

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: P236460

Luminaire Tested: **SKB2-LD5-18-W-UNV-L835-CD2-U all blades tilted out 20 degrees**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P236460  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24074)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: SKB2-LD5-18-W-UNV-L835-CD2-U all blades tilted out 20 degrees  
Description: METALUX SKYBAR LED WAVESTREAM LUMINAIRE  
2 BLADES WITH WIDE DISTRIBUTION LENS, ALL BLADES TILTED OUT 20 DEGREES  
Light Source: (476) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

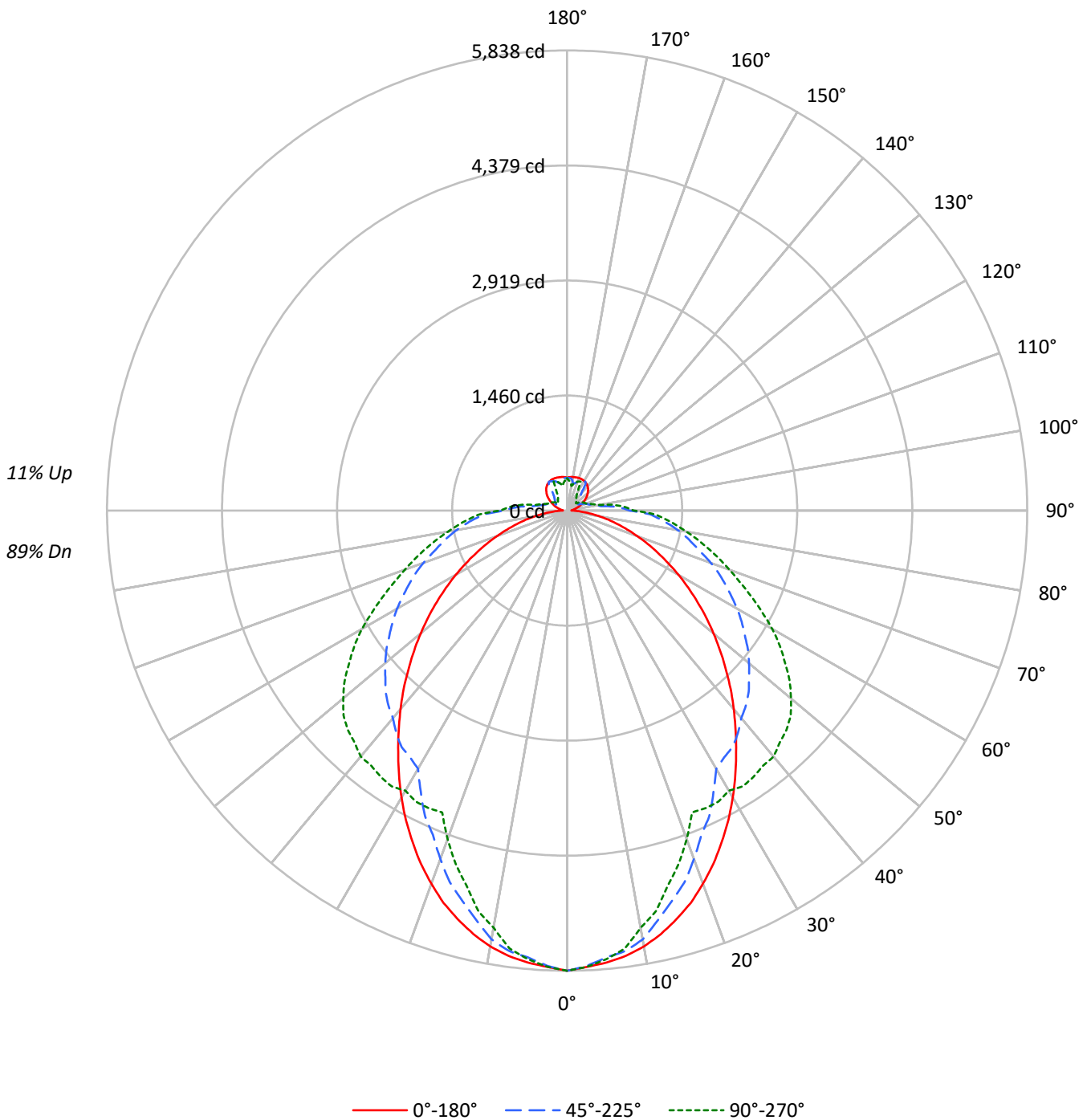
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18069.0 lumens  
Efficiency: N/A  
Efficacy: 107.2 lumens/watt  
Spacing Criteria (0/90/45): 1.09 / 1.03 / 1.25  
Luminous Opening: Rectangular w/ Sides (W: 1.25' x L: 2' x H: 0.21')  
CIE Type: Semi-Direct  
  
