

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: P1032208

Luminaire Tested: S123RDIW-B340D1320UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032208
REPORT IS A COMBINATION OF REPORTS P994238 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B340D1320UB40-4F0-XX-W2A-F
Description: Define 3 Regressed Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

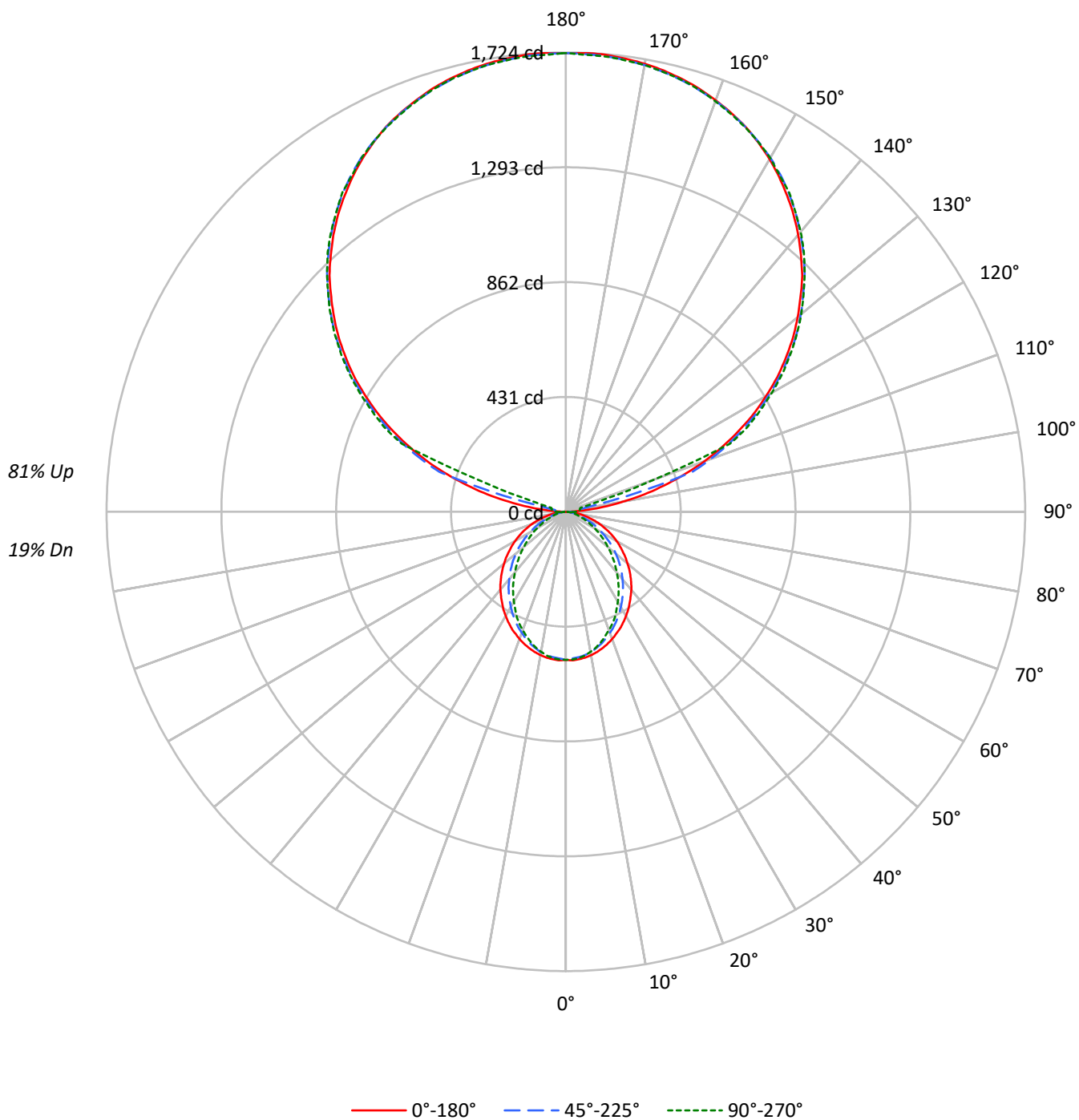
Lumens per Lamp: N/A
Luminaire Lumens: 6508.0 lumens
Efficiency: N/A
Efficacy: 118.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.1
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
RCR																	
0	100	100	100	100	88	88	88	88	66	66	66	46	46	46	28	28	28
1	91	87	83	80	80	77	74	71	58	56	54	41	40	39	25	24	24
2	83	76	70	65	73	67	63	59	51	48	45	36	34	32	22	21	20
3	76	67	60	55	67	59	54	49	45	41	38	32	29	27	20	18	17
4	69	59	52	46	61	52	46	41	40	36	32	28	26	24	18	16	15
5	63	52	45	39	56	47	40	35	36	31	28	25	23	20	16	14	13
6	58	47	39	34	51	42	35	31	32	27	24	23	20	18	14	13	11
7	54	42	35	29	47	38	31	27	29	24	21	21	18	16	13	11	10
8	50	38	31	26	44	34	28	23	26	22	19	19	16	14	12	10	9
9	46	35	28	23	41	31	25	21	24	20	16	17	14	12	11	9	8
10	43	32	25	20	38	28	22	18	22	18	15	16	13	11	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5985	5985	5985
5°	5994	5773	5756
10°	5947	5555	5446
15°	5870	5288	5106
20°	5769	4995	4725
25°	5664	4692	4364
30°	5529	4370	3938
35°	5392	4053	3550
40°	5263	3709	3121
45°	5095	3372	2736
50°	4913	3013	2337
55°	4722	2629	1971
60°	4540	2234	1600
65°	4305	1829	1249
70°	4011	1384	892
75°	3583	937	707
80°	3062	651	497
85°	2296	351	259

