

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: P398097

Luminaire Tested: **ARCH-S-PA1-80-830-U-T2U**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398097
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-PA1-80-830-U-T2U
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 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: 8666 lumens
Efficiency: N/A
Efficacy: 104.4 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

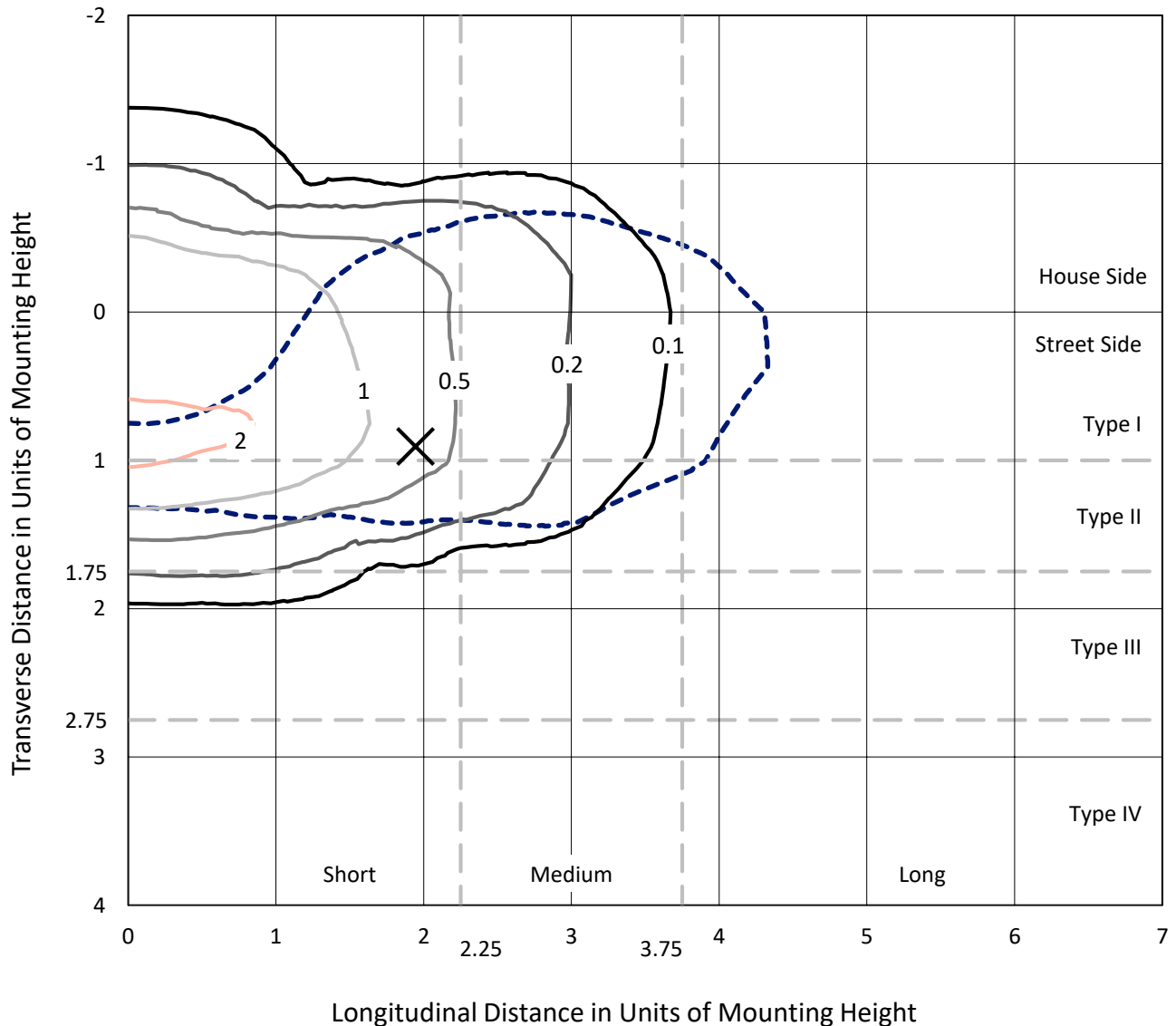
Input Watts (W): 83
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

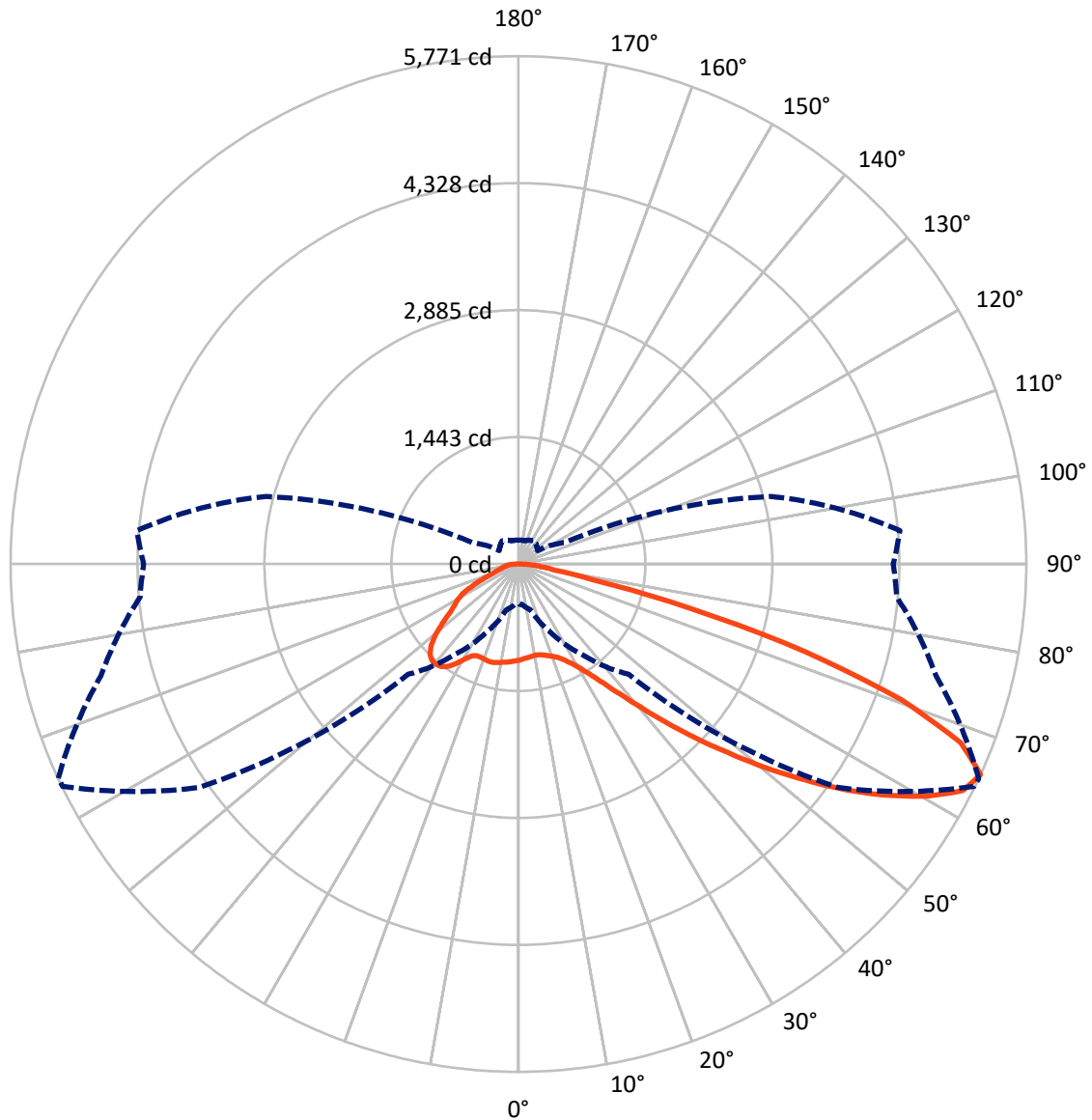
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 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	2505.5	0.0	2505.5
	% Fixture	28.9	0.0	28.9
Street Side	Lumens	6160.5	0.0	6160.5
	% Fixture	71.1	0.0	71.1
Total	Lumens	8666.0	0.0	8666.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.3	1.2
10°-20°	311.5	3.6
20°-30°	553.3	6.4
30°-40°	936.0	10.8
40°-50°	1629.4	18.8
50°-60°	2105.7	24.3
60°-70°	1842.6	21.3
70°-80°	1002.2	11.6
80°-90°	181.1	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°	8666.0	100.0
0°-180°	8666.0	100.0



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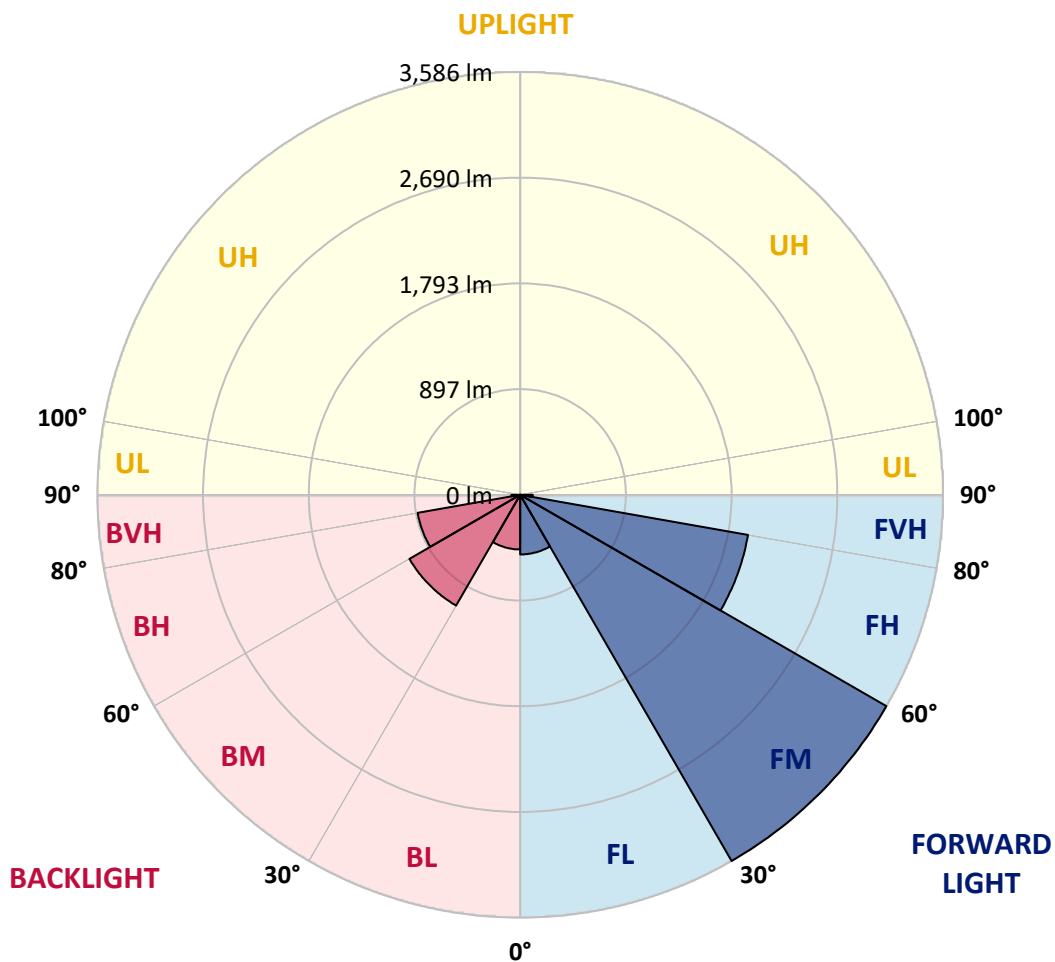
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	505.6	5.8			
FM	(30°-60°)	3586.2	41.4			
FH	(60°-80°)	1962.1	22.6			G2/5000
FVH	(80°-90°)	106.6	1.2			G2/225
BL	(0°-30°)	463.4	5.3	B1/500		
