

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: P994974

Luminaire Tested: S123RDR-B340DB35-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P994974
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-B340DB35-4F0-XX-W2A-F
Description: Define 3 Regressed Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

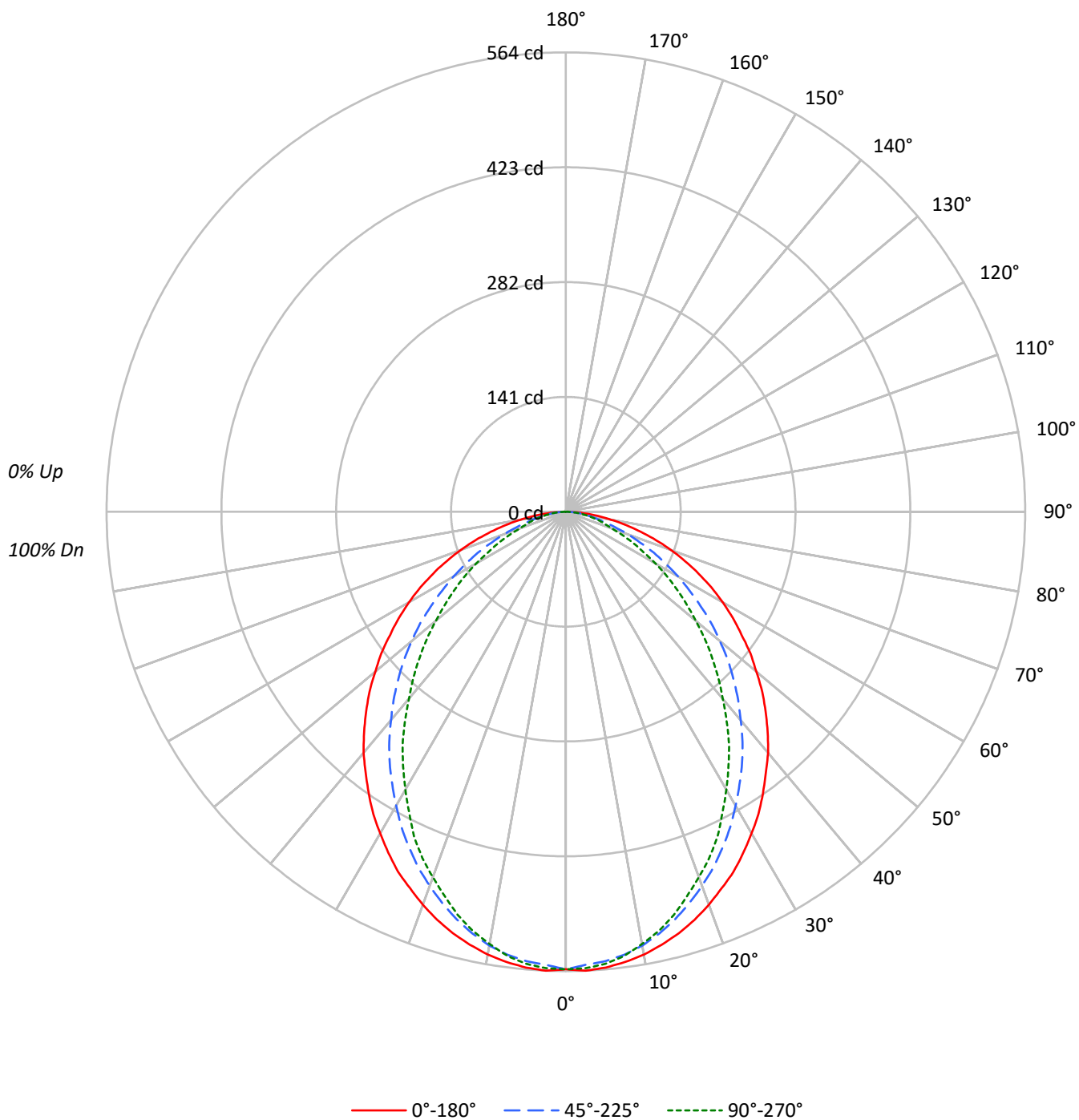
Lumens per Lamp: N/A
Luminaire Lumens: 1269.0 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

