

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: P1031434

Luminaire Tested: S123DIW-B1165D1030UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031434
REPORT IS A COMBINATION OF REPORTS P990913 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D1030UB50-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

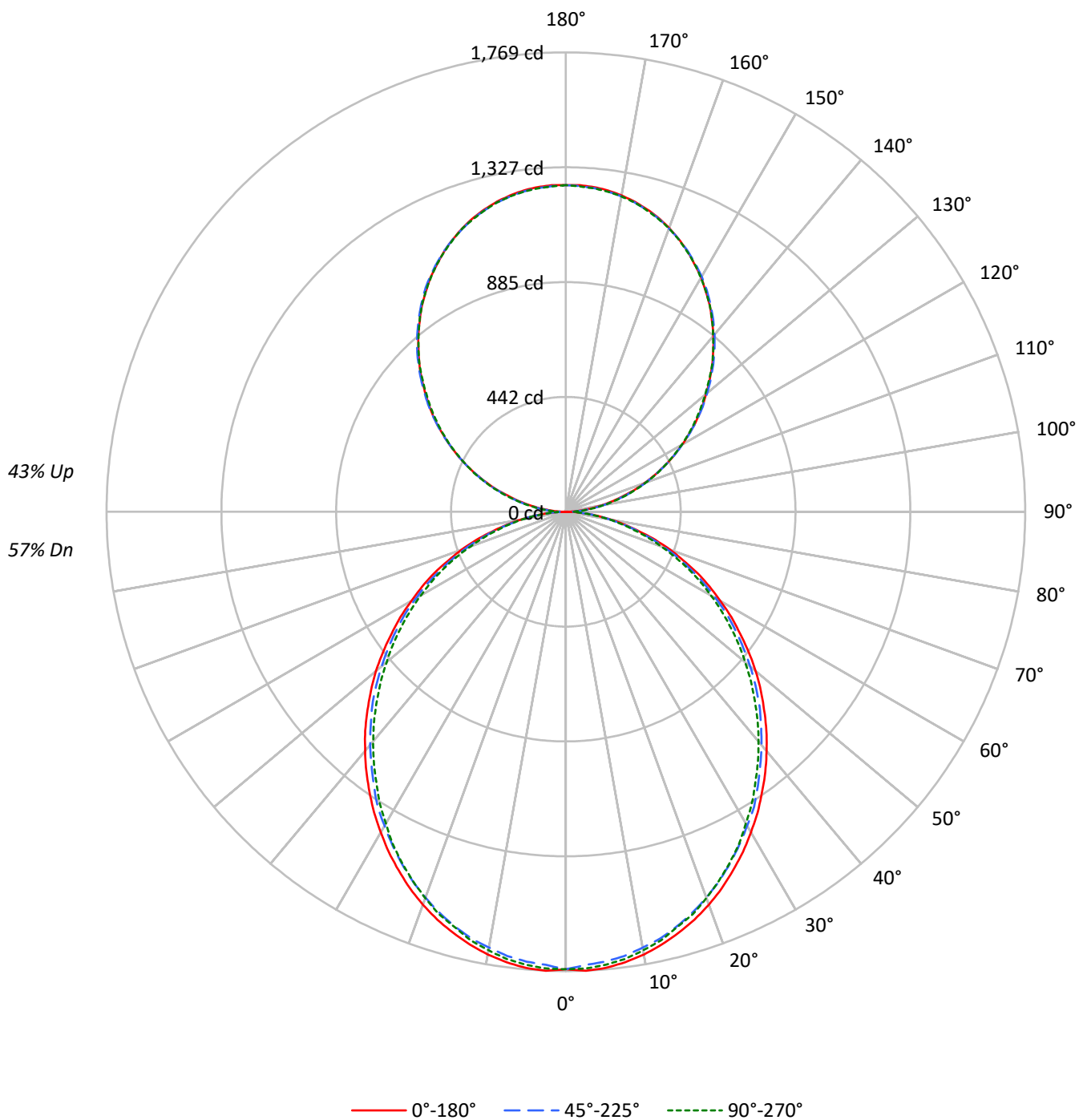
Lumens per Lamp: N/A
Luminaire Lumens: 8073.0 lumens
Efficiency: N/A
Efficacy: 87.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	99	95	91	87	92	88	85	82	76	74	71	65	63	62	55	54	53
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	48	46	44
3	82	73	65	59	76	68	61	56	59	54	50	51	47	44	43	40	38
4	75	64	56	50	70	60	53	48	52	47	42	45	41	37	38	35	32
5	69	57	49	43	64	54	46	41	47	41	37	40	36	32	35	31	28
6	64	52	43	37	59	48	41	36	42	36	32	37	32	28	31	28	25
7	59	47	38	33	55	44	36	31	38	32	28	33	29	25	29	25	22
8	55	42	34	29	51	40	33	28	35	29	25	30	26	22	26	23	20
9	51	39	31	26	47	36	29	25	32	26	22	28	23	20	24	21	18
10	48	35	28	23	44	33	27	22	30	24	20	26	21	18	23	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18963	18963	18963
5°	19010	18309	18281
10°	18841	17689	17508
15°	18579	17045	16664
20°	18278	16330	15828
25°	17890	15574	14935
30°	17464	14793	13996
35°	17020	13994	13061
40°	16554	13157	12144
45°	16041	12340	11184
50°	15518	11431	10221
55°	14849	10482	9245
60°	14159	9436	8206
65°	13513	8305	7123
70°	12581	7050	5860
75°	11237	5583	4550
80°	9702	3924	3218
85°	7569	2108	1611

