

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: STREETWORKS

Report Number: P162517

Luminaire Tested: **CEM-E02-LED-E-U-SL3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P162517
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33727)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CEM-E02-LED-E-U-SL3-HSS
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL
Light Source: (42) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3296.9 lumens
Efficiency: N/A
Efficacy: 63.3 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B0 - U0 - G1

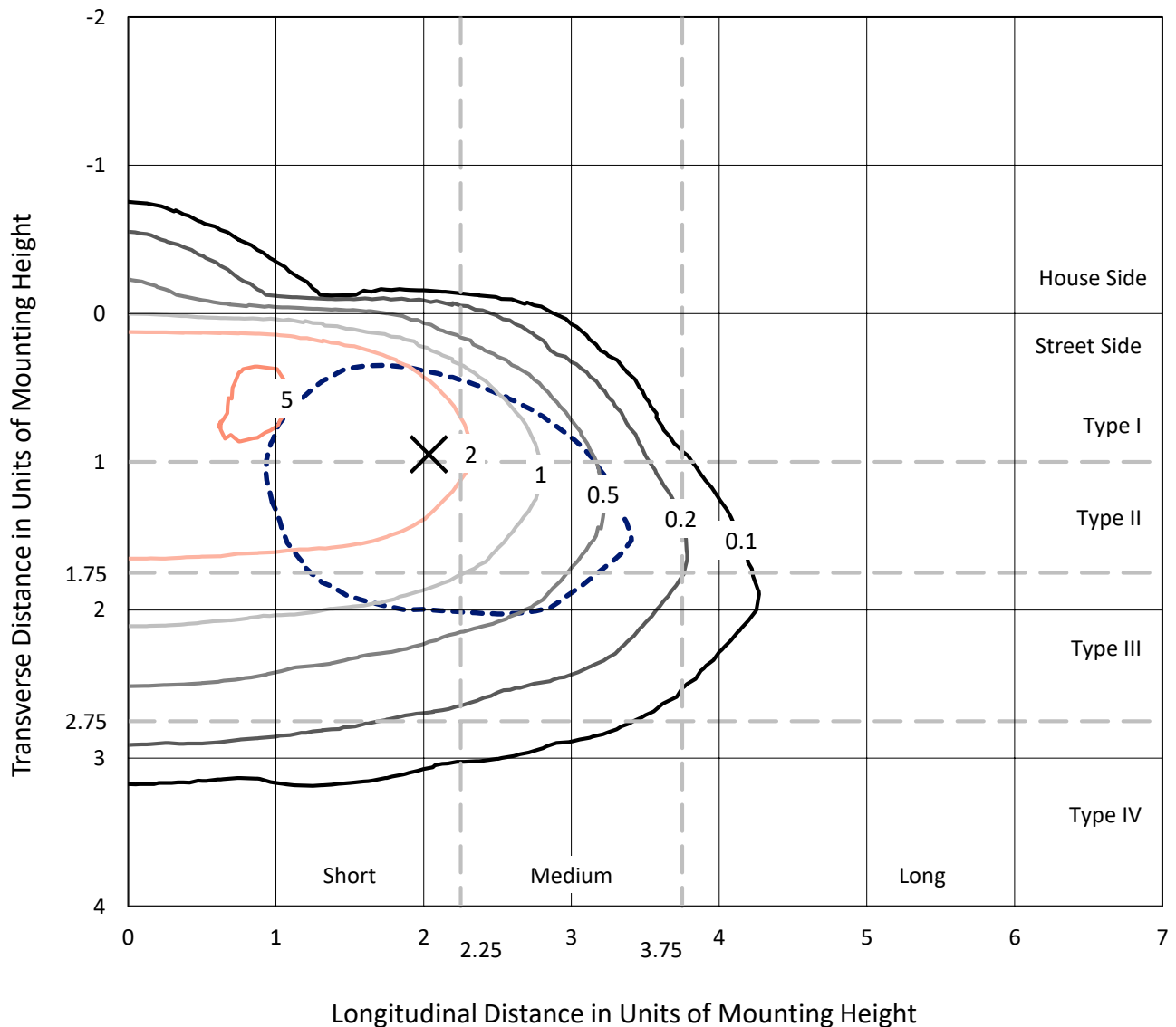
Input Watts (W): 52.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

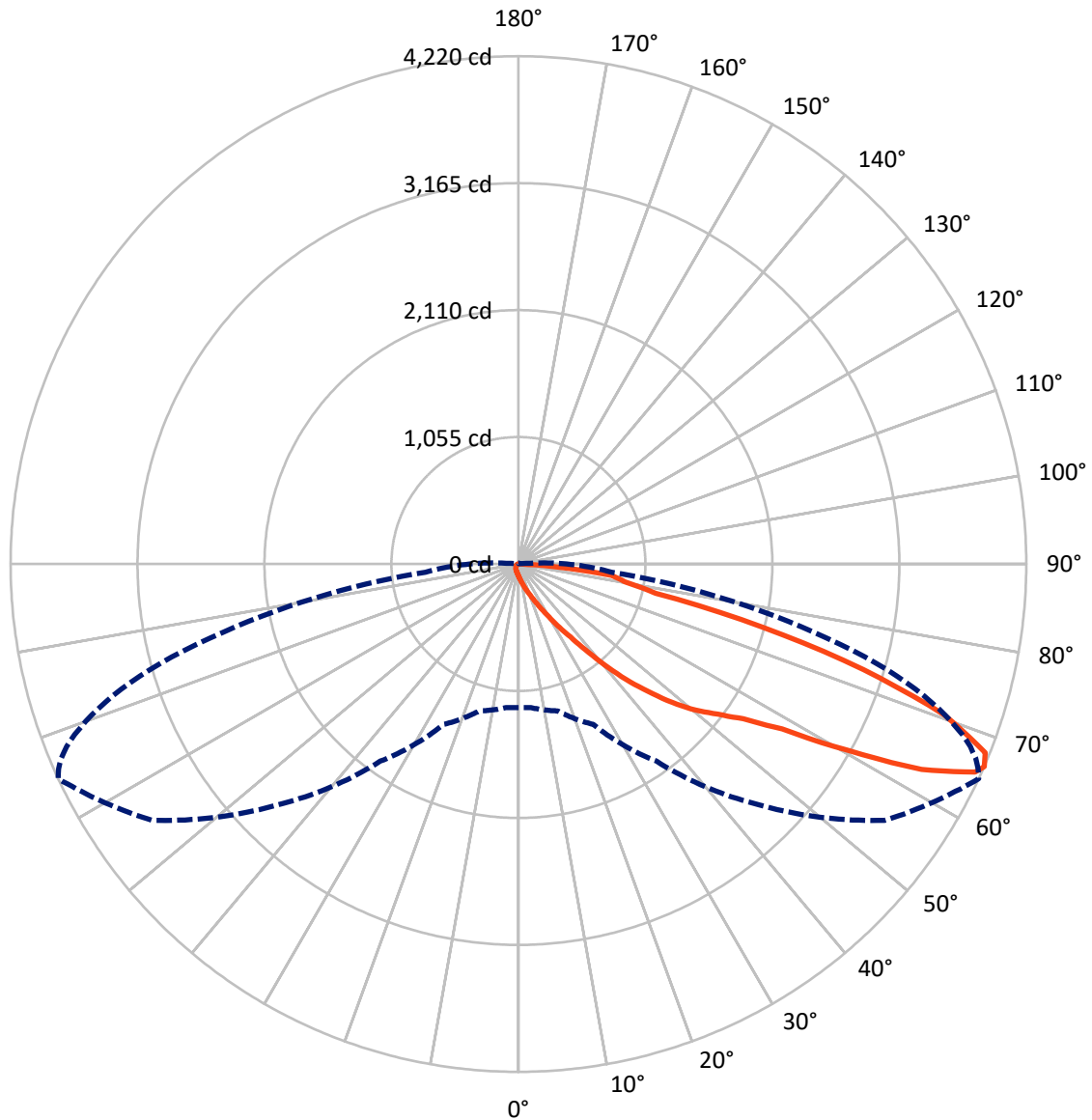
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.4 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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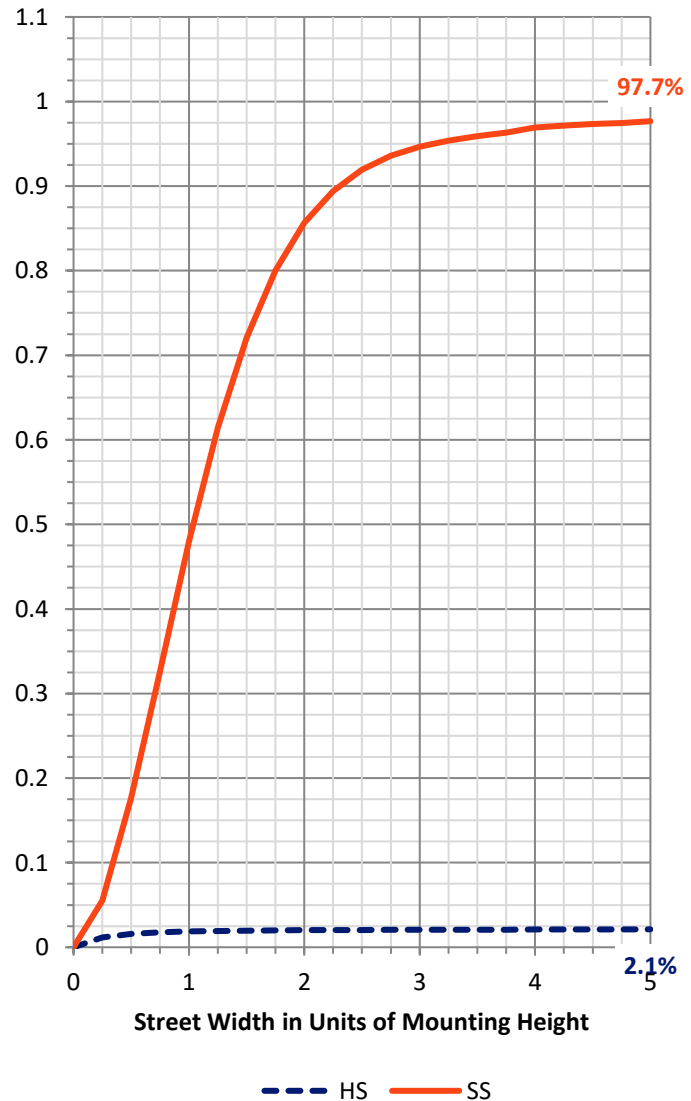
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	71.5	0.0	71.5
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	3225.5	0.0	3225.5
	% Fixture	97.8	0.0	97.8
Total	Lumens	3296.9	0.0	3296.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.1	0.3
10°-20°	47.2	1.4
20°-30°	101.9	3.1
30°-40°	217.6	6.6
40°-50°	481.1	14.6
50°-60°	815.4	24.7
60°-70°	1088.1	33.0
70°-80°	479.3	14.5
80°-90°	55.2	1.7
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°	3296.9	100.0
