

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: P397971

Luminaire Tested: **ARCH-S-PA1-70-727-U-T2U**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397971
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-PA1-70-727-U-T2U
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8439 lumens
Efficiency: N/A
Efficacy: 114.0 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

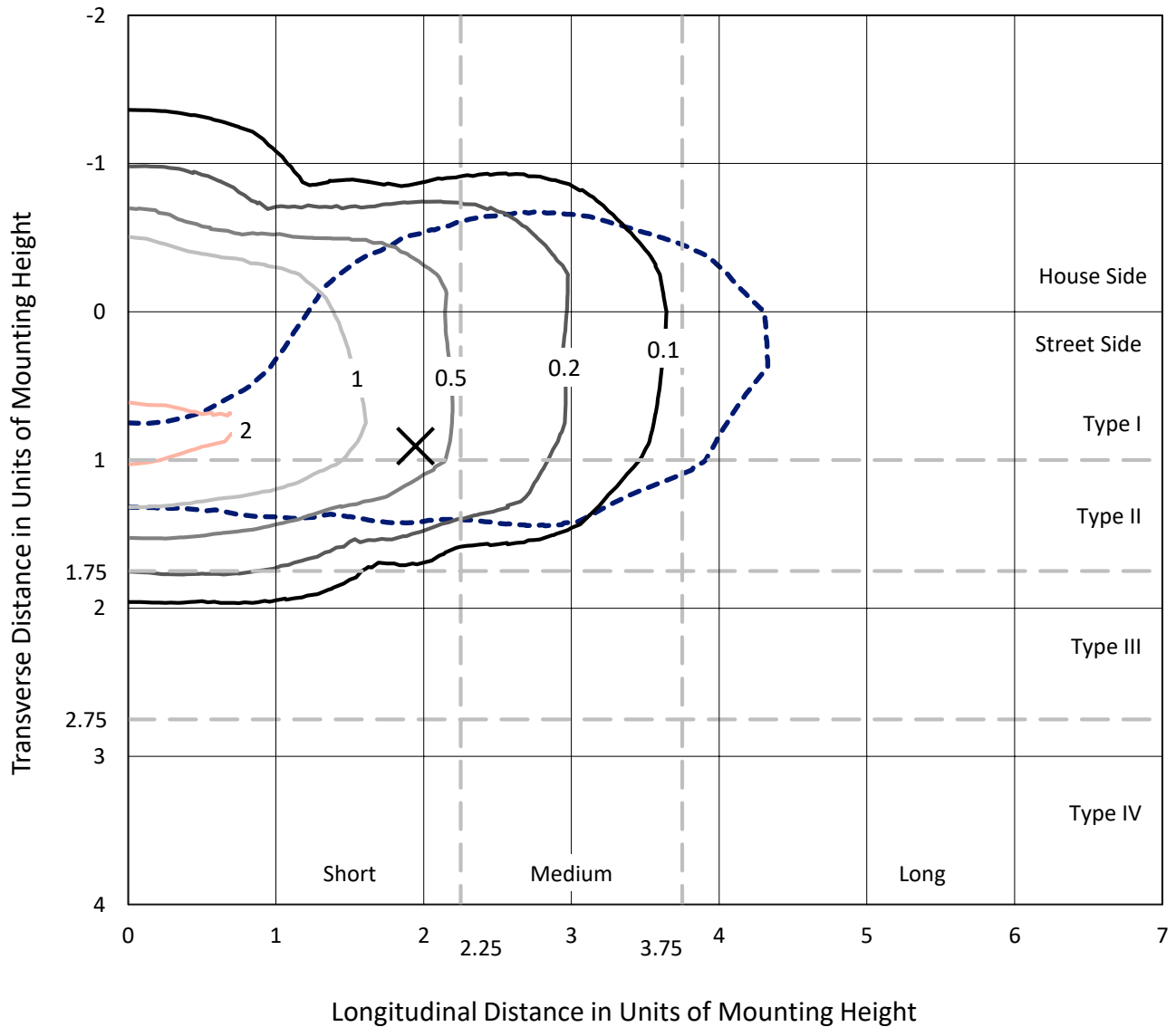
Input Watts (W): 74
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

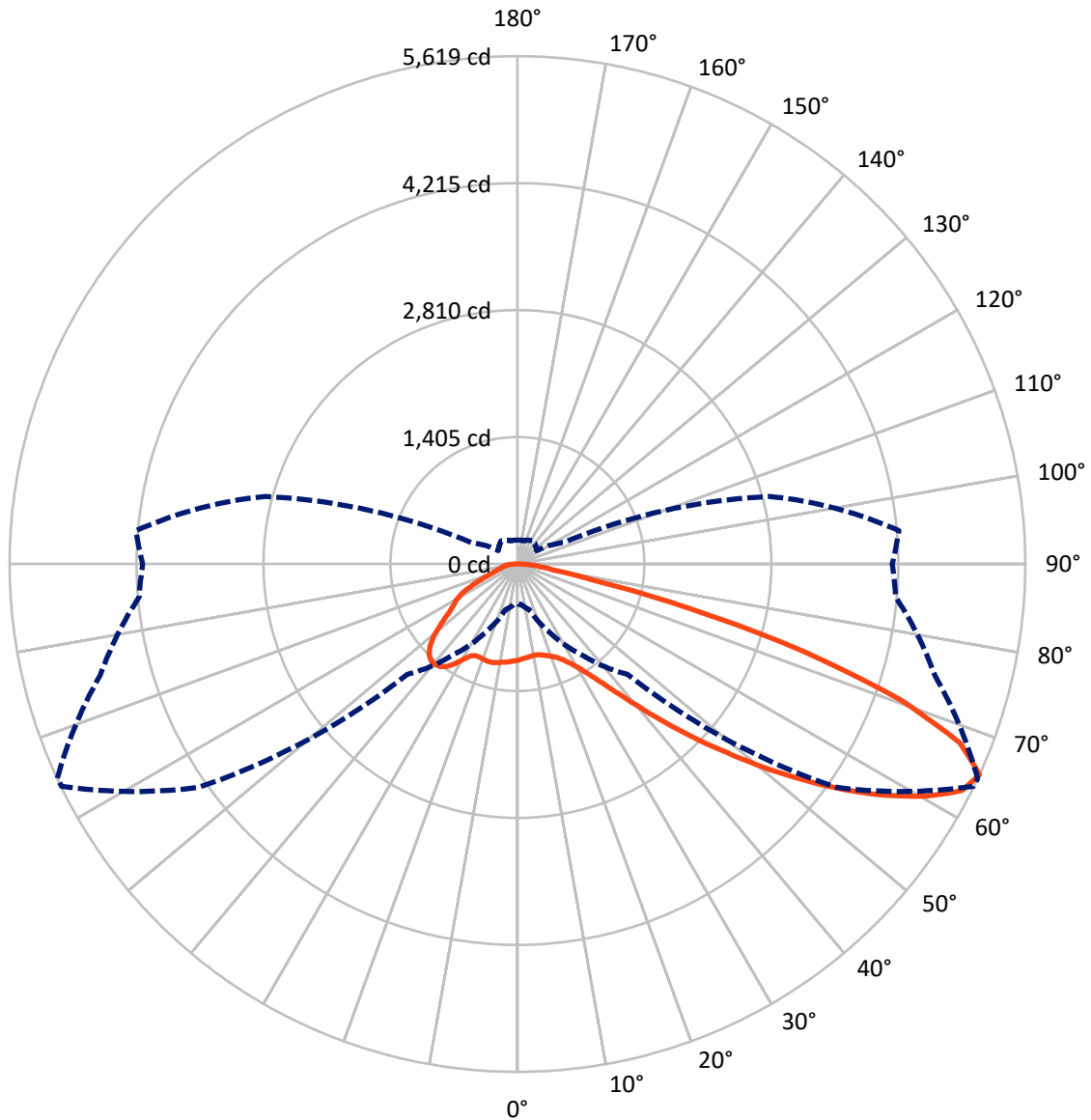


Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
 Type II - Short - Non-Cutoff

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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	2439.8	0.0	2439.8
	% Fixture	28.9	0.0	28.9
Street Side	Lumens	5999.2	0.0	5999.2
	% Fixture	71.1	0.0	71.1
Total	Lumens	8439.0	0.0	8439.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.6	1.2
10°-20°	303.3	3.6
20°-30°	538.8	6.4
30°-40°	911.5	10.8
40°-50°	1586.7	18.8
50°-60°	2050.5	24.3
60°-70°	1794.3	21.3
70°-80°	976.0	11.6
80°-90°	176.3	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°	8439.0	100.0
0°-180°	8439.0	100.0



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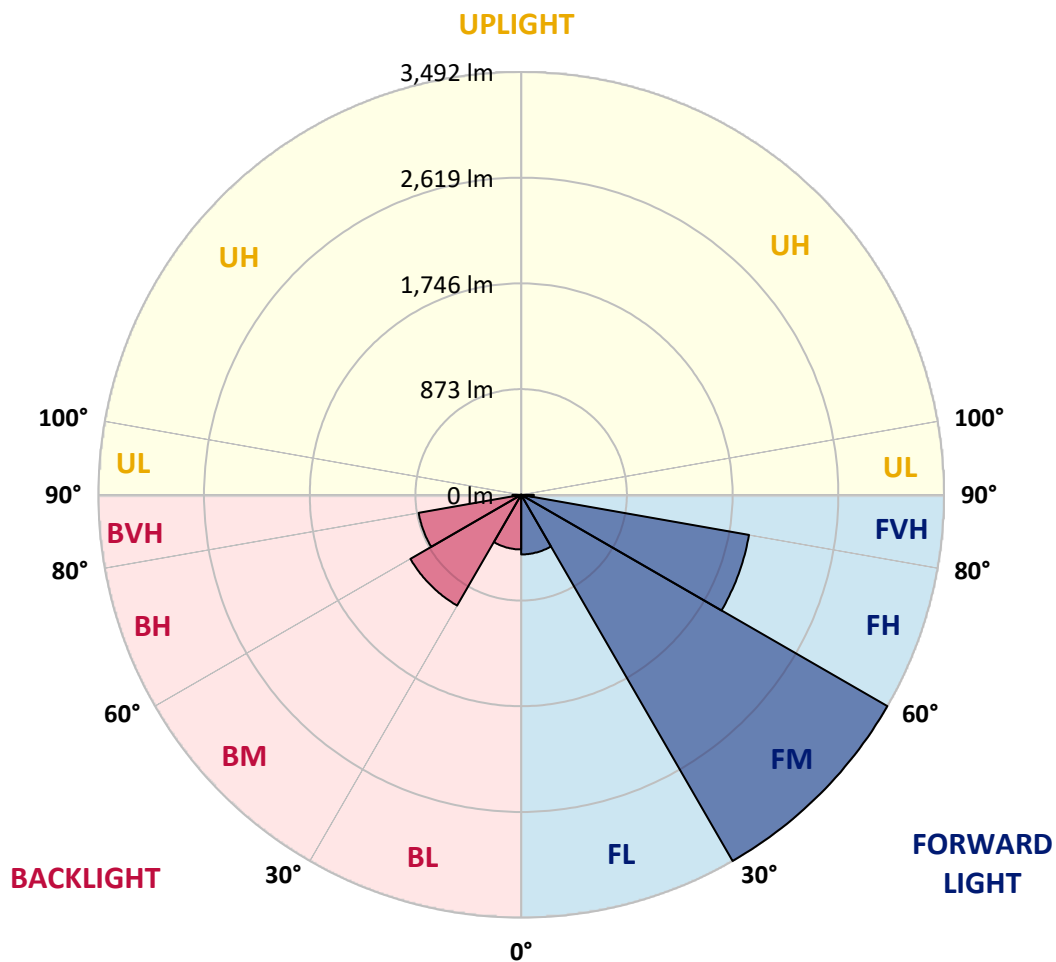
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	492.4	5.8			
FM	(30°-60°)	3492.3	41.4			
FH	(60°-80°)	1910.7	22.6			G2/5000
FVH	(80°-90°)	103.8	1.2			G2/225
BL	(0°-30°)	451.3	5.3	B1/500		
