

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: P198283

Luminaire Tested: **TT-C1-LED-E1-WQ-CG-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198283
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P27139) AND SCALED
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TT-C1-LED-E1-WQ-CG-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
WIDE DISTRIBUTION WITH CLEAR GLASS LENS
Light Source: (168) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4294.8 lumens
Efficiency: N/A
Efficacy: 94.6 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B2 - U4 - G1

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

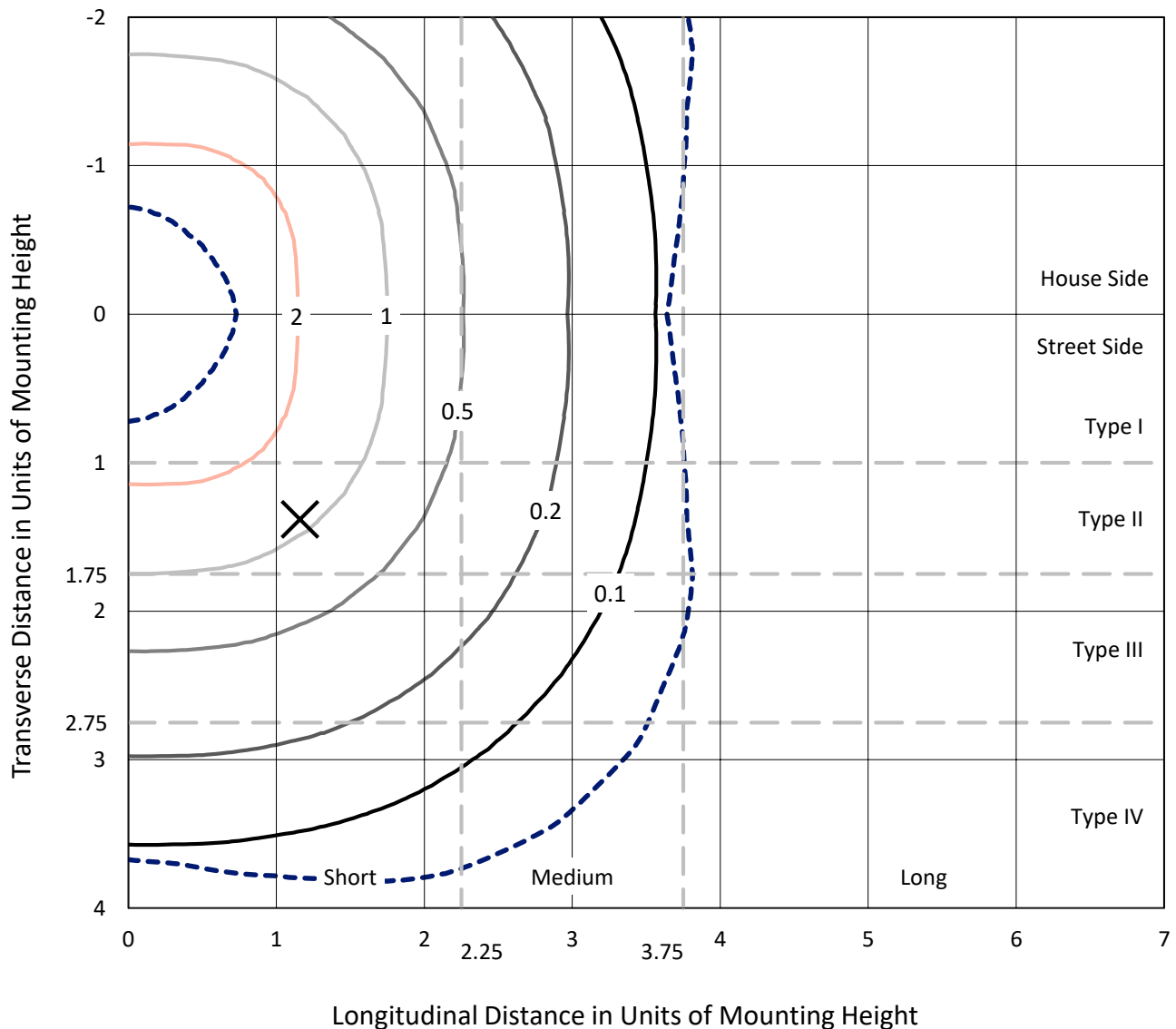


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

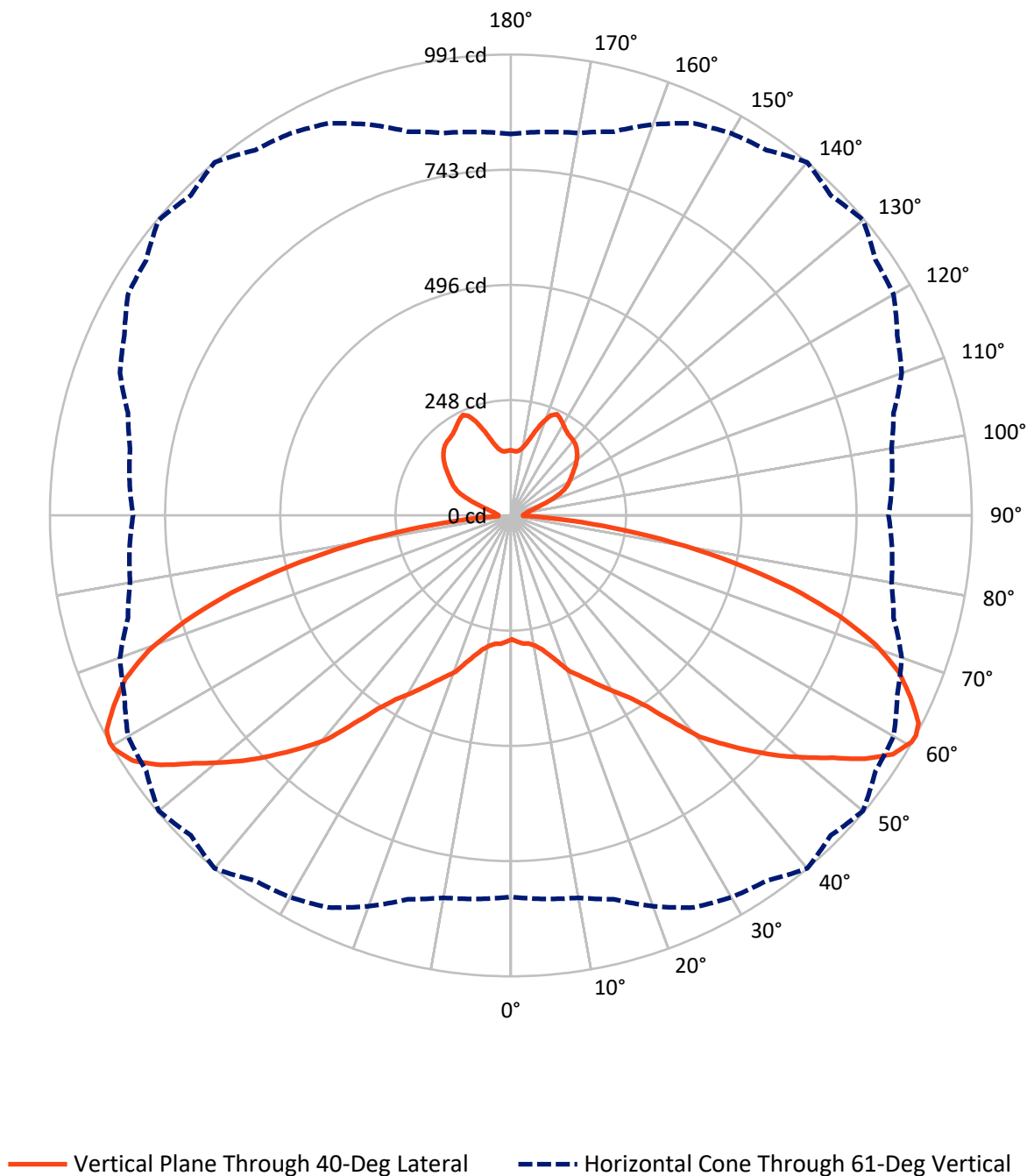


Based on 10 foot mounting height. Maximum calculated value = 3 fc
Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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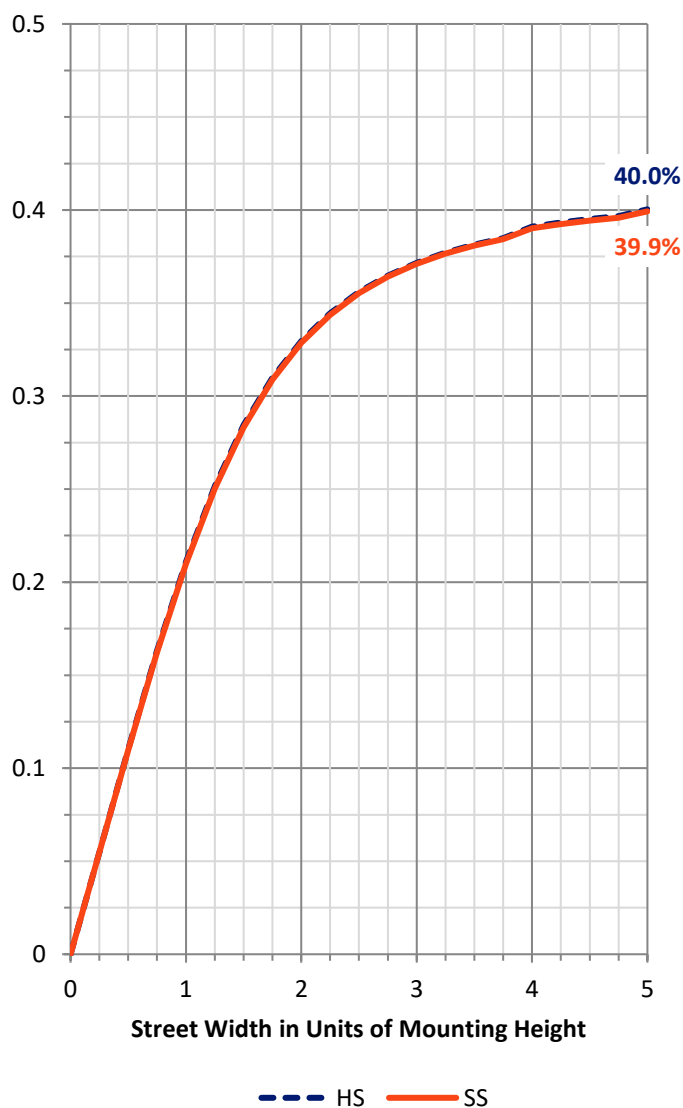
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1735.4	412.0	2147.4
	% Fixture	40.4	9.6	50.0
Street Side	Lumens	1735.4	412.0	2147.4
	% Fixture	40.4	9.6	50.0
Total	Lumens	3470.9	824.0	4294.8
	% Fixture	80.8	19.2	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.5	0.6
10°-20°	89.6	2.1
20°-30°	181.8	4.2
30°-40°	316.1	7.4
40°-50°	532.2	12.4
50°-60°	766.7	17.9
60°-70°	850.7	19.8
70°-80°	577.8	13.5
80°-90°	129.5	3.0
90°-100°	38.3	0.9
100°-110°	59.4	1.4
110°-120°	119.3	2.8
120°-130°	148.7	3.5
130°-140°	153.2	3.6
140°-150°	136.0	3.2
150°-160°	103.7	2.4
160°-170°	51.8	1.2
170°-180°	13.6	0.3
0°-90°	3470.9	80.8
0°-180°	4294.8	100.0

