

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: P141861

Luminaire Tested: **ECM-E01-LED-E1-T3-7050**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P141861
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33683)
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-T3-7050
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 3
Light Source: (21) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3012.9 lumens
Efficiency: N/A
Efficacy: 122.0 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

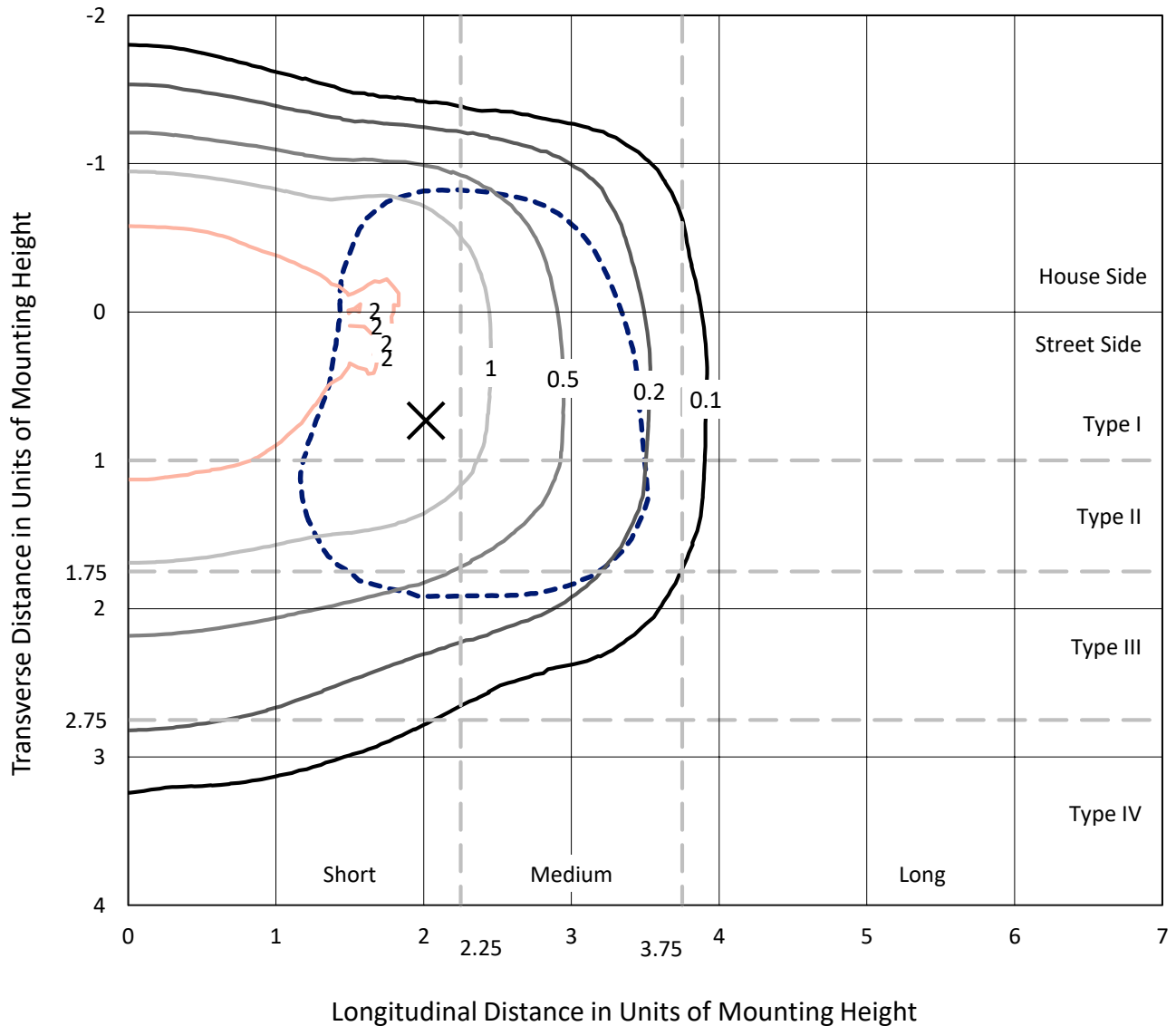
Input Watts (W): 24.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

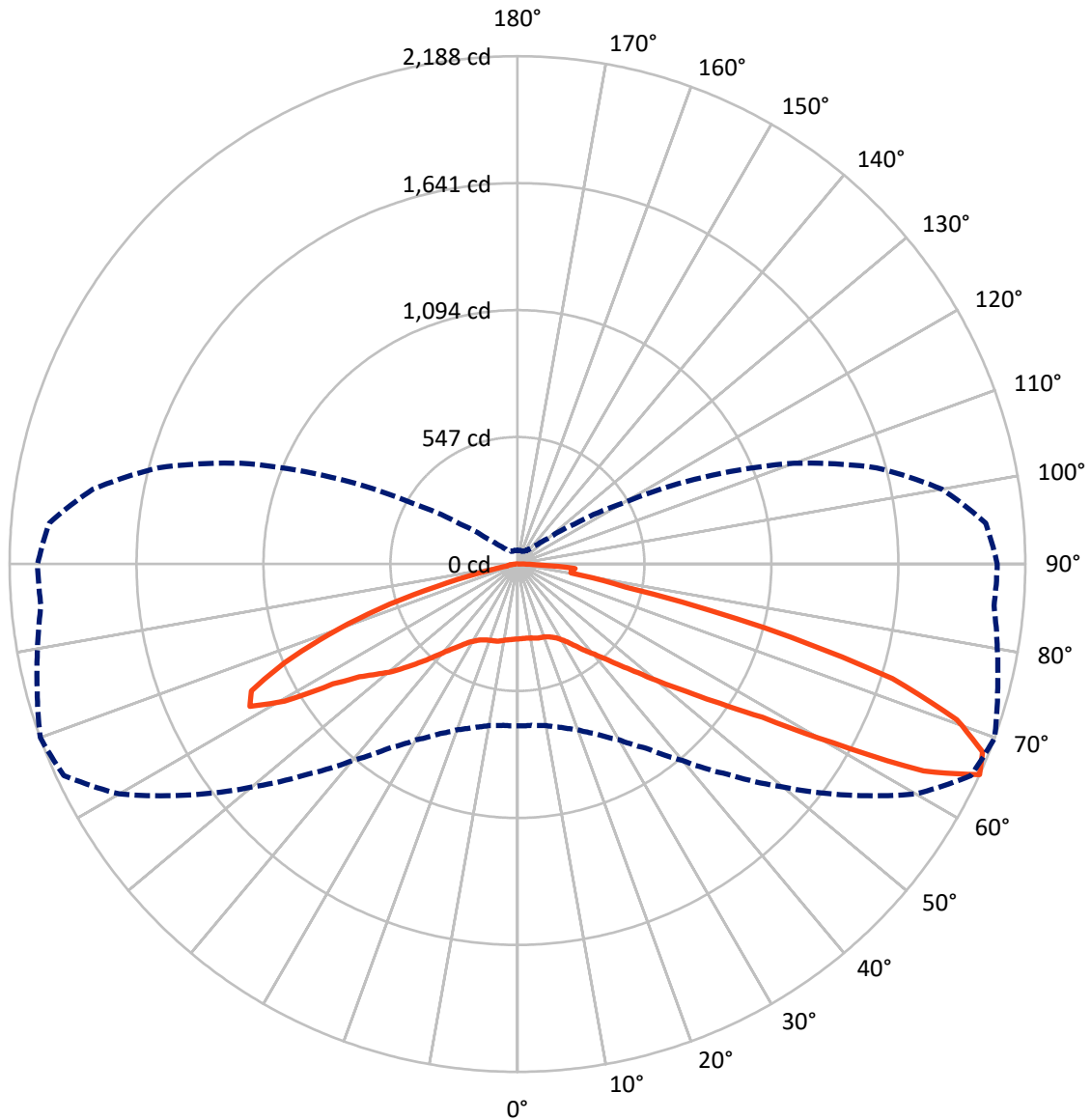
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.3 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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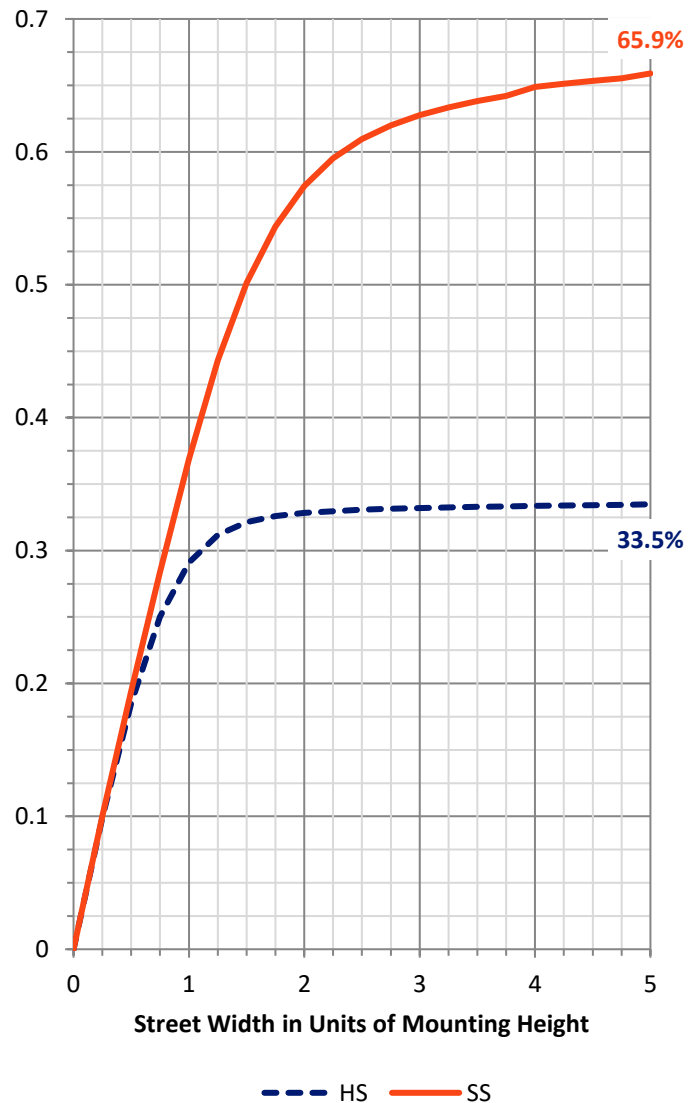
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1017.1	0.0	1017.1
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	1995.8	0.0	1995.8
	% Fixture	66.2	0.0	66.2
Total	Lumens	3012.9	0.0	3012.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.1	1.0
10°-20°	92.1	3.1
20°-30°	158.3	5.3
30°-40°	253.7	8.4
40°-50°	415.3	13.8
50°-60°	650.1	21.6
60°-70°	913.6	30.3
70°-80°	432.4	14.4
80°-90°	66.4	2.2
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°	3012.9	100.0
0°-180°	3012.9	100.0



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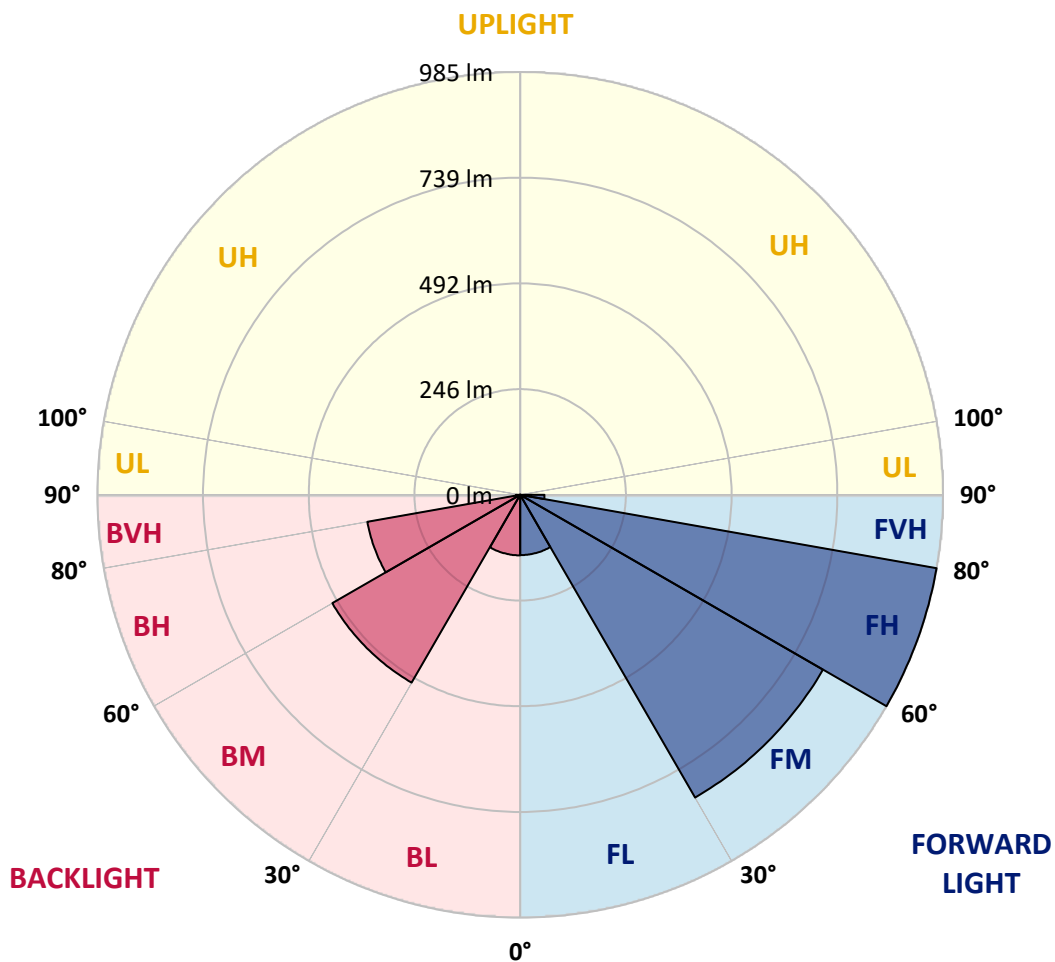
CATALOG NUMBER: ECM-E01-LED-E1-T3-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	140.4	4.7			
