

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: P1062125

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062125
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-H610D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

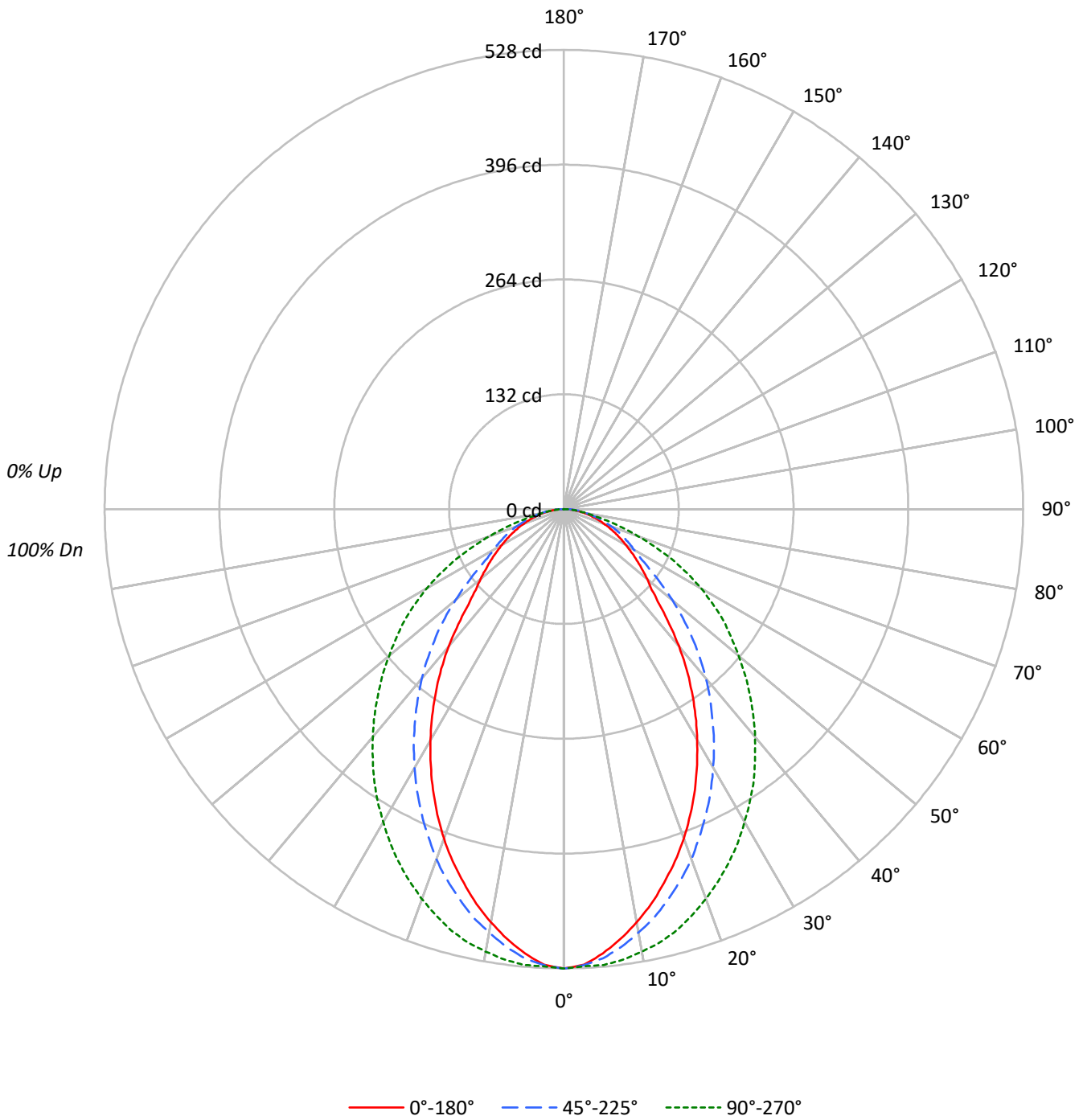
Lumens per Lamp: N/A
Luminaire Lumens: 990.2 lumens
Efficiency: N/A
Efficacy: 56.9 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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°	3637	3637	3637
5°	3545	3582	3636
10°	3372	3457	3612
15°	3171	3310	3573
20°	2954	3140	3495
25°	2706	2939	3407
30°	2438	2727	3302
35°	2155	2506	3198
40°	1850	2281	3073
45°	1510	2029	2945
50°	1340	1741	2810
55°	1229	1444	2693
60°	1133	1279	2506
65°	1057	1230	2235
70°	988	1168	1828
75°	912	1096	1349
80°	856	1027	983
85°	790	1003	837

