

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: P265599

Luminaire Tested: **ARCH-L-AF72-120-D-U-T2R-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265599
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-AF72-120-D-U-T2R-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 530mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14511.2 lumens
Efficiency: N/A
Efficacy: 118.0 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): 123
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

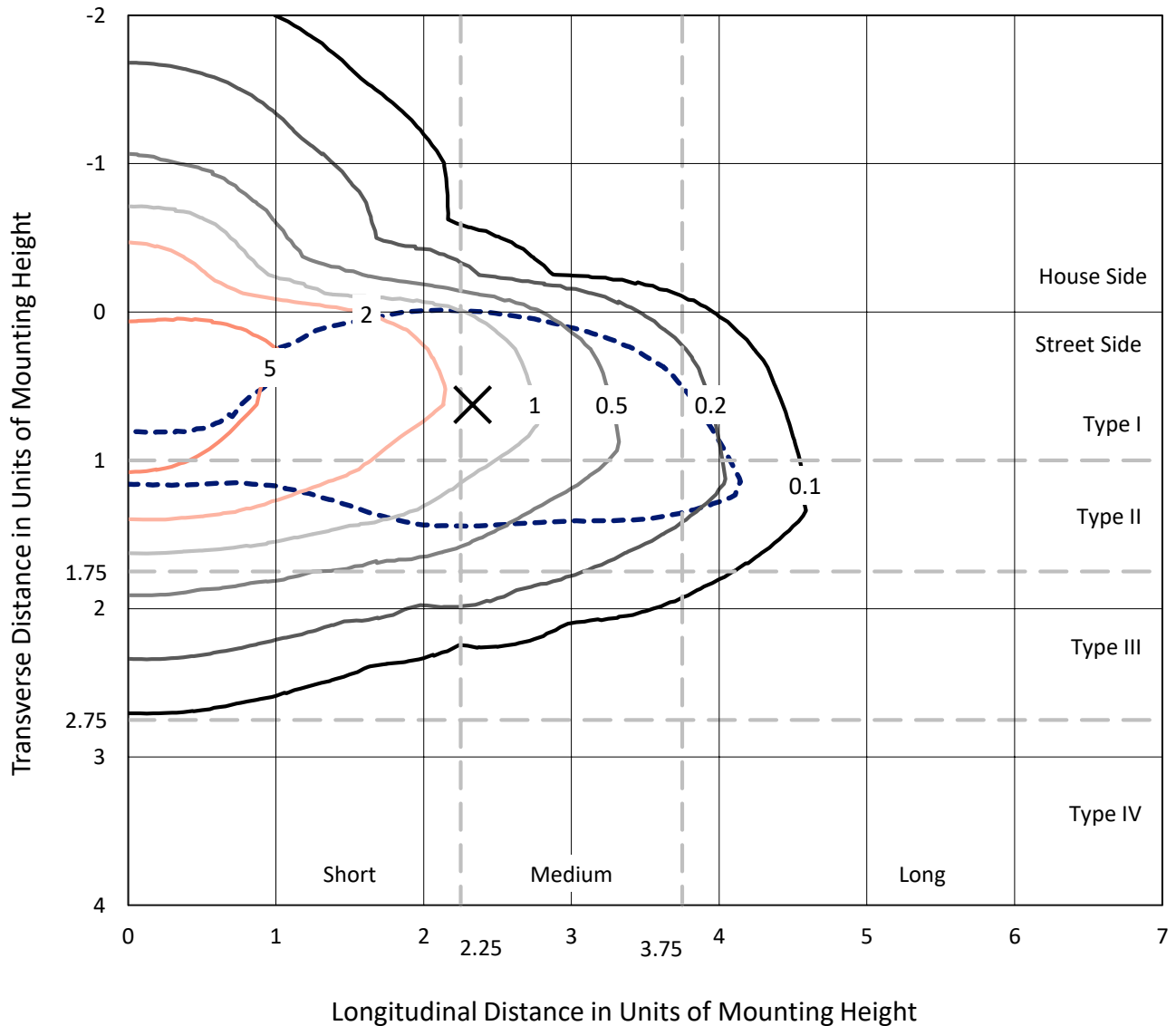


REPORT NUMBER: P265599

CATALOG NUMBER: ARCH-L-AF72-120-D-U-T2R-7027

Iso-Footcandle Lines of Horizontal Illumination

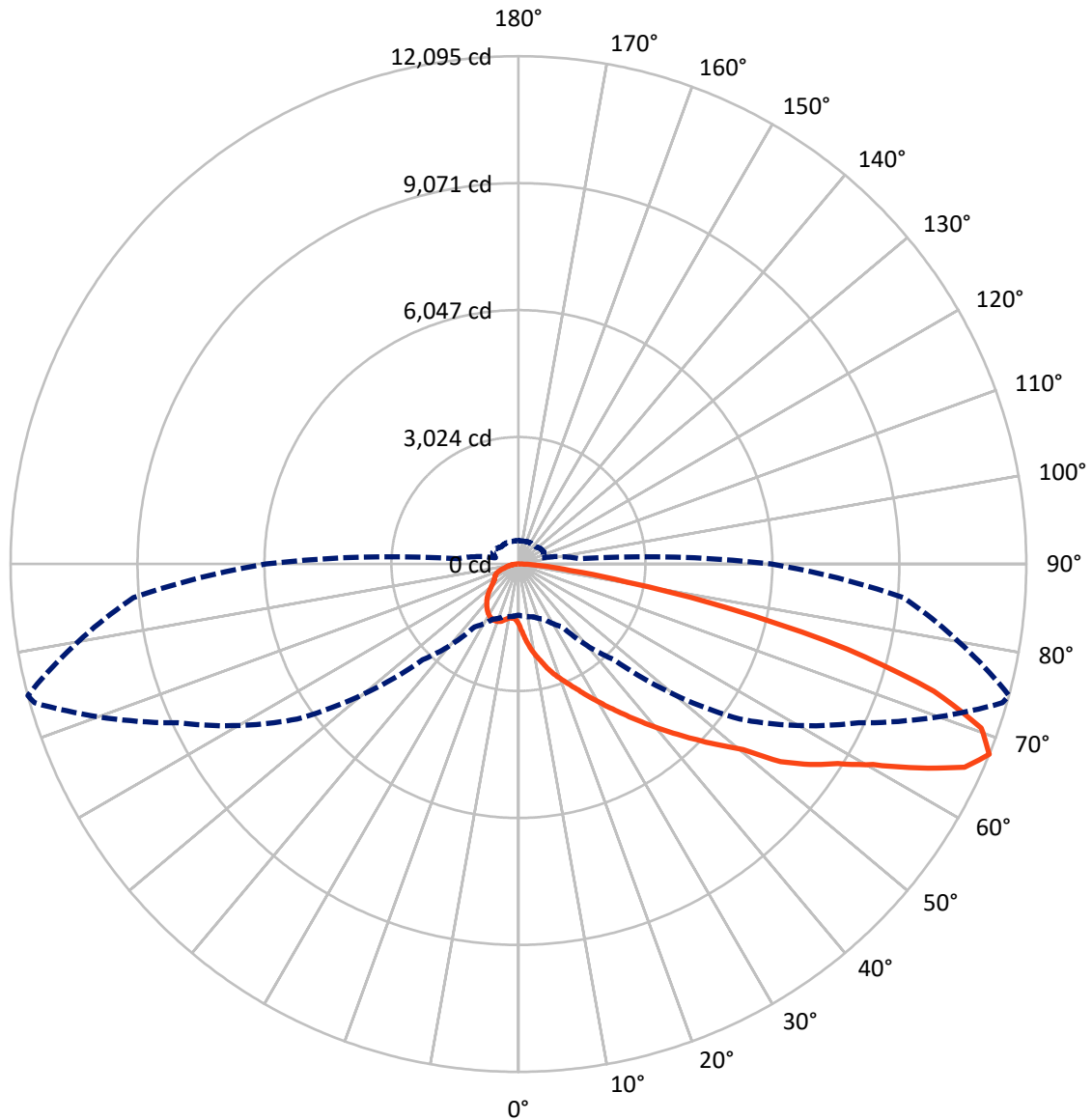
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.5 fc
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P265599
CATALOG NUMBER: ARCH-L-AF72-120-D-U-T2R-7027

