

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: P226433

Luminaire Tested: **IST-AF-600-LED-E1-T3-7050-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226433
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35938)-DOWNLIGHT AND
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: IST-AF-600-LED-E1-T3-7050-ULG
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III, WITH UPLIGHT GLOW
Light Source: (16) 5000K CCT, 70 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5838.6 lumens
Efficiency: N/A
Efficacy: 115.8 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U5 - G1

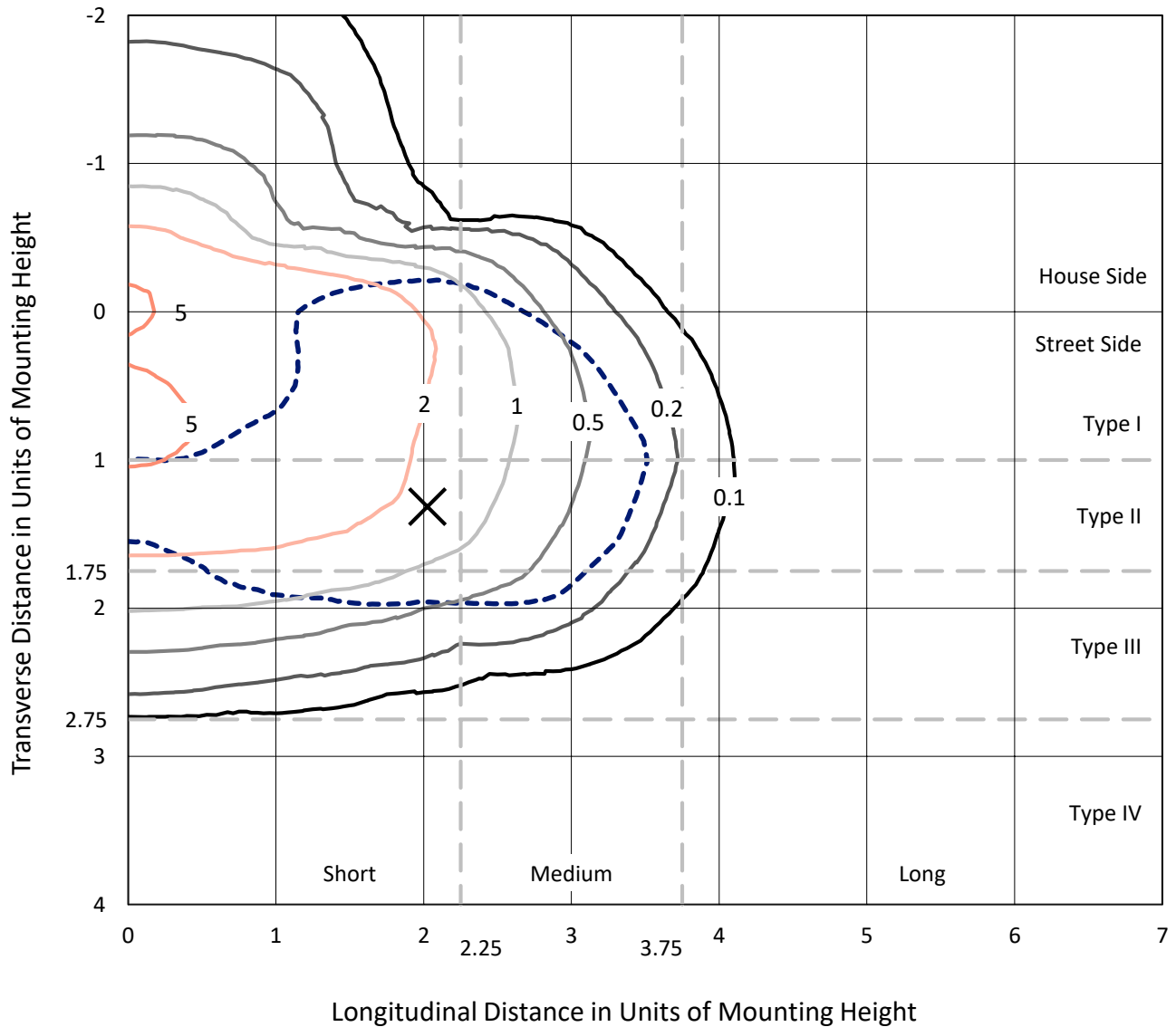
Input Watts (W): 50.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

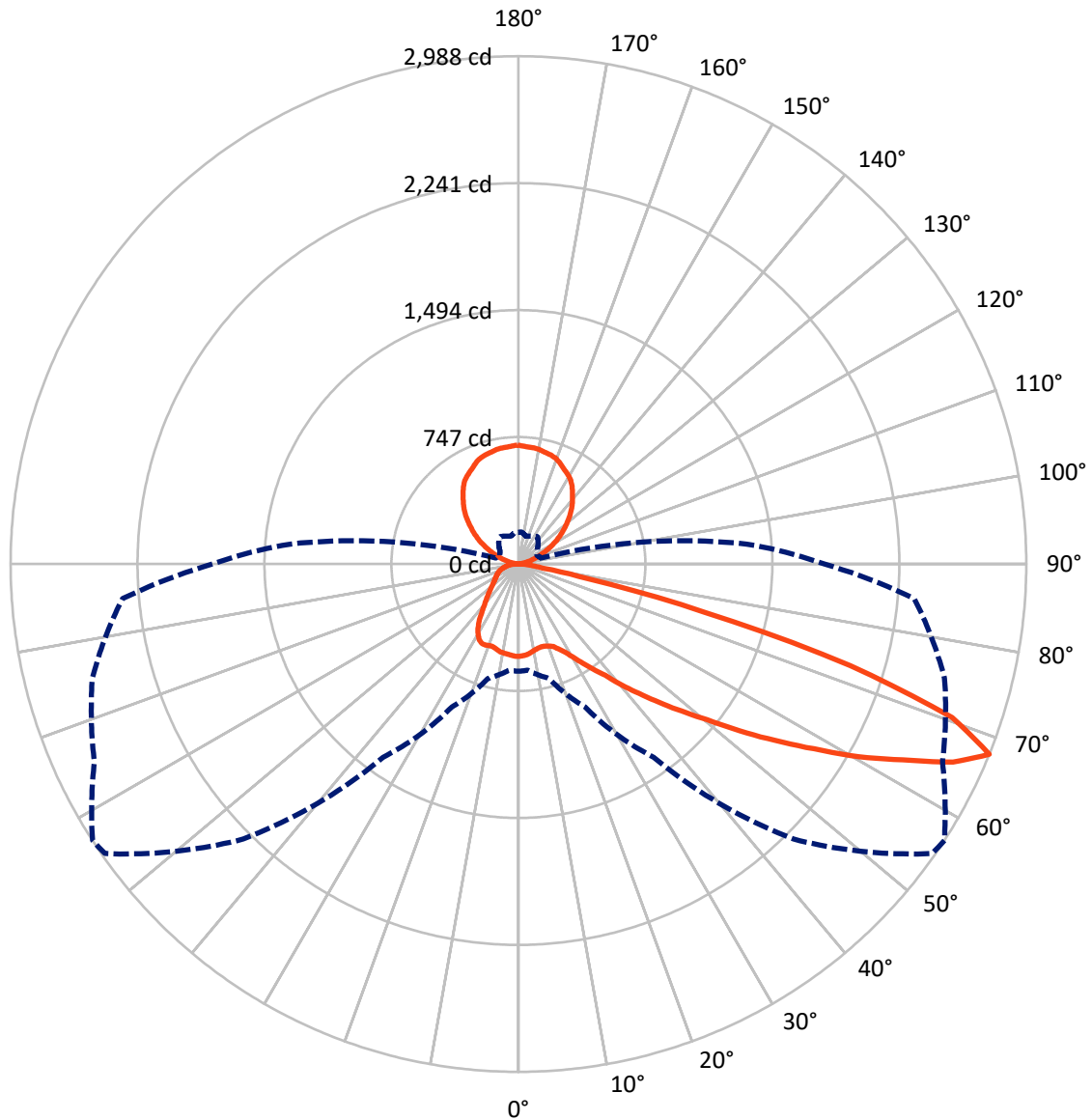
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.7 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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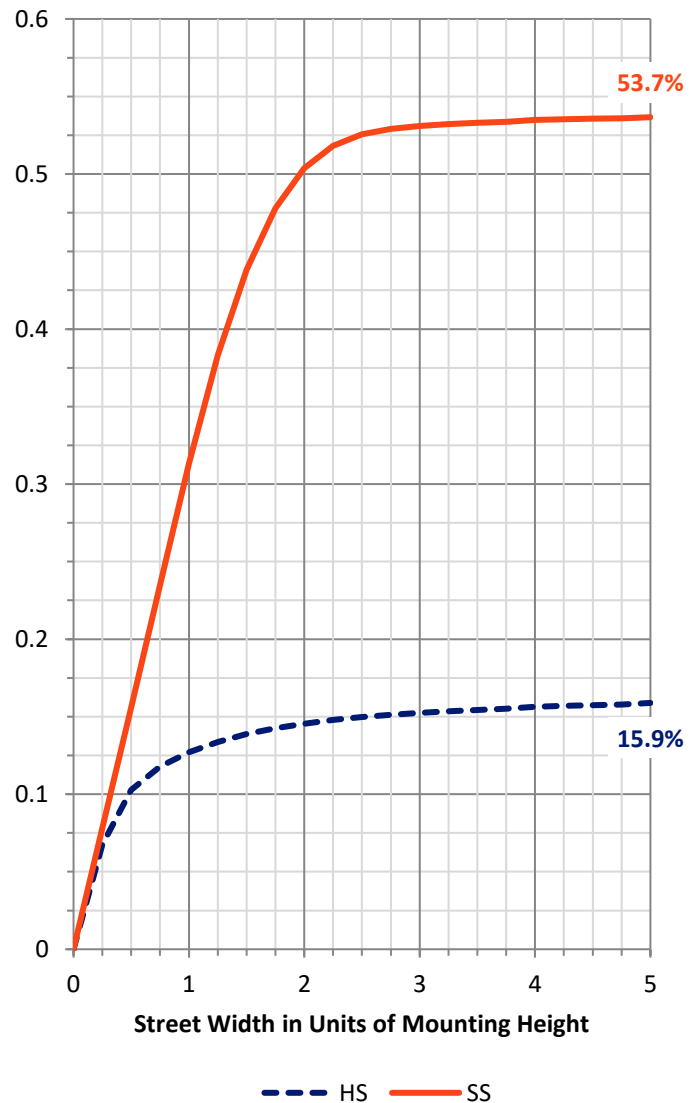
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	955.2	868.8	1824.0
	% Fixture	16.4	14.9	31.2
Street Side	Lumens	3146.7	867.9	4014.6
	% Fixture	53.9	14.9	68.8
Total	Lumens	4102.0	1736.7	5838.6
	% Fixture	70.3	29.7	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.8	0.9
10°-20°	146.1	2.5
20°-30°	251.5	4.3
30°-40°	408.9	7.0
40°-50°	659.6	11.3
50°-60°	983.3	16.8
60°-70°	1107.5	19.0
70°-80°	427.0	7.3
80°-90°	67.2	1.2
90°-100°	10.8	0.2
100°-110°	57.4	1.0
110°-120°	166.1	2.8
120°-130°	273.2	4.7
130°-140°	336.8	5.8
140°-150°	344.6	5.9
150°-160°	290.3	5.0
160°-170°	191.2	3.3
