

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: P141223

Luminaire Tested: **ECM-F01-LED-E1-SL4-8030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P141223
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33692)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ECM-F01-LED-E1-SL4-8030
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL
Light Source: (7) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1967.2 lumens
Efficiency: N/A
Efficacy: 76.0 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

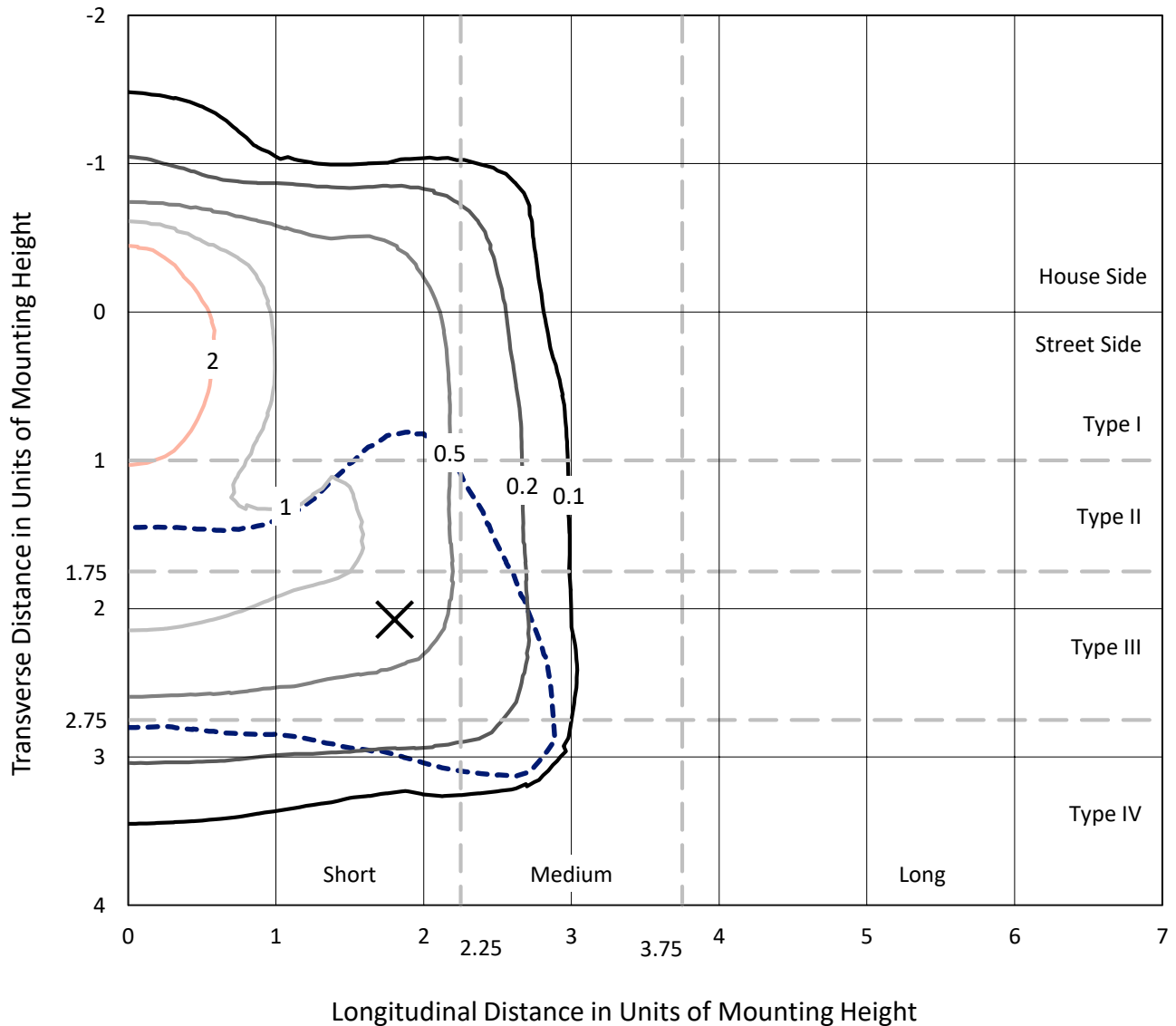
Input Watts (W): 25.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

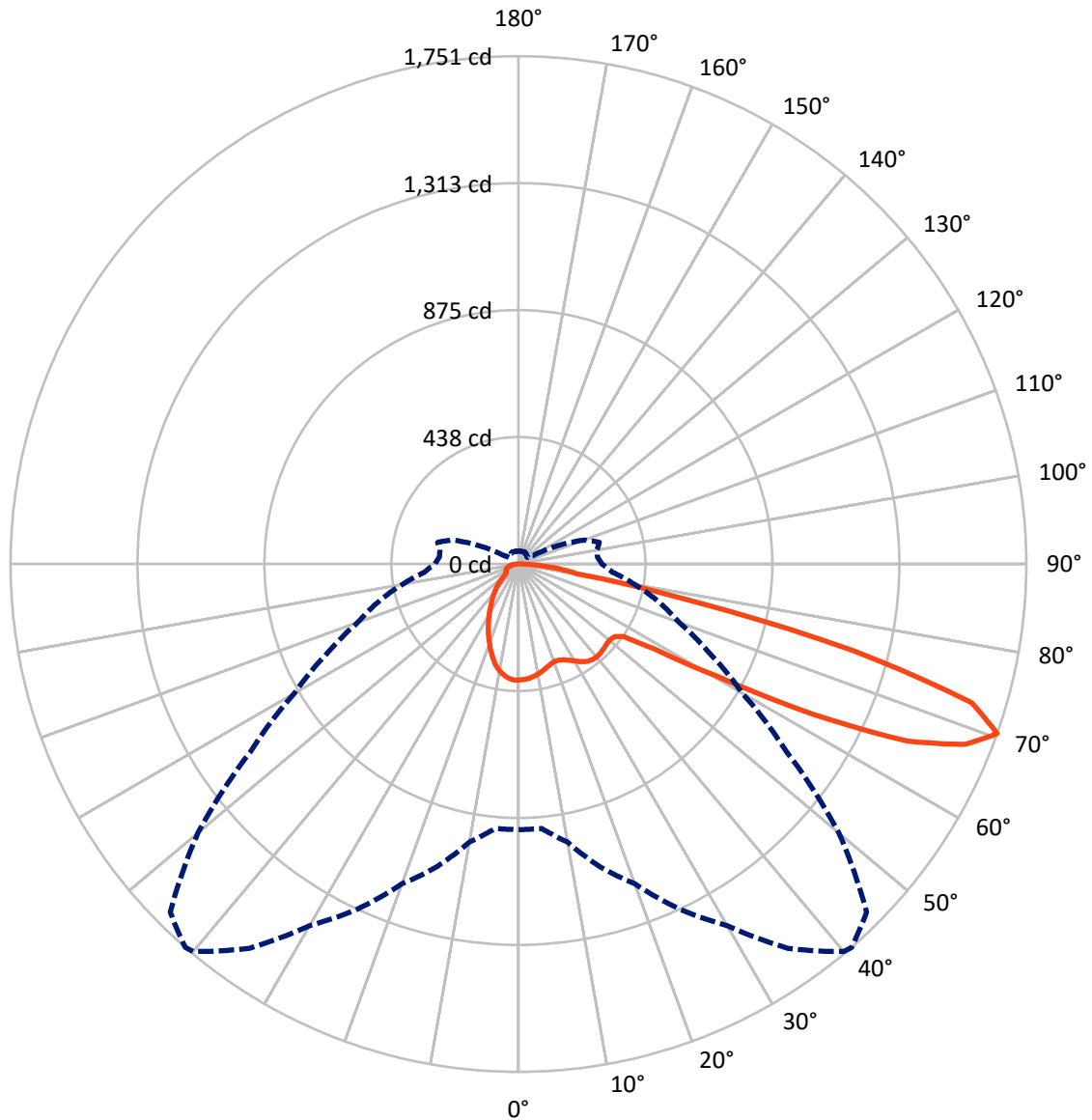
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 41-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	422.1	0.0	422.1
	% Fixture	21.5	0.0	21.5
Street Side	Lumens	1545.1	0.0	1545.1
	% Fixture	78.5	0.0	78.5
Total	Lumens	1967.2	0.0	1967.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.2	1.9
10°-20°	99.7	5.1
20°-30°	144.1	7.3
30°-40°	183.4	9.3
40°-50°	216.2	11.0
50°-60°	330.8	16.8
60°-70°	614.8	31.3
70°-80°	296.7	15.1
80°-90°	44.3	2.3
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°	1967.2	100.0
0°-180°	1967.2	100.0



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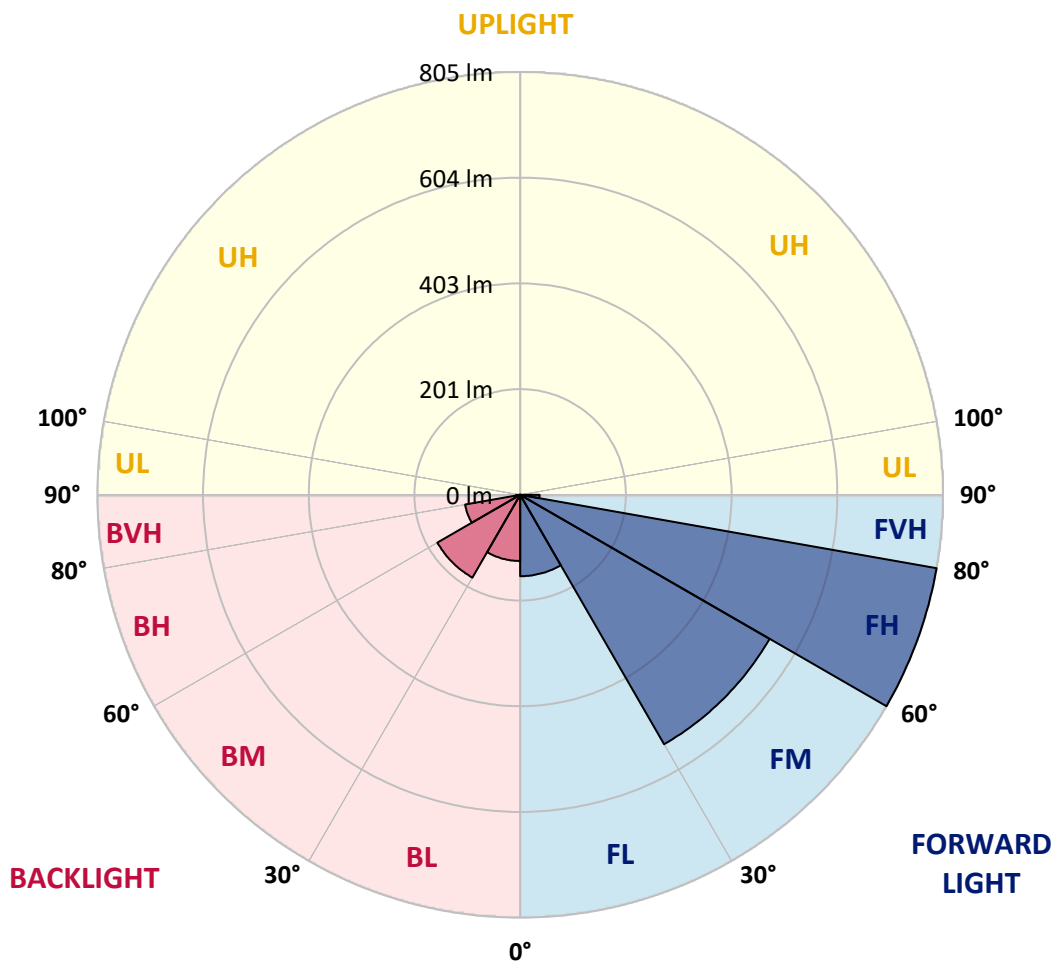
CATALOG NUMBER: ECM-F01-LED-E1-SL4-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	154.9	7.9			
FM	(30°-60°)	548.3	27.9			
FH	(60°-80°)	805.1	40.9			G1/1800
FVH	(80°-90°)	36.8	1.9			G1/100
