

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: P228210

Luminaire Tested: **ISS-AF-XXX-LED-E1-SL3-XXB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P228210  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29762)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: ISS-AF-XXX-LED-E1-SL3-XXB  
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE, EMERGENCY MODE WITH BATTERY BACKPACK BOX LIGHT SQUARE WITH ACCUCLED OPTICS-TYPE III W/SPILL CONTROL  
Light Source: (16) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 603.5 lumens  
Efficiency: N/A  
Efficacy: 46.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B0 - U0 - G0

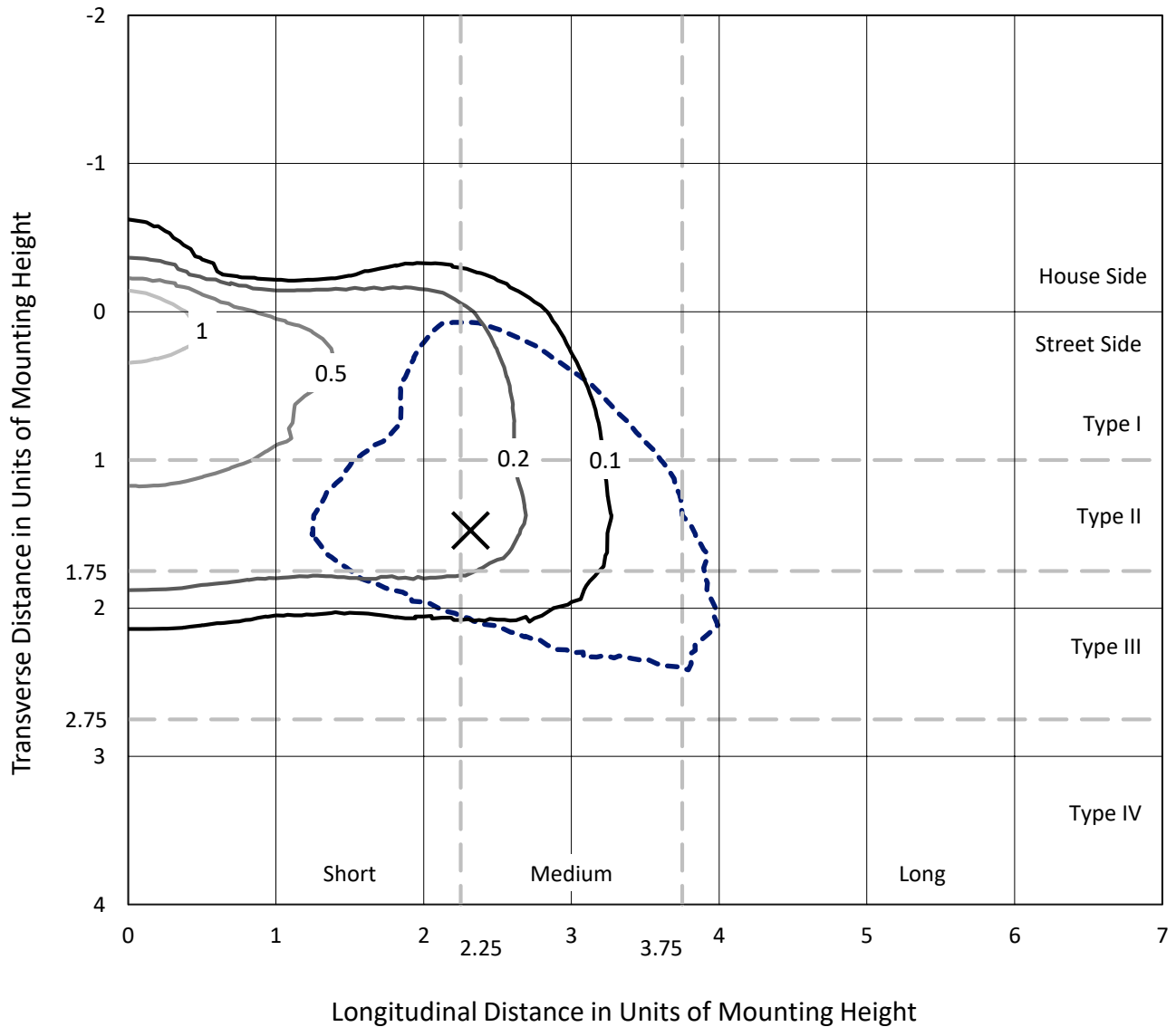
Input Watts (W): 13  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

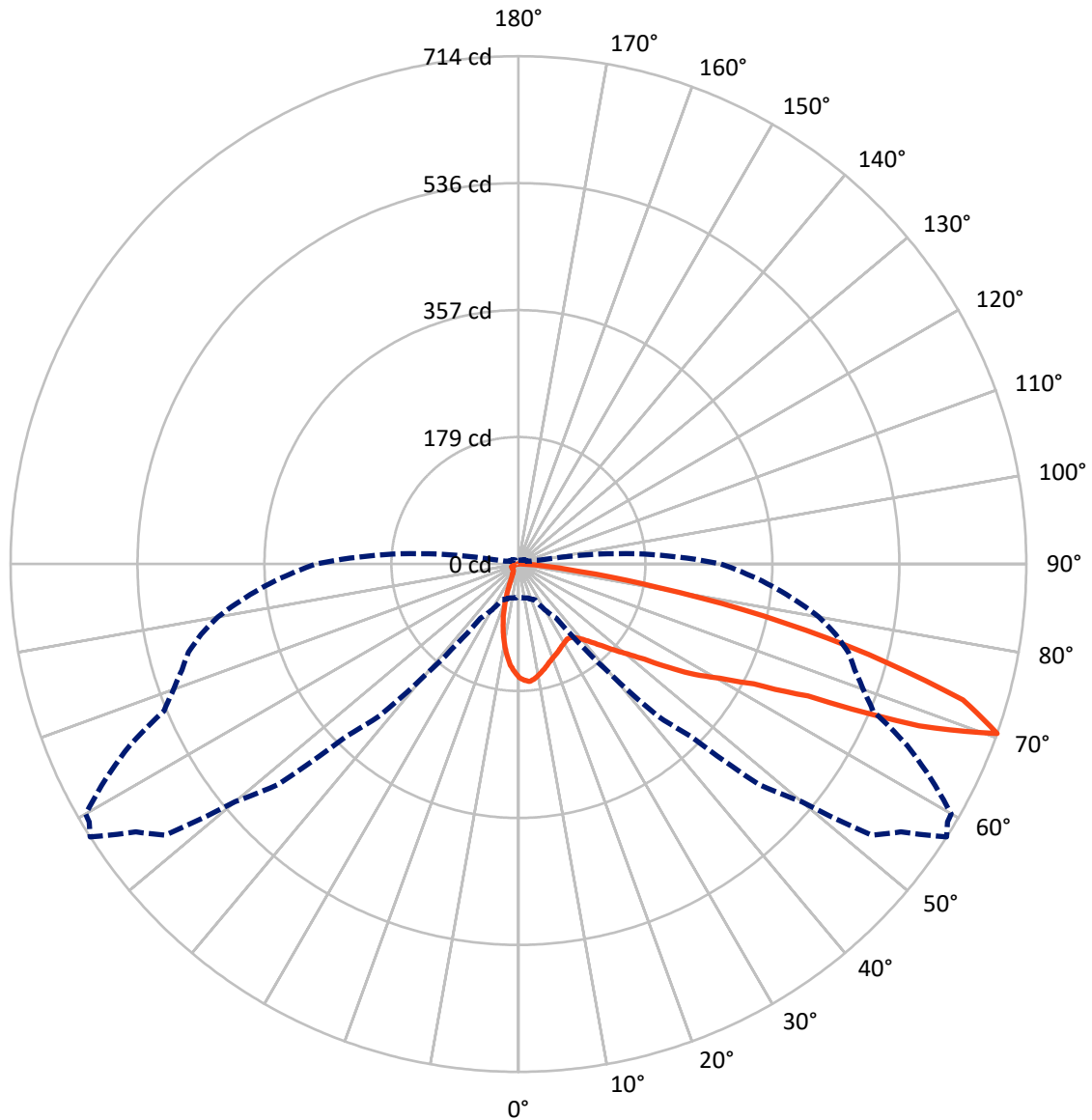
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.6 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57.5-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	74.7	0.0	74.7
	% Fixture	12.4	0.0	12.4
<b>Street Side</b>	Lumens	528.9	0.0	528.9
	% Fixture	87.6	0.0	87.6
<b>Total</b>	Lumens	603.5	0.0	603.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	13.8	2.3
10°-20°	29.9	5.0
20°-30°	37.6	6.2
30°-40°	49.2	8.1
40°-50°	73.8	12.2
50°-60°	116.7	19.3
60°-70°	168.1	27.9
70°-80°	104.1	17.2
80°-90°	10.3	1.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	603.5	100.0
0°-180°	603.5	100.0



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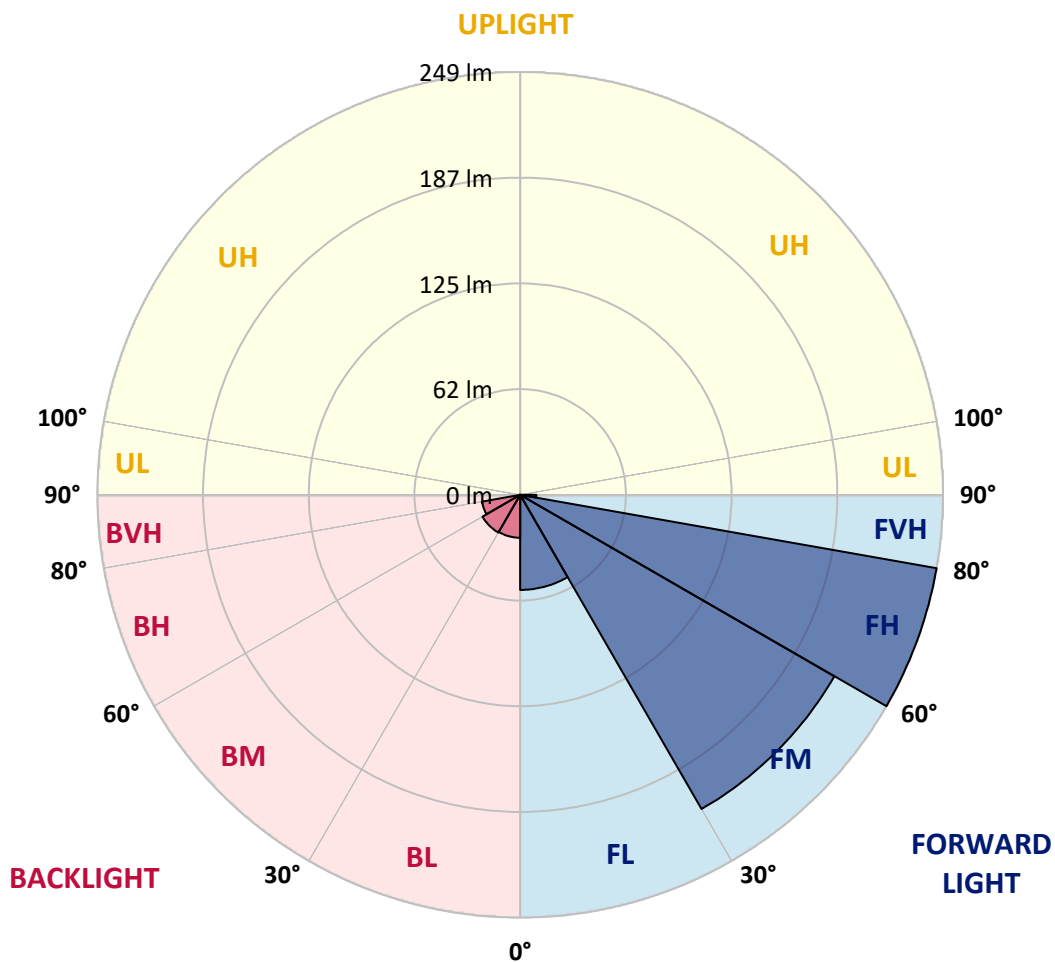
CATALOG NUMBER: ISS-AF-XXX-LED-E1-SL3-XXB

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	56.1	9.3			
FM	(30°-60°)	213.9	35.4			
FH	(60°-80°)	249.3	41.3			G0/660
FVH	(80°-90°)	9.5	1.6			G0/10
BL	(0°-30°)	25.3	4.2	B0/110		
