

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: P399624

Luminaire Tested: **ARCH-L-PA3-170-727-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399624
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-170-727-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17432 lumens
Efficiency: N/A
Efficacy: 100.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

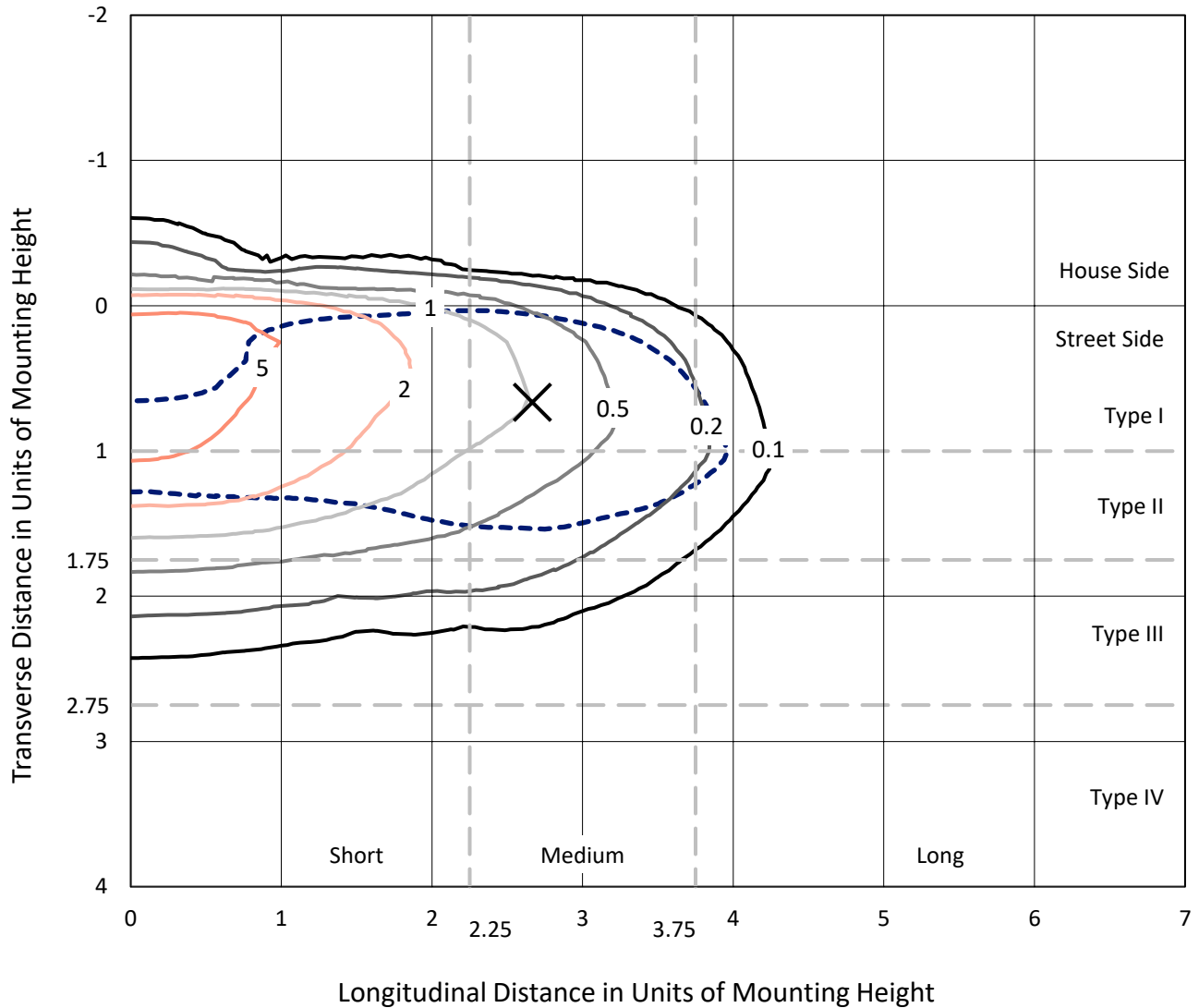
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

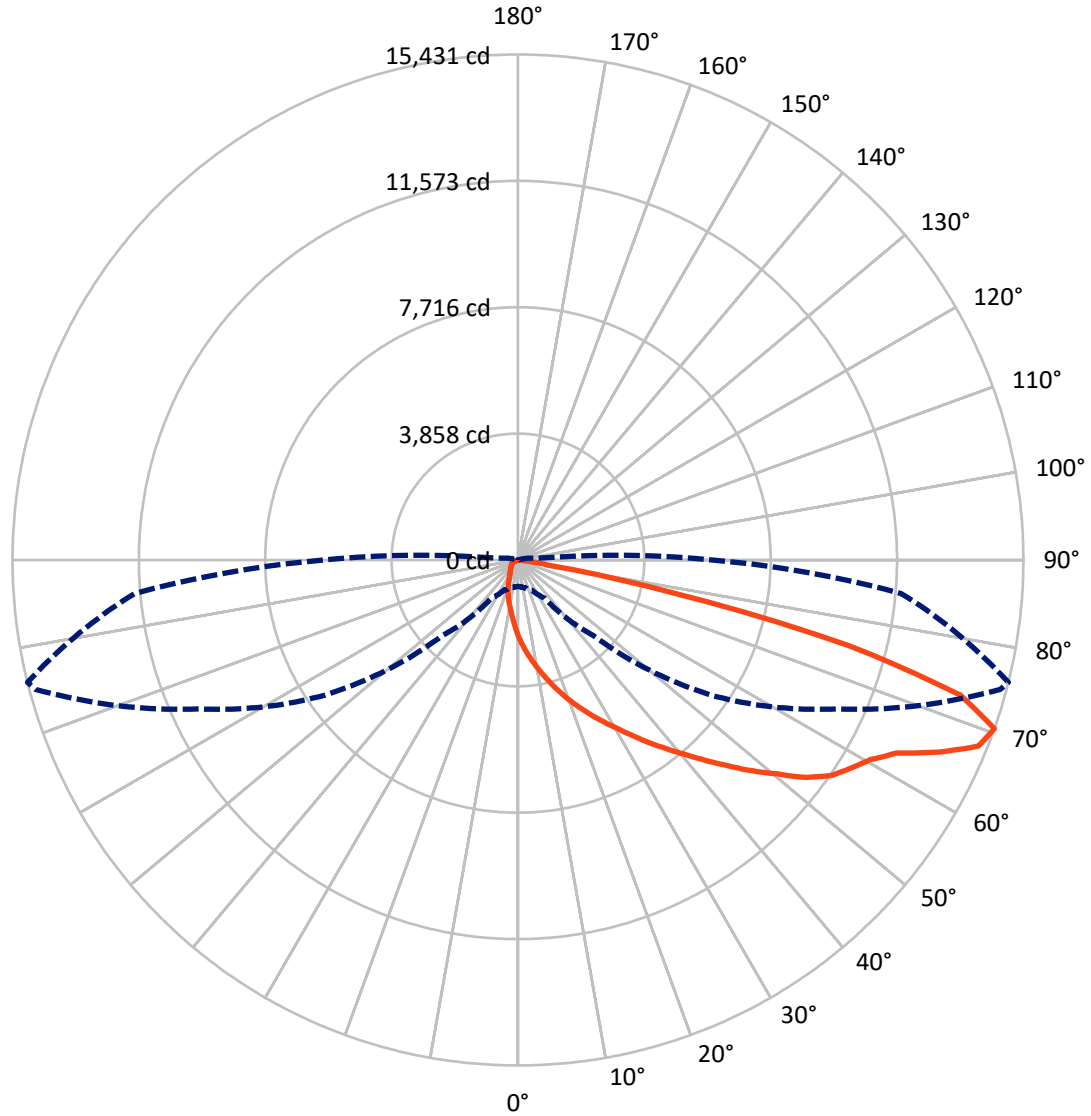
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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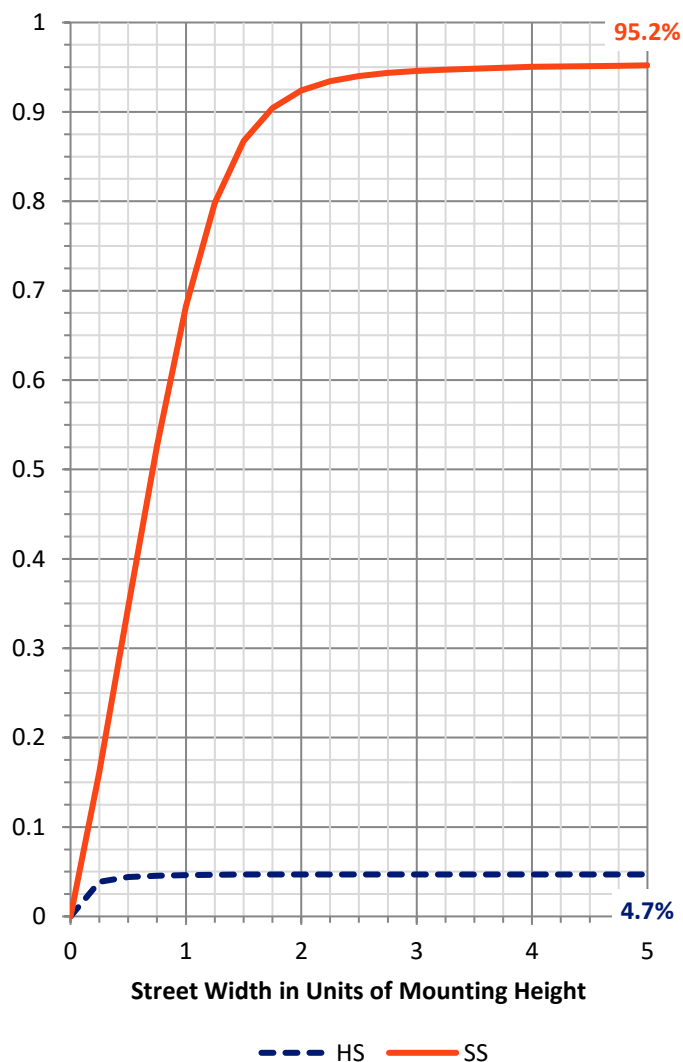
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	822.1	0.0	822.1
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	16609.8	0.0	16609.8
	% Fixture	95.3	0.0	95.3
Total	Lumens	17432.0	0.0	17432.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.8	1.3
10°-20°	709.5	4.1
20°-30°	1321.3	7.6
30°-40°	2337.1	13.4
40°-50°	3573.9	20.5
50°-60°	4052.0	23.2
60°-70°	3473.6	19.9
70°-80°	1682.4	9.7
80°-90°	62.4	0.4
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°	17432.0	100.0
