

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: P1031416

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031416
REPORT IS A COMBINATION OF REPORTS P990882 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-D
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

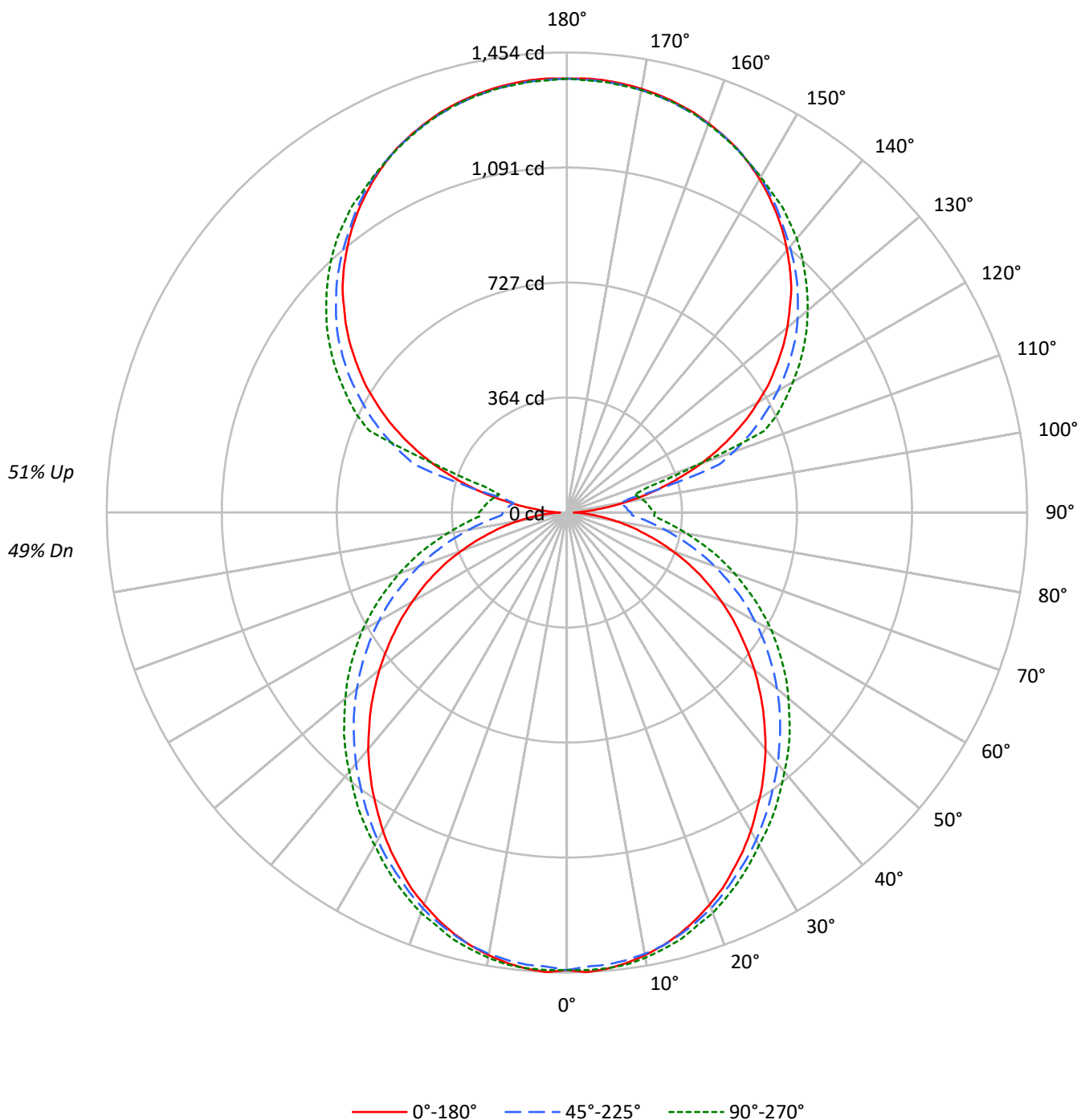
Lumens per Lamp: N/A
Luminaire Lumens: 9043.0 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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	55	55	55
1	97	92	88	84	89	85	81	78	71	68	66	59	57	55	47	46	45
2	88	80	73	67	80	73	68	63	62	57	54	51	48	45	41	39	37
3	80	70	62	56	73	64	57	52	54	49	45	45	41	38	36	33	31
4	73	61	53	47	66	57	49	44	48	42	38	40	35	32	32	29	26
5	67	55	46	40	61	50	43	37	43	37	32	35	31	28	29	25	23
6	61	49	40	34	56	45	38	32	38	33	28	32	27	24	26	23	20
7	57	44	36	30	52	41	33	28	35	29	25	29	25	21	24	20	18
8	52	40	32	27	48	37	30	25	32	26	22	27	22	19	22	18	16
9	49	36	29	24	45	34	27	22	29	23	20	24	20	17	20	17	14
10	46	33	26	21	42	31	24	20	27	21	18	23	18	15	19	15	13

