

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: P1059468

Luminaire Tested: S123RDR-H1000D935-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059468
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-H1000D935-X4F0-XX-UDD-SVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

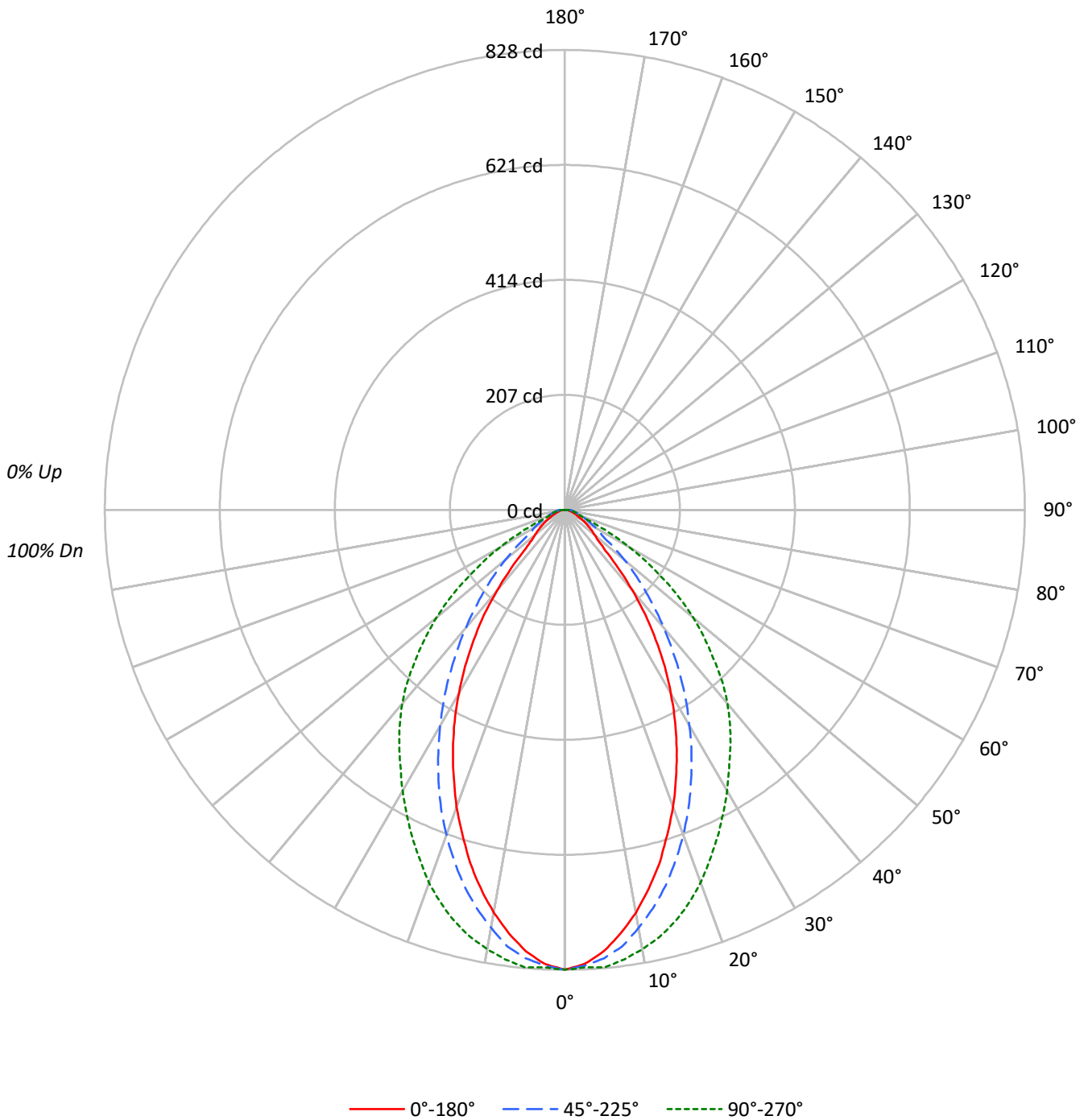
Lumens per Lamp: N/A
Luminaire Lumens: 1111.2 lumens
Efficiency: N/A
Efficacy: 35.6 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9720	9720	9720
5°	9406	9551	9745
10°	8779	9110	9576
15°	8000	8513	9325
20°	7119	7786	8931
25°	6169	6968	8420
30°	5173	6078	7920
35°	4098	5173	7444
40°	2900	4255	6982
45°	1707	3364	6284
50°	1277	2554	5504
55°	1073	1726	4420
60°	869	1473	3140
65°	686	1256	1656
70°	601	1095	1023
75°	558	1025	980
80°	555	1116	974
85°	687	1657	1253

