

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: P198337

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198337
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-LWR-LW-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
RECTANGULAR DISTRIBUTION WITH SOFTENING 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: 3646.3 lumens
Efficiency: N/A
Efficacy: 70.9 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



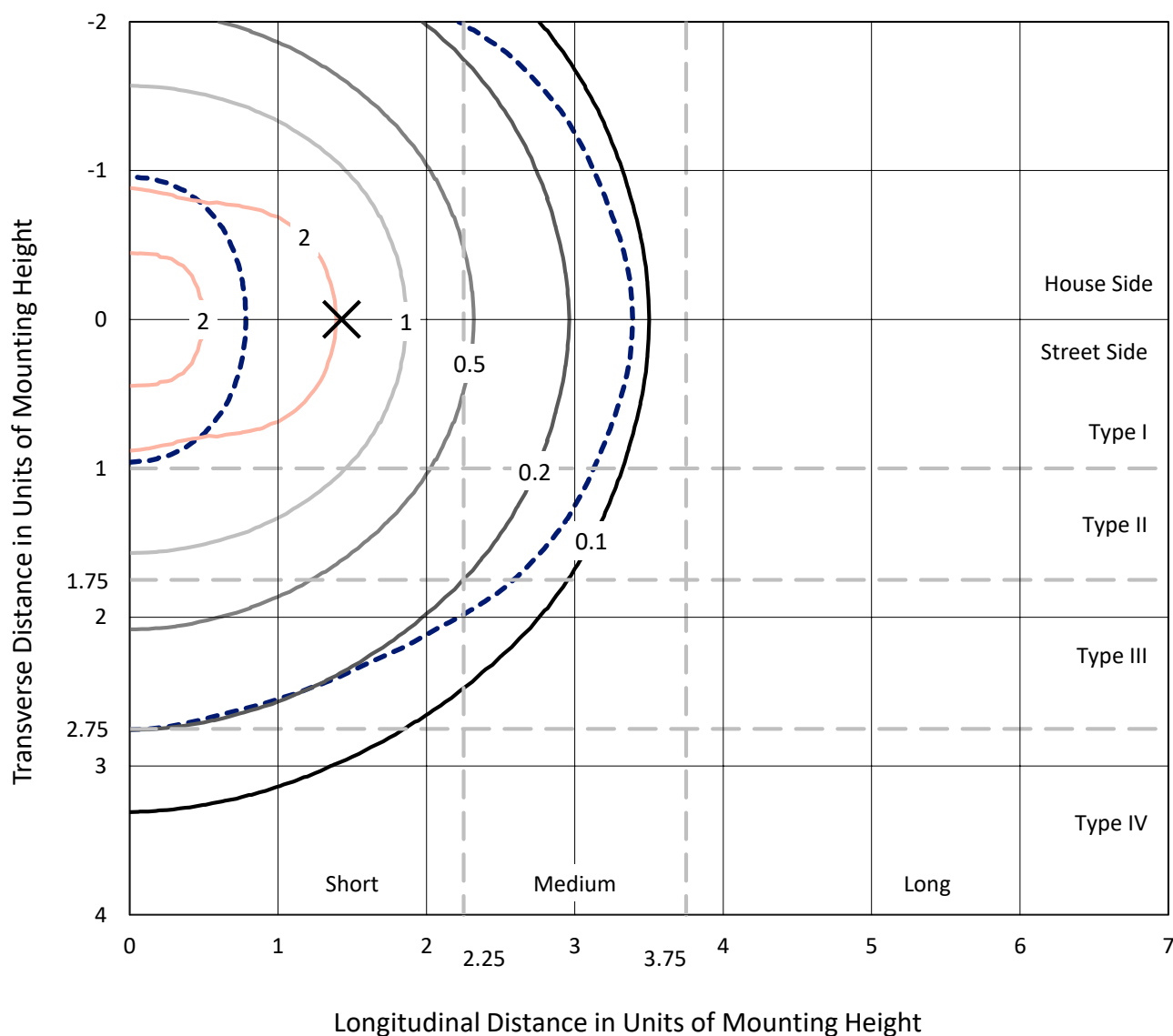
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

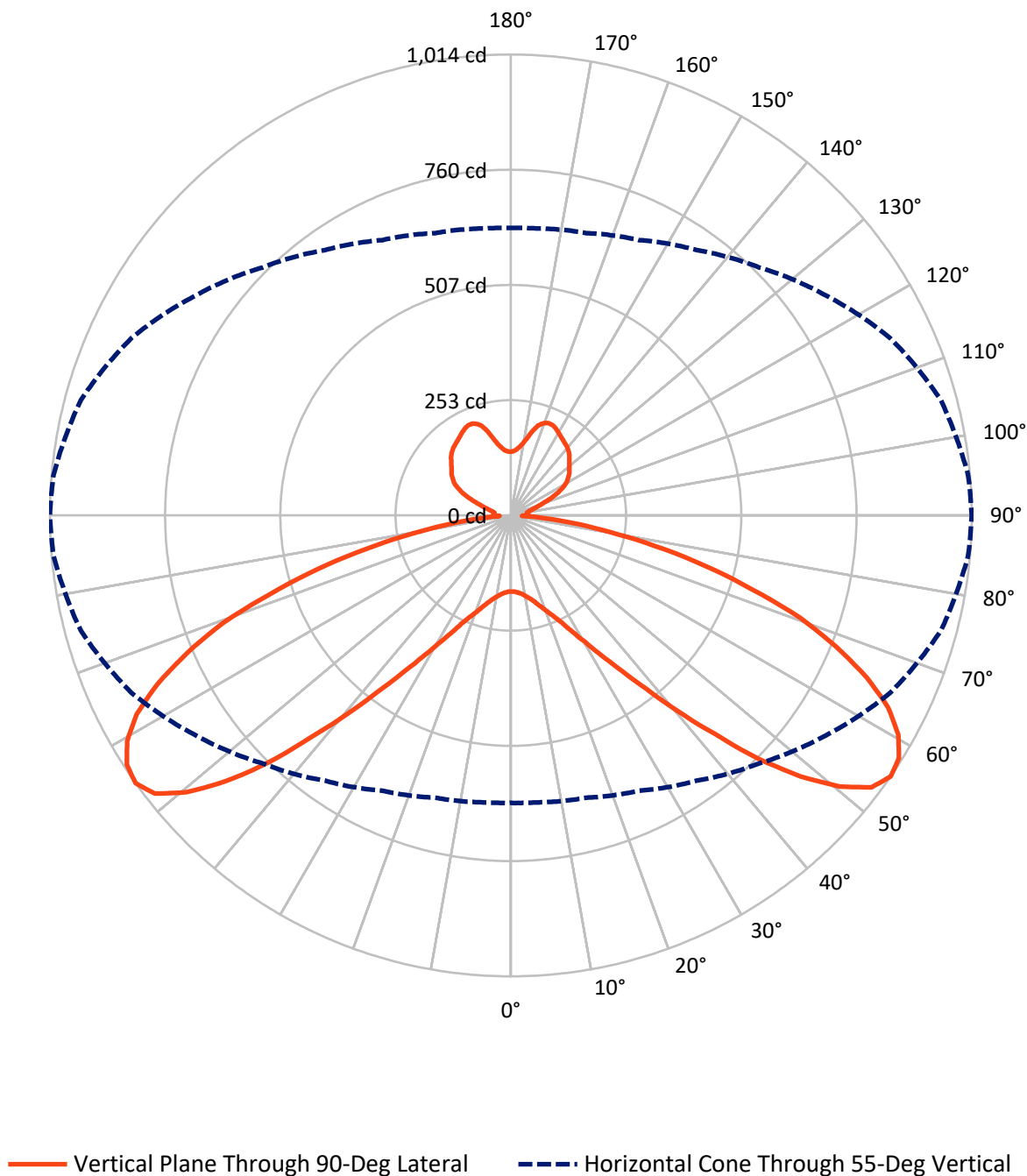


Based on 10 foot mounting height. Maximum calculated value = 2.7 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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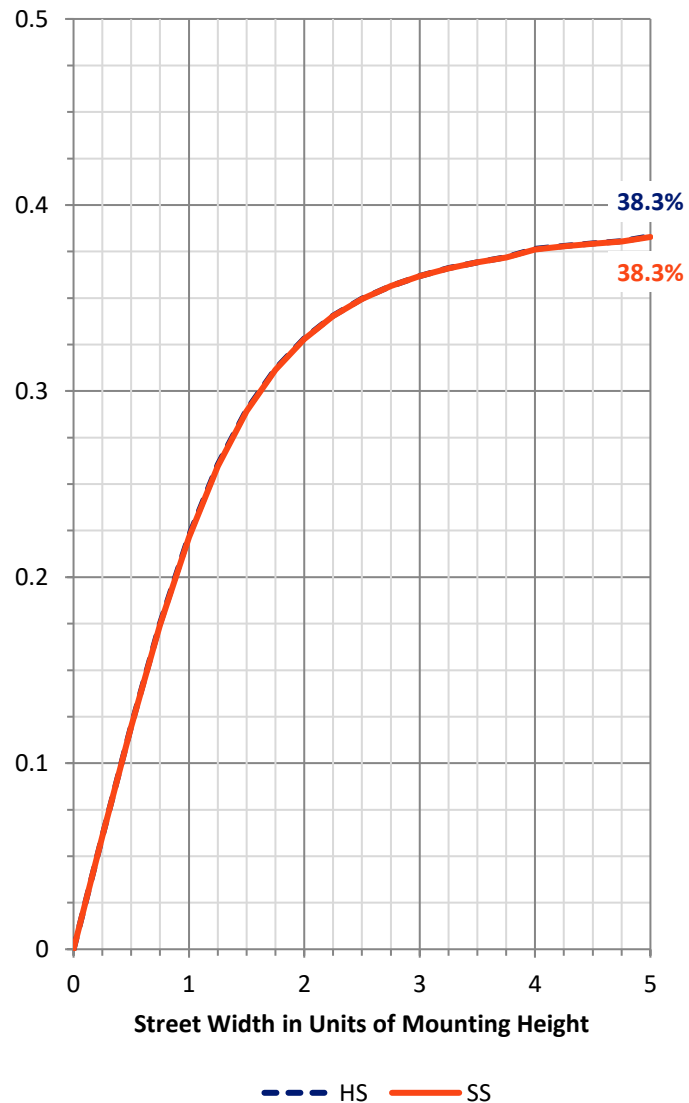
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1410.5	412.7	1823.1
	% Fixture	38.7	11.3	50.0
