

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: P265639

Luminaire Tested: **ARCH-L-AF72-160-D-U-T3-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265639
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-160-D-U-T3-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18223.2 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B3 - U0 - G3

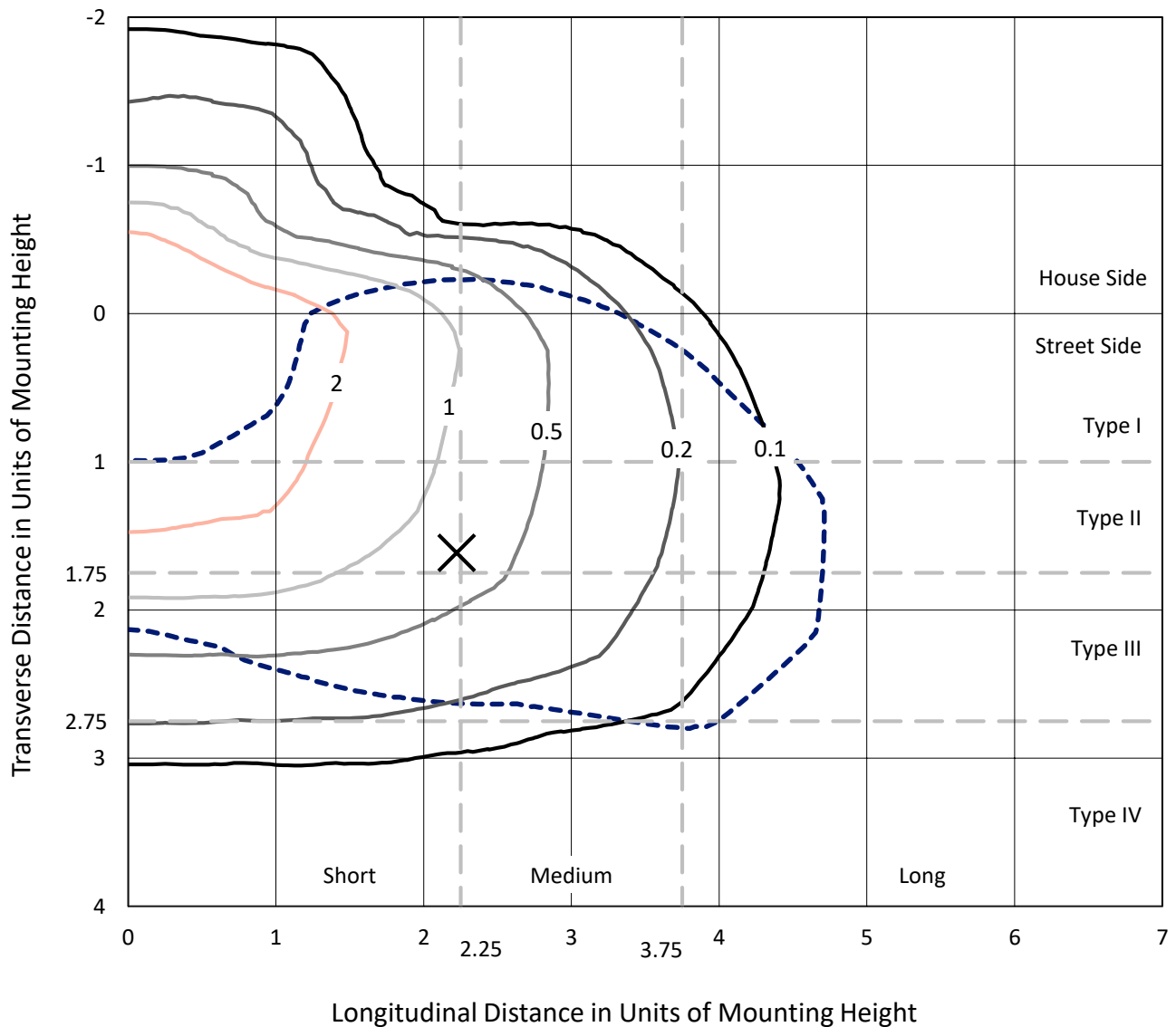
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P265639
 CATALOG NUMBER: ARCH-L-AF72-160-D-U-T3-7027

