

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: P400489

Luminaire Tested: **ARCH-L-PA3-90-727-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400489  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-90-727-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 400mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13084 lumens  
Efficiency: N/A  
Efficacy: 140.7 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G2

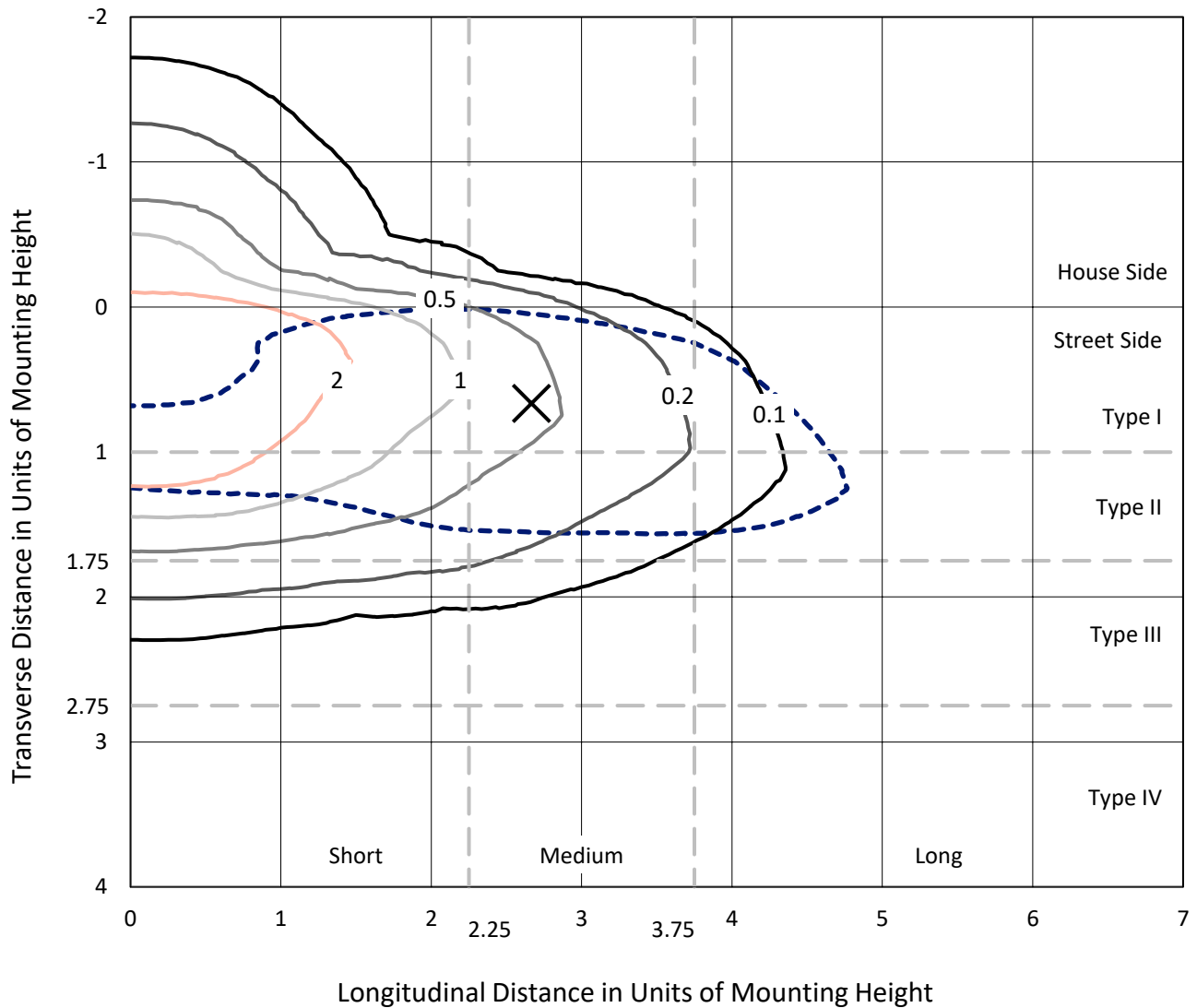
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

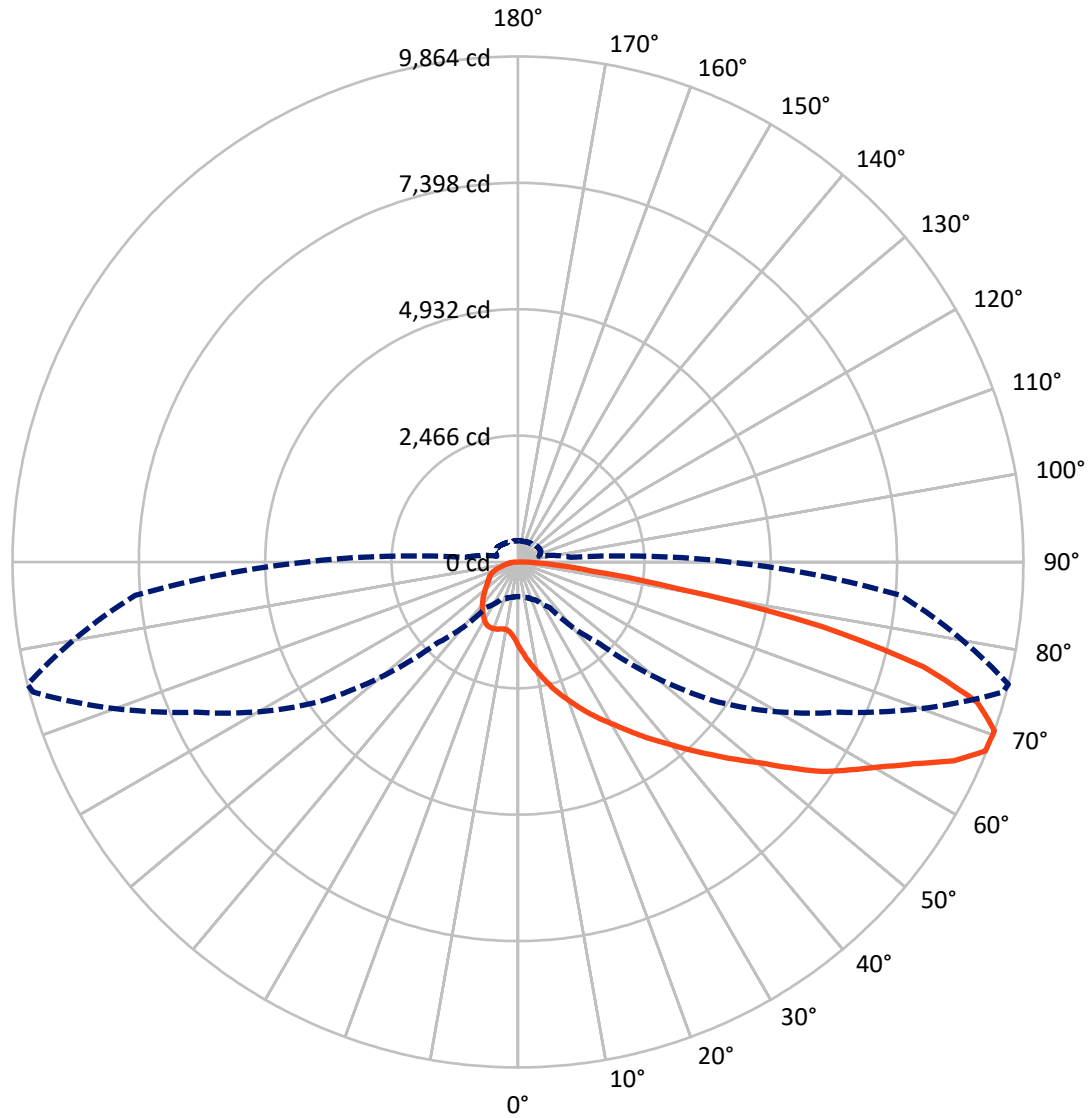
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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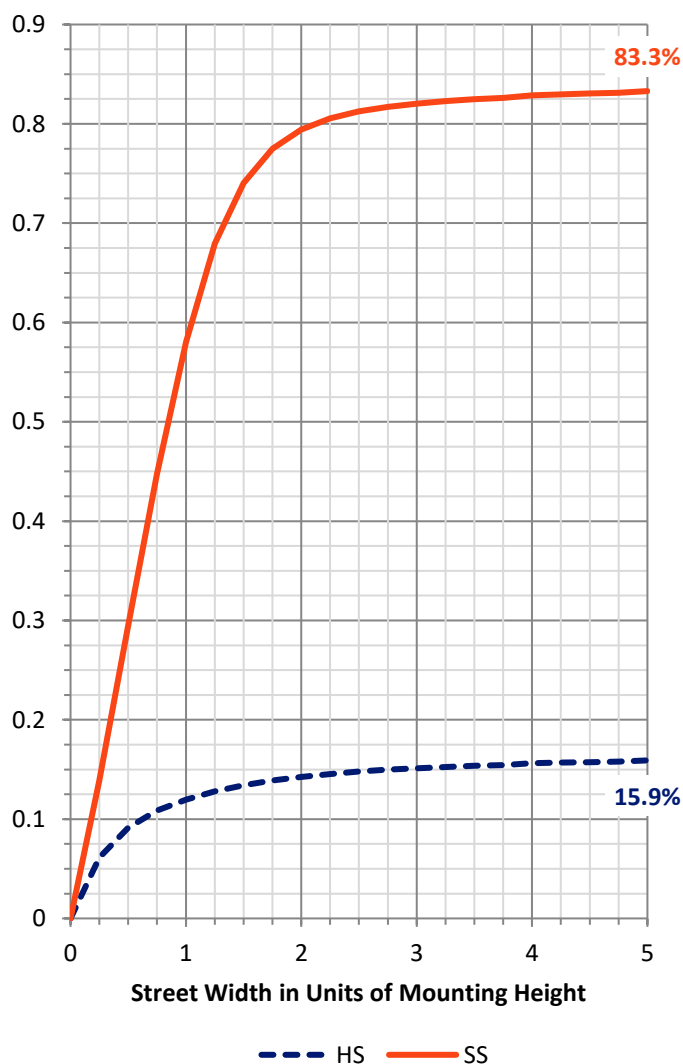
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2136.1	0.0	2136.1
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	10947.9	0.0	10947.9
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	13084.0	0.0	13084.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	170.0	1.3
10°-20°	577.8	4.4
20°-30°	1033.8	7.9
30°-40°	1672.3	12.8
40°-50°	2419.2	18.5
50°-60°	2768.9	21.2
60°-70°	2547.1	19.5
70°-80°	1575.1	12.0
80°-90°	319.8	2.4
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°	13084.0	100.0
