

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: P398115

Luminaire Tested: **ARCH-S-PA1-90-727-U-T2U**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398115
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-90-727-U-T2U
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9775 lumens
Efficiency: N/A
Efficacy: 104.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

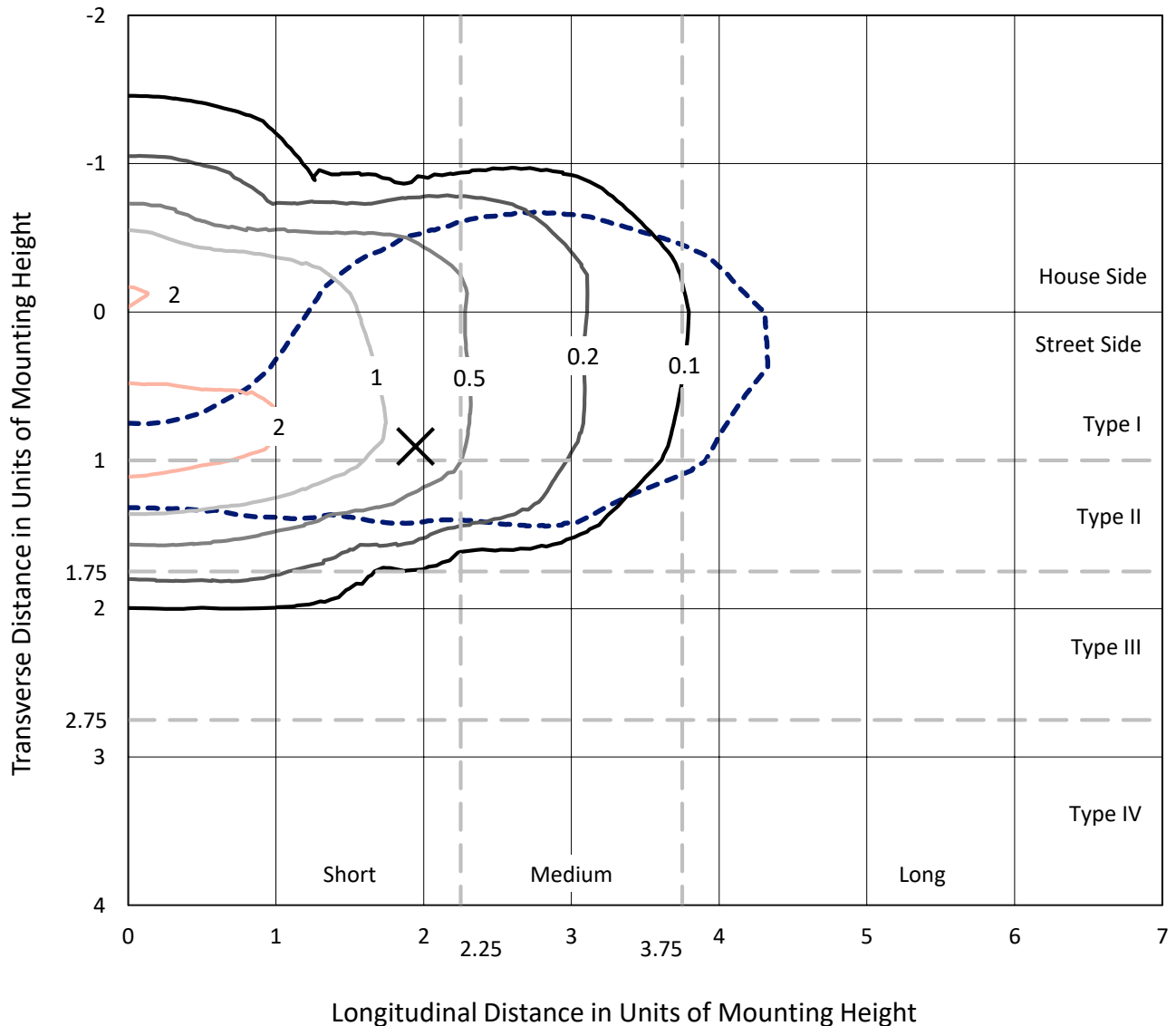
Input Watts (W): 94
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

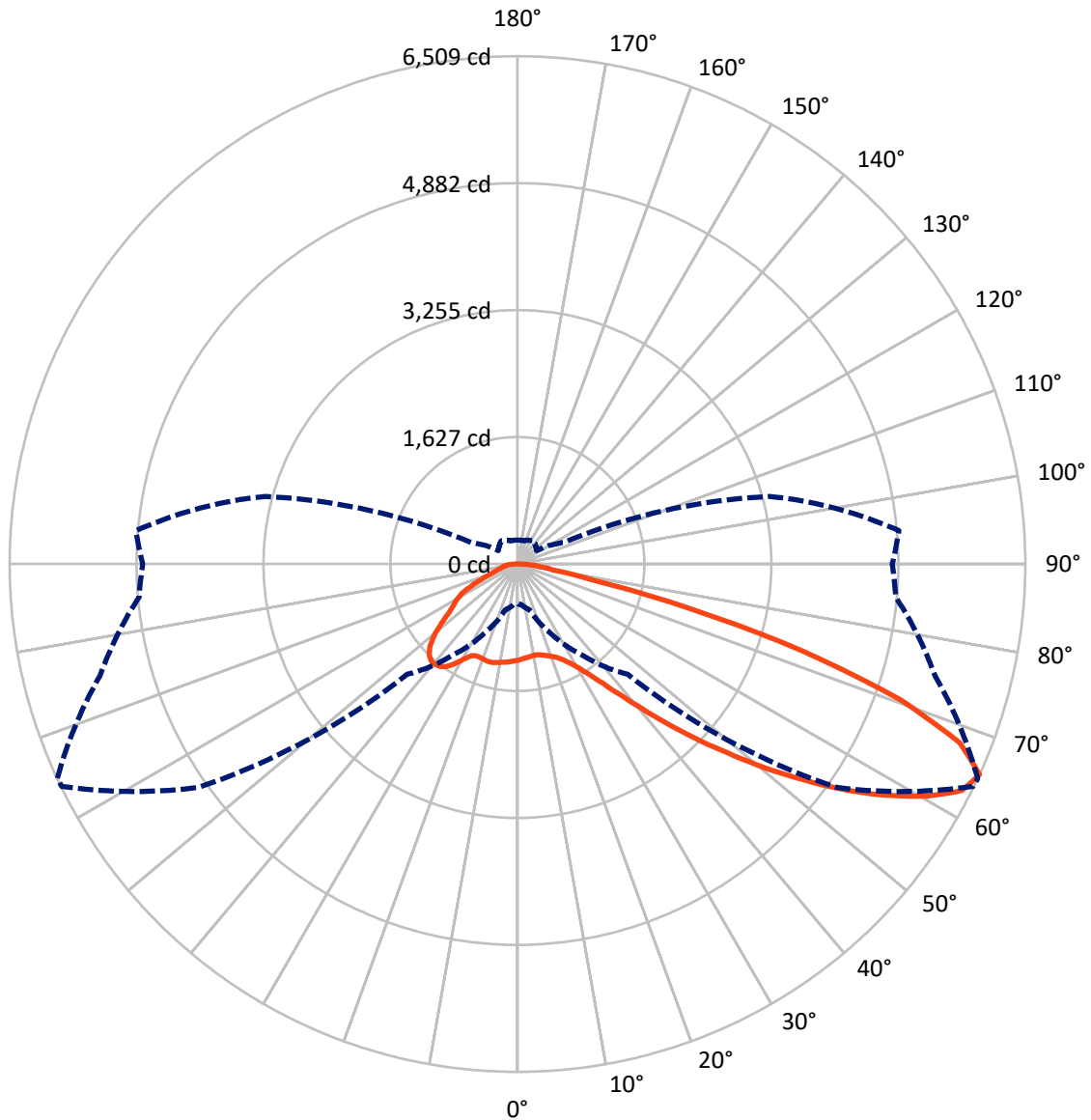
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2826.1	0.0	2826.1
	% Fixture	28.9	0.0	28.9
Street Side	Lumens	6948.9	0.0	6948.9
	% Fixture	71.1	0.0	71.1
Total	Lumens	9775.0	0.0	9775.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.7	1.2
10°-20°	351.3	3.6
20°-30°	624.1	6.4
30°-40°	1055.8	10.8
40°-50°	1837.9	18.8
50°-60°	2375.1	24.3
60°-70°	2078.4	21.3
70°-80°	1130.5	11.6
80°-90°	204.3	2.1
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°	9775.0	100.0
0°-180°	9775.0	100.0



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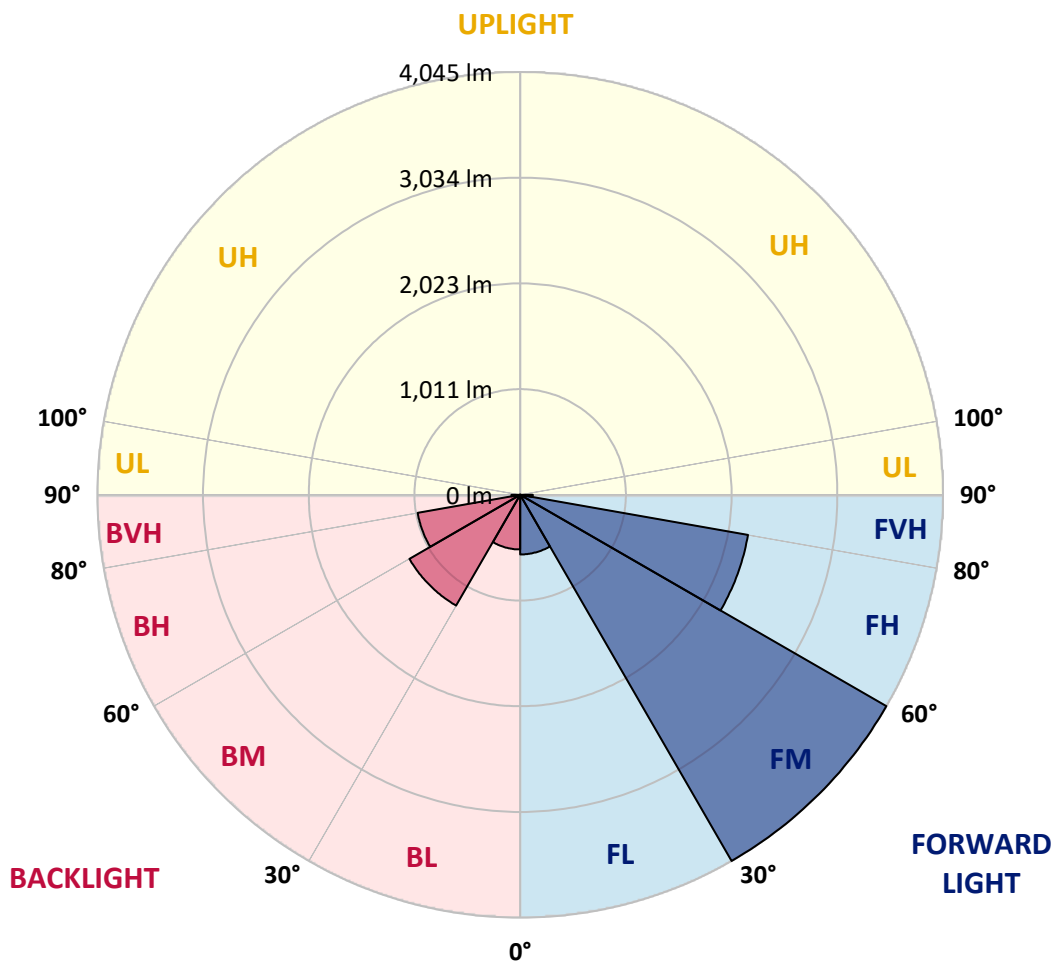
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	570.3	5.8			
FM	(30°-60°)	4045.2	41.4			
FH	(60°-80°)	2213.2	22.6			G2/5000
FVH	(80°-90°)	120.2	1.2			G2/225
BL	(0°-30°)	522.7	5.3	B2/1000		
BM	(30°-60°)	1223.6	12.5	B2/2500		
BH	(60°-80°)	995.7	10.2	B2/1000		G2/1000
