

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: P236421

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236421
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-LD5-15-N-UNV-L835-CD2-U all blades horizontal
Description: METALUX SKYBAR LED WAVESTREAM LUMINAIRE
2 BLADES WITH NARROW DISTRIBUTION LENS, ALL BLADES HORIZONTAL
Light Source: (476) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

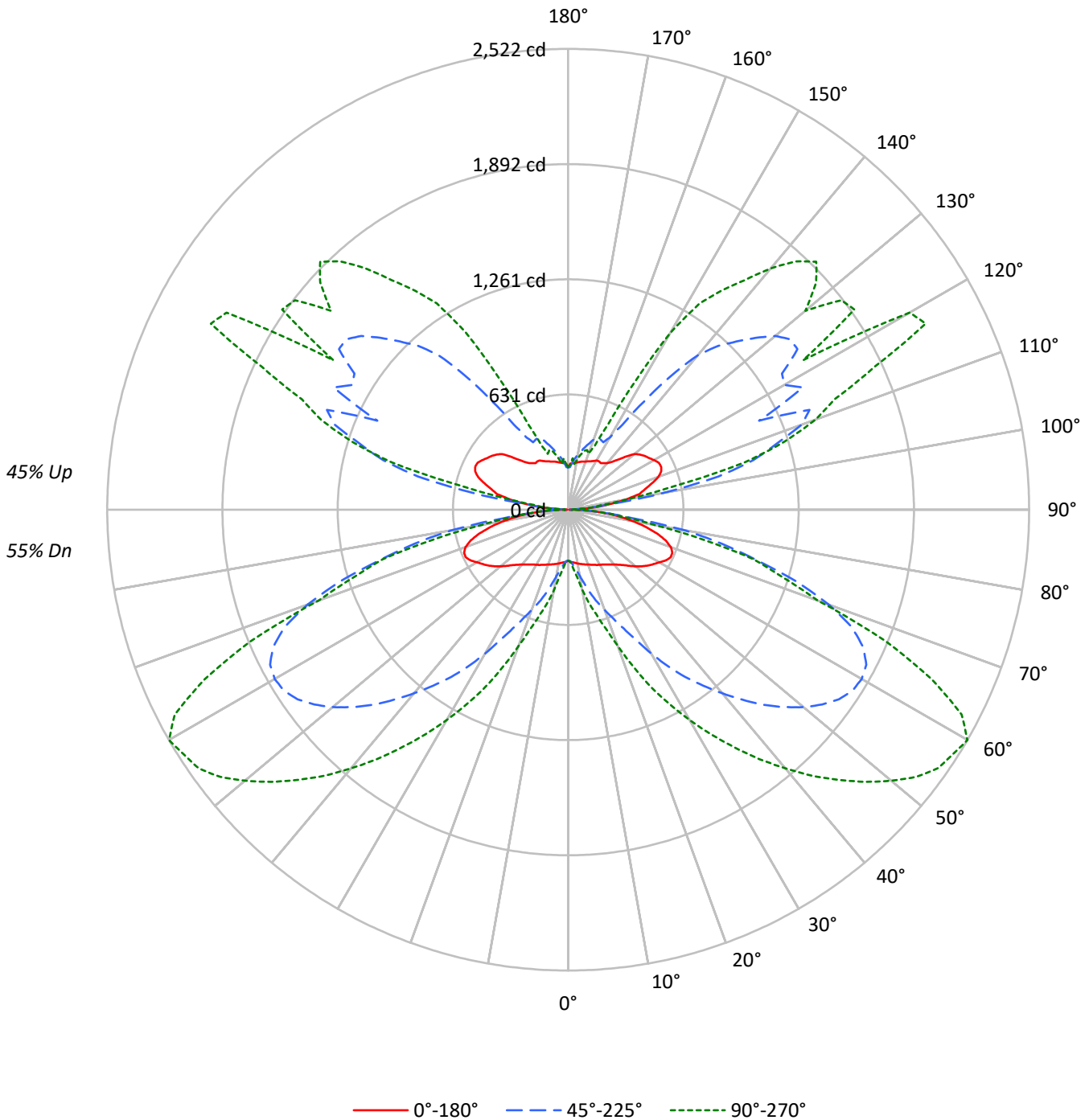
Lumens per Lamp: N/A
Luminaire Lumens: 11860.0 lumens
Efficiency: N/A
Efficacy: 89.6 lumens/watt
Spacing Criteria (0/90/45): 2.2 / 4.49 / 3.74
Luminous Opening: Rectangular (W 1.25' x L: 2' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 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

