

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: P400030

Luminaire Tested: **ARCH-L-PA3-220-827-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400030
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-PA3-220-827-U-T2R
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 2700K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22912 lumens
Efficiency: N/A
Efficacy: 103.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

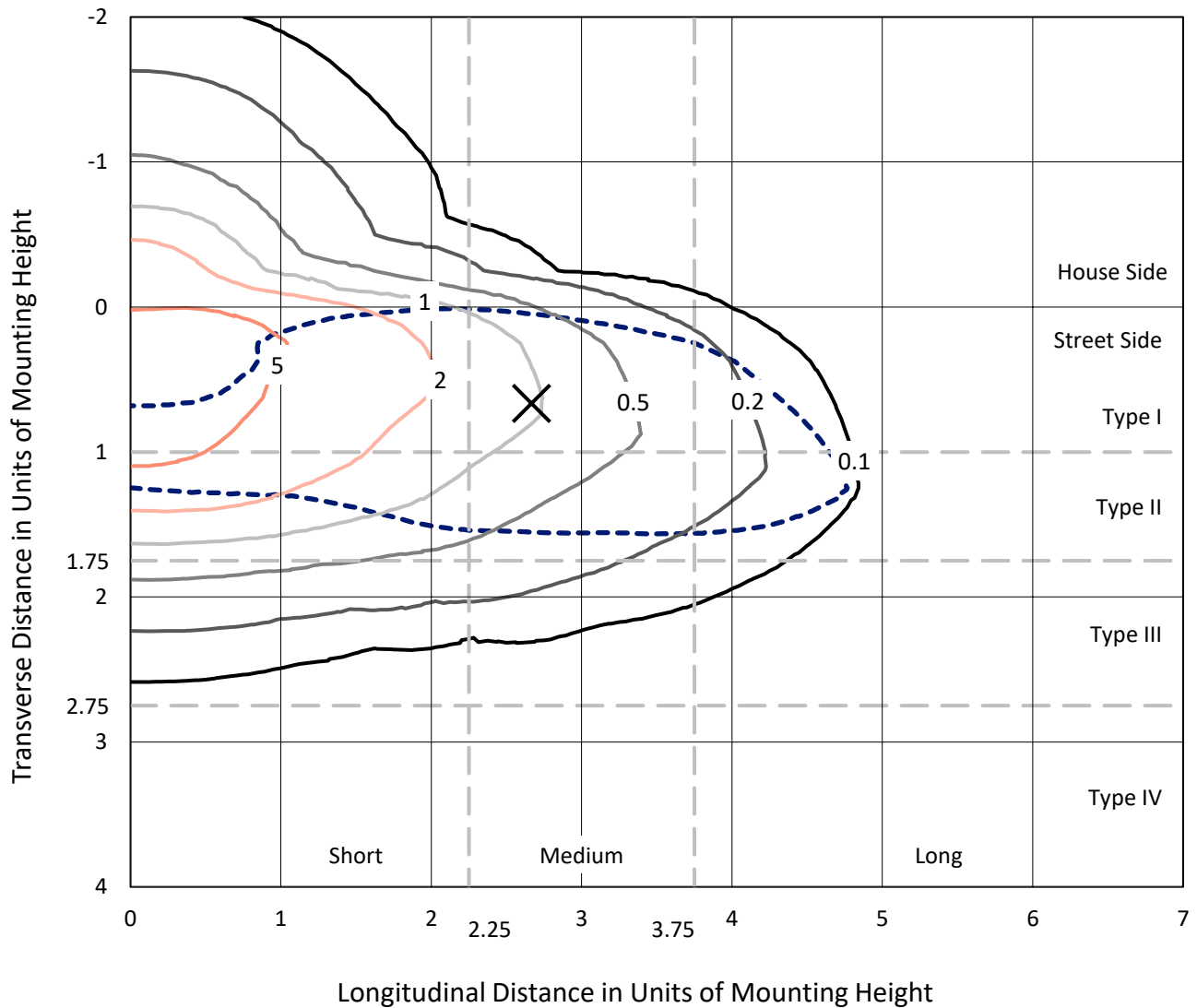
Input Watts (W): 222
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

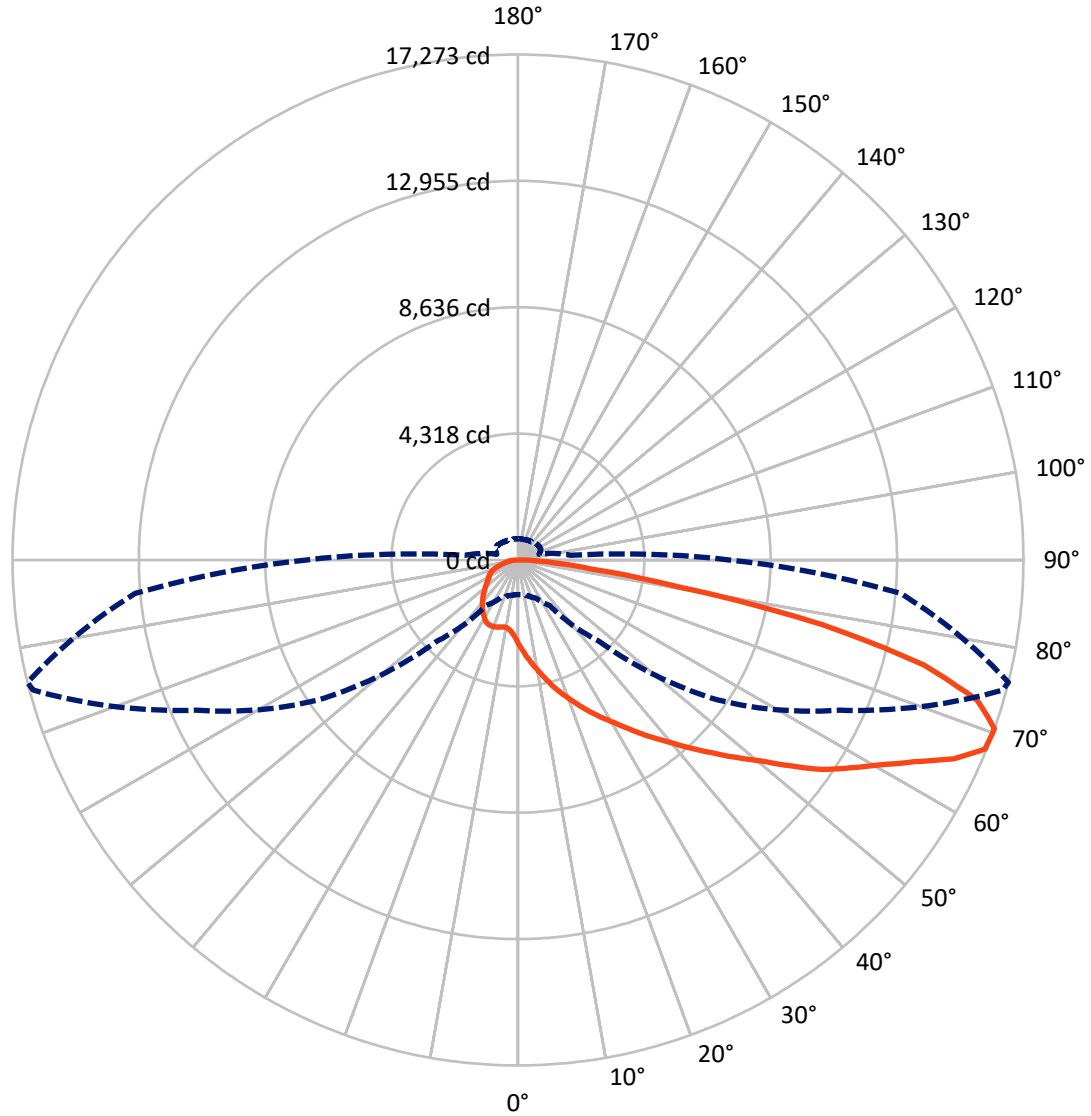
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.8 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
House Side	Lumens	3740.6	0.0	3740.6
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	19171.4	0.0	19171.4
	% Fixture	83.7	0.0	83.7
Total	Lumens	22912.0	0.0	22912.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.7	1.3
10°-20°	1011.8	4.4
20°-30°	1810.3	7.9
30°-40°	2928.4	12.8
40°-50°	4236.4	18.5
50°-60°	4848.8	21.2
60°-70°	4460.3	19.5
70°-80°	2758.2	12.0
80°-90°	560.1	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°	22912.0	100.0
0°-180°	22912.0	100.0

Coefficient of Utilization



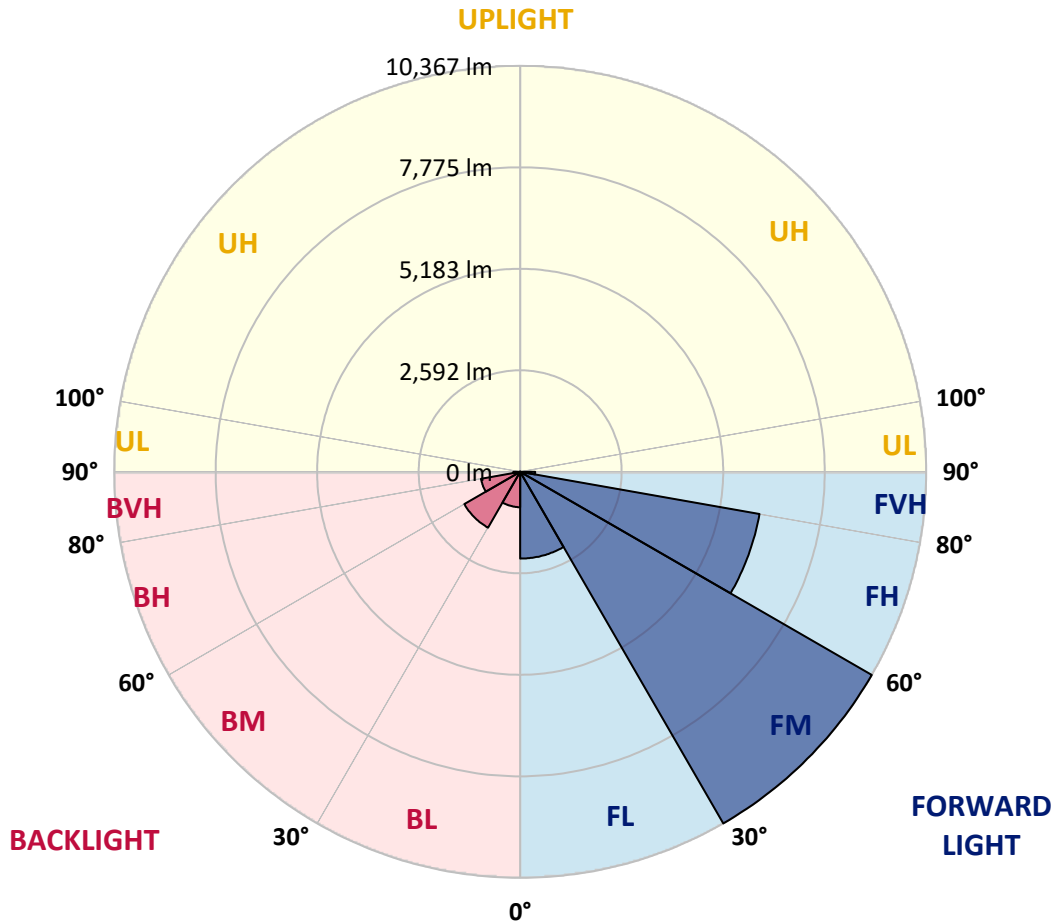
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2216.3	9.7			
FM (30°-60°)	10366.6	45.2			
FH (60°-80°)	6203.9	27.1			G3/7500
FVH (80°-90°)	384.5	1.7			G3/500
BL (0°-30°)	903.5	3.9	B2/1000		
BM (30°-60°)	1647.0	7.2	B2/2500		
