

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: P398164

Luminaire Tested: **ARCH-S-PA1-90-827-U-T4W**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398164
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-PA1-90-827-U-T4W
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8521 lumens
Efficiency: N/A
Efficacy: 90.6 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): 94
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

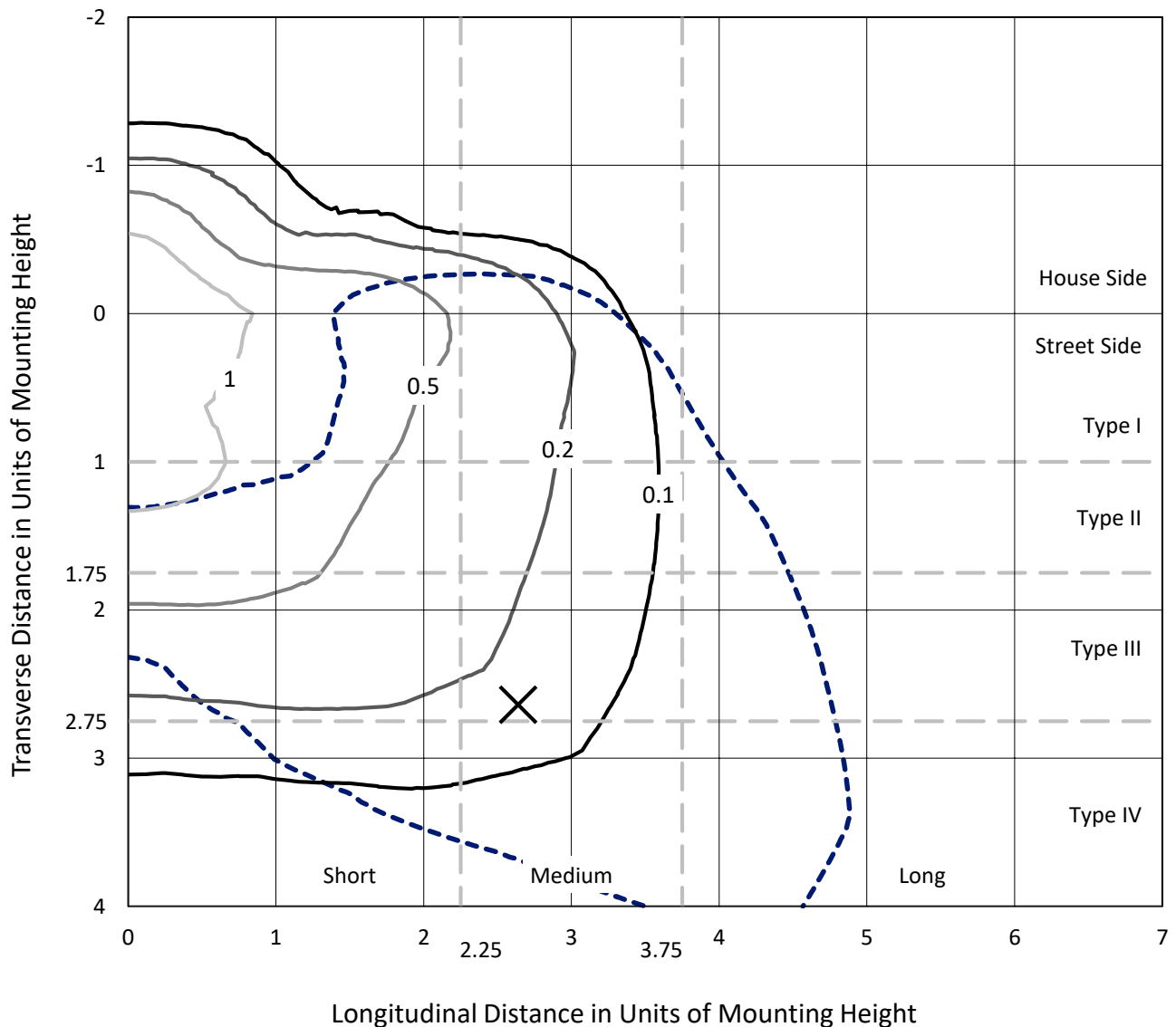


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

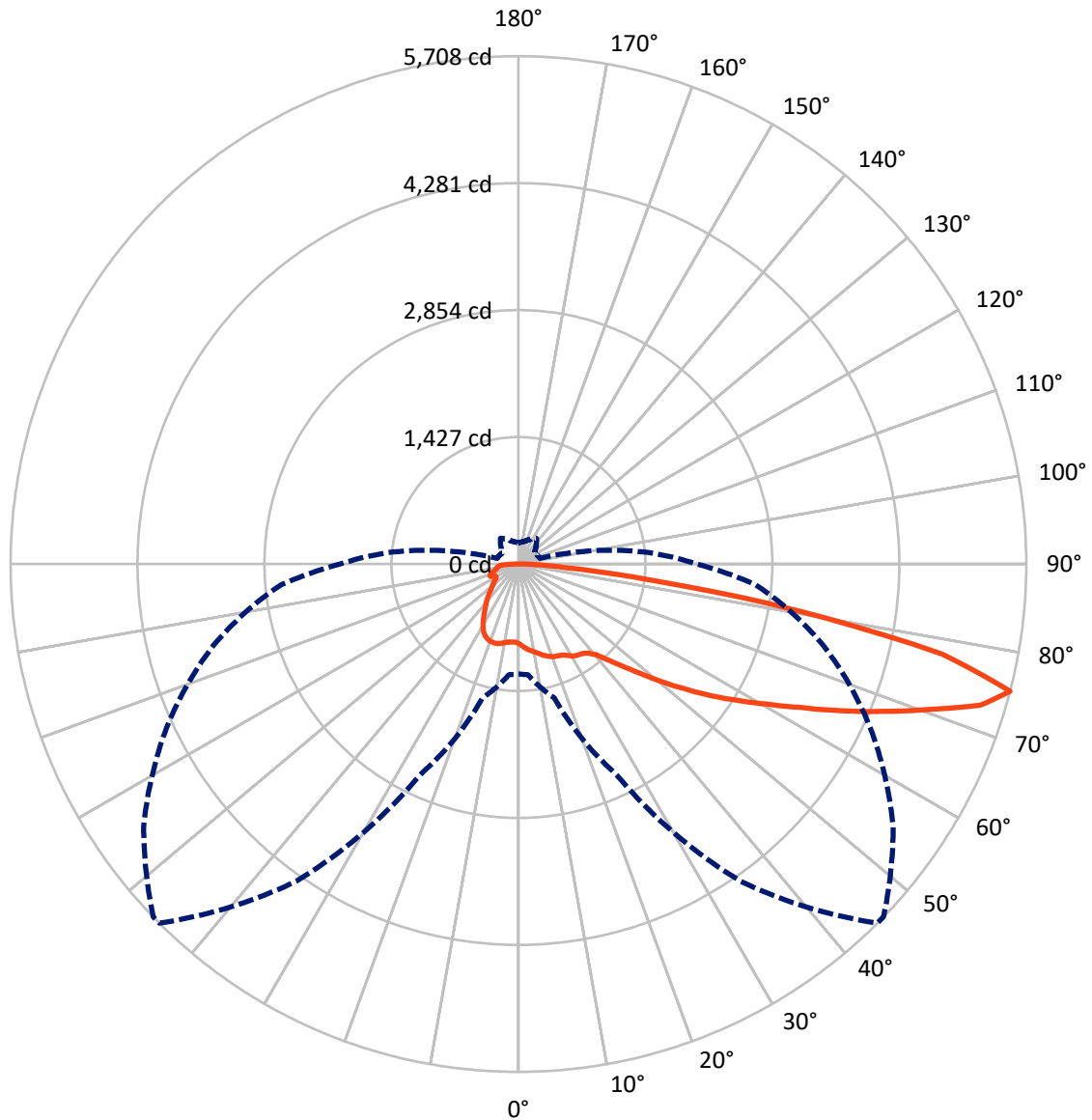


Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type IV - Medium - Non-Cutoff

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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	1883.1	0.0	1883.1
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	6637.9	0.0	6637.9
	% Fixture	77.9	0.0	77.9
Total	Lumens	8521.0	0.0	8521.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.5	1.0
10°-20°	281.6	3.3
20°-30°	480.2	5.6
30°-40°	672.8	7.9
40°-50°	988.4	11.6
50°-60°	1573.1	18.5
60°-70°	2237.7	26.3
70°-80°	1873.6	22.0
80°-90°	325.2	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°	8521.0	100.0
0°-180°	8521.0	100.0

