

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: P398101

Luminaire Tested: **ARCH-S-PA1-80-830-U-T4W**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398101
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-80-830-U-T4W
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8592 lumens
Efficiency: N/A
Efficacy: 103.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G3

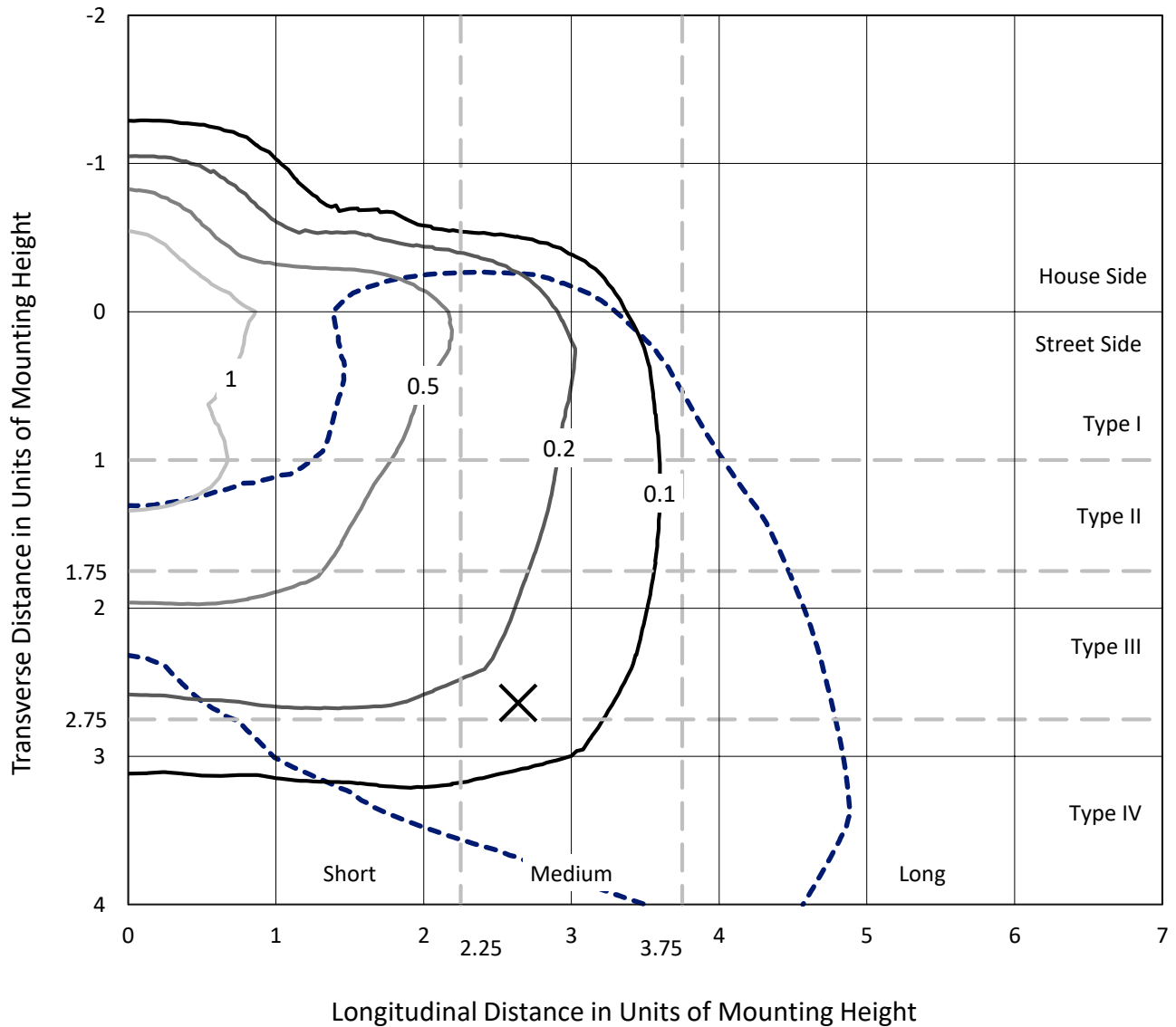
Input Watts (W): 83
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

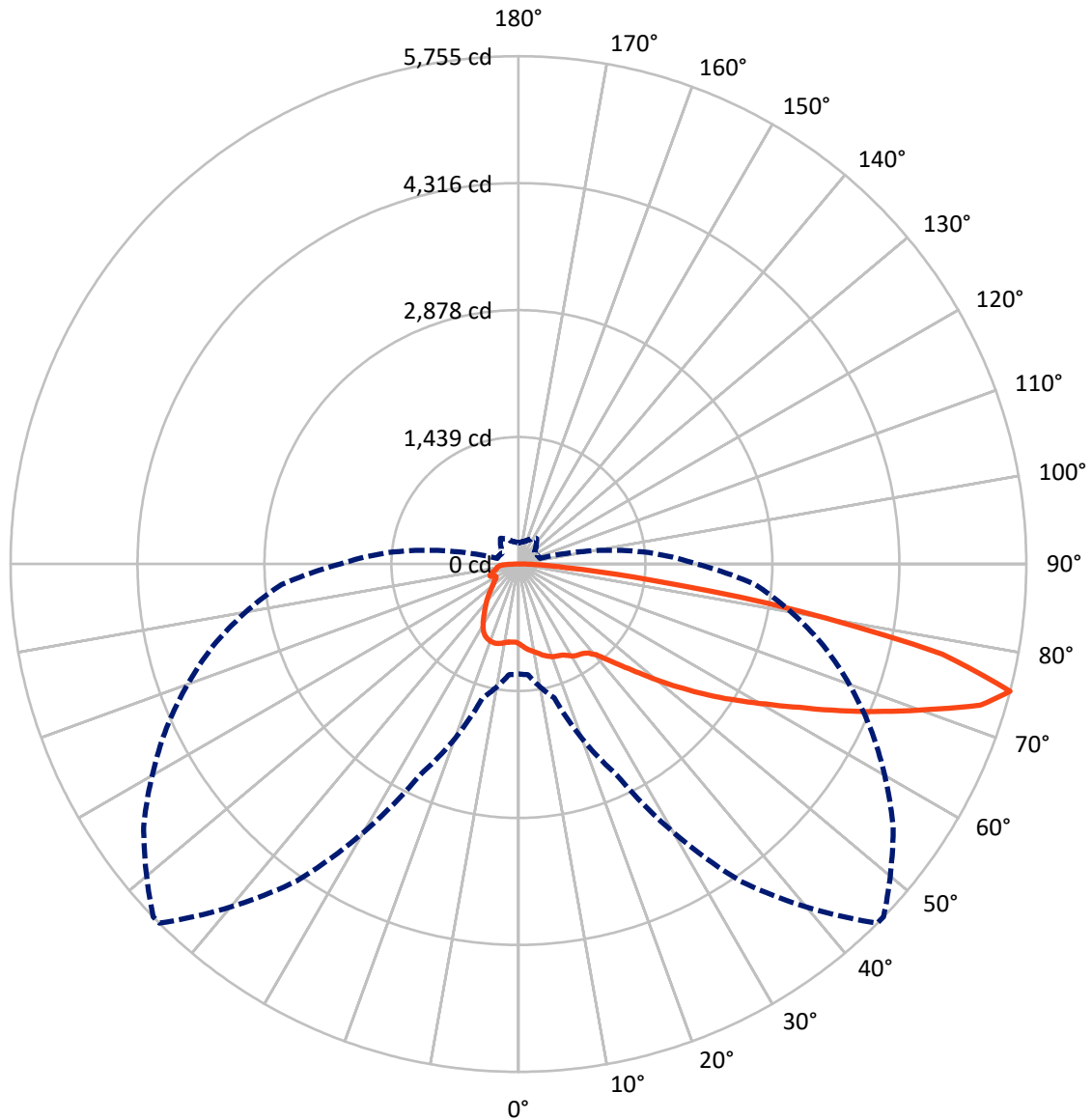
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1898.8	0.0	1898.8
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	6693.2	0.0	6693.2
	% Fixture	77.9	0.0	77.9
Total	Lumens	8592.0	0.0	8592.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.3	1.0
10°-20°	284.0	3.3
20°-30°	484.2	5.6
30°-40°	678.4	7.9
40°-50°	996.6	11.6
50°-60°	1586.2	18.5
60°-70°	2256.3	26.3
70°-80°	1889.2	22.0
80°-90°	327.9	3.8
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°	8592.0	100.0
0°-180°	8592.0	100.0



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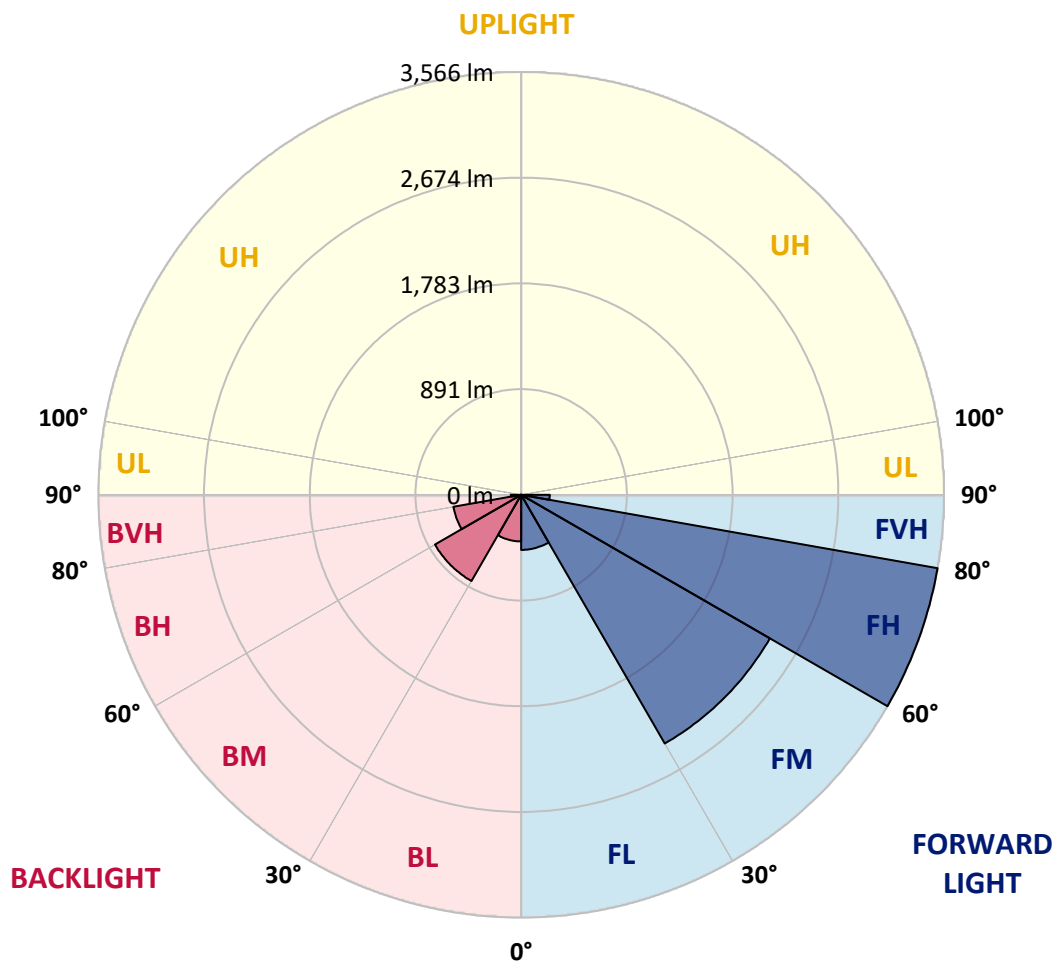
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	464.5	5.4			
FM	(30°-60°)	2421.8	28.2			
FH	(60°-80°)	3565.9	41.5			G2/5000
FVH	(80°-90°)	241.0	2.8			G3/500
BL	(0°-30°)	393.0	4.6	B1/500		
BM	(30°-60°)	839.4	9.8	B1/1000		
BH	(60°-80°)	579.6	6.7	B2/1000		G2/1000