170°-180°	66.3	1.1
0°-90°	4102.0	70.3
0°-180°	5838.6	100.0



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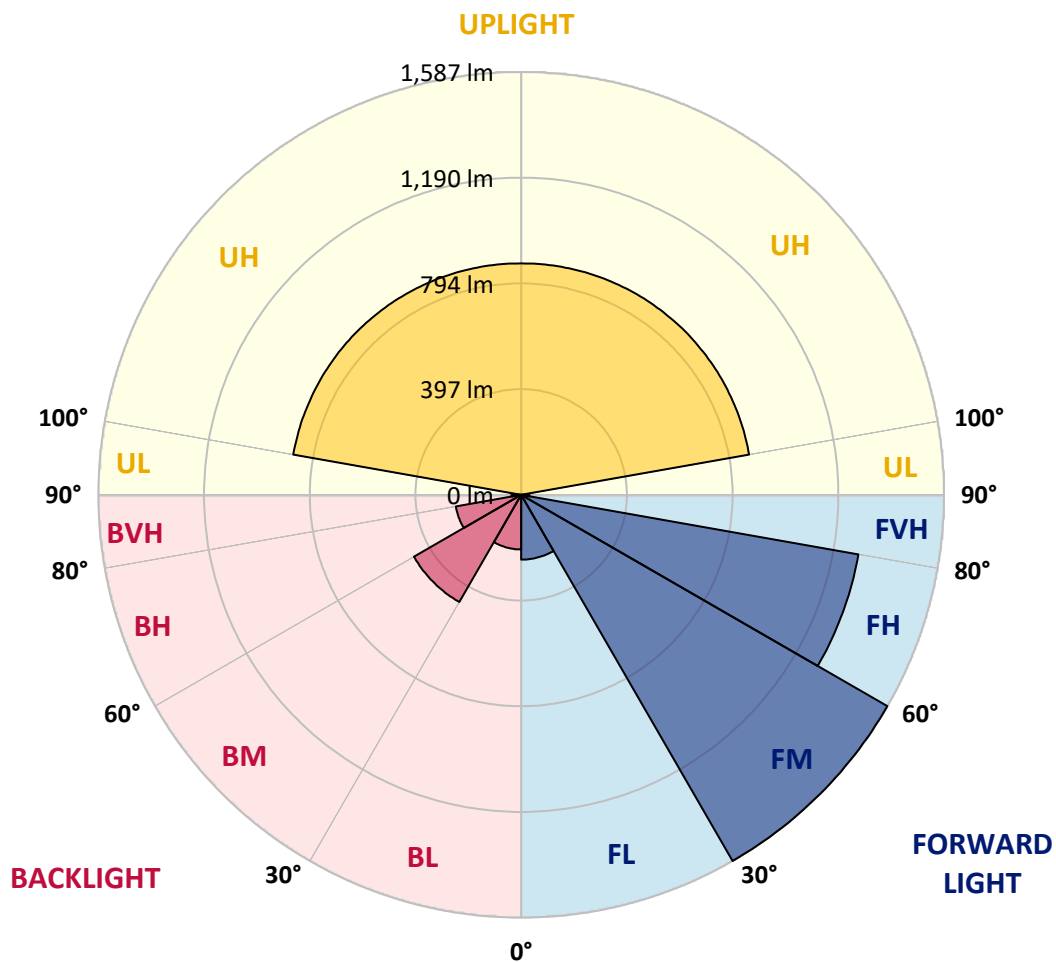
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	243.3	4.2			
FM	(30°-60°)	1587.2	27.2			
FH	(60°-80°)	1285.3	22.0			G1/1800
FVH	(80°-90°)	30.9	0.5			G1/100
BL	(0°-30°)	205.1	3.5	B1/500		
BM	(30°-60°)	464.7	8.0	B1/1000		
BH	(60°-80°)	249.1	4.3	B1/500		G1/500
BVH	(80°-90°)	36.3	0.6			G1/100
UL	(90°-100°)	10.8	0.2		U2/50	
UH	(100°-180°)	868.8	14.9		U4/1000	

BUG Rating: B1-U5-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7
2.5°	539.5	540.7	541.9	541.3	541.3	541.3	541.3	540.1	541.9	541.9	540.7
5°	530.6	531.2	531.8	533.0	534.1	535.3	535.9	535.9	536.5	535.9	534.7
7.5°	517.5	518.1	520.5	520.5	521.7	524.0	525.2	526.4	528.2	528.2	527.6
10°	513.4	513.4	513.4	511.6	512.8	513.4	515.1	515.1	519.9	522.3	523.5
12.5°	518.1	517.5	517.5	512.8	508.6	506.8	508.6	509.2	514.5	518.1	520.5
15°	528.8	528.8	527.6	520.5	512.2	505.6	505.0	505.0	509.2	514.5	518.7
17.5°	553.8	556.1	547.8	536.5	522.9	512.2	508.0	507.4	510.4	514.5	518.7
20°	601.3	600.7	588.2	568.0	544.2	526.4	516.3	515.1	514.5	516.9	521.7
22.5°	657.7	655.4	640.5	615.0	582.3	549.6	530.0	527.6	522.9	524.6	531.2
25°	718.3	718.9	700.5	667.2	626.2	587.0	557.3	554.9	544.8	543.7	550.8
27.5°	778.9	786.7	761.7	730.2	681.5	634.6	591.2	587.6	578.7	575.7	582.9
30°	867.5	864.5	833.6	792.6	743.9	685.1	643.5	636.9	619.1	623.3	631.0
32.5°	942.3	948.9	920.9	872.2	808.1	746.3	698.1	694.6	677.3	682.1	692.8
