

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: P265716

Luminaire Tested: **ARCH-L-AF72-250-D-U-T2R-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265716
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-AF72-250-D-U-T2R-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1070mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24704.9 lumens
Efficiency: N/A
Efficacy: 98.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B3 - U0 - G3

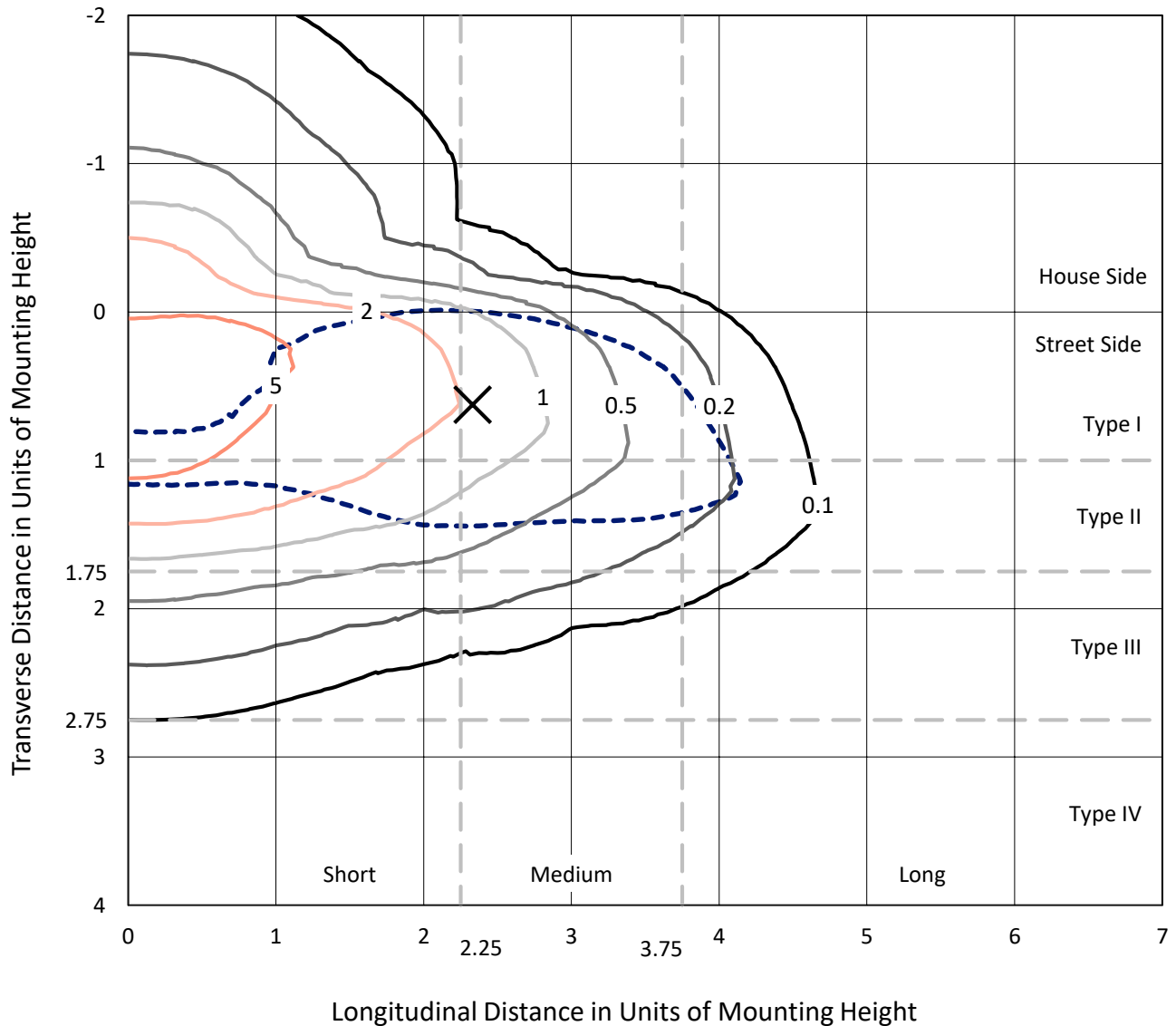
Input Watts (W): 251
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P265716
 CATALOG NUMBER: ARCH-L-AF72-250-D-U-T2R-7027

