

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: P198262

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198262
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P27139) AND SCALED
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TT-C1-LED-E1-RW-CG-LWR-LW-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
RECTANGULAR DISTRIBUTION WITH CLEAR GLASS LENS AND LumaWatt WIRELESS
SENSOR
Light Source: (168) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3506.8 lumens
Efficiency: N/A
Efficacy: 77.2 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U4 - G2

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



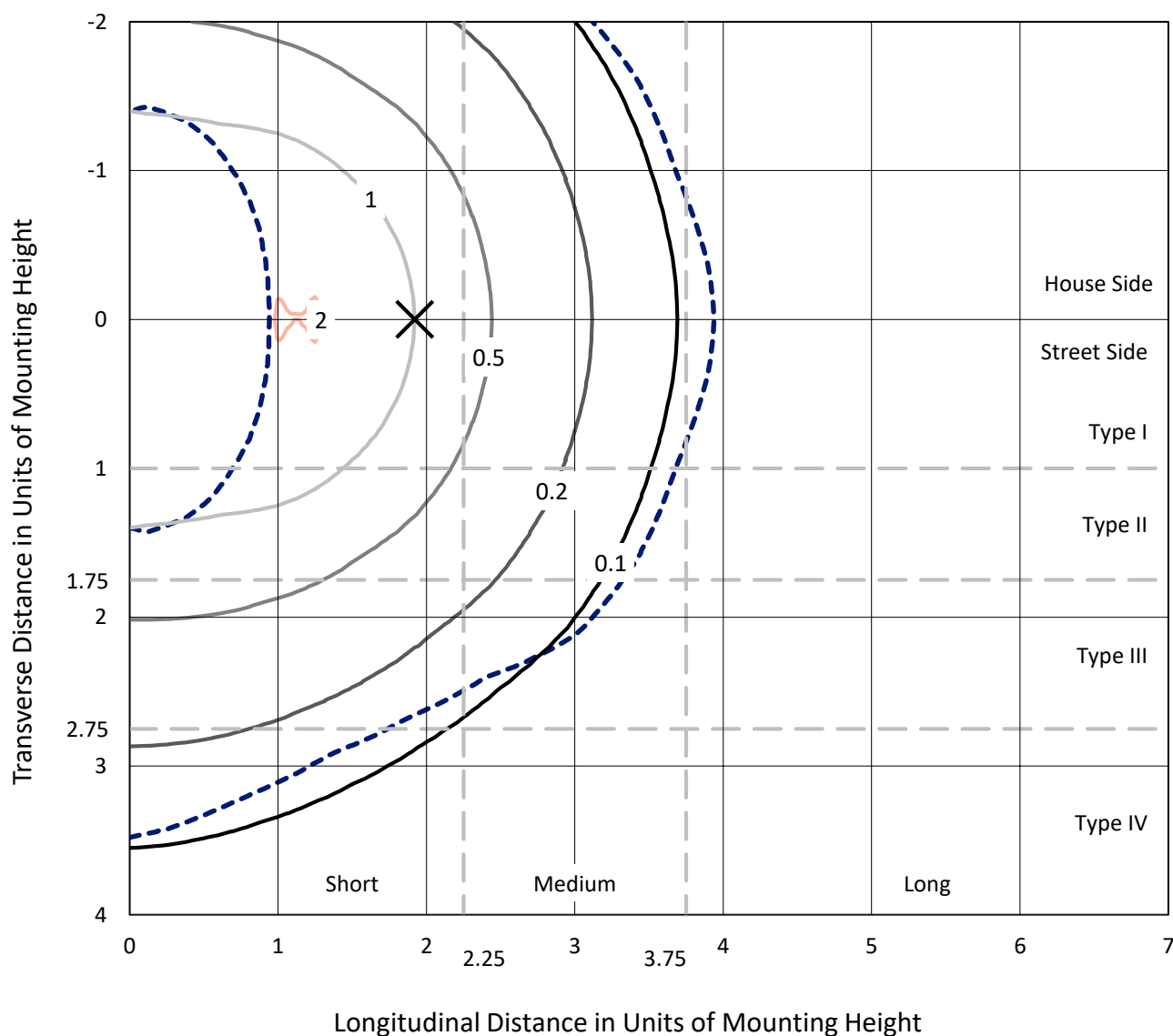
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

