

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: P1059240

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059240
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-66)
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-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

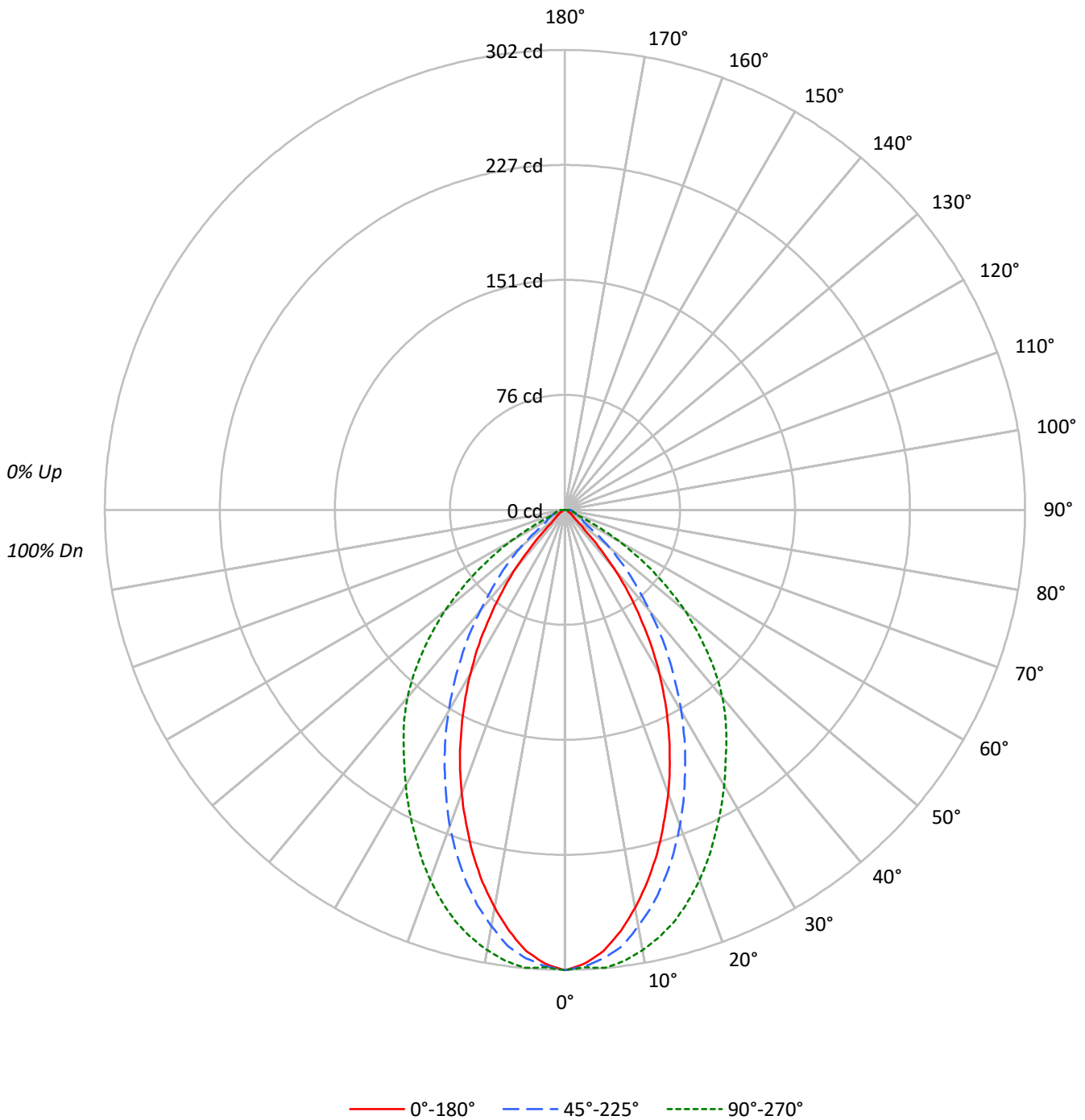
Lumens per Lamp: N/A
Luminaire Lumens: 363.0 lumens
Efficiency: N/A
Efficacy: 29.0 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1059240

