

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: P1031572

Luminaire Tested: S123DIW-B340D1030UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031572
REPORT IS A COMBINATION OF REPORTS P991234 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D1030UB40-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

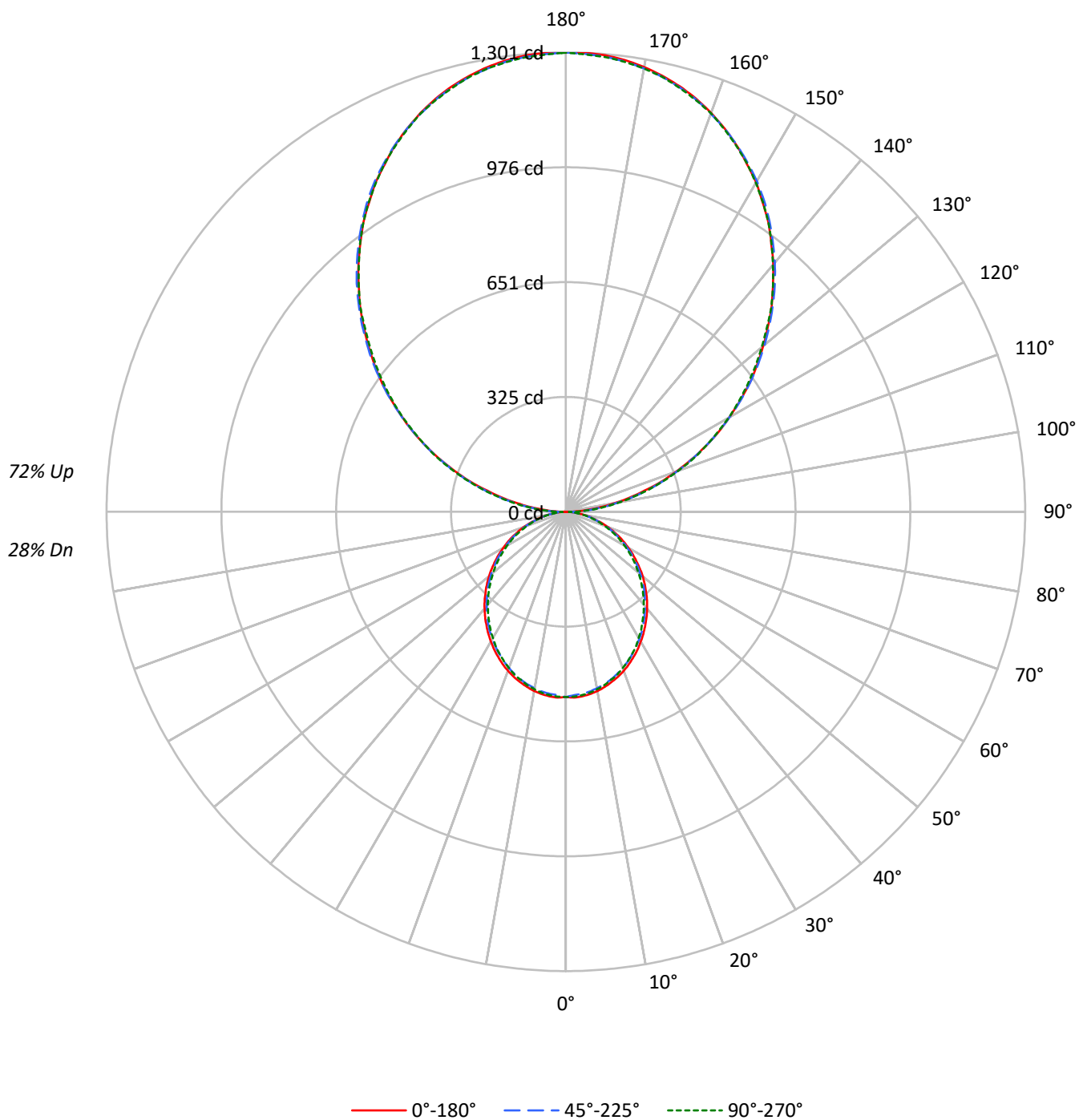
Lumens per Lamp: N/A
Luminaire Lumens: 4971.0 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
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	102	102	102	102	91	91	91	91	71	71	71	52	52	52	35	35	35			28
1	93	89	85	81	83	79	76	73	62	60	58	46	45	43	31	30	30			23
2	84	77	71	66	75	69	64	60	54	51	48	40	38	36	27	26	25			19
3	77	68	61	55	68	61	55	50	48	44	40	36	33	31	24	23	21			16
4	70	60	52	46	63	54	47	42	42	38	34	32	29	26	22	20	18			14
5	64	53	45	40	57	48	41	36	38	33	29	28	25	22	19	18	16			12
6	59	48	40	34	53	43	36	31	34	29	25	25	22	20	18	16	14			11
7	55	43	35	30	49	39	32	27	31	26	22	23	20	17	16	14	12			9
8	51	39	31	26	45	35	28	24	28	23	20	21	18	15	15	13	11			8
9	47	35	28	23	42	32	25	21	25	21	17	19	16	14	14	11	10			8
10	44	32	25	21	39	29	23	19	23	19	16	18	15	12	13	10	9			7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5646	5646	5646
5°	5659	5450	5442
10°	5610	5266	5212
15°	5531	5074	4961
20°	5442	4861	4713
25°	5326	4637	4446
30°	5200	4404	4166
35°	5066	4167	3888
40°	4928	3917	3615
45°	4775	3674	3329
50°	4620	3403	3043
55°	4421	3121	2752
60°	4216	2809	2443
65°	4022	2472	2121
70°	3746	2100	1745
75°	3344	1662	1355
80°	2888	1169	958
85°	2257	627	479

