

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: P237469

Luminaire Tested: **ARCH-L-AF72-160-D-U-T4W-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237469
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-AF72-160-D-U-T4W-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 705mA 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: 15121 lumens
Efficiency: N/A
Efficacy: 93.3 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G3

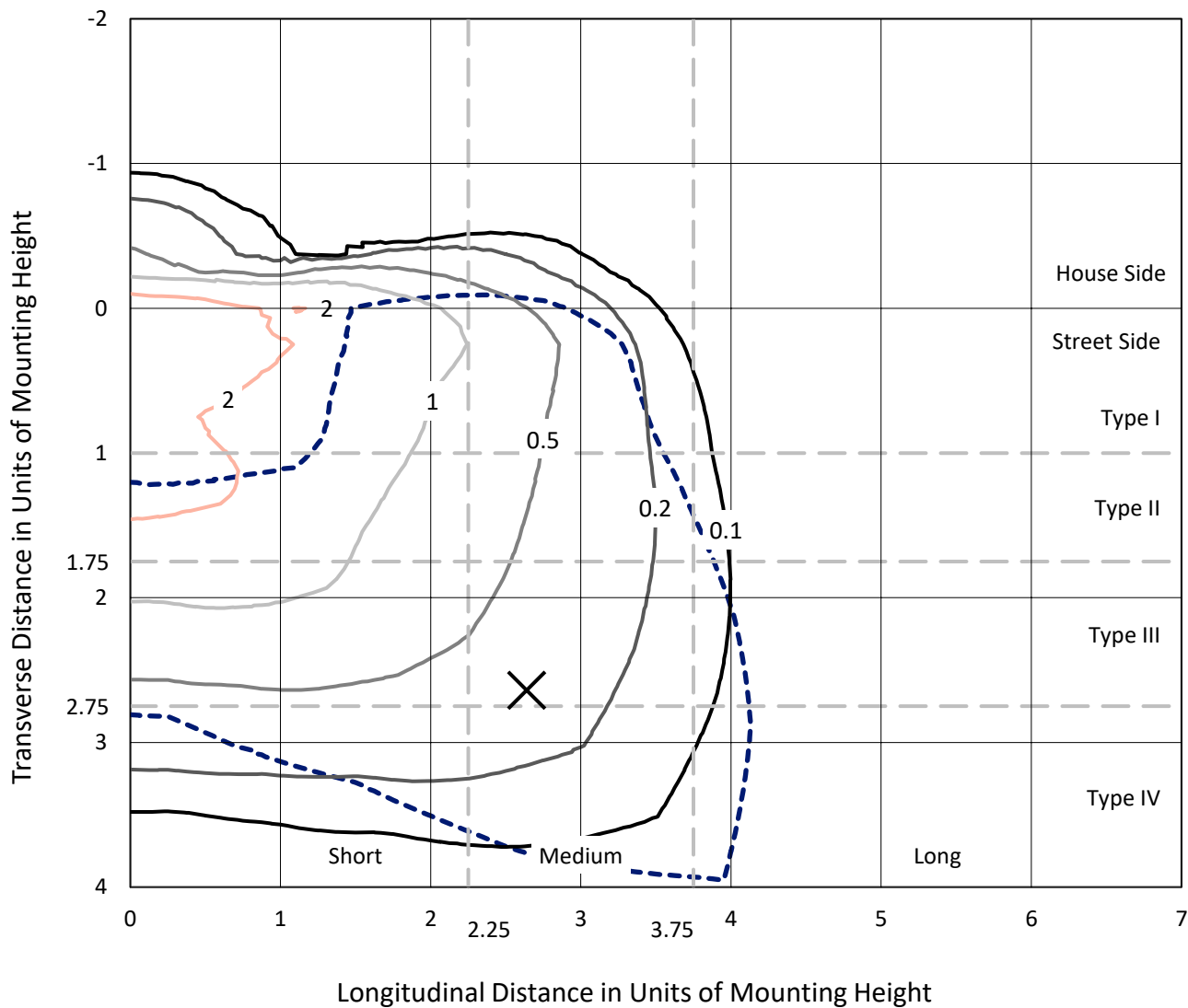
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P237469
 CATALOG NUMBER: ARCH-L-AF72-160-D-U-T4W-7050-HSS

