

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: P180791

Luminaire Tested: **ICM-F04-LED-E1-SL4-HSS-8030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P180791
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33728)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ICM-F04-LED-E1-SL4-HSS-8030
Description: ICON SITE MEDIUM LED LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (28) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5275.3 lumens
Efficiency: N/A
Efficacy: 51.6 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G2

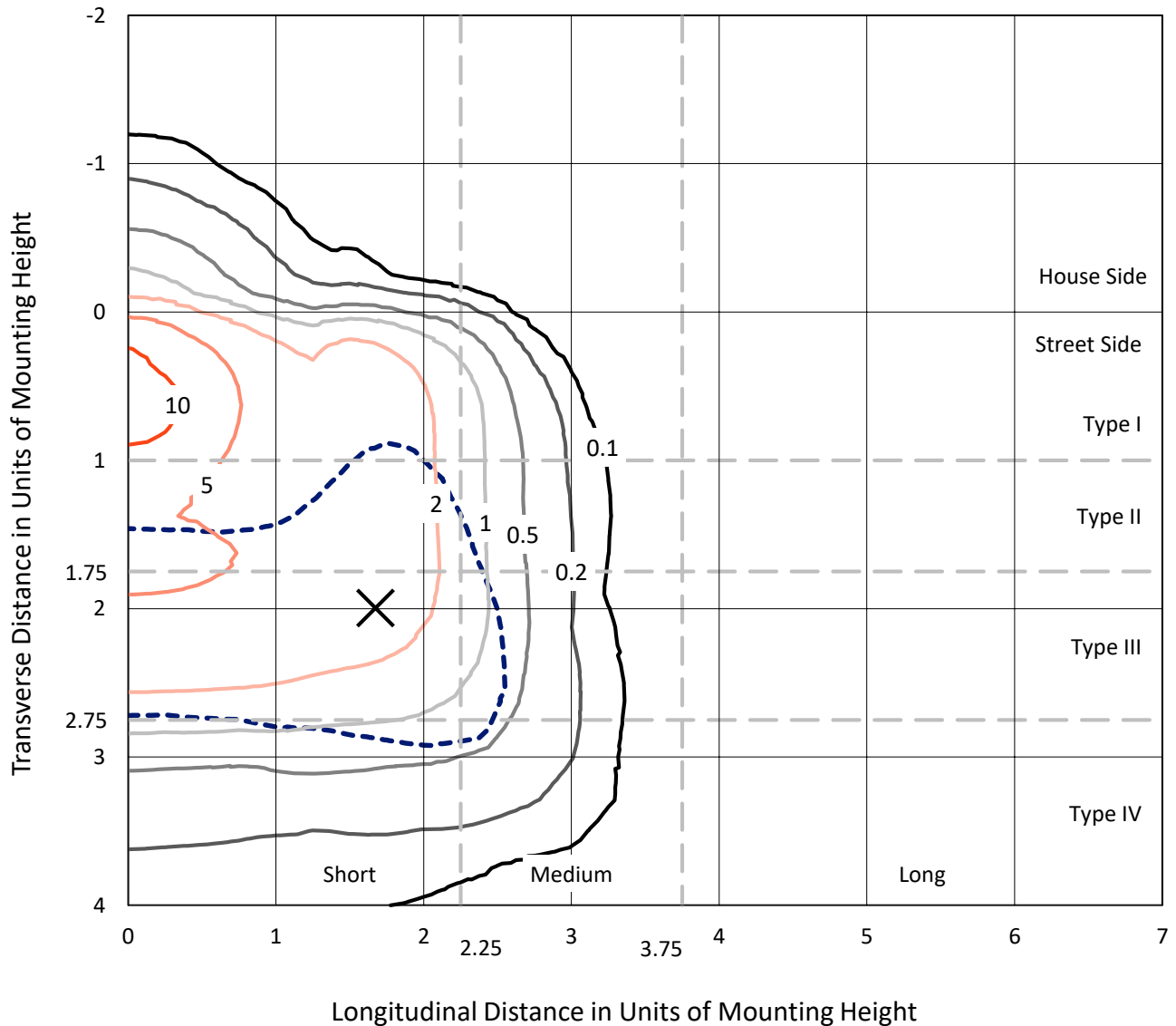
Input Watts (W): 102.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

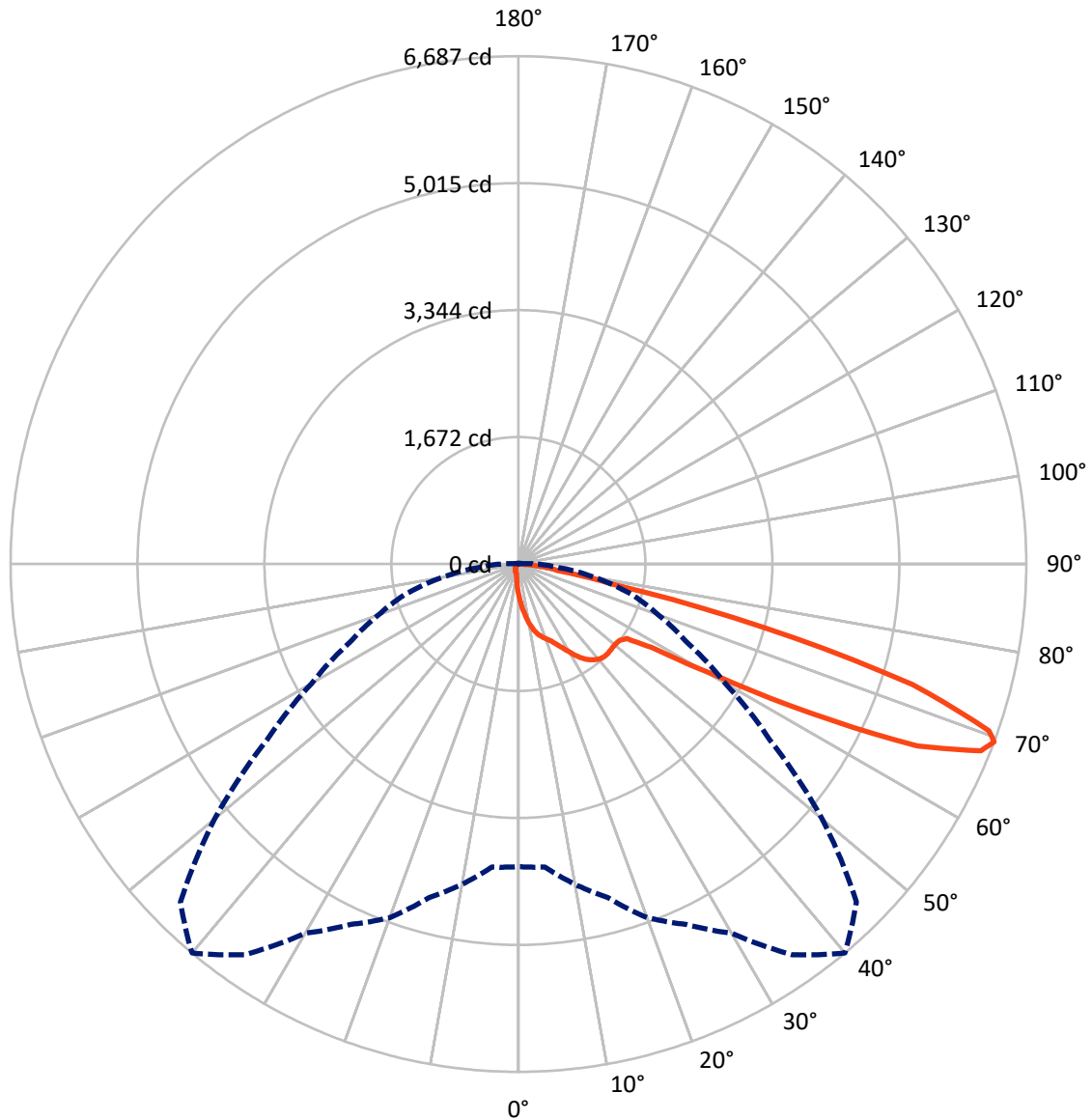
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.8 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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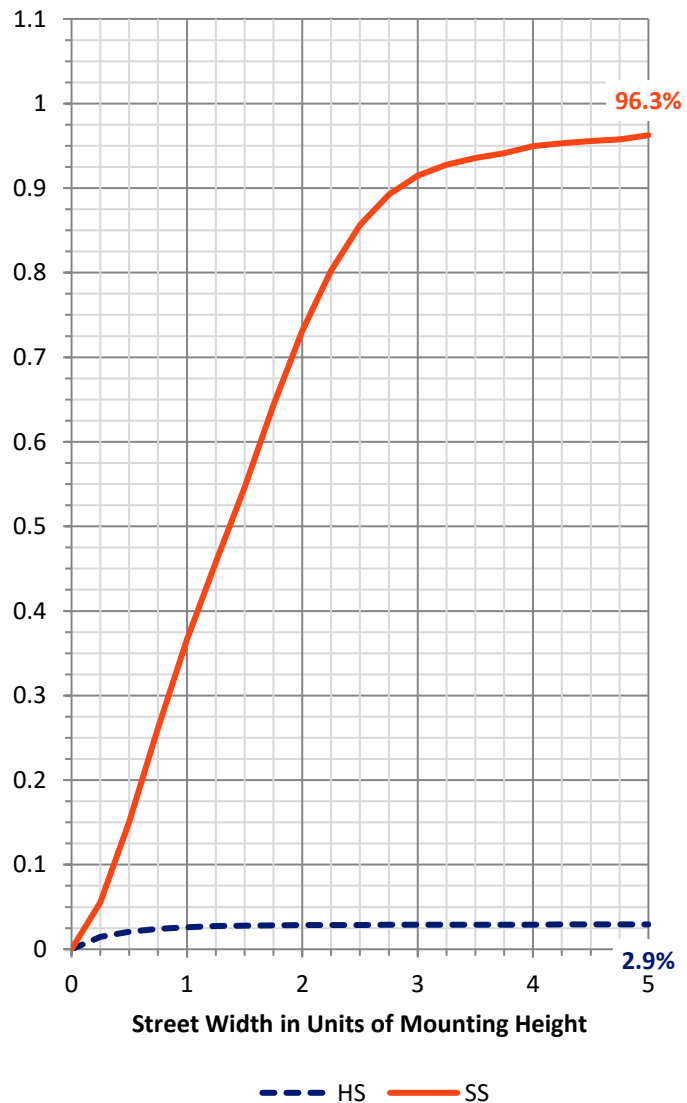
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	157.1	0.0	157.1
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	5118.2	0.0	5118.2
	% Fixture	97.0	0.0	97.0
Total	Lumens	5275.3	0.0	5275.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.9	0.8
10°-20°	141.2	2.7
20°-30°	270.2	5.1
30°-40°	449.4	8.5
40°-50°	608.1	11.5
50°-60°	950.9	18.0
60°-70°	1955.1	37.1
70°-80°	786.7	14.9
80°-90°	72.8	1.4
