

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: P1031590

Luminaire Tested: S123DIW-B340D1320UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031590
REPORT IS A COMBINATION OF REPORTS P991282 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D1320UB30-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

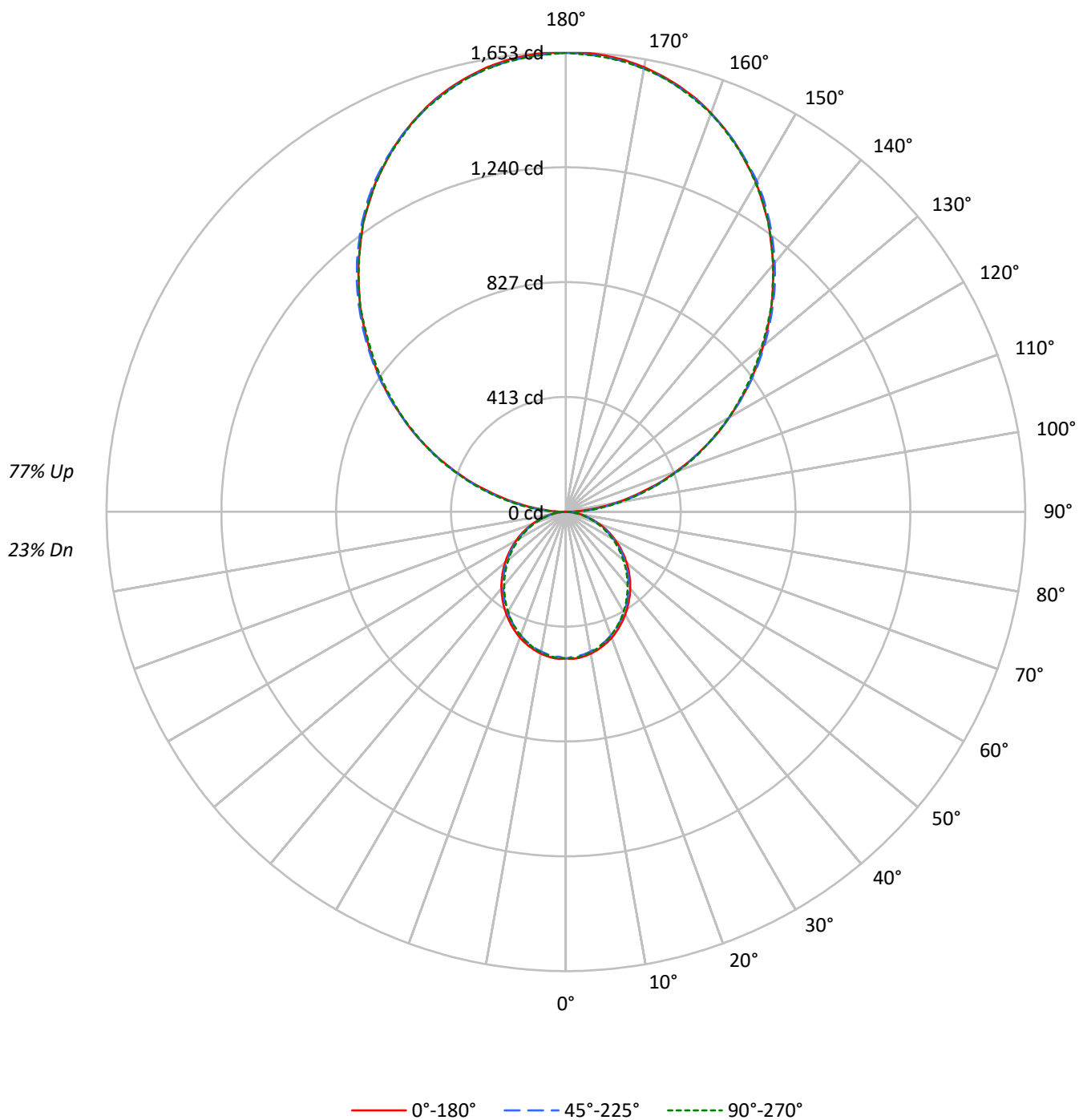
Lumens per Lamp: N/A
Luminaire Lumens: 5953.0 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	50	30	10
RCR																				
0	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31			23
1	92	88	84	80	81	78	75	72	60	58	56	43	42	41	28	27	26			19
2	83	76	71	66	74	68	63	59	52	49	46	38	36	34	24	23	22			16
3	76	67	60	54	67	60	54	49	46	42	39	33	31	29	22	20	19			14
4	69	59	52	46	61	53	46	41	41	36	33	30	27	24	19	18	16			12
5	64	53	45	39	56	47	40	35	36	32	28	26	23	21	17	15	14			10
6	58	47	39	34	52	42	35	31	33	28	24	24	21	18	16	14	12			9
7	54	42	35	29	48	38	31	27	29	25	21	22	18	16	14	12	11			8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	14	13	11	10			7
9	46	35	27	23	41	31	25	21	24	20	17	18	15	13	12	10	9			6
10	43	32	25	20	38	28	22	18	22	18	15	17	13	11	11	9	8			6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5679	5679	5679
5°	5693	5483	5475
10°	5642	5297	5243
15°	5564	5104	4990
20°	5474	4890	4740
25°	5357	4664	4472
30°	5230	4429	4191
35°	5096	4190	3911
40°	4957	3940	3637
45°	4803	3695	3349
50°	4647	3423	3061
55°	4446	3140	2769
60°	4240	2826	2457
65°	4047	2487	2133
70°	3767	2112	1754
75°	3366	1672	1363
80°	2904	1176	963
85°	2267	632	483