Iso-Footcandle Lines of Horizontal Illumination

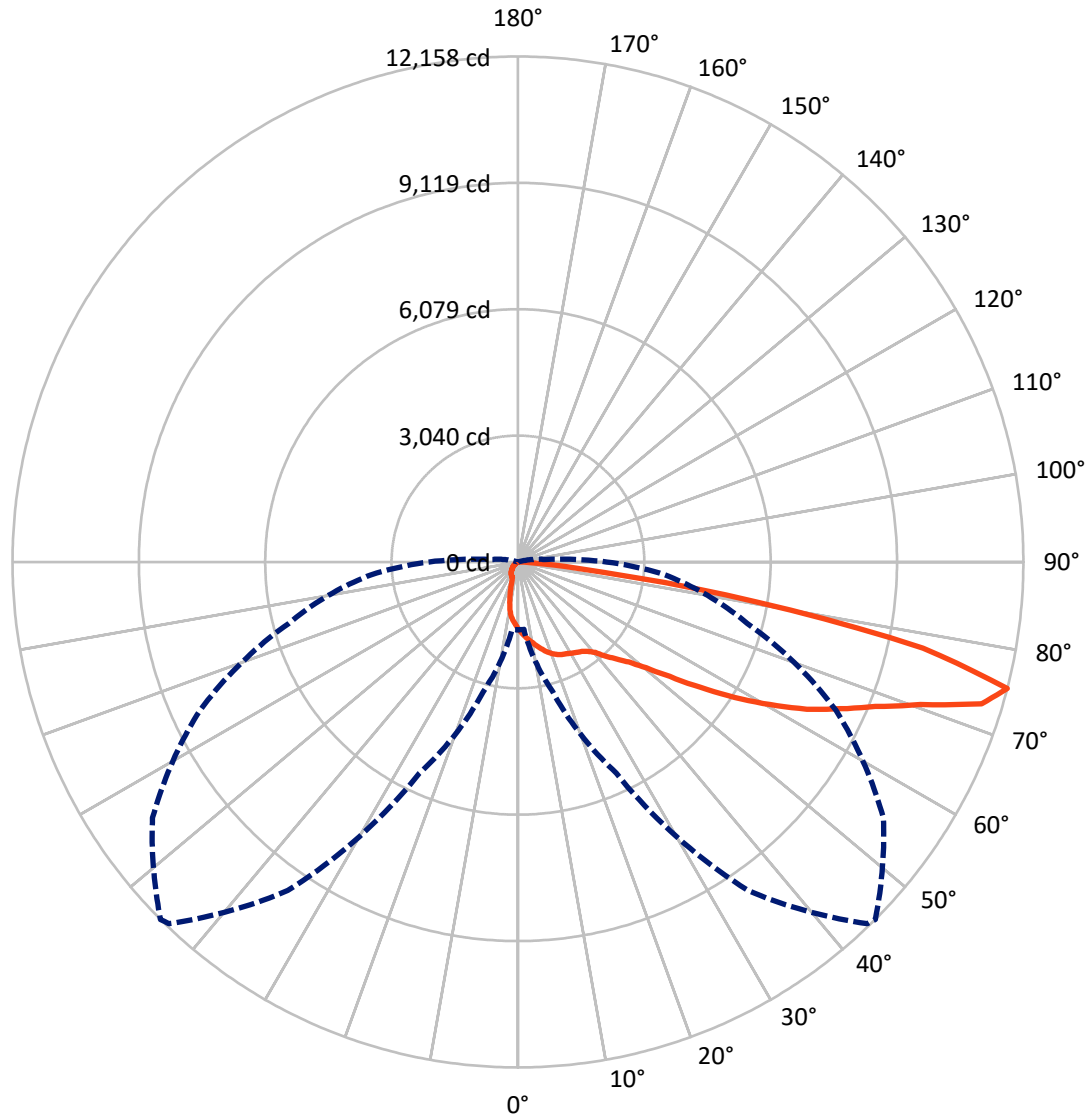
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type IV - Medium - N/A

