

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: P1059234

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059234
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-S340D940-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, 90 CRI LEDS
Ballast/Driver: -

Summary

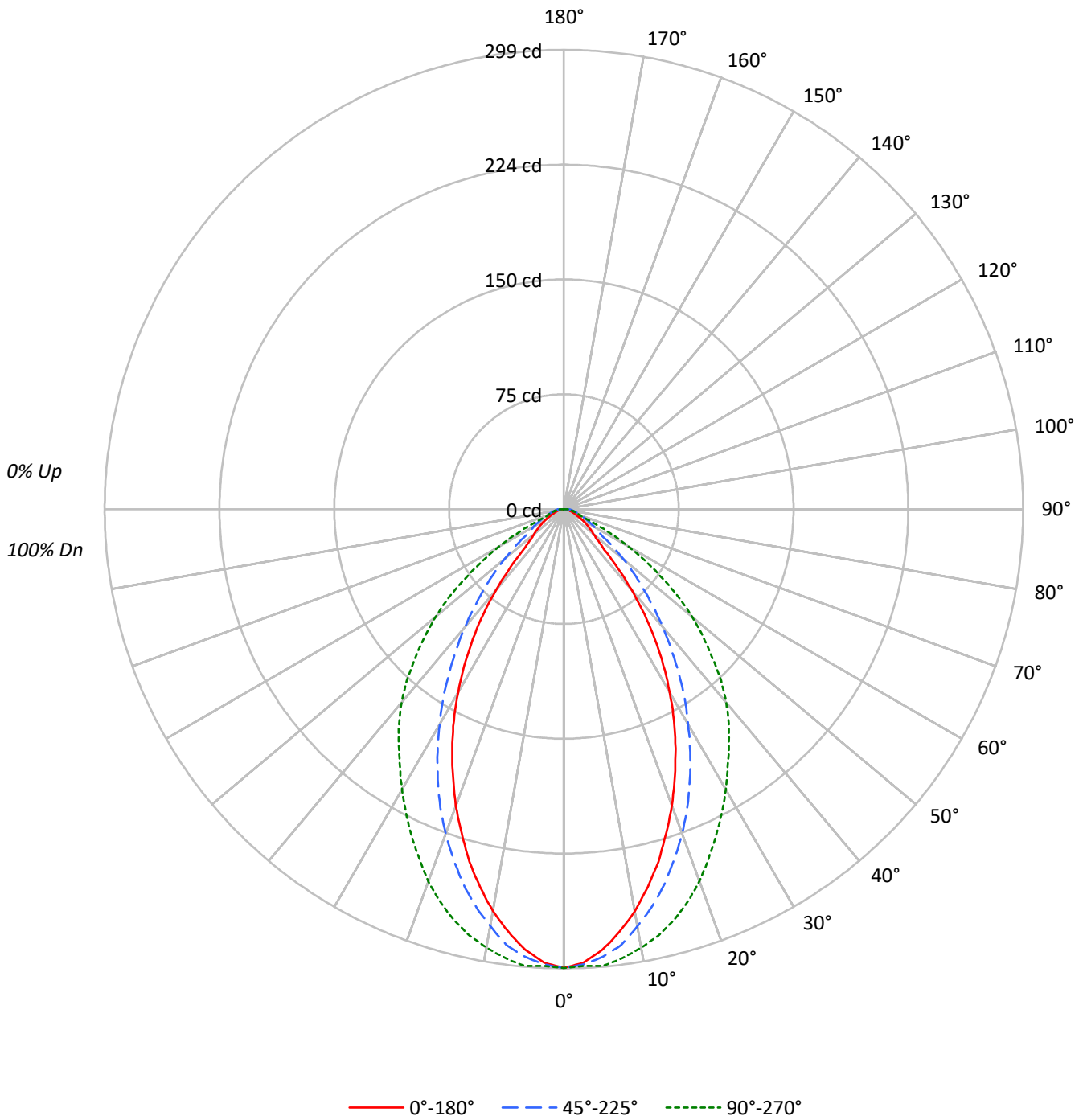
Lumens per Lamp: N/A
Luminaire Lumens: 401.1 lumens
Efficiency: N/A
Efficacy: 32.1 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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									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°	3509	3509	3509
5°	3395	3448	3517
10°	3169	3289	3457
15°	2888	3073	3366
20°	2569	2810	3224
25°	2227	2515	3040
30°	1867	2194	2858
35°	1479	1868	2686
40°	1047	1536	2520
45°	616	1214	2268
50°	460	923	1988
55°	387	622	1595
60°	315	531	1134
65°	247	453	597
70°	216	395	371
75°	204	372	354
80°	203	399	352
85°	256	606	445

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2268 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.5	6.9
10°-20°	71.5	17.8
20°-30°	91.0	22.7
30°-40°	85.6	21.3
40°-50°	61.7	15.4
50°-60°	35.6	8.9
60°-70°	16.3	4.1
70°-80°	8.1	2.0
80°-90°	3.8	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°	190.0	47.4
0°-40°	275.6	68.7
0°-60°	372.9	93.0
0°-90°	401.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	401.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	299	299	299	299	299	
5°	288	293	292	296	298	27
15°	238	246	253	267	277	66
25°	172	181	194	216	235	79
35°	103	112	130	160	187	64
45°	37	46	73	110	137	31
55°	19	20	30	58	78	17
65°	9	13	16	18	22	9
75°	4	8	8	8	8	5
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	298.8	298.8	298.8	298.8	298.8
2.5°	295.5	299.2	296.6	296.9	297.7
5°	288.0	292.9	292.5	295.5	298.4
7.5°	277.6	283.2	286.2	290.6	294.7
10°	265.8	272.1	275.8	283.9	289.9
12.5°	252.0	260.2	265.0	275.8	284.3
15°	237.6	246.1	252.8	266.9	276.9
17.5°	221.2	230.5	239.0	255.7	268.0
20°	205.6	214.5	224.9	243.1	258.0
22.5°	188.6	198.2	210.1	229.4	246.1
25°	171.9	180.8	194.1	215.7	234.6
27.5°	155.2	164.1	178.2	201.9	222.7
30°	137.7	147.0	161.8	188.2	210.8
32.5°	120.6	129.5	146.2	174.8	198.6
35°	103.2	112.1	130.3	160.3	187.4
37.5°	86.1	95.4	114.7	148.5	176.3
40°	68.3	78.3	100.2	136.2	164.4
42.5°	51.6	62.4	85.7	123.6	151.4
45°	37.1	46.4	73.1	109.9	136.6
47.5°	29.0	33.8	61.6	95.8	122.9
50°	25.2	26.0	50.5	82.8	108.8
52.5°	21.9	22.6	39.7	70.5	93.9
55°	18.9	19.7	30.4	57.9	77.9
57.5°	16.0	17.1	25.2	46.0	62.7
60°	13.4	14.8	22.6	35.3	48.3
62.5°	10.8	13.4	19.3	26.0	34.5
65°	8.9	12.6	16.3	18.2	21.5
67.5°	7.4	11.5	13.7	13.0	12.6
70°	6.3	10.4	11.5	10.4	10.8
72.5°	5.2	9.7	9.7	8.9	8.9
75°	4.5	8.5	8.2	7.8	7.8
77.5°	3.7	7.4	7.1	6.7	6.3
80°	3.0	5.9	5.9	5.6	5.2
82.5°	2.6	4.8	4.8	4.8	4.1
85°	1.9	4.1	4.5	4.1	3.3
87.5°	1.5	3.7	3.7	3.3	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)