

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: P265783

Luminaire Tested: **ARCH-M-AF48-70-D-U-T3-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265783
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-M-AF48-70-D-U-T3-7027
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 470mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8640 lumens
Efficiency: N/A
Efficacy: 118.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

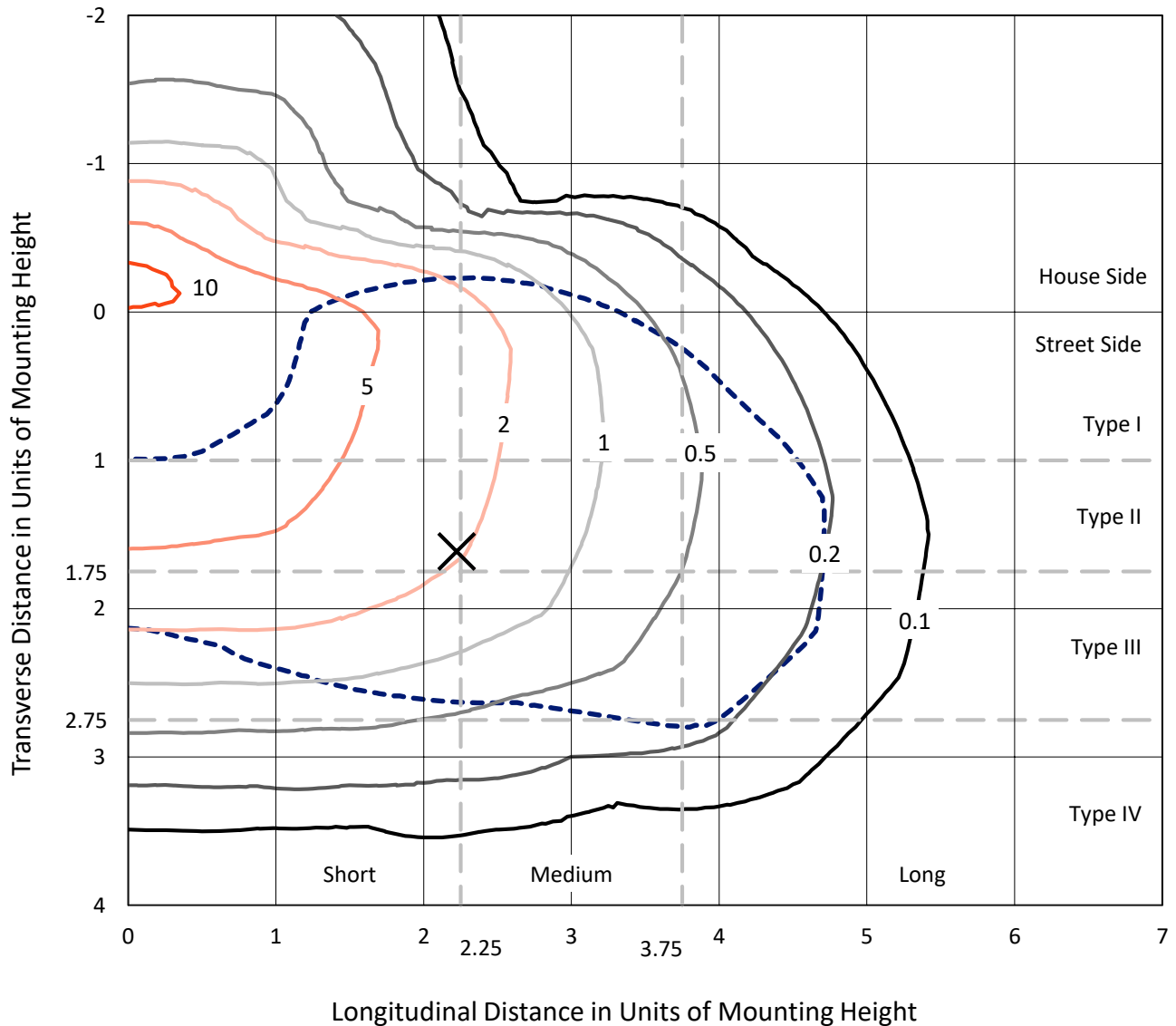
Input Watts (W): 73
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

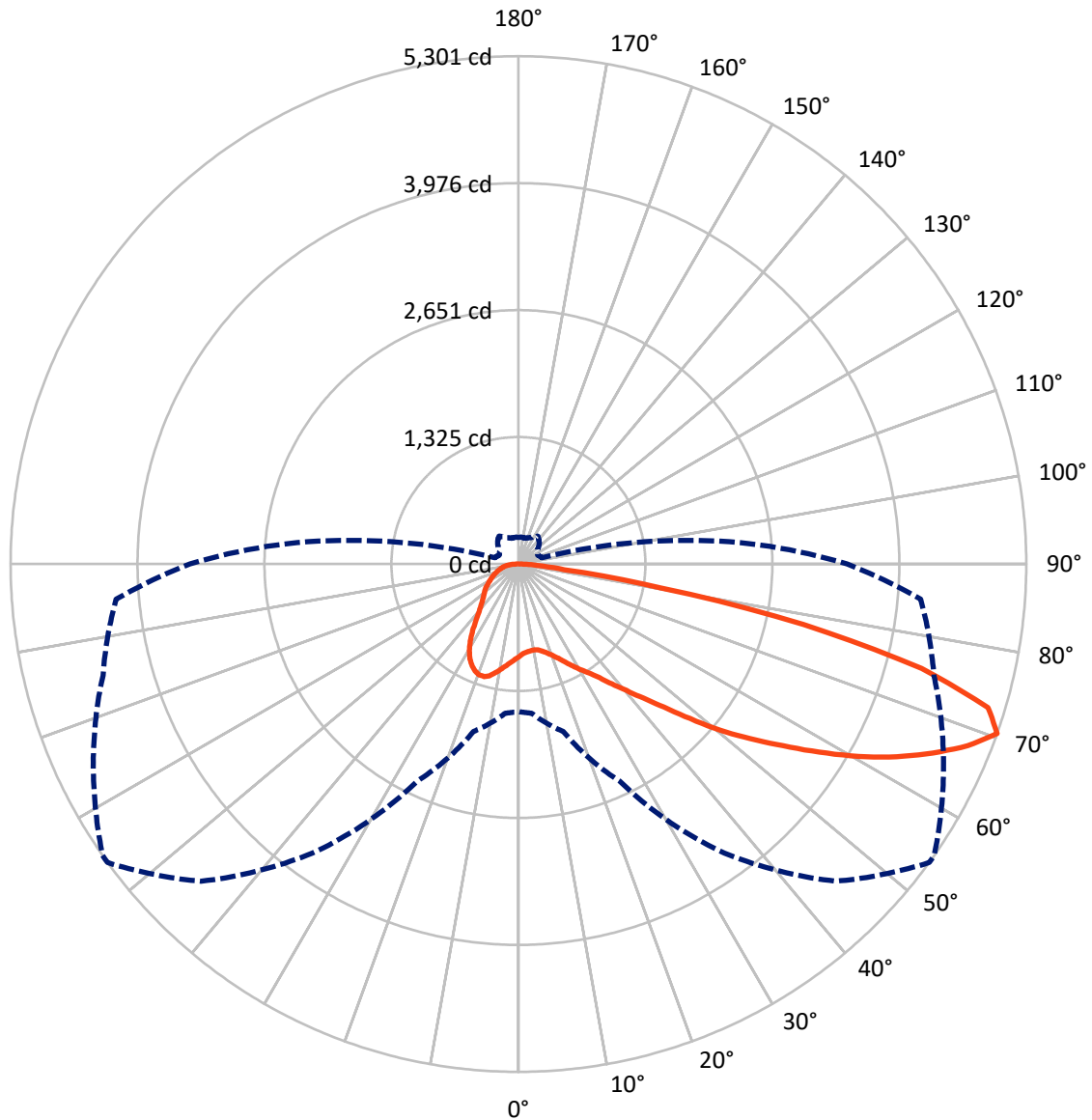


Based on 10 foot mounting height. Maximum calculated value = 11.2 fc
 Type III - Short - Non-Cutoff

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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	1959.5	0.0	1959.5
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	6680.5	0.0	6680.5
	% Fixture	77.3	0.0	77.3
Total	Lumens	8640.0	0.0	8640.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.9	1.1
10°-20°	303.1	3.5
20°-30°	526.6	6.1
30°-40°	769.6	8.9
40°-50°	1207.8	14.0
50°-60°	1857.4	21.5
60°-70°	2269.3	26.3
70°-80°	1406.9	16.3
80°-90°	204.4	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°	8640.0	100.0
0°-180°	8640.0	100.0



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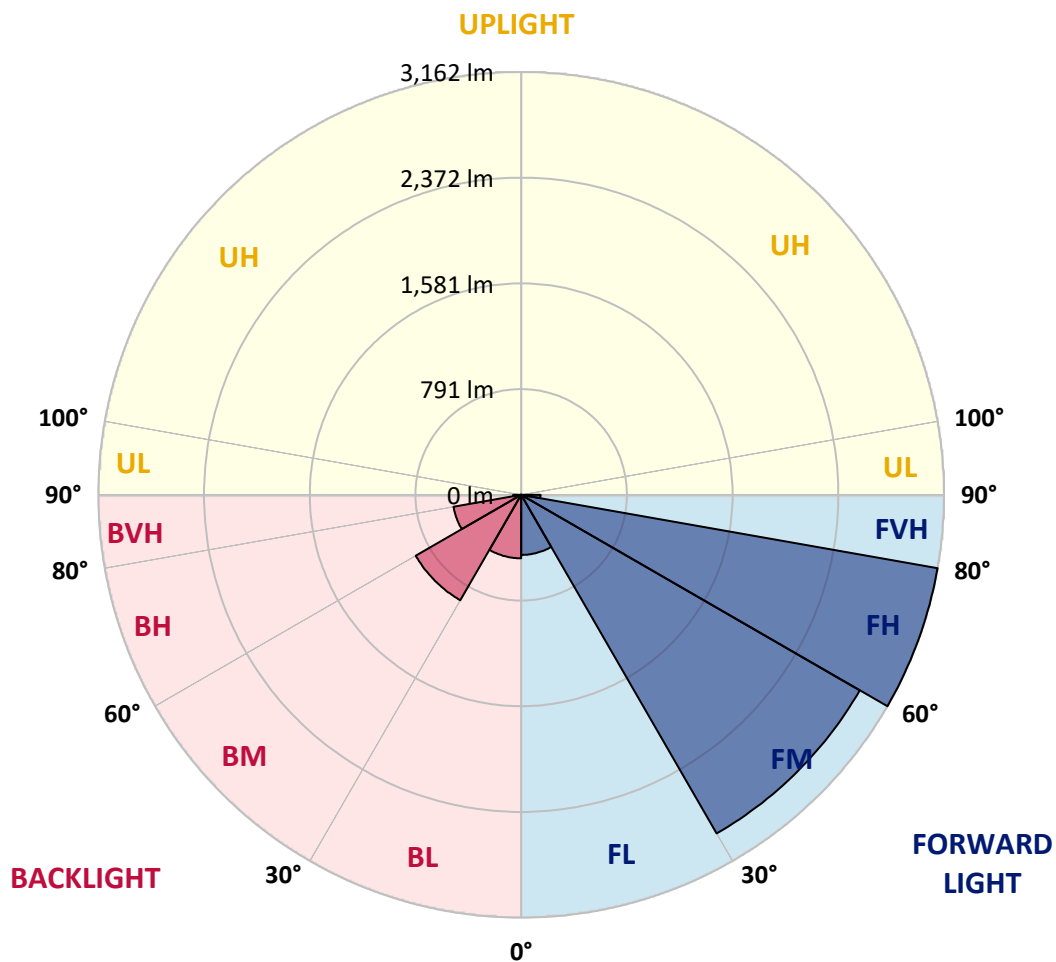
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	449.5	5.2			
FM	(30°-60°)	2924.2	33.8			