FM	(30°-60°)	814.2	27.0			
FH	(60°-80°)	984.7	32.7			G1/1800
FVH	(80°-90°)	56.6	1.9			G1/100
BL	(0°-30°)	141.0	4.7	B1/500		
BM	(30°-60°)	505.0	16.8	B1/1000		
BH	(60°-80°)	361.3	12.0	B1/500		G1/500
BVH	(80°-90°)	9.8	0.3			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	322.9	322.9	322.9	322.9	322.9	322.9	322.9	322.9	322.9	322.9	322.9
2.5°	321.2	321.5	321.5	320.8	320.8	321.2	321.2	321.5	321.5	321.5	321.9
5°	321.2	321.5	321.5	321.2	320.8	321.5	321.2	321.5	321.5	321.5	321.5
7.5°	320.5	320.8	320.8	320.5	320.8	321.2	321.2	321.9	322.2	322.2	322.5
10°	317.1	317.4	317.8	317.8	318.4	319.5	319.8	321.2	321.5	322.5	323.2
12.5°	310.9	310.9	311.6	312.3	313.3	315.4	316.4	318.4	320.1	321.5	323.9
15°	305.4	305.4	306.1	306.5	308.5	309.9	311.9	314.3	317.4	320.1	323.9
17.5°	308.2	308.2	307.8	307.5	307.8	307.8	309.5	311.9	314.7	318.4	323.2
20°	318.8	318.4	317.1	316.4	316.0	314.7	313.6	313.3	314.7	317.4	322.2
22.5°	328.0	327.3	327.0	326.3	327.3	326.6	325.3	323.6	321.5	320.5	323.2
25°	333.5	333.8	333.8	333.8	335.9	336.6	337.2	335.2	332.8	329.4	329.7
27.5°	341.0	341.4	340.7	342.0	344.4	346.1	347.8	349.2	347.8	345.8	343.4
30°	357.1	357.1	356.1	357.1	359.1	360.8	363.2	365.6	365.6	363.6	361.2
32.5°	373.8	374.2	374.2	374.9	377.9	379.3	382.7	385.1	386.8	385.5	386.8
35°	394.0	393.7	394.7	395.1	399.8	401.5	408.4	410.1	412.8	413.5	414.5
37.5°	427.5	428.2	426.2	424.8	428.9	428.9	437.8	442.6	441.9	446.7	450.1
40°	481.6	478.5	477.5	476.8	479.2	478.8	478.5	485.0	488.1	488.8	490.5
