

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: P821225

Luminaire Tested: **TT-D3-735-24VDC-MQ-UPL**

Issue Date: 7/23/2020

Test Information

Test Method: LM-79-08
Report Number: P821225
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G2-2002-677-2) AND
Test Lab: INNOVATION CENTER
Issue Date: 7/23/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TT-D3-735-24VDC-MQ-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3500K, 70 CRI LEDS AND MEDIUM DISTRIBUTION
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

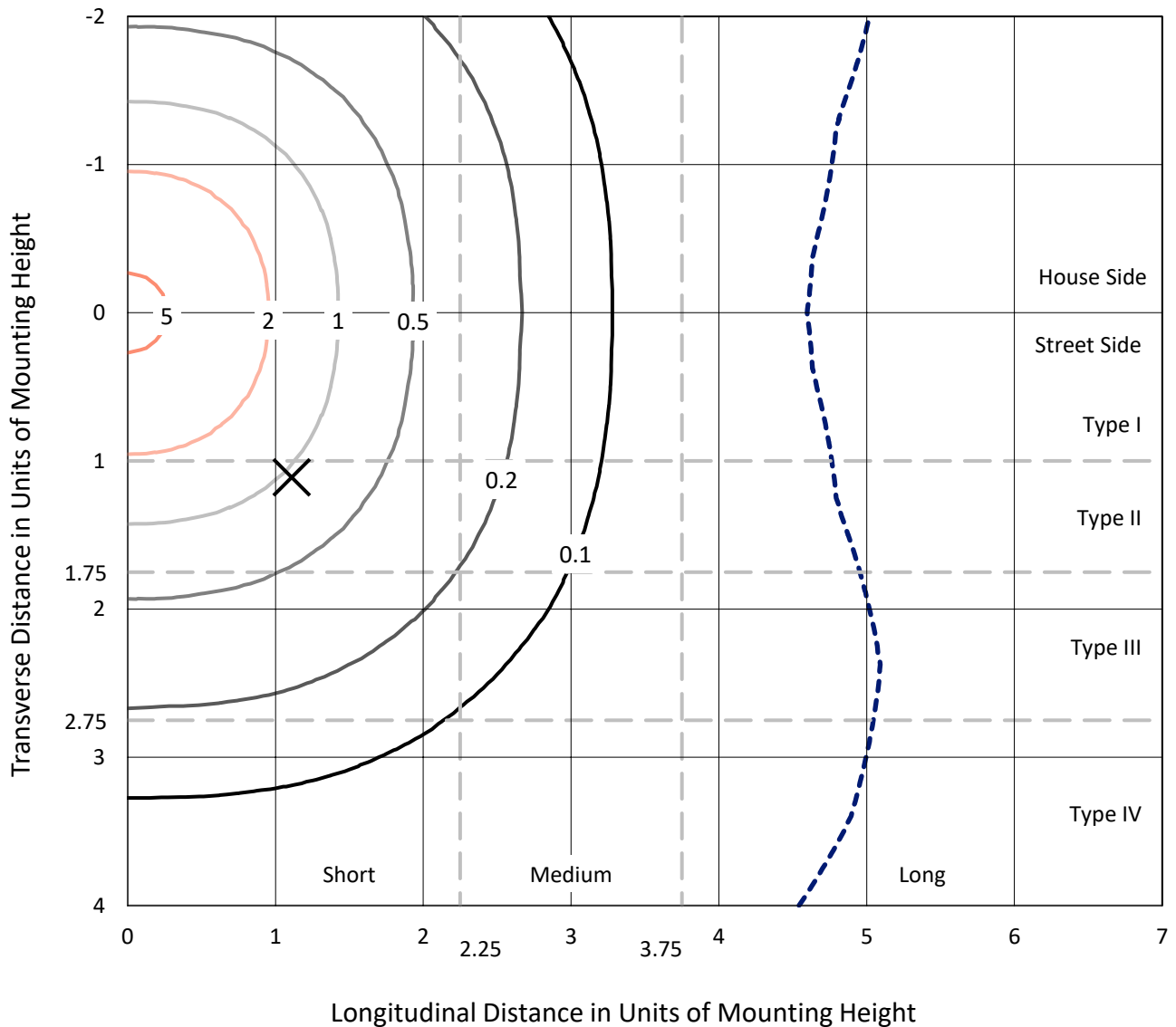
Lumens per Lamp: N/A
Luminaire Lumens: 7190.8 lumens
Efficiency: N/A
Efficacy: 156.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B3 - U4 - G2

