

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: P1058180

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058180  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)  
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-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

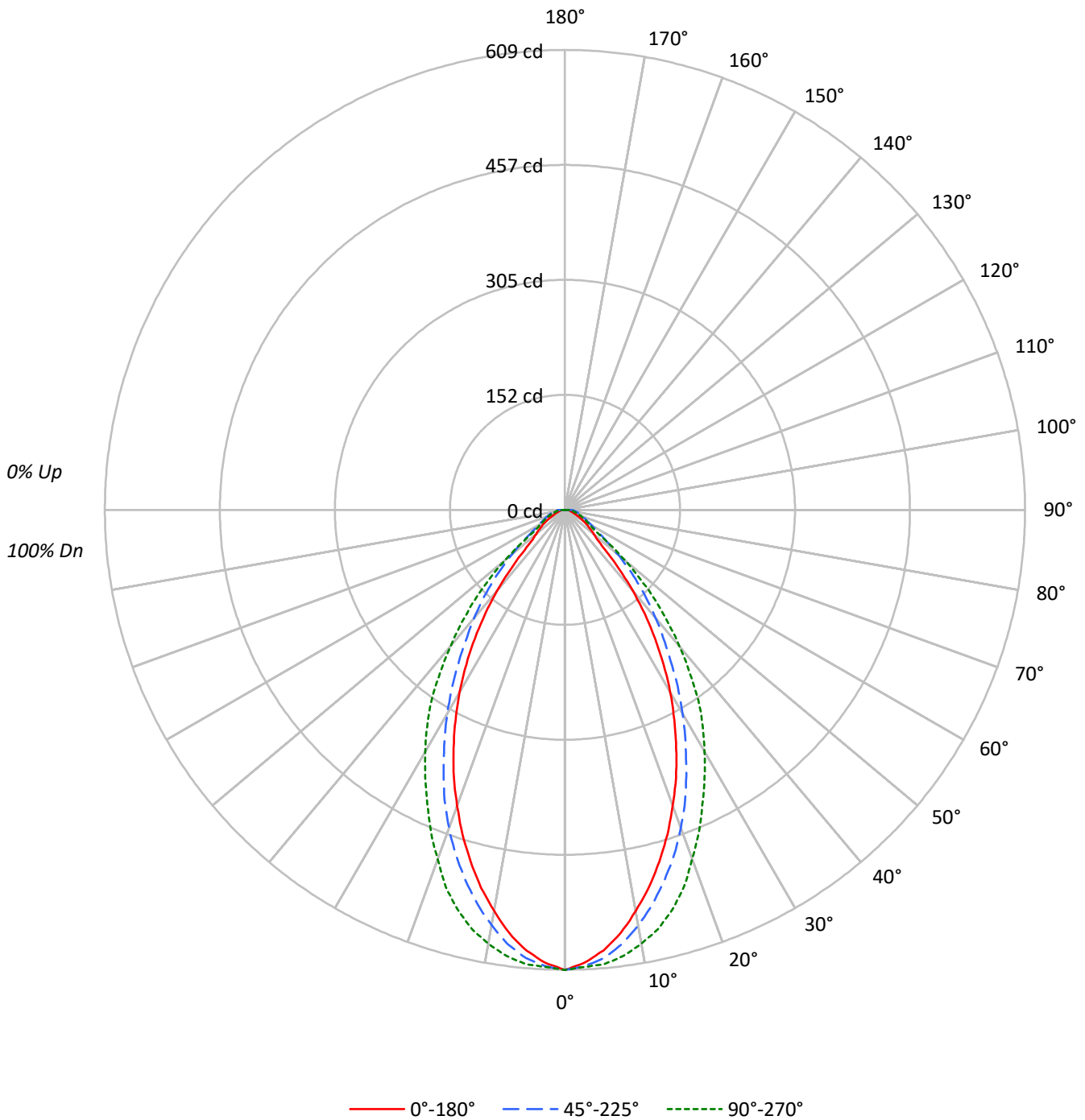
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 734.9 lumens  
Efficiency: N/A  
Efficacy: 21.0 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94  
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	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	101	99	97	98	96	94	94	93	91	89		89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80		80
3	97	89	83	78	95	88	82	77	85	80	76	82	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	66	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	44	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°	11241	11241	11241
5°	10847	11034	11180
10°	10109	10467	10929
15°	9212	9705	10478
20°	8189	8807	9667
25°	7093	7735	8765
30°	5938	6633	7879
35°	4683	5494	6938
40°	3358	4495	5685
45°	1965	3549	4400
50°	1421	2581	2968
55°	1194	1843	1554
60°	956	1495	1329
65°	786	1323	1227
70°	669	1273	1155
75°	642	1362	1119
80°	712	1668	1190
85°	1186	2625	1673

