

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: P236544

Luminaire Tested: **SKB4-LD5-36-W-UNV-L835-CD4-U all blades tilted out 20 degrees**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P236544  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24078)  
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 all blades tilted out 20 degrees  
Description: METALUX SKYBAR LED WAVESTREAM LUMINAIRE  
4 BLADES WITH WIDE DISTRIBUTION LENS, ALL BLADES TILTED OUT 20 DEGREES  
Light Source: (952) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

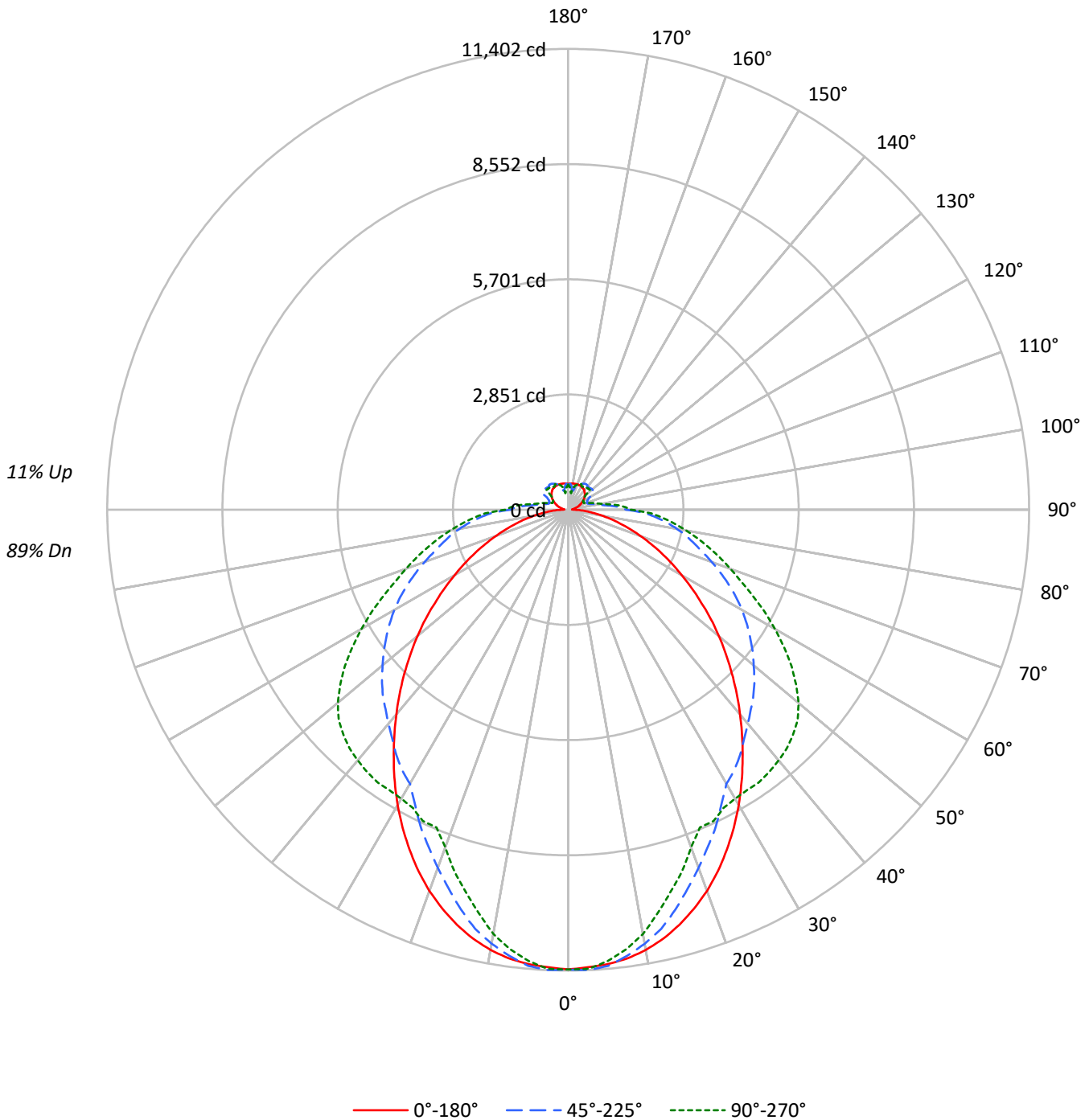
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 36115.0 lumens  
Efficiency: N/A  
Efficacy: 108.3 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 1.07 / 1.26  
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 all blades tilted out 20 degrees

