

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: P157938

Luminaire Tested: **VTS-E09-LED-E1-RW-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157938
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33711)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: VTS-E09-LED-E1-RW-8030
Description: VENTUS LED SITE LUMINAIRE
(9) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (189) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

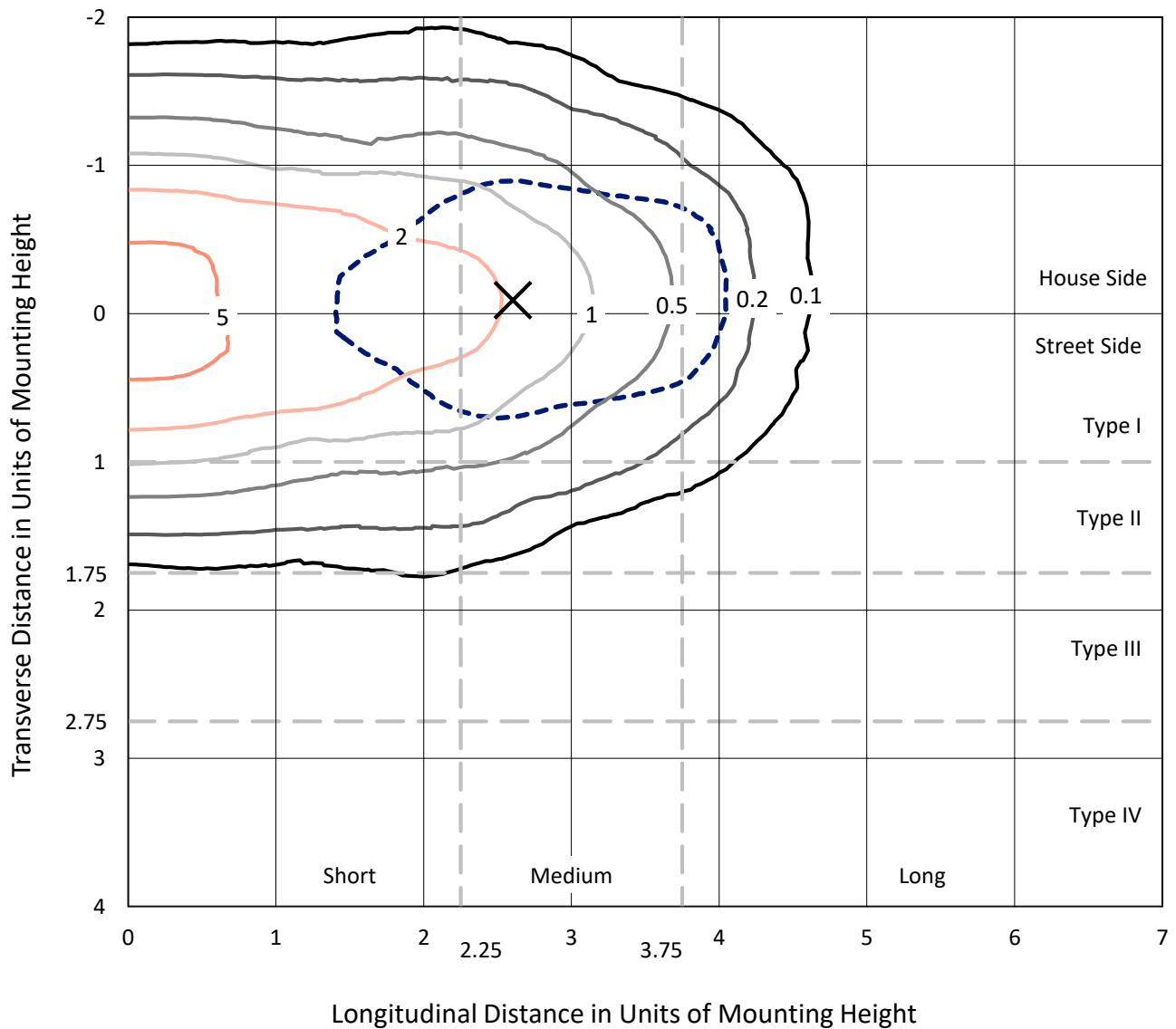
Lumens per Lamp: N/A
Luminaire Lumens: 23664.5 lumens
Efficiency: N/A
Efficacy: 104.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type I - Short - Full Cutoff
BUG Rating: B4 - U0 - G4

Input Watts (W): 225.7
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

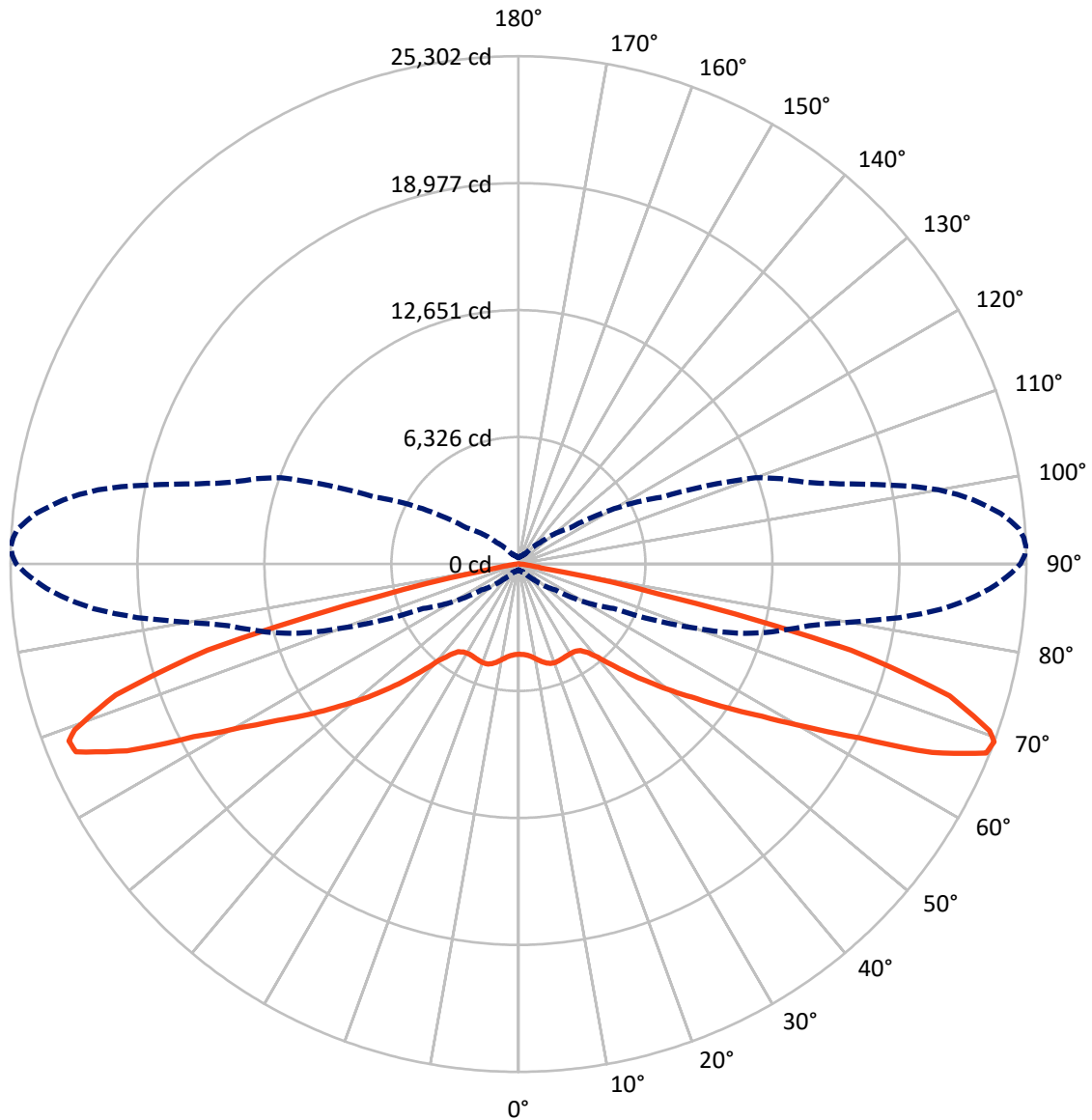
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 fc
 Type I - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 92-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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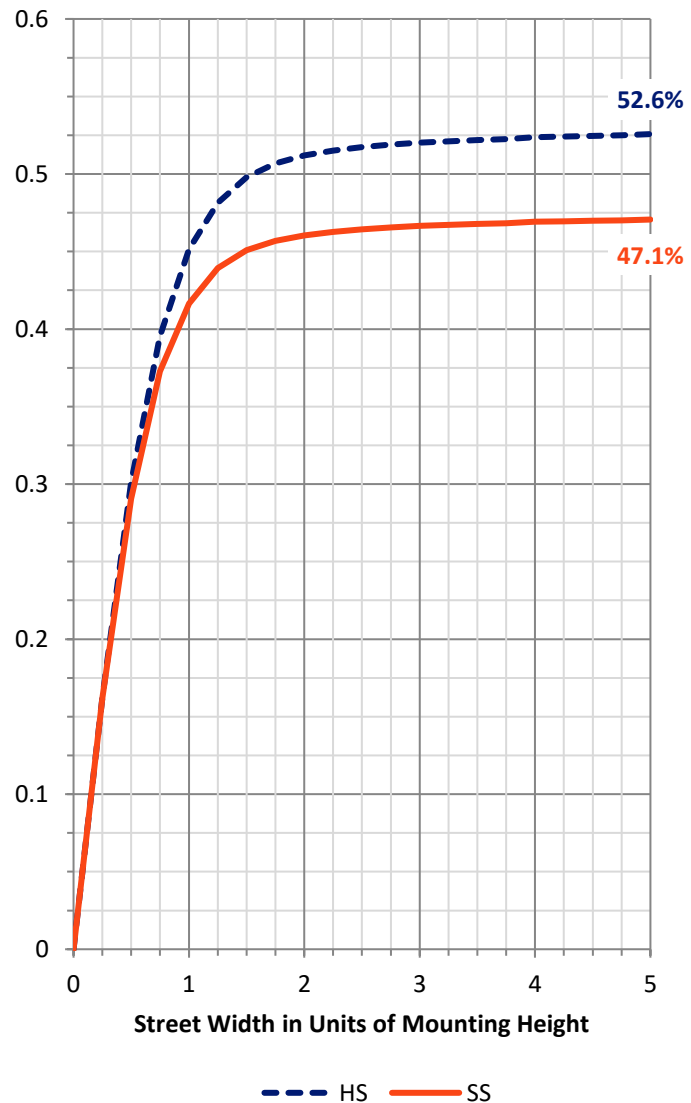
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12550.5	0.0	12550.5
	% Fixture	53.0	0.0	53.0
Street Side	Lumens	11114.0	0.0	11114.0
	% Fixture	47.0	0.0	47.0
Total	Lumens	23664.5	0.0	23664.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	439.9	1.9
10°-20°	1389.5	5.9
20°-30°	2254.4	9.5
30°-40°	2809.6	11.9
40°-50°	3498.2	14.8
50°-60°	4314.2	18.2
60°-70°	5357.9	22.6
70°-80°	3292.1	13.9
80°-90°	308.6	1.3
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°	23664.5	100.0
0°-180°	23664.5	100.0



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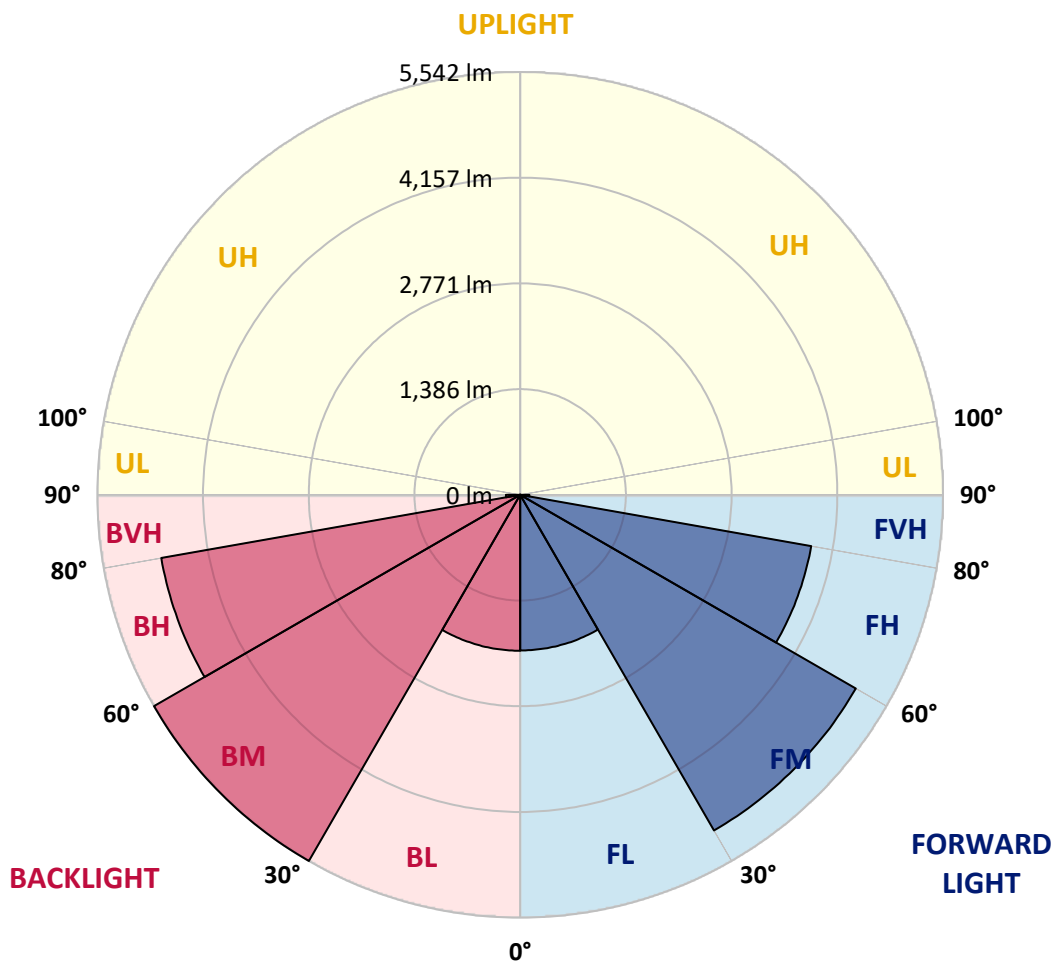
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2039.7	8.6			
FM	(30°-60°)	5079.8	21.5			
FH	(60°-80°)	3873.6	16.4			G2/5000
FVH	(80°-90°)	120.8	0.5			G2/225
BL	(0°-30°)	2044.1	8.6	B3/2500		
BM	(30°-60°)	5542.2	23.4	B4/8500		
BH	(60°-80°)	4776.5	20.2	B4/5000		G4/5000
BVH	(80°-90°)	187.7	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	71°	72°
0°	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3
2.5°	4566.7	4554.5	4565.1	4566.7	4565.1	4565.1	4551.5	4548.4	4530.2	4534.8	4533.2
5°	4629.0	4624.4	4632.0	4635.0	4638.1	4632.0	4621.4	4616.8	4604.6	4600.1	4598.6
7.5°	4686.7	4679.1	4691.2	4701.9	4709.5	4711.0	4712.5	4704.9	4704.9	4698.8	4698.8
