

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: P232561

Luminaire Tested: **4SKB1-LD5-3-W-UNV-L835-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232561
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1709-317-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SKB1-LD5-3-W-UNV-L835-CD1-U
Description: METALUX SKYBAR 4' WAVESTREAM STRIP
WITH WIDE LENS
Light Source: (196) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2825.0 lumens
Efficiency: N/A
Efficacy: 131.8 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.48 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.29')
CIE Type: Semi-Direct

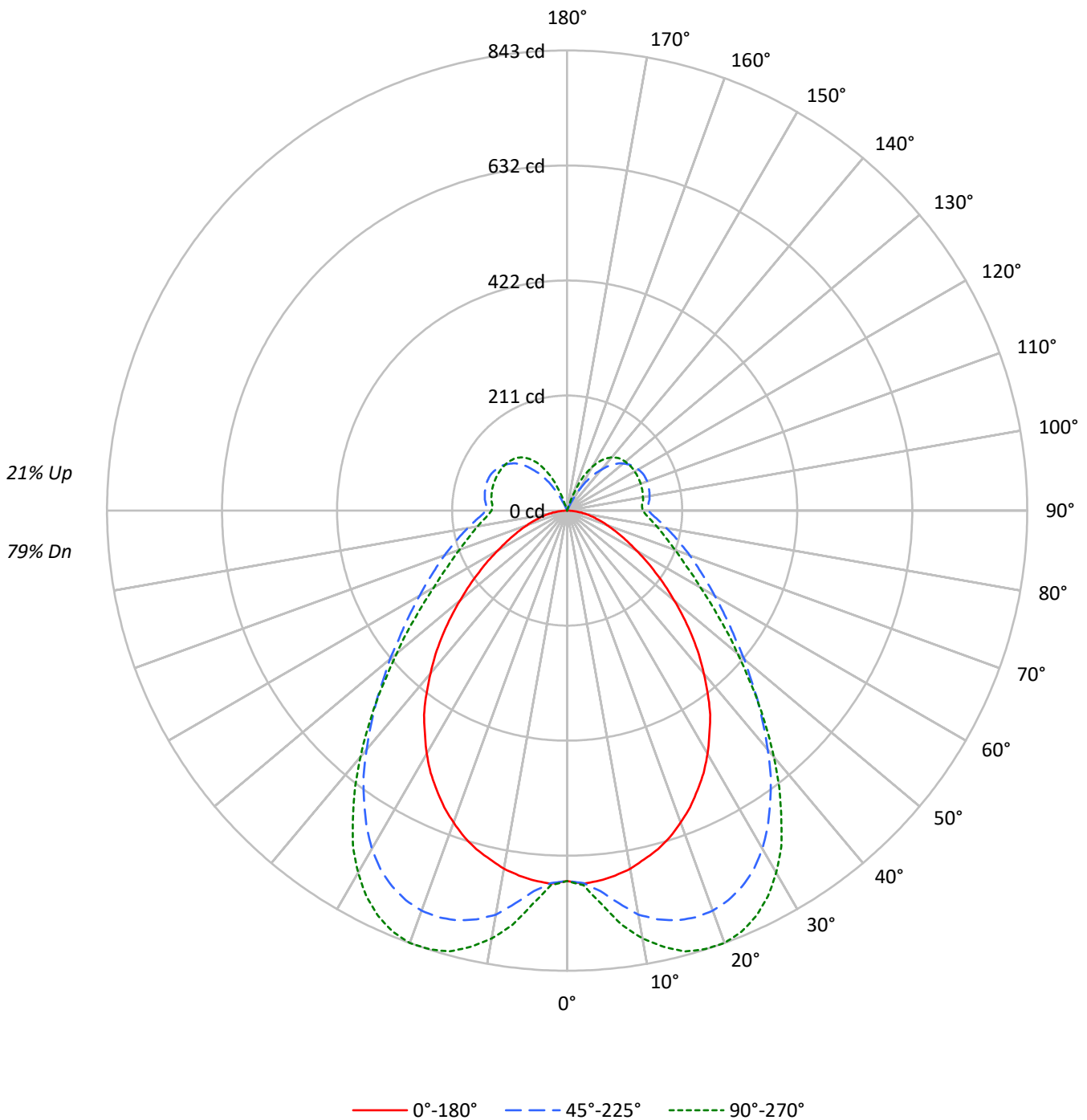
Input Watts (W): 21.44
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P232561

