

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: P994978

Luminaire Tested: S123RDR-B340DB50-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P994978
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-B340DB50-4F0-XX-W2A-F
Description: Define 3 Regressed Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

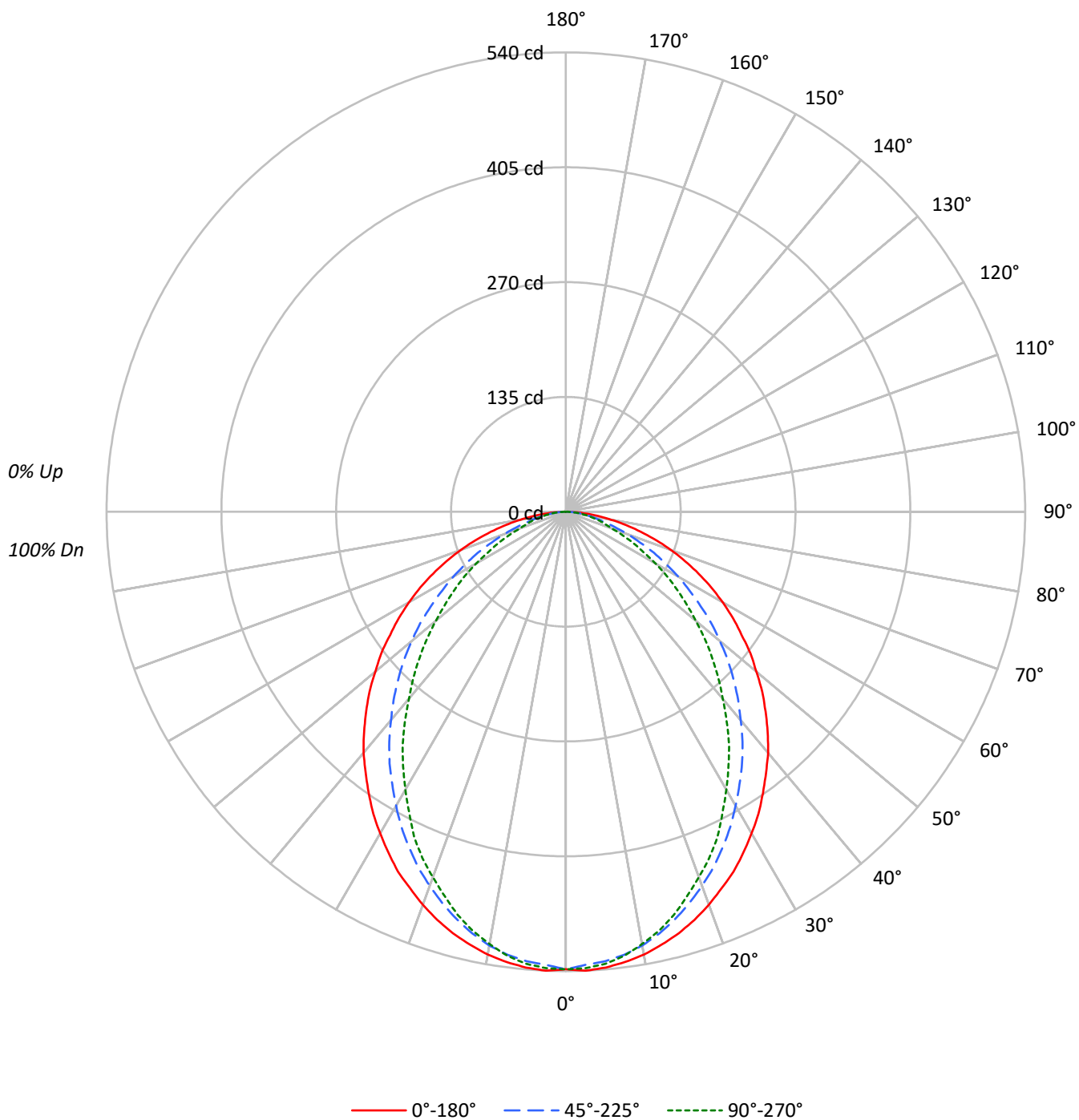
Lumens per Lamp: N/A
Luminaire Lumens: 1215.0 lumens
Efficiency: N/A
Efficacy: 93.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

