

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: P1031417

Luminaire Tested: S123DIW-B1165D1030UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031417
REPORT IS A COMBINATION OF REPORTS P990883 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D1030UB30-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

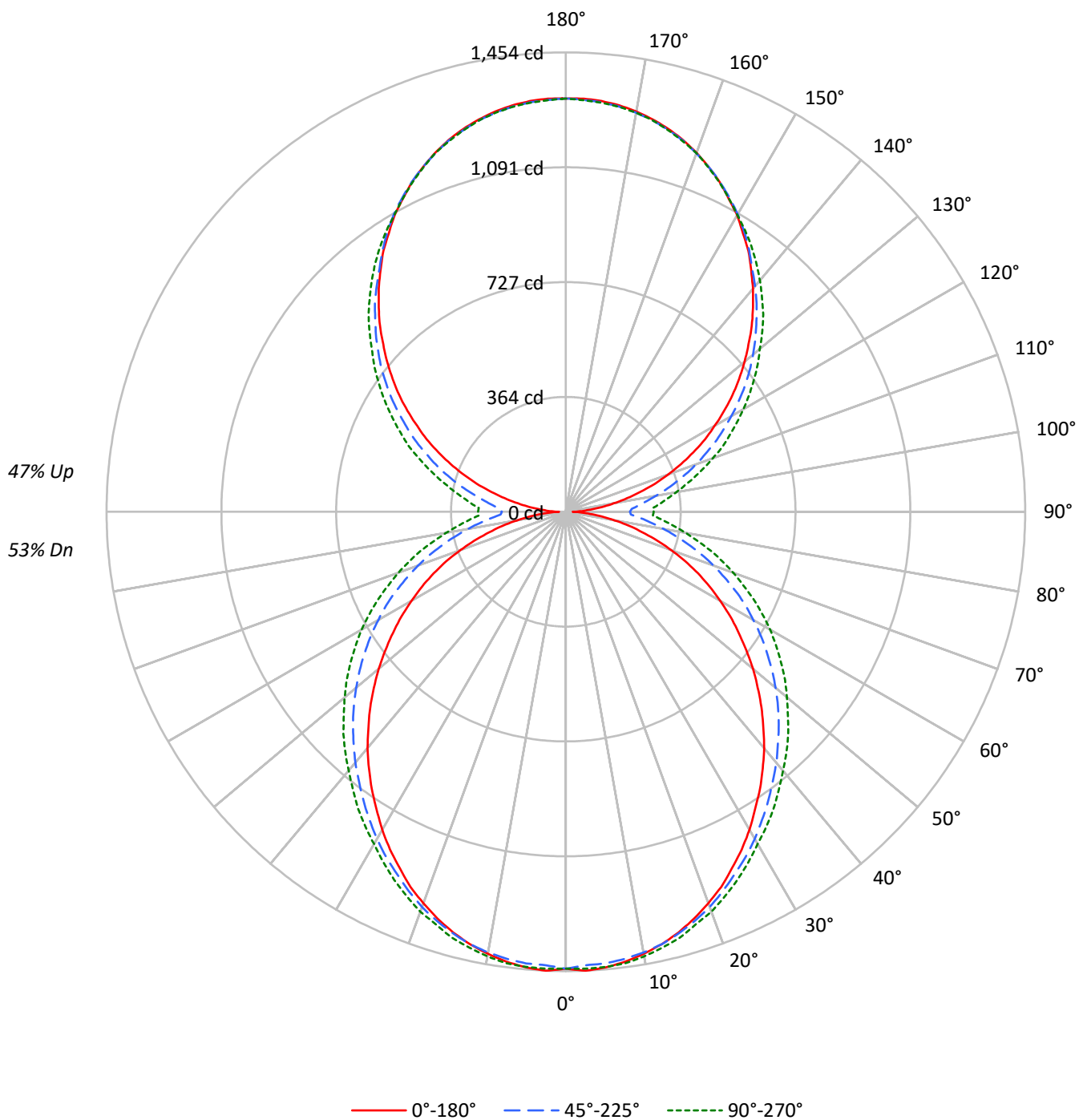
Lumens per Lamp: N/A
Luminaire Lumens: 8487.0 lumens
Efficiency: N/A
Efficacy: 91.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 92.8
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: P1031417

