

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: P165517

Luminaire Tested: **VST-E08-LED-E-U-SL4-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165517
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33728)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E08-LED-E-U-SL4-HSS
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(8) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND
HOUSE SIDE SHIELD
Light Source: (168) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16083.9 lumens
Efficiency: N/A
Efficacy: 82.7 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.33' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G4

Input Watts (W): 194.5
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: 28.75 FT

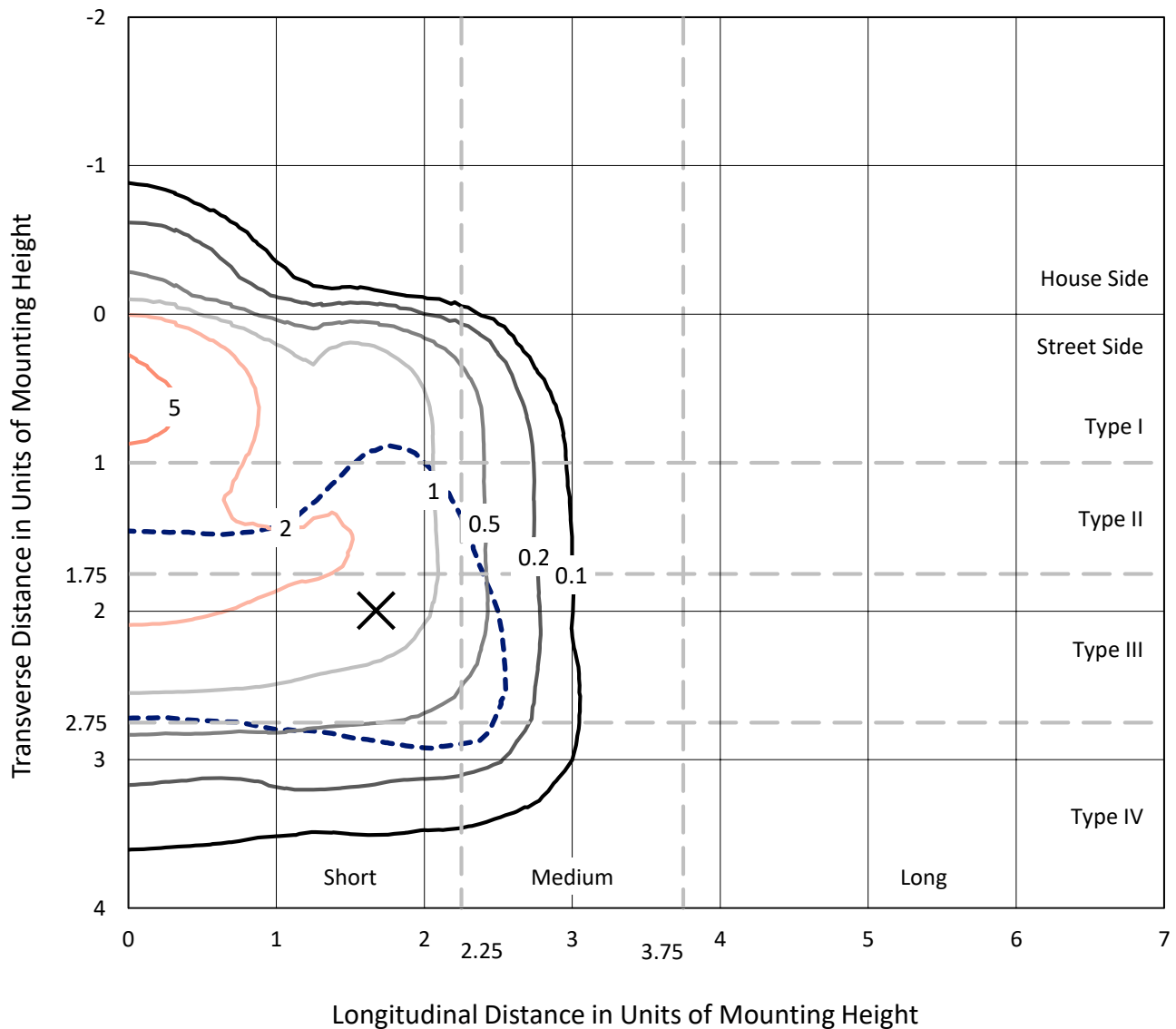


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

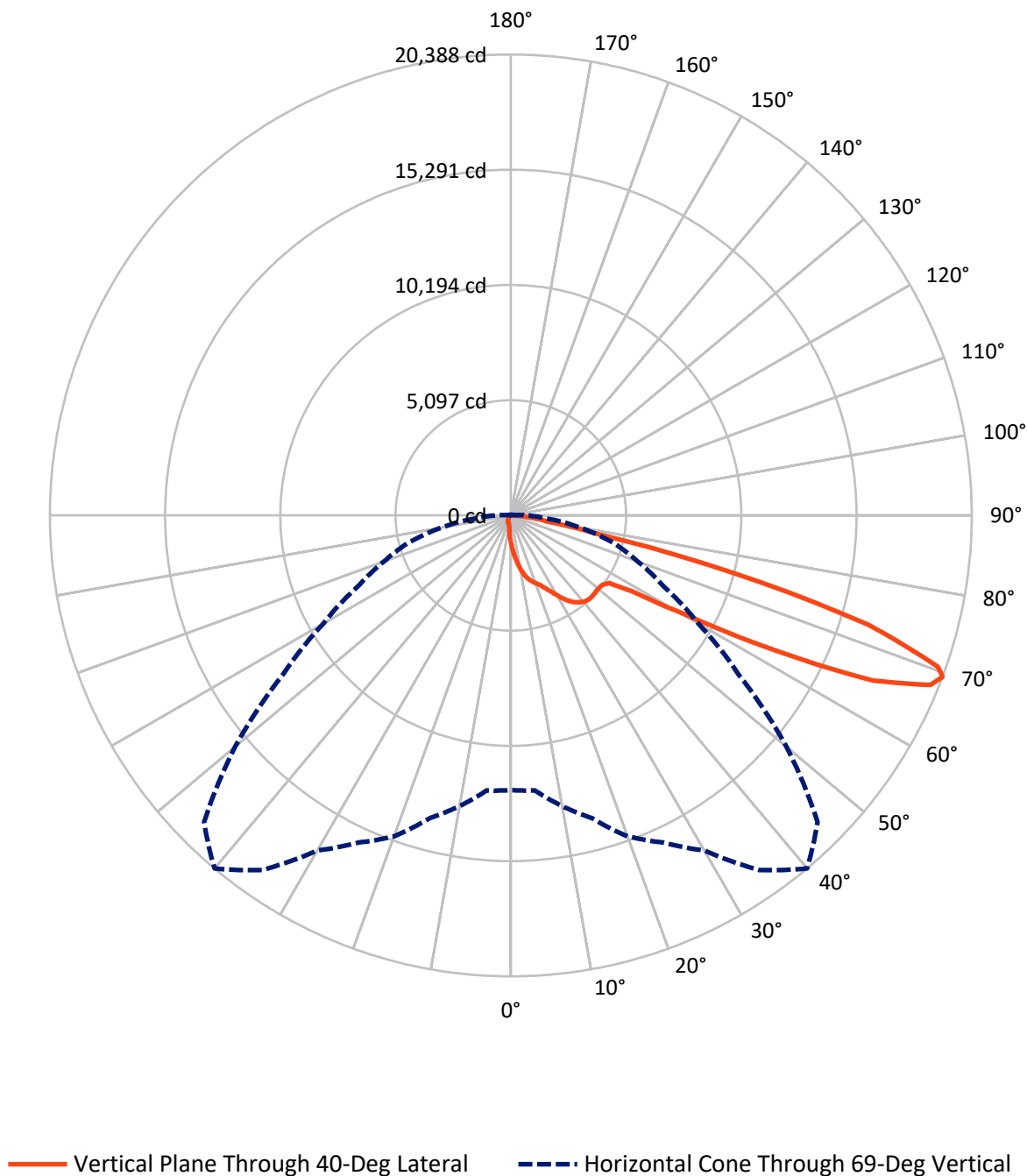


Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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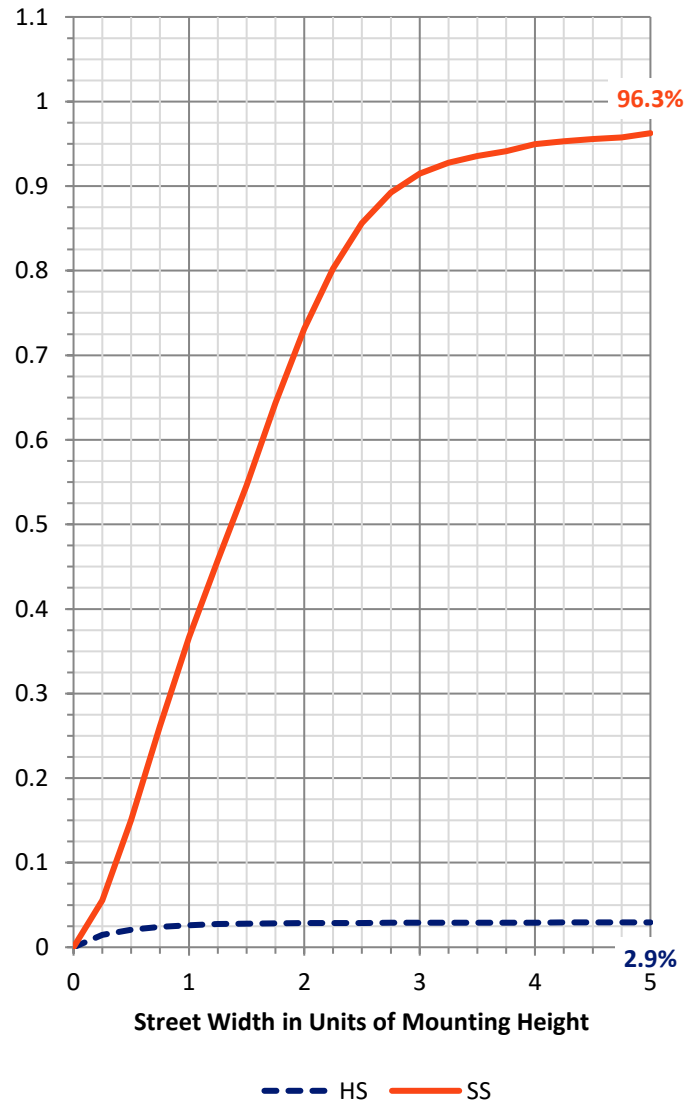
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	479.0	0.0	479.0
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	15605.0	0.0	15605.0
	% Fixture	97.0	0.0	97.0
Total	Lumens	16083.9	0.0	16083.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.8	0.8
10°-20°	430.4	2.7
20°-30°	823.8	5.1
30°-40°	1370.1	8.5
40°-50°	1853.9	11.5
50°-60°	2899.3	18.0
60°-70°	5961.0	37.1
70°-80°	2398.6	14.9
