

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: P265590

Luminaire Tested: **ARCH-L-AF72-110-D-U-T2R-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265590
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-110-D-U-T2R-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 485mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13463 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B2 - U0 - G2

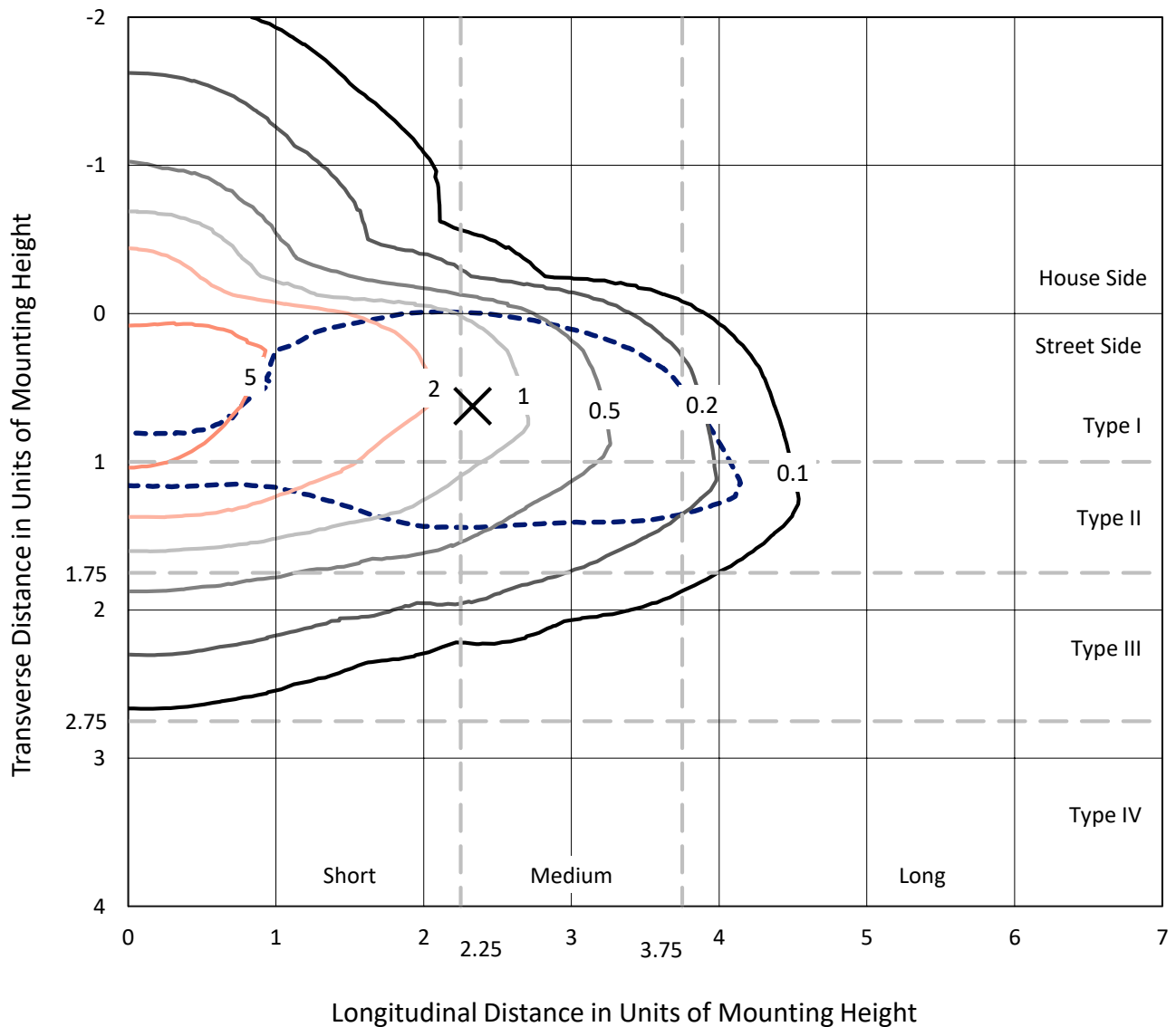
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

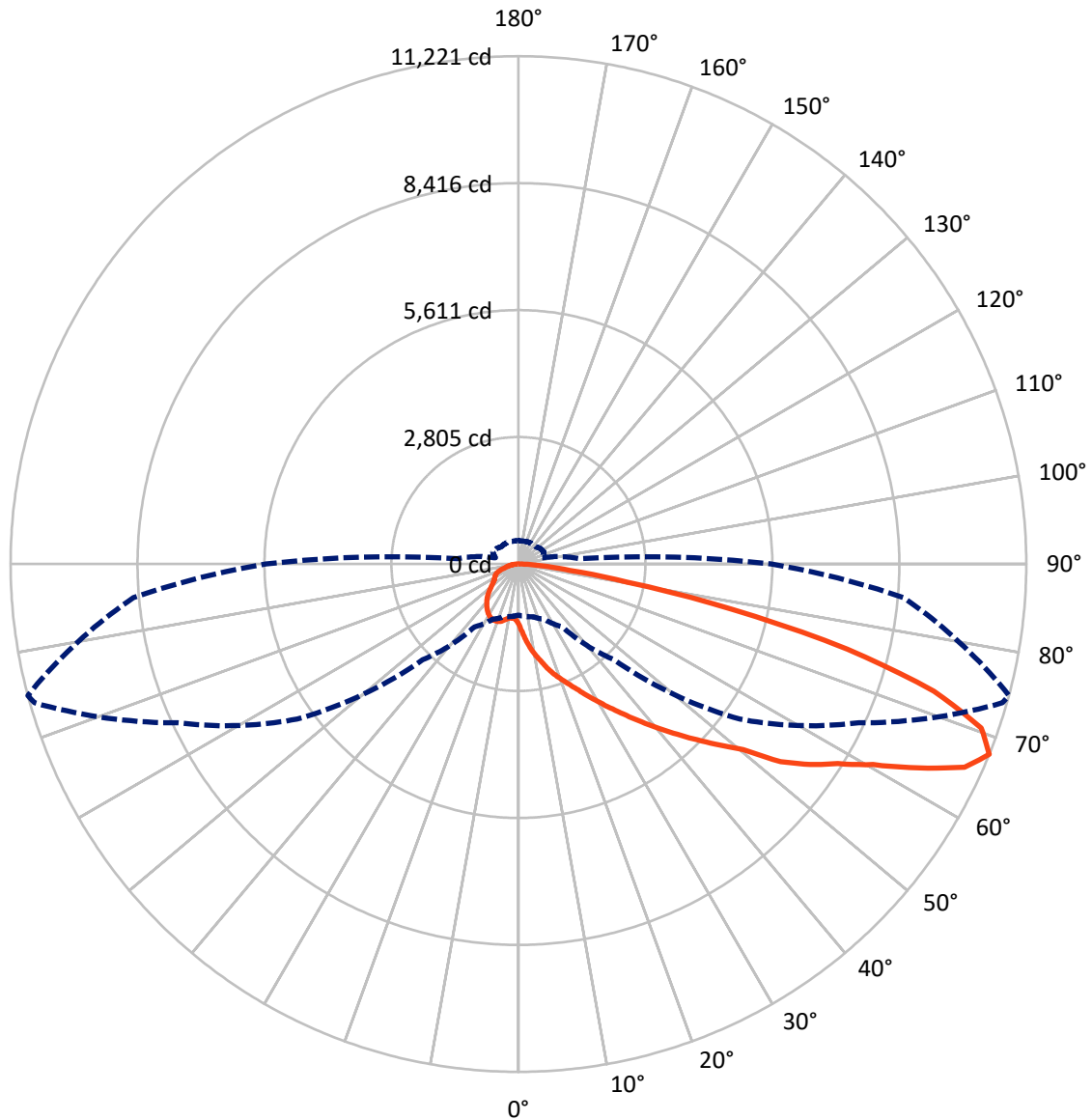
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2299.0	0.0	2299.0
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	11164.0	0.0	11164.0
	% Fixture	82.9	0.0	82.9
Total	Lumens	13463.0	0.0	13463.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.7	1.2
10°-20°	566.4	4.2
20°-30°	1033.0	7.7
30°-40°	1695.6	12.6
40°-50°	2452.1	18.2
50°-60°	2889.8	21.5
60°-70°	2808.2	20.9
70°-80°	1561.0	11.6
80°-90°	300.1	2.2
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°	13463.0	100.0
0°-180°	13463.0	100.0

Coefficient of Utilization



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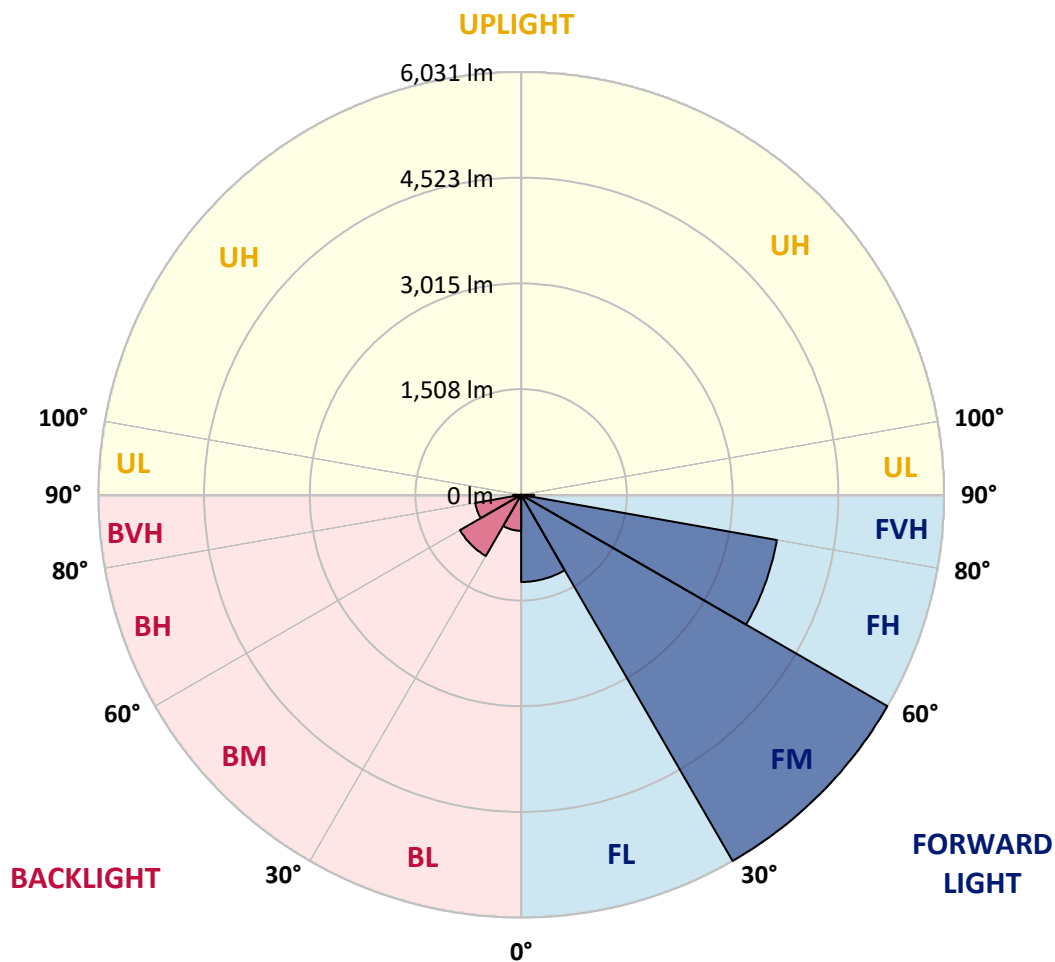
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1243.0	9.2			
FM	(30°-60°)	6030.7	44.8			
FH	(60°-80°)	3703.5	27.5			G2/5000
FVH	(80°-90°)	186.8	1.4			G2/225
BL	(0°-30°)	513.1	3.8	B2/1000		
BM	(30°-60°)	1006.8	7.5	B2/2500		
BH	(60°-80°)	665.7	4.9	B2/1000		G2/1000
