

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: P994972

Luminaire Tested: S123RDR-B340DB30-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P994972
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-B340DB30-4F0-XX-W2A-F
Description: Define 3 Regressed Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

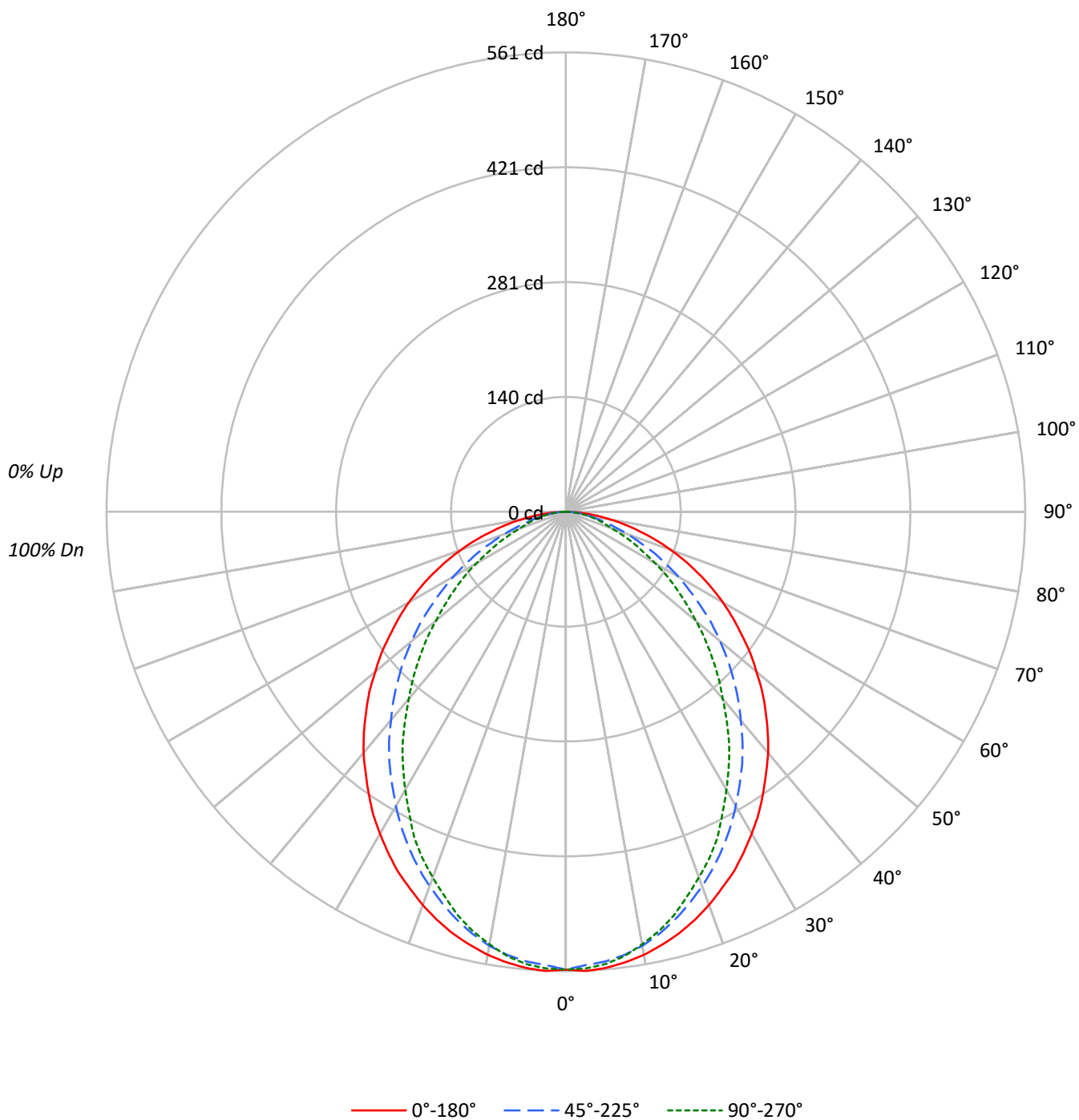
Lumens per Lamp: N/A
Luminaire Lumens: 1263.0 lumens
Efficiency: N/A
Efficacy: 97.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 13
Input Voltage (V):
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

