

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: P573216

Luminaire Tested: **ARCH-S-PA2-50-727-U-T3**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573216
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-38)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-50-727-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 520mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6703 lumens
Efficiency: N/A
Efficacy: 125.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

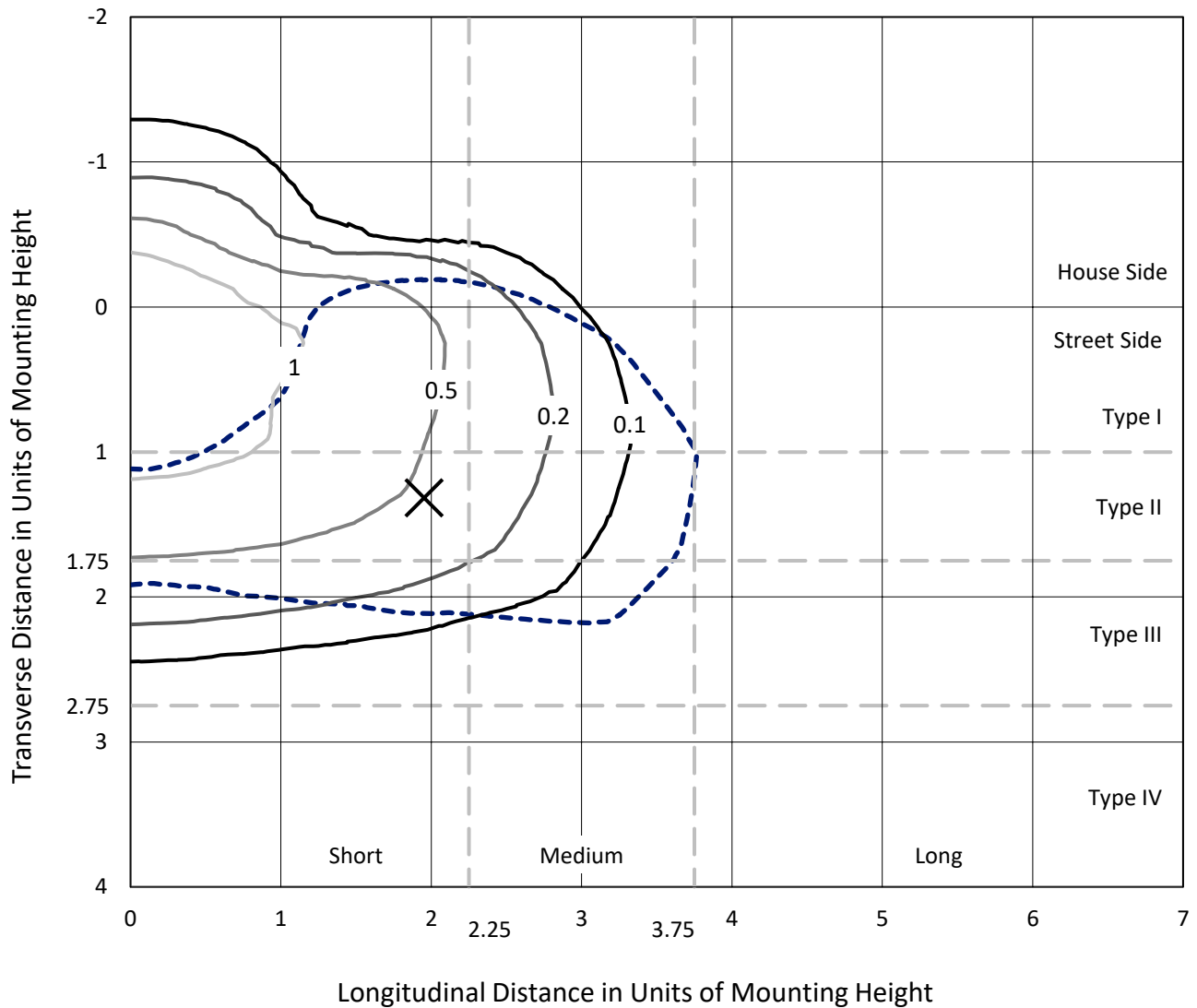
Input Watts (W): 53.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

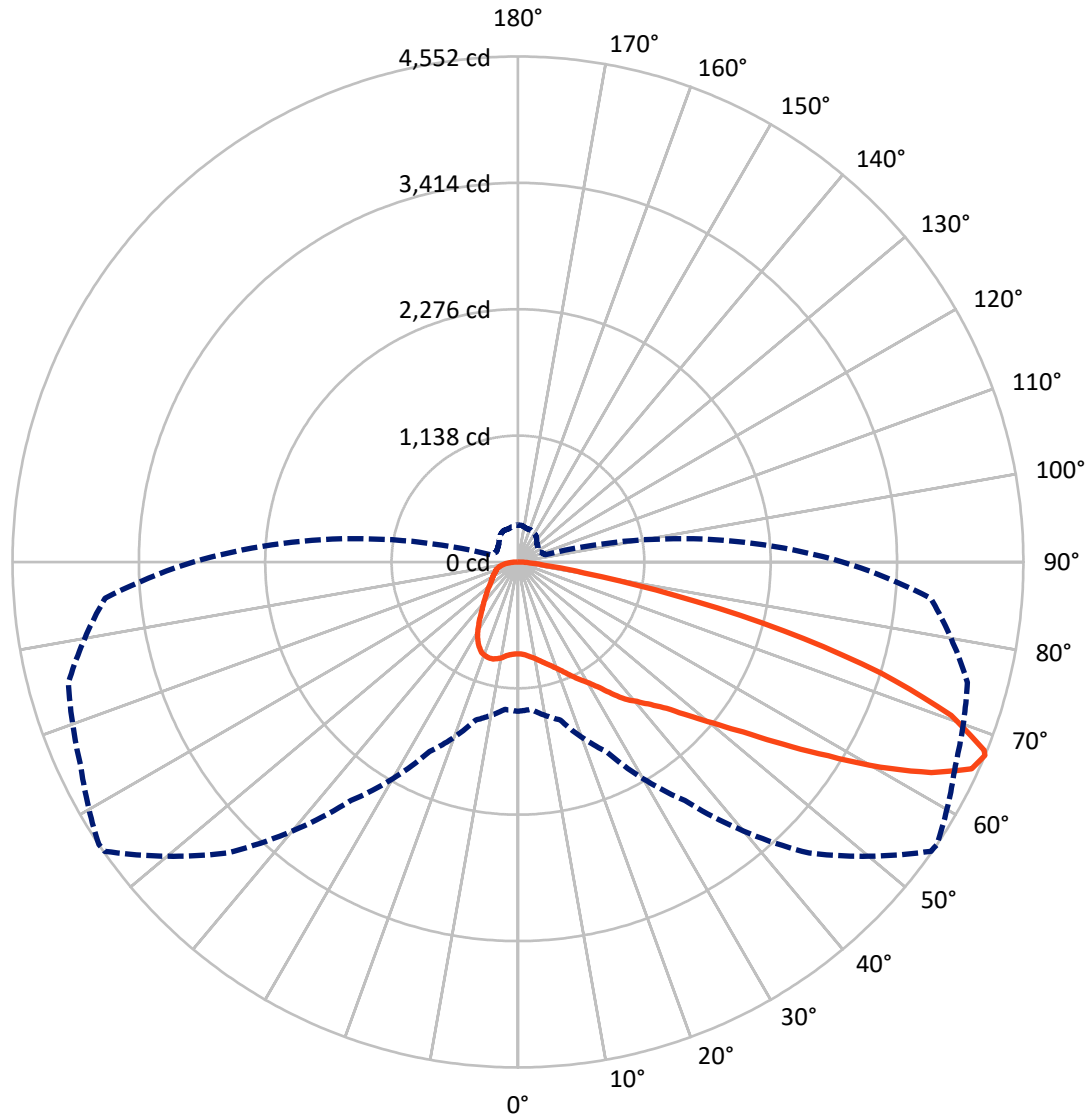
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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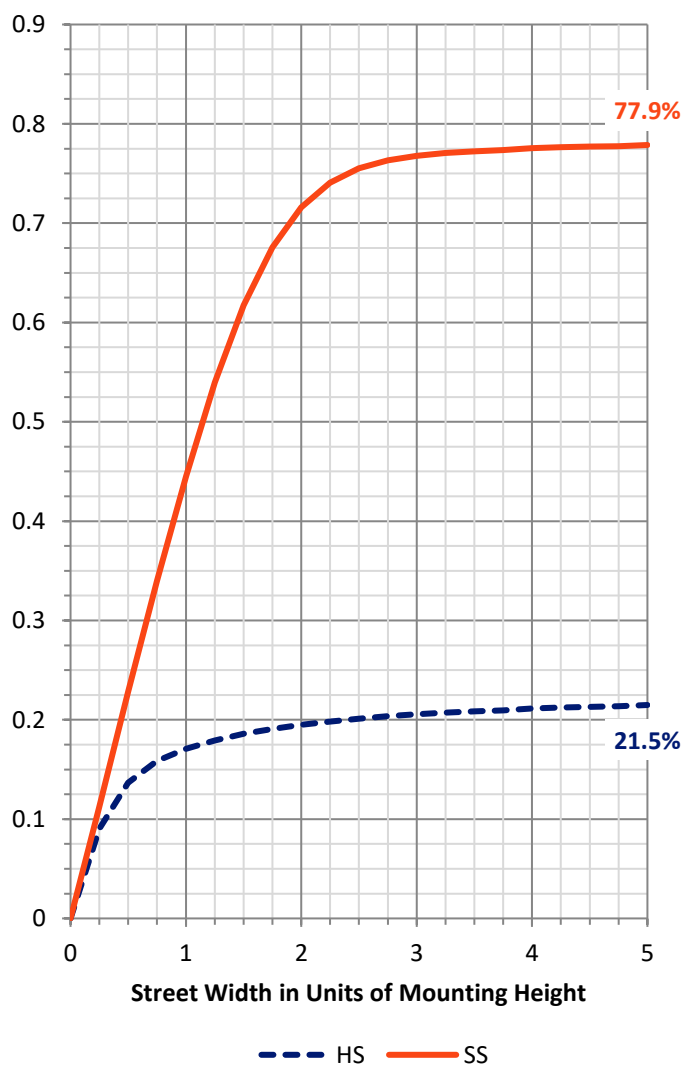
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1466.5	0.0	1466.5
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	5236.5	0.0	5236.5
	% Fixture	78.1	0.0	78.1
Total	Lumens	6703.0	0.0	6703.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.4	1.2
10°-20°	261.1	3.9
20°-30°	454.4	6.8
30°-40°	666.3	9.9
40°-50°	974.9	14.5
50°-60°	1523.6	22.7
60°-70°	1810.9	27.0
70°-80°	824.7	12.3
80°-90°	105.8	1.6
