

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: P1060263

Luminaire Tested: S124RDR-S1020D927-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060263  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S1020D927-X4F0-XX-UDD-WVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

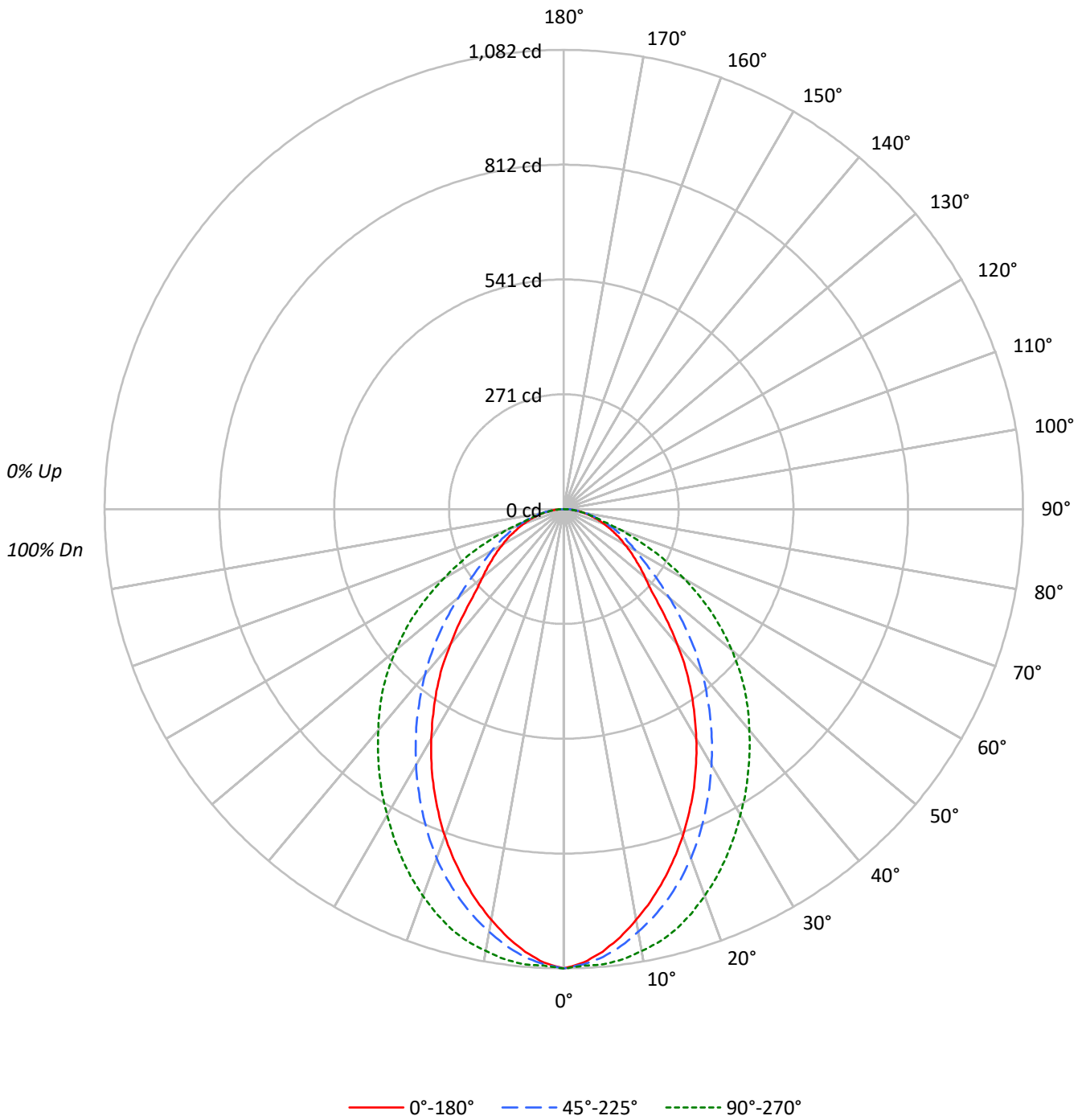
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1985.9 lumens  
Efficiency: N/A  
Efficacy: 56.7 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11  
Luminous Opening: Rectangular (W 0.31' 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	100	100	100	
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	87	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75	75	75	75	
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65	65	65	65	
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57	57	57	57	
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50	50	50	50	
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45	45	45	45	
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40	40	40	40	
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37	37	37	37	
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33	33	33	33	
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31	31	31	31	