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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	114	114	114	114	109	109	109	109	99	99	99	91	91	91	83	83	83	79
1	103	97	93	88	98	93	89	85	85	82	78	77	75	72	70	68	67	63
2	93	85	78	72	89	81	75	69	74	69	64	68	63	60	62	58	55	52
3	85	74	66	60	81	71	64	58	65	59	54	60	55	51	55	51	47	44
4	78	66	57	51	74	63	55	49	58	51	46	53	48	43	49	44	41	38
5	72	59	50	44	68	57	49	42	52	45	40	48	42	38	44	39	36	33
6	66	53	44	38	63	51	43	37	47	40	35	44	38	33	40	35	31	29
7	61	48	40	34	58	46	38	33	43	36	31	40	34	30	37	32	28	26
8	57	44	36	30	54	42	35	29	39	33	28	36	31	26	34	29	25	23
9	53	40	32	27	51	39	31	26	36	30	25	34	28	24	31	26	23	21
10	50	37	29	24	48	36	29	24	33	27	23	31	26	22	29	24	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7303	7303	7303
5°	7306	7021	7094
10°	7190	7115	7215
15°	7020	7014	7098
20°	6787	6775	6778
25°	6491	6402	6304
30°	6135	5905	5688
35°	5715	5283	4945
40°	5153	4628	4183
45°	4571	4007	3468
50°	3944	3468	2857
55°	3348	3013	2376
60°	2812	2671	2007
65°	2381	2404	1752
70°	2045	2206	1572
75°	1739	2037	1442
80°	1425	1915	1356
85°	957	1839	1291



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.5	2.4
10°-20°	215.4	7.6
20°-30°	337.5	11.9
30°-40°	386.5	13.7
40°-50°	355.9	12.6
50°-60°	292.1	10.3
60°-70°	233.6	8.3
70°-80°	187.6	6.6
80°-90°	149.2	5.3
90°-100°	133.4	4.7
100°-110°	129.9	4.6
110°-120°	117.7	4.2
120°-130°	97.3	3.4
130°-140°	69.8	2.5
140°-150°	38.8	1.4
150°-160°	11.7	0.4
160°-170°	0.3	0.0
170°-180°	0.0	0.0
0°-30°	621.3	22.0
0°-40°	1007.8	35.7
0°-60°	1655.8	58.6
0°-90°	2226.2	78.8
90°-120°	381.0	13.5
90°-150°	586.9	20.8
90°-180°	599.0	21.2
0°-180°	2825.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	678	678	678	678	678	
5°	680	687	700	724	724	64
15°	642	707	777	826	836	181
25°	565	673	759	813	820	260
35°	457	568	649	687	684	284
45°	322	429	494	507	494	248
55°	197	308	362	352	338	178
65°	108	226	272	253	241	109
75°	53	172	209	193	186	57
85°	14	130	164	154	150	16
90°	1	116	149	142	138	1
95°	0	115	150	142	138	0
105°	0	112	155	148	143	0
115°	0	102	155	150	143	0
125°	0	79	144	149	142	0
135°	0	29	120	139	135	0
145°	0	1	74	112	114	0
155°	0	0	11	52	66	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P232561

