

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: P1057915

Luminaire Tested: S122RDR-S290D930-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057915
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-S290D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

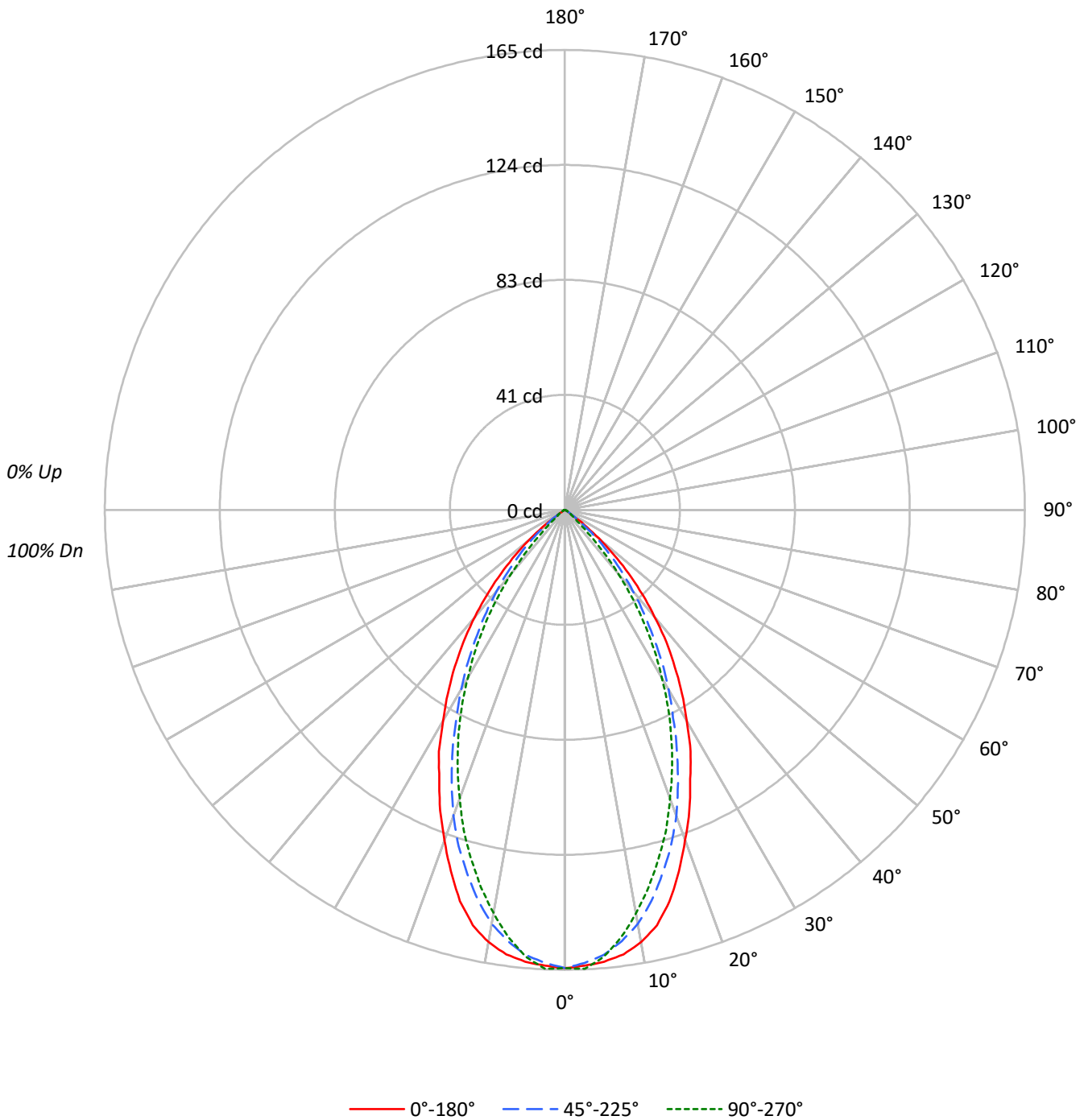
Lumens per Lamp: N/A
Luminaire Lumens: 154.6 lumens
Efficiency: N/A
Efficacy: 12.4 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	63
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	53	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°	3034	3034	3034
5°	3014	2969	2980
10°	2951	2827	2754
15°	2776	2583	2478
20°	2478	2294	2164
25°	2166	1938	1841
30°	1860	1585	1481
35°	1550	1237	1113
40°	1207	913	711
45°	843	608	308
50°	459	319	109
55°	68	113	77
60°	11	26	52
65°	0	13	31
70°	0	0	16
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 843 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.1	9.8
10°-20°	38.1	24.6
20°-30°	44.4	28.7
30°-40°	35.6	23.0
40°-50°	17.7	11.4
50°-60°	3.5	2.2
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°	97.6	63.1
0°-40°	133.1	86.1
0°-60°	154.3	99.8
0°-90°	154.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	154.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	164	164	164	164	164	
5°	163	163	160	161	161	15
15°	145	142	135	132	130	40
25°	106	101	95	93	90	49
35°	69	62	55	52	49	43
45°	32	28	23	16	12	25
55°	2	4	4	2	2	4
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	164.4	164.4	164.4	164.4	164.4
2.5°	163.7	164.4	162.7	164.4	164.8
5°	162.7	162.7	160.3	160.6	160.9
7.5°	160.9	160.3	156.1	155.4	154.7
10°	157.5	156.1	150.9	148.1	147.0
12.5°	152.6	150.5	143.6	140.4	138.7
15°	145.3	142.5	135.2	131.7	129.7
17.5°	135.9	133.5	126.5	122.7	120.6
20°	126.2	122.7	116.8	113.0	110.2
22.5°	116.8	112.3	106.0	103.2	100.5
25°	106.4	101.2	95.2	93.2	90.4
27.5°	97.7	91.1	84.1	82.7	80.3
30°	87.3	81.0	74.4	72.3	69.5
32.5°	78.2	71.3	64.7	62.2	59.8
35°	68.8	61.9	54.9	52.5	49.4
37.5°	59.8	53.2	46.2	42.4	39.6
40°	50.1	44.5	37.9	33.0	29.5
42.5°	41.4	36.5	30.2	24.0	20.5
45°	32.3	28.5	23.3	15.6	11.8
47.5°	24.0	21.2	17.0	9.0	6.3
50°	16.0	14.9	11.1	4.5	3.8
52.5°	8.7	9.4	6.6	2.8	3.1
55°	2.1	4.2	3.5	2.1	2.4
57.5°	0.3	0.7	1.7	1.7	1.7
60°	0.3	0.3	0.7	1.0	1.4
62.5°	0.3	0.0	0.3	0.7	1.0
65°	0.0	0.0	0.3	0.3	0.7
67.5°	0.0	0.0	0.0	0.3	0.3
70°	0.0	0.0	0.0	0.3	0.3
72.5°	0.0	0.0	0.0	0.0	0.3
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)