

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: P265734

Luminaire Tested: **ARCH-L-AF72-270-D-U-T2R-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265734
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-AF72-270-D-U-T2R-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1155mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25983.7 lumens
Efficiency: N/A
Efficacy: 95.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 273
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

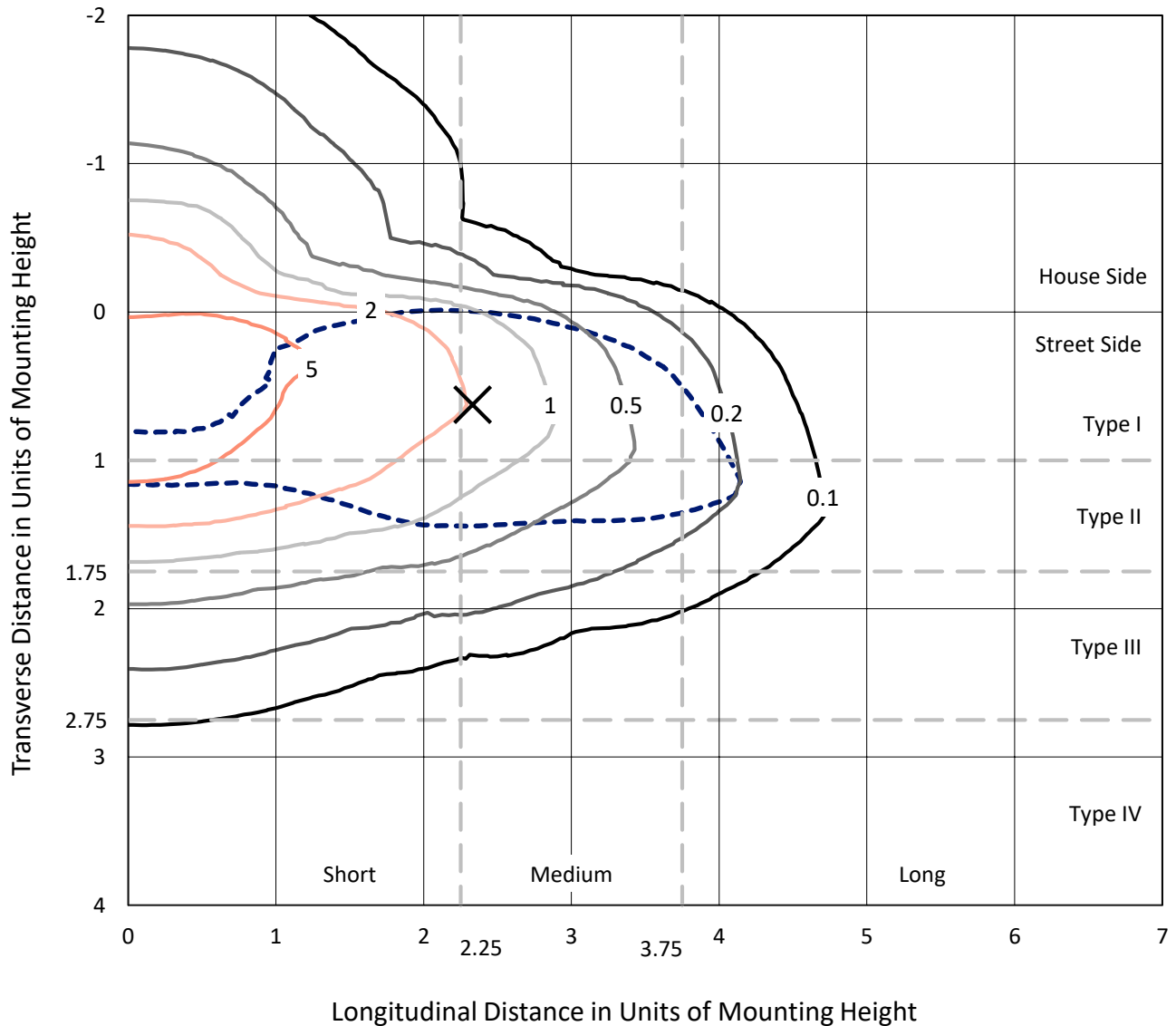


REPORT NUMBER: P265734

CATALOG NUMBER: ARCH-L-AF72-270-D-U-T2R-7027

Iso-Footcandle Lines of Horizontal Illumination

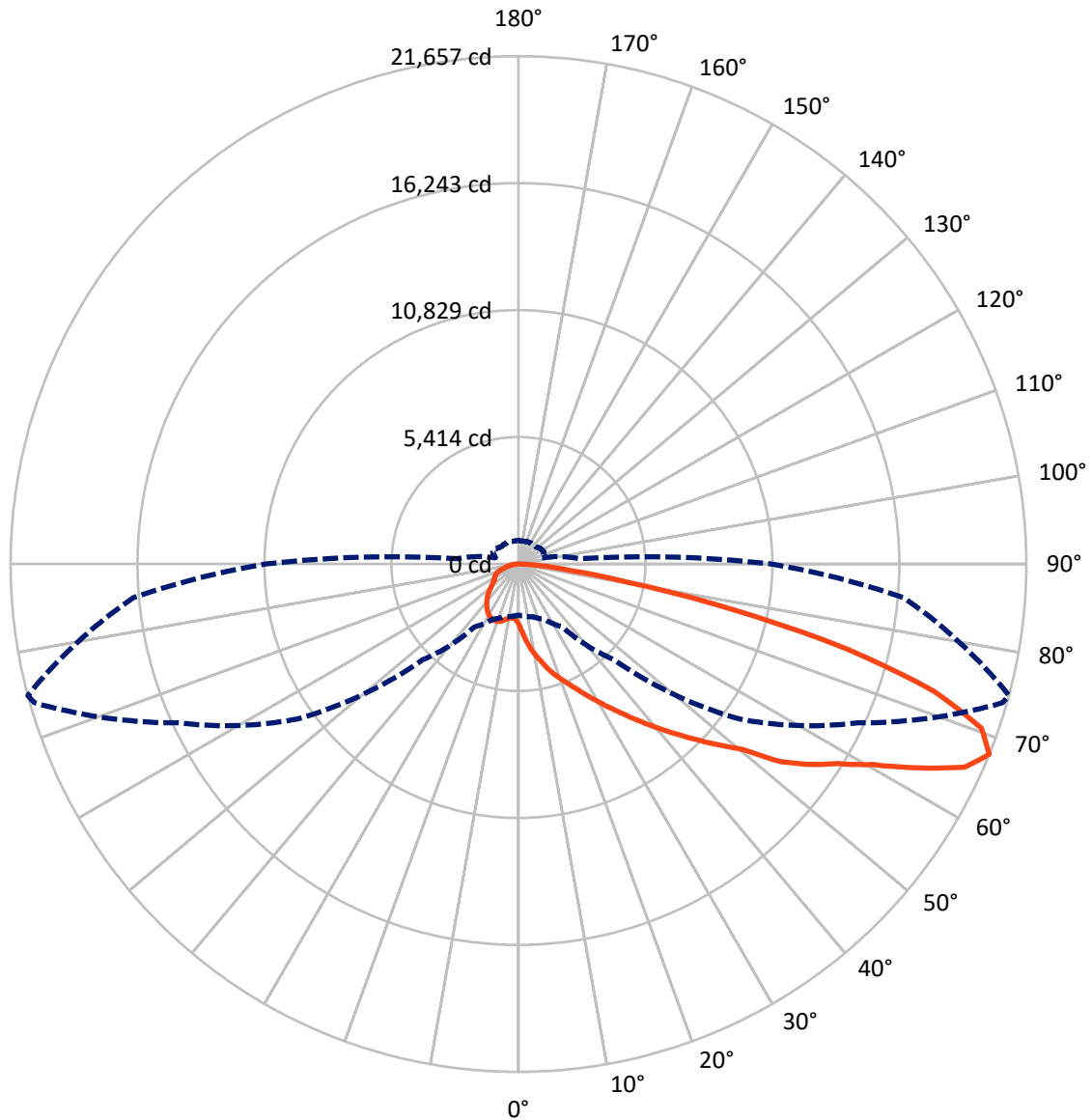
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 fc
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P265734
CATALOG NUMBER: ARCH-L-AF72-270-D-U-T2R-7027

