

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: P198258

Luminaire Tested: **TT-C1-LED-E1-MQ-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198258
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-MQ-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
MEDIUM DISTRIBUTION
Light Source: (168) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4751.8 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B2 - U4 - 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



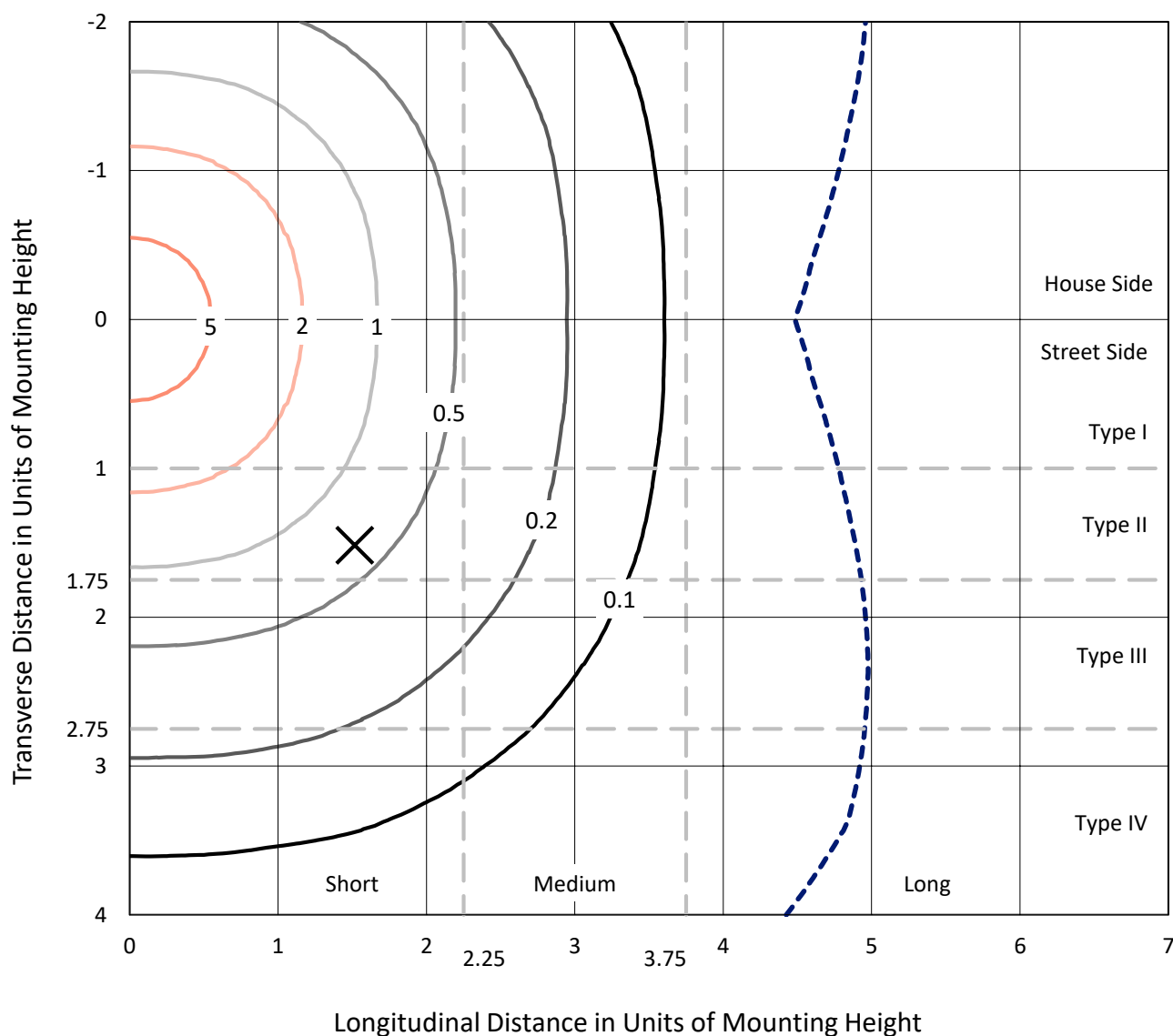
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

