

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: P397847

Luminaire Tested: **ARCH-S-PA1-50-740-U-T3**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397847
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-50-740-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7868 lumens
Efficiency: N/A
Efficacy: 145.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 54
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

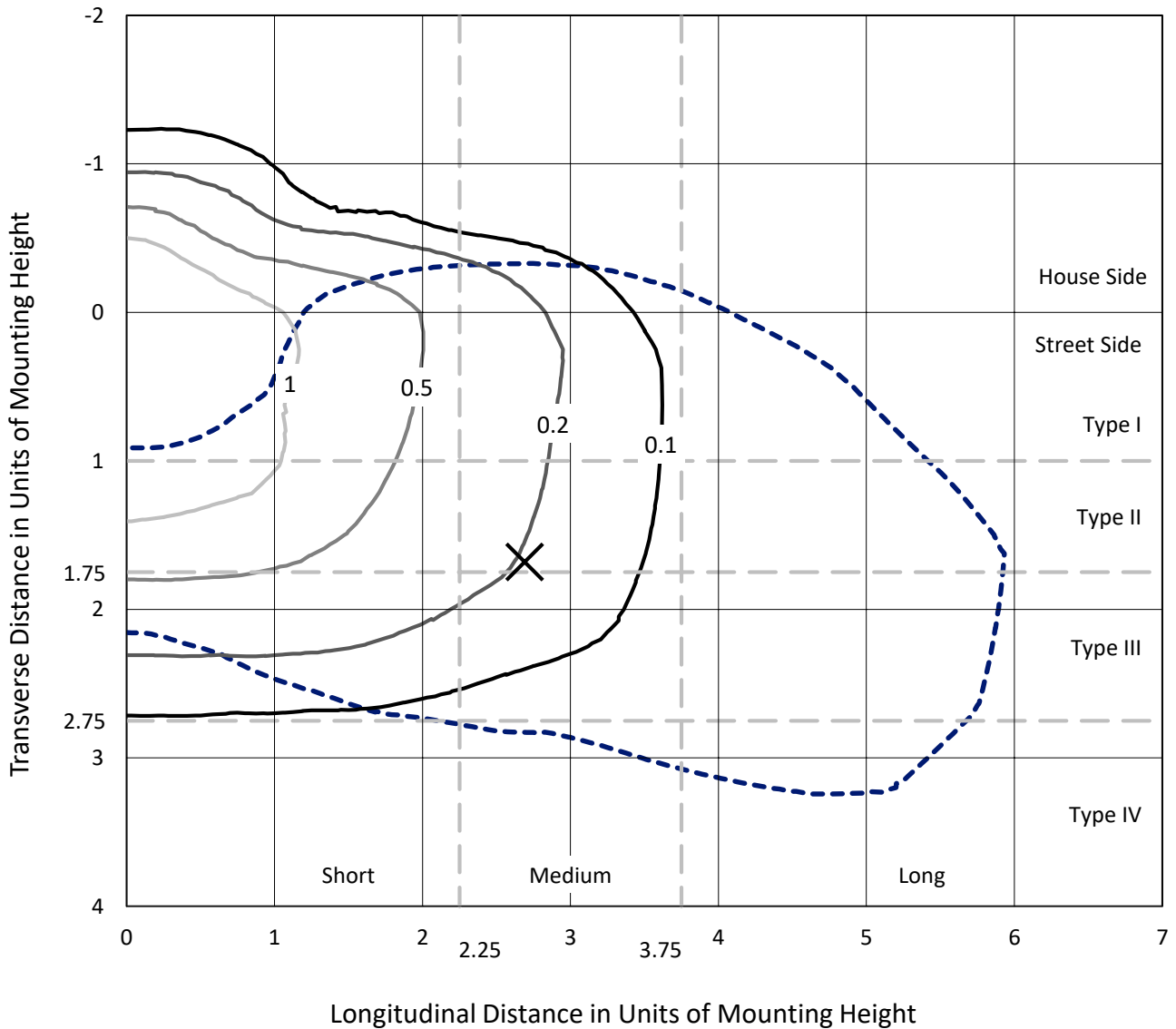


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

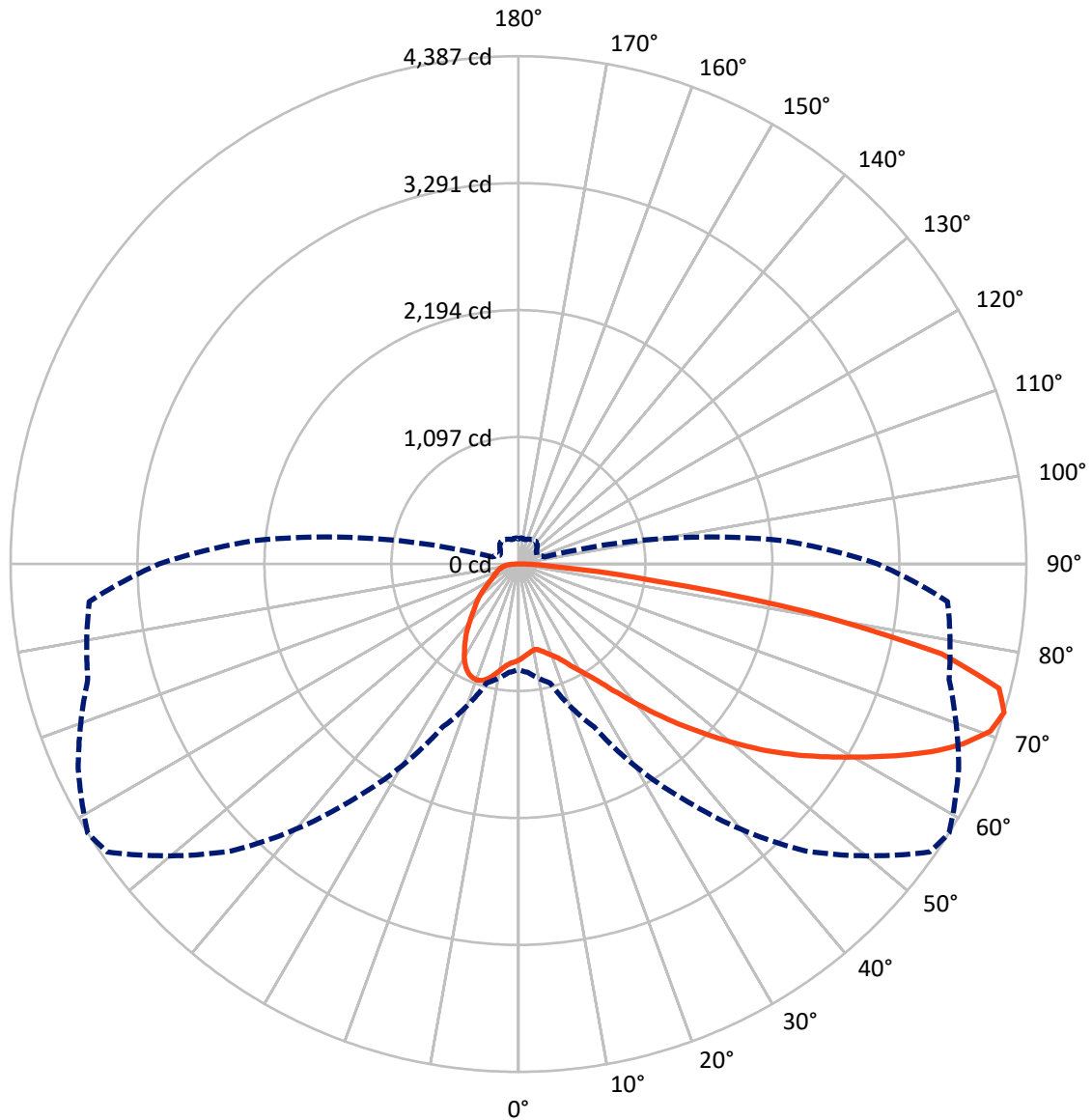


Based on 25 foot mounting height. Maximum calculated value = 1.5 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1784.4	0.0	1784.4
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	6083.6	0.0	6083.6
	% Fixture	77.3	0.0	77.3
Total	Lumens	7868.0	0.0	7868.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.9	1.0
10°-20°	253.9	3.2
20°-30°	454.8	5.8
30°-40°	684.1	8.7
40°-50°	1107.9	14.1
50°-60°	1667.7	21.2
60°-70°	1962.7	24.9
70°-80°	1391.7	17.7
80°-90°	265.2	3.4
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°	7868.0	100.0
0°-180°	7868.0	100.0

Coefficient of Utilization



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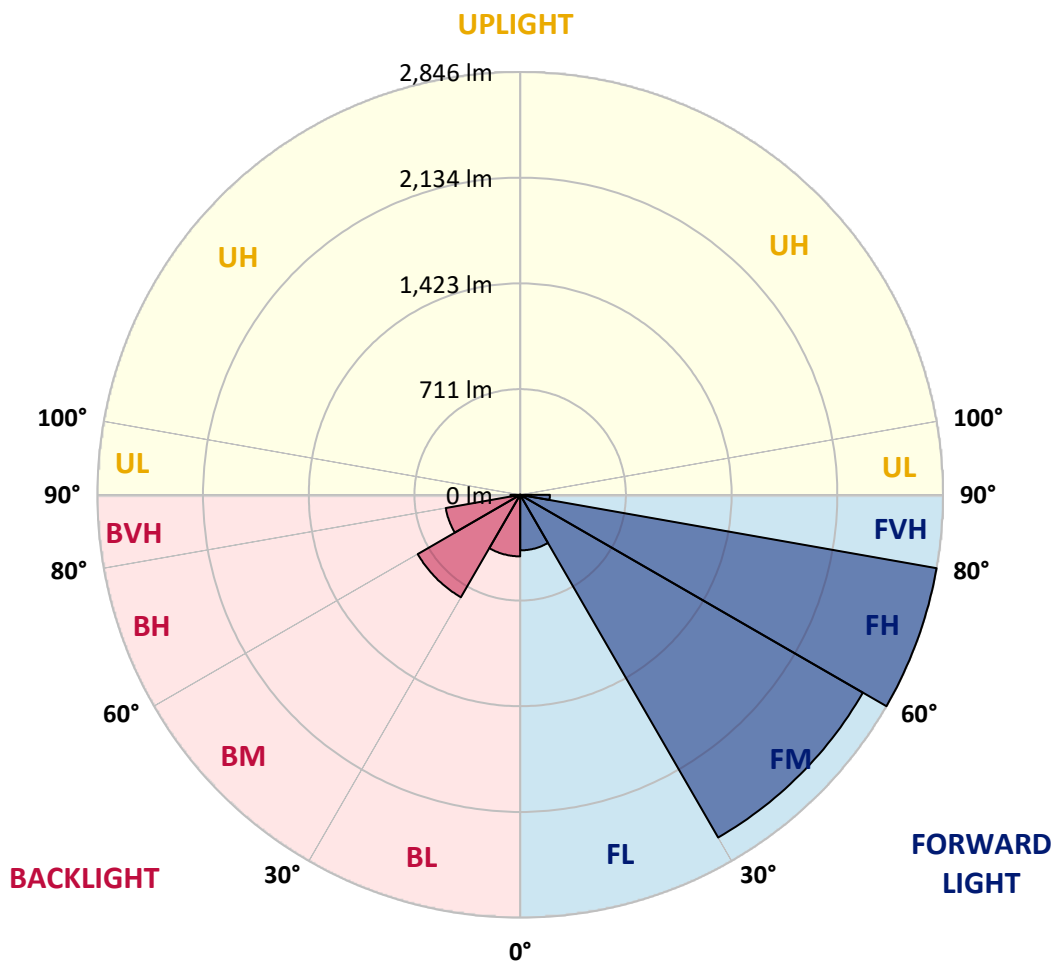
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	374.2	4.8			
FM	(30°-60°)	2663.5	33.9			
FH	(60°-80°)	2845.9	36.2			G2/5000
FVH	(80°-90°)	200.0	2.5			G2/225
