

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: P398027

Luminaire Tested: **ARCH-S-PA1-70-830-U-T3**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398027
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-PA1-70-830-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8003 lumens
Efficiency: N/A
Efficacy: 108.1 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): 74
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

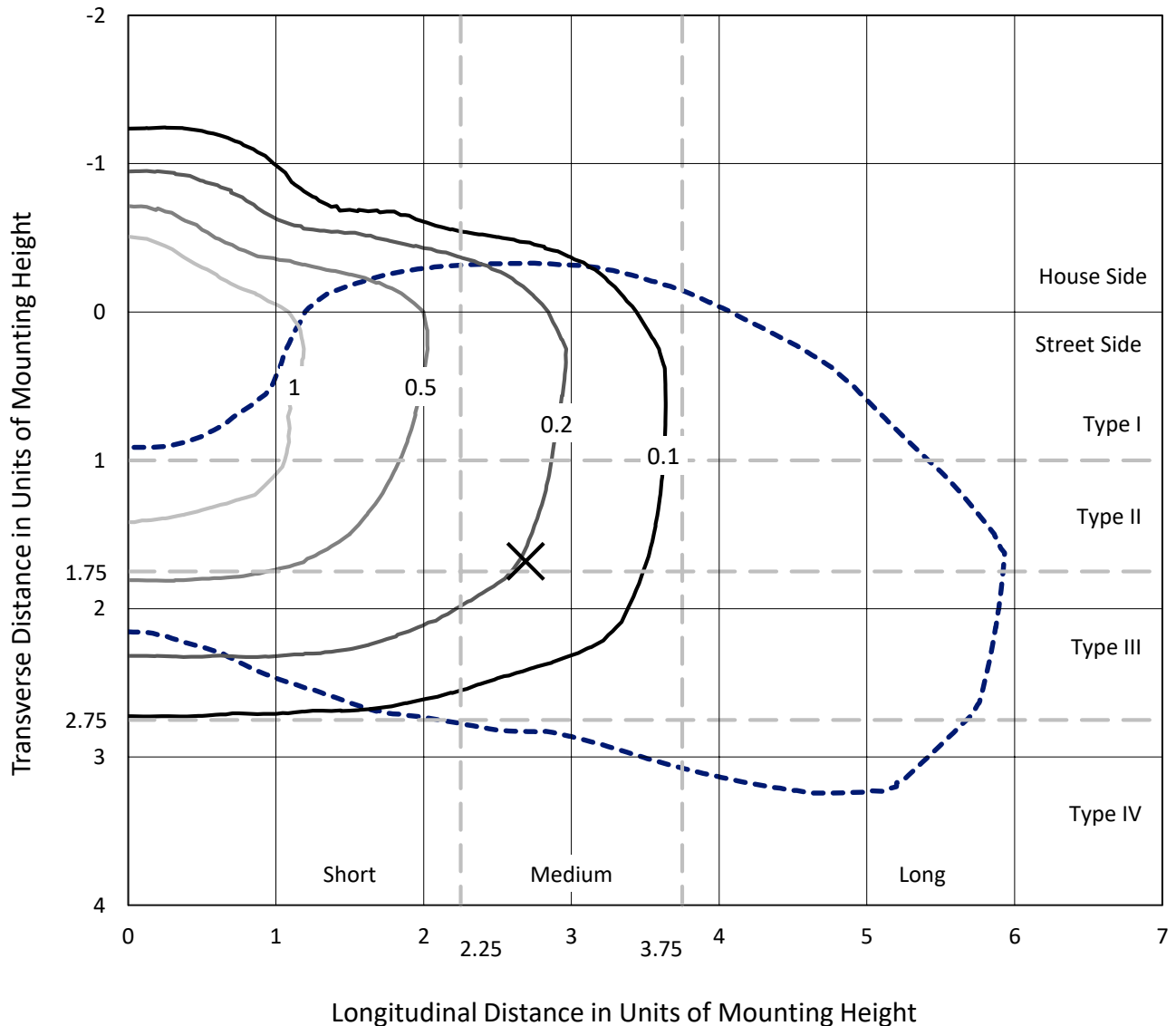


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

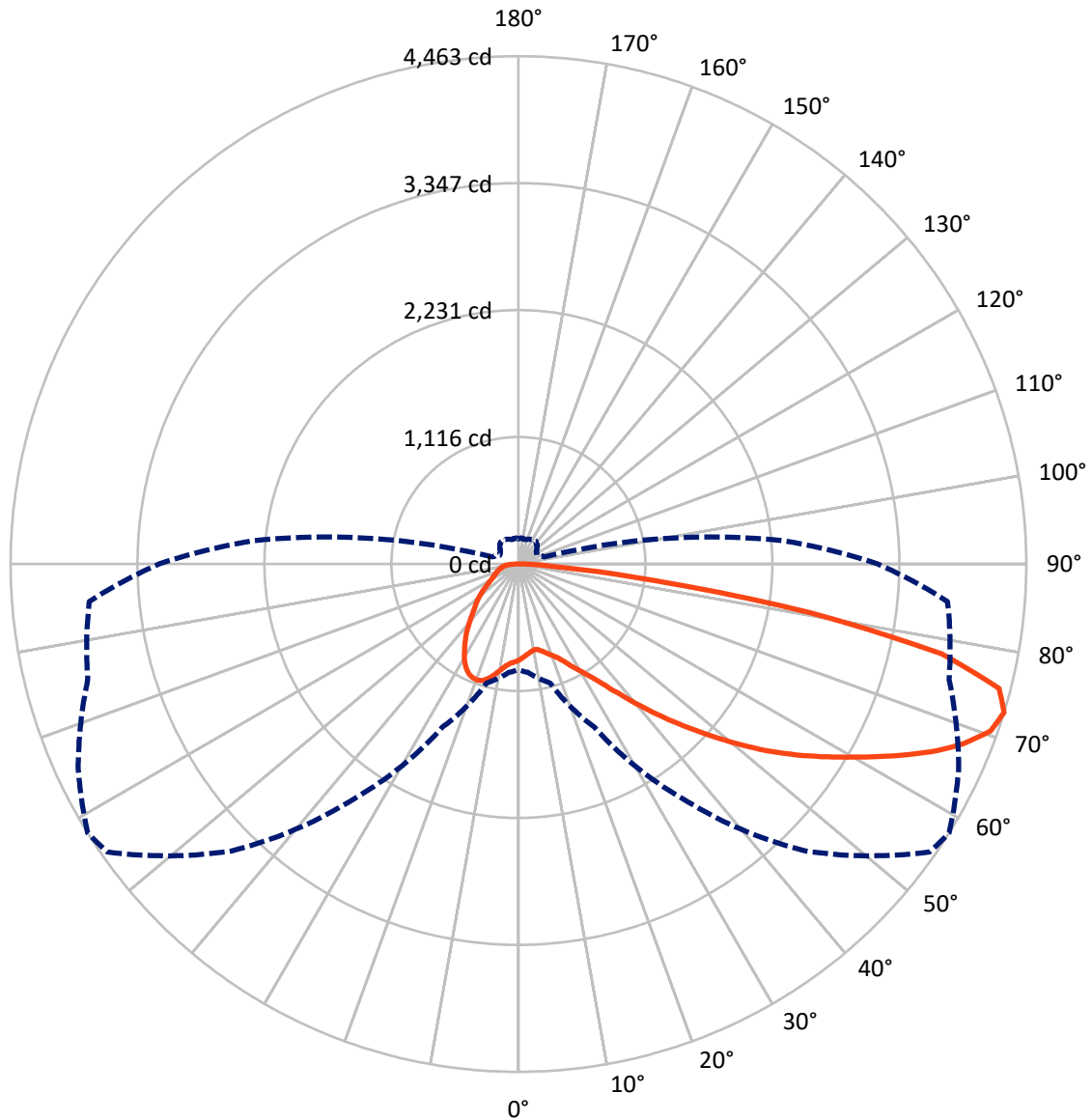


Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
 Type IV - Medium - Non-Cutoff

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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	1815.0	0.0	1815.0
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	6188.0	0.0	6188.0
	% Fixture	77.3	0.0	77.3
Total	Lumens	8003.0	0.0	8003.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.3	1.0
10°-20°	258.2	3.2
20°-30°	462.6	5.8
30°-40°	695.9	8.7
40°-50°	1126.9	14.1
50°-60°	1696.3	21.2
60°-70°	1996.4	24.9
70°-80°	1415.6	17.7
80°-90°	269.7	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°	8003.0	100.0
0°-180°	8003.0	100.0

