

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: P1062097

Luminaire Tested: S125RDR-H610D835-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062097
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-H610D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

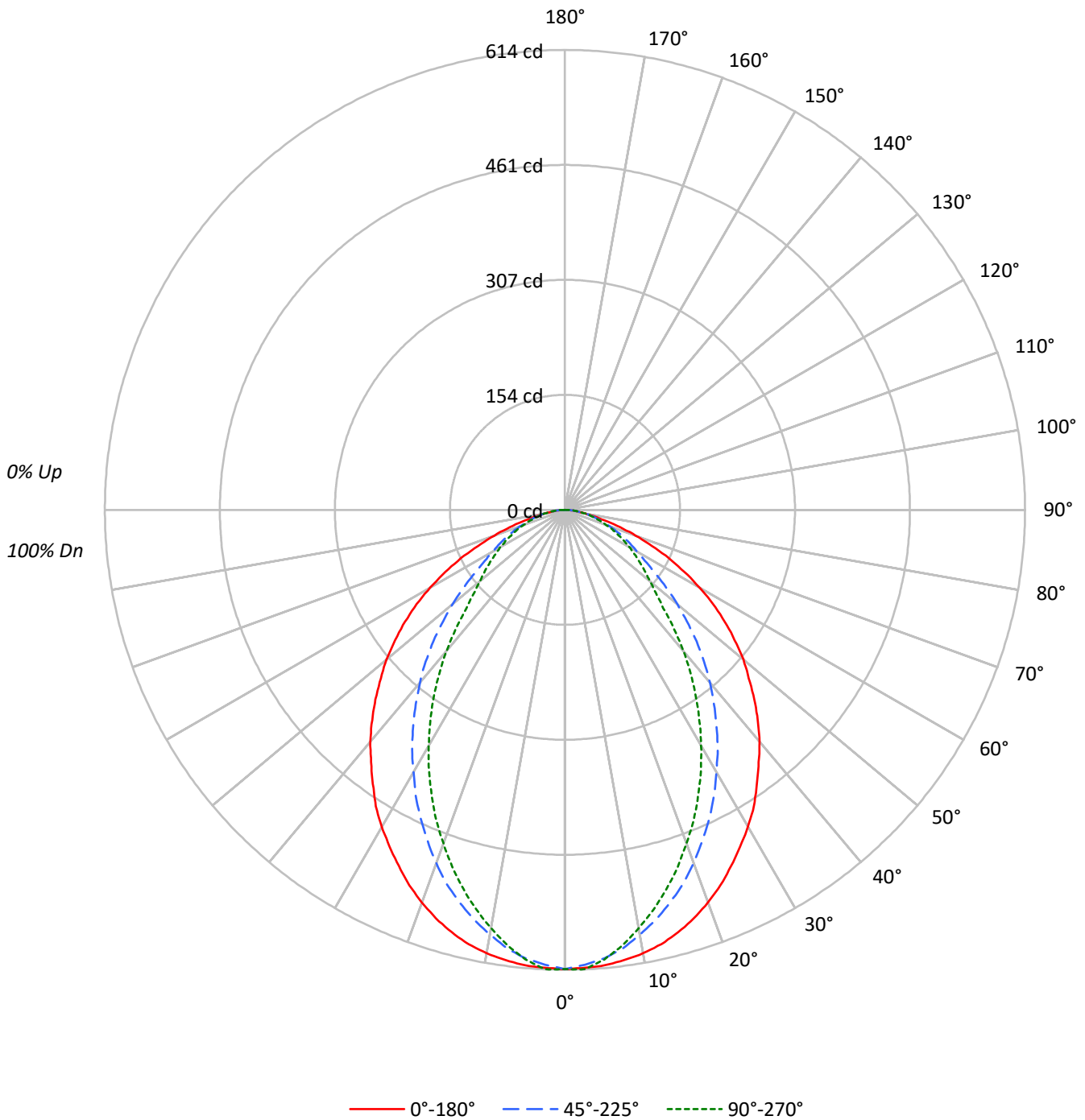
Lumens per Lamp: N/A
Luminaire Lumens: 1161.6 lumens
Efficiency: N/A
Efficacy: 66.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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										
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	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	108	104	100	97	100	97	94	96	93	91	92	90	89	87																				
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75																				
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65																				
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57																				
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50																				
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45																				
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40																				
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36																				
9	61	48	41	35	60	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°	4222	4222	4222
5°	4219	4155	4164
10°	4203	4026	3966
15°	4162	3868	3735
20°	4088	3678	3473
25°	3985	3460	3197
30°	3885	3213	2890
35°	3755	2966	2563
40°	3632	2705	2208
45°	3481	2418	1809
50°	3330	2096	1583
55°	3125	1750	1462
60°	2852	1531	1366
65°	2494	1399	1269
70°	2023	1260	1180
75°	1452	1152	1099
80°	1003	1031	1031
85°	735	893	948

