

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: P1031287

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031287
REPORT IS A COMBINATION OF REPORTS P990579 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-D
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

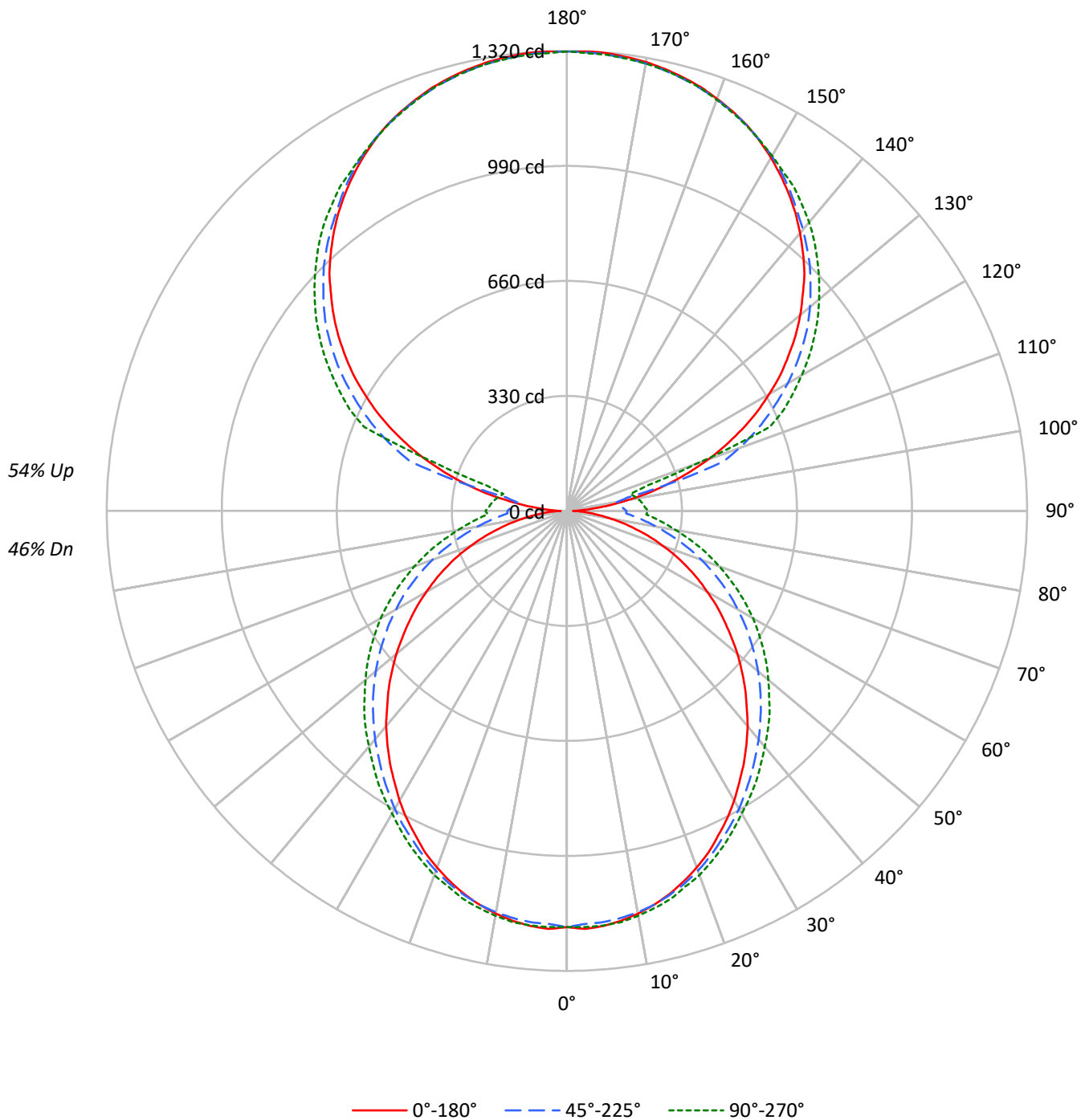
Lumens per Lamp: N/A
Luminaire Lumens: 8035.0 lumens
Efficiency: N/A
Efficacy: 102.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P1031287