Coefficient of Utilization



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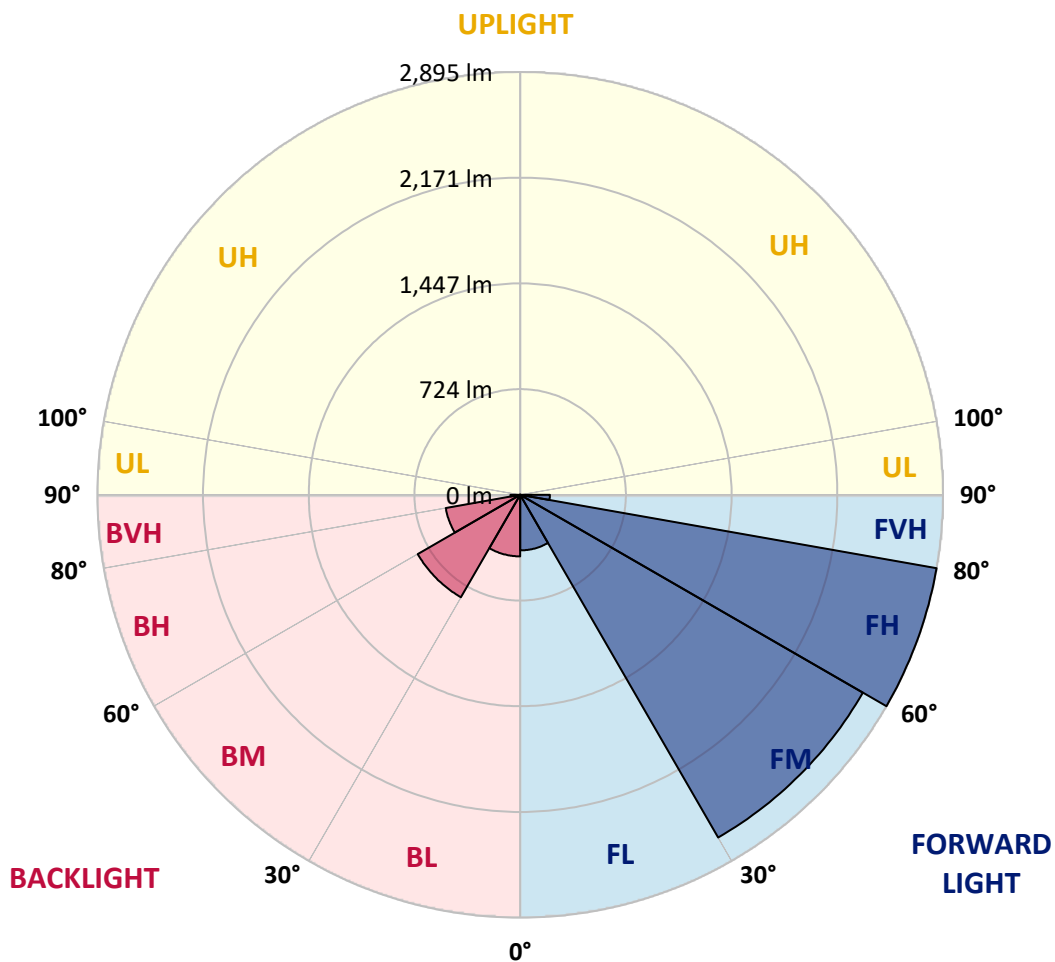
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	380.6	4.8			
FM	(30°-60°)	2709.2	33.9			
FH	(60°-80°)	2894.7	36.2			G2/5000
FVH	(80°-90°)	203.5	2.5			G2/225
BL	(0°-30°)	421.6	5.3	B1/500		
BM	(30°-60°)	809.8	10.1	B1/1000		
BH	(60°-80°)	517.3	6.5	B2/1000		G2/1000
BVH	(80°-90°)	66.3	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°	844.1	844.1	844.1	844.1	844.1	844.1	844.1	844.1	844.1	844.1	844.1
2.5°	812.5	808.2	809.3	809.3	813.5	815.6	816.7	819.8	822.0	827.2	834.6
5°	774.4	771.2	772.3	773.4	780.8	788.2	794.5	798.7	805.1	813.5	824.1
7.5°	746.9	744.8	745.9	748.0	754.3	762.8	773.4	779.7	789.2	805.1	823.0
10°	726.9	726.9	727.9	732.2	738.5	749.1	757.5	764.9	783.9	812.5	839.9
12.5°	711.0	711.0	714.2	722.6	733.2	743.8	763.9	772.3	797.7	836.8	869.5
15°	710.0	711.0	712.1	719.5	731.1	754.3	783.9	796.6	827.2	873.7	911.8
17.5°	726.9	727.9	723.7	725.8	739.6	772.3	811.4	826.2	865.3	916.0	955.1
20°	778.6	778.6	766.0	754.3	763.9	799.8	844.1	858.9	902.3	958.2	997.3
22.5°	884.3	889.6	860.0	834.6	819.8	839.9	880.1	895.9	944.5	1004.7	1043.8
25°	1012.1	1017.4	977.3	941.3	913.9	910.7	937.1	954.0	994.2	1056.5	1089.3
27.5°	1135.7	1126.2	1089.3	1055.4	1020.6	992.1	1012.1	1026.9	1073.4	1121.0	1141.0
30°	1232.9	1225.5	1189.6	1165.3	1132.6	1095.6	1084.0	1099.8	1137.9	1182.2	1192.8
32.5°	1340.7	1335.4	1299.5	1267.8	1240.3	1205.5	1180.1	1187.5	1208.6	1240.3	1246.7
35°	1478.0	1489.7	1451.6	1387.2	1356.6	1322.7	1304.8	1306.9	1322.7	1342.8	1332.3
37.5°	1622.8	1636.5	1638.6	1537.2	1496.0	1465.4	1446.4	1453.7	1472.8	1486.5	1453.7
40°	1891.1	1877.4	1822.5	1747.5	1684.1	1654.5	1628.1	1627.0	1640.8	1665.0	1605.9
42.5°	2247.2	2234.5	2123.6	2026.4	1926.0	1892.2	1840.4	1818.2	1824.6	1855.2	1772.8
45°	2588.4	2583.2	2494.4	2381.4	2260.9	2195.4	2077.1	2023.2	2017.9	2042.2	1944.0
47.5°	2891.7	2868.4	2804.0	2716.3	2703.6	2532.4	2314.8	2241.9	2216.5	2230.3	2120.4