Luminous Intensity Polar Plot



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

REPORT NUMBER: P265734

CATALOG NUMBER: ARCH-L-AF72-270-D-U-T2R-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4437.1	0.0	4437.1
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	21546.7	0.0	21546.7
	% Fixture	82.9	0.0	82.9
Total	Lumens	25983.7	0.0	25983.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	302.5	1.2
10°-20°	1093.1	4.2
20°-30°	1993.8	7.7
30°-40°	3272.6	12.6
40°-50°	4732.6	18.2
50°-60°	5577.4	21.5
60°-70°	5419.9	20.9
70°-80°	3012.7	11.6
80°-90°	579.3	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°	25983.7	100.0
0°-180°	25983.7	100.0

Coefficient of Utilization



REPORT NUMBER: P265734

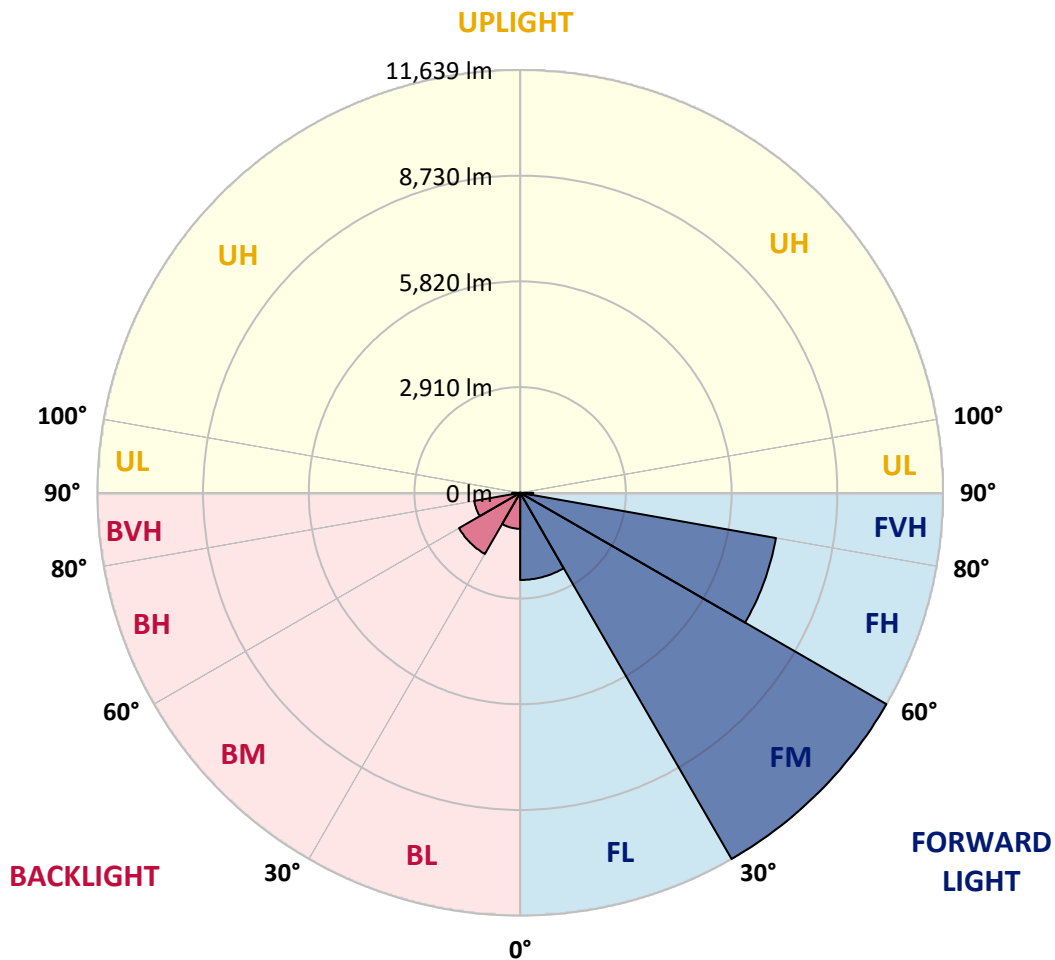
CATALOG NUMBER: ARCH-L-AF72-270-D-U-T2R-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2399.0	9.2			
FM	(30°-60°)	11639.3	44.8			
FH	(60°-80°)	7147.8	27.5			G3/7500
FVH	(80°-90°)	360.5	1.4			G3/500
BL	(0°-30°)	990.4	3.8	B2/1000		
BM	(30°-60°)	1943.2	7.5	B2/2500		
BH	(60°-80°)	1284.7	4.9	B3/2500		G3/2500
BVH	(80°-90°)	218.8	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: P265734

