

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: P1059235

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059235
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-28)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S340D940-X4F0-XX-UDD-WVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

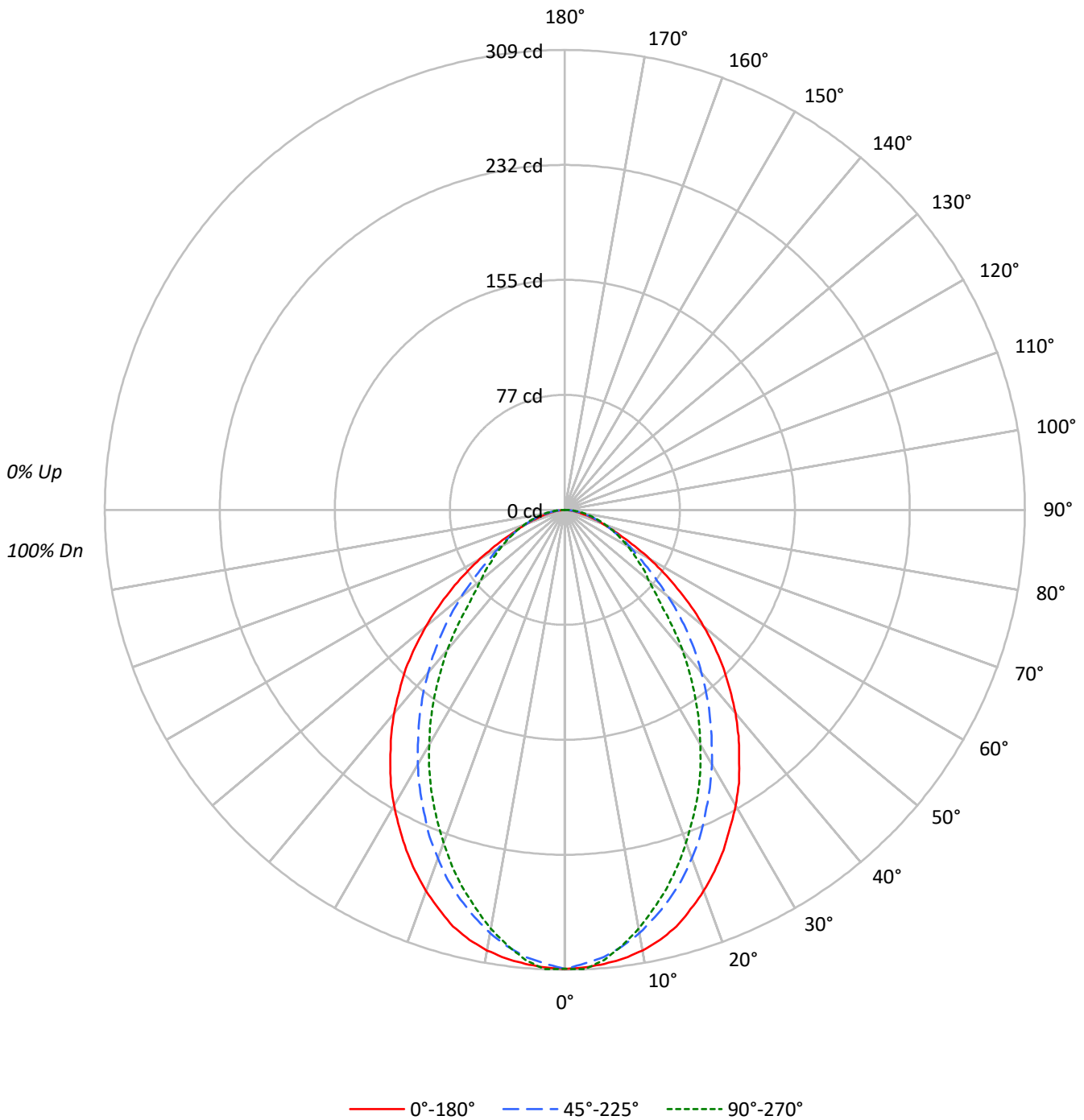
Lumens per Lamp: N/A
Luminaire Lumens: 539.4 lumens
Efficiency: N/A
Efficacy: 43.2 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	88				
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76				
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66				
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58				
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52				
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42				
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35				
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3621	3621	3621
5°	3609	3556	3579
10°	3584	3444	3408
15°	3524	3294	3204
20°	3405	3113	2974
25°	3266	2901	2738
30°	3112	2679	2468
35°	2927	2438	2185
40°	2733	2187	1881
45°	2506	1933	1544
50°	2221	1659	1341
55°	1890	1388	1230
60°	1541	1209	1141
65°	1175	1072	1061
70°	917	954	992
75°	740	857	926
80°	555	703	852
85°	296	445	754

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2506 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.6	5.3
10°-20°	77.0	14.3
20°-30°	104.7	19.4
30°-40°	108.5	20.1
40°-50°	91.5	17.0
50°-60°	65.0	12.0
60°-70°	39.7	7.4
70°-80°	19.8	3.7
80°-90°	4.5	0.8
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°	210.4	39.0
0°-40°	318.9	59.1
0°-60°	475.4	88.1
0°-90°	539.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	539.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	308	308	308	308	308	
5°	306	306	302	304	304	29
15°	290	284	271	266	264	81
25°	252	241	224	216	211	116
35°	204	189	170	158	152	128
45°	151	135	116	100	93	116
55°	92	83	68	62	60	83
65°	42	41	39	39	38	43
75°	16	17	19	20	20	18
85°	2	3	3	5	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	308.4	308.4	308.4	308.4	308.4
2.5°	307.7	308.0	305.1	308.4	308.8
5°	306.2	306.2	301.7	303.6	303.6
7.5°	304.0	303.2	295.8	295.8	295.1
10°	300.6	298.4	288.8	286.9	285.8
12.5°	295.8	292.1	280.2	276.9	274.7
15°	289.9	284.3	271.0	266.2	263.6
17.5°	281.3	275.8	261.0	254.3	251.3
20°	272.5	264.3	249.1	242.4	238.0
22.5°	262.8	252.4	237.6	229.5	224.6
25°	252.1	240.9	223.9	215.7	211.3
27.5°	240.6	228.3	210.9	201.7	197.2
30°	229.5	215.4	197.6	187.2	182.0
32.5°	217.6	201.7	183.5	172.7	167.5
35°	204.2	188.7	170.1	158.3	152.4
37.5°	191.6	175.7	156.4	143.8	137.2
40°	178.3	162.4	142.7	129.7	122.7
42.5°	164.2	149.0	129.7	114.5	107.9
45°	150.9	134.9	116.4	100.5	93.0
47.5°	136.4	121.6	103.4	87.1	81.9
50°	121.6	107.9	90.8	76.0	73.4
52.5°	107.1	95.6	78.2	68.6	67.5
55°	92.3	82.7	67.8	61.9	60.1
57.5°	78.6	71.5	58.2	55.2	54.5
60°	65.6	59.7	51.5	49.7	48.6
62.5°	53.0	49.7	44.9	44.1	43.4
65°	42.3	40.8	38.6	38.6	38.2
67.5°	33.4	33.4	33.0	33.7	33.4
70°	26.7	27.1	27.8	28.5	28.9
72.5°	21.1	22.2	23.0	24.1	24.5
75°	16.3	17.4	18.9	19.6	20.4
77.5°	11.9	13.0	14.5	15.6	16.3
80°	8.2	8.9	10.4	11.9	12.6
82.5°	5.2	5.6	6.7	8.2	8.9
85°	2.2	2.6	3.3	4.8	5.6
87.5°	0.0	0.0	0.4	1.5	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)