Street Side	Lumens	1410.5	412.7	1823.1
	% Fixture	38.7	11.3	50.0
Total	Lumens	2821.0	825.3	3646.3
	% Fixture	77.4	22.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.6	0.5
10°-20°	57.5	1.6
20°-30°	125.6	3.4
30°-40°	252.6	6.9
40°-50°	477.3	13.1
50°-60°	704.1	19.3
60°-70°	693.5	19.0
70°-80°	403.8	11.1
80°-90°	89.9	2.5
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	3.7
150°-160°	103.9	2.8
160°-170°	51.8	1.4
170°-180°	13.6	0.4
0°-90°	2821.0	77.4
0°-180°	3646.3	100.0

Coefficient of Utilization



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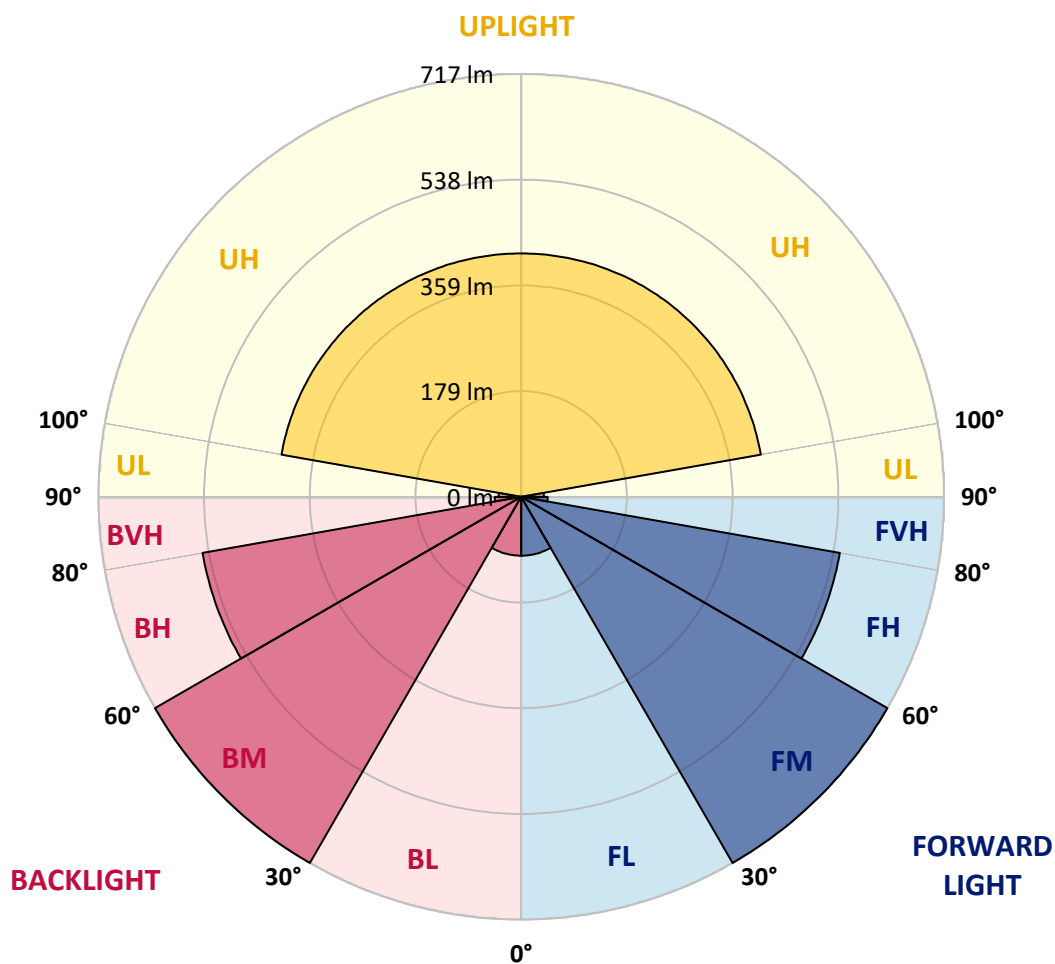
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	99.9	2.7			
FM	(30°-60°)	717.0	19.7			
FH	(60°-80°)	548.7	15.0			G0/660
FVH	(80°-90°)	44.9	1.2			G1/100
BL	(0°-30°)	99.9	2.7	B0/110		
BM	(30°-60°)	717.0	19.7	B1/1000		
BH	(60°-80°)	548.7	15.0	B2/1000		G2/1000
BVH	(80°-90°)	44.9	1.2			G1/100