BM	(30°-60°)	1084.8	12.5	B2/2500		
BH	(60°-80°)	882.7	10.2	B2/1000		G2/1000
BVH	(80°-90°)	74.5	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°	1095.0	1095.0	1095.0	1095.0	1095.0	1095.0	1095.0	1095.0	1095.0	1095.0	1095.0
2.5°	1075.6	1074.5	1072.2	1074.5	1075.6	1077.9	1076.8	1079.1	1077.9	1081.3	1087.0
5°	1048.3	1046.0	1044.8	1050.5	1054.0	1059.7	1062.0	1069.9	1068.8	1074.5	1083.6
7.5°	1017.5	1017.5	1016.3	1023.2	1027.7	1038.0	1046.0	1059.7	1060.8	1071.1	1081.3
10°	993.5	994.7	993.5	999.2	1006.1	1018.6	1032.3	1051.7	1052.8	1067.7	1077.9
12.5°	984.4	984.4	984.4	992.4	1001.5	1018.6	1034.6	1055.1	1057.4	1073.4	1082.5
15°	996.9	998.1	995.8	1003.8	1014.0	1034.6	1049.4	1071.1	1073.4	1088.2	1093.9
17.5°	1041.4	1046.0	1040.3	1044.8	1042.6	1058.5	1072.2	1093.9	1095.0	1107.6	1109.9
20°	1129.3	1133.8	1124.7	1119.0	1098.5	1097.3	1103.0	1120.1	1120.1	1128.1	1122.4
22.5°	1265.0	1269.6	1253.6	1231.9	1182.9	1158.9	1146.4	1154.3	1153.2	1156.6	1141.8
25°	1445.2	1444.1	1424.7	1384.8	1306.1	1247.9	1217.1	1204.5	1204.5	1197.7	1179.4
27.5°	1668.8	1651.7	1617.5	1569.5	1460.0	1379.1	1312.9	1281.0	1275.3	1254.7	1220.5
30°	1907.2	1894.6	1845.6	1776.0	1649.4	1545.6	1436.1	1372.2	1368.8	1324.3	1273.0
32.5°	2187.8	2167.3	2112.5	2029.2	1877.5	1731.5	1594.6	1497.7	1492.0	1421.3	1350.5
35°	2548.2	2531.1	2425.0	2341.8	2146.7	1955.1	1793.1	1664.2	1659.7	1573.0	1482.9
37.5°	2980.5	2936.1	2833.4	2677.1	2471.8	2244.8	2039.5	1877.5	1871.8	1776.0	1661.9
