

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: P1061886

Luminaire Tested: S125RDR-H1090D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061886
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-H1090D930-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

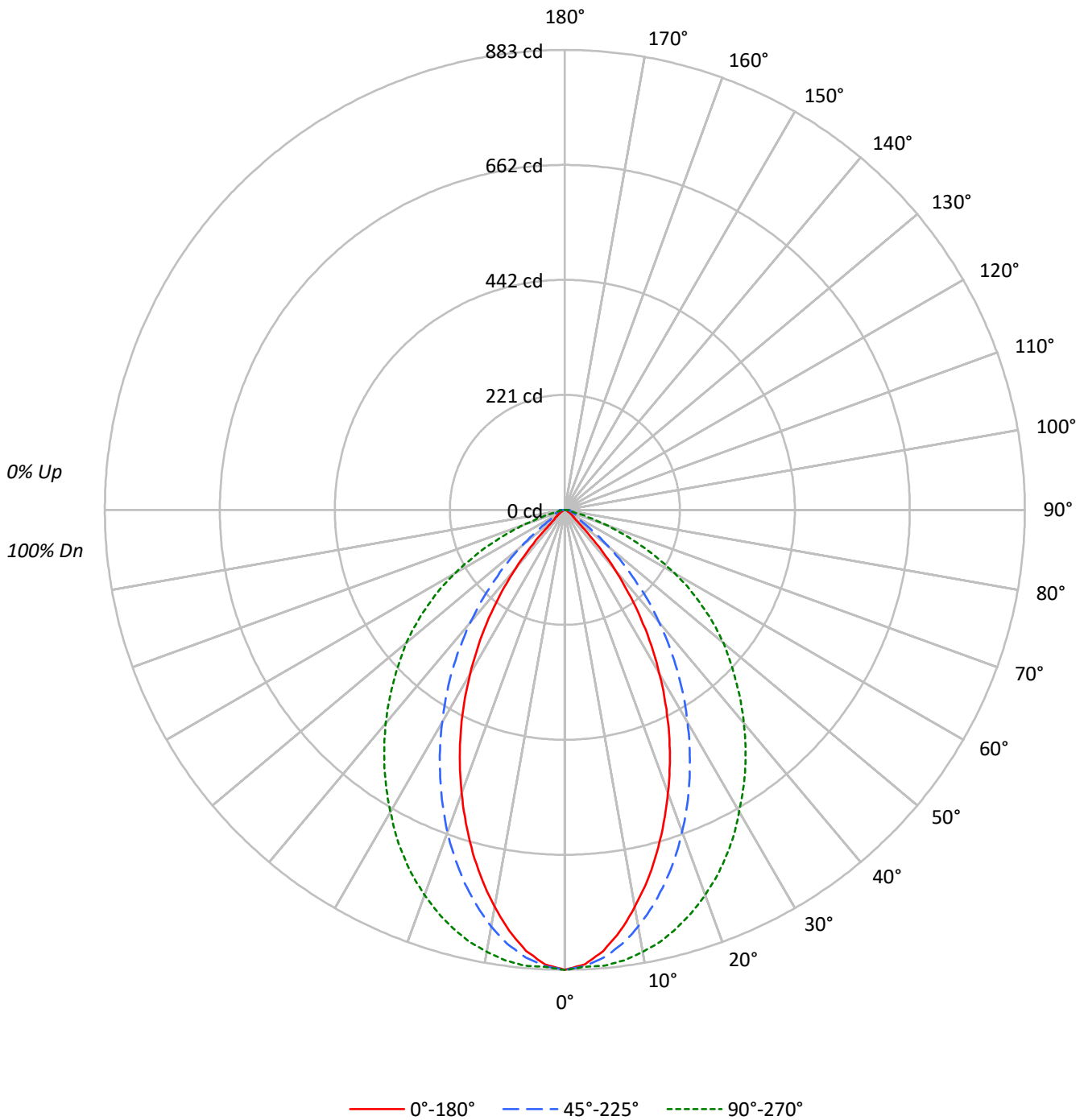
Lumens per Lamp: N/A
Luminaire Lumens: 1142.7 lumens
Efficiency: N/A
Efficacy: 36.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1061886

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6081	6081	6081
5°	5874	5962	6070
10°	5413	5681	6025
15°	4862	5288	5925
20°	4242	4825	5767
25°	3593	4302	5569
30°	2887	3745	5321
35°	2137	3160	5073
40°	1323	2523	4808
45°	516	1844	4520
50°	242	1157	4258
55°	176	495	3864
60°	121	351	3352
65°	80	368	2607
70°	79	336	1641
75°	104	341	521
80°	155	389	349
85°	229	774	545