Iso-Footcandle Lines of Horizontal Illumination

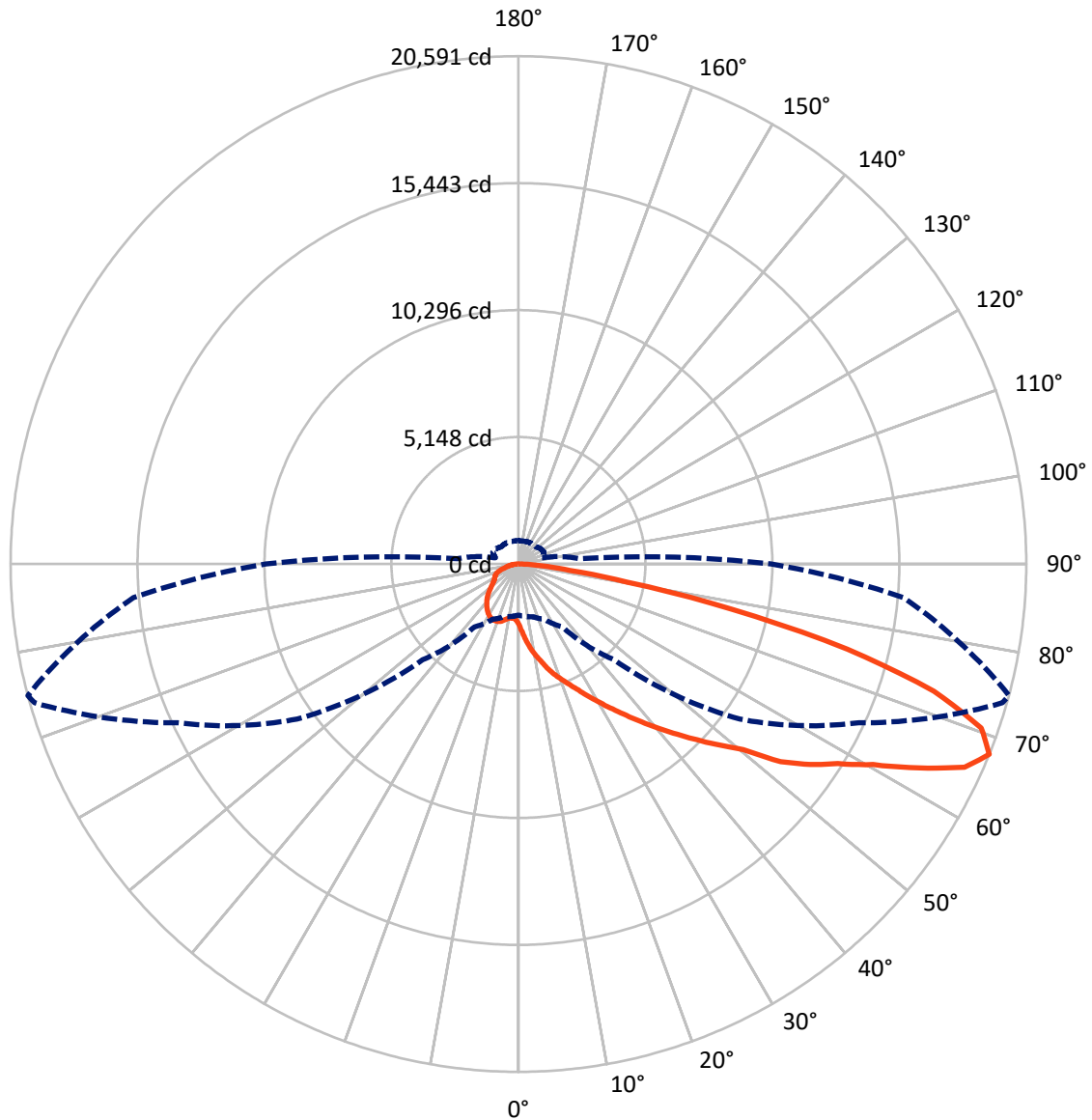
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.2 fc
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P265716
CATALOG NUMBER: ARCH-L-AF72-250-D-U-T2R-7027

