

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: P1057878

Luminaire Tested: S122RDR-S290D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057878
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S290D830-X4F0-XX-UDD-WVL-W
Description: DEFINE 2 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

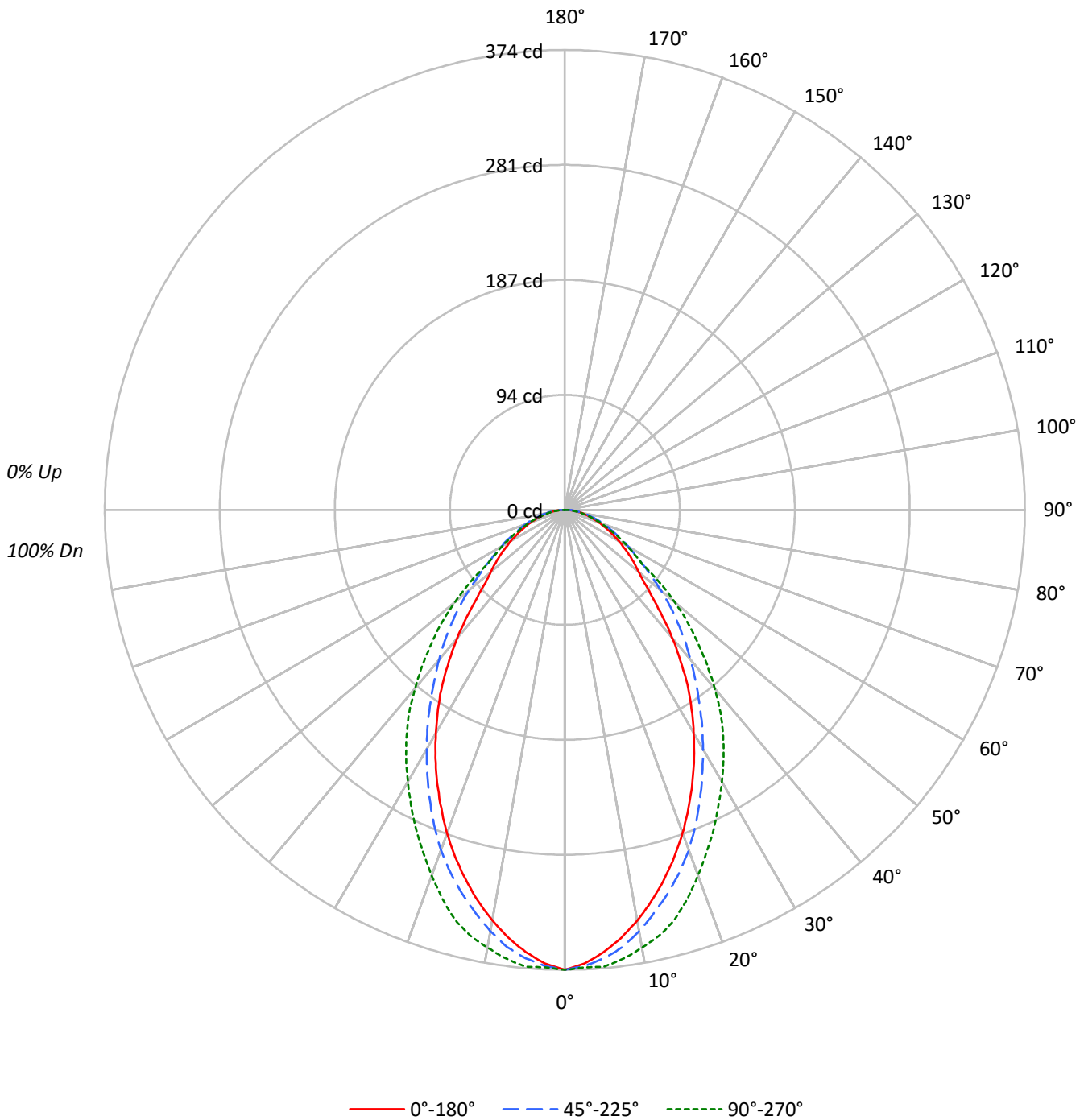
Lumens per Lamp: N/A
Luminaire Lumens: 609.8 lumens
Efficiency: N/A
Efficacy: 48.8 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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: P1057878

