

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: P1061841

Luminaire Tested: S125RDR-H1090D830-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061841
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-H1090D830-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

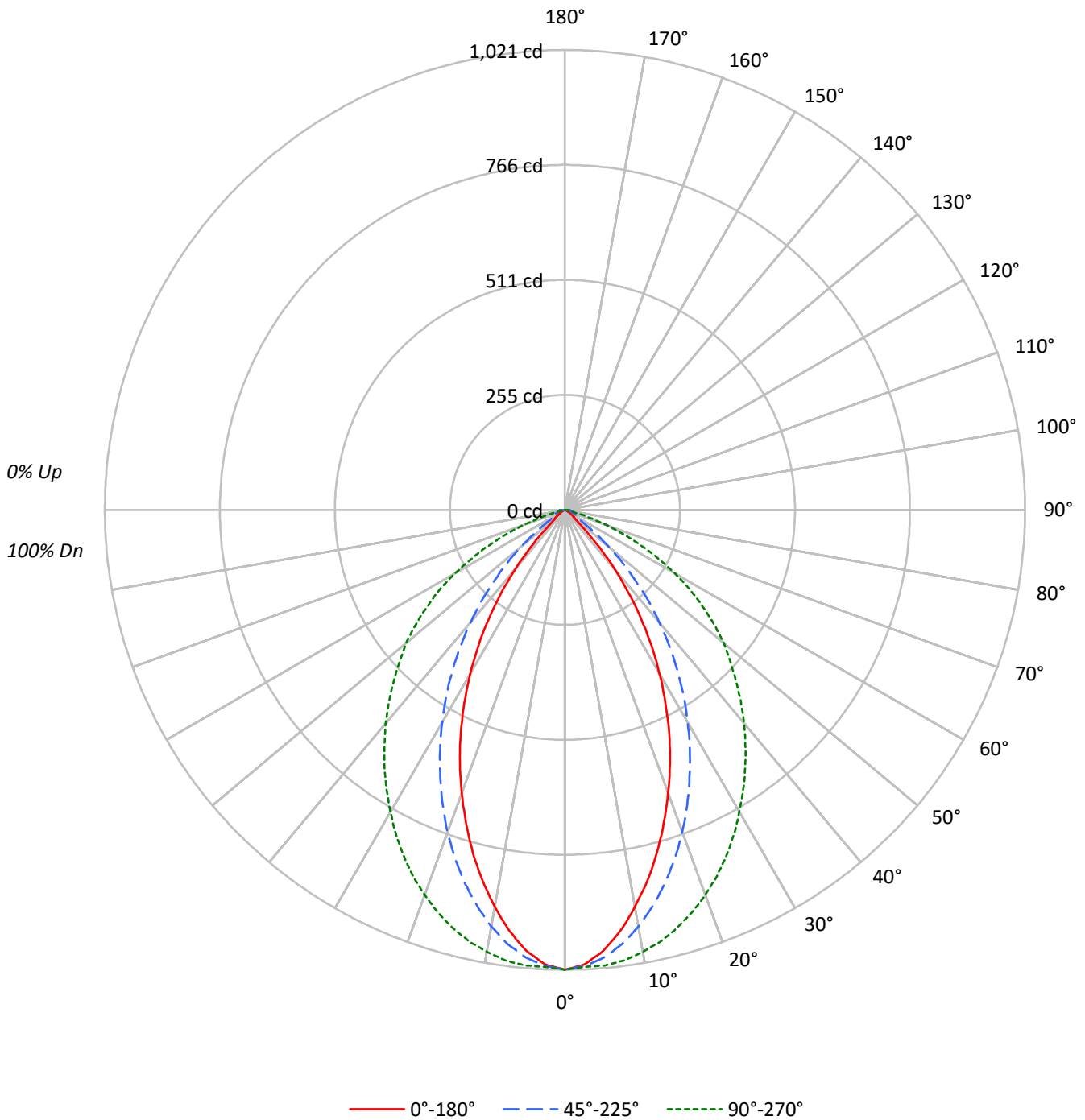
Lumens per Lamp: N/A
Luminaire Lumens: 1321.1 lumens
Efficiency: N/A
Efficacy: 42.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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°	7031	7031	7031
5°	6791	6893	7018
10°	6259	6568	6964
15°	5621	6114	6850
20°	4905	5578	6667
25°	4155	4973	6438
30°	3338	4330	6152
35°	2469	3652	5865
40°	1530	2917	5557
45°	597	2132	5225
50°	280	1337	4922
55°	204	573	4467
60°	140	406	3875
65°	93	425	3012
70°	91	389	1896
75°	120	391	604
80°	178	448	404
85°	269	893	624

