

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: P236555

Luminaire Tested: **SKB4-LD5-30-W-UNV-L850-CD4-U inner 2 blades tilted out 20 degrees**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236555
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-L850-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) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

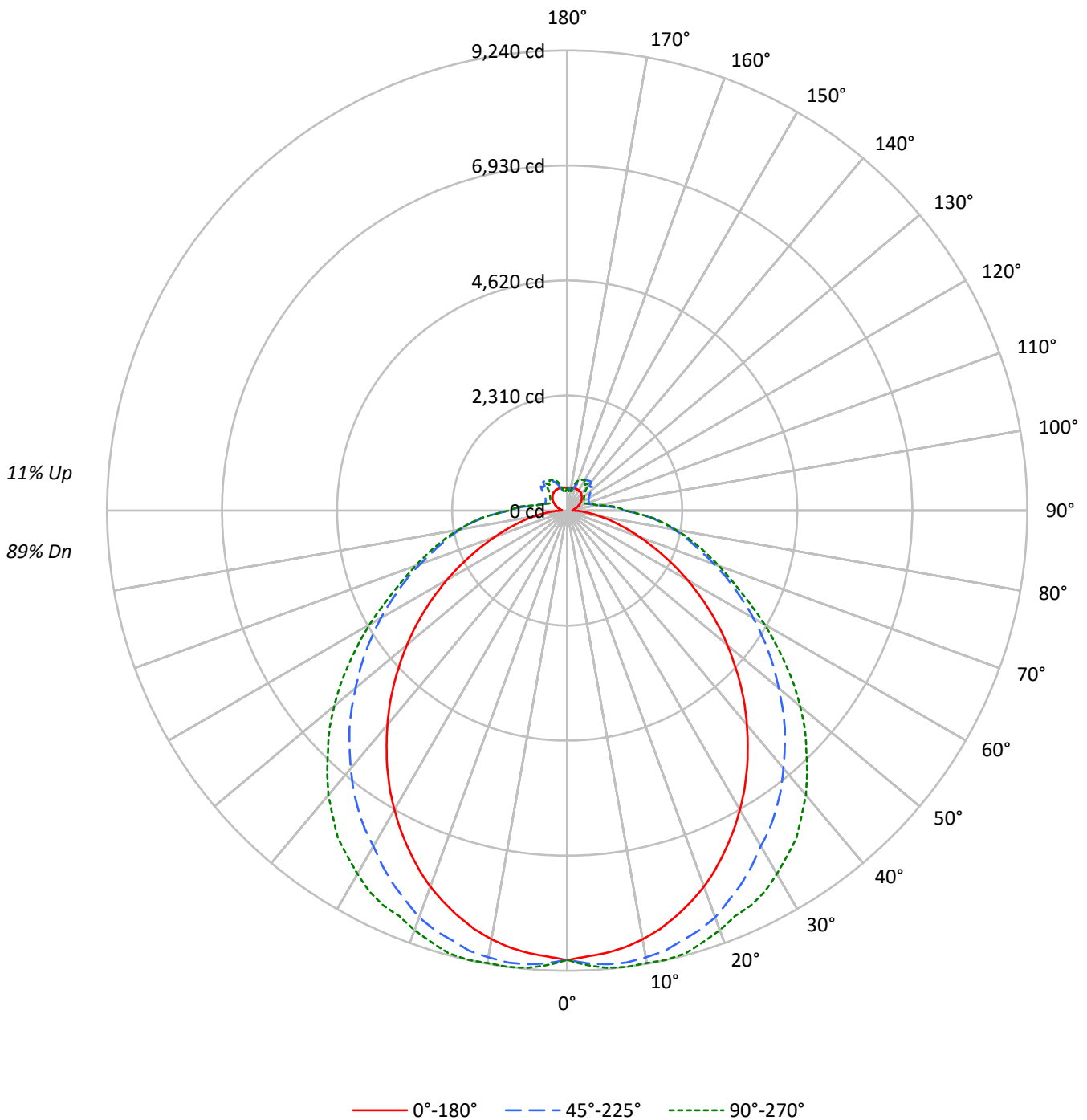
Lumens per Lamp: N/A
Luminaire Lumens: 31482.0 lumens
Efficiency: N/A
Efficacy: 120.9 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.38 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 1.88' x L: 4' x H: 0.21')
CIE Type: Semi-Direct

