

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: P198322

Luminaire Tested: **TT-C2-LED-E1-MQ-MS/DIM-8030-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198322
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-C2-LED-E1-MQ-MS/DIM-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
MEDIUM DISTRIBUTION WITH DIMMING OCCUPANCY SENSOR
Light Source: (168) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4811.4 lumens
Efficiency: N/A
Efficacy: 93.6 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B2 - U4 - G2

Input Watts (W): 51.4
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

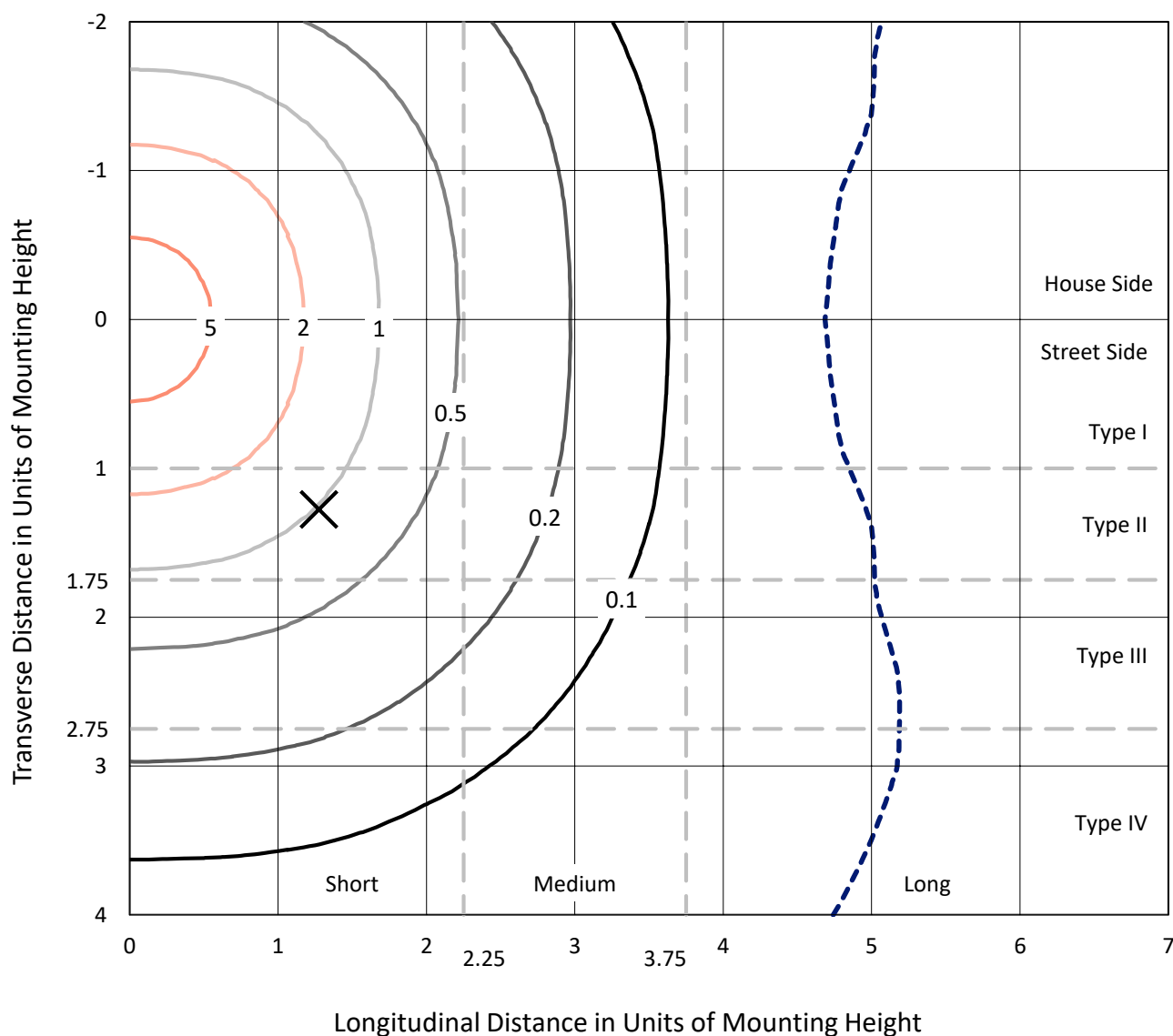


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

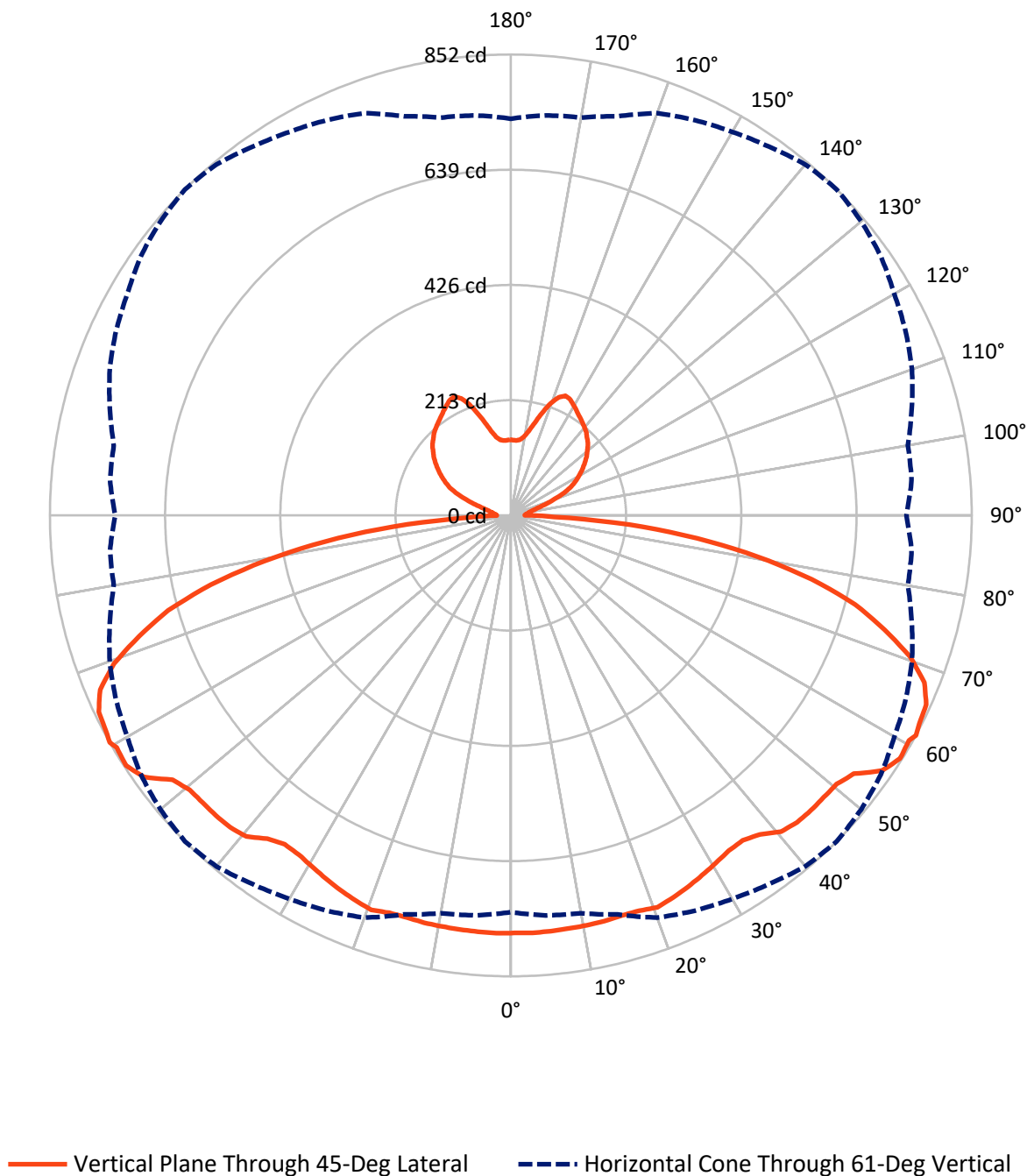


Based on 10 foot mounting height. Maximum calculated value = 7.7 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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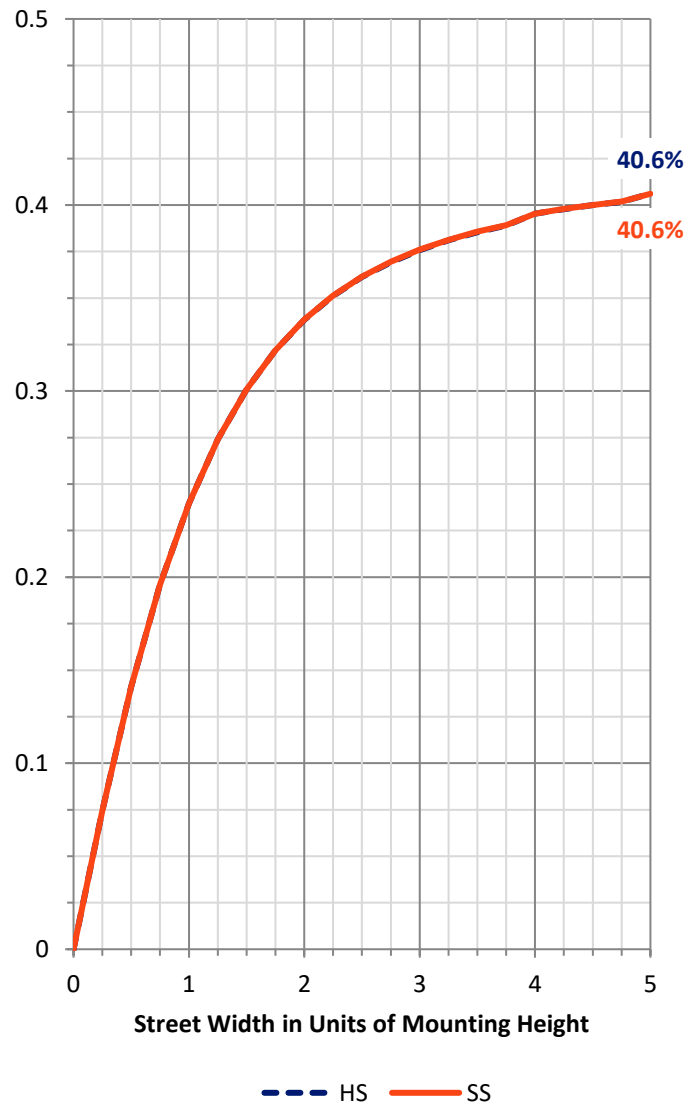
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1993.7	412.0	2405.7
	% Fixture	41.4	8.6	50.0
Street Side	Lumens	1993.7	412.0	2405.7
	% Fixture	41.4	8.6	50.0
Total	Lumens	3987.4	824.0	4811.4
	% Fixture	82.9	17.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.6	1.5
10°-20°	217.6	4.5
20°-30°	350.2	7.3
30°-40°	463.9	9.6
40°-50°	585.8	12.2
50°-60°	702.0	14.6
60°-70°	767.5	16.0
70°-80°	614.4	12.8
80°-90°	212.3	4.4
90°-100°	38.3	0.8
100°-110°	59.4	1.2
110°-120°	119.3	2.5
120°-130°	148.7	3.1
130°-140°	153.2	3.2
140°-150°	136.0	2.8
150°-160°	103.7	2.2
160°-170°	51.8	1.1
170°-180°	13.6	0.3
0°-90°	3987.4	82.9
0°-180°	4811.4	100.0

