

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: P1057935

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057935
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-S290D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

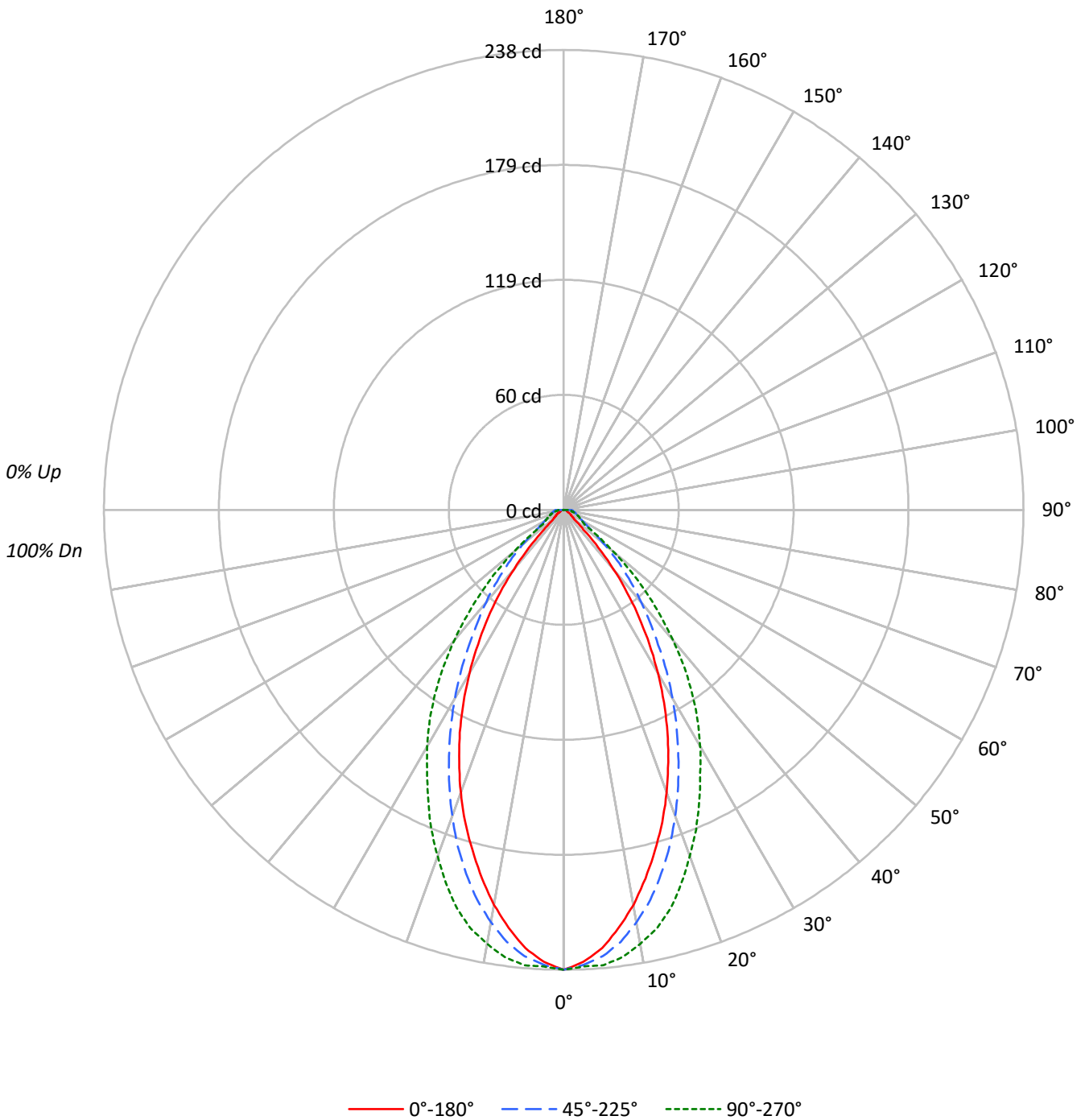
Lumens per Lamp: N/A
Luminaire Lumens: 259.1 lumens
Efficiency: N/A
Efficacy: 20.7 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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																		
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	74																												
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	72	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°	4392	4392	4392
5°	4218	4295	4381
10°	3890	4060	4274
15°	3484	3725	4080
20°	3059	3313	3747
25°	2590	2861	3380
30°	2077	2401	3011
35°	1536	1921	2609
40°	964	1505	2120
45°	378	1133	1571
50°	187	766	962
55°	148	502	428
60°	111	406	395
65°	83	384	384
70°	103	388	388
75°	107	435	406
80°	159	563	446
85°	318	974	635

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 1777 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.7	8.4
10°-20°	55.0	21.2
20°-30°	65.7	25.4
30°-40°	55.3	21.4
40°-50°	31.5	12.2
50°-60°	12.4	4.8
60°-70°	7.8	3.0
70°-80°	5.8	2.2
80°-90°	3.7	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°	142.4	55.0
0°-40°	197.8	76.3
0°-60°	241.7	93.3
0°-90°	259.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	259.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	238	238	238	238	238	
5°	228	233	232	235	236	21
15°	182	189	195	206	214	51
25°	127	133	140	155	166	58
35°	68	74	85	104	116	42
45°	14	26	43	54	60	14
55°	5	10	16	16	13	4
65°	2	9	9	8	9	2
75°	2	6	6	6	6	2
85°	2	4	5	4	3	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	238.0	238.0	238.0	238.0	238.0
2.5°	234.2	238.4	235.7	236.1	236.5
5°	227.7	232.7	231.9	234.6	236.5
7.5°	218.2	223.5	225.5	230.0	233.4
10°	207.6	213.6	216.7	223.9	228.1
12.5°	195.4	202.2	206.8	215.9	222.0
15°	182.4	188.9	195.0	206.4	213.6
17.5°	169.5	175.9	182.4	195.0	202.6
20°	155.8	161.9	168.7	182.0	190.8
22.5°	141.3	147.8	154.6	168.3	179.0
25°	127.2	132.9	140.5	155.0	166.0
27.5°	112.3	118.1	126.4	141.3	153.1
30°	97.5	103.2	112.7	128.0	141.3
32.5°	82.6	88.7	99.0	115.8	129.1
35°	68.2	74.3	85.3	103.6	115.8
37.5°	54.1	60.9	73.1	91.0	102.4
40°	40.0	48.0	62.5	78.5	88.0
42.5°	26.7	36.6	52.6	65.9	73.9
45°	14.5	25.5	43.4	54.5	60.2
47.5°	8.0	16.4	34.7	43.4	46.8
50°	6.5	11.4	26.7	33.1	33.5
52.5°	5.3	10.3	19.8	23.6	21.7
55°	4.6	9.9	15.6	16.0	13.3
57.5°	3.8	9.5	12.9	11.4	11.4
60°	3.0	9.5	11.0	10.3	10.7
62.5°	2.3	9.5	9.9	9.1	9.5
65°	1.9	8.8	8.8	8.4	8.8
67.5°	1.9	8.0	8.0	7.6	8.0
70°	1.9	7.6	7.2	7.2	7.2
72.5°	1.5	6.9	6.9	6.5	6.5
75°	1.5	6.1	6.1	5.7	5.7
77.5°	1.5	5.7	5.7	5.3	5.0
80°	1.5	5.0	5.3	5.0	4.2
82.5°	1.5	4.6	5.0	4.6	3.4
85°	1.5	4.2	4.6	4.2	3.0
87.5°	1.1	4.2	4.2	3.4	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)