

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: P400543

Luminaire Tested: **ARCH-L-PA3-90-830-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400543  
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-PA3-90-830-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 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: 12432 lumens  
Efficiency: N/A  
Efficacy: 133.7 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

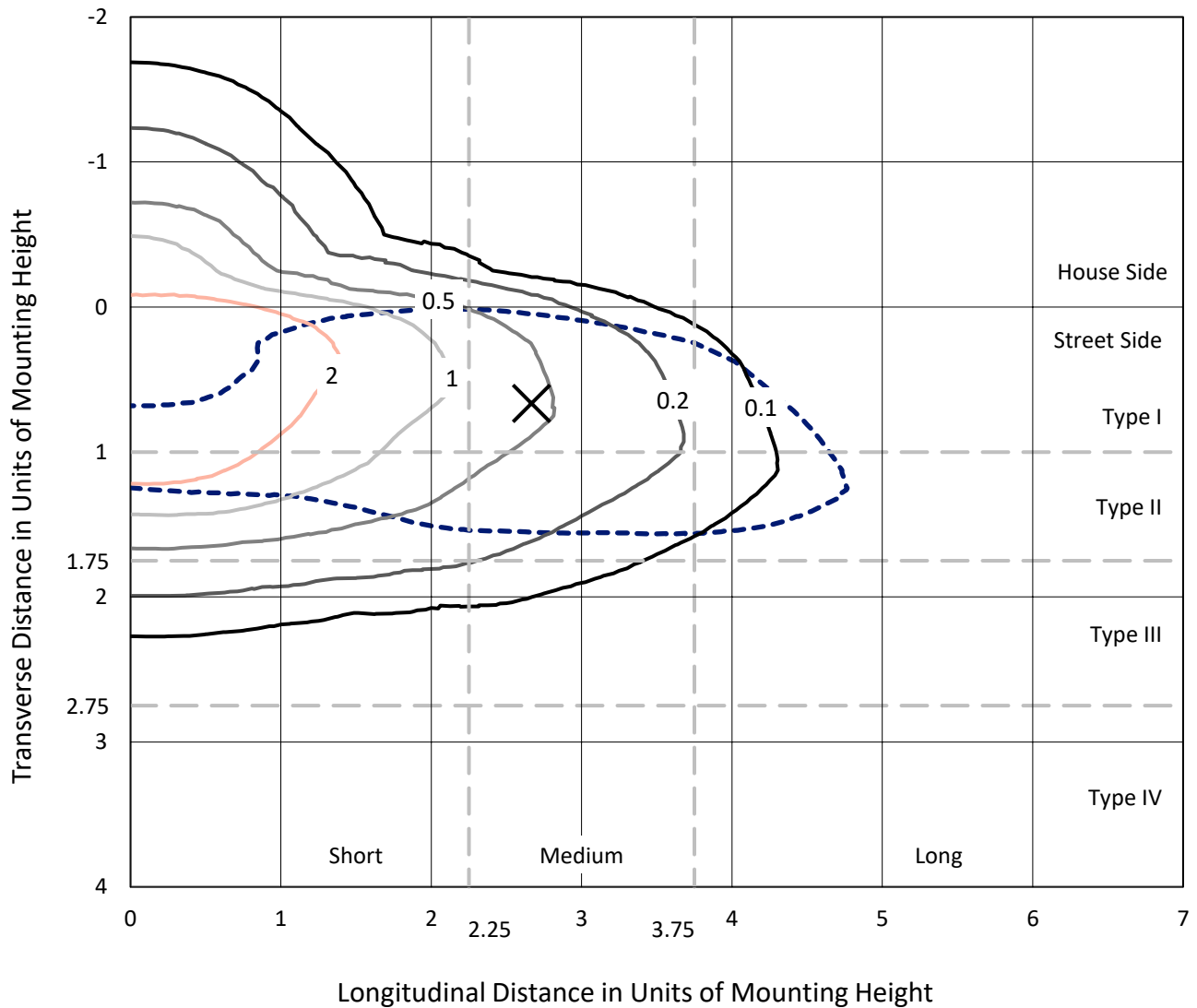
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

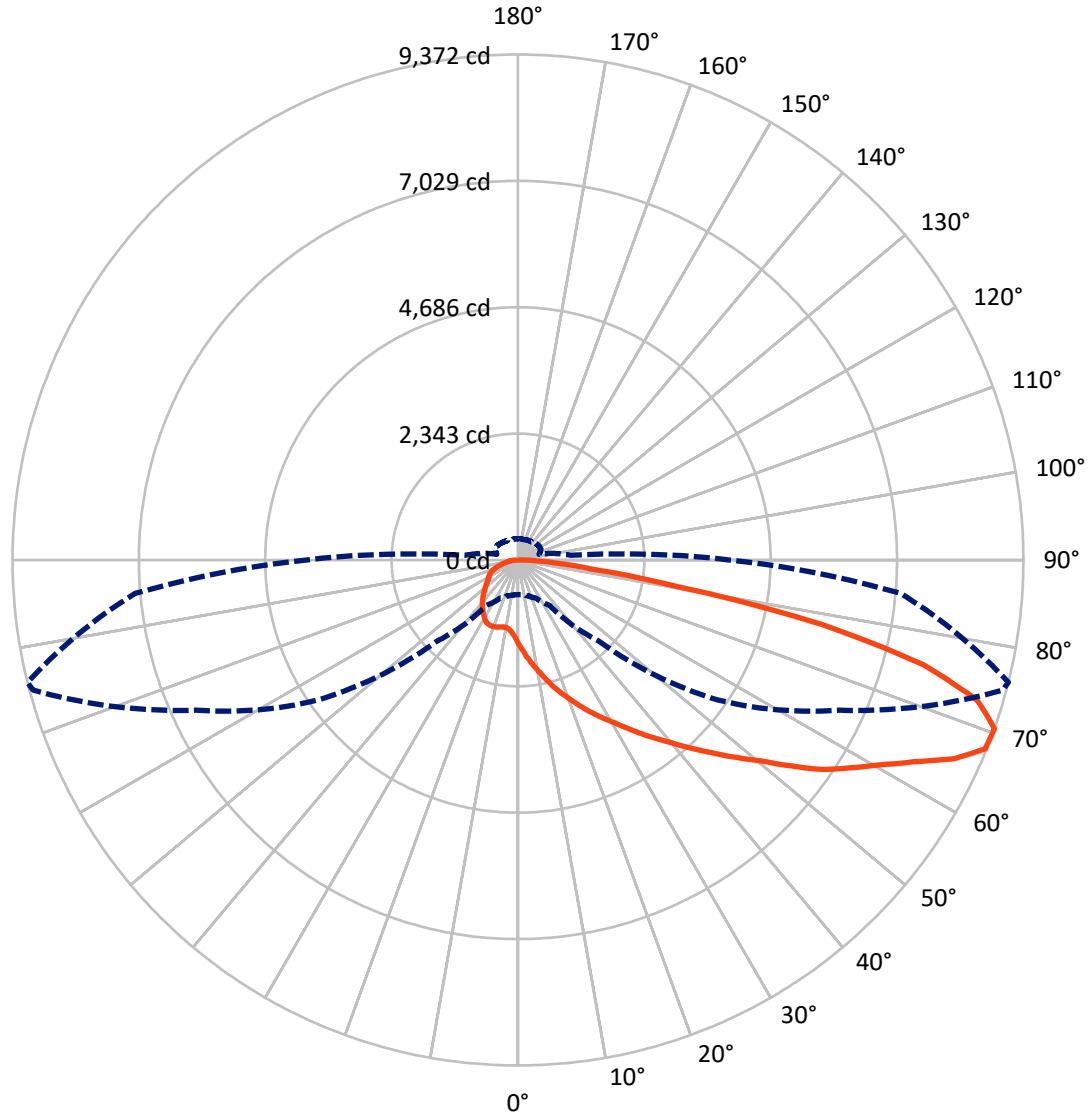
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 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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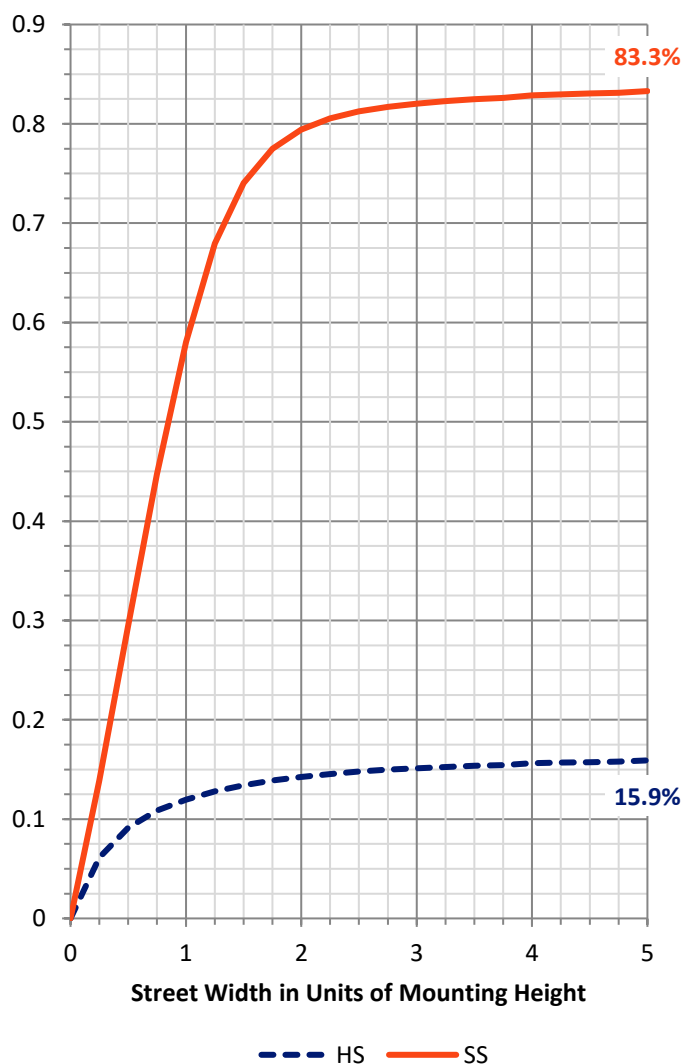
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2029.6	0.0	2029.6
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	10402.4	0.0	10402.4
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	12432.0	0.0	12432.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	161.5	1.3
10°-20°	549.0	4.4
20°-30°	982.3	7.9
30°-40°	1588.9	12.8
40°-50°	2298.6	18.5
50°-60°	2630.9	21.2
60°-70°	2420.2	19.5
70°-80°	1496.6	12.0
