

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: P398043

Luminaire Tested: **ARCH-S-PA1-80-727-U-T2U**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398043
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-PA1-80-727-U-T2U
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9118 lumens
Efficiency: N/A
Efficacy: 109.9 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): 83
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

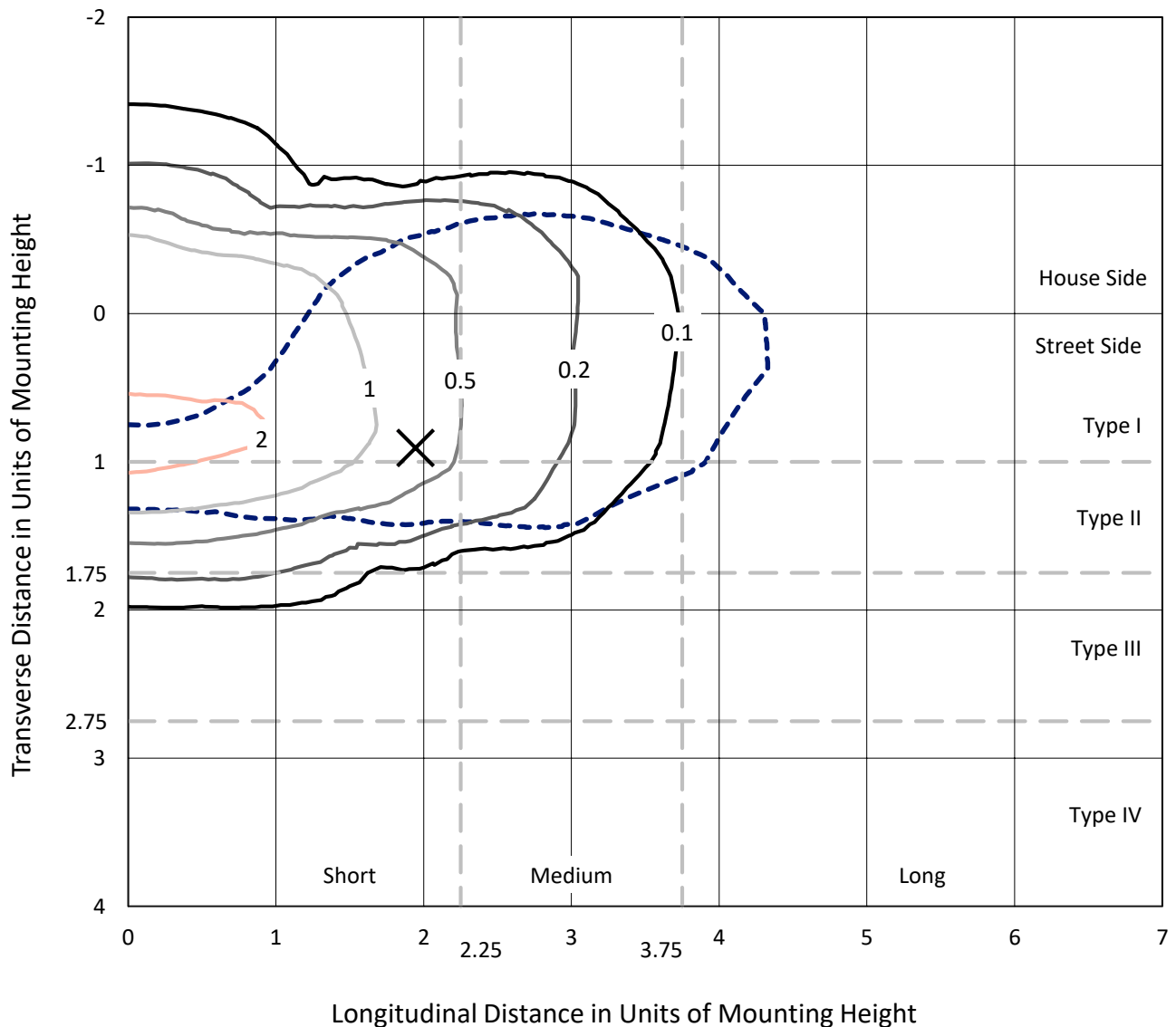


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Iso-Footcandle Lines of Horizontal Illumination

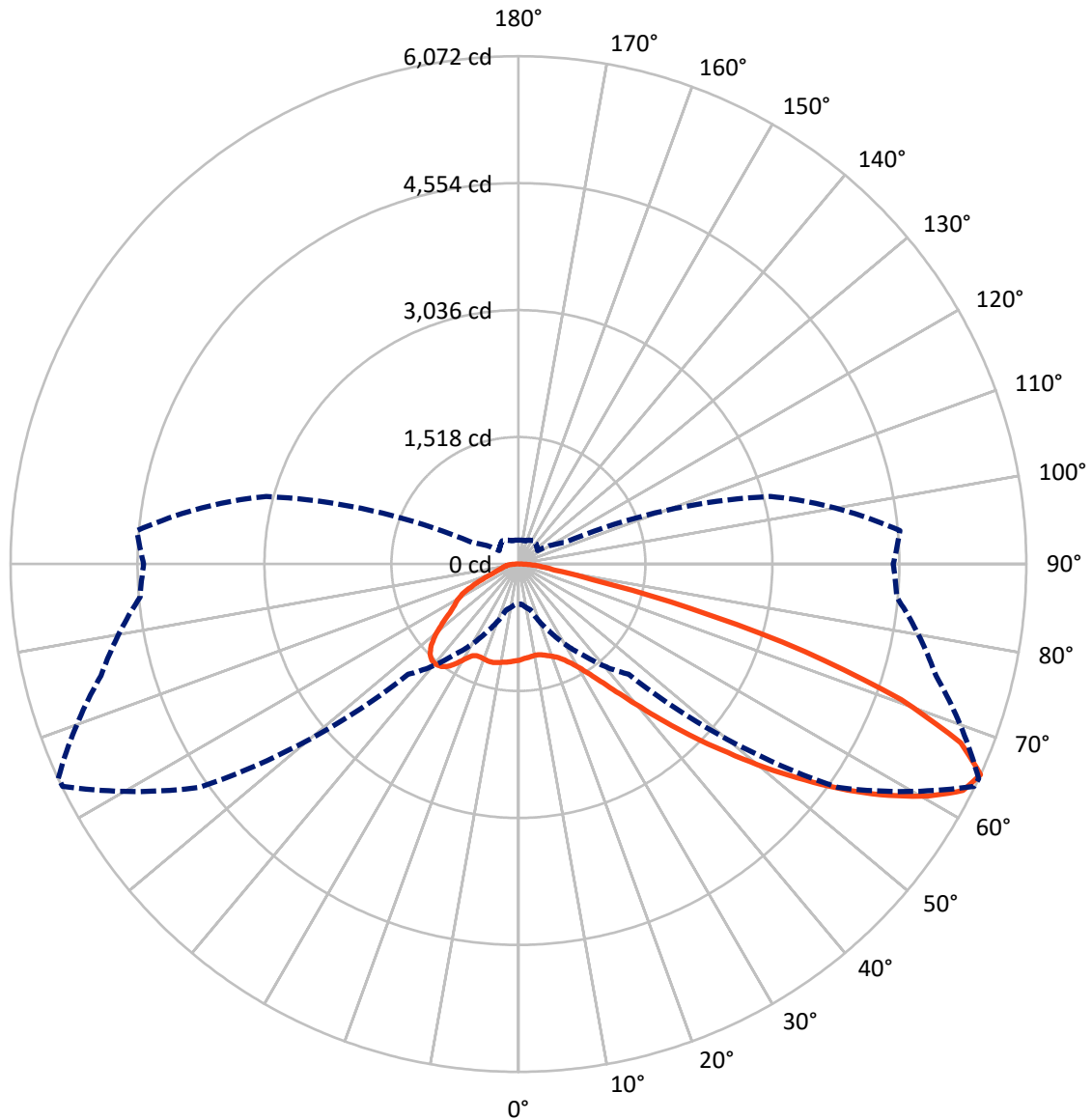
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 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	2636.1	0.0	2636.1
	% Fixture	28.9	0.0	28.9
Street Side	Lumens	6481.8	0.0	6481.8
	% Fixture	71.1	0.0	71.1
Total	Lumens	9118.0	0.0	9118.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.8	1.2
10°-20°	327.7	3.6
20°-30°	582.1	6.4
30°-40°	984.8	10.8
40°-50°	1714.4	18.8
50°-60°	2215.5	24.3
60°-70°	1938.7	21.3
70°-80°	1054.5	11.6
80°-90°	190.5	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°	9118.0	100.0
0°-180°	9118.0	100.0



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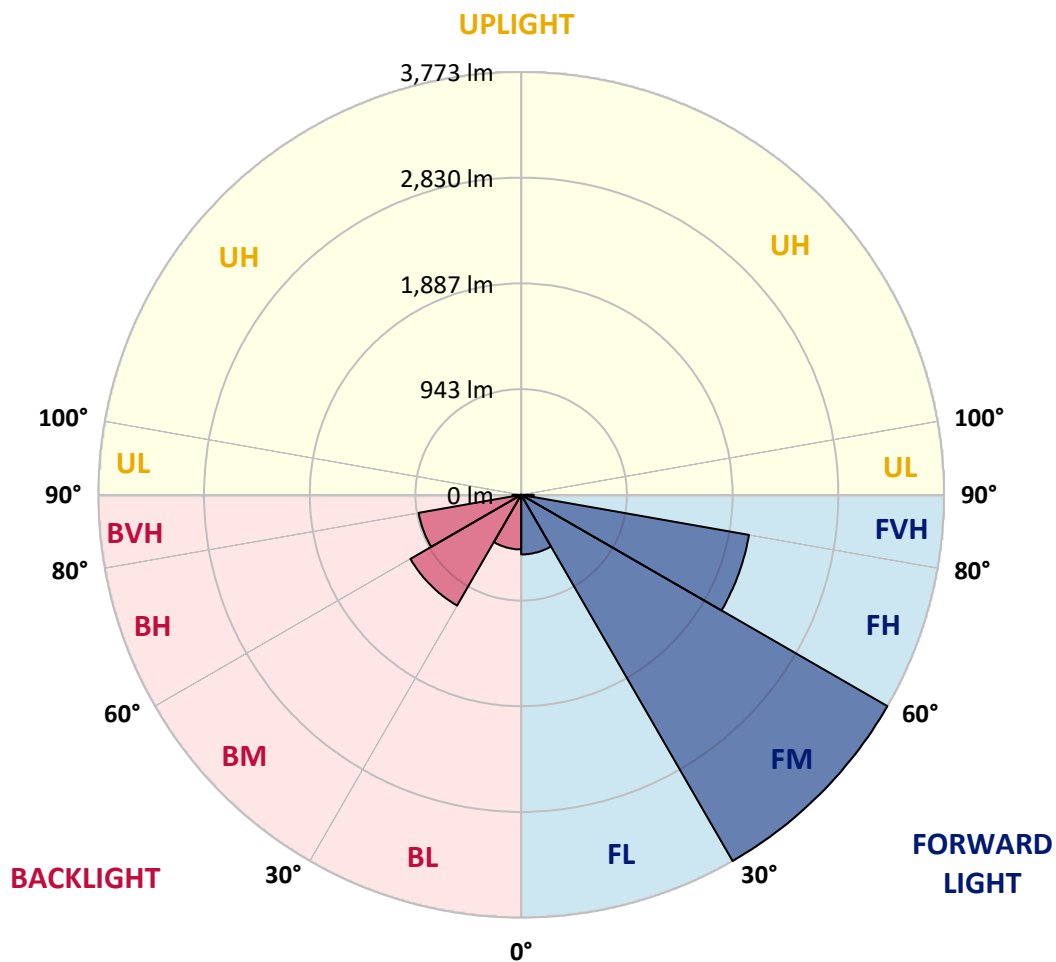
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	532.0	5.8			
FM (30°-60°)	3773.3	41.4			
FH (60°-80°)	2064.4	22.6			G2/5000
FVH (80°-90°)	112.1	1.2			G2/225
BL (0°-30°)	487.6	5.3	B1/500		