### 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	50	30	10	50	30	10	0		
RCR																										
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	91	91	91	89								
1	104	99	94	89	100	95	91	87	89	85	82	83	80	77	77	75	73	70								
2	94	85	78	71	90	82	75	70	77	71	66	72	67	63	67	63	60	57								
3	86	74	66	59	82	72	64	57	67	60	55	63	57	53	59	54	50	47								
4	78	66	56	49	75	63	55	48	59	52	47	56	50	45	52	47	43	40								
5	72	58	49	42	69	57	48	42	53	46	40	50	44	39	47	42	37	35								
6	66	53	43	37	64	51	42	36	48	41	35	45	39	34	43	37	33	30								
7	61	48	39	32	59	46	38	32	44	36	31	41	35	30	39	33	29	27								
8	57	43	35	29	55	42	34	28	40	33	28	38	31	27	36	30	26	24								
9	53	40	32	26	51	39	31	26	37	30	25	35	29	24	33	28	23	21								
10	50	37	29	24	48	36	28	23	34	27	23	32	26	22	31	25	21	19								

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	16326	16326	16326
5°	16186	16156	15994
10°	15971	15572	15238
15°	15578	14765	14124
20°	15044	13819	13046
25°	14348	12990	12797
30°	13571	12164	12857
35°	12718	12015	13383
40°	11873	11807	13877
45°	11047	11795	14373
50°	10232	11760	14666
55°	9372	11798	14555
60°	8552	11881	14210
65°	7777	11927	13799
70°	6986	12040	13713
75°	6243	12496	14097
80°	5482	13655	15026
85°	4648	15533	17036



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1065.5	3.0
10°-20°	2877.3	8.0
20°-30°	4041.7	11.2
30°-40°	4794.6	13.3
40°-50°	5134.0	14.2
50°-60°	4876.1	13.5
60°-70°	4068.8	11.3
70°-80°	3077.3	8.5
80°-90°	2032.9	5.6
90°-100°	1011.5	2.8
100°-110°	583.8	1.6
110°-120°	508.4	1.4
120°-130°	547.2	1.5
130°-140°	538.3	1.5
140°-150°	429.0	1.2
150°-160°	306.1	0.8
160°-170°	166.5	0.5
170°-180°	55.9	0.2
0°-30°	7984.6	22.1
0°-40°	12779.2	35.4
0°-60°	22789.3	63.1
0°-90°	31968.3	88.5
90°-120°	2103.6	5.8
90°-150°	3618.2	10.0
90°-180°	4147.0	11.5
0°-180°	36115.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	11375	11375	11375	11375	11375	
5°	11286	11374	11328	11236	11209	###
15°	10631	10578	10244	9890	9789	2990
25°	9281	9101	8644	8370	8500	4267
35°	7524	7377	7412	7924	8233	4704
45°	5726	5866	6482	7482	7868	4420
55°	4024	4484	5492	6462	6740	3611
65°	2546	3302	4381	4940	5032	2531
75°	1345	2401	3224	3546	3596	1432
85°	450	1581	2188	2319	2348	455
90°	132	1006	1426	1515	1548	91
95°	124	683	1073	1218	1254	104
105°	208	511	551	621	635	225
115°	348	684	520	452	421	346
125°	482	720	775	530	472	429
135°	580	690	758	752	723	447
145°	644	629	770	711	684	403
155°	665	501	702	728	703	307
165°	663	580	503	606	598	188
175°	652	647	645	602	550	62
180°	624	624	624	624	624	



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CATALOG NUMBER: SKB4-LD5-36-W-UNV-L835-CD4-U all blades tilted out 20 degrees

