

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: P821157

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

Issue Date: 7/23/2020



Test Information

Test Method: LM-79-08
Report Number: P821157
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-WQ-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND WIDE DISTRIBUTION
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

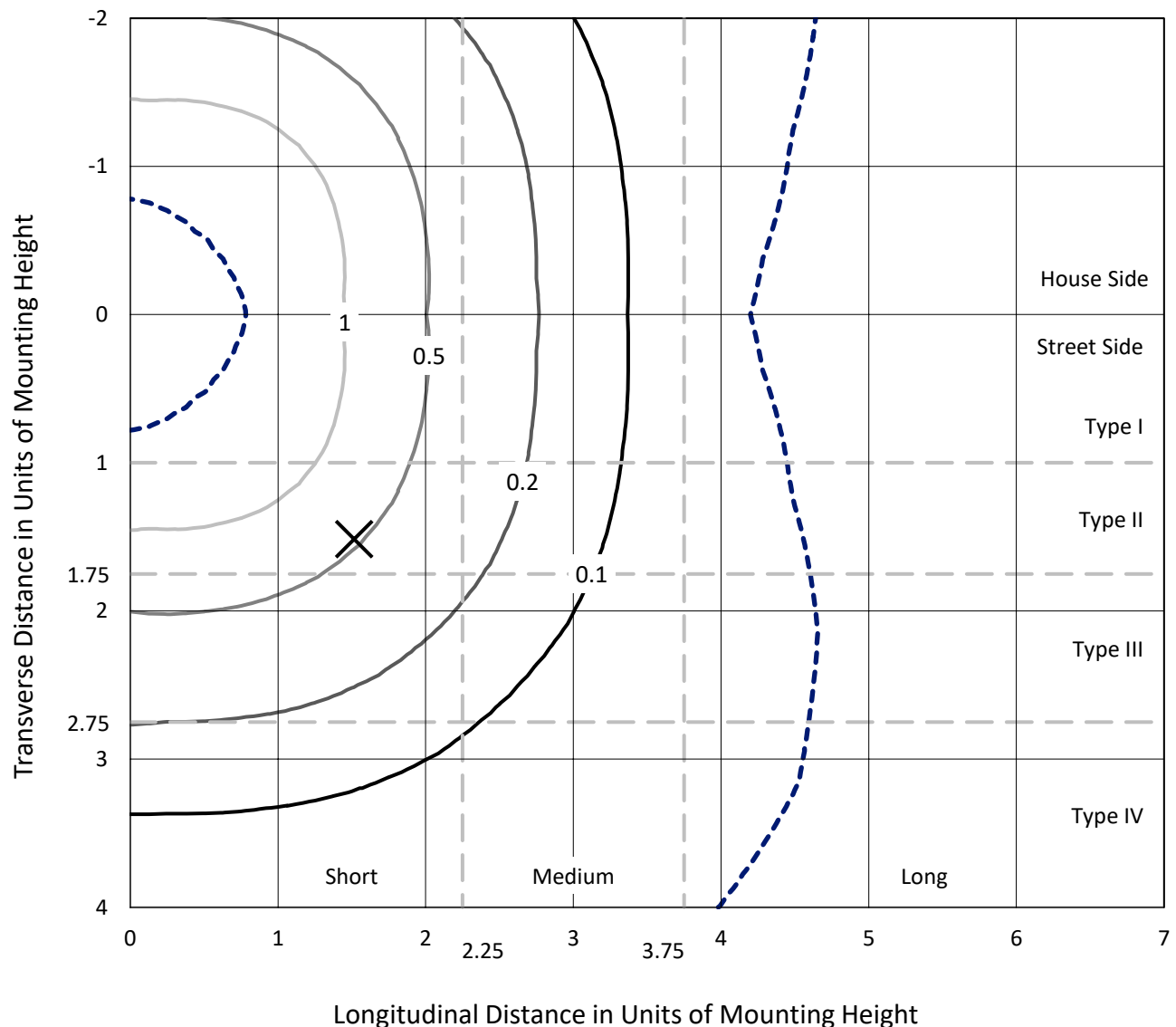
Lumens per Lamp: N/A
Luminaire Lumens: 6497.7 lumens
Efficiency: N/A
Efficacy: 141.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B3 - U4 - G2

