

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: P236580

Luminaire Tested: **SKB4-LD5-36-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: P236580  
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-LD5-36-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

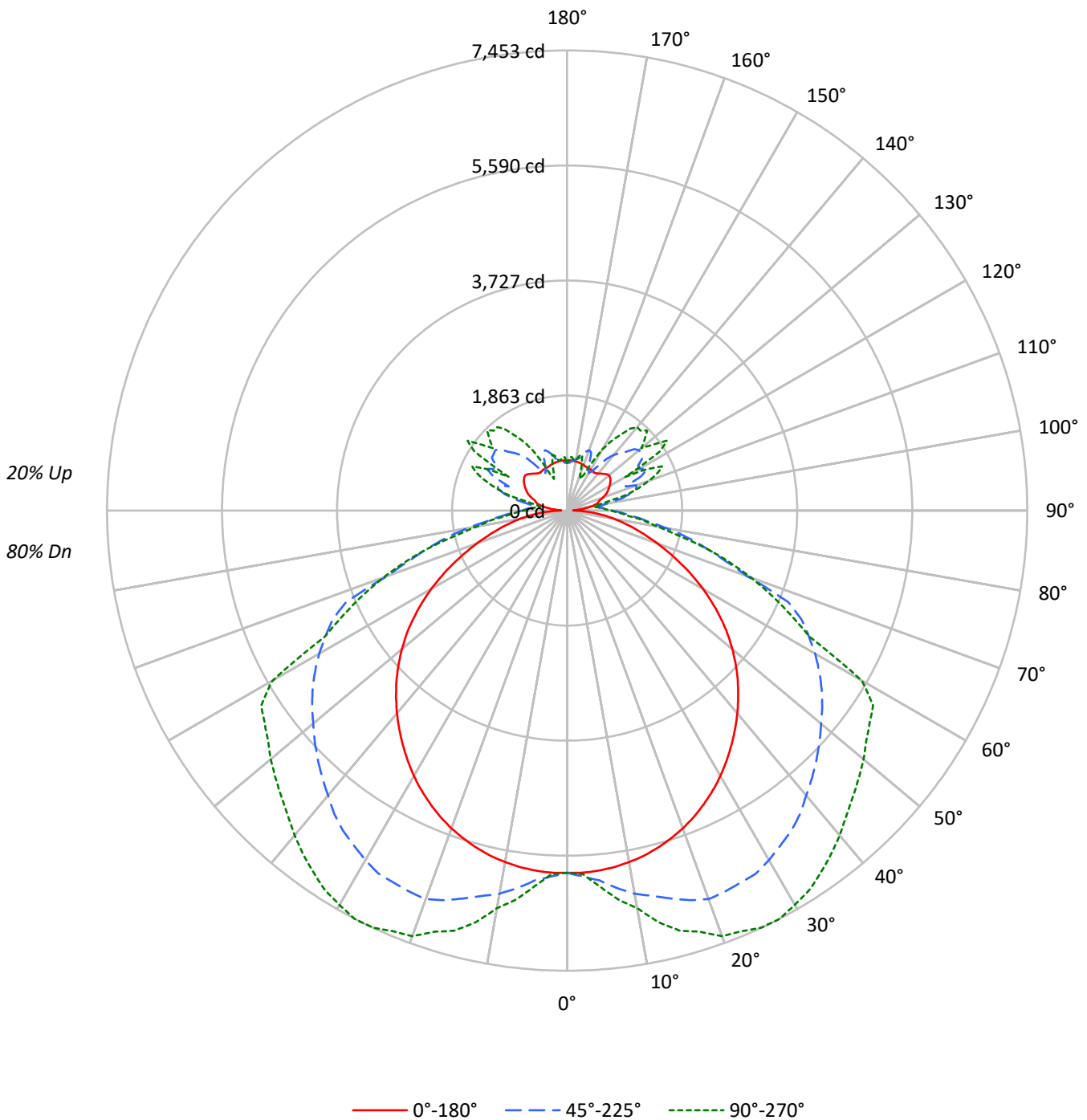
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 31024.0 lumens  
Efficiency: N/A  
Efficacy: 93.0 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): 333.5  
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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CATALOG NUMBER: SKB4-LD5-36-W-UNV-L835-CD4-U outer 2 blades vertical inner 2 blades