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4400 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.8	7.6
10°-20°	143.0	19.5
20°-30°	175.8	23.9
30°-40°	155.4	21.1
40°-50°	99.2	13.5
50°-60°	48.4	6.6
60°-70°	28.8	3.9
70°-80°	18.4	2.5
80°-90°	10.1	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°	374.6	51.0
0°-40°	530.0	72.1
0°-60°	677.6	92.2
0°-90°	734.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	734.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	609	609	609	609	609	
5°	586	598	596	598	604	54
15°	482	496	508	530	548	135
25°	348	361	380	404	430	159
35°	208	219	244	278	308	129
45°	75	97	136	153	169	63
55°	37	50	57	54	48	33
65°	18	34	30	28	28	18
75°	9	20	19	17	16	10
85°	6	11	12	11	8	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	609.2	609.2	609.2	609.2	609.2
2.5°	600.2	611.4	604.7	604.7	605.8
5°	585.6	597.9	595.7	597.9	603.6
7.5°	565.4	577.7	580.0	589.0	595.7
10°	539.5	551.9	558.6	573.2	583.3
12.5°	512.5	524.9	535.0	554.1	568.7
15°	482.2	495.7	508.0	530.5	548.5
17.5°	450.7	464.2	479.9	502.4	523.8
20°	417.0	429.4	448.5	469.8	492.3
22.5°	384.4	395.6	415.9	436.1	463.1
25°	348.4	360.8	379.9	403.5	430.5
27.5°	313.6	326.0	345.1	372.0	400.1
30°	278.7	290.0	311.3	339.4	369.8
32.5°	242.8	254.0	277.6	308.0	339.4
35°	207.9	219.2	243.9	277.6	308.0
37.5°	173.1	185.5	213.6	245.0	270.9
40°	139.4	154.0	186.6	213.6	236.0
42.5°	105.7	125.9	160.7	183.2	201.2
45°	75.3	96.7	136.0	152.9	168.6
47.5°	57.3	74.2	112.4	124.8	134.9
50°	49.5	60.7	89.9	98.9	103.4
52.5°	42.7	54.0	71.9	75.3	73.1
55°	37.1	49.5	57.3	54.0	48.3
57.5°	31.5	46.1	47.2	40.5	41.6
60°	25.9	41.6	40.5	34.8	36.0
62.5°	21.4	38.2	34.8	31.5	31.5
65°	18.0	33.7	30.3	28.1	28.1
67.5°	14.6	30.3	27.0	24.7	24.7
70°	12.4	27.0	23.6	21.4	21.4
72.5°	11.2	23.6	21.4	19.1	19.1
75°	9.0	20.2	19.1	16.9	15.7
77.5°	7.9	16.9	16.9	15.7	13.5
80°	6.7	14.6	15.7	13.5	11.2
82.5°	6.7	13.5	13.5	12.4	9.0
85°	5.6	11.2	12.4	11.2	7.9
87.5°	3.4	10.1	10.1	9.0	5.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)