

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: P397543

Luminaire Tested: **ARCH-S-PA1-100-727-U-T4W**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397543
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-PA1-100-727-U-T4W
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 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: 9794 lumens
Efficiency: N/A
Efficacy: 102.0 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

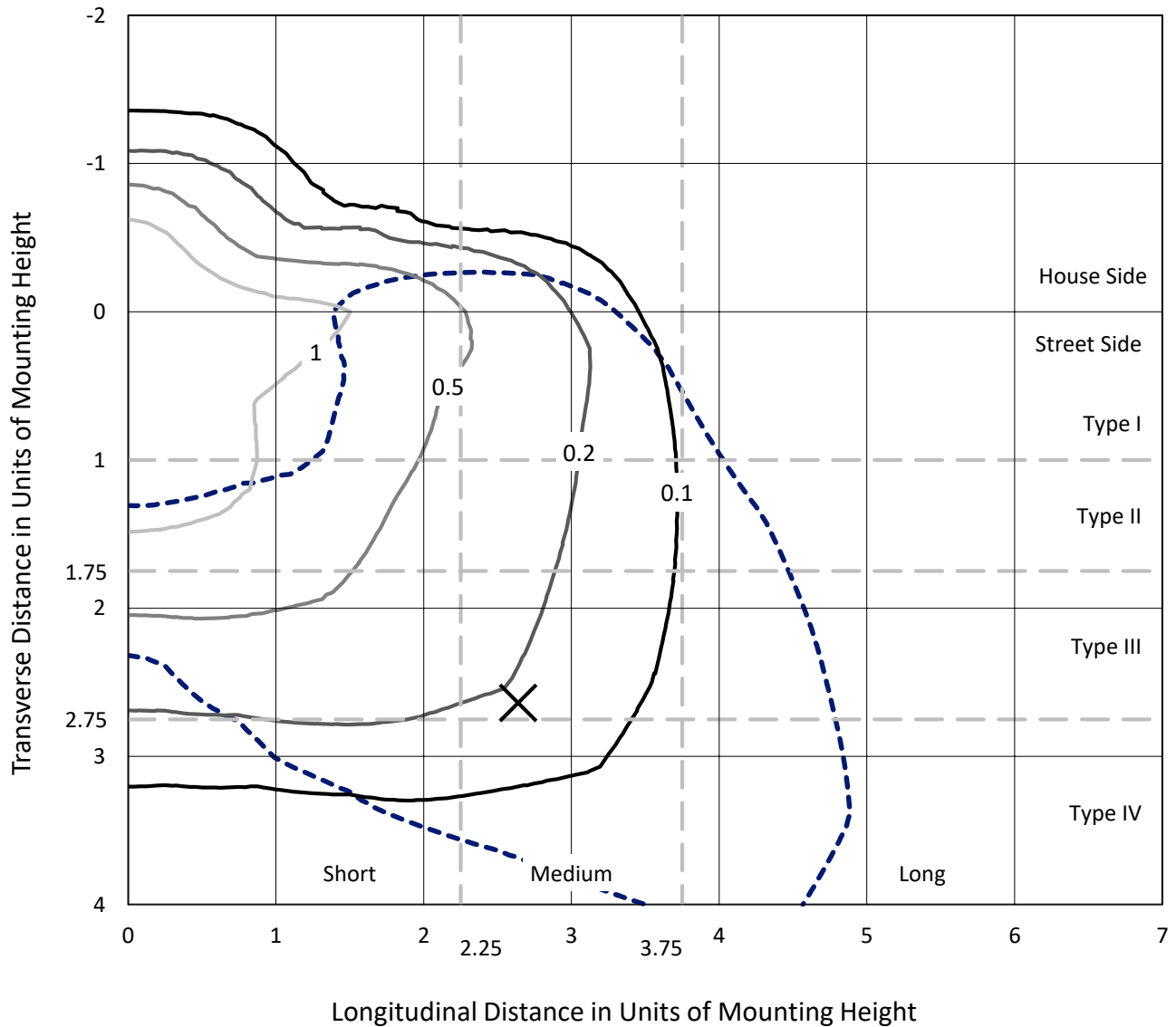
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

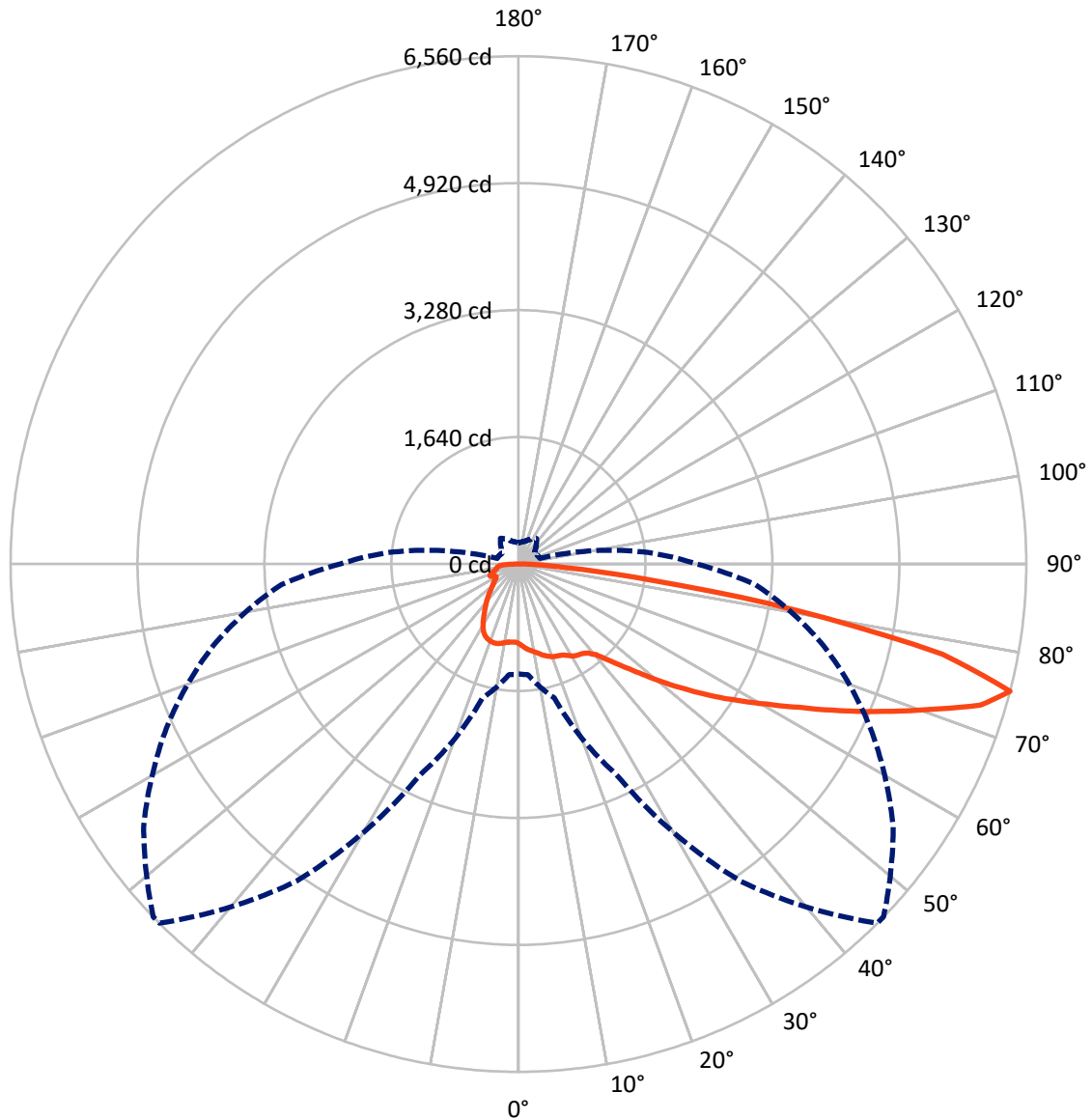
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 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	2164.4	0.0	2164.4
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	7629.6	0.0	7629.6
	% Fixture	77.9	0.0	77.9
Total	Lumens	9794.0	0.0	9794.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.8	1.0
10°-20°	323.7	3.3
20°-30°	551.9	5.6
30°-40°	773.3	7.9
40°-50°	1136.1	11.6
50°-60°	1808.1	18.5
60°-70°	2572.0	26.3
70°-80°	2153.5	22.0
80°-90°	373.7	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°	9794.0	100.0
0°-180°	9794.0	100.0



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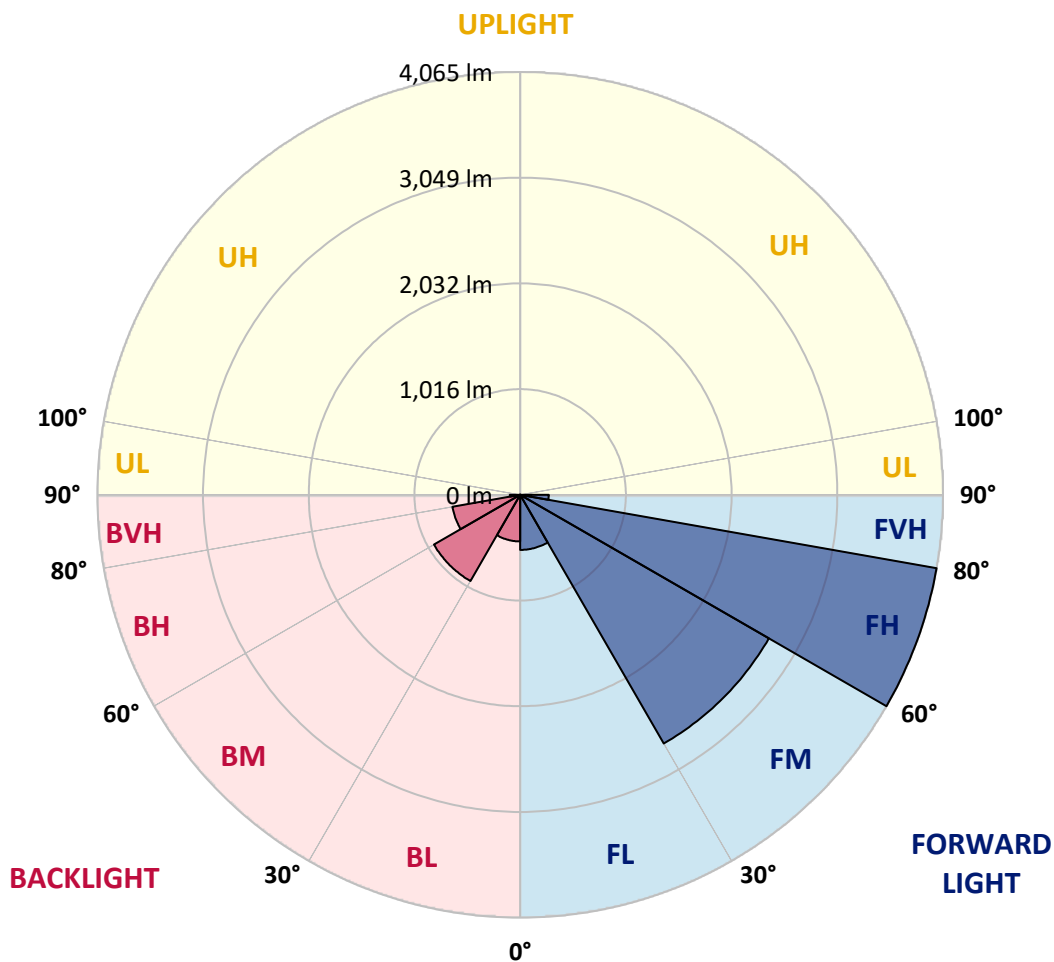
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	529.4	5.4			
FM	(30°-60°)	2760.6	28.2			
FH	(60°-80°)	4064.8	41.5			G2/5000
FVH	(80°-90°)	274.8	2.8			G3/500
BL	(0°-30°)	448.0	4.6	B1/500		
BM	(30°-60°)	956.8	9.8	B1/1000		
