

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: McGRAW-EDISON

Report Number: P198199

Luminaire Tested: **TT-C2-LED-E1-DL-CG-LWR-LW-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198199
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34709)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TT-C2-LED-E1-DL-CG-LWR-LW-7050
Description: TOPTIER LED PARKING GARAGE LUMINAIRE
DRIVE LANE DISTRIBUTION WITH CLEAR GLASS LENS AND LumaWatt WIRELESS SENSOR
Light Source: (160) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3328.7 lumens
Efficiency: N/A
Efficacy: 80.4 lumens/watt
Luminous Opening: Circular (Dia: 1.12' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 41.4
Input Voltage (V): NR
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



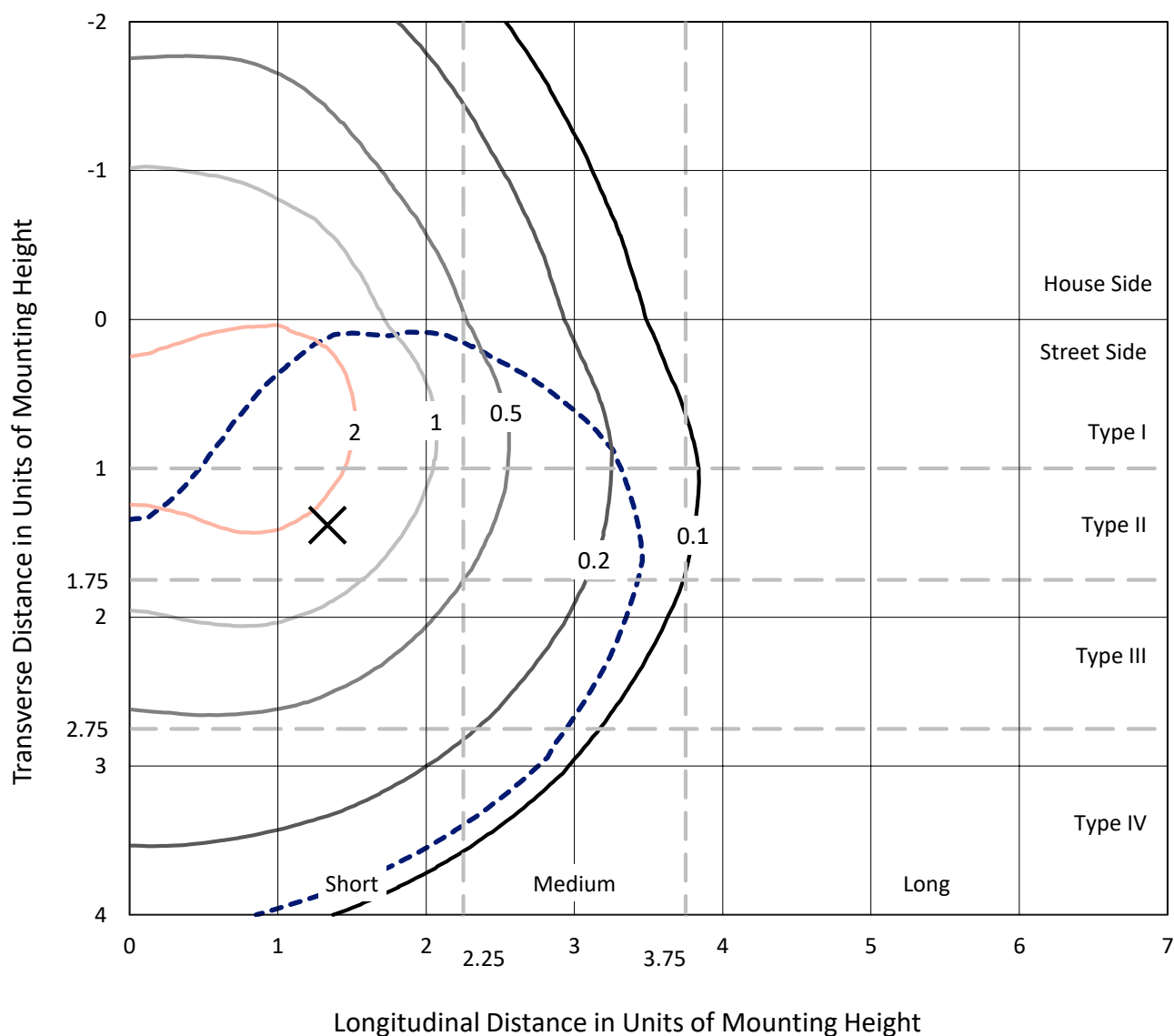
REPORT NUMBER: P198199

CATALOG NUMBER: TT-C2-LED-E1-DL-CG-LWR-LW-7050

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

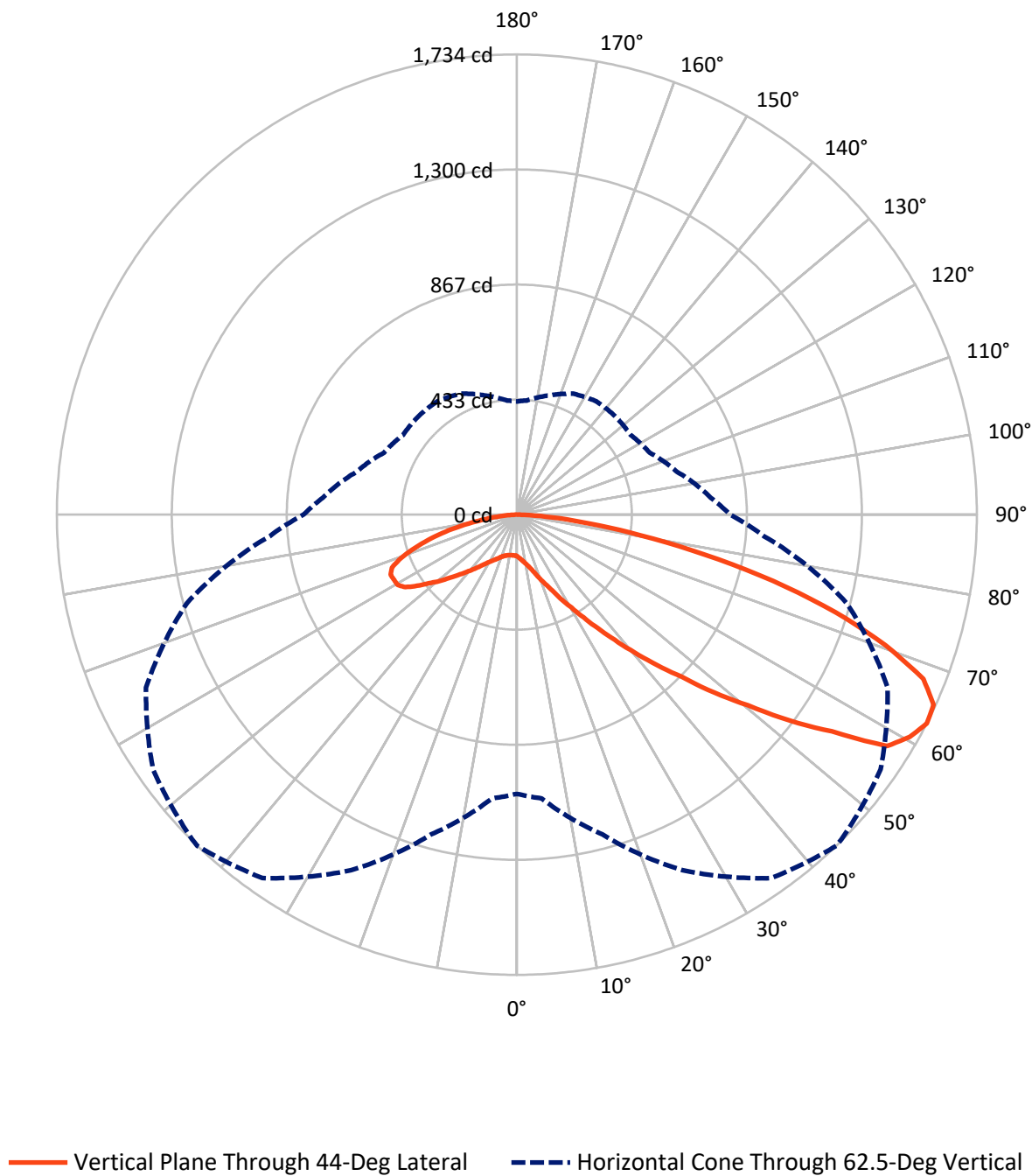


Based on 10 foot mounting height. Maximum calculated value = 3.1 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P198199

