

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: P237472

Luminaire Tested: **ARCH-L-AF72-190-D-U-T4W-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237472
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-AF72-190-D-U-T4W-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 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: 16791 lumens
Efficiency: N/A
Efficacy: 88.8 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

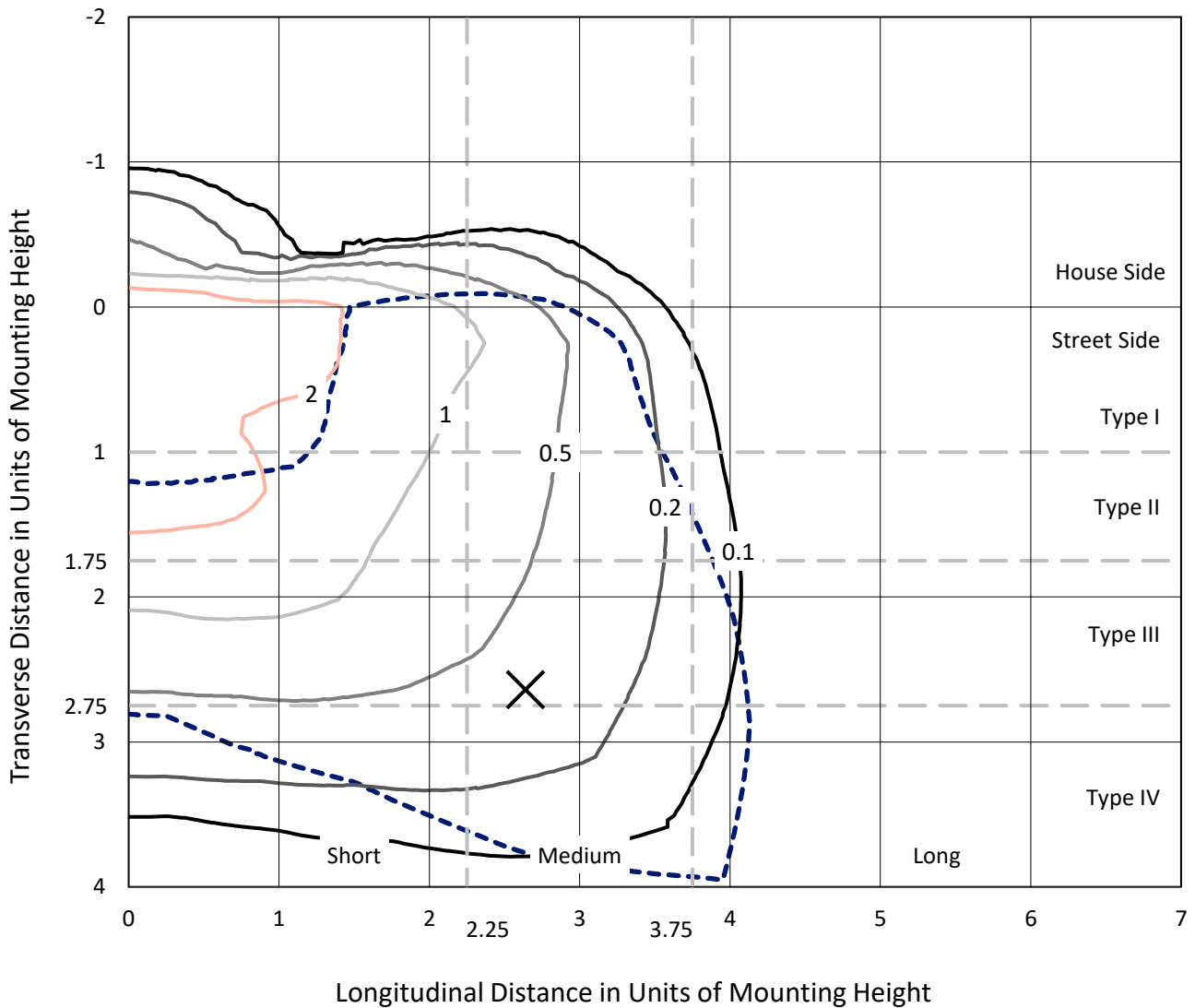
Input Watts (W): 189
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

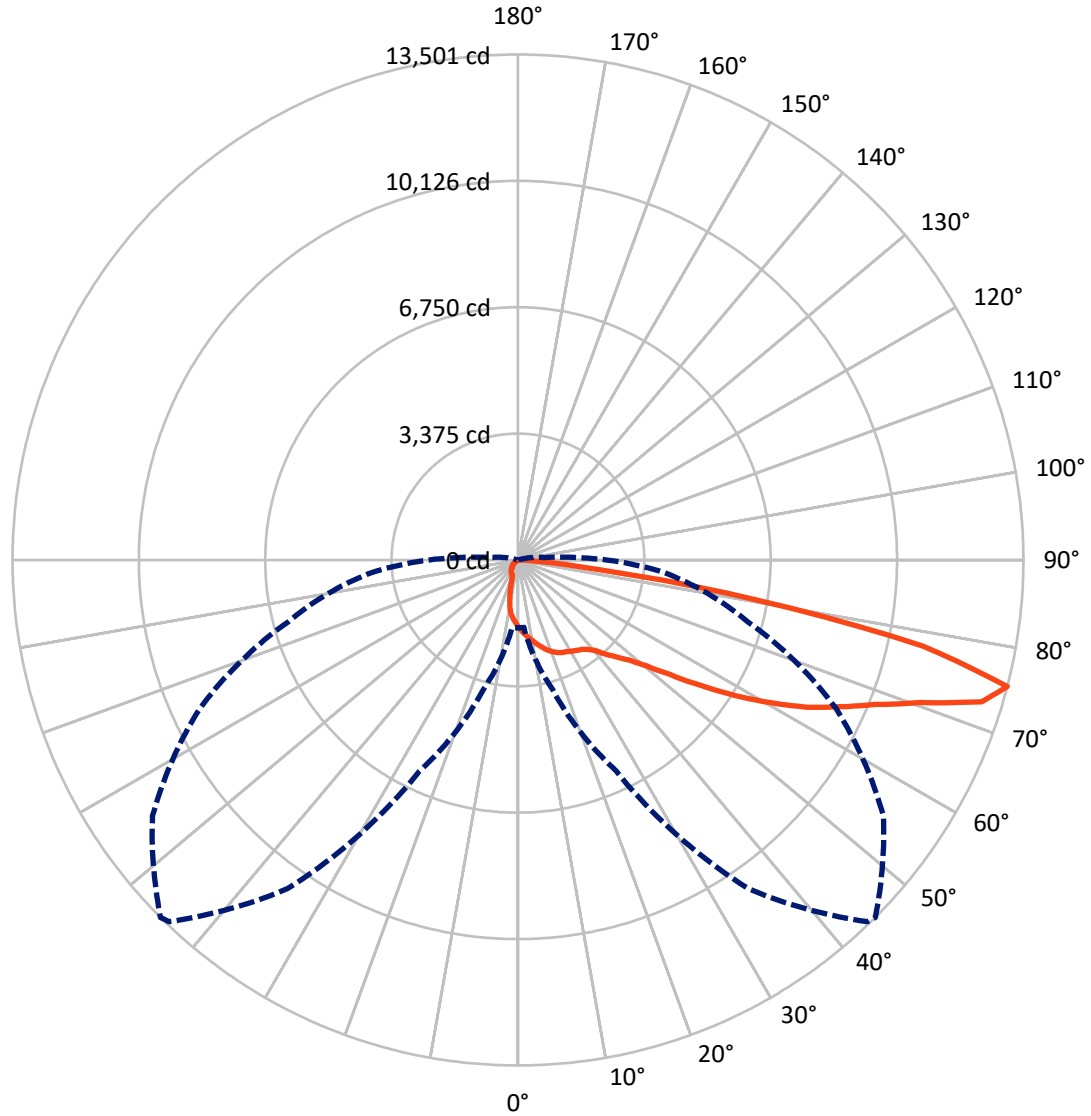
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 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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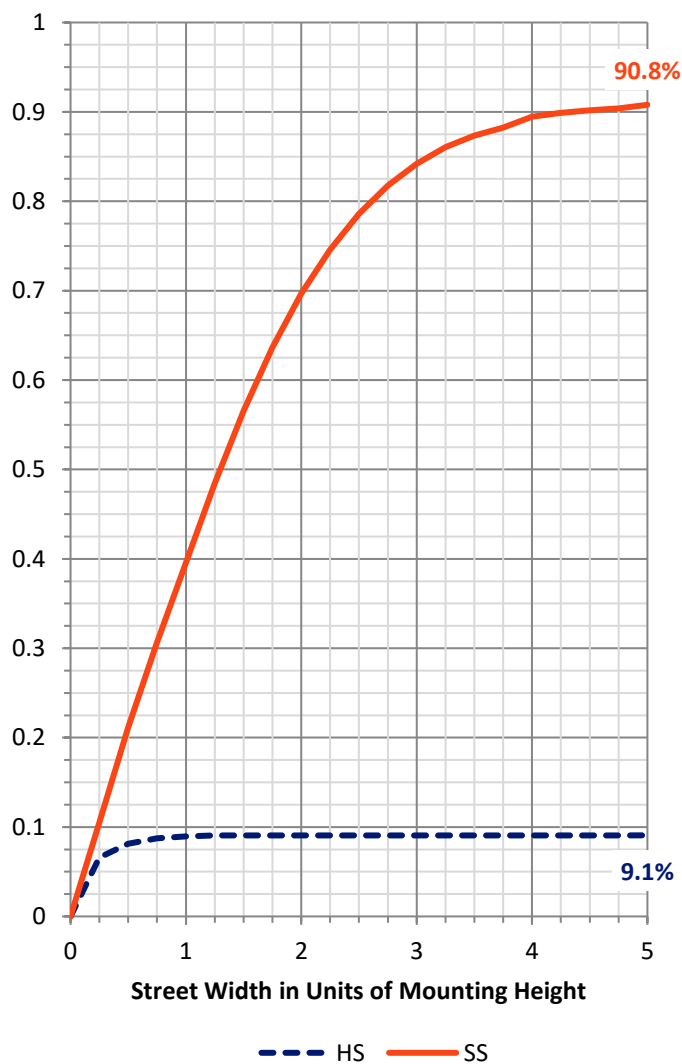
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1535.9	0.0	1535.9
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	15255.1	0.0	15255.1
	% Fixture	90.9	0.0	90.9
Total	Lumens	16791.0	0.0	16791.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.5	1.0
10°-20°	480.2	2.9
20°-30°	795.2	4.7
30°-40°	1150.9	6.9
40°-50°	1884.6	11.2
50°-60°	3357.9	20.0
60°-70°	4936.5	29.4
70°-80°	3724.1	22.2