BH	(60°-80°)	660.7	6.7	B2/1000		G2/1000
BVH	(80°-90°)	99.0	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°	1028.6	1028.6	1028.6	1028.6	1028.6	1028.6	1028.6	1028.6	1028.6	1028.6	1028.6
2.5°	1087.5	1082.2	1079.6	1079.6	1069.2	1062.6	1061.3	1052.1	1044.3	1036.4	1029.9
5°	1150.3	1146.4	1138.5	1132.0	1117.6	1099.3	1096.6	1077.0	1057.4	1039.1	1023.3
7.5°	1207.9	1200.0	1190.9	1177.8	1154.2	1129.3	1125.4	1097.9	1070.5	1043.0	1022.0
10°	1256.3	1248.4	1235.3	1217.0	1186.9	1156.8	1152.9	1124.1	1095.3	1062.6	1032.5
12.5°	1302.1	1295.5	1275.9	1251.1	1215.7	1188.2	1184.3	1159.4	1129.3	1092.7	1053.4
15°	1341.3	1334.8	1313.9	1285.1	1244.5	1223.6	1218.3	1194.8	1164.7	1125.4	1084.9
17.5°	1361.0	1361.0	1338.7	1307.3	1269.4	1253.7	1249.7	1221.0	1193.5	1155.5	1115.0
20°	1367.5	1370.1	1354.4	1316.5	1283.8	1277.2	1273.3	1249.7	1218.3	1181.7	1143.7
22.5°	1371.4	1376.7	1363.6	1320.4	1292.9	1289.0	1286.4	1270.7	1245.8	1210.5	1172.5
25°	1384.5	1384.5	1375.4	1327.0	1304.7	1303.4	1303.4	1294.2	1277.2	1247.1	1209.2
27.5°	1404.2	1402.9	1391.1	1341.3	1330.9	1334.8	1333.5	1332.2	1320.4	1290.3	1249.7
30°	1436.9	1436.9	1423.8	1370.1	1363.6	1380.6	1381.9	1384.5	1366.2	1319.1	1286.4
32.5°	1486.6	1481.4	1468.3	1398.9	1388.5	1404.2	1406.8	1405.5	1389.8	1345.3	1329.6
35°	1639.7	1627.9	1580.8	1463.0	1410.7	1419.9	1421.2	1427.7	1430.3	1395.0	1387.1
37.5°	1908.0	1892.3	1820.3	1614.9	1481.4	1459.1	1457.8	1474.8	1489.2	1457.8	1457.8
40°	2199.8	2186.7	2144.8	1876.6	1612.2	1539.0	1533.7	1549.4	1567.7	1545.5	1552.0