0°-180°	3296.9	100.0

Coefficient of Utilization



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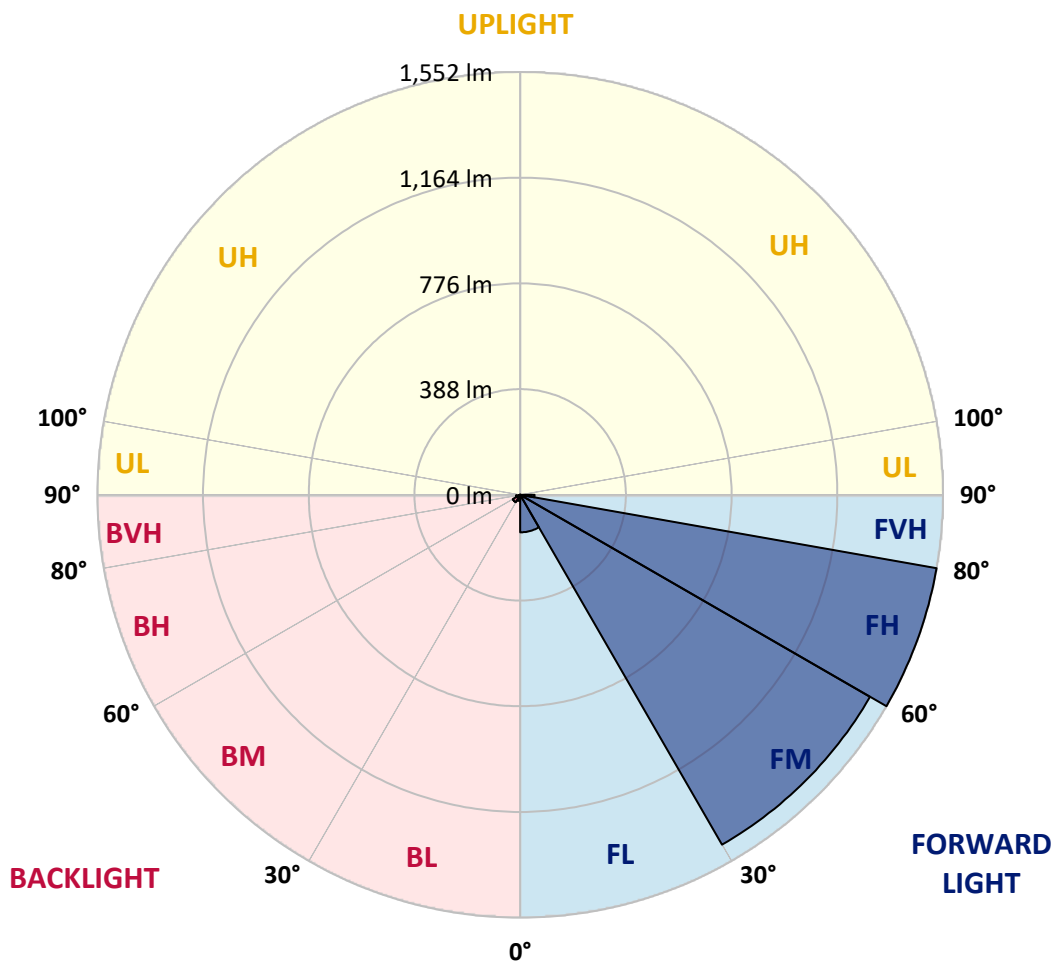
CATALOG NUMBER: CEM-E02-LED-E-U-SL3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	137.7	4.2			
FM	(30°-60°)	1482.7	45.0			
FH	(60°-80°)	1552.0	47.1			G1/1800
FVH	(80°-90°)	53.0	1.6			G1/100
BL	(0°-30°)	22.5	0.7	B0/110		
BM	(30°-60°)	31.4	1.0	B0/220		
BH	(60°-80°)	15.3	0.5	B0/110		G0/110
BVH	(80°-90°)	2.2	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-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
2.5°	125.5	124.9	122.3	122.3	118.5	116.0	112.8	109.7	109.7	109.0	108.4
5°	166.1	162.3	161.6	154.7	148.9	140.7	133.1	122.9	121.7	120.4	119.8
7.5°	211.1	210.5	204.7	196.5	185.1	169.9	154.7	138.2	135.7	134.4	131.9
10°	269.4	266.2	258.6	244.7	227.5	207.3	182.5	156.5	153.4	150.9	149.6
12.5°	325.1	319.5	315.0	297.3	275.7	245.9	216.1	178.7	176.2	173.1	168.0
15°	377.1	372.1	364.5	349.3	325.1	287.7	252.9	207.3	200.9	196.5	192.7
17.5°	417.7	414.5	405.7	388.5	362.5	329.6	287.7	236.4	231.3	225.7	218.7
20°	456.3	451.9	438.0	414.5	386.7	361.3	328.9	274.5	267.5	260.5	252.9
22.5°	493.1	488.7	465.9	427.2	397.4	386.7	375.2	317.5	306.8	301.1	293.5
25°	544.5	534.9	499.5	438.0	398.1	406.3	425.9	373.3	363.2	354.9	342.9
27.5°	613.5	600.9	545.1	453.8	400.6	427.9	484.3	441.1	430.4	420.9	407.5
