

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: P398131

Luminaire Tested: **ARCH-S-PA1-90-740-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398131
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-PA1-90-740-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 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: 11729 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 (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

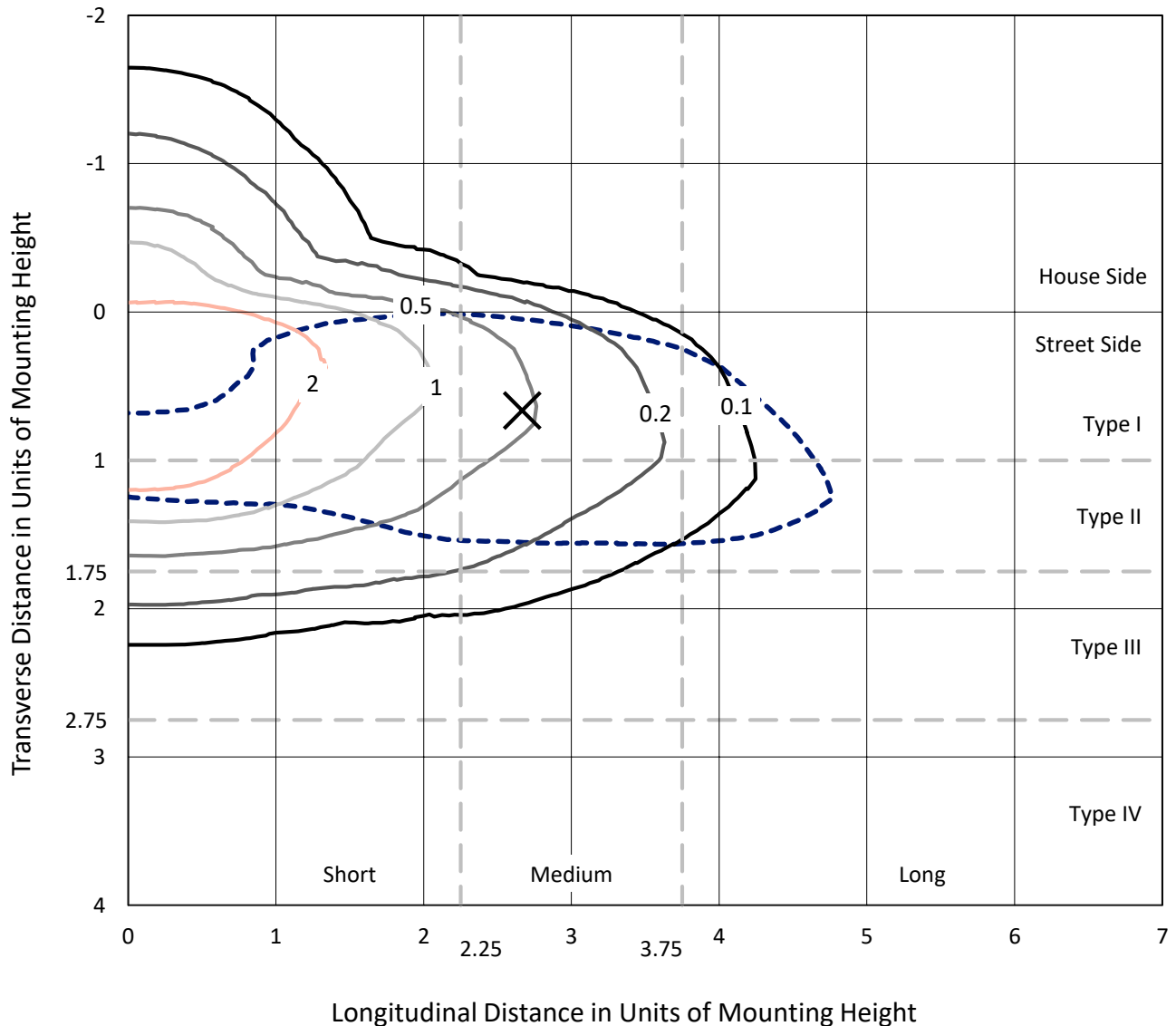


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Iso-Footcandle Lines of Horizontal Illumination

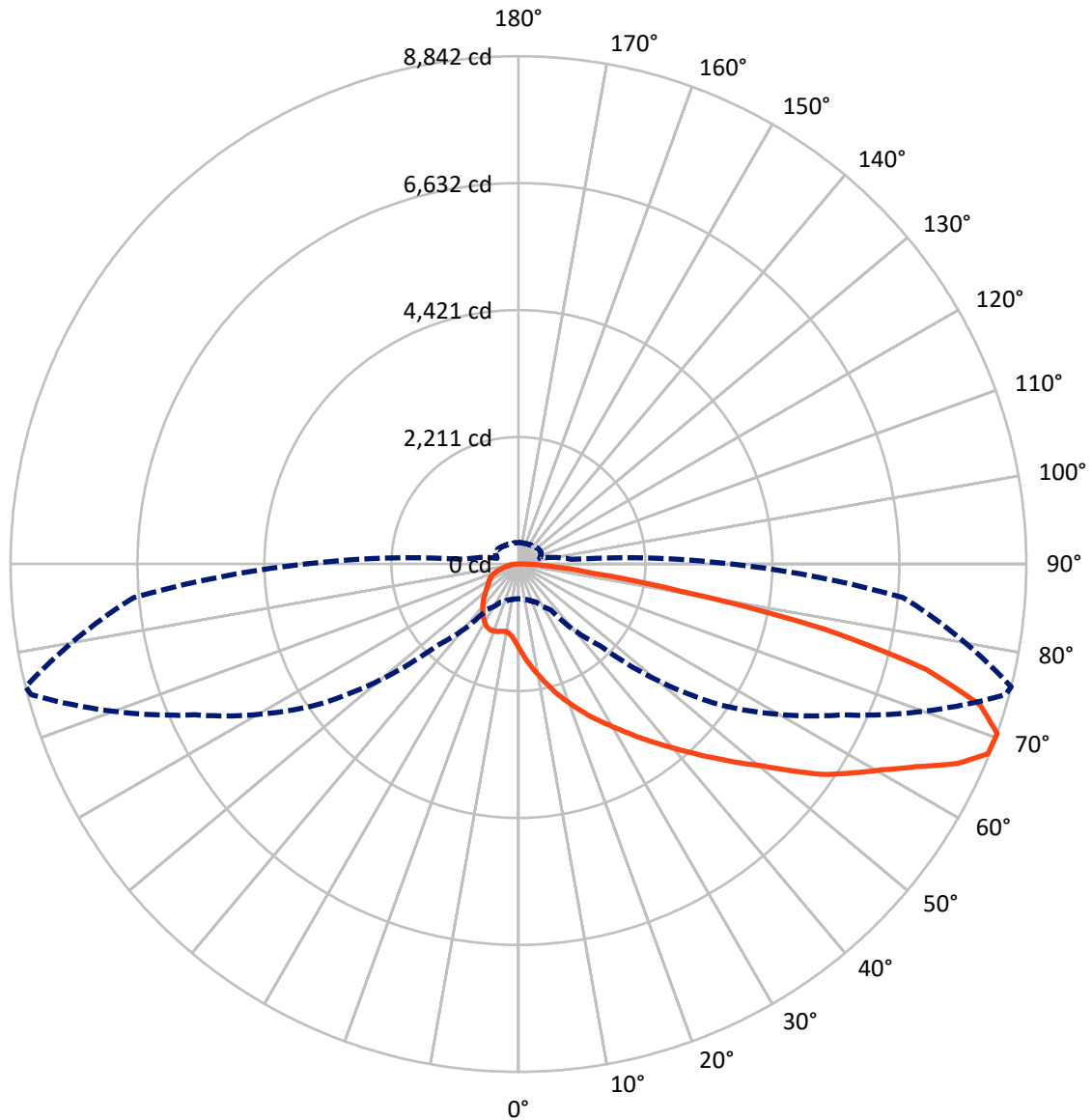
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 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
House Side	Lumens	1914.9	0.0	1914.9
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	9814.1	0.0	9814.1
	% Fixture	83.7	0.0	83.7
Total	Lumens	11729.0	0.0	11729.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.4	1.3
10°-20°	518.0	4.4
20°-30°	926.7	7.9
30°-40°	1499.1	12.8
40°-50°	2168.7	18.5
50°-60°	2482.2	21.2
60°-70°	2283.3	19.5
70°-80°	1412.0	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°	11729.0	100.0
0°-180°	11729.0	100.0



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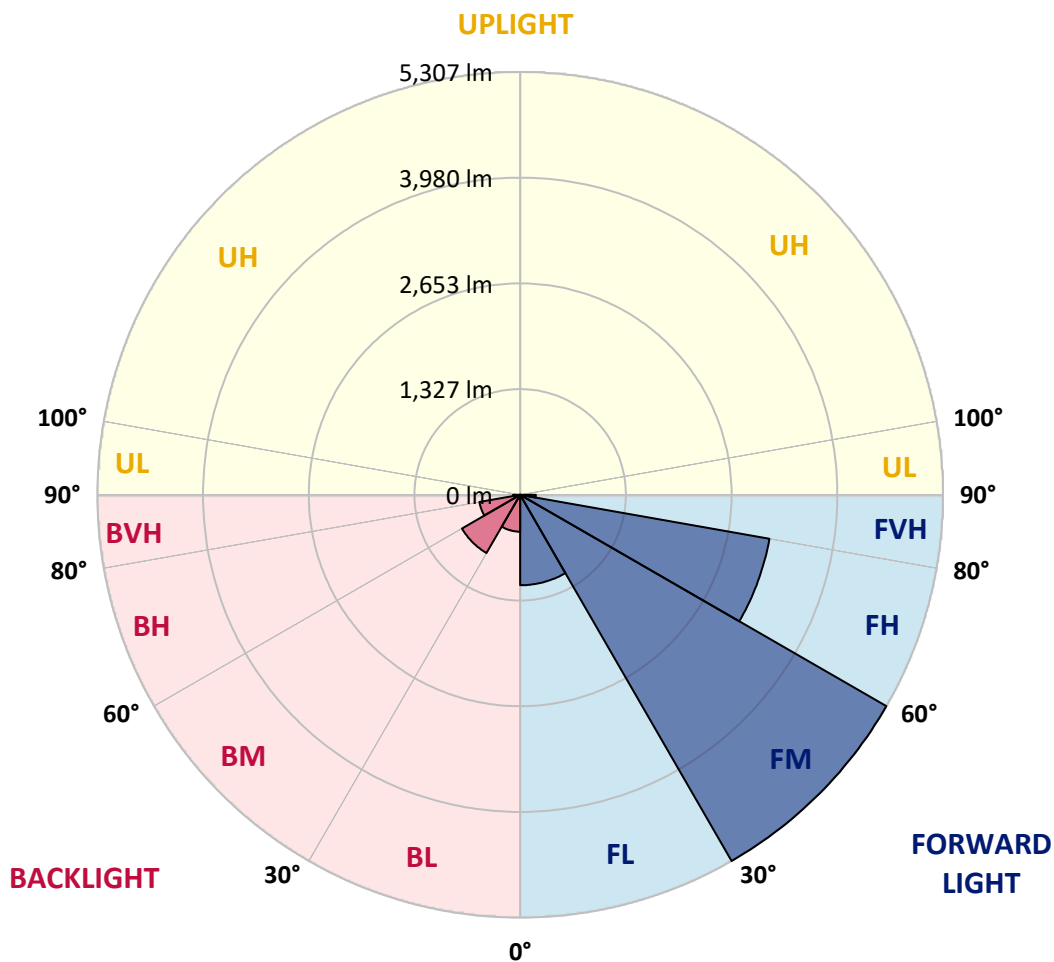
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1134.6	9.7			
FM	(30°-60°)	5306.8	45.2			