35°	1033.8	1049.3	1012.4	952.4	890.6	827.1	769.4	759.9	746.3	755.8	764.1
37.5°	1138.4	1146.1	1117.6	1040.4	977.4	910.8	845.5	830.6	815.8	835.4	850.2
40°	1238.2	1250.7	1213.9	1148.5	1075.4	1011.9	940.6	937.6	903.1	924.5	963.1
42.5°	1386.2	1401.6	1342.8	1266.7	1200.8	1124.1	1056.4	1040.4	1002.9	1033.2	1098.0
45°	1489.6	1489.0	1449.2	1386.2	1345.8	1271.5	1180.0	1161.0	1120.6	1161.0	1247.7
47.5°	1527.0	1535.9	1522.2	1514.5	1500.2	1446.2	1311.3	1293.5	1255.5	1315.5	1395.7
50°	1582.2	1579.9	1579.9	1627.4	1668.4	1657.1	1465.2	1439.6	1399.8	1471.7	1587.0
52.5°	1596.5	1575.1	1608.4	1699.3	1829.4	1838.9	1644.0	1629.8	1582.2	1652.4	1794.4
55°	1556.7	1551.3	1604.2	1736.1	1941.1	2008.8	1851.4	1831.8	1778.3	1838.3	2018.4
57.5°	1467.6	1481.2	1566.2	1728.4	2018.4	2158.6	2079.0	2051.0	1974.4	2010.6	2240.6
60°	1374.3	1380.8	1493.1	1701.1	2039.2	2262.6	2317.8	2301.8	2170.5	2191.8	2405.2
62.5°	1270.9	1255.5	1371.9	1678.5	2016.0	2405.7	2549.5	2537.1	2382.0	2375.4	2522.2
65°	982.1	1003.5	1102.8	1387.4	1857.3	2517.4	2825.8	2809.8	2617.9	2527.0	2509.7
67.5°	631.0	626.8	696.9	927.5	1388.0	2288.1	2970.2	2988.0	2752.7	2595.3	2337.4
70°	226.4	232.9	259.1	421.3	761.1	1524.6	2618.5	2707.0	2653.5	2467.5	1902.5
72.5°	137.8	137.8	156.9	189.5	308.4	723.1	1866.3	2041.5	2165.7	2033.2	1405.2
75°	108.1	107.5	114.1	130.7	166.4	237.1	992.2	1127.7	1389.1	1404.6	799.7
77.5°	85.6	85.0	91.5	99.2	124.2	125.4	316.7	412.3	637.5	600.1	285.8
80°	68.9	68.3	73.1	75.5	90.9	86.7	127.1	147.4	223.4	196.1	123.6
82.5°	62.4	62.4	67.1	57.6	63.0	61.2	79.0	84.4	112.3	116.5	74.3