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3481 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.0	4.9
10°-20°	154.2	13.3
20°-30°	213.1	18.3
30°-40°	227.0	19.5
40°-50°	199.4	17.2
50°-60°	151.2	13.0
60°-70°	98.2	8.5
70°-80°	48.6	4.2
80°-90°	12.7	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°	424.4	36.5
0°-40°	651.4	56.1
0°-60°	1002.0	86.3
0°-90°	1161.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1161.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	613	613	613	613	613	
5°	610	609	601	603	602	58
15°	584	571	543	530	524	164
25°	525	496	455	432	421	242
35°	447	406	353	321	305	280
45°	358	308	248	204	186	276
55°	260	209	146	126	122	232
65°	153	114	86	79	78	151
75°	55	48	43	42	41	61
85°	9	11	11	11	12	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	613.2	613.2	613.2	613.2	613.2
2.5°	611.9	613.2	607.9	612.5	613.9
5°	610.5	609.2	601.2	603.2	602.5
7.5°	606.5	603.9	590.5	589.2	586.6
10°	601.2	594.5	575.9	571.2	567.2
12.5°	593.9	583.2	560.6	551.3	546.6
15°	583.9	570.6	542.6	530.0	524.0
17.5°	571.9	553.3	524.0	506.7	500.0
20°	557.9	536.0	502.0	482.0	474.0
22.5°	542.6	516.6	478.7	457.4	448.7
25°	524.6	496.0	455.4	432.1	420.8
27.5°	506.7	474.7	430.8	404.8	392.8
30°	488.7	452.1	404.1	376.2	363.5
32.5°	469.4	428.8	379.5	348.9	334.2
35°	446.7	405.5	352.9	320.9	304.9
37.5°	424.8	380.8	326.9	290.9	275.6
40°	404.1	357.5	300.9	261.7	245.7
42.5°	380.8	332.9	275.0	233.7	215.7
45°	357.5	307.6	248.3	203.7	185.8
47.5°	332.9	283.6	220.4	176.4	164.4
50°	310.9	259.0	195.7	155.8	147.8
52.5°	285.6	235.0	170.4	139.8	134.5
55°	260.3	209.1	145.8	125.8	121.8
57.5°	234.4	185.8	126.5	113.8	109.9
60°	207.1	161.8	111.2	101.2	99.2
62.5°	179.8	137.2	97.9	90.5	87.9
65°	153.1	113.8	85.9	79.2	77.9
67.5°	125.8	92.5	73.9	69.2	68.6
70°	100.5	75.2	62.6	59.9	58.6
72.5°	77.2	59.9	52.6	50.6	49.9
75°	54.6	47.9	43.3	41.9	41.3
77.5°	36.6	36.6	34.6	33.3	34.0
80°	25.3	26.6	26.0	26.0	26.0
82.5°	16.6	18.0	18.6	18.6	18.6
85°	9.3	10.7	11.3	11.3	12.0
87.5°	3.3	4.0	4.7	5.3	5.3
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	15.56	17.05	15.92	17.36	17.68	11.80	13.29	12.16	13.60	13.92
	3H	16.87	18.21	17.25	18.53	18.90	13.38	14.72	13.76	15.05	15.41
	4H	17.24	18.49	17.64	18.84	19.22	13.98	15.24	14.38	15.58	15.96
	6H	17.41	18.57	17.83	18.94	19.33	14.46	15.61	14.87	15.98	16.37
	8H	17.45	18.55	17.88	18.94	19.34	14.62	15.72	15.04	16.11	16.51
	12H	17.46	18.52	17.89	18.90	19.33	14.73	15.78	15.16	16.16	16.59
4H	2H	15.67	16.92	16.07	17.27	17.65	12.46	13.71	12.86	14.06	14.44
	3H	17.16	18.19	17.57	18.59	19.00	14.24	15.28	14.65	15.68	16.08
	4H	17.63	18.56	18.06	18.98	19.42	14.96	15.89	15.39	16.31	16.75
	6H	17.92	18.73	18.37	19.17	19.63	15.55	16.36	16.01	16.80	17.26
	8H	17.99	18.74	18.45	19.19	19.66	15.75	16.51	16.22	16.96	17.42
	12H	18.03	18.70	18.51	19.18	19.65	15.91	16.58	16.39	17.06	17.53
8H	4H	17.71	18.47	18.18	18.92	19.38	15.27	16.03	15.73	16.47	16.94
	6H	18.08	18.70	18.58	19.19	19.67	15.98	16.60	16.48	17.09	17.57
	8H	18.19	18.75	18.71	19.26	19.75	16.26	16.82	16.77	17.33	17.82
	12H	18.28	18.78	18.79	19.27	19.83	16.49	16.98	17.00	17.47	18.04
12H	4H	17.71	18.38	18.19	18.86	19.33	15.30	15.97	15.78	16.45	16.92
	6H	18.08	18.64	18.60	19.15	19.64	16.03	16.59	16.54	17.10	17.59
	8H	18.24	18.74	18.75	19.23	19.79	16.36	16.86	16.87	17.35	17.92