

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: P572704

Luminaire Tested: **ARCH-S-PA2-100-827-U-T4W-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P572704
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-20)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-100-827-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 2700K, 1010mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7494 lumens
Efficiency: N/A
Efficacy: 72.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

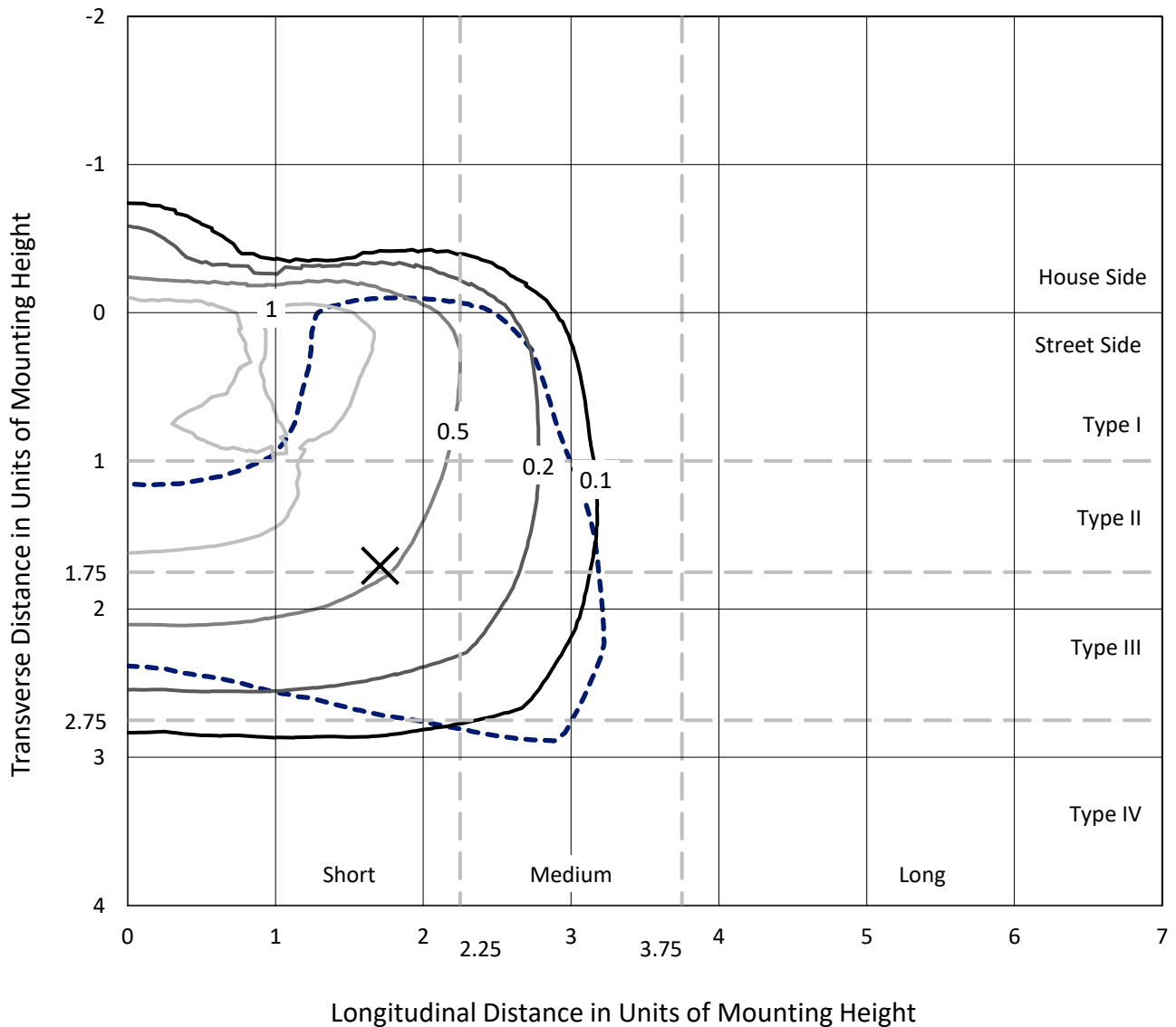
Input Watts (W): 103.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

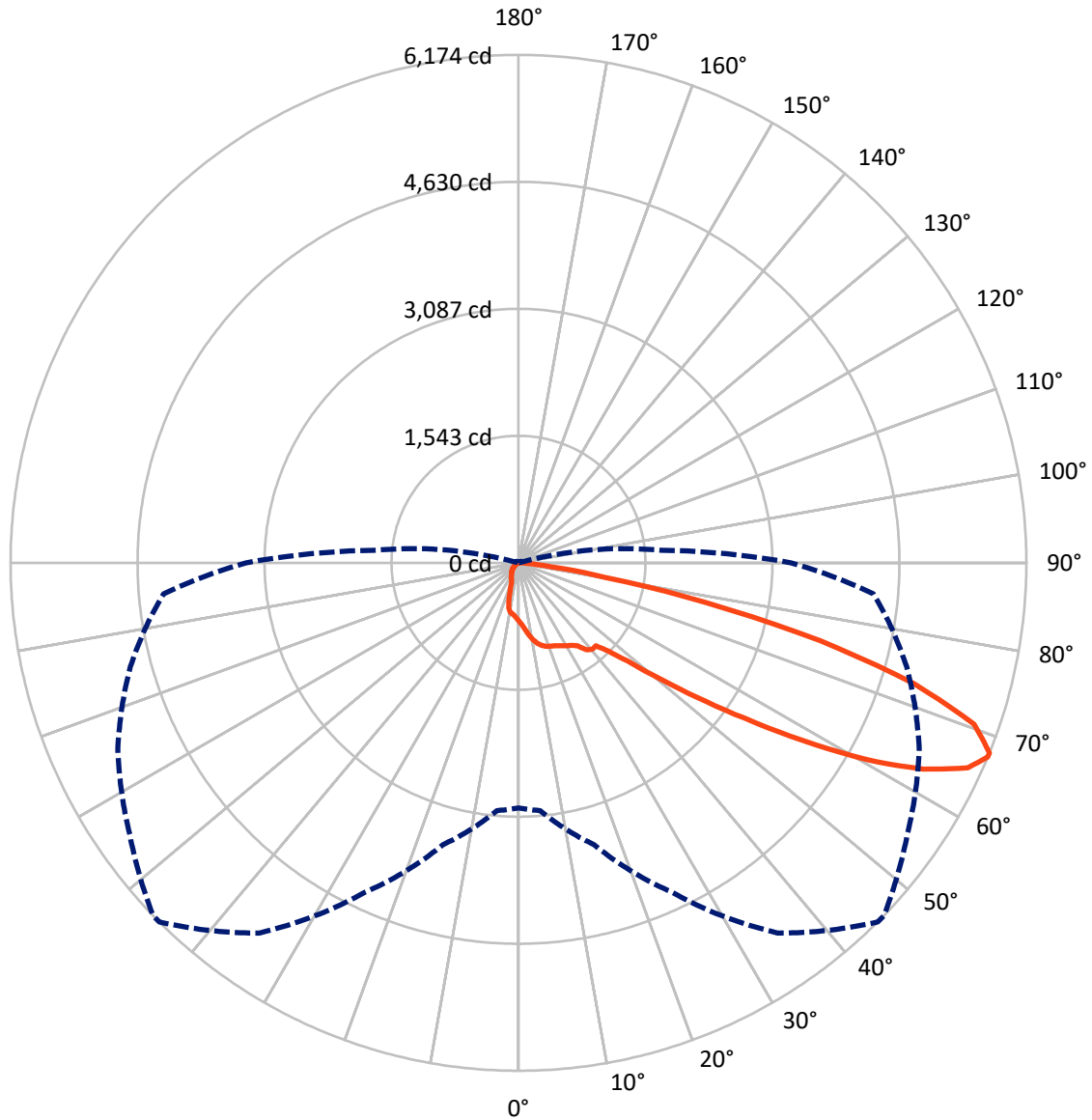
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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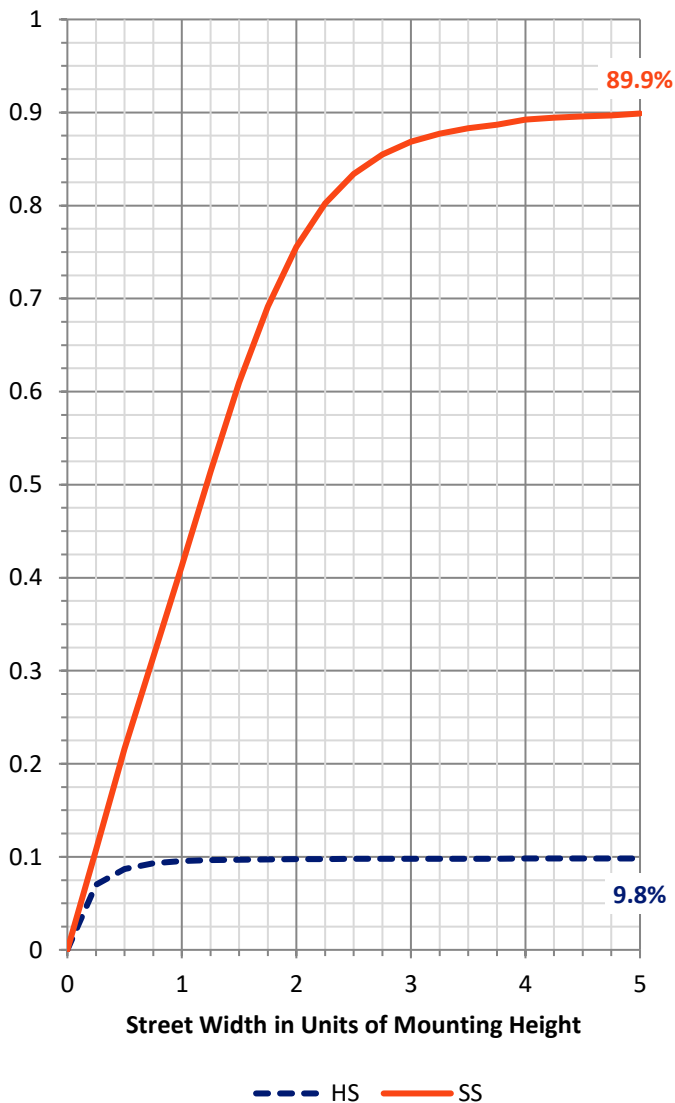
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	742.5	0.0	742.5
	% Fixture	9.9	0.0	9.9
Street Side	Lumens	6751.5	0.0	6751.5
	% Fixture	90.1	0.0	90.1
Total	Lumens	7494.0	0.0	7494.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.1	0.9
10°-20°	215.0	2.9
20°-30°	344.0	4.6
30°-40°	495.1	6.6
40°-50°	868.5	11.6
50°-60°	1830.0	24.4
60°-70°	2530.6	33.8
70°-80°	1059.4	14.1
80°-90°	80.1	1.1