BM (30°-60°)	1141.4	12.5	B2/2500		
BH (60°-80°)	928.7	10.2	B2/1000		G2/1000
BVH (80°-90°)	78.4	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°	1152.1	1152.1	1152.1	1152.1	1152.1	1152.1	1152.1	1152.1	1152.1	1152.1	1152.1
2.5°	1131.7	1130.5	1128.1	1130.5	1131.7	1134.1	1132.9	1135.3	1134.1	1137.7	1143.7
5°	1102.9	1100.5	1099.3	1105.3	1108.9	1114.9	1117.3	1125.7	1124.5	1130.5	1140.1
7.5°	1070.5	1070.5	1069.3	1076.5	1081.3	1092.1	1100.5	1114.9	1116.1	1126.9	1137.7
10°	1045.3	1046.5	1045.3	1051.3	1058.5	1071.7	1086.1	1106.5	1107.7	1123.3	1134.1
12.5°	1035.7	1035.7	1035.7	1044.1	1053.7	1071.7	1088.5	1110.1	1112.5	1129.3	1138.9
15°	1048.9	1050.1	1047.7	1056.1	1066.9	1088.5	1104.1	1126.9	1129.3	1144.9	1150.9
17.5°	1095.7	1100.5	1094.5	1099.3	1096.9	1113.7	1128.1	1150.9	1152.1	1165.3	1167.7
20°	1188.2	1193.0	1183.4	1177.4	1155.7	1154.5	1160.5	1178.6	1178.6	1187.0	1181.0
22.5°	1331.0	1335.8	1319.0	1296.2	1244.6	1219.4	1206.2	1214.6	1213.4	1217.0	1201.4
25°	1520.6	1519.4	1499.0	1457.0	1374.2	1313.0	1280.6	1267.4	1267.4	1260.2	1241.0
27.5°	1755.8	1737.8	1701.8	1651.4	1536.2	1451.0	1381.4	1347.8	1341.8	1320.2	1284.2
30°	2006.7	1993.5	1941.8	1868.6	1735.4	1626.2	1511.0	1443.8	1440.2	1393.4	1339.4
32.5°	2301.9	2280.3	2222.7	2135.1	1975.5	1821.8	1677.8	1575.8	1569.8	1495.4	1421.0
35°	2681.1	2663.1	2551.5	2463.9	2258.7	2057.1	1886.6	1751.0	1746.2	1655.0	1560.2
37.5°	3136.0	3089.2	2981.2	2816.8	2600.7	2361.9	2145.9	1975.5	1969.5	1868.6	1748.6
