

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: P265659

Luminaire Tested: **ARCH-L-AF72-180-D-U-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265659
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-180-D-U-T4W-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19472.6 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 181
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

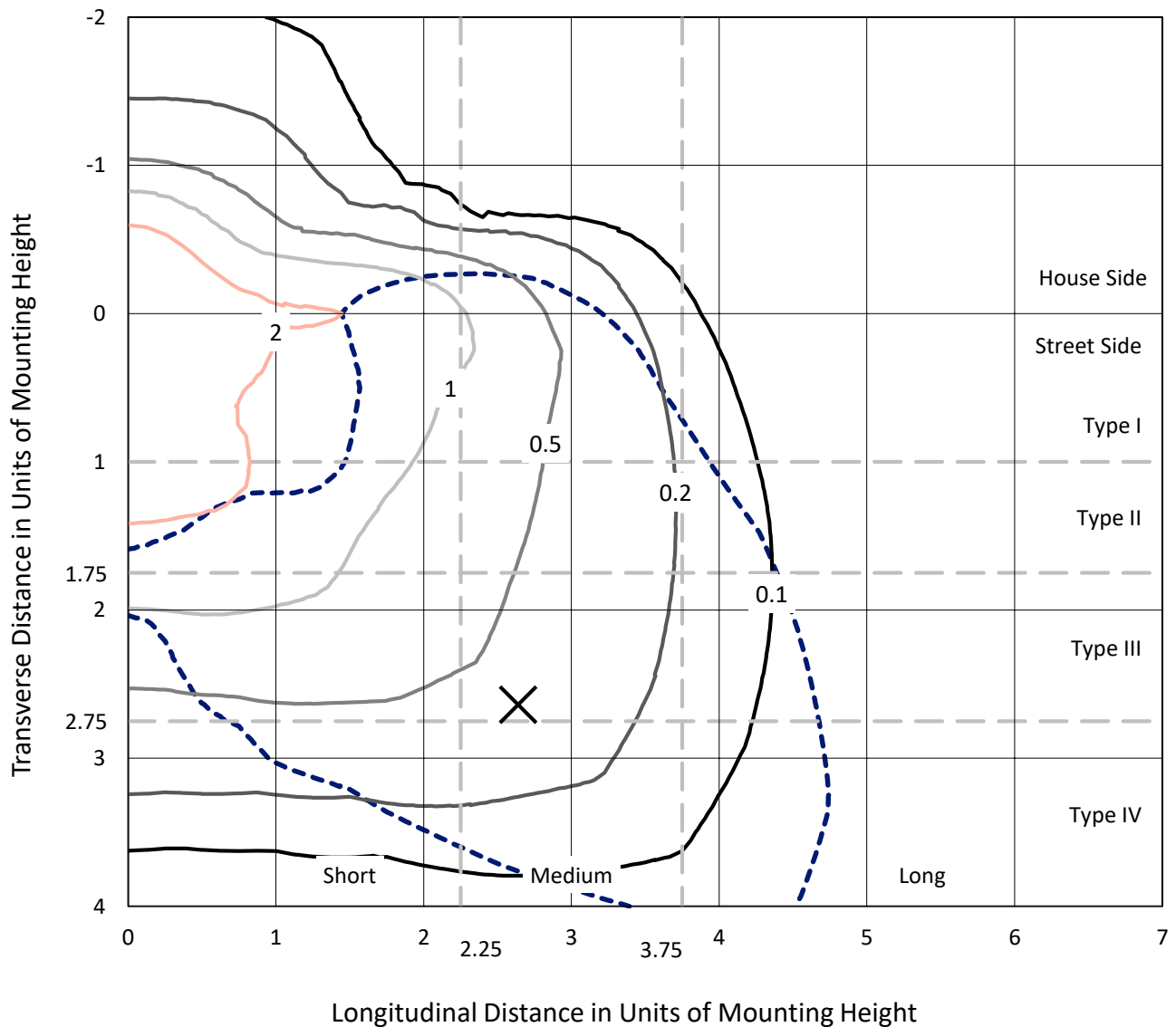


REPORT NUMBER: P265659

CATALOG NUMBER: ARCH-L-AF72-180-D-U-T4W-7027

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

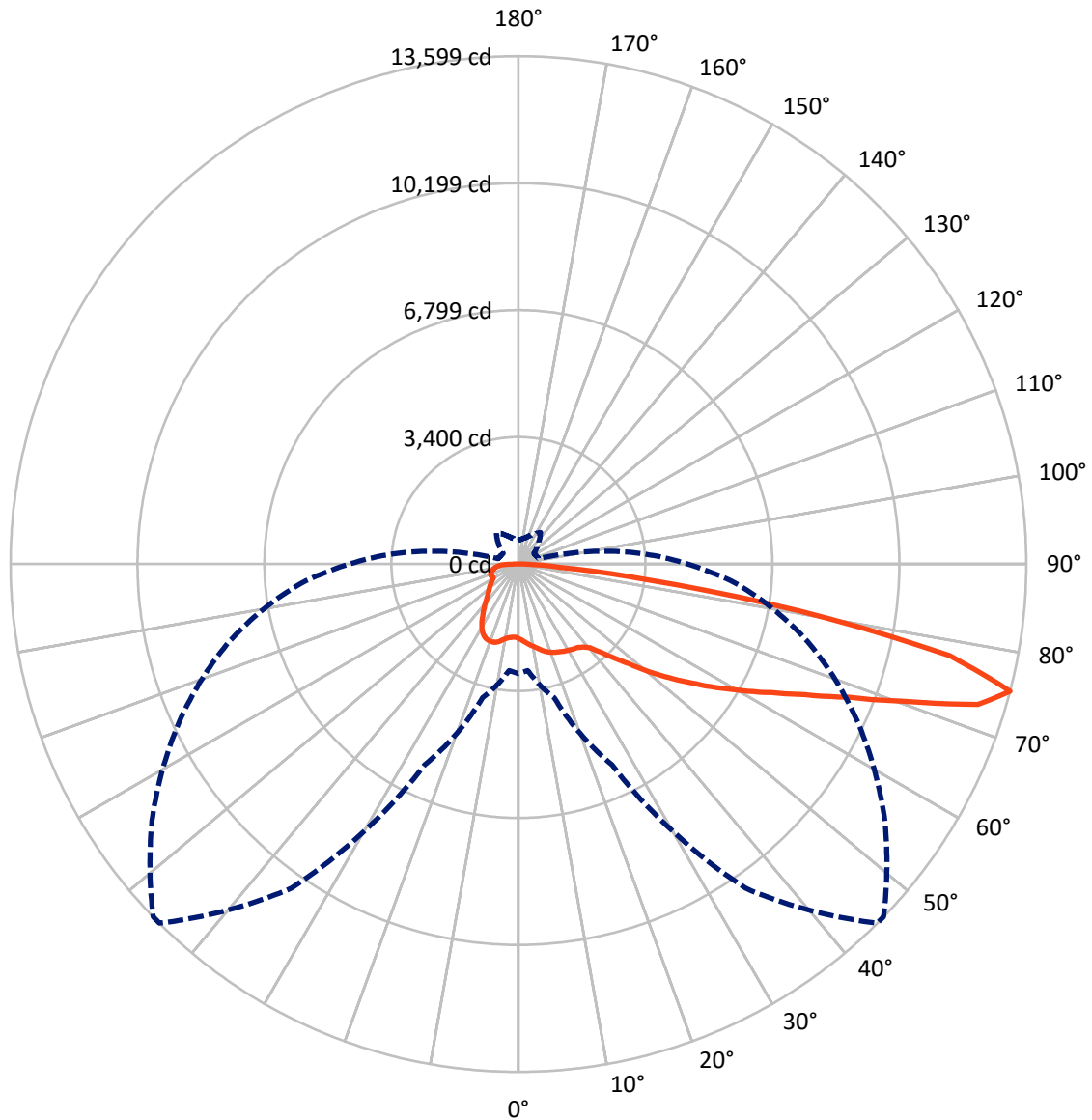


Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P265659

CATALOG NUMBER: ARCH-L-AF72-180-D-U-T4W-7027

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical



REPORT NUMBER: P265659

CATALOG NUMBER: ARCH-L-AF72-180-D-U-T4W-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4511.0	0.0	4511.0
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	14961.6	0.0	14961.6
	% Fixture	76.8	0.0	76.8
Total	Lumens	19472.6	0.0	19472.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.8	1.0
10°-20°	641.1	3.3
20°-30°	1100.1	5.6
30°-40°	1538.6	7.9
40°-50°	2256.9	11.6
50°-60°	3515.7	18.1
60°-70°	5058.8	26.0
70°-80°	4406.8	22.6
80°-90°	756.8	3.9
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°	19472.6	100.0
0°-180°	19472.6	100.0



REPORT NUMBER: P265659

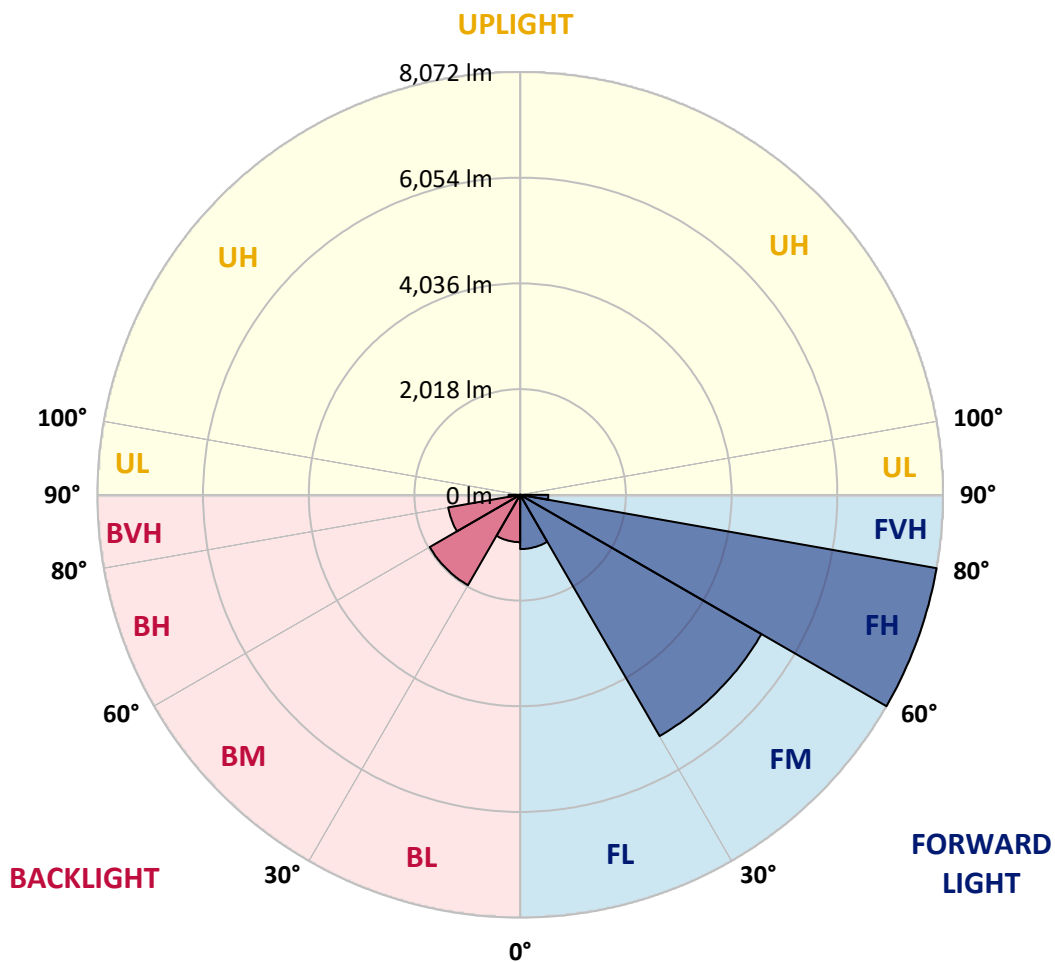
CATALOG NUMBER: ARCH-L-AF72-180-D-U-T4W-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1035.5	5.3			
FM	(30°-60°)	5317.6	27.3			
FH	(60°-80°)	8071.6	41.5			G4/12000
FVH	(80°-90°)	537.0	2.8			G4/750
BL	(0°-30°)	903.5	4.6	B2/1000		
BM	(30°-60°)	1993.6	10.2	B2/2500		
BH	(60°-80°)	1394.0	7.2	B3/2500		G3/2500
BVH	(80°-90°)	219.9	1.1			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Medium





