

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: P1058178

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058178  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S865D940-X4F0-XX-UDD-BVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

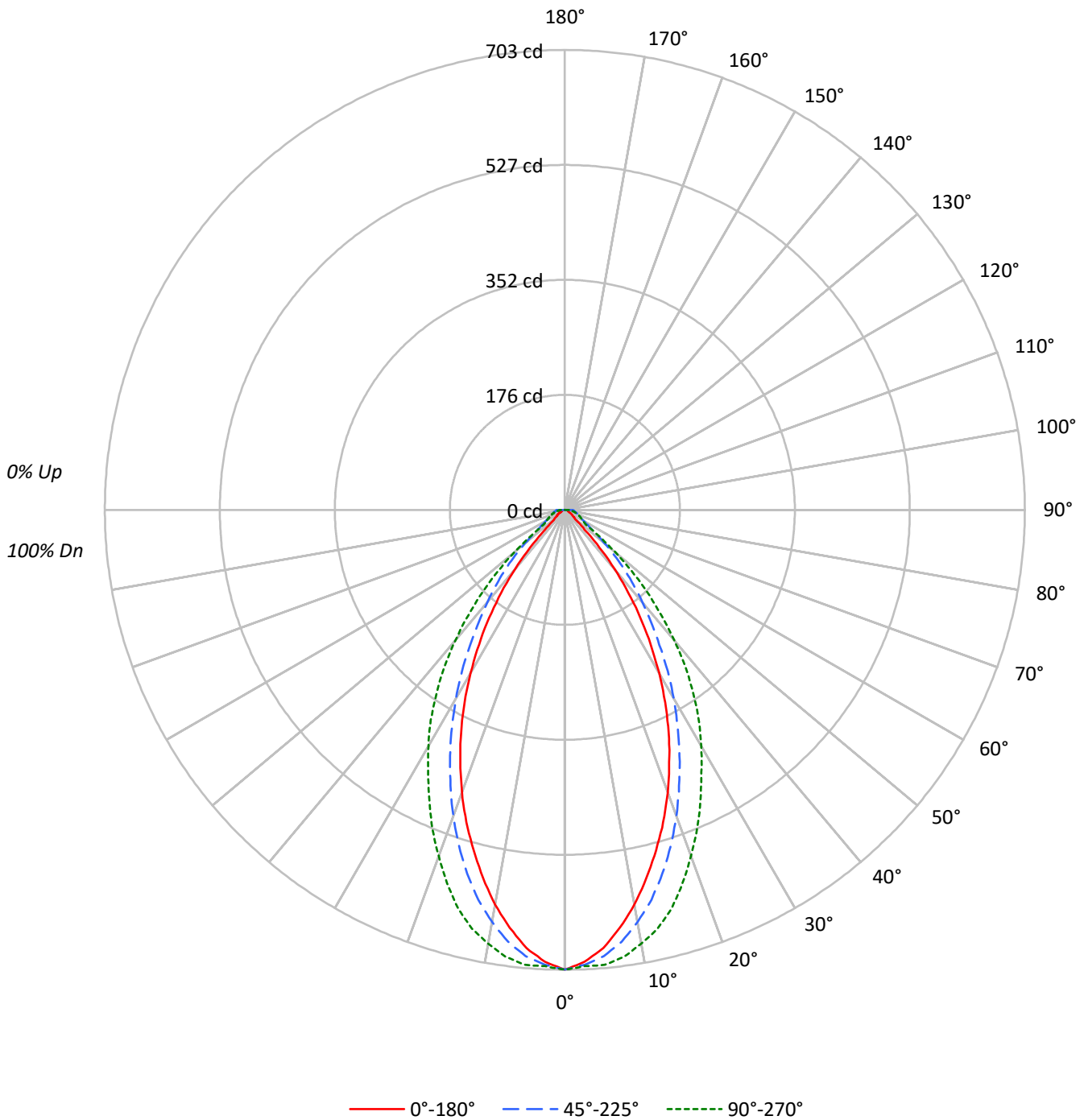
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 764.9 lumens  
Efficiency: N/A  
Efficacy: 21.9 lumens/watt  
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91  
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	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	76	81	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	67	64	71	66	63	61				
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56				
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52				
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48				
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45				
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42				