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4775 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.4	1.0
10°-20°	139.6	2.8
20°-30°	206.2	4.1
30°-40°	240.8	4.8
40°-50°	242.1	4.9
50°-60°	212.7	4.3
60°-70°	158.4	3.2
70°-80°	90.1	1.8
80°-90°	28.4	0.6
90°-100°	83.7	1.7
100°-110°	253.4	5.1
110°-120°	431.3	8.7
120°-130°	567.5	11.4
130°-140°	637.8	12.8
140°-150°	627.1	12.6
150°-160°	527.9	10.6
160°-170°	351.5	7.1
170°-180°	123.1	2.5
0°-30°	395.3	8.0
0°-40°	636.1	12.8
0°-60°	1090.8	21.9
0°-90°	1367.7	27.5
90°-120°	768.4	15.5
90°-150°	2600.8	52.3
90°-180°	3603.0	72.5
0°-180°	4971.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	524	524	524	524	524	
5°	525	523	518	522	521	50
15°	500	498	492	496	493	141
25°	454	451	445	446	444	209
35°	392	390	384	381	379	245
45°	322	320	314	308	306	248
55°	244	244	238	233	230	219
65°	166	164	160	156	155	164
75°	88	86	85	82	81	94
85°	24	22	22	22	22	25
90°	1	11	24	29	31	6
95°	60	67	76	80	80	66
105°	230	232	241	241	243	246
115°	434	437	435	436	435	430
125°	635	638	636	632	628	567
135°	824	830	830	825	823	635
145°	1000	1002	1005	1004	1000	625
155°	1145	1145	1146	1150	1143	527
165°	1247	1244	1244	1250	1243	352
175°	1297	1293	1293	1299	1292	123
180°	1300	1300	1300	1300	1300	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	524.5	524.5	524.5	524.5	524.5
2.5°	526.7	524.9	520.0	524.5	524.0
5°	524.9	522.7	517.7	522.2	521.3
7.5°	520.9	518.6	513.7	517.7	517.3
10°	515.5	513.2	507.3	511.4	510.5
12.5°	508.2	506.4	501.0	503.7	503.3
15°	499.7	497.9	492.0	495.6	492.9
17.5°	490.2	488.0	482.1	484.8	483.9
20°	479.4	476.7	470.8	472.6	471.3
22.5°	467.2	464.5	458.6	460.0	458.2
25°	453.7	451.0	445.1	445.6	444.2
27.5°	439.7	437.0	430.7	431.1	429.8
30°	424.4	422.1	415.8	415.8	412.6
32.5°	409.0	405.9	401.4	398.2	396.9
35°	392.3	389.6	383.8	381.1	378.8
37.5°	375.7	372.1	366.2	363.0	361.7
40°	358.1	355.4	349.1	345.4	343.6
42.5°	340.5	337.3	331.0	327.4	325.6
45°	321.5	319.7	313.9	308.5	306.2
47.5°	303.1	300.3	294.9	289.5	287.7
