

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: P162427

Luminaire Tested: **ECM-E01-LED-E1-SL3-HSS**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P162427
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-E01-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: (21) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1648.4 lumens
Efficiency: N/A
Efficacy: 66.7 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

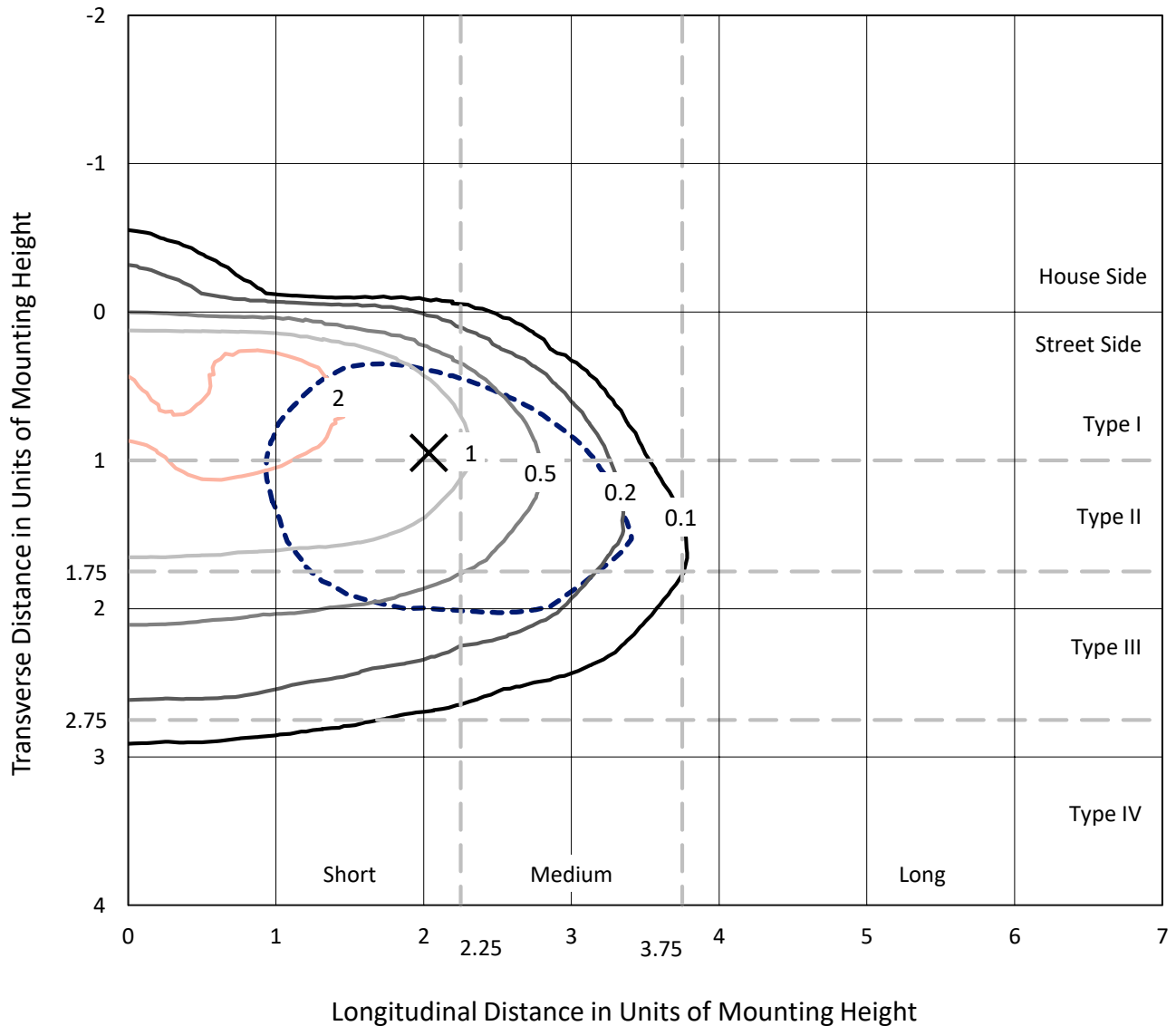
Input Watts (W): 24.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

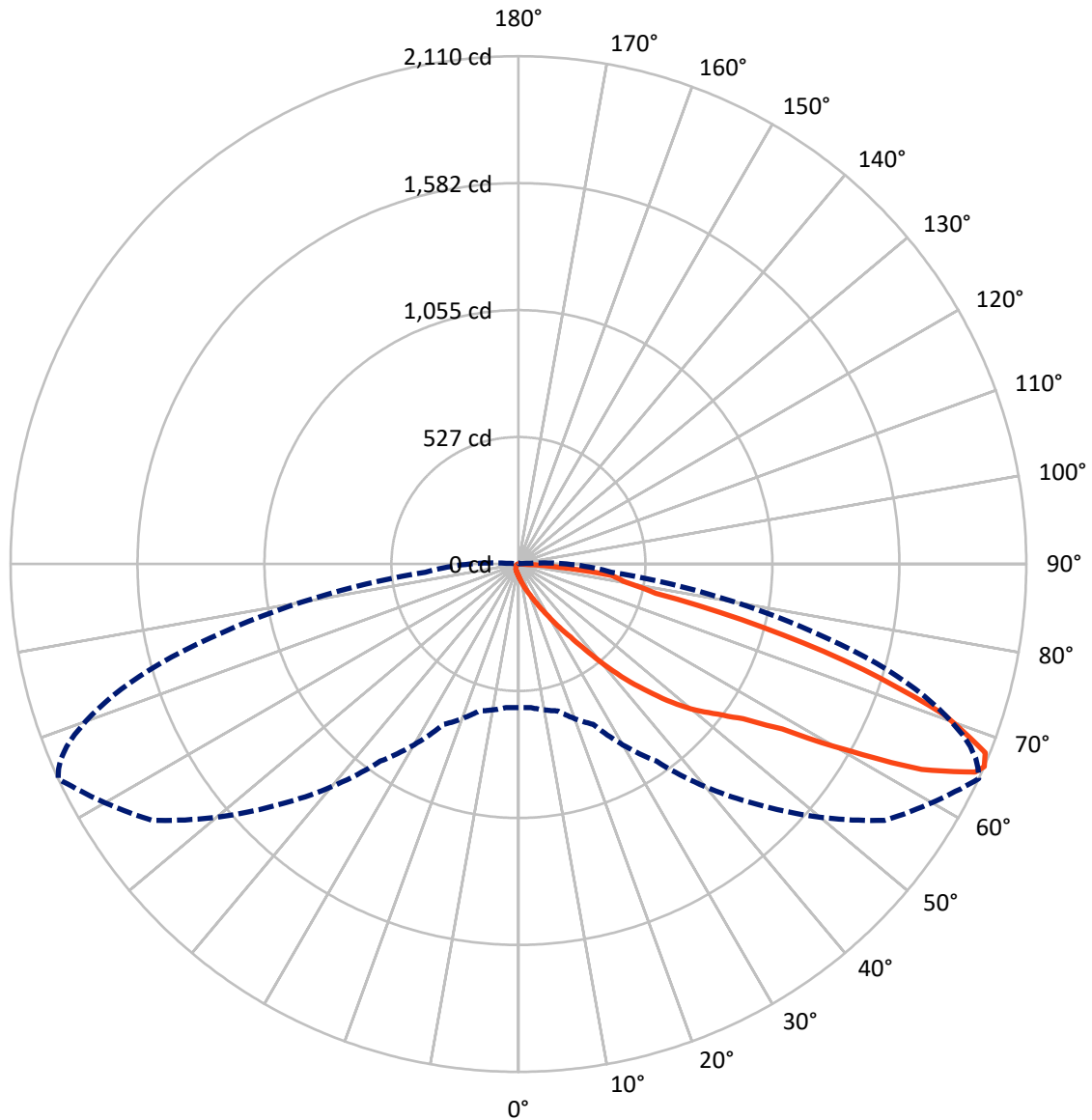


Based on 10 foot mounting height. Maximum calculated value = 2.7 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	35.7	0.0	35.7
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	1612.7	0.0	1612.7
	% Fixture	97.8	0.0	97.8
Total	Lumens	1648.4	0.0	1648.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.6	0.3
10°-20°	23.6	1.4
20°-30°	50.9	3.1
30°-40°	108.8	6.6
40°-50°	240.6	14.6
50°-60°	407.7	24.7
60°-70°	544.0	33.0
70°-80°	239.6	14.5
80°-90°	27.6	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°	1648.4	100.0
0°-180°	1648.4	100.0



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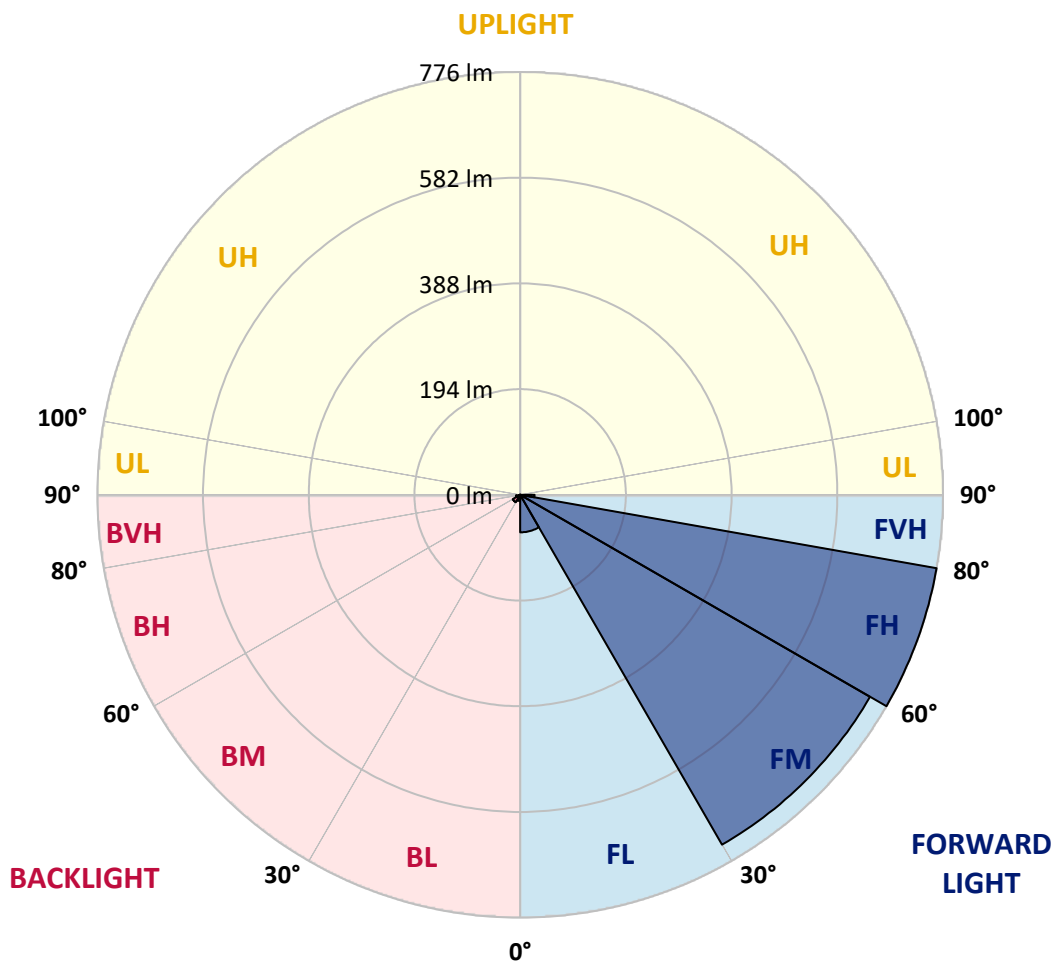
CATALOG NUMBER: ECM-E01-LED-E1-SL3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	68.9	4.2			
FM	(30°-60°)	741.4	45.0			
FH	(60°-80°)	776.0	47.1			G1/1800
FVH	(80°-90°)	26.5	1.6			G1/100
BL	(0°-30°)	11.3	0.7	B0/110		