Input Watts (W): 46
Input Voltage (V): NR
Input Current (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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Iso-Footcandle Lines of Horizontal Illumination

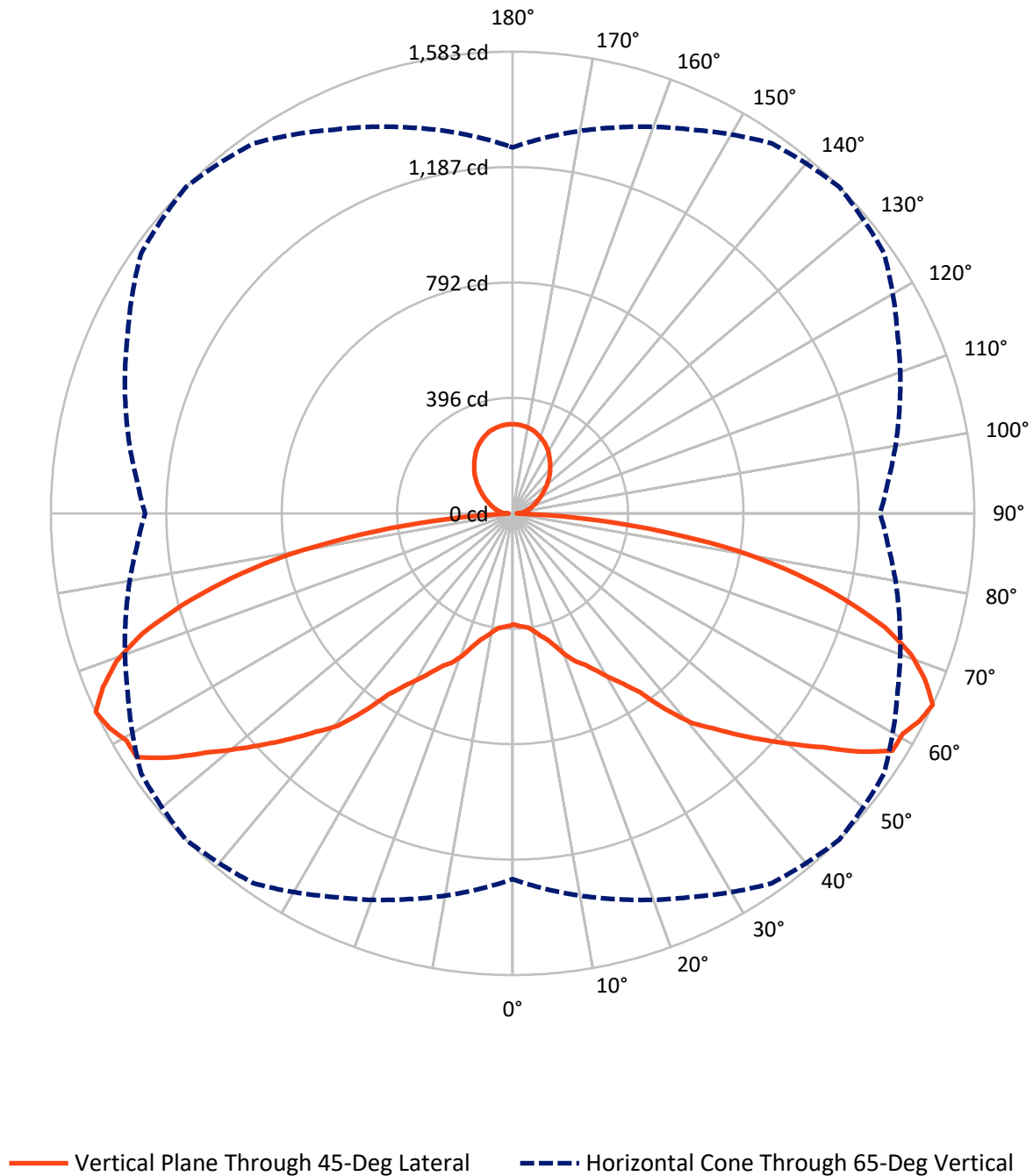
✕ Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 1.9 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



