

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: P198352

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198352
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-WQ-MS/DIM-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
WIDE 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: 4508 lumens
Efficiency: N/A
Efficacy: 87.7 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



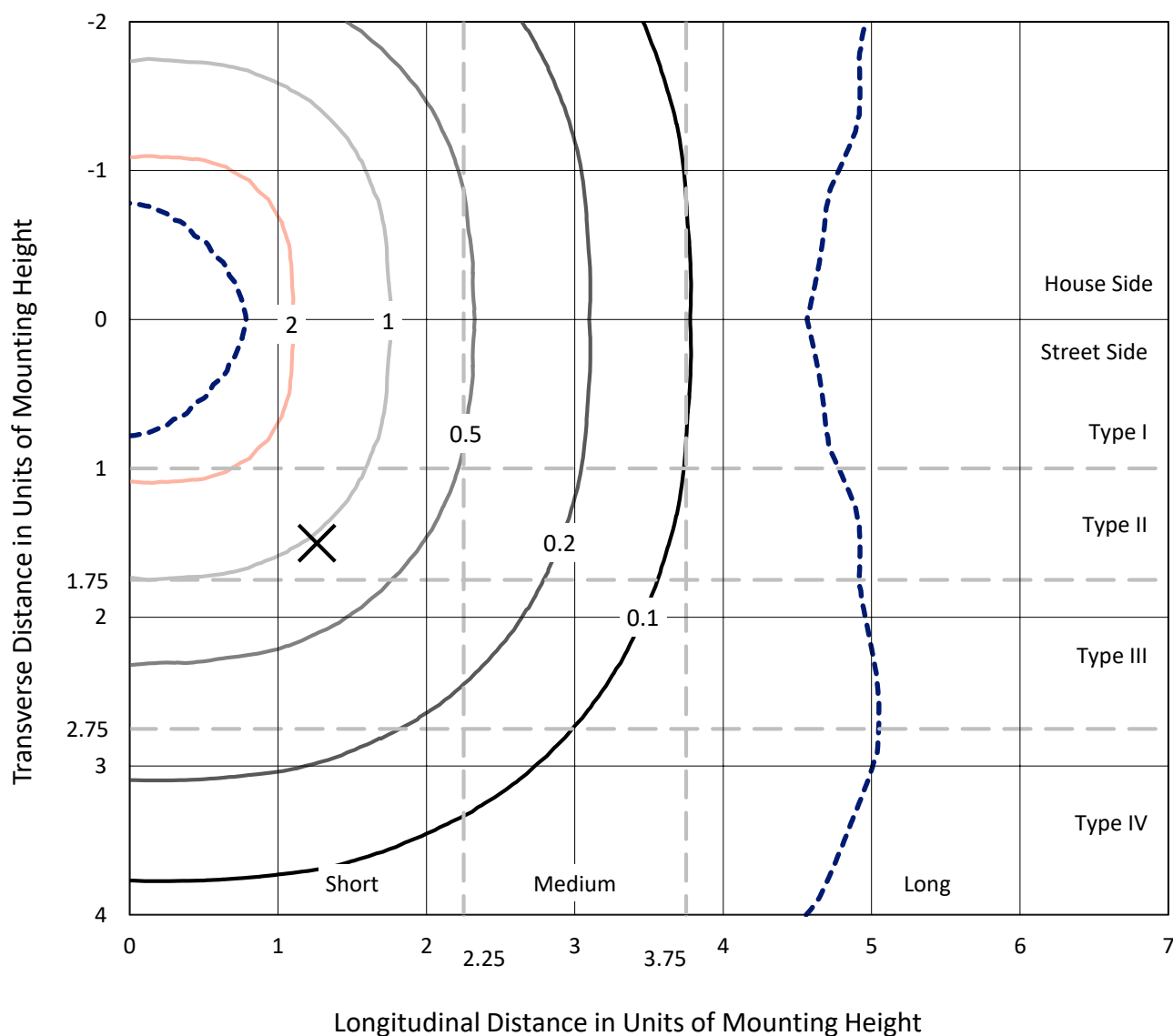
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

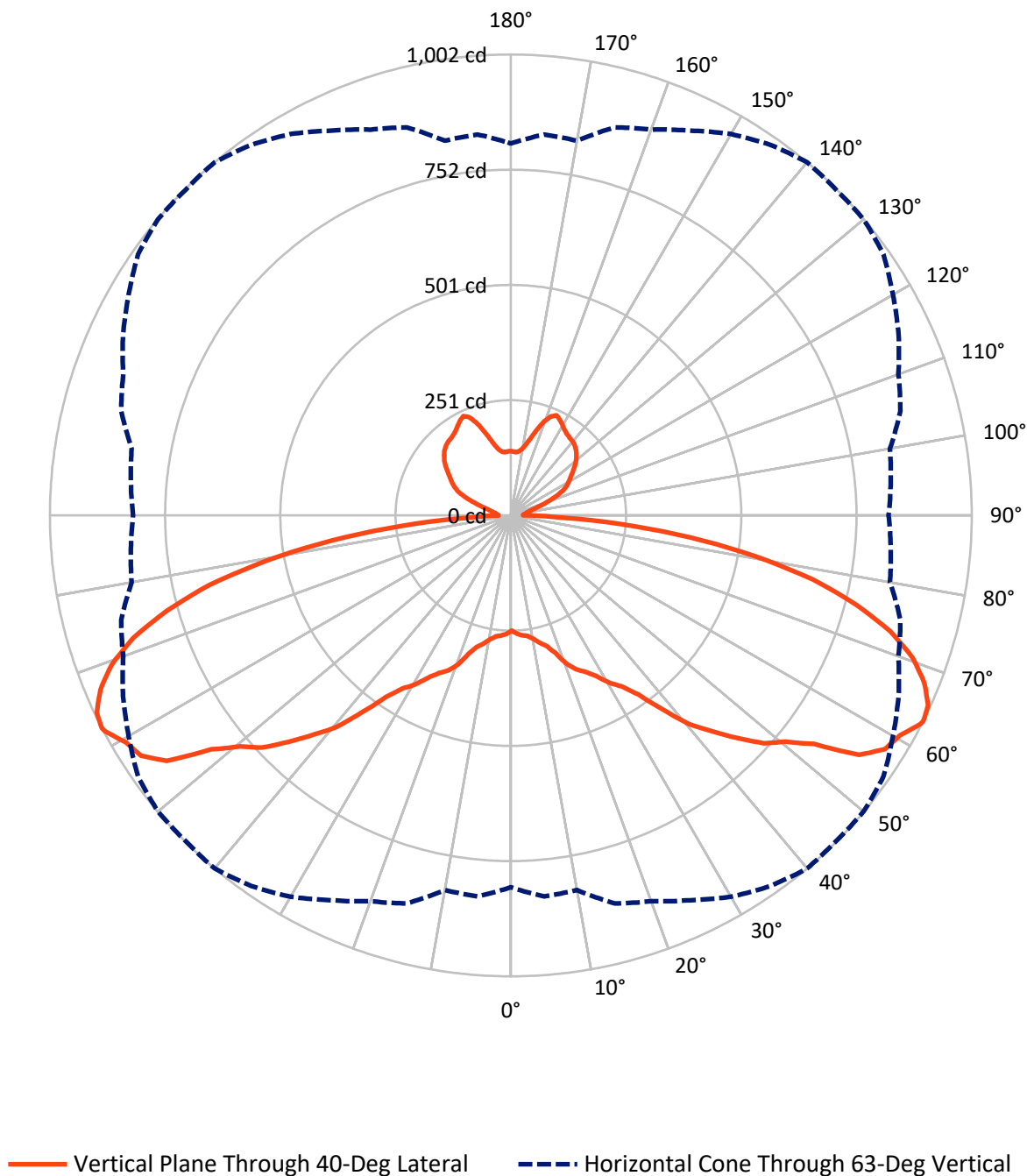


Based on 10 foot mounting height. Maximum calculated value = 2.8 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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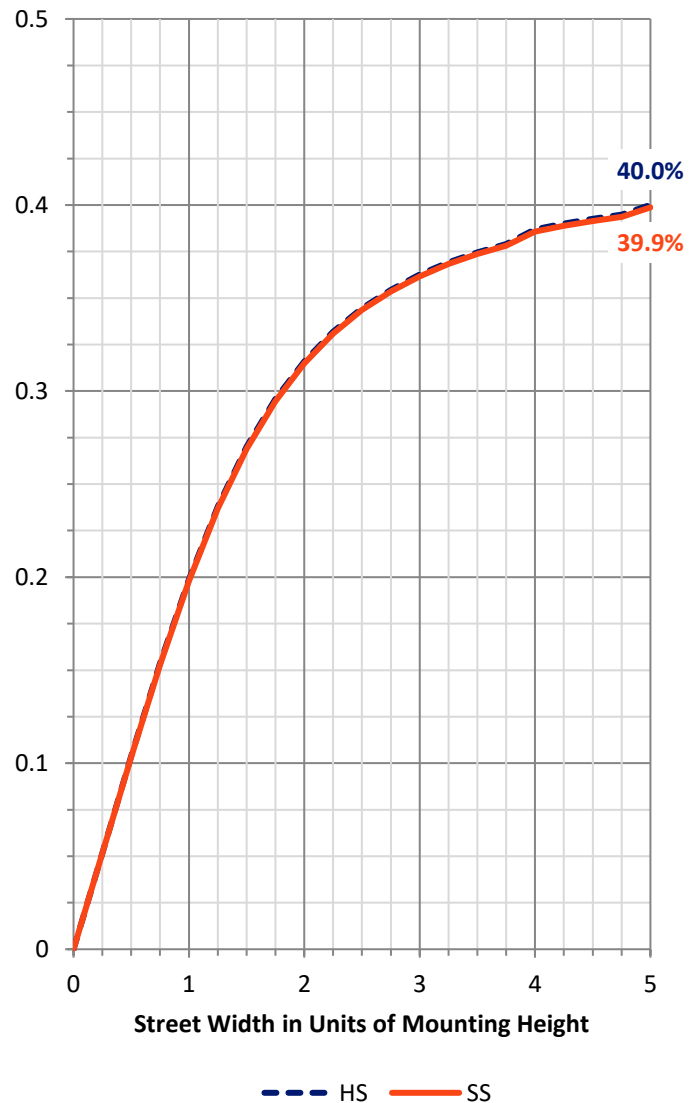
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1842.0	412.0	2254.0
	% Fixture	40.9	9.1	50.0
Street Side	Lumens	1842.0	412.0	2254.0
	% Fixture	40.9	9.1	50.0
Total	Lumens	3684.0	824.0	4508.0
	% Fixture	81.7	18.3	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.3	0.6
10°-20°	86.0	1.9
20°-30°	174.8	3.9
30°-40°	301.2	6.7
40°-50°	507.4	11.3
