

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: P232562

Luminaire Tested: **4SKB1-LD5-3-W-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232562
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-L840-CD1-U
Description: METALUX SKYBAR 4' WAVESTREAM STRIP
WITH WIDE LENS
Light Source: (196) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3021.0 lumens
Efficiency: N/A
Efficacy: 140.9 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

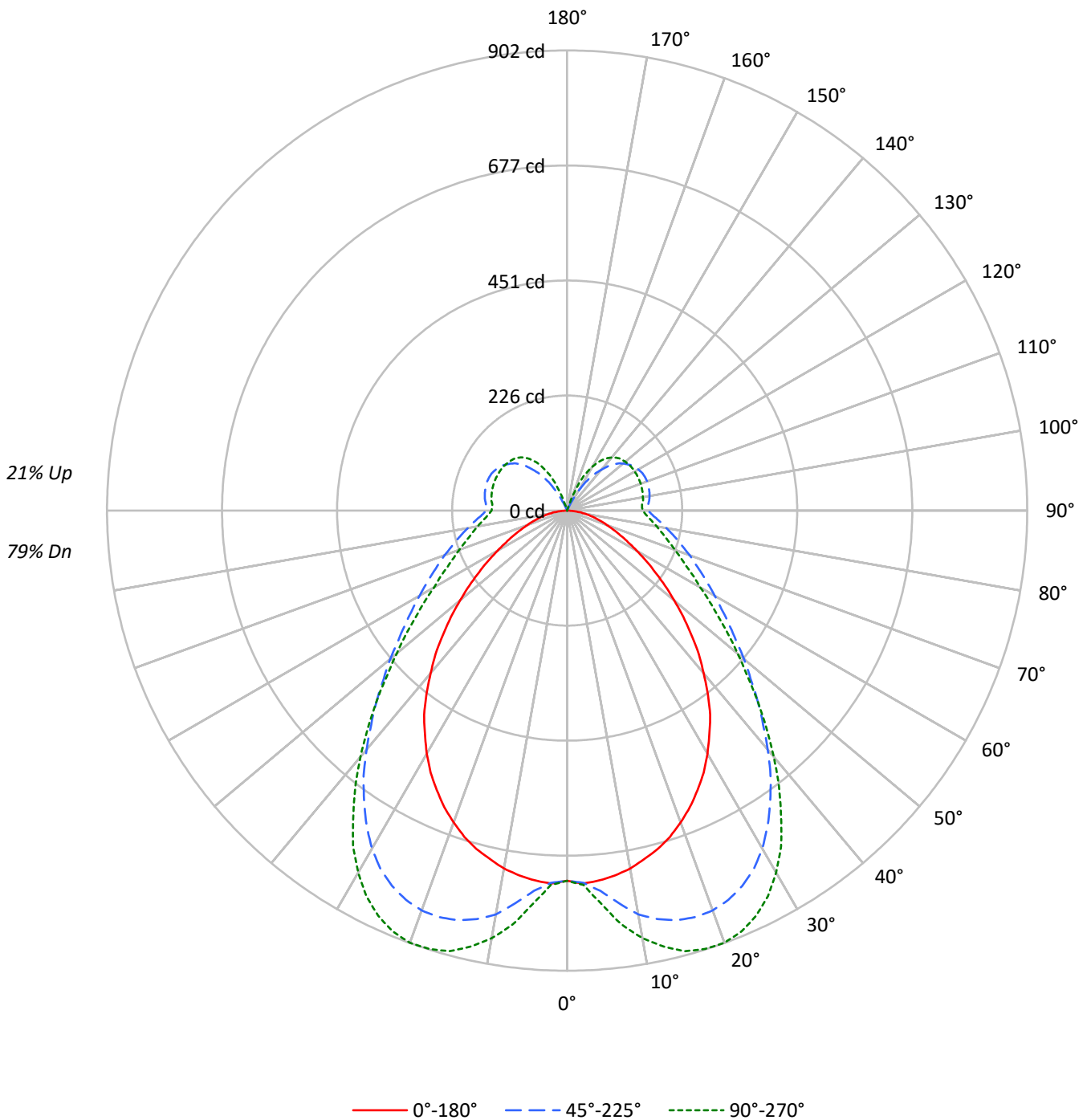
Input Watts (W): 21.44
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7810	7810	7810
5°	7813	7509	7587
10°	7689	7609	7715
15°	7508	7501	7591
20°	7258	7244	7248
25°	6942	6846	6740
30°	6560	6314	6082
35°	6111	5650	5288
40°	5511	4949	4473
45°	4888	4286	3709
50°	4217	3708	3056
55°	3581	3223	2541
60°	3007	2856	2146
65°	2546	2571	1873
70°	2187	2359	1681
75°	1860	2179	1543
80°	1526	2048	1449
85°	1024	1967	1381



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.2	2.4
10°-20°	230.3	7.6
20°-30°	360.9	11.9
30°-40°	413.3	13.7
40°-50°	380.6	12.6
50°-60°	312.4	10.3
60°-70°	249.7	8.3
70°-80°	200.6	6.6
80°-90°	159.6	5.3
90°-100°	142.6	4.7
100°-110°	138.9	4.6
110°-120°	125.9	4.2
120°-130°	104.0	3.4
130°-140°	74.6	2.5
140°-150°	41.5	1.4
150°-160°	12.5	0.4
160°-170°	0.3	0.0
170°-180°	0.0	0.0
0°-30°	664.4	22.0
0°-40°	1077.7	35.7
0°-60°	1770.7	58.6
0°-90°	2380.6	78.8
90°-120°	407.4	13.5
90°-150°	627.6	20.8
90°-180°	640.0	21.2
0°-180°	3021.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	726	726	726	726	726	
5°	728	735	748	774	774	69
15°	687	756	831	883	894	193
25°	604	720	812	869	876	278
35°	489	608	694	735	731	304
45°	344	459	528	542	528	266
55°	211	330	387	377	361	190
65°	116	242	291	271	258	116
75°	57	184	224	207	199	61
85°	15	140	176	165	160	17
90°	1	124	159	152	148	1
95°	0	123	160	152	147	0
105°	0	120	166	158	152	0
115°	0	109	166	161	153	0
125°	0	85	154	160	152	0
135°	0	31	128	149	145	0
145°	0	1	79	120	122	0
155°	0	0	12	56	70	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	725.6	725.6	725.6	725.6	725.6	725.6	725.6	725.6	725.6	725.6	725.6
2.5°	731.7	728.6	726.4	728.6	729.5	730.4	732.5	732.1	732.5	731.7	730.4