42.5°	541.4	542.5	541.4	543.8	543.8	542.1	540.8	539.7	545.5	549.3	550.0
45°	611.6	612.9	610.9	609.2	613.6	616.0	616.0	618.7	623.5	625.2	624.2
47.5°	667.7	671.4	669.7	672.1	679.3	687.5	698.4	705.6	710.7	715.5	723.1
50°	718.3	720.0	724.1	732.0	742.6	755.6	773.3	791.1	801.4	813.4	822.3
52.5°	749.1	754.2	760.3	773.3	791.1	809.3	836.6	865.7	891.7	905.0	915.6
55°	767.5	771.3	779.5	797.3	822.3	849.3	883.5	923.5	958.0	987.5	1010.4
57.5°	766.8	769.9	781.2	800.7	830.5	864.3	907.1	957.0	1008.0	1056.9	1100.0
60°	752.1	754.9	766.2	787.0	819.5	859.9	911.2	972.4	1041.5	1115.0	1190.6
62.5°	729.6	731.6	741.5	762.4	795.2	838.3	898.5	978.9	1077.1	1193.0	1339.8
65°	697.8	697.8	707.0	728.5	760.0	808.2	874.6	969.0	1104.8	1281.3	1494.7
67.5°	650.9	650.9	658.4	676.2	700.8	734.3	800.7	898.9	1042.2	1253.6	1503.2
70°	562.3	563.7	563.7	574.6	585.6	600.6	632.1	707.3	841.7	1048.3	1293.9
72.5°	412.2	387.2	406.7	424.5	436.8	445.0	463.1	486.7	554.4	709.4	931.7
75°	259.6	266.1	280.8	301.0	331.4	362.9	397.4	412.2	406.0	424.5	573.9
77.5°	157.3	151.9	166.2	196.3	230.5	273.3	337.9	394.0	426.2	424.1	406.3
80°	68.1	66.4	75.9	90.3	107.1	145.7	204.9	281.8	367.3	416.9	409.4
82.5°	24.3	24.6	31.1	36.9	44.5	57.1	81.1	129.6	205.6	292.8	361.9
85°	7.2	7.9	10.9	15.4	17.4	19.8	27.4	40.7	69.4	110.8	197.0
87.5°	2.1	2.4	3.1	5.5	5.1	4.8	5.5	8.6	6.5	5.5	27.4
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	322.9	322.9	322.9	322.9	322.9	322.9	322.9	322.9	322.9	322.9	322.9
2.5°	321.5	321.5	321.5	321.9	321.5	321.5	321.9	321.9	322.2	322.5	323.2