50°	3216.0	3136.8	3048.0	2994.1	3086.0	2926.5	2554.6	2478.6	2416.2	2425.7	2311.6
52.5°	3388.2	3255.1	3197.0	3212.8	3336.4	3275.2	2815.6	2722.6	2622.2	2636.0	2501.8
55°	3240.3	3239.2	3264.6	3362.9	3535.1	3464.3	3063.9	2959.3	2849.4	2852.6	2720.5
57.5°	3037.4	3078.7	3209.7	3426.2	3781.2	3662.9	3307.9	3197.0	3096.6	3080.8	2968.8
60°	2852.6	2898.0	3088.2	3415.7	3866.8	3844.6	3540.3	3443.1	3361.8	3315.3	3229.7
62.5°	2571.5	2605.3	2874.7	3348.1	3795.0	3975.6	3775.9	3709.4	3648.1	3552.0	3510.8
65°	2240.8	2252.5	2536.7	3125.1	3705.2	4026.3	4010.5	3980.9	3921.7	3780.2	3788.6
67.5°	1882.7	1905.9	2155.3	2769.1	3508.6	4003.1	4192.2	4216.5	4146.8	3934.4	3966.1
70°	1501.3	1529.8	1718.9	2276.8	3174.8	3902.7	4360.2	4399.3	4265.1	3985.1	3998.9
72.5°	928.7	956.1	1082.9	1581.6	2516.6	3565.7	4412.0	4462.7	4268.3	3917.5	3785.5
75°	321.2	324.3	423.7	758.6	1493.9	2692.0	4242.9	4362.3	4134.1	3671.3	3294.2
77.5°	146.9	152.1	188.1	312.7	662.4	1452.7	3503.4	3802.4	3726.3	3286.8	2535.6
80°	101.4	103.5	129.9	187.0	382.5	511.3	2211.3	2601.1	2734.2	2545.1	1624.9
82.5°	76.1	78.2	100.4	126.8	275.7	248.3	842.0	1208.6	1502.3	1474.9	679.3
85°	72.9	71.8	78.2	84.5	183.8	147.9	272.6	374.0	586.4	501.8	171.2
87.5°	31.7	34.9	80.3	47.5	96.1	68.7	118.3	138.4	178.5	155.3	61.3
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°	844.1	844.1	844.1	844.1	844.1	844.1	844.1	844.1	844.1	844.1	844.1
2.5°	837.8	839.9	846.3	855.8	861.1	871.6	879.0	883.2	886.4	887.5	887.5
5°	830.4	834.6	848.4	864.2	879.0	901.2	921.3	932.9	941.3	944.5	945.6
7.5°	832.5	843.1	863.2	886.4	905.4	933.9	958.2	981.5	1000.5	1007.9	1007.9
10°	852.6	867.4	894.9	925.5	949.8	979.4	1004.7	1024.8	1047.0	1059.7	1061.8
12.5°	883.2	901.2	937.1	970.9	998.4	1021.6	1044.9	1059.7	1070.2	1079.7	1081.9
15°	926.6	948.7	984.7	1019.5	1043.8	1058.6	1065.0	1065.0	1063.9	1065.0	1067.1
17.5°	969.9	991.0	1026.9	1061.8	1073.4	1065.0	1057.6	1055.4	1054.4	1052.3	1053.3
20°	1012.1	1032.2	1062.8	1089.3	1079.7	1050.2	1040.7	1039.6	1036.4	1034.3	1032.2