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4520 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.0	7.1
10°-20°	209.9	18.4
20°-30°	267.3	23.4
30°-40°	248.8	21.8
40°-50°	171.2	15.0
50°-60°	97.0	8.5
60°-70°	45.8	4.0
70°-80°	14.3	1.3
80°-90°	7.5	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°	558.2	48.8
0°-40°	807.0	70.6
0°-60°	1075.2	94.1
0°-90°	1142.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1142.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	883	883	883	883	883	
5°	850	862	863	870	878	79
15°	682	705	742	798	831	190
25°	473	504	566	662	733	216
35°	254	290	376	504	604	157
45°	53	84	189	342	464	50
55°	15	17	41	197	322	14
65°	5	6	23	71	160	5
75°	4	9	13	14	20	4
85°	3	8	10	9	7	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	883.2	883.2	883.2	883.2	883.2
2.5°	873.4	882.3	876.4	877.4	878.3
5°	849.9	861.7	862.6	870.5	878.3
7.5°	815.5	830.3	841.0	859.7	872.5
10°	774.3	792.0	812.6	843.0	861.7
12.5°	730.2	750.8	779.2	822.4	848.9
15°	682.1	704.6	741.9	797.9	831.2
17.5°	631.0	656.5	701.7	768.4	810.6
20°	579.0	606.5	658.5	735.1	787.1
22.5°	527.0	555.5	613.4	698.7	761.6
25°	473.0	503.5	566.3	661.5	733.1
27.5°	418.1	449.5	519.2	623.2	702.7
30°	363.1	396.5	471.1	583.9	669.3
32.5°	309.1	342.5	424.0	544.7	636.9
35°	254.2	289.5	375.9	504.4	603.6
37.5°	199.2	237.5	328.8	463.2	569.2
40°	147.2	183.5	280.7	423.0	534.9
42.5°	98.1	133.5	237.5	382.7	499.5
45°	53.0	84.4	189.4	342.5	464.2
47.5°	28.5	45.1	148.2	303.2	429.8
50°	22.6	25.5	108.0	266.9	397.5
52.5°	18.6	20.6	70.7	232.6	360.2
55°	14.7	16.7	41.2	197.3	321.9
57.5°	11.8	13.7	26.5	163.9	284.6
60°	8.8	10.8	25.5	131.5	243.4
62.5°	6.9	7.9	23.6	101.1	200.2
65°	4.9	5.9	22.6	70.7	160.0
67.5°	3.9	4.9	20.6	45.1	119.7
70°	3.9	3.9	16.7	29.4	81.5
72.5°	3.9	6.9	14.7	19.6	49.1
75°	3.9	8.8	12.8	13.7	19.6
77.5°	3.9	9.8	10.8	10.8	10.8
80°	3.9	8.8	9.8	9.8	8.8
82.5°	3.9	7.9	8.8	9.8	7.9
85°	2.9	7.9	9.8	8.8	6.9
87.5°	2.9	7.9	8.8	7.9	4.9
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	15.52	16.81	15.88	17.12	17.44
	3H	0.00	0.00	0.00	0.00	0.00	16.24	17.38	16.62	17.71	18.07
	4H	0.00	0.00	0.00	0.00	0.37	16.26	17.32	16.66	17.67	18.06
	6H	0.00	0.80	0.24	1.18	1.57	16.21	17.19	16.63	17.56	17.95
	8H	0.47	1.39	0.90	1.79	2.19	16.19	17.11	16.62	17.50	17.91
	12H	1.06	1.94	1.49	2.32	2.75	16.17	17.05	16.60	17.44	17.87
4H	2H	0.03	1.09	0.43	1.44	1.82	15.31	16.37	15.71	16.72	17.11
	3H	0.84	1.70	1.25	2.11	2.51	16.06	16.93	16.48	17.34	17.74
	4H	1.84	2.61	2.27	3.03	3.48	16.09	16.87	16.53	17.29	17.73
	6H	3.11	3.78	3.58	4.23	4.69	16.07	16.74	16.53	17.19	17.65
	8H	3.69	4.32	4.16	4.77	5.24	16.06	16.68	16.53	17.13	17.60
	12H	4.26	4.81	4.74	5.29	5.76	16.06	16.61	16.55	17.10	17.57
8H	4H	3.26	3.88	3.73	4.33	4.80	15.98	16.60	16.45	17.05	17.52
	6H	4.81	5.32	5.32	5.82	6.30	15.97	16.47	16.47	16.97	17.45
	8H	5.61	6.07	6.14	6.59	7.08	15.98	16.43	16.50	16.95	17.44
	12H	6.46	6.86	6.97	7.35	7.93	16.04	16.44	16.55	16.94	17.51
12H	4H	3.48	4.03	3.97	4.51	4.99	15.93	16.48	16.42	16.97	17.44
	6H	5.18	5.64	5.71	6.16	6.65	15.92	16.38	16.44	16.89	17.38
	8H	6.18	6.58	6.70	7.08	7.65	15.97	16.37	16.48	16.87	17.44