80°-90°	292.2	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°	16791.0	100.0
0°-180°	16791.0	100.0

Coefficient of Utilization



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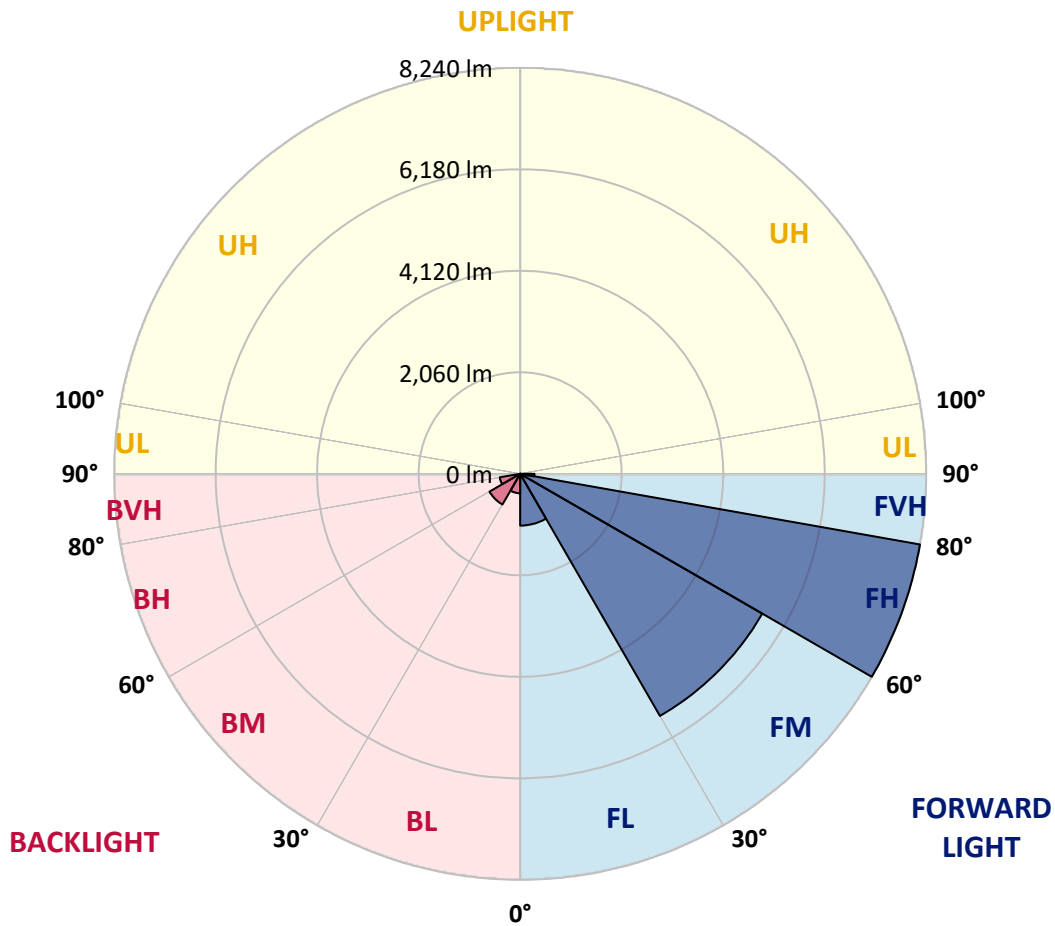
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1050.2	6.3			
FM (30°-60°)	5673.6	33.8			
FH (60°-80°)	8239.9	49.1			G4/12000
FVH (80°-90°)	291.4	1.7			G3/500
BL (0°-30°)	394.7	2.4	B1/500		
BM (30°-60°)	719.7	4.3	B1/1000		
BH (60°-80°)	420.7	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1795.9	1795.9	1795.9	1795.9	1795.9	1795.9	1795.9	1795.9	1795.9	1795.9	1795.9
2.5°	1950.8	1950.8	1946.9	1942.9	1923.0	1903.2	1899.2	1887.3	1851.5	1827.7	1803.8
5°	2113.7	2117.7	2109.8	2089.9	2046.2	2002.5	1998.5	1966.7	1899.2	1851.5	1799.9
7.5°	2268.7	2276.6	2256.8	2221.0	2169.4	2105.8	2101.8	2042.2	1954.8	1887.3	1811.8
10°	2399.8	2399.8	2372.0	2328.3	2272.7	2205.1	2197.2	2129.6	2030.3	1946.9	1847.5
12.5°	2542.9	2538.9	2499.1	2439.5	2376.0	2312.4	2308.4	2225.0	2129.6	2022.4	1899.2
15°	2674.0	2666.0	2614.4	2558.7	2491.2	2423.7	2419.7	2336.2	2236.9	2109.8	1974.7
17.5°	2745.5	2741.5	2693.8	2638.2	2582.6	2530.9	2527.0	2439.5	2332.3	2201.2	2050.2
