

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: P1061710

Luminaire Tested: S125RDRP-S610D850-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

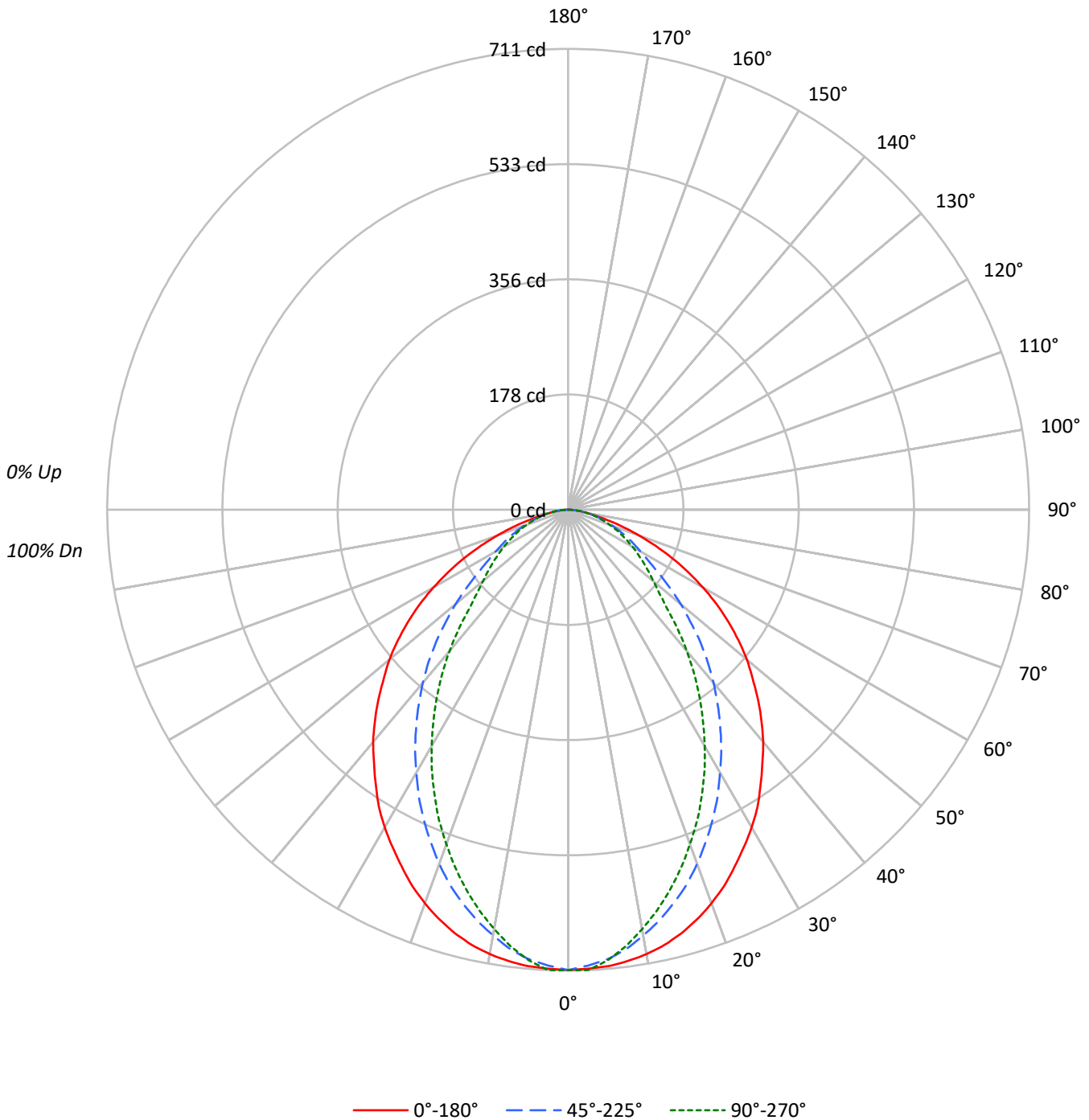
Test Method: LM-79-2024  
Report Number: P1061710  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S610D850-X4F0-XX-UDD-WVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1345.4 lumens  
Efficiency: N/A  
Efficacy: 68.6 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	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					100			
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87					87			
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75					75			
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65					65			
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57					57			
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50					50			
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45					45			
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40					40			
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36					36			
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33					33			
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30					30			

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

	0°	45°	90°
0°	4890	4890	4890
5°	4887	4813	4824
10°	4868	4663	4593
15°	4821	4480	4326
20°	4735	4260	4023
25°	4616	4007	3703
30°	4500	3722	3347
35°	4349	3435	2969
40°	4207	3132	2557
45°	4032	2800	2094
50°	3857	2428	1834
55°	3619	2027	1694
60°	3302	1774	1582
65°	2890	1621	1470
70°	2343	1460	1367
75°	1681	1333	1272
80°	1162	1193	1193
85°	853	1035	1098

