

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: P1061677

Luminaire Tested: S125RDR-S610D830-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061677
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-S610D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

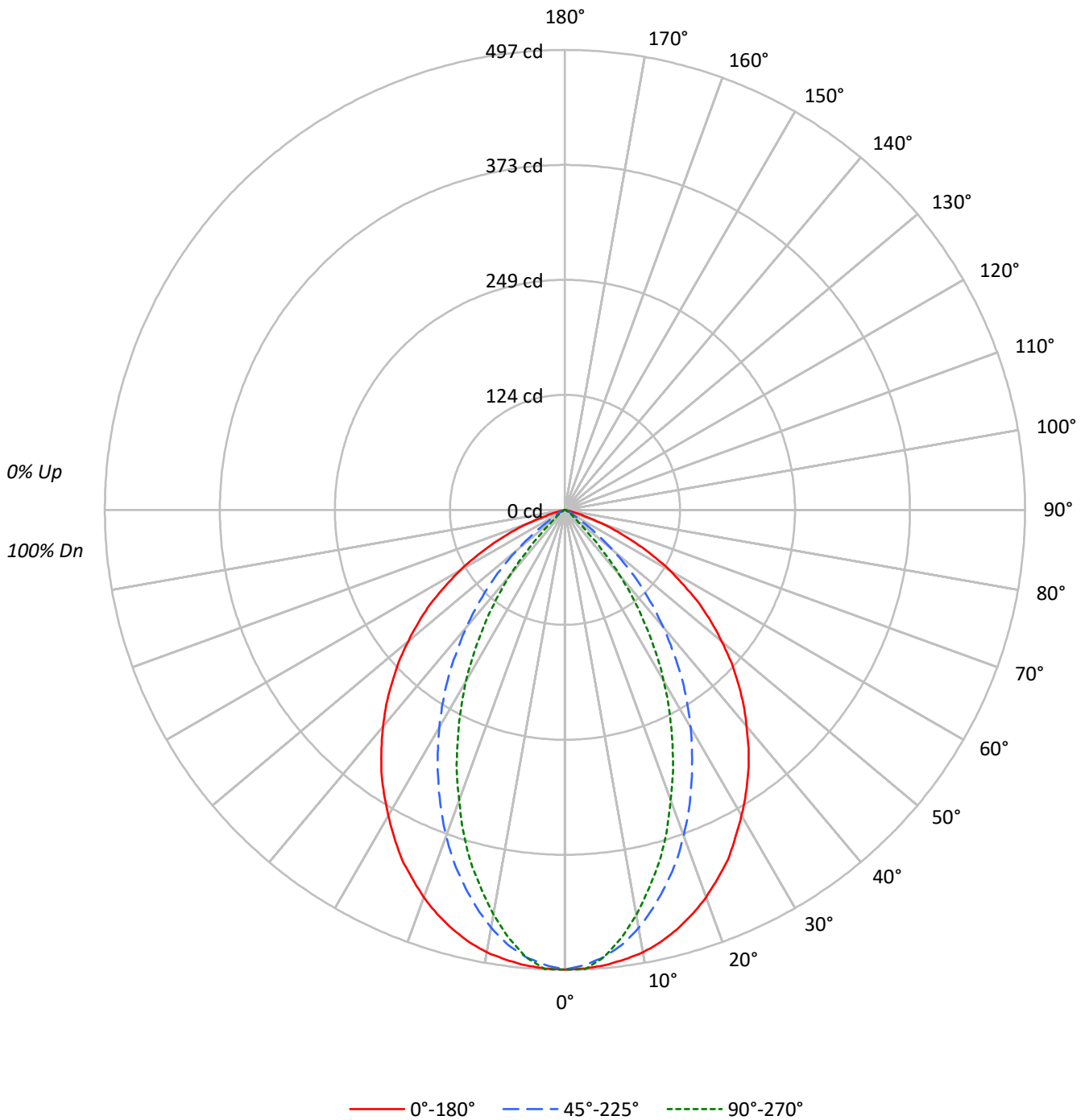
Lumens per Lamp: N/A
Luminaire Lumens: 641.8 lumens
Efficiency: N/A
Efficacy: 32.7 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

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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	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°	3421	3421	3421
5°	3415	3352	3352
10°	3395	3208	3106
15°	3345	2995	2808
20°	3265	2747	2444
25°	3166	2459	2081
30°	3032	2157	1698
35°	2903	1840	1273
40°	2745	1485	825
45°	2572	1123	357
50°	2366	716	134
55°	2132	315	95
60°	1805	135	63
65°	1367	85	33
70°	831	40	14
75°	176	19	19
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2572 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.8	7.1
10°-20°	119.4	18.6
20°-30°	153.3	23.9
30°-40°	144.3	22.5
40°-50°	100.9	15.7
50°-60°	53.9	8.4
60°-70°	21.5	3.3
70°-80°	2.8	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°	318.4	49.6
0°-40°	462.7	72.1
0°-60°	617.5	96.2
0°-90°	641.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	641.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	497	497	497	497	497	
5°	494	493	485	486	485	47
15°	469	454	420	400	394	132
25°	417	380	324	288	274	191
35°	345	290	219	169	151	216
45°	264	198	115	56	37	204
55°	178	109	26	9	8	157
65°	84	33	5	3	2	83
75°	7	2	1	1	1	13
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	496.8	496.8	496.8	496.8	496.8
2.5°	496.1	496.8	492.2	496.1	496.8
5°	494.1	492.8	485.0	486.3	485.0
7.5°	490.2	486.9	473.8	469.2	466.6
10°	485.6	478.4	458.8	448.9	444.3
12.5°	478.4	467.9	440.4	425.3	418.8
15°	469.2	454.2	420.1	400.4	393.9
17.5°	458.1	438.4	399.1	374.9	365.0
20°	445.6	419.4	374.9	346.0	333.6
22.5°	431.2	401.1	350.0	317.8	305.4
25°	416.8	380.1	323.7	288.4	273.9
27.5°	399.1	358.5	297.5	259.5	243.8
30°	381.4	336.9	271.3	230.0	213.6
32.5°	363.7	313.9	245.1	199.2	182.8
35°	345.4	290.3	218.9	169.1	151.4
37.5°	325.7	266.7	190.7	140.2	121.9
40°	305.4	243.8	165.2	112.1	91.8
42.5°	285.7	220.9	139.6	84.5	62.3
45°	264.1	197.9	115.3	55.7	36.7
47.5°	243.8	175.6	90.4	32.1	19.0
50°	220.9	152.7	66.8	17.0	12.5
52.5°	199.2	130.4	44.6	11.1	9.8
55°	177.6	108.8	26.2	9.2	7.9
57.5°	152.7	87.8	14.4	7.2	5.9
60°	131.1	68.8	9.8	5.2	4.6
62.5°	106.2	50.5	7.2	3.9	3.3
65°	83.9	33.4	5.2	2.6	2.0
67.5°	62.3	19.7	3.3	1.3	1.3
70°	41.3	10.5	2.0	0.7	0.7
72.5°	21.6	4.6	1.3	0.7	0.7
75°	6.6	2.0	0.7	0.7	0.7
77.5°	0.0	0.7	0.0	0.0	0.7
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)