

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: P198276

Luminaire Tested: **TT-C1-LED-E1-RW-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198276
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P27139) AND SCALED
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TT-C1-LED-E1-RW-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
RECTANGULAR DISTRIBUTION
Light Source: (168) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4014.5 lumens
Efficiency: N/A
Efficacy: 88.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U4 - G2

Input Watts (W): 45.4
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



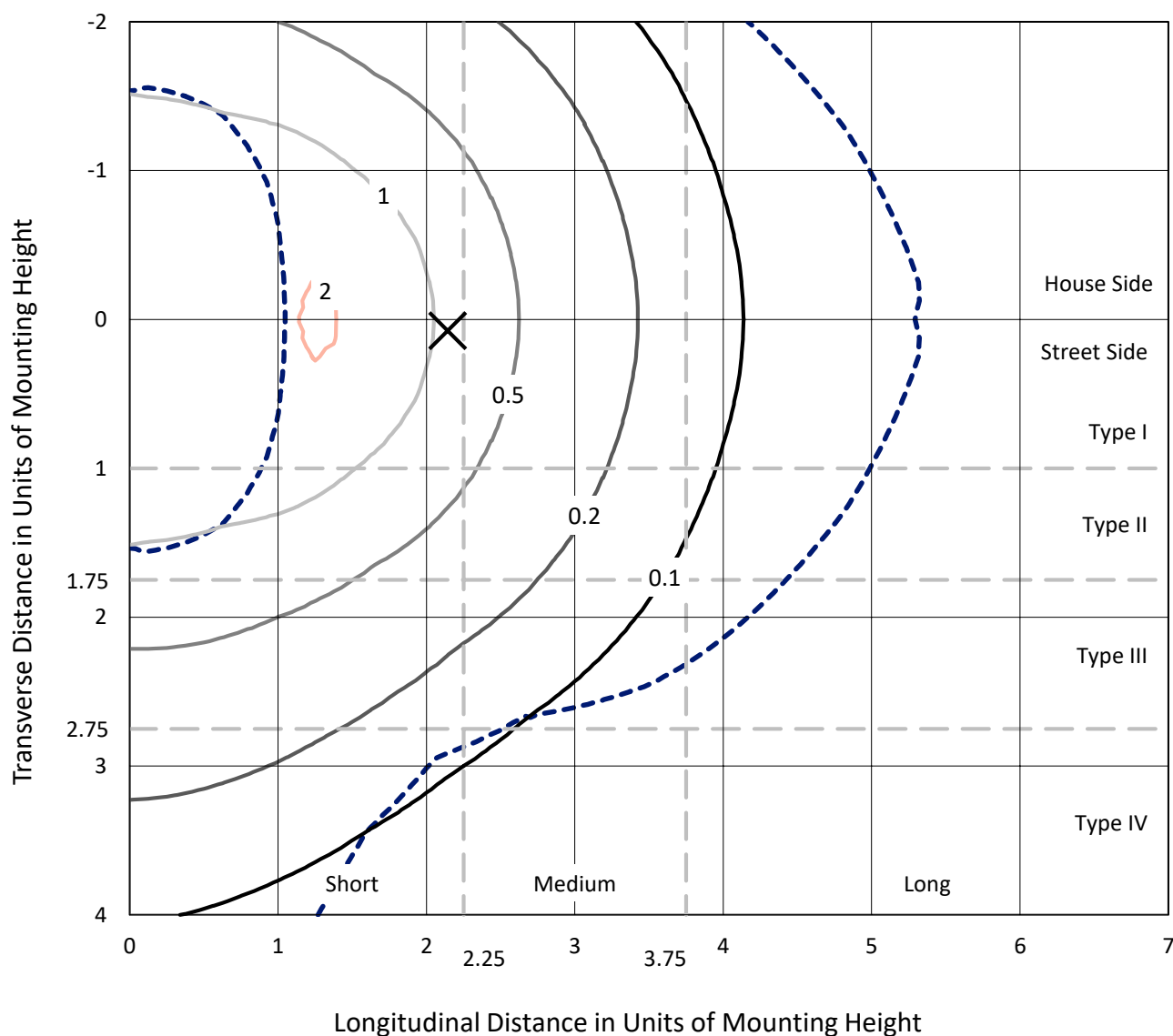
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

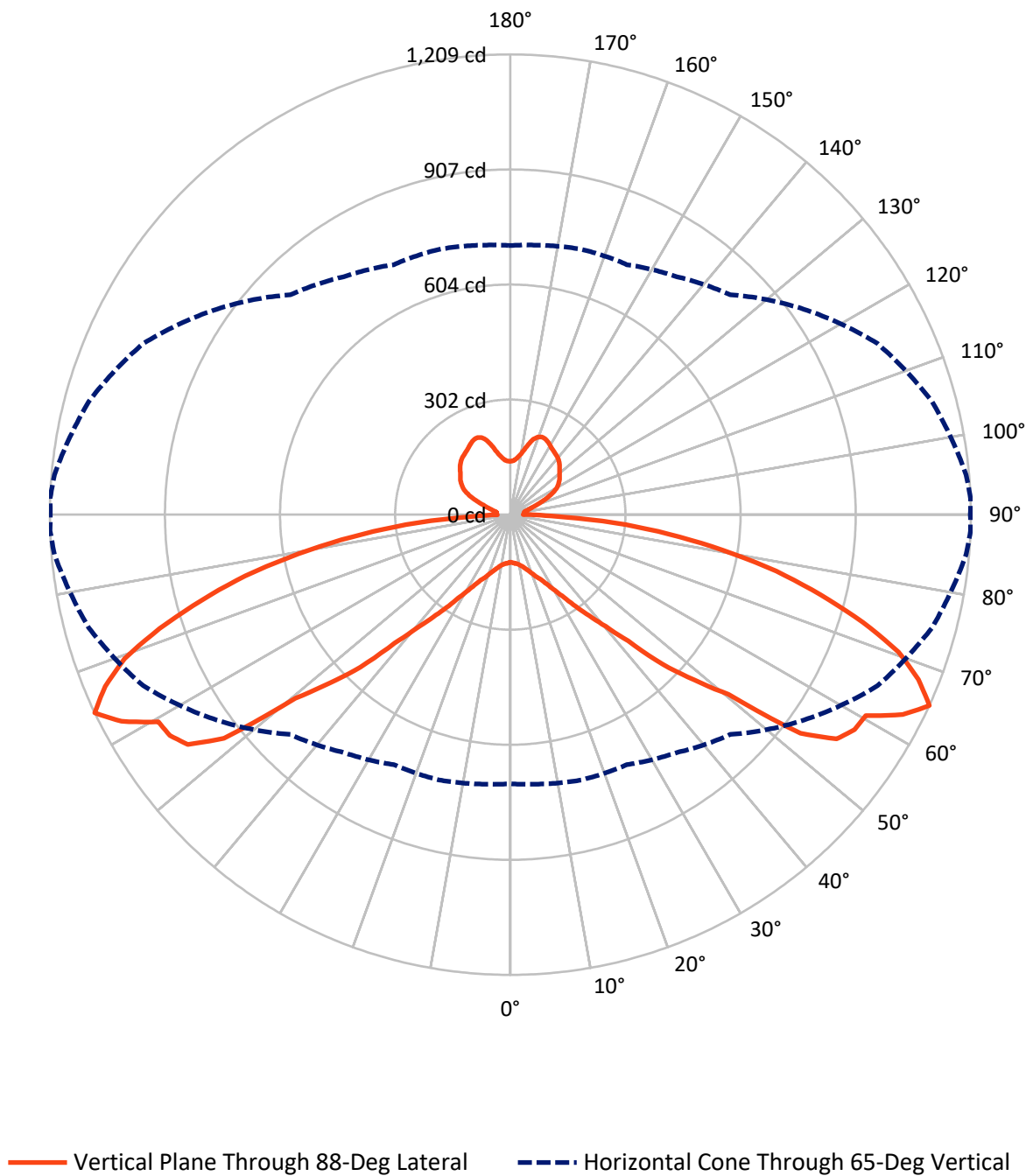


Based on 10 foot mounting height. Maximum calculated value = 2.1 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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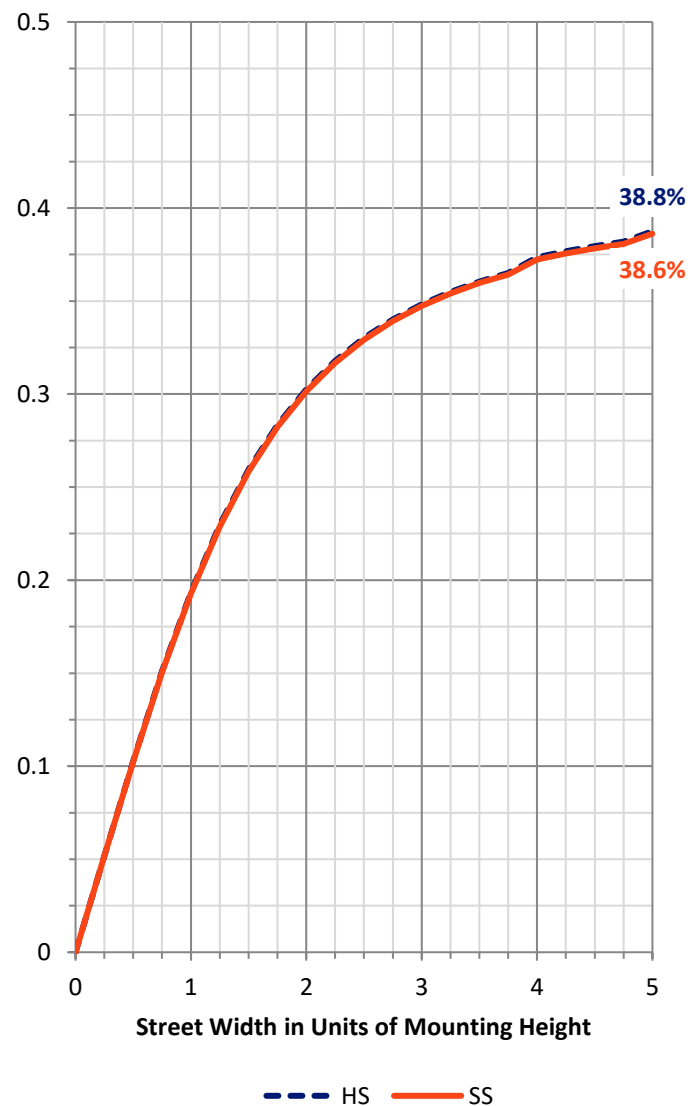
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1594.6	412.7	2007.3
	% Fixture	39.7	10.3	50.0
Street Side	Lumens	1594.6	412.7	2007.3
	% Fixture	39.7	10.3	50.0
Total	Lumens	3189.2	825.3	4014.5
	% Fixture	79.4	20.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.5	0.3
10°-20°	43.4	1.1
20°-30°	95.8	2.4
30°-40°	190.9	4.8