CATALOG NUMBER: ARCH-L-AF72-270-D-U-T2R-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	2574.7	2574.7	2574.7	2574.7	2574.7	2574.7	2574.7	2574.7	2574.7	2574.7	2574.7
2.5°	3650.3	3661.1	3639.5	3590.4	3519.9	3389.6	3275.5	3074.4	2895.1	2873.5	2683.3
5°	4291.3	4302.2	4274.9	4215.1	4139.1	3997.8	3840.3	3579.7	3291.7	3237.4	2835.5
7.5°	4731.3	4736.7	4704.1	4644.2	4584.5	4443.3	4285.9	3992.4	3639.5	3595.9	3031.1
10°	5106.1	5116.8	5073.4	5035.4	4970.2	4829.0	4666.1	4356.4	3992.4	3932.7	3232.0
12.5°	5453.7	5464.5	5437.4	5404.7	5383.1	5252.7	5073.4	4704.1	4312.9	4247.7	3471.1
15°	5687.2	5698.0	5703.5	5746.9	5774.1	5681.8	5502.6	5100.5	4660.5	4600.8	3753.5
17.5°	5622.0	5649.3	5730.6	5888.2	6056.6	6062.0	5915.3	5491.7	5002.8	4937.7	4041.4
20°	5432.0	5453.7	5551.4	5790.5	6121.8	6311.9	6301.0	5888.2	5323.3	5252.7	4307.6
22.5°	5589.4	5616.7	5616.7	5763.3	6089.3	6442.3	6583.5	6279.3	5643.8	5578.6	4573.7
25°	6263.1	6279.3	6165.2	6105.5	6225.0	6550.9	6817.1	6703.1	6034.9	5958.8	4861.5
27.5°	7202.7	7175.7	7034.4	6795.4	6665.0	6751.9	7023.5	7105.0	6485.8	6393.3	5160.4
30°	8137.0	8120.8	7957.7	7637.3	7344.0	7159.3	7251.6	7463.5	6974.6	6865.9	5448.2
32.5°	9011.5	8984.4	8805.1	8430.4	8098.9	7756.8	7577.6	7789.5	7496.0	7371.1	5768.7
35°	9815.5	9744.9	9565.6	9174.5	8832.3	8506.4	8066.4	8098.9	8061.0	7930.5	6121.8
37.5°	10467.3	10413.1	10217.4	9853.5	9489.5	9180.0	8718.2	8452.2	8669.4	8544.4	6529.2
40°	11043.1	10983.3	10782.4	10418.5	10081.7	9788.3	9424.4	8881.3	9353.8	9212.6	6985.5
42.5°	11477.6	11434.2	11271.3	10912.7	10586.9	10320.6	10141.4	9424.4	10065.4	9929.5	7485.1
