

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: P226711

Luminaire Tested: **IST-AF-1000-LED-E1-T4W-8030-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226711
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35944)-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-1000-LED-E1-T4W-8030-ULG
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE, WITH UPLIGHT GLOW
Light Source: (16) 3000K CCT, 80 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6683.3 lumens
Efficiency: N/A
Efficacy: 93.7 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U5 - G2

Input Watts (W): 71.3
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

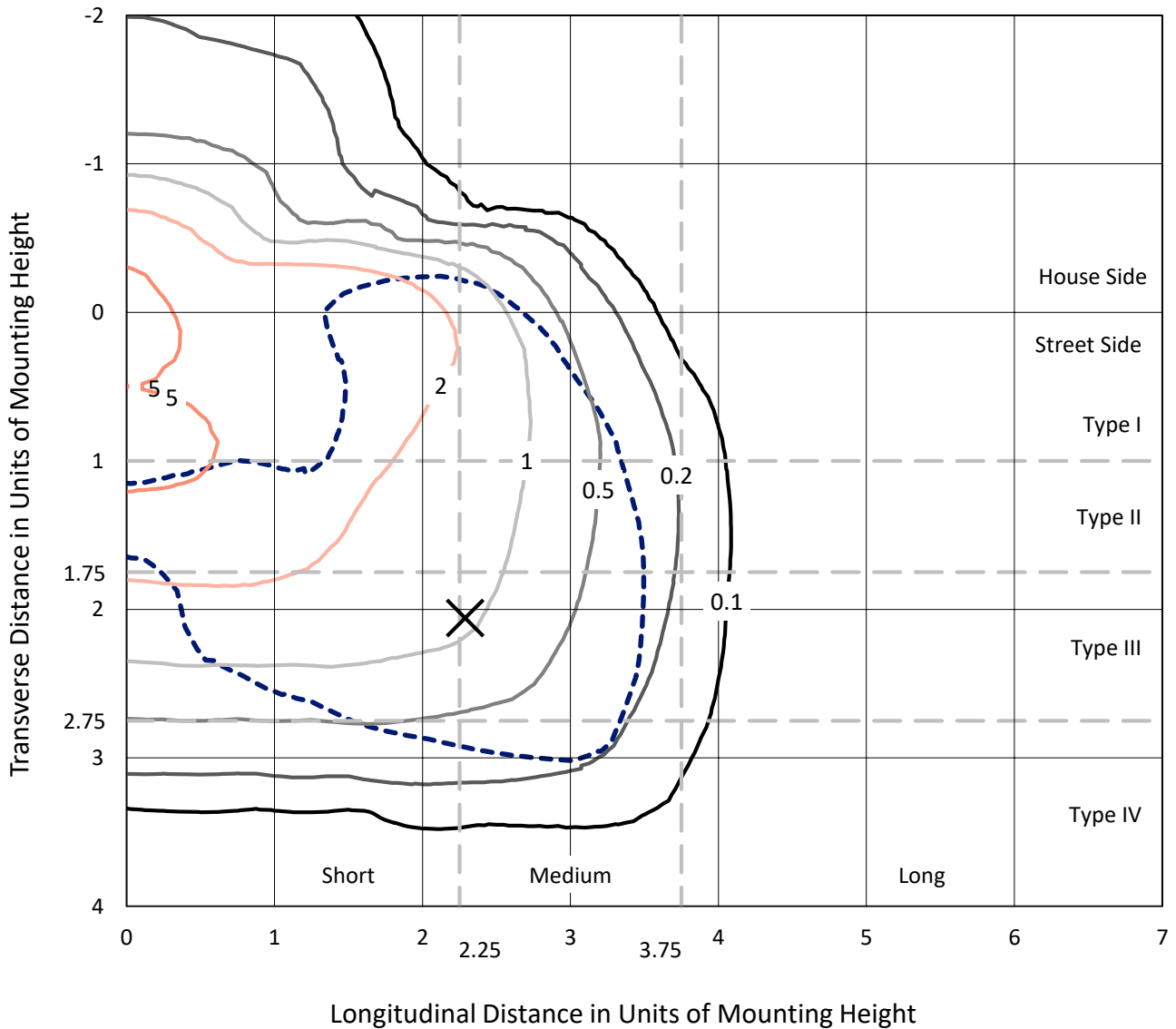


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

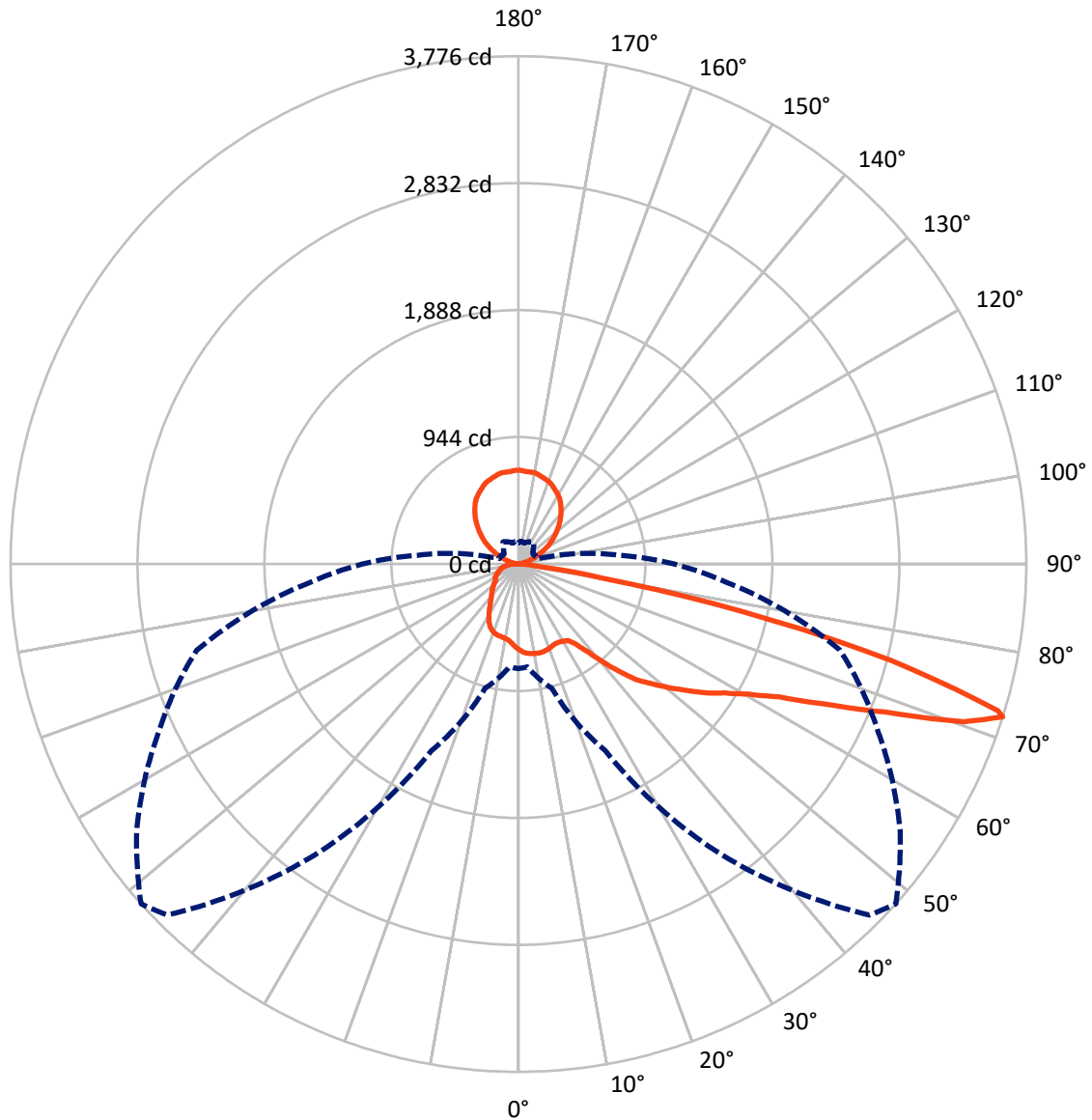


Based on 10 foot mounting height. Maximum calculated value = 7.1 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 48-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

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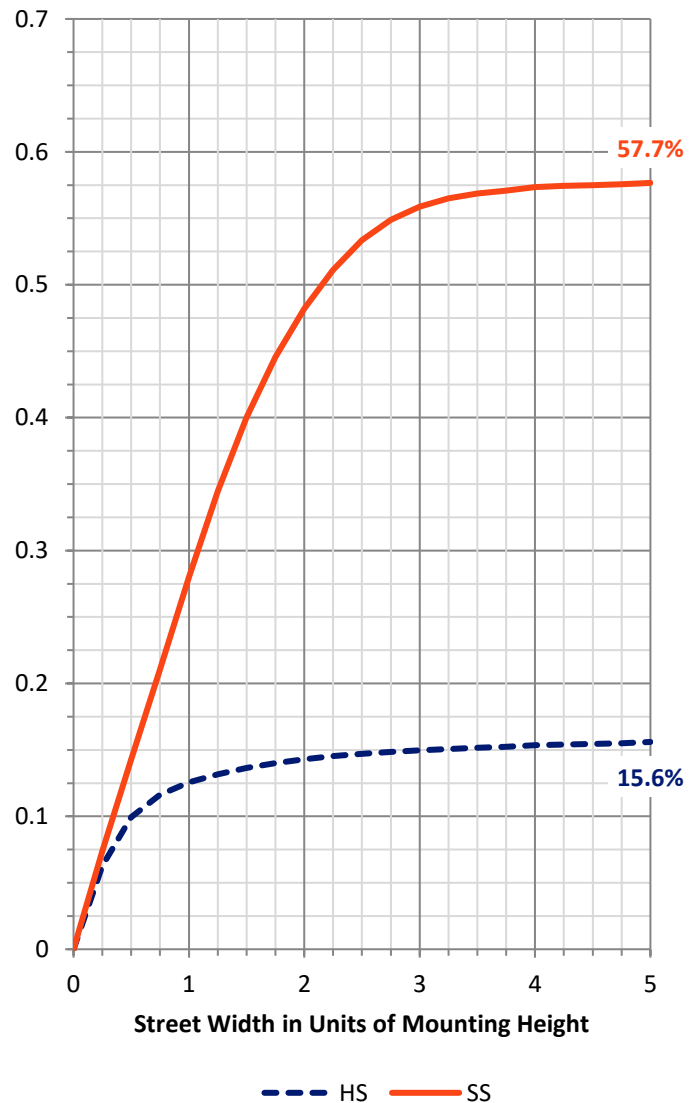
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1075.0	869.8	1944.8
	% Fixture	16.1	13.0	29.1
Street Side	Lumens	3870.2	868.4	4738.5
	% Fixture	57.9	13.0	70.9
Total	Lumens	4945.2	1738.1	6683.3
	% Fixture	74.0	26.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.2	0.9
10°-20°	175.8	2.6
20°-30°	271.1	4.1
30°-40°	406.3	6.1
40°-50°	676.6	10.1
50°-60°	1057.3	15.8
60°-70°	1396.5	20.9
70°-80°	807.9	12.1
80°-90°	93.6	1.4
