

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: P1030734

Luminaire Tested: S123DIW-B1165D1320UB2750-4F0-XX-W2A-D1_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1030734
REPORT IS A COMBINATION OF REPORTS P990931 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D1320UB2750-4F0-XX-W2A-D1_5000K
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

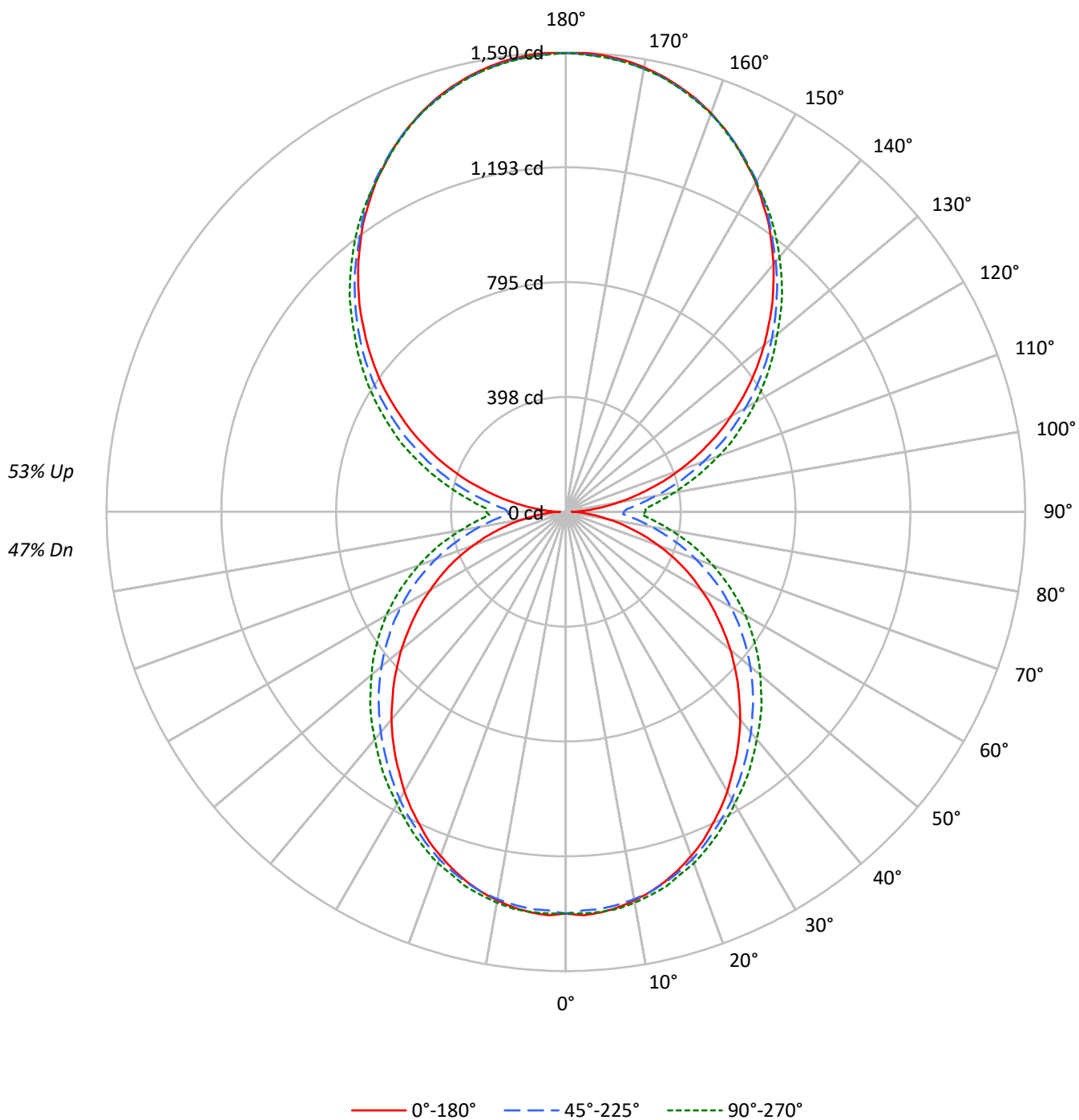
Lumens per Lamp: N/A
Luminaire Lumens: 9077.0 lumens
Efficiency: N/A
Efficacy: 87.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 103.4
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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	54	54	54
1	96	91	87	83	88	84	80	77	70	68	65	57	56	54	46	44	43
2	87	79	73	67	80	73	67	62	61	57	53	50	47	44	40	38	36
3	79	69	62	56	72	64	57	52	53	48	44	44	40	37	35	32	30
4	72	61	53	47	66	56	49	44	47	42	37	39	35	31	31	28	26
5	66	54	46	40	61	50	43	37	42	36	32	35	30	27	28	25	22
6	61	49	40	34	56	45	38	32	38	32	28	31	27	23	25	22	19
7	56	44	36	30	52	41	33	28	34	29	24	28	24	21	23	20	17
8	52	40	32	26	48	37	30	25	31	26	22	26	22	18	21	18	15
9	49	36	29	23	45	34	27	22	29	23	19	24	20	16	19	16	14
10	45	33	26	21	42	31	24	20	26	21	17	22	18	15	18	15	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14966	14966	14966
5°	15008	14527	14515
10°	14867	14134	14026
15°	14670	13699	13507
20°	14391	13215	12949
25°	14048	12670	12372
30°	13696	12176	11792
35°	13302	11658	11319
40°	12924	11183	10819
45°	12506	10726	10409
50°	12093	10272	9962
55°	11636	9805	9551
60°	11188	9329	9130
65°	10728	8820	8638
70°	10036	8250	8130
75°	9160	7602	7606
80°	8143	6943	7009
85°	7127	6410	6581