Coefficient of Utilization



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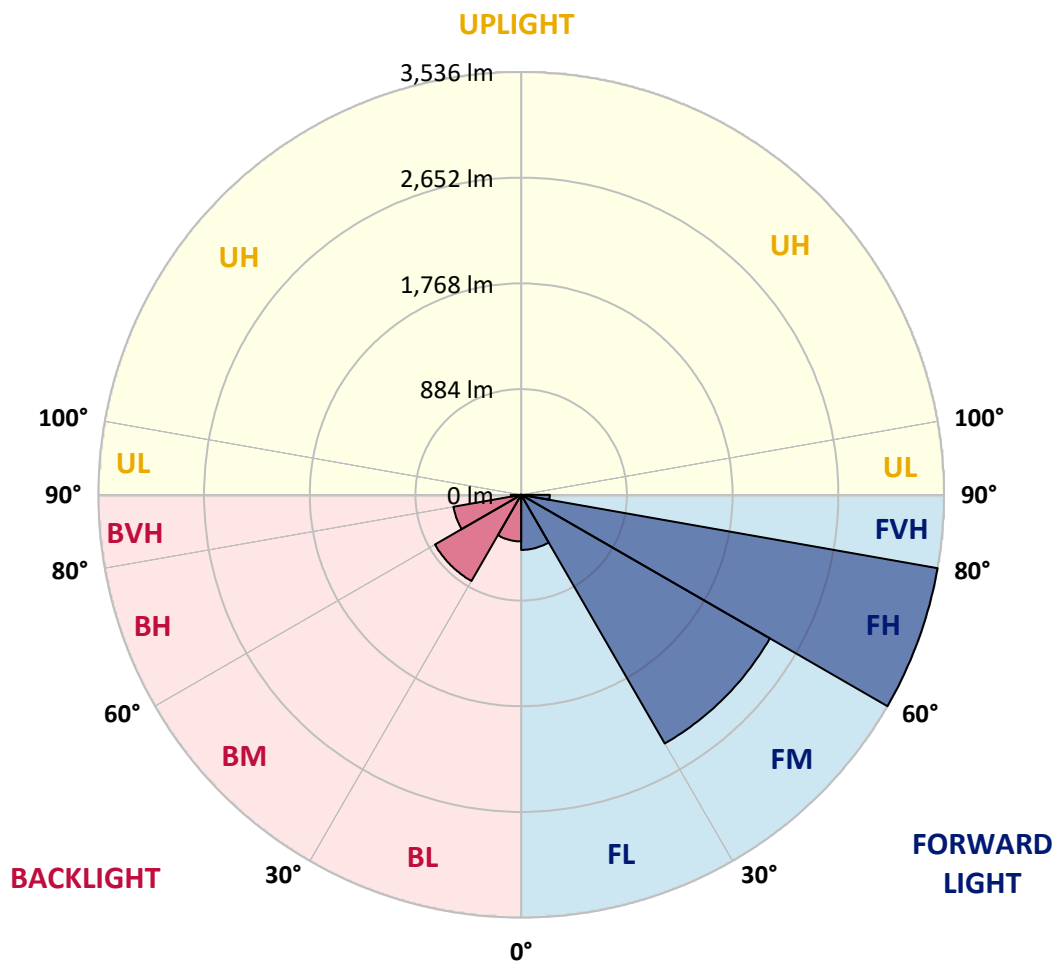
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	460.6	5.4			
FM (30°-60°)	2401.8	28.2			
FH (60°-80°)	3536.4	41.5			G2/5000
FVH (80°-90°)	239.0	2.8			G3/500
BL (0°-30°)	389.7	4.6	B1/500		
BM (30°-60°)	832.4	9.8	B1/1000		
BH (60°-80°)	574.8	6.7	B2/1000		G2/1000
BVH (80°-90°)	86.1	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°	894.9	894.9	894.9	894.9	894.9	894.9	894.9	894.9	894.9	894.9	894.9
2.5°	946.1	941.6	939.3	939.3	930.2	924.5	923.4	915.4	908.6	901.7	896.0
5°	1000.8	997.4	990.5	984.8	972.3	956.4	954.1	937.0	919.9	904.0	890.3
7.5°	1050.9	1044.0	1036.1	1024.7	1004.2	982.6	979.1	955.2	931.3	907.4	889.2
10°	1093.0	1086.2	1074.8	1058.8	1032.7	1006.5	1003.1	978.0	953.0	924.5	898.3
12.5°	1132.8	1127.2	1110.1	1088.4	1057.7	1033.8	1030.4	1008.7	982.6	950.7	916.5
15°	1167.0	1161.3	1143.1	1118.0	1082.8	1064.5	1060.0	1039.5	1013.3	979.1	943.8
17.5°	1184.1	1184.1	1164.7	1137.4	1104.4	1090.7	1087.3	1062.3	1038.3	1005.3	970.0
20°	1189.8	1192.1	1178.4	1145.4	1116.9	1111.2	1107.8	1087.3	1060.0	1028.1	995.1
22.5°	1193.2	1197.7	1186.4	1148.8	1124.9	1121.5	1119.2	1105.5	1083.9	1053.1	1020.1
25°	1204.6	1204.6	1196.6	1154.5	1135.1	1134.0	1134.0	1126.0	1111.2	1085.0	1052.0
27.5°	1221.7	1220.5	1210.3	1167.0	1157.9	1161.3	1160.2	1159.0	1148.8	1122.6	1087.3
30°	1250.1	1250.1	1238.7	1192.1	1186.4	1201.2	1202.3	1204.6	1188.6	1147.6	1119.2
32.5°	1293.4	1288.8	1277.4	1217.1	1208.0	1221.7	1223.9	1222.8	1209.1	1170.4	1156.8
35°	1426.6	1416.3	1375.4	1272.9	1227.3	1235.3	1236.5	1242.1	1244.4	1213.7	1206.9
37.5°	1660.0	1646.3	1583.7	1405.0	1288.8	1269.5	1268.3	1283.1	1295.7	1268.3	1268.3
40°	1913.9	1902.5	1866.1	1632.7	1402.7	1338.9	1334.4	1348.0	1364.0	1344.6	1350.3
42.5°	2132.5	2141.6	2145.0	1874.0	1573.5	1468.7	1456.2	1436.8	1461.9	1444.8	1467.6
45°	2296.4	2291.9	2354.5	2121.1	1794.3	1631.5	1614.4	1562.1	1594.0	1592.8	1642.9
47.5°	2470.6	2462.7	2488.8	2353.4	2046.0	1830.8	1804.6	1727.2	1775.0	1808.0	1891.1
