

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P236445

Luminaire Tested: **SKB2-LD5-15-W-UNV-L835-CD2-U all blades horizontal**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236445
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24072)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SKB2-LD5-15-W-UNV-L835-CD2-U all blades horizontal
Description: METALUX SKYBAR LED WAVESTREAM LUMINAIRE
2 BLADES WITH WIDE DISTRIBUTION LENS, ALL BLADES HORIZONTAL
Light Source: (476) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

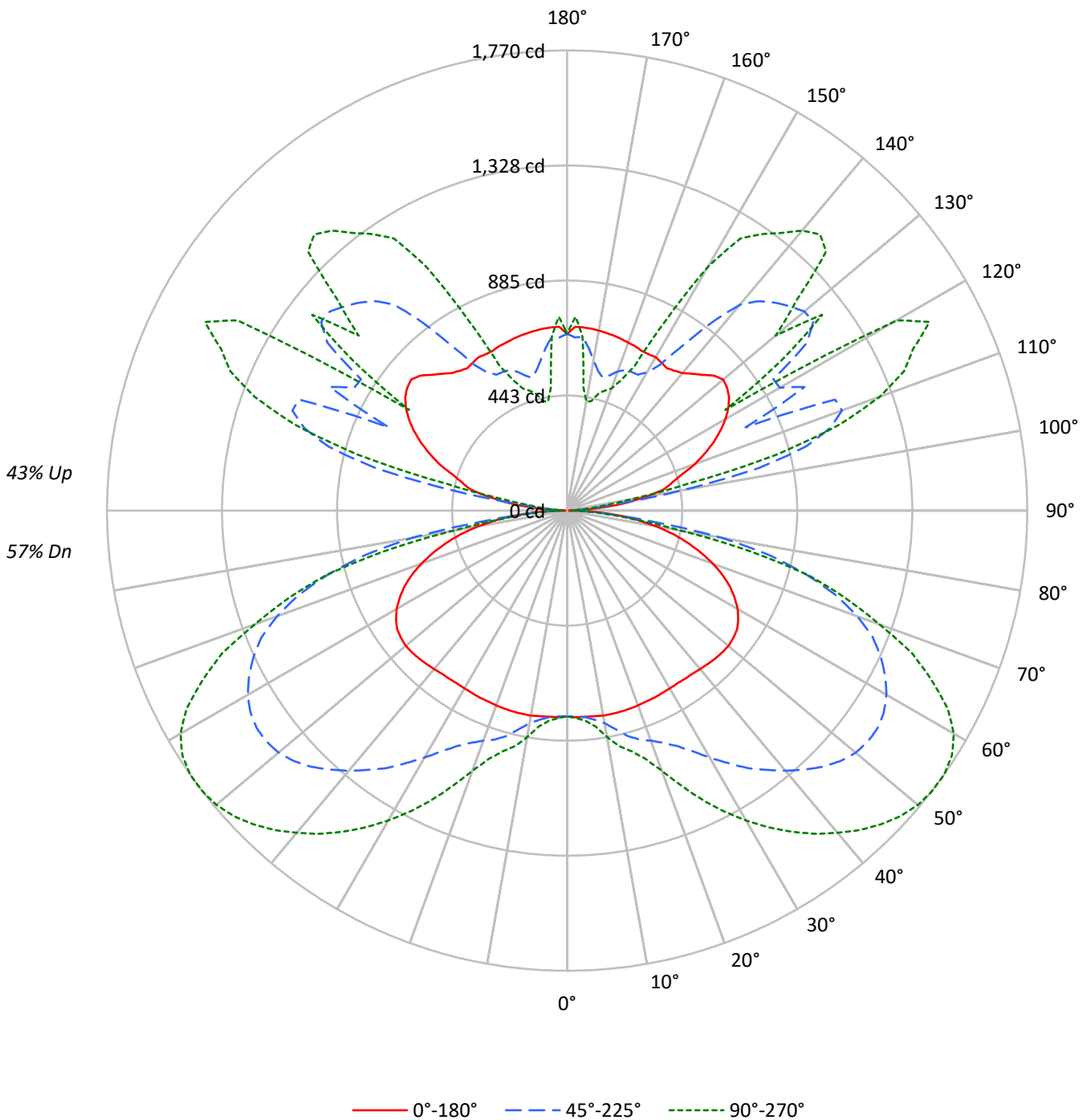
Lumens per Lamp: N/A
Luminaire Lumens: 10798.0 lumens
Efficiency: N/A
Efficacy: 81.6 lumens/watt
Spacing Criteria (0/90/45): 1.53 / 2.62 / 2.36
Luminous Opening: Rectangular (W 1.25' x L: 2' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 132.4
Input Voltage (V): 120
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: 25 FT

