

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: P400418

Luminaire Tested: **ARCH-L-PA3-280-727-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400418
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-280-727-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20697 lumens
Efficiency: N/A
Efficacy: 74.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G3

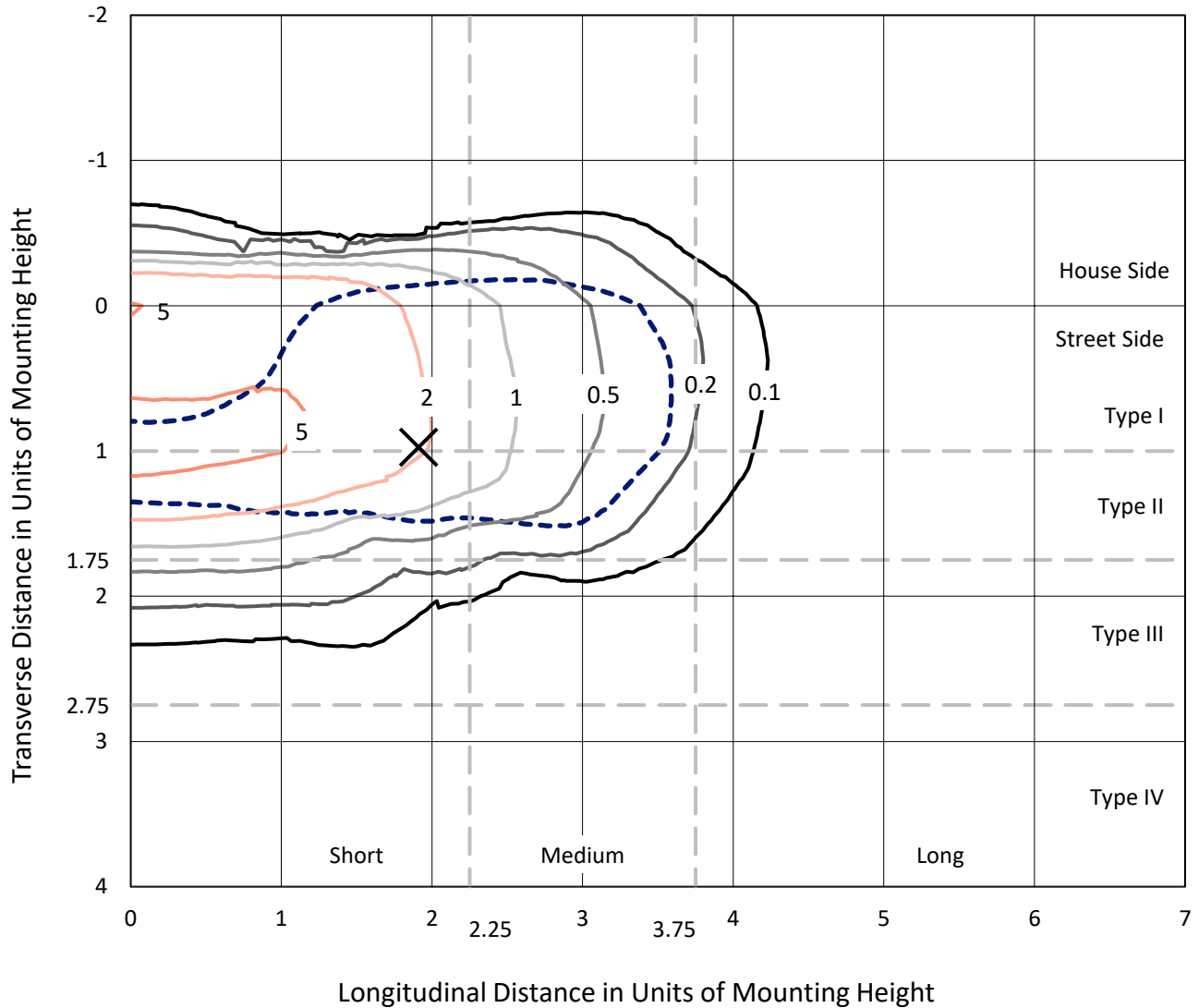
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P400418
 CATALOG NUMBER: ARCH-L-PA3-280-727-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

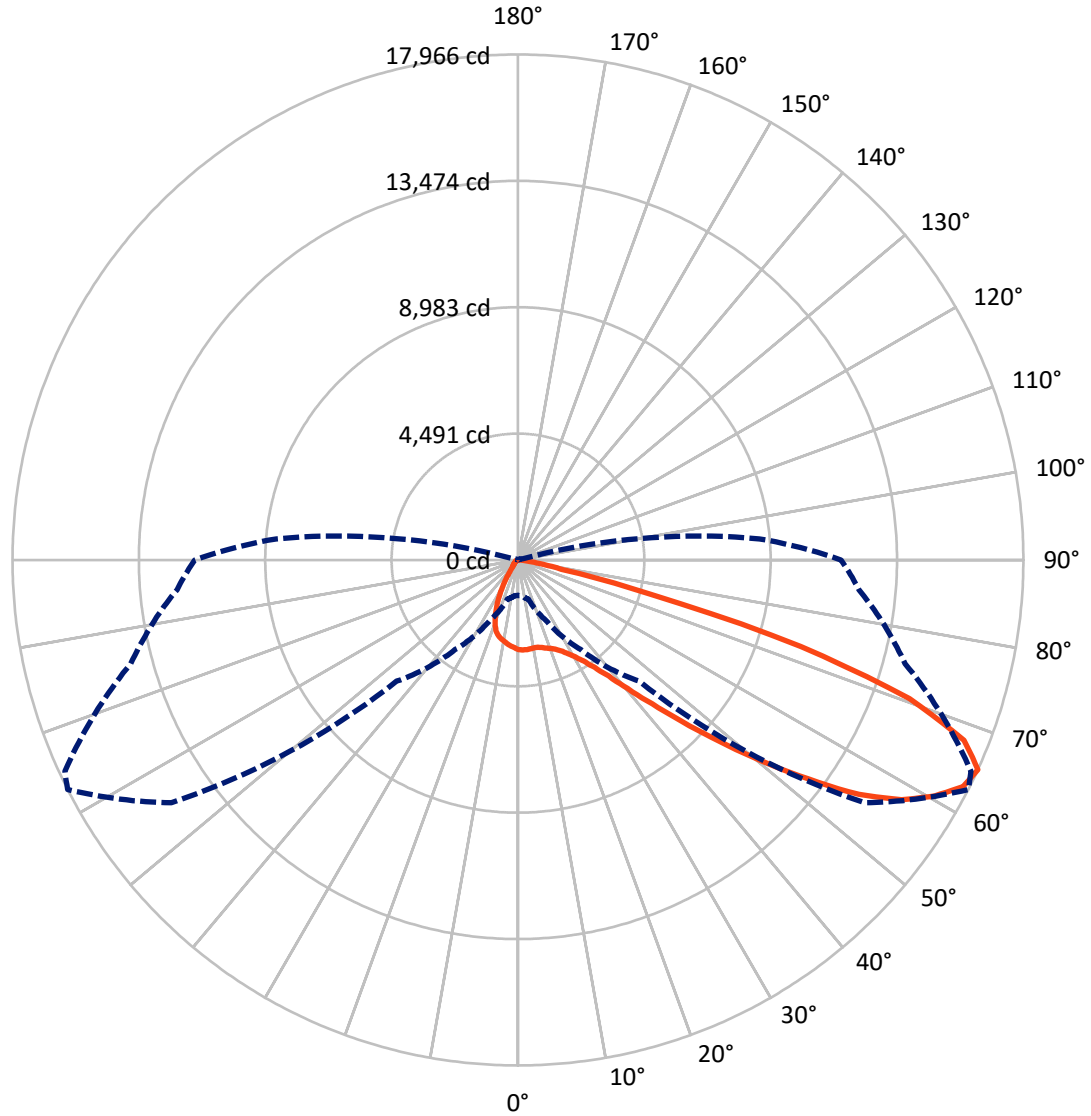
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P400418
CATALOG NUMBER: ARCH-L-PA3-280-727-U-T2U-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P400418
 CATALOG NUMBER: ARCH-L-PA3-280-727-U-T2U-HSS

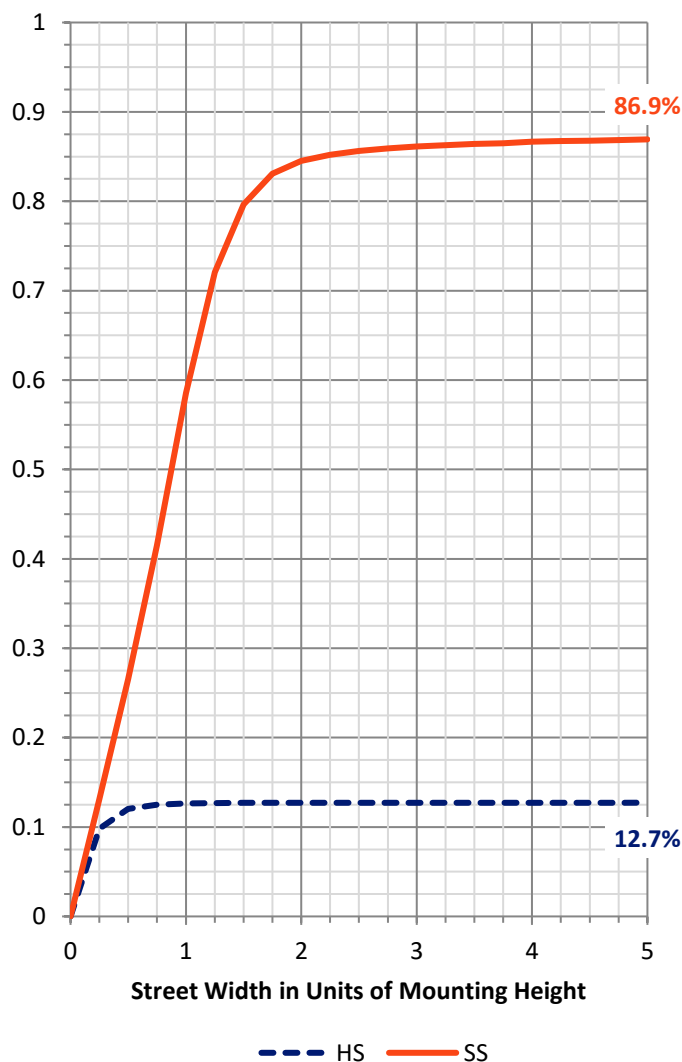
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2663.7	0.0	2663.7
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	18033.3	0.0	18033.3
	% Fixture	87.1	0.0	87.1
Total	Lumens	20697.0	0.0	20697.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.9	1.4
10°-20°	717.7	3.5
20°-30°	1063.8	5.1
30°-40°	1975.1	9.5
40°-50°	4184.2	20.2
50°-60°	5785.7	28.0
60°-70°	4631.6	22.4
70°-80°	1924.3	9.3