20°	2757.4	2761.4	2721.6	2674.0	2642.2	2614.4	2614.4	2534.9	2419.7	2280.6	2129.6
22.5°	2761.4	2773.3	2745.5	2681.9	2674.0	2677.9	2685.9	2622.3	2503.1	2372.0	2213.1
25°	2789.2	2805.1	2785.2	2709.7	2701.8	2729.6	2737.5	2709.7	2602.4	2471.3	2308.4
27.5°	2844.8	2860.7	2844.8	2749.5	2737.5	2765.4	2773.3	2789.2	2709.7	2566.7	2407.8
30°	2956.1	2960.0	2924.3	2805.1	2781.2	2817.0	2828.9	2872.6	2809.1	2658.1	2503.1
32.5°	3150.8	3111.0	3003.7	2844.8	2824.9	2864.7	2876.6	2924.3	2900.4	2745.5	2602.4
35°	3548.1	3341.5	3095.1	2900.4	2880.6	2920.3	2936.2	3003.7	3015.7	2868.7	2725.6
37.5°	3544.1	3357.4	3309.7	3007.7	2979.9	3007.7	3027.6	3111.0	3158.7	3031.6	2904.4
40°	3794.4	3714.9	3714.9	3210.3	3119.0	3158.7	3178.6	3262.0	3345.4	3246.1	3115.0
42.5°	4581.1	4529.5	4473.8	3599.7	3313.7	3424.9	3436.8	3488.5	3587.8	3556.0	3401.1
45°	5459.2	5411.5	5197.0	4259.3	3647.4	3667.3	3695.1	3778.5	3921.6	3981.2	3798.4
47.5°	6146.5	6098.9	5916.1	5053.9	4167.9	3993.1	3993.1	4156.0	4378.5	4529.5	4354.6
50°	6698.8	6643.2	6531.9	5900.2	5022.1	4461.9	4438.1	4628.8	4958.6	5193.0	5073.8
52.5°	7235.2	7072.3	7004.8	6774.3	5987.6	5141.3	5077.8	5212.8	5669.8	5959.8	5860.5
55°	7592.8	7569.0	7497.4	7576.9	7000.8	5967.8	5912.1	5939.9	6512.1	6706.8	6583.6
