

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: P265776

Luminaire Tested: **ARCH-M-AF48-60-D-U-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265776
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-60-D-U-T4W-7027
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 405mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7540.7 lumens
Efficiency: N/A
Efficacy: 119.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 63
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

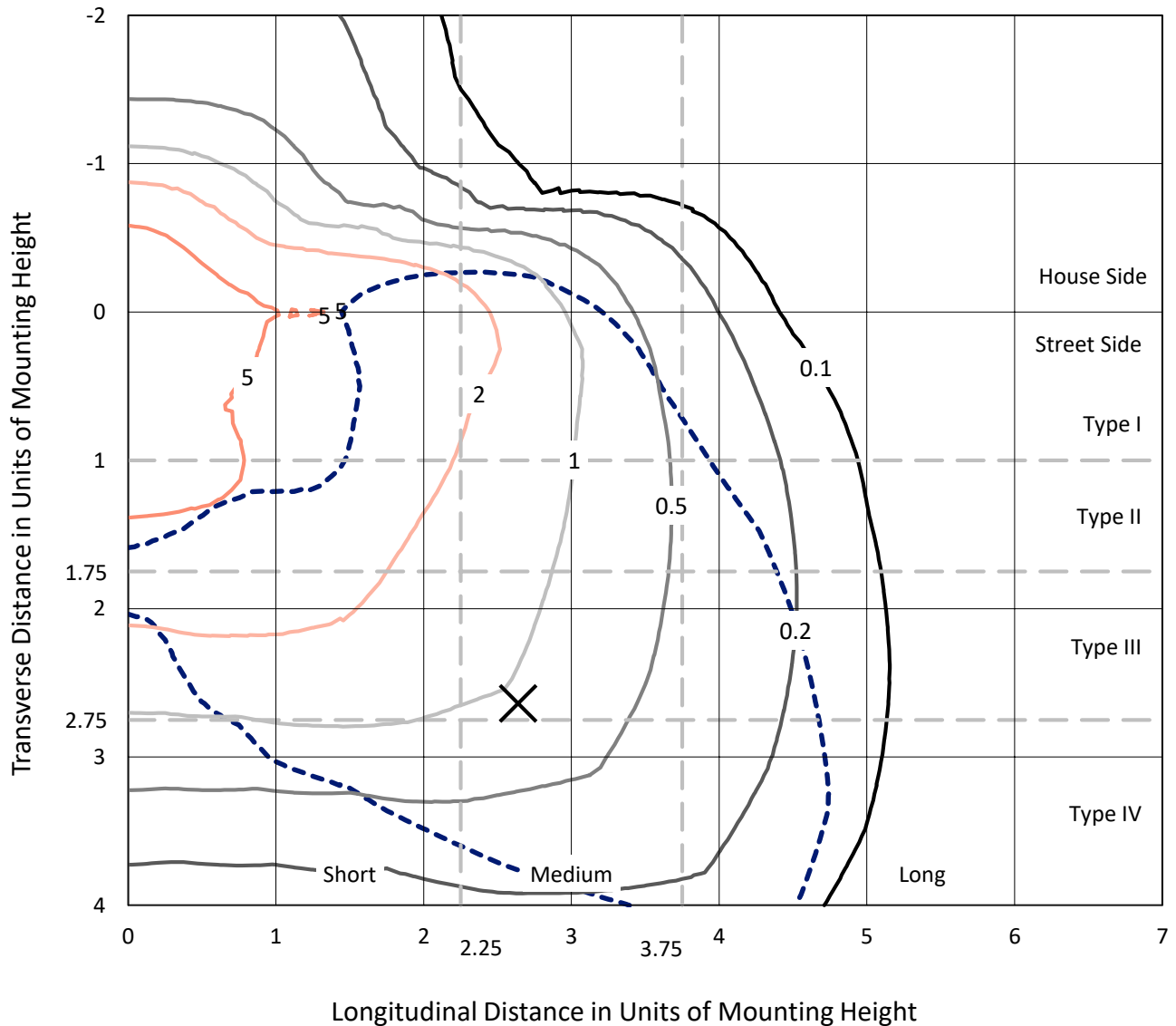


REPORT NUMBER: P265776

CATALOG NUMBER: ARCH-M-AF48-60-D-U-T4W-7027

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

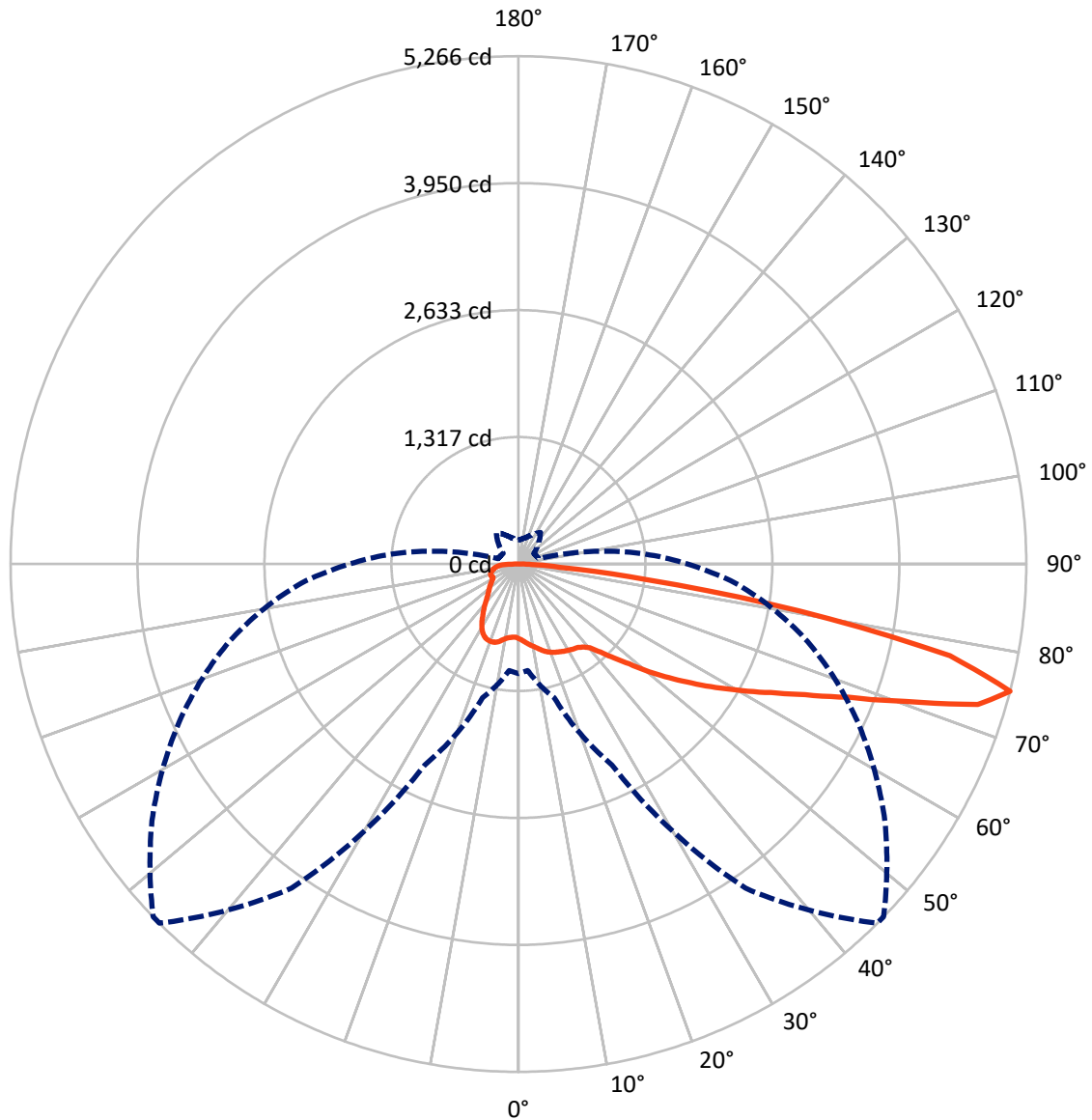


Based on 10 foot mounting height. Maximum calculated value = 9 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P265776

CATALOG NUMBER: ARCH-M-AF48-60-D-U-T4W-7027

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P265776

CATALOG NUMBER: ARCH-M-AF48-60-D-U-T4W-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1746.9	0.0	1746.9
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	5793.8	0.0	5793.8
	% Fixture	76.8	0.0	76.8
Total	Lumens	7540.7	0.0	7540.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.6	1.0
10°-20°	248.2	3.3
20°-30°	426.0	5.6
30°-40°	595.8	7.9
40°-50°	874.0	11.6
50°-60°	1361.5	18.1
60°-70°	1959.0	26.0
70°-80°	1706.5	22.6
80°-90°	293.1	3.9
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°	7540.7	100.0
0°-180°	7540.7	100.0

