

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: P1031411

Luminaire Tested: S123DIW-B1165D1030UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031411
REPORT IS A COMBINATION OF REPORTS P990853 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D1030UB27-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

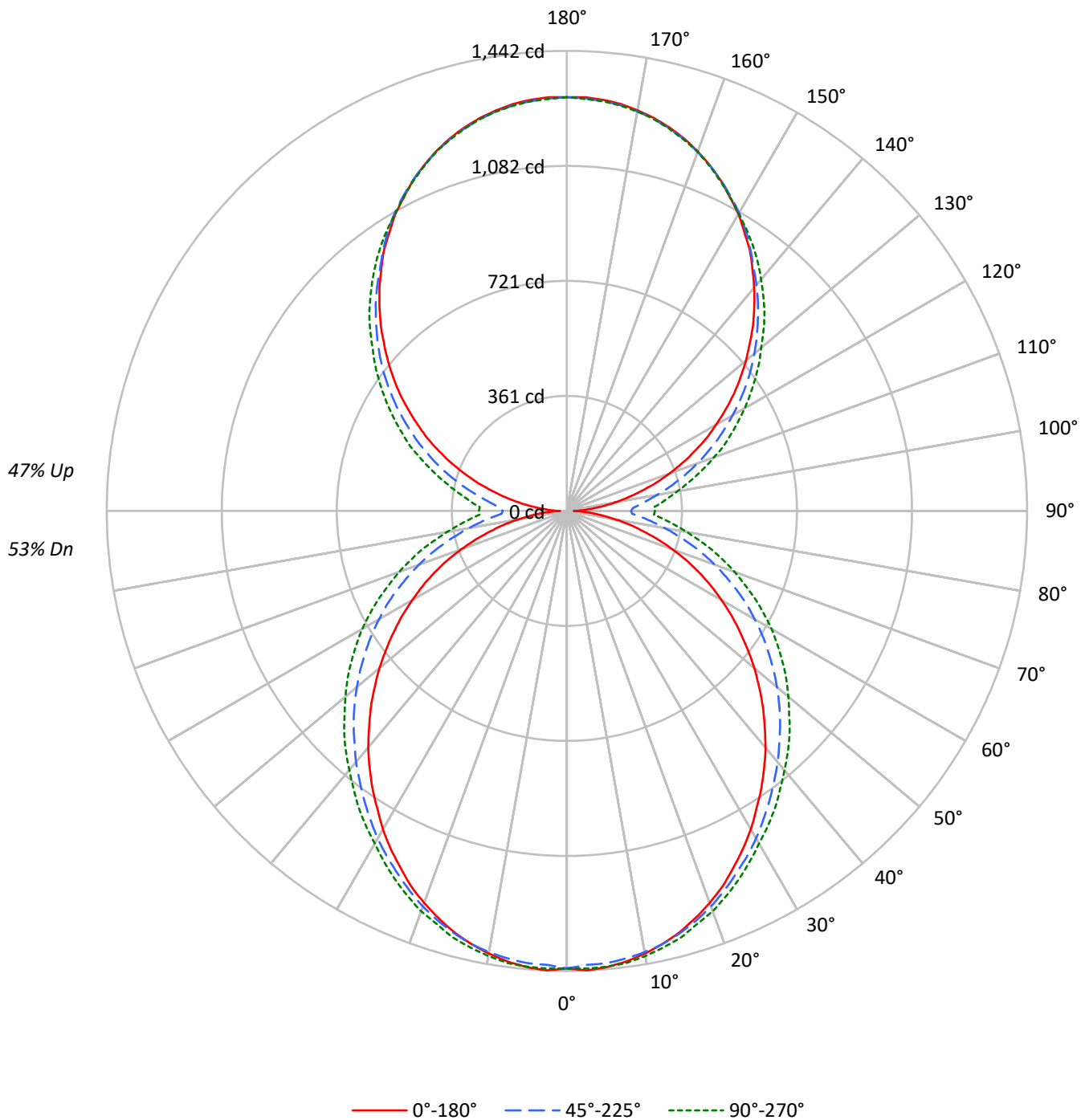
Lumens per Lamp: N/A
Luminaire Lumens: 8415.0 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 92.8
Input Voltage (V):
Input Current (A_{in}): 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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58
1	97	92	88	84	90	86	82	78	73	70	67	61	59	57	50	48	47
2	88	80	73	68	81	74	68	63	63	59	55	53	50	47	43	41	39
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	33
4	73	62	53	47	67	57	50	44	49	43	39	41	37	33	34	30	28
5	67	55	46	40	62	51	43	38	44	38	33	37	32	29	30	27	24
6	62	49	41	35	57	46	38	33	39	33	29	33	28	25	27	24	21
7	57	44	36	30	52	41	34	29	35	30	25	30	25	22	25	21	19
8	53	40	32	27	49	37	30	25	32	26	22	27	23	19	23	19	17
9	49	37	29	24	45	34	27	22	30	24	20	25	21	17	21	18	15
10	46	34	26	21	42	31	25	20	27	22	18	23	19	16	20	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15434	15434	15434
5°	15477	14982	14969
10°	15332	14576	14464
15°	15129	14128	13929
20°	14841	13628	13354
25°	14487	13066	12758
30°	14123	12556	12160
35°	13716	12022	11673
40°	13328	11534	11158
45°	12898	11061	10734
50°	12471	10593	10273
55°	12000	10112	9850
60°	11539	9621	9416
65°	11064	9096	8908
70°	10348	8509	8384
75°	9449	7839	7845
80°	8393	7161	7228
85°	7348	6611	6785