40°	3541.7	3499.6	3403.6	3252.4	3020.8	2755.6	2462.7	2256.3	2250.3	2127.9	1976.7
42.5°	3841.7	3812.9	3750.5	3662.9	3497.2	3336.4	2867.2	2595.9	2585.1	2426.7	2238.3
45°	4015.7	3992.9	3956.9	3978.5	3976.1	3946.1	3349.6	3000.4	2965.6	2760.4	2529.9
47.5°	3973.7	3953.3	3967.7	4135.7	4367.4	4541.4	3911.3	3414.4	3367.6	3100.0	2840.8
50°	3670.1	3678.5	3754.1	4075.7	4595.4	4981.8	4534.2	3886.1	3823.7	3442.0	3136.0
52.5°	3116.8	3137.2	3320.8	3770.9	4570.2	5267.5	5097.1	4373.4	4290.5	3775.7	3404.8
55°	2475.9	2527.5	2765.2	3238.0	4241.3	5287.9	5521.9	4863.0	4771.8	4088.9	3638.9
57.5°	1831.4	1908.2	2183.1	2617.5	3611.3	4965.0	5734.3	5331.1	5220.7	4399.8	3886.1
60°	1161.7	1208.6	1525.4	2037.9	2764.0	4175.3	5706.7	5729.5	5633.5	4709.4	4144.1
62.5°	741.7	764.5	924.1	1453.4	1932.2	3091.6	5405.5	6030.8	5966.0	4991.4	4389.0
65°	476.5	486.1	567.7	894.1	1315.4	1866.2	4655.4	6063.2	6071.6	5167.9	4540.2
67.5°	387.6	392.5	422.5	552.1	930.1	1030.9	3242.8	5602.3	5704.3	5122.3	4488.6
70°	352.8	358.8	390.0	440.5	720.1	711.7	1569.8	4687.8	4854.6	4859.4	4259.3
72.5°	297.6	306.0	348.0	416.5	556.9	561.7	664.9	3338.8	3584.9	4343.4	3914.9
75°	248.4	253.2	289.2	367.2	471.7	448.9	466.9	1770.2	2125.5	3482.8	3548.9
77.5°	201.6	206.4	232.8	292.8	418.9	349.2	367.2	733.3	906.1	2364.3	2900.8
80°	144.0	148.8	178.8	228.0	316.8	314.4	272.4	404.5	439.3	1278.2	1884.2
82.5°	103.2	106.8	135.6	163.2	219.6	315.6	205.2	274.8	288.0	566.5	759.7
85°	69.6	69.6	93.6	108.0	141.6	199.2	165.6	186.0	194.4	268.8	205.2
