

Scaled data based on original data using  
LM-79-2019 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: S125RDR-S610D850-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

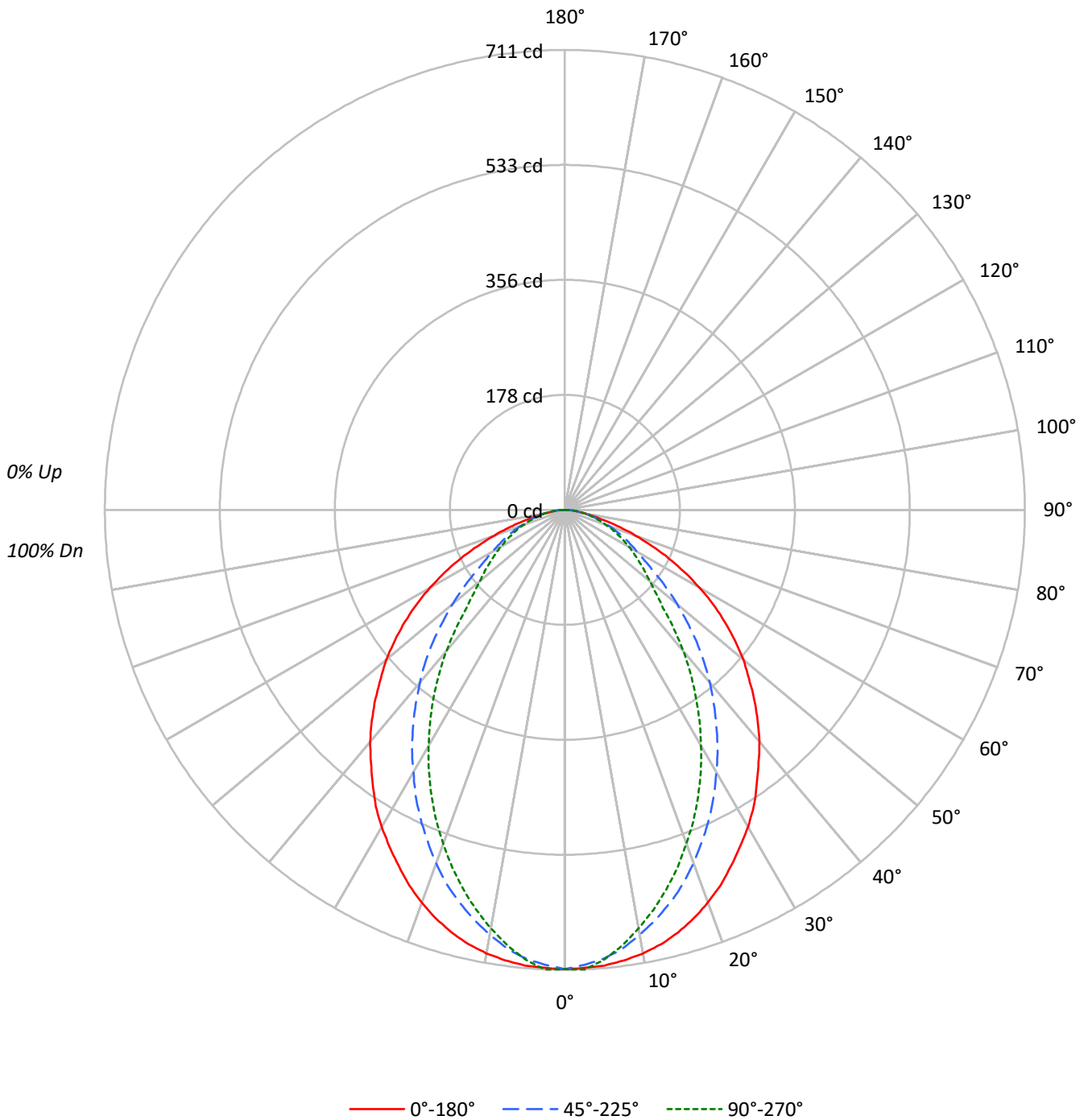
Test Method: LM-79-2019  
Report Number: P1061710  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S610D850-X4F0-XX-UDD-WVL-B  
Description: 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 (Ain): 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	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	
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	75	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°	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

(END OF REPORT)