57.5°	7926.5	7922.6	8081.5	8451.0	8105.3	6913.4	6826.0	6782.3	7326.6	7278.9	7386.2
60°	8339.8	8268.2	8637.7	9166.2	9118.5	7835.2	7735.8	7648.4	7950.4	7815.3	8347.7
62.5°	8359.6	8339.8	9090.7	9849.6	10123.7	8772.8	8657.6	8343.7	8494.7	8339.8	9265.5
65°	7600.7	7700.1	9281.4	10211.1	10966.0	9595.3	9456.2	8967.5	8979.4	8876.1	10346.2
67.5°	7429.9	7481.5	8756.9	10600.5	11573.9	10425.7	10294.6	9686.7	9543.6	9551.6	10985.9
70°	7004.8	7084.2	8105.3	10572.7	12054.7	11534.2	11403.1	10743.5	10397.9	10012.5	10493.2
72.5°	5351.9	5487.0	6829.9	9269.5	11923.6	12984.4	12948.7	12082.5	10739.6	9194.0	7938.5
75°	1811.8	1807.8	3587.8	6226.0	10711.8	13429.4	13500.9	11915.6	9368.8	6341.2	3941.4
77.5°	389.4	393.3	739.0	2523.0	7116.0	10783.3	11057.4	8987.4	6043.2	2824.9	901.9
80°	190.7	194.7	305.9	667.5	2844.8	6047.2	6476.3	4620.8	2232.9	564.2	151.0
82.5°	95.4	99.3	158.9	353.6	1052.9	2149.5	2296.5	1700.5	639.7	317.9	75.5
85°	35.8	35.8	79.5	210.6	480.8	504.6	619.8	492.7	385.4	258.3	19.9
87.5°	7.9	7.9	43.7	103.3	214.6	158.9	158.9	151.0	234.4	174.8	7.9
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°	1795.9	1795.9	1795.9	1795.9	1795.9	1795.9	1795.9	1795.9	1795.9	1795.9	1795.9
2.5°	1791.9	1776.0	1748.2	1720.4	1700.5	1676.7	1664.8	1652.9	1648.9	1644.9	1652.9
