

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: P236857

Luminaire Tested: **ARCH-L-AF72-240-D-U-T2R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P236857  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-240-D-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28434.9 lumens  
Efficiency: N/A  
Efficacy: 117.5 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium - Semi-Cutoff  
BUG Rating: B3 - U0 - G4

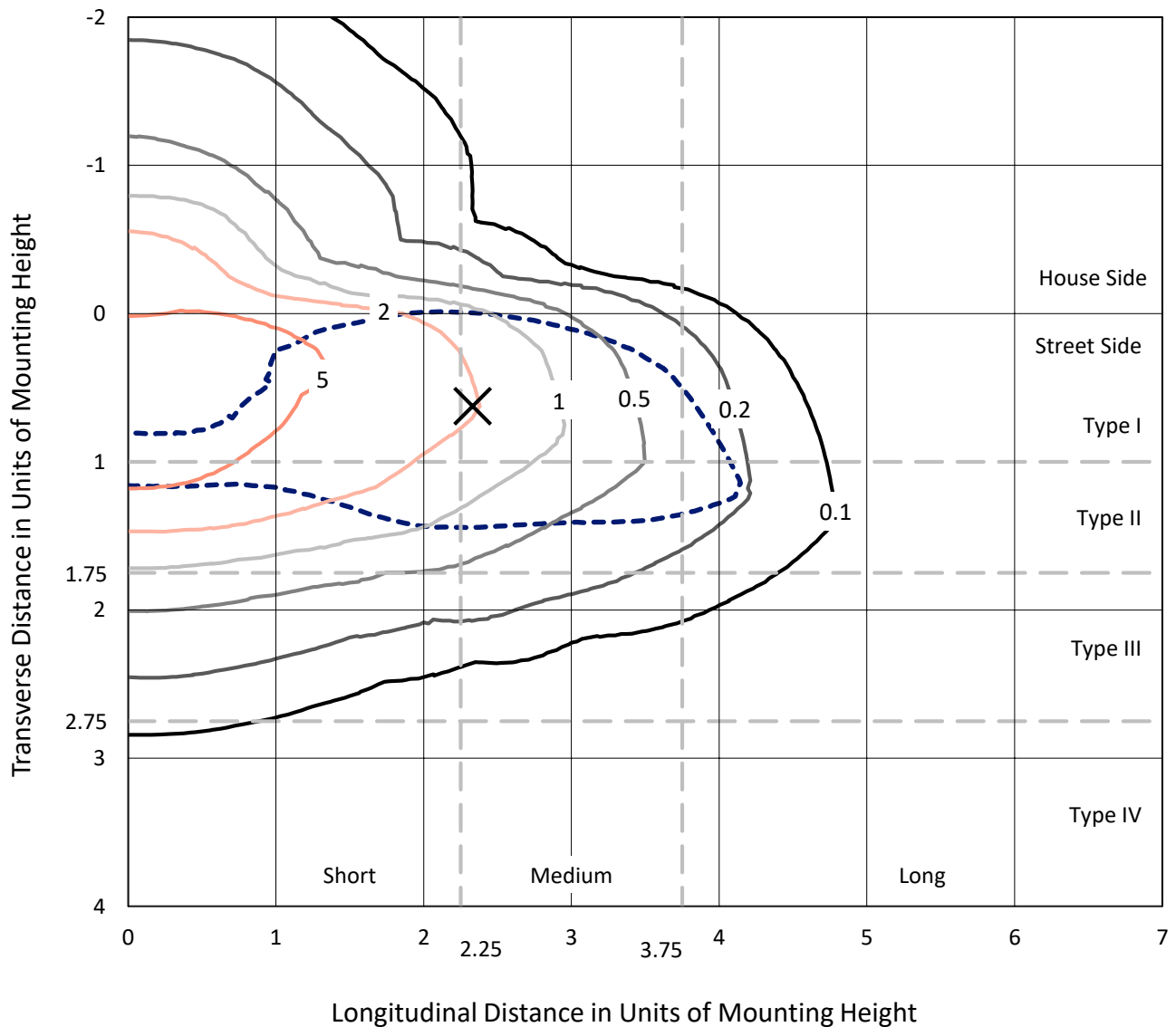
Input Watts (W): 242  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

