

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: P232565

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232565
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-LD5-4-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: 4022.0 lumens
Efficiency: N/A
Efficacy: 138.7 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

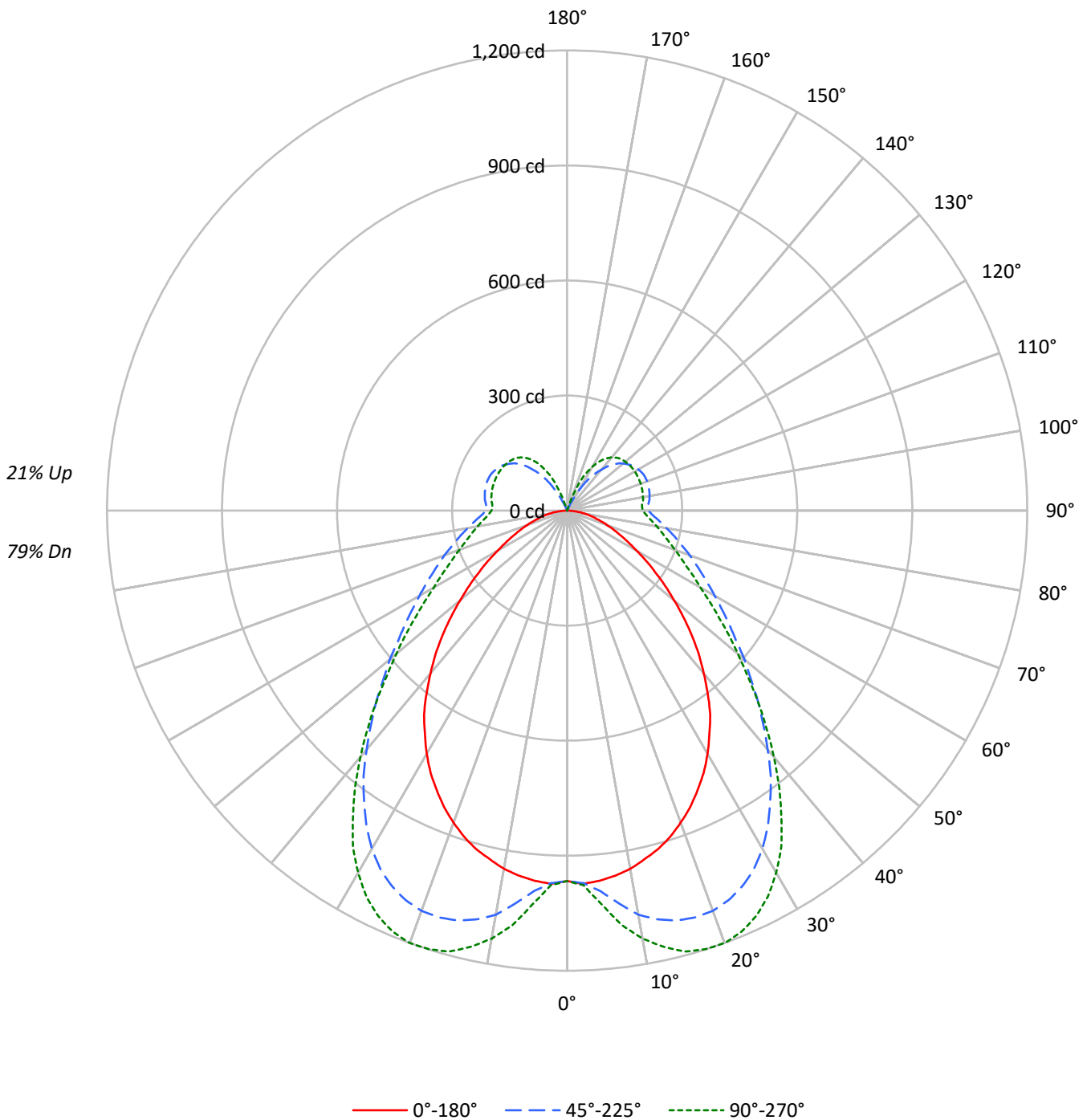
Input Watts (W): 29
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	10398	10398	10398
5°	10403	9996	10100
10°	10237	10130	10273
15°	9996	9986	10106
20°	9662	9645	9651
25°	9242	9114	8974
30°	8734	8406	8098
35°	8135	7522	7040
40°	7337	6590	5955
45°	6508	5706	4938
50°	5614	4936	4069
55°	4767	4290	3383
60°	4002	3803	2857
65°	3390	3423	2495
70°	2913	3140	2238
75°	2478	2901	2053
80°	2030	2726	1930
85°	1361	2619	1838



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.5	2.4
10°-20°	306.6	7.6
20°-30°	480.5	11.9
30°-40°	550.2	13.7
40°-50°	506.7	12.6
50°-60°	415.9	10.3
60°-70°	332.5	8.3
70°-80°	267.1	6.6
80°-90°	212.5	5.3
90°-100°	189.9	4.7
100°-110°	184.9	4.6
110°-120°	167.6	4.2
120°-130°	138.5	3.4
130°-140°	99.4	2.5
140°-150°	55.2	1.4
150°-160°	16.6	0.4
160°-170°	0.4	0.0
170°-180°	0.0	0.0
0°-30°	884.6	22.0
0°-40°	1434.8	35.7
0°-60°	2357.4	58.6
0°-90°	3169.5	78.8
90°-120°	542.4	13.5
90°-150°	835.5	20.8
90°-180°	853.0	21.2
0°-180°	4022.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	966	966	966	966	966	
5°	969	979	996	1030	1030	92
15°	914	1007	1107	1176	1190	257
25°	805	958	1081	1158	1167	370
35°	651	809	924	978	974	404
45°	459	611	703	722	703	354
55°	280	439	515	502	481	253
65°	154	322	387	360	343	155
75°	76	245	298	275	264	81
85°	20	186	234	219	213	22
90°	1	165	212	202	197	2
95°	1	164	213	202	196	0
105°	1	160	221	210	203	1
115°	1	145	220	214	204	1
125°	1	113	205	212	202	1
135°	1	41	171	198	193	0
145°	1	2	105	160	162	0
155°	1	1	16	75	94	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°	966.0	966.0	966.0	966.0	966.0	966.0	966.0	966.0	966.0	966.0	966.0
2.5°	974.1	970.0	967.1	970.0	971.2	972.4	975.2	974.7	975.2	974.1	972.4
5°	968.9	965.4	964.3	970.0	975.8	978.7	982.8	986.8	990.3	994.9	996.1
7.5°	960.2	958.5	959.6	970.0	979.3	986.2	992.0	1002.4	1012.8	1023.3	1033.1