BM	(30°-60°)	15.7	1.0	B0/220		
BH	(60°-80°)	7.7	0.5	B0/110		G0/110
BVH	(80°-90°)	1.1	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°	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
2.5°	62.8	62.4	61.2	61.2	59.3	58.0	56.4	54.8	54.8	54.5	54.2
5°	83.0	81.1	80.8	77.3	74.5	70.4	66.6	61.5	60.8	60.2	59.9
7.5°	105.5	105.2	102.4	98.2	92.5	84.9	77.3	69.1	67.8	67.2	65.9
10°	134.7	133.1	129.3	122.3	113.8	103.6	91.3	78.3	76.7	75.4	74.8
12.5°	162.6	159.7	157.5	148.6	137.9	123.0	108.1	89.4	88.1	86.5	84.0
15°	188.6	186.0	182.2	174.6	162.6	143.9	126.5	103.6	100.5	98.2	96.3
17.5°	208.9	207.3	202.8	194.3	181.3	164.8	143.9	118.2	115.7	112.8	109.3
20°	228.2	226.0	219.0	207.3	193.3	180.6	164.5	137.2	133.7	130.3	126.5
22.5°	246.6	244.3	232.9	213.6	198.7	193.3	187.6	158.8	153.4	150.5	146.7
25°	272.2	267.5	249.7	219.0	199.0	203.1	213.0	186.7	181.6	177.5	171.5
27.5°	306.8	300.4	272.6	226.9	200.3	213.9	242.1	220.6	215.2	210.4	203.8
30°	345.8	341.6	308.4	245.9	209.5	229.8	274.8	263.7	257.3	251.6	243.7
32.5°	385.1	379.4	346.4	282.1	234.2	260.5	315.7	313.8	305.5	300.1	291.6
35°	419.6	416.7	392.3	341.3	290.6	314.4	370.2	372.4	365.1	359.4	349.9
37.5°	443.1	443.1	438.3	405.0	380.3	398.1	450.3	450.7	443.4	430.4	425.6
40°	455.1	458.6	475.7	482.0	480.8	503.6	555.6	549.9	543.8	537.2	521.3
42.5°	479.8	483.0	519.4	563.2	591.7	621.8	657.6	655.7	648.4	636.4	621.8
45°	521.7	525.8	569.2	638.6	697.2	740.0	762.8	754.0	746.7	735.3	727.6