Luminous Intensity Polar Plot



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

REPORT NUMBER: P265599

CATALOG NUMBER: ARCH-L-AF72-120-D-U-T2R-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2478.0	0.0	2478.0
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	12033.2	0.0	12033.2
	% Fixture	82.9	0.0	82.9
Total	Lumens	14511.2	0.0	14511.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.9	1.2
10°-20°	610.5	4.2
20°-30°	1113.5	7.7
30°-40°	1827.6	12.6
40°-50°	2643.0	18.2
50°-60°	3114.8	21.5
60°-70°	3026.8	20.9
70°-80°	1682.5	11.6
80°-90°	323.5	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°	14511.2	100.0
0°-180°	14511.2	100.0

Coefficient of Utilization



REPORT NUMBER: P265599

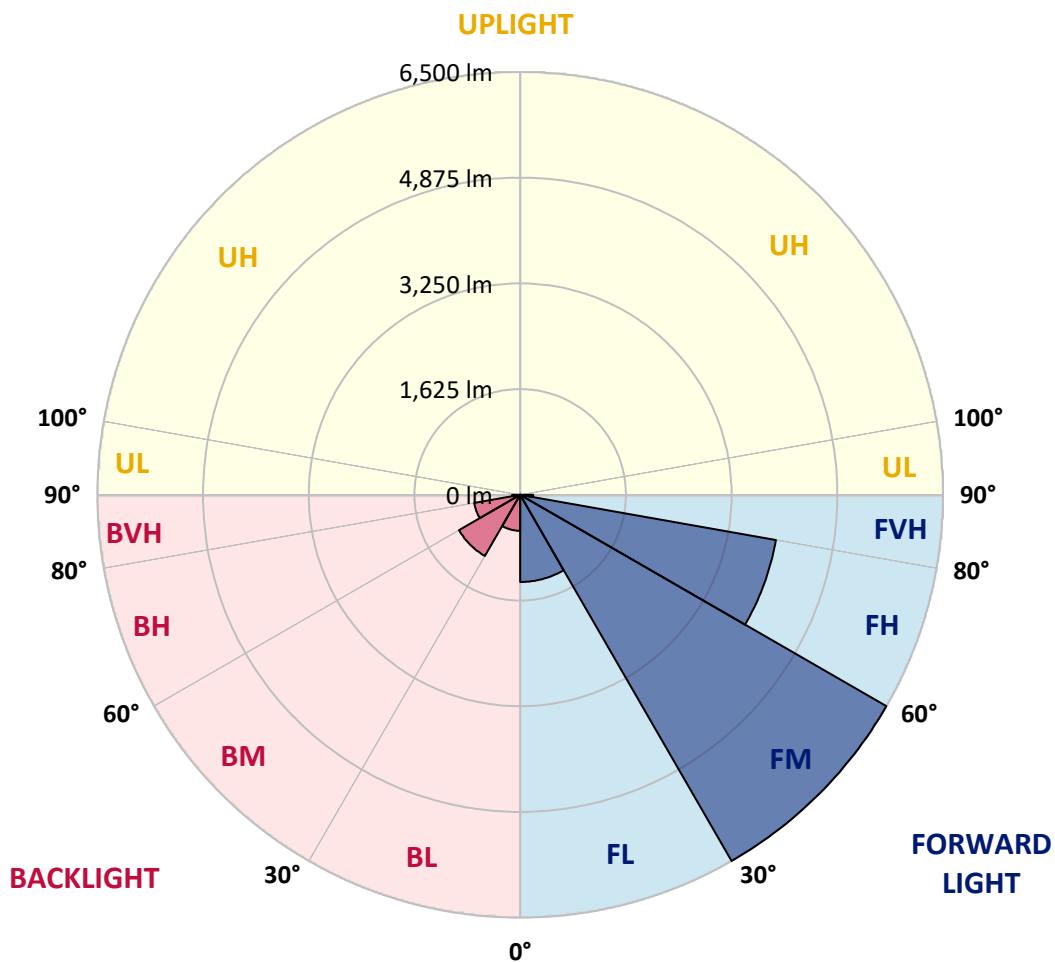
CATALOG NUMBER: ARCH-L-AF72-120-D-U-T2R-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1339.8	9.2			
FM (30°-60°)	6500.3	44.8			
FH (60°-80°)	3991.9	27.5			G2/5000
FVH (80°-90°)	201.3	1.4			G2/225
BL (0°-30°)	553.1	3.8	B2/1000		
BM (30°-60°)	1085.2	7.5	B2/2500		
BH (60°-80°)	717.5	4.9	B2/1000		G2/1000
BVH (80°-90°)	122.2	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