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5225 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.6	7.1
10°-20°	242.6	18.4
20°-30°	309.0	23.4
30°-40°	287.6	21.8
40°-50°	198.0	15.0
50°-60°	112.1	8.5
60°-70°	52.9	4.0
70°-80°	16.5	1.3
80°-90°	8.6	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°	645.3	48.8
0°-40°	932.9	70.6
0°-60°	1243.0	94.1
0°-90°	1321.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1321.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1021	1021	1021	1021	1021	
5°	982	996	997	1006	1015	91
15°	788	815	858	922	961	220
25°	547	582	655	765	848	249
35°	294	335	434	583	698	182
45°	61	98	219	396	537	58
55°	17	19	48	228	372	16
65°	6	7	26	82	185	6
75°	4	10	15	16	23	5
85°	3	9	11	10	8	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1021.1	1021.1	1021.1	1021.1	1021.1
2.5°	1009.8	1020.0	1013.2	1014.3	1015.4
5°	982.5	996.1	997.3	1006.3	1015.4
7.5°	942.8	959.8	972.3	993.9	1008.6
10°	895.2	915.6	939.4	974.6	996.1
12.5°	844.1	867.9	900.8	950.8	981.4
15°	788.5	814.6	857.7	922.4	961.0
17.5°	729.5	759.0	811.2	888.4	937.1
20°	669.4	701.2	761.3	849.8	909.9
22.5°	609.3	642.2	709.1	807.8	880.4
25°	546.9	582.0	654.6	764.7	847.5
27.5°	483.3	519.6	600.2	720.4	812.3
30°	419.8	458.4	544.6	675.1	773.8
32.5°	357.4	396.0	490.1	629.7	736.3
35°	293.8	334.7	434.5	583.2	697.8
37.5°	230.3	274.6	380.1	535.5	658.0
40°	170.2	212.2	324.5	489.0	618.3
42.5°	113.5	154.3	274.6	442.5	577.5
45°	61.3	97.6	219.0	396.0	536.6
47.5°	32.9	52.2	171.3	350.6	496.9
50°	26.1	29.5	124.8	308.6	459.5
52.5°	21.6	23.8	81.7	268.9	416.4
55°	17.0	19.3	47.7	228.0	372.1
57.5°	13.6	15.9	30.6	189.5	329.0
60°	10.2	12.5	29.5	152.0	281.4
62.5°	7.9	9.1	27.2	116.9	231.4
65°	5.7	6.8	26.1	81.7	184.9
67.5°	4.5	5.7	23.8	52.2	138.4
70°	4.5	4.5	19.3	34.0	94.2
72.5°	4.5	7.9	17.0	22.7	56.7
75°	4.5	10.2	14.7	15.9	22.7
77.5°	4.5	11.3	12.5	12.5	12.5
80°	4.5	10.2	11.3	11.3	10.2
82.5°	4.5	9.1	10.2	11.3	9.1
85°	3.4	9.1	11.3	10.2	7.9
87.5°	3.4	9.1	10.2	9.1	5.7
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	16.02	17.31	16.39	17.62	17.94
	3H	0.00	0.00	0.00	0.00	0.03	16.74	17.88	17.12	18.21	18.58
	4H	0.00	0.15	0.00	0.50	0.88	16.76	17.83	17.17	18.18	18.56
	6H	0.34	1.31	0.75	1.68	2.08	16.72	17.69	17.13	18.06	18.46
	8H	0.98	1.90	1.41	2.29	2.70	16.69	17.62	17.12	18.01	18.41
	12H	1.57	2.45	2.00	2.83	3.26	16.68	17.56	17.11	17.94	18.37
4H	2H	0.53	1.60	0.94	1.95	2.33	15.81	16.88	16.22	17.23	17.61
	3H	1.34	2.21	1.75	2.61	3.02	16.57	17.44	16.98	17.84	18.24
	4H	2.34	3.12	2.78	3.54	3.98	16.60	17.37	17.03	17.79	18.24
	6H	3.62	4.28	4.08	4.73	5.20	16.58	17.24	17.04	17.69	18.16
	8H	4.20	4.82	4.67	5.27	5.74	16.56	17.18	17.03	17.63	18.10
	12H	4.76	5.31	5.25	5.79	6.27	16.57	17.12	17.05	17.60	18.08
8H	4H	3.76	4.38	4.23	4.83	5.30	16.48	17.10	16.95	17.55	18.02
	6H	5.32	5.82	5.82	6.32	6.80	16.47	16.98	16.97	17.48	17.96
	8H	6.11	6.57	6.63	7.08	7.58	16.48	16.94	17.00	17.45	17.95
	12H	6.96	7.36	7.47	7.85	8.43	16.54	16.94	17.06	17.44	18.01
12H	4H	3.98	4.53	4.47	5.01	5.49	16.44	16.99	16.93	17.47	17.95
	6H	5.69	6.14	6.21	6.66	7.15	16.42	16.88	16.95	17.40	17.89
	8H	6.68	7.08	7.19	7.58	8.15	16.47	16.87	16.99	17.37	17.94