85°	40.4	41.6	63.0	55.9	41.0	37.4	50.5	53.5	70.1	76.6	36.2
87.5°	19.0	20.8	48.1	46.3	27.3	20.2	28.5	30.3	38.0	46.9	21.4
90°	8.6	8.6	12.9	14.5	11.6	10.6	11.8	11.6	13.2	14.9	12.9
92.5°	4.0	4.0	5.0	6.0	6.0	6.0	7.0	7.0	7.0	6.0	6.0
95°	5.0	5.0	6.0	7.0	7.0	7.0	7.0	7.2	8.0	7.0	7.0
97.5°	7.0	7.0	8.0	8.0	9.0	9.0	12.0	11.6	10.0	9.0	8.0
100°	8.0	8.0	9.0	10.0	12.0	21.0	29.0	28.4	26.0	23.0	19.0
102.5°	11.0	11.0	13.0	18.0	27.0	40.0	50.0	49.4	47.0	42.0	39.0
105°	21.0	22.0	27.0	36.0	48.0	63.0	72.0	71.6	70.0	65.0	61.0
107.5°	41.0	42.0	49.0	58.0	73.0	88.0	95.0	94.8	94.0	90.0	87.0
110°	66.0	68.0	74.0	87.0	102.0	114.0	120.0	120.2	121.0	119.0	116.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
112.5°	99.0	99.0	106.0	121.0	134.0	143.0	148.0	148.4	150.0	149.0	147.0
115°	140.0	139.0	147.0	159.0	168.0	174.0	179.0	179.6	182.0	179.0	177.0
117.5°	184.0	184.0	189.0	197.0	202.0	205.0	211.0	211.8	215.0	210.0	208.0
120°	225.0	223.0	226.0	233.0	237.0	243.0	246.0	246.8	250.0	245.0	243.0
122.5°	263.0	260.0	261.0	267.0	271.0	277.0	279.0	279.8	283.0	278.0	276.0
125°	298.0	294.0	296.0	299.0	305.0	310.0	313.0	313.4	315.0	310.0	310.0
127.5°	330.0	329.0	329.0	333.0	339.0	340.0	345.0	345.2	346.0	346.0	345.0
130°	363.0	361.0	362.0	366.0	370.0	372.0	377.0	377.8	381.0	381.0	379.0
132.5°	396.0	394.0	393.0	401.0	404.0	405.0	411.0	412.0	416.0	414.0	414.0
135°	429.0	426.0	426.0	432.0	435.0	437.0	443.0	444.0	448.0	447.0	450.0
137.5°	460.0	457.0	459.0	460.0	464.0	468.0	473.0	473.4	475.0	476.0	481.0
140°	488.0	485.0	487.0	489.0	491.0	497.0	500.0	500.4	502.0	504.0	509.0
