

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: P398149

Luminaire Tested: **ARCH-S-PA1-90-760-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398149  
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-S-PA1-90-760-U-T2R  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5700K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11728 lumens  
Efficiency: N/A  
Efficacy: 124.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Medium - Non-Cutoff  
BUG Rating: B2 - U0 - G2

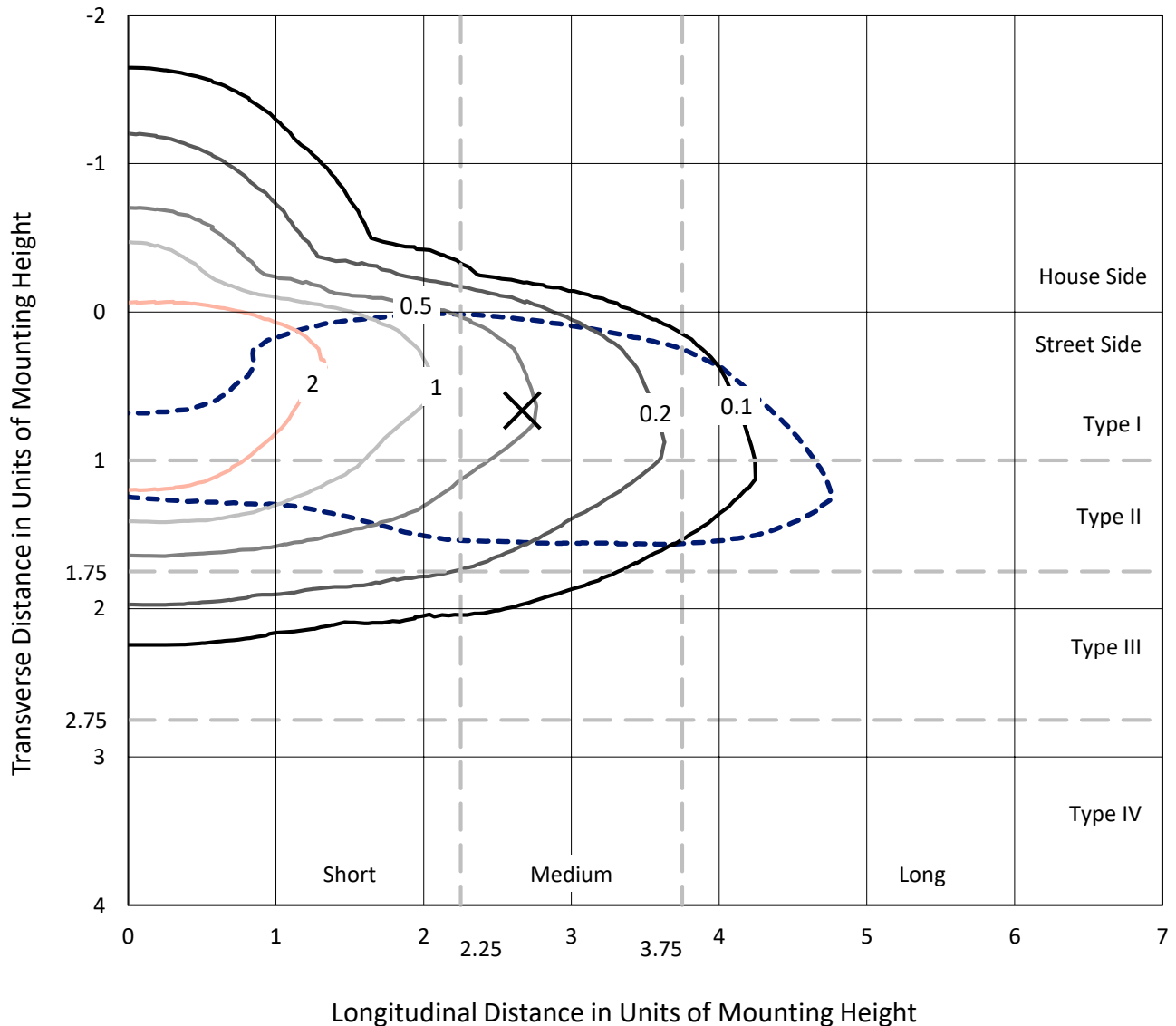
Input Watts (W): 94  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

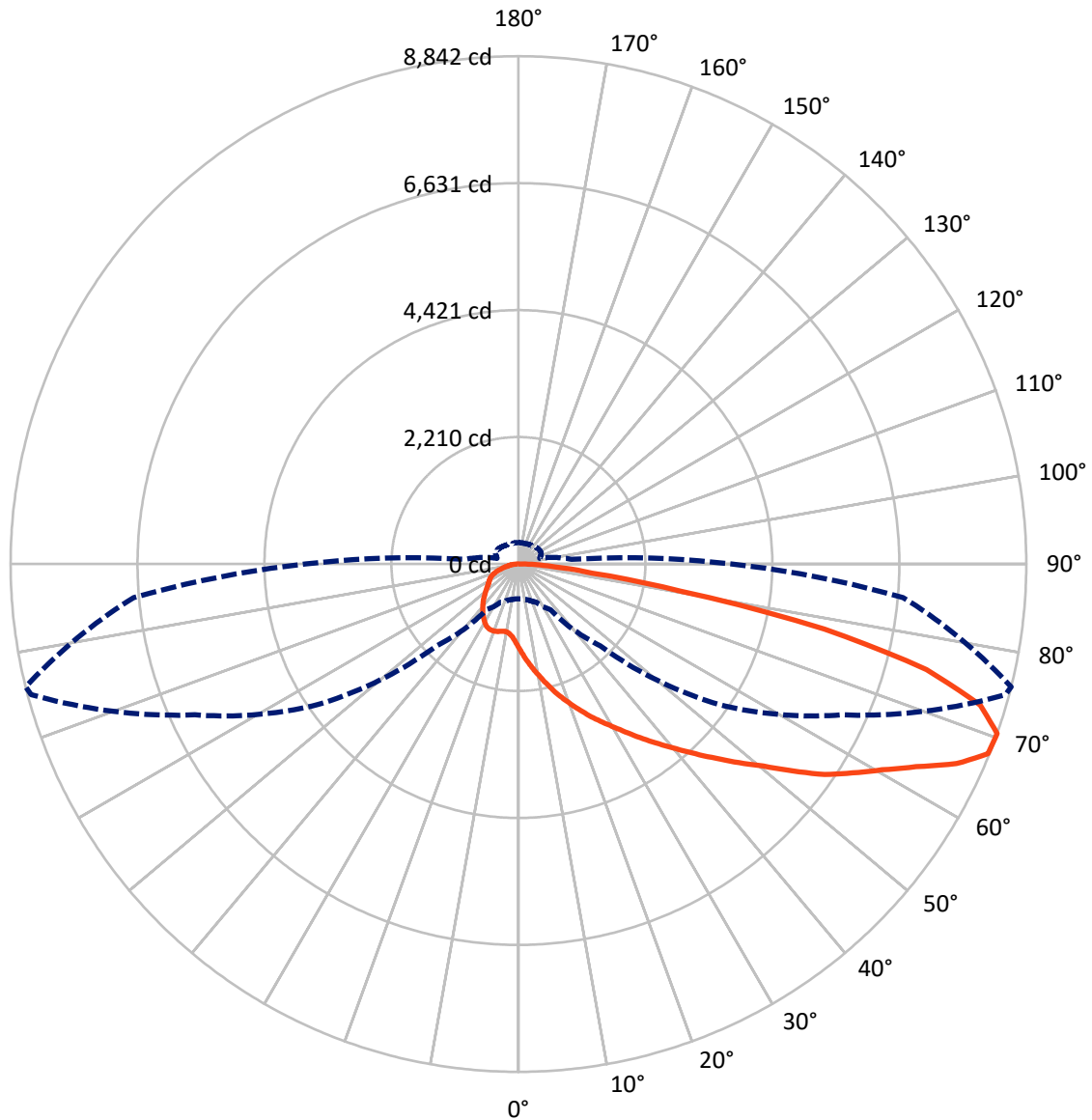


Based on 25 foot mounting height. Maximum calculated value = 4 fc  
 Type II - Medium - Non-Cutoff

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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	1914.7	0.0	1914.7
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	9813.3	0.0	9813.3
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	11728.0	0.0	11728.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.4	1.3
10°-20°	517.9	4.4
20°-30°	926.6	7.9
30°-40°	1499.0	12.8
40°-50°	2168.5	18.5
50°-60°	2482.0	21.2
60°-70°	2283.1	19.5
70°-80°	1411.8	12.0
80°-90°	286.7	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°	11728.0	100.0
0°-180°	11728.0	100.0



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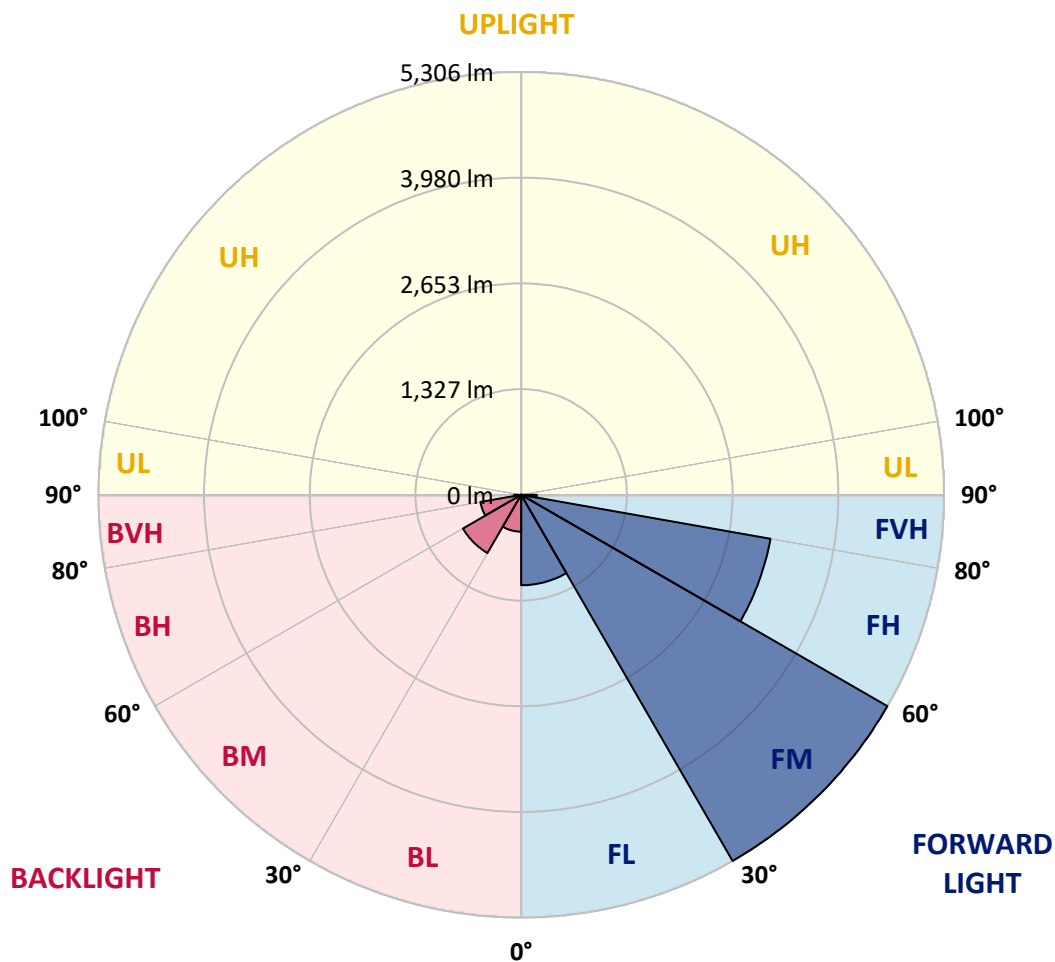
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1134.5	9.7			