Coefficient of Utilization



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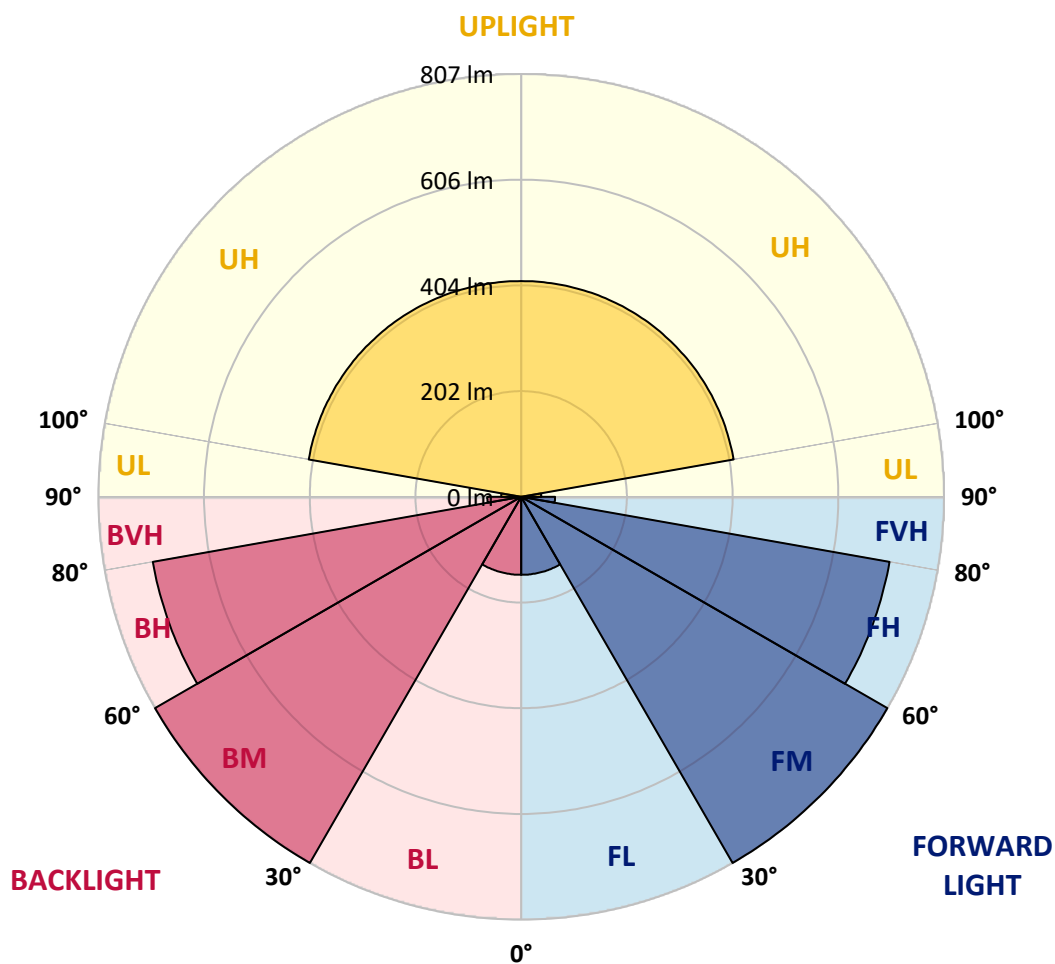
CATALOG NUMBER: TT-C1-LED-E1-WQ-CG-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	149.0	3.5			
FM	(30°-60°)	807.5	18.8			
FH	(60°-80°)	714.2	16.6			G1/1800
FVH	(80°-90°)	64.8	1.5			G1/100
BL	(0°-30°)	149.0	3.5	B1/500		
BM	(30°-60°)	807.5	18.8	B1/1000		
BH	(60°-80°)	714.2	16.6	B2/1000		G1/1800
BVH	(80°-90°)	64.8	1.5			G1/100
UL	(90°-100°)	38.3	0.9		U2/50	
UH	(100°-180°)	412.0	9.6		U3/500	

