

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: P236843

Luminaire Tested: **ARCH-L-AF72-100-D-U-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236843
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-AF72-100-D-U-T2R
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 440mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14502.4 lumens
Efficiency: N/A
Efficacy: 142.2 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

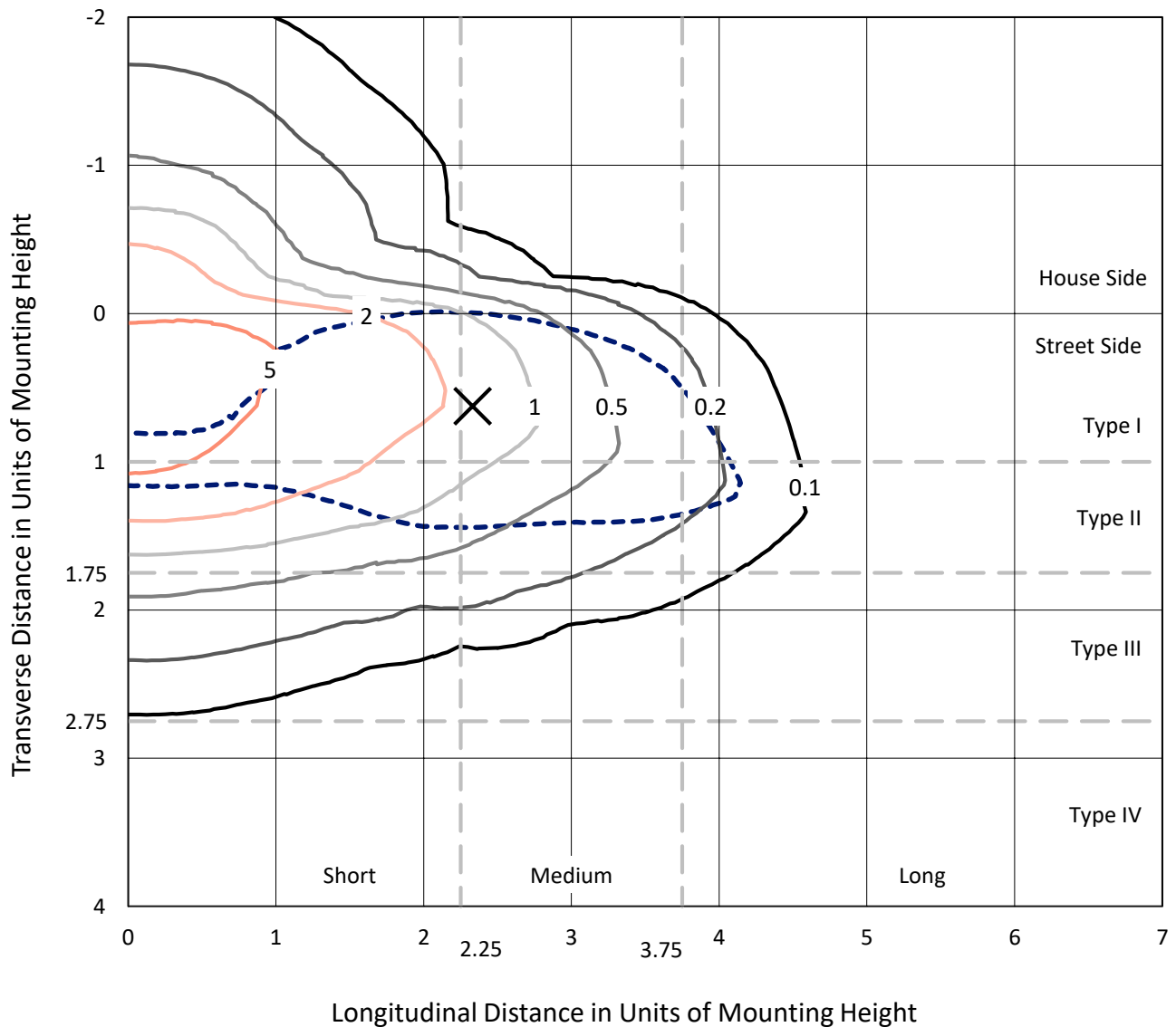
Input Watts (W): 102
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

