

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: P1061697

Luminaire Tested: S125RDR-S610D840-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061697  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S610D840-X4F0-XX-UDD-BVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

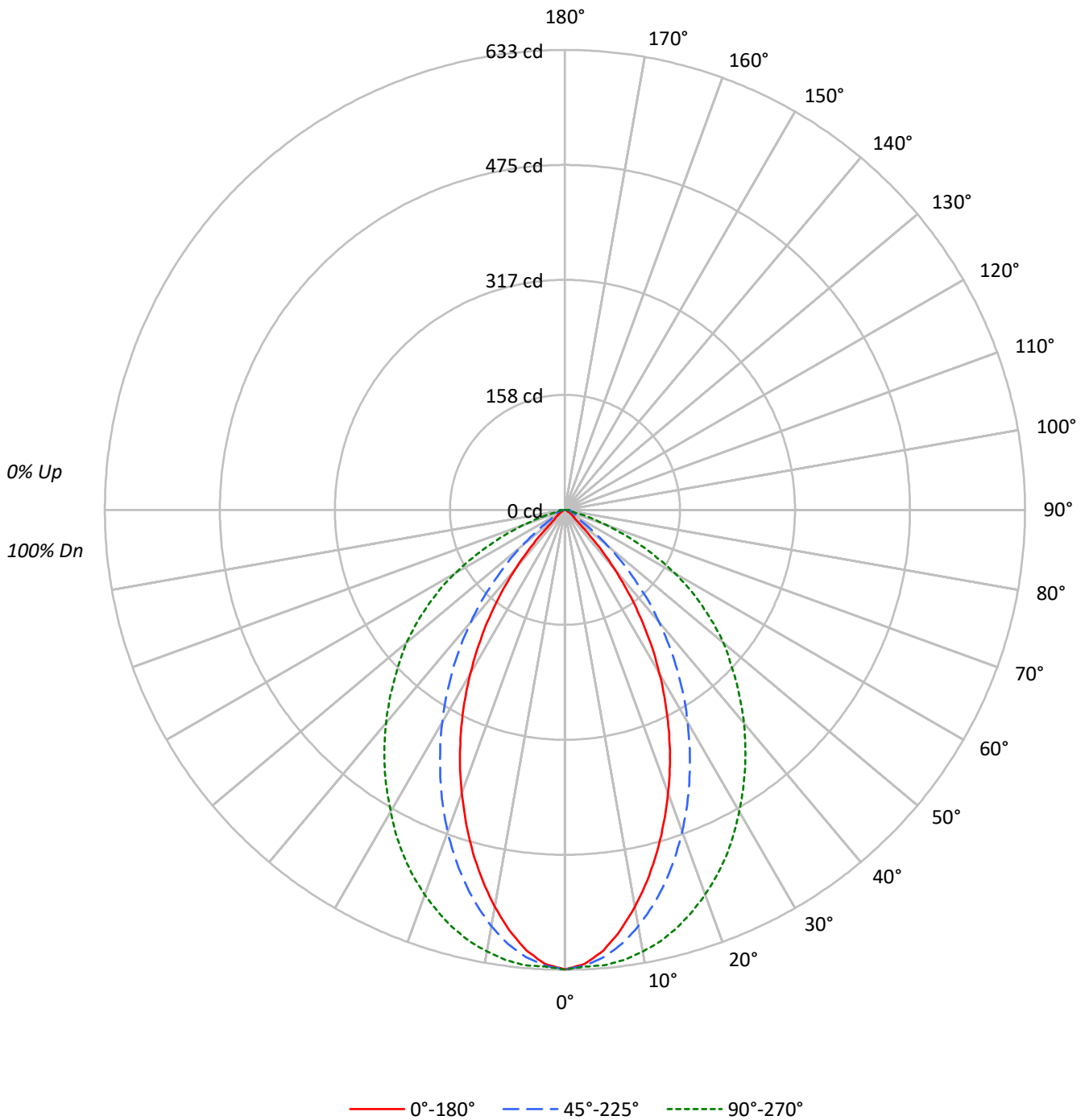
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 818.4 lumens  
Efficiency: N/A  
Efficacy: 41.8 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98  
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				
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80				
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72				
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65				
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59				
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53				
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49				
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45				
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41				
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38				