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°	7494.0	100.0
0°-180°	7494.0	100.0

Coefficient of Utilization



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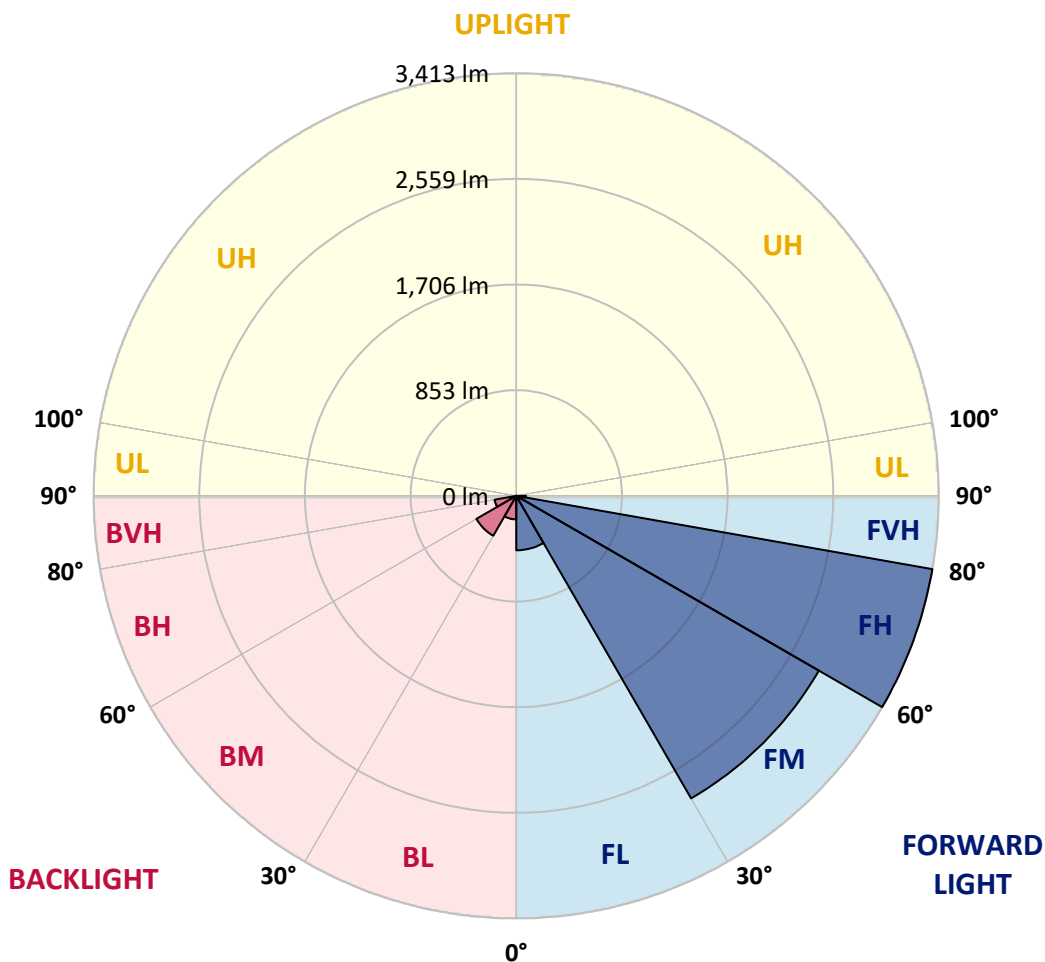
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	439.9	5.9			
FM (30°-60°)	2821.6	37.7			
FH (60°-80°)	3412.6	45.5			G2/5000
FVH (80°-90°)	77.4	1.0			G1/100
BL (0°-30°)	190.3	2.5	B1/500		
BM (30°-60°)	372.0	5.0	B1/1000		
BH (60°-80°)	177.5	2.4	B1/500		G1/500
BVH (80°-90°)	2.7	0.0			G0/10
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°	46°	55°	65°	75°	85°
0°	708.7	708.7	708.7	708.7	708.7	708.7	708.7	708.7	708.7	708.7	708.7
2.5°	789.0	775.2	772.4	769.6	761.3	750.3	753.0	744.7	730.9	722.6	714.3
5°	885.9	872.1	866.5	849.9	833.3	808.4	808.4	786.2	761.3	739.2	717.0
7.5°	985.6	974.5	963.4	938.5	913.6	880.4	877.6	844.4	805.6	772.4	736.4
10°	1068.6	1060.3	1046.5	1016.0	982.8	946.8	938.5	908.1	858.2	813.9	766.9
12.5°	1135.1	1126.8	1107.4	1076.9	1035.4	999.4	996.7	957.9	908.1	861.0	802.9
15°	1184.9	1171.1	1148.9	1115.7	1074.2	1040.9	1035.4	1002.2	955.1	902.5	833.3
17.5°	1193.2	1184.9	1165.5	1129.5	1093.5	1065.9	1063.1	1038.2	996.7	941.3	869.3