FM	(30°-60°)	5306.4	45.2			
FH	(60°-80°)	3175.6	27.1			G2/5000
FVH	(80°-90°)	196.8	1.7			G2/225
BL	(0°-30°)	462.5	3.9	B1/500		
BM	(30°-60°)	843.0	7.2	B1/1000		
BH	(60°-80°)	519.3	4.4	B2/1000		G2/1000
BVH	(80°-90°)	89.9	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°	1466.6	1466.6	1466.6	1466.6	1466.6	1466.6	1466.6	1466.6	1466.6	1466.6	1466.6
2.5°	1869.2	1855.3	1853.7	1832.1	1812.1	1758.1	1719.6	1651.7	1583.8	1582.3	1514.4
5°	2160.6	2146.7	2139.0	2112.8	2078.9	2008.0	1938.6	1833.7	1718.0	1710.3	1582.3
7.5°	2358.0	2345.7	2330.3	2319.5	2287.1	2223.9	2139.0	2014.1	1855.3	1839.9	1661.0
10°	2490.7	2482.9	2479.9	2472.2	2452.1	2401.2	2319.5	2186.8	1992.5	1975.6	1744.2
12.5°	2547.7	2544.6	2558.5	2580.1	2587.8	2567.8	2489.1	2364.2	2143.7	2125.2	1844.5
15°	2481.4	2484.5	2520.0	2594.0	2672.6	2715.8	2669.6	2547.7	2314.8	2288.6	1961.7
17.5°	2450.6	2455.2	2479.9	2550.8	2661.8	2796.0	2817.6	2722.0	2479.9	2442.9	2085.1
20°	2504.5	2510.7	2529.2	2584.7	2661.8	2805.3	2917.9	2888.5	2641.8	2603.2	2203.8
22.5°	2641.8	2649.5	2648.0	2683.4	2735.9	2834.6	2973.4	3045.9	2811.4	2768.3	2327.2
25°	2934.8	2928.6	2876.2	2859.2	2873.1	2936.4	3047.4	3197.0	2988.8	2945.6	2456.7
27.5°	3332.7	3325.0	3229.4	3143.0	3065.9	3093.7	3152.3	3318.8	3169.2	3119.9	2580.1
30°	3758.4	3749.1	3638.1	3497.7	3326.5	3286.4	3278.7	3425.2	3351.2	3298.8	2711.2
32.5°	4173.2	4165.5	4046.7	3883.3	3647.3	3527.0	3453.0	3544.0	3557.9	3507.0	2854.6
35°	4551.0	4551.0	4449.3	4254.9	3988.1	3806.2	3684.3	3690.5	3795.4	3736.8	3018.1