142.5°	518.0	515.0	517.0	518.0	521.0	525.0	527.0	528.2	533.0	533.0	534.0
145°	550.0	546.0	544.0	547.0	550.0	551.0	556.0	557.2	562.0	561.0	558.0
147.5°	575.0	572.0	571.0	574.0	574.0	575.0	580.0	581.0	585.0	586.0	583.0
150°	595.0	592.0	593.0	593.0	593.0	593.0	597.0	597.6	600.0	603.0	606.0
152.5°	611.0	608.0	608.0	609.0	610.0	610.0	611.0	611.6	614.0	618.0	623.0
155°	629.0	625.0	625.0	627.0	630.0	628.0	626.0	627.0	631.0	636.0	638.0
157.5°	646.0	643.0	643.0	644.0	646.0	645.0	644.0	644.8	648.0	650.0	650.0
160°	663.0	660.0	659.0	656.0	655.0	655.0	658.0	659.2	664.0	661.0	660.0
162.5°	673.0	669.0	669.0	665.0	661.0	663.0	667.0	667.8	671.0	670.0	668.0
165°	681.0	678.0	676.0	676.0	673.0	673.0	672.0	673.0	677.0	680.0	678.0
167.5°	690.0	687.0	684.0	686.0	688.0	685.0	678.0	679.2	684.0	688.0	688.0
170°	698.0	695.0	692.0	692.0	693.0	691.0	686.0	686.6	689.0	694.0	696.0
172.5°	699.0	697.0	695.0	693.0	690.0	690.0	689.0	689.6	692.0	694.0	696.0
175°	700.0	698.0	697.0	695.0	691.0	690.0	690.0	691.0	695.0	696.0	694.0
177.5°	707.0	705.0	700.0	699.0	697.0	695.0	694.0	695.0	699.0	701.0	698.0
180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7
2.5°	542.5	541.3	541.9	542.5	543.1	544.8	545.4	545.4	545.4	544.8	546.0
5°	535.9	534.7	534.7	536.5	538.3	540.7	544.2	547.2	548.4	549.0	549.0
7.5°	528.8	527.6	528.2	531.2	534.1	535.9	539.5	541.3	546.0	546.0	547.2
10°	524.0	525.2	525.8	528.8	531.2	531.2	530.6	529.4	528.2	531.2	530.0
12.5°	521.1	522.9	522.3	525.8	527.0	522.3	515.1	505.6	504.4	505.6	506.8
15°	519.9	519.9	521.7	521.7	515.7	506.2	497.3	497.9	499.1	502.7	502.7