42.5°	2451.1	2461.5	2465.5	2154.0	1808.5	1688.1	1673.7	1651.5	1680.3	1660.7	1686.8
45°	2639.5	2634.3	2706.2	2438.0	2062.4	1875.3	1855.6	1795.4	1832.1	1830.8	1888.4
47.5°	2839.7	2830.6	2860.7	2704.9	2351.6	2104.3	2074.2	1985.2	2040.2	2078.1	2173.6
50°	3029.5	3032.1	3042.6	2915.6	2665.7	2383.0	2345.1	2226.0	2304.5	2384.3	2519.1
52.5°	3276.8	3258.5	3245.4	3161.7	3017.7	2673.5	2648.7	2512.6	2622.5	2716.7	2896.0
55°	3492.7	3481.0	3473.1	3469.2	3312.1	2994.1	2968.0	2826.6	2985.0	3051.7	3316.1
57.5°	3723.1	3716.5	3758.4	3825.1	3762.3	3320.0	3292.5	3156.4	3333.1	3380.2	3771.5
60°	3891.9	3895.8	4011.0	4181.1	4137.9	3673.3	3640.6	3520.2	3672.0	3713.9	4226.9
62.5°	3893.2	3932.4	4199.4	4504.3	4554.0	4080.3	4042.4	3911.5	4020.1	4020.1	4635.2
65°	3521.5	3566.0	4165.4	4584.1	4975.4	4564.5	4527.9	4322.4	4363.0	4308.0	5018.6
67.5°	3151.2	3203.5	3767.5	4590.7	5271.2	5082.7	5039.5	4733.3	4664.0	4525.2	5286.9
70°	2905.2	2941.8	3412.9	4505.6	5449.1	5624.5	5591.8	5123.3	4900.8	4707.1	5230.6
72.5°	2445.8	2432.7	2882.9	4101.3	5548.6	6239.6	6212.1	5547.3	5106.3	4620.8	4461.1
75°	1419.9	1435.6	1788.9	3004.6	5001.6	6560.2	6557.6	5909.8	5016.0	4081.6	3074.0
77.5°	409.6	421.4	587.6	1320.4	3163.0	5595.7	5775.0	5404.6	4240.0	2909.1	1593.9
80°	179.3	188.4	255.2	439.7	1362.3	3655.0	3812.0	3655.0	2557.1	1334.8	625.5
82.5°	106.0	112.5	166.2	272.2	653.0	1739.2	1951.2	1703.8	1103.2	566.6	259.1
85°	60.2	62.8	95.5	172.7	410.9	608.5	683.1	639.9	537.8	321.9	136.1