5°	1772.0	1748.2	1696.6	1652.9	1613.1	1581.3	1557.5	1533.7	1521.7	1513.8	1517.8
7.5°	1772.0	1736.3	1660.8	1593.3	1529.7	1462.1	1394.6	1342.9	1303.2	1279.4	1283.3
10°	1791.9	1744.2	1644.9	1553.5	1434.3	1291.3	1144.3	1033.0	957.5	913.8	913.8
12.5°	1835.6	1772.0	1648.9	1505.8	1303.2	1052.9	830.4	695.3	639.7	607.9	611.9
15°	1895.2	1819.7	1668.7	1442.3	1120.4	782.7	580.1	492.7	492.7	500.6	504.6
17.5°	1962.8	1879.3	1684.6	1346.9	886.0	560.2	456.9	449.0	460.9	480.8	480.8
20°	2030.3	1938.9	1692.6	1195.9	663.5	445.0	433.1	433.1	441.0	460.9	464.9
22.5°	2113.7	2014.4	1684.6	1009.2	496.7	421.2	417.2	417.2	417.2	441.0	441.0
25°	2201.2	2101.8	1652.9	810.5	421.2	405.3	401.3	397.3	397.3	417.2	421.2
27.5°	2300.5	2193.2	1577.4	619.8	397.3	389.4	385.4	377.5	377.5	393.3	393.3
30°	2399.8	2296.5	1462.1	468.8	377.5	373.5	365.5	357.6	349.6	365.5	365.5
32.5°	2507.1	2403.8	1311.2	373.5	349.6	349.6	345.7	333.7	325.8	333.7	337.7
35°	2650.1	2527.0	1140.3	325.8	313.9	313.9	313.9	309.9	294.0	302.0	302.0
37.5°	2840.8	2697.8	941.6	302.0	286.1	278.1	278.1	278.1	266.2	270.2	270.2
40°	3083.2	2896.5	750.9	282.1	266.2	246.3	238.4	242.4	234.4	234.4	230.4
42.5°	3413.0	3111.0	564.2	266.2	250.3	222.5	206.6	202.6	194.7	190.7	190.7