80°-90°	303.9	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°	12432.0	100.0
0°-180°	12432.0	100.0

**Coefficient of Utilization**

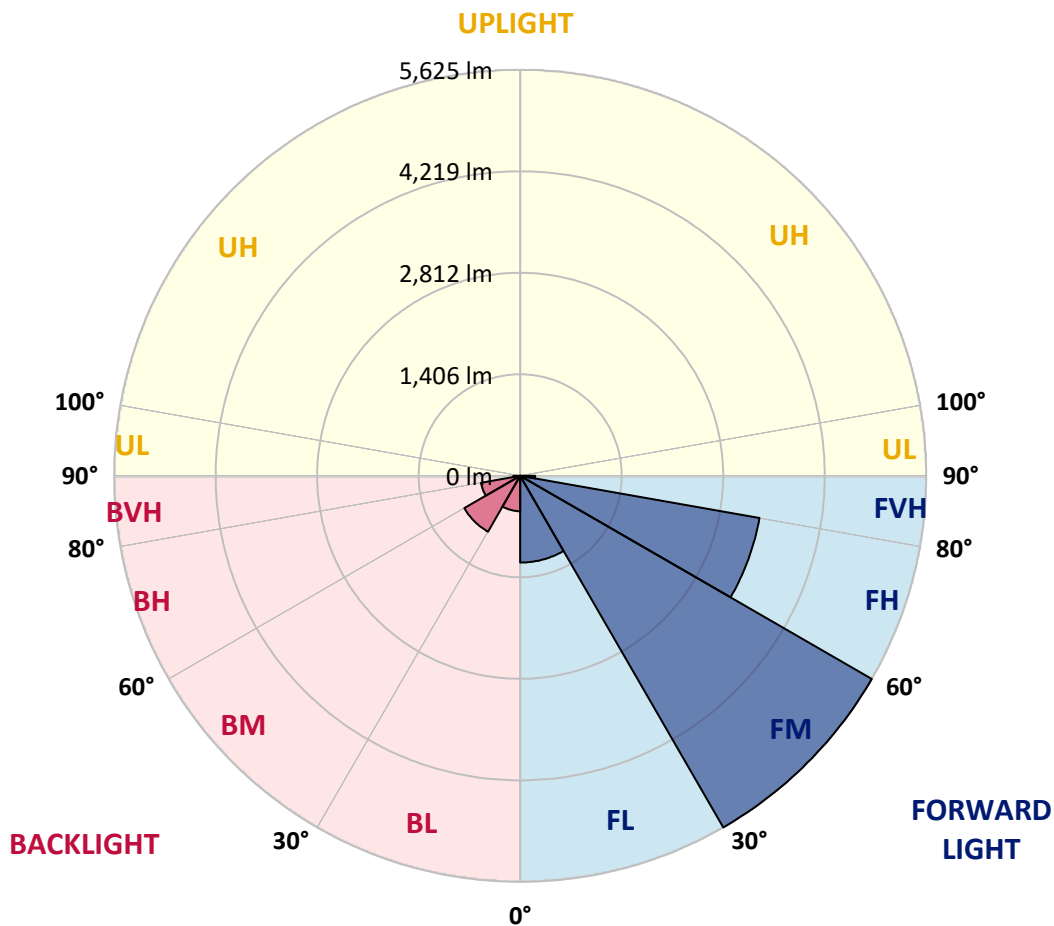


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1202.6	9.7			
FM (30°-60°)	5624.9	45.2			
FH (60°-80°)	3366.2	27.1			G2/5000
FVH (80°-90°)	208.6	1.7			G2/225
BL (0°-30°)	490.2	3.9	B1/500		
BM (30°-60°)	893.6	7.2	B1/1000		
BH (60°-80°)	550.5	4.4	B2/1000		G2/1000
BVH (80°-90°)	95.3	0.8			G1/100
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°	1554.7	1554.7	1554.7	1554.7	1554.7	1554.7	1554.7	1554.7	1554.7	1554.7	1554.7
2.5°	1981.4	1966.6	1965.0	1942.1	1920.9	1863.6	1822.8	1750.8	1678.9	1677.3	1605.4
5°	2290.3	2275.6	2267.4	2239.6	2203.7	2128.5	2054.9	1943.8	1821.1	1813.0	1677.3
7.5°	2499.6	2486.5	2470.2	2458.7	2424.4	2357.4	2267.4	2135.0	1966.6	1950.3	1760.7
10°	2640.2	2632.0	2628.7	2620.6	2599.3	2545.4	2458.7	2318.1	2112.1	2094.2	1848.9
12.5°	2700.7	2697.4	2712.1	2735.0	2743.2	2721.9	2638.5	2506.1	2272.3	2252.7	1955.2
15°	2630.4	2633.6	2671.2	2749.7	2833.1	2878.8	2829.8	2700.7	2453.8	2426.0	2079.4
17.5°	2597.7	2602.6	2628.7	2703.9	2821.6	2963.9	2986.7	2885.4	2628.7	2589.5	2210.2
20°	2654.9	2661.4	2681.0	2739.9	2821.6	2973.7	3093.0	3061.9	2800.4	2759.5	2336.1
