

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: P821145

Luminaire Tested: **TT-D3-830-24VDC-CQ-UPL**

Issue Date: 7/23/2020

Test Information

Test Method: LM-79-08
Report Number: P821145
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-D3-830-24VDC-CQ-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND CONCENTRATED DISTRIBUTION
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6430.7 lumens
Efficiency: N/A
Efficacy: 139.8 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U4 - G1

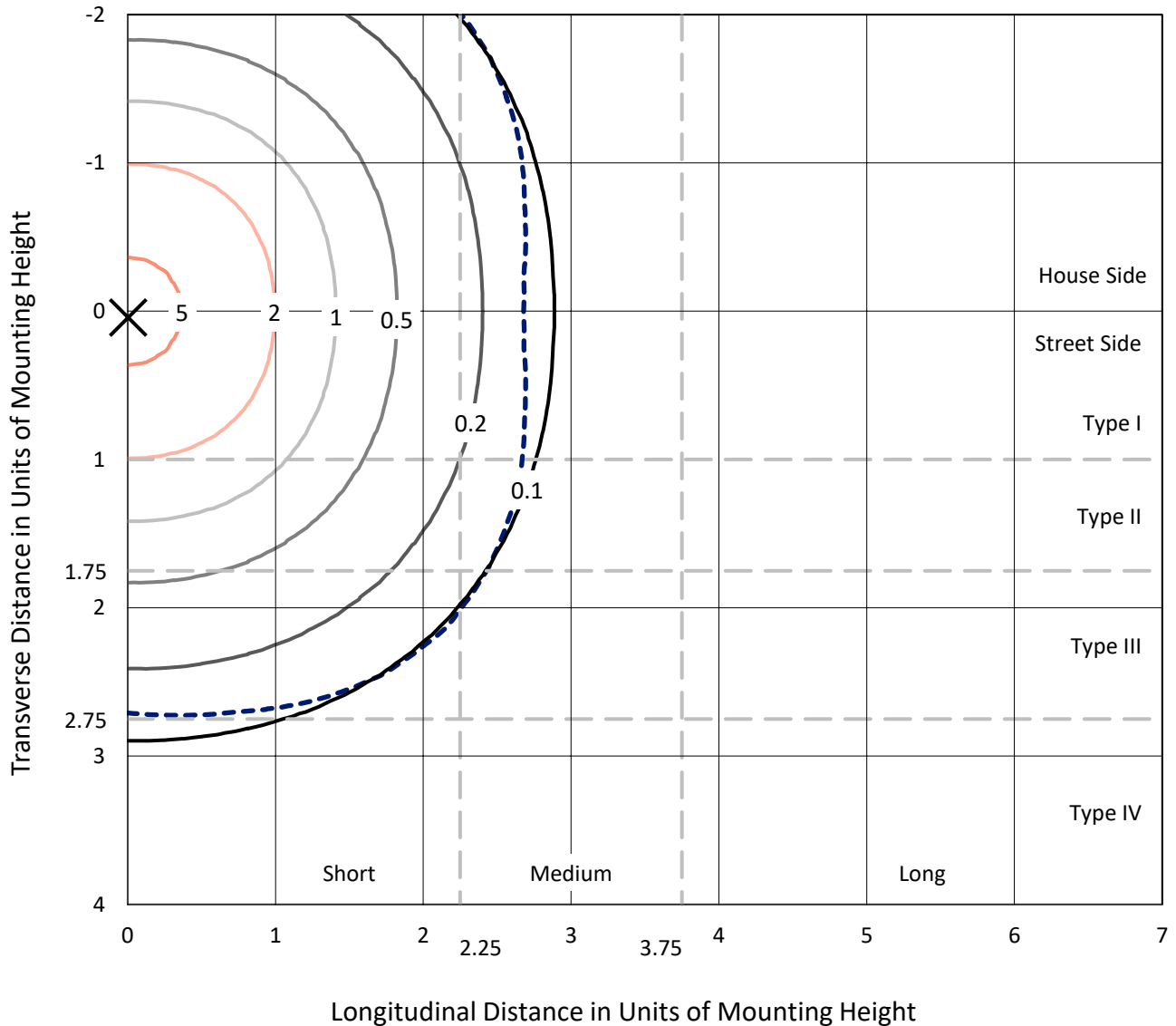
Input Watts (W): 46
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

