

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: P1057860

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057860  
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-S1005D940-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: -

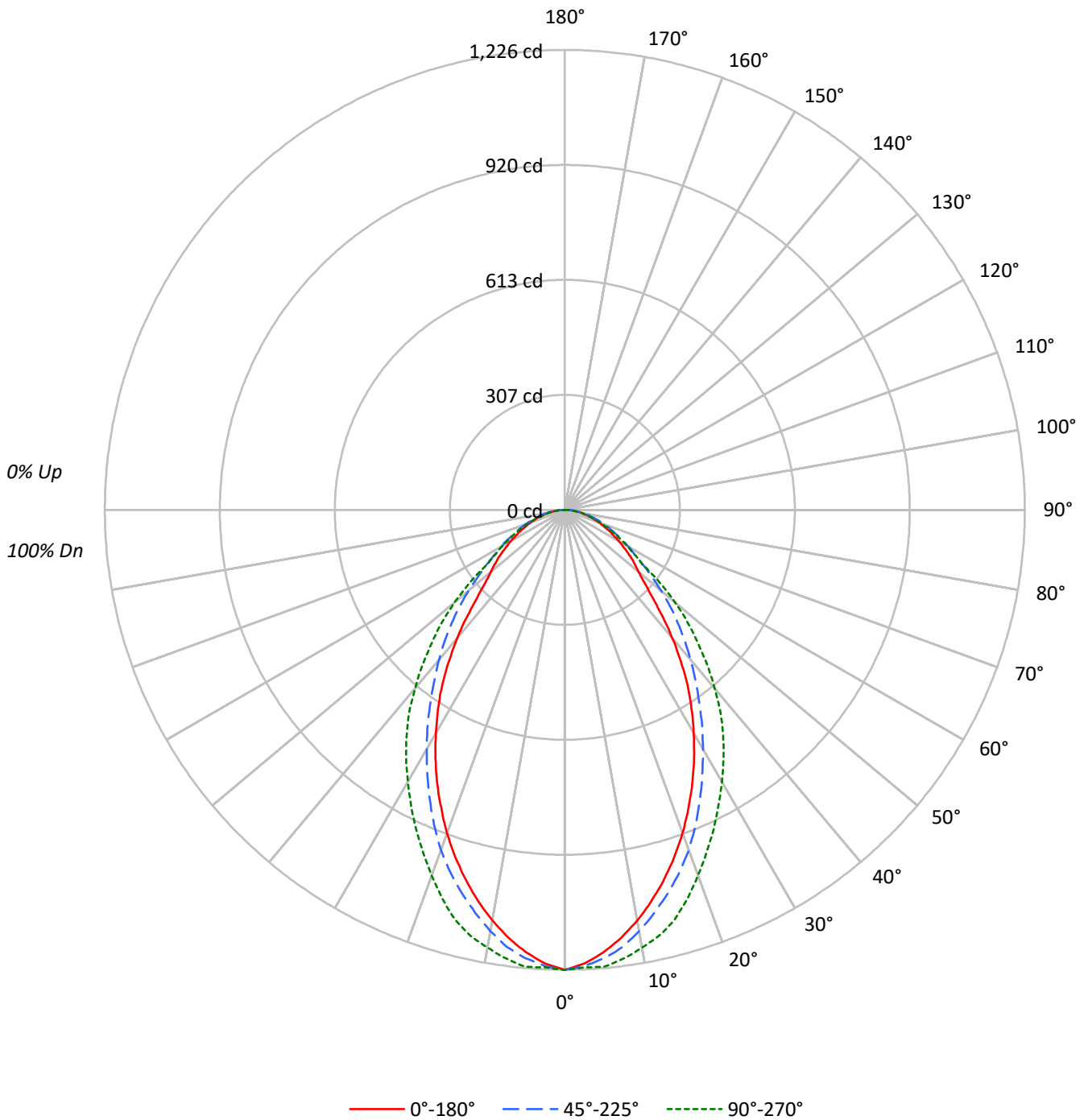
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1999.0 lumens  
Efficiency: N/A  
Efficacy: 47.8 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): 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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	110	106	103	99	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	39	35	46	39	35	45	39	35	44	38	34	33				

