

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: P198417

Luminaire Tested: **TT-C3-LED-E1-WQ-LWR-LW-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198417
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-LWR-LW-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
WIDE DISTRIBUTION WITH LumaWatt WIRELESS SENSOR
Light Source: (168) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6109.5 lumens
Efficiency: N/A
Efficacy: 97.9 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



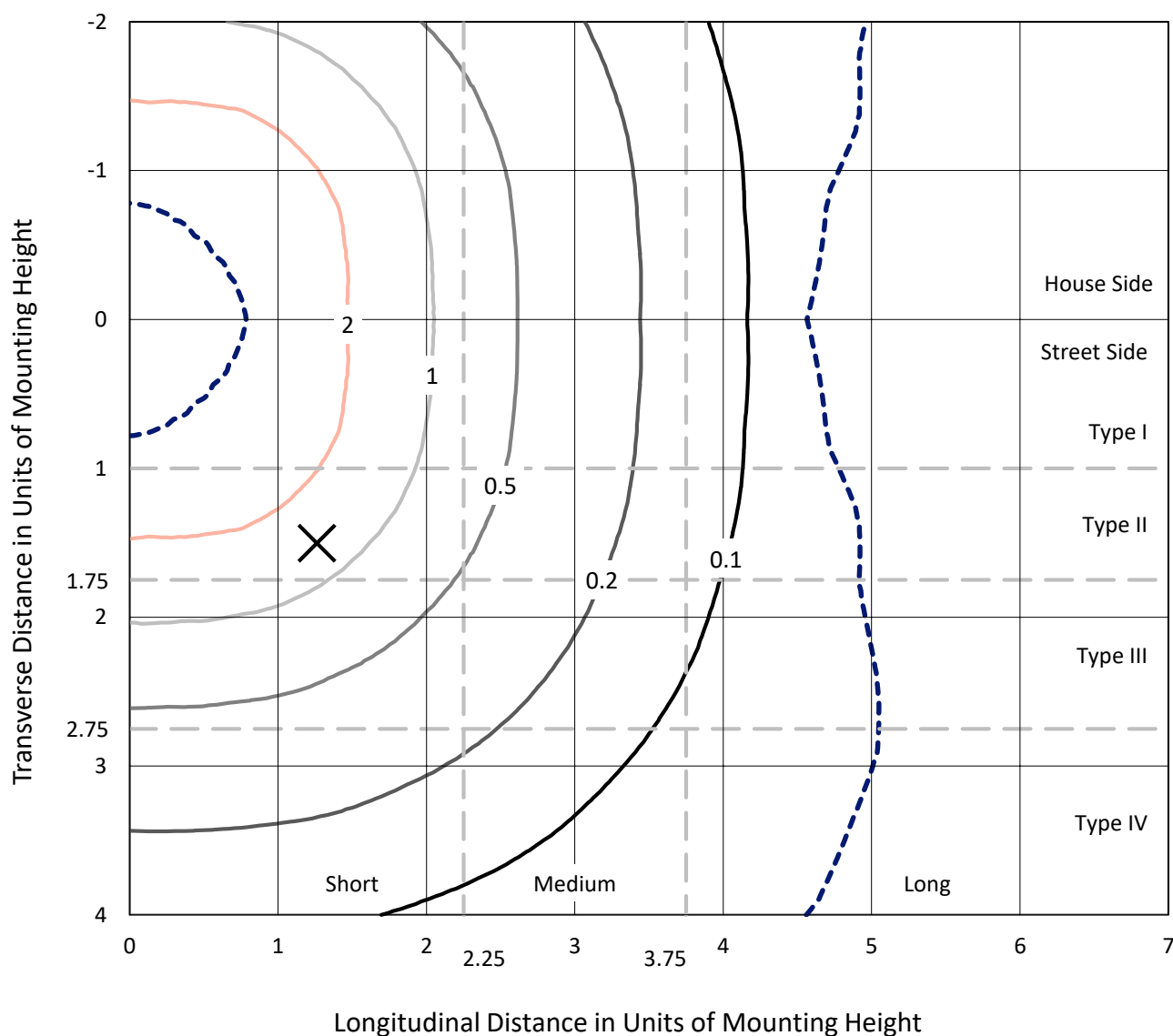
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

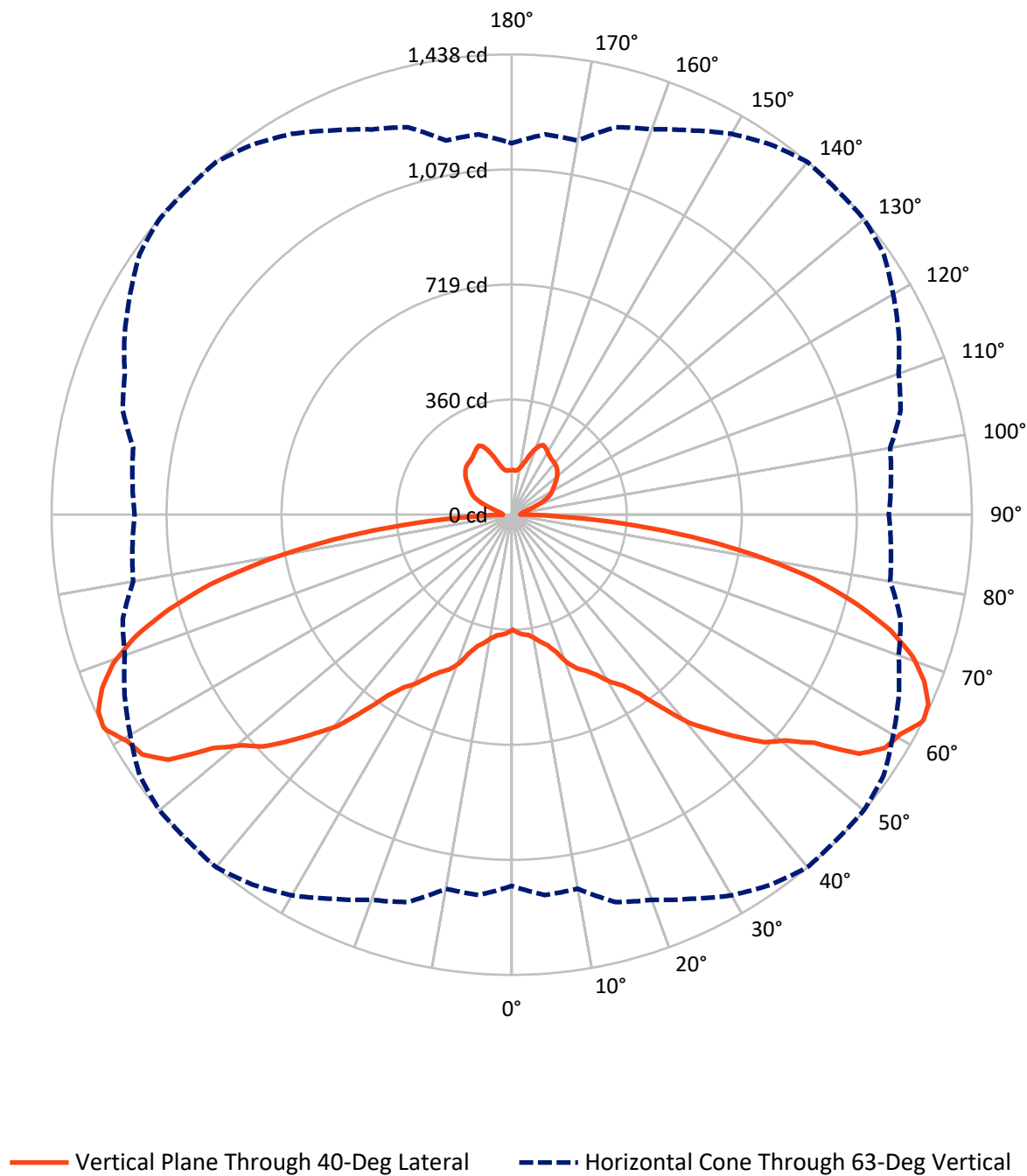


Based on 10 foot mounting height. Maximum calculated value = 4.1 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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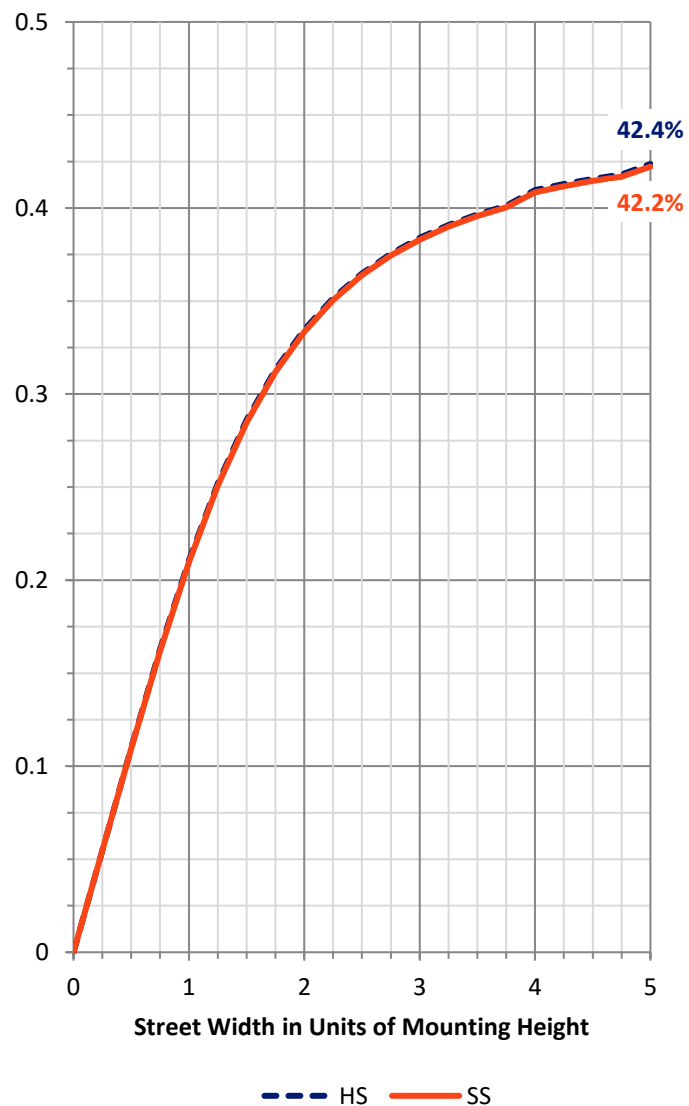
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2642.8	412.0	3054.8
	% Fixture	43.3	6.7	50.0
Street Side	Lumens	2642.8	412.0	3054.8
	% Fixture	43.3	6.7	50.0
Total	Lumens	5285.6	824.0	6109.5
	% Fixture	86.5	13.5	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.3	0.6
10°-20°	123.4	2.0
20°-30°	250.8	4.1