CATALOG NUMBER: TT-C2-LED-E1-DL-CG-LWR-LW-7050

Luminous Intensity Polar Plot



REPORT NUMBER: P198199

CATALOG NUMBER: TT-C2-LED-E1-DL-CG-LWR-LW-7050

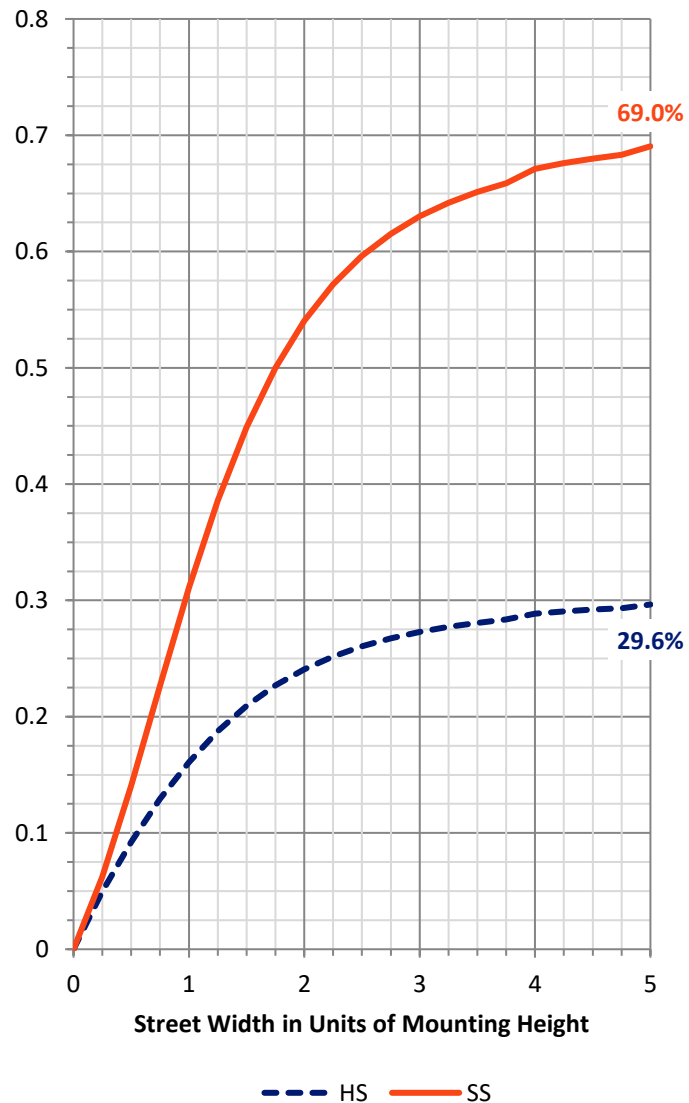
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	999.5	0.0	999.5
	% Fixture	30.0	0.0	30.0
Street Side	Lumens	2329.2	0.0	2329.2
	% Fixture	70.0	0.0	70.0
Total	Lumens	3328.7	0.0	3328.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.7	0.5
10°-20°	54.2	1.6
20°-30°	117.3	3.5
30°-40°	231.5	7.0
40°-50°	437.7	13.1
50°-60°	752.2	22.6
60°-70°	943.8	28.4
70°-80°	644.5	19.4
80°-90°	131.9	4.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	3328.7	100.0
0°-180°	3328.7	100.0