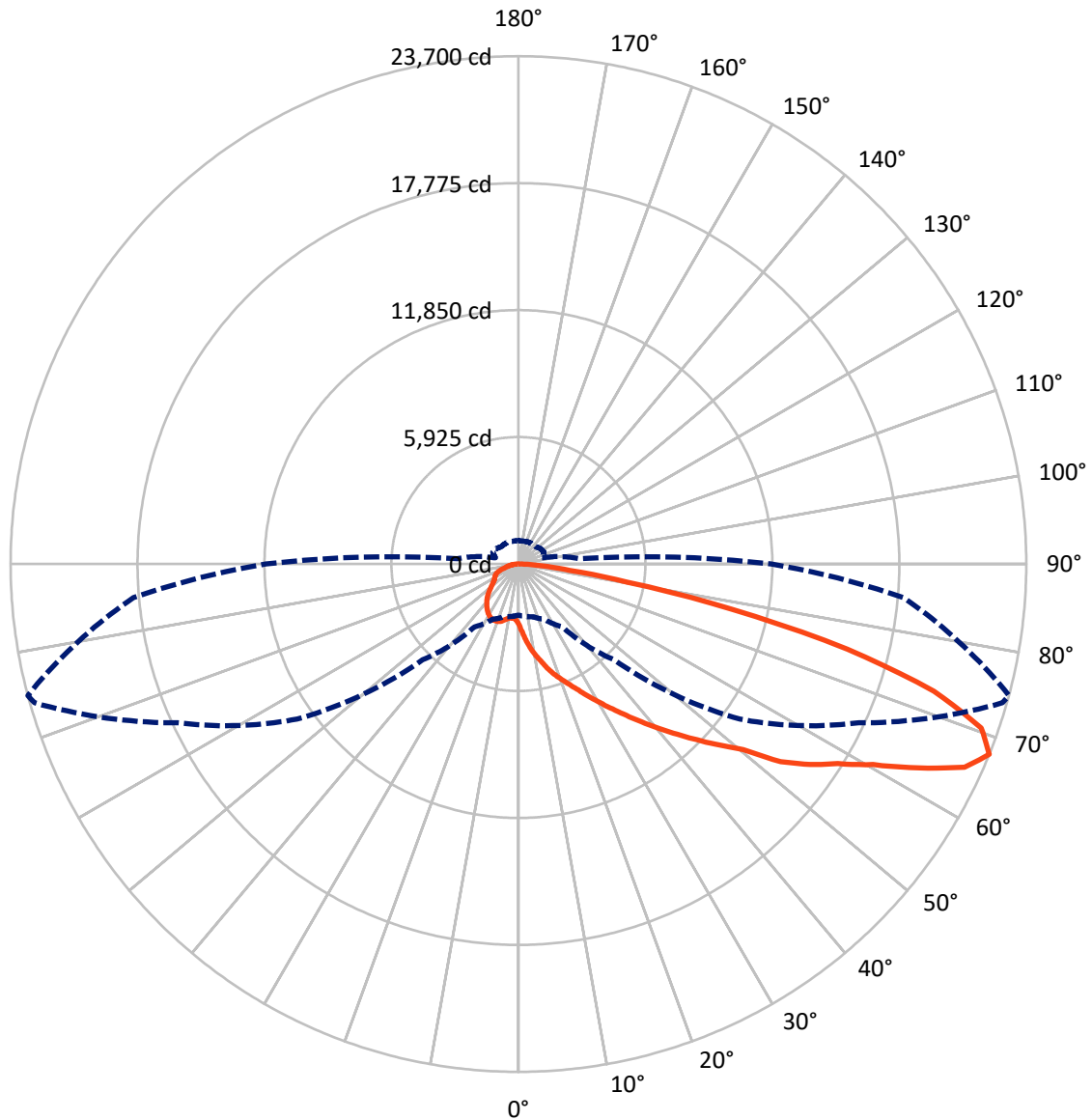


Based on 25 foot mounting height. Maximum calculated value = 9.4 fc  
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P236857

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2R

### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4855.6	0.0	4855.6
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	23579.3	0.0	23579.3
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	28434.9	0.0	28434.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	331.0	1.2
10°-20°	1196.2	4.2
20°-30°	2181.8	7.7
30°-40°	3581.3	12.6
40°-50°	5179.0	18.2
50°-60°	6103.5	21.5
60°-70°	5931.2	20.9
70°-80°	3296.9	11.6
80°-90°	633.9	2.2
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°	28434.9	100.0
0°-180°	28434.9	100.0