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	11375.4	11375.4	11375.4	11375.4	11375.4	11375.4	11375.4	11375.4	11375.4	11375.4	11375.4
2.5°	11331.4	11361.6	11430.8	11440.8	11434.5	11404.3	11388.0	11432.0	11410.6	11401.8	11381.7
5°	11286.1	11317.5	11389.3	11398.1	11390.5	11357.8	11340.2	11379.2	11349.0	11327.6	11289.9
7.5°	11200.6	11223.2	11293.6	11306.2	11287.4	11244.6	11210.6	11227.0	11172.9	11136.4	11093.6
10°	11059.7	11082.3	11151.5	11157.8	11121.3	11058.4	11004.3	10999.3	10951.5	10902.4	10843.3
12.5°	10873.5	10891.1	10957.8	10954.0	10892.4	10823.2	10766.6	10747.7	10683.6	10624.4	10549.0
15°	10630.7	10649.6	10708.7	10688.6	10616.9	10538.9	10477.3	10452.1	10352.7	10244.5	10132.6
17.5°	10351.5	10374.1	10411.8	10381.7	10310.0	10220.6	10148.9	10078.5	9942.6	9826.9	9717.5
20°	10037.0	10035.7	10072.2	10037.0	9960.2	9865.9	9755.2	9653.3	9522.5	9428.1	9320.0
22.5°	9678.5	9689.8	9698.6	9673.4	9590.4	9458.3	9330.0	9236.9	9118.7	9028.1	8923.7
25°	9281.0	9293.5	9294.8	9262.1	9176.6	9025.6	8909.9	8830.6	8718.7	8644.5	8503.6
27.5°	8869.6	8865.9	8887.2	8858.3	8732.5	8585.3	8498.5	8421.8	8333.8	8209.2	8094.7
30°	8435.6	8413.0	8448.2	8411.7	8278.4	8160.2	8075.9	8036.9	7912.3	7829.3	7904.8
32.5°	7982.8	7960.1	7999.1	7952.6	7829.3	7755.1	7693.5	7634.3	7548.8	7641.9	7726.2
35°	7523.6	7501.0	7542.5	7492.2	7397.9	7356.3	7302.3	7255.7	7326.2	7411.7	7487.2
37.5°	7065.8	7044.4	7088.4	7038.1	6985.3	6984.0	6917.3	6991.5	7064.5	7145.0	7285.9
40°	6614.2	6596.6	6640.6	6605.4	6590.3	6605.4	6590.3	6719.8	6771.4	6912.3	7093.4
42.5°	6166.3	6162.6	6199.1	6186.5	6217.9	6236.8	6304.7	6411.6	6503.5	6688.4	6922.4
45°	5726.1	5726.1	5763.8	5783.9	5838.0	5893.4	5991.5	6098.4	6246.9	6482.1	6717.3
47.5°	5290.8	5295.9	5339.9	5397.8	5463.2	5571.3	5675.8	5810.4	6009.1	6246.9	6480.8
50°	4866.9	4871.9	4929.8	5019.1	5100.9	5238.0	5348.7	5523.5	5752.5	5991.5	6254.4
52.5°	4450.5	4458.1	4537.3	4634.2	4751.2	4895.8	5045.5	5265.7	5485.8	5746.2	6016.7
55°	4024.1	4054.3	4149.9	4256.8	4409.0	4558.7	4748.7	4992.7	5226.7	5492.1	5747.5
57.5°	3630.4	3661.8	3767.5	3892.0	4071.9	4244.2	4484.5	4727.3	4975.1	5231.7	5477.0
60°	3248.0	3281.9	3393.9	3541.1	3747.4	3959.9	4220.3	4482.0	4718.5	4966.3	5176.4
62.5°	2898.3	2918.4	3024.1	3206.5	3437.9	3692.0	3975.0	4234.2	4459.3	4679.5	4871.9
65°	2546.0	2569.9	2673.1	2893.2	3154.9	3449.2	3743.6	3987.6	4188.9	4381.4	4549.9
67.5°	2215.2	2245.4	2351.1	2608.9	2904.5	3224.1	3503.3	3727.2	3908.4	4078.2	4222.9
70°	1903.2	1930.9	2058.0	2357.4	2685.7	2998.9	3251.7	3461.8	3622.8	3778.8	3903.3
72.5°	1611.4	1642.8	1801.3	2137.2	2484.4	2773.7	2995.1	3188.8	3346.1	3479.4	3601.4
75°	1344.7	1374.9	1581.2	1952.3	2271.8	2530.9	2743.5	2931.0	3081.9	3224.1	3338.5
77.5°	1093.1	1140.9	1402.6	1771.2	2051.7	2295.7	2500.8	2698.2	2860.5	2986.3	3071.9
80°	859.2	939.7	1247.9	1581.2	1837.8	2081.9	2300.7	2497.0	2631.6	2733.5	2800.1
82.5°	642.8	766.1	1090.6	1387.5	1641.6	1899.5	2100.7	2271.8	2386.3	2468.0	2518.4
