

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: P236553

Luminaire Tested: **SKB4-LD5-30-W-UNV-L835-CD4-U inner 2 blades tilted out 20 degrees**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236553
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24079)
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 inner 2 blades tilted out 20 degrees
Description: METALUX SKYBAR LED WAVESTREAM LUMINAIRE
4 BLADES WITH WIDE DISTRIBUTION LENS, INNER 2 BLADES TILTED OUT 20 DEGREES
Light Source: (952) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

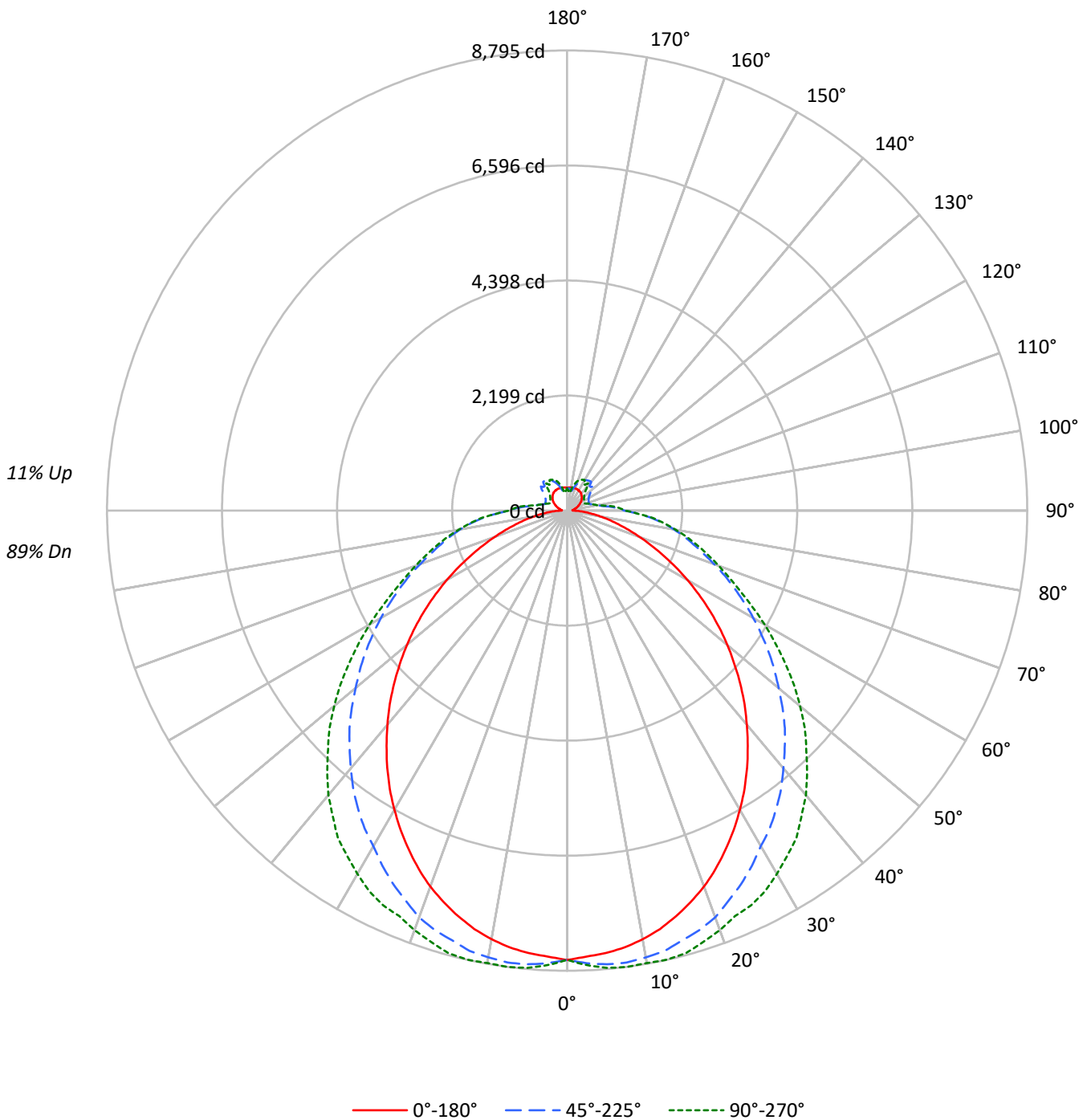
Lumens per Lamp: N/A
Luminaire Lumens: 29966.0 lumens
Efficiency: N/A
Efficacy: 115.0 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.38 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 1.88' x L: 4' x H: 0.21')
CIE Type: Semi-Direct