TEST NUMBER: P236421

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

Luminous Intensity Polar Plot





TEST NUMBER: P236421

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

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1200	1200	1200
5°	1248	1306	1393
10°	1307	1608	1945
15°	1377	2118	2634
20°	1462	2669	3631
25°	1580	3406	5081
30°	1728	4508	6603
35°	1924	5869	8349
40°	2199	7370	10381
45°	2607	9191	12728
50°	3228	11258	15453
55°	3996	13574	18528
60°	4959	15962	21716
65°	6295	18150	22357
70°	7524	19087	18284
75°	8351	17737	17486
80°	8867	15946	11864
85°	9124	9539	10117



TEST NUMBER: P236421

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.1	0.3
10°-20°	134.5	1.1
20°-30°	337.8	2.8
30°-40°	665.0	5.6
40°-50°	1083.1	9.1
50°-60°	1492.5	12.6
60°-70°	1564.7	13.2
70°-80°	996.6	8.4
80°-90°	264.7	2.2
90°-100°	178.2	1.5
100°-110°	913.4	7.7
110°-120°	1290.8	10.9
120°-130°	1146.7	9.7
130°-140°	911.0	7.7
140°-150°	519.0	4.4
150°-160°	211.3	1.8
160°-170°	94.5	0.8
170°-180°	25.4	0.2
0°-30°	503.3	4.2
0°-40°	1168.3	9.9
0°-60°	3743.8	31.6
0°-90°	6569.8	55.4
90°-120°	2382.3	20.1
90°-150°	4959.0	41.8
90°-180°	5290.0	44.6
0°-180°	11860.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	279	279	279	279	279	
5°	289	294	302	316	322	28
15°	309	364	475	557	591	88
25°	332	485	717	974	1070	155
35°	366	627	1117	1482	1588	231
45°	428	834	1510	1970	2090	335
55°	532	1063	1808	2332	2468	477
65°	618	1171	1782	2109	2194	601
75°	502	920	1066	1054	1051	521
85°	185	273	193	198	205	187
90°	7	13	15	15	17	20
95°	143	151	96	107	111	151
105°	435	810	1049	1043	999	459
115°	561	992	1152	1892	1849	547
125°	512	849	1531	1798	1911	458
135°	388	476	1301	1799	1919	307
145°	311	416	722	1269	1464	199
155°	292	365	423	484	510	136
165°	272	312	354	366	332	77
175°	255	254	260	246	282	25
180°	232	232	232	232	232	



