

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: P1059011

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
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: S123RDRP-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

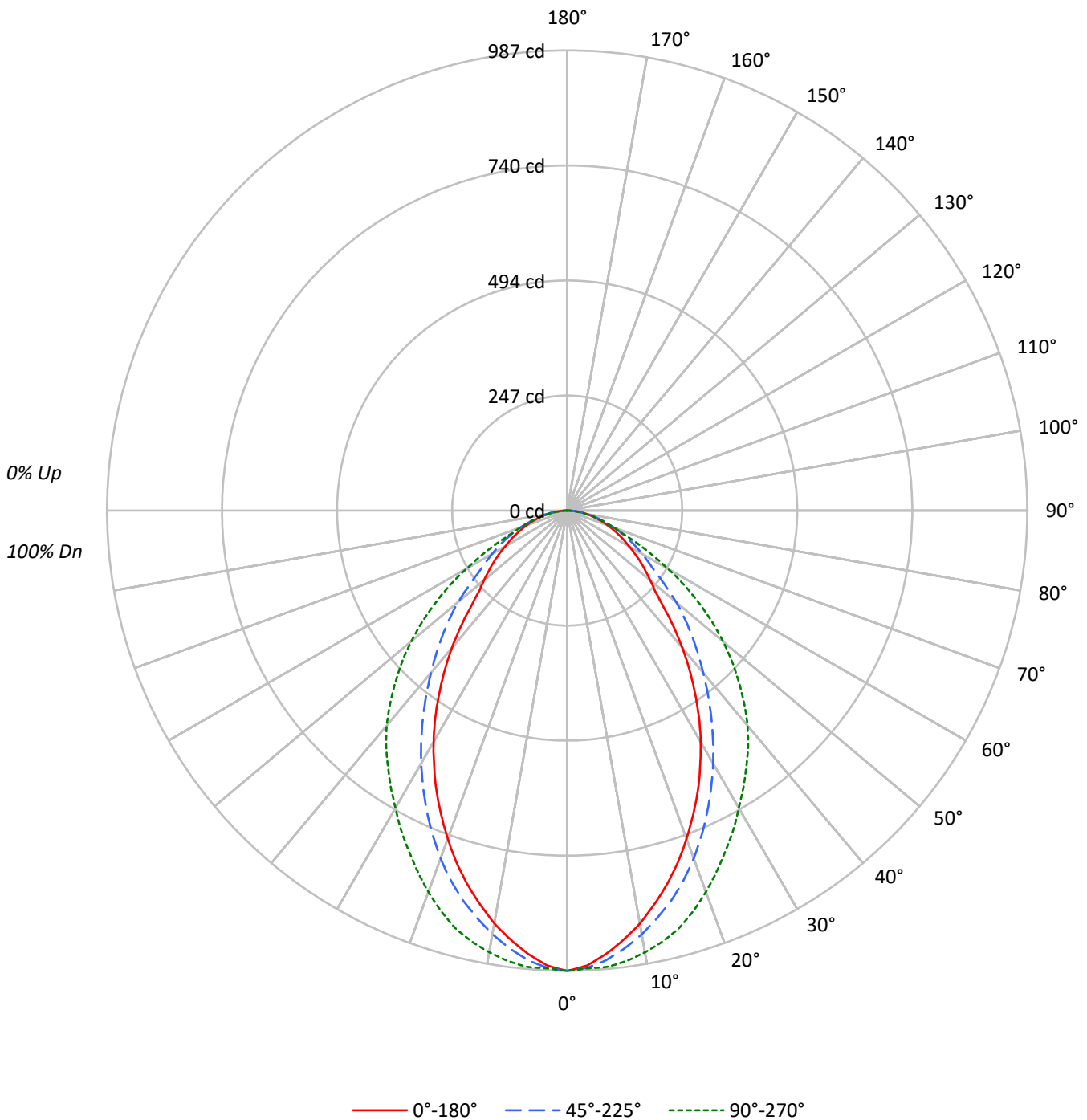
Lumens per Lamp: N/A
Luminaire Lumens: 1783.5 lumens
Efficiency: N/A
Efficacy: 51.0 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (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

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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	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					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



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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	15.30	16.78	15.67	17.10	17.41	18.06	19.54	18.42	19.85	20.17
	3H	17.01	18.34	17.39	18.67	19.03	19.08	20.41	19.46	20.73	21.10
	4H	17.67	18.92	18.07	19.27	19.65	19.44	20.69	19.84	21.04	21.42
	6H	18.17	19.32	18.58	19.69	20.08	19.70	20.85	20.11	21.21	21.61
	8H	18.35	19.44	18.78	19.83	20.24	19.77	20.86	20.19	21.25	21.65
	12H	18.48	19.53	18.91	19.91	20.34	19.80	20.85	20.23	21.23	21.66
4H	2H	16.08	17.32	16.48	17.67	18.05	18.33	19.57	18.73	19.92	20.30
	3H	18.00	19.04	18.41	19.44	19.84	19.58	20.61	19.99	21.01	21.42
	4H	18.81	19.74	19.24	20.16	20.60	20.07	21.00	20.50	21.41	21.85
	6H	19.45	20.26	19.91	20.70	21.16	20.45	21.26	20.91	21.70	22.16
	8H	19.68	20.44	20.14	20.88	21.35	20.56	21.32	21.02	21.76	22.23
	12H	19.85	20.53	20.34	21.01	21.48	20.63	21.30	21.11	21.78	22.26
8H	4H	19.13	19.89	19.60	20.33	20.80	20.26	21.01	20.72	21.46	21.93
	6H	19.92	20.55	20.42	21.04	21.52	20.75	21.37	21.24	21.86	22.34
	8H	20.25	20.81	20.77	21.32	21.81	20.92	21.48	21.44	21.99	22.48
	12H	20.53	21.03	21.04	21.52	22.08	21.06	21.55	21.57	22.04	22.61
12H	4H	19.16	19.83	19.64	20.31	20.78	20.27	20.95	20.76	21.43	21.90
	6H	19.98	20.54	20.49	21.05	21.54	20.78	21.34	21.30	21.86	22.34
	8H	20.37	20.87	20.88	21.36	21.93	21.01	21.51	21.52	22.00	22.57