BL	(0°-30°)	126.1	6.4	B1/500		
BM	(30°-60°)	182.1	9.3	B0/220		
BH	(60°-80°)	106.4	5.4	B0/110		G0/110
BVH	(80°-90°)	7.5	0.4			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	41°	45°
0°	399.7	399.7	399.7	399.7	399.7	399.7	399.7	399.7	399.7	399.7	399.7
2.5°	399.7	400.2	399.9	399.5	399.0	399.2	399.0	398.8	398.8	398.5	398.3
5°	397.8	398.8	398.1	397.6	396.9	396.9	396.7	396.2	395.7	395.5	395.0
7.5°	393.9	394.8	394.4	393.9	393.2	392.7	391.8	391.3	390.9	390.6	389.9
10°	388.5	389.0	388.5	387.6	387.2	386.9	386.5	385.5	384.6	384.1	383.4
12.5°	381.6	381.8	381.3	380.9	380.2	380.2	379.5	378.8	377.4	376.9	375.3
15°	375.5	374.8	374.4	374.1	373.9	372.8	373.0	371.8	369.5	368.8	366.9
17.5°	373.9	373.2	373.0	372.3	371.8	370.4	369.0	366.7	362.8	362.1	359.3
20°	378.6	378.6	377.9	377.4	376.7	374.1	371.1	366.7	359.5	357.9	354.4
22.5°	389.7	388.5	388.1	388.1	387.8	384.1	378.6	371.6	362.1	360.0	353.9
25°	407.1	405.0	405.7	405.5	405.0	399.7	391.6	381.6	368.6	365.8	357.9
27.5°	427.8	428.3	428.0	427.1	425.7	419.9	408.3	394.8	378.6	375.8	365.6
30°	449.4	449.9	451.3	450.6	449.6	440.8	426.4	411.8	392.0	388.3	375.8
32.5°	474.5	476.1	477.3	477.5	473.8	461.7	444.7	426.2	405.3	401.6	386.0
35°	503.5	502.6	504.7	503.7	497.2	480.7	459.8	437.8	416.4	411.5	394.8
37.5°	532.8	533.9	531.8	527.9	517.7	496.1	470.3	445.4	421.8	417.1	399.7
40°	561.1	560.4	555.5	548.8	533.5	505.8	476.1	448.9	423.6	418.7	400.9
42.5°	582.2	580.4	572.9	562.0	542.3	510.5	477.7	448.9	422.5	417.3	399.2
45°	591.5	589.7	582.5	568.5	545.1	509.5	474.9	445.0	418.5	414.1	396.0
