

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: P398070

Luminaire Tested: **ARCH-S-PA1-80-750-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398070  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-80-750-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10905 lumens  
Efficiency: N/A  
Efficacy: 131.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G3

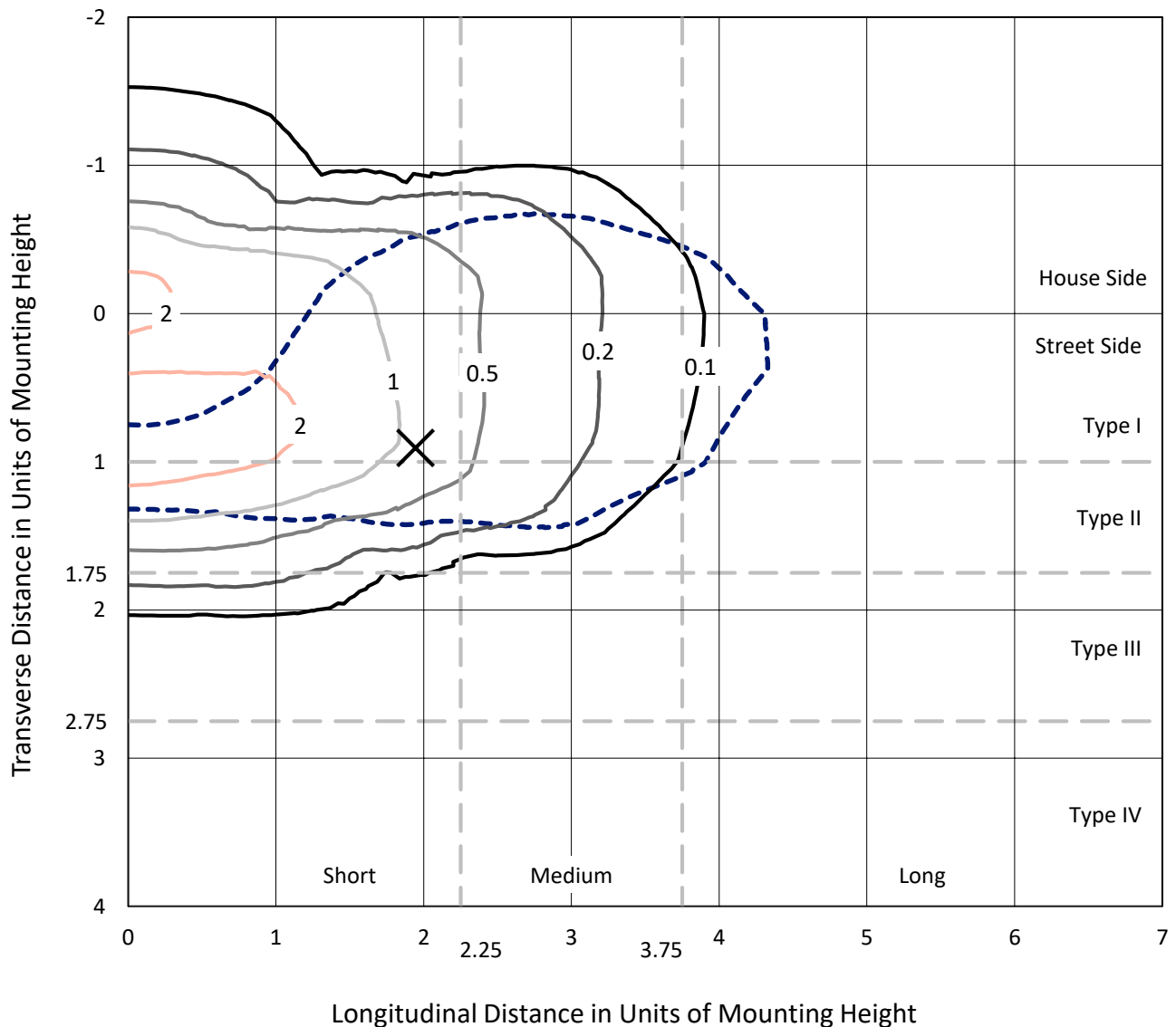
Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

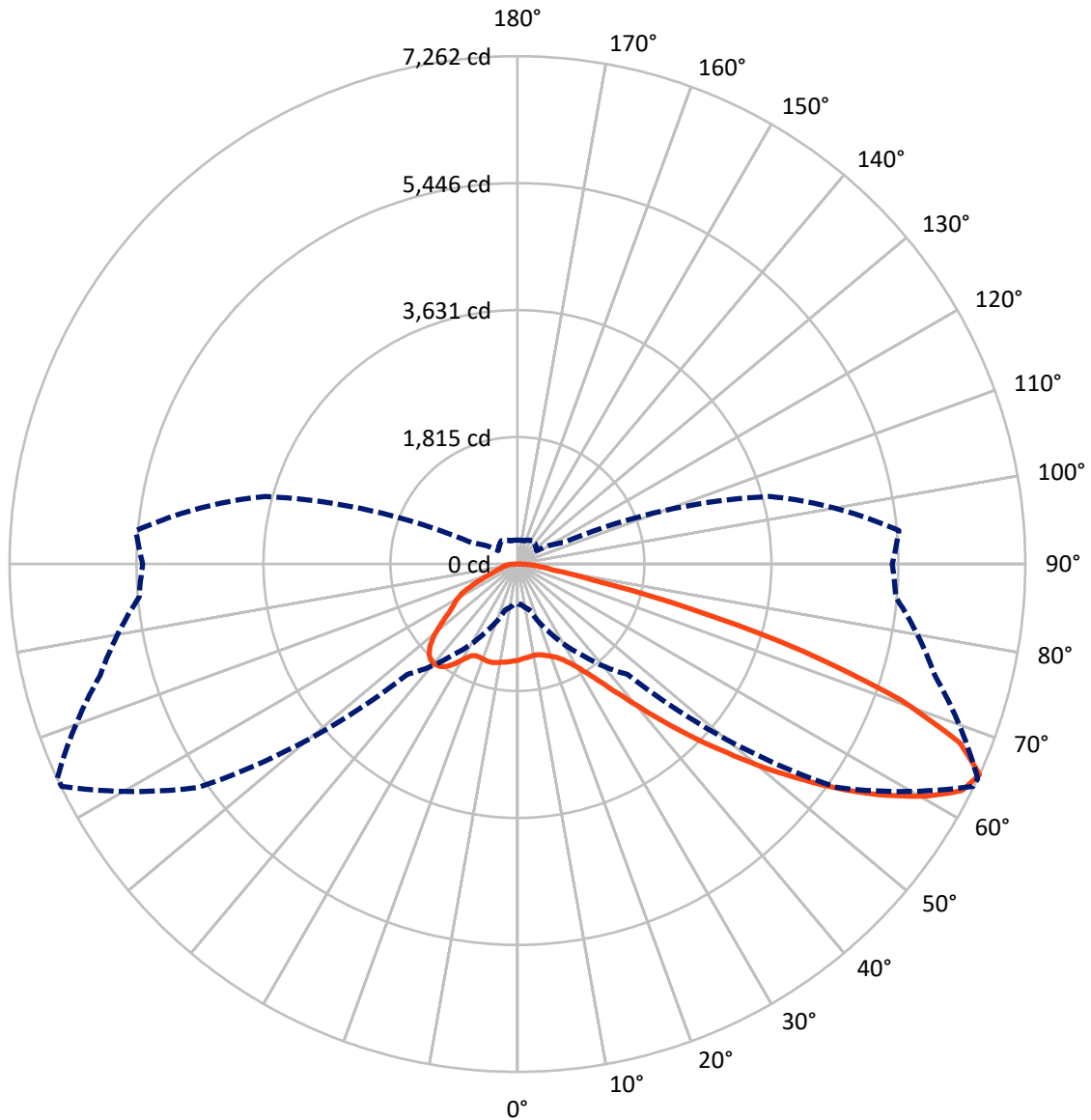
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 fc  
 Type II - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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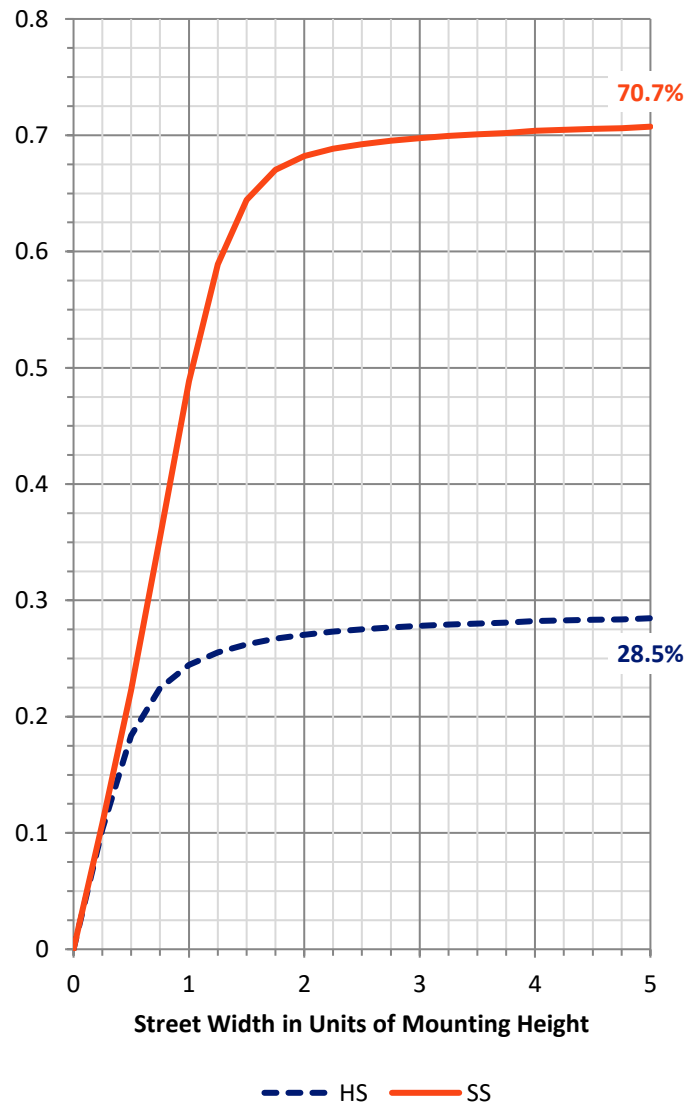
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3152.8	0.0	3152.8
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	7752.2	0.0	7752.2