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4803 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.7	0.8
10°-20°	140.4	2.4
20°-30°	207.4	3.5
30°-40°	242.2	4.1
40°-50°	243.5	4.1
50°-60°	213.9	3.6
60°-70°	159.3	2.7
70°-80°	90.7	1.5
80°-90°	29.3	0.5
90°-100°	106.3	1.8
100°-110°	321.8	5.4
110°-120°	547.8	9.2
120°-130°	720.7	12.1
130°-140°	810.1	13.6
140°-150°	796.4	13.4
150°-160°	670.5	11.3
160°-170°	446.4	7.5
170°-180°	156.3	2.6
0°-30°	397.6	6.7
0°-40°	639.8	10.7
0°-60°	1097.2	18.4
0°-90°	1376.5	23.1
90°-120°	976.0	16.4
90°-150°	3303.2	55.5
90°-180°	4576.0	76.9
0°-180°	5953.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	528	528	528	528	528	
5°	528	526	521	525	524	50
15°	503	501	495	498	496	142
25°	456	454	448	448	447	210
35°	395	392	386	383	381	247
45°	323	322	316	310	308	250
55°	245	245	239	234	232	220
65°	167	165	161	157	156	165
75°	88	87	85	83	82	94
85°	24	23	23	22	22	25
90°	1	14	31	36	39	7
95°	77	86	96	101	101	84
105°	292	294	306	306	309	313
115°	551	555	553	554	553	546
125°	807	811	808	803	798	720
135°	1047	1055	1054	1048	1046	807
145°	1270	1273	1277	1275	1270	793
155°	1454	1454	1456	1461	1452	670
165°	1584	1580	1580	1588	1579	447
175°	1648	1643	1643	1650	1641	157
180°	1652	1652	1652	1652	1652	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	527.6	527.6	527.6	527.6	527.6
2.5°	529.8	528.0	523.0	527.6	527.1
5°	528.0	525.7	520.8	525.3	524.4
7.5°	523.9	521.7	516.7	520.8	520.3
10°	518.5	516.2	510.3	514.4	513.5
12.5°	511.2	509.4	504.0	506.7	506.2
15°	502.6	500.8	494.9	498.5	495.8
17.5°	493.1	490.8	484.9	487.6	486.7
20°	482.2	479.5	473.6	475.4	474.0
22.5°	469.9	467.2	461.3	462.7	460.9
25°	456.3	453.6	447.7	448.2	446.8
27.5°	442.3	439.6	433.2	433.7	432.3
30°	426.9	424.6	418.2	418.2	415.1
32.5°	411.4	408.3	403.7	400.5	399.2
35°	394.6	391.9	386.0	383.3	381.0
37.5°	377.9	374.2	368.3	365.2	363.8
40°	360.2	357.5	351.1	347.5	345.7
42.5°	342.5	339.3	333.0	329.3	327.5
45°	323.4	321.6	315.7	310.3	308.0
47.5°	304.8	302.1	296.7	291.2	289.4
