

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: P236426

Luminaire Tested: **SKB2-LD5-18-N-UNV-L850-CD2-U all blades horizontal**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236426
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24071)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SKB2-LD5-18-N-UNV-L850-CD2-U all blades horizontal
Description: METALUX SKYBAR LED WAVESTREAM LUMINAIRE
2 BLADES WITH NARROW DISTRIBUTION LENS, ALL BLADES HORIZONTAL
Light Source: (476) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

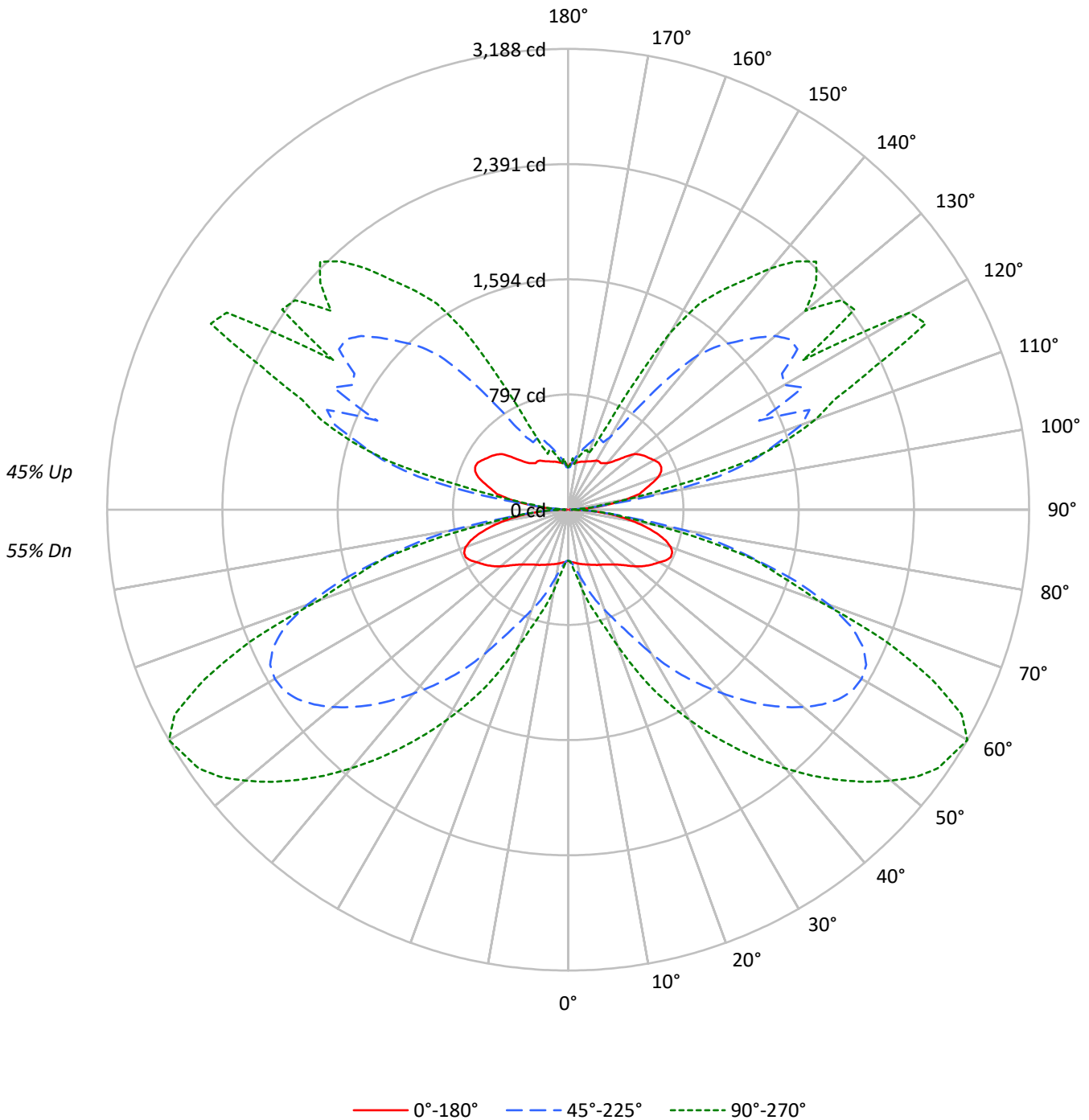
Lumens per Lamp: N/A
Luminaire Lumens: 14990.0 lumens
Efficiency: N/A
Efficacy: 89.0 lumens/watt
Spacing Criteria (0/90/45): 2.2 / 4.49 / 3.74
Luminous Opening: Rectangular (W 1.25' x L: 2' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 168.5
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

