

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: P1059203

Luminaire Tested: S123RDR-S340D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059203
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-69)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S340D927-X4F0-XX-UDD-BVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

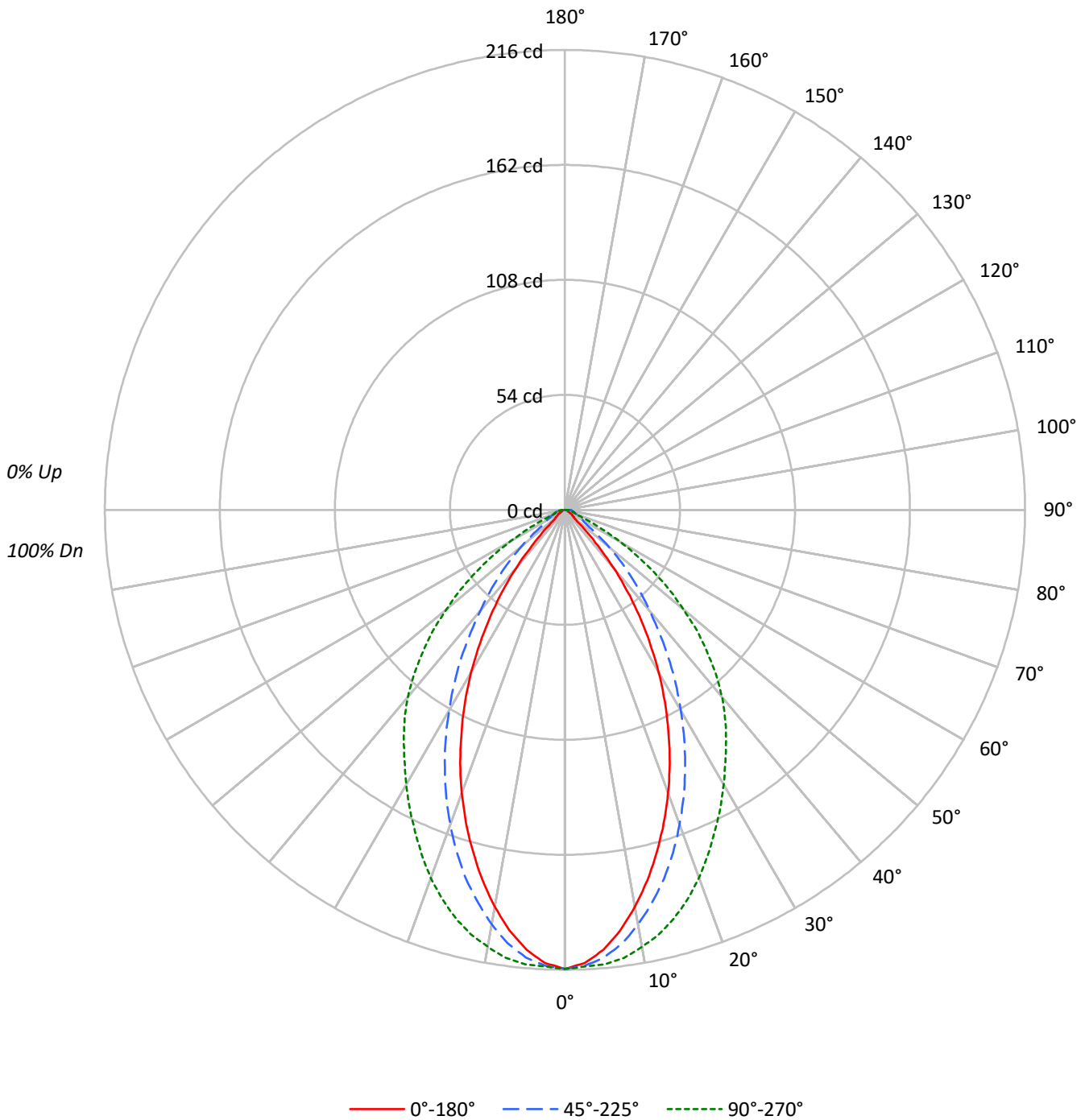
Lumens per Lamp: N/A
Luminaire Lumens: 259.0 lumens
Efficiency: N/A
Efficacy: 20.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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					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	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81				
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73				
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66				
5	86	76	69	64	84	75	68	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	64	58	53	63	57	53	62	56	52	61	56	52	50				
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46				
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	41	40				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2532	2532	2532
5°	2445	2487	2526
10°	2257	2358	2485
15°	2024	2181	2413
20°	1768	1966	2299
25°	1486	1730	2157
30°	1193	1475	2020
35°	874	1214	1891
40°	541	946	1758
45°	208	712	1566
50°	102	488	1324
55°	82	270	1040
60°	54	225	698
65°	44	203	311
70°	45	182	182
75°	59	195	181
80°	88	243	203
85°	135	404	269

