

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: P1057958

Luminaire Tested: S122RDR-S485D830-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057958  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S485D830-X4F0-XX-UDD-WVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

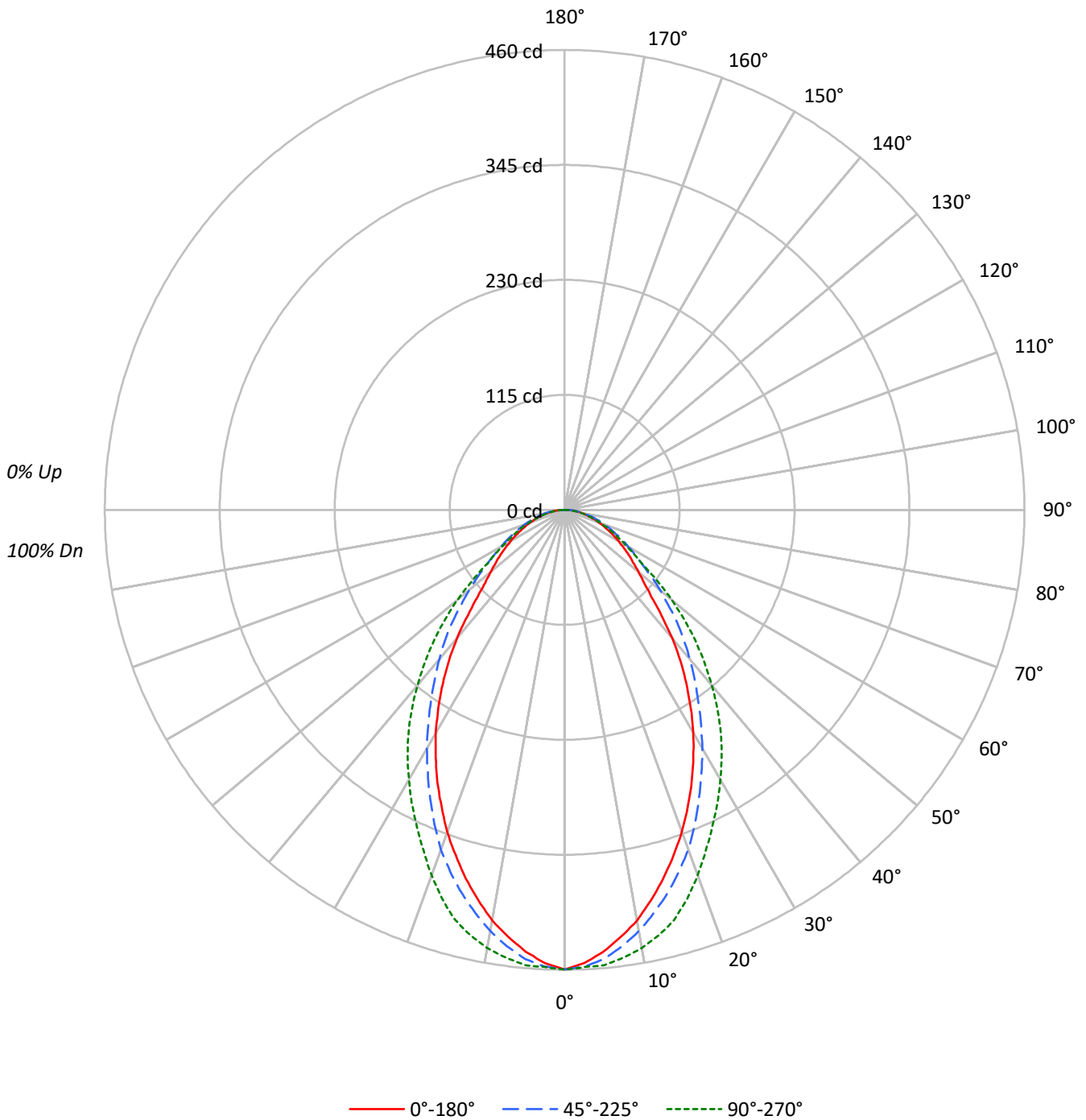
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 748.6 lumens  
Efficiency: N/A  
Efficacy: 38.2 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): 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				
1	110	106	103	99	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	79	84	80	78	76				
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66				
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59				
5	81	70	62	56	79	69	61	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	45	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	39	35	45	39	35	45	39	34	44	38	34	33				