0°-180°	17432.0	100.0

Coefficient of Utilization



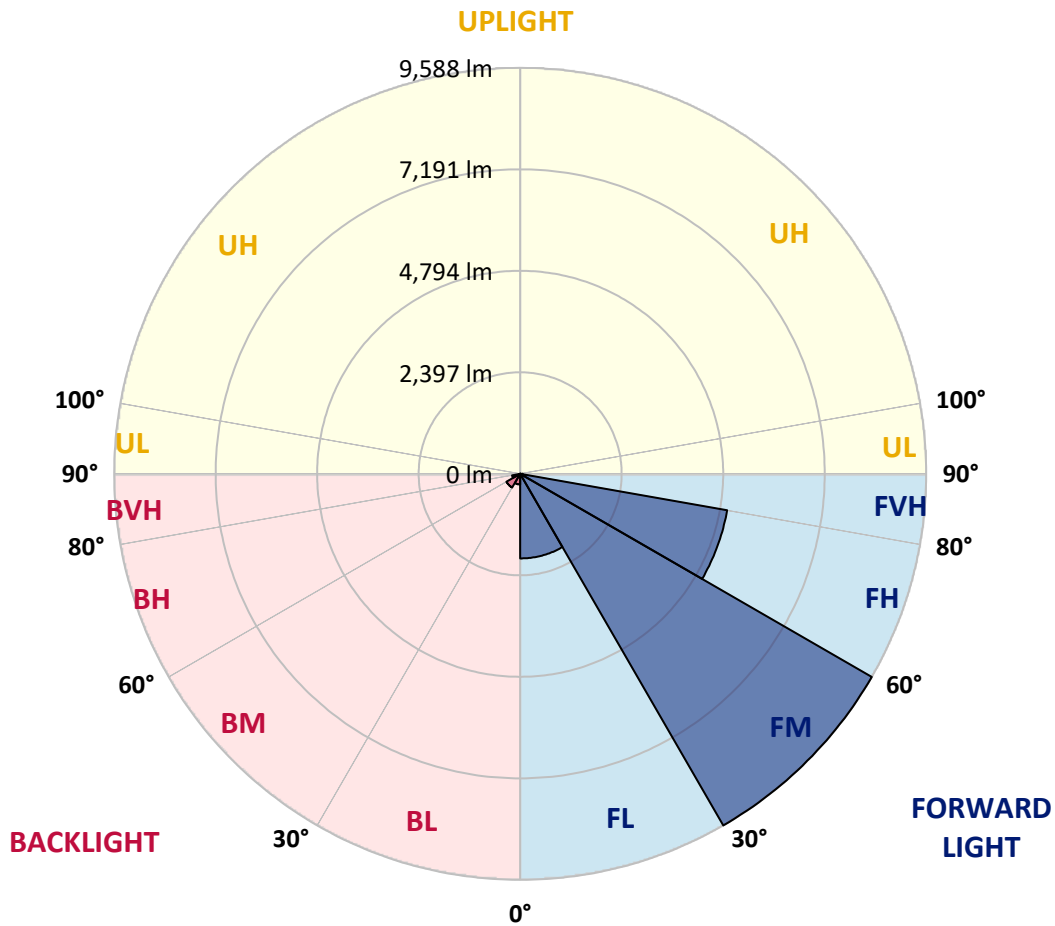
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1998.4	11.5			
FM (30°-60°)	9587.7	55.0			
FH (60°-80°)	4962.4	28.5			G2/5000
FVH (80°-90°)	61.3	0.4			G1/100
BL (0°-30°)	252.2	1.4	B1/500		
BM (30°-60°)	375.3	2.2	B1/1000		
BH (60°-80°)	193.6	1.1	B1/500		G1/500
BVH (80°-90°)	1.1	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4
2.5°	3189.5	3172.1	3154.7	3088.0	3027.0	2971.9	2867.4	2731.0	2609.1	2583.0	2440.8
5°	3746.8	3726.5	3700.3	3633.6	3555.2	3462.3	3308.5	3099.6	2884.8	2838.4	2574.3
7.5°	4124.1	4106.6	4068.9	4037.0	3958.6	3868.7	3697.4	3453.6	3157.6	3099.6	2728.1
10°	4382.4	4370.7	4364.9	4338.8	4280.8	4208.2	4037.0	3781.6	3433.3	3366.6	2890.6
12.5°	4475.2	4475.2	4504.2	4547.8	4556.5	4533.3	4376.5	4121.2	3723.5	3653.9	3082.2
15°	4350.4	4364.9	4428.8	4568.1	4713.2	4809.0	4710.3	4472.3	4042.8	3967.3	3308.5
17.5°	4315.6	4330.1	4373.6	4495.5	4690.0	4945.4	4994.7	4811.9	4344.6	4280.8	3540.7
20°	4414.3	4428.8	4466.5	4571.0	4719.0	4977.3	5183.4	5139.8	4663.9	4597.1	3775.8
