

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: P1057987

Luminaire Tested: S122RDR-S485D927-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057987  
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-S485D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

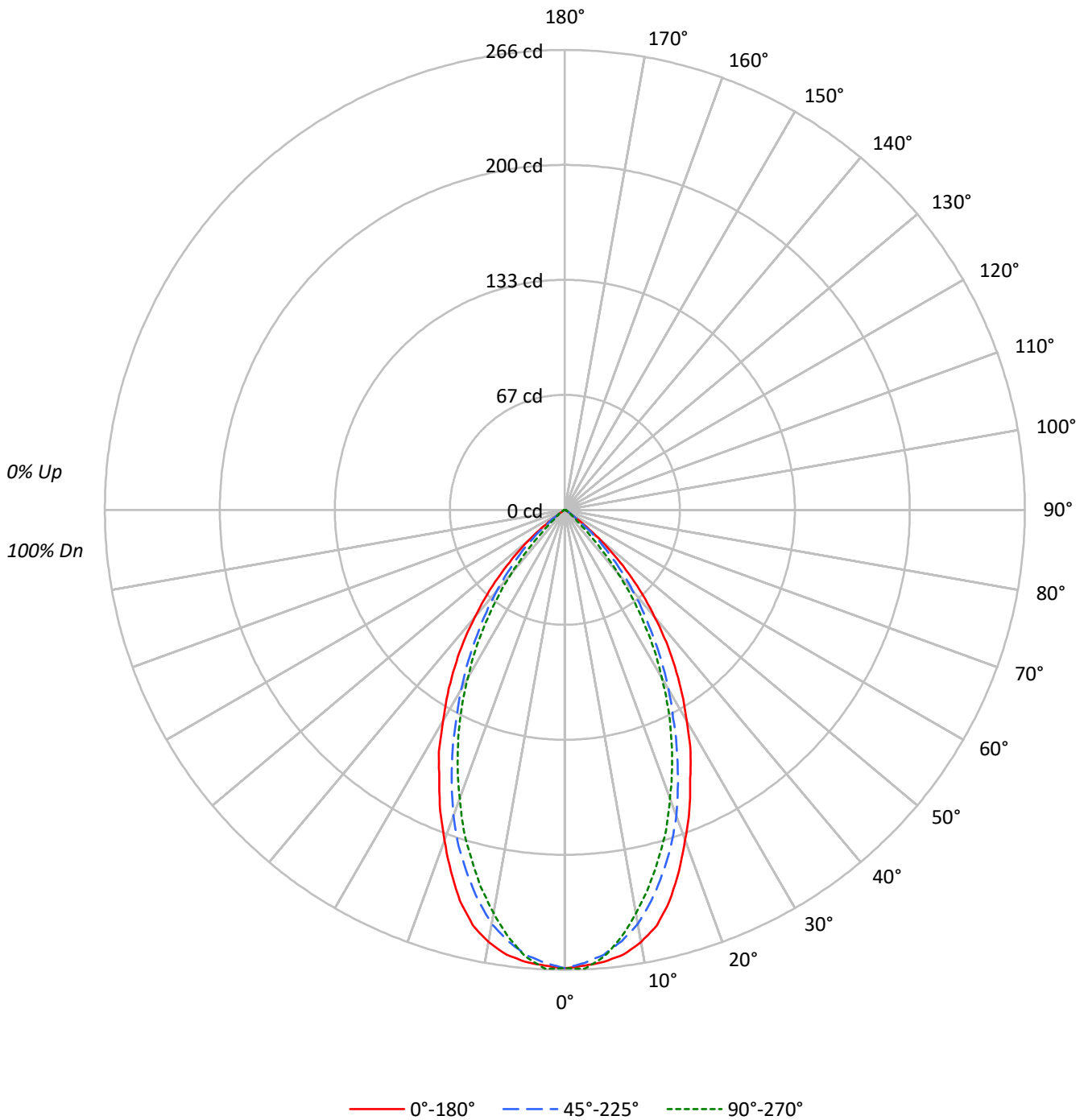
Lumens per Lamp: N/A  
Luminaire Lumens: 249.3 lumens  
Efficiency: N/A  
Efficacy: 12.7 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 19.6  
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	89	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°	4892	4892	4892
5°	4859	4784	4807
10°	4757	4557	4441
15°	4474	4165	3993
20°	3994	3698	3487
25°	3492	3125	2966
30°	2998	2555	2389
35°	2500	1994	1793
40°	1944	1472	1147
45°	1360	979	498
50°	741	514	178
55°	109	180	125
60°	22	41	81
65°	0	26	48
70°	0	0	32
75°	0	0	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1360 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	24.3	9.8
10°-20°	61.4	24.6
20°-30°	71.5	28.7
30°-40°	57.3	23.0
40°-50°	28.5	11.4
50°-60°	5.6	2.3
60°-70°	0.5	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°	157.3	63.1
0°-40°	214.6	86.1
0°-60°	248.7	99.8
0°-90°	249.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	249.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	265	265	265	265	265	
5°	262	262	258	259	260	25
15°	234	230	218	212	209	65
25°	172	163	154	150	146	79
35°	111	100	88	85	80	69
45°	52	46	38	25	19	40
55°	3	7	6	3	4	7
65°	0	0	1	1	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°	265.1	265.1	265.1	265.1	265.1
2.5°	263.9	265.1	262.3	265.1	265.6
5°	262.3	262.3	258.3	258.9	259.5
7.5°	259.5	258.3	251.6	250.5	249.4
10°	253.9	251.6	243.2	238.7	237.0
12.5°	246.0	242.6	231.4	226.4	223.6
15°	234.2	229.8	218.0	212.4	209.0
17.5°	219.1	215.2	204.0	197.8	194.5
20°	203.4	197.8	188.3	182.1	177.6
22.5°	188.3	181.0	170.9	166.4	162.0
25°	171.5	163.1	153.5	150.2	145.7
27.5°	157.5	146.8	135.6	133.4	129.5
30°	140.7	130.6	119.9	116.6	112.1
32.5°	126.1	114.9	104.2	100.3	96.4
35°	111.0	99.7	88.5	84.6	79.6
37.5°	96.4	85.7	74.5	68.4	63.9
40°	80.7	71.7	61.1	53.2	47.6
42.5°	66.7	58.8	48.8	38.7	33.1
45°	52.1	46.0	37.5	25.2	19.1
47.5°	38.7	34.2	27.5	14.6	10.1
50°	25.8	24.1	17.9	7.3	6.2
52.5°	14.0	15.1	10.6	4.5	5.0
55°	3.4	6.7	5.6	3.4	3.9
57.5°	0.6	1.1	2.8	2.8	2.8
60°	0.6	0.6	1.1	1.7	2.2
62.5°	0.6	0.0	0.6	1.1	1.7
65°	0.0	0.0	0.6	0.6	1.1
67.5°	0.0	0.0	0.0	0.6	0.6
70°	0.0	0.0	0.0	0.6	0.6
72.5°	0.0	0.0	0.0	0.0	0.6
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)