

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: P237481

Luminaire Tested: **ARCH-L-AF72-280-D-U-T4W-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237481
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-280-D-U-T4W-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 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: 21730 lumens
Efficiency: N/A
Efficacy: 77.9 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

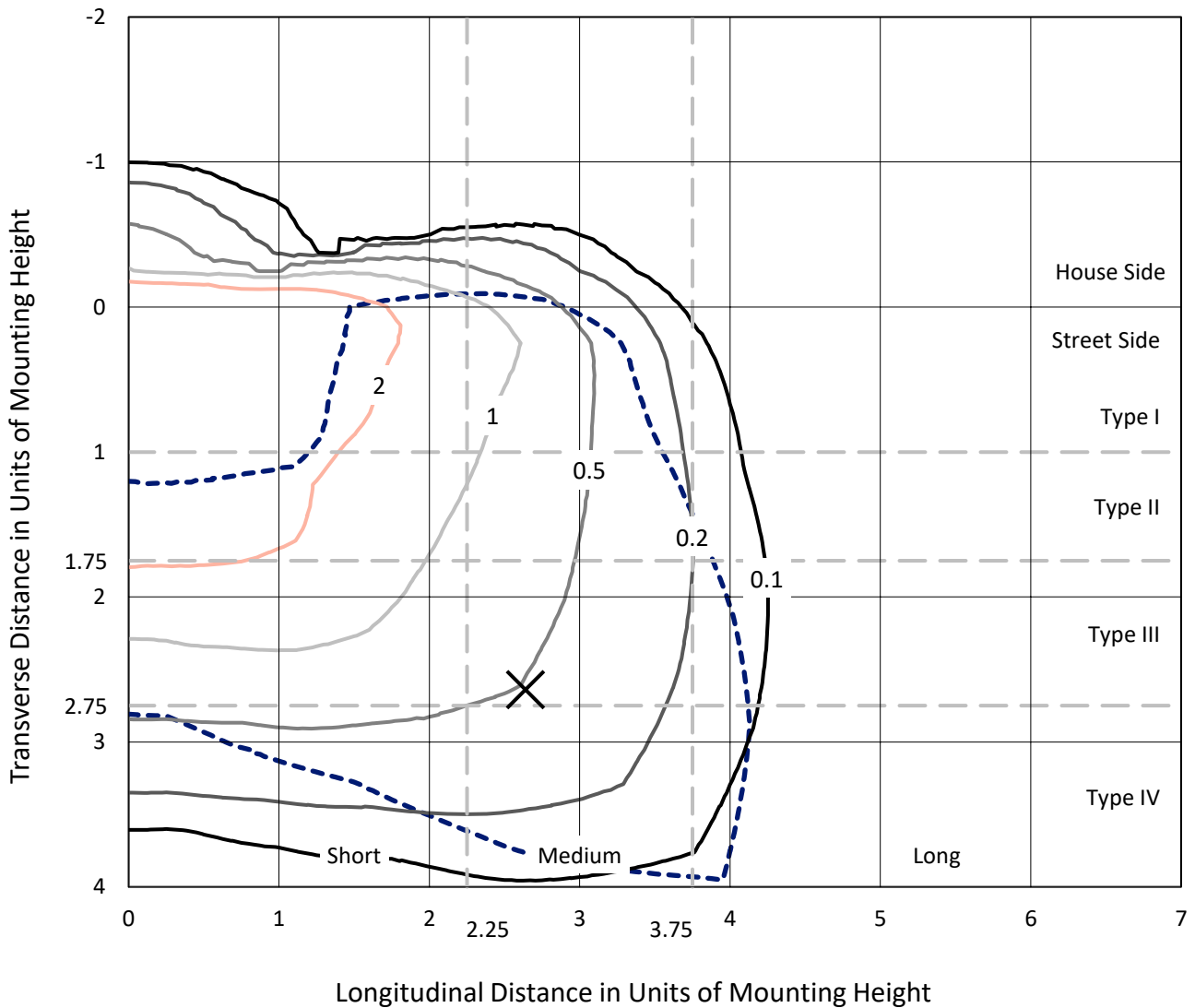
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

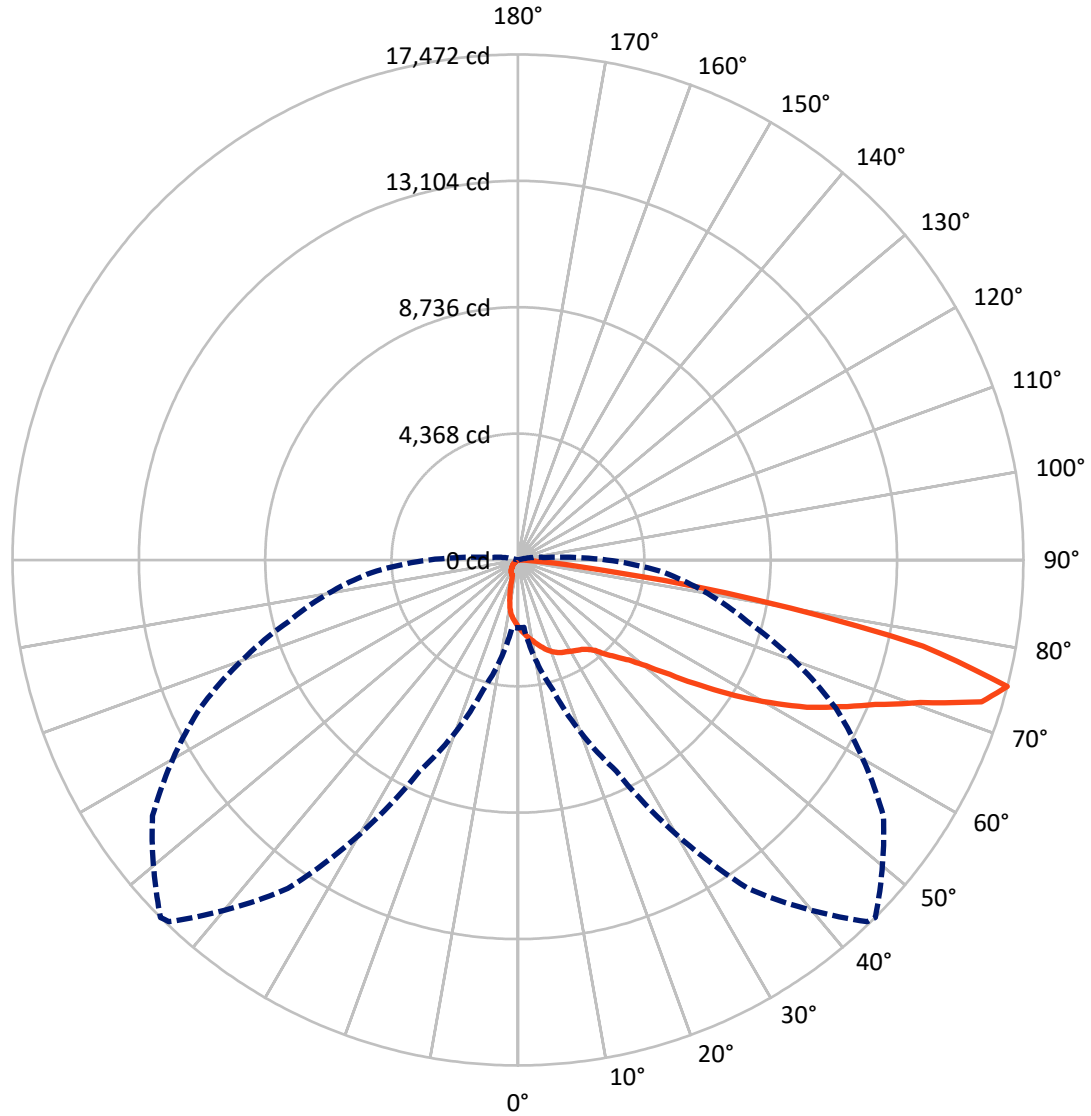
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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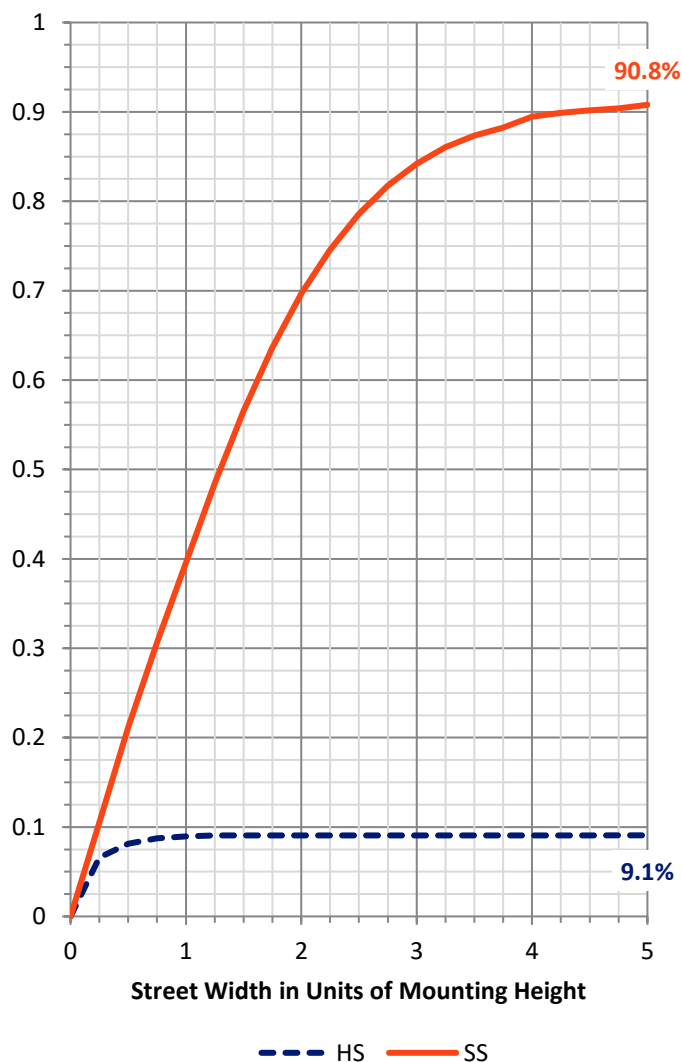
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1987.6	0.0	1987.6
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	19742.4	0.0	19742.4
	% Fixture	90.9	0.0	90.9
Total	Lumens	21730.0	0.0	21730.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.3	1.0
10°-20°	621.4	2.9
20°-30°	1029.1	4.7
30°-40°	1489.4	6.9
40°-50°	2438.9	11.2
50°-60°	4345.6	20.0
60°-70°	6388.5	29.4
70°-80°	4819.6	22.2
80°-90°	378.1	1.7
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°	21730.0	100.0
