

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: P236442

Luminaire Tested: **SKB2-LD5-12-W-UNV-L835-CD2-U all blades horizontal**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236442
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-LD5-12-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

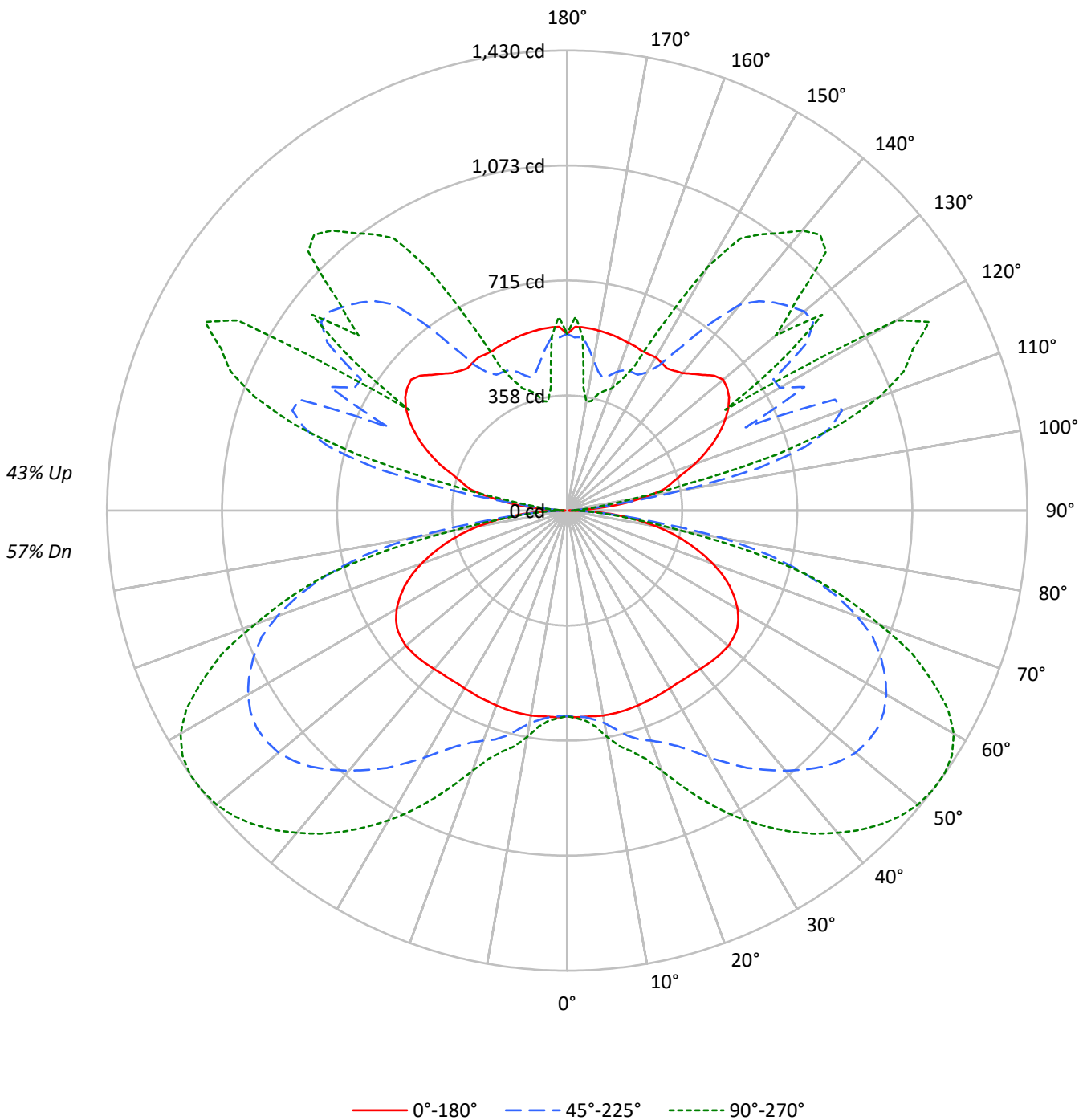
Lumens per Lamp: N/A
Luminaire Lumens: 8722.0 lumens
Efficiency: N/A
Efficacy: 83.1 lumens/watt
Spacing Criteria (0/90/45): 1.53 / 2.62 / 2.36
Luminous Opening: Rectangular (W 1.25' x L: 2' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 104.9
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-LD5-12-W-UNV-L835-CD2-U all blades horizontal

