

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: P237478

Luminaire Tested: **ARCH-L-AF72-250-D-U-T4W-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237478
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-AF72-250-D-U-T4W-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1070mA 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: 20358 lumens
Efficiency: N/A
Efficacy: 81.1 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

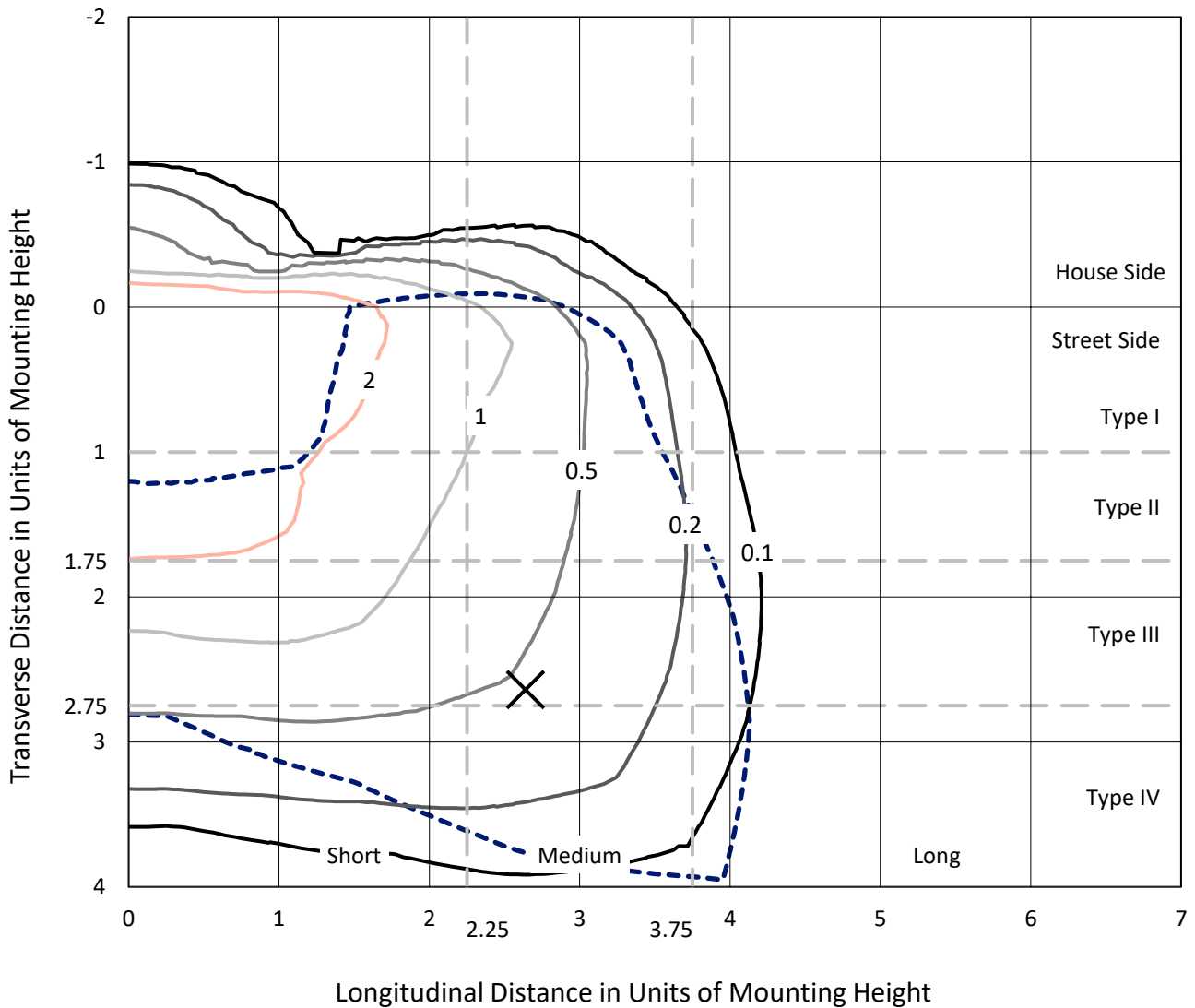
Input Watts (W): 251
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P237478
 CATALOG NUMBER: ARCH-L-AF72-250-D-U-T4W-7050-HSS

