

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: P198463

Luminaire Tested: **TT-C4-LED-E1-WQ-8030-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198463
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P27139) AND DOWNLIGHT
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TT-C4-LED-E1-WQ-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
WIDE DISTRIBUTION
Light Source: (160) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5994.4 lumens
Efficiency: N/A
Efficacy: 79.5 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): 75.4
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



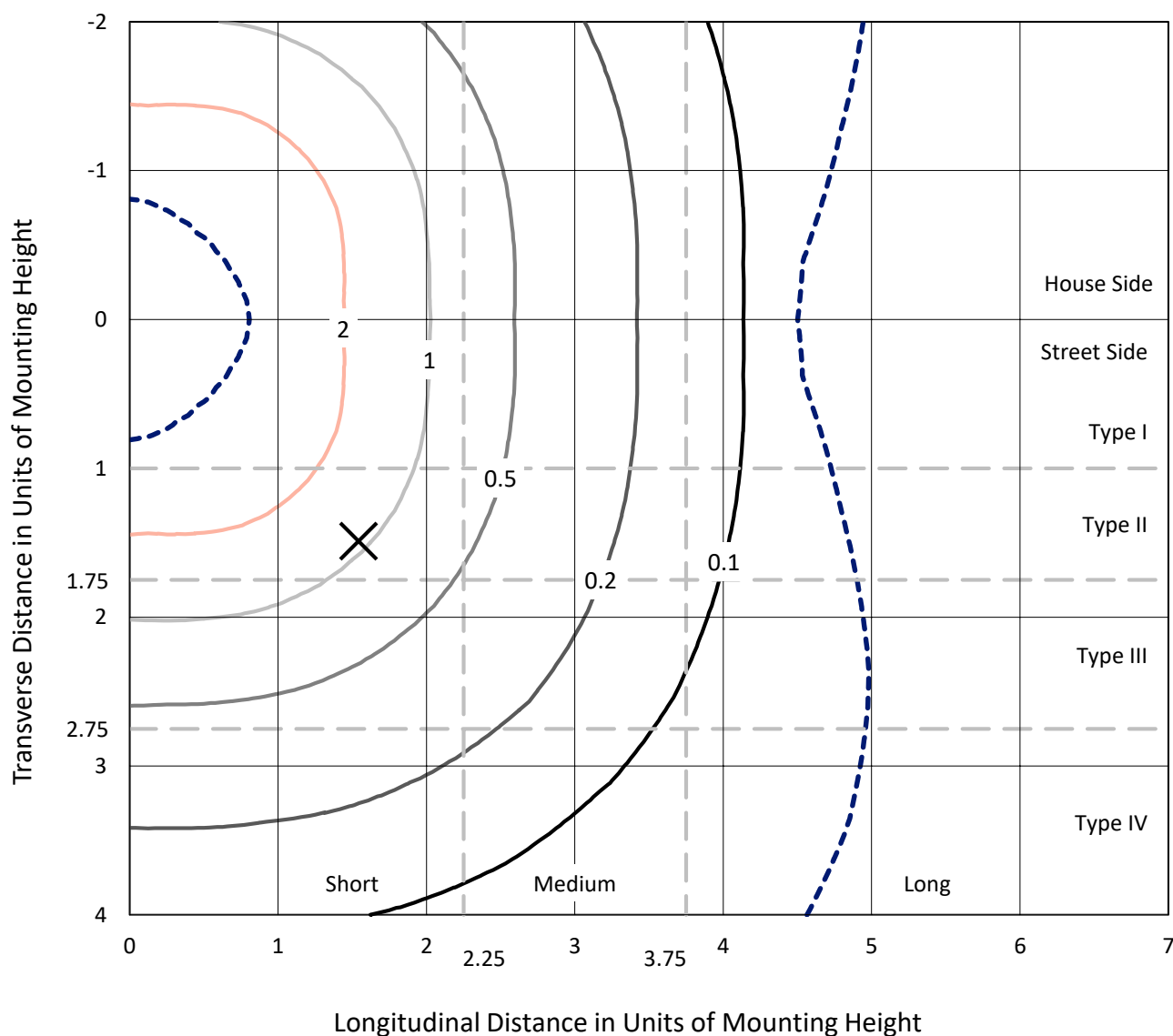
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

