

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: P237328

Luminaire Tested: **ARCH-L-AF72-150-D-U-T4W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237328  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-150-D-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 665mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20414 lumens  
Efficiency: N/A  
Efficacy: 133.4 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B3 - U0 - G4

Input Watts (W): 153  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: 28.75 FT

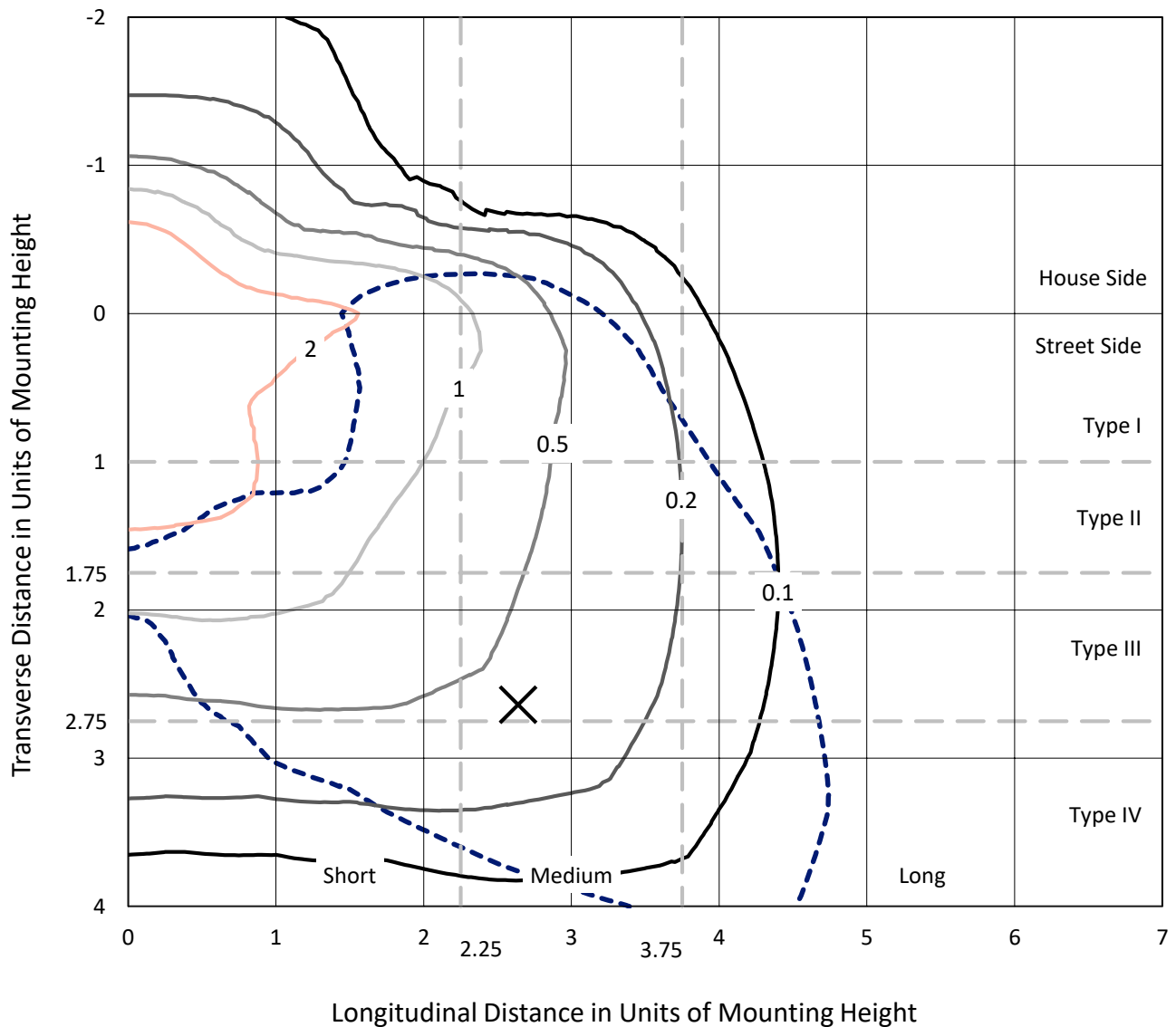


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### Iso-Footcandle Lines of Horizontal Illumination

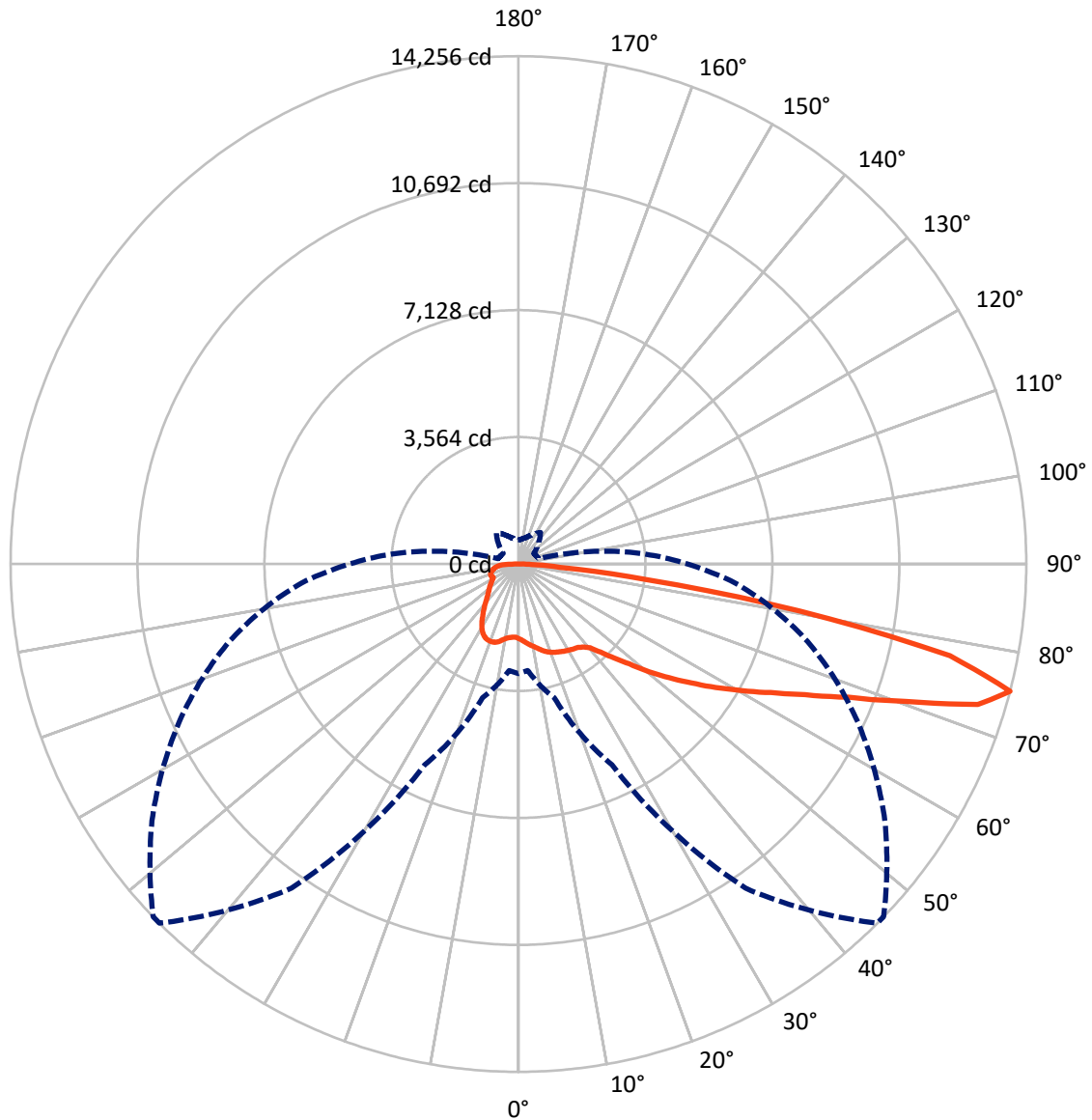
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc  
 Type IV - Medium - Non-Cutoff

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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
<b>House Side</b>	Lumens	4729.1	0.0	4729.1
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	15684.9	0.0	15684.9
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	20414.0	0.0	20414.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	207.4	1.0
10°-20°	672.1	3.3
20°-30°	1153.3	5.6
30°-40°	1612.9	7.9
40°-50°	2366.0	11.6
50°-60°	3685.7	18.1
60°-70°	5303.4	26.0
70°-80°	4619.8	22.6
80°-90°	793.4	3.9
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°	20414.0	100.0
0°-180°	20414.0	100.0



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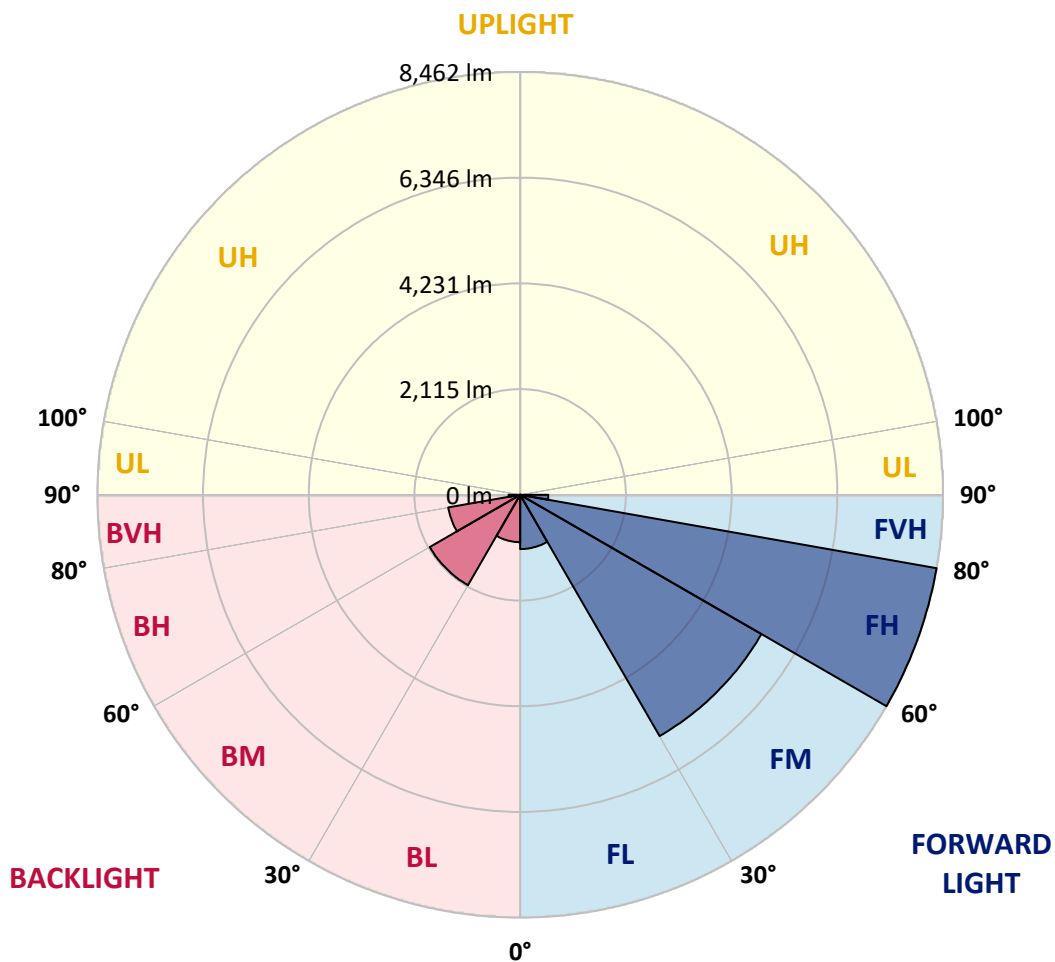