BM	(30°-60°)	25.7	4.3	B0/220		
BH	(60°-80°)	22.9	3.8	B0/110		G0/110
BVH	(80°-90°)	0.8	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G0**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
0°	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8
2.5°	167.7	167.5	167.0	166.1	165.7	166.1	165.7	165.1	164.3	164.9	164.5
5°	167.3	167.7	166.8	166.1	167.3	167.7	166.8	166.8	165.9	166.8	166.4
7.5°	158.9	159.1	159.3	159.1	161.9	161.9	161.4	161.9	162.1	162.5	162.8
10°	148.4	148.6	149.0	149.7	153.1	153.5	153.7	154.2	154.8	155.3	156.5
12.5°	137.9	138.3	139.2	141.4	145.0	145.4	146.1	146.7	147.7	148.4	150.8
15°	129.1	129.3	130.2	132.6	137.9	139.0	139.4	140.2	142.4	142.4	145.0
17.5°	121.0	121.4	122.0	124.8	130.2	131.9	133.2	133.6	136.4	137.1	140.0
20°	114.8	115.0	115.2	117.7	122.7	125.3	126.3	128.1	130.2	131.9	134.5
22.5°	111.4	111.6	111.1	112.2	116.5	119.7	121.0	122.7	123.6	126.5	128.1
25°	111.6	111.8	110.7	110.1	112.2	115.6	116.7	118.5	117.9	122.2	122.2
27.5°	113.8	114.2	113.0	111.1	111.4	114.2	114.8	115.4	114.2	118.5	117.5
30°	117.9	118.5	117.1	115.6	113.2	115.0	115.0	115.0	112.6	116.3	114.8
32.5°	122.4	123.0	122.4	121.4	118.5	118.9	117.9	117.5	114.4	117.3	115.0
35°	129.1	129.3	129.5	129.5	125.3	126.1	123.8	122.4	119.5	121.8	118.7
37.5°	137.1	137.1	138.5	139.2	134.5	134.5	131.9	130.2	127.5	128.3	125.1
40°	144.1	144.7	148.2	150.1	145.9	144.1	142.0	140.5	138.3	138.3	135.1
42.5°	152.2	153.5	157.6	161.2	158.9	156.3	154.2	152.7	151.6	151.4	147.9
45°	162.3	163.8	168.3	171.8	172.4	170.4	168.8	167.3	166.4	165.9	163.0
47.5°	173.7	175.1	179.2	183.3	186.3	185.9	183.9	182.5	183.1	182.7	180.8
50°	186.3	187.2	189.8	194.5	201.3	202.7	202.3	201.3	202.5	202.5	200.9
52.5°	196.4	197.0	199.0	204.5	215.8	219.3	222.1	224.2	226.4	227.6	226.6
