

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: P1057908

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057908
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S290D927-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

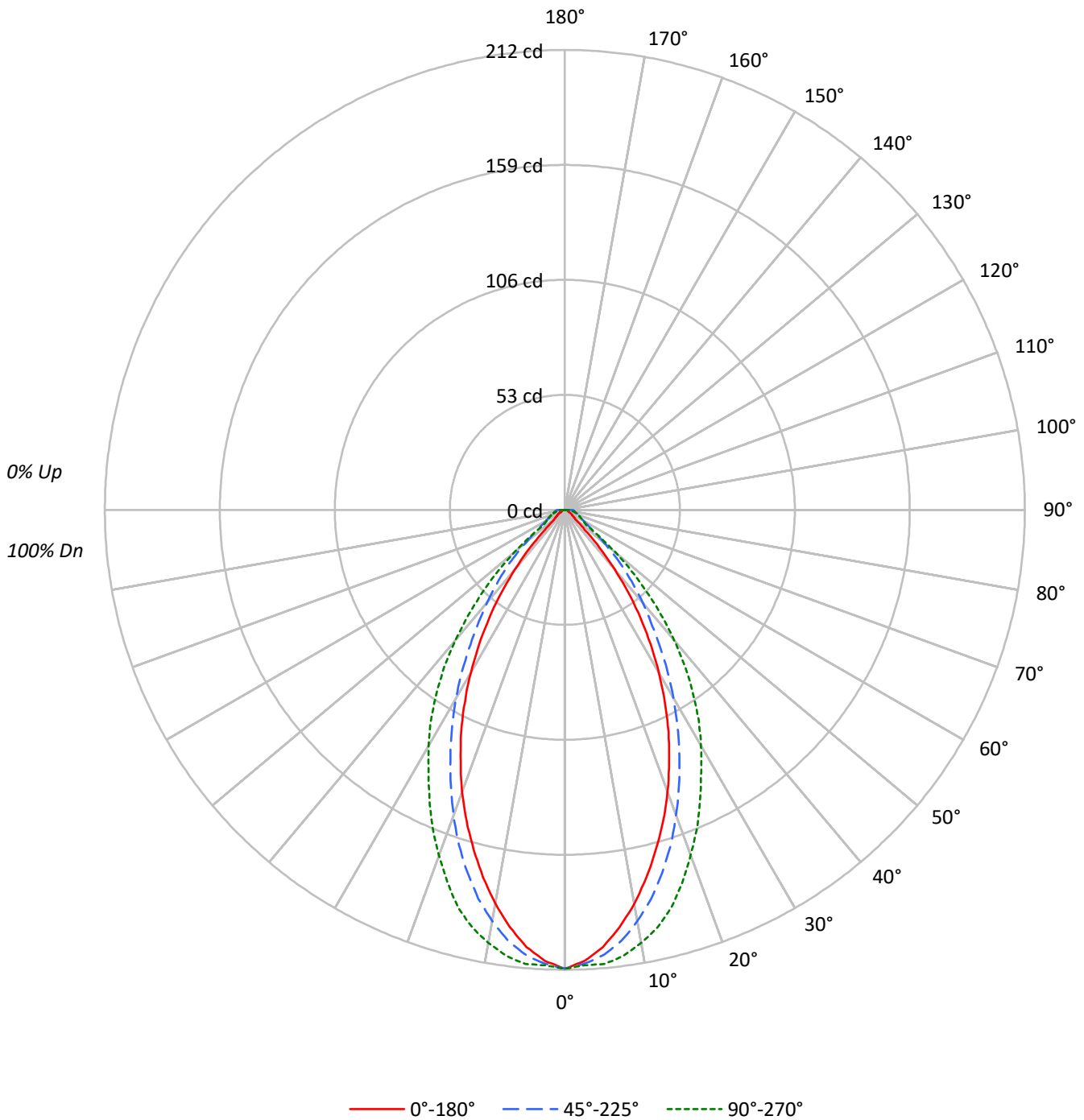
Lumens per Lamp: N/A
Luminaire Lumens: 230.2 lumens
Efficiency: N/A
Efficacy: 18.4 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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									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	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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90																												
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81																												
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	73																												
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67																												
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61																												
6	82	71	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56																												
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52																												
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48																												
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45																												
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3903	3903	3903
5°	3747	3816	3892
10°	3455	3607	3798
15°	3097	3309	3626
20°	2718	2944	3328
25°	2301	2541	3003
30°	1845	2133	2674
35°	1365	1707	2318
40°	855	1337	1884
45°	337	1007	1396
50°	167	680	855
55°	132	447	380
60°	100	362	351
65°	74	341	341
70°	92	345	345
75°	100	385	364
80°	149	499	393
85°	296	868	572

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 1565 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.3	8.4
10°-20°	48.8	21.2
20°-30°	58.4	25.4
30°-40°	49.2	21.4
40°-50°	28.0	12.2
50°-60°	11.0	4.8
60°-70°	7.0	3.0
70°-80°	5.2	2.2
80°-90°	3.3	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°	126.6	55.0
0°-40°	175.7	76.3
0°-60°	214.8	93.3
0°-90°	230.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	230.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	212	212	212	212	212	
5°	202	207	206	208	210	19
15°	162	168	173	183	190	45
25°	113	118	125	138	148	51
35°	61	66	76	92	103	38
45°	13	23	39	48	54	12
55°	4	9	14	14	12	4
65°	2	8	8	7	8	2
75°	1	5	5	5	5	2
85°	1	4	4	4	3	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	211.5	211.5	211.5	211.5	211.5
2.5°	208.1	211.8	209.4	209.8	210.1
5°	202.3	206.7	206.0	208.4	210.1
7.5°	193.9	198.6	200.3	204.3	207.4
10°	184.4	189.8	192.5	198.9	202.7
12.5°	173.6	179.7	183.7	191.8	197.2
15°	162.1	167.8	173.2	183.4	189.8
17.5°	150.6	156.3	162.1	173.2	180.0
20°	138.4	143.8	149.9	161.7	169.5
22.5°	125.5	131.3	137.4	149.5	159.0
25°	113.0	118.1	124.8	137.7	147.5
27.5°	99.8	104.9	112.3	125.5	136.0
30°	86.6	91.7	100.1	113.7	125.5
32.5°	73.4	78.8	88.0	102.9	114.7
35°	60.6	66.0	75.8	92.0	102.9
37.5°	48.0	54.1	65.0	80.9	91.0
40°	35.5	42.6	55.5	69.7	78.2
42.5°	23.7	32.5	46.7	58.5	65.6
45°	12.9	22.7	38.6	48.4	53.5
47.5°	7.1	14.5	30.8	38.6	41.6
50°	5.8	10.1	23.7	29.4	29.8
52.5°	4.7	9.1	17.6	21.0	19.3
55°	4.1	8.8	13.9	14.2	11.8
57.5°	3.4	8.5	11.5	10.1	10.1
60°	2.7	8.5	9.8	9.1	9.5
62.5°	2.0	8.5	8.8	8.1	8.5
65°	1.7	7.8	7.8	7.4	7.8
67.5°	1.7	7.1	7.1	6.8	7.1
70°	1.7	6.8	6.4	6.4	6.4
72.5°	1.4	6.1	6.1	5.8	5.8
75°	1.4	5.4	5.4	5.1	5.1
77.5°	1.4	5.1	5.1	4.7	4.4
80°	1.4	4.4	4.7	4.4	3.7
82.5°	1.4	4.1	4.4	4.1	3.0
85°	1.4	3.7	4.1	3.7	2.7
87.5°	1.0	3.7	3.7	3.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)