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

	0°	45°	90°
0°	12967	12967	12967
5°	12455	12683	12933
10°	11482	11988	12619
15°	10289	10998	12050
20°	9031	9781	11061
25°	7645	8447	9980
30°	6132	7091	8887
35°	4535	5674	7699
40°	2845	4442	6256
45°	1114	3345	4637
50°	548	2259	2839
55°	434	1483	1268
60°	332	1203	1163
65°	245	1131	1131
70°	302	1155	1155
75°	321	1283	1205
80°	478	1668	1318
85°	953	2858	1905

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 87.5°  
 Luminance: 5246 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.2	8.4
10°-20°	162.3	21.2
20°-30°	194.1	25.4
30°-40°	163.4	21.4
40°-50°	93.0	12.2
50°-60°	36.7	4.8
60°-70°	23.1	3.0
70°-80°	17.2	2.2
80°-90°	10.9	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°	420.6	55.0
0°-40°	584.0	76.3
0°-60°	713.7	93.3
0°-90°	764.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	764.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	703	703	703	703	703	
5°	672	687	685	693	698	62
15°	539	558	576	609	631	150
25°	376	392	415	458	490	171
35°	201	219	252	306	342	125
45°	43	75	128	161	178	40
55°	14	29	46	47	39	12
65°	6	26	26	25	26	6
75°	4	18	18	17	17	5
85°	4	12	14	12	9	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	702.7	702.7	702.7	702.7	702.7
2.5°	691.5	703.9	696.0	697.1	698.2
5°	672.4	687.0	684.7	692.6	698.2
7.5°	644.3	660.0	665.6	679.1	689.2
10°	612.8	630.8	639.8	661.1	673.5
12.5°	576.8	597.0	610.5	637.5	655.5
15°	538.6	557.7	575.7	609.4	630.8
17.5°	500.3	519.5	538.6	575.7	598.2
20°	459.9	477.9	498.1	537.5	563.3
22.5°	417.1	436.3	456.5	497.0	528.5
25°	375.5	392.4	414.9	457.6	490.2
27.5°	331.7	348.6	373.3	417.1	452.0
30°	287.8	304.7	332.8	377.8	417.1
32.5°	244.0	262.0	292.3	341.8	381.2
35°	201.3	219.3	251.9	305.8	341.8
37.5°	159.7	179.9	215.9	268.7	302.5
40°	118.1	141.7	184.4	231.6	259.7
42.5°	78.7	107.9	155.2	194.5	218.1
45°	42.7	75.3	128.2	160.8	177.7
47.5°	23.6	48.3	102.3	128.2	138.3
50°	19.1	33.7	78.7	97.8	98.9
52.5°	15.7	30.4	58.5	69.7	64.1
55°	13.5	29.2	46.1	47.2	39.4
57.5°	11.2	28.1	38.2	33.7	33.7
60°	9.0	28.1	32.6	30.4	31.5
62.5°	6.7	28.1	29.2	27.0	28.1
65°	5.6	25.9	25.9	24.7	25.9
67.5°	5.6	23.6	23.6	22.5	23.6
70°	5.6	22.5	21.4	21.4	21.4
72.5°	4.5	20.2	20.2	19.1	19.1
75°	4.5	18.0	18.0	16.9	16.9
77.5°	4.5	16.9	16.9	15.7	14.6
80°	4.5	14.6	15.7	14.6	12.4
82.5°	4.5	13.5	14.6	13.5	10.1
85°	4.5	12.4	13.5	12.4	9.0
87.5°	3.4	12.4	12.4	10.1	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)