

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: P214720

Luminaire Tested: **ARCH-AF24-90-D-U-T3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214720
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-90-D-U-T3-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8689 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

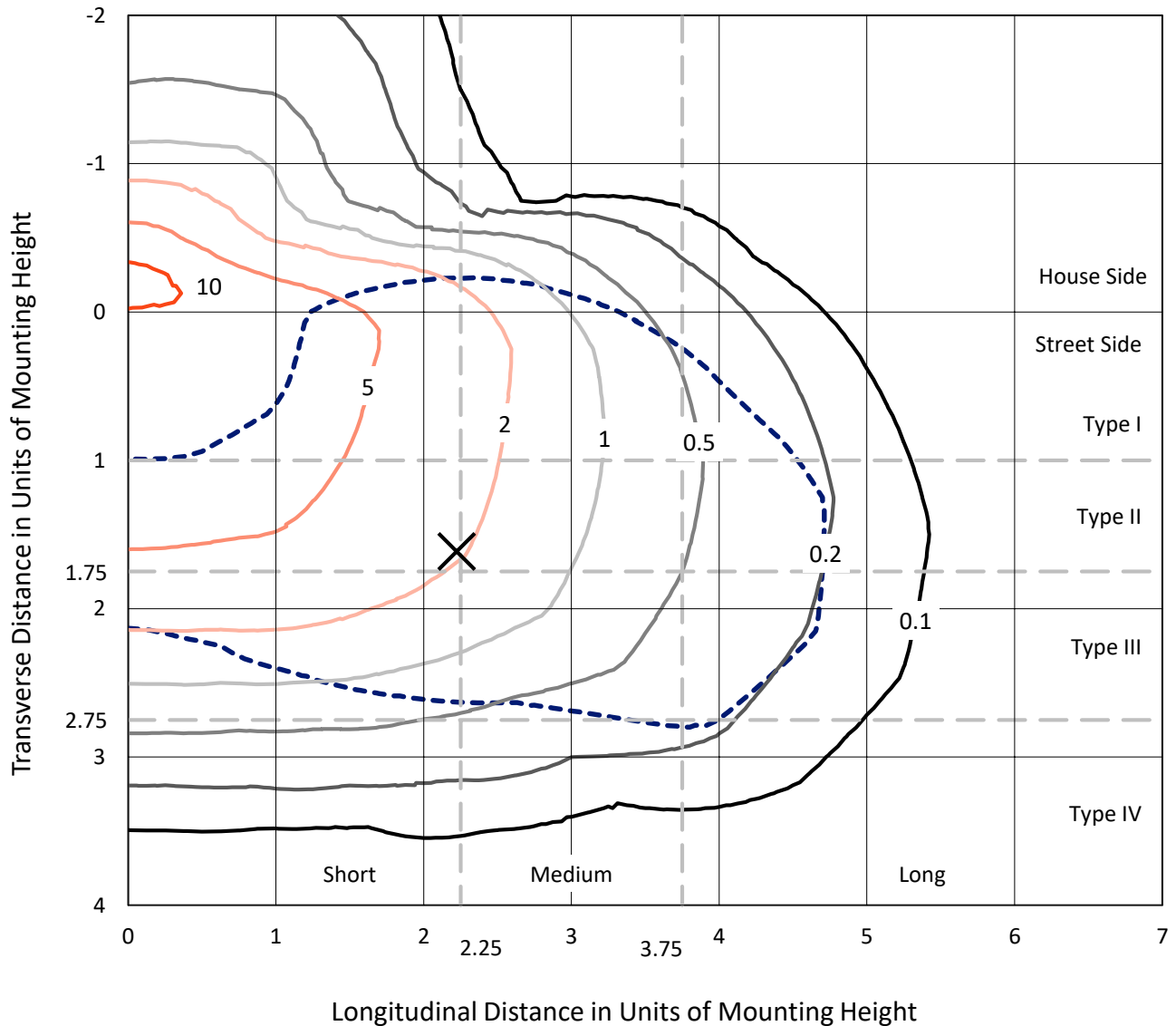
Input Watts (W): 94
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

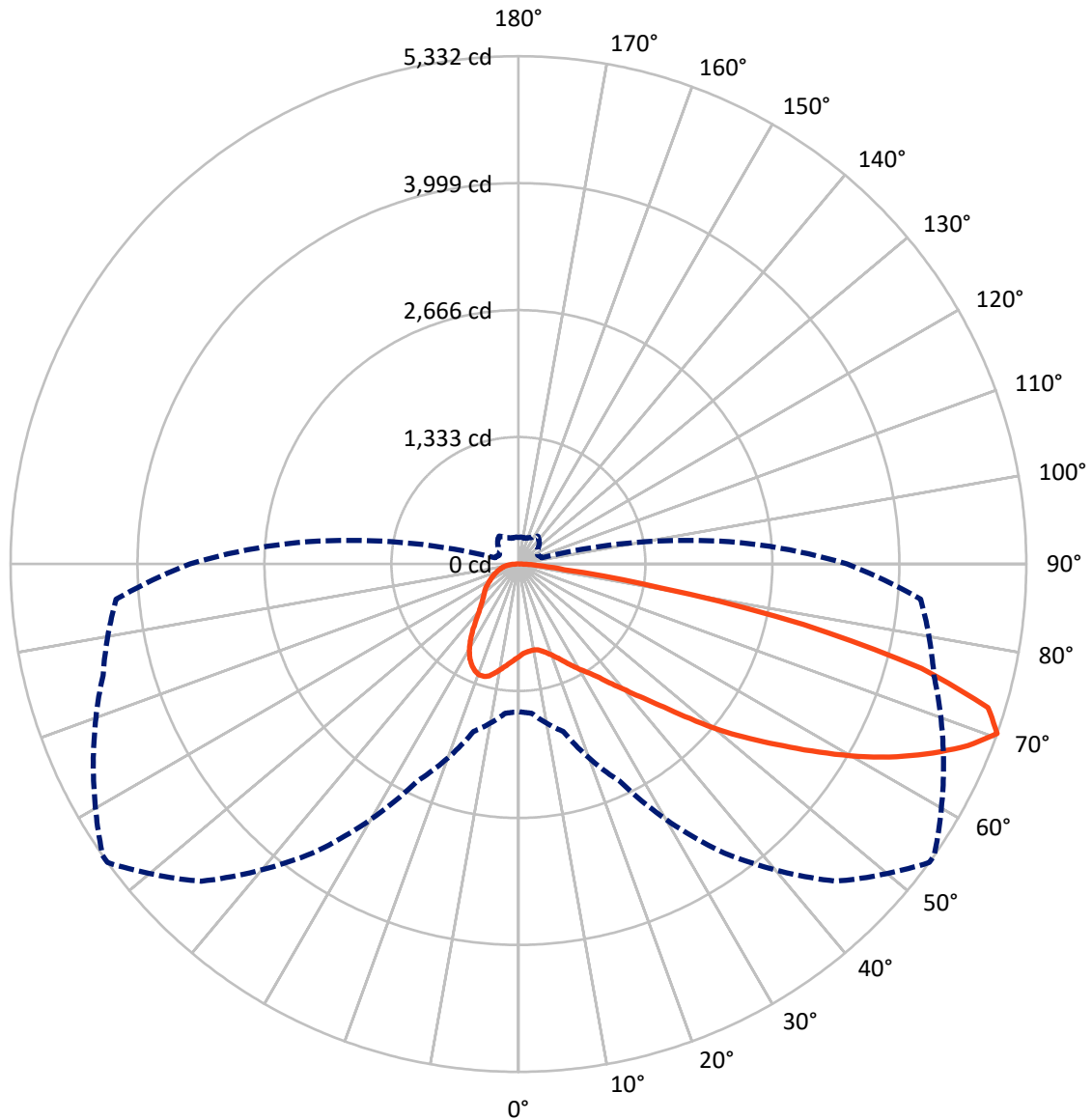


Based on 10 foot mounting height. Maximum calculated value = 11.3 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1970.6	0.0	1970.6
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	6718.4	0.0	6718.4
	% Fixture	77.3	0.0	77.3
Total	Lumens	8689.0	0.0	8689.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.4	1.1
10°-20°	304.8	3.5
20°-30°	529.6	6.1
30°-40°	773.9	8.9
40°-50°	1214.7	14.0
50°-60°	1867.9	21.5
60°-70°	2282.1	26.3
70°-80°	1414.9	16.3
80°-90°	205.6	2.4
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°	8689.0	100.0
0°-180°	8689.0	100.0

Coefficient of Utilization



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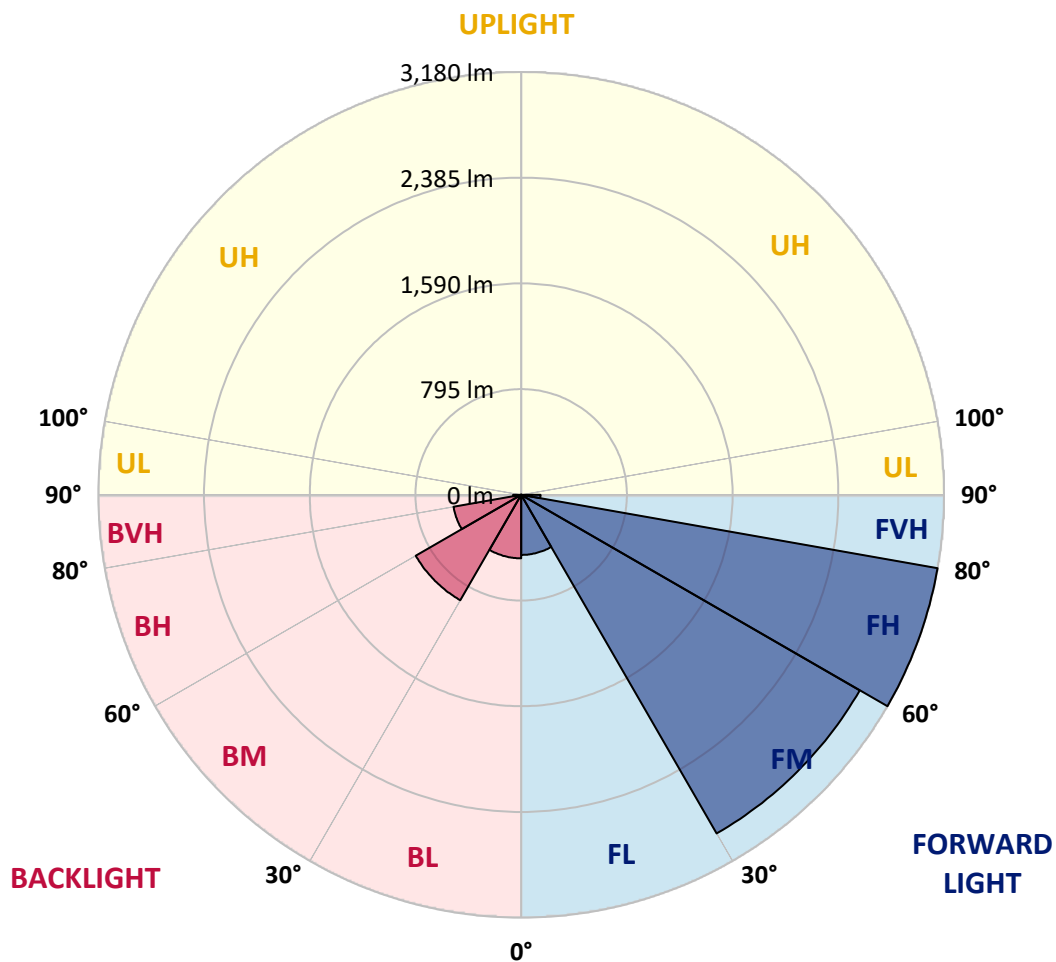
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	452.1	5.2			
FM	(30°-60°)	2940.8	33.8			
FH	(60°-80°)	3180.3	36.6			G2/5000
FVH	(80°-90°)	145.1	1.7			G2/225
BL	(0°-30°)	477.8	5.5	B1/500		
BM	(30°-60°)	915.7	10.5	B1/1000		
BH	(60°-80°)	516.8	5.9	B2/1000		G2/1000