Coefficient of Utilization



REPORT NUMBER: P265776

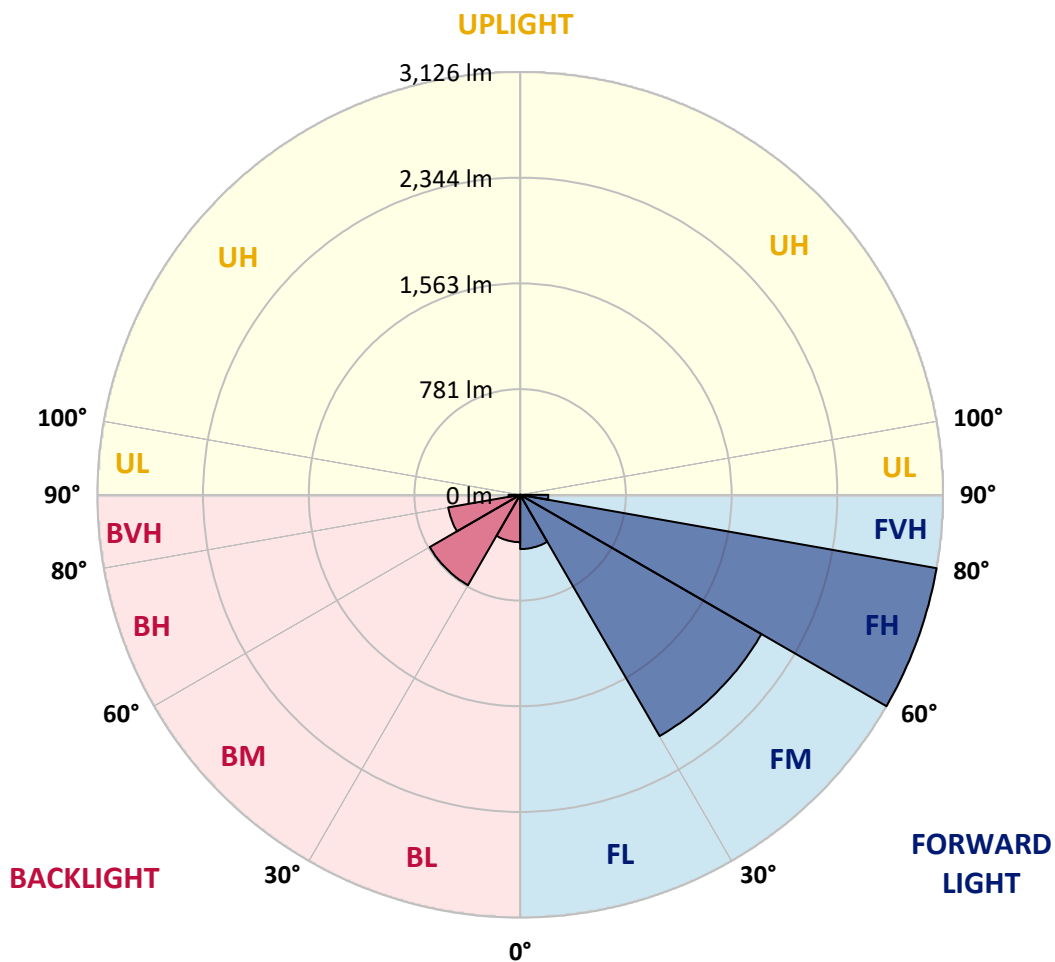
CATALOG NUMBER: ARCH-M-AF48-60-D-U-T4W-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	401.0	5.3			
FM	(30°-60°)	2059.2	27.3			
FH	(60°-80°)	3125.7	41.5			G2/5000
FVH	(80°-90°)	207.9	2.8			G2/225
BL	(0°-30°)	349.9	4.6	B1/500		
BM	(30°-60°)	772.0	10.2	B1/1000		
BH	(60°-80°)	539.8	7.2	B2/1000		G2/1000
BVH	(80°-90°)	85.1	1.1			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 IV Medium