90°-100°	12.3	0.2
100°-110°	57.4	0.9
110°-120°	166.1	2.5
120°-130°	273.2	4.1
130°-140°	336.8	5.0
140°-150°	344.6	5.2
150°-160°	290.3	4.3
160°-170°	191.2	2.9
170°-180°	66.3	1.0
0°-90°	4945.2	74.0
0°-180°	6683.3	100.0



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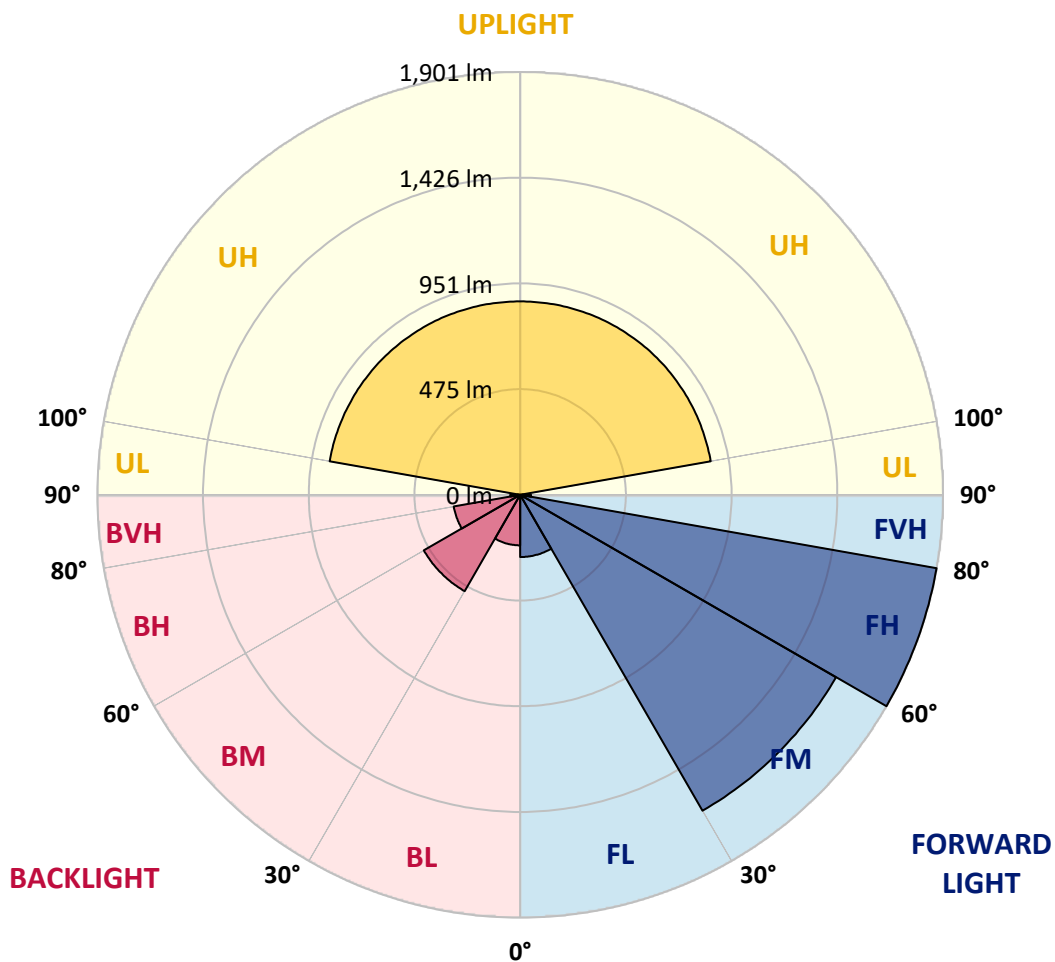
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	279.7	4.2			
FM	(30°-60°)	1640.1	24.5			
FH	(60°-80°)	1901.2	28.4			G2/5000
FVH	(80°-90°)	49.1	0.7			G1/100
BL	(0°-30°)	227.3	3.4	B1/500		
BM	(30°-60°)	500.0	7.5	B1/1000		
BH	(60°-80°)	303.2	4.5	B1/500		G1/500
BVH	(80°-90°)	44.5	0.7			G1/100
UL	(90°-100°)	12.3	0.2		U2/50	
UH	(100°-180°)	869.8	13.0		U4/1000	

BUG Rating: B1-U5-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
0°	636.4	636.4	636.4	636.4	636.4	636.4	636.4	636.4	636.4	636.4	636.4
2.5°	670.2	669.4	669.4	663.7	661.5	658.0	655.1	650.8	646.5	641.5	635.0
5°	702.4	704.6	701.7	693.1	682.3	670.9	666.6	656.5	642.9	630.7	619.2
7.5°	733.3	734.0	726.1	711.8	695.3	677.3	671.6	658.0	642.9	626.4	609.9
10°	755.5	756.3	744.8	724.7	702.4	682.3	675.9	662.3	643.6	625.7	604.9
12.5°	768.4	769.2	751.9	731.1	704.6	684.5	678.8	664.4	645.0	622.1	599.1
15°	766.3	768.4	754.1	731.1	703.2	685.2	678.0	665.8	641.5	618.5	594.1
17.5°	751.9	754.8	743.3	718.2	696.0	681.6	673.7	661.5	637.9	613.5	586.9
20°	724.0	727.6	722.5	698.1	683.1	671.6	666.6	655.1	632.8	607.7	580.5
22.5°	692.4	696.0	694.5	674.5	667.3	661.5	656.5	647.9	628.5	603.4	577.6
25°	669.4	672.3	670.2	652.9	655.1	655.1	652.2	645.8	627.8	604.9	577.6
