

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: P198419

Luminaire Tested: **TT-C3-LED-E1-WQ-MS/DIM-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198419
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P27139) AND DOWNLIGHT
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TT-C3-LED-E1-WQ-MS/DIM-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
WIDE DISTRIBUTION WITH DIMMING OCCUPANCY SENSOR
Light Source: (168) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6481.2 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B3 - U4 - G2

Input Watts (W): 62.4
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

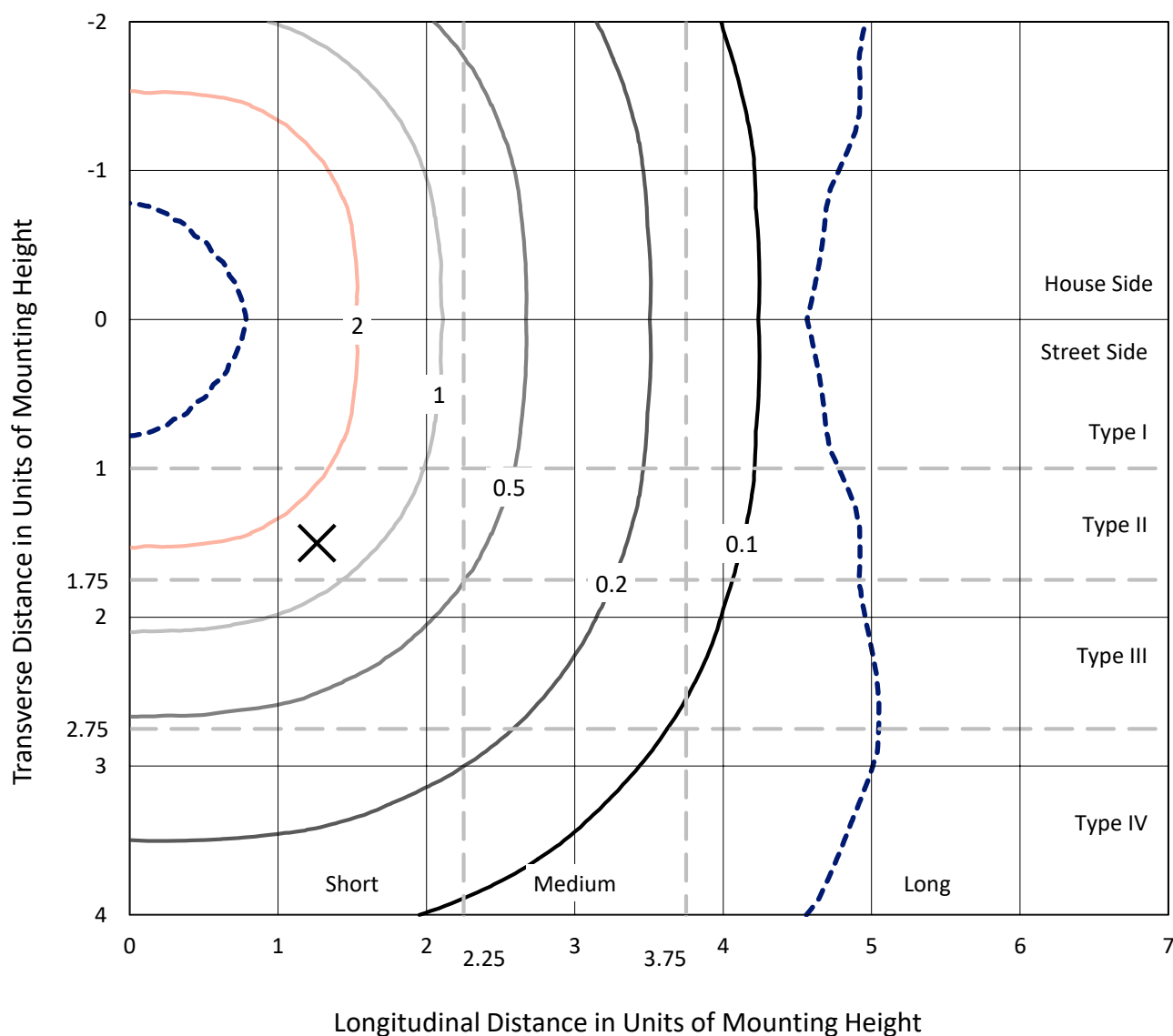


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

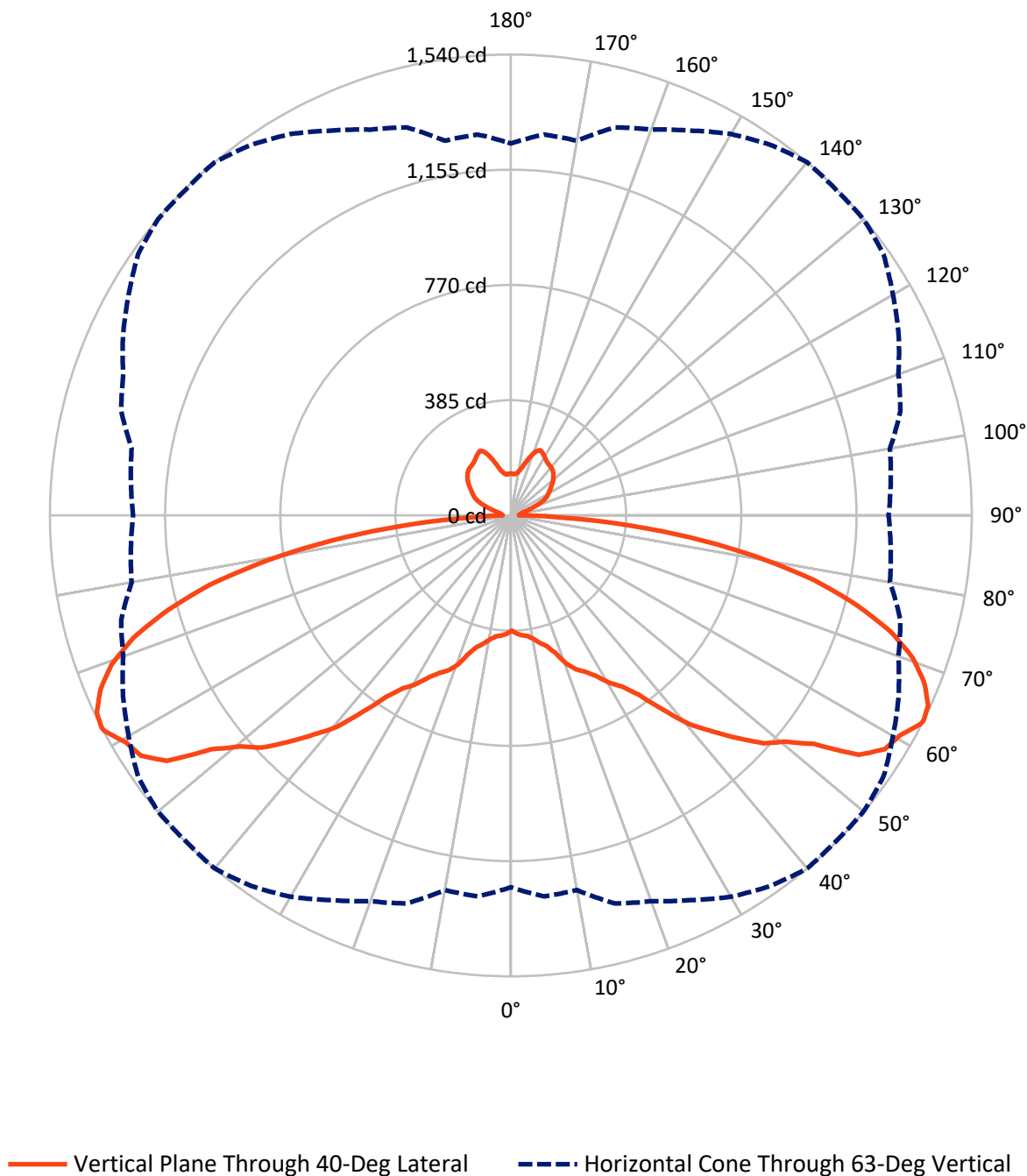


Based on 10 foot mounting height. Maximum calculated value = 4.3 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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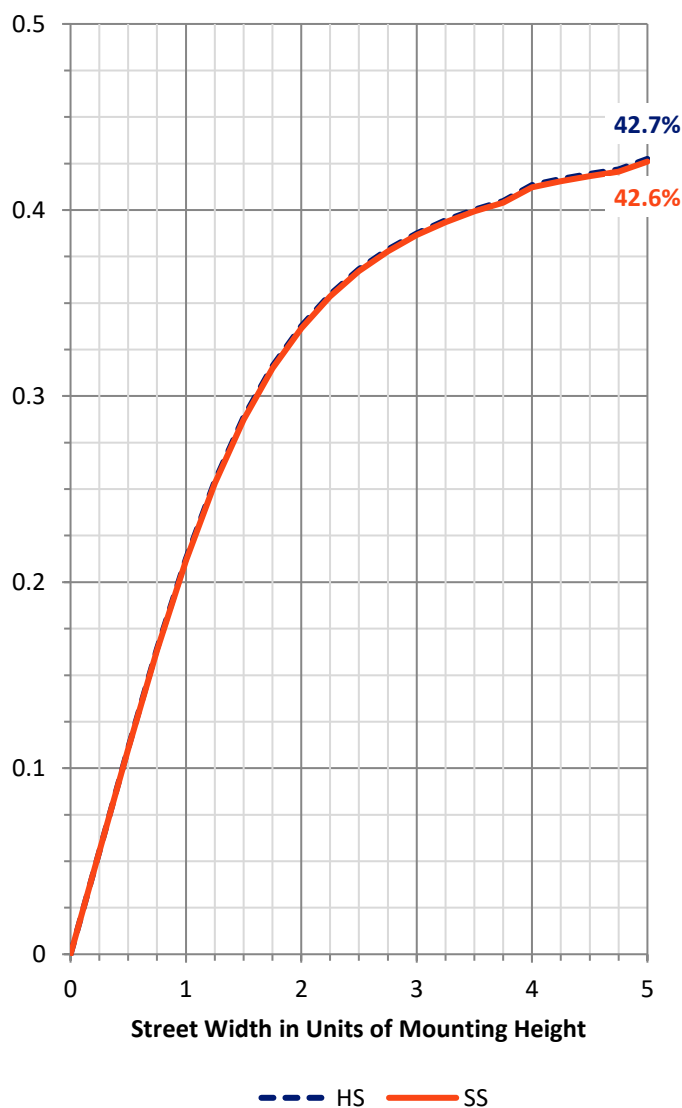
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2828.6	412.0	3240.6
	% Fixture	43.6	6.4	50.0
Street Side	Lumens	2828.6	412.0	3240.6
	% Fixture	43.6	6.4	50.0
Total	Lumens	5657.2	824.0	6481.2
	% Fixture	87.3	12.7	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.8	0.6
10°-20°	132.1	2.0
20°-30°	268.5	4.1
30°-40°	462.7	7.1
40°-50°	779.5	12.0
50°-60°	1147.8	17.7
60°-70°	1364.9	21.1
70°-80°	1105.0	17.0
80°-90°	357.9	5.5
90°-100°	38.3	0.6
100°-110°	59.4	0.9
