

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: P1057933

Luminaire Tested: S122RDR-S290D940-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057933
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-S290D940-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, 90 CRI LEDS
Ballast/Driver: -

Summary

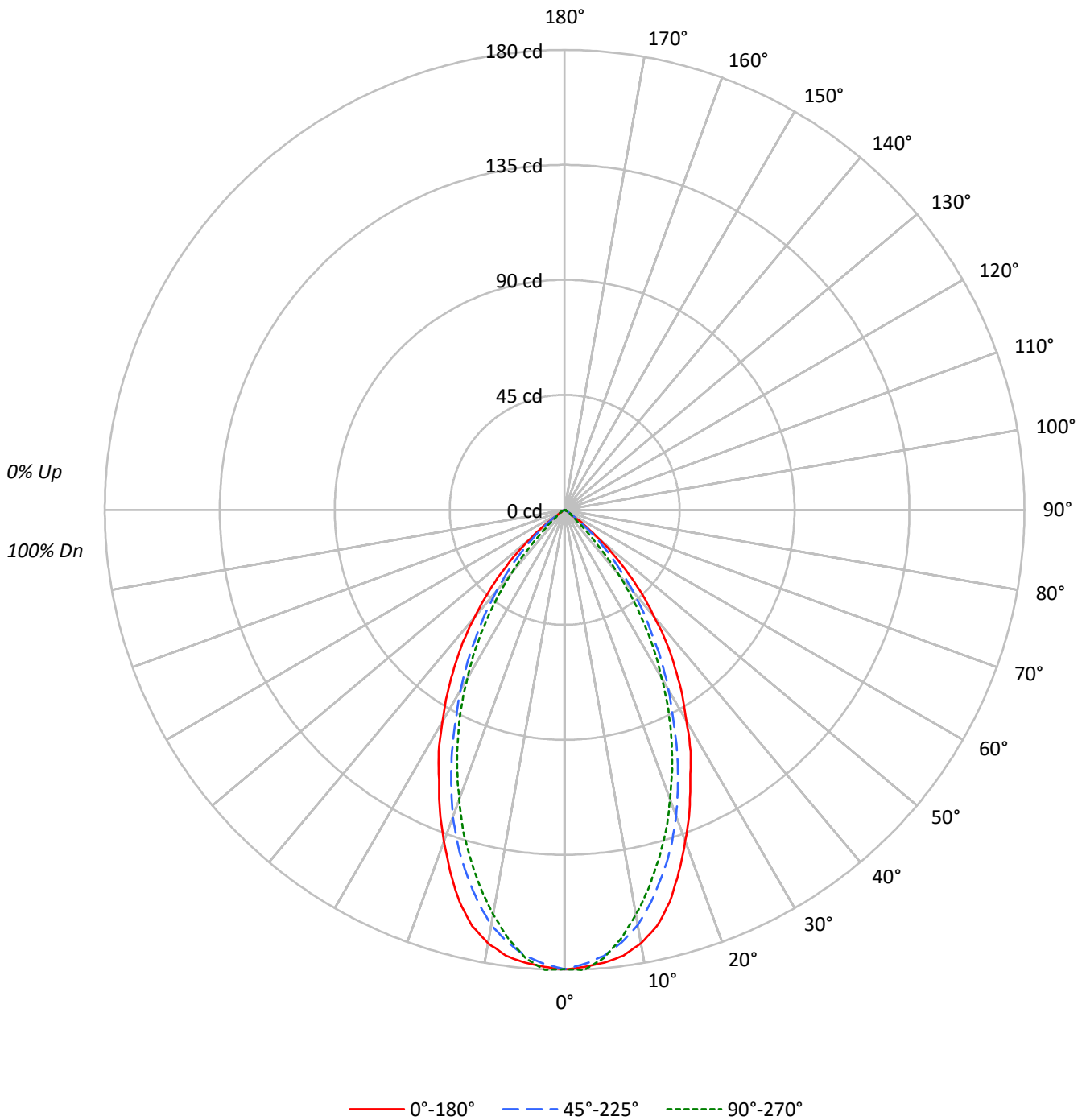
Lumens per Lamp: N/A
Luminaire Lumens: 169.1 lumens
Efficiency: N/A
Efficacy: 13.5 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	89	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°	3318	3318	3318
5°	3295	3247	3260
10°	3227	3092	3013
15°	3036	2825	2709
20°	2710	2508	2366
25°	2368	2122	2014
30°	2033	1734	1619
35°	1696	1354	1216
40°	1318	997	778
45°	924	665	337
50°	502	350	121
55°	74	122	87
60°	15	30	55
65°	0	17	35
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: 924 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.5	9.8
10°-20°	41.6	24.6
20°-30°	48.5	28.7
30°-40°	38.9	23.0
40°-50°	19.3	11.4
50°-60°	3.8	2.3
60°-70°	0.3	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°	106.7	63.1
0°-40°	145.6	86.1
0°-60°	168.7	99.8
0°-90°	169.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	169.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	180	180	180	180	180	
5°	178	178	175	176	176	17
15°	159	156	148	144	142	44
25°	116	111	104	102	99	54
35°	75	68	60	57	54	47
45°	35	31	26	17	13	27
55°	2	5	4	2	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°	179.8	179.8	179.8	179.8	179.8
2.5°	179.1	179.8	177.9	179.8	180.2
5°	177.9	177.9	175.3	175.7	176.0
7.5°	176.0	175.3	170.7	170.0	169.2
10°	172.2	170.7	165.0	162.0	160.8
12.5°	166.9	164.6	157.0	153.6	151.7
15°	158.9	155.9	147.9	144.1	141.8
17.5°	148.7	146.0	138.4	134.2	131.9
20°	138.0	134.2	127.7	123.6	120.5
22.5°	127.7	122.8	116.0	112.9	109.9
25°	116.3	110.6	104.2	101.9	98.9
27.5°	106.8	99.6	92.0	90.5	87.8
30°	95.4	88.6	81.4	79.1	76.0
32.5°	85.5	77.9	70.7	68.1	65.4
35°	75.3	67.7	60.1	57.4	54.0
37.5°	65.4	58.2	50.6	46.4	43.3
40°	54.7	48.7	41.4	36.1	32.3
42.5°	45.2	39.9	33.1	26.2	22.4
45°	35.4	31.2	25.5	17.1	12.9
47.5°	26.2	23.2	18.6	9.9	6.8
50°	17.5	16.3	12.2	4.9	4.2
52.5°	9.5	10.3	7.2	3.0	3.4
55°	2.3	4.6	3.8	2.3	2.7
57.5°	0.4	0.8	1.9	1.9	1.9
60°	0.4	0.4	0.8	1.1	1.5
62.5°	0.4	0.0	0.4	0.8	1.1
65°	0.0	0.0	0.4	0.4	0.8
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)