

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: P1060497

Luminaire Tested: S124RDR-S575D850-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060497  
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-S575D850-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: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

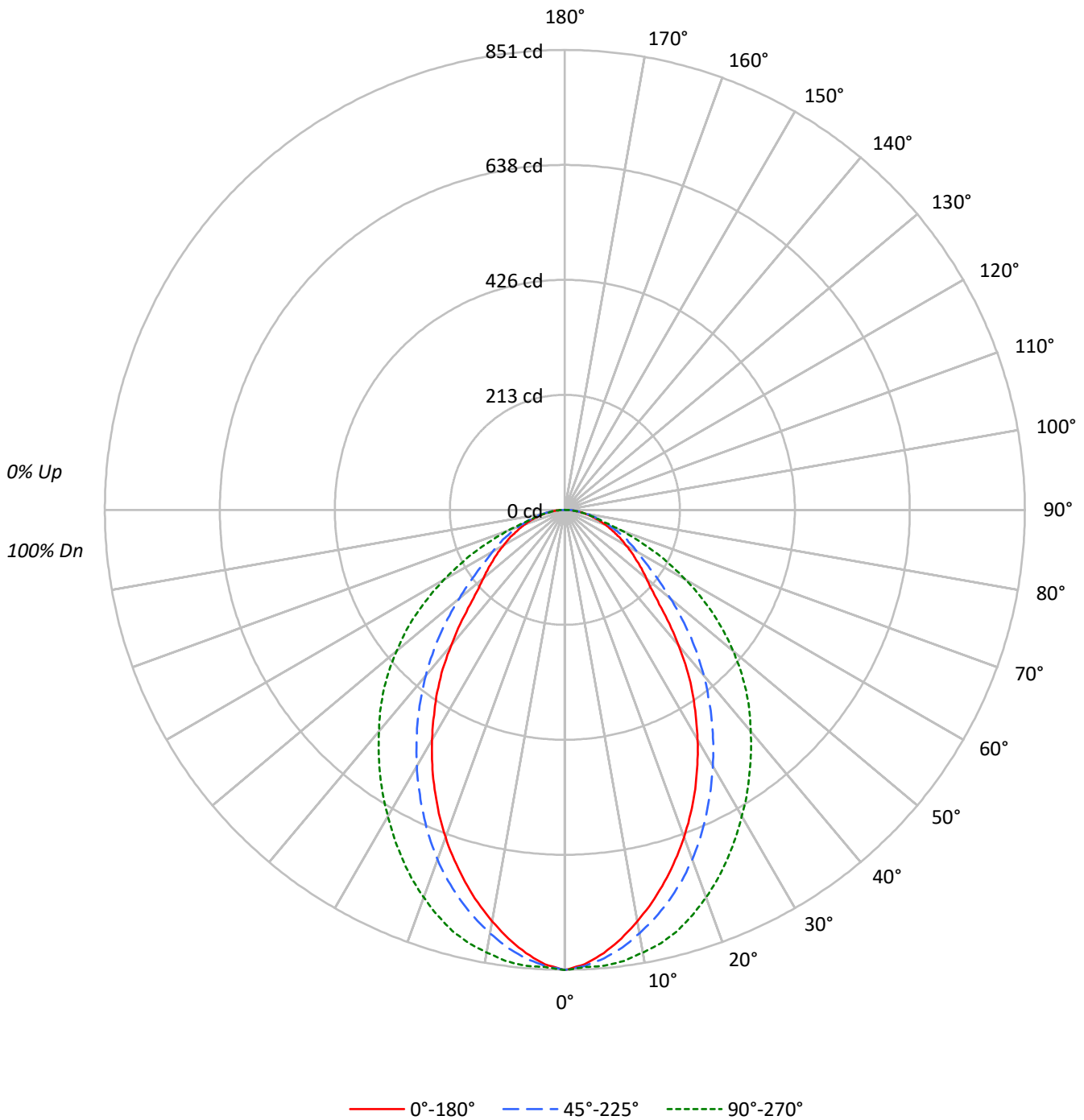
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1562.3 lumens  
Efficiency: N/A  
Efficacy: 79.7 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): 19.6  
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										
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	0														
RCR																																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	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	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	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	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	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	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	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	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	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	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	31	31	31														

