

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: P1057796

Luminaire Tested: S122RDR-S1005D830-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057796
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S1005D830-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 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

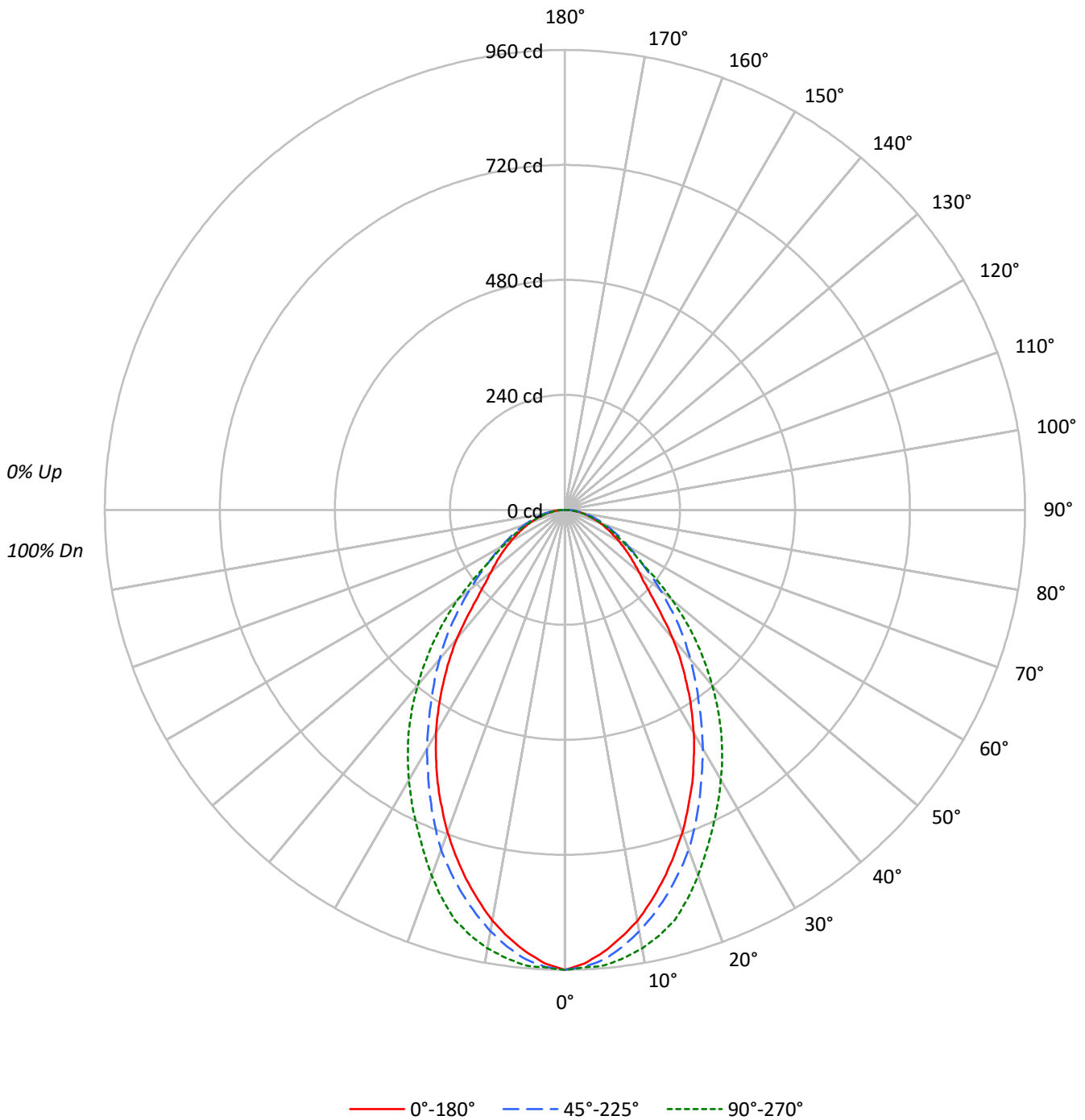
Lumens per Lamp: N/A
Luminaire Lumens: 1563.5 lumens
Efficiency: N/A
Efficacy: 37.4 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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