0°-180°	13084.0	100.0

**Coefficient of Utilization**



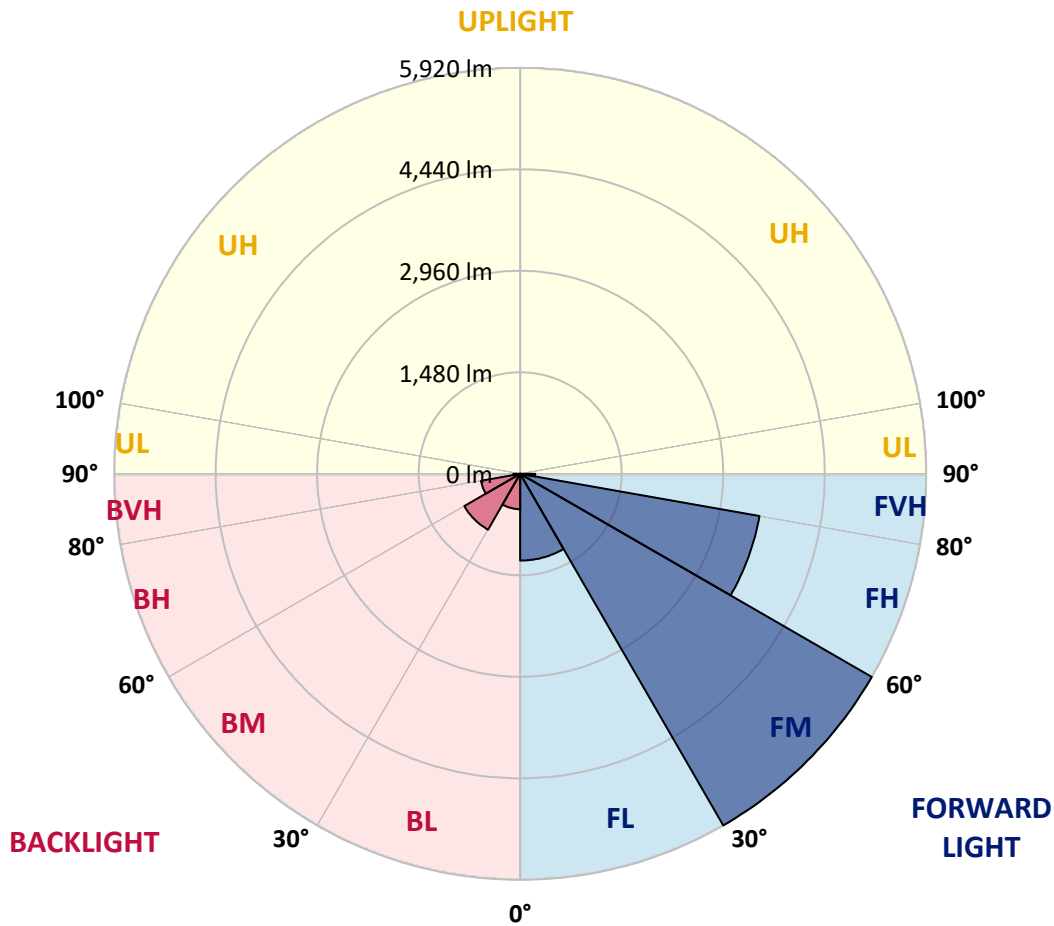
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1265.7	9.7			
FM (30°-60°)	5919.9	45.2			
FH (60°-80°)	3542.8	27.1			G2/5000
FVH (80°-90°)	219.6	1.7			G2/225
BL (0°-30°)	515.9	3.9	B2/1000		
BM (30°-60°)	940.5	7.2	B1/1000		
BH (60°-80°)	579.4	4.4	B2/1000		G2/1000
BVH (80°-90°)	100.3	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1636.2	1636.2	1636.2	1636.2	1636.2	1636.2	1636.2	1636.2	1636.2	1636.2	1636.2
2.5°	2085.3	2069.8	2068.1	2044.0	2021.6	1961.4	1918.4	1842.7	1767.0	1765.2	1689.5
5°	2410.4	2395.0	2386.4	2357.1	2319.3	2240.1	2162.7	2045.7	1916.7	1908.1	1765.2
7.5°	2630.7	2616.9	2599.7	2587.7	2551.5	2481.0	2386.4	2247.0	2069.8	2052.6	1853.0
10°	2778.6	2770.0	2766.6	2758.0	2735.6	2678.8	2587.7	2439.7	2222.9	2204.0	1945.9
12.5°	2842.3	2838.9	2854.3	2878.4	2887.0	2864.7	2776.9	2637.6	2391.5	2370.9	2057.7
15°	2768.3	2771.8	2811.3	2893.9	2981.7	3029.8	2978.2	2842.3	2582.5	2553.2	2188.5
17.5°	2733.9	2739.1	2766.6	2845.7	2969.6	3119.3	3143.4	3036.7	2766.6	2725.3	2326.1
20°	2794.1	2801.0	2821.6	2883.6	2969.6	3129.6	3255.2	3222.5	2947.2	2904.2	2458.6
22.5°	2947.2	2955.8	2954.1	2993.7	3052.2	3162.3	3317.2	3398.0	3136.5	3088.3	2596.3