FH	(60°-80°)	3162.4	36.6			G2/5000
FVH	(80°-90°)	144.3	1.7			G2/225
BL	(0°-30°)	475.1	5.5	B1/500		
BM	(30°-60°)	910.5	10.5	B1/1000		
BH	(60°-80°)	513.8	5.9	B2/1000		G2/1000
BVH	(80°-90°)	60.1	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°	966.7	966.7	966.7	966.7	966.7	966.7	966.7	966.7	966.7	966.7	966.7
2.5°	928.7	925.6	925.6	930.3	931.8	936.7	936.7	938.2	943.0	950.9	960.3
5°	900.2	898.7	900.2	906.5	909.7	919.1	922.3	923.9	933.3	946.0	960.3
7.5°	871.7	870.2	873.3	882.8	892.2	906.5	914.5	916.0	930.3	947.6	966.7
10°	862.3	860.7	865.3	873.3	882.8	898.7	911.3	912.9	933.3	954.0	980.9
12.5°	874.9	873.3	878.1	886.0	895.4	906.5	920.8	922.3	949.1	976.1	1004.7
15°	906.5	906.5	908.0	912.9	922.3	931.8	944.5	946.0	974.5	1006.2	1034.7
17.5°	955.5	952.5	952.5	950.9	957.1	961.8	977.7	979.3	1009.3	1037.8	1066.3
20°	1015.7	1014.0	1007.8	999.9	998.2	1001.4	1017.3	1018.9	1049.0	1072.7	1099.5
22.5°	1088.4	1090.1	1075.8	1058.5	1050.5	1055.1	1069.5	1071.0	1093.1	1113.8	1137.6
25°	1185.0	1180.3	1159.6	1134.3	1118.5	1118.5	1132.8	1132.8	1153.3	1166.0	1181.8
27.5°	1276.8	1267.1	1248.3	1211.9	1186.5	1191.3	1205.5	1205.5	1224.5	1229.3	1237.1
30°	1376.5	1367.0	1343.1	1297.3	1264.0	1261.0	1278.3	1276.8	1302.1	1300.4	1294.1
32.5°	1498.3	1493.4	1453.8	1395.3	1351.1	1340.0	1355.8	1357.3	1373.1	1368.5	1347.8
35°	1669.1	1667.6	1631.1	1528.2	1469.7	1449.1	1458.7	1458.7	1469.7	1457.1	1422.2
37.5°	1884.3	1887.3	1855.8	1703.8	1621.6	1586.8	1588.5	1586.8	1590.0	1575.7	1539.3