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°	5275.3	100.0
0°-180°	5275.3	100.0



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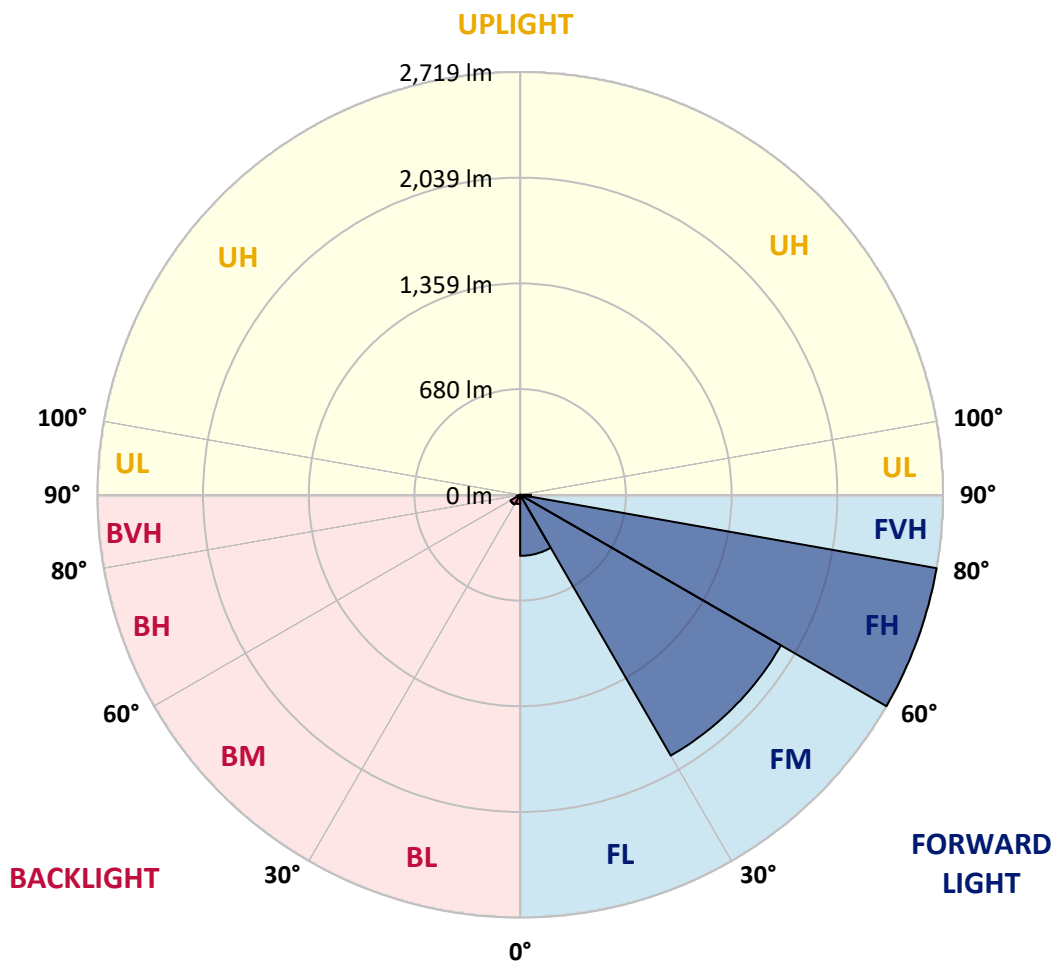
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	392.6	7.4			
FM	(30°-60°)	1936.6	36.7			
FH	(60°-80°)	2718.9	51.5			G2/5000
FVH	(80°-90°)	70.1	1.3			G1/100
BL	(0°-30°)	59.7	1.1	B0/110		
BM	(30°-60°)	71.7	1.4	B0/220		
BH	(60°-80°)	22.9	0.4	B0/110		G0/110
BVH	(80°-90°)	2.7	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-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	398.4	398.4	398.4	398.4	398.4	398.4	398.4	398.4	398.4	398.4	398.4
2.5°	531.4	525.4	518.5	518.5	509.9	509.9	504.7	490.9	489.1	481.3	473.6
5°	678.3	673.2	664.6	656.7	649.9	637.8	629.1	612.7	594.5	577.3	561.7
7.5°	821.9	819.3	803.7	801.1	789.9	770.0	752.7	728.5	697.4	673.2	644.7
10°	954.9	948.8	945.4	930.7	914.3	892.7	865.9	836.6	800.2	762.2	721.6
12.5°	1060.4	1056.8	1041.3	1035.3	1018.0	996.4	962.7	924.7	888.4	839.1	791.5
15°	1139.0	1132.9	1122.5	1113.0	1092.3	1073.3	1042.2	1000.8	956.7	903.1	846.1
17.5°	1204.7	1193.4	1190.8	1176.1	1154.5	1132.1	1097.5	1059.4	1007.6	954.1	891.8
20°	1292.8	1277.2	1272.1	1250.4	1225.4	1194.3	1154.5	1107.0	1052.6	993.8	929.9
22.5°	1396.5	1385.3	1374.1	1355.0	1323.1	1279.0	1221.0	1169.2	1100.1	1035.3	966.1
25°	1543.5	1533.9	1515.7	1489.9	1450.1	1397.4	1327.4	1251.4	1170.1	1087.2	1005.9