### 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	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°	8418	8418	8418
5°	8396	8576	8721
10°	8349	8996	9344
15°	8287	9373	10160
20°	8209	9816	10767
25°	8106	9990	11217
30°	7988	10155	11483
35°	7840	10261	11637
40°	7695	10290	11764
45°	7542	10390	11960
50°	7344	10543	12354
55°	7072	10809	12922
60°	6693	11095	13277
65°	6213	11424	10946
70°	5708	9867	10167
75°	5285	8956	8954
80°	4960	8113	7449
85°	4557	7700	7227



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	580.8	1.9
10°-20°	1824.2	5.9
20°-30°	3007.0	9.7
30°-40°	3838.2	12.4
40°-50°	4242.5	13.7
50°-60°	4289.8	13.8
60°-70°	3558.0	11.5
70°-80°	2261.8	7.3
80°-90°	1088.9	3.5
90°-100°	572.0	1.8
100°-110°	944.6	3.0
110°-120°	1194.0	3.8
120°-130°	1215.8	3.9
130°-140°	1020.1	3.3
140°-150°	669.6	2.2
150°-160°	387.9	1.3
160°-170°	251.6	0.8
170°-180°	77.3	0.2
0°-30°	5412.0	17.4
0°-40°	9250.2	29.8
0°-60°	17782.5	57.3
0°-90°	24691.2	79.6
90°-120°	2710.6	8.7
90°-150°	5616.0	18.1
90°-180°	6333.0	20.4
0°-180°	31024.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5866	5866	5866	5866	5866	
5°	5854	5936	6013	6093	6112	556
15°	5656	6012	6503	6905	7042	1596
25°	5243	5822	6648	7230	7451	2416
35°	4638	5344	6330	7000	7159	2902
45°	3910	4628	5710	6390	6547	3013
55°	3037	3863	5032	5739	5984	2710
65°	2034	3053	4196	3937	3991	2018
75°	1138	2192	2311	2326	2284	1213
85°	442	977	1084	1014	996	428
90°	98	625	728	701	689	77
95°	215	459	532	538	535	211
105°	523	823	1052	1041	1005	547
115°	720	1044	1328	1523	1696	708
125°	857	994	1492	1699	1970	762
135°	840	809	1348	1706	1833	651
145°	754	957	898	1305	1489	480
155°	769	897	857	708	644	357
165°	799	847	936	1009	936	226
175°	815	816	800	748	870	77
180°	774	774	774	774	774	