CATALOG NUMBER: 4SKB1-LD5-3-W-UNV-L835-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	678.5	678.5	678.5	678.5	678.5	678.5	678.5	678.5	678.5	678.5	678.5
2.5°	684.2	681.3	679.3	681.3	682.2	683.0	685.0	684.6	685.0	684.2	683.0
5°	680.5	678.1	677.3	681.3	685.4	687.4	690.3	693.1	695.6	698.8	699.6
7.5°	674.4	673.2	674.0	681.3	687.8	692.7	696.8	704.1	711.4	718.7	725.6
10°	666.3	665.5	669.2	680.1	690.7	697.6	704.5	717.9	730.5	741.9	751.6
12.5°	654.1	656.2	662.2	676.9	693.5	703.3	714.3	730.9	744.3	757.3	767.1
15°	642.3	643.6	655.3	672.8	692.3	707.3	718.7	739.8	753.7	767.1	777.2
17.5°	626.9	629.7	642.7	667.5	691.5	704.9	718.7	735.4	752.0	767.5	781.3
20°	608.2	614.3	631.8	659.0	686.2	699.6	711.8	732.1	749.2	764.2	780.1
22.5°	588.3	595.2	614.7	647.2	675.3	688.7	700.4	722.8	740.3	755.3	772.4
25°	565.1	574.1	597.2	632.2	659.0	672.8	685.4	708.2	726.4	741.5	759.4
27.5°	541.6	551.7	576.9	612.3	639.9	652.9	665.9	688.7	706.9	722.0	740.7
30°	514.4	525.3	553.8	587.9	615.1	629.3	641.1	663.5	683.4	696.8	715.5
32.5°	485.1	497.7	528.2	561.1	588.3	601.7	613.5	635.0	652.9	667.1	684.2
35°	457.1	467.2	498.1	530.2	556.2	568.4	582.2	602.9	618.8	633.4	648.8
37.5°	423.4	435.5	466.8	497.3	523.3	536.3	547.7	566.8	581.4	595.2	612.7
40°	389.2	402.6	435.1	462.4	489.2	499.3	510.7	528.2	542.0	559.1	571.6
42.5°	357.1	369.7	400.6	428.2	453.4	463.6	474.5	492.8	504.6	519.2	531.8
45°	322.2	335.2	368.1	394.1	418.1	429.0	440.4	455.4	468.9	480.6	494.0
47.5°	288.9	304.3	336.0	360.4	384.8	394.9	404.7	420.5	433.9	446.5	455.9
50°	256.0	272.6	303.5	329.9	353.1	363.2	373.0	388.8	402.6	413.6	423.4
52.5°	225.9	243.4	275.1	302.7	323.4	334.0	343.7	359.2	373.0	383.1	389.6
55°	197.0	216.6	249.5	276.3	297.0	308.4	316.1	332.3	346.2	355.5	361.6
57.5°	171.9	193.4	224.7	252.3	273.8	284.0	293.3	308.8	321.8	330.7	335.6
60°	147.1	171.0	203.6	230.4	252.3	262.1	272.2	287.7	299.8	308.0	312.4
62.5°	126.4	151.5	185.3	211.3	233.6	243.4	252.3	267.7	279.5	287.7	291.3
65°	108.1	134.5	168.6	194.6	216.1	226.3	235.6	251.5	262.5	270.2	271.8
67.5°	92.2	119.0	153.6	179.2	201.5	210.9	220.2	236.1	246.6	253.1	254.3
70°	78.0	105.2	139.8	165.4	187.3	197.5	206.8	221.0	232.0	237.3	238.9
72.5°	65.0	93.4	126.8	153.2	175.1	184.5	193.4	208.4	218.6	223.5	223.1
75°	53.2	82.5	115.8	141.8	162.5	172.3	181.2	195.8	206.0	210.1	209.2
77.5°	43.1	73.1	105.2	130.4	151.5	161.3	169.4	184.0	193.4	197.9	197.0
80°	32.5	63.0	95.1	119.9	141.0	149.9	158.9	172.7	182.0	186.5	184.5
82.5°	23.6	53.6	85.7	110.1	130.8	140.2	148.3	162.5	171.5	175.1	173.9
85°	14.2	44.3	75.6	100.8	121.5	130.4	139.4	152.8	161.7	165.4	164.1
87.5°	6.1	35.8	67.0	92.2	112.9	121.9	130.4	143.8	152.4	156.0	154.8
90°	0.8	30.1	61.8	86.5	106.9	115.8	124.3	137.7	146.3	149.9	148.7
92.5°	0.4	28.8	60.1	84.9	105.2	114.6	122.7	136.5	145.5	148.7	148.3
95°	0.4	26.8	59.3	84.9	105.6	115.0	123.5	137.3	146.3	149.9	149.5
97.5°	0.4	24.0	58.1	84.5	106.0	115.8	124.3	139.0	148.3	152.4	152.0
100°	0.4	19.5	55.7	83.3	105.2	115.4	123.9	139.0	148.7	153.2	153.2
102.5°	0.4	13.4	52.8	81.3	104.4	114.2	123.1	138.5	148.7	153.6	154.4
105°	0.4	8.1	49.2	78.8	102.4	112.5	121.9	137.7	148.3	154.0	155.2
107.5°	0.4	5.3	44.7	76.0	100.4	110.9	120.3	136.5	147.5	154.0	155.6
110°	0.4	4.5	39.0	72.7	97.5	108.1	117.8	134.9	146.3	153.6	156.0



