

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: P1059255

Luminaire Tested: S123RDR-S560D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059255  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S560D830-X4F0-XX-UDD-WVL-W  
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

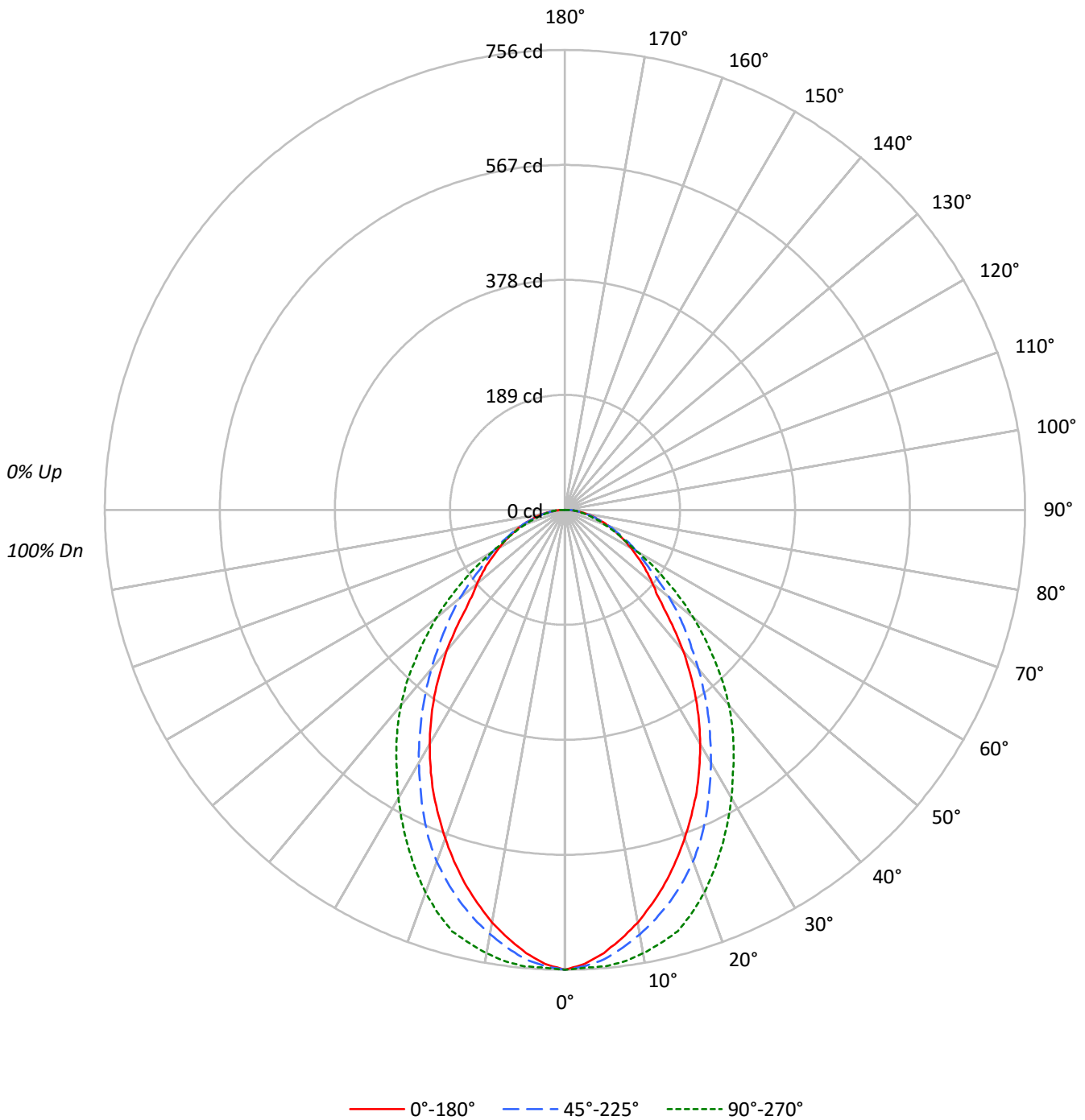
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1328.3 lumens  
Efficiency: N/A  
Efficacy: 67.8 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09  
Luminous Opening: Rectangular (W 0.23' 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					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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66				
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58				
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51				
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46				
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41				
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38				
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34				
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32				

