

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: P1061704

Luminaire Tested: S125RDR-S610D850-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061704
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S610D850-X4F0-XX-UDD-BVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

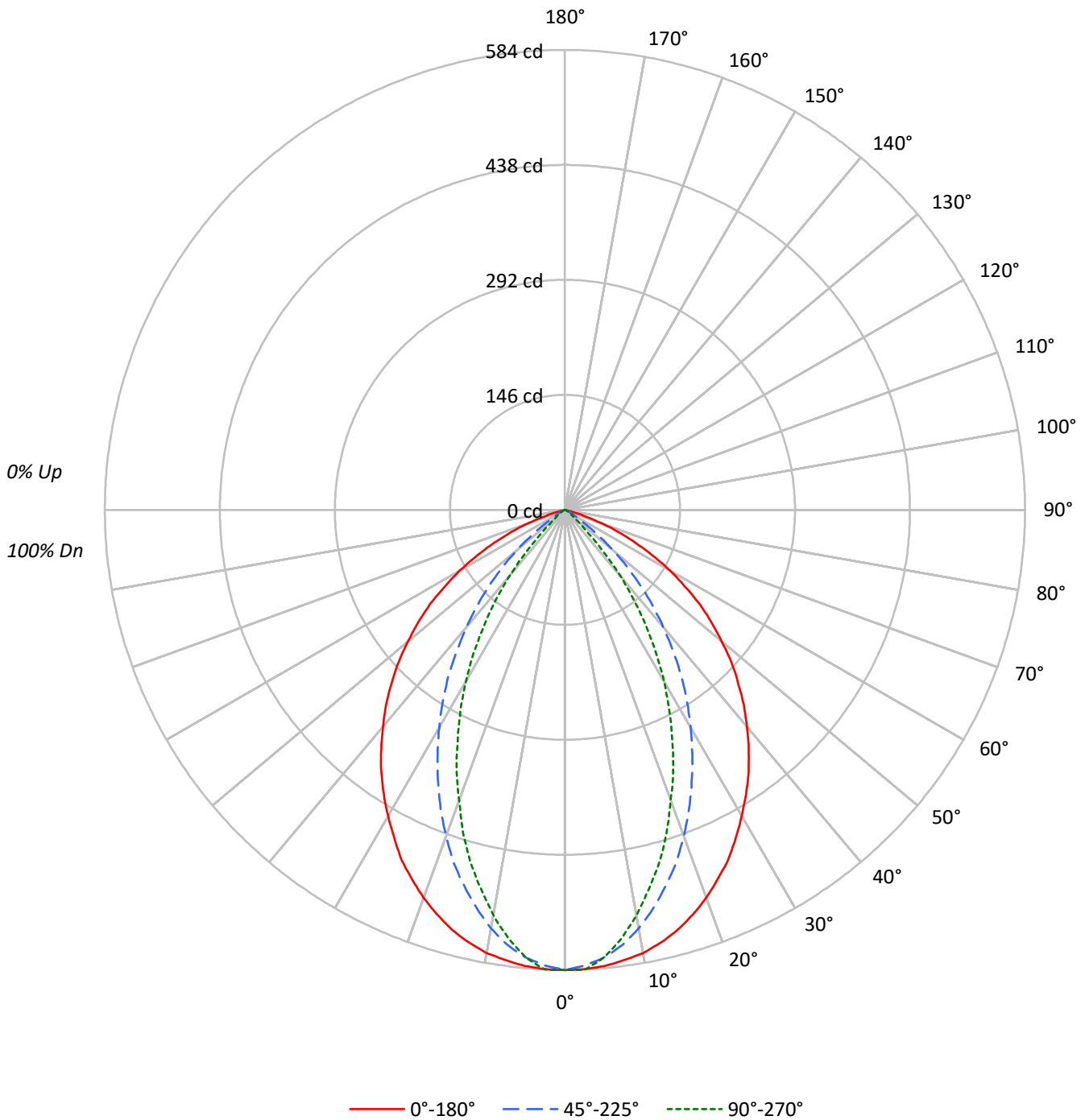
Lumens per Lamp: N/A
Luminaire Lumens: 755.1 lumens
Efficiency: N/A
Efficacy: 38.5 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1061704

CATALOG NUMBER: S125RDR-S610D850-X4F0-XX-UDD-BVL-B

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	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91				
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82				
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73				
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66				
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54				
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50				
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42				
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4024	4024	4024
5°	4018	3944	3944
10°	3995	3774	3655
15°	3935	3523	3303
20°	3842	3232	2876
25°	3726	2894	2449
30°	3568	2538	1999
35°	3416	2164	1497
40°	3229	1746	971
45°	3026	1321	421
50°	2784	843	157
55°	2509	370	112
60°	2123	160	74
65°	1608	101	37
70°	978	46	16
75°	205	21	21
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3026 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.9	7.1
10°-20°	140.5	18.6
20°-30°	180.3	23.9
30°-40°	169.8	22.5
40°-50°	118.7	15.7
50°-60°	63.4	8.4
60°-70°	25.3	3.3
70°-80°	3.3	0.4
80°-90°	0.0	0.0
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°	374.7	49.6
0°-40°	544.4	72.1
0°-60°	726.5	96.2
0°-90°	755.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	755.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	584	584	584	584	584	
5°	581	580	571	572	571	55
15°	552	534	494	471	463	155
25°	490	447	381	339	322	225
35°	406	342	258	199	178	254
45°	311	233	136	66	43	240
55°	209	128	31	11	9	185
65°	99	39	6	3	2	98
75°	8	2	1	1	1	15
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	584.5	584.5	584.5	584.5	584.5
2.5°	583.7	584.5	579.1	583.7	584.5
5°	581.4	579.9	570.6	572.2	570.6
7.5°	576.8	572.9	557.5	552.1	549.0
10°	571.4	562.9	539.8	528.2	522.8
12.5°	562.9	550.6	518.2	500.4	492.7
15°	552.1	534.4	494.3	471.1	463.4
17.5°	539.0	515.9	469.6	441.1	429.5
20°	524.3	493.5	441.1	407.1	392.5
22.5°	507.4	471.9	411.8	374.0	359.3
25°	490.4	447.2	380.9	339.3	322.3
27.5°	469.6	421.8	350.1	305.4	286.8
30°	448.8	396.3	319.2	270.7	251.4
32.5°	428.0	369.4	288.4	234.4	215.1
35°	406.4	341.6	257.5	198.9	178.1
37.5°	383.2	313.8	224.4	165.0	143.4
40°	359.3	286.8	194.3	131.9	108.0
42.5°	336.2	259.9	164.2	99.5	73.3
45°	310.8	232.9	135.7	65.5	43.2
47.5°	286.8	206.7	106.4	37.8	22.4
50°	259.9	179.7	78.7	20.0	14.7
52.5°	234.4	153.4	52.4	13.1	11.6
55°	209.0	128.0	30.8	10.8	9.3
57.5°	179.7	103.3	17.0	8.5	6.9
60°	154.2	81.0	11.6	6.2	5.4
62.5°	124.9	59.4	8.5	4.6	3.9
65°	98.7	39.3	6.2	3.1	2.3
67.5°	73.3	23.1	3.9	1.5	1.5
70°	48.6	12.3	2.3	0.8	0.8
72.5°	25.4	5.4	1.5	0.8	0.8
75°	7.7	2.3	0.8	0.8	0.8
77.5°	0.0	0.8	0.0	0.0	0.8
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)