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1085.5	5.3			
FM	(30°-60°)	5574.7	27.3			
FH	(60°-80°)	8461.8	41.5			G4/12000
FVH	(80°-90°)	562.9	2.8			G4/750
BL	(0°-30°)	947.2	4.6	B2/1000		
BM	(30°-60°)	2090.0	10.2	B2/2500		
BH	(60°-80°)	1461.4	7.2	B3/2500		G3/2500
BVH	(80°-90°)	230.5	1.1			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2092.8	2092.8	2092.8	2092.8	2092.8	2092.8	2092.8	2092.8	2092.8	2092.8	2092.8
2.5°	2196.0	2180.1	2180.1	2168.1	2168.1	2148.3	2140.4	2136.4	2116.6	2104.6	2092.8
5°	2323.0	2303.2	2299.2	2271.5	2259.5	2215.8	2211.8	2184.1	2148.3	2112.6	2084.8
7.5°	2438.2	2426.3	2406.4	2378.7	2342.9	2287.3	2283.3	2239.6	2180.1	2132.4	2092.8
10°	2521.6	2513.7	2485.9	2450.1	2410.4	2354.8	2350.8	2303.2	2231.7	2176.1	2120.5
12.5°	2620.9	2608.9	2573.2	2525.6	2481.9	2430.2	2426.3	2386.5	2307.2	2235.7	2164.2
15°	2716.1	2700.3	2656.6	2608.9	2561.3	2517.6	2517.6	2473.9	2390.5	2307.2	2223.8
17.5°	2763.8	2755.9	2712.3	2660.6	2620.9	2589.1	2585.1	2545.4	2462.0	2374.7	2283.3
20°	2779.7	2783.7	2744.0	2688.4	2660.6	2644.7	2640.7	2612.9	2521.6	2438.2	2350.8
22.5°	2775.8	2787.6	2755.9	2696.3	2688.4	2688.4	2688.4	2656.6	2585.1	2501.7	2414.4
25°	2791.6	2807.5	2783.7	2712.3	2712.3	2728.1	2728.1	2712.3	2648.6	2577.2	2489.9
27.5°	2847.2	2859.1	2839.3	2740.0	2744.0	2767.8	2763.8	2767.8	2728.1	2660.6	2573.2
30°	2914.7	2930.7	2906.8	2783.7	2779.7	2803.5	2803.5	2823.3	2795.6	2724.1	2652.6
32.5°	3097.4	3093.4	3018.0	2831.3	2819.5	2843.3	2843.3	2863.1	2847.2	2791.6	2724.1
35°	3641.4	3581.9	3415.1	2986.2	2867.0	2879.0	2879.0	2914.7	2922.7	2879.0	2819.5