27.5°	707.5	707.5	688.8	653.6	650.1	656.5	655.1	651.5	637.1	612.0	583.3
30°	846.7	835.9	802.2	713.9	668.7	665.8	665.1	663.0	650.1	627.8	601.3
32.5°	1002.4	991.6	951.4	840.9	746.9	685.2	678.8	679.5	675.9	655.1	628.5
35°	1140.8	1139.4	1107.8	988.0	868.2	753.4	727.6	710.3	708.9	700.3	679.5
37.5°	1252.8	1252.8	1255.6	1119.3	999.5	861.7	818.0	763.4	763.4	758.4	745.5
40°	1380.5	1386.2	1392.7	1238.4	1140.1	990.9	941.4	858.9	833.7	841.6	844.5
42.5°	1548.4	1555.6	1551.2	1385.5	1268.6	1145.1	1084.2	984.4	922.7	935.6	965.8
45°	1661.7	1664.6	1695.5	1539.1	1430.0	1275.7	1224.1	1087.0	1026.0	1052.6	1105.7
47.5°	1790.2	1797.4	1802.4	1713.4	1619.4	1423.5	1328.8	1186.8	1147.3	1187.5	1271.4
50°	1915.7	1906.4	1920.0	1916.5	1798.8	1554.8	1442.2	1280.0	1282.9	1337.4	1475.2
52.5°	2024.8	1993.2	2024.8	2064.3	2029.8	1689.7	1558.4	1389.8	1431.4	1498.2	1715.6
55°	2108.8	2032.7	2085.8	2197.7	2189.8	1808.8	1691.2	1536.2	1605.8	1696.9	2007.6
57.5°	1937.3	1946.6	2093.0	2287.4	2283.8	1929.4	1807.4	1719.1	1804.5	1906.4	2353.4
60°	1777.3	1818.9	2044.9	2301.8	2349.1	2060.7	1963.8	1927.2	2006.1	2130.3	2684.9
62.5°	1692.6	1732.1	1966.7	2275.2	2453.2	2255.1	2174.0	2146.1	2253.7	2392.9	2980.5
65°	1719.1	1743.5	1961.7	2315.4	2573.0	2549.3	2514.1	2467.5	2521.3	2651.9	3114.0
67.5°	1644.5	1684.7	1920.0	2386.4	2791.8	2908.1	2937.5	2887.2	2842.0	2824.1	2919.5
70°	1224.1	1262.8	1509.6	2093.0	2971.2	3530.9	3512.9	3345.0	3040.8	2786.8	2281.0
72°	777.8	767.0	955.7	1533.3	2641.1	3690.9	3775.5	3464.8	2950.4	2474.7	1549.1