27.5°	1686.0	1677.4	1664.4	1644.6	1599.5	1541.7	1455.3	1358.5	1255.6	1155.4	1065.5
30°	1819.9	1812.2	1799.2	1779.4	1739.5	1682.5	1584.9	1481.2	1353.3	1236.7	1128.6
32.5°	1964.3	1961.7	1947.0	1918.4	1883.9	1807.0	1700.7	1589.2	1459.5	1324.8	1198.6
35°	2127.6	2107.7	2093.9	2065.4	2006.6	1924.5	1800.1	1678.2	1541.7	1403.5	1262.5
37.5°	2265.9	2246.8	2229.6	2193.3	2121.5	2016.9	1876.1	1742.2	1601.3	1460.5	1317.0
40°	2367.0	2357.5	2336.8	2289.2	2208.9	2084.4	1932.3	1786.2	1644.6	1502.8	1361.0
42.5°	2442.2	2427.5	2404.1	2354.9	2259.8	2118.1	1954.8	1804.4	1664.4	1528.8	1389.6
45°	2469.8	2457.7	2436.1	2382.5	2279.7	2127.6	1953.9	1799.2	1665.2	1536.5	1408.6
47.5°	2453.4	2441.3	2422.2	2372.2	2271.1	2116.4	1938.3	1784.5	1656.7	1539.1	1425.9
50°	2399.0	2392.0	2377.3	2335.0	2244.3	2094.7	1924.5	1776.8	1654.9	1552.0	1450.1
52.5°	2393.8	2389.4	2371.3	2328.9	2236.5	2087.8	1922.8	1781.0	1669.6	1568.5	1467.4
55°	2925.2	2863.8	2726.4	2609.8	2418.0	2189.8	2010.1	1851.1	1731.8	1633.3	1562.4
57.5°	4157.5	4066.0	3885.3	3663.2	3222.5	2789.5	2443.0	2192.4	2068.8	2023.9	2050.7
60°	4734.8	4718.4	4689.9	4584.4	4358.9	3986.4	3571.6	3123.1	2943.4	2927.8	2982.3
62.5°	5008.8	4998.4	5007.0	4994.1	4924.0	4815.2	4695.9	4502.4	4324.3	4209.4	3965.7
65°	5134.9	5141.8	5191.1	5230.0	5238.6	5267.1	5354.5	5595.6	5771.8	5475.4	4798.7
