

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: P236439

Luminaire Tested: **SKB2-LD5-9-W-UNV-L835-CD1-U all blades horizontal**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236439
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24072)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SKB2-LD5-9-W-UNV-L835-CD1-U all blades horizontal
Description: METALUX SKYBAR LED WAVESTREAM LUMINAIRE
2 BLADES WITH WIDE DISTRIBUTION LENS, ALL BLADES HORIZONTAL
Light Source: (476) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

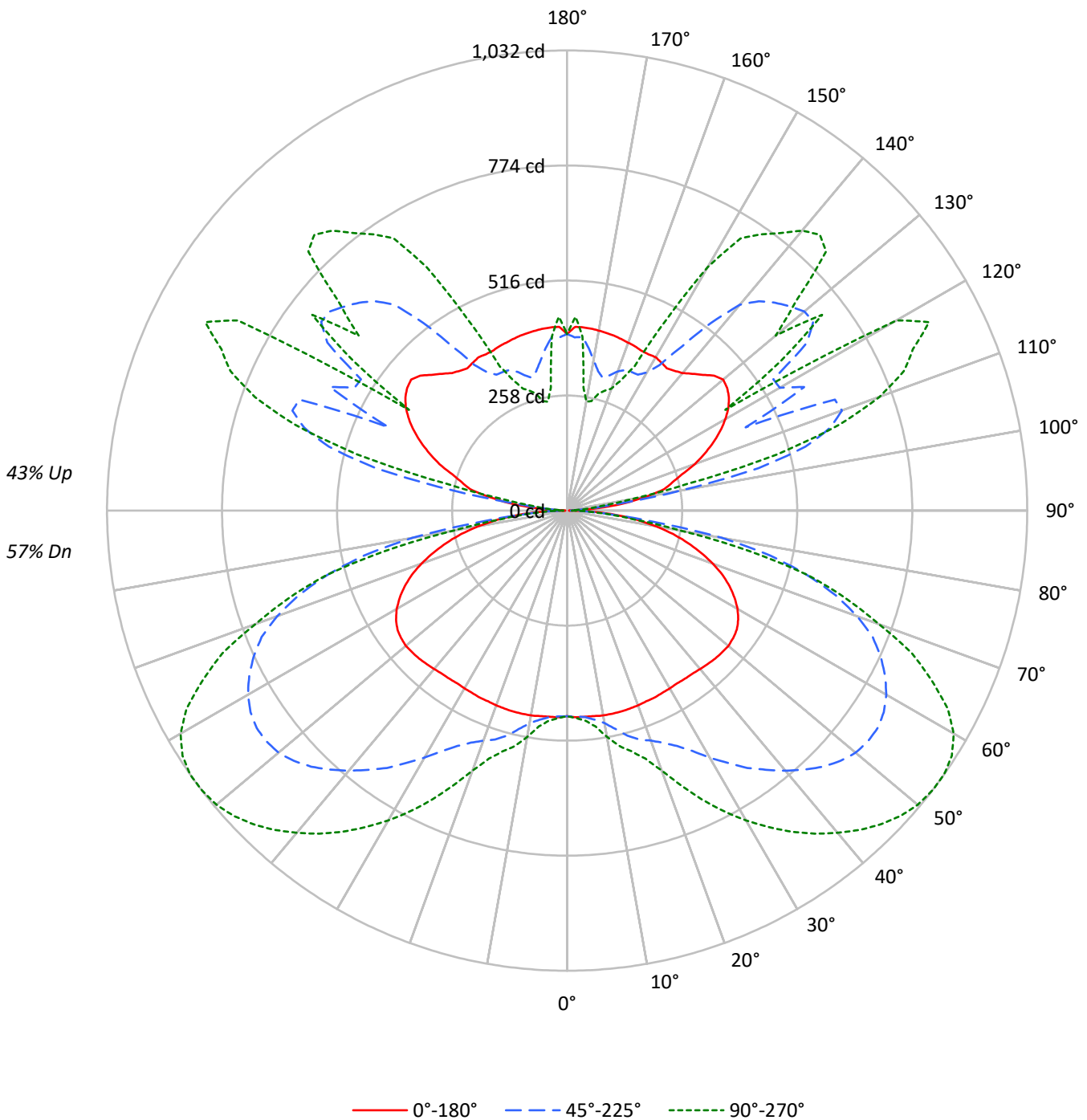
Lumens per Lamp: N/A
Luminaire Lumens: 6294.0 lumens
Efficiency: N/A
Efficacy: 83.5 lumens/watt
Spacing Criteria (0/90/45): 1.53 / 2.62 / 2.36
Luminous Opening: Rectangular (W 1.25' x L: 2' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 75.4
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-LD5-9-W-UNV-L835-CD1-U all blades horizontal