80°-90°	221.9	1.4
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°	16083.9	100.0
0°-180°	16083.9	100.0

Coefficient of Utilization



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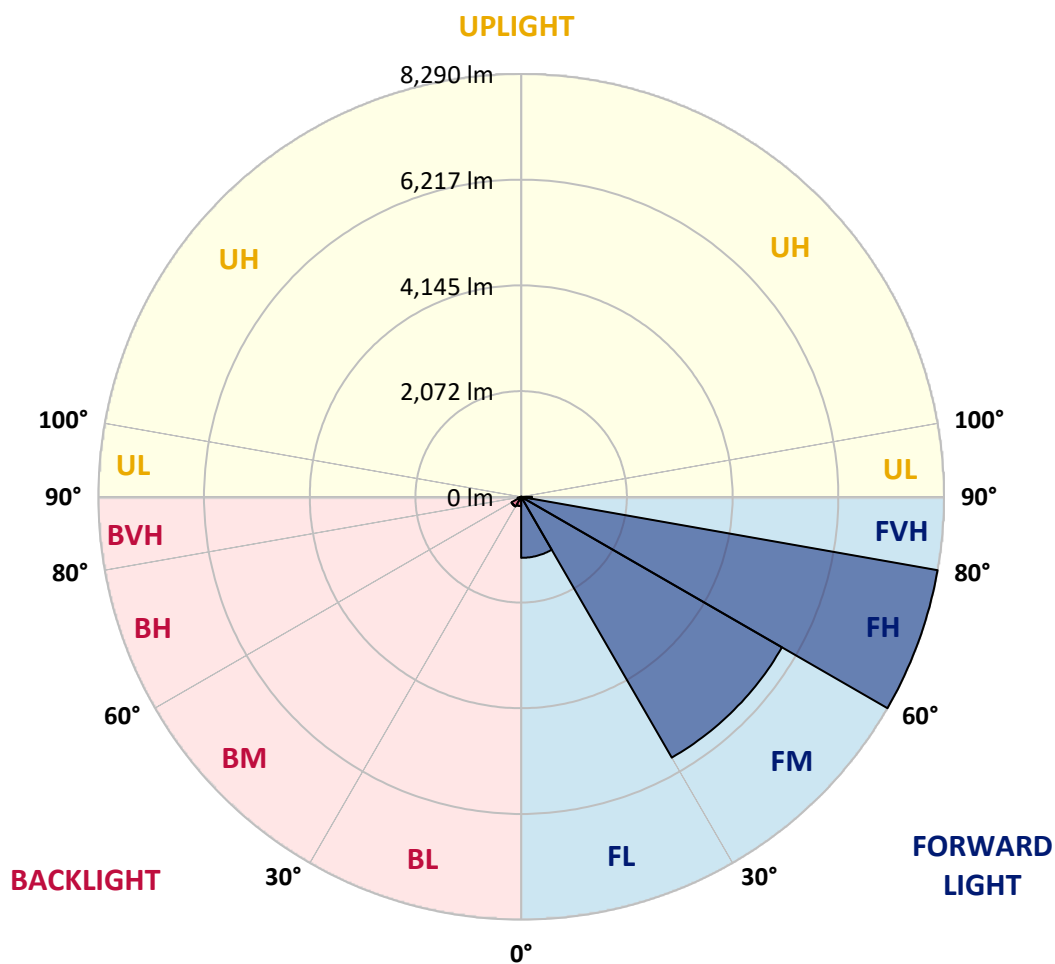
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1197.0	7.4			
FM	(30°-60°)	5904.7	36.7			
FH	(60°-80°)	8289.7	51.5			G4/12000
FVH	(80°-90°)	213.6	1.3			G2/225
BL	(0°-30°)	182.2	1.1	B1/500		
BM	(30°-60°)	218.7	1.4	B0/220		
BH	(60°-80°)	69.9	0.4	B0/110		G0/110
BVH	(80°-90°)	8.2	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7
2.5°	1620.5	1601.9	1580.8	1580.8	1554.6	1554.6	1538.7	1496.6	1491.4	1467.5	1443.8
5°	2068.3	2052.5	2026.2	2002.4	1981.4	1944.5	1918.1	1868.0	1812.8	1760.0	1712.6
7.5°	2505.8	2497.8	2450.4	2442.4	2408.2	2347.7	2294.9	2221.1	2126.2	2052.5	1965.6
10°	2911.5	2893.0	2882.4	2837.6	2787.7	2721.8	2640.0	2550.6	2439.8	2323.8	2200.0
12.5°	3233.0	3222.4	3174.9	3156.5	3103.8	3037.9	2935.2	2819.2	2708.6	2558.4	2413.4
15°	3472.6	3454.2	3422.6	3393.6	3330.4	3272.5	3177.6	3051.0	2916.8	2753.4	2579.5
17.5°	3673.0	3638.7	3630.7	3585.9	3520.2	3451.5	3346.2	3230.2	3072.2	2908.8	2719.0
20°	3941.6	3894.2	3878.4	3812.5	3736.2	3641.3	3520.2	3375.2	3209.1	3030.1	2835.0
22.5°	4257.8	4223.5	4189.3	4131.4	4033.9	3899.5	3723.0	3565.0	3354.1	3156.5	2945.8
25°	4705.8	4676.8	4621.4	4542.4	4421.1	4260.5	4047.0	3815.2	3567.5	3314.6	3066.9