CATALOG NUMBER: S123RDR-S340D950-X4F0-XX-UDD-BVL-W

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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	99	94	89	102	97	92	88	94	90	86	91	87	85	88	85	83	81				
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73				
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66				
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55				
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	50				
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47				
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43				
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	42	40				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3550	3550	3550
5°	3427	3483	3559
10°	3163	3310	3500
15°	2840	3061	3394
20°	2477	2759	3231
25°	2090	2419	3030
30°	1680	2068	2832
35°	1230	1703	2648
40°	766	1327	2466
45°	291	990	2197
50°	137	681	1872
55°	106	375	1447
60°	75	317	951
65°	56	275	397
70°	55	257	257
75°	73	272	272
80°	108	325	298
85°	216	539	431

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2197 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.7	7.6
10°-20°	71.1	19.6
20°-30°	88.1	24.3
30°-40°	79.0	21.8
40°-50°	51.8	14.3
50°-60°	25.9	7.1
60°-70°	10.1	2.8
70°-80°	5.7	1.6
80°-90°	3.5	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°	187.0	51.5
0°-40°	265.9	73.3
0°-60°	343.6	94.7
0°-90°	363.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	363.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	302	302	302	302	302	
5°	291	296	296	299	302	27
15°	234	243	252	268	279	65
25°	161	171	187	213	234	74
35°	86	97	119	154	185	53
45°	18	28	60	102	132	17
55°	5	6	18	50	71	5
65°	2	6	10	13	14	2
75°	2	6	6	6	6	2
85°	2	4	4	4	3	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	302.3	302.3	302.3	302.3	302.3
2.5°	298.3	302.7	299.9	300.3	300.7
5°	290.7	295.5	295.5	298.7	301.9
7.5°	279.2	284.8	288.8	294.3	298.7
10°	265.3	272.1	277.6	287.6	293.5
12.5°	250.2	258.6	265.7	278.8	287.2
15°	233.6	243.1	251.8	268.5	279.2
17.5°	215.7	225.2	236.7	256.2	269.3
20°	198.2	207.7	220.8	242.7	258.6
22.5°	179.9	189.9	203.8	228.0	246.7
25°	161.3	171.2	186.7	213.3	233.9
27.5°	142.6	152.5	170.0	199.0	221.6
30°	123.9	133.9	152.5	183.5	208.9
32.5°	105.3	116.0	135.4	169.2	196.2
35°	85.8	97.3	118.8	154.5	184.7
37.5°	67.9	78.6	102.9	141.8	173.2
40°	50.0	61.6	86.6	129.5	160.9
42.5°	32.6	44.9	71.9	116.0	147.0
45°	17.5	28.2	59.6	102.1	132.3
47.5°	9.5	15.5	48.1	87.4	117.2
50°	7.5	8.7	37.3	74.7	102.5
52.5°	6.4	7.1	26.6	62.8	86.2
55°	5.2	6.4	18.3	50.0	70.7
57.5°	4.4	5.6	14.3	38.9	55.2
60°	3.2	4.8	13.5	28.6	40.5
62.5°	2.4	5.2	11.9	19.9	26.6
65°	2.0	6.0	9.9	13.1	14.3
67.5°	1.6	6.4	8.7	8.3	8.3
70°	1.6	6.0	7.5	7.1	7.5
72.5°	1.6	6.4	6.8	6.4	6.8
75°	1.6	6.0	6.0	6.0	6.0
77.5°	1.6	5.6	5.6	5.2	5.2
80°	1.6	4.8	4.8	4.8	4.4
82.5°	1.6	4.4	4.4	4.4	3.6
85°	1.6	4.0	4.0	4.0	3.2
87.5°	1.2	3.6	4.0	3.6	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)