

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: P265608

Luminaire Tested: **ARCH-L-AF72-130-D-U-T2R-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265608  
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-AF72-130-D-U-T2R-7027  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 575mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15553.5 lumens  
Efficiency: N/A  
Efficacy: 116.9 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

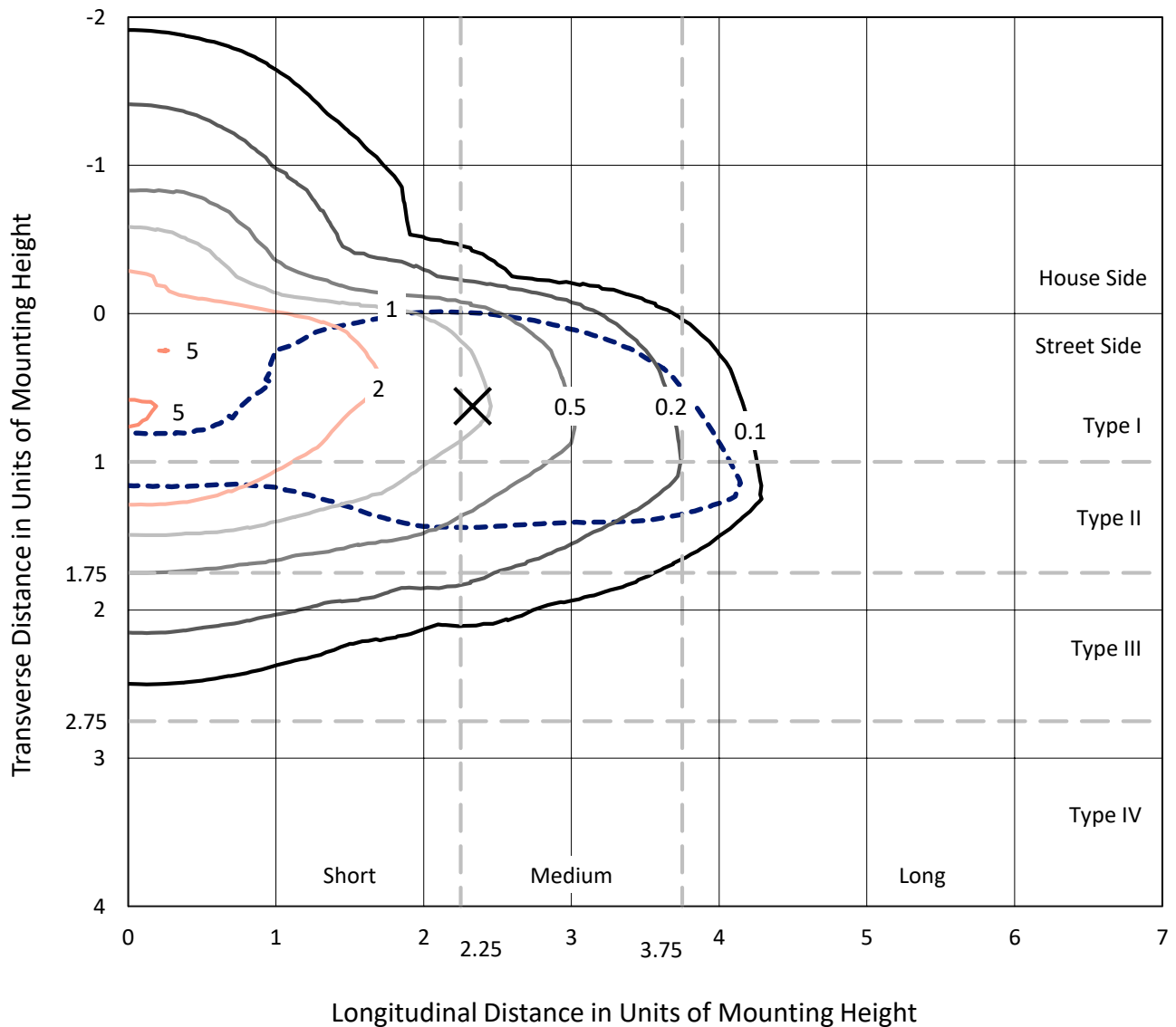
Input Watts (W): 133  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

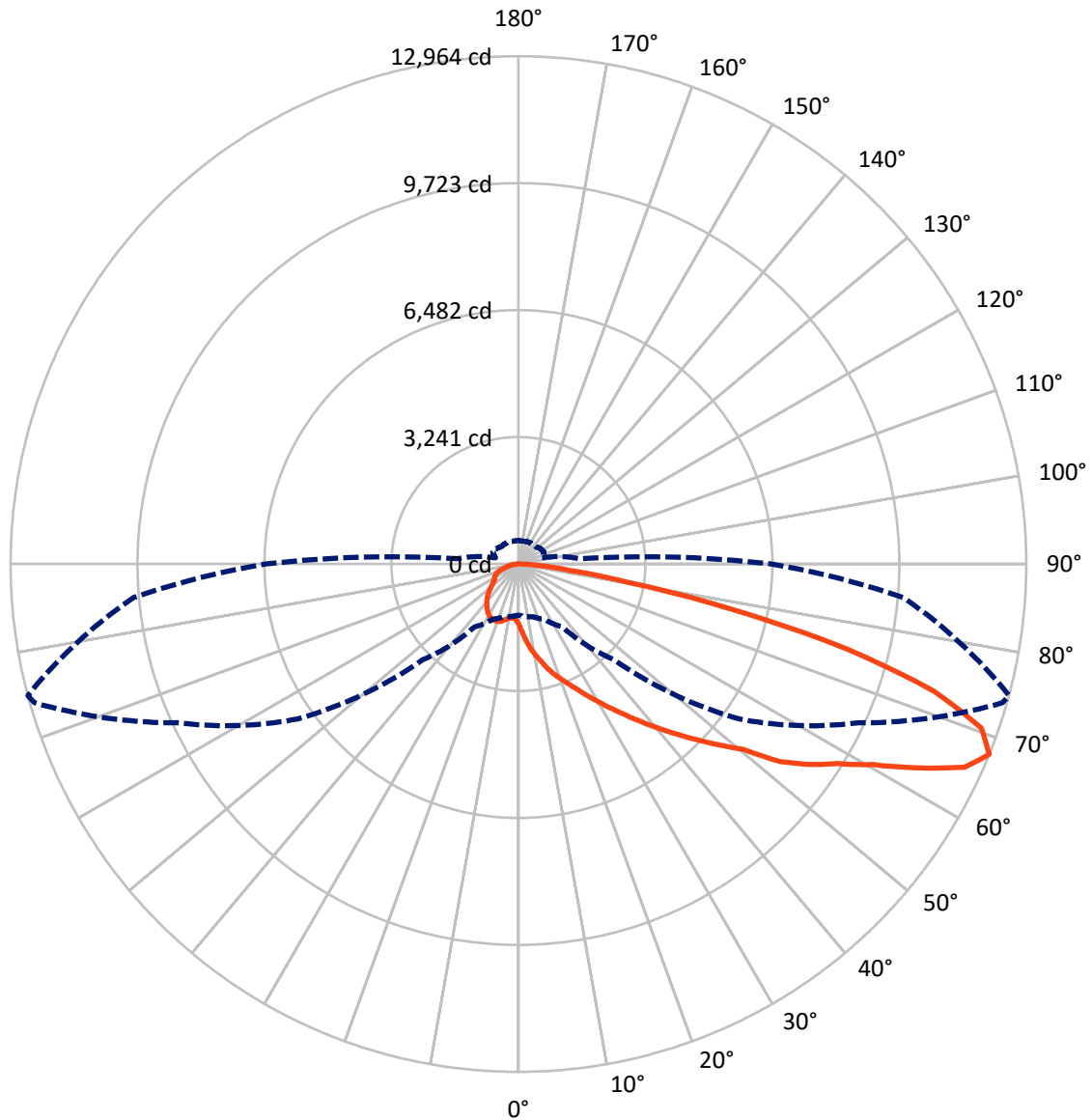
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 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
<b>House Side</b>	Lumens	2656.0	0.0	2656.0
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	12897.6	0.0	12897.6
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	15553.5	0.0	15553.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	181.1	1.2
10°-20°	654.3	4.2
20°-30°	1193.4	7.7
30°-40°	1958.9	12.6
40°-50°	2832.9	18.2
50°-60°	3338.5	21.5
60°-70°	3244.3	20.9
70°-80°	1803.4	11.6
80°-90°	346.8	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°	15553.5	100.0
0°-180°	15553.5	100.0



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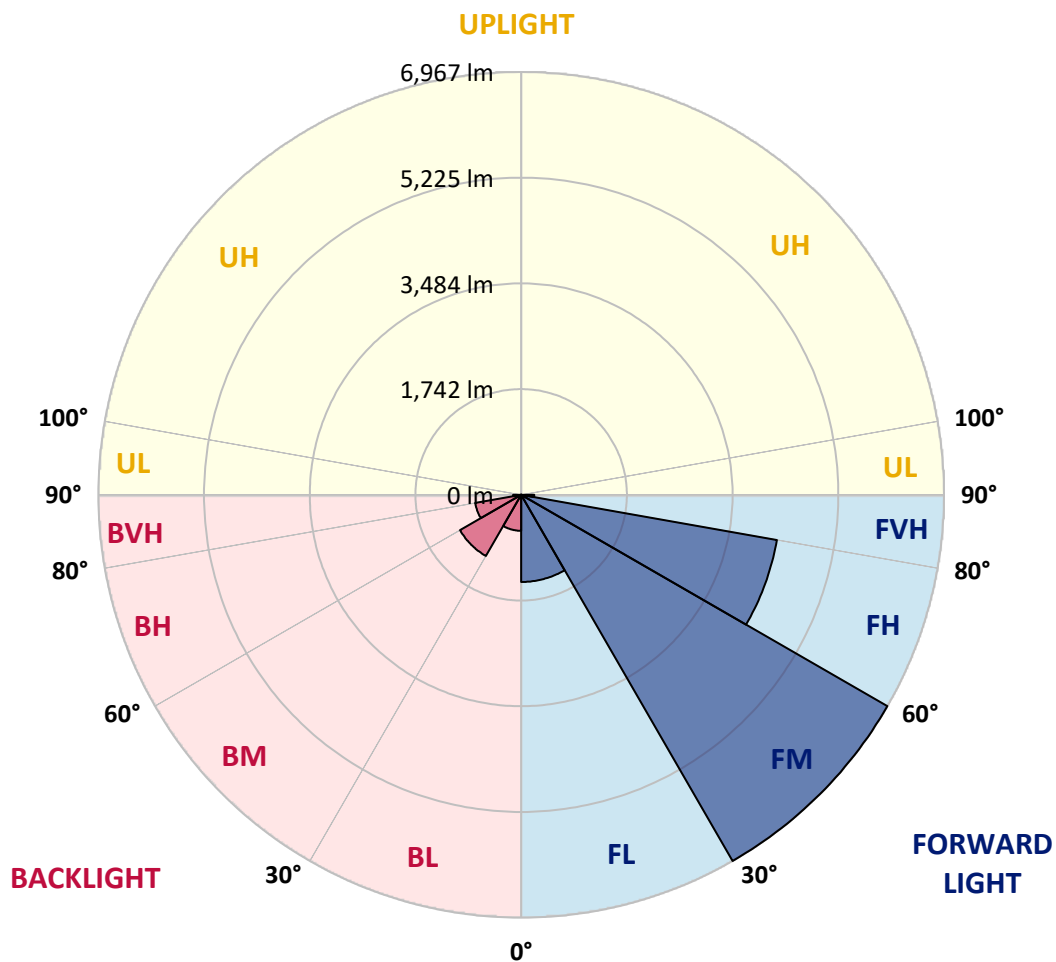
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1436.0	9.2			
FM	(30°-60°)	6967.2	44.8			
FH	(60°-80°)	4278.6	27.5			G2/5000
FVH	(80°-90°)	215.8	1.4			G2/225