TEST NUMBER: P236580

CATALOG NUMBER: SKB4-LD5-36-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°	5865.6	5865.6	5865.6	5865.6	5865.6	5865.6	5865.6	5865.6	5865.6	5865.6	5865.6
2.5°	5870.6	5868.1	5885.7	5895.8	5910.9	5926.0	5926.0	5923.5	5923.5	5932.3	5924.7
5°	5854.3	5858.1	5887.0	5903.3	5928.5	5943.6	5946.1	5958.7	5973.8	6012.8	6034.2
7.5°	5824.1	5834.2	5868.1	5884.5	5919.7	5961.2	6007.7	6055.5	6112.1	6166.2	6191.4
10°	5781.3	5797.7	5831.6	5861.8	5929.8	6022.8	6093.3	6149.9	6217.8	6298.3	6352.4
12.5°	5727.2	5748.6	5787.6	5843.0	5957.4	6058.1	6142.3	6230.4	6323.5	6393.9	6448.0
15°	5655.5	5680.7	5727.2	5819.1	5957.4	6066.9	6191.4	6276.9	6372.5	6503.4	6616.6
17.5°	5572.5	5597.7	5660.6	5783.8	5929.8	6069.4	6186.4	6300.8	6468.1	6616.6	6742.4
20°	5476.9	5508.4	5586.3	5723.5	5887.0	6034.2	6173.8	6349.9	6531.0	6697.1	6801.5
22.5°	5368.7	5402.7	5492.0	5644.2	5824.1	5975.0	6170.0	6354.9	6553.7	6680.7	6815.3
25°	5242.9	5279.4	5381.3	5543.6	5729.7	5913.4	6136.0	6339.8	6482.0	6648.0	6834.2
27.5°	5108.3	5141.0	5250.5	5425.3	5621.6	5839.2	6076.9	6236.7	6416.6	6625.4	6785.1
30°	4964.9	4995.1	5112.1	5290.7	5500.8	5744.8	5959.9	6118.4	6353.7	6536.1	6704.6
32.5°	4803.9	4845.4	4957.4	5142.3	5361.2	5615.3	5802.7	6017.8	6239.2	6429.1	6639.2
35°	4637.9	4680.7	4792.6	4983.8	5225.3	5463.1	5650.5	5879.4	6103.3	6329.8	6527.3
37.5°	4465.6	4509.6	4619.0	4820.3	5059.3	5280.7	5504.6	5718.4	5971.3	6193.9	6367.5
40°	4286.9	4329.7	4441.7	4650.5	4892.0	5100.8	5337.3	5565.0	5827.9	6024.1	6219.1
42.5°	4102.0	4143.5	4260.5	4479.4	4702.0	4927.2	5163.7	5414.0	5659.3	5870.6	6060.6
45°	3909.6	3952.3	4075.6	4303.3	4507.1	4748.6	4998.9	5253.0	5497.0	5709.6	5893.3
47.5°	3705.8	3752.3	3880.6	4107.1	4308.3	4564.9	4826.6	5081.9	5332.2	5543.6	5736.0
50°	3493.2	3547.3	3681.9	3905.8	4114.6	4382.5	4649.2	4909.6	5166.2	5371.2	5576.3
52.5°	3273.1	3336.0	3491.9	3703.3	3919.6	4196.4	4471.8	4737.3	4996.4	5207.7	5409.0
55°	3036.6	3112.1	3294.4	3488.2	3723.4	4002.6	4285.7	4559.9	4819.0	5031.6	5231.6
57.5°	2792.5	2883.1	3068.0	3270.5	3519.6	3808.9	4097.0	4376.2	4634.1	4839.2	5044.2
60°	2542.2	2646.6	2834.1	3051.7	3314.6	3610.2	3905.8	4178.8	4431.6	4637.9	4826.6
62.5°	2288.1	2405.1	2610.1	2836.6	3110.8	3406.4	3705.8	3980.0	4216.5	4410.2	4616.5
65°	2034.0	2164.9	2393.8	2622.7	2903.2	3202.6	3491.9	3753.6	3981.3	4196.4	4380.0
67.5°	1787.5	1940.9	2173.7	2415.2	2696.9	2992.5	3269.3	3522.1	3759.9	3874.3	3649.2
70°	1554.8	1728.4	1953.5	2210.1	2491.9	2771.2	3037.8	3291.9	3333.4	3097.0	3035.3
72.5°	1338.4	1509.5	1747.2	2012.6	2279.3	2542.2	2810.2	2837.8	2664.2	2660.5	2655.4
75°	1138.4	1309.5	1553.5	1815.2	2060.4	2323.3	2371.1	2295.7	2304.5	2310.8	2300.7
77.5°	953.5	1124.6	1368.6	1610.1	1850.4	1944.7	1930.9	1971.1	1979.9	1977.4	1957.3
80°	777.4	944.7	1174.9	1403.8	1530.9	1564.8	1631.5	1668.0	1660.4	1624.0	1562.3
82.5°	607.6	763.5	976.1	1128.3	1200.0	1288.1	1340.9	1344.7	1327.1	1303.2	1279.3