BM	(30°-60°)	1056.4	12.5	B2/2500		
BH	(60°-80°)	859.6	10.2	B2/1000		G2/1000
BVH	(80°-90°)	72.6	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°	1066.3	1066.3	1066.3	1066.3	1066.3	1066.3	1066.3	1066.3	1066.3	1066.3	1066.3
2.5°	1047.5	1046.4	1044.1	1046.4	1047.5	1049.7	1048.6	1050.8	1049.7	1053.0	1058.6
5°	1020.8	1018.6	1017.5	1023.0	1026.4	1031.9	1034.1	1041.9	1040.8	1046.4	1055.2
7.5°	990.8	990.8	989.7	996.4	1000.8	1010.8	1018.6	1031.9	1033.0	1043.0	1053.0
10°	967.5	968.6	967.5	973.0	979.7	991.9	1005.3	1024.1	1025.3	1039.7	1049.7
12.5°	958.6	958.6	958.6	966.4	975.3	991.9	1007.5	1027.5	1029.7	1045.2	1054.1
15°	970.8	971.9	969.7	977.5	987.5	1007.5	1021.9	1043.0	1045.2	1059.7	1065.2
17.5°	1014.1	1018.6	1013.0	1017.5	1015.3	1030.8	1044.1	1065.2	1066.3	1078.6	1080.8
20°	1099.7	1104.1	1095.2	1089.7	1069.7	1068.6	1074.1	1090.8	1090.8	1098.6	1093.0
22.5°	1231.9	1236.3	1220.7	1199.6	1151.9	1128.6	1116.3	1124.1	1123.0	1126.3	1111.9
25°	1407.4	1406.2	1387.4	1348.5	1271.8	1215.2	1185.2	1173.0	1173.0	1166.3	1148.5
27.5°	1625.1	1608.4	1575.1	1528.4	1421.8	1342.9	1278.5	1247.4	1241.9	1221.9	1188.5
30°	1857.2	1845.0	1797.2	1729.5	1606.2	1505.1	1398.5	1336.3	1332.9	1289.6	1239.6
32.5°	2130.5	2110.5	2057.2	1976.1	1828.3	1686.2	1552.9	1458.5	1452.9	1384.0	1315.2
35°	2481.5	2464.8	2361.5	2280.4	2090.5	1903.9	1746.1	1620.6	1616.2	1531.8	1444.0
37.5°	2902.5	2859.1	2759.2	2607.0	2407.1	2186.0	1986.1	1828.3	1822.8	1729.5	1618.4