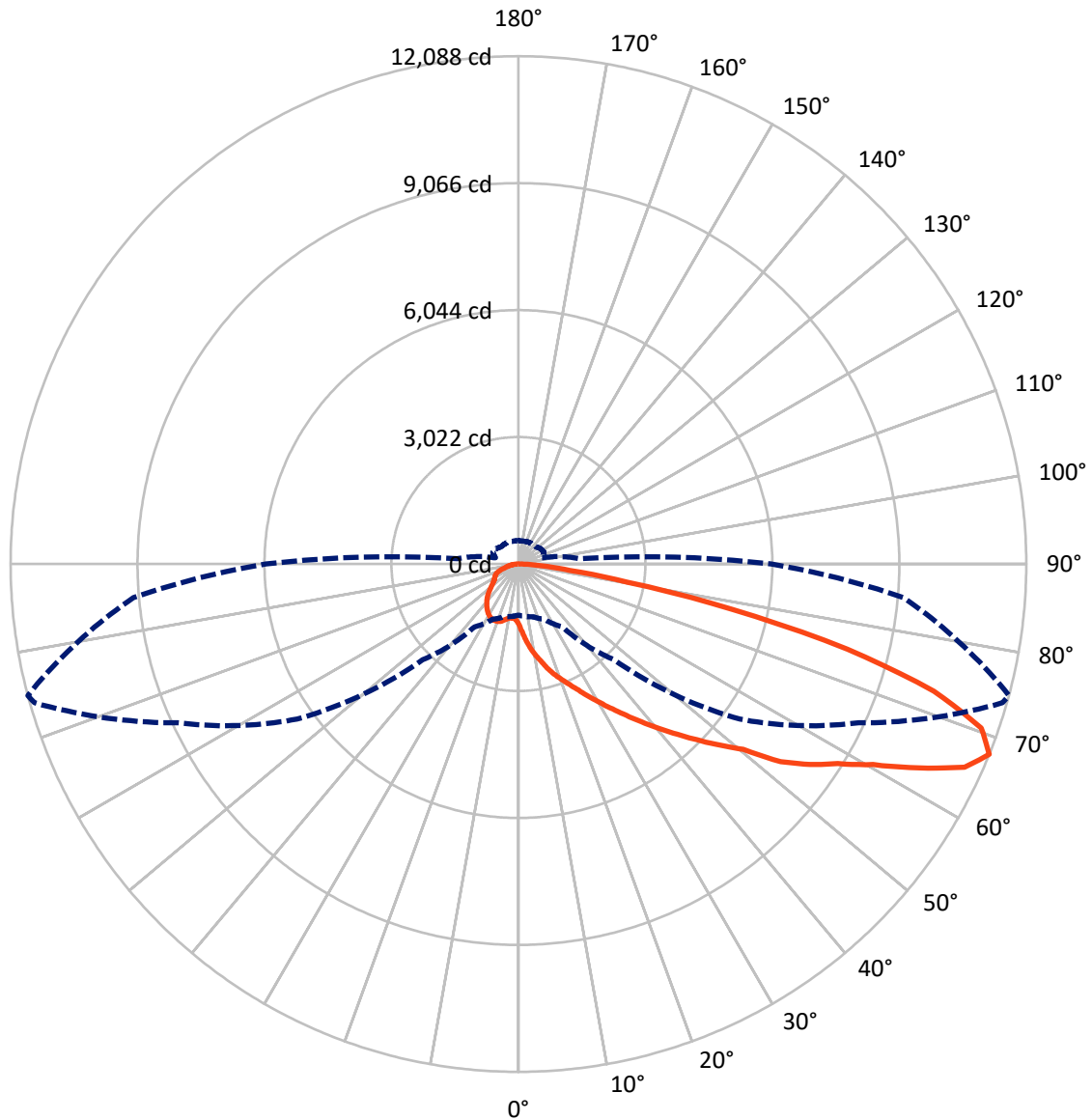


Based on 20 foot mounting height. Maximum calculated value = 7.5 fc
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P236843

CATALOG NUMBER: ARCH-L-AF72-100-D-U-T2R

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	2476.5	0.0	2476.5
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	12025.9	0.0	12025.9
	% Fixture	82.9	0.0	82.9
Total	Lumens	14502.4	0.0	14502.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.8	1.2
10°-20°	610.1	4.2
20°-30°	1112.8	7.7
30°-40°	1826.5	12.6
40°-50°	2641.4	18.2
50°-60°	3112.9	21.5
60°-70°	3025.0	20.9
70°-80°	1681.5	11.6
80°-90°	323.3	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°	14502.4	100.0
0°-180°	14502.4	100.0