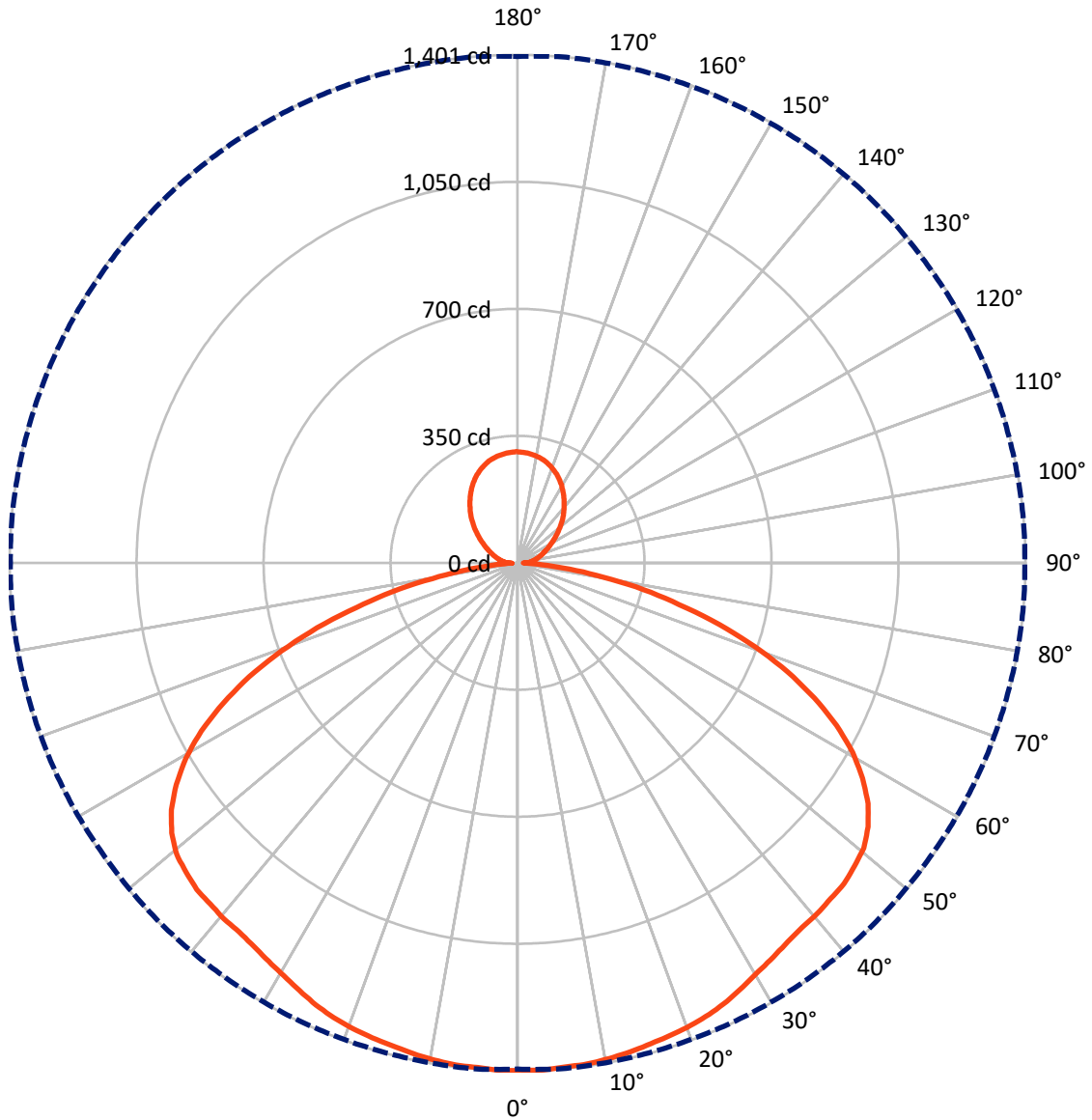
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 6.2 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 5-Deg Lateral - - - Horizontal Cone Through 2.5-Deg Vertical

