

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: P198252

Luminaire Tested: **TT-C1-LED-E1-MQ-CG-MS/DIM-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198252
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-MQ-CG-MS/DIM-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS AND DIMMING OCCUPANCY SENSOR
Light Source: (168) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4232 lumens
Efficiency: N/A
Efficacy: 93.2 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



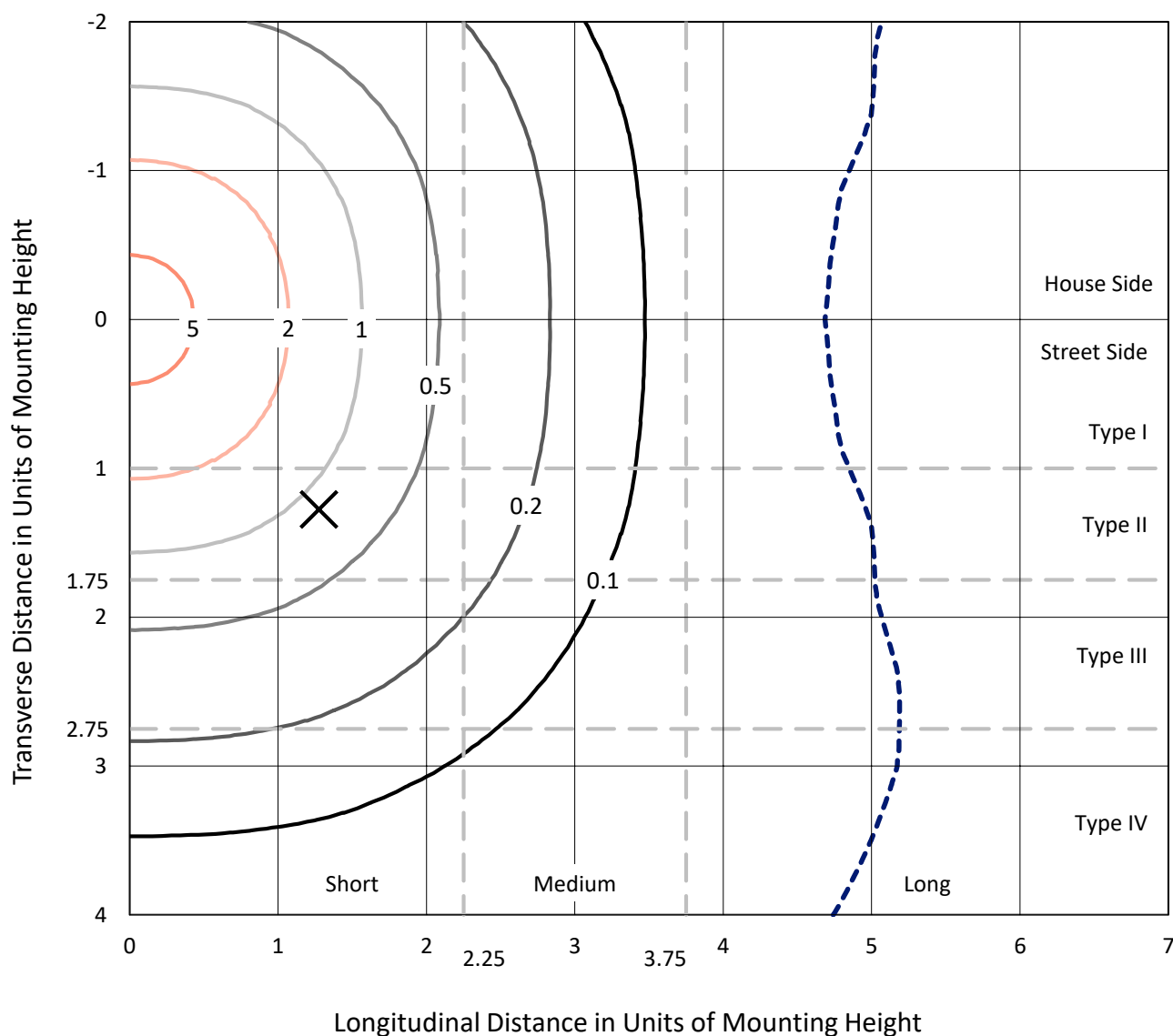
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

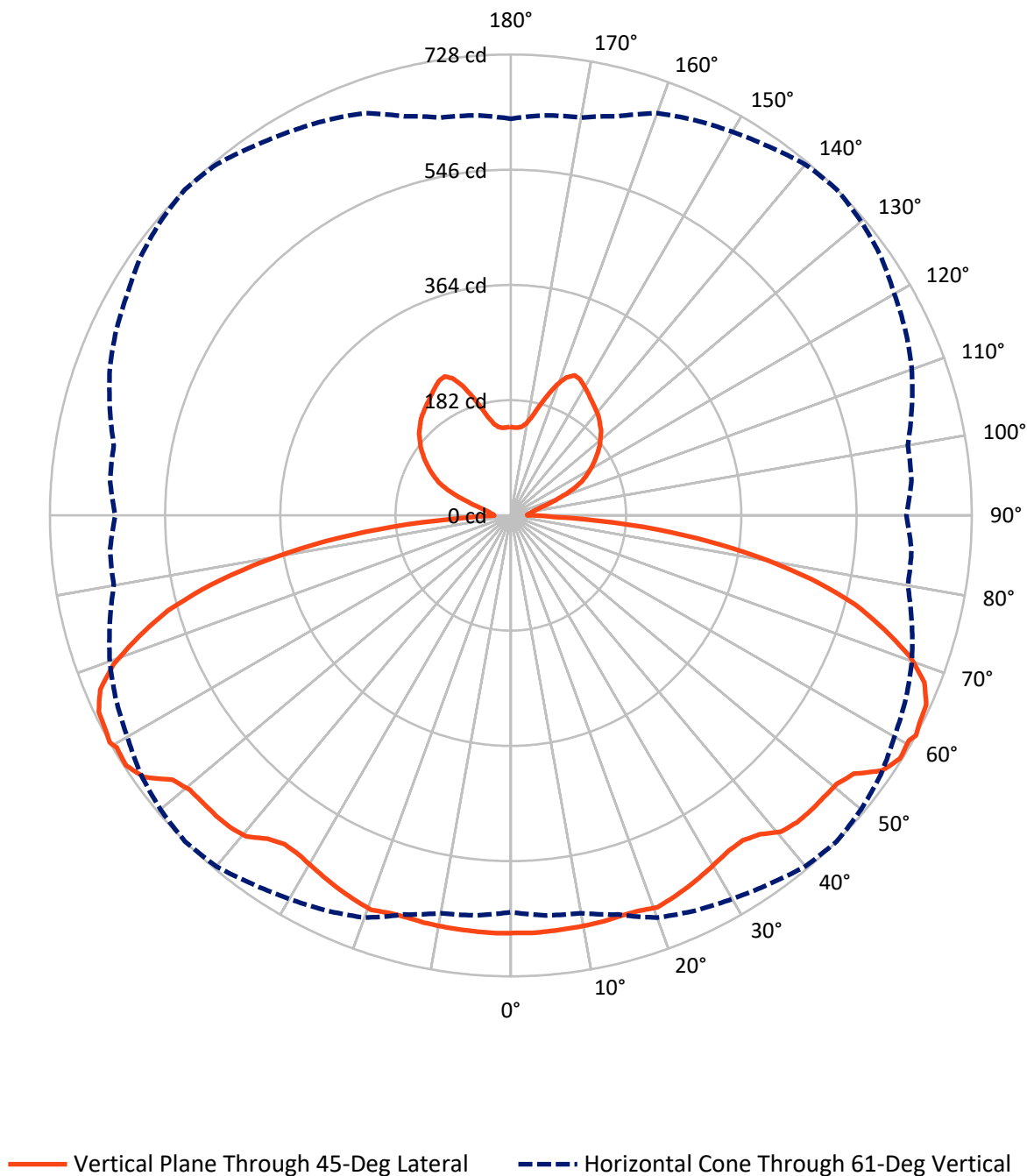


Based on 10 foot mounting height. Maximum calculated value = 6.6 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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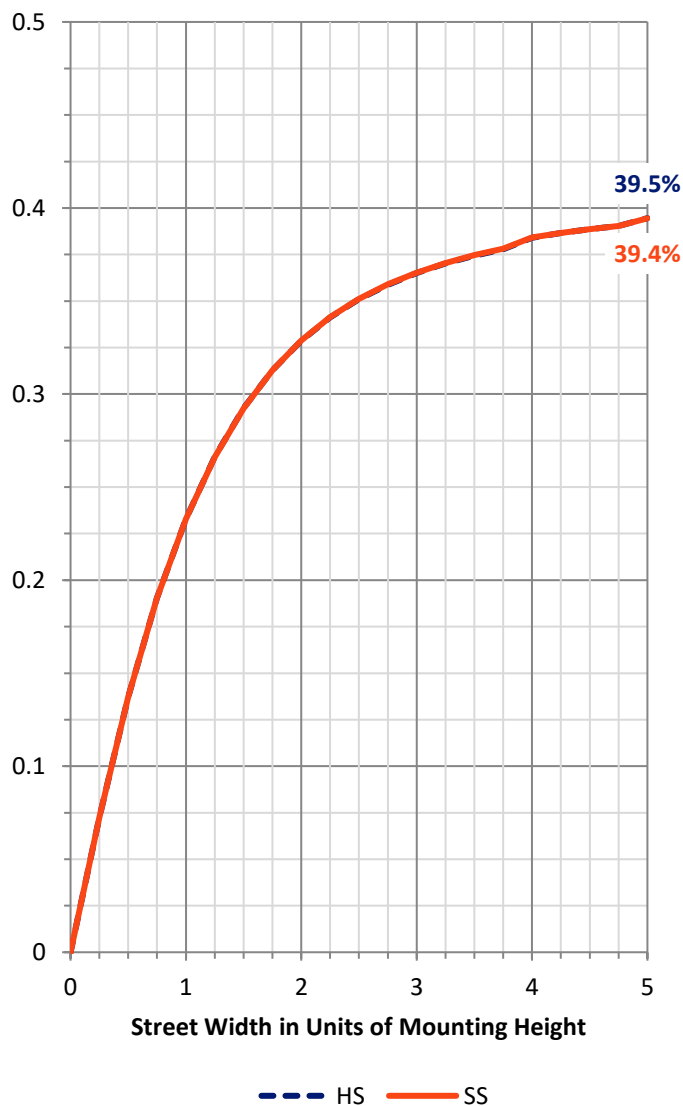
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1704.0	412.0	2116.0
	% Fixture	40.3	9.7	50.0
Street Side	Lumens	1704.0	412.0	2116.0
	% Fixture	40.3	9.7	50.0
Total	Lumens	3408.0	824.0	4232.0
	% Fixture	80.5	19.5	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.9	1.5
10°-20°	186.0	4.4
20°-30°	299.3	7.1
30°-40°	396.4	9.4
40°-50°	500.6	11.8
50°-60°	599.8	14.2
60°-70°	655.9	15.5
70°-80°	525.0	12.4
80°-90°	182.0	4.3
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	2.5
