

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: P1059189

Luminaire Tested: S123RDR-S340D840-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059189
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-S340D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

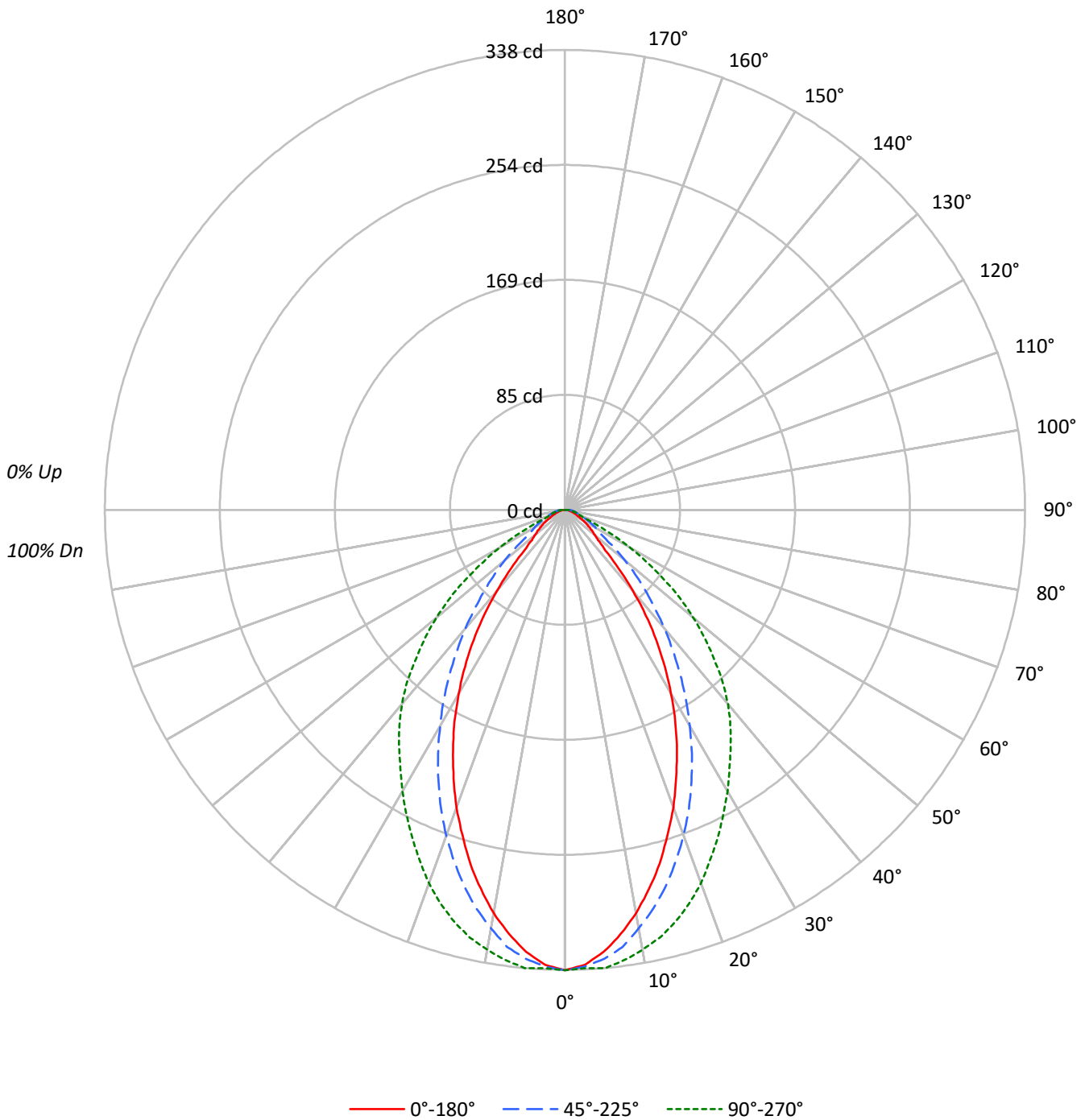
Lumens per Lamp: N/A
Luminaire Lumens: 454.2 lumens
Efficiency: N/A
Efficacy: 36.3 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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									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	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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89																																				
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79																																				
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71																																				
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64																																				
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58																																				
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52																																				
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48																																				
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44																																				
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40																																				
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37																																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3974	3974	3974
5°	3845	3904	3984
10°	3589	3724	3915
15°	3270	3480	3812
20°	2910	3183	3650
25°	2521	2848	3443
30°	2115	2485	3238
35°	1676	2114	3043
40°	1185	1740	2854
45°	697	1375	2569
50°	522	1045	2251
55°	438	706	1808
60°	355	601	1282
65°	281	514	678
70°	244	446	419
75°	227	417	399
80°	230	453	399
85°	283	674	512