40°	3366.1	3326.2	3234.9	3091.2	2871.0	2619.0	2340.6	2144.4	2138.7	2022.4	1878.7
42.5°	3651.2	3623.9	3564.6	3481.3	3323.9	3171.0	2725.0	2467.2	2457.0	2306.4	2127.3
45°	3816.6	3795.0	3760.8	3781.3	3779.0	3750.5	3183.6	2851.6	2818.6	2623.5	2404.5
47.5°	3776.7	3757.3	3771.0	3930.7	4150.9	4316.3	3717.4	3245.2	3200.7	2946.3	2699.9
50°	3488.1	3496.1	3568.0	3873.7	4367.6	4734.9	4309.4	3693.5	3634.1	3271.4	2980.5
52.5°	2962.3	2981.7	3156.2	3584.0	4343.6	5006.4	4844.4	4156.6	4077.9	3588.5	3236.0
55°	2353.2	2402.2	2628.1	3077.5	4031.1	5025.7	5248.2	4622.0	4535.3	3886.2	3458.5
57.5°	1740.6	1813.6	2074.9	2487.8	3432.2	4718.9	5450.1	5066.8	4961.9	4181.7	3693.5
60°	1104.2	1148.6	1449.8	1936.8	2626.9	3968.4	5423.8	5445.5	5354.3	4475.9	3938.7
62.5°	704.9	726.6	878.3	1381.3	1836.5	2938.3	5137.5	5731.8	5670.2	4744.0	4171.4
65°	452.8	462.0	539.5	849.8	1250.2	1773.7	4424.6	5762.6	5770.6	4911.7	4315.1
67.5°	368.4	373.0	401.5	524.7	884.0	979.8	3082.1	5324.6	5421.6	4868.3	4266.1
70°	335.4	341.1	370.7	418.6	684.4	676.4	1492.0	4455.4	4614.0	4618.5	4048.2
72.5°	282.9	290.9	330.8	395.8	529.3	533.8	631.9	3173.3	3407.1	4128.0	3720.8
75°	236.1	240.7	274.9	349.0	448.3	426.6	443.7	1682.5	2020.1	3310.2	3372.9
77.5°	191.6	196.2	221.3	278.3	398.1	331.9	349.0	696.9	861.2	2247.1	2757.0
80°	136.9	141.4	170.0	216.7	301.1	298.9	258.9	384.4	417.5	1214.8	1790.8
82.5°	98.1	101.5	128.9	155.1	208.7	300.0	195.1	261.2	273.8	538.4	722.0
85°	66.2	66.2	89.0	102.7	134.6	189.3	157.4	176.8	184.8	255.5	195.1
