

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: P1060275

Luminaire Tested: S124RDR-S1020D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060275  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S1020D935-X4F0-XX-UDD-BVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

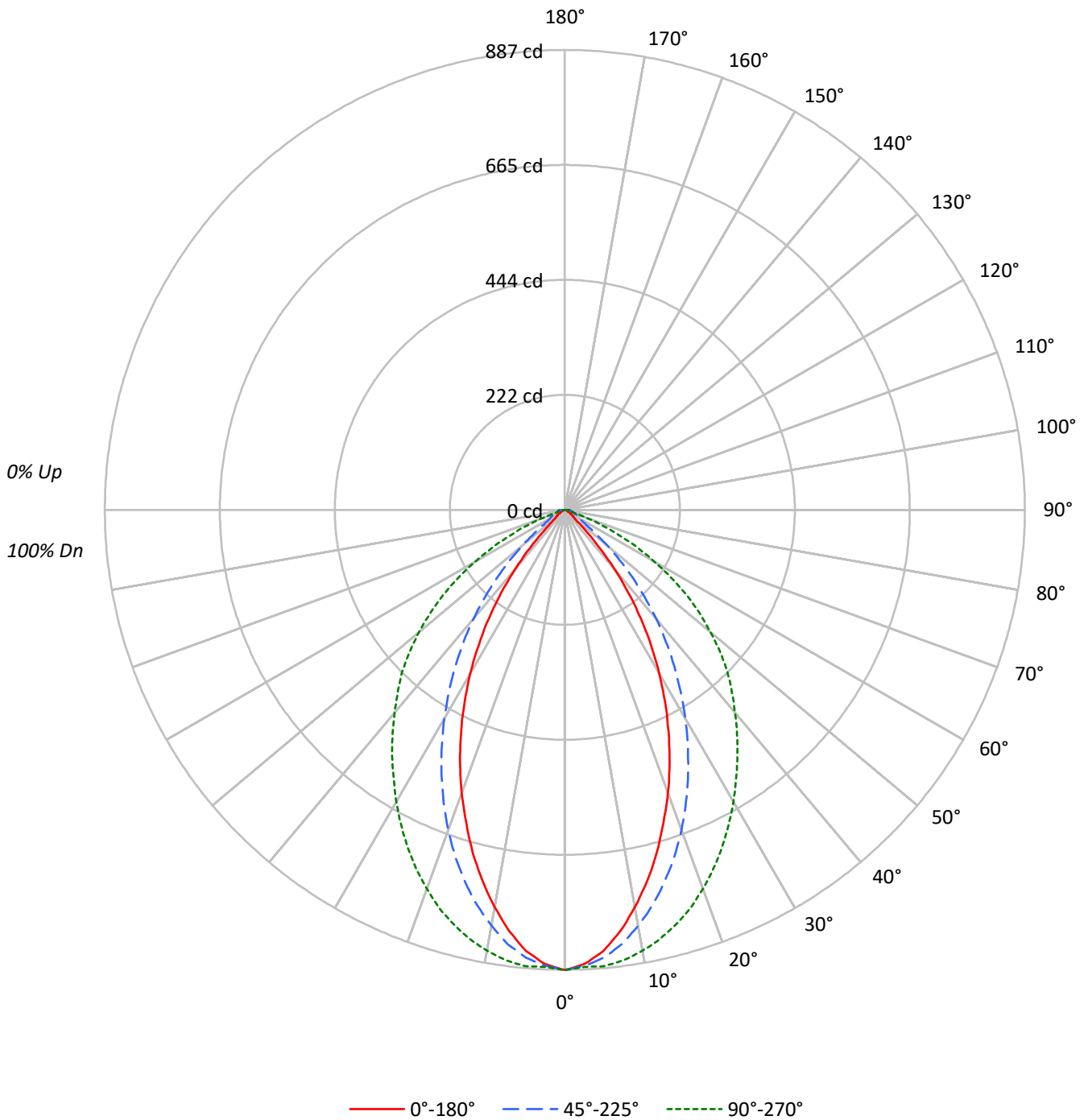
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1118.5 lumens  
Efficiency: N/A  
Efficacy: 32.0 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97  
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									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	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	98	98	96	95	95	93	92	90																												
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81																												
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72																												
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65																												
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59																												
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54																												
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49																												
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45																												
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42																												
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39																												

