

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: P236457

Luminaire Tested: **SKB2-LD5-15-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: P236457
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-LD5-15-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

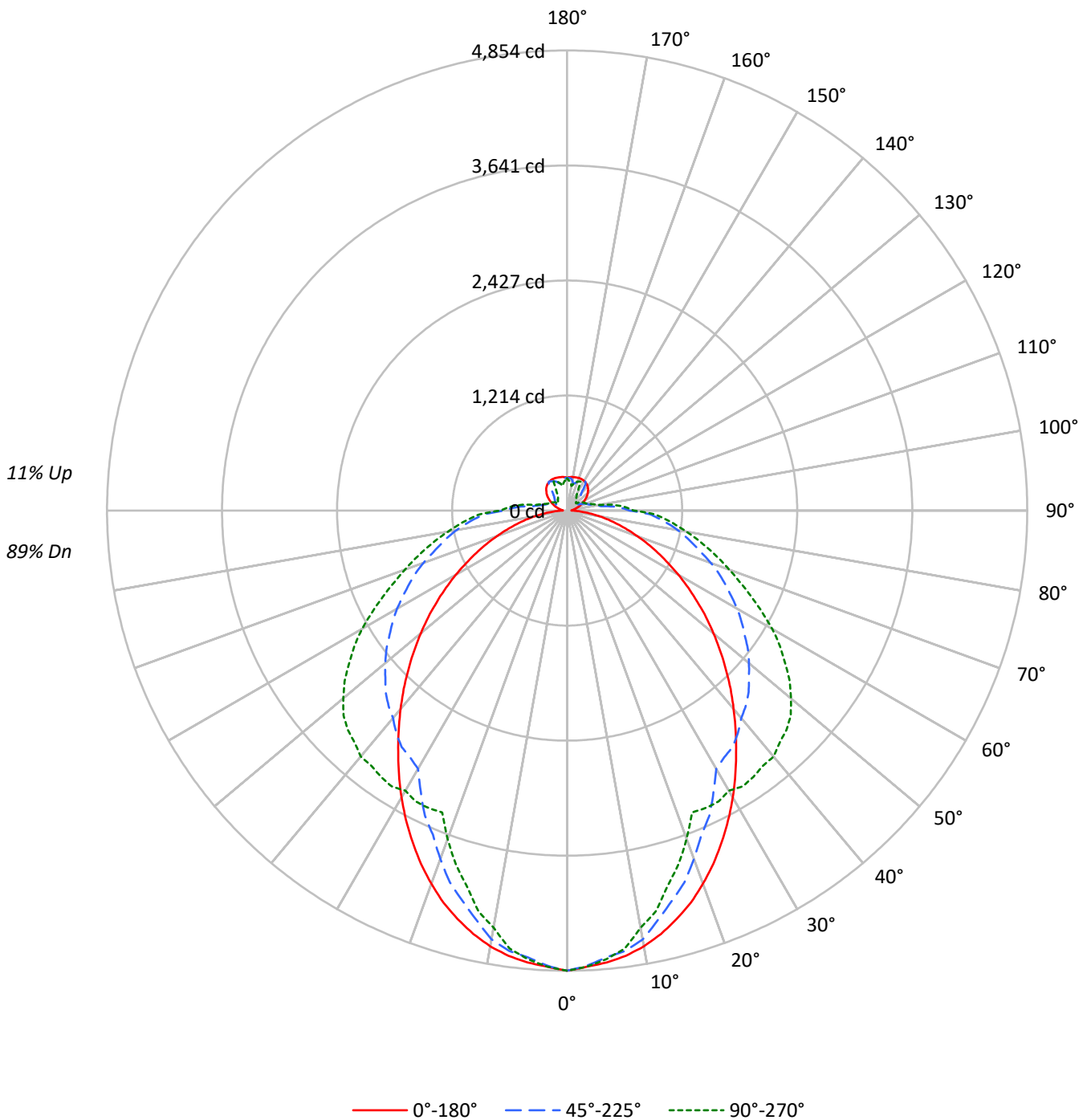
Lumens per Lamp: N/A
Luminaire Lumens: 15021.0 lumens
Efficiency: N/A
Efficacy: 113.5 lumens/watt
Spacing Criteria (0/90/45): 1.09 / 1.03 / 1.25
Luminous Opening: Rectangular w/ Sides (W: 1.25' x L: 2' x H: 0.21')
CIE Type: Semi-Direct

Input Watts (W): 132.4
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-LD5-15-W-UNV-L835-CD2-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	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°	20897	20897	20897
5°	20495	20110	20232
10°	20036	19422	18970
15°	19342	18075	17474
20°	18490	16749	15918
25°	17476	15488	15257
30°	16392	14082	15472
35°	15227	14111	16130
40°	14122	13840	16699
45°	13053	13835	17074
50°	12011	13654	17223
55°	10958	13476	17018
60°	9898	13396	16699
65°	8801	13289	16073
70°	7697	13294	15714
75°	6591	13404	15780
80°	5377	14076	16244
85°	3890	15071	17760



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	449.2	3.0
10°-20°	1201.9	8.0
20°-30°	1665.0	11.1
30°-40°	1982.3	13.2
40°-50°	2128.9	14.2
50°-60°	2028.4	13.5
60°-70°	1712.4	11.4
70°-80°	1309.9	8.7
80°-90°	896.6	6.0
90°-100°	444.7	3.0
100°-110°	233.7	1.6
110°-120°	183.2	1.2
120°-130°	166.3	1.1
130°-140°	171.1	1.1
140°-150°	171.6	1.1
150°-160°	152.9	1.0
160°-170°	90.9	0.6
170°-180°	31.7	0.2
0°-30°	3316.2	22.1
0°-40°	5298.6	35.3
0°-60°	9455.9	63.0
0°-90°	13374.8	89.0
90°-120°	861.6	5.7
90°-150°	1370.6	9.1
90°-180°	1646.0	11.0
0°-180°	15021.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4854	4854	4854	4854	4854	
5°	4785	4793	4731	4755	4750	453
15°	4460	4439	4263	4168	4095	1255
25°	3857	3775	3551	3390	3461	1774
35°	3108	3051	3045	3310	3427	1945
45°	2367	2396	2707	3098	3272	1828
55°	1677	1846	2286	2686	2807	1502
65°	1057	1378	1840	2089	2142	1051
75°	550	1007	1382	1513	1539	586
85°	172	693	973	1030	1044	177
90°	44	443	657	695	704	33