10°	948.6	947.5	952.7	968.3	983.3	993.2	1003.0	1022.1	1040.0	1056.2	1070.1
12.5°	931.3	934.2	942.9	963.7	987.4	1001.3	1016.9	1040.6	1059.7	1078.2	1092.1
15°	914.5	916.2	933.0	957.9	985.7	1007.1	1023.3	1053.3	1073.0	1092.1	1106.6
17.5°	892.5	896.6	915.1	950.4	984.5	1003.6	1023.3	1047.0	1070.7	1092.7	1112.3
20°	865.9	874.6	899.5	938.2	977.0	996.1	1013.4	1042.3	1066.6	1088.0	1110.6
22.5°	837.6	847.4	875.2	921.5	961.4	980.5	997.2	1029.0	1053.9	1075.3	1099.6
25°	804.6	817.3	850.3	900.1	938.2	957.9	975.8	1008.2	1034.2	1055.7	1081.1
27.5°	771.1	785.5	821.4	871.7	911.0	929.6	948.1	980.5	1006.5	1027.9	1054.5
30°	732.3	747.9	788.4	837.0	875.8	896.0	912.8	944.6	972.9	992.0	1018.6
32.5°	690.7	708.6	752.0	798.8	837.6	856.7	873.4	904.1	929.6	949.8	974.1
35°	650.7	665.2	709.2	754.9	791.9	809.2	828.9	858.4	881.0	901.8	923.8
37.5°	602.7	620.1	664.6	708.0	745.0	763.5	779.7	806.9	827.7	847.4	872.3
40°	554.1	573.2	619.5	658.3	696.4	710.9	727.1	752.0	771.6	795.9	813.9
42.5°	508.4	526.4	570.3	609.7	645.5	660.0	675.6	701.6	718.4	739.2	757.2
45°	458.7	477.2	524.1	561.1	595.2	610.8	627.0	648.4	667.5	684.3	703.4
47.5°	411.3	433.3	478.4	513.1	547.8	562.2	576.1	598.7	617.8	635.7	649.0
50°	364.4	388.1	432.1	469.7	502.7	517.1	531.0	553.6	573.2	588.9	602.7
52.5°	321.6	346.5	391.6	430.9	460.4	475.5	489.4	511.3	531.0	545.5	554.7
55°	280.5	308.3	355.2	393.3	422.8	439.0	450.0	473.2	492.8	506.1	514.8
57.5°	244.7	275.3	319.9	359.2	389.9	404.3	417.6	439.6	458.1	470.8	477.8
60°	209.4	243.5	289.8	328.0	359.2	373.1	387.6	409.5	426.9	438.5	444.8
62.5°	179.9	215.8	263.8	300.8	332.6	346.5	359.2	381.2	398.0	409.5	414.7
65°	153.9	191.5	240.1	277.1	307.7	322.2	335.5	358.1	373.7	384.7	387.0
67.5°	131.3	169.5	218.6	255.1	286.9	300.2	313.5	336.1	351.1	360.4	362.1
70°	111.1	149.8	199.0	235.4	266.7	281.1	294.4	314.7	330.3	337.8	340.1
72.5°	92.6	133.0	180.5	218.1	249.3	262.6	275.3	296.7	311.2	318.1	317.6
75°	75.8	117.4	164.9	201.9	231.4	245.3	258.0	278.8	293.3	299.1	297.9
77.5°	61.3	104.1	149.8	185.7	215.8	229.6	241.2	262.0	275.3	281.7	280.5
80°	46.3	89.7	135.4	170.6	200.7	213.4	226.2	245.8	259.1	265.5	262.6
82.5°	33.5	76.4	122.1	156.8	186.3	199.6	211.1	231.4	244.1	249.3	247.6