Coefficient of Utilization



REPORT NUMBER: P198199

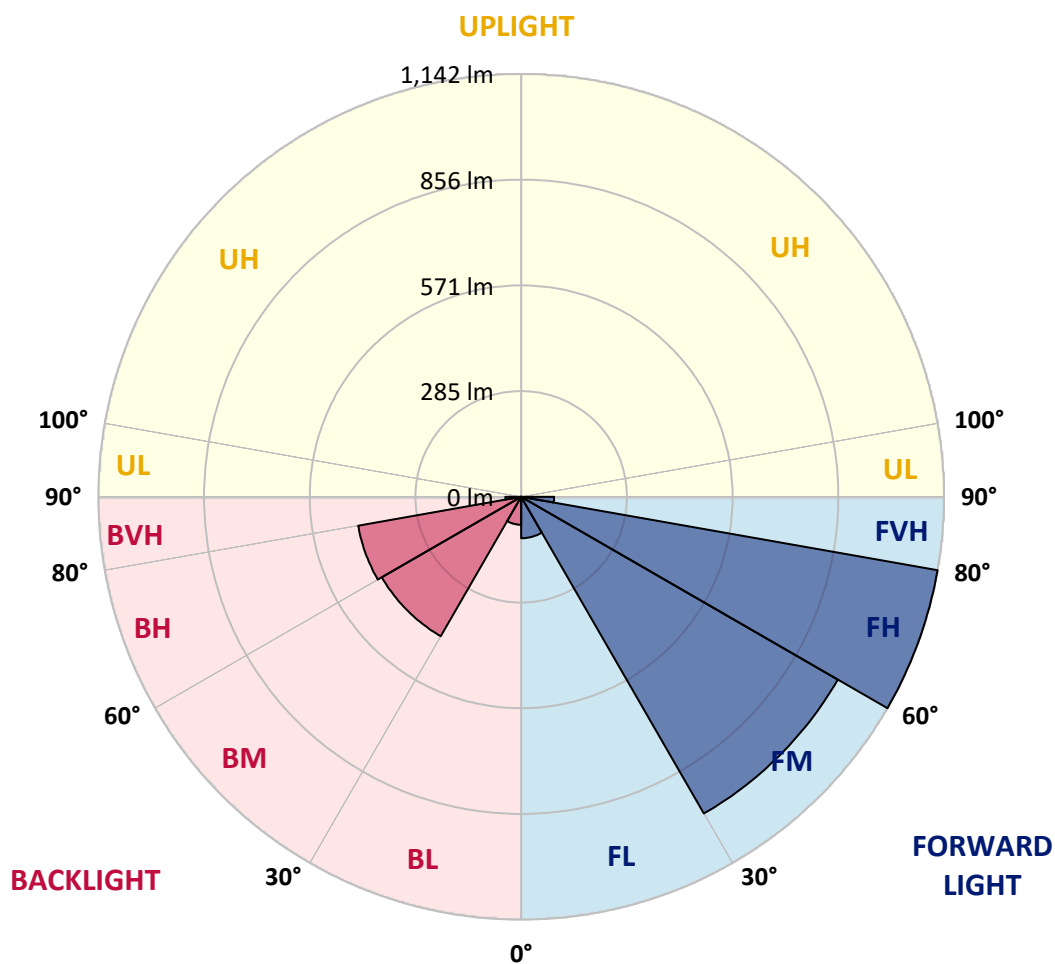
CATALOG NUMBER: TT-C2-LED-E1-DL-CG-LWR-LW-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	111.7	3.4			
FM	(30°-60°)	986.9	29.6			
FH	(60°-80°)	1141.5	34.3			G1/1800
FVH	(80°-90°)	89.0	2.7			G1/100
BL	(0°-30°)	75.5	2.3	B0/110		
BM	(30°-60°)	434.4	13.0	B1/1000		
BH	(60°-80°)	446.8	13.4	B1/500		G1/500
BVH	(80°-90°)	42.8	1.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type IV Short