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5095 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.3	0.8
10°-20°	145.4	2.2
20°-30°	209.3	3.2
30°-40°	235.7	3.6
40°-50°	225.5	3.5
50°-60°	184.6	2.8
60°-70°	124.4	1.9
70°-80°	62.4	1.0
80°-90°	19.8	0.3
90°-100°	60.7	0.9
100°-110°	293.5	4.5
110°-120°	719.3	11.1
120°-130°	913.1	14.0
130°-140°	975.5	15.0
140°-150°	912.2	14.0
150°-160°	735.8	11.3
160°-170°	474.8	7.3
170°-180°	163.6	2.5
0°-30°	407.0	6.3
0°-40°	642.7	9.9
0°-60°	1052.8	16.2
0°-90°	1259.4	19.4
90°-120°	1073.6	16.5
90°-150°	3874.4	59.5
90°-180°	5249.0	80.7
0°-180°	6508.0	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	26
90°	1	14	31	36	38	6
95°	78	26	40	49	49	93
105°	381	395	280	54	56	404
115°	715	723	734	747	752	706
125°	1008	1018	1023	1026	1028	901
135°	1255	1262	1268	1271	1268	966
145°	1448	1457	1459	1462	1462	906
155°	1595	1592	1594	1600	1592	735
165°	1682	1678	1677	1687	1678	475
175°	1722	1715	1716	1726	1715	164
180°	1722	1722	1722	1722	1722	

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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°	1.3	14.1	30.7	35.8	38.4
92.5°	29.4	21.7	33.3	42.2	43.5
95°	78.0	25.6	39.7	48.6	48.6
97.5°	142.0	106.2	40.9	51.2	52.4
100°	216.2	241.7	42.2	52.4	53.7
102.5°	300.6	317.2	94.7	52.4	55.0
105°	381.2	395.2	280.1	53.7	56.3
107.5°	466.9	478.4	497.6	300.6	133.0
110°	552.6	562.8	576.9	534.7	351.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	634.4	643.4	657.4	669.0	666.4
115°	715.0	722.7	734.2	747.0	752.1
117.5°	794.3	803.3	809.7	819.9	821.2
120°	867.2	878.7	882.6	892.8	892.8
122.5°	941.4	950.4	955.5	961.9	963.1
125°	1007.9	1018.1	1023.3	1025.8	1028.4
127.5°	1074.4	1084.7	1091.1	1094.9	1092.3
130°	1135.8	1146.1	1151.2	1156.3	1153.7
132.5°	1194.7	1204.9	1208.7	1213.8	1210.0
135°	1254.8	1262.4	1267.6	1271.4	1267.6
137.5°	1305.9	1316.2	1318.7	1325.1	1322.6
140°	1357.1	1364.8	1368.6	1373.7	1371.2
142.5°	1404.4	1412.1	1415.9	1419.8	1415.9
145°	1447.9	1456.9	1459.4	1462.0	1462.0
147.5°	1490.1	1496.5	1499.1	1501.6	1495.2
150°	1528.5	1532.3	1534.9	1537.5	1533.6
152.5°	1563.0	1564.3	1565.6	1570.7	1564.3
155°	1595.0	1592.5	1593.7	1600.1	1592.5
157.5°	1620.6	1620.6	1619.3	1627.0	1616.8
160°	1643.6	1642.3	1641.1	1648.7	1639.8
162.5°	1665.4	1661.5	1660.2	1669.2	1661.5
165°	1682.0	1678.2	1676.9	1687.1	1678.2
167.5°	1696.1	1690.9	1690.9	1701.2	1690.9
170°	1707.6	1702.5	1702.5	1712.7	1702.5
172.5°	1715.2	1708.8	1710.1	1720.4	1708.8
175°	1721.6	1715.2	1716.5	1725.5	1715.2
177.5°	1724.2	1717.8	1719.1	1729.3	1716.5
180°	1721.6	1721.6	1721.6	1721.6	1721.6

(END OF REPORT)