5°	727.7	725.1	724.3	728.6	733.0	735.1	738.2	741.2	743.8	747.3	748.2
7.5°	721.2	719.9	720.8	728.6	735.6	740.8	745.1	752.9	760.8	768.6	776.0
10°	712.5	711.7	715.6	727.3	738.6	746.0	753.4	767.7	781.2	793.4	803.8
12.5°	699.5	701.7	708.2	723.8	741.7	752.1	763.8	781.6	796.0	809.9	820.3
15°	686.9	688.2	700.8	719.5	740.3	756.4	768.6	791.2	806.0	820.3	831.2
17.5°	670.4	673.4	687.3	713.8	739.5	753.8	768.6	786.4	804.2	820.7	835.5
20°	650.4	656.9	675.6	704.7	733.8	748.2	761.2	782.9	801.2	817.2	834.2
22.5°	629.1	636.5	657.4	692.1	722.1	736.4	749.0	772.9	791.6	807.7	825.9
25°	604.4	613.9	638.7	676.0	704.7	719.5	733.0	757.3	776.8	792.9	812.0
27.5°	579.2	590.0	617.0	654.8	684.3	698.2	712.1	736.4	756.0	772.1	792.0
30°	550.0	561.8	592.2	628.7	657.8	673.0	685.6	709.5	730.8	745.1	765.1
32.5°	518.8	532.2	564.8	600.0	629.1	643.5	656.1	679.1	698.2	713.4	731.7
35°	488.8	499.6	532.7	567.0	594.8	607.8	622.6	644.8	661.7	677.3	693.9
37.5°	452.7	465.8	499.2	531.8	559.6	573.5	585.7	606.1	621.7	636.5	655.2
40°	416.2	430.6	465.3	494.4	523.1	534.0	546.1	564.8	579.6	597.8	611.3
42.5°	381.9	395.4	428.4	457.9	484.9	495.7	507.5	527.0	539.6	555.3	568.7
45°	344.5	358.4	393.6	421.4	447.1	458.8	471.0	487.0	501.4	514.0	528.3
47.5°	308.9	325.4	359.3	385.4	411.4	422.3	432.7	449.7	464.0	477.5	487.5
50°	273.7	291.5	324.6	352.8	377.6	388.4	398.8	415.8	430.6	442.3	452.7
52.5°	241.6	260.3	294.1	323.7	345.8	357.1	367.6	384.1	398.8	409.7	416.7
55°	210.7	231.6	266.8	295.4	317.6	329.8	338.0	355.4	370.2	380.2	386.7
57.5°	183.8	206.8	240.3	269.8	292.8	303.7	313.7	330.2	344.1	353.7	358.9
60°	157.3	182.9	217.7	246.3	269.8	280.2	291.1	307.6	320.6	329.3	334.1
62.5°	135.1	162.1	198.1	225.9	249.8	260.3	269.8	286.3	298.9	307.6	311.5
65°	115.6	143.8	180.3	208.1	231.1	242.0	252.0	268.9	280.7	288.9	290.7
67.5°	98.6	127.3	164.2	191.6	215.5	225.5	235.5	252.4	263.7	270.7	272.0
70°	83.4	112.5	149.5	176.8	200.3	211.2	221.1	236.4	248.1	253.7	255.5
72.5°	69.5	99.9	135.6	163.8	187.3	197.3	206.8	222.9	233.7	239.0	238.5
75°	56.9	88.2	123.8	151.6	173.8	184.2	193.8	209.4	220.3	224.6	223.8
77.5°	46.1	78.2	112.5	139.5	162.1	172.5	181.2	196.8	206.8	211.6	210.7