Input Watts (W): 46
Input Voltage (V): NR
Input Current (A_{in}): 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: P821225
 CATALOG NUMBER: TT-D3-735-24VDC-MQ-UPL

Iso-Footcandle Lines of Horizontal Illumination

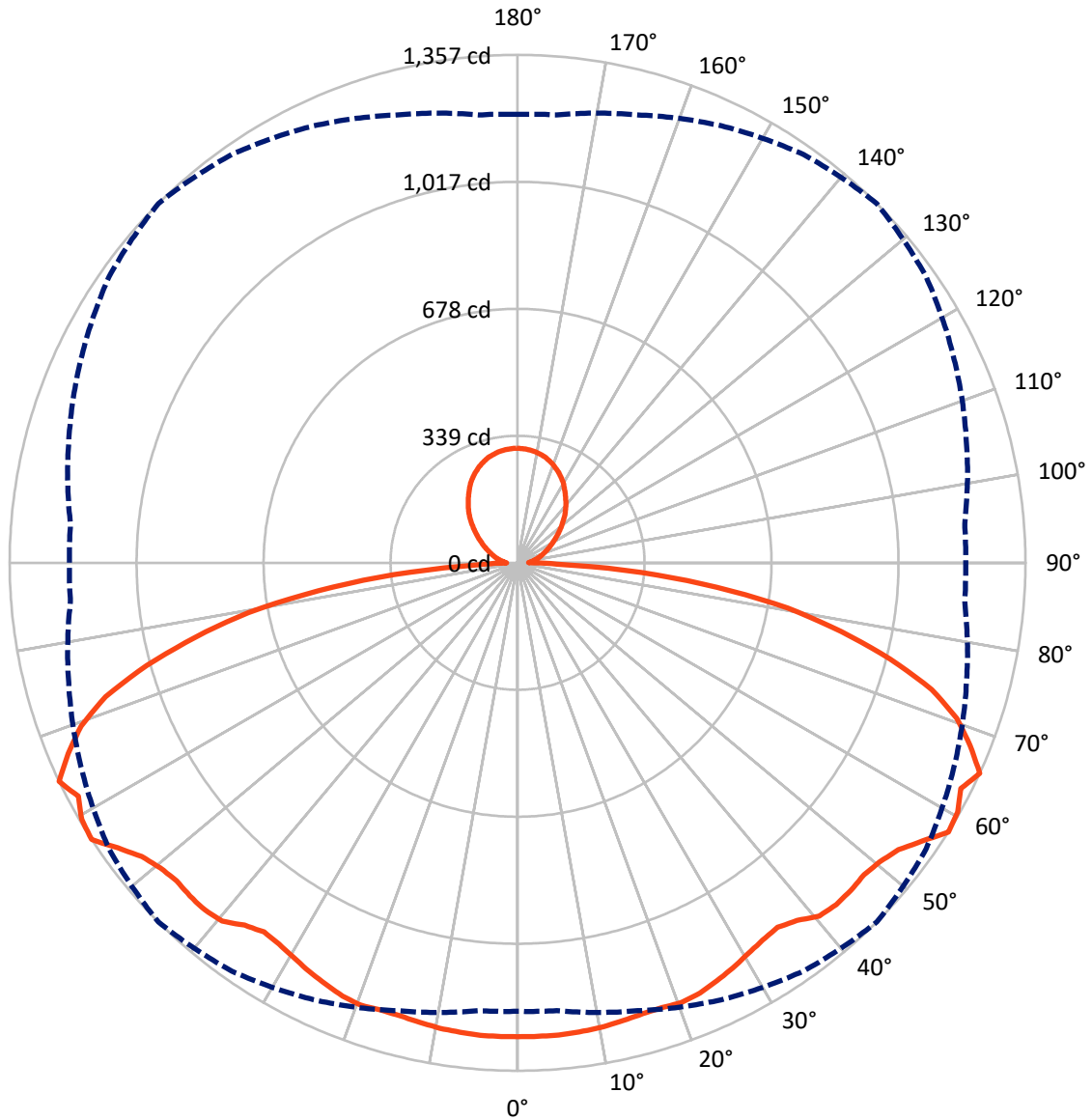
✕ Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 5.6 fc
 Type V - Short - N/A