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

	0°	45°	90°
0°	7332	7332	7332
5°	7118	7203	7321
10°	6759	6957	7273
15°	6355	6663	7187
20°	5910	6310	6994
25°	5420	5892	6765
30°	4884	5447	6510
35°	4325	4982	6265
40°	3676	4498	6013
45°	3009	3972	5781
50°	2634	3412	5440
55°	2420	2941	5034
60°	2244	2647	4438
65°	2103	2488	3714
70°	1974	2276	2790
75°	1857	2079	2030
80°	1721	1904	1721
85°	1561	1857	1492

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5781 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.7	5.0
10°-20°	211.7	13.6
20°-30°	289.4	18.5
30°-40°	304.1	19.5
40°-50°	263.9	16.9
50°-60°	199.1	12.7
60°-70°	129.1	8.3
70°-80°	66.2	4.2
80°-90°	20.1	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°	579.8	37.1
0°-40°	883.9	56.6
0°-60°	1346.9	86.2
0°-90°	1562.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1562.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	851	851	851	851	851	
5°	824	835	833	840	847	77
15°	713	730	747	781	806	200
25°	570	591	620	668	712	261
35°	411	434	474	537	596	256
45°	247	270	326	408	475	195
55°	161	166	196	278	335	145
65°	103	106	122	148	182	103
75°	56	62	62	63	61	59
85°	16	20	19	18	15	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	851.4	851.4	851.4	851.4	851.4
2.5°	841.6	852.1	844.6	846.1	846.9
5°	823.5	834.8	833.3	840.1	846.9
7.5°	800.2	813.7	816.7	830.3	841.6
10°	773.0	788.1	795.6	817.5	831.8
12.5°	744.4	759.5	773.0	800.9	821.3
15°	712.8	730.1	747.4	781.3	806.2
17.5°	679.6	697.7	719.5	756.5	785.8
20°	644.9	663.0	688.6	728.6	763.2
22.5°	608.0	628.4	655.5	698.4	739.1
25°	570.4	590.7	620.1	667.6	712.0
27.5°	531.2	552.3	583.9	636.7	684.1
30°	491.2	513.8	547.8	603.5	654.7
32.5°	450.6	474.7	510.8	570.4	626.1
35°	411.4	434.0	473.9	537.2	596.0
37.5°	370.7	393.3	436.2	504.8	565.8
40°	327.0	351.9	400.1	470.9	534.9
42.5°	286.3	311.2	363.2	438.5	505.6
45°	247.1	270.5	326.2	407.6	474.7
47.5°	217.0	233.6	289.3	377.5	441.5
50°	196.6	204.2	254.7	344.3	406.1
52.5°	178.6	184.6	223.0	311.2	371.4
55°	161.2	165.8	195.9	278.0	335.3
57.5°	146.2	148.4	171.8	244.9	296.1
60°	130.3	133.4	153.7	211.0	257.7
62.5°	117.5	119.0	137.9	178.6	219.3
65°	103.2	105.5	122.1	147.7	182.3
67.5°	90.4	94.2	105.5	120.6	143.9
70°	78.4	83.6	90.4	97.9	110.8
72.5°	67.1	73.1	76.9	79.9	77.6
75°	55.8	62.5	62.5	63.3	61.0
77.5°	45.2	51.2	50.5	49.7	46.7
80°	34.7	39.9	38.4	37.7	34.7
82.5°	25.6	29.4	27.9	27.1	23.4
85°	15.8	19.6	18.8	18.1	15.1
87.5°	7.5	11.3	10.5	9.8	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)