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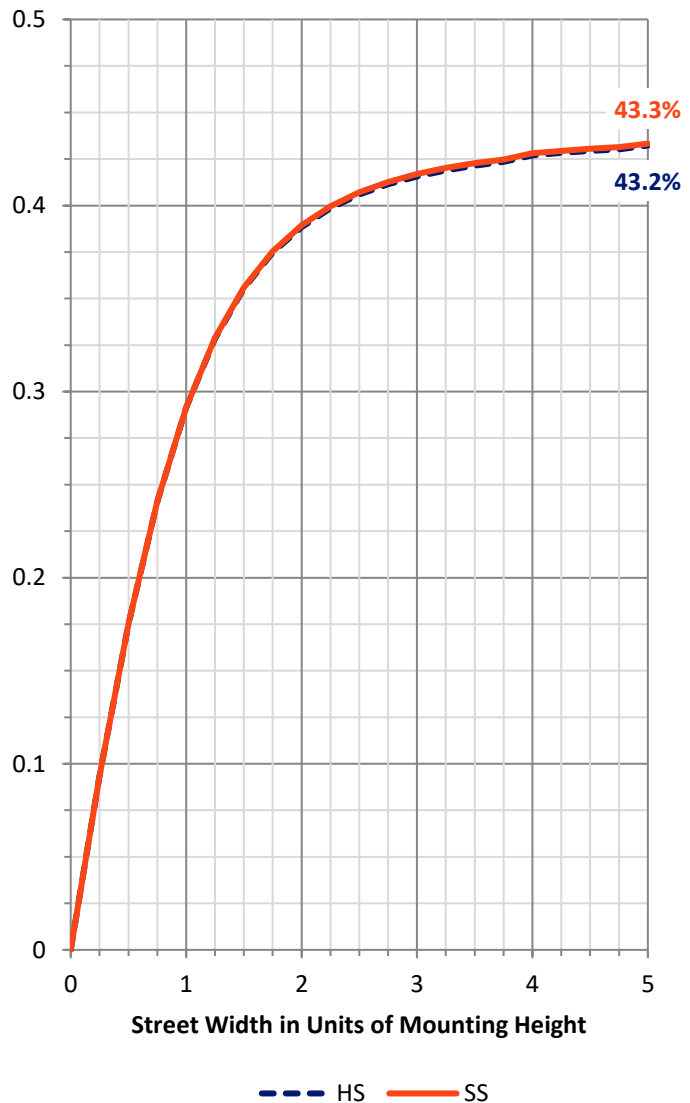
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2799.5	415.9	3215.4
	% Fixture	43.5	6.5	50.0
Street Side	Lumens	2799.5	415.9	3215.4
	% Fixture	43.5	6.5	50.0
Total	Lumens	5599.0	831.7	6430.7
	% Fixture	87.1	12.9	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.1	2.1
10°-20°	389.9	6.1
20°-30°	620.0	9.6
30°-40°	815.6	12.7
40°-50°	998.3	15.5
50°-60°	1081.3	16.8
60°-70°	930.2	14.5
70°-80°	523.0	8.1
80°-90°	107.7	1.7
90°-100°	42.6	0.7
100°-110°	66.0	1.0
110°-120°	91.9	1.4
120°-130°	119.0	1.9
130°-140°	138.7	2.2
140°-150°	140.5	2.2
150°-160°	121.9	1.9
160°-170°	82.2	1.3
170°-180°	28.9	0.4
0°-90°	5599.0	87.1
0°-180°	6430.7	100.0