BVH	(80°-90°)	84.1	0.9			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1235.2	1235.2	1235.2	1235.2	1235.2	1235.2	1235.2	1235.2	1235.2	1235.2	1235.2
2.5°	1213.3	1212.0	1209.4	1212.0	1213.3	1215.9	1214.6	1217.2	1215.9	1219.7	1226.2
5°	1182.4	1179.8	1178.6	1185.0	1188.8	1195.3	1197.9	1206.9	1205.6	1212.0	1222.3
7.5°	1147.7	1147.7	1146.4	1154.1	1159.3	1170.8	1179.8	1195.3	1196.6	1208.1	1219.7
10°	1120.7	1121.9	1120.7	1127.1	1134.8	1149.0	1164.4	1186.3	1187.6	1204.3	1215.9
12.5°	1110.4	1110.4	1110.4	1119.4	1129.7	1149.0	1167.0	1190.1	1192.7	1210.7	1221.0
15°	1124.5	1125.8	1123.2	1132.2	1143.8	1167.0	1183.7	1208.1	1210.7	1227.4	1233.9
17.5°	1174.7	1179.8	1173.4	1178.6	1176.0	1194.0	1209.4	1233.9	1235.2	1249.3	1251.9
20°	1273.8	1278.9	1268.6	1262.2	1239.0	1237.7	1244.2	1263.5	1263.5	1272.5	1266.0
22.5°	1426.9	1432.0	1414.0	1389.6	1334.2	1307.2	1293.1	1302.1	1300.8	1304.6	1287.9
25°	1630.2	1628.9	1607.0	1562.0	1473.2	1407.6	1372.8	1358.7	1358.7	1351.0	1330.4
27.5°	1882.3	1863.0	1824.4	1770.4	1646.9	1555.5	1480.9	1444.9	1438.5	1415.3	1376.7
30°	2151.2	2137.1	2081.8	2003.3	1860.5	1743.4	1619.9	1547.8	1544.0	1493.8	1435.9
32.5°	2467.8	2444.6	2382.8	2288.9	2117.8	1953.1	1798.7	1689.3	1682.9	1603.1	1523.4
35°	2874.3	2855.0	2735.4	2641.5	2421.4	2205.3	2022.6	1877.2	1872.0	1774.3	1672.6
37.5°	3362.0	3311.8	3196.0	3019.7	2788.1	2532.1	2300.5	2117.8	2111.4	2003.3	1874.6
40°	3796.8	3751.8	3648.9	3486.8	3238.4	2954.1	2640.2	2418.9	2412.4	2281.2	2119.1