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

TEST NUMBER: P236553

CATALOG NUMBER: SKB4-LD5-30-W-UNV-L835-CD4-U inner 2 blades tilted out 20 degrees

Luminous Intensity Polar Plot





TEST NUMBER: P236553

CATALOG NUMBER: SKB4-LD5-30-W-UNV-L835-CD4-U inner 2 blades tilted out 20 degrees

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	105	99	94	90	101	96	92	88	90	86	83	84	81	78	78	76	74	71								
2	95	86	79	73	91	83	76	71	78	72	67	73	68	64	68	64	61	58								
3	86	75	67	60	83	73	65	59	68	62	56	64	58	54	60	55	51	49								
4	79	66	57	51	76	64	56	50	60	53	48	57	51	46	53	48	44	41								
5	72	59	50	43	69	58	49	43	54	47	41	51	45	40	48	43	38	36								
6	67	53	44	38	64	52	43	37	49	41	36	46	40	35	44	38	34	31								
7	62	48	39	33	59	47	39	33	44	37	32	42	36	31	40	34	30	28								
8	58	44	35	30	55	43	35	29	41	33	28	38	32	27	36	31	27	25								
9	54	40	32	27	52	39	32	26	37	30	25	35	29	25	34	28	24	22								
10	50	37	29	24	49	36	29	24	35	28	23	33	27	22	31	26	22	20								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12326	12326	12326
5°	12175	12415	12519
10°	12013	12383	12553
15°	11767	12252	12638
20°	11462	12126	12525
25°	11065	11828	12530
30°	10622	11505	12485
35°	10134	11292	12419
40°	9592	10983	12163
45°	9021	10708	11809
50°	8405	10357	11459
55°	7726	10092	10978
60°	6988	9834	10498
65°	6190	9627	10018
70°	5417	9522	9896
75°	4716	9689	10109
80°	4085	10362	10664
85°	3542	11545	11968



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	827.0	2.8
10°-20°	2390.8	8.0
20°-30°	3604.9	12.0
30°-40°	4309.1	14.4
40°-50°	4418.1	14.7
50°-60°	3988.9	13.3
60°-70°	3201.7	10.7
70°-80°	2358.7	7.9
80°-90°	1509.9	5.0
90°-100°	772.1	2.6
100°-110°	472.0	1.6
110°-120°	424.3	1.4
120°-130°	438.4	1.5
130°-140°	437.3	1.5
140°-150°	377.3	1.3
150°-160°	263.2	0.9
160°-170°	132.6	0.4
170°-180°	39.6	0.1
0°-30°	6822.7	22.8
0°-40°	11131.8	37.1
0°-60°	19538.8	65.2
0°-90°	26609.2	88.8
90°-120°	1668.3	5.6
90°-150°	2921.4	9.7
90°-180°	3357.0	11.2
0°-180°	29966.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8589	8589	8589	8589	8589	
5°	8490	8645	8704	8751	8774	805
15°	8030	8321	8501	8686	8759	2262
25°	7157	7487	7871	8150	8323	3294
35°	5995	6372	6966	7437	7640	3745
45°	4676	5138	5885	6333	6464	3606
55°	3317	3927	4698	5007	5084	2968
65°	2026	2851	3536	3637	3653	2019
75°	1016	2004	2500	2567	2579	1088
85°	343	1274	1626	1648	1650	342
90°	113	839	1091	1117	1110	76
95°	118	570	826	890	892	97
105°	170	417	468	491	483	180
115°	249	529	453	393	362	248
125°	333	652	519	433	393	297
135°	392	628	637	544	477	303
145°	436	546	699	615	602	272
155°	450	428	618	665	651	208
165°	450	426	431	508	510	127
175°	443	438	426	410	376	42
180°	426	426	426	426	426	



TEST NUMBER: P236553

CATALOG NUMBER: SKB4-LD5-30-W-UNV-L835-CD4-U inner 2 blades tilted out 20 degrees