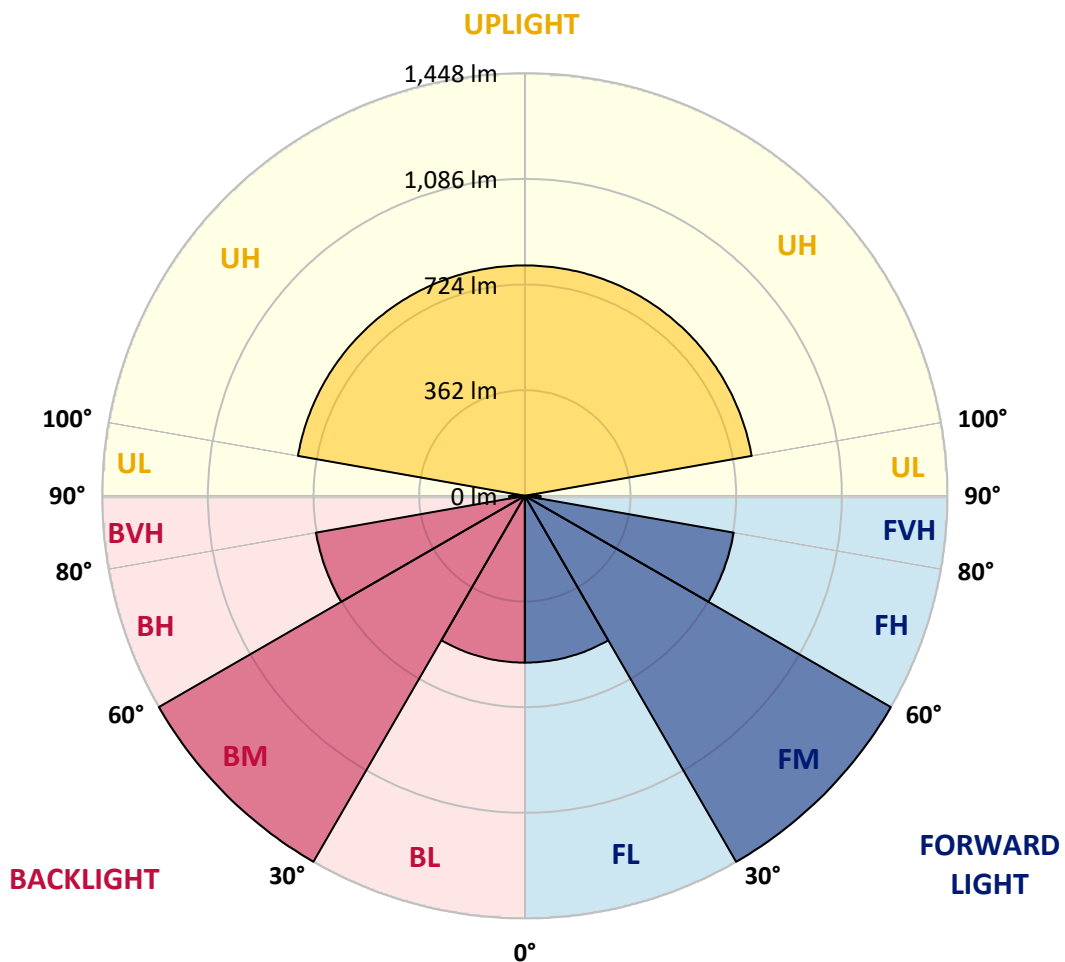


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	571.5	8.9			
FM (30°-60°)	1447.6	22.5			
FH (60°-80°)	726.6	11.3			G1/1800
FVH (80°-90°)	53.8	0.8			G1/100
BL (0°-30°)	571.5	8.9	B2/1000		
BM (30°-60°)	1447.6	22.5	B2/2500		
BH (60°-80°)	726.6	11.3	B2/1000		G1/1800
BVH (80°-90°)	53.8	0.8			G1/100
UL (90°-100°)	42.6	0.7		U2/50	
UH (100°-180°)	789.1	12.3		U4/1000	