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

	0°	45°	90°
0°	8876	8876	8876
5°	8619	8741	8879
10°	8214	8447	8827
15°	7726	8106	8715
20°	7185	7690	8365
25°	6632	7130	7906
30°	6024	6510	7418
35°	5361	5874	6928
40°	4626	5235	6421
45°	3824	4635	5757
50°	3434	4088	5027
55°	3183	3488	4168
60°	2933	3178	3194
65°	2728	2873	2676
70°	2568	2613	2345
75°	2418	2332	2064
80°	2286	2110	1934
85°	2196	2371	2196

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5757 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.0	5.3
10°-20°	188.6	14.2
20°-30°	255.2	19.2
30°-40°	262.2	19.7
40°-50°	220.2	16.6
50°-60°	157.9	11.9
60°-70°	100.5	7.6
70°-80°	55.2	4.2
80°-90°	18.4	1.4
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°	513.8	38.7
0°-40°	776.0	58.4
0°-60°	1154.1	86.9
0°-90°	1328.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1328.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	756	756	756	756	756	
5°	731	744	742	747	753	68
15°	636	653	667	695	717	178
25°	512	532	550	580	610	235
35°	374	394	410	446	483	233
45°	230	250	279	319	347	182
55°	156	159	170	193	204	139
65°	98	104	103	98	96	98
75°	53	58	51	48	46	57
85°	16	17	18	18	16	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	755.9	755.9	755.9	755.9	755.9
2.5°	747.4	757.8	750.7	751.3	753.3
5°	731.2	744.2	741.6	746.8	753.3
7.5°	711.0	725.3	726.0	738.3	748.7
10°	688.9	703.8	708.4	727.3	740.3
12.5°	662.9	679.1	688.9	712.3	729.2
15°	635.5	653.1	666.8	695.4	716.9
17.5°	605.6	624.5	642.1	672.6	694.7
20°	575.0	595.2	615.4	644.0	669.4
22.5°	543.2	564.0	584.8	612.8	640.7
25°	511.9	531.5	550.3	580.3	610.2
27.5°	478.1	498.3	514.6	547.7	579.0
30°	444.3	464.5	480.1	514.6	547.1
32.5°	409.2	430.0	444.3	480.1	513.9
35°	374.0	394.2	409.8	446.2	483.3
37.5°	337.0	359.1	374.7	415.7	452.1
40°	301.8	322.7	341.5	384.4	418.9
42.5°	265.4	286.9	308.3	352.6	384.4
45°	230.3	250.4	279.1	319.4	346.7
47.5°	204.9	217.9	251.1	284.9	310.9
50°	188.0	193.2	223.8	253.7	275.2
52.5°	171.1	175.0	195.8	223.1	239.4
55°	155.5	158.7	170.4	193.2	203.6
57.5°	138.6	141.8	151.6	164.6	170.4
60°	124.9	127.5	135.3	137.3	136.0
62.5°	111.2	115.1	119.0	114.5	112.5
65°	98.2	104.1	103.4	97.6	96.3
67.5°	86.5	92.4	89.1	83.3	81.3
70°	74.8	80.7	76.1	70.3	68.3
72.5°	63.7	70.3	63.1	57.9	56.6
75°	53.3	58.5	51.4	47.5	45.5
77.5°	43.6	47.5	41.0	37.7	36.4
80°	33.8	36.4	31.2	29.3	28.6
82.5°	24.7	26.0	22.8	24.1	23.4
85°	16.3	16.9	17.6	18.2	16.3
87.5°	7.8	11.1	11.1	10.4	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)