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	8588.7	8588.7	8588.7	8588.7	8588.7	8588.7	8588.7	8588.7	8588.7	8588.7	8588.7
2.5°	8531.4	8566.8	8580.4	8619.0	8634.6	8638.8	8649.2	8655.5	8647.1	8658.6	8647.1
5°	8489.7	8533.4	8560.6	8615.8	8638.8	8651.3	8672.1	8684.7	8685.7	8704.5	8700.3
7.5°	8420.8	8470.9	8513.6	8572.0	8601.2	8623.1	8654.4	8679.4	8697.2	8712.8	8705.5
10°	8318.6	8380.2	8430.2	8491.7	8532.4	8572.0	8612.7	8622.1	8637.7	8670.1	8689.9
12.5°	8192.4	8259.2	8309.2	8381.2	8438.6	8474.0	8508.4	8543.9	8585.6	8620.0	8621.0
15°	8029.8	8110.1	8159.1	8242.5	8305.1	8336.4	8398.9	8441.7	8459.4	8501.1	8547.0
17.5°	7847.3	7930.7	7981.8	8073.6	8132.0	8185.1	8258.1	8265.4	8338.4	8408.3	8462.5
20°	7647.0	7722.1	7774.3	7876.5	7938.0	7996.4	8053.7	8112.1	8210.2	8272.7	8308.2
22.5°	7415.5	7487.5	7558.4	7649.1	7718.0	7759.7	7862.9	7944.3	8024.6	8070.4	8127.8
25°	7156.9	7229.9	7297.7	7394.7	7454.1	7519.8	7660.6	7724.2	7789.9	7871.3	7937.0
27.5°	6890.0	6952.5	7027.6	7115.2	7179.9	7289.4	7417.6	7461.4	7562.6	7649.1	7703.4
30°	6602.1	6657.4	6728.3	6817.0	6896.2	7032.8	7131.9	7201.8	7312.3	7405.1	7525.0
32.5°	6308.1	6358.1	6418.6	6496.8	6610.5	6740.8	6844.1	6939.0	7057.9	7204.9	7331.1
35°	5995.2	6043.2	6095.3	6175.6	6313.3	6431.1	6556.3	6659.5	6820.1	6966.1	7101.6
37.5°	5670.9	5720.9	5763.7	5861.7	6002.5	6131.8	6261.1	6395.7	6557.3	6716.8	6829.5
40°	5343.4	5393.5	5430.0	5542.6	5688.6	5831.5	5972.3	6121.4	6289.3	6430.1	6560.4
42.5°	5016.0	5060.8	5102.6	5230.8	5370.6	5527.0	5683.4	5838.8	5996.3	6154.8	6299.7
45°	4676.0	4726.1	4766.8	4910.7	5050.4	5225.6	5386.2	5548.9	5703.2	5884.7	5994.2
47.5°	4336.1	4388.2	4434.1	4593.7	4743.8	4928.4	5084.8	5247.5	5421.7	5582.3	5693.8
50°	3998.2	4048.3	4109.8	4276.6	4428.9	4621.8	4785.5	4960.7	5132.8	5276.7	5403.9
52.5°	3659.3	3711.4	3789.6	3960.7	4124.4	4323.6	4492.5	4679.2	4834.5	4989.9	5097.3
55°	3317.2	3374.6	3473.7	3644.7	3829.3	4025.3	4207.8	4391.3	4549.9	4697.9	4789.7
57.5°	2981.4	3044.0	3160.8	3341.2	3536.2	3737.5	3939.8	4114.0	4272.5	4401.8	4490.4
60°	2654.0	2722.8	2854.2	3047.1	3256.7	3466.4	3667.6	3851.2	3990.9	4110.8	4168.2
62.5°	2333.8	2411.0	2553.9	2767.7	2985.6	3206.7	3420.5	3590.5	3712.5	3818.8	3867.8
65°	2026.2	2111.7	2270.2	2502.8	2736.4	2964.8	3179.6	3328.7	3443.4	3536.2	3573.8
67.5°	1740.5	1833.3	2014.7	2258.8	2507.0	2741.6	2938.7	3078.4	3183.7	3264.0	3288.0
70°	1475.6	1573.6	1775.9	2035.6	2298.4	2522.6	2704.0	2841.7	2929.3	2988.7	2997.1
72.5°	1232.6	1334.8	1562.2	1835.4	2101.3	2305.7	2484.0	2605.0	2684.2	2725.9	2748.9
75°	1015.7	1122.1	1374.4	1659.1	1906.3	2102.3	2267.1	2369.3	2450.6	2499.7	2521.6
77.5°	820.7	934.4	1210.7	1489.2	1720.7	1902.1	2049.2	2160.7	2251.5	2290.0	2302.6
80°	640.3	771.7	1065.8	1327.5	1540.3	1706.1	1863.5	1974.1	2050.2	2074.2	2079.4
82.5°	478.7	628.8	921.9	1162.8	1360.9	1540.3	1681.0	1773.8	1838.5	1853.1	1856.2
85°	343.1	502.6	779.0	1005.3	1197.2	1351.5	1479.8	1558.0	1613.3	1625.8	1624.7
87.5°	232.6	398.4	650.7	846.8	1012.6	1152.3	1259.7	1325.4	1370.3	1352.5	1352.5
90°	112.6	312.8	509.9	659.1	779.0	898.9	978.2	1037.6	1076.2	1090.8	1093.9
92.5°	99.1	240.9	408.8	541.2	654.9	774.8	861.4	923.9	964.6	981.3	984.4
95°	117.8	195.0	312.8	415.0	520.4	619.4	688.3	740.4	793.6	825.9	843.6
97.5°	122.0	198.1	288.9	354.6	425.5	519.3	585.0	630.9	658.0	666.4	665.3
100°	133.5	230.5	298.2	351.4	394.2	436.9	502.6	552.7	581.9	592.3	592.3
102.5°	151.2	255.5	335.8	365.0	395.2	426.5	443.2	480.7	514.1	528.7	532.9
105°	170.0	265.9	391.1	384.8	406.7	427.6	445.3	450.5	453.6	468.2	476.6
107.5°	189.8	273.2	416.1	428.6	419.2	436.9	446.3	452.6	451.5	431.7	426.5
110°	210.7	279.5	424.4	477.6	449.5	449.5	455.7	457.8	451.5	443.2	426.5