REPORT NUMBER: P236843

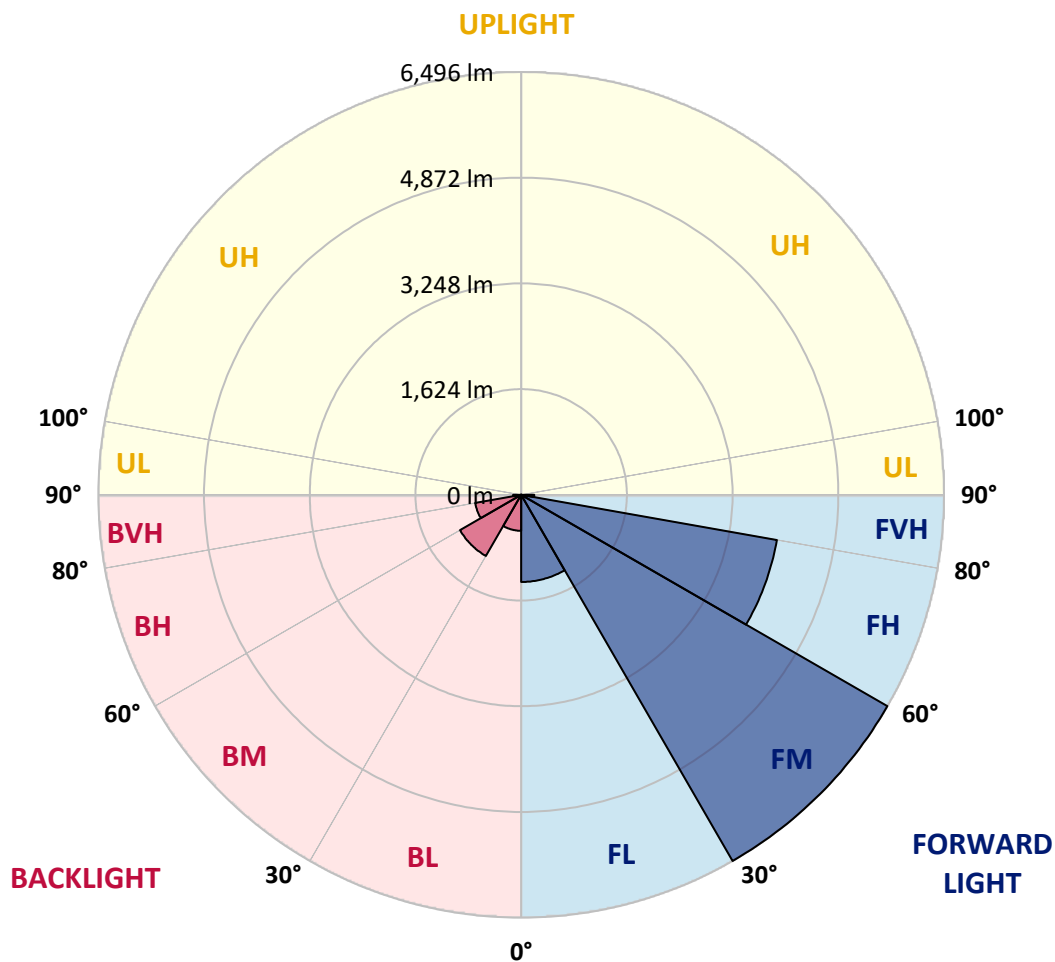
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1339.0	9.2			
FM (30°-60°)	6496.3	44.8			
FH (60°-80°)	3989.4	27.5			G2/5000
FVH (80°-90°)	201.2	1.4			G2/225
BL (0°-30°)	552.8	3.8	B2/1000		
BM (30°-60°)	1084.6	7.5	B2/2500		
BH (60°-80°)	717.1	4.9	B2/1000		G2/1000
BVH (80°-90°)	122.1	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: P236843

