

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: P1031595

Luminaire Tested: S123DIW-B340D1320UB35-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031595
REPORT IS A COMBINATION OF REPORTS P991290 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D1320UB35-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

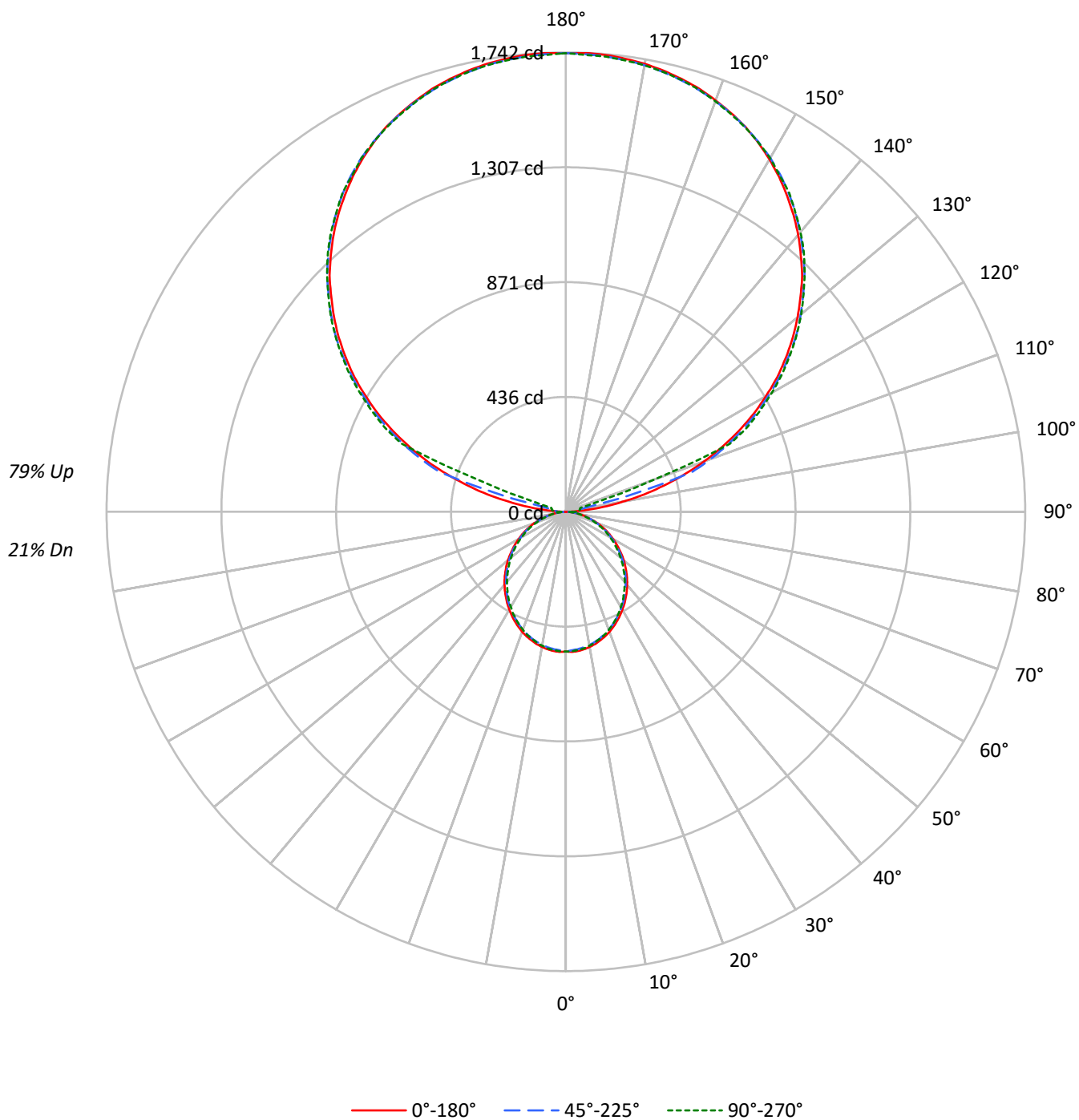
Lumens per Lamp: N/A
Luminaire Lumens: 6684.0 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	89	89	89	89	67	67	67	47	47	47	29	29	29
1	91	87	83	80	81	77	74	71	59	57	55	41	40	39	26	25	25
2	83	76	70	65	73	67	62	58	51	48	45	36	34	33	23	22	21
3	76	67	60	54	67	59	53	49	45	41	38	32	30	28	20	19	17
4	69	59	51	46	61	52	46	41	40	36	32	28	26	23	18	16	15
5	63	52	44	39	56	46	40	35	36	31	27	25	22	20	16	14	13
6	58	47	39	33	51	42	35	30	32	27	24	23	20	18	14	13	11
7	54	42	34	29	47	37	31	26	29	24	21	21	18	15	13	11	10
8	50	38	30	25	44	34	27	23	26	22	18	19	16	14	12	10	9
9	46	34	27	22	41	31	25	20	24	19	16	17	14	12	11	9	8
10	43	31	24	20	38	28	22	18	22	17	14	16	13	11	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5704	5704	5704
5°	5717	5506	5499
10°	5667	5321	5265
15°	5588	5127	5012
20°	5497	4911	4761
25°	5380	4684	4492
30°	5253	4449	4210
35°	5119	4209	3928
40°	4978	3957	3653
45°	4824	3712	3364
50°	4667	3438	3074
55°	4466	3153	2780
60°	4259	2839	2468
65°	4064	2498	2143
70°	3784	2120	1762
75°	3378	1680	1368
80°	2921	1180	967
85°	2276	635	485