40°	2099.3	2107.3	2105.7	1922.3	1817.8	1757.7	1735.5	1732.3	1740.2	1734.0	1699.1
42.5°	2382.6	2401.6	2357.2	2191.1	2074.0	1972.9	1912.8	1904.8	1922.3	1930.1	1897.0
45°	2676.9	2670.5	2601.0	2480.7	2374.7	2245.0	2131.0	2118.4	2131.0	2154.8	2120.0
47.5°	2830.3	2825.6	2808.1	2748.1	2732.3	2583.5	2411.1	2400.0	2376.2	2409.4	2368.3
50°	3083.4	3088.3	3017.0	3010.7	3077.1	2994.8	2727.4	2702.1	2659.4	2686.3	2651.5
52.5°	3267.0	3246.4	3202.1	3257.4	3464.8	3420.4	3025.0	3013.9	2974.3	2967.9	2952.1
55°	3341.3	3341.3	3349.2	3477.3	3773.2	3714.8	3347.7	3358.8	3305.0	3260.6	3281.1
57.5°	3363.4	3373.0	3441.0	3653.0	4135.4	3944.1	3703.6	3719.4	3641.9	3553.3	3618.2
60°	3254.3	3282.8	3445.7	3752.7	4339.6	4187.7	4078.6	4083.2	3971.0	3841.2	3955.1
62.5°	2974.3	3009.1	3300.2	3793.8	4306.4	4437.6	4433.0	4444.1	4290.6	4129.1	4271.6
65°	2631.0	2665.8	2975.8	3678.3	4281.1	4616.5	4757.2	4787.2	4589.6	4372.8	4469.2
67.5°	2126.3	2172.2	2466.4	3289.1	4157.6	4763.6	5061.1	5092.6	4820.6	4499.4	4451.9
70°	1541.0	1563.1	1809.8	2499.7	3654.6	4683.0	5301.4	5299.9	4896.5	4489.9	4214.6
72.5°	742.0	759.3	973.0	1552.0	2613.6	3974.1	5127.4	5157.4	4792.1	4352.3	3671.9
75°	305.3	322.8	393.9	655.0	1371.6	2626.3	4345.9	4417.1	4352.3	3906.1	2873.0
77.5°	189.8	196.2	231.0	338.5	626.5	1226.0	3042.3	3138.8	3449.0	3129.3	1897.0
80°	142.4	147.1	172.5	237.3	395.6	452.4	1510.9	1632.7	2089.8	1795.6	859.0
82.5°	118.7	120.3	137.6	172.5	269.0	259.5	484.0	539.5	974.5	685.0	295.8
