

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: P237432

Luminaire Tested: **ARCH-L-AF72-190-D-U-T4W-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237432
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-190-D-U-T4W-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 810mA 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: 16239.2 lumens
Efficiency: N/A
Efficacy: 85.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G4

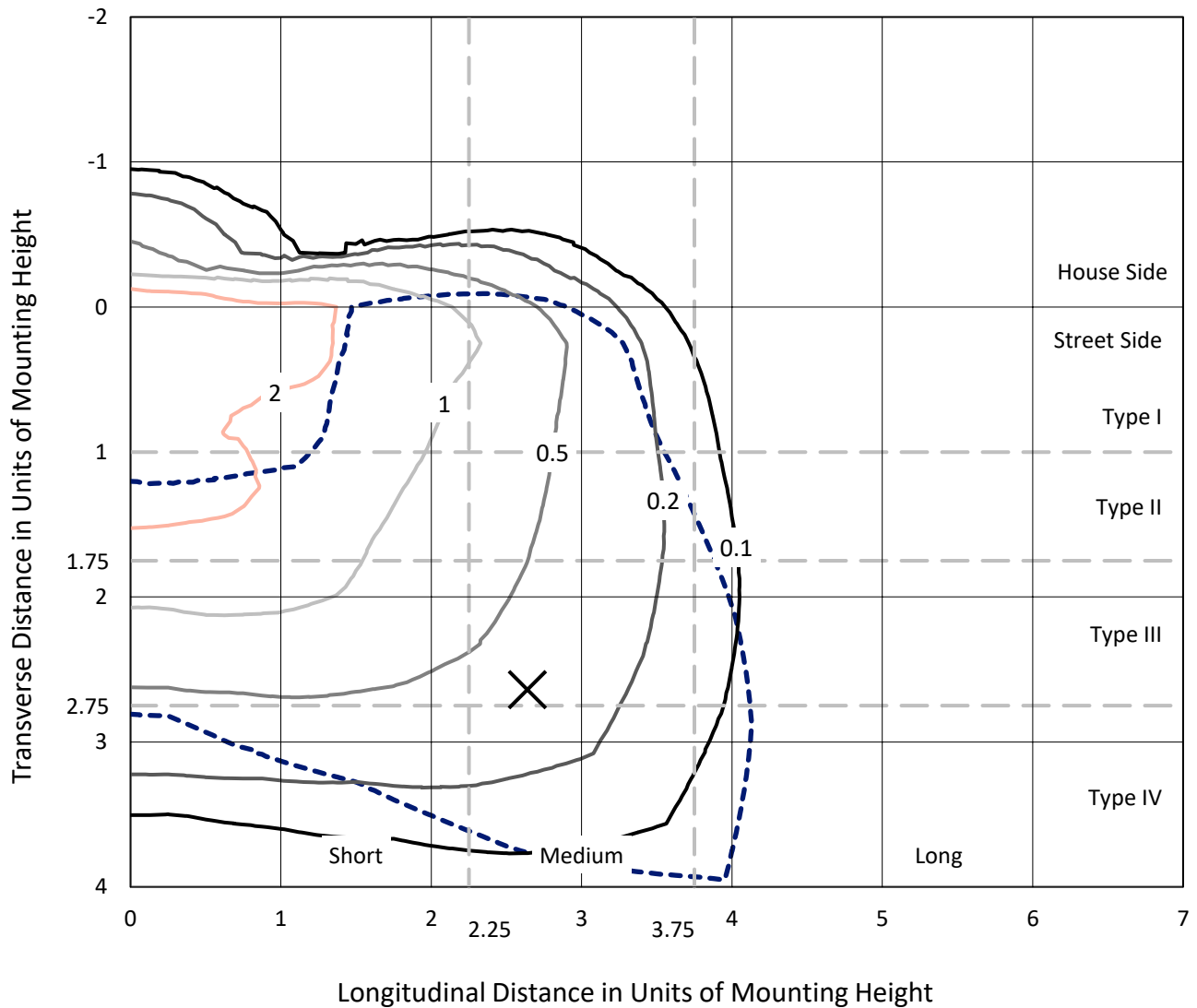
Input Watts (W): 189
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P237432
 CATALOG NUMBER: ARCH-L-AF72-190-D-U-T4W-7030-HSS