Luminous Intensity Polar Plot





TEST NUMBER: P236439

CATALOG NUMBER: SKB2-LD5-9-W-UNV-L835-CD1-U all blades horizontal

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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57
1	97	92	87	83	90	86	82	78	73	70	67	62	60	58	52	50	49	44
2	87	78	71	65	80	73	66	61	62	57	53	52	49	45	43	41	38	34
3	78	67	59	52	72	62	55	49	53	47	42	45	40	36	37	33	30	26
4	71	58	49	42	65	54	46	40	46	40	35	39	34	30	32	28	25	21
5	64	51	42	35	59	48	39	33	41	34	29	34	29	25	28	24	20	17
6	59	45	36	30	54	42	34	28	36	29	24	30	25	21	25	21	17	14
7	54	40	32	25	50	38	30	24	32	26	21	27	22	18	22	18	15	12
8	50	36	28	22	46	34	26	21	29	23	18	24	19	15	20	16	13	10
9	46	33	25	19	43	31	23	18	26	20	16	22	17	13	18	14	11	9
10	43	30	22	17	40	28	21	16	24	18	14	20	15	12	17	13	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1986	1986	1986
5°	2005	2009	2044
10°	2040	2115	2254
15°	2080	2330	2491
20°	2130	2515	2843
25°	2200	2767	3394
30°	2288	3179	3988
35°	2419	3703	4620
40°	2607	4280	5301
45°	2858	4945	6057
50°	3162	5658	6875
55°	3489	6381	7746
60°	3800	7118	8621
65°	4100	7905	9195
70°	4372	8709	9370
75°	4663	9253	9298
80°	4979	8745	6412
85°	5404	4649	4421



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CATALOG NUMBER: SKB2-LD5-9-W-UNV-L835-CD1-U all blades horizontal

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.3	0.7
10°-20°	147.1	2.3
20°-30°	274.4	4.4
30°-40°	432.6	6.9
40°-50°	597.6	9.5
50°-60°	717.0	11.4
60°-70°	711.6	11.3
70°-80°	512.5	8.1
80°-90°	137.1	2.2
90°-100°	86.5	1.4
100°-110°	464.0	7.4
110°-120°	594.4	9.4
120°-130°	495.9	7.9
130°-140°	461.6	7.3
140°-150°	315.2	5.0
150°-160°	171.6	2.7
160°-170°	94.5	1.5
170°-180°	35.2	0.6
0°-30°	466.8	7.4
0°-40°	899.3	14.3
0°-60°	2214.0	35.2
0°-90°	3575.2	56.8
90°-120°	1144.9	18.2
90°-150°	2417.5	38.4
90°-180°	2719.0	43.2
0°-180°	6294.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	461	461	461	461	461	
5°	464	468	465	470	473	44
15°	467	482	523	548	559	132
25°	463	512	582	677	714	214
35°	460	538	704	842	879	289
45°	469	586	812	959	995	363
55°	465	629	850	993	1032	414
65°	402	589	776	883	902	396
75°	280	450	556	566	559	294
85°	109	150	94	88	90	107
90°	4	7	8	7	9	12
95°	83	75	42	45	44	86
105°	244	403	554	530	488	259
115°	362	491	441	838	856	357
125°	443	496	657	683	585	394
135°	430	351	659	805	821	334
145°	390	318	450	668	756	248
155°	395	317	343	375	356	184
165°	406	373	308	306	271	115
175°	412	407	391	352	392	39
180°	396	396	396	396	396	