22.5°	4649.4	4658.1	4658.1	4739.3	4869.9	5061.5	5302.4	5450.4	4991.8	4919.3	4008.0
25°	5154.3	5136.9	5067.3	5026.6	5110.8	5267.5	5453.3	5723.2	5357.5	5258.8	4257.6
27.5°	5816.0	5874.1	5705.8	5511.3	5447.5	5537.4	5665.1	5964.1	5711.6	5607.1	4483.9
30°	6712.8	6689.6	6469.0	6190.4	5914.7	5882.8	5926.3	6170.1	6065.6	5967.0	4736.4
32.5°	7450.0	7493.5	7261.4	6921.8	6509.7	6315.2	6268.8	6416.8	6442.9	6379.1	5035.4
35°	8207.5	8253.9	8027.5	7650.3	7159.8	6834.7	6701.2	6721.5	6910.2	6828.9	5348.8
37.5°	8886.6	8927.2	8703.8	8317.8	7827.3	7429.7	7238.1	7081.4	7362.9	7290.4	5679.6
40°	9403.2	9409.0	9258.1	8912.7	8448.4	8036.2	7818.6	7510.9	7841.8	7792.5	6025.0
42.5°	9768.9	9780.5	9670.2	9374.2	8944.6	8561.6	8384.5	8018.8	8393.2	8349.7	6425.5
45°	9940.1	9960.4	9948.8	9676.0	9319.0	8988.2	8930.1	8558.6	8996.9	8956.3	6887.0
47.5°	9777.6	9777.6	9925.6	9887.9	9559.9	9339.3	9406.1	9121.7	9652.8	9615.1	7357.1
50°	9101.4	9110.1	9411.9	9844.3	9652.8	9603.4	9812.4	9673.1	10247.7	10271.0	7920.2
52.5°	7325.2	7310.7	8329.4	9159.4	9588.9	9722.4	10186.8	10236.1	10961.7	11031.3	8480.3
55°	5473.6	5464.9	6440.0	7946.3	9142.0	9661.5	10395.8	10738.2	11571.2	11614.7	8898.2