50°	2635.7	2638.0	2647.1	2536.7	2319.2	2073.3	2040.3	1936.7	2005.0	2074.4	2191.7
52.5°	2850.9	2835.0	2823.6	2750.7	2625.5	2326.0	2304.4	2186.0	2281.6	2363.6	2519.6
55°	3038.8	3028.5	3021.7	3018.3	2881.6	2605.0	2582.2	2459.2	2597.0	2655.1	2885.1
57.5°	3239.1	3233.5	3269.9	3327.9	3273.3	2888.5	2864.6	2746.2	2899.9	2940.8	3281.3
60°	3386.0	3389.4	3489.6	3637.6	3600.1	3195.9	3167.4	3062.7	3194.7	3231.2	3677.5
62.5°	3387.2	3421.3	3653.6	3918.9	3962.1	3550.0	3516.9	3403.1	3497.6	3497.6	4032.7
65°	3063.8	3102.5	3624.0	3988.3	4328.7	3971.2	3939.3	3760.6	3795.9	3748.1	4366.3
67.5°	2741.6	2787.1	3277.9	3994.0	4586.0	4422.1	4384.5	4118.1	4057.8	3937.1	4599.7
70°	2527.6	2559.4	2969.3	3920.0	4740.9	4893.4	4865.0	4457.4	4263.8	4095.3	4550.7
72.5°	2127.9	2116.5	2508.2	3568.2	4827.4	5428.6	5404.6	4826.3	4442.6	4020.2	3881.3
75°	1235.3	1249.0	1556.4	2614.1	4351.5	5707.5	5705.2	5141.6	4364.0	3551.1	2674.4
77.5°	356.4	366.6	511.2	1148.8	2751.8	4868.4	5024.4	4702.2	3688.9	2531.0	1386.7
80°	156.0	163.9	222.0	382.5	1185.2	3179.9	3316.6	3179.9	2224.7	1161.3	544.2
82.5°	92.2	97.9	144.6	236.8	568.1	1513.1	1697.6	1482.4	959.8	493.0	225.4
85°	52.4	54.6	83.1	150.3	357.5	529.4	594.3	556.7	467.9	280.1	118.4
87.5°	23.9	25.0	41.0	70.6	200.4	178.8	185.6	245.9	271.0	170.8	59.2
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°	894.9	894.9	894.9	894.9	894.9	894.9	894.9	894.9	894.9	894.9	894.9
2.5°	893.8	890.3	883.5	881.2	877.8	879.0	880.1	880.1	881.2	877.8	877.8
5°	884.6	879.0	872.1	872.1	872.1	881.2	889.2	893.8	896.0	896.0	893.8
7.5°	881.2	874.4	866.4	868.7	871.0	882.4	897.2	912.0	916.5	916.5	914.2
10°	888.1	881.2	875.5	879.0	884.6	893.8	905.1	918.8	930.2	931.3	930.2
12.5°	904.0	896.0	890.3	897.2	904.0	909.7	915.4	921.1	935.9	938.2	938.2
15°	930.2	922.2	915.4	921.1	923.4	923.4	923.4	923.4	938.2	940.4	940.4
17.5°	956.4	949.5	942.7	943.8	937.0	927.9	924.5	923.4	931.3	938.2	939.3
20°	981.4	975.7	968.9	957.5	940.4	923.4	917.7	917.7	922.2	932.5	932.5
