

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: P1062107

Luminaire Tested: S125RDR-H610D840-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062107
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H610D840-X4F0-XX-UDD-WVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

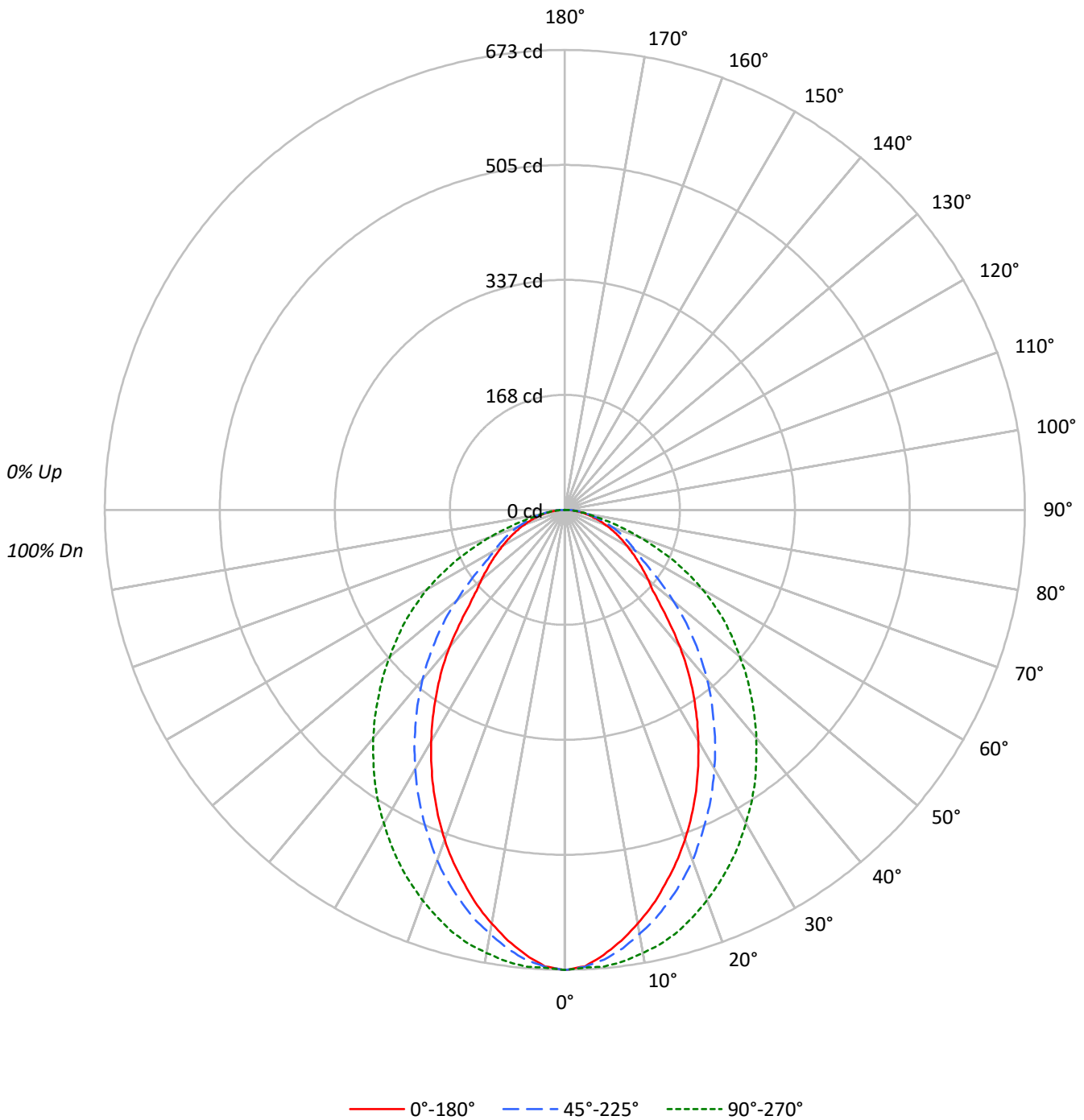
Lumens per Lamp: N/A
Luminaire Lumens: 1262.3 lumens
Efficiency: N/A
Efficacy: 72.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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	74	69	77	72	68	74	70	66	64				
4	86	75	67	61	84	74	67	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	48	59	52	47	58	52	47	56	51	46	44				
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40				
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36				
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33				
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4636	4636	4636
5°	4519	4566	4636
10°	4298	4407	4604
15°	4042	4219	4555
20°	3765	4002	4456
25°	3450	3746	4344
30°	3107	3476	4209
35°	2748	3195	4077
40°	2358	2909	3918
45°	1926	2587	3753
50°	1707	2219	3581
55°	1567	1841	3432
60°	1445	1630	3196
65°	1347	1567	2849
70°	1260	1490	2329
75°	1163	1397	1719
80°	1094	1308	1253
85°	1011	1272	1066

