

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: P1062084

Luminaire Tested: S125RDR-H610D830-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062084
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-H610D830-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, 80 CRI LEDS
Ballast/Driver: -

Summary

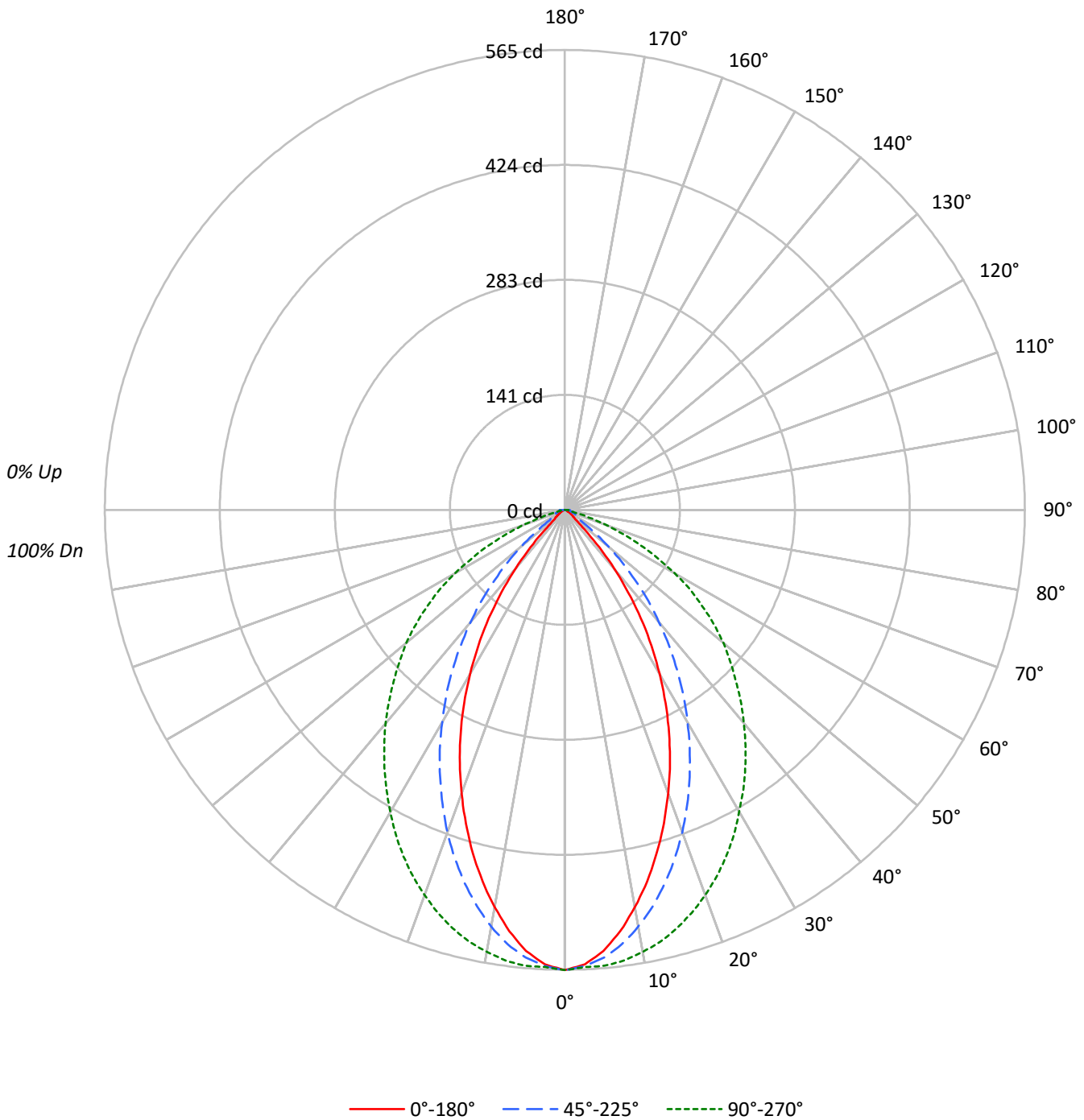
Lumens per Lamp: N/A
Luminaire Lumens: 731.5 lumens
Efficiency: N/A
Efficacy: 42.0 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	
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	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°	3893	3893	3893
5°	3760	3817	3886
10°	3465	3636	3856
15°	3112	3385	3793
20°	2715	3088	3691
25°	2300	2754	3565
30°	1848	2397	3406
35°	1368	2022	3247
40°	847	1615	3078
45°	330	1180	2893
50°	154	740	2725
55°	113	317	2473
60°	78	224	2145
65°	51	235	1668
70°	50	215	1049
75°	67	218	335
80°	99	250	226
85°	150	498	348

