

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: INVUE

Report Number: P162432

Luminaire Tested: **ECM-F01-LED-E1-SL3-HSS**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P162432
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33727)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ECM-F01-LED-E1-SL3-HSS
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (7) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1360.8 lumens
Efficiency: N/A
Efficacy: 52.5 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 25.9
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

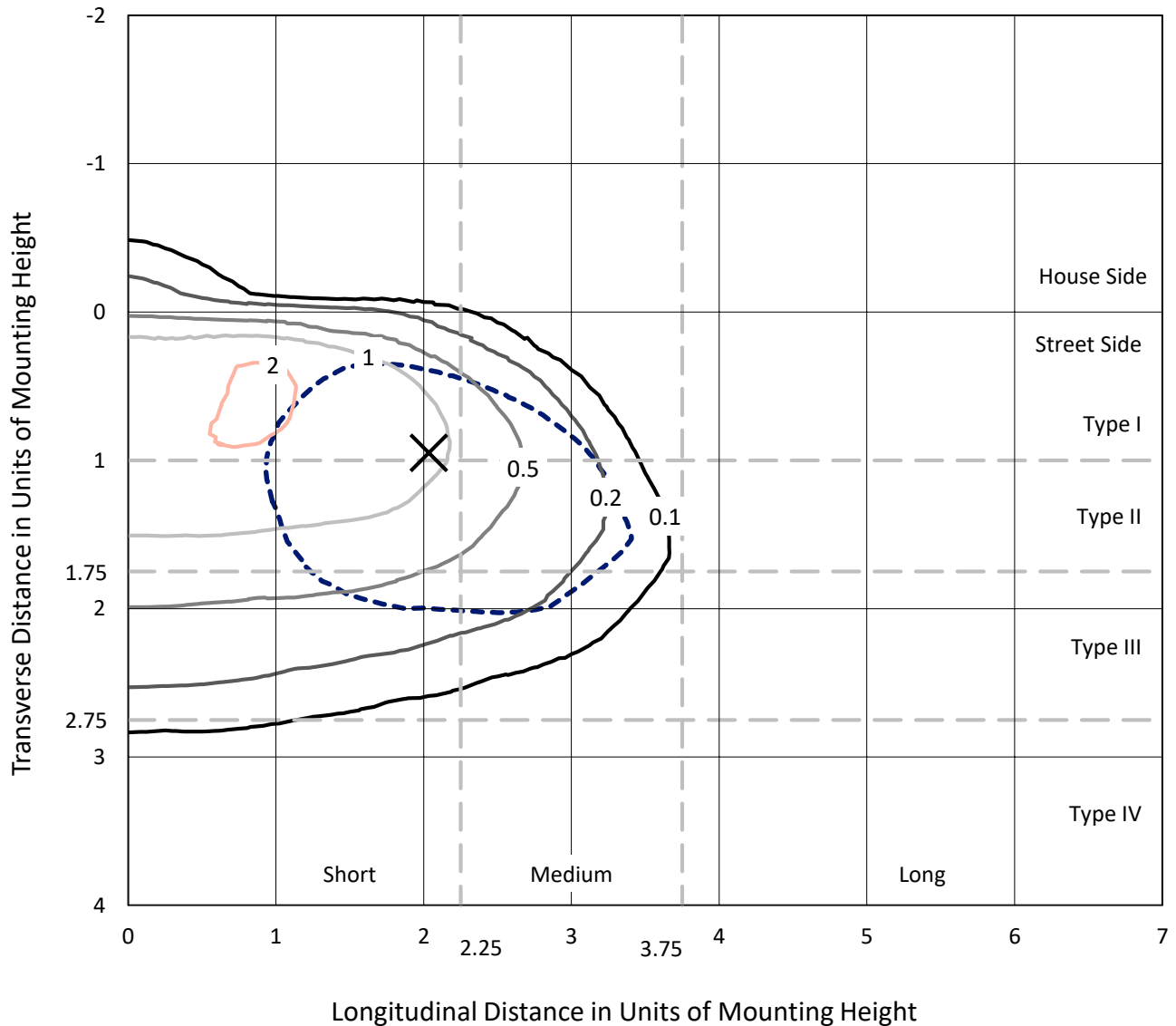


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

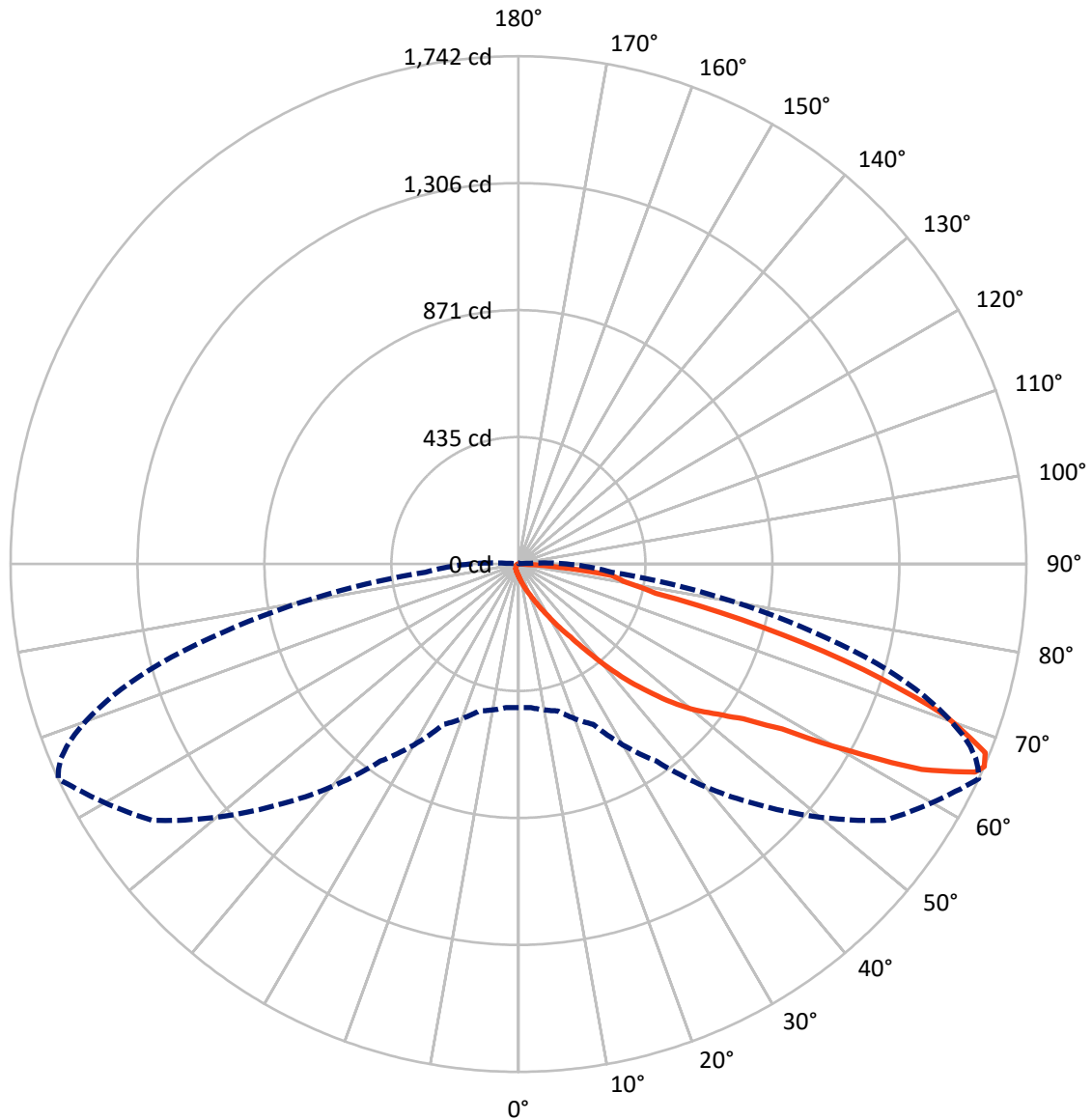


Based on 10 foot mounting height. Maximum calculated value = 2.2 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	29.5	0.0	29.5
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	1331.3	0.0	1331.3
	% Fixture	97.8	0.0	97.8
Total	Lumens	1360.8	0.0	1360.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.6	0.3
10°-20°	19.5	1.4
20°-30°	42.1	3.1
30°-40°	89.8	6.6
40°-50°	198.6	14.6
50°-60°	336.6	24.7
60°-70°	449.1	33.0
70°-80°	197.8	14.5
80°-90°	22.8	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°	1360.8	100.0
0°-180°	1360.8	100.0



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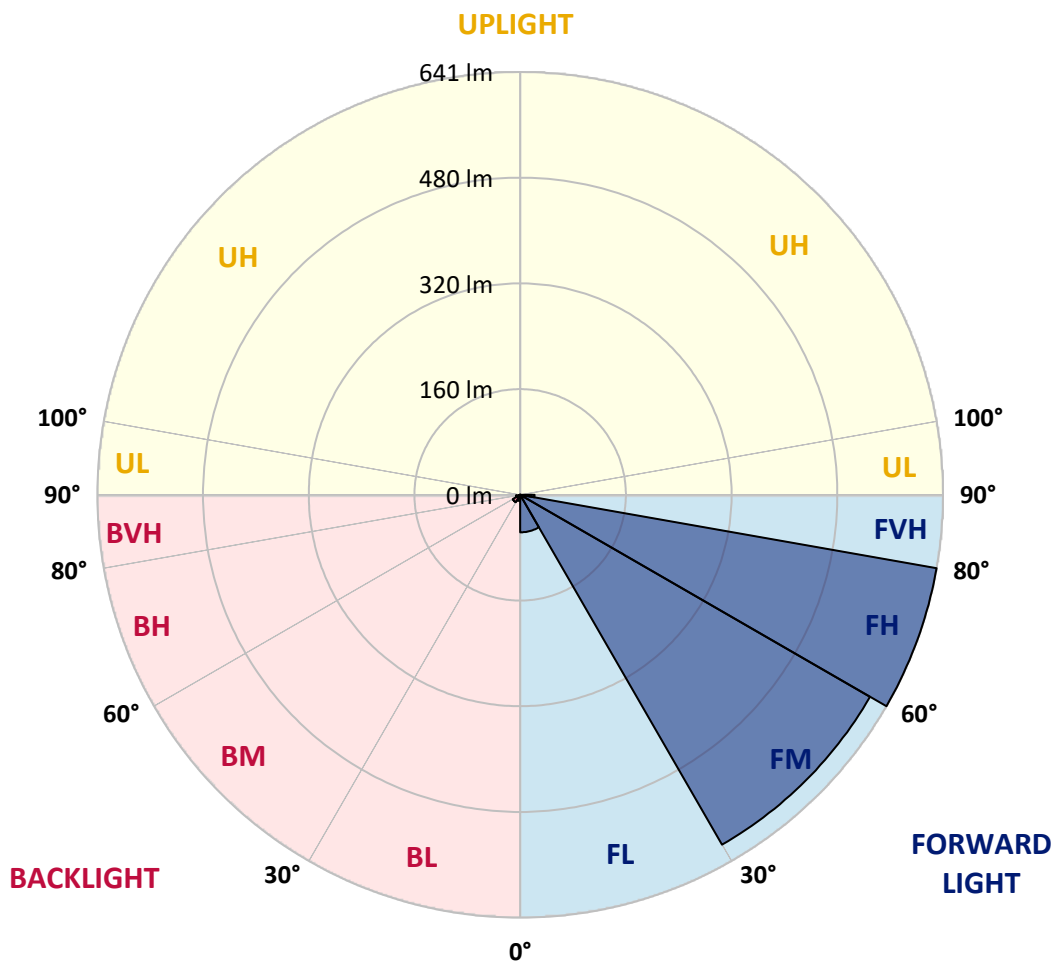
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	56.8	4.2			