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12506 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	1.5
10°-20°	376.0	4.1
20°-30°	562.3	6.2
30°-40°	671.4	7.4
40°-50°	702.4	7.7
50°-60°	659.2	7.3
60°-70°	550.6	6.1
70°-80°	393.7	4.3
80°-90°	237.6	2.6
90°-100°	249.4	2.7
100°-110°	417.6	4.6
110°-120°	599.0	6.6
120°-130°	734.3	8.1
130°-140°	797.5	8.8
140°-150°	769.7	8.5
150°-160°	644.8	7.1
160°-170°	429.2	4.7
170°-180°	150.3	1.7
0°-30°	1070.2	11.8
0°-40°	1741.6	19.2
0°-60°	3103.2	34.2
0°-90°	4285.1	47.2
90°-120°	1266.1	13.9
90°-150°	3567.6	39.3
90°-180°	4792.0	52.8
0°-180°	9077.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1390	1390	1390	1390	1390	
5°	1392	1389	1380	1392	1390	132
15°	1325	1330	1328	1344	1342	373
25°	1197	1212	1216	1236	1236	552
35°	1030	1054	1074	1097	1103	644
45°	842	878	916	945	957	649
55°	642	692	747	788	800	575
65°	444	503	570	615	630	439
75°	241	312	388	438	456	257
85°	74	150	230	282	297	76
90°	21	108	201	258	275	20
95°	90	158	242	294	309	94
105°	293	332	408	450	466	313
115°	538	560	612	649	660	533
125°	780	784	826	853	858	697
135°	1010	1016	1031	1054	1059	778
145°	1223	1224	1228	1238	1240	764
155°	1399	1399	1400	1405	1396	644
165°	1523	1520	1520	1527	1518	430
175°	1584	1580	1580	1587	1578	151
180°	1588	1588	1588	1588	1588	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1390.4	1390.4	1390.4	1390.4	1390.4
2.5°	1398.0	1393.5	1381.4	1393.5	1392.0
5°	1392.0	1388.9	1379.8	1392.0	1390.4
7.5°	1381.4	1381.4	1372.3	1387.4	1385.9
10°	1366.2	1369.2	1361.7	1376.8	1373.8
12.5°	1348.0	1352.6	1348.0	1361.7	1358.6
15°	1325.3	1329.9	1328.3	1343.5	1342.0
17.5°	1298.1	1307.1	1305.6	1319.3	1316.2
20°	1267.8	1276.9	1279.9	1293.5	1295.0
22.5°	1236.0	1245.0	1249.6	1267.8	1266.2
25°	1196.6	1211.7	1216.3	1236.0	1236.0
27.5°	1158.7	1175.4	1184.5	1201.1	1202.6
30°	1117.8	1137.5	1149.6	1167.8	1167.8
32.5°	1072.4	1095.1	1111.8	1131.4	1136.0
35°	1030.0	1054.2	1073.9	1096.6	1102.7
37.5°	984.5	1011.8	1034.5	1060.3	1064.8
40°	939.1	966.3	996.6	1022.4	1028.4
42.5°	889.1	923.9	955.7	984.5	993.6
45°	842.1	878.5	916.4	945.1	957.3