45°	3885.8	3373.3	405.3	250.3	238.4	194.7	178.8	166.9	147.0	135.1	135.1
47.5°	4497.7	3671.2	302.0	234.4	226.5	170.8	151.0	127.1	99.3	91.4	91.4
50°	5244.6	4005.0	254.3	210.6	206.6	151.0	119.2	83.4	55.6	47.7	51.7
52.5°	5971.7	4318.9	226.5	186.7	182.8	131.1	87.4	43.7	23.8	23.8	23.8
55°	6583.6	4541.4	206.6	166.9	158.9	103.3	47.7	19.9	11.9	11.9	11.9
57.5°	7135.9	4668.5	186.7	147.0	127.1	71.5	19.9	7.9	7.9	4.0	4.0
60°	7640.5	4744.0	162.9	127.1	99.3	39.7	7.9	4.0	4.0	0.0	0.0
62.5°	8137.1	4799.6	139.1	103.3	75.5	15.9	4.0	4.0	0.0	0.0	0.0
65°	8514.6	4779.8	111.2	83.4	47.7	7.9	4.0	0.0	0.0	0.0	0.0
67.5°	8502.7	4509.6	83.4	63.6	23.8	4.0	0.0	0.0	0.0	0.0	0.0
70°	7604.7	3798.4	55.6	39.7	7.9	4.0	0.0	0.0	0.0	0.0	0.0
72.5°	5395.6	2435.6	35.8	23.8	4.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	2376.0	739.0	19.9	11.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	464.9	170.8	11.9	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	111.2	19.9	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	47.7	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.9	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.9	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)