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4032 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.0	4.9
10°-20°	178.6	13.3
20°-30°	246.9	18.3
30°-40°	262.9	19.5
40°-50°	231.0	17.2
50°-60°	175.1	13.0
60°-70°	113.7	8.5
70°-80°	56.3	4.2
80°-90°	14.8	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°	491.5	36.5
0°-40°	754.4	56.1
0°-60°	1160.6	86.3
0°-90°	1345.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1345.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	710	710	710	710	710	
5°	707	706	696	699	698	67
15°	676	661	628	614	607	190
25°	608	574	528	500	487	280
35°	517	470	409	372	353	324
45°	414	356	288	236	215	319
55°	302	242	169	146	141	269
65°	177	132	100	92	90	175
75°	63	56	50	49	48	71
85°	11	12	13	13	14	13
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	710.2	710.2	710.2	710.2	710.2
2.5°	708.7	710.2	704.0	709.4	711.0
5°	707.1	705.6	696.3	698.6	697.9
7.5°	702.5	699.4	684.0	682.4	679.4
10°	696.3	688.6	667.0	661.6	657.0
12.5°	687.8	675.5	649.3	638.5	633.1
15°	676.3	660.9	628.5	613.8	606.9
17.5°	662.4	640.8	606.9	586.8	579.1
20°	646.2	620.8	581.4	558.3	549.0
22.5°	628.5	598.4	554.4	529.8	519.7
25°	607.6	574.5	527.5	500.5	487.4
27.5°	586.8	549.8	498.9	468.8	455.0
30°	566.0	523.6	468.1	435.7	421.0
32.5°	543.6	496.6	439.5	404.1	387.1
35°	517.4	469.6	408.7	371.7	353.2
37.5°	492.0	441.1	378.6	337.0	319.2
40°	468.1	414.1	348.5	303.1	284.5
42.5°	441.1	385.6	318.5	270.7	249.8
45°	414.1	356.3	287.6	236.0	215.1
47.5°	385.6	328.5	255.2	204.3	190.5
50°	360.1	300.0	226.7	180.4	171.2
52.5°	330.8	272.2	197.4	161.9	155.8
55°	301.5	242.1	168.9	145.7	141.1
57.5°	271.4	215.1	146.5	131.9	127.2
60°	239.8	187.4	128.8	117.2	114.9
62.5°	208.2	158.9	113.4	104.9	101.8
65°	177.4	131.9	99.5	91.8	90.2
67.5°	145.7	107.2	85.6	80.2	79.4
70°	116.4	87.1	72.5	69.4	67.9
72.5°	89.5	69.4	60.9	58.6	57.8
75°	63.2	55.5	50.1	48.6	47.8
77.5°	42.4	42.4	40.1	38.6	39.3
80°	29.3	30.8	30.1	30.1	30.1
82.5°	19.3	20.8	21.6	21.6	21.6
85°	10.8	12.3	13.1	13.1	13.9
87.5°	3.9	4.6	5.4	6.2	6.2
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	16.07	17.56	16.43	17.87	18.19	12.31	13.80	12.68	14.12	14.43
	3H	17.38	18.71	17.76	19.04	19.40	13.89	15.23	14.27	15.56	15.92
	4H	17.75	19.00	18.15	19.35	19.73	14.50	15.75	14.90	16.10	16.48
	6H	17.92	19.08	18.34	19.45	19.84	14.97	16.12	15.38	16.49	16.88
	8H	17.96	19.06	18.39	19.45	19.85	15.13	16.23	15.55	16.62	17.02
	12H	17.97	19.03	18.40	19.41	19.84	15.24	16.29	15.67	16.67	17.10
4H	2H	16.18	17.43	16.58	17.78	18.16	12.97	14.22	13.37	14.57	14.95
	3H	17.67	18.70	18.08	19.10	19.51	14.75	15.79	15.16	16.19	16.59
	4H	18.14	19.07	18.57	19.49	19.93	15.47	16.40	15.90	16.82	17.26
	6H	18.43	19.24	18.88	19.68	20.14	16.06	16.87	16.52	17.31	17.78
	8H	18.50	19.25	18.96	19.70	20.17	16.27	17.02	16.73	17.47	17.94
	12H	18.54	19.21	19.02	19.69	20.16	16.42	17.10	16.90	17.57	18.05
8H	4H	18.22	18.98	18.69	19.43	19.89	15.78	16.54	16.25	16.98	17.45
	6H	18.59	19.21	19.08	19.70	20.18	16.49	17.11	16.99	17.61	18.08
	8H	18.70	19.26	19.22	19.77	20.26	16.77	17.33	17.28	17.84	18.33
	12H	18.79	19.29	19.30	19.78	20.34	17.00	17.49	17.51	17.99	18.55
12H	4H	18.22	18.89	18.70	19.37	19.84	15.81	16.48	16.29	16.96	17.43
	6H	18.59	19.15	19.11	19.66	20.15	16.54	17.10	17.05	17.61	18.10
	8H	18.75	19.24	19.26	19.74	20.30	16.88	17.37	17.39	17.86	18.43