

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: P1031319

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031319
REPORT IS A COMBINATION OF REPORTS P990648 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-F
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

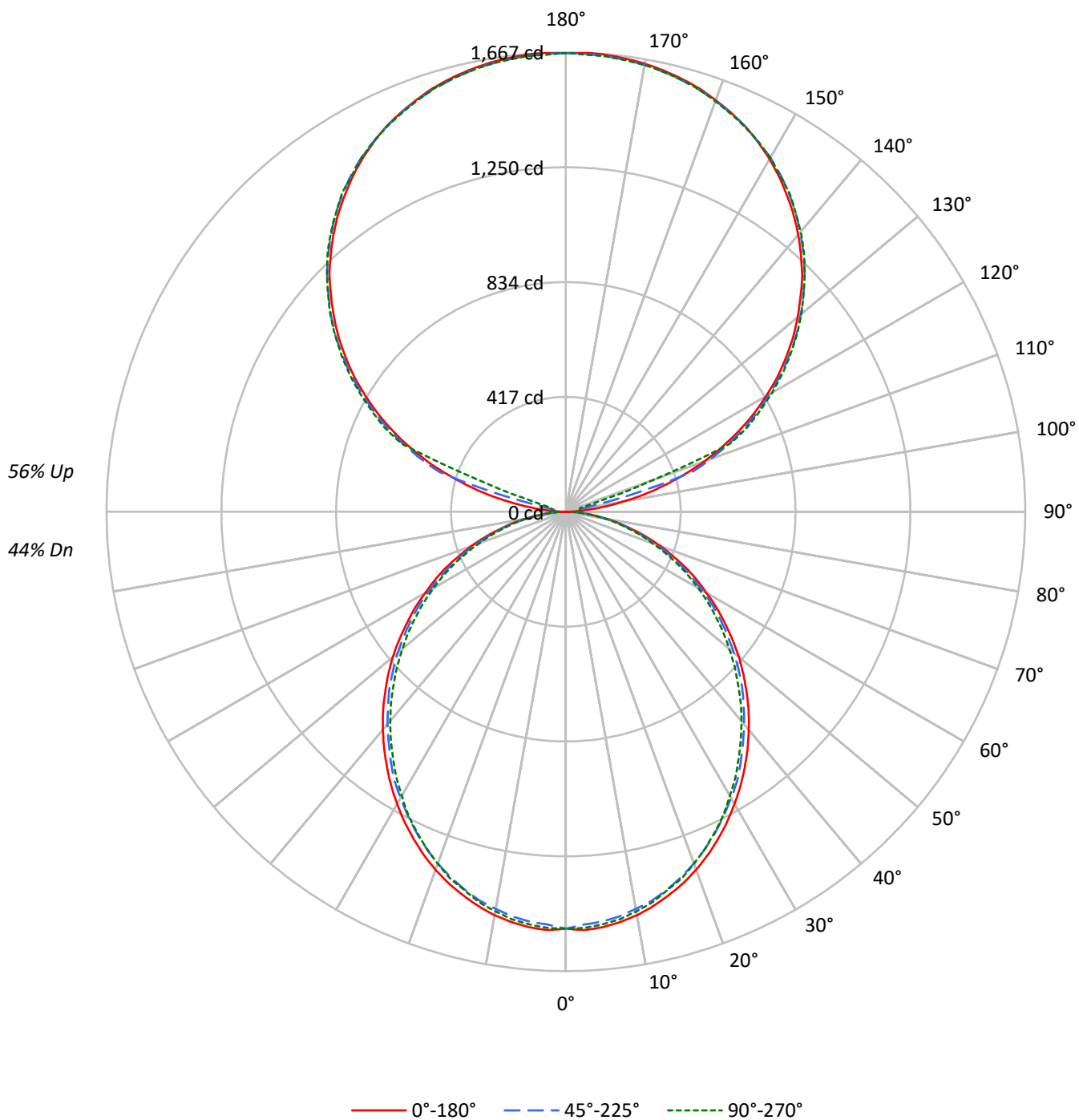
Lumens per Lamp: N/A
Luminaire Lumens: 9016.0 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	97	97	97	97	80	80	80	64	64	64	50	50	50
1	96	92	88	85	88	84	81	78	70	68	65	57	55	54	44	43	42
2	88	80	74	69	80	74	68	64	61	57	54	50	47	45	39	37	36
3	80	71	63	57	73	65	58	53	54	49	45	44	41	38	35	32	30
4	73	62	55	49	67	57	50	45	48	43	39	39	35	32	31	28	26
5	67	56	47	42	61	51	44	39	43	37	33	35	31	28	28	25	23
6	62	50	42	36	56	46	39	34	39	33	29	32	28	24	25	22	20
7	57	45	37	31	52	41	34	29	35	29	25	29	25	22	23	20	18
8	53	41	33	28	48	38	31	26	32	26	23	26	22	19	21	18	16
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	17	14
10	46	34	27	22	42	32	25	21	27	22	18	22	18	16	18	15	13