110°-120°	119.3	1.8
120°-130°	148.7	2.3
130°-140°	153.2	2.4
140°-150°	136.0	2.1
150°-160°	103.7	1.6
160°-170°	51.8	0.8
170°-180°	13.6	0.2
0°-90°	5657.2	87.3
0°-180°	6481.2	100.0

Coefficient of Utilization



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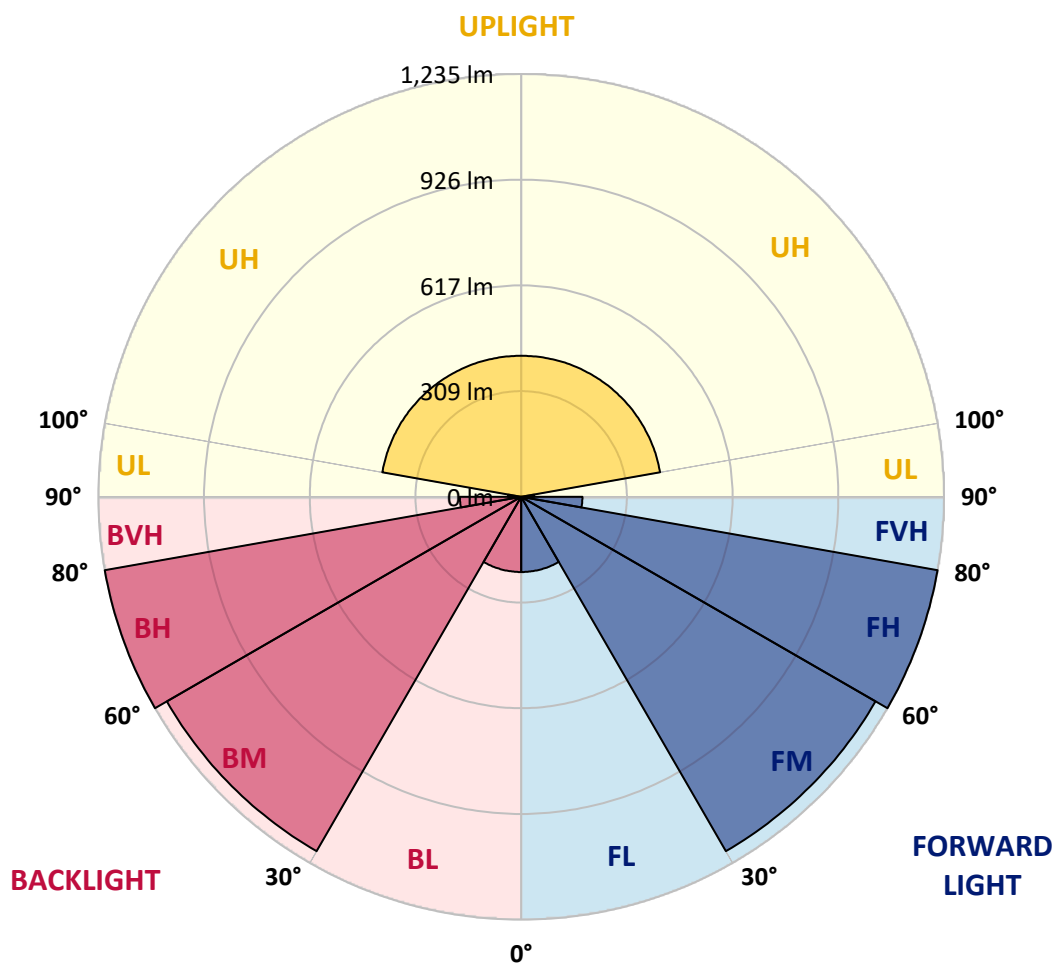
CATALOG NUMBER: TT-C3-LED-E1-WQ-MS/DIM-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	219.7	3.4			
FM	(30°-60°)	1195.0	18.4			
FH	(60°-80°)	1235.0	19.1			G1/1800
FVH	(80°-90°)	179.0	2.8			G2/225
BL	(0°-30°)	219.7	3.4	B1/500		
BM	(30°-60°)	1195.0	18.4	B2/2500		
BH	(60°-80°)	1235.0	19.1	B3/2500		G1/1800
BVH	(80°-90°)	179.0	2.8			G2/225
UL	(90°-100°)	38.3	0.6		U2/50	
UH	(100°-180°)	412.0	6.4		U3/500	

BUG Rating: B3-U4-G2

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	384.8	384.8	384.8	384.8	384.8	384.8	384.8	384.8	384.8	384.8	384.8
2.5°	396.9	396.9	396.9	396.9	396.9	396.9	395.8	396.9	395.8	395.8	395.8
5°	404.5	404.5	404.5	404.5	403.5	403.5	402.4	402.4	402.4	401.3	402.4
7.5°	407.9	407.9	407.9	407.9	406.8	406.8	406.8	406.8	406.8	406.8	406.8
10°	415.5	415.5	416.6	417.7	419.8	419.8	419.8	421.0	419.8	419.8	419.8
12.5°	431.9	430.8	433.0	435.2	437.4	438.4	438.4	438.4	437.4	437.4	438.4
15°	454.8	452.7	453.7	454.8	456.0	457.1	457.1	456.0	453.7	453.7	453.7
17.5°	484.4	481.1	480.0	478.9	478.9	481.1	483.2	482.2	483.2	482.2	483.2
20°	519.4	517.1	517.1	517.1	518.3	522.6	527.0	529.2	528.1	526.0	529.2