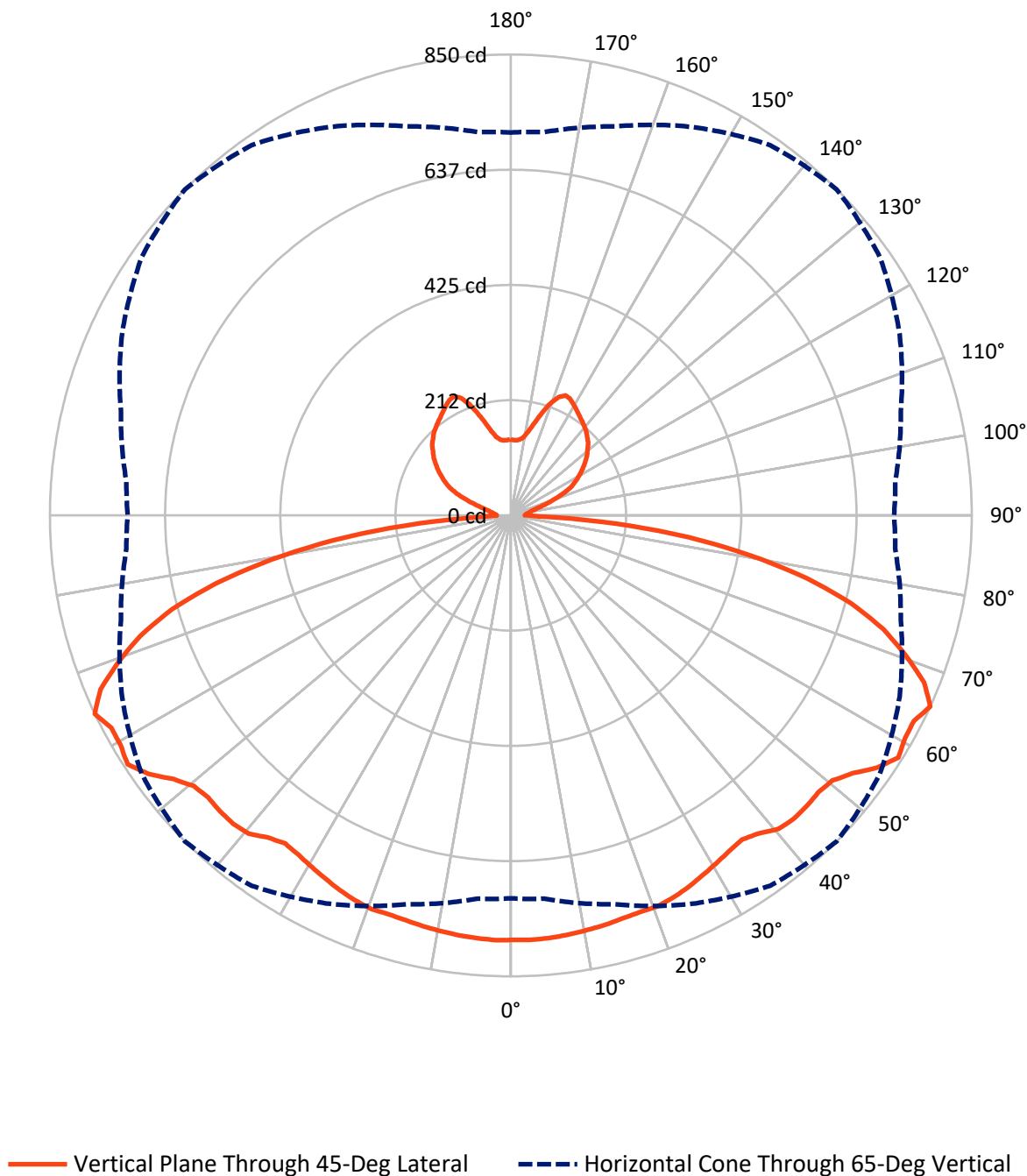


Based on 10 foot mounting height. Maximum calculated value = 7.8 fc
Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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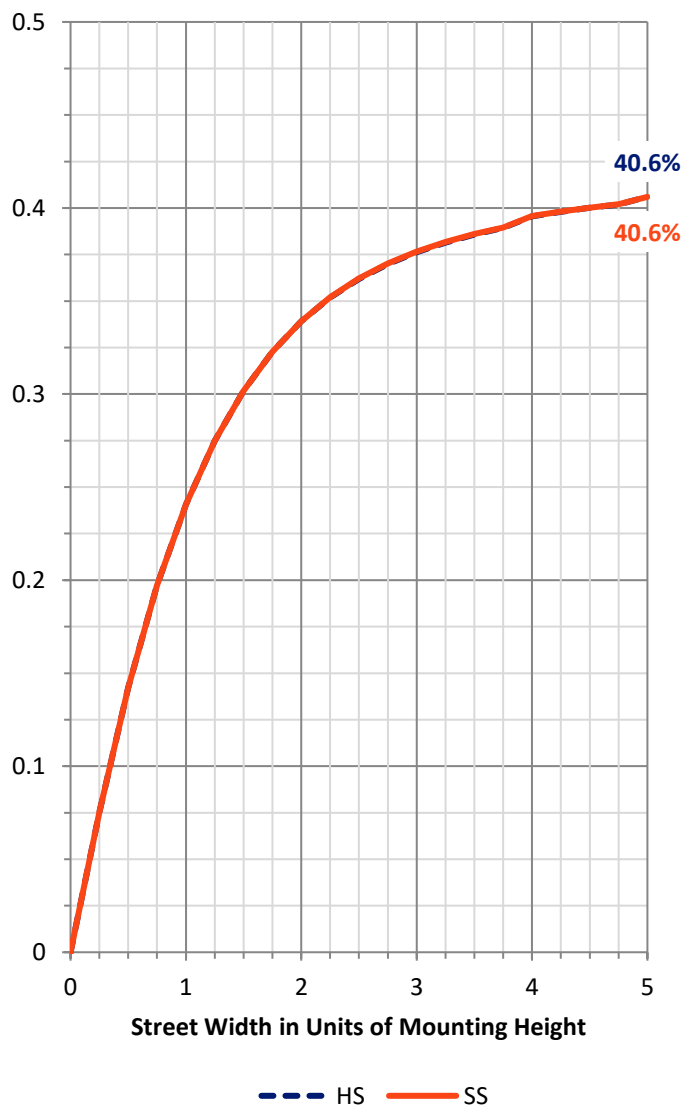
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1963.2	412.7	2375.9
	% Fixture	41.3	8.7	50.0
Street Side	Lumens	1963.2	412.7	2375.9
	% Fixture	41.3	8.7	50.0
Total	Lumens	3926.5	825.3	4751.8
	% Fixture	82.6	17.4	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.5	1.6
10°-20°	218.5	4.6
20°-30°	349.5	7.4
30°-40°	461.7	9.7
40°-50°	577.1	12.1
50°-60°	692.9	14.6
60°-70°	757.4	15.9
70°-80°	601.8	12.7
80°-90°	193.1	4.1
90°-100°	38.4	0.8
100°-110°	59.5	1.3
110°-120°	119.6	2.5
120°-130°	148.9	3.1
130°-140°	153.3	3.2
140°-150°	136.3	2.9
150°-160°	103.9	2.2
160°-170°	51.8	1.1
170°-180°	13.6	0.3
0°-90°	3926.5	82.6
0°-180°	4751.8	100.0