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	1.6
10°-20°	402.7	4.5
20°-30°	594.7	6.6
30°-40°	694.6	7.7
40°-50°	698.3	7.7
50°-60°	613.4	6.8
60°-70°	456.8	5.1
70°-80°	260.0	2.9
80°-90°	77.2	0.9
90°-100°	58.7	0.7
100°-110°	283.9	3.1
110°-120°	695.6	7.7
120°-130°	883.1	9.8
130°-140°	943.4	10.5
140°-150°	882.1	9.8
150°-160°	711.5	7.9
160°-170°	459.2	5.1
170°-180°	158.2	1.8
0°-30°	1140.0	12.6
0°-40°	1834.6	20.3
0°-60°	3146.3	34.9
0°-90°	3940.3	43.7
90°-120°	1038.2	11.5
90°-150°	3746.7	41.6
90°-180°	5076.0	56.3
0°-180°	9016.0	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	9
95°	76	25	38	47	47	90
105°	369	382	271	52	54	391
115°	692	699	710	722	727	683
125°	975	985	990	992	994	871
135°	1213	1221	1226	1230	1226	934
145°	1400	1409	1411	1414	1414	877
155°	1542	1540	1541	1547	1540	711
165°	1627	1623	1622	1632	1623	460
175°	1665	1659	1660	1669	1659	158
180°	1665	1665	1665	1665	1665	

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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	13.6	29.7	34.6	37.1
92.5°	28.4	21.0	32.2	40.8	42.1
95°	75.5	24.7	38.3	47.0	47.0
97.5°	137.3	102.7	39.6	49.5	50.7
100°	209.0	233.8	40.8	50.7	52.0
102.5°	290.7	306.8	91.5	50.7	53.2
105°	368.6	382.2	270.9	52.0	54.4
107.5°	451.5	462.6	481.2	290.7	128.6
110°	534.4	544.3	557.9	517.0	340.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	613.5	622.2	635.8	646.9	644.4
115°	691.5	698.9	710.0	722.4	727.3
117.5°	768.1	776.8	783.0	792.9	794.1
120°	838.6	849.8	853.5	863.4	863.4
122.5°	910.4	919.1	924.0	930.2	931.4
125°	974.7	984.6	989.6	992.0	994.5
127.5°	1039.0	1048.9	1055.1	1058.8	1056.4
130°	1098.4	1108.3	1113.3	1118.2	1115.7
132.5°	1155.3	1165.2	1168.9	1173.9	1170.2
135°	1213.4	1220.9	1225.8	1229.5	1225.8
137.5°	1262.9	1272.8	1275.3	1281.5	1279.0
140°	1312.4	1319.8	1323.5	1328.5	1326.0
142.5°	1358.2	1365.6	1369.3	1373.0	1369.3
145°	1400.2	1408.9	1411.4	1413.8	1413.8
147.5°	1441.0	1447.2	1449.7	1452.2	1446.0
150°	1478.1	1481.9	1484.3	1486.8	1483.1
152.5°	1511.5	1512.8	1514.0	1519.0	1512.8
155°	1542.5	1540.0	1541.2	1547.4	1540.0
157.5°	1567.2	1567.2	1566.0	1573.4	1563.5
160°	1589.5	1588.2	1587.0	1594.4	1585.8
162.5°	1610.5	1606.8	1605.6	1614.2	1606.8
165°	1626.6	1622.9	1621.6	1631.5	1622.9
167.5°	1640.2	1635.2	1635.2	1645.1	1635.2
170°	1651.3	1646.4	1646.4	1656.3	1646.4
172.5°	1658.7	1652.6	1653.8	1663.7	1652.6
175°	1664.9	1658.7	1660.0	1668.6	1658.7
177.5°	1667.4	1661.2	1662.5	1672.3	1660.0
180°	1664.9	1664.9	1664.9	1664.9	1664.9

(END OF REPORT)