

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: P1031410

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031410
REPORT IS A COMBINATION OF REPORTS P990852 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-D
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

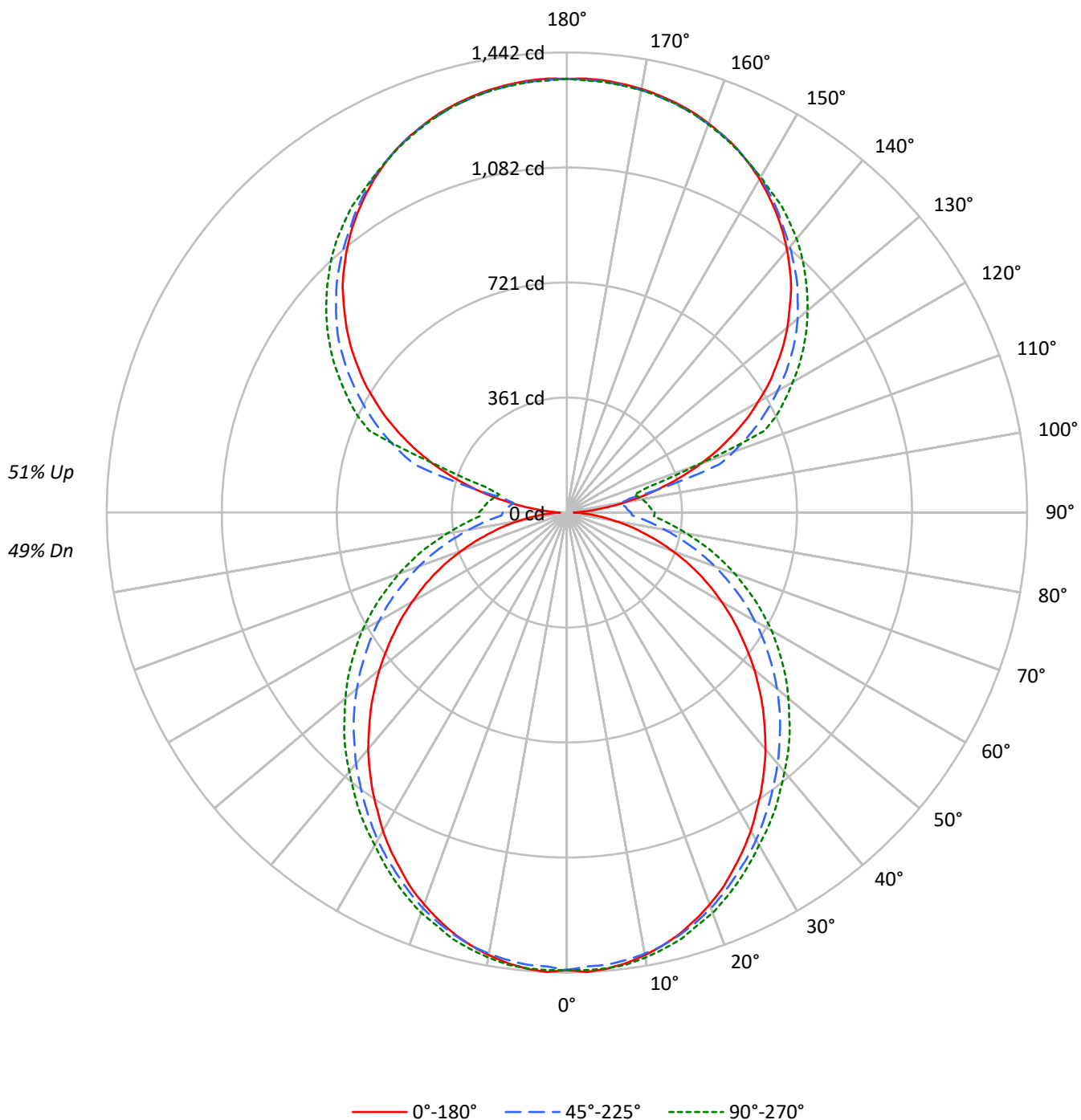
Lumens per Lamp: N/A
Luminaire Lumens: 8966.0 lumens
Efficiency: N/A
Efficacy: 96.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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	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°	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	1.5
10°-20°	387.8	4.3
20°-30°	579.9	6.5
30°-40°	692.3	7.7
40°-50°	724.4	8.1
50°-60°	679.8	7.6
60°-70°	567.8	6.3
70°-80°	406.0	4.5
80°-90°	244.3	2.7
90°-100°	199.7	2.2
100°-110°	343.4	3.8
110°-120°	642.5	7.2
120°-130°	763.5	8.5
130°-140°	789.3	8.8
140°-150°	724.2	8.1
150°-160°	581.0	6.5
160°-170°	374.9	4.2
170°-180°	129.2	1.4
0°-30°	1103.7	12.3
0°-40°	1796.0	20.0
0°-60°	3200.1	35.7
0°-90°	4418.2	49.3
90°-120°	1185.6	13.2
90°-150°	3462.7	38.6
90°-180°	4548.0	50.7
0°-180°	8966.0	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	18
95°	79	98	186	242	257	87
105°	314	362	338	203	219	332
115°	572	597	662	710	727	566
125°	801	809	858	893	906	716
135°	994	998	1020	1051	1056	765
145°	1145	1150	1152	1167	1173	716
155°	1259	1257	1258	1264	1257	580
165°	1328	1325	1324	1332	1325	375
175°	1359	1354	1355	1362	1354	129
180°	1359	1359	1359	1359	1359	

