

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: P1057914

Luminaire Tested: S122RDR-S290D927-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057914
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-S290D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

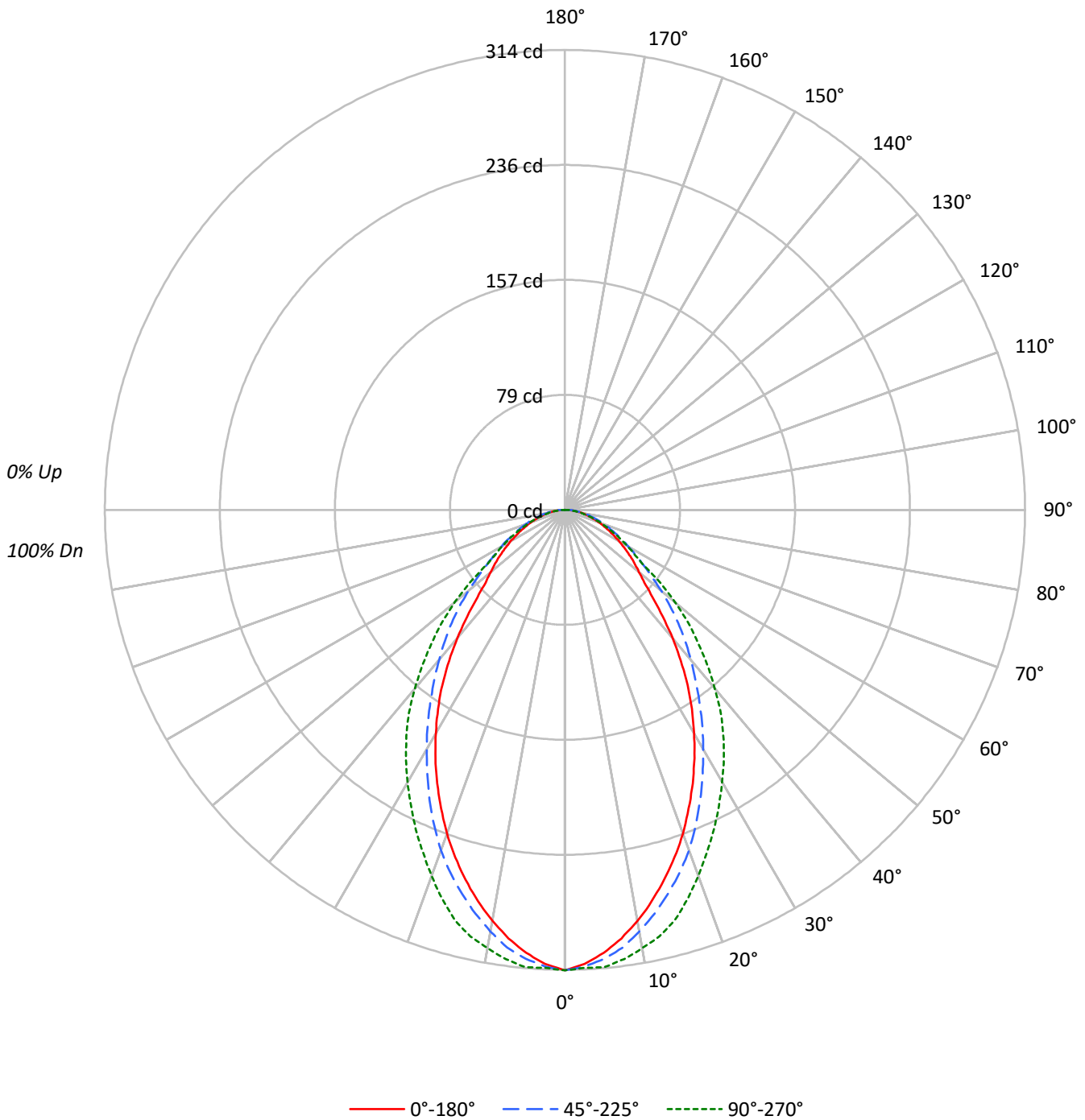
Lumens per Lamp: N/A
Luminaire Lumens: 512.5 lumens
Efficiency: N/A
Efficacy: 41.0 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