25°	3274.1	3267.3	3208.8	3189.8	3205.3	3275.9	3399.7	3566.6	3334.4	3286.2	2740.8
27.5°	3718.0	3709.4	3602.8	3506.4	3420.4	3451.4	3516.7	3702.5	3535.7	3480.6	2878.4
30°	4192.9	4182.6	4058.7	3902.1	3711.2	3666.4	3657.8	3821.3	3738.7	3680.2	3024.7
32.5°	4655.7	4647.1	4514.6	4332.3	4069.0	3934.8	3852.2	3953.7	3969.2	3912.5	3184.7
35°	5077.2	5077.2	4963.7	4746.9	4449.3	4246.2	4110.3	4117.2	4234.2	4168.8	3367.0
37.5°	5452.3	5450.6	5326.7	5113.4	4827.8	4595.5	4426.9	4315.1	4487.1	4430.3	3558.0
40°	5750.0	5737.9	5646.7	5460.9	5173.6	4943.0	4772.7	4547.3	4769.3	4717.7	3761.0
42.5°	5966.7	5959.9	5897.9	5736.2	5462.6	5245.9	5128.9	4839.8	5089.3	5037.7	3998.5
45°	6051.1	6064.8	6064.8	5911.7	5694.9	5497.0	5445.4	5161.5	5435.1	5383.5	4253.1
47.5°	5915.1	5951.3	6025.2	6035.6	5844.6	5710.4	5727.6	5485.0	5791.3	5763.7	4531.8
50°	5490.2	5557.3	5719.0	6011.5	5904.8	5873.8	5968.5	5815.3	6173.2	6164.6	4870.8
52.5°	4394.2	4557.6	5061.8	5586.5	5863.5	5949.5	6207.6	6187.0	6665.3	6679.0	5313.0
55°	3370.5	3432.4	4015.7	4908.6	5610.6	5925.5	6367.6	6550.0	7198.6	7215.8	5719.0
57.5°	2725.3	2766.6	3084.9	4015.7	5034.2	5794.7	6493.2	6761.6	7608.1	7652.9	6080.3
60°	2159.2	2219.5	2432.8	3072.8	4227.3	5479.8	6581.0	6997.3	8048.6	8115.7	6512.2
