

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: P397879

Luminaire Tested: **ARCH-S-PA1-50-830-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397879
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-PA1-50-830-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6287 lumens
Efficiency: N/A
Efficacy: 116.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 54
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

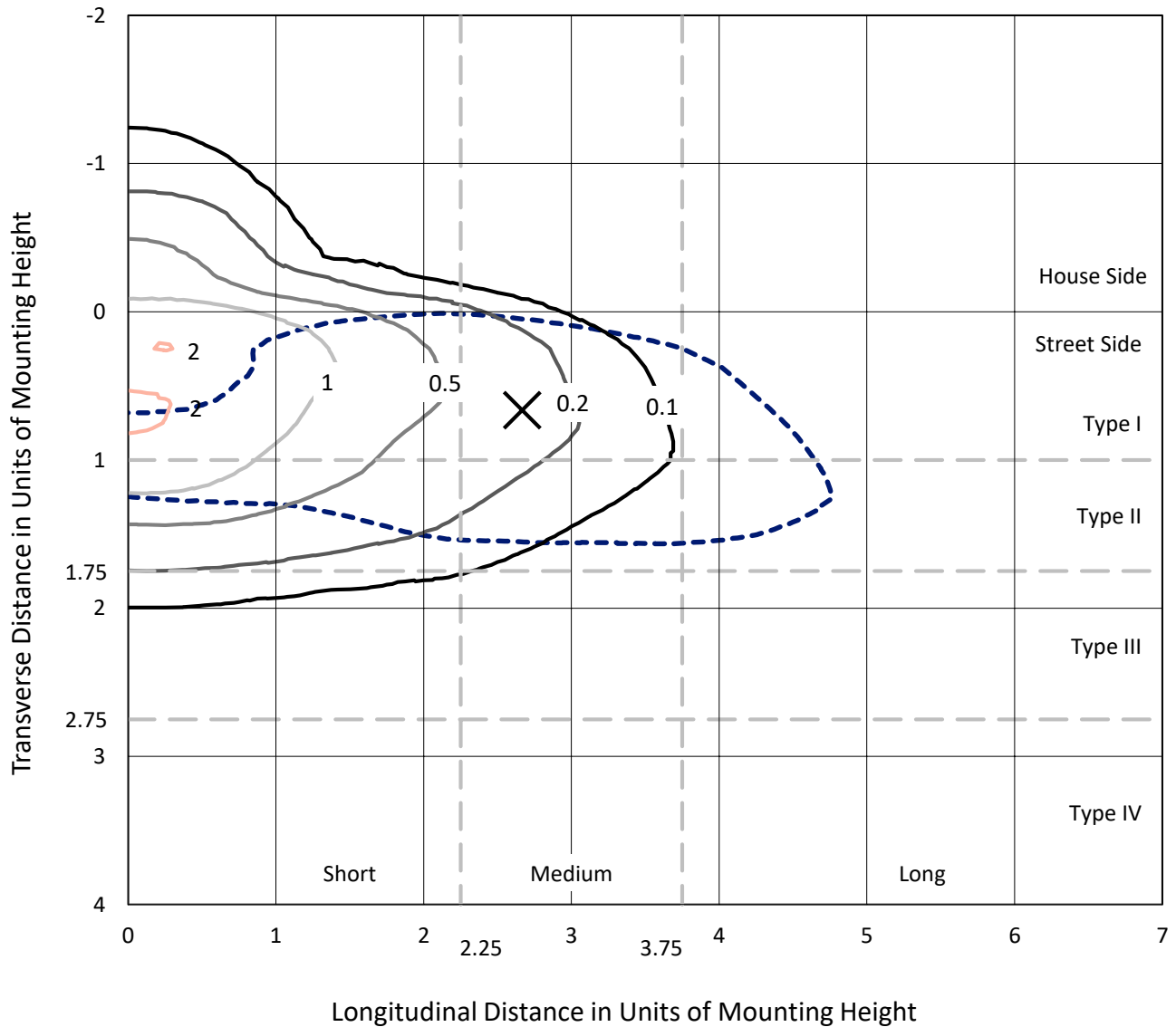


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

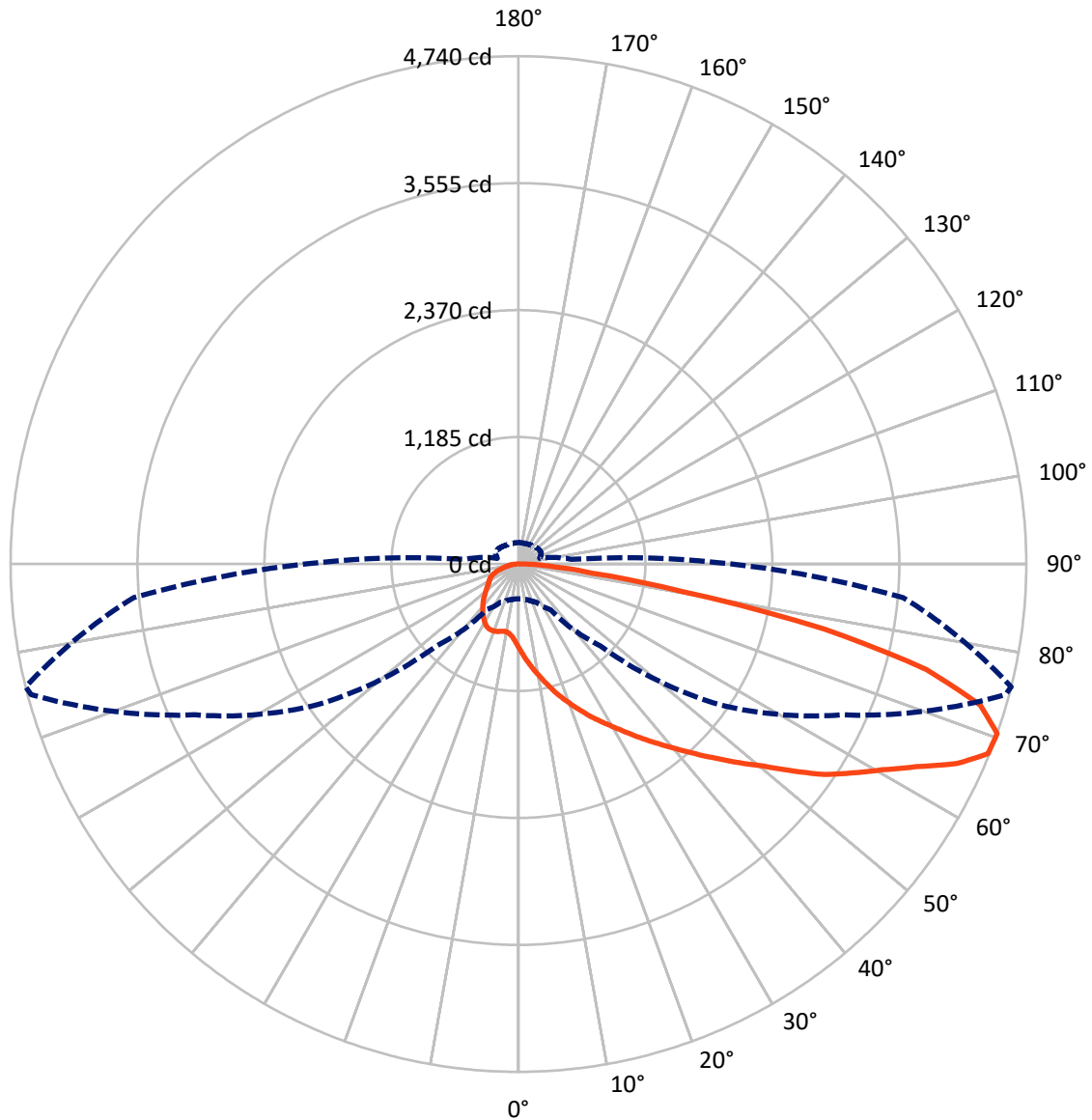


Based on 25 foot mounting height. Maximum calculated value = 2.1 fc
 Type II - Medium - Non-Cutoff

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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	1026.4	0.0	1026.4
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	5260.6	0.0	5260.6
	% Fixture	83.7	0.0	83.7
Total	Lumens	6287.0	0.0	6287.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	1.3
10°-20°	277.6	4.4
20°-30°	496.7	7.9
30°-40°	803.5	12.8
40°-50°	1162.5	18.5
50°-60°	1330.5	21.2
60°-70°	1223.9	19.5
70°-80°	756.8	12.0
80°-90°	153.7	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°	6287.0	100.0
0°-180°	6287.0	100.0