55°	205.6	205.6	205.8	212.9	229.8	235.4	241.5	246.0	248.8	254.0	256.1
57.5°	220.5	219.5	219.3	226.8	246.4	252.3	261.3	267.7	271.5	282.0	281.8
60°	216.3	216.7	224.4	246.4	280.7	285.9	294.0	300.8	308.1	315.9	316.5
62.5°	186.5	187.6	199.2	232.1	302.6	329.4	354.4	373.5	384.1	391.0	381.6
65°	130.6	133.2	148.8	189.0	278.5	319.9	359.6	403.7	437.5	490.0	505.1
67.5°	65.1	67.0	69.6	99.1	208.2	266.2	320.8	380.9	426.0	503.0	546.1
70°	46.6	47.6	49.5	55.6	93.2	139.4	203.7	289.7	342.6	458.9	519.8
72.5°	36.2	37.0	39.6	48.4	61.7	68.1	80.9	132.4	196.8	316.9	399.2
75°	28.0	29.4	32.9	43.7	59.3	62.9	63.6	68.3	77.9	140.7	223.8
77.5°	19.7	19.9	23.5	37.6	57.6	64.7	63.6	63.6	64.9	71.7	95.7
80°	13.1	13.3	15.7	26.1	50.5	58.9	65.1	62.1	62.3	63.4	65.1
82.5°	6.9	7.3	9.2	15.9	29.6	39.8	54.2	56.6	55.6	56.8	56.4
85°	1.9	1.9	3.2	6.0	14.5	15.4	23.9	32.7	33.5	38.0	40.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.8	1.9	2.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	52.5°	55°	57.5°	59°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8
2.5°	164.9	164.0	163.8	163.4	163.6	163.0	162.8	161.9	161.9	161.4	161.0
5°	165.9	165.1	165.9	164.5	164.7	164.0	163.0	163.0	162.1	161.4	160.2
7.5°	163.0	163.0	163.2	162.3	162.5	162.3	161.0	160.8	159.6	159.6	158.0
10°	157.4	157.4	158.3	157.6	157.8	157.6	156.9	156.7	156.3	156.3	154.0
12.5°	151.0	152.2	153.5	152.9	152.9	153.3	153.3	153.5	153.3	153.1	151.2
15°	145.6	147.5	148.8	148.6	148.8	149.9	150.4	150.6	151.2	151.0	149.2
17.5°	140.7	142.8	143.9	144.7	145.4	146.3	147.5	148.2	149.0	148.8	147.1
20°	136.2	138.1	140.0	141.2	141.4	143.0	144.5	146.5	146.9	147.3	145.2
22.5°	131.4	133.2	137.1	136.4	137.9	141.2	142.0	144.7	144.7	146.3	143.2
25°	127.5	127.7	133.6	132.6	133.8	139.6	140.2	145.2	143.9	146.1	142.6
