

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: P1031300

Luminaire Tested: S123DIW-B1000D1320UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031300
REPORT IS A COMBINATION OF REPORTS P990619 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1000D1320UB30-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

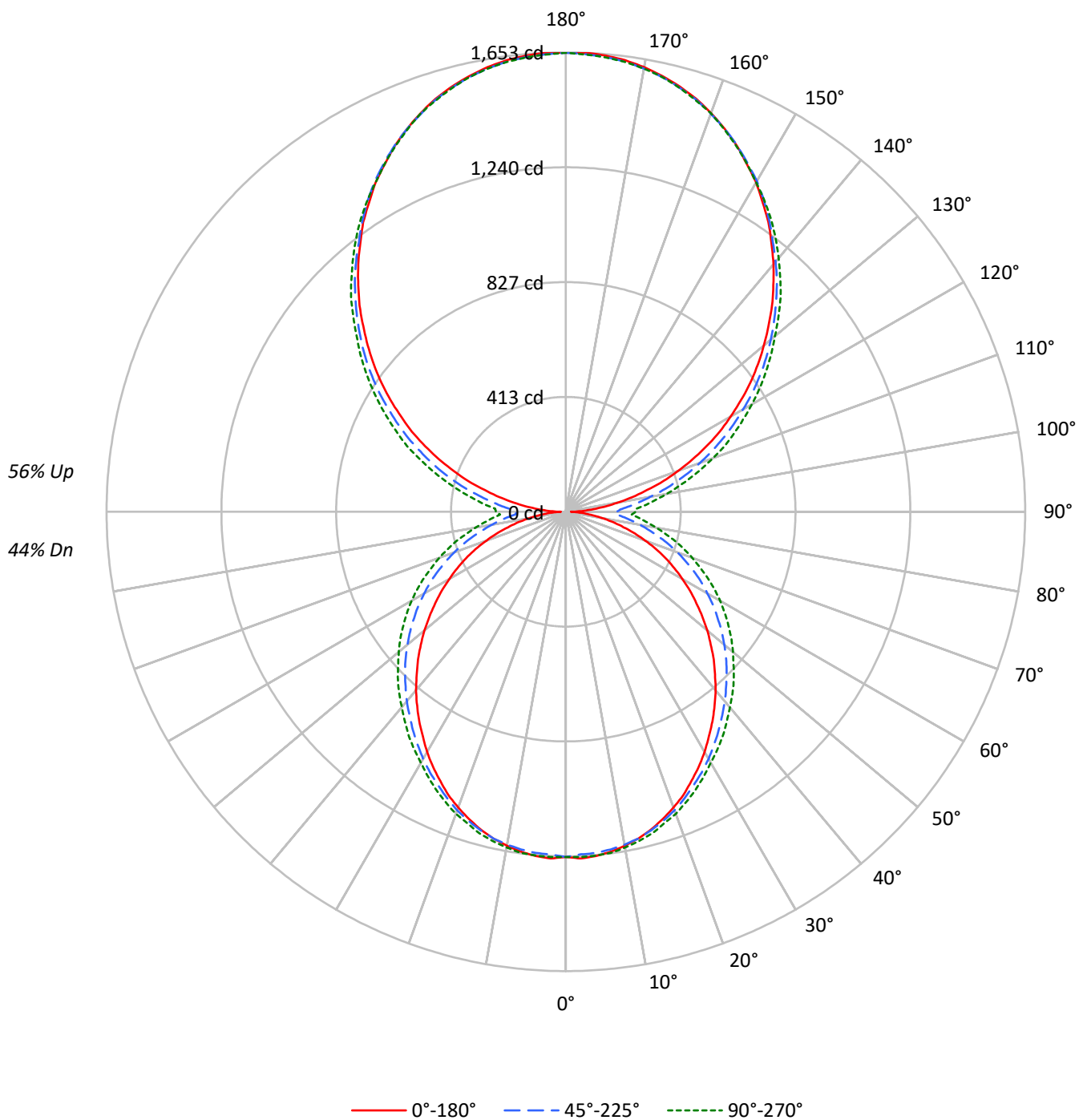
Lumens per Lamp: N/A
Luminaire Lumens: 8754.0 lumens
Efficiency: N/A
Efficacy: 98.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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