20°	1171.1	1168.3	1151.7	1124.0	1096.3	1082.5	1079.7	1063.1	1029.9	980.0	908.1
22.5°	1137.8	1135.1	1124.0	1110.2	1099.1	1096.3	1096.3	1090.8	1071.4	1024.3	957.9
25°	1115.7	1112.9	1107.4	1099.1	1099.1	1115.7	1118.5	1124.0	1107.4	1071.4	999.4
27.5°	1118.5	1112.9	1107.4	1099.1	1110.2	1140.6	1143.4	1157.2	1143.4	1110.2	1046.5
30°	1157.2	1148.9	1132.3	1112.9	1126.8	1168.3	1171.1	1187.7	1176.6	1160.0	1099.1
32.5°	1218.1	1212.6	1179.4	1146.2	1154.5	1196.0	1201.5	1232.0	1245.8	1220.9	1146.2
35°	1306.7	1287.3	1245.8	1212.6	1207.1	1237.5	1245.8	1295.6	1331.6	1270.7	1173.8
37.5°	1378.7	1362.1	1295.6	1243.0	1273.5	1342.7	1345.5	1406.4	1375.9	1276.3	1218.1
40°	1622.3	1619.6	1503.3	1337.2	1304.0	1381.5	1392.5	1403.6	1389.8	1339.9	1315.0
42.5°	2015.5	1982.2	1852.1	1597.4	1370.4	1378.7	1384.2	1442.4	1514.4	1492.2	1500.5
45°	2441.8	2414.1	2267.4	1946.2	1597.4	1528.2	1533.7	1627.9	1766.3	1794.0	1838.3
47.5°	2834.9	2790.6	2707.6	2383.7	1985.0	1782.9	1794.0	1907.5	2137.3	2198.2	2267.4
50°	3167.1	3136.7	3059.2	2846.0	2461.2	2184.3	2195.4	2289.5	2588.5	2685.4	2774.0
52.5°	3648.9	3607.3	3457.8	3358.2	3067.5	2707.6	2682.7	2782.3	3125.6	3189.3	3308.3
55°	4091.8	4006.0	3917.4	3875.9	3754.1	3333.2	3324.9	3344.3	3629.5	3662.7	3875.9