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1566 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.8	7.6
10°-20°	50.6	19.5
20°-30°	62.8	24.3
30°-40°	56.3	21.7
40°-50°	37.0	14.3
50°-60°	18.5	7.2
60°-70°	7.3	2.8
70°-80°	4.1	1.6
80°-90°	2.6	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°	133.2	51.4
0°-40°	189.5	73.2
0°-60°	245.0	94.6
0°-90°	259.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	259.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	216	216	216	216	216	
5°	207	211	211	212	214	19
15°	166	172	179	192	198	46
25°	115	122	134	152	166	52
35°	61	69	85	111	132	38
45°	12	21	43	72	94	12
55°	4	5	13	36	51	4
65°	2	5	7	9	11	2
75°	1	4	4	4	4	1
85°	1	3	3	3	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	215.6	215.6	215.6	215.6	215.6
2.5°	213.0	216.0	214.3	214.3	214.7
5°	207.4	210.7	211.0	212.3	214.3
7.5°	199.2	203.4	205.4	209.4	212.3
10°	189.3	193.9	197.8	204.8	208.4
12.5°	178.4	183.0	188.9	198.5	204.1
15°	166.5	171.8	179.4	191.6	198.5
17.5°	154.3	159.6	168.8	182.7	191.6
20°	141.5	147.4	157.3	173.1	184.0
22.5°	128.6	135.2	145.7	162.9	175.4
25°	114.7	122.0	133.5	152.3	166.5
27.5°	101.6	109.1	121.3	141.8	157.9
30°	88.0	95.6	108.8	130.9	149.0
32.5°	74.2	82.8	96.6	120.7	140.1
35°	61.0	69.2	84.7	110.8	131.9
37.5°	48.1	56.4	72.5	101.2	123.6
40°	35.3	43.9	61.7	92.0	114.7
42.5°	23.1	32.0	52.1	82.8	104.9
45°	12.5	20.8	42.9	72.2	94.3
47.5°	6.9	11.2	34.6	62.3	84.1
50°	5.6	6.3	26.7	53.1	72.5
52.5°	4.6	5.3	19.1	44.2	62.0
55°	4.0	4.6	13.2	35.6	50.8
57.5°	3.3	4.0	10.6	27.4	39.9
60°	2.3	4.0	9.6	20.1	29.7
62.5°	2.0	4.0	8.2	13.8	19.8
65°	1.6	4.6	7.3	9.2	11.2
67.5°	1.3	4.6	6.3	5.9	5.9
70°	1.3	4.6	5.3	4.9	5.3
72.5°	1.3	4.9	4.9	4.6	4.6
75°	1.3	4.3	4.3	4.0	4.0
77.5°	1.3	4.0	4.0	3.6	3.6
80°	1.3	3.6	3.6	3.3	3.0
82.5°	1.3	3.3	3.3	3.0	2.6
85°	1.0	3.0	3.0	3.0	2.0
87.5°	1.0	2.6	3.0	2.6	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)