87.5°	28.5	28.5	47.9	52.5	70.7	87.8	117.5	89.0	91.3	138.0	79.8
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°	1095.0	1095.0	1095.0	1095.0	1095.0	1095.0	1095.0	1095.0	1095.0	1095.0	1095.0
2.5°	1090.5	1091.6	1093.9	1100.7	1105.3	1112.1	1115.6	1120.1	1120.1	1117.8	1119.0
5°	1088.2	1091.6	1099.6	1112.1	1120.1	1132.7	1141.8	1148.6	1150.9	1148.6	1149.8
7.5°	1087.0	1092.8	1106.4	1124.7	1136.1	1152.1	1164.6	1172.6	1178.3	1176.0	1177.2
10°	1083.6	1092.8	1109.9	1132.7	1149.8	1165.8	1177.2	1180.6	1184.0	1181.7	1180.6
12.5°	1088.2	1098.5	1116.7	1144.1	1163.5	1176.0	1179.4	1173.7	1165.8	1161.2	1160.1
15°	1097.3	1107.6	1125.8	1154.3	1171.5	1176.0	1168.0	1149.8	1131.5	1121.3	1120.1
17.5°	1109.9	1116.7	1131.5	1156.6	1170.3	1164.6	1148.6	1127.0	1113.3	1105.3	1106.4
20°	1117.8	1117.8	1129.3	1148.6	1160.1	1155.5	1136.1	1112.1	1090.5	1080.2	1076.8
22.5°	1129.3	1123.5	1124.7	1141.8	1157.8	1150.9	1109.9	1067.7	1036.9	1025.5	1024.3
25°	1160.1	1144.1	1133.8	1144.1	1181.7	1125.8	1043.7	994.7	966.1	955.9	957.0
27.5°	1197.7	1176.0	1154.3	1171.5	1201.1	1068.8	959.3	903.4	886.3	878.3	881.7
30°	1235.3	1206.8	1178.3	1239.9	1187.4	979.8	850.9	796.2	781.4	775.6	780.2
32.5°	1304.9	1258.1	1223.9	1331.1	1145.2	878.3	733.4	683.3	669.6	662.7	660.4
35°	1421.3	1361.9	1327.7	1411.0	1085.9	765.4	626.2	590.9	576.0	561.2	558.9
37.5°	1588.9	1517.1	1486.3	1456.6	1002.6	653.6	544.1	520.1	498.5	475.7	474.5
40°	1789.7	1696.2	1673.3	1477.2	887.4	548.7	487.1	464.2	436.9	415.2	416.3