FH	(60°-80°)	3175.9	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°)	843.1	7.2	B1/1000		
BH	(60°-80°)	519.4	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°	1466.8	1466.8	1466.8	1466.8	1466.8	1466.8	1466.8	1466.8	1466.8	1466.8	1466.8
2.5°	1869.3	1855.4	1853.9	1832.3	1812.2	1758.3	1719.7	1651.8	1584.0	1582.4	1514.6
5°	2160.8	2146.9	2139.2	2113.0	2079.1	2008.1	1938.7	1833.8	1718.2	1710.5	1582.4
7.5°	2358.2	2345.9	2330.5	2319.7	2287.3	2224.0	2139.2	2014.3	1855.4	1840.0	1661.1
10°	2490.9	2483.2	2480.1	2472.4	2452.3	2401.4	2319.7	2187.0	1992.7	1975.7	1744.4
12.5°	2547.9	2544.9	2558.7	2580.3	2588.0	2568.0	2489.3	2364.4	2143.8	2125.3	1844.6
15°	2481.6	2484.7	2520.2	2594.2	2672.9	2716.1	2669.8	2547.9	2315.0	2288.8	1961.9
17.5°	2450.8	2455.4	2480.1	2551.0	2662.1	2796.3	2817.8	2722.2	2480.1	2443.1	2085.2
20°	2504.8	2510.9	2529.4	2585.0	2662.1	2805.5	2918.1	2888.8	2642.0	2603.5	2204.0
22.5°	2642.0	2649.7	2648.2	2683.7	2736.1	2834.8	2973.6	3046.1	2811.7	2768.5	2327.4
25°	2935.1	2928.9	2876.5	2859.5	2873.4	2936.6	3047.7	3197.3	2989.0	2945.9	2456.9
27.5°	3333.0	3325.3	3229.7	3143.3	3066.2	3093.9	3152.5	3319.1	3169.5	3120.1	2580.3
30°	3758.7	3749.4	3638.4	3498.0	3326.8	3286.7	3279.0	3425.5	3351.5	3299.1	2711.4
32.5°	4173.6	4165.8	4047.1	3883.6	3647.6	3527.3	3453.3	3544.3	3558.2	3507.3	2854.9
35°	4551.4	4551.4	4449.6	4255.3	3988.5	3806.5	3684.6	3690.8	3795.7	3737.1	3018.4
37.5°	4887.7	4886.1	4775.1	4583.8	4327.8	4119.6	3968.4	3868.2	4022.4	3971.5	3189.6