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2569 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.1	6.9
10°-20°	80.9	17.8
20°-30°	103.1	22.7
30°-40°	97.0	21.3
40°-50°	69.8	15.4
50°-60°	40.3	8.9
60°-70°	18.4	4.1
70°-80°	9.2	2.0
80°-90°	4.3	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°	215.1	47.4
0°-40°	312.1	68.7
0°-60°	422.2	93.0
0°-90°	454.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	454.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	338	338	338	338	338	
5°	326	332	331	335	338	30
15°	269	279	286	302	314	75
25°	195	205	220	244	266	89
35°	117	127	148	182	212	72
45°	42	52	83	124	155	36
55°	21	22	34	66	88	19
65°	10	14	18	21	24	10
75°	5	10	9	9	9	5
85°	2	5	5	5	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	338.4	338.4	338.4	338.4	338.4
2.5°	334.6	338.8	335.9	336.3	337.1
5°	326.2	331.7	331.2	334.6	338.0
7.5°	314.4	320.7	324.1	329.1	333.8
10°	301.0	308.1	312.3	321.6	328.3
12.5°	285.4	294.7	300.1	312.3	322.0
15°	269.0	278.7	286.3	302.2	313.6
17.5°	250.5	261.0	270.7	289.6	303.5
20°	232.9	243.0	254.7	275.3	292.1
22.5°	213.5	224.5	237.9	259.8	278.7
25°	194.6	204.7	219.8	244.2	265.7
27.5°	175.7	185.8	201.8	228.7	252.2
30°	156.0	166.5	183.3	213.1	238.8
32.5°	136.6	146.7	165.6	198.0	224.9
35°	116.9	126.9	147.5	181.6	212.3
37.5°	97.5	108.0	129.9	168.1	199.7
40°	77.3	88.7	113.5	154.3	186.2
42.5°	58.4	70.6	97.1	140.0	171.5
45°	42.0	52.5	82.8	124.4	154.7
47.5°	32.8	38.3	69.8	108.5	139.1
50°	28.6	29.4	57.2	93.7	123.2
52.5°	24.8	25.6	45.0	79.9	106.3
55°	21.4	22.3	34.5	65.6	88.3
57.5°	18.1	19.3	28.6	52.1	71.0
60°	15.1	16.8	25.6	39.9	54.6
62.5°	12.2	15.1	21.9	29.4	39.1
65°	10.1	14.3	18.5	20.6	24.4
67.5°	8.4	13.0	15.6	14.7	14.3
70°	7.1	11.8	13.0	11.8	12.2
72.5°	5.9	10.9	10.9	10.1	10.1
75°	5.0	9.7	9.2	8.8	8.8
77.5°	4.2	8.4	8.0	7.6	7.1
80°	3.4	6.7	6.7	6.3	5.9
82.5°	2.9	5.5	5.5	5.5	4.6
85°	2.1	4.6	5.0	4.6	3.8
87.5°	1.7	4.2	4.2	3.8	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)