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12898 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.0	1.6
10°-20°	387.8	4.6
20°-30°	579.9	6.9
30°-40°	692.3	8.2
40°-50°	724.4	8.6
50°-60°	679.8	8.1
60°-70°	567.8	6.7
70°-80°	406.0	4.8
80°-90°	244.3	2.9
90°-100°	235.3	2.8
100°-110°	364.2	4.3
110°-120°	504.7	6.0
120°-130°	608.4	7.2
130°-140°	655.1	7.8
140°-150°	629.3	7.5
150°-160°	526.5	6.3
160°-170°	350.5	4.2
170°-180°	122.7	1.5
0°-30°	1103.7	13.1
0°-40°	1796.0	21.3
0°-60°	3200.1	38.0
0°-90°	4418.3	52.5
90°-120°	1104.2	13.1
90°-150°	2997.0	35.6
90°-180°	3997.0	47.5
0°-180°	8415.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1434	1434	1434	1434	1434	
5°	1436	1432	1423	1436	1434	136
15°	1367	1371	1370	1386	1384	385
25°	1234	1250	1254	1275	1275	569
35°	1062	1087	1107	1131	1137	664
45°	868	906	945	975	987	670
55°	662	714	770	812	825	593
65°	458	519	587	634	650	452
75°	248	322	400	451	470	265
85°	76	155	237	290	306	79
90°	21	108	201	258	276	19
95°	77	145	230	283	298	80
105°	242	281	358	401	417	258
115°	441	463	517	555	567	437
125°	638	641	685	713	720	570
135°	825	830	846	870	876	636
145°	999	999	1002	1014	1016	624
155°	1142	1142	1143	1147	1140	526
165°	1244	1241	1241	1247	1240	351
175°	1294	1290	1290	1296	1289	123
180°	1297	1297	1297	1297	1297	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1433.9	1433.9	1433.9	1433.9	1433.9
2.5°	1441.7	1437.0	1424.5	1437.0	1435.5
5°	1435.5	1432.3	1423.0	1435.5	1433.9
7.5°	1424.5	1424.5	1415.1	1430.8	1429.2
10°	1408.9	1412.0	1404.2	1419.8	1416.7
12.5°	1390.2	1394.8	1390.2	1404.2	1401.1
15°	1366.7	1371.4	1369.9	1385.5	1383.9
17.5°	1338.6	1348.0	1346.4	1360.5	1357.4
20°	1307.4	1316.7	1319.9	1333.9	1335.5
22.5°	1274.6	1283.9	1288.6	1307.4	1305.8
25°	1234.0	1249.6	1254.3	1274.6	1274.6
27.5°	1194.9	1212.1	1221.5	1238.6	1240.2
30°	1152.7	1173.0	1185.5	1204.3	1204.3
32.5°	1105.9	1129.3	1146.5	1166.8	1171.5
35°	1062.1	1087.1	1107.4	1130.9	1137.1
37.5°	1015.3	1043.4	1066.8	1093.4	1098.1
40°	968.4	996.5	1027.8	1054.3	1060.6
42.5°	916.9	952.8	985.6	1015.3	1024.7
45°	868.5	905.9	945.0	974.7	987.2