0°-180°	21730.0	100.0

Coefficient of Utilization



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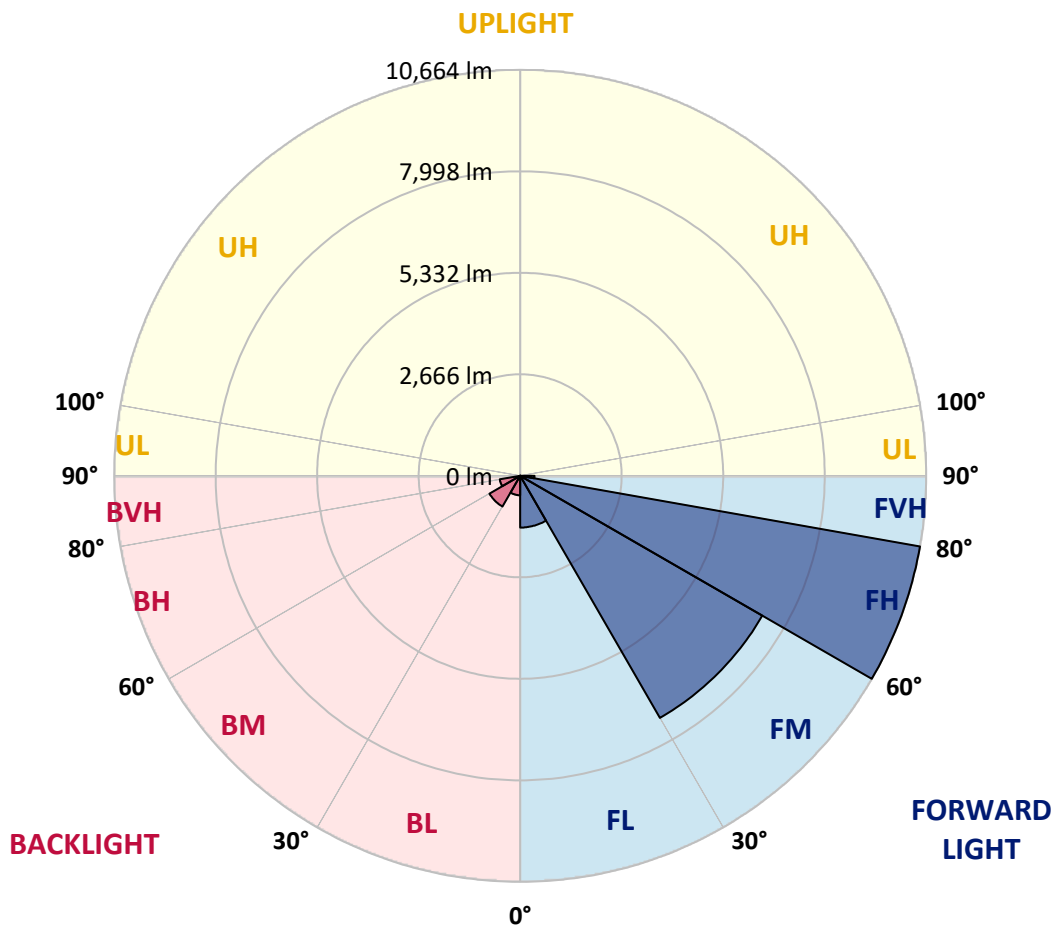
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1359.2	6.3			
FM (30°-60°)	7342.4	33.8			
FH (60°-80°)	10663.7	49.1			G4/12000
FVH (80°-90°)	377.1	1.7			G3/500
BL (0°-30°)	510.8	2.4	B2/1000		
BM (30°-60°)	931.4	4.3	B1/1000		
BH (60°-80°)	544.4	2.5	B2/1000		G2/1000
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: B2-U0-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1
2.5°	2524.7	2524.7	2519.5	2514.4	2488.7	2463.0	2457.8	2442.4	2396.1	2365.3	2334.4
5°	2735.5	2740.6	2730.4	2704.6	2648.1	2591.5	2586.4	2545.2	2457.8	2396.1	2329.3
7.5°	2936.0	2946.3	2920.6	2874.3	2807.5	2725.2	2720.1	2642.9	2529.8	2442.4	2344.7
10°	3105.7	3105.7	3069.7	3013.2	2941.2	2853.8	2843.5	2756.1	2627.5	2519.5	2391.0
12.5°	3290.8	3285.7	3234.3	3157.1	3074.9	2992.6	2987.4	2879.5	2756.1	2617.2	2457.8
15°	3460.5	3450.2	3383.4	3311.4	3224.0	3136.6	3131.4	3023.4	2894.9	2730.4	2555.5
17.5°	3553.1	3547.9	3486.2	3414.2	3342.2	3275.4	3270.3	3157.1	3018.3	2848.6	2653.2
20°	3568.5	3573.6	3522.2	3460.5	3419.4	3383.4	3383.4	3280.5	3131.4	2951.5	2756.1
