

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: P1057956

Luminaire Tested: S122RDR-S485D830-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057956  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S485D830-X4F0-XX-UDD-SVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

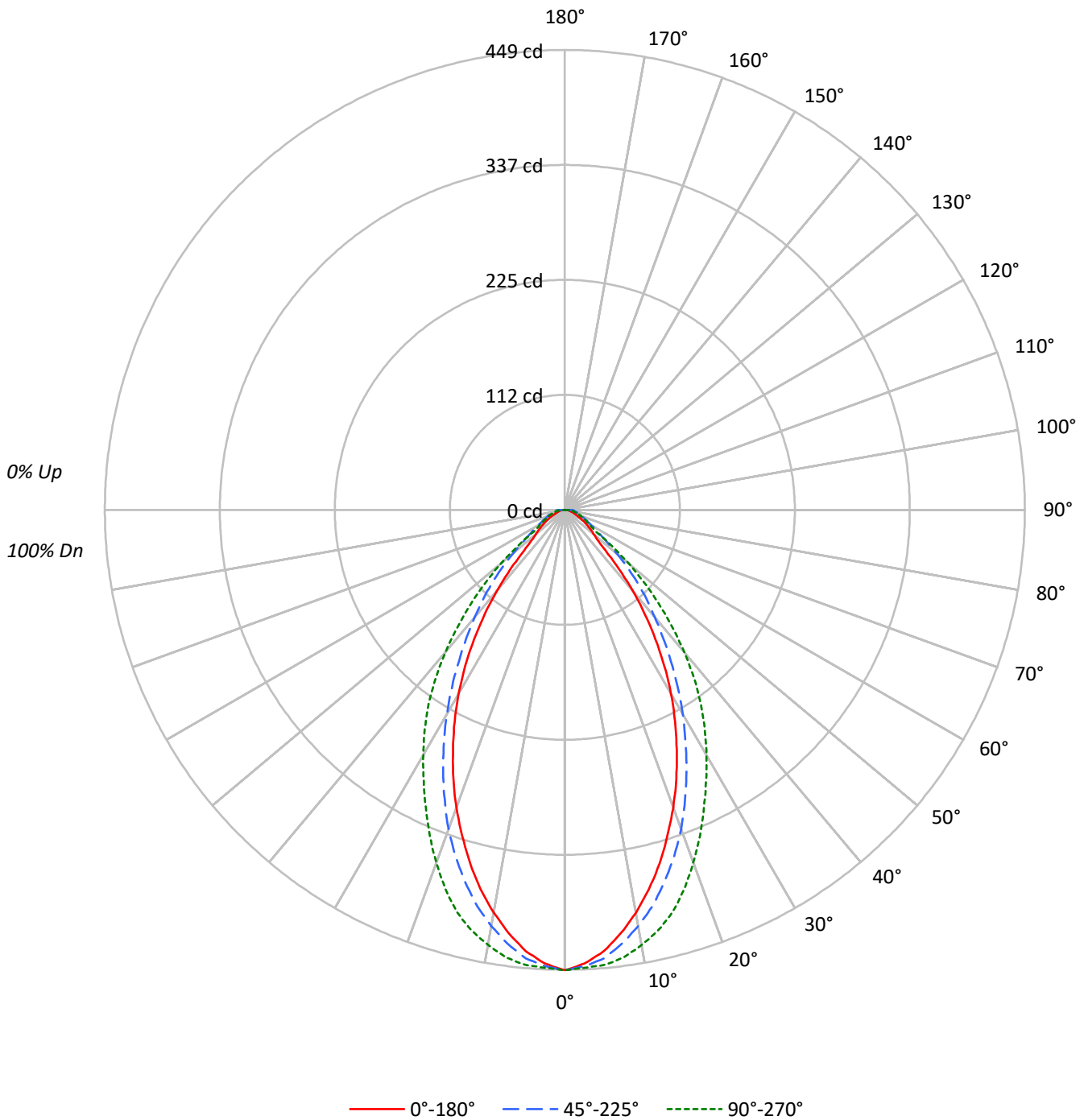
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 545.1 lumens  
Efficiency: N/A  
Efficacy: 27.8 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95  
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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89				89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59				59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50				50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				46
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42				42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39				39

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

	0°	45°	90°
0°	8293	8293	8293
5°	8015	8139	8261
10°	7482	7731	8081
15°	6824	7181	7767
20°	6072	6517	7199
25°	5261	5723	6540
30°	4411	4909	5889
35°	3474	4061	5219
40°	2476	3281	4360
45°	1464	2597	3379
50°	1054	1877	2299
55°	881	1354	1161
60°	716	1085	985
65°	585	961	904
70°	502	939	863
75°	478	955	856
80°	499	1137	924
85°	699	1842	1122

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3379 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.2	7.6
10°-20°	105.9	19.4
20°-30°	130.6	24.0
30°-40°	116.2	21.3
40°-50°	74.2	13.6
50°-60°	35.6	6.5
60°-70°	20.9	3.8
70°-80°	13.4	2.5
80°-90°	7.1	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°	277.7	51.0
0°-40°	393.9	72.3
0°-60°	503.7	92.4
0°-90°	545.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	545.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	449	449	449	449	449	
5°	433	441	439	442	446	40
15°	357	366	376	393	407	100
25°	258	268	281	301	321	118
35°	154	166	180	208	232	96
45°	56	73	100	116	130	47
55°	27	35	42	41	36	25
65°	13	24	22	20	21	13
75°	7	15	13	13	12	7
85°	3	8	9	7	5	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	449.4	449.4	449.4	449.4	449.4
2.5°	443.4	450.7	446.0	446.0	447.4
5°	432.7	440.7	439.4	442.0	446.0
7.5°	417.3	426.0	427.3	434.7	440.7
10°	399.3	408.6	412.6	423.3	431.3
12.5°	379.3	388.6	396.0	409.3	420.7
15°	357.2	365.9	375.9	393.3	406.6
17.5°	333.2	344.5	354.6	372.6	387.9
20°	309.2	319.8	331.9	349.2	366.6
22.5°	284.4	294.5	306.5	324.5	344.5
25°	258.4	268.4	281.1	301.1	321.2
27.5°	233.0	243.0	255.1	277.1	298.5
30°	207.0	217.0	230.4	253.1	276.4
32.5°	181.0	191.6	205.0	229.7	254.4
35°	154.2	166.3	180.3	207.7	231.7
37.5°	128.2	140.2	157.6	184.3	207.0
40°	102.8	116.8	136.2	160.3	181.0
42.5°	78.1	93.5	117.5	136.9	154.9
45°	56.1	72.8	99.5	115.5	129.5
47.5°	42.7	54.8	82.1	94.8	104.8
50°	36.7	44.1	65.4	74.8	80.1
52.5°	32.1	38.7	52.1	56.8	56.8
55°	27.4	35.4	42.1	40.7	36.1
57.5°	23.4	32.1	34.7	29.4	30.7
60°	19.4	29.4	29.4	26.0	26.7
62.5°	16.0	27.4	25.4	22.7	23.4
65°	13.4	24.0	22.0	20.0	20.7
67.5°	10.7	21.4	19.4	18.0	18.0
70°	9.3	19.4	17.4	16.0	16.0
72.5°	8.0	16.7	15.4	14.0	14.0
75°	6.7	14.7	13.4	12.7	12.0
77.5°	6.0	12.7	12.0	10.7	10.0
80°	4.7	10.7	10.7	10.0	8.7
82.5°	4.0	9.3	9.3	8.7	7.3
85°	3.3	8.0	8.7	7.3	5.3
87.5°	2.7	7.3	7.3	6.0	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)