BL	(0°-30°)	414.5	5.3	B1/500		
BM	(30°-60°)	796.2	10.1	B1/1000		
BH	(60°-80°)	508.6	6.5	B2/1000		G2/1000
BVH	(80°-90°)	65.2	0.8			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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	829.9	829.9	829.9	829.9	829.9	829.9	829.9	829.9	829.9	829.9	829.9
2.5°	798.7	794.6	795.6	795.6	799.8	801.9	802.9	806.0	808.1	813.3	820.6
5°	761.4	758.2	759.3	760.3	767.6	774.9	781.1	785.2	791.5	799.8	810.2
7.5°	734.3	732.3	733.3	735.4	741.6	749.9	760.3	766.5	775.9	791.5	809.1
10°	714.6	714.6	715.7	719.8	726.0	736.4	744.7	752.0	770.7	798.7	825.8
12.5°	699.0	699.0	702.1	710.5	720.8	731.2	751.0	759.3	784.2	822.6	854.8
15°	698.0	699.0	700.1	707.3	718.8	741.6	770.7	783.2	813.3	859.0	896.4
17.5°	714.6	715.7	711.5	713.6	727.1	759.3	797.7	812.2	850.7	900.5	939.0
20°	765.5	765.5	753.0	741.6	751.0	786.3	829.9	844.4	887.0	942.1	980.5
22.5°	869.4	874.6	845.5	820.6	806.0	825.8	865.2	880.8	928.6	987.8	1026.2
25°	995.1	1000.3	960.8	925.5	898.5	895.3	921.3	937.9	977.4	1038.7	1070.9
27.5°	1116.6	1107.2	1070.9	1037.6	1003.4	975.3	995.1	1009.6	1055.3	1102.0	1121.8
30°	1212.1	1204.9	1169.6	1145.7	1113.5	1077.1	1065.7	1081.3	1118.7	1162.3	1172.7
32.5°	1318.1	1312.9	1277.6	1246.4	1219.4	1185.1	1160.2	1167.5	1188.3	1219.4	1225.6
35°	1453.1	1464.5	1427.1	1363.8	1333.7	1300.4	1282.8	1284.8	1300.4	1320.2	1309.8
37.5°	1595.4	1608.9	1611.0	1511.3	1470.8	1440.7	1422.0	1429.2	1447.9	1461.4	1429.2