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CATALOG NUMBER: SKB2-LD5-15-W-UNV-L835-CD2-U all blades horizontal

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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57
1	97	92	87	83	90	86	82	78	73	70	67	62	60	58	52	50	49	44
2	87	78	71	65	80	73	66	61	62	57	53	52	49	45	43	41	38	34
3	78	67	59	52	72	62	55	49	53	47	42	45	40	36	37	33	30	26
4	71	58	49	42	65	54	46	40	46	40	35	39	34	30	32	28	25	21
5	64	51	42	35	59	48	39	33	41	34	29	34	29	25	28	24	20	17
6	59	45	36	30	54	42	34	28	36	29	24	30	25	21	25	21	17	14
7	54	40	32	25	50	38	30	24	32	26	21	27	22	18	22	18	15	12
8	50	36	28	22	46	34	26	21	29	23	18	24	19	15	20	16	13	10
9	46	33	25	19	43	31	23	18	26	20	16	22	17	13	18	14	11	9
10	43	30	22	17	40	28	21	16	24	18	14	20	15	12	17	13	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3407	3407	3407
5°	3440	3447	3507
10°	3500	3629	3867
15°	3569	3997	4274
20°	3654	4315	4877
25°	3774	4747	5823
30°	3926	5453	6842
35°	4151	6353	7927
40°	4473	7343	9095
45°	4903	8484	10392
50°	5425	9706	11796
55°	5986	10948	13289
60°	6519	12211	14790
65°	7034	13562	15775
70°	7500	14941	16074
75°	8002	15874	15950
80°	8539	15003	11001
85°	9273	7973	7588



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.7	0.7
10°-20°	252.4	2.3
20°-30°	470.7	4.4
30°-40°	742.1	6.9
40°-50°	1025.2	9.5
50°-60°	1230.1	11.4
60°-70°	1220.9	11.3
70°-80°	879.3	8.1
80°-90°	235.2	2.2
90°-100°	148.4	1.4
100°-110°	796.0	7.4
110°-120°	1019.7	9.4
120°-130°	850.8	7.9
130°-140°	791.9	7.3
140°-150°	540.7	5.0
150°-160°	294.3	2.7
160°-170°	162.1	1.5
170°-180°	60.4	0.6
0°-30°	800.8	7.4
0°-40°	1542.9	14.3
0°-60°	3798.3	35.2
0°-90°	6133.6	56.8
90°-120°	1964.2	18.2
90°-150°	4147.5	38.4
90°-180°	4664.0	43.2
0°-180°	10798.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	791	791	791	791	791	
5°	796	802	798	807	811	76
15°	801	826	897	940	959	227
25°	794	879	999	1161	1226	367
35°	790	922	1209	1444	1508	497
45°	805	1005	1393	1645	1707	623
55°	798	1078	1458	1704	1770	710
65°	690	1010	1331	1515	1548	679
75°	481	773	954	971	959	504
85°	188	258	161	150	154	184
90°	8	12	14	12	16	20
95°	143	128	73	77	76	147
105°	419	692	950	909	838	443
115°	621	842	757	1438	1468	612
125°	760	851	1126	1172	1004	675
135°	738	602	1131	1382	1409	574
145°	669	545	773	1147	1297	425
155°	678	544	588	643	611	315
165°	697	639	529	524	466	197
175°	708	699	670	604	672	67
180°	680	680	680	680	680	



