

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: P1057853

Luminaire Tested: S122RDR-S1005D940-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057853  
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-S1005D940-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

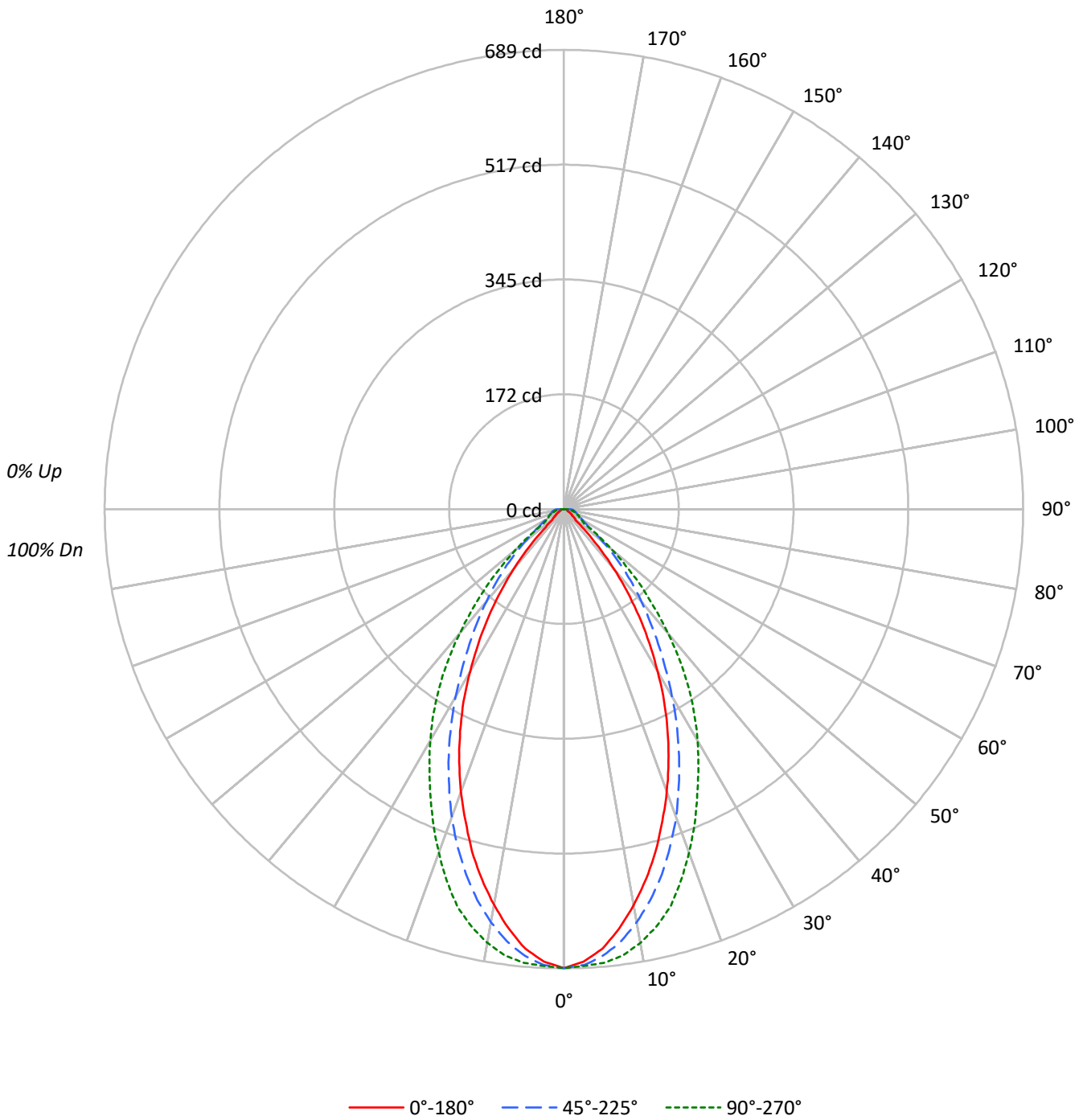
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 742.3 lumens  
Efficiency: N/A  
Efficacy: 17.8 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	
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	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°	12708	12708	12708
5°	12268	12462	12659
10°	11297	11791	12385
15°	10157	10837	11794
20°	8860	9663	10777
25°	7495	8327	9643
30°	5987	6914	8546
35°	4429	5557	7341
40°	2797	4353	5846
45°	1101	3270	4303
50°	568	2196	2650
55°	466	1444	1187
60°	340	1170	1070
65°	288	1096	1096
70°	286	1138	1068
75°	378	1319	1126
80°	563	1679	1265
85°	847	2795	1673

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 87.5°  
 Luminance: 5584 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.0	8.5
10°-20°	159.1	21.4
20°-30°	189.1	25.5
30°-40°	157.3	21.2
40°-50°	87.8	11.8
50°-60°	35.5	4.8
60°-70°	22.7	3.1
70°-80°	17.0	2.3
80°-90°	10.9	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°	411.2	55.4
0°-40°	568.4	76.6
0°-60°	691.7	93.2
0°-90°	742.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	742.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	689	689	689	689	689	
5°	662	674	673	678	683	61
15°	532	548	567	596	617	148
25°	368	383	409	441	474	168
35°	197	215	247	288	326	122
45°	42	71	125	146	165	40
55°	14	30	45	44	37	13
65°	7	26	25	24	25	7
75°	5	18	18	17	16	6
85°	4	12	13	12	8	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	688.7	688.7	688.7	688.7	688.7
2.5°	679.4	690.0	684.7	684.7	686.0
5°	662.3	674.2	672.8	678.1	683.4
7.5°	634.6	647.8	654.4	666.2	675.5
10°	602.9	617.4	629.3	647.8	661.0
12.5°	568.6	583.1	600.3	624.0	641.2
15°	531.7	547.5	567.3	596.3	617.4
17.5°	490.8	507.9	530.4	562.0	584.4
20°	451.2	468.3	492.1	523.8	548.8
22.5°	410.3	424.8	449.9	481.5	511.9
25°	368.1	382.6	409.0	440.6	473.6
27.5°	325.9	340.4	366.8	399.7	436.7
30°	281.0	296.8	324.5	361.5	401.1
32.5°	238.8	254.6	283.6	324.5	364.1
35°	196.6	215.0	246.7	287.6	325.9
37.5°	155.7	176.8	212.4	250.7	285.0
40°	116.1	138.5	180.7	213.7	242.7
42.5°	76.5	102.9	151.7	179.4	201.9
45°	42.2	71.2	125.3	146.4	164.9
47.5°	23.7	46.2	98.9	116.1	126.7
50°	19.8	34.3	76.5	88.4	92.3
52.5°	15.8	31.7	58.0	64.6	62.0
55°	14.5	30.3	44.9	43.5	36.9
57.5°	11.9	30.3	35.6	31.7	31.7
60°	9.2	29.0	31.7	27.7	29.0
62.5°	7.9	27.7	29.0	26.4	26.4
65°	6.6	26.4	25.1	23.7	25.1
67.5°	5.3	23.7	23.7	22.4	22.4
70°	5.3	22.4	21.1	19.8	19.8
72.5°	5.3	19.8	19.8	18.5	18.5
75°	5.3	18.5	18.5	17.2	15.8
77.5°	5.3	15.8	17.2	15.8	14.5
80°	5.3	14.5	15.8	14.5	11.9
82.5°	5.3	13.2	14.5	13.2	10.6
85°	4.0	11.9	13.2	11.9	7.9
87.5°	4.0	11.9	13.2	10.6	6.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)