20.02	16.67	17.17	17.18	17.66	18.22
12H	4H	17.89	18.57	18.38	19.05	19.52	15.48	16.16	15.96	16.64	17.11
	6H	18.27	18.83	18.78	19.34	19.83	16.21	16.77	16.73	17.29	17.77
	8H	18.43	18.92	18.94	19.41	19.98	16.55	17.05	17.06	17.54	18.10