

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: P236577

Luminaire Tested: **SKB4-LD5-30-W-UNV-L835-CD4-U outer 2 blades vertical inner 2 blades**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236577
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24080)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SKB4-LD5-30-W-UNV-L835-CD4-U outer 2 blades vertical inner 2 blades
Description: METALUX SKYBAR LED WAVESTREAM LUMINAIRE
4 BLADES WITH WIDE DISTRIBUTION LENS, OUTER 2 BLADES VERTICAL INNER 2
BLADES HORIZONTAL
Light Source: (952) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

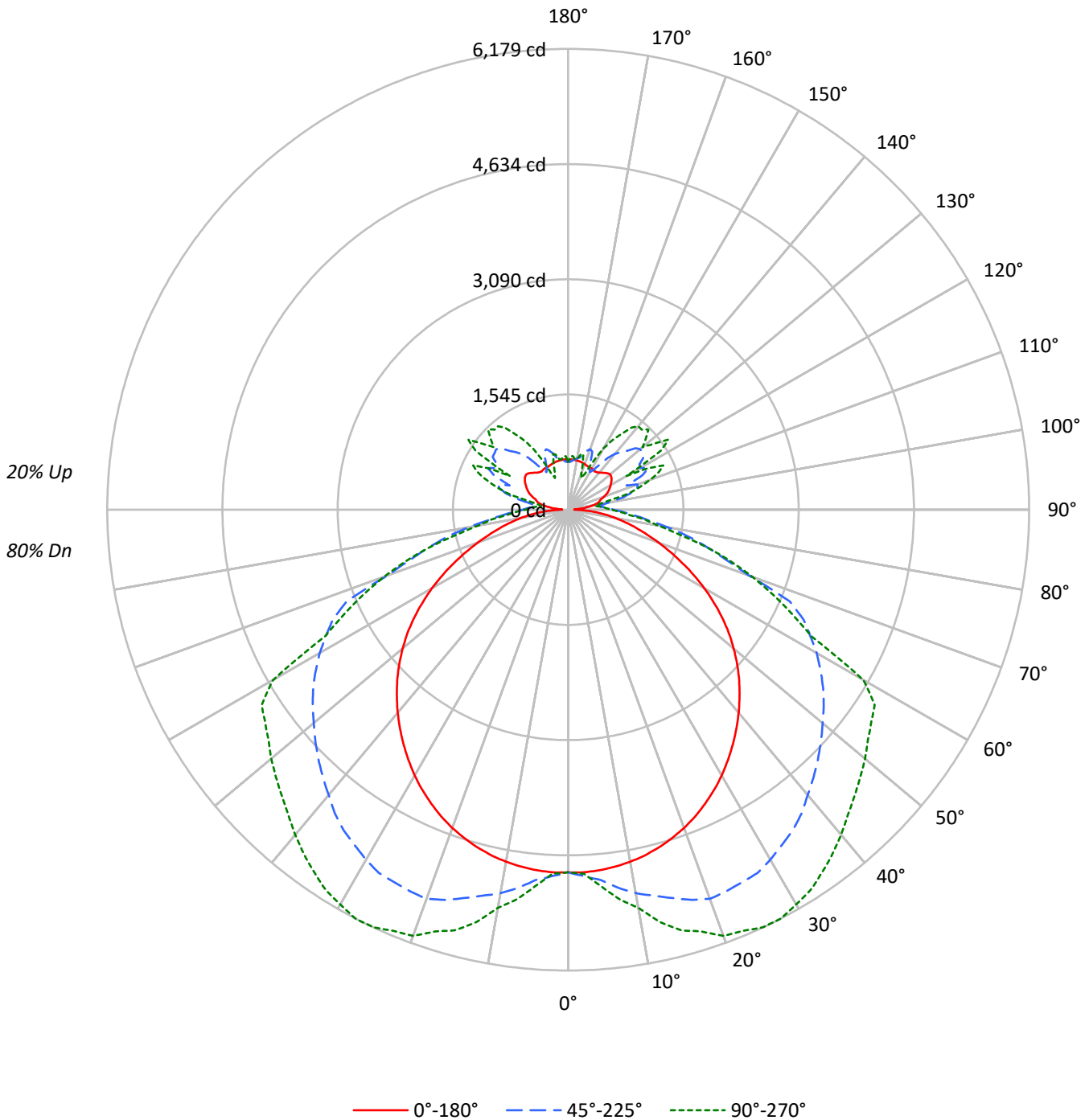
Lumens per Lamp: N/A
Luminaire Lumens: 25719.0 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.73 / 1.68
Luminous Opening: Rectangular w/ Sides (W: 1.88' x L: 4' x H: 0.21')
CIE Type: Semi-Direct

