

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: P198327

Luminaire Tested: **TT-C2-LED-E1-RW-CG-LWR-LW-8030-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198327
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-CG-LWR-LW-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
RECTANGULAR 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: 3610.5 lumens
Efficiency: N/A
Efficacy: 70.2 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): 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

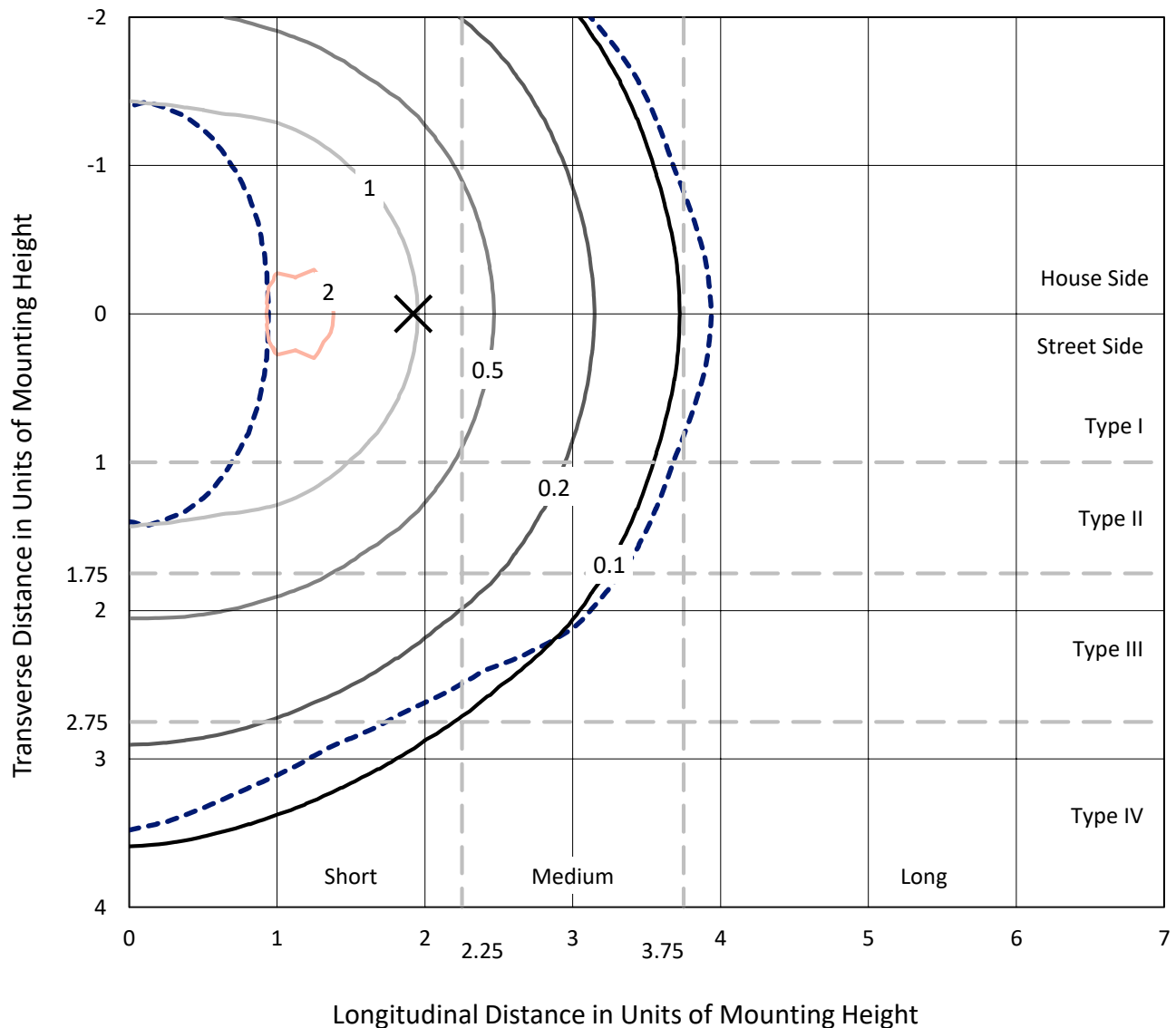


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

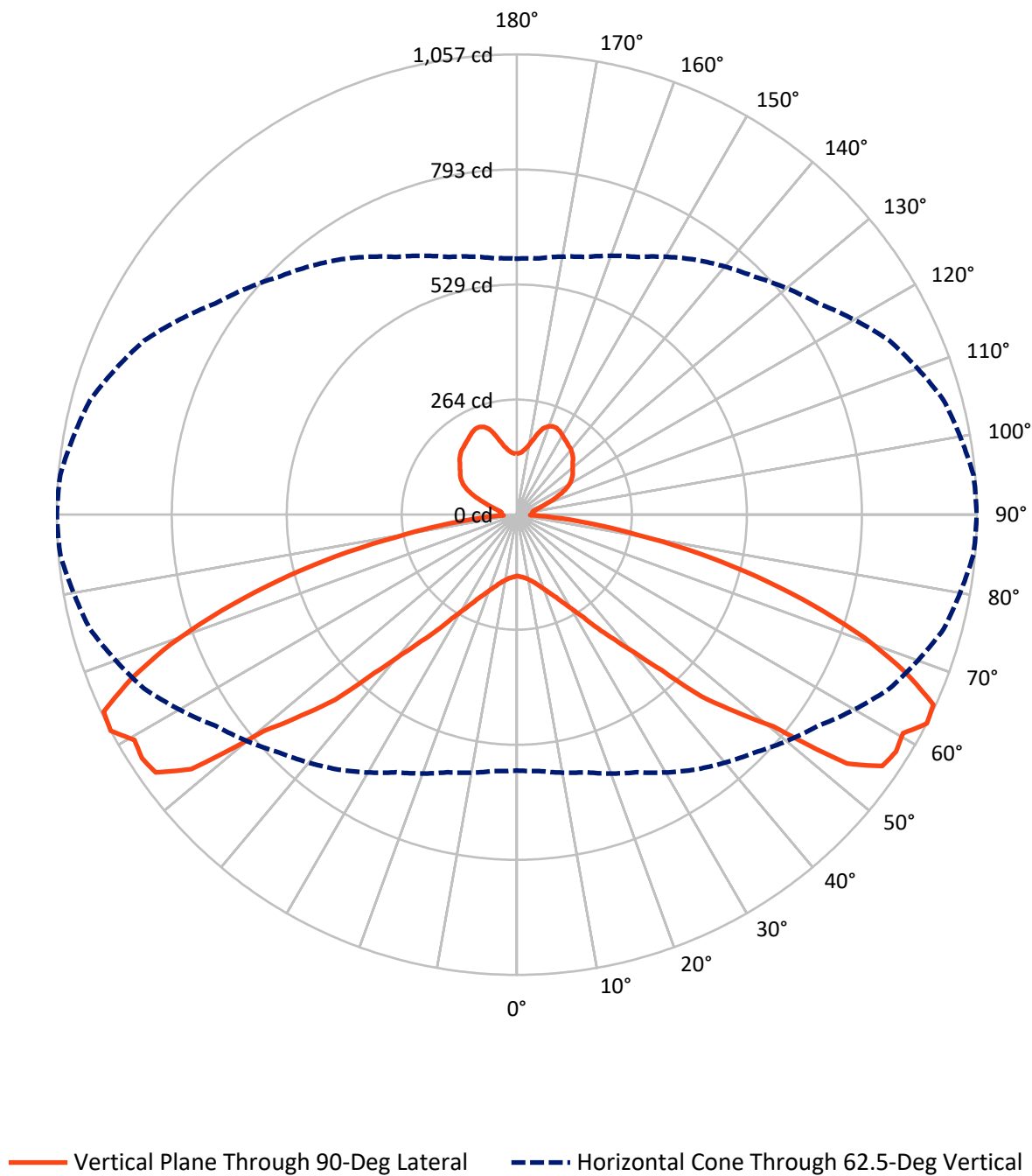


Based on 10 foot mounting height. Maximum calculated value = 2.1 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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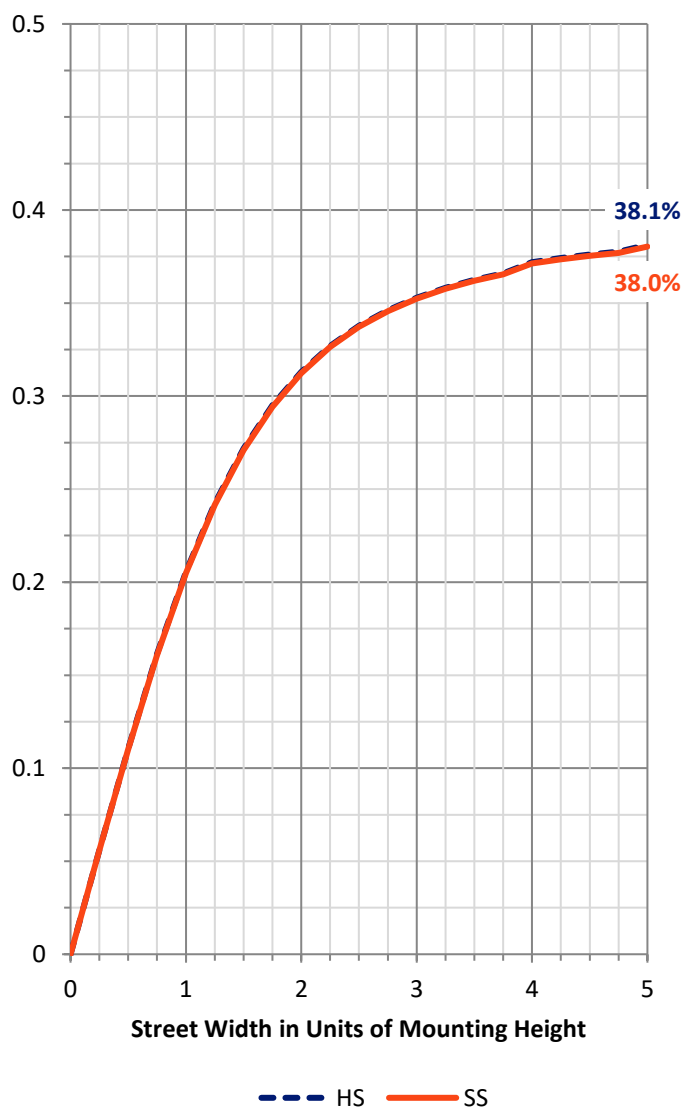
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1392.6	412.7	1805.3