BVH	(80°-90°)	86.8	1.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	902.3	902.3	902.3	902.3	902.3	902.3	902.3	902.3	902.3	902.3	902.3
2.5°	954.0	949.4	947.1	947.1	937.9	932.2	931.0	923.0	916.1	909.2	903.5
5°	1009.1	1005.7	998.8	993.0	980.4	964.3	962.0	944.8	927.6	911.5	897.8
7.5°	1059.6	1052.7	1044.7	1033.2	1012.6	990.7	987.3	963.2	939.1	915.0	896.6
10°	1102.1	1095.2	1083.7	1067.7	1041.3	1014.9	1011.4	986.2	960.9	932.2	905.8
12.5°	1142.3	1136.5	1119.3	1097.5	1066.5	1042.4	1039.0	1017.2	990.7	958.6	924.2
15°	1176.7	1171.0	1152.6	1127.4	1091.8	1073.4	1068.8	1048.1	1021.7	987.3	951.7
17.5°	1193.9	1193.9	1174.4	1146.9	1113.6	1099.8	1096.4	1071.1	1047.0	1013.7	978.1
20°	1199.7	1202.0	1188.2	1154.9	1126.2	1120.5	1117.0	1096.4	1068.8	1036.7	1003.4
22.5°	1203.1	1207.7	1196.2	1158.4	1134.2	1130.8	1128.5	1114.7	1092.9	1061.9	1028.6
25°	1214.6	1214.6	1206.6	1164.1	1144.6	1143.4	1143.4	1135.4	1120.5	1094.1	1060.8
27.5°	1231.8	1230.7	1220.4	1176.7	1167.5	1171.0	1169.8	1168.7	1158.4	1132.0	1096.4
30°	1260.5	1260.5	1249.1	1202.0	1196.2	1211.2	1212.3	1214.6	1198.5	1157.2	1128.5
32.5°	1304.2	1299.6	1288.1	1227.2	1218.1	1231.8	1234.1	1233.0	1219.2	1180.2	1166.4
35°	1438.5	1428.1	1386.8	1283.5	1237.6	1245.6	1246.8	1252.5	1254.8	1223.8	1216.9
37.5°	1673.8	1660.0	1596.9	1416.7	1299.6	1280.0	1278.9	1293.8	1306.5	1278.9	1278.9
40°	1929.8	1918.4	1881.6	1646.3	1414.4	1350.1	1345.5	1359.3	1375.3	1355.8	1361.6