TEST NUMBER: P236421

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	278.7	278.7	278.7	278.7	278.7	278.7	278.7	278.7	278.7	278.7	278.7
2.5°	287.1	287.1	287.1	287.1	285.4	287.1	285.4	285.4	283.8	282.1	282.1
5°	288.8	288.8	290.5	292.2	293.8	293.8	293.8	297.2	298.9	302.2	305.6
7.5°	293.8	293.8	295.5	298.9	302.2	307.3	314.0	322.4	329.1	332.5	337.5
10°	298.9	298.9	303.9	307.3	317.3	330.8	339.2	347.6	357.6	367.7	381.1
12.5°	303.9	305.6	310.6	320.7	337.5	350.9	362.7	381.1	401.3	418.1	438.2
15°	308.9	310.6	319.0	335.8	354.3	372.7	396.3	424.8	451.7	475.2	500.4
17.5°	314.0	317.3	329.1	352.6	372.7	404.7	436.6	471.8	505.4	530.6	555.8
20°	319.0	322.4	339.2	366.0	396.3	438.2	480.2	520.5	554.1	582.6	614.5
22.5°	325.7	329.1	352.6	381.1	423.1	475.2	522.2	564.2	602.8	644.8	686.7
25°	332.5	337.5	366.0	403.0	455.0	515.5	562.5	609.5	661.5	717.0	777.4
27.5°	340.8	345.9	379.5	424.8	488.6	552.4	602.8	663.2	730.4	802.6	883.2
30°	347.6	356.0	392.9	450.0	522.2	589.3	649.8	727.0	814.3	906.7	997.4
32.5°	356.0	367.7	409.7	478.5	555.8	626.3	703.5	800.9	911.7	1015.8	1108.2
35°	366.0	379.5	428.2	507.1	586.0	668.3	765.6	888.2	1012.5	1116.6	1214.0
37.5°	377.8	394.6	450.0	539.0	621.2	720.3	839.5	980.6	1103.1	1214.0	1318.1
40°	391.2	411.4	475.2	567.5	658.2	777.4	920.1	1066.2	1195.5	1311.3	1423.8
42.5°	408.0	429.8	503.7	597.7	703.5	844.6	1000.7	1148.5	1282.8	1410.4	1533.0
45°	428.2	451.7	535.6	629.6	753.9	913.4	1076.3	1229.1	1371.8	1509.5	1635.4
47.5°	455.0	478.5	570.9	666.6	811.0	982.2	1146.8	1306.3	1459.1	1598.5	1734.5
50°	481.9	505.4	604.5	706.9	869.7	1041.0	1212.3	1378.5	1534.6	1680.7	1820.1
52.5°	508.8	535.6	634.7	750.5	925.2	1096.4	1272.7	1444.0	1601.8	1751.2	1899.0
55°	532.3	564.2	663.2	795.9	975.5	1150.1	1326.4	1496.0	1657.2	1808.3	1954.4
57.5°	554.1	589.3	688.4	841.2	1017.5	1195.5	1370.1	1534.6	1694.2	1843.6	1988.0
60°	575.9	616.2	717.0	881.5	1052.8	1230.7	1398.6	1556.5	1709.3	1853.7	1994.7
62.5°	601.1	643.1	747.2	911.7	1081.3	1250.9	1407.0	1556.5	1704.2	1838.6	1966.2
65°	617.9	659.9	772.4	928.5	1093.1	1249.2	1391.9	1529.6	1663.9	1781.5	1890.6
67.5°	616.2	658.2	777.4	928.5	1077.9	1220.7	1350.0	1469.2	1583.3	1679.0	1752.9
70°	597.7	638.0	762.3	905.0	1036.0	1163.6	1274.4	1371.8	1459.1	1516.2	1553.1
72.5°	559.1	599.4	725.3	854.6	967.1	1076.3	1166.9	1240.8	1284.5	1311.3	1318.1
75°	502.0	549.0	671.6	780.8	874.8	965.5	1024.2	1059.5	1081.3	1066.2	1049.4
77.5°	434.9	488.6	597.7	686.7	764.0	824.4	858.0	863.0	858.0	859.7	864.7
80°	357.6	416.4	503.7	577.6	626.3	656.5	659.9	666.6	664.9	643.1	606.1
82.5°	275.4	330.8	396.3	444.9	463.4	471.8	478.5	439.9	396.3	354.3	337.5
85°	184.7	228.4	268.6	287.1	287.1	258.6	220.0	204.8	199.8	193.1	194.8
87.5°	94.0	102.4	110.8	99.1	89.0	94.0	94.0	94.0	97.4	97.4	99.1
90°	6.7	6.7	8.4	10.1	11.8	15.1	16.8	16.8	18.5	15.1	15.1
92.5°	40.3	36.9	36.9	33.6	36.9	36.9	36.9	35.3	31.9	31.9	31.9
95°	142.7	174.6	201.5	206.5	166.2	136.0	124.2	114.2	100.7	95.7	97.4
97.5°	231.7	285.4	344.2	382.8	403.0	404.7	371.1	297.2	250.2	230.0	218.3
100°	319.0	372.7	456.7	525.5	575.9	607.8	622.9	619.6	596.1	532.3	470.1
102.5°	399.6	444.9	552.4	643.1	713.6	770.7	800.9	831.1	844.6	841.2	834.5
105°	434.9	466.8	594.4	706.9	785.8	834.5	915.1	975.5	1027.6	1049.4	1064.5
107.5°	480.2	485.2	628.0	748.9	831.1	896.6	940.3	1104.8	1153.5	1190.4	1230.7
110°	525.5	512.1	648.1	799.2	905.0	938.6	1000.7	1022.5	1296.2	1358.3	1376.8



