

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: P1031131

Luminaire Tested: S123RDIW-B340D1320UB2750-4F0-XX-W2A-F_3000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031131
REPORT IS A COMBINATION OF REPORTS P994219 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B340D1320UB2750-4F0-XX-W2A-F_3000K
Description: Define 3 Regressed Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589}
{m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

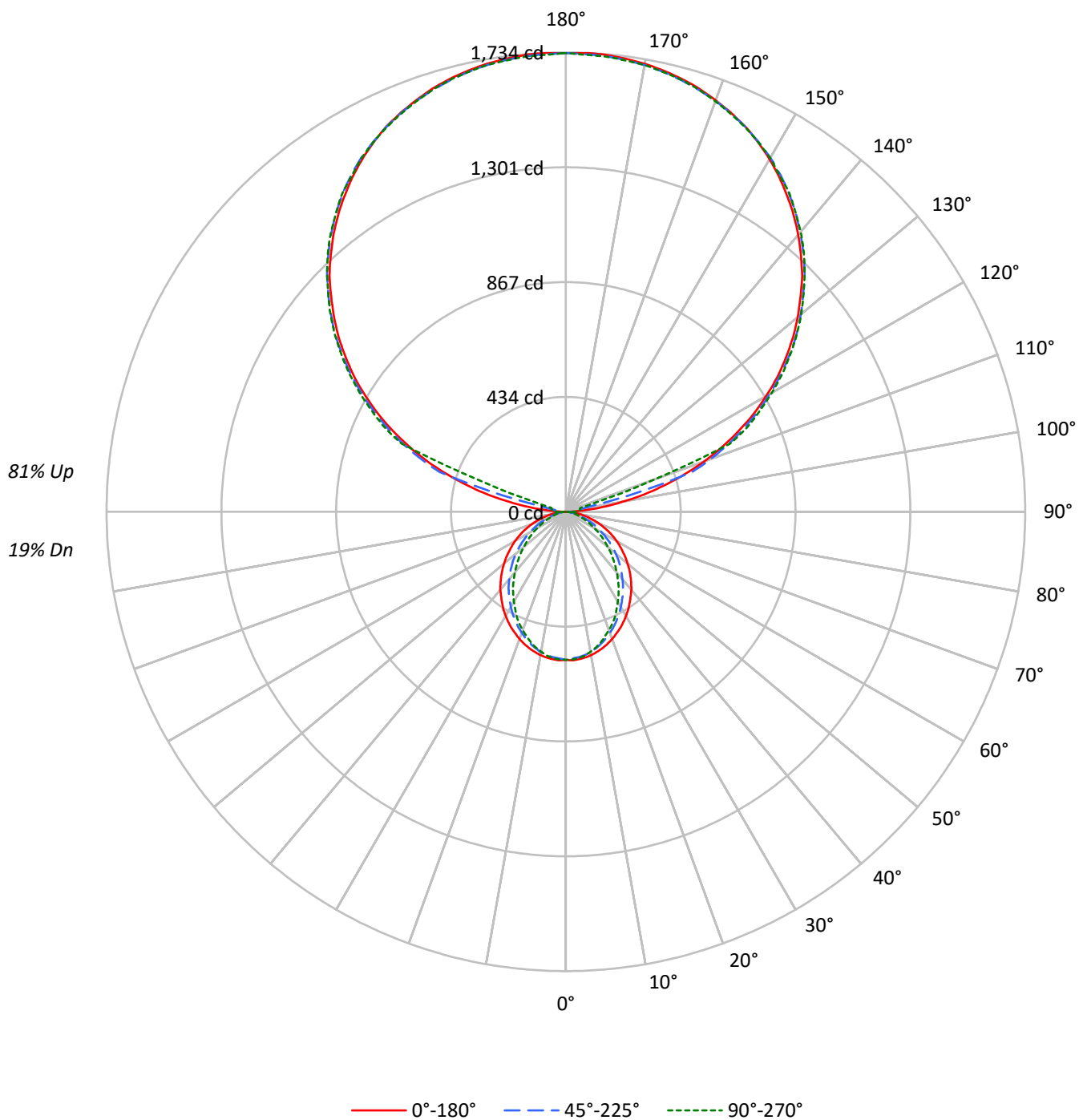
Lumens per Lamp: N/A
Luminaire Lumens: 6545.0 lumens
Efficiency: N/A
Efficacy: 118.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

TEST NUMBER: P1031131

CATALOG NUMBER: S123RDIW-B340D1320UB2750-4F0-XX-W2A-F_3000K

Luminous Intensity Polar Plot



TEST NUMBER: P1031131

CATALOG NUMBER: S123RDIW-B340D1320UB2750-4F0-XX-W2A-F_3000K

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°	6018	6018	6018
5°	6028	5804	5789
10°	5980	5586	5477
15°	5902	5316	5134
20°	5801	5023	4752
25°	5695	4719	4388
30°	5561	4394	3960
35°	5423	4075	3570
40°	5292	3729	3138
45°	5124	3391	2751
50°	4940	3029	2350
55°	4749	2643	1981
60°	4566	2247	1609
65°	4329	1840	1256
70°	4032	1391	897
75°	3606	943	711
80°	3078	656	499
85°	2305	354	262