BH (60°-80°)	1014.6	4.4	B3/2500		G3/2500
BVH (80°-90°)	175.6	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2865.2	2865.2	2865.2	2865.2	2865.2	2865.2	2865.2	2865.2	2865.2	2865.2	2865.2
2.5°	3651.6	3624.5	3621.5	3579.3	3540.1	3434.7	3359.4	3226.8	3094.2	3091.2	2958.6
5°	4221.0	4193.9	4178.9	4127.6	4061.4	3922.8	3787.2	3582.3	3356.3	3341.3	3091.2
7.5°	4606.7	4582.6	4552.5	4531.4	4468.1	4344.6	4178.9	3934.8	3624.5	3594.4	3244.9
10°	4865.8	4850.7	4844.7	4829.6	4790.5	4691.0	4531.4	4272.3	3892.6	3859.5	3407.6
12.5°	4977.3	4971.2	4998.4	5040.5	5055.6	5016.4	4862.8	4618.7	4187.9	4151.7	3603.4
15°	4847.7	4853.7	4923.0	5067.7	5221.3	5305.7	5215.3	4977.3	4522.3	4471.1	3832.4
17.5°	4787.5	4796.5	4844.7	4983.3	5200.2	5462.3	5504.5	5317.7	4844.7	4772.4	4073.4
20°	4892.9	4905.0	4941.1	5049.6	5200.2	5480.4	5700.4	5643.1	5161.1	5085.7	4305.4
22.5°	5161.1	5176.1	5173.1	5242.4	5344.8	5537.7	5808.8	5950.4	5492.5	5408.1	4546.4
25°	5733.5	5721.4	5619.0	5585.9	5613.0	5736.5	5953.4	6245.7	5839.0	5754.6	4799.5
27.5°	6510.8	6495.8	6309.0	6140.2	5989.6	6043.8	6158.3	6483.7	6191.5	6095.0	5040.5
30°	7342.4	7324.3	7107.4	6833.2	6498.8	6420.4	6405.4	6691.6	6547.0	6444.5	5296.6
32.5°	8152.8	8137.8	7905.8	7586.4	7125.4	6890.4	6745.8	6923.6	6950.7	6851.3	5576.8
35°	8891.0	8891.0	8692.1	8312.5	7791.3	7435.8	7197.8	7209.8	7414.7	7300.2	5896.2
37.5°	9547.8	9544.8	9327.9	8954.3	8454.1	8047.4	7752.1	7556.3	7857.6	7758.2	6230.6
40°	10069.0	10047.9	9888.3	9562.9	9059.7	8656.0	8357.7	7963.0	8351.7	8261.3	6586.1
