

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: P1031289

Luminaire Tested: S123DIW-B1000D1030UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031289
REPORT IS A COMBINATION OF REPORTS P990582 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1000D1030UB50-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

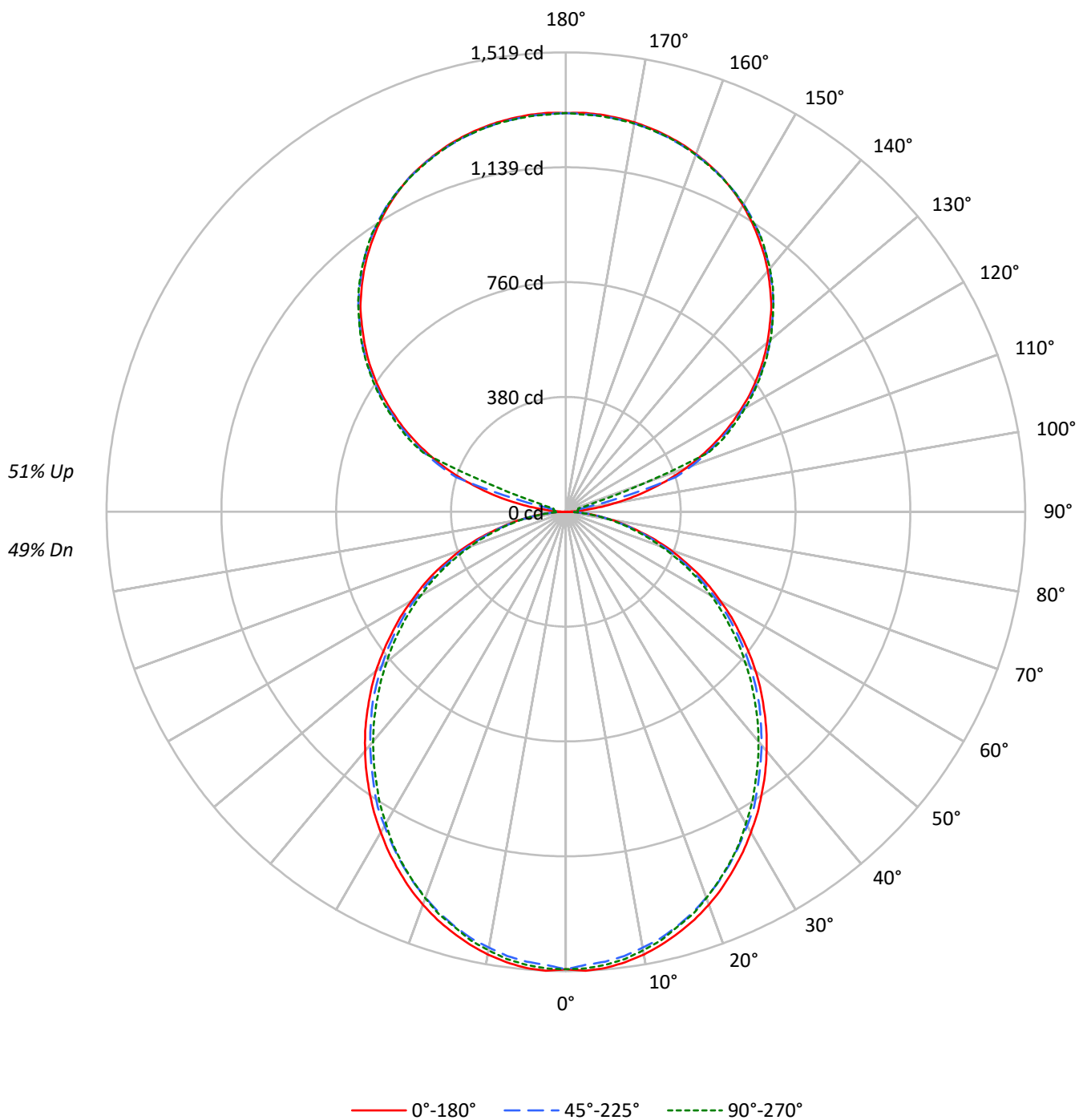
Lumens per Lamp: N/A
Luminaire Lumens: 7959.0 lumens
Efficiency: N/A
Efficacy: 101.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 78.3
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56
1	98	93	89	86	90	86	83	80	73	70	68	60	59	57	49	48	47
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	39
3	81	72	64	58	74	66	60	55	56	51	47	47	43	40	38	36	34
4	74	63	55	49	68	59	52	46	50	45	40	42	38	34	34	31	29
5	68	56	48	42	62	52	45	40	45	39	35	37	33	30	31	28	25
6	63	51	42	37	58	47	40	34	40	34	30	34	29	26	28	25	22
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	25	22	20
8	54	41	34	28	49	39	32	27	33	28	24	28	24	21	23	20	18
9	50	38	30	25	46	35	28	24	30	25	21	26	22	19	22	18	16
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16283	16283	16283
5°	16323	15721	15697
10°	16178	15189	15033
15°	15953	14635	14309
20°	15696	14022	13592
25°	15362	13373	12824
30°	14997	12702	12018
35°	14614	12016	11216
40°	14214	11298	10428
45°	13773	10596	9603
50°	13326	9815	8776
55°	12751	9001	7939
60°	12158	8103	7047
65°	11603	7132	6116
70°	10802	6054	5032
75°	9647	4793	3906
80°	8333	3369	2763
85°	6493	1810	1383