37.5°	4197.4	4177.5	4050.5	3399.2	3041.8	2954.5	2950.5	3002.1	3037.9	3002.1	2962.4
40°	4757.2	4741.4	4713.6	3951.1	3407.1	3089.4	3077.5	3121.2	3184.8	3160.9	3137.1
42.5°	5277.5	5269.5	5297.4	4495.2	3871.8	3379.3	3343.6	3292.0	3383.3	3375.3	3375.3
45°	5686.5	5706.3	5722.3	5003.5	4376.1	3752.6	3708.9	3534.2	3657.4	3689.1	3712.9
47.5°	5916.8	5932.7	5988.3	5499.9	4880.4	4185.4	4153.7	3867.8	4030.6	4125.9	4193.4
50°	6246.4	6202.8	6250.3	5984.4	5487.9	4749.4	4662.0	4316.4	4523.0	4689.8	4848.6
52.5°	6564.1	6492.6	6532.4	6544.2	6178.9	5301.3	5210.0	4844.6	5102.8	5364.9	5646.8
55°	6850.0	6846.0	6885.8	7088.2	6846.0	5893.0	5789.7	5428.4	5801.7	6083.6	6560.1
57.5°	7080.4	7120.0	7294.8	7719.7	7616.4	6536.2	6421.2	6107.4	6548.2	6830.1	7620.4
60°	7350.3	7413.8	7703.7	8255.7	8319.2	7211.4	7092.2	6865.8	7314.6	7600.5	8847.4
62.5°	7441.7	7533.0	8128.7	8819.6	9053.9	7950.0	7842.8	7691.9	8120.7	8378.9	10070.5
65°	6834.1	7008.8	8362.9	9109.5	9844.2	8839.5	8748.2	8617.1	8922.9	9093.6	10900.5
67.5°	6667.3	6746.8	7906.3	9526.4	10586.7	9983.2	9891.8	9665.5	9673.4	9601.9	11170.4
70°	6433.0	6520.4	7437.7	9840.2	11651.0	11547.7	11436.5	10769.4	10360.3	9927.5	10638.4
72.5°	5480.0	5452.2	6409.2	8994.4	12163.2	13485.6	13354.5	11956.8	10868.6	9645.6	8978.4
75°	3077.5	2998.2	3887.6	6222.6	11106.9	14255.9	14252.0	12556.3	10511.2	8402.6	6111.4
77.5°	893.4	869.6	1282.7	2608.9	7477.5	12385.6	12536.5	11325.3	8772.0	6035.9	3355.5
80°	420.9	428.8	552.0	861.7	3192.7	7993.6	8426.5	7457.6	5241.7	2783.7	1385.9
82.5°	266.1	270.1	377.3	556.0	1350.2	3629.5	3987.0	3355.5	2076.8	1203.2	611.5