42.5°	2150.3	2159.4	2162.9	1889.6	1586.6	1481.0	1468.3	1448.8	1474.1	1456.8	1479.8
45°	2315.6	2311.0	2374.1	2138.8	1809.3	1645.1	1627.9	1575.1	1607.2	1606.1	1656.6
47.5°	2491.2	2483.2	2509.6	2373.0	2063.0	1846.0	1819.6	1741.6	1789.8	1823.1	1906.9
50°	2657.7	2660.0	2669.2	2557.8	2338.5	2090.6	2057.3	1952.8	2021.7	2091.7	2209.9
52.5°	2874.7	2858.6	2847.1	2773.6	2647.3	2345.4	2323.6	2204.2	2300.6	2383.3	2540.6
55°	3064.1	3053.7	3046.9	3043.4	2905.7	2626.7	2603.7	2479.7	2618.6	2677.2	2909.1
57.5°	3266.1	3260.4	3297.1	3355.7	3300.6	2912.5	2888.4	2769.0	2924.0	2965.3	3308.6
60°	3414.2	3417.7	3518.7	3667.9	3630.1	3222.5	3193.8	3088.2	3221.4	3258.1	3708.1
62.5°	3415.4	3449.8	3684.0	3951.5	3995.1	3579.5	3546.3	3431.4	3526.7	3526.7	4066.3
65°	3089.3	3128.4	3654.2	4021.5	4364.8	4004.3	3972.2	3791.9	3827.5	3779.3	4402.7
67.5°	2764.4	2810.4	3305.2	4027.3	4624.2	4458.9	4421.0	4152.4	4091.6	3969.9	4638.0
70°	2548.6	2580.8	2994.1	3952.7	4780.4	4934.2	4905.5	4494.5	4299.4	4129.4	4588.7
72.5°	2145.7	2134.2	2529.1	3597.9	4867.6	5473.8	5449.7	4866.5	4479.6	4053.7	3913.6
75°	1245.6	1259.4	1569.4	2635.9	4387.8	5755.1	5752.8	5184.5	4400.4	3580.7	2696.7
77.5°	359.3	369.7	515.5	1158.4	2774.8	4909.0	5066.2	4741.3	3719.6	2552.1	1398.3
80°	157.3	165.3	223.9	385.7	1195.1	3206.4	3344.2	3206.4	2243.2	1171.0	548.8
82.5°	93.0	98.7	145.8	238.8	572.9	1525.7	1711.7	1494.7	967.8	497.1	227.3
