

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: P1062124

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062124
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)
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-B
Description: DEFINE 5 BLACK 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

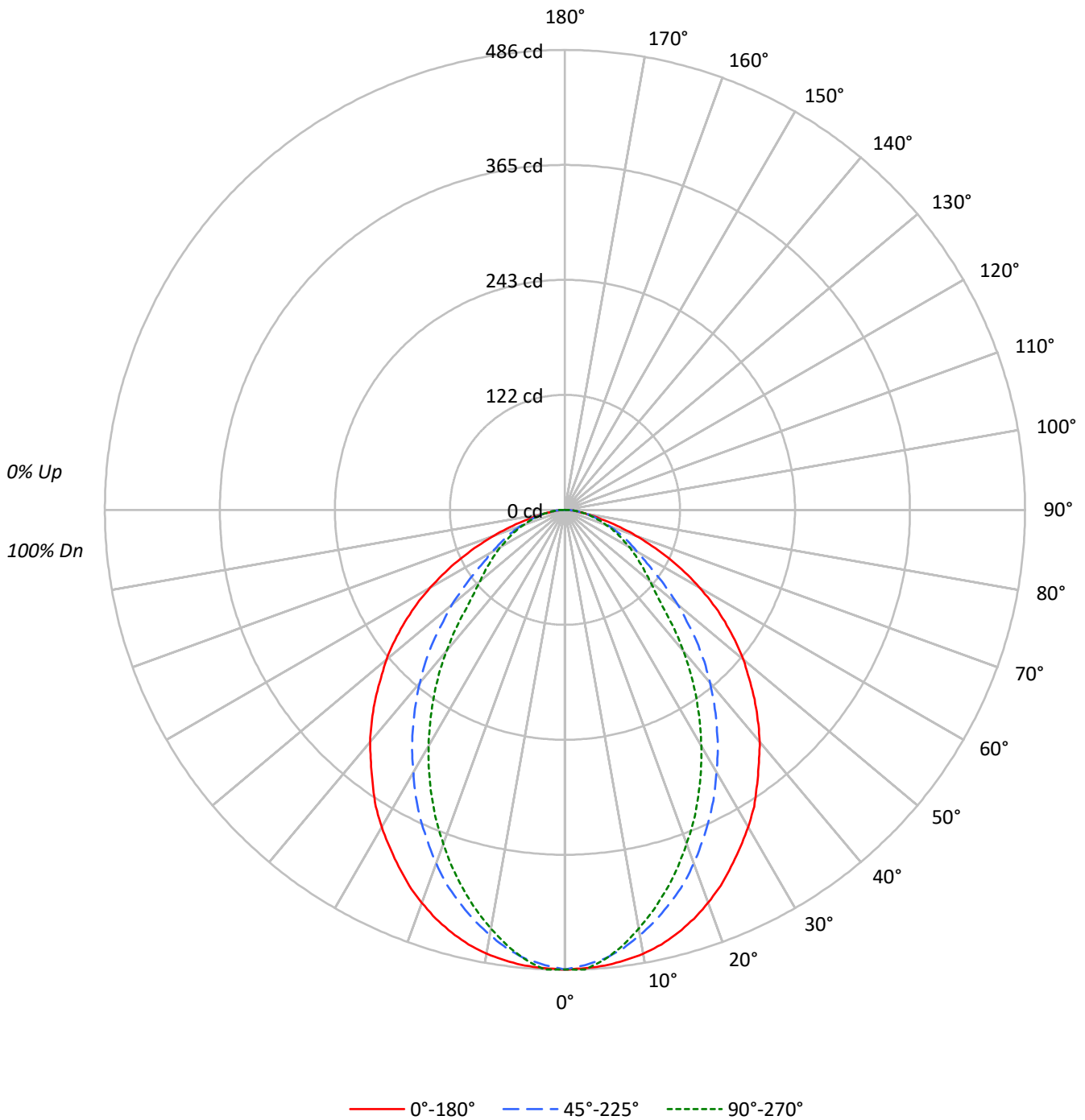
Lumens per Lamp: N/A
Luminaire Lumens: 920.2 lumens
Efficiency: N/A
Efficacy: 52.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
Input Voltage (V): 120
Input Current (A_{in}): 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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CATALOG NUMBER: S125RDR-H610D927-X4F0-XX-UDD-WVL-B

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	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	100	100	97	97	97	94	94	94	91	91	91	87	87	87														
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	84	84	84	82	82	82	80	80	80	77	77	77														
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75	75	75	73	73	73	71	71	71	69	69	69	67	67	67														
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65	65	65	63	63	63	61	61	61	59	59	59	57	57	57														
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57	57	57	55	55	55	53	53	53	51	51	51	49	49	49														
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50	50	50	48	48	48	46	46	46	44	44	44	42	42	42														
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45	45	45	43	43	43	41	41	41	39	39	39	37	37	37														
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40	40	40	38	38	38	36	36	36	34	34	34	32	32	32														
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36	36	36	34	34	34	32	32	32	30	30	30	28	28	28														
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33	33	33	31	31	31	29	29	29	27	27	27	25	25	25														
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30	30	30	28	28	28	26	26	26	24	24	24	22	22	22														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3345	3345	3345
5°	3342	3292	3299
10°	3330	3190	3142
15°	3297	3064	2959
20°	3239	2914	2751
25°	3157	2741	2532
30°	3078	2545	2290
35°	2975	2349	2031
40°	2877	2143	1749
45°	2758	1915	1433
50°	2638	1661	1254
55°	2475	1386	1158
60°	2258	1213	1082
65°	1976	1108	1005
70°	1602	999	934
75°	1149	912	870
80°	793	817	817
85°	585	711	750

