

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: P1062088

Luminaire Tested: S125RDR-H610D830-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062088
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-H610D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

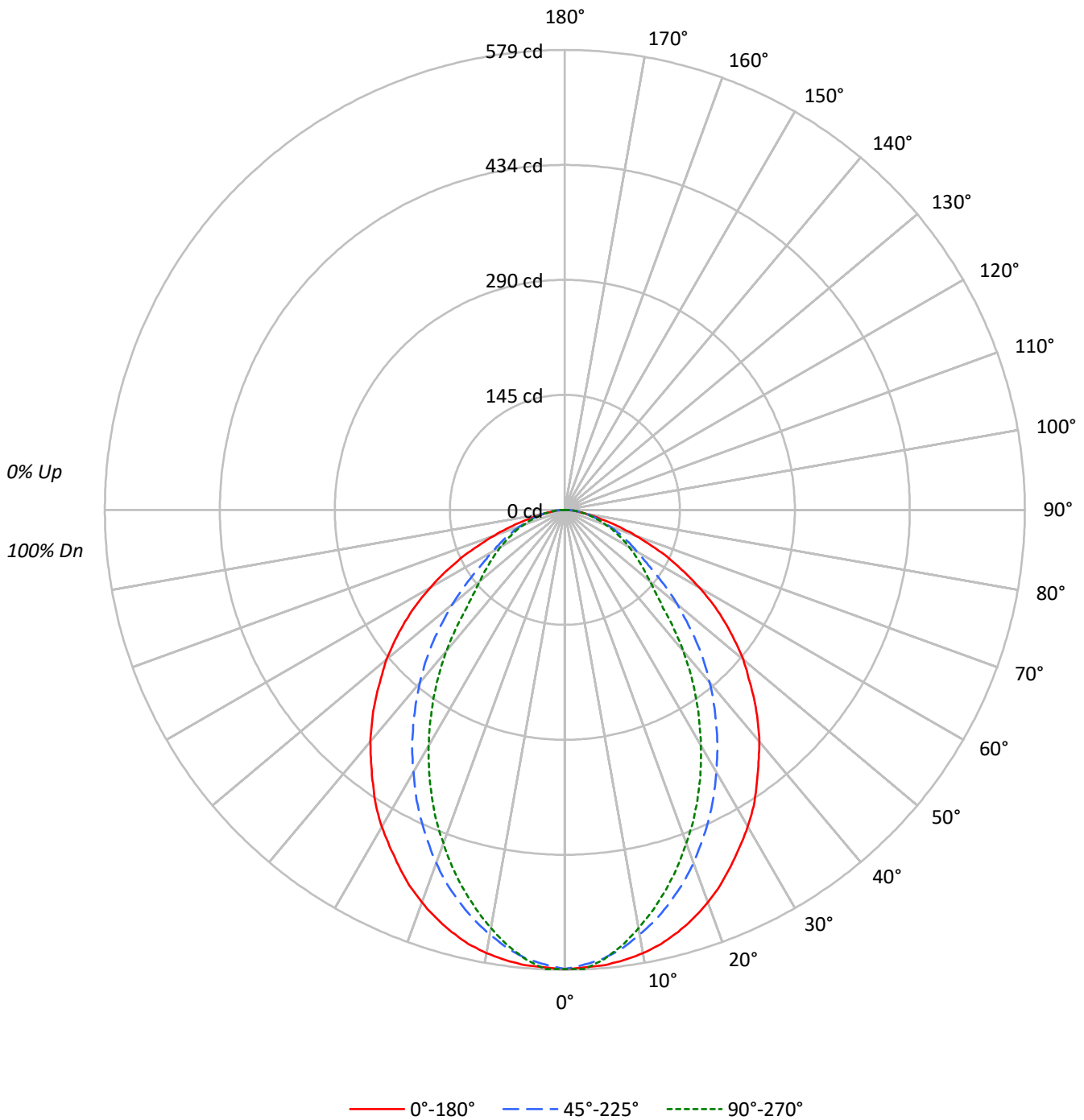
Lumens per Lamp: N/A
Luminaire Lumens: 1094.9 lumens
Efficiency: N/A
Efficacy: 62.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
Input Voltage (V): 120
Input Current (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			100	
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87			87	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75			75	
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65			65	
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57			57	
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50			50	
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45			45	
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40			40	
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36			36	
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33			33	
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30			30	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3980	3980	3980
5°	3977	3917	3925
10°	3962	3795	3738
15°	3923	3645	3521
20°	3853	3467	3274
25°	3757	3261	3013
30°	3662	3028	2724
35°	3539	2796	2416
40°	3424	2549	2082
45°	3281	2279	1705
50°	3140	1976	1492
55°	2946	1649	1378
60°	2688	1443	1288
65°	2351	1320	1196
70°	1908	1188	1111
75°	1370	1085	1035
80°	944	971	971
85°	695	845	893