72.5°	565.4	616.3	792.8	1363.3	2509.1	3603.3	3726.7	3426.1	2832.0	2337.6	1362.5
75°	137.8	145.7	190.1	488.6	1469.5	2711.5	2866.4	2646.9	2067.1	1387.7	604.1
77.5°	93.3	96.9	125.6	172.2	431.9	1546.2	1701.2	1461.6	924.9	472.1	269.1
80°	69.6	71.8	91.1	122.0	179.4	527.4	622.1	494.4	230.3	261.9	191.6
82.5°	48.8	50.2	68.9	89.7	119.1	123.4	164.3	181.5	149.2	171.5	111.9
85°	33.7	33.7	50.2	61.7	75.3	61.0	65.3	91.1	101.2	101.9	68.2
87.5°	17.9	20.1	29.4	39.5	39.5	28.0	30.9	46.6	56.7	61.0	40.9
90°	11.5	11.5	19.2	23.1	17.3	14.2	13.5	16.3	22.6	28.4	19.9
92.5°	4.0	4.0	5.0	6.0	6.0	6.0	6.3	7.0	7.0	6.0	6.0
95°	5.0	5.0	6.0	7.0	7.0	7.0	7.0	7.0	8.0	7.0	7.0
97.5°	7.0	7.0	8.0	8.0	9.0	9.0	9.9	12.0	10.0	9.0	8.0
100°	8.0	8.0	9.0	10.0	12.0	21.0	23.4	29.0	26.0	23.0	19.0
102.5°	11.0	11.0	13.0	18.0	27.0	40.0	43.0	50.0	47.0	42.0	39.0
105°	21.0	22.0	27.0	36.0	48.0	63.0	65.7	72.0	70.0	65.0	61.0
107.5°	41.0	42.0	49.0	58.0	73.0	88.0	90.1	95.0	94.0	90.0	87.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
110°	66.0	68.0	74.0	87.0	102.0	114.0	115.8	120.0	121.0	119.0	116.0
112.5°	99.0	99.0	106.0	121.0	134.0	143.0	144.5	148.0	150.0	149.0	147.0
115°	140.0	139.0	147.0	159.0	168.0	174.0	175.5	179.0	182.0	179.0	177.0
117.5°	184.0	184.0	189.0	197.0	202.0	205.0	206.8	211.0	215.0	210.0	208.0
120°	225.0	223.0	226.0	233.0	237.0	243.0	243.9	246.0	250.0	245.0	243.0
122.5°	263.0	260.0	261.0	267.0	271.0	277.0	277.6	279.0	283.0	278.0	276.0
125°	298.0	294.0	296.0	299.0	305.0	310.0	310.9	313.0	315.0	310.0	310.0