85°	441.5	574.9	733.4	849.1	943.4	1011.4	1074.2	1110.7	1109.5	1084.3	1051.6
87.5°	267.9	364.8	500.6	632.7	739.6	817.6	873.0	903.2	904.4	890.6	869.2
90°	98.1	193.7	345.9	479.3	587.4	661.7	715.7	738.4	737.1	728.3	708.2
92.5°	96.9	163.5	290.6	403.8	490.6	564.8	618.9	649.1	654.1	646.6	630.2
95°	215.1	242.8	317.0	383.7	437.8	479.3	510.7	523.3	525.8	532.1	529.6
97.5°	310.7	340.9	403.8	478.0	538.4	574.9	568.6	551.0	534.6	512.0	491.8
100°	403.8	442.8	495.6	573.6	647.8	699.4	730.8	749.7	725.8	662.9	603.8
102.5°	486.8	538.4	596.2	666.7	739.6	802.5	854.1	891.9	903.2	896.9	883.0
105°	523.3	587.4	637.8	728.3	803.8	841.5	903.2	991.2	1041.5	1051.6	1055.4
107.5°	551.0	630.2	681.8	778.6	871.7	937.1	925.8	984.9	1109.5	1171.1	1203.8
110°	616.4	696.9	734.6	831.5	939.7	979.9	1073.0	1027.7	1002.5	1195.0	1293.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	675.5	737.1	769.8	852.9	972.4	1042.8	1101.9	1215.1	1164.8	1022.7	1134.6
115°	719.5	776.1	795.0	855.4	982.4	1105.7	1138.4	1213.9	1344.7	1328.3	1172.4
117.5°	757.3	816.4	834.0	845.3	981.2	1119.5	1207.6	1218.9	1300.7	1460.4	1501.9
120°	792.5	852.9	885.6	829.0	986.2	1119.5	1249.1	1315.8	1298.2	1348.5	1520.8
122.5°	826.4	883.0	958.5	823.9	957.3	1103.2	1252.9	1351.0	1410.1	1364.8	1378.7
125°	856.6	900.7	1005.1	859.1	899.4	1089.3	1222.7	1379.9	1440.3	1491.9	1451.6
127.5°	876.8	906.9	1017.6	915.8	844.1	1041.5	1188.7	1334.6	1464.2	1500.7	1559.8
130°	886.8	910.7	1013.9	972.4	802.5	954.7	1149.7	1265.4	1411.4	1519.5	1552.3
132.5°	870.5	890.6	987.5	1021.4	813.9	844.1	1061.7	1210.1	1309.5	1473.0	1574.9
135°	840.3	861.7	952.2	1036.5	860.4	758.5	934.6	1128.3	1241.5	1348.5	1504.5
137.5°	811.3	831.5	912.0	1018.9	922.0	739.6	810.1	1013.9	1166.1	1264.2	1358.5
140°	782.4	803.8	868.0	979.9	969.8	784.9	730.8	875.5	1050.3	1177.4	1262.9
142.5°	763.5	784.9	831.5	930.8	995.0	873.0	722.0	754.7	901.9	1057.9	1168.6
145°	753.5	772.4	803.8	885.6	976.1	937.1	772.4	699.4	768.6	898.1	1027.7
147.5°	761.0	772.4	790.0	841.5	943.4	983.7	879.3	742.2	700.7	761.0	861.7
150°	767.3	777.4	793.7	820.2	910.7	974.9	976.1	841.5	740.9	700.7	737.1
152.5°	763.5	778.6	806.3	827.7	888.1	963.6	1006.3	962.3	840.3	751.0	706.9
155°	768.6	779.9	806.3	826.4	861.7	932.1	990.0	1013.9	976.1	856.6	782.4
157.5°	776.1	786.2	806.3	823.9	845.3	890.6	956.0	1002.5	1030.2	1016.4	915.8
160°	783.7	792.5	810.1	826.4	839.0	865.4	913.2	974.9	1015.1	1041.5	1044.1
162.5°	791.2	797.5	815.1	830.2	841.5	855.4	878.0	920.8	967.3	997.5	1026.4
165°	798.8	803.8	817.6	831.5	844.1	850.3	860.4	876.8	904.4	935.9	959.8
167.5°	803.8	806.3	817.6	830.2	840.3	846.6	850.3	856.6	860.4	866.7	876.8
170°	807.6	810.1	817.6	826.4	832.7	839.0	840.3	842.8	844.1	839.0	829.0
172.5°	811.3	812.6	816.4	821.4	825.2	827.7	829.0	826.4	826.4	821.4	810.1
175°	815.1	815.1	817.6	816.4	816.4	816.4	813.9	810.1	805.1	800.0	788.7
177.5°	815.1	815.1	816.4	815.1	812.6	808.8	803.8	795.0	787.4	774.9	764.8
180°	773.6	773.6	773.6	773.6	773.6	773.6	773.6	773.6	773.6	773.6	773.6