47.5°	816.9	859.1	902.8	935.6	945.0
50°	766.9	810.7	859.1	895.0	905.9
52.5°	713.8	760.7	815.4	852.8	866.9
55°	662.3	713.8	770.1	812.2	824.7
57.5°	612.3	665.4	726.3	768.5	782.5
60°	559.2	615.4	679.5	723.2	740.4
62.5°	509.2	567.0	635.7	679.5	695.1
65°	457.7	518.6	587.3	634.2	649.8
67.5°	406.1	470.2	538.9	590.4	602.9
70°	351.4	418.6	493.6	543.6	559.2
72.5°	301.5	368.6	446.7	498.3	513.9
75°	248.4	321.8	399.9	451.4	470.2
77.5°	203.1	276.5	354.6	409.2	423.3
80°	154.6	231.2	312.4	365.5	381.1
82.5°	112.5	190.6	273.3	326.5	342.1
85°	76.5	154.6	237.4	290.5	306.1
87.5°	46.9	125.0	204.6	257.7	273.3
90°	21.3	108.0	200.9	258.1	275.8
92.5°	49.3	122.6	206.8	261.4	273.4
95°	77.3	145.3	230.0	282.6	298.2
97.5°	114.4	175.8	255.3	307.2	321.8
100°	152.6	208.7	285.7	334.0	351.6
102.5°	196.9	243.6	321.1	367.9	382.5
105°	241.7	281.2	357.5	401.3	417.4
107.5°	293.1	326.9	395.1	440.2	453.3
110°	340.5	370.6	435.2	479.8	490.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	391.4	414.2	473.6	517.7	531.8
115°	440.8	462.6	516.8	555.3	566.8
117.5°	492.7	506.2	557.3	594.8	604.2
120°	539.0	553.0	599.4	634.3	643.2
122.5°	588.9	596.2	642.5	673.9	681.7
125°	638.3	641.4	684.7	713.4	720.2
127.5°	685.2	689.7	726.8	751.9	758.7
130°	732.1	738.6	766.9	792.4	794.6
132.5°	777.3	785.5	806.9	829.9	835.7
135°	825.2	829.8	845.9	870.0	875.8
137.5°	869.0	872.6	886.6	906.5	911.2
140°	913.3	918.4	924.1	946.5	947.2
142.5°	955.1	958.6	960.6	979.9	982.6
145°	998.9	999.4	1002.4	1013.9	1016.0
147.5°	1035.0	1039.1	1042.1	1046.8	1046.9
150°	1074.7	1076.8	1078.8	1078.8	1075.8
152.5°	1107.3	1110.4	1111.4	1113.5	1108.4
155°	1142.0	1142.0	1143.0	1147.1	1139.9
157.5°	1171.5	1170.5	1171.5	1175.6	1169.5
160°	1199.0	1197.0	1197.0	1202.1	1198.0
162.5°	1223.5	1220.4	1221.4	1226.5	1219.4
165°	1243.8	1240.8	1240.8	1246.9	1239.8
167.5°	1261.2	1257.1	1258.1	1264.2	1258.1
170°	1275.4	1271.4	1271.4	1278.5	1271.4
172.5°	1286.6	1282.6	1282.6	1288.7	1281.5
175°	1293.8	1289.7	1289.7	1295.8	1288.7
177.5°	1297.8	1293.8	1293.8	1299.9	1292.7
180°	1296.8	1296.8	1296.8	1296.8	1296.8

(END OF REPORT)