

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: P198249

Luminaire Tested: **TT-C1-LED-E1-MQ-CG-LWR-LW-8030-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198249
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-LWR-LW-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS AND LumaWatt WIRELESS SENSOR
Light Source: (168) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3489.1 lumens
Efficiency: N/A
Efficacy: 76.9 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B1 - 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



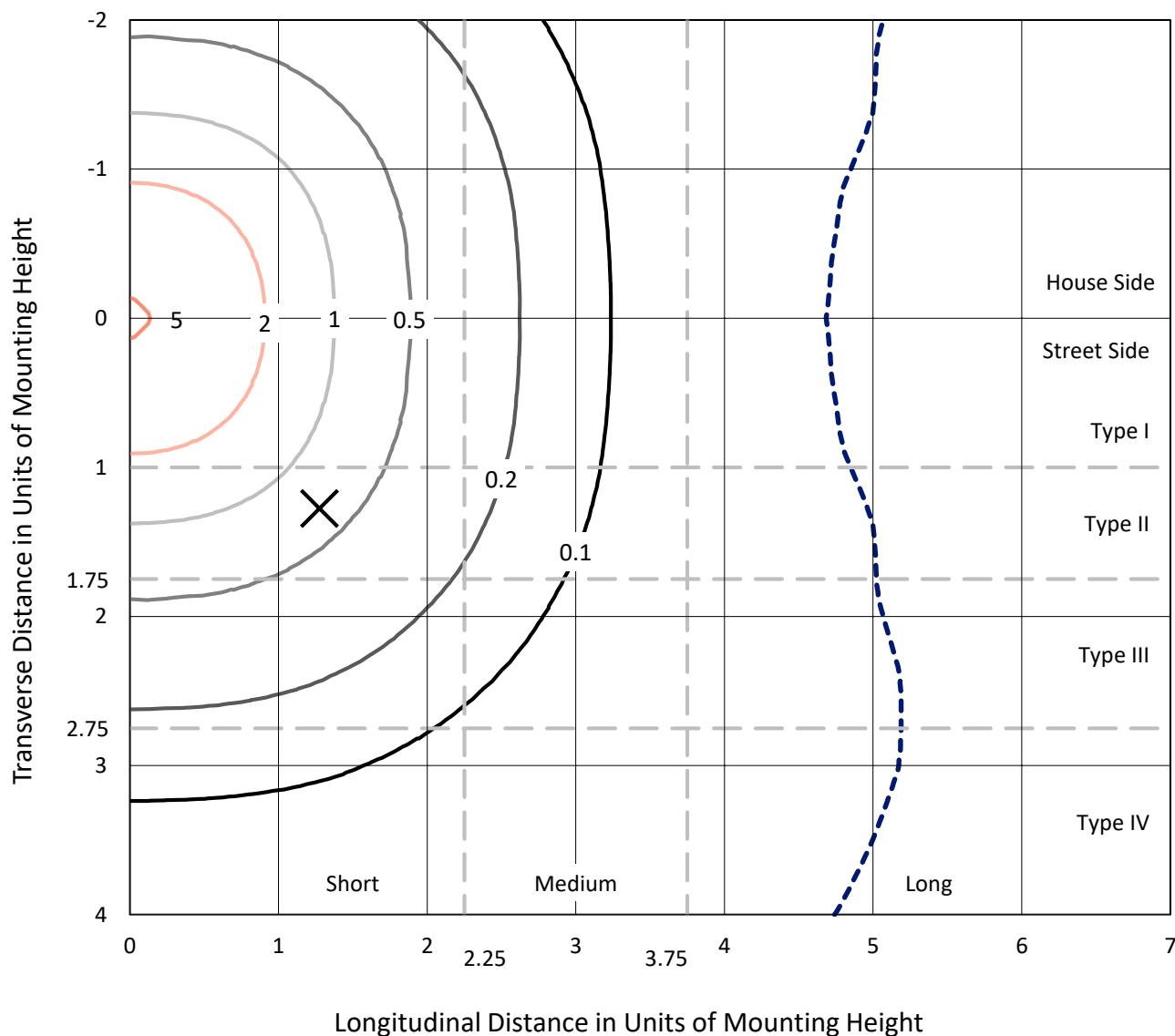
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

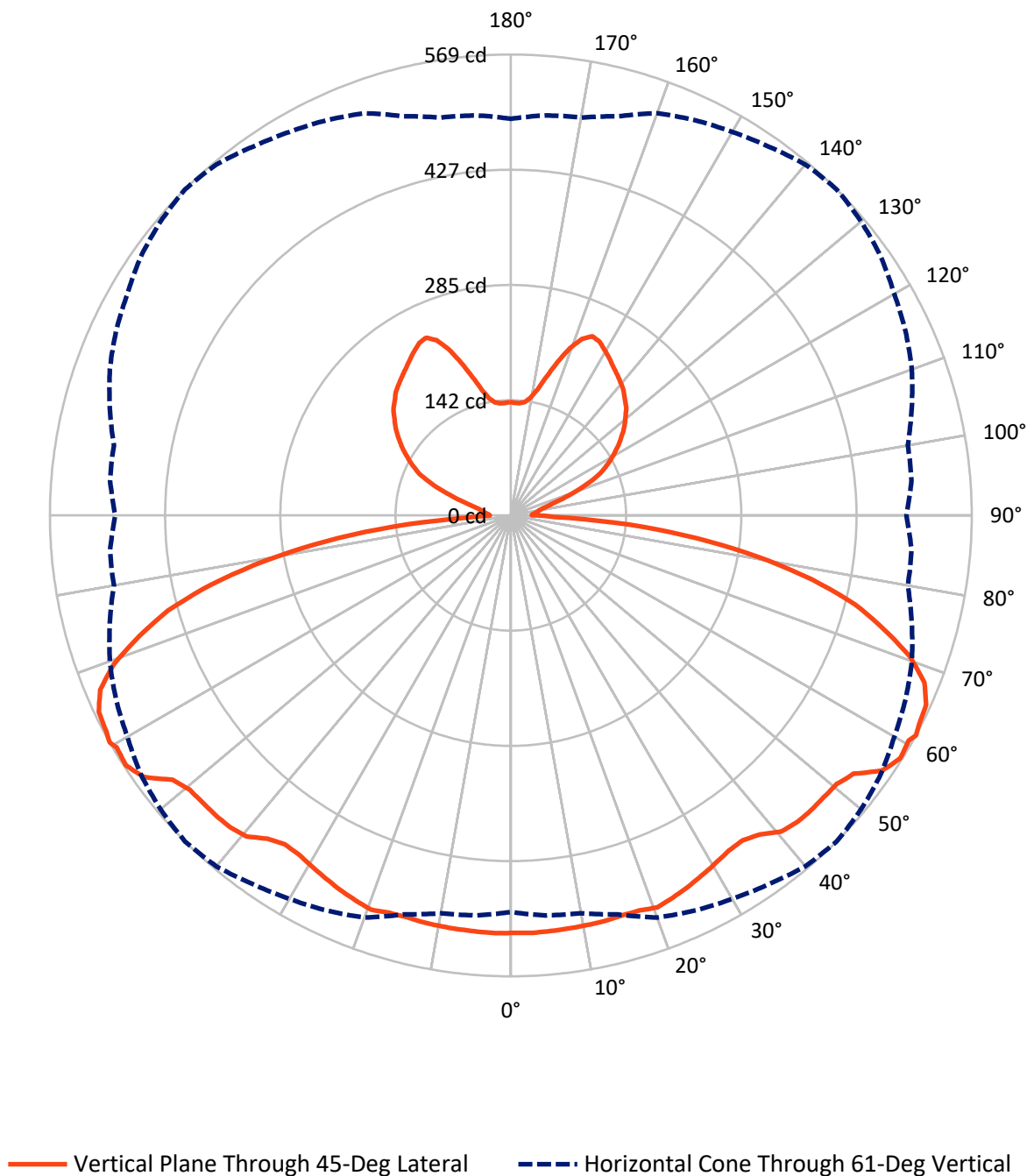


Based on 10 foot mounting height. Maximum calculated value = 5.2 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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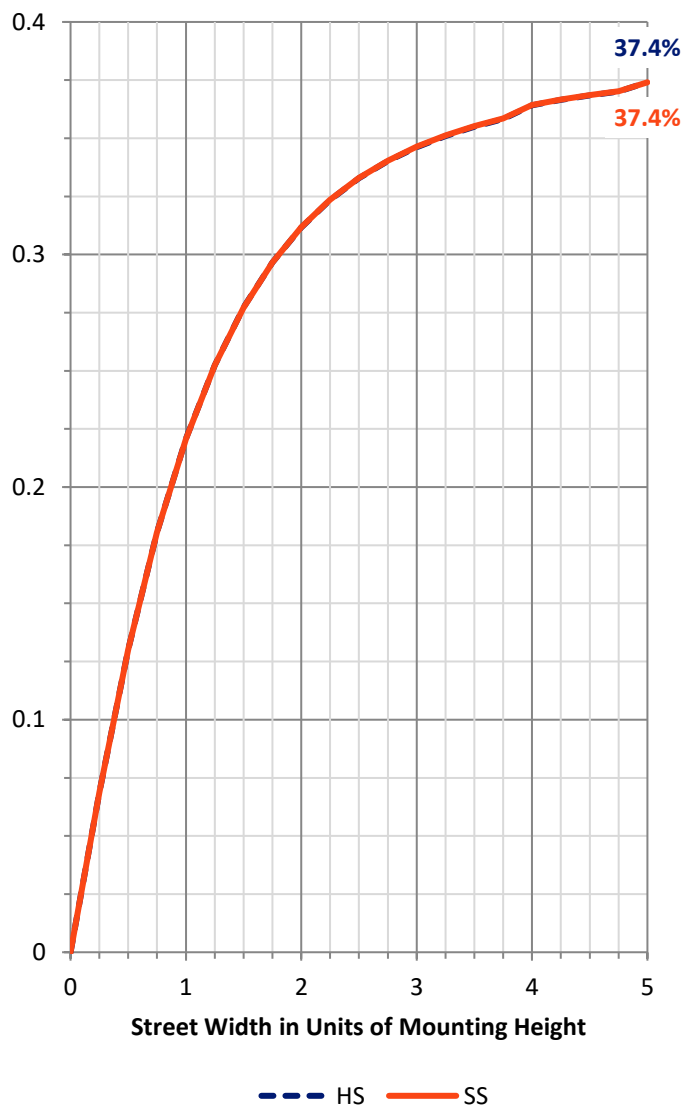
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1332.6	412.0	1744.6
	% Fixture	38.2	11.8	50.0
Street Side	Lumens	1332.6	412.0	1744.6
	% Fixture	38.2	11.8	50.0
Total	Lumens	2665.2	824.0	3489.1