Iso-Footcandle Lines of Horizontal Illumination

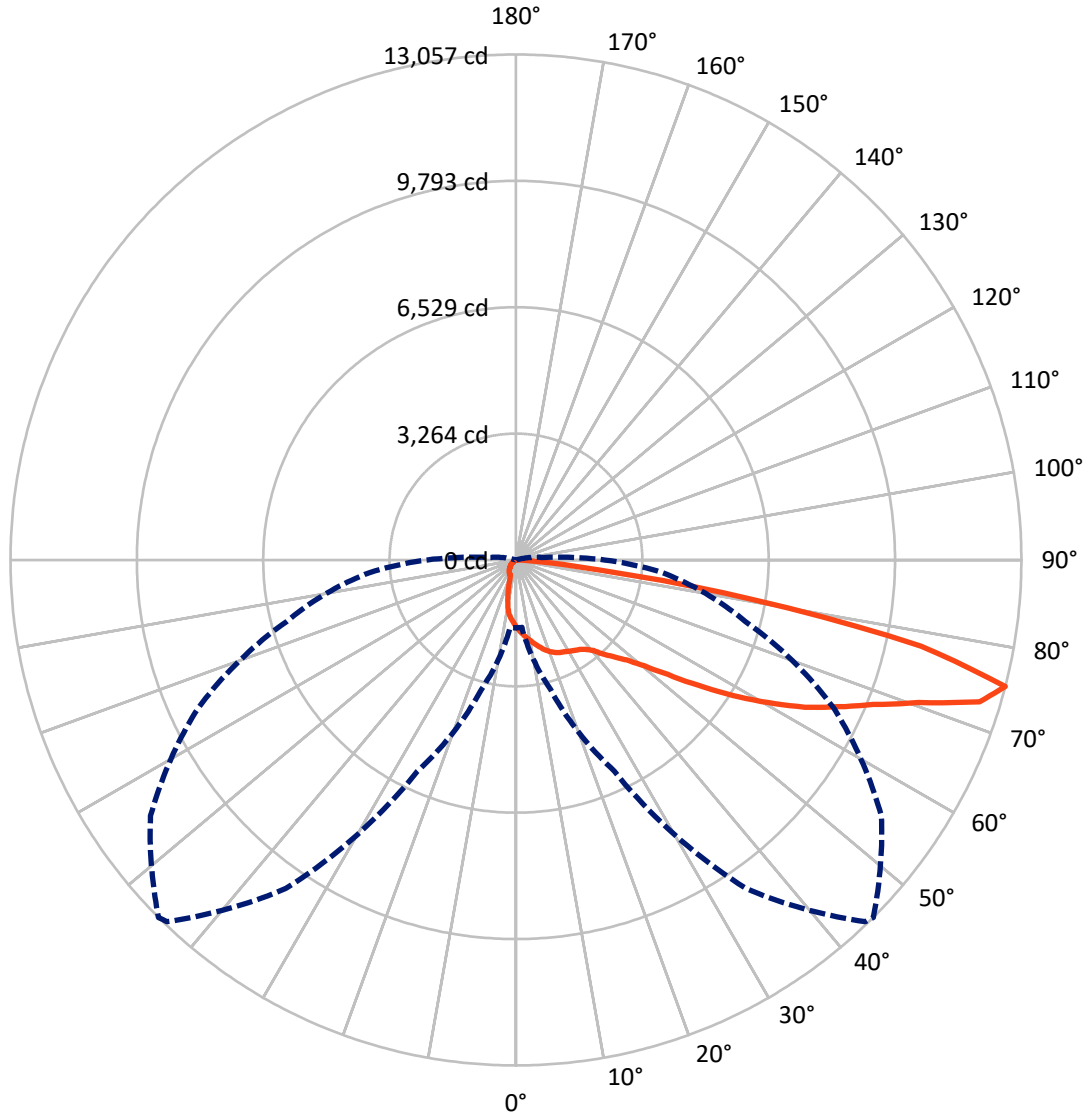
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type IV - Medium - N/A

