

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: P400422

Luminaire Tested: **ARCH-L-PA3-280-727-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400422
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)
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-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21594 lumens
Efficiency: N/A
Efficacy: 77.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G4

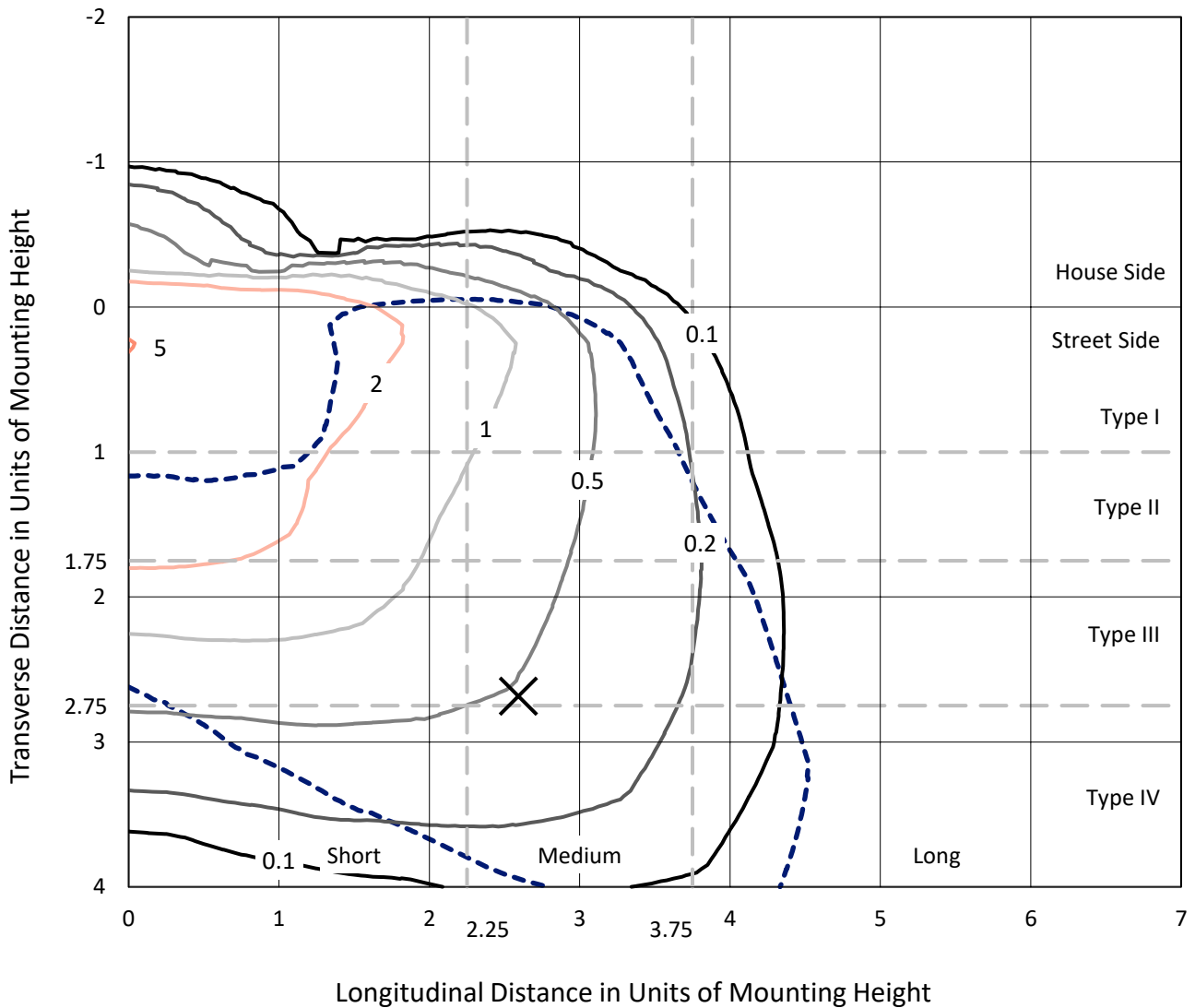
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P400422
 CATALOG NUMBER: ARCH-L-PA3-280-727-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