67.5°	4814.4	4854.9	4968.1	5109.9	5275.8	5436.5	5695.8	6203.9	6566.0	6217.7	5256.8
69°	3985.6	4005.4	4282.0	4549.1	4954.3	5237.8	5613.7	6279.9	6687.0	6293.8	5220.5
70°	3137.8	3155.9	3452.4	3815.3	4500.6	4865.3	5357.1	6151.2	6573.8	6192.7	5033.8
72.5°	1415.5	1389.6	1494.1	1688.6	2433.5	3012.5	3872.4	4983.7	5423.6	4961.2	3766.1
75°	988.7	977.4	988.7	989.5	1105.3	1425.9	1799.2	2701.4	3340.9	2882.9	1799.2
77.5°	765.7	757.9	750.1	741.5	755.3	846.1	882.3	958.3	1244.4	1177.0	686.1
80°	605.8	598.9	617.9	611.8	611.8	622.2	615.3	586.8	533.2	494.3	442.4
82.5°	281.7	283.4	283.4	307.6	370.7	432.9	452.8	424.3	376.7	320.7	258.4
85°	26.8	30.2	51.0	78.6	156.4	176.3	177.1	146.9	146.9	115.8	93.3
87.5°	0.0	0.8	0.8	0.8	7.8	21.6	18.1	5.2	2.6	2.6	4.3
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	398.4	398.4	398.4	398.4	398.4	398.4	398.4	398.4	398.4	398.4	398.4
2.5°	459.7	457.1	446.8	436.4	426.9	416.6	407.0	397.5	387.2	379.4	369.9
5°	537.5	518.5	496.9	476.2	455.4	433.8	411.4	391.4	370.7	351.7	333.6
7.5°	616.2	579.0	549.6	512.5	478.8	445.0	414.0	382.0	352.6	324.9	299.0
10°	682.7	637.8	592.0	544.5	496.0	451.1	407.9	369.9	331.0	297.3	265.3
12.5°	737.1	680.1	623.9	564.3	509.9	452.8	399.3	353.5	307.6	269.6	236.7
15°	786.4	720.7	653.3	584.2	515.1	450.2	390.6	333.6	286.9	243.7	206.5
17.5°	826.1	751.0	674.9	597.1	522.8	446.8	379.4	319.7	265.3	220.4	184.1
