

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: P236459

Luminaire Tested: **SKB2-LD5-15-W-UNV-L850-CD2-U all blades tilted out 20 degrees**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236459
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-L850-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) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

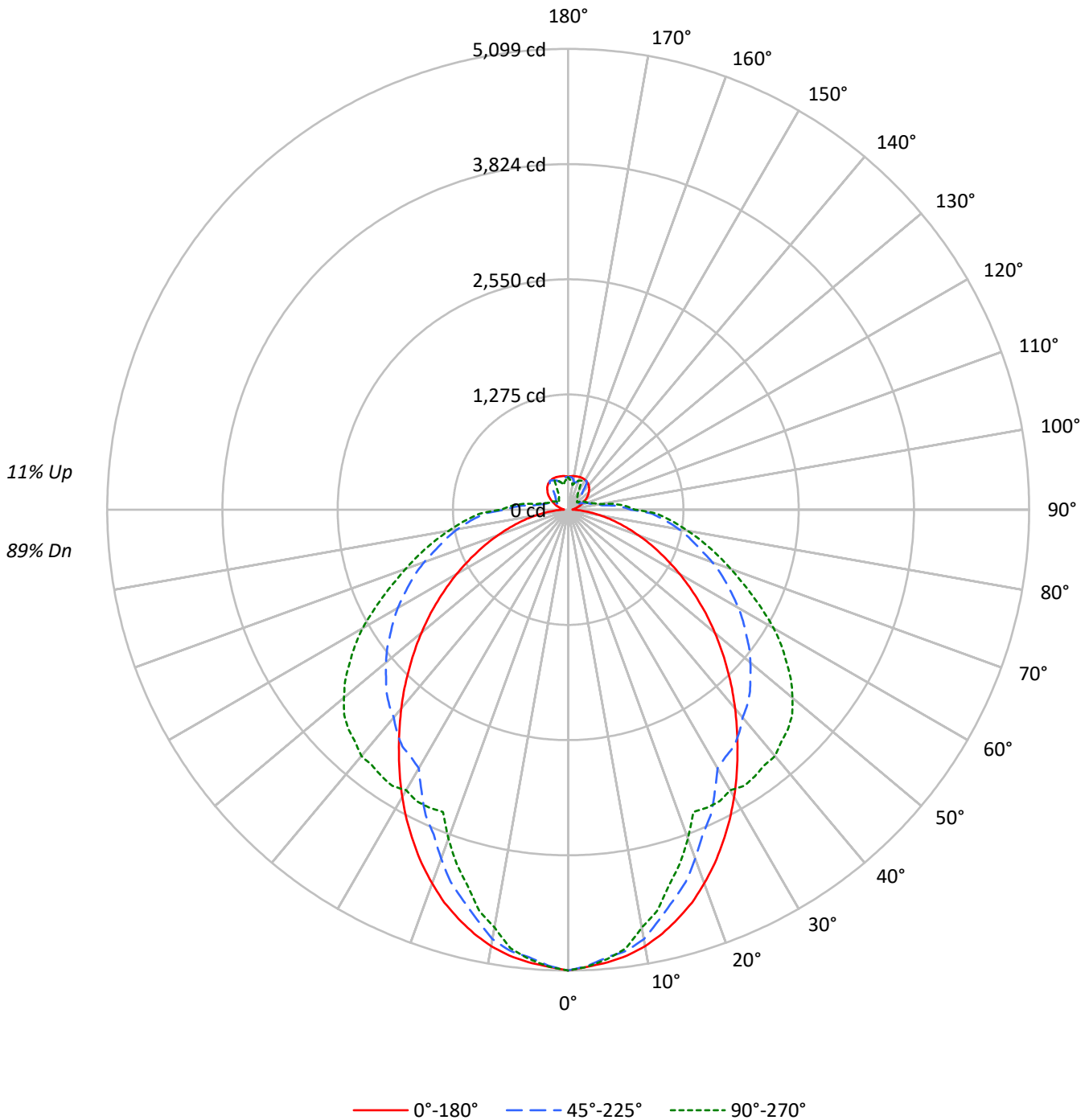
Lumens per Lamp: N/A
Luminaire Lumens: 15781.0 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Spacing Criteria (0/90/45): 1.09 / 1.03 / 1.25
Luminous Opening: Rectangular w/ Sides (W: 1.25' x L: 2' x H: 0.21')
CIE Type: Semi-Direct

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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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°	21955	21955	21955
5°	21532	21127	21256
10°	21051	20405	19930
15°	20321	18989	18358
20°	19426	17596	16723
25°	18361	16271	16029
30°	17221	14794	16254
35°	15998	14824	16946
40°	14836	14540	17543
45°	13713	14535	17938
50°	12618	14345	18094
55°	11512	14157	17879
60°	10398	14074	17544
65°	9246	13961	16887
70°	8086	13966	16510
75°	6924	14083	16579
80°	5650	14788	17066
85°	4086	15834	18658



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	472.0	3.0
10°-20°	1262.8	8.0
20°-30°	1749.3	11.1
30°-40°	2082.7	13.2
40°-50°	2236.6	14.2
50°-60°	2131.0	13.5
60°-70°	1799.0	11.4
70°-80°	1376.2	8.7
80°-90°	942.0	6.0
90°-100°	467.2	3.0
100°-110°	245.5	1.6
110°-120°	192.4	1.2
120°-130°	174.7	1.1
130°-140°	179.7	1.1
140°-150°	180.3	1.1
150°-160°	160.7	1.0
160°-170°	95.5	0.6
170°-180°	33.3	0.2
0°-30°	3484.0	22.1
0°-40°	5566.7	35.3
0°-60°	9934.3	63.0
0°-90°	14051.5	89.0
90°-120°	905.2	5.7
90°-150°	1440.0	9.1
90°-180°	1729.0	11.0
0°-180°	15781.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5099	5099	5099	5099	5099	
5°	5027	5036	4970	4996	4990	476
15°	4686	4663	4479	4379	4302	1318
25°	4053	3966	3731	3562	3636	1864
35°	3266	3205	3199	3477	3600	2043
45°	2487	2517	2844	3255	3437	1921
55°	1762	1939	2402	2822	2949	1578
65°	1110	1447	1933	2194	2250	1104