REPORT NUMBER: P236857

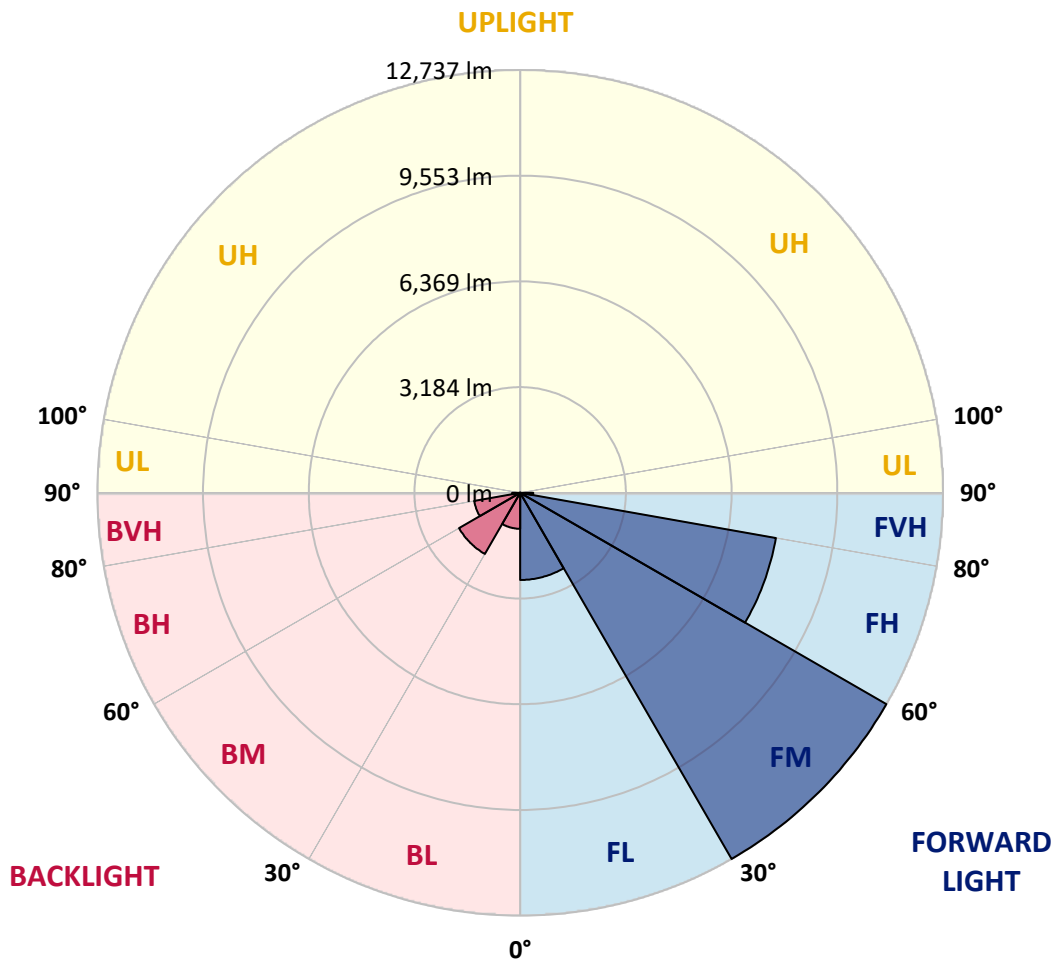
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2625.3	9.2			
FM	(30°-60°)	12737.4	44.8			
FH	(60°-80°)	7822.1	27.5			G4/12000
FVH	(80°-90°)	394.5	1.4			G3/500
BL	(0°-30°)	1083.8	3.8	B3/2500		
BM	(30°-60°)	2126.5	7.5	B2/2500		
BH	(60°-80°)	1405.9	4.9	B3/2500		G3/2500
BVH	(80°-90°)	239.4	0.8			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 II Medium





