

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: P236517

Luminaire Tested: **SKB4-LD5-30-N-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: P236517
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24061)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SKB4-LD5-30-N-UNV-L835-CD4-U outer 2 blades vertical inner 2 blades
Description: METALUX SKYBAR LED WAVESTREAM LUMINAIRE
4 BLADES WITH NARROW DISTRIBUTION LENS, OUTER 2 BLADES VERTICAL INNER 2
BLADES HORIZONTAL
Light Source: (952) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

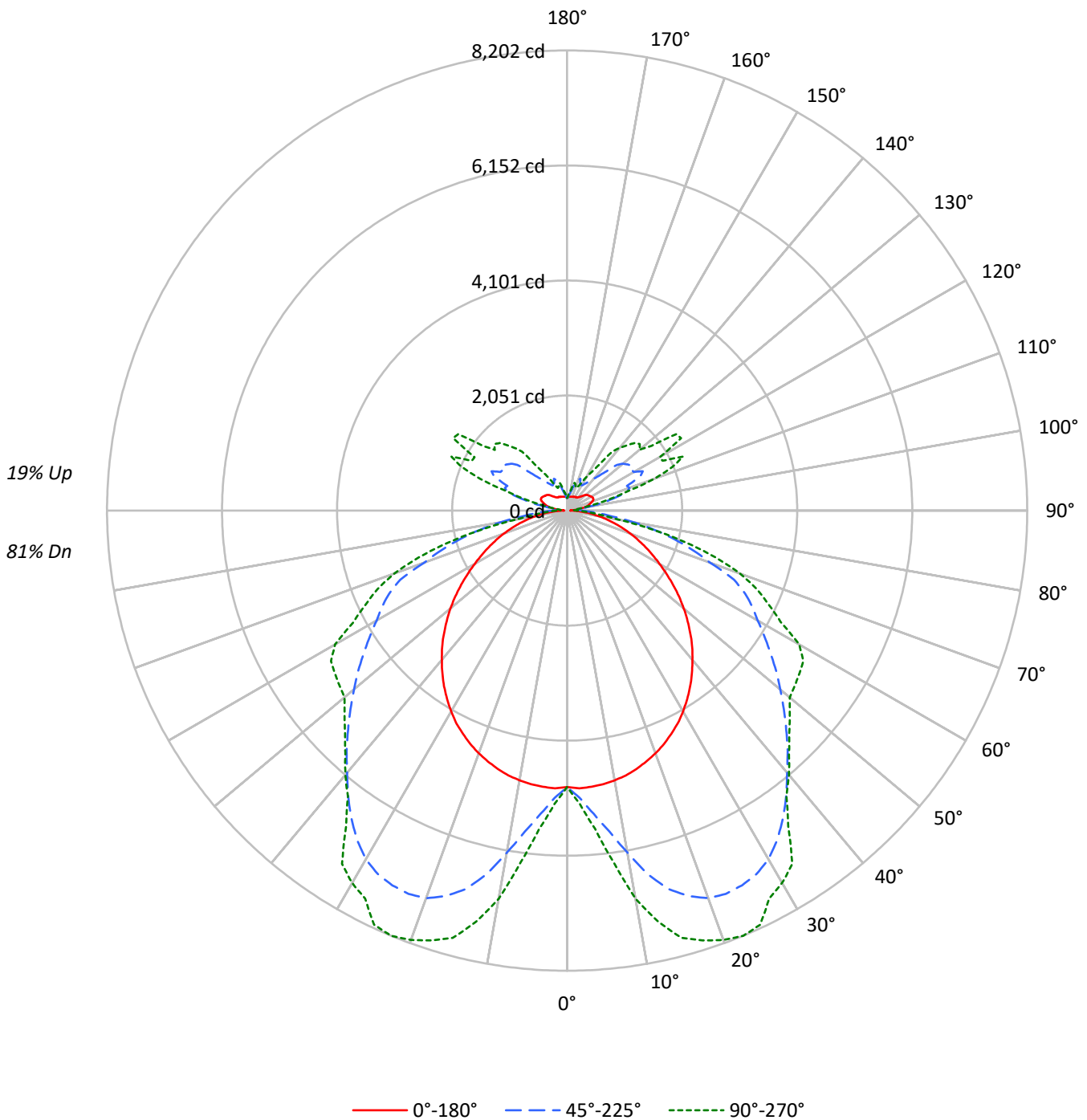
Lumens per Lamp: N/A
Luminaire Lumens: 27937.0 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.79 / 1.74
Luminous Opening: Rectangular w/ Sides (W: 1.88' x L: 4' x H: 0.21')
CIE Type: Semi-Direct

