

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: P397588

Luminaire Tested: **ARCH-S-PA1-100-827-U-T4W**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397588
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-PA1-100-827-U-T4W
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8608 lumens
Efficiency: N/A
Efficacy: 89.7 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

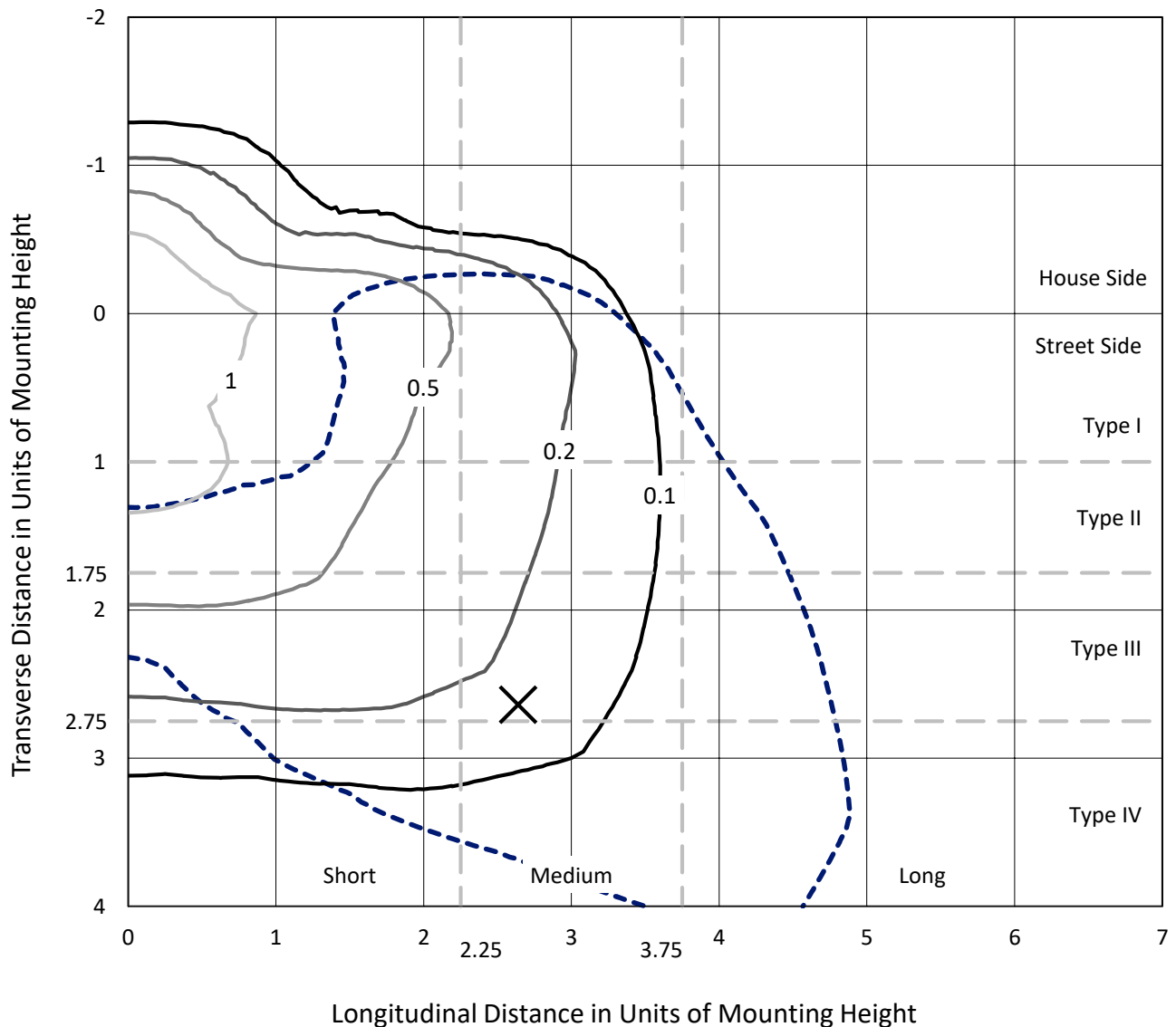
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

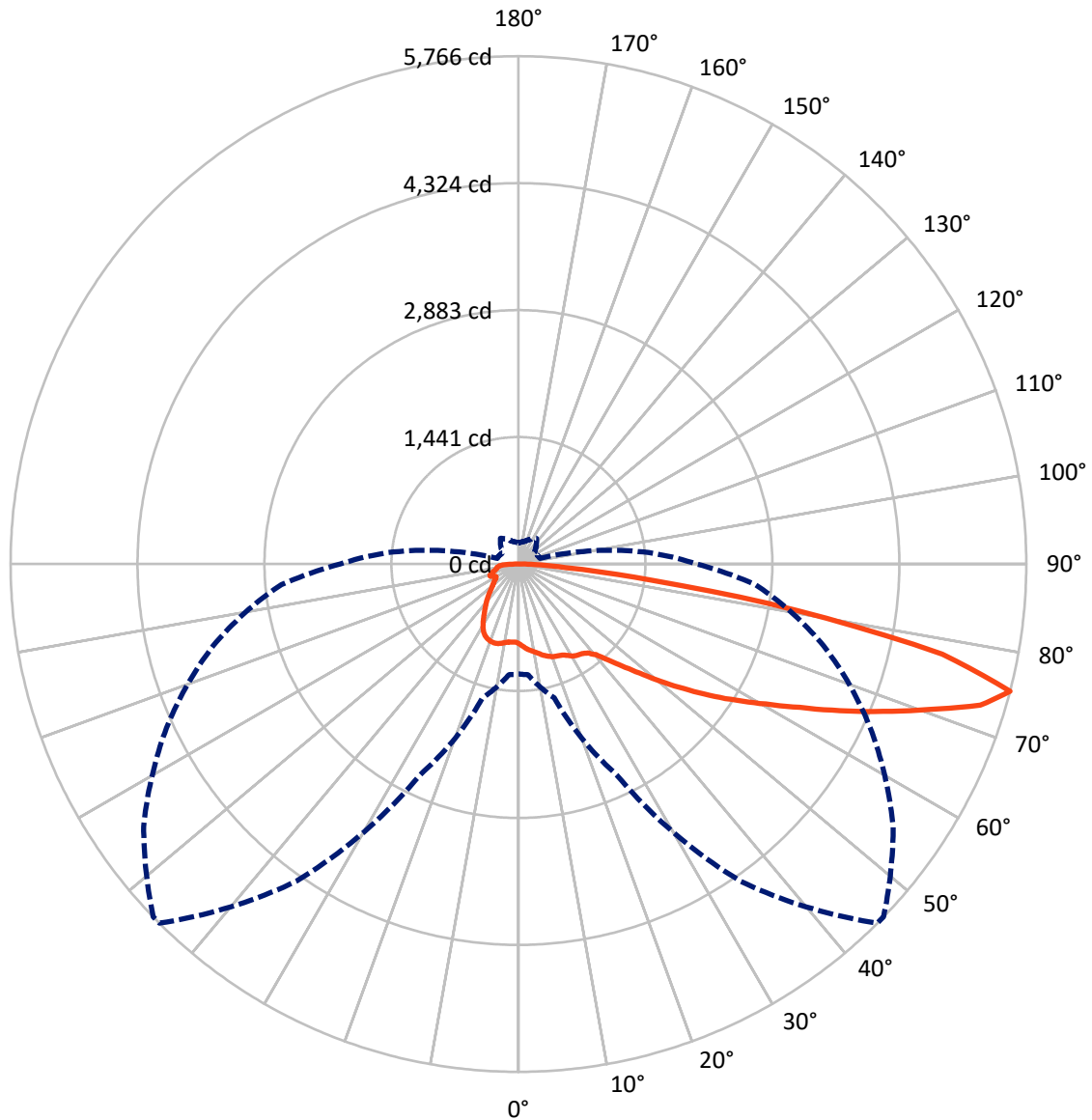
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 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	1902.3	0.0	1902.3
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	6705.7	0.0	6705.7
	% Fixture	77.9	0.0	77.9
Total	Lumens	8608.0	0.0	8608.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.4	1.0
10°-20°	284.5	3.3
20°-30°	485.1	5.6
30°-40°	679.6	7.9
40°-50°	998.5	11.6
50°-60°	1589.1	18.5
60°-70°	2260.5	26.3
70°-80°	1892.7	22.0
80°-90°	328.5	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°	8608.0	100.0
0°-180°	8608.0	100.0



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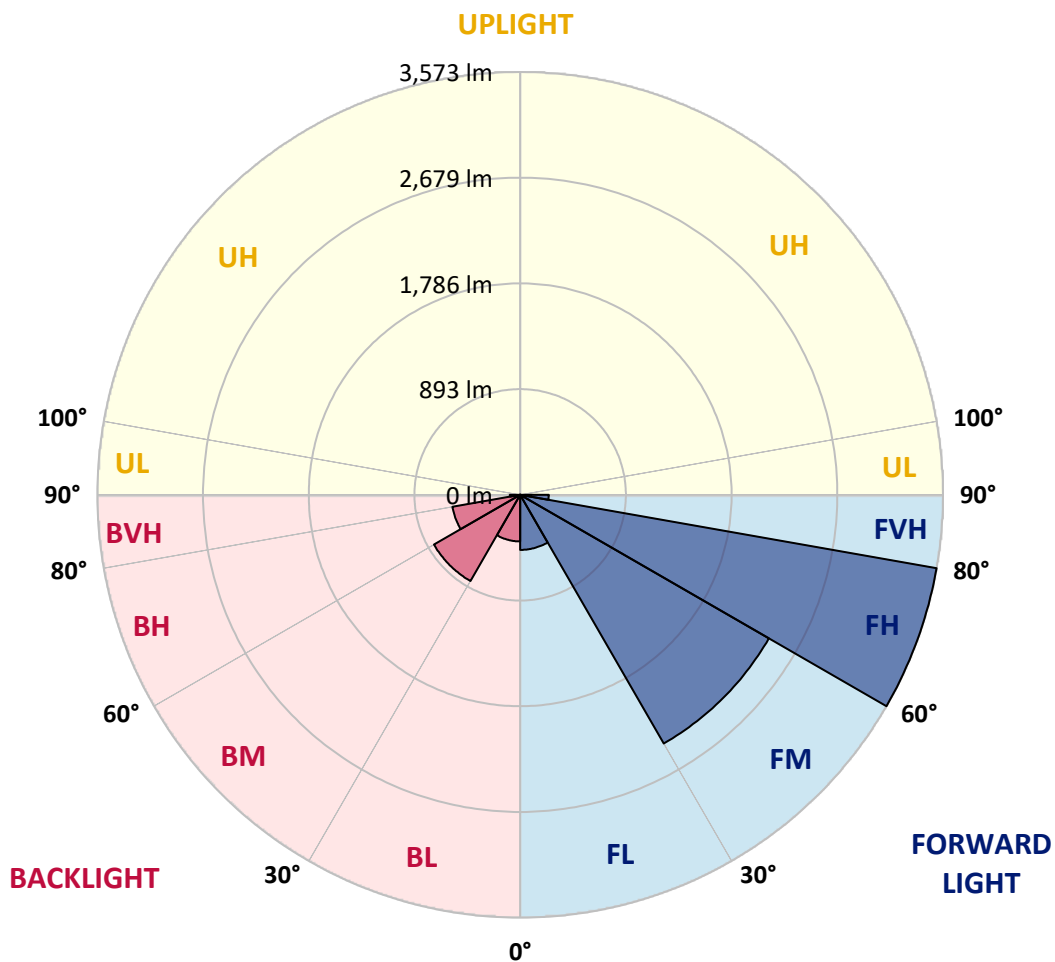
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	465.3	5.4			
FM	(30°-60°)	2426.3	28.2			
FH	(60°-80°)	3572.5	41.5			G2/5000
FVH	(80°-90°)	241.5	2.8			G3/500
BL	(0°-30°)	393.7	4.6	B1/500		
BM	(30°-60°)	840.9	9.8	B1/1000		
