

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: P1175420

Luminaire Tested: S125RDRP-H610D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1175420  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/18/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-H610D835-X4F0-XX-UDD-WVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

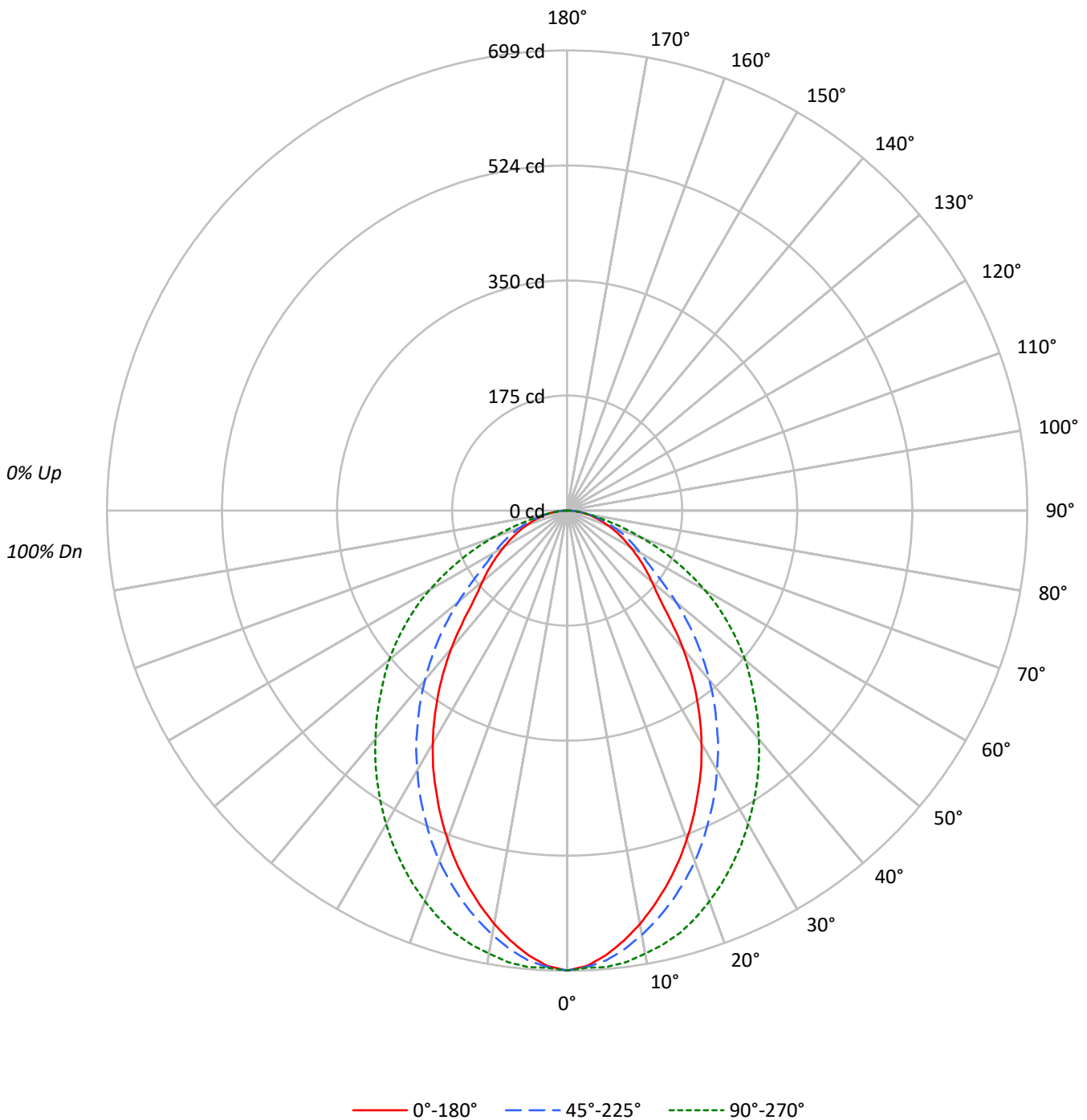
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1316.2 lumens  
Efficiency: N/A  
Efficacy: 75.6 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 17.4  
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	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30

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

	0°	45°	90°
0°	4810	4810	4810
5°	4685	4739	4808
10°	4458	4574	4777
15°	4189	4380	4731
20°	3894	4154	4628
25°	3577	3893	4506
30°	3244	3617	4371
35°	2871	3325	4227
40°	2463	3023	4072
45°	2021	2691	3915
50°	1797	2313	3780
55°	1659	1936	3588
60°	1527	1764	3324
65°	1421	1662	2937
70°	1325	1552	2400
75°	1248	1437	1798
80°	1178	1316	1293
85°	1074	1311	1074

