

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: P1059010

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059010
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-28)
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-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

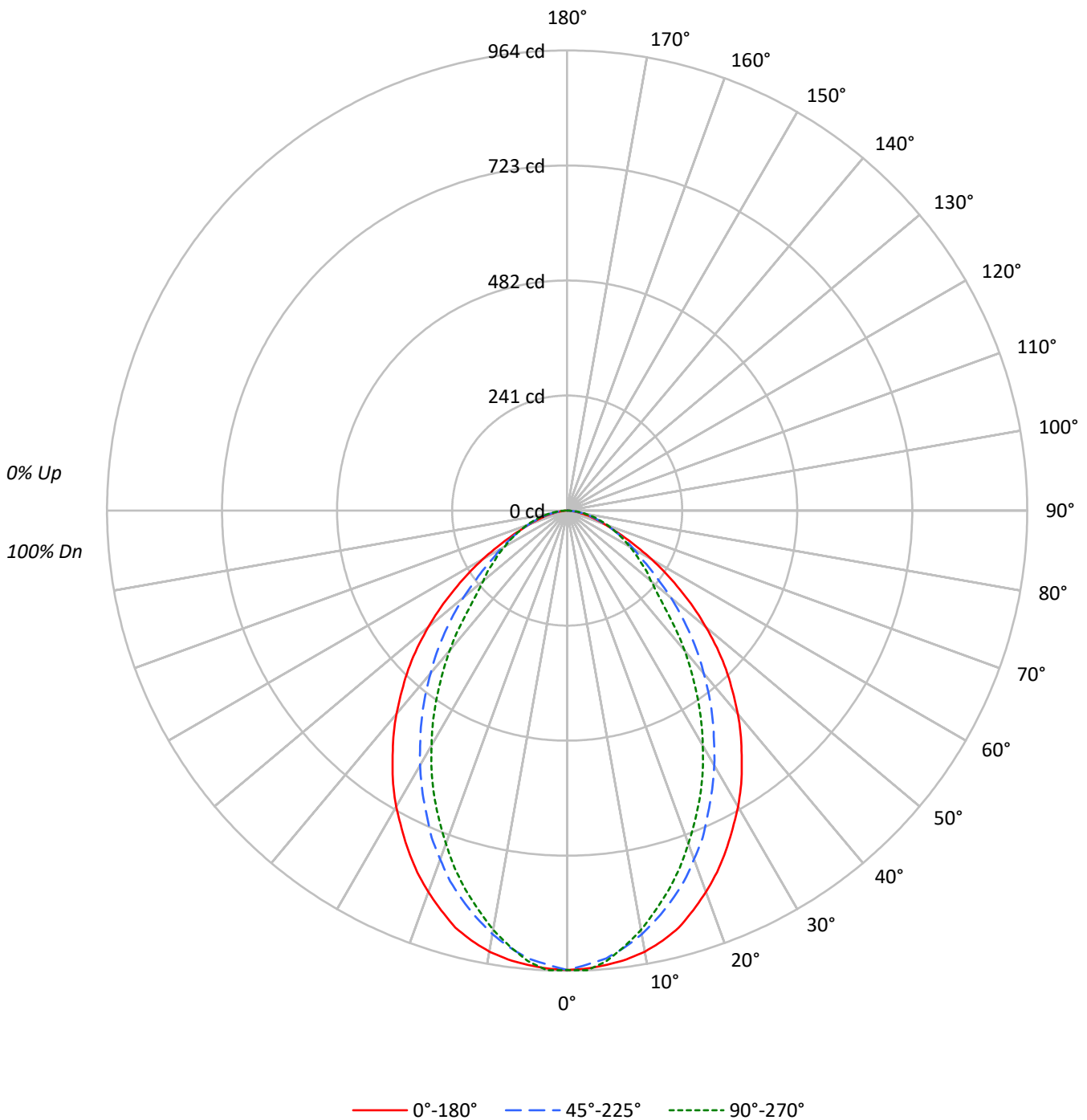
Lumens per Lamp: N/A
Luminaire Lumens: 1683.3 lumens
Efficiency: N/A
Efficacy: 48.1 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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: P1059010

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

Luminous Intensity Polar Plot





TEST NUMBER: P1059010

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

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	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	88
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11302	11302	11302
5°	11263	11099	11167
10°	11187	10744	10635
15°	10997	10280	9999
20°	10624	9714	9281
25°	10191	9053	8543
30°	9710	8360	7702
35°	9137	7612	6815
40°	8529	6827	5869
45°	7818	6031	4822
50°	6931	5177	4183
55°	5896	4334	3837
60°	4810	3776	3558
65°	3665	3343	3312
70°	2860	2980	3097
75°	2309	2677	2885
80°	1718	2191	2658
85°	930	1401	2344