95°	56	279	485	550	567	49
105°	103	148	242	260	266	110
115°	172	172	166	199	197	171
125°	250	268	152	136	149	222
135°	312	334	190	157	137	240
145°	351	323	336	198	169	220
155°	365	301	342	349	339	169
165°	362	343	297	308	300	103
175°	354	352	344	332	314	34
180°	342	342	342	342	342	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4853.6	4853.6	4853.6	4853.6	4853.6	4853.6	4853.6	4853.6	4853.6	4853.6	4853.6
2.5°	4816.3	4831.9	4847.4	4855.2	4849.0	4839.6	4841.2	4842.8	4811.7	4805.5	4793.0
5°	4785.2	4800.8	4810.1	4810.1	4800.8	4785.2	4777.5	4771.3	4735.5	4730.9	4721.5
7.5°	4737.1	4749.5	4752.6	4746.4	4727.7	4704.4	4707.5	4716.9	4690.4	4685.8	4673.3
10°	4667.1	4676.5	4673.3	4656.3	4636.0	4636.0	4642.3	4642.3	4609.6	4592.5	4558.3
12.5°	4573.9	4580.1	4572.3	4552.1	4555.2	4547.5	4547.5	4525.7	4463.5	4423.1	4371.8
15°	4460.4	4465.1	4448.0	4444.9	4446.4	4430.9	4402.9	4350.1	4280.1	4263.0	4232.0
17.5°	4337.6	4334.5	4317.4	4322.1	4319.0	4277.0	4225.8	4176.0	4141.8	4112.3	4065.7
20°	4188.5	4186.9	4174.5	4183.8	4160.5	4096.8	4061.0	4019.0	3978.6	3910.3	3827.9
22.5°	4031.5	4026.8	4022.2	4023.7	3989.5	3918.0	3900.9	3849.6	3767.3	3700.4	3678.7
25°	3857.4	3857.4	3857.4	3848.1	3801.5	3748.6	3731.5	3638.3	3583.9	3551.2	3498.4
27.5°	3680.2	3680.2	3683.3	3664.7	3618.1	3580.8	3526.4	3459.6	3434.7	3344.5	3248.2
30°	3495.3	3498.4	3501.5	3472.0	3439.3	3395.8	3338.3	3304.1	3226.4	3145.6	3187.6
32.5°	3301.0	3311.9	3311.9	3285.5	3260.6	3200.0	3179.8	3119.2	3041.5	3083.4	3172.0
35°	3108.3	3131.6	3119.2	3100.5	3074.1	3027.5	3010.4	2921.8	2960.7	3044.6	3100.5
37.5°	2918.7	2943.6	2928.0	2921.8	2884.5	2883.0	2814.6	2819.2	2900.1	2959.1	3012.0
40°	2732.2	2752.4	2744.6	2738.4	2716.7	2713.6	2671.6	2738.4	2805.3	2858.1	2960.7
42.5°	2551.9	2569.0	2562.8	2558.1	2561.2	2533.3	2569.0	2645.2	2698.0	2789.7	2895.4
45°	2367.0	2384.1	2384.1	2385.6	2401.2	2390.3	2463.3	2523.9	2601.7	2707.3	2795.9
47.5°	2189.8	2203.8	2208.5	2224.0	2228.7	2269.1	2346.8	2407.4	2513.1	2601.7	2715.1
50°	2015.7	2028.2	2037.5	2067.0	2070.1	2151.0	2214.7	2306.4	2399.6	2503.7	2618.8