REPORT NUMBER: P237469
CATALOG NUMBER: ARCH-L-AF72-160-D-U-T4W-7050-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P237469

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T4W-7050-HSS

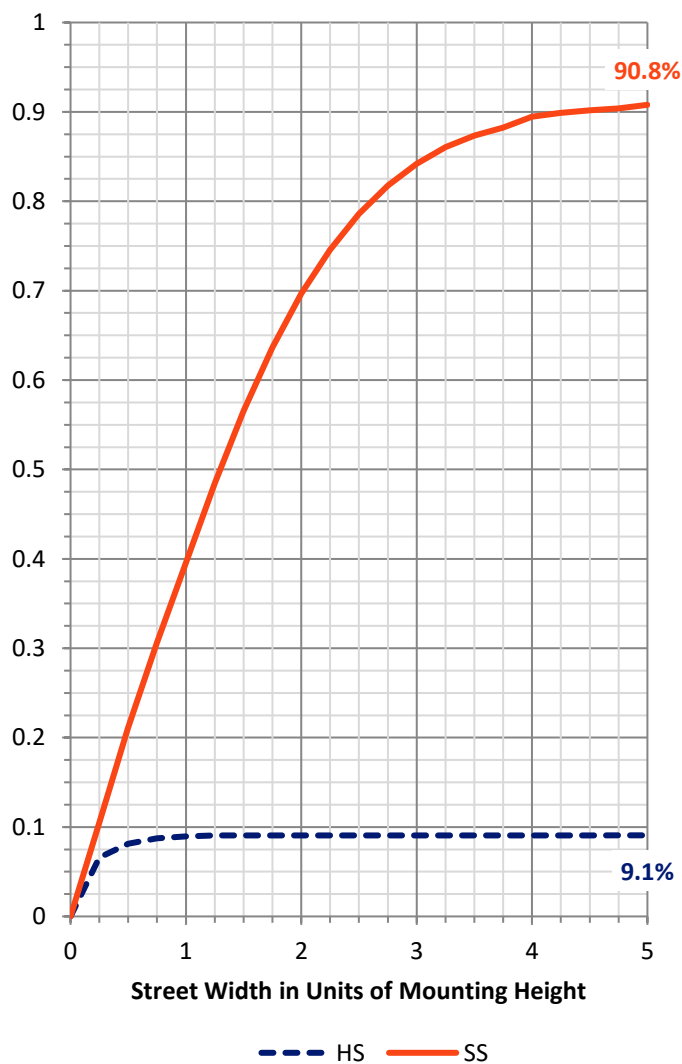
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1383.1	0.0	1383.1
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	13737.9	0.0	13737.9
	% Fixture	90.9	0.0	90.9
Total	Lumens	15121.0	0.0	15121.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.6	1.0
10°-20°	432.4	2.9
20°-30°	716.1	4.7
30°-40°	1036.4	6.9
40°-50°	1697.1	11.2
50°-60°	3023.9	20.0
60°-70°	4445.5	29.4
70°-80°	3353.7	22.2
80°-90°	263.1	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°	15121.0	100.0
0°-180°	15121.0	100.0