Coefficient of Utilization



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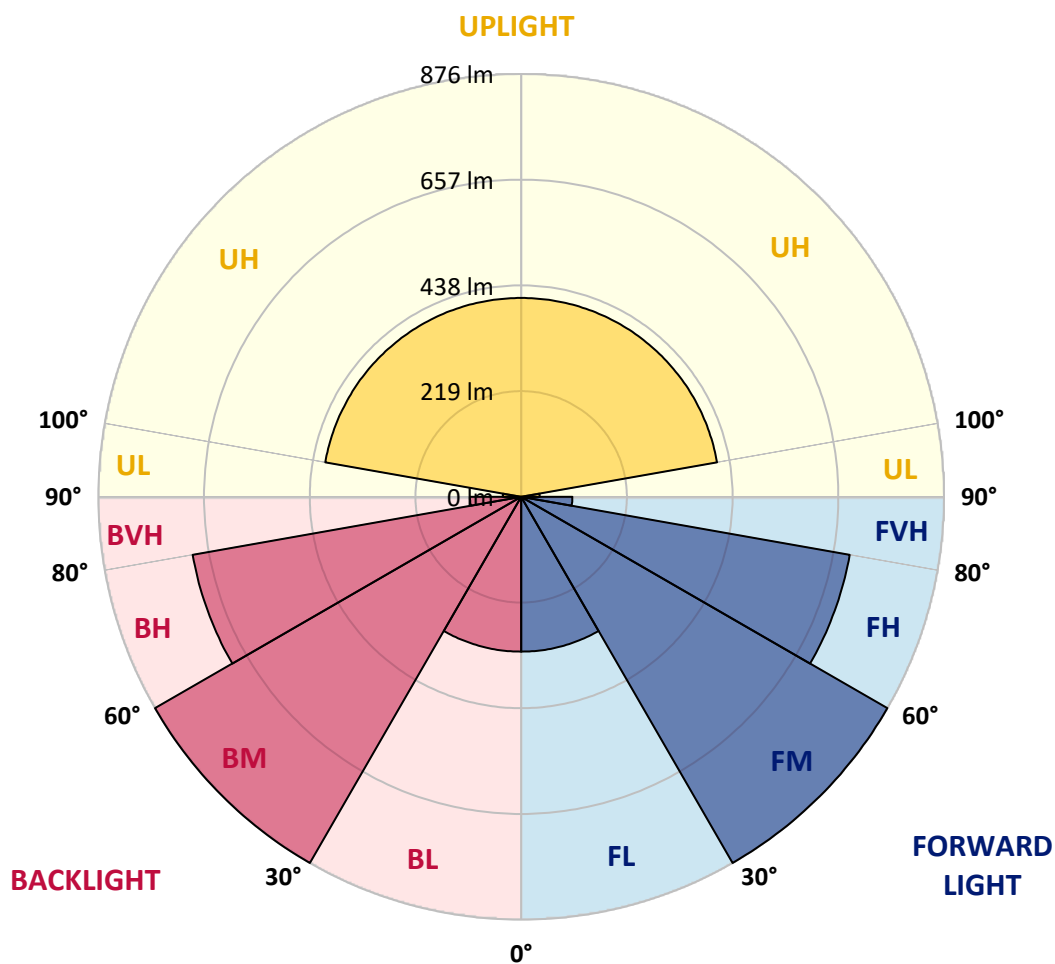
CATALOG NUMBER: TT-C2-LED-E1-MQ-MS/DIM-8030-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	320.7	6.7			
FM	(30°-60°)	875.9	18.2			
FH	(60°-80°)	691.0	14.4			G1/1800
FVH	(80°-90°)	106.1	2.2			G2/225
BL	(0°-30°)	320.7	6.7	B1/500		
BM	(30°-60°)	875.9	18.2	B1/1000		
BH	(60°-80°)	691.0	14.4	B2/1000		G1/1800
BVH	(80°-90°)	106.1	2.2			G2/225
UL	(90°-100°)	38.3	0.8		U2/50	
UH	(100°-180°)	412.0	8.6		U3/500	