BUG Rating: B2-U4-G1

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	266.3	266.3	266.3	266.3	266.3	266.3	266.3	266.3	266.3	266.3	266.3
2.5°	272.6	272.6	272.6	272.6	272.6	271.9	272.6	271.9	271.9	271.9	271.9
5°	274.7	275.4	275.4	275.4	275.4	276.1	276.1	276.8	276.8	276.8	276.8
7.5°	276.8	276.8	276.8	276.8	276.8	276.8	277.5	277.5	278.2	278.2	278.9
10°	285.2	285.2	285.9	285.9	285.2	285.2	285.2	284.5	284.5	283.8	283.8
12.5°	297.2	297.2	297.9	298.6	298.6	297.9	297.2	295.8	295.1	295.1	295.1
15°	306.3	307.0	308.4	309.8	310.5	310.5	311.2	311.2	311.2	310.5	309.8
17.5°	323.8	323.8	324.5	325.2	325.2	325.9	327.3	328.7	331.5	332.2	330.1
20°	349.0	349.7	351.8	351.1	351.1	352.5	353.9	354.6	356.7	358.1	358.1
22.5°	367.9	369.3	372.1	372.1	371.4	372.1	373.5	373.5	373.5	372.8	374.2
25°	382.7	384.1	386.2	386.2	387.6	391.1	395.3	394.6	392.5	392.5	391.8
27.5°	402.3	403.0	404.4	404.4	406.5	408.6	411.4	414.2	415.6	414.9	413.5
30°	426.8	428.2	429.6	427.5	431.0	433.1	434.5	434.5	440.1	442.9	438.0
32.5°	445.0	447.8	450.6	452.7	459.7	463.3	461.2	463.3	466.1	468.9	468.9
35°	475.2	478.0	480.1	481.5	488.5	493.4	499.0	504.6	503.9	501.8	506.0
37.5°	518.6	521.4	523.5	526.3	535.4	538.9	543.1	555.1	559.3	553.7	556.5
40°	564.9	569.8	576.8	585.2	598.5	602.7	609.7	618.1	625.8	628.7	621.6
42.5°	604.8	610.4	611.8	625.1	641.3	653.9	663.7	665.8	672.8	679.1	674.2
45°	647.6	652.5	656.0	667.2	676.3	693.8	709.9	717.7	721.2	720.5	726.1
47.5°	687.5	693.1	698.0	709.9	721.2	735.9	746.4	764.6	770.9	762.5	771.6
50°	712.1	719.1	725.4	747.8	767.4	782.8	791.2	806.7	817.9	812.3	814.4
52.5°	752.7	755.5	760.4	773.0	799.0	834.7	843.1	851.5	865.5	872.5	859.9
55°	804.6	812.3	819.3	835.4	848.7	875.3	913.9	924.4	923.7	945.4	925.8
57.5°	815.8	827.0	841.0	870.4	896.4	911.8	936.3	965.8	968.6	970.0	972.8
60°	817.2	824.2	833.3	857.8	903.4	931.4	945.4	964.4	989.6	971.4	990.3
61°	820.0	827.7	834.7	854.3	894.3	930.0	948.2	958.7	991.0	972.8	988.2
62.5°	815.1	824.2	834.7	853.6	880.3	916.7	951.7	951.7	984.0	972.1	980.5
65°	785.6	794.0	814.4	838.9	871.1	890.1	926.5	949.6	944.7	965.8	944.7
67.5°	735.9	742.9	760.4	789.1	824.2	850.8	867.6	904.8	899.9	921.6	897.8
70°	665.8	674.9	696.6	716.3	749.2	777.2	799.7	822.1	831.9	829.8	831.2
72.5°	581.7	588.0	607.6	629.4	655.3	686.8	707.1	721.2	736.6	735.9	738.7
75°	484.3	489.9	506.7	522.8	548.1	572.6	595.7	610.4	623.0	622.3	619.5