80°-90°	123.6	0.6
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°	20697.0	100.0
0°-180°	20697.0	100.0

Coefficient of Utilization



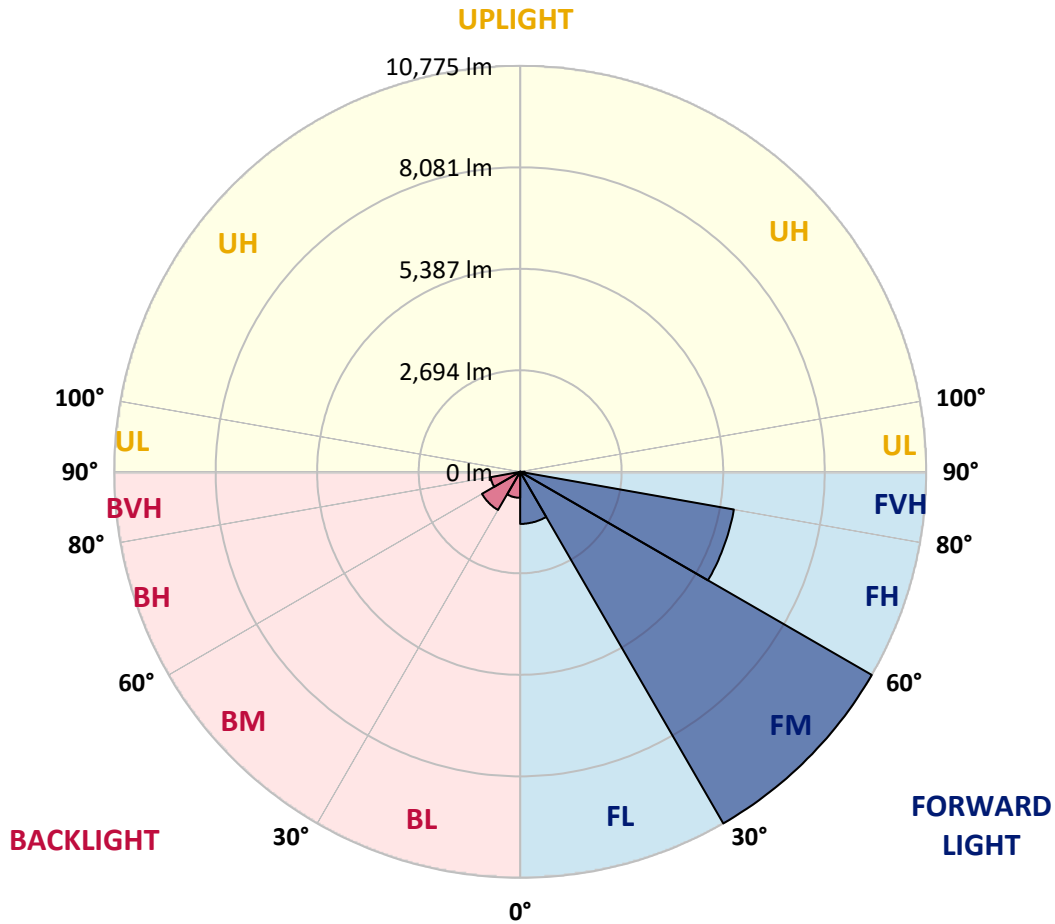
REPORT NUMBER: P400418
 CATALOG NUMBER: ARCH-L-PA3-280-727-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1382.1	6.7			
FM (30°-60°)	10774.9	52.1			
FH (60°-80°)	5758.4	27.8			G3/7500
FVH (80°-90°)	117.9	0.6			G2/225
BL (0°-30°)	690.3	3.3	B2/1000		
BM (30°-60°)	1170.1	5.7	B2/2500		
BH (60°-80°)	797.6	3.9	B2/1000		G2/1000
BVH (80°-90°)	5.6	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type II Short





REPORT NUMBER: P400418

CATALOG NUMBER: ARCH-L-PA3-280-727-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	3188.4	3188.4	3188.4	3188.4	3188.4	3188.4	3188.4	3188.4	3188.4	3188.4	3188.4
2.5°	3243.1	3235.3	3227.5	3223.5	3223.5	3219.6	3204.0	3200.1	3192.3	3184.5	3176.7
5°	3211.8	3200.1	3196.2	3200.1	3204.0	3211.8	3204.0	3204.0	3196.2	3188.4	3172.8
7.5°	3133.7	3125.9	3129.8	3141.5	3145.4	3172.8	3176.7	3188.4	3188.4	3180.6	3168.8
10°	3039.9	3036.0	3036.0	3055.5	3075.1	3114.1	3141.5	3172.8	3176.7	3176.7	3157.1
12.5°	2969.6	2965.7	2977.4	3000.8	3039.9	3090.7	3137.6	3184.5	3192.3	3196.2	3164.9
15°	2926.6	2926.6	2942.2	2989.1	3043.8	3114.1	3168.8	3231.4	3239.2	3235.3	3192.3