85°	110.8	113.9	123.3	123.3	170.9	163.0	201.0	210.5	283.1	234.2	102.9
87.5°	57.0	53.8	109.1	96.5	88.7	79.1	85.3	91.7	106.0	112.3	45.9
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°	966.7	966.7	966.7	966.7	966.7	966.7	966.7	966.7	966.7	966.7	966.7
2.5°	963.5	968.3	976.1	984.1	993.5	1004.7	1011.0	1018.9	1025.1	1022.0	1020.5
5°	968.3	976.1	993.5	1009.3	1028.3	1050.5	1064.8	1080.5	1093.1	1096.4	1091.6
7.5°	976.1	990.4	1014.0	1042.6	1067.8	1096.4	1118.5	1140.7	1156.5	1159.6	1159.6
10°	995.1	1011.0	1042.6	1080.5	1110.7	1140.7	1166.0	1183.3	1197.6	1204.0	1204.0
12.5°	1022.0	1041.0	1079.0	1124.9	1158.0	1186.5	1200.8	1208.7	1215.0	1221.3	1223.0
15°	1053.6	1074.3	1120.0	1169.1	1204.0	1218.2	1218.2	1216.7	1216.7	1219.8	1223.0
17.5°	1085.3	1107.4	1155.0	1207.1	1229.3	1221.3	1210.2	1205.5	1202.4	1200.8	1205.5
20°	1118.5	1140.7	1188.1	1237.1	1230.9	1197.6	1181.8	1170.8	1161.1	1156.5	1162.9
22.5°	1155.0	1175.5	1224.5	1257.7	1210.2	1159.6	1129.6	1112.2	1096.4	1086.9	1093.1
25°	1197.6	1218.2	1265.6	1264.0	1173.8	1102.7	1055.1	1026.8	1009.3	999.9	999.9
27.5°	1248.3	1265.6	1311.5	1248.3	1123.3	1026.8	957.1	930.3	925.6	917.6	917.6
30°	1300.4	1314.7	1354.3	1211.9	1053.6	927.1	851.1	838.5	840.0	832.2	833.7
32.5°	1354.3	1368.5	1379.5	1158.0	963.5	814.8	764.2	754.7	753.0	746.8	740.5
35°	1430.2	1450.8	1382.8	1085.3	854.3	721.3	685.0	675.5	666.1	643.8	643.8
37.5°	1545.7	1567.8	1374.9	995.1	742.0	648.7	615.3	602.8	587.0	564.9	556.9
40°	1703.8	1703.8	1357.3	893.9	651.8	590.0	558.4	542.7	525.2	503.1	498.4