85°	450.3	608.8	925.8	1213.9	1464.2	1696.9	1874.3	2021.5	2118.3	2187.5	2226.5
87.5°	299.4	467.9	772.4	1029.0	1246.6	1455.4	1610.1	1743.5	1830.3	1895.7	1933.4
90°	132.1	352.2	591.2	768.6	932.1	1079.3	1205.1	1315.8	1379.9	1426.5	1440.3
92.5°	100.6	264.2	465.4	635.3	787.5	935.9	1069.2	1178.7	1252.9	1299.4	1315.8
95°	124.5	218.9	359.8	485.6	620.2	745.9	850.4	942.2	1016.4	1073.0	1105.7
97.5°	132.1	226.4	342.2	423.9	510.7	621.4	714.5	787.5	832.7	864.2	876.8
100°	151.0	244.0	376.1	418.9	474.2	527.1	605.1	674.2	715.8	742.2	754.8
102.5°	176.1	259.1	407.6	455.4	475.5	513.2	533.4	572.4	612.6	641.5	655.4
105°	207.6	273.0	436.5	522.0	508.2	514.5	530.8	532.1	530.8	551.0	563.6
107.5°	249.1	283.0	454.1	547.2	590.0	544.7	534.6	533.4	522.0	498.1	493.1
110°	285.5	288.1	445.3	563.6	627.7	602.5	561.0	539.6	520.8	504.4	483.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	315.7	299.4	446.6	586.2	647.8	691.9	611.4	566.1	529.6	501.9	483.0
115°	348.4	308.2	452.9	593.7	659.2	708.2	732.1	616.4	559.8	519.5	489.3
117.5°	383.7	322.0	462.9	590.0	675.5	724.6	747.2	748.5	611.4	553.5	512.0
120°	416.4	337.1	466.7	590.0	705.7	729.6	757.3	771.1	747.2	607.6	548.5
122.5°	450.3	358.5	471.7	591.2	689.3	737.1	767.3	777.4	777.4	753.5	615.1
125°	481.8	384.9	469.2	592.5	689.3	751.0	763.6	782.4	779.9	774.9	768.6
127.5°	510.7	416.4	462.9	591.2	683.1	748.5	762.3	777.4	782.4	776.1	769.8
130°	534.6	444.0	439.0	583.7	671.7	743.4	764.8	771.1	779.9	777.4	767.3
132.5°	556.0	470.5	421.4	577.4	664.2	737.1	769.8	769.8	769.8	772.4	764.8
135°	579.9	513.2	426.4	567.3	656.6	723.3	764.8	781.2	764.8	758.5	758.5
137.5°	600.0	557.3	434.0	553.5	646.6	710.7	757.3	778.7	754.8	753.5	747.2
140°	617.6	596.3	450.3	534.6	634.0	699.4	739.7	771.1	777.4	742.2	742.2
142.5°	635.3	630.2	476.8	494.4	616.4	683.1	723.3	757.3	773.6	772.4	728.3
145°	644.1	649.1	505.7	464.2	593.7	664.2	707.0	738.4	762.3	769.8	764.8
147.5°	650.3	656.6	527.1	461.7	564.8	641.5	690.6	722.0	744.7	761.0	762.3
150°	656.6	660.4	558.5	474.2	515.7	617.6	669.2	704.4	727.1	743.4	751.0
152.5°	662.9	664.2	603.8	500.7	476.8	586.2	642.8	681.8	707.0	724.6	730.9
155°	665.4	666.7	640.3	533.4	474.2	528.3	610.1	652.9	681.8	701.9	709.5
157.5°	668.0	666.7	665.4	558.5	496.9	479.3	566.1	618.9	651.6	675.5	686.8
160°	666.7	665.4	674.2	605.1	529.6	479.3	486.8	572.4	611.4	640.3	655.4
162.5°	665.4	664.2	669.2	646.6	558.5	509.5	475.5	483.0	553.5	596.3	615.1
165°	662.9	661.7	664.2	669.2	615.1	544.7	505.7	478.0	471.7	503.2	552.2
167.5°	660.4	659.2	660.4	665.4	656.6	605.1	547.2	518.3	489.3	466.7	461.7
170°	657.9	656.6	656.6	656.6	661.7	654.1	618.9	572.4	534.6	517.0	488.1
172.5°	655.4	654.1	654.1	654.1	652.9	652.9	659.2	647.8	622.7	593.7	558.5
175°	651.6	650.3	650.3	650.3	647.8	645.3	645.3	645.3	642.8	645.3	641.5
177.5°	649.1	647.8	647.8	646.6	644.1	641.5	641.5	640.3	635.3	632.7	626.4
180°	623.9	623.9	623.9	623.9	623.9	623.9	623.9	623.9	623.9	623.9	623.9