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5124 cd/sqm

TEST NUMBER: P1031131

CATALOG NUMBER: S123RDIW-B340D1320UB2750-4F0-XX-W2A-F_3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.6	0.8
10°-20°	146.2	2.2
20°-30°	210.5	3.2
30°-40°	237.1	3.6
40°-50°	226.7	3.5
50°-60°	185.6	2.8
60°-70°	125.1	1.9
70°-80°	62.8	1.0
80°-90°	19.9	0.3
90°-100°	61.1	0.9
100°-110°	295.2	4.5
110°-120°	723.4	11.1
120°-130°	918.4	14.0
130°-140°	981.1	15.0
140°-150°	917.4	14.0
150°-160°	740.0	11.3
160°-170°	477.5	7.3
170°-180°	164.6	2.5
0°-30°	409.2	6.3
0°-40°	646.3	9.9
0°-60°	1058.7	16.2
0°-90°	1266.4	19.3
90°-120°	1079.7	16.5
90°-150°	3896.5	59.5
90°-180°	5279.0	80.7
0°-180°	6545.0	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	26
90°	1	14	31	36	39	6
95°	78	26	40	49	49	94
105°	383	398	282	54	57	406
115°	719	727	738	751	756	710
125°	1014	1024	1029	1032	1034	906
135°	1262	1270	1275	1279	1275	972
145°	1456	1465	1468	1470	1470	912
155°	1604	1602	1603	1609	1602	739
165°	1692	1688	1686	1697	1688	478
175°	1732	1725	1726	1735	1725	165
180°	1732	1732	1732	1732	1732	

TEST NUMBER: P1031131

CATALOG NUMBER: S123RDIW-B340D1320UB2750-4F0-XX-W2A-F_3000K

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°	1.3	14.2	30.9	36.0	38.6
92.5°	29.6	21.9	33.4	42.5	43.7
95°	78.5	25.7	39.9	48.9	48.9
97.5°	142.8	106.8	41.2	51.5	52.7
100°	217.4	243.1	42.5	52.7	54.0
102.5°	302.3	319.0	95.2	52.7	55.3
105°	383.3	397.5	281.7	54.0	56.6
107.5°	469.5	481.1	500.4	302.3	133.8
110°	555.7	566.0	580.2	537.7	353.8

TEST NUMBER: P1031131

CATALOG NUMBER: S123RDIW-B340D1320UB2750-4F0-XX-W2A-F_3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	638.0	647.1	661.2	672.8	670.2
115°	719.1	726.8	738.4	751.2	756.4
117.5°	798.8	807.8	814.3	824.6	825.9
120°	872.2	883.7	887.6	897.9	897.9
122.5°	946.8	955.8	960.9	967.4	968.6
125°	1013.7	1024.0	1029.1	1031.7	1034.3
127.5°	1080.6	1090.9	1097.3	1101.1	1098.6
130°	1142.3	1152.6	1157.7	1162.9	1160.3
132.5°	1201.5	1211.8	1215.6	1220.8	1216.9
135°	1261.9	1269.7	1274.8	1278.7	1274.8
137.5°	1313.4	1323.7	1326.3	1332.7	1330.1
140°	1364.9	1372.6	1376.4	1381.6	1379.0
142.5°	1412.4	1420.2	1424.0	1427.9	1424.0
145°	1456.2	1465.2	1467.8	1470.3	1470.3
147.5°	1498.6	1505.1	1507.6	1510.2	1503.8
150°	1537.2	1541.1	1543.7	1546.2	1542.4
152.5°	1572.0	1573.2	1574.5	1579.7	1573.2
155°	1604.1	1601.5	1602.8	1609.3	1601.5
157.5°	1629.8	1629.8	1628.6	1636.3	1626.0
160°	1653.0	1651.7	1650.4	1658.1	1649.1
162.5°	1674.9	1671.0	1669.7	1678.7	1671.0
165°	1691.6	1687.7	1686.4	1696.7	1687.7
167.5°	1705.7	1700.6	1700.6	1710.9	1700.6
170°	1717.3	1712.2	1712.2	1722.5	1712.2
172.5°	1725.0	1718.6	1719.9	1730.2	1718.6
175°	1731.5	1725.0	1726.3	1735.3	1725.0
177.5°	1734.0	1727.6	1728.9	1739.2	1726.3
180°	1731.5	1731.5	1731.5	1731.5	1731.5

(END OF REPORT)