

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: P198270

Luminaire Tested: **TT-C1-LED-E1-RW-SG-8030-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198270
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P27139) AND SCALED
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TT-C1-LED-E1-RW-SG-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
RECTANGULAR DISTRIBUTION WITH SOFTENING GLASS LENS
Light Source: (168) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3408 lumens
Efficiency: N/A
Efficacy: 75.1 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): 45.4
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

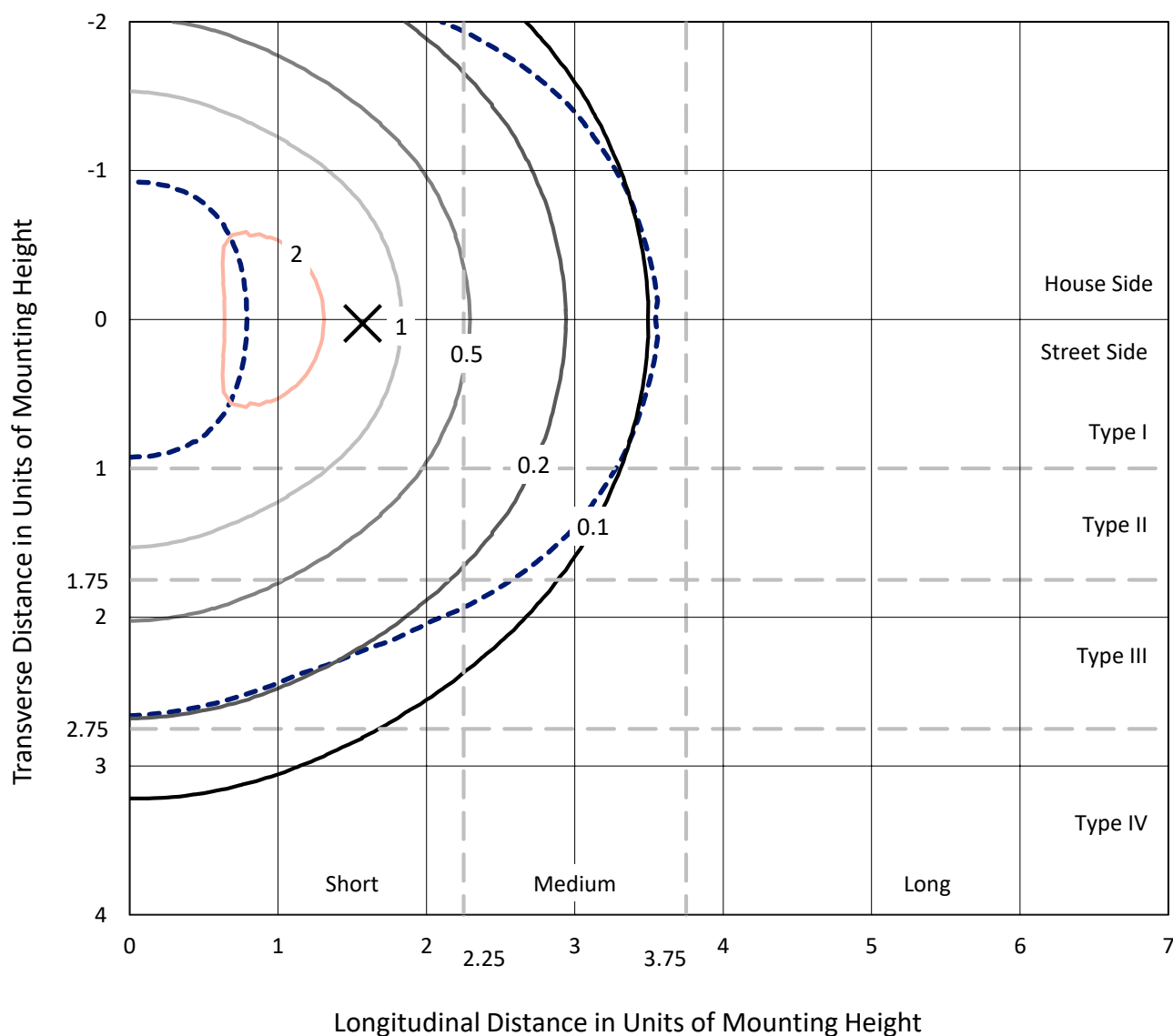


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

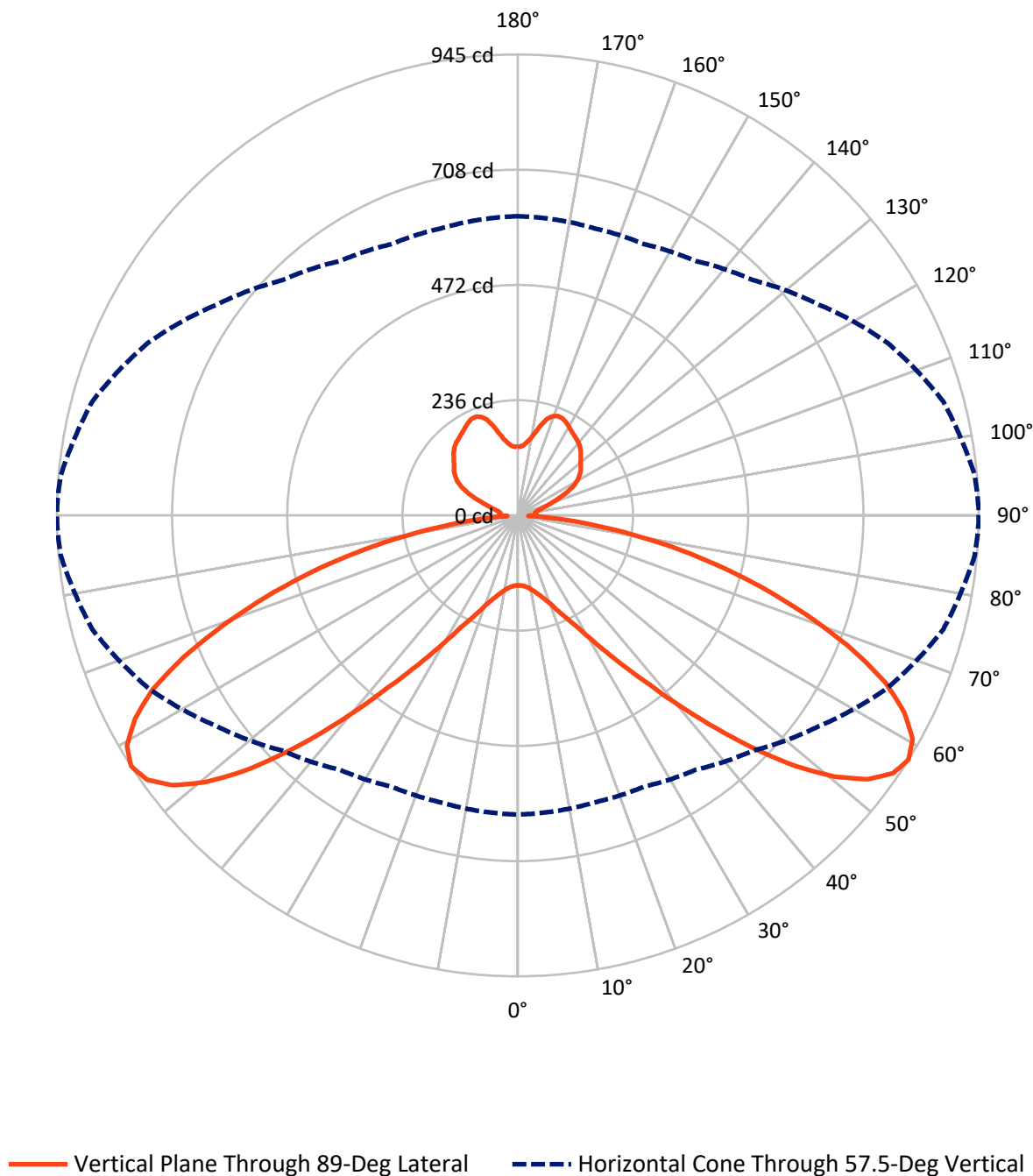