47.5°	574.9	582.8	631.9	717.8	788.5	859.2	882.9	859.5	853.1	844.3	831.9
50°	631.6	639.2	691.5	789.8	869.6	953.9	993.5	953.9	944.7	941.9	927.9
52.5°	680.7	687.1	737.5	845.2	931.7	1030.6	1088.3	1036.0	1029.4	1019.8	1009.7
55°	709.9	715.0	762.2	871.8	973.9	1099.7	1179.9	1133.9	1124.1	1120.3	1105.7
57.5°	719.7	724.8	767.3	875.3	996.7	1162.8	1291.1	1292.7	1281.0	1267.4	1262.9
60°	719.7	725.4	761.2	866.8	1018.9	1230.0	1439.5	1571.6	1546.3	1543.7	1527.6
62.5°	689.9	695.3	731.5	840.5	1048.7	1320.6	1646.1	1879.3	1872.0	1855.6	1828.9
65°	625.3	628.5	663.9	773.3	1037.3	1404.0	1825.1	2084.1	2072.3	2040.0	2005.8
66°	596.1	598.7	631.9	734.9	999.9	1415.4	1856.8	2109.7	2090.4	2063.1	2024.5
67.5°	554.0	558.4	581.9	663.6	910.2	1375.7	1836.9	2091.7	2074.9	2041.9	2003.3
70°	369.8	366.7	449.4	509.3	693.4	1120.9	1648.0	1878.1	1878.4	1862.9	1847.3
72.5°	175.6	177.5	201.6	313.4	453.8	748.9	1311.7	1499.0	1520.6	1492.7	1473.4
75°	126.1	129.0	143.6	191.7	270.6	449.4	850.3	1048.4	1049.0	999.6	955.5
77.5°	36.8	38.3	53.9	118.2	202.8	303.3	488.4	582.8	569.2	533.7	500.4
80°	15.2	15.2	15.8	37.7	81.4	206.0	341.6	448.8	447.2	433.5	413.9
82.5°	5.7	6.0	7.6	15.5	19.3	50.7	227.9	389.5	388.5	369.2	355.3
85°	0.6	0.6	1.9	6.7	7.3	9.5	45.6	171.8	170.8	171.8	150.5
87.5°	0.0	0.0	0.3	0.6	1.0	1.3	1.9	6.7	7.3	7.0	6.3
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):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
2.5°	54.2	53.6	53.6	53.2	53.2	53.2	52.9	52.6	52.6	52.3	52.0