Input Watts (W): 260.5
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

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Luminous Intensity Polar Plot





TEST NUMBER: P236577

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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	114	114	114	114	109	109	109	109		100	100	100		91	91	91		83	83	83	80
1	103	98	93	89	98	93	89	85		85	82	79		78	75	73		71	69	67	64
2	93	84	77	71	88	80	74	68		73	68	64		67	63	59		61	58	55	52
3	84	73	65	58	80	70	62	56		64	58	52		59	53	49		53	49	46	42
4	76	64	55	48	73	61	53	47		56	49	44		52	46	41		47	42	38	36
5	70	57	48	41	66	54	46	40		50	43	37		46	40	35		42	37	33	30
6	64	51	42	35	61	49	40	34		45	38	32		41	35	30		38	33	29	26
7	59	46	37	31	56	44	36	30		41	33	28		37	31	27		34	29	25	23
8	55	41	33	27	52	40	32	26		37	30	25		34	28	24		31	26	22	20
9	51	38	30	24	49	36	29	23		34	27	22		31	25	21		29	24	20	18
10	48	35	27	21	46	33	26	21		31	24	20		29	23	19		27	22	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6979	6979	6979
5°	6960	7109	7230
10°	6921	7457	7746
15°	6870	7770	8423
20°	6806	8138	8926
25°	6720	8282	9299
30°	6622	8419	9520
35°	6499	8506	9647
40°	6379	8530	9752
45°	6252	8613	9915
50°	6088	8740	10241
55°	5863	8960	10712
60°	5549	9198	11007
65°	5151	9470	9074
70°	4731	8180	8428
75°	4381	7425	7423
80°	4112	6726	6175
85°	3778	6383	5991



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CATALOG NUMBER: SKB4-LD5-30-W-UNV-L835-CD4-U outer 2 blades vertical inner 2 blades

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	481.5	1.9
10°-20°	1512.3	5.9
20°-30°	2492.8	9.7
30°-40°	3181.9	12.4
40°-50°	3517.0	13.7
50°-60°	3556.2	13.8
60°-70°	2949.6	11.5
70°-80°	1875.1	7.3
80°-90°	902.7	3.5
90°-100°	474.2	1.8
100°-110°	783.1	3.0
110°-120°	989.8	3.8
120°-130°	1007.9	3.9
130°-140°	845.6	3.3
140°-150°	555.1	2.2
150°-160°	321.6	1.3
160°-170°	208.6	0.8
170°-180°	64.1	0.2
0°-30°	4486.6	17.4
0°-40°	7668.5	29.8
0°-60°	14741.7	57.3
0°-90°	20469.1	79.6
90°-120°	2247.1	8.7
90°-150°	4655.7	18.1
90°-180°	5250.0	20.4
0°-180°	25719.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4863	4863	4863	4863	4863	
5°	4853	4921	4985	5051	5067	461
15°	4688	4984	5391	5724	5838	1323
25°	4346	4826	5511	5994	6176	2003
35°	3845	4430	5247	5803	5935	2406
45°	3241	3836	4733	5297	5428	2498
55°	2517	3202	4171	4758	4961	2247
65°	1686	2531	3479	3264	3309	1673
75°	944	1817	1916	1929	1894	1005
85°	366	810	899	841	826	354
90°	81	518	604	581	572	64
95°	178	380	441	446	443	175
105°	434	682	872	863	833	454
115°	596	866	1101	1263	1406	587
125°	710	824	1237	1409	1633	631
135°	697	671	1118	1415	1519	540
145°	625	793	745	1082	1235	398
155°	637	744	710	587	534	296
165°	662	702	776	837	776	187
175°	676	677	663	620	722	64
180°	641	641	641	641	641	



TEST NUMBER: P236577

CATALOG NUMBER: SKB4-LD5-30-W-UNV-L835-CD4-U outer 2 blades vertical inner 2 blades