BVH	(80°-90°)	113.3	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1334.1	1334.1	1334.1	1334.1	1334.1	1334.1	1334.1	1334.1	1334.1	1334.1	1334.1
2.5°	1891.3	1897.0	1885.7	1860.4	1823.7	1756.2	1697.1	1593.0	1500.1	1488.9	1390.3
5°	2223.5	2229.1	2215.0	2184.0	2144.7	2071.4	1989.8	1854.7	1705.5	1677.5	1469.2
7.5°	2451.4	2454.2	2437.3	2406.4	2375.4	2302.3	2220.6	2068.6	1885.7	1863.2	1570.4
10°	2645.6	2651.2	2628.7	2608.9	2575.3	2502.0	2417.6	2257.3	2068.6	2037.6	1674.6
12.5°	2825.7	2831.4	2817.3	2800.3	2789.1	2721.5	2628.7	2437.3	2234.7	2200.8	1798.4
15°	2946.7	2952.4	2955.2	2977.7	2991.7	2943.9	2851.0	2642.8	2414.9	2383.8	1944.8
17.5°	2912.9	2927.0	2969.3	3050.9	3138.0	3141.0	3064.9	2845.4	2592.1	2558.4	2093.9
20°	2814.5	2825.7	2876.4	3000.2	3171.8	3270.4	3264.8	3050.9	2758.2	2721.5	2231.8
22.5°	2896.0	2910.1	2910.1	2986.1	3154.9	3337.9	3411.1	3253.5	2924.3	2890.4	2369.8
25°	3245.0	3253.5	3194.5	3163.4	3225.4	3394.2	3532.1	3473.0	3126.9	3087.5	2518.9
27.5°	3732.0	3717.8	3644.8	3520.8	3453.4	3498.4	3639.0	3681.3	3360.5	3312.6	2673.7
30°	4216.0	4207.7	4123.2	3957.2	3805.1	3709.5	3757.3	3867.1	3613.7	3557.5	2823.0
32.5°	4669.2	4655.0	4562.2	4368.0	4196.3	4019.0	3926.1	4035.9	3883.9	3819.2	2988.9
35°	5085.8	5049.2	4956.3	4753.7	4576.2	4407.4	4179.5	4196.3	4176.6	4109.0	3171.8
37.5°	5423.4	5395.3	5294.0	5105.3	4916.9	4756.4	4517.1	4379.2	4491.9	4427.1	3382.9
40°	5721.8	5690.9	5586.6	5398.2	5223.6	5071.7	4883.0	4601.6	4846.4	4773.4	3619.5
