

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: P1059297

Luminaire Tested: S123RDR-S560D930-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059297  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S560D930-X4F0-XX-UDD-SVL-W  
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

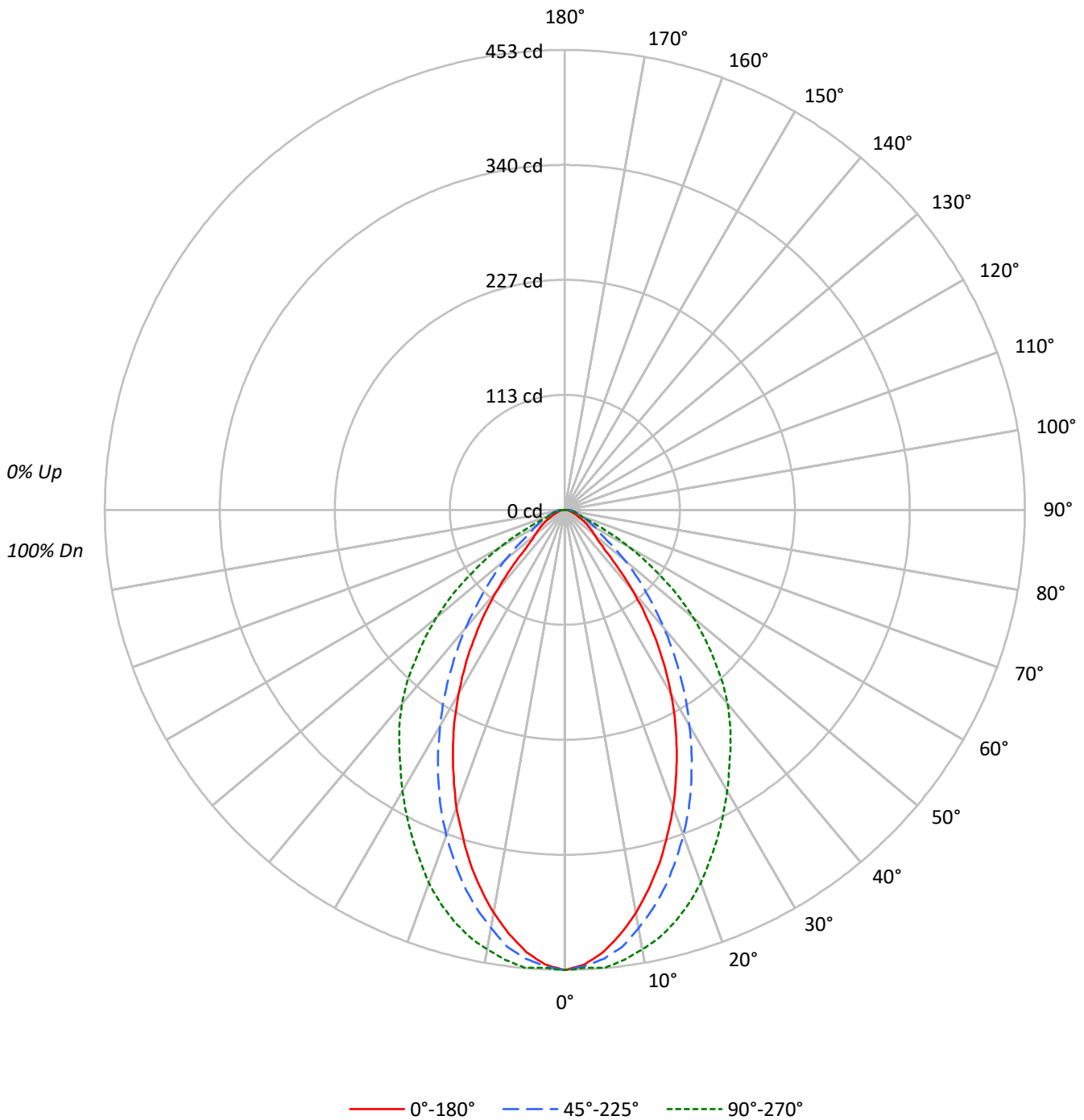
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 608.5 lumens  
Efficiency: N/A  
Efficacy: 31.0 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 1.08 / 0.98  
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				100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89				89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79				79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71				71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64				64
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58				58
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52				52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48				48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44				44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40				40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37				37