Luminous Intensity Polar Plot





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CATALOG NUMBER: SKB2-LD5-12-W-UNV-L835-CD2-U all blades horizontal

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	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°	2752	2752	2752
5°	2779	2784	2833
10°	2827	2931	3123
15°	2883	3229	3452
20°	2952	3485	3939
25°	3048	3834	4703
30°	3171	4405	5526
35°	3353	5132	6402
40°	3613	5931	7347
45°	3960	6853	8394
50°	4382	7840	9528
55°	4836	8843	10734
60°	5267	9863	11946
65°	5682	10955	12742
70°	6058	12069	12984
75°	6463	12821	12884
80°	6898	12120	8886
85°	7489	6437	6131



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.7	0.7
10°-20°	203.9	2.3
20°-30°	380.2	4.4
30°-40°	599.4	6.9
40°-50°	828.1	9.5
50°-60°	993.6	11.4
60°-70°	986.2	11.3
70°-80°	710.2	8.1
80°-90°	190.0	2.2
90°-100°	119.9	1.4
100°-110°	643.0	7.4
110°-120°	823.7	9.4
120°-130°	687.2	7.9
130°-140°	639.6	7.3
140°-150°	436.7	5.0
150°-160°	237.7	2.7
160°-170°	131.0	1.5
170°-180°	48.8	0.6
0°-30°	646.9	7.4
0°-40°	1246.3	14.3
0°-60°	3068.0	35.2
0°-90°	4954.4	56.8
90°-120°	1586.6	18.2
90°-150°	3350.1	38.4
90°-180°	3768.0	43.2
0°-180°	8722.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	639	639	639	639	639	
5°	643	648	644	652	655	61
15°	647	667	724	759	774	183
25°	642	710	807	938	990	297
35°	638	745	976	1166	1218	401
45°	650	811	1125	1329	1378	503
55°	644	871	1178	1376	1430	573
65°	558	816	1075	1224	1251	548
75°	388	624	771	785	774	407
85°	152	208	130	122	124	148
90°	6	9	11	10	12	16
95°	115	103	59	62	61	119
105°	338	559	767	734	677	358
115°	501	680	612	1161	1186	494
125°	614	687	910	947	811	546
135°	596	486	914	1116	1138	463
145°	540	440	624	926	1048	344
155°	548	439	475	520	494	255
165°	563	516	427	424	376	159
175°	572	565	541	488	543	54
180°	549	549	549	549	549	