52.5°	1846.3	1855.7	1874.3	1905.4	1928.7	2025.1	2095.0	2197.6	2290.8	2402.7	2503.7
55°	1676.9	1687.8	1714.2	1739.1	1799.7	1891.4	1981.5	2081.0	2188.3	2286.2	2399.6
57.5°	1513.7	1527.7	1554.2	1585.2	1673.8	1767.1	1871.2	1973.8	2079.5	2182.0	2283.1
60°	1356.8	1370.8	1398.7	1443.8	1551.0	1653.6	1760.9	1869.6	1972.2	2071.7	2154.1
62.5°	1202.9	1216.9	1241.8	1316.4	1426.7	1546.4	1655.2	1765.5	1861.9	1950.5	2037.5
65°	1056.8	1070.8	1095.7	1196.7	1314.8	1440.7	1558.8	1658.3	1753.1	1840.1	1922.5
67.5°	918.5	930.9	962.0	1086.4	1213.8	1342.8	1456.2	1555.7	1650.5	1732.9	1793.5
70°	786.4	798.8	843.9	982.2	1119.0	1249.5	1355.2	1460.9	1547.9	1611.7	1666.1
72.5°	663.6	672.9	741.3	889.0	1032.0	1153.2	1268.2	1364.5	1436.0	1488.9	1537.1
75°	550.2	557.9	655.9	809.7	946.5	1067.7	1174.9	1258.9	1322.6	1381.6	1428.3
77.5°	444.5	461.6	581.3	736.7	864.1	983.8	1073.9	1161.0	1234.0	1285.3	1321.0
80°	345.0	374.6	516.0	662.1	791.1	890.5	993.1	1081.7	1142.3	1184.3	1209.1
82.5°	253.3	301.5	452.3	592.1	707.1	822.1	915.4	993.1	1045.9	1078.6	1100.3
85°	172.5	240.9	388.5	522.2	641.9	744.4	828.4	898.3	944.9	972.9	993.1
87.5°	107.2	192.7	335.7	460.0	564.2	657.4	736.7	801.9	845.5	873.4	887.4
90°	43.5	125.9	239.3	327.9	404.1	481.8	547.1	601.5	638.8	657.4	668.3
92.5°	45.1	91.7	171.0	251.8	323.3	401.0	469.4	526.9	564.2	585.9	596.8
95°	55.9	85.5	125.9	192.7	250.2	307.7	357.5	402.5	452.3	484.9	505.1
97.5°	63.7	96.4	111.9	155.4	208.3	256.4	295.3	326.4	346.6	360.6	371.4
100°	76.2	115.0	122.8	125.9	178.7	223.8	254.9	279.7	296.8	307.7	313.9
102.5°	88.6	127.4	136.8	129.0	144.5	194.3	228.5	250.2	261.1	268.9	273.5
105°	102.6	138.3	157.0	143.0	133.7	163.2	202.0	226.9	237.8	242.4	244.0
107.5°	119.7	147.6	184.9	153.9	143.0	135.2	172.5	202.0	219.1	225.4	226.9
110°	136.8	155.4	203.6	167.8	155.4	139.9	136.8	175.6	195.8	208.3	214.5



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CATALOG NUMBER: SKB2-LD5-15-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°	153.9	161.6	216.0	191.2	164.7	152.3	136.8	143.0	172.5	188.1	197.4
115°	172.5	171.0	222.2	230.0	178.7	164.7	149.2	135.2	143.0	166.3	180.3