REPORT NUMBER: P265776

CATALOG NUMBER: ARCH-M-AF48-60-D-U-T4W-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	773.0	773.0	773.0	773.0	773.0	773.0	773.0	773.0	773.0	773.0	773.0
2.5°	811.2	805.3	805.3	800.8	800.8	793.6	790.7	789.3	781.9	777.5	773.0
5°	858.2	850.8	849.3	839.0	834.6	818.4	817.1	806.8	793.6	780.4	770.0
7.5°	900.6	896.2	889.0	878.6	865.4	844.9	843.5	827.2	805.3	787.8	773.0
10°	931.5	928.5	918.2	905.0	890.4	869.9	868.4	850.8	824.4	803.9	783.3
12.5°	968.2	963.7	950.5	932.9	916.8	897.8	896.2	881.5	852.2	825.8	799.4
15°	1003.3	997.5	981.3	963.7	946.2	929.9	929.9	913.8	883.0	852.2	821.4
17.5°	1021.0	1018.0	1001.9	982.7	968.2	956.3	954.9	940.3	909.4	877.1	843.5
20°	1026.9	1028.3	1013.6	993.0	982.7	976.9	975.5	965.1	931.5	900.6	868.4
22.5°	1025.3	1029.7	1018.0	996.0	993.0	993.0	993.0	981.3	954.9	924.1	891.8
25°	1031.3	1037.1	1028.3	1001.9	1001.9	1007.7	1007.7	1001.9	978.4	951.9	919.8
27.5°	1051.7	1056.1	1048.9	1012.1	1013.6	1022.5	1021.0	1022.5	1007.7	982.7	950.5
30°	1076.7	1082.5	1073.7	1028.3	1026.9	1035.6	1035.6	1042.9	1032.6	1006.2	979.8
32.5°	1144.1	1142.6	1114.7	1045.8	1041.5	1050.3	1050.3	1057.7	1051.7	1031.3	1006.2
35°	1345.1	1323.2	1261.5	1103.1	1059.0	1063.5	1063.5	1076.7	1079.7	1063.5	1041.5
37.5°	1550.5	1543.1	1496.1	1255.7	1123.6	1091.4	1089.9	1109.0	1122.2	1109.0	1094.2
40°	1757.3	1751.4	1741.2	1459.6	1258.5	1141.1	1136.8	1153.0	1176.4	1167.5	1158.9
42.5°	1949.4	1946.4	1956.8	1660.4	1430.2	1248.3	1235.1	1216.0	1249.7	1246.8	1246.8
45°	2100.5	2107.9	2113.7	1848.3	1616.5	1386.2	1370.0	1305.4	1351.1	1362.6	1371.5
47.5°	2185.5	2191.4	2211.9	2031.5	1802.8	1546.1	1534.3	1428.8	1488.9	1524.1	1548.9
50°	2307.3	2291.2	2308.9	2210.5	2027.1	1754.4	1722.1	1594.5	1670.8	1732.3	1791.0
52.5°	2424.7	2398.4	2412.9	2417.3	2282.5	1958.2	1924.4	1789.6	1885.0	1981.8	2085.9
55°	2530.3	2528.9	2543.6	2618.3	2528.9	2176.9	2138.7	2005.1	2143.0	2247.2	2423.3
57.5°	2615.3	2630.1	2694.6	2851.6	2813.4	2414.5	2372.0	2256.1	2418.9	2523.0	2814.8
60°	2715.1	2738.7	2845.7	3049.6	3073.0	2663.8	2619.7	2536.2	2701.9	2807.6	3268.2
62.5°	2748.9	2782.6	3002.7	3257.9	3344.4	2936.6	2897.0	2841.2	2999.7	3095.1	3719.9
65°	2524.4	2588.9	3089.2	3365.0	3636.2	3265.2	3231.5	3183.1	3296.1	3359.1	4026.6
67.5°	2462.9	2492.2	2920.5	3519.0	3910.6	3687.6	3653.9	3570.4	3573.3	3546.9	4126.3
70°	2376.2	2408.5	2747.5	3634.8	4303.7	4265.6	4224.5	3978.1	3827.0	3667.2	3929.6
72.5°	2024.2	2014.0	2367.6	3322.4	4493.0	4981.5	4933.0	4416.6	4014.7	3562.9	3316.5
75°	1136.8	1107.5	1436.0	2298.6	4102.7	5266.0	5264.5	4638.2	3882.7	3103.9	2257.5
77.5°	330.0	321.2	473.8	963.7	2762.1	4575.1	4630.9	4183.4	3240.2	2229.7	1239.5
80°	155.4	158.5	203.8	318.3	1179.4	2952.8	3112.6	2754.7	1936.2	1028.3	511.9
82.5°	98.3	99.7	139.3	205.4	498.6	1340.7	1472.7	1239.5	767.2	444.4	226.0
85°	61.7	61.7	92.4	134.9	297.8	428.3	465.1	422.5	328.6	242.1	123.2
87.5°	33.7	33.7	55.8	77.8	162.9	137.9	142.3	168.7	205.4	148.1	61.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P265776