80°	34.8	67.3	101.7	128.2	150.8	160.3	169.9	184.7	194.6	199.4	197.3
82.5°	25.2	57.4	91.7	117.7	139.9	149.9	158.6	173.8	183.3	187.3	186.0
85°	15.2	47.4	80.8	107.8	129.9	139.5	149.0	163.4	172.9	176.8	175.5
87.5°	6.5	38.2	71.7	98.6	120.8	130.3	139.5	153.8	162.9	166.8	165.5
90°	0.9	32.2	66.0	92.5	114.3	123.8	132.9	147.3	156.4	160.3	159.0
92.5°	0.4	30.8	64.3	90.8	112.5	122.5	131.2	146.0	155.5	159.0	158.6
95°	0.4	28.7	63.4	90.8	113.0	123.0	132.1	146.9	156.4	160.3	159.9
97.5°	0.4	25.6	62.1	90.4	113.4	123.8	132.9	148.6	158.6	162.9	162.5
100°	0.4	20.9	59.5	89.1	112.5	123.4	132.5	148.6	159.0	163.8	163.8
102.5°	0.4	14.3	56.5	86.9	111.7	122.1	131.6	148.2	159.0	164.2	165.1
105°	0.4	8.7	52.6	84.3	109.5	120.3	130.3	147.3	158.6	164.7	166.0
107.5°	0.4	5.6	47.8	81.2	107.3	118.6	128.6	146.0	157.7	164.7	166.4
110°	0.4	4.8	41.7	77.8	104.3	115.6	126.0	144.2	156.4	164.2	166.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.4	3.9	32.2	73.0	100.8	112.5	123.4	141.2	154.7	162.5	166.4
115°	0.4	3.0	20.9	67.3	96.5	108.6	119.5	138.2	151.6	160.8	165.5
117.5°	0.4	2.6	13.5	60.8	91.7	103.8	115.1	134.3	148.6	158.1	163.8
120°	0.4	2.2	5.6	52.1	85.6	98.6	109.9	129.0	144.2	154.7	161.2
122.5°	0.4	1.7	4.3	39.1	78.6	92.1	103.8	123.8	139.0	150.8	157.7
125°	0.4	1.7	3.5	25.2	70.0	84.7	97.3	117.7	133.8	146.0	154.2
127.5°	0.4	1.3	3.0	16.9	59.5	76.0	89.5	110.8	127.3	139.9	149.0
130°	0.4	1.3	2.6	7.4	44.3	65.2	79.9	102.5	119.9	133.4	143.4
132.5°	0.4	0.9	2.2	3.0	27.4	50.4	67.8	92.1	111.2	125.6	136.9
135°	0.4	0.9	1.7	2.6	18.2	30.8	53.0	80.4	99.9	115.1	128.2
137.5°	0.4	0.9	1.3	2.2	7.4	20.4	32.6	67.3	87.8	103.8	117.3
140°	0.4	0.9	1.3	1.7	2.2	9.6	22.2	51.3	74.3	91.7	104.7
142.5°	0.4	0.9	1.3	1.3	1.7	2.2	10.9	30.0	59.5	78.2	92.5
145°	0.4	0.4	0.9	1.3	1.3	1.3	1.7	20.4	38.7	63.4	78.6
147.5°	0.4	0.4	0.9	0.9	1.3	1.3	1.3	8.3	23.9	44.8	63.4
150°	0.4	0.4	0.9	0.9	0.9	0.9	0.9	0.9	12.2	24.3	43.0
152.5°	0.4	0.4	0.4	0.9	0.9	0.9	0.9	0.9	1.3	13.9	23.9
155°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.3	12.2
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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	725.6	725.6	725.6	725.6	725.6	725.6	725.6	725.6	725.6	725.6