30°-40°	432.3	7.1
40°-50°	728.2	11.9
50°-60°	1072.3	17.6
60°-70°	1275.2	20.9
70°-80°	1032.3	16.9
80°-90°	334.7	5.5
90°-100°	38.3	0.6
100°-110°	59.4	1.0
110°-120°	119.3	2.0
120°-130°	148.7	2.4
130°-140°	153.2	2.5
140°-150°	136.0	2.2
150°-160°	103.7	1.7
160°-170°	51.8	0.8
170°-180°	13.6	0.2
0°-90°	5285.6	86.5
0°-180°	6109.5	100.0

Coefficient of Utilization



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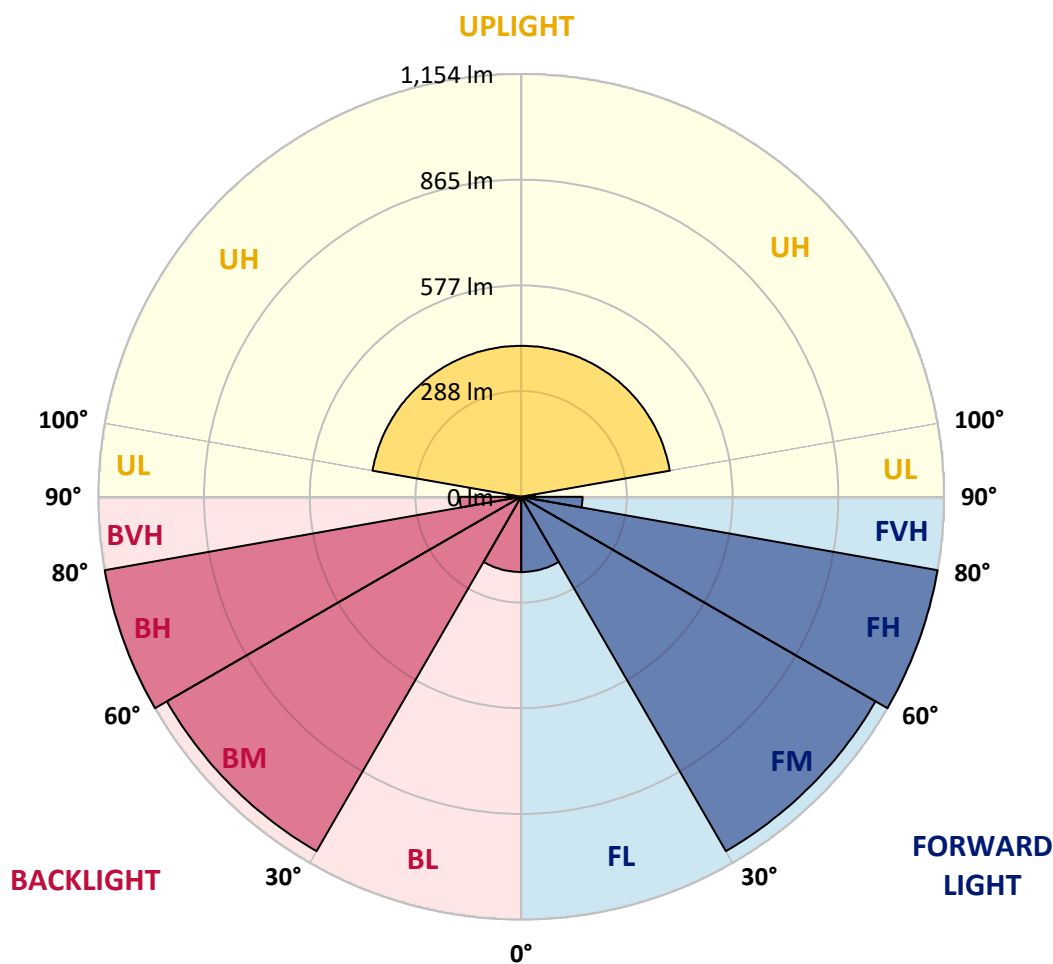
CATALOG NUMBER: TT-C3-LED-E1-WQ-LWR-LW-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	205.3	3.4			
FM	(30°-60°)	1116.4	18.3			
FH	(60°-80°)	1153.8	18.9			G1/1800
FVH	(80°-90°)	167.3	2.7			G2/225
BL	(0°-30°)	205.3	3.4	B1/500		
BM	(30°-60°)	1116.4	18.3	B2/2500		
BH	(60°-80°)	1153.8	18.9	B3/2500		G1/1800
BVH	(80°-90°)	167.3	2.7			G2/225
UL	(90°-100°)	38.3	0.6		U2/50	
UH	(100°-180°)	412.0	6.7		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°	359.6	359.6	359.6	359.6	359.6	359.6	359.6	359.6	359.6	359.6	359.6
2.5°	370.9	370.9	370.9	370.9	370.9	370.9	369.7	370.9	369.7	369.7	369.7
5°	378.0	378.0	378.0	378.0	376.9	376.9	375.9	375.9	375.9	374.9	375.9
7.5°	381.0	381.0	381.0	381.0	380.0	380.0	380.0	380.0	380.0	380.0	380.0