30°	691.5	683.3	616.7	491.9	419.0	459.5	549.5	527.3	514.7	503.3	487.4
32.5°	770.1	758.7	692.8	564.1	468.4	521.0	631.3	627.5	611.0	600.3	583.1
35°	839.2	833.5	784.7	682.7	581.2	628.8	740.3	744.7	730.2	718.8	699.7
37.5°	886.1	886.1	876.6	810.1	760.6	796.1	900.7	901.3	886.7	860.7	851.3
40°	910.2	917.1	951.4	964.1	961.5	1007.2	1111.1	1099.7	1087.7	1074.3	1042.7
42.5°	959.7	966.0	1038.9	1126.3	1183.4	1243.6	1315.2	1311.4	1296.9	1272.7	1243.6
45°	1043.3	1051.5	1138.4	1277.2	1394.5	1480.0	1525.7	1507.9	1493.3	1470.5	1455.3
47.5°	1149.8	1165.6	1263.9	1435.7	1577.0	1718.3	1765.9	1719.0	1706.3	1688.5	1663.8
50°	1263.3	1278.5	1383.1	1579.5	1739.3	1907.9	1987.1	1907.9	1889.5	1883.8	1855.9
52.5°	1361.5	1374.1	1474.9	1690.5	1863.5	2061.3	2176.6	2072.0	2058.7	2039.7	2019.4
55°	1419.8	1429.9	1524.4	1743.7	1947.8	2199.4	2359.8	2267.9	2248.2	2240.6	2211.5
57.5°	1439.5	1449.6	1534.5	1750.7	1993.4	2325.5	2582.3	2585.5	2562.0	2534.7	2525.9
60°	1439.5	1450.9	1522.5	1733.5	2037.8	2459.9	2878.9	3143.2	3092.5	3087.5	3055.1
62.5°	1379.9	1390.7	1462.9	1680.9	2097.4	2641.2	3292.1	3758.7	3744.1	3711.1	3657.9
65°	1250.5	1256.9	1327.9	1546.6	2074.5	2807.9	3650.3	4168.1	4144.7	4080.0	4011.6
66°	1192.3	1197.3	1263.9	1469.9	1999.7	2830.7	3713.7	4219.5	4180.8	4126.3	4049.0
67.5°	1107.9	1116.8	1163.7	1327.3	1820.4	2751.5	3673.7	4183.3	4149.7	4083.8	4006.5
70°	739.7	733.3	898.8	1018.6	1386.9	2241.9	3296.0	3756.1	3756.8	3725.7	3694.7