50°	284.1	281.9	276.0	271.0	268.3
52.5°	264.3	262.9	256.6	252.5	249.8
55°	244.0	243.5	237.7	232.7	230.4
57.5°	225.0	223.2	218.7	214.2	211.5
60°	204.3	203.8	198.4	194.4	192.1
62.5°	185.8	184.4	179.0	175.0	173.6
65°	166.4	164.2	159.6	156.0	154.7
67.5°	145.7	143.9	140.3	137.1	135.3
70°	127.2	124.5	121.8	118.6	116.4
72.5°	107.8	106.0	102.8	100.1	99.2
75°	87.9	86.1	84.8	82.5	81.2
77.5°	70.4	69.5	67.6	65.8	65.8
80°	53.2	51.9	51.0	50.5	50.5
82.5°	36.5	36.5	36.5	35.6	35.2
85°	23.5	22.5	22.5	21.6	21.6
87.5°	11.7	10.4	9.9	9.5	9.5
90°	1.0	11.2	24.5	28.6	30.6
92.5°	30.6	36.8	42.9	46.0	43.9
95°	60.3	67.4	75.6	79.7	79.7
97.5°	99.1	104.2	110.3	115.4	114.4
100°	138.9	145.1	150.2	153.2	155.3
102.5°	184.9	188.0	195.1	198.2	197.2
105°	229.8	231.9	241.1	241.1	243.1
107.5°	283.0	284.0	288.1	291.1	290.1
110°	332.0	334.0	336.1	340.2	338.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	383.1	384.1	384.1	389.2	389.2
115°	434.2	437.2	435.2	436.2	435.2
117.5°	486.3	487.3	485.2	485.2	482.2
120°	534.3	540.4	535.3	534.3	532.2
122.5°	584.3	588.4	586.4	583.3	580.2
125°	635.4	638.5	636.4	632.3	628.3
127.5°	682.4	688.5	686.5	680.3	676.3
130°	729.4	737.6	734.5	730.4	723.3
132.5°	776.4	784.5	782.5	777.4	772.3
135°	824.4	830.5	829.5	825.4	823.4
137.5°	868.3	873.4	876.5	871.4	868.3
140°	914.3	919.4	920.4	919.4	912.2
142.5°	956.2	961.3	963.3	962.3	957.2
145°	1000.1	1002.1	1005.2	1004.2	1000.1
147.5°	1037.9	1042.0	1045.0	1045.0	1038.9
150°	1077.7	1079.8	1081.8	1081.8	1075.7
152.5°	1110.4	1113.5	1114.5	1116.6	1111.4
155°	1145.2	1145.2	1146.2	1150.3	1143.1
157.5°	1174.8	1173.8	1174.8	1178.9	1172.7
160°	1202.4	1200.3	1200.3	1205.4	1201.3
162.5°	1226.9	1223.8	1224.8	1229.9	1222.8
165°	1247.3	1244.2	1244.2	1250.4	1243.2
167.5°	1264.7	1260.6	1261.6	1267.7	1261.6
170°	1279.0	1274.9	1274.9	1282.0	1274.9
172.5°	1290.2	1286.1	1286.1	1292.3	1285.1
175°	1297.4	1293.3	1293.3	1299.4	1292.3
177.5°	1301.4	1297.4	1297.4	1303.5	1296.3
180°	1300.4	1300.4	1300.4	1300.4	1300.4

(END OF REPORT)