

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: P198457

Luminaire Tested: **TT-C4-LED-E1-RW-SG-LWR-LW-8030-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198457
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-C4-LED-E1-RW-SG-LWR-LW-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
RECTANGULAR DISTRIBUTION WITH SOFTENING GLASS LENS AND LumaWatt WIRELESS
SENSOR
Light Source: (160) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

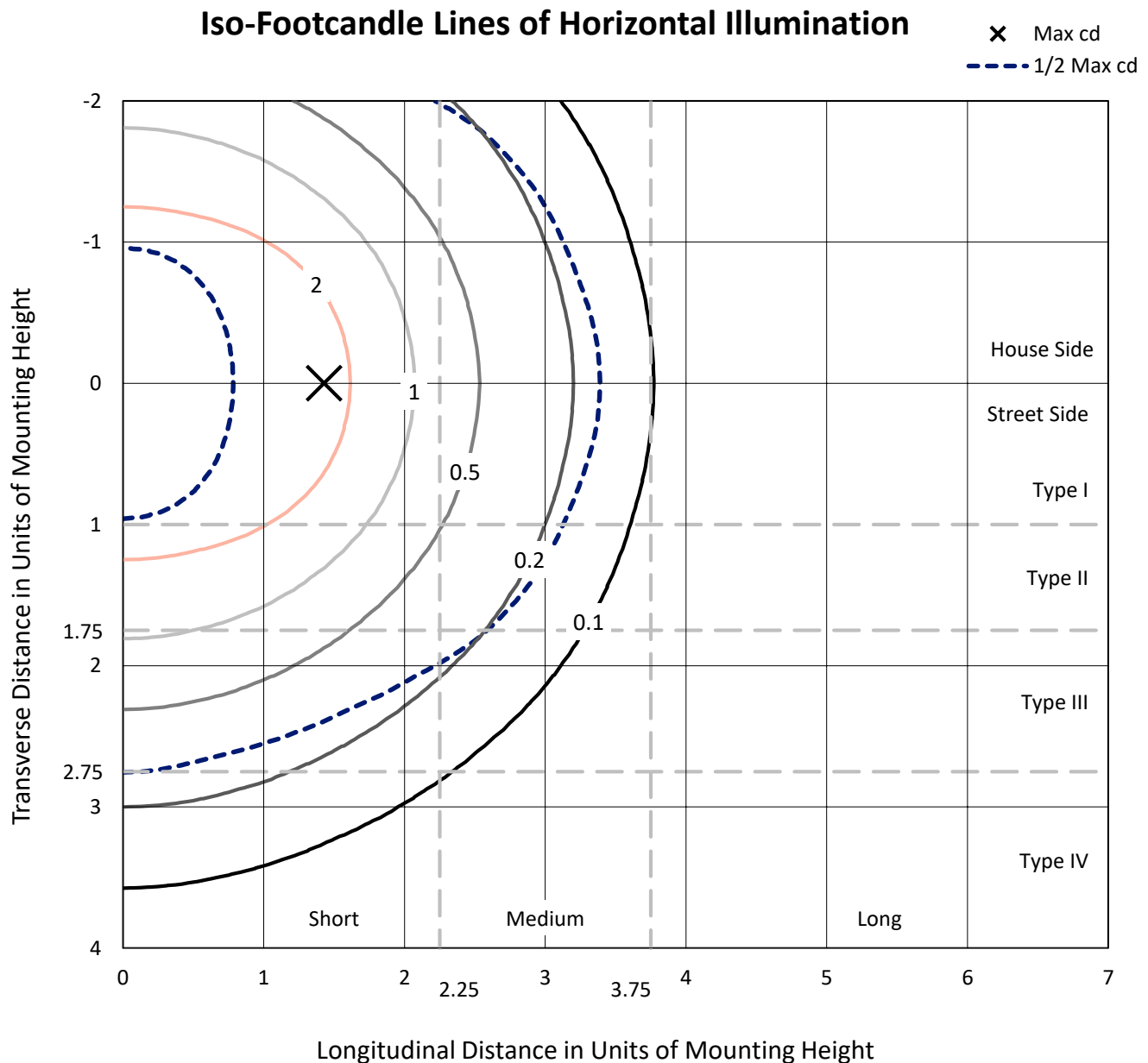
Lumens per Lamp: N/A
Luminaire Lumens: 4694.8 lumens
Efficiency: N/A
Efficacy: 62.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B2 - U4 - G2

Input Watts (W): 75.4
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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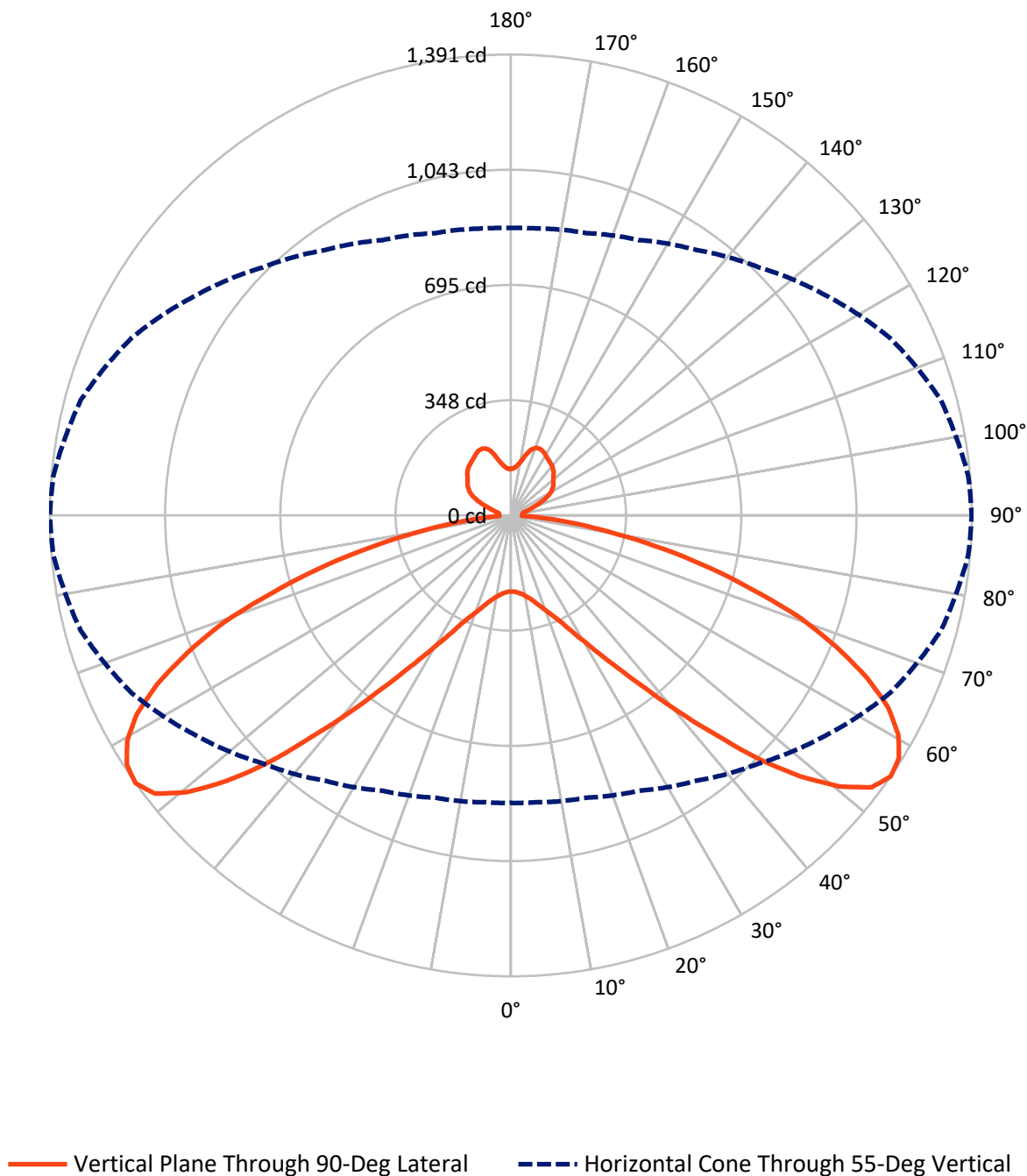


Based on 10 foot mounting height. Maximum calculated value = 3.7 fc
Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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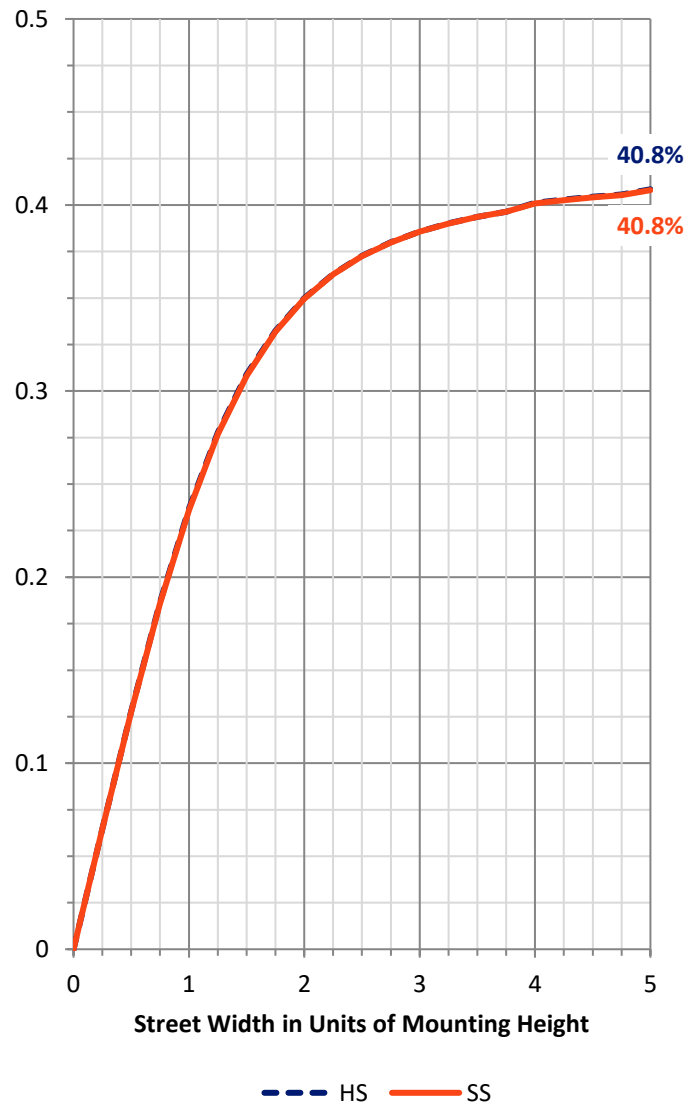
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1934.8	412.7	2347.4
	% Fixture	41.2	8.8	50.0
Street Side	Lumens	1934.8	412.7	2347.4
	% Fixture	41.2	8.8	50.0
Total	Lumens	3869.5	825.3	4694.8
	% Fixture	82.4	17.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.8	0.5
10°-20°	78.9	1.7
20°-30°	172.4	3.7
30°-40°	346.6	7.4
40°-50°	655.0	14.0
50°-60°	966.2	20.6
60°-70°	951.7	20.3
70°-80°	554.2	11.8
80°-90°	121.7	2.6
90°-100°	38.4	0.8
100°-110°	59.5	1.3
110°-120°	119.6	2.5
120°-130°	148.9	3.2
130°-140°	153.3	3.3
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°	3869.5	82.4
0°-180°	4694.8	100.0

Coefficient of Utilization



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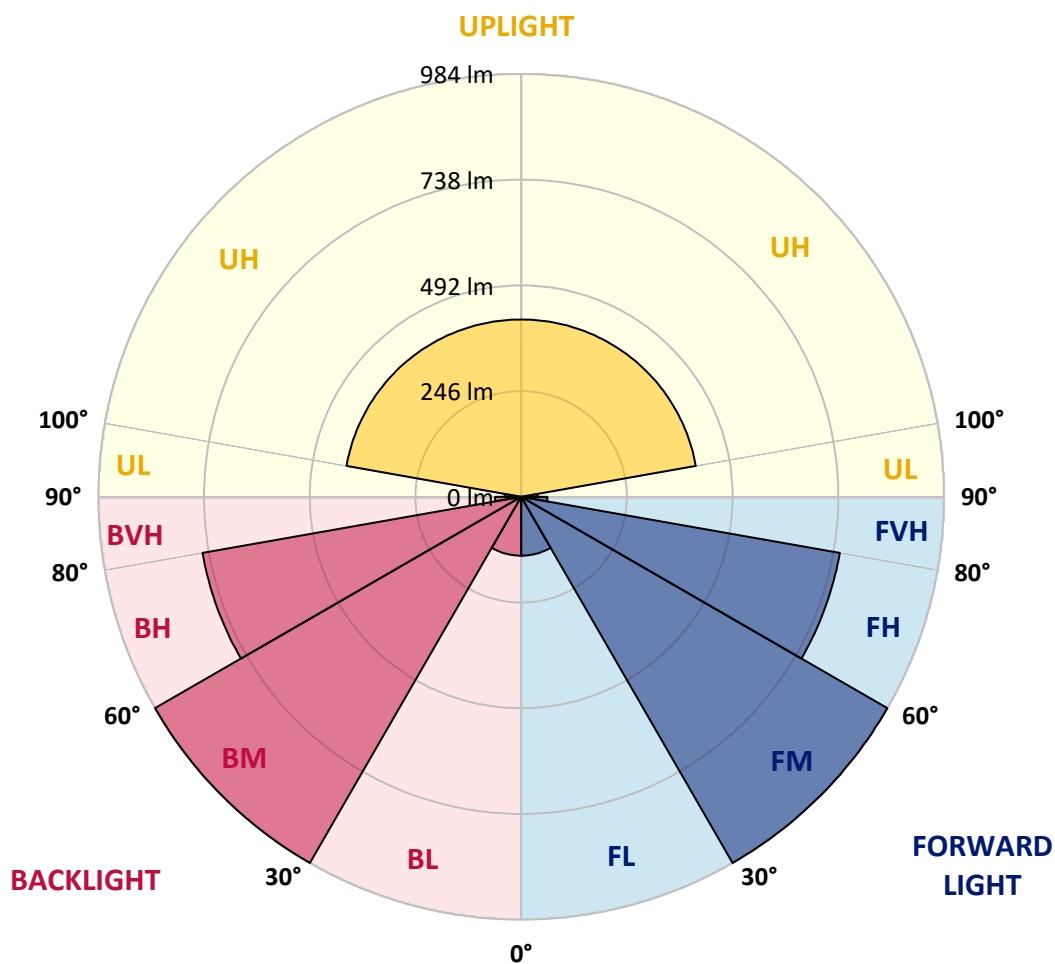
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	137.0	2.9			
FM	(30°-60°)	983.9	21.0			
FH	(60°-80°)	752.9	16.0			G1/1800
FVH	(80°-90°)	60.9	1.3			G1/100