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: P236555

CATALOG NUMBER: SKB4-LD5-30-W-UNV-L850-CD4-U inner 2 blades tilted out 20 degrees

Luminous Intensity Polar Plot





TEST NUMBER: P236555

CATALOG NUMBER: SKB4-LD5-30-W-UNV-L850-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	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°	12950	12950	12950
5°	12791	13043	13153
10°	12620	13010	13188
15°	12362	12872	13277
20°	12042	12739	13159
25°	11624	12427	13164
30°	11159	12087	13117
35°	10647	11864	13047
40°	10077	11539	12778
45°	9477	11250	12406
50°	8831	10881	12038
55°	8117	10602	11534
60°	7341	10332	11029
65°	6503	10114	10525
70°	5691	10004	10397
75°	4954	10179	10620
80°	4292	10886	11204
85°	3720	12128	12573



TEST NUMBER: P236555

CATALOG NUMBER: SKB4-LD5-30-W-UNV-L850-CD4-U inner 2 blades tilted out 20 degrees

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	868.9	2.8
10°-20°	2511.8	8.0
20°-30°	3787.3	12.0
30°-40°	4527.1	14.4
40°-50°	4641.6	14.7
50°-60°	4190.7	13.3
60°-70°	3363.7	10.7
70°-80°	2478.1	7.9
80°-90°	1586.3	5.0
90°-100°	811.1	2.6
100°-110°	495.9	1.6
110°-120°	445.7	1.4
120°-130°	460.6	1.5
130°-140°	459.5	1.5
140°-150°	396.4	1.3
150°-160°	276.5	0.9
160°-170°	139.3	0.4
170°-180°	41.6	0.1
0°-30°	7167.9	22.8
0°-40°	11695.0	37.1
0°-60°	20527.3	65.2
0°-90°	27955.4	88.8
90°-120°	1752.7	5.6
90°-150°	3069.2	9.7
90°-180°	3527.0	11.2
0°-180°	31482.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9023	9023	9023	9023	9023	
5°	8919	9082	9145	9194	9218	846
15°	8436	8742	8931	9125	9202	2376
25°	7519	7866	8270	8563	8744	3460
35°	6298	6695	7318	7813	8026	3935
45°	4913	5398	6182	6654	6792	3788
55°	3485	4126	4936	5260	5341	3118
65°	2129	2995	3715	3821	3838	2121
75°	1067	2106	2626	2697	2709	1143
85°	360	1339	1708	1732	1733	360
90°	118	881	1146	1174	1166	80
95°	124	599	868	934	937	102
105°	179	438	492	515	507	189
115°	262	556	476	412	380	260
125°	350	685	546	455	413	312
135°	412	660	669	572	501	318
145°	458	574	734	646	632	286
155°	472	450	650	699	684	218
165°	472	448	452	534	536	134
175°	466	461	447	431	396	45
180°	447	447	447	447	447	



TEST NUMBER: P236555

CATALOG NUMBER: SKB4-LD5-30-W-UNV-L850-CD4-U inner 2 blades tilted out 20 degrees

