

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: P232569

Luminaire Tested: **4SKB1-LD5-5-W-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232569
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-LD5-5-W-UNV-L850-CD1-U
Description: METALUX SKYBAR 4' WAVESTREAM STRIP
WITH WIDE LENS
Light Source: (196) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

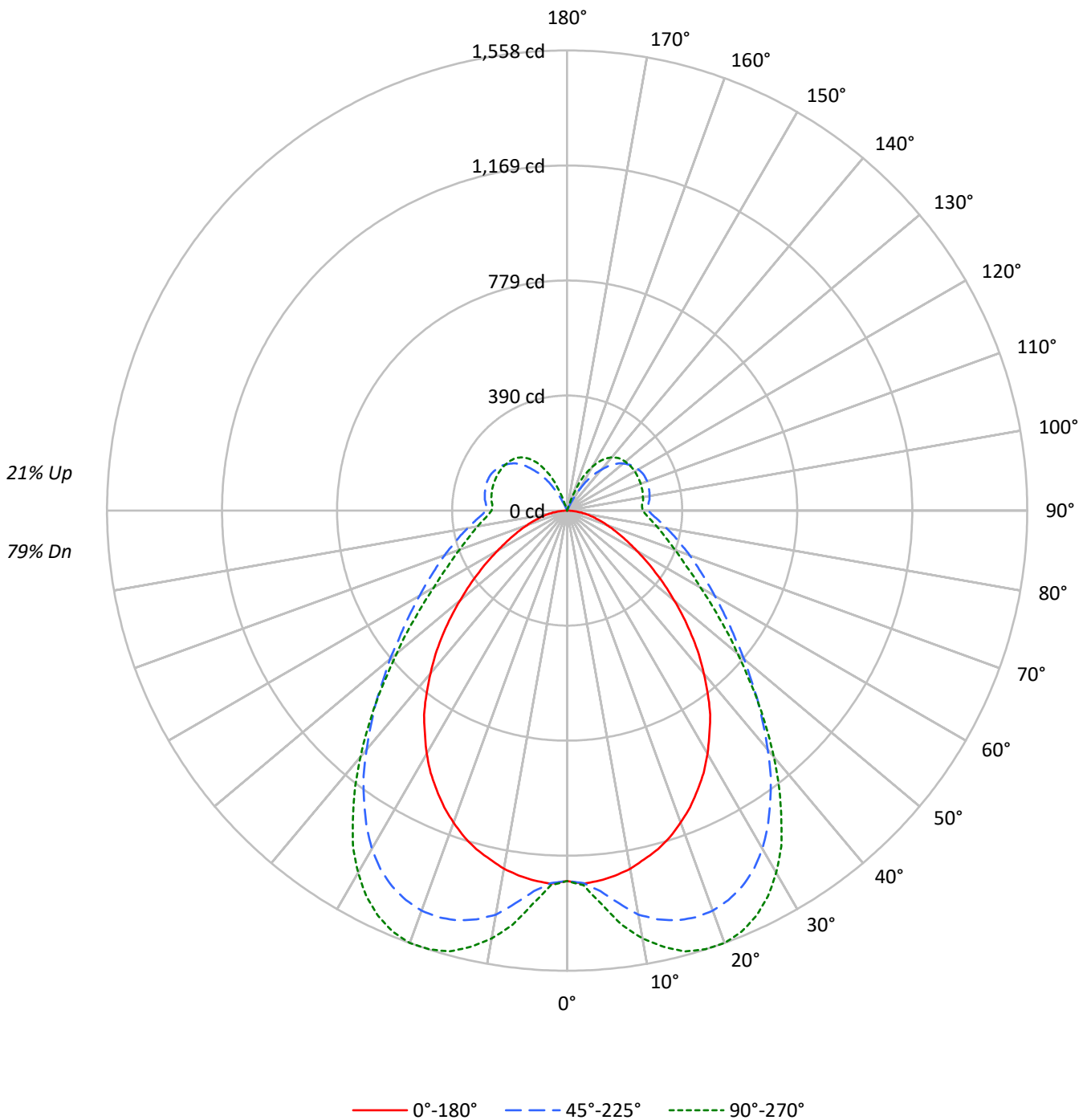
Lumens per Lamp: N/A
Luminaire Lumens: 5221.0 lumens
Efficiency: N/A
Efficacy: 137.4 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.48 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.29')
CIE Type: Semi-Direct

Input Watts (W): 38
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°	13498	13498	13498
5°	13503	12976	13111
10°	13288	13150	13335
15°	12975	12962	13119
20°	12543	12520	12528
25°	11997	11832	11649
30°	11338	10912	10512
35°	10560	9765	9139
40°	9524	8554	7731
45°	8447	7407	6409
50°	7289	6408	5281
55°	6190	5569	4392
60°	5195	4936	3709
65°	4398	4443	3239
70°	3781	4077	2905
75°	3217	3765	2666
80°	2636	3539	2506
85°	1772	3401	2387



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.6	2.4
10°-20°	398.0	7.6
20°-30°	623.7	11.9
30°-40°	714.2	13.7
40°-50°	657.8	12.6
50°-60°	539.9	10.3
60°-70°	431.6	8.3
70°-80°	346.7	6.6
80°-90°	275.8	5.3
90°-100°	246.5	4.7
100°-110°	240.1	4.6
110°-120°	217.6	4.2
120°-130°	179.8	3.4
130°-140°	129.0	2.5
140°-150°	71.7	1.4
150°-160°	21.6	0.4
160°-170°	0.5	0.0
170°-180°	0.0	0.0
0°-30°	1148.3	22.0
0°-40°	1862.5	35.7
0°-60°	3060.2	58.6
0°-90°	4114.3	78.8
90°-120°	704.2	13.5
90°-150°	1084.7	20.8
90°-180°	1107.0	21.2
0°-180°	5221.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1254	1254	1254	1254	1254	
5°	1258	1270	1293	1337	1337	119
15°	1187	1307	1436	1526	1545	334
25°	1044	1244	1403	1502	1514	480
35°	845	1050	1199	1270	1264	525
45°	595	793	913	937	912	459
55°	364	570	668	651	624	328
65°	200	418	502	468	445	201
75°	98	318	387	357	343	106
85°	26	241	303	285	277	29
90°	2	214	275	262	256	2
95°	1	212	276	262	254	1
105°	1	208	287	273	264	1
115°	1	188	286	278	265	1
125°	1	146	267	276	262	1
135°	1	53	222	258	250	1
145°	1	2	136	208	210	1
155°	1	1	21	97	122	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°	1254.0	1254.0	1254.0	1254.0	1254.0	1254.0	1254.0	1254.0	1254.0	1254.0	1254.0
