

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: P1057799

Luminaire Tested: S122RDR-S1005D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057799  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S1005D835-X4F0-XX-UDD-BVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

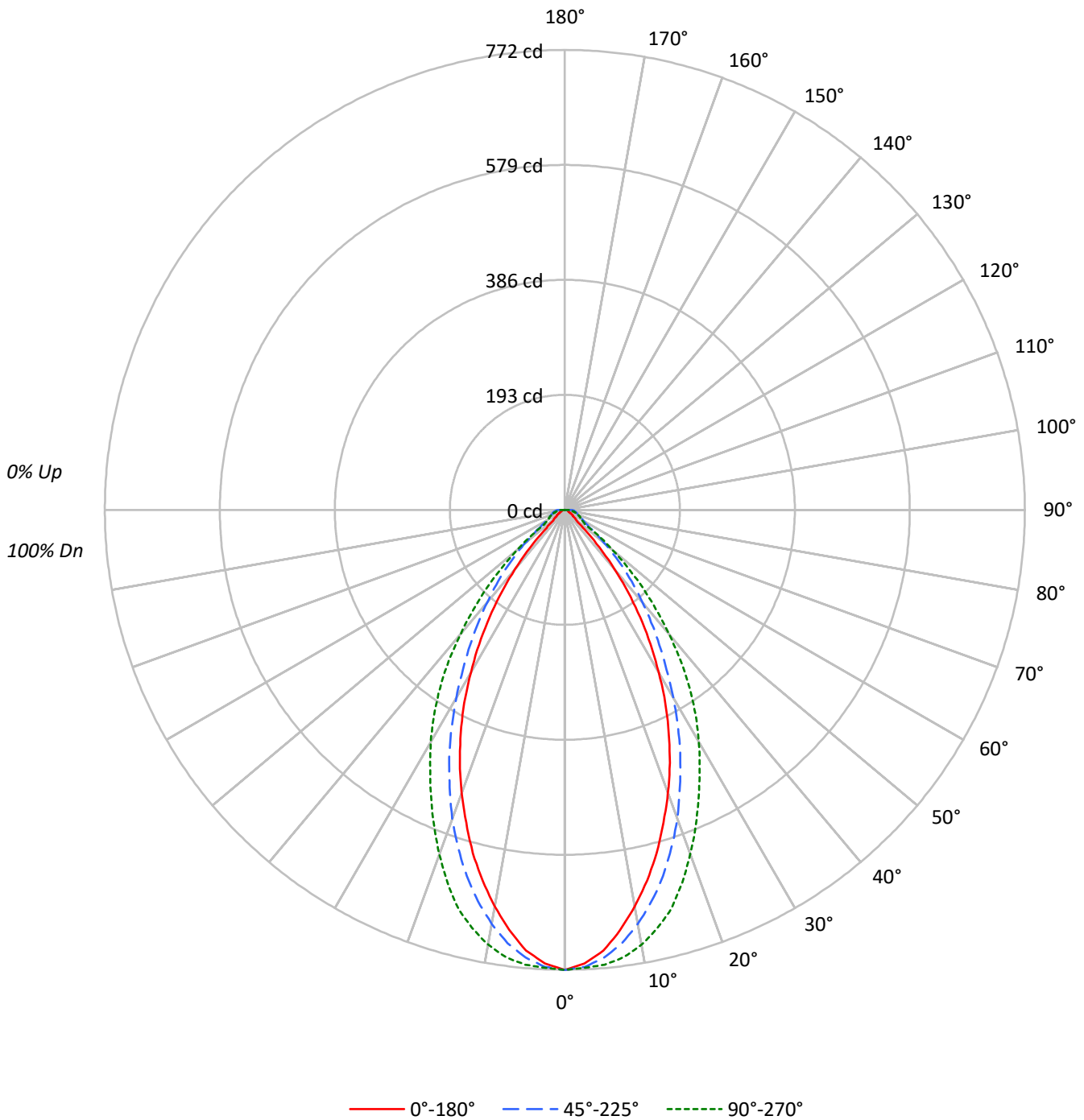
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 832.5 lumens  
Efficiency: N/A  
Efficacy: 19.9 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 41.8  
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									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	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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90																												
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81																												
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74																												
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67																												
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61																												
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57																												
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52																												
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48																												
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45																												
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42																												