	% Fixture	38.6	11.4	50.0
Street Side	Lumens	1392.6	412.7	1805.3
	% Fixture	38.6	11.4	50.0
Total	Lumens	2785.2	825.3	3610.5
	% Fixture	77.1	22.9	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	14.0	0.4
10°-20°	47.9	1.3
20°-30°	102.3	2.8
30°-40°	198.9	5.5
40°-50°	375.0	10.4
50°-60°	640.8	17.7
60°-70°	771.6	21.4
70°-80°	519.3	14.4
80°-90°	115.5	3.2
90°-100°	38.4	1.1
100°-110°	59.5	1.6
110°-120°	119.6	3.3
120°-130°	148.9	4.1
130°-140°	153.3	4.2
140°-150°	136.3	3.8
150°-160°	103.9	2.9
160°-170°	51.8	1.4
170°-180°	13.6	0.4
0°-90°	2785.2	77.1
0°-180°	3610.5	100.0

Coefficient of Utilization



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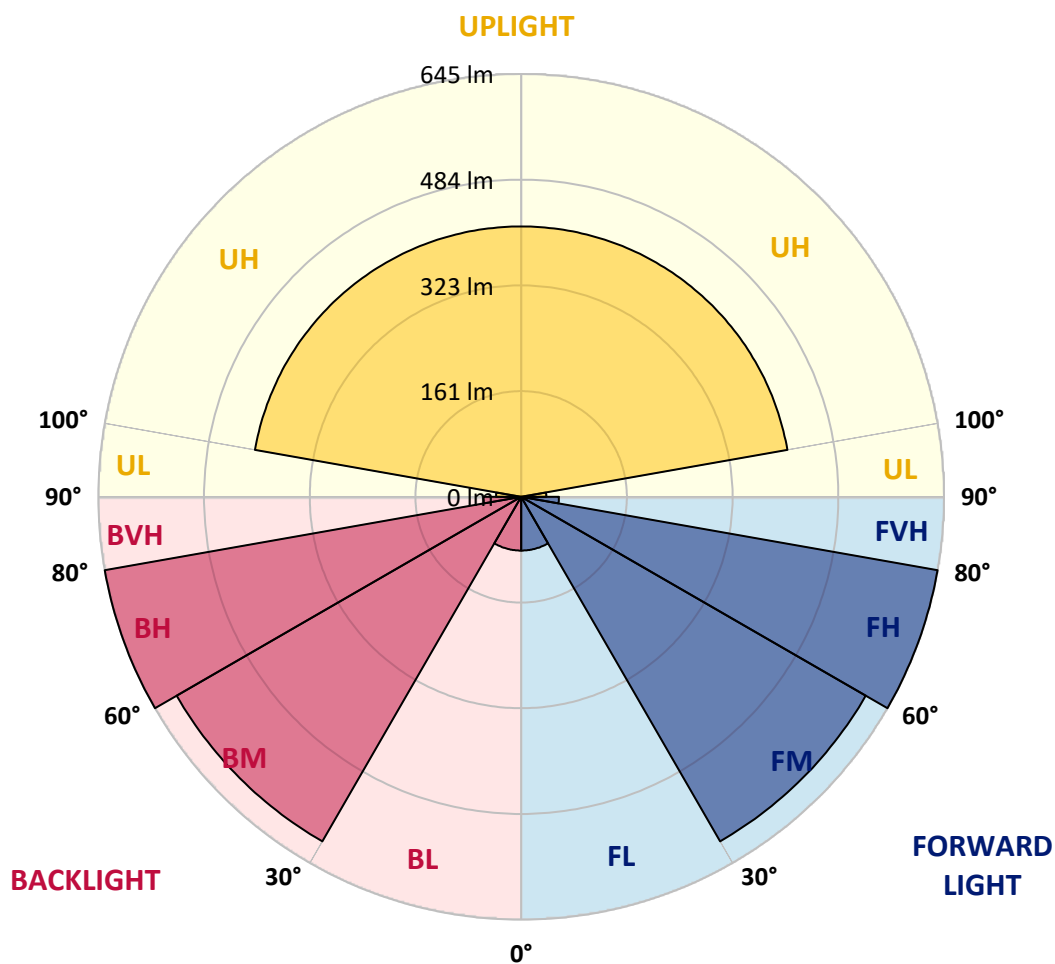
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	82.1	2.3			
FM	(30°-60°)	607.3	16.8			
FH	(60°-80°)	645.5	17.9			G0/660
FVH	(80°-90°)	57.7	1.6			G1/100
BL	(0°-30°)	82.1	2.3	B0/110		
BM	(30°-60°)	607.3	16.8	B1/1000		
