

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: P1031716

Luminaire Tested: S123DIW-B560D1030UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031716
REPORT IS A COMBINATION OF REPORTS P991564 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D1030UB40-4F0-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

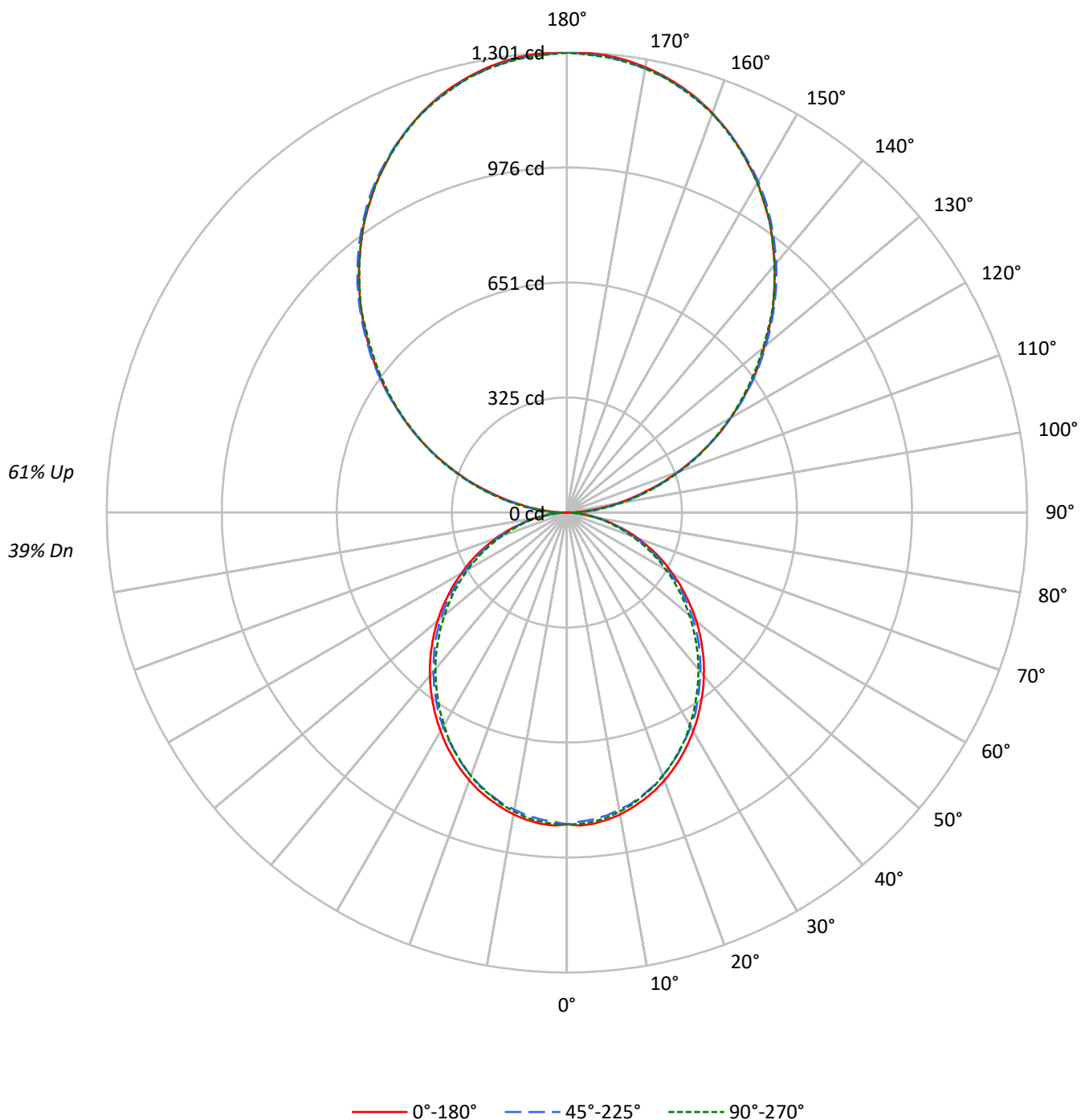
Lumens per Lamp: N/A
Luminaire Lumens: 5902.0 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.5
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
RCR																	
0	105	105	105	105	95	95	95	95	77	77	77	61	61	61	46	46	46
1	95	91	87	84	86	83	80	77	68	65	63	53	52	51	41	40	39
2	87	79	73	68	79	72	67	63	59	55	52	47	44	42	36	34	33
3	79	70	63	57	72	64	57	52	52	48	44	41	38	36	32	29	28
4	72	62	54	48	65	56	50	44	46	41	37	37	33	30	28	26	24
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	23	21
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18
7	56	44	36	31	51	41	34	29	34	28	25	27	23	20	21	18	16
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	17	14
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13
10	45	33	26	22	41	31	24	20	26	21	17	21	17	15	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9496	9496	9496
5°	9520	9168	9155
10°	9435	8858	8767
15°	9304	8535	8345
20°	9154	8177	7926
25°	8959	7799	7479
30°	8746	7408	7008
35°	8523	7008	6541
40°	8289	6588	6081
45°	8033	6180	5601
50°	7771	5723	5118
55°	7436	5250	4629
60°	7090	4726	4109
65°	6766	4159	3567
70°	6299	3530	2934
75°	5626	2795	2277
80°	4859	1964	1612
85°	3785	1055	807

