

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: P1058184

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058184  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55 )  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S865D940-X4F0-XX-UDD-WVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

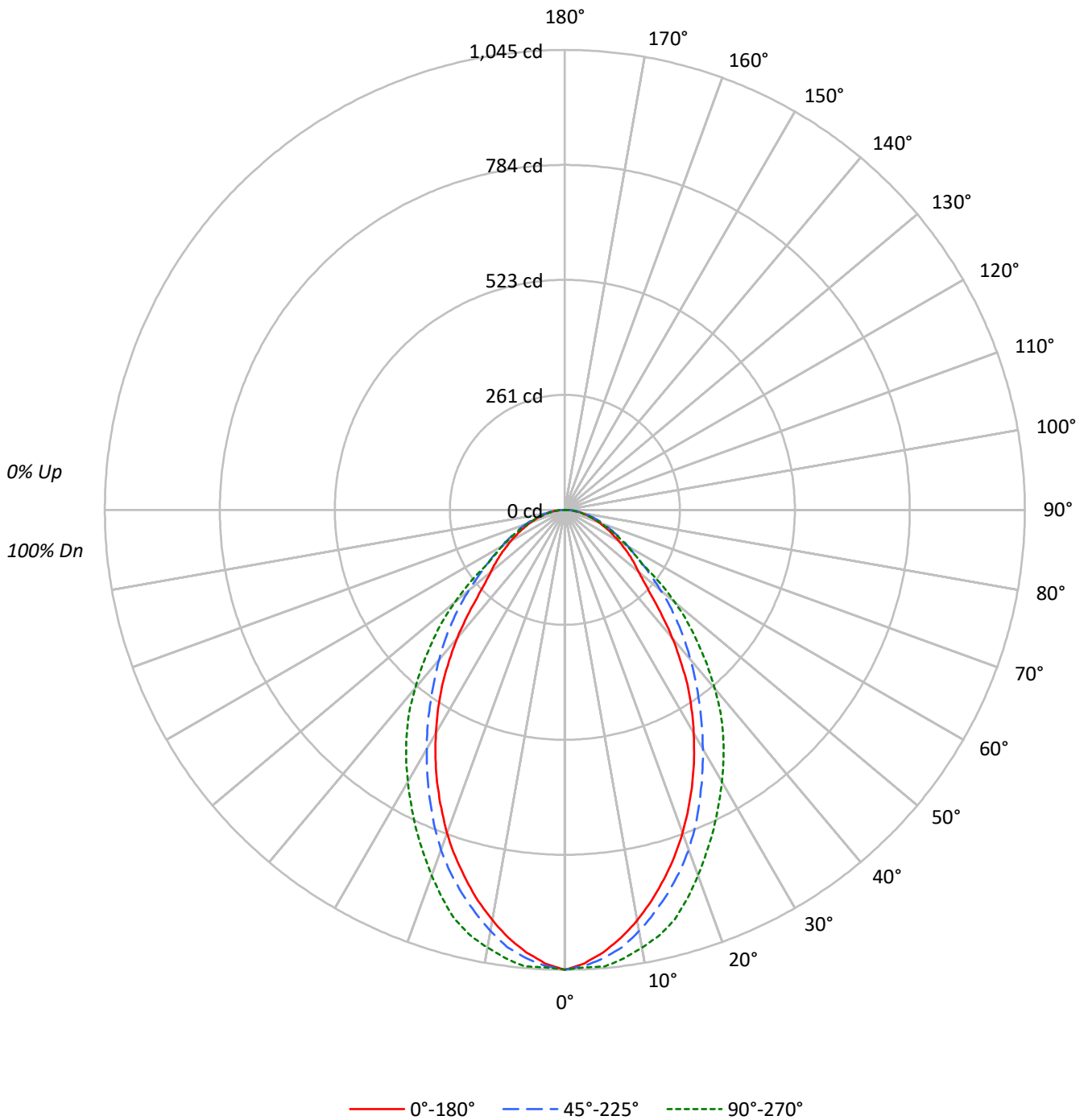
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1703.3 lumens  
Efficiency: N/A  
Efficacy: 48.7 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05  
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		
1	110	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87		
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76		
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67		
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59		
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54	52		
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47		
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43		
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39		
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36		
10	59	47	40	35	58	46	40	35	46	39	35	45	39	35	44	38	34	33		