5°	59.3	58.6	58.3	57.7	57.4	57.0	56.4	56.1	55.5	55.1	54.8
7.5°	65.3	64.0	63.7	62.8	61.8	61.2	60.5	59.6	58.9	57.7	57.4
10°	72.9	71.3	70.0	68.8	67.8	66.2	65.3	64.0	62.8	61.8	60.8
12.5°	82.7	80.5	78.6	77.3	75.1	73.2	71.3	70.4	67.8	66.6	65.0
15°	93.5	91.0	88.7	86.2	84.6	81.4	78.9	76.1	74.8	72.6	70.0
17.5°	107.4	103.3	99.8	97.3	94.1	91.0	88.1	85.3	81.4	78.9	75.7
20°	122.3	118.8	114.1	109.7	105.9	102.0	97.9	94.1	90.6	86.5	82.7
22.5°	141.3	136.3	130.6	126.1	121.1	116.9	111.2	106.2	100.5	95.1	90.6
25°	165.4	158.8	153.4	147.1	141.0	134.7	127.7	121.4	114.1	109.0	101.4
27.5°	195.2	188.9	181.6	173.4	167.3	157.8	148.6	140.7	132.2	124.2	115.7
30°	233.3	224.1	216.5	208.5	196.5	187.3	176.5	165.7	154.0	146.1	133.1
32.5°	278.9	269.1	257.7	246.2	235.2	222.2	208.9	195.5	182.5	168.0	154.7
35°	334.7	322.9	309.9	297.6	280.5	266.5	249.7	231.4	216.8	200.0	183.2
37.5°	408.5	389.2	377.8	364.8	341.6	322.6	303.9	285.5	259.9	242.1	218.4
40°	501.1	489.6	470.9	450.0	429.1	404.1	378.7	354.3	324.5	299.8	272.2
42.5°	609.8	593.0	573.9	543.8	522.6	493.1	464.3	432.0	395.5	363.8	331.5
45°	711.8	691.8	677.3	647.2	625.0	590.1	555.2	521.0	478.9	438.0	400.6
47.5°	822.1	805.6	781.5	757.1	734.6	695.3	657.6	616.1	571.7	523.2	474.7
50°	919.1	906.1	889.6	860.1	835.1	802.1	757.8	712.4	656.3	608.2	553.0
52.5°	1001.5	991.3	968.2	947.3	924.8	893.7	854.1	810.7	750.1	697.2	634.5
55°	1098.8	1091.5	1071.2	1058.2	1038.2	1008.4	971.4	931.1	867.1	809.4	738.4
57.5°	1258.2	1252.5	1234.7	1229.3	1209.7	1183.7	1138.1	1095.0	1020.2	948.5	867.4