Luminous Intensity Polar Plot



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



REPORT NUMBER: P265716

CATALOG NUMBER: ARCH-L-AF72-250-D-U-T2R-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4218.7	0.0	4218.7
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	20486.2	0.0	20486.2
	% Fixture	82.9	0.0	82.9
Total	Lumens	24704.9	0.0	24704.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	287.6	1.2
10°-20°	1039.3	4.2
20°-30°	1895.6	7.7
30°-40°	3111.5	12.6
40°-50°	4499.7	18.2
50°-60°	5302.9	21.5
60°-70°	5153.1	20.9
70°-80°	2864.4	11.6
80°-90°	550.8	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°	24704.9	100.0
0°-180°	24704.9	100.0

Coefficient of Utilization



REPORT NUMBER: P265716

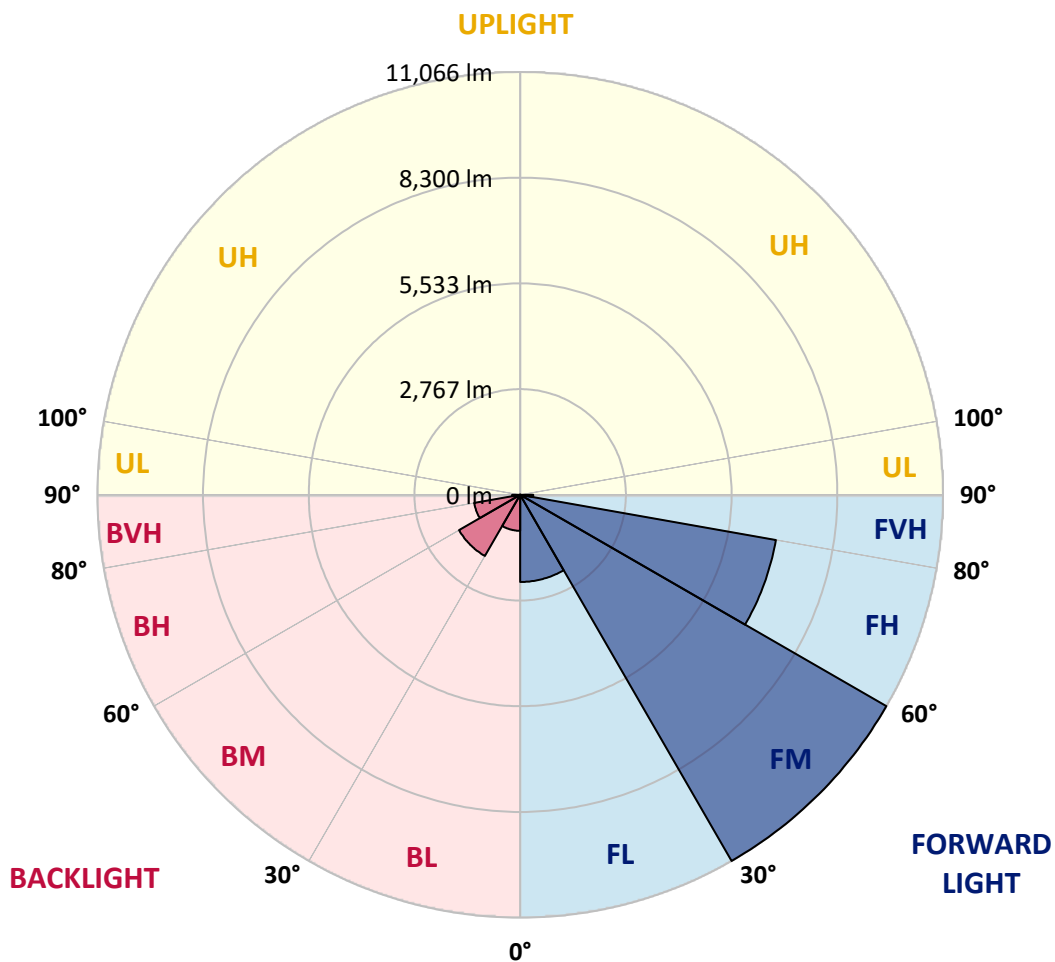
CATALOG NUMBER: ARCH-L-AF72-250-D-U-T2R-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2280.9	9.2			
FM	(30°-60°)	11066.5	44.8			
FH	(60°-80°)	6796.0	27.5			G3/7500
FVH	(80°-90°)	342.8	1.4			G3/500
BL	(0°-30°)	941.6	3.8	B2/1000		
BM	(30°-60°)	1847.6	7.5	B2/2500		
BH	(60°-80°)	1221.5	4.9	B3/2500		G3/2500
BVH	(80°-90°)	208.0	0.8			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 II Medium