47.5°	591.5	590.8	582.9	569.5	544.4	507.0	470.8	440.1	414.6	410.1	393.2
50°	586.9	586.4	579.5	566.2	542.1	505.6	469.6	439.2	414.3	409.9	394.4
52.5°	602.4	599.4	592.2	576.9	550.7	511.4	475.4	443.8	419.9	415.5	399.5
55°	791.7	789.2	752.7	688.6	621.5	560.2	507.7	471.5	447.3	440.6	429.0
57.5°	1097.8	1094.1	1056.7	998.4	883.0	751.8	648.9	588.5	554.6	549.7	542.8
60°	1222.1	1220.7	1204.9	1181.2	1137.5	1069.7	974.0	873.7	795.7	783.1	784.1
62.5°	1293.4	1289.9	1282.2	1276.4	1261.6	1233.9	1216.0	1187.9	1150.1	1141.5	1087.1
65°	1333.3	1332.9	1337.0	1341.9	1341.0	1349.3	1358.4	1412.1	1475.0	1472.2	1414.8
67.5°	1273.9	1277.8	1299.6	1333.1	1368.2	1405.3	1474.5	1582.1	1659.9	1659.9	1609.5
70°	915.7	915.0	973.1	1079.0	1173.3	1312.2	1439.7	1616.9	1744.2	1750.9	1697.5
72.5°	548.8	561.6	597.3	645.4	725.5	893.7	1130.8	1449.2	1626.9	1634.1	1570.2
75°	385.5	376.0	374.6	377.4	391.1	432.4	563.0	889.5	1179.3	1190.5	1128.7
77.5°	246.6	244.6	245.5	248.5	249.2	253.1	259.4	304.9	546.7	600.1	597.3
80°	212.7	212.0	212.3	208.8	202.1	199.5	207.4	201.1	195.3	203.4	192.3
82.5°	142.6	145.2	149.3	154.9	168.4	173.0	170.5	169.3	151.0	146.8	130.3
85°	105.7	104.3	105.9	105.9	102.4	98.9	101.5	98.9	87.6	82.0	72.5
87.5°	57.1	57.4	62.0	63.9	63.6	54.3	44.8	38.8	35.1	32.5	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):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	399.7	399.7	399.7	399.7	399.7	399.7	399.7	399.7	399.7	399.7	399.7
2.5°	398.5	397.8	398.1	398.1	397.8	398.3	397.6	397.4	397.6	397.6	397.6