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

	0°	45°	90°
0°	22626	22626	22626
5°	21931	22224	22639
10°	20826	21370	22209
15°	19495	20225	21610
20°	18019	18951	20375
25°	16376	17341	19112
30°	14636	15676	17838
35°	12831	14047	16573
40°	10734	12545	14959
45°	8601	11114	13074
50°	7381	9577	10978
55°	6743	8142	8101
60°	6130	7200	7056
65°	5584	6449	6161
70°	5120	5902	5476
75°	4791	5454	4791
80°	4484	5048	4208
85°	4467	5314	3620

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 13074 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.2	5.7
10°-20°	299.7	15.0
20°-30°	395.3	19.8
30°-40°	398.0	19.9
40°-50°	323.9	16.2
50°-60°	220.9	11.0
60°-70°	143.4	7.2
70°-80°	79.0	3.9
80°-90°	25.8	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°	808.1	40.4
0°-40°	1206.1	60.3
0°-60°	1750.9	87.6
0°-90°	1999.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1999.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1226	1226	1226	1226	1226	
5°	1184	1206	1200	1210	1222	111
15°	1020	1047	1059	1102	1131	286
25°	804	831	852	890	939	369
35°	570	599	624	678	736	354
45°	330	370	426	463	501	260
55°	210	231	253	254	252	188
65°	128	152	148	140	141	127
75°	67	83	76	69	67	71
85°	21	28	25	20	17	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1226.2	1226.2	1226.2	1226.2	1226.2
2.5°	1210.3	1230.1	1216.9	1218.2	1220.9
5°	1184.0	1206.4	1199.8	1210.3	1222.2
7.5°	1151.0	1173.4	1176.1	1191.9	1206.4
10°	1111.5	1136.5	1140.5	1164.2	1185.3
12.5°	1067.9	1095.6	1100.9	1135.2	1162.9
15°	1020.5	1046.9	1058.7	1102.2	1131.2
17.5°	970.4	995.4	1013.9	1053.4	1086.4
20°	917.6	941.4	965.1	1000.7	1037.6
22.5°	860.9	887.3	909.7	945.3	987.5
25°	804.3	830.6	851.7	890.0	938.7
27.5°	746.2	772.6	793.7	834.6	887.3
30°	686.9	714.6	735.7	781.8	837.2
32.5°	628.9	656.6	680.3	729.1	787.1
35°	569.6	598.6	623.6	677.7	735.7
37.5°	506.3	539.2	570.9	624.9	681.6
40°	445.6	482.6	520.8	570.9	621.0
42.5°	385.0	425.9	473.3	515.5	561.7
45°	329.6	370.5	425.9	462.8	501.0
47.5°	286.1	320.4	379.7	410.0	444.3
50°	257.1	280.8	333.6	357.3	382.4
52.5°	233.4	253.1	290.1	305.9	319.1
55°	209.6	230.7	253.1	254.5	251.8
57.5°	185.9	209.6	221.5	212.3	217.5
60°	166.1	189.9	195.1	185.9	191.2
62.5°	145.0	171.4	171.4	162.2	164.8
65°	127.9	151.6	147.7	139.8	141.1
67.5°	110.7	134.5	127.9	120.0	120.0
70°	94.9	117.3	109.4	101.5	101.5
72.5°	80.4	98.9	93.6	84.4	83.1
75°	67.2	83.1	76.5	68.6	67.2
77.5°	54.1	67.2	62.0	55.4	52.7
80°	42.2	54.1	47.5	42.2	39.6
82.5°	31.6	40.9	35.6	30.3	27.7
85°	21.1	27.7	25.1	19.8	17.1
87.5°	10.5	18.5	15.8	13.2	10.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)