

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: P1059067

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059067
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1000D940-X4F0-XX-UDD-BVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

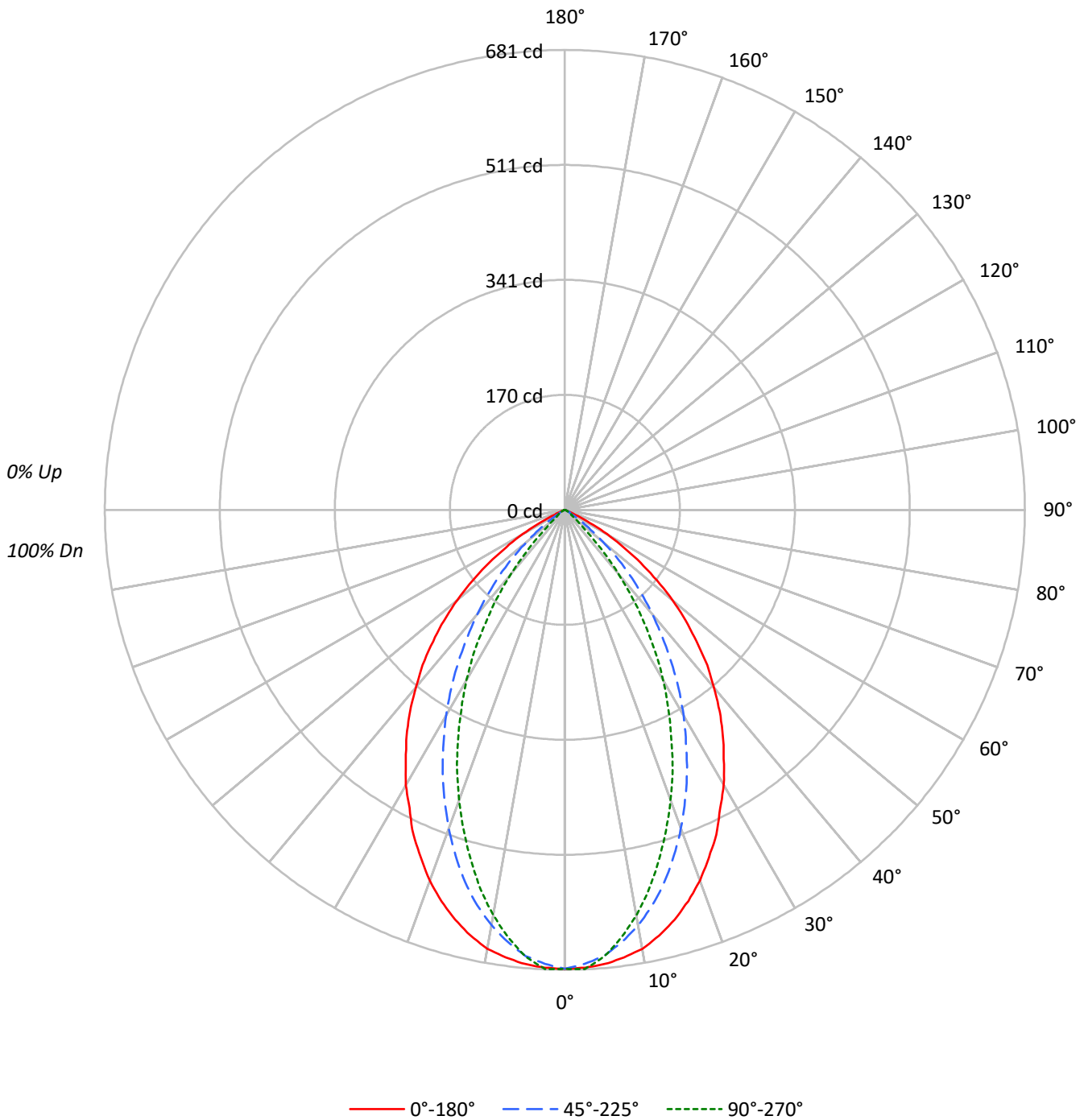
Lumens per Lamp: N/A
Luminaire Lumens: 775.5 lumens
Efficiency: N/A
Efficacy: 22.2 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7980	7980	7980
5°	7959	7817	7830
10°	7868	7451	7269
15°	7637	6932	6532
20°	7303	6277	5716
25°	6877	5544	4835
30°	6381	4763	3947
35°	5851	3938	2933
40°	5250	3087	1879
45°	4580	2253	782
50°	3798	1339	300
55°	2801	561	223
60°	1696	207	129
65°	456	122	61
70°	0	38	38
75°	0	0	50
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4580 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.6	8.1
10°-20°	161.5	20.8
20°-30°	201.2	25.9
30°-40°	179.9	23.2
40°-50°	113.6	14.6
50°-60°	47.5	6.1
60°-70°	9.0	1.2
70°-80°	0.3	0.0
80°-90°	0.0	0.0
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°	425.3	54.8
0°-40°	605.2	78.0
0°-60°	766.2	98.8
0°-90°	775.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	775.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	680	680	680	680	680	
5°	675	674	663	665	664	64
15°	628	613	570	546	537	176
25°	531	488	428	391	373	243
35°	408	349	275	225	205	254
45°	276	214	136	72	47	213
55°	137	94	27	11	11	123
65°	16	12	4	2	2	23
75°	0	0	0	0	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	679.6	679.6	679.6	679.6	679.6
2.5°	678.5	679.6	673.0	679.6	680.7
5°	675.2	674.1	663.2	665.4	664.3
7.5°	668.6	665.4	645.7	641.3	639.1
10°	659.9	651.1	624.9	613.9	609.6
12.5°	645.7	633.6	599.7	582.2	575.6
15°	628.2	612.8	570.2	546.1	537.3
17.5°	607.4	585.5	537.3	511.1	497.9
20°	584.4	553.7	502.3	470.6	457.4
22.5°	557.0	523.1	465.1	431.2	416.9
25°	530.8	488.1	427.9	390.7	373.2
27.5°	497.9	453.1	388.5	350.2	331.6
30°	470.6	419.1	351.3	308.6	291.1
32.5°	437.7	384.1	313.0	265.9	249.5
35°	408.2	349.1	274.7	225.4	204.6
37.5°	376.5	315.2	236.4	184.9	165.2
40°	342.5	281.2	201.4	144.5	122.6
42.5°	311.9	247.3	166.3	107.2	85.4
45°	275.8	214.5	135.7	72.2	47.1
47.5°	242.9	183.9	102.9	40.5	25.2
50°	207.9	152.1	73.3	20.8	16.4
52.5°	171.8	121.5	48.2	14.2	13.1
55°	136.8	94.1	27.4	10.9	10.9
57.5°	102.9	67.8	14.2	8.8	7.7
60°	72.2	44.9	8.8	6.6	5.5
62.5°	41.6	26.3	6.6	4.4	4.4
65°	16.4	12.0	4.4	2.2	2.2
67.5°	1.1	3.3	2.2	1.1	1.1
70°	0.0	0.0	1.1	1.1	1.1
72.5°	0.0	0.0	1.1	1.1	1.1
75°	0.0	0.0	0.0	0.0	1.1
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)