Iso-Footcandle Lines of Horizontal Illumination

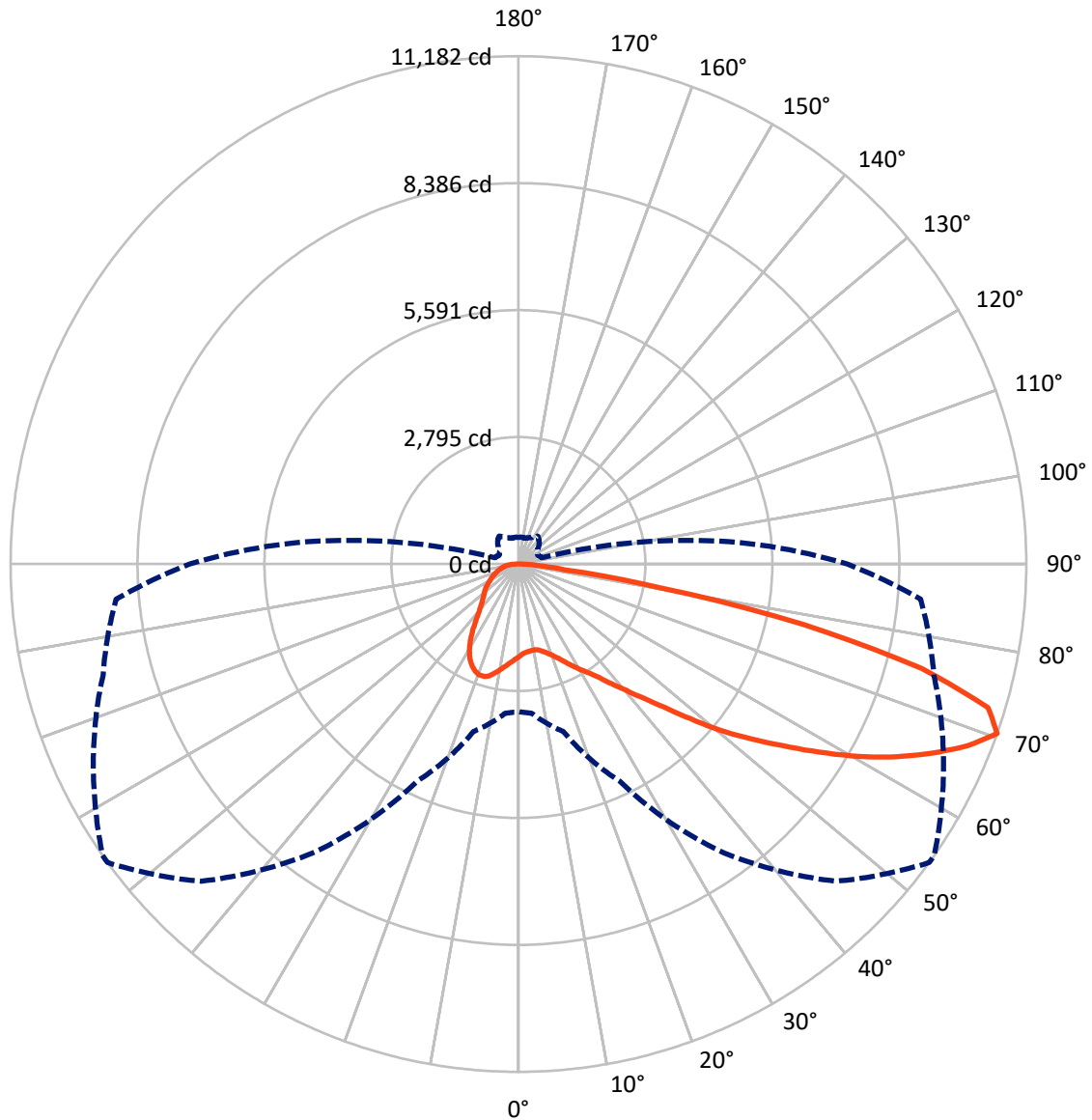
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P265639
CATALOG NUMBER: ARCH-L-AF72-160-D-U-T3-7027

Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



REPORT NUMBER: P265639

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T3-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4133.0	0.0	4133.0
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	14090.2	0.0	14090.2
	% Fixture	77.3	0.0	77.3
Total	Lumens	18223.2	0.0	18223.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.1	1.1
10°-20°	639.3	3.5
20°-30°	1110.7	6.1
30°-40°	1623.2	8.9
40°-50°	2547.5	14.0
50°-60°	3917.5	21.5
60°-70°	4786.3	26.3
70°-80°	2967.5	16.3
80°-90°	431.1	2.4
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°	18223.2	100.0
0°-180°	18223.2	100.0



