

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: P1059070

Luminaire Tested: S123RDR-S1000D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059070  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S1000D940-X4F0-XX-UDD-SVL-B  
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

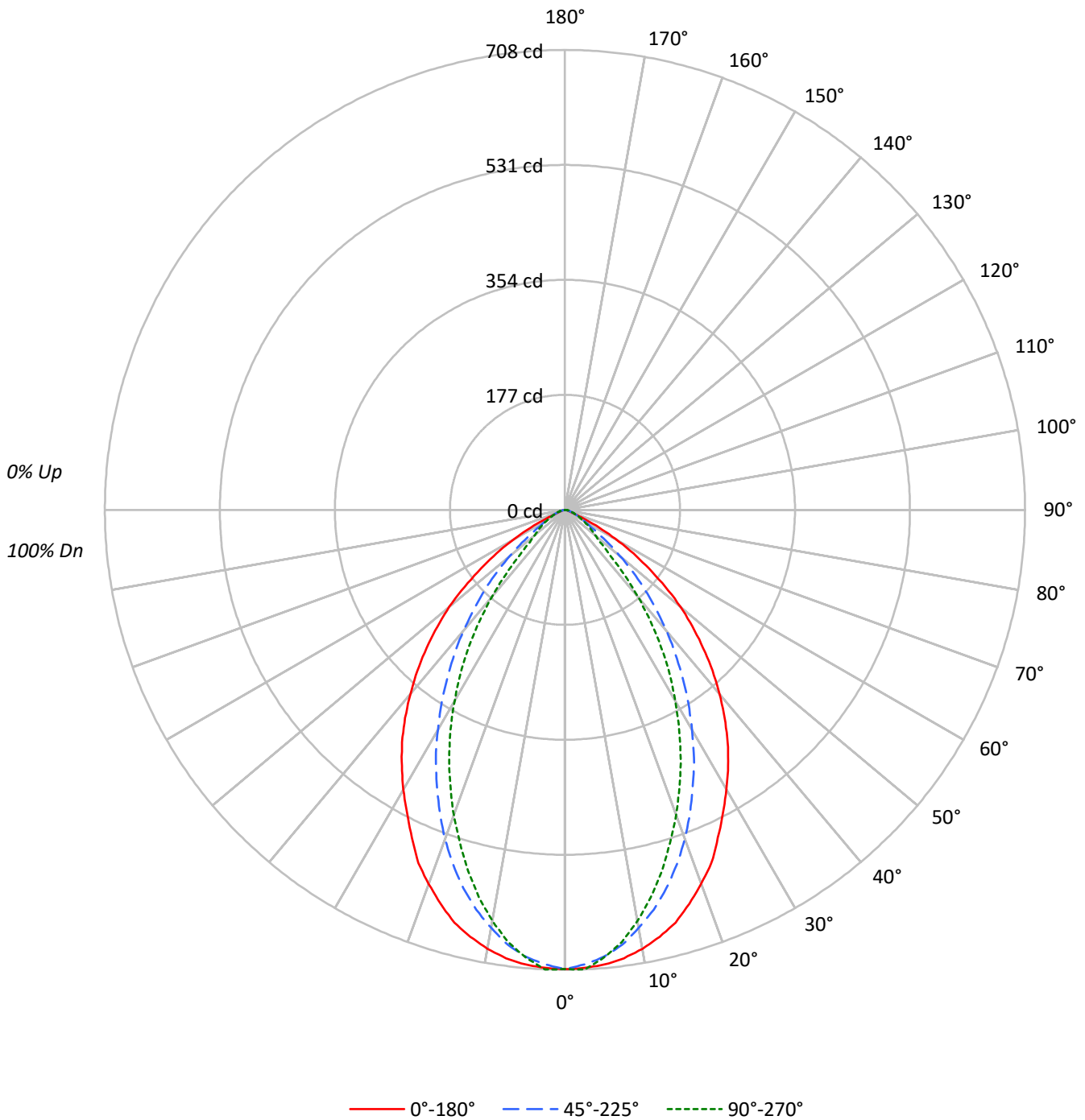
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 912.7 lumens  
Efficiency: N/A  
Efficacy: 26.1 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39

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

	0°	45°	90°
0°	8302	8302	8302
5°	8282	8140	8153
10°	8182	7791	7660
15°	7997	7330	6999
20°	7659	6743	6251
25°	7218	6040	5460
30°	6737	5298	4601
35°	6260	4518	3703
40°	5670	3725	2684
45°	4998	2889	1617
50°	4238	2019	1100
55°	3226	1210	919
60°	2107	770	719
65°	881	578	578
70°	302	412	450
75°	250	299	349
80°	149	223	298
85°	148	148	296

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4998 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.3	7.2
10°-20°	170.9	18.7
20°-30°	219.1	24.0
30°-40°	205.6	22.5
40°-50°	143.5	15.7
50°-60°	74.2	8.1
60°-70°	25.4	2.8
70°-80°	7.3	0.8
80°-90°	1.5	0.2
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°	455.3	49.9
0°-40°	661.0	72.4
0°-60°	878.6	96.3
0°-90°	912.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	912.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	707	707	707	707	707	
5°	703	702	691	694	692	67
15°	658	641	603	583	576	184
25°	557	522	466	434	421	256
35°	437	383	315	275	258	272
45°	301	246	174	120	97	232
55°	158	118	59	46	45	142
65°	32	27	21	20	21	37
75°	6	6	7	8	8	6
85°	1	1	1	1	2	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	707.0	707.0	707.0	707.0	707.0
2.5°	705.9	707.0	700.4	707.0	708.1
5°	702.6	701.5	690.6	693.9	691.7
7.5°	696.1	692.8	675.3	670.9	670.9
10°	686.2	679.6	653.4	645.7	642.4
12.5°	673.1	664.3	630.4	616.2	610.7
15°	657.8	641.3	603.0	583.3	575.7
17.5°	635.9	614.0	572.4	549.4	537.4
20°	612.9	585.5	539.6	512.2	500.2
22.5°	588.8	556.0	503.4	473.9	460.8
25°	557.1	522.0	466.2	434.5	421.4
27.5°	526.4	489.2	430.1	394.0	380.9
30°	496.9	453.1	390.7	355.7	339.3
32.5°	467.3	418.1	353.5	315.2	299.9
35°	436.7	383.1	315.2	274.7	258.3
37.5°	403.8	349.1	279.1	235.3	215.6
40°	369.9	313.0	243.0	193.7	175.1
42.5°	336.0	280.2	206.8	156.5	134.6
45°	301.0	246.2	174.0	120.4	97.4
47.5°	265.9	212.3	142.3	87.6	73.3
50°	232.0	180.6	110.5	64.6	60.2
52.5°	194.8	149.9	83.2	53.6	52.5
55°	157.6	118.2	59.1	46.0	44.9
57.5°	124.8	91.9	42.7	38.3	37.2
60°	89.7	65.7	32.8	31.7	30.6
62.5°	59.1	44.9	26.3	25.2	25.2
65°	31.7	27.4	20.8	19.7	20.8
67.5°	13.1	15.3	15.3	16.4	16.4
70°	8.8	9.8	12.0	13.1	13.1
72.5°	6.6	7.7	8.8	9.8	9.8
75°	5.5	5.5	6.6	7.7	7.7
77.5°	3.3	4.4	4.4	5.5	6.6
80°	2.2	3.3	3.3	4.4	4.4
82.5°	1.1	2.2	2.2	3.3	3.3
85°	1.1	1.1	1.1	1.1	2.2
87.5°	0.0	0.0	0.0	0.0	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)