22.5°	1008.7	1001.9	990.5	964.3	935.9	912.0	906.3	909.7	915.4	929.0	927.9
25°	1039.5	1030.4	1011.0	962.1	921.1	892.6	893.8	904.0	914.2	929.0	929.0
27.5°	1073.6	1061.1	1022.4	943.8	888.1	860.7	871.0	894.9	909.7	925.6	927.9
30°	1111.2	1099.8	1031.5	912.0	834.5	809.5	834.5	873.3	896.0	910.8	914.2
32.5°	1156.8	1147.6	1039.5	871.0	765.1	743.5	779.9	827.7	864.2	881.2	884.6
35°	1213.7	1204.6	1049.7	824.3	700.2	677.4	710.4	759.4	807.2	828.9	835.7
37.5°	1287.7	1274.0	1058.8	774.2	645.6	619.4	635.3	679.7	723.0	752.6	760.5
40°	1382.2	1360.6	1066.8	717.3	597.7	568.1	573.8	595.5	620.5	646.7	656.9
42.5°	1515.4	1472.1	1067.9	656.9	548.8	521.5	519.2	526.0	526.0	526.0	529.4
45°	1701.0	1619.0	1070.2	600.0	498.7	470.2	463.4	461.1	444.0	411.0	408.7
47.5°	1935.5	1811.4	1080.5	552.2	446.3	421.3	412.2	403.0	371.2	337.0	330.2
50°	2236.1	2034.6	1101.0	506.6	401.9	384.8	373.4	351.8	316.5	290.3	283.5
52.5°	2582.2	2299.8	1120.3	458.8	368.9	357.5	343.8	317.7	280.1	264.1	261.9
55°	2979.6	2595.9	1159.0	416.7	340.4	332.5	319.9	294.9	266.4	255.0	253.9
57.5°	3386.0	2927.2	1213.7	379.1	313.1	308.5	308.5	286.9	268.7	264.1	264.1
60°	3777.7	3211.8	1171.6	343.8	288.1	290.3	312.0	306.3	292.6	298.3	301.7
62.5°	4081.7	3379.2	950.7	315.4	269.8	290.3	346.1	346.1	330.2	327.9	327.9
65°	4211.5	3376.9	668.3	293.7	263.0	318.8	386.0	367.7	325.6	309.7	306.3
67.5°	4178.4	3228.9	461.1	278.9	260.7	348.4	404.2	352.9	305.1	291.5	281.2
70°	3888.1	2915.8	355.2	265.3	257.3	335.9	398.5	335.9	289.2	276.7	267.6
72.5°	3136.7	2338.6	294.9	251.6	243.6	310.8	379.1	319.9	276.7	263.0	253.9
75°	2000.4	1471.0	249.3	233.4	217.5	278.9	352.9	304.0	263.0	244.8	238.0
77.5°	962.1	634.2	217.5	211.8	195.8	258.4	326.8	283.5	244.8	230.0	225.4
80°	389.4	290.3	189.0	190.1	179.9	245.9	308.5	264.1	226.6	210.6	202.7
82.5°	202.7	168.5	159.4	163.9	163.9	234.5	294.9	248.2	210.6	203.8	177.6
85°	109.3	104.7	123.0	132.1	142.3	211.8	274.4	231.1	192.4	165.1	159.4
87.5°	53.5	68.3	69.5	79.7	99.1	169.6	231.1	193.6	160.5	133.2	130.9
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)