REPORT NUMBER: P237432
CATALOG NUMBER: ARCH-L-AF72-190-D-U-T4W-7030-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P237432
 CATALOG NUMBER: ARCH-L-AF72-190-D-U-T4W-7030-HSS

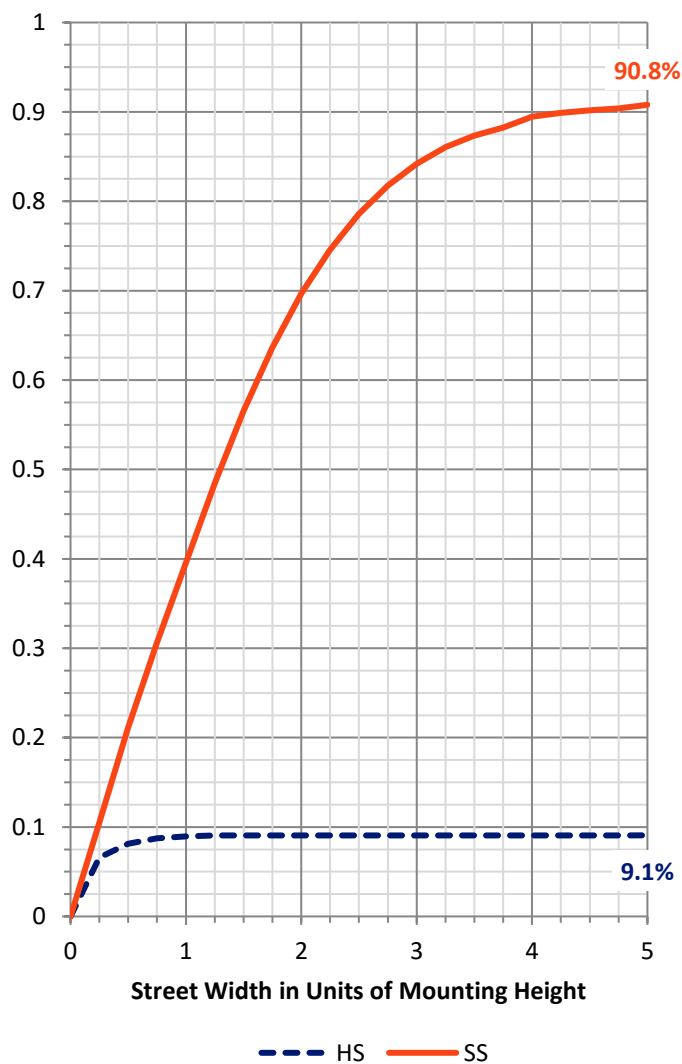
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1485.4	0.0	1485.4
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	14753.8	0.0	14753.8
	% Fixture	90.9	0.0	90.9
Total	Lumens	16239.2	0.0	16239.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.9	1.0
10°-20°	464.4	2.9
20°-30°	769.1	4.7
30°-40°	1113.1	6.9
40°-50°	1822.6	11.2
50°-60°	3247.5	20.0
60°-70°	4774.3	29.4
70°-80°	3601.7	22.2
80°-90°	282.6	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°	16239.2	100.0
0°-180°	16239.2	100.0