REPORT NUMBER: P821225
CATALOG NUMBER: TT-D3-735-24VDC-MQ-UPL

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

REPORT NUMBER: P821225
 CATALOG NUMBER: TT-D3-735-24VDC-MQ-UPL

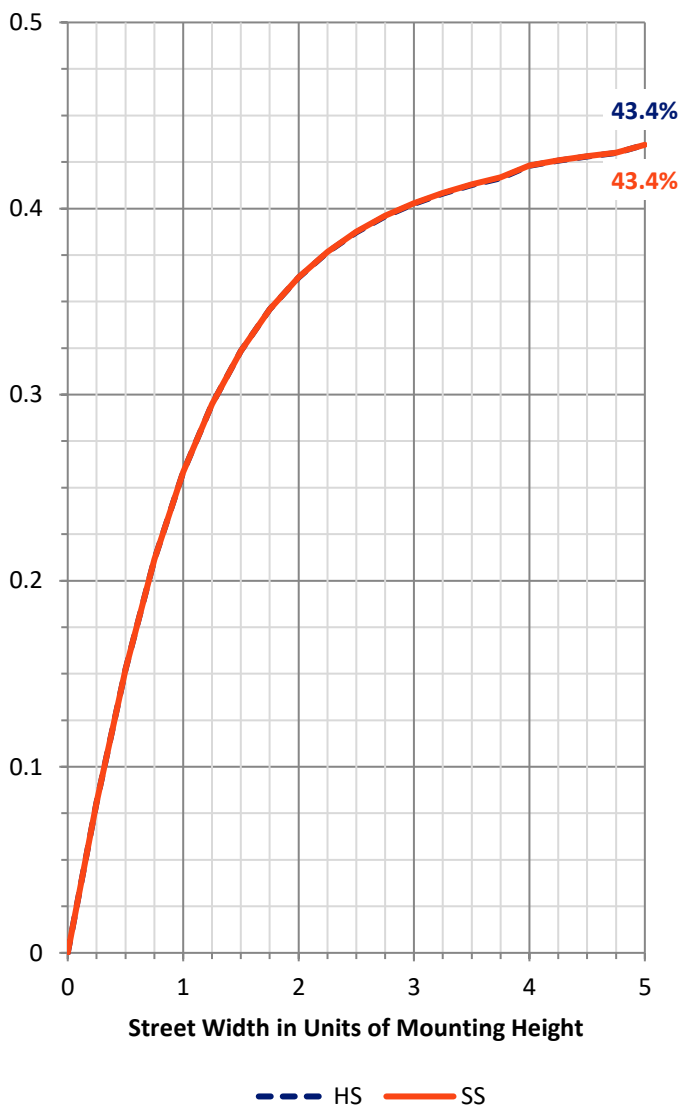
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3179.5	415.9	3595.4
	% Fixture	44.2	5.8	50.0
Street Side	Lumens	3179.5	415.9	3595.4
	% Fixture	44.2	5.8	50.0
Total	Lumens	6359.0	831.7	7190.8
	% Fixture	88.4	11.6	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.6	1.7
10°-20°	354.8	4.9
20°-30°	570.0	7.9
30°-40°	752.5	10.5
40°-50°	941.5	13.1
50°-60°	1119.9	15.6
60°-70°	1214.6	16.9
70°-80°	966.8	13.4
80°-90°	318.3	4.4
90°-100°	42.6	0.6
100°-110°	66.0	0.9
110°-120°	91.9	1.3
120°-130°	119.0	1.7
130°-140°	138.7	1.9
140°-150°	140.5	2.0
150°-160°	121.9	1.7
160°-170°	82.2	1.1
170°-180°	28.9	0.4
0°-90°	6359.0	88.4
0°-180°	7190.8	100.0