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4824 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.0	0.7
10°-20°	141.0	2.1
20°-30°	208.3	3.1
30°-40°	243.3	3.6
40°-50°	244.6	3.7
50°-60°	214.8	3.2
60°-70°	160.0	2.4
70°-80°	91.1	1.4
80°-90°	29.4	0.4
90°-100°	61.3	0.9
100°-110°	296.5	4.4
110°-120°	726.6	10.9
120°-130°	922.4	13.8
130°-140°	985.3	14.7
140°-150°	921.4	13.8
150°-160°	743.2	11.1
160°-170°	479.6	7.2
170°-180°	165.3	2.5
0°-30°	399.3	6.0
0°-40°	642.6	9.6
0°-60°	1102.0	16.5
0°-90°	1382.5	20.7
90°-120°	1084.4	16.2
90°-150°	3913.5	58.5
90°-180°	5302.0	79.3
0°-180°	6684.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	530	530	530	530	530	
5°	530	528	523	528	527	50
15°	505	503	497	501	498	142
25°	458	456	450	450	449	211
35°	396	394	388	385	383	248
45°	325	323	317	312	309	251
55°	246	246	240	235	233	221
65°	168	166	161	158	156	166
75°	89	87	86	83	82	95
85°	24	23	23	22	22	25
90°	1	14	31	36	39	6
95°	79	26	40	49	49	94
105°	385	399	283	54	57	408
115°	722	730	742	754	760	713
125°	1018	1028	1034	1036	1039	910
135°	1267	1275	1280	1284	1280	976
145°	1462	1472	1474	1477	1477	916
155°	1611	1608	1610	1616	1608	742
165°	1699	1695	1694	1704	1695	480
175°	1739	1733	1734	1743	1733	166
180°	1739	1739	1739	1739	1739	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	529.9	529.9	529.9	529.9	529.9
2.5°	532.1	530.3	525.3	529.9	529.4
5°	530.3	528.0	523.0	527.6	526.7
7.5°	526.2	523.9	518.9	523.0	522.6
10°	520.8	518.5	512.6	516.7	515.7
12.5°	513.5	511.6	506.2	508.9	508.5
15°	504.8	503.0	497.1	500.7	498.0
17.5°	495.2	493.0	487.0	489.8	488.9
20°	484.3	481.6	475.6	477.5	476.1
22.5°	472.0	469.3	463.3	464.7	462.9
25°	458.3	455.6	449.7	450.1	448.8
27.5°	444.2	441.5	435.1	435.6	434.2
30°	428.7	426.4	420.1	420.1	416.9
32.5°	413.2	410.0	405.5	402.3	400.9
35°	396.4	393.6	387.7	385.0	382.7
37.5°	379.5	375.9	369.9	366.8	365.4
40°	361.7	359.0	352.6	349.0	347.2
42.5°	344.0	340.8	334.4	330.8	328.9
45°	324.8	323.0	317.1	311.6	309.4
47.5°	306.2	303.4	298.0	292.5	290.7
