

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: P398171

Luminaire Tested: **ARCH-S-PA1-90-830-U-T3**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398171
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-90-830-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9269 lumens
Efficiency: N/A
Efficacy: 98.6 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 (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

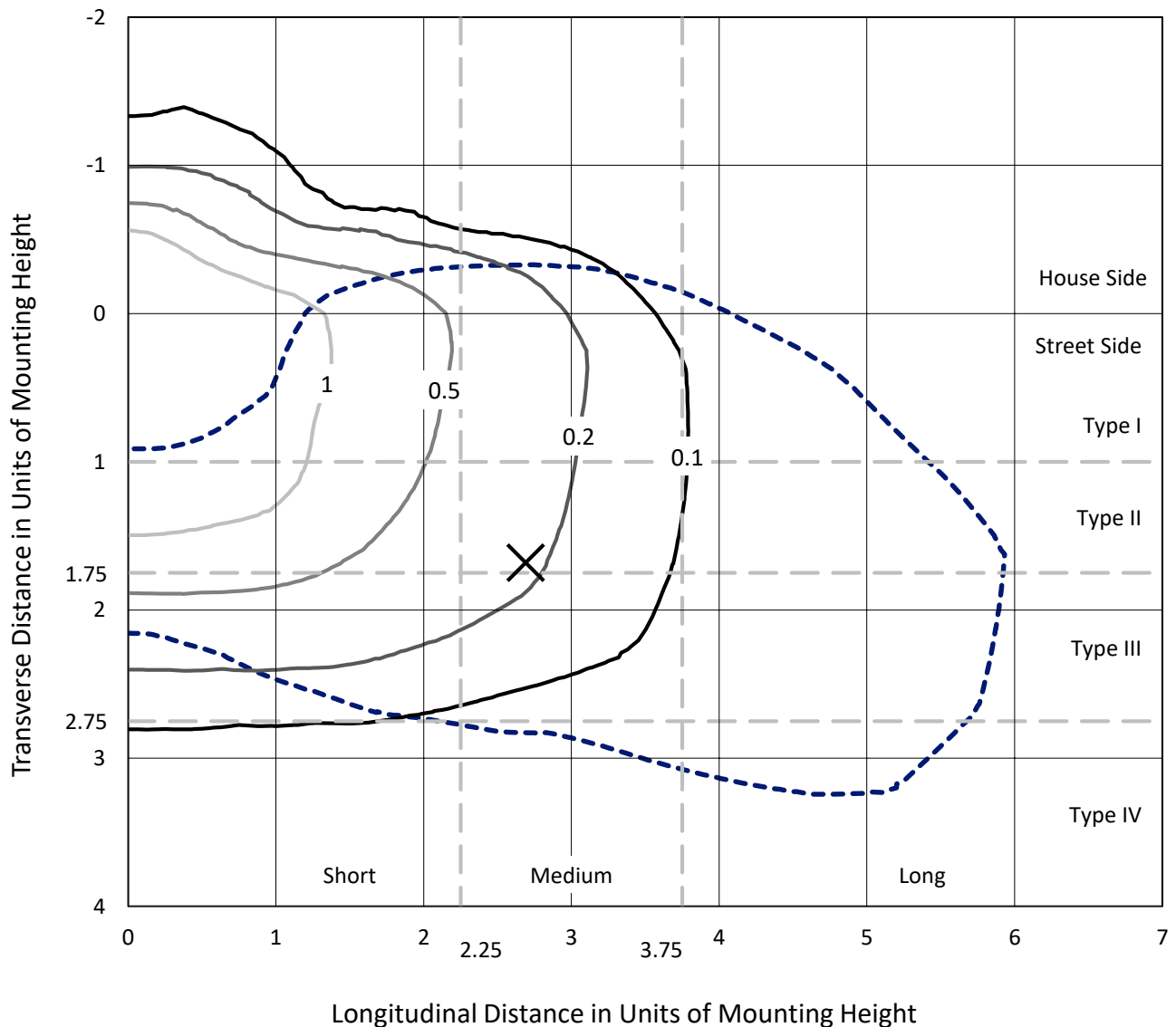


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

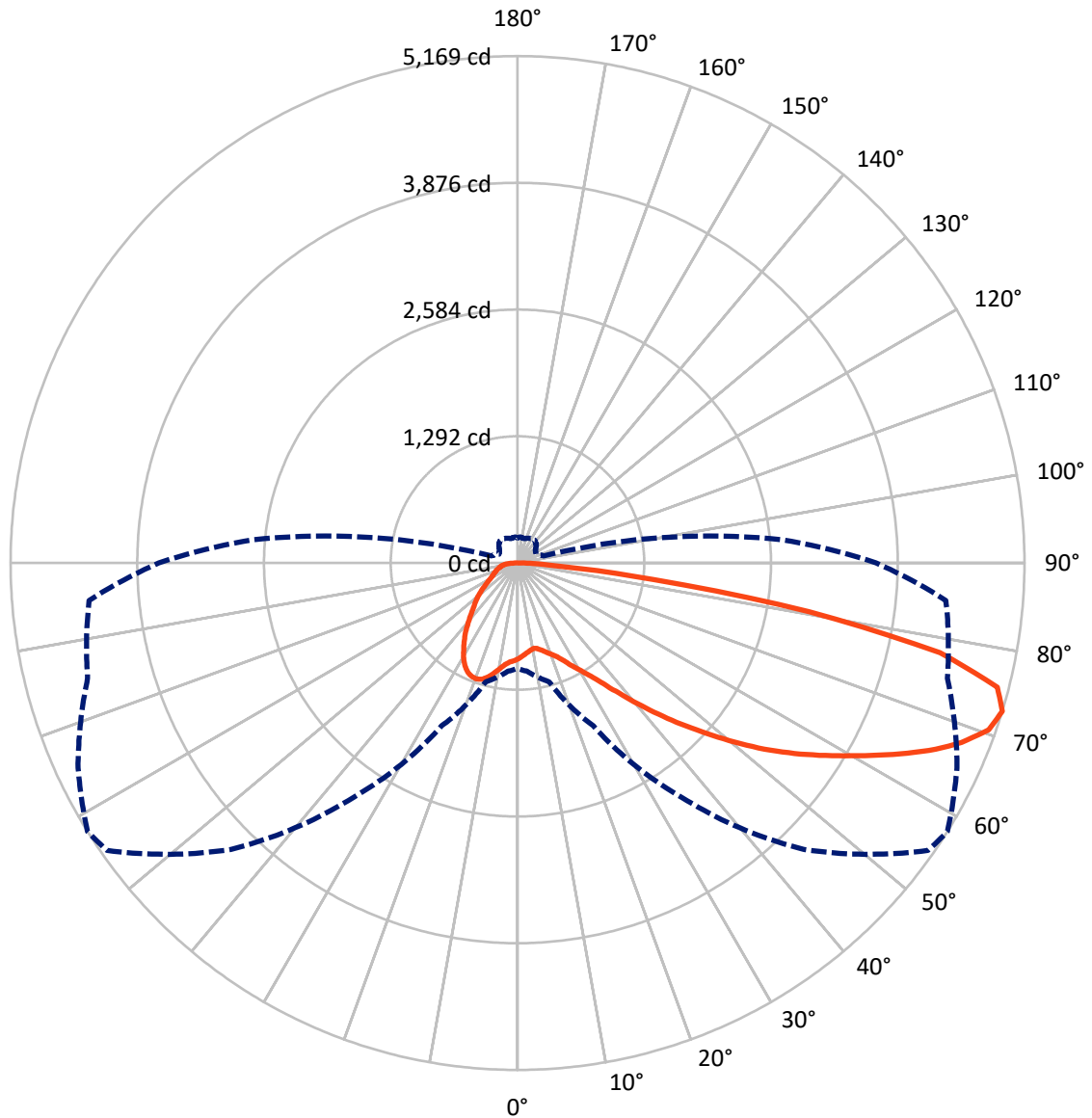


Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2102.1	0.0	2102.1
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	7166.9	0.0	7166.9
	% Fixture	77.3	0.0	77.3
Total	Lumens	9269.0	0.0	9269.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.2	1.0
10°-20°	299.1	3.2
20°-30°	535.8	5.8
30°-40°	806.0	8.7
40°-50°	1305.1	14.1
50°-60°	1964.7	21.2
60°-70°	2312.2	24.9
70°-80°	1639.6	17.7
80°-90°	312.4	3.4
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°	9269.0	100.0
0°-180°	9269.0	100.0



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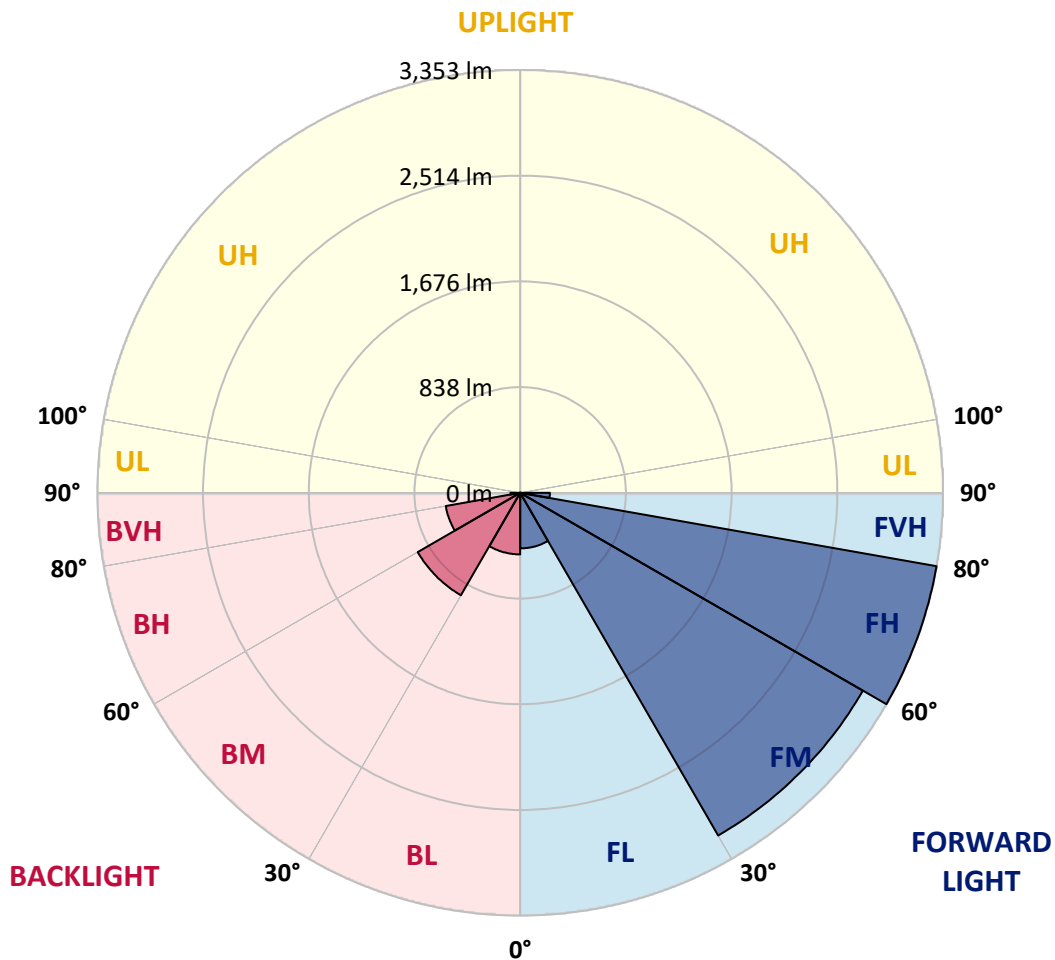
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	440.8	4.8			
FM	(30°-60°)	3137.8	33.9			
FH	(60°-80°)	3352.6	36.2			G2/5000
FVH	(80°-90°)	235.7	2.5			G3/500
BL	(0°-30°)	488.3	5.3	B1/500		
BM	(30°-60°)	937.9	10.1	B1/1000		
BH	(60°-80°)	599.1	6.5	B2/1000		G2/1000