Input Watts (W): 168.5  
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: SKB2-LD5-18-W-UNV-L835-CD2-U all blades tilted out 20 degrees

### Luminous Intensity Polar Plot





TEST NUMBER: P236460

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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	92	92	92	89								
1	104	99	94	89	100	95	91	86	89	85	82	83	80	77	78	75	73	70								
2	94	85	77	71	90	82	75	69	77	71	66	72	67	63	67	63	60	57								
3	85	74	65	58	82	72	64	57	67	60	55	63	57	52	59	54	50	47								
4	78	65	56	49	75	63	55	48	59	52	46	56	50	45	52	47	43	40								
5	72	58	49	42	69	57	48	41	53	46	40	50	44	39	47	42	37	35								
6	66	52	43	37	63	51	42	36	48	40	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	31	26	51	39	31	26	37	30	25	35	29	24	33	28	23	21								
10	50	37	29	23	48	36	28	23	34	27	23	32	26	22	31	25	21	19								

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

	0°	45°	90°
0°	25138	25138	25138
5°	24654	24190	24338
10°	24103	23364	22820
15°	23267	21743	21020
20°	22242	20147	19148
25°	21022	18631	18353
30°	19717	16939	18611
35°	18317	16974	19403
40°	16988	16648	20087
45°	15702	16643	20539
50°	14448	16425	20717
55°	13181	16210	20472
60°	11906	16115	20088
65°	10587	15986	19335
70°	9259	15991	18903
75°	7927	16124	18982
80°	6469	16932	19540
85°	4679	18129	21364



