

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: P1059232

Luminaire Tested: S123RDR-S340D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059232
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-S340D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

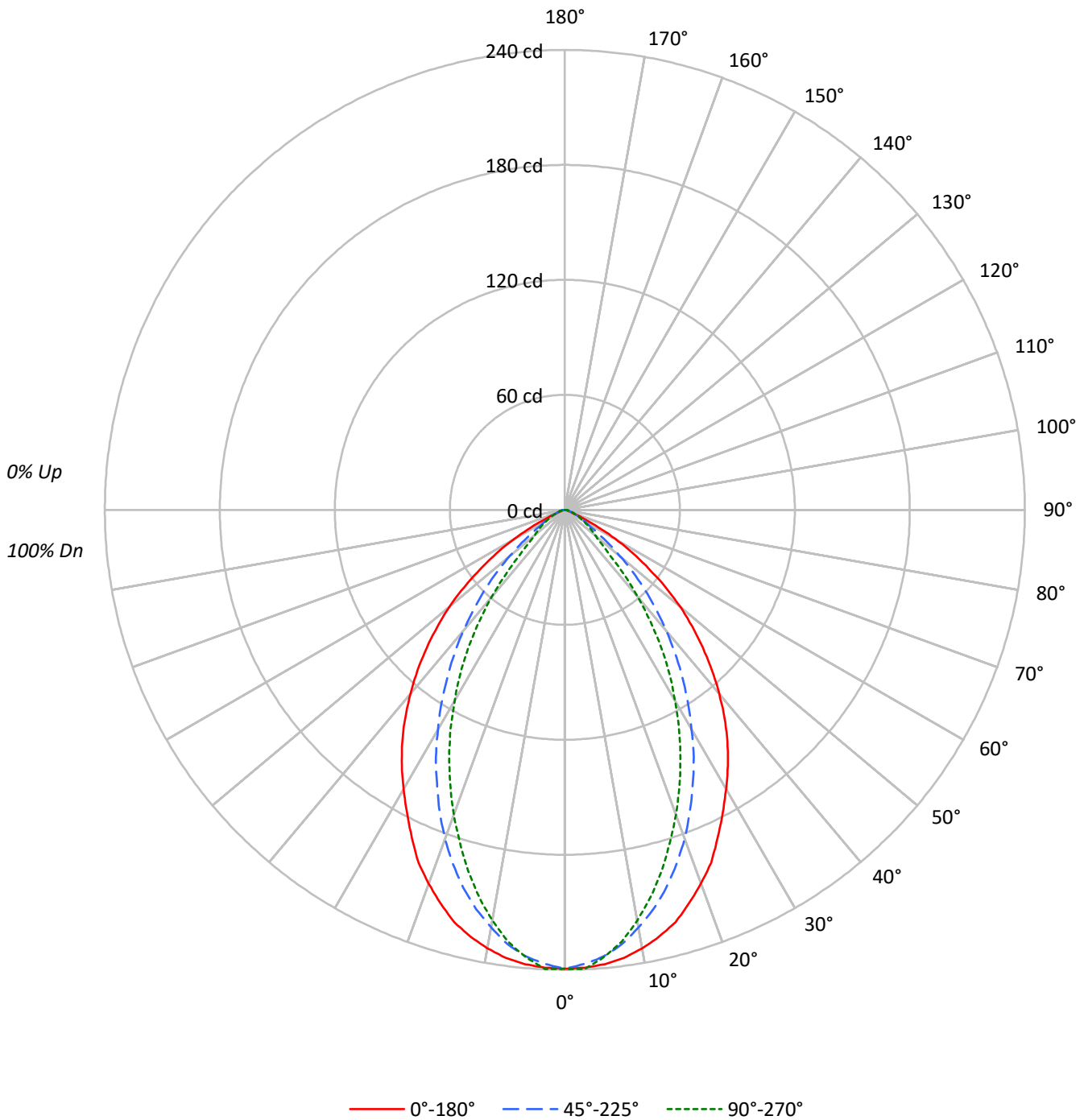
Lumens per Lamp: N/A
Luminaire Lumens: 309.1 lumens
Efficiency: N/A
Efficacy: 24.7 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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°	2812	2812	2812
5°	2805	2757	2762
10°	2771	2639	2595
15°	2709	2482	2371
20°	2594	2283	2117
25°	2445	2046	1849
30°	2282	1794	1558
35°	2120	1531	1254
40°	1921	1262	909
45°	1692	978	548
50°	1436	683	373
55°	1093	409	311
60°	714	261	244
65°	297	194	194
70°	103	141	151
75°	86	100	118
80°	47	74	101
85°	54	54	94

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1692 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.1	7.2
10°-20°	57.9	18.7
20°-30°	74.2	24.0
30°-40°	69.6	22.5
40°-50°	48.6	15.7
50°-60°	25.1	8.1
60°-70°	8.6	2.8
70°-80°	2.5	0.8
80°-90°	0.5	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°	154.2	49.9
0°-40°	223.9	72.4
0°-60°	297.6	96.3
0°-90°	309.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	309.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	240	240	240	240	240	
5°	238	238	234	235	234	23
15°	223	217	204	198	195	62
25°	189	177	158	147	143	87
35°	148	130	107	93	88	92
45°	102	83	59	41	33	78
55°	53	40	20	16	15	48
65°	11	9	7	7	7	13
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°	239.5	239.5	239.5	239.5	239.5
2.5°	239.1	239.5	237.2	239.5	239.8
5°	238.0	237.6	233.9	235.0	234.3
7.5°	235.8	234.6	228.7	227.2	227.2
10°	232.4	230.2	221.3	218.7	217.6
12.5°	228.0	225.0	213.5	208.7	206.8
15°	222.8	217.2	204.2	197.6	195.0
17.5°	215.4	208.0	193.9	186.1	182.0
20°	207.6	198.3	182.7	173.5	169.4
22.5°	199.4	188.3	170.5	160.5	156.1
25°	188.7	176.8	157.9	147.2	142.7
27.5°	178.3	165.7	145.7	133.4	129.0
30°	168.3	153.5	132.3	120.5	114.9
32.5°	158.3	141.6	119.7	106.8	101.6
35°	147.9	129.7	106.8	93.0	87.5
37.5°	136.8	118.2	94.5	79.7	73.0
40°	125.3	106.0	82.3	65.6	59.3
42.5°	113.8	94.9	70.1	53.0	45.6
45°	101.9	83.4	58.9	40.8	33.0
47.5°	90.1	71.9	48.2	29.7	24.8
50°	78.6	61.2	37.4	21.9	20.4
52.5°	66.0	50.8	28.2	18.2	17.8
55°	53.4	40.0	20.0	15.6	15.2
57.5°	42.3	31.1	14.5	13.0	12.6
60°	30.4	22.2	11.1	10.7	10.4
62.5°	20.0	15.2	8.9	8.5	8.5
65°	10.7	9.3	7.0	6.7	7.0
67.5°	4.4	5.2	5.2	5.6	5.6
70°	3.0	3.3	4.1	4.4	4.4
72.5°	2.2	2.6	3.0	3.3	3.3
75°	1.9	1.9	2.2	2.6	2.6
77.5°	1.1	1.5	1.5	1.9	2.2
80°	0.7	1.1	1.1	1.5	1.5
82.5°	0.4	0.7	0.7	1.1	1.1
85°	0.4	0.4	0.4	0.4	0.7
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)