5°	394.6	393.7	393.7	393.4	393.0	393.0	392.0	391.8	391.3	392.0	391.6
7.5°	389.0	387.6	386.5	385.5	385.1	384.4	383.2	382.7	382.3	382.0	381.6
10°	382.3	380.6	378.3	376.5	375.5	373.7	372.3	370.4	370.4	369.5	368.6
12.5°	374.1	371.8	369.5	366.9	365.3	362.8	360.4	358.4	356.7	354.6	353.2
15°	366.0	362.5	360.0	357.4	354.4	350.9	348.1	344.9	341.9	338.6	337.7
17.5°	357.2	354.4	352.1	349.1	345.8	341.6	337.9	332.6	328.9	324.9	321.9
20°	351.4	348.1	345.6	342.8	339.3	334.4	329.6	323.5	317.9	312.1	307.7
22.5°	348.4	343.0	340.7	338.1	334.7	329.3	323.7	316.3	309.4	301.7	294.7
25°	349.5	342.3	337.7	334.9	331.9	326.5	319.3	311.0	303.1	293.3	285.4
27.5°	354.6	344.9	337.7	333.0	329.8	324.2	316.8	307.3	297.7	287.5	278.0
30°	361.4	349.1	339.8	333.0	328.2	322.1	314.0	303.8	293.3	281.9	271.0
32.5°	369.0	353.9	342.8	333.5	325.6	317.9	309.6	298.9	288.0	275.9	265.2
35°	375.1	357.7	344.9	332.6	322.1	312.6	302.8	292.9	281.9	270.6	259.2
37.5°	378.6	360.0	344.9	329.3	316.6	306.6	296.3	286.6	276.1	265.0	255.0
40°	380.0	360.9	343.5	325.6	310.7	299.4	289.8	279.9	270.6	260.8	252.0
42.5°	379.3	360.2	341.6	322.1	306.1	293.8	283.3	274.0	266.4	258.3	250.8
45°	376.5	357.9	339.8	320.5	304.5	291.9	281.2	272.4	265.2	257.8	252.0
47.5°	374.1	357.0	340.9	324.4	309.1	296.3	284.7	275.0	268.9	263.1	259.4
50°	376.0	359.5	343.5	327.9	313.1	300.1	288.2	279.2	275.7	274.7	273.6
52.5°	381.1	364.9	351.4	340.5	333.7	328.9	316.8	314.7	311.7	310.0	306.1
55°	414.3	407.6	419.7	432.9	435.2	449.9	455.7	456.1	451.0	432.9	390.6
57.5°	549.5	566.2	571.3	602.0	610.3	603.8	595.0	594.5	578.8	554.8	493.3