50°-60°	747.1	16.6
60°-70°	888.5	19.7
70°-80°	719.3	16.0
80°-90°	234.5	5.2
90°-100°	38.3	0.9
100°-110°	59.4	1.3
110°-120°	119.3	2.6
120°-130°	148.7	3.3
130°-140°	153.2	3.4
140°-150°	136.0	3.0
150°-160°	103.7	2.3
160°-170°	51.8	1.1
170°-180°	13.6	0.3
0°-90°	3684.0	81.7
0°-180°	4508.0	100.0

Coefficient of Utilization



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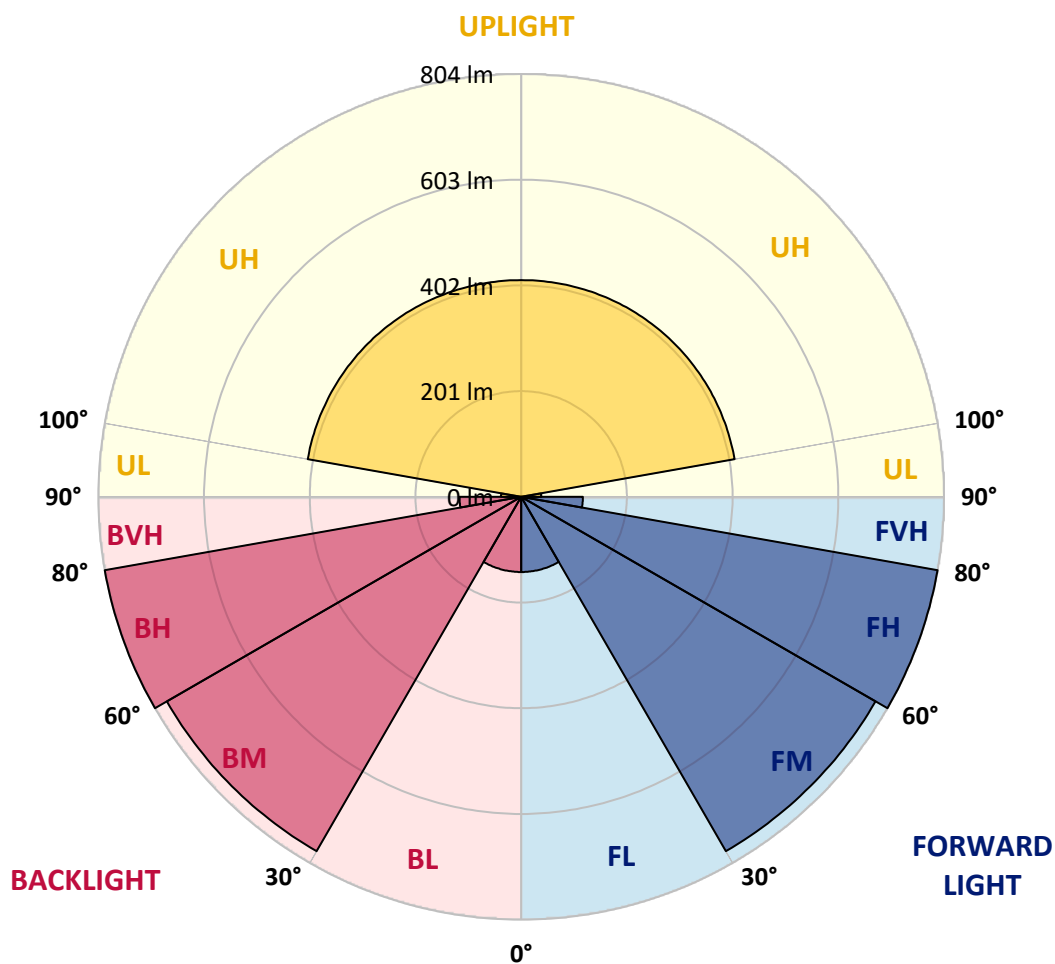
CATALOG NUMBER: TT-C2-LED-E1-WQ-MS/DIM-8030-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	143.0	3.2			
FM	(30°-60°)	777.9	17.3			
FH	(60°-80°)	803.9	17.8			G1/1800
FVH	(80°-90°)	117.2	2.6			G2/225
BL	(0°-30°)	143.0	3.2	B1/500		
BM	(30°-60°)	777.9	17.3	B1/1000		
BH	(60°-80°)	803.9	17.8	B2/1000		G1/1800
BVH	(80°-90°)	117.2	2.6			G2/225
UL	(90°-100°)	38.3	0.9		U2/50	
UH	(100°-180°)	412.0	9.1		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°	250.5	250.5	250.5	250.5	250.5	250.5	250.5	250.5	250.5	250.5	250.5
2.5°	258.4	258.4	258.4	258.4	258.4	258.4	257.6	258.4	257.6	257.6	257.6
5°	263.3	263.3	263.3	263.3	262.7	262.7	261.9	261.9	261.9	261.2	261.9