Coefficient of Utilization



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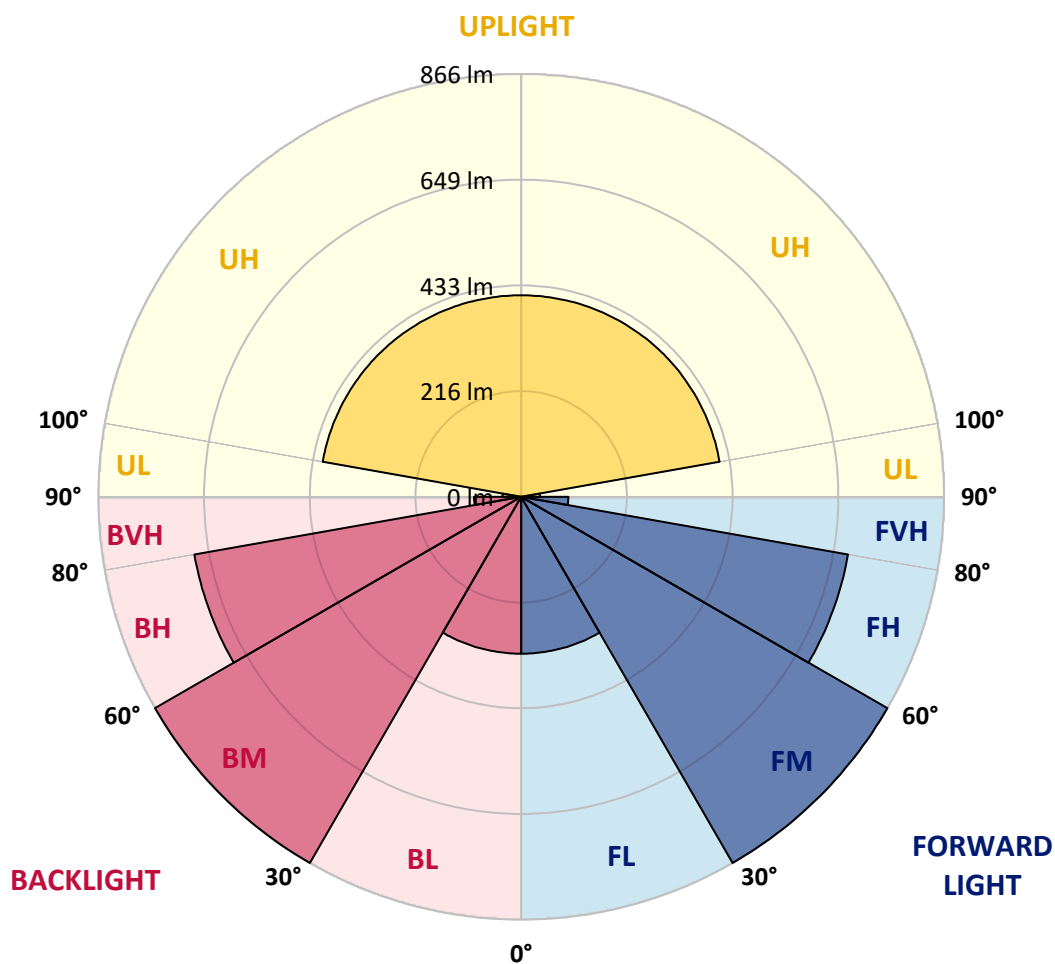
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	321.2	6.8			
FM	(30°-60°)	865.9	18.2			
FH	(60°-80°)	679.6	14.3			G1/1800
FVH	(80°-90°)	96.6	2.0			G1/100
BL	(0°-30°)	321.2	6.8	B1/500		
BM	(30°-60°)	865.9	18.2	B1/1000		
BH	(60°-80°)	679.6	14.3	B2/1000		G1/1800
BVH	(80°-90°)	96.6	2.0			G1/100
UL	(90°-100°)	38.4	0.8		U2/50	
UH	(100°-180°)	412.7	8.7		U3/500	