42.5°	4118.5	4087.6	4020.7	3926.8	3749.2	3576.8	3073.8	2783.0	2771.4	2601.6	2399.6
45°	4305.1	4280.6	4242.0	4265.2	4262.6	4230.4	3591.0	3216.6	3179.3	2959.3	2712.2
47.5°	4260.0	4238.2	4253.6	4433.7	4682.0	4868.6	4193.1	3660.5	3610.3	3323.4	3045.5
50°	3934.5	3943.5	4024.6	4369.4	4926.5	5340.8	4860.9	4166.1	4099.2	3690.1	3362.0
52.5°	3341.4	3363.3	3560.1	4042.6	4899.5	5647.0	5464.3	4688.5	4599.7	4047.7	3650.2
55°	2654.3	2709.6	2964.4	3471.3	4547.0	5668.9	5919.8	5213.4	5115.6	4383.6	3901.1
57.5°	1963.4	2045.7	2340.4	2806.1	3871.5	5322.8	6147.5	5715.2	5596.8	4716.8	4166.1
60°	1245.5	1295.6	1635.3	2184.7	2963.1	4476.2	6117.9	6142.4	6039.4	5048.7	4442.7
62.5°	795.1	819.6	990.7	1558.1	2071.5	3314.4	5795.0	6465.3	6395.8	5351.1	4705.2
65°	510.8	521.1	608.6	958.5	1410.1	2000.7	4990.8	6500.1	6509.1	5540.2	4867.3
67.5°	415.6	420.7	452.9	591.9	997.1	1105.2	3476.5	6006.0	6115.4	5491.3	4812.0
70°	378.3	384.7	418.2	472.2	772.0	763.0	1682.9	5025.6	5204.4	5209.6	4566.3
72.5°	319.1	328.1	373.1	446.5	597.0	602.1	712.8	3579.4	3843.2	4656.3	4197.0
75°	266.3	271.5	310.1	393.7	505.6	481.2	500.5	1897.8	2278.6	3733.8	3804.6
77.5°	216.2	221.3	249.6	313.9	449.0	374.4	393.7	786.1	971.4	2534.7	3109.8
80°	154.4	159.5	191.7	244.5	339.7	337.1	292.1	433.6	470.9	1370.3	2020.0
82.5°	110.7	114.5	145.4	175.0	235.5	338.4	220.0	294.6	308.8	607.3	814.4
85°	74.6	74.6	100.4	115.8	151.8	213.6	177.6	199.4	208.4	288.2	220.0
87.5°	32.2	32.2	54.0	59.2	79.8	99.1	132.5	100.4	102.9	155.7	90.1