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

	0°	45°	90°
0°	19279	19279	19279
5°	18686	18936	19290
10°	17744	18209	18924
15°	16610	17233	18414
20°	15354	16147	17361
25°	13953	14775	16286
30°	12471	13357	15200
35°	10932	11970	14122
40°	9146	10690	12745
45°	7330	9470	11140
50°	6290	8159	9353
55°	5746	6939	6904
60°	5226	6137	6012
65°	4759	5493	5248
70°	4365	5028	4667
75°	4085	4648	4085
80°	3815	4293	3581
85°	3811	4510	3091

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11140 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.4	5.7
10°-20°	255.4	15.0
20°-30°	336.8	19.8
30°-40°	339.1	19.9
40°-50°	276.0	16.2
50°-60°	188.2	11.0
60°-70°	122.2	7.2
70°-80°	67.3	3.9
80°-90°	21.9	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°	688.6	40.4
0°-40°	1027.7	60.3
0°-60°	1491.9	87.6
0°-90°	1703.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1703.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1045	1045	1045	1045	1045	
5°	1009	1028	1022	1031	1041	94
15°	870	892	902	939	964	244
25°	685	708	726	758	800	314
35°	485	510	531	577	627	301
45°	281	316	363	394	427	221
55°	179	197	216	217	215	160
65°	109	129	126	119	120	108
75°	57	71	65	58	57	61
85°	18	24	21	17	15	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1044.8	1044.8	1044.8	1044.8	1044.8
2.5°	1031.3	1048.2	1036.9	1038.0	1040.3
5°	1008.8	1027.9	1022.3	1031.3	1041.4
7.5°	980.7	999.8	1002.1	1015.6	1027.9
10°	947.0	968.4	971.8	992.0	1010.0
12.5°	910.0	933.6	938.1	967.3	990.9
15°	869.5	892.0	902.1	939.2	963.9
17.5°	826.8	848.2	863.9	897.6	925.7
20°	781.9	802.1	822.3	852.7	884.1
22.5°	733.6	756.1	775.2	805.5	841.4
25°	685.3	707.8	725.7	758.3	799.9
27.5°	635.9	658.3	676.3	711.1	756.1
30°	585.3	608.9	626.9	666.2	713.4
32.5°	535.9	559.5	579.7	621.3	670.7
35°	485.3	510.0	531.4	577.4	626.9
37.5°	431.4	459.5	486.4	532.5	580.8
40°	379.7	411.2	443.8	486.4	529.1
42.5°	328.0	362.9	403.3	439.3	478.6
45°	280.9	315.7	362.9	394.3	426.9
47.5°	243.8	273.0	323.5	349.4	378.6
50°	219.1	239.3	284.2	304.4	325.8
52.5°	198.8	215.7	247.2	260.6	271.9
55°	178.6	196.6	215.7	216.8	214.6
57.5°	158.4	178.6	188.7	180.9	185.4
60°	141.6	161.8	166.3	158.4	162.9
62.5°	123.6	146.0	146.0	138.2	140.4
65°	109.0	129.2	125.8	119.1	120.2
67.5°	94.4	114.6	109.0	102.2	102.2
70°	80.9	100.0	93.2	86.5	86.5
72.5°	68.5	84.3	79.8	71.9	70.8
75°	57.3	70.8	65.2	58.4	57.3
77.5°	46.1	57.3	52.8	47.2	44.9
80°	35.9	46.1	40.4	35.9	33.7
82.5°	27.0	34.8	30.3	25.8	23.6
85°	18.0	23.6	21.3	16.9	14.6
87.5°	9.0	15.7	13.5	11.2	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)