

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: P1060276

Luminaire Tested: S124RDR-S1020D935-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060276  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S1020D935-X4F0-XX-UDD-SVL-B  
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

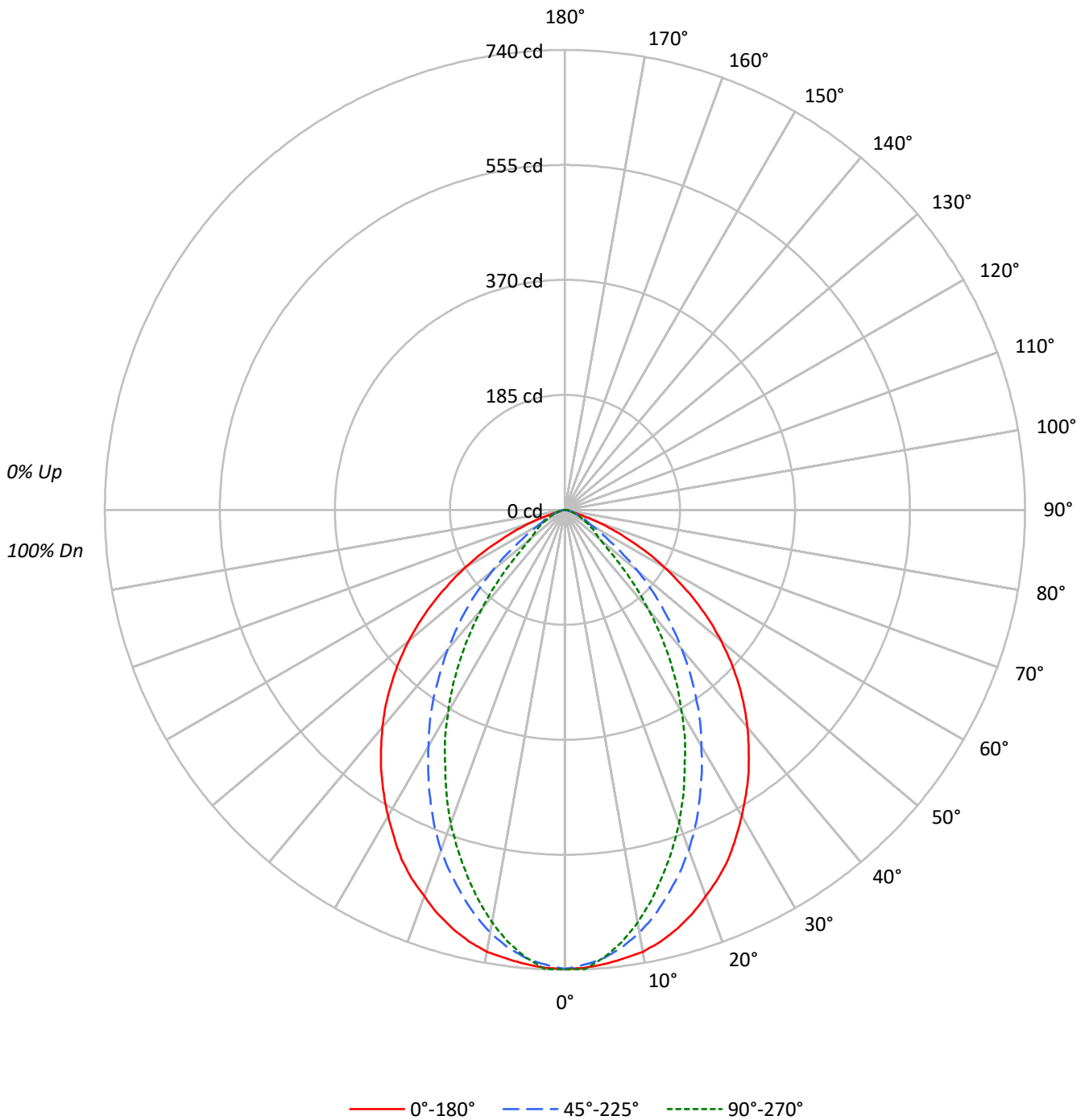
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1088.9 lumens  
Efficiency: N/A  
Efficacy: 31.1 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02  
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				
1	112	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90				
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71				
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63				
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59	57				
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51				
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47				
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43				
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39				
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36				