BUG Rating: B2-U4-G1
 Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1399.7	1399.7	1399.7	1399.7	1399.7	1399.7	1399.7	1399.7	1399.7	1399.7	1399.7
2.5°	1396.1	1400.6	1398.8	1398.8	1398.8	1398.8	1397.0	1398.8	1398.8	1399.7	1398.8
5°	1397.0	1396.1	1396.1	1397.0	1397.0	1397.9	1396.1	1397.0	1397.9	1397.9	1398.8
7.5°	1394.4	1395.3	1393.5	1395.3	1393.5	1394.4	1394.4	1395.3	1394.4	1395.3	1397.0
10°	1389.0	1389.9	1389.0	1389.0	1389.0	1390.8	1387.2	1389.9	1389.0	1389.9	1389.0
12.5°	1379.2	1383.7	1381.9	1383.7	1383.7	1383.7	1381.0	1382.8	1383.7	1383.7	1383.7
15°	1374.8	1375.7	1373.0	1376.6	1377.4	1378.3	1374.8	1376.6	1376.6	1377.4	1378.3
17.5°	1365.0	1369.4	1368.5	1371.2	1370.3	1373.0	1372.1	1371.2	1370.3	1372.1	1370.3
20°	1357.9	1362.3	1361.4	1364.1	1365.0	1367.7	1365.0	1365.0	1362.3	1363.2	1365.9
22.5°	1350.7	1352.5	1352.5	1355.2	1355.2	1357.9	1355.2	1354.3	1354.3	1353.4	1356.1
25°	1339.2	1340.0	1339.2	1341.8	1343.6	1345.4	1344.5	1342.7	1341.8	1341.8	1340.9
27.5°	1320.5	1324.0	1325.8	1329.4	1330.3	1332.9	1329.4	1329.4	1327.6	1325.8	1326.7
30°	1306.2	1308.0	1308.0	1316.0	1316.0	1320.5	1316.0	1315.1	1314.2	1313.3	1311.6
32.5°	1292.9	1295.5	1298.2	1304.4	1308.9	1310.7	1308.0	1306.2	1301.8	1299.1	1298.2
35°	1282.2	1283.1	1288.4	1297.3	1302.7	1307.1	1303.5	1299.1	1292.9	1288.4	1292.0
37.5°	1274.2	1275.0	1283.1	1294.6	1304.4	1308.0	1302.7	1295.5	1285.7	1280.4	1278.6
40°	1267.0	1272.4	1281.3	1297.3	1308.0	1313.3	1308.9	1299.1	1284.8	1274.2	1273.3
42.5°	1263.5	1266.1	1279.5	1298.2	1313.3	1320.5	1314.2	1300.9	1283.1	1270.6	1269.7
45°	1254.6	1262.6	1275.0	1299.1	1316.0	1324.9	1316.0	1299.1	1277.7	1263.5	1260.8
47.5°	1247.4	1250.1	1269.7	1297.3	1317.8	1324.9	1316.0	1294.6	1267.9	1249.2	1247.4
50°	1230.5	1236.8	1256.4	1285.7	1309.8	1316.9	1306.2	1277.7	1247.4	1227.0	1223.4
52.5°	1204.7	1210.1	1233.2	1269.7	1292.9	1300.9	1284.8	1254.6	1219.0	1194.0	1194.0
55°	1164.6	1172.7	1196.7	1234.1	1263.5	1270.6	1251.9	1219.8	1179.8	1154.8	1154.0
57.5°	1116.6	1121.9	1147.7	1188.7	1217.2	1227.9	1209.2	1173.5	1133.5	1104.1	1101.4
60°	1054.2	1061.4	1089.0	1128.1	1157.5	1166.4	1150.4	1114.8	1073.8	1042.7	1042.7
62.5°	979.4	987.5	1015.1	1055.1	1085.4	1098.8	1076.5	1042.7	999.9	969.6	967.0
65°	892.2	899.3	924.2	966.1	997.2	1007.0	990.1	954.5	913.5	885.1	882.4
67.5°	794.2	804.0	829.0	864.6	891.3	903.8	893.1	861.0	818.3	788.9	786.2
70°	688.3	695.4	715.0	747.9	778.2	787.1	771.1	749.7	709.6	682.9	679.4
72.5°	575.2	581.4	597.5	628.6	650.0	661.6	652.7	625.1	593.0	570.7	574.3
75°	461.2	460.3	478.1	500.4	520.0	528.0	521.8	504.0	474.6	455.9	455.0
77.5°	347.3	356.2	362.4	381.1	397.1	403.4	394.4	380.2	357.9	342.8	345.5
80°	244.0	238.6	250.2	261.8	272.5	278.7	273.4	265.3	250.2	238.6	236.8
82.5°	149.6	145.1	150.5	161.2	168.3	170.1	171.0	161.2	154.9	146.0	147.8
85°	65.9	66.8	71.2	78.4	79.2	80.1	80.1	78.4	71.2	70.3	68.6
87.5°	16.0	16.0	16.9	19.6	19.6	20.5	20.5	17.8	16.9	15.1	16.0
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	168.1	168.6	168.6	168.6	168.6	168.1
135°	179.4	179.4	179.4	179.4	179.4	180.3	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)