REPORT NUMBER: P265716
 CATALOG NUMBER: ARCH-L-AF72-250-D-U-T2R-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	2448.1	2448.1	2448.1	2448.1	2448.1	2448.1	2448.1	2448.1	2448.1	2448.1	2448.1
2.5°	3470.6	3480.9	3460.4	3413.7	3346.6	3222.7	3114.2	2923.2	2752.8	2732.0	2551.2
5°	4080.0	4090.3	4064.6	4007.7	3935.5	3801.1	3651.4	3403.5	3129.8	3078.1	2696.0
7.5°	4498.4	4503.6	4472.5	4415.7	4358.8	4224.5	4074.8	3796.0	3460.4	3418.9	2881.9
10°	4854.7	4865.0	4823.7	4787.5	4725.7	4591.2	4436.4	4141.9	3796.0	3739.1	3072.9
12.5°	5185.2	5195.5	5169.7	5138.8	5118.2	4994.1	4823.7	4472.5	4100.7	4038.7	3300.2
15°	5407.3	5417.7	5422.8	5464.1	5489.9	5402.1	5231.6	4849.5	4431.2	4374.3	3568.7
17.5°	5345.4	5371.1	5448.6	5598.3	5758.6	5763.6	5624.2	5221.4	4756.5	4694.6	3842.4
20°	5164.5	5185.2	5278.3	5505.4	5820.5	6001.2	5990.8	5598.3	5061.3	4994.1	4095.6
22.5°	5314.4	5340.2	5340.2	5479.7	5789.4	6125.3	6259.5	5970.2	5365.9	5304.0	4348.5
25°	5954.8	5970.2	5861.8	5804.9	5918.7	6228.5	6481.5	6373.0	5737.8	5665.5	4622.3
27.5°	6848.1	6822.4	6688.2	6460.9	6337.0	6419.6	6677.8	6755.3	6166.5	6078.7	4906.4
30°	7736.6	7721.0	7566.2	7261.4	6982.5	6806.8	6894.8	7096.2	6631.3	6528.1	5180.0
32.5°	8568.0	8542.3	8371.8	8015.4	7700.5	7375.1	7204.5	7405.9	7127.2	7008.3	5484.8
35°	9332.4	9265.3	9094.8	8723.0	8397.6	8087.7	7669.4	7700.5	7664.2	7540.4	5820.5
37.5°	9952.1	9900.5	9714.6	9368.6	9022.5	8728.1	8289.1	8036.1	8242.7	8123.9	6207.8
40°	10499.6	10442.7	10251.6	9905.7	9585.5	9306.6	8960.6	8444.1	8893.4	8759.2	6641.7
42.5°	10912.8	10871.5	10716.5	10375.7	10065.8	9812.6	9642.2	8960.6	9570.0	9440.8	7116.8