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4862.6	4862.6	4862.6	4862.6	4862.6	4862.6	4862.6	4862.6	4862.6	4862.6	4862.6
2.5°	4866.8	4864.7	4879.3	4887.6	4900.1	4912.7	4912.7	4910.6	4910.6	4917.9	4911.6
5°	4853.2	4856.3	4880.3	4893.9	4914.7	4927.3	4929.3	4939.8	4952.3	4984.6	5002.3
7.5°	4828.2	4836.5	4864.7	4878.2	4907.4	4941.9	4980.4	5020.1	5067.0	5111.8	5132.7
10°	4792.7	4806.3	4834.4	4859.5	4915.8	4993.0	5051.3	5098.3	5154.6	5221.3	5266.2
12.5°	4747.9	4765.6	4797.9	4843.8	4938.7	5022.2	5092.0	5165.0	5242.2	5300.6	5345.4
15°	4688.5	4709.3	4747.9	4824.0	4938.7	5029.5	5132.7	5203.6	5282.9	5391.3	5485.2
17.5°	4619.6	4640.5	4692.6	4794.8	4915.8	5031.5	5128.5	5223.4	5362.1	5485.2	5589.4
20°	4540.4	4566.4	4631.1	4744.8	4880.3	5002.3	5118.1	5264.1	5414.2	5551.9	5638.4
22.5°	4450.7	4478.8	4552.9	4679.1	4828.2	4953.3	5115.0	5268.3	5433.0	5538.3	5649.9
25°	4346.4	4376.7	4461.1	4595.6	4750.0	4902.2	5086.8	5255.7	5373.6	5511.2	5665.6
27.5°	4234.8	4261.9	4352.7	4497.6	4660.3	4840.7	5037.8	5170.2	5319.4	5492.5	5624.9
30°	4116.0	4141.0	4238.0	4386.0	4560.2	4762.5	4940.8	5072.2	5267.2	5418.4	5558.2
32.5°	3982.5	4016.9	4109.7	4263.0	4444.4	4655.1	4810.5	4988.8	5172.3	5329.8	5503.9
35°	3844.8	3880.3	3973.1	4131.6	4331.8	4528.9	4684.3	4874.1	5059.7	5247.4	5411.1
37.5°	3702.0	3738.5	3829.2	3996.0	4194.2	4377.7	4563.3	4740.6	4950.2	5134.8	5278.7
40°	3553.9	3589.3	3682.1	3855.3	4055.5	4228.6	4424.6	4613.4	4831.3	4994.0	5155.6
42.5°	3400.6	3435.0	3532.0	3713.4	3898.0	4084.7	4280.7	4488.2	4691.6	4866.8	5024.2
45°	3241.0	3276.5	3378.7	3567.4	3736.4	3936.6	4144.1	4354.8	4557.1	4733.3	4885.5
47.5°	3072.1	3110.7	3217.1	3404.8	3571.6	3784.3	4001.2	4212.9	4420.5	4595.6	4755.2
50°	2895.9	2940.7	3052.3	3237.9	3411.0	3633.1	3854.2	4070.1	4282.8	4452.8	4622.8
52.5°	2713.4	2765.5	2894.8	3070.0	3249.4	3478.8	3707.2	3927.2	4142.0	4317.2	4484.1
55°	2517.3	2579.9	2731.1	2891.7	3086.7	3318.2	3552.8	3780.2	3995.0	4171.2	4337.0
57.5°	2315.0	2390.1	2543.4	2711.3	2917.8	3157.6	3396.4	3627.9	3841.7	4011.7	4181.6
60°	2107.5	2194.1	2349.4	2529.8	2747.8	2992.9	3237.9	3464.2	3673.8	3844.8	4001.2
62.5°	1896.9	1993.8	2163.8	2351.5	2578.9	2823.9	3072.1	3299.4	3495.5	3656.1	3827.1
65°	1686.2	1794.7	1984.5	2174.2	2406.8	2655.0	2894.8	3111.7	3300.5	3478.8	3631.0
67.5°	1481.8	1609.0	1802.0	2002.2	2235.8	2480.8	2710.3	2919.9	3116.9	3211.8	3025.2
70°	1288.9	1432.8	1619.5	1832.2	2065.8	2297.3	2518.4	2729.0	2763.4	2567.4	2516.3
72.5°	1109.5	1251.4	1448.5	1668.5	1889.6	2107.5	2329.6	2352.6	2208.7	2205.5	2201.4
75°	943.7	1085.6	1287.9	1504.8	1708.1	1926.1	1965.7	1903.1	1910.4	1915.6	1907.3
77.5°	790.4	932.3	1134.6	1334.8	1534.0	1612.2	1600.7	1634.1	1641.4	1639.3	1622.6
80°	644.5	783.1	974.0	1163.8	1269.1	1297.2	1352.5	1382.8	1376.5	1346.3	1295.2
82.5°	503.7	633.0	809.2	935.4	994.8	1067.8	1111.6	1114.8	1100.2	1080.3	1060.5
85°	366.0	476.6	608.0	703.9	782.1	838.4	890.6	920.8	919.8	898.9	871.8
87.5°	222.1	302.4	415.0	524.5	613.2	677.8	723.7	748.7	749.8	738.3	720.6
90°	81.3	160.6	286.8	397.3	487.0	548.5	593.4	612.1	611.1	603.8	587.1
92.5°	80.3	135.6	240.9	334.7	406.7	468.2	513.1	538.1	542.3	536.0	522.4
95°	178.3	201.3	262.8	318.1	362.9	397.3	423.4	433.8	435.9	441.1	439.0
97.5°	257.6	282.6	334.7	396.3	446.3	476.6	471.3	456.7	443.2	424.4	407.7
100°	334.7	367.1	410.9	475.5	537.0	579.8	605.9	621.5	601.7	549.6	500.5
102.5°	403.6	446.3	494.3	552.7	613.2	665.3	708.1	739.3	748.7	743.5	732.0
105°	433.8	487.0	528.7	603.8	666.4	697.6	748.7	821.7	863.4	871.8	874.9
107.5°	456.7	522.4	565.2	645.5	722.7	776.9	767.5	816.5	919.8	970.9	998.0
110°	511.0	577.7	609.0	689.3	779.0	812.3	889.5	852.0	831.1	990.7	1072.0