40°-50°	365.4	9.1
50°-60°	653.9	16.3
60°-70°	866.5	21.6
70°-80°	723.1	18.0
80°-90°	237.7	5.9
90°-100°	38.4	1.0
100°-110°	59.5	1.5
110°-120°	119.6	3.0
120°-130°	148.9	3.7
130°-140°	153.3	3.8
140°-150°	136.3	3.4
150°-160°	103.9	2.6
160°-170°	51.8	1.3
170°-180°	13.6	0.3
0°-90°	3189.2	79.4
0°-180°	4014.5	100.0

Coefficient of Utilization



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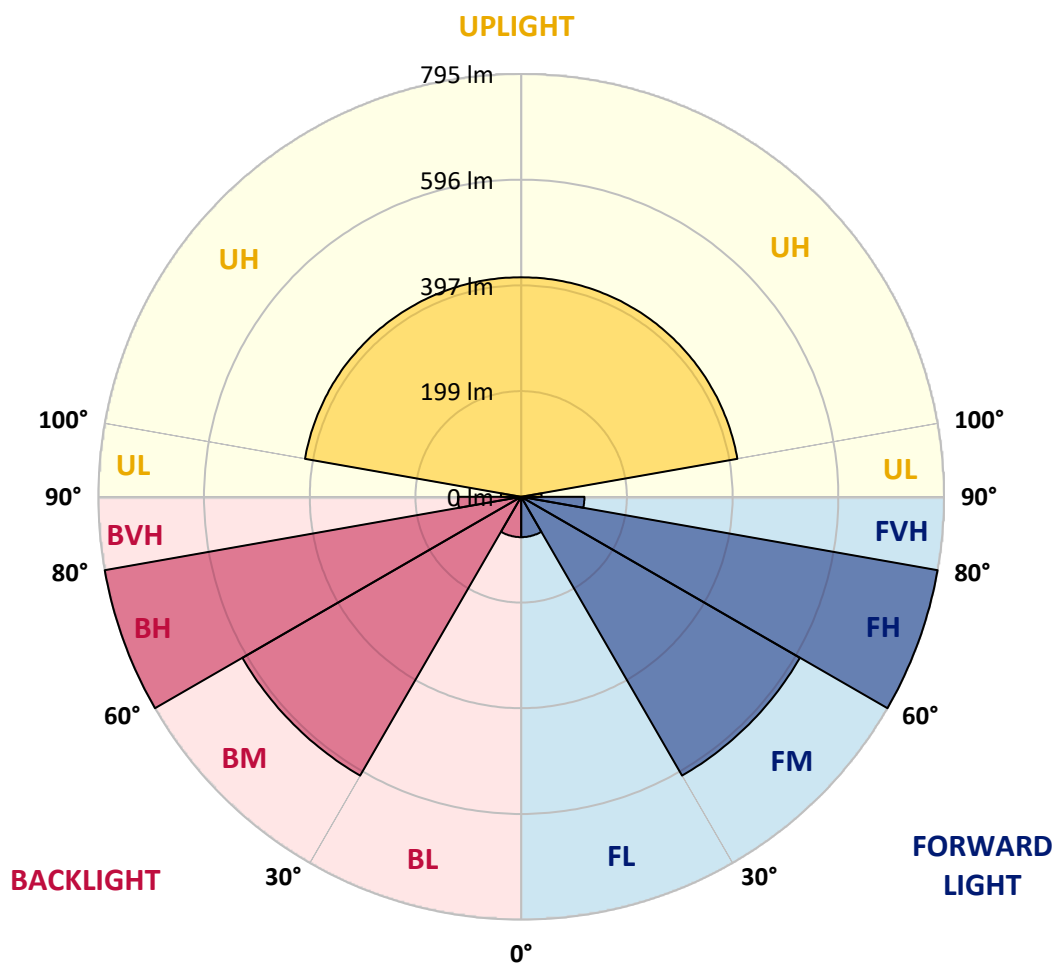
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	75.8	1.9			
FM	(30°-60°)	605.1	15.1			
FH	(60°-80°)	794.8	19.8			G1/1800
FVH	(80°-90°)	118.9	3.0			G2/225
BL	(0°-30°)	75.8	1.9	B0/110		
BM	(30°-60°)	605.1	15.1	B1/1000		
BH	(60°-80°)	794.8	19.8	B2/1000		G2/1000
BVH	(80°-90°)	118.9	3.0			G2/225
UL	(90°-100°)	38.4	1.0		U2/50	
UH	(100°-180°)	412.7	10.3		U3/500	

BUG Rating: B2-U4-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	88°
0°	124.7	124.7	124.7	124.7	124.7	124.7	124.7	124.7	124.7	124.7	124.7
2.5°	126.0	126.0	126.0	126.0	126.6	126.6	126.6	126.6	126.6	126.6	126.6
5°	127.8	127.8	128.5	128.5	129.1	129.1	129.1	129.1	128.5	128.5	128.5
7.5°	131.0	131.6	132.2	132.2	132.2	131.6	131.0	131.0	130.3	130.3	130.3
10°	136.6	136.6	137.2	137.2	136.6	136.0	135.4	134.7	134.7	134.7	134.1
12.5°	143.5	143.5	144.1	143.5	142.3	141.6	140.4	139.7	139.7	139.1	139.1