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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	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	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	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	39	35	46	39	35	45	39	35	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5801	5801	5801
5°	5624	5698	5805
10°	5340	5479	5694
15°	4997	5185	5540
20°	4621	4858	5223
25°	4198	4447	4901
30°	3752	4019	4575
35°	3289	3602	4248
40°	2753	3216	3835
45°	2205	2850	3353
50°	1892	2454	2813
55°	1728	2088	2078
60°	1572	1845	1808
65°	1432	1655	1581
70°	1311	1516	1403
75°	1226	1397	1226
80°	1148	1296	1073
85°	1143	1355	932

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3353 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.0	5.7
10°-20°	76.8	15.0
20°-30°	101.3	19.8
30°-40°	102.0	19.9
40°-50°	83.1	16.2
50°-60°	56.6	11.0
60°-70°	36.8	7.2
70°-80°	20.2	3.9
80°-90°	6.6	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°	207.2	40.4
0°-40°	309.2	60.3
0°-60°	448.9	87.6
0°-90°	512.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	512.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	314	314	314	314	314	
5°	304	309	308	310	313	28
15°	262	268	271	283	290	73
25°	206	213	218	228	241	95
35°	146	154	160	174	189	91
45°	84	95	109	119	128	67
55°	54	59	65	65	65	48
65°	33	39	38	36	36	33
75°	17	21	20	18	17	18
85°	5	7	6	5	4	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	314.4	314.4	314.4	314.4	314.4
2.5°	310.3	315.4	312.0	312.3	313.0
5°	303.6	309.3	307.6	310.3	313.4
7.5°	295.1	300.9	301.5	305.6	309.3
10°	285.0	291.4	292.4	298.5	303.9
12.5°	273.8	280.9	282.3	291.1	298.2
15°	261.6	268.4	271.4	282.6	290.0
17.5°	248.8	255.2	260.0	270.1	278.5
20°	235.3	241.4	247.4	256.6	266.0
22.5°	220.7	227.5	233.2	242.4	253.2
25°	206.2	213.0	218.4	228.2	240.7
27.5°	191.3	198.1	203.5	214.0	227.5
30°	176.1	183.2	188.6	200.5	214.7
32.5°	161.2	168.3	174.4	186.9	201.8
35°	146.0	153.5	159.9	173.8	188.6
37.5°	129.8	138.3	146.4	160.2	174.8
40°	114.3	123.7	133.5	146.4	159.2
42.5°	98.7	109.2	121.4	132.2	144.0
45°	84.5	95.0	109.2	118.7	128.5
47.5°	73.4	82.1	97.4	105.1	113.9
50°	65.9	72.0	85.5	91.6	98.0
52.5°	59.8	64.9	74.4	78.4	81.8
55°	53.7	59.2	64.9	65.2	64.6
57.5°	47.7	53.7	56.8	54.4	55.8
60°	42.6	48.7	50.0	47.7	49.0
62.5°	37.2	43.9	43.9	41.6	42.3
65°	32.8	38.9	37.9	35.8	36.2
67.5°	28.4	34.5	32.8	30.8	30.8
70°	24.3	30.1	28.1	26.0	26.0
72.5°	20.6	25.4	24.0	21.6	21.3
75°	17.2	21.3	19.6	17.6	17.2
77.5°	13.9	17.2	15.9	14.2	13.5
80°	10.8	13.9	12.2	10.8	10.1
82.5°	8.1	10.5	9.1	7.8	7.1
85°	5.4	7.1	6.4	5.1	4.4
87.5°	2.7	4.7	4.1	3.4	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)