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2758 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.2	4.9
10°-20°	122.2	13.3
20°-30°	168.8	18.3
30°-40°	179.8	19.5
40°-50°	158.0	17.2
50°-60°	119.8	13.0
60°-70°	77.8	8.5
70°-80°	38.5	4.2
80°-90°	10.1	1.1
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°	336.2	36.5
0°-40°	516.0	56.1
0°-60°	793.8	86.3
0°-90°	920.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	920.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	486	486	486	486	486	
5°	484	483	476	478	477	46
15°	462	452	430	420	415	130
25°	416	393	361	342	333	191
35°	354	321	280	254	242	222
45°	283	244	197	161	147	218
55°	206	166	116	100	96	184
65°	121	90	68	63	62	120
75°	43	38	34	33	33	48
85°	7	8	9	9	10	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	485.8	485.8	485.8	485.8	485.8
2.5°	484.7	485.8	481.5	485.2	486.3
5°	483.6	482.6	476.3	477.8	477.3
7.5°	480.5	478.4	467.8	466.8	464.7
10°	476.3	471.0	456.2	452.5	449.4
12.5°	470.5	462.0	444.1	436.7	433.0
15°	462.5	452.0	429.8	419.8	415.1
17.5°	453.1	438.3	415.1	401.4	396.1
20°	442.0	424.6	397.7	381.9	375.5
22.5°	429.8	409.3	379.2	362.3	355.5
25°	415.6	392.9	360.8	342.3	333.3
27.5°	401.4	376.1	341.2	320.7	311.2
30°	387.1	358.1	320.1	298.0	288.0
32.5°	371.8	339.7	300.6	276.4	264.8
35°	353.9	321.2	279.5	254.2	241.6
37.5°	336.5	301.7	259.0	230.5	218.4
40°	320.1	283.2	238.4	207.3	194.6
42.5°	301.7	263.7	217.8	185.1	170.9
45°	283.2	243.7	196.7	161.4	147.2
47.5°	263.7	224.7	174.6	139.8	130.3
50°	246.3	205.2	155.1	123.4	117.1
52.5°	226.3	186.2	135.0	110.8	106.5
55°	206.2	165.6	115.5	99.7	96.5
57.5°	185.7	147.2	100.2	90.2	87.0
60°	164.0	128.2	88.1	80.2	78.6
62.5°	142.4	108.6	77.5	71.7	69.6
65°	121.3	90.2	68.0	62.8	61.7
67.5°	99.7	73.3	58.5	54.9	54.3
70°	79.6	59.6	49.6	47.5	46.4
72.5°	61.2	47.5	41.7	40.1	39.6
75°	43.2	38.0	34.3	33.2	32.7
77.5°	29.0	29.0	27.4	26.4	26.9
80°	20.0	21.1	20.6	20.6	20.6
82.5°	13.2	14.2	14.8	14.8	14.8
85°	7.4	8.4	9.0	9.0	9.5
87.5°	2.6	3.2	3.7	4.2	4.2
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	14.75	16.24	15.11	16.55	16.87	10.99	12.48	11.35	12.80	13.11
	3H	16.06	17.40	16.44	17.72	18.09	12.57	13.91	12.95	14.24	14.60
	4H	16.43	17.68	16.83	18.03	18.41	13.18	14.43	13.58	14.78	15.16
	6H	16.60	17.76	17.02	18.13	18.52	13.65	14.80	14.06	15.17	15.56
	8H	16.64	17.74	17.07	18.13	18.53	13.81	14.91	14.24	15.30	15.70
	12H	16.65	17.71	17.08	18.09	18.52	13.92	14.97	14.35	15.36	15.79
4H	2H	14.86	16.11	15.26	16.46	16.84	11.65	12.90	12.05	13.25	13.63
	3H	16.35	17.39	16.76	17.79	18.19	13.43	14.47	13.84	14.87	15.27
	4H	16.82	17.76	17.26	18.17	18.61	14.15	15.08	14.58	15.50	15.94
	6H	17.11	17.92	17.57	18.36	18.82	14.74	15.55	15.20	15.99	16.46
	8H	17.18	17.93	17.64	18.38	18.85	14.95	15.70	15.41	16.15	16.62
	12H	17.22	17.89	17.70	18.37	18.84	15.10	15.78	15.58	16.26	16.73
8H	4H	16.91	17.66	17.37	18.11	18.58	14.46	15.22	14.93	15.66	16.13
	6H	17.27	17.89	17.77	18.39	18.86	15.17	15.79	15.67	16.29	16.76
	8H	17.38	17.95	17.90	18.46	18.94	15.45	16.01	15.96	16.52	17.01
	12H	17.47	17.97	17.98	18.46	19.03	15.68	16.18	16.19	16.67	17.23
12H	4H	16.90	17.58	17.38	18.05	18.53	14.49	15.16	14.97	15.64	16.11
	6H	17.27	17.83	17.79	18.34	18.83	15.22	15.78	15.74	16.29	16.78
	8H	17.43	17.93	17.94	18.42	18.99	15.56	16.05	16.07	16.55	17.11