

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: P1059217

Luminaire Tested: S123RDR-S340D930-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059217
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-S340D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

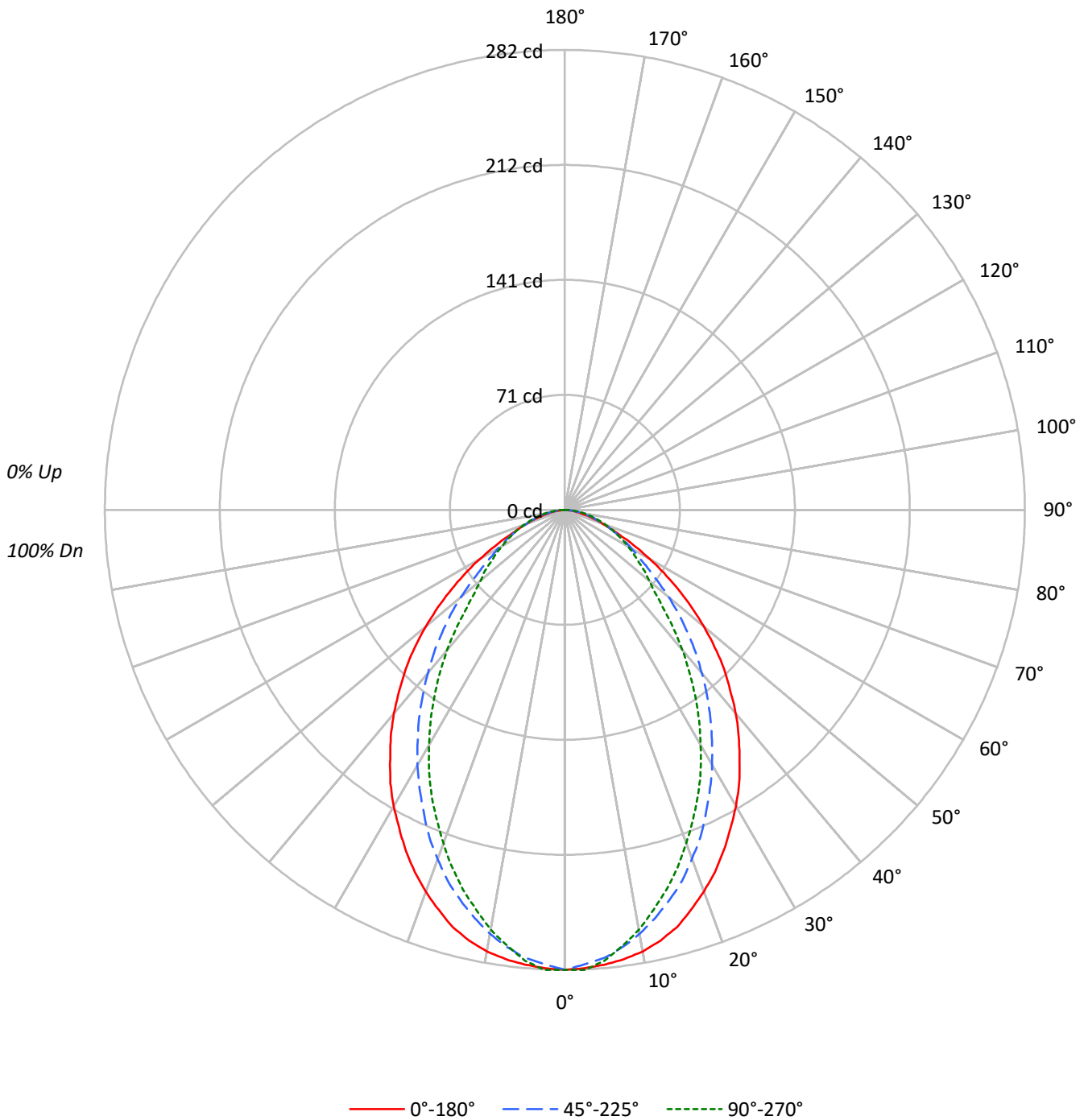
Lumens per Lamp: N/A
Luminaire Lumens: 493.2 lumens
Efficiency: N/A
Efficacy: 39.5 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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°	3311	3311	3311
5°	3299	3252	3272
10°	3278	3148	3116
15°	3222	3011	2930
20°	3113	2847	2719
25°	2986	2652	2503
30°	2845	2449	2256
35°	2676	2231	1997
40°	2499	2000	1720
45°	2290	1767	1413
50°	2031	1516	1226
55°	1728	1269	1124
60°	1409	1106	1043
65°	1072	978	970
70°	838	872	906
75°	676	785	844
80°	507	642	778
85°	269	418	687

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2290 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.2	5.3
10°-20°	70.4	14.3
20°-30°	95.7	19.4
30°-40°	99.2	20.1
40°-50°	83.7	17.0
50°-60°	59.4	12.0
60°-70°	36.3	7.4
70°-80°	18.1	3.7
80°-90°	4.1	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°	192.3	39.0
0°-40°	291.6	59.1
0°-60°	434.7	88.1
0°-90°	493.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	493.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	282	282	282	282	282	
5°	280	280	276	278	278	27
15°	265	260	248	243	241	74
25°	230	220	205	197	193	106
35°	187	172	156	145	139	117
45°	138	123	106	92	85	106
55°	84	76	62	57	55	76
65°	39	37	35	35	35	39
75°	15	16	17	18	19	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°	282.0	282.0	282.0	282.0	282.0
2.5°	281.3	281.6	278.9	282.0	282.3
5°	279.9	279.9	275.9	277.6	277.6
7.5°	277.9	277.2	270.5	270.5	269.8
10°	274.9	272.8	264.0	262.3	261.3
12.5°	270.5	267.1	256.2	253.2	251.1
15°	265.0	260.0	247.7	243.3	241.0
17.5°	257.2	252.2	238.6	232.5	229.8
20°	249.1	241.6	227.8	221.7	217.6
22.5°	240.3	230.8	217.2	209.8	205.4
25°	230.5	220.3	204.7	197.3	193.2
27.5°	220.0	208.8	192.8	184.4	180.3
30°	209.8	196.9	180.6	171.2	166.4
32.5°	198.9	184.4	167.8	157.9	153.2
35°	186.7	172.5	155.6	144.7	139.3
37.5°	175.2	160.6	143.0	131.5	125.4
40°	163.0	148.4	130.5	118.6	112.2
42.5°	150.1	136.2	118.6	104.7	98.6
45°	137.9	123.4	106.4	91.8	85.1
47.5°	124.7	111.2	94.6	79.6	74.9
50°	111.2	98.6	83.0	69.5	67.1
52.5°	97.9	87.4	71.5	62.7	61.7
55°	84.4	75.6	62.0	56.6	54.9
57.5°	71.9	65.4	53.2	50.5	49.8
60°	60.0	54.6	47.1	45.4	44.4
62.5°	48.5	45.4	41.0	40.3	39.7
65°	38.6	37.3	35.2	35.2	34.9
67.5°	30.5	30.5	30.2	30.8	30.5
70°	24.4	24.7	25.4	26.1	26.4
72.5°	19.3	20.3	21.0	22.0	22.4
75°	14.9	15.9	17.3	18.0	18.6
77.5°	10.8	11.9	13.2	14.2	14.9
80°	7.5	8.1	9.5	10.8	11.5
82.5°	4.7	5.1	6.1	7.5	8.1
85°	2.0	2.4	3.1	4.4	5.1
87.5°	0.0	0.0	0.3	1.4	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)