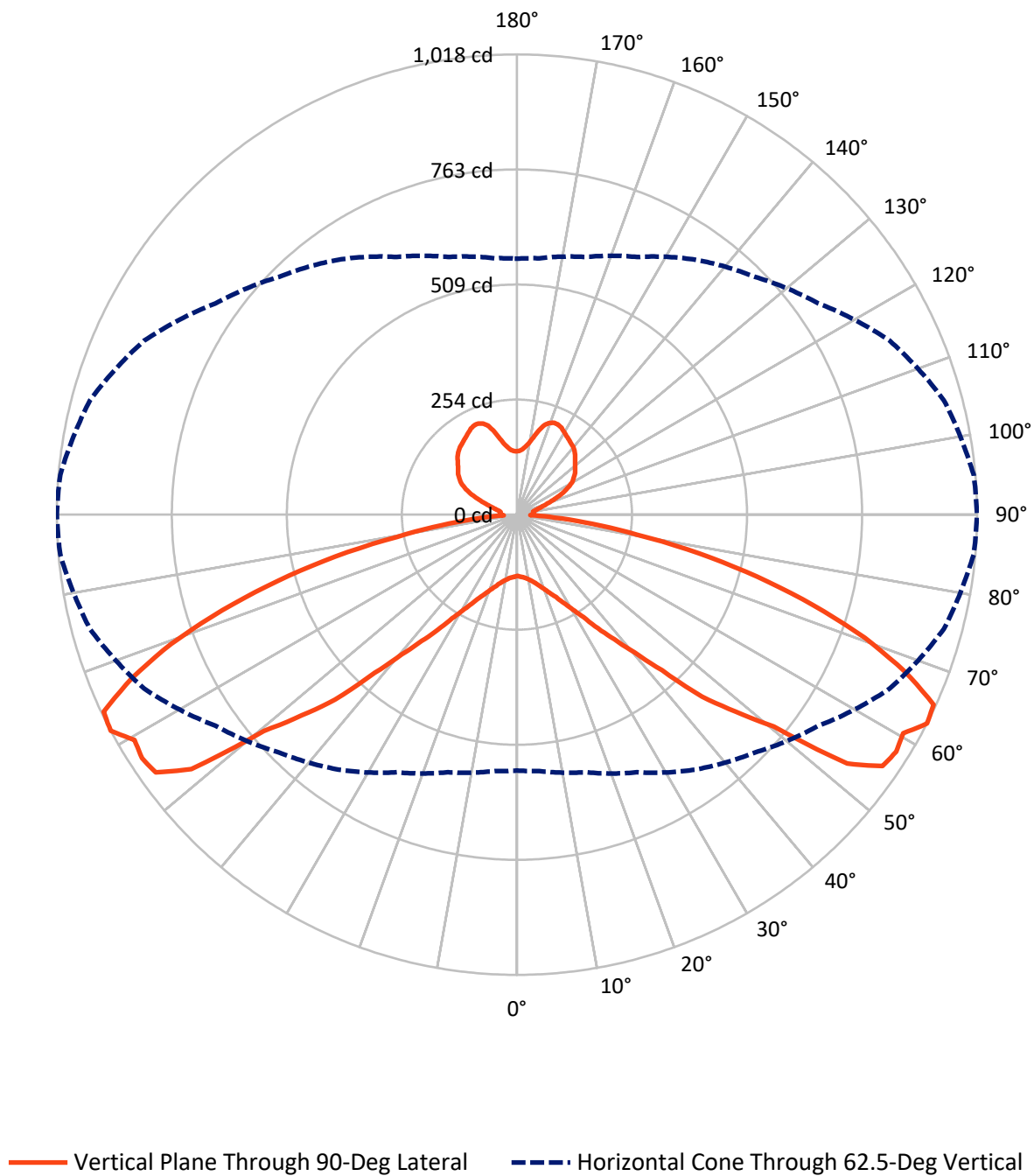


Based on 10 foot mounting height. Maximum calculated value = 2 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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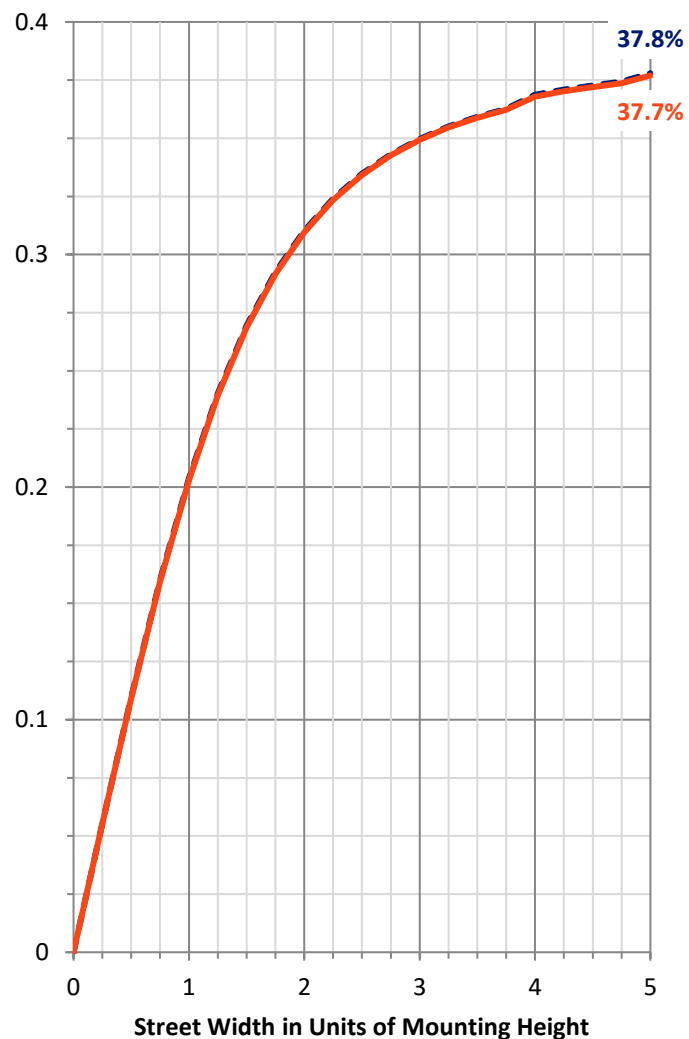
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1340.8	412.7	1753.4
	% Fixture	38.2	11.8	50.0
Street Side	Lumens	1340.8	412.7	1753.4
	% Fixture	38.2	11.8	50.0
Total	Lumens	2681.5	825.3	3506.8
	% Fixture	76.5	23.5	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.5	0.4
10°-20°	46.1	1.3
20°-30°	98.5	2.8
30°-40°	191.5	5.5
40°-50°	361.0	10.3
50°-60°	616.9	17.6
60°-70°	742.9	21.2
70°-80°	499.9	14.3
80°-90°	111.3	3.2
90°-100°	38.4	1.1
100°-110°	59.5	1.7
110°-120°	119.6	3.4
120°-130°	148.9	4.2
130°-140°	153.3	4.4
140°-150°	136.3	3.9
150°-160°	103.9	3.0
160°-170°	51.8	1.5
170°-180°	13.6	0.4
0°-90°	2681.5	76.5
0°-180°	3506.8	100.0