22.5°	3573.6	3589.1	3553.1	3470.8	3460.5	3465.6	3475.9	3393.7	3239.4	3069.7	2864.0
25°	3609.6	3630.2	3604.5	3506.8	3496.5	3532.5	3542.8	3506.8	3367.9	3198.3	2987.4
27.5°	3681.6	3702.2	3681.6	3558.2	3542.8	3578.8	3589.1	3609.6	3506.8	3321.7	3116.0
30°	3825.6	3830.7	3784.4	3630.2	3599.3	3645.6	3661.0	3717.6	3635.3	3439.9	3239.4
32.5°	4077.5	4026.1	3887.3	3681.6	3655.9	3707.3	3722.7	3784.4	3753.6	3553.1	3367.9
35°	4591.7	4324.3	4005.5	3753.6	3727.9	3779.3	3799.9	3887.3	3902.7	3712.5	3527.3
37.5°	4586.6	4344.9	4283.2	3892.4	3856.4	3892.4	3918.1	4026.1	4087.8	3923.3	3758.7
40°	4910.5	4807.7	4807.7	4154.7	4036.4	4087.8	4113.5	4221.5	4329.5	4200.9	4031.3
42.5°	5928.6	5861.8	5789.8	4658.6	4288.3	4432.3	4447.7	4514.6	4643.1	4602.0	4401.5
45°	7065.0	7003.3	6725.6	5512.1	4720.3	4746.0	4782.0	4890.0	5075.1	5152.2	4915.7
47.5°	7954.5	7892.8	7656.3	6540.5	5393.9	5167.6	5167.6	5378.4	5666.4	5861.8	5635.5
50°	8669.3	8597.3	8453.3	7635.7	6499.4	5774.4	5743.5	5990.3	6417.1	6720.5	6566.2
52.5°	9363.4	9152.6	9065.2	8766.9	7748.9	6653.6	6571.4	6746.2	7337.5	7712.9	7584.3
55°	9826.2	9795.3	9702.8	9805.6	9060.0	7723.1	7651.2	7687.1	8427.6	8679.5	8520.1
57.5°	10258.1	10253.0	10458.6	10936.8	10489.5	8946.9	8833.8	8777.2	9481.7	9420.0	9558.8