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

	0°	45°	90°
0°	14251	14251	14251
5°	13757	13976	14196
10°	12668	13223	13888
15°	11389	12154	13227
20°	9936	10837	12086
25°	8405	9337	10813
30°	6714	7756	9584
35°	4965	6233	8231
40°	3136	4883	6557
45°	1234	3669	4825
50°	637	2463	2974
55°	524	1618	1332
60°	384	1310	1199
65°	323	1227	1227
70°	318	1279	1198
75°	421	1476	1269
80°	627	1891	1413
85°	932	3133	1884

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 87.5°  
 Luminance: 6261 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.6	8.5
10°-20°	178.4	21.4
20°-30°	212.0	25.5
30°-40°	176.4	21.2
40°-50°	98.5	11.8
50°-60°	39.8	4.8
60°-70°	25.5	3.1
70°-80°	19.1	2.3
80°-90°	12.2	1.5
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°	461.1	55.4
0°-40°	637.5	76.6
0°-60°	775.8	93.2
0°-90°	832.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	832.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	772	772	772	772	772	
5°	743	756	754	760	766	69
15°	596	614	636	669	692	166
25°	413	429	459	494	531	188
35°	220	241	277	322	365	137
45°	47	80	141	164	185	44
55°	16	34	50	49	41	14
65°	7	30	28	27	28	7
75°	6	21	21	19	18	6
85°	4	13	15	13	9	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	772.3	772.3	772.3	772.3	772.3
2.5°	761.9	773.8	767.9	767.9	769.3
5°	742.7	756.0	754.5	760.5	766.4
7.5°	711.6	726.4	733.8	747.1	757.5
10°	676.1	692.4	705.7	726.4	741.2
12.5°	637.7	653.9	673.2	699.8	719.0
15°	596.2	614.0	636.2	668.7	692.4
17.5°	550.4	569.6	594.8	630.3	655.4
20°	506.0	525.2	551.9	587.4	615.5
22.5°	460.1	476.4	504.5	540.0	574.0
25°	412.8	429.1	458.6	494.2	531.1
27.5°	365.4	381.7	411.3	448.3	489.7
30°	315.1	332.9	364.0	405.4	449.8
32.5°	267.8	285.5	318.1	364.0	408.3
35°	220.4	241.2	276.7	322.5	365.4
37.5°	174.6	198.3	238.2	281.1	319.6
40°	130.2	155.3	202.7	239.7	272.2
42.5°	85.8	115.4	170.1	201.2	226.4
45°	47.3	79.9	140.6	164.2	184.9
47.5°	26.6	51.8	111.0	130.2	142.0
50°	22.2	38.5	85.8	99.1	103.6
52.5°	17.8	35.5	65.1	72.5	69.5
55°	16.3	34.0	50.3	48.8	41.4
57.5°	13.3	34.0	39.9	35.5	35.5
60°	10.4	32.5	35.5	31.1	32.5
62.5°	8.9	31.1	32.5	29.6	29.6
65°	7.4	29.6	28.1	26.6	28.1
67.5°	5.9	26.6	26.6	25.2	25.2
70°	5.9	25.2	23.7	22.2	22.2
72.5°	5.9	22.2	22.2	20.7	20.7
75°	5.9	20.7	20.7	19.2	17.8
77.5°	5.9	17.8	19.2	17.8	16.3
80°	5.9	16.3	17.8	16.3	13.3
82.5°	5.9	14.8	16.3	14.8	11.8
85°	4.4	13.3	14.8	13.3	8.9
87.5°	4.4	13.3	14.8	11.8	7.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)