REPORT NUMBER: P265639

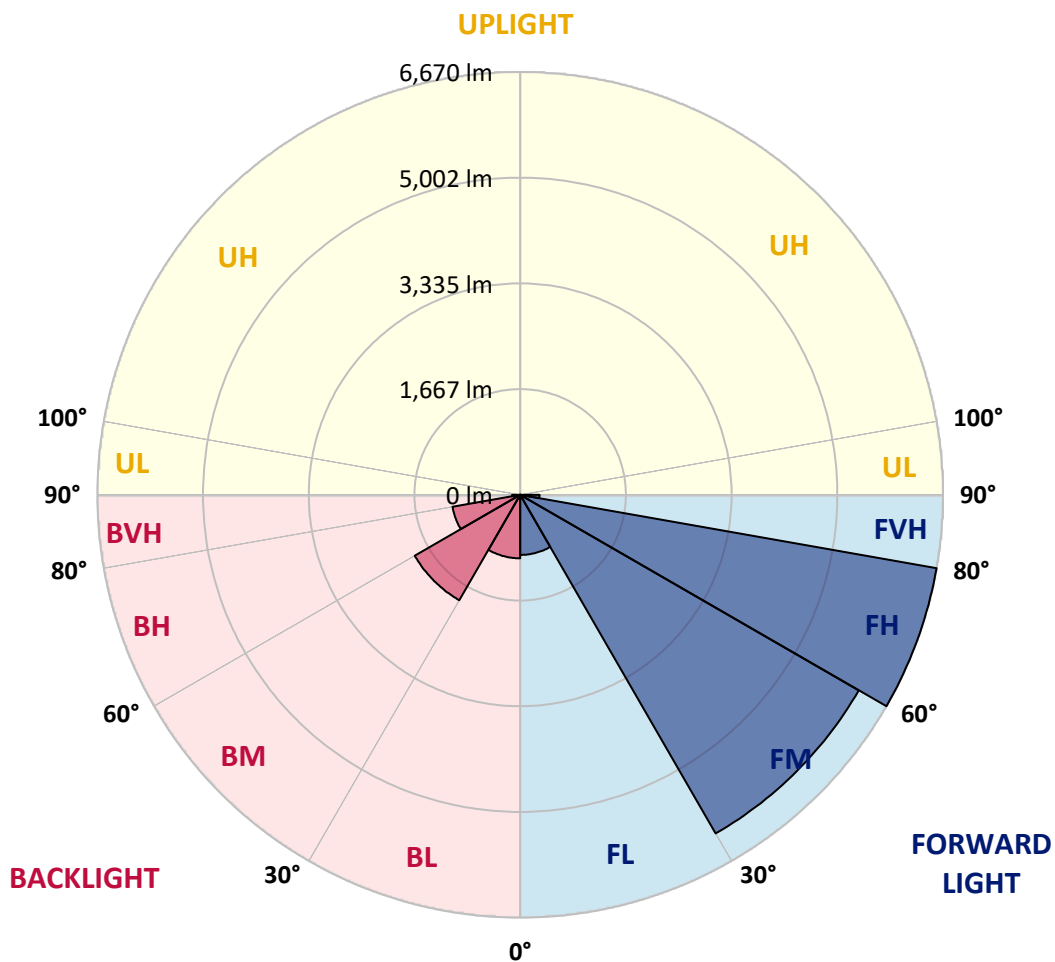
CATALOG NUMBER: ARCH-L-AF72-160-D-U-T3-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	948.1	5.2			
FM	(30°-60°)	6167.7	33.8			
FH	(60°-80°)	6670.0	36.6			G3/7500
FVH	(80°-90°)	304.4	1.7			G3/500
BL	(0°-30°)	1002.0	5.5	B3/2500		
BM	(30°-60°)	1920.5	10.5	B2/2500		
BH	(60°-80°)	1083.8	5.9	B3/2500		G3/2500
BVH	(80°-90°)	126.7	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short