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3915 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.7	4.9
10°-20°	174.3	13.2
20°-30°	239.8	18.2
30°-40°	254.4	19.3
40°-50°	222.6	16.9
50°-60°	170.8	13.0
60°-70°	113.8	8.6
70°-80°	58.3	4.4
80°-90°	17.3	1.3
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°	478.9	36.4
0°-40°	733.2	55.7
0°-60°	1126.7	85.6
0°-90°	1316.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1316.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	699	699	699	699	699	
5°	678	687	686	690	696	63
15°	588	601	614	644	664	165
25°	471	487	512	556	593	216
35°	342	358	396	454	503	213
45°	208	225	276	345	402	164
55°	138	141	161	240	299	124
65°	87	88	102	134	180	87
75°	47	50	54	57	68	50
85°	14	15	17	16	14	15
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	698.6	698.6	698.6	698.6	698.6
2.5°	692.1	699.2	693.9	694.5	695.1
5°	677.9	686.8	685.6	690.3	695.7
7.5°	658.9	668.4	671.4	683.2	691.5
10°	637.6	648.2	654.2	672.0	683.2
12.5°	613.2	625.7	635.2	658.3	674.9
15°	587.7	601.4	614.4	643.5	663.7
17.5°	560.5	574.1	591.3	624.5	648.8
20°	531.4	546.2	567.0	602.6	631.6
22.5°	501.7	517.2	540.9	580.0	613.2
25°	470.9	486.9	512.4	555.7	593.1
27.5°	440.7	455.5	485.1	531.4	572.3
30°	408.0	423.5	454.9	505.9	549.8
32.5°	375.4	390.8	427.0	480.4	526.7
35°	341.6	357.6	395.6	453.7	502.9
37.5°	307.8	324.4	366.5	426.4	478.6
40°	274.0	291.8	336.3	399.1	453.1
42.5°	239.6	258.6	305.4	372.5	428.2
45°	207.6	224.8	276.4	345.2	402.1
47.5°	184.4	194.5	245.5	317.3	377.2
50°	167.8	172.6	215.9	290.6	352.9
52.5°	153.0	156.0	186.8	265.7	326.2
55°	138.2	141.2	161.3	239.6	298.9
57.5°	124.0	125.7	142.3	213.5	271.6
60°	110.9	112.1	128.1	187.4	241.4
62.5°	99.0	99.6	114.5	160.7	211.1
65°	87.2	87.8	102.0	134.0	180.3
67.5°	76.5	76.5	90.1	109.7	150.6
70°	65.8	65.8	77.1	89.0	119.2
72.5°	56.3	57.5	65.2	71.8	93.1
75°	46.9	49.8	54.0	56.9	67.6
77.5°	38.0	41.5	43.3	44.5	45.1
80°	29.7	32.0	33.2	33.8	32.6
82.5°	21.9	23.7	24.3	24.3	22.5
85°	13.6	15.4	16.6	16.0	13.6
87.5°	6.5	8.9	9.5	8.3	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	12.07	13.57	12.44	13.88	14.20	16.10	17.60	16.46	17.91	18.22
	3H	13.66	15.00	14.04	15.33	15.69	17.48	18.83	17.86	19.16	19.52
	4H	14.30	15.56	14.70	15.91	16.29	17.89	19.15	18.29	19.50	19.88
	6H	14.81	15.98	15.22	16.34	16.74	18.10	19.26	18.51	19.63	20.02
	8H	14.99	16.10	15.42	16.49	16.89	18.15	19.26	18.58	19.65	20.05
	12H	15.12	16.18	15.55	16.56	16.99	18.19	19.25	18.62	19.63	20.06
4H	2H	12.84	14.10	13.24	14.45	14.83	16.23	17.49	16.63	17.84	18.22
	3H	14.62	15.67	15.03	16.07	16.47	17.80	18.84	18.21	19.24	19.65
	4H	15.39	16.33	15.82	16.75	17.19	18.31	19.25	18.74	19.66	20.10
	6H	16.03	16.85	16.49	17.29	17.75	18.63	19.45	19.09	19.90	20.36
	8H	16.26	17.03	16.72	17.47	17.94	18.73	19.50	19.20	19.94	20.41
	12H	16.43	17.12	16.91	17.59	18.07	18.80	19.49	19.29	19.97	20.44
8H	4H	15.77	16.54	16.24	16.98	17.45	18.41	19.17	18.87	19.62	20.08
	6H	16.55	17.19	17.05	17.68	18.15	18.83	19.46	19.32	19.95	20.43
	8H	16.87	17.44	17.38	17.95	18.43	18.99	19.55	19.50	20.06	20.55
	12H	17.13	17.63	17.64	18.12	18.69	19.12	19.62	19.63	20.12	20.68
12H	4H	15.81	16.50	16.30	16.98	17.45	18.41	19.09	18.89	19.57	20.04
	6H	16.63	17.20	17.14	17.71	18.19	18.84	19.41	19.35	19.92	20.41
	8H	17.01	17.51	17.52	18.00	18.57	19.05	19.55	19.56	20.04	20.61