

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: P1059060

Luminaire Tested: S123RDR-S1000D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059060  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-66)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S1000D935-X4F0-XX-UDD-BVL-W  
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

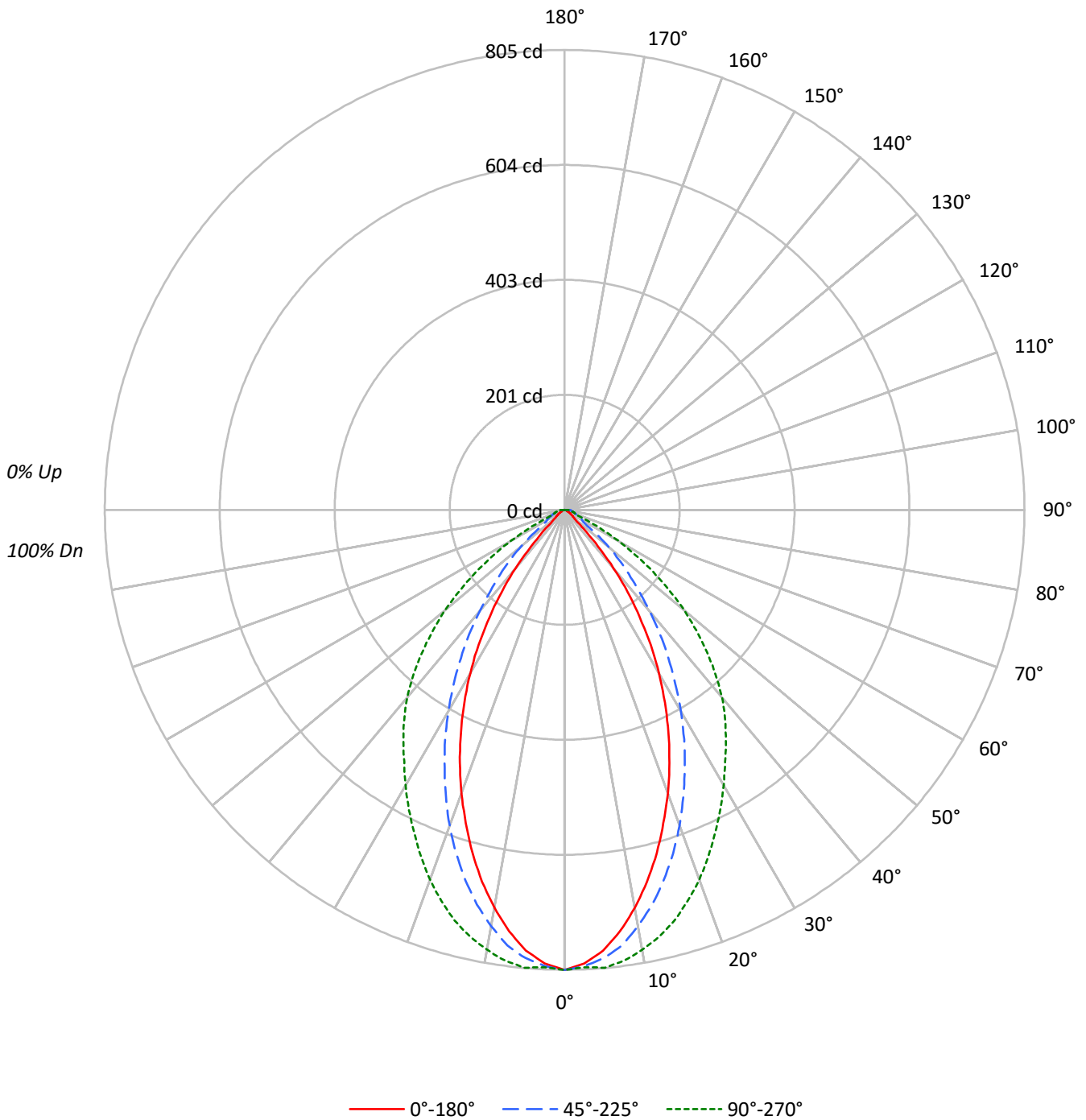
Lumens per Lamp: N/A  
Luminaire Lumens: 967.0 lumens  
Efficiency: N/A  
Efficacy: 27.6 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct

