

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: P1031320

Luminaire Tested: S123DIW-B1000D1320UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031320
REPORT IS A COMBINATION OF REPORTS P990649 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1000D1320UB50-4F0-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

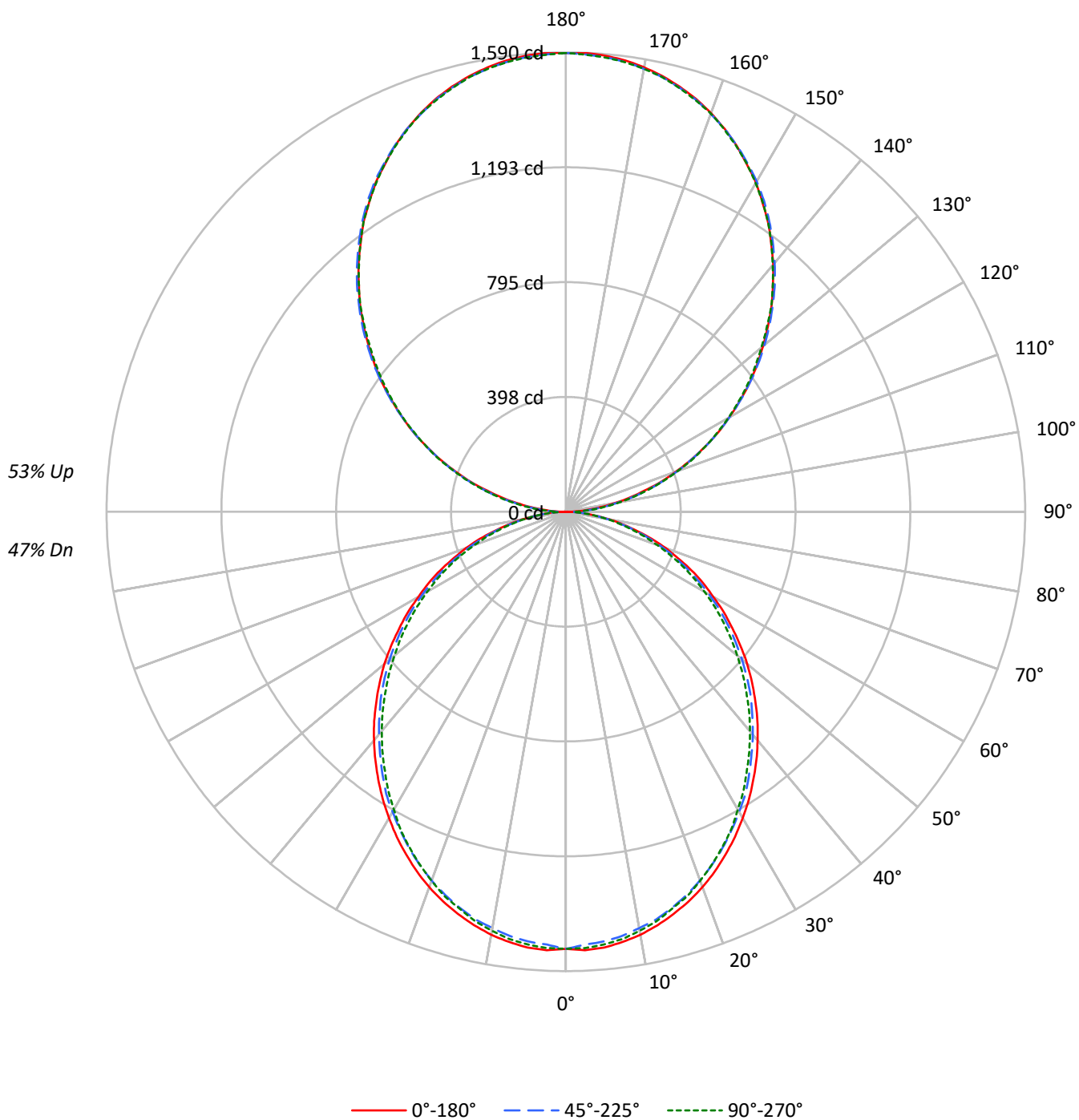
Lumens per Lamp: N/A
Luminaire Lumens: 8341.0 lumens
Efficiency: N/A
Efficacy: 93.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 88.9
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	97	93	89	85	89	85	82	79	72	69	67	59	57	56	47	46	45
2	88	81	75	70	81	75	69	65	63	59	55	52	49	46	42	40	38
3	81	71	64	58	74	66	59	54	55	50	47	46	42	39	37	34	32
4	74	63	55	49	67	58	51	46	49	44	40	41	37	34	33	30	28
5	68	56	48	42	62	52	45	39	44	38	34	36	32	29	30	27	24
6	62	50	42	36	57	47	39	34	40	34	30	33	29	25	27	24	21
7	58	45	37	32	53	42	35	30	36	30	26	30	26	23	25	21	19
8	53	41	33	28	49	38	31	26	33	27	23	27	23	20	22	19	17
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	15
10	46	34	27	22	43	32	26	21	28	22	19	23	19	16	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16283	16283	16283
5°	16323	15721	15697
10°	16178	15189	15033
15°	15953	14635	14309
20°	15696	14022	13592
25°	15362	13373	12824
30°	14997	12702	12018
35°	14614	12016	11216
40°	14214	11298	10428
45°	13773	10596	9603
50°	13326	9815	8776
55°	12751	9001	7939
60°	12158	8103	7047
65°	11603	7132	6116
70°	10802	6054	5032
75°	9647	4793	3906
80°	8333	3369	2763
85°	6493	1810	1383