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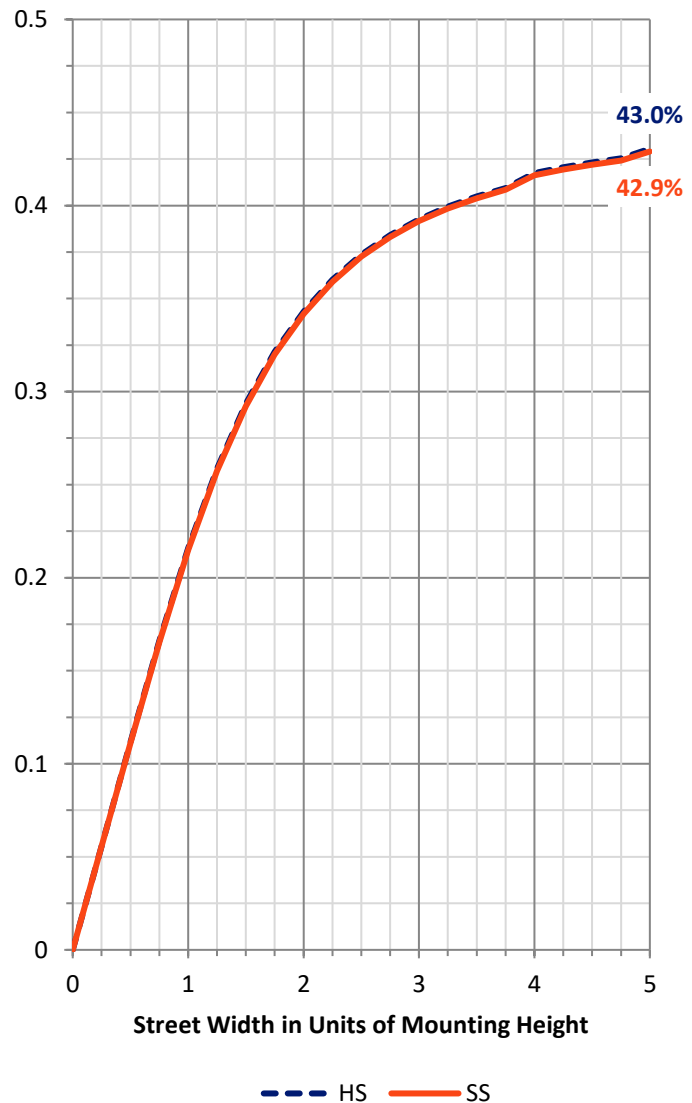
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2833.0	415.9	3248.9
	% Fixture	43.6	6.4	50.0
Street Side	Lumens	2833.0	415.9	3248.9
	% Fixture	43.6	6.4	50.0
Total	Lumens	5666.0	831.7	6497.7
	% Fixture	87.2	12.8	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.0	0.6
10°-20°	130.7	2.0
20°-30°	268.4	4.1
30°-40°	476.8	7.3
40°-50°	803.7	12.4
50°-60°	1185.6	18.2
60°-70°	1391.4	21.4
70°-80°	1084.0	16.7
80°-90°	287.4	4.4
90°-100°	42.6	0.7
100°-110°	66.0	1.0
110°-120°	91.9	1.4
120°-130°	119.0	1.8
130°-140°	138.7	2.1
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°	5666.0	87.2
0°-180°	6497.7	100.0