Coefficient of Utilization



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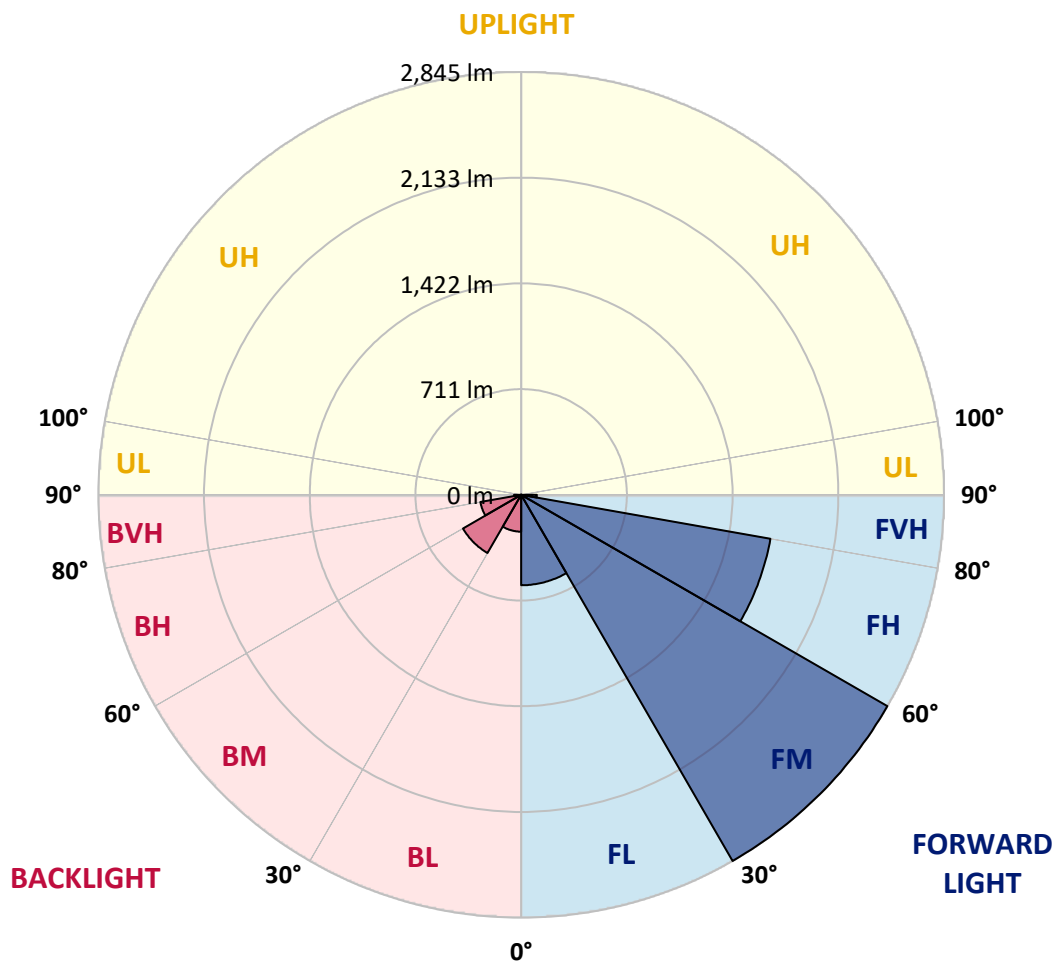
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	608.2	9.7			
FM (30°-60°)	2844.6	45.2			
FH (60°-80°)	1702.3	27.1			G1/1800
FVH (80°-90°)	105.5	1.7			G2/225
BL (0°-30°)	247.9	3.9	B1/500		
BM (30°-60°)	451.9	7.2	B1/1000		
BH (60°-80°)	278.4	4.4	B1/500		G1/500
BVH (80°-90°)	48.2	0.8			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	786.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2
2.5°	1002.0	994.6	993.7	982.2	971.4	942.5	921.8	885.4	849.0	848.2	811.8
5°	1158.2	1150.8	1146.7	1132.6	1114.4	1076.4	1039.2	983.0	921.0	916.8	848.2
7.5°	1264.1	1257.4	1249.2	1243.4	1226.0	1192.1	1146.7	1079.7	994.6	986.3	890.4
10°	1335.2	1331.0	1329.4	1325.2	1314.5	1287.2	1243.4	1172.3	1068.1	1059.0	935.0
12.5°	1365.8	1364.1	1371.5	1383.1	1387.2	1376.5	1334.3	1267.4	1149.1	1139.2	988.8
15°	1330.2	1331.9	1350.9	1390.6	1432.7	1455.9	1431.1	1365.8	1240.9	1226.9	1051.6
17.5°	1313.7	1316.1	1329.4	1367.4	1426.9	1498.9	1510.4	1459.2	1329.4	1309.5	1117.7
20°	1342.6	1345.9	1355.8	1385.6	1426.9	1503.8	1564.2	1548.5	1416.2	1395.5	1181.4
22.5°	1416.2	1420.3	1419.5	1438.5	1466.6	1519.5	1593.9	1632.8	1507.1	1484.0	1247.5
25°	1573.3	1570.0	1541.8	1532.7	1540.2	1574.1	1633.6	1713.8	1602.2	1579.0	1317.0
27.5°	1786.6	1782.4	1731.2	1684.9	1643.5	1658.4	1689.8	1779.1	1698.9	1672.5	1383.1
30°	2014.7	2009.8	1950.2	1875.0	1783.2	1761.8	1757.6	1836.2	1796.5	1768.4	1453.4
32.5°	2237.1	2233.0	2169.3	2081.7	1955.2	1890.7	1851.0	1899.8	1907.3	1880.0	1530.3
35°	2439.7	2439.7	2385.1	2280.9	2137.9	2040.4	1975.0	1978.4	2034.6	2003.2	1617.9
37.5°	2619.9	2619.1	2559.5	2457.0	2319.8	2208.2	2127.2	2073.4	2156.1	2128.8	1709.7
40°	2762.9	2757.1	2713.3	2624.0	2486.0	2375.2	2293.3	2185.0	2291.7	2266.9	1807.2
42.5°	2867.1	2863.8	2834.0	2756.3	2624.9	2520.7	2464.5	2325.6	2445.5	2420.7	1921.3
45°	2907.6	2914.2	2914.2	2840.6	2736.5	2641.4	2616.6	2480.2	2611.6	2586.8	2043.7
