

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: P1059024

Luminaire Tested: S123RDR-S1000D840-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059024
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-S1000D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

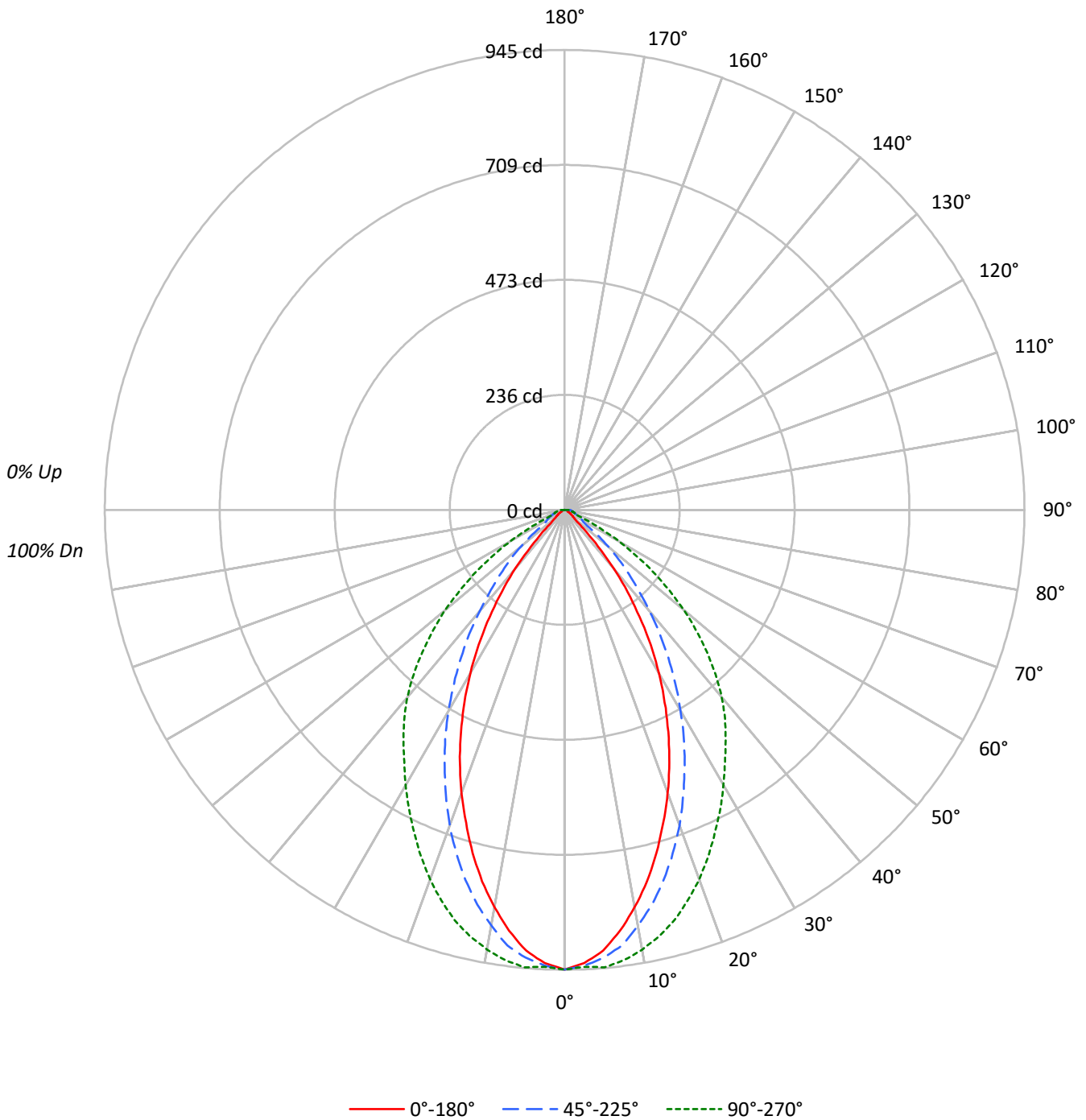
Lumens per Lamp: N/A
Luminaire Lumens: 1134.2 lumens
Efficiency: N/A
Efficacy: 32.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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									
RC	80									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	86	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°	11093	11093	11093
5°	10711	10887	11120
10°	9887	10346	10939
15°	8873	9567	10609
20°	7740	8625	10098
25°	6530	7559	9474
30°	5251	6464	8854
35°	3843	5321	8274
40°	2397	4148	7706
45°	907	3092	6865
50°	431	2132	5851
55°	330	1169	4524
60°	233	991	2973
65°	172	861	1242
70°	172	810	810
75°	227	844	844
80°	338	1008	926
85°	674	1671	1334

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6865 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.7	7.6
10°-20°	222.4	19.6
20°-30°	275.3	24.3
30°-40°	246.8	21.8
40°-50°	161.8	14.3
50°-60°	81.0	7.1
60°-70°	31.6	2.8
70°-80°	17.8	1.6
80°-90°	11.0	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°	584.3	51.5
0°-40°	831.1	73.3
0°-60°	1073.8	94.7
0°-90°	1134.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1134.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	945	945	945	945	945	
5°	909	924	924	934	943	84
15°	730	760	787	839	873	203
25°	504	535	583	667	731	230
35°	268	304	371	483	577	167
45°	55	88	186	319	413	52
55°	16	20	57	156	221	15
65°	6	19	31	41	45	6
75°	5	19	19	19	19	5
85°	5	12	12	12	10	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	944.7	944.7	944.7	944.7	944.7
2.5°	932.3	945.9	937.2	938.5	939.7
5°	908.7	923.6	923.6	933.5	943.4
7.5°	872.7	890.1	902.5	919.8	933.5
10°	829.2	850.3	867.7	898.7	917.4
12.5°	782.1	808.1	830.5	871.4	897.5
15°	729.9	759.7	787.0	839.2	872.7
17.5°	674.1	703.8	739.8	800.7	841.6
20°	619.4	649.2	690.2	758.5	808.1
22.5°	562.3	593.4	636.8	712.5	770.9
25°	504.0	535.0	583.4	666.6	731.2
27.5°	445.6	476.7	531.3	621.9	692.7
30°	387.3	418.3	476.7	573.5	653.0
32.5°	329.0	362.5	423.3	528.8	613.2
35°	268.1	304.1	371.2	482.9	577.2
37.5°	212.3	245.8	321.5	443.2	541.2
40°	156.4	192.4	270.6	404.7	502.7
42.5°	101.8	140.3	224.7	362.5	459.3
45°	54.6	88.1	186.2	319.0	413.4
47.5°	29.8	48.4	150.2	273.1	366.2
50°	23.6	27.3	116.7	233.4	320.3
52.5°	19.9	22.3	83.2	196.1	269.4
55°	16.1	19.9	57.1	156.4	221.0
57.5°	13.7	17.4	44.7	121.7	172.5
60°	9.9	14.9	42.2	89.4	126.6
62.5°	7.4	16.1	37.2	62.1	83.2
65°	6.2	18.6	31.0	41.0	44.7
67.5°	5.0	19.9	27.3	26.1	26.1
70°	5.0	18.6	23.6	22.3	23.6
72.5°	5.0	19.9	21.1	19.9	21.1
75°	5.0	18.6	18.6	18.6	18.6
77.5°	5.0	17.4	17.4	16.1	16.1
80°	5.0	14.9	14.9	14.9	13.7
82.5°	5.0	13.7	13.7	13.7	11.2
85°	5.0	12.4	12.4	12.4	9.9
87.5°	3.7	11.2	12.4	11.2	7.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)