45°	11711.3	11667.7	11580.9	11293.0	10994.3	10787.8	10804.2	10070.8	10809.6	10695.5	8077.3
47.5°	11423.3	11455.9	11532.0	11477.6	11293.0	11195.1	11396.2	10738.9	11640.6	11532.0	8718.2
50°	10652.0	10684.6	10988.7	11363.6	11428.7	11548.3	11928.6	11510.3	12520.5	12433.7	9511.3
52.5°	8756.3	8935.5	9777.5	10673.8	11287.6	11781.9	12520.5	12656.4	14003.5	14003.5	10912.7
55°	6616.0	6773.6	7735.0	9299.4	10738.9	11803.5	12955.1	13433.2	15073.6	15095.3	11646.0
57.5°	5361.4	5459.1	5931.7	7534.1	9587.3	11532.0	13471.3	14101.2	15964.5	16062.2	12591.3
60°	4351.0	4405.3	4714.9	5828.5	7995.9	10798.6	13840.5	15057.3	17235.5	17371.3	13797.1
62.5°	3498.2	3552.4	3758.9	4427.0	6273.9	9424.4	13775.4	16051.4	18930.3	19153.0	15377.7
65°	2792.0	2851.8	2987.6	3400.4	4649.7	7718.7	13107.2	16562.0	20684.8	20902.0	16426.1
67.5°	2178.2	2232.5	2324.9	2596.6	3275.5	5774.1	11526.5	16024.1	21472.5	21657.1	16480.5
70°	1645.9	1673.1	1749.1	1922.9	2341.2	3835.0	9022.4	14220.8	20766.3	20934.6	15394.1
72.5°	1276.5	1271.1	1314.5	1401.4	1635.1	2639.8	5980.6	11564.6	18359.9	18533.7	13134.4
75°	1042.9	1037.5	1064.6	1091.8	1184.1	1770.7	3530.8	8707.5	14818.4	14487.0	9853.5
77.5°	880.0	874.5	901.7	907.1	945.1	1222.1	2009.8	5730.6	9886.0	9315.8	5551.4
80°	744.2	738.8	771.4	782.2	809.4	896.2	1156.9	3101.7	4964.8	4704.1	2650.8
82.5°	559.5	581.3	641.0	668.1	700.7	662.7	716.9	1368.8	2303.2	2199.9	1151.5
85°	271.6	320.4	483.5	537.7	575.8	418.3	488.9	646.4	1037.5	988.7	467.2
87.5°	92.3	81.4	287.8	342.3	374.9	190.1	271.6	358.6	429.1	391.1	146.7
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: P265734