160°-170°	51.8	1.2
170°-180°	13.6	0.3
0°-90°	3408.0	80.5
0°-180°	4232.0	100.0

Coefficient of Utilization



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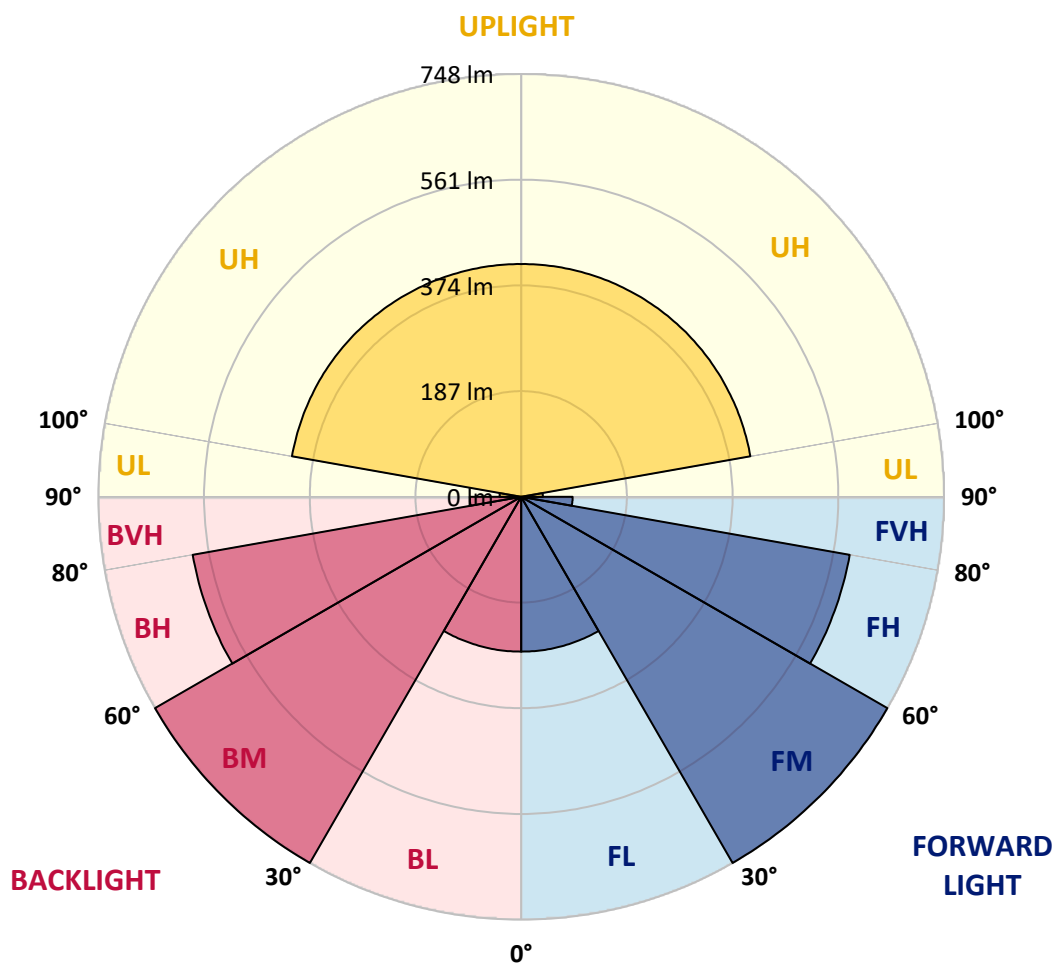
CATALOG NUMBER: TT-C1-LED-E1-MQ-CG-MS/DIM-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	274.1	6.5			
FM	(30°-60°)	748.4	17.7			
FH	(60°-80°)	590.5	14.0			G0/660
FVH	(80°-90°)	91.0	2.2			G1/100
BL	(0°-30°)	274.1	6.5	B1/500		
BM	(30°-60°)	748.4	17.7	B1/1000		
BH	(60°-80°)	590.5	14.0	B2/1000		G0/660
BVH	(80°-90°)	91.0	2.2			G1/100
UL	(90°-100°)	38.3	0.9		U2/50	
UH	(100°-180°)	412.0	9.7		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°	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4
2.5°	660.1	659.4	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1
5°	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4
7.5°	658.8	658.8	658.8	658.8	658.8	658.8	658.8	658.8	659.4	658.8	659.4
10°	657.5	657.5	657.5	657.5	658.2	658.2	658.2	658.2	658.2	658.2	658.2
12.5°	656.3	656.3	656.3	656.3	656.9	656.9	656.9	656.9	657.5	657.5	656.9
15°	655.0	654.4	654.4	655.0	655.0	655.6	655.6	655.6	656.3	655.6	655.6
17.5°	653.7	653.1	653.7	654.4	654.4	655.0	655.6	655.6	656.3	656.3	656.3
20°	655.6	655.0	655.6	656.3	656.9	658.2	658.8	659.4	660.1	660.7	660.7
22.5°	651.8	651.2	651.8	651.8	652.5	653.1	654.4	655.0	655.6	655.6	655.6