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

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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
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°	5789	5789	5789
5°	5811	5731	5763
10°	5778	5658	5640
15°	5716	5526	5468
20°	5631	5361	5236
25°	5543	5175	5010
30°	5427	4960	4689
35°	5307	4746	4395
40°	5198	4492	4033
45°	5052	4243	3705
50°	4893	3959	3337
55°	4731	3635	2995
60°	4583	3287	2620
65°	4388	2911	2244
70°	4145	2442	1813
75°	3793	1921	1705
80°	3378	1705	1568
85°	2853	1507	1396

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5052 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.6	4.2
10°-20°	140.6	11.6
20°-30°	202.5	16.7
30°-40°	228.0	18.8
40°-50°	218.1	18.0
50°-60°	178.6	14.7
60°-70°	120.4	9.9
70°-80°	60.4	5.0
80°-90°	15.8	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°	393.7	32.4
0°-40°	621.7	51.2
0°-60°	1018.4	83.8
0°-90°	1215.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1215.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	538	538	538	538	538	
5°	538	536	530	534	533	51
15°	513	508	496	494	491	145
25°	467	456	436	427	422	215
35°	404	388	361	342	334	253
45°	332	312	279	254	243	256
55°	252	231	194	168	160	226
65°	172	148	114	93	88	171
75°	91	70	46	42	41	97
85°	23	14	12	11	11	27
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	537.8	537.8	537.8	537.8	537.8
2.5°	540.0	538.2	533.0	537.8	536.9
5°	537.8	535.6	530.4	534.3	533.4
7.5°	533.9	531.7	525.2	527.8	526.5
10°	528.6	525.6	517.7	518.2	516.0
12.5°	521.2	517.7	507.7	507.3	504.7
15°	512.9	508.1	495.9	493.8	490.7
17.5°	502.9	497.7	482.4	478.1	473.7
20°	491.6	484.6	468.0	462.3	457.1
22.5°	478.9	470.6	452.8	445.3	440.5
25°	466.7	455.8	435.7	426.6	421.8
27.5°	451.9	440.1	418.3	406.1	398.7
30°	436.6	423.5	399.1	384.3	377.3
32.5°	421.3	406.1	379.9	363.3	355.9
35°	403.9	388.2	361.2	342.4	334.5
37.5°	386.5	369.4	341.1	320.2	310.6
40°	369.9	350.7	319.7	297.0	287.0
42.5°	351.1	331.9	299.7	274.4	265.6
45°	331.9	312.3	278.7	253.9	243.4
47.5°	313.2	291.4	258.2	231.2	222.0
50°	292.2	271.7	236.4	209.4	199.3
52.5°	273.5	250.8	215.9	187.6	178.8
55°	252.1	230.7	193.7	168.4	159.6
57.5°	232.9	209.8	172.3	148.3	140.9
60°	212.9	188.9	152.7	129.1	121.7
62.5°	192.8	168.8	132.6	110.8	102.9
65°	172.3	148.3	114.3	92.9	88.1
67.5°	151.8	127.4	94.2	78.1	72.8
70°	131.7	108.2	77.6	62.4	57.6
72.5°	111.7	88.5	61.5	49.7	48.4
75°	91.2	70.2	46.2	41.9	41.0
77.5°	72.4	53.2	36.2	33.6	32.7
80°	54.5	36.6	27.5	26.2	25.3
82.5°	37.5	22.7	19.6	18.3	18.3
85°	23.1	13.5	12.2	11.3	11.3
87.5°	10.5	5.7	5.7	5.2	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)