BH	(60°-80°)	645.5	17.9	B2/1000		G2/1000
BVH	(80°-90°)	57.7	1.6			G1/100
UL	(90°-100°)	38.4	1.1		U2/50	
UH	(100°-180°)	412.7	11.4		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°	140.6	140.6	140.6	140.6	140.6	140.6	140.6	140.6	140.6	140.6	140.6
2.5°	141.9	141.9	141.9	141.9	141.9	141.9	142.6	142.6	142.6	142.6	142.6
5°	143.9	143.9	144.5	144.5	145.2	145.2	145.2	145.2	144.5	144.5	144.5
7.5°	147.1	147.1	147.8	148.4	148.4	147.8	147.8	147.1	147.1	147.1	147.1
10°	152.3	152.3	153.0	153.0	152.3	152.3	152.3	151.7	151.7	151.7	151.7
12.5°	158.2	158.8	159.5	158.8	158.2	157.5	157.5	156.9	156.9	156.9	156.9
15°	166.6	167.9	167.3	167.3	166.6	165.3	164.7	164.0	164.0	164.0	164.0
17.5°	179.7	179.7	177.7	176.4	175.1	174.4	173.8	173.1	173.1	173.1	173.1
20°	193.3	192.7	190.7	188.8	186.8	186.2	184.2	183.6	184.2	183.6	183.6
22.5°	209.6	208.9	206.3	204.4	201.8	199.2	198.5	196.6	195.9	195.3	195.9