5°	321.2	321.2	321.5	321.5	321.5	321.9	322.2	322.5	323.2	324.2	325.3
7.5°	322.2	322.2	321.9	322.2	322.2	322.5	323.2	323.6	324.9	326.0	327.7
10°	323.2	323.2	323.6	323.9	323.9	324.6	325.6	326.0	327.3	329.4	331.1
12.5°	324.6	325.6	327.0	327.7	328.4	329.0	330.1	330.7	332.5	335.2	337.2
15°	325.6	328.0	329.4	331.1	332.1	332.5	333.5	334.9	336.6	339.3	341.7
17.5°	325.6	328.7	330.7	332.5	334.2	335.2	336.2	337.6	340.0	342.7	345.1
20°	325.3	329.7	332.5	335.2	338.3	339.3	341.0	342.4	345.1	348.5	350.2
22.5°	327.0	332.1	335.9	340.7	344.1	346.8	348.9	351.3	353.3	355.7	356.4
25°	332.1	337.2	343.4	349.2	354.0	358.1	360.8	362.9	365.3	366.3	365.0
27.5°	340.7	344.4	353.0	361.5	369.1	374.2	377.3	380.0	380.7	382.7	377.6
30°	356.1	357.8	366.7	379.0	387.5	396.1	400.2	402.9	403.3	401.9	393.0
32.5°	381.4	378.3	386.2	402.6	415.6	422.8	429.3	431.0	429.9	425.5	411.1
35°	412.2	407.4	411.1	435.1	449.4	460.0	466.2	467.9	465.5	457.6	437.8
37.5°	450.1	448.4	450.1	473.0	498.0	507.9	510.7	512.7	506.9	492.5	466.5
40°	492.2	492.5	490.5	511.3	542.8	557.2	563.7	559.2	552.0	531.5	502.8
42.5°	550.3	548.3	541.1	559.9	600.3	615.0	620.8	617.4	610.2	584.2	550.7
45°	627.3	620.5	613.6	623.5	662.5	681.7	690.2	687.8	675.2	643.7	612.2
47.5°	721.4	714.2	701.5	699.8	739.1	761.7	764.8	761.0	751.5	720.0	681.3
50°	820.2	818.1	812.3	798.7	833.9	856.5	854.4	851.7	841.1	801.0	761.4
52.5°	922.5	926.6	922.8	913.2	950.9	960.1	960.8	952.6	940.3	903.3	849.3
55°	1029.9	1045.3	1051.1	1058.6	1088.4	1087.0	1079.1	1059.6	1062.7	1020.6	945.7