15°	152.9	154.2	154.2	152.3	150.4	148.5	147.9	146.6	146.6	146.6	146.6
17.5°	167.3	166.7	164.2	162.3	161.1	157.9	156.7	156.0	154.8	154.8	154.8
20°	183.6	182.4	179.2	176.7	174.2	170.5	167.9	166.7	166.1	165.4	165.4
22.5°	201.8	199.9	195.5	193.6	188.6	184.9	181.7	179.2	177.3	176.7	178.0
25°	220.6	220.6	216.8	211.8	206.8	201.2	196.8	193.6	191.1	190.5	189.9
27.5°	240.6	241.9	236.9	231.9	226.2	218.7	214.3	209.9	209.3	208.7	208.1
30°	261.9	264.5	259.4	254.4	246.9	239.4	233.7	231.9	230.0	231.2	231.2
32.5°	288.3	289.5	283.9	280.1	270.1	262.6	257.6	256.3	256.9	256.3	258.2
35°	319.0	317.1	312.7	305.2	296.4	289.5	285.8	288.3	295.2	297.7	296.4
37.5°	352.8	345.9	343.4	334.0	325.9	320.2	321.5	327.7	333.4	337.8	336.5
40°	377.9	379.1	372.2	363.5	355.9	354.7	361.6	369.7	380.4	384.1	385.4
42.5°	403.6	411.1	402.9	394.2	390.4	392.9	402.9	419.2	443.1	455.6	453.7
45°	433.0	441.2	432.4	425.5	424.9	434.3	456.2	498.8	533.9	559.0	561.5
47.5°	463.7	470.0	461.9	457.5	463.7	481.9	519.5	576.5	614.1	643.6	648.6
50°	502.6	500.1	493.8	493.2	507.0	540.2	590.9	648.6	716.3	735.7	742.0
52.5°	540.8	531.4	530.2	533.3	557.7	595.3	663.0	776.4	876.1	946.3	953.8
55°	576.5	565.9	568.4	576.5	611.0	668.0	762.0	900.5	987.6	1037.1	1039.6
57.5°	609.1	602.9	608.5	619.8	671.2	744.5	844.1	958.2	1024.0	1059.1	1065.3
