

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: P1031314

Luminaire Tested: S123DIW-B1000D1320UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031314
REPORT IS A COMBINATION OF REPORTS P990640 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1000D1320UB40-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

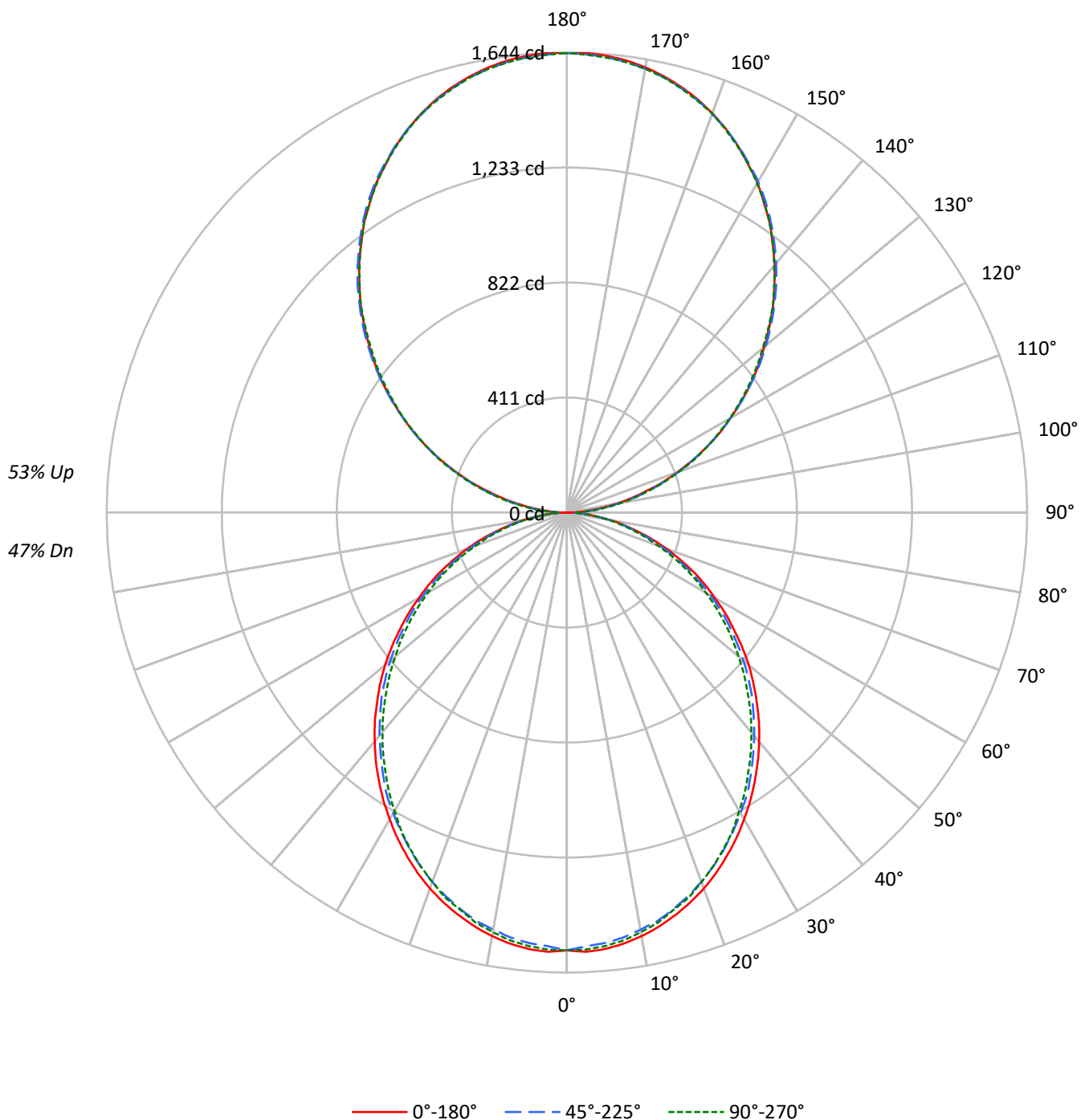
Lumens per Lamp: N/A
Luminaire Lumens: 8626.0 lumens
Efficiency: N/A
Efficacy: 97.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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	51	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	37	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°	16841	16841	16841
5°	16884	16260	16236
10°	16733	15710	15549
15°	16500	15138	14799
20°	16234	14502	14058
25°	15889	13832	13264
30°	15511	13138	12430
35°	15115	12429	11601
40°	14701	11685	10784
45°	14245	10959	9933
50°	13783	10151	9078
55°	13187	9310	8211
60°	12575	8380	7288
65°	12000	7375	6326
70°	11173	6261	5204
75°	9978	4958	4041
80°	8616	3484	2858
85°	6724	1874	1432