10°	388.2	388.2	389.2	390.2	392.2	392.2	392.2	393.3	392.2	392.2	392.2
12.5°	403.5	402.5	404.5	406.5	408.7	409.7	409.7	409.7	408.7	408.7	409.7
15°	425.0	422.9	424.0	425.0	426.0	427.0	427.0	426.0	424.0	424.0	424.0
17.5°	452.5	449.5	448.5	447.5	447.5	449.5	451.5	450.5	451.5	450.5	451.5
20°	485.3	483.1	483.1	483.1	484.1	488.3	492.4	494.4	493.4	491.3	494.4
22.5°	506.6	507.7	512.8	511.8	510.8	514.9	519.9	524.1	521.9	518.9	520.9
25°	530.2	530.2	537.3	540.4	537.3	537.3	539.4	542.4	540.4	538.4	540.4
27.5°	556.7	556.7	559.7	562.9	560.9	560.9	563.9	569.0	567.9	566.9	567.9
30°	588.4	584.3	581.2	586.4	591.5	592.5	595.5	603.7	605.7	604.7	606.8
32.5°	618.0	611.9	614.0	617.0	628.2	632.3	631.3	637.5	636.4	633.3	637.5
35°	646.6	653.8	657.8	664.0	668.1	673.1	673.1	684.4	686.5	683.4	686.5
37.5°	701.8	704.8	716.1	717.1	722.2	741.6	743.7	759.0	767.2	763.1	764.1
40°	777.4	776.4	784.5	796.7	807.0	831.5	838.7	848.8	856.0	853.0	857.0
42.5°	838.7	830.5	836.6	863.2	874.5	892.8	902.0	907.1	920.4	916.3	921.4
45°	882.6	885.6	893.8	920.4	927.6	942.9	964.3	973.5	990.9	985.7	988.9
47.5°	925.4	939.8	946.9	959.2	981.7	1002.1	1028.7	1037.8	1062.3	1060.3	1057.3