TEST NUMBER: P236426

CATALOG NUMBER: SKB2-LD5-18-N-UNV-L850-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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61
1	97	91	86	82	89	85	80	77	72	69	66	61	58	56	50	49	47
2	86	77	69	63	79	71	65	59	60	55	51	50	47	43	41	38	36
3	77	66	57	50	71	61	53	46	51	45	40	43	38	34	34	31	28
4	69	57	47	40	63	52	44	37	44	37	32	36	31	27	29	25	22
5	63	49	40	33	57	45	37	31	38	31	26	32	26	22	25	21	18
6	57	43	34	27	52	40	32	25	34	27	22	28	22	18	22	18	15
7	52	38	29	23	48	36	27	22	30	23	18	25	19	15	20	15	12
8	48	34	26	20	44	32	24	18	27	20	16	22	17	13	18	13	10
9	45	31	23	17	41	29	21	16	24	18	14	20	15	11	16	12	9
10	42	28	20	15	38	26	19	14	22	16	12	18	13	10	15	11	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1517	1517	1517
5°	1578	1651	1761
10°	1651	2032	2459
15°	1741	2677	3330
20°	1847	3374	4590
25°	1996	4305	6422
30°	2184	5697	8345
35°	2431	7417	10552
40°	2779	9315	13121
45°	3295	11617	16088
50°	4080	14229	19531
55°	5050	17157	23417
60°	6268	20175	27448
65°	7957	22939	28258
70°	9511	24124	23109
75°	10555	22418	22100
80°	11207	20153	14996
85°	11530	12054	12790



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.3	0.3
10°-20°	170.0	1.1
20°-30°	426.9	2.8
30°-40°	840.4	5.6
40°-50°	1368.9	9.1
50°-60°	1886.4	12.6
60°-70°	1977.7	13.2
70°-80°	1259.6	8.4
80°-90°	334.5	2.2
90°-100°	225.2	1.5
100°-110°	1154.4	7.7
110°-120°	1631.4	10.9
120°-130°	1449.3	9.7
130°-140°	1151.4	7.7
140°-150°	656.0	4.4
150°-160°	267.0	1.8
160°-170°	119.5	0.8
170°-180°	32.1	0.2
0°-30°	636.2	4.2
0°-40°	1476.6	9.9
0°-60°	4731.8	31.6
0°-90°	8303.6	55.4
90°-120°	3011.0	20.1
90°-150°	6267.8	41.8
90°-180°	6686.0	44.6
0°-180°	14990.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	352	352	352	352	352	
5°	365	371	382	399	408	35
15°	390	459	601	705	747	111
25°	420	613	906	1231	1352	195
35°	463	793	1411	1873	2008	292
45°	541	1054	1908	2489	2642	424
55°	673	1343	2286	2948	3120	603
65°	781	1480	2252	2665	2774	760
75°	634	1163	1348	1332	1328	659
85°	233	345	244	250	259	236
90°	8	17	19	19	21	26
95°	180	191	121	135	140	190
105°	550	1024	1326	1318	1263	580
115°	709	1253	1456	2392	2336	691
125°	647	1073	1935	2273	2415	579
135°	490	602	1645	2274	2426	388
145°	393	526	912	1604	1850	252
155°	369	462	535	611	645	172
165°	344	395	448	463	420	98
175°	323	320	329	311	356	31
180°	293	293	293	293	293	



