

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: P198272

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198272
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-SG-LWR-LW-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
RECTANGULAR DISTRIBUTION WITH SOFTENING 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: 3541.3 lumens
Efficiency: N/A
Efficacy: 78.0 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type III - 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



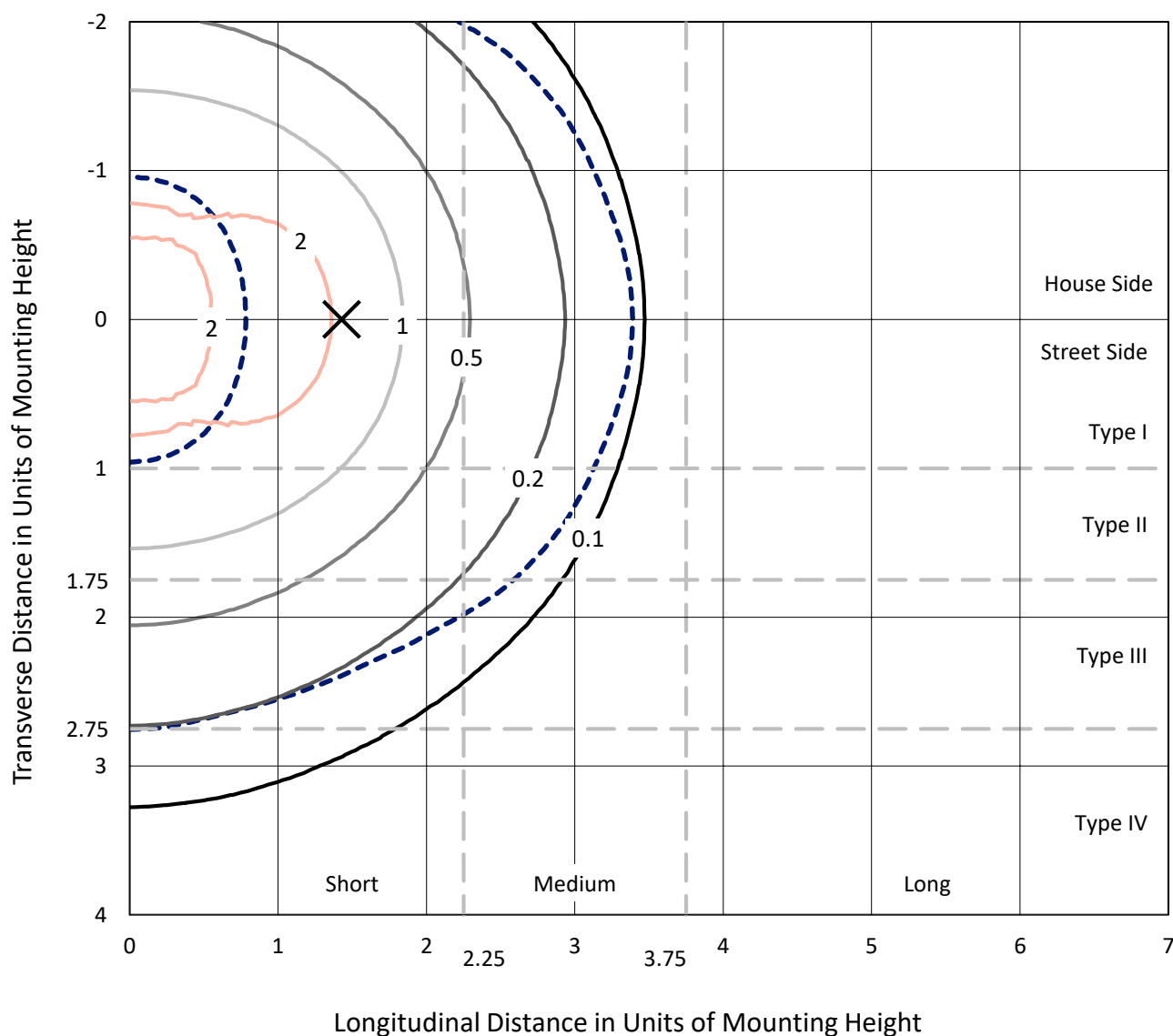
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

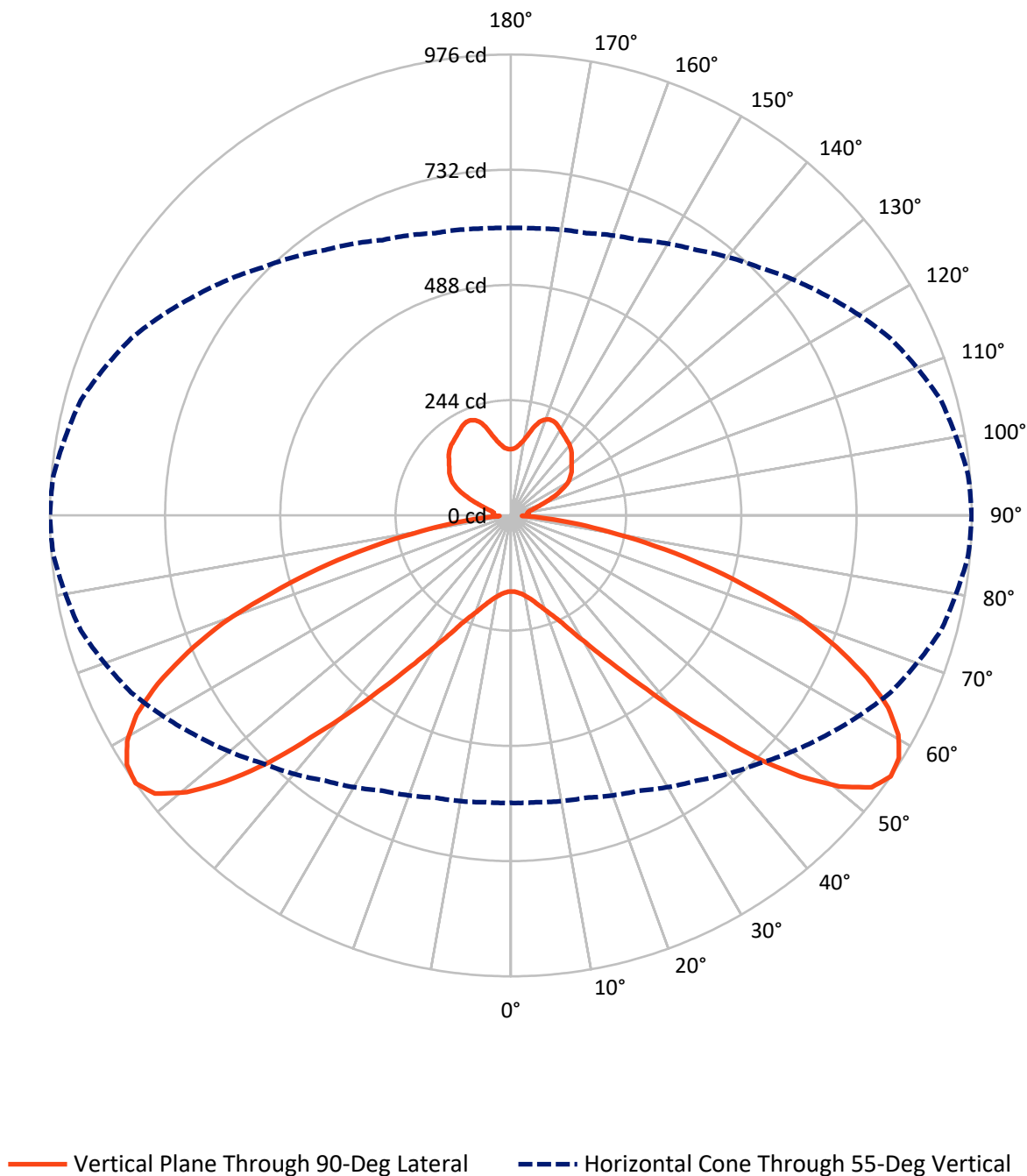


Based on 10 foot mounting height. Maximum calculated value = 2.6 fc
Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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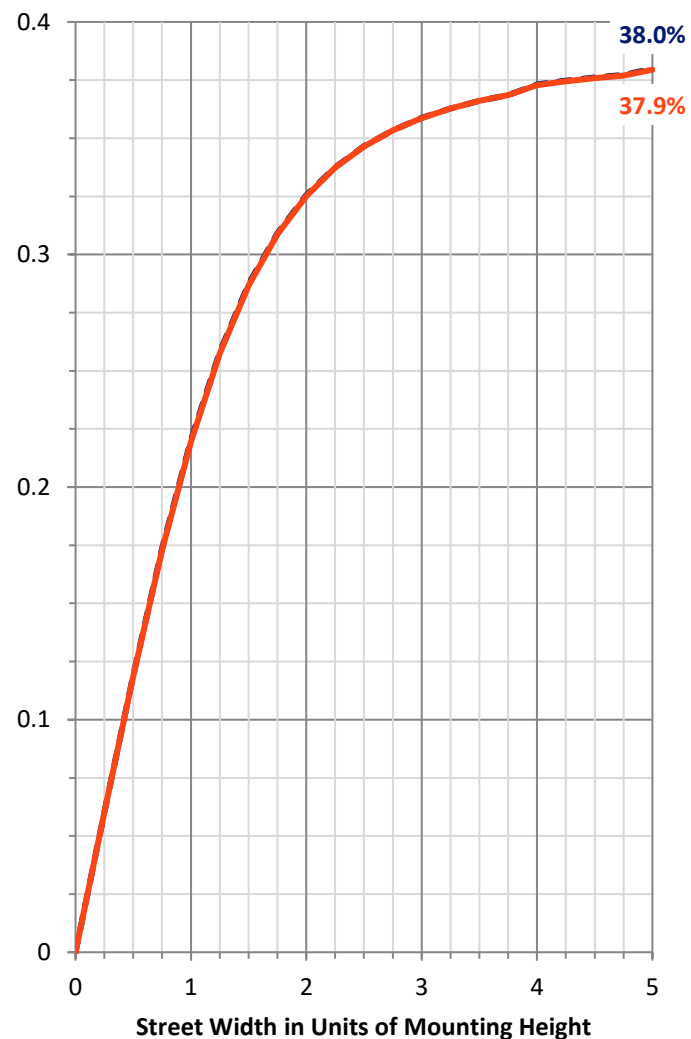
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1358.0	412.7	1770.6