Coefficient of Utilization



REPORT NUMBER: P237469

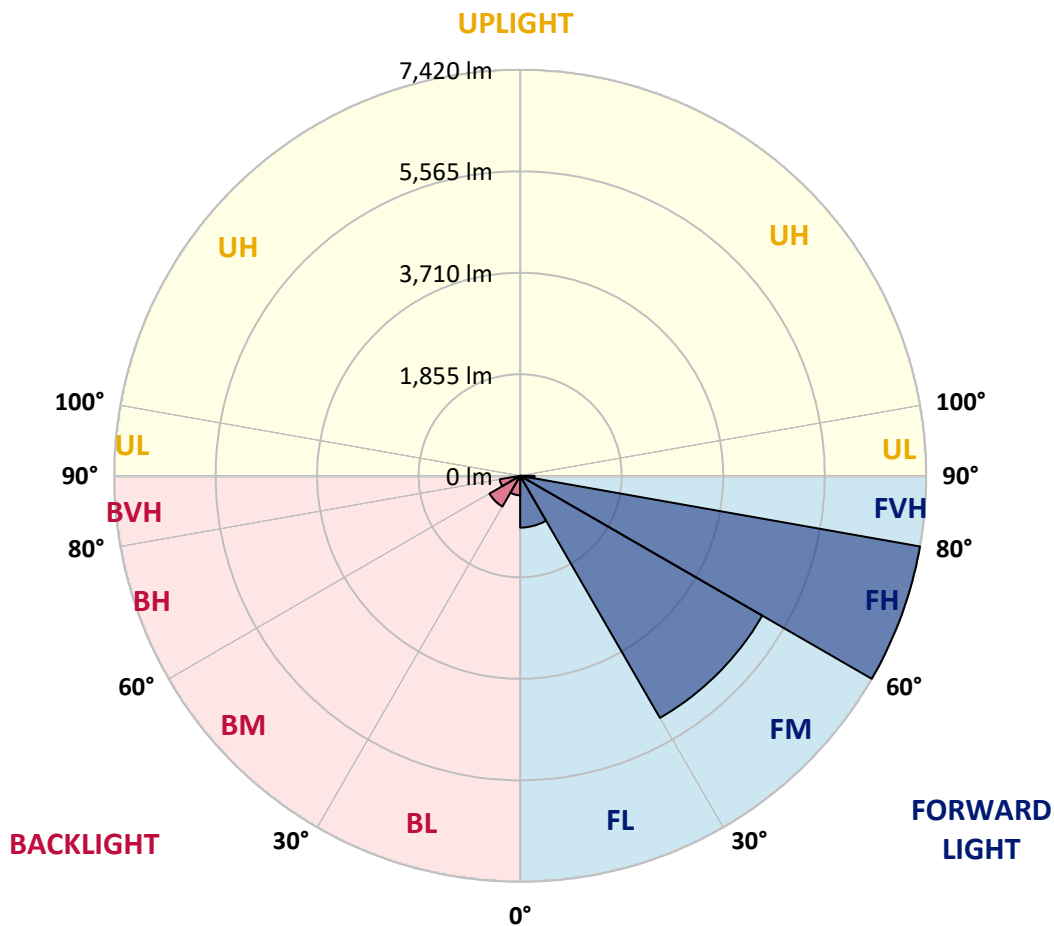
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	945.8	6.3			
FM (30°-60°)	5109.3	33.8			
FH (60°-80°)	7420.4	49.1			G3/7500
FVH (80°-90°)	262.4	1.7			G3/500
BL (0°-30°)	355.4	2.4	B1/500		
BM (30°-60°)	648.1	4.3	B1/1000		
BH (60°-80°)	378.8	2.5	B1/500		G1/500
BVH (80°-90°)	0.7	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-G3