Based on 10 foot mounting height. Maximum calculated value = 2.4 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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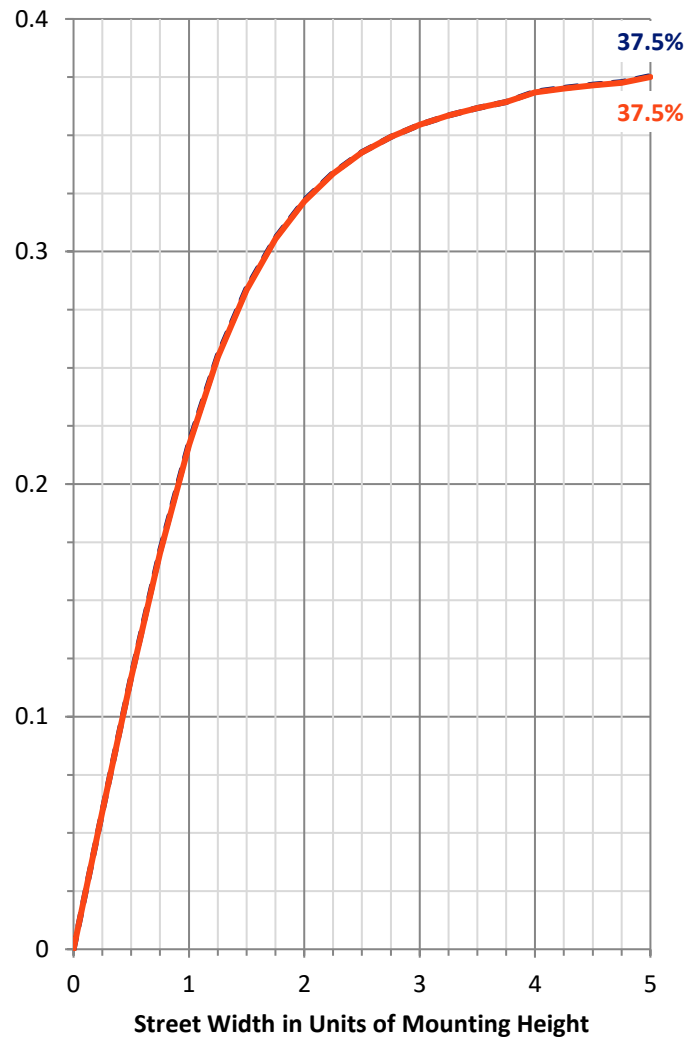
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1291.3	412.7	1704.0
	% Fixture	37.9	12.1	50.0
Street Side	Lumens	1291.3	412.7	1704.0
	% Fixture	37.9	12.1	50.0
Total	Lumens	2582.7	825.3	3408.0
	% Fixture	75.8	24.2	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	14.2	0.4
10°-20°	49.6	1.5
20°-30°	111.2	3.3
30°-40°	230.1	6.8
40°-50°	436.9	12.8
50°-60°	639.3	18.8
60°-70°	637.3	18.7
70°-80°	379.3	11.1
80°-90°	84.6	2.5
90°-100°	38.4	1.1
100°-110°	59.5	1.7
110°-120°	119.6	3.5
120°-130°	148.9	4.4
130°-140°	153.3	4.5
140°-150°	136.3	4.0
150°-160°	103.9	3.0
160°-170°	51.8	1.5
170°-180°	13.6	0.4
0°-90°	2582.7	75.8
0°-180°	3408.0	100.0