40°	3277.9	3239.0	3150.2	3010.2	2795.8	2550.4	2279.3	2088.3	2082.7	1969.4	1829.5
42.5°	3555.6	3528.9	3471.2	3390.1	3236.8	3088.0	2653.7	2402.6	2392.6	2246.0	2071.6
45°	3716.7	3695.6	3662.2	3682.2	3680.0	3652.2	3100.2	2777.0	2744.7	2554.8	2341.5
47.5°	3677.8	3658.9	3672.2	3827.7	4042.1	4203.2	3620.0	3160.2	3116.8	2869.1	2629.2
50°	3396.8	3404.5	3474.5	3772.2	4253.2	4610.8	4196.5	3596.7	3538.9	3185.7	2902.5
52.5°	2884.7	2903.6	3073.5	3490.1	4229.9	4875.2	4717.5	4047.7	3971.0	3494.5	3151.3
55°	2291.5	2339.3	2559.2	2996.9	3925.5	4894.1	5110.7	4500.9	4416.5	3784.4	3367.9
57.5°	1695.1	1766.1	2020.5	2422.6	3342.3	4595.3	5307.3	4934.1	4831.9	4072.1	3596.7
60°	1075.2	1118.6	1411.8	1886.1	2558.1	3864.4	5281.8	5302.9	5214.0	4358.7	3835.5
62.5°	686.5	707.6	855.3	1345.2	1788.4	2861.4	5003.0	5581.7	5521.7	4619.7	4062.1
65°	441.0	449.9	525.4	827.5	1217.4	1727.3	4308.7	5611.7	5619.4	4783.0	4202.1
67.5°	358.8	363.2	391.0	511.0	860.9	954.2	3001.3	5185.1	5279.5	4740.8	4154.3
70°	326.6	332.1	361.0	407.7	666.5	658.7	1452.9	4338.7	4493.1	4497.5	3942.2
72.5°	275.5	283.2	322.1	385.4	515.4	519.8	615.4	3090.2	3317.9	4019.9	3623.4
75°	229.9	234.4	267.7	339.9	436.5	415.4	432.1	1638.4	1967.2	3223.5	3284.6
77.5°	186.6	191.1	215.5	271.0	387.7	323.2	339.9	678.7	838.6	2188.2	2684.8
80°	133.3	137.7	165.5	211.0	293.2	291.0	252.1	374.3	406.5	1183.0	1743.9
82.5°	95.5	98.9	125.5	151.1	203.3	292.1	189.9	254.4	266.6	524.3	703.1
85°	64.4	64.4	86.6	100.0	131.1	184.4	153.3	172.2	179.9	248.8	189.9