	% Fixture	76.4	23.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.2	1.4
10°-20°	145.4	4.2
20°-30°	233.9	6.7
30°-40°	309.9	8.9
40°-50°	391.4	11.2
50°-60°	468.9	13.4
60°-70°	512.7	14.7
70°-80°	410.5	11.8
80°-90°	143.3	4.1
90°-100°	38.3	1.1
100°-110°	59.4	1.7
110°-120°	119.3	3.4
120°-130°	148.7	4.3
130°-140°	153.2	4.4
140°-150°	136.0	3.9
150°-160°	103.7	3.0
160°-170°	51.8	1.5
170°-180°	13.6	0.4
0°-90°	2665.2	76.4
0°-180°	3489.1	100.0

Coefficient of Utilization



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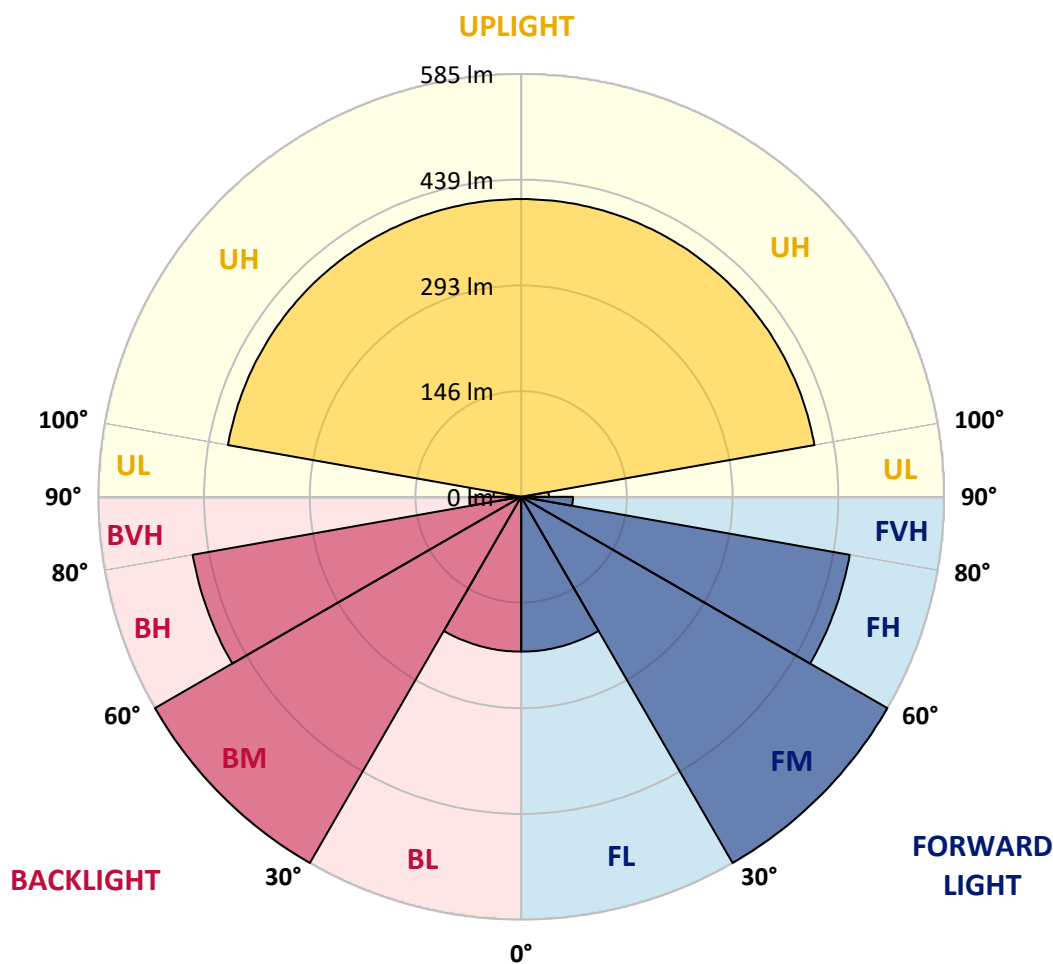
CATALOG NUMBER: TT-C1-LED-E1-MQ-CG-LWR-LW-8030-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	214.3	6.1			
FM	(30°-60°)	585.1	16.8			
FH	(60°-80°)	461.6	13.2			G0/660
FVH	(80°-90°)	71.6	2.1			G1/100
BL	(0°-30°)	214.3	6.1	B1/500		
BM	(30°-60°)	585.1	16.8	B1/1000		
BH	(60°-80°)	461.6	13.2	B1/500		G0/660
BVH	(80°-90°)	71.6	2.1			G1/100
UL	(90°-100°)	38.3	1.1		U2/50	
UH	(100°-180°)	412.0	11.8		U3/500	

BUG Rating: B1-U4-G1

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	515.5	515.5	515.5	515.5	515.5	515.5	515.5	515.5	515.5	515.5	515.5
2.5°	516.0	515.5	516.0	516.0	516.0	516.0	516.0	516.0	516.0	516.0	516.0