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CATALOG NUMBER: SKB4-LD5-30-W-UNV-L835-CD4-U outer 2 blades vertical inner 2 blades

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	560.0	611.1	638.2	707.0	806.1	864.5	913.5	1007.3	965.6	847.8	940.6
115°	596.5	643.4	659.1	709.1	814.4	916.6	943.7	1006.3	1114.8	1101.2	971.9
117.5°	627.8	676.8	691.4	700.8	813.4	928.1	1001.1	1010.5	1078.3	1210.7	1245.1
120°	657.0	707.0	734.1	687.2	817.6	928.1	1035.5	1090.8	1076.2	1117.9	1260.8
122.5°	685.1	732.0	794.6	683.0	793.6	914.5	1038.6	1120.0	1169.0	1131.4	1142.9
125°	710.2	746.6	833.2	712.2	745.6	903.1	1013.6	1144.0	1194.0	1236.8	1203.4
127.5°	726.8	751.9	843.6	759.2	699.7	863.4	985.5	1106.4	1213.8	1244.1	1293.1
130°	735.2	755.0	840.5	806.1	665.3	791.5	953.1	1049.1	1170.0	1259.7	1286.8
132.5°	721.6	738.3	818.6	846.8	674.7	699.7	880.1	1003.2	1085.6	1221.1	1305.6
135°	696.6	714.3	789.4	859.3	713.3	628.8	774.8	935.4	1029.2	1117.9	1247.2
137.5°	672.6	689.3	756.0	844.7	764.4	613.2	671.6	840.5	966.7	1048.0	1126.2
140°	648.6	666.4	719.5	812.3	804.0	650.7	605.9	725.8	870.7	976.1	1047.0
142.5°	633.0	650.7	689.3	771.7	824.9	723.7	598.6	625.7	747.7	877.0	968.8
145°	624.6	640.3	666.4	734.1	809.2	776.9	640.3	579.8	637.2	744.6	852.0
147.5°	630.9	640.3	654.9	697.6	782.1	815.5	728.9	615.3	580.8	630.9	714.3
150°	636.1	644.5	658.0	679.9	755.0	808.2	809.2	697.6	614.2	580.8	611.1
152.5°	633.0	645.5	668.4	686.2	736.2	798.8	834.2	797.7	696.6	622.6	586.1
155°	637.2	646.5	668.4	685.1	714.3	772.7	820.7	840.5	809.2	710.2	648.6
157.5°	643.4	651.8	668.4	683.0	700.8	738.3	792.5	831.1	854.1	842.6	759.2
160°	649.7	657.0	671.6	685.1	695.6	717.5	757.1	808.2	841.5	863.4	865.5
162.5°	655.9	661.1	675.7	688.3	697.6	709.1	727.9	763.3	801.9	826.9	850.9
165°	662.2	666.4	677.8	689.3	699.7	704.9	713.3	726.8	749.8	775.8	795.7
167.5°	666.4	668.4	677.8	688.3	696.6	701.8	704.9	710.2	713.3	718.5	726.8
170°	669.5	671.6	677.8	685.1	690.3	695.6	696.6	698.7	699.7	695.6	687.2
172.5°	672.6	673.7	676.8	681.0	684.1	686.2	687.2	685.1	685.1	681.0	671.6
175°	675.7	675.7	677.8	676.8	676.8	676.8	674.7	671.6	667.4	663.2	653.8
177.5°	675.7	675.7	676.8	675.7	673.7	670.5	666.4	659.1	652.8	642.4	634.0
180°	641.3	641.3	641.3	641.3	641.3	641.3	641.3	641.3	641.3	641.3	641.3