87.5°	27.5	28.8	47.1	81.1	230.3	205.5	213.3	282.7	311.5	196.3	68.0
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°	1028.6	1028.6	1028.6	1028.6	1028.6	1028.6	1028.6	1028.6	1028.6	1028.6	1028.6
2.5°	1027.3	1023.3	1015.5	1012.9	1009.0	1010.3	1011.6	1011.6	1012.9	1009.0	1009.0
5°	1016.8	1010.3	1002.4	1002.4	1002.4	1012.9	1022.0	1027.3	1029.9	1029.9	1027.3
7.5°	1012.9	1005.0	995.9	998.5	1001.1	1014.2	1031.2	1048.2	1053.4	1053.4	1050.8
10°	1020.7	1012.9	1006.3	1010.3	1016.8	1027.3	1040.4	1056.1	1069.2	1070.5	1069.2
12.5°	1039.1	1029.9	1023.3	1031.2	1039.1	1045.6	1052.1	1058.7	1075.7	1078.3	1078.3
15°	1069.2	1060.0	1052.1	1058.7	1061.3	1061.3	1061.3	1061.3	1078.3	1080.9	1080.9
17.5°	1099.3	1091.4	1083.5	1084.9	1077.0	1066.5	1062.6	1061.3	1070.5	1078.3	1079.6
20°	1128.0	1121.5	1113.6	1100.6	1080.9	1061.3	1054.8	1054.8	1060.0	1071.8	1071.8
22.5°	1159.4	1151.6	1138.5	1108.4	1075.7	1048.2	1041.7	1045.6	1052.1	1067.8	1066.5
25°	1194.8	1184.3	1162.1	1105.8	1058.7	1026.0	1027.3	1039.1	1050.8	1067.8	1067.8
27.5°	1234.0	1219.6	1175.2	1084.9	1020.7	989.3	1001.1	1028.6	1045.6	1063.9	1066.5
30°	1277.2	1264.1	1185.6	1048.2	959.2	930.4	959.2	1003.7	1029.9	1046.9	1050.8
32.5°	1329.6	1319.1	1194.8	1001.1	879.4	854.5	896.4	951.4	993.3	1012.9	1016.8
35°	1395.0	1384.5	1206.6	947.4	804.8	778.6	816.6	872.9	927.8	952.7	960.5
37.5°	1480.1	1464.4	1217.0	889.9	742.0	711.9	730.2	781.3	831.0	865.0	874.2
40°	1588.7	1563.8	1226.2	824.4	687.0	653.0	659.6	684.4	713.2	743.3	755.1