75°	578	1058	1452	1590	1616	616
85°	181	728	1022	1083	1097	186
90°	46	465	691	731	740	34
95°	59	293	509	578	596	52
105°	108	156	255	273	279	116
115°	181	180	175	209	207	180
125°	263	282	160	143	157	234
135°	328	351	199	165	144	252
145°	369	340	353	208	178	231
155°	384	316	359	367	356	177
165°	380	360	312	323	315	108
175°	372	370	361	349	330	36
180°	359	359	359	359	359	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5099.2	5099.2	5099.2	5099.2	5099.2	5099.2	5099.2	5099.2	5099.2	5099.2	5099.2
2.5°	5060.0	5076.3	5092.7	5100.8	5094.3	5084.5	5086.1	5087.8	5055.1	5048.6	5035.5
5°	5027.4	5043.7	5053.5	5053.5	5043.7	5027.4	5019.2	5012.7	4975.1	4970.2	4960.4
7.5°	4976.7	4989.8	4993.1	4986.5	4966.9	4942.5	4945.7	4955.5	4927.8	4922.9	4909.8
10°	4903.3	4913.1	4909.8	4891.8	4870.6	4870.6	4877.1	4877.1	4842.9	4824.9	4789.0
12.5°	4805.3	4811.8	4803.7	4782.4	4785.7	4777.5	4777.5	4754.7	4689.4	4646.9	4593.0
15°	4686.1	4691.0	4673.0	4669.8	4671.4	4655.1	4625.7	4570.2	4496.7	4478.7	4446.1
17.5°	4557.1	4553.9	4535.9	4540.8	4537.5	4493.4	4439.6	4387.3	4351.4	4320.4	4271.4
20°	4400.4	4398.7	4385.7	4395.5	4371.0	4304.0	4266.5	4222.4	4179.9	4108.1	4021.6
22.5°	4235.5	4230.6	4225.7	4227.3	4191.4	4116.3	4098.3	4044.4	3957.9	3887.7	3864.8
25°	4052.6	4052.6	4052.6	4042.8	3993.8	3938.3	3920.3	3822.4	3765.2	3730.9	3675.4
27.5°	3866.4	3866.4	3869.7	3850.1	3801.1	3761.9	3704.8	3634.6	3608.5	3513.8	3412.5
30°	3672.1	3675.4	3678.7	3647.7	3613.4	3567.6	3507.2	3471.3	3389.7	3304.8	3348.9
32.5°	3468.0	3479.5	3479.5	3451.7	3425.6	3361.9	3340.7	3277.0	3195.4	3239.5	3332.5
35°	3265.6	3290.1	3277.0	3257.4	3229.7	3180.7	3162.7	3069.6	3110.5	3198.6	3257.4
37.5°	3066.4	3092.5	3076.2	3069.6	3030.5	3028.8	2957.0	2961.9	3046.8	3108.8	3164.3
40°	2870.4	2891.7	2883.5	2877.0	2854.1	2850.9	2806.8	2877.0	2947.2	3002.7	3110.5
42.5°	2681.0	2699.0	2692.5	2687.6	2690.8	2661.4	2699.0	2779.0	2834.5	2930.9	3041.9
45°	2486.7	2504.7	2504.7	2506.3	2522.7	2511.2	2588.0	2651.7	2733.3	2844.3	2937.4
47.5°	2300.6	2315.3	2320.2	2336.5	2341.4	2383.9	2465.5	2529.2	2640.2	2733.3	2852.5