42.5°	5946.9	5924.4	5840.1	5654.2	5485.4	5347.5	5254.5	4883.0	5215.2	5144.9	3878.3
45°	6068.0	6045.5	6000.4	5851.2	5696.4	5589.6	5598.0	5218.0	5600.8	5541.6	4185.2
47.5°	5918.8	5935.7	5975.0	5946.9	5851.2	5800.5	5904.6	5564.2	6031.4	5975.0	4517.1
50°	5519.1	5536.1	5693.6	5887.9	5921.5	5983.5	6180.5	5963.8	6487.3	6442.3	4928.1
52.5°	4536.9	4629.8	5066.0	5530.3	5848.4	6104.5	6487.3	6557.6	7255.7	7255.7	5654.2
55°	3428.0	3509.6	4007.8	4818.4	5564.2	6115.8	6712.5	6960.2	7810.1	7821.4	6034.2
57.5°	2777.9	2828.6	3073.5	3903.7	4967.4	5975.0	6979.8	7306.4	8271.7	8322.3	6523.9
60°	2254.3	2282.6	2442.9	3019.9	4142.9	5595.2	7171.2	7801.7	8930.2	9000.6	7148.7
62.5°	1812.5	1840.6	1947.5	2293.8	3250.6	4883.0	7137.5	8316.7	9808.4	9923.8	7967.6
65°	1446.6	1477.6	1548.0	1761.8	2409.2	3999.3	6791.2	8581.2	10717.4	10830.0	8510.9
67.5°	1128.6	1156.7	1204.5	1345.3	1697.1	2991.7	5972.2	8302.7	11125.5	11221.2	8539.1
70°	852.9	866.9	906.3	996.3	1213.0	1987.1	4674.8	7368.3	10759.7	10846.9	7976.1
72.5°	661.4	658.5	681.0	726.1	847.1	1367.8	3098.8	5992.0	9512.8	9602.9	6805.3
75°	540.4	537.5	551.6	565.8	613.5	917.4	1829.4	4511.6	7677.9	7506.1	5105.3
77.5°	455.9	453.1	467.2	470.1	489.8	633.2	1041.3	2969.3	5122.2	4826.9	2876.4
80°	385.6	382.8	399.7	405.2	419.4	464.3	599.4	1607.1	2572.3	2437.3	1373.5
82.5°	290.0	301.1	332.2	346.1	363.1	343.3	371.4	709.2	1193.3	1139.9	596.7
85°	140.8	166.0	250.4	278.7	298.3	216.8	253.3	334.9	537.5	512.3	242.1