Iso-Footcandle Lines of Horizontal Illumination

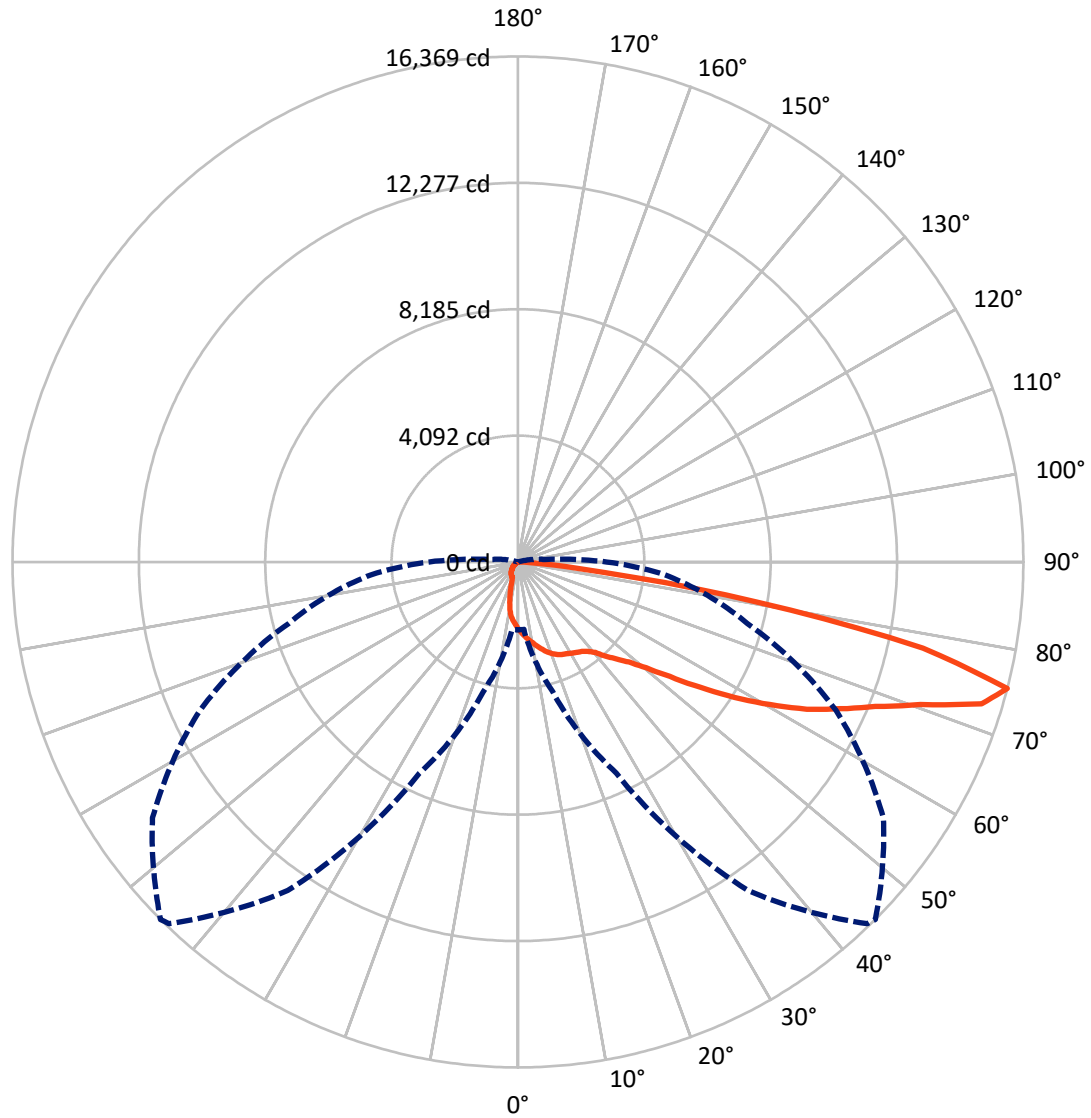
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type IV - Medium - N/A