BL	(0°-30°)	137.0	2.9	B1/500		
BM	(30°-60°)	983.9	21.0	B1/1000		
BH	(60°-80°)	752.9	16.0	B2/1000		G2/1000
BVH	(80°-90°)	60.9	1.3			G1/100
UL	(90°-100°)	38.4	0.8		U2/50	
UH	(100°-180°)	412.7	8.8		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°	229.6	229.6	229.6	229.6	229.6	229.6	229.6	229.6	229.6	229.6	229.6
2.5°	231.4	231.4	231.4	231.4	230.5	231.4	230.5	230.5	230.5	230.5	230.5
5°	234.0	234.9	234.0	234.0	234.0	234.0	234.0	234.0	233.1	233.1	234.0
7.5°	240.3	240.3	240.3	240.3	239.4	240.3	239.4	239.4	239.4	239.4	239.4
10°	249.2	249.2	249.2	249.2	248.3	248.3	248.3	247.4	247.4	247.4	247.4
12.5°	259.9	260.8	260.8	259.9	259.0	259.0	258.2	258.2	258.2	258.2	257.3
15°	276.0	275.1	275.1	273.3	273.3	271.6	272.4	271.6	270.7	269.8	270.7
17.5°	292.1	293.0	293.0	291.2	290.3	289.4	287.6	287.6	286.7	287.6	287.6
20°	317.1	317.1	315.3	313.5	310.9	310.0	308.2	308.2	306.4	308.2	308.2
22.5°	342.1	342.1	340.3	339.4	335.9	333.2	332.3	331.4	330.5	332.3	330.5