7.5°	265.5	265.5	265.5	265.5	264.8	264.8	264.8	264.8	264.8	264.8	264.8
10°	270.4	270.4	271.2	271.9	273.3	273.3	273.3	274.0	273.3	273.3	273.3
12.5°	281.1	280.4	281.9	283.3	284.7	285.4	285.4	285.4	284.7	284.7	285.4
15°	296.1	294.7	295.3	296.1	296.8	297.5	297.5	296.8	295.3	295.3	295.3
17.5°	315.3	313.2	312.4	311.7	311.7	313.2	314.6	313.9	314.6	313.9	314.6
20°	338.1	336.6	336.6	336.6	337.3	340.2	343.0	344.5	343.8	342.4	344.5
22.5°	353.0	353.7	357.3	356.6	355.8	358.7	362.2	365.1	363.7	361.6	363.0
25°	369.4	369.4	374.4	376.5	374.4	374.4	375.8	377.9	376.5	375.1	376.5
27.5°	387.9	387.9	390.1	392.2	390.7	390.7	392.9	396.5	395.7	395.0	395.7
30°	409.9	407.1	405.0	408.5	412.1	412.8	414.9	420.6	422.1	421.4	422.7
32.5°	430.6	426.3	427.8	429.9	437.7	440.6	439.8	444.1	443.4	441.3	444.1
35°	450.5	455.5	458.3	462.6	465.5	469.0	469.0	476.8	478.3	476.2	478.3
37.5°	489.0	491.1	499.0	499.6	503.2	516.7	518.1	528.8	534.5	531.6	532.4
40°	541.6	540.9	546.6	555.2	562.3	579.3	584.3	591.4	596.4	594.3	597.2
42.5°	584.3	578.7	582.9	601.4	609.2	622.1	628.5	632.0	641.3	638.4	642.0
45°	614.9	617.0	622.8	641.3	646.2	656.9	671.9	678.3	690.3	686.8	689.0