FM (30°-60°)	612.0	45.0			
FH (60°-80°)	640.6	47.1			G0/660
FVH (80°-90°)	21.9	1.6			G1/100
BL (0°-30°)	9.3	0.7	B0/110		
BM (30°-60°)	12.9	1.0	B0/220		
BH (60°-80°)	6.3	0.5	B0/110		G0/110
BVH (80°-90°)	0.9	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-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
2.5°	51.8	51.5	50.5	50.5	48.9	47.9	46.6	45.3	45.3	45.0	44.7
5°	68.5	67.0	66.7	63.8	61.5	58.1	55.0	50.7	50.2	49.7	49.4
7.5°	87.1	86.9	84.5	81.1	76.4	70.1	63.8	57.0	56.0	55.5	54.4
10°	111.2	109.9	106.7	101.0	93.9	85.6	75.3	64.6	63.3	62.3	61.7
12.5°	134.2	131.9	130.0	122.7	113.8	101.5	89.2	73.8	72.7	71.4	69.3
15°	155.7	153.6	150.4	144.2	134.2	118.8	104.4	85.6	82.9	81.1	79.5
17.5°	172.4	171.1	167.4	160.4	149.6	136.0	118.8	97.6	95.5	93.1	90.3
20°	188.4	186.5	180.8	171.1	159.6	149.1	135.8	113.3	110.4	107.5	104.4
22.5°	203.5	201.7	192.3	176.3	164.0	159.6	154.9	131.1	126.6	124.3	121.1
25°	224.7	220.8	206.2	180.8	164.3	167.7	175.8	154.1	149.9	146.5	141.6
27.5°	253.2	248.0	225.0	187.3	165.4	176.6	199.9	182.1	177.7	173.7	168.2
30°	285.4	282.0	254.6	203.0	172.9	189.7	226.8	217.7	212.4	207.7	201.2
32.5°	317.9	313.2	286.0	232.9	193.3	215.0	260.6	259.0	252.2	247.8	240.7
35°	346.4	344.0	323.9	281.8	239.9	259.5	305.6	307.4	301.4	296.7	288.8
37.5°	365.8	365.8	361.8	334.4	313.9	328.6	371.8	372.0	366.0	355.3	351.4
40°	375.7	378.6	392.7	397.9	396.9	415.7	458.6	453.9	448.9	443.4	430.4
42.5°	396.1	398.7	428.8	464.9	488.5	513.3	542.9	541.3	535.3	525.3	513.3
