

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: P1062129

Luminaire Tested: S125RDR-H610D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062129
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H610D930-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

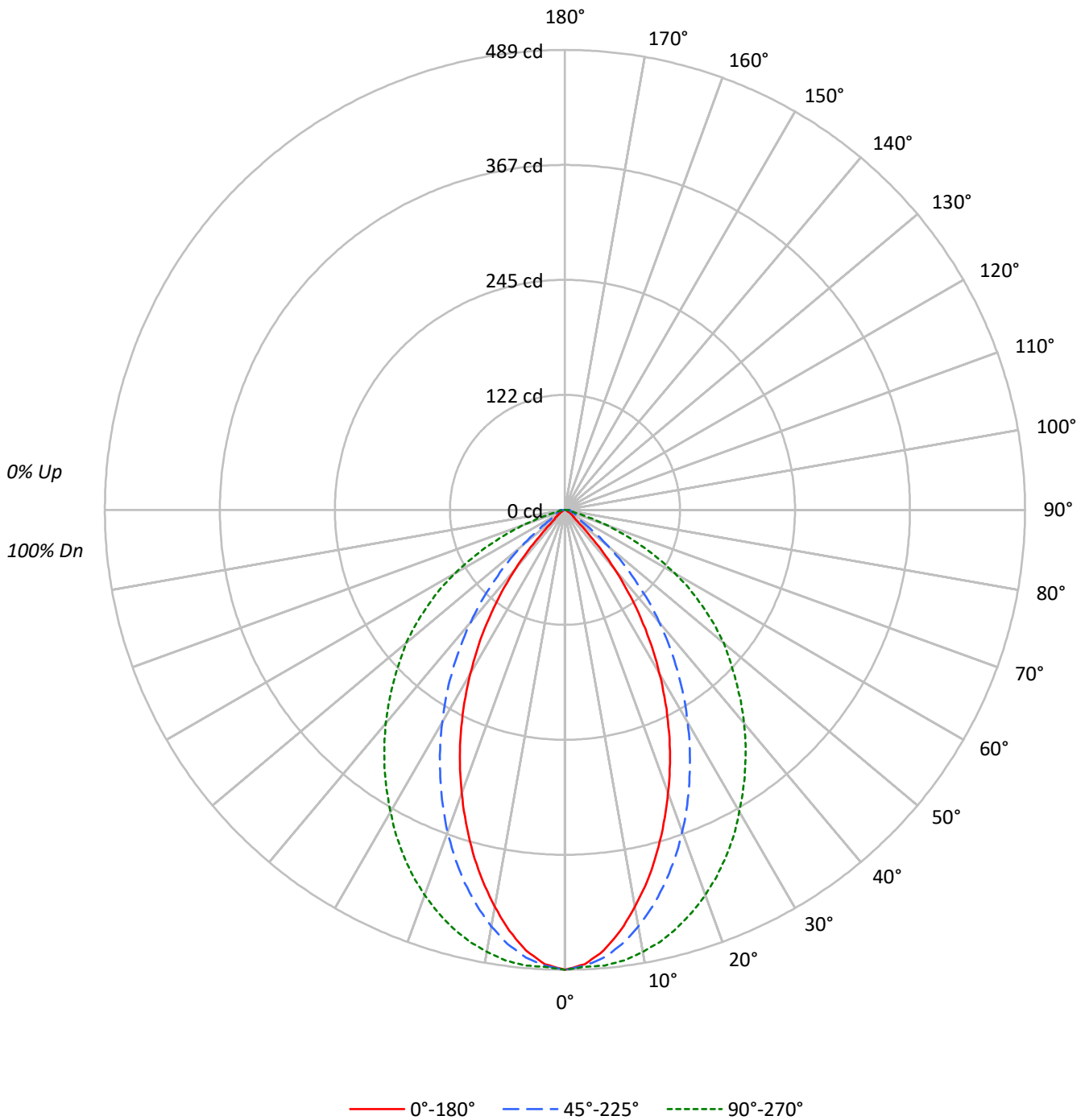
Lumens per Lamp: N/A
Luminaire Lumens: 632.7 lumens
Efficiency: N/A
Efficacy: 36.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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									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																												
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90																												
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80																												
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72																												
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65																												
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59																												
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53																												
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49																												
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45																												
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41																												
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3367	3367	3367
5°	3253	3301	3361
10°	2997	3145	3336
15°	2692	2928	3280
20°	2349	2671	3193
25°	1990	2382	3084
30°	1598	2073	2946
35°	1183	1749	2809
40°	733	1397	2661
45°	285	1021	2502
50°	134	641	2358
55°	98	274	2139
60°	67	194	1856
65°	44	204	1443
70°	44	185	908
75°	59	189	290
80°	87	214	194
85°	126	427	300