TEST NUMBER: P236445

CATALOG NUMBER: SKB2-LD5-15-W-UNV-L835-CD2-U all blades horizontal

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	791.3	791.3	791.3	791.3	791.3	791.3	791.3	791.3	791.3	791.3	791.3
2.5°	795.9	795.9	795.9	795.9	797.5	800.6	799.0	795.9	794.4	792.8	791.3
5°	795.9	795.9	795.9	797.5	800.6	803.7	803.7	800.6	799.0	797.5	799.0
7.5°	797.5	797.5	799.0	802.1	805.2	808.3	809.9	811.4	811.4	811.4	813.0
10°	800.6	800.6	802.1	806.8	809.9	817.6	820.7	820.7	823.9	830.1	837.8
12.5°	800.6	800.6	805.2	808.3	817.6	825.4	830.1	837.8	848.7	861.1	871.9
15°	800.6	800.6	805.2	811.4	820.7	831.6	847.1	862.6	879.7	896.8	909.2
17.5°	799.0	800.6	805.2	816.1	823.9	847.1	867.3	890.6	909.2	923.1	934.0
20°	797.5	799.0	805.2	816.1	833.2	865.7	892.1	913.8	929.4	941.8	957.3
22.5°	794.4	797.5	805.2	817.6	844.0	881.3	909.2	927.8	946.4	966.6	989.9
25°	794.4	795.9	806.8	823.9	858.0	899.9	921.6	940.2	968.1	999.2	1034.9
27.5°	791.3	792.8	805.2	831.6	871.9	912.3	932.5	961.9	999.2	1042.6	1090.7
30°	789.7	791.3	803.7	839.4	884.4	920.0	946.4	988.3	1041.1	1096.9	1148.1
32.5°	788.2	791.3	806.8	850.2	893.7	929.4	966.6	1024.0	1090.7	1151.2	1210.2
35°	789.7	791.3	811.4	861.1	901.4	943.3	993.0	1065.9	1140.4	1208.6	1267.6
37.5°	791.3	794.4	820.7	871.9	909.2	961.9	1028.7	1110.9	1188.5	1256.7	1321.9
40°	795.9	799.0	831.6	881.3	921.6	988.3	1069.0	1157.4	1236.6	1306.4	1373.1
42.5°	800.6	803.7	842.5	889.0	938.7	1019.3	1107.8	1199.3	1281.5	1351.4	1421.2
45°	805.2	806.8	853.3	895.2	958.8	1050.4	1145.0	1238.1	1321.9	1393.3	1463.1
47.5°	808.3	809.9	862.6	903.0	980.6	1079.9	1177.6	1270.7	1354.5	1425.8	1494.1
50°	809.9	811.4	865.7	910.7	1002.3	1104.7	1204.0	1297.1	1379.3	1449.1	1515.8
52.5°	805.2	809.9	859.5	915.4	1017.8	1120.2	1221.0	1311.0	1390.2	1458.4	1526.7
55°	797.5	802.1	848.7	918.5	1027.1	1129.5	1228.8	1315.7	1390.2	1458.4	1525.1
57.5°	780.4	789.7	833.2	916.9	1024.0	1127.9	1224.1	1304.8	1379.3	1444.5	1509.6
60°	757.1	769.5	811.4	906.1	1013.1	1115.5	1204.0	1281.5	1352.9	1418.1	1483.2
62.5°	726.1	741.6	786.6	887.5	993.0	1092.3	1174.5	1247.4	1317.2	1379.3	1442.9
65°	690.4	705.9	760.2	861.1	963.5	1056.6	1132.6	1204.0	1270.7	1331.2	1390.2
67.5°	647.0	660.9	724.6	827.0	923.1	1006.9	1081.4	1149.7	1211.7	1272.2	1320.3
70°	595.8	609.7	684.2	783.5	870.4	951.1	1019.3	1084.5	1143.5	1186.9	1221.0
72.5°	539.9	555.4	639.2	730.8	808.3	882.8	949.5	1006.9	1047.3	1083.0	1112.4
75°	481.0	501.1	589.6	667.1	738.5	806.8	864.2	903.0	938.7	954.2	961.9
77.5°	417.4	443.7	529.1	597.3	659.4	715.2	752.5	780.4	791.3	800.6	802.1
80°	344.4	381.7	454.6	510.4	561.6	598.9	620.6	625.3	622.2	605.1	563.2
82.5°	268.4	313.4	366.2	409.6	434.4	446.8	451.5	422.0	380.1	336.7	311.9
85°	187.7	221.9	257.6	273.1	271.5	243.6	207.9	184.6	172.2	161.4	158.3
87.5°	94.6	102.4	110.2	93.1	77.6	74.5	76.0	72.9	74.5	72.9	72.9
90°	7.8	7.8	9.3	9.3	10.9	12.4	14.0	15.5	15.5	14.0	14.0
92.5°	34.1	31.0	29.5	27.9	29.5	29.5	29.5	26.4	26.4	26.4	24.8
95°	142.7	167.6	184.6	186.2	144.3	111.7	96.2	83.8	76.0	72.9	69.8
97.5°	228.1	268.4	316.5	355.3	377.0	361.5	302.5	235.8	200.1	181.5	164.5
100°	307.2	349.1	414.3	476.3	530.6	561.6	566.3	552.3	499.6	443.7	375.5
102.5°	383.2	411.1	494.9	567.9	631.5	688.9	726.1	752.5	760.2	754.0	723.0
105°	418.9	429.8	526.0	609.7	671.8	712.1	791.3	867.3	929.4	949.5	948.0
107.5°	462.3	448.4	557.0	643.9	693.5	735.4	769.5	926.3	989.9	1061.2	1107.8
110°	522.9	481.0	589.6	696.6	761.8	757.1	786.6	797.5	1056.6	1124.8	1174.5