20°	860.7	782.1	700.0	612.7	528.0	446.0	369.9	302.4	246.3	198.8	163.3
22.5°	892.7	814.1	725.9	632.6	535.8	445.0	361.2	289.5	229.9	182.3	146.9
25°	929.0	846.1	753.6	653.3	549.6	448.5	356.0	279.2	215.2	166.8	134.0
27.5°	969.6	882.3	786.4	679.3	567.7	455.4	354.3	267.9	202.2	152.1	123.5
30°	1026.6	925.5	819.3	705.1	584.2	463.2	352.6	261.0	189.2	140.8	113.2
32.5°	1076.8	967.9	855.5	731.9	602.3	471.0	351.7	251.4	177.1	129.6	105.4
35°	1129.5	1006.8	886.6	757.9	617.9	479.6	350.9	244.6	166.0	118.4	97.7
37.5°	1175.3	1039.6	910.8	780.4	635.2	487.4	351.7	238.5	155.5	108.9	90.7
40°	1214.1	1073.3	937.6	801.1	653.3	499.5	352.6	232.5	145.2	100.3	84.7
42.5°	1248.8	1105.3	966.1	824.4	674.1	513.3	357.8	227.3	136.6	92.5	78.6
45°	1275.5	1134.7	997.2	857.2	707.7	535.8	367.3	223.8	127.9	85.6	73.5
47.5°	1303.2	1177.9	1050.0	909.1	757.0	571.3	383.7	223.0	121.0	80.4	69.1
50°	1341.2	1221.0	1096.7	961.9	802.0	607.5	403.5	223.8	112.4	75.2	64.8
52.5°	1368.8	1265.1	1157.1	1053.4	909.1	718.1	480.5	239.4	108.0	70.9	59.6
55°	1532.2	1514.1	1516.7	1533.9	1422.4	1222.0	803.7	345.7	127.1	80.4	58.8
57.5°	2160.5	2224.4	2261.5	2260.7	2076.6	1722.3	1079.4	444.2	141.8	93.3	70.0
60°	2986.6	2938.2	2869.9	2701.4	2456.9	1966.0	1207.3	477.9	122.7	74.3	63.9
62.5°	3716.8	3433.3	3181.9	2908.8	2588.2	2050.7	1233.2	475.3	107.2	56.2	44.9
65°	4172.2	3662.3	3256.2	2914.0	2536.4	1979.8	1166.6	436.4	90.7	45.8	37.1