60°	1522.2	1510.8	1484.8	1471.5	1429.9	1395.1	1335.8	1276.6	1186.2	1095.0	997.3
62.5°	1804.9	1772.9	1723.4	1680.9	1622.0	1561.5	1482.2	1391.6	1285.7	1177.4	1065.2
65°	1957.3	1902.8	1840.4	1772.9	1696.5	1607.4	1507.6	1398.9	1285.1	1170.7	1052.2
66°	1974.7	1913.2	1847.0	1771.9	1687.0	1592.2	1490.8	1376.7	1258.5	1146.9	1028.4
67.5°	1952.9	1888.5	1818.5	1735.1	1643.2	1545.0	1438.5	1320.0	1206.2	1093.1	977.7
70°	1799.8	1735.8	1673.3	1585.6	1487.6	1388.7	1288.0	1155.5	1047.7	943.8	841.1
72.5°	1437.2	1393.8	1332.0	1256.9	1161.5	1045.5	961.5	843.0	749.5	648.7	569.2
75°	898.2	837.0	760.6	664.9	592.0	497.9	448.8	358.8	305.5	258.9	213.9
77.5°	459.2	413.3	359.7	305.8	254.2	202.8	156.9	110.9	74.8	52.0	38.7
80°	379.4	338.8	294.4	245.3	199.7	155.0	111.6	76.1	48.5	31.7	24.7
82.5°	313.4	279.2	239.6	194.0	154.3	121.7	84.6	55.1	34.2	22.2	17.4
85°	133.4	121.1	93.5	74.2	55.8	41.2	28.8	19.3	13.6	11.1	10.1
87.5°	5.7	6.3	6.0	4.8	3.5	3.5	3.2	2.5	2.5	2.5	2.5
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°	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
2.5°	52.0	51.7	51.3	51.3	51.0	50.7	48.8	47.2	45.3	44.1	42.8
5°	54.2	53.9	53.2	52.9	52.3	52.0	47.9	44.4	41.5	39.3	37.7
7.5°	56.4	56.1	55.1	54.2	53.9	53.2	46.6	42.2	38.3	35.8	34.2
10°	59.3	58.3	57.4	56.1	55.1	54.2	45.3	39.6	35.5	33.3	31.7
12.5°	63.4	61.8	60.2	58.6	57.4	55.8	44.7	37.4	33.3	30.7	29.2
15°	68.1	65.9	64.0	62.1	59.9	58.3	43.4	35.5	31.4	28.8	26.9