42.5°	1741.8	1692.1	1227.5	755.1	630.8	599.4	596.7	604.6	604.6	604.6	608.5
45°	1955.1	1860.9	1230.1	689.6	573.2	540.5	532.6	530.0	510.4	472.4	469.8
47.5°	2224.7	2082.0	1241.9	634.7	513.0	484.2	473.7	463.3	426.6	387.4	379.5
50°	2570.2	2338.5	1265.4	582.3	461.9	442.3	429.2	404.4	363.8	333.7	325.8
52.5°	2968.0	2643.4	1287.7	527.4	424.0	410.9	395.2	365.1	321.9	303.6	301.0
55°	3424.7	2983.7	1332.2	479.0	391.3	382.1	367.7	338.9	306.2	293.1	291.8
57.5°	3891.9	3364.5	1395.0	435.8	359.9	354.6	354.6	329.8	308.8	303.6	303.6
60°	4342.0	3691.6	1346.6	395.2	331.1	333.7	358.6	352.0	336.3	342.9	346.8
62.5°	4691.4	3884.0	1092.7	362.5	310.1	333.7	397.8	397.8	379.5	376.9	376.9
65°	4840.6	3881.4	768.2	337.6	302.3	366.4	443.6	422.7	374.3	355.9	352.0
67.5°	4802.7	3711.3	530.0	320.6	299.7	400.4	464.6	405.7	350.7	335.0	323.2
70°	4469.0	3351.4	408.3	304.9	295.8	386.0	458.0	386.0	332.4	318.0	307.5
72.5°	3605.3	2687.9	338.9	289.2	280.0	357.3	435.8	367.7	318.0	302.3	291.8
75°	2299.3	1690.8	286.6	268.3	249.9	320.6	405.7	349.4	302.3	281.4	273.5
77.5°	1105.8	728.9	249.9	243.4	225.1	297.1	375.6	325.8	281.4	264.3	259.1
80°	447.6	333.7	217.2	218.5	206.8	282.7	354.6	303.6	260.4	242.1	232.9
82.5°	232.9	193.7	183.2	188.4	188.4	269.6	338.9	285.3	242.1	234.2	204.1
85°	125.6	120.4	141.3	151.8	163.6	243.4	315.4	265.7	221.2	189.8	183.2
87.5°	61.5	78.5	79.8	91.6	113.9	195.0	265.7	222.5	184.5	153.1	150.5
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)