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

	0°	45°	90°
0°	5323	5323	5323
5°	5150	5230	5336
10°	4806	4988	5243
15°	4380	4661	5106
20°	3898	4264	4890
25°	3378	3816	4610
30°	2832	3329	4336
35°	2243	2833	4075
40°	1588	2330	3823
45°	935	1842	3441
50°	700	1399	3014
55°	588	946	2420
60°	477	806	1719
65°	375	689	909
70°	330	601	560
75°	309	563	535
80°	304	609	534
85°	377	916	687

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3441 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.7	6.9
10°-20°	108.4	17.8
20°-30°	138.1	22.7
30°-40°	129.9	21.3
40°-50°	93.5	15.4
50°-60°	54.0	8.9
60°-70°	24.7	4.1
70°-80°	12.3	2.0
80°-90°	5.8	1.0
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°	288.2	47.4
0°-40°	418.0	68.7
0°-60°	565.6	93.0
0°-90°	608.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	608.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	453	453	453	453	453	
5°	437	444	444	448	453	41
15°	360	373	383	405	420	100
25°	261	274	294	327	356	119
35°	156	170	198	243	284	97
45°	56	70	111	167	207	48
55°	29	30	46	88	118	26
65°	14	19	25	28	33	14
75°	7	13	12	12	12	7
85°	3	6	7	6	5	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	453.3	453.3	453.3	453.3	453.3
2.5°	448.2	453.8	449.9	450.4	451.6
5°	436.9	444.2	443.7	448.2	452.7
7.5°	421.2	429.6	434.1	440.9	447.1
10°	403.1	412.7	418.3	430.7	439.7
12.5°	382.3	394.7	402.0	418.3	431.3
15°	360.3	373.3	383.4	404.8	420.0
17.5°	335.6	349.7	362.6	387.9	406.5
20°	311.9	325.4	341.2	368.8	391.3
22.5°	286.0	300.7	318.7	348.0	373.3
25°	260.7	274.2	294.5	327.1	355.8
27.5°	235.4	248.9	270.3	306.3	337.8
30°	208.9	223.0	245.5	285.5	319.8
32.5°	183.0	196.5	221.8	265.2	301.2
35°	156.5	170.0	197.6	243.2	284.3
37.5°	130.6	144.7	174.0	225.2	267.4
40°	103.6	118.8	152.0	206.6	249.4
42.5°	78.3	94.6	130.1	187.5	229.7
45°	56.3	70.4	110.9	166.7	207.2
47.5°	43.9	51.2	93.5	145.3	186.4
50°	38.3	39.4	76.6	125.6	165.0
52.5°	33.2	34.3	60.2	107.0	142.5
55°	28.7	29.8	46.2	87.8	118.2
57.5°	24.2	25.9	38.3	69.8	95.2
60°	20.3	22.5	34.3	53.5	73.2
62.5°	16.3	20.3	29.3	39.4	52.4
65°	13.5	19.1	24.8	27.6	32.7
67.5°	11.3	17.5	20.8	19.7	19.1
70°	9.6	15.8	17.5	15.8	16.3
72.5°	7.9	14.6	14.6	13.5	13.5
75°	6.8	13.0	12.4	11.8	11.8
77.5°	5.6	11.3	10.7	10.1	9.6
80°	4.5	9.0	9.0	8.4	7.9
82.5°	3.9	7.3	7.3	7.3	6.2
85°	2.8	6.2	6.8	6.2	5.1
87.5°	2.3	5.6	5.6	5.1	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)