17.5°	519.9	520.5	521.7	517.5	506.8	498.5	496.7	494.9	488.4	486.6	484.8
20°	524.0	522.9	524.0	516.3	506.8	500.3	486.6	473.5	461.1	455.7	453.3
22.5°	534.1	532.4	531.8	524.0	512.2	490.2	463.4	443.2	421.9	414.7	412.3
25°	552.0	551.4	547.2	541.9	508.6	465.8	432.0	399.9	376.7	364.2	364.8
27.5°	583.5	583.5	581.1	557.3	490.2	435.5	389.8	357.1	333.3	321.4	319.7
30°	631.0	632.2	633.4	561.5	461.1	391.0	343.4	321.4	307.2	298.3	297.7
32.5°	689.8	696.4	688.6	556.7	421.3	336.9	307.2	299.5	292.3	286.4	285.8
35°	767.7	785.5	736.8	537.7	376.7	300.0	285.2	279.8	274.5	270.3	270.9
37.5°	872.2	889.5	767.7	505.6	319.7	279.3	272.7	264.4	256.1	247.2	246.0
40°	995.8	990.5	778.3	445.0	284.0	269.2	260.2	249.5	235.3	222.2	219.8
42.5°	1119.4	1083.7	769.4	370.2	260.8	260.2	247.8	234.1	219.8	208.5	208.5
45°	1257.8	1165.7	742.1	300.0	242.4	250.7	235.3	221.0	208.0	199.6	199.0
47.5°	1388.5	1242.4	696.9	250.1	224.0	238.3	225.8	212.7	200.2	193.1	191.3
50°	1541.8	1329.7	662.5	216.3	206.2	225.8	220.4	208.5	196.7	188.3	187.2
52.5°	1696.9	1414.7	636.3	193.1	190.1	216.3	218.1	210.9	198.4	182.4	181.2
55°	1859.1	1521.0	584.1	174.7	175.9	209.1	221.0	215.7	206.8	180.6	179.4
57.5°	1995.2	1619.1	492.6	162.2	164.6	203.8	222.2	212.1	202.0	181.8	180.0
60°	2101.5	1686.2	361.2	152.1	154.5	197.9	216.9	199.6	186.6	181.8	178.8
62.5°	2134.2	1688.6	240.0	140.2	146.8	187.8	207.4	193.1	177.7	180.0	178.8
65°	2052.2	1599.5	171.7	128.9	140.2	175.9	203.2	186.6	173.5	183.0	181.8
67.5°	1799.7	1347.6	137.8	120.0	131.3	163.4	195.5	180.6	169.9	189.5	186.0
