

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: P994976

Luminaire Tested: S123RDR-B340DB40-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P994976
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-B340DB40-4F0-XX-W2A-F
Description: Define 3 Regressed Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

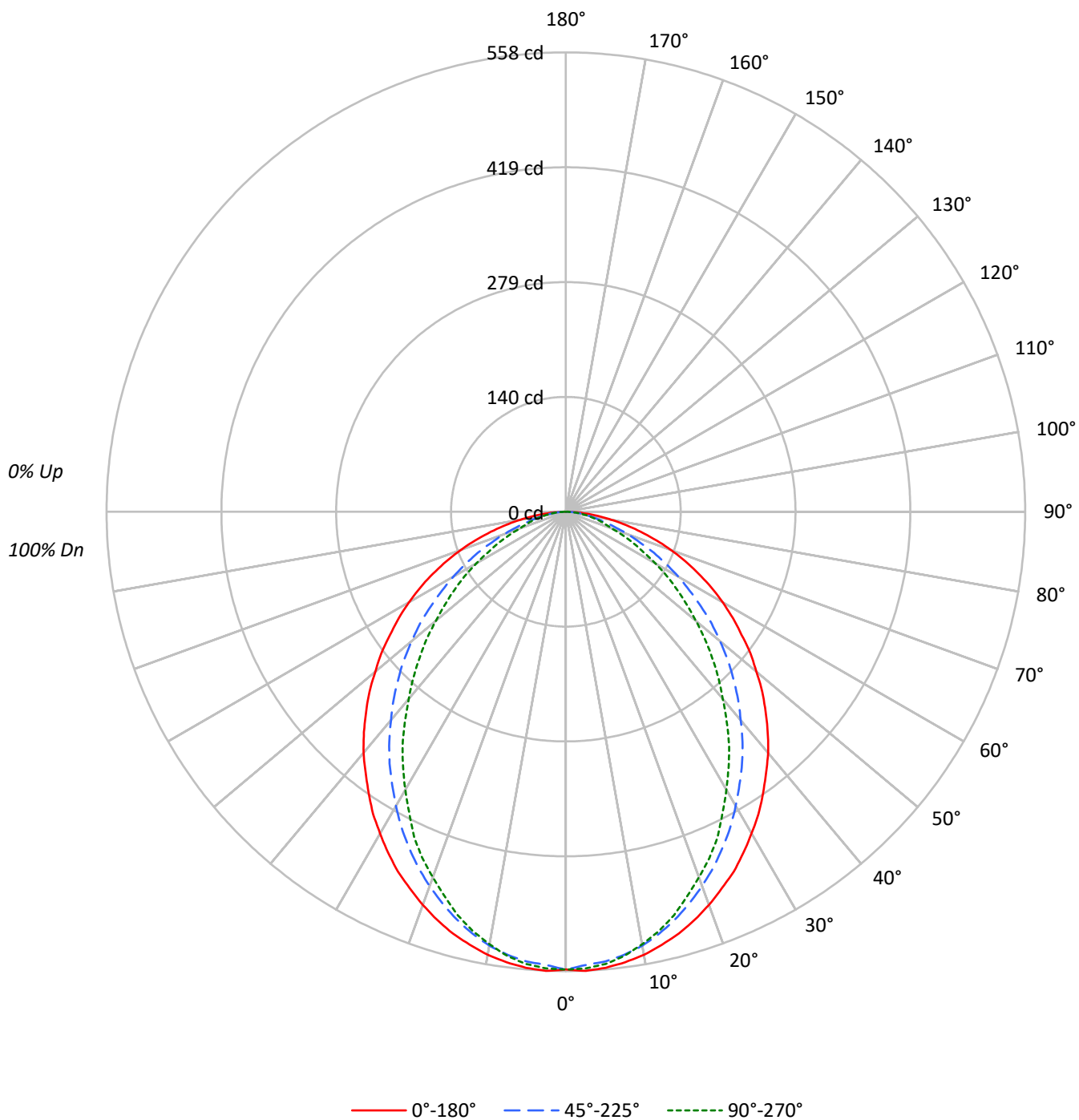
Lumens per Lamp: N/A
Luminaire Lumens: 1256.0 lumens
Efficiency: N/A
Efficacy: 96.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