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

	0°	45°	90°
0°	8483	8483	8483
5°	8219	8356	8467
10°	7813	8014	8340
15°	7292	7584	8107
20°	6735	7103	7639
25°	6126	6481	7118
30°	5489	5872	6639
35°	4780	5246	6132
40°	4035	4692	5514
45°	3205	4144	4822
50°	2759	3563	4005
55°	2513	3050	3069
60°	2292	2709	2609
65°	2096	2445	2301
70°	1942	2266	2050
75°	1811	2139	1811
80°	1700	2062	1626
85°	1694	2117	1419

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4822 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.4	5.7
10°-20°	112.2	15.0
20°-30°	147.6	19.7
30°-40°	148.5	19.8
40°-50°	120.3	16.1
50°-60°	82.9	11.1
60°-70°	54.2	7.2
70°-80°	30.2	4.0
80°-90°	10.2	1.4
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°	302.3	40.4
0°-40°	450.7	60.2
0°-60°	653.9	87.4
0°-90°	748.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	748.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	460	460	460	460	460	
5°	444	452	451	453	457	42
15°	382	391	397	412	424	107
25°	301	309	318	332	350	138
35°	212	222	233	254	272	132
45°	123	137	159	173	185	97
55°	78	87	95	97	95	70
65°	48	57	56	53	53	48
75°	25	31	30	27	25	27
85°	8	11	10	9	7	9
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	459.7	459.7	459.7	459.7	459.7
2.5°	453.7	461.7	457.1	457.1	457.7
5°	443.7	452.4	451.1	453.1	457.1
7.5°	431.0	440.4	440.4	446.4	451.7
10°	417.0	426.4	427.7	437.1	445.1
12.5°	399.7	409.0	413.0	425.0	435.7
15°	381.7	391.0	397.0	411.7	424.4
17.5°	362.3	371.7	379.7	395.0	407.7
20°	343.0	351.6	361.7	375.0	389.0
22.5°	321.6	331.0	340.3	353.0	369.0
25°	300.9	308.9	318.3	332.3	349.6
27.5°	278.9	287.6	296.3	312.9	331.0
30°	257.6	266.2	275.6	292.9	311.6
32.5°	234.9	244.2	253.6	272.9	292.3
35°	212.2	222.2	232.9	253.6	272.2
37.5°	190.2	200.8	213.5	234.9	250.9
40°	167.5	178.8	194.8	213.5	228.9
42.5°	143.5	157.5	176.8	192.8	206.8
45°	122.8	136.8	158.8	172.8	184.8
47.5°	107.4	118.8	140.1	152.1	162.1
50°	96.1	104.8	124.1	132.8	139.5
52.5°	86.7	95.4	108.8	114.8	116.8
55°	78.1	86.7	94.8	96.8	95.4
57.5°	69.4	78.7	83.4	81.4	81.4
60°	62.1	72.1	73.4	70.7	70.7
62.5°	54.7	64.7	64.7	61.4	61.4
65°	48.0	57.4	56.0	53.4	52.7
67.5°	42.0	50.7	48.7	46.0	45.4
70°	36.0	44.0	42.0	38.7	38.0
72.5°	30.7	38.0	35.4	32.7	31.4
75°	25.4	31.4	30.0	26.7	25.4
77.5°	20.7	25.4	24.0	21.4	20.0
80°	16.0	20.0	19.4	16.7	15.3
82.5°	12.0	15.3	14.7	12.7	10.7
85°	8.0	10.7	10.0	8.7	6.7
87.5°	4.0	7.3	6.7	6.0	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)