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	540.4	3.0
10°-20°	1445.8	8.0
20°-30°	2002.9	11.1
30°-40°	2384.6	13.2
40°-50°	2560.9	14.2
50°-60°	2440.0	13.5
60°-70°	2059.8	11.4
70°-80°	1575.7	8.7
80°-90°	1078.6	6.0
90°-100°	535.0	3.0
100°-110°	281.1	1.6
110°-120°	220.3	1.2
120°-130°	200.1	1.1
130°-140°	205.8	1.1
140°-150°	206.4	1.1
150°-160°	184.0	1.0
160°-170°	109.3	0.6
170°-180°	38.2	0.2
0°-30°	3989.1	22.1
0°-40°	6373.7	35.3
0°-60°	11374.6	63.0
0°-90°	16088.8	89.0
90°-120°	1036.4	5.7
90°-150°	1648.8	9.1
90°-180°	1980.0	11.0
0°-180°	18069.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5838	5838	5838	5838	5838	
5°	5756	5766	5691	5720	5713	545
15°	5366	5339	5128	5014	4926	1509
25°	4640	4541	4272	4078	4163	2134
35°	3739	3670	3662	3981	4122	2339
45°	2847	2882	3257	3727	3935	2199
55°	2017	2220	2750	3232	3376	1807
65°	1271	1657	2214	2513	2576	1264
75°	662	1211	1662	1820	1851	706
85°	208	834	1170	1240	1256	213
90°	52	533	791	837	847	39
95°	67	336	583	662	682	59
105°	123	179	292	313	320	132
115°	208	207	200	239	237	206
125°	301	322	183	164	180	268
135°	376	402	228	189	164	289
145°	422	389	404	238	204	264
155°	439	362	411	420	408	203
165°	436	412	357	370	361	124
175°	426	423	413	399	378	41
180°	411	411	411	411	411	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5838.5	5838.5	5838.5	5838.5	5838.5	5838.5	5838.5	5838.5	5838.5	5838.5	5838.5
2.5°	5793.6	5812.3	5831.0	5840.4	5832.9	5821.7	5823.6	5825.4	5788.0	5780.6	5765.6
5°	5756.2	5774.9	5786.2	5786.2	5774.9	5756.2	5746.9	5739.4	5696.4	5690.8	5679.6
7.5°	5698.3	5713.3	5717.0	5709.5	5687.1	5659.0	5662.8	5674.0	5642.2	5636.6	5621.6
10°	5614.2	5625.4	5621.6	5601.1	5576.8	5576.8	5584.3	5584.3	5545.0	5524.4	5483.3
12.5°	5502.0	5509.5	5500.1	5475.8	5479.6	5470.2	5470.2	5444.0	5369.3	5320.7	5259.0
15°	5365.5	5371.1	5350.6	5346.8	5348.7	5330.0	5296.3	5232.8	5148.7	5128.1	5090.7
17.5°	5217.8	5214.1	5193.5	5199.1	5195.4	5144.9	5083.2	5023.4	4982.3	4946.7	4890.7
20°	5038.4	5036.5	5021.5	5032.7	5004.7	4928.1	4885.1	4834.6	4786.0	4703.7	4604.6
22.5°	4849.5	4843.9	4838.3	4840.2	4799.1	4713.1	4692.5	4630.8	4531.7	4451.3	4425.2
25°	4640.1	4640.1	4640.1	4628.9	4572.8	4509.3	4488.7	4376.5	4311.1	4271.9	4208.3
27.5°	4427.0	4427.0	4430.8	4408.3	4352.2	4307.4	4241.9	4161.5	4131.6	4023.2	3907.3
30°	4204.5	4208.3	4212.0	4176.5	4137.2	4084.9	4015.7	3974.6	3881.1	3783.9	3834.4
32.5°	3970.9	3983.9	3983.9	3952.2	3922.3	3849.3	3825.0	3752.1	3658.6	3709.1	3815.7
35°	3739.0	3767.1	3752.1	3729.7	3697.9	3641.8	3621.3	3514.7	3561.4	3662.4	3729.7
37.5°	3511.0	3540.9	3522.2	3514.7	3469.8	3468.0	3385.7	3391.3	3488.5	3559.6	3623.1
40°	3286.6	3310.9	3301.6	3294.1	3267.9	3264.2	3213.7	3294.1	3374.5	3438.0	3561.4
42.5°	3069.8	3090.3	3082.8	3077.2	3081.0	3047.3	3090.3	3181.9	3245.5	3355.8	3482.9
45°	2847.3	2867.8	2867.8	2869.7	2888.4	2875.3	2963.2	3036.1	3129.6	3256.7	3363.3
47.5°	2634.2	2651.0	2656.6	2675.3	2680.9	2729.5	2823.0	2895.9	3023.0	3129.6	3266.0
50°	2424.8	2439.7	2450.9	2486.5	2490.2	2587.4	2664.1	2774.4	2886.5	3011.8	3150.1
52.5°	2221.0	2232.2	2254.6	2292.0	2320.1	2436.0	2520.1	2643.5	2755.7	2890.3	3011.8
55°	2017.2	2030.3	2062.1	2092.0	2164.9	2275.2	2383.6	2503.3	2632.3	2750.1	2886.5
57.5°	1820.9	1837.7	1869.5	1906.9	2013.5	2125.6	2250.9	2374.3	2501.4	2624.8	2746.3
60°	1632.1	1648.9	1682.6	1736.8	1865.8	1989.2	2118.2	2249.0	2372.4	2492.1	2591.2
62.5°	1447.0	1463.8	1493.7	1583.5	1716.2	1860.2	1991.0	2123.8	2239.7	2346.2	2450.9
65°	1271.3	1288.1	1318.0	1439.5	1581.6	1733.0	1875.1	1994.8	2108.8	2213.5	2312.6
67.5°	1104.9	1119.8	1157.2	1306.8	1460.1	1615.3	1751.7	1871.4	1985.4	2084.5	2157.4
70°	946.0	960.9	1015.1	1181.5	1346.1	1503.1	1630.2	1757.3	1862.0	1938.7	2004.1
72.5°	798.3	809.5	891.8	1069.4	1241.4	1387.2	1525.5	1641.4	1727.4	1791.0	1849.0
75°	661.8	671.2	788.9	974.0	1138.5	1284.4	1413.4	1514.3	1591.0	1662.0	1718.1
77.5°	534.7	555.2	699.2	886.2	1039.5	1183.4	1291.8	1396.5	1484.4	1546.1	1589.1
80°	415.0	450.6	620.7	796.4	951.6	1071.2	1194.6	1301.2	1374.1	1424.6	1454.5
82.5°	304.7	362.7	544.0	712.3	850.6	989.0	1101.1	1194.6	1258.2	1297.4	1323.6
85°	207.5	289.8	467.4	628.2	772.1	895.5	996.5	1080.6	1136.7	1170.3	1194.6
87.5°	129.0	231.8	403.8	553.4	678.6	790.8	886.2	964.7	1017.0	1050.7	1067.5
90°	52.3	151.4	287.9	394.5	486.1	579.6	658.1	723.5	768.4	790.8	803.9
92.5°	54.2	110.3	205.6	302.9	388.9	482.3	564.6	633.8	678.6	704.8	717.9
95°	67.3	102.8	151.4	231.8	301.0	370.2	430.0	484.2	544.0	583.3	607.6
97.5°	76.7	115.9	134.6	187.0	250.5	308.5	355.2	392.6	416.9	433.7	446.8
100°	91.6	138.3	147.7	151.4	215.0	269.2	306.6	336.5	357.1	370.2	377.6
102.5°	106.6	153.3	164.5	155.2	173.9	233.7	274.8	301.0	314.1	323.4	329.0
105°	123.4	166.4	188.8	172.0	160.8	196.3	243.0	272.9	286.0	291.6	293.5
107.5°	144.0	177.6	222.5	185.1	172.0	162.6	207.5	243.0	263.6	271.1	272.9
110°	164.5	187.0	244.9	201.9	187.0	168.3	164.5	211.3	235.6	250.5	258.0