22.5°	1054.4	1069.2	1094.5	1104.0	1066.0	1023.8	1012.1	1005.8	1001.6	996.3	991.0
25°	1103.0	1107.2	1126.2	1111.4	1032.2	975.2	958.2	948.7	944.5	939.2	935.0
27.5°	1148.4	1148.4	1151.6	1099.8	982.5	910.7	885.4	868.4	867.4	866.3	865.3
30°	1189.6	1184.3	1173.8	1065.0	918.1	831.5	793.4	776.5	782.9	788.2	789.2
32.5°	1238.2	1227.7	1198.1	1017.4	841.0	742.7	696.2	688.8	696.2	702.6	698.3
35°	1314.3	1295.3	1223.4	962.5	767.0	661.4	617.0	606.4	604.3	603.3	594.8
37.5°	1423.1	1390.4	1243.5	903.3	694.1	589.5	556.8	534.6	514.5	493.4	490.2
40°	1556.2	1500.2	1257.2	835.7	617.0	529.3	494.4	465.9	432.1	395.1	390.9
42.5°	1702.0	1618.6	1263.6	760.7	549.4	479.7	436.3	400.4	362.4	333.9	328.6
45°	1859.4	1746.4	1258.3	688.8	494.4	437.4	388.8	349.7	319.1	299.0	294.8
47.5°	2012.6	1893.3	1243.5	631.8	452.2	401.5	351.8	315.9	292.7	270.5	265.2
50°	2209.1	2033.8	1225.5	587.4	405.7	365.6	328.6	290.5	264.1	253.6	251.4
52.5°	2426.8	2174.3	1204.4	531.4	360.3	337.0	313.8	280.0	271.5	251.4	248.3
55°	2662.4	2341.2	1200.2	460.6	320.1	317.0	299.0	289.5	291.6	251.4	246.2
57.5°	2910.7	2519.8	1209.7	389.8	287.4	299.0	305.3	297.9	294.8	256.7	246.2
60°	3169.5	2692.0	1181.2	324.3	262.0	284.2	312.7	293.7	270.5	254.6	247.2
62.5°	3421.0	2836.7	1057.6	277.9	243.0	280.0	308.5	277.9	251.4	251.4	248.3
65°	3603.7	2901.2	827.2	244.1	230.3	274.7	301.1	267.3	246.2	253.6	249.3
67.5°	3624.9	2834.6	555.7	217.6	219.8	265.2	284.2	257.8	240.9	259.9	253.6
70°	3494.9	2661.3	340.2	197.6	206.0	248.3	269.4	248.3	233.5	254.6	245.1
72.5°	3157.9	2338.0	239.8	180.7	191.2	232.4	255.7	239.8	222.9	230.3	220.8
75°	2590.5	1811.9	190.2	164.8	176.4	217.6	244.1	227.1	210.2	207.1	200.7
77.5°	1835.1	1161.1	153.2	152.1	160.6	199.7	228.2	212.4	195.5	189.1	184.9
80°	1055.4	569.5	132.1	137.3	145.8	181.7	209.2	195.5	179.6	170.1	163.8
82.5°	403.6	198.6	116.2	119.4	128.9	162.7	190.2	178.5	162.7	171.2	143.7
85°	131.0	108.8	95.1	98.3	107.8	135.2	168.0	158.5	140.5	124.7	115.2
87.5°	58.1	59.2	50.7	56.0	67.6	89.8	122.6	116.2	102.5	85.6	82.4
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)