60°	642.3	641.1	648.0	668.6	723.8	789.0	872.3	973.2	1039.0	1066.0	1072.2
62.5°	673.7	678.0	686.8	706.9	749.5	800.2	881.1	1004.5	1102.9	1145.5	1156.2
65°	706.9	710.6	721.3	724.4	762.6	816.5	940.6	1063.4	1146.2	1201.3	1208.8
67.5°	737.0	742.0	738.2	735.7	768.9	816.5	928.7	1036.5	1105.4	1147.4	1155.6
70°	765.8	760.1	745.1	725.7	735.1	767.7	870.4	963.8	1033.4	1072.8	1081.0
72.5°	773.3	765.8	725.7	681.2	667.4	691.8	786.5	869.2	926.2	963.2	968.2
75°	753.9	738.2	670.5	609.1	582.8	607.2	686.2	757.0	797.1	837.2	840.4
77.5°	676.2	666.1	590.9	516.4	486.9	505.1	570.9	621.0	667.4	706.2	713.8
80°	555.2	546.5	480.0	419.2	379.8	392.3	440.5	480.7	525.1	555.9	565.3
82.5°	408.6	407.3	359.7	302.7	275.1	273.9	310.2	349.7	383.5	413.0	419.2
85°	256.9	256.9	224.3	189.9	161.1	161.7	183.6	212.4	255.1	273.9	275.7
87.5°	87.1	82.7	77.1	62.7	50.1	45.1	48.3	55.1	84.0	104.0	107.8
90°	36.0	36.0	36.0	34.0	29.0	26.0	28.0	32.0	34.0	34.0	34.0
92.5°	40.0	39.0	38.0	34.0	29.0	27.0	28.0	32.0	35.0	36.0	36.0
95°	44.0	43.0	41.0	36.0	32.0	30.0	30.0	34.0	37.0	39.0	38.4
97.5°	42.0	42.0	40.0	37.0	35.0	33.0	33.0	34.0	36.0	36.0	36.0
100°	45.0	45.0	44.0	40.0	38.0	36.0	36.0	38.0	38.0	37.0	37.0
102.5°	51.0	51.0	49.0	46.0	44.0	42.0	43.0	44.0	42.0	41.0	41.0
105°	60.0	60.0	57.0	54.0	53.0	52.0	54.0	53.0	49.0	48.0	48.6
107.5°	72.0	72.0	70.0	67.0	66.0	68.0	68.0	66.0	60.0	59.0	59.6
