

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: P1057857

Luminaire Tested: S122RDR-S1005D940-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057857  
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-S1005D940-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

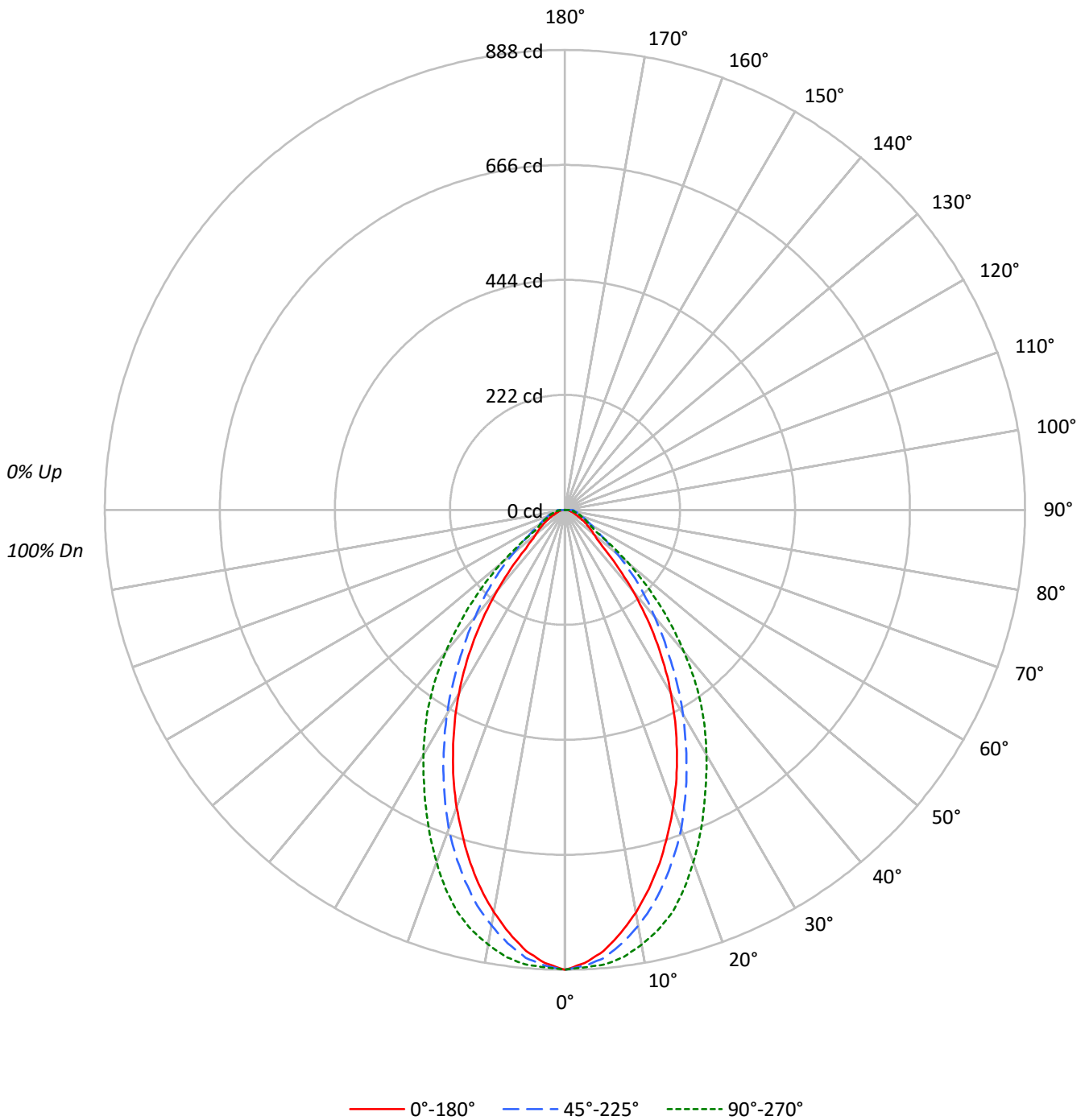
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1077.0 lumens  
Efficiency: N/A  
Efficacy: 25.8 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): 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
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°	16384	16384	16384
5°	15835	16080	16324
10°	14782	15276	15970
15°	13483	14190	15348
20°	11994	12876	14223
25°	10396	11308	12920
30°	8715	9699	11638
35°	6866	8024	10313
40°	4895	6482	8611
45°	2891	5130	6678
50°	2084	3712	4544
55°	1740	2673	2291
60°	1413	2140	1949
65°	1153	1899	1786
70°	998	1851	1710
75°	941	1882	1690
80°	978	2242	1828
85°	1397	3642	2244

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6678 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.4	7.6
10°-20°	209.2	19.4
20°-30°	258.1	24.0
30°-40°	229.6	21.3
40°-50°	146.5	13.6
50°-60°	70.4	6.5
60°-70°	41.3	3.8
70°-80°	26.4	2.4
80°-90°	14.1	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°	548.7	51.0
0°-40°	778.3	72.3
0°-60°	995.2	92.4
0°-90°	1077.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1077.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	888	888	888	888	888	
5°	855	871	868	873	881	79
15°	706	723	743	777	803	197
25°	511	530	555	595	635	234
35°	305	328	356	410	458	189
45°	111	144	197	228	256	93
55°	54	70	83	80	71	49
65°	26	48	44	40	41	27
75°	13	29	26	25	24	14
85°	7	16	17	14	11	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	887.9	887.9	887.9	887.9	887.9
2.5°	876.0	890.5	881.3	881.3	883.9
5°	854.9	870.7	868.1	873.4	881.3
7.5°	824.5	841.7	844.3	858.8	870.7
10°	788.9	807.4	815.3	836.4	852.3
12.5°	749.3	767.8	782.3	808.7	831.1
15°	705.8	723.0	742.8	777.1	803.4
17.5°	658.3	680.7	700.5	736.2	766.5
20°	610.8	631.9	655.7	690.0	724.3
22.5°	562.0	581.8	605.5	641.2	680.7
25°	510.6	530.3	555.4	595.0	634.6
27.5°	460.4	480.2	504.0	547.5	589.7
30°	409.0	428.8	455.2	500.0	546.2
32.5°	357.5	378.6	405.0	453.8	502.6
35°	304.8	328.5	356.2	410.3	457.8
37.5°	253.3	277.0	311.3	364.1	409.0
40°	203.2	230.9	269.1	316.6	357.5
42.5°	154.4	184.7	232.2	270.5	306.1
45°	110.8	143.8	196.6	228.2	255.9
47.5°	84.4	108.2	162.3	187.3	207.1
50°	72.6	87.1	129.3	147.8	158.3
52.5°	63.3	76.5	102.9	112.1	112.1
55°	54.1	69.9	83.1	80.5	71.2
57.5°	46.2	63.3	68.6	58.0	60.7
60°	38.3	58.0	58.0	51.5	52.8
62.5°	31.7	54.1	50.1	44.9	46.2
65°	26.4	47.5	43.5	39.6	40.9
67.5°	21.1	42.2	38.3	35.6	35.6
70°	18.5	38.3	34.3	31.7	31.7
72.5°	15.8	33.0	30.3	27.7	27.7
75°	13.2	29.0	26.4	25.1	23.7
77.5°	11.9	25.1	23.7	21.1	19.8
80°	9.2	21.1	21.1	19.8	17.2
82.5°	7.9	18.5	18.5	17.2	14.5
85°	6.6	15.8	17.2	14.5	10.6
87.5°	5.3	14.5	14.5	11.9	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)