BVH	(80°-90°)	60.4	0.7			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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	972.1	972.1	972.1	972.1	972.1	972.1	972.1	972.1	972.1	972.1	972.1
2.5°	933.9	930.8	930.8	935.5	937.1	941.9	941.9	943.5	948.3	956.2	965.8
5°	905.3	903.7	905.3	911.7	914.8	924.4	927.6	929.2	938.7	951.4	965.8
7.5°	876.7	875.1	878.3	887.8	897.3	911.7	919.6	921.2	935.5	953.0	972.1
10°	867.1	865.5	870.3	878.3	887.8	903.7	916.4	918.0	938.7	959.4	986.4
12.5°	879.8	878.3	883.0	891.0	900.5	911.7	926.0	927.6	954.6	981.7	1010.3
15°	911.7	911.7	913.3	918.0	927.6	937.1	949.8	951.4	980.1	1011.9	1040.5
17.5°	961.0	957.8	957.8	956.2	962.6	967.4	983.3	984.9	1015.1	1043.7	1072.4
20°	1021.4	1019.9	1013.5	1005.5	1003.9	1007.1	1023.0	1024.6	1054.9	1078.7	1105.8
22.5°	1094.6	1096.2	1081.9	1064.4	1056.4	1061.2	1075.5	1077.1	1099.4	1120.1	1144.0
25°	1191.7	1186.9	1166.2	1140.8	1124.9	1124.9	1139.2	1139.2	1159.9	1172.6	1188.5
27.5°	1284.0	1274.4	1255.3	1218.7	1193.3	1198.1	1212.4	1212.4	1231.5	1236.2	1244.2
30°	1384.2	1374.7	1350.8	1304.7	1271.2	1268.1	1285.6	1284.0	1309.4	1307.8	1301.5
32.5°	1506.7	1501.9	1462.2	1403.3	1358.7	1347.6	1363.5	1365.1	1381.0	1376.2	1355.6
35°	1678.5	1677.0	1640.4	1536.9	1478.1	1457.4	1466.9	1466.9	1478.1	1465.3	1430.3
37.5°	1894.9	1898.1	1866.3	1713.5	1630.8	1595.8	1597.4	1595.8	1599.0	1584.7	1548.1
40°	2111.3	2119.3	2117.7	1933.1	1828.1	1767.6	1745.4	1742.2	1750.1	1743.8	1708.8