57.5°	4280.1	4263.5	4338.2	4476.6	4504.3	4069.7	4033.7	3958.9	4183.2	4180.4	4429.6
60°	4399.1	4399.1	4598.4	4941.7	5163.2	4855.9	4806.1	4573.5	4653.8	4656.6	4886.4
62.5°	4324.4	4343.7	4653.8	5171.5	5617.2	5523.1	5489.9	5099.5	5094.0	5030.3	5110.6
65°	3862.0	3895.3	4393.6	5044.2	5783.4	6004.8	5991.0	5548.0	5387.5	5154.9	4975.0
67°	3150.5	3211.4	3815.0	4584.6	5595.1	6170.9	6173.7	5741.8	5390.2	4947.3	4496.0
67.5°	2978.9	3023.2	3546.4	4418.5	5492.7	6173.7	6173.7	5766.7	5373.6	4883.6	4329.9
70°	1899.2	1910.3	2480.6	3419.1	4692.6	5874.7	5896.9	5578.5	4894.7	3953.4	3039.8
72.5°	938.5	913.6	1309.5	2200.9	3521.5	5027.6	5085.7	4764.6	3873.1	2583.0	1605.7
75°	368.2	393.1	570.3	1171.1	2206.5	3790.0	3834.3	3466.1	2491.6	1331.6	634.0
77.5°	163.3	163.3	243.6	526.0	1160.0	2325.5	2347.7	2115.1	1315.0	548.2	193.8
80°	88.6	94.1	127.4	229.8	584.1	1068.6	1165.5	1049.3	595.2	240.9	66.4
82.5°	44.3	47.1	77.5	130.1	293.5	404.2	426.3	445.7	274.1	149.5	27.7
85°	16.6	19.4	41.5	74.7	132.9	135.7	135.7	174.4	149.5	113.5	13.8
87.5°	2.8	5.5	19.4	30.5	52.6	47.1	41.5	55.4	83.1	72.0	8.3
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°	708.7	708.7	708.7	708.7	708.7	708.7	708.7	708.7	708.7	708.7	708.7