TEST NUMBER: P236421

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

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	550.7	527.2	606.1	811.0	933.5	1022.5	1051.1	1126.6	1089.7	1428.9	1583.3
115°	560.8	533.9	552.4	785.8	930.2	1052.8	1104.8	1165.3	1269.4	1151.8	1407.0
117.5°	557.4	532.3	515.5	725.3	911.7	1052.8	1172.0	1190.4	1274.4	1447.3	1286.1
120°	542.3	523.9	505.4	631.3	879.8	1044.4	1187.1	1302.9	1284.5	1365.1	1556.5
122.5°	525.5	513.8	505.4	554.1	814.3	1019.2	1175.3	1319.7	1422.2	1386.9	1423.8
125°	512.1	502.0	503.7	495.3	718.6	978.9	1146.8	1302.9	1437.3	1531.3	1509.5
127.5°	495.3	490.3	497.0	476.8	614.5	896.6	1109.8	1252.6	1407.0	1531.3	1627.0
130°	473.5	471.8	481.9	480.2	530.6	777.4	1042.7	1193.8	1331.5	1479.2	1608.5
132.5°	431.5	433.2	451.7	473.5	460.1	629.6	916.8	1128.3	1257.6	1391.9	1529.6
135°	387.9	394.6	424.8	458.4	431.5	520.5	748.9	1012.5	1188.8	1301.3	1425.5
137.5°	356.0	364.4	397.9	436.6	439.9	446.6	599.4	851.3	1081.3	1215.6	1316.4
140°	332.5	342.5	374.4	413.0	439.9	413.0	500.4	678.3	911.7	1103.1	1222.3
142.5°	320.7	329.1	354.3	392.9	426.5	423.1	436.6	540.7	720.3	921.8	1101.5
145°	310.6	317.3	337.5	372.7	406.3	426.5	408.0	451.7	559.1	722.0	900.0
147.5°	314.0	314.0	324.1	350.9	386.2	421.4	428.2	411.4	461.7	550.7	686.7
150°	310.6	308.9	324.1	340.8	372.7	408.0	431.5	424.8	418.1	456.7	518.8
152.5°	300.5	302.2	325.7	342.5	367.7	392.9	418.1	429.8	423.1	416.4	438.2
155°	292.2	293.8	315.7	332.5	354.3	376.1	396.3	418.1	429.8	423.1	409.7
157.5°	287.1	285.4	305.6	322.4	337.5	357.6	377.8	396.3	418.1	428.2	429.8
160°	280.4	278.7	297.2	314.0	325.7	344.2	361.0	376.1	392.9	409.7	419.8
162.5°	275.4	275.4	287.1	305.6	317.3	327.4	344.2	356.0	367.7	379.5	389.5
165°	272.0	272.0	278.7	295.5	308.9	315.7	325.7	337.5	345.9	354.3	359.3
167.5°	267.0	267.0	270.3	283.8	295.5	303.9	310.6	315.7	322.4	327.4	329.1
170°	261.9	261.9	261.9	270.3	282.1	290.5	295.5	298.9	302.2	303.9	302.2
172.5°	258.6	258.6	258.6	258.6	265.3	272.0	277.0	282.1	282.1	283.8	280.4
175°	255.2	255.2	253.5	253.5	253.5	253.5	255.2	256.9	258.6	260.3	258.6
177.5°	251.9	250.2	250.2	248.5	248.5	246.8	243.5	240.1	236.7	233.4	230.0
180°	231.7	231.7	231.7	231.7	231.7	231.7	231.7	231.7	231.7	231.7	231.7