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	11375.4	11375.4	11375.4	11375.4	11375.4	11375.4	11375.4	11375.4
2.5°	11340.2	11359.1	11385.5	11352.8	11357.8	11384.2	11376.7	11370.4
5°	11240.8	11248.4	11257.2	11214.4	11211.9	11234.5	11211.9	11209.4
7.5°	11037.0	11033.3	11040.8	10984.2	10980.4	10999.3	10981.7	10971.6
10°	10785.4	10775.4	10769.1	10708.7	10688.6	10693.6	10676.0	10660.9
12.5°	10450.8	10400.5	10364.0	10296.1	10267.2	10264.7	10232.0	10221.9
15°	10025.7	9972.8	9926.3	9853.3	9834.5	9840.7	9814.3	9789.2
17.5°	9615.6	9562.7	9517.5	9439.5	9424.4	9433.2	9382.9	9374.1
20°	9221.8	9161.5	9122.5	9035.7	8999.2	8990.4	8908.6	8887.2
22.5°	8842.0	8750.1	8639.4	8555.1	8540.1	8552.6	8541.3	8507.3
25°	8367.7	8317.4	8343.8	8395.4	8470.9	8522.4	8525.0	8499.8
27.5°	8108.6	8209.2	8282.2	8291.0	8318.7	8351.4	8352.6	8321.2
30°	7997.9	8031.8	8068.3	8130.0	8211.7	8267.1	8280.9	8255.8
32.5°	7763.9	7852.0	7950.1	8044.4	8146.3	8220.5	8244.4	8225.6
35°	7594.1	7721.1	7858.3	7990.3	8114.9	8204.2	8243.2	8233.1
37.5°	7434.3	7610.4	7782.8	7941.3	8067.1	8143.8	8175.3	8174.0
40°	7297.2	7497.2	7668.3	7831.8	7963.9	8054.5	8091.0	8097.3
42.5°	7136.2	7328.7	7532.5	7721.1	7864.5	7960.1	7999.1	8007.9
45°	6929.9	7153.8	7382.8	7580.3	7709.8	7806.7	7854.5	7868.3
47.5°	6724.9	6965.1	7196.6	7390.3	7514.8	7623.0	7675.9	7696.0
50°	6499.7	6740.0	6977.7	7158.8	7275.8	7381.5	7425.5	7438.1
52.5°	6250.6	6495.9	6716.1	6880.8	6967.6	7063.2	7099.7	7103.5
55°	5990.2	6210.4	6395.3	6528.6	6614.2	6707.3	6734.9	6740.0
57.5°	5687.1	5878.3	6039.3	6162.6	6226.7	6304.7	6322.3	6328.6
60°	5363.8	5528.6	5663.2	5765.1	5817.9	5879.5	5894.6	5903.4
62.5°	5033.0	5155.0	5280.8	5371.3	5405.3	5460.7	5472.0	5477.0
65°	4679.5	4787.7	4905.9	4975.1	4999.0	5033.0	5030.4	5031.7
67.5°	4332.3	4429.2	4515.9	4587.7	4610.3	4622.9	4631.7	4622.9
70°	3990.1	4070.6	4160.0	4209.0	4250.5	4254.3	4269.4	4265.6
72.5°	3690.8	3768.7	3840.4	3883.2	3919.7	3919.7	3938.6	3927.2
75°	3415.3	3474.4	3529.7	3562.4	3593.9	3587.6	3606.5	3596.4
77.5°	3127.2	3172.5	3214.0	3250.5	3278.2	3288.2	3289.5	3278.2
80°	2841.7	2876.9	2908.3	2939.8	2963.7	2957.4	2973.7	2963.7
82.5°	2546.0	2572.5	2601.4	2629.1	2650.4	2655.5	2656.7	2646.7
85°	2249.2	2275.6	2309.5	2328.4	2348.5	2354.8	2356.1	2348.5
87.5°	1954.8	1981.2	2015.2	2034.1	2055.4	2060.5	2061.7	2055.4
90°	1460.5	1486.9	1502.0	1528.4	1535.9	1547.2	1532.2	1548.5
92.5°	1338.4	1361.1	1379.9	1400.1	1410.1	1416.4	1410.1	1417.7
95°	1146.0	1181.2	1205.1	1230.3	1242.8	1252.9	1251.6	1254.2
97.5°	896.9	927.1	957.3	990.0	1005.1	1018.9	1017.7	1018.9
100°	773.6	791.2	805.1	820.2	826.5	827.7	826.5	827.7
102.5°	673.0	690.6	705.7	719.5	723.3	728.3	727.1	724.6
105°	582.4	600.0	615.1	627.7	632.7	637.8	637.8	635.3
107.5°	506.9	519.5	533.4	544.7	551.0	553.5	556.0	553.5
110°	465.4	462.9	469.2	476.8	480.5	483.0	480.5	479.3





