

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: P226429

Luminaire Tested: **IST-AF-800-LED-E1-T3-7030-ULG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P226429  
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-800-LED-E1-T3-7030-ULG  
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III, WITH UPLIGHT GLOW  
Light Source: (16) 3000K CCT, 70 CRI LEDs and (1) UPLIGHT LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6282 lumens  
Efficiency: N/A  
Efficacy: 104.4 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

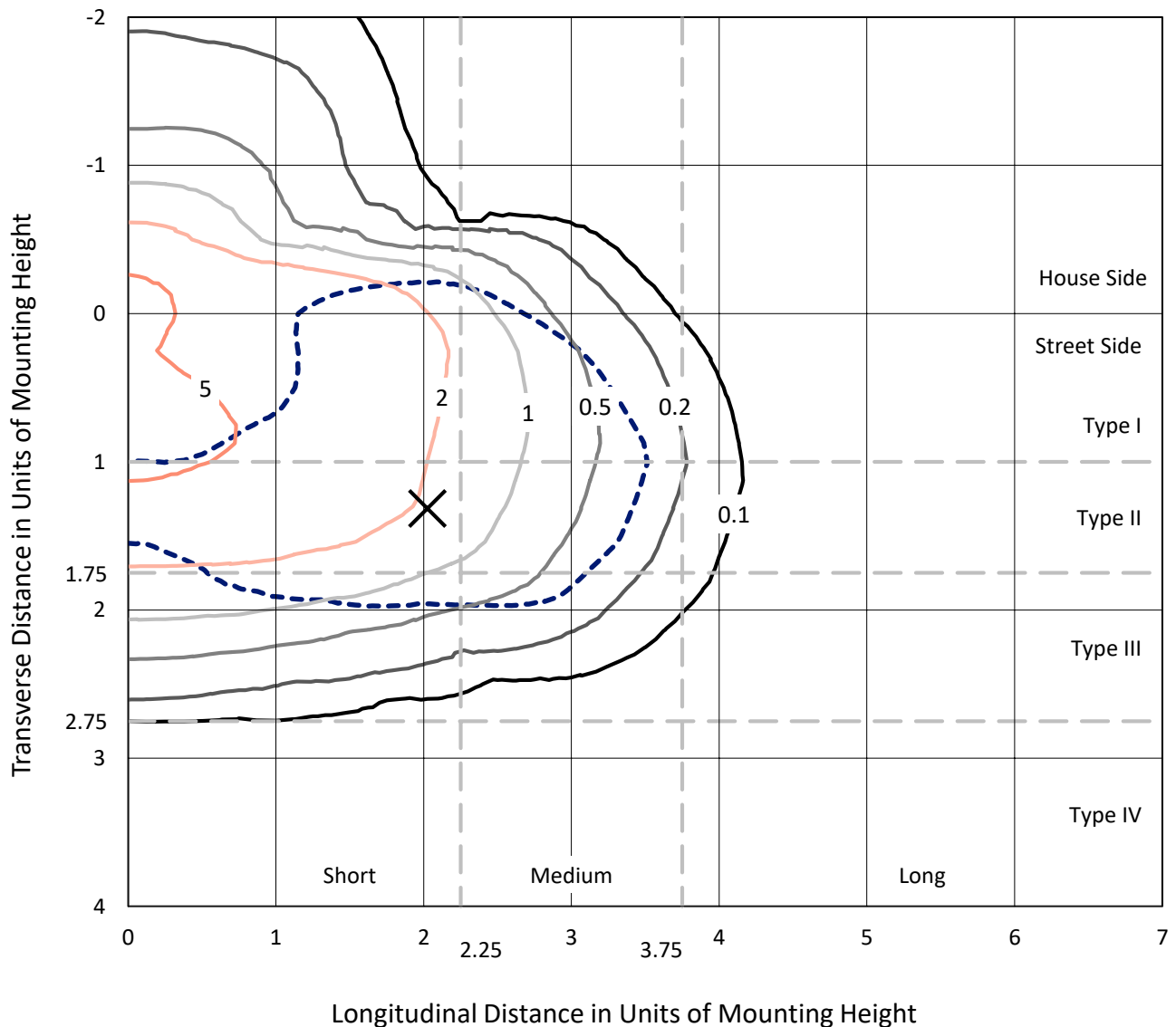
Input Watts (W): 60.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

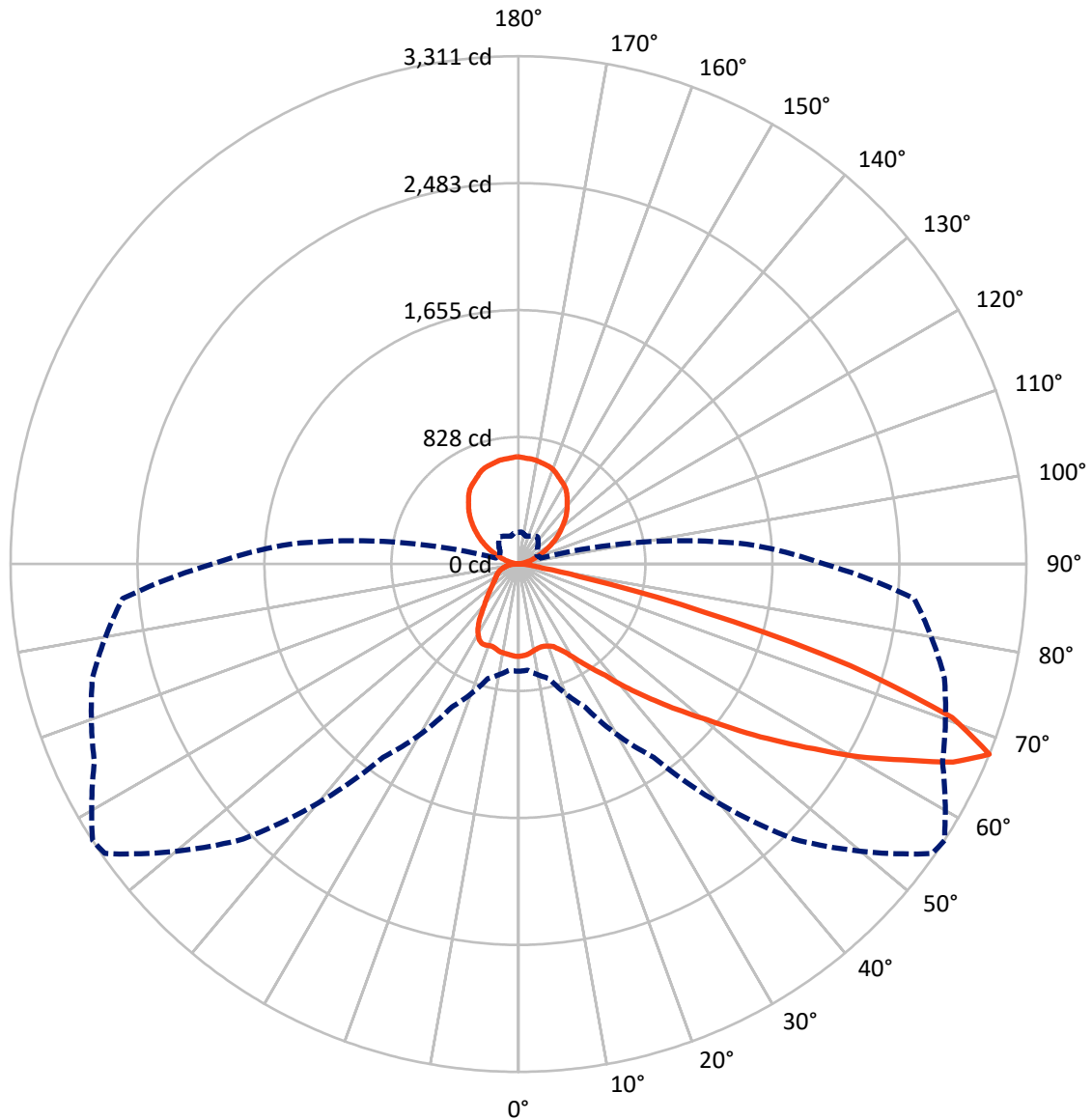
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.3 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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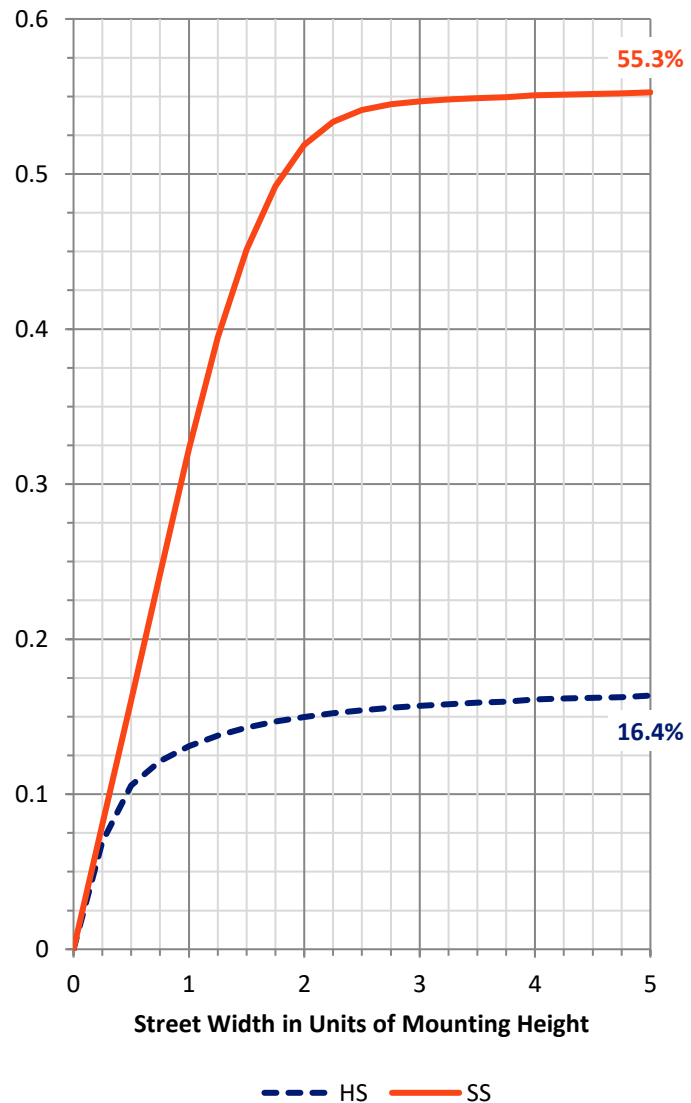
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1058.4	868.9	1927.3
	% Fixture	16.8	13.8	30.7
<b>Street Side</b>	Lumens	3486.8	867.9	4354.7
	% Fixture	55.5	13.8	69.3
<b>Total</b>	Lumens	4545.1	1736.8	6282.0
	% Fixture	72.4	27.6	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.3	0.9
10°-20°	161.9	2.6
20°-30°	278.7	4.4
30°-40°	453.1	7.2