85°	20.2	63.0	107.6	143.5	173.0	185.7	198.4	217.5	230.2	235.4	233.7
87.5°	8.7	50.9	95.4	131.3	160.8	173.5	185.7	204.8	216.9	222.1	220.4
90°	1.2	42.8	87.9	123.2	152.1	164.9	177.0	196.1	208.2	213.4	211.7
92.5°	0.6	41.1	85.6	120.9	149.8	163.1	174.7	194.4	207.1	211.7	211.1
95°	0.6	38.2	84.5	120.9	150.4	163.7	175.8	195.5	208.2	213.4	212.9
97.5°	0.6	34.1	82.7	120.3	151.0	164.9	177.0	197.8	211.1	216.9	216.3
100°	0.6	27.8	79.2	118.6	149.8	164.3	176.4	197.8	211.7	218.1	218.1
102.5°	0.6	19.1	75.2	115.7	148.7	162.5	175.3	197.2	211.7	218.6	219.8
105°	0.6	11.6	70.0	112.2	145.8	160.2	173.5	196.1	211.1	219.2	221.0
107.5°	0.6	7.5	63.6	108.2	142.9	157.9	171.2	194.4	210.0	219.2	221.5
110°	0.6	6.4	55.5	103.5	138.8	153.9	167.7	192.0	208.2	218.6	222.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.6	5.2	42.8	97.2	134.2	149.8	164.3	188.0	205.9	216.3	221.5
115°	0.6	4.0	27.8	89.7	128.4	144.6	159.1	183.9	201.9	214.0	220.4
117.5°	0.6	3.5	17.9	81.0	122.1	138.2	153.3	178.7	197.8	210.6	218.1
120°	0.6	2.9	7.5	69.4	114.0	131.3	146.3	171.8	192.0	205.9	214.6
122.5°	0.6	2.3	5.8	52.1	104.7	122.6	138.2	164.9	185.1	200.7	210.0
125°	0.6	2.3	4.6	33.5	93.1	112.8	129.6	156.8	178.2	194.4	205.3
127.5°	0.6	1.7	4.0	22.6	79.2	101.2	119.2	147.5	169.5	186.3	198.4
130°	0.6	1.7	3.5	9.8	59.0	86.8	106.4	136.5	159.6	177.6	190.9
132.5°	0.6	1.2	2.9	4.0	36.4	67.1	90.2	122.6	148.1	167.2	182.2
135°	0.6	1.2	2.3	3.5	24.3	41.1	70.6	107.0	133.0	153.3	170.6
137.5°	0.6	1.2	1.7	2.9	9.8	27.2	43.4	89.7	116.8	138.2	156.2
140°	0.6	1.2	1.7	2.3	2.9	12.7	29.5	68.3	98.9	122.1	139.4
142.5°	0.6	1.2	1.7	1.7	2.3	2.9	14.5	39.9	79.2	104.1	123.2
145°	0.6	0.6	1.2	1.7	1.7	1.7	2.3	27.2	51.5	84.5	104.7
147.5°	0.6	0.6	1.2	1.2	1.7	1.7	1.7	11.0	31.8	59.6	84.5
150°	0.6	0.6	1.2	1.2	1.2	1.2	1.2	1.2	16.2	32.4	57.3
152.5°	0.6	0.6	0.6	1.2	1.2	1.2	1.2	1.2	1.7	18.5	31.8
155°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.7	16.2
157.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
160°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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°	966.0	966.0	966.0	966.0	966.0	966.0	966.0	966.0	966.0	966.0
2.5°	975.2	980.5	982.8	985.1	985.7	986.2	985.1	984.5	980.5	978.1