CATALOG NUMBER: S122RDR-S290D830-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	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	103	100	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	80	84	81	78	76				
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67				
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59				
5	81	70	62	56	80	69	62	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	46	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	40	35	46	39	35	45	39	35	44	38	34	33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6901	6901	6901
5°	6690	6779	6905
10°	6354	6519	6775
15°	5947	6170	6593
20°	5496	5781	6215
25°	4994	5290	5831
30°	4464	4781	5442
35°	3915	4285	5055
40°	3274	3828	4562
45°	2625	3390	3987
50°	2251	2922	3347
55°	2056	2484	2471
60°	1871	2196	2152
65°	1703	1965	1877
70°	1565	1802	1672
75°	1462	1661	1462
80°	1371	1541	1286
85°	1355	1609	1101

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3987 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.5	5.7
10°-20°	91.4	15.0
20°-30°	120.6	19.8
30°-40°	121.4	19.9
40°-50°	98.8	16.2
50°-60°	67.4	11.0
60°-70°	43.7	7.2
70°-80°	24.1	3.9
80°-90°	7.8	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°	246.5	40.4
0°-40°	367.9	60.3
0°-60°	534.1	87.6
0°-90°	609.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	609.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	374	374	374	374	374	
5°	361	368	366	369	373	34
15°	311	319	323	336	345	87
25°	245	253	260	272	286	112
35°	174	183	190	207	224	108
45°	101	113	130	141	153	79
55°	64	70	77	78	77	57
65°	39	46	45	43	43	39
75°	20	25	23	21	20	22
85°	6	8	8	6	5	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	374.0	374.0	374.0	374.0	374.0
2.5°	369.2	375.3	371.2	371.6	372.4
5°	361.2	368.0	366.0	369.2	372.8
7.5°	351.1	358.0	358.8	363.6	368.0
10°	339.1	346.7	347.9	355.1	361.6
12.5°	325.8	334.2	335.8	346.3	354.7
15°	311.3	319.3	323.0	336.2	345.1
17.5°	296.0	303.7	309.3	321.4	331.4
20°	279.9	287.2	294.4	305.3	316.5
22.5°	262.6	270.7	277.5	288.4	301.2
25°	245.3	253.4	259.8	271.5	286.4
27.5°	227.6	235.7	242.1	254.6	270.7
30°	209.5	218.0	224.4	238.5	255.4
32.5°	191.8	200.3	207.5	222.4	240.1
35°	173.8	182.6	190.2	206.7	224.4
37.5°	154.4	164.5	174.2	190.6	207.9
40°	135.9	147.2	158.9	174.2	189.4
42.5°	117.4	129.9	144.4	157.3	171.3
45°	100.6	113.0	129.9	141.2	152.8
47.5°	87.3	97.7	115.8	125.1	135.5
50°	78.4	85.7	101.8	109.0	116.6
52.5°	71.2	77.2	88.5	93.3	97.3
55°	63.9	70.4	77.2	77.6	76.8
57.5°	56.7	63.9	67.6	64.8	66.4
60°	50.7	57.9	59.5	56.7	58.3
62.5°	44.2	52.3	52.3	49.5	50.3
65°	39.0	46.3	45.0	42.6	43.0
67.5°	33.8	41.0	39.0	36.6	36.6
70°	29.0	35.8	33.4	31.0	31.0
72.5°	24.5	30.2	28.6	25.7	25.3
75°	20.5	25.3	23.3	20.9	20.5
77.5°	16.5	20.5	18.9	16.9	16.1
80°	12.9	16.5	14.5	12.9	12.1
82.5°	9.7	12.5	10.9	9.3	8.4
85°	6.4	8.4	7.6	6.0	5.2
87.5°	3.2	5.6	4.8	4.0	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)