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	9023.2	9023.2	9023.2	9023.2	9023.2	9023.2	9023.2	9023.2	9023.2	9023.2	9023.2
2.5°	8963.0	9000.2	9014.5	9055.0	9071.4	9075.8	9086.8	9093.3	9084.6	9096.6	9084.6
5°	8919.1	8965.2	8993.6	9051.7	9075.8	9089.0	9110.9	9124.0	9125.1	9144.8	9140.5
7.5°	8846.8	8899.4	8944.3	9005.7	9036.4	9059.4	9092.3	9118.5	9137.2	9153.6	9145.9
10°	8739.5	8804.1	8856.7	8921.3	8964.1	9005.7	9048.4	9058.3	9074.7	9108.7	9129.5
12.5°	8606.9	8677.0	8729.6	8805.2	8865.5	8902.7	8938.9	8976.1	9019.9	9056.1	9057.2
15°	8436.0	8520.4	8571.8	8659.5	8725.2	8758.1	8823.8	8868.8	8887.4	8931.2	8979.4
17.5°	8244.3	8331.9	8385.6	8482.0	8543.4	8599.2	8675.9	8683.6	8760.3	8833.7	8890.7
20°	8033.9	8112.8	8167.6	8274.9	8339.6	8400.9	8461.2	8522.5	8625.5	8691.3	8728.5
22.5°	7790.7	7866.3	7940.8	8036.1	8108.4	8152.2	8260.7	8346.2	8430.5	8478.7	8539.0
25°	7519.0	7595.7	7666.9	7768.8	7831.2	7900.3	8048.2	8115.0	8184.0	8269.5	8338.5
27.5°	7238.5	7304.3	7383.1	7475.2	7543.1	7658.1	7792.9	7838.9	7945.2	8036.1	8093.1
30°	6936.1	6994.2	7068.7	7161.8	7245.1	7388.6	7492.7	7566.1	7682.2	7779.7	7905.7
32.5°	6627.2	6679.8	6743.3	6825.5	6944.9	7081.9	7190.3	7290.0	7414.9	7569.4	7702.0
35°	6298.5	6348.9	6403.7	6488.0	6632.7	6756.5	6887.9	6996.4	7165.1	7318.5	7460.9
37.5°	5957.8	6010.4	6055.3	6158.3	6306.2	6442.0	6577.9	6719.2	6889.0	7056.7	7175.0
40°	5613.8	5666.4	5704.7	5823.0	5976.4	6126.5	6274.4	6431.1	6607.5	6755.4	6892.3
42.5°	5269.8	5316.9	5360.7	5495.4	5642.3	5806.6	5970.9	6134.2	6299.6	6466.1	6618.4
45°	4912.6	4965.2	5007.9	5159.1	5305.9	5490.0	5658.7	5829.6	5991.7	6182.4	6297.4
47.5°	4555.4	4610.2	4658.4	4826.0	4983.8	5177.7	5342.1	5513.0	5695.9	5864.7	5981.9
50°	4200.5	4253.1	4317.7	4493.0	4652.9	4855.6	5027.6	5211.7	5392.5	5543.7	5677.3
52.5°	3844.4	3899.2	3981.4	4161.0	4333.0	4542.3	4719.8	4915.9	5079.1	5242.4	5355.2
55°	3485.1	3545.3	3649.4	3829.1	4023.0	4229.0	4420.7	4613.5	4780.0	4935.6	5032.0
57.5°	3132.3	3198.0	3320.7	3510.3	3715.1	3926.6	4139.1	4322.1	4488.6	4624.5	4717.6
60°	2788.3	2860.6	2998.6	3201.3	3421.5	3641.7	3853.2	4046.0	4192.8	4318.8	4379.0
62.5°	2451.9	2533.0	2683.1	2907.7	3136.7	3368.9	3593.5	3772.1	3900.3	4012.0	4063.5
65°	2128.7	2218.6	2385.1	2629.4	2874.8	3114.7	3340.4	3497.1	3617.6	3715.1	3754.6
67.5°	1828.5	1926.0	2116.7	2373.0	2633.8	2880.3	3087.4	3234.2	3344.8	3429.2	3454.4
70°	1550.3	1653.2	1865.8	2138.6	2414.7	2650.2	2840.8	2985.5	3077.5	3139.9	3148.7
72.5°	1295.0	1402.3	1641.2	1928.2	2207.6	2422.3	2609.7	2736.8	2820.0	2863.9	2888.0
75°	1067.1	1178.8	1444.0	1743.1	2002.7	2208.7	2381.8	2489.2	2574.6	2626.1	2649.1
77.5°	862.2	981.6	1272.0	1564.5	1807.7	1998.3	2152.8	2270.0	2365.4	2405.9	2419.0
80°	672.7	810.7	1119.7	1394.7	1618.2	1792.4	1957.8	2073.9	2153.9	2179.1	2184.6
82.5°	502.9	660.6	968.5	1221.6	1429.7	1618.2	1766.1	1863.6	1931.5	1946.9	1950.1
85°	360.4	528.1	818.4	1056.1	1257.7	1419.9	1554.6	1636.8	1694.9	1708.0	1706.9
87.5°	244.3	418.5	683.6	889.6	1063.8	1210.6	1323.5	1392.5	1439.6	1421.0	1421.0
90°	118.3	328.7	535.7	692.4	818.4	944.4	1027.7	1090.1	1130.6	1146.0	1149.3
92.5°	104.1	253.1	429.5	568.6	688.0	814.0	905.0	970.7	1013.4	1030.9	1034.2
95°	123.8	204.9	328.7	436.0	546.7	650.8	723.1	777.9	833.7	867.7	886.3
97.5°	128.2	208.2	303.5	372.5	447.0	545.6	614.6	662.8	691.3	700.1	699.0
100°	140.2	242.1	313.3	369.2	414.1	459.0	528.1	580.7	611.3	622.3	622.3
102.5°	158.9	268.4	352.8	383.5	415.2	448.1	465.6	505.1	540.1	555.5	559.8
105°	178.6	279.4	410.8	404.3	427.3	449.2	467.8	473.3	476.6	491.9	500.7
107.5°	199.4	287.0	437.1	450.3	440.4	459.0	468.9	475.5	474.4	453.6	448.1
110°	221.3	293.6	445.9	501.8	472.2	472.2	478.8	481.0	474.4	465.6	448.1