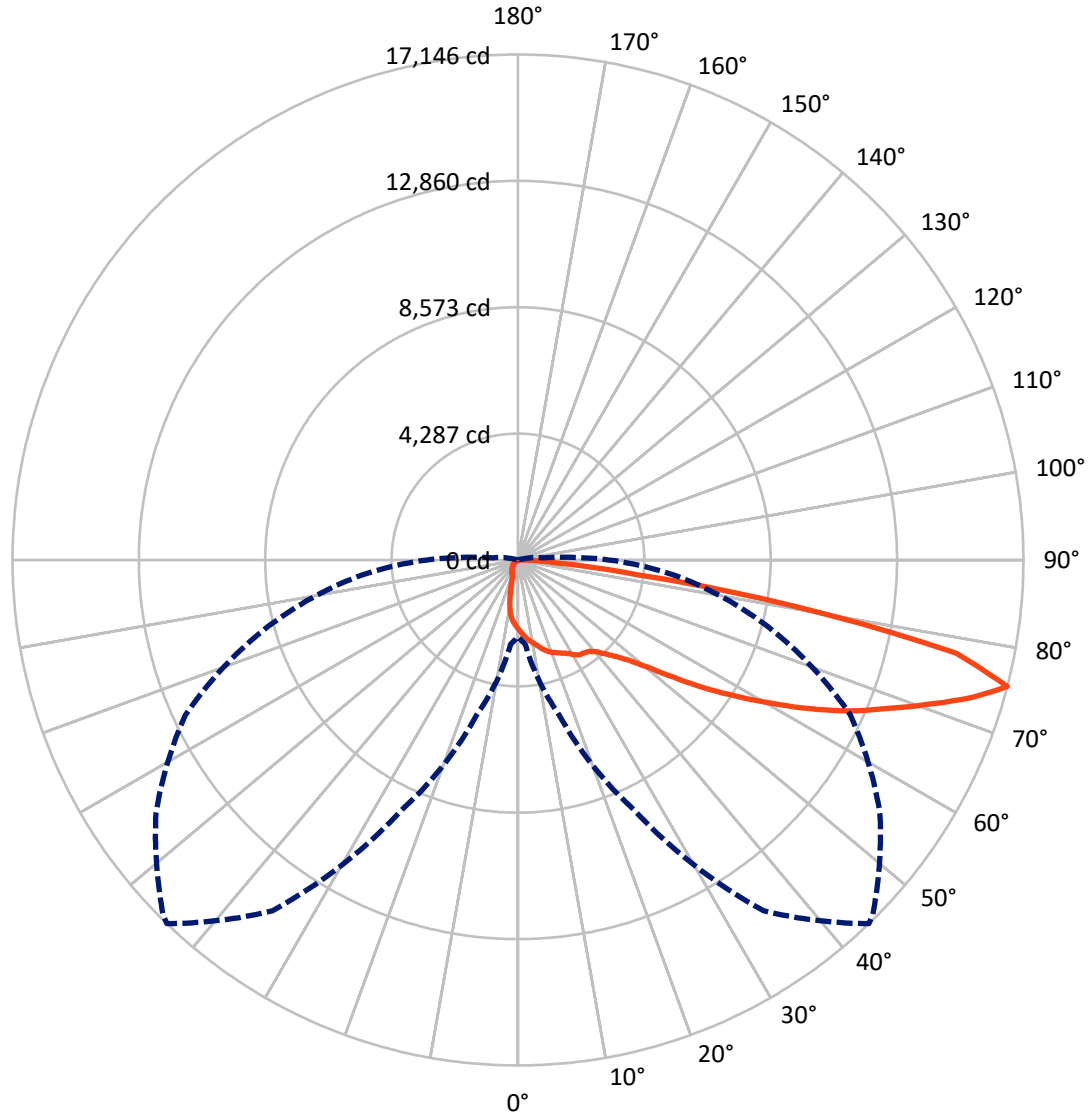
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc
 Type IV - Medium - N/A