87.5°	30.0	30.0	50.4	55.2	74.4	92.4	123.6	93.6	96.0	145.2	84.0
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°	1152.1	1152.1	1152.1	1152.1	1152.1	1152.1	1152.1	1152.1	1152.1	1152.1	1152.1
2.5°	1147.3	1148.5	1150.9	1158.1	1162.9	1170.1	1173.7	1178.6	1178.6	1176.2	1177.4
5°	1144.9	1148.5	1156.9	1170.1	1178.6	1191.8	1201.4	1208.6	1211.0	1208.6	1209.8
7.5°	1143.7	1149.7	1164.1	1183.4	1195.4	1212.2	1225.4	1233.8	1239.8	1237.4	1238.6
10°	1140.1	1149.7	1167.7	1191.8	1209.8	1226.6	1238.6	1242.2	1245.8	1243.4	1242.2
12.5°	1144.9	1155.7	1175.0	1203.8	1224.2	1237.4	1241.0	1235.0	1226.6	1221.8	1220.6
15°	1154.5	1165.3	1184.6	1214.6	1232.6	1237.4	1229.0	1209.8	1190.6	1179.8	1178.6
17.5°	1167.7	1175.0	1190.6	1217.0	1231.4	1225.4	1208.6	1185.8	1171.3	1162.9	1164.1
20°	1176.2	1176.2	1188.2	1208.6	1220.6	1215.8	1195.4	1170.1	1147.3	1136.5	1132.9
22.5°	1188.2	1182.2	1183.4	1201.4	1218.2	1211.0	1167.7	1123.3	1090.9	1078.9	1077.7
25°	1220.6	1203.8	1193.0	1203.8	1243.4	1184.6	1098.1	1046.5	1016.5	1005.7	1006.9
27.5°	1260.2	1237.4	1214.6	1232.6	1263.8	1124.5	1009.3	950.5	932.5	924.1	927.7
30°	1299.8	1269.8	1239.8	1304.6	1249.4	1030.9	895.3	837.7	822.1	816.1	820.9
32.5°	1373.0	1323.8	1287.8	1400.6	1205.0	924.1	771.7	718.9	704.5	697.3	694.9
35°	1495.4	1433.0	1397.0	1484.6	1142.5	805.3	658.9	621.7	606.1	590.5	588.1
37.5°	1671.8	1596.2	1563.8	1532.6	1054.9	687.7	572.5	547.3	524.5	500.5	499.3
40°	1883.0	1784.6	1760.6	1554.2	933.7	577.3	512.5	488.5	459.7	436.9	438.1