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CATALOG NUMBER: SKB4-LD5-30-W-UNV-L835-CD4-U inner 2 blades tilted out 20 degrees

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	229.4	282.6	429.6	517.2	507.9	471.4	466.1	465.1	457.8	445.3	430.7
115°	249.2	284.7	431.7	538.1	545.4	513.1	484.9	477.6	466.1	452.6	435.9
117.5°	270.1	284.7	432.8	543.3	572.5	585.0	518.3	493.3	478.7	464.1	444.2
120°	292.0	285.7	430.7	548.5	626.7	604.8	573.6	522.5	495.3	476.6	456.8
122.5°	312.8	295.1	428.6	550.6	627.8	613.2	650.7	568.3	520.4	493.3	472.4
125°	332.7	308.7	426.5	549.6	627.8	675.8	626.7	650.7	561.0	519.3	492.2
127.5°	351.4	324.3	421.3	542.3	624.7	681.0	639.3	658.0	637.2	562.1	519.3
130°	365.0	344.1	410.9	526.6	616.3	673.7	702.9	632.0	674.7	640.3	564.2
132.5°	377.5	359.8	395.2	514.1	608.0	668.5	702.9	671.6	639.3	681.0	646.6
135°	392.1	377.5	376.5	500.6	595.5	660.1	694.5	718.5	646.6	637.2	676.8
137.5°	405.7	393.1	371.2	487.0	577.7	648.6	685.1	709.1	720.6	635.1	632.0
140°	417.1	407.7	371.2	470.3	556.9	633.0	671.6	696.6	712.3	715.4	633.0
142.5°	429.6	420.3	373.3	448.4	535.0	610.1	655.9	682.0	699.7	710.2	714.3
145°	435.9	427.6	393.1	414.0	511.0	581.9	634.0	665.3	687.2	698.7	705.0
147.5°	439.0	432.8	408.8	398.4	484.9	552.7	609.0	646.6	671.6	687.2	694.5
150°	442.2	438.0	420.3	389.0	453.6	524.5	579.8	621.5	651.8	670.5	679.9
152.5°	447.4	443.2	430.7	386.9	417.1	495.3	548.5	590.2	624.7	648.6	662.2
155°	449.5	446.3	436.9	411.9	398.4	457.8	514.1	553.7	589.2	618.4	637.2
157.5°	451.5	449.5	442.2	425.5	391.1	416.1	475.5	517.2	550.6	580.9	602.8
160°	450.5	449.5	444.2	433.8	409.8	393.1	422.3	474.5	508.9	537.1	557.9
162.5°	450.5	449.5	445.3	438.0	424.4	392.1	396.3	418.2	462.0	492.2	512.0
165°	449.5	449.5	446.3	441.1	432.8	419.2	390.0	389.0	406.7	430.7	458.8
167.5°	449.5	449.5	447.4	443.2	438.0	430.7	420.3	403.6	384.8	389.0	398.4
170°	447.4	448.4	446.3	443.2	440.1	434.9	429.6	422.3	411.9	400.4	378.5
172.5°	445.3	446.3	446.3	444.2	441.1	438.0	434.9	430.7	423.4	419.2	411.9
175°	443.2	444.2	444.2	443.2	440.1	436.9	435.9	432.8	427.6	425.5	421.3
177.5°	441.1	441.1	442.2	441.1	440.1	438.0	436.9	434.9	429.6	428.6	424.4
180°	425.5	425.5	425.5	425.5	425.5	425.5	425.5	425.5	425.5	425.5	425.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	8588.7	8588.7	8588.7	8588.7	8588.7	8588.7	8588.7	8588.7
2.5°	8639.8	8676.3	8675.3	8655.5	8675.3	8698.2	8685.7	8697.2
5°	8703.4	8751.4	8758.7	8744.1	8760.8	8780.6	8762.9	8774.3
7.5°	8707.6	8748.3	8757.7	8746.2	8776.4	8804.6	8786.9	8795.2