110°	86.0	86.0	89.0	85.0	86.0	87.0	84.0	84.0	78.0	74.0	74.6

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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	88°
112.5°	101.0	102.0	108.0	107.0	110.0	107.0	102.0	105.0	100.0	95.0	94.4
115°	121.0	122.0	128.0	128.0	129.0	124.0	121.0	125.0	123.0	116.0	114.2
117.5°	140.0	141.0	144.0	141.0	141.0	136.0	138.0	141.0	139.0	133.0	130.6
120°	152.0	153.0	155.0	149.0	149.0	147.0	150.0	153.0	148.0	145.0	143.2
122.5°	161.0	162.0	164.0	154.0	155.0	158.0	159.0	162.0	155.0	153.0	151.2
125°	169.0	169.0	172.0	163.0	165.0	168.0	167.0	168.0	163.0	160.0	158.8
127.5°	177.0	177.0	181.0	171.0	176.0	178.0	176.0	175.0	173.0	166.0	164.2
130°	187.0	188.0	191.0	179.0	186.0	186.0	183.0	183.0	184.0	171.0	169.8
132.5°	198.0	199.0	201.0	186.0	193.0	195.0	190.0	192.0	192.0	179.0	177.2
135°	210.0	210.0	209.0	192.0	199.0	201.0	196.0	201.0	199.0	185.0	184.4
137.5°	221.0	219.0	213.0	197.0	205.0	208.0	203.0	210.0	204.0	191.0	190.4
140°	229.0	226.0	216.0	200.0	207.0	213.0	212.0	217.0	209.0	195.0	195.0
142.5°	235.0	231.0	218.0	201.0	208.0	218.0	220.0	223.0	211.0	198.0	198.0
145°	235.0	230.0	218.0	202.0	211.0	223.0	230.0	227.0	211.0	201.0	201.6
147.5°	230.0	227.0	219.0	207.0	216.0	229.0	239.0	229.0	212.0	204.0	205.2
150°	224.0	221.0	220.0	214.0	222.0	235.0	242.0	232.0	214.0	210.0	210.6