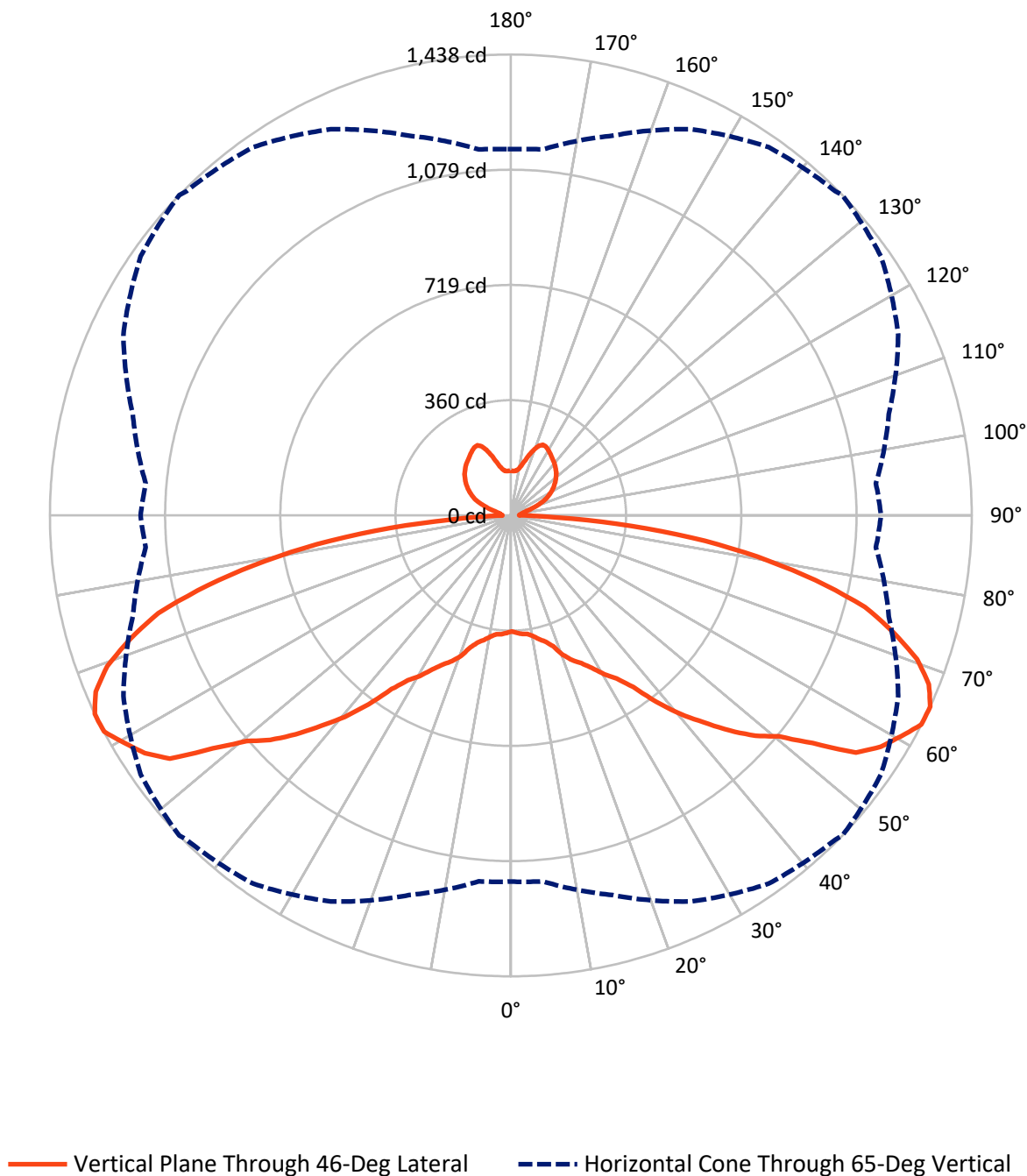


Based on 10 foot mounting height. Maximum calculated value = 3.9 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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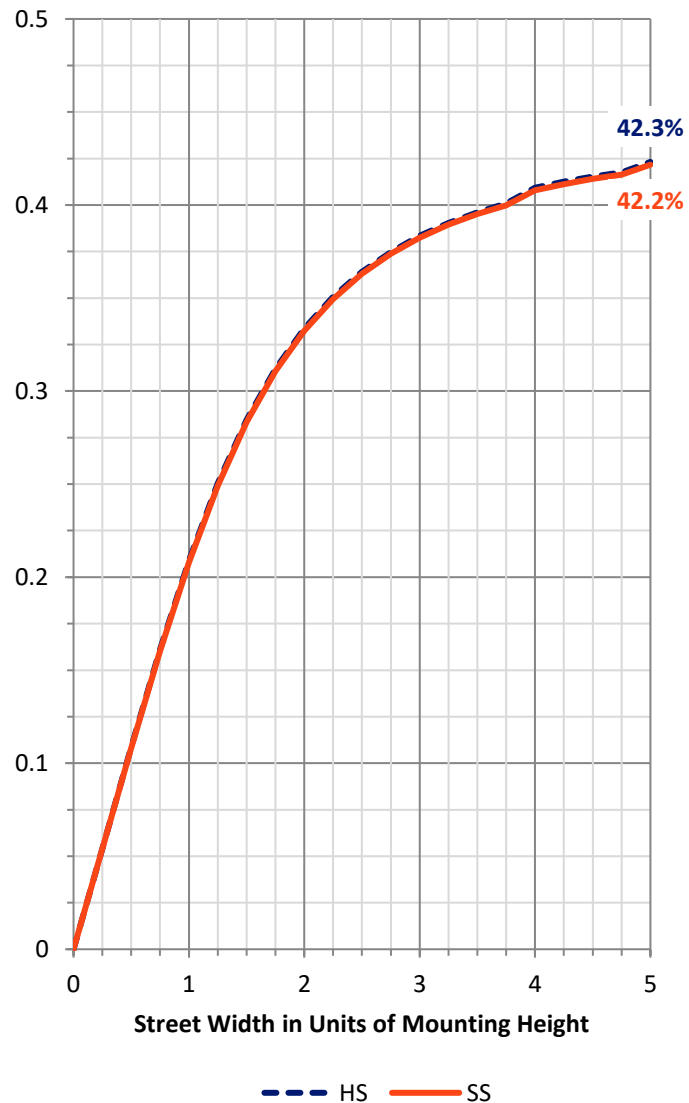
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2584.6	412.6	2997.2
	% Fixture	43.1	6.9	50.0
Street Side	Lumens	2584.6	412.6	2997.2
	% Fixture	43.1	6.9	50.0
Total	Lumens	5169.1	825.3	5994.4
	% Fixture	86.2	13.8	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.8	0.6
10°-20°	119.2	2.0
20°-30°	239.9	4.0
30°-40°	417.8	7.0
40°-50°	706.6	11.8
50°-60°	1053.3	17.6
60°-70°	1260.5	21.0
70°-80°	1020.6	17.0
80°-90°	315.3	5.3
90°-100°	38.4	0.6
100°-110°	59.5	1.0
110°-120°	119.6	2.0
120°-130°	148.9	2.5
130°-140°	153.3	2.6
140°-150°	136.3	2.3
150°-160°	103.9	1.7
160°-170°	51.8	0.9
170°-180°	13.6	0.2
0°-90°	5169.1	86.2
0°-180°	5994.4	100.0