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14245 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.5	1.7
10°-20°	416.5	4.8
20°-30°	615.1	7.1
30°-40°	718.4	8.3
40°-50°	722.2	8.4
50°-60°	634.4	7.4
60°-70°	472.5	5.5
70°-80°	268.9	3.1
80°-90°	79.9	0.9
90°-100°	105.7	1.2
100°-110°	320.0	3.7
110°-120°	544.7	6.3
120°-130°	716.6	8.3
130°-140°	805.5	9.3
140°-150°	791.9	9.2
150°-160°	666.7	7.7
160°-170°	443.9	5.1
170°-180°	155.4	1.8
0°-30°	1179.1	13.7
0°-40°	1897.5	22.0
0°-60°	3254.2	37.7
0°-90°	4075.5	47.2
90°-120°	970.4	11.3
90°-150°	3284.5	38.1
90°-180°	4551.0	52.8
0°-180°	8626.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1565	1565	1565	1565	1565	
5°	1566	1559	1544	1558	1555	149
15°	1491	1485	1468	1478	1470	420
25°	1353	1345	1328	1329	1325	623
35°	1170	1162	1145	1137	1130	732
45°	959	954	936	920	914	741
55°	728	726	709	694	688	652
65°	496	490	476	466	461	490
75°	262	257	253	246	242	280
85°	70	67	67	65	65	75
90°	1	14	31	36	39	10
95°	76	85	96	101	101	84
105°	290	293	304	304	307	311
115°	548	552	550	551	550	543
125°	802	806	804	799	793	716
135°	1041	1049	1048	1042	1040	802
145°	1263	1266	1270	1268	1263	789
155°	1446	1446	1448	1453	1444	666
165°	1575	1571	1571	1579	1570	444
175°	1638	1633	1633	1641	1632	156
180°	1642	1642	1642	1642	1642	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1564.6	1564.6	1564.6	1564.6	1564.6
2.5°	1571.3	1566.0	1551.2	1564.6	1563.3
5°	1566.0	1559.2	1544.4	1557.9	1555.2
7.5°	1553.9	1547.1	1532.3	1544.4	1543.1
10°	1537.7	1531.0	1513.5	1525.6	1522.9
12.5°	1516.2	1510.8	1494.7	1502.7	1501.4
15°	1490.6	1485.2	1467.8	1478.5	1470.4
17.5°	1462.4	1455.6	1438.2	1446.2	1443.5
20°	1430.1	1422.0	1404.5	1409.9	1405.9
22.5°	1393.8	1385.7	1368.2	1372.2	1366.9
25°	1353.4	1345.3	1327.8	1329.2	1325.1
27.5°	1311.7	1303.6	1284.8	1286.1	1282.1
30°	1266.0	1259.2	1240.4	1240.4	1231.0
32.5°	1220.2	1210.8	1197.3	1187.9	1183.9
35°	1170.4	1162.4	1144.9	1136.8	1130.1
37.5°	1120.7	1109.9	1092.4	1083.0	1079.0
40°	1068.2	1060.1	1041.3	1030.5	1025.1
42.5°	1015.7	1006.3	987.5	976.7	971.3
45°	959.2	953.8	936.3	920.2	913.5
47.5°	904.1	896.0	879.8	863.7	858.3
50°	847.6	840.8	823.3	808.5	800.5
52.5°	788.4	784.3	765.5	753.4	745.3
55°	727.8	726.5	709.0	694.2	687.5
57.5°	671.3	665.9	652.5	639.0	631.0
60°	609.4	608.1	591.9	579.8	573.1
62.5°	554.3	550.2	534.1	522.0	518.0
65°	496.4	489.7	476.2	465.5	461.4
67.5°	434.5	429.2	418.4	409.0	403.6
70°	379.4	371.3	363.2	353.8	347.1
72.5°	321.5	316.2	306.7	298.7	296.0
75°	262.3	257.0	252.9	246.2	242.2
77.5°	209.9	207.2	201.8	196.4	196.4
80°	158.7	154.7	152.0	150.7	150.7
82.5°	109.0	109.0	109.0	106.3	104.9
85°	70.0	67.3	67.3	64.6	64.6
87.5°	35.0	30.9	29.6	28.3	28.3
90°	1.3	14.2	31.0	36.1	38.7
92.5°	38.7	46.4	54.2	58.1	55.5
95°	76.1	85.1	95.5	100.6	100.6
97.5°	125.1	131.6	139.3	145.8	144.5
100°	175.5	183.2	189.6	193.5	196.1
102.5°	233.5	237.4	246.4	250.3	249.0
105°	290.3	292.9	304.5	304.5	307.0
107.5°	357.4	358.6	363.8	367.7	366.4
110°	419.3	421.9	424.4	429.6	427.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	483.8	485.1	485.1	491.5	491.5
115°	548.3	552.2	549.6	550.9	549.6
117.5°	614.1	615.4	612.8	612.8	608.9
120°	674.7	682.5	676.0	674.7	672.1
122.5°	737.9	743.1	740.5	736.7	732.8
125°	802.4	806.3	803.7	798.6	793.4
127.5°	861.8	869.5	867.0	859.2	854.1
130°	921.1	931.5	927.6	922.4	913.4
132.5°	980.5	990.8	988.2	981.8	975.3
135°	1041.1	1048.9	1047.6	1042.4	1039.8
137.5°	1096.6	1103.0	1106.9	1100.5	1096.6
140°	1154.6	1161.1	1162.4	1161.1	1152.1
142.5°	1207.5	1214.0	1216.6	1215.3	1208.8
145°	1263.0	1265.6	1269.5	1268.2	1263.0
147.5°	1310.7	1315.9	1319.8	1319.8	1312.0
150°	1361.1	1363.6	1366.2	1366.2	1358.5
152.5°	1402.3	1406.2	1407.5	1410.1	1403.6
155°	1446.2	1446.2	1447.5	1452.7	1443.6
157.5°	1483.6	1482.3	1483.6	1488.8	1481.0
160°	1518.5	1515.9	1515.9	1522.3	1517.2
162.5°	1549.4	1545.5	1546.8	1553.3	1544.3
165°	1575.2	1571.3	1571.3	1579.1	1570.1
167.5°	1597.2	1592.0	1593.3	1601.0	1593.3
170°	1615.2	1610.1	1610.1	1619.1	1610.1
172.5°	1629.4	1624.2	1624.2	1632.0	1623.0
175°	1638.4	1633.3	1633.3	1641.0	1632.0
177.5°	1643.6	1638.4	1638.4	1646.2	1637.1
180°	1642.3	1642.3	1642.3	1642.3	1642.3

(END OF REPORT)