BL	(0°-30°)	592.8	3.8	B2/1000		
BM	(30°-60°)	1163.2	7.5	B2/2500		
BH	(60°-80°)	769.0	4.9	B2/1000		G2/1000
BVH	(80°-90°)	130.9	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°	1541.2	1541.2	1541.2	1541.2	1541.2	1541.2	1541.2	1541.2	1541.2	1541.2	1541.2
2.5°	2184.9	2191.4	2178.5	2149.3	2107.0	2028.9	1960.6	1840.4	1733.0	1720.1	1606.2
5°	2568.7	2575.3	2558.9	2523.2	2477.6	2393.1	2298.9	2142.7	1970.4	1937.9	1697.3
7.5°	2832.0	2835.3	2815.7	2780.1	2744.2	2659.7	2565.4	2389.9	2178.5	2152.5	1814.3
10°	3056.5	3063.0	3036.9	3014.2	2975.0	2890.6	2793.0	2607.7	2389.9	2354.1	1934.6
12.5°	3264.5	3271.0	3254.6	3235.2	3222.2	3144.2	3036.9	2815.7	2581.6	2542.7	2077.7
15°	3404.2	3410.9	3414.1	3440.1	3456.3	3401.1	3293.7	3053.1	2789.7	2754.1	2246.8
17.5°	3365.3	3381.5	3430.3	3524.6	3625.4	3628.7	3540.8	3287.3	2994.6	2955.7	2419.0
20°	3251.4	3264.5	3323.0	3466.1	3664.5	3778.2	3771.8	3524.6	3186.5	3144.2	2578.4
22.5°	3345.7	3362.0	3362.0	3449.9	3645.0	3856.2	3940.9	3758.7	3378.3	3339.3	2737.8
25°	3748.9	3758.7	3690.4	3654.7	3726.2	3921.3	4080.6	4012.3	3612.4	3566.9	2910.1
27.5°	4311.4	4295.2	4210.6	4067.6	3989.6	4041.7	4204.2	4252.9	3882.3	3827.0	3088.9
30°	4870.7	4861.0	4763.4	4571.6	4395.9	4285.5	4340.7	4467.5	4175.0	4109.8	3261.2
32.5°	5394.2	5378.0	5270.6	5046.3	4848.0	4643.1	4535.8	4662.7	4487.0	4412.3	3453.1
35°	5875.5	5833.1	5725.8	5491.8	5287.0	5091.9	4828.5	4848.0	4825.2	4747.2	3664.5
37.5°	6265.6	6233.1	6116.0	5898.2	5680.3	5495.0	5218.7	5059.3	5189.4	5114.6	3908.3