REPORT NUMBER: P400422
CATALOG NUMBER: ARCH-L-PA3-280-727-U-T4W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P400422

CATALOG NUMBER: ARCH-L-PA3-280-727-U-T4W-HSS

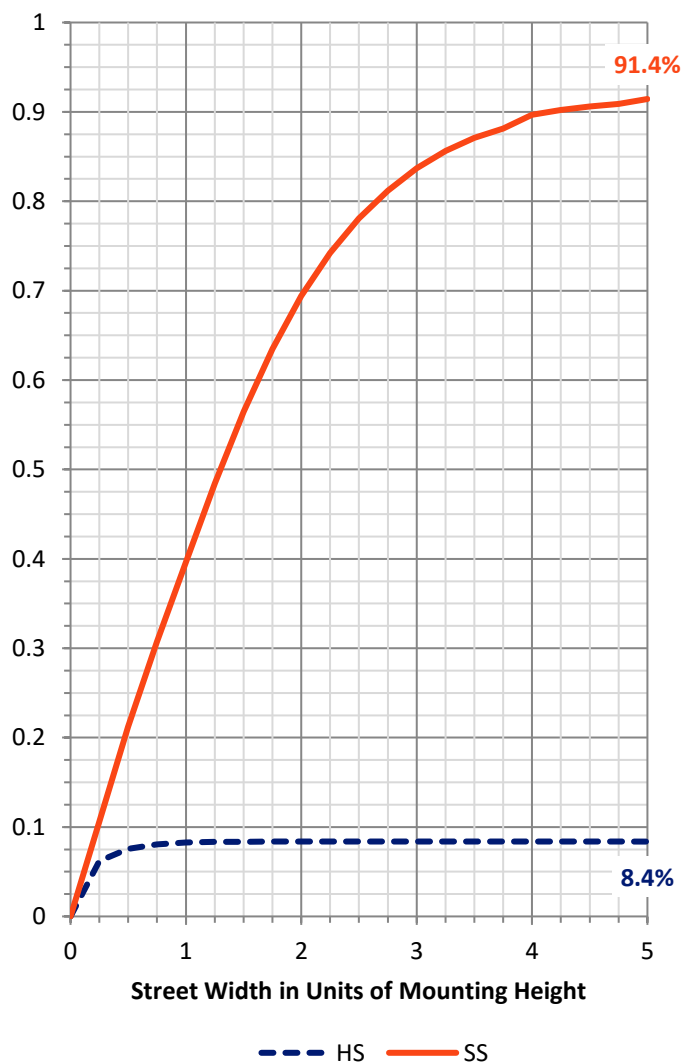
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1821.1	0.0	1821.1
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	19772.9	0.0	19772.9
	% Fixture	91.6	0.0	91.6
Total	Lumens	21594.0	0.0	21594.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.7	1.0
10°-20°	621.1	2.9
20°-30°	1025.0	4.7
30°-40°	1487.7	6.9
40°-50°	2418.4	11.2
50°-60°	4263.4	19.7
60°-70°	6127.3	28.4
70°-80°	4906.6	22.7
80°-90°	522.8	2.4
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°	21594.0	100.0
0°-180°	21594.0	100.0