37.5°	4887.2	4885.7	4774.7	4583.4	4327.4	4119.2	3968.1	3867.8	4022.1	3971.2	3189.3
40°	5154.0	5143.3	5061.5	4895.0	4637.4	4430.8	4278.1	4076.0	4275.0	4228.7	3371.3
42.5°	5348.4	5342.2	5286.7	5141.7	4896.5	4702.2	4597.3	4338.2	4561.8	4515.6	3584.1
45°	5423.9	5436.3	5436.3	5299.0	5104.7	4927.3	4881.1	4626.6	4871.8	4825.6	3812.3
47.5°	5302.1	5334.5	5400.8	5410.1	5238.9	5118.6	5134.0	4916.5	5191.1	5166.4	4062.2
50°	4921.2	4981.3	5126.3	5388.5	5292.8	5265.1	5349.9	5212.7	5533.4	5525.7	4366.0
52.5°	3938.8	4085.3	4537.2	5007.5	5255.8	5332.9	5564.3	5545.8	5974.5	5986.8	4762.3
55°	3021.2	3076.7	3599.5	4399.9	5029.1	5311.4	5707.7	5871.2	6452.6	6468.0	5126.3
57.5°	2442.9	2479.9	2765.2	3599.5	4512.5	5194.1	5820.3	6060.9	6819.6	6859.7	5450.2
60°	1935.5	1989.4	2180.7	2754.4	3789.2	4911.9	5898.9	6272.1	7214.4	7274.6	5837.2
62.5°	1438.9	1465.1	1645.5	2040.3	2999.6	4404.5	5857.3	6501.9	7698.7	7771.2	6303.0
65°	1024.0	1047.2	1175.2	1451.2	2217.7	3718.3	5615.2	6673.1	8306.3	8380.3	6771.8
67.5°	766.5	775.7	848.2	1014.8	1494.4	2888.5	5124.7	6643.8	8750.5	8816.8	6960.0
70°	606.1	609.2	644.6	734.1	971.6	2011.0	4265.7	6213.5	8782.9	8841.5	6722.5
72.5°	502.8	501.2	521.3	564.4	677.0	1272.3	3160.0	5414.7	8366.5	8406.6	6059.3
75°	414.9	417.9	431.8	456.5	516.6	839.0	2048.0	4319.7	7381.0	7337.8	5084.6
77.5°	348.5	347.0	353.2	374.8	417.9	603.0	1199.8	3121.4	5470.2	5448.6	3337.3
80°	280.7	283.8	293.0	311.5	351.6	459.6	709.4	1947.8	2934.8	2856.2	1594.6