REPORT NUMBER: P236857

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6
2.5°	3994.6	4006.5	3982.8	3929.3	3851.9	3709.3	3584.4	3364.5	3168.4	3144.6	2936.5
5°	4696.1	4707.9	4678.3	4612.8	4529.6	4375.1	4202.7	3917.3	3602.3	3542.9	3102.9
7.5°	5177.6	5183.5	5147.8	5082.4	5017.1	4862.5	4690.1	4369.1	3982.8	3935.2	3316.9
10°	5587.7	5599.6	5552.1	5510.4	5439.1	5284.6	5106.2	4767.4	4369.1	4303.8	3536.9
12.5°	5968.1	5980.1	5950.3	5914.6	5890.9	5748.2	5552.1	5147.8	4719.8	4648.5	3798.4
15°	6223.7	6235.6	6241.5	6289.1	6318.9	6217.8	6021.6	5581.7	5100.2	5034.9	4107.6
17.5°	6152.4	6182.1	6271.3	6443.7	6628.0	6633.9	6473.4	6009.7	5474.7	5403.4	4422.6
20°	5944.4	5968.1	6075.1	6336.7	6699.3	6907.4	6895.5	6443.7	5825.5	5748.2	4713.9
22.5°	6116.7	6146.5	6146.5	6307.0	6663.6	7050.0	7204.5	6871.7	6176.2	6104.9	5005.2
25°	6853.9	6871.7	6746.9	6681.5	6812.2	7168.9	7460.2	7335.4	6604.2	6521.0	5320.2
27.5°	7882.2	7852.5	7697.9	7436.4	7293.7	7388.9	7686.0	7775.2	7097.5	6996.5	5647.1
30°	8904.7	8886.8	8708.5	8357.8	8036.8	7834.7	7935.7	8167.5	7632.5	7513.7	5962.2
32.5°	9861.7	9832.0	9635.8	9225.7	8863.1	8488.5	8292.3	8524.2	8203.2	8066.5	6312.9
35°	10741.5	10664.2	10468.1	10040.1	9665.6	9308.9	8827.3	8863.1	8821.4	8678.7	6699.3
37.5°	11454.8	11395.4	11181.4	10783.0	10384.8	10046.0	9540.7	9249.4	9487.2	9350.5	7145.1
40°	12084.8	12019.5	11799.5	11401.3	11032.7	10711.7	10313.5	9719.1	10236.2	10081.6	7644.4
42.5°	12560.4	12512.8	12334.5	11942.2	11585.5	11294.3	11098.1	10313.5	11014.9	10866.3	8191.3
45°	12816.0	12768.5	12673.3	12358.4	12031.3	11805.5	11823.4	11020.9	11829.3	11704.4	8839.2
47.5°	12501.0	12536.7	12619.8	12560.4	12358.4	12251.4	12471.3	11752.0	12738.8	12619.8	9540.7
50°	11656.9	11692.5	12025.4	12435.6	12506.9	12637.7	13053.8	12596.1	13701.7	13606.7	10408.5
52.5°	9582.3	9778.5	10699.9	11680.7	12352.3	12893.3	13701.7	13850.3	15324.5	15324.5	11942.2
55°	7240.2	7412.6	8464.8	10176.7	11752.0	12917.1	14177.3	14700.4	16495.6	16519.3	12744.7
57.5°	5867.0	5974.0	6491.2	8244.8	10491.8	12619.8	14742.1	15431.5	17470.5	17577.5	13779.0
60°	4761.4	4820.9	5159.7	6378.3	8750.1	11817.4	15146.2	16477.8	18861.5	19010.1	15098.7
62.5°	3828.2	3887.6	4113.5	4844.7	6865.7	10313.5	15074.9	17565.6	20716.1	20959.9	16828.5
65°	3055.3	3120.8	3269.4	3721.2	5088.4	8446.9	14343.7	18124.3	22636.2	22873.9	17975.7
67.5°	2383.7	2443.1	2544.2	2841.5	3584.4	6318.9	12613.9	17535.8	23498.1	23700.1	18035.1
70°	1801.1	1830.9	1914.0	2104.3	2562.0	4196.8	9873.6	15562.4	22725.3	22909.6	16846.4
72.5°	1396.9	1391.0	1438.6	1533.6	1789.2	2888.9	6544.7	12655.5	20092.0	20282.1	14373.5
75°	1141.3	1135.4	1165.1	1194.8	1295.9	1937.9	3863.8	9528.8	16216.2	15853.6	10783.0
77.5°	963.0	957.1	986.7	992.7	1034.3	1337.5	2199.4	6271.3	10818.7	10194.6	6075.1
80°	814.4	808.4	844.1	856.0	885.7	980.8	1266.1	3394.3	5433.1	5147.8	2900.9
82.5°	612.2	636.1	701.4	731.2	766.8	725.2	784.7	1498.0	2520.4	2407.5	1260.2
85°	297.2	350.7	529.1	588.5	630.1	457.7	535.0	707.4	1135.4	1081.9	511.2
87.5°	101.1	89.2	315.1	374.5	410.2	208.1	297.2	392.3	469.6	428.0	160.5
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: P236857