42.5°	10448.6	10436.6	10328.1	10044.9	9565.9	9186.3	8981.4	8475.2	8912.1	8821.7	7001.9
45°	10596.3	10620.4	10620.4	10352.2	9972.6	9626.1	9535.7	9038.6	9517.7	9427.3	7447.8
47.5°	10358.3	10421.5	10551.1	10569.2	10234.7	9999.7	10029.9	9605.0	10141.3	10093.1	7935.9
50°	9614.1	9731.6	10014.8	10527.0	10340.2	10286.0	10451.7	10183.5	10810.2	10795.1	8529.4
52.5°	7694.9	7981.1	8863.9	9782.8	10267.9	10418.5	10870.5	10834.3	11671.9	11696.0	9303.8
55°	5902.2	6010.7	7032.0	8595.7	9825.0	10376.3	11150.6	11470.0	12605.9	12636.0	10014.8
57.5°	4772.4	4844.7	5402.1	7032.0	8815.7	10147.4	11370.6	11840.6	13322.9	13401.3	10647.5
60°	3781.2	3886.6	4260.2	5381.0	7402.6	9596.0	11524.2	12253.4	14094.2	14211.7	11403.7
62.5°	2811.0	2862.2	3214.7	3986.0	5860.0	8604.8	11442.9	12702.3	15040.3	15181.9	12313.6
65°	2000.5	2045.7	2295.8	2835.1	4332.5	7264.0	10969.9	13036.7	16227.3	16372.0	13229.5
67.5°	1497.4	1515.5	1657.1	1982.5	2919.5	5643.1	10011.8	12979.5	17095.0	17224.6	13597.1
70°	1184.1	1190.1	1259.4	1434.1	1898.1	3928.8	8333.6	12138.9	17158.3	17272.8	13133.1
72.5°	982.2	979.2	1018.4	1102.7	1322.7	2485.6	6173.4	10578.2	16344.8	16423.2	11837.6
75°	810.5	816.5	843.6	891.8	1009.3	1639.0	4001.1	8439.1	14419.6	14335.3	9933.4
77.5°	680.9	677.9	689.9	732.1	816.5	1178.0	2344.0	6098.1	10686.7	10644.5	6519.9
80°	548.3	554.4	572.4	608.6	686.9	897.8	1385.9	3805.3	5733.5	5579.8	3115.3
82.5°	367.6	424.8	461.0	503.2	593.5	662.8	879.8	1934.3	2564.0	2524.8	1413.0
85°	174.7	232.0	343.5	391.7	482.1	415.8	596.5	921.9	1283.5	1268.4	509.2
