

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: P1057939

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057939
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S290D940-X4F0-XX-UDD-WVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

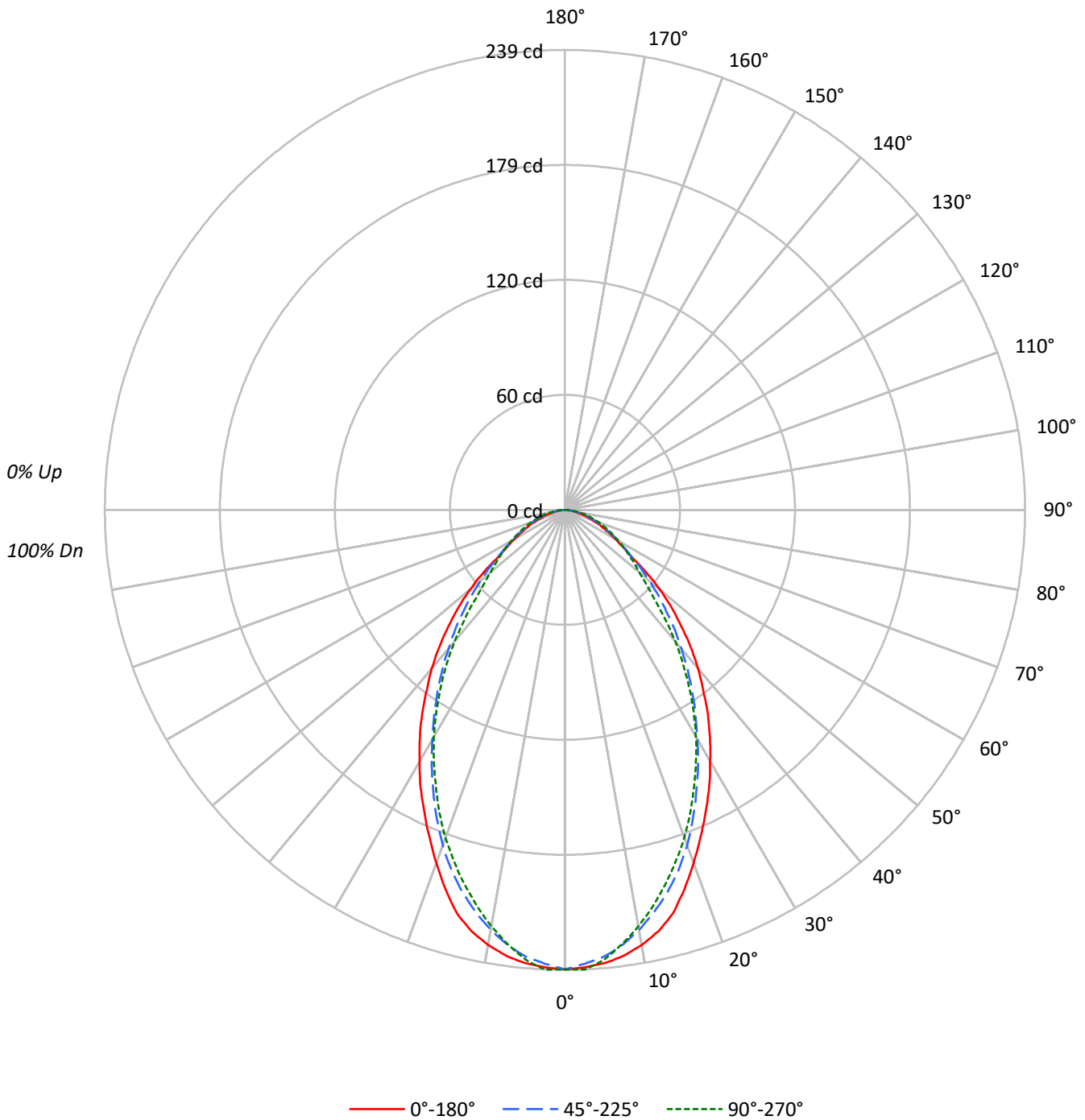
Lumens per Lamp: N/A
Luminaire Lumens: 362.6 lumens
Efficiency: N/A
Efficacy: 29.0 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61				
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54				
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49				
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44				
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41				
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37				
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4406	4406	4406
5°	4381	4318	4345
10°	4304	4154	4118
15°	4147	3930	3849
20°	3837	3643	3562
25°	3522	3290	3229
30°	3215	2932	2900
35°	2913	2595	2534
40°	2592	2262	2144
45°	2231	1944	1717
50°	1846	1636	1441
55°	1332	1358	1296
60°	1107	1166	1177
65°	947	1013	1078
70°	777	901	987
75°	649	756	891
80°	489	606	808
85°	169	318	720

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2231 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.1	6.1
10°-20°	58.1	16.0
20°-30°	75.2	20.7
30°-40°	73.8	20.3
40°-50°	58.1	16.0
50°-60°	38.1	10.5
60°-70°	23.2	6.4
70°-80°	11.6	3.2
80°-90°	2.5	0.7
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°	155.4	42.9
0°-40°	229.2	63.2
0°-60°	325.4	89.7
0°-90°	362.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	362.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	239	239	239	239	239	
5°	236	236	233	235	235	22
15°	217	214	206	203	202	60
25°	173	167	162	161	159	80
35°	129	122	115	115	112	81
45°	86	80	74	69	66	66
55°	41	44	42	41	40	39
65°	22	22	23	24	25	22
75°	9	10	11	12	12	10
85°	1	1	2	3	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	238.8	238.8	238.8	238.8	238.8
2.5°	238.0	238.4	236.1	238.4	239.2
5°	236.5	236.5	233.1	234.6	234.6
7.5°	233.8	233.5	228.1	228.1	227.7
10°	229.7	228.1	221.7	220.5	219.8
12.5°	224.3	221.7	214.1	212.2	211.0
15°	217.1	214.1	205.7	203.0	201.5
17.5°	206.5	203.4	196.2	193.2	191.6
20°	195.4	190.9	185.5	182.9	181.4
22.5°	184.0	178.7	173.8	171.9	170.3
25°	173.0	167.3	161.6	160.8	158.6
27.5°	162.4	155.5	149.8	149.4	147.5
30°	150.9	143.7	137.6	138.0	136.1
32.5°	140.3	133.5	126.2	126.6	124.3
35°	129.3	122.0	115.2	114.8	112.5
37.5°	117.9	111.0	104.6	103.0	100.8
40°	107.6	100.8	93.9	91.3	89.0
42.5°	96.6	90.5	84.4	80.2	77.2
45°	85.5	80.2	74.5	69.2	65.8
47.5°	74.9	70.7	65.8	59.3	57.0
50°	64.3	61.2	57.0	51.3	50.2
52.5°	53.2	52.1	49.4	45.6	45.2
55°	41.4	43.7	42.2	40.7	40.3
57.5°	35.0	35.4	36.5	36.1	36.1
60°	30.0	30.0	31.6	31.9	31.9
62.5°	25.5	25.9	27.4	28.1	28.1
65°	21.7	22.1	23.2	24.3	24.7
67.5°	17.9	18.6	19.8	20.9	21.3
70°	14.4	15.2	16.7	17.9	18.3
72.5°	11.8	12.2	13.7	14.8	15.2
75°	9.1	9.5	10.6	12.2	12.5
77.5°	6.5	7.2	8.4	9.5	10.3
80°	4.6	4.9	5.7	7.2	7.6
82.5°	2.7	3.0	3.8	4.9	5.3
85°	0.8	1.1	1.5	2.7	3.4
87.5°	0.0	0.0	0.0	0.8	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)