10°	4735.3	4729.2	4749.0	4762.6	4786.9	4800.6	4815.8	4826.4	4832.5	4834.0	4832.5
12.5°	4756.6	4752.0	4783.9	4824.9	4870.5	4902.4	4940.4	4967.7	4975.3	4973.8	4981.4
15°	4720.1	4723.1	4771.8	4852.3	4949.5	5030.0	5083.2	5106.0	5112.1	5115.1	5116.6
17.5°	4621.4	4627.4	4697.3	4828.0	4998.1	5144.0	5223.0	5223.0	5210.8	5210.8	5209.3
20°	4463.4	4469.4	4560.6	4749.0	4999.6	5223.0	5335.4	5312.6	5267.0	5257.9	5248.8
22.5°	4244.6	4268.9	4369.2	4587.9	4934.3	5245.7	5405.3	5371.8	5300.4	5280.7	5267.0
25°	3997.0	3993.9	4113.9	4360.1	4776.3	5191.1	5425.0	5418.9	5343.0	5321.7	5297.4
27.5°	3714.4	3723.5	3834.4	4083.6	4534.8	5033.1	5391.6	5472.1	5409.8	5388.5	5365.8
30°	3424.2	3433.4	3538.2	3828.3	4259.8	4806.7	5323.2	5523.8	5499.4	5482.7	5467.5
32.5°	3132.6	3135.6	3260.2	3571.6	4027.4	4536.3	5219.9	5570.8	5604.3	5596.7	5590.6
35°	2859.1	2862.1	2997.3	3313.3	3798.0	4305.4	5095.3	5639.2	5747.1	5756.2	5762.3
37.5°	2593.2	2597.8	2736.0	3067.2	3571.6	4130.7	4957.1	5744.0	5947.6	5981.0	5987.1
40°	2328.9	2333.5	2465.6	2816.6	3342.2	3977.2	4850.8	5891.4	6218.0	6263.6	6310.7
42.5°	2076.7	2093.4	2205.9	2541.6	3087.0	3787.3	4805.2	6070.7	6538.6	6610.0	6663.1
45°	1841.3	1842.8	1970.4	2284.9	2784.7	3530.6	4774.8	6274.2	6897.1	7005.0	7077.9
47.5°	1589.1	1607.3	1741.0	2046.3	2502.1	3213.1	4677.6	6512.7	7287.5	7413.6	7561.0
50°	1344.5	1370.3	1499.4	1801.8	2243.8	2884.9	4416.3	6792.3	7726.6	7890.6	8060.8
52.5°	1109.0	1107.5	1244.2	1558.7	1984.1	2606.9	3992.4	7085.5	8234.0	8410.2	8594.0
55°	838.6	838.6	973.8	1260.9	1703.0	2359.3	3538.2	7267.8	8704.9	8917.6	9118.1
57.5°	575.8	591.0	718.6	966.2	1409.8	2132.9	3190.3	7163.0	9065.0	9329.3	9567.8
60°	426.9	442.1	536.3	694.3	1102.9	1865.6	2929.0	6669.2	9282.2	9633.1	9943.1
62.5°	369.2	379.8	469.4	556.0	794.5	1581.5	2698.1	6041.8	9595.2	10075.2	10506.7
65°	329.7	340.3	429.9	480.1	621.3	1271.6	2568.9	5683.3	9968.9	10702.6	11328.6
67.5°	305.4	317.5	393.5	429.9	542.3	1150.0	2468.7	5599.7	9965.8	10856.1	11655.2
69°	293.2	302.3	364.6	404.1	524.1	1113.6	2251.4	5236.6	9308.0	10263.6	11065.7
70°	285.6	294.7	347.9	387.4	518.0	1048.2	2050.9	4756.6	8559.1	9520.7	10335.0
72.5°	261.3	270.4	309.9	346.4	431.4	700.3	1429.6	3044.4	6116.2	6802.9	7734.2
75°	230.9	241.6	271.9	302.3	326.6	405.6	824.9	1580.0	3497.2	4018.2	4847.7