2.5°	1264.5	1259.2	1255.5	1259.2	1260.7	1262.2	1266.0	1265.2	1266.0	1264.5	1262.2
5°	1257.7	1253.2	1251.7	1259.2	1266.7	1270.5	1275.7	1281.0	1285.5	1291.5	1293.0
7.5°	1246.5	1244.2	1245.7	1259.2	1271.2	1280.2	1287.8	1301.3	1314.8	1328.3	1341.1
10°	1231.4	1229.9	1236.7	1257.0	1276.5	1289.3	1302.0	1326.8	1350.1	1371.1	1389.1
12.5°	1208.9	1212.7	1223.9	1251.0	1281.7	1299.8	1320.0	1350.8	1375.6	1399.6	1417.7
15°	1187.1	1189.4	1211.2	1243.5	1279.5	1307.3	1328.3	1367.3	1392.9	1417.7	1436.4
17.5°	1158.6	1163.9	1187.9	1233.7	1278.0	1302.8	1328.3	1359.1	1389.9	1418.4	1443.9
20°	1124.1	1135.3	1167.6	1217.9	1268.2	1293.0	1315.5	1353.1	1384.6	1412.4	1441.7
22.5°	1087.3	1100.0	1136.1	1196.1	1248.0	1272.7	1294.5	1335.8	1368.1	1395.9	1427.4
25°	1044.5	1061.0	1103.8	1168.4	1217.9	1243.5	1266.7	1308.8	1342.6	1370.4	1403.4
27.5°	1000.9	1019.7	1066.2	1131.6	1182.6	1206.7	1230.7	1272.7	1306.5	1334.3	1368.8
30°	950.6	970.9	1023.4	1086.5	1136.8	1163.1	1184.9	1226.2	1263.0	1287.8	1322.3
32.5°	896.5	919.8	976.1	1037.0	1087.3	1112.0	1133.8	1173.6	1206.7	1232.9	1264.5
35°	844.7	863.5	920.6	979.9	1028.0	1050.5	1076.0	1114.3	1143.6	1170.6	1199.2
37.5°	782.4	804.9	862.8	919.1	967.1	991.2	1012.2	1047.5	1074.5	1100.0	1132.3
40°	719.3	744.1	804.2	854.5	904.1	922.8	943.9	976.1	1001.7	1033.2	1056.5
42.5°	660.0	683.3	740.4	791.4	838.0	856.8	877.0	910.8	932.6	959.6	982.9
45°	595.4	619.5	680.3	728.4	772.7	792.9	814.0	841.7	866.5	888.3	913.1
47.5°	533.9	562.4	621.0	666.0	711.1	729.9	747.9	777.2	801.9	825.2	842.5
50°	473.1	503.8	560.9	609.7	652.5	671.3	689.3	718.6	744.1	764.4	782.4
52.5°	417.5	449.8	508.3	559.4	597.7	617.2	635.2	663.8	689.3	708.1	720.1
55°	364.2	400.2	461.0	510.6	548.9	569.9	584.2	614.2	639.7	657.0	668.3
57.5°	317.6	357.4	415.2	466.3	506.1	524.9	542.1	570.7	594.7	611.2	620.2
60°	271.8	316.1	376.2	425.7	466.3	484.3	503.1	531.6	554.1	569.2	577.4
62.5°	233.5	280.1	342.4	390.5	431.8	449.8	466.3	494.8	516.6	531.6	538.4
65°	199.7	248.5	311.6	359.7	399.5	418.2	435.5	464.8	485.1	499.3	502.3
67.5°	170.4	220.0	283.8	331.1	372.4	389.7	407.0	436.3	455.8	467.8	470.0
70°	144.2	194.5	258.3	305.6	346.2	364.9	382.2	408.5	428.8	438.5	441.5
72.5°	120.1	172.7	234.3	283.1	323.6	340.9	357.4	385.2	404.0	413.0	412.2
75°	98.4	152.4	214.0	262.1	300.4	318.4	334.9	361.9	380.7	388.2	386.7