10°	8713.9	8760.8	8773.3	8755.6	8774.3	8790.0	8769.1	8782.7
12.5°	8627.3	8689.9	8726.4	8732.6	8768.1	8794.2	8776.4	8791.0
15°	8585.6	8650.2	8681.5	8689.9	8729.5	8757.7	8739.9	8758.7
17.5°	8502.2	8547.0	8556.4	8554.3	8599.1	8634.6	8628.3	8647.1
20°	8337.4	8397.9	8442.7	8452.1	8494.9	8524.1	8507.4	8532.4
22.5°	8191.4	8254.0	8268.6	8273.8	8333.2	8370.8	8368.7	8388.5
25°	7986.0	8048.5	8124.7	8175.8	8244.6	8289.4	8300.9	8322.8
27.5°	7811.8	7913.0	8004.7	8054.8	8124.7	8169.5	8186.2	8197.7
30°	7648.1	7754.5	7836.8	7890.0	7950.5	7986.0	7999.5	8017.3
32.5°	7447.9	7556.3	7627.2	7670.0	7730.5	7776.4	7805.6	7824.3
35°	7205.9	7306.0	7400.9	7472.9	7540.7	7586.6	7604.3	7639.7
37.5°	6943.1	7081.8	7179.9	7228.9	7268.5	7306.0	7326.9	7358.2
40°	6703.3	6820.1	6887.9	6937.9	6991.1	7040.1	7066.2	7097.5
42.5°	6411.3	6512.5	6606.3	6665.7	6711.6	6753.3	6771.1	6788.8
45°	6108.9	6228.8	6310.1	6356.0	6384.2	6428.0	6455.1	6464.5
47.5°	5819.0	5918.0	5983.7	6040.1	6078.6	6122.4	6146.4	6162.1
50°	5509.3	5595.8	5671.9	5723.0	5746.0	5775.2	5790.8	5811.7
52.5°	5193.3	5290.3	5337.2	5367.4	5390.4	5423.7	5440.4	5461.3
55°	4881.5	4940.9	4987.8	5025.4	5048.3	5073.4	5088.0	5083.8
57.5°	4545.7	4613.5	4654.1	4676.0	4689.6	4706.3	4710.4	4721.9
60°	4229.7	4277.7	4303.7	4323.6	4329.8	4343.4	4348.6	4361.1
62.5°	3915.8	3951.3	3964.8	3979.4	3987.8	3985.7	3986.7	3995.1
65°	3599.8	3629.0	3634.3	3640.5	3645.7	3647.8	3649.9	3653.0
67.5°	3297.4	3320.4	3327.7	3345.4	3352.7	3348.5	3348.5	3351.6
70°	3016.9	3038.8	3047.1	3060.7	3071.1	3071.1	3074.3	3078.4
72.5°	2760.4	2785.4	2802.1	2810.4	2825.0	2826.1	2826.1	2825.0
75°	2533.0	2551.8	2564.3	2570.6	2585.2	2584.1	2583.1	2578.9
77.5°	2306.7	2321.3	2335.9	2334.9	2349.5	2349.5	2346.4	2343.2
80°	2079.4	2096.1	2102.3	2100.3	2113.8	2111.7	2110.7	2103.4
82.5°	1845.8	1860.4	1866.7	1866.7	1879.2	1877.1	1876.0	1869.8
85°	1621.6	1631.0	1648.7	1647.7	1656.0	1656.0	1655.0	1649.8
87.5°	1330.6	1337.9	1344.2	1342.1	1348.4	1352.5	1348.4	1345.2
90°	1095.0	1102.3	1115.8	1119.0	1124.2	1119.0	1117.9	1109.6
92.5°	988.6	995.9	1007.4	1011.5	1014.7	1013.6	1014.7	1009.5
95°	856.2	869.7	887.4	891.6	896.8	895.8	898.9	891.6
97.5°	667.4	681.0	705.0	719.6	723.7	724.8	730.0	721.6
100°	592.3	595.5	599.6	597.5	596.5	594.4	593.4	587.1
102.5°	533.9	537.1	541.2	541.2	539.1	538.1	536.0	530.8
105°	480.7	486.0	490.1	491.2	490.1	489.1	487.0	482.8
107.5°	430.7	434.9	441.1	442.2	442.2	443.2	442.2	435.9
110°	402.5	395.2	397.3	397.3	397.3	398.4	396.3	391.1