22.5°	2800.4	2808.6	2806.9	2844.5	2900.1	3004.7	3151.9	3228.7	2980.2	2934.4	2466.9
25°	3111.0	3104.4	3048.9	3030.9	3045.6	3112.6	3230.3	3388.9	3168.2	3122.4	2604.2
27.5°	3532.8	3524.6	3423.2	3331.7	3249.9	3279.4	3341.5	3518.0	3359.5	3307.2	2735.0
30°	3984.0	3974.1	3856.4	3707.7	3526.2	3483.7	3475.5	3630.8	3552.4	3496.8	2873.9
32.5°	4423.7	4415.5	4289.7	4116.4	3866.3	3738.7	3660.3	3756.7	3771.4	3717.5	3026.0
35°	4824.2	4824.2	4716.3	4510.4	4227.5	4034.6	3905.5	3912.0	4023.2	3961.1	3199.3
37.5°	5180.6	5179.0	5061.3	4858.6	4587.2	4366.5	4206.3	4100.0	4263.5	4209.6	3380.7
40°	5463.4	5452.0	5365.3	5188.8	4915.8	4696.7	4534.9	4320.7	4531.6	4482.6	3573.6
42.5°	5669.4	5662.9	5604.0	5450.4	5190.4	4984.4	4873.3	4598.6	4835.7	4786.6	3799.2
45°	5749.5	5762.6	5762.6	5617.1	5411.1	5223.1	5174.1	4904.3	5164.3	5115.2	4041.2
47.5°	5620.4	5654.7	5725.0	5734.8	5553.3	5425.8	5442.2	5211.7	5502.7	5476.5	4306.0
50°	5216.6	5280.3	5434.0	5711.9	5610.6	5581.1	5671.0	5525.6	5865.6	5857.4	4628.1
52.5°	4175.2	4330.5	4809.5	5308.1	5571.3	5653.1	5898.3	5878.7	6333.1	6346.2	5048.2
55°	3202.5	3261.4	3815.6	4664.0	5331.0	5630.2	6050.3	6223.6	6839.9	6856.3	5434.0
57.5°	2589.5	2628.7	2931.2	3815.6	4783.4	5505.9	6169.7	6424.7	7229.0	7271.5	5777.3