40°	5154.5	5143.7	5061.9	4895.4	4637.8	4431.1	4278.4	4076.4	4275.4	4229.1	3371.5
42.5°	5348.8	5342.7	5287.1	5142.1	4896.9	4702.6	4597.7	4338.6	4562.2	4516.0	3584.4
45°	5424.4	5436.7	5436.7	5299.5	5105.1	4927.8	4881.5	4627.0	4872.2	4826.0	3812.7
47.5°	5302.6	5334.9	5401.3	5410.5	5239.3	5119.0	5134.4	4917.0	5191.5	5166.8	4062.5
50°	4921.6	4981.7	5126.7	5388.9	5293.3	5265.5	5350.4	5213.1	5533.9	5526.2	4366.4
52.5°	3939.1	4085.6	4537.6	5008.0	5256.3	5333.4	5564.7	5546.2	5975.0	5987.3	4762.7
55°	3021.4	3077.0	3599.8	4400.3	5029.6	5311.8	5708.2	5871.7	6453.1	6468.6	5126.7
57.5°	2443.1	2480.1	2765.4	3599.8	4512.9	5194.6	5820.8	6061.4	6820.2	6860.3	5450.6
60°	1935.6	1989.6	2180.9	2754.6	3789.5	4912.3	5899.4	6272.7	7215.0	7275.2	5837.7
62.5°	1439.0	1465.2	1645.7	2040.5	2999.8	4404.9	5857.8	6502.5	7699.3	7771.8	6303.5
65°	1024.1	1047.2	1175.3	1451.3	2217.9	3718.6	5615.6	6673.7	8307.0	8381.1	6772.4
67.5°	766.5	775.8	848.3	1014.9	1494.5	2888.8	5125.2	6644.4	8751.2	8817.5	6960.6
70°	606.1	609.2	644.7	734.2	971.7	2011.2	4266.1	6214.1	8783.6	8842.2	6723.0
72.5°	502.8	501.3	521.3	564.5	677.1	1272.4	3160.2	5415.1	8367.2	8407.3	6059.8
75°	414.9	418.0	431.9	456.5	516.7	839.0	2048.2	4320.1	7381.6	7338.4	5085.1
77.5°	348.6	347.0	353.2	374.8	418.0	603.1	1199.9	3121.7	5470.7	5449.1	3337.6
80°	280.7	283.8	293.0	311.6	351.7	459.6	709.5	1948.0	2935.1	2856.4	1594.8
82.5°	188.2	217.5	236.0	257.6	303.8	339.3	450.4	990.2	1312.5	1292.5	723.4