47.5°	644.8	654.8	659.8	668.3	683.9	698.2	716.7	723.1	740.2	738.8	736.6
50°	683.9	691.8	697.5	703.9	725.3	748.7	764.4	767.2	773.0	768.7	775.8
52.5°	725.9	725.3	730.2	748.0	777.9	787.2	800.7	813.5	825.6	829.9	825.6
55°	781.5	763.7	784.3	810.0	822.8	844.8	877.6	895.3	918.9	922.4	915.3
57.5°	804.3	804.3	825.6	840.5	864.0	903.2	938.1	946.6	958.7	952.3	959.4
60°	801.4	828.4	828.4	854.8	893.2	928.1	940.9	955.1	971.5	970.8	970.8
62.5°	805.0	831.3	824.1	869.7	893.2	921.7	950.2	976.5	999.3	998.6	997.8
63°	808.5	831.3	827.1	873.3	892.5	923.1	957.3	983.6	1002.1	1000.7	1001.4
65°	819.2	812.8	838.4	867.6	889.7	935.2	963.7	984.3	997.1	996.4	996.4
67.5°	799.2	784.3	820.7	832.0	874.0	914.6	936.6	960.1	969.4	969.4	967.9
70°	738.1	744.4	769.4	787.9	830.6	866.9	885.4	915.3	926.6	926.6	926.0
72.5°	676.1	686.8	703.9	730.2	770.8	799.2	821.3	848.4	863.3	862.6	862.6
75°	597.2	607.1	627.0	652.0	687.5	715.3	733.1	758.7	775.8	782.2	775.1
77.5°	508.2	511.0	529.5	555.2	586.5	605.7	632.8	657.7	671.9	671.1	669.0
80°	400.0	403.5	419.2	448.4	465.5	488.3	513.2	526.7	538.8	538.8	537.3
82.5°	276.1	284.0	299.6	318.9	336.6	356.6	370.1	383.6	393.6	392.9	390.7