TEST NUMBER: P994972

CATALOG NUMBER: S123RDR-B340DB30-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P994972

CATALOG NUMBER: S123RDR-B340DB30-4F0-XX-W2A-F

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86		
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73		
3	92	82	75	68	90	81	74	68	78	72	67	75	70	66	73	68	64	62		
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54		
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47		
6	73	60	51	45	71	59	51	45	57	50	45	55	49	44	54	48	44	42		
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	37		
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34		
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30		
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	34	29	28		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6018	6018	6018
5°	6041	5957	5991
10°	6006	5883	5863
15°	5942	5745	5684
20°	5853	5573	5443
25°	5761	5380	5207
30°	5642	5157	4875
35°	5518	4933	4570
40°	5403	4669	4192
45°	5252	4410	3851
50°	5087	4114	3470
55°	4919	3778	3113
60°	4764	3416	2723
65°	4562	3026	2333
70°	4308	2540	1882
75°	3943	2000	1772
80°	3515	1773	1630
85°	2964	1568	1457

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5252 cd/sqm

TEST NUMBER: P994972

CATALOG NUMBER: S123RDR-B340DB30-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.6	4.2
10°-20°	146.2	11.6
20°-30°	210.5	16.7
30°-40°	237.1	18.8
40°-50°	226.7	18.0
50°-60°	185.6	14.7
60°-70°	125.1	9.9
70°-80°	62.8	5.0
80°-90°	16.4	1.3
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°	409.2	32.4
0°-40°	646.3	51.2
0°-60°	1058.7	83.8
0°-90°	1263.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1263.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	559	559	559	559	559	
5°	559	557	551	555	554	53
15°	533	528	516	513	510	150
25°	485	474	453	443	438	223
35°	420	404	375	356	348	263
45°	345	325	290	264	253	266
55°	262	240	201	175	166	235
65°	179	154	119	97	92	177
75°	95	73	48	44	43	101
85°	24	14	13	12	12	28
90°	0	0	0	0	0	

TEST NUMBER: P994972

CATALOG NUMBER: S123RDR-B340DB30-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	559.1	559.1	559.1	559.1	559.1
2.5°	561.3	559.5	554.1	559.1	558.1
5°	559.1	556.8	551.3	555.4	554.5
7.5°	555.0	552.7	545.9	548.6	547.3
10°	549.5	546.4	538.2	538.6	536.4
12.5°	541.8	538.2	527.8	527.3	524.6
15°	533.2	528.2	515.5	513.3	510.1
17.5°	522.8	517.3	501.5	496.9	492.4
20°	511.0	503.7	486.5	480.6	475.2
22.5°	497.8	489.2	470.6	462.9	457.9
25°	485.1	473.8	453.0	443.4	438.4
27.5°	469.7	457.5	434.8	422.1	414.4
30°	453.9	440.3	414.9	399.5	392.2
32.5°	438.0	422.1	394.9	377.7	370.0
35°	419.9	403.5	375.4	355.9	347.8
37.5°	401.7	384.0	354.6	332.8	322.8
40°	384.5	364.5	332.3	308.8	298.3
42.5°	365.0	345.0	311.5	285.2	276.1
45°	345.0	324.6	289.7	263.9	253.0
47.5°	325.5	302.9	268.4	240.3	230.8
50°	303.8	282.5	245.7	217.6	207.2
52.5°	284.3	260.7	224.4	195.0	185.9
55°	262.1	239.9	201.3	175.0	165.9
57.5°	242.1	218.1	179.1	154.2	146.5
60°	221.3	196.3	158.7	134.2	126.5
62.5°	200.4	175.5	137.8	115.2	107.0
65°	179.1	154.2	118.8	96.6	91.6
67.5°	157.8	132.4	97.9	81.2	75.7
70°	136.9	112.4	80.7	64.8	59.8
72.5°	116.1	92.0	63.9	51.7	50.3
75°	94.8	73.0	48.1	43.5	42.6
77.5°	75.3	55.3	37.6	34.9	34.0
80°	56.7	38.1	28.6	27.2	26.3
82.5°	39.0	23.6	20.4	19.0	19.0
85°	24.0	14.1	12.7	11.8	11.8
87.5°	10.9	5.9	5.9	5.4	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)