67.5°	4281.1	3538.8	2964.1	2527.7	2119.0	1540.8	856.4	328.4	70.9	38.0	32.8
69°	4043.5	3145.6	2456.0	1960.8	1541.7	1022.3	529.8	207.4	54.4	34.6	30.2
70°	3719.4	2736.0	2000.6	1573.7	1141.6	718.1	370.7	146.0	44.1	32.0	27.6
72.5°	2392.9	1437.1	983.4	684.5	471.0	286.0	145.2	65.7	33.7	26.8	22.5
75°	928.1	531.4	385.4	292.9	229.0	159.0	88.2	42.3	28.6	22.5	17.3
77.5°	457.1	350.0	286.0	196.2	114.0	70.9	47.5	32.8	23.3	16.5	11.3
80°	361.2	240.3	143.4	89.0	67.4	51.0	36.3	26.8	17.3	10.3	7.8
82.5°	184.9	101.1	74.3	60.5	50.1	39.7	29.4	19.0	11.3	6.9	6.0
85°	57.9	42.3	38.0	37.1	34.6	28.6	20.7	12.1	6.9	4.3	4.3
87.5°	4.3	6.0	7.8	6.0	6.9	6.0	7.8	5.2	3.4	3.4	2.6
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	398.4	398.4	398.4	398.4	398.4	398.4	398.4	398.4	398.4	398.4	398.4
2.5°	363.0	352.6	343.1	337.0	325.8	321.5	317.1	315.4	307.6	309.4	302.4
5°	317.1	299.0	285.2	271.4	258.4	248.8	241.1	231.6	223.8	220.4	213.5
7.5°	275.6	252.4	234.2	219.5	203.9	191.8	181.5	174.6	167.6	160.7	157.3
10°	239.4	214.3	193.6	178.9	164.2	153.9	146.0	140.8	136.6	134.0	133.1
12.5°	205.7	181.5	162.4	149.5	138.2	133.1	129.6	127.1	126.1	125.3	125.3
15°	179.7	155.5	140.8	131.3	126.1	123.5	122.7	121.0	119.3	118.4	118.4
17.5°	155.5	137.4	127.1	121.9	119.3	117.5	115.8	114.0	112.4	111.4	111.4
20°	139.2	124.5	119.3	115.8	113.2	111.4	108.9	107.2	106.3	105.4	104.6