117.5°	191.2	178.7	230.0	261.1	197.4	174.1	160.1	144.5	133.7	139.9	160.1
120°	211.4	192.7	236.2	279.7	226.9	186.5	171.0	157.0	143.0	133.7	133.7
122.5°	230.0	208.3	242.4	284.4	272.0	205.1	180.3	166.3	153.9	141.4	133.7
125°	250.2	225.4	248.7	289.1	306.2	230.0	194.3	175.6	163.2	152.3	141.4
127.5°	267.3	244.0	251.8	292.2	321.7	264.2	211.4	184.9	171.0	161.6	150.8
130°	282.9	262.7	256.4	293.7	323.3	324.8	236.2	198.9	180.3	169.4	160.1
132.5°	296.8	281.3	259.5	295.3	323.3	346.6	272.0	219.1	192.7	177.2	167.8
135°	312.4	298.4	262.7	296.8	323.3	345.0	337.3	248.7	209.8	189.6	175.6
137.5°	324.8	313.9	265.8	296.8	323.3	343.5	359.0	290.6	234.7	205.1	189.6
140°	335.7	327.9	276.6	296.8	321.7	341.9	354.3	351.2	270.4	230.0	206.7
142.5°	345.0	337.3	296.8	295.3	318.6	337.3	351.2	359.0	343.5	265.8	231.6
145°	351.2	345.0	313.9	292.2	313.9	332.6	346.6	355.9	362.1	335.7	268.9
147.5°	355.9	351.2	329.5	287.5	309.3	327.9	341.9	351.2	357.5	360.6	345.0
150°	360.6	357.5	340.4	293.7	304.6	321.7	335.7	346.6	352.8	355.9	359.0
152.5°	363.7	362.1	349.7	312.4	300.0	315.5	327.9	338.8	346.6	349.7	352.8
155°	365.2	363.7	354.3	332.6	293.7	307.7	320.2	331.0	337.3	341.9	346.6
157.5°	365.2	363.7	357.5	343.5	306.2	298.4	310.8	320.2	327.9	334.1	337.3
160°	365.2	365.2	359.0	349.7	329.5	293.7	300.0	309.3	317.0	321.7	326.4
162.5°	363.7	363.7	360.6	354.3	341.9	318.6	290.6	298.4	304.6	309.3	313.9
165°	362.1	362.1	360.6	355.9	348.1	337.3	318.6	293.7	290.6	296.8	300.0
167.5°	360.6	360.6	360.6	355.9	351.2	345.0	337.3	323.3	300.0	287.5	284.4
170°	359.0	359.0	359.0	357.5	354.3	349.7	345.0	338.8	331.0	321.7	310.8
172.5°	357.5	357.5	355.9	355.9	354.3	351.2	349.7	346.6	341.9	337.3	331.0
175°	354.3	355.9	354.3	354.3	352.8	351.2	349.7	348.1	345.0	343.5	340.4
177.5°	352.8	352.8	352.8	352.8	351.2	351.2	349.7	348.1	346.6	345.0	341.9
180°	341.9	341.9	341.9	341.9	341.9	341.9	341.9	341.9	341.9	341.9	341.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	4853.6	4853.6	4853.6	4853.6	4853.6	4853.6	4853.6	4853.6
2.5°	4785.2	4811.7	4822.5	4799.2	4793.0	4797.7	4800.8	4814.8
5°	4723.1	4754.2	4765.0	4744.8	4737.1	4737.1	4737.1	4749.5