82.5°	188.1	217.5	236.0	257.5	303.8	339.3	450.3	990.1	1312.4	1292.4	723.3
85°	89.4	118.7	175.8	200.5	246.8	212.8	305.4	471.9	657.0	649.3	260.6
87.5°	18.5	18.5	94.1	112.6	152.7	91.0	169.6	205.1	317.7	297.6	106.4
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°	1466.6	1466.6	1466.6	1466.6	1466.6	1466.6	1466.6	1466.6	1466.6	1466.6	1466.6
2.5°	1474.3	1432.7	1349.4	1283.1	1215.3	1176.7	1128.9	1105.8	1101.1	1088.8	1098.0
5°	1500.6	1418.8	1261.5	1158.2	1088.8	1054.9	1037.9	1031.7	1030.2	1027.1	1027.1
7.5°	1536.0	1411.1	1206.0	1101.1	1056.4	1045.6	1050.2	1059.5	1061.0	1064.1	1062.6
10°	1579.2	1412.7	1175.2	1087.3	1065.7	1067.2	1082.6	1095.0	1101.1	1105.8	1104.2
12.5°	1639.4	1431.2	1170.5	1096.5	1087.3	1093.4	1108.8	1121.2	1127.4	1128.9	1128.9
15°	1718.0	1469.7	1181.3	1116.6	1108.8	1113.5	1122.7	1127.4	1128.9	1127.4	1127.4
17.5°	1804.4	1516.0	1196.8	1128.9	1116.6	1111.9	1108.8	1104.2	1095.0	1088.8	1088.8
20°	1887.7	1557.6	1204.5	1127.4	1105.8	1087.3	1068.7	1045.6	1030.2	1017.9	1017.9
22.5°	1970.9	1596.2	1204.5	1110.4	1076.5	1041.0	1002.4	965.4	942.3	926.9	926.9
25°	2058.8	1633.2	1195.2	1081.1	1030.2	979.3	926.9	880.6	857.5	842.0	839.0
27.5°	2132.9	1654.8	1170.5	1039.4	973.1	908.4	848.2	800.4	783.4	769.6	769.6
30°	2211.5	1668.7	1124.3	985.5	908.4	834.3	772.6	734.1	715.6	695.5	694.0
32.5°	2299.4	1677.9	1071.8	928.4	842.0	763.4	711.0	680.1	640.0	618.4	615.3
35°	2401.2	1690.3	1016.3	863.6	775.7	704.8	673.9	623.1	584.5	566.0	564.4
37.5°	2509.2	1699.5	956.2	806.6	715.6	666.2	635.4	575.2	541.3	513.6	510.5