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°	6703.0	100.0
0°-180°	6703.0	100.0

Coefficient of Utilization



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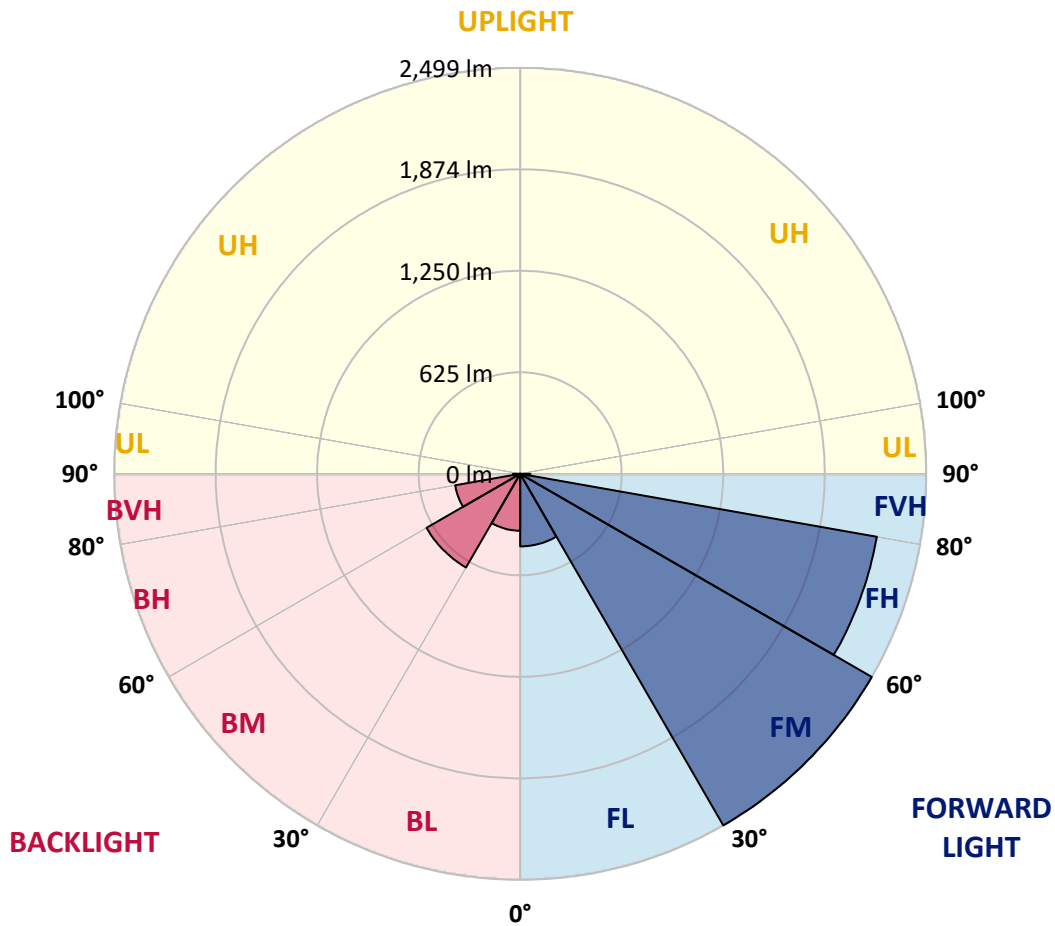
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	446.5	6.7			
FM (30°-60°)	2499.1	37.3			
FH (60°-80°)	2229.3	33.3			G2/5000
FVH (80°-90°)	61.7	0.9			G1/100
BL (0°-30°)	350.5	5.2	B1/500		
BM (30°-60°)	665.7	9.9	B1/1000		
BH (60°-80°)	406.3	6.1	B1/500		G1/500
BVH (80°-90°)	44.1	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	827.6	827.6	827.6	827.6	827.6	827.6	827.6	827.6	827.6	827.6	827.6
2.5°	840.3	836.6	834.8	836.6	834.8	831.2	833.0	831.2	829.4	827.6	827.6
5°	851.2	847.5	845.7	847.5	849.3	845.7	845.7	845.7	840.3	838.4	834.8
7.5°	858.4	853.0	853.0	856.6	860.2	862.0	865.7	863.9	858.4	854.8	847.5
10°	882.0	874.7	874.7	874.7	878.4	882.0	885.6	887.4	885.6	883.8	878.4
12.5°	918.3	911.0	911.0	911.0	911.0	909.2	914.7	916.5	920.1	920.1	911.0
15°	967.3	958.2	954.6	947.3	945.5	941.9	949.2	949.2	954.6	956.4	947.3
17.5°	1014.5	1003.6	1000.0	992.7	985.4	976.4	983.6	985.4	996.3	998.2	983.6
20°	1063.5	1059.9	1054.4	1043.5	1030.8	1021.7	1029.0	1027.2	1036.3	1039.9	1021.7
22.5°	1127.0	1117.9	1114.3	1099.8	1085.3	1076.2	1076.2	1079.8	1088.9	1088.9	1061.7