27.5°	5140.5	5114.1	5074.6	5014.1	4877.0	4700.5	4437.0	4141.9	3828.3	3522.7	3248.6
30°	5549.0	5525.1	5485.6	5425.1	5303.8	5129.9	4832.2	4516.0	4126.1	3770.4	3441.1
32.5°	5989.0	5981.0	5936.2	5849.3	5743.8	5509.4	5185.3	4845.4	4450.2	4039.2	3654.4
35°	6486.9	6426.2	6384.2	6297.1	6118.1	5867.7	5488.3	5116.8	4700.5	4278.9	3849.4
37.5°	6908.5	6850.6	6797.8	6687.2	6468.5	6149.6	5720.2	5311.7	4882.2	4452.8	4015.4
40°	7216.6	7187.7	7124.5	6979.5	6734.6	6355.2	5891.4	5446.1	5014.1	4581.9	4149.8
42.5°	7445.9	7401.1	7330.1	7179.8	6890.1	6457.9	5959.8	5501.4	5074.6	4661.0	4236.8
45°	7530.2	7493.4	7427.5	7264.2	6950.6	6486.9	5957.3	5485.6	5077.3	4684.6	4294.7
47.5°	7480.2	7443.4	7385.3	7232.5	6924.3	6452.6	5909.9	5440.8	5050.9	4692.6	4347.4
50°	7314.2	7293.1	7248.3	7119.2	6842.6	6386.7	5867.7	5417.1	5045.6	4732.2	4421.1
52.5°	7298.4	7285.3	7229.9	7100.8	6818.9	6365.6	5862.4	5430.4	5090.4	4782.2	4473.9
55°	8918.7	8731.7	8312.8	7957.1	7372.2	6676.6	6128.5	5643.7	5280.2	4979.8	4763.7
57.5°	12676.0	12396.8	11846.1	11169.0	9825.1	8505.1	7448.6	6684.5	6307.7	6170.7	6252.3
60°	14436.0	14386.1	14299.0	13977.6	13289.9	12154.4	10889.6	9522.2	8974.1	8926.7	9092.6
62.5°	15271.4	15239.7	15266.1	15226.6	15013.1	14681.1	14317.4	13727.4	13184.5	12834.1	12091.0
65°	15656.0	15677.1	15827.2	15945.8	15972.2	16059.0	16325.3	17060.3	17597.8	16694.1	14631.0
67.5°	14678.4	14802.2	15147.5	15579.5	16085.4	16575.5	17365.9	18915.2	20019.2	18957.4	16027.5