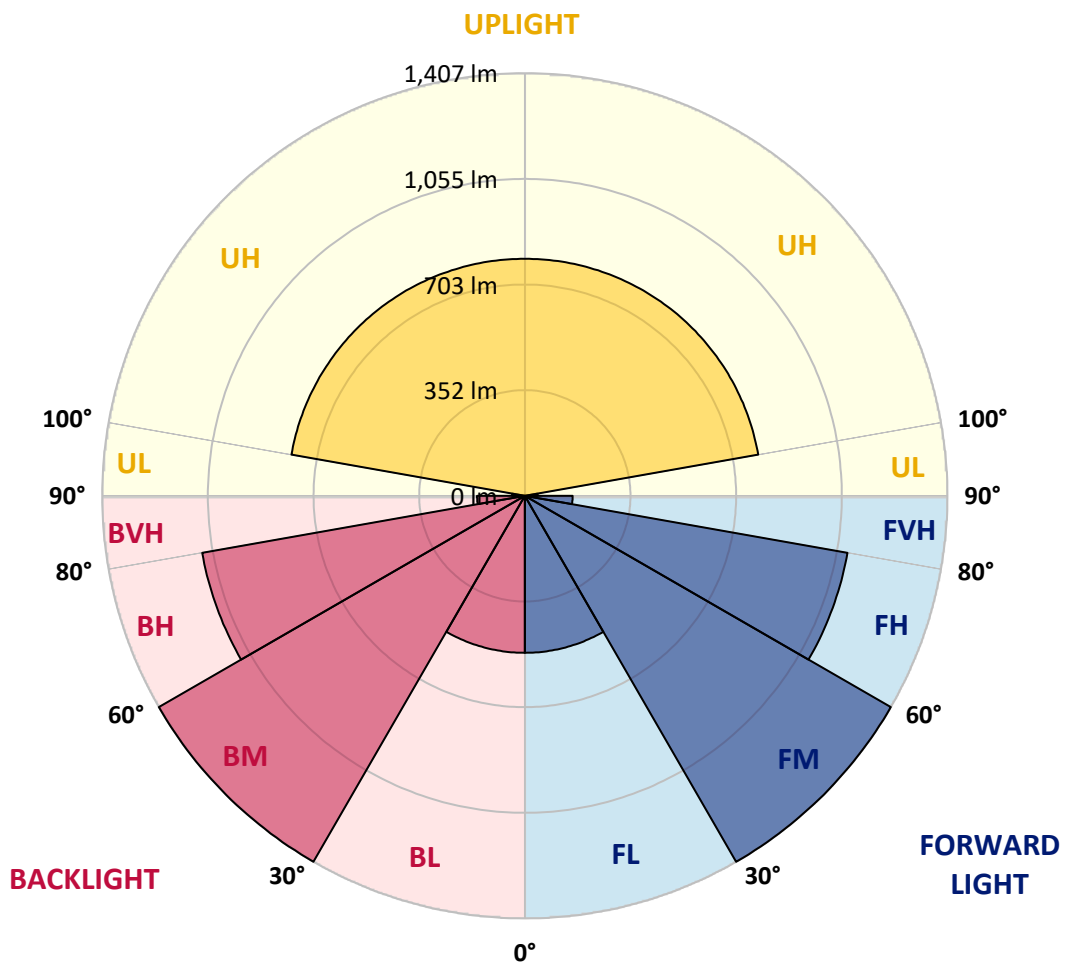


REPORT NUMBER: P821225
 CATALOG NUMBER: TT-D3-735-24VDC-MQ-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	522.7	7.3			
FM (30°-60°)	1407.0	19.6			
FH (60°-80°)	1090.7	15.2			G1/1800
FVH (80°-90°)	159.1	2.2			G2/225
BL (0°-30°)	522.7	7.3	B2/1000		
BM (30°-60°)	1407.0	19.6	B2/2500		
BH (60°-80°)	1090.7	15.2	B3/2500		G1/1800
BVH (80°-90°)	159.1	2.2			G2/225
UL (90°-100°)	42.6	0.6		U2/50	
UH (100°-180°)	789.1	11.0		U4/1000	