Coefficient of Utilization



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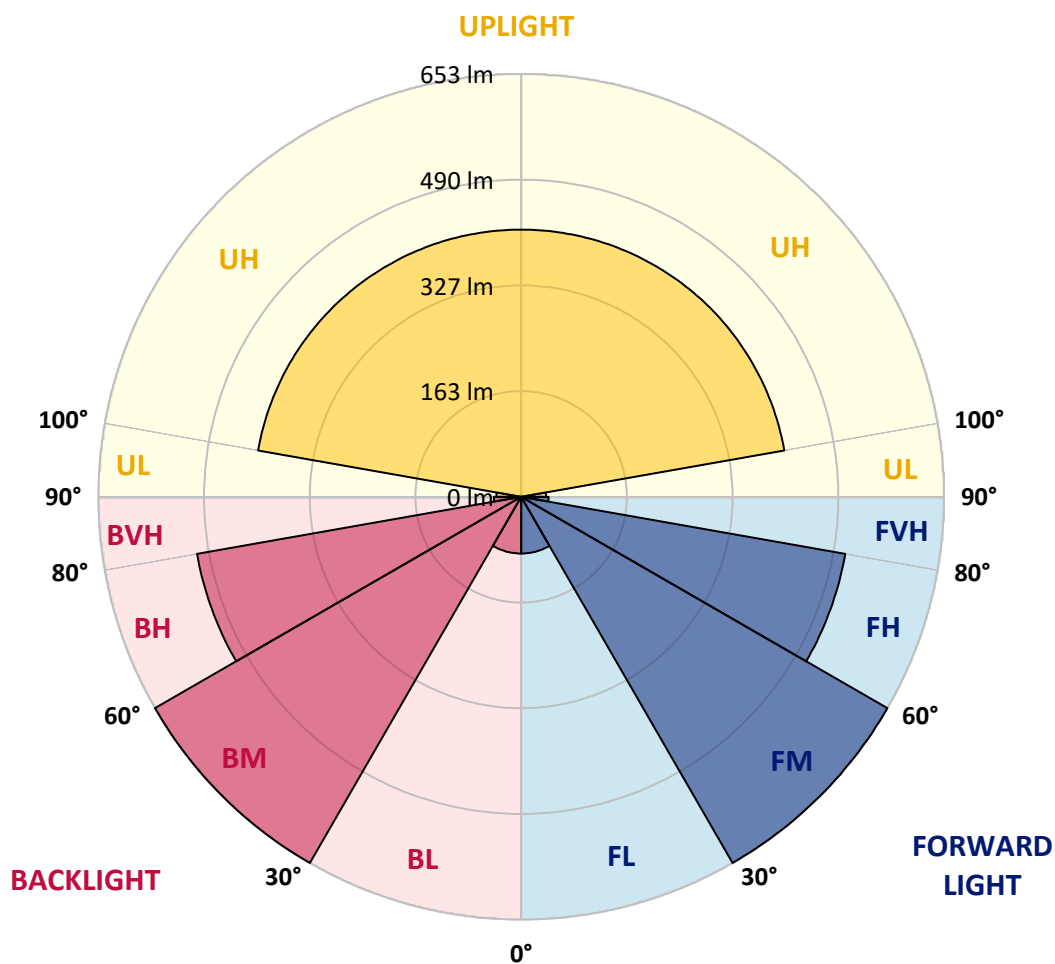
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	87.5	2.6			
FM	(30°-60°)	653.1	19.2			
FH	(60°-80°)	508.3	14.9			G0/660
FVH	(80°-90°)	42.3	1.2			G1/100
BL	(0°-30°)	87.5	2.6	B0/110		
BM	(30°-60°)	653.1	19.2	B1/1000		
BH	(60°-80°)	508.3	14.9	B2/1000		G2/1000
BVH	(80°-90°)	42.3	1.2			G1/100
UL	(90°-100°)	38.4	1.1		U2/50	
UH	(100°-180°)	412.7	12.1		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°	89°
0°	143.2	143.2	143.2	143.2	143.2	143.2	143.2	143.2	143.2	143.2	143.2
2.5°	144.3	144.3	144.3	144.3	143.7	143.7	143.7	143.7	143.7	143.7	143.7
5°	146.4	146.4	145.9	146.4	145.9	145.9	145.9	145.9	145.9	145.9	145.9
7.5°	149.6	149.6	149.6	149.6	149.6	149.6	149.1	149.6	149.1	149.1	149.1
10°	155.5	155.0	155.5	155.0	155.0	154.5	154.5	154.5	154.5	154.5	154.5
12.5°	163.1	163.1	163.1	162.5	162.0	162.0	161.4	161.4	161.4	160.9	161.4
15°	173.2	173.8	172.2	171.6	171.6	170.6	170.0	170.6	170.0	169.5	170.0
17.5°	185.6	186.1	185.0	184.0	182.9	182.4	181.8	181.3	181.3	181.3	180.8
20°	201.7	201.7	200.6	198.5	196.8	195.8	195.8	195.2	195.2	195.8	194.2
22.5°	219.9	219.4	218.3	217.2	215.1	212.9	211.9	211.3	211.3	212.4	212.9
25°	242.4	243.0	239.7	237.6	235.5	231.7	231.2	231.7	232.2	232.2	233.3
27.5°	265.5	266.6	263.9	260.7	257.4	255.8	254.8	255.8	256.9	258.5	258.0
30°	292.8	292.3	291.8	286.9	283.2	281.6	282.7	285.9	288.6	292.3	292.8
32.5°	322.3	323.4	319.7	315.9	314.3	312.7	314.3	321.3	328.8	330.9	333.6
35°	357.2	355.1	352.9	350.2	347.6	347.6	355.6	363.6	375.4	383.5	383.5
37.5°	392.6	391.0	387.2	383.5	383.5	388.9	396.9	416.7	433.9	445.7	440.9