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	10905.0	0.0	10905.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.3	1.2
10°-20°	391.9	3.6
20°-30°	696.2	6.4
30°-40°	1177.8	10.8
40°-50°	2050.4	18.8
50°-60°	2649.7	24.3
60°-70°	2318.6	21.3
70°-80°	1261.2	11.6
80°-90°	227.9	2.1
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°	10905.0	100.0
0°-180°	10905.0	100.0



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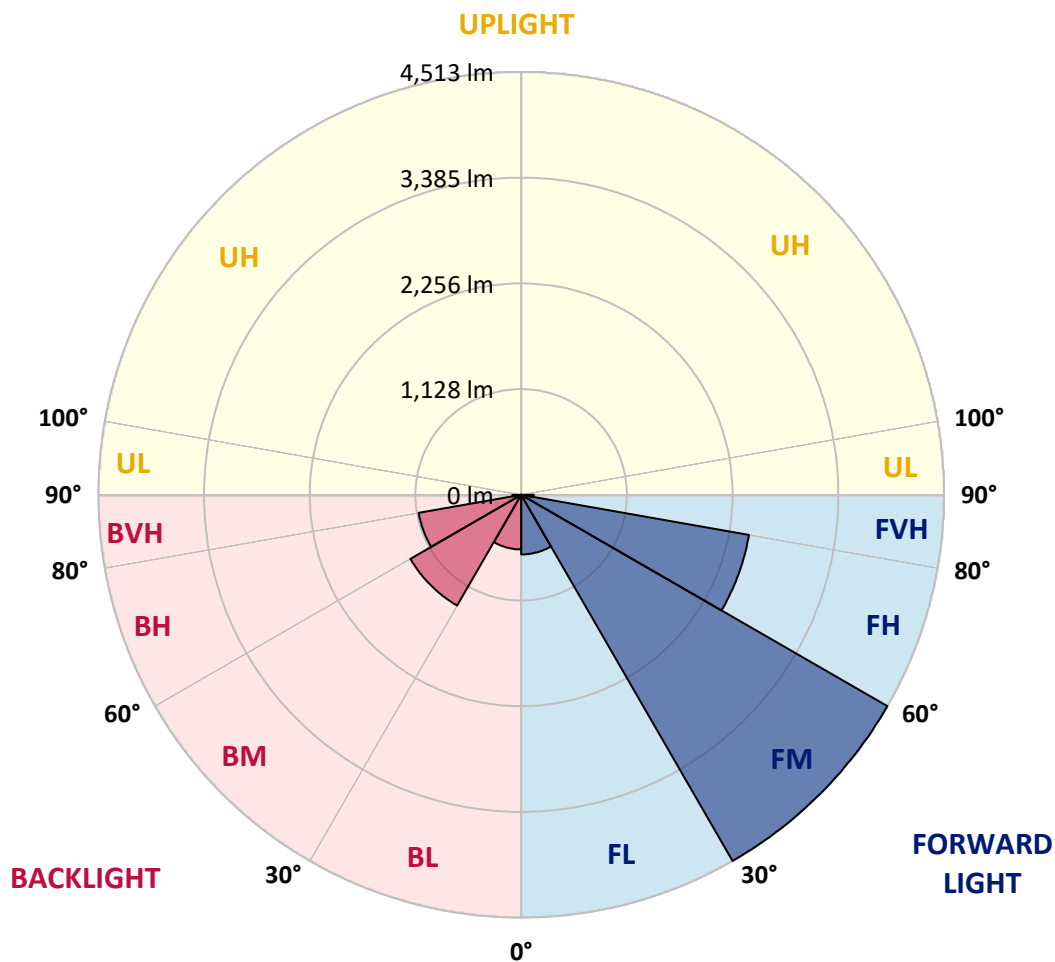
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	636.3	5.8			
FM (30°-60°)	4512.8	41.4			
FH (60°-80°)	2469.0	22.6			G2/5000
FVH (80°-90°)	134.1	1.2			G2/225
BL (0°-30°)	583.2	5.3	B2/1000		
BM (30°-60°)	1365.1	12.5	B2/2500		
BH (60°-80°)	1110.8	10.2	B3/2500		G3/2500
BVH (80°-90°)	93.8	0.9			G1/100