REPORT NUMBER: P265599
 CATALOG NUMBER: ARCH-L-AF72-120-D-U-T2R-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1437.8	1437.8	1437.8	1437.8	1437.8	1437.8	1437.8	1437.8	1437.8	1437.8	1437.8
2.5°	2038.6	2044.6	2032.4	2005.1	1965.9	1893.0	1829.3	1717.0	1616.9	1604.7	1498.6
5°	2396.5	2402.5	2387.4	2354.1	2311.6	2232.6	2144.8	1999.2	1838.3	1808.0	1583.5
7.5°	2642.3	2645.2	2627.1	2593.8	2560.3	2481.5	2393.5	2229.8	2032.4	2008.3	1692.8
10°	2851.6	2857.7	2833.3	2812.1	2775.8	2696.8	2605.9	2432.9	2229.8	2196.4	1805.0
12.5°	3045.8	3051.8	3036.6	3018.5	3006.3	2933.4	2833.3	2627.1	2408.6	2372.2	1938.5
15°	3176.1	3182.2	3185.3	3209.6	3224.6	3173.2	3073.0	2848.5	2602.7	2569.4	2096.3
17.5°	3139.8	3154.9	3200.4	3288.3	3382.5	3385.5	3303.5	3067.0	2793.9	2757.5	2257.0
20°	3033.5	3045.8	3100.3	3233.8	3418.9	3524.9	3519.0	3288.3	2972.9	2933.4	2405.7
22.5°	3121.6	3136.7	3136.7	3218.6	3400.7	3597.8	3676.8	3506.9	3152.0	3115.5	2554.3
25°	3497.7	3506.9	3443.2	3409.7	3476.5	3658.4	3807.1	3743.4	3370.4	3327.9	2715.0
27.5°	4022.5	4007.3	3928.5	3795.0	3722.1	3770.7	3922.4	3968.0	3622.1	3570.6	2881.9
30°	4544.3	4535.3	4444.3	4265.2	4101.4	3998.3	4049.7	4168.1	3895.1	3834.4	3042.6
32.5°	5032.8	5017.6	4917.4	4708.1	4523.1	4331.9	4231.8	4350.1	4186.3	4116.6	3221.7
35°	5481.6	5442.2	5342.1	5123.8	4932.7	4750.5	4504.9	4523.1	4501.9	4429.1	3418.9
37.5°	5845.7	5815.4	5706.2	5502.8	5299.7	5126.7	4869.0	4720.2	4841.5	4771.8	3646.4
40°	6167.3	6133.8	6021.7	5818.4	5630.3	5466.5	5263.3	4959.9	5223.9	5145.0	3901.2
