

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: P1060296

Luminaire Tested: S124RDR-S1020D950-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060296  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-74)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S1020D950-X4F0-XX-UDD-SVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

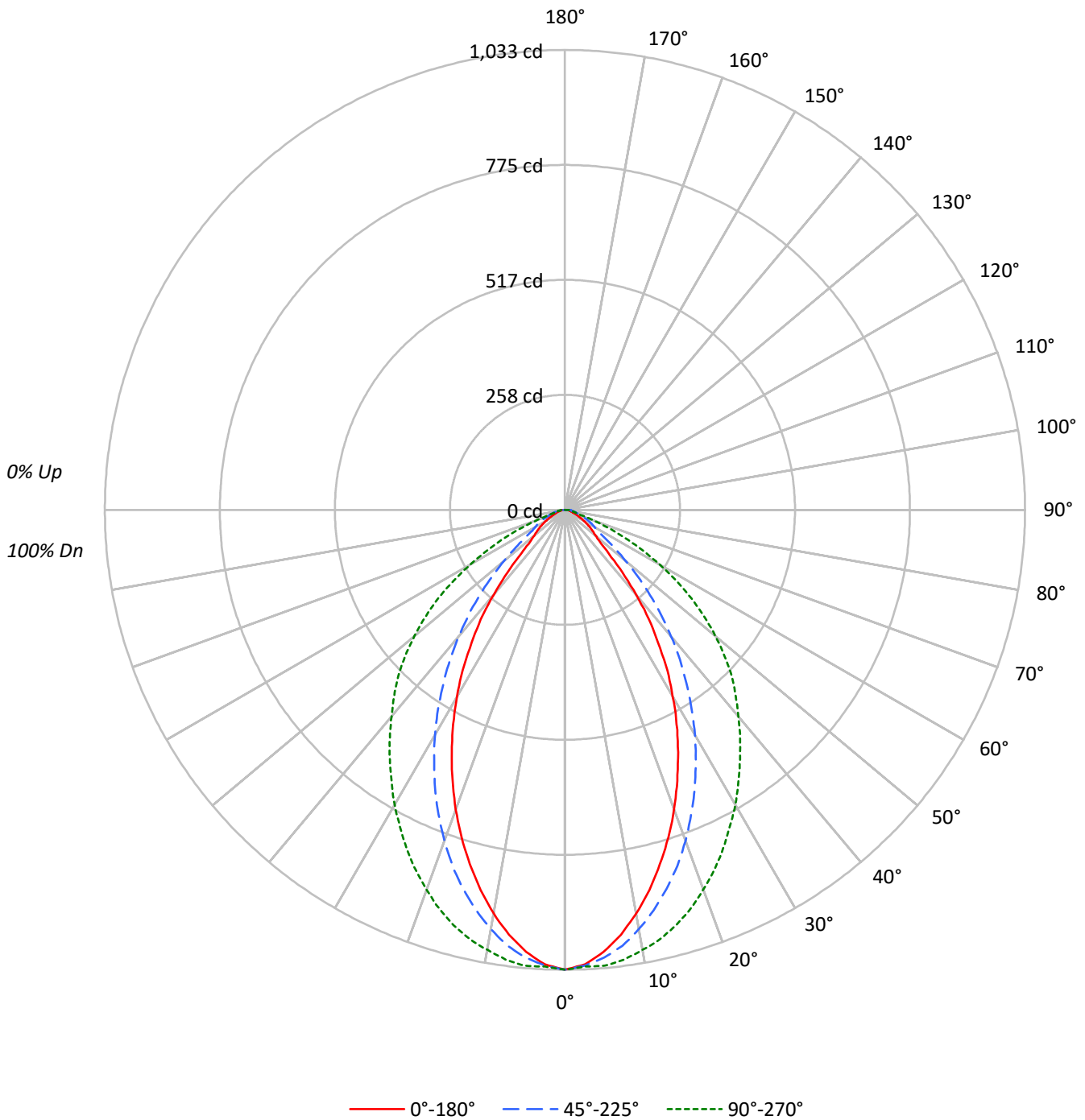
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1461.6 lumens  
Efficiency: N/A  
Efficacy: 41.8 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01  
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
1	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79				79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70				70
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63				63
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57				57
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51				51
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47				47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43				43
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36				36