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: P994976

CATALOG NUMBER: S123RDR-B340DB40-4F0-XX-W2A-F

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5985	5985	5985
5°	6008	5924	5958
10°	5973	5850	5830
15°	5909	5713	5653
20°	5821	5542	5412
25°	5730	5349	5178
30°	5609	5128	4847
35°	5486	4905	4544
40°	5373	4644	4169
45°	5223	4386	3830
50°	5059	4093	3451
55°	4891	3757	3096
60°	4736	3397	2708
65°	4536	3008	2320
70°	4286	2527	1873
75°	3918	1988	1763
80°	3496	1760	1624
85°	2952	1556	1445

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5223 cd/sqm

TEST NUMBER: P994976

CATALOG NUMBER: S123RDR-B340DB40-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.3	4.2
10°-20°	145.4	11.6
20°-30°	209.3	16.7
30°-40°	235.7	18.8
40°-50°	225.5	18.0
50°-60°	184.6	14.7
60°-70°	124.4	9.9
70°-80°	62.4	5.0
80°-90°	16.3	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°	407.0	32.4
0°-40°	642.7	51.2
0°-60°	1052.8	83.8
0°-90°	1256.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1256.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	556	556	556	556	556	
5°	556	554	548	552	551	53
15°	530	525	513	510	507	149
25°	482	471	450	441	436	222
35°	418	401	373	354	346	261
45°	343	323	288	262	252	265
55°	261	238	200	174	165	234
65°	178	153	118	96	91	176
75°	94	73	48	43	42	100
85°	24	14	13	12	12	28
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	556.0	556.0	556.0	556.0	556.0
2.5°	558.2	556.4	551.0	556.0	555.1
5°	556.0	553.7	548.3	552.3	551.4
7.5°	551.9	549.6	542.9	545.6	544.2
10°	546.5	543.3	535.2	535.7	533.4
12.5°	538.8	535.2	524.8	524.4	521.7
15°	530.3	525.3	512.7	510.4	507.3
17.5°	519.9	514.5	498.7	494.2	489.7
20°	508.2	500.9	483.8	477.9	472.5
22.5°	495.1	486.5	468.0	460.4	455.4
25°	482.5	471.2	450.4	441.0	436.0
27.5°	467.1	455.0	432.4	419.8	412.1
30°	451.3	437.8	412.6	397.2	390.0
32.5°	435.6	419.8	392.7	375.6	367.9
35°	417.5	401.3	373.3	354.0	345.8
37.5°	399.5	381.9	352.6	331.0	321.0
40°	382.4	362.5	330.5	307.1	296.7
42.5°	363.0	343.1	309.8	283.6	274.6
45°	343.1	322.8	288.1	262.4	251.6
47.5°	323.7	301.2	266.9	239.0	229.5
50°	302.1	280.9	244.4	216.4	206.1
52.5°	282.7	259.3	223.2	193.9	184.9
55°	260.6	238.5	200.2	174.0	165.0
57.5°	240.8	216.9	178.1	153.3	145.6
60°	220.0	195.2	157.8	133.5	125.8
62.5°	199.3	174.5	137.1	114.5	106.4
65°	178.1	153.3	118.1	96.0	91.1
67.5°	156.9	131.7	97.4	80.7	75.3
70°	136.2	111.8	80.3	64.5	59.5
72.5°	115.4	91.5	63.6	51.4	50.0
75°	94.2	72.6	47.8	43.3	42.4
77.5°	74.8	55.0	37.4	34.7	33.8
80°	56.4	37.9	28.4	27.1	26.2
82.5°	38.8	23.4	20.3	18.9	18.9
85°	23.9	14.0	12.6	11.7	11.7
87.5°	10.8	5.9	5.9	5.4	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)