5°	1004.2	1016.9	1022.1	1029.6	1030.2	1030.8	1034.2	1032.5	1033.1	1030.2
7.5°	1046.4	1064.9	1073.0	1082.8	1085.2	1088.0	1093.8	1094.4	1093.8	1089.8
10°	1085.7	1101.3	1113.5	1122.7	1126.2	1128.5	1135.5	1137.2	1136.1	1133.2
12.5°	1109.4	1129.7	1141.8	1155.1	1158.6	1162.1	1167.9	1170.8	1167.3	1165.6
15°	1129.7	1151.1	1160.9	1175.4	1176.0	1182.3	1192.2	1193.3	1191.6	1190.4
17.5°	1134.9	1156.9	1171.3	1184.1	1188.7	1192.7	1198.5	1203.2	1203.7	1199.1
20°	1133.7	1154.6	1171.9	1185.2	1190.4	1193.3	1200.8	1204.3	1202.6	1200.3
22.5°	1124.5	1145.3	1162.7	1174.2	1178.9	1183.5	1190.4	1193.3	1193.3	1188.7
25°	1105.4	1126.2	1141.3	1153.4	1157.5	1162.1	1169.0	1170.8	1169.6	1166.7
27.5°	1078.2	1096.7	1111.8	1122.2	1126.2	1130.3	1137.8	1139.5	1137.2	1134.3
30°	1038.3	1057.4	1072.4	1081.7	1085.2	1088.0	1092.7	1096.7	1093.2	1090.4
32.5°	994.9	1012.3	1022.7	1031.4	1033.7	1036.0	1040.6	1042.3	1038.9	1039.5
35°	944.0	959.1	971.2	977.0	978.1	977.6	979.9	980.5	981.0	973.5
37.5°	888.5	901.8	907.6	915.7	913.9	916.8	919.1	916.8	911.0	908.1
40°	828.9	837.6	847.4	850.3	848.6	852.6	851.5	847.4	841.0	838.7
42.5°	769.9	779.7	783.2	785.5	783.8	784.4	782.0	780.9	774.5	769.3
45°	713.8	720.7	722.5	721.9	721.9	719.0	716.1	711.5	705.7	702.8
47.5°	658.8	663.5	664.0	661.2	658.8	655.4	655.9	647.9	640.9	637.4
50°	607.9	609.7	607.9	602.7	601.6	597.5	595.2	588.9	582.5	580.8
52.5°	562.2	561.7	558.2	552.4	550.1	546.0	542.0	536.2	529.8	529.8
55°	517.7	516.0	511.3	505.0	501.5	499.8	494.6	488.2	483.6	480.7
57.5°	478.9	475.5	469.7	463.9	459.3	454.7	451.2	446.6	440.8	439.6
60°	444.2	437.3	432.1	425.7	422.3	418.2	413.6	410.1	405.5	400.9
62.5°	411.8	406.1	399.1	392.8	389.3	385.8	381.2	376.0	373.1	371.9
65°	383.5	377.7	369.6	363.3	360.4	356.9	353.4	347.6	345.9	343.0
67.5°	358.1	350.5	343.0	337.2	334.3	333.2	329.7	326.2	322.2	319.9
70°	334.3	326.8	319.9	315.8	312.4	311.2	308.3	303.7	300.8	299.1
72.5°	311.8	305.4	299.6	293.8	291.5	291.0	288.6	285.2	282.3	280.5
75°	292.7	286.3	280.5	277.7	275.3	273.6	272.4	269.0	267.2	264.3
77.5°	275.9	268.4	263.2	260.3	258.6	257.4	256.2	254.5	252.2	250.5
80°	258.0	252.2	248.2	245.3	244.1	242.9	241.8	240.6	238.9	237.2
82.5°	242.9	237.7	234.3	232.0	232.0	230.8	230.2	229.1	227.3	225.0