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6284 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.2	6.9
10°-20°	198.0	17.8
20°-30°	252.1	22.7
30°-40°	237.2	21.3
40°-50°	170.8	15.4
50°-60°	98.6	8.9
60°-70°	45.1	4.1
70°-80°	22.5	2.0
80°-90°	10.7	1.0
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°	526.3	47.4
0°-40°	763.5	68.7
0°-60°	1032.9	93.0
0°-90°	1111.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1111.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	828	828	828	828	828	
5°	798	811	810	818	827	74
15°	658	682	700	739	767	183
25°	476	501	538	597	650	218
35°	286	310	361	444	519	177
45°	103	128	203	304	378	87
55°	52	54	84	160	216	47
65°	25	35	45	50	60	25
75°	12	24	23	22	22	13
85°	5	11	12	11	9	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	827.8	827.8	827.8	827.8	827.8
2.5°	818.5	828.8	821.6	822.6	824.7
5°	798.0	811.3	810.3	818.5	826.7
7.5°	769.2	784.6	792.8	805.2	816.5
10°	736.3	753.7	764.0	786.6	803.1
12.5°	698.2	720.8	734.2	764.0	787.7
15°	658.1	681.8	700.3	739.3	767.1
17.5°	612.9	638.6	662.2	708.5	742.4
20°	569.7	594.4	623.1	673.5	714.7
22.5°	522.4	549.1	582.0	635.5	681.8
25°	476.1	500.8	537.8	597.4	649.9
27.5°	429.8	454.5	493.6	559.4	617.0
30°	381.5	407.2	448.3	521.3	584.1
32.5°	334.2	358.9	405.1	484.3	550.1
35°	285.9	310.5	360.9	444.2	519.3
37.5°	238.6	264.3	317.7	411.3	488.4
40°	189.2	217.0	277.6	377.4	455.5
42.5°	142.9	172.8	237.5	342.4	419.5
45°	102.8	128.5	202.6	304.4	378.4
47.5°	80.2	93.6	170.7	265.3	340.4
50°	69.9	72.0	139.8	229.3	301.3
52.5°	60.7	62.7	110.0	195.4	260.2
55°	52.4	54.5	84.3	160.4	215.9
57.5°	44.2	47.3	69.9	127.5	173.8
60°	37.0	41.1	62.7	97.7	133.7
62.5°	29.8	37.0	53.5	72.0	95.6
65°	24.7	35.0	45.2	50.4	59.6
67.5°	20.6	31.9	38.0	36.0	35.0
70°	17.5	28.8	31.9	28.8	29.8
72.5°	14.4	26.7	26.7	24.7	24.7
75°	12.3	23.7	22.6	21.6	21.6
77.5°	10.3	20.6	19.5	18.5	17.5
80°	8.2	16.5	16.5	15.4	14.4
82.5°	7.2	13.4	13.4	13.4	11.3
85°	5.1	11.3	12.3	11.3	9.3
87.5°	4.1	10.3	10.3	9.3	6.2
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	7.87	9.19	8.24	9.50	9.82	15.23	16.55	15.60	16.87	17.18
	3H	9.26	10.43	9.64	10.76	11.13	15.47	16.64	15.84	16.97	17.33
	4H	9.81	10.90	10.22	11.26	11.64	15.58	16.67	15.98	17.02	17.40
	6H	10.25	11.25	10.66	11.62	12.02	15.69	16.70	16.11	17.07	17.46
	8H	10.43	11.38	10.86	11.77	12.17	15.75	16.70	16.18	17.09	17.49
	12H	10.58	11.49	11.01	11.87	12.30	15.81	16.71	16.24	17.10	17.53
4H	2H	8.97	10.06	9.37	10.41	10.79	15.19	16.28	15.60	16.63	17.02
	3H	10.63	11.53	11.05	11.93	12.33	15.55	16.45	15.97	16.85	17.25
	4H	11.45	12.25	11.88	12.66	13.11	15.75	16.55	16.18	16.97	17.41
	6H	12.08	12.77	12.55	13.22	13.69	15.98	16.67	16.44	17.11	17.58
	8H	12.32	12.96	12.79	13.41	13.88	16.08	16.73	16.55	17.17	17.65
	12H	12.53	13.10	13.02	13.58	14.06	16.21	16.78	16.70	17.27	17.74
8H	4H	11.89	12.53	12.36	12.98	13.45	15.79	16.43	16.26	16.88	17.35
	6H	12.80	13.33	13.30	13.83	14.31	16.12	16.65	16.62	17.14	17.62
	8H	13.22	13.70	13.74	14.21	14.70	16.31	16.78	16.83	17.30	17.79
	12H	13.64	14.06	14.15	14.55	15.12	16.56	16.98	17.07	17.47	18.04
12H	4H	11.94	12.52	12.43	13.00	13.47	15.78	16.35	16.26	16.83	17.31
	6H	12.94	13.41	13.46	13.93	14.42	16.13	16.61	16.65	17.12	17.62
	8H	13.48	13.90	13.99	14.39	14.96	16.39	16.81	16.90	17.31	17.88