	% Fixture	38.3	11.7	50.0
Street Side	Lumens	1358.0	412.7	1770.6
	% Fixture	38.3	11.7	50.0
Total	Lumens	2716.0	825.3	3541.3
	% Fixture	76.7	23.3	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.0	0.5
10°-20°	55.4	1.6
20°-30°	120.9	3.4
30°-40°	243.1	6.9
40°-50°	459.5	13.0
50°-60°	677.8	19.1
60°-70°	667.7	18.9
70°-80°	388.8	11.0
80°-90°	86.7	2.4
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	4.3
140°-150°	136.3	3.8
150°-160°	103.9	2.9
160°-170°	51.8	1.5
170°-180°	13.6	0.4
0°-90°	2716.0	76.7
0°-180°	3541.3	100.0

Coefficient of Utilization



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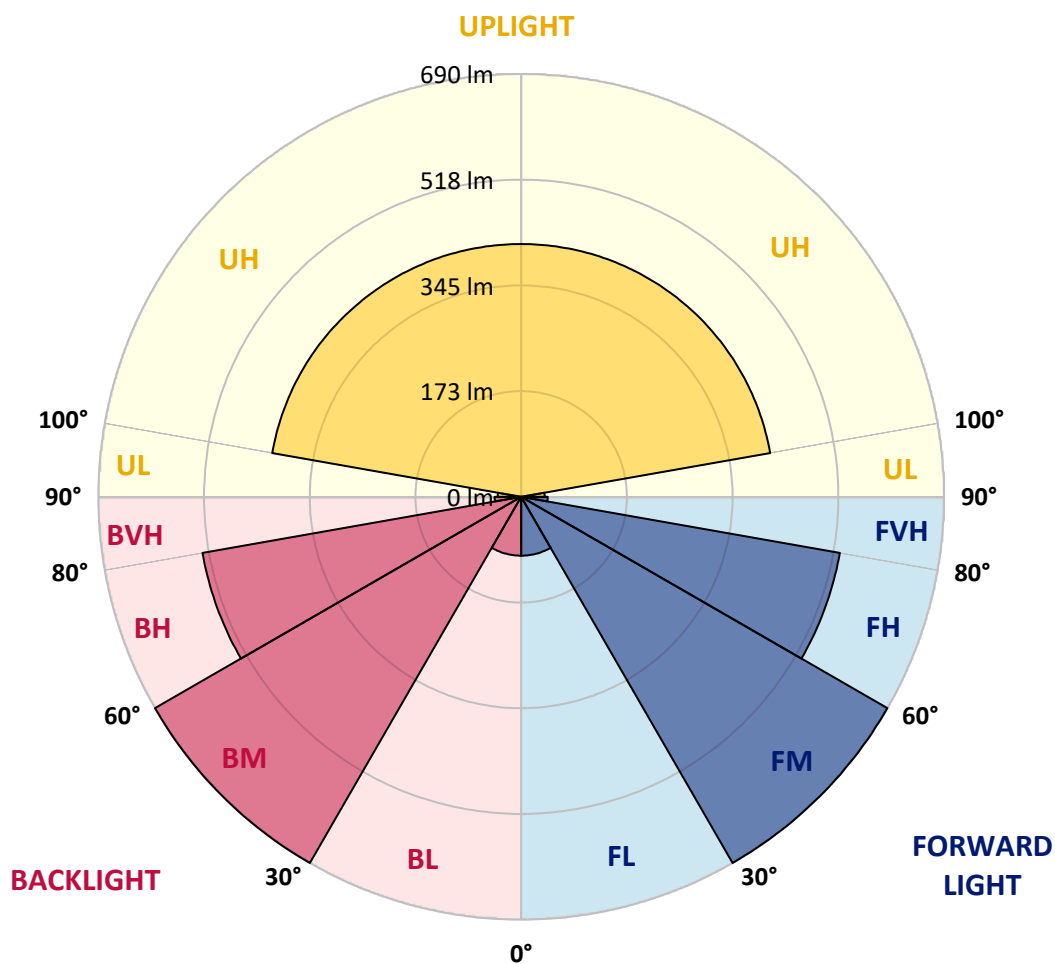
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	96.1	2.7			
FM	(30°-60°)	690.3	19.5			
FH	(60°-80°)	528.2	14.9			G0/660
FVH	(80°-90°)	43.4	1.2			G1/100
BL	(0°-30°)	96.1	2.7	B0/110		
BM	(30°-60°)	690.3	19.5	B1/1000		
BH	(60°-80°)	528.2	14.9	B2/1000		G2/1000