TEST NUMBER: P236426

CATALOG NUMBER: SKB2-LD5-18-N-UNV-L850-CD2-U all blades horizontal

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	352.3	352.3	352.3	352.3	352.3	352.3	352.3	352.3	352.3	352.3	352.3
2.5°	362.9	362.9	362.9	362.9	360.8	362.9	360.8	360.8	358.6	356.5	356.5
5°	365.0	365.0	367.1	369.3	371.4	371.4	371.4	375.6	377.7	382.0	386.2
7.5°	371.4	371.4	373.5	377.7	382.0	388.4	396.8	407.5	415.9	420.2	426.6
10°	377.7	377.7	384.1	388.4	401.1	418.1	428.7	439.3	452.0	464.8	481.7
12.5°	384.1	386.2	392.6	405.3	426.6	443.5	458.4	481.7	507.2	528.4	553.9
15°	390.5	392.6	403.2	424.4	447.8	471.1	500.8	536.9	570.9	600.6	632.4
17.5°	396.8	401.1	415.9	445.7	471.1	511.4	551.8	596.3	638.8	670.6	702.4
20°	403.2	407.5	428.7	462.6	500.8	553.9	606.9	657.9	700.3	736.4	776.7
22.5°	411.7	415.9	445.7	481.7	534.8	600.6	660.0	713.0	761.9	814.9	868.0
25°	420.2	426.6	462.6	509.3	575.1	651.5	710.9	770.3	836.1	906.2	982.6
27.5°	430.8	437.2	479.6	536.9	617.6	698.2	761.9	838.3	923.1	1014.4	1116.3
30°	439.3	449.9	496.6	568.7	660.0	744.9	821.3	918.9	1029.3	1146.0	1260.6
32.5°	449.9	464.8	517.8	604.8	702.4	791.6	889.2	1012.3	1152.3	1283.9	1400.6
35°	462.6	479.6	541.2	640.9	740.6	844.6	967.7	1122.6	1279.7	1411.2	1534.3
37.5°	477.5	498.7	568.7	681.2	785.2	910.4	1061.1	1239.3	1394.3	1534.3	1665.9
40°	494.5	519.9	600.6	717.3	831.9	982.6	1162.9	1347.6	1511.0	1657.4	1799.6
42.5°	515.7	543.3	636.7	755.5	889.2	1067.5	1264.8	1451.6	1621.3	1782.6	1937.5
45°	541.2	570.9	677.0	795.8	952.9	1154.5	1360.3	1553.4	1733.8	1907.8	2067.0
47.5°	575.1	604.8	721.5	842.5	1025.0	1241.5	1449.4	1651.0	1844.2	2020.3	2192.2
50°	609.1	638.8	764.0	893.4	1099.3	1315.7	1532.2	1742.3	1939.7	2124.3	2300.4
52.5°	643.0	677.0	802.2	948.6	1169.3	1385.8	1608.6	1825.1	2024.5	2213.4	2400.2
55°	672.7	713.0	838.3	1005.9	1233.0	1453.7	1676.5	1890.9	2094.6	2285.6	2470.2
57.5°	700.3	744.9	870.1	1063.2	1286.0	1511.0	1731.7	1939.7	2141.3	2330.1	2512.6
60°	727.9	778.8	906.2	1114.1	1330.6	1555.5	1767.8	1967.2	2160.4	2342.9	2521.1
62.5°	759.7	812.8	944.4	1152.3	1366.7	1581.0	1778.4	1967.2	2154.0	2323.8	2485.1
65°	781.0	834.0	976.2	1173.6	1381.5	1578.9	1759.3	1933.3	2103.1	2251.6	2389.6
67.5°	778.8	831.9	982.6	1173.6	1362.4	1542.8	1706.2	1856.9	2001.2	2122.2	2215.5
70°	755.5	806.4	963.5	1143.8	1309.4	1470.7	1610.7	1733.8	1844.2	1916.3	1963.0
72.5°	706.7	757.6	916.8	1080.2	1222.4	1360.3	1474.9	1568.3	1623.5	1657.4	1665.9
75°	634.5	693.9	848.9	986.8	1105.6	1220.2	1294.5	1339.1	1366.7	1347.6	1326.4
77.5°	549.6	617.6	755.5	868.0	965.6	1042.0	1084.4	1090.8	1084.4	1086.5	1092.9
80°	452.0	526.3	636.7	730.0	791.6	829.8	834.0	842.5	840.4	812.8	766.1
82.5°	348.0	418.1	500.8	562.4	585.7	596.3	604.8	556.0	500.8	447.8	426.6
85°	233.4	288.6	339.5	362.9	362.9	326.8	278.0	258.9	252.5	244.0	246.2
87.5°	118.8	129.5	140.1	125.2	112.5	118.8	118.8	118.8	123.1	123.1	125.2
90°	8.5	8.5	10.6	12.7	14.9	19.1	21.2	21.2	23.3	19.1	19.1
92.5°	50.9	46.7	46.7	42.4	46.7	46.7	46.7	44.6	40.3	40.3	40.3
95°	180.4	220.7	254.7	261.0	210.1	171.9	157.0	144.3	127.3	121.0	123.1
97.5°	292.9	360.8	435.0	483.9	509.3	511.4	469.0	375.6	316.2	290.7	275.9
100°	403.2	471.1	577.2	664.2	727.9	768.2	787.3	783.1	753.4	672.7	594.2
102.5°	505.1	562.4	698.2	812.8	901.9	974.1	1012.3	1050.5	1067.5	1063.2	1054.7
105°	549.6	590.0	751.2	893.4	993.2	1054.7	1156.6	1233.0	1298.8	1326.4	1345.5
107.5°	606.9	613.3	793.7	946.5	1050.5	1133.2	1188.4	1396.4	1457.9	1504.6	1555.5
110°	664.2	647.3	819.2	1010.2	1143.8	1186.3	1264.8	1292.4	1638.3	1716.8	1740.2