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13773 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.6	1.7
10°-20°	402.7	4.8
20°-30°	594.7	7.1
30°-40°	694.6	8.3
40°-50°	698.3	8.4
50°-60°	613.4	7.4
60°-70°	456.8	5.5
70°-80°	260.0	3.1
80°-90°	77.3	0.9
90°-100°	102.2	1.2
100°-110°	309.4	3.7
110°-120°	526.8	6.3
120°-130°	693.0	8.3
130°-140°	779.0	9.3
140°-150°	765.8	9.2
150°-160°	644.8	7.7
160°-170°	429.2	5.1
170°-180°	150.3	1.8
0°-30°	1140.0	13.7
0°-40°	1834.6	22.0
0°-60°	3146.3	37.7
0°-90°	3940.4	47.2
90°-120°	938.5	11.3
90°-150°	3176.3	38.1
90°-180°	4401.0	52.8
0°-180°	8341.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1513	1513	1513	1513	1513	
5°	1514	1508	1493	1506	1504	144
15°	1441	1436	1419	1430	1422	406
25°	1308	1301	1284	1285	1281	603
35°	1132	1124	1107	1099	1093	708
45°	927	922	905	890	883	716
55°	704	702	686	671	665	630
65°	480	474	460	450	446	474
75°	254	248	244	238	234	271
85°	68	65	65	62	62	73
90°	1	14	30	35	37	10
95°	74	82	92	97	97	81
105°	281	283	294	294	297	301
115°	530	534	532	533	532	525
125°	776	780	777	772	767	692
135°	1007	1014	1013	1008	1006	776
145°	1221	1224	1228	1226	1221	763
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°	1512.7	1512.7	1512.7	1512.7	1512.7
2.5°	1519.2	1514.0	1499.7	1512.7	1511.4
5°	1514.0	1507.5	1493.2	1506.2	1503.6
7.5°	1502.3	1495.8	1481.5	1493.2	1491.9
10°	1486.7	1480.2	1463.3	1475.0	1472.4
12.5°	1465.9	1460.7	1445.1	1452.9	1451.6
15°	1441.2	1436.0	1419.1	1429.5	1421.7
17.5°	1413.9	1407.4	1390.5	1398.3	1395.7
20°	1382.7	1374.9	1358.0	1363.2	1359.3
22.5°	1347.6	1339.7	1322.8	1326.7	1321.5
25°	1308.5	1300.7	1283.8	1285.1	1281.2
27.5°	1268.2	1260.4	1242.2	1243.5	1239.6
30°	1224.0	1217.5	1199.3	1199.3	1190.2
32.5°	1179.8	1170.7	1157.6	1148.5	1144.6
35°	1131.6	1123.8	1106.9	1099.1	1092.6
37.5°	1083.5	1073.1	1056.2	1047.1	1043.2
40°	1032.8	1025.0	1006.8	996.4	991.2
42.5°	982.0	972.9	954.7	944.3	939.1
45°	927.4	922.2	905.3	889.7	883.2
47.5°	874.1	866.3	850.7	835.1	829.9
50°	819.5	813.0	796.0	781.7	773.9
52.5°	762.2	758.3	740.1	728.4	720.6
55°	703.7	702.4	685.5	671.2	664.7
57.5°	649.1	643.9	630.9	617.8	610.0
60°	589.2	587.9	572.3	560.6	554.1
62.5°	535.9	532.0	516.4	504.7	500.8
65°	480.0	473.5	460.5	450.1	446.1
67.5°	420.1	414.9	404.5	395.4	390.2
70°	366.8	359.0	351.2	342.1	335.6
72.5°	310.9	305.7	296.6	288.8	286.2
75°	253.6	248.4	244.5	238.0	234.1
77.5°	202.9	200.3	195.1	189.9	189.9
80°	153.5	149.6	147.0	145.7	145.7
82.5°	105.4	105.4	105.4	102.8	101.5
85°	67.6	65.0	65.0	62.4	62.4
87.5°	33.8	29.9	28.6	27.3	27.3
90°	1.2	13.7	29.9	34.9	37.4
92.5°	37.4	44.9	52.4	56.1	53.6
95°	73.6	82.3	92.3	97.3	97.3
97.5°	121.0	127.3	134.7	141.0	139.7
100°	169.7	177.2	183.4	187.1	189.6
102.5°	225.8	229.6	238.3	242.0	240.8
105°	280.7	283.2	294.4	294.4	296.9
107.5°	345.6	346.8	351.8	355.6	354.3
110°	405.5	408.0	410.5	415.5	413.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	467.9	469.1	469.1	475.3	475.3
115°	530.2	534.0	531.5	532.7	531.5
117.5°	593.9	595.1	592.6	592.6	588.9
120°	652.5	660.0	653.7	652.5	650.0
122.5°	713.6	718.6	716.1	712.4	708.6
125°	776.0	779.8	777.3	772.3	767.3
127.5°	833.4	840.9	838.4	830.9	825.9
130°	890.8	900.8	897.0	892.0	883.3
132.5°	948.2	958.2	955.7	949.4	943.2
135°	1006.8	1014.3	1013.1	1008.1	1005.6
137.5°	1060.5	1066.7	1070.5	1064.2	1060.5
140°	1116.6	1122.9	1124.1	1122.9	1114.1
142.5°	1167.8	1174.0	1176.5	1175.3	1169.0
145°	1221.4	1223.9	1227.7	1226.4	1221.4
147.5°	1267.6	1272.6	1276.3	1276.3	1268.8
150°	1316.2	1318.7	1321.2	1321.2	1313.7
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)