BVH	(80°-90°)	76.8	0.8			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°	55°	58°	65°	75°	85°
0°	977.7	977.7	977.7	977.7	977.7	977.7	977.7	977.7	977.7	977.7	977.7
2.5°	941.0	936.1	937.3	937.3	942.2	944.6	945.9	949.5	952.0	958.1	966.7
5°	896.9	893.3	894.5	895.7	904.3	912.8	920.2	925.1	932.4	942.2	954.4
7.5°	865.1	862.7	863.9	866.3	873.7	883.5	895.7	903.0	914.1	932.4	953.2
10°	841.9	841.9	843.1	848.0	855.3	867.6	877.3	885.9	907.9	941.0	972.8
12.5°	823.5	823.5	827.2	837.0	849.2	861.4	884.7	894.5	923.8	969.1	1007.0
15°	822.3	823.5	824.7	833.3	846.8	873.7	907.9	922.6	958.1	1011.9	1056.0
17.5°	841.9	843.1	838.2	840.6	856.5	894.5	939.7	956.9	1002.2	1060.9	1106.2
20°	901.8	901.8	887.1	873.7	884.7	926.3	977.7	994.8	1045.0	1109.8	1155.1
22.5°	1024.2	1030.3	996.0	966.7	949.5	972.8	1019.3	1037.6	1093.9	1163.7	1208.9
25°	1172.2	1178.4	1131.9	1090.3	1058.4	1054.8	1085.4	1104.9	1151.4	1223.6	1261.6
27.5°	1315.4	1304.4	1261.6	1222.4	1182.0	1149.0	1172.2	1189.4	1243.2	1298.3	1321.5
30°	1428.0	1419.4	1377.8	1349.7	1311.7	1268.9	1255.4	1273.8	1317.9	1369.2	1381.5
32.5°	1552.8	1546.7	1505.1	1468.4	1436.5	1396.2	1366.8	1375.4	1399.8	1436.5	1443.9
35°	1711.9	1725.3	1681.3	1606.6	1571.1	1532.0	1511.2	1513.6	1532.0	1555.2	1543.0
37.5°	1879.5	1895.4	1897.9	1780.4	1732.7	1697.2	1675.2	1683.7	1705.7	1721.7	1683.7
40°	2190.3	2174.4	2110.8	2023.9	1950.5	1916.2	1885.6	1884.4	1900.3	1928.4	1859.9