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





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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	115	115	115	115	110	110	110	110	101	101	101	93	93	93	85	85	85	81
1	104	99	95	91	99	95	91	87	87	84	81	80	78	75	74	72	70	67
2	94	86	79	73	90	82	76	70	76	70	66	70	65	62	64	61	58	55
3	85	75	66	60	81	72	64	58	66	60	55	61	56	51	56	52	48	45
4	78	66	57	50	74	63	55	49	58	52	46	54	48	44	50	45	41	38
5	71	58	49	43	68	56	48	42	52	45	40	48	42	37	44	39	35	33
6	66	52	43	37	63	50	42	36	47	40	34	43	37	33	40	35	31	28
7	61	47	38	32	58	46	37	32	42	35	30	39	33	29	36	31	27	25
8	56	43	34	29	54	41	33	28	39	32	27	36	30	25	33	28	24	22
9	53	39	31	25	50	38	30	25	35	29	24	33	27	23	31	26	22	20
10	49	36	28	23	47	35	27	22	33	26	21	30	25	21	28	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7073	7073	7073
5°	7086	7738	8119
10°	7049	8841	10043
15°	6986	10064	11376
20°	6903	10776	11957
25°	6788	11075	12260
30°	6647	11150	11936
35°	6465	10868	11170
40°	6240	10420	10541
45°	5995	10048	10230
50°	5705	9732	10209
55°	5364	9494	10916
60°	5007	9383	11495
65°	4702	9524	10876
70°	4398	8647	10520
75°	4050	7685	8572
80°	3655	6044	4794
85°	3091	4003	3093



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	535.4	1.9
10°-20°	1882.1	6.7
20°-30°	3167.9	11.3
30°-40°	3831.6	13.7
40°-50°	3899.1	14.0
50°-60°	3712.1	13.3
60°-70°	3145.8	11.3
70°-80°	1947.1	7.0
80°-90°	640.5	2.3
90°-100°	263.0	0.9
100°-110°	802.5	2.9
110°-120°	1303.6	4.7
120°-130°	1186.6	4.2
130°-140°	815.3	2.9
140°-150°	431.3	1.5
150°-160°	228.0	0.8
160°-170°	118.6	0.4
170°-180°	26.5	0.1
0°-30°	5585.4	20.0
0°-40°	9417.0	33.7
0°-60°	17028.2	61.0
0°-90°	22761.6	81.5
90°-120°	2369.0	8.5
90°-150°	4802.2	17.2
90°-180°	5175.0	18.5
0°-180°	27937.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4928	4928	4928	4928	4928	
5°	4941	5149	5425	5595	5691	470
15°	4767	5676	6983	7634	7884	1345
25°	4391	5992	7370	8014	8143	2023
35°	3824	5512	6704	6936	6872	2389
45°	3108	4555	5522	5711	5600	2396
55°	2303	3506	4419	4923	5055	2061
65°	1539	2594	3499	3838	3966	1528
75°	872	1709	1983	2180	2187	926
85°	300	739	564	466	426	301
90°	58	413	268	209	182	48
95°	141	301	194	137	112	145
105°	403	712	895	794	773	419
115°	514	856	1436	1857	2278	501
125°	470	684	1394	1868	2374	420
135°	358	566	993	1566	1702	284
145°	285	592	598	820	1003	182
155°	269	447	544	528	484	126
165°	256	319	458	537	513	73
175°	245	245	259	261	292	23
180°	226	226	226	226	226	