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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1437.0	1437.0	1437.0	1437.0	1437.0	1437.0	1437.0	1437.0	1437.0	1437.0	1437.0
2.5°	2037.3	2043.3	2031.3	2004.0	1964.6	1891.8	1828.1	1716.0	1616.0	1603.8	1497.7
5°	2395.0	2401.2	2385.9	2352.6	2310.2	2231.4	2143.4	1997.9	1837.2	1806.9	1582.6
7.5°	2640.6	2643.7	2625.5	2592.2	2558.8	2479.9	2392.1	2228.3	2031.3	2007.0	1691.8
10°	2849.8	2855.9	2831.6	2810.5	2774.0	2695.2	2604.2	2431.5	2228.3	2194.9	1803.9
12.5°	3043.9	3049.9	3034.8	3016.6	3004.4	2931.7	2831.6	2625.5	2407.2	2370.8	1937.3
15°	3174.2	3180.3	3183.3	3207.6	3222.7	3171.1	3071.1	2846.8	2601.3	2567.9	2094.9
17.5°	3137.8	3153.0	3198.5	3286.4	3380.3	3383.4	3301.6	3065.1	2792.2	2755.8	2255.6
20°	3031.7	3043.9	3098.4	3231.8	3416.8	3522.8	3516.8	3286.4	2971.1	2931.7	2404.1
22.5°	3119.7	3134.8	3134.8	3216.7	3398.5	3595.7	3674.4	3504.7	3150.0	3113.6	2552.7
25°	3495.6	3504.7	3441.0	3407.7	3474.4	3656.2	3804.9	3741.1	3368.3	3325.8	2713.4
27.5°	4020.1	4005.0	3926.1	3792.7	3720.0	3768.4	3920.0	3965.5	3619.9	3568.4	2880.1
30°	4541.5	4532.5	4441.4	4262.6	4098.9	3995.9	4047.4	4165.6	3892.7	3832.1	3040.8
32.5°	5029.6	5014.5	4914.5	4705.3	4520.3	4329.3	4229.3	4347.5	4183.8	4114.1	3219.7
35°	5478.3	5438.9	5338.9	5120.6	4929.6	4747.7	4502.1	4520.3	4499.1	4426.3	3416.8
37.5°	5842.2	5811.8	5702.7	5499.6	5296.4	5123.7	4866.0	4717.3	4838.7	4768.9	3644.2
40°	6163.5	6130.1	6018.0	5814.9	5626.9	5463.2	5260.0	4956.9	5220.6	5141.9	3898.8
42.5°	6406.0	6381.8	6290.8	6090.8	5908.9	5760.3	5660.3	5260.0	5617.8	5542.0	4177.7
45°	6536.5	6512.2	6463.6	6303.0	6136.3	6021.0	6030.1	5620.8	6033.2	5969.5	4508.1
47.5°	6375.7	6394.0	6436.4	6406.0	6303.0	6248.4	6360.6	5993.8	6497.0	6436.4	4866.0
50°	5945.2	5963.4	6133.2	6342.4	6378.8	6445.5	6657.7	6424.2	6988.2	6939.6	5308.6
52.5°	4887.1	4987.2	5457.1	5957.4	6299.9	6575.8	6988.2	7064.0	7815.9	7815.9	6090.8
55°	3692.6	3780.6	4317.2	5190.4	5993.8	6588.0	7230.7	7497.5	8413.1	8425.2	6500.0
57.5°	2992.3	3046.9	3310.7	4205.0	5351.1	6436.4	7518.7	7870.4	8910.3	8964.8	7027.6
60°	2428.4	2458.8	2631.5	3253.1	4462.7	6027.1	7724.9	8404.0	9619.7	9695.5	7700.6
62.5°	1952.4	1982.8	2098.0	2470.8	3501.7	5260.0	7688.5	8958.8	10565.6	10689.9	8582.9
65°	1558.4	1591.7	1667.4	1897.9	2595.1	4308.1	7315.5	9243.8	11544.8	11666.1	9168.0
67.5°	1215.8	1246.1	1297.6	1449.2	1828.1	3222.7	6433.3	8943.7	11984.5	12087.5	9198.3
70°	918.6	933.7	976.2	1073.3	1306.7	2140.4	5035.7	7937.1	11590.3	11684.3	8592.0
72.5°	712.5	709.4	733.7	782.1	912.6	1473.5	3338.0	6454.6	10247.3	10344.3	7330.8
75°	582.1	579.1	594.2	609.4	660.9	988.4	1970.6	4859.8	8270.6	8085.6	5499.6
77.5°	491.1	488.2	503.3	506.3	527.5	682.1	1121.8	3198.5	5517.8	5199.5	3098.4
80°	415.3	412.4	430.5	436.6	451.7	500.2	645.8	1731.1	2771.0	2625.5	1479.5
82.5°	312.3	324.4	357.7	372.9	391.1	369.9	400.2	764.0	1285.4	1227.8	642.7
85°	151.6	178.9	269.9	300.1	321.4	233.4	272.8	360.8	579.1	551.8	260.8