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 Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1378.0	1378.0	1378.0	1378.0	1378.0	1378.0	1378.0	1378.0	1378.0	1378.0	1378.0
2.5°	1353.6	1352.1	1349.2	1352.1	1353.6	1356.4	1355.0	1357.9	1356.4	1360.7	1367.9
5°	1319.1	1316.2	1314.8	1322.0	1326.3	1333.5	1336.3	1346.4	1344.9	1352.1	1363.6
7.5°	1280.3	1280.3	1278.9	1287.5	1293.3	1306.2	1316.2	1333.5	1334.9	1347.8	1360.7
10°	1250.2	1251.6	1250.2	1257.4	1266.0	1281.8	1299.0	1323.4	1324.8	1343.5	1356.4
12.5°	1238.7	1238.7	1238.7	1248.8	1260.3	1281.8	1301.9	1327.7	1330.6	1350.7	1362.2
15°	1254.5	1255.9	1253.1	1263.1	1276.0	1301.9	1320.5	1347.8	1350.7	1369.3	1376.5
17.5°	1310.5	1316.2	1309.1	1314.8	1311.9	1332.0	1349.2	1376.5	1378.0	1393.7	1396.6
20°	1421.0	1426.8	1415.3	1408.1	1382.3	1380.8	1388.0	1409.5	1409.5	1419.6	1412.4
22.5°	1591.8	1597.6	1577.5	1550.2	1488.5	1458.3	1442.5	1452.6	1451.2	1455.5	1436.8