60°	791.0	782.2	771.3	751.3	732.5	712.3	684.4	663.1	642.9	606.2	541.4
62.5°	1043.7	966.8	910.9	853.5	807.1	766.4	726.0	691.6	658.9	608.0	538.6
65°	1262.9	1106.4	992.8	906.7	834.7	775.2	721.6	674.7	633.3	569.7	499.3
67.5°	1405.5	1180.5	1010.7	882.1	780.3	704.6	625.7	551.6	510.9	459.6	423.8
70°	1442.0	1128.2	891.4	726.5	589.4	499.1	406.0	325.1	287.8	273.4	274.5
72.5°	1300.8	891.8	631.9	462.2	361.8	286.8	233.2	179.3	140.0	117.5	114.7
75°	849.8	496.3	300.1	209.0	166.3	132.4	104.3	87.8	75.7	61.1	51.1
77.5°	321.2	189.0	134.7	109.9	81.3	56.7	44.1	37.2	34.1	33.2	30.0
80°	164.7	131.2	93.8	61.8	43.2	34.6	29.0	24.6	22.8	21.8	22.3
82.5°	111.0	82.7	51.8	37.2	30.0	25.8	20.4	17.2	15.3	15.1	16.3
85°	61.8	41.3	30.2	25.1	22.1	19.3	15.6	12.8	11.8	12.5	14.6
87.5°	19.3	19.0	13.7	11.1	11.6	10.0	7.4	5.6	5.6	7.2	10.2
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	399.7	399.7	399.7	399.7	399.7	399.7	399.7	399.7	399.7	399.7	399.7
2.5°	397.6	398.1	399.0	398.3	398.5	398.8	399.5	400.4	399.7	399.2	400.6
5°	392.0	392.0	393.2	392.7	393.7	394.6	395.0	396.7	396.2	395.7	397.6
7.5°	381.8	382.0	383.7	383.2	385.1	385.3	387.2	388.5	388.5	389.5	391.1
10°	368.8	368.8	370.2	370.4	371.6	372.5	374.6	377.2	377.6	379.3	381.6
12.5°	354.2	353.7	354.9	354.9	355.8	357.0	359.3	362.3	362.8	365.3	368.3
15°	336.1	335.4	334.9	335.4	335.8	336.1	339.5	342.6	344.4	347.2	350.2
17.5°	318.6	316.1	314.9	314.9	315.2	315.2	316.6	320.0	322.6	327.0	331.4
20°	303.1	298.7	297.0	293.3	292.6	291.0	292.2	296.1	300.8	304.2	307.7
