

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: P1061895

Luminaire Tested: S125RDR-H1090D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061895
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-H1090D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

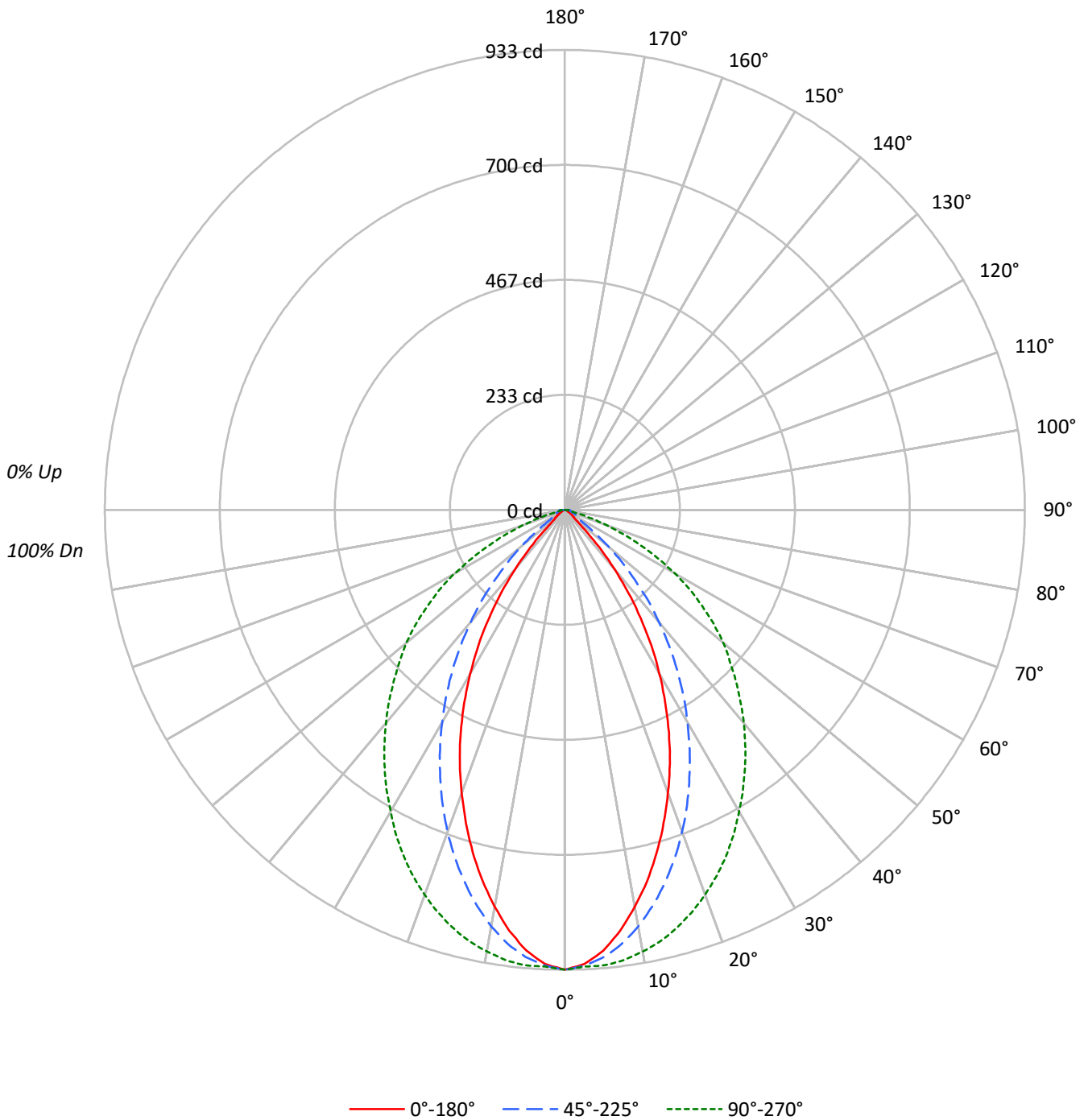
Lumens per Lamp: N/A
Luminaire Lumens: 1206.8 lumens
Efficiency: N/A
Efficacy: 38.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	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°	6423	6423	6423
5°	6203	6296	6411
10°	5717	5999	6362
15°	5134	5585	6257
20°	4481	5095	6090
25°	3795	4543	5882
30°	3049	3955	5619
35°	2256	3336	5358
40°	1398	2664	5076
45°	545	1947	4773
50°	255	1221	4496
55°	186	522	4080
60°	128	370	3539
65°	85	388	2752
70°	83	354	1731
75°	109	359	551
80°	163	412	369
85°	245	822	577