77.5°	188.4	199.0	230.9	279.5	276.5	308.4	536.3	970.8	1637.7	2031.1	2338.0
80°	155.0	162.6	189.9	282.6	226.4	258.3	434.5	796.1	1153.1	1274.6	1347.5
82.5°	103.3	113.9	147.4	221.8	173.2	183.8	325.1	744.4	975.3	1069.5	1157.6
85°	48.6	53.2	89.6	118.5	104.8	98.7	185.3	525.6	726.2	770.2	803.6
87.5°	0.0	0.0	4.6	9.1	13.7	13.7	33.4	110.9	203.6	246.1	243.1
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):

	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°	83°
0°	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3
2.5°	4527.2	4528.7	4527.2	4527.2	4525.6	4522.6	4522.6	4519.6	4521.1	4519.6	4522.6
5°	4597.0	4597.0	4592.5	4589.5	4594.0	4589.5	4591.0	4583.4	4583.4	4578.8	4572.7
7.5°	4697.3	4697.3	4698.8	4689.7	4695.8	4697.3	4692.8	4689.7	4686.7	4679.1	4680.6
10°	4831.0	4831.0	4835.6	4823.4	4829.5	4832.5	4834.0	4834.0	4831.0	4817.3	4818.9
12.5°	4979.9	4976.8	4978.4	4972.3	4978.4	4981.4	4984.4	4981.4	4981.4	4978.4	4976.8
15°	5115.1	5113.6	5116.6	5112.1	5113.6	5116.6	5125.7	5124.2	5122.7	5113.6	5113.6
17.5°	5207.8	5203.2	5200.2	5198.6	5198.6	5197.1	5198.6	5198.6	5194.1	5192.6	5192.6
20°	5242.7	5230.5	5223.0	5218.4	5212.3	5209.3	5206.2	5207.8	5204.7	5200.2	5201.7
22.5°	5248.8	5232.1	5216.9	5203.2	5191.1	5183.5	5175.9	5172.8	5165.2	5160.7	5160.7
25°	5277.6	5251.8	5227.5	5204.7	5186.5	5169.8	5153.1	5140.9	5131.8	5121.2	5118.1
27.5°	5341.4	5314.1	5285.2	5256.4	5232.1	5198.6	5175.9	5151.6	5130.3	5113.6	5101.4
30°	5440.2	5412.9	5384.0	5350.6	5318.7	5283.7	5245.7	5216.9	5186.5	5153.1	5134.8
32.5°	5570.8	5552.6	5523.8	5491.8	5463.0	5426.5	5380.9	5336.9	5308.0	5268.5	5239.7
35°	5757.7	5736.4	5727.3	5713.6	5684.8	5662.0	5611.9	5570.8	5543.5	5488.8	5467.5
37.5°	6012.9	6011.4	6019.0	6014.4	6019.0	5990.1	5967.4	5965.8	5926.3	5873.2	5821.5
40°	6360.8	6379.1	6420.1	6448.9	6476.3	6479.3	6511.2	6477.8	6482.4	6474.8	6421.6
42.5°	6757.3	6819.6	6868.2	6953.3	7018.6	7079.4	7120.4	7176.6	7219.2	7257.1	7266.3
45°	7199.4	7292.1	7404.5	7480.5	7608.1	7709.9	7849.6	7957.5	8069.9	8180.8	8220.3
47.5°	7679.5	7794.9	7919.5	8060.8	8221.8	8381.3	8597.1	8762.7	8943.4	9093.8	9227.5
50°	8209.7	8329.7	8496.8	8659.3	8881.1	9065.0	9347.5	9564.8	9856.5	10057.0	10230.2
52.5°	8762.7	8913.1	9099.9	9279.2	9505.5	9741.0	10055.5	10376.0	10727.0	11030.8	11283.0
55°	9303.5	9488.8	9668.1	9877.7	10128.4	10401.9	10757.3	11179.7	11617.2	11965.1	12299.3