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	98	98	96	95	95	93	92	90				
2	105	99	94	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81				
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73				
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66				
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55				
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	50				
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47				
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43				
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	42	40				

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

	0°	45°	90°
0°	9457	9457	9457
5°	9132	9281	9482
10°	8430	8821	9325
15°	7565	8157	9045
20°	6599	7354	8610
25°	5567	6444	8077
30°	4477	5510	7548
35°	3277	4537	7054
40°	2045	3536	6570
45°	774	2637	5852
50°	367	1818	4989
55°	283	997	3857
60°	200	845	2536
65°	147	736	1059
70°	144	690	690
75°	191	721	721
80°	284	859	784
85°	566	1428	1145

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5852 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.9	7.6
10°-20°	189.6	19.6
20°-30°	234.7	24.3
30°-40°	210.4	21.8
40°-50°	137.9	14.3
50°-60°	69.0	7.1
60°-70°	26.9	2.8
70°-80°	15.2	1.6
80°-90°	9.3	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°	498.2	51.5
0°-40°	708.6	73.3
0°-60°	915.6	94.7
0°-90°	967.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	967.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	805	805	805	805	805	
5°	775	787	787	796	804	72
15°	622	648	671	716	744	173
25°	430	456	497	568	623	196
35°	229	259	316	412	492	142
45°	47	75	159	272	352	44
55°	14	17	49	133	188	13
65°	5	16	26	35	38	5
75°	4	16	16	16	16	4
85°	4	11	11	11	8	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	805.4	805.4	805.4	805.4	805.4
2.5°	794.8	806.5	799.1	800.1	801.2
5°	774.7	787.4	787.4	795.9	804.4
7.5°	744.0	758.8	769.4	784.2	795.9
10°	707.0	725.0	739.8	766.3	782.1
12.5°	666.8	689.0	708.0	743.0	765.2
15°	622.3	647.7	671.0	715.5	744.0
17.5°	574.7	600.1	630.8	682.6	717.6
20°	528.1	553.5	588.5	646.7	689.0
22.5°	479.4	505.9	542.9	607.5	657.2
25°	429.7	456.2	497.4	568.3	623.4
27.5°	380.0	406.4	453.0	530.2	590.6
30°	330.2	356.7	406.4	489.0	556.7
32.5°	280.5	309.0	360.9	450.9	522.8
35°	228.6	259.3	316.5	411.7	492.1
37.5°	181.0	209.6	274.1	377.8	461.4
40°	133.4	164.0	230.7	345.0	428.6
42.5°	86.8	119.6	191.6	309.0	391.6
45°	46.6	75.1	158.8	272.0	352.4
47.5°	25.4	41.3	128.1	232.8	312.2
50°	20.1	23.3	99.5	199.0	273.1
52.5°	16.9	19.1	70.9	167.2	229.7
55°	13.8	16.9	48.7	133.4	188.4
57.5°	11.6	14.8	38.1	103.7	147.1
60°	8.5	12.7	36.0	76.2	108.0
62.5°	6.4	13.8	31.8	52.9	70.9
65°	5.3	15.9	26.5	34.9	38.1
67.5°	4.2	16.9	23.3	22.2	22.2
70°	4.2	15.9	20.1	19.1	20.1
72.5°	4.2	16.9	18.0	16.9	18.0
75°	4.2	15.9	15.9	15.9	15.9
77.5°	4.2	14.8	14.8	13.8	13.8
80°	4.2	12.7	12.7	12.7	11.6
82.5°	4.2	11.6	11.6	11.6	9.5
85°	4.2	10.6	10.6	10.6	8.5
87.5°	3.2	9.5	10.6	9.5	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)