69°	12151.7	12212.3	13055.4	13869.6	15105.3	15969.6	17115.7	19147.0	20388.2	19189.3	15916.8
70°	9566.9	9622.2	10526.1	11632.6	13722.1	14833.9	16333.1	18754.6	20042.9	18881.0	15347.7
72.5°	4315.8	4236.8	4555.5	5148.3	7419.5	9185.0	11806.6	15194.9	16536.0	15126.4	11482.4
75°	3014.2	2980.0	3014.2	3016.8	3369.9	4347.4	5485.6	8236.3	10186.1	8789.8	5485.6
77.5°	2334.4	2310.7	2287.0	2260.6	2302.9	2579.5	2690.1	2921.9	3794.1	3588.6	2092.0
80°	1847.0	1825.9	1883.8	1865.4	1865.4	1897.1	1876.0	1789.0	1625.6	1507.0	1349.0
82.5°	858.9	864.2	864.2	937.9	1130.4	1320.0	1380.6	1293.8	1148.8	977.4	787.8
85°	81.6	92.2	155.5	239.8	477.0	537.4	540.2	447.8	447.8	353.1	284.5
87.5°	0.0	2.6	2.6	2.6	23.7	65.9	55.4	15.8	7.8	7.8	13.1
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7
2.5°	1401.8	1393.8	1362.2	1330.6	1301.6	1269.9	1241.0	1212.0	1180.3	1156.6	1127.7
5°	1638.9	1580.8	1515.0	1451.8	1388.5	1322.7	1254.2	1193.6	1130.4	1072.3	1017.0
7.5°	1878.6	1765.3	1675.7	1562.4	1459.7	1357.0	1262.1	1164.6	1075.0	990.7	911.7
10°	2081.4	1944.5	1804.8	1660.0	1512.3	1375.4	1243.7	1127.7	1009.1	906.4	809.0
12.5°	2247.5	2073.6	1902.4	1720.5	1554.6	1380.6	1217.3	1077.6	937.9	822.1	721.9
15°	2397.6	2197.4	1991.8	1781.1	1570.4	1372.8	1190.9	1017.0	874.7	743.0	629.8
17.5°	2518.9	2289.6	2057.8	1820.6	1594.1	1362.2	1156.6	974.9	809.0	671.8	561.3
20°	2624.3	2384.5	2134.2	1868.0	1609.9	1359.5	1127.7	922.2	750.9	606.1	497.9