BVH	(80°-90°)	43.4	1.2			G1/100
UL	(90°-100°)	38.4	1.1		U2/50	
UH	(100°-180°)	412.7	11.7		U3/500	

BUG Rating: B2-U4-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	161.1	161.1	161.1	161.1	161.1	161.1	161.1	161.1	161.1	161.1	161.1
2.5°	162.3	162.3	162.3	162.3	161.7	162.3	161.7	161.7	161.7	161.7	161.7
5°	164.2	164.8	164.2	164.2	164.2	164.2	164.2	164.2	163.6	163.6	164.2
7.5°	168.6	168.6	168.6	168.6	167.9	168.6	167.9	167.9	167.9	167.9	167.9
10°	174.8	174.8	174.8	174.8	174.2	174.2	174.2	173.6	173.6	173.6	173.6
12.5°	182.4	183.0	183.0	182.4	181.7	181.7	181.1	181.1	181.1	181.1	180.5
15°	193.6	193.0	193.0	191.8	191.8	190.5	191.1	190.5	189.9	189.3	189.9
17.5°	204.9	205.5	205.5	204.3	203.7	203.0	201.8	201.8	201.2	201.8	201.8
20°	222.5	222.5	221.2	220.0	218.1	217.5	216.2	216.2	214.9	216.2	216.2
22.5°	240.0	240.0	238.8	238.1	235.6	233.7	233.1	232.5	231.9	233.1	231.9
25°	261.9	261.9	260.7	258.2	255.7	255.1	253.2	253.2	253.8	254.4	251.9