127.5°	330.0	329.0	329.0	333.0	339.0	340.0	341.5	345.0	346.0	346.0	345.0
130°	363.0	361.0	362.0	366.0	370.0	372.0	373.5	377.0	381.0	381.0	379.0
132.5°	396.0	394.0	393.0	401.0	404.0	405.0	406.8	411.0	416.0	414.0	414.0
135°	429.0	426.0	426.0	432.0	435.0	437.0	438.8	443.0	448.0	447.0	450.0
137.5°	460.0	457.0	459.0	460.0	464.0	468.0	469.5	473.0	475.0	476.0	481.0
140°	488.0	485.0	487.0	489.0	491.0	497.0	497.9	500.0	502.0	504.0	509.0
142.5°	518.0	515.0	517.0	518.0	521.0	525.0	525.6	527.0	533.0	533.0	534.0
145°	550.0	546.0	544.0	547.0	550.0	551.0	552.5	556.0	562.0	561.0	558.0
147.5°	575.0	572.0	571.0	574.0	574.0	575.0	576.5	580.0	585.0	586.0	583.0
150°	595.0	592.0	593.0	593.0	593.0	593.0	594.2	597.0	600.0	603.0	606.0
152.5°	611.0	608.0	608.0	609.0	610.0	610.0	610.3	611.0	614.0	618.0	623.0
155°	629.0	625.0	625.0	627.0	630.0	628.0	627.4	626.0	631.0	636.0	638.0
157.5°	646.0	643.0	643.0	644.0	646.0	645.0	644.7	644.0	648.0	650.0	650.0
160°	663.0	660.0	659.0	656.0	655.0	655.0	655.9	658.0	664.0	661.0	660.0
162.5°	673.0	669.0	669.0	665.0	661.0	663.0	664.2	667.0	671.0	670.0	668.0
165°	681.0	678.0	676.0	676.0	673.0	673.0	672.7	672.0	677.0	680.0	678.0
167.5°	690.0	687.0	684.0	686.0	688.0	685.0	682.9	678.0	684.0	688.0	688.0
170°	698.0	695.0	692.0	692.0	693.0	691.0	689.5	686.0	689.0	694.0	696.0
172.5°	699.0	697.0	695.0	693.0	690.0	690.0	689.7	689.0	692.0	694.0	696.0
175°	700.0	698.0	697.0	695.0	691.0	690.0	690.0	690.0	695.0	696.0	694.0