2.5°	708.7	703.2	692.1	683.8	678.3	672.7	667.2	667.2	664.4	664.4	667.2
5°	708.7	697.7	675.5	661.7	650.6	642.3	636.8	636.8	634.0	636.8	639.5
7.5°	722.6	706.0	675.5	650.6	636.8	622.9	617.4	614.6	614.6	617.4	614.6
10°	744.7	722.6	683.8	650.6	631.2	611.8	581.4	553.7	528.8	517.7	514.9
12.5°	772.4	744.7	697.7	658.9	628.4	562.0	478.9	426.3	393.1	376.5	371.0
15°	802.9	769.6	714.3	670.0	586.9	462.3	354.4	296.2	276.8	279.6	282.4
17.5°	836.1	800.1	739.2	664.4	503.9	343.3	260.2	246.4	254.7	263.0	263.0
20°	869.3	830.5	764.1	622.9	395.9	254.7	232.6	235.3	243.6	251.9	251.9
22.5°	913.6	872.1	789.0	550.9	293.5	221.5	221.5	227.0	232.6	240.9	240.9
25°	960.7	919.1	805.6	462.3	218.7	207.6	210.4	215.9	221.5	229.8	229.8
27.5°	1010.5	969.0	802.9	357.1	191.0	191.0	193.8	202.1	207.6	215.9	215.9
30°	1065.9	1029.9	772.4	260.2	177.2	174.4	174.4	182.7	191.0	196.6	199.3
32.5°	1112.9	1082.5	719.8	196.6	166.1	160.6	157.8	160.6	168.9	174.4	177.2
35°	1151.7	1140.6	642.3	168.9	155.0	146.7	141.2	138.4	141.2	141.2	144.0
37.5°	1223.7	1226.4	550.9	157.8	146.7	135.7	124.6	116.3	110.7	108.0	105.2
40°	1359.3	1356.6	454.0	149.5	138.4	124.6	108.0	96.9	83.1	77.5	77.5
42.5°	1550.3	1508.8	346.1	141.2	130.1	113.5	91.4	74.7	60.9	58.1	58.1