BH	(60°-80°)	580.7	6.7	B2/1000		G2/1000
BVH	(80°-90°)	87.0	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°	904.0	904.0	904.0	904.0	904.0	904.0	904.0	904.0	904.0	904.0	904.0
2.5°	955.8	951.2	948.9	948.9	939.7	933.9	932.8	924.7	917.8	910.9	905.2
5°	1011.0	1007.5	1000.6	994.9	982.2	966.1	963.8	946.6	929.3	913.2	899.4
7.5°	1061.6	1054.7	1046.6	1035.1	1014.4	992.6	989.1	965.0	940.8	916.7	898.3
10°	1104.2	1097.3	1085.8	1069.7	1043.2	1016.7	1013.3	988.0	962.7	933.9	907.5
12.5°	1144.4	1138.7	1121.4	1099.6	1068.5	1044.3	1040.9	1019.0	992.6	960.4	925.9
15°	1178.9	1173.2	1154.8	1129.5	1093.8	1075.4	1070.8	1050.1	1023.6	989.1	953.5
17.5°	1196.2	1196.2	1176.6	1149.0	1115.7	1101.9	1098.4	1073.1	1048.9	1015.6	979.9
20°	1201.9	1204.2	1190.4	1157.1	1128.3	1122.6	1119.1	1098.4	1070.8	1038.6	1005.2
22.5°	1205.4	1210.0	1198.5	1160.5	1136.4	1132.9	1130.6	1116.8	1095.0	1063.9	1030.5
25°	1216.9	1216.9	1208.8	1166.3	1146.7	1145.6	1145.6	1137.5	1122.6	1096.1	1062.8
27.5°	1234.1	1233.0	1222.6	1178.9	1169.7	1173.2	1172.0	1170.9	1160.5	1134.1	1098.4
30°	1262.9	1262.9	1251.4	1204.2	1198.5	1213.4	1214.6	1216.9	1200.8	1159.4	1130.6
32.5°	1306.6	1302.0	1290.5	1229.5	1220.3	1234.1	1236.4	1235.3	1221.5	1182.4	1168.6
35°	1441.2	1430.8	1389.4	1285.9	1239.9	1247.9	1249.1	1254.8	1257.1	1226.1	1219.2
37.5°	1676.9	1663.1	1599.9	1419.3	1302.0	1282.4	1281.3	1296.2	1308.9	1281.3	1281.3
40°	1933.4	1921.9	1885.1	1649.3	1417.0	1352.6	1348.0	1361.8	1377.9	1358.3	1364.1