TEST NUMBER: P236439

CATALOG NUMBER: SKB2-LD5-9-W-UNV-L835-CD1-U all blades horizontal

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	461.2	461.2	461.2	461.2	461.2	461.2	461.2	461.2	461.2	461.2	461.2
2.5°	463.9	463.9	463.9	463.9	464.8	466.6	465.7	463.9	463.0	462.1	461.2
5°	463.9	463.9	463.9	464.8	466.6	468.5	468.5	466.6	465.7	464.8	465.7
7.5°	464.8	464.8	465.7	467.6	469.4	471.2	472.1	473.0	473.0	473.0	473.9
10°	466.6	466.6	467.6	470.3	472.1	476.6	478.4	478.4	480.2	483.8	488.4
12.5°	466.6	466.6	469.4	471.2	476.6	481.1	483.8	488.4	494.7	501.9	508.2
15°	466.6	466.6	469.4	473.0	478.4	484.7	493.8	502.8	512.8	522.7	530.0
17.5°	465.7	466.6	469.4	475.7	480.2	493.8	505.5	519.1	530.0	538.1	544.4
20°	464.8	465.7	469.4	475.7	485.6	504.6	520.0	532.7	541.7	548.9	558.0
22.5°	463.0	464.8	469.4	476.6	492.0	513.7	530.0	540.8	551.7	563.4	577.0
25°	463.0	463.9	470.3	480.2	500.1	524.5	537.2	548.0	564.3	582.4	603.2
27.5°	461.2	462.1	469.4	484.7	508.2	531.8	543.5	560.7	582.4	607.7	635.8
30°	460.3	461.2	468.5	489.3	515.5	536.3	551.7	576.1	606.8	639.4	669.2
32.5°	459.4	461.2	470.3	495.6	520.9	541.7	563.4	596.9	635.8	671.0	705.4
35°	460.3	461.2	473.0	501.9	525.4	549.8	578.8	621.3	664.7	704.5	738.9
37.5°	461.2	463.0	478.4	508.2	530.0	560.7	599.6	647.5	692.7	732.5	770.5
40°	463.9	465.7	484.7	513.7	537.2	576.1	623.1	674.6	720.8	761.5	800.4
42.5°	466.6	468.5	491.1	518.2	547.1	594.2	645.7	699.1	747.0	787.7	828.4
45°	469.4	470.3	497.4	521.8	558.9	612.2	667.4	721.7	770.5	812.1	852.8
47.5°	471.2	472.1	502.8	526.3	571.6	629.4	686.4	740.7	789.5	831.1	870.9
50°	472.1	473.0	504.6	530.9	584.2	643.9	701.8	756.0	804.0	844.7	883.6
52.5°	469.4	472.1	501.0	533.6	593.3	652.9	711.7	764.2	810.3	850.1	889.9
55°	464.8	467.6	494.7	535.4	598.7	658.4	716.2	766.9	810.3	850.1	889.0
57.5°	454.9	460.3	485.6	534.5	596.9	657.5	713.5	760.6	804.0	842.0	879.9
60°	441.3	448.6	473.0	528.1	590.5	650.2	701.8	747.0	788.6	826.6	864.6
62.5°	423.2	432.3	458.5	517.3	578.8	636.7	684.6	727.1	767.8	804.0	841.0
65°	402.4	411.5	443.1	501.9	561.6	615.9	660.2	701.8	740.7	775.9	810.3
67.5°	377.1	385.3	422.3	482.0	538.1	586.9	630.3	670.1	706.3	741.6	769.6
70°	347.3	355.4	398.8	456.7	507.3	554.4	594.2	632.1	666.5	691.8	711.7
72.5°	314.7	323.8	372.6	426.0	471.2	514.6	553.5	586.9	610.4	631.2	648.4
75°	280.3	292.1	343.7	388.9	430.5	470.3	503.7	526.3	547.1	556.2	560.7
77.5°	243.3	258.6	308.4	348.2	384.3	416.9	438.6	454.9	461.2	466.6	467.6
80°	200.8	222.5	265.0	297.5	327.4	349.1	361.7	364.5	362.6	352.7	328.3
82.5°	156.5	182.7	213.4	238.7	253.2	260.5	263.2	246.0	221.6	196.2	181.8
85°	109.4	129.3	150.1	159.2	158.3	142.0	121.2	107.6	100.4	94.1	92.2
87.5°	55.2	59.7	64.2	54.3	45.2	43.4	44.3	42.5	43.4	42.5	42.5
90°	4.5	4.5	5.4	5.4	6.3	7.2	8.1	9.0	9.0	8.1	8.1
92.5°	19.9	18.1	17.2	16.3	17.2	17.2	17.2	15.4	15.4	15.4	14.5
95°	83.2	97.7	107.6	108.5	84.1	65.1	56.1	48.8	44.3	42.5	40.7
97.5°	132.9	156.5	184.5	207.1	219.8	210.7	176.3	137.5	116.7	105.8	95.9
100°	179.1	203.5	241.5	277.6	309.3	327.4	330.1	321.9	291.2	258.6	218.9
102.5°	223.4	239.7	288.5	331.0	368.1	401.5	423.2	438.6	443.1	439.5	421.4
105°	244.2	250.5	306.6	355.4	391.6	415.1	461.2	505.5	541.7	553.5	552.6
107.5°	269.5	261.4	324.7	375.3	404.2	428.7	448.6	539.9	577.0	618.6	645.7
110°	304.8	280.3	343.7	406.1	444.0	441.3	458.5	464.8	615.9	655.7	684.6