60°	2051.6	2108.9	2311.6	2919.7	4016.7	5206.8	6253.0	6648.6	7647.5	7711.3	6187.6
62.5°	1525.2	1553.0	1744.3	2162.8	3179.6	4668.9	6208.9	6892.2	8160.8	8237.7	6681.3
65°	1085.5	1110.0	1245.7	1538.3	2350.8	3941.5	5952.2	7073.7	8804.9	8883.4	7178.3
67.5°	812.5	822.3	899.1	1075.7	1584.1	3061.9	5432.4	7042.6	9275.7	9346.0	7377.8
70°	642.5	645.7	683.3	778.2	1029.9	2131.8	4521.8	6586.5	9310.1	9372.2	7126.0
72.5°	532.9	531.3	552.6	598.3	717.7	1348.7	3349.7	5739.7	8868.7	8911.2	6423.0
75°	439.8	443.0	457.7	483.9	547.7	889.3	2171.0	4579.0	7824.1	7778.3	5389.9
77.5°	369.5	367.8	374.4	397.3	443.0	639.2	1271.9	3308.8	5798.6	5775.7	3537.7
80°	297.5	300.8	310.6	330.2	372.7	487.2	752.0	2064.7	3111.0	3027.6	1690.4
82.5°	199.4	230.5	250.1	273.0	322.1	359.7	477.4	1049.5	1391.2	1369.9	766.7
85°	94.8	125.9	186.4	212.5	261.6	225.6	323.7	500.2	696.4	688.2	276.3
87.5°	19.6	19.6	99.7	119.3	161.8	96.5	179.8	217.4	336.8	315.5	112.8
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°	1554.7	1554.7	1554.7	1554.7	1554.7	1554.7	1554.7	1554.7	1554.7	1554.7	1554.7
2.5°	1562.8	1518.7	1430.4	1360.1	1288.2	1247.3	1196.7	1172.1	1167.2	1154.2	1164.0
5°	1590.6	1504.0	1337.2	1227.7	1154.2	1118.2	1100.2	1093.7	1092.0	1088.8	1088.8
7.5°	1628.2	1495.8	1278.4	1167.2	1119.8	1108.4	1113.3	1123.1	1124.7	1128.0	1126.4