Type IV Medium





REPORT NUMBER: P237469

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T4W-7050-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1617.3	1617.3	1617.3	1617.3	1617.3	1617.3	1617.3	1617.3	1617.3	1617.3	1617.3
2.5°	1756.8	1756.8	1753.2	1749.7	1731.8	1713.9	1710.3	1699.6	1667.4	1645.9	1624.4
5°	1903.5	1907.1	1899.9	1882.0	1842.7	1803.3	1799.8	1771.1	1710.3	1667.4	1620.9
7.5°	2043.1	2050.2	2032.3	2000.1	1953.6	1896.4	1892.8	1839.1	1760.4	1699.6	1631.6
10°	2161.1	2161.1	2136.1	2096.7	2046.6	1985.8	1978.7	1917.8	1828.4	1753.2	1663.8
12.5°	2289.9	2286.4	2250.6	2196.9	2139.7	2082.4	2078.8	2003.7	1917.8	1821.2	1710.3
15°	2408.0	2400.9	2354.3	2304.3	2243.4	2182.6	2179.0	2103.9	2014.4	1899.9	1778.3
17.5°	2472.4	2468.8	2425.9	2375.8	2325.7	2279.2	2275.6	2196.9	2100.3	1982.2	1846.3
20°	2483.2	2486.7	2451.0	2408.0	2379.4	2354.3	2354.3	2282.8	2179.0	2053.8	1917.8
22.5°	2486.7	2497.5	2472.4	2415.2	2408.0	2411.6	2418.8	2361.5	2254.2	2136.1	1993.0
25°	2511.8	2526.1	2508.2	2440.2	2433.1	2458.1	2465.3	2440.2	2343.6	2225.5	2078.8
27.5°	2561.9	2576.2	2561.9	2476.0	2465.3	2490.3	2497.5	2511.8	2440.2	2311.4	2168.3
30°	2662.1	2665.6	2633.4	2526.1	2504.6	2536.8	2547.6	2586.9	2529.7	2393.7	2254.2
32.5°	2837.4	2801.6	2705.0	2561.9	2544.0	2579.8	2590.5	2633.4	2612.0	2472.4	2343.6
35°	3195.2	3009.1	2787.3	2612.0	2594.1	2629.9	2644.2	2705.0	2715.7	2583.3	2454.5
37.5°	3191.6	3023.4	2980.5	2708.6	2683.5	2708.6	2726.5	2801.6	2844.5	2730.0	2615.5
40°	3417.0	3345.5	3345.5	2891.1	2808.8	2844.5	2862.4	2937.6	3012.7	2923.3	2805.2
42.5°	4125.5	4079.0	4028.9	3241.7	2984.1	3084.3	3095.0	3141.5	3231.0	3202.3	3062.8
45°	4916.2	4873.3	4680.1	3835.7	3284.6	3302.5	3327.6	3402.7	3531.5	3585.2	3420.6
47.5°	5535.2	5492.3	5327.7	4551.3	3753.4	3595.9	3595.9	3742.6	3943.0	4079.0	3921.5
50°	6032.6	5982.5	5882.3	5313.4	4522.6	4018.1	3996.7	4168.4	4465.4	4676.5	4569.2
52.5°	6515.6	6368.9	6308.1	6100.6	5392.1	4630.0	4572.7	4694.4	5105.9	5367.1	5277.6
55°	6837.6	6816.2	6751.8	6823.3	6304.5	5374.2	5324.1	5349.2	5864.4	6039.7	5928.8
57.5°	7138.2	7134.6	7277.7	7610.5	7299.2	6225.8	6147.1	6107.7	6597.9	6555.0	6651.6
60°	7510.3	7445.9	7778.7	8254.5	8211.6	7055.9	6966.4	6887.7	7159.7	7038.0	7517.5
62.5°	7528.2	7510.3	8186.5	8870.0	9116.8	7900.3	7796.5	7513.9	7649.8	7510.3	8344.0
65°	6844.8	6934.2	8358.3	9195.6	9875.4	8641.0	8515.7	8075.6	8086.4	7993.3	9317.2
67.5°	6690.9	6737.4	7886.0	9546.2	10422.8	9388.8	9270.7	8723.3	8594.4	8601.6	9893.3
70°	6308.1	6379.6	7299.2	9521.2	10855.8	10387.0	10269.0	9675.0	9363.7	9016.7	9449.6
72.5°	4819.6	4941.3	6150.6	8347.6	10737.7	11693.0	11660.8	10880.8	9671.4	8279.6	7148.9
75°	1631.6	1628.0	3231.0	5606.8	9646.4	12093.8	12158.2	10730.5	8437.0	5710.5	3549.4
77.5°	350.6	354.2	665.5	2272.1	6408.3	9710.8	9957.7	8093.5	5442.2	2544.0	812.2
80°	171.7	175.3	275.5	601.1	2561.9	5445.8	5832.2	4161.3	2010.9	508.1	136.0
82.5°	85.9	89.5	143.1	318.4	948.2	1935.7	2068.1	1531.4	576.1	286.2	68.0
85°	32.2	32.2	71.6	189.6	432.9	454.4	558.2	443.7	347.1	232.6	17.9
87.5°	7.2	7.2	39.4	93.0	193.2	143.1	143.1	136.0	211.1	157.4	7.2
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: P237469