REPORT NUMBER: P265639

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T3-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	2038.9	2038.9	2038.9	2038.9	2038.9	2038.9	2038.9	2038.9	2038.9	2038.9	2038.9
2.5°	1958.8	1952.0	1952.0	1962.1	1965.4	1975.5	1975.5	1978.7	1988.8	2005.5	2025.5
5°	1898.7	1895.3	1898.7	1912.0	1918.7	1938.7	1945.4	1948.8	1968.7	1995.4	2025.5
7.5°	1838.7	1835.2	1842.0	1861.9	1881.9	1912.0	1928.8	1932.1	1962.1	1998.8	2038.9
10°	1818.6	1815.2	1825.3	1842.0	1861.9	1895.3	1922.1	1925.3	1968.7	2012.2	2068.8
12.5°	1845.3	1842.0	1851.9	1868.7	1888.6	1912.0	1942.0	1945.4	2002.1	2058.8	2118.9
15°	1912.0	1912.0	1915.4	1925.3	1945.4	1965.4	1992.1	1995.4	2055.5	2122.2	2182.3
17.5°	2015.4	2008.8	2008.8	2005.5	2018.9	2028.8	2062.1	2065.6	2129.0	2189.0	2249.0
20°	2142.3	2139.0	2125.6	2109.0	2105.5	2112.3	2145.6	2148.9	2212.3	2262.4	2319.2
22.5°	2295.8	2299.1	2269.1	2232.4	2215.7	2225.7	2255.7	2259.1	2305.8	2349.2	2399.2
25°	2499.3	2489.3	2445.8	2392.5	2359.2	2359.2	2389.2	2389.2	2432.5	2459.2	2492.5
27.5°	2692.8	2672.7	2632.8	2555.9	2502.6	2512.6	2542.7	2542.7	2582.6	2592.7	2609.3
30°	2903.1	2883.0	2833.0	2736.1	2666.1	2659.4	2696.2	2692.8	2746.2	2742.9	2729.5
32.5°	3160.0	3149.9	3066.5	2943.0	2849.7	2826.2	2859.7	2863.0	2896.3	2886.3	2843.0
35°	3520.4	3517.0	3440.2	3223.4	3100.0	3056.6	3076.5	3076.5	3100.0	3073.2	2999.8
37.5°	3974.2	3980.8	3914.2	3593.8	3420.2	3346.8	3350.1	3346.8	3353.6	3323.5	3246.7
40°	4427.9	4444.6	4441.3	4054.2	3834.1	3707.2	3660.6	3653.9	3670.6	3657.2	3583.8
42.5°	5025.3	5065.4	4971.8	4621.5	4374.6	4160.9	4034.2	4017.5	4054.2	4070.8	4000.8
45°	5645.8	5632.6	5485.8	5232.2	5008.6	4735.0	4494.7	4468.0	4494.7	4544.7	4471.4
47.5°	5969.5	5959.5	5922.9	5796.0	5762.6	5449.1	5085.3	5061.9	5012.0	5082.0	4995.3
50°	6503.5	6513.5	6363.4	6349.9	6490.2	6316.6	5752.7	5699.2	5609.1	5665.9	5592.5
52.5°	6890.5	6847.2	6753.7	6870.5	7307.6	7214.2	6380.0	6356.6	6273.3	6259.8	6226.5
55°	7047.5	7047.5	7064.1	7334.3	7958.4	7834.8	7060.8	7084.2	6970.7	6877.2	6920.6
57.5°	7094.2	7114.1	7257.5	7704.8	8722.5	8318.8	7811.5	7844.9	7681.3	7494.5	7631.3
60°	6863.9	6924.0	7267.6	7915.0	9152.9	8832.6	8602.3	8612.4	8375.4	8101.9	8342.1
62.5°	6273.3	6346.6	6960.6	8001.7	9082.9	9359.8	9349.7	9373.2	9049.4	8709.2	9009.5
65°	5549.2	5622.5	6276.5	7758.1	9029.5	9736.9	10033.9	10097.3	9680.1	9223.0	9426.5
67.5°	4484.7	4581.4	5202.2	6937.3	8769.3	10047.3	10674.5	10741.3	10167.3	9490.0	9389.9
70°	3250.1	3296.8	3817.3	5272.2	7708.0	9877.0	11181.7	11178.4	10327.5	9469.9	8889.3
72.5°	1564.9	1601.7	2052.2	3273.5	5512.4	8382.2	10814.6	10878.0	10107.3	9179.6	7744.7
75°	644.1	680.7	830.8	1381.5	2893.0	5539.2	9166.2	9316.4	9179.6	8238.6	6059.6
77.5°	400.5	413.8	487.2	714.2	1321.3	2586.0	6416.8	6620.2	7274.2	6600.2	4000.8
80°	300.4	310.4	363.8	500.5	834.2	954.3	3186.6	3443.7	4408.0	3787.3	1811.9
82.5°	250.3	253.6	290.3	363.8	567.3	547.2	1021.1	1137.9	2055.5	1444.8	624.1
85°	233.6	240.2	260.2	260.2	360.4	343.7	423.8	443.9	597.4	493.9	216.9
87.5°	120.2	113.5	230.2	203.6	186.8	166.8	180.2	193.6	223.6	237.0	96.7
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: P265639