22.5°	542.3	543.4	548.9	547.8	546.7	551.0	556.5	560.9	558.7	555.5	557.6
25°	567.5	567.5	575.2	578.4	575.2	575.2	577.3	580.5	578.4	576.2	578.4
27.5°	595.9	595.9	599.2	602.5	600.2	600.2	603.6	609.1	607.9	606.8	607.9
30°	629.8	625.4	622.1	627.6	633.1	634.2	637.5	646.2	648.4	647.3	649.4
32.5°	661.5	654.9	657.2	660.4	672.5	676.8	675.7	682.3	681.2	678.0	682.3
35°	692.2	699.8	704.1	710.7	715.1	720.6	720.6	732.5	734.8	731.5	734.8
37.5°	751.2	754.5	766.5	767.5	773.0	793.8	795.9	812.4	821.1	816.7	817.9
40°	832.1	830.9	839.8	852.9	863.8	890.0	897.7	908.6	916.3	913.0	917.4
42.5°	897.7	889.0	895.5	923.9	936.0	955.6	965.5	971.0	985.2	980.8	986.3
45°	944.7	947.9	956.8	985.2	992.8	1009.2	1032.1	1042.0	1060.5	1055.2	1058.4
47.5°	990.7	1006.0	1013.6	1026.7	1050.7	1072.6	1101.0	1110.9	1137.2	1134.9	1131.7
50°	1050.7	1062.8	1071.5	1081.3	1114.2	1150.2	1174.3	1178.6	1187.5	1180.9	1191.8
52.5°	1115.2	1114.2	1121.8	1149.1	1195.1	1209.3	1230.1	1249.8	1268.3	1274.9	1268.3
55°	1200.6	1173.2	1204.9	1244.3	1264.0	1297.9	1348.2	1375.5	1411.6	1417.1	1406.1
57.5°	1235.6	1235.6	1268.3	1291.3	1327.4	1387.6	1441.1	1454.2	1472.8	1462.9	1473.9
60°	1231.2	1272.7	1272.7	1313.2	1372.2	1425.8	1445.5	1467.3	1492.5	1491.5	1491.5
62.5°	1236.7	1277.1	1266.1	1336.1	1372.2	1416.0	1459.7	1500.2	1535.2	1534.1	1532.9
63°	1242.1	1277.1	1270.6	1341.6	1371.1	1418.1	1470.7	1511.0	1539.5	1537.3	1538.4
65°	1258.5	1248.7	1288.0	1332.9	1366.8	1436.8	1480.5	1512.1	1531.8	1530.7	1530.7