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CATALOG NUMBER: SKB2-LD5-18-W-UNV-L835-CD2-U all blades tilted out 20 degrees

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	185.1	194.4	259.9	230.0	198.2	183.2	164.5	172.0	207.5	226.2	237.4
115°	207.5	205.6	267.3	276.7	215.0	198.2	179.5	162.6	172.0	200.0	216.9
117.5°	230.0	215.0	276.7	314.1	237.4	209.4	192.6	173.9	160.8	168.3	192.6
120°	254.3	231.8	284.2	336.5	272.9	224.3	205.6	188.8	172.0	160.8	160.8
122.5°	276.7	250.5	291.6	342.1	327.2	246.8	216.9	200.0	185.1	170.1	160.8
125°	301.0	271.1	299.1	347.7	368.3	276.7	233.7	211.3	196.3	183.2	170.1
127.5°	321.6	293.5	302.9	351.5	387.0	317.8	254.3	222.5	205.6	194.4	181.3
130°	340.3	315.9	308.5	353.3	388.9	390.7	284.2	239.3	216.9	203.8	192.6
132.5°	357.1	338.4	312.2	355.2	388.9	416.9	327.2	263.6	231.8	213.1	201.9
135°	375.8	358.9	315.9	357.1	388.9	415.0	405.7	299.1	252.4	228.1	211.3
137.5°	390.7	377.6	319.7	357.1	388.9	413.2	431.9	349.6	282.3	246.8	228.1
140°	403.8	394.5	332.8	357.1	387.0	411.3	426.3	422.5	325.3	276.7	248.6
142.5°	415.0	405.7	357.1	355.2	383.3	405.7	422.5	431.9	413.2	319.7	278.6
145°	422.5	415.0	377.6	351.5	377.6	400.1	416.9	428.1	435.6	403.8	323.4
147.5°	428.1	422.5	396.3	345.9	372.0	394.5	411.3	422.5	430.0	433.7	415.0
150°	433.7	430.0	409.4	353.3	366.4	387.0	403.8	416.9	424.4	428.1	431.9
152.5°	437.5	435.6	420.6	375.8	360.8	379.5	394.5	407.6	416.9	420.6	424.4
155°	439.3	437.5	426.3	400.1	353.3	370.2	385.1	398.2	405.7	411.3	416.9
157.5°	439.3	437.5	430.0	413.2	368.3	358.9	373.9	385.1	394.5	401.9	405.7
160°	439.3	439.3	431.9	420.6	396.3	353.3	360.8	372.0	381.4	387.0	392.6
162.5°	437.5	437.5	433.7	426.3	411.3	383.3	349.6	358.9	366.4	372.0	377.6
165°	435.6	435.6	433.7	428.1	418.8	405.7	383.3	353.3	349.6	357.1	360.8
167.5°	433.7	433.7	433.7	428.1	422.5	415.0	405.7	388.9	360.8	345.9	342.1
170°	431.9	431.9	431.9	430.0	426.3	420.6	415.0	407.6	398.2	387.0	373.9
172.5°	430.0	430.0	428.1	428.1	426.3	422.5	420.6	416.9	411.3	405.7	398.2
175°	426.3	428.1	426.3	426.3	424.4	422.5	420.6	418.8	415.0	413.2	409.4
177.5°	424.4	424.4	424.4	424.4	422.5	422.5	420.6	418.8	416.9	415.0	411.3
180°	411.3	411.3	411.3	411.3	411.3	411.3	411.3	411.3	411.3	411.3	411.3