TEST NUMBER: P236426

CATALOG NUMBER: SKB2-LD5-18-N-UNV-L850-CD2-U all blades horizontal

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	696.1	666.4	766.1	1025.0	1179.9	1292.4	1328.5	1424.0	1377.3	1806.0	2001.2
115°	708.8	674.8	698.2	993.2	1175.7	1330.6	1396.4	1472.8	1604.4	1455.8	1778.4
117.5°	704.6	672.7	651.5	916.8	1152.3	1330.6	1481.3	1504.6	1610.7	1829.3	1625.6
120°	685.5	662.1	638.8	797.9	1112.0	1320.0	1500.4	1646.8	1623.5	1725.3	1967.2
122.5°	664.2	649.4	638.8	700.3	1029.3	1288.2	1485.5	1668.0	1797.5	1752.9	1799.6
125°	647.3	634.5	636.7	626.0	908.3	1237.2	1449.4	1646.8	1816.6	1935.4	1907.8
127.5°	626.0	619.7	628.2	602.7	776.7	1133.2	1402.8	1583.1	1778.4	1935.4	2056.4
130°	598.5	596.3	609.1	606.9	670.6	982.6	1317.9	1508.9	1682.9	1869.6	2033.0
132.5°	545.4	547.5	570.9	598.5	581.5	795.8	1158.7	1426.1	1589.5	1759.3	1933.3
135°	490.2	498.7	536.9	579.4	545.4	657.9	946.5	1279.7	1502.5	1644.7	1801.7
137.5°	449.9	460.5	503.0	551.8	556.0	564.5	757.6	1075.9	1366.7	1536.4	1663.8
140°	420.2	432.9	473.2	522.1	556.0	522.1	632.4	857.4	1152.3	1394.3	1544.9
142.5°	405.3	415.9	447.8	496.6	539.0	534.8	551.8	683.3	910.4	1165.1	1392.1
145°	392.6	401.1	426.6	471.1	513.6	539.0	515.7	570.9	706.7	912.5	1137.5
147.5°	396.8	396.8	409.6	443.5	488.1	532.7	541.2	519.9	583.6	696.1	868.0
150°	392.6	390.5	409.6	430.8	471.1	515.7	545.4	536.9	528.4	577.2	655.7
152.5°	379.9	382.0	411.7	432.9	464.8	496.6	528.4	543.3	534.8	526.3	553.9
155°	369.3	371.4	399.0	420.2	447.8	475.4	500.8	528.4	543.3	534.8	517.8
157.5°	362.9	360.8	386.2	407.5	426.6	452.0	477.5	500.8	528.4	541.2	543.3
160°	354.4	352.3	375.6	396.8	411.7	435.0	456.3	475.4	496.6	517.8	530.5
162.5°	348.0	348.0	362.9	386.2	401.1	413.8	435.0	449.9	464.8	479.6	492.3
165°	343.8	343.8	352.3	373.5	390.5	399.0	411.7	426.6	437.2	447.8	454.1
167.5°	337.4	337.4	341.7	358.6	373.5	384.1	392.6	399.0	407.5	413.8	415.9
170°	331.1	331.1	331.1	341.7	356.5	367.1	373.5	377.7	382.0	384.1	382.0
172.5°	326.8	326.8	326.8	326.8	335.3	343.8	350.2	356.5	356.5	358.6	354.4
175°	322.6	322.6	320.4	320.4	320.4	320.4	322.6	324.7	326.8	328.9	326.8
177.5°	318.3	316.2	316.2	314.1	314.1	312.0	307.7	303.5	299.2	295.0	290.7
180°	292.9	292.9	292.9	292.9	292.9	292.9	292.9	292.9	292.9	292.9	292.9