27.5°	284.5	285.1	283.9	282.0	279.5	277.0	277.0	277.6	278.2	280.7	280.1
30°	312.1	311.5	309.6	307.1	305.8	303.9	304.6	307.1	309.6	312.1	312.1
32.5°	340.3	339.7	339.0	336.5	335.9	335.3	338.4	343.4	348.4	350.3	353.4
35°	370.4	370.4	369.7	367.9	369.1	372.2	377.3	386.7	394.2	402.9	402.9
37.5°	403.6	402.3	402.9	402.9	406.1	411.7	423.6	441.8	457.5	466.2	466.2
40°	438.0	436.2	436.8	439.9	445.6	459.3	480.0	505.1	530.2	541.4	545.2
42.5°	471.3	469.4	471.9	475.0	488.8	510.1	540.8	579.0	614.8	632.3	631.7
45°	502.0	503.2	506.3	513.9	533.9	565.3	609.1	660.5	706.9	727.6	735.1
47.5°	532.7	533.3	537.7	550.8	579.0	618.5	671.8	740.1	791.5	815.9	825.3
50°	561.5	562.7	570.3	589.1	622.3	669.9	735.7	808.4	864.8	893.6	901.8
52.5°	587.2	588.4	597.2	620.4	659.9	715.0	784.0	858.5	918.1	951.3	956.3
55°	608.5	609.7	618.5	643.0	685.6	742.6	812.8	886.7	942.5	972.0	975.7
57.5°	621.0	621.7	631.0	656.1	698.1	751.4	819.0	890.5	939.4	965.7	968.8