Coefficient of Utilization



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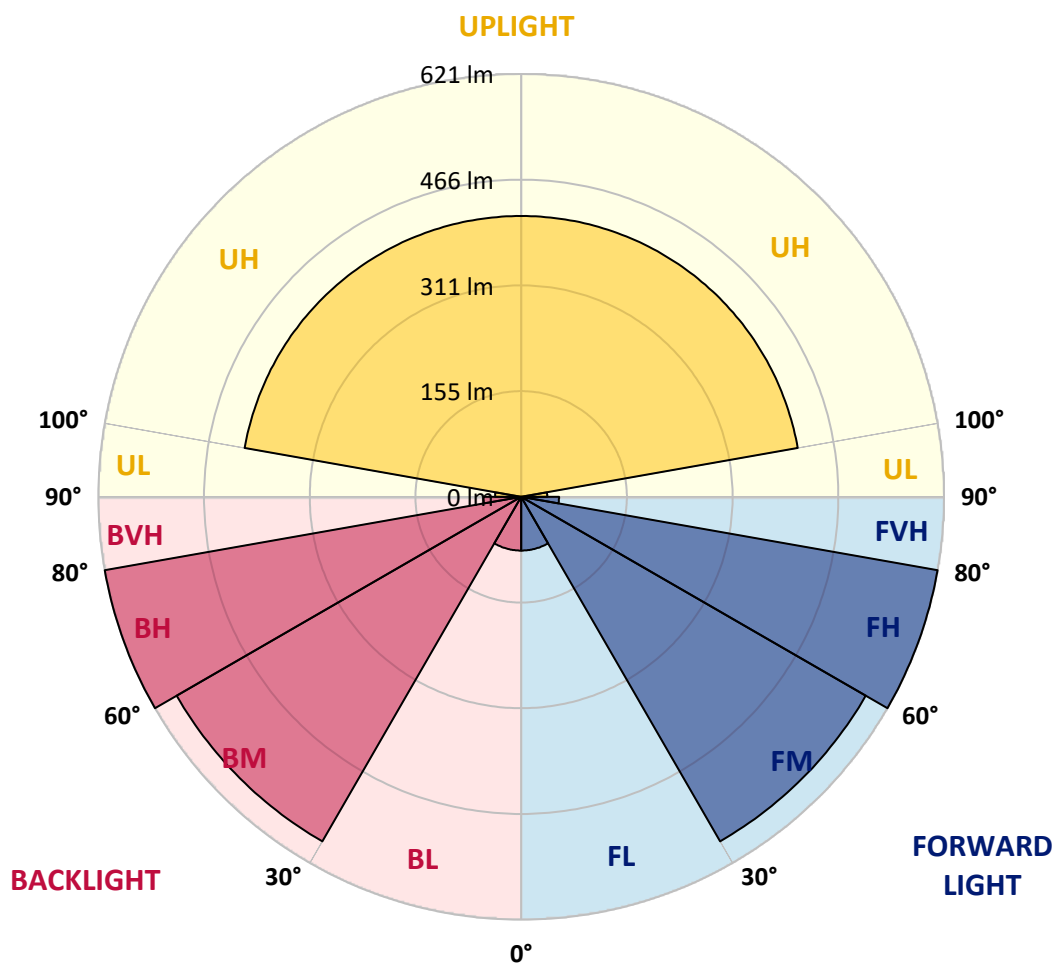
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	79.0	2.3			
FM	(30°-60°)	584.7	16.7			
FH	(60°-80°)	621.4	17.7			G0/660
FVH	(80°-90°)	55.7	1.6			G1/100
BL	(0°-30°)	79.0	2.3	B0/110		
BM	(30°-60°)	584.7	16.7	B1/1000		
BH	(60°-80°)	621.4	17.7	B2/1000		G2/1000
BVH	(80°-90°)	55.7	1.6			G1/100
UL	(90°-100°)	38.4	1.1		U2/50	
UH	(100°-180°)	412.7	11.8		U3/500	