40°	2623.3	1699.5	894.5	751.1	667.8	649.3	590.7	536.7	479.6	465.7	462.7
42.5°	2749.8	1696.4	832.8	697.1	623.1	610.7	564.4	507.4	478.1	465.7	462.7
45°	2883.9	1685.6	774.2	635.4	576.8	552.1	516.6	501.2	488.9	488.9	488.9
47.5°	3036.6	1676.4	707.9	579.9	542.9	515.1	488.9	479.6	478.1	482.7	487.3
50°	3232.5	1673.3	652.4	539.8	516.6	484.3	481.2	473.5	475.0	475.0	475.0
52.5°	3470.0	1645.5	599.9	510.5	490.4	451.9	461.1	468.8	471.9	470.4	468.8
55°	3644.2	1596.2	555.2	490.4	471.9	439.5	451.9	464.2	467.3	462.7	462.7
57.5°	3801.5	1526.8	519.7	475.0	459.6	431.8	445.7	458.0	455.0	453.4	451.9
60°	3982.0	1460.5	492.0	467.3	447.2	428.7	441.1	448.8	444.2	441.1	439.5
62.5°	4177.8	1395.7	471.9	467.3	438.0	427.2	436.4	439.5	430.3	427.2	427.2
65°	4268.8	1293.9	450.3	467.3	433.4	424.1	427.2	424.1	414.9	414.9	413.3
67.5°	4119.2	1125.8	422.6	461.1	439.5	419.5	413.3	408.7	397.9	397.9	394.8
70°	3705.9	925.3	382.5	441.1	441.1	417.9	394.8	384.0	371.7	376.3	370.1
72.5°	3166.1	734.1	333.1	407.1	431.8	416.4	374.8	357.8	347.0	351.6	342.4
75°	2564.7	569.1	274.5	353.2	408.7	408.7	354.7	331.6	319.2	319.2	308.4
77.5°	1634.7	421.0	223.6	293.0	367.0	397.9	337.7	302.3	283.8	279.1	271.4
80°	809.7	296.1	183.5	232.9	313.1	373.2	325.4	268.3	242.1	232.9	219.0
82.5°	430.3	205.1	146.5	182.0	249.8	336.2	310.0	231.3	198.9	185.1	169.6
85°	192.8	126.5	117.2	138.8	189.7	276.1	279.1	189.7	152.7	182.0	134.2
87.5°	70.9	57.1	57.1	70.9	109.5	115.7	197.4	121.8	97.2	66.3	52.4
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)