

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: P1057942

Luminaire Tested: S122RDR-S290D950-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057942
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-S290D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

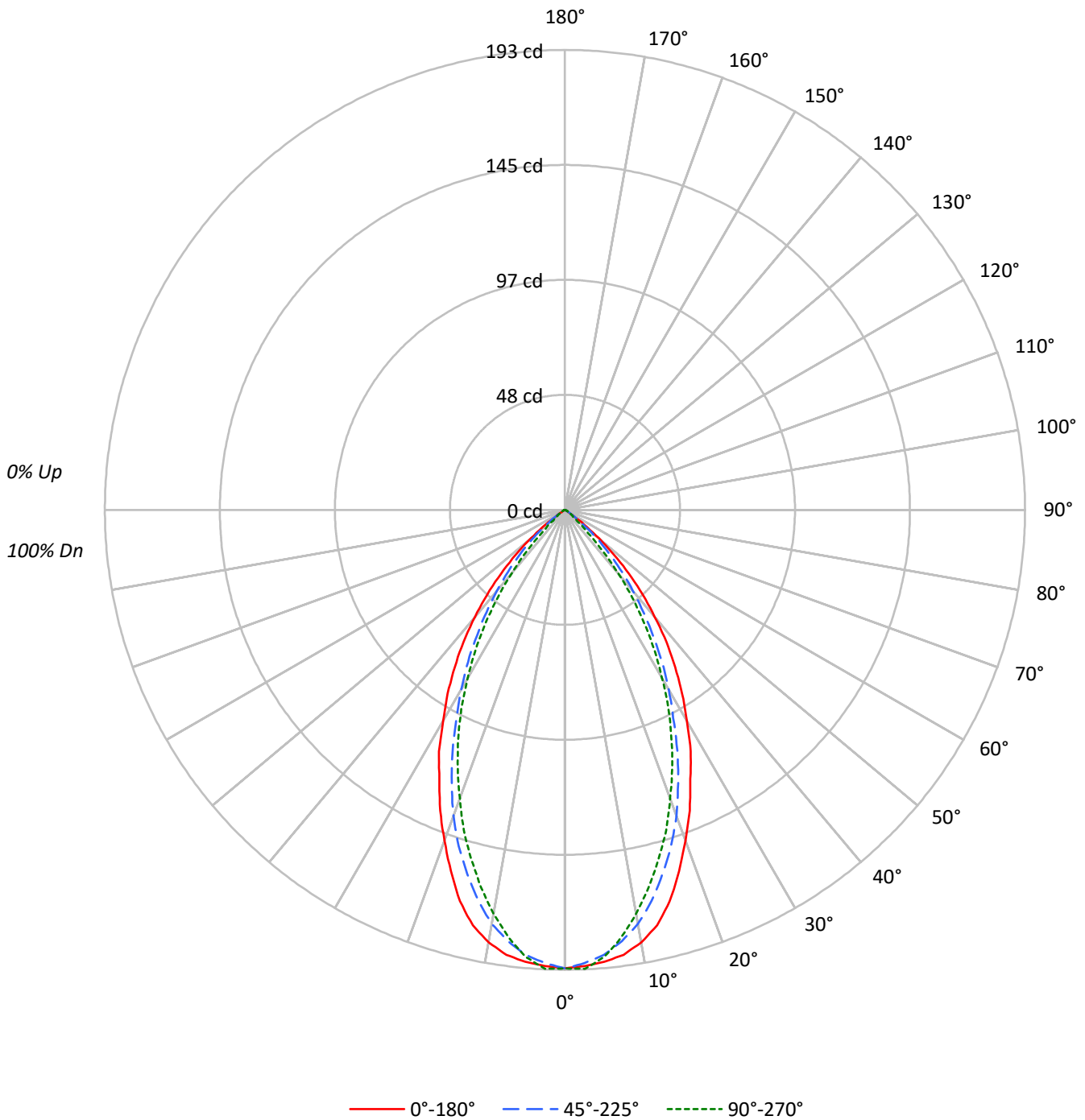
Lumens per Lamp: N/A
Luminaire Lumens: 180.9 lumens
Efficiency: N/A
Efficacy: 14.5 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	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°	3550	3550	3550
5°	3527	3473	3488
10°	3453	3307	3225
15°	3248	3022	2898
20°	2900	2684	2531
25°	2535	2270	2154
30°	2175	1854	1734
35°	1813	1448	1302
40°	1412	1067	833
45°	986	712	360
50°	537	373	129
55°	77	132	90
60°	15	30	59
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: 986 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.7	9.8
10°-20°	44.6	24.6
20°-30°	51.9	28.7
30°-40°	41.6	23.0
40°-50°	20.7	11.4
50°-60°	4.1	2.3
60°-70°	0.4	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°	114.2	63.1
0°-40°	155.8	86.1
0°-60°	180.5	99.8
0°-90°	180.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	180.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	192	192	192	192	192	
5°	190	190	188	188	188	18
15°	170	167	158	154	152	47
25°	124	118	112	109	106	57
35°	80	72	64	61	58	50
45°	38	33	27	18	14	29
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°	192.4	192.4	192.4	192.4	192.4
2.5°	191.6	192.4	190.4	192.4	192.8
5°	190.4	190.4	187.5	187.9	188.3
7.5°	188.3	187.5	182.6	181.8	181.0
10°	184.3	182.6	176.5	173.3	172.1
12.5°	178.6	176.1	168.0	164.3	162.3
15°	170.0	166.8	158.2	154.2	151.7
17.5°	159.0	156.2	148.1	143.6	141.1
20°	147.7	143.6	136.7	132.2	128.9
22.5°	136.7	131.4	124.1	120.8	117.6
25°	124.5	118.4	111.5	109.0	105.8
27.5°	114.3	106.6	98.4	96.8	94.0
30°	102.1	94.8	87.0	84.6	81.4
32.5°	91.5	83.4	75.7	72.8	70.0
35°	80.5	72.4	64.3	61.4	57.8
37.5°	70.0	62.2	54.1	49.6	46.4
40°	58.6	52.1	44.3	38.6	34.6
42.5°	48.4	42.7	35.4	28.1	24.0
45°	37.8	33.4	27.3	18.3	13.8
47.5°	28.1	24.8	19.9	10.6	7.3
50°	18.7	17.5	13.0	5.3	4.5
52.5°	10.2	11.0	7.7	3.3	3.7
55°	2.4	4.9	4.1	2.4	2.8
57.5°	0.4	0.8	2.0	2.0	2.0
60°	0.4	0.4	0.8	1.2	1.6
62.5°	0.4	0.0	0.4	0.8	1.2
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)