TEST NUMBER: P1031300

CATALOG NUMBER: S123DIW-B1000D1320UB30-4F0-XX-W2A-D1

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	95	91	87	83	87	83	79	76	69	66	64	55	53	52	43	42	41
2	87	79	72	67	79	72	66	62	60	55	52	48	45	43	37	35	34
3	79	69	61	55	72	63	56	51	52	47	43	42	39	36	33	30	28
4	72	61	53	46	65	56	49	43	46	41	37	37	33	30	29	26	24
5	66	54	46	40	60	50	42	37	41	36	31	33	29	26	26	23	21
6	61	48	40	34	55	44	37	32	37	31	27	30	26	23	24	21	18
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	22	18	16
8	52	39	32	26	47	36	29	24	30	25	21	25	21	18	20	17	14
9	48	36	28	23	44	33	26	22	28	22	19	23	19	16	18	15	13
10	45	33	26	21	41	30	24	19	26	20	17	21	17	14	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13369	13369	13369
5°	13405	12976	12966
10°	13279	12625	12529
15°	13104	12237	12065
20°	12854	11804	11566
25°	12548	11317	11051
30°	12233	10876	10532
35°	11881	10413	10110
40°	11544	9989	9664
45°	11171	9580	9297
50°	10802	9175	8898
55°	10393	8758	8531
60°	9993	8332	8156
65°	9582	7879	7716
70°	8964	7369	7261
75°	8182	6788	6793
80°	7269	6203	6260
85°	6368	5725	5878

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11171 cd/sqm

TEST NUMBER: P1031300

CATALOG NUMBER: S123DIW-B1000D1320UB30-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.8	1.3
10°-20°	335.9	3.8
20°-30°	502.3	5.7
30°-40°	599.7	6.9
40°-50°	627.4	7.2
50°-60°	588.8	6.7
60°-70°	491.8	5.6
70°-80°	351.7	4.0
80°-90°	212.7	2.4
90°-100°	237.8	2.7
100°-110°	418.5	4.8
110°-120°	612.4	7.0
120°-130°	757.6	8.7
130°-140°	826.7	9.4
140°-150°	799.9	9.1
150°-160°	670.5	7.7
160°-170°	446.4	5.1
170°-180°	156.3	1.8
0°-30°	955.9	10.9
0°-40°	1555.6	17.8
0°-60°	2771.8	31.7
0°-90°	3828.0	43.7
90°-120°	1268.7	14.5
90°-150°	3652.7	41.7
90°-180°	4926.0	56.3
0°-180°	8754.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1242	1242	1242	1242	1242	
5°	1243	1241	1232	1243	1242	118
15°	1184	1188	1186	1200	1199	333
25°	1069	1082	1086	1104	1104	493
35°	920	942	959	980	985	575
45°	752	785	818	844	855	580
55°	574	618	667	704	714	514
65°	396	449	509	549	563	392
75°	215	279	346	391	407	230
85°	66	134	206	252	265	68
90°	19	98	184	235	251	18
95°	92	153	230	277	291	96
105°	303	338	408	446	460	323
115°	558	578	624	658	668	553
125°	811	815	852	875	879	724
135°	1050	1056	1070	1089	1093	809
145°	1272	1273	1277	1286	1286	794
155°	1454	1454	1456	1461	1452	670
165°	1584	1580	1580	1588	1579	447
175°	1648	1643	1643	1650	1641	157
180°	1652	1652	1652	1652	1652	