77.5°	79.6	135.2	194.5	241.0	280.1	298.1	313.1	340.1	357.4	365.7	364.2
80°	60.1	116.4	175.7	221.5	260.6	277.1	293.6	319.1	336.4	344.7	340.9
82.5°	43.6	99.1	158.4	203.5	241.8	259.1	274.1	300.4	316.9	323.6	321.4
85°	26.3	81.8	139.7	186.2	224.5	241.0	257.6	282.3	298.8	305.6	303.4
87.5°	11.3	66.1	123.9	170.4	208.7	225.3	241.0	265.8	281.6	288.3	286.1
90°	1.5	55.6	114.1	159.9	197.5	214.0	229.8	254.5	270.3	277.1	274.8
92.5°	0.8	53.3	111.1	156.9	194.5	211.7	226.8	252.3	268.8	274.8	274.1
95°	0.8	49.6	109.6	156.9	195.2	212.5	228.3	253.8	270.3	277.1	276.3
97.5°	0.8	44.3	107.4	156.2	196.0	214.0	229.8	256.8	274.1	281.6	280.8
100°	0.8	36.0	102.9	153.9	194.5	213.2	229.0	256.8	274.8	283.1	283.1
102.5°	0.8	24.8	97.6	150.2	193.0	211.0	227.5	256.0	274.8	283.8	285.3
105°	0.8	15.0	90.9	145.7	189.2	208.0	225.3	254.5	274.1	284.6	286.8
107.5°	0.8	9.8	82.6	140.4	185.5	205.0	222.3	252.3	272.6	284.6	287.6
110°	0.8	8.3	72.1	134.4	180.2	199.7	217.8	249.3	270.3	283.8	288.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.8	6.8	55.6	126.1	174.2	194.5	213.2	244.0	267.3	280.8	287.6
115°	0.8	5.3	36.0	116.4	166.7	187.7	206.5	238.8	262.1	277.8	286.1
117.5°	0.8	4.5	23.3	105.1	158.4	179.5	199.0	232.0	256.8	273.3	283.1
120°	0.8	3.8	9.8	90.1	147.9	170.4	190.0	223.0	249.3	267.3	278.6
122.5°	0.8	3.0	7.5	67.6	135.9	159.2	179.5	214.0	240.3	260.6	272.6
125°	0.8	3.0	6.0	43.6	120.9	146.4	168.2	203.5	231.3	252.3	266.6
127.5°	0.8	2.3	5.3	29.3	102.9	131.4	154.7	191.5	220.0	241.8	257.6
130°	0.8	2.3	4.5	12.8	76.6	112.6	138.2	177.2	207.2	230.5	247.8
132.5°	0.8	1.5	3.8	5.3	47.3	87.1	117.1	159.2	192.2	217.0	236.5
135°	0.8	1.5	3.0	4.5	31.5	53.3	91.6	138.9	172.7	199.0	221.5
137.5°	0.8	1.5	2.3	3.8	12.8	35.3	56.3	116.4	151.7	179.5	202.7
140°	0.8	1.5	2.3	3.0	3.8	16.5	38.3	88.6	128.4	158.4	181.0
142.5°	0.8	1.5	2.3	2.3	3.0	3.8	18.8	51.8	102.9	135.2	159.9
145°	0.8	0.8	1.5	2.3	2.3	2.3	3.0	35.3	66.8	109.6	135.9
147.5°	0.8	0.8	1.5	1.5	2.3	2.3	2.3	14.3	41.3	77.3	109.6
150°	0.8	0.8	1.5	1.5	1.5	1.5	1.5	1.5	21.0	42.0	74.3
152.5°	0.8	0.8	0.8	1.5	1.5	1.5	1.5	1.5	2.3	24.0	41.3
155°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	2.3	21.0
157.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
160°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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°	1254.0	1254.0	1254.0	1254.0	1254.0	1254.0	1254.0	1254.0	1254.0	1254.0