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	5865.6	5865.6	5865.6	5865.6	5865.6	5865.6	5865.6	5865.6
2.5°	5917.2	5902.1	5894.5	5907.1	5931.0	5939.8	5923.5	5893.3
5°	6060.6	6069.4	6076.9	6109.6	6139.8	6153.7	6137.3	6112.1
7.5°	6226.6	6245.5	6269.4	6317.2	6366.2	6383.9	6370.0	6356.2
10°	6401.5	6419.1	6443.0	6485.7	6534.8	6553.7	6547.4	6537.3
12.5°	6531.0	6597.7	6658.1	6731.0	6820.3	6841.7	6840.5	6827.9
15°	6722.2	6785.1	6860.6	6949.9	7030.4	7055.6	7056.8	7041.7
17.5°	6863.1	6926.0	6966.3	7038.0	7144.9	7173.8	7165.0	7151.2
20°	6900.9	6980.1	7080.7	7195.2	7290.8	7326.0	7336.1	7334.8
22.5°	6966.3	7074.4	7180.1	7271.9	7348.7	7376.3	7382.6	7373.8
25°	6981.4	7063.1	7172.6	7287.0	7387.7	7432.9	7453.1	7450.6
27.5°	6922.2	7040.5	7190.2	7314.7	7406.5	7445.5	7454.3	7453.1
30°	6887.0	7021.6	7156.2	7249.3	7314.7	7351.2	7367.5	7373.8
32.5°	6812.8	6918.5	7048.0	7161.2	7234.2	7269.4	7285.8	7294.6
35°	6670.7	6805.3	6946.1	7053.1	7109.7	7137.3	7143.6	7158.7
37.5°	6541.1	6680.7	6806.5	6897.1	6953.7	6988.9	7005.3	7020.4
40°	6391.4	6518.5	6653.0	6754.9	6812.8	6840.5	6854.3	6864.4
42.5°	6225.4	6371.3	6507.1	6596.4	6643.0	6671.9	6694.6	6695.8
45°	6073.2	6217.8	6342.3	6436.7	6490.8	6526.0	6548.6	6547.4
47.5°	5924.7	6060.6	6187.6	6283.2	6338.6	6377.6	6398.9	6406.5
50°	5759.9	5900.8	6029.1	6124.7	6185.1	6231.6	6255.5	6265.6
52.5°	5597.7	5736.0	5863.1	5968.7	6039.2	6082.0	6103.3	6109.6
55°	5417.8	5558.7	5681.9	5796.4	5882.0	5937.3	5975.0	5983.8
57.5°	5225.3	5363.7	5508.4	5636.7	5741.1	5816.5	5859.3	5875.7
60°	5017.8	5177.5	5343.6	5494.5	5544.8	5552.4	5515.9	5515.9
62.5°	4829.1	4947.3	4904.6	4736.0	4563.7	4508.3	4475.6	4427.8
65°	4351.1	4070.6	3927.2	3947.3	3975.0	3991.3	3996.4	3991.3
67.5°	3486.9	3464.3	3507.0	3541.0	3554.8	3578.7	3581.2	3580.0
70°	3051.7	3055.4	3102.0	3132.2	3146.0	3164.9	3164.9	3162.4
72.5°	2679.3	2689.4	2720.8	2739.7	2743.5	2747.3	2751.0	2737.2
75°	2305.7	2313.3	2320.8	2332.2	2307.0	2309.5	2290.6	2284.4
77.5°	1935.9	1922.1	1893.1	1865.5	1830.2	1837.8	1815.2	1827.7
80°	1535.9	1525.8	1510.7	1486.8	1462.9	1468.0	1462.9	1469.2
82.5°	1276.8	1284.3	1280.5	1280.5	1264.2	1269.2	1254.1	1260.4
85°	1036.5	1021.4	1016.4	1012.6	1000.0	1002.5	990.0	996.3
87.5°	861.7	856.6	856.6	857.9	854.1	852.9	844.1	847.8
90°	703.2	700.7	700.7	700.7	699.4	695.6	685.6	689.3
92.5°	625.2	620.1	618.9	618.9	617.6	615.1	608.8	610.1
95°	532.1	534.6	537.1	538.4	538.4	537.1	530.8	534.6
97.5°	473.0	459.1	455.4	451.6	449.1	444.0	441.5	441.5
100°	562.3	542.2	527.1	517.0	508.2	500.6	496.9	489.3
102.5°	840.3	817.6	776.1	728.3	698.1	675.5	671.7	655.4
105°	1050.3	1047.8	1042.8	1039.0	1034.0	1027.7	1023.9	1005.1
107.5°	1211.4	1222.7	1223.9	1223.9	1217.6	1218.9	1217.6	1208.8
110°	1342.2	1376.1	1398.8	1415.1	1418.9	1416.4	1417.7	1407.6