Coefficient of Utilization



REPORT NUMBER: P237432

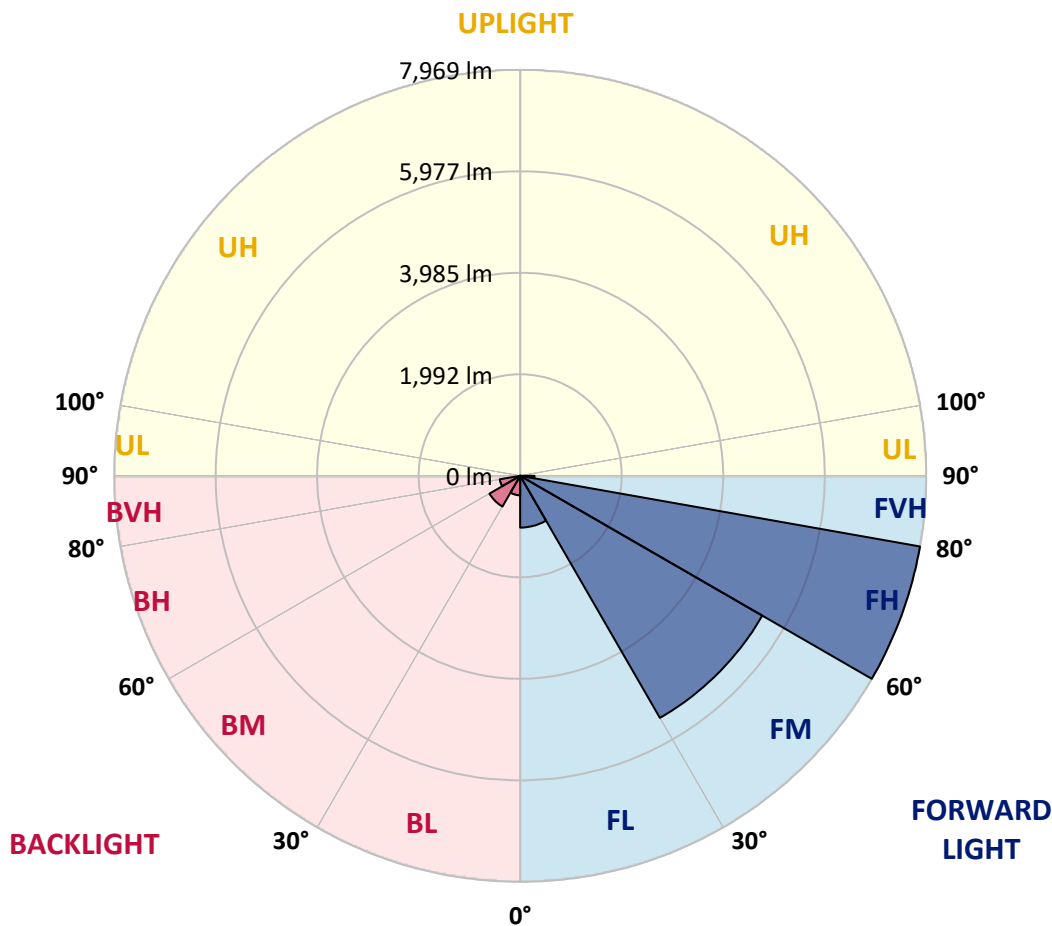
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1015.7	6.3			
FM (30°-60°)	5487.1	33.8			
FH (60°-80°)	7969.2	49.1			G4/12000
FVH (80°-90°)	281.8	1.7			G3/500
BL (0°-30°)	381.7	2.4	B1/500		
BM (30°-60°)	696.1	4.3	B1/1000		
BH (60°-80°)	406.9	2.5	B1/500		G1/500
BVH (80°-90°)	0.8	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-G4