17.5°	2887.5	2891.4	2922.7	3000.8	3063.3	3157.1	3223.5	3293.9	3297.8	3293.9	3223.5
20°	2871.9	2879.7	2926.6	3028.2	3098.5	3204.0	3290.0	3360.3	3364.2	3348.6	3254.8
22.5°	2914.9	2918.8	2977.4	3086.8	3153.2	3270.4	3379.8	3446.3	3450.2	3426.7	3301.7
25°	3063.3	3063.3	3114.1	3207.9	3266.5	3383.8	3501.0	3579.1	3579.1	3551.8	3407.2
27.5°	3411.1	3379.8	3368.1	3395.5	3415.0	3540.0	3665.1	3762.8	3758.9	3719.8	3544.0
30°	4083.2	4005.0	3880.0	3739.3	3669.0	3754.9	3872.2	3997.2	3993.3	3930.8	3712.0
32.5°	5212.4	5099.1	4802.1	4430.9	4130.1	4032.4	4141.8	4278.5	4282.4	4208.2	3981.6
35°	6794.9	6615.1	6083.7	5567.9	4880.3	4509.1	4540.3	4688.8	4735.7	4696.6	4434.8
37.5°	8318.7	8154.6	7646.7	6931.6	5997.8	5239.7	5106.9	5235.8	5290.5	5290.5	5013.1
40°	9854.3	9662.8	9213.5	8494.5	7509.9	6380.7	5904.0	6009.5	6068.1	6079.8	5716.4
42.5°	11085.1	10960.1	10616.2	10057.5	9135.3	8381.2	7052.7	6994.1	7048.8	7005.8	6533.1
45°	11936.9	11839.2	11600.9	11389.9	10940.5	10561.5	8588.3	8193.7	8228.8	8080.4	7451.3
47.5°	12112.7	12003.3	11952.5	12245.6	12566.0	12659.8	10475.6	9619.9	9584.7	9256.5	8404.7
50°	11346.9	11358.6	11546.2	12382.3	13718.6	14562.6	12663.7	11229.7	11100.7	10370.1	9291.6
52.5°	9694.1	9881.6	10354.4	11710.3	14070.3	15945.8	14851.8	12937.2	12737.9	11452.4	9955.9