42.5°	2396.1	2415.2	2370.6	2203.6	2085.8	1984.0	1923.6	1915.6	1933.1	1941.1	1907.7
45°	2692.0	2685.7	2615.7	2494.7	2388.1	2257.7	2143.1	2130.4	2143.1	2167.0	2132.0
47.5°	2846.4	2841.6	2824.1	2763.6	2747.7	2598.2	2424.7	2413.6	2389.7	2423.1	2381.8
50°	3100.9	3105.7	3034.1	3027.7	3094.6	3011.8	2742.9	2717.5	2674.5	2701.6	2666.6
52.5°	3285.5	3264.8	3220.3	3275.9	3484.4	3439.8	3042.1	3030.9	2991.1	2984.8	2968.9
55°	3360.3	3360.3	3368.2	3497.1	3794.6	3735.8	3366.6	3377.8	3323.7	3279.1	3299.8
57.5°	3382.5	3392.1	3460.5	3673.7	4159.0	3966.5	3724.6	3740.5	3662.6	3573.5	3638.7
60°	3272.8	3301.4	3465.3	3773.9	4364.2	4211.5	4101.7	4106.5	3993.5	3863.0	3977.6
62.5°	2991.1	3026.2	3318.9	3815.3	4330.8	4462.9	4458.1	4469.2	4314.9	4152.6	4295.8
65°	2645.9	2680.9	2992.7	3699.2	4305.3	4642.6	4784.2	4814.5	4615.6	4397.6	4494.7
67.5°	2138.4	2184.5	2480.4	3307.8	4181.2	4790.6	5089.7	5121.5	4847.9	4524.9	4477.2
70°	1549.7	1571.9	1820.1	2513.8	3675.3	4709.5	5331.6	5330.0	4924.3	4515.4	4238.5
72.5°	746.2	763.7	978.5	1560.8	2628.4	3996.7	5156.6	5186.8	4819.3	4376.9	3692.8
75°	307.1	324.6	396.2	658.7	1379.4	2641.1	4370.6	4442.2	4376.9	3928.3	2889.3
77.5°	190.9	197.3	232.3	340.5	630.1	1233.1	3059.6	3156.6	3468.5	3147.1	1907.7
80°	143.2	148.0	173.4	238.7	397.8	455.0	1519.4	1642.0	2101.8	1805.8	863.9
82.5°	119.3	120.9	138.4	173.4	270.5	260.9	486.9	542.5	980.1	688.9	297.5
85°	111.4	114.6	124.1	124.1	171.8	163.9	202.1	211.6	284.8	235.5	103.4