TEST NUMBER: P236555

CATALOG NUMBER: SKB4-LD5-30-W-UNV-L850-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°	241.0	296.9	451.4	543.4	533.5	495.2	489.7	488.6	481.0	467.8	452.5
115°	261.8	299.1	453.6	565.3	573.0	539.0	509.4	501.8	489.7	475.5	458.0
117.5°	283.8	299.1	454.7	570.8	601.5	614.6	544.5	518.2	502.9	487.5	466.7
120°	306.8	300.2	452.5	576.3	658.4	635.4	602.6	548.9	520.4	500.7	479.9
122.5°	328.7	310.1	450.3	578.5	659.5	644.2	683.6	597.1	546.7	518.2	496.3
125°	349.5	324.3	448.1	577.4	659.5	709.9	658.4	683.6	589.4	545.6	517.1
127.5°	369.2	340.7	442.6	569.7	656.3	715.4	671.6	691.3	669.4	590.5	545.6
130°	383.5	361.5	431.7	553.3	647.5	707.7	738.4	663.9	708.8	672.7	592.7
132.5°	396.6	378.0	415.2	540.1	638.7	702.3	738.4	705.6	671.6	715.4	679.3
135°	411.9	396.6	395.5	525.9	625.6	693.5	729.7	754.9	679.3	669.4	711.0
137.5°	426.2	413.0	390.0	511.6	607.0	681.5	719.8	745.0	757.0	667.2	663.9
140°	438.2	428.4	390.0	494.1	585.0	665.0	705.6	731.9	748.3	751.6	665.0
142.5°	451.4	441.5	392.2	471.1	562.0	640.9	689.1	716.5	735.1	746.1	750.5
145°	458.0	449.2	413.0	434.9	536.8	611.3	666.1	699.0	722.0	734.0	740.6
147.5°	461.2	454.7	429.5	418.5	509.4	580.7	639.8	679.3	705.6	722.0	729.7
150°	464.5	460.1	441.5	408.7	476.6	551.1	609.1	653.0	684.7	704.5	714.3
152.5°	470.0	465.6	452.5	406.5	438.2	520.4	576.3	620.1	656.3	681.5	695.7
155°	472.2	468.9	459.0	432.8	418.5	481.0	540.1	581.8	619.0	649.7	669.4
157.5°	474.4	472.2	464.5	447.0	410.8	437.1	499.6	543.4	578.5	610.2	633.2
160°	473.3	472.2	466.7	455.8	430.6	413.0	443.7	498.5	534.6	564.2	586.1
162.5°	473.3	472.2	467.8	460.1	445.9	411.9	416.3	439.3	485.3	517.1	537.9
165°	472.2	472.2	468.9	463.4	454.7	440.4	409.7	408.7	427.3	452.5	482.1
167.5°	472.2	472.2	470.0	465.6	460.1	452.5	441.5	424.0	404.3	408.7	418.5
170°	470.0	471.1	468.9	465.6	462.3	456.9	451.4	443.7	432.8	420.7	397.7
172.5°	467.8	468.9	468.9	466.7	463.4	460.1	456.9	452.5	444.8	440.4	432.8
175°	465.6	466.7	466.7	465.6	462.3	459.0	458.0	454.7	449.2	447.0	442.6
177.5°	463.4	463.4	464.5	463.4	462.3	460.1	459.0	456.9	451.4	450.3	445.9
180°	447.0	447.0	447.0	447.0	447.0	447.0	447.0	447.0	447.0	447.0	447.0