45°	430.6	434.0	469.9	527.2	575.6	610.9	629.7	622.4	616.4	607.0	600.7
47.5°	474.6	481.1	521.7	592.6	650.9	709.3	728.9	709.5	704.3	697.0	686.8
50°	521.4	527.7	570.9	652.0	717.9	787.5	820.2	787.5	779.9	777.6	766.0
52.5°	562.0	567.2	608.8	697.8	769.2	850.8	898.4	855.2	849.8	841.9	833.5
55°	586.0	590.2	629.2	719.7	804.0	907.8	974.0	936.1	928.0	924.8	912.8
57.5°	594.2	598.3	633.4	722.6	822.8	959.9	1065.9	1067.2	1057.5	1046.2	1042.6
60°	594.2	598.9	628.4	715.5	841.1	1015.4	1188.3	1297.4	1276.5	1274.4	1261.0
62.5°	569.6	574.0	603.8	693.8	865.7	1090.2	1358.9	1551.4	1545.4	1531.8	1509.8
65°	516.2	518.8	548.1	638.4	856.3	1159.0	1506.7	1720.4	1710.8	1684.1	1655.8
66°	492.1	494.2	521.7	606.7	825.4	1168.4	1532.9	1741.6	1725.7	1703.2	1671.3
67.5°	457.3	461.0	480.3	547.8	751.4	1135.7	1516.4	1726.7	1712.9	1685.6	1653.7
70°	305.3	302.7	371.0	420.4	572.4	925.4	1360.5	1550.4	1550.7	1537.8	1525.0
72.5°	144.9	146.5	166.4	258.7	374.7	618.2	1082.9	1237.5	1255.3	1232.3	1216.3
75°	104.1	106.5	118.5	158.3	223.4	371.0	701.9	865.5	866.0	825.2	788.8
77.5°	30.4	31.6	44.5	97.6	167.4	250.4	403.2	481.1	469.9	440.6	413.1
80°	12.5	12.5	13.1	31.1	67.2	170.1	282.0	370.5	369.1	357.9	341.7
82.5°	4.7	5.0	6.3	12.8	16.0	41.9	188.1	321.5	320.7	304.8	293.3
85°	0.5	0.5	1.6	5.5	6.0	7.8	37.7	141.8	141.0	141.8	124.3
87.5°	0.0	0.0	0.3	0.5	0.8	1.0	1.6	5.5	6.0	5.8	5.2
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):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