42.5°	6409.9	6385.7	6294.8	6094.6	5912.5	5763.9	5663.8	5263.3	5621.2	5545.3	4180.3
45°	6540.4	6516.1	6467.5	6306.8	6139.9	6024.8	6033.7	5624.3	6036.8	5973.1	4510.8
47.5°	6379.7	6397.8	6440.3	6409.9	6306.8	6252.3	6364.4	5997.4	6500.9	6440.3	4869.0
50°	5948.8	5967.0	6137.0	6346.3	6382.6	6449.4	6661.7	6428.1	6992.3	6943.9	5311.8
52.5°	4890.2	4990.3	5460.4	5961.1	6303.8	6579.8	6992.3	7068.3	7820.6	7820.6	6094.6
55°	3694.9	3782.9	4319.8	5193.6	5997.4	6592.0	7235.0	7502.0	8418.1	8430.4	6504.0
57.5°	2994.1	3048.8	3312.7	4207.7	5354.3	6440.3	7523.2	7875.3	8915.7	8970.4	7031.8
60°	2429.8	2460.3	2633.1	3255.0	4465.5	6030.7	7729.6	8409.2	9625.6	9701.3	7705.3
62.5°	1953.6	1983.9	2099.2	2472.3	3503.7	5263.3	7693.2	8964.2	10572.1	10696.4	8588.1
65°	1559.3	1592.7	1668.5	1899.0	2596.7	4310.7	7320.0	9249.4	11551.8	11673.2	9173.5
67.5°	1216.5	1246.8	1298.4	1450.0	1829.3	3224.6	6437.3	8949.0	11991.7	12094.9	9203.9
70°	919.1	934.3	976.7	1074.0	1307.5	2141.6	5038.9	7941.9	11597.4	11691.4	8597.1
72.5°	712.9	709.9	734.2	782.7	913.0	1474.3	3340.0	6458.5	10253.6	10350.6	7335.2
75°	582.5	579.3	594.6	609.8	661.3	988.9	1971.8	4862.9	8275.6	8090.6	5502.8
77.5°	491.5	488.4	503.6	506.6	527.8	682.5	1122.4	3200.4	5521.2	5202.7	3100.3
80°	415.6	412.6	430.7	436.8	451.9	500.5	646.2	1732.2	2772.7	2627.1	1480.3
82.5°	312.5	324.6	358.0	373.2	391.3	370.1	400.5	764.5	1286.3	1228.6	643.1
85°	151.6	179.0	270.0	300.4	321.6	233.6	273.1	360.9	579.3	552.1	260.9
87.5°	51.6	45.5	160.7	191.1	209.3	106.2	151.6	200.2	239.7	218.4	81.9
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: P265599