72.5°	351.1	354.9	403.1	626.9	907.7	1497.7	2623.5	2998.1	3041.1	2985.4	2946.7
75°	252.3	258.0	287.1	383.5	541.3	898.8	1700.6	2096.7	2098.0	1999.1	1911.0
77.5°	73.5	76.7	107.7	236.4	405.7	606.6	976.7	1165.6	1138.4	1067.4	1000.9
80°	30.4	30.4	31.7	75.4	162.9	412.0	683.3	897.5	894.3	867.1	827.8
82.5°	11.4	12.1	15.2	31.1	38.7	101.4	455.7	779.0	777.1	738.4	710.5
85°	1.3	1.3	3.8	13.3	14.6	19.0	91.3	343.5	341.7	343.5	301.1
87.5°	0.0	0.0	0.7	1.3	1.9	2.5	3.8	13.3	14.6	13.9	12.7
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):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
2.5°	108.4	107.1	107.1	106.5	106.5	106.5	105.9	105.2	105.2	104.6	103.9
5°	118.5	117.3	116.6	115.3	114.7	114.1	112.8	112.2	110.9	110.3	109.7
7.5°	130.6	128.1	127.4	125.5	123.6	122.3	121.1	119.1	117.9	115.3	114.7
10°	145.8	142.6	140.1	137.5	135.7	132.5	130.6	128.1	125.5	123.6	121.7
12.5°	165.4	161.0	157.2	154.7	150.2	146.4	142.6	140.7	135.7	133.1	129.9
15°	187.0	181.9	177.5	172.4	169.3	162.9	157.8	152.1	149.6	145.1	140.1
17.5°	214.9	206.6	199.7	194.6	188.3	181.9	176.2	170.5	162.9	157.8	151.5
20°	244.7	237.7	228.2	219.3	211.7	204.1	195.9	188.3	181.3	173.1	165.4
22.5°	282.7	272.5	261.1	252.3	242.1	233.9	222.5	212.3	200.9	190.1	181.3
25°	330.9	317.5	306.8	294.1	282.1	269.4	255.5	242.7	228.2	218.1	202.8
27.5°	390.5	377.8	363.2	346.7	334.7	315.7	297.3	281.4	264.3	248.5	231.3