85°	52.8	55.1	83.8	151.5	360.5	533.8	599.3	561.4	471.8	282.4	119.4
87.5°	24.1	25.3	41.3	71.2	202.1	180.2	187.1	248.0	273.2	172.2	59.7
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°	902.3	902.3	902.3	902.3	902.3	902.3	902.3	902.3	902.3	902.3	902.3
2.5°	901.2	897.8	890.9	888.6	885.1	886.3	887.4	887.4	888.6	885.1	885.1
5°	892.0	886.3	879.4	879.4	879.4	888.6	896.6	901.2	903.5	903.5	901.2
7.5°	888.6	881.7	873.6	875.9	878.2	889.7	904.6	919.6	924.2	924.2	921.9
10°	895.5	888.6	882.8	886.3	892.0	901.2	912.7	926.5	937.9	939.1	937.9
12.5°	911.5	903.5	897.8	904.6	911.5	917.3	923.0	928.8	943.7	946.0	946.0
15°	937.9	929.9	923.0	928.8	931.0	931.0	931.0	931.0	946.0	948.3	948.3
17.5°	964.3	957.5	950.6	951.7	944.8	935.6	932.2	931.0	939.1	946.0	947.1
20°	989.6	983.9	977.0	965.5	948.3	931.0	925.3	925.3	929.9	940.2	940.2
22.5°	1017.2	1010.3	998.8	972.4	943.7	919.6	913.8	917.3	923.0	936.8	935.6
25°	1048.1	1039.0	1019.4	970.1	928.8	900.1	901.2	911.5	921.9	936.8	936.8
27.5°	1082.6	1070.0	1030.9	951.7	895.5	867.9	878.2	902.3	917.3	933.3	935.6
30°	1120.5	1109.0	1040.1	919.6	841.5	816.2	841.5	880.5	903.5	918.4	921.9
32.5°	1166.4	1157.2	1048.1	878.2	771.5	749.7	786.4	834.6	871.4	888.6	892.0
35°	1223.8	1214.6	1058.5	831.2	706.0	683.1	716.4	765.7	814.0	835.8	842.7
37.5°	1298.4	1284.6	1067.7	780.7	650.9	624.5	640.6	685.4	729.0	758.8	766.9
40°	1393.7	1371.9	1075.7	723.3	602.7	572.9	578.6	600.4	625.7	652.1	662.4
