

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P1062119

Luminaire Tested: S125RDR-H610D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062119
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-H610D927-X4F0-XX-UDD-BVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

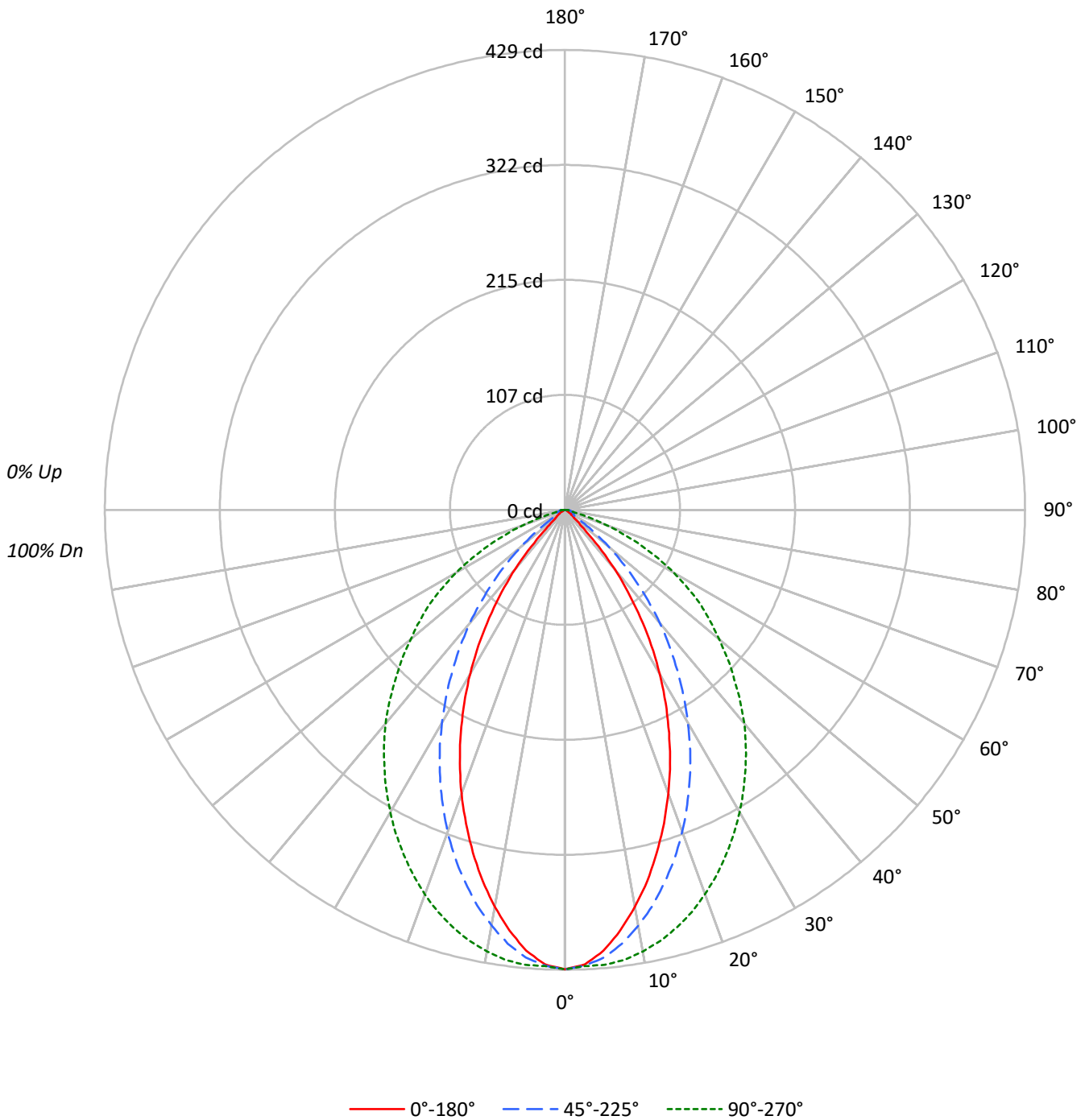
Lumens per Lamp: N/A
Luminaire Lumens: 551.3 lumens
Efficiency: N/A
Efficacy: 31.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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	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°	2951	2951	2951
5°	2853	2897	2944
10°	2628	2753	2923
15°	2359	2563	2875
20°	2066	2344	2797
25°	1744	2094	2699
30°	1406	1821	2589
35°	1034	1535	2467
40°	645	1239	2339
45°	241	905	2174
50°	114	566	2007
55°	83	234	1857
60°	58	124	1607
65°	34	147	1272
70°	32	169	807
75°	43	168	253
80°	63	210	190
85°	126	332	253

