

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: P1175377

Luminaire Tested: S125RDR-S610D850-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2019
Report Number: P1175377
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: S125RDR-S610D850-X4F0-XX-UDD-WVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

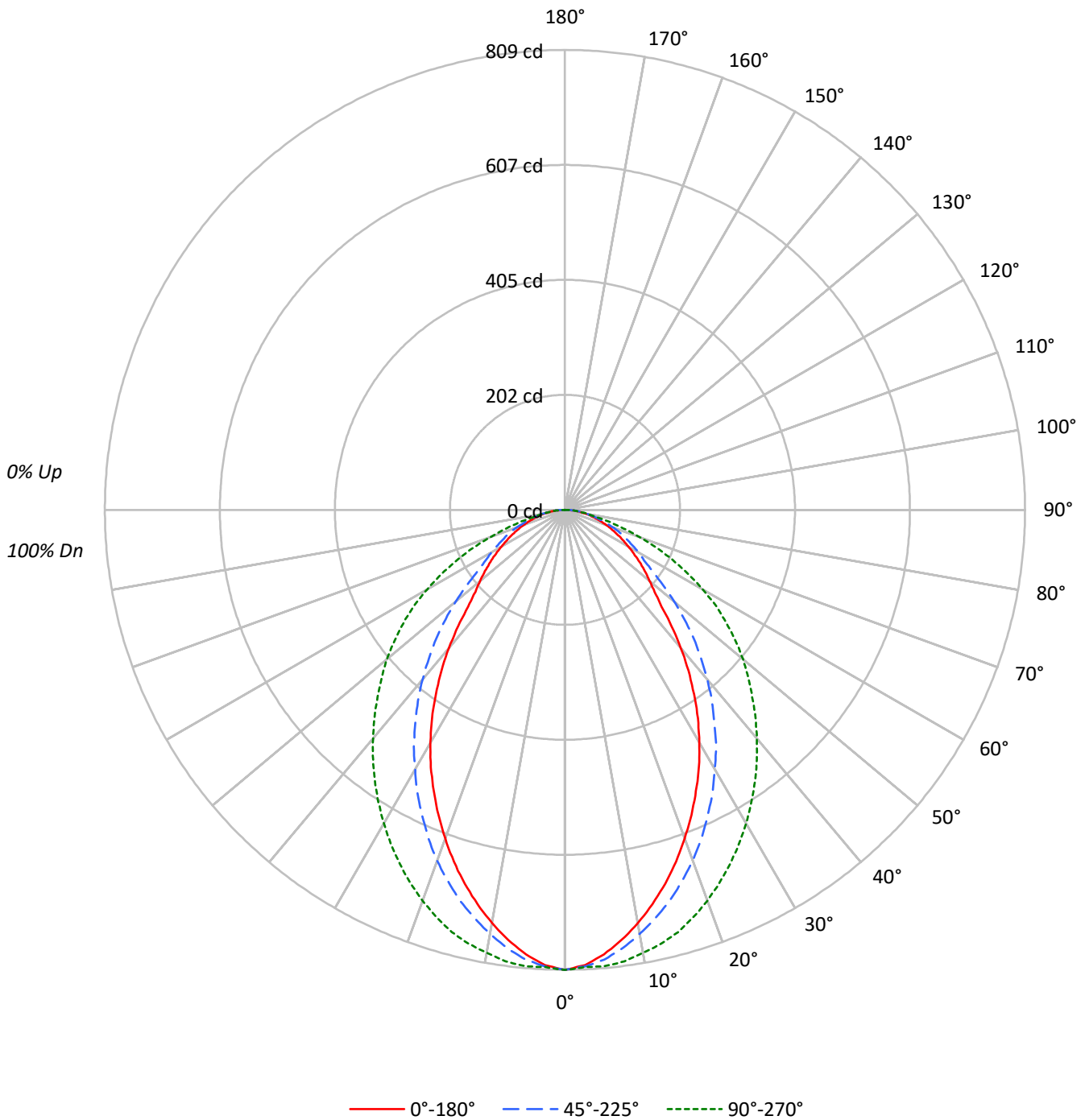
Lumens per Lamp: N/A
Luminaire Lumens: 1524.5 lumens
Efficiency: N/A
Efficacy: 77.8 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	5572	5572	5572
5°	5426	5488	5569
10°	5162	5297	5532
15°	4852	5072	5479
20°	4510	4812	5361
25°	4143	4509	5218
30°	3757	4189	5063
35°	3326	3851	4896
40°	2853	3501	4717
45°	2341	3117	4535
50°	2082	2678	4378
55°	1922	2242	4156
60°	1770	2044	3850
65°	1645	1924	3402
70°	1534	1798	2780
75°	1445	1663	2083
80°	1360	1527	1499
85°	1248	1517	1248