25°	225.9	226.5	224.6	222.6	218.7	216.1	213.5	212.2	210.9	210.3	210.3
27.5°	244.8	246.1	244.8	240.8	236.9	235.0	231.1	229.8	229.1	229.8	229.8
30°	264.9	265.6	263.6	261.7	257.8	253.2	250.6	251.3	251.3	253.2	252.6
32.5°	289.7	289.0	286.4	285.1	281.2	277.3	276.0	276.6	279.2	280.6	280.6
35°	317.0	315.1	312.4	309.8	306.6	304.0	304.6	309.8	317.7	319.6	320.9
37.5°	344.3	341.1	341.1	337.2	334.6	336.5	340.4	350.2	356.1	365.2	363.2
40°	369.7	370.4	369.1	365.8	365.2	371.7	380.1	392.5	407.5	416.6	415.9
42.5°	393.2	399.0	395.1	395.8	399.0	409.4	423.1	447.2	477.1	488.8	488.8
45°	419.2	426.4	423.1	425.1	434.2	450.4	479.7	527.3	568.3	596.3	596.3
47.5°	445.9	452.4	451.1	455.0	471.3	499.9	544.8	604.1	645.1	672.4	676.3
50°	479.7	477.1	477.8	487.5	515.5	557.2	614.5	673.1	740.8	757.0	764.8
52.5°	509.0	501.2	505.8	522.0	562.4	611.2	682.2	785.7	879.4	944.5	949.7
55°	533.1	527.3	536.4	559.1	611.2	675.7	768.1	895.0	972.5	1012.2	1019.4
57.5°	553.9	551.3	566.3	595.6	662.0	740.8	834.5	937.3	991.4	1022.0	1027.2