42.5°	1528.0	1484.4	1076.8	662.4	553.3	525.8	523.5	530.4	530.4	530.4	533.8
45°	1715.2	1632.5	1079.1	605.0	502.8	474.1	467.2	465.0	447.7	414.4	412.1
47.5°	1951.6	1826.5	1089.5	556.8	450.0	424.8	415.6	406.4	374.3	339.8	332.9
50°	2254.7	2051.5	1110.1	510.9	405.3	388.0	376.6	354.7	319.2	292.7	285.9
52.5°	2603.7	2319.0	1129.7	462.7	372.0	360.5	346.7	320.3	282.4	266.3	264.0
55°	3004.4	2617.5	1168.7	420.2	343.3	335.2	322.6	297.3	268.6	257.2	256.0
57.5°	3414.2	2951.6	1223.8	382.3	315.7	311.1	311.1	289.3	270.9	266.3	266.3
60°	3809.1	3238.6	1181.3	346.7	290.5	292.7	314.6	308.8	295.0	300.8	304.2
62.5°	4115.7	3407.3	958.6	318.0	272.1	292.7	349.0	349.0	332.9	330.6	330.6
65°	4246.5	3405.0	673.9	296.2	265.2	321.4	389.2	370.8	328.3	312.3	308.8
67.5°	4213.3	3255.8	465.0	281.3	262.9	351.3	407.5	355.9	307.7	293.9	283.6
70°	3920.5	2940.1	358.2	267.5	259.5	338.7	401.8	338.7	291.6	279.0	269.8
72.5°	3162.8	2358.0	297.3	253.7	245.7	313.4	382.3	322.6	279.0	265.2	256.0
75°	2017.1	1483.2	251.4	235.3	219.3	281.3	355.9	306.5	265.2	246.8	239.9
77.5°	970.1	639.5	219.3	213.5	197.5	260.6	329.5	285.9	246.8	231.9	227.3
80°	392.6	292.7	190.6	191.7	181.4	248.0	311.1	266.3	228.5	212.4	204.3
82.5°	204.3	169.9	160.7	165.3	165.3	236.5	297.3	250.3	212.4	205.5	179.1
85°	110.2	105.6	124.0	133.2	143.5	213.5	276.7	233.0	194.0	166.5	160.7
87.5°	54.0	68.9	70.0	80.4	99.9	171.1	233.0	195.2	161.9	134.3	132.0
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)