42.5°	2154.3	2163.5	2166.9	1893.2	1589.5	1483.7	1471.1	1451.5	1476.8	1459.6	1482.6
45°	2319.9	2315.3	2378.5	2142.8	1812.7	1648.2	1630.9	1578.0	1610.2	1609.1	1659.7
47.5°	2495.9	2487.8	2514.3	2377.4	2066.8	1849.5	1823.0	1744.8	1793.1	1826.5	1910.4
50°	2662.6	2664.9	2674.1	2562.6	2342.9	2094.4	2061.1	1956.4	2025.4	2095.6	2214.1
52.5°	2880.0	2863.9	2852.4	2778.8	2652.3	2349.8	2327.9	2208.3	2304.9	2387.7	2545.3
55°	3069.8	3059.4	3052.5	3049.1	2911.1	2631.6	2608.6	2484.4	2623.5	2682.2	2914.5
57.5°	3272.2	3266.5	3303.3	3361.9	3306.7	2918.0	2893.8	2774.2	2929.5	2970.9	3314.8
60°	3420.6	3424.0	3525.3	3674.8	3636.8	3228.5	3199.8	3093.9	3227.4	3264.2	3715.0
62.5°	3421.7	3456.2	3690.9	3958.9	4002.6	3586.2	3552.9	3437.8	3533.3	3533.3	4073.9
65°	3095.1	3134.2	3661.0	4029.0	4372.9	4011.8	3979.6	3799.0	3834.6	3786.3	4410.9
67.5°	2769.6	2815.6	3311.3	4034.8	4632.9	4467.2	4429.3	4160.1	4099.2	3977.3	4646.7
70°	2553.4	2585.6	2999.6	3960.0	4789.3	4943.4	4914.6	4502.9	4307.4	4137.1	4597.2
72.5°	2149.7	2138.2	2533.8	3604.6	4876.7	5484.0	5459.8	4875.5	4487.9	4061.2	3920.9
75°	1247.9	1261.7	1572.3	2640.8	4395.9	5765.8	5763.5	5194.1	4408.6	3587.4	2701.7
77.5°	360.0	370.4	516.4	1160.5	2779.9	4918.1	5075.7	4750.2	3726.5	2556.8	1400.9
80°	157.6	165.6	224.3	386.5	1197.3	3212.4	3350.4	3212.4	2247.4	1173.2	549.8
82.5°	93.2	98.9	146.1	239.2	573.9	1528.6	1714.9	1497.5	969.6	498.0	227.7