25°	1203.2	1190.5	1181.4	1165.1	1147.0	1136.1	1137.9	1141.5	1154.2	1145.2	1103.4
27.5°	1297.6	1284.9	1272.2	1239.5	1221.4	1199.6	1197.8	1201.4	1221.4	1197.8	1143.3
30°	1386.5	1381.1	1370.2	1344.8	1315.7	1279.4	1263.1	1264.9	1279.4	1246.8	1177.8
32.5°	1462.7	1455.5	1450.0	1431.9	1411.9	1368.4	1346.6	1348.4	1346.6	1306.7	1219.6
35°	1553.5	1542.6	1539.0	1522.6	1497.2	1468.2	1459.1	1455.5	1444.6	1390.2	1274.0
37.5°	1640.6	1629.7	1624.3	1615.2	1595.2	1569.8	1569.8	1568.0	1546.2	1470.0	1328.4
40°	1744.0	1731.3	1715.0	1709.6	1693.2	1675.1	1660.6	1651.5	1613.4	1544.4	1433.7
42.5°	1869.3	1862.0	1852.9	1829.3	1803.9	1800.3	1758.6	1754.9	1727.7	1687.8	1582.5
45°	2048.9	2034.4	2021.7	2014.5	1983.6	1950.9	1892.9	1878.3	1878.3	1869.3	1756.7
47.5°	2230.4	2205.0	2223.2	2217.7	2210.5	2174.2	2061.6	2063.5	2059.8	2083.4	2012.6
50°	2352.0	2337.5	2388.3	2411.9	2462.7	2462.7	2301.2	2281.2	2295.7	2364.7	2274.0
52.5°	2446.4	2437.3	2495.4	2587.9	2738.6	2753.1	2586.1	2544.4	2564.3	2662.3	2626.0
55°	2522.6	2513.5	2580.7	2742.2	2983.6	3072.5	2914.6	2896.5	2856.5	2961.8	2972.7
57.5°	2568.0	2548.0	2649.6	2865.6	3183.2	3388.3	3299.3	3293.9	3201.3	3299.3	3348.3
60°	2499.0	2486.3	2626.0	2916.4	3344.7	3685.9	3751.2	3751.2	3586.1	3638.7	3698.6