Type IV Medium





REPORT NUMBER: P237432

CATALOG NUMBER: ARCH-L-AF72-190-D-U-T4W-7030-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1736.9	1736.9	1736.9	1736.9	1736.9	1736.9	1736.9	1736.9	1736.9	1736.9	1736.9
2.5°	1886.7	1886.7	1882.9	1879.0	1859.8	1840.6	1836.7	1825.2	1790.6	1767.6	1744.6
5°	2044.2	2048.2	2040.4	2021.2	1978.9	1936.7	1932.8	1902.1	1836.7	1790.6	1740.7
7.5°	2194.2	2201.8	2182.6	2148.0	2098.1	2036.6	2032.8	1975.1	1890.6	1825.2	1752.2
10°	2321.0	2321.0	2294.0	2251.9	2198.0	2132.6	2125.0	2059.6	1963.6	1882.9	1786.8
12.5°	2459.3	2455.5	2417.1	2359.4	2297.9	2236.4	2232.6	2151.9	2059.6	1955.8	1836.7
15°	2586.0	2578.4	2528.5	2474.6	2409.3	2344.0	2340.2	2259.5	2163.5	2040.4	1909.8
17.5°	2655.2	2651.4	2605.3	2551.5	2497.6	2447.7	2443.9	2359.4	2255.6	2128.8	1982.8
20°	2666.8	2670.7	2632.2	2586.0	2555.3	2528.5	2528.5	2451.6	2340.2	2205.7	2059.6
22.5°	2670.7	2682.2	2655.2	2593.9	2586.0	2589.9	2597.6	2536.1	2420.8	2294.0	2140.4
25°	2697.5	2712.9	2693.7	2620.7	2613.1	2639.9	2647.6	2620.7	2516.9	2390.1	2232.6
27.5°	2751.3	2766.7	2751.3	2659.2	2647.6	2674.4	2682.2	2697.5	2620.7	2482.4	2328.7
30°	2858.9	2862.8	2828.1	2712.9	2689.9	2724.4	2736.0	2778.3	2716.7	2570.8	2420.8
32.5°	3047.2	3008.8	2904.9	2751.3	2732.1	2770.5	2782.1	2828.1	2805.1	2655.2	2516.9
35°	3431.5	3231.7	2993.3	2805.1	2785.9	2824.4	2839.7	2904.9	2916.5	2774.4	2636.1
37.5°	3427.7	3247.0	3201.0	2908.9	2881.9	2908.9	2928.0	3008.8	3054.9	2932.0	2808.9
40°	3669.7	3592.9	3592.9	3104.8	3016.4	3054.9	3074.1	3154.8	3235.5	3139.4	3012.6
42.5°	4430.6	4380.6	4326.7	3481.4	3204.8	3312.3	3323.8	3373.8	3469.8	3439.2	3289.2
45°	5279.7	5233.6	5026.2	4119.3	3527.6	3546.8	3573.7	3654.4	3792.7	3850.3	3673.6
47.5°	5944.6	5898.5	5721.7	4887.8	4030.9	3861.9	3861.9	4019.4	4234.6	4380.6	4211.5
50°	6478.6	6424.9	6317.3	5706.3	4857.1	4315.3	4292.2	4476.7	4795.6	5022.3	4907.1
52.5°	6997.4	6839.8	6774.5	6551.7	5790.8	4972.4	4910.8	5041.6	5483.4	5764.0	5668.0
55°	7343.4	7320.3	7251.1	7327.9	6770.7	5771.6	5717.9	5744.8	6298.0	6486.4	6367.2
57.5°	7666.0	7662.3	7816.0	8173.2	7839.1	6686.2	6601.7	6559.4	7085.8	7039.7	7143.5
60°	8065.7	7996.5	8353.9	8865.0	8818.9	7577.6	7481.6	7397.1	7689.1	7558.4	8073.3
62.5°	8084.8	8065.7	8792.0	9525.9	9791.0	8484.5	8373.1	8069.6	8215.5	8065.7	8961.0
65°	7351.0	7447.0	8976.4	9875.6	10605.7	9279.9	9145.4	8672.8	8684.4	8584.5	10006.2
67.5°	7185.8	7235.7	8469.1	10252.2	11193.6	10083.1	9956.2	9368.3	9230.0	9237.7	10624.9
70°	6774.5	6851.4	7839.1	10225.2	11658.5	11155.2	11028.4	10390.4	10056.2	9683.4	10148.4
72.5°	5176.0	5306.7	6605.5	8964.8	11531.8	12557.7	12523.2	11685.5	10386.6	8891.8	7677.5
75°	1752.2	1748.3	3469.8	6021.4	10359.8	12988.0	13057.2	11524.0	9061.0	6132.8	3811.9
77.5°	376.6	380.4	714.8	2440.1	6882.1	10428.9	10694.1	8692.0	5844.6	2732.1	872.3
80°	184.4	188.3	295.9	645.6	2751.3	5848.5	6263.5	4469.0	2159.5	545.6	146.0
82.5°	92.3	96.0	153.7	342.0	1018.3	2078.8	2221.0	1644.7	618.6	307.4	72.9
85°	34.6	34.6	76.8	203.7	465.0	488.1	599.5	476.5	372.7	249.7	19.2
87.5°	7.6	7.6	42.3	99.9	207.5	153.7	153.7	146.0	226.7	169.1	7.6
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: P237432