57.5°	9785.1	9999.3	10210.4	10423.1	10679.9	10997.4	11396.9	11852.7	12354.0	12817.4	13276.1
60°	10231.7	10488.4	10746.7	11012.6	11307.3	11699.2	12179.3	12739.9	13388.6	14022.1	14622.1
62.5°	10938.1	11275.4	11595.9	11939.3	12294.8	12755.1	13321.7	14057.0	14801.4	15592.9	16208.2
65°	11895.2	12369.2	12788.5	13233.6	13693.9	14309.2	14986.7	15866.4	16932.8	17744.1	18731.5
67.5°	12370.7	12995.1	13534.4	14029.7	14599.4	15220.7	16025.9	17066.5	18204.4	19380.2	20481.6
69°	11811.7	12455.8	13052.8	13607.3	14183.1	14786.2	15627.8	16695.8	17899.0	19170.6	20246.2
70°	11087.0	11731.1	12367.7	12999.7	13525.3	14113.2	14957.9	16059.3	17261.0	18582.7	19649.1
72.5°	8493.8	9268.5	9844.3	10436.8	11046.0	11544.3	12519.6	13447.8	14699.6	16041.1	17215.4
75°	5434.1	6146.6	6775.6	7279.9	7875.4	8472.5	9192.6	10224.1	11008.0	12109.4	13061.9
77.5°	2792.3	3003.4	3609.6	3790.4	4203.6	4528.7	4925.2	5183.5	5821.5	5956.7	6518.8
80°	1323.2	1192.6	1122.7	1058.9	1077.1	1069.5	1037.6	995.1	1048.2	1025.4	1016.3
82.5°	1153.1	1028.5	820.4	697.3	603.1	512.0	440.6	404.1	408.7	420.8	425.4
85°	808.2	759.6	592.5	449.7	350.9	271.9	218.8	209.6	215.7	232.4	226.4
87.5°	234.0	244.6	215.7	150.4	104.8	76.0	59.2	66.8	63.8	62.3	65.3
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):

	84°	85°	86°	87°	88°	89°	90°	91°	92°	93°	94°
0°	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3
2.5°	4522.6	4521.1	4516.5	4512.0	4512.0	4508.9	4512.0	4513.5	4512.0	4512.0	4508.9
5°	4574.3	4575.8	4580.3	4571.2	4569.7	4571.2	4565.1	4563.6	4559.1	4563.6	4557.6
7.5°	4673.0	4677.6	4677.6	4671.5	4670.0	4674.5	4665.4	4662.4	4657.8	4656.3	4654.8
10°	4820.4	4824.9	4817.3	4812.8	4808.2	4814.3	4806.7	4806.7	4802.1	4797.6	4796.1
12.5°	4984.4	4981.4	4978.4	4981.4	4976.8	4976.8	4972.3	4969.2	4967.7	4966.2	4963.2
15°	5112.1	5122.7	5122.7	5125.7	5122.7	5122.7	5116.6	5118.1	5115.1	5113.6	5115.1
17.5°	5194.1	5197.1	5204.7	5209.3	5209.3	5210.8	5207.8	5210.8	5207.8	5207.8	5213.8
20°	5204.7	5207.8	5215.4	5223.0	5227.5	5230.5	5230.5	5235.1	5238.1	5241.2	5248.8
22.5°	5162.2	5166.7	5175.9	5189.5	5197.1	5200.2	5206.2	5213.8	5221.4	5227.5	5238.1
25°	5118.1	5119.6	5128.8	5142.4	5151.6	5159.1	5169.8	5178.9	5189.5	5201.7	5213.8
27.5°	5093.8	5092.3	5099.9	5113.6	5121.2	5131.8	5140.9	5154.6	5166.7	5181.9	5192.6
