

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: P1058181

Luminaire Tested: S122RDR-S865D940-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058181  
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-S865D940-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: -

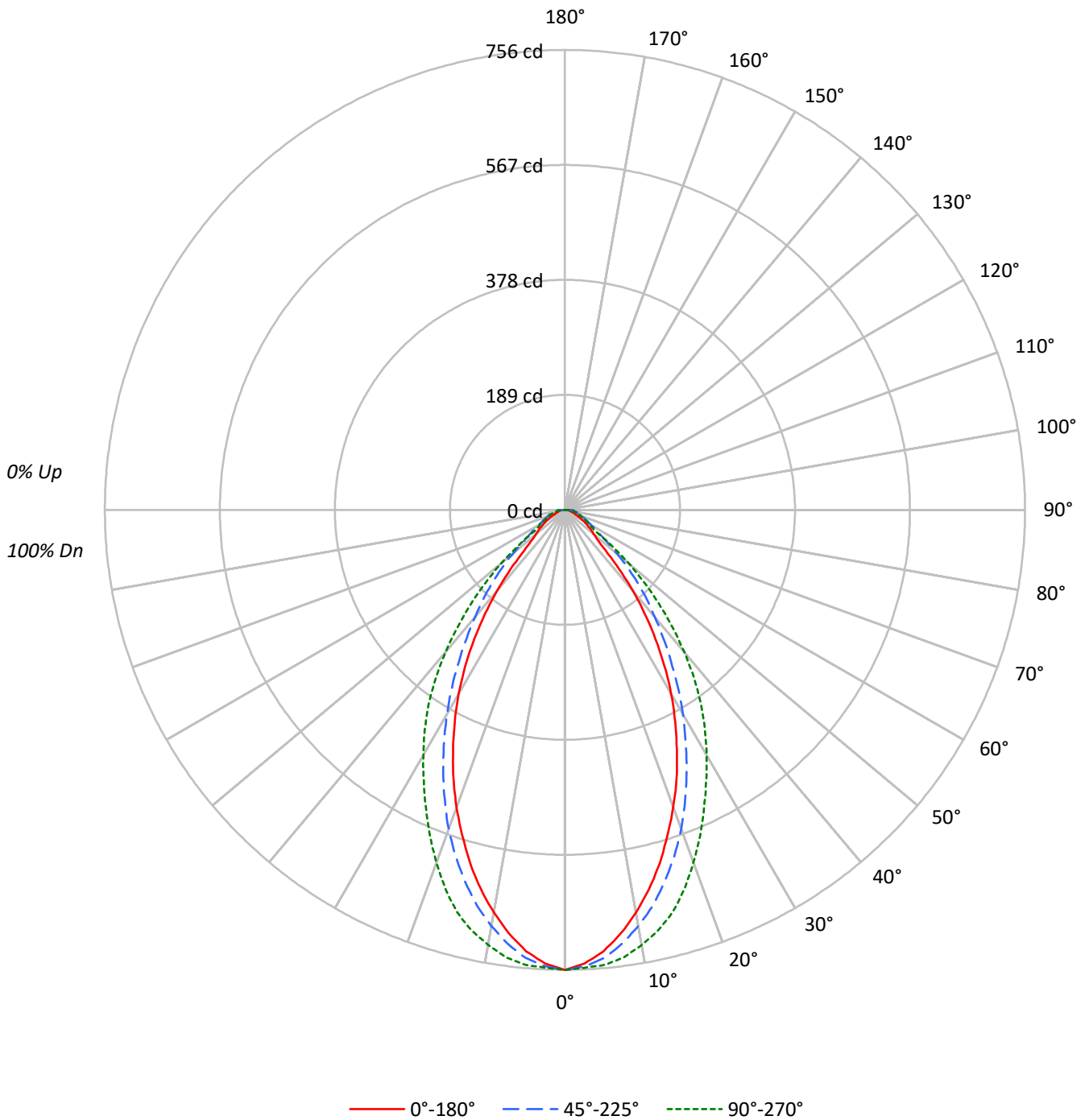
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 917.7 lumens  
Efficiency: N/A  
Efficacy: 26.2 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): 35  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39

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

	0°	45°	90°
0°	13959	13959	13959
5°	13492	13701	13909
10°	12595	13017	13607
15°	11489	12091	13078
20°	10221	10971	12118
25°	8857	9636	11009
30°	7426	8263	9916
35°	5850	6837	8788
40°	4170	5523	7337
45°	2463	4371	5691
50°	1774	3164	3873
55°	1483	2278	1953
60°	1203	1827	1661
65°	982	1620	1519
70°	847	1575	1457
75°	799	1604	1440
80°	839	1913	1551
85°	1186	3091	1905

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5691 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.4	7.6
10°-20°	178.3	19.4
20°-30°	219.9	24.0
30°-40°	195.6	21.3
40°-50°	124.9	13.6
50°-60°	60.0	6.5
60°-70°	35.2	3.8
70°-80°	22.5	2.4
80°-90°	12.0	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°	467.6	51.0
0°-40°	663.2	72.3
0°-60°	848.0	92.4
0°-90°	917.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	917.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	756	756	756	756	756	
5°	728	742	740	744	751	68
15°	601	616	633	662	685	168
25°	435	452	473	507	541	199
35°	260	280	304	350	390	161
45°	94	122	168	194	218	79
55°	46	60	71	69	61	42
65°	22	40	37	34	35	23
75°	11	25	22	21	20	12
85°	6	14	15	12	9	6
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	756.5	756.5	756.5	756.5	756.5
2.5°	746.4	758.8	750.9	750.9	753.2
5°	728.4	741.9	739.7	744.2	750.9
7.5°	702.6	717.2	719.4	731.8	741.9
10°	672.2	688.0	694.7	712.7	726.2
12.5°	638.5	654.2	666.6	689.1	708.2
15°	601.4	616.0	632.9	662.1	684.6
17.5°	560.9	580.0	596.9	627.3	653.1
20°	520.5	538.5	558.7	587.9	617.1
22.5°	478.9	495.7	516.0	546.3	580.0
25°	435.0	451.9	473.3	507.0	540.7
27.5°	392.3	409.2	429.4	466.5	502.5
30°	348.5	365.3	387.8	426.0	465.4
32.5°	304.6	322.6	345.1	386.7	428.3
35°	259.7	279.9	303.5	349.6	390.1
37.5°	215.8	236.1	265.3	310.3	348.5
40°	173.1	196.7	229.3	269.8	304.6
42.5°	131.5	157.4	197.8	230.4	260.8
45°	94.4	122.5	167.5	194.5	218.1
47.5°	71.9	92.2	138.3	159.6	176.5
50°	61.8	74.2	110.2	125.9	134.9
52.5°	54.0	65.2	87.7	95.6	95.6
55°	46.1	59.6	70.8	68.6	60.7
57.5°	39.3	54.0	58.5	49.5	51.7
60°	32.6	49.5	49.5	43.8	45.0
62.5°	27.0	46.1	42.7	38.2	39.3
65°	22.5	40.5	37.1	33.7	34.8
67.5°	18.0	36.0	32.6	30.4	30.4
70°	15.7	32.6	29.2	27.0	27.0
72.5°	13.5	28.1	25.9	23.6	23.6
75°	11.2	24.7	22.5	21.4	20.2
77.5°	10.1	21.4	20.2	18.0	16.9
80°	7.9	18.0	18.0	16.9	14.6
82.5°	6.7	15.7	15.7	14.6	12.4
85°	5.6	13.5	14.6	12.4	9.0
87.5°	4.5	12.4	12.4	10.1	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)