5°	515.5	515.5	515.5	515.5	515.5	515.5	515.5	515.5	515.5	515.5	515.5
7.5°	515.0	515.0	515.0	515.0	515.0	515.0	515.0	515.0	515.5	515.0	515.5
10°	514.0	514.0	514.0	514.0	514.5	514.5	514.5	514.5	514.5	514.5	514.5
12.5°	513.0	513.0	513.0	513.0	513.5	513.5	513.5	513.5	514.0	514.0	513.5
15°	512.0	511.5	511.5	512.0	512.0	512.5	512.5	512.5	513.0	512.5	512.5
17.5°	511.0	510.5	511.0	511.5	511.5	512.0	512.5	512.5	513.0	513.0	513.0
20°	512.5	512.0	512.5	513.0	513.5	514.5	515.0	515.5	516.0	516.5	516.5
22.5°	509.5	509.0	509.5	509.5	510.0	510.5	511.5	512.0	512.5	512.5	512.5
25°	505.1	505.1	505.6	505.6	506.1	506.6	507.1	507.6	507.6	508.1	507.6
27.5°	500.2	500.2	500.7	500.7	501.7	501.7	502.2	502.6	503.1	503.1	503.1
30°	494.2	494.2	494.7	495.2	496.2	496.7	497.2	497.7	498.2	498.2	498.2
32.5°	488.8	488.3	488.8	489.7	491.2	492.2	493.2	493.7	493.7	493.7	494.2
35°	484.3	484.8	485.8	486.8	488.8	489.7	490.7	492.2	492.7	492.7	492.7
37.5°	485.3	485.8	487.3	489.2	491.7	494.7	496.7	498.7	500.2	499.7	499.2
40°	491.7	492.7	495.2	498.2	502.2	506.1	509.0	511.5	513.0	513.5	513.0
42.5°	492.7	493.7	495.7	500.2	504.6	509.0	513.0	515.5	517.5	518.0	517.5