Coefficient of Utilization



REPORT NUMBER: P400422

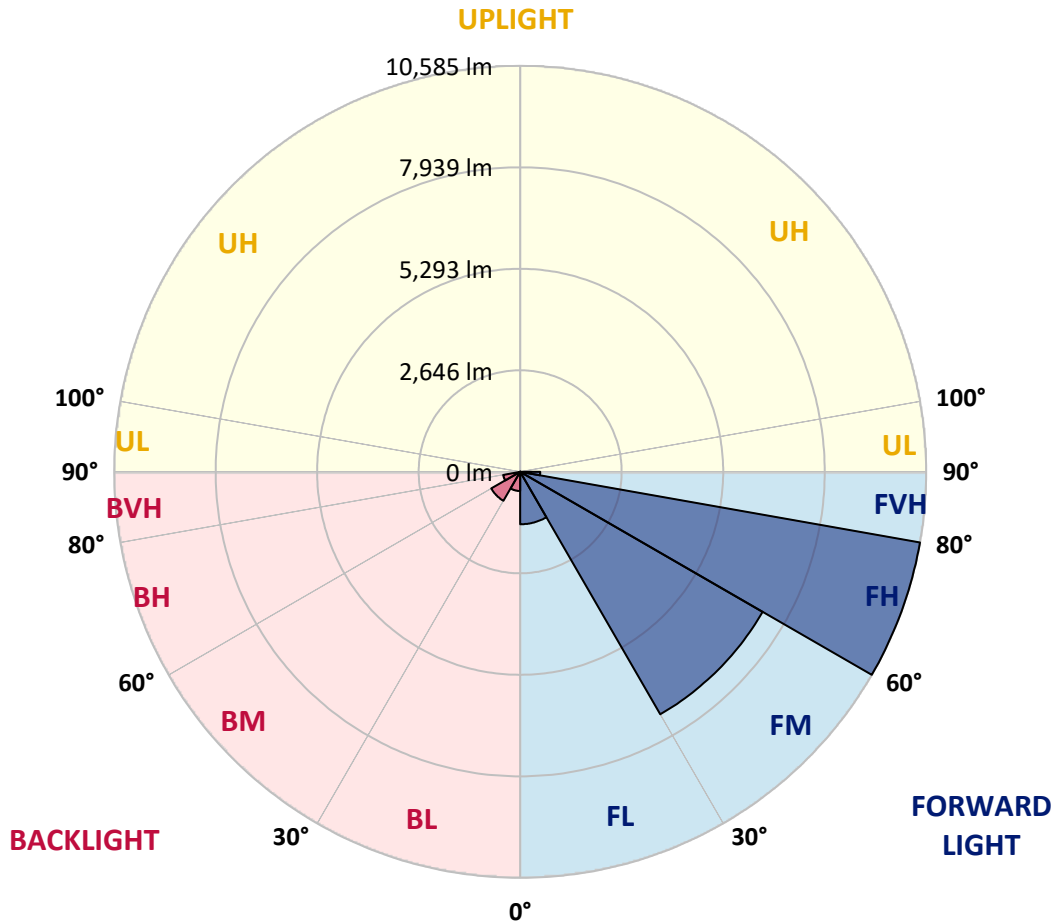
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1367.5	6.3			
FM (30°-60°)	7299.0	33.8			
FH (60°-80°)	10585.0	49.0			G4/12000
FVH (80°-90°)	521.4	2.4			G4/750
BL (0°-30°)	500.3	2.3	B2/1000		
BM (30°-60°)	870.5	4.0	B1/1000		
BH (60°-80°)	448.9	2.1	B1/500		G1/500
BVH (80°-90°)	1.3	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-G4