TEST NUMBER: P236426

CATALOG NUMBER: SKB2-LD5-18-N-UNV-L850-CD2-U all blades horizontal

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	352.3	352.3	352.3	352.3	352.3	352.3	352.3	352.3
2.5°	356.5	356.5	356.5	356.5	356.5	358.6	358.6	360.8
5°	390.5	394.7	399.0	399.0	401.1	405.3	405.3	407.5
7.5°	432.9	441.4	447.8	452.0	456.3	464.8	464.8	469.0
10°	496.6	511.4	524.2	534.8	541.2	553.9	553.9	562.4
12.5°	577.2	596.3	615.4	628.2	636.7	647.3	651.5	657.9
15°	657.9	679.1	698.2	710.9	721.5	736.4	740.6	747.0
17.5°	734.3	757.6	785.2	804.3	823.4	840.4	851.0	859.5
20°	821.3	859.5	897.7	923.1	950.7	974.1	988.9	1001.7
22.5°	925.3	982.6	1037.7	1080.2	1116.3	1146.0	1167.2	1173.6
25°	1065.3	1139.6	1207.5	1254.2	1294.5	1326.4	1345.5	1351.8
27.5°	1216.0	1298.8	1368.8	1421.9	1464.3	1487.6	1517.3	1515.2
30°	1366.7	1455.8	1530.1	1585.3	1625.6	1655.3	1680.8	1678.6
32.5°	1513.1	1608.6	1682.9	1742.3	1789.0	1820.8	1842.0	1844.2
35°	1653.2	1755.0	1839.9	1905.7	1956.6	1988.5	2005.4	2007.6
37.5°	1797.5	1907.8	1997.0	2067.0	2122.2	2158.2	2175.2	2175.2
40°	1943.9	2056.4	2151.9	2228.3	2283.5	2317.4	2334.4	2334.4
42.5°	2086.1	2207.1	2300.4	2381.1	2438.4	2474.4	2493.5	2495.7
45°	2224.0	2347.1	2446.9	2531.7	2584.8	2620.9	2640.0	2642.1
47.5°	2351.4	2485.1	2584.8	2667.6	2729.1	2767.3	2784.3	2786.4
50°	2470.2	2603.9	2716.4	2799.1	2856.4	2892.5	2913.7	2915.9
52.5°	2567.8	2716.4	2822.5	2909.5	2971.0	3005.0	3030.5	3034.7
55°	2646.3	2786.4	2903.1	2992.3	3055.9	3096.2	3119.6	3119.6
57.5°	2684.5	2824.6	2935.0	3026.2	3094.1	3134.4	3149.3	3151.4
60°	2682.4	2809.7	2915.9	3002.9	3064.4	3113.2	3164.2	3187.5
62.5°	2627.2	2739.7	2831.0	2894.6	2956.2	3019.8	3058.0	3066.5
65°	2497.8	2584.8	2644.2	2686.7	2735.5	2769.4	2771.6	2773.7
67.5°	2277.1	2332.3	2359.8	2374.7	2389.6	2391.7	2378.9	2376.8
70°	1986.3	1999.1	1977.9	1937.5	1897.2	1871.8	1842.0	1835.7
72.5°	1634.1	1595.9	1564.0	1553.4	1553.4	1557.7	1555.5	1553.4
75°	1332.7	1334.8	1334.8	1328.5	1328.5	1330.6	1328.5	1328.5
77.5°	1092.9	1073.8	1039.9	1001.7	986.8	969.8	959.2	955.0
80°	719.4	674.8	647.3	621.8	615.4	609.1	604.8	604.8
82.5°	415.9	405.3	399.0	396.8	394.7	394.7	394.7	396.8
85°	246.2	248.3	248.3	252.5	254.7	254.7	258.9	258.9
87.5°	129.5	129.5	135.8	135.8	137.9	137.9	144.3	140.1
90°	21.2	21.2	21.2	17.0	19.1	19.1	19.1	21.2
92.5°	34.0	34.0	34.0	36.1	34.0	31.8	29.7	31.8
95°	125.2	129.5	133.7	135.8	140.1	140.1	140.1	140.1
97.5°	256.8	248.3	244.0	237.7	235.6	227.1	222.8	224.9
100°	513.6	475.4	456.3	443.5	428.7	415.9	415.9	411.7
102.5°	1003.8	952.9	901.9	861.6	812.8	772.5	761.9	749.1
105°	1332.7	1326.4	1322.1	1313.6	1296.6	1286.0	1271.2	1262.7
107.5°	1574.6	1589.5	1600.1	1604.4	1598.0	1583.1	1581.0	1572.5
110°	1746.5	1778.4	1812.3	1827.2	1833.6	1827.2	1820.8	1816.6