40°	6610.3	6574.4	6454.2	6236.4	6034.8	5859.1	5641.4	5316.2	5599.0	5514.5	4181.4
42.5°	6870.3	6844.4	6746.8	6532.2	6337.2	6177.9	6070.6	5641.4	6025.0	5943.7	4480.6
45°	7010.3	6984.2	6932.2	6759.8	6581.1	6457.5	6467.2	6028.3	6470.4	6402.2	4834.9
47.5°	6837.9	6857.4	6902.8	6870.3	6759.8	6701.3	6821.5	6428.2	6968.0	6902.8	5218.7
50°	6376.2	6395.7	6577.7	6802.1	6841.1	6912.6	7140.3	6889.9	7494.6	7442.6	5693.4
52.5°	5241.4	5348.7	5852.6	6389.1	6756.6	7052.5	7494.6	7575.9	8382.4	8382.4	6532.2
55°	3960.3	4054.6	4630.1	5566.5	6428.2	7065.4	7754.8	8040.9	9022.8	9036.0	6971.1
57.5°	3209.3	3267.8	3550.6	4509.9	5738.8	6902.8	8063.6	8440.8	9556.1	9614.6	7536.9
60°	2604.5	2637.0	2822.2	3488.8	4786.2	6463.9	8284.8	9013.1	10316.9	10398.2	8258.7
62.5°	2093.9	2126.5	2250.1	2650.0	3755.5	5641.4	8245.7	9608.1	11331.4	11464.7	9204.9
65°	1671.2	1707.0	1788.3	2035.4	2783.3	4620.3	7845.8	9913.8	12381.7	12511.8	9832.5
67.5°	1303.8	1336.4	1391.7	1554.2	1960.6	3456.3	6899.6	9591.9	12853.0	12963.7	9864.9
70°	985.3	1001.5	1047.0	1151.0	1401.4	2295.6	5400.7	8512.3	12430.4	12531.3	9214.8
72.5°	764.1	760.9	786.8	838.8	978.8	1580.2	3579.8	6922.3	10990.0	11094.1	7862.1
75°	624.3	621.1	637.3	653.5	708.9	1060.0	2113.4	5212.1	8870.0	8671.7	5898.2
77.5°	526.8	523.5	539.7	542.9	565.8	731.6	1203.0	3430.3	5917.8	5576.3	3323.0
80°	445.5	442.1	461.6	468.1	484.5	536.5	692.6	1856.5	2971.9	2815.7	1586.8
82.5°	334.9	348.0	383.7	399.9	419.5	396.7	429.2	819.3	1378.5	1316.8	689.3