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°	1235.2	1235.2	1235.2	1235.2	1235.2	1235.2	1235.2	1235.2	1235.2	1235.2	1235.2
2.5°	1230.0	1231.3	1233.9	1241.6	1246.7	1254.5	1258.3	1263.5	1263.5	1260.9	1262.2
5°	1227.4	1231.3	1240.3	1254.5	1263.5	1277.6	1287.9	1295.6	1298.2	1295.6	1296.9
7.5°	1226.2	1232.6	1248.0	1268.6	1281.5	1299.5	1313.6	1322.7	1329.1	1326.5	1327.8
10°	1222.3	1232.6	1251.9	1277.6	1296.9	1314.9	1327.8	1331.7	1335.5	1332.9	1331.7
12.5°	1227.4	1239.0	1259.6	1290.5	1312.4	1326.5	1330.4	1323.9	1314.9	1309.8	1308.5
15°	1237.7	1249.3	1269.9	1302.1	1321.4	1326.5	1317.5	1296.9	1276.3	1264.8	1263.5
17.5°	1251.9	1259.6	1276.3	1304.6	1320.1	1313.6	1295.6	1271.2	1255.8	1246.7	1248.0
20°	1260.9	1260.9	1273.8	1295.6	1308.5	1303.4	1281.5	1254.5	1230.0	1218.4	1214.6
22.5°	1273.8	1267.3	1268.6	1287.9	1305.9	1298.2	1251.9	1204.3	1169.5	1156.7	1155.4
25°	1308.5	1290.5	1278.9	1290.5	1332.9	1269.9	1177.3	1121.9	1089.8	1078.2	1079.5
27.5°	1351.0	1326.5	1302.1	1321.4	1354.8	1205.6	1082.1	1019.0	999.7	990.7	994.6
30°	1393.4	1361.3	1329.1	1398.6	1339.4	1105.2	959.8	898.1	881.3	874.9	880.1
32.5°	1471.9	1419.2	1380.6	1501.5	1291.8	990.7	827.3	770.7	755.3	747.5	745.0
35°	1603.1	1536.2	1497.6	1591.6	1224.9	863.3	706.4	666.5	649.7	633.0	630.4
37.5°	1792.3	1711.2	1676.5	1643.0	1130.9	737.2	613.7	586.7	562.3	536.5	535.2
40°	2018.7	1913.2	1887.5	1666.2	1001.0	618.9	549.4	523.7	492.8	468.3	469.6
