

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: P1059011

Luminaire Tested: S123RDR-S1000D830-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059011
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1000D830-X4F0-XX-UDD-WVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

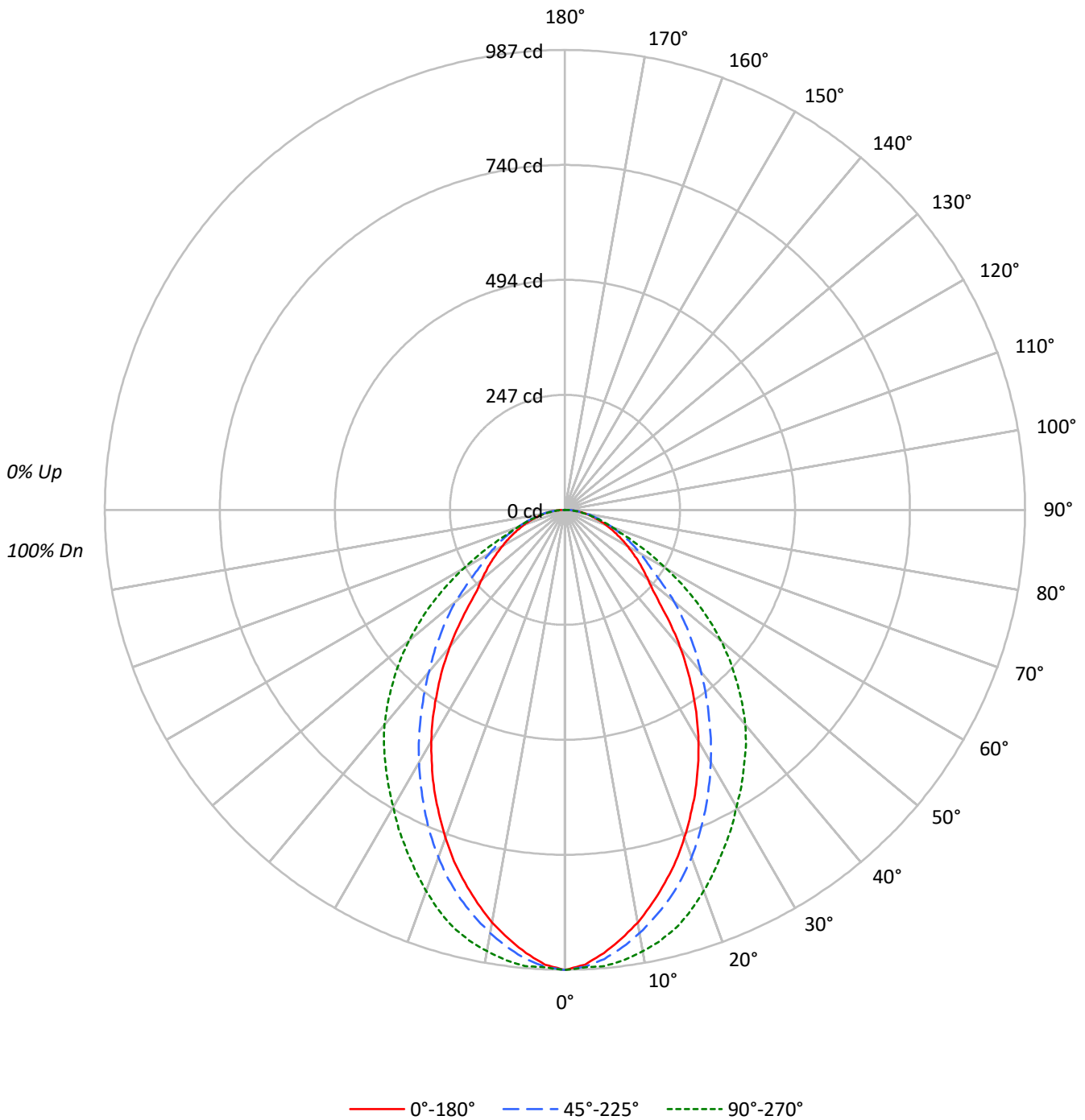
Lumens per Lamp: N/A
Luminaire Lumens: 1783.5 lumens
Efficiency: N/A
Efficacy: 51.0 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (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										
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	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	100	97	100	97	94	96	93	91	92	90	89	87																				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75																				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65																				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57																				
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53	51																				
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45																				
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41																				
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37																				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34																				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11593	11593	11593
5°	11256	11407	11583
10°	10724	11000	11469
15°	10075	10512	11272
20°	9358	9922	10877
25°	8593	9224	10423
30°	7769	8491	9982
35°	6852	7715	9607
40°	5891	6955	9226
45°	4844	6266	8650
50°	4251	5583	7972
55°	3933	4764	7061
60°	3614	4378	5845
65°	3376	4020	4598
70°	3179	3656	3656
75°	2994	3362	3149
80°	2820	3050	2664
85°	2654	2964	2021