REPORT NUMBER: P198199

CATALOG NUMBER: TT-C2-LED-E1-DL-CG-LWR-LW-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3
2.5°	164.0	164.0	164.0	164.0	162.6	162.6	162.6	161.9	161.2	159.8	159.1
5°	172.4	173.1	172.4	171.7	170.3	169.6	168.9	168.2	166.1	164.0	161.9
7.5°	182.9	182.2	182.2	181.5	179.4	178.0	178.0	175.2	172.4	169.6	166.1
10°	194.1	194.8	194.8	192.7	191.3	188.5	188.5	184.3	180.8	176.6	172.4
12.5°	208.1	207.4	208.8	207.4	205.3	200.4	200.4	196.9	190.6	185.0	179.4
15°	225.7	225.7	226.4	223.5	221.4	216.5	217.9	208.8	203.2	196.9	187.8
17.5°	248.1	248.1	246.0	244.6	241.1	238.3	235.5	227.8	219.3	208.8	198.3
20°	273.3	274.0	270.5	270.5	266.3	262.8	260.7	251.6	239.0	224.9	211.6
22.5°	304.1	302.7	299.9	297.1	295.0	288.7	290.8	278.9	262.1	243.2	225.7
25°	328.7	330.8	330.8	332.9	329.4	322.4	324.5	309.7	290.1	267.7	243.2
27.5°	358.8	363.0	366.5	370.7	369.3	364.4	363.0	349.7	324.5	297.8	264.9
30°	391.7	398.0	400.8	408.6	410.7	406.5	405.7	392.4	367.9	328.0	292.2
32.5°	434.5	433.8	442.2	455.5	463.9	461.8	461.1	446.4	413.5	371.4	322.4
35°	475.8	477.2	487.0	507.4	520.7	524.9	524.2	508.8	475.8	423.3	362.3
37.5°	520.7	522.8	541.7	566.2	588.0	598.5	598.5	591.5	547.3	476.5	406.5
40°	564.8	574.6	596.4	627.9	664.3	681.9	681.2	669.9	629.3	550.1	452.7
42.5°	618.1	627.9	651.7	696.6	742.1	775.8	775.8	772.3	721.1	636.3	520.0
45°	670.6	679.1	708.5	765.2	831.8	871.1	876.0	888.6	852.8	733.7	597.8
47.5°	726.7	733.7	771.6	843.0	926.4	1002.8	1007.7	1017.5	960.1	829.0	658.7
50°	782.8	785.6	840.9	936.9	1055.4	1128.3	1144.4	1164.0	1084.1	943.9	727.4
52.5°	847.2	848.6	913.1	1035.7	1183.6	1290.1	1292.9	1306.9	1262.8	1084.8	855.6
55°	904.0	906.1	988.8	1146.5	1339.2	1441.5	1469.5	1510.2	1402.3	1179.4	893.5
57.5°	956.6	965.0	1078.5	1280.3	1489.9	1644.7	1639.8	1637.7	1484.2	1217.2	901.2
60°	1007.7	1023.1	1168.2	1388.9	1600.6	1700.8	1706.4	1666.4	1506.0	1232.7	893.5
62.5°	1051.9	1072.9	1246.7	1477.9	1671.4	1733.7	1730.2	1673.5	1541.7	1286.6	935.5
65°	1083.4	1112.1	1282.4	1515.8	1665.7	1726.0	1730.9	1700.8	1572.5	1289.4	922.9
67.5°	1099.5	1140.2	1281.7	1490.6	1623.7	1652.4	1654.5	1599.2	1477.9	1220.8	844.4
70°	1103.7	1130.4	1247.4	1398.0	1477.9	1475.1	1471.6	1430.3	1314.0	1089.0	750.5
72.5°	1058.2	1082.0	1138.8	1231.3	1263.5	1256.5	1243.2	1196.9	1118.4	936.2	639.8
75°	958.0	966.4	968.5	994.4	995.8	997.9	982.5	952.4	897.0	756.8	510.9
77.5°	771.6	784.2	756.8	727.4	726.7	723.9	720.4	682.6	655.9	567.6	379.8
80°	562.0	556.4	534.0	500.4	477.9	470.9	466.7	456.2	440.1	388.9	264.2
82.5°	339.2	345.5	322.4	298.5	286.6	274.7	281.0	269.8	261.4	237.6	161.9
85°	152.1	152.1	147.2	140.9	131.0	131.7	133.1	128.9	123.3	111.4	77.8
87.5°	29.4	26.6	28.7	29.4	27.3	28.0	30.1	31.5	32.9	30.8	23.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P198199