85°	89.5	118.8	175.8	200.5	246.8	212.8	305.4	472.0	657.0	649.3	260.7
87.5°	18.5	18.5	94.1	112.6	152.7	91.0	169.7	205.1	317.7	297.7	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°	1466.8	1466.8	1466.8	1466.8	1466.8	1466.8	1466.8	1466.8	1466.8	1466.8	1466.8
2.5°	1474.5	1432.8	1349.5	1283.2	1215.4	1176.8	1129.0	1105.9	1101.2	1088.9	1098.1
5°	1500.7	1418.9	1261.6	1158.3	1088.9	1055.0	1038.0	1031.8	1030.3	1027.2	1027.2
7.5°	1536.2	1411.2	1206.1	1101.2	1056.5	1045.7	1050.3	1059.6	1061.1	1064.2	1062.7
10°	1579.4	1412.8	1175.3	1087.3	1065.8	1067.3	1082.7	1095.1	1101.2	1105.9	1104.3
12.5°	1639.5	1431.3	1170.6	1096.6	1087.3	1093.5	1108.9	1121.3	1127.4	1129.0	1129.0
15°	1718.2	1469.8	1181.4	1116.7	1108.9	1113.6	1122.8	1127.4	1129.0	1127.4	1127.4
17.5°	1804.5	1516.1	1196.9	1129.0	1116.7	1112.0	1108.9	1104.3	1095.1	1088.9	1088.9
20°	1887.8	1557.8	1204.6	1127.4	1105.9	1087.3	1068.8	1045.7	1030.3	1017.9	1017.9
22.5°	1971.1	1596.3	1204.6	1110.5	1076.6	1041.1	1002.5	965.5	942.4	926.9	926.9
25°	2059.0	1633.3	1195.3	1081.2	1030.3	979.4	926.9	880.7	857.5	842.1	839.0
27.5°	2133.1	1654.9	1170.6	1039.5	973.2	908.4	848.3	800.5	783.5	769.6	769.6
30°	2211.7	1668.8	1124.4	985.6	908.4	834.4	772.7	734.2	715.6	695.6	694.1
32.5°	2299.6	1678.1	1071.9	928.5	842.1	763.5	711.0	680.2	640.1	618.5	615.4
35°	2401.4	1690.4	1016.4	863.7	775.8	704.8	674.0	623.1	584.5	566.0	564.5
37.5°	2509.4	1699.7	956.2	806.6	715.6	666.3	635.4	575.3	541.4	513.6	510.5