45°	1893.6	1722.0	260.2	135.7	121.8	99.7	74.7	55.4	47.1	44.3	44.3
47.5°	2272.9	1968.4	207.6	127.4	113.5	88.6	58.1	44.3	36.0	36.0	36.0
50°	2691.0	2203.7	174.4	119.0	99.7	74.7	47.1	36.0	33.2	30.5	33.2
52.5°	3147.8	2389.2	152.3	108.0	85.8	60.9	38.8	33.2	27.7	27.7	27.7
55°	3557.5	2513.8	127.4	94.1	72.0	49.8	36.0	27.7	24.9	22.1	19.4
57.5°	3928.5	2580.2	102.4	80.3	55.4	41.5	30.5	22.1	19.4	13.8	13.8
60°	4119.5	2519.3	80.3	63.7	44.3	33.2	24.9	19.4	13.8	8.3	8.3
62.5°	4150.0	2361.5	63.7	49.8	38.8	27.7	19.4	13.8	8.3	5.5	5.5
65°	3884.2	2084.7	52.6	41.5	30.5	22.1	16.6	11.1	5.5	2.8	2.8
67°	3408.0	1794.0	47.1	36.0	27.7	19.4	13.8	8.3	5.5	2.8	0.0
67.5°	3313.9	1741.4	44.3	36.0	27.7	19.4	13.8	8.3	5.5	2.8	0.0
70°	2176.0	1204.3	41.5	33.2	24.9	16.6	11.1	8.3	2.8	0.0	0.0
72.5°	1187.7	606.3	38.8	30.5	22.1	16.6	11.1	5.5	2.8	0.0	0.0
75°	434.7	229.8	33.2	27.7	19.4	16.6	11.1	5.5	2.8	0.0	0.0
77.5°	146.7	80.3	30.5	27.7	22.1	16.6	11.1	5.5	2.8	0.0	0.0
80°	49.8	36.0	24.9	22.1	16.6	13.8	11.1	5.5	2.8	0.0	0.0
82.5°	19.4	11.1	8.3	8.3	8.3	11.1	11.1	8.3	2.8	0.0	0.0
85°	8.3	5.5	2.8	2.8	2.8	2.8	2.8	2.8	2.8	0.0	0.0
87.5°	8.3	5.5	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0
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)