25°	373.4	373.4	371.6	368.0	364.4	363.6	360.9	360.9	361.8	362.7	359.1
27.5°	405.5	406.4	404.6	402.0	398.4	394.8	394.8	395.7	396.6	400.2	399.3
30°	444.8	443.9	441.3	437.7	435.9	433.2	434.1	437.7	441.3	444.8	444.8
32.5°	485.0	484.1	483.3	479.7	478.8	477.9	482.4	489.5	496.7	499.3	503.8
35°	527.9	527.9	527.0	524.3	526.1	530.6	537.7	551.1	561.9	574.4	574.4
37.5°	575.3	573.5	574.4	574.4	578.8	586.9	603.8	629.7	652.1	664.6	664.6
40°	624.4	621.7	622.6	627.1	635.1	654.8	684.2	720.0	755.7	771.8	777.1
42.5°	671.7	669.0	672.6	677.1	696.7	727.1	770.9	825.4	876.3	901.3	900.4
45°	715.5	717.3	721.8	732.5	761.1	805.7	868.2	941.5	1007.6	1037.1	1047.8
47.5°	759.3	760.2	766.4	785.2	825.4	881.6	957.6	1054.9	1128.2	1163.0	1176.4
50°	800.4	802.1	812.9	839.7	887.0	954.9	1048.7	1152.3	1232.7	1273.8	1285.4
52.5°	837.0	838.8	851.3	884.3	940.6	1019.2	1117.5	1223.8	1308.6	1356.0	1363.1
55°	867.4	869.1	881.6	916.5	977.2	1058.5	1158.6	1264.0	1343.5	1385.4	1390.8