TEST NUMBER: P236555

CATALOG NUMBER: SKB4-LD5-30-W-UNV-L850-CD4-U inner 2 blades tilted out 20 degrees

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	9023.2	9023.2	9023.2	9023.2	9023.2	9023.2	9023.2	9023.2
2.5°	9076.9	9115.3	9114.2	9093.3	9114.2	9138.3	9125.1	9137.2
5°	9143.7	9194.1	9201.8	9186.5	9204.0	9224.8	9206.2	9218.2
7.5°	9148.1	9190.9	9200.7	9188.7	9220.4	9250.0	9231.4	9240.2
10°	9154.7	9204.0	9217.1	9198.5	9218.2	9234.7	9212.8	9227.0
12.5°	9063.8	9129.5	9167.8	9174.4	9211.7	9239.1	9220.4	9235.8
15°	9019.9	9087.9	9120.7	9129.5	9171.1	9200.7	9182.1	9201.8
17.5°	8932.3	8979.4	8989.3	8987.1	9034.2	9071.4	9064.9	9084.6
20°	8759.2	8822.7	8869.8	8879.7	8924.6	8955.3	8937.8	8964.1
22.5°	8605.8	8671.5	8686.9	8692.4	8754.8	8794.3	8792.1	8812.9
25°	8390.0	8455.7	8535.7	8589.4	8661.7	8708.8	8720.8	8743.9
27.5°	8207.0	8313.3	8409.7	8462.3	8535.7	8582.8	8600.3	8612.4
30°	8035.0	8146.8	8233.3	8289.2	8352.7	8390.0	8404.2	8422.8
32.5°	7824.7	7938.6	8013.1	8058.0	8121.6	8169.8	8200.4	8220.2
35°	7570.5	7675.7	7775.4	7851.0	7922.2	7970.4	7989.0	8026.2
37.5°	7294.4	7440.1	7543.1	7594.6	7636.2	7675.7	7697.6	7730.4
40°	7042.4	7165.1	7236.3	7288.9	7344.8	7396.3	7423.7	7456.5
42.5°	6735.6	6841.9	6940.5	7003.0	7051.2	7095.0	7113.6	7132.3
45°	6417.9	6543.9	6629.4	6677.6	6707.2	6753.2	6781.7	6791.5
47.5°	6113.4	6217.4	6286.5	6345.6	6386.2	6432.2	6457.4	6473.8
50°	5788.0	5878.9	5958.9	6012.6	6036.7	6067.3	6083.8	6105.7
52.5°	5456.0	5557.9	5607.2	5639.0	5663.1	5698.1	5715.7	5737.6
55°	5128.4	5190.9	5240.2	5279.6	5303.7	5330.0	5345.4	5341.0
57.5°	4775.6	4846.9	4889.6	4912.6	4926.8	4944.4	4948.8	4960.8
60°	4443.7	4494.1	4521.5	4542.3	4548.9	4563.1	4568.6	4581.7
62.5°	4113.9	4151.2	4165.4	4180.7	4189.5	4187.3	4188.4	4197.2
65°	3782.0	3812.6	3818.1	3824.7	3830.2	3832.4	3834.5	3837.8
67.5°	3464.2	3488.3	3496.0	3514.6	3522.3	3517.9	3517.9	3521.2
70°	3169.5	3192.5	3201.3	3215.5	3226.5	3226.5	3229.8	3234.2
72.5°	2900.0	2926.3	2943.8	2952.6	2967.9	2969.0	2969.0	2967.9
75°	2661.2	2680.9	2694.0	2700.6	2716.0	2714.9	2713.8	2709.4
77.5°	2423.4	2438.8	2454.1	2453.0	2468.4	2468.4	2465.1	2461.8
80°	2184.6	2202.1	2208.7	2206.5	2220.7	2218.6	2217.5	2209.8
82.5°	1939.2	1954.5	1961.1	1961.1	1974.2	1972.1	1971.0	1964.4
85°	1703.6	1713.5	1732.1	1731.0	1739.8	1739.8	1738.7	1733.2
87.5°	1398.0	1405.6	1412.2	1410.0	1416.6	1421.0	1416.6	1413.3
90°	1150.4	1158.0	1172.3	1175.6	1181.0	1175.6	1174.5	1165.7
92.5°	1038.6	1046.3	1058.3	1062.7	1066.0	1064.9	1066.0	1060.5
95°	899.5	913.7	932.3	936.7	942.2	941.1	944.4	936.7
97.5°	701.2	715.4	740.6	756.0	760.3	761.4	766.9	758.1
100°	622.3	625.6	630.0	627.8	626.7	624.5	623.4	616.8
102.5°	560.9	564.2	568.6	568.6	566.4	565.3	563.1	557.7
105°	505.1	510.5	514.9	516.0	514.9	513.8	511.6	507.3
107.5°	452.5	456.9	463.4	464.5	464.5	465.6	464.5	458.0
110°	422.9	415.2	417.4	417.4	417.4	418.5	416.3	410.8