47.5°	792.2	833.1	875.5	907.3	916.4
50°	743.7	786.1	833.1	867.9	878.5
52.5°	692.2	737.6	790.6	827.0	840.6
55°	642.2	692.2	746.7	787.6	799.7
57.5°	593.7	645.2	704.3	745.2	758.8
60°	542.2	596.8	658.9	701.3	717.9
62.5°	493.8	549.8	616.5	658.9	674.0
65°	443.8	502.9	569.5	614.9	630.1
67.5°	393.8	455.9	522.6	572.5	584.7
70°	340.8	405.9	478.6	527.1	542.2
72.5°	292.3	357.5	433.2	483.2	498.3
75°	240.8	312.0	387.8	437.7	455.9
77.5°	196.9	268.1	343.8	396.8	410.5
80°	150.0	224.2	302.9	354.4	369.6
82.5°	109.1	184.8	265.1	316.6	331.7
85°	74.2	150.0	230.2	281.7	296.9
87.5°	45.4	121.2	198.4	249.9	265.1
90°	20.9	107.6	201.1	257.6	275.2
92.5°	55.6	128.2	211.4	265.1	276.3
95°	90.3	158.0	242.3	294.2	309.4
97.5°	136.1	197.0	275.6	327.3	341.1
100°	183.3	239.3	315.2	362.8	380.4
102.5°	237.9	284.1	361.0	407.1	421.0
105°	292.8	331.7	408.0	450.4	466.5
107.5°	356.2	389.2	456.3	501.0	513.3
110°	414.6	444.4	507.4	551.8	561.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	477.0	499.4	556.9	601.0	614.6
115°	537.8	559.7	611.8	649.3	660.2
117.5°	601.5	614.8	663.8	700.1	708.6
120°	658.6	673.6	717.3	751.0	759.1
122.5°	719.7	727.7	772.1	801.8	808.6
125°	780.5	784.3	825.8	852.6	858.2
127.5°	837.9	843.9	879.3	902.1	907.7
130°	895.3	903.8	930.3	954.1	954.5
132.5°	951.2	961.2	981.4	1002.4	1006.8
135°	1009.8	1015.8	1031.3	1053.5	1058.6
137.5°	1063.5	1068.2	1082.6	1100.6	1104.4
140°	1118.1	1124.4	1130.2	1151.7	1150.5
142.5°	1169.3	1174.0	1176.5	1195.0	1196.3
145°	1222.9	1223.9	1227.7	1238.5	1239.6
147.5°	1267.6	1272.6	1276.3	1280.8	1279.4
150°	1316.2	1318.7	1321.2	1321.2	1316.7
152.5°	1356.2	1359.9	1361.1	1363.6	1357.4
155°	1398.6	1398.6	1399.8	1404.8	1396.1
157.5°	1434.8	1433.5	1434.8	1439.7	1432.3
160°	1468.4	1465.9	1465.9	1472.2	1467.2
162.5°	1498.4	1494.6	1495.9	1502.1	1493.4
165°	1523.3	1519.6	1519.6	1527.1	1518.3
167.5°	1544.5	1539.6	1540.8	1548.3	1540.8
170°	1562.0	1557.0	1557.0	1565.8	1557.0
172.5°	1575.7	1570.7	1570.7	1578.2	1569.5
175°	1584.5	1579.5	1579.5	1587.0	1578.2
177.5°	1589.5	1584.5	1584.5	1592.0	1583.2
180°	1588.2	1588.2	1588.2	1588.2	1588.2

(END OF REPORT)