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8650 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.3	5.1
10°-20°	244.7	13.7
20°-30°	331.8	18.6
30°-40°	346.9	19.5
40°-50°	300.9	16.9
50°-60°	223.8	12.6
60°-70°	143.6	8.1
70°-80°	77.0	4.3
80°-90°	23.3	1.3
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°	667.9	37.4
0°-40°	1014.8	56.9
0°-60°	1539.6	86.3
0°-90°	1783.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1783.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	987	987	987	987	987	
5°	955	971	968	975	983	89
15°	829	848	865	899	927	232
25°	663	684	712	759	804	304
35°	478	501	538	606	670	298
45°	292	314	377	458	521	230
55°	192	197	233	299	345	172
65°	122	132	145	154	166	121
75°	66	76	74	71	69	70
85°	20	24	22	18	15	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	987.3	987.3	987.3	987.3	987.3
2.5°	976.9	990.8	981.6	981.6	982.7
5°	954.9	971.1	967.7	974.6	982.7
7.5°	928.3	945.7	946.8	963.0	974.6
10°	899.4	916.7	922.5	945.7	961.9
12.5°	864.7	884.3	894.7	923.7	946.8
15°	828.8	848.4	864.7	899.4	927.2
17.5°	790.6	810.2	831.1	870.4	900.5
20°	748.9	769.7	794.0	833.4	870.4
22.5°	706.1	728.1	753.5	796.4	838.0
25°	663.2	684.1	711.9	759.3	804.5
27.5°	618.1	640.1	669.0	721.1	772.1
30°	573.0	595.0	626.2	681.8	736.2
32.5°	526.7	548.7	582.2	644.7	703.8
35°	478.0	501.2	538.2	606.5	670.2
37.5°	431.7	453.7	495.4	570.6	637.8
40°	384.3	407.4	453.7	534.8	601.9
42.5°	338.0	361.1	415.5	496.6	562.5
45°	291.7	313.7	377.3	458.4	520.9
47.5°	255.8	272.0	341.5	417.9	480.4
50°	232.7	238.4	305.6	378.5	436.4
52.5°	211.8	216.5	266.2	339.1	391.2
55°	192.1	196.8	232.7	298.6	344.9
57.5°	172.5	178.3	207.2	257.0	298.6
60°	153.9	160.9	186.4	219.9	248.9
62.5°	137.7	145.8	165.5	186.4	206.0
65°	121.5	132.0	144.7	153.9	165.5
67.5°	106.5	118.1	125.0	127.3	128.5
70°	92.6	104.2	106.5	106.5	106.5
72.5°	78.7	91.4	89.1	88.0	86.8
75°	66.0	76.4	74.1	70.6	69.4
77.5°	53.2	62.5	59.0	56.7	53.2
80°	41.7	48.6	45.1	42.8	39.4
82.5°	31.3	35.9	32.4	30.1	26.6
85°	19.7	24.3	22.0	18.5	15.0
87.5°	10.4	13.9	11.6	10.4	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)