17.5°	72.6	70.0	67.2	64.3	62.1	59.9	42.2	33.6	29.5	26.9	25.0
20°	78.9	75.1	71.6	68.1	65.0	62.1	40.2	31.7	27.9	25.0	23.1
22.5°	85.9	81.4	77.0	72.3	68.1	64.3	38.7	30.1	26.3	23.5	21.2
25°	94.8	89.4	83.3	77.3	72.6	67.5	37.1	28.5	24.7	21.9	19.6
27.5°	107.1	99.5	92.9	85.3	78.0	72.3	35.8	27.3	23.1	20.3	18.1
30°	123.9	112.8	102.4	94.1	85.6	77.3	34.5	25.7	21.9	18.7	16.2
32.5°	142.6	129.6	117.6	105.2	94.4	84.9	33.3	24.4	20.3	17.1	14.9
35°	165.7	149.3	133.1	118.8	105.9	93.2	32.0	23.1	19.0	15.5	13.3
37.5°	199.0	178.4	157.2	138.8	122.0	105.2	31.1	21.9	17.4	13.9	11.7
40°	244.7	218.0	192.1	167.0	145.1	124.2	29.8	20.6	16.2	12.7	10.5
42.5°	294.1	261.8	227.5	199.3	169.2	142.9	28.5	19.3	14.9	11.4	9.2
45°	355.6	315.3	273.8	235.5	198.7	164.8	27.3	18.1	13.3	10.1	7.9
47.5°	422.8	371.4	324.5	276.4	232.6	192.1	25.7	17.1	12.0	8.9	7.0
50°	491.9	437.7	378.4	323.6	271.6	219.3	24.1	15.5	10.8	7.9	5.7
52.5°	566.3	502.3	441.8	373.6	313.1	255.1	22.5	14.3	9.8	7.0	4.8
55°	661.1	589.5	518.5	442.1	369.2	296.6	20.9	12.7	8.6	6.0	3.8
57.5°	780.3	695.3	608.2	522.0	433.5	351.1	19.6	11.1	7.3	5.1	3.2
60°	892.8	793.6	688.0	588.8	489.0	393.0	17.7	9.8	6.3	4.1	3.2
62.5°	951.1	837.9	724.2	614.8	508.3	407.9	15.8	8.2	5.4	3.5	2.9
65°	936.8	821.5	711.2	600.9	496.6	398.4	13.9	7.3	4.8	3.2	2.9
66°	916.2	802.1	691.2	586.3	486.8	388.2	13.0	7.0	4.4	3.2	2.5
67.5°	871.2	760.9	655.1	557.5	459.9	368.9	11.7	6.3	4.1	2.9	2.5
70°	744.1	644.0	559.4	472.5	393.0	310.9	9.5	5.4	3.5	2.5	2.5
