

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: P1057912

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057912
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
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-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

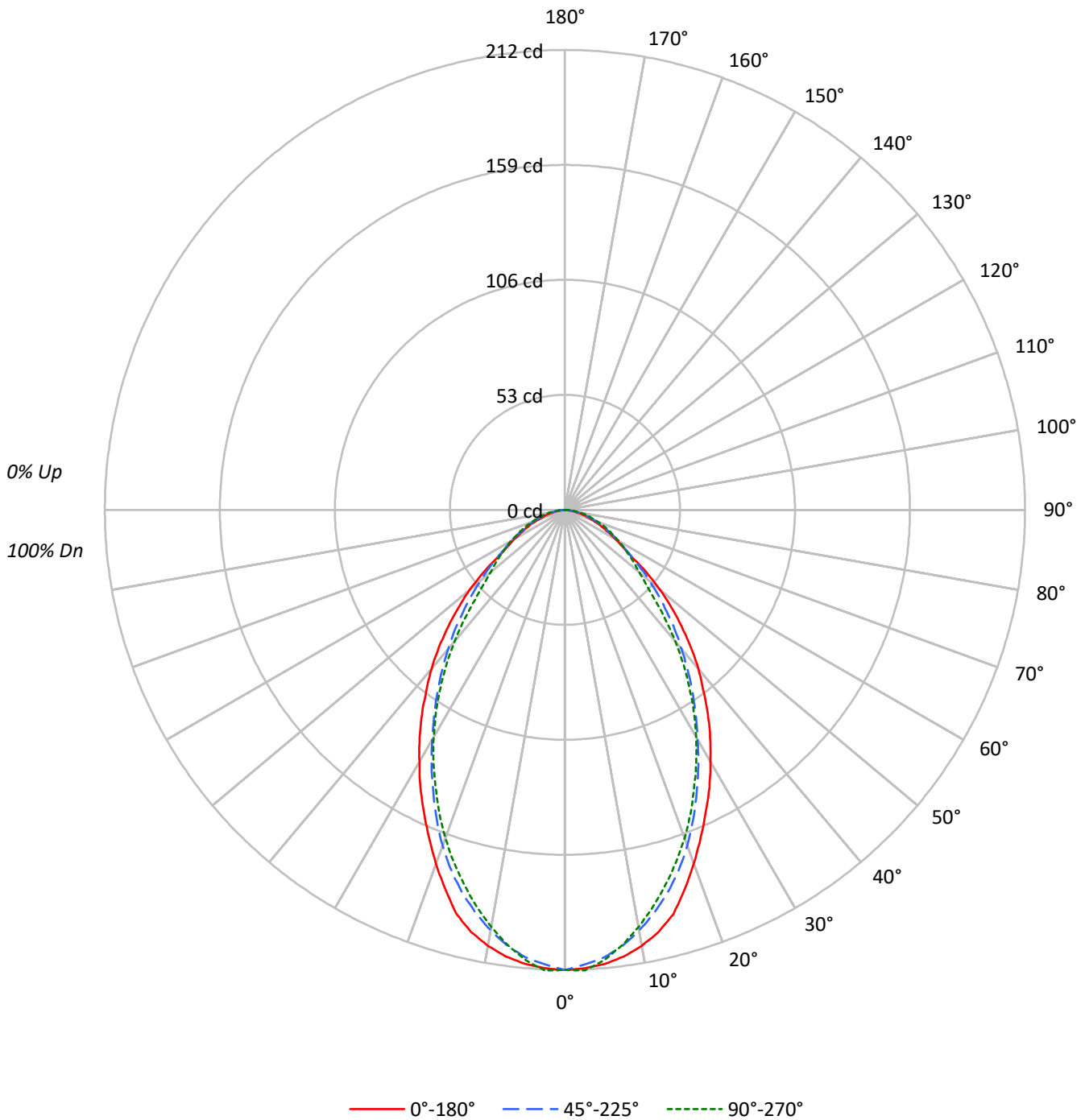
Lumens per Lamp: N/A
Luminaire Lumens: 322.2 lumens
Efficiency: N/A
Efficacy: 25.8 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61				61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54				54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49				49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44				44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41				41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37				37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34				34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3914	3914	3914
5°	3892	3836	3860
10°	3822	3689	3657
15°	3685	3490	3420
20°	3409	3236	3163
25°	3129	2924	2869
30°	2857	2606	2576
35°	2586	2304	2253
40°	2303	2009	1903
45°	1983	1728	1524
50°	1639	1455	1280
55°	1184	1206	1152
60°	985	1033	1048
65°	843	899	961
70°	691	804	874
75°	577	677	791
80°	436	542	723
85°	148	296	635

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1983 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.6	6.1
10°-20°	51.6	16.0
20°-30°	66.8	20.7
30°-40°	65.5	20.3
40°-50°	51.6	16.0
50°-60°	33.8	10.5
60°-70°	20.6	6.4
70°-80°	10.3	3.2
80°-90°	2.2	0.7
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°	138.1	42.9
0°-40°	203.6	63.2
0°-60°	289.1	89.7
0°-90°	322.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	322.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	212	212	212	212	212	
5°	210	210	207	208	208	20
15°	193	190	183	180	179	54
25°	154	149	144	143	141	71
35°	115	108	102	102	100	72
45°	76	71	66	62	58	59
55°	37	39	38	36	36	35
65°	19	20	21	22	22	19
75°	8	8	10	11	11	9
85°	1	1	1	2	3	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	212.1	212.1	212.1	212.1	212.1
2.5°	211.4	211.8	209.8	211.8	212.5
5°	210.1	210.1	207.1	208.4	208.4
7.5°	207.7	207.4	202.7	202.7	202.3
10°	204.0	202.7	196.9	195.9	195.2
12.5°	199.3	196.9	190.2	188.5	187.5
15°	192.9	190.2	182.7	180.4	179.0
17.5°	183.4	180.7	174.3	171.6	170.2
20°	173.6	169.6	164.8	162.5	161.1
22.5°	163.5	158.8	154.4	152.7	151.3
25°	153.7	148.6	143.6	142.9	140.9
27.5°	144.2	138.2	133.1	132.7	131.1
30°	134.1	127.7	122.3	122.6	120.9
32.5°	124.6	118.6	112.1	112.5	110.5
35°	114.8	108.4	102.3	102.0	100.0
37.5°	104.7	98.6	92.9	91.5	89.5
40°	95.6	89.5	83.4	81.1	79.0
42.5°	85.8	80.4	75.0	71.3	68.6
45°	76.0	71.3	66.2	61.5	58.4
47.5°	66.5	62.8	58.4	52.7	50.7
50°	57.1	54.4	50.7	45.6	44.6
52.5°	47.3	46.3	43.9	40.5	40.2
55°	36.8	38.8	37.5	36.1	35.8
57.5°	31.1	31.4	32.4	32.1	32.1
60°	26.7	26.7	28.0	28.4	28.4
62.5°	22.6	23.0	24.3	25.0	25.0
65°	19.3	19.6	20.6	21.6	22.0
67.5°	15.9	16.6	17.6	18.6	18.9
70°	12.8	13.5	14.9	15.9	16.2
72.5°	10.5	10.8	12.2	13.2	13.5
75°	8.1	8.4	9.5	10.8	11.1
77.5°	5.7	6.4	7.4	8.4	9.1
80°	4.1	4.4	5.1	6.4	6.8
82.5°	2.4	2.7	3.4	4.4	4.7
85°	0.7	1.0	1.4	2.4	3.0
87.5°	0.0	0.0	0.0	0.7	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)