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13773 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.6	1.8
10°-20°	402.7	5.1
20°-30°	594.7	7.5
30°-40°	694.6	8.7
40°-50°	698.3	8.8
50°-60°	613.4	7.7
60°-70°	456.8	5.7
70°-80°	260.0	3.3
80°-90°	76.5	1.0
90°-100°	46.5	0.6
100°-110°	224.8	2.8
110°-120°	550.8	6.9
120°-130°	699.3	8.8
130°-140°	747.0	9.4
140°-150°	698.6	8.8
150°-160°	563.5	7.1
160°-170°	363.6	4.6
170°-180°	125.3	1.6
0°-30°	1140.0	14.3
0°-40°	1834.6	23.1
0°-60°	3146.3	39.5
0°-90°	3939.6	49.5
90°-120°	822.1	10.3
90°-150°	2967.0	37.3
90°-180°	4019.0	50.5
0°-180°	7959.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1513	1513	1513	1513	1513	
5°	1514	1508	1493	1506	1504	144
15°	1441	1436	1419	1430	1422	406
25°	1308	1301	1284	1285	1281	603
35°	1132	1124	1107	1099	1093	708
45°	927	922	905	890	883	716
55°	704	702	686	671	665	630
65°	480	474	460	450	446	474
75°	254	248	244	238	234	271
85°	68	65	65	62	62	73
90°	1	11	24	27	29	8
95°	60	20	30	37	37	71
105°	292	303	214	41	43	309
115°	548	553	562	572	576	541
125°	772	780	784	786	788	690
135°	961	967	971	974	971	740
145°	1109	1116	1118	1120	1120	694
155°	1222	1220	1220	1225	1220	563
165°	1288	1285	1284	1292	1285	364
175°	1318	1314	1314	1321	1314	125
180°	1318	1318	1318	1318	1318	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1512.7	1512.7	1512.7	1512.7	1512.7
2.5°	1519.2	1514.0	1499.7	1512.7	1511.4
5°	1514.0	1507.5	1493.2	1506.2	1503.6
7.5°	1502.3	1495.8	1481.5	1493.2	1491.9
10°	1486.7	1480.2	1463.3	1475.0	1472.4
12.5°	1465.9	1460.7	1445.1	1452.9	1451.6
15°	1441.2	1436.0	1419.1	1429.5	1421.7
17.5°	1413.9	1407.4	1390.5	1398.3	1395.7
20°	1382.7	1374.9	1358.0	1363.2	1359.3
22.5°	1347.6	1339.7	1322.8	1326.7	1321.5
25°	1308.5	1300.7	1283.8	1285.1	1281.2
27.5°	1268.2	1260.4	1242.2	1243.5	1239.6
30°	1224.0	1217.5	1199.3	1199.3	1190.2
32.5°	1179.8	1170.7	1157.6	1148.5	1144.6
35°	1131.6	1123.8	1106.9	1099.1	1092.6
37.5°	1083.5	1073.1	1056.2	1047.1	1043.2
40°	1032.8	1025.0	1006.8	996.4	991.2
42.5°	982.0	972.9	954.7	944.3	939.1
45°	927.4	922.2	905.3	889.7	883.2