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

	0°	45°	90°
0°	9319	9319	9319
5°	9049	9157	9305
10°	8592	8844	9245
15°	8077	8470	9136
20°	7512	8022	8891
25°	6888	7489	8600
30°	6209	6924	8276
35°	5497	6333	7964
40°	4673	5717	7644
45°	3825	5050	7348
50°	3349	4336	6915
55°	3078	3738	6399
60°	2854	3365	5640
65°	2673	3162	4723
70°	2508	2893	3545
75°	2359	2645	2582
80°	2187	2420	2187
85°	1986	2361	1897

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7348 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.0	5.0
10°-20°	269.1	13.6
20°-30°	367.8	18.5
30°-40°	386.6	19.5
40°-50°	335.5	16.9
50°-60°	253.1	12.7
60°-70°	164.0	8.3
70°-80°	84.2	4.2
80°-90°	25.5	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°	737.0	37.1
0°-40°	1123.6	56.6
0°-60°	1712.1	86.2
0°-90°	1985.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1985.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1082	1082	1082	1082	1082	
5°	1047	1061	1059	1068	1076	98
15°	906	928	950	993	1025	254
25°	725	751	788	849	905	332
35°	523	552	602	683	758	325
45°	314	344	415	518	603	247
55°	205	211	249	353	426	184
65°	131	134	155	188	232	131
75°	71	80	80	80	78	75
85°	20	25	24	23	19	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1082.2	1082.2	1082.2	1082.2	1082.2
2.5°	1069.8	1083.2	1073.6	1075.5	1076.5
5°	1046.8	1061.2	1059.3	1067.9	1076.5
7.5°	1017.1	1034.4	1038.2	1055.4	1069.8
10°	982.6	1001.8	1011.4	1039.1	1057.3
12.5°	946.2	965.4	982.6	1018.1	1043.9
15°	906.0	928.0	950.1	993.2	1024.8
17.5°	863.9	886.9	914.6	961.6	998.9
20°	819.8	842.8	875.4	926.1	970.2
22.5°	772.9	798.8	833.2	887.8	939.5
25°	725.0	750.9	788.2	848.6	905.1
27.5°	675.2	702.0	742.2	809.3	869.6
30°	624.4	653.2	696.3	767.1	832.3
32.5°	572.7	603.4	649.3	725.0	795.9
35°	522.9	551.7	602.4	682.9	757.6
37.5°	471.2	499.9	554.5	641.7	719.3
40°	415.7	447.3	508.6	598.6	680.0
42.5°	363.9	395.5	461.6	557.4	642.6
45°	314.1	343.8	414.7	518.1	603.4
47.5°	275.8	296.9	367.8	479.8	561.2
50°	250.0	259.5	323.7	437.7	516.2
52.5°	227.0	234.6	283.5	395.5	472.2
55°	205.0	210.7	249.0	353.4	426.2
57.5°	185.8	188.7	218.4	311.3	376.4
60°	165.7	169.5	195.4	268.2	327.5
62.5°	149.4	151.3	175.3	227.0	278.7
65°	131.2	134.1	155.2	187.7	231.8
67.5°	114.9	119.7	134.1	153.2	182.9
70°	99.6	106.3	114.9	124.5	140.8
72.5°	85.2	92.9	97.7	101.5	98.6
75°	70.9	79.5	79.5	80.4	77.6
77.5°	57.5	65.1	64.2	63.2	59.4
80°	44.1	50.8	48.8	47.9	44.1
82.5°	32.6	37.4	35.4	34.5	29.7
85°	20.1	24.9	23.9	23.0	19.2
87.5°	9.6	14.4	13.4	12.5	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)