30°	466.5	448.1	432.9	417.1	393.0	374.6	353.1	331.5	308.1	292.2	266.2
32.5°	557.8	538.1	515.3	492.5	470.3	444.3	417.7	391.1	365.1	335.9	309.3
35°	669.3	645.9	619.9	595.2	560.9	533.1	499.5	462.7	433.5	399.9	366.3
37.5°	817.0	778.3	755.5	729.5	683.3	645.3	607.9	571.1	519.7	484.3	436.7
40°	1002.1	979.3	941.9	900.1	858.2	808.1	757.5	708.6	649.1	599.6	544.5
42.5°	1219.5	1185.9	1147.9	1087.7	1045.2	986.3	928.6	863.9	791.0	727.7	663.0
45°	1423.6	1383.7	1354.5	1294.3	1249.9	1180.2	1110.5	1042.0	957.7	876.0	801.2
47.5°	1644.2	1611.2	1563.1	1514.3	1469.3	1390.7	1315.2	1232.2	1143.5	1046.5	949.5
50°	1838.1	1812.1	1779.2	1720.3	1670.2	1604.3	1515.5	1424.9	1312.7	1216.3	1106.1
52.5°	2002.9	1982.7	1936.4	1894.5	1849.5	1787.4	1708.2	1621.3	1500.3	1394.5	1268.9
55°	2197.5	2182.9	2142.4	2116.4	2076.5	2016.9	1942.7	1862.2	1734.2	1618.8	1476.9
57.5°	2516.3	2504.9	2469.5	2458.7	2419.4	2367.4	2276.1	2189.9	2040.3	1897.1	1734.8
60°	3044.3	3021.5	2969.5	2942.9	2859.9	2790.1	2671.7	2553.1	2372.5	2189.9	1994.7
62.5°	3609.7	3545.7	3446.8	3361.9	3244.0	3122.9	2964.5	2783.2	2571.5	2354.7	2130.3
65°	3914.6	3805.6	3680.7	3545.7	3392.9	3214.9	3015.2	2797.8	2570.2	2341.4	2104.3
66°	3949.5	3826.5	3694.0	3543.8	3373.9	3184.4	2981.6	2753.4	2517.0	2293.9	2056.8
67.5°	3905.7	3777.1	3637.0	3470.3	3286.5	3090.0	2877.0	2639.9	2412.4	2186.1	1955.4
