

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: P1059238

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059238
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S340D950-X4F0-XX-UDD-BVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

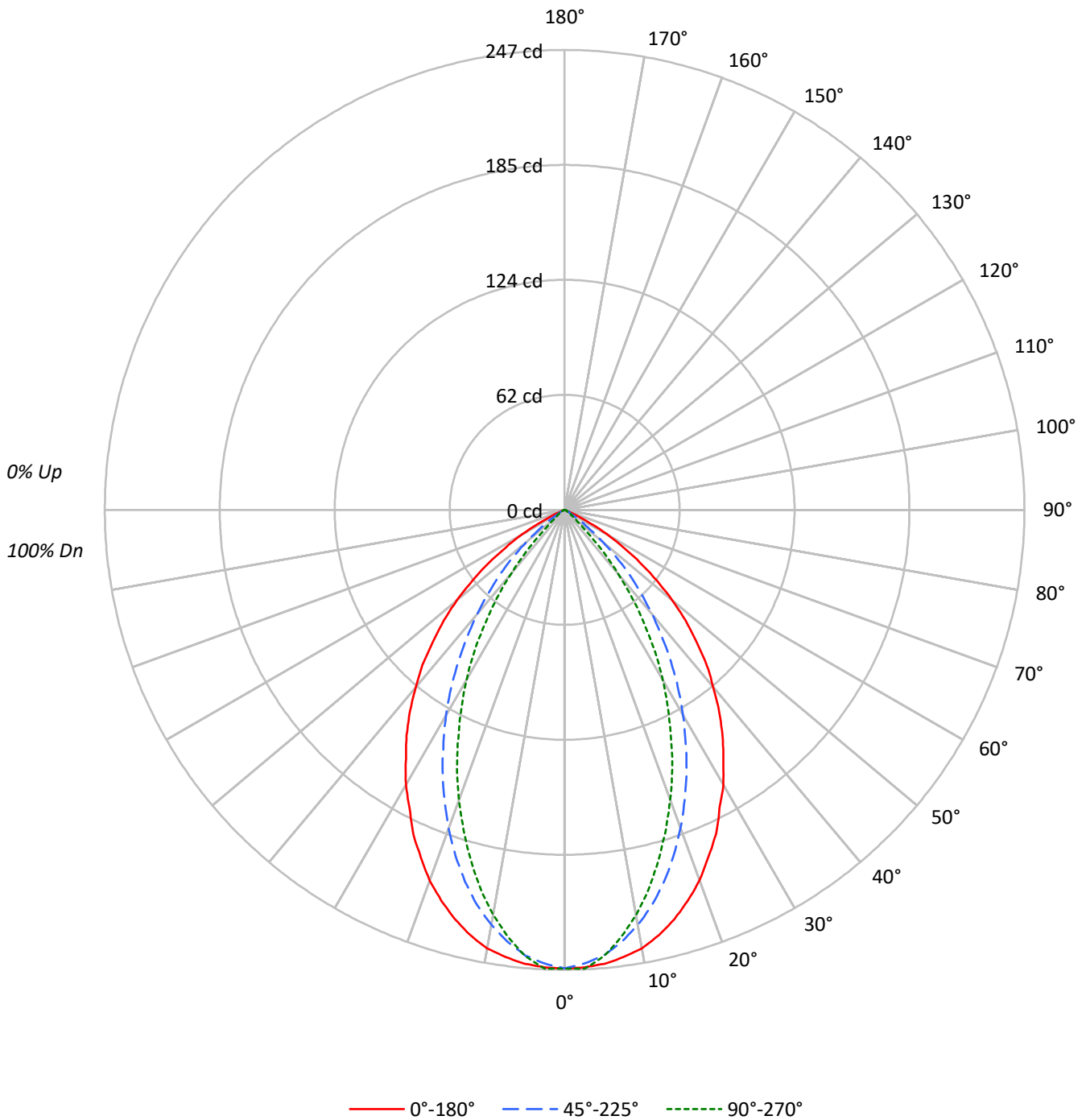
Lumens per Lamp: N/A
Luminaire Lumens: 281.0 lumens
Efficiency: N/A
Efficacy: 22.5 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.93
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94		92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85		84
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78		76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71		69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65		63
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60		58
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55		53
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51		49
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47		46
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44		42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2892	2892	2892
5°	2884	2832	2837
10°	2851	2699	2634
15°	2767	2512	2367
20°	2647	2274	2072
25°	2492	2010	1752
30°	2312	1726	1430
35°	2120	1426	1064
40°	1902	1119	681
45°	1659	817	284
50°	1376	486	108
55°	1015	203	82
60°	615	75	47
65°	164	44	22
70°	0	14	14
75°	0	0	18
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1659 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.7	8.1
10°-20°	58.5	20.8
20°-30°	72.9	25.9
30°-40°	65.2	23.2
40°-50°	41.1	14.6
50°-60°	17.2	6.1
60°-70°	3.2	1.2
70°-80°	0.1	0.0
80°-90°	0.0	0.0
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°	154.1	54.8
0°-40°	219.3	78.0
0°-60°	277.7	98.8
0°-90°	281.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	281.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	246	246	246	246	246	
5°	245	244	240	241	241	23
15°	228	222	207	198	195	64
25°	192	177	155	142	135	88
35°	148	126	100	82	74	92
45°	100	78	49	26	17	77
55°	50	34	10	4	4	44
65°	6	4	2	1	1	8
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	246.3	246.3	246.3	246.3	246.3
2.5°	245.9	246.3	243.9	246.3	246.7
5°	244.7	244.3	240.3	241.1	240.7
7.5°	242.3	241.1	234.0	232.4	231.6
10°	239.1	235.9	226.4	222.5	220.9
12.5°	234.0	229.6	217.3	211.0	208.6
15°	227.6	222.1	206.6	197.9	194.7
17.5°	220.1	212.2	194.7	185.2	180.4
20°	211.8	200.7	182.0	170.5	165.8
22.5°	201.8	189.6	168.5	156.2	151.1
25°	192.3	176.9	155.1	141.6	135.2
27.5°	180.4	164.2	140.8	126.9	120.2
30°	170.5	151.9	127.3	111.8	105.5
32.5°	158.6	139.2	113.4	96.4	90.4
35°	147.9	126.5	99.5	81.7	74.2
37.5°	136.4	114.2	85.7	67.0	59.9
40°	124.1	101.9	73.0	52.3	44.4
42.5°	113.0	89.6	60.3	38.9	30.9
45°	99.9	77.7	49.2	26.2	17.1
47.5°	88.0	66.6	37.3	14.7	9.1
50°	75.3	55.1	26.6	7.5	5.9
52.5°	62.3	44.0	17.4	5.2	4.8
55°	49.6	34.1	9.9	4.0	4.0
57.5°	37.3	24.6	5.2	3.2	2.8
60°	26.2	16.3	3.2	2.4	2.0
62.5°	15.1	9.5	2.4	1.6	1.6
65°	5.9	4.4	1.6	0.8	0.8
67.5°	0.4	1.2	0.8	0.4	0.4
70°	0.0	0.0	0.4	0.4	0.4
72.5°	0.0	0.0	0.4	0.4	0.4
75°	0.0	0.0	0.0	0.0	0.4
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)