30°	5115.1	5102.9	5104.5	5110.5	5116.6	5124.2	5134.8	5147.0	5160.7	5174.3	5186.5
32.5°	5209.3	5181.9	5163.7	5159.1	5160.7	5162.2	5168.3	5175.9	5186.5	5197.1	5201.7
35°	5412.9	5365.8	5341.4	5321.7	5305.0	5291.3	5294.4	5292.8	5292.8	5302.0	5291.3
37.5°	5800.2	5741.0	5715.2	5680.2	5660.5	5610.3	5596.7	5593.6	5573.9	5573.9	5551.1
40°	6407.9	6373.0	6353.2	6321.3	6225.6	6237.8	6169.4	6170.9	6114.7	6120.8	6081.3
42.5°	7272.3	7276.9	7252.6	7231.3	7156.9	7123.5	7059.6	6968.5	6897.1	6895.6	6816.6
45°	8272.0	8326.6	8249.2	8276.5	8211.2	8121.6	8047.1	7930.1	7819.2	7784.3	7703.8
47.5°	9317.2	9406.8	9347.5	9358.2	9326.3	9198.7	9098.4	8954.1	8809.7	8712.5	8663.9
50°	10433.8	10493.0	10491.5	10462.6	10447.4	10322.9	10161.8	10052.4	9946.1	9815.4	9772.9
52.5°	11445.5	11583.8	11676.4	11655.2	11611.1	11536.7	11393.9	11299.7	11143.2	11125.0	11143.2
55°	12528.7	12708.0	12802.2	12916.1	12917.6	12903.9	12844.7	12809.8	12663.9	12680.6	12659.4
57.5°	13554.2	13817.0	13961.3	14204.4	14287.9	14398.8	14357.8	14403.4	14315.3	14373.0	14356.3
60°	14944.2	15308.8	15548.8	15881.5	16036.5	16314.5	16369.2	16402.6	16451.2	16569.7	16502.9
62.5°	16692.8	17227.5	17725.8	18178.6	18327.4	18745.2	18813.6	19074.9	19088.5	19169.1	19021.7
65°	19554.9	20206.7	20755.1	21297.4	21610.4	22099.6	22297.1	22804.5	22649.5	22714.8	22400.4
67.5°	21429.6	22187.7	22923.0	23436.4	23956.0	24455.8	24815.9	25144.0	25141.0	25077.2	24797.6
69°	21264.0	22108.7	22833.3	23521.5	24068.4	24581.9	25014.9	25227.6	25302.0	25209.3	25010.3
70°	20691.3	21558.7	22445.9	23012.6	23608.1	24171.7	24618.4	24850.8	24902.5	24837.1	24665.5
72.5°	18044.9	18877.4	19855.7	20370.7	21090.8	21498.0	22113.2	22414.0	22467.2	22383.7	22271.2
75°	14082.8	14233.2	15229.8	15558.0	16080.6	16550.0	16932.8	16835.6	17107.5	17054.4	17011.8
77.5°	6634.3	6233.2	6878.9	7179.7	7021.7	6600.9	7213.1	6771.0	7064.2	7445.5	7348.3
80°	1093.8	1090.8	1119.6	1183.4	1107.5	1175.8	1174.3	1140.9	1143.9	1226.0	1183.4
82.5°	420.8	429.9	434.5	446.6	446.6	448.2	455.8	464.9	457.3	472.5	469.4
85°	227.9	243.1	229.4	218.8	226.4	230.9	237.0	244.6	237.0	259.8	247.6
87.5°	59.2	62.3	54.7	54.7	53.2	48.6	48.6	51.7	56.2	66.8	72.9
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):

	95°	96°	97°	98°	99°	100°	101°	102°	103°	104°	105°
0°	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3