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8033 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.2	1.4
10°-20°	234.8	4.0
20°-30°	346.8	5.9
30°-40°	405.1	6.9
40°-50°	407.2	6.9
50°-60°	357.7	6.1
60°-70°	266.4	4.5
70°-80°	151.6	2.6
80°-90°	45.8	0.8
90°-100°	83.7	1.4
100°-110°	253.4	4.3
110°-120°	431.3	7.3
120°-130°	567.5	9.6
130°-140°	637.8	10.8
140°-150°	627.1	10.6
150°-160°	527.9	8.9
160°-170°	351.5	6.0
170°-180°	123.1	2.1
0°-30°	664.8	11.3
0°-40°	1069.9	18.1
0°-60°	1834.9	31.1
0°-90°	2298.7	38.9
90°-120°	768.4	13.0
90°-150°	2600.8	44.1
90°-180°	3603.0	61.0
0°-180°	5902.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	882	882	882	882	882	
5°	883	879	871	878	877	84
15°	840	838	828	834	829	237
25°	763	759	749	750	747	352
35°	660	655	646	641	637	413
45°	541	538	528	519	515	418
55°	410	410	400	391	388	368
65°	280	276	268	262	260	276
75°	148	145	143	139	136	158
85°	39	38	38	36	36	42
90°	1	11	24	29	31	7
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°	882.2	882.2	882.2	882.2	882.2
2.5°	886.0	883.0	874.6	882.2	881.5
5°	883.0	879.2	870.8	878.4	876.9
7.5°	876.1	872.3	864.0	870.8	870.1
10°	867.0	863.2	853.4	860.2	858.7
12.5°	854.9	851.9	842.8	847.3	846.6
15°	840.5	837.5	827.6	833.7	829.1
17.5°	824.6	820.8	810.9	815.5	813.9
20°	806.4	801.8	791.9	795.0	792.7
22.5°	785.9	781.3	771.5	773.7	770.7
25°	763.1	758.6	748.7	749.5	747.2
27.5°	739.6	735.0	724.4	725.2	722.9
30°	713.8	710.0	699.4	699.4	694.1
32.5°	688.0	682.7	675.1	669.8	667.5
35°	660.0	655.4	645.5	641.0	637.2
37.5°	631.9	625.8	616.0	610.6	608.4
40°	602.3	597.7	587.1	581.1	578.0
42.5°	572.7	567.4	556.8	550.7	547.7
45°	540.9	537.8	528.0	518.9	515.1
47.5°	509.8	505.2	496.1	487.0	484.0
50°	477.9	474.1	464.2	455.9	451.3
52.5°	444.5	442.2	431.6	424.8	420.2
55°	410.4	409.6	399.8	391.4	387.6
57.5°	378.5	375.5	367.9	360.3	355.8
60°	343.6	342.9	333.8	326.9	323.1
62.5°	312.5	310.3	301.1	294.3	292.0
65°	279.9	276.1	268.5	262.5	260.2
67.5°	245.0	242.0	235.9	230.6	227.6
70°	213.9	209.4	204.8	199.5	195.7
72.5°	181.3	178.3	173.0	168.4	166.9
75°	147.9	144.9	142.6	138.8	136.5
77.5°	118.3	116.8	113.8	110.8	110.8
80°	89.5	87.2	85.7	85.0	85.0
82.5°	61.4	61.4	61.4	59.9	59.2
85°	39.4	37.9	37.9	36.4	36.4
87.5°	19.7	17.4	16.7	15.9	15.9
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)