57.5°	4333.0	4309.8	4846.7	6405.2	8132.0	9388.7	10404.5	10834.0	11910.7	11986.2	9304.5
60°	3331.7	3311.4	3711.9	4765.4	6701.2	8663.1	10154.9	10839.8	12238.7	12372.2	9850.1
62.5°	2382.7	2405.9	2713.6	3418.8	5154.3	7638.6	9829.8	10921.1	12822.0	12972.9	10625.0
65°	1607.8	1596.2	1851.6	2327.6	3665.5	6260.1	9330.6	11092.3	13872.6	14136.7	11553.7
67.5°	1117.4	1126.1	1242.2	1515.0	2327.6	4806.1	8500.6	11188.1	14958.0	15164.1	12203.8
70°	806.8	818.4	882.3	1018.7	1422.1	3259.2	7185.9	10749.8	15251.2	15431.1	11751.1
72.5°	531.1	554.3	650.1	722.7	908.4	2040.3	5293.6	9261.0	13988.7	14122.2	9858.8
75°	287.3	293.1	417.9	539.8	647.2	1271.2	3157.6	6245.6	10465.4	10421.9	6501.0
77.5°	223.5	232.2	258.3	386.0	435.3	699.4	1248.0	2821.0	4957.0	4823.5	2217.3
80°	136.4	142.2	179.9	229.3	304.7	406.3	365.7	766.2	1007.1	943.2	325.0
82.5°	81.3	87.1	107.4	191.5	240.9	191.5	127.7	185.7	188.6	185.7	81.3
85°	14.5	14.5	75.5	133.5	127.7	55.1	75.5	60.9	55.1	58.0	17.4
87.5°	0.0	0.0	29.0	40.6	58.0	20.3	29.0	14.5	14.5	14.5	8.7
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4
2.5°	2353.7	2255.0	2051.9	1874.8	1697.8	1567.2	1468.5	1366.9	1332.1	1288.6	1265.4