2.5°	44.7	44.2	44.2	43.9	43.9	43.9	43.7	43.4	43.4	43.2	42.9
5°	48.9	48.4	48.1	47.6	47.4	47.1	46.6	46.3	45.8	45.5	45.3
7.5°	53.9	52.9	52.6	51.8	51.0	50.5	50.0	49.2	48.7	47.6	47.4
10°	60.2	58.9	57.8	56.8	56.0	54.7	53.9	52.9	51.8	51.0	50.2
12.5°	68.3	66.5	64.9	63.8	62.0	60.4	58.9	58.1	56.0	55.0	53.6
15°	77.2	75.1	73.3	71.2	69.9	67.2	65.1	62.8	61.7	59.9	57.8
17.5°	88.7	85.3	82.4	80.3	77.7	75.1	72.7	70.4	67.2	65.1	62.5
20°	101.0	98.1	94.2	90.5	87.4	84.2	80.8	77.7	74.8	71.4	68.3
22.5°	116.7	112.5	107.8	104.1	99.9	96.5	91.8	87.6	82.9	78.5	74.8
25°	136.6	131.1	126.6	121.4	116.4	111.2	105.4	100.2	94.2	90.0	83.7
27.5°	161.2	155.9	149.9	143.1	138.1	130.3	122.7	116.2	109.1	102.6	95.5
30°	192.6	185.0	178.7	172.1	162.2	154.6	145.7	136.8	127.2	120.6	109.9
32.5°	230.2	222.1	212.7	203.3	194.1	183.4	172.4	161.4	150.7	138.7	127.7
35°	276.3	266.6	255.9	245.7	231.5	220.0	206.2	191.0	178.9	165.1	151.2
37.5°	337.2	321.3	311.9	301.1	282.0	266.3	250.9	235.7	214.5	199.9	180.3
40°	413.6	404.2	388.8	371.5	354.2	333.6	312.7	292.5	267.9	247.5	224.7
42.5°	503.4	489.5	473.8	448.9	431.4	407.1	383.3	356.6	326.5	300.4	273.7
45°	587.6	571.1	559.1	534.3	515.9	487.1	458.4	430.1	395.3	361.6	330.7
47.5°	678.7	665.0	645.2	625.0	606.5	574.0	542.9	508.6	472.0	431.9	391.9
50°	758.7	748.0	734.4	710.1	689.4	662.2	625.6	588.1	541.8	502.1	456.5
52.5°	826.7	818.4	799.3	782.0	763.4	737.8	705.1	669.2	619.3	575.6	523.8
55°	907.1	901.0	884.3	873.6	857.1	832.5	801.9	768.6	715.8	668.2	609.6
