

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: P1058020

Luminaire Tested: S122RDR-S485D940-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058020  
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-S485D940-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: -

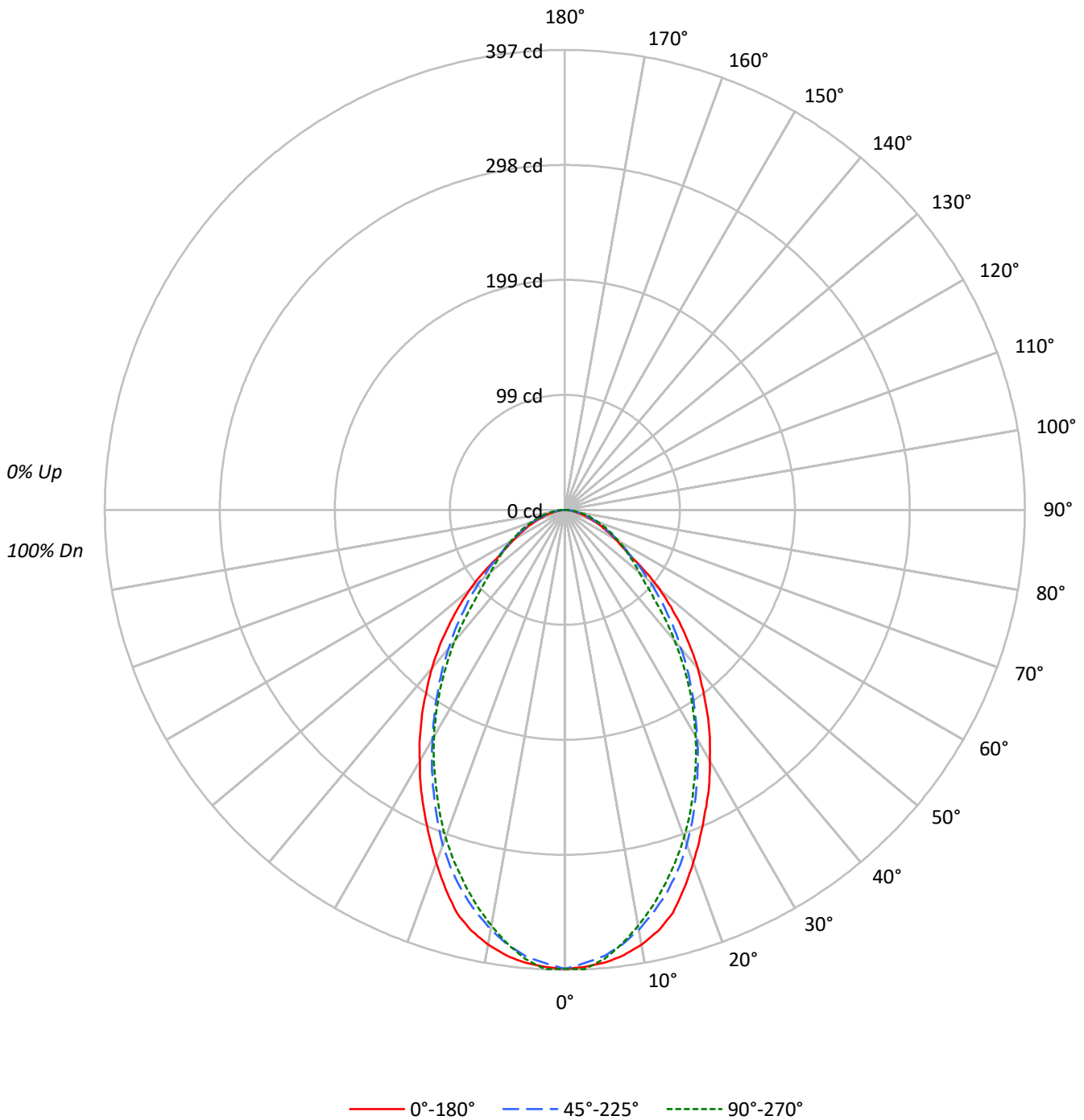
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 601.7 lumens  
Efficiency: N/A  
Efficacy: 30.7 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): 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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61				61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54				54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49				49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44				44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41				41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37				37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34				34

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	7311	7311	7311
5°	7268	7163	7209
10°	7139	6892	6832
15°	6881	6520	6386
20°	6366	6044	5909
25°	5843	5459	5357
30°	5335	4867	4811
35°	4832	4305	4206
40°	4300	3753	3555
45°	3703	3225	2847
50°	3060	2716	2391
55°	2213	2252	2152
60°	1838	1934	1956
65°	1572	1681	1790
70°	1295	1500	1635
75°	1077	1262	1483
80°	808	1010	1339
85°	275	529	1207

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3703 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.6	6.1
10°-20°	96.4	16.0
20°-30°	124.8	20.7
30°-40°	122.4	20.3
40°-50°	96.4	16.0
50°-60°	63.2	10.5
60°-70°	38.5	6.4
70°-80°	19.2	3.2
80°-90°	4.1	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°	257.9	42.9
0°-40°	380.3	63.2
0°-60°	539.8	89.7
0°-90°	601.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	601.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	396	396	396	396	396	
5°	392	392	387	389	389	37
15°	360	355	341	337	334	100
25°	287	278	268	267	263	132
35°	214	202	191	190	187	134
45°	142	133	124	115	109	109
55°	69	72	70	68	67	65
65°	36	37	38	40	41	36
75°	15	16	18	20	21	16
85°	1	2	2	4	6	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	396.2	396.2	396.2	396.2	396.2
2.5°	394.9	395.5	391.7	395.5	396.8
5°	392.4	392.4	386.7	389.2	389.2
7.5°	388.0	387.3	378.5	378.5	377.9
10°	381.0	378.5	367.8	365.9	364.6
12.5°	372.2	367.8	355.2	352.0	350.1
15°	360.2	355.2	341.3	336.9	334.3
17.5°	342.5	337.5	325.5	320.5	317.9
20°	324.2	316.7	307.8	303.4	300.9
22.5°	305.3	296.5	288.3	285.1	282.6
25°	287.0	277.6	268.1	266.8	263.1
27.5°	269.4	258.0	248.5	247.9	244.8
30°	250.4	238.5	228.4	229.0	225.8
32.5°	232.8	221.4	209.4	210.1	206.3
35°	214.5	202.5	191.1	190.5	186.7
37.5°	195.6	184.2	173.5	171.0	167.2
40°	178.5	167.2	155.8	151.4	147.6
42.5°	160.2	150.1	140.0	133.1	128.1
45°	141.9	133.1	123.6	114.8	109.1
47.5°	124.3	117.3	109.1	98.4	94.6
50°	106.6	101.6	94.6	85.2	83.3
52.5°	88.3	86.4	82.0	75.7	75.1
55°	68.8	72.5	70.0	67.5	66.9
57.5°	58.0	58.7	60.6	59.9	59.9
60°	49.8	49.8	52.4	53.0	53.0
62.5°	42.3	42.9	45.4	46.7	46.7
65°	36.0	36.6	38.5	40.4	41.0
67.5°	29.6	30.9	32.8	34.7	35.3
70°	24.0	25.2	27.8	29.6	30.3
72.5°	19.6	20.2	22.7	24.6	25.2
75°	15.1	15.8	17.7	20.2	20.8
77.5°	10.7	12.0	13.9	15.8	17.0
80°	7.6	8.2	9.5	12.0	12.6
82.5°	4.4	5.0	6.3	8.2	8.8
85°	1.3	1.9	2.5	4.4	5.7
87.5°	0.0	0.0	0.0	1.3	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)