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

	0°	45°	90°
0°	7642	7642	7642
5°	7383	7491	7635
10°	6804	7122	7550
15°	6110	6620	7382
20°	5326	6022	7130
25°	4493	5344	6818
30°	3625	4619	6462
35°	2683	3865	6099
40°	1663	3079	5737
45°	660	2246	5403
50°	293	1409	4911
55°	234	736	4300
60°	162	556	3426
65°	106	552	2355
70°	106	499	1100
75°	140	486	486
80°	208	570	570
85°	415	1136	820

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5403 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.4	7.3
10°-20°	210.1	18.8
20°-30°	265.2	23.7
30°-40°	243.3	21.8
40°-50°	165.7	14.8
50°-60°	90.3	8.1
60°-70°	39.1	3.5
70°-80°	14.3	1.3
80°-90°	9.2	0.8
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°	556.7	49.8
0°-40°	800.0	71.5
0°-60°	1056.0	94.4
0°-90°	1118.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1118.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	887	887	887	887	887	
5°	854	866	867	876	883	79
15°	685	709	743	796	828	191
25°	473	506	562	652	718	216
35°	255	293	368	484	580	158
45°	54	91	184	327	444	50
55°	16	17	49	180	286	14
65°	5	7	27	56	116	6
75°	4	14	15	15	15	4
85°	4	9	12	12	8	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	887.4	887.4	887.4	887.4	887.4
2.5°	877.0	887.4	880.1	882.2	882.2
5°	854.1	865.6	866.6	876.0	883.3
7.5°	819.7	836.4	844.7	863.5	876.0
10°	778.1	797.8	814.5	846.8	863.5
12.5°	733.3	756.2	781.2	823.9	847.8
15°	685.4	709.3	742.6	795.8	828.1
17.5°	632.2	661.4	702.0	765.6	805.1
20°	581.2	610.4	657.2	729.1	778.1
22.5°	528.1	558.3	610.4	690.6	748.9
25°	472.9	506.2	562.5	652.0	717.6
27.5°	418.7	454.1	513.5	611.4	684.3
30°	364.6	400.0	464.5	569.7	649.9
32.5°	309.3	345.8	415.6	526.0	614.5
35°	255.2	292.7	367.7	484.3	580.2
37.5°	200.0	239.6	319.8	443.7	545.8
40°	147.9	187.5	273.9	403.1	510.4
42.5°	99.0	138.5	227.1	363.5	477.0
45°	54.2	90.6	184.4	327.1	443.7
47.5°	29.2	50.0	142.7	291.6	406.2
50°	21.9	27.1	105.2	254.1	366.6
52.5°	18.7	20.8	72.9	214.6	327.1
55°	15.6	16.7	49.0	180.2	286.4
57.5°	12.5	13.5	36.5	145.8	242.7
60°	9.4	11.5	32.3	112.5	198.9
62.5°	7.3	9.4	30.2	82.3	157.3
65°	5.2	7.3	27.1	56.2	115.6
67.5°	5.2	8.3	22.9	36.5	78.1
70°	4.2	11.5	19.8	24.0	43.7
72.5°	4.2	12.5	16.7	16.7	16.7
75°	4.2	13.5	14.6	14.6	14.6
77.5°	4.2	12.5	13.5	12.5	12.5
80°	4.2	11.5	11.5	11.5	11.5
82.5°	4.2	10.4	11.5	11.5	9.4
85°	4.2	9.4	11.5	11.5	8.3
87.5°	3.1	9.4	10.4	10.4	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)