42.5°	2279.9	2144.8	2089.5	1659.8	840.2	555.8	503.1	474.8	447.7	425.9	424.6
45°	2559.1	2406.0	2278.6	1614.7	680.6	512.1	474.8	441.3	414.3	389.8	387.3
47.5°	2867.9	2696.8	2453.6	1527.2	562.3	481.2	458.0	410.4	386.0	370.5	370.5
50°	3179.3	2974.7	2614.4	1394.7	492.8	458.0	433.6	393.7	374.4	361.5	361.5
52.5°	3445.6	3264.2	2747.0	1236.5	449.0	438.7	416.9	386.0	365.4	353.8	352.5
55°	3704.2	3533.1	2865.3	1079.5	413.0	413.0	413.0	379.6	356.4	346.1	344.8
57.5°	3961.5	3816.1	2988.8	976.6	380.8	391.1	405.3	371.8	348.7	339.7	338.4
60°	4252.3	4155.8	3131.7	904.5	352.5	368.0	395.0	362.8	335.8	328.1	326.8
62.5°	4561.1	4561.1	3261.6	802.9	326.8	348.7	379.6	351.3	324.2	317.8	316.5
65°	4803.0	4907.2	3345.2	651.0	301.1	329.4	361.5	335.8	308.8	307.5	304.9
67.5°	4831.3	4994.7	3292.5	491.5	277.9	308.8	343.5	319.1	293.4	293.4	289.5
70°	4628.0	4794.0	3127.8	368.0	261.2	288.2	320.4	298.5	274.1	276.6	270.2
72.5°	4288.3	4329.5	2718.7	290.8	241.9	266.3	292.1	275.3	253.5	253.5	244.5
75°	3840.6	3611.6	1975.0	243.2	218.7	240.6	263.8	249.6	230.3	223.9	218.7
77.5°	3057.0	2617.0	1147.7	209.7	199.4	216.2	231.6	221.3	204.6	190.4	190.4
80°	1863.0	1533.7	506.9	181.4	176.3	189.1	199.4	187.8	173.7	159.5	155.7
82.5°	708.9	591.9	245.7	155.7	154.4	162.1	169.8	158.3	148.0	141.5	122.2
85°	194.3	178.8	168.5	129.9	127.4	126.1	135.1	129.9	115.8	95.2	84.9
87.5°	73.3	83.6	91.4	79.8	84.9	78.5	90.1	82.3	73.3	47.6	42.5
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)