REPORT NUMBER: P237478
CATALOG NUMBER: ARCH-L-AF72-250-D-U-T4W-7050-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P237478
 CATALOG NUMBER: ARCH-L-AF72-250-D-U-T4W-7050-HSS

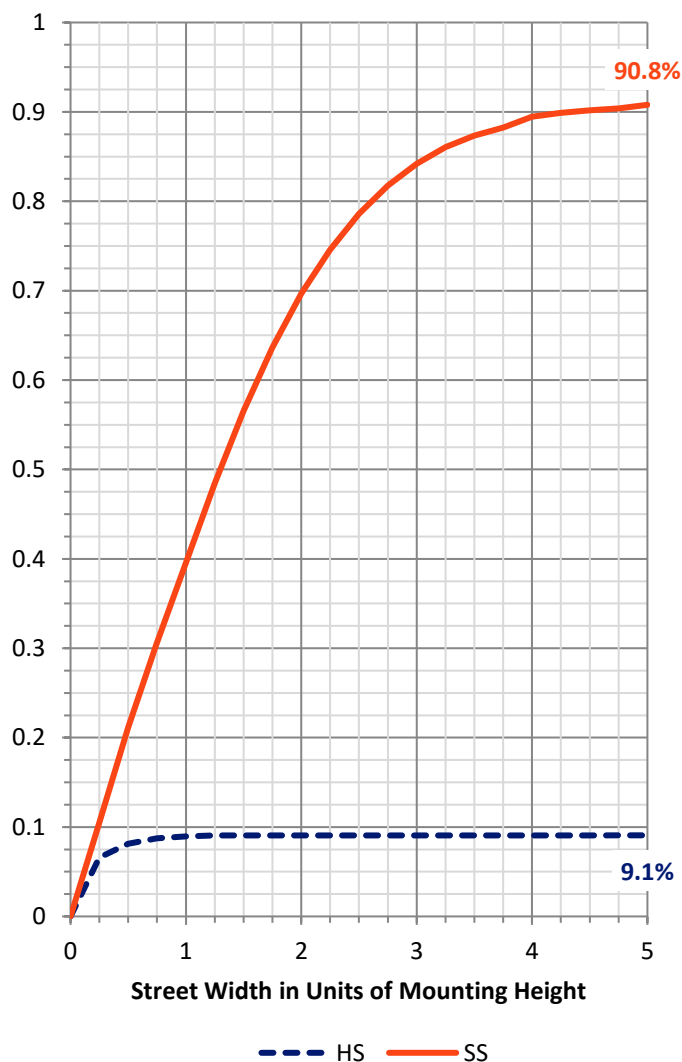
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1862.1	0.0	1862.1
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	18495.9	0.0	18495.9
	% Fixture	90.9	0.0	90.9
Total	Lumens	20358.0	0.0	20358.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.5	1.0
10°-20°	582.2	2.9
20°-30°	964.2	4.7
30°-40°	1395.4	6.9
40°-50°	2284.9	11.2
50°-60°	4071.2	20.0
60°-70°	5985.2	29.4
70°-80°	4515.3	22.2
80°-90°	354.3	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°	20358.0	100.0
0°-180°	20358.0	100.0

