

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: P1057950

Luminaire Tested: S122RDR-S290D950-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057950
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S290D950-X4F0-XX-UDD-WVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

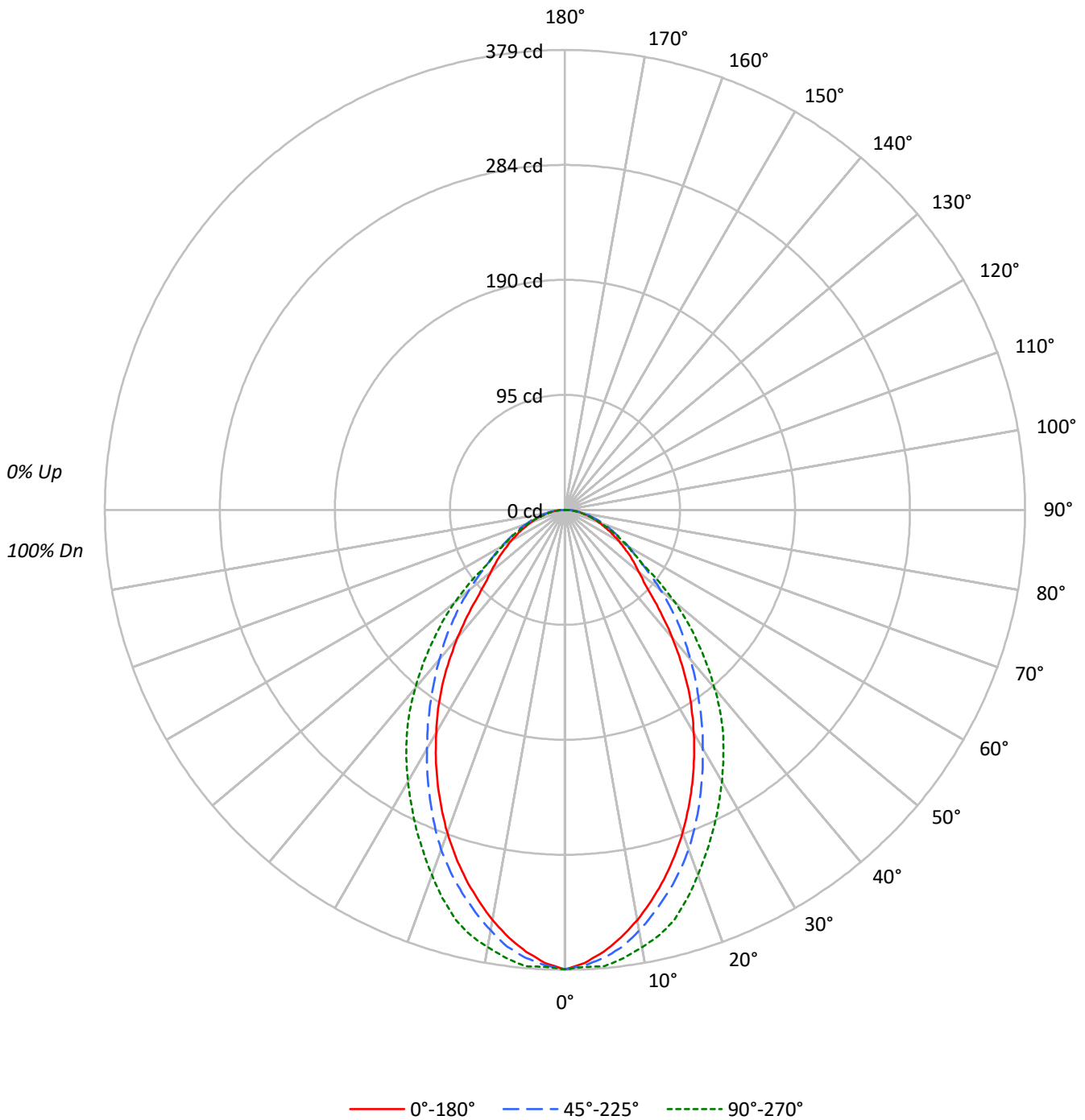
Lumens per Lamp: N/A
Luminaire Lumens: 617.2 lumens
Efficiency: N/A
Efficacy: 49.4 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	110	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87				
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76				
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67				
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59				
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54	52				
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47				
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43				
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39				
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36				
10	59	47	40	35	58	46	40	35	46	39	35	45	39	35	44	38	34	33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6986	6986	6986
5°	6772	6863	6991
10°	6431	6597	6858
15°	6019	6245	6673
20°	5563	5852	6292
25°	5055	5355	5900
30°	4519	4841	5508
35°	3962	4339	5118
40°	3315	3873	4618
45°	2657	3432	4037
50°	2279	2957	3390
55°	2081	2516	2503
60°	1893	2222	2177
65°	1725	1991	1904
70°	1581	1824	1689
75°	1483	1683	1483
80°	1381	1562	1296
85°	1376	1630	1122