42.5°	2602.7	2588.0	2459.5	2346.9	2230.7	2191.5	2131.6	2105.9	2113.2	2148.7	2053.3
45°	2997.9	2991.8	2889.0	2758.1	2618.6	2542.7	2405.7	2343.3	2337.1	2365.3	2251.5
47.5°	3349.1	3322.2	3247.5	3146.0	3131.3	2933.0	2681.0	2596.5	2567.2	2583.1	2455.8
50°	3724.7	3633.0	3530.2	3467.8	3574.2	3389.5	2958.7	2870.6	2798.4	2809.5	2677.3
52.5°	3924.2	3770.0	3702.7	3721.1	3864.2	3793.3	3261.0	3153.3	3037.1	3053.0	2897.6
55°	3752.9	3751.7	3781.0	3894.8	4094.3	4012.3	3548.5	3427.4	3300.1	3303.8	3150.9
57.5°	3517.9	3565.7	3717.4	3968.2	4379.4	4242.3	3831.2	3702.7	3586.5	3568.1	3438.4
60°	3303.8	3356.4	3576.7	3956.0	4478.5	4452.8	4100.4	3987.8	3893.6	3839.8	3740.6
62.5°	2978.3	3017.5	3329.5	3877.7	4395.3	4604.5	4373.3	4296.2	4225.2	4113.9	4066.1
65°	2595.3	2608.8	2937.9	3619.5	4291.3	4663.3	4644.9	4610.6	4542.1	4378.2	4387.9
67.5°	2180.5	2207.4	2496.2	3207.1	4063.7	4636.3	4855.4	4883.5	4802.8	4556.8	4593.5
70°	1738.8	1771.8	1990.9	2636.9	3677.0	4520.1	5049.9	5095.2	4939.8	4615.5	4631.4
72.5°	1075.6	1107.4	1254.2	1831.8	2914.7	4129.8	5109.9	5168.6	4943.5	4537.2	4384.3
75°	372.0	375.7	490.7	878.6	1730.2	3117.8	4914.1	5052.4	4788.1	4252.1	3815.3
77.5°	170.1	176.2	217.8	362.2	767.2	1682.5	4057.6	4403.9	4315.8	3806.7	2936.7
80°	117.5	119.9	150.5	216.6	443.0	592.2	2561.1	3012.6	3166.8	2947.7	1881.9
82.5°	88.1	90.5	116.2	146.8	319.4	287.6	975.2	1399.8	1740.0	1708.2	786.8
85°	84.4	83.2	90.5	97.9	212.9	171.3	315.7	433.2	679.1	581.2	198.2