TEST NUMBER: P236517

CATALOG NUMBER: SKB4-LD5-30-N-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°	4928.2	4928.2	4928.2	4928.2	4928.2	4928.2	4928.2	4928.2	4928.2	4928.2	4928.2
2.5°	4955.7	4938.6	4933.4	4959.6	5000.1	5019.7	5043.3	5062.9	5090.4	5123.1	5157.1
5°	4941.3	4936.0	4960.9	5027.6	5110.0	5188.5	5270.9	5317.9	5368.9	5425.2	5482.7
7.5°	4920.3	4930.8	4992.3	5107.4	5260.4	5345.4	5442.2	5546.8	5665.8	5767.9	5888.2
10°	4881.1	4917.7	5021.0	5195.0	5341.5	5490.6	5658.0	5821.5	6007.2	6190.3	6369.5
12.5°	4835.3	4890.3	5052.4	5229.0	5437.0	5651.5	5886.9	6134.1	6397.0	6637.6	6862.6
15°	4767.3	4852.3	5056.4	5253.9	5533.7	5817.6	6130.1	6454.5	6757.9	6982.9	7203.9
17.5°	4690.1	4801.3	5023.7	5276.1	5618.8	5973.2	6366.9	6704.3	6986.8	7205.2	7428.9
20°	4605.1	4742.5	4977.9	5287.9	5694.6	6122.3	6529.1	6841.6	7109.8	7351.7	7571.5
22.5°	4504.4	4670.5	4920.3	5281.3	5750.9	6211.2	6598.4	6896.6	7185.6	7394.9	7579.3
25°	4390.6	4580.3	4845.8	5256.5	5777.0	6207.3	6593.1	6911.0	7151.6	7370.0	7563.6
27.5°	4274.2	4465.2	4755.5	5205.5	5740.4	6161.5	6552.6	6827.3	7079.7	7306.0	7517.8
30°	4131.7	4331.8	4637.8	5123.1	5634.5	6055.6	6427.0	6701.7	6952.8	7176.5	7360.9
32.5°	3982.6	4182.7	4497.9	5009.3	5494.5	5913.0	6250.5	6521.2	6755.3	6964.6	7124.2
35°	3824.3	4015.3	4340.9	4860.2	5319.2	5703.8	6049.1	6297.6	6527.8	6704.3	6810.3
37.5°	3653.0	3834.8	4170.9	4677.1	5129.6	5482.7	5812.3	6050.4	6257.0	6412.7	6489.8
40°	3476.4	3645.1	3983.9	4477.0	4900.7	5246.0	5544.2	5784.9	5968.0	6100.1	6165.5
42.5°	3299.8	3445.0	3786.4	4262.5	4645.7	4991.0	5281.3	5506.3	5689.4	5816.3	5890.8
45°	3107.6	3243.6	3583.7	4036.2	4389.3	4721.5	5010.6	5226.4	5395.1	5522.0	5608.3
47.5°	2912.7	3039.6	3373.1	3803.4	4133.0	4457.3	4734.6	4945.2	5116.5	5238.2	5346.7
50°	2713.9	2832.9	3154.7	3539.2	3867.5	4182.7	4452.1	4662.7	4828.8	4958.3	5070.7
52.5°	2511.2	2622.3	2928.4	3288.1	3605.9	3922.4	4172.2	4382.8	4551.5	4695.4	4819.6
55°	2303.2	2414.4	2716.5	3048.7	3357.4	3655.6	3904.1	4109.4	4276.8	4419.4	4562.0
57.5°	2097.9	2209.1	2507.3	2813.3	3122.0	3405.8	3649.1	3838.7	4008.7	4167.0	4323.9
60°	1901.7	2018.1	2303.2	2598.8	2889.2	3163.8	3401.9	3578.4	3743.2	3922.4	4134.3
62.5°	1717.3	1840.2	2107.0	2401.3	2679.9	2936.2	3149.4	3316.8	3497.3	3723.6	3940.7
65°	1539.4	1668.9	1921.3	2209.1	2475.9	2712.6	2895.7	3059.2	3276.3	3498.6	3698.8
67.5°	1368.1	1500.2	1746.1	2022.0	2262.7	2483.7	2638.0	2826.4	3038.3	3218.8	3422.7
70°	1198.0	1336.7	1578.6	1835.0	2056.0	2236.5	2411.8	2580.5	2693.0	2713.9	2809.4
72.5°	1033.2	1181.0	1406.0	1642.7	1841.5	2011.6	2175.0	2223.4	2247.0	2355.5	2430.1
75°	872.4	1022.8	1238.6	1449.2	1623.1	1794.4	1838.9	1844.1	1910.8	1982.8	2031.2
77.5°	718.0	865.8	1071.2	1255.6	1426.9	1500.2	1515.9	1538.1	1565.6	1603.5	1625.7
80°	572.9	714.1	901.1	1071.2	1178.4	1228.1	1237.3	1230.7	1220.3	1209.8	1192.8
82.5°	434.2	565.0	729.8	873.7	950.8	982.2	961.3	918.1	880.2	827.9	792.6
85°	299.5	413.3	557.2	665.7	735.0	742.9	705.0	659.2	613.4	563.7	523.2
87.5°	172.6	261.6	384.5	493.1	561.1	557.2	510.1	461.7	422.5	389.8	366.2
90°	57.5	136.0	253.7	353.1	415.9	409.4	368.8	329.6	298.2	268.1	244.6
92.5°	61.5	112.5	198.8	274.7	323.1	328.3	300.8	269.4	238.0	208.0	187.0
95°	141.3	171.3	231.5	282.5	302.1	300.8	279.9	251.1	222.3	193.6	170.0
97.5°	214.5	249.8	299.5	364.9	404.1	396.3	361.0	306.0	269.4	242.0	218.4
100°	290.4	344.0	381.9	453.8	511.4	544.1	529.7	487.8	452.5	408.1	350.5
102.5°	362.3	430.3	465.6	542.8	612.1	663.1	695.8	694.5	671.0	625.2	596.4
105°	402.8	482.6	514.0	604.3	688.0	735.0	779.5	846.2	897.2	894.6	875.0
107.5°	436.8	511.4	550.6	639.6	737.7	842.3	852.8	886.8	1029.3	1113.0	1161.4
110°	482.6	549.3	585.9	668.3	792.6	872.4	1003.2	999.2	996.6	1182.3	1347.1



