

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: P198340

Luminaire Tested: **TT-C2-LED-E1-RW-SG-MS/DIM-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198340
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P27139) AND DOWNLIGHT
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TT-C2-LED-E1-RW-SG-MS/DIM-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
RECTANGULAR DISTRIBUTION WITH SOFTENING GLASS LENS AND DIMMING OCCUPANCY
SENSOR
Light Source: (168) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4333.8 lumens
Efficiency: N/A
Efficacy: 84.3 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): 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



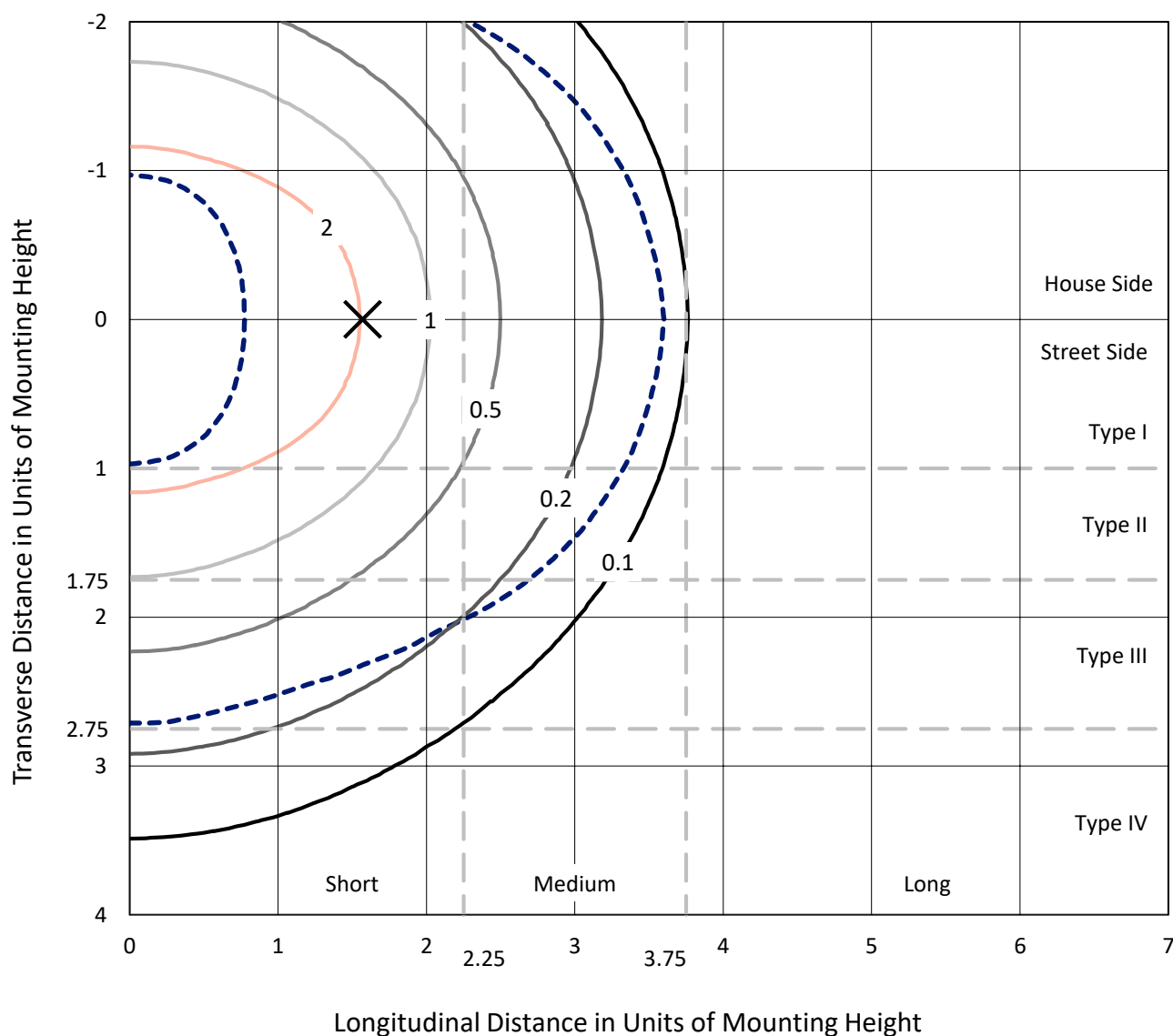
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

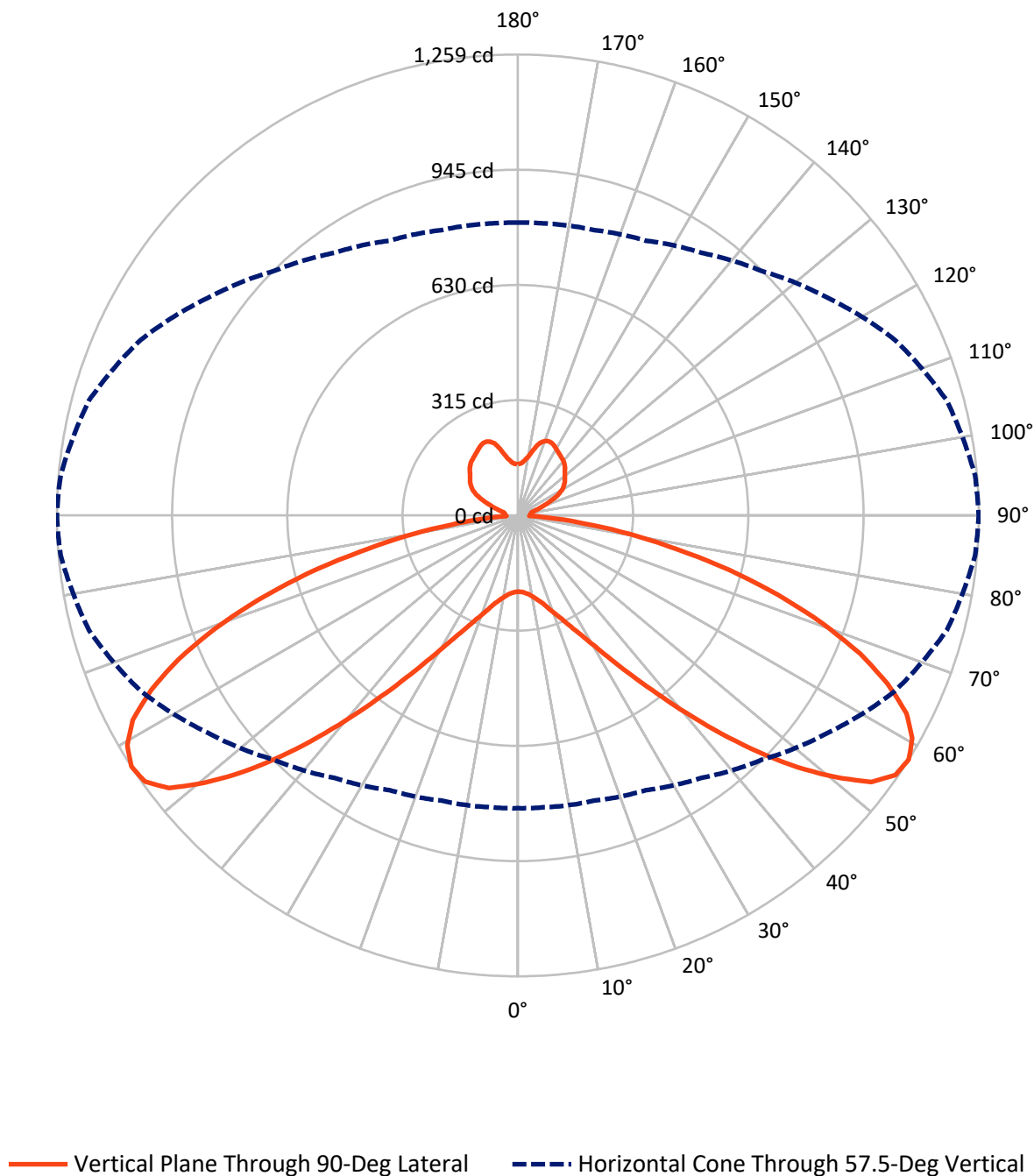


Based on 10 foot mounting height. Maximum calculated value = 3.3 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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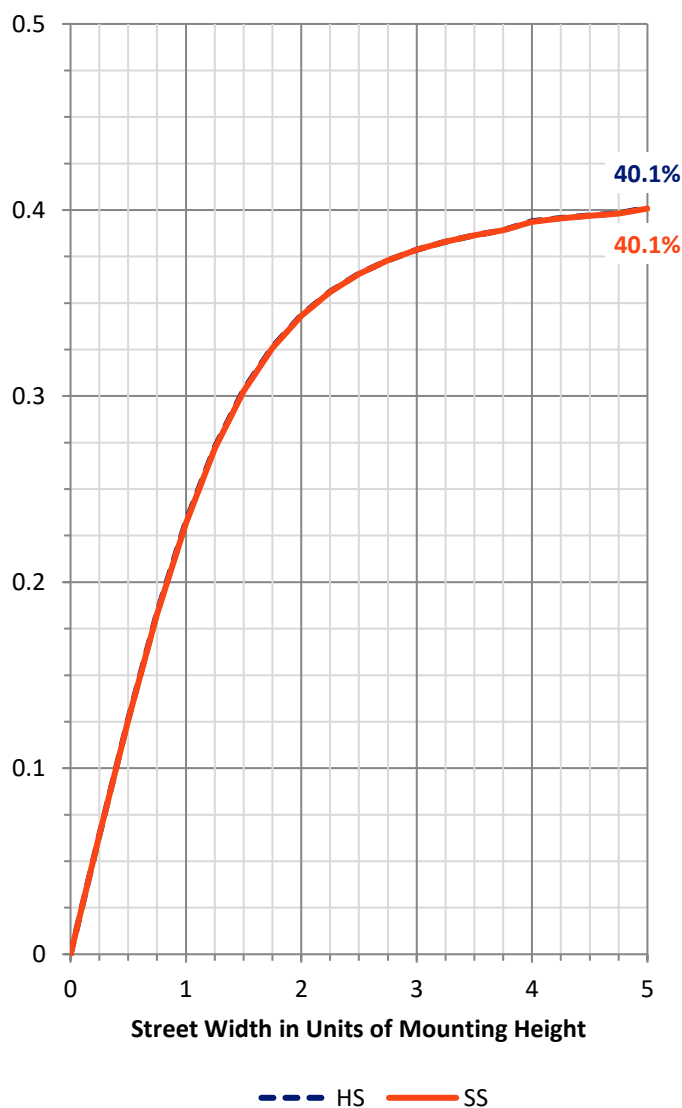