CATALOG NUMBER: TT-C2-LED-E1-DL-CG-LWR-LW-7050

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3
2.5°	159.1	158.4	157.7	156.3	154.9	154.2	153.5	152.8	152.8	152.1	152.1
5°	161.2	160.5	159.1	157.7	156.3	154.2	152.8	152.1	150.7	150.7	150.7
7.5°	164.7	163.3	160.5	158.4	156.3	154.2	152.8	151.4	150.7	149.3	149.3
10°	169.6	167.5	164.0	159.8	157.0	154.9	152.8	151.4	150.7	150.0	150.0
12.5°	176.6	173.1	167.5	163.3	159.1	156.3	154.2	152.8	152.1	151.4	151.4
15°	183.6	180.1	173.1	166.8	161.9	159.1	156.3	155.6	154.2	154.2	154.2
17.5°	193.4	187.8	179.4	172.4	166.8	162.6	160.5	158.4	158.4	159.1	159.1
20°	204.6	198.3	187.8	178.7	172.4	168.2	166.1	164.7	164.0	164.7	165.4
22.5°	217.9	208.8	195.5	187.1	180.1	175.2	173.1	171.7	171.0	172.4	171.7
25°	231.3	222.1	206.7	195.5	187.1	183.6	181.5	180.8	179.4	180.8	180.1
27.5°	253.7	241.1	220.0	205.3	197.6	193.4	190.6	189.2	189.2	189.2	188.5
30°	273.3	258.6	234.1	219.3	208.1	203.2	200.4	199.7	199.7	200.4	199.7
32.5°	300.6	282.4	253.7	234.1	223.5	215.8	213.0	212.3	212.3	211.6	212.3
35°	335.7	313.9	276.1	253.0	239.0	232.0	229.2	228.5	226.4	226.4	226.4
37.5°	373.5	344.8	302.7	277.5	260.0	250.9	246.7	243.9	242.5	241.1	241.1
40°	414.9	381.9	335.0	302.0	283.8	271.9	264.2	260.0	257.9	255.8	254.4
42.5°	468.8	432.4	372.1	332.2	309.0	295.7	284.5	280.3	274.7	272.6	268.4
45°	539.6	493.3	418.4	373.5	339.9	321.0	309.7	300.6	293.6	290.1	286.6
47.5°	595.0	540.3	463.2	409.3	376.3	351.8	336.4	321.7	313.2	306.9	305.5
50°	651.0	593.6	510.9	446.4	410.0	388.2	367.9	349.7	334.3	327.3	328.7
52.5°	759.6	690.3	574.6	496.9	445.7	421.2	400.1	377.7	360.2	349.0	349.7
55°	790.5	719.7	616.0	545.9	496.9	464.6	436.6	412.1	386.8	370.7	371.4
57.5°	788.4	718.3	619.5	559.2	527.0	503.9	477.9	444.3	414.9	393.8	391.0
60°	777.9	707.1	613.2	552.2	528.4	522.8	509.5	478.6	438.7	414.9	410.0
62.5°	803.8	733.7	624.4	552.2	523.5	524.2	521.4	502.5	464.6	431.7	426.1
65°	792.6	716.9	617.4	557.1	532.6	527.0	525.6	507.4	481.4	444.3	439.4
67.5°	726.0	660.1	569.7	516.5	506.0	510.9	517.9	506.0	480.0	452.0	445.7
70°	637.0	580.9	504.6	458.3	453.4	463.2	479.3	480.7	466.0	444.3	445.0
72.5°	537.5	492.6	428.2	396.6	391.0	400.1	420.5	430.3	431.0	423.3	422.6
75°	431.7	391.0	344.8	318.2	319.6	333.6	349.0	365.8	371.4	376.3	380.5
77.5°	321.7	299.9	260.7	243.2	246.7	262.1	271.9	282.4	294.3	299.9	304.1
80°	224.9	206.0	180.1	169.6	173.8	182.9	191.3	200.4	215.8	216.5	224.9
82.5°	140.9	128.2	114.9	111.4	112.1	115.6	125.4	131.0	138.1	140.2	138.8
85°	68.7	65.9	61.7	59.6	60.3	63.8	70.1	74.3	78.5	77.8	73.6
87.5°	21.7	22.4	23.1	23.8	23.8	25.9	28.0	28.0	29.4	28.7	28.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)