45°	492.2	492.2	495.2	500.2	504.6	509.0	514.0	517.5	519.5	519.5	519.5
47.5°	488.8	490.2	492.2	497.2	503.1	507.6	512.5	516.0	518.5	520.0	518.5
50°	488.8	488.8	492.2	495.7	501.2	509.0	516.0	519.5	522.0	521.5	522.0
52.5°	487.8	490.7	492.7	497.7	507.6	515.5	521.0	525.9	529.4	529.9	528.9
55°	496.7	497.2	501.7	511.0	520.5	529.4	539.3	546.7	552.7	556.2	551.2
57.5°	503.6	501.2	510.0	518.0	528.9	542.3	557.1	563.1	567.6	566.6	568.1
60°	494.2	497.7	504.1	512.5	529.9	543.2	551.2	557.6	563.1	564.6	562.6
61°	489.7	495.7	498.7	510.0	528.4	538.3	546.7	555.7	565.6	569.1	564.6
62.5°	482.3	491.7	490.7	509.0	520.5	531.9	547.7	558.1	565.1	566.1	565.1
65°	482.8	481.3	492.7	506.1	517.5	537.8	551.2	557.6	561.6	563.6	562.6
67.5°	466.9	461.9	475.8	485.3	504.6	520.5	533.4	542.7	548.7	550.7	548.2
70°	430.2	433.7	443.6	458.0	473.9	493.2	505.1	517.5	522.5	522.9	522.9
72.5°	395.0	397.0	407.0	420.4	438.7	455.5	467.4	477.3	481.8	482.3	483.3
75°	348.4	350.4	361.8	374.2	392.6	407.0	415.4	427.3	433.7	439.2	434.7
77.5°	294.4	297.9	306.8	320.2	337.1	345.0	359.9	373.8	378.2	379.7	378.2
80°	233.4	237.9	245.9	263.7	271.2	284.0	298.4	304.4	308.3	309.3	309.8
