

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: P1059213

Luminaire Tested: S123RDR-S340D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059213
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-S340D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

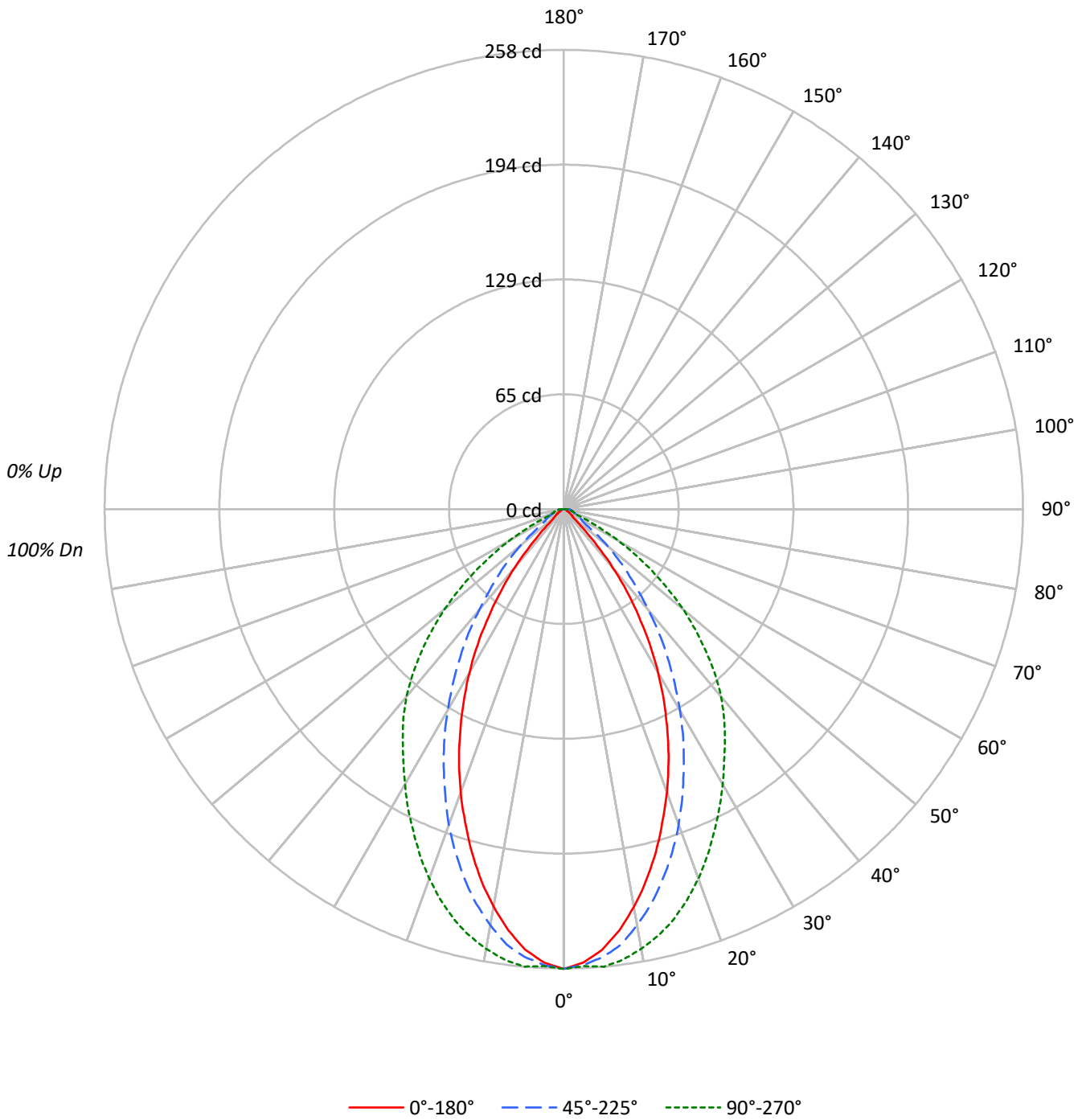
Lumens per Lamp: N/A
Luminaire Lumens: 310.1 lumens
Efficiency: N/A
Efficacy: 24.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

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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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	99	94	90	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°	3033	3033	3033
5°	2929	2976	3041
10°	2704	2829	2992
15°	2426	2616	2901
20°	2117	2358	2762
25°	1785	2067	2590
30°	1436	1767	2420
35°	1051	1455	2262
40°	656	1134	2108
45°	247	845	1877
50°	117	583	1600
55°	90	319	1237
60°	63	270	813
65°	47	236	339
70°	48	220	220
75°	64	231	231
80°	95	277	250
85°	189	458	364

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1877 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.7	7.6
10°-20°	60.8	19.6
20°-30°	75.3	24.3
30°-40°	67.5	21.8
40°-50°	44.2	14.3
50°-60°	22.1	7.1
60°-70°	8.6	2.8
70°-80°	4.9	1.6
80°-90°	3.0	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°	159.8	51.5
0°-40°	227.3	73.3
0°-60°	293.6	94.7
0°-90°	310.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	310.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	258	258	258	258	258	
5°	248	252	252	255	258	23
15°	200	208	215	230	239	56
25°	138	146	160	182	200	63
35°	73	83	102	132	158	46
45°	15	24	51	87	113	14
55°	4	5	16	43	60	4
65°	2	5	8	11	12	2
75°	1	5	5	5	5	1
85°	1	3	3	3	3	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	258.3	258.3	258.3	258.3	258.3
2.5°	254.9	258.7	256.3	256.6	257.0
5°	248.5	252.5	252.5	255.3	258.0
7.5°	238.6	243.4	246.8	251.5	255.3
10°	226.8	232.5	237.3	245.8	250.9
12.5°	213.9	221.0	227.1	238.3	245.4
15°	199.6	207.7	215.2	229.5	238.6
17.5°	184.3	192.5	202.3	218.9	230.1
20°	169.4	177.5	188.7	207.4	221.0
22.5°	153.8	162.3	174.1	194.8	210.8
25°	137.8	146.3	159.5	182.3	199.9
27.5°	121.9	130.3	145.3	170.1	189.4
30°	105.9	114.4	130.3	156.8	178.5
32.5°	90.0	99.1	115.8	144.6	167.7
35°	73.3	83.2	101.5	132.0	157.8
37.5°	58.0	67.2	87.9	121.2	148.0
40°	42.8	52.6	74.0	110.7	137.5
42.5°	27.8	38.4	61.4	99.1	125.6
45°	14.9	24.1	50.9	87.2	113.0
47.5°	8.1	13.2	41.1	74.7	100.1
50°	6.4	7.5	31.9	63.8	87.6
52.5°	5.4	6.1	22.7	53.6	73.7
55°	4.4	5.4	15.6	42.8	60.4
57.5°	3.7	4.8	12.2	33.3	47.2
60°	2.7	4.1	11.5	24.4	34.6
62.5°	2.0	4.4	10.2	17.0	22.7
65°	1.7	5.1	8.5	11.2	12.2
67.5°	1.4	5.4	7.5	7.1	7.1
70°	1.4	5.1	6.4	6.1	6.4
72.5°	1.4	5.4	5.8	5.4	5.8
75°	1.4	5.1	5.1	5.1	5.1
77.5°	1.4	4.8	4.8	4.4	4.4
80°	1.4	4.1	4.1	4.1	3.7
82.5°	1.4	3.7	3.7	3.7	3.1
85°	1.4	3.4	3.4	3.4	2.7
87.5°	1.0	3.1	3.4	3.1	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)