CATALOG NUMBER: ARCH-L-AF72-190-D-U-T4W-7030-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1736.9	1736.9	1736.9	1736.9	1736.9	1736.9	1736.9	1736.9	1736.9	1736.9	1736.9
2.5°	1733.1	1717.7	1690.8	1663.9	1644.7	1621.6	1610.1	1598.6	1594.6	1590.9	1598.6
5°	1713.8	1690.8	1640.8	1598.6	1560.1	1529.4	1506.3	1483.3	1471.7	1464.1	1467.9
7.5°	1713.8	1679.2	1606.2	1540.9	1479.4	1414.2	1348.8	1298.8	1260.5	1237.4	1241.1
10°	1733.1	1687.0	1590.9	1502.5	1387.1	1248.9	1106.7	999.0	926.1	883.8	883.8
12.5°	1775.3	1713.8	1594.6	1456.3	1260.5	1018.3	803.2	672.5	618.6	588.0	591.7
15°	1833.0	1759.9	1613.9	1394.9	1083.7	756.9	561.0	476.5	476.5	484.1	488.1
17.5°	1898.3	1817.5	1629.3	1302.7	856.9	541.8	442.0	434.2	445.8	465.0	465.0
20°	1963.6	1875.2	1636.9	1156.6	641.7	430.4	418.9	418.9	426.5	445.8	449.6
22.5°	2044.2	1948.2	1629.3	976.0	480.3	407.3	403.5	403.5	403.5	426.5	426.5
25°	2128.8	2032.8	1598.6	783.9	407.3	391.9	388.1	384.3	384.3	403.5	407.3
27.5°	2224.8	2121.2	1525.5	599.5	384.3	376.6	372.7	365.0	365.0	380.4	380.4
30°	2321.0	2221.0	1414.2	453.4	365.0	361.2	353.6	345.8	338.1	353.6	353.6
32.5°	2424.7	2324.8	1268.1	361.2	338.1	338.1	334.4	322.8	315.1	322.8	326.5
35°	2563.0	2443.9	1102.9	315.1	303.5	303.5	303.5	299.7	284.4	292.0	292.0
37.5°	2747.5	2609.1	910.6	292.0	276.7	269.0	269.0	269.0	257.5	261.3	261.3
40°	2981.9	2801.3	726.2	272.8	257.5	238.3	230.5	234.4	226.7	226.7	222.9
42.5°	3300.8	3008.8	545.6	257.5	242.1	215.2	199.8	196.0	188.3	184.4	184.4
45°	3758.1	3262.4	391.9	242.1	230.5	188.3	172.9	161.3	142.1	130.7	130.7
47.5°	4349.8	3550.6	292.0	226.7	219.1	165.2	146.0	122.9	96.0	88.4	88.4
50°	5072.3	3873.3	246.0	203.7	199.8	146.0	115.3	80.8	53.7	46.1	49.9
52.5°	5775.5	4177.0	219.1	180.6	176.8	126.8	84.5	42.3	23.1	23.1	23.1
55°	6367.2	4392.1	199.8	161.3	153.7	99.9	46.1	19.2	11.6	11.6	11.6
57.5°	6901.4	4515.1	180.6	142.1	122.9	69.2	19.2	7.6	7.6	3.9	3.9
60°	7389.4	4588.2	157.6	122.9	96.0	38.5	7.6	3.9	3.9	0.0	0.0
62.5°	7869.7	4641.9	134.5	99.9	72.9	15.4	3.9	3.9	0.0	0.0	0.0
65°	8234.8	4622.6	107.6	80.8	46.1	7.6	3.9	0.0	0.0	0.0	0.0
67.5°	8223.3	4361.4	80.8	61.5	23.1	3.9	0.0	0.0	0.0	0.0	0.0
70°	7354.8	3673.6	53.7	38.5	7.6	3.9	0.0	0.0	0.0	0.0	0.0
72.5°	5218.3	2355.5	34.6	23.1	3.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	2297.9	714.8	19.2	11.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	449.6	165.2	11.6	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	107.6	19.2	3.9	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	46.1	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.6	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.6	3.9	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)