87.5°	57.3	54.1	109.8	97.1	89.1	79.6	85.9	92.3	106.6	113.0	46.1
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°	972.1	972.1	972.1	972.1	972.1	972.1	972.1	972.1	972.1	972.1	972.1
2.5°	968.9	973.7	981.7	989.6	999.2	1010.3	1016.7	1024.6	1031.0	1027.8	1026.2
5°	973.7	981.7	999.2	1015.1	1034.2	1056.4	1070.8	1086.7	1099.4	1102.6	1097.8
7.5°	981.7	996.0	1019.9	1048.5	1073.9	1102.6	1124.9	1147.1	1163.0	1166.2	1166.2
10°	1000.8	1016.7	1048.5	1086.7	1116.9	1147.1	1172.6	1190.1	1204.4	1210.8	1210.8
12.5°	1027.8	1046.9	1085.1	1131.2	1164.6	1193.3	1207.6	1215.6	1221.9	1228.3	1229.9
15°	1059.6	1080.3	1126.5	1175.8	1210.8	1225.1	1225.1	1223.5	1223.5	1226.7	1229.9
17.5°	1091.5	1113.7	1161.5	1214.0	1236.2	1228.3	1217.1	1212.4	1209.2	1207.6	1212.4
20°	1124.9	1147.1	1194.9	1244.2	1237.8	1204.4	1188.5	1177.4	1167.8	1163.0	1169.4
22.5°	1161.5	1182.1	1231.5	1264.9	1217.1	1166.2	1136.0	1118.5	1102.6	1093.0	1099.4
25°	1204.4	1225.1	1272.8	1271.2	1180.5	1109.0	1061.2	1032.6	1015.1	1005.5	1005.5
27.5°	1255.3	1272.8	1319.0	1255.3	1129.6	1032.6	962.6	935.5	930.8	922.8	922.8
30°	1307.8	1322.2	1361.9	1218.7	1059.6	932.3	856.0	843.2	844.8	836.9	838.5
32.5°	1361.9	1376.2	1387.4	1164.6	968.9	819.4	768.5	758.9	757.3	751.0	744.6
35°	1438.3	1459.0	1390.6	1091.5	859.2	725.5	688.9	679.4	669.8	647.6	647.6
37.5°	1554.4	1576.7	1382.6	1000.8	746.2	652.3	618.9	606.2	590.3	568.0	560.0
40°	1713.5	1713.5	1365.1	898.9	655.5	593.5	561.6	545.7	528.2	505.9	501.2