55°	7584.1	7826.4	8603.9	10163.0	13335.7	16563.2	16696.0	14711.1	14257.9	12265.1	10471.7
57.5°	5638.3	5712.5	6619.0	8041.3	11597.0	15957.5	17641.6	16078.7	15496.5	12913.7	10983.5
60°	3512.7	3559.6	4516.9	6122.8	8783.7	13718.6	17641.6	17020.3	16465.5	13495.9	11452.4
62.5°	2184.2	2199.8	2559.3	4196.5	5970.4	10174.7	16910.9	17751.0	17305.6	13914.0	11854.8
65°	1258.2	1273.8	1441.8	2371.8	3883.9	6091.5	15043.2	17965.9	17766.6	14246.1	12167.4
67.5°	918.2	926.0	992.5	1332.4	2539.8	3129.8	11300.0	17102.4	17352.5	14410.2	12159.6
70°	797.1	808.8	894.8	1039.4	1832.5	1922.4	5751.6	14769.7	15469.1	14175.8	11796.2
72.5°	613.5	629.1	758.0	976.8	1344.1	1383.2	2082.6	10510.7	11569.6	12710.6	10799.9
75°	422.0	437.6	566.6	804.9	1109.7	1035.4	1144.8	4837.3	6103.3	8525.8	8221.0
77.5°	269.6	273.5	355.6	586.1	957.3	734.6	785.4	1578.6	2215.5	3856.5	3880.0
80°	179.7	183.6	218.8	379.0	656.4	679.9	484.5	730.7	801.0	1125.3	781.5
82.5°	109.4	109.4	148.5	238.3	398.5	562.7	316.5	382.9	410.3	433.7	203.2
85°	43.0	43.0	89.9	156.3	250.1	261.8	199.3	222.7	234.4	254.0	93.8
87.5°	11.7	11.7	50.8	86.0	109.4	121.1	121.1	109.4	117.2	144.6	46.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P400418

CATALOG NUMBER: ARCH-L-PA3-280-727-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3188.4	3188.4	3188.4	3188.4	3188.4	3188.4	3188.4	3188.4	3188.4	3188.4	3188.4