42.5°	1890.6	1846.2	1330.5	791.0	585.3	550.5	522.0	504.7	484.0	458.9	455.6
45°	2109.0	1988.7	1292.5	699.3	536.3	526.9	509.3	479.3	444.5	417.6	413.0
47.5°	2321.0	2116.8	1256.2	634.5	495.1	517.3	503.1	452.4	405.0	367.0	362.2
50°	2553.4	2230.8	1213.4	580.7	463.5	511.0	495.1	413.0	360.7	333.8	330.7
52.5°	2786.1	2346.3	1167.5	523.6	436.7	498.4	476.2	384.5	359.1	322.8	318.0
55°	3031.2	2480.7	1113.8	460.4	405.0	473.0	450.9	382.9	370.2	322.8	311.6
57.5°	3270.1	2629.3	1026.8	398.7	370.2	435.0	441.3	373.3	346.4	319.5	307.0
60°	3534.3	2787.6	882.8	346.4	340.2	403.3	428.8	352.9	319.5	310.1	303.7
62.5°	3746.3	2930.0	689.8	310.1	314.9	378.0	413.0	340.2	308.5	300.7	299.0
65°	3838.1	2933.1	495.1	278.5	289.6	354.4	397.1	329.0	299.0	295.8	294.3
67.5°	3741.6	2771.8	348.1	248.4	262.7	332.3	376.5	318.0	289.6	291.1	287.9
70°	3429.9	2431.6	254.7	219.9	237.3	308.5	354.4	303.7	278.5	281.6	276.9
72.5°	2869.8	1895.3	204.1	196.2	216.8	283.1	332.3	287.9	261.0	262.7	253.1
75°	2120.0	1256.2	170.9	175.6	193.0	259.5	303.7	267.3	242.1	235.7	229.3
77.5°	1261.0	645.5	140.9	153.5	172.5	231.0	272.0	242.1	221.5	210.5	205.6
80°	520.5	261.0	115.5	129.7	150.2	205.6	240.4	212.0	197.7	186.7	180.4
82.5°	207.2	128.2	91.7	106.0	126.7	178.8	210.5	186.7	172.5	164.5	147.1
85°	79.1	63.3	61.8	74.4	95.0	137.6	174.0	156.7	145.5	125.0	120.3
87.5°	31.6	28.4	28.4	36.4	53.8	87.0	125.0	109.1	113.9	90.2	91.7
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)