85°	52.9	55.2	84.0	151.8	361.2	534.8	600.4	562.4	472.7	282.9	119.6
87.5°	24.2	25.3	41.4	71.3	202.4	180.6	187.5	248.4	273.7	172.5	59.8
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°	904.0	904.0	904.0	904.0	904.0	904.0	904.0	904.0	904.0	904.0	904.0
2.5°	902.9	899.4	892.5	890.2	886.8	887.9	889.1	889.1	890.2	886.8	886.8
5°	893.7	887.9	881.0	881.0	881.0	890.2	898.3	902.9	905.2	905.2	902.9
7.5°	890.2	883.3	875.3	877.6	879.9	891.4	906.3	921.3	925.9	925.9	923.6
10°	897.1	890.2	884.5	887.9	893.7	902.9	914.4	928.2	939.7	940.8	939.7
12.5°	913.2	905.2	899.4	906.3	913.2	919.0	924.7	930.5	945.4	947.7	947.7
15°	939.7	931.6	924.7	930.5	932.8	932.8	932.8	932.8	947.7	950.0	950.0
17.5°	966.1	959.2	952.3	953.5	946.6	937.4	933.9	932.8	940.8	947.7	948.9
20°	991.4	985.7	978.8	967.3	950.0	932.8	927.0	927.0	931.6	942.0	942.0
22.5°	1019.0	1012.1	1000.6	974.2	945.4	921.3	915.5	919.0	924.7	938.5	937.4
25°	1050.1	1040.9	1021.3	971.9	930.5	901.7	902.9	913.2	923.6	938.5	938.5
27.5°	1084.6	1072.0	1032.8	953.5	897.1	869.5	879.9	904.0	919.0	935.1	937.4
30°	1122.6	1111.1	1042.0	921.3	843.1	817.8	843.1	882.2	905.2	920.1	923.6
32.5°	1168.6	1159.4	1050.1	879.9	772.9	751.1	787.9	836.2	873.0	890.2	893.7
35°	1226.1	1216.9	1060.5	832.7	707.4	684.3	717.7	767.2	815.5	837.3	844.2
37.5°	1300.8	1287.0	1069.7	782.1	652.1	625.7	641.8	686.6	730.4	760.3	768.3
40°	1396.3	1374.4	1077.7	724.6	603.8	573.9	579.7	601.5	626.8	653.3	663.6