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

	0°	45°	90°
0°	4356	4356	4356
5°	4207	4271	4348
10°	3877	4069	4315
15°	3482	3788	4244
20°	3039	3456	4130
25°	2574	3081	3989
30°	2068	2682	3811
35°	1531	2263	3634
40°	947	1807	3443
45°	370	1321	3238
50°	174	828	3050
55°	126	354	2768
60°	87	252	2400
65°	57	264	1867
70°	56	240	1174
75°	74	242	375
80°	111	278	250
85°	166	553	387

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3238 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.0	7.1
10°-20°	150.3	18.4
20°-30°	191.5	23.4
30°-40°	178.2	21.8
40°-50°	122.7	15.0
50°-60°	69.4	8.5
60°-70°	32.8	4.0
70°-80°	10.2	1.3
80°-90°	5.3	0.7
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°	399.8	48.8
0°-40°	578.0	70.6
0°-60°	770.1	94.1
0°-90°	818.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	818.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	633	633	633	633	633	
5°	609	617	618	624	629	56
15°	488	505	531	572	595	136
25°	339	361	406	474	525	154
35°	182	207	269	361	432	113
45°	38	60	136	245	332	36
55°	10	12	30	141	231	10
65°	4	4	16	51	115	4
75°	3	6	9	10	14	3
85°	2	6	7	6	5	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	632.6	632.6	632.6	632.6	632.6
2.5°	625.6	631.9	627.7	628.4	629.1
5°	608.7	617.2	617.9	623.5	629.1
7.5°	584.1	594.7	602.4	615.8	624.9
10°	554.6	567.3	582.0	603.8	617.2
12.5°	523.0	537.7	558.1	589.0	608.0
15°	488.5	504.7	531.4	571.5	595.4
17.5°	452.0	470.2	502.6	550.4	580.6
20°	414.7	434.4	471.7	526.5	563.7
22.5°	377.5	397.8	439.3	500.5	545.5
25°	338.8	360.6	405.6	473.8	525.1
27.5°	299.4	321.9	371.8	446.4	503.3
30°	260.1	284.0	337.4	418.2	479.4
32.5°	221.4	245.3	303.7	390.1	456.2
35°	182.1	207.4	269.2	361.3	432.3
37.5°	142.7	170.1	235.5	331.8	407.7
40°	105.4	131.4	201.0	303.0	383.1
42.5°	70.3	95.6	170.1	274.1	357.8
45°	38.0	60.5	135.7	245.3	332.5
47.5°	20.4	32.3	106.1	217.2	307.9
50°	16.2	18.3	77.3	191.2	284.7
52.5°	13.4	14.8	50.6	166.6	258.0
55°	10.5	11.9	29.5	141.3	230.6
57.5°	8.4	9.8	19.0	117.4	203.8
60°	6.3	7.7	18.3	94.2	174.3
62.5°	4.9	5.6	16.9	72.4	143.4
65°	3.5	4.2	16.2	50.6	114.6
67.5°	2.8	3.5	14.8	32.3	85.8
70°	2.8	2.8	11.9	21.1	58.3
72.5°	2.8	4.9	10.5	14.1	35.1
75°	2.8	6.3	9.1	9.8	14.1
77.5°	2.8	7.0	7.7	7.7	7.7
80°	2.8	6.3	7.0	7.0	6.3
82.5°	2.8	5.6	6.3	7.0	5.6
85°	2.1	5.6	7.0	6.3	4.9
87.5°	2.1	5.6	6.3	5.6	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)