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16041 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.1	2.1
10°-20°	469.0	5.8
20°-30°	692.6	8.6
30°-40°	808.9	10.0
40°-50°	813.2	10.1
50°-60°	714.4	8.8
60°-70°	532.0	6.6
70°-80°	302.8	3.8
80°-90°	88.7	1.1
90°-100°	81.0	1.0
100°-110°	245.1	3.0
110°-120°	417.2	5.2
120°-130°	548.9	6.8
130°-140°	617.0	7.6
140°-150°	606.5	7.5
150°-160°	510.6	6.3
160°-170°	340.0	4.2
170°-180°	119.0	1.5
0°-30°	1327.7	16.4
0°-40°	2136.6	26.5
0°-60°	3664.1	45.4
0°-90°	4587.7	56.8
90°-120°	743.3	9.2
90°-150°	2515.7	31.2
90°-180°	3485.0	43.2
0°-180°	8073.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1762	1762	1762	1762	1762	
5°	1763	1756	1739	1754	1751	167
15°	1678	1672	1653	1665	1656	473
25°	1524	1515	1495	1497	1492	702
35°	1318	1309	1289	1280	1272	825
45°	1080	1074	1054	1036	1029	834
55°	820	818	798	782	774	734
65°	559	551	536	524	520	551
75°	295	289	285	277	273	316
85°	79	76	76	73	73	84
90°	1	11	24	28	30	10
95°	58	65	73	77	77	64
105°	222	224	233	233	235	238
115°	420	423	421	422	421	416
125°	615	618	616	612	608	548
135°	797	803	802	798	796	614
145°	967	969	972	971	967	604
155°	1108	1108	1109	1113	1106	510
165°	1206	1204	1204	1210	1202	340
175°	1255	1251	1251	1257	1250	119
180°	1258	1258	1258	1258	1258	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1761.7	1761.7	1761.7	1761.7	1761.7
2.5°	1769.3	1763.2	1746.6	1761.7	1760.2
5°	1763.2	1755.7	1739.0	1754.2	1751.1
7.5°	1749.6	1742.0	1725.4	1739.0	1737.5
10°	1731.4	1723.9	1704.2	1717.8	1714.8
12.5°	1707.2	1701.1	1683.0	1692.0	1690.5
15°	1678.4	1672.4	1652.7	1664.8	1655.7
17.5°	1646.6	1639.0	1619.3	1628.4	1625.4
20°	1610.2	1601.2	1581.5	1587.5	1583.0
22.5°	1569.3	1560.3	1540.6	1545.1	1539.1
25°	1523.9	1514.8	1495.1	1496.6	1492.1
27.5°	1476.9	1467.9	1446.6	1448.2	1443.6
30°	1425.4	1417.9	1396.7	1396.7	1386.1
32.5°	1373.9	1363.3	1348.2	1337.6	1333.0
35°	1317.9	1308.8	1289.1	1280.0	1272.4
37.5°	1261.8	1249.7	1230.0	1219.4	1214.9
40°	1202.8	1193.7	1172.5	1160.3	1154.3
42.5°	1143.7	1133.1	1111.9	1099.8	1093.7
45°	1080.1	1074.0	1054.3	1036.1	1028.6