50°	981.7	992.9	1001.0	1010.2	1041.0	1074.6	1097.1	1101.1	1109.3	1103.3	1113.4
52.5°	1042.0	1041.0	1048.0	1073.6	1116.5	1129.8	1149.2	1167.6	1184.9	1191.1	1184.9
55°	1121.6	1096.1	1125.7	1162.4	1180.9	1212.5	1259.5	1285.1	1318.8	1323.9	1313.6
57.5°	1154.3	1154.3	1184.9	1206.4	1240.2	1296.3	1346.4	1358.6	1375.9	1366.8	1377.0
60°	1150.2	1189.0	1189.0	1226.8	1282.0	1332.1	1350.4	1370.9	1394.4	1393.4	1393.4
62.5°	1155.4	1193.1	1182.9	1248.3	1282.0	1322.8	1363.7	1401.5	1434.2	1433.2	1432.2
63°	1160.4	1193.1	1187.0	1253.4	1281.0	1324.9	1373.9	1411.7	1438.3	1436.2	1437.2
65°	1175.7	1166.6	1203.4	1245.2	1276.8	1342.3	1383.1	1412.7	1431.2	1430.2	1430.2
67.5°	1147.1	1125.7	1177.8	1194.2	1254.5	1312.6	1344.3	1378.1	1391.2	1391.2	1389.2
70°	1059.3	1068.5	1104.3	1130.8	1192.1	1244.2	1270.8	1313.6	1330.0	1330.0	1329.0
72.5°	970.4	985.7	1010.2	1048.0	1106.3	1147.1	1178.9	1217.7	1239.0	1238.0	1238.0
75°	857.0	871.3	899.9	935.7	986.7	1026.7	1052.2	1089.0	1113.4	1122.6	1112.4
77.5°	729.4	733.4	760.0	796.7	841.7	869.3	908.1	943.9	964.3	963.2	960.2
80°	574.1	579.2	601.7	643.5	668.1	700.8	736.6	755.9	773.2	773.2	771.2
82.5°	396.3	407.5	430.0	457.6	483.1	511.8	531.2	550.6	564.9	563.9	560.9