57.5°	1143.8	1191.0	1228.2	1245.0	1273.4	1281.6	1261.8	1268.3	1265.5	1222.1	1104.1
60°	1293.9	1406.8	1503.9	1563.8	1602.1	1587.4	1615.1	1616.5	1663.3	1567.9	1383.9
62.5°	1533.3	1740.6	1913.0	1964.6	1974.6	1971.1	1938.3	1971.1	1962.3	1846.0	1607.6
65°	1734.8	1981.4	2156.5	2188.0	2141.8	2099.4	2061.1	2067.6	2025.2	1856.9	1601.1
67.5°	1762.2	2007.7	2170.2	2161.3	2060.4	1981.8	1918.1	1868.2	1781.7	1629.5	1406.4
70°	1545.7	1805.9	2015.3	2008.4	1868.2	1763.2	1659.9	1584.6	1496.4	1378.7	1167.7
72.5°	1202.3	1434.2	1637.0	1689.7	1551.5	1435.5	1340.8	1245.0	1154.0	1042.2	909.1
75°	818.5	992.9	1087.3	1101.7	975.1	888.3	851.7	773.3	676.9	652.9	554.4
77.5°	475.4	542.5	513.7	475.4	382.7	281.2	214.8	183.7	184.4	211.7	202.8
80°	386.5	368.0	290.4	232.9	158.4	80.7	54.0	46.5	46.9	54.4	52.7
82.5°	398.5	409.1	336.2	235.3	162.1	85.5	41.0	30.4	35.6	38.6	38.0
85°	295.2	386.8	346.8	249.7	174.1	91.0	26.7	16.8	23.6	28.7	30.8
87.5°	82.8	130.0	100.9	66.7	48.6	16.4	10.6	8.9	10.9	15.0	15.0
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	322.9	322.9	322.9	322.9	322.9	322.9	322.9	322.9	322.9	322.9	322.9
2.5°	323.6	324.9	324.6	325.3	325.6	326.6	327.3	327.0	327.0	327.7	328.4
5°	326.3	328.0	328.0	329.0	330.1	331.4	332.5	331.8	332.1	332.8	333.5
7.5°	329.0	331.1	331.4	332.5	333.1	333.8	334.5	333.5	333.1	333.1	332.8
10°	332.5	334.5	334.2	334.2	333.8	333.1	331.8	329.4	327.7	326.6	326.0
12.5°	338.3	339.6	337.6	335.5	332.1	329.7	326.6	323.9	321.9	320.1	319.5
15°	343.4	342.7	340.3	336.6	331.8	328.0	324.9	321.2	318.8	316.7	315.7
17.5°	346.1	343.7	340.3	336.9	332.8	329.4	325.6	321.2	317.4	314.7	313.3