50°	2117.7	2130.8	2140.6	2171.6	2174.9	2259.8	2326.7	2423.1	2521.0	2630.4	2751.3
52.5°	1939.8	1949.6	1969.1	2001.8	2026.3	2127.5	2201.0	2308.8	2406.7	2524.3	2630.4
55°	1761.8	1773.2	1801.0	1827.1	1890.8	1987.1	2081.8	2186.3	2299.0	2401.8	2521.0
57.5°	1590.3	1605.0	1632.8	1665.4	1758.5	1856.5	1965.9	2073.6	2184.7	2292.4	2398.6
60°	1425.4	1440.1	1469.5	1516.9	1629.5	1737.3	1850.0	1964.2	2072.0	2176.5	2263.0
62.5°	1263.8	1278.5	1304.6	1383.0	1498.9	1624.6	1738.9	1854.8	1956.1	2049.2	2140.6
65°	1110.3	1125.0	1151.1	1257.2	1381.3	1513.6	1637.7	1742.2	1841.8	1933.2	2019.8
67.5°	965.0	978.0	1010.7	1141.3	1275.2	1410.7	1529.9	1634.4	1734.0	1820.6	1884.2
70°	826.2	839.3	886.6	1031.9	1175.6	1312.8	1423.8	1534.8	1626.3	1693.2	1750.4
72.5°	697.2	707.0	778.8	934.0	1084.2	1211.5	1332.4	1433.6	1508.7	1564.2	1614.8
75°	578.0	586.2	689.0	850.7	994.4	1121.7	1234.4	1322.6	1389.5	1451.6	1500.5
77.5°	467.0	484.9	610.7	773.9	907.8	1033.6	1128.3	1219.7	1296.4	1350.3	1387.9
80°	362.5	393.5	542.1	695.6	831.1	935.6	1043.4	1136.4	1200.1	1244.2	1270.3
82.5°	266.1	316.8	475.1	622.1	742.9	863.7	961.7	1043.4	1098.9	1133.2	1156.0
85°	181.2	253.1	408.2	548.6	674.3	782.1	870.3	943.8	992.7	1022.1	1043.4
87.5°	112.7	202.5	352.7	483.3	592.7	690.7	773.9	842.5	888.2	917.6	932.3
90°	45.7	132.3	251.4	344.5	424.5	506.2	574.7	631.9	671.1	690.7	702.1
92.5°	47.4	96.3	179.6	264.5	339.6	421.3	493.1	553.5	592.7	615.6	627.0
95°	58.8	89.8	132.3	202.5	262.9	323.3	375.5	422.9	475.1	509.4	530.7
97.5°	66.9	101.2	117.6	163.3	218.8	269.4	310.2	342.9	364.1	378.8	390.2
100°	80.0	120.8	129.0	132.3	187.8	235.1	267.8	293.9	311.9	323.3	329.8
102.5°	93.1	133.9	143.7	135.5	151.8	204.1	240.0	262.9	274.3	282.5	287.4
105°	107.8	145.3	164.9	150.2	140.4	171.4	212.3	238.4	249.8	254.7	256.3
107.5°	125.7	155.1	194.3	161.6	150.2	142.1	181.2	212.3	230.2	236.8	238.4
110°	143.7	163.3	213.9	176.3	163.3	147.0	143.7	184.5	205.7	218.8	225.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	161.6	169.8	227.0	200.8	173.1	160.0	143.7	150.2	181.2	197.6	207.4
115°	181.2	179.6	233.5	241.7	187.8	173.1	156.7	142.1	150.2	174.7	189.4