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.2	1.5
10°-20°	391.1	4.3
20°-30°	584.8	6.5
30°-40°	698.2	7.7
40°-50°	730.6	8.1
50°-60°	685.6	7.6
60°-70°	572.6	6.3
70°-80°	409.5	4.5
80°-90°	246.4	2.7
90°-100°	201.5	2.2
100°-110°	346.3	3.8
110°-120°	648.0	7.2
120°-130°	770.2	8.5
130°-140°	796.2	8.8
140°-150°	730.5	8.1
150°-160°	586.0	6.5
160°-170°	378.2	4.2
170°-180°	130.3	1.4
0°-30°	1113.0	12.3
0°-40°	1811.3	20.0
0°-60°	3227.4	35.7
0°-90°	4455.8	49.3
90°-120°	1195.8	13.2
90°-150°	3492.7	38.6
90°-180°	4587.0	50.7
0°-180°	9043.0	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	202	260	278	18
95°	79	99	188	244	259	88
105°	316	365	341	205	221	335
115°	577	602	668	716	733	571
125°	808	816	865	900	914	722
135°	1003	1007	1028	1060	1065	772
145°	1155	1160	1162	1177	1183	723
155°	1270	1268	1269	1274	1268	585
165°	1340	1337	1336	1344	1337	379
175°	1371	1366	1367	1374	1366	130
180°	1371	1371	1371	1371	1371	

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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	108.9	202.4	260.1	277.9
92.5°	42.3	103.9	191.9	251.0	266.2
95°	79.4	99.2	187.6	243.5	259.2
97.5°	128.9	157.1	179.1	234.5	251.3
100°	186.4	257.1	170.6	224.5	241.3
102.5°	252.0	309.3	203.0	213.5	231.3
105°	316.2	365.2	341.2	205.1	221.2
107.5°	382.8	425.1	505.0	390.6	271.3
110°	449.6	486.0	560.2	567.6	434.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	514.8	543.9	615.0	663.5	675.7
115°	577.4	602.4	668.3	716.2	732.9
117.5°	640.5	660.3	718.9	764.8	778.4
120°	697.0	714.1	769.1	813.5	824.5
122.5°	756.1	766.4	819.3	859.0	871.1
125°	807.5	815.6	865.4	900.5	913.6
127.5°	860.4	867.1	911.5	946.0	955.1
130°	909.3	916.0	951.6	985.5	992.9
132.5°	954.7	962.8	989.5	1021.9	1029.9
135°	1002.6	1007.1	1028.5	1059.9	1064.7
137.5°	1043.3	1049.9	1062.9	1093.2	1099.1
140°	1082.5	1088.6	1096.3	1124.0	1129.9
142.5°	1120.2	1124.7	1127.7	1151.3	1156.1
145°	1154.8	1160.3	1162.4	1177.0	1183.3
147.5°	1186.8	1191.9	1194.0	1200.7	1201.9
150°	1217.4	1220.4	1222.5	1224.5	1224.7
152.5°	1244.9	1245.9	1246.9	1251.0	1245.9
155°	1270.4	1268.3	1269.3	1274.4	1268.3
157.5°	1290.7	1290.7	1289.7	1295.8	1287.7
160°	1309.1	1308.1	1307.0	1313.1	1306.0
162.5°	1326.4	1323.3	1322.3	1329.4	1323.3
165°	1339.6	1336.6	1335.6	1343.7	1336.6
167.5°	1350.8	1346.8	1346.8	1354.9	1346.8
170°	1360.0	1355.9	1355.9	1364.1	1355.9
172.5°	1366.1	1361.0	1362.0	1370.2	1361.0
175°	1371.2	1366.1	1367.1	1374.3	1366.1
177.5°	1373.3	1368.2	1369.2	1377.3	1367.1
180°	1371.2	1371.2	1371.2	1371.2	1371.2

(END OF REPORT)