Coefficient of Utilization



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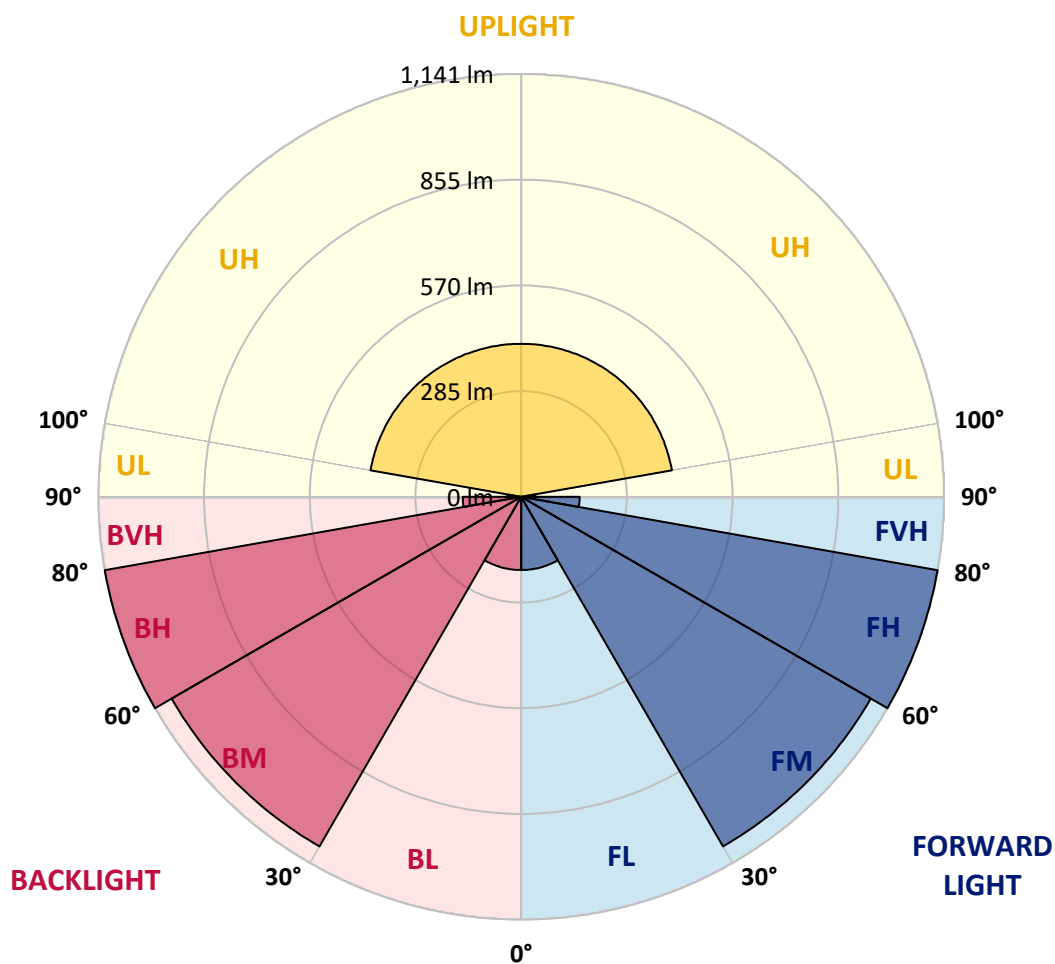
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	197.5	3.3			
FM	(30°-60°)	1088.8	18.2			
FH	(60°-80°)	1140.5	19.0			G1/1800
FVH	(80°-90°)	157.7	2.6			G2/225
BL	(0°-30°)	197.5	3.3	B1/500		
BM	(30°-60°)	1088.8	18.2	B2/2500		
BH	(60°-80°)	1140.5	19.0	B3/2500		G1/1800
BVH	(80°-90°)	157.7	2.6			G2/225
UL	(90°-100°)	38.4	0.6		U2/50	
UH	(100°-180°)	412.6	6.9		U3/500	