47.5°	1018.0	1008.9	990.7	972.5	966.5
50°	954.3	946.8	927.1	910.4	901.3
52.5°	887.7	883.1	861.9	848.3	839.2
55°	819.5	818.0	798.3	781.6	774.1
57.5°	755.9	749.8	734.7	719.5	710.4
60°	686.2	684.7	666.5	652.9	645.3
62.5°	624.1	619.6	601.4	587.7	583.2
65°	559.0	551.4	536.2	524.1	519.6
67.5°	489.3	483.2	471.1	460.5	454.4
70°	427.2	418.1	409.0	398.4	390.8
72.5°	362.0	356.0	345.4	336.3	333.3
75°	295.4	289.3	284.8	277.2	272.7
77.5°	236.3	233.3	227.2	221.2	221.2
80°	178.7	174.2	171.2	169.7	169.7
82.5°	122.7	122.7	122.7	119.7	118.2
85°	78.8	75.7	75.7	72.7	72.7
87.5°	39.4	34.8	33.3	31.8	31.8
90°	1.0	10.9	23.7	27.7	29.6
92.5°	29.6	35.6	41.5	44.5	42.5
95°	58.3	65.2	73.1	77.1	77.1
97.5°	95.8	100.8	106.7	111.7	110.7
100°	134.4	140.3	145.3	148.2	150.2
102.5°	178.8	181.8	188.7	191.7	190.7
105°	222.3	224.3	233.2	233.2	235.2
107.5°	273.7	274.7	278.6	281.6	280.6
110°	321.1	323.1	325.1	329.0	327.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	370.5	371.5	371.5	376.5	376.5
115°	420.0	422.9	420.9	421.9	420.9
117.5°	470.3	471.3	469.4	469.4	466.4
120°	516.8	522.7	517.8	516.8	514.8
122.5°	565.2	569.2	567.2	564.2	561.3
125°	614.6	617.6	615.6	611.6	607.7
127.5°	660.1	666.0	664.0	658.1	654.1
130°	705.5	713.4	710.5	706.5	699.6
132.5°	751.0	758.9	756.9	752.0	747.0
135°	797.4	803.3	802.4	798.4	796.4
137.5°	839.9	844.8	847.8	842.9	839.9
140°	884.4	889.3	890.3	889.3	882.4
142.5°	924.9	929.8	931.8	930.8	925.9
145°	967.4	969.3	972.3	971.3	967.4
147.5°	1003.9	1007.9	1010.8	1010.8	1004.9
150°	1042.5	1044.4	1046.4	1046.4	1040.5
152.5°	1074.1	1077.0	1078.0	1080.0	1075.1
155°	1107.7	1107.7	1108.7	1112.6	1105.7
157.5°	1136.3	1135.3	1136.3	1140.3	1134.4
160°	1163.0	1161.0	1161.0	1166.0	1162.0
162.5°	1186.7	1183.8	1184.8	1189.7	1182.8
165°	1206.5	1203.5	1203.5	1209.5	1202.5
167.5°	1223.3	1219.3	1220.3	1226.3	1220.3
170°	1237.1	1233.2	1233.2	1240.1	1233.2
172.5°	1248.0	1244.0	1244.0	1250.0	1243.1
175°	1254.9	1251.0	1251.0	1256.9	1250.0
177.5°	1258.9	1254.9	1254.9	1260.8	1253.9
180°	1257.9	1257.9	1257.9	1257.9	1257.9

(END OF REPORT)