2.5°	4502.9	4504.4	4505.9	4501.3	4498.3	4498.3	4496.8	4493.7	4492.2	4492.2	4492.2
5°	4554.5	4557.6	4550.0	4548.4	4545.4	4542.4	4542.4	4539.3	4540.8	4540.8	4533.2
7.5°	4657.8	4653.3	4644.1	4638.1	4644.1	4633.5	4629.0	4632.0	4629.0	4630.5	4627.4
10°	4796.1	4796.1	4785.4	4791.5	4783.9	4771.8	4776.3	4771.8	4768.7	4758.1	4764.2
12.5°	4967.7	4963.2	4957.1	4943.4	4938.9	4937.3	4923.7	4925.2	4920.6	4917.6	4913.0
15°	5118.1	5116.6	5102.9	5095.3	5093.8	5087.7	5081.7	5078.6	5071.0	5069.5	5066.5
17.5°	5218.4	5213.8	5207.8	5200.2	5200.2	5191.1	5188.0	5180.4	5178.9	5174.3	5169.8
20°	5251.8	5253.3	5247.3	5241.2	5238.1	5232.1	5227.5	5221.4	5218.4	5212.3	5207.8
22.5°	5244.2	5244.2	5238.1	5236.6	5230.5	5221.4	5215.4	5207.8	5200.2	5192.6	5183.5
25°	5219.9	5218.4	5213.8	5206.2	5198.6	5185.0	5172.8	5160.7	5150.0	5140.9	5127.2
27.5°	5198.6	5195.6	5186.5	5175.9	5160.7	5145.5	5122.7	5106.0	5092.3	5080.2	5065.0
30°	5191.1	5180.4	5166.7	5150.0	5131.8	5109.0	5084.7	5063.4	5048.2	5036.1	5030.0
32.5°	5200.2	5186.5	5165.2	5144.0	5121.2	5093.8	5069.5	5051.3	5037.6	5034.6	5034.6
35°	5283.7	5260.9	5232.1	5201.7	5172.8	5150.0	5133.3	5131.8	5122.7	5133.3	5150.0
37.5°	5528.3	5508.6	5464.5	5425.0	5405.3	5394.6	5379.4	5382.5	5361.2	5394.6	5422.0
40°	6047.9	6023.6	5971.9	5940.0	5900.5	5862.5	5892.9	5883.8	5899.0	5892.9	5921.8
42.5°	6805.9	6781.6	6699.6	6687.4	6670.7	6655.5	6655.5	6643.4	6637.3	6658.6	6634.3
45°	7728.1	7679.5	7649.1	7685.6	7635.4	7650.6	7703.8	7632.4	7649.1	7550.3	7459.2
47.5°	8685.2	8680.6	8673.0	8717.1	8724.7	8747.5	8776.3	8703.4	8571.2	8496.8	8311.5
50°	9786.6	9833.7	9851.9	9894.4	9912.7	9929.4	9883.8	9775.9	9552.6	9355.1	9136.4
52.5°	11125.0	11042.9	11155.4	11196.4	11178.2	11111.3	10947.2	10815.1	10506.7	10222.6	9883.8
55°	12683.7	12703.4	12624.4	12592.5	12530.2	12344.9	12118.5	11820.8	11430.3	11059.7	10631.2
57.5°	14271.2	14263.6	14140.6	13967.4	13756.2	13532.9	13195.6	12768.7	12313.0	11814.7	11296.6
60°	16202.1	16194.5	15945.4	15649.1	15348.3	14988.3	14459.6	13946.1	13335.4	12680.6	12063.8
62.5°	18739.1	18412.5	18167.9	17725.8	17261.0	16790.0	16074.5	15392.4	14576.6	13750.1	13030.0
65°	21990.2	21452.4	21174.4	20533.3	19813.2	19077.9	18350.2	17453.9	16355.5	15355.9	14476.3
67.5°	24395.1	23902.8	23393.9	22754.3	21964.4	21144.0	20147.4	19018.7	17771.4	16650.3	15691.6