BUG Rating: B3-U4-G2
 Type V Short





REPORT NUMBER: P821225

CATALOG NUMBER: TT-D3-735-24VDC-MQ-UPL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1265.7	1265.7	1265.7	1265.7	1265.7	1265.7	1265.7	1265.7	1265.7	1265.7	1265.7
2.5°	1267.6	1266.7	1267.6	1266.7	1266.7	1265.7	1266.7	1266.7	1266.7	1266.7	1266.7
5°	1266.7	1265.7	1265.7	1266.7	1265.7	1265.7	1265.7	1265.7	1265.7	1265.7	1265.7
7.5°	1262.9	1262.9	1263.8	1262.9	1262.9	1262.9	1262.9	1262.9	1262.9	1263.8	1263.8
10°	1260.0	1259.1	1260.0	1260.0	1259.1	1260.0	1259.1	1260.0	1260.0	1260.0	1260.0
12.5°	1256.3	1255.3	1256.3	1256.3	1255.3	1254.4	1255.3	1255.3	1256.3	1256.3	1256.3
15°	1249.7	1249.7	1251.5	1250.6	1250.6	1249.7	1251.5	1250.6	1249.7	1250.6	1250.6
17.5°	1244.9	1244.9	1246.8	1248.7	1248.7	1248.7	1248.7	1247.8	1245.9	1246.8	1244.9
20°	1245.9	1246.8	1247.8	1250.6	1252.5	1253.4	1253.4	1250.6	1247.8	1248.7	1247.8
22.5°	1243.0	1242.1	1243.0	1244.9	1247.8	1247.8	1247.8	1244.0	1243.0	1242.1	1242.1
25°	1231.7	1231.7	1233.6	1235.5	1237.4	1236.4	1237.4	1235.5	1233.6	1231.7	1231.7
27.5°	1218.5	1218.5	1221.3	1223.2	1225.1	1225.1	1224.1	1222.2	1221.3	1219.4	1218.5
30°	1205.2	1205.2	1208.1	1209.9	1212.8	1211.8	1211.8	1209.0	1206.2	1204.3	1204.3
32.5°	1191.0	1190.1	1192.9	1197.7	1201.4	1201.4	1201.4	1195.8	1192.0	1190.1	1189.2
35°	1178.8	1178.8	1182.5	1191.0	1195.8	1195.8	1193.9	1190.1	1181.6	1178.8	1178.8
37.5°	1175.0	1177.8	1188.2	1200.5	1209.9	1211.8	1209.0	1198.6	1187.3	1178.8	1175.9
40°	1187.3	1190.1	1203.3	1223.2	1237.4	1240.2	1237.4	1222.2	1202.4	1189.2	1188.2
42.5°	1189.2	1191.0	1207.1	1229.8	1243.0	1247.8	1243.0	1227.9	1206.2	1190.1	1189.2
45°	1182.5	1183.5	1202.4	1226.0	1242.1	1247.8	1242.1	1224.1	1201.4	1183.5	1182.5
47.5°	1174.0	1175.9	1196.7	1221.3	1241.1	1244.9	1240.2	1220.3	1194.8	1176.9	1174.0
50°	1167.4	1173.1	1192.0	1219.4	1243.0	1254.4	1243.0	1216.6	1191.0	1171.2	1167.4
52.5°	1171.2	1173.1	1197.7	1236.4	1268.6	1273.3	1267.6	1236.4	1195.8	1173.1	1170.2
55°	1182.5	1191.0	1217.5	1273.3	1302.6	1311.1	1298.8	1271.4	1218.5	1191.0	1182.5
57.5°	1197.7	1200.5	1238.3	1287.5	1330.9	1356.5	1331.9	1286.5	1241.1	1198.6	1196.7
60°	1185.4	1176.9	1224.1	1281.8	1340.4	1350.8	1336.6	1282.7	1222.2	1175.9	1184.4
62.5°	1152.3	1158.0	1196.7	1276.1	1316.8	1328.1	1313.0	1276.1	1194.8	1162.7	1149.5
65°	1125.8	1159.8	1202.4	1259.1	1324.3	1356.5	1325.3	1257.2	1204.3	1154.2	1123.0
67.5°	1089.0	1095.6	1158.9	1228.9	1287.5	1303.5	1286.5	1229.8	1153.2	1090.8	1095.6
70°	1026.6	1017.1	1081.4	1162.7	1218.5	1244.0	1220.3	1158.9	1078.6	1015.2	1023.7
72.5°	923.5	929.2	988.8	1074.8	1132.4	1157.0	1133.4	1068.2	986.9	934.9	929.2
75°	815.8	822.4	880.0	958.5	1017.1	1027.5	1020.9	953.8	881.9	821.4	815.8
77.5°	692.9	699.5	746.8	832.8	867.8	883.8	869.7	837.5	744.9	698.6	691.0
80°	556.8	554.9	596.5	670.2	713.7	731.6	713.7	672.1	594.6	558.7	546.4