UL	(90°-100°)	38.4	1.1		U2/50	
UH	(100°-180°)	412.7	11.3		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°	167.3	167.3	167.3	167.3	167.3	167.3	167.3	167.3	167.3	167.3	167.3
2.5°	168.6	168.6	168.6	168.6	167.9	168.6	167.9	167.9	167.9	167.9	167.9
5°	170.5	171.2	170.5	170.5	170.5	170.5	170.5	170.5	169.9	169.9	170.5
7.5°	175.1	175.1	175.1	175.1	174.4	175.1	174.4	174.4	174.4	174.4	174.4
10°	181.6	181.6	181.6	181.6	181.0	181.0	181.0	180.3	180.3	180.3	180.3
12.5°	189.4	190.1	190.1	189.4	188.8	188.8	188.1	188.1	188.1	188.1	187.5
15°	201.1	200.5	200.5	199.2	199.2	197.9	198.5	197.9	197.2	196.6	197.2
17.5°	212.9	213.5	213.5	212.2	211.6	210.9	209.6	209.6	208.9	209.6	209.6
20°	231.1	231.1	229.8	228.5	226.5	225.9	224.6	224.6	223.3	224.6	224.6
22.5°	249.3	249.3	248.0	247.4	244.8	242.8	242.1	241.5	240.8	242.1	240.8
25°	272.1	272.1	270.8	268.2	265.6	264.9	263.0	263.0	263.6	264.3	261.7