87.5°	51.6	45.5	160.7	191.0	209.2	106.1	151.6	200.1	239.5	218.3	81.8
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°	1437.0	1437.0	1437.0	1437.0	1437.0	1437.0	1437.0	1437.0	1437.0	1437.0	1437.0
2.5°	1452.2	1406.8	1340.1	1288.5	1255.2	1227.8	1215.8	1212.7	1206.7	1203.6	1203.6
5°	1482.6	1400.6	1297.6	1243.0	1227.8	1215.8	1221.8	1224.8	1224.8	1224.8	1224.8
7.5°	1528.0	1412.8	1288.5	1252.1	1249.1	1249.1	1267.2	1276.3	1282.5	1282.5	1282.5
10°	1588.6	1434.0	1303.6	1273.4	1282.5	1288.5	1309.7	1321.9	1327.9	1331.0	1333.9
12.5°	1670.5	1479.5	1333.9	1309.7	1321.9	1324.8	1340.1	1346.1	1352.1	1355.2	1355.2
15°	1779.6	1546.2	1382.5	1352.1	1355.2	1352.1	1352.1	1346.1	1343.0	1343.0	1349.2
17.5°	1891.8	1609.8	1424.9	1382.5	1370.3	1346.1	1327.9	1312.8	1303.6	1297.6	1300.6
20°	2004.0	1667.4	1449.2	1388.6	1355.2	1315.8	1282.5	1261.2	1249.1	1237.0	1243.0
22.5°	2116.2	1722.0	1458.2	1370.3	1321.9	1264.3	1227.8	1194.5	1167.2	1149.0	1152.0
25°	2240.5	1782.7	1458.2	1349.2	1276.3	1215.8	1170.3	1115.6	1076.2	1061.1	1067.1
27.5°	2364.8	1834.2	1443.1	1309.7	1224.8	1164.2	1097.5	1033.8	1009.6	1000.4	1003.5
30°	2489.0	1873.6	1409.7	1261.2	1170.3	1103.6	1015.6	973.2	942.9	918.6	921.7
32.5°	2613.3	1900.9	1364.3	1200.5	1112.7	1027.8	955.0	906.5	851.9	821.6	824.6
35°	2755.8	1922.1	1309.7	1140.0	1048.9	961.1	906.5	827.7	770.1	745.8	739.7
37.5°	2904.4	1937.3	1252.1	1073.3	985.3	912.6	857.9	761.0	706.3	673.0	670.0
40°	3065.1	1943.3	1182.3	1003.5	924.6	882.2	794.3	721.6	627.6	606.3	606.3
42.5°	3256.1	1940.3	1112.7	933.7	857.9	812.5	748.8	715.5	633.6	612.4	600.3
45°	3474.4	1940.3	1036.9	851.9	791.3	724.6	697.3	676.1	621.5	630.6	636.7
47.5°	3722.9	1934.3	945.9	785.2	736.7	679.1	664.0	618.5	597.3	603.3	609.4
50°	4065.5	1943.3	864.1	730.7	697.3	648.8	630.6	606.3	597.3	600.3	597.3
52.5°	4541.5	1913.0	785.2	697.3	667.0	603.3	603.3	600.3	603.3	600.3	600.3
55°	4802.2	1846.3	727.6	679.1	645.8	582.1	594.2	600.3	606.3	603.3	603.3
57.5°	5172.1	1800.8	682.1	667.0	633.6	576.0	588.2	600.3	603.3	600.3	600.3
60°	5608.7	1770.5	651.8	670.0	624.5	576.0	591.2	600.3	597.3	594.2	594.2
62.5°	6115.0	1758.5	630.6	679.1	615.4	579.1	591.2	600.3	588.2	585.1	585.1
65°	6306.0	1649.3	603.3	685.2	621.5	579.1	588.2	591.2	576.0	573.0	570.0
67.5°	6012.0	1461.3	564.0	673.0	639.7	579.1	579.1	576.0	557.8	554.8	548.7
70°	5354.0	1212.7	503.3	633.6	651.8	582.1	566.9	551.8	533.6	533.6	521.5
72.5°	4383.9	955.0	424.4	564.0	642.7	591.2	542.7	521.5	500.2	500.2	488.2
75°	3159.1	712.5	339.5	469.9	603.3	588.2	512.4	485.1	460.8	457.8	442.6
77.5°	1800.8	500.2	275.9	366.8	536.6	573.0	485.1	442.6	415.3	406.2	397.1
80°	924.6	336.6	224.3	288.1	445.7	530.6	463.8	394.1	363.8	348.6	333.5
82.5°	439.6	224.3	172.8	212.3	336.6	463.8	436.6	339.5	306.2	288.1	269.9
85°	197.0	133.4	115.2	136.5	239.5	360.8	385.0	279.0	239.5	300.1	221.4
87.5°	63.6	60.7	60.7	63.6	115.2	157.6	281.9	206.1	191.0	157.6	133.4
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)