67.5°	1227.9	1204.9	1260.7	1278.2	1342.7	1405.0	1438.9	1475.0	1489.2	1489.2	1487.0
70°	1133.9	1143.6	1182.0	1210.4	1275.9	1331.8	1360.2	1406.1	1423.6	1423.6	1422.6
72.5°	1038.7	1055.2	1081.3	1121.8	1184.1	1227.9	1261.7	1303.3	1326.3	1325.2	1325.2
75°	917.4	932.7	963.3	1001.6	1056.2	1098.9	1126.2	1165.6	1191.8	1201.7	1190.7
77.5°	780.7	785.1	813.5	852.9	901.0	930.5	972.1	1010.3	1032.1	1031.0	1027.8
80°	614.5	619.9	644.1	688.8	715.1	750.1	788.3	809.1	827.7	827.7	825.5
82.5°	424.2	436.3	460.3	489.8	517.1	547.8	568.6	589.4	604.7	603.6	600.2
85°	239.4	244.9	267.8	286.5	307.2	326.9	341.1	354.3	367.4	367.4	365.1
87.5°	72.1	64.5	77.6	85.3	96.2	106.0	112.6	125.7	134.5	124.7	124.7
90°	36.0	36.0	36.0	36.0	35.0	34.0	31.0	29.0	27.0	26.0	26.0
92.5°	40.0	39.0	39.0	38.0	36.0	34.0	32.0	29.0	27.0	27.0	27.0
95°	44.0	43.0	42.0	41.0	38.0	36.0	34.0	32.0	31.0	30.0	30.0
97.5°	42.0	42.0	41.0	40.0	38.0	37.0	36.0	35.0	34.0	33.0	32.0
100°	45.0	45.0	45.0	44.0	42.0	40.0	39.0	38.0	36.0	36.0	35.0
102.5°	51.0	51.0	50.0	49.0	47.0	46.0	45.0	44.0	42.0	42.0	42.0
105°	60.0	60.0	59.0	57.0	55.0	54.0	53.0	53.0	51.0	52.0	52.0
107.5°	72.0	72.0	72.0	70.0	68.0	67.0	66.0	66.0	66.0	68.0	68.0

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	86.0	86.0	87.0	89.0	86.0	85.0	85.0	86.0	86.0	87.0	86.0
112.5°	101.0	102.0	104.0	108.0	106.0	107.0	107.0	110.0	108.0	107.0	103.0
115°	121.0	122.0	123.0	128.0	126.0	128.0	127.0	129.0	126.0	124.0	120.0
117.5°	140.0	141.0	141.0	144.0	141.0	141.0	140.0	141.0	138.0	136.0	135.0