7.5°	4668.7	4696.7	4696.7	4667.1	4654.7	4648.5	4645.4	4657.8
10°	4528.8	4536.6	4527.3	4482.2	4468.2	4458.9	4454.2	4466.6
12.5°	4354.7	4379.6	4376.5	4337.6	4329.9	4320.6	4314.3	4326.8
15°	4211.8	4224.2	4194.7	4141.8	4113.9	4098.3	4085.9	4095.2
17.5°	4011.3	3986.4	3946.0	3902.5	3905.6	3904.0	3897.8	3910.3
20°	3799.9	3820.1	3799.9	3759.5	3737.7	3709.8	3683.3	3684.9
22.5°	3661.6	3638.3	3546.6	3459.6	3437.8	3434.7	3439.3	3445.6
25°	3392.7	3367.9	3383.4	3397.4	3408.3	3434.7	3459.6	3461.1
27.5°	3283.9	3329.0	3381.8	3428.5	3458.0	3458.0	3464.2	3459.6
30°	3269.9	3352.3	3353.9	3374.1	3403.6	3408.3	3412.9	3411.4
32.5°	3234.2	3280.8	3290.1	3316.6	3371.0	3416.0	3447.1	3448.7
35°	3154.9	3209.3	3280.8	3338.3	3378.7	3405.2	3425.4	3426.9
37.5°	3108.3	3201.6	3243.5	3288.6	3322.8	3357.0	3383.4	3392.7
40°	3063.2	3128.5	3173.6	3251.3	3318.1	3360.1	3377.2	3386.5
42.5°	2976.2	3058.6	3147.2	3214.0	3268.4	3302.6	3311.9	3318.1
45°	2906.3	2998.0	3069.5	3127.0	3190.7	3237.3	3265.3	3271.5
47.5°	2822.3	2896.9	2977.8	3066.3	3130.1	3167.4	3187.6	3198.5
50°	2704.2	2808.4	2900.1	2971.5	3022.8	3049.3	3066.3	3081.9
52.5°	2611.0	2705.8	2775.7	2845.7	2903.2	2938.9	2952.9	2960.7
55°	2496.0	2573.7	2652.9	2719.8	2764.8	2791.3	2802.1	2806.8
57.5°	2367.0	2447.8	2516.2	2572.1	2614.1	2642.1	2654.5	2662.3
60°	2244.2	2312.6	2371.6	2429.1	2466.4	2488.2	2491.3	2499.1
62.5°	2116.8	2177.4	2227.1	2270.6	2300.2	2314.1	2315.7	2317.2
65°	1981.5	2034.4	2071.7	2105.9	2130.7	2144.7	2144.7	2141.6
67.5°	1847.9	1886.7	1922.5	1956.7	1972.2	1978.4	1970.7	1973.8
70°	1706.5	1737.5	1764.0	1790.4	1809.0	1823.0	1816.8	1819.9
72.5°	1580.6	1611.7	1636.5	1656.7	1670.7	1681.6	1675.4	1676.9
75°	1467.1	1487.3	1504.4	1521.5	1534.0	1541.7	1535.5	1538.6
77.5°	1349.0	1364.5	1375.4	1392.5	1403.4	1411.2	1405.0	1406.5
80°	1229.3	1244.9	1254.2	1263.5	1276.0	1282.2	1272.9	1274.4
82.5°	1115.9	1126.8	1136.1	1148.5	1156.3	1161.0	1157.8	1156.3
85°	1007.1	1013.3	1024.2	1036.6	1042.8	1049.1	1045.9	1044.4
87.5°	896.7	899.9	909.2	921.6	926.3	930.9	926.3	926.3
90°	676.1	683.8	690.0	700.9	705.6	707.1	704.0	704.0
92.5°	606.1	615.4	621.7	627.9	635.6	637.2	635.6	638.8