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1754.3	412.7	2166.9
	% Fixture	40.5	9.5	50.0
Street Side	Lumens	1754.3	412.7	2166.9
	% Fixture	40.5	9.5	50.0
Total	Lumens	3508.5	825.3	4333.8
	% Fixture	81.0	19.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.7	0.5
10°-20°	71.6	1.7
20°-30°	156.1	3.6
30°-40°	313.3	7.2
40°-50°	585.1	13.5
50°-60°	861.8	19.9
60°-70°	868.2	20.0
70°-80°	518.2	12.0
80°-90°	113.6	2.6
90°-100°	38.4	0.9
100°-110°	59.5	1.4
110°-120°	119.6	2.8
120°-130°	148.9	3.4
130°-140°	153.3	3.5
140°-150°	136.3	3.1
150°-160°	103.9	2.4
160°-170°	51.8	1.2
170°-180°	13.6	0.3
0°-90°	3508.5	81.0
0°-180°	4333.8	100.0

Coefficient of Utilization



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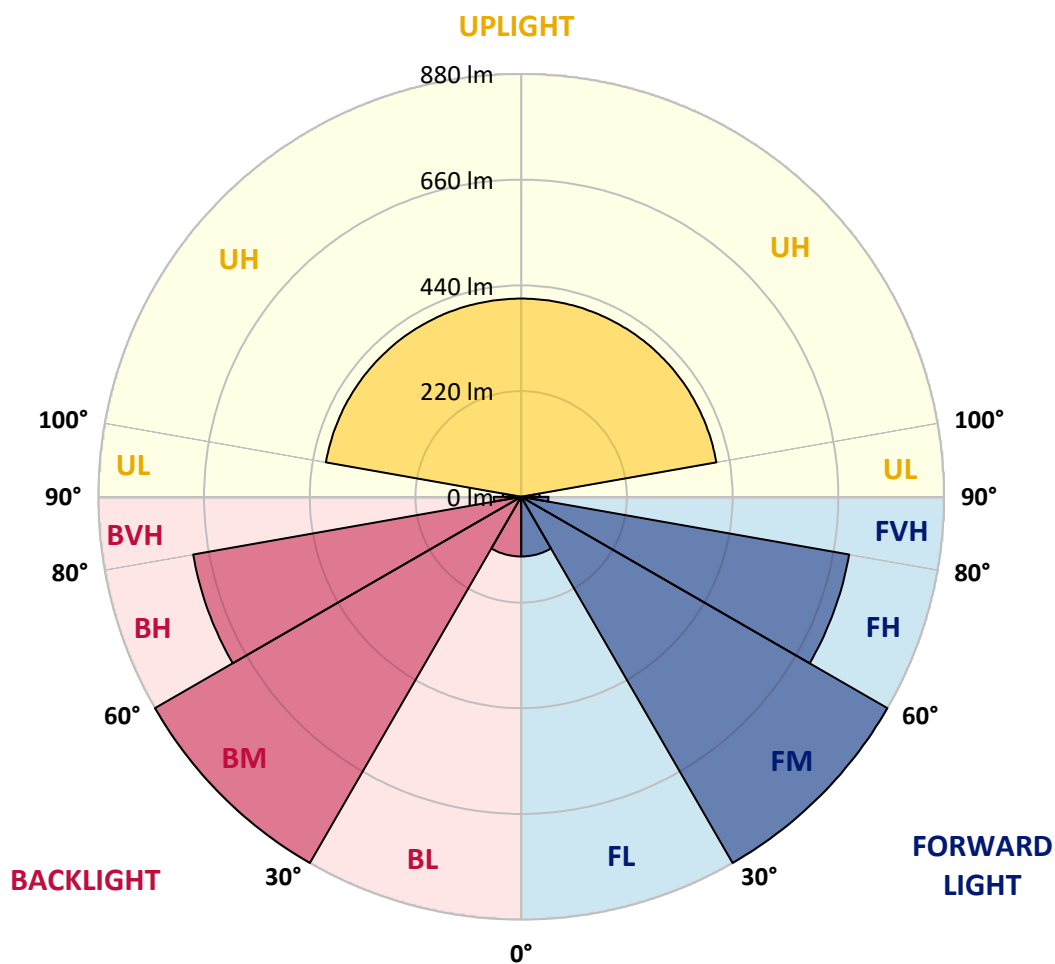
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	124.2	2.9			
FM	(30°-60°)	880.1	20.3			
FH	(60°-80°)	693.2	16.0			G1/1800