REPORT NUMBER: P265659

CATALOG NUMBER: ARCH-L-AF72-180-D-U-T4W-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1996.3	1996.3	1996.3	1996.3	1996.3	1996.3	1996.3	1996.3	1996.3	1996.3	1996.3
2.5°	2094.7	2079.5	2079.5	2068.2	2068.2	2049.3	2041.7	2037.8	2018.9	2007.6	1996.3
5°	2215.8	2197.0	2193.2	2166.7	2155.4	2113.6	2109.8	2083.3	2049.3	2015.2	1988.7
7.5°	2325.7	2314.5	2295.4	2268.9	2234.9	2181.9	2178.0	2136.3	2079.5	2034.1	1996.3
10°	2405.3	2397.8	2371.3	2337.1	2299.2	2246.2	2242.3	2197.0	2128.9	2075.8	2022.8
12.5°	2500.1	2488.7	2454.6	2409.2	2367.5	2318.2	2314.5	2276.6	2200.8	2132.5	2064.3
15°	2590.9	2575.8	2534.1	2488.7	2443.2	2401.4	2401.4	2359.8	2280.3	2200.8	2121.2
17.5°	2636.3	2628.8	2587.1	2537.9	2500.1	2469.7	2465.8	2427.9	2348.4	2265.2	2178.0
20°	2651.5	2655.3	2617.4	2564.4	2537.9	2522.7	2518.9	2492.4	2405.3	2325.7	2242.3
22.5°	2647.8	2659.2	2628.8	2571.9	2564.4	2564.4	2564.4	2534.1	2465.8	2386.3	2303.1
25°	2662.8	2678.0	2655.3	2587.1	2587.1	2602.3	2602.3	2587.1	2526.6	2458.3	2374.9
27.5°	2715.9	2727.3	2708.3	2613.7	2617.4	2640.2	2636.3	2640.2	2602.3	2537.9	2454.6
30°	2780.3	2795.4	2772.7	2655.3	2651.5	2674.3	2674.3	2693.2	2666.7	2598.4	2530.3
32.5°	2954.5	2950.8	2878.8	2700.8	2689.3	2712.2	2712.2	2731.0	2715.9	2662.8	2598.4
35°	3473.4	3416.7	3257.6	2848.4	2734.9	2746.2	2746.2	2780.3	2787.9	2746.2	2689.3
37.5°	4003.7	3984.8	3863.6	3242.4	2901.5	2818.3	2814.4	2863.6	2897.8	2863.6	2825.8
40°	4537.9	4522.7	4496.2	3769.0	3250.0	2947.0	2935.7	2977.3	3037.9	3015.2	2992.4
42.5°	5034.1	5026.6	5053.1	4287.9	3693.2	3223.5	3189.4	3140.1	3227.3	3219.7	3219.7