77.5°	373.5	379.9	398.8	412.8	424.7	452.0	469.6	479.4	489.9	489.9	491.3
80°	260.7	264.9	279.6	294.4	305.6	318.9	341.3	343.4	355.3	352.5	355.3
82.5°	157.0	159.8	171.0	179.4	187.1	199.7	210.3	214.5	221.5	218.7	222.9
85°	70.8	72.2	79.2	84.1	87.6	94.6	100.2	102.3	105.8	105.1	107.9
87.5°	14.7	16.1	18.2	19.6	20.3	23.1	25.2	25.2	26.6	26.6	27.3
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°	266.3	266.3	266.3	266.3	266.3	266.3	266.3	266.3
2.5°	271.9	272.6	271.9	271.9	271.9	272.6	271.9	272.6
5°	276.8	276.8	276.8	276.1	275.4	275.4	275.4	274.7
7.5°	279.6	279.6	278.9	278.2	277.5	278.2	278.2	278.2
10°	285.2	286.6	287.3	287.3	286.6	286.6	286.6	285.9
12.5°	295.1	295.8	297.9	298.6	299.3	298.6	296.5	295.8
15°	308.4	308.4	309.1	310.5	310.5	307.7	305.6	304.9
17.5°	327.3	326.6	325.2	325.2	325.9	324.5	322.4	322.4
20°	356.0	353.2	351.8	349.7	351.8	351.8	347.6	345.5
22.5°	376.4	373.5	370.0	367.9	370.7	372.8	367.9	365.1
25°	393.9	394.6	389.0	386.2	386.9	388.3	382.0	381.3
27.5°	412.1	413.5	410.7	405.8	404.4	407.2	402.3	400.9
30°	434.5	433.8	435.2	428.9	426.1	428.2	427.5	424.0
32.5°	464.0	460.5	461.9	456.2	450.6	450.6	446.4	442.2
35°	504.6	496.9	493.4	489.9	479.4	480.1	476.6	473.1
37.5°	557.9	546.0	536.1	538.2	522.8	521.4	519.3	514.4
40°	618.8	613.2	602.0	595.7	579.6	571.9	569.1	560.0
42.5°	664.4	665.8	649.0	637.8	625.1	611.8	610.4	601.3
45°	713.5	708.5	693.1	674.9	669.3	653.2	651.1	642.0
47.5°	762.5	745.7	736.6	717.7	708.5	688.2	689.6	681.2
50°	808.8	789.1	780.7	758.3	744.3	724.0	719.1	705.0
52.5°	857.8	839.6	826.3	797.6	777.2	761.8	753.4	747.8
55°	923.7	905.5	875.3	848.7	831.9	806.7	803.9	794.0
57.5°	954.5	941.2	908.3	889.4	859.2	833.3	824.9	805.3
60°	958.0	952.4	917.4	899.2	855.0	834.0	823.5	811.6
61°	957.3	950.3	916.7	894.3	852.2	831.2	822.8	812.3
62.5°	954.5	946.1	909.0	885.9	846.6	826.3	819.3	803.9
65°	945.4	922.3	890.1	869.0	826.3	808.1	791.2	775.8
67.5°	905.5	862.0	848.7	822.1	778.6	758.3	742.9	729.6
70°	820.0	791.2	777.2	744.3	709.2	692.4	674.9	658.1
72.5°	719.8	700.8	688.9	649.0	623.0	606.2	590.1	574.0
75°	607.6	593.6	571.9	541.7	518.6	501.8	487.1	479.4
77.5°	477.3	468.2	451.3	421.2	408.6	393.9	379.2	367.2
80°	343.4	336.4	323.1	301.4	290.8	276.1	265.6	255.8
82.5°	213.8	208.1	200.4	184.3	180.1	171.0	161.2	154.2
85°	102.3	98.8	96.0	85.5	84.8	77.1	73.6	69.4
87.5°	26.6	25.9	24.5	21.0	20.3	18.2	16.8	14.7
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)