22.5°	288.4	283.8	279.2	274.7	271.3	269.2	271.3	273.8	275.4	278.2	279.2
25°	277.3	269.6	263.1	256.2	252.5	250.6	250.4	250.1	248.7	248.3	248.3
27.5°	268.5	259.4	249.7	242.0	236.9	233.4	229.5	226.7	223.2	218.5	216.2
30°	261.0	251.3	240.6	231.5	225.0	218.3	210.2	203.9	197.6	192.1	187.2
32.5°	254.3	244.3	233.9	224.3	213.2	201.6	191.4	183.9	173.0	165.6	159.3
35°	249.2	239.2	229.5	216.9	201.6	186.7	173.5	162.6	151.4	141.7	133.3
37.5°	245.5	237.1	226.7	209.7	190.4	172.6	158.6	145.6	132.4	119.1	108.7
40°	244.3	237.1	223.9	201.8	179.8	160.5	144.5	128.4	113.8	99.6	88.9
42.5°	245.0	237.4	219.5	194.9	170.9	150.0	131.9	113.3	95.9	80.8	70.1
45°	247.6	237.4	214.8	187.2	162.8	140.5	118.9	96.8	76.6	64.6	59.9
47.5°	255.2	239.0	211.1	181.6	155.6	130.1	104.3	79.2	62.0	56.9	56.9
50°	267.1	243.9	210.6	177.4	147.5	118.0	86.2	62.5	54.8	54.6	56.0
52.5°	287.3	252.5	213.0	174.6	138.9	101.7	67.1	53.9	52.3	53.6	55.7
55°	326.5	267.5	216.2	169.5	124.5	79.7	55.0	51.1	51.8	53.4	55.3
57.5°	398.3	298.0	219.7	158.6	100.8	60.4	49.9	50.2	51.3	53.0	54.6
60°	447.8	335.6	226.7	140.3	75.0	49.9	47.8	49.7	51.1	52.3	53.6
62.5°	451.9	349.3	231.8	119.6	55.7	45.5	46.0	48.8	50.6	51.1	51.8
65°	426.9	331.6	217.1	98.7	46.2	43.2	44.8	47.4	49.2	49.5	50.2
67.5°	372.1	294.7	185.3	75.0	42.3	41.6	43.4	45.1	46.4	47.6	48.5
70°	288.2	240.6	149.1	58.3	39.2	39.0	40.6	42.5	43.9	45.1	46.4
72.5°	151.9	170.9	111.0	46.7	36.0	36.2	37.9	39.5	40.4	41.6	43.0
75°	47.1	72.5	68.5	37.4	32.0	33.0	33.9	35.3	36.9	37.6	38.3
77.5°	27.9	29.5	35.8	29.3	27.9	28.6	29.7	30.9	32.0	33.0	33.7
