

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: P1031589

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031589
REPORT IS A COMBINATION OF REPORTS P991281 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-F
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

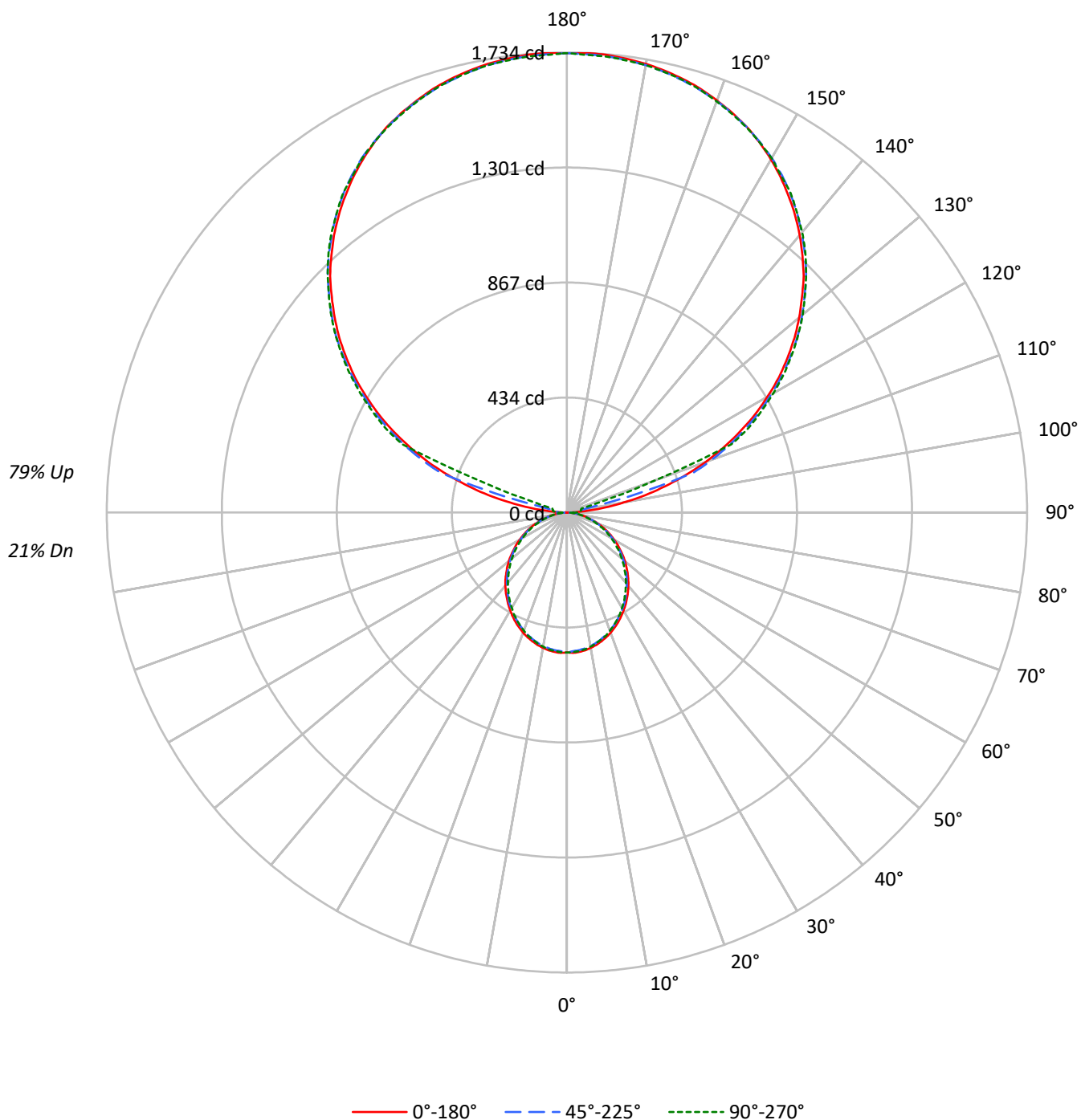
Lumens per Lamp: N/A
Luminaire Lumens: 6655.0 lumens
Efficiency: N/A
Efficacy: 120.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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°	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	0.7
10°-20°	140.4	2.1
20°-30°	207.4	3.1
30°-40°	242.2	3.6
40°-50°	243.5	3.7
50°-60°	213.9	3.2
60°-70°	159.3	2.4
70°-80°	90.7	1.4
80°-90°	29.2	0.4
90°-100°	61.1	0.9
100°-110°	295.2	4.4
110°-120°	723.4	10.9
120°-130°	918.4	13.8
130°-140°	981.1	14.7
140°-150°	917.4	13.8
150°-160°	740.0	11.1
160°-170°	477.5	7.2
170°-180°	164.6	2.5
0°-30°	397.6	6.0
0°-40°	639.8	9.6
0°-60°	1097.2	16.5
0°-90°	1376.5	20.7
90°-120°	1079.7	16.2
90°-150°	3896.5	58.5
90°-180°	5279.0	79.3
0°-180°	6655.0	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	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	

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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	14.2	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

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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)