Type IV Medium





REPORT NUMBER: P400422

CATALOG NUMBER: ARCH-L-PA3-280-727-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2350.4	2350.4	2350.4	2350.4	2350.4	2350.4	2350.4	2350.4	2350.4	2350.4	2350.4
2.5°	2561.6	2557.6	2545.6	2525.7	2505.8	2485.9	2481.9	2450.0	2414.2	2386.3	2362.4
5°	2788.6	2784.7	2764.7	2720.9	2677.1	2625.3	2621.3	2545.6	2477.9	2402.2	2338.5
7.5°	3023.7	3015.7	2979.9	2912.1	2836.4	2756.8	2748.8	2637.3	2537.7	2438.1	2346.4
10°	3206.9	3199.0	3147.2	3067.5	2963.9	2864.3	2852.4	2736.9	2637.3	2509.8	2386.3
12.5°	3386.2	3370.3	3302.5	3214.9	3087.4	2991.8	2979.9	2860.3	2740.8	2609.4	2458.0
15°	3553.5	3533.6	3469.9	3358.3	3222.9	3131.2	3123.3	2995.8	2872.3	2720.9	2553.6
17.5°	3669.1	3661.1	3585.4	3461.9	3330.4	3254.7	3246.8	3115.3	2991.8	2832.5	2653.2
20°	3728.8	3728.8	3657.1	3521.7	3402.1	3350.4	3338.4	3214.9	3095.4	2944.0	2756.8
22.5°	3740.8	3752.7	3696.9	3549.5	3461.9	3418.1	3410.1	3302.5	3187.0	3047.6	2872.3
25°	3764.7	3764.7	3736.8	3577.4	3513.7	3501.7	3497.8	3402.1	3298.6	3159.1	2987.8
27.5°	3792.6	3792.6	3772.6	3617.3	3593.4	3589.4	3585.4	3541.6	3457.9	3294.6	3123.3
30°	3864.3	3868.2	3852.3	3696.9	3681.0	3724.8	3732.8	3708.9	3605.3	3402.1	3262.7
32.5°	4043.5	4007.7	3963.9	3752.7	3780.6	3836.4	3840.4	3792.6	3681.0	3517.7	3430.0
35°	4493.7	4282.6	4083.4	3800.5	3812.5	3868.2	3876.2	3872.2	3804.5	3665.1	3621.2
37.5°	4912.0	4613.2	4330.4	3912.1	3872.2	3932.0	3947.9	4015.6	3963.9	3868.2	3880.2
40°	5155.0	5039.5	4840.3	4218.8	3991.7	4083.4	4099.3	4202.9	4183.0	4143.1	4218.8
42.5°	5903.9	5911.9	5696.8	4676.9	4210.8	4358.2	4378.2	4461.8	4489.7	4509.6	4692.9
45°	6772.4	6800.3	6748.5	5501.6	4625.2	4673.0	4700.9	4812.4	4916.0	5043.5	5378.1
47.5°	7816.2	7792.3	7601.0	6509.5	5346.2	5079.3	5099.2	5314.4	5493.6	5772.5	6250.5
50°	8740.4	8800.2	8437.6	7449.7	6362.1	5720.7	5700.8	5911.9	6234.6	6625.0	7226.6
52.5°	9672.6	9585.0	9094.9	8381.9	7565.2	6593.1	6533.4	6648.9	7103.1	7565.2	8182.7
55°	9919.6	9927.6	9760.2	9401.7	8569.1	7652.8	7553.2	7545.3	8111.0	8425.7	9186.6
57.5°	10405.6	10425.5	10465.4	10537.1	10142.7	8712.5	8608.9	8497.4	9047.1	9230.4	10194.5
60°	10899.6	10923.5	11166.5	11552.9	11290.0	9855.9	9744.3	9481.4	9788.1	10035.1	11254.2
62.5°	10835.9	11003.2	11708.3	12477.2	12445.3	11110.7	10971.3	10337.9	10533.1	10748.2	12226.2
65°	9784.1	9963.4	11549.0	12732.1	13604.6	12349.7	12122.6	11222.3	11234.2	11493.2	13162.4
67.5°	8844.0	9039.2	10553.0	12624.6	14369.5	13461.2	13226.1	12110.7	11923.4	12353.7	13664.3
70°	8302.2	8497.4	9760.2	12289.9	14584.6	14692.1	14489.0	13126.5	12744.1	13138.5	13102.6
72.5°	6497.5	6804.3	8748.4	11652.5	14815.6	16010.8	15851.4	14413.3	13441.2	12317.8	9975.4
75°	2589.5	2872.3	5461.8	9377.8	14524.8	17146.2	17022.7	14990.9	12441.3	8796.2	5107.2
77.5°	780.8	836.6	1517.8	4637.1	10648.6	15202.1	15162.2	12604.7	8804.1	4083.4	1394.3
80°	258.9	286.8	466.1	1278.8	4860.2	9497.3	9676.6	8031.3	3999.7	936.2	282.8
82.5°	107.6	119.5	235.0	513.9	1721.0	4091.3	4031.6	3597.3	1394.3	581.6	103.6
85°	27.9	35.9	107.6	294.8	629.4	1410.3	1482.0	1207.1	788.8	482.0	31.9
87.5°	0.0	0.0	51.8	119.5	282.8	426.3	446.2	366.5	446.2	362.5	15.9
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: P400422