TEST NUMBER: P236442

CATALOG NUMBER: SKB2-LD5-12-W-UNV-L835-CD2-U all blades horizontal

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	639.1	639.1	639.1	639.1	639.1	639.1	639.1	639.1	639.1	639.1	639.1
2.5°	642.9	642.9	642.9	642.9	644.2	646.7	645.4	642.9	641.6	640.4	639.1
5°	642.9	642.9	642.9	644.2	646.7	649.2	649.2	646.7	645.4	644.2	645.4
7.5°	644.2	644.2	645.4	647.9	650.4	652.9	654.2	655.4	655.4	655.4	656.7
10°	646.7	646.7	647.9	651.7	654.2	660.4	663.0	663.0	665.5	670.5	676.7
12.5°	646.7	646.7	650.4	652.9	660.4	666.7	670.5	676.7	685.5	695.5	704.3
15°	646.7	646.7	650.4	655.4	663.0	671.7	684.3	696.8	710.6	724.4	734.4
17.5°	645.4	646.7	650.4	659.2	665.5	684.3	700.5	719.3	734.4	745.7	754.4
20°	644.2	645.4	650.4	659.2	673.0	699.3	720.6	738.1	750.7	760.7	773.2
22.5°	641.6	644.2	650.4	660.4	681.8	711.8	734.4	749.4	764.5	780.8	799.6
25°	641.6	642.9	651.7	665.5	693.0	726.9	744.4	759.5	782.0	807.1	835.9
27.5°	639.1	640.4	650.4	671.7	704.3	736.9	753.2	777.0	807.1	842.2	881.0
30°	637.9	639.1	649.2	678.0	714.3	743.2	764.5	798.3	840.9	886.0	927.4
32.5°	636.6	639.1	651.7	686.8	721.9	750.7	780.8	827.1	881.0	929.9	977.5
35°	637.9	639.1	655.4	695.5	728.1	762.0	802.1	861.0	921.1	976.3	1023.9
37.5°	639.1	641.6	663.0	704.3	734.4	777.0	830.9	897.3	960.0	1015.1	1067.7
40°	642.9	645.4	671.7	711.8	744.4	798.3	863.5	934.9	998.8	1055.2	1109.1
42.5°	646.7	649.2	680.5	718.1	758.2	823.4	894.8	968.7	1035.2	1091.6	1147.9
45°	650.4	651.7	689.3	723.1	774.5	848.4	924.9	1000.1	1067.7	1125.4	1181.8
47.5°	652.9	654.2	696.8	729.4	792.0	872.2	951.2	1026.4	1094.1	1151.7	1206.9
50°	654.2	655.4	699.3	735.6	809.6	892.3	972.5	1047.7	1114.1	1170.5	1224.4
52.5°	650.4	654.2	694.3	739.4	822.1	904.8	986.3	1059.0	1122.9	1178.0	1233.2
55°	644.2	647.9	685.5	741.9	829.6	912.3	992.5	1062.7	1122.9	1178.0	1231.9
57.5°	630.4	637.9	673.0	740.7	827.1	911.1	988.8	1054.0	1114.1	1166.7	1219.4
60°	611.6	621.6	655.4	731.9	818.4	901.1	972.5	1035.2	1092.8	1145.4	1198.1
62.5°	586.5	599.0	635.4	716.8	802.1	882.3	948.7	1007.6	1064.0	1114.1	1165.5
65°	557.7	570.2	614.1	695.5	778.2	853.4	914.9	972.5	1026.4	1075.3	1122.9
67.5°	522.6	533.9	585.3	668.0	745.7	813.3	873.5	928.6	978.8	1027.6	1066.5
70°	481.2	492.5	552.7	632.9	703.1	768.2	823.4	876.0	923.6	958.7	986.3
72.5°	436.1	448.7	516.3	590.3	652.9	713.1	767.0	813.3	845.9	874.7	898.6
75°	388.5	404.8	476.2	538.9	596.5	651.7	698.0	729.4	758.2	770.7	777.0
77.5°	337.1	358.4	427.3	482.5	532.6	577.7	607.8	630.4	639.1	646.7	647.9
80°	278.2	308.3	367.2	412.3	453.7	483.7	501.3	505.0	502.5	488.8	454.9
82.5°	216.8	253.2	295.8	330.8	350.9	360.9	364.7	340.9	307.0	271.9	251.9
85°	151.6	179.2	208.0	220.6	219.3	196.8	167.9	149.1	139.1	130.3	127.8
87.5°	76.4	82.7	89.0	75.2	62.7	60.2	61.4	58.9	60.2	58.9	58.9
90°	6.3	6.3	7.5	7.5	8.8	10.0	11.3	12.5	12.5	11.3	11.3
92.5°	27.6	25.1	23.8	22.6	23.8	23.8	23.8	21.3	21.3	21.3	20.1
95°	115.3	135.3	149.1	150.4	116.5	90.2	77.7	67.7	61.4	58.9	56.4
97.5°	184.2	216.8	255.7	287.0	304.5	292.0	244.4	190.5	161.7	146.6	132.8
100°	248.1	282.0	334.6	384.7	428.6	453.7	457.4	446.1	403.5	358.4	303.3
102.5°	309.5	332.1	399.8	458.7	510.1	556.4	586.5	607.8	614.1	609.1	584.0
105°	338.4	347.1	424.8	492.5	542.6	575.2	639.1	700.5	750.7	767.0	765.7
107.5°	373.5	362.2	449.9	520.1	560.2	594.0	621.6	748.2	799.6	857.2	894.8
110°	422.3	388.5	476.2	562.7	615.3	611.6	635.4	644.2	853.4	908.6	948.7