2.5°	1266.0	1272.7	1275.7	1278.7	1279.5	1280.2	1278.7	1278.0	1272.7	1269.7
5°	1303.5	1320.0	1326.8	1336.6	1337.3	1338.1	1342.6	1340.3	1341.1	1337.3
7.5°	1358.3	1382.4	1392.9	1405.6	1408.6	1412.4	1419.9	1420.7	1419.9	1414.7
10°	1409.4	1429.7	1445.4	1457.5	1462.0	1465.0	1474.0	1476.2	1474.7	1471.0
12.5°	1440.2	1466.5	1482.2	1499.5	1504.0	1508.5	1516.0	1519.8	1515.3	1513.0
15°	1466.5	1494.2	1507.0	1525.8	1526.5	1534.8	1547.6	1549.1	1546.8	1545.3
17.5°	1473.2	1501.8	1520.5	1537.0	1543.1	1548.3	1555.8	1561.8	1562.6	1556.6
20°	1471.7	1498.8	1521.3	1538.5	1545.3	1549.1	1558.8	1563.3	1561.1	1558.1
22.5°	1459.7	1486.7	1509.3	1524.3	1530.3	1536.3	1545.3	1549.1	1549.1	1543.1
25°	1434.9	1462.0	1481.5	1497.2	1502.5	1508.5	1517.5	1519.8	1518.3	1514.5
27.5°	1399.6	1423.7	1443.2	1456.7	1462.0	1467.2	1477.0	1479.2	1476.2	1472.5
30°	1347.8	1372.6	1392.1	1404.1	1408.6	1412.4	1418.4	1423.7	1419.2	1415.4
32.5°	1291.5	1314.0	1327.6	1338.8	1341.8	1344.8	1350.8	1353.1	1348.6	1349.3
35°	1225.4	1245.0	1260.7	1268.2	1269.7	1269.0	1272.0	1272.7	1273.5	1263.7
37.5°	1153.3	1170.6	1178.1	1188.6	1186.4	1190.1	1193.1	1190.1	1182.6	1178.9
40°	1076.0	1087.3	1100.0	1103.8	1101.5	1106.8	1105.3	1100.0	1091.8	1088.8
42.5°	999.4	1012.2	1016.7	1019.7	1017.4	1018.2	1015.2	1013.7	1005.4	998.7
45°	926.6	935.6	937.8	937.1	937.1	933.3	929.6	923.6	916.1	912.3
47.5°	855.2	861.3	862.0	858.3	855.2	850.7	851.5	841.0	832.0	827.5
50°	789.2	791.4	789.2	782.4	780.9	775.7	772.7	764.4	756.1	753.9
52.5°	729.9	729.1	724.6	717.1	714.1	708.8	703.6	696.1	687.8	687.8
55°	672.0	669.8	663.8	655.5	651.0	648.8	642.0	633.7	627.7	624.0
57.5°	621.7	617.2	609.7	602.2	596.2	590.2	585.7	579.7	572.2	570.7
60°	576.7	567.7	560.9	552.6	548.1	542.9	536.9	532.4	526.4	520.4
62.5°	534.6	527.1	518.1	509.8	505.3	500.8	494.8	488.1	484.3	482.8
65°	497.8	490.3	479.8	471.6	467.8	463.3	458.8	451.3	449.0	445.3
67.5°	464.8	455.0	445.3	437.8	434.0	432.5	428.0	423.5	418.2	415.2
70°	434.0	424.2	415.2	410.0	405.5	404.0	400.2	394.2	390.5	388.2
72.5°	404.7	396.5	389.0	381.4	378.4	377.7	374.7	370.2	366.4	364.2
75°	379.9	371.7	364.2	360.4	357.4	355.2	353.7	349.2	346.9	343.2
77.5°	358.2	348.4	341.6	337.9	335.6	334.1	332.6	330.4	327.4	325.1