87.5°	47.8	42.2	149.2	177.3	194.3	98.5	140.8	185.8	222.3	202.7	75.9
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°	1334.1	1334.1	1334.1	1334.1	1334.1	1334.1	1334.1	1334.1	1334.1	1334.1	1334.1
2.5°	1348.1	1305.9	1244.1	1196.2	1165.2	1139.9	1128.6	1125.8	1120.1	1117.3	1117.3
5°	1376.3	1300.2	1204.5	1154.0	1139.9	1128.6	1134.2	1137.1	1137.1	1137.1	1137.1
7.5°	1418.5	1311.5	1196.2	1162.3	1159.5	1159.5	1176.4	1184.9	1190.6	1190.6	1190.6
10°	1474.7	1331.3	1210.1	1182.1	1190.6	1196.2	1215.9	1227.2	1232.7	1235.6	1238.4
12.5°	1550.7	1373.5	1238.4	1215.9	1227.2	1229.9	1244.1	1249.6	1255.2	1258.0	1258.0
15°	1652.2	1435.4	1283.4	1255.2	1258.0	1255.2	1255.2	1249.6	1246.8	1246.8	1252.4
17.5°	1756.2	1494.5	1322.8	1283.4	1272.1	1249.6	1232.7	1218.7	1210.1	1204.5	1207.4
20°	1860.4	1548.0	1345.3	1289.0	1258.0	1221.4	1190.6	1170.9	1159.5	1148.4	1154.0
22.5°	1964.6	1598.7	1353.7	1272.1	1227.2	1173.6	1139.9	1108.9	1083.5	1066.6	1069.5
25°	2079.8	1654.9	1353.7	1252.4	1184.9	1128.6	1086.4	1035.7	999.2	985.0	990.7
27.5°	2195.3	1702.7	1339.7	1215.9	1137.1	1080.8	1018.9	959.7	937.2	928.8	931.6
30°	2310.7	1739.3	1308.7	1170.9	1086.4	1024.4	942.9	903.4	875.3	852.9	855.5
32.5°	2426.1	1764.7	1266.5	1114.5	1033.0	954.1	886.5	841.5	790.9	762.8	765.5
35°	2558.4	1784.4	1215.9	1058.3	973.9	892.1	841.5	768.3	715.0	692.4	686.8
37.5°	2696.3	1798.4	1162.3	996.3	914.7	847.1	796.4	706.4	655.8	624.9	621.9
40°	2845.4	1804.1	1097.5	931.6	858.4	819.1	737.4	669.9	582.6	562.9	562.9