85°	162.6	191.9	289.3	322.0	344.7	250.4	292.7	386.9	621.1	591.8	279.6
87.5°	55.2	48.8	172.4	204.9	224.3	113.7	162.6	214.5	256.8	234.1	87.8
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°	1541.2	1541.2	1541.2	1541.2	1541.2	1541.2	1541.2	1541.2	1541.2	1541.2	1541.2
2.5°	1557.4	1508.8	1437.2	1382.0	1346.1	1316.8	1303.8	1300.6	1294.1	1290.9	1290.9
5°	1590.0	1502.1	1391.7	1333.2	1316.8	1303.8	1310.4	1313.6	1313.6	1313.6	1313.6
7.5°	1638.8	1515.3	1382.0	1342.8	1339.6	1339.6	1359.1	1368.8	1375.3	1375.3	1375.3
10°	1703.7	1538.0	1398.1	1365.7	1375.3	1382.0	1404.6	1417.6	1424.2	1427.3	1430.6
12.5°	1791.6	1586.8	1430.6	1404.6	1417.6	1420.8	1437.2	1443.7	1450.1	1453.4	1453.4
15°	1908.5	1658.2	1482.7	1450.1	1453.4	1450.1	1450.1	1443.7	1440.4	1440.4	1446.9
17.5°	2028.9	1726.5	1528.1	1482.7	1469.6	1443.7	1424.2	1408.0	1398.1	1391.7	1394.9
20°	2149.3	1788.3	1554.2	1489.2	1453.4	1411.1	1375.3	1352.6	1339.6	1326.5	1333.2
22.5°	2269.6	1846.8	1563.9	1469.6	1417.6	1355.9	1316.8	1281.2	1251.8	1232.4	1235.6
25°	2402.8	1911.9	1563.9	1446.9	1368.8	1303.8	1255.1	1196.5	1154.3	1138.1	1144.5
27.5°	2536.2	1967.2	1547.7	1404.6	1313.6	1248.6	1177.0	1108.8	1082.7	1072.9	1076.2
30°	2669.5	2009.4	1511.9	1352.6	1255.1	1183.5	1089.3	1043.7	1011.2	985.3	988.5
32.5°	2802.8	2038.7	1463.2	1287.6	1193.3	1102.3	1024.2	972.1	913.7	881.1	884.4
35°	2955.7	2061.4	1404.6	1222.6	1124.9	1030.7	972.1	887.6	825.9	799.9	793.4
37.5°	3115.0	2077.7	1342.8	1151.0	1056.8	978.8	920.1	816.1	757.6	721.8	718.6