TEST NUMBER: P236442

CATALOG NUMBER: SKB2-LD5-12-W-UNV-L835-CD2-U all blades horizontal

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	462.4	412.3	466.2	580.2	645.4	660.4	661.7	680.5	635.4	901.1	1011.3
115°	501.3	442.4	444.9	581.5	652.9	708.1	680.5	710.6	741.9	611.6	819.6
117.5°	536.4	476.2	439.9	569.0	663.0	726.9	760.7	701.8	749.4	830.9	635.4
120°	567.7	508.8	453.7	537.6	671.7	744.4	800.8	814.6	725.6	763.2	877.3
122.5°	594.0	538.9	475.0	511.3	655.4	756.9	818.4	867.2	861.0	759.5	758.2
125°	614.1	563.9	492.5	486.2	616.6	758.2	828.4	887.3	921.1	909.8	809.6
127.5°	626.6	582.7	503.8	475.0	565.2	721.9	829.6	882.3	932.4	963.7	958.7
130°	632.9	596.5	507.6	482.5	522.6	661.7	807.1	867.2	912.3	962.5	1001.3
132.5°	620.3	591.5	500.0	487.5	481.2	574.0	735.6	844.7	889.8	938.7	995.1
135°	596.5	575.2	493.8	482.5	458.7	513.8	640.4	784.5	866.0	913.6	961.2
137.5°	576.5	561.4	490.0	468.7	457.4	472.5	552.7	688.0	822.1	882.3	923.6
140°	557.7	548.9	485.0	452.4	457.4	447.4	502.5	594.0	726.9	834.6	887.3
142.5°	547.7	540.1	481.2	438.6	449.9	447.4	467.5	522.6	622.8	734.4	833.4
145°	540.1	533.9	478.7	432.4	436.1	444.9	446.1	481.2	538.9	624.1	718.1
147.5°	545.2	535.1	481.2	431.1	423.6	443.6	453.7	458.7	491.3	536.4	606.6
150°	550.2	540.1	496.3	439.9	418.6	438.6	458.7	463.7	472.5	495.0	522.6
152.5°	547.7	542.6	517.6	464.9	432.4	433.6	452.4	462.4	471.2	476.2	488.8
155°	547.7	543.9	530.1	481.2	447.4	431.1	439.9	456.2	468.7	475.0	476.2
157.5°	552.7	547.7	540.1	500.0	461.2	432.4	431.1	443.6	462.4	472.5	478.7
160°	555.2	550.2	550.2	517.6	481.2	452.4	431.1	434.9	447.4	459.9	470.0
162.5°	558.9	553.9	555.2	537.6	506.3	476.2	452.4	433.6	433.6	441.1	448.7
165°	562.7	558.9	558.9	555.2	530.1	502.5	476.2	454.9	436.1	427.3	426.1
167.5°	565.2	562.7	561.4	562.7	551.4	528.9	505.0	481.2	461.2	443.6	426.1
170°	567.7	566.5	565.2	565.2	565.2	555.2	533.9	513.8	493.8	473.7	453.7
172.5°	570.2	569.0	566.5	565.2	565.2	565.2	557.7	542.6	527.6	510.1	491.3
175°	571.5	571.5	570.2	567.7	565.2	563.9	560.2	553.9	547.7	541.4	528.9
177.5°	571.5	571.5	570.2	569.0	567.7	566.5	560.2	553.9	545.2	538.9	530.1
180°	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9