22.5°	2721.8	2481.9	2213.3	1928.6	1633.6	1357.0	1101.3	882.7	700.8	556.0	447.8
25°	2832.5	2579.5	2297.6	1991.8	1675.7	1367.5	1085.6	851.0	656.0	508.5	408.3
27.5°	2956.3	2690.1	2397.6	2070.9	1731.0	1388.5	1080.3	816.8	616.5	463.7	376.8
30°	3130.1	2821.9	2497.8	2149.9	1781.1	1412.3	1075.0	795.7	577.0	429.4	345.1
32.5°	3283.0	2951.0	2608.5	2231.7	1836.5	1436.0	1072.3	766.7	540.2	395.2	321.4
35°	3443.7	3069.6	2703.4	2310.7	1883.8	1462.2	1069.8	745.6	505.9	361.0	297.8
37.5°	3583.4	3169.6	2777.1	2379.2	1936.6	1486.1	1072.3	727.2	474.2	332.0	276.6
40°	3701.9	3272.5	2858.7	2442.4	1991.8	1522.9	1075.0	708.8	442.7	305.6	258.2
42.5°	3807.4	3369.9	2945.8	2513.6	2055.2	1565.1	1090.9	693.0	416.3	281.9	239.8
45°	3889.0	3459.5	3040.5	2613.8	2157.9	1633.6	1119.8	682.4	389.9	260.8	224.0
47.5°	3973.3	3591.2	3201.3	2771.8	2308.2	1741.6	1169.9	679.8	368.8	245.0	210.7
50°	4089.3	3723.0	3343.5	2932.5	2445.1	1852.3	1230.4	682.4	342.6	229.3	197.6
52.5°	4173.6	3857.3	3528.0	3211.8	2771.8	2189.4	1465.0	729.8	329.3	216.0	181.8
55°	4671.5	4616.2	4624.0	4676.8	4337.0	3725.6	2450.4	1053.9	387.4	245.0	179.2
57.5°	6587.0	6781.9	6895.2	6892.6	6331.4	5251.2	3290.9	1354.2	432.2	284.5	213.4
60°	9105.9	8958.4	8750.2	8236.3	7490.7	5994.2	3680.8	1457.1	374.1	226.6	195.0
62.5°	11332.3	10468.0	9701.3	8868.8	7891.2	6252.3	3759.8	1449.1	326.7	171.2	137.0
65°	12720.8	11166.2	9928.0	8884.5	7733.1	6036.3	3557.0	1330.6	276.6	139.7	113.3