25°	646.1	646.1	646.8	646.8	647.4	648.0	648.7	649.3	649.3	649.3	649.3
27.5°	639.8	639.8	640.4	640.4	641.7	641.7	642.3	643.0	643.6	643.6	643.6
30°	632.2	632.2	632.8	633.4	634.7	635.3	636.0	636.6	637.2	637.2	637.2
32.5°	625.2	624.6	625.2	626.5	628.4	629.6	630.9	631.5	631.5	631.5	632.2
35°	619.4	620.1	621.3	622.7	625.2	626.5	627.7	629.6	630.3	630.3	630.3
37.5°	620.8	621.3	623.3	625.8	629.0	632.8	635.3	637.9	639.8	639.1	638.5
40°	629.0	630.3	633.4	637.2	642.3	647.4	651.2	654.4	656.3	656.9	656.3
42.5°	630.3	631.5	634.1	639.8	645.5	651.2	656.3	659.4	662.0	662.6	662.0
45°	629.6	629.6	633.4	639.8	645.5	651.2	657.5	662.0	664.5	664.5	664.5
47.5°	625.2	627.1	629.6	636.0	643.6	649.3	655.6	660.1	663.2	665.1	663.2
50°	625.2	625.2	629.6	634.1	641.0	651.2	660.1	664.5	667.7	667.0	667.7
52.5°	623.9	627.7	630.3	636.6	649.3	659.4	666.4	672.7	677.2	677.8	676.5
55°	635.3	636.0	641.7	653.7	665.8	677.2	689.9	699.4	707.0	711.4	705.1
57.5°	644.2	641.0	652.5	662.6	676.5	693.7	712.7	720.3	726.0	724.7	726.6
60°	632.2	636.6	644.9	655.6	677.8	694.9	705.1	713.3	720.3	722.2	719.7
61°	626.5	634.1	637.9	652.5	675.9	688.6	699.4	710.8	723.5	727.9	722.2
62.5°	617.0	629.0	627.7	651.2	665.8	680.4	700.6	713.9	722.8	724.1	722.8
65°	617.5	615.6	630.3	647.4	662.0	688.0	705.1	713.3	718.4	720.9	719.7
67.5°	597.3	590.9	608.7	620.8	645.5	665.8	682.3	694.3	701.9	704.4	701.3