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	5838.5	5838.5	5838.5	5838.5	5838.5	5838.5	5838.5	5838.5
2.5°	5756.2	5788.0	5801.1	5773.1	5765.6	5771.2	5774.9	5791.8
5°	5681.5	5718.9	5731.9	5707.6	5698.3	5698.3	5698.3	5713.3
7.5°	5616.0	5649.7	5649.7	5614.2	5599.2	5591.7	5588.0	5602.9
10°	5447.8	5457.1	5445.9	5391.7	5374.9	5363.7	5358.0	5373.0
12.5°	5238.4	5268.3	5264.6	5217.8	5208.5	5197.3	5189.8	5204.7
15°	5066.4	5081.4	5045.8	4982.3	4948.6	4929.9	4915.0	4926.2
17.5°	4825.2	4795.3	4746.7	4694.4	4698.1	4696.2	4688.8	4703.7
20°	4571.0	4595.3	4571.0	4522.4	4496.2	4462.5	4430.8	4432.6
22.5°	4404.6	4376.5	4266.2	4161.5	4135.4	4131.6	4137.2	4144.7
25°	4081.2	4051.2	4069.9	4086.8	4099.9	4131.6	4161.5	4163.4
27.5°	3950.3	4004.5	4068.1	4124.2	4159.7	4159.7	4167.2	4161.5
30°	3933.5	4032.6	4034.4	4058.7	4094.2	4099.9	4105.5	4103.6
32.5°	3890.5	3946.6	3957.8	3989.6	4055.0	4109.2	4146.6	4148.5
35°	3795.1	3860.6	3946.6	4015.7	4064.3	4096.1	4120.4	4122.3
37.5°	3739.0	3851.2	3901.7	3955.9	3997.0	4038.2	4069.9	4081.2
40°	3684.8	3763.3	3817.6	3911.0	3991.4	4041.9	4062.5	4073.7
42.5°	3580.1	3679.2	3785.8	3866.2	3931.6	3972.7	3983.9	3991.4
45°	3496.0	3606.3	3692.3	3761.5	3838.1	3894.2	3927.9	3935.3
47.5°	3395.0	3484.8	3582.0	3688.6	3765.2	3810.1	3834.4	3847.5
50°	3253.0	3378.2	3488.5	3574.5	3636.2	3668.0	3688.6	3707.3
52.5°	3140.8	3254.8	3339.0	3423.1	3492.3	3535.3	3552.1	3561.4
55°	3002.4	3095.9	3191.3	3271.7	3325.9	3357.7	3370.7	3376.4
57.5°	2847.3	2944.5	3026.8	3094.1	3144.5	3178.2	3193.1	3202.5
60°	2699.6	2781.8	2852.9	2922.1	2966.9	2993.1	2996.8	3006.2
62.5°	2546.3	2619.2	2679.0	2731.4	2766.9	2783.7	2785.6	2787.5
65°	2383.6	2447.2	2492.1	2533.2	2563.1	2579.9	2579.9	2576.2
67.5°	2222.9	2269.6	2312.6	2353.7	2372.4	2379.9	2370.6	2374.3
70°	2052.7	2090.1	2121.9	2153.7	2176.1	2192.9	2185.5	2189.2
72.5°	1901.3	1938.7	1968.6	1992.9	2009.7	2022.8	2015.3	2017.2
75°	1764.8	1789.1	1809.7	1830.3	1845.2	1854.6	1847.1	1850.8
77.5°	1622.7	1641.4	1654.5	1675.1	1688.2	1697.5	1690.0	1691.9
80°	1478.8	1497.5	1508.7	1519.9	1534.9	1542.4	1531.1	1533.0
82.5°	1342.3	1355.4	1366.6	1381.6	1390.9	1396.5	1392.8	1390.9
85°	1211.4	1218.9	1232.0	1247.0	1254.4	1261.9	1258.2	1256.3
87.5°	1078.7	1082.5	1093.7	1108.6	1114.2	1119.8	1114.2	1114.2
90°	813.2	822.6	830.1	843.2	848.8	850.6	846.9	846.9
92.5°	729.1	740.3	747.8	755.3	764.6	766.5	764.6	768.4
95°	628.2	645.0	658.1	665.5	674.9	678.6	676.8	682.4
97.5°	476.7	512.2	538.4	551.5	566.5	570.2	570.2	570.2
100°	387.0	394.5	401.9	403.8	409.4	411.3	409.4	411.3
102.5°	336.5	344.0	351.5	357.1	360.8	360.8	358.9	360.8
105°	299.1	304.7	310.3	315.9	317.8	319.7	317.8	319.7
107.5°	274.8	276.7	278.6	282.3	284.2	286.0	286.0	284.2
110°	259.9	261.7	261.7	263.6	263.6	263.6	259.9	258.0