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3281 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.7	4.9
10°-20°	145.3	13.3
20°-30°	200.9	18.3
30°-40°	214.0	19.5
40°-50°	188.0	17.2
50°-60°	142.5	13.0
60°-70°	92.5	8.5
70°-80°	45.9	4.2
80°-90°	12.0	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°	400.0	36.5
0°-40°	614.0	56.1
0°-60°	944.4	86.3
0°-90°	1094.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1094.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	578	578	578	578	578	
5°	575	574	567	568	568	55
15°	550	538	511	500	494	155
25°	494	468	429	407	397	228
35°	421	382	333	302	287	264
45°	337	290	234	192	175	260
55°	245	197	137	119	115	219
65°	144	107	81	75	73	143
75°	52	45	41	40	39	57
85°	9	10	11	11	11	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	578.0	578.0	578.0	578.0	578.0
2.5°	576.7	578.0	572.9	577.3	578.6
5°	575.4	574.2	566.7	568.5	567.9
7.5°	571.7	569.2	556.6	555.4	552.9
10°	566.7	560.4	542.8	538.4	534.7
12.5°	559.8	549.7	528.4	519.6	515.2
15°	550.3	537.8	511.4	499.5	493.9
17.5°	539.0	521.5	493.9	477.5	471.3
20°	525.9	505.2	473.2	454.3	446.8
22.5°	511.4	487.0	451.2	431.1	423.0
25°	494.5	467.5	429.2	407.3	396.6
27.5°	477.5	447.4	406.0	381.5	370.2
30°	460.6	426.1	380.9	354.6	342.6
32.5°	442.4	404.1	357.7	328.8	315.0
35°	421.1	382.2	332.6	302.5	287.4
37.5°	400.4	358.9	308.1	274.2	259.8
40°	380.9	337.0	283.6	246.6	231.6
42.5°	358.9	313.8	259.2	220.3	203.3
45°	337.0	289.9	234.1	192.0	175.1
47.5°	313.8	267.3	207.7	166.3	155.0
50°	293.1	244.1	184.5	146.8	139.3
52.5°	269.2	221.5	160.6	131.8	126.8
55°	245.4	197.0	137.4	118.6	114.8
57.5°	220.9	175.1	119.2	107.3	103.5
60°	195.2	152.5	104.8	95.4	93.5
62.5°	169.4	129.3	92.2	85.3	82.8
65°	144.3	107.3	81.0	74.7	73.4
67.5°	118.6	87.2	69.7	65.3	64.6
70°	94.8	70.9	59.0	56.5	55.2
72.5°	72.8	56.5	49.6	47.7	47.1
75°	51.5	45.2	40.8	39.5	38.9
77.5°	34.5	34.5	32.6	31.4	32.0
80°	23.8	25.1	24.5	24.5	24.5
82.5°	15.7	16.9	17.6	17.6	17.6
85°	8.8	10.0	10.7	10.7	11.3
87.5°	3.1	3.8	4.4	5.0	5.0
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	15.35	16.84	15.72	17.16	17.47	11.59	13.08	11.96	13.40	13.71
	3H	16.66	18.00	17.04	18.33	18.69	13.18	14.51	13.55	14.84	15.20
	4H	17.03	18.29	17.43	18.64	19.01	13.78	15.03	14.18	15.38	15.76
	6H	17.21	18.36	17.62	18.73	19.12	14.25	15.41	14.66	15.77	16.17
	8H	17.25	18.35	17.67	18.74	19.14	14.41	15.51	14.84	15.90	16.30
	12H	17.26	18.31	17.69	18.69	19.12	14.52	15.58	14.95	15.96	16.39
4H	2H	15.46	16.72	15.86	17.07	17.45	12.25	13.51	12.65	13.86	14.24
	3H	16.95	17.99	17.36	18.39	18.79	14.04	15.07	14.45	15.47	15.88
	4H	17.43	18.36	17.86	18.78	19.22	14.75	15.69	15.19	16.10	16.54
	6H	17.71	18.52	18.17	18.97	19.43	15.34	16.15	15.80	16.60	17.06
	8H	17.78	18.54	18.25	18.98	19.45	15.55	16.31	16.01	16.75	17.22
	12H	17.82	18.50	18.30	18.98	19.45	15.70	16.38	16.19	16.86	17.33
8H	4H	17.51	18.27	17.97	18.71	19.18	15.06	15.82	15.53	16.27	16.73
	6H	17.87	18.50	18.37	18.99	19.47	15.77	16.40	16.27	16.89	17.37
	8H	17.99	18.55	18.50	19.06	19.55	16.05	16.61	16.57	17.12	17.61
	12H	18.08	18.57	18.59	19.06	19.63	16.28	16.78	16.79	17.27	17.84
12H	4H	17.50	18.18	17.99	18.66	19.13	15.09	15.77	15.57	16.25	16.72
	6H	17.88	18.44	18.39	18.95	19.44	15.82	16.39	16.34	16.90	17.38
	8H	18.04	18.53	18.55	19.02	19.59	16.16	16.66	16.67	17.15	17.71