TEST NUMBER: P236553

CATALOG NUMBER: SKB4-LD5-30-W-UNV-L835-CD4-U inner 2 blades tilted out 20 degrees

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	418.2	403.6	384.8	370.2	365.0	363.9	360.8	355.6
115°	419.2	406.7	397.3	387.9	381.7	375.4	367.1	361.9
117.5°	428.6	413.0	400.4	390.0	384.8	379.6	373.3	368.1
120°	440.1	422.3	409.8	398.4	391.1	383.8	376.5	371.2
122.5°	454.7	438.0	422.3	408.8	400.4	393.1	385.8	380.6
125°	472.4	453.6	439.0	426.5	416.1	407.7	399.4	393.1
127.5°	493.3	473.4	457.8	443.2	431.7	422.3	413.0	407.7
130°	523.5	499.5	481.8	464.1	451.5	441.1	431.7	424.4
132.5°	571.5	538.1	513.1	490.1	476.6	465.1	453.6	446.3
135°	669.5	595.5	557.9	530.8	512.0	496.4	483.9	476.6
137.5°	671.6	688.3	651.8	587.1	562.1	543.3	527.7	520.4
140°	627.8	648.6	676.8	681.0	676.8	642.4	620.5	613.2
142.5°	640.3	611.1	627.8	640.3	659.1	662.2	657.0	653.9
145°	710.2	685.1	625.7	603.8	604.8	612.1	608.0	601.7
147.5°	700.8	703.9	705.0	690.4	644.5	615.3	599.6	592.3
150°	689.3	693.5	695.6	695.6	693.5	689.3	681.0	674.7
152.5°	672.6	679.9	684.1	685.1	684.1	678.9	669.5	664.3
155°	650.7	659.1	664.3	666.4	667.4	664.3	655.9	650.7
157.5°	620.5	634.0	641.3	644.5	645.5	643.4	637.2	633.0
160°	579.8	595.5	606.9	611.1	615.3	615.3	610.1	605.9
162.5°	531.8	548.5	561.0	567.3	571.5	573.6	568.3	567.3
165°	480.7	495.3	505.8	511.0	515.2	517.2	513.1	509.9
167.5°	409.8	429.6	445.3	451.5	455.7	455.7	452.6	452.6
170°	377.5	380.6	381.7	381.7	379.6	377.5	373.3	371.2
172.5°	405.7	402.5	394.2	383.8	373.3	360.8	351.4	341.0
175°	417.1	417.1	413.0	406.7	399.4	392.1	383.8	376.5
177.5°	421.3	422.3	419.2	414.0	407.7	400.4	390.0	384.8
180°	425.5	425.5	425.5	425.5	425.5	425.5	425.5	425.5

(END OF REPORT)