TEST NUMBER: P1057796

CATALOG NUMBER: S122RDR-S1005D830-X4F0-XX-UDD-WVL-S

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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87		
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76		
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66		
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59		
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52		
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47		
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43		
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39		
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36		
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17716	17716	17716
5°	17165	17449	17682
10°	16320	16738	17416
15°	15227	15839	16931
20°	14066	14832	15953
25°	12796	13533	14867
30°	11461	12262	13867
35°	9981	10955	12808
40°	8426	9801	11514
45°	6691	8656	10073
50°	5761	7441	8359
55°	5244	6367	6412
60°	4783	5658	5451
65°	4379	5113	4807
70°	4063	4737	4284
75°	3779	4470	3779
80°	3549	4293	3411
85°	3536	4425	2943

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10073 cd/sqm



TEST NUMBER: P1057796

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.6	5.7
10°-20°	234.3	15.0
20°-30°	308.3	19.7
30°-40°	310.1	19.8
40°-50°	251.3	16.1
50°-60°	173.1	11.1
60°-70°	113.3	7.2
70°-80°	63.1	4.0
80°-90°	21.4	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°	631.3	40.4
0°-40°	941.3	60.2
0°-60°	1365.7	87.4
0°-90°	1563.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1563.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	960	960	960	960	960	
5°	927	945	942	946	955	87
15°	797	817	829	860	886	223
25°	628	645	665	694	730	288
35°	443	464	486	530	569	276
45°	256	286	332	361	386	203
55°	163	181	198	202	199	146
65°	100	120	117	112	110	100
75°	53	66	63	56	53	57
85°	17	22	21	18	14	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	960.1	960.1	960.1	960.1	960.1
2.5°	947.6	964.3	954.6	954.6	956.0
5°	926.7	944.8	942.0	946.2	954.6
7.5°	900.2	919.7	919.7	932.3	943.4
10°	871.0	890.5	893.3	912.8	929.5
12.5°	834.7	854.2	862.6	887.7	910.0
15°	797.1	816.6	829.1	859.8	886.3
17.5°	756.7	776.2	792.9	825.0	851.4
20°	716.3	734.4	755.3	783.2	812.4
22.5°	671.7	691.2	710.7	737.2	770.6
25°	628.5	645.2	664.7	694.0	730.2
27.5°	582.5	600.6	618.7	653.6	691.2
30°	537.9	556.0	575.5	611.8	650.8
32.5°	490.5	510.0	529.5	570.0	610.4
35°	443.1	464.0	486.3	529.5	568.6
37.5°	397.2	419.5	445.9	490.5	524.0
40°	349.8	373.5	406.9	445.9	478.0
42.5°	299.6	328.9	369.3	402.7	432.0
45°	256.4	285.7	331.7	360.9	386.0
47.5°	224.4	248.0	292.6	317.7	338.6
50°	200.7	218.8	259.2	277.3	291.2
52.5°	181.2	199.3	227.1	239.7	243.9
55°	163.0	181.2	197.9	202.1	199.3
57.5°	144.9	164.4	174.2	170.0	170.0
60°	129.6	150.5	153.3	147.7	147.7
62.5°	114.3	135.2	135.2	128.2	128.2
65°	100.3	119.8	117.1	111.5	110.1
67.5°	87.8	105.9	101.7	96.2	94.8
70°	75.3	92.0	87.8	80.8	79.4
72.5°	64.1	79.4	73.9	68.3	65.5
75°	53.0	65.5	62.7	55.7	53.0
77.5°	43.2	53.0	50.2	44.6	41.8
80°	33.4	41.8	40.4	34.8	32.1
82.5°	25.1	32.1	30.7	26.5	22.3
85°	16.7	22.3	20.9	18.1	13.9
87.5°	8.4	15.3	13.9	12.5	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)