25°	1818.6	1817.2	1792.8	1742.5	1643.5	1570.3	1531.5	1515.7	1515.7	1507.1	1484.2
27.5°	2099.9	2078.4	2035.3	1975.1	1837.3	1735.4	1652.1	1611.9	1604.7	1578.9	1535.8
30°	2399.9	2384.1	2322.4	2234.9	2075.5	1944.9	1807.1	1726.7	1722.4	1666.5	1601.9
32.5°	2753.0	2727.2	2658.3	2553.5	2362.6	2178.9	2006.6	1884.6	1877.5	1788.5	1699.5
35°	3206.6	3185.1	3051.6	2946.8	2701.4	2460.2	2256.4	2094.2	2088.5	1979.4	1866.0
37.5°	3750.6	3694.6	3565.5	3368.8	3110.4	2824.8	2566.4	2362.6	2355.4	2234.9	2091.3
40°	4235.8	4185.5	4070.7	3889.8	3612.8	3295.6	2945.4	2698.5	2691.3	2544.9	2364.0
42.5°	4594.6	4560.2	4485.5	4380.7	4182.7	3990.3	3429.1	3104.7	3091.8	2902.3	2677.0
45°	4802.7	4775.5	4732.4	4758.2	4755.4	4719.5	4006.1	3588.4	3546.8	3301.3	3025.8
47.5°	4752.5	4728.1	4745.3	4946.3	5223.3	5431.4	4677.9	4083.6	4027.6	3707.6	3397.5
50°	4389.4	4399.4	4489.8	4874.5	5496.0	5958.2	5422.8	4647.7	4573.1	4116.6	3750.6