177.5°	707.0	705.0	700.0	699.0	697.0	695.0	694.7	694.0	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°	636.4	636.4	636.4	636.4	636.4	636.4	636.4	636.4	636.4	636.4	636.4
2.5°	633.6	629.3	623.5	620.6	619.2	616.3	613.5	612.0	612.0	609.2	609.9
5°	613.5	607.0	599.1	593.4	592.7	592.7	594.1	594.1	594.8	592.7	595.5
7.5°	603.4	596.2	584.8	578.3	573.3	572.6	575.4	581.2	584.1	581.9	584.8
10°	596.2	588.4	575.4	567.5	564.0	562.5	564.7	570.4	579.7	579.7	582.6
12.5°	589.1	579.0	566.1	560.4	557.5	558.2	561.1	565.4	575.4	579.0	580.5
15°	581.9	570.4	559.7	551.8	551.8	553.9	557.5	562.5	571.9	578.3	579.7
17.5°	574.7	563.2	553.9	547.5	547.5	550.3	553.9	560.4	566.8	576.2	576.2
20°	568.3	558.9	546.7	541.0	540.3	542.4	546.7	553.2	558.2	567.5	568.3
22.5°	564.7	553.2	541.7	533.1	529.5	528.1	532.4	538.8	543.9	553.2	554.6
25°	563.2	550.3	536.0	520.2	510.9	508.0	510.1	518.0	522.3	529.5	531.7
27.5°	568.3	556.1	533.8	505.1	485.8	477.9	480.0	485.0	486.5	494.4	497.9
30°	585.5	571.1	538.1	489.3	454.2	439.8	439.8	440.5	442.7	449.2	449.9
32.5°	613.5	599.8	551.0	472.8	421.9	401.8	396.8	393.2	393.2	392.5	393.2
35°	665.1	653.6	573.3	454.2	386.7	364.5	352.3	345.8	339.4	336.5	335.8
37.5°	739.7	729.7	604.9	432.7	355.9	333.6	318.6	305.7	298.5	297.8	301.4
40°	851.0	840.9	640.0	408.3	326.5	310.0	294.2	280.5	272.7	273.4	277.0
42.5°	988.0	957.2	678.0	375.3	302.8	294.2	277.0	265.5	257.6	253.3	252.6
45°	1148.0	1096.4	713.9	344.4	277.0	280.5	264.0	251.1	241.1	229.6	228.2
47.5°	1347.5	1235.5	745.5	313.6	249.0	266.2	250.4	238.2	223.1	209.5	207.4