40°-50°	730.9	11.6
50°-60°	1089.6	17.3
60°-70°	1227.2	19.5
70°-80°	473.1	7.5
80°-90°	74.3	1.2
90°-100°	11.0	0.2
100°-110°	57.4	0.9
110°-120°	166.1	2.6
120°-130°	273.2	4.3
130°-140°	336.8	5.4
140°-150°	344.6	5.5
150°-160°	290.3	4.6
160°-170°	191.2	3.0
170°-180°	66.3	1.1
0°-90°	4545.1	72.4
0°-180°	6282.0	100.0



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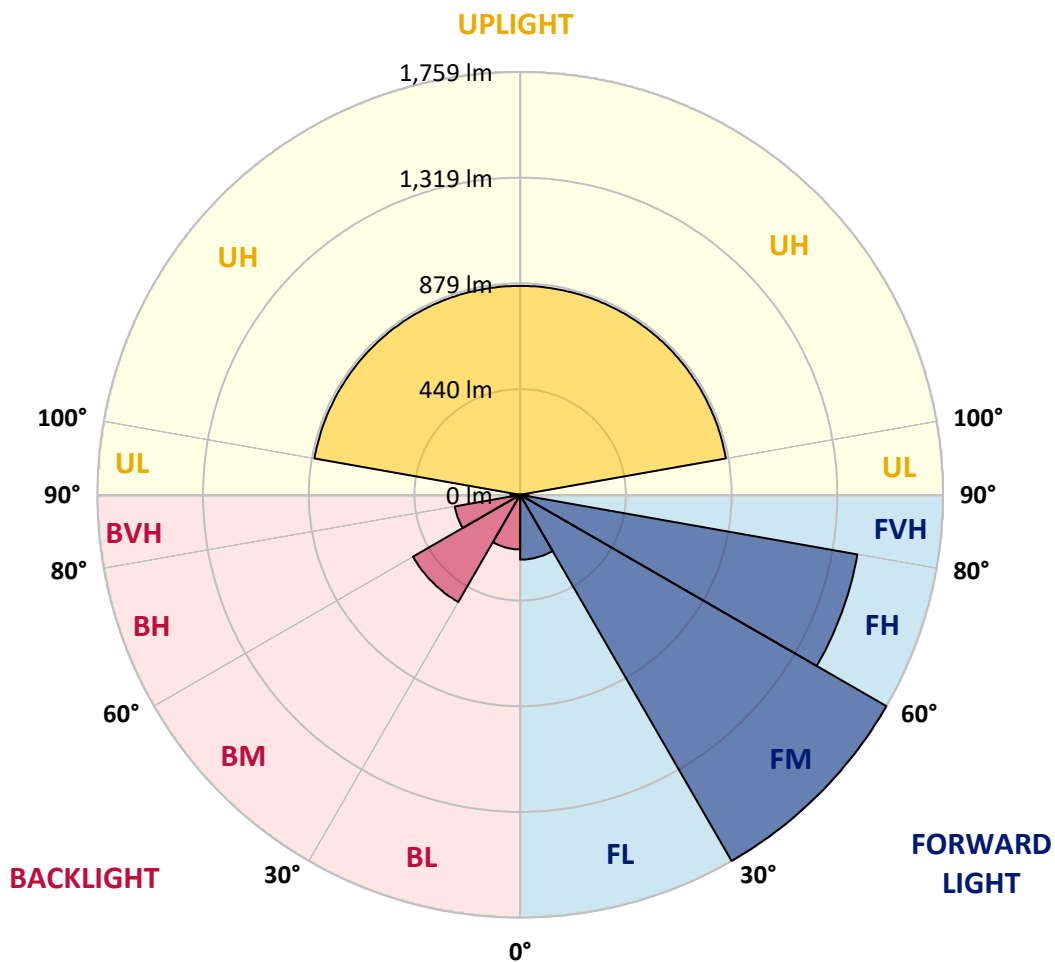
CATALOG NUMBER: IST-AF-800-LED-E1-T3-7030-ULG

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	269.6	4.3			
FM	(30°-60°)	1758.7	28.0			
FH	(60°-80°)	1424.2	22.7			G1/1800
FVH	(80°-90°)	34.2	0.5			G1/100
BL	(0°-30°)	227.3	3.6	B1/500		
BM	(30°-60°)	514.9	8.2	B1/1000		
BH	(60°-80°)	276.0	4.4	B1/500		G1/500
BVH	(80°-90°)	40.2	0.6			G1/100
UL	(90°-100°)	11.0	0.2		U2/50	
UH	(100°-180°)	868.9	13.8		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°	602.4	602.4	602.4	602.4	602.4	602.4	602.4	602.4	602.4	602.4	602.4
2.5°	597.8	599.1	600.4	599.8	599.8	599.8	599.8	598.5	600.4	600.4	599.1
5°	587.9	588.6	589.2	590.6	591.9	593.2	593.8	593.8	594.5	593.8	592.5
7.5°	573.4	574.1	576.7	576.7	578.0	580.7	582.0	583.3	585.3	585.3	584.6
10°	568.8	568.8	568.8	566.9	568.2	568.8	570.8	570.8	576.1	578.7	580.0
12.5°	574.1	573.4	573.4	568.2	563.6	561.6	563.6	564.2	570.1	574.1	576.7