60°	621.7	622.9	631.7	654.2	693.1	742.0	806.5	870.4	914.9	938.7	942.5
62.5°	610.4	611.0	618.5	636.1	669.3	711.9	771.4	829.1	869.2	892.4	896.8
65°	584.7	584.7	588.4	601.6	627.3	663.6	714.4	767.7	804.6	825.9	828.4
67.5°	542.1	542.1	542.7	551.5	569.0	597.8	641.1	685.6	718.8	740.1	743.2
70°	487.5	486.9	481.9	487.5	498.8	523.3	561.5	595.3	622.3	639.2	650.5
72.5°	418.6	416.1	412.3	411.1	422.4	443.7	475.0	498.2	513.2	531.4	532.7
75°	338.4	337.1	332.1	332.1	343.4	360.3	385.4	401.1	408.6	420.5	423.0
77.5°	252.5	251.9	253.8	254.4	260.7	278.9	293.3	304.6	302.7	310.2	312.7
80°	176.7	178.0	178.0	177.3	183.6	190.5	206.2	209.3	206.8	209.3	209.3
82.5°	112.2	111.5	110.3	112.2	117.2	122.8	129.1	129.7	131.6	129.7	131.0
85°	56.4	55.8	57.0	57.7	60.2	63.3	68.9	70.2	67.1	67.1	65.8
87.5°	19.4	20.7	19.4	20.1	20.1	23.2	22.6	22.6	22.6	22.6	23.8
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)