57.5°	1038.6	1033.9	1019.3	1014.8	998.6	977.2	939.5	903.9	842.2	783.0	716.1
60°	1256.6	1247.2	1225.7	1214.7	1180.4	1151.7	1102.8	1053.8	979.3	903.9	823.3
62.5°	1490.0	1463.5	1422.7	1387.7	1339.0	1289.0	1223.6	1148.8	1061.4	971.9	879.3
65°	1615.8	1570.8	1519.3	1463.5	1400.5	1327.0	1244.6	1154.8	1060.9	966.4	868.6
66°	1630.2	1579.4	1524.7	1462.7	1392.6	1314.4	1230.7	1136.5	1038.9	946.8	849.0
67.5°	1612.1	1559.0	1501.2	1432.4	1356.5	1275.4	1187.5	1089.7	995.7	902.4	807.1
70°	1485.8	1432.9	1381.4	1308.9	1228.1	1146.4	1063.2	953.9	864.9	779.1	694.3
72.5°	1186.5	1150.6	1099.6	1037.6	958.8	863.1	793.8	695.9	618.7	535.5	469.9
75°	741.5	691.0	627.9	548.9	488.7	411.0	370.5	296.2	252.2	213.8	176.6
77.5°	379.1	341.2	296.9	252.5	209.8	167.4	129.5	91.6	61.7	42.9	31.9
80°	313.2	279.7	243.1	202.5	164.8	127.9	92.1	62.8	40.0	26.2	20.4
82.5°	258.7	230.5	197.8	160.1	127.4	100.5	69.9	45.5	28.3	18.3	14.4
85°	110.2	99.9	77.2	61.2	46.0	34.0	23.8	16.0	11.3	9.2	8.4
87.5°	4.7	5.2	5.0	3.9	2.9	2.9	2.6	2.1	2.1	2.1	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):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
2.5°	42.9	42.7	42.4	42.4	42.1	41.9	40.3	39.0	37.4	36.4	35.3
5°	44.7	44.5	43.9	43.7	43.2	42.9	39.5	36.6	34.3	32.4	31.1
7.5°	46.6	46.3	45.5	44.7	44.5	43.9	38.5	34.8	31.6	29.6	28.3
10°	48.9	48.1	47.4	46.3	45.5	44.7	37.4	32.7	29.3	27.5	26.2
12.5°	52.3	51.0	49.7	48.4	47.4	46.0	36.9	30.9	27.5	25.4	24.1
15°	56.2	54.4	52.9	51.3	49.4	48.1	35.9	29.3	25.9	23.8	22.2