15°	585.9	585.9	584.6	576.7	567.5	560.3	559.6	559.6	564.2	570.1	574.8
17.5°	613.6	616.2	607.0	594.5	579.4	567.5	562.9	562.2	565.5	570.1	574.8
20°	666.3	665.6	651.8	629.4	603.1	583.3	572.1	570.8	570.1	572.8	578.0
22.5°	728.8	726.2	709.7	681.4	645.2	609.0	587.3	584.6	579.4	581.3	588.6
25°	796.0	796.6	776.2	739.3	693.9	650.5	617.5	614.9	603.7	602.4	610.3
27.5°	863.1	871.7	844.0	809.1	755.1	703.1	655.1	651.1	641.2	638.0	645.9
30°	961.2	957.9	923.7	878.3	824.3	759.1	713.0	705.8	686.0	690.6	699.2
32.5°	1044.2	1051.4	1020.5	966.5	895.4	826.9	773.6	769.6	750.5	755.8	767.7
35°	1145.6	1162.7	1121.9	1055.4	986.9	916.4	852.6	842.1	826.9	837.4	846.7
37.5°	1261.4	1270.0	1238.4	1152.8	1083.0	1009.3	936.9	920.4	903.9	925.7	942.1
40°	1372.0	1385.9	1345.0	1272.6	1191.6	1121.2	1042.2	1038.9	1000.7	1024.4	1067.2
42.5°	1536.0	1553.1	1487.9	1403.6	1330.6	1245.6	1170.6	1152.8	1111.3	1144.9	1216.7
45°	1650.5	1649.9	1605.8	1536.0	1491.2	1408.9	1307.5	1286.4	1241.7	1286.4	1382.6
47.5°	1692.0	1701.9	1686.7	1678.2	1662.4	1602.5	1453.0	1433.3	1391.1	1457.6	1546.5
50°	1753.2	1750.6	1750.6	1803.3	1848.7	1836.2	1623.5	1595.2	1551.1	1630.8	1758.5
52.5°	1769.0	1745.3	1782.2	1882.9	2027.1	2037.6	1821.7	1805.9	1753.2	1830.9	1988.3