117.5°	200.8	187.8	241.7	274.3	207.4	182.9	168.2	151.8	140.4	147.0	168.2
120°	222.1	202.5	248.2	293.9	238.4	195.9	179.6	164.9	150.2	140.4	140.4
122.5°	241.7	218.8	254.7	298.8	285.7	215.5	189.4	174.7	161.6	148.6	140.4
125°	262.9	236.8	261.2	303.7	321.7	241.7	204.1	184.5	171.4	160.0	148.6
127.5°	280.8	256.3	264.5	307.0	338.0	277.6	222.1	194.3	179.6	169.8	158.4
130°	297.2	275.9	269.4	308.6	339.6	341.3	248.2	209.0	189.4	178.0	168.2
132.5°	311.9	295.5	272.7	310.2	339.6	364.1	285.7	230.2	202.5	186.1	176.3
135°	328.2	313.5	275.9	311.9	339.6	362.5	354.3	261.2	220.4	199.2	184.5
137.5°	341.3	329.8	279.2	311.9	339.6	360.8	377.2	305.3	246.6	215.5	199.2
140°	352.7	344.5	290.6	311.9	338.0	359.2	372.3	369.0	284.1	241.7	217.2
142.5°	362.5	354.3	311.9	310.2	334.7	354.3	369.0	377.2	360.8	279.2	243.3
145°	369.0	362.5	329.8	307.0	329.8	349.4	364.1	373.9	380.4	352.7	282.5
147.5°	373.9	369.0	346.2	302.1	324.9	344.5	359.2	369.0	375.5	378.8	362.5
150°	378.8	375.5	357.6	308.6	320.0	338.0	352.7	364.1	370.6	373.9	377.2
152.5°	382.1	380.4	367.4	328.2	315.1	331.5	344.5	355.9	364.1	367.4	370.6
155°	383.7	382.1	372.3	349.4	308.6	323.3	336.4	347.8	354.3	359.2	364.1
157.5°	383.7	382.1	375.5	360.8	321.7	313.5	326.6	336.4	344.5	351.0	354.3
160°	383.7	383.7	377.2	367.4	346.2	308.6	315.1	324.9	333.1	338.0	342.9
162.5°	382.1	382.1	378.8	372.3	359.2	334.7	305.3	313.5	320.0	324.9	329.8
165°	380.4	380.4	378.8	373.9	365.7	354.3	334.7	308.6	305.3	311.9	315.1
167.5°	378.8	378.8	378.8	373.9	369.0	362.5	354.3	339.6	315.1	302.1	298.8
170°	377.2	377.2	377.2	375.5	372.3	367.4	362.5	355.9	347.8	338.0	326.6
172.5°	375.5	375.5	373.9	373.9	372.3	369.0	367.4	364.1	359.2	354.3	347.8
175°	372.3	373.9	372.3	372.3	370.6	369.0	367.4	365.7	362.5	360.8	357.6
177.5°	370.6	370.6	370.6	370.6	369.0	369.0	367.4	365.7	364.1	362.5	359.2
180°	359.2	359.2	359.2	359.2	359.2	359.2	359.2	359.2	359.2	359.2	359.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	5099.2	5099.2	5099.2	5099.2	5099.2	5099.2	5099.2	5099.2
2.5°	5027.4	5055.1	5066.5	5042.1	5035.5	5040.4	5043.7	5058.4
5°	4962.0	4994.7	5006.1	4984.9	4976.7	4976.7	4976.7	4989.8