50°	287.0	284.8	278.8	273.8	271.1
52.5°	267.0	265.6	259.2	255.1	252.4
55°	246.5	246.0	240.1	235.1	232.8
57.5°	227.3	225.5	221.0	216.4	213.7
60°	206.4	205.9	200.5	196.4	194.1
62.5°	187.7	186.3	180.9	176.8	175.4
65°	168.1	165.8	161.3	157.6	156.3
67.5°	147.2	145.3	141.7	138.5	136.7
70°	128.5	125.7	123.0	119.8	117.5
72.5°	108.9	107.1	103.9	101.1	100.2
75°	88.8	87.0	85.7	83.4	82.0
77.5°	71.1	70.2	68.3	66.5	66.5
80°	53.8	52.4	51.5	51.0	51.0
82.5°	36.9	36.9	36.9	36.0	35.5
85°	23.7	22.8	22.8	21.9	21.9
87.5°	11.8	10.5	10.0	9.6	9.6
90°	1.3	14.2	31.0	36.2	38.8
92.5°	29.7	22.0	33.6	42.6	43.9
95°	78.8	25.8	40.1	49.1	49.1
97.5°	143.4	107.2	41.3	51.7	53.0
100°	218.3	244.2	42.6	53.0	54.3
102.5°	303.6	320.4	95.6	53.0	55.6
105°	385.0	399.2	282.9	54.3	56.8
107.5°	471.6	483.2	502.6	303.6	134.4
110°	558.1	568.5	582.7	540.0	355.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	640.8	649.9	664.1	675.7	673.1
115°	722.2	730.0	741.6	754.5	759.7
117.5°	802.3	811.4	817.8	828.2	829.5
120°	876.0	887.6	891.5	901.8	901.8
122.5°	950.9	959.9	965.1	971.6	972.9
125°	1018.1	1028.4	1033.6	1036.2	1038.8
127.5°	1085.3	1095.6	1102.1	1105.9	1103.4
130°	1147.3	1157.6	1162.8	1168.0	1165.4
132.5°	1206.7	1217.1	1220.9	1226.1	1222.2
135°	1267.4	1275.2	1280.4	1284.2	1280.4
137.5°	1319.1	1329.5	1332.0	1338.5	1335.9
140°	1370.8	1378.5	1382.4	1387.6	1385.0
142.5°	1418.6	1426.4	1430.2	1434.1	1430.2
145°	1462.5	1471.6	1474.2	1476.7	1476.7
147.5°	1505.2	1511.6	1514.2	1516.8	1510.3
150°	1543.9	1547.8	1550.4	1553.0	1549.1
152.5°	1578.8	1580.1	1581.4	1586.6	1580.1
155°	1611.1	1608.5	1609.8	1616.3	1608.5
157.5°	1636.9	1636.9	1635.7	1643.4	1633.1
160°	1660.2	1658.9	1657.6	1665.4	1656.3
162.5°	1682.2	1678.3	1677.0	1686.0	1678.3
165°	1699.0	1695.1	1693.8	1704.1	1695.1
167.5°	1713.2	1708.0	1708.0	1718.3	1708.0
170°	1724.8	1719.6	1719.6	1730.0	1719.6
172.5°	1732.6	1726.1	1727.4	1737.7	1726.1
175°	1739.0	1732.6	1733.8	1742.9	1732.6
177.5°	1741.6	1735.1	1736.4	1746.8	1733.8
180°	1739.0	1739.0	1739.0	1739.0	1739.0

(END OF REPORT)