CATALOG NUMBER: S123DIW-B1165D1030UB30-4F0-XX-W2A-D1

Luminous Intensity Polar Plot



TEST NUMBER: P1031417

CATALOG NUMBER: S123DIW-B1165D1030UB30-4F0-XX-W2A-D1

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
RCR																	
0	108	108	108	108	100	100	100	100	85	85	85		71	71	71		58
1	97	92	88	84	90	86	82	78	73	70	67		61	59	57		50
2	88	80	73	68	81	74	68	63	63	59	55		53	50	47		43
3	80	70	62	56	74	65	58	53	55	50	46		46	42	39		38
4	73	62	53	47	67	57	50	44	49	43	39		41	37	33		34
5	67	55	46	40	62	51	43	38	44	38	33		37	32	29		30
6	62	49	41	35	57	46	38	33	39	33	29		33	28	25		27
7	57	44	36	30	52	41	34	29	35	30	25		30	25	22		25
8	53	40	32	27	49	37	30	25	32	26	22		27	23	19		23
9	49	37	29	24	45	34	27	22	30	24	20		25	21	17		21
10	46	34	26	21	42	31	25	20	27	22	18		23	19	16		20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15566	15566	15566
5°	15608	15109	15097
10°	15462	14700	14588
15°	15258	14248	14048
20°	14967	13744	13467
25°	14610	13176	12866
30°	14243	12663	12263
35°	13834	12125	11772
40°	13442	11631	11252
45°	13007	11155	10825
50°	12578	10683	10361
55°	12102	10197	9933
60°	11636	9701	9496
65°	11159	9174	8984
70°	10437	8581	8455
75°	9529	7906	7911
80°	8469	7223	7290
85°	7415	6667	6844

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13007 cd/sqm

TEST NUMBER: P1031417

CATALOG NUMBER: S123DIW-B1165D1030UB30-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.2	1.6
10°-20°	391.1	4.6
20°-30°	584.8	6.9
30°-40°	698.2	8.2
40°-50°	730.6	8.6
50°-60°	685.6	8.1
60°-70°	572.6	6.7
70°-80°	409.5	4.8
80°-90°	246.4	2.9
90°-100°	237.3	2.8
100°-110°	367.4	4.3
110°-120°	509.0	6.0
120°-130°	613.6	7.2
130°-140°	660.8	7.8
140°-150°	634.7	7.5
150°-160°	531.0	6.3
160°-170°	353.5	4.2
170°-180°	123.8	1.5
0°-30°	1113.0	13.1
0°-40°	1811.3	21.3
0°-60°	3227.4	38.0
0°-90°	4455.9	52.5
90°-120°	1113.7	13.1
90°-150°	3022.9	35.6
90°-180°	4031.0	47.5
0°-180°	8487.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1446	1446	1446	1446	1446	
5°	1448	1444	1435	1448	1446	137
15°	1378	1383	1382	1397	1396	388
25°	1244	1260	1265	1285	1285	574
35°	1071	1096	1117	1140	1147	670
45°	876	914	953	983	996	675
55°	668	720	777	819	832	598
65°	462	523	592	640	655	456
75°	250	324	403	455	474	268
85°	77	156	239	293	309	79
90°	22	109	203	260	278	19
95°	78	147	232	285	301	80
105°	244	284	361	405	421	260
115°	445	467	521	560	572	440
125°	644	647	690	720	726	575
135°	832	837	853	878	883	641
145°	1008	1008	1011	1023	1025	629
155°	1152	1152	1153	1157	1150	530
165°	1255	1252	1252	1258	1250	354
175°	1305	1301	1301	1307	1300	124
180°	1308	1308	1308	1308	1308	