FVH	(80°-90°)	56.8	1.3			G1/100
BL	(0°-30°)	124.2	2.9	B1/500		
BM	(30°-60°)	880.1	20.3	B1/1000		
BH	(60°-80°)	693.2	16.0	B2/1000		G2/1000
BVH	(80°-90°)	56.8	1.3			G1/100
UL	(90°-100°)	38.4	0.9		U2/50	
UH	(100°-180°)	412.7	9.5		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°	208.4	208.4	208.4	208.4	208.4	208.4	208.4	208.4	208.4	208.4	208.4
2.5°	209.9	209.9	209.9	209.9	209.9	209.1	209.9	209.1	209.1	209.1	209.1
5°	212.2	212.2	212.2	212.9	212.9	212.9	212.9	212.2	212.9	212.2	212.9
7.5°	217.5	217.5	217.5	217.5	217.5	217.5	218.3	217.5	218.3	217.5	217.5
10°	224.4	224.4	224.4	224.4	225.1	225.1	225.1	225.9	225.9	225.9	225.9
12.5°	234.2	234.2	234.2	234.2	234.2	234.2	235.0	235.0	235.8	235.8	235.8
15°	247.2	247.2	246.4	246.4	246.4	247.2	247.2	248.7	247.9	247.9	247.9
17.5°	263.1	262.4	262.4	262.4	262.4	262.4	262.4	263.9	263.9	263.9	264.7
20°	280.6	282.2	281.4	279.9	279.9	279.9	280.6	282.2	282.2	284.4	285.2
22.5°	305.0	305.7	304.2	303.5	301.2	301.2	303.5	304.2	307.3	306.5	307.3