47.5°	2842.3	2859.6	2895.2	2900.2	2808.4	2743.9	2752.2	2635.6	2782.8	2769.5	2177.6
50°	2638.1	2670.3	2748.0	2888.6	2837.3	2822.4	2867.9	2794.3	2966.3	2962.2	2340.5
52.5°	2111.5	2190.0	2432.2	2684.4	2817.5	2858.8	2982.8	2972.9	3202.7	3209.3	2552.9
55°	1619.6	1649.3	1929.6	2358.6	2696.0	2847.2	3059.7	3147.3	3459.0	3467.3	2748.0
57.5°	1309.5	1329.4	1482.3	1929.6	2419.0	2784.4	3120.1	3249.0	3655.8	3677.3	2921.6
60°	1037.5	1066.5	1169.0	1476.5	2031.3	2633.1	3162.2	3362.3	3867.4	3899.7	3129.2
62.5°	771.3	785.4	882.1	1093.8	1608.0	2361.1	3139.9	3485.5	4127.0	4165.9	3378.8
65°	548.9	561.3	630.0	777.9	1188.8	1993.2	3010.1	3577.2	4452.7	4492.4	3630.2
67.5°	410.9	415.8	454.7	544.0	801.1	1548.5	2747.2	3561.5	4690.8	4726.4	3731.0
70°	324.9	326.6	345.6	393.5	520.8	1078.1	2286.7	3330.9	4708.2	4739.6	3603.7
72.5°	269.5	268.7	279.4	302.6	362.9	682.0	1694.0	2902.6	4485.0	4506.5	3248.2
75°	222.4	224.0	231.5	244.7	277.0	449.7	1097.9	2315.7	3956.7	3933.6	2725.7
77.5°	186.8	186.0	189.3	200.9	224.0	323.2	643.2	1673.3	2932.4	2920.8	1789.0
80°	150.5	152.1	157.1	167.0	188.5	246.4	380.3	1044.2	1573.3	1531.1	854.8
82.5°	100.9	116.6	126.5	138.1	162.9	181.9	241.4	530.8	703.5	692.8	387.7
85°	48.0	63.7	94.2	107.5	132.3	114.1	163.7	253.0	352.2	348.1	139.7
87.5°	9.9	9.9	50.4	60.4	81.8	48.8	90.9	110.0	170.3	159.6	57.0
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°	786.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2
2.5°	790.3	768.0	723.4	687.8	651.5	630.8	605.2	592.8	590.3	583.7	588.6
5°	804.4	760.6	676.3	620.9	583.7	565.5	556.4	553.1	552.3	550.6	550.6
7.5°	823.4	756.5	646.5	590.3	566.3	560.5	563.0	568.0	568.8	570.4	569.6
10°	846.6	757.3	630.0	582.8	571.3	572.1	580.4	587.0	590.3	592.8	591.9
12.5°	878.8	767.2	627.5	587.8	582.8	586.1	594.4	601.0	604.3	605.2	605.2
15°	921.0	787.9	633.3	598.5	594.4	596.9	601.9	604.3	605.2	604.3	604.3
17.5°	967.3	812.7	641.5	605.2	598.5	596.1	594.4	591.9	587.0	583.7	583.7
20°	1011.9	835.0	645.7	604.3	592.8	582.8	572.9	560.5	552.3	545.6	545.6