80°	334.9	327.4	322.1	318.4	316.9	315.4	313.9	312.4	310.1	307.9
82.5°	315.4	308.6	304.1	301.1	301.1	299.6	298.8	297.3	295.1	292.1
85°	296.6	290.6	286.8	285.3	284.6	283.8	283.1	281.6	279.3	277.1
87.5°	280.8	276.3	272.6	271.8	271.8	271.1	270.3	269.6	267.3	265.1
90°	270.3	265.8	263.6	262.8	262.1	262.1	262.1	260.6	258.3	256.0
92.5°	268.8	264.3	262.1	260.6	260.6	260.6	260.6	259.1	256.8	253.8
95°	271.1	266.6	264.3	262.8	262.1	262.1	261.3	259.8	257.6	254.5
97.5°	276.3	271.8	268.8	266.6	265.8	265.8	265.1	263.6	261.3	259.1
100°	279.3	274.8	271.8	269.6	268.8	268.1	267.3	265.8	263.6	260.6
102.5°	281.6	277.1	273.3	271.8	271.1	270.3	268.8	267.3	265.1	262.1
105°	283.1	279.3	276.3	273.3	272.6	271.8	270.3	268.8	265.8	263.6
107.5°	285.3	281.6	277.8	275.6	274.1	273.3	271.8	270.3	267.3	264.3
110°	286.1	283.1	279.3	277.1	275.6	274.8	272.6	270.3	267.3	265.1



TEST NUMBER: P232569

CATALOG NUMBER: 4SKB1-LD5-5-W-UNV-L850-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	286.8	284.6	280.8	277.8	277.1	275.6	273.3	271.1	268.1	265.1
115°	286.8	284.6	281.6	278.6	277.8	276.3	274.1	271.1	268.1	265.1
117.5°	286.1	284.6	282.3	279.3	277.8	276.3	274.1	271.1	267.3	265.1
120°	283.8	283.8	281.6	279.3	277.8	276.3	273.3	270.3	267.3	264.3
122.5°	280.1	281.6	280.1	277.8	277.1	275.6	273.3	269.6	265.8	263.6
125°	274.8	278.6	277.8	276.3	275.6	274.1	271.8	268.8	265.1	262.1
127.5°	268.1	273.3	274.8	274.1	273.3	272.6	269.6	266.6	263.6	259.8
130°	259.8	266.6	269.6	269.6	269.6	268.8	267.3	264.3	260.6	257.6
132.5°	249.3	257.6	262.1	264.3	264.3	264.3	262.8	260.6	257.6	253.8
135°	237.3	247.8	253.8	256.8	257.6	257.6	257.6	256.0	253.0	250.0
137.5°	223.0	235.0	243.3	247.8	249.3	250.0	250.8	249.3	246.3	243.3
140°	202.0	219.3	229.8	235.8	237.3	239.5	241.0	239.5	237.3	235.0
142.5°	181.0	199.0	214.0	222.3	223.8	226.0	228.3	228.3	226.0	223.8
145°	158.4	176.5	192.2	205.7	208.0	210.2	213.2	214.8	212.5	210.2
147.5°	132.2	150.9	167.4	182.5	189.2	192.2	195.2	196.7	196.0	193.7
150°	104.4	124.6	140.4	155.4	162.2	171.2	175.0	175.7	175.0	172.7
152.5°	63.1	92.4	110.4	125.4	131.4	139.7	150.2	152.4	150.9	149.4
155°	35.3	48.1	67.6	90.1	96.9	104.4	117.1	122.4	121.6	121.6
157.5°	10.5	26.3	36.0	44.3	47.3	51.8	66.8	79.6	83.3	84.1
160°	0.8	0.8	9.0	18.0	22.5	27.0	34.5	39.0	39.8	40.5
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)