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3753 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.3	4.9
10°-20°	167.9	13.3
20°-30°	230.7	18.3
30°-40°	244.5	19.4
40°-50°	213.4	16.9
50°-60°	162.1	12.8
60°-70°	108.6	8.6
70°-80°	56.0	4.4
80°-90°	16.8	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°	460.8	36.5
0°-40°	705.3	55.9
0°-60°	1080.9	85.6
0°-90°	1262.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1262.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	673	673	673	673	673	
5°	654	661	661	665	671	61
15°	567	578	592	618	639	159
25°	454	468	493	534	572	208
35°	327	346	380	434	485	204
45°	198	217	266	329	385	156
55°	130	134	153	225	286	117
65°	83	85	96	128	175	82
75°	44	46	52	56	65	47
85°	13	16	16	15	14	14
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	673.3	673.3	673.3	673.3	673.3
2.5°	668.6	673.3	669.3	669.3	670.7
5°	653.8	660.6	660.6	665.3	670.7
7.5°	635.7	643.1	647.1	657.9	665.9
10°	614.8	622.9	630.3	646.4	658.5
12.5°	592.6	601.4	612.8	633.7	650.5
15°	567.1	577.8	591.9	618.2	639.0
17.5°	541.5	552.3	569.8	600.7	624.2
20°	513.9	525.4	546.2	579.8	608.1
22.5°	484.3	497.1	519.3	557.6	590.6
25°	454.1	468.2	493.1	534.1	571.8
27.5°	422.4	439.3	466.2	509.9	551.6
30°	390.8	407.6	437.2	485.0	529.4
32.5°	359.2	377.4	409.7	460.1	507.9
35°	326.9	345.8	380.1	433.9	485.0
37.5°	295.3	314.1	352.5	408.3	460.1
40°	262.3	281.8	323.6	382.1	435.9
42.5°	228.7	249.6	294.6	355.2	411.0
45°	197.8	217.3	265.7	328.9	385.4
47.5°	174.9	187.7	236.8	302.0	360.6
50°	159.4	166.1	207.2	275.8	334.3
52.5°	144.0	149.3	179.6	248.9	309.4
55°	130.5	134.5	153.4	225.3	285.9
57.5°	117.0	121.1	133.2	201.8	258.3
60°	104.9	108.3	118.4	176.9	232.1
62.5°	93.5	96.2	107.0	153.4	203.8
65°	82.7	84.8	96.2	128.5	174.9
67.5°	72.0	74.0	85.4	104.9	144.0
70°	62.6	63.2	74.0	85.4	115.7
72.5°	53.1	53.8	62.6	69.3	88.8
75°	43.7	46.4	52.5	55.8	64.6
77.5°	35.7	39.0	42.4	43.7	43.7
80°	27.6	31.6	33.0	33.0	31.6
82.5°	20.2	23.5	24.2	22.9	21.5
85°	12.8	16.1	16.1	14.8	13.5
87.5°	6.1	8.7	8.7	8.1	6.1
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	11.94	13.43	12.30	13.75	14.06	15.86	17.36	16.23	17.67	17.99
	3H	13.51	14.85	13.89	15.18	15.54	17.29	18.63	17.66	18.96	19.32
	4H	14.12	15.38	14.52	15.73	16.11	17.70	18.96	18.10	19.31	19.69
	6H	14.62	15.78	15.03	16.15	16.54	17.92	19.08	18.33	19.45	19.84
	8H	14.79	15.90	15.22	16.29	16.69	17.98	19.08	18.40	19.47	19.87
	12H	14.91	15.97	15.34	16.35	16.78	18.01	19.07	18.44	19.45	19.88
4H	2H	12.67	13.93	13.07	14.28	14.66	15.99	17.25	16.39	17.60	17.98
	3H	14.45	15.50	14.86	15.90	16.30	17.60	18.64	18.01	19.04	19.45
	4H	15.19	16.13	15.62	16.54	16.98	18.13	19.07	18.56	19.48	19.92
	6H	15.82	16.64	16.28	17.08	17.55	18.47	19.29	18.93	19.73	20.19
	8H	16.05	16.82	16.52	17.26	17.73	18.57	19.33	19.03	19.78	20.24
	12H	16.23	16.91	16.71	17.39	17.86	18.64	19.32	19.12	19.80	20.27
8H	4H	15.59	16.35	16.05	16.80	17.26	18.23	19.00	18.70	19.44	19.91
	6H	16.38	17.01	16.87	17.50	17.98	18.67	19.30	19.17	19.80	20.27
	8H	16.70	17.27	17.21	17.78	18.26	18.83	19.40	19.34	19.91	20.40
	12H	16.97	17.47	17.48	17.97	18.53	18.97	19.47	19.48	19.96	20.52
12H	4H	15.63	16.31	16.11	16.79	17.26	18.23	18.92	18.72	19.39	19.87
	6H	16.46	17.03	16.97	17.54	18.02	18.69	19.26	19.20	19.77	20.25
	8H	16.85	17.35	17.36	17.85	18.41	18.90	19.40	19.41	19.89	20.46