

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: P1059212

Luminaire Tested: S123RDR-S340D930-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059212
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-S340D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

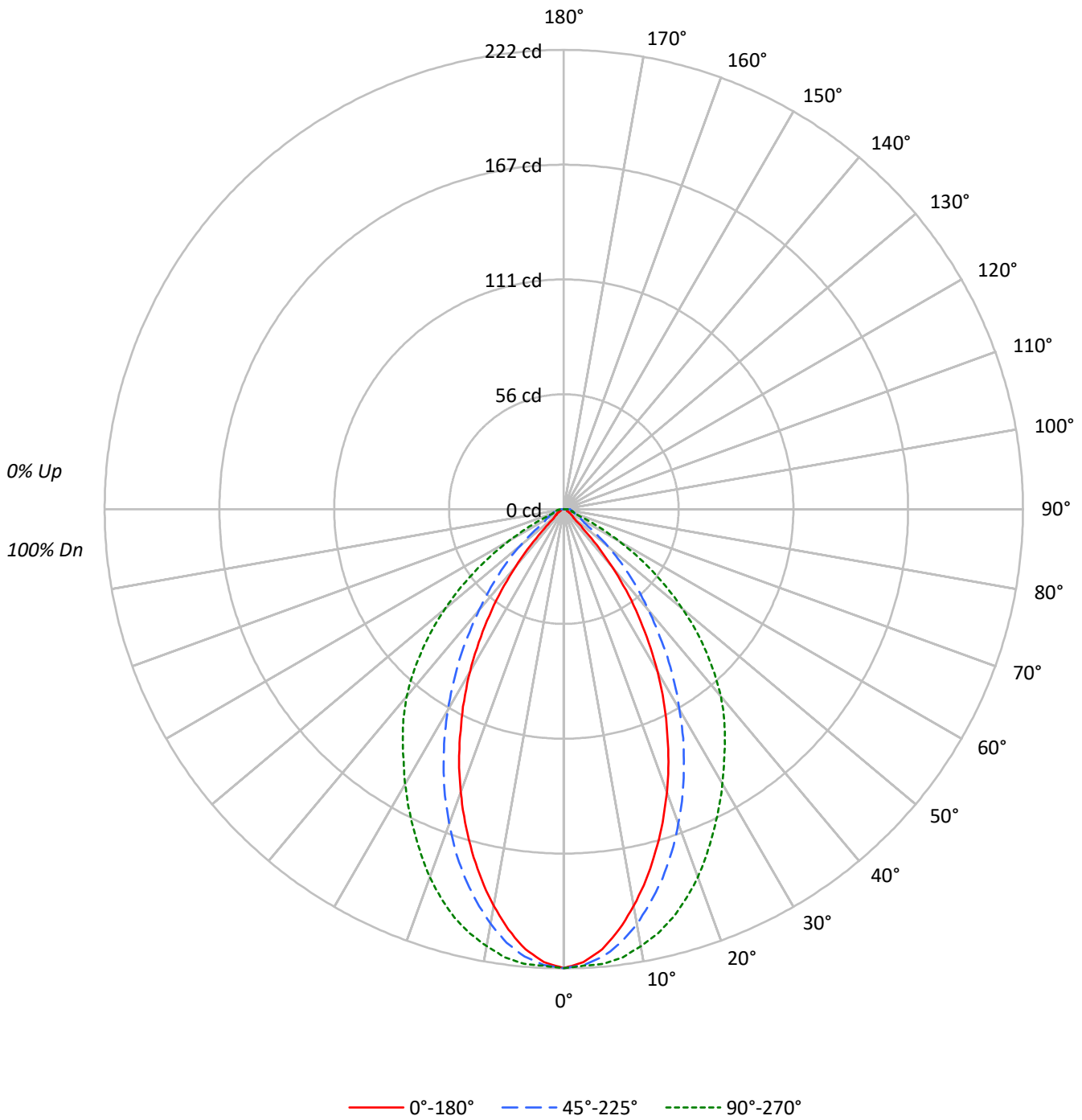
Lumens per Lamp: N/A
Luminaire Lumens: 266.6 lumens
Efficiency: N/A
Efficacy: 21.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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°	2606	2606	2606
5°	2517	2560	2600
10°	2323	2428	2558
15°	2084	2244	2484
20°	1819	2023	2367
25°	1530	1780	2221
30°	1228	1519	2080
35°	900	1250	1945
40°	556	973	1810
45°	214	732	1612
50°	106	502	1365
55°	84	278	1071
60°	56	230	716
65°	47	208	320
70°	48	185	185
75°	64	200	186
80°	95	250	210
85°	135	418	269

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1612 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.3	7.6
10°-20°	52.1	19.5
20°-30°	64.7	24.2
30°-40°	57.9	21.7
40°-50°	38.1	14.3
50°-60°	19.1	7.2
60°-70°	7.5	2.8
70°-80°	4.2	1.6
80°-90°	2.7	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°	137.1	51.4
0°-40°	195.0	73.1
0°-60°	252.2	94.6
0°-90°	266.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	266.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	222	222	222	222	222	
5°	214	217	217	218	221	20
15°	171	177	185	197	204	48
25°	118	126	137	157	171	54
35°	63	71	87	114	136	39
45°	13	21	44	74	97	12
55°	4	5	14	37	52	4
65°	2	5	8	10	12	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°	221.9	221.9	221.9	221.9	221.9
2.5°	219.2	222.3	220.6	220.6	220.9
5°	213.5	216.8	217.2	218.5	220.6
7.5°	205.0	209.4	211.4	215.5	218.5
10°	194.8	199.5	203.6	210.7	214.5
12.5°	183.6	188.3	194.4	204.3	210.1
15°	171.4	176.8	184.6	197.2	204.3
17.5°	158.8	164.2	173.7	188.0	197.2
20°	145.6	151.7	161.9	178.2	189.4
22.5°	132.3	139.1	150.0	167.6	180.5
25°	118.1	125.6	137.4	156.8	171.4
27.5°	104.5	112.3	124.9	145.9	162.5
30°	90.6	98.4	112.0	134.7	153.4
32.5°	76.4	85.2	99.4	124.2	144.2
35°	62.8	71.3	87.2	114.0	135.7
37.5°	49.5	58.0	74.7	104.2	127.3
40°	36.3	45.1	63.5	94.7	118.1
42.5°	23.8	32.9	53.6	85.2	107.9
45°	12.9	21.4	44.1	74.3	97.1
47.5°	7.1	11.5	35.6	64.1	86.5
50°	5.8	6.4	27.5	54.6	74.7
52.5°	4.8	5.4	19.7	45.5	63.8
55°	4.1	4.8	13.6	36.7	52.3
57.5°	3.4	4.1	10.9	28.2	41.1
60°	2.4	4.1	9.8	20.7	30.5
62.5°	2.0	4.1	8.5	14.3	20.4
65°	1.7	4.8	7.5	9.5	11.5
67.5°	1.4	4.8	6.4	6.1	6.1
70°	1.4	4.8	5.4	5.1	5.4
72.5°	1.4	5.1	5.1	4.8	4.8
75°	1.4	4.4	4.4	4.1	4.1
77.5°	1.4	4.1	4.1	3.7	3.7
80°	1.4	3.7	3.7	3.4	3.1
82.5°	1.4	3.4	3.4	3.1	2.7
85°	1.0	3.1	3.1	3.1	2.0
87.5°	1.0	2.7	3.1	2.7	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)