70°	3599.6	3471.5	3346.7	3171.1	2975.3	2777.5	2575.9	2311.0	2095.5	1887.6	1682.2
72.5°	2874.5	2787.6	2664.0	2513.8	2323.0	2091.1	1923.1	1686.0	1499.0	1297.5	1138.4
75°	1796.3	1674.0	1521.2	1329.8	1184.0	995.7	897.5	717.5	611.0	517.9	427.9
77.5°	918.5	826.5	719.4	611.7	508.3	405.7	313.7	221.9	149.6	103.9	77.3
80°	758.7	677.6	588.9	490.6	399.3	309.9	223.1	152.1	97.0	63.4	49.5
82.5°	626.9	558.4	479.2	387.9	308.7	243.4	169.3	110.3	68.5	44.4	34.9
85°	266.9	242.1	187.0	148.3	111.5	82.4	57.7	38.7	27.3	22.2	20.3
87.5°	11.4	12.7	12.1	9.5	7.0	7.0	6.3	5.1	5.1	5.1	5.1
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):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
2.5°	103.9	103.3	102.7	102.7	102.1	101.4	97.6	94.5	90.7	88.1	85.6
5°	108.4	107.7	106.5	105.9	104.6	103.9	95.7	88.7	83.0	78.6	75.4
7.5°	112.8	112.2	110.3	108.4	107.7	106.5	93.2	84.3	76.7	71.6	68.5
10°	118.5	116.6	114.7	112.2	110.3	108.4	90.7	79.2	71.0	66.5	63.4
12.5°	126.8	123.6	120.4	117.3	114.7	111.5	89.4	74.8	66.5	61.5	58.3
15°	136.3	131.9	128.1	124.2	119.8	116.6	86.9	71.0	62.7	57.7	53.9
17.5°	145.1	140.1	134.4	128.7	124.2	119.8	84.3	67.2	58.9	53.9	50.1
20°	157.8	150.2	143.3	136.3	129.9	124.2	80.5	63.4	55.8	50.1	46.3
22.5°	171.8	162.9	154.0	144.5	136.3	128.7	77.3	60.2	52.6	46.9	42.5
25°	189.5	178.7	166.7	154.7	145.1	135.0	74.1	57.1	49.5	43.7	39.3
27.5°	214.3	199.0	185.7	170.5	155.9	144.5	71.6	54.5	46.3	40.5	36.1