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

	0°	45°	90°
0°	8893	8893	8893
5°	8617	8727	8887
10°	8051	8364	8777
15°	7344	7858	8609
20°	6566	7253	8322
25°	5711	6556	7981
30°	4819	5805	7607
35°	3833	4998	7205
40°	2789	4164	6810
45°	1687	3288	6449
50°	1206	2381	5905
55°	1022	1611	5214
60°	835	1312	4213
65°	658	1176	3032
70°	551	987	1599
75°	499	922	805
80°	516	917	803
85°	682	1363	909

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6449 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.1	6.5
10°-20°	249.1	17.0
20°-30°	323.1	22.1
30°-40°	311.0	21.3
40°-50°	231.4	15.8
50°-60°	142.3	9.7
60°-70°	69.9	4.8
70°-80°	27.3	1.9
80°-90°	12.4	0.9
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°	667.3	45.7
0°-40°	978.4	66.9
0°-60°	1352.0	92.5
0°-90°	1461.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1461.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1033	1033	1033	1033	1033	
5°	997	1012	1010	1019	1028	93
15°	824	850	882	935	966	230
25°	601	633	690	776	840	275
35°	365	399	475	594	685	228
45°	138	172	270	416	530	115
55°	68	70	107	245	347	61
65°	32	35	58	92	149	33
75°	15	26	28	25	24	16
85°	7	13	14	14	9	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1032.7	1032.7	1032.7	1032.7	1032.7
2.5°	1022.3	1033.8	1024.6	1025.7	1026.9
5°	996.9	1011.9	1009.6	1018.8	1028.1
7.5°	962.3	979.6	987.7	1006.1	1018.8
10°	920.8	940.4	956.5	986.5	1003.8
12.5°	874.6	897.7	920.8	961.1	987.7
15°	823.8	850.4	881.5	934.6	965.7
17.5°	771.9	798.4	838.8	900.0	939.2
20°	716.5	745.4	791.5	859.6	908.1
22.5°	658.8	690.0	740.8	818.1	875.8
25°	601.1	633.4	690.0	776.5	840.0
27.5°	543.5	574.6	635.8	732.7	801.9
30°	484.6	516.9	583.8	685.4	765.0
32.5°	428.1	458.1	529.6	640.4	724.6
35°	364.6	399.2	475.4	594.2	685.4
37.5°	310.4	341.5	423.5	548.1	646.1
40°	248.1	282.7	370.4	503.1	605.8
42.5°	190.4	225.0	319.6	458.1	567.7
45°	138.5	171.9	270.0	416.5	529.6
47.5°	105.0	124.6	221.5	376.1	486.9
50°	90.0	95.8	177.7	332.3	440.8
52.5°	79.6	81.9	138.5	288.5	394.6
55°	68.1	70.4	107.3	244.6	347.3
57.5°	57.7	58.8	86.5	203.1	296.5
60°	48.5	49.6	76.2	162.7	244.6
62.5°	40.4	41.5	68.1	125.8	195.0
65°	32.3	34.6	57.7	92.3	148.8
67.5°	26.5	31.2	48.5	64.6	103.8
70°	21.9	30.0	39.2	45.0	63.5
72.5°	18.5	27.7	33.5	32.3	31.2
75°	15.0	26.5	27.7	25.4	24.2
77.5°	12.7	23.1	23.1	20.8	19.6
80°	10.4	18.5	18.5	18.5	16.2
82.5°	9.2	15.0	16.2	16.2	12.7
85°	6.9	12.7	13.8	13.8	9.2
87.5°	4.6	11.5	12.7	11.5	6.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)