62.5°	1605.2	1634.5	1835.8	2276.2	3346.4	4913.8	6534.5	7253.7	8588.8	8669.7	7031.7
65°	1142.4	1168.2	1311.0	1619.0	2474.1	4148.2	6264.4	7444.7	9266.7	9349.3	7554.8
67.5°	855.1	865.4	946.3	1132.1	1667.2	3222.5	5717.3	7412.0	9762.2	9836.2	7764.7
70°	676.2	679.6	719.2	819.0	1083.9	2243.6	4758.9	6932.0	9798.3	9863.7	7499.7
72.5°	560.9	559.2	581.5	629.7	755.3	1419.4	3525.3	6040.7	9333.8	9378.5	6759.9
75°	462.8	466.3	481.7	509.3	576.4	936.0	2284.8	4819.2	8234.4	8186.2	5672.5
77.5°	388.8	387.1	394.0	418.1	466.3	672.7	1338.6	3482.3	6102.7	6078.6	3723.2
80°	313.1	316.6	326.9	347.5	392.3	512.7	791.4	2173.0	3274.1	3186.4	1779.0
82.5°	209.9	242.6	263.2	287.3	338.9	378.5	502.4	1104.6	1464.2	1441.8	806.9
85°	99.8	132.5	196.1	223.7	275.3	237.4	340.7	526.5	732.9	724.3	290.8
87.5°	20.6	20.6	105.0	125.6	170.3	101.5	189.3	228.8	354.4	332.1	118.7
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°	1636.2	1636.2	1636.2	1636.2	1636.2	1636.2	1636.2	1636.2	1636.2	1636.2	1636.2
2.5°	1644.8	1598.4	1505.5	1431.5	1355.8	1312.8	1259.4	1233.6	1228.4	1214.7	1225.0
5°	1674.1	1582.9	1407.4	1292.1	1214.7	1176.8	1157.9	1151.0	1149.3	1145.9	1145.9
7.5°	1713.6	1574.3	1345.4	1228.4	1178.6	1166.5	1171.7	1182.0	1183.7	1187.2	1185.4