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4773 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.5	7.1
10°-20°	221.6	18.4
20°-30°	282.3	23.4
30°-40°	262.7	21.8
40°-50°	180.8	15.0
50°-60°	102.4	8.5
60°-70°	48.4	4.0
70°-80°	15.1	1.3
80°-90°	7.9	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°	589.4	48.8
0°-40°	852.2	70.6
0°-60°	1135.4	94.1
0°-90°	1206.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1206.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	933	933	933	933	933	
5°	898	910	911	919	928	83
15°	720	744	784	843	878	201
25°	500	532	598	698	774	228
35°	268	306	397	533	637	166
45°	56	89	200	362	490	53
55°	16	18	44	208	340	14
65°	5	6	24	75	169	6
75°	4	9	14	14	21	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°	932.8	932.8	932.8	932.8	932.8
2.5°	922.4	931.7	925.5	926.5	927.6
5°	897.5	910.0	911.0	919.3	927.6
7.5°	861.2	876.8	888.2	907.9	921.4
10°	817.7	836.4	858.1	890.3	910.0
12.5°	771.1	792.8	822.9	868.5	896.5
15°	720.3	744.1	783.5	842.6	877.8
17.5°	666.4	693.3	741.0	811.5	856.1
20°	611.5	640.5	695.4	776.3	831.2
22.5°	556.5	586.6	647.7	737.9	804.2
25°	499.5	531.7	598.0	698.5	774.2
27.5°	441.5	474.7	548.3	658.1	742.1
30°	383.5	418.7	497.5	616.7	706.8
32.5°	326.5	361.7	447.7	575.2	672.6
35°	268.4	305.7	396.9	532.7	637.4
37.5°	210.4	250.8	347.2	489.2	601.1
40°	155.5	193.8	296.4	446.7	564.8
42.5°	103.6	141.0	250.8	404.2	527.5
45°	56.0	89.1	200.0	361.7	490.2
47.5°	30.1	47.7	156.5	320.2	453.9
50°	23.8	26.9	114.0	281.9	419.7
52.5°	19.7	21.8	74.6	245.6	380.4
55°	15.5	17.6	43.5	208.3	339.9
57.5°	12.4	14.5	28.0	173.1	300.6
60°	9.3	11.4	26.9	138.9	257.0
62.5°	7.3	8.3	24.9	106.7	211.4
65°	5.2	6.2	23.8	74.6	168.9
67.5°	4.1	5.2	21.8	47.7	126.4
70°	4.1	4.1	17.6	31.1	86.0
72.5°	4.1	7.3	15.5	20.7	51.8
75°	4.1	9.3	13.5	14.5	20.7
77.5°	4.1	10.4	11.4	11.4	11.4
80°	4.1	9.3	10.4	10.4	9.3
82.5°	4.1	8.3	9.3	10.4	8.3
85°	3.1	8.3	10.4	9.3	7.3
87.5°	3.1	8.3	9.3	8.3	5.2
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	15.71	17.00	16.07	17.31	17.63
	3H	0.00	0.00	0.00	0.00	0.00	16.43	17.57	16.81	17.90	18.26
	4H	0.00	0.00	0.00	0.17	0.56	16.45	17.51	16.85	17.86	18.25
	6H	0.02	0.99	0.43	1.36	1.76	16.40	17.38	16.82	17.75	18.14
	8H	0.65	1.58	1.08	1.97	2.37	16.38	17.30	16.81	17.69	18.10
	12H	1.24	2.13	1.68	2.51	2.94	16.36	17.24	16.79	17.63	18.06
4H	2H	0.21	1.27	0.61	1.62	2.01	15.50	16.56	15.90	16.91	17.30
	3H	1.02	1.89	1.43	2.29	2.69	16.25	17.12	16.67	17.53	17.93
	4H	2.02	2.80	2.46	3.22	3.66	16.28	17.06	16.72	17.48	17.92
	6H	3.30	3.97	3.76	4.41	4.88	16.26	16.93	16.73	17.38	17.84
	8H	3.88	4.50	4.35	4.95	5.42	16.25	16.87	16.72	17.32	17.79
	12H	4.44	4.99	4.93	5.47	5.95	16.25	16.80	16.74	17.29	17.76
8H	4H	3.44	4.07	3.91	4.51	4.99	16.17	16.79	16.64	17.24	17.71
	6H	5.00	5.51	5.51	6.01	6.49	16.16	16.66	16.66	17.16	17.64
	8H	5.80	6.25	6.32	6.77	7.26	16.17	16.62	16.69	17.14	17.63
	12H	6.64	7.04	7.15	7.54	8.11	16.23	16.63	16.74	17.13	17.70
12H	4H	3.67	4.22	4.15	4.70	5.18	16.12	16.67	16.61	17.16	17.63
	6H	5.38	5.83	5.90	6.35	6.84	16.11	16.57	16.63	17.08	17.58
	8H	6.37	6.77	6.88	7.27	7.84	16.16	16.56	16.67	17.06	17.63