85°	155.9	159.4	174.4	186.5	200.0	212.8	222.0	230.6	239.1	239.1	237.7
87.5°	47.0	42.0	50.5	55.5	62.6	69.0	73.3	81.8	87.6	81.2	81.2
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°	250.5	250.5	250.5	250.5	250.5	250.5	250.5	250.5
2.5°	258.4	258.4	258.4	258.4	258.4	258.4	258.4	258.4
5°	261.9	262.7	262.7	263.3	263.3	263.3	263.3	263.3
7.5°	264.8	264.8	264.8	264.8	265.5	265.5	265.5	265.5
10°	273.3	274.0	273.3	273.3	271.9	271.2	271.2	271.2
12.5°	285.4	286.1	286.1	284.7	283.3	281.9	281.1	280.4
15°	296.8	298.9	297.5	296.8	295.3	296.1	296.1	296.8
17.5°	314.6	315.3	313.2	311.7	311.0	312.4	313.9	314.6
20°	345.2	343.8	339.5	338.1	336.6	336.6	338.1	338.1
22.5°	364.4	360.9	358.0	356.6	356.6	356.6	354.5	351.6
25°	377.9	375.8	373.7	375.1	376.5	374.4	369.4	368.6
27.5°	396.5	392.2	391.4	390.7	391.4	390.1	389.3	386.5
30°	420.6	414.9	413.5	412.1	407.8	406.4	407.8	409.9
32.5°	443.4	439.8	441.3	438.4	430.6	427.8	429.1	428.5
35°	476.2	469.8	469.8	464.0	461.9	461.2	455.5	450.5
37.5°	528.1	519.6	517.4	504.6	499.0	500.3	492.6	486.8
40°	591.4	585.1	579.3	565.1	557.3	547.3	542.3	542.3