57.5°	885.2	886.1	899.5	935.2	995.1	1071.0	1167.5	1269.3	1339.0	1376.5	1381.0
60°	886.1	887.9	900.4	932.6	987.9	1057.6	1149.6	1240.7	1304.2	1338.1	1343.5
62.5°	870.0	870.9	881.6	906.7	954.0	1014.7	1099.6	1181.8	1238.9	1272.0	1278.3
65°	833.4	833.4	838.8	857.5	894.2	946.0	1018.3	1094.2	1146.9	1177.3	1180.9
67.5°	772.7	772.7	773.6	786.1	811.1	852.2	913.8	977.2	1024.6	1054.9	1059.4
70°	695.0	694.1	686.9	695.0	711.0	745.9	800.4	848.6	887.0	911.1	927.2
72.5°	596.7	593.1	587.8	586.0	602.1	632.4	677.1	710.1	731.6	757.5	759.3
75°	482.4	480.6	473.4	473.4	489.5	513.6	549.4	571.7	582.4	599.4	602.9
77.5°	360.0	359.1	361.8	362.7	371.6	397.5	418.0	434.1	431.4	442.2	445.7
80°	251.9	253.7	253.7	252.8	261.7	271.6	293.9	298.3	294.8	298.3	298.3
82.5°	159.9	159.0	157.2	159.9	167.0	175.1	184.0	184.9	187.6	184.9	186.7
85°	80.4	79.5	81.3	82.2	85.8	90.2	98.3	100.0	95.6	95.6	93.8
87.5°	27.7	29.5	27.7	28.6	28.6	33.1	32.2	32.2	32.2	32.2	33.9
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)