TEST NUMBER: P236421

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	278.7	278.7	278.7	278.7	278.7	278.7	278.7	278.7
2.5°	282.1	282.1	282.1	282.1	282.1	283.8	283.8	285.4
5°	308.9	312.3	315.7	315.7	317.3	320.7	320.7	322.4
7.5°	342.5	349.2	354.3	357.6	361.0	367.7	367.7	371.1
10°	392.9	404.7	414.7	423.1	428.2	438.2	438.2	444.9
12.5°	456.7	471.8	486.9	497.0	503.7	512.1	515.5	520.5
15°	520.5	537.3	552.4	562.5	570.9	582.6	586.0	591.0
17.5°	580.9	599.4	621.2	636.4	651.5	664.9	673.3	680.0
20°	649.8	680.0	710.2	730.4	752.2	770.7	782.4	792.5
22.5°	732.1	777.4	821.1	854.6	883.2	906.7	923.5	928.5
25°	842.9	901.6	955.4	992.3	1024.2	1049.4	1064.5	1069.6
27.5°	962.1	1027.6	1083.0	1125.0	1158.5	1177.0	1200.5	1198.8
30°	1081.3	1151.8	1210.6	1254.2	1286.1	1309.7	1329.8	1328.1
32.5°	1197.2	1272.7	1331.5	1378.5	1415.4	1440.6	1457.4	1459.1
35°	1308.0	1388.6	1455.7	1507.8	1548.1	1573.3	1586.7	1588.4
37.5°	1422.2	1509.5	1580.0	1635.4	1679.0	1707.6	1721.0	1721.0
40°	1538.0	1627.0	1702.6	1763.0	1806.7	1833.5	1847.0	1847.0
42.5°	1650.5	1746.2	1820.1	1883.9	1929.2	1957.8	1972.9	1974.6
45°	1759.6	1857.0	1935.9	2003.1	2045.1	2073.6	2088.7	2090.4
47.5°	1860.4	1966.2	2045.1	2110.6	2159.3	2189.5	2202.9	2204.6
50°	1954.4	2060.2	2149.2	2214.7	2260.0	2288.5	2305.3	2307.0
52.5°	2031.6	2149.2	2233.1	2302.0	2350.7	2377.5	2397.7	2401.0
55°	2093.8	2204.6	2296.9	2367.5	2417.8	2449.7	2468.2	2468.2
57.5°	2124.0	2234.8	2322.1	2394.3	2448.0	2480.0	2491.7	2493.4
60°	2122.3	2223.1	2307.0	2375.9	2424.5	2463.2	2503.5	2521.9
62.5°	2078.7	2167.6	2239.8	2290.2	2338.9	2389.3	2419.5	2426.2
65°	1976.2	2045.1	2092.1	2125.7	2164.3	2191.2	2192.8	2194.5
67.5°	1801.6	1845.3	1867.1	1878.9	1890.6	1892.3	1882.2	1880.5
70°	1571.6	1581.7	1564.9	1533.0	1501.1	1480.9	1457.4	1452.4
72.5°	1292.9	1262.6	1237.5	1229.1	1229.1	1232.4	1230.7	1229.1
75°	1054.4	1056.1	1056.1	1051.1	1051.1	1052.8	1051.1	1051.1
77.5°	864.7	849.6	822.7	792.5	780.8	767.3	758.9	755.6
80°	569.2	533.9	512.1	492.0	486.9	481.9	478.5	478.5
82.5°	329.1	320.7	315.7	314.0	312.3	312.3	312.3	314.0
85°	194.8	196.4	196.4	199.8	201.5	201.5	204.8	204.8
87.5°	102.4	102.4	107.5	107.5	109.1	109.1	114.2	110.8
90°	16.8	16.8	16.8	13.4	15.1	15.1	15.1	16.8
92.5°	26.9	26.9	26.9	28.5	26.9	25.2	23.5	25.2
95°	99.1	102.4	105.8	107.5	110.8	110.8	110.8	110.8
97.5°	203.2	196.4	193.1	188.1	186.4	179.7	176.3	178.0
100°	406.3	376.1	361.0	350.9	339.2	329.1	329.1	325.7
102.5°	794.2	753.9	713.6	681.7	643.1	611.2	602.8	592.7
105°	1054.4	1049.4	1046.0	1039.3	1025.9	1017.5	1005.7	999.0
107.5°	1245.9	1257.6	1266.0	1269.4	1264.3	1252.6	1250.9	1244.2
110°	1381.9	1407.0	1433.9	1445.7	1450.7	1445.7	1440.6	1437.3