TEST NUMBER: P236445

CATALOG NUMBER: SKB2-LD5-15-W-UNV-L835-CD2-U all blades horizontal

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	572.5	510.4	577.2	718.3	799.0	817.6	819.2	842.5	786.6	1115.5	1252.1
115°	620.6	547.7	550.8	719.9	808.3	876.6	842.5	879.7	918.5	757.1	1014.7
117.5°	664.0	589.6	544.6	704.4	820.7	899.9	941.8	868.8	927.8	1028.7	786.6
120°	702.8	629.9	561.6	665.6	831.6	921.6	991.4	1008.5	898.3	944.9	1086.1
122.5°	735.4	667.1	588.0	633.0	811.4	937.1	1013.1	1073.6	1065.9	940.2	938.7
125°	760.2	698.2	609.7	602.0	763.3	938.7	1025.5	1098.5	1140.4	1126.4	1002.3
127.5°	775.8	721.5	623.7	588.0	699.7	893.7	1027.1	1092.3	1154.3	1193.1	1186.9
130°	783.5	738.5	628.4	597.3	647.0	819.2	999.2	1073.6	1129.5	1191.6	1239.7
132.5°	768.0	732.3	619.1	603.5	595.8	710.6	910.7	1045.7	1101.6	1162.1	1231.9
135°	738.5	712.1	611.3	597.3	567.9	636.1	792.8	971.2	1072.1	1131.1	1190.0
137.5°	713.7	695.1	606.6	580.3	566.3	584.9	684.2	851.8	1017.8	1092.3	1143.5
140°	690.4	679.6	600.4	560.1	566.3	553.9	622.2	735.4	899.9	1033.3	1098.5
142.5°	678.0	668.7	595.8	543.0	557.0	553.9	578.7	647.0	771.1	909.2	1031.8
145°	668.7	660.9	592.7	535.3	539.9	550.8	552.3	595.8	667.1	772.7	889.0
147.5°	674.9	662.5	595.8	533.7	524.4	549.2	561.6	567.9	608.2	664.0	750.9
150°	681.1	668.7	614.4	544.6	518.2	543.0	567.9	574.1	584.9	612.8	647.0
152.5°	678.0	671.8	640.8	575.6	535.3	536.8	560.1	572.5	583.4	589.6	605.1
155°	678.0	673.4	656.3	595.8	553.9	533.7	544.6	564.7	580.3	588.0	589.6
157.5°	684.2	678.0	668.7	619.1	571.0	535.3	533.7	549.2	572.5	584.9	592.7
160°	687.3	681.1	681.1	640.8	595.8	560.1	533.7	538.4	553.9	569.4	581.8
162.5°	692.0	685.8	687.3	665.6	626.8	589.6	560.1	536.8	536.8	546.1	555.4
165°	696.6	692.0	692.0	687.3	656.3	622.2	589.6	563.2	539.9	529.1	527.5
167.5°	699.7	696.6	695.1	696.6	682.7	654.7	625.3	595.8	571.0	549.2	527.5
170°	702.8	701.3	699.7	699.7	699.7	687.3	660.9	636.1	611.3	586.5	561.6
172.5°	705.9	704.4	701.3	699.7	699.7	699.7	690.4	671.8	653.2	631.5	608.2
175°	707.5	707.5	705.9	702.8	699.7	698.2	693.5	685.8	678.0	670.3	654.7
177.5°	707.5	707.5	705.9	704.4	702.8	701.3	693.5	685.8	674.9	667.1	656.3
180°	679.6	679.6	679.6	679.6	679.6	679.6	679.6	679.6	679.6	679.6	679.6