TEST NUMBER: P232561

CATALOG NUMBER: 4SKB1-LD5-3-W-UNV-L835-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.4	3.7	30.1	68.3	94.3	105.2	115.4	132.0	144.6	152.0	155.6
115°	0.4	2.8	19.5	63.0	90.2	101.6	111.7	129.2	141.8	150.3	154.8
117.5°	0.4	2.4	12.6	56.9	85.7	97.1	107.7	125.5	139.0	147.9	153.2
120°	0.4	2.0	5.3	48.8	80.0	92.2	102.8	120.7	134.9	144.6	150.7
122.5°	0.4	1.6	4.1	36.6	73.5	86.1	97.1	115.8	130.0	141.0	147.5
125°	0.4	1.6	3.3	23.6	65.4	79.2	91.0	110.1	125.1	136.5	144.2
127.5°	0.4	1.2	2.8	15.8	55.7	71.1	83.7	103.6	119.0	130.8	139.4
130°	0.4	1.2	2.4	6.9	41.4	60.9	74.8	95.9	112.1	124.7	134.1
132.5°	0.4	0.8	2.0	2.8	25.6	47.1	63.4	86.1	104.0	117.4	128.0
135°	0.4	0.8	1.6	2.4	17.1	28.8	49.6	75.2	93.4	107.7	119.9
137.5°	0.4	0.8	1.2	2.0	6.9	19.1	30.5	63.0	82.1	97.1	109.7
140°	0.4	0.8	1.2	1.6	2.0	8.9	20.7	47.9	69.5	85.7	97.9
142.5°	0.4	0.8	1.2	1.2	1.6	2.0	10.2	28.0	55.7	73.1	86.5
145°	0.4	0.4	0.8	1.2	1.2	1.2	1.6	19.1	36.2	59.3	73.5
147.5°	0.4	0.4	0.8	0.8	1.2	1.2	1.2	7.7	22.3	41.8	59.3
150°	0.4	0.4	0.8	0.8	0.8	0.8	0.8	0.8	11.4	22.8	40.2
152.5°	0.4	0.4	0.4	0.8	0.8	0.8	0.8	0.8	1.2	13.0	22.3
155°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.2	11.4
157.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
160°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P232561

CATALOG NUMBER: 4SKB1-LD5-3-W-UNV-L835-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	678.5	678.5	678.5	678.5	678.5	678.5	678.5	678.5	678.5	678.5
2.5°	685.0	688.7	690.3	691.9	692.3	692.7	691.9	691.5	688.7	687.0
5°	705.3	714.3	717.9	723.2	723.6	724.0	726.4	725.2	725.6	723.6
7.5°	735.0	748.0	753.7	760.6	762.2	764.2	768.3	768.7	768.3	765.4
10°	762.6	773.6	782.1	788.6	791.0	792.7	797.5	798.8	797.9	795.9
12.5°	779.3	793.5	802.0	811.4	813.8	816.2	820.3	822.3	819.9	818.7
15°	793.5	808.5	815.4	825.6	826.0	830.5	837.4	838.2	837.0	836.1
17.5°	797.1	812.6	822.7	831.7	834.9	837.8	841.8	845.1	845.5	842.2
20°	796.3	811.0	823.1	832.5	836.1	838.2	843.5	845.9	844.7	843.0
22.5°	789.8	804.4	816.6	824.8	828.0	831.3	836.1	838.2	838.2	834.9
25°	776.4	791.0	801.6	810.1	813.0	816.2	821.1	822.3	821.5	819.5
27.5°	757.3	770.3	780.9	788.2	791.0	793.9	799.2	800.4	798.8	796.7
30°	729.3	742.7	753.3	759.8	762.2	764.2	767.5	770.3	767.9	765.9
32.5°	698.8	711.0	718.3	724.4	726.0	727.7	730.9	732.1	729.7	730.1
35°	663.1	673.6	682.2	686.2	687.0	686.6	688.3	688.7	689.1	683.8
37.5°	624.1	633.4	637.5	643.2	641.9	644.0	645.6	644.0	639.9	637.9
40°	582.2	588.3	595.2	597.2	596.0	598.9	598.1	595.2	590.7	589.1
42.5°	540.8	547.7	550.1	551.7	550.5	550.9	549.3	548.5	544.0	540.4
45°	501.4	506.2	507.5	507.0	507.0	505.0	503.0	499.7	495.7	493.6
47.5°	462.8	466.0	466.4	464.4	462.8	460.3	460.7	455.0	450.2	447.7
50°	427.0	428.2	427.0	423.4	422.5	419.7	418.1	413.6	409.1	407.9
52.5°	394.9	394.5	392.1	388.0	386.4	383.5	380.7	376.6	372.2	372.2
55°	363.6	362.4	359.2	354.7	352.3	351.0	347.4	342.9	339.7	337.6
57.5°	336.4	334.0	329.9	325.8	322.6	319.3	316.9	313.7	309.6	308.8
60°	312.0	307.2	303.5	299.0	296.6	293.7	290.5	288.1	284.8	281.6
62.5°	289.3	285.2	280.3	275.9	273.4	271.0	267.7	264.1	262.1	261.2
65°	269.4	265.3	259.6	255.1	253.1	250.7	248.2	244.2	243.0	240.9
67.5°	251.5	246.2	240.9	236.9	234.8	234.0	231.6	229.1	226.3	224.7
70°	234.8	229.6	224.7	221.8	219.4	218.6	216.6	213.3	211.3	210.1
72.5°	219.0	214.5	210.5	206.4	204.8	204.4	202.7	200.3	198.3	197.0
75°	205.6	201.1	197.0	195.0	193.4	192.2	191.4	188.9	187.7	185.7
77.5°	193.8	188.5	184.9	182.8	181.6	180.8	180.0	178.8	177.1	175.9
80°	181.2	177.1	174.3	172.3	171.5	170.6	169.8	169.0	167.8	166.6
82.5°	170.6	167.0	164.5	162.9	162.9	162.1	161.7	160.9	159.7	158.0
85°	160.5	157.2	155.2	154.4	154.0	153.6	153.2	152.4	151.1	149.9
87.5°	152.0	149.5	147.5	147.1	147.1	146.7	146.3	145.9	144.6	143.4
90°	146.3	143.8	142.6	142.2	141.8	141.8	141.8	141.0	139.8	138.5
92.5°	145.5	143.0	141.8	141.0	141.0	141.0	141.0	140.2	139.0	137.3
95°	146.7	144.2	143.0	142.2	141.8	141.8	141.4	140.6	139.4	137.7
97.5°	149.5	147.1	145.5	144.2	143.8	143.8	143.4	142.6	141.4	140.2
100°	151.1	148.7	147.1	145.9	145.5	145.0	144.6	143.8	142.6	141.0
102.5°	152.4	149.9	147.9	147.1	146.7	146.3	145.5	144.6	143.4	141.8
105°	153.2	151.1	149.5	147.9	147.5	147.1	146.3	145.5	143.8	142.6
107.5°	154.4	152.4	150.3	149.1	148.3	147.9	147.1	146.3	144.6	143.0
110°	154.8	153.2	151.1	149.9	149.1	148.7	147.5	146.3	144.6	143.4