27.5°	123.4	123.2	130.4	129.1	130.6	138.5	139.0	145.9	144.5	147.1	142.6
30°	120.3	119.7	128.1	125.5	127.7	137.5	137.7	146.5	145.4	148.8	144.1
32.5°	119.7	118.7	125.9	124.0	126.1	136.4	137.7	148.8	147.5	151.8	145.9
35°	122.4	120.8	126.9	125.3	126.9	136.9	138.7	152.4	151.0	155.9	149.9
37.5°	127.7	126.3	131.4	129.8	131.0	139.8	141.6	157.2	156.9	163.0	156.1
40°	136.7	135.3	139.4	137.1	138.1	146.3	147.1	163.8	164.5	171.8	164.9
42.5°	148.8	146.7	149.9	147.1	148.6	155.9	155.1	172.0	173.9	183.9	176.0
45°	164.5	161.6	163.6	160.6	161.6	167.9	165.5	182.9	184.8	197.2	190.2
47.5°	181.6	178.2	180.6	176.7	177.3	183.9	179.6	195.9	199.0	214.6	207.8
50°	202.1	197.6	198.6	194.9	195.3	201.9	197.2	212.0	215.6	233.0	227.0
52.5°	228.5	222.1	222.1	217.2	217.4	224.0	218.2	231.1	235.1	252.7	248.6
55°	263.2	258.0	257.0	251.9	250.1	251.4	243.3	252.3	256.8	273.2	270.1
57.5°	290.8	290.1	293.4	286.1	284.4	284.8	274.6	275.2	280.3	293.2	294.2
60°	324.4	325.5	325.9	319.9	319.3	313.3	302.8	301.1	307.5	316.3	319.7
62.5°	378.0	376.9	371.5	367.0	362.9	346.9	341.2	331.7	340.6	345.7	352.7
65°	493.0	481.8	447.5	450.5	439.9	405.0	400.0	380.9	395.1	395.3	408.6
67.5°	606.9	628.7	607.7	608.1	584.0	520.8	505.5	467.7	475.6	466.4	473.2
70°	626.4	656.9	714.3	704.1	702.8	654.2	603.0	539.8	516.1	496.3	480.5
72.5°	539.0	569.6	653.8	630.4	639.2	654.0	600.7	553.3	500.2	475.2	440.9
75°	379.2	423.4	508.8	496.5	503.0	527.4	481.6	476.0	414.6	397.8	345.1
77.5°	203.3	257.8	353.5	338.6	341.4	355.3	307.5	297.7	238.3	221.9	162.1
80°	91.5	126.7	198.6	181.8	176.9	169.0	124.4	98.1	59.9	39.8	27.6
82.5°	60.6	62.9	88.0	76.2	71.3	58.9	38.2	22.5	17.8	15.0	14.3
85°	40.7	37.2	37.0	32.7	30.4	23.9	17.8	11.2	9.2	7.7	7.1
87.5°	2.4	1.5	2.1	2.4	1.7	1.5	1.0	0.0	0.2	0.0	0.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