82.5°	168.0	171.5	179.9	192.3	200.7	211.2	221.1	228.5	232.9	232.0	231.5
85°	99.1	100.1	109.1	117.5	123.9	130.4	138.3	143.8	144.8	146.7	146.2
87.5°	29.8	30.3	34.2	38.6	41.6	44.6	49.6	56.0	57.5	53.5	54.0
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°	515.5	515.5	515.5	515.5	515.5	515.5	515.5	515.5
2.5°	516.0	516.0	516.0	516.0	516.0	516.0	515.5	516.0
5°	515.5	515.5	515.5	515.5	515.5	515.5	515.5	515.5
7.5°	515.5	515.0	515.0	515.0	515.0	515.0	515.0	515.0
10°	514.5	514.5	514.5	514.5	514.0	514.0	514.0	514.0
12.5°	513.5	513.5	513.5	513.5	513.0	513.0	513.0	513.0
15°	512.5	512.5	512.5	512.5	512.0	512.0	512.0	512.0
17.5°	513.0	512.5	512.0	512.0	511.5	511.0	511.0	511.0
20°	516.0	515.5	514.5	513.5	513.0	512.5	512.5	512.5
22.5°	512.0	511.5	510.5	510.0	510.0	509.5	509.0	509.0
25°	507.6	506.6	506.6	506.1	506.1	505.1	505.1	504.6
27.5°	502.6	502.2	501.7	501.2	501.2	500.7	500.2	499.7
30°	498.2	497.2	496.2	495.7	495.2	494.7	494.7	494.7
32.5°	493.7	492.7	492.2	490.7	489.7	489.2	488.8	488.8
35°	492.2	490.7	489.7	488.3	486.8	485.8	485.3	484.3
37.5°	498.2	496.2	494.7	492.2	488.8	487.3	485.8	485.3