BUG Rating: B2-U4-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	135.4	135.4	135.4	135.4	135.4	135.4	135.4	135.4	135.4	135.4	135.4
2.5°	136.6	136.6	136.6	136.6	136.6	136.6	137.2	137.2	137.2	137.2	137.2
5°	138.5	138.5	139.1	139.1	139.7	139.7	139.7	139.7	139.1	139.1	139.1
7.5°	141.6	141.6	142.3	142.9	142.9	142.3	142.3	141.6	141.6	141.6	141.6
10°	146.6	146.6	147.3	147.3	146.6	146.6	146.6	146.0	146.0	146.0	146.0
12.5°	152.3	152.9	153.5	152.9	152.3	151.7	151.7	151.0	151.0	151.0	151.0
15°	160.4	161.7	161.1	161.1	160.4	159.2	158.5	157.9	157.9	157.9	157.9
17.5°	173.0	173.0	171.1	169.8	168.6	167.9	167.3	166.7	166.7	166.7	166.7
20°	186.1	185.5	183.6	181.7	179.9	179.2	177.3	176.7	177.3	176.7	176.7
22.5°	201.8	201.2	198.7	196.8	194.3	191.8	191.1	189.3	188.6	188.0	188.6
25°	217.5	218.1	216.2	214.3	210.6	208.1	205.5	204.3	203.0	202.4	202.4
27.5°	235.6	236.9	235.6	231.9	228.1	226.2	222.5	221.2	220.6	221.2	221.2
30°	255.1	255.7	253.8	251.9	248.2	243.8	241.3	241.9	241.9	243.8	243.1
32.5°	278.9	278.2	275.7	274.5	270.7	267.0	265.7	266.3	268.8	270.1	270.1
35°	305.2	303.3	300.8	298.3	295.2	292.7	293.3	298.3	305.8	307.7	308.9
37.5°	331.5	328.4	328.4	324.6	322.1	324.0	327.7	337.1	342.8	351.6	349.7
40°	355.9	356.6	355.3	352.2	351.6	357.8	366.0	377.9	392.3	401.1	400.4
42.5°	378.5	384.1	380.4	381.0	384.1	394.2	407.3	430.5	459.3	470.6	470.6
45°	403.6	410.5	407.3	409.2	418.0	433.7	461.9	507.6	547.1	574.0	574.0
47.5°	429.3	435.5	434.3	438.0	453.7	481.3	524.5	581.5	621.0	647.3	651.1
50°	461.9	459.3	460.0	469.4	496.3	536.4	591.6	648.0	713.1	728.8	736.3
52.5°	490.1	482.5	486.9	502.6	541.4	588.4	656.7	756.4	846.6	909.3	914.3
55°	513.2	507.6	516.4	538.3	588.4	650.5	739.5	861.7	936.2	974.5	981.4
57.5°	533.3	530.8	545.2	573.4	637.3	713.1	803.4	902.4	954.4	983.9	988.9
60°	551.5	553.3	569.0	606.6	675.5	745.1	817.8	901.1	953.2	976.3	981.4
62.5°	565.9	569.0	589.7	628.5	688.1	743.8	814.0	909.9	977.6	1013.9	1017.7
65°	575.3	578.4	601.6	628.5	684.3	738.2	837.2	918.7	968.8	1005.8	1012.7
67.5°	576.5	580.9	594.7	617.3	664.3	711.9	797.1	856.0	896.1	918.7	925.0
70°	569.0	567.8	572.8	582.2	610.4	643.0	715.0	758.9	787.7	810.9	816.5
72.5°	540.2	538.3	526.4	515.7	526.4	552.1	614.1	643.6	663.0	681.8	685.6
75°	485.0	476.3	446.8	431.8	428.6	451.2	498.8	517.6	525.1	546.5	549.0
77.5°	387.9	384.1	359.1	332.8	330.3	344.0	380.4	388.5	382.3	405.5	412.3
80°	283.3	278.2	254.4	235.0	230.0	239.4	260.7	262.6	258.2	269.5	269.5
82.5°	181.1	176.1	166.1	151.7	141.0	146.6	162.9	162.9	162.9	166.1	167.9
85°	93.4	91.5	84.0	77.1	73.3	74.6	80.2	80.8	84.0	85.9	83.3
87.5°	26.3	27.6	26.3	23.2	22.6	21.9	24.4	25.1	26.9	28.2	29.5
90°	36.0	36.0	36.0	34.0	29.0	26.0	28.0	32.0	34.0	34.0	34.0
92.5°	40.0	39.0	38.0	34.0	29.0	27.0	28.0	32.0	35.0	36.0	36.0
95°	44.0	43.0	41.0	36.0	32.0	30.0	30.0	34.0	37.0	39.0	38.0
97.5°	42.0	42.0	40.0	37.0	35.0	33.0	33.0	34.0	36.0	36.0	36.0
100°	45.0	45.0	44.0	40.0	38.0	36.0	36.0	38.0	38.0	37.0	37.0
102.5°	51.0	51.0	49.0	46.0	44.0	42.0	43.0	44.0	42.0	41.0	41.0
105°	60.0	60.0	57.0	54.0	53.0	52.0	54.0	53.0	49.0	48.0	49.0
107.5°	72.0	72.0	70.0	67.0	66.0	68.0	68.0	66.0	60.0	59.0	60.0
110°	86.0	86.0	89.0	85.0	86.0	87.0	84.0	84.0	78.0	74.0	75.0