TEST NUMBER: P236544

CATALOG NUMBER: SKB4-LD5-36-W-UNV-L835-CD4-U all blades tilted out 20 degrees

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	473.0	461.7	445.3	434.0	432.7	432.7	427.7	425.2
115°	470.5	461.7	454.1	449.1	442.8	436.5	427.7	421.4
117.5°	485.6	466.7	452.9	446.6	441.5	436.5	430.2	425.2
120°	514.5	489.3	469.2	456.6	447.8	440.3	431.5	426.4
122.5°	558.5	524.6	499.4	481.8	470.5	459.1	450.3	444.0
125°	639.0	578.6	542.2	518.3	503.2	489.3	478.0	471.7
127.5°	767.3	710.7	616.4	574.9	551.0	530.8	517.0	509.5
130°	764.8	763.6	759.8	728.3	640.3	606.3	584.9	573.6
132.5°	761.0	762.3	758.5	753.5	748.5	739.7	729.6	725.8
135°	758.5	756.0	753.5	751.0	744.7	737.1	727.1	723.3
137.5°	749.7	751.0	749.7	744.7	738.4	730.9	722.0	718.3
140°	738.4	737.1	738.4	738.4	734.6	725.8	717.0	712.0
142.5°	730.9	727.1	723.3	722.0	720.8	714.5	705.7	703.2
145°	744.7	714.5	713.2	709.5	705.7	698.1	689.3	684.3
147.5°	761.0	754.8	714.5	694.4	693.1	686.8	678.0	673.0
150°	756.0	754.8	747.2	740.9	730.9	709.5	684.3	666.7
152.5°	739.7	747.2	744.7	740.9	733.4	724.6	713.2	708.2
155°	719.5	727.1	728.3	728.3	724.6	718.3	708.2	703.2
157.5°	698.1	705.7	707.0	708.2	704.4	699.4	690.6	686.8
160°	669.2	679.3	681.8	683.1	679.3	675.5	666.7	662.9
162.5°	631.5	645.3	651.6	652.9	651.6	647.8	640.3	636.5
165°	578.6	596.3	603.8	607.6	608.8	606.3	600.0	597.5
167.5°	471.7	503.2	530.8	547.2	548.5	545.9	540.9	539.6
170°	471.7	459.1	446.6	441.5	435.2	426.4	420.1	415.1
172.5°	529.6	517.0	505.7	490.6	474.2	457.9	446.6	441.5
175°	632.7	623.9	608.8	595.0	579.9	566.1	554.7	549.7
177.5°	622.7	621.4	616.4	608.8	601.3	592.5	581.2	574.9
180°	623.9	623.9	623.9	623.9	623.9	623.9	623.9	623.9

(END OF REPORT)