2.5°	3172.8	3161.0	3145.4	3129.8	3114.1	3102.4	3090.7	3090.7	3082.9	3071.2	3063.3
5°	3164.9	3145.4	3110.2	3082.9	3039.9	3008.6	2985.2	2965.7	2953.9	2926.6	2922.7
7.5°	3153.2	3129.8	3079.0	3024.3	2953.9	2899.2	2844.5	2805.5	2766.4	2735.1	2727.3
10°	3133.7	3106.3	3032.1	2953.9	2856.3	2754.7	2625.7	2477.2	2340.5	2262.3	2238.9
12.5°	3133.7	3098.5	3000.8	2895.3	2754.7	2504.6	2176.4	1848.2	1594.2	1480.9	1449.6
15°	3153.2	3106.3	2977.4	2832.8	2571.0	2063.1	1531.7	1098.0	820.5	734.6	715.0
17.5°	3172.8	3106.3	2942.2	2746.9	2235.0	1496.5	871.3	578.3	488.4	468.9	468.9
20°	3180.6	3098.5	2895.3	2586.7	1785.7	929.9	519.7	433.7	398.5	386.8	386.8
22.5°	3211.8	3102.4	2860.2	2356.1	1297.2	547.0	410.3	363.4	328.2	316.5	316.5
25°	3290.0	3149.3	2868.0	2063.1	832.3	414.2	347.8	300.9	265.7	250.1	250.1
27.5°	3415.0	3254.8	2911.0	1723.1	523.6	355.6	293.0	242.3	214.9	199.3	199.3
30°	3555.7	3372.0	2930.5	1332.4	390.7	300.9	238.3	191.5	171.9	160.2	156.3
32.5°	3801.8	3575.2	2914.9	914.3	320.4	254.0	191.5	152.4	136.8	132.8	132.8
35°	4196.5	3930.8	2883.6	574.4	265.7	203.2	152.4	125.0	113.3	109.4	105.5
37.5°	4731.8	4450.5	2789.8	379.0	218.8	160.2	125.0	105.5	93.8	89.9	89.9