TEST NUMBER: P236460

CATALOG NUMBER: SKB2-LD5-18-W-UNV-L835-CD2-U all blades tilted out 20 degrees

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	244.9	248.6	250.5	250.5	252.4	252.4	248.6	246.8
115°	226.2	233.7	237.4	241.2	243.0	241.2	239.3	237.4
117.5°	207.5	216.9	220.6	226.2	230.0	230.0	228.1	224.3
120°	185.1	196.3	203.8	211.3	215.0	215.0	213.1	211.3
122.5°	157.0	172.0	185.1	192.6	198.2	198.2	198.2	194.4
125°	162.6	155.2	158.9	168.3	179.5	181.3	179.5	179.5
127.5°	172.0	164.5	160.8	155.2	151.4	153.3	151.4	149.6
130°	183.2	175.7	170.1	164.5	160.8	155.2	149.6	147.7
132.5°	194.4	187.0	181.3	173.9	168.3	164.5	158.9	155.2
135°	203.8	198.2	192.6	185.1	179.5	173.9	168.3	164.5
137.5°	215.0	205.6	200.0	196.3	190.7	185.1	177.6	173.9
140°	230.0	218.7	209.4	201.9	198.2	192.6	187.0	183.2
142.5°	252.4	235.6	222.5	215.0	207.5	201.9	194.4	190.7
145°	286.0	261.7	244.9	231.8	222.5	215.0	207.5	203.8
147.5°	342.1	299.1	276.7	258.0	246.8	237.4	228.1	224.3
150°	433.7	390.7	330.9	299.1	282.3	271.1	261.7	256.1
152.5°	428.1	430.0	428.1	405.7	373.9	349.6	327.2	310.3
155°	418.8	420.6	420.6	418.8	416.9	415.0	411.3	407.6
157.5°	409.4	413.2	413.2	411.3	409.4	405.7	401.9	400.1
160°	398.2	400.1	401.9	400.1	400.1	396.3	392.6	390.7
162.5°	383.3	387.0	387.0	387.0	385.1	383.3	381.4	377.6
165°	364.6	368.3	370.2	370.2	368.3	366.4	362.7	360.8
167.5°	345.9	349.6	351.5	349.6	349.6	345.9	342.1	338.4
170°	353.3	345.9	332.8	327.2	327.2	323.4	317.8	317.8
172.5°	394.5	388.9	381.4	375.8	368.3	362.7	357.1	351.5
175°	405.7	403.8	401.9	396.3	392.6	387.0	383.3	377.6
177.5°	409.4	409.4	407.6	403.8	400.1	394.5	388.9	383.3
180°	411.3	411.3	411.3	411.3	411.3	411.3	411.3	411.3

(END OF REPORT)