45°	5424.2	5443.2	5458.3	4772.8	4174.2	3579.6	3537.9	3371.2	3488.7	3518.9	3541.7
47.5°	5644.0	5659.1	5712.1	5246.2	4655.3	3992.4	3962.2	3689.3	3844.7	3935.7	4000.1
50°	5958.4	5916.6	5962.1	5708.4	5234.9	4530.3	4447.0	4117.4	4314.4	4473.5	4625.1
52.5°	6261.4	6193.2	6231.1	6242.4	5894.0	5056.7	4969.8	4621.2	4867.5	5117.5	5386.3
55°	6534.1	6530.3	6568.1	6761.5	6530.3	5621.2	5522.7	5178.0	5534.1	5803.1	6257.7
57.5°	6753.7	6791.6	6958.4	7363.6	7265.1	6234.9	6125.1	5825.8	6246.3	6515.1	7268.9
60°	7011.5	7071.9	7348.6	7875.0	7935.6	6878.9	6765.1	6549.3	6977.2	7250.0	8439.3
62.5°	7098.4	7185.6	7753.8	8412.8	8636.3	7583.3	7481.1	7337.1	7746.3	7992.4	9606.0
65°	6519.0	6685.6	7977.3	8689.5	9390.2	8431.9	8344.7	8219.8	8511.4	8674.3	10397.7
67.5°	6359.9	6435.5	7541.7	9087.2	10098.4	9522.8	9435.6	9219.8	9227.3	9159.1	10655.3
70°	6136.4	6219.8	7094.8	9386.4	11113.7	11015.1	10909.1	10272.7	9882.7	9469.8	10147.8
72.5°	5227.2	5200.7	6113.7	8579.5	11602.2	12863.6	12738.7	11405.3	10367.5	9200.8	8564.4
75°	2935.7	2859.8	3708.4	5935.6	10594.7	13598.5	13594.7	11977.3	10026.5	8015.1	5829.6
77.5°	852.3	829.6	1223.5	2488.7	7132.6	11814.4	11958.3	10803.0	8367.4	5757.5	3200.8
80°	401.5	409.1	526.5	821.9	3045.4	7625.1	8037.9	7113.7	5000.1	2655.3	1321.9
82.5°	253.9	257.5	359.9	530.3	1287.9	3462.2	3803.1	3200.8	1981.0	1147.8	583.3
85°	159.1	159.1	238.6	348.5	768.9	1106.1	1200.8	1090.9	848.4	625.0	318.2
87.5°	87.1	87.1	144.0	200.7	420.4	356.1	367.4	435.6	530.3	382.6	159.1
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: P265659