10°	1674.0	1497.5	1245.7	1152.5	1129.6	1131.3	1147.6	1160.7	1167.2	1172.1	1170.5
12.5°	1737.8	1517.1	1240.8	1162.3	1152.5	1159.1	1175.4	1188.5	1195.0	1196.7	1196.7
15°	1821.1	1557.9	1252.2	1183.6	1175.4	1180.3	1190.1	1195.0	1196.7	1195.0	1195.0
17.5°	1912.7	1607.0	1268.6	1196.7	1183.6	1178.7	1175.4	1170.5	1160.7	1154.2	1154.2
20°	2001.0	1651.1	1276.8	1195.0	1172.1	1152.5	1132.9	1108.4	1092.0	1079.0	1079.0
22.5°	2089.2	1692.0	1276.8	1177.0	1141.1	1103.5	1062.6	1023.4	998.8	982.5	982.5
25°	2182.4	1731.2	1267.0	1146.0	1092.0	1038.1	982.5	933.5	908.9	892.6	889.3
27.5°	2260.9	1754.1	1240.8	1101.8	1031.5	962.9	899.1	848.5	830.5	815.8	815.8
30°	2344.3	1768.8	1191.8	1044.6	962.9	884.4	819.0	778.2	758.5	737.3	735.7
32.5°	2437.5	1778.6	1136.2	984.1	892.6	809.2	753.6	720.9	678.4	655.5	652.3
35°	2545.4	1791.7	1077.3	915.5	822.3	747.1	714.4	660.5	619.6	600.0	598.3
37.5°	2659.8	1801.5	1013.6	855.0	758.5	706.2	673.5	609.8	573.8	544.4	541.1
40°	2780.8	1801.5	948.2	796.1	707.9	688.2	626.1	568.9	508.4	493.7	490.4
42.5°	2914.8	1798.3	882.8	738.9	660.5	647.4	598.3	537.8	506.8	493.7	490.4
45°	3057.0	1786.8	820.7	673.5	611.4	585.3	547.7	531.3	518.2	518.2	518.2
47.5°	3218.9	1777.0	750.4	614.7	575.4	546.0	518.2	508.4	506.8	511.7	516.6