Coefficient of Utilization



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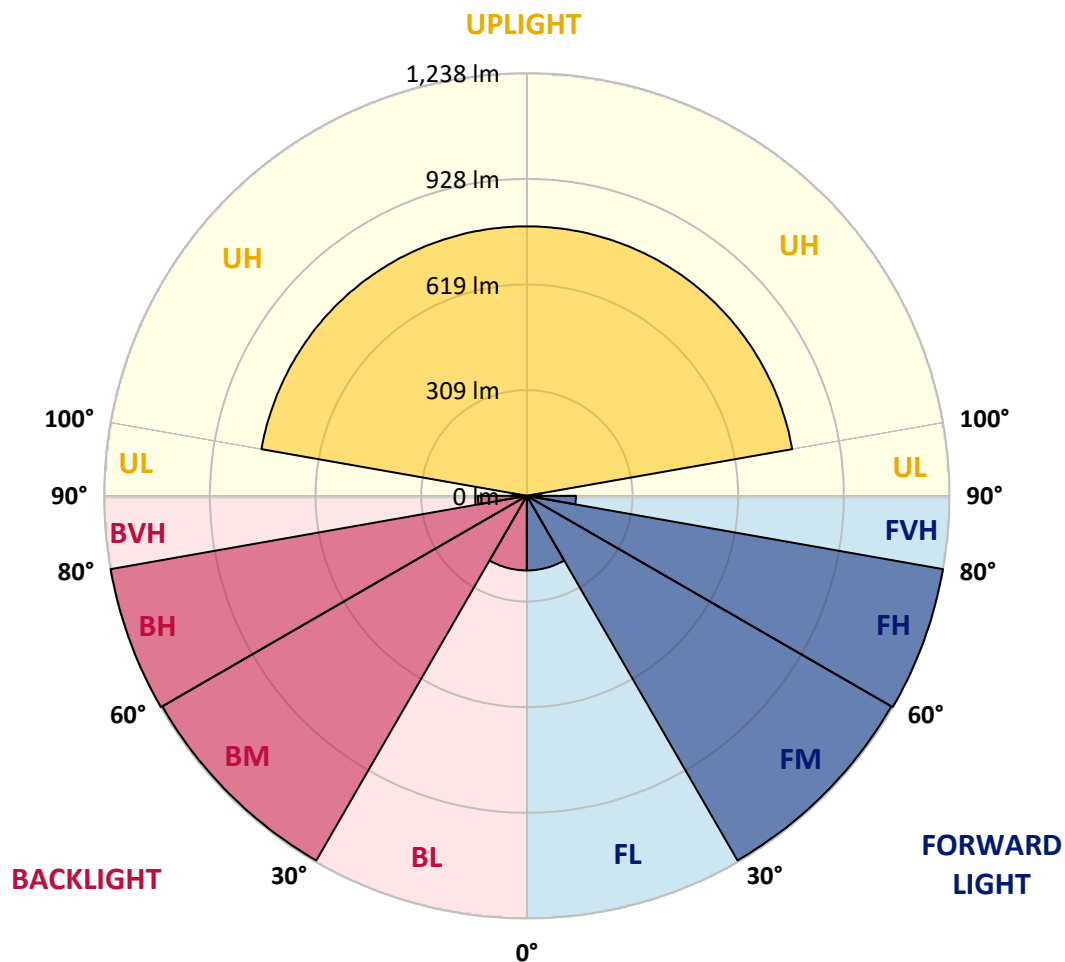
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	218.5	3.4			
FM	(30°-60°)	1233.0	19.0			
FH	(60°-80°)	1237.7	19.0			G1/1800
FVH	(80°-90°)	143.7	2.2			G2/225
BL	(0°-30°)	218.5	3.4	B1/500		
BM	(30°-60°)	1233.0	19.0	B2/2500		
BH	(60°-80°)	1237.7	19.0	B3/2500		G1/1800
BVH	(80°-90°)	143.7	2.2			G2/225
UL	(90°-100°)	42.6	0.7		U2/50	
UH	(100°-180°)	789.1	12.1		U4/1000	