67.5°	13052.8	10789.4	9037.4	7706.7	6460.5	4697.9	2611.0	1001.3	216.0	116.0	100.2
69°	12328.2	9590.7	7488.2	5978.4	4700.5	3117.0	1615.2	632.3	165.9	105.4	92.2
70°	11340.2	8341.8	6099.5	4797.9	3480.6	2189.4	1130.4	445.3	134.4	97.4	84.3
72.5°	7295.8	4381.6	2998.4	2086.7	1436.0	872.2	442.7	200.3	102.7	81.6	68.5
75°	2829.8	1620.5	1175.2	893.1	698.2	484.8	268.8	129.1	86.9	68.5	52.6
77.5°	1393.8	1067.0	872.2	598.1	347.8	216.0	145.0	100.2	71.2	50.1	34.2
80°	1101.3	732.5	437.4	271.4	205.4	155.5	110.7	81.6	52.6	31.7	23.7
82.5°	563.8	308.3	226.6	184.5	152.8	121.3	89.6	57.9	34.2	21.1	18.4
85°	176.5	129.1	116.0	113.3	105.4	86.9	63.2	37.0	21.1	13.1	13.1
87.5°	13.1	18.4	23.7	18.4	21.1	18.4	23.7	15.8	10.6	10.6	7.8
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7
2.5°	1106.6	1075.0	1046.1	1027.5	993.3	980.2	967.0	961.8	937.9	943.2	922.2
5°	967.0	911.7	869.4	827.4	787.8	758.9	735.0	706.1	682.4	671.8	650.7
7.5°	840.5	769.4	714.1	669.3	621.8	585.0	553.3	532.2	511.2	490.1	479.5
10°	729.8	653.4	590.2	545.4	500.6	469.0	445.3	429.4	416.3	408.3	405.8
12.5°	627.0	553.3	495.4	455.8	421.6	405.8	395.2	387.4	384.6	382.1	382.1
15°	548.0	474.2	429.4	400.5	384.6	376.8	374.1	368.8	363.7	361.0	361.0
17.5°	474.2	418.9	387.4	371.5	363.7	358.4	353.1	347.8	342.6	339.8	339.8
20°	424.2	379.4	363.7	353.1	345.1	339.8	332.0	326.7	324.2	321.4	318.9
22.5°	384.6	355.7	345.1	337.3	326.7	318.9	313.6	308.3	303.0	300.3	297.8
25°	355.7	337.3	329.3	318.9	308.3	300.3	292.5	284.5	279.4	276.6	271.4