69°	24606.2	24145.9	23535.2	22894.1	22146.7	21254.9	20167.2	18903.2	17639.2	16504.4	15561.0
70°	24285.7	23796.5	23153.9	22487.0	21651.4	20809.8	19670.4	18353.3	17087.8	15949.9	15029.3
72.5°	21894.5	21417.5	20733.8	19936.2	19079.4	18359.3	17277.7	15904.3	14528.0	13476.7	12759.6
75°	16648.7	16543.9	16059.3	15594.4	14919.9	14116.3	13127.3	12203.6	11074.8	9962.8	9294.4
77.5°	7103.7	7345.3	7597.4	7633.9	7658.2	7410.6	7257.1	7024.7	6269.7	5926.3	5572.4
80°	1312.6	1172.8	1251.8	1260.9	1312.6	1339.9	1440.2	1707.6	1737.9	1803.3	1883.8
82.5°	466.4	474.0	486.1	490.7	495.3	513.5	581.8	697.3	802.1	938.9	1121.2
85°	264.3	268.9	279.5	288.6	294.7	313.0	350.9	419.3	522.6	679.1	920.6
87.5°	80.5	91.2	97.2	109.4	113.9	117.0	133.7	179.3	230.9	341.8	498.3
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):

	106°	107°	108°	109°	110°	115°	125°	135°	145°	155°	165°
0°	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3	4495.3
2.5°	4492.2	4490.7	4487.7	4484.6	4486.1	4483.1	4474.0	4471.0	4460.3	4452.7	4446.7
5°	4533.2	4531.7	4525.6	4527.2	4525.6	4510.5	4499.8	4481.6	4471.0	4454.2	4448.2
7.5°	4618.3	4616.8	4606.2	4610.7	4607.7	4584.9	4566.7	4537.8	4522.6	4501.3	4484.6
10°	4745.9	4745.9	4733.8	4735.3	4735.3	4704.9	4673.0	4624.4	4589.5	4556.0	4527.2
12.5°	4900.9	4894.8	4893.3	4885.7	4879.6	4846.2	4797.6	4732.3	4666.9	4612.2	4572.7
15°	5057.4	5048.2	5043.7	5034.6	5027.0	4996.6	4931.3	4850.8	4762.6	4674.5	4609.2
17.5°	5159.1	5153.1	5144.0	5140.9	5130.3	5099.9	5054.3	4973.8	4864.4	4741.4	4642.6
20°	5197.1	5186.5	5180.4	5174.3	5168.3	5147.0	5147.0	5095.3	4973.8	4800.6	4650.2
22.5°	5172.8	5166.7	5157.6	5153.1	5147.0	5150.0	5209.3	5201.7	5061.9	4814.3	4595.5
25°	5116.6	5109.0	5101.4	5101.4	5099.9	5131.8	5274.6	5294.4	5087.7	4747.4	4475.5
27.5°	5058.9	5048.2	5051.3	5052.8	5060.4	5128.8	5346.0	5318.7	5017.9	4586.4	4268.9
30°	5023.9	5023.9	5031.5	5043.7	5058.9	5178.9	5402.2	5264.0	4837.1	4343.3	3995.5
32.5°	5039.1	5054.3	5071.0	5101.4	5124.2	5289.8	5422.0	5122.7	4574.3	4042.5	3709.8
35°	5174.3	5192.6	5224.5	5271.6	5298.9	5449.3	5422.0	4916.1	4268.9	3784.3	3415.1
37.5°	5469.1	5487.3	5525.3	5561.7	5589.1	5649.8	5399.2	4653.3	4013.7	3516.9	3150.8
40°	5943.0	5968.9	5996.2	5990.1	5971.9	5912.7	5353.6	4408.7	3778.2	3283.0	2891.0
42.5°	6610.0	6585.7	6582.6	6523.4	6462.6	6208.9	5320.2	4249.2	3576.2	3036.8	2632.7