50°	1555.6	1395.6	772.8	280.5	223.9	250.4	236.8	220.3	199.5	187.3	187.3
52.5°	1795.9	1587.8	807.9	244.0	204.5	233.2	219.6	198.0	180.8	179.4	179.4
55°	2063.5	1789.5	832.3	215.3	189.4	214.5	208.1	201.6	195.9	197.3	198.0
57.5°	2343.4	1999.7	810.8	195.2	177.2	210.2	228.9	220.3	202.3	201.6	200.9
60°	2584.5	2163.3	691.7	182.2	167.9	217.4	245.4	220.3	202.3	211.7	212.4
62.5°	2742.3	2240.8	460.6	165.7	154.3	205.2	239.6	213.8	203.1	229.6	231.8
65°	2720.8	2154.0	264.8	154.3	145.7	188.7	231.8	205.9	189.4	204.5	200.2
67.5°	2400.1	1805.2	191.6	149.2	139.2	177.2	217.4	194.4	176.5	195.2	187.3
70°	1724.9	1229.1	165.0	144.9	134.9	163.6	207.4	187.3	169.3	182.2	170.0
72°	1157.3	747.6	151.4	141.3	130.6	155.0	200.2	181.5	162.9	170.0	156.4
72.5°	985.1	589.8	147.8	139.9	129.2	152.8	198.0	180.1	161.4	168.6	155.7
75°	368.1	231.0	131.3	129.2	119.1	142.1	189.4	173.6	154.3	152.1	146.4
77.5°	189.4	146.4	111.9	114.1	106.9	129.9	180.1	163.6	142.1	134.2	131.3
80°	137.8	106.2	90.4	96.9	91.1	117.0	167.2	148.5	129.2	120.5	117.0
82.5°	86.8	66.0	68.9	76.8	77.5	103.3	152.1	133.5	114.8	107.6	101.9
85°	41.6	39.5	48.8	56.7	62.4	87.5	139.2	118.4	100.5	86.1	86.8
87.5°	22.2	30.1	29.4	38.0	48.1	71.8	123.4	96.9	80.4	64.6	65.3
90°	12.0	14.9	17.6	24.1	26.4	37.9	87.6	63.2	60.8	28.0	25.1
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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	117.0	116.0	119.0	121.0	120.0	114.0	102.0	87.0	74.0	68.0	66.0
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)