27.5°	334.6	321.4	310.9	297.8	287.2	279.4	271.4	263.5	258.2	253.0	250.2
30°	316.2	303.0	289.8	279.4	266.1	258.2	247.7	239.8	237.1	231.8	226.6
32.5°	297.8	284.5	271.4	258.2	245.0	234.6	229.3	218.7	213.4	210.7	205.4
35°	276.6	263.5	247.7	237.1	224.0	213.4	205.4	197.6	192.3	187.0	184.5
37.5°	258.2	242.4	226.6	213.4	202.9	192.3	184.5	176.5	171.2	165.9	163.4
40°	237.1	221.3	205.4	192.3	181.8	173.9	165.9	158.1	152.8	150.2	150.2
42.5°	218.7	200.3	184.5	173.9	165.9	155.5	147.5	139.7	137.0	134.4	137.0
45°	200.3	181.8	168.6	158.1	150.2	139.7	131.7	126.4	123.8	126.4	129.1
47.5°	184.5	165.9	152.8	145.0	137.0	129.1	121.3	116.0	116.0	121.3	126.4
50°	168.6	150.2	139.7	134.4	126.4	118.6	108.0	105.4	108.0	113.3	118.6
52.5°	152.8	131.7	123.8	121.3	113.3	105.4	97.4	94.9	97.4	102.7	100.2
55°	137.0	116.0	113.3	110.7	102.7	92.2	84.3	84.3	84.3	81.6	76.5
57.5°	131.7	102.7	100.2	97.4	89.6	79.0	73.8	68.5	65.9	57.9	55.4
60°	137.0	92.2	92.2	86.9	79.0	68.5	60.6	52.6	47.4	42.1	42.1
62.5°	110.7	84.3	81.6	76.5	65.9	55.4	47.4	39.5	37.0	34.2	34.2
65°	89.6	76.5	71.2	63.2	55.4	44.8	37.0	31.7	29.0	29.0	31.7
67.5°	81.6	68.5	60.6	52.6	44.8	34.2	29.0	26.4	26.4	29.0	29.0
69°	76.5	63.2	55.4	47.4	39.5	31.7	26.4	26.4	26.4	26.4	29.0
70°	71.2	60.6	52.6	44.8	34.2	26.4	23.7	23.7	26.4	26.4	29.0
72.5°	55.4	47.4	44.8	37.0	26.4	23.7	21.1	23.7	23.7	26.4	26.4
75°	42.1	34.2	34.2	29.0	21.1	18.4	18.4	21.1	21.1	23.7	23.7