70°	550.4	554.8	567.5	585.9	606.1	630.9	646.1	662.0	668.3	668.9	668.9
72.5°	505.3	507.9	520.6	537.7	561.1	582.7	597.9	610.6	616.3	617.0	618.2
75°	445.8	448.3	462.9	478.7	502.2	520.6	531.3	546.5	554.8	561.8	556.1
77.5°	376.6	381.0	392.5	409.6	431.2	441.3	460.3	478.1	483.8	485.7	483.8
80°	298.6	304.3	314.5	337.3	346.8	363.4	381.7	389.3	394.4	395.6	396.3
82.5°	215.0	219.4	230.2	246.0	256.8	270.1	282.8	292.3	298.0	296.7	296.1
85°	126.8	128.1	139.5	150.3	158.6	166.7	176.9	183.9	185.1	187.7	187.0
87.5°	38.1	38.7	43.8	49.5	53.3	57.1	63.4	71.7	73.6	68.5	69.1
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°	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4
2.5°	660.1	660.1	660.1	660.1	660.1	660.1	659.4	660.1
5°	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4
7.5°	659.4	658.8	658.8	658.8	658.8	658.8	658.8	658.8
10°	658.2	658.2	658.2	658.2	657.5	657.5	657.5	657.5
12.5°	656.9	656.9	656.9	656.9	656.3	656.3	656.3	656.3
15°	655.6	655.6	655.6	655.6	655.0	655.0	655.0	655.0
17.5°	656.3	655.6	655.0	655.0	654.4	653.7	653.7	653.7
20°	660.1	659.4	658.2	656.9	656.3	655.6	655.6	655.6
22.5°	655.0	654.4	653.1	652.5	652.5	651.8	651.2	651.2
25°	649.3	648.0	648.0	647.4	647.4	646.1	646.1	645.5
27.5°	643.0	642.3	641.7	641.0	641.0	640.4	639.8	639.1
30°	637.2	636.0	634.7	634.1	633.4	632.8	632.8	632.8