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**CANDELA DISTRIBUTION (continued):**

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°
0°	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8
2.5°	160.0	160.0	159.8	158.3	157.4	156.9	155.5	155.3	154.6	154.4	154.4
5°	159.8	158.9	157.8	155.7	153.5	151.6	151.0	149.5	148.4	147.1	147.1
7.5°	156.7	155.9	153.5	150.4	147.5	144.7	143.2	141.2	139.4	137.7	137.3
10°	153.3	152.0	148.8	144.5	140.9	136.0	134.0	131.2	129.3	126.7	124.2
12.5°	149.7	148.8	145.0	140.0	134.5	128.3	125.3	121.4	118.9	115.8	112.0
15°	148.2	146.5	141.6	135.3	128.5	121.0	116.7	112.6	108.7	105.4	100.2
17.5°	146.3	144.1	138.5	131.2	122.7	113.8	108.1	103.6	98.5	94.8	89.1
20°	144.1	140.9	134.9	126.1	116.5	105.8	98.7	94.2	87.4	83.7	76.9
22.5°	142.4	138.3	131.0	121.2	109.7	97.7	89.3	84.2	76.4	72.1	63.6
25°	142.0	137.1	128.3	117.1	103.8	89.7	79.7	74.5	64.9	59.9	49.9
27.5°	142.2	136.4	126.5	113.8	98.7	82.7	70.7	64.7	52.5	47.4	35.8
30°	142.4	136.7	124.8	110.7	94.0	75.4	61.3	54.2	39.6	35.1	24.9
32.5°	144.5	137.5	124.4	108.3	89.7	68.1	50.5	44.1	28.0	25.5	18.4
35°	147.1	140.2	125.3	107.9	86.5	60.9	39.6	32.9	20.2	19.4	15.0
37.5°	152.4	144.5	128.7	109.0	84.6	53.3	29.6	25.3	15.9	16.3	13.1
40°	160.6	151.8	134.3	112.2	84.4	45.8	21.9	19.7	13.7	14.1	12.0
42.5°	171.5	161.9	142.8	119.1	85.4	38.8	17.6	16.9	12.7	13.1	11.6
45°	185.9	176.0	154.8	127.9	88.5	32.9	15.4	15.4	12.2	12.7	11.4
47.5°	204.1	193.1	169.6	139.6	93.2	29.8	14.5	14.7	12.0	12.7	11.4
50°	224.6	212.7	188.4	154.8	100.5	28.9	14.7	14.7	12.2	12.7	11.4
52.5°	246.0	234.9	208.8	172.2	110.5	30.8	15.2	15.0	12.2	12.7	11.2
55°	267.9	257.8	231.3	192.5	124.4	37.6	16.3	15.7	12.2	12.7	11.4
57.5°	289.7	282.6	254.8	214.3	141.8	50.1	20.6	18.2	13.5	13.7	11.6