45°	11134.9	11093.4	11010.9	10737.1	10453.0	10256.8	10272.4	9575.2	10277.5	10169.1	7679.7
47.5°	10861.0	10892.0	10964.4	10912.8	10737.1	10644.1	10835.3	10210.3	11067.7	10964.4	8289.1
50°	10127.8	10158.8	10447.9	10804.4	10866.3	10980.0	11341.5	10943.7	11904.3	11821.8	9043.1
52.5°	8325.3	8495.7	9296.2	10148.4	10732.1	11202.0	11904.3	12033.4	13314.3	13314.3	10375.7
55°	6290.4	6440.2	7354.3	8841.7	10210.3	11222.6	12317.5	12772.0	14331.6	14352.4	11072.9
57.5°	5097.4	5190.3	5639.6	7163.3	9115.6	10964.4	12808.2	13407.3	15178.8	15271.6	11971.5
60°	4136.9	4188.4	4482.8	5541.6	7602.3	10267.2	13159.4	14316.2	16387.2	16516.3	13117.9
62.5°	3326.0	3377.6	3573.8	4209.1	5965.0	8960.6	13097.4	15261.3	17998.6	18210.4	14621.0
65°	2654.6	2711.4	2840.5	3233.0	4420.9	7338.9	12462.1	15746.7	19666.8	19873.4	15617.8
67.5°	2071.0	2122.7	2210.4	2468.6	3114.2	5489.9	10959.2	15235.6	20415.6	20591.2	15669.3
70°	1564.8	1590.7	1663.0	1828.3	2225.9	3646.2	8578.4	13520.8	19744.1	19904.3	14636.4
72.5°	1213.7	1208.5	1249.8	1332.5	1554.5	2510.0	5686.2	10995.3	17456.3	17621.5	12488.0
75°	991.5	986.3	1012.3	1038.1	1125.8	1683.7	3357.0	8278.8	14088.9	13773.9	9368.6
77.5°	836.6	831.6	857.3	862.6	898.7	1162.0	1910.9	5448.6	9399.5	8857.3	5278.3
80°	707.5	702.4	733.3	743.6	769.5	852.1	1100.1	2949.0	4720.5	4472.5	2520.4
82.5°	531.9	552.5	609.4	635.2	666.3	630.2	681.8	1301.5	2189.8	2091.7	1094.9
85°	258.3	304.7	459.7	511.2	547.4	397.7	464.9	614.6	986.3	939.9	444.1
87.5°	87.9	77.4	273.8	325.4	356.4	180.7	258.3	340.8	408.0	371.9	139.4
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: P265716