25°	330.8	330.1	329.3	327.8	327.8	327.8	329.3	331.6	333.9	336.2	336.2
27.5°	359.7	359.0	358.2	357.5	355.9	358.2	359.7	365.1	366.6	371.9	370.4
30°	391.7	392.4	390.9	390.2	389.4	390.2	396.2	403.8	409.9	413.7	414.5
32.5°	427.4	428.2	427.4	425.9	427.4	431.2	438.8	448.7	460.9	467.7	470.0
35°	467.0	468.5	467.0	468.5	470.0	476.9	490.5	505.8	527.1	533.1	536.9
37.5°	509.6	508.0	507.3	509.6	516.4	530.9	549.9	576.5	598.5	616.8	616.8
40°	552.1	552.9	553.7	553.7	566.6	586.4	617.6	653.3	686.0	709.6	710.3
42.5°	597.8	597.8	597.8	604.6	620.6	651.8	692.1	744.6	789.4	811.5	814.5
45°	644.2	647.2	648.7	657.9	681.4	721.0	774.2	837.3	894.4	924.1	922.5
47.5°	689.8	693.6	696.7	710.3	742.3	784.9	851.0	927.1	991.7	1025.2	1028.2
50°	737.0	734.7	740.8	757.5	793.2	848.0	918.7	1006.2	1080.0	1121.0	1124.1
52.5°	768.1	767.4	773.5	791.0	832.8	894.4	975.8	1075.4	1155.3	1197.8	1210.0
55°	790.2	789.4	796.3	816.8	862.4	927.9	1016.1	1121.0	1201.6	1245.8	1251.8