87.5°	27.8	27.8	46.7	51.1	68.9	85.5	114.4	86.6	88.9	134.4	77.8
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°	1066.3	1066.3	1066.3	1066.3	1066.3	1066.3	1066.3	1066.3	1066.3	1066.3	1066.3
2.5°	1061.9	1063.0	1065.2	1071.9	1076.3	1083.0	1086.3	1090.8	1090.8	1088.6	1089.7
5°	1059.7	1063.0	1070.8	1083.0	1090.8	1103.0	1111.9	1118.6	1120.8	1118.6	1119.7
7.5°	1058.6	1064.1	1077.5	1095.2	1106.3	1121.9	1134.1	1141.9	1147.4	1145.2	1146.3
10°	1055.2	1064.1	1080.8	1103.0	1119.7	1135.2	1146.3	1149.7	1153.0	1150.8	1149.7
12.5°	1059.7	1069.7	1087.5	1114.1	1133.0	1145.2	1148.5	1143.0	1135.2	1130.8	1129.7
15°	1068.6	1078.6	1096.3	1124.1	1140.8	1145.2	1137.4	1119.7	1101.9	1091.9	1090.8
17.5°	1080.8	1087.5	1101.9	1126.3	1139.7	1134.1	1118.6	1097.5	1084.1	1076.3	1077.5
20°	1088.6	1088.6	1099.7	1118.6	1129.7	1125.2	1106.3	1083.0	1061.9	1051.9	1048.6
22.5°	1099.7	1094.1	1095.2	1111.9	1127.4	1120.8	1080.8	1039.7	1009.7	998.6	997.5
25°	1129.7	1114.1	1104.1	1114.1	1150.8	1096.3	1016.4	968.6	940.8	930.8	931.9
27.5°	1166.3	1145.2	1124.1	1140.8	1169.7	1040.8	934.2	879.7	863.1	855.3	858.6
30°	1203.0	1175.2	1147.4	1207.4	1156.3	954.2	828.6	775.3	760.9	755.3	759.8
32.5°	1270.7	1225.2	1191.9	1296.3	1115.2	855.3	714.2	665.4	652.0	645.4	643.1
35°	1384.0	1326.3	1292.9	1374.0	1057.5	745.3	609.8	575.4	560.9	546.5	544.3
37.5°	1547.3	1477.3	1447.3	1418.5	976.4	636.5	529.8	506.5	485.4	463.2	462.1
40°	1742.8	1651.7	1629.5	1438.5	864.2	534.3	474.3	452.1	425.4	404.3	405.4