32.5°	631.5	630.3	629.6	627.7	626.5	625.8	625.2	625.2
35°	629.6	627.7	626.5	624.6	622.7	621.3	620.8	619.4
37.5°	637.2	634.7	632.8	629.6	625.2	623.3	621.3	620.8
40°	653.7	651.2	647.4	642.3	637.2	633.4	630.3	629.0
42.5°	659.4	656.3	651.2	646.1	639.8	634.1	631.5	630.3
45°	661.3	658.2	651.2	644.9	639.1	634.1	630.3	629.0
47.5°	659.4	655.0	648.7	643.6	635.3	629.0	626.5	624.6
50°	663.9	660.1	651.8	640.4	633.4	629.6	625.2	624.6
52.5°	672.7	665.8	658.2	649.9	636.6	629.0	626.5	623.3
55°	699.4	689.9	676.5	663.2	655.0	643.0	635.3	635.3
57.5°	719.7	712.0	694.9	677.2	662.0	653.1	641.7	642.3
60°	713.9	703.8	695.6	677.8	656.3	644.2	639.8	631.5
61°	713.3	699.4	688.0	674.0	655.6	636.6	635.3	624.6
62.5°	714.6	701.9	680.4	665.8	651.8	627.1	626.5	616.3
65°	713.3	701.3	690.5	663.2	644.2	634.1	612.5	620.8
67.5°	693.7	682.9	663.2	648.0	618.9	606.1	594.1	594.1
70°	662.6	646.8	627.7	608.7	589.0	567.5	556.7	550.4
72.5°	610.6	597.3	582.0	561.8	537.7	518.0	507.9	503.4
75°	545.3	530.7	517.4	502.2	476.8	460.3	449.6	446.4
77.5°	476.8	464.1	440.7	426.1	408.9	389.9	380.4	376.6
80°	389.3	382.3	365.8	342.4	334.1	310.7	304.3	298.6
82.5°	292.3	284.7	269.5	253.0	242.9	229.5	218.1	216.9
85°	183.9	178.8	169.3	157.2	144.6	136.9	126.8	129.3
87.5°	68.5	65.3	59.6	52.0	46.3	41.2	36.2	38.1
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)