

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059012

Luminaire Tested: S123RDRP-S1000D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059012
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S1000D830-X4F0-XX-UDD-WVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

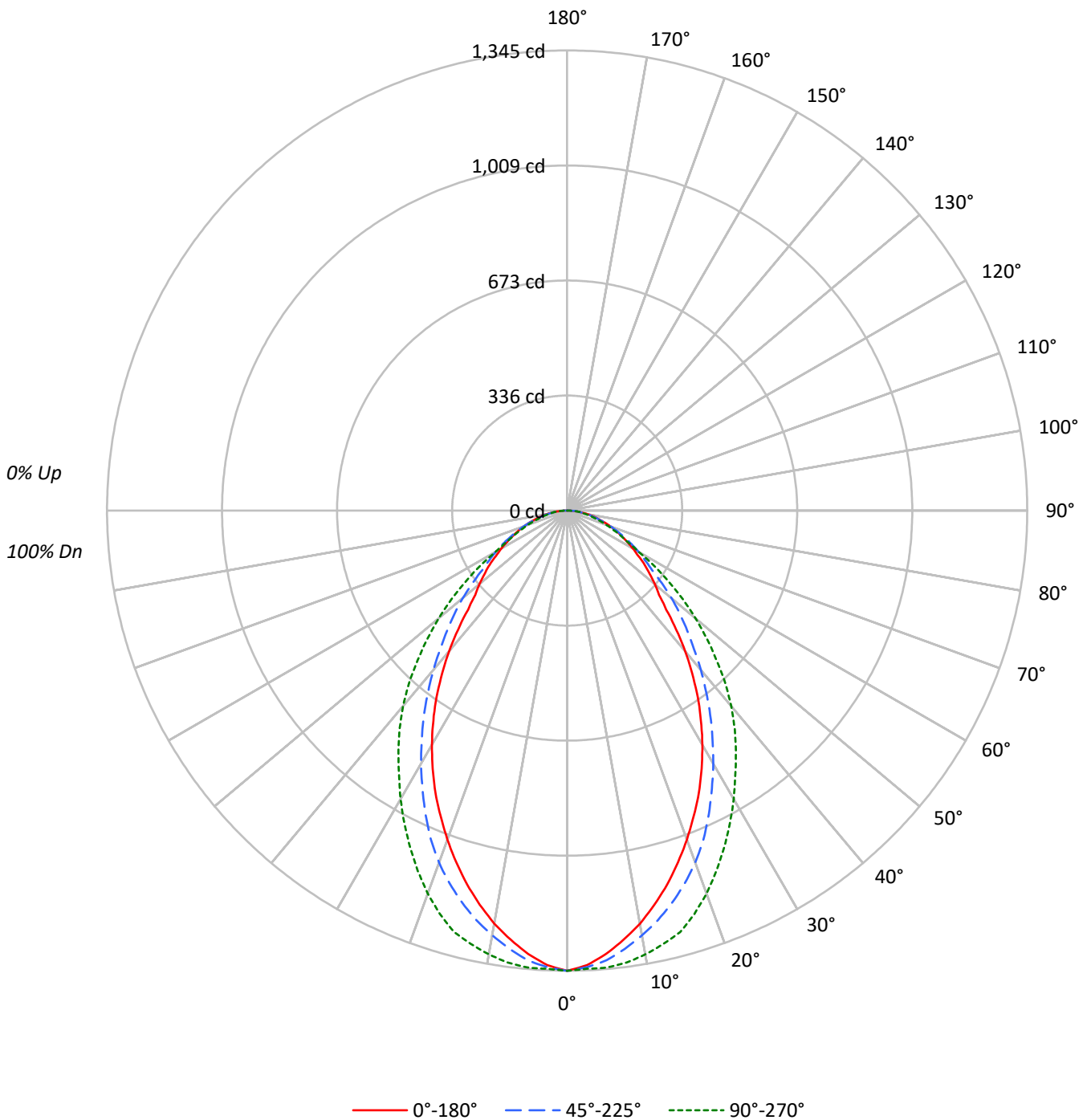
Lumens per Lamp: N/A
Luminaire Lumens: 2363.6 lumens
Efficiency: N/A
Efficacy: 67.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): 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: P1059012

CATALOG NUMBER: S123RDRP-S1000D830-X4F0-XX-UDD-WVL-W

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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15795	15795	15795
5°	15336	15555	15801
10°	14617	15031	15707
15°	13749	14424	15508
20°	12787	13684	14885
25°	11803	12688	14068
30°	10720	11583	13200
35°	9541	10454	12329
40°	8233	9315	11428
45°	6805	8247	10246
50°	6111	7274	8946
55°	5665	6209	7417
60°	5221	5655	5681
65°	4857	5115	4760
70°	4570	4649	4171
75°	4306	4147	3675
80°	4071	3760	3442
85°	3894	4217	3894