TEST NUMBER: P232561

CATALOG NUMBER: 4SKB1-LD5-3-W-UNV-L835-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	155.2	154.0	152.0	150.3	149.9	149.1	147.9	146.7	145.0	143.4
115°	155.2	154.0	152.4	150.7	150.3	149.5	148.3	146.7	145.0	143.4
117.5°	154.8	154.0	152.8	151.1	150.3	149.5	148.3	146.7	144.6	143.4
120°	153.6	153.6	152.4	151.1	150.3	149.5	147.9	146.3	144.6	143.0
122.5°	151.5	152.4	151.5	150.3	149.9	149.1	147.9	145.9	143.8	142.6
125°	148.7	150.7	150.3	149.5	149.1	148.3	147.1	145.5	143.4	141.8
127.5°	145.0	147.9	148.7	148.3	147.9	147.5	145.9	144.2	142.6	140.6
130°	140.6	144.2	145.9	145.9	145.9	145.5	144.6	143.0	141.0	139.4
132.5°	134.9	139.4	141.8	143.0	143.0	143.0	142.2	141.0	139.4	137.3
135°	128.4	134.1	137.3	139.0	139.4	139.4	139.4	138.5	136.9	135.3
137.5°	120.7	127.2	131.6	134.1	134.9	135.3	135.7	134.9	133.3	131.6
140°	109.3	118.6	124.3	127.6	128.4	129.6	130.4	129.6	128.4	127.2
142.5°	97.9	107.7	115.8	120.3	121.1	122.3	123.5	123.5	122.3	121.1
145°	85.7	95.5	104.0	111.3	112.5	113.8	115.4	116.2	115.0	113.8
147.5°	71.5	81.7	90.6	98.7	102.4	104.0	105.6	106.4	106.0	104.8
150°	56.5	67.4	76.0	84.1	87.8	92.6	94.7	95.1	94.7	93.4
152.5°	34.1	50.0	59.7	67.9	71.1	75.6	81.3	82.5	81.7	80.9
155°	19.1	26.0	36.6	48.8	52.4	56.5	63.4	66.2	65.8	65.8
157.5°	5.7	14.2	19.5	24.0	25.6	28.0	36.2	43.1	45.1	45.5
160°	0.4	0.4	4.9	9.8	12.2	14.6	18.7	21.1	21.5	21.9
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)