40°	5384.3	5044.4	2610.1	289.1	187.6	128.9	105.5	89.9	82.1	78.1	78.1
42.5°	6130.6	5704.7	2324.9	250.1	156.3	109.4	89.9	74.2	70.3	66.4	66.4
45°	6947.2	6396.3	1930.2	222.7	132.8	89.9	74.2	66.4	58.6	58.6	54.7
47.5°	7814.7	7091.8	1484.8	195.4	113.3	78.1	66.4	54.7	50.8	46.9	46.9
50°	8650.8	7713.1	1043.3	168.0	93.8	66.4	54.7	46.9	43.0	39.1	39.1
52.5°	9240.8	8088.2	738.5	144.6	78.1	58.6	43.0	35.2	31.3	31.3	31.3
55°	9713.6	8322.6	515.8	121.1	66.4	50.8	35.2	27.4	27.4	23.4	23.4
57.5°	10159.1	8475.0	379.0	101.6	54.7	39.1	27.4	19.5	19.5	15.6	15.6
60°	10620.1	8557.1	289.1	82.1	46.9	31.3	19.5	15.6	11.7	11.7	11.7
62.5°	11085.1	8607.9	222.7	66.4	39.1	23.4	15.6	11.7	7.8	3.9	3.9
65°	11491.5	8623.5	171.9	50.8	31.3	15.6	11.7	3.9	0.0	0.0	0.0
67.5°	11612.6	8443.7	132.8	39.1	23.4	11.7	7.8	0.0	0.0	0.0	0.0
70°	11284.4	7967.1	101.6	31.3	19.5	7.8	3.9	0.0	0.0	0.0	0.0
72.5°	10014.5	6681.5	78.1	19.5	15.6	7.8	3.9	0.0	0.0	0.0	0.0
75°	7166.0	3563.5	54.7	15.6	11.7	3.9	0.0	0.0	0.0	0.0	0.0
77.5°	3297.8	1379.3	39.1	11.7	7.8	3.9	0.0	0.0	0.0	0.0	0.0
80°	644.7	343.8	15.6	7.8	3.9	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	148.5	58.6	7.8	7.8	3.9	0.0	0.0	0.0	0.0	0.0	0.0
85°	50.8	19.5	3.9	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	19.5	7.8	3.9	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)