

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: P1059241

Luminaire Tested: S123RDR-S340D950-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059241
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-S340D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

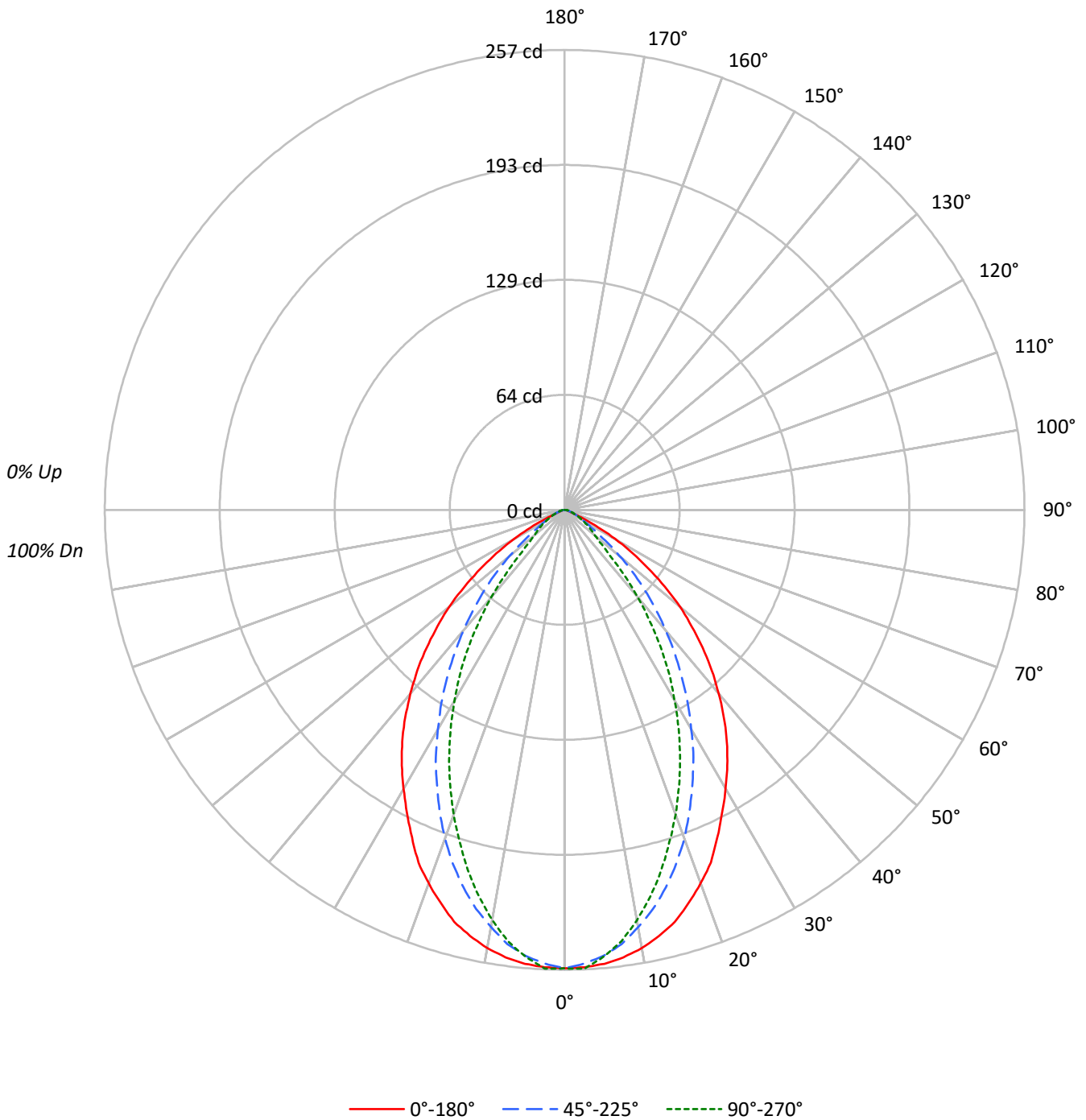
Lumens per Lamp: N/A
Luminaire Lumens: 330.8 lumens
Efficiency: N/A
Efficacy: 26.5 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	3008	3008	3008
5°	3001	2949	2954
10°	2965	2824	2776
15°	2897	2656	2536
20°	2775	2443	2264
25°	2616	2188	1978
30°	2441	1920	1666
35°	2268	1637	1342
40°	2054	1349	973
45°	1812	1048	586
50°	1536	733	398
55°	1169	438	334
60°	763	279	261
65°	320	208	208
70°	110	151	165
75°	91	109	127
80°	54	81	108
85°	54	54	108

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1812 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.7	7.2
10°-20°	61.9	18.7
20°-30°	79.4	24.0
30°-40°	74.5	22.5
40°-50°	52.0	15.7
50°-60°	26.9	8.1
60°-70°	9.2	2.8
70°-80°	2.6	0.8
80°-90°	0.6	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°	165.0	49.9
0°-40°	239.5	72.4
0°-60°	318.4	96.3
0°-90°	330.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	330.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	256	256	256	256	256	
5°	255	254	250	251	251	24
15°	238	232	218	211	209	67
25°	202	189	169	157	153	93
35°	158	139	114	100	94	99
45°	109	89	63	44	35	84
55°	57	43	21	17	16	51
65°	12	10	8	7	8	14
75°	2	2	2	3	3	2
85°	0	0	0	0	1	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	256.2	256.2	256.2	256.2	256.2
2.5°	255.8	256.2	253.8	256.2	256.6
5°	254.6	254.2	250.2	251.4	250.6
7.5°	252.2	251.0	244.7	243.1	243.1
10°	248.7	246.3	236.8	234.0	232.8
12.5°	243.9	240.7	228.4	223.3	221.3
15°	238.3	232.4	218.5	211.4	208.6
17.5°	230.4	222.5	207.4	199.1	194.7
20°	222.1	212.2	195.5	185.6	181.2
22.5°	213.4	201.5	182.4	171.7	167.0
25°	201.9	189.2	168.9	157.4	152.7
27.5°	190.8	177.3	155.9	142.8	138.0
30°	180.0	164.2	141.6	128.9	122.9
32.5°	169.3	151.5	128.1	114.2	108.7
35°	158.2	138.8	114.2	99.5	93.6
37.5°	146.3	126.5	101.1	85.3	78.1
40°	134.0	113.4	88.0	70.2	63.5
42.5°	121.8	101.5	75.0	56.7	48.8
45°	109.1	89.2	63.1	43.6	35.3
47.5°	96.4	76.9	51.6	31.7	26.6
50°	84.1	65.4	40.1	23.4	21.8
52.5°	70.6	54.3	30.1	19.4	19.0
55°	57.1	42.8	21.4	16.7	16.3
57.5°	45.2	33.3	15.5	13.9	13.5
60°	32.5	23.8	11.9	11.5	11.1
62.5°	21.4	16.3	9.5	9.1	9.1
65°	11.5	9.9	7.5	7.1	7.5
67.5°	4.8	5.6	5.6	5.9	5.9
70°	3.2	3.6	4.4	4.8	4.8
72.5°	2.4	2.8	3.2	3.6	3.6
75°	2.0	2.0	2.4	2.8	2.8
77.5°	1.2	1.6	1.6	2.0	2.4
80°	0.8	1.2	1.2	1.6	1.6
82.5°	0.4	0.8	0.8	1.2	1.2
85°	0.4	0.4	0.4	0.4	0.8
87.5°	0.0	0.0	0.0	0.0	0.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)