60°	10792.9	10700.3	11178.5	11862.4	11800.7	10139.8	10011.3	9898.2	10289.0	10114.1	10803.1
62.5°	10818.6	10792.9	11764.7	12746.8	13101.6	11353.3	11204.2	10798.0	10993.4	10792.9	11990.9
65°	9836.5	9965.0	12011.5	13214.7	14191.7	12417.7	12237.7	11605.3	11620.7	11487.0	13389.5
67.5°	9615.4	9682.2	11332.8	13718.6	14978.4	13492.4	13322.7	12536.0	12350.9	12361.1	14217.4
70°	9065.2	9168.0	10489.5	13682.6	15600.5	14927.0	14757.3	13903.7	13456.4	12957.6	13579.8
72.5°	6926.1	7101.0	8838.9	11996.1	15430.9	16803.7	16757.5	15636.5	13898.6	11898.4	10273.5
75°	2344.7	2339.6	4643.1	8057.4	13862.6	17379.6	17472.2	15420.6	12124.6	8206.5	5100.8
77.5°	503.9	509.0	956.4	3265.1	9209.2	13955.1	14309.9	11631.0	7820.8	3655.9	1167.2
80°	246.8	252.0	395.9	863.8	3681.6	7826.0	8381.3	5980.0	2889.8	730.2	195.4
82.5°	123.4	128.5	205.7	457.6	1362.6	2781.8	2972.0	2200.7	827.8	411.4	97.7
85°	46.3	46.3	102.8	272.5	622.2	653.0	802.1	637.6	498.8	334.2	25.7
87.5°	10.3	10.3	56.6	133.7	277.7	205.7	205.7	195.4	303.4	226.2	10.3
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1
2.5°	2319.0	2298.4	2262.4	2226.4	2200.7	2169.9	2154.5	2139.0	2133.9	2128.7	2139.0