Coefficient of Utilization



REPORT NUMBER: P237478

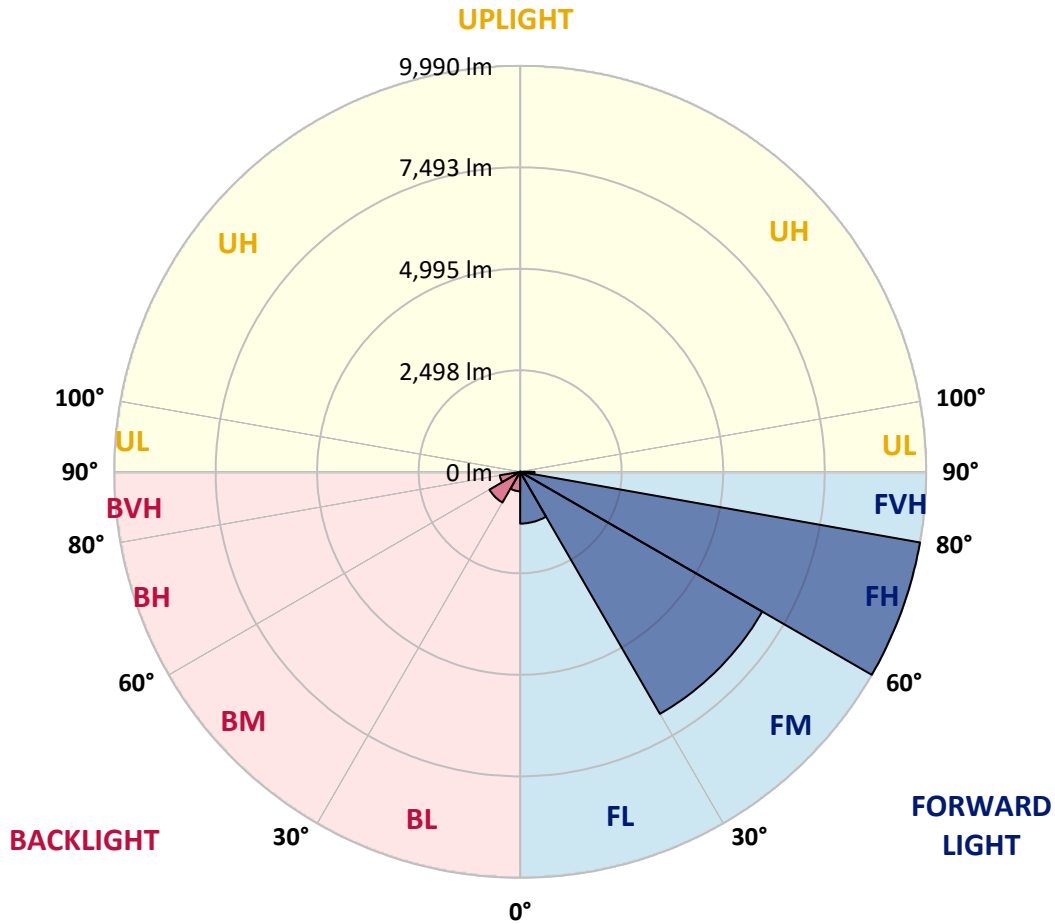
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1273.3	6.3			
FM (30°-60°)	6878.8	33.8			
FH (60°-80°)	9990.4	49.1			G4/12000
FVH (80°-90°)	353.3	1.7			G3/500
BL (0°-30°)	478.5	2.4	B1/500		
BM (30°-60°)	872.6	4.3	B1/1000		
BH (60°-80°)	510.0	2.5	B2/1000		G2/1000
BVH (80°-90°)	1.0	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: P237478