87.5°	36.2	36.2	183.8	219.9	298.3	177.8	331.4	400.7	620.7	581.5	207.9
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°	2865.2	2865.2	2865.2	2865.2	2865.2	2865.2	2865.2	2865.2	2865.2	2865.2	2865.2
2.5°	2880.3	2799.0	2636.3	2506.7	2374.1	2298.8	2205.4	2160.2	2151.2	2127.1	2145.2
5°	2931.5	2771.8	2464.5	2262.7	2127.1	2060.8	2027.7	2015.6	2012.6	2006.6	2006.6
7.5°	3000.8	2756.8	2356.1	2151.2	2063.8	2042.7	2051.8	2069.8	2072.9	2078.9	2075.9
10°	3085.2	2759.8	2295.8	2124.1	2081.9	2084.9	2115.0	2139.1	2151.2	2160.2	2157.2
12.5°	3202.7	2795.9	2286.8	2142.2	2124.1	2136.1	2166.3	2190.4	2202.4	2205.4	2205.4
15°	3356.3	2871.3	2307.9	2181.3	2166.3	2175.3	2193.4	2202.4	2205.4	2202.4	2202.4
17.5°	3525.1	2961.7	2338.0	2205.4	2181.3	2172.3	2166.3	2157.2	2139.1	2127.1	2127.1
20°	3687.8	3043.0	2353.1	2202.4	2160.2	2124.1	2087.9	2042.7	2012.6	1988.5	1988.5
22.5°	3850.5	3118.3	2353.1	2169.3	2103.0	2033.7	1958.4	1886.1	1840.9	1810.7	1810.7
25°	4022.2	3190.6	2335.0	2112.0	2012.6	1913.2	1810.7	1720.4	1675.2	1645.0	1639.0
27.5°	4166.8	3232.8	2286.8	2030.7	1901.1	1774.6	1657.1	1563.7	1530.5	1503.4	1503.4
30°	4320.5	3259.9	2196.4	1925.2	1774.6	1630.0	1509.5	1434.1	1398.0	1358.8	1355.8
32.5°	4492.2	3278.0	2093.9	1813.8	1645.0	1491.4	1388.9	1328.7	1250.3	1208.2	1202.1
35°	4691.0	3302.1	1985.5	1687.2	1515.5	1376.9	1316.6	1217.2	1141.9	1105.7	1102.7
37.5°	4901.9	3320.2	1868.0	1575.7	1398.0	1301.6	1241.3	1123.8	1057.5	1003.3	997.3