87.5°	36.7	40.4	93.0	55.1	111.4	79.5	137.0	160.3	206.8	179.9	71.0
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°	977.7	977.7	977.7	977.7	977.7	977.7	977.7	977.7	977.7	977.7	977.7
2.5°	970.3	972.8	980.1	991.1	997.3	1009.5	1018.1	1023.0	1026.6	1027.9	1027.9
5°	961.8	966.7	982.6	1000.9	1018.1	1043.8	1067.0	1080.5	1090.3	1093.9	1095.2
7.5°	964.2	976.5	999.7	1026.6	1048.7	1081.7	1109.8	1136.8	1158.8	1167.3	1167.3
10°	987.5	1004.6	1036.4	1071.9	1100.0	1134.3	1163.7	1186.9	1212.6	1227.3	1229.8
12.5°	1023.0	1043.8	1085.4	1124.5	1156.3	1183.3	1210.2	1227.3	1239.5	1250.6	1253.0
15°	1073.1	1098.8	1140.4	1180.8	1208.9	1226.1	1233.4	1233.4	1232.2	1233.4	1235.9
17.5°	1123.3	1147.8	1189.4	1229.8	1243.2	1233.4	1224.9	1222.4	1221.2	1218.7	1220.0
20°	1172.2	1195.5	1231.0	1261.6	1250.6	1216.3	1205.3	1204.1	1200.4	1197.9	1195.5
22.5°	1221.2	1238.3	1267.7	1278.7	1234.6	1185.7	1172.2	1164.9	1160.0	1153.9	1147.8
25°	1277.5	1282.4	1304.4	1287.3	1195.5	1129.4	1109.8	1098.8	1093.9	1087.8	1082.9
27.5°	1330.1	1330.1	1333.8	1273.8	1138.0	1054.8	1025.4	1005.8	1004.6	1003.4	1002.2
30°	1377.8	1371.7	1359.5	1233.4	1063.3	963.0	918.9	899.4	906.7	912.8	914.1
32.5°	1434.1	1421.9	1387.6	1178.4	974.0	860.2	806.4	797.8	806.4	813.7	808.8
35°	1522.2	1500.2	1417.0	1114.7	888.4	766.0	714.6	702.4	699.9	698.7	688.9
37.5°	1648.2	1610.3	1440.2	1046.2	803.9	682.8	644.9	619.2	595.9	571.4	567.8
40°	1802.4	1737.6	1456.1	967.9	714.6	613.0	572.7	539.6	500.5	457.6	452.7