152.5°	216.0	214.0	221.0	220.0	230.0	241.0	242.0	235.0	219.0	215.0	215.6
155°	208.0	207.0	219.0	224.0	237.0	243.0	238.0	234.0	224.0	220.0	219.4
157.5°	203.0	203.0	216.0	224.0	234.0	235.0	228.0	229.0	226.0	222.0	220.2
160°	199.0	198.0	210.0	213.0	219.0	219.0	215.0	219.0	221.0	218.0	216.2
162.5°	185.0	184.0	193.0	193.0	198.0	198.0	196.0	200.0	204.0	207.0	207.0
165°	169.0	167.0	173.0	173.0	176.0	177.0	176.0	181.0	185.0	190.0	191.2
167.5°	154.0	152.0	156.0	155.0	159.0	159.0	160.0	165.0	168.0	172.0	173.2
170°	142.0	141.0	145.0	144.0	147.0	147.0	148.0	152.0	155.0	159.0	159.6
172.5°	137.0	135.0	139.0	138.0	141.0	141.0	141.0	145.0	146.0	149.0	150.2
175°	136.0	134.0	137.0	137.0	139.0	139.0	138.0	141.0	141.0	143.0	143.6
177.5°	137.0	136.0	139.0	138.0	140.0	139.0	138.0	140.0	140.0	141.0	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°	124.7
2.5°	126.6
5°	128.5
7.5°	130.3
10°	134.1
12.5°	139.7
15°	146.0
17.5°	154.8
20°	165.4
22.5°	177.3
25°	189.9
27.5°	208.7
30°	230.6
32.5°	257.6
35°	297.0
37.5°	337.8
40°	388.5
42.5°	458.7
45°	555.2
47.5°	648.6
50°	735.1
52.5°	938.1
55°	1042.1
57.5°	1064.7
60°	1070.3
62.5°	1150.6
65°	1207.6
67.5°	1154.9
70°	1079.1
72.5°	964.4
75°	845.4
77.5°	713.8
80°	557.7
82.5°	419.2
85°	271.3
87.5°	104.7
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)