TEST NUMBER: P236517

CATALOG NUMBER: SKB4-LD5-30-N-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°	506.2	567.6	593.8	668.3	808.3	912.9	1009.7	1171.9	1192.8	1152.3	1247.7
115°	514.0	570.2	601.6	651.3	780.8	931.2	1020.2	1143.1	1352.4	1436.1	1404.7
117.5°	510.1	561.1	621.3	630.4	733.7	920.8	1048.9	1128.7	1270.0	1518.5	1662.3
120°	495.7	536.2	636.9	601.6	694.5	869.8	1046.3	1170.6	1241.2	1374.6	1615.3
122.5°	481.3	515.3	639.6	582.0	672.3	793.9	1016.2	1158.8	1288.3	1351.1	1441.3
125°	469.5	497.0	634.3	580.7	631.7	736.4	912.9	1131.3	1263.4	1394.2	1462.2
127.5°	455.2	478.7	626.5	618.6	600.3	707.6	824.0	1048.9	1228.1	1352.4	1480.5
130°	434.2	456.5	609.5	656.6	571.6	656.6	752.0	895.9	1149.6	1298.7	1417.8
132.5°	397.6	419.8	563.7	661.8	555.9	599.0	712.8	791.3	954.8	1208.5	1344.5
135°	358.4	380.6	506.2	631.7	572.9	559.8	634.3	729.8	827.9	992.7	1230.7
137.5°	330.9	351.8	451.2	596.4	621.3	532.3	584.6	669.6	740.3	839.7	977.0
140°	308.7	329.6	401.5	568.9	635.6	545.4	546.7	602.9	685.3	739.0	821.4
142.5°	293.0	311.3	366.2	523.2	606.9	576.8	523.2	553.2	605.6	680.1	725.9
145°	285.1	298.2	345.3	472.2	567.6	616.0	540.2	516.6	555.9	597.7	665.7
147.5°	285.1	293.0	329.6	414.6	538.9	604.3	574.2	528.4	517.9	551.9	585.9
150°	283.8	289.0	323.1	372.8	493.1	563.7	621.3	545.4	527.1	516.6	540.2
152.5°	276.0	282.5	319.1	358.4	452.5	541.5	591.2	608.2	546.7	534.9	511.4
155°	269.4	274.7	308.7	345.3	400.2	494.4	549.3	593.8	599.0	544.1	542.8
157.5°	265.5	269.4	296.9	329.6	361.0	439.5	510.1	549.3	595.1	614.7	571.6
160°	261.6	264.2	287.7	313.9	344.0	383.2	453.8	508.8	545.4	579.4	614.7
162.5°	257.7	259.0	277.3	300.8	325.7	349.2	389.8	446.0	493.1	529.7	546.7
165°	256.3	256.3	268.1	290.4	308.7	329.6	349.2	378.0	418.5	457.8	489.2
167.5°	252.4	252.4	260.3	276.0	294.3	307.4	324.4	338.7	349.2	374.1	398.9
170°	249.8	249.8	253.7	262.9	276.0	289.0	299.5	308.7	317.8	325.7	329.6
172.5°	247.2	245.9	247.2	251.1	257.7	265.5	276.0	282.5	286.4	291.7	293.0
175°	244.6	243.3	243.3	243.3	244.6	245.9	249.8	252.4	253.7	259.0	261.6
177.5°	242.0	240.7	240.7	239.3	238.0	236.7	235.4	234.1	231.5	230.2	228.9
180°	226.3	226.3	226.3	226.3	226.3	226.3	226.3	226.3	226.3	226.3	226.3