5°	2394.3	2199.9	1796.5	1474.3	1201.5	992.6	859.1	777.8	725.6	687.8	679.1
7.5°	2455.3	2156.3	1590.4	1155.1	856.2	647.2	536.9	481.8	452.7	435.3	429.5
10°	2527.8	2118.6	1387.3	899.7	603.7	455.6	394.7	371.5	359.9	354.1	351.2
12.5°	2629.4	2104.1	1216.0	693.6	455.6	374.4	342.5	328.0	319.2	310.5	307.6
15°	2762.9	2109.9	1059.3	536.9	377.3	333.8	307.6	293.1	281.5	272.8	272.8
17.5°	2902.2	2118.6	905.5	435.3	342.5	304.7	275.7	255.4	246.7	238.0	235.1
20°	3032.8	2115.7	757.5	371.5	310.5	272.8	243.8	223.5	209.0	200.3	200.3
22.5°	3157.6	2098.3	618.2	333.8	284.4	240.9	209.0	188.6	177.0	168.3	168.3
25°	3291.1	2063.5	505.0	304.7	252.5	211.9	179.9	159.6	150.9	142.2	142.2
27.5°	3395.6	2005.4	412.1	278.6	223.5	182.8	153.8	136.4	127.7	121.9	121.9
30°	3508.8	1921.3	342.5	249.6	194.4	156.7	130.6	116.1	107.4	104.5	104.5
32.5°	3633.6	1828.4	293.1	220.6	165.4	133.5	110.3	101.6	92.9	90.0	90.0
35°	3778.7	1747.1	264.1	191.5	145.1	113.2	95.8	87.1	81.3	81.3	81.3
37.5°	3944.1	1663.0	238.0	168.3	124.8	95.8	81.3	78.4	75.5	72.6	72.6
40°	4124.1	1573.0	214.8	148.0	107.4	81.3	69.7	69.7	66.8	66.8	66.8
42.5°	4327.2	1494.6	194.4	130.6	92.9	69.7	60.9	60.9	58.0	58.0	58.0