TEST NUMBER: P236555

CATALOG NUMBER: SKB4-LD5-30-W-UNV-L850-CD4-U inner 2 blades tilted out 20 degrees

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	439.3	424.0	404.3	388.9	383.5	382.4	379.1	373.6
115°	440.4	427.3	417.4	407.6	401.0	394.4	385.6	380.2
117.5°	450.3	433.9	420.7	409.7	404.3	398.8	392.2	386.7
120°	462.3	443.7	430.6	418.5	410.8	403.2	395.5	390.0
122.5°	477.7	460.1	443.7	429.5	420.7	413.0	405.4	399.9
125°	496.3	476.6	461.2	448.1	437.1	428.4	419.6	413.0
127.5°	518.2	497.4	481.0	465.6	453.6	443.7	433.9	428.4
130°	550.0	524.8	506.2	487.5	474.4	463.4	453.6	445.9
132.5°	600.4	565.3	539.0	514.9	500.7	488.6	476.6	468.9
135°	703.4	625.6	586.1	557.7	537.9	521.5	508.4	500.7
137.5°	705.6	723.1	684.7	616.8	590.5	570.8	554.4	546.7
140°	659.5	681.5	711.0	715.4	711.0	674.9	651.9	644.2
142.5°	672.7	642.0	659.5	672.7	692.4	695.7	690.2	686.9
145°	746.1	719.8	657.4	634.3	635.4	643.1	638.7	632.2
147.5°	736.2	739.5	740.6	725.3	677.1	646.4	630.0	622.3
150°	724.2	728.6	730.8	730.8	728.6	724.2	715.4	708.8
152.5°	706.7	714.3	718.7	719.8	718.7	713.2	703.4	697.9
155°	683.6	692.4	697.9	700.1	701.2	697.9	689.1	683.6
157.5°	651.9	666.1	673.8	677.1	678.2	676.0	669.4	665.0
160°	609.1	625.6	637.6	642.0	646.4	646.4	640.9	636.5
162.5°	558.7	576.3	589.4	596.0	600.4	602.6	597.1	596.0
165°	505.1	520.4	531.4	536.8	541.2	543.4	539.0	535.7
167.5°	430.6	451.4	467.8	474.4	478.8	478.8	475.5	475.5
170°	396.6	399.9	401.0	401.0	398.8	396.6	392.2	390.0
172.5°	426.2	422.9	414.1	403.2	392.2	379.1	369.2	358.3
175°	438.2	438.2	433.9	427.3	419.6	411.9	403.2	395.5
177.5°	442.6	443.7	440.4	434.9	428.4	420.7	409.7	404.3
180°	447.0	447.0	447.0	447.0	447.0	447.0	447.0	447.0

(END OF REPORT)