TEST NUMBER: P236442

CATALOG NUMBER: SKB2-LD5-12-W-UNV-L835-CD2-U all blades horizontal

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	639.1	639.1	639.1	639.1	639.1	639.1	639.1	639.1
2.5°	639.1	639.1	640.4	642.9	642.9	644.2	645.4	645.4
5°	646.7	647.9	650.4	652.9	652.9	654.2	654.2	655.4
7.5°	657.9	660.4	664.2	669.2	671.7	671.7	674.2	676.7
10°	684.3	688.0	696.8	703.1	706.8	709.3	713.1	714.3
12.5°	715.6	721.9	731.9	738.1	741.9	744.4	746.9	749.4
15°	743.2	749.4	756.9	762.0	765.7	768.2	770.7	774.5
17.5°	763.2	770.7	782.0	790.8	797.0	800.8	805.8	808.3
20°	789.5	803.3	819.6	832.1	843.4	848.4	855.9	859.7
22.5°	822.1	845.9	869.7	886.0	902.3	908.6	918.6	923.6
25°	869.7	899.8	928.6	947.4	966.2	972.5	985.0	990.0
27.5°	921.1	957.5	988.8	1008.8	1027.6	1037.7	1048.9	1052.7
30°	975.0	1015.1	1046.4	1069.0	1089.0	1097.8	1107.8	1111.6
32.5°	1026.4	1070.2	1101.6	1125.4	1145.4	1155.5	1163.0	1166.7
35°	1075.3	1120.4	1154.2	1178.0	1198.1	1208.1	1215.6	1218.1
37.5°	1121.6	1165.5	1200.6	1226.9	1248.2	1258.2	1263.2	1265.8
40°	1166.7	1210.6	1247.0	1272.0	1293.3	1300.8	1307.1	1307.1
42.5°	1204.3	1249.5	1283.3	1309.6	1329.7	1338.4	1343.5	1346.0
45°	1235.7	1279.5	1315.9	1342.2	1362.2	1372.3	1374.8	1378.5
47.5°	1260.7	1304.6	1340.9	1368.5	1387.3	1397.3	1401.1	1404.9
50°	1278.3	1323.4	1358.5	1384.8	1404.9	1416.1	1421.2	1422.4
52.5°	1285.8	1329.7	1364.8	1391.1	1412.4	1424.9	1431.2	1429.9
55°	1283.3	1325.9	1362.2	1389.8	1411.1	1424.9	1429.9	1429.9
57.5°	1270.8	1313.4	1347.2	1376.0	1397.3	1409.9	1414.9	1417.4
60°	1245.7	1288.3	1320.9	1348.5	1367.3	1381.0	1384.8	1387.3
62.5°	1210.6	1252.0	1282.0	1303.3	1319.6	1325.9	1329.7	1333.4
65°	1164.2	1196.8	1215.6	1231.9	1243.2	1245.7	1247.0	1250.7
67.5°	1094.1	1116.6	1135.4	1147.9	1160.5	1160.5	1158.0	1160.5
70°	1011.3	1031.4	1037.7	1036.4	1041.4	1035.2	1030.1	1031.4
72.5°	903.6	908.6	912.3	909.8	916.1	912.3	908.6	909.8
75°	780.8	784.5	788.3	780.8	787.0	778.2	772.0	774.5
77.5°	640.4	631.6	621.6	597.8	596.5	579.0	572.7	581.5
80°	429.9	409.8	394.8	371.0	365.9	355.9	348.4	358.4
82.5°	233.1	225.6	221.8	211.8	215.6	209.3	208.0	211.8
85°	122.8	122.8	122.8	120.3	124.1	121.6	121.6	124.1
87.5°	57.6	57.6	58.9	56.4	60.2	58.9	60.2	61.4
90°	10.0	10.0	11.3	8.8	12.5	10.0	10.0	12.5
92.5°	18.8	20.1	18.8	18.8	16.3	17.5	16.3	16.3
95°	57.6	60.2	61.4	62.7	62.7	63.9	62.7	61.4
97.5°	124.1	120.3	112.8	112.8	107.8	105.3	104.0	100.3
100°	265.7	248.1	226.8	221.8	211.8	204.3	204.3	198.0
102.5°	543.9	503.8	468.7	449.9	419.8	401.0	397.3	382.2
105°	759.5	758.2	738.1	730.6	710.6	696.8	691.8	676.7
107.5°	906.1	913.6	909.8	912.3	904.8	898.6	897.3	886.0
110°	985.0	1018.9	1036.4	1047.7	1046.4	1042.7	1040.2	1032.7