55°	1724.9	1719.0	1777.6	1923.7	2150.9	2225.9	2051.5	2029.7	1970.5	2037.0	2236.5
57.5°	1626.2	1641.3	1735.5	1915.2	2236.5	2391.8	2303.6	2272.7	2187.8	2227.9	2482.7
60°	1522.8	1530.0	1654.5	1884.9	2259.5	2507.1	2568.3	2550.5	2405.0	2428.7	2665.1
62.5°	1408.2	1391.1	1520.2	1859.9	2233.8	2665.7	2825.1	2811.2	2639.4	2632.2	2794.8
65°	1088.3	1112.0	1221.9	1537.3	2058.1	2789.5	3131.2	3113.4	2900.8	2800.0	2780.9
67.5°	699.2	694.6	772.3	1027.7	1537.9	2535.4	3291.2	3310.9	3050.2	2875.7	2590.0
70°	250.8	258.1	287.0	466.8	843.4	1689.4	2901.4	2999.5	2940.3	2734.2	2108.1
72.5°	152.7	152.7	173.8	210.0	341.7	801.2	2067.9	2262.1	2399.7	2252.9	1557.0
75°	119.8	119.2	126.4	144.8	184.3	262.7	1099.5	1249.6	1539.3	1556.4	886.2
77.5°	94.8	94.1	101.4	109.9	137.6	138.9	350.9	456.9	706.4	665.0	316.7
80°	76.4	75.7	81.0	83.6	100.7	96.1	140.9	163.3	247.5	217.3	136.9
82.5°	69.1	69.1	74.4	63.9	69.8	67.8	87.6	93.5	124.4	129.0	82.3
85°	44.8	46.1	69.8	61.9	45.4	41.5	56.0	59.3	77.7	84.9	40.2
87.5°	21.1	23.0	53.3	51.4	30.3	22.4	31.6	33.6	42.1	52.0	23.7
90°	9.0	9.0	13.6	15.2	12.0	11.0	12.3	12.0	13.6	15.6	13.6
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°	602.4	602.4	602.4	602.4	602.4	602.4	602.4	602.4	602.4	602.4	602.4
2.5°	601.1	599.8	600.4	601.1	601.7	603.7	604.4	604.4	604.4	603.7	605.0