CATALOG NUMBER: S123DIW-B1000D1030UB50-4F0-XX-W2A-D

Luminous Intensity Polar Plot



TEST NUMBER: P1031287

CATALOG NUMBER: S123DIW-B1000D1030UB50-4F0-XX-W2A-D

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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52
1	96	91	87	83	88	84	80	77	70	67	64	57	55	53	45	43	42
2	87	79	73	67	79	73	67	62	60	56	53	49	46	43	39	37	35
3	79	69	62	55	72	64	57	51	53	48	44	43	39	36	34	31	29
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25
5	66	54	46	40	60	50	43	37	42	36	32	34	30	27	27	24	22
6	61	48	40	34	55	45	37	32	38	32	28	31	26	23	25	21	19
7	56	44	36	30	51	40	33	28	34	28	24	28	24	20	22	19	17
8	52	40	32	26	48	37	30	25	31	25	21	26	21	18	20	17	15
9	48	36	28	23	44	33	27	22	28	23	19	23	19	16	19	16	13
10	45	33	26	21	41	31	24	20	26	21	17	22	17	15	18	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12853	12853	12853
5°	12888	12476	12466
10°	12768	12138	12046
15°	12598	11764	11599
20°	12358	11349	11120
25°	12064	10880	10624
30°	11761	10457	10127
35°	11423	10011	9720
40°	11100	9605	9292
45°	10740	9211	8939
50°	10386	8821	8555
55°	9993	8421	8203
60°	9609	8011	7840
65°	9213	7575	7418
70°	8620	7085	6983
75°	7867	6528	6532
80°	6993	5962	6019
85°	6119	5505	5650

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10740 cd/sqm

TEST NUMBER: P1031287

CATALOG NUMBER: S123DIW-B1000D1030UB50-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.3	1.4
10°-20°	322.9	4.0
20°-30°	482.9	6.0
30°-40°	576.5	7.2
40°-50°	603.2	7.5
50°-60°	566.1	7.0
60°-70°	472.8	5.9
70°-80°	338.1	4.2
80°-90°	203.8	2.5
90°-100°	172.9	2.2
100°-110°	317.7	4.0
110°-120°	612.9	7.6
120°-130°	734.7	9.1
130°-140°	762.9	9.5
140°-150°	701.9	8.7
150°-160°	563.5	7.0
160°-170°	363.6	4.5
170°-180°	125.3	1.6
0°-30°	919.1	11.4
0°-40°	1495.6	18.6
0°-60°	2664.9	33.2
0°-90°	3679.6	45.8
90°-120°	1103.5	13.7
90°-150°	3302.9	41.1
90°-180°	4355.0	54.2
0°-180°	8035.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1194	1194	1194	1194	1194	
5°	1195	1193	1185	1195	1194	113
15°	1138	1142	1141	1154	1152	321
25°	1028	1041	1044	1061	1061	474
35°	884	905	922	942	947	553
45°	723	754	787	812	822	558
55°	552	594	641	676	687	494
65°	381	432	489	528	541	377
75°	207	268	333	376	392	221
85°	64	129	198	242	255	66
90°	18	91	170	219	234	15
95°	74	85	159	206	219	83
105°	302	344	312	175	189	320
115°	554	576	631	672	687	548
125°	776	784	825	854	866	694
135°	964	968	986	1013	1016	742
145°	1110	1116	1118	1130	1135	695
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	

