

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: P198447

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198447
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-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: (160) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4645.7 lumens
Efficiency: N/A
Efficacy: 61.6 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): 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

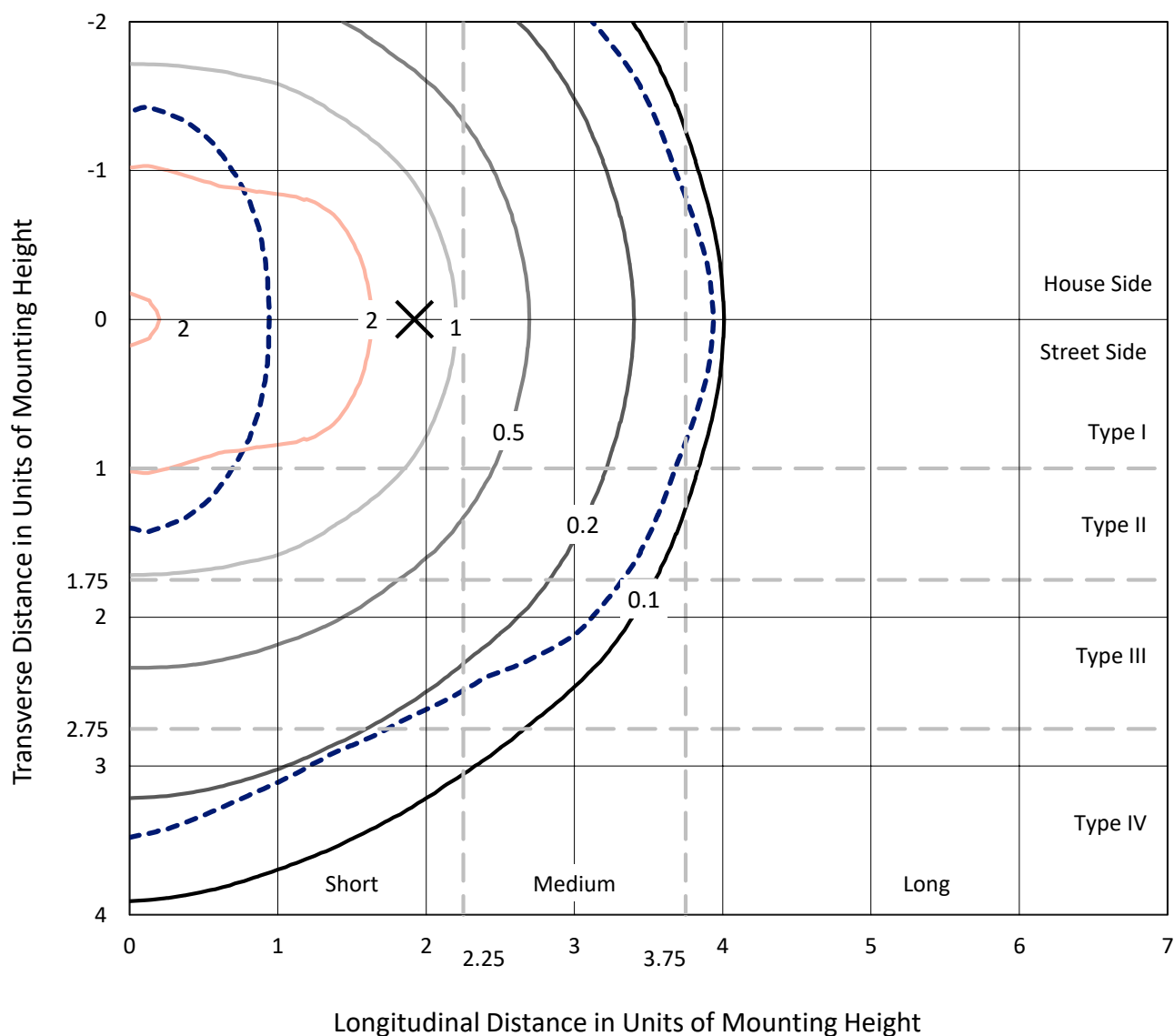


REPORT NUMBER: P198447

CATALOG NUMBER: TT-C4-LED-E1-RW-CG-LWR-LW-8030-UPL

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

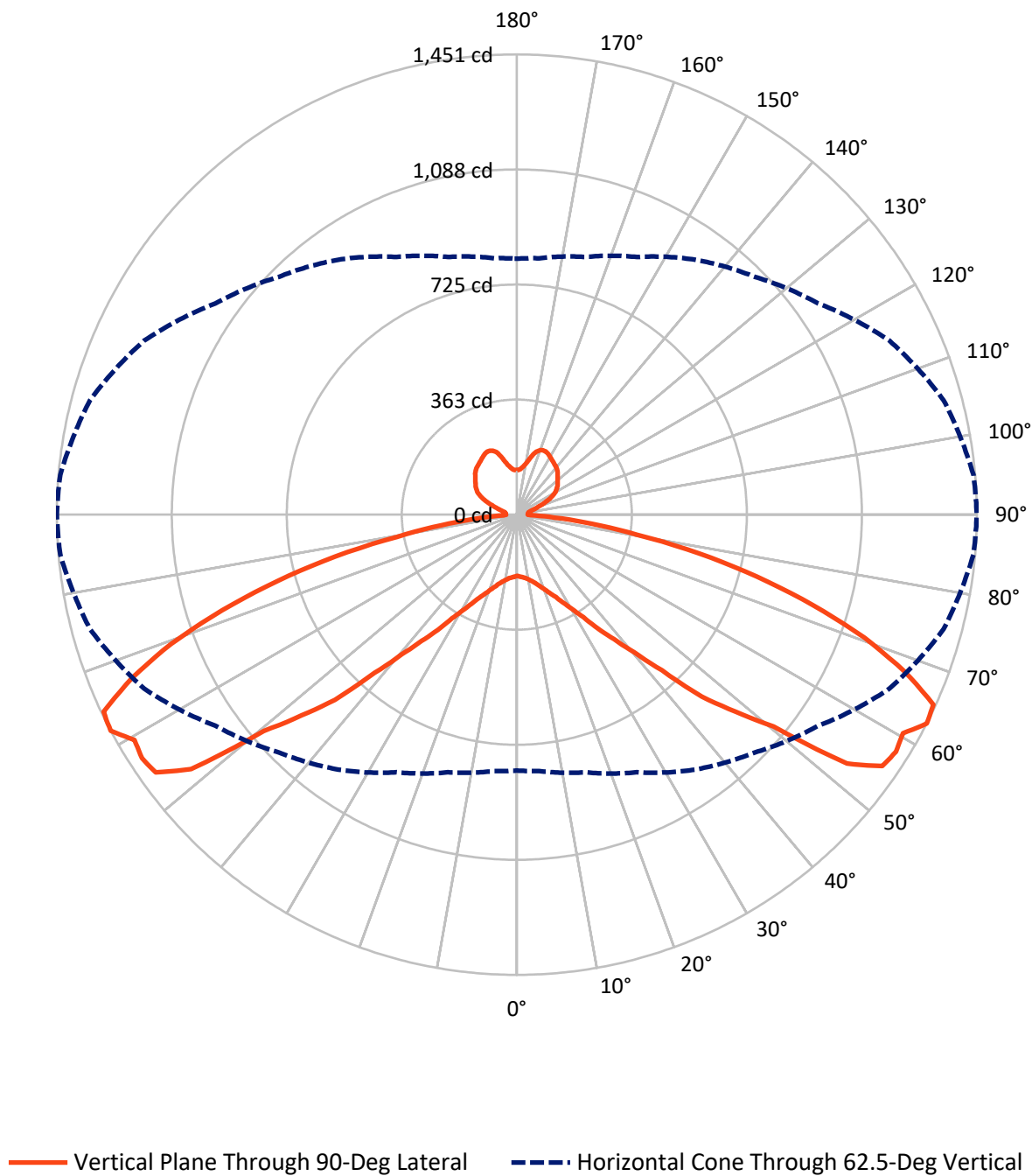


Based on 10 foot mounting height. Maximum calculated value = 2.9 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P198447