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2174 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.3	7.1
10°-20°	101.8	18.5
20°-30°	129.6	23.5
30°-40°	120.6	21.9
40°-50°	82.7	15.0
50°-60°	45.5	8.3
60°-70°	21.6	3.9
70°-80°	6.8	1.2
80°-90°	3.5	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°	270.7	49.1
0°-40°	391.3	71.0
0°-60°	519.5	94.2
0°-90°	551.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	551.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	429	429	429	429	429	
5°	413	418	419	422	426	38
15°	331	342	360	386	403	92
25°	230	244	276	320	355	105
35°	123	140	183	243	294	76
45°	25	42	93	165	223	24
55°	7	8	20	92	155	6
65°	2	3	9	34	78	2
75°	2	3	6	7	10	2
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	428.6	428.6	428.6	428.6	428.6
2.5°	424.4	428.6	425.5	425.5	426.0
5°	412.8	418.1	419.1	422.3	426.0
7.5°	395.9	402.8	408.1	417.0	423.4
10°	375.9	384.3	393.8	408.6	418.1
12.5°	354.7	363.7	378.0	398.6	411.7
15°	331.0	341.5	359.5	386.4	403.3
17.5°	306.7	318.3	340.5	372.2	393.3
20°	281.9	294.0	319.9	355.3	381.7
22.5°	256.0	269.2	297.7	337.8	369.0
25°	229.6	243.9	275.6	319.9	355.3
27.5°	203.2	218.0	252.9	301.4	341.0
30°	176.8	192.1	229.1	282.4	325.7
32.5°	149.9	166.8	205.9	263.4	309.9
35°	123.0	140.4	182.6	242.8	293.5
37.5°	96.6	114.6	159.9	223.3	277.1
40°	71.8	89.7	137.8	203.8	260.2
42.5°	46.5	65.5	114.6	183.7	241.8
45°	24.8	41.7	92.9	164.7	223.3
47.5°	13.2	22.2	72.3	145.7	205.9
50°	10.6	12.1	52.8	126.7	187.4
52.5°	8.4	9.5	33.8	107.2	171.0
55°	6.9	7.9	19.5	91.9	154.7
57.5°	5.3	6.3	11.1	76.5	135.7
60°	4.2	4.8	9.0	61.2	116.7
62.5°	2.6	3.7	9.0	47.5	97.7
65°	2.1	2.6	9.0	33.8	78.1
67.5°	2.1	2.1	9.0	22.2	58.6
70°	1.6	1.6	8.4	14.3	40.1
72.5°	1.6	1.6	7.4	9.5	23.2
75°	1.6	2.6	6.3	6.9	9.5
77.5°	1.6	4.2	5.8	5.8	5.3
80°	1.6	4.2	5.3	4.8	4.8
82.5°	1.6	4.2	4.2	4.2	3.7
85°	1.6	3.7	4.2	3.7	3.2
87.5°	1.6	3.7	3.7	3.7	2.1
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	0.00	0.00	0.00	0.00	0.00	12.80	14.09	13.17	14.40	14.72
	3H	0.00	0.00	0.00	0.00	0.00	13.59	14.73	13.97	15.06	15.42
	4H	0.00	0.00	0.00	0.00	0.00	13.62	14.68	14.02	15.03	15.41
	6H	0.00	0.00	0.00	0.00	0.00	13.57	14.55	13.99	14.92	15.31
	8H	0.00	0.00	0.00	0.00	0.00	13.55	14.47	13.98	14.86	15.27
	12H	0.00	0.00	0.00	0.00	0.00	13.53	14.41	13.97	14.79	15.22
4H	2H	0.00	0.00	0.00	0.00	0.00	12.59	13.64	12.99	13.99	14.38
	3H	0.00	0.00	0.00	0.00	0.00	13.42	14.28	13.83	14.68	15.09
	4H	0.00	0.00	0.00	0.00	0.00	13.45	14.22	13.89	14.64	15.08
	6H	0.00	0.21	0.01	0.65	1.12	13.44	14.10	13.90	14.55	15.02
	8H	0.29	0.91	0.76	1.35	1.82	13.42	14.04	13.89	14.49	14.96
	12H	1.04	1.58	1.52	2.07	2.54	13.42	13.97	13.91	14.45	14.93
8H	4H	0.09	0.71	0.56	1.15	1.63	13.34	13.96	13.81	14.40	14.87
	6H	1.83	2.34	2.33	2.83	3.32	13.34	13.84	13.84	14.34	14.82
	8H	2.78	3.23	3.30	3.75	4.24	13.34	13.80	13.87	14.31	14.81
	12H	3.72	4.12	4.24	4.62	5.19	13.39	13.79	13.91	14.29	14.86
12H	4H	0.39	0.94	0.88	1.42	1.90	13.29	13.84	13.78	14.32	14.80
	6H	2.29	2.74	2.81	3.26	3.75	13.29	13.75	13.82	14.26	14.76
	8H	3.42	3.82	3.93	4.31	4.89	13.33	13.73	13.85	14.23	14.80