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2945 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.9	4.9
10°-20°	131.7	13.3
20°-30°	181.0	18.3
30°-40°	191.8	19.4
40°-50°	167.4	16.9
50°-60°	127.2	12.8
60°-70°	85.2	8.6
70°-80°	43.9	4.4
80°-90°	13.2	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°	361.5	36.5
0°-40°	553.3	55.9
0°-60°	847.9	85.6
0°-90°	990.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	990.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	528	528	528	528	528	
5°	513	518	518	522	526	48
15°	445	453	464	485	501	125
25°	356	367	387	419	448	163
35°	256	271	298	340	380	160
45°	155	170	208	258	302	122
55°	102	106	120	177	224	92
65°	65	66	76	101	137	64
75°	34	36	41	44	51	37
85°	10	13	13	12	11	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	528.2	528.2	528.2	528.2	528.2
2.5°	524.5	528.2	525.0	525.0	526.1
5°	512.9	518.2	518.2	521.9	526.1
7.5°	498.6	504.5	507.6	516.1	522.4
10°	482.3	488.6	494.4	507.1	516.6
12.5°	464.9	471.7	480.7	497.1	510.3
15°	444.8	453.3	464.3	484.9	501.3
17.5°	424.8	433.2	446.9	471.2	489.7
20°	403.1	412.1	428.5	454.9	477.0
22.5°	379.9	389.9	407.4	437.4	463.3
25°	356.2	367.3	386.8	419.0	448.5
27.5°	331.4	344.6	365.7	400.0	432.7
30°	306.6	319.8	343.0	380.5	415.3
32.5°	281.8	296.0	321.4	360.9	398.4
35°	256.4	271.2	298.1	340.3	380.5
37.5°	231.6	246.4	276.5	320.3	360.9
40°	205.8	221.1	253.8	299.7	341.9
42.5°	179.4	195.8	231.1	278.6	322.4
45°	155.1	170.4	208.4	258.0	302.4
47.5°	137.2	147.2	185.7	236.9	282.8
50°	125.1	130.3	162.5	216.3	262.3
52.5°	112.9	117.1	140.9	195.2	242.7
55°	102.4	105.5	120.3	176.8	224.3
57.5°	91.8	95.0	104.5	158.3	202.6
60°	82.3	85.0	92.9	138.8	182.0
62.5°	73.3	75.5	83.9	120.3	159.9
65°	64.9	66.5	75.5	100.8	137.2
67.5°	56.5	58.0	67.0	82.3	112.9
70°	49.1	49.6	58.0	67.0	90.8
72.5°	41.7	42.2	49.1	54.4	69.7
75°	34.3	36.4	41.2	43.8	50.7
77.5°	28.0	30.6	33.2	34.3	34.3
80°	21.6	24.8	25.9	25.9	24.8
82.5°	15.8	18.5	19.0	17.9	16.9
85°	10.0	12.7	12.7	11.6	10.6
87.5°	4.7	6.9	6.9	6.3	4.7
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	11.09	12.59	11.46	12.90	13.22	15.02	16.52	15.39	16.83	17.14
	3H	12.66	14.01	13.04	14.34	14.70	16.44	17.78	16.82	18.11	18.47
	4H	13.28	14.54	13.68	14.89	15.26	16.86	18.12	17.26	18.46	18.84
	6H	13.77	14.94	14.19	15.30	15.69	17.07	18.24	17.49	18.60	19.00
	8H	13.95	15.05	14.37	15.44	15.84	17.13	18.24	17.56	18.63	19.03
	12H	14.07	15.13	14.50	15.51	15.94	17.17	18.23	17.60	18.61	19.04
4H	2H	11.83	13.09	12.23	13.44	13.82	15.15	16.41	15.55	16.75	17.13
	3H	13.61	14.65	14.02	15.05	15.46	16.76	17.80	17.17	18.20	18.60
	4H	14.34	15.29	14.78	15.70	16.14	17.28	18.22	17.72	18.64	19.08
	6H	14.98	15.80	15.44	16.24	16.70	17.63	18.44	18.08	18.89	19.35
	8H	15.21	15.97	15.67	16.42	16.89	17.73	18.49	18.19	18.93	19.40
	12H	15.38	16.06	15.86	16.54	17.01	17.80	18.48	18.28	18.96	19.43
8H	4H	14.75	15.51	15.21	15.95	16.42	17.39	18.15	17.85	18.60	19.07
	6H	15.53	16.16	16.03	16.66	17.13	17.83	18.46	18.33	18.95	19.43
	8H	15.86	16.42	16.37	16.93	17.42	17.99	18.55	18.50	19.06	19.55
	12H	16.13	16.63	16.64	17.12	17.69	18.12	18.62	18.63	19.12	19.68
12H	4H	14.79	15.47	15.27	15.95	16.42	17.39	18.07	17.87	18.55	19.02
	6H	15.61	16.18	16.13	16.69	17.18	17.85	18.41	18.36	18.92	19.41
	8H	16.01	16.51	16.52	17.00	17.57	18.05	18.56	18.56	19.05	19.61