

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: P1057888

Luminaire Tested: S122RDR-S290D840-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057888
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S290D840-X4F0-XX-UDD-BVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

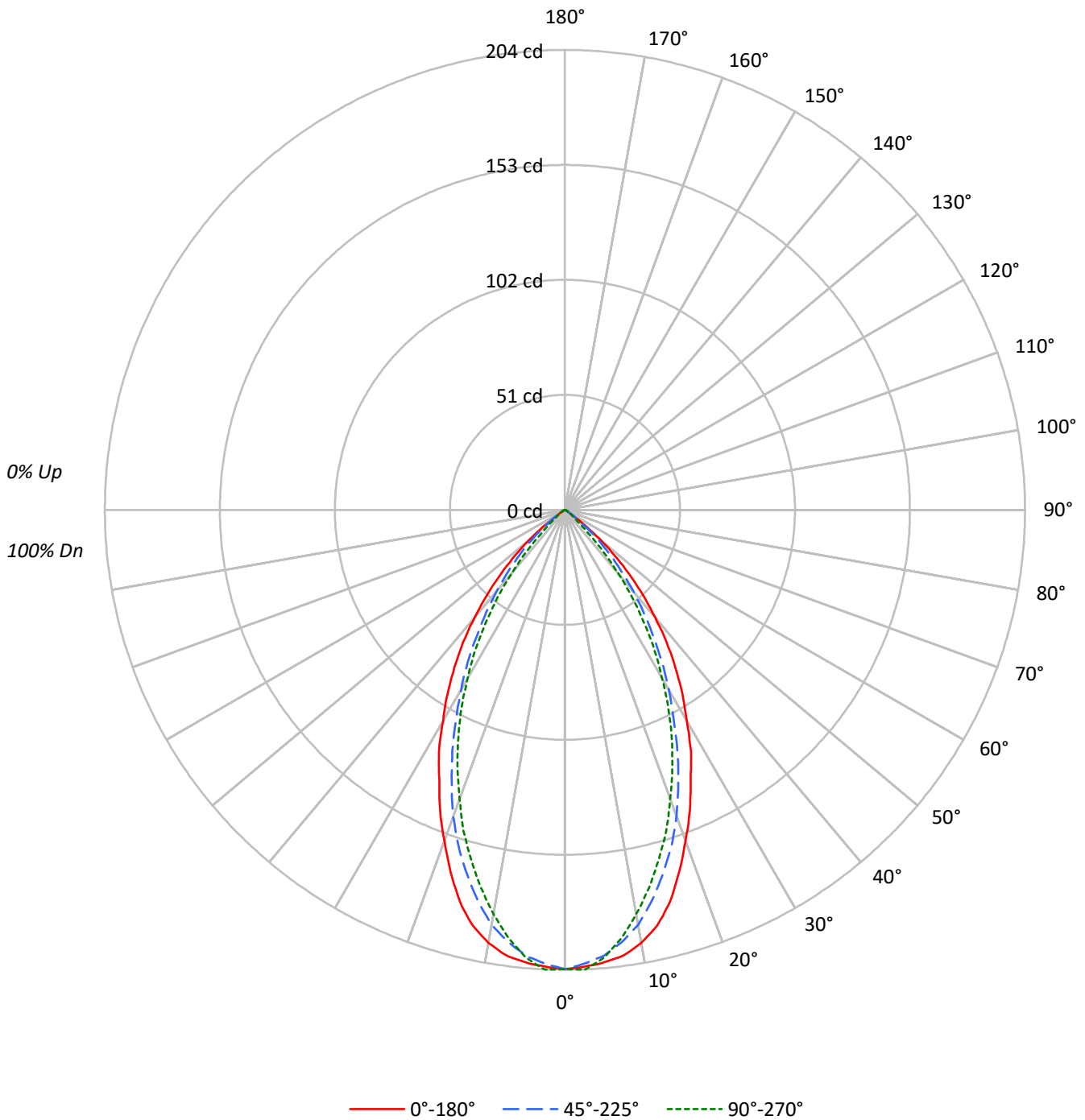
Lumens per Lamp: N/A
Luminaire Lumens: 191.5 lumens
Efficiency: N/A
Efficacy: 15.3 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52	51
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3759	3759	3759
5°	3732	3677	3693
10°	3656	3502	3412
15°	3439	3200	3068
20°	3069	2841	2680
25°	2683	2402	2280
30°	2303	1962	1835
35°	1921	1532	1376
40°	1493	1130	882
45°	1044	752	381
50°	568	396	135
55°	84	138	97
60°	15	33	63
65°	0	17	39
70°	0	0	22
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1044 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.7	9.8
10°-20°	47.2	24.6
20°-30°	55.0	28.7
30°-40°	44.1	23.0
40°-50°	21.9	11.4
50°-60°	4.3	2.3
60°-70°	0.4	0.2
70°-80°	0.0	0.0
80°-90°	0.0	0.0
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°	120.8	63.1
0°-40°	164.9	86.1
0°-60°	191.1	99.8
0°-90°	191.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	191.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	204	204	204	204	204	
5°	202	202	198	199	199	19
15°	180	176	168	163	161	50
25°	132	125	118	115	112	61
35°	85	77	68	65	61	53
45°	40	35	29	19	15	31
55°	3	5	4	3	3	5
65°	0	0	0	0	1	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	203.7	203.7	203.7	203.7	203.7
2.5°	202.8	203.7	201.5	203.7	204.1
5°	201.5	201.5	198.5	198.9	199.4
7.5°	199.4	198.5	193.3	192.5	191.6
10°	195.1	193.3	186.9	183.4	182.1
12.5°	189.0	186.4	177.8	174.0	171.8
15°	180.0	176.5	167.5	163.2	160.6
17.5°	168.4	165.3	156.7	152.0	149.4
20°	156.3	152.0	144.7	139.9	136.5
22.5°	144.7	139.1	131.3	127.9	124.4
25°	131.8	125.3	118.0	115.4	112.0
27.5°	121.0	112.8	104.2	102.5	99.5
30°	108.1	100.3	92.1	89.6	86.1
32.5°	96.9	88.3	80.1	77.1	74.1
35°	85.3	76.6	68.0	65.0	61.1
37.5°	74.1	65.9	57.3	52.5	49.1
40°	62.0	55.1	46.9	40.9	36.6
42.5°	51.2	45.2	37.5	29.7	25.4
45°	40.0	35.3	28.8	19.4	14.6
47.5°	29.7	26.3	21.1	11.2	7.8
50°	19.8	18.5	13.8	5.6	4.7
52.5°	10.8	11.6	8.2	3.4	3.9
55°	2.6	5.2	4.3	2.6	3.0
57.5°	0.4	0.9	2.2	2.2	2.2
60°	0.4	0.4	0.9	1.3	1.7
62.5°	0.4	0.0	0.4	0.9	1.3
65°	0.0	0.0	0.4	0.4	0.9
67.5°	0.0	0.0	0.0	0.4	0.4
70°	0.0	0.0	0.0	0.4	0.4
72.5°	0.0	0.0	0.0	0.0	0.4
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)