5°	593.8	592.5	592.5	594.5	596.5	599.1	603.1	606.4	607.7	608.3	608.3
7.5°	585.9	584.6	585.3	588.6	591.9	593.8	597.8	599.8	605.0	605.0	606.4
10°	580.7	582.0	582.7	585.9	588.6	588.6	587.9	586.6	585.3	588.6	587.3
12.5°	577.4	579.4	578.7	582.7	584.0	578.7	570.8	560.3	559.0	560.3	561.6
15°	576.1	576.1	578.0	578.0	571.5	560.9	551.1	551.7	553.0	557.0	557.0
17.5°	576.1	576.7	578.0	573.4	561.6	552.4	550.4	548.4	541.2	539.2	537.2
20°	580.7	579.4	580.7	572.1	561.6	554.3	539.2	524.7	510.9	505.0	502.3
22.5°	591.9	589.9	589.2	580.7	567.5	543.2	513.5	491.1	467.4	459.5	456.9
25°	611.6	611.0	606.4	600.4	563.6	516.2	478.6	443.1	417.4	403.6	404.2
27.5°	646.5	646.5	643.9	617.5	543.2	482.6	431.9	395.7	369.3	356.2	354.2
30°	699.2	700.5	701.8	622.2	510.9	433.2	380.5	356.2	340.4	330.5	329.8
32.5°	764.4	771.6	763.0	616.9	466.8	373.3	340.4	331.8	323.9	317.3	316.7
35°	850.6	870.4	816.4	595.8	417.4	332.5	316.0	310.1	304.2	299.6	300.2
37.5°	966.5	985.6	850.6	560.3	354.2	309.4	302.2	293.0	283.8	273.9	272.6
40°	1103.4	1097.5	862.5	493.1	314.7	298.2	288.4	276.5	260.7	246.2	243.6
42.5°	1240.4	1200.9	852.6	410.2	289.0	288.4	274.5	259.4	243.6	231.1	231.1
45°	1393.8	1291.7	822.3	332.5	268.6	277.8	260.7	244.9	230.4	221.2	220.6
47.5°	1538.6	1376.6	772.3	277.2	248.2	264.0	250.2	235.7	221.9	214.0	212.0