40°	3287.3	2084.2	1268.0	1076.2	991.6	946.2	852.0	773.9	673.1	650.4	650.4
42.5°	3492.2	2081.0	1193.3	1001.5	920.1	871.4	803.2	767.3	679.6	656.8	643.7
45°	3726.2	2081.0	1112.0	913.7	848.5	777.2	747.8	725.1	666.5	676.3	682.8
47.5°	3992.8	2074.5	1014.5	842.2	790.1	728.3	712.0	663.3	640.5	647.0	653.5
50°	4360.3	2084.2	926.7	783.6	747.8	695.7	676.3	650.4	640.5	643.7	640.5
52.5°	4870.7	2051.6	842.2	747.8	715.3	647.0	647.0	643.7	647.0	643.7	643.7
55°	5150.3	1980.1	780.4	728.3	692.6	624.3	637.3	643.7	650.4	647.0	647.0
57.5°	5547.0	1931.4	731.6	715.3	679.6	617.8	630.8	643.7	647.0	643.7	643.7
60°	6015.2	1898.8	699.2	718.6	669.7	617.8	634.1	643.7	640.5	637.3	637.3
62.5°	6558.3	1885.8	676.3	728.3	660.1	621.1	634.1	643.7	630.8	627.6	627.6
65°	6763.1	1768.9	647.0	734.9	666.5	621.1	630.8	634.1	617.8	614.5	611.2
67.5°	6447.7	1567.3	604.7	721.8	686.0	621.1	621.1	617.8	598.4	594.9	588.5
70°	5742.1	1300.6	539.7	679.6	699.2	624.3	608.1	591.8	572.3	572.3	559.3
72.5°	4701.6	1024.2	455.3	604.7	689.3	634.1	582.0	559.3	536.5	536.5	523.5
75°	3388.0	764.1	364.2	503.9	647.0	630.8	549.6	520.3	494.2	491.0	474.8
77.5°	1931.4	536.5	295.9	393.5	575.5	614.5	520.3	474.8	445.5	435.7	425.9
80°	991.6	360.8	240.6	308.8	478.0	568.9	497.5	422.7	390.1	374.0	357.6
82.5°	471.5	240.6	185.3	227.6	360.8	497.5	468.1	364.2	328.4	308.8	289.3
85°	211.3	143.1	123.5	146.3	256.8	386.9	413.0	299.1	256.8	322.0	237.3
87.5°	68.4	65.0	65.0	68.4	123.5	169.2	302.4	221.2	204.9	169.2	143.1
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)