CATALOG NUMBER: ARCH-M-AF48-60-D-U-T4W-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	773.0	773.0	773.0	773.0	773.0	773.0	773.0	773.0	773.0	773.0	773.0
2.5°	771.6	768.6	764.2	762.8	761.4	759.8	761.4	764.2	761.4	761.4	762.8
5°	767.2	764.2	758.3	758.3	759.8	761.4	768.6	773.0	774.5	774.5	774.5
7.5°	767.2	762.8	758.3	759.8	762.8	768.6	780.4	787.8	793.6	795.0	795.0
10°	774.5	768.6	765.6	768.6	777.5	781.9	793.6	805.3	812.6	815.7	815.7
12.5°	787.8	781.9	781.9	787.8	799.4	805.3	815.7	824.4	833.2	837.6	837.6
15°	809.7	802.4	803.9	814.1	827.2	833.2	840.5	843.5	850.8	856.7	856.7
17.5°	830.3	822.8	825.8	837.6	846.4	849.3	853.7	852.2	855.1	859.6	861.0
20°	853.7	846.4	847.8	855.1	856.7	853.7	853.7	849.3	847.8	855.1	858.2
22.5°	877.1	869.9	868.4	864.0	856.7	849.3	844.9	840.5	837.6	844.9	847.8
25°	905.0	894.8	887.4	868.4	849.3	836.1	830.3	827.2	825.8	833.2	836.1
27.5°	935.9	925.6	903.5	862.6	831.7	809.7	805.3	805.3	808.2	812.6	815.7
30°	965.1	954.9	915.4	849.3	800.8	768.6	764.2	768.6	776.0	780.4	784.8
32.5°	994.6	984.3	922.6	828.7	755.5	714.3	711.4	718.7	730.5	733.5	736.4
35°	1034.0	1023.9	931.5	799.4	698.3	654.2	651.4	655.8	666.0	670.3	674.7
37.5°	1089.9	1084.1	944.7	767.2	645.4	597.1	588.2	585.2	591.2	589.6	595.5
40°	1163.2	1167.5	968.2	724.7	594.0	544.3	525.1	516.3	510.4	498.6	504.6
42.5°	1270.4	1273.3	994.6	676.2	550.0	494.3	469.4	453.3	441.5	422.5	425.3
45°	1427.2	1402.3	1025.3	625.0	510.4	454.7	425.3	406.4	390.1	374.1	375.5
47.5°	1635.5	1559.3	1059.0	582.3	470.8	422.5	396.1	374.1	355.0	341.7	343.2
50°	1892.2	1754.4	1092.8	542.8	431.2	397.5	374.1	350.6	331.6	318.3	316.8
52.5°	2231.1	1989.0	1114.7	498.6	391.7	375.5	355.0	333.0	309.5	293.3	291.9
55°	2583.2	2261.9	1133.9	445.9	353.6	350.6	340.3	315.3	287.5	266.9	264.0
57.5°	2970.3	2553.8	1148.6	394.5	324.2	330.0	327.2	297.8	266.9	247.9	246.4
60°	3322.4	2855.9	1101.6	349.1	297.8	309.5	312.4	287.5	271.4	275.8	277.2
62.5°	3677.4	3089.2	922.6	315.3	280.2	296.4	321.2	319.7	312.4	319.7	321.2
65°	3805.0	3137.6	654.2	287.5	262.6	302.2	349.1	346.1	312.4	299.2	296.4
67.5°	3733.1	2993.8	440.1	265.4	249.4	309.5	378.5	346.1	300.8	283.1	277.2
70°	3391.3	2640.4	322.8	243.5	237.6	308.1	394.5	344.7	294.9	275.8	268.5
72.5°	2704.8	2037.4	259.6	223.0	220.1	300.8	403.3	341.7	289.0	268.5	259.6
75°	1751.4	1267.4	218.6	202.4	193.7	289.0	398.9	333.0	281.6	255.2	249.4
77.5°	812.6	545.7	186.3	178.9	168.7	271.4	385.8	315.3	265.4	240.6	233.2
80°	378.5	258.2	156.9	155.4	151.1	256.6	368.1	294.9	246.4	226.0	214.2
82.5°	202.4	155.4	127.6	127.6	132.1	239.0	346.1	269.9	221.5	211.2	180.4
85°	107.1	89.6	92.4	99.7	112.9	211.2	316.8	243.5	193.7	161.3	156.9
87.5°	54.3	57.2	57.2	67.5	86.5	171.7	261.0	201.0	164.3	132.1	129.0
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)