27.5°	295.5	296.2	294.9	292.9	290.3	287.7	287.7	288.4	289.0	291.6	291.0
30°	324.2	323.5	321.6	319.0	317.7	315.7	316.4	319.0	321.6	324.2	324.2
32.5°	353.5	352.8	352.2	349.6	348.9	348.2	351.5	356.7	361.9	363.9	367.1
35°	384.7	384.7	384.0	382.1	383.4	386.7	391.9	401.6	409.4	418.5	418.5
37.5°	419.2	417.9	418.5	418.5	421.8	427.7	440.0	458.9	475.2	484.3	484.3
40°	455.0	453.0	453.7	457.0	462.8	477.1	498.6	524.7	550.7	562.4	566.3
42.5°	489.5	487.5	490.2	493.4	507.7	529.9	561.8	601.5	638.6	656.8	656.1
45°	521.4	522.7	526.0	533.8	554.6	587.1	632.7	686.1	734.3	755.7	763.5
47.5°	553.3	553.9	558.5	572.2	601.5	642.5	697.8	768.7	822.1	847.5	857.3
50°	583.2	584.5	592.3	611.9	646.4	695.8	764.2	839.7	898.3	928.2	936.7
52.5°	609.9	611.2	620.3	644.4	685.4	742.7	814.3	891.8	953.6	988.1	993.3
55°	632.1	633.4	642.5	667.9	712.1	771.4	844.3	921.1	979.0	1009.6	1013.5
57.5°	645.1	645.7	655.5	681.5	725.1	780.5	850.8	925.0	975.7	1003.1	1006.3