42.5°	1530.9	1487.2	1078.9	663.6	554.4	526.8	524.5	531.4	531.4	531.4	534.8
45°	1718.3	1635.5	1081.2	606.1	503.8	475.0	468.1	465.8	448.6	415.2	412.9
47.5°	1955.3	1829.9	1091.5	557.8	450.9	425.6	416.4	407.2	375.0	340.4	333.5
50°	2258.9	2055.3	1112.2	511.8	406.0	388.8	377.3	355.4	319.7	293.3	286.4
52.5°	2608.6	2323.3	1131.8	463.5	372.7	361.2	347.3	320.9	282.9	266.8	264.5
55°	3010.0	2622.4	1170.9	421.0	343.9	335.8	323.2	297.9	269.1	257.6	256.5
57.5°	3420.6	2957.1	1226.1	383.0	316.3	311.7	311.7	289.8	271.4	266.8	266.8
60°	3816.2	3244.6	1183.5	347.3	291.0	293.3	315.1	309.4	295.6	301.3	304.8
62.5°	4123.3	3413.7	960.4	318.6	272.6	293.3	349.6	349.6	333.5	331.2	331.2
65°	4254.5	3411.4	675.1	296.7	265.7	322.0	389.9	371.5	328.9	312.8	309.4
67.5°	4221.1	3261.9	465.8	281.8	263.4	351.9	408.3	356.6	308.2	294.4	284.1
70°	3927.8	2945.6	358.9	268.0	259.9	339.3	402.6	339.3	292.1	279.5	270.3
72.5°	3168.7	2362.4	297.9	254.2	246.1	314.0	383.0	323.2	279.5	265.7	256.5
75°	2020.8	1486.0	251.9	235.8	219.7	281.8	356.6	307.1	265.7	247.3	240.4
77.5°	971.9	640.6	219.7	213.9	197.8	261.1	330.1	286.4	247.3	232.3	227.7
80°	393.4	293.3	190.9	192.1	181.7	248.4	311.7	266.8	228.9	212.8	204.7
82.5°	204.7	170.2	161.0	165.6	165.6	236.9	297.9	250.7	212.8	205.9	179.4
85°	110.4	105.8	124.2	133.4	143.8	213.9	277.2	233.5	194.4	166.8	161.0
87.5°	54.1	69.0	70.2	80.5	100.1	171.4	233.5	195.5	162.2	134.6	132.3
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)