85°	166.7	166.7	250.2	365.3	806.1	1159.5	1258.8	1143.7	889.6	655.2	333.6
87.5°	91.3	91.3	150.9	210.4	440.8	373.3	385.1	456.6	556.0	401.1	166.7
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°	2092.8	2092.8	2092.8	2092.8	2092.8	2092.8	2092.8	2092.8	2092.8	2092.8	2092.8
2.5°	2088.8	2080.8	2068.9	2064.9	2060.9	2056.9	2060.9	2068.9	2060.9	2060.9	2064.9
5°	2076.8	2068.9	2053.1	2053.1	2056.9	2060.9	2080.8	2092.8	2096.7	2096.7	2096.7
7.5°	2076.8	2064.9	2053.1	2056.9	2064.9	2080.8	2112.6	2132.4	2148.3	2152.3	2152.3
10°	2096.7	2080.8	2072.9	2080.8	2104.6	2116.6	2148.3	2180.1	2200.0	2207.8	2207.8
12.5°	2132.4	2116.6	2116.6	2132.4	2164.2	2180.1	2207.8	2231.7	2255.5	2267.5	2267.5
15°	2192.0	2172.1	2176.1	2203.9	2239.6	2255.5	2275.3	2283.3	2303.2	2319.0	2319.0
17.5°	2247.6	2227.8	2235.7	2267.5	2291.3	2299.2	2311.2	2307.2	2315.1	2327.0	2331.0
20°	2311.2	2291.3	2295.3	2315.1	2319.0	2311.2	2311.2	2299.2	2295.3	2315.1	2323.0
22.5°	2374.7	2354.8	2350.8	2339.0	2319.0	2299.2	2287.3	2275.3	2267.5	2287.3	2295.3
25°	2450.1	2422.3	2402.5	2350.8	2299.2	2263.5	2247.6	2239.6	2235.7	2255.5	2263.5
27.5°	2533.5	2505.7	2446.2	2335.0	2251.6	2192.0	2180.1	2180.1	2188.0	2200.0	2207.8
30°	2612.9	2585.1	2477.9	2299.2	2168.1	2080.8	2068.9	2080.8	2100.6	2112.6	2124.5
32.5°	2692.3	2664.6	2497.7	2243.6	2045.1	1933.9	1925.9	1945.8	1977.6	1985.5	1993.4
35°	2799.6	2771.8	2521.6	2164.2	1890.2	1771.0	1763.2	1775.0	1802.8	1814.7	1826.7
37.5°	2950.5	2934.5	2557.4	2076.8	1747.2	1616.2	1592.4	1584.4	1600.3	1596.3	1612.3