72.5°	492.5	424.4	367.9	316.6	264.6	205.4	7.9	4.4	2.9	2.5	2.2
75°	185.7	168.0	144.2	129.6	113.1	99.2	6.3	2.9	2.2	2.2	2.2
77.5°	33.0	30.4	26.9	24.7	22.8	20.9	5.1	1.9	1.9	2.2	2.2
80°	22.2	20.6	18.7	17.1	15.8	14.3	3.5	1.6	1.9	1.9	2.2
82.5°	15.8	14.9	13.9	12.7	11.7	10.5	2.2	1.6	1.9	1.9	1.9
85°	9.5	8.9	8.2	7.6	6.7	6.3	1.6	1.6	1.6	1.9	1.9
87.5°	2.5	2.2	2.5	2.5	1.9	2.2	1.3	1.3	1.3	1.6	1.6
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°	49.8	49.8	49.8	49.8	49.8
2.5°	42.2	42.2	41.5	42.5	42.5
5°	36.4	36.4	36.1	36.4	36.4
7.5°	33.3	33.0	33.0	33.0	33.3
10°	30.4	30.1	30.1	30.1	30.1
12.5°	27.9	27.6	27.3	27.6	27.6
15°	25.7	25.0	25.0	25.0	25.0
17.5°	23.8	23.1	22.8	22.8	22.8
20°	21.9	20.9	20.9	20.9	20.9
22.5°	20.0	19.0	19.0	19.0	19.0
25°	18.1	17.1	17.1	17.1	17.1
27.5°	16.5	15.5	15.5	15.5	15.5
30°	14.6	13.9	13.9	14.3	13.9
32.5°	13.3	12.4	12.4	12.7	12.7
35°	11.7	11.1	11.1	11.1	11.1
37.5°	10.1	9.5	9.5	9.5	9.5
40°	8.9	8.2	7.9	8.2	8.2
42.5°	7.6	7.0	6.7	6.7	6.7
45°	6.7	5.7	5.4	5.7	5.7
47.5°	5.4	4.8	4.8	5.1	5.1
50°	4.1	4.1	4.4	5.1	5.1
52.5°	3.8	3.8	4.4	5.1	5.1
55°	3.5	3.8	4.4	4.8	5.1
57.5°	3.2	3.8	4.4	4.8	4.8
60°	3.2	3.5	4.1	4.8	4.8
62.5°	2.9	3.2	3.8	4.4	4.4
65°	2.9	3.2	3.8	4.4	4.4
66°	2.9	3.2	3.8	4.4	4.4
67.5°	2.9	3.2	3.8	4.4	4.4
70°	2.9	3.2	3.8	4.1	4.1
72.5°	2.5	2.9	3.5	4.1	4.1
75°	2.5	2.9	3.5	4.1	4.1
77.5°	2.5	2.9	3.5	4.1	4.1
80°	2.5	2.9	3.5	3.8	4.1
82.5°	2.2	2.9	3.2	3.8	3.8
85°	2.2	2.5	3.2	3.5	3.8
87.5°	1.9	2.2	2.5	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)