40°	1859.2	1845.7	1791.7	1718.0	1655.7	1626.6	1600.6	1599.6	1613.1	1637.0	1578.8
42.5°	2209.3	2196.8	2087.8	1992.2	1893.5	1860.3	1809.4	1787.6	1793.8	1823.9	1742.9
45°	2544.8	2539.6	2452.3	2341.2	2222.8	2158.4	2042.0	1989.1	1983.9	2007.8	1911.2
47.5°	2842.9	2820.0	2756.7	2670.5	2658.0	2489.7	2275.8	2204.1	2179.2	2192.7	2084.6
50°	3161.7	3083.8	2996.6	2943.6	3034.0	2877.1	2511.5	2436.7	2375.5	2384.8	2272.6
52.5°	3331.1	3200.2	3143.1	3158.6	3280.2	3219.9	2768.1	2676.7	2578.0	2591.5	2459.6
55°	3185.6	3184.6	3209.5	3306.1	3475.4	3405.8	3012.2	2909.3	2801.3	2804.4	2674.6
57.5°	2986.2	3026.7	3155.5	3368.4	3717.4	3601.1	3252.1	3143.1	3044.4	3028.8	2918.7
60°	2804.4	2849.1	3036.1	3358.1	3801.6	3779.8	3480.6	3385.1	3305.1	3259.4	3175.3
62.5°	2528.2	2561.4	2826.3	3291.6	3730.9	3908.6	3712.2	3646.8	3586.6	3492.0	3451.5
65°	2203.0	2214.5	2493.9	3072.4	3642.7	3958.4	3942.8	3913.8	3855.6	3716.4	3724.7
67.5°	1850.9	1873.8	2118.9	2722.4	3449.5	3935.6	4121.5	4145.4	4076.8	3868.1	3899.2
70°	1476.0	1504.0	1689.9	2238.4	3121.2	3836.9	4286.6	4325.1	4193.2	3917.9	3931.4
72.5°	913.0	940.0	1064.6	1554.9	2474.1	3505.6	4337.5	4387.4	4196.3	3851.4	3721.6
75°	315.8	318.9	416.5	745.8	1468.7	2646.6	4171.3	4288.7	4064.4	3609.4	3238.6
77.5°	144.4	149.6	184.9	307.4	651.3	1428.2	3444.3	3738.2	3663.4	3231.3	2492.8
80°	99.7	101.8	127.8	183.8	376.0	502.7	2174.0	2557.2	2688.1	2502.2	1597.5
82.5°	74.8	76.9	98.7	124.6	271.1	244.1	827.8	1188.3	1477.0	1450.0	667.9