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T4W-7050-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1617.3	1617.3	1617.3	1617.3	1617.3	1617.3	1617.3	1617.3	1617.3	1617.3	1617.3
2.5°	1613.7	1599.4	1574.3	1549.3	1531.4	1509.9	1499.2	1488.5	1484.9	1481.3	1488.5
5°	1595.8	1574.3	1527.8	1488.5	1452.7	1424.1	1402.6	1381.1	1370.4	1363.2	1366.8
7.5°	1595.8	1563.6	1495.6	1434.8	1377.5	1316.7	1255.9	1209.4	1173.6	1152.1	1155.7
10°	1613.7	1570.8	1481.3	1399.0	1291.7	1162.9	1030.5	930.3	862.3	822.9	822.9
12.5°	1653.1	1595.8	1484.9	1356.1	1173.6	948.2	747.8	626.2	576.1	547.4	551.0
15°	1706.7	1638.7	1502.8	1298.8	1009.0	704.9	522.4	443.7	443.7	450.8	454.4
17.5°	1767.6	1692.4	1517.1	1213.0	797.9	504.5	411.5	404.3	415.1	432.9	432.9
20°	1828.4	1746.1	1524.2	1077.0	597.5	400.7	390.0	390.0	397.2	415.1	418.6
22.5°	1903.5	1814.1	1517.1	908.8	447.3	379.3	375.7	375.7	375.7	397.2	397.2
25°	1982.2	1892.8	1488.5	729.9	379.3	365.0	361.4	357.8	357.8	375.7	379.3
27.5°	2071.7	1975.1	1420.5	558.2	357.8	350.6	347.1	339.9	339.9	354.2	354.2
30°	2161.1	2068.1	1316.7	422.2	339.9	336.3	329.2	322.0	314.9	329.2	329.2
32.5°	2257.7	2164.7	1180.8	336.3	314.9	314.9	311.3	300.6	293.4	300.6	304.1
35°	2386.6	2275.6	1026.9	293.4	282.7	282.7	282.7	279.1	264.8	271.9	271.9
37.5°	2558.3	2429.5	848.0	271.9	257.6	250.5	250.5	250.5	239.7	243.3	243.3
40°	2776.6	2608.4	676.2	254.0	239.7	221.8	214.7	218.3	211.1	211.1	207.5
42.5°	3073.5	2801.6	508.1	239.7	225.4	200.4	186.1	182.5	175.3	171.7	171.7
45°	3499.3	3037.8	365.0	225.4	214.7	175.3	161.0	150.3	132.4	121.7	121.7
47.5°	4050.3	3306.1	271.9	211.1	203.9	153.9	136.0	114.5	89.5	82.3	82.3
50°	4723.0	3606.7	229.0	189.6	186.1	136.0	107.3	75.1	50.1	42.9	46.5
52.5°	5377.8	3889.3	203.9	168.2	164.6	118.1	78.7	39.4	21.5	21.5	21.5
55°	5928.8	4089.7	186.1	150.3	143.1	93.0	42.9	17.9	10.7	10.7	10.7
57.5°	6426.2	4204.2	168.2	132.4	114.5	64.4	17.9	7.2	7.2	3.6	3.6
60°	6880.6	4272.2	146.7	114.5	89.5	35.8	7.2	3.6	3.6	0.0	0.0
62.5°	7327.8	4322.3	125.2	93.0	68.0	14.3	3.6	3.6	0.0	0.0	0.0
65°	7667.7	4304.4	100.2	75.1	42.9	7.2	3.6	0.0	0.0	0.0	0.0
67.5°	7657.0	4061.1	75.1	57.2	21.5	3.6	0.0	0.0	0.0	0.0	0.0
70°	6848.4	3420.6	50.1	35.8	7.2	3.6	0.0	0.0	0.0	0.0	0.0
72.5°	4859.0	2193.3	32.2	21.5	3.6	0.0	0.0	0.0	0.0	0.0	0.0
75°	2139.7	665.5	17.9	10.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	418.6	153.9	10.7	7.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	100.2	17.9	3.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	42.9	7.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.7	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.2	3.6	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)