30°	247.8	225.7	204.7	188.3	171.1	154.7	69.1	51.3	43.7	37.4	32.3
32.5°	285.2	259.3	235.1	210.5	188.9	169.9	66.5	48.8	40.5	34.2	29.8
35°	331.5	298.5	266.2	237.7	211.7	186.3	64.0	46.3	38.0	31.1	26.6
37.5°	398.1	356.9	314.4	277.6	244.0	210.5	62.1	43.7	34.9	27.9	23.5
40°	489.3	436.1	384.1	334.1	290.3	248.5	59.6	41.2	32.3	25.3	20.9
42.5°	588.2	523.5	455.1	398.7	338.5	285.9	57.1	38.7	29.8	22.8	18.4
45°	711.2	630.7	547.7	470.9	397.4	329.6	54.5	36.1	26.6	20.3	15.9
47.5°	845.5	742.9	649.1	552.7	465.3	384.1	51.3	34.2	24.1	17.7	13.9
50°	983.7	875.3	756.8	647.1	543.2	438.6	48.2	31.1	21.5	15.9	11.4
52.5°	1132.7	1004.7	883.6	747.3	626.3	510.3	45.0	28.5	19.7	13.9	9.5
55°	1322.2	1178.9	1036.9	884.2	738.4	593.3	41.9	25.3	17.1	12.1	7.6
57.5°	1560.5	1390.7	1216.3	1043.9	867.1	702.3	39.3	22.2	14.6	10.1	6.3
60°	1785.5	1587.1	1376.1	1177.7	978.0	785.9	35.5	19.7	12.7	8.3	6.3
62.5°	1902.1	1675.9	1448.3	1229.7	1016.7	815.7	31.7	16.5	10.8	7.0	5.7
65°	1873.6	1642.9	1422.3	1201.7	993.2	796.7	27.9	14.6	9.5	6.3	5.7
66°	1832.4	1604.3	1382.4	1172.6	973.6	776.5	26.0	13.9	8.9	6.3	5.1
67.5°	1742.4	1521.9	1310.1	1114.9	919.7	737.8	23.5	12.7	8.3	5.7	5.1
70°	1488.3	1287.9	1118.7	945.1	785.9	621.8	19.0	10.8	7.0	5.1	5.1
72.5°	985.0	848.7	735.9	633.2	529.3	410.7	15.9	8.9	5.7	5.1	4.5
75°	371.4	335.9	288.4	259.3	226.3	198.4	12.7	5.7	4.5	4.5	4.5
77.5°	65.9	60.9	53.9	49.5	45.7	41.9	10.1	3.8	3.8	4.5	4.5