60°	572.8	574.8	591.0	630.1	701.7	774.0	849.5	936.0	990.1	1014.2	1019.4
62.5°	587.8	591.0	612.5	652.9	714.7	772.7	845.6	945.2	1015.5	1053.2	1057.1
65°	597.6	600.8	624.9	652.9	710.8	766.8	869.6	954.3	1006.3	1044.7	1051.9
67.5°	598.9	603.4	617.7	641.2	690.0	739.5	828.0	889.2	930.8	954.3	960.8
70°	591.0	589.7	595.0	604.7	634.0	667.9	742.7	788.3	818.2	842.3	848.2
72.5°	561.1	559.1	546.8	535.7	546.8	573.5	637.9	668.5	688.7	708.2	712.1
75°	503.8	494.7	464.1	448.5	445.2	468.7	518.1	537.7	545.5	567.6	570.2
77.5°	402.9	399.0	373.0	345.6	343.0	357.4	395.1	403.6	397.1	421.2	428.3
80°	294.2	289.0	264.3	244.1	238.9	248.7	270.8	272.7	268.2	279.9	279.9
82.5°	188.1	182.9	172.5	157.5	146.5	152.3	169.2	169.2	169.2	172.5	174.4
85°	97.0	95.0	87.2	80.1	76.2	77.5	83.3	84.0	87.2	89.2	86.6
87.5°	27.3	28.6	27.3	24.1	23.4	22.8	25.4	26.0	28.0	29.3	30.6
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)