CATALOG NUMBER: ARCH-L-AF72-270-D-U-T2R-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2574.7	2574.7	2574.7	2574.7	2574.7	2574.7	2574.7	2574.7	2574.7	2574.7	2574.7
2.5°	2601.9	2520.5	2400.9	2308.6	2248.7	2199.9	2178.2	2172.8	2162.0	2156.6	2156.6
5°	2656.2	2509.5	2324.9	2227.1	2199.9	2178.2	2189.1	2194.5	2194.5	2194.5	2194.5
7.5°	2737.7	2531.2	2308.6	2243.3	2237.9	2237.9	2270.6	2286.8	2297.8	2297.8	2297.8
10°	2846.3	2569.3	2335.8	2281.4	2297.8	2308.6	2346.6	2368.3	2379.3	2384.6	2390.0
12.5°	2993.1	2650.8	2390.0	2346.6	2368.3	2373.7	2400.9	2411.8	2422.6	2428.1	2428.1
15°	3188.5	2770.4	2476.9	2422.6	2428.1	2422.6	2422.6	2411.8	2406.3	2406.3	2417.2
17.5°	3389.6	2884.4	2553.1	2476.9	2455.2	2411.8	2379.3	2352.0	2335.8	2324.9	2330.4
20°	3590.4	2987.6	2596.6	2487.9	2428.1	2357.4	2297.8	2259.6	2237.9	2216.2	2227.1
22.5°	3791.4	3085.3	2612.8	2455.2	2368.3	2265.2	2199.9	2140.2	2091.3	2058.6	2064.1
25°	4014.2	3194.0	2612.8	2417.2	2286.8	2178.2	2096.7	1999.0	1928.3	1901.2	1912.0
27.5°	4236.9	3286.3	2585.6	2346.6	2194.5	2085.9	1966.4	1852.2	1808.8	1792.6	1798.0
30°	4459.6	3357.0	2525.9	2259.6	2096.7	1977.2	1819.6	1743.6	1689.4	1645.9	1651.4
32.5°	4682.3	3405.8	2444.4	2151.0	1993.5	1841.4	1711.0	1624.1	1526.4	1472.1	1477.5
35°	4937.7	3443.8	2346.6	2042.3	1879.4	1722.0	1624.1	1482.9	1379.6	1336.3	1325.4
37.5°	5203.8	3471.1	2243.3	1922.9	1765.3	1635.1	1537.2	1363.4	1265.6	1205.9	1200.5
40°	5491.7	3481.9	2118.5	1798.0	1656.7	1580.7	1423.2	1292.8	1124.4	1086.4	1086.4
42.5°	5834.0	3476.4	1993.5	1673.1	1537.2	1455.8	1341.7	1281.9	1135.3	1097.3	1075.5
45°	6225.0	3476.4	1857.8	1526.4	1417.7	1298.2	1249.4	1211.4	1113.5	1129.9	1140.7
47.5°	6670.5	3465.7	1694.7	1406.8	1320.0	1216.8	1189.5	1108.1	1070.2	1080.9	1091.8
50°	7284.3	3481.9	1548.0	1309.1	1249.4	1162.4	1129.9	1086.4	1070.2	1075.5	1070.2
52.5°	8137.0	3427.6	1406.8	1249.4	1195.0	1080.9	1080.9	1075.5	1080.9	1075.5	1075.5
55°	8604.1	3308.1	1303.7	1216.8	1156.9	1042.9	1064.6	1075.5	1086.4	1080.9	1080.9
57.5°	9266.8	3226.5	1222.1	1195.0	1135.3	1032.1	1053.8	1075.5	1080.9	1075.5	1075.5
60°	10049.1	3172.3	1167.8	1200.5	1119.0	1032.1	1059.2	1075.5	1070.2	1064.6	1064.6
62.5°	10956.2	3150.5	1129.9	1216.8	1102.7	1037.5	1059.2	1075.5	1053.8	1048.3	1048.3
65°	11298.4	2955.0	1080.9	1227.7	1113.5	1037.5	1053.8	1059.2	1032.1	1026.7	1021.3
67.5°	10771.4	2618.2	1010.4	1205.9	1146.1	1037.5	1037.5	1032.1	999.5	994.1	983.1
70°	9592.8	2172.8	901.7	1135.3	1167.8	1042.9	1015.8	988.7	956.1	956.1	934.2
72.5°	7854.6	1711.0	760.4	1010.4	1151.5	1059.2	972.3	934.2	896.2	896.2	874.5
75°	5660.1	1276.5	608.4	841.9	1080.9	1053.8	918.0	869.1	825.6	820.2	793.1
77.5°	3226.5	896.2	494.2	657.3	961.5	1026.7	869.1	793.1	744.2	727.8	711.5
80°	1656.7	602.9	401.9	516.0	798.6	950.5	831.1	706.2	651.8	624.7	597.6
82.5°	787.6	401.9	309.6	380.3	602.9	831.1	782.2	608.4	548.7	516.0	483.5
85°	353.0	238.9	206.4	244.3	429.1	646.4	689.9	499.7	429.1	537.7	396.5
87.5°	114.1	108.7	108.7	114.1	206.4	282.4	505.1	369.4	342.3	282.4	238.9
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)