85°	71.7	70.6	76.9	83.1	180.7	145.4	268.0	367.7	576.5	493.4	168.3
87.5°	31.2	34.3	78.9	46.7	94.5	67.5	116.3	136.1	175.5	152.7	60.2
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°	829.9	829.9	829.9	829.9	829.9	829.9	829.9	829.9	829.9	829.9	829.9
2.5°	823.7	825.8	832.0	841.3	846.5	856.9	864.2	868.3	871.5	872.5	872.5
5°	816.4	820.6	834.1	849.6	864.2	886.0	905.7	917.2	925.5	928.6	929.6
7.5°	818.5	828.9	848.6	871.5	890.2	918.2	942.1	964.9	983.6	990.9	990.9
10°	838.2	852.8	879.8	909.9	933.8	962.9	987.8	1007.5	1029.3	1041.8	1043.9
12.5°	868.3	886.0	921.3	954.5	981.6	1004.4	1027.3	1041.8	1052.2	1061.5	1063.6
15°	910.9	932.7	968.1	1002.3	1026.2	1040.8	1047.0	1047.0	1046.0	1047.0	1049.1
17.5°	953.5	974.3	1009.6	1043.9	1055.3	1047.0	1039.7	1037.6	1036.6	1034.5	1035.6
20°	995.1	1014.8	1044.9	1070.9	1061.5	1032.4	1023.1	1022.1	1018.9	1016.9	1014.8
22.5°	1036.6	1051.1	1076.1	1085.4	1048.0	1006.5	995.1	988.8	984.7	979.5	974.3
25°	1084.4	1088.5	1107.2	1092.7	1014.8	958.7	942.1	932.7	928.6	923.4	919.2
27.5°	1129.0	1129.0	1132.2	1081.3	966.0	895.3	870.4	853.8	852.8	851.7	850.7
30°	1169.6	1164.4	1154.0	1047.0	902.6	817.4	780.1	763.4	769.7	774.9	775.9
32.5°	1217.3	1206.9	1177.9	1000.3	826.8	730.2	684.5	677.2	684.5	690.7	686.6
35°	1292.1	1273.4	1202.8	946.2	754.1	650.2	606.6	596.2	594.1	593.1	584.8
37.5°	1399.1	1366.9	1222.5	888.1	682.4	579.6	547.4	525.6	505.8	485.1	481.9
40°	1530.0	1474.9	1236.0	821.6	606.6	520.4	486.1	458.1	424.8	388.5	384.3