22.5°	1056.6	855.7	645.7	595.2	577.1	558.0	537.4	517.5	505.1	496.9	496.9
25°	1103.7	875.5	640.7	579.5	552.3	525.0	496.9	472.1	459.7	451.4	449.7
27.5°	1143.4	887.1	627.5	557.2	521.7	486.9	454.7	429.1	420.0	412.5	412.5
30°	1185.5	894.5	602.7	528.3	486.9	447.3	414.2	393.5	383.6	372.9	372.0
32.5°	1232.6	899.5	574.6	497.7	451.4	409.2	381.1	364.6	343.1	331.5	329.9
35°	1287.2	906.1	544.8	463.0	415.8	377.8	361.3	334.0	313.3	303.4	302.6
37.5°	1345.1	911.1	512.6	432.4	383.6	357.1	340.6	308.4	290.2	275.3	273.6
40°	1406.3	911.1	479.5	402.6	358.0	348.1	316.6	287.7	257.1	249.7	248.0
42.5°	1474.1	909.4	446.4	373.7	334.0	327.4	302.6	272.0	256.3	249.7	248.0
45°	1546.0	903.6	415.0	340.6	309.2	296.0	277.0	268.7	262.1	262.1	262.1
47.5°	1627.8	898.7	379.5	310.8	291.0	276.1	262.1	257.1	256.3	258.8	261.2
50°	1732.8	897.0	349.7	289.4	277.0	259.6	257.9	253.8	254.6	254.6	254.6
52.5°	1860.1	882.1	321.6	273.6	262.9	242.2	247.2	251.3	253.0	252.2	251.3
55°	1953.6	855.7	297.6	262.9	253.0	235.6	242.2	248.8	250.5	248.0	248.0
57.5°	2037.9	818.5	278.6	254.6	246.4	231.5	238.9	245.5	243.9	243.1	242.2
60°	2134.6	782.9	263.7	250.5	239.8	229.8	236.4	240.6	238.1	236.4	235.6
62.5°	2239.6	748.2	253.0	250.5	234.8	229.0	234.0	235.6	230.7	229.0	229.0
65°	2288.4	693.6	241.4	250.5	232.3	227.3	229.0	227.3	222.4	222.4	221.6
67.5°	2208.2	603.5	226.5	247.2	235.6	224.9	221.6	219.1	213.3	213.3	211.6
70°	1986.6	496.0	205.0	236.4	236.4	224.0	211.6	205.9	199.2	201.7	198.4
72.5°	1697.3	393.5	178.6	218.3	231.5	223.2	200.9	191.8	186.0	188.5	183.5
75°	1374.8	305.1	147.2	189.3	219.1	219.1	190.1	177.7	171.1	171.1	165.3
77.5°	876.3	225.7	119.9	157.1	196.8	213.3	181.1	162.0	152.1	149.6	145.5
80°	434.0	158.7	98.4	124.8	167.8	200.1	174.4	143.9	129.8	124.8	117.4
82.5°	230.7	110.0	78.5	97.6	133.9	180.2	166.2	124.0	106.6	99.2	90.9
85°	103.3	67.8	62.8	74.4	101.7	148.0	149.6	101.7	81.8	97.6	71.9
87.5°	38.0	30.6	30.6	38.0	58.7	62.0	105.8	65.3	52.1	35.5	28.1
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)