62.5°	2275.8	2259.5	2406.5	2798.5	3364.7	3929.1	4199.5	4177.7	3956.3	3954.5	3901.9
65°	1851.1	1831.2	1996.3	2410.1	3112.4	3958.1	4502.6	4489.9	4234.0	4161.4	3914.6
67°	1344.8	1332.1	1473.6	1883.8	2622.4	3705.9	4540.7	4551.6	4344.7	4190.4	3731.3
67.5°	1206.9	1205.0	1323.0	1729.5	2479.0	3613.3	4515.3	4526.2	4342.9	4166.8	3658.7
70°	562.6	588.0	698.7	990.9	1671.4	2845.6	4097.9	4139.6	4110.6	3894.6	3081.6
72.5°	261.3	272.2	321.2	479.1	898.3	1834.8	3321.1	3420.9	3548.0	3341.1	2440.9
75°	161.5	165.1	192.4	248.6	422.9	882.0	2364.7	2473.6	2666.0	2513.5	1560.7
77.5°	127.0	128.9	147.0	177.9	246.8	379.3	1297.6	1433.7	1684.2	1486.3	785.8
80°	94.4	98.0	112.5	137.9	174.2	194.2	551.7	602.5	813.0	622.5	326.7
82.5°	69.0	72.6	87.1	99.8	121.6	123.4	225.0	237.7	348.4	252.3	141.6
85°	58.1	58.1	67.1	74.4	81.7	69.0	110.7	108.9	134.3	114.3	56.3
87.5°	27.2	29.0	63.5	47.2	39.9	29.0	32.7	34.5	41.7	45.4	21.8
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°	827.6	827.6	827.6	827.6	827.6	827.6	827.6	827.6	827.6	827.6	827.6
2.5°	825.7	825.7	825.7	827.6	829.4	829.4	831.2	831.2	833.0	834.8	838.4
5°	833.0	833.0	831.2	833.0	836.6	838.4	842.1	845.7	849.3	853.0	854.8
7.5°	847.5	845.7	845.7	845.7	849.3	853.0	858.4	862.0	867.5	869.3	872.9