40°	5124.9	3320.2	1747.5	1467.3	1304.6	1268.4	1153.9	1048.5	937.0	909.9	903.9
42.5°	5372.0	3314.2	1627.0	1361.8	1217.2	1193.1	1102.7	991.2	934.0	909.9	903.9
45°	5634.1	3293.1	1512.5	1241.3	1126.8	1078.6	1009.3	979.2	955.1	955.1	955.1
47.5°	5932.3	3275.0	1382.9	1132.8	1060.5	1006.3	955.1	937.0	934.0	943.0	952.1
50°	6315.0	3269.0	1274.4	1054.5	1009.3	946.0	940.0	925.0	928.0	928.0	928.0
52.5°	6779.0	3214.7	1172.0	997.3	958.1	882.8	900.8	915.9	921.9	918.9	915.9
55°	7119.4	3118.3	1084.6	958.1	921.9	858.7	882.8	906.9	912.9	903.9	903.9
57.5°	7426.7	2982.7	1015.3	928.0	897.8	843.6	870.7	894.8	888.8	885.8	882.8
60°	7779.2	2853.2	961.1	912.9	873.7	837.6	861.7	876.7	867.7	861.7	858.7
62.5°	8161.9	2726.7	921.9	912.9	855.7	834.6	852.6	858.7	840.6	834.6	834.6
65°	8339.6	2527.8	879.8	912.9	846.6	828.5	834.6	828.5	810.5	810.5	807.5
67.5°	8047.4	2199.4	825.5	900.8	858.7	819.5	807.5	798.4	777.3	777.3	771.3
70°	7239.9	1807.7	747.2	861.7	861.7	816.5	771.3	750.2	726.1	735.1	723.1
72.5°	6185.4	1434.1	650.8	795.4	843.6	813.5	732.1	699.0	677.9	686.9	668.9
75°	5010.4	1111.8	536.3	689.9	798.4	798.4	693.0	647.8	623.7	623.7	602.6
77.5°	3193.6	822.5	436.9	572.4	717.1	777.3	659.8	590.5	554.4	545.3	530.3
80°	1581.8	578.5	358.5	454.9	611.6	729.1	635.7	524.2	473.0	454.9	427.8
82.5°	840.6	400.7	286.2	355.5	488.1	656.8	605.6	451.9	388.7	361.5	331.4
85°	376.6	247.1	229.0	271.2	370.6	539.3	545.3	370.6	298.3	355.5	262.1
87.5°	138.6	111.5	111.5	138.6	213.9	226.0	385.6	238.0	189.8	129.6	102.4
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)