BUG Rating: B3-U4-G2

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	361.8	361.8	361.8	361.8	361.8	361.8	361.8	361.8	361.8	361.8	361.8
2.5°	368.0	367.1	367.1	367.1	367.1	367.1	367.1	367.1	367.1	367.1	368.0
5°	374.3	374.3	373.4	372.5	372.5	371.6	371.6	371.6	372.5	373.4	373.4
7.5°	377.0	376.1	376.1	375.2	374.3	374.3	374.3	374.3	375.2	376.1	376.1
10°	382.3	383.2	384.1	385.0	385.9	385.0	385.0	385.0	385.0	384.1	382.3
12.5°	394.8	394.8	397.5	400.2	400.2	399.3	396.6	400.2	399.3	396.6	394.8
15°	411.8	412.7	412.7	415.4	413.6	411.8	409.1	413.6	413.6	411.8	410.9
17.5°	435.9	434.1	431.4	433.2	435.0	435.0	429.7	435.0	431.4	429.7	432.3
20°	462.7	461.8	460.9	462.7	469.9	467.2	464.5	468.1	463.6	457.3	459.1
22.5°	483.3	485.0	487.7	490.4	497.5	495.8	490.4	496.7	489.5	487.7	482.4
25°	509.2	508.3	515.4	515.4	519.9	517.2	510.9	519.9	512.7	515.4	507.4
27.5°	535.1	534.2	539.5	539.5	547.6	546.7	538.6	547.6	539.5	537.7	535.1
30°	564.5	562.8	563.6	570.8	582.4	582.4	575.3	579.7	570.8	561.9	561.0
32.5°	595.8	592.2	597.6	609.2	615.5	613.7	606.5	613.7	611.0	595.8	592.2
35°	626.2	630.6	640.5	650.3	661.9	663.7	657.4	661.0	651.2	639.6	630.6
37.5°	677.1	684.2	696.7	720.0	737.8	743.2	737.8	736.0	721.8	695.8	683.3
40°	748.5	750.3	767.3	802.1	820.9	824.5	814.7	817.3	800.4	771.8	745.0
42.5°	806.6	803.9	834.3	865.6	885.2	893.3	882.5	886.1	862.9	835.2	805.7
45°	854.0	856.6	887.9	919.2	950.4	965.6	957.6	951.3	917.4	886.1	860.2
47.5°	897.7	910.2	931.7	977.2	1016.5	1033.5	1027.2	1018.3	982.6	930.8	911.1
50°	953.1	961.1	987.0	1046.0	1082.6	1088.9	1083.5	1083.5	1049.6	989.7	962.9
52.5°	1013.0	1013.8	1052.3	1113.0	1159.4	1184.5	1180.0	1167.5	1113.9	1061.2	1017.4
55°	1084.4	1074.6	1134.4	1197.9	1267.5	1308.6	1306.8	1280.0	1206.8	1137.1	1079.1
57.5°	1124.6	1126.4	1180.9	1276.5	1343.5	1355.1	1361.3	1345.2	1289.9	1182.7	1137.1
60°	1133.5	1155.0	1205.0	1310.4	1363.1	1397.1	1398.8	1372.0	1314.0	1212.1	1163.9
62.5°	1137.1	1163.0	1224.7	1308.6	1397.9	1431.0	1437.3	1409.6	1315.8	1227.3	1156.8
65°	1142.5	1146.0	1226.4	1329.2	1402.4	1431.0	1438.1	1409.6	1333.6	1221.1	1143.4
67.5°	1120.1	1111.2	1181.8	1293.4	1364.9	1398.8	1406.9	1372.9	1296.1	1183.6	1122.8
70°	1039.8	1043.3	1121.9	1228.2	1306.8	1339.0	1344.4	1307.7	1227.3	1130.0	1059.4
72.5°	954.9	963.8	1029.9	1137.1	1207.7	1238.9	1248.8	1210.4	1142.5	1042.4	969.2
75°	837.0	854.0	917.4	1013.8	1084.4	1131.8	1141.6	1091.6	1010.3	923.6	853.1
77.5°	706.6	718.2	778.9	862.0	937.9	962.0	971.0	946.9	866.5	789.6	723.5
80°	555.6	560.1	621.7	687.8	746.8	766.4	779.8	749.4	695.0	625.3	561.0
82.5°	381.4	387.7	431.4	492.2	544.0	552.0	569.0	544.0	493.1	439.5	391.2
85°	198.3	207.2	241.2	274.2	314.4	324.3	329.6	310.9	284.1	240.3	208.1
87.5°	42.9	47.3	52.7	67.9	81.3	92.9	100.9	84.0	67.0	56.3	42.9
90°	36.0	36.0	36.0	34.0	29.0	26.0	26.0	28.0	32.0	34.0	34.0
92.5°	40.0	39.0	38.0	34.0	29.0	27.0	27.0	28.0	32.0	35.0	36.0
95°	44.0	43.0	41.0	36.0	32.0	30.0	30.0	30.0	34.0	37.0	39.0
97.5°	42.0	42.0	40.0	37.0	35.0	33.0	32.8	33.0	34.0	36.0	36.0
100°	45.0	45.0	44.0	40.0	38.0	36.0	35.8	36.0	38.0	38.0	37.0
102.5°	51.0	51.0	49.0	46.0	44.0	42.0	42.0	43.0	44.0	42.0	41.0
105°	60.0	60.0	57.0	54.0	53.0	52.0	52.0	54.0	53.0	49.0	48.0
107.5°	72.0	72.0	70.0	67.0	66.0	68.0	68.0	68.0	66.0	60.0	59.0
110°	86.0	86.0	89.0	85.0	86.0	87.0	86.8	84.0	84.0	78.0	74.0