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Luminous Intensity Polar Plot



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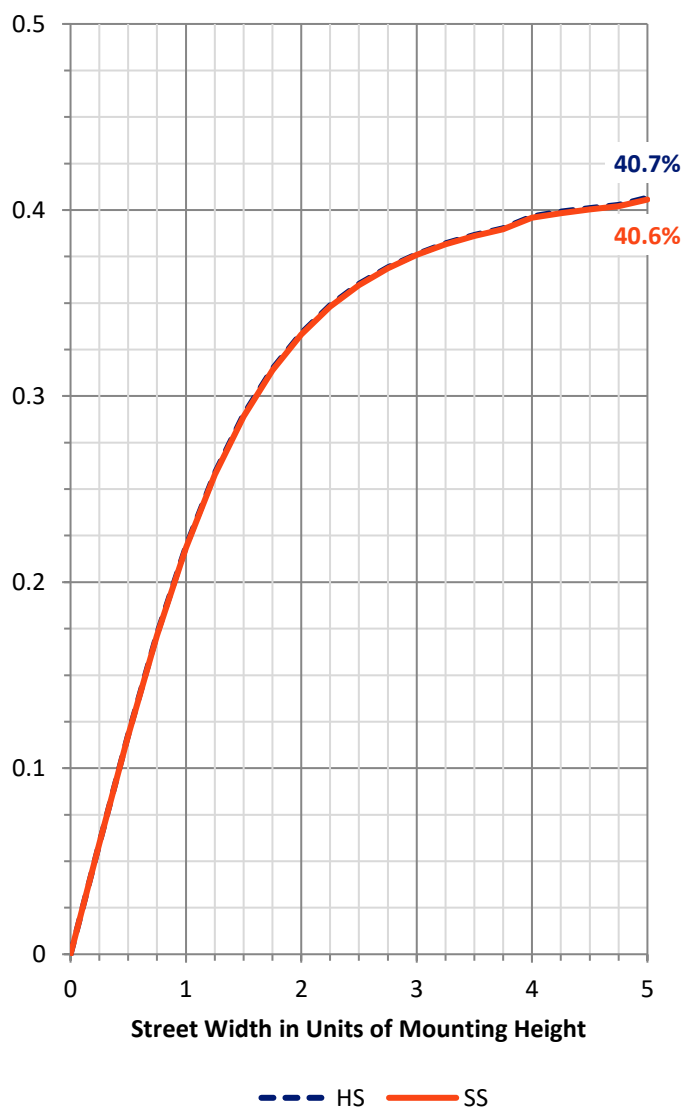
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1910.2	412.7	2322.9
	% Fixture	41.1	8.9	50.0
Street Side	Lumens	1910.2	412.7	2322.9
	% Fixture	41.1	8.9	50.0
Total	Lumens	3820.4	825.3	4645.7
	% Fixture	82.2	17.8	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.3	0.4
10°-20°	65.7	1.4
20°-30°	140.3	3.0
30°-40°	272.9	5.9
40°-50°	514.6	11.1
50°-60°	879.3	18.9
60°-70°	1058.9	22.8
70°-80°	712.6	15.3
80°-90°	156.8	3.4
90°-100°	38.4	0.8
100°-110°	59.5	1.3
110°-120°	119.6	2.6
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°	3820.4	82.2
0°-180°	4645.7	100.0