10°	1761.8	1576.0	1311.0	1213.0	1188.9	1190.6	1207.8	1221.6	1228.4	1233.6	1231.9
12.5°	1828.9	1596.6	1305.9	1223.3	1213.0	1219.8	1237.1	1250.8	1257.7	1259.4	1259.4
15°	1916.7	1639.7	1317.9	1245.7	1237.1	1242.2	1252.5	1257.7	1259.4	1257.7	1257.7
17.5°	2013.0	1691.3	1335.1	1259.4	1245.7	1240.5	1237.1	1231.9	1221.6	1214.7	1214.7
20°	2105.9	1737.7	1343.7	1257.7	1233.6	1213.0	1192.3	1166.5	1149.3	1135.5	1135.5
22.5°	2198.8	1780.7	1343.7	1238.8	1200.9	1161.3	1118.3	1077.0	1051.2	1034.0	1034.0
25°	2296.9	1822.0	1333.4	1206.1	1149.3	1092.5	1034.0	982.4	956.6	939.4	936.0
27.5°	2379.5	1846.1	1305.9	1159.6	1085.6	1013.4	946.3	892.9	874.0	858.5	858.5
30°	2467.2	1861.6	1254.3	1099.4	1013.4	930.8	862.0	819.0	798.3	776.0	774.2
32.5°	2565.3	1871.9	1195.8	1035.8	939.4	851.7	793.2	758.7	714.0	689.9	686.5
35°	2678.8	1885.7	1133.8	963.5	865.4	786.3	751.9	695.1	652.1	631.4	629.7
37.5°	2799.3	1896.0	1066.7	899.8	798.3	743.3	708.9	641.8	603.9	572.9	569.5
40°	2926.6	1896.0	997.9	837.9	745.0	724.3	659.0	598.7	535.1	519.6	516.2
42.5°	3067.7	1892.6	929.1	777.7	695.1	681.3	629.7	566.0	533.4	519.6	516.2
45°	3217.4	1880.5	863.7	708.9	643.5	615.9	576.4	559.2	545.4	545.4	545.4
47.5°	3387.7	1870.2	789.7	646.9	605.6	574.7	545.4	535.1	533.4	538.5	543.7