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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	101.0	102.0	108.0	107.0	110.0	107.0	102.0	105.0	100.0	95.0	94.0
115°	121.0	122.0	128.0	128.0	129.0	124.0	121.0	125.0	123.0	116.0	113.0
117.5°	140.0	141.0	144.0	141.0	141.0	136.0	138.0	141.0	139.0	133.0	129.0
120°	152.0	153.0	155.0	149.0	149.0	147.0	150.0	153.0	148.0	145.0	142.0
122.5°	161.0	162.0	164.0	154.0	155.0	158.0	159.0	162.0	155.0	153.0	150.0
125°	169.0	169.0	172.0	163.0	165.0	168.0	167.0	168.0	163.0	160.0	158.0
127.5°	177.0	177.0	181.0	171.0	176.0	178.0	176.0	175.0	173.0	166.0	163.0
130°	187.0	188.0	191.0	179.0	186.0	186.0	183.0	183.0	184.0	171.0	169.0
132.5°	198.0	199.0	201.0	186.0	193.0	195.0	190.0	192.0	192.0	179.0	176.0
135°	210.0	210.0	209.0	192.0	199.0	201.0	196.0	201.0	199.0	185.0	184.0
137.5°	221.0	219.0	213.0	197.0	205.0	208.0	203.0	210.0	204.0	191.0	190.0
140°	229.0	226.0	216.0	200.0	207.0	213.0	212.0	217.0	209.0	195.0	195.0
142.5°	235.0	231.0	218.0	201.0	208.0	218.0	220.0	223.0	211.0	198.0	198.0
145°	235.0	230.0	218.0	202.0	211.0	223.0	230.0	227.0	211.0	201.0	202.0
147.5°	230.0	227.0	219.0	207.0	216.0	229.0	239.0	229.0	212.0	204.0	206.0
150°	224.0	221.0	220.0	214.0	222.0	235.0	242.0	232.0	214.0	210.0	211.0
152.5°	216.0	214.0	221.0	220.0	230.0	241.0	242.0	235.0	219.0	215.0	216.0
155°	208.0	207.0	219.0	224.0	237.0	243.0	238.0	234.0	224.0	220.0	219.0
157.5°	203.0	203.0	216.0	224.0	234.0	235.0	228.0	229.0	226.0	222.0	219.0
160°	199.0	198.0	210.0	213.0	219.0	219.0	215.0	219.0	221.0	218.0	215.0
162.5°	185.0	184.0	193.0	193.0	198.0	198.0	196.0	200.0	204.0	207.0	207.0
165°	169.0	167.0	173.0	173.0	176.0	177.0	176.0	181.0	185.0	190.0	192.0
167.5°	154.0	152.0	156.0	155.0	159.0	159.0	160.0	165.0	168.0	172.0	174.0
170°	142.0	141.0	145.0	144.0	147.0	147.0	148.0	152.0	155.0	159.0	160.0
172.5°	137.0	135.0	139.0	138.0	141.0	141.0	141.0	145.0	146.0	149.0	151.0
175°	136.0	134.0	137.0	137.0	139.0	139.0	138.0	141.0	141.0	143.0	144.0
177.5°	137.0	136.0	139.0	138.0	140.0	139.0	138.0	140.0	140.0	141.0	141.0
180°	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0

(END OF REPORT)