TEST NUMBER: P1031417

CATALOG NUMBER: S123DIW-B1165D1030UB30-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1446.1	1446.1	1446.1	1446.1	1446.1
2.5°	1454.0	1449.2	1436.6	1449.2	1447.7
5°	1447.7	1444.5	1435.1	1447.7	1446.1
7.5°	1436.6	1436.6	1427.2	1442.9	1441.4
10°	1420.9	1424.0	1416.2	1431.9	1428.8
12.5°	1402.0	1406.7	1402.0	1416.2	1413.0
15°	1378.4	1383.1	1381.5	1397.3	1395.7
17.5°	1350.0	1359.5	1357.9	1372.1	1368.9
20°	1318.5	1327.9	1331.1	1345.3	1346.8
22.5°	1285.4	1294.9	1299.6	1318.5	1316.9
25°	1244.5	1260.2	1264.9	1285.4	1285.4
27.5°	1205.1	1222.4	1231.9	1249.2	1250.8
30°	1162.5	1183.0	1195.6	1214.5	1214.5
32.5°	1115.3	1138.9	1156.2	1176.7	1181.4
35°	1071.2	1096.4	1116.9	1140.5	1146.8
37.5°	1023.9	1052.3	1075.9	1102.7	1107.4
40°	976.7	1005.0	1036.5	1063.3	1069.6
42.5°	924.7	960.9	994.0	1023.9	1033.4
45°	875.8	913.7	953.0	983.0	995.6
47.5°	823.9	866.4	910.5	943.6	953.0
50°	773.5	817.6	866.4	902.6	913.7
52.5°	719.9	767.2	822.3	860.1	874.3
55°	667.9	719.9	776.6	819.1	831.7
57.5°	617.5	671.1	732.5	775.0	789.2
60°	563.9	620.7	685.2	729.3	746.7
62.5°	513.5	571.8	641.1	685.2	701.0
65°	461.6	523.0	592.3	639.6	655.3
67.5°	409.6	474.2	543.5	595.4	608.1
70°	354.4	422.2	497.8	548.2	563.9
72.5°	304.0	371.8	450.5	502.5	518.3
75°	250.5	324.5	403.3	455.3	474.2
77.5°	204.8	278.8	357.6	412.7	426.9
80°	156.0	233.1	315.1	368.6	384.4
82.5°	113.4	192.2	275.7	329.2	345.0
85°	77.2	156.0	239.4	293.0	308.8
87.5°	47.3	126.0	206.4	259.9	275.7
90°	21.5	109.0	202.7	260.4	278.1
92.5°	49.7	123.6	208.6	263.6	275.8
95°	77.9	146.6	232.0	284.9	300.6
97.5°	115.5	177.3	257.5	309.9	324.6
100°	153.9	210.5	288.0	336.8	354.7
102.5°	198.6	245.8	323.9	371.0	385.8
105°	243.8	283.6	360.6	404.8	420.9
107.5°	295.6	329.7	398.5	444.0	457.2
110°	343.4	373.8	438.8	484.0	494.5



TEST NUMBER: P1031417

CATALOG NUMBER: S123DIW-B1165D1030UB30-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	394.8	417.8	477.7	522.2	536.4
115°	444.6	466.6	521.2	560.0	571.6
117.5°	497.0	510.6	562.1	599.9	609.4
120°	543.7	557.7	604.6	639.8	648.7
122.5°	594.0	601.3	648.1	679.6	687.6
125°	643.8	646.9	690.5	719.5	726.4
127.5°	691.1	695.7	733.0	758.3	765.3
130°	738.3	745.1	773.5	799.3	801.5
132.5°	784.1	792.3	813.9	837.0	843.0
135°	832.4	837.0	853.2	877.5	883.3
137.5°	876.6	880.1	894.2	914.3	919.1
140°	921.2	926.3	932.1	954.6	955.4
142.5°	963.3	966.9	968.9	988.4	991.2
145°	1007.5	1008.0	1011.1	1022.6	1024.8
147.5°	1043.9	1048.0	1051.1	1055.8	1056.0
150°	1084.0	1086.1	1088.1	1088.1	1085.2
152.5°	1116.9	1120.0	1121.0	1123.1	1117.9
155°	1151.8	1151.8	1152.8	1157.0	1149.8
157.5°	1181.6	1180.6	1181.6	1185.7	1179.6
160°	1209.4	1207.3	1207.3	1212.4	1208.3
162.5°	1234.0	1230.9	1232.0	1237.1	1229.9
165°	1254.6	1251.5	1251.5	1257.7	1250.5
167.5°	1272.0	1267.9	1269.0	1275.1	1269.0
170°	1286.4	1282.3	1282.3	1289.5	1282.3
172.5°	1297.7	1293.6	1293.6	1299.8	1292.6
175°	1304.9	1300.8	1300.8	1307.0	1299.8
177.5°	1309.0	1304.9	1304.9	1311.1	1303.9
180°	1308.0	1308.0	1308.0	1308.0	1308.0

(END OF REPORT)