

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: P1059208

Luminaire Tested: S123RDR-S340D927-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059208
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-S340D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

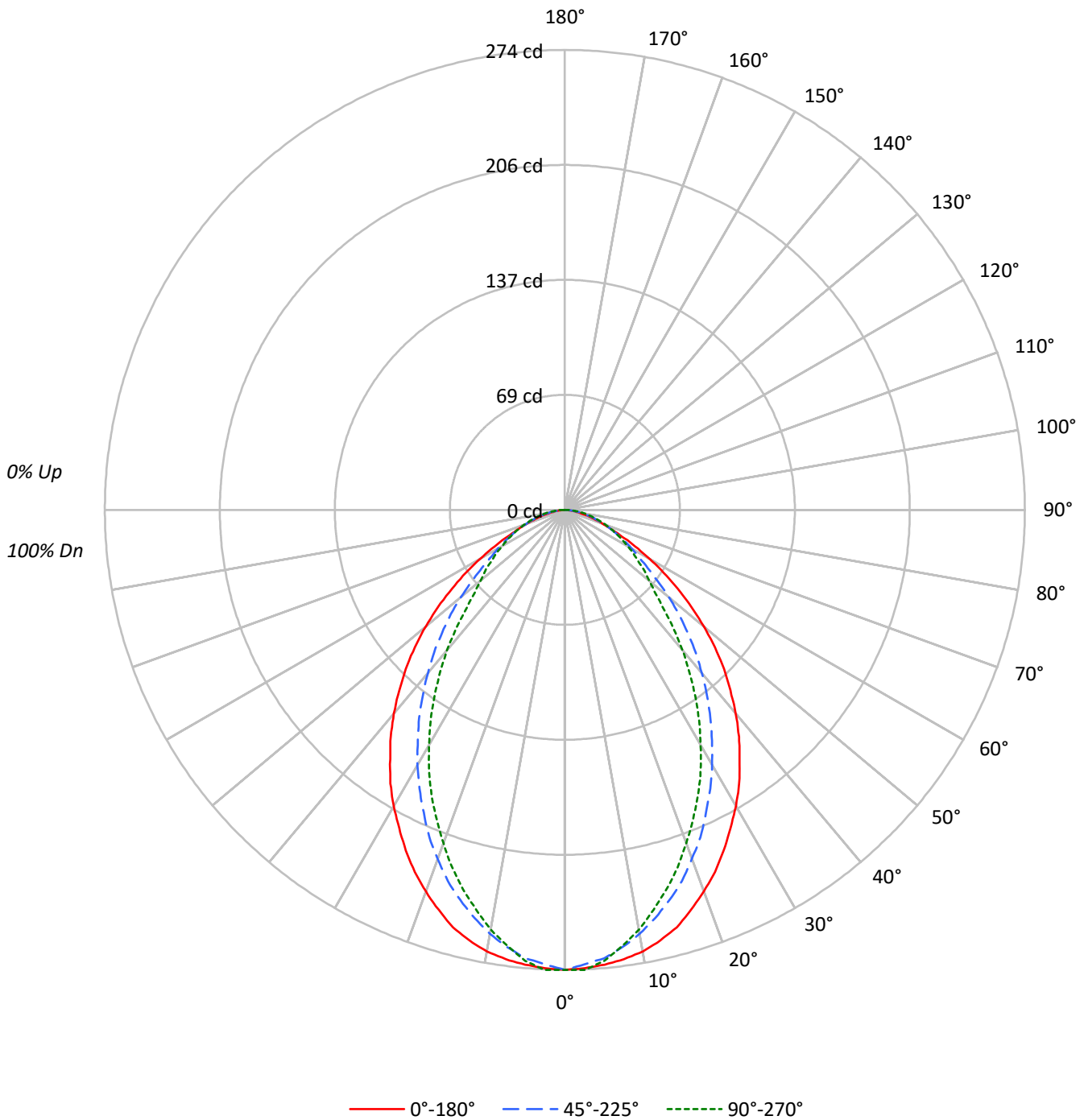
Lumens per Lamp: N/A
Luminaire Lumens: 479.2 lumens
Efficiency: N/A
Efficacy: 38.3 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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°	3217	3217	3217
5°	3206	3160	3179
10°	3185	3058	3027
15°	3130	2926	2846
20°	3024	2765	2642
25°	2901	2577	2432
30°	2763	2380	2192
35°	2600	2167	1940
40°	2428	1944	1671
45°	2225	1717	1373
50°	1973	1474	1191
55°	1679	1234	1091
60°	1369	1076	1012
65°	1042	950	942
70°	814	848	882
75°	658	762	821
80°	487	622	757
85°	269	404	660

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2225 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.4	5.3
10°-20°	68.4	14.3
20°-30°	93.0	19.4
30°-40°	96.4	20.1
40°-50°	81.3	17.0
50°-60°	57.7	12.0
60°-70°	35.3	7.4
70°-80°	17.6	3.7
80°-90°	4.0	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°	186.9	39.0
0°-40°	283.3	59.1
0°-60°	422.4	88.1
0°-90°	479.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	479.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	274	274	274	274	274	
5°	272	272	268	270	270	26
15°	258	253	241	236	234	72
25°	224	214	199	192	188	103
35°	181	168	151	141	135	113
45°	134	120	103	89	83	103
55°	82	73	60	55	53	74
65°	38	36	34	34	34	38
75°	14	16	17	18	18	16
85°	2	2	3	4	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	274.0	274.0	274.0	274.0	274.0
2.5°	273.3	273.7	271.0	274.0	274.3
5°	272.0	272.0	268.1	269.7	269.7
7.5°	270.0	269.4	262.8	262.8	262.1
10°	267.1	265.1	256.5	254.9	253.9
12.5°	262.8	259.5	249.0	246.0	244.0
15°	257.5	252.6	240.7	236.4	234.1
17.5°	249.9	245.0	231.8	225.9	223.3
20°	242.0	234.8	221.3	215.4	211.4
22.5°	233.5	224.3	211.1	203.8	199.6
25°	223.9	214.1	198.9	191.7	187.7
27.5°	213.7	202.9	187.4	179.1	175.2
30°	203.8	191.3	175.5	166.3	161.7
32.5°	193.3	179.1	163.0	153.5	148.8
35°	181.4	167.6	151.2	140.6	135.3
37.5°	170.3	156.1	139.0	127.8	121.8
40°	158.4	144.2	126.8	115.3	109.0
42.5°	145.9	132.4	115.3	101.8	95.8
45°	134.0	119.9	103.4	89.2	82.7
47.5°	121.2	108.0	91.9	77.4	72.8
50°	108.0	95.8	80.7	67.5	65.2
52.5°	95.2	85.0	69.5	60.9	59.9
55°	82.0	73.4	60.3	55.0	53.3
57.5°	69.8	63.6	51.7	49.1	48.4
60°	58.3	53.0	45.8	44.1	43.1
62.5°	47.1	44.1	39.8	39.2	38.5
65°	37.5	36.2	34.2	34.2	33.9
67.5°	29.6	29.6	29.3	30.0	29.6
70°	23.7	24.0	24.7	25.4	25.7
72.5°	18.8	19.8	20.4	21.4	21.7
75°	14.5	15.5	16.8	17.5	18.1
77.5°	10.5	11.5	12.8	13.8	14.5
80°	7.2	7.9	9.2	10.5	11.2
82.5°	4.6	4.9	5.9	7.2	7.9
85°	2.0	2.3	3.0	4.3	4.9
87.5°	0.0	0.0	0.3	1.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)