20°	348.9	345.1	340.7	337.2	334.2	331.4	328.7	323.2	318.4	314.3	312.3
22.5°	353.0	347.8	343.4	340.3	337.2	334.5	331.8	326.6	321.5	316.0	313.0
25°	358.8	352.0	348.9	345.8	342.4	339.6	335.9	331.1	325.6	319.1	314.7
27.5°	368.0	361.9	358.5	355.4	351.3	346.8	342.7	336.2	331.1	323.6	317.8
30°	381.4	374.9	371.8	368.7	363.9	358.1	352.3	344.1	336.9	328.4	320.8
32.5°	398.1	394.7	390.9	385.8	379.3	372.1	363.6	352.6	342.4	331.8	322.2
35°	424.1	418.3	412.2	407.0	397.4	387.5	374.5	358.5	344.8	331.8	320.1
37.5°	453.9	447.7	439.5	430.3	415.9	400.2	382.1	361.9	343.7	328.0	315.0
40°	489.8	481.9	471.0	453.5	432.3	408.7	384.4	359.1	337.9	319.8	304.8
42.5°	537.3	521.3	500.1	474.4	444.3	412.2	381.4	352.0	328.0	308.2	293.1
45°	591.0	565.4	531.2	492.9	451.1	410.8	374.5	340.3	313.3	291.4	275.7
47.5°	648.8	608.8	558.5	504.5	451.8	403.3	361.2	322.9	292.4	269.2	249.7
50°	714.2	648.2	577.7	510.3	447.4	389.9	342.0	297.9	266.4	238.7	221.0
52.5°	770.3	682.7	591.0	507.9	431.6	366.7	310.6	267.8	230.9	206.2	188.8
55°	836.6	716.2	598.2	496.0	406.3	330.4	276.7	229.2	194.3	172.4	157.3
57.5°	948.5	773.0	604.4	471.7	364.6	284.9	229.8	185.4	158.0	138.9	128.3
60°	1164.3	883.1	629.7	435.4	311.6	230.2	177.5	145.0	121.4	108.8	101.2
62.5°	1305.5	958.0	618.4	379.7	243.5	172.4	130.0	104.7	91.0	81.7	78.3
65°	1269.6	882.5	524.7	301.0	169.6	114.6	87.2	71.8	65.7	60.9	58.8
67.5°	1090.4	711.8	380.3	194.6	107.4	69.8	57.1	51.0	48.2	46.2	45.8
70°	868.8	501.8	226.1	103.3	59.5	46.2	40.7	38.3	37.3	37.3	37.3