TEST NUMBER: P236445

CATALOG NUMBER: SKB2-LD5-15-W-UNV-L835-CD2-U all blades horizontal

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	791.3	791.3	791.3	791.3	791.3	791.3	791.3	791.3
2.5°	791.3	791.3	792.8	795.9	795.9	797.5	799.0	799.0
5°	800.6	802.1	805.2	808.3	808.3	809.9	809.9	811.4
7.5°	814.5	817.6	822.3	828.5	831.6	831.6	834.7	837.8
10°	847.1	851.8	862.6	870.4	875.1	878.2	882.8	884.4
12.5°	885.9	893.7	906.1	913.8	918.5	921.6	924.7	927.8
15°	920.0	927.8	937.1	943.3	948.0	951.1	954.2	958.8
17.5°	944.9	954.2	968.1	979.0	986.8	991.4	997.6	1000.7
20°	977.5	994.5	1014.7	1030.2	1044.2	1050.4	1059.7	1064.3
22.5°	1017.8	1047.3	1076.7	1096.9	1117.1	1124.8	1137.3	1143.5
25°	1076.7	1114.0	1149.7	1172.9	1196.2	1204.0	1219.5	1225.7
27.5°	1140.4	1185.4	1224.1	1249.0	1272.2	1284.6	1298.6	1303.3
30°	1207.1	1256.7	1295.5	1323.4	1348.3	1359.1	1371.5	1376.2
32.5°	1270.7	1325.0	1363.8	1393.3	1418.1	1430.5	1439.8	1444.5
35°	1331.2	1387.0	1428.9	1458.4	1483.2	1495.7	1505.0	1508.1
37.5°	1388.6	1442.9	1486.3	1518.9	1545.3	1557.7	1563.9	1567.0
40°	1444.5	1498.8	1543.8	1574.8	1601.2	1610.5	1618.2	1618.2
42.5°	1491.0	1546.9	1588.7	1621.3	1646.2	1657.0	1663.2	1666.3
45°	1529.8	1584.1	1629.1	1661.7	1686.5	1698.9	1702.0	1706.7
47.5°	1560.8	1615.1	1660.1	1694.2	1717.5	1729.9	1734.6	1739.2
50°	1582.5	1638.4	1681.8	1714.4	1739.2	1753.2	1759.4	1761.0
52.5°	1591.8	1646.2	1689.6	1722.2	1748.6	1764.1	1771.8	1770.3
55°	1588.7	1641.5	1686.5	1720.6	1747.0	1764.1	1770.3	1770.3
57.5°	1573.2	1626.0	1667.9	1703.6	1729.9	1745.4	1751.7	1754.8
60°	1542.2	1595.0	1635.3	1669.4	1692.7	1709.8	1714.4	1717.5
62.5°	1498.8	1550.0	1587.2	1613.6	1633.7	1641.5	1646.2	1650.8
65°	1441.4	1481.7	1505.0	1525.1	1539.1	1542.2	1543.8	1548.4
67.5°	1354.5	1382.4	1405.7	1421.2	1436.7	1436.7	1433.6	1436.7
70°	1252.1	1276.9	1284.6	1283.1	1289.3	1281.5	1275.3	1276.9
72.5°	1118.6	1124.8	1129.5	1126.4	1134.2	1129.5	1124.8	1126.4
75°	966.6	971.2	975.9	966.6	974.3	963.5	955.7	958.8
77.5°	792.8	782.0	769.5	740.1	738.5	716.8	709.0	719.9
80°	532.2	507.3	488.7	459.2	453.0	440.6	431.3	443.7
82.5°	288.6	279.3	274.6	262.2	266.9	259.1	257.6	262.2
85°	152.0	152.0	152.0	148.9	153.6	150.5	150.5	153.6
87.5°	71.4	71.4	72.9	69.8	74.5	72.9	74.5	76.0
90°	12.4	12.4	14.0	10.9	15.5	12.4	12.4	15.5
92.5°	23.3	24.8	23.3	23.3	20.2	21.7	20.2	20.2
95°	71.4	74.5	76.0	77.6	77.6	79.1	77.6	76.0
97.5°	153.6	148.9	139.6	139.6	133.4	130.3	128.8	124.1
100°	328.9	307.2	280.8	274.6	262.2	252.9	252.9	245.1
102.5°	673.4	623.7	580.3	557.0	519.8	496.5	491.8	473.2
105°	940.2	938.7	913.8	904.5	879.7	862.6	856.4	837.8
107.5°	1121.7	1131.1	1126.4	1129.5	1120.2	1112.4	1110.9	1096.9
110°	1219.5	1261.4	1283.1	1297.1	1295.5	1290.9	1287.8	1278.4