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T3-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2038.9	2038.9	2038.9	2038.9	2038.9	2038.9	2038.9	2038.9	2038.9	2038.9	2038.9
2.5°	2032.1	2042.1	2058.8	2075.5	2095.6	2118.9	2132.2	2148.9	2162.3	2155.7	2152.2
5°	2042.1	2058.8	2095.6	2129.0	2169.0	2215.7	2245.8	2279.1	2305.8	2312.4	2302.4
7.5°	2058.8	2088.9	2139.0	2199.1	2252.4	2312.4	2359.2	2405.8	2439.2	2445.8	2445.8
10°	2098.9	2132.2	2199.1	2279.1	2342.5	2405.8	2459.2	2495.9	2525.9	2539.2	2539.2
12.5°	2155.7	2195.6	2275.8	2372.6	2442.5	2502.6	2532.6	2549.3	2562.7	2576.0	2579.4
15°	2222.3	2265.7	2362.5	2465.8	2539.2	2569.3	2569.3	2566.0	2566.0	2572.7	2579.4
17.5°	2289.2	2335.9	2435.8	2545.9	2592.7	2576.0	2552.7	2542.7	2535.9	2532.6	2542.7
20°	2359.2	2405.8	2505.9	2609.3	2596.0	2525.9	2492.5	2469.3	2449.1	2439.2	2452.6
22.5°	2435.8	2479.2	2582.6	2652.8	2552.7	2445.8	2382.6	2345.8	2312.4	2292.5	2305.8
25°	2525.9	2569.3	2669.5	2666.1	2475.9	2325.8	2225.7	2165.6	2129.0	2109.0	2109.0
27.5°	2632.8	2669.5	2766.2	2632.8	2369.2	2165.6	2018.9	1962.1	1952.0	1935.4	1935.4
30°	2742.9	2772.9	2856.3	2555.9	2222.3	1955.4	1795.3	1768.6	1771.8	1755.2	1758.5
32.5°	2856.3	2886.3	2909.7	2442.5	2032.1	1718.5	1611.6	1591.6	1588.4	1575.0	1561.7
35°	3016.5	3059.8	2916.3	2289.2	1801.9	1521.5	1444.8	1424.8	1404.8	1358.1	1358.1
37.5°	3260.0	3306.8	2899.6	2098.9	1564.9	1368.1	1298.1	1271.3	1238.0	1191.2	1174.5
40°	3593.8	3593.8	2863.0	1885.4	1374.8	1244.6	1177.9	1144.5	1107.8	1061.1	1051.0
42.5°	3987.5	3894.2	2806.2	1668.4	1234.6	1161.1	1101.1	1064.4	1021.1	967.7	960.9
45°	4448.0	4194.4	2726.1	1474.8	1131.1	1111.2	1074.5	1011.0	937.7	880.9	870.8
47.5°	4895.1	4464.7	2649.5	1338.0	1044.4	1091.1	1061.1	954.3	854.2	774.2	764.2
50°	5385.7	4705.0	2559.4	1224.6	977.6	1077.7	1044.4	870.8	760.9	704.1	697.4
52.5°	5876.2	4948.6	2462.6	1104.5	920.9	1051.0	1004.3	810.8	757.5	680.7	670.8
55°	6393.3	5232.2	2349.2	971.0	854.2	997.7	950.9	807.4	780.8	680.7	657.4
57.5°	6897.2	5545.9	2165.6	840.9	780.8	917.6	931.0	787.5	730.9	674.1	647.4
60°	7454.4	5879.4	1861.9	730.9	717.4	850.9	904.2	744.2	674.1	654.1	640.8
62.5°	7901.6	6179.8	1454.8	654.1	664.0	797.5	870.8	717.4	650.7	634.1	630.7
65°	8095.2	6186.4	1044.4	587.3	610.7	747.5	837.5	694.1	630.7	624.1	620.6
67.5°	7891.6	5846.1	734.2	523.9	554.0	700.8	794.2	670.8	610.7	614.0	607.3
70°	7234.2	5128.8	537.2	463.9	500.5	650.7	747.5	640.8	587.3	594.0	584.0
72.5°	6053.0	3997.5	430.5	413.8	457.1	597.4	700.8	607.3	550.7	554.0	534.0
75°	4471.4	2649.5	360.4	370.5	407.1	547.2	640.8	564.0	510.5	497.2	483.8
77.5°	2659.4	1361.4	297.0	323.7	363.8	487.2	573.9	510.5	467.2	443.9	433.8
80°	1097.8	550.7	243.6	273.7	317.0	433.8	507.3	447.1	417.2	393.7	380.4
82.5°	437.1	270.3	193.6	223.6	266.9	377.1	443.9	393.7	363.8	347.0	310.4
85°	166.8	133.5	130.2	156.8	200.2	290.3	367.0	330.3	307.0	263.7	253.6
87.5°	66.7	60.0	60.0	76.7	113.5	183.6	263.7	230.2	240.2	190.3	193.6
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)