72.5°	630.4	289.0	111.2	55.8	40.0	35.2	32.8	32.2	31.8	31.8	32.2
75°	360.2	125.2	57.1	38.3	32.8	30.4	29.1	29.1	29.1	29.1	29.4
77.5°	125.5	57.1	40.4	32.2	28.4	27.0	26.3	27.0	27.4	27.4	27.4
80°	45.8	40.4	34.5	28.0	25.3	23.9	23.9	25.0	25.7	25.0	24.6
82.5°	36.3	31.8	28.0	24.3	22.2	21.5	21.9	22.6	22.2	21.9	20.9
85°	27.7	20.9	19.5	18.1	17.8	17.8	19.2	19.5	18.1	17.4	16.4
87.5°	13.7	10.9	9.9	11.6	11.3	10.3	10.6	10.6	8.9	8.2	8.6
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):

	165°	170°	175°	180°
0°	322.9	322.9	322.9	322.9
2.5°	328.4	328.7	329.7	329.4
5°	333.1	333.5	334.2	334.2
7.5°	332.1	332.5	332.5	332.5
10°	324.2	324.2	324.9	324.9
12.5°	318.1	317.8	317.8	317.1
15°	314.3	313.6	314.0	313.0
17.5°	311.6	311.3	311.3	310.6
20°	310.6	309.9	309.5	308.9
22.5°	309.9	309.5	308.9	308.2
25°	311.6	309.9	309.5	308.9
27.5°	313.3	311.6	310.2	309.9
30°	315.0	311.9	310.2	309.5
32.5°	314.7	310.6	308.2	307.1
35°	310.9	305.8	302.7	301.7
37.5°	303.7	297.9	293.1	291.4
40°	293.5	285.9	281.5	279.1
42.5°	281.2	272.6	268.8	266.8
45°	261.0	254.1	249.7	248.0
47.5°	238.4	229.2	225.1	223.3
50°	209.3	201.8	198.4	196.0
52.5°	178.5	171.7	168.6	167.3
55°	148.8	145.4	140.6	139.6
57.5°	120.7	119.7	116.3	115.9
60°	98.2	96.5	94.1	94.1
62.5°	77.3	75.6	74.6	74.6
65°	59.5	59.2	58.5	58.1
67.5°	45.8	46.9	47.2	46.5
70°	38.3	38.6	38.6	38.6
72.5°	33.2	33.2	33.2	32.8
75°	30.1	30.1	29.4	29.1
77.5°	27.7	27.4	27.7	27.4
80°	24.3	23.9	23.3	22.6
82.5°	20.2	19.8	18.1	18.1
85°	15.7	14.7	13.3	12.0
87.5°	8.9	7.9	5.8	4.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)