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CATALOG NUMBER: SKB4-LD5-30-W-UNV-L835-CD4-U outer 2 blades vertical inner 2 blades

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	4862.6	4862.6	4862.6	4862.6	4862.6	4862.6	4862.6	4862.6
2.5°	4905.4	4892.8	4886.6	4897.0	4916.8	4924.1	4910.6	4885.5
5°	5024.2	5031.5	5037.8	5064.9	5089.9	5101.4	5087.8	5067.0
7.5°	5161.9	5177.5	5197.3	5237.0	5277.6	5292.2	5280.8	5269.3
10°	5306.8	5321.4	5341.2	5376.7	5417.4	5433.0	5427.8	5419.5
12.5°	5414.2	5469.5	5519.6	5580.1	5654.1	5671.8	5670.8	5660.3
15°	5572.8	5624.9	5687.5	5761.5	5828.2	5849.1	5850.1	5837.6
17.5°	5689.5	5741.7	5775.1	5834.5	5923.1	5947.1	5939.8	5928.3
20°	5720.8	5786.5	5870.0	5964.8	6044.1	6073.3	6081.6	6080.6
22.5°	5775.1	5864.7	5952.3	6028.5	6092.1	6115.0	6120.2	6112.9
25°	5787.6	5855.4	5946.1	6041.0	6124.4	6161.9	6178.6	6176.5
27.5°	5738.6	5836.6	5960.7	6063.9	6140.0	6172.4	6179.7	6178.6
30°	5709.4	5820.9	5932.5	6009.7	6063.9	6094.2	6107.7	6112.9
32.5°	5647.8	5735.4	5842.8	5936.7	5997.2	6026.4	6039.9	6047.2
35°	5530.0	5641.6	5758.4	5847.0	5893.9	5916.9	5922.1	5934.6
37.5°	5422.6	5538.3	5642.6	5717.7	5764.6	5793.8	5807.4	5819.9
40°	5298.5	5403.8	5515.4	5599.9	5647.8	5670.8	5682.2	5690.6
42.5°	5160.8	5281.8	5394.4	5468.5	5507.1	5531.0	5549.8	5550.9
45°	5034.7	5154.6	5257.8	5336.0	5380.9	5410.1	5428.8	5427.8
47.5°	4911.6	5024.2	5129.6	5208.8	5254.7	5287.0	5304.8	5311.0
50°	4775.0	4891.8	4998.2	5077.4	5127.5	5166.1	5185.9	5194.2
52.5°	4640.5	4755.2	4860.5	4948.1	5006.5	5042.0	5059.7	5064.9
55°	4491.4	4608.2	4710.4	4805.2	4876.2	4922.0	4953.3	4960.6
57.5°	4331.8	4446.5	4566.4	4672.8	4759.4	4821.9	4857.4	4870.9
60°	4159.8	4292.2	4429.8	4555.0	4596.7	4602.9	4572.7	4572.7
62.5°	4003.3	4101.4	4065.9	3926.2	3783.3	3737.4	3710.3	3670.7
65°	3607.1	3374.5	3255.6	3272.3	3295.3	3308.8	3313.0	3308.8
67.5°	2890.7	2871.9	2907.3	2935.5	2947.0	2966.8	2968.9	2967.8
70°	2529.8	2533.0	2571.6	2596.6	2608.1	2623.7	2623.7	2621.6
72.5°	2221.2	2229.5	2255.6	2271.2	2274.4	2277.5	2280.6	2269.1
75°	1911.5	1917.7	1924.0	1933.4	1912.5	1914.6	1898.9	1893.7
77.5°	1604.9	1593.4	1569.4	1546.5	1517.3	1523.5	1504.8	1515.2
80°	1273.3	1264.9	1252.4	1232.6	1212.8	1217.0	1212.8	1218.0
82.5°	1058.4	1064.7	1061.6	1061.6	1048.0	1052.2	1039.7	1044.9
85°	859.3	846.8	842.6	839.5	829.0	831.1	820.7	825.9
87.5°	714.3	710.2	710.2	711.2	708.1	707.0	699.7	702.9
90°	582.9	580.8	580.8	580.8	579.8	576.7	568.3	571.5
92.5°	518.3	514.1	513.1	513.1	512.0	509.9	504.7	505.8
95°	441.1	443.2	445.3	446.3	446.3	445.3	440.1	443.2
97.5°	392.1	380.6	377.5	374.4	372.3	368.1	366.0	366.0
100°	466.1	449.4	436.9	428.6	421.3	415.0	411.9	405.7
102.5°	696.6	677.8	643.4	603.8	578.8	560.0	556.9	543.3
105°	870.7	868.7	864.5	861.4	857.2	852.0	848.8	833.2
107.5°	1004.2	1013.6	1014.6	1014.6	1009.4	1010.5	1009.4	1002.1
110°	1112.7	1140.8	1159.6	1173.2	1176.3	1174.2	1175.2	1166.9