120°	152.0	153.0	154.0	155.0	151.0	149.0	147.0	149.0	147.0	147.0	148.0
122.5°	161.0	162.0	163.0	164.0	159.0	154.0	153.0	155.0	156.0	158.0	158.0
125°	169.0	169.0	170.0	172.0	168.0	163.0	160.0	165.0	166.0	168.0	167.0
127.5°	177.0	177.0	179.0	181.0	177.0	171.0	170.0	176.0	177.0	178.0	175.0
130°	187.0	188.0	190.0	191.0	185.0	179.0	179.0	186.0	187.0	186.0	183.0
132.5°	198.0	199.0	200.0	201.0	193.0	186.0	187.0	193.0	195.0	195.0	191.0
135°	210.0	210.0	211.0	209.0	199.0	192.0	193.0	199.0	202.0	201.0	197.0
137.5°	221.0	219.0	217.0	213.0	203.0	197.0	198.0	205.0	207.0	208.0	203.0
140°	229.0	226.0	222.0	216.0	205.0	200.0	201.0	207.0	210.0	213.0	212.0
142.5°	235.0	231.0	225.0	218.0	206.0	201.0	202.0	208.0	212.0	218.0	218.0
145°	235.0	230.0	225.0	218.0	207.0	202.0	204.0	211.0	215.0	223.0	225.0
147.5°	230.0	227.0	223.0	219.0	210.0	207.0	209.0	216.0	220.0	229.0	233.0
150°	224.0	221.0	219.0	220.0	215.0	214.0	216.0	222.0	227.0	235.0	239.0
152.5°	216.0	214.0	216.0	221.0	220.0	220.0	224.0	230.0	234.0	241.0	241.0
155°	208.0	207.0	211.0	219.0	222.0	224.0	229.0	237.0	239.0	243.0	239.0
157.5°	203.0	203.0	207.0	216.0	220.0	224.0	229.0	234.0	232.0	235.0	230.0
160°	199.0	198.0	203.0	210.0	212.0	213.0	216.0	219.0	216.0	219.0	216.0
162.5°	185.0	184.0	188.0	193.0	194.0	193.0	196.0	198.0	195.0	198.0	196.0
165°	169.0	167.0	169.0	173.0	173.0	173.0	175.0	176.0	174.0	177.0	175.0
167.5°	154.0	152.0	153.0	156.0	156.0	155.0	157.0	159.0	157.0	159.0	158.0