50°	285.8	283.5	277.6	272.6	269.9
52.5°	265.8	264.5	258.1	254.0	251.3
55°	245.4	245.0	239.1	234.1	231.8
57.5°	226.4	224.5	220.0	215.5	212.7
60°	205.5	205.0	199.6	195.5	193.2
62.5°	186.9	185.5	180.1	176.0	174.6
65°	167.4	165.1	160.6	157.0	155.6
67.5°	146.5	144.7	141.1	137.9	136.1
70°	127.9	125.2	122.5	119.3	117.0
72.5°	108.4	106.6	103.4	100.7	99.8
75°	88.5	86.6	85.3	83.0	81.7
77.5°	70.8	69.9	68.0	66.2	66.2
80°	53.5	52.2	51.3	50.8	50.8
82.5°	36.7	36.7	36.7	35.8	35.4
85°	23.6	22.7	22.7	21.8	21.8
87.5°	11.8	10.4	10.0	9.5	9.5
90°	1.3	14.3	31.1	36.3	38.9
92.5°	38.9	46.7	54.5	58.4	55.8
95°	76.6	85.6	96.0	101.2	101.2
97.5°	125.9	132.3	140.1	146.6	145.3
100°	176.5	184.2	190.7	194.6	197.2
102.5°	234.8	238.7	247.8	251.7	250.4
105°	291.9	294.5	306.2	306.2	308.8
107.5°	359.4	360.7	365.9	369.8	368.5
110°	421.7	424.3	426.9	432.1	429.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	486.6	487.8	487.8	494.3	494.3
115°	551.4	555.3	552.7	554.0	552.7
117.5°	617.6	618.9	616.3	616.3	612.4
120°	678.6	686.4	679.9	678.6	676.0
122.5°	742.2	747.3	744.7	740.9	737.0
125°	807.0	810.9	808.3	803.1	797.9
127.5°	866.7	874.5	871.9	864.1	858.9
130°	926.4	936.8	932.9	927.7	918.6
132.5°	986.1	996.5	993.9	987.4	980.9
135°	1047.1	1054.8	1053.5	1048.4	1045.8
137.5°	1102.9	1109.3	1113.2	1106.7	1102.9
140°	1161.2	1167.7	1169.0	1167.7	1158.6
142.5°	1214.4	1220.9	1223.5	1222.2	1215.7
145°	1270.2	1272.8	1276.7	1275.4	1270.2
147.5°	1318.2	1323.4	1327.3	1327.3	1319.5
150°	1368.8	1371.4	1374.0	1374.0	1366.2
152.5°	1410.4	1414.2	1415.5	1418.1	1411.6
155°	1454.5	1454.5	1455.8	1461.0	1451.9
157.5°	1492.1	1490.8	1492.1	1497.3	1489.5
160°	1527.1	1524.5	1524.5	1531.0	1525.8
162.5°	1558.3	1554.4	1555.7	1562.2	1553.1
165°	1584.2	1580.3	1580.3	1588.1	1579.0
167.5°	1606.3	1601.1	1602.4	1610.2	1602.4
170°	1624.4	1619.2	1619.2	1628.3	1619.2
172.5°	1638.7	1633.5	1633.5	1641.3	1632.2
175°	1647.8	1642.6	1642.6	1650.4	1641.3
177.5°	1653.0	1647.8	1647.8	1655.6	1646.5
180°	1651.7	1651.7	1651.7	1651.7	1651.7

(END OF REPORT)