57.5°	800.1	800.8	806.9	828.2	875.4	943.8	1035.1	1136.2	1213.1	1254.1	1259.4
60°	798.6	799.3	804.6	825.2	871.6	937.7	1026.0	1121.0	1194.0	1232.1	1238.2
62.5°	782.6	781.8	786.4	803.9	845.0	906.6	991.0	1080.7	1149.9	1184.9	1191.8
65°	749.1	748.4	748.4	763.6	798.6	851.0	930.9	1010.8	1075.4	1108.9	1110.4
67.5°	694.4	694.4	692.8	702.0	727.8	778.8	847.2	920.2	972.7	1003.9	1008.5
70°	620.6	622.1	616.8	622.1	643.4	683.7	744.6	803.1	844.2	879.9	882.2
72.5°	540.0	533.9	531.6	533.1	549.1	575.0	627.4	676.9	714.9	739.2	743.8
75°	435.8	435.8	434.3	432.0	441.1	467.0	502.0	542.3	574.2	590.9	597.0
77.5°	333.9	336.9	332.4	332.4	339.2	359.0	389.4	411.4	434.3	445.7	442.6
80°	237.3	236.5	234.2	232.7	240.3	251.7	276.1	289.0	295.8	306.5	311.1
82.5°	146.8	148.3	150.6	143.7	146.8	157.4	170.4	177.2	180.2	184.8	184.0
85°	72.3	73.0	73.8	74.5	74.5	78.3	85.9	89.0	91.3	93.5	92.0
87.5°	26.6	25.1	24.3	24.3	24.3	25.1	28.9	28.1	29.7	29.7	31.2
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)