5°	2293.3	2262.4	2195.6	2139.0	2087.6	2046.5	2015.6	1984.8	1969.3	1959.1	1964.2
7.5°	2293.3	2247.0	2149.3	2061.9	1979.6	1892.2	1804.8	1738.0	1686.5	1655.7	1660.8
10°	2319.0	2257.3	2128.7	2010.5	1856.2	1671.1	1480.9	1336.9	1239.2	1182.6	1182.6
12.5°	2375.6	2293.3	2133.9	1948.8	1686.5	1362.6	1074.7	899.8	827.8	786.7	791.9
15°	2452.7	2355.0	2159.6	1866.5	1450.0	1013.0	750.7	637.6	637.6	647.9	653.0
17.5°	2540.1	2432.1	2180.2	1743.1	1146.6	725.0	591.3	581.0	596.5	622.2	622.2
20°	2627.5	2509.2	2190.5	1547.7	858.7	575.9	560.5	560.5	570.8	596.5	601.6
22.5°	2735.5	2606.9	2180.2	1306.0	642.7	545.0	539.9	539.9	539.9	570.8	570.8
25°	2848.6	2720.1	2139.0	1048.9	545.0	524.5	519.3	514.2	514.2	539.9	545.0
27.5°	2977.2	2838.3	2041.3	802.1	514.2	503.9	498.8	488.5	488.5	509.0	509.0
30°	3105.7	2972.0	1892.2	606.7	488.5	483.3	473.1	462.8	452.5	473.1	473.1
32.5°	3244.5	3110.9	1696.8	483.3	452.5	452.5	447.3	431.9	421.6	431.9	437.1
35°	3429.7	3270.3	1475.7	421.6	406.2	406.2	406.2	401.1	380.5	390.8	390.8
37.5°	3676.5	3491.4	1218.6	390.8	370.2	359.9	359.9	359.9	344.5	349.6	349.6
40°	3990.1	3748.4	971.8	365.1	344.5	318.8	308.5	313.7	303.4	303.4	298.2
42.5°	4416.9	4026.1	730.2	344.5	323.9	287.9	267.4	262.2	252.0	246.8	246.8