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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	4928.2	4928.2	4928.2	4928.2	4928.2	4928.2	4928.2	4928.2
2.5°	5145.3	5171.5	5172.8	5191.1	5242.1	5248.6	5247.3	5235.5
5°	5501.0	5553.4	5575.6	5614.8	5682.8	5697.2	5702.5	5690.7
7.5°	5949.7	6047.8	6109.2	6173.3	6266.2	6313.3	6327.6	6318.5
10°	6492.4	6646.8	6748.8	6848.2	6971.1	7009.1	7037.8	7026.1
12.5°	6982.9	7121.5	7224.9	7345.2	7453.7	7490.4	7510.0	7507.4
15°	7321.6	7469.4	7578.0	7689.2	7804.3	7852.7	7884.0	7884.0
17.5°	7562.3	7714.0	7772.9	7884.0	7963.8	7995.2	8027.9	8031.8
20°	7672.2	7780.7	7871.0	7984.8	8081.5	8111.6	8143.0	8145.6
22.5°	7707.5	7822.6	7931.1	8059.3	8153.5	8178.3	8205.8	8201.9
25°	7697.0	7825.2	7949.4	8078.9	8165.2	8156.1	8173.1	8143.0
27.5°	7647.3	7744.1	7813.4	7851.4	7842.2	7803.0	7799.0	7796.4
30°	7444.6	7493.0	7547.9	7589.8	7619.9	7625.1	7657.8	7664.3
32.5°	7173.9	7226.2	7289.0	7350.4	7394.9	7411.9	7445.9	7466.8
35°	6843.0	6870.4	6922.7	6948.9	6943.7	6895.3	6873.0	6871.7
37.5°	6499.0	6538.2	6573.5	6569.6	6536.9	6465.0	6433.6	6419.2
40°	6204.7	6255.7	6283.2	6279.2	6238.7	6165.5	6149.8	6151.1
42.5°	5926.1	5971.9	5983.7	5958.8	5915.7	5864.6	5860.7	5852.9
45°	5654.1	5706.4	5720.8	5701.2	5667.2	5618.8	5601.8	5600.4
47.5°	5396.4	5454.0	5463.1	5443.5	5430.4	5397.7	5389.9	5380.7
50°	5151.8	5219.8	5225.1	5226.4	5212.0	5183.2	5180.6	5178.0
52.5°	4902.0	4962.2	5000.1	5052.4	5093.0	5095.6	5116.5	5117.8
55°	4656.1	4779.1	4878.5	4967.4	5019.7	5030.2	5052.4	5055.1
57.5°	4479.6	4636.5	4762.1	4858.9	4926.9	4953.0	4987.0	4991.0
60°	4317.4	4491.3	4615.6	4700.6	4742.5	4764.7	4784.3	4775.2
62.5°	4122.5	4265.1	4310.9	4284.7	4280.8	4283.4	4300.4	4289.9
65°	3769.4	3775.9	3795.5	3880.6	3931.6	3944.6	3966.9	3965.6
67.5°	3272.4	3378.3	3462.0	3562.7	3621.6	3637.3	3662.1	3659.5
70°	2897.0	3013.4	3090.6	3186.1	3233.1	3248.8	3275.0	3272.4
72.5°	2511.2	2601.4	2662.9	2734.8	2767.5	2783.2	2778.0	2774.1
75°	2086.1	2137.1	2162.0	2198.6	2201.2	2205.1	2193.4	2186.8
77.5°	1628.3	1632.3	1627.0	1632.3	1610.0	1595.6	1573.4	1559.0
80°	1153.6	1109.1	1048.9	1018.9	986.2	973.1	952.2	945.6
82.5°	759.9	736.4	695.8	672.3	647.4	626.5	610.8	602.9
85°	494.4	482.6	469.5	461.7	451.2	442.1	431.6	426.4
87.5°	349.2	341.4	329.6	323.1	313.9	306.0	295.6	291.7
90°	227.6	221.0	210.6	206.6	200.1	194.9	187.0	181.8
92.5°	174.0	164.8	158.3	153.0	146.5	139.9	133.4	130.8
95°	154.3	146.5	139.9	133.4	128.2	120.3	115.1	112.5
97.5°	205.3	194.9	185.7	181.8	177.9	167.4	163.5	160.9
100°	313.9	304.7	299.5	291.7	282.5	274.7	270.7	269.4
102.5°	583.3	578.1	554.6	537.5	504.9	477.4	468.2	465.6
105°	848.8	809.6	796.5	791.3	783.4	775.6	775.6	773.0
107.5°	1183.7	1199.3	1203.3	1195.4	1153.6	1119.6	1103.9	1098.6
110°	1437.4	1521.1	1585.2	1636.2	1642.7	1640.1	1641.4	1644.0