TEST NUMBER: P236442

CATALOG NUMBER: SKB2-LD5-12-W-UNV-L835-CD2-U all blades horizontal

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1043.9	1072.8	1094.1	1109.1	1120.4	1131.7	1134.2	1132.9
115°	1070.2	1140.4	1158.0	1164.2	1170.5	1180.5	1186.8	1185.5
117.5°	660.4	904.8	1125.4	1204.3	1235.7	1253.2	1265.8	1268.3
120°	778.2	604.1	637.9	773.2	947.4	1075.3	1140.4	1181.8
122.5°	868.5	936.2	804.6	656.7	577.7	575.2	571.5	582.7
125°	748.2	814.6	916.1	977.5	976.3	913.6	859.7	810.8
127.5°	891.0	802.1	788.3	843.4	904.8	946.2	981.3	998.8
130°	1017.6	1000.1	937.4	871.0	838.4	834.6	839.7	845.9
132.5°	1040.2	1074.0	1084.0	1072.8	1038.9	1008.8	983.8	966.2
135°	1008.8	1059.0	1100.3	1131.7	1139.2	1140.4	1141.7	1137.9
137.5°	968.7	1011.3	1060.2	1107.8	1142.9	1153.0	1159.2	1163.0
140°	924.9	966.2	1006.3	1042.7	1094.1	1122.9	1131.7	1135.4
142.5°	887.3	918.6	956.2	992.5	1023.9	1057.7	1084.0	1086.5
145°	818.4	874.7	912.3	939.9	970.0	992.5	1028.9	1047.7
147.5°	691.8	774.5	844.7	886.0	919.9	943.7	968.7	1002.6
150°	577.7	651.7	709.3	759.5	819.6	852.2	884.8	873.5
152.5°	508.8	545.2	585.3	625.4	670.5	689.3	688.0	671.7
155°	487.5	495.0	512.6	526.4	551.4	558.9	510.1	493.8
157.5°	482.5	476.2	482.5	483.7	492.5	456.2	441.1	438.6
160°	475.0	475.0	472.5	462.4	443.6	408.5	403.5	403.5
162.5°	456.2	458.7	456.2	447.4	413.6	394.8	391.0	391.0
165°	428.6	429.9	428.6	418.6	393.5	374.7	374.7	376.0
167.5°	411.1	404.8	402.3	387.2	373.5	358.4	347.1	348.4
170°	436.1	422.3	409.8	391.0	381.0	372.2	350.9	343.4
172.5°	472.5	456.2	443.6	432.4	429.9	434.9	422.3	386.0
175°	513.8	498.8	488.8	487.5	493.8	515.1	525.1	542.6
177.5°	518.8	503.8	497.5	503.8	518.8	548.9	585.3	602.8
180°	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9

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