82.5°	398.0	399.9	438.6	489.7	531.2	536.9	528.4	494.4	434.8	404.6	387.6
85°	221.2	229.7	258.1	295.9	323.3	332.7	318.6	286.4	257.1	233.5	225.9
87.5°	52.9	57.7	67.1	85.1	95.5	104.9	95.5	88.9	63.3	57.7	52.9
90°	30.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1
92.5°	34.8	34.2	34.2	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8
95°	39.4	39.4	39.4	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5
97.5°	44.6	44.6	44.6	44.2	44.2	44.2	44.2	44.2	44.2	44.2	44.2
100°	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
102.5°	55.9	55.9	55.9	55.9	55.9	55.9	55.9	56.4	55.9	55.9	55.9
105°	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.9	62.0	62.0	62.0
107.5°	68.6	68.6	69.0	69.0	69.0	69.0	69.0	69.5	69.0	69.0	69.0
110°	75.1	75.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	83.1	83.1	84.0	84.0	84.0	84.0	84.6	84.6	84.0	84.0	84.0
115°	91.1	91.1	92.0	92.0	92.0	92.0	93.0	93.0	92.0	92.0	92.0
117.5°	100.5	100.5	101.0	101.4	101.4	101.4	102.4	102.4	101.4	101.4	101.4
120°	109.9	109.9	109.9	110.8	110.8	110.8	111.8	111.8	110.8	110.8	110.8
122.5°	120.7	120.7	121.2	121.6	121.6	121.6	122.6	122.6	122.1	122.1	121.6
125°	131.5	131.5	132.4	132.4	132.4	132.4	133.4	133.4	133.4	133.4	132.4
127.5°	143.2	143.2	144.2	144.2	144.2	144.2	145.1	145.1	145.1	145.1	144.2
130°	155.0	155.0	155.9	155.9	155.9	155.9	156.8	156.8	156.8	156.8	155.9
132.5°	167.2	167.2	167.6	167.6	167.6	167.6	168.6	168.6	168.6	168.6	168.1
135°	179.4	179.4	179.4	179.4	179.4	179.4	180.3	180.3	180.3	180.3	180.3
137.5°	191.2	190.6	191.2	190.6	191.2	191.6	191.6	191.6	191.6	191.6	191.6
140°	202.9	201.9	202.9	201.9	202.9	202.9	202.9	202.9	202.9	202.9	202.9
142.5°	213.7	213.2	213.7	212.7	213.7	213.7	213.7	213.7	213.7	213.7	213.7
145°	224.5	224.5	224.5	223.5	224.5	224.5	224.5	224.5	224.5	224.5	224.5
147.5°	235.8	235.3	235.8	234.8	235.8	235.8	235.8	235.8	235.8	235.8	235.8
150°	247.0	246.1	247.0	246.1	247.0	247.0	247.0	247.0	247.0	247.0	247.0
152.5°	256.0	255.5	256.4	255.5	256.0	256.0	256.4	256.0	256.0	256.0	256.0
155°	264.9	264.9	265.8	264.9	264.9	264.9	265.8	264.9	264.9	264.9	264.9
157.5°	272.4	272.4	273.3	272.4	272.4	272.4	273.3	272.4	272.4	272.4	272.4
160°	279.9	279.9	280.8	279.9	279.9	279.9	280.8	279.9	279.9	279.9	279.9
162.5°	286.0	286.0	286.9	286.0	286.0	286.0	286.9	286.0	286.0	286.0	286.0
165°	292.1	292.1	293.0	292.1	292.1	292.1	293.0	292.1	292.1	292.1	292.1
167.5°	295.8	295.8	296.8	295.8	295.8	295.8	296.8	295.8	295.8	295.8	295.8
170°	299.6	299.6	300.5	299.6	299.6	299.6	300.5	299.6	299.6	299.6	299.6
172.5°	302.0	302.0	302.8	302.0	302.4	302.0	302.8	302.0	302.0	302.0	302.0
175°	304.3	304.3	305.2	304.3	305.2	304.3	305.2	304.3	304.3	304.3	304.3
177.5°	305.2	305.2	305.7	305.2	305.7	305.2	305.7	305.2	305.2	305.2	305.2
180°	306.2	306.2	306.2	306.2	306.2	306.2	306.2	306.2	306.2	306.2	306.2

(END OF REPORT)