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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
112.5°	101.0	102.0	108.0	107.0	110.0	107.0	106.2	102.0	105.0	100.0	95.0
115°	121.0	122.0	128.0	128.0	129.0	124.0	123.2	121.0	125.0	123.0	116.0
117.5°	140.0	141.0	144.0	141.0	141.0	136.0	135.8	138.0	141.0	139.0	133.0
120°	152.0	153.0	155.0	149.0	149.0	147.0	147.2	150.0	153.0	148.0	145.0
122.5°	161.0	162.0	164.0	154.0	155.0	158.0	158.0	159.0	162.0	155.0	153.0
125°	169.0	169.0	172.0	163.0	165.0	168.0	167.8	167.0	168.0	163.0	160.0
127.5°	177.0	177.0	181.0	171.0	176.0	178.0	177.4	176.0	175.0	173.0	166.0
130°	187.0	188.0	191.0	179.0	186.0	186.0	185.4	183.0	183.0	184.0	171.0
132.5°	198.0	199.0	201.0	186.0	193.0	195.0	194.2	190.0	192.0	192.0	179.0
135°	210.0	210.0	209.0	192.0	199.0	201.0	200.2	196.0	201.0	199.0	185.0
137.5°	221.0	219.0	213.0	197.0	205.0	208.0	207.0	203.0	210.0	204.0	191.0
140°	229.0	226.0	216.0	200.0	207.0	213.0	212.8	212.0	217.0	209.0	195.0
142.5°	235.0	231.0	218.0	201.0	208.0	218.0	218.0	220.0	223.0	211.0	198.0
145°	235.0	230.0	218.0	202.0	211.0	223.0	223.4	230.0	227.0	211.0	201.0
147.5°	230.0	227.0	219.0	207.0	216.0	229.0	229.8	239.0	229.0	212.0	204.0
150°	224.0	221.0	220.0	214.0	222.0	235.0	235.8	242.0	232.0	214.0	210.0
152.5°	216.0	214.0	221.0	220.0	230.0	241.0	241.0	242.0	235.0	219.0	215.0
155°	208.0	207.0	219.0	224.0	237.0	243.0	242.2	238.0	234.0	224.0	220.0
157.5°	203.0	203.0	216.0	224.0	234.0	235.0	234.0	228.0	229.0	226.0	222.0
160°	199.0	198.0	210.0	213.0	219.0	219.0	218.4	215.0	219.0	221.0	218.0
162.5°	185.0	184.0	193.0	193.0	198.0	198.0	197.6	196.0	200.0	204.0	207.0
165°	169.0	167.0	173.0	173.0	176.0	177.0	176.6	176.0	181.0	185.0	190.0
167.5°	154.0	152.0	156.0	155.0	159.0	159.0	158.8	160.0	165.0	168.0	172.0
170°	142.0	141.0	145.0	144.0	147.0	147.0	147.0	148.0	152.0	155.0	159.0
172.5°	137.0	135.0	139.0	138.0	141.0	141.0	140.8	141.0	145.0	146.0	149.0
175°	136.0	134.0	137.0	137.0	139.0	139.0	138.8	138.0	141.0	141.0	143.0
177.5°	137.0	136.0	139.0	138.0	140.0	139.0	138.8	138.0	140.0	140.0	141.0
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):

	90°
0°	361.8
2.5°	367.1
5°	373.4
7.5°	376.1
10°	382.3
12.5°	393.9
15°	411.8
17.5°	434.1
20°	458.2
22.5°	479.7
25°	505.6
27.5°	535.1
30°	565.4
32.5°	590.4
35°	625.3
37.5°	682.4
40°	751.2
42.5°	806.6
45°	852.2
47.5°	903.1
50°	954.0
52.5°	1019.2
55°	1083.5
57.5°	1116.6
60°	1137.1
62.5°	1153.2
65°	1155.0
67.5°	1108.5
70°	1038.0
72.5°	957.6
75°	839.7
77.5°	715.5
80°	555.6
82.5°	390.4
85°	204.6
87.5°	40.2
90°	34.0
92.5°	36.0
95°	38.0
97.5°	36.0
100°	37.0
102.5°	41.0
105°	49.0
107.5°	60.0
110°	75.0

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CANDELA DISTRIBUTION (continued):

	90°
112.5°	94.0
115°	113.0
117.5°	129.0
120°	142.0
122.5°	150.0
125°	158.0
127.5°	163.0
130°	169.0
132.5°	176.0
135°	184.0
137.5°	190.0
140°	195.0
142.5°	198.0
145°	202.0
147.5°	206.0
150°	211.0
152.5°	216.0
155°	219.0
157.5°	219.0
160°	215.0
162.5°	207.0
165°	192.0
167.5°	174.0
170°	160.0
172.5°	151.0
175°	144.0
177.5°	141.0
180°	140.0

(END OF REPORT)