85°	228.5	223.9	221.0	219.8	219.2	218.6	218.1	216.9	215.2	213.4
87.5°	216.3	212.9	210.0	209.4	209.4	208.8	208.2	207.7	205.9	204.2
90°	208.2	204.8	203.0	202.5	201.9	201.9	201.9	200.7	199.0	197.2
92.5°	207.1	203.6	201.9	200.7	200.7	200.7	200.7	199.6	197.8	195.5
95°	208.8	205.3	203.6	202.5	201.9	201.9	201.3	200.1	198.4	196.1
97.5°	212.9	209.4	207.1	205.3	204.8	204.8	204.2	203.0	201.3	199.6
100°	215.2	211.7	209.4	207.7	207.1	206.5	205.9	204.8	203.0	200.7
102.5°	216.9	213.4	210.6	209.4	208.8	208.2	207.1	205.9	204.2	201.9
105°	218.1	215.2	212.9	210.6	210.0	209.4	208.2	207.1	204.8	203.0
107.5°	219.8	216.9	214.0	212.3	211.1	210.6	209.4	208.2	205.9	203.6
110°	220.4	218.1	215.2	213.4	212.3	211.7	210.0	208.2	205.9	204.2



TEST NUMBER: P232565

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

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	221.0	219.2	216.3	214.0	213.4	212.3	210.6	208.8	206.5	204.2
115°	221.0	219.2	216.9	214.6	214.0	212.9	211.1	208.8	206.5	204.2
117.5°	220.4	219.2	217.5	215.2	214.0	212.9	211.1	208.8	205.9	204.2
120°	218.6	218.6	216.9	215.2	214.0	212.9	210.6	208.2	205.9	203.6
122.5°	215.8	216.9	215.8	214.0	213.4	212.3	210.6	207.7	204.8	203.0
125°	211.7	214.6	214.0	212.9	212.3	211.1	209.4	207.1	204.2	201.9
127.5°	206.5	210.6	211.7	211.1	210.6	210.0	207.7	205.3	203.0	200.1
130°	200.1	205.3	207.7	207.7	207.7	207.1	205.9	203.6	200.7	198.4
132.5°	192.0	198.4	201.9	203.6	203.6	203.6	202.5	200.7	198.4	195.5
135°	182.8	190.9	195.5	197.8	198.4	198.4	198.4	197.2	194.9	192.6
137.5°	171.8	181.1	187.4	190.9	192.0	192.6	193.2	192.0	189.7	187.4
140°	155.6	168.9	177.0	181.6	182.8	184.5	185.7	184.5	182.8	181.1
142.5°	139.4	153.3	164.9	171.2	172.4	174.1	175.8	175.8	174.1	172.4
145°	122.1	135.9	148.1	158.5	160.2	162.0	164.3	165.4	163.7	162.0
147.5°	101.8	116.3	129.0	140.6	145.8	148.1	150.4	151.6	151.0	149.2
150°	80.4	96.0	108.2	119.7	124.9	131.9	134.8	135.4	134.8	133.0
152.5°	48.6	71.1	85.0	96.6	101.2	107.6	115.7	117.4	116.3	115.1
155°	27.2	37.0	52.1	69.4	74.6	80.4	90.2	94.3	93.7	93.7
157.5°	8.1	20.2	27.8	34.1	36.4	39.9	51.5	61.3	64.2	64.8
160°	0.6	0.6	6.9	13.9	17.4	20.8	26.6	30.1	30.7	31.2
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)