47.5°	874.1	866.3	850.7	835.1	829.9
50°	819.5	813.0	796.0	781.7	773.9
52.5°	762.2	758.3	740.1	728.4	720.6
55°	703.7	702.4	685.5	671.2	664.7
57.5°	649.1	643.9	630.9	617.8	610.0
60°	589.2	587.9	572.3	560.6	554.1
62.5°	535.9	532.0	516.4	504.7	500.8
65°	480.0	473.5	460.5	450.1	446.1
67.5°	420.1	414.9	404.5	395.4	390.2
70°	366.8	359.0	351.2	342.1	335.6
72.5°	310.9	305.7	296.6	288.8	286.2
75°	253.6	248.4	244.5	238.0	234.1
77.5°	202.9	200.3	195.1	189.9	189.9
80°	153.5	149.6	147.0	145.7	145.7
82.5°	105.4	105.4	105.4	102.8	101.5
85°	67.6	65.0	65.0	62.4	62.4
87.5°	33.8	29.9	28.6	27.3	27.3
90°	1.0	10.8	23.5	27.4	29.4
92.5°	22.5	16.7	25.5	32.3	33.3
95°	59.8	19.6	30.4	37.2	37.2
97.5°	108.7	81.3	31.3	39.2	40.2
100°	165.5	185.1	32.3	40.2	41.1
102.5°	230.2	242.9	72.5	40.2	42.1
105°	291.9	302.7	214.5	41.1	43.1
107.5°	357.5	366.3	381.0	230.2	101.9
110°	423.2	431.0	441.8	409.4	269.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	485.8	492.7	503.5	512.3	510.3
115°	547.6	553.4	562.2	572.0	576.0
117.5°	608.3	615.1	620.0	627.9	628.9
120°	664.1	672.9	675.9	683.7	683.7
122.5°	720.9	727.8	731.7	736.6	737.6
125°	771.9	779.7	783.6	785.6	787.5
127.5°	822.8	830.6	835.5	838.5	836.5
130°	869.8	877.7	881.6	885.5	883.5
132.5°	914.9	922.7	925.6	929.6	926.6
135°	960.9	966.8	970.7	973.6	970.7
137.5°	1000.1	1007.9	1009.9	1014.8	1012.8
140°	1039.3	1045.2	1048.1	1052.0	1050.0
142.5°	1075.5	1081.4	1084.3	1087.3	1084.3
145°	1108.8	1115.7	1117.6	1119.6	1119.6
147.5°	1141.1	1146.0	1148.0	1150.0	1145.1
150°	1170.5	1173.5	1175.4	1177.4	1174.4
152.5°	1197.0	1198.0	1198.9	1202.9	1198.0
155°	1221.5	1219.5	1220.5	1225.4	1219.5
157.5°	1241.1	1241.1	1240.1	1246.0	1238.1
160°	1258.7	1257.7	1256.7	1262.6	1255.7
162.5°	1275.3	1272.4	1271.4	1278.3	1272.4
165°	1288.1	1285.1	1284.2	1292.0	1285.1
167.5°	1298.8	1294.9	1294.9	1302.8	1294.9
170°	1307.7	1303.7	1303.7	1311.6	1303.7
172.5°	1313.5	1308.6	1309.6	1317.5	1308.6
175°	1318.4	1313.5	1314.5	1321.4	1313.5
177.5°	1320.4	1315.5	1316.5	1324.3	1314.5
180°	1318.4	1318.4	1318.4	1318.4	1318.4

(END OF REPORT)