60°	314.4	309.2	281.4	243.1	166.4	69.4	30.2	22.9	16.1	15.2	12.4
62.5°	346.3	344.9	322.9	284.4	206.0	97.2	42.9	27.8	17.4	15.9	13.3
65°	402.5	406.0	385.0	332.8	232.3	97.9	41.7	24.4	16.3	15.0	13.1
67.5°	459.1	449.1	395.1	325.5	209.6	65.1	26.6	19.0	14.3	13.9	12.2
70°	457.0	429.5	358.2	284.6	165.5	35.3	19.2	15.9	12.9	12.9	11.6
72.5°	409.9	369.2	293.0	225.3	110.5	22.5	16.3	13.9	11.8	11.6	10.7
75°	308.5	260.6	188.2	129.8	49.2	14.5	12.4	11.4	10.2	10.2	9.4
77.5°	145.2	81.8	45.4	30.2	16.5	9.8	8.6	8.6	8.4	8.6	7.7
80°	19.7	17.8	15.2	13.3	10.0	6.9	6.2	6.4	6.2	6.4	5.8
82.5°	12.0	10.7	8.8	8.4	6.2	4.7	4.5	4.7	4.3	4.5	3.4
85°	5.8	5.1	4.1	3.9	3.2	2.8	2.4	2.8	2.1	2.4	1.5
87.5°	0.0	0.4	0.2	0.4	0.4	0.4	0.0	0.4	0.0	0.4	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°
0°	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8
2.5°	153.3	152.7	152.4	151.6	151.4	150.6	150.4	149.5	147.9	147.3	146.3
5°	145.2	144.1	143.2	142.8	141.2	140.2	139.0	137.3	134.0	132.6	130.0
7.5°	133.8	133.6	131.0	130.2	128.1	126.5	124.6	121.8	117.1	114.4	110.3
10°	121.4	120.6	117.5	115.8	113.0	110.9	108.3	104.2	97.0	91.2	85.0
12.5°	109.9	107.3	103.8	101.3	97.9	94.8	91.9	85.6	74.1	64.7	56.1
15°	97.9	94.0	90.3	86.1	82.4	77.7	74.3	66.2	50.9	39.4	34.1
17.5°	85.6	80.3	76.2	70.5	66.4	59.9	56.4	46.4	33.5	28.2	26.6
20°	72.8	65.8	61.3	54.2	50.1	41.9	39.2	32.1	25.7	23.7	23.3
22.5°	59.1	50.5	45.6	38.0	35.1	30.2	28.0	24.7	21.6	20.8	21.2
25°	44.8	35.5	32.3	26.8	25.7	23.1	22.3	20.6	19.0	19.0	19.7
27.5°	31.9	24.9	23.9	20.6	20.4	19.0	18.4	17.6	17.1	17.6	18.4
30°	23.3	18.8	18.8	16.9	16.9	16.1	15.9	15.4	15.4	16.3	17.1
32.5°	18.4	15.4	15.9	14.3	14.5	13.9	14.1	13.9	14.1	14.7	15.4
35°	15.4	13.3	13.9	12.7	13.1	12.4	12.9	12.9	13.3	13.5	13.7