TEST NUMBER: P236577

CATALOG NUMBER: SKB4-LD5-30-W-UNV-L835-CD4-U outer 2 blades vertical inner 2 blades

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1144.0	1221.1	1259.7	1288.9	1307.7	1316.0	1318.1	1313.9
115°	876.0	994.8	1206.5	1319.1	1375.5	1399.4	1407.8	1405.7
117.5°	1175.2	1009.4	907.2	908.3	982.3	1075.1	1151.3	1194.0
120°	1361.9	1359.8	1317.1	1231.6	1087.6	978.2	927.1	904.1
122.5°	1264.9	1408.8	1479.7	1506.9	1506.9	1495.4	1492.3	1473.5
125°	1167.9	1226.3	1344.2	1473.5	1566.3	1610.1	1627.8	1633.0
127.5°	1284.7	1235.7	1237.8	1272.2	1329.6	1375.5	1422.4	1454.7
130°	1347.3	1399.4	1361.9	1321.2	1302.5	1296.2	1298.3	1301.4
132.5°	1337.9	1374.4	1438.0	1480.8	1474.5	1452.6	1428.6	1412.0
135°	1333.7	1374.4	1401.5	1427.6	1469.3	1495.4	1511.0	1519.4
137.5°	1249.3	1339.0	1394.2	1428.6	1451.6	1456.8	1455.8	1456.8
140°	1116.8	1214.9	1312.9	1366.1	1416.1	1449.5	1458.9	1462.0
142.5°	1040.7	1092.9	1159.6	1227.4	1292.0	1346.3	1377.5	1382.8
145°	951.0	1012.6	1062.6	1101.2	1131.4	1169.0	1211.7	1234.7
147.5°	817.6	905.2	968.8	1011.5	1042.8	1067.8	1096.0	1104.3
150°	674.7	751.9	821.7	882.2	922.9	949.0	963.6	950.0
152.5°	585.0	621.5	673.7	718.5	747.7	776.9	749.8	735.2
155°	601.7	576.7	576.7	597.5	610.0	585.0	551.6	533.9
157.5°	698.7	646.5	601.7	574.6	547.5	483.9	465.1	460.9
160°	838.4	758.1	708.1	660.1	584.0	543.3	519.3	512.0
162.5°	864.5	864.5	850.9	818.6	741.4	688.3	658.0	647.6
165°	816.5	832.2	842.6	831.1	813.4	793.6	780.0	775.8
167.5°	741.4	761.2	771.7	773.8	786.3	780.0	756.0	751.9
170°	679.9	682.0	688.3	693.5	714.3	721.6	709.1	686.2
172.5°	658.0	650.7	645.5	649.7	665.3	686.2	682.0	683.0
175°	640.3	623.6	616.3	624.6	641.3	671.6	702.9	721.6
177.5°	620.5	599.6	590.2	598.6	616.3	649.7	702.9	719.5
180°	641.3	641.3	641.3	641.3	641.3	641.3	641.3	641.3

(END OF REPORT)