85°	223.7	228.8	250.3	267.6	287.1	305.4	318.7	330.9	343.2	343.2	341.2
87.5°	67.4	60.3	72.6	79.6	89.9	99.1	105.2	117.4	125.6	116.4	116.4
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°	359.6	359.6	359.6	359.6	359.6	359.6	359.6	359.6
2.5°	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9
5°	375.9	376.9	376.9	378.0	378.0	378.0	378.0	378.0
7.5°	380.0	380.0	380.0	380.0	381.0	381.0	381.0	381.0
10°	392.2	393.3	392.2	392.2	390.2	389.2	389.2	389.2
12.5°	409.7	410.7	410.7	408.7	406.5	404.5	403.5	402.5
15°	426.0	429.0	427.0	426.0	424.0	425.0	425.0	426.0
17.5°	451.5	452.5	449.5	447.5	446.5	448.5	450.5	451.5
20°	495.4	493.4	487.3	485.3	483.1	483.1	485.3	485.3
22.5°	523.1	517.9	513.8	511.8	511.8	511.8	508.7	504.6
25°	542.4	539.4	536.3	538.4	540.4	537.3	530.2	529.1
27.5°	569.0	562.9	561.9	560.9	561.9	559.7	558.7	554.7
30°	603.7	595.5	593.5	591.5	585.4	583.2	585.4	588.4
32.5°	636.4	631.3	633.3	629.3	618.0	614.0	616.0	615.0
35°	683.4	674.2	674.2	666.0	663.0	662.0	653.8	646.6
37.5°	757.9	745.7	742.6	724.3	716.1	718.1	706.9	698.8
40°	848.8	839.7	831.5	811.0	799.9	785.5	778.4	778.4
42.5°	909.1	903.0	891.8	877.5	865.2	840.7	831.5	836.6