TEST NUMBER: P236421

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1605.2	1608.5	1606.8	1583.3	1566.6	1573.3	1576.6	1576.6
115°	1742.8	1857.0	1890.6	1894.0	1883.9	1863.7	1852.0	1848.6
117.5°	1324.8	1640.4	1946.0	2082.0	2162.6	2187.8	2194.5	2204.6
120°	1534.6	1373.5	1413.8	1608.5	1820.1	2018.2	2129.0	2157.6
122.5°	1581.7	1756.3	1684.1	1553.1	1484.3	1497.7	1521.2	1522.9
125°	1472.5	1581.7	1726.1	1870.5	1942.7	1929.2	1900.7	1910.8
127.5°	1648.8	1573.3	1598.5	1677.4	1746.2	1811.7	1870.5	1883.9
130°	1710.9	1774.8	1758.0	1699.2	1684.1	1687.4	1692.5	1694.2
132.5°	1662.3	1764.7	1841.9	1875.5	1875.5	1855.3	1840.2	1840.2
135°	1543.0	1663.9	1759.6	1838.6	1885.6	1905.7	1915.8	1919.1
137.5°	1425.5	1521.2	1627.0	1719.3	1781.5	1816.7	1840.2	1843.6
140°	1308.0	1402.0	1482.6	1558.2	1638.7	1700.9	1722.7	1724.4
142.5°	1208.9	1281.1	1358.3	1427.2	1475.9	1536.3	1580.0	1581.7
145°	1067.9	1170.3	1240.8	1297.9	1343.2	1388.6	1444.0	1464.1
147.5°	849.6	983.9	1093.1	1173.7	1220.7	1264.3	1301.3	1338.2
150°	631.3	752.2	854.6	947.0	1017.5	1083.0	1131.7	1118.2
152.5°	476.8	545.7	628.0	703.5	753.9	804.3	812.7	782.4
155°	418.1	433.2	465.1	502.0	530.6	562.5	522.2	510.4
157.5°	418.1	399.6	403.0	406.3	416.4	389.5	381.1	379.5
160°	424.8	419.8	406.3	387.9	364.4	330.8	329.1	325.7
162.5°	401.3	404.7	399.6	392.9	361.0	349.2	342.5	342.5
165°	367.7	369.4	369.4	362.7	347.6	335.8	334.1	332.5
167.5°	332.5	335.8	335.8	329.1	324.1	317.3	305.6	305.6
170°	302.2	302.2	302.2	297.2	298.9	297.2	285.4	278.7
172.5°	277.0	273.7	272.0	268.6	272.0	278.7	278.7	251.9
175°	255.2	250.2	246.8	245.1	250.2	260.3	272.0	282.1
177.5°	226.7	220.0	213.2	213.2	216.6	226.7	241.8	246.8
180°	231.7	231.7	231.7	231.7	231.7	231.7	231.7	231.7

(END OF REPORT)