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

	0°	45°	90°
0°	6360	6360	6360
5°	6340	6258	6249
10°	6312	6039	5894
15°	6223	5713	5425
20°	6063	5338	4919
25°	5900	4872	4329
30°	5658	4365	3734
35°	5413	3860	3083
40°	5134	3286	2338
45°	4801	2685	1571
50°	4390	2035	975
55°	3857	1344	827
60°	3190	823	680
65°	2311	636	550
70°	1256	471	418
75°	276	346	379
80°	208	258	307
85°	207	207	306

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4801 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.4	6.3
10°-20°	181.7	16.7
20°-30°	240.8	22.1
30°-40°	238.9	21.9
40°-50°	183.9	16.9
50°-60°	109.6	10.1
60°-70°	49.8	4.6
70°-80°	12.9	1.2
80°-90°	2.9	0.3
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°	490.9	45.1
0°-40°	729.9	67.0
0°-60°	1023.3	94.0
0°-90°	1088.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1088.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	739	739	739	739	739	
5°	733	734	724	724	723	70
15°	698	680	641	619	608	196
25°	621	576	513	470	456	285
35°	515	450	367	311	293	321
45°	394	317	220	154	129	304
55°	257	183	90	56	55	229
65°	113	68	31	27	27	114
75°	8	10	10	11	11	17
85°	2	2	2	3	3	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	738.6	738.6	738.6	738.6	738.6
2.5°	737.5	738.6	732.3	737.5	739.6
5°	733.4	734.4	724.0	724.0	722.9
7.5°	728.1	726.1	709.4	703.2	701.1
10°	721.9	714.6	690.7	678.2	674.1
12.5°	711.5	700.1	667.8	650.1	642.9
15°	698.0	680.3	640.8	618.9	608.5
17.5°	681.3	659.5	612.7	584.6	573.2
20°	661.6	632.4	582.5	547.2	536.8
22.5°	642.9	606.4	549.2	508.7	497.2
25°	621.0	576.3	512.8	470.2	455.6
27.5°	595.0	547.2	476.4	432.7	418.2
30°	569.0	515.9	439.0	393.2	375.5
32.5°	542.0	483.7	404.6	352.6	336.0
35°	514.9	450.4	367.2	311.0	293.3
37.5°	485.8	417.1	329.7	271.5	251.7
40°	456.7	384.9	292.3	233.0	208.0
42.5°	426.5	351.6	255.9	193.5	168.5
45°	394.2	317.3	220.5	154.0	129.0
47.5°	362.0	285.0	185.2	115.5	92.6
50°	327.7	250.7	151.9	84.3	72.8
52.5°	293.3	217.4	118.6	65.5	62.4
55°	256.9	183.1	89.5	56.2	55.1
57.5°	219.5	151.9	64.5	48.9	46.8
60°	185.2	122.7	47.8	41.6	39.5
62.5°	149.8	92.6	39.5	34.3	32.2
65°	113.4	67.6	31.2	27.0	27.0
67.5°	82.2	45.8	25.0	21.8	20.8
70°	49.9	28.1	18.7	17.7	16.6
72.5°	25.0	16.6	14.6	13.5	13.5
75°	8.3	10.4	10.4	11.4	11.4
77.5°	6.2	7.3	7.3	8.3	8.3
80°	4.2	5.2	5.2	6.2	6.2
82.5°	3.1	3.1	4.2	4.2	5.2
85°	2.1	2.1	2.1	3.1	3.1
87.5°	1.0	1.0	1.0	2.1	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)