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: P994974

CATALOG NUMBER: S123RDR-B340DB35-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P994974

CATALOG NUMBER: S123RDR-B340DB35-4F0-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
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°	6046	6046	6046
5°	6069	5986	6021
10°	6034	5911	5890
15°	5970	5772	5711
20°	5881	5599	5468
25°	5790	5405	5232
30°	5668	5180	4898
35°	5544	4957	4591
40°	5428	4692	4213
45°	5278	4431	3870
50°	5111	4135	3486
55°	4941	3796	3128
60°	4786	3432	2736
65°	4582	3041	2343
70°	4330	2552	1891
75°	3959	2009	1780
80°	3527	1779	1636
85°	2976	1581	1457

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5278 cd/sqm

TEST NUMBER: P994974

CATALOG NUMBER: S123RDR-B340DB35-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.8	4.2
10°-20°	146.9	11.6
20°-30°	211.5	16.7
30°-40°	238.2	18.8
40°-50°	227.8	18.0
50°-60°	186.5	14.7
60°-70°	125.7	9.9
70°-80°	63.1	5.0
80°-90°	16.5	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°	411.2	32.4
0°-40°	649.4	51.2
0°-60°	1063.7	83.8
0°-90°	1269.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1269.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	562	562	562	562	562	
5°	562	559	554	558	557	53
15°	536	531	518	516	512	151
25°	488	476	455	446	440	224
35°	422	406	377	358	349	264
45°	347	326	291	265	254	268
55°	263	241	202	176	167	236
65°	180	155	119	97	92	178
75°	95	73	48	44	43	101
85°	24	14	13	12	12	28
90°	0	0	0	0	0	

TEST NUMBER: P994974

CATALOG NUMBER: S123RDR-B340DB35-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	561.7	561.7	561.7	561.7	561.7
2.5°	564.0	562.2	556.7	561.7	560.8
5°	561.7	559.4	554.0	558.1	557.2
7.5°	557.6	555.3	548.5	551.2	549.9
10°	552.1	549.0	540.8	541.2	538.9
12.5°	544.4	540.8	530.3	529.8	527.1
15°	535.7	530.7	518.0	515.7	512.5
17.5°	525.3	519.8	503.9	499.3	494.7
20°	513.4	506.1	488.8	482.9	477.4
22.5°	500.2	491.6	472.9	465.1	460.1
25°	487.5	476.1	455.1	445.5	440.5
27.5°	472.0	459.7	436.9	424.1	416.4
30°	456.0	442.4	416.8	401.4	394.1
32.5°	440.1	424.1	396.8	379.5	371.7
35°	421.9	405.5	377.2	357.6	349.4
37.5°	403.6	385.9	356.3	334.4	324.4
40°	386.3	366.3	333.9	310.2	299.8
42.5°	366.7	346.7	313.0	286.5	277.4
45°	346.7	326.2	291.1	265.1	254.2
47.5°	327.1	304.3	269.7	241.4	231.9
50°	305.2	283.8	246.9	218.7	208.2
52.5°	285.6	261.9	225.5	195.9	186.8
55°	263.3	241.0	202.3	175.8	166.7
57.5°	243.3	219.1	179.9	154.9	147.1
60°	222.3	197.3	159.4	134.8	127.1
62.5°	201.4	176.3	138.5	115.7	107.5
65°	179.9	154.9	119.4	97.0	92.0
67.5°	158.5	133.0	98.4	81.5	76.1
70°	137.6	113.0	81.1	65.1	60.1
72.5°	116.6	92.5	64.2	51.9	50.6
75°	95.2	73.3	48.3	43.7	42.8
77.5°	75.6	55.6	37.8	35.1	34.2
80°	56.9	38.3	28.7	27.3	26.4
82.5°	39.2	23.7	20.5	19.1	19.1
85°	24.1	14.1	12.8	11.8	11.8
87.5°	10.9	5.9	5.9	5.5	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)