17.5°	59.9	57.8	55.5	53.1	51.3	49.4	34.8	27.7	24.3	22.2	20.7
20°	65.1	62.0	59.1	56.2	53.6	51.3	33.2	26.2	23.0	20.7	19.1
22.5°	70.9	67.2	63.6	59.7	56.2	53.1	31.9	24.8	21.7	19.4	17.5
25°	78.2	73.8	68.8	63.8	59.9	55.7	30.6	23.6	20.4	18.1	16.2
27.5°	88.4	82.1	76.7	70.4	64.4	59.7	29.6	22.5	19.1	16.7	14.9
30°	102.3	93.1	84.5	77.7	70.6	63.8	28.5	21.2	18.1	15.4	13.3
32.5°	117.7	107.0	97.1	86.9	78.0	70.1	27.5	20.1	16.7	14.1	12.3
35°	136.8	123.2	109.9	98.1	87.4	76.9	26.4	19.1	15.7	12.8	11.0
37.5°	164.3	147.3	129.8	114.6	100.7	86.9	25.6	18.1	14.4	11.5	9.7
40°	202.0	180.0	158.6	137.9	119.8	102.6	24.6	17.0	13.3	10.5	8.6
42.5°	242.8	216.1	187.8	164.6	139.7	118.0	23.6	16.0	12.3	9.4	7.6
45°	293.6	260.3	226.1	194.4	164.0	136.0	22.5	14.9	11.0	8.4	6.5
47.5°	349.0	306.6	267.9	228.1	192.0	158.6	21.2	14.1	9.9	7.3	5.8
50°	406.0	361.3	312.4	267.1	224.2	181.0	19.9	12.8	8.9	6.5	4.7
52.5°	467.5	414.7	364.7	308.4	258.5	210.6	18.6	11.8	8.1	5.8	3.9
55°	545.8	486.6	428.0	365.0	304.8	244.9	17.3	10.5	7.1	5.0	3.1
57.5°	644.1	574.0	502.1	430.9	357.9	289.9	16.2	9.2	6.0	4.2	2.6
60°	737.0	655.1	568.0	486.1	403.7	324.4	14.6	8.1	5.2	3.4	2.6
62.5°	785.1	691.7	597.8	507.6	419.6	336.7	13.1	6.8	4.5	2.9	2.4
65°	773.4	678.1	587.1	496.0	410.0	328.9	11.5	6.0	3.9	2.6	2.4
66°	756.3	662.2	570.6	484.0	401.9	320.5	10.7	5.8	3.7	2.6	2.1
67.5°	719.2	628.2	540.8	460.2	379.6	304.5	9.7	5.2	3.4	2.4	2.1
70°	614.3	531.6	461.8	390.1	324.4	256.7	7.8	4.5	2.9	2.1	2.1
72.5°	406.6	350.3	303.7	261.4	218.5	169.5	6.5	3.7	2.4	2.1	1.8