TEST NUMBER: P236445

CATALOG NUMBER: SKB2-LD5-15-W-UNV-L835-CD2-U all blades horizontal

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1292.4	1328.1	1354.5	1373.1	1387.0	1401.0	1404.1	1402.6
115°	1325.0	1411.9	1433.6	1441.4	1449.1	1461.5	1469.3	1467.7
117.5°	817.6	1120.2	1393.3	1491.0	1529.8	1551.5	1567.0	1570.1
120°	963.5	747.8	789.7	957.3	1172.9	1331.2	1411.9	1463.1
122.5°	1075.2	1159.0	996.1	813.0	715.2	712.1	707.5	721.5
125°	926.3	1008.5	1134.2	1210.2	1208.6	1131.1	1064.3	1003.8
127.5°	1103.1	993.0	975.9	1044.2	1120.2	1171.4	1214.8	1236.6
130°	1259.8	1238.1	1160.5	1078.3	1038.0	1033.3	1039.5	1047.3
132.5°	1287.8	1329.6	1342.1	1328.1	1286.2	1249.0	1217.9	1196.2
135°	1249.0	1311.0	1362.2	1401.0	1410.3	1411.9	1413.4	1408.8
137.5°	1199.3	1252.1	1312.6	1371.5	1415.0	1427.4	1435.1	1439.8
140°	1145.0	1196.2	1245.9	1290.9	1354.5	1390.2	1401.0	1405.7
142.5°	1098.5	1137.3	1183.8	1228.8	1267.6	1309.5	1342.1	1345.2
145°	1013.1	1083.0	1129.5	1163.6	1200.9	1228.8	1273.8	1297.1
147.5°	856.4	958.8	1045.7	1096.9	1138.8	1168.3	1199.3	1241.2
150°	715.2	806.8	878.2	940.2	1014.7	1055.0	1095.4	1081.4
152.5°	629.9	674.9	724.6	774.2	830.1	853.3	851.8	831.6
155°	603.5	612.8	634.6	651.6	682.7	692.0	631.5	611.3
157.5°	597.3	589.6	597.3	598.9	609.7	564.7	546.1	543.0
160°	588.0	588.0	584.9	572.5	549.2	505.8	499.6	499.6
162.5°	564.7	567.9	564.7	553.9	512.0	488.7	484.1	484.1
165°	530.6	532.2	530.6	518.2	487.2	463.9	463.9	465.5
167.5°	508.9	501.1	498.0	479.4	462.3	443.7	429.8	431.3
170°	539.9	522.9	507.3	484.1	471.7	460.8	434.4	425.1
172.5°	584.9	564.7	549.2	535.3	532.2	538.4	522.9	477.9
175°	636.1	617.5	605.1	603.5	611.3	637.7	650.1	671.8
177.5°	642.3	623.7	615.9	623.7	642.3	679.6	724.6	746.3
180°	679.6	679.6	679.6	679.6	679.6	679.6	679.6	679.6

(END OF REPORT)