TEST NUMBER: P236439

CATALOG NUMBER: SKB2-LD5-9-W-UNV-L835-CD1-U all blades horizontal

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	333.7	297.5	336.4	418.7	465.7	476.6	477.5	491.1	458.5	650.2	729.8
115°	361.7	319.2	321.0	419.6	471.2	511.0	491.1	512.8	535.4	441.3	591.4
117.5°	387.1	343.7	317.4	410.6	478.4	524.5	548.9	506.4	540.8	599.6	458.5
120°	409.7	367.2	327.4	388.0	484.7	537.2	577.9	587.8	523.6	550.8	633.0
122.5°	428.7	388.9	342.7	369.0	473.0	546.2	590.5	625.8	621.3	548.0	547.1
125°	443.1	407.0	355.4	350.9	444.9	547.1	597.8	640.3	664.7	656.6	584.2
127.5°	452.2	420.5	363.5	342.7	407.9	520.9	598.7	636.7	672.8	695.4	691.8
130°	456.7	430.5	366.3	348.2	377.1	477.5	582.4	625.8	658.4	694.5	722.6
132.5°	447.7	426.9	360.8	351.8	347.3	414.2	530.9	609.5	642.1	677.4	718.1
135°	430.5	415.1	356.3	348.2	331.0	370.8	462.1	566.1	624.9	659.3	693.6
137.5°	416.0	405.1	353.6	338.2	330.1	340.9	398.8	496.5	593.3	636.7	666.5
140°	402.4	396.1	350.0	326.5	330.1	322.9	362.6	428.7	524.5	602.3	640.3
142.5°	395.2	389.8	347.3	316.5	324.7	322.9	337.3	377.1	449.5	530.0	601.4
145°	389.8	385.3	345.5	312.0	314.7	321.0	321.9	347.3	388.9	450.4	518.2
147.5°	393.4	386.2	347.3	311.1	305.7	320.1	327.4	331.0	354.5	387.1	437.7
150°	397.0	389.8	358.1	317.4	302.1	316.5	331.0	334.6	340.9	357.2	377.1
152.5°	395.2	391.6	373.5	335.5	312.0	312.9	326.5	333.7	340.0	343.7	352.7
155°	395.2	392.5	382.5	347.3	322.9	311.1	317.4	329.2	338.2	342.7	343.7
157.5°	398.8	395.2	389.8	360.8	332.8	312.0	311.1	320.1	333.7	340.9	345.5
160°	400.6	397.0	397.0	373.5	347.3	326.5	311.1	313.8	322.9	331.9	339.1
162.5°	403.3	399.7	400.6	388.0	365.4	343.7	326.5	312.9	312.9	318.3	323.8
165°	406.1	403.3	403.3	400.6	382.5	362.6	343.7	328.3	314.7	308.4	307.5
167.5°	407.9	406.1	405.1	406.1	397.9	381.6	364.5	347.3	332.8	320.1	307.5
170°	409.7	408.8	407.9	407.9	407.9	400.6	385.3	370.8	356.3	341.8	327.4
172.5°	411.5	410.6	408.8	407.9	407.9	407.9	402.4	391.6	380.7	368.1	354.5
175°	412.4	412.4	411.5	409.7	407.9	407.0	404.2	399.7	395.2	390.7	381.6
177.5°	412.4	412.4	411.5	410.6	409.7	408.8	404.2	399.7	393.4	388.9	382.5
180°	396.1	396.1	396.1	396.1	396.1	396.1	396.1	396.1	396.1	396.1	396.1