BUG Rating: B2-U4-G1

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	782.5	782.5	782.5	782.5	782.5	782.5	782.5	782.5	782.5	782.5	782.5
2.5°	783.2	783.2	783.2	783.2	782.5	783.2	782.5	782.5	783.2	783.2	783.2
5°	781.8	781.8	781.8	781.8	781.8	781.8	781.8	781.8	781.8	781.8	781.8
7.5°	779.8	779.8	779.8	779.8	779.8	779.8	779.8	779.8	779.8	779.8	779.8
10°	777.0	777.7	777.7	777.7	777.0	777.0	777.0	777.7	777.7	777.0	777.0
12.5°	774.3	774.3	775.0	774.3	774.3	774.3	774.3	774.3	774.3	774.3	773.6
15°	770.2	770.2	770.8	770.8	770.8	770.8	770.8	770.2	770.2	769.5	769.5
17.5°	766.7	766.7	768.1	768.1	768.8	768.8	768.8	767.4	767.4	766.1	766.1
20°	766.1	766.1	766.7	768.1	768.8	769.5	768.8	767.4	766.1	764.7	764.7
22.5°	761.3	761.9	763.3	764.0	765.4	765.4	765.4	763.3	762.6	761.3	761.3
25°	755.1	754.4	756.5	757.8	759.2	759.2	758.5	757.1	756.5	754.4	754.4
27.5°	745.5	746.2	747.6	749.6	751.7	751.7	751.0	749.6	748.2	746.9	746.2
30°	737.3	738.0	739.3	741.4	742.8	744.8	742.8	741.4	739.3	738.6	738.0
32.5°	728.4	729.1	731.1	734.5	736.6	738.0	736.6	735.2	731.8	729.7	729.1
35°	722.2	722.9	724.9	729.7	733.8	733.8	733.8	730.4	726.3	722.9	722.2
37.5°	722.9	724.3	729.1	735.9	742.8	743.4	742.8	735.9	729.7	724.3	723.6
40°	728.4	729.7	738.0	748.2	757.1	759.9	757.8	748.2	738.6	731.1	729.1
42.5°	727.7	729.7	738.6	751.7	760.6	764.7	760.6	751.7	740.0	731.8	729.1
45°	724.9	726.3	735.9	749.6	760.6	764.7	761.3	751.0	738.0	728.4	726.3
47.5°	720.8	722.2	729.7	746.2	758.5	762.6	759.2	748.2	731.8	724.3	722.9
50°	715.3	719.5	731.8	748.9	765.4	768.1	766.1	750.3	733.2	722.2	716.7
52.5°	720.8	720.1	734.5	765.4	780.4	789.3	782.5	764.0	738.0	723.6	722.2
55°	733.2	738.6	754.4	783.2	807.8	820.2	810.6	785.2	755.8	738.0	734.5
57.5°	732.5	739.3	767.4	796.2	833.9	842.1	831.1	799.6	766.1	742.8	733.8
60°	728.4	731.1	752.3	803.7	825.0	834.6	825.0	800.3	757.8	731.8	731.8
62.5°	714.7	719.5	753.0	788.7	818.8	833.9	822.2	791.4	752.3	724.3	715.3
65°	705.8	709.2	742.1	790.0	833.2	849.6	830.5	790.7	744.1	711.2	706.4
67.5°	677.7	683.8	714.7	766.7	808.5	821.6	814.0	765.4	714.7	684.5	677.0
70°	629.7	633.1	675.6	724.9	763.3	772.2	761.3	729.7	671.5	637.9	627.6
72.5°	570.8	575.6	614.6	669.4	706.4	718.1	705.1	671.5	611.2	581.0	571.5
75°	511.2	516.0	541.3	600.9	631.8	648.2	633.1	596.8	542.7	513.2	509.1
77.5°	425.5	433.0	472.1	511.8	541.3	558.4	545.4	511.8	469.4	434.4	421.4
80°	334.4	339.9	376.2	411.1	437.8	448.8	442.6	411.1	376.9	341.2	335.1
82.5°	234.3	237.8	269.3	297.4	330.3	330.3	323.4	302.9	268.6	237.8	239.1
85°	125.4	129.5	153.5	175.4	196.0	196.0	189.8	176.8	152.8	128.8	126.1
87.5°	25.4	28.1	37.0	40.4	48.0	51.4	46.6	42.5	37.0	29.5	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)