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4535 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.9	4.9
10°-20°	201.9	13.2
20°-30°	277.8	18.2
30°-40°	294.6	19.3
40°-50°	257.9	16.9
50°-60°	197.9	13.0
60°-70°	131.8	8.6
70°-80°	67.6	4.4
80°-90°	20.1	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°	554.6	36.4
0°-40°	849.3	55.7
0°-60°	1305.0	85.6
0°-90°	1524.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1524.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	809	809	809	809	809	
5°	785	795	794	800	806	73
15°	681	696	712	745	769	191
25°	545	564	594	644	687	250
35°	396	414	458	526	582	247
45°	240	260	320	400	466	190
55°	160	164	187	278	346	144
65°	101	102	118	155	209	101
75°	54	58	62	66	78	58
85°	16	18	19	18	16	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	809.2	809.2	809.2	809.2	809.2
2.5°	801.6	809.9	803.7	804.4	805.1
5°	785.1	795.4	794.1	799.6	805.8
7.5°	763.2	774.2	777.6	791.3	800.9
10°	738.4	750.8	757.7	778.3	791.3
12.5°	710.3	724.7	735.7	762.5	781.7
15°	680.7	696.5	711.6	745.3	768.7
17.5°	649.1	664.9	684.9	723.3	751.5
20°	615.5	632.7	656.7	697.9	731.6
22.5°	581.1	599.0	626.5	671.8	710.3
25°	545.4	564.0	593.5	643.6	686.9
27.5°	510.4	527.6	561.9	615.5	662.9
30°	472.6	490.5	526.9	585.9	636.8
32.5°	434.8	452.7	494.6	556.4	610.0
35°	395.7	414.2	458.2	525.5	582.5
37.5°	356.5	375.7	424.5	493.9	554.3
40°	317.4	338.0	389.5	462.3	524.8
42.5°	277.5	299.5	353.8	431.4	496.0
45°	240.4	260.3	320.1	399.8	465.7
47.5°	213.6	225.3	284.4	367.5	436.9
50°	194.4	199.9	250.0	336.6	408.7
52.5°	177.2	180.7	216.4	307.7	377.8
55°	160.1	163.5	186.8	277.5	346.2
57.5°	143.6	145.6	164.9	247.3	314.6
60°	128.5	129.8	148.4	217.1	279.6
62.5°	114.7	115.4	132.6	186.2	244.5
65°	101.0	101.7	118.1	155.2	208.8
67.5°	88.6	88.6	104.4	127.1	174.5
70°	76.2	76.2	89.3	103.0	138.1
72.5°	65.3	66.6	75.6	83.1	107.8
75°	54.3	57.7	62.5	65.9	78.3
77.5°	44.0	48.1	50.1	51.5	52.2
80°	34.3	37.1	38.5	39.2	37.8
82.5°	25.4	27.5	28.2	28.2	26.1
85°	15.8	17.9	19.2	18.5	15.8
87.5°	7.6	10.3	11.0	9.6	7.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)