7.5°	4904.9	4934.3	4934.3	4903.3	4890.2	4883.7	4880.4	4893.5
10°	4757.9	4766.1	4756.3	4709.0	4694.3	4684.5	4679.6	4692.6
12.5°	4575.1	4601.2	4597.9	4557.1	4549.0	4539.2	4532.6	4545.7
15°	4424.9	4437.9	4406.9	4351.4	4322.0	4305.7	4292.6	4302.4
17.5°	4214.2	4188.1	4145.7	4099.9	4103.2	4101.6	4095.0	4108.1
20°	3992.2	4013.4	3992.2	3949.7	3926.9	3897.5	3869.7	3871.3
22.5°	3846.9	3822.4	3726.0	3634.6	3611.7	3608.5	3613.4	3619.9
25°	3564.4	3538.3	3554.6	3569.3	3580.7	3608.5	3634.6	3636.2
27.5°	3450.1	3497.4	3553.0	3601.9	3633.0	3633.0	3639.5	3634.6
30°	3435.4	3521.9	3523.6	3544.8	3575.8	3580.7	3585.6	3584.0
32.5°	3397.8	3446.8	3456.6	3484.4	3541.5	3588.9	3621.5	3623.2
35°	3314.6	3371.7	3446.8	3507.2	3549.7	3577.4	3598.7	3600.3
37.5°	3265.6	3363.5	3407.6	3455.0	3490.9	3526.8	3554.6	3564.4
40°	3218.2	3286.8	3334.2	3415.8	3486.0	3530.1	3548.1	3557.8
42.5°	3126.8	3213.3	3306.4	3376.6	3433.8	3469.7	3479.5	3486.0
45°	3053.3	3149.7	3224.8	3285.2	3352.1	3401.1	3430.5	3437.0
47.5°	2965.1	3043.5	3128.4	3221.5	3288.4	3327.6	3348.9	3360.3
50°	2841.1	2950.5	3046.8	3121.9	3175.8	3203.5	3221.5	3237.8
52.5°	2743.1	2842.7	2916.2	2989.6	3050.1	3087.6	3102.3	3110.5
55°	2622.3	2703.9	2787.2	2857.4	2904.7	2932.5	2943.9	2948.8
57.5°	2486.7	2571.6	2643.5	2702.3	2746.4	2775.7	2788.8	2797.0
60°	2357.7	2429.6	2491.6	2552.1	2591.2	2614.1	2617.4	2625.5
62.5°	2223.9	2287.5	2339.8	2385.5	2416.5	2431.2	2432.9	2434.5
65°	2081.8	2137.3	2176.5	2212.4	2238.6	2253.2	2253.2	2250.0
67.5°	1941.4	1982.2	2019.8	2055.7	2072.0	2078.5	2070.4	2073.6
70°	1792.8	1825.5	1853.2	1881.0	1900.6	1915.3	1908.7	1912.0
72.5°	1660.5	1693.2	1719.3	1740.6	1755.2	1766.7	1760.1	1761.8
75°	1541.4	1562.6	1580.5	1598.5	1611.6	1619.7	1613.2	1616.5
77.5°	1417.3	1433.6	1445.0	1463.0	1474.4	1482.6	1476.0	1477.7
80°	1291.5	1307.9	1317.7	1327.5	1340.5	1347.1	1337.3	1338.9
82.5°	1172.3	1183.8	1193.6	1206.6	1214.8	1219.7	1216.4	1214.8
85°	1058.0	1064.6	1076.0	1089.1	1095.6	1102.1	1098.9	1097.2
87.5°	942.1	945.4	955.2	968.2	973.1	978.0	973.1	973.1
90°	710.3	718.4	725.0	736.4	741.3	742.9	739.7	739.7
92.5°	636.8	646.6	653.1	659.6	667.8	669.4	667.8	671.1