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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	107.9	200.7	257.9	275.5
92.5°	41.9	103.1	190.3	248.9	263.9
95°	78.8	98.3	185.9	241.5	257.1
97.5°	127.7	155.7	177.6	232.5	249.1
100°	184.8	254.9	169.2	222.6	239.2
102.5°	249.8	306.7	201.2	211.7	229.3
105°	313.5	362.1	338.3	203.3	219.3
107.5°	379.5	421.4	500.7	387.2	269.0
110°	445.7	481.9	555.5	562.8	430.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	510.3	539.2	609.7	657.8	669.9
115°	572.4	597.2	662.5	710.1	726.7
117.5°	635.0	654.6	712.7	758.3	771.8
120°	691.0	707.9	762.5	806.5	817.5
122.5°	749.5	759.8	812.2	851.7	863.6
125°	800.6	808.6	858.0	892.8	905.7
127.5°	853.1	859.6	903.7	937.9	946.8
130°	901.5	908.0	943.4	977.0	984.4
132.5°	946.4	954.5	981.0	1013.2	1021.0
135°	993.9	998.4	1019.6	1050.8	1055.6
137.5°	1034.3	1040.9	1053.8	1083.8	1089.6
140°	1073.2	1079.2	1086.9	1114.4	1120.2
142.5°	1110.5	1115.0	1118.0	1141.4	1146.1
145°	1144.9	1150.4	1152.4	1166.9	1173.1
147.5°	1176.6	1181.7	1183.7	1190.4	1191.5
150°	1206.9	1209.9	1212.0	1214.0	1214.0
152.5°	1234.2	1235.2	1236.2	1240.2	1235.2
155°	1259.4	1257.4	1258.4	1263.5	1257.4
157.5°	1279.6	1279.6	1278.6	1284.7	1276.6
160°	1297.8	1296.8	1295.8	1301.8	1294.8
162.5°	1315.0	1311.9	1310.9	1318.0	1311.9
165°	1328.1	1325.1	1324.1	1332.1	1325.1
167.5°	1339.2	1335.2	1335.2	1343.3	1335.2
170°	1348.3	1344.3	1344.3	1352.3	1344.3
172.5°	1354.4	1349.3	1350.3	1358.4	1349.3
175°	1359.4	1354.4	1355.4	1362.4	1354.4
177.5°	1361.4	1356.4	1357.4	1365.5	1355.4
180°	1359.4	1359.4	1359.4	1359.4	1359.4

(END OF REPORT)