45°	975.6	967.4	943.9	929.6	918.3	901.0	890.8	880.5
47.5°	1043.0	1031.7	1004.2	985.7	959.2	954.1	942.9	928.6
50°	1102.3	1098.1	1078.7	1048.0	1014.4	1006.2	996.0	982.7
52.5°	1174.7	1150.2	1133.9	1120.6	1082.8	1056.3	1042.0	1048.0
55°	1293.3	1262.6	1220.7	1178.9	1170.7	1138.9	1103.3	1122.6
57.5°	1361.7	1344.3	1312.6	1246.2	1213.5	1192.1	1168.6	1151.2
60°	1378.1	1346.4	1339.2	1289.1	1237.0	1192.1	1201.3	1160.4
62.5°	1409.7	1366.8	1326.9	1287.1	1255.5	1194.2	1192.1	1170.7
63°	1419.9	1377.0	1335.1	1287.1	1258.5	1201.3	1190.1	1178.9
65°	1417.9	1381.1	1349.4	1287.1	1244.2	1221.7	1166.6	1192.1
67.5°	1379.1	1348.4	1311.6	1268.7	1197.2	1179.9	1141.1	1146.1
70°	1316.8	1276.8	1242.2	1202.4	1145.1	1105.3	1081.8	1062.3
72.5°	1219.7	1183.9	1147.1	1110.4	1059.3	1011.3	994.9	973.5
75°	1091.0	1056.3	1022.5	987.9	939.8	896.9	879.5	864.2
77.5°	943.9	914.3	866.3	833.5	806.0	760.0	743.7	727.3
80°	752.9	738.6	703.8	661.0	646.6	601.7	589.4	567.9
82.5°	547.6	533.2	505.6	476.0	458.6	435.2	414.7	400.5
85°	334.1	318.7	304.4	277.8	267.6	250.3	234.0	225.8
87.5°	120.6	108.3	97.1	84.8	78.6	66.4	64.3	58.3
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)