80°	44.4	41.2	37.4	34.2	31.7	28.5	7.0	3.2	3.8	3.8	4.5
82.5°	31.7	29.8	27.9	25.3	23.5	20.9	4.5	3.2	3.8	3.8	3.8
85°	19.0	17.7	16.5	15.2	13.3	12.7	3.2	3.2	3.2	3.8	3.8
87.5°	5.1	4.5	5.1	5.1	3.8	4.5	2.5	2.5	2.5	3.2	3.2
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):

	145°	155°	165°	175°	180°
0°	99.5	99.5	99.5	99.5	99.5
2.5°	84.3	84.3	83.0	84.9	84.9
5°	72.9	72.9	72.3	72.9	72.9
7.5°	66.5	65.9	65.9	65.9	66.5
10°	60.9	60.2	60.2	60.2	60.2
12.5°	55.8	55.1	54.5	55.1	55.1
15°	51.3	50.1	50.1	50.1	50.1
17.5°	47.5	46.3	45.7	45.7	45.7
20°	43.7	41.9	41.9	41.9	41.9
22.5°	39.9	38.0	38.0	38.0	38.0
25°	36.1	34.2	34.2	34.2	34.2
27.5°	32.9	31.1	31.1	31.1	31.1
30°	29.1	27.9	27.9	28.5	27.9
32.5°	26.6	24.7	24.7	25.3	25.3
35°	23.5	22.2	22.2	22.2	22.2
37.5°	20.3	19.0	19.0	19.0	19.0
40°	17.7	16.5	15.9	16.5	16.5
42.5°	15.2	13.9	13.3	13.3	13.3
45°	13.3	11.4	10.8	11.4	11.4
47.5°	10.8	9.5	9.5	10.1	10.1
50°	8.3	8.3	8.9	10.1	10.1
52.5°	7.6	7.6	8.9	10.1	10.1
55°	7.0	7.6	8.9	9.5	10.1
57.5°	6.3	7.6	8.9	9.5	9.5
60°	6.3	7.0	8.3	9.5	9.5
62.5°	5.7	6.3	7.6	8.9	8.9
65°	5.7	6.3	7.6	8.9	8.9
66°	5.7	6.3	7.6	8.9	8.9
67.5°	5.7	6.3	7.6	8.9	8.9
70°	5.7	6.3	7.6	8.3	8.3
72.5°	5.1	5.7	7.0	8.3	8.3
75°	5.1	5.7	7.0	8.3	8.3
77.5°	5.1	5.7	7.0	8.3	8.3
80°	5.1	5.7	7.0	7.6	8.3
82.5°	4.5	5.7	6.3	7.6	7.6
85°	4.5	5.1	6.3	7.0	7.6
87.5°	3.8	4.5	5.1	6.3	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)