BUG Rating: B2-U4-G2

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	771.7	771.7	771.7	771.7	771.7	771.7	771.7	771.7	771.7	771.7	771.7
2.5°	772.5	771.7	772.5	772.5	772.5	772.5	772.5	772.5	772.5	772.5	772.5
5°	771.7	771.7	771.7	771.7	771.7	771.7	771.7	771.7	771.7	771.7	771.7
7.5°	770.9	770.9	770.9	770.9	770.9	770.9	770.9	770.9	771.7	770.9	771.7
10°	769.5	769.5	769.5	769.5	770.2	770.2	770.2	770.2	770.2	770.2	770.2
12.5°	768.0	768.0	768.0	768.0	768.7	768.7	768.7	768.7	769.5	769.5	768.7
15°	766.5	765.8	765.8	766.5	766.5	767.2	767.2	767.2	768.0	767.2	767.2
17.5°	765.0	764.3	765.0	765.8	765.8	766.5	767.2	767.2	768.0	768.0	768.0
20°	767.2	766.5	767.2	768.0	768.7	770.2	770.9	771.7	772.5	773.1	773.1
22.5°	762.8	762.1	762.8	762.8	763.5	764.3	765.8	766.5	767.2	767.2	767.2
25°	756.1	756.1	756.8	756.8	757.6	758.3	759.1	759.8	759.8	760.5	759.8
27.5°	748.7	748.7	749.5	749.5	750.9	750.9	751.7	752.4	753.1	753.1	753.1
30°	739.7	739.7	740.5	741.3	742.8	743.5	744.2	745.0	745.7	745.7	745.7
32.5°	731.6	730.9	731.6	733.1	735.3	736.8	738.3	739.1	739.1	739.1	739.7
35°	724.9	725.7	727.1	728.7	731.6	733.1	734.6	736.8	737.5	737.5	737.5
37.5°	726.4	727.1	729.4	732.4	736.1	740.5	743.5	746.4	748.7	747.9	747.2
40°	736.1	737.5	741.3	745.7	751.7	757.6	762.1	765.8	768.0	768.7	768.0
42.5°	737.5	739.1	742.0	748.7	755.4	762.1	768.0	771.7	774.7	775.4	774.7
45°	736.8	736.8	741.3	748.7	755.4	762.1	769.5	774.7	777.6	777.6	777.6
47.5°	731.6	733.8	736.8	744.2	753.1	759.8	767.2	772.5	776.1	778.4	776.1
50°	731.6	731.6	736.8	742.0	750.1	762.1	772.5	777.6	781.3	780.6	781.3
52.5°	730.1	734.6	737.5	745.0	759.8	771.7	779.8	787.2	792.5	793.2	791.7
55°	743.5	744.2	750.9	765.0	779.1	792.5	807.3	818.4	827.3	832.6	825.1
57.5°	753.9	750.1	763.5	775.4	791.7	811.8	834.0	842.9	849.6	848.1	850.3
60°	739.7	745.0	754.6	767.2	793.2	813.2	825.1	834.8	842.9	845.2	842.2
61°	733.1	742.0	746.4	763.5	791.0	805.8	818.4	831.8	846.6	851.8	845.2
62.5°	722.0	736.1	734.6	762.1	779.1	796.1	819.9	835.5	845.9	847.4	845.9
65°	722.7	720.5	737.5	757.6	774.7	805.1	825.1	834.8	840.7	843.6	842.2
67.5°	699.0	691.5	712.3	726.4	755.4	779.1	798.4	812.5	821.4	824.4	820.6
70°	644.0	649.3	664.1	685.6	709.4	738.3	756.1	774.7	782.1	782.8	782.8
72.5°	591.4	594.3	609.2	629.2	656.6	681.9	699.7	714.5	721.2	722.0	723.4
75°	521.6	524.6	541.7	560.2	587.6	609.2	621.8	639.6	649.3	657.4	650.7