170°	142.0	141.0	142.0	145.0	144.0	144.0	146.0	147.0	146.0	147.0	147.0
172.5°	137.0	135.0	136.0	139.0	139.0	138.0	140.0	141.0	140.0	141.0	140.0
175°	136.0	134.0	135.0	137.0	137.0	137.0	138.0	139.0	138.0	139.0	138.0
177.5°	137.0	136.0	136.0	139.0	138.0	138.0	139.0	140.0	139.0	139.0	138.0
180°	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	384.8	384.8	384.8	384.8	384.8	384.8	384.8	384.8
2.5°	396.9	396.9	396.9	396.9	396.9	396.9	396.9	396.9
5°	402.4	403.5	403.5	404.5	404.5	404.5	404.5	404.5
7.5°	406.8	406.8	406.8	406.8	407.9	407.9	407.9	407.9
10°	419.8	421.0	419.8	419.8	417.7	416.6	416.6	416.6
12.5°	438.4	439.5	439.5	437.4	435.2	433.0	431.9	430.8
15°	456.0	459.2	457.1	456.0	453.7	454.8	454.8	456.0
17.5°	483.2	484.4	481.1	478.9	477.8	480.0	482.2	483.2
20°	530.3	528.1	521.6	519.4	517.1	517.1	519.4	519.4
22.5°	559.9	554.4	550.0	547.8	547.8	547.8	544.5	540.2
25°	580.5	577.3	574.1	576.2	578.4	575.2	567.5	566.3
27.5°	609.1	602.5	601.3	600.2	601.3	599.2	598.1	593.7
30°	646.2	637.5	635.2	633.1	626.5	624.4	626.5	629.8
32.5°	681.2	675.7	678.0	673.5	661.5	657.2	659.3	658.3
35°	731.5	721.7	721.7	712.8	709.6	708.5	699.8	692.2
37.5°	811.3	798.2	794.9	775.3	766.5	768.7	756.7	747.9
40°	908.6	898.8	890.0	868.2	856.1	840.8	833.2	833.2
42.5°	973.1	966.6	954.5	939.2	926.1	899.8	890.0	895.5
45°	1044.2	1035.5	1010.3	995.0	982.9	964.4	953.4	942.6
47.5°	1116.4	1104.4	1074.9	1055.2	1026.7	1021.2	1009.2	993.9
50°	1179.8	1175.4	1154.6	1121.8	1085.7	1077.0	1066.0	1051.8