TEST NUMBER: P236580

CATALOG NUMBER: SKB4-LD5-36-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°	1379.9	1473.0	1519.5	1554.8	1577.4	1587.5	1590.0	1585.0
115°	1056.6	1200.0	1455.4	1591.2	1659.2	1688.1	1698.2	1695.7
117.5°	1417.7	1217.6	1094.4	1095.6	1184.9	1296.9	1388.7	1440.3
120°	1642.8	1640.3	1588.7	1485.6	1312.0	1179.9	1118.3	1090.6
122.5°	1525.8	1699.4	1785.0	1817.7	1817.7	1803.8	1800.1	1777.4
125°	1408.9	1479.3	1621.4	1777.4	1889.4	1942.2	1963.6	1969.9
127.5°	1549.7	1490.6	1493.1	1534.6	1603.8	1659.2	1715.8	1754.8
130°	1625.2	1688.1	1642.8	1593.8	1571.1	1563.6	1566.1	1569.9
132.5°	1613.9	1657.9	1734.6	1786.2	1778.7	1752.3	1723.3	1703.2
135°	1608.9	1657.9	1690.6	1722.1	1772.4	1803.8	1822.7	1832.8
137.5°	1507.0	1615.1	1681.8	1723.3	1751.0	1757.3	1756.0	1757.3
140°	1347.2	1465.5	1583.7	1647.9	1708.2	1748.5	1759.8	1763.6
142.5°	1255.4	1318.3	1398.8	1480.6	1558.5	1624.0	1661.7	1668.0
145°	1147.2	1221.4	1281.8	1328.3	1364.8	1410.1	1461.7	1489.4
147.5°	986.2	1091.9	1168.6	1220.2	1257.9	1288.1	1322.1	1332.1
150°	813.9	906.9	991.2	1064.2	1113.2	1144.7	1162.3	1145.9
152.5°	705.7	749.7	812.6	866.7	901.9	937.1	904.4	886.8
155°	725.8	695.6	695.6	720.8	735.9	705.7	665.4	644.0
157.5°	842.8	779.9	725.8	693.1	660.4	583.7	561.0	556.0
160°	1011.4	914.5	854.1	796.3	704.4	655.4	626.4	617.6
162.5°	1042.8	1042.8	1026.4	987.5	894.4	830.2	793.7	781.2
165°	984.9	1003.8	1016.4	1002.5	981.2	957.3	940.9	935.9
167.5°	894.4	918.3	930.8	933.4	948.5	940.9	912.0	906.9
170°	820.2	822.7	830.2	836.5	861.7	870.5	855.4	827.7
172.5°	793.7	784.9	778.6	783.7	802.5	827.7	822.7	823.9
175°	772.4	752.2	743.4	753.5	773.6	810.1	847.8	870.5
177.5°	748.5	723.3	712.0	722.0	743.4	783.7	847.8	868.0
180°	773.6	773.6	773.6	773.6	773.6	773.6	773.6	773.6

(END OF REPORT)