10°	874.7	871.1	871.1	872.9	874.7	869.3	867.5	865.7	871.1	874.7	878.4
12.5°	907.4	903.8	902.0	896.5	889.3	878.4	869.3	862.0	863.9	867.5	872.9
15°	941.9	934.6	931.0	918.3	900.2	876.6	862.0	853.0	853.0	853.0	858.4
17.5°	978.2	970.9	956.4	932.8	898.3	865.7	847.5	831.2	823.9	822.1	825.7
20°	1012.7	1001.8	978.2	941.9	887.4	843.9	820.3	793.1	782.2	774.9	778.6
22.5°	1045.3	1030.8	998.2	941.9	869.3	811.2	769.5	733.2	715.0	711.4	713.2
25°	1079.8	1061.7	1018.1	931.0	829.4	762.2	704.2	666.0	642.4	638.8	644.3
27.5°	1114.3	1087.1	1034.4	902.0	784.0	695.1	633.4	597.1	584.4	577.1	578.9
30°	1143.3	1117.9	1050.8	862.0	722.3	617.0	560.8	544.4	535.4	531.7	531.7
32.5°	1181.4	1157.9	1061.7	814.9	649.7	546.3	510.0	497.3	490.0	480.9	482.7
35°	1228.6	1206.9	1056.2	755.0	580.7	499.1	470.0	451.9	435.6	422.9	421.0
37.5°	1292.2	1275.8	1029.0	682.4	517.2	464.6	435.6	412.0	388.4	368.4	364.8
40°	1397.4	1359.3	989.1	602.5	473.7	437.4	402.9	373.9	344.8	323.0	317.6
42.5°	1531.7	1451.9	934.6	520.9	437.4	408.3	373.9	335.7	308.5	288.6	288.6
45°	1687.8	1551.7	869.3	459.1	399.3	379.3	337.6	304.9	288.6	275.9	274.0
47.5°	1872.9	1651.5	785.8	410.1	368.4	353.9	312.1	292.2	281.3	270.4	268.6