BUG Rating: B3-U4-G2

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	381.1	381.1	381.1	381.1	381.1	381.1	381.1	381.1	381.1	381.1	381.1
2.5°	387.3	387.3	387.3	386.4	386.4	386.4	386.4	387.3	387.3	387.3	387.3
5°	396.2	396.2	394.4	392.6	390.9	390.9	391.8	392.6	393.5	395.3	395.3
7.5°	401.5	401.5	400.7	398.9	396.2	396.2	397.1	398.9	399.8	399.8	398.9
10°	408.7	409.6	412.2	413.1	411.3	411.3	412.2	413.1	411.3	408.7	408.7
12.5°	425.6	426.5	430.0	432.7	432.7	430.9	431.8	433.6	429.1	424.7	425.6
15°	449.6	449.6	450.5	453.2	451.4	449.6	451.4	452.3	449.6	448.7	450.5
17.5°	481.7	481.7	476.3	480.8	481.7	480.8	482.6	478.1	475.4	479.0	480.8
20°	516.4	512.8	510.2	513.7	520.9	518.2	521.7	512.0	509.3	511.1	512.0
22.5°	538.7	541.3	543.1	544.9	554.7	551.1	554.7	544.0	542.2	538.7	536.0
25°	565.4	568.0	578.7	573.4	579.6	574.3	578.7	572.5	576.1	565.4	565.4
27.5°	595.6	601.0	607.2	604.5	612.6	609.9	612.6	603.7	604.5	600.1	598.3
30°	636.6	636.6	634.8	640.2	654.4	652.6	653.5	641.9	633.9	634.8	638.4
32.5°	677.6	672.2	674.9	690.9	699.8	696.3	698.0	692.7	674.9	671.3	674.0
35°	715.8	723.9	730.1	743.4	755.9	754.1	753.2	744.3	732.8	718.5	714.1
37.5°	775.5	784.4	801.3	825.4	847.6	852.1	840.5	828.9	802.2	781.7	771.0
40°	853.8	854.7	874.3	920.6	941.1	944.7	938.4	918.8	877.9	854.7	853.8
42.5°	922.4	916.2	948.2	987.4	1006.1	1007.9	1003.4	987.4	948.2	915.3	921.5
45°	975.8	975.8	1014.1	1045.3	1075.5	1082.7	1074.7	1040.8	1015.0	976.7	974.0
47.5°	1024.8	1038.1	1070.2	1108.5	1151.2	1161.0	1151.2	1111.2	1067.5	1039.0	1023.9
50°	1083.6	1099.6	1122.7	1182.4	1230.5	1243.8	1229.6	1185.9	1122.7	1098.7	1089.8
52.5°	1152.1	1165.5	1202.0	1276.8	1312.4	1332.0	1320.4	1278.5	1203.8	1167.3	1160.1
55°	1234.0	1221.6	1278.5	1350.7	1416.5	1442.4	1419.2	1352.4	1287.4	1221.6	1234.0
57.5°	1275.9	1261.6	1341.8	1410.3	1502.0	1535.9	1507.4	1415.7	1341.8	1266.1	1275.0
60°	1279.4	1285.7	1346.2	1458.4	1521.6	1535.9	1527.0	1466.4	1348.9	1291.0	1274.1
62.5°	1268.8	1307.0	1358.7	1474.4	1531.4	1566.1	1535.9	1476.2	1364.0	1313.3	1269.6
65°	1254.5	1292.8	1369.4	1451.3	1548.3	1583.0	1554.6	1455.7	1372.9	1292.8	1259.8
67.5°	1229.6	1216.2	1310.6	1420.1	1504.7	1525.2	1507.4	1421.9	1309.7	1214.4	1232.2
70°	1150.3	1138.8	1219.8	1340.0	1421.0	1449.5	1428.1	1341.8	1221.6	1141.4	1152.1
72.5°	1032.8	1036.4	1114.7	1229.6	1316.8	1334.6	1323.1	1228.7	1119.2	1040.8	1026.6
75°	895.7	904.6	979.4	1083.6	1162.8	1173.5	1161.9	1088.0	978.5	909.9	891.2
77.5°	736.3	749.7	810.2	914.4	966.9	991.0	972.3	917.1	814.7	753.2	734.5
80°	570.7	575.2	617.9	701.6	771.0	787.1	769.3	704.3	623.2	576.9	563.6
82.5°	373.9	381.1	419.4	483.5	528.9	524.4	528.9	478.1	423.8	379.3	357.0
85°	166.5	180.7	206.6	236.8	266.2	274.2	266.2	240.4	206.6	177.2	173.6
87.5°	11.6	13.4	16.0	16.9	18.7	14.2	14.2	14.2	12.5	14.2	11.6
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)