40°	3149.1	3160.9	2620.9	1961.7	1608.3	1473.3	1421.6	1397.8	1381.9	1350.2	1366.0
42.5°	3438.9	3446.8	2692.3	1830.7	1489.1	1338.2	1270.7	1227.0	1195.3	1143.7	1151.6
45°	3863.8	3796.3	2775.8	1691.7	1381.9	1231.0	1151.6	1100.0	1056.3	1012.6	1016.6
47.5°	4427.6	4221.2	2867.0	1576.5	1274.7	1143.7	1072.2	1012.6	961.0	925.3	929.2
50°	5122.6	4749.4	2958.4	1469.3	1167.5	1076.1	1012.6	949.1	897.4	861.7	857.7
52.5°	6039.9	5384.7	3018.0	1350.2	1060.3	1016.6	961.0	901.4	837.9	794.2	790.2
55°	6993.0	6123.3	3069.6	1207.2	957.0	949.1	921.3	853.8	778.4	722.7	714.7
57.5°	8041.3	6913.5	3109.3	1068.2	877.6	893.4	885.6	806.1	722.7	671.1	667.2
60°	8994.4	7731.6	2982.2	945.1	806.1	837.9	845.8	778.4	734.7	746.5	750.5
62.5°	9955.4	8362.9	2497.7	853.8	758.4	802.1	869.6	865.7	845.8	865.7	869.6
65°	10300.8	8494.0	1771.0	778.4	710.8	818.1	945.1	937.1	845.8	810.1	802.1
67.5°	10106.2	8104.8	1191.3	718.7	675.0	837.9	1024.5	937.1	814.1	766.4	750.5
70°	9181.0	7147.9	873.6	659.2	643.3	833.9	1068.2	933.2	798.2	746.5	726.7
72.5°	7322.6	5515.8	702.9	603.6	595.7	814.1	1092.0	925.3	782.3	726.7	702.9
75°	4741.4	3431.0	591.7	548.0	524.2	782.3	1080.1	901.4	762.4	691.0	675.0
77.5°	2200.0	1477.2	504.3	484.5	456.6	734.7	1044.3	853.8	718.7	651.2	631.4
80°	1024.5	698.9	424.9	420.9	409.0	694.9	996.8	798.2	667.2	611.5	579.8
82.5°	548.0	420.9	345.5	345.5	357.4	647.3	937.1	730.7	599.7	571.8	488.5
85°	289.9	242.2	250.2	270.1	305.8	571.8	857.7	659.2	524.2	436.8	424.9
87.5°	146.9	154.9	154.9	182.7	234.3	464.6	706.9	544.0	444.8	357.4	349.4
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)