Coefficient of Utilization



REPORT NUMBER: P198447

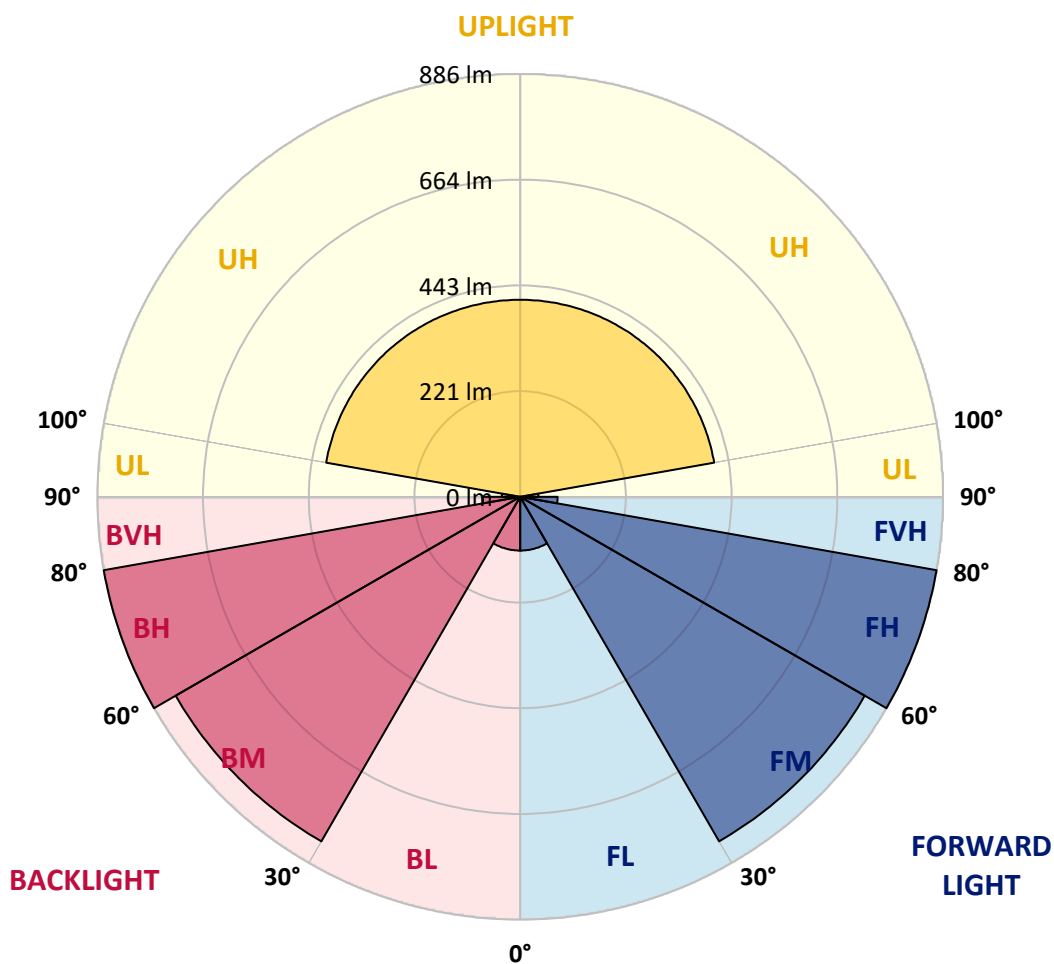
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	112.6	2.4			
FM	(30°-60°)	833.4	17.9			
FH	(60°-80°)	885.7	19.1			G1/1800
FVH	(80°-90°)	78.4	1.7			G1/100
BL	(0°-30°)	112.6	2.4	B1/500		
BM	(30°-60°)	833.4	17.9	B1/1000		
BH	(60°-80°)	885.7	19.1	B2/1000		G2/1000
BVH	(80°-90°)	78.4	1.7			G1/100
UL	(90°-100°)	38.4	0.8		U2/50	
UH	(100°-180°)	412.7	8.9		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°	192.9	192.9	192.9	192.9	192.9	192.9	192.9	192.9	192.9	192.9	192.9
2.5°	194.7	194.7	194.7	194.7	194.7	194.7	195.6	195.6	195.6	195.6	195.6
5°	197.4	197.4	198.3	198.3	199.2	199.2	199.2	199.2	198.3	198.3	198.3
7.5°	201.9	201.9	202.8	203.7	203.7	202.8	202.8	201.9	201.9	201.9	201.9
10°	209.0	209.0	209.9	209.9	209.0	209.0	209.0	208.1	208.1	208.1	208.1
12.5°	217.1	218.0	218.8	218.0	217.1	216.2	216.2	215.3	215.3	215.3	215.3
15°	228.7	230.5	229.6	229.6	228.7	226.9	226.0	225.1	225.1	225.1	225.1
17.5°	246.5	246.5	243.9	242.1	240.3	239.4	238.5	237.6	237.6	237.6	237.6
20°	265.3	264.4	261.7	259.0	256.4	255.5	252.8	251.9	252.8	251.9	251.9
22.5°	287.6	286.7	283.2	280.5	276.9	273.3	272.4	269.8	268.9	268.0	268.9
25°	310.0	310.9	308.2	305.5	300.1	296.6	293.0	291.2	289.4	288.5	288.5
27.5°	335.9	337.7	335.9	330.5	325.1	322.5	317.1	315.3	314.4	315.3	315.3
30°	363.6	364.4	361.8	359.1	353.7	347.5	343.9	344.8	344.8	347.5	346.6
32.5°	397.5	396.6	393.0	391.2	385.9	380.5	378.7	379.6	383.2	385.0	385.0
35°	435.0	432.3	428.8	425.2	420.7	417.2	418.0	425.2	435.9	438.6	440.4