42.5°	2021.2	1901.5	1852.4	1471.5	744.9	492.8	446.0	420.9	396.9	377.6	376.4
45°	2268.8	2133.0	2020.1	1431.5	603.4	454.0	420.9	391.2	367.3	345.6	343.3
47.5°	2542.5	2390.8	2175.2	1354.0	498.5	426.6	406.1	363.9	342.2	328.5	328.5
50°	2818.6	2637.2	2317.8	1236.5	436.9	406.1	384.4	349.0	331.9	320.5	320.5
52.5°	3054.7	2893.9	2435.3	1096.2	398.1	389.0	369.6	342.2	323.9	313.7	312.5
55°	3284.0	3132.2	2540.2	957.0	366.2	366.2	366.2	336.5	316.0	306.8	305.7
57.5°	3512.1	3383.2	2649.8	865.8	337.6	346.8	359.3	329.7	309.1	301.1	300.0
60°	3769.9	3684.3	2776.4	801.9	312.5	326.2	350.2	321.7	297.7	290.9	289.7
62.5°	4043.6	4043.6	2891.6	711.8	289.7	309.1	336.5	311.4	287.4	281.7	280.6
65°	4258.1	4350.5	2965.7	577.2	266.9	292.0	320.5	297.7	273.8	272.6	270.3
67.5°	4283.2	4428.0	2918.9	435.7	246.4	273.8	304.6	282.9	260.1	260.1	256.6
70°	4103.0	4250.1	2772.9	326.2	231.6	255.5	284.0	264.6	243.0	245.2	239.5
72.5°	3801.8	3838.3	2410.2	257.8	214.4	236.1	258.9	244.1	224.7	224.7	216.7
75°	3404.9	3201.8	1750.9	215.6	193.9	213.3	233.8	221.3	204.2	198.5	193.9
77.5°	2710.2	2320.1	1017.5	185.9	176.8	191.6	205.3	196.2	181.4	168.8	168.8
80°	1651.7	1359.7	449.4	160.8	156.3	167.7	176.8	166.5	154.0	141.4	138.0
82.5°	628.5	524.7	217.9	138.0	136.9	143.7	150.6	140.3	131.2	125.5	108.4
85°	172.2	158.6	149.4	115.2	112.9	111.8	119.8	115.2	102.7	84.4	75.3
87.5°	65.0	74.1	81.0	70.7	75.3	69.6	79.8	73.0	65.0	42.2	37.6
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)