42.5°	633.4	629.2	621.3	611.4	602.8	585.7	579.3	582.9
45°	679.7	674.0	657.7	647.7	639.8	627.7	620.6	613.5
47.5°	726.7	718.9	699.7	686.8	668.3	664.7	656.9	647.0
50°	767.9	765.1	751.6	730.2	706.7	701.0	693.9	684.7
52.5°	818.5	801.4	790.0	780.8	754.4	735.9	725.9	730.2
55°	901.0	879.7	850.5	821.3	815.6	793.6	768.7	782.2
57.5°	948.7	936.6	914.6	868.3	845.5	830.6	814.2	802.1
60°	960.1	938.1	933.1	898.2	861.9	830.6	837.0	808.5
62.5°	982.2	952.3	924.5	896.8	874.7	832.0	830.6	815.6
63°	989.3	959.4	930.2	896.8	876.9	837.0	829.2	821.3
65°	987.9	962.2	940.2	896.8	866.9	851.2	812.8	830.6
67.5°	960.9	939.5	913.8	884.0	834.1	822.0	795.0	798.6
70°	917.4	889.7	865.5	837.7	797.9	770.1	753.8	740.2
72.5°	849.8	824.9	799.2	773.6	738.1	704.6	693.3	678.3
75°	760.2	735.9	712.5	688.2	654.8	624.9	612.8	602.1
77.5°	657.7	637.0	603.6	580.8	561.6	529.5	518.1	506.7
80°	524.5	514.6	490.4	460.5	450.5	419.2	410.7	395.7
82.5°	381.5	371.5	352.3	331.7	319.6	303.2	288.9	279.0
85°	232.7	222.0	212.1	193.6	186.5	174.4	163.0	157.3
87.5°	84.0	75.4	67.6	59.0	54.8	46.2	44.8	40.5
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)