95°	522.2	536.2	547.1	553.3	561.1	564.2	562.6	567.3
97.5°	396.3	425.8	447.6	458.5	470.9	474.0	474.0	474.0
100°	321.7	327.9	334.1	335.7	340.4	341.9	340.4	341.9
102.5°	279.7	286.0	292.2	296.8	300.0	300.0	298.4	300.0
105°	248.7	253.3	258.0	262.7	264.2	265.8	264.2	265.8
107.5°	228.5	230.0	231.6	234.7	236.2	237.8	237.8	236.2
110°	216.0	217.6	217.6	219.1	219.1	219.1	216.0	214.5



TEST NUMBER: P236457

CATALOG NUMBER: SKB2-LD5-15-W-UNV-L835-CD2-U all blades tilted out 20 degrees

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	203.6	206.7	208.3	208.3	209.8	209.8	206.7	205.1
115°	188.1	194.3	197.4	200.5	202.0	200.5	198.9	197.4
117.5°	172.5	180.3	183.4	188.1	191.2	191.2	189.6	186.5
120°	153.9	163.2	169.4	175.6	178.7	178.7	177.2	175.6
122.5°	130.5	143.0	153.9	160.1	164.7	164.7	164.7	161.6
125°	135.2	129.0	132.1	139.9	149.2	150.8	149.2	149.2
127.5°	143.0	136.8	133.7	129.0	125.9	127.4	125.9	124.3
130°	152.3	146.1	141.4	136.8	133.7	129.0	124.3	122.8
132.5°	161.6	155.4	150.8	144.5	139.9	136.8	132.1	129.0
135°	169.4	164.7	160.1	153.9	149.2	144.5	139.9	136.8
137.5°	178.7	171.0	166.3	163.2	158.5	153.9	147.6	144.5
140°	191.2	181.8	174.1	167.8	164.7	160.1	155.4	152.3
142.5°	209.8	195.8	184.9	178.7	172.5	167.8	161.6	158.5
145°	237.8	217.6	203.6	192.7	184.9	178.7	172.5	169.4
147.5°	284.4	248.7	230.0	214.5	205.1	197.4	189.6	186.5
150°	360.6	324.8	275.1	248.7	234.7	225.4	217.6	212.9
152.5°	355.9	357.5	355.9	337.3	310.8	290.6	272.0	258.0
155°	348.1	349.7	349.7	348.1	346.6	345.0	341.9	338.8
157.5°	340.4	343.5	343.5	341.9	340.4	337.3	334.1	332.6
160°	331.0	332.6	334.1	332.6	332.6	329.5	326.4	324.8
162.5°	318.6	321.7	321.7	321.7	320.2	318.6	317.0	313.9
165°	303.1	306.2	307.7	307.7	306.2	304.6	301.5	300.0
167.5°	287.5	290.6	292.2	290.6	290.6	287.5	284.4	281.3
170°	293.7	287.5	276.6	272.0	272.0	268.9	264.2	264.2
172.5°	327.9	323.3	317.0	312.4	306.2	301.5	296.8	292.2
175°	337.3	335.7	334.1	329.5	326.4	321.7	318.6	313.9
177.5°	340.4	340.4	338.8	335.7	332.6	327.9	323.3	318.6
180°	341.9	341.9	341.9	341.9	341.9	341.9	341.9	341.9

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