40°	2623.5	1699.7	894.6	751.1	667.8	649.3	590.7	536.7	479.7	465.8	462.7
42.5°	2750.0	1696.6	832.9	697.1	623.1	610.8	564.5	507.4	478.1	465.8	462.7
45°	2884.2	1685.8	774.3	635.4	576.8	552.2	516.7	501.3	488.9	488.9	488.9
47.5°	3036.9	1676.5	707.9	579.9	542.9	515.1	488.9	479.7	478.1	482.8	487.4
50°	3232.7	1673.4	652.4	539.8	516.7	484.3	481.2	473.5	475.0	475.0	475.0
52.5°	3470.3	1645.7	600.0	510.5	490.5	451.9	461.2	468.9	472.0	470.4	468.9
55°	3644.5	1596.3	555.2	490.5	472.0	439.6	451.9	464.2	467.3	462.7	462.7
57.5°	3801.9	1526.9	519.8	475.0	459.6	431.9	445.7	458.1	455.0	453.4	451.9
60°	3982.3	1460.6	492.0	467.3	447.3	428.8	441.1	448.8	444.2	441.1	439.6
62.5°	4178.2	1395.8	472.0	467.3	438.0	427.2	436.5	439.6	430.3	427.2	427.2
65°	4269.2	1294.0	450.4	467.3	433.4	424.1	427.2	424.1	414.9	414.9	413.3
67.5°	4119.6	1125.9	422.6	461.2	439.6	419.5	413.3	408.7	397.9	397.9	394.8
70°	3706.2	925.4	382.5	441.1	441.1	418.0	394.8	384.0	371.7	376.3	370.2
72.5°	3166.4	734.2	333.1	407.2	431.9	416.4	374.8	357.8	347.0	351.7	342.4
75°	2564.9	569.1	274.5	353.2	408.7	408.7	354.7	331.6	319.3	319.3	308.5
77.5°	1634.9	421.1	223.6	293.0	367.1	397.9	337.8	302.3	283.8	279.2	271.5
80°	809.7	296.1	183.5	232.9	313.1	373.2	325.4	268.4	242.1	232.9	219.0
82.5°	430.3	205.1	146.5	182.0	249.9	336.2	310.0	231.4	199.0	185.1	169.7
85°	192.8	126.5	117.2	138.8	189.7	276.1	279.2	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)