45°	5028.8	4365.5	524.5	323.9	308.5	252.0	231.4	216.0	190.3	174.8	174.8
47.5°	5820.6	4751.1	390.8	303.4	293.1	221.1	195.4	164.5	128.5	118.3	118.3
50°	6787.3	5183.0	329.1	272.5	267.4	195.4	154.3	108.0	72.0	61.7	66.8
52.5°	7728.3	5589.3	293.1	241.7	236.5	169.7	113.1	56.6	30.9	30.9	30.9
55°	8520.1	5877.2	267.4	216.0	205.7	133.7	61.7	25.7	15.4	15.4	15.4
57.5°	9234.9	6041.7	241.7	190.3	164.5	92.6	25.7	10.3	10.3	5.1	5.1
60°	9887.9	6139.4	210.8	164.5	128.5	51.4	10.3	5.1	5.1	0.0	0.0
62.5°	10530.6	6211.4	180.0	133.7	97.7	20.6	5.1	5.1	0.0	0.0	0.0
65°	11019.1	6185.7	144.0	108.0	61.7	10.3	5.1	0.0	0.0	0.0	0.0
67.5°	11003.7	5836.1	108.0	82.3	30.9	5.1	0.0	0.0	0.0	0.0	0.0
70°	9841.6	4915.7	72.0	51.4	10.3	5.1	0.0	0.0	0.0	0.0	0.0
72.5°	6982.7	3152.0	46.3	30.9	5.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	3074.9	956.4	25.7	15.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	601.6	221.1	15.4	10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	144.0	25.7	5.1	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	61.7	10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.4	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.3	5.1	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)