TEST NUMBER: P1031300

CATALOG NUMBER: S123DIW-B1000D1320UB30-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1242.0	1242.0	1242.0	1242.0	1242.0
2.5°	1248.7	1244.7	1233.9	1244.7	1243.3
5°	1243.3	1240.6	1232.5	1243.3	1242.0
7.5°	1233.9	1233.9	1225.7	1239.3	1237.9
10°	1220.3	1223.0	1216.3	1229.8	1227.1
12.5°	1204.1	1208.1	1204.1	1216.3	1213.6
15°	1183.8	1187.9	1186.5	1200.0	1198.7
17.5°	1159.4	1167.6	1166.2	1178.4	1175.7
20°	1132.4	1140.5	1143.2	1155.4	1156.7
22.5°	1104.0	1112.1	1116.2	1132.4	1131.0
25°	1068.8	1082.3	1086.4	1104.0	1104.0
27.5°	1035.0	1049.9	1058.0	1072.9	1074.2
30°	998.4	1016.0	1026.9	1043.1	1043.1
32.5°	957.9	978.2	993.0	1010.6	1014.7
35°	920.0	941.6	959.2	979.5	984.9
37.5°	879.4	903.7	924.0	947.0	951.1
40°	838.8	863.2	890.2	913.2	918.6
42.5°	794.2	825.3	853.7	879.4	887.5
45°	752.2	784.7	818.5	844.2	855.0
47.5°	707.6	744.1	782.0	810.4	818.5
50°	664.3	702.2	744.1	775.2	784.7
52.5°	618.3	658.9	706.2	738.7	750.9
55°	573.6	618.3	667.0	703.5	714.3
57.5°	530.3	576.3	629.1	665.6	677.8
60°	484.3	533.0	588.5	626.4	641.3
62.5°	441.0	491.1	550.6	588.5	602.0
65°	396.4	449.2	508.7	549.3	562.8
67.5°	351.8	407.2	466.8	511.4	522.2
70°	304.4	362.6	427.5	470.8	484.3
72.5°	261.1	319.3	386.9	431.6	445.1
75°	215.1	278.7	346.3	391.0	407.2
77.5°	175.9	239.5	307.1	354.5	366.6
80°	133.9	200.2	270.6	316.6	330.1
82.5°	97.4	165.1	236.8	282.8	296.3
85°	66.3	133.9	205.6	251.6	265.2
87.5°	40.6	108.2	177.2	223.2	236.8
90°	18.9	98.2	184.0	235.2	251.3
92.5°	55.1	121.1	196.6	245.1	254.7
95°	91.5	153.2	229.9	277.1	290.6
97.5°	139.4	194.5	265.9	313.0	325.2
100°	188.7	239.7	308.4	351.5	367.7
102.5°	245.6	287.4	357.4	399.2	411.4
105°	302.7	337.8	407.7	445.5	460.3
107.5°	368.9	398.6	459.3	499.7	510.6
110°	429.8	456.8	513.5	553.9	562.1

TEST NUMBER: P1031300

CATALOG NUMBER: S123DIW-B1000D1320UB30-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	494.7	514.9	566.3	606.6	618.8
115°	558.2	578.3	624.4	658.2	667.7
117.5°	624.4	636.5	679.9	712.4	719.3
120°	684.0	698.6	736.7	766.5	773.4
122.5°	747.6	755.4	794.8	820.7	826.3
125°	811.1	815.0	851.6	874.8	879.1
127.5°	870.8	877.2	908.4	927.7	932.0
130°	930.5	939.5	962.7	983.2	982.2
132.5°	988.8	999.2	1016.9	1034.8	1037.7
135°	1049.8	1056.2	1069.7	1089.0	1093.2
137.5°	1105.6	1110.7	1124.0	1139.2	1142.1
140°	1162.6	1169.1	1174.4	1193.4	1191.1
142.5°	1215.8	1220.9	1223.5	1239.8	1240.1
145°	1271.6	1272.8	1276.7	1286.2	1286.4
147.5°	1318.2	1323.4	1327.3	1331.4	1329.0
150°	1368.8	1371.4	1374.0	1374.0	1368.9
152.5°	1410.4	1414.2	1415.5	1418.1	1411.6
155°	1454.5	1454.5	1455.8	1461.0	1451.9
157.5°	1492.1	1490.8	1492.1	1497.3	1489.5
160°	1527.1	1524.5	1524.5	1531.0	1525.8
162.5°	1558.3	1554.4	1555.7	1562.2	1553.1
165°	1584.2	1580.3	1580.3	1588.1	1579.0
167.5°	1606.3	1601.1	1602.4	1610.2	1602.4
170°	1624.4	1619.2	1619.2	1628.3	1619.2
172.5°	1638.7	1633.5	1633.5	1641.3	1632.2
175°	1647.8	1642.6	1642.6	1650.4	1641.3
177.5°	1653.0	1647.8	1647.8	1655.6	1646.5
180°	1651.7	1651.7	1651.7	1651.7	1651.7

(END OF REPORT)