52.5°	1257.4	1231.2	1213.7	1199.4	1159.0	1130.6	1115.2	1121.8
55°	1384.2	1351.4	1306.6	1261.7	1253.0	1219.1	1180.9	1201.7
57.5°	1457.5	1438.9	1405.0	1334.0	1299.0	1275.9	1250.9	1232.2
60°	1475.0	1441.1	1433.4	1379.8	1324.1	1275.9	1285.8	1242.1
62.5°	1508.9	1462.9	1420.3	1377.7	1343.8	1278.2	1275.9	1253.0
63°	1519.9	1473.9	1429.1	1377.7	1347.1	1285.8	1273.8	1261.7
65°	1517.6	1478.3	1444.4	1377.7	1331.8	1307.7	1248.7	1275.9
67.5°	1476.1	1443.3	1403.9	1358.0	1281.4	1262.9	1221.4	1226.8
70°	1409.4	1366.8	1329.6	1286.9	1225.7	1183.0	1158.0	1137.2
72.5°	1305.5	1267.2	1227.9	1188.5	1133.9	1082.5	1065.0	1042.0
75°	1167.8	1130.6	1094.5	1057.3	1006.0	960.0	941.4	925.0
77.5°	1010.3	978.6	927.2	892.2	862.7	813.5	795.9	778.5
80°	805.8	790.6	753.3	707.5	692.2	644.1	630.9	607.9
82.5°	586.0	570.7	541.2	509.5	491.0	465.8	443.9	428.6
85°	357.5	341.1	325.8	297.4	286.5	267.8	250.4	241.7
87.5°	129.1	115.9	103.9	90.7	84.2	71.0	68.9	62.3
90°	28.0	30.0	32.0	33.0	34.0	34.0	34.0	34.0
92.5°	28.0	30.0	32.0	33.0	35.0	36.0	36.0	36.0
95°	30.0	32.0	34.0	35.0	37.0	38.0	39.0	38.0
97.5°	33.0	34.0	34.0	35.0	36.0	36.0	36.0	36.0
100°	36.0	37.0	38.0	38.0	38.0	38.0	37.0	37.0
102.5°	43.0	44.0	44.0	42.0	42.0	41.0	41.0	41.0
105°	54.0	54.0	53.0	51.0	49.0	48.0	48.0	49.0
107.5°	68.0	68.0	66.0	63.0	60.0	59.0	59.0	60.0

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	84.0	83.0	84.0	81.0	78.0	76.0	74.0	75.0
112.5°	102.0	102.0	105.0	103.0	100.0	98.0	95.0	94.0