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2R

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6	2817.6
2.5°	2847.4	2758.2	2627.4	2526.4	2461.0	2407.5	2383.7	2377.7	2365.9	2359.9	2359.9
5°	2906.8	2746.3	2544.2	2437.2	2407.5	2383.7	2395.5	2401.5	2401.5	2401.5	2401.5
7.5°	2995.9	2770.0	2526.4	2455.0	2449.0	2449.0	2484.7	2502.5	2514.4	2514.4	2514.4
10°	3114.9	2811.7	2556.0	2496.6	2514.4	2526.4	2567.9	2591.7	2603.6	2609.5	2615.5
12.5°	3275.4	2900.9	2615.5	2567.9	2591.7	2597.7	2627.4	2639.3	2651.2	2657.1	2657.1
15°	3489.4	3031.6	2710.6	2651.2	2657.1	2651.2	2651.2	2639.3	2633.4	2633.4	2645.2
17.5°	3709.3	3156.4	2793.9	2710.6	2686.9	2639.3	2603.6	2573.9	2556.0	2544.2	2550.1
20°	3929.3	3269.4	2841.5	2722.5	2657.1	2579.9	2514.4	2472.9	2449.0	2425.3	2437.2
22.5°	4149.2	3376.4	2859.2	2686.9	2591.7	2478.8	2407.5	2342.0	2288.5	2252.9	2258.9
25°	4392.9	3495.3	2859.2	2645.2	2502.5	2383.7	2294.5	2187.5	2110.2	2080.5	2092.4
27.5°	4636.6	3596.4	2829.5	2567.9	2401.5	2282.6	2151.9	2027.0	1979.5	1961.6	1967.5
30°	4880.3	3673.6	2764.1	2472.9	2294.5	2163.7	1991.4	1908.1	1848.7	1801.1	1807.0
32.5°	5124.1	3727.1	2674.9	2354.0	2181.5	2015.1	1872.5	1777.4	1670.4	1610.9	1616.9
35°	5403.4	3768.8	2567.9	2235.0	2056.7	1884.4	1777.4	1622.8	1509.9	1462.3	1450.4
37.5°	5694.7	3798.4	2455.0	2104.3	1931.9	1789.2	1682.2	1492.1	1385.1	1319.6	1313.7
40°	6009.7	3810.3	2318.3	1967.5	1813.1	1729.8	1557.4	1414.7	1230.5	1188.9	1188.9
42.5°	6384.2	3804.4	2181.5	1830.9	1682.2	1593.0	1468.2	1402.9	1242.4	1200.7	1177.0
45°	6812.2	3804.4	2033.0	1670.4	1551.5	1420.7	1367.2	1325.6	1218.6	1236.4	1248.3
47.5°	7299.7	3792.5	1854.6	1539.5	1444.5	1331.6	1301.8	1212.6	1171.1	1182.9	1194.8
50°	7971.3	3810.3	1694.1	1432.5	1367.2	1272.1	1236.4	1188.9	1171.1	1177.0	1171.1
52.5°	8904.7	3750.9	1539.5	1367.2	1307.7	1182.9	1182.9	1177.0	1182.9	1177.0	1177.0
55°	9415.9	3620.1	1426.6	1331.6	1266.1	1141.3	1165.1	1177.0	1188.9	1182.9	1182.9
57.5°	10141.1	3530.9	1337.5	1307.7	1242.4	1129.4	1153.2	1177.0	1182.9	1177.0	1177.0
60°	10997.0	3471.5	1278.1	1313.7	1224.6	1129.4	1159.1	1177.0	1171.1	1165.1	1165.1
62.5°	11989.8	3447.8	1236.4	1331.6	1206.7	1135.4	1159.1	1177.0	1153.2	1147.2	1147.2
65°	12364.3	3233.8	1182.9	1343.4	1218.6	1135.4	1153.2	1159.1	1129.4	1123.5	1117.6
67.5°	11787.7	2865.2	1105.6	1319.6	1254.2	1135.4	1135.4	1129.4	1093.7	1087.8	1075.9
70°	10497.7	2377.7	986.7	1242.4	1278.1	1141.3	1111.6	1081.9	1046.2	1046.2	1022.4
72.5°	8595.5	1872.5	832.2	1105.6	1260.2	1159.1	1064.1	1022.4	980.8	980.8	957.1
75°	6194.1	1396.9	665.7	921.4	1182.9	1153.2	1004.6	951.1	903.6	897.6	867.9
77.5°	3530.9	980.8	540.9	719.2	1052.1	1123.5	951.1	867.9	814.4	796.6	778.7
80°	1813.1	659.8	439.9	564.7	873.8	1040.2	909.5	772.7	713.3	683.6	653.9
82.5°	861.9	439.9	338.8	416.1	659.8	909.5	856.0	665.7	600.4	564.7	529.1
85°	386.4	261.6	225.9	267.5	469.6	707.4	754.9	546.9	469.6	588.5	433.9
87.5°	124.8	118.9	118.9	124.8	225.9	309.1	552.8	404.2	374.5	309.1	261.6
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)