2.5°	732.5	736.4	738.2	739.9	740.3	740.8	739.9	739.5	736.4	734.7
5°	754.3	763.8	767.7	773.4	773.8	774.2	776.8	775.5	776.0	773.8
7.5°	786.0	799.9	806.0	813.3	815.1	817.2	821.6	822.0	821.6	818.6
10°	815.5	827.2	836.4	843.3	845.9	847.7	852.9	854.2	853.3	851.1
12.5°	833.3	848.5	857.7	867.6	870.3	872.9	877.2	879.4	876.8	875.5
15°	848.5	864.6	872.0	882.9	883.3	888.1	895.5	896.3	895.0	894.2
17.5°	852.4	869.0	879.8	889.4	892.8	895.9	900.2	903.7	904.1	900.7
20°	851.6	867.2	880.2	890.2	894.2	896.3	902.0	904.6	903.3	901.5
22.5°	844.6	860.3	873.3	882.0	885.5	888.9	894.2	896.3	896.3	892.8
25°	830.3	845.9	857.2	866.3	869.4	872.9	878.1	879.4	878.5	876.3
27.5°	809.9	823.8	835.1	842.9	845.9	849.0	854.6	855.9	854.2	852.0
30°	779.9	794.2	805.5	812.5	815.1	817.2	820.7	823.8	821.2	819.0
32.5°	747.3	760.3	768.2	774.7	776.4	778.1	781.6	782.9	780.3	780.8
35°	709.1	720.4	729.5	733.8	734.7	734.3	736.0	736.4	736.9	731.2
37.5°	667.4	677.3	681.7	687.8	686.5	688.6	690.4	688.6	684.3	682.1
40°	622.6	629.1	636.5	638.7	637.4	640.4	639.5	636.5	631.7	630.0
42.5°	578.3	585.7	588.3	590.0	588.7	589.1	587.4	586.5	581.8	577.9
45°	536.1	541.4	542.7	542.2	542.2	540.1	537.9	534.4	530.1	527.9
47.5°	494.9	498.3	498.8	496.6	494.9	492.3	492.7	486.6	481.4	478.8
50°	456.6	457.9	456.6	452.7	451.9	448.8	447.1	442.3	437.5	436.2
52.5°	422.3	421.9	419.3	414.9	413.2	410.1	407.1	402.8	398.0	398.0
55°	388.9	387.6	384.1	379.3	376.7	375.4	371.5	366.7	363.2	361.0
57.5°	359.7	357.1	352.8	348.4	345.0	341.5	338.9	335.4	331.1	330.2
60°	333.7	328.5	324.6	319.8	317.2	314.1	310.7	308.0	304.6	301.1
62.5°	309.3	305.0	299.8	295.0	292.4	289.8	286.3	282.4	280.2	279.4
65°	288.1	283.7	277.6	272.9	270.7	268.1	265.5	261.1	259.8	257.6
67.5°	268.9	263.3	257.6	253.3	251.1	250.3	247.7	245.0	242.0	240.3
70°	251.1	245.5	240.3	237.2	234.6	233.7	231.6	228.1	225.9	224.6
72.5°	234.2	229.4	225.1	220.7	219.0	218.5	216.8	214.2	212.0	210.7
75°	219.8	215.1	210.7	208.5	206.8	205.5	204.6	202.0	200.7	198.6
77.5°	207.2	201.6	197.7	195.5	194.2	193.3	192.5	191.2	189.4	188.1
80°	193.8	189.4	186.4	184.2	183.3	182.5	181.6	180.7	179.4	178.1
82.5°	182.5	178.6	176.0	174.2	174.2	173.4	172.9	172.1	170.7	169.0