22.5°	126.1	116.7	113.2	110.6	107.2	104.6	102.8	101.1	99.3	98.5	97.7
25°	116.7	110.6	108.0	104.6	101.1	98.5	95.9	93.3	91.6	90.7	89.0
27.5°	109.8	105.4	102.0	97.7	94.2	91.6	89.0	86.4	84.7	83.0	82.1
30°	103.7	99.3	95.1	91.6	87.3	84.7	81.2	78.6	77.8	76.1	74.3
32.5°	97.7	93.3	89.0	84.7	80.4	76.9	75.2	71.7	70.0	69.1	67.4
35°	90.7	86.4	81.2	77.8	73.5	70.0	67.4	64.8	63.1	61.4	60.5
37.5°	84.7	79.5	74.3	70.0	66.5	63.1	60.5	57.9	56.2	54.4	53.6
40°	77.8	72.6	67.4	63.1	59.6	57.0	54.4	51.8	50.1	49.3	49.3
42.5°	71.7	65.7	60.5	57.0	54.4	51.0	48.4	45.8	44.9	44.1	44.9
45°	65.7	59.6	55.3	51.8	49.3	45.8	43.2	41.5	40.7	41.5	42.3
47.5°	60.5	54.4	50.1	47.5	44.9	42.3	39.7	38.0	38.0	39.7	41.5
50°	55.3	49.3	45.8	44.1	41.5	38.9	35.4	34.6	35.4	37.1	38.9
52.5°	50.1	43.2	40.7	39.7	37.1	34.6	32.0	31.1	32.0	33.7	32.8
55°	44.9	38.0	37.1	36.3	33.7	30.2	27.6	27.6	27.6	26.8	25.0
57.5°	43.2	33.7	32.8	32.0	29.4	26.0	24.2	22.5	21.6	19.0	18.1
60°	44.9	30.2	30.2	28.6	26.0	22.5	19.9	17.3	15.5	13.9	13.9
62.5°	36.3	27.6	26.8	25.0	21.6	18.1	15.5	12.9	12.1	11.3	11.3
65°	29.4	25.0	23.3	20.7	18.1	14.7	12.1	10.3	9.5	9.5	10.3
67.5°	26.8	22.5	19.9	17.3	14.7	11.3	9.5	8.7	8.7	9.5	9.5
69°	25.0	20.7	18.1	15.5	12.9	10.3	8.7	8.7	8.7	8.7	9.5
70°	23.3	19.9	17.3	14.7	11.3	8.7	7.8	7.8	8.7	8.7	9.5
72.5°	18.1	15.5	14.7	12.1	8.7	7.8	6.9	7.8	7.8	8.7	8.7