42.5°	2126.7	2000.7	1949.0	1548.2	783.7	518.5	469.3	442.9	417.7	397.3	396.1
45°	2387.1	2244.3	2125.5	1506.2	634.9	477.7	442.9	411.7	386.4	363.6	361.2
47.5°	2675.1	2515.5	2288.7	1424.6	524.5	448.9	427.3	382.8	360.0	345.6	345.6
50°	2965.6	2774.8	2438.7	1301.0	459.7	427.3	404.5	367.2	349.2	337.2	337.2
52.5°	3214.0	3044.8	2562.3	1153.3	418.9	409.3	388.8	360.0	340.8	330.0	328.8
55°	3455.2	3295.6	2672.7	1006.9	385.2	385.2	385.2	354.0	332.4	322.8	321.6
57.5°	3695.3	3559.7	2788.0	910.9	355.2	364.8	378.0	346.8	325.2	316.8	315.6
60°	3966.5	3876.5	2921.2	843.7	328.8	343.2	368.4	338.4	313.2	306.0	304.8
62.5°	4254.5	4254.5	3042.4	748.9	304.8	325.2	354.0	327.6	302.4	296.4	295.2
65°	4480.2	4577.4	3120.4	607.3	280.8	307.2	337.2	313.2	288.0	286.8	284.4
67.5°	4506.6	4659.0	3071.2	458.5	259.2	288.0	320.4	297.6	273.6	273.6	270.0
70°	4317.0	4471.8	2917.6	343.2	243.6	268.8	298.8	278.4	255.6	258.0	252.0
72.5°	4000.1	4038.5	2535.9	271.2	225.6	248.4	272.4	256.8	236.4	236.4	228.0
75°	3582.5	3368.8	1842.2	226.8	204.0	224.4	246.0	232.8	214.8	208.8	204.0
77.5°	2851.6	2441.1	1070.5	195.6	186.0	201.6	216.0	206.4	190.8	177.6	177.6
80°	1737.8	1430.6	472.9	169.2	164.4	176.4	186.0	175.2	162.0	148.8	145.2
82.5°	661.3	552.1	229.2	145.2	144.0	151.2	158.4	147.6	138.0	132.0	114.0
85°	181.2	166.8	157.2	121.2	118.8	117.6	126.0	121.2	108.0	88.8	79.2
87.5°	68.4	78.0	85.2	74.4	79.2	73.2	84.0	76.8	68.4	44.4	39.6
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)