115°	121.0	123.0	125.0	124.0	123.0	121.0	116.0	113.0
117.5°	138.0	140.0	141.0	139.0	139.0	139.0	133.0	129.0
120°	150.0	151.0	153.0	148.0	148.0	148.0	145.0	142.0
122.5°	159.0	160.0	162.0	156.0	155.0	156.0	153.0	150.0
125°	167.0	167.0	168.0	164.0	163.0	164.0	160.0	158.0
127.5°	176.0	175.0	175.0	173.0	173.0	173.0	166.0	163.0
130°	183.0	182.0	183.0	181.0	184.0	181.0	171.0	169.0
132.5°	190.0	189.0	192.0	189.0	192.0	190.0	179.0	176.0
135°	196.0	197.0	201.0	199.0	199.0	195.0	185.0	184.0
137.5°	203.0	205.0	210.0	207.0	204.0	198.0	191.0	190.0
140°	212.0	214.0	217.0	214.0	209.0	202.0	195.0	195.0
142.5°	220.0	222.0	223.0	217.0	211.0	204.0	198.0	198.0
145°	230.0	230.0	227.0	217.0	211.0	205.0	201.0	202.0
147.5°	239.0	236.0	229.0	218.0	212.0	207.0	204.0	206.0
150°	242.0	240.0	232.0	220.0	214.0	211.0	210.0	211.0
152.5°	242.0	241.0	235.0	223.0	219.0	217.0	215.0	216.0
155°	238.0	237.0	234.0	227.0	224.0	223.0	220.0	219.0
157.5°	228.0	229.0	229.0	226.0	226.0	225.0	222.0	219.0
160°	215.0	217.0	219.0	219.0	221.0	222.0	218.0	215.0
162.5°	196.0	199.0	200.0	201.0	204.0	208.0	207.0	207.0
165°	176.0	179.0	181.0	181.0	185.0	189.0	190.0	192.0
167.5°	160.0	163.0	165.0	164.0	168.0	171.0	172.0	174.0
170°	148.0	150.0	152.0	152.0	155.0	158.0	159.0	160.0
172.5°	141.0	144.0	145.0	144.0	146.0	149.0	149.0	151.0
175°	138.0	140.0	141.0	140.0	141.0	143.0	143.0	144.0
177.5°	138.0	140.0	140.0	138.0	140.0	141.0	141.0	141.0
180°	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0

(END OF REPORT)