50°	3606.2	1866.8	727.8	602.2	576.4	540.2	536.8	528.2	529.9	529.9	529.9
52.5°	3871.2	1835.8	669.3	569.5	547.1	504.1	514.4	523.0	526.5	524.8	523.0
55°	4065.6	1780.7	619.4	547.1	526.5	490.3	504.1	517.9	521.3	516.2	516.2
57.5°	4241.1	1703.3	579.8	529.9	512.7	481.7	497.2	511.0	507.6	505.8	504.1
60°	4442.4	1629.3	548.8	521.3	498.9	478.3	492.1	500.7	495.5	492.1	490.3
62.5°	4660.9	1557.1	526.5	521.3	488.6	476.6	486.9	490.3	480.0	476.6	476.6
65°	4762.4	1443.5	502.4	521.3	483.5	473.1	476.6	473.1	462.8	462.8	461.1
67.5°	4595.5	1256.0	471.4	514.4	490.3	468.0	461.1	455.9	443.9	443.9	440.5
70°	4134.4	1032.3	426.7	492.1	492.1	466.3	440.5	428.4	414.6	419.8	412.9
72.5°	3532.2	819.0	371.6	454.2	481.7	464.5	418.1	399.2	387.1	392.3	382.0
75°	2861.2	634.9	306.3	394.0	455.9	455.9	395.7	369.9	356.1	356.1	344.1
77.5°	1823.7	469.7	249.5	326.9	409.5	443.9	376.8	337.2	316.6	311.4	302.8
80°	903.3	330.3	204.7	259.8	349.3	416.4	363.0	299.4	270.1	259.8	244.3
82.5°	480.0	228.8	163.4	203.0	278.7	375.1	345.8	258.1	221.9	206.5	189.3
85°	215.1	141.1	130.8	154.8	211.6	308.0	311.4	211.6	170.3	203.0	149.7
87.5°	79.1	63.7	63.7	79.1	122.2	129.0	220.2	135.9	108.4	74.0	58.5
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)