TEST NUMBER: P236439

CATALOG NUMBER: SKB2-LD5-9-W-UNV-L835-CD1-U all blades horizontal

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	461.2	461.2	461.2	461.2	461.2	461.2	461.2	461.2
2.5°	461.2	461.2	462.1	463.9	463.9	464.8	465.7	465.7
5°	466.6	467.6	469.4	471.2	471.2	472.1	472.1	473.0
7.5°	474.8	476.6	479.3	482.9	484.7	484.7	486.5	488.4
10°	493.8	496.5	502.8	507.3	510.1	511.9	514.6	515.5
12.5°	516.4	520.9	528.1	532.7	535.4	537.2	539.0	540.8
15°	536.3	540.8	546.2	549.8	552.6	554.4	556.2	558.9
17.5°	550.8	556.2	564.3	570.6	575.2	577.9	581.5	583.3
20°	569.7	579.7	591.4	600.5	608.6	612.2	617.7	620.4
22.5°	593.3	610.4	627.6	639.4	651.1	655.7	662.9	666.5
25°	627.6	649.3	670.1	683.7	697.3	701.8	710.8	714.4
27.5°	664.7	690.9	713.5	728.0	741.6	748.8	756.9	759.7
30°	703.6	732.5	755.1	771.4	785.9	792.2	799.4	802.2
32.5°	740.7	772.3	794.9	812.1	826.6	833.8	839.2	842.0
35°	775.9	808.5	832.9	850.1	864.6	871.8	877.2	879.0
37.5°	809.4	841.0	866.4	885.4	900.7	908.0	911.6	913.4
40°	842.0	873.6	899.8	917.9	933.3	938.7	943.2	943.2
42.5°	869.1	901.6	926.1	945.0	959.5	965.8	969.5	971.3
45°	891.7	923.3	949.6	968.6	983.0	990.3	992.1	994.8
47.5°	909.8	941.4	967.7	987.6	1001.1	1008.4	1011.1	1013.8
50°	922.4	955.0	980.3	999.3	1013.8	1021.9	1025.5	1026.4
52.5°	927.9	959.5	984.8	1003.8	1019.2	1028.2	1032.8	1031.9
55°	926.1	956.8	983.0	1002.9	1018.3	1028.2	1031.9	1031.9
57.5°	917.0	947.8	972.2	993.0	1008.4	1017.4	1021.0	1022.8
60°	898.9	929.7	953.2	973.1	986.6	996.6	999.3	1001.1
62.5°	873.6	903.4	925.2	940.5	952.3	956.8	959.5	962.2
65°	840.1	863.7	877.2	889.0	897.1	898.9	899.8	902.5
67.5°	789.5	805.8	819.3	828.4	837.4	837.4	835.6	837.4
70°	729.8	744.3	748.8	747.9	751.5	747.0	743.4	744.3
72.5°	652.0	655.7	658.4	656.6	661.1	658.4	655.7	656.6
75°	563.4	566.1	568.8	563.4	567.9	561.6	557.1	558.9
77.5°	462.1	455.8	448.6	431.4	430.5	417.8	413.3	419.6
80°	310.2	295.7	284.9	267.7	264.1	256.8	251.4	258.6
82.5°	168.2	162.8	160.1	152.8	155.5	151.0	150.1	152.8
85°	88.6	88.6	88.6	86.8	89.5	87.7	87.7	89.5
87.5°	41.6	41.6	42.5	40.7	43.4	42.5	43.4	44.3
90°	7.2	7.2	8.1	6.3	9.0	7.2	7.2	9.0
92.5°	13.6	14.5	13.6	13.6	11.8	12.7	11.8	11.8
95°	41.6	43.4	44.3	45.2	45.2	46.1	45.2	44.3
97.5°	89.5	86.8	81.4	81.4	77.8	76.0	75.1	72.3
100°	191.7	179.1	163.7	160.1	152.8	147.4	147.4	142.9
102.5°	392.5	363.5	338.2	324.7	303.0	289.4	286.7	275.8
105°	548.0	547.1	532.7	527.2	512.8	502.8	499.2	488.4
107.5°	653.8	659.3	656.6	658.4	652.9	648.4	647.5	639.4
110°	710.8	735.2	747.9	756.0	755.1	752.4	750.6	745.2