77.5°	440.7	446.0	459.3	479.3	504.5	516.5	538.7	559.5	566.2	568.4	566.2
80°	349.5	356.2	368.0	394.7	405.9	425.2	446.7	455.6	461.5	463.0	463.7
82.5°	251.5	256.7	269.3	287.9	300.5	316.1	330.9	342.1	348.7	347.3	346.5
85°	148.4	149.9	163.2	175.8	185.5	195.1	207.0	215.2	216.7	219.6	218.9
87.5°	44.5	45.2	51.2	57.9	62.3	66.8	74.2	83.9	86.1	80.1	80.9
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°	771.7	771.7	771.7	771.7	771.7	771.7	771.7	771.7
2.5°	772.5	772.5	772.5	772.5	772.5	772.5	771.7	772.5
5°	771.7	771.7	771.7	771.7	771.7	771.7	771.7	771.7
7.5°	771.7	770.9	770.9	770.9	770.9	770.9	770.9	770.9
10°	770.2	770.2	770.2	770.2	769.5	769.5	769.5	769.5
12.5°	768.7	768.7	768.7	768.7	768.0	768.0	768.0	768.0
15°	767.2	767.2	767.2	767.2	766.5	766.5	766.5	766.5
17.5°	768.0	767.2	766.5	766.5	765.8	765.0	765.0	765.0
20°	772.5	771.7	770.2	768.7	768.0	767.2	767.2	767.2
22.5°	766.5	765.8	764.3	763.5	763.5	762.8	762.1	762.1
25°	759.8	758.3	758.3	757.6	757.6	756.1	756.1	755.4
27.5°	752.4	751.7	750.9	750.1	750.1	749.5	748.7	747.9
30°	745.7	744.2	742.8	742.0	741.3	740.5	740.5	740.5
32.5°	739.1	737.5	736.8	734.6	733.1	732.4	731.6	731.6
35°	736.8	734.6	733.1	730.9	728.7	727.1	726.4	724.9
37.5°	745.7	742.8	740.5	736.8	731.6	729.4	727.1	726.4
40°	765.0	762.1	757.6	751.7	745.7	741.3	737.5	736.1
42.5°	771.7	768.0	762.1	756.1	748.7	742.0	739.1	737.5
45°	773.9	770.2	762.1	754.6	747.9	742.0	737.5	736.1
47.5°	771.7	766.5	759.1	753.1	743.5	736.1	733.1	730.9
50°	776.9	772.5	762.8	749.5	741.3	736.8	731.6	730.9
52.5°	787.2	779.1	770.2	760.5	745.0	736.1	733.1	729.4
55°	818.4	807.3	791.7	776.1	766.5	752.4	743.5	743.5
57.5°	842.2	833.2	813.2	792.5	774.7	764.3	750.9	751.7
60°	835.5	823.6	814.0	793.2	768.0	753.9	748.7	739.1
61°	834.8	818.4	805.1	788.8	767.2	745.0	743.5	730.9
62.5°	836.2	821.4	796.1	779.1	762.8	733.8	733.1	721.2
65°	834.8	820.6	808.0	776.1	753.9	742.0	716.7	726.4
67.5°	811.8	799.2	776.1	758.3	724.2	709.4	695.3	695.3
70°	775.4	756.8	734.6	712.3	689.3	664.1	651.5	644.0
72.5°	714.5	699.0	681.1	657.4	629.2	606.2	594.3	589.2
75°	638.1	621.0	605.5	587.6	558.0	538.7	526.1	522.4
77.5°	558.0	543.2	515.7	498.6	478.6	456.4	445.2	440.7
80°	455.6	447.4	428.1	400.6	391.0	363.6	356.2	349.5
82.5°	342.1	333.2	315.3	296.1	284.2	268.6	255.2	253.8
85°	215.2	209.2	198.1	184.0	169.2	160.3	148.4	151.3
87.5°	80.1	76.4	69.7	60.9	54.2	48.2	42.3	44.5
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)