40°	429.1	426.9	425.9	421.6	422.1	435.0	452.1	476.8	501.5	518.1	514.9
42.5°	466.1	466.6	462.9	461.3	466.1	480.6	510.6	543.9	575.0	595.9	596.4
45°	504.2	504.2	501.5	500.4	509.5	531.5	569.1	614.7	656.5	680.6	683.3
47.5°	539.0	538.5	536.4	535.8	551.4	577.7	624.8	683.3	734.8	761.6	768.6
50°	569.1	569.6	566.4	569.1	583.0	617.9	674.7	745.5	804.5	838.3	841.5
52.5°	592.7	593.2	589.5	591.6	610.4	650.6	713.9	793.3	857.6	893.6	897.9
55°	608.8	606.6	603.9	607.2	628.6	673.1	742.3	824.9	892.0	929.5	932.7
57.5°	613.1	611.4	608.8	613.1	636.1	681.7	753.0	836.2	902.7	940.2	944.5
60°	606.6	606.6	603.4	608.2	631.3	675.8	745.5	826.0	889.3	923.6	929.5
62.5°	590.0	590.0	586.2	590.0	612.0	653.3	719.8	794.3	851.7	881.8	888.7
65°	558.9	558.3	556.2	557.3	575.5	614.7	675.3	742.8	792.7	819.5	828.7
67.5°	513.8	512.2	510.1	512.2	525.6	560.5	616.3	675.3	716.6	742.3	744.5
70°	456.4	454.8	452.1	451.1	465.0	492.9	538.0	590.0	624.3	643.1	645.2
72.5°	388.3	390.5	388.3	385.1	394.2	418.9	456.4	496.1	524.6	541.7	544.4
75°	321.3	321.8	316.4	315.4	322.3	337.9	368.5	399.0	423.7	438.2	442.5
77.5°	248.9	248.9	244.0	241.4	245.1	258.5	279.4	304.1	324.5	333.6	341.1
80°	179.1	179.1	174.9	168.4	172.2	179.1	197.9	211.3	227.4	237.6	238.7
82.5°	112.1	110.5	111.6	106.7	107.8	110.0	121.8	130.9	140.5	145.9	146.4
85°	58.5	56.3	55.2	52.6	51.0	54.7	60.1	66.5	68.7	73.5	71.9
87.5°	18.2	17.2	16.6	16.6	15.0	16.1	16.6	17.7	20.4	20.4	21.5
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	38.2
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	48.8
107.5°	72.0	72.0	70.0	67.0	66.0	68.0	68.0	66.0	60.0	59.0	59.8
110°	86.0	86.0	89.0	85.0	86.0	87.0	84.0	84.0	78.0	74.0	74.8