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4037 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.9	5.7
10°-20°	92.5	15.0
20°-30°	122.0	19.8
30°-40°	122.9	19.9
40°-50°	100.0	16.2
50°-60°	68.2	11.0
60°-70°	44.3	7.2
70°-80°	24.4	3.9
80°-90°	8.0	1.3
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°	249.5	40.4
0°-40°	372.4	60.3
0°-60°	540.6	87.6
0°-90°	617.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	617.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	379	379	379	379	379	
5°	366	372	370	374	377	34
15°	315	323	327	340	349	88
25°	248	256	263	275	290	114
35°	176	185	193	209	227	109
45°	102	114	132	143	155	80
55°	65	71	78	79	78	58
65°	40	47	46	43	44	39
75°	21	26	24	21	21	22
85°	6	8	8	6	5	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	378.6	378.6	378.6	378.6	378.6
2.5°	373.7	379.8	375.7	376.2	377.0
5°	365.6	372.5	370.5	373.7	377.4
7.5°	355.4	362.3	363.1	368.0	372.5
10°	343.2	350.9	352.1	359.5	366.0
12.5°	329.7	338.3	339.9	350.5	359.1
15°	315.1	323.2	326.9	340.3	349.3
17.5°	299.6	307.4	313.1	325.3	335.4
20°	283.3	290.7	298.0	309.0	320.4
22.5°	265.8	274.0	280.9	291.9	304.9
25°	248.3	256.5	263.0	274.8	289.8
27.5°	230.4	238.6	245.1	257.7	274.0
30°	212.1	220.6	227.2	241.4	258.5
32.5°	194.2	202.7	210.1	225.1	243.0
35°	175.9	184.8	192.6	209.2	227.2
37.5°	156.3	166.5	176.3	193.0	210.5
40°	137.6	149.0	160.8	176.3	191.7
42.5°	118.9	131.5	146.1	159.2	173.4
45°	101.8	114.4	131.5	142.9	154.7
47.5°	88.3	98.9	117.2	126.6	137.2
50°	79.4	86.7	103.0	110.3	118.1
52.5°	72.1	78.2	89.6	94.4	98.5
55°	64.7	71.2	78.2	78.6	77.8
57.5°	57.4	64.7	68.4	65.5	67.2
60°	51.3	58.6	60.2	57.4	59.0
62.5°	44.8	52.9	52.9	50.1	50.9
65°	39.5	46.8	45.6	43.2	43.6
67.5°	34.2	41.5	39.5	37.0	37.0
70°	29.3	36.2	33.8	31.3	31.3
72.5°	24.8	30.5	28.9	26.1	25.6
75°	20.8	25.6	23.6	21.2	20.8
77.5°	16.7	20.8	19.1	17.1	16.3
80°	13.0	16.7	14.7	13.0	12.2
82.5°	9.8	12.6	11.0	9.4	8.5
85°	6.5	8.5	7.7	6.1	5.3
87.5°	3.3	5.7	4.9	4.1	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)