

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: P1059073

Luminaire Tested: S123RDR-S1000D940-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059073
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-S1000D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

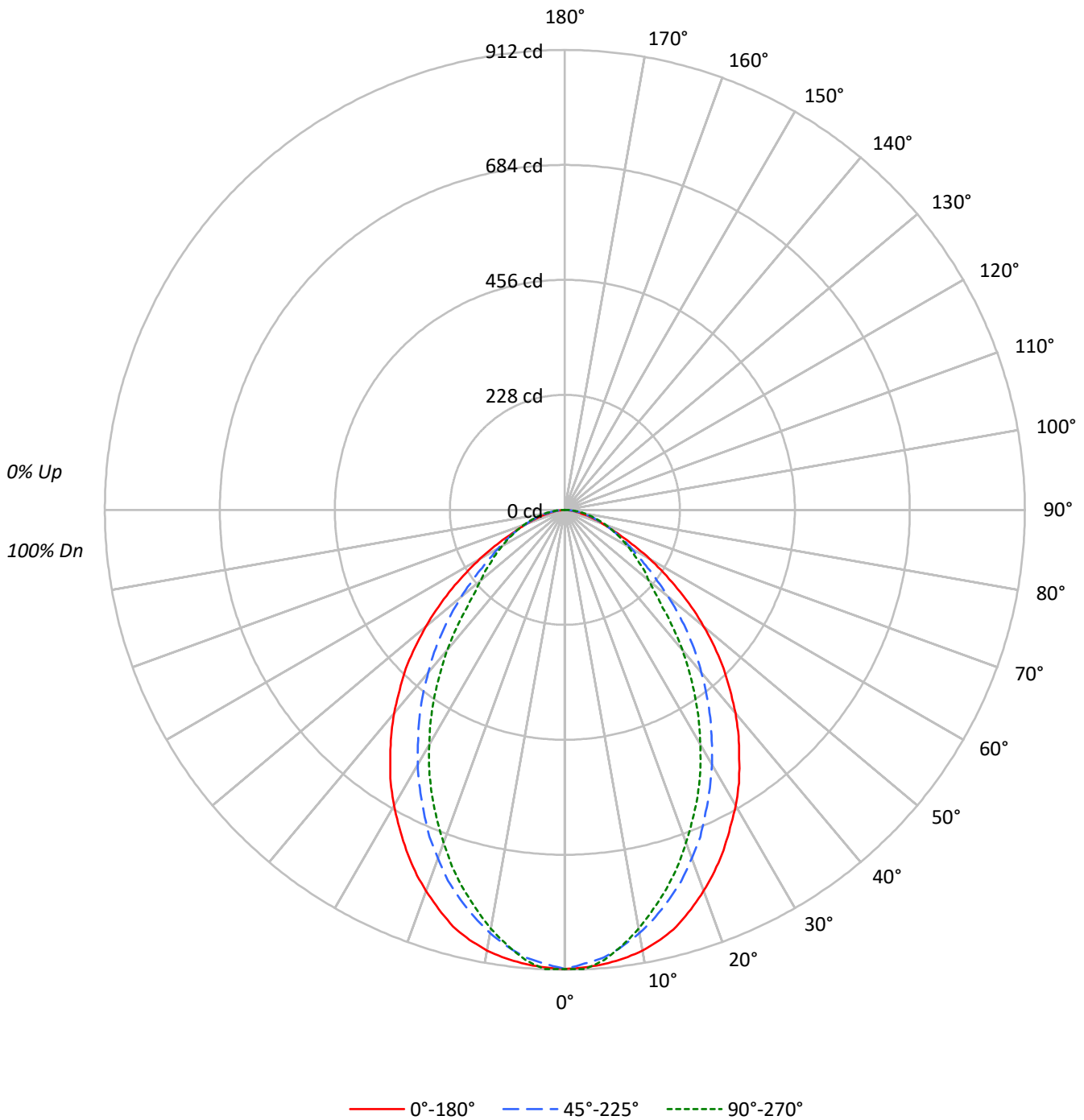
Lumens per Lamp: N/A
Luminaire Lumens: 1592.6 lumens
Efficiency: N/A
Efficacy: 45.5 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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°	10691	10691	10691
5°	10656	10500	10565
10°	10583	10165	10061
15°	10404	9725	9459
20°	10052	9190	8780
25°	9642	8564	8082
30°	9185	7909	7287
35°	8644	7200	6448
40°	8069	6458	5552
45°	7396	5706	4562
50°	6558	4898	3959
55°	5579	4101	3630
60°	4549	3572	3368
65°	3468	3162	3131
70°	2705	2819	2932
75°	2187	2532	2731
80°	1630	2069	2516
85°	889	1320	2210

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7396 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.5	5.3
10°-20°	227.4	14.3
20°-30°	309.2	19.4
30°-40°	320.5	20.1
40°-50°	270.3	17.0
50°-60°	191.9	12.0
60°-70°	117.3	7.4
70°-80°	58.3	3.7
80°-90°	13.2	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°	621.1	39.0
0°-40°	941.5	59.1
0°-60°	1403.7	88.1
0°-90°	1592.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1592.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	910	910	910	910	910	
5°	904	904	891	896	896	86
15°	856	839	800	786	778	240
25°	744	711	661	637	624	342
35°	603	557	502	467	450	377
45°	445	398	344	297	275	342
55°	272	244	200	183	177	245
65°	125	120	114	114	113	127
75°	48	51	56	58	60	52
85°	7	8	10	14	16	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	910.5	910.5	910.5	910.5	910.5
2.5°	908.4	909.5	900.7	910.5	911.6
5°	904.0	904.0	890.8	896.3	896.3
7.5°	897.4	895.2	873.3	873.3	871.2
10°	887.6	881.0	852.5	847.1	843.8
12.5°	873.3	862.4	827.4	817.5	811.0
15°	855.8	839.4	800.0	785.8	778.1
17.5°	830.7	814.2	770.5	750.8	742.0
20°	804.4	780.3	735.4	715.7	702.6
22.5°	775.9	745.3	701.5	677.4	663.2
25°	744.2	711.4	661.0	636.9	623.8
27.5°	710.3	674.2	622.7	595.4	582.2
30°	677.4	635.9	583.3	552.7	537.4
32.5°	642.4	595.4	541.7	510.0	494.7
35°	603.0	557.1	502.3	467.3	449.8
37.5°	565.8	518.8	461.8	424.6	404.9
40°	526.4	479.4	421.3	383.0	362.2
42.5°	484.8	440.0	383.0	338.2	318.5
45°	445.4	398.4	343.6	296.6	274.7
47.5°	402.7	359.0	305.3	257.2	241.9
50°	359.0	318.5	268.1	224.4	216.7
52.5°	316.3	282.4	230.9	202.5	199.2
55°	272.5	244.1	200.3	182.8	177.3
57.5°	232.0	211.2	171.8	163.1	160.9
60°	193.7	176.2	152.1	146.7	143.4
62.5°	156.5	146.7	132.4	130.2	128.0
65°	124.8	120.4	113.8	113.8	112.7
67.5°	98.5	98.5	97.4	99.6	98.5
70°	78.8	79.9	82.1	84.3	85.4
72.5°	62.4	65.7	67.9	71.1	72.2
75°	48.2	51.4	55.8	58.0	60.2
77.5°	35.0	38.3	42.7	46.0	48.2
80°	24.1	26.3	30.6	35.0	37.2
82.5°	15.3	16.4	19.7	24.1	26.3
85°	6.6	7.7	9.8	14.2	16.4
87.5°	0.0	0.0	1.1	4.4	7.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)