37.5°	472.5	468.1	468.1	462.7	459.1	461.8	467.2	480.6	488.6	501.1	498.4
40°	507.4	508.3	506.5	502.0	501.1	510.0	521.7	538.6	559.2	571.7	570.8
42.5°	539.5	547.6	542.2	543.1	547.6	561.9	580.6	613.7	654.8	670.8	670.8
45°	575.3	585.1	580.6	583.3	595.8	618.1	658.3	723.5	779.8	818.2	818.2
47.5°	611.9	620.8	619.0	624.4	646.7	686.0	747.7	828.9	885.2	922.7	928.1
50°	658.3	654.8	655.7	669.0	707.5	764.6	843.2	923.6	1016.5	1038.9	1049.6
52.5°	698.5	687.8	694.1	716.4	771.8	838.8	936.1	1078.2	1206.8	1296.1	1303.3
55°	731.6	723.5	736.0	767.3	838.8	927.2	1054.0	1228.2	1334.5	1389.0	1398.8
57.5°	760.2	756.6	777.1	817.3	908.4	1016.5	1145.2	1286.3	1360.4	1402.4	1409.6
60°	786.1	788.7	811.1	864.7	962.9	1062.1	1165.7	1284.5	1358.6	1391.7	1398.8
62.5°	806.6	811.1	840.6	895.9	980.8	1060.3	1160.3	1297.0	1393.5	1445.3	1450.6
65°	820.0	824.5	857.5	895.9	975.4	1052.3	1193.4	1309.5	1381.0	1433.7	1443.5
67.5°	821.8	828.0	847.7	879.9	946.9	1014.7	1136.2	1220.2	1277.4	1309.5	1318.4
70°	811.1	809.3	816.4	829.8	870.0	916.5	1019.2	1081.7	1122.8	1155.9	1163.9
72.5°	770.0	767.3	750.3	735.2	750.3	787.0	875.4	917.4	945.1	971.9	977.2
75°	691.4	678.9	636.9	615.5	611.0	643.1	711.0	737.8	748.5	778.9	782.5
77.5°	552.9	547.6	511.8	474.3	470.7	490.4	542.2	553.8	544.9	577.9	587.8
80°	403.8	396.6	362.7	335.0	327.8	341.2	371.6	374.3	368.0	384.1	384.1
82.5°	258.2	251.0	236.7	216.2	201.0	209.0	232.2	232.2	232.2	236.7	239.4
85°	133.1	130.4	119.7	109.9	104.5	106.3	114.3	115.2	119.7	122.4	118.8
87.5°	37.5	39.3	37.5	33.1	32.2	31.3	34.8	35.7	38.4	40.2	42.0
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)