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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	89°
112.5°	101.0	102.0	108.0	107.0	110.0	107.0	102.0	105.0	100.0	95.0	94.2
115°	121.0	122.0	128.0	128.0	129.0	124.0	121.0	125.0	123.0	116.0	113.6
117.5°	140.0	141.0	144.0	141.0	141.0	136.0	138.0	141.0	139.0	133.0	129.8
120°	152.0	153.0	155.0	149.0	149.0	147.0	150.0	153.0	148.0	145.0	142.6
122.5°	161.0	162.0	164.0	154.0	155.0	158.0	159.0	162.0	155.0	153.0	150.6
125°	169.0	169.0	172.0	163.0	165.0	168.0	167.0	168.0	163.0	160.0	158.4
127.5°	177.0	177.0	181.0	171.0	176.0	178.0	176.0	175.0	173.0	166.0	163.6
130°	187.0	188.0	191.0	179.0	186.0	186.0	183.0	183.0	184.0	171.0	169.4
132.5°	198.0	199.0	201.0	186.0	193.0	195.0	190.0	192.0	192.0	179.0	176.6
135°	210.0	210.0	209.0	192.0	199.0	201.0	196.0	201.0	199.0	185.0	184.2
137.5°	221.0	219.0	213.0	197.0	205.0	208.0	203.0	210.0	204.0	191.0	190.2
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	201.8
147.5°	230.0	227.0	219.0	207.0	216.0	229.0	239.0	229.0	212.0	204.0	205.6
150°	224.0	221.0	220.0	214.0	222.0	235.0	242.0	232.0	214.0	210.0	210.8
152.5°	216.0	214.0	221.0	220.0	230.0	241.0	242.0	235.0	219.0	215.0	215.8
155°	208.0	207.0	219.0	224.0	237.0	243.0	238.0	234.0	224.0	220.0	219.2
157.5°	203.0	203.0	216.0	224.0	234.0	235.0	228.0	229.0	226.0	222.0	219.6
160°	199.0	198.0	210.0	213.0	219.0	219.0	215.0	219.0	221.0	218.0	215.6
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	191.6
167.5°	154.0	152.0	156.0	155.0	159.0	159.0	160.0	165.0	168.0	172.0	173.6
170°	142.0	141.0	145.0	144.0	147.0	147.0	148.0	152.0	155.0	159.0	159.8
172.5°	137.0	135.0	139.0	138.0	141.0	141.0	141.0	145.0	146.0	149.0	150.6
175°	136.0	134.0	137.0	137.0	139.0	139.0	138.0	141.0	141.0	143.0	143.8
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