CATALOG NUMBER: ARCH-L-AF72-250-D-U-T4W-7050-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4
2.5°	2365.3	2365.3	2360.5	2355.6	2331.6	2307.5	2302.6	2288.2	2244.8	2215.9	2187.0
5°	2562.8	2567.6	2558.0	2533.9	2480.9	2427.9	2423.1	2384.5	2302.6	2244.8	2182.2
7.5°	2750.7	2760.3	2736.2	2692.8	2630.2	2553.1	2548.3	2476.1	2370.1	2288.2	2196.7
10°	2909.6	2909.6	2875.9	2822.9	2755.5	2673.6	2663.9	2582.0	2461.6	2360.5	2240.0
12.5°	3083.0	3078.2	3030.1	2957.8	2880.7	2803.6	2798.8	2697.7	2582.0	2452.0	2302.6
15°	3242.0	3232.4	3169.8	3102.3	3020.4	2938.5	2933.7	2832.5	2712.1	2558.0	2394.2
17.5°	3328.7	3323.9	3266.1	3198.7	3131.2	3068.6	3063.8	2957.8	2827.7	2668.8	2485.7
20°	3343.2	3348.0	3299.8	3242.0	3203.5	3169.8	3169.8	3073.4	2933.7	2765.1	2582.0
22.5°	3348.0	3362.4	3328.7	3251.6	3242.0	3246.8	3256.5	3179.4	3034.9	2875.9	2683.2
25°	3381.7	3401.0	3376.9	3285.4	3275.7	3309.5	3319.1	3285.4	3155.3	2996.3	2798.8
27.5°	3449.2	3468.4	3449.2	3333.5	3319.1	3352.8	3362.4	3381.7	3285.4	3111.9	2919.3
30°	3584.0	3588.9	3545.5	3401.0	3372.1	3415.4	3429.9	3482.9	3405.8	3222.7	3034.9
32.5°	3820.1	3771.9	3641.8	3449.2	3425.1	3473.2	3487.7	3545.5	3516.6	3328.7	3155.3
35°	4301.8	4051.3	3752.6	3516.6	3492.5	3540.7	3560.0	3641.8	3656.3	3478.1	3304.6
37.5°	4297.0	4070.6	4012.8	3646.7	3612.9	3646.7	3670.7	3771.9	3829.7	3675.6	3521.4
40°	4600.5	4504.1	4504.1	3892.3	3781.5	3829.7	3853.8	3955.0	4056.1	3935.7	3776.7
42.5°	5554.3	5491.7	5424.2	4364.4	4017.6	4152.5	4166.9	4229.5	4350.0	4311.4	4123.6
45°	6618.9	6561.1	6301.0	5164.1	4422.2	4446.3	4480.0	4581.2	4754.6	4826.9	4605.3
47.5°	7452.3	7394.5	7172.9	6127.5	5053.3	4841.3	4841.3	5038.8	5308.6	5491.7	5279.7
50°	8121.9	8054.4	7919.6	7153.6	6089.0	5409.8	5380.9	5612.1	6011.9	6296.1	6151.6
52.5°	8772.2	8574.7	8492.8	8213.4	7259.6	6233.5	6156.4	6320.2	6874.2	7225.9	7105.4
55°	9205.8	9176.9	9090.2	9186.5	8488.0	7235.5	7168.1	7201.8	7895.5	8131.5	7982.2
57.5°	9610.4	9605.6	9798.3	10246.3	9827.2	8382.0	8276.0	8223.1	8883.0	8825.2	8955.3
60°	10111.4	10024.7	10472.7	11113.4	11055.6	9499.6	9379.2	9273.2	9639.3	9475.5	10121.0
62.5°	10135.5	10111.4	11021.9	11942.0	12274.4	10636.5	10496.8	10116.2	10299.3	10111.4	11233.8
65°	9215.4	9335.8	11253.1	12380.3	13295.6	11633.7	11465.1	10872.5	10887.0	10761.7	12544.1
67.5°	9008.3	9070.9	10617.2	12852.4	14032.7	12640.5	12481.5	11744.5	11571.0	11580.7	13319.7
70°	8492.8	8589.2	9827.2	12818.7	14615.5	13984.5	13825.5	13025.9	12606.8	12139.5	12722.4
72.5°	6488.8	6652.6	8280.9	11238.7	14456.6	15742.8	15699.4	14649.3	13021.0	11147.1	9624.9
75°	2196.7	2191.9	4350.0	7548.6	12987.3	16282.3	16369.0	14446.9	11359.1	7688.3	4778.7
77.5°	472.1	476.9	896.0	3059.0	8627.7	13074.0	13406.4	10896.6	7327.0	3425.1	1093.5
80°	231.2	236.0	370.9	809.3	3449.2	7331.9	7852.1	5602.5	2707.3	684.0	183.1
82.5°	115.6	120.4	192.7	428.7	1276.6	2606.1	2784.4	2061.8	775.6	385.4	91.5
85°	43.4	43.4	96.3	255.3	582.9	611.8	751.5	597.3	467.3	313.1	24.1
87.5°	9.6	9.6	53.0	125.2	260.1	192.7	192.7	183.1	284.2	212.0	9.6
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: P237478