42.5°	1901.3	1856.7	1338.1	795.5	588.7	553.7	525.0	507.5	486.9	461.4	458.2
45°	2120.9	1999.9	1299.9	703.2	539.4	529.8	512.3	482.1	447.1	420.0	415.3
47.5°	2334.1	2128.8	1263.3	638.0	498.0	520.3	505.9	455.0	407.3	369.1	364.3
50°	2567.9	2243.4	1220.3	583.9	466.2	513.9	498.0	415.3	362.8	335.7	332.5
52.5°	2801.8	2359.5	1174.2	526.6	439.1	501.2	478.9	386.6	361.2	324.6	319.8
55°	3048.4	2494.7	1120.1	463.0	407.3	475.7	453.4	385.0	372.3	324.6	313.4
57.5°	3288.7	2644.3	1032.6	400.9	372.3	437.5	443.9	375.5	348.4	321.4	308.7
60°	3554.4	2803.4	887.8	348.4	342.1	405.7	431.2	354.8	321.4	311.8	305.5
62.5°	3767.6	2946.6	693.7	311.8	316.6	380.3	415.3	342.1	310.3	302.3	300.7
65°	3859.9	2949.8	498.0	280.0	291.2	356.4	399.4	330.9	300.7	297.5	295.9
67.5°	3762.8	2787.5	350.0	249.8	264.1	334.1	378.7	319.8	291.2	292.8	289.6
70°	3449.4	2445.4	256.2	221.2	238.7	310.3	356.4	305.5	280.0	283.2	278.4
72.5°	2886.1	1906.1	205.2	197.3	218.0	284.8	334.1	289.6	262.5	264.1	254.6
75°	2132.0	1263.3	171.8	176.6	194.1	260.9	305.5	268.9	243.4	237.1	230.7
77.5°	1268.1	649.1	141.6	154.3	173.4	232.3	273.7	243.4	222.7	211.6	206.8
80°	523.5	262.5	116.1	130.5	151.1	206.8	241.8	213.2	198.9	187.7	181.4
82.5°	208.4	128.9	92.3	106.6	127.3	179.8	211.6	187.7	173.4	165.5	148.0
85°	79.6	63.6	62.1	74.8	95.5	138.4	175.0	157.5	146.4	125.7	120.9
87.5°	31.8	28.6	28.6	36.6	54.1	87.5	125.7	109.8	114.6	90.7	92.3
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)