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7818 cd/sqm



TEST NUMBER: P1059010

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.3	5.3
10°-20°	240.4	14.3
20°-30°	326.8	19.4
30°-40°	338.7	20.1
40°-50°	285.7	17.0
50°-60°	202.8	12.0
60°-70°	124.0	7.4
70°-80°	61.7	3.7
80°-90°	14.0	0.8
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°	656.5	39.0
0°-40°	995.2	59.1
0°-60°	1483.7	88.1
0°-90°	1683.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1683.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	962	962	962	962	962	
5°	956	956	942	947	947	91
15°	905	887	846	831	822	254
25°	787	752	699	673	659	362
35°	637	589	531	494	475	399
45°	471	421	363	314	290	362
55°	288	258	212	193	187	259
65°	132	127	120	120	119	135
75°	51	54	59	61	64	55
85°	7	8	10	15	17	10
90°	0	0	0	0	0	

TEST NUMBER: P1059010

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	962.5	962.5	962.5	962.5	962.5
2.5°	960.1	961.3	952.0	962.5	963.6
5°	955.5	955.5	941.6	947.4	947.4
7.5°	948.6	946.3	923.1	923.1	920.8
10°	938.2	931.2	901.1	895.4	891.9
12.5°	923.1	911.6	874.5	864.1	857.2
15°	904.6	887.3	845.6	830.6	822.5
17.5°	878.0	860.7	814.4	793.6	784.3
20°	850.2	824.8	777.4	756.5	742.7
22.5°	820.2	787.8	741.5	716.1	701.0
25°	786.6	751.9	698.7	673.3	659.4
27.5°	750.8	712.6	658.2	629.3	615.4
30°	716.1	672.1	616.6	584.2	568.0
32.5°	679.0	629.3	572.6	539.1	522.9
35°	637.4	588.8	531.0	494.0	475.4
37.5°	598.1	548.3	488.2	448.8	428.0
40°	556.4	506.7	445.4	404.9	382.9
42.5°	512.5	465.0	404.9	357.5	336.6
45°	470.8	421.1	363.2	313.5	290.4
47.5°	425.7	379.4	322.7	271.8	255.7
50°	379.4	336.6	283.4	237.1	229.0
52.5°	334.3	298.5	244.1	214.0	210.5
55°	288.0	258.0	211.7	193.2	187.4
57.5°	245.2	223.3	181.6	172.4	170.0
60°	204.8	186.2	160.8	155.0	151.5
62.5°	165.4	155.0	140.0	137.7	135.3
65°	131.9	127.2	120.3	120.3	119.2
67.5°	104.1	104.1	103.0	105.3	104.1
70°	83.3	84.4	86.8	89.1	90.2
72.5°	65.9	69.4	71.7	75.2	76.3
75°	50.9	54.4	59.0	61.3	63.6
77.5°	37.0	40.5	45.1	48.6	50.9
80°	25.4	27.8	32.4	37.0	39.3
82.5°	16.2	17.4	20.8	25.4	27.8
85°	6.9	8.1	10.4	15.0	17.4
87.5°	0.0	0.0	1.2	4.6	8.1
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1059010
 CATALOG NUMBER: S123RDRP-S1000D830-X4F0-XX-UDD-WVL-B

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	17.24	18.69	17.60	19.00	19.31	15.33	16.78	15.70	17.09	17.41
	3H	18.13	19.43	18.51	19.76	20.12	16.90	18.20	17.28	18.53	18.89
	4H	18.41	19.63	18.81	19.98	20.36	17.50	18.71	17.90	19.06	19.44
	6H	18.56	19.68	18.98	20.05	20.44	17.95	19.07	18.36	19.44	19.83
	8H	18.59	19.65	19.01	20.04	20.44	18.10	19.16	18.53	19.55	19.95
	12H	18.58	19.60	19.01	19.98	20.41	18.20	19.21	18.63	19.60	20.03
4H	2H	17.48	18.69	17.88	19.04	19.42	15.87	17.09	16.27	17.43	17.81
	3H	18.59	19.59	19.00	19.99	20.40	17.65	18.65	18.06	19.05	19.45
	4H	18.98	19.88	19.42	20.30	20.74	18.36	19.26	18.79	19.67	20.11
	6H	19.22	20.00	19.68	20.45	20.91	18.93	19.71	19.39	20.15	20.61
	8H	19.27	19.99	19.73	20.44	20.91	19.12	19.85	19.59	20.29	20.76
	12H	19.27	19.92	19.76	20.40	20.87	19.26	19.91	19.74	20.39	20.86
8H	4H	19.14	19.87	19.61	20.31	20.78	18.57	19.29	19.03	19.74	20.21
	6H	19.45	20.05	19.95	20.54	21.02	19.24	19.84	19.74	20.33	20.81
	8H	19.53	20.07	20.05	20.58	21.07	19.50	20.04	20.02	20.55	21.04
	12H	19.56	20.04	20.07	20.53	21.10	19.71	20.18	20.22	20.68	21.24
12H	4H	19.14	19.79	19.63	20.27	20.74	18.57	19.21	19.05	19.69	20.16
	6H	19.47	20.00	19.98	20.52	21.01	19.25	19.79	19.77	20.30	20.79
	8H	19.58	20.06	20.09	20.55	21.12	19.55	20.03	20.07	20.52	21.09