80°	22.5	23.0	23.2	23.2	23.2	24.2	25.1	26.7	27.6	28.1	28.3
82.5°	17.7	18.8	19.0	18.6	19.3	20.2	20.7	21.6	21.8	22.3	22.8
85°	14.6	14.4	14.9	15.1	14.2	14.2	13.7	13.7	14.6	16.3	16.5
87.5°	11.4	10.0	8.1	7.7	7.2	6.7	6.3	6.3	6.5	7.4	8.1
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):

	160°	165°	170°	175°	180°
0°	399.7	399.7	399.7	399.7	399.7
2.5°	400.6	400.4	400.9	401.6	401.1
5°	397.8	397.8	398.8	399.5	399.0
7.5°	392.3	392.5	393.9	394.8	394.4
10°	383.4	383.9	385.5	386.9	387.6
12.5°	370.2	371.8	373.9	375.3	375.3
15°	353.5	356.0	358.4	360.4	359.3
17.5°	334.4	337.5	340.5	341.6	340.5
20°	311.4	311.7	313.5	314.7	314.2
22.5°	280.1	279.2	280.1	280.6	281.2
25°	248.0	246.4	245.5	246.9	247.6
27.5°	215.3	213.0	213.7	212.0	210.2
30°	183.5	181.4	178.8	178.1	179.3
32.5°	155.4	150.0	147.9	144.0	145.6
35°	125.6	120.3	115.2	113.8	112.9
37.5°	101.3	94.8	88.5	86.4	85.9
40°	79.2	73.9	69.7	68.5	68.0
42.5°	64.3	62.0	61.3	61.3	61.5
45°	58.8	59.0	59.7	60.2	60.4
47.5°	57.6	58.5	59.5	60.4	60.6
50°	57.6	58.3	59.0	59.9	60.2
52.5°	57.1	57.8	58.1	58.5	59.0
55°	56.7	56.9	56.9	57.1	57.6
57.5°	55.5	55.7	55.3	55.5	56.4
60°	54.3	54.6	54.1	54.6	54.8
62.5°	52.7	52.7	52.5	52.7	53.0
65°	50.9	50.2	50.6	50.4	50.6
67.5°	48.5	47.6	47.4	47.4	47.6
70°	45.3	44.6	44.4	44.8	45.3
72.5°	41.3	41.8	42.5	43.2	44.4
75°	38.6	39.2	40.2	42.5	44.1
77.5°	34.6	34.4	35.3	37.9	40.2
80°	28.8	29.0	28.8	29.5	30.0
82.5°	22.1	21.8	21.1	21.1	20.7
85°	15.6	14.9	13.9	13.7	13.5
87.5°	7.9	8.4	7.7	7.0	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)