

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: P1061696

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061696
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)
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-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

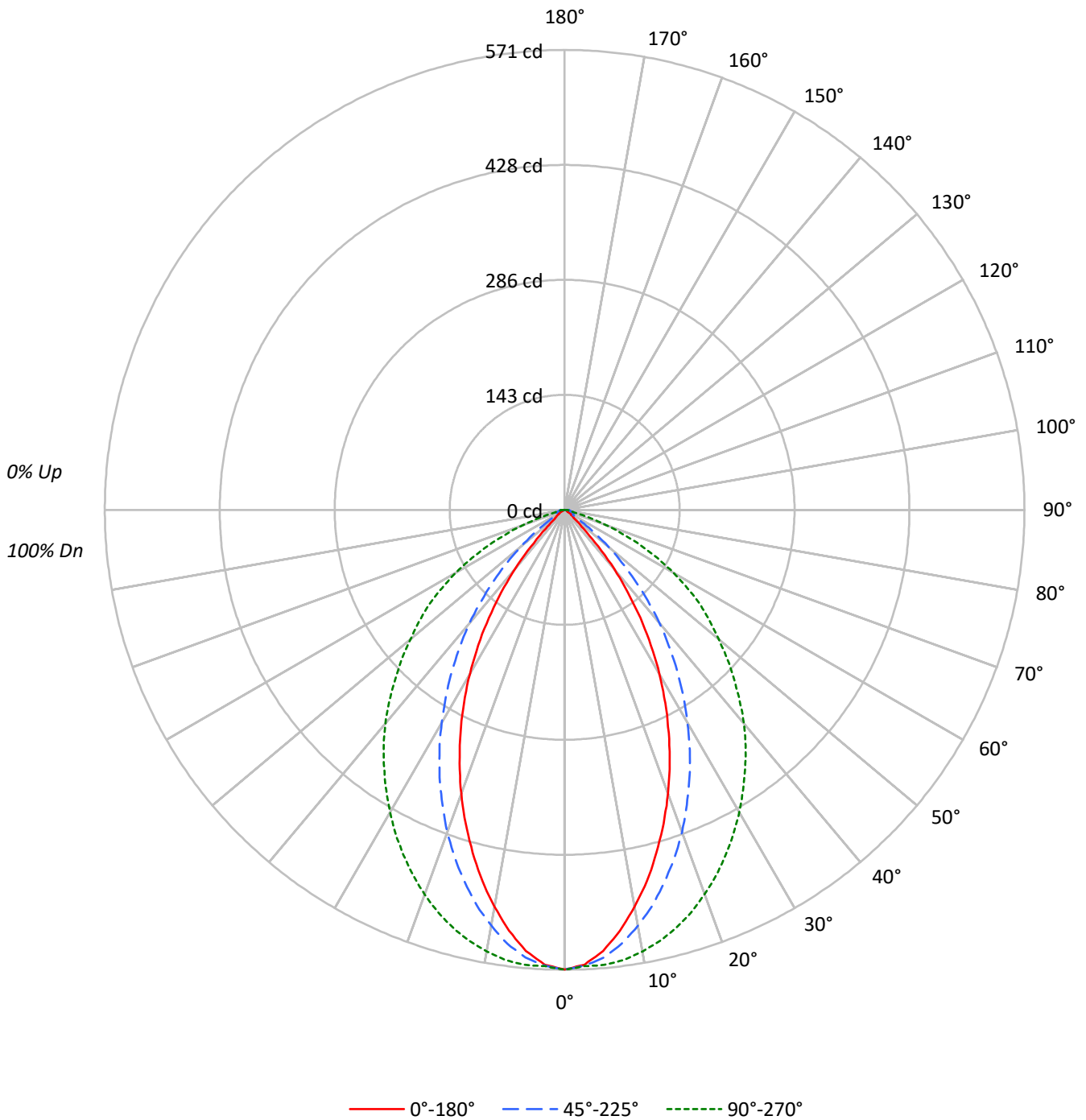
Lumens per Lamp: N/A
Luminaire Lumens: 734.0 lumens
Efficiency: N/A
Efficacy: 37.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				
3	98	90	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	68	74	70	67	65				
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59				
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54				
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49				
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45				
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42				
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3929	3929	3929
5°	3799	3857	3920
10°	3499	3666	3891
15°	3141	3412	3827
20°	2750	3121	3723
25°	2322	2787	3593
30°	1872	2425	3447
35°	1377	2044	3285
40°	859	1648	3114
45°	321	1204	2895
50°	151	753	2673
55°	109	312	2472
60°	77	164	2139
65°	46	194	1694
70°	42	225	1075
75°	56	223	338
80°	83	278	250
85°	166	442	332

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2895 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.3	7.1
10°-20°	135.5	18.5
20°-30°	172.6	23.5
30°-40°	160.6	21.9
40°-50°	110.1	15.0
50°-60°	60.6	8.3
60°-70°	28.7	3.9
70°-80°	9.0	1.2
80°-90°	4.6	0.6
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°	360.4	49.1
0°-40°	521.0	71.0
0°-60°	691.7	94.2
0°-90°	734.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	734.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	571	571	571	571	571	
5°	550	557	558	562	567	51
15°	441	455	479	514	537	123
25°	306	325	367	426	473	140
35°	164	187	243	323	391	102
45°	33	56	124	219	297	31
55°	9	10	26	122	206	8
65°	3	4	12	45	104	3
75°	2	4	8	9	13	2
85°	2	5	6	5	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	570.7	570.7	570.7	570.7	570.7
2.5°	565.1	570.7	566.5	566.5	567.2
5°	549.6	556.6	558.0	562.2	567.2
7.5°	527.1	536.2	543.3	555.2	563.7
10°	500.4	511.6	524.3	544.0	556.6
12.5°	472.3	484.2	503.2	530.6	548.2
15°	440.7	454.7	478.6	514.5	536.9
17.5°	408.3	423.8	453.3	495.5	523.6
20°	375.3	391.5	425.9	473.0	508.1
22.5°	340.9	358.4	396.4	449.8	491.3
25°	305.7	324.7	366.9	425.9	473.0
27.5°	270.6	290.3	336.6	401.3	454.0
30°	235.4	255.8	305.0	376.0	433.6
32.5°	199.6	222.1	274.1	350.7	412.5
35°	163.8	186.9	243.2	323.3	390.8
37.5°	128.6	152.5	213.0	297.3	369.0
40°	95.6	119.5	183.4	271.3	346.5
42.5°	61.8	87.1	152.5	244.6	321.9
45°	33.0	55.5	123.7	219.3	297.3
47.5°	17.6	29.5	96.3	194.0	274.1
50°	14.1	16.2	70.3	168.7	249.5
52.5°	11.2	12.7	45.0	142.7	227.7
55°	9.1	10.5	26.0	122.3	205.9
57.5°	7.0	8.4	14.8	101.9	180.6
60°	5.6	6.3	11.9	81.5	155.3
62.5°	3.5	4.9	11.9	63.3	130.0
65°	2.8	3.5	11.9	45.0	104.0
67.5°	2.8	2.8	11.9	29.5	78.0
70°	2.1	2.1	11.2	19.0	53.4
72.5°	2.1	2.1	9.8	12.7	30.9
75°	2.1	3.5	8.4	9.1	12.7
77.5°	2.1	5.6	7.7	7.7	7.0
80°	2.1	5.6	7.0	6.3	6.3
82.5°	2.1	5.6	5.6	5.6	4.9
85°	2.1	4.9	5.6	4.9	4.2
87.5°	2.1	4.9	4.9	4.9	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)