70°	1402.2	966.7	117.0	111.1	121.8	151.5	184.8	174.1	165.2	184.2	179.4
72.5°	924.5	569.2	103.4	102.8	110.5	141.4	172.9	168.1	157.5	167.0	159.8
75°	482.5	263.8	89.7	93.3	98.0	132.5	162.2	157.5	145.6	149.1	146.8
77.5°	189.5	123.6	77.8	82.0	87.3	119.4	148.5	143.8	133.7	130.7	130.1
80°	104.0	83.2	64.8	70.1	73.7	107.5	134.3	128.9	118.2	116.5	114.7
82.5°	66.0	54.1	53.5	57.0	61.8	95.7	120.6	112.3	103.4	121.8	98.6
85°	30.9	32.1	38.0	42.8	48.1	81.4	105.2	96.3	87.3	85.0	75.5
87.5°	17.2	21.4	25.0	29.1	33.3	57.0	83.2	74.9	65.4	55.9	57.6
90°	11.2	11.2	16.1	15.5	14.1	15.3	49.0	44.8	39.7	20.4	15.1
92.5°	6.0	6.0	6.0	7.0	7.0	6.0	6.0	6.0	5.0	4.0	4.0
95°	7.0	7.0	7.0	8.0	7.0	7.0	7.0	7.0	6.0	5.0	5.0
97.5°	8.0	8.0	9.0	10.0	12.0	9.0	9.0	8.0	8.0	7.0	7.0
100°	19.0	19.0	23.0	26.0	29.0	21.0	12.0	10.0	9.0	8.0	8.0
102.5°	38.0	39.0	42.0	47.0	50.0	40.0	27.0	18.0	13.0	11.0	11.0
105°	61.0	61.0	65.0	70.0	72.0	63.0	48.0	36.0	27.0	22.0	21.0
107.5°	86.0	87.0	90.0	94.0	95.0	88.0	73.0	58.0	49.0	42.0	41.0
110°	117.0	116.0	119.0	121.0	120.0	114.0	102.0	87.0	74.0	68.0	66.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	147.0	147.0	149.0	150.0	148.0	143.0	134.0	121.0	106.0	99.0	99.0
115°	178.0	177.0	179.0	182.0	179.0	174.0	168.0	159.0	147.0	139.0	140.0
117.5°	209.0	208.0	210.0	215.0	211.0	205.0	202.0	197.0	189.0	184.0	184.0
120°	243.0	243.0	245.0	250.0	246.0	243.0	237.0	233.0	226.0	223.0	225.0
122.5°	277.0	276.0	278.0	283.0	279.0	277.0	271.0	267.0	261.0	260.0	263.0
125°	310.0	310.0	310.0	315.0	313.0	310.0	305.0	299.0	296.0	294.0	298.0
127.5°	347.0	345.0	346.0	346.0	345.0	340.0	339.0	333.0	329.0	329.0	330.0