42.5°	1968.3	1851.7	1803.9	1432.9	725.3	479.9	434.3	409.9	386.6	367.7	366.6
45°	2209.3	2077.2	1967.2	1394.0	587.6	442.1	409.9	381.0	357.7	336.6	334.3
47.5°	2475.9	2328.2	2118.3	1318.5	485.4	415.4	395.4	354.3	333.2	319.9	319.9
50°	2744.7	2568.1	2257.1	1204.1	425.4	395.4	374.3	339.9	323.2	312.1	312.1
52.5°	2974.7	2818.0	2371.5	1067.5	387.7	378.8	359.9	333.2	315.5	305.5	304.4
55°	3197.9	3050.2	2473.7	931.9	356.6	356.6	356.6	327.7	307.7	298.8	297.7
57.5°	3420.1	3294.6	2580.3	843.1	328.8	337.7	349.9	321.0	301.0	293.2	292.1
60°	3671.1	3587.8	2703.6	780.9	304.4	317.7	341.0	313.2	289.9	283.2	282.1
62.5°	3937.7	3937.7	2815.8	693.1	282.1	301.0	327.7	303.2	279.9	274.4	273.3
65°	4146.5	4236.5	2888.0	562.1	259.9	284.4	312.1	289.9	266.6	265.5	263.3
67.5°	4171.0	4312.0	2842.5	424.3	239.9	266.6	296.6	275.5	253.3	253.3	249.9
70°	3995.5	4138.8	2700.3	317.7	225.5	248.8	276.6	257.7	236.6	238.8	233.3
72.5°	3702.2	3737.8	2347.1	251.0	208.8	229.9	252.1	237.7	218.8	218.8	211.0
75°	3315.7	3118.0	1705.0	209.9	188.8	207.7	227.7	215.5	198.8	193.3	188.8
77.5°	2639.2	2259.3	990.8	181.1	172.2	186.6	199.9	191.1	176.6	164.4	164.4
80°	1608.4	1324.0	437.6	156.6	152.2	163.3	172.2	162.2	150.0	137.7	134.4
82.5°	612.0	511.0	212.2	134.4	133.3	140.0	146.6	136.6	127.7	122.2	105.5
85°	167.7	154.4	145.5	112.2	110.0	108.9	116.6	112.2	100.0	82.2	73.3
87.5°	63.3	72.2	78.9	68.9	73.3	67.8	77.8	71.1	63.3	41.1	36.7
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)