TEST NUMBER: P236426

CATALOG NUMBER: SKB2-LD5-18-N-UNV-L850-CD2-U all blades horizontal

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	2028.8	2033.0	2030.9	2001.2	1980.0	1988.5	1992.7	1992.7
115°	2202.8	2347.1	2389.6	2393.8	2381.1	2355.6	2340.8	2336.5
117.5°	1674.4	2073.4	2459.6	2631.5	2733.4	2765.2	2773.7	2786.4
120°	1939.7	1735.9	1786.9	2033.0	2300.4	2550.8	2690.9	2727.0
122.5°	1999.1	2219.8	2128.5	1963.0	1876.0	1893.0	1922.7	1924.8
125°	1861.1	1999.1	2181.6	2364.1	2455.3	2438.4	2402.3	2415.0
127.5°	2084.0	1988.5	2020.3	2120.0	2207.1	2289.8	2364.1	2381.1
130°	2162.5	2243.1	2221.9	2147.6	2128.5	2132.8	2139.1	2141.3
132.5°	2100.9	2230.4	2328.0	2370.5	2370.5	2345.0	2325.9	2325.9
135°	1950.3	2103.1	2224.0	2323.8	2383.2	2408.7	2421.4	2425.6
137.5°	1801.7	1922.7	2056.4	2173.1	2251.6	2296.2	2325.9	2330.1
140°	1653.2	1772.0	1873.9	1969.4	2071.2	2149.8	2177.3	2179.5
142.5°	1528.0	1619.2	1716.8	1803.8	1865.4	1941.8	1997.0	1999.1
145°	1349.7	1479.2	1568.3	1640.4	1697.7	1755.0	1825.1	1850.5
147.5°	1073.8	1243.6	1381.5	1483.4	1542.8	1598.0	1644.7	1691.4
150°	797.9	950.7	1080.2	1196.9	1286.0	1368.8	1430.3	1413.4
152.5°	602.7	689.7	793.7	889.2	952.9	1016.5	1027.1	988.9
155°	528.4	547.5	587.8	634.5	670.6	710.9	660.0	645.1
157.5°	528.4	505.1	509.3	513.6	526.3	492.3	481.7	479.6
160°	536.9	530.5	513.6	490.2	460.5	418.1	415.9	411.7
162.5°	507.2	511.4	505.1	496.6	456.3	441.4	432.9	432.9
165°	464.8	466.9	466.9	458.4	439.3	424.4	422.3	420.2
167.5°	420.2	424.4	424.4	415.9	409.6	401.1	386.2	386.2
170°	382.0	382.0	382.0	375.6	377.7	375.6	360.8	352.3
172.5°	350.2	345.9	343.8	339.5	343.8	352.3	352.3	318.3
175°	322.6	316.2	312.0	309.8	316.2	328.9	343.8	356.5
177.5°	286.5	278.0	269.5	269.5	273.8	286.5	305.6	312.0
180°	292.9	292.9	292.9	292.9	292.9	292.9	292.9	292.9

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