75°	13.9	11.3	11.3	9.5	6.9	6.0	6.0	6.9	6.9	7.8	7.8
77.5°	9.5	7.8	7.8	6.9	6.0	5.2	5.2	6.0	6.9	6.9	7.8
80°	6.9	6.0	5.2	6.0	5.2	4.3	5.2	6.0	6.0	6.9	6.9
82.5°	5.2	5.2	5.2	5.2	4.3	4.3	5.2	5.2	6.0	6.9	6.9
85°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	5.2	5.2	6.0	6.0
87.5°	2.6	2.6	2.6	3.4	3.4	4.3	4.3	4.3	4.3	5.2	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):

	165°	170°	175°	180°
0°	398.4	398.4	398.4	398.4
2.5°	300.7	299.9	296.4	297.3
5°	210.9	205.7	209.1	208.3
7.5°	154.7	153.9	152.9	154.7
10°	132.2	132.2	131.3	132.2
12.5°	124.5	124.5	124.5	124.5
15°	118.4	118.4	117.5	117.5
17.5°	111.4	111.4	111.4	110.6
20°	104.6	103.7	103.7	103.7
22.5°	96.7	95.9	95.9	95.9
25°	89.0	88.2	88.2	88.2
27.5°	81.2	80.4	79.5	79.5
30°	73.5	72.6	71.7	71.7
32.5°	65.7	64.8	63.9	63.9
35°	58.8	58.8	57.9	57.0
37.5°	52.7	52.7	52.7	52.7
40°	48.4	49.3	49.3	49.3
42.5°	45.8	46.7	47.5	48.4
45°	44.1	45.8	46.7	46.7
47.5°	43.2	44.1	44.9	44.9
50°	39.7	38.9	38.9	38.9
52.5°	32.0	30.2	29.4	28.6
55°	23.3	22.5	20.7	20.7
57.5°	16.5	16.5	15.5	15.5
60°	12.9	12.9	12.1	12.9
62.5°	11.3	11.3	11.3	11.3
65°	10.3	10.3	10.3	10.3
67.5°	10.3	10.3	10.3	10.3
69°	9.5	9.5	9.5	9.5
70°	9.5	9.5	9.5	9.5
72.5°	8.7	8.7	8.7	8.7
75°	7.8	8.7	8.7	8.7
77.5°	7.8	7.8	7.8	7.8
80°	6.9	6.9	7.8	7.8
82.5°	6.9	6.9	6.9	6.9
85°	6.0	6.0	6.9	6.9
87.5°	5.2	5.2	6.0	6.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)