42.5°	1673.3	1591.3	1242.3	747.9	540.1	471.6	429.0	393.7	356.3	328.2	323.0
45°	1828.1	1716.9	1237.1	677.2	486.1	430.0	382.2	343.8	313.7	293.9	289.8
47.5°	1978.7	1861.3	1222.5	621.1	444.6	394.7	345.9	310.6	287.7	265.9	260.7
50°	2171.9	1999.5	1204.9	577.5	398.9	359.4	323.0	285.6	259.7	249.3	247.2
52.5°	2385.9	2137.6	1184.1	522.5	354.2	331.3	308.5	275.3	266.9	247.2	244.1
55°	2617.5	2301.7	1179.9	452.9	314.7	311.6	293.9	284.6	286.7	247.2	242.0
57.5°	2861.6	2477.3	1189.3	383.3	282.5	293.9	300.2	292.9	289.8	252.4	242.0
60°	3116.0	2646.6	1161.2	318.9	257.6	279.4	307.4	288.8	265.9	250.3	243.1
62.5°	3363.3	2788.9	1039.7	273.2	238.9	275.3	303.3	273.2	247.2	247.2	244.1
65°	3542.9	2852.2	813.3	239.9	226.4	270.1	296.0	262.8	242.0	249.3	245.1
67.5°	3563.7	2786.8	546.3	214.0	216.0	260.7	279.4	253.4	236.8	255.5	249.3
70°	3436.0	2616.4	334.5	194.2	202.5	244.1	264.9	244.1	229.5	250.3	241.0
72.5°	3104.6	2298.6	235.8	177.6	188.0	228.5	251.4	235.8	219.2	226.4	217.1
75°	2546.8	1781.3	187.0	162.0	173.5	214.0	239.9	223.3	206.7	203.6	197.3
77.5°	1804.2	1141.5	150.6	149.6	157.9	196.3	224.4	208.8	192.2	185.9	181.8
80°	1037.6	559.8	129.8	135.0	143.3	178.7	205.7	192.2	176.6	167.2	161.0
82.5°	396.8	195.3	114.3	117.4	126.7	160.0	187.0	175.5	160.0	168.3	141.3
85°	128.8	107.0	93.5	96.6	105.9	133.0	165.2	155.8	138.1	122.6	113.2
87.5°	57.1	58.2	49.9	55.1	66.5	88.3	120.5	114.3	100.8	84.1	81.0
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)