42.5°	1971.3	1874.6	1463.5	881.0	636.3	555.5	505.4	463.8	419.7	386.7	380.5
45°	2153.6	2022.7	1457.3	797.8	572.7	506.6	450.3	405.0	369.5	346.3	341.4
47.5°	2331.0	2192.7	1440.2	731.7	523.7	465.0	407.5	365.9	338.9	313.2	307.1
50°	2558.6	2355.5	1419.4	680.3	469.9	423.4	380.5	336.5	305.9	293.7	291.2
52.5°	2810.7	2518.2	1394.9	615.5	417.3	390.3	363.4	324.3	314.5	291.2	287.6
55°	3083.6	2711.6	1390.0	533.5	370.8	367.1	346.3	335.3	337.7	291.2	285.1
57.5°	3371.1	2918.4	1401.1	451.5	332.8	346.3	353.6	345.1	341.4	297.3	285.1
60°	3670.9	3117.8	1368.0	375.7	303.5	329.2	362.2	340.2	313.2	294.9	286.3
62.5°	3962.1	3285.5	1224.9	321.8	281.4	324.3	357.3	321.8	291.2	291.2	287.6
65°	4173.8	3360.1	958.1	282.7	266.8	318.1	348.7	309.6	285.1	293.7	288.8
67.5°	4198.3	3283.0	643.6	252.1	254.5	307.1	329.2	298.6	279.0	301.0	293.7
70°	4047.8	3082.3	394.0	228.8	238.6	287.6	312.0	287.6	270.4	294.9	283.9
72.5°	3657.4	2707.9	277.8	209.2	221.5	269.2	296.1	277.8	258.2	266.8	255.7
75°	3000.3	2098.5	220.3	190.9	204.3	252.1	282.7	263.1	243.5	239.8	232.5
77.5°	2125.4	1344.8	177.4	176.2	186.0	231.3	264.3	246.0	226.4	219.0	214.1
80°	1222.4	659.5	153.0	159.1	168.9	210.5	242.3	226.4	208.0	197.0	189.7
82.5°	467.4	230.0	134.6	138.3	149.3	188.4	220.3	206.8	188.4	198.2	166.4
85°	151.7	126.0	110.1	113.8	124.8	156.6	194.6	183.5	162.7	144.4	133.4
87.5°	67.3	68.5	58.7	64.9	78.3	104.0	141.9	134.6	118.7	99.1	95.4
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)