TEST NUMBER: P1031287

CATALOG NUMBER: S123DIW-B1000D1030UB50-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1194.1	1194.1	1194.1	1194.1	1194.1
2.5°	1200.6	1196.7	1186.3	1196.7	1195.4
5°	1195.4	1192.8	1185.0	1195.4	1194.1
7.5°	1186.3	1186.3	1178.5	1191.5	1190.2
10°	1173.3	1175.9	1169.4	1182.4	1179.8
12.5°	1157.6	1161.5	1157.6	1169.4	1166.8
15°	1138.1	1142.0	1140.7	1153.7	1152.4
17.5°	1114.7	1122.5	1121.2	1132.9	1130.3
20°	1088.7	1096.5	1099.1	1110.8	1112.1
22.5°	1061.4	1069.2	1073.1	1088.7	1087.4
25°	1027.6	1040.6	1044.5	1061.4	1061.4
27.5°	995.1	1009.4	1017.2	1031.5	1032.8
30°	959.9	976.8	987.3	1002.9	1002.9
32.5°	920.9	940.4	954.7	971.6	975.5
35°	884.5	905.3	922.2	941.7	946.9
37.5°	845.5	868.9	888.4	910.5	914.4
40°	806.5	829.9	855.9	878.0	883.2
42.5°	763.5	793.4	820.8	845.5	853.3
45°	723.2	754.4	786.9	811.7	822.1
47.5°	680.3	715.4	751.8	779.1	786.9
50°	638.7	675.1	715.4	745.3	754.4
52.5°	594.4	633.5	679.0	710.2	721.9
55°	551.5	594.4	641.3	676.4	686.8
57.5°	509.9	554.1	604.8	640.0	651.7
60°	465.7	512.5	565.8	602.2	616.5
62.5°	424.0	472.2	529.4	565.8	578.8
65°	381.1	431.8	489.1	528.1	541.1
67.5°	338.2	391.5	448.8	491.7	502.1
70°	292.7	348.6	411.0	452.7	465.7
72.5°	251.0	307.0	372.0	414.9	427.9
75°	206.8	267.9	333.0	375.9	391.5
77.5°	169.1	230.2	295.3	340.8	352.5
80°	128.8	192.5	260.1	304.4	317.4
82.5°	93.7	158.7	227.6	271.9	284.9
85°	63.7	128.8	197.7	241.9	254.9
87.5°	39.0	104.1	170.4	214.6	227.6
90°	17.9	91.4	170.5	218.6	233.6
92.5°	38.1	88.2	162.1	211.8	224.5
95°	74.1	84.6	159.2	206.3	219.3
97.5°	121.7	141.1	152.3	199.2	213.2
100°	177.2	238.4	145.5	191.1	205.0
102.5°	240.6	289.7	177.9	182.0	196.9
105°	302.3	344.3	312.1	175.1	188.8
107.5°	366.6	402.7	470.8	355.1	238.5
110°	431.0	462.2	525.0	526.5	396.9

TEST NUMBER: P1031287

CATALOG NUMBER: S123DIW-B1000D1030UB50-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	493.6	518.7	578.9	620.3	630.0
115°	554.1	575.5	631.1	672.2	686.6
117.5°	614.8	632.0	681.1	720.3	731.7
120°	669.3	684.6	730.5	768.2	777.4
122.5°	726.1	735.6	779.8	813.3	823.4
125°	775.8	783.6	825.2	854.5	865.5
127.5°	826.7	833.2	870.6	899.6	906.7
130°	873.7	880.3	910.2	938.8	944.6
132.5°	917.5	925.3	947.7	975.1	981.2
135°	963.5	968.1	986.3	1012.6	1016.2
137.5°	1002.7	1009.2	1020.3	1046.0	1050.5
140°	1040.6	1046.5	1053.3	1076.7	1081.2
142.5°	1076.8	1081.4	1084.3	1104.2	1107.7
145°	1110.1	1115.7	1117.6	1130.0	1135.2
147.5°	1141.1	1146.0	1148.0	1153.9	1154.2
150°	1170.5	1173.5	1175.4	1177.4	1177.0
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)