45°	7380.2	7281.4	7179.7	7100.7	7008.0	6534.0	5311.1	4120.0	3352.8	2763.4	2351.7
47.5°	8155.0	7997.0	7799.5	7676.4	7526.0	6880.4	5338.4	3946.8	3065.7	2465.6	2088.9
50°	8914.6	8656.3	8411.7	8264.4	8094.2	7278.4	5382.5	3655.2	2722.4	2195.2	1848.8
52.5°	9618.0	9285.3	9034.6	8861.4	8653.3	7741.8	5343.0	3272.3	2424.6	1935.4	1621.0
55°	10286.4	9918.8	9659.0	9476.7	9232.1	8206.6	5057.4	2924.4	2140.5	1681.7	1364.2
57.5°	10871.3	10518.8	10248.4	10000.8	9794.2	8610.7	4493.7	2637.3	1867.1	1391.6	1086.2
60°	11554.9	11158.4	10837.9	10573.5	10330.4	8818.9	3861.8	2382.1	1575.4	1077.1	785.4
62.5°	12477.1	12021.3	11650.6	11348.3	11030.8	8864.4	3430.3	2126.9	1250.3	779.3	571.2
65°	13844.3	13282.2	12818.9	12402.6	11972.7	8676.1	3217.6	1848.8	929.7	578.8	478.5
67.5°	14930.5	14347.2	13810.9	13276.1	12726.2	8326.6	3170.5	1592.1	714.0	492.2	429.9
69°	14798.4	14242.3	13750.1	13171.3	12562.1	7887.6	3123.4	1493.4	651.7	457.3	407.1
70°	14289.4	13762.3	13262.5	12791.5	12045.6	7398.4	2998.9	1438.7	627.4	440.6	390.4
72.5°	12074.5	11463.8	10979.1	10392.7	9607.3	5497.9	2274.2	1163.7	575.8	402.6	352.5
75°	8806.7	8300.8	7817.7	7169.0	6404.9	3181.2	1415.9	665.4	422.3	364.6	319.0
77.5°	5142.4	5028.5	4562.1	4135.2	3378.7	1619.4	812.8	398.0	328.1	331.2	281.0
80°	1935.4	2061.5	2108.6	1961.3	1812.4	1118.1	591.0	323.6	285.6	326.6	238.5
82.5°	1411.3	1637.7	1665.0	1595.1	1484.2	1042.2	472.5	259.8	232.4	350.9	205.1
85°	1177.4	1303.5	1323.2	1250.3	1213.8	882.6	329.7	182.3	170.1	252.2	153.4
87.5°	595.5	627.4	644.1	583.4	586.4	411.7	132.2	77.5	92.7	107.9	85.1
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):

	175°	180°
0°	4495.3	4495.3
2.5°	4433.0	4442.1
5°	4439.1	4439.1
7.5°	4474.0	4474.0
10°	4512.0	4513.5
12.5°	4546.9	4545.4
15°	4574.3	4569.7
17.5°	4591.0	4586.4
20°	4574.3	4566.7
22.5°	4489.2	4467.9
25°	4334.2	4306.9
27.5°	4129.1	4110.9
30°	3861.8	3834.4
32.5°	3548.8	3535.1
35°	3249.5	3232.8
37.5°	2976.1	2971.5
40°	2745.2	2720.9
42.5°	2474.8	2464.1
45°	2199.8	2193.7
47.5°	1941.5	1935.4
50°	1703.0	1690.9
52.5°	1469.1	1449.3
55°	1209.3	1195.6
57.5°	928.2	916.1
60°	653.2	639.6
62.5°	464.9	449.7
65°	387.4	375.2
67.5°	350.9	337.3
69°	334.2	322.1
70°	323.6	314.5
72.5°	300.8	294.7
75°	275.0	270.4
77.5°	241.6	234.0
80°	202.1	194.5
82.5°	170.1	162.6
85°	113.9	103.3
87.5°	51.7	45.6
90°	0.0	0.0

(END OF REPORT)