77.5°	29.0	23.7	23.7	21.1	18.4	15.8	15.8	18.4	21.1	21.1	23.7
80°	21.1	18.4	15.8	18.4	15.8	13.1	15.8	18.4	18.4	21.1	21.1
82.5°	15.8	15.8	15.8	15.8	13.1	13.1	15.8	15.8	18.4	21.1	21.1
85°	13.1	13.1	13.1	13.1	13.1	13.1	13.1	15.8	15.8	18.4	18.4
87.5°	7.8	7.8	7.8	10.6	10.6	13.1	13.1	13.1	13.1	15.8	15.8
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):

	165°	170°	175°	180°
0°	1214.7	1214.7	1214.7	1214.7
2.5°	917.0	914.2	903.7	906.4
5°	642.9	627.0	637.6	635.0
7.5°	471.7	469.0	466.4	471.7
10°	403.2	403.2	400.5	403.2
12.5°	379.4	379.4	379.4	379.4
15°	361.0	361.0	358.4	358.4
17.5°	339.8	339.8	339.8	337.3
20°	318.9	316.2	316.2	316.2
22.5°	295.0	292.5	292.5	292.5
25°	271.4	268.8	268.8	268.8
27.5°	247.7	245.0	242.4	242.4
30°	224.0	221.3	218.7	218.7
32.5°	200.3	197.6	195.0	195.0
35°	179.2	179.2	176.5	173.9
37.5°	160.8	160.8	160.8	160.8
40°	147.5	150.2	150.2	150.2
42.5°	139.7	142.2	145.0	147.5
45°	134.4	139.7	142.2	142.2
47.5°	131.7	134.4	137.0	137.0
50°	121.3	118.6	118.6	118.6
52.5°	97.4	92.2	89.6	86.9
55°	71.2	68.5	63.2	63.2
57.5°	50.1	50.1	47.4	47.4
60°	39.5	39.5	37.0	39.5
62.5°	34.2	34.2	34.2	34.2
65°	31.7	31.7	31.7	31.7
67.5°	31.7	31.7	31.7	31.7
69°	29.0	29.0	29.0	29.0
70°	29.0	29.0	29.0	29.0
72.5°	26.4	26.4	26.4	26.4
75°	23.7	26.4	26.4	26.4
77.5°	23.7	23.7	23.7	23.7
80°	21.1	21.1	23.7	23.7
82.5°	21.1	21.1	21.1	21.1
85°	18.4	18.4	21.1	21.1
87.5°	15.8	15.8	18.4	18.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)