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2893 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.8	7.1
10°-20°	134.3	18.4
20°-30°	171.1	23.4
30°-40°	159.2	21.8
40°-50°	109.6	15.0
50°-60°	62.1	8.5
60°-70°	29.3	4.0
70°-80°	9.2	1.3
80°-90°	4.8	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°	357.3	48.8
0°-40°	516.5	70.6
0°-60°	688.2	94.1
0°-90°	731.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	731.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	565	565	565	565	565	
5°	544	552	552	557	562	50
15°	437	451	475	511	532	122
25°	303	322	362	423	469	138
35°	163	185	241	323	386	101
45°	34	54	121	219	297	32
55°	9	11	26	126	206	9
65°	3	4	14	45	102	3
75°	2	6	8	9	13	3
85°	2	5	6	6	4	2
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	565.4	565.4	565.4	565.4	565.4
2.5°	559.1	564.7	561.0	561.6	562.2
5°	544.0	551.5	552.2	557.2	562.2
7.5°	522.0	531.4	538.3	550.3	558.4
10°	495.6	506.9	520.1	539.6	551.5
12.5°	467.4	480.6	498.8	526.4	543.4
15°	436.6	451.0	474.9	510.7	532.1
17.5°	403.9	420.2	449.1	491.9	518.9
20°	370.6	388.2	421.5	470.5	503.8
22.5°	337.3	355.5	392.6	447.3	487.5
25°	302.8	322.3	362.5	423.4	469.2
27.5°	267.6	287.7	332.3	398.9	449.8
30°	232.4	253.8	301.5	373.8	428.4
32.5°	197.9	219.2	271.4	348.6	407.7
35°	162.7	185.3	240.6	322.9	386.3
37.5°	127.5	152.0	210.4	296.5	364.3
40°	94.2	117.5	179.7	270.7	342.4
42.5°	62.8	85.4	152.0	245.0	319.7
45°	33.9	54.0	121.2	219.2	297.1
47.5°	18.2	28.9	94.9	194.1	275.1
50°	14.4	16.3	69.1	170.9	254.4
52.5°	11.9	13.2	45.2	148.9	230.5
55°	9.4	10.7	26.4	126.3	206.0
57.5°	7.5	8.8	17.0	104.9	182.2
60°	5.7	6.9	16.3	84.2	155.8
62.5°	4.4	5.0	15.1	64.7	128.1
65°	3.1	3.8	14.4	45.2	102.4
67.5°	2.5	3.1	13.2	28.9	76.6
70°	2.5	2.5	10.7	18.8	52.1
72.5°	2.5	4.4	9.4	12.6	31.4
75°	2.5	5.7	8.2	8.8	12.6
77.5°	2.5	6.3	6.9	6.9	6.9
80°	2.5	5.7	6.3	6.3	5.7
82.5°	2.5	5.0	5.7	6.3	5.0
85°	1.9	5.0	6.3	5.7	4.4
87.5°	1.9	5.0	5.7	5.0	3.1
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	13.97	15.26	14.33	15.57	15.89
	3H	0.00	0.00	0.00	0.00	0.00	14.69	15.83	15.07	16.16	16.52
	4H	0.00	0.00	0.00	0.00	0.00	14.71	15.77	15.11	16.12	16.51
	6H	0.00	0.00	0.00	0.00	0.04	14.66	15.64	15.08	16.01	16.40
	8H	0.00	0.00	0.00	0.25	0.66	14.64	15.56	15.07	15.95	16.36
	12H	0.00	0.41	0.00	0.79	1.22	14.62	15.50	15.05	15.89	16.32
4H	2H	0.00	0.00	0.00	0.00	0.26	13.76	14.82	14.16	15.17	15.56
	3H	0.00	0.14	0.00	0.55	0.95	14.51	15.38	14.93	15.79	16.19
	4H	0.30	1.07	0.73	1.49	1.94	14.54	15.32	14.98	15.74	16.18
	6H	1.58	2.25	2.05	2.70	3.16	14.52	15.19	14.99	15.64	16.10
	8H	2.16	2.78	2.63	3.23	3.70	14.51	15.13	14.98	15.58	16.05
	12H	2.72	3.27	3.21	3.75	4.23	14.51	15.06	15.00	15.55	16.02
8H	4H	1.71	2.34	2.18	2.79	3.26	14.43	15.05	14.90	15.50	15.97
	6H	3.28	3.79	3.79	4.29	4.77	14.42	14.92	14.92	15.42	15.90
	8H	4.07	4.53	4.59	5.04	5.54	14.43	14.88	14.95	15.40	15.89
	12H	4.91	5.31	5.42	5.80	6.38	14.49	14.89	15.00	15.39	15.96
12H	4H	1.94	2.49	2.42	2.97	3.44	14.38	14.93	14.87	15.42	15.89
	6H	3.66	4.11	4.18	4.63	5.12	14.37	14.83	14.89	15.34	15.83
	8H	4.64	5.05	5.16	5.54	6.11	14.42	14.82	14.93	15.32	15.89