45°	4547.8	1422.1	177.0	116.1	81.3	60.9	55.1	52.2	49.3	49.3	49.3
47.5°	4809.0	1381.5	162.5	101.6	69.7	52.2	46.4	43.5	40.6	37.7	37.7
50°	5142.7	1398.9	148.0	84.2	60.9	43.5	37.7	34.8	31.9	29.0	29.0
52.5°	5406.8	1390.2	127.7	72.6	49.3	34.8	29.0	26.1	23.2	20.3	20.3
55°	5598.4	1355.3	110.3	60.9	37.7	29.0	23.2	17.4	14.5	14.5	14.5
57.5°	5787.0	1320.5	92.9	49.3	29.0	20.3	14.5	11.6	11.6	11.6	11.6
60°	6080.2	1271.2	81.3	40.6	23.2	14.5	8.7	8.7	5.8	5.8	5.8
62.5°	6437.1	1210.2	66.8	34.8	17.4	11.6	5.8	5.8	0.0	0.0	0.0
65°	6828.9	1102.8	55.1	26.1	14.5	8.7	5.8	0.0	0.0	0.0	0.0
67.5°	6739.0	885.2	46.4	17.4	11.6	5.8	2.9	0.0	0.0	0.0	0.0
70°	5961.2	597.9	37.7	14.5	8.7	5.8	2.9	0.0	0.0	0.0	0.0
72.5°	4669.7	354.1	26.1	11.6	5.8	2.9	0.0	0.0	0.0	0.0	0.0
75°	2989.3	177.0	17.4	8.7	5.8	2.9	0.0	0.0	0.0	0.0	0.0
77.5°	1001.3	87.1	11.6	5.8	2.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	142.2	29.0	5.8	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	31.9	11.6	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.6	5.8	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.8	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)