TEST NUMBER: P236439

CATALOG NUMBER: SKB2-LD5-9-W-UNV-L835-CD1-U all blades horizontal

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	753.3	774.1	789.5	800.4	808.5	816.6	818.4	817.5
115°	772.3	823.0	835.6	840.1	844.7	851.9	856.4	855.5
117.5°	476.6	652.9	812.1	869.1	891.7	904.4	913.4	915.2
120°	561.6	435.9	460.3	558.0	683.7	775.9	823.0	852.8
122.5°	626.7	675.6	580.6	473.9	416.9	415.1	412.4	420.5
125°	539.9	587.8	661.1	705.4	704.5	659.3	620.4	585.1
127.5°	643.0	578.8	568.8	608.6	652.9	682.8	708.1	720.8
130°	734.3	721.7	676.5	628.5	605.0	602.3	605.9	610.4
132.5°	750.6	775.0	782.3	774.1	749.7	728.0	709.9	697.3
135°	728.0	764.2	794.0	816.6	822.1	823.0	823.9	821.2
137.5°	699.1	729.8	765.1	799.4	824.8	832.0	836.5	839.2
140°	667.4	697.3	726.2	752.4	789.5	810.3	816.6	819.3
142.5°	640.3	662.9	690.0	716.2	738.9	763.3	782.3	784.1
145°	590.5	631.2	658.4	678.3	700.0	716.2	742.5	756.0
147.5°	499.2	558.9	609.5	639.4	663.8	681.0	699.1	723.5
150°	416.9	470.3	511.9	548.0	591.4	615.0	638.5	630.3
152.5°	367.2	393.4	422.3	451.3	483.8	497.4	496.5	484.7
155°	351.8	357.2	369.9	379.8	397.9	403.3	368.1	356.3
157.5°	348.2	343.7	348.2	349.1	355.4	329.2	318.3	316.5
160°	342.7	342.7	340.9	333.7	320.1	294.8	291.2	291.2
162.5°	329.2	331.0	329.2	322.9	298.4	284.9	282.2	282.2
165°	309.3	310.2	309.3	302.1	284.0	270.4	270.4	271.3
167.5°	296.6	292.1	290.3	279.4	269.5	258.6	250.5	251.4
170°	314.7	304.8	295.7	282.2	274.9	268.6	253.2	247.8
172.5°	340.9	329.2	320.1	312.0	310.2	313.8	304.8	278.5
175°	370.8	359.9	352.7	351.8	356.3	371.7	378.9	391.6
177.5°	374.4	363.5	359.0	363.5	374.4	396.1	422.3	435.0
180°	396.1	396.1	396.1	396.1	396.1	396.1	396.1	396.1

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