50°	1708.5	1473.4	734.1	239.6	228.5	250.2	244.3	231.1	217.9	208.7	207.4
52.5°	1880.3	1567.6	705.1	214.0	210.7	239.6	241.6	233.7	219.9	202.1	200.8
55°	2060.0	1685.4	647.2	193.6	194.9	231.7	244.9	239.0	229.1	200.1	198.8
57.5°	2210.8	1794.0	545.8	179.7	182.4	225.8	246.2	235.0	223.8	201.5	199.5
60°	2328.6	1868.4	400.3	168.5	171.2	219.2	240.3	221.2	206.7	201.5	198.2
62.5°	2364.9	1871.1	266.0	155.4	162.6	208.0	229.8	214.0	196.9	199.5	198.2
65°	2274.0	1772.3	190.3	142.9	155.4	194.9	225.2	206.7	192.2	202.8	201.5
67.5°	1994.2	1493.2	152.7	133.0	145.5	181.1	216.6	200.1	188.3	210.0	206.1
70°	1553.7	1071.2	129.7	123.1	135.0	167.9	204.8	192.9	183.0	204.1	198.8
72.5°	1024.4	630.7	114.6	113.9	122.5	156.7	191.6	186.3	174.5	185.0	177.1
75°	534.6	292.3	99.4	103.4	108.6	146.8	179.7	174.5	161.3	165.3	162.6
77.5°	210.0	136.9	86.2	90.9	96.8	132.3	164.6	159.3	148.1	144.8	144.2
80°	115.2	92.2	71.8	77.7	81.6	119.2	148.8	142.9	131.0	129.0	127.1
82.5°	73.1	59.9	59.3	63.2	68.5	106.0	133.6	124.4	114.6	135.0	109.3
85°	34.2	35.6	42.1	47.4	53.3	90.2	116.5	106.7	96.8	94.1	83.6
87.5°	19.1	23.7	27.7	32.3	36.9	63.2	92.2	83.0	72.4	61.9	63.9
90°	11.6	11.6	16.9	16.2	14.9	16.2	53.4	48.8	43.2	22.1	16.2
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)