50°	3426.5	1773.7	691.5	572.2	547.7	513.3	510.1	501.9	503.5	503.5	503.5
52.5°	3678.3	1744.3	635.9	541.1	519.9	479.0	488.8	497.0	500.2	498.6	497.0
55°	3863.0	1692.0	588.5	519.9	500.2	465.9	479.0	492.1	495.3	490.4	490.4
57.5°	4029.7	1618.4	550.9	503.5	487.2	457.7	472.5	485.5	482.3	480.6	479.0
60°	4221.0	1548.1	521.5	495.3	474.1	454.5	467.5	475.7	470.8	467.5	465.9
62.5°	4428.6	1479.5	500.2	495.3	464.3	452.8	462.6	465.9	456.1	452.8	452.8
65°	4525.1	1371.6	477.4	495.3	459.4	449.6	452.8	449.6	439.8	439.8	438.1
67.5°	4366.5	1193.4	447.9	488.8	465.9	444.7	438.1	433.2	421.8	421.8	418.5
70°	3928.4	980.9	405.4	467.5	467.5	443.0	418.5	407.1	394.0	398.9	392.3
72.5°	3356.2	778.2	353.1	431.6	457.7	441.4	397.3	379.3	367.8	372.7	362.9
75°	2718.6	603.2	291.0	374.4	433.2	433.2	376.0	351.5	338.4	338.4	327.0
77.5°	1732.9	446.3	237.0	310.6	389.1	421.8	358.0	320.4	300.8	295.9	287.7
80°	858.3	313.9	194.5	246.9	331.9	395.6	344.9	284.5	256.7	246.9	232.1
82.5°	456.1	217.4	155.3	192.9	264.8	356.4	328.6	245.2	210.9	196.2	179.8
85°	204.3	134.1	124.2	147.1	201.1	292.6	295.9	201.1	161.8	192.9	142.2
87.5°	75.2	60.5	60.5	75.2	116.1	122.6	209.3	129.1	103.0	70.3	55.6
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)