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2502 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.8	7.1
10°-20°	116.2	18.4
20°-30°	148.0	23.4
30°-40°	137.8	21.8
40°-50°	94.8	15.0
50°-60°	53.7	8.5
60°-70°	25.4	4.0
70°-80°	7.9	1.3
80°-90°	4.1	0.7
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°	309.0	48.8
0°-40°	446.8	70.6
0°-60°	595.3	94.1
0°-90°	632.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	632.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	489	489	489	489	489	
5°	471	477	478	482	486	44
15°	378	390	411	442	460	105
25°	262	279	314	366	406	119
35°	141	160	208	279	334	87
45°	29	47	105	190	257	28
55°	8	9	23	109	178	7
65°	3	3	12	39	89	3
75°	2	5	7	8	11	2
85°	2	4	5	5	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	489.0	489.0	489.0	489.0	489.0
2.5°	483.6	488.5	485.2	485.8	486.3
5°	470.6	477.1	477.6	482.0	486.3
7.5°	451.5	459.7	465.7	476.0	483.1
10°	428.7	438.5	449.9	466.8	477.1
12.5°	404.3	415.7	431.4	455.3	470.0
15°	377.6	390.1	410.8	441.8	460.2
17.5°	349.4	363.5	388.5	425.5	448.8
20°	320.6	335.8	364.6	407.0	435.8
22.5°	291.8	307.5	339.6	386.9	421.7
25°	261.9	278.7	313.5	366.2	405.9
27.5°	231.5	248.9	287.4	345.0	389.1
30°	201.0	219.5	260.8	323.3	370.6
32.5°	171.2	189.6	234.7	301.6	352.6
35°	140.7	160.3	208.1	279.3	334.2
37.5°	110.3	131.5	182.0	256.5	315.2
40°	81.5	101.6	155.4	234.2	296.1
42.5°	54.3	73.9	131.5	211.9	276.6
45°	29.3	46.7	104.9	189.6	257.0
47.5°	15.8	25.0	82.0	167.9	238.0
50°	12.5	14.1	59.8	147.8	220.1
52.5°	10.3	11.4	39.1	128.8	199.4
55°	8.2	9.2	22.8	109.2	178.2
57.5°	6.5	7.6	14.7	90.7	157.6
60°	4.9	6.0	14.1	72.8	134.8
62.5°	3.8	4.3	13.0	56.0	110.8
65°	2.7	3.3	12.5	39.1	88.6
67.5°	2.2	2.7	11.4	25.0	66.3
70°	2.2	2.2	9.2	16.3	45.1
72.5°	2.2	3.8	8.2	10.9	27.2
75°	2.2	4.9	7.1	7.6	10.9
77.5°	2.2	5.4	6.0	6.0	6.0
80°	2.2	4.9	5.4	5.4	4.9
82.5°	2.2	4.3	4.9	5.4	4.3
85°	1.6	4.3	5.4	4.9	3.8
87.5°	1.6	4.3	4.9	4.3	2.7
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	0.00	0.00	0.00	0.00	0.00	13.46	14.75	13.83	15.06	15.38
	3H	0.00	0.00	0.00	0.00	0.00	14.18	15.32	14.56	15.65	16.02
	4H	0.00	0.00	0.00	0.00	0.00	14.21	15.27	14.61	15.62	16.00
	6H	0.00	0.00	0.00	0.00	0.00	14.16	15.13	14.57	15.50	15.90
	8H	0.00	0.00	0.00	0.00	0.18	14.13	15.06	14.56	15.45	15.85
	12H	0.00	0.00	0.00	0.31	0.74	14.12	15.00	14.55	15.38	15.81
4H	2H	0.00	0.00	0.00	0.00	0.00	13.25	14.32	13.66	14.67	15.05
	3H	0.00	0.00	0.00	0.06	0.46	14.01	14.88	14.42	15.28	15.69
	4H	0.00	0.57	0.24	0.99	1.44	14.04	14.81	14.47	15.23	15.68
	6H	1.08	1.75	1.54	2.20	2.66	14.02	14.68	14.48	15.13	15.60
	8H	1.66	2.28	2.13	2.73	3.20	14.00	14.62	14.47	15.07	15.54
	12H	2.21	2.76	2.70	3.25	3.72	14.01	14.56	14.50	15.04	15.52
8H	4H	1.22	1.84	1.69	2.29	2.76	13.92	14.55	14.39	14.99	15.46
	6H	2.78	3.28	3.28	3.78	4.26	13.91	14.42	14.41	14.92	15.40
	8H	3.56	4.02	4.09	4.53	5.03	13.92	14.38	14.45	14.90	15.39
	12H	4.39	4.79	4.90	5.28	5.86	13.98	14.39	14.50	14.88	15.45
12H	4H	1.44	1.99	1.92	2.47	2.94	13.88	14.43	14.37	14.91	15.39
	6H	3.14	3.60	3.67	4.12	4.61	13.86	14.32	14.39	14.84	15.33
	8H	4.13	4.53	4.64	5.02	5.60	13.91	14.31	14.43	14.81	15.38