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10246 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.6	5.3
10°-20°	335.6	14.2
20°-30°	454.1	19.2
30°-40°	466.6	19.7
40°-50°	391.9	16.6
50°-60°	281.0	11.9
60°-70°	178.9	7.6
70°-80°	98.3	4.2
80°-90°	32.8	1.4
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°	914.3	38.7
0°-40°	1380.9	58.4
0°-60°	2053.7	86.9
0°-90°	2363.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2363.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1345	1345	1345	1345	1345	
5°	1301	1324	1320	1329	1340	122
15°	1131	1162	1186	1238	1276	317
25°	911	946	979	1033	1086	418
35°	666	702	729	794	860	414
45°	410	446	497	568	617	324
55°	277	282	303	344	362	247
65°	175	185	184	174	171	174
75°	95	104	91	84	81	101
85°	29	30	31	32	29	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1345.1	1345.1	1345.1	1345.1	1345.1
2.5°	1330.1	1348.6	1335.9	1337.0	1340.5
5°	1301.1	1324.3	1319.6	1328.9	1340.5
7.5°	1265.2	1290.7	1291.9	1313.9	1332.4
10°	1225.9	1252.5	1260.6	1294.2	1317.3
12.5°	1179.6	1208.5	1225.9	1267.6	1297.7
15°	1131.0	1162.2	1186.5	1237.5	1275.7
17.5°	1077.7	1111.3	1142.5	1196.9	1236.3
20°	1023.3	1059.2	1095.1	1146.0	1191.2
22.5°	966.6	1003.6	1040.7	1090.4	1140.2
25°	911.0	945.7	979.3	1032.6	1085.8
27.5°	850.8	886.7	915.7	974.7	1030.3
30°	790.6	826.5	854.3	915.7	973.5
32.5°	728.1	765.2	790.6	854.3	914.5
35°	665.6	701.5	729.3	794.1	860.1
37.5°	599.6	639.0	666.8	739.7	804.5
40°	537.1	574.2	607.7	684.1	745.5
42.5°	472.3	510.5	548.7	627.4	684.1
45°	409.8	445.7	496.6	568.4	617.0
47.5°	364.6	387.8	446.8	507.0	553.3
50°	334.5	343.8	398.2	451.5	489.7
52.5°	304.4	311.4	348.4	397.1	426.0
55°	276.7	282.5	303.3	343.8	362.3
57.5°	246.6	252.4	269.7	292.9	303.3
60°	222.3	226.9	240.8	244.3	241.9
62.5°	197.9	204.9	211.8	203.7	200.3
65°	174.8	185.2	184.1	173.6	171.3
67.5°	154.0	164.4	158.6	148.2	144.7
70°	133.1	143.5	135.4	125.0	121.5
72.5°	113.4	125.0	112.3	103.0	100.7
75°	94.9	104.2	91.4	84.5	81.0
77.5°	77.6	84.5	72.9	67.1	64.8
80°	60.2	64.8	55.6	52.1	50.9
82.5°	44.0	46.3	40.5	42.8	41.7
85°	28.9	30.1	31.3	32.4	28.9
87.5°	13.9	19.7	19.7	18.5	15.0
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	16.77	18.24	17.14	18.55	18.87	17.84	19.31	18.21	19.62	19.93
	3H	18.47	19.78	18.85	20.11	20.47	18.93	20.24	19.31	20.57	20.93
	4H	19.12	20.35	19.53	20.70	21.08	19.33	20.56	19.73	20.91	21.29
	6H	19.63	20.76	20.04	21.13	21.52	19.64	20.77	20.05	21.14	21.53
	8H	19.80	20.88	20.23	21.27	21.67	19.77	20.85	20.20	21.24	21.64
	12H	19.93	20.96	20.36	21.34	21.77	19.89	20.93	20.32	21.31	21.74
4H	2H	17.38	18.60	17.78	18.95	19.33	18.25	19.47	18.65	19.82	20.20
	3H	19.30	20.32	19.71	20.72	21.12	19.56	20.58	19.98	20.98	21.38
	4H	20.11	21.03	20.55	21.45	21.89	20.08	21.00	20.52	21.42	21.86
	6H	20.76	21.56	21.22	22.00	22.46	20.52	21.31	20.97	21.76	22.22
	8H	20.98	21.73	21.45	22.17	22.64	20.71	21.45	21.17	21.89	22.36
	12H	21.16	21.82	21.64	22.30	22.77	20.89	21.55	21.37	22.03	22.50
8H	4H	20.35	21.10	20.82	21.54	22.01	20.33	21.07	20.79	21.52	21.99
	6H	21.14	21.75	21.64	22.25	22.72	20.88	21.49	21.37	21.98	22.46
	8H	21.45	22.00	21.97	22.52	23.00	21.15	21.71	21.67	22.22	22.71
	12H	21.72	22.21	22.23	22.70	23.27	21.44	21.93	21.96	22.43	22.99
12H	4H	20.36	21.03	20.85	21.51	21.98	20.35	21.02	20.84	21.50	21.97
	6H	21.17	21.73	21.69	22.24	22.73	20.93	21.48	21.44	21.99	22.48
	8H	21.55	22.04	22.06	22.53	23.10	21.27	21.76	21.78	22.25	22.82