50°	2121.5	1785.8	724.1	368.4	337.6	324.9	304.9	288.6	277.7	270.4	268.6
52.5°	2406.5	1958.2	680.6	335.7	312.1	306.7	303.1	290.4	279.5	274.0	272.2
55°	2715.0	2170.5	638.8	308.5	292.2	299.4	306.7	294.0	286.7	279.5	275.9
57.5°	3005.3	2350.2	571.7	284.9	277.7	290.4	304.9	295.8	286.7	281.3	279.5
60°	3203.2	2440.9	479.1	263.1	263.1	277.7	299.4	286.7	277.7	279.5	279.5
62.5°	3266.7	2406.5	379.3	243.2	248.6	263.1	283.1	275.9	272.2	281.3	281.3
65°	3172.3	2266.7	303.1	226.9	234.1	245.0	274.0	281.3	292.2	312.1	314.0
67°	2925.5	2041.7	255.9	214.1	221.4	239.6	284.9	310.3	310.3	332.1	332.1
67.5°	2852.9	1965.4	248.6	210.5	219.6	239.6	290.4	317.6	310.3	335.7	335.7
70°	2319.3	1546.2	210.5	199.6	212.3	252.3	314.0	319.4	303.1	326.7	324.9
72.5°	1720.4	1117.9	192.4	188.7	197.8	237.7	312.1	306.7	283.1	290.4	284.9
75°	1063.5	647.9	177.9	174.2	179.7	210.5	288.6	279.5	252.3	246.8	241.4
77.5°	513.6	328.5	152.4	157.9	163.3	183.3	254.1	245.0	221.4	208.7	206.9
80°	223.2	168.8	130.7	139.7	141.6	156.1	210.5	199.6	177.9	157.9	157.9
82.5°	110.7	94.4	103.4	116.1	112.5	125.2	165.1	147.0	130.7	108.9	105.3
85°	50.8	54.4	76.2	87.1	76.2	78.0	112.5	103.4	81.7	61.7	63.5
87.5°	18.1	25.4	43.6	52.6	38.1	36.3	59.9	43.6	25.4	7.3	9.1
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)