CATALOG NUMBER: ARCH-L-AF72-250-D-U-T4W-7050-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4	2177.4
2.5°	2172.6	2153.3	2119.6	2085.9	2061.8	2032.9	2018.4	2004.0	1999.2	1994.3	2004.0
5°	2148.5	2119.6	2057.0	2004.0	1955.8	1917.3	1888.4	1859.5	1845.0	1835.4	1840.2
7.5°	2148.5	2105.1	2013.6	1931.7	1854.6	1772.7	1690.9	1628.2	1580.1	1551.2	1556.0
10°	2172.6	2114.8	1994.3	1883.5	1739.0	1565.6	1387.4	1252.5	1161.0	1108.0	1108.0
12.5°	2225.6	2148.5	1999.2	1825.7	1580.1	1276.6	1006.8	843.0	775.6	737.0	741.9
15°	2297.8	2206.3	2023.2	1748.7	1358.5	949.0	703.3	597.3	597.3	607.0	611.8
17.5°	2379.7	2278.6	2042.5	1633.0	1074.2	679.2	554.0	544.3	558.8	582.9	582.9
20°	2461.6	2350.8	2052.1	1450.0	804.5	539.5	525.1	525.1	534.7	558.8	563.6
22.5°	2562.8	2442.3	2042.5	1223.6	602.2	510.6	505.8	505.8	505.8	534.7	534.7
25°	2668.8	2548.3	2004.0	982.7	510.6	491.4	486.5	481.7	481.7	505.8	510.6
27.5°	2789.2	2659.1	1912.4	751.5	481.7	472.1	467.3	457.6	457.6	476.9	476.9
30°	2909.6	2784.4	1772.7	568.4	457.6	452.8	443.2	433.6	423.9	443.2	443.2
32.5°	3039.7	2914.4	1589.7	452.8	423.9	423.9	419.1	404.6	395.0	404.6	409.5
35°	3213.1	3063.8	1382.6	395.0	380.6	380.6	380.6	375.7	356.5	366.1	366.1
37.5°	3444.3	3270.9	1141.7	366.1	346.8	337.2	337.2	337.2	322.8	327.6	327.6
40°	3738.2	3511.8	910.5	342.0	322.8	298.7	289.0	293.9	284.2	284.2	279.4
42.5°	4138.0	3771.9	684.0	322.8	303.5	269.8	250.5	245.7	236.0	231.2	231.2
45°	4711.3	4089.8	491.4	303.5	289.0	236.0	216.8	202.3	178.2	163.8	163.8
47.5°	5453.1	4451.1	366.1	284.2	274.6	207.1	183.1	154.2	120.4	110.8	110.8
50°	6358.8	4855.8	308.3	255.3	250.5	183.1	144.5	101.2	67.4	57.8	62.6
52.5°	7240.3	5236.4	274.6	226.4	221.6	159.0	106.0	53.0	28.9	28.9	28.9
55°	7982.2	5506.1	250.5	202.3	192.7	125.2	57.8	24.1	14.5	14.5	14.5
57.5°	8651.8	5660.3	226.4	178.2	154.2	86.7	24.1	9.6	9.6	4.8	4.8
60°	9263.6	5751.8	197.5	154.2	120.4	48.2	9.6	4.8	4.8	0.0	0.0
62.5°	9865.7	5819.2	168.6	125.2	91.5	19.3	4.8	4.8	0.0	0.0	0.0
65°	10323.4	5795.2	134.9	101.2	57.8	9.6	4.8	0.0	0.0	0.0	0.0
67.5°	10308.9	5467.6	101.2	77.1	28.9	4.8	0.0	0.0	0.0	0.0	0.0
70°	9220.2	4605.3	67.4	48.2	9.6	4.8	0.0	0.0	0.0	0.0	0.0
72.5°	6541.8	2953.0	43.4	28.9	4.8	0.0	0.0	0.0	0.0	0.0	0.0
75°	2880.7	896.0	24.1	14.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	563.6	207.1	14.5	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	134.9	24.1	4.8	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	57.8	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.5	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.6	4.8	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)