130°	380.0	379.0	381.0	381.0	377.0	372.0	370.0	366.0	362.0	361.0	363.0
132.5°	415.0	414.0	414.0	416.0	411.0	405.0	404.0	401.0	393.0	394.0	396.0
135°	451.0	450.0	447.0	448.0	443.0	437.0	435.0	432.0	426.0	426.0	429.0
137.5°	482.0	481.0	476.0	475.0	473.0	468.0	464.0	460.0	459.0	457.0	460.0
140°	511.0	509.0	504.0	502.0	500.0	497.0	491.0	489.0	487.0	485.0	488.0
142.5°	536.0	534.0	533.0	533.0	527.0	525.0	521.0	518.0	517.0	515.0	518.0
145°	560.0	558.0	561.0	562.0	556.0	551.0	550.0	547.0	544.0	546.0	550.0
147.5°	585.0	583.0	586.0	585.0	580.0	575.0	574.0	574.0	571.0	572.0	575.0
150°	610.0	606.0	603.0	600.0	597.0	593.0	593.0	593.0	593.0	592.0	595.0
152.5°	628.0	623.0	618.0	614.0	611.0	610.0	610.0	609.0	608.0	608.0	611.0
155°	641.0	638.0	636.0	631.0	626.0	628.0	630.0	627.0	625.0	625.0	629.0
157.5°	655.0	650.0	650.0	648.0	644.0	645.0	646.0	644.0	643.0	643.0	646.0
160°	666.0	660.0	661.0	664.0	658.0	655.0	655.0	656.0	659.0	660.0	663.0
162.5°	674.0	668.0	670.0	671.0	667.0	663.0	661.0	665.0	669.0	669.0	673.0
165°	682.0	678.0	680.0	677.0	672.0	673.0	673.0	676.0	676.0	678.0	681.0
167.5°	694.0	688.0	688.0	684.0	678.0	685.0	688.0	686.0	684.0	687.0	690.0
170°	701.0	696.0	694.0	689.0	686.0	691.0	693.0	692.0	692.0	695.0	698.0
172.5°	701.0	696.0	694.0	692.0	689.0	690.0	690.0	693.0	695.0	697.0	699.0
175°	699.0	694.0	696.0	695.0	690.0	690.0	691.0	695.0	697.0	698.0	700.0
177.5°	702.0	698.0	701.0	699.0	694.0	695.0	697.0	699.0	700.0	705.0	707.0
180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0

(END OF REPORT)