CATALOG NUMBER: ARCH-L-AF72-120-D-U-T2R-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1437.8	1437.8	1437.8	1437.8	1437.8	1437.8	1437.8	1437.8	1437.8	1437.8	1437.8
2.5°	1453.1	1407.6	1340.8	1289.2	1255.9	1228.6	1216.5	1213.4	1207.3	1204.4	1204.4
5°	1483.5	1401.5	1298.4	1243.8	1228.6	1216.5	1222.6	1225.6	1225.6	1225.6	1225.6
7.5°	1528.9	1413.7	1289.2	1252.9	1249.8	1249.8	1268.0	1277.1	1283.1	1283.1	1283.1
10°	1589.6	1435.0	1304.5	1274.1	1283.1	1289.2	1310.4	1322.7	1328.8	1331.7	1334.8
12.5°	1671.4	1480.3	1334.8	1310.4	1322.7	1325.7	1340.8	1346.9	1352.9	1356.0	1356.0
15°	1780.7	1547.2	1383.3	1352.9	1356.0	1352.9	1352.9	1346.9	1343.9	1343.9	1350.0
17.5°	1893.0	1610.8	1425.8	1383.3	1371.3	1346.9	1328.8	1313.5	1304.5	1298.4	1301.5
20°	2005.1	1668.5	1450.0	1389.4	1356.0	1316.6	1283.1	1261.9	1249.8	1237.8	1243.8
22.5°	2117.5	1723.0	1459.1	1371.3	1322.7	1265.1	1228.6	1195.3	1167.9	1149.7	1152.7
25°	2241.8	1783.8	1459.1	1350.0	1277.1	1216.5	1171.0	1116.4	1076.9	1061.7	1067.8
27.5°	2366.1	1835.2	1443.9	1310.4	1225.6	1164.9	1098.2	1034.5	1010.1	1001.2	1004.1
30°	2490.6	1874.8	1410.6	1261.9	1171.0	1104.2	1016.3	973.9	943.4	919.1	922.2
32.5°	2615.0	1902.0	1365.2	1201.4	1113.3	1028.4	955.5	907.1	852.4	822.0	825.2
35°	2757.5	1923.4	1310.4	1140.6	1049.6	961.6	907.1	828.1	770.6	746.2	740.3
37.5°	2906.1	1938.5	1252.9	1074.0	985.9	913.0	858.5	761.5	706.8	673.5	670.5
40°	3067.0	1944.6	1183.1	1004.1	925.3	882.8	794.8	722.0	627.9	606.7	606.7
42.5°	3258.1	1941.4	1113.3	934.3	858.5	813.0	749.2	715.9	634.1	612.7	600.6
45°	3476.5	1941.4	1037.5	852.4	791.8	725.0	697.8	676.6	621.8	631.0	637.1
47.5°	3725.2	1935.4	946.5	785.7	737.1	679.5	664.3	618.8	597.6	603.8	609.8
50°	4068.1	1944.6	864.6	731.1	697.8	649.1	631.0	606.7	597.6	600.6	597.6
52.5°	4544.3	1914.2	785.7	697.8	667.4	603.8	603.8	600.6	603.8	600.6	600.6
55°	4805.3	1847.5	728.0	679.5	646.2	582.5	594.6	600.6	606.7	603.8	603.8
57.5°	5175.2	1801.9	682.5	667.4	634.1	576.4	588.5	600.6	603.8	600.6	600.6
60°	5612.2	1771.5	652.2	670.5	625.0	576.4	591.5	600.6	597.6	594.6	594.6
62.5°	6118.7	1759.5	631.0	679.5	615.8	579.3	591.5	600.6	588.5	585.4	585.4
65°	6309.9	1650.2	603.8	685.5	621.8	579.3	588.5	591.5	576.4	573.4	570.3
67.5°	6015.6	1462.3	564.2	673.5	640.1	579.3	579.3	576.4	558.1	555.2	549.0
70°	5357.3	1213.4	503.6	634.1	652.2	582.5	567.3	552.1	534.0	534.0	521.7
72.5°	4386.6	955.5	424.7	564.2	643.1	591.5	543.0	521.7	500.5	500.5	488.4
75°	3161.0	712.9	339.7	470.3	603.8	588.5	512.7	485.4	461.1	458.0	443.0
77.5°	1801.9	500.5	276.0	367.0	536.9	573.4	485.4	443.0	415.6	406.6	397.4
80°	925.3	336.8	224.4	288.1	446.0	530.9	464.2	394.4	364.1	348.8	333.7
82.5°	439.9	224.4	173.0	212.4	336.8	464.2	436.8	339.7	306.4	288.1	270.0
85°	197.2	133.5	115.3	136.5	239.7	360.9	385.3	279.2	239.7	300.4	221.4
87.5°	63.7	60.6	60.6	63.7	115.3	157.7	282.1	206.3	191.1	157.7	133.5
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)