85°	171.6	168.1	166.0	165.1	164.7	164.2	163.8	162.9	161.6	160.3
87.5°	162.5	159.9	157.7	157.3	157.3	156.8	156.4	156.0	154.7	153.4
90°	156.4	153.8	152.5	152.1	151.6	151.6	151.6	150.8	149.5	148.2
92.5°	155.5	152.9	151.6	150.8	150.8	150.8	150.8	149.9	148.6	146.9
95°	156.8	154.2	152.9	152.1	151.6	151.6	151.2	150.3	149.0	147.3
97.5°	159.9	157.3	155.5	154.2	153.8	153.8	153.4	152.5	151.2	149.9
100°	161.6	159.0	157.3	156.0	155.5	155.1	154.7	153.8	152.5	150.8
102.5°	162.9	160.3	158.1	157.3	156.8	156.4	155.5	154.7	153.4	151.6
105°	163.8	161.6	159.9	158.1	157.7	157.3	156.4	155.5	153.8	152.5
107.5°	165.1	162.9	160.8	159.5	158.6	158.1	157.3	156.4	154.7	152.9
110°	165.5	163.8	161.6	160.3	159.5	159.0	157.7	156.4	154.7	153.4



TEST NUMBER: P232562

CATALOG NUMBER: 4SKB1-LD5-3-W-UNV-L840-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	166.0	164.7	162.5	160.8	160.3	159.5	158.1	156.8	155.1	153.4
115°	166.0	164.7	162.9	161.2	160.8	159.9	158.6	156.8	155.1	153.4
117.5°	165.5	164.7	163.4	161.6	160.8	159.9	158.6	156.8	154.7	153.4
120°	164.2	164.2	162.9	161.6	160.8	159.9	158.1	156.4	154.7	152.9
122.5°	162.1	162.9	162.1	160.8	160.3	159.5	158.1	156.0	153.8	152.5
125°	159.0	161.2	160.8	159.9	159.5	158.6	157.3	155.5	153.4	151.6
127.5°	155.1	158.1	159.0	158.6	158.1	157.7	156.0	154.2	152.5	150.3
130°	150.3	154.2	156.0	156.0	156.0	155.5	154.7	152.9	150.8	149.0
132.5°	144.2	149.0	151.6	152.9	152.9	152.9	152.1	150.8	149.0	146.9
135°	137.3	143.4	146.9	148.6	149.0	149.0	149.0	148.2	146.4	144.7
137.5°	129.0	136.0	140.8	143.4	144.2	144.7	145.1	144.2	142.5	140.8
140°	116.9	126.9	132.9	136.4	137.3	138.6	139.5	138.6	137.3	136.0
142.5°	104.7	115.1	123.8	128.6	129.5	130.8	132.1	132.1	130.8	129.5
145°	91.7	102.1	111.2	119.0	120.3	121.7	123.4	124.3	123.0	121.7
147.5°	76.5	87.3	96.9	105.6	109.5	111.2	113.0	113.8	113.4	112.1
150°	60.4	72.1	81.2	89.9	93.8	99.1	101.2	101.7	101.2	99.9
152.5°	36.5	53.4	63.9	72.6	76.0	80.8	86.9	88.2	87.3	86.5
155°	20.4	27.8	39.1	52.1	56.0	60.4	67.8	70.8	70.4	70.4
157.5°	6.1	15.2	20.9	25.6	27.4	30.0	38.7	46.1	48.2	48.7
160°	0.4	0.4	5.2	10.4	13.0	15.6	20.0	22.6	23.0	23.5
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)