CATALOG NUMBER: ARCH-L-PA3-280-727-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2350.4	2350.4	2350.4	2350.4	2350.4	2350.4	2350.4	2350.4	2350.4	2350.4	2350.4
2.5°	2342.5	2322.5	2286.7	2262.8	2230.9	2222.9	2207.0	2187.1	2183.1	2163.2	2167.2
5°	2302.6	2270.7	2207.0	2163.2	2111.4	2095.5	2067.6	2047.7	2031.7	2003.8	2007.8
7.5°	2294.7	2246.8	2159.2	2075.5	1991.9	1932.1	1848.5	1780.7	1725.0	1665.2	1677.2
10°	2322.5	2262.8	2139.3	2023.8	1872.4	1681.2	1462.0	1318.6	1246.9	1175.2	1183.2
12.5°	2378.3	2306.6	2147.3	1972.0	1665.2	1338.5	1035.8	840.6	788.8	756.9	760.9
15°	2462.0	2374.3	2171.2	1872.4	1386.4	968.1	689.2	605.5	625.5	637.4	637.4
17.5°	2549.6	2450.0	2191.1	1693.1	1071.6	677.2	561.7	553.7	581.6	609.5	609.5
20°	2657.2	2529.7	2195.1	1466.0	772.9	549.8	529.8	529.8	549.8	581.6	581.6
22.5°	2760.8	2617.3	2159.2	1207.1	589.6	509.9	509.9	509.9	521.9	553.7	557.7
25°	2884.3	2724.9	2083.5	932.2	505.9	486.0	486.0	490.0	498.0	525.9	529.8
27.5°	3015.7	2836.4	1956.0	681.2	462.1	458.1	462.1	466.1	470.1	498.0	505.9
30°	3167.1	2959.9	1792.7	509.9	422.3	422.3	434.2	442.2	442.2	466.1	474.1
32.5°	3342.4	3123.3	1597.5	422.3	382.4	378.5	398.4	410.3	410.3	430.2	438.2
35°	3561.5	3290.6	1362.4	374.5	350.6	342.6	350.6	370.5	378.5	394.4	398.4
37.5°	3852.3	3489.8	1111.5	346.6	326.7	310.7	310.7	314.7	330.7	346.6	350.6
40°	4222.8	3708.9	864.5	326.7	302.8	286.8	274.9	270.9	266.9	278.9	286.8
42.5°	4688.9	3955.9	645.4	306.8	282.8	258.9	243.0	227.1	207.2	203.2	207.2
45°	5286.5	4258.7	478.1	290.8	270.9	235.0	207.2	179.3	143.4	131.5	135.4
47.5°	5991.6	4573.4	374.5	274.9	262.9	207.2	171.3	123.5	87.6	79.7	83.7
50°	6740.5	4876.1	318.7	255.0	247.0	179.3	123.5	75.7	51.8	51.8	55.8
52.5°	7377.9	5047.4	290.8	239.0	223.1	147.4	79.7	43.8	31.9	31.9	35.9
55°	7995.4	5139.1	270.9	223.1	191.2	103.6	43.8	27.9	19.9	19.9	19.9
57.5°	8632.8	5178.9	247.0	203.2	151.4	63.7	23.9	15.9	12.0	12.0	12.0
60°	9198.5	5103.2	211.1	167.3	99.6	31.9	12.0	12.0	8.0	4.0	4.0
62.5°	9672.6	4959.8	147.4	119.5	59.8	15.9	8.0	4.0	0.0	0.0	0.0
65°	9963.4	4728.7	95.6	79.7	35.9	12.0	4.0	0.0	0.0	0.0	0.0
67.5°	9879.8	4294.5	59.8	51.8	15.9	8.0	4.0	0.0	0.0	0.0	0.0
70°	8915.7	3521.7	43.8	31.9	12.0	4.0	0.0	0.0	0.0	0.0	0.0
72.5°	6425.8	2382.3	31.9	19.9	8.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	3091.4	848.5	19.9	15.9	4.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	756.9	187.2	12.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	167.3	35.9	8.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	55.8	15.9	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	19.9	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	12.0	4.0	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)