42.5°	3022.7	1801.2	1033.0	866.9	796.4	754.2	695.2	664.1	588.2	568.4	557.3
45°	3225.4	1801.2	962.5	790.9	734.5	672.7	647.3	627.6	576.9	585.4	591.1
47.5°	3456.1	1795.6	878.2	729.0	683.9	630.4	616.3	574.1	554.4	560.1	565.8
50°	3774.1	1804.1	802.1	678.3	647.3	602.4	585.4	562.9	554.4	557.3	554.4
52.5°	4216.0	1775.9	729.0	647.3	619.2	560.1	560.1	557.3	560.1	557.3	557.3
55°	4458.1	1714.0	675.4	630.4	599.4	540.4	551.6	557.3	562.9	560.1	560.1
57.5°	4801.4	1671.7	633.2	619.2	588.2	534.8	546.0	557.3	560.1	557.3	557.3
60°	5206.8	1643.7	605.1	621.9	579.8	534.8	548.9	557.3	554.4	551.6	551.6
62.5°	5676.7	1632.4	585.4	630.4	571.3	537.5	548.9	557.3	546.0	543.1	543.1
65°	5854.1	1531.0	560.1	636.1	576.9	537.5	546.0	548.9	534.8	531.9	529.1
67.5°	5581.1	1356.6	523.5	624.9	593.9	537.5	537.5	534.8	517.9	515.1	509.3
70°	4970.3	1125.8	467.2	588.2	605.1	540.4	526.2	512.3	495.3	495.3	484.0
72.5°	4069.7	886.5	394.0	523.5	596.7	548.9	503.8	484.0	464.3	464.3	453.1
75°	2932.6	661.4	315.2	436.2	560.1	546.0	475.7	450.3	427.9	425.0	411.0
77.5°	1671.7	464.3	256.0	340.5	498.2	531.9	450.3	411.0	385.6	377.2	368.7
80°	858.4	312.4	208.2	267.3	413.7	492.5	430.6	365.9	337.8	323.7	309.6
82.5°	408.1	208.2	160.4	197.0	312.4	430.6	405.2	315.2	284.3	267.3	250.4
85°	183.0	123.8	107.0	126.7	222.3	334.9	357.4	258.9	222.3	278.7	205.4
87.5°	59.1	56.4	56.4	59.1	107.0	146.3	261.8	191.3	177.3	146.3	123.8
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)