TEST NUMBER: P236517

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1517.2	1706.8	1842.8	1938.3	1986.7	2007.6	2023.3	2029.9
115°	1345.8	1491.0	1708.1	2005.0	2145.0	2223.4	2264.0	2278.4
117.5°	1702.9	1691.1	1633.6	1668.9	1786.6	1863.8	1908.2	1918.7
120°	1837.6	1948.8	2016.8	2031.2	2027.3	1977.6	1922.6	1905.6
122.5°	1619.2	1874.2	2067.8	2190.7	2277.1	2341.1	2390.8	2406.5
125°	1501.5	1619.2	1765.7	1971.0	2146.3	2264.0	2345.1	2373.8
127.5°	1573.4	1594.3	1632.3	1700.3	1781.4	1832.4	1880.8	1896.5
130°	1538.1	1644.0	1695.0	1706.8	1688.5	1683.3	1685.9	1684.6
132.5°	1458.3	1551.2	1651.9	1722.5	1747.4	1753.9	1756.5	1756.5
135°	1352.4	1451.8	1531.6	1599.6	1655.8	1678.0	1696.4	1701.6
137.5°	1207.2	1330.1	1416.5	1484.5	1543.3	1565.6	1574.7	1577.3
140°	932.5	1106.5	1262.1	1352.4	1420.4	1447.9	1458.3	1460.9
142.5°	782.1	868.4	960.0	1098.6	1226.8	1289.6	1327.5	1330.1
145°	710.2	736.4	786.1	854.1	912.9	952.2	987.5	1003.2
147.5°	630.4	686.6	708.9	725.9	750.7	775.6	797.8	816.1
150°	567.6	592.5	627.8	671.0	691.9	701.0	711.5	699.7
152.5°	524.5	545.4	568.9	580.7	589.9	592.5	578.1	567.6
155°	515.3	507.5	521.9	534.9	537.5	532.3	495.7	483.9
157.5°	544.1	537.5	524.5	504.9	498.3	459.1	439.5	435.5
160°	609.5	570.2	528.4	520.5	493.1	460.4	451.2	447.3
162.5°	576.8	600.3	606.9	589.9	534.9	508.8	495.7	490.5
165°	519.2	528.4	534.9	538.9	533.6	519.2	514.0	512.7
167.5°	427.7	451.2	463.0	468.2	476.1	468.2	448.6	444.7
170°	334.8	353.1	362.3	370.1	391.1	391.1	375.4	363.6
172.5°	294.3	296.9	300.8	306.0	316.5	321.7	321.7	317.8
175°	260.3	259.0	259.0	262.9	270.7	278.6	285.1	291.7
177.5°	225.0	222.3	218.4	219.7	225.0	232.8	242.0	243.3
180°	226.3	226.3	226.3	226.3	226.3	226.3	226.3	226.3

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