37.5°	13.7	12.2	12.7	11.8	12.2	11.6	12.2	12.2	12.4	12.4	12.4
40°	12.7	11.4	12.0	11.2	11.8	11.2	11.8	11.8	11.6	11.4	11.6
42.5°	12.0	11.2	11.8	10.9	11.6	10.9	11.4	11.2	10.7	10.7	10.7
45°	11.8	10.9	11.4	10.7	11.2	10.5	10.9	10.7	10.0	9.8	10.2
47.5°	11.8	10.7	11.4	10.5	10.9	10.2	10.7	10.0	9.4	9.4	10.0
50°	11.8	10.7	11.4	10.5	10.9	10.0	10.2	9.6	8.8	9.0	9.8
52.5°	12.0	11.2	11.6	10.7	10.9	9.6	10.0	9.2	8.6	8.8	9.4
55°	12.2	11.2	11.6	10.2	10.5	9.6	9.6	9.2	8.6	8.6	9.2
57.5°	12.2	10.9	11.2	10.0	10.2	9.2	9.4	9.0	8.4	8.2	8.6
60°	12.7	11.4	11.4	9.8	10.0	9.0	9.2	8.8	8.2	7.7	7.9
62.5°	13.1	11.6	11.8	10.2	10.2	9.2	9.4	8.6	7.7	7.3	7.5
65°	13.1	11.6	11.8	10.5	10.5	9.4	9.4	8.6	7.3	6.9	6.9
67.5°	12.4	11.4	11.6	10.5	10.5	9.4	9.4	8.4	7.1	6.4	6.2
70°	12.0	10.9	11.2	9.8	10.0	9.0	9.0	7.9	6.6	6.0	5.5
72.5°	10.9	10.0	10.0	9.2	9.0	7.9	7.9	7.3	6.2	5.3	4.9
75°	9.4	8.6	8.4	7.5	7.5	6.9	6.6	6.0	5.1	4.5	4.3
77.5°	7.7	6.6	6.6	5.5	5.5	4.9	5.1	4.5	3.9	3.7	3.4
80°	5.5	4.5	4.5	3.7	3.7	3.0	3.2	3.0	2.8	2.8	2.6
82.5°	3.4	2.4	2.6	1.9	2.4	1.7	1.9	1.7	1.7	1.5	1.5
85°	1.7	0.8	1.3	0.6	1.0	0.2	0.6	0.4	0.4	0.4	0.4
87.5°	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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	175°	180°
0°	159.8	159.8
2.5°	145.2	145.9
5°	129.1	129.3
7.5°	109.7	109.3
10°	83.7	82.7
12.5°	54.0	52.5
15°	32.5	32.1
17.5°	26.1	26.1
20°	23.3	23.3
22.5°	21.6	21.6
25°	20.4	20.6
27.5°	19.2	19.2
30°	18.0	18.0
32.5°	15.9	15.9
35°	14.1	13.9
37.5°	12.7	12.9
40°	11.6	11.8
42.5°	11.2	11.2
45°	10.7	10.7
47.5°	10.7	10.7
50°	10.5	10.7
52.5°	10.2	10.2
55°	9.6	9.8
57.5°	9.0	9.2
60°	8.4	8.4
62.5°	7.5	7.5
65°	6.9	6.9
67.5°	6.0	6.0
70°	5.3	5.3
72.5°	4.7	4.7
75°	4.1	4.1
77.5°	3.4	3.2
80°	2.6	2.6
82.5°	1.5	1.5
85°	0.4	0.4
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)