75°	153.3	138.7	119.0	107.0	93.4	81.9	5.2	2.4	1.8	1.8	1.8
77.5°	27.2	25.1	22.2	20.4	18.8	17.3	4.2	1.6	1.6	1.8	1.8
80°	18.3	17.0	15.4	14.1	13.1	11.8	2.9	1.3	1.6	1.6	1.8
82.5°	13.1	12.3	11.5	10.5	9.7	8.6	1.8	1.3	1.6	1.6	1.6
85°	7.8	7.3	6.8	6.3	5.5	5.2	1.3	1.3	1.3	1.6	1.6
87.5°	2.1	1.8	2.1	2.1	1.6	1.8	1.0	1.0	1.0	1.3	1.3
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):

	145°	155°	165°	175°	180°
0°	41.1	41.1	41.1	41.1	41.1
2.5°	34.8	34.8	34.3	35.1	35.1
5°	30.1	30.1	29.8	30.1	30.1
7.5°	27.5	27.2	27.2	27.2	27.5
10°	25.1	24.8	24.8	24.8	24.8
12.5°	23.0	22.8	22.5	22.8	22.8
15°	21.2	20.7	20.7	20.7	20.7
17.5°	19.6	19.1	18.8	18.8	18.8
20°	18.1	17.3	17.3	17.3	17.3
22.5°	16.5	15.7	15.7	15.7	15.7
25°	14.9	14.1	14.1	14.1	14.1
27.5°	13.6	12.8	12.8	12.8	12.8
30°	12.0	11.5	11.5	11.8	11.5
32.5°	11.0	10.2	10.2	10.5	10.5
35°	9.7	9.2	9.2	9.2	9.2
37.5°	8.4	7.8	7.8	7.8	7.8
40°	7.3	6.8	6.5	6.8	6.8
42.5°	6.3	5.8	5.5	5.5	5.5
45°	5.5	4.7	4.5	4.7	4.7
47.5°	4.5	3.9	3.9	4.2	4.2
50°	3.4	3.4	3.7	4.2	4.2
52.5°	3.1	3.1	3.7	4.2	4.2
55°	2.9	3.1	3.7	3.9	4.2
57.5°	2.6	3.1	3.7	3.9	3.9
60°	2.6	2.9	3.4	3.9	3.9
62.5°	2.4	2.6	3.1	3.7	3.7
65°	2.4	2.6	3.1	3.7	3.7
66°	2.4	2.6	3.1	3.7	3.7
67.5°	2.4	2.6	3.1	3.7	3.7
70°	2.4	2.6	3.1	3.4	3.4
72.5°	2.1	2.4	2.9	3.4	3.4
75°	2.1	2.4	2.9	3.4	3.4
77.5°	2.1	2.4	2.9	3.4	3.4
80°	2.1	2.4	2.9	3.1	3.4
82.5°	1.8	2.4	2.6	3.1	3.1
85°	1.8	2.1	2.6	2.9	3.1
87.5°	1.6	1.8	2.1	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)