60°	645.7	647.0	656.1	679.6	719.9	770.7	837.7	904.1	950.4	975.1	979.0
62.5°	634.0	634.7	642.5	660.7	695.2	739.5	801.3	861.2	902.8	926.9	931.5
65°	607.3	607.3	611.2	624.9	651.6	689.3	742.1	797.4	835.8	857.9	860.5
67.5°	563.1	563.1	563.7	572.8	591.0	621.0	665.9	712.1	746.6	768.7	772.0
70°	506.4	505.8	500.6	506.4	518.1	543.5	583.2	618.4	646.4	663.9	675.7
72.5°	434.8	432.2	428.3	427.0	438.7	460.9	493.4	517.5	533.1	552.0	553.3
75°	351.5	350.2	345.0	345.0	356.7	374.3	400.3	416.6	424.4	436.8	439.4
77.5°	262.3	261.7	263.6	264.3	270.8	289.7	304.6	316.4	314.4	322.2	324.8
80°	183.6	184.9	184.9	184.2	190.7	197.9	214.2	217.4	214.8	217.4	217.4
82.5°	116.5	115.9	114.6	116.5	121.7	127.6	134.1	134.7	136.7	134.7	136.0
85°	58.6	57.9	59.2	59.9	62.5	65.7	71.6	72.9	69.6	69.6	68.3
87.5°	20.2	21.5	20.2	20.8	20.8	24.1	23.4	23.4	23.4	23.4	24.7
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)