95°	548.6	563.3	574.7	581.3	589.4	592.7	591.1	596.0
97.5°	416.4	447.4	470.2	481.7	494.7	498.0	498.0	498.0
100°	338.0	344.5	351.0	352.7	357.6	359.2	357.6	359.2
102.5°	293.9	300.4	307.0	311.9	315.1	315.1	313.5	315.1
105°	261.2	266.1	271.0	275.9	277.6	279.2	277.6	279.2
107.5°	240.0	241.7	243.3	246.6	248.2	249.8	249.8	248.2
110°	227.0	228.6	228.6	230.2	230.2	230.2	227.0	225.3



TEST NUMBER: P236459

CATALOG NUMBER: SKB2-LD5-15-W-UNV-L850-CD2-U all blades tilted out 20 degrees

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	213.9	217.2	218.8	218.8	220.4	220.4	217.2	215.5
115°	197.6	204.1	207.4	210.6	212.3	210.6	209.0	207.4
117.5°	181.2	189.4	192.7	197.6	200.8	200.8	199.2	195.9
120°	161.6	171.4	178.0	184.5	187.8	187.8	186.1	184.5
122.5°	137.2	150.2	161.6	168.2	173.1	173.1	173.1	169.8
125°	142.1	135.5	138.8	147.0	156.7	158.4	156.7	156.7
127.5°	150.2	143.7	140.4	135.5	132.3	133.9	132.3	130.6
130°	160.0	153.5	148.6	143.7	140.4	135.5	130.6	129.0
132.5°	169.8	163.3	158.4	151.8	147.0	143.7	138.8	135.5
135°	178.0	173.1	168.2	161.6	156.7	151.8	147.0	143.7
137.5°	187.8	179.6	174.7	171.4	166.5	161.6	155.1	151.8
140°	200.8	191.0	182.9	176.3	173.1	168.2	163.3	160.0
142.5°	220.4	205.7	194.3	187.8	181.2	176.3	169.8	166.5
145°	249.8	228.6	213.9	202.5	194.3	187.8	181.2	178.0
147.5°	298.8	261.2	241.7	225.3	215.5	207.4	199.2	195.9
150°	378.8	341.3	289.0	261.2	246.6	236.8	228.6	223.7
152.5°	373.9	375.5	373.9	354.3	326.6	305.3	285.7	271.0
155°	365.7	367.4	367.4	365.7	364.1	362.5	359.2	355.9
157.5°	357.6	360.8	360.8	359.2	357.6	354.3	351.0	349.4
160°	347.8	349.4	351.0	349.4	349.4	346.2	342.9	341.3
162.5°	334.7	338.0	338.0	338.0	336.4	334.7	333.1	329.8
165°	318.4	321.7	323.3	323.3	321.7	320.0	316.8	315.1
167.5°	302.1	305.3	307.0	305.3	305.3	302.1	298.8	295.5
170°	308.6	302.1	290.6	285.7	285.7	282.5	277.6	277.6
172.5°	344.5	339.6	333.1	328.2	321.7	316.8	311.9	307.0
175°	354.3	352.7	351.0	346.2	342.9	338.0	334.7	329.8
177.5°	357.6	357.6	355.9	352.7	349.4	344.5	339.6	334.7
180°	359.2	359.2	359.2	359.2	359.2	359.2	359.2	359.2

(END OF REPORT)