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CANDELA DISTRIBUTION (continued):

	90°
0°	143.2
2.5°	143.7
5°	145.9
7.5°	149.1
10°	154.5
12.5°	160.9
15°	170.0
17.5°	181.3
20°	194.2
22.5°	211.3
25°	232.2
27.5°	256.9
30°	292.3
32.5°	332.0
35°	380.3
37.5°	446.2
40°	514.4
42.5°	600.2
45°	683.3
47.5°	768.6
50°	839.9
52.5°	896.2
55°	934.3
57.5°	944.5
60°	927.9
62.5°	887.1
65°	827.6
67.5°	744.5
70°	648.4
72.5°	542.8
75°	437.7
77.5°	339.0
80°	238.7
82.5°	150.7
85°	71.9
87.5°	23.1
90°	34.0
92.5°	36.0
95°	38.0
97.5°	36.0
100°	37.0
102.5°	41.0
105°	49.0
107.5°	60.0
110°	75.0

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CANDELA DISTRIBUTION (continued):

	90°
112.5°	94.0
115°	113.0
117.5°	129.0
120°	142.0
122.5°	150.0
125°	158.0
127.5°	163.0
130°	169.0
132.5°	176.0
135°	184.0
137.5°	190.0
140°	195.0
142.5°	198.0
145°	202.0
147.5°	206.0
150°	211.0
152.5°	216.0
155°	219.0
157.5°	219.0
160°	215.0
162.5°	207.0
165°	192.0
167.5°	174.0
170°	160.0
172.5°	151.0
175°	144.0
177.5°	141.0
180°	140.0

(END OF REPORT)