CATALOG NUMBER: ARCH-L-AF72-180-D-U-T4W-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1996.3	1996.3	1996.3	1996.3	1996.3	1996.3	1996.3	1996.3	1996.3	1996.3	1996.3
2.5°	1992.4	1984.8	1973.4	1969.8	1965.9	1962.1	1965.9	1973.4	1965.9	1965.9	1969.8
5°	1981.0	1973.4	1958.3	1958.3	1962.1	1965.9	1984.8	1996.3	1999.9	1999.9	1999.9
7.5°	1981.0	1969.8	1958.3	1962.1	1969.8	1984.8	2015.2	2034.1	2049.3	2053.0	2053.0
10°	1999.9	1984.8	1977.3	1984.8	2007.6	2018.9	2049.3	2079.5	2098.5	2106.0	2106.0
12.5°	2034.1	2018.9	2018.9	2034.1	2064.3	2079.5	2106.0	2128.9	2151.5	2162.8	2162.8
15°	2091.0	2072.0	2075.8	2102.3	2136.3	2151.5	2170.5	2178.0	2197.0	2212.2	2212.2
17.5°	2144.0	2125.0	2132.5	2162.8	2185.5	2193.2	2204.5	2200.8	2208.4	2219.7	2223.5
20°	2204.5	2185.5	2189.3	2208.4	2212.2	2204.5	2204.5	2193.2	2189.3	2208.4	2215.8
22.5°	2265.2	2246.2	2242.3	2231.1	2212.2	2193.2	2181.9	2170.5	2162.8	2181.9	2189.3
25°	2337.1	2310.6	2291.7	2242.3	2193.2	2159.0	2144.0	2136.3	2132.5	2151.5	2159.0
27.5°	2416.7	2390.2	2333.3	2227.3	2147.8	2091.0	2079.5	2079.5	2087.1	2098.5	2106.0
30°	2492.4	2465.8	2363.6	2193.2	2068.2	1984.8	1973.4	1984.8	2003.8	2015.2	2026.5
32.5°	2568.2	2541.7	2382.6	2140.1	1950.8	1844.7	1837.2	1856.1	1886.4	1893.9	1901.5
35°	2670.4	2643.9	2405.3	2064.3	1803.1	1689.4	1681.8	1693.1	1719.6	1731.0	1742.4
37.5°	2814.4	2799.3	2439.3	1981.0	1666.6	1541.8	1518.9	1511.4	1526.5	1522.7	1537.9
40°	3003.8	3015.2	2500.1	1871.2	1534.0	1405.3	1356.1	1333.4	1318.3	1287.9	1303.0
42.5°	3280.3	3287.8	2568.2	1746.2	1420.5	1276.5	1212.2	1170.4	1140.2	1090.9	1098.4
45°	3685.7	3621.2	2647.8	1613.6	1318.3	1174.3	1098.4	1049.2	1007.5	965.9	969.7
47.5°	4223.6	4026.6	2734.9	1503.9	1215.9	1090.9	1022.7	965.9	916.7	882.6	886.4
50°	4886.4	4530.3	2821.9	1401.5	1113.7	1026.6	965.9	905.3	856.1	821.9	818.1
52.5°	5761.4	5136.4	2878.8	1287.9	1011.3	969.7	916.7	859.9	799.2	757.6	753.8
55°	6670.5	5840.9	2928.0	1151.4	912.9	905.3	878.8	814.5	742.4	689.4	681.9
57.5°	7670.4	6594.6	2965.9	1018.9	837.1	852.3	844.6	768.9	689.4	640.1	636.4
60°	8579.5	7375.1	2844.8	901.4	768.9	799.2	806.8	742.4	700.8	712.1	715.9
62.5°	9496.3	7977.3	2382.6	814.5	723.5	765.1	829.6	825.7	806.8	825.7	829.6
65°	9825.8	8102.4	1689.4	742.4	678.0	780.3	901.4	894.0	806.8	772.7	765.1
67.5°	9640.3	7731.1	1136.4	685.5	643.9	799.2	977.3	894.0	776.6	731.1	715.9
70°	8757.5	6818.1	833.4	628.9	613.6	795.4	1018.9	890.1	761.4	712.1	693.2
72.5°	6985.0	5261.4	670.5	575.8	568.2	776.6	1041.7	882.6	746.2	693.2	670.5
75°	4522.7	3272.7	564.3	522.8	499.9	746.2	1030.3	859.9	727.3	659.0	643.9
77.5°	2098.5	1409.1	481.0	462.1	435.6	700.8	996.2	814.5	685.5	621.2	602.3
80°	977.3	666.6	405.3	401.5	390.1	662.9	950.8	761.4	636.4	583.3	553.0
82.5°	522.8	401.5	329.6	329.6	340.8	617.5	894.0	696.9	572.0	545.5	466.0
85°	276.5	231.0	238.6	257.5	291.7	545.5	818.1	628.9	499.9	416.6	405.3
87.5°	140.1	147.7	147.7	174.2	223.5	443.1	674.3	519.0	424.2	340.8	333.4
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)