40°	511.0	509.0	506.1	502.2	498.2	495.2	492.7	491.7
42.5°	515.5	513.0	509.0	505.1	500.2	495.7	493.7	492.7
45°	517.0	514.5	509.0	504.1	499.7	495.7	492.7	491.7
47.5°	515.5	512.0	507.1	503.1	496.7	491.7	489.7	488.3
50°	519.0	516.0	509.5	500.7	495.2	492.2	488.8	488.3
52.5°	525.9	520.5	514.5	508.1	497.7	491.7	489.7	487.3
55°	546.7	539.3	528.9	518.5	512.0	502.6	496.7	496.7
57.5°	562.6	556.6	543.2	529.4	517.5	510.5	501.7	502.2
60°	558.1	550.2	543.7	529.9	513.0	503.6	500.2	493.7
61°	557.6	546.7	537.8	526.9	512.5	497.7	496.7	488.3
62.5°	558.6	548.7	531.9	520.5	509.5	490.2	489.7	481.8
65°	557.6	548.2	539.8	518.5	503.6	495.7	478.8	485.3
67.5°	542.3	533.9	518.5	506.6	483.8	473.9	464.4	464.4
70°	518.0	505.6	490.7	475.8	460.5	443.6	435.2	430.2
72.5°	477.3	466.9	455.1	439.2	420.4	405.0	397.0	393.6
75°	426.3	414.9	404.5	392.6	372.8	359.9	351.4	348.9
77.5°	372.8	362.8	344.5	333.1	319.7	304.9	297.4	294.4
80°	304.4	298.9	286.0	267.7	261.2	242.9	237.9	233.4
82.5°	228.5	222.6	210.7	197.8	189.9	179.4	170.5	169.5
85°	143.8	139.8	132.3	122.9	113.0	107.1	99.1	101.1
87.5°	53.5	51.0	46.6	40.6	36.2	32.2	28.3	29.8
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)