CATALOG NUMBER: ARCH-L-AF72-250-D-U-T2R-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2448.1	2448.1	2448.1	2448.1	2448.1	2448.1	2448.1	2448.1	2448.1	2448.1	2448.1
2.5°	2473.8	2396.4	2282.8	2195.0	2138.1	2091.7	2071.0	2065.8	2055.5	2050.3	2050.3
5°	2525.4	2386.1	2210.4	2117.5	2091.7	2071.0	2081.4	2086.6	2086.6	2086.6	2086.6
7.5°	2603.0	2406.6	2195.0	2132.9	2127.8	2127.8	2158.7	2174.3	2184.6	2184.6	2184.6
10°	2706.2	2442.9	2220.8	2169.1	2184.6	2195.0	2231.1	2251.7	2262.1	2267.2	2272.4
12.5°	2845.7	2520.4	2272.4	2231.1	2251.7	2256.9	2282.8	2293.1	2303.4	2308.6	2308.6
15°	3031.6	2633.9	2355.0	2303.4	2308.6	2303.4	2303.4	2293.1	2288.0	2288.0	2298.3
17.5°	3222.7	2742.3	2427.4	2355.0	2334.3	2293.1	2262.1	2236.3	2220.8	2210.4	2215.6
20°	3413.7	2840.5	2468.6	2365.3	2308.6	2241.5	2184.6	2148.4	2127.8	2107.2	2117.5
22.5°	3604.9	2933.4	2484.2	2334.3	2251.7	2153.6	2091.7	2034.8	1988.4	1957.3	1962.5
25°	3816.5	3036.8	2484.2	2298.3	2174.3	2071.0	1993.5	1900.5	1833.4	1807.6	1817.9
27.5°	4028.4	3124.6	2458.3	2231.1	2086.6	1983.2	1869.6	1761.1	1719.8	1704.4	1709.5
30°	4240.1	3191.7	2401.4	2148.4	1993.5	1880.0	1730.1	1657.8	1606.2	1564.8	1570.1
32.5°	4451.9	3238.2	2324.1	2045.3	1895.5	1750.7	1626.8	1544.1	1451.2	1399.6	1404.8
35°	4694.6	3274.3	2231.1	1941.9	1787.0	1637.3	1544.1	1409.9	1311.9	1270.6	1260.1
37.5°	4947.7	3300.2	2132.9	1828.3	1678.6	1554.5	1461.6	1296.3	1203.4	1146.5	1141.3
40°	5221.4	3310.6	2014.2	1709.5	1575.2	1502.9	1353.1	1229.2	1069.1	1033.0	1033.0
42.5°	5546.8	3305.4	1895.5	1590.7	1461.6	1384.1	1275.7	1218.8	1079.5	1043.2	1022.6
45°	5918.7	3305.4	1766.2	1451.2	1347.9	1234.4	1187.9	1151.6	1058.7	1074.3	1084.6
47.5°	6342.2	3295.1	1611.4	1337.7	1255.0	1156.8	1131.1	1053.6	1017.4	1027.8	1038.1
50°	6925.8	3310.6	1472.0	1244.6	1187.9	1105.3	1074.3	1033.0	1017.4	1022.6	1017.4
52.5°	7736.6	3258.8	1337.7	1187.9	1136.1	1027.8	1027.8	1022.6	1027.8	1022.6	1022.6
55°	8180.7	3145.2	1239.5	1156.8	1100.1	991.5	1012.3	1022.6	1033.0	1027.8	1027.8
57.5°	8810.8	3067.7	1162.0	1136.1	1079.5	981.3	1001.9	1022.6	1027.8	1022.6	1022.6
60°	9554.5	3016.1	1110.3	1141.3	1064.0	981.3	1007.1	1022.6	1017.4	1012.3	1012.3
62.5°	10416.9	2995.5	1074.3	1156.8	1048.4	986.3	1007.1	1022.6	1001.9	996.8	996.8
65°	10742.3	2809.4	1027.8	1167.2	1058.7	986.3	1001.9	1007.1	981.3	976.1	971.0
67.5°	10241.3	2489.4	960.6	1146.5	1089.7	986.3	986.3	981.3	950.2	945.1	934.7
70°	9120.6	2065.8	857.3	1079.5	1110.3	991.5	965.8	939.9	908.9	908.9	888.3
72.5°	7468.0	1626.8	723.0	960.6	1094.9	1007.1	924.4	888.3	852.1	852.1	831.6
75°	5381.4	1213.7	578.4	800.5	1027.8	1001.9	872.9	826.4	784.9	779.9	754.0
77.5°	3067.7	852.1	470.0	625.0	914.1	976.1	826.4	754.0	707.5	692.1	676.6
80°	1575.2	573.3	382.1	490.7	759.2	903.9	790.1	671.5	619.7	593.9	568.1
82.5°	748.8	382.1	294.4	361.5	573.3	790.1	743.6	578.4	521.6	490.7	459.7
85°	335.6	227.2	196.3	232.4	408.0	614.6	655.9	475.2	408.0	511.2	377.0
87.5°	108.4	103.2	103.2	108.4	196.3	268.6	480.4	351.1	325.4	268.6	227.2
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)