52.5°	3727.6	3752.0	3971.7	4509.9	5465.9	6299.8	6096.0	5230.5	5131.4	4515.7	4072.1
55°	2961.2	3022.9	3307.1	3872.6	5072.6	6324.2	6604.1	5816.1	5707.0	4890.3	4352.0
57.5°	2190.4	2282.2	2610.9	3130.5	4319.0	5938.1	6858.2	6375.9	6243.8	5262.1	4647.7
60°	1389.4	1445.4	1824.4	2437.3	3305.6	4993.6	6825.2	6852.4	6737.6	5632.4	4956.3
62.5°	887.1	914.3	1105.2	1738.2	2310.9	3697.5	6464.9	7212.7	7135.2	5969.7	5249.1
65°	569.8	581.3	678.9	1069.3	1573.2	2232.0	5567.8	7251.5	7261.5	6180.7	5430.0
67.5°	463.6	469.4	505.2	660.3	1112.4	1233.0	3878.4	6700.3	6822.3	6126.1	5368.3
70°	422.0	429.2	466.5	526.8	861.2	851.2	1877.5	5606.5	5806.1	5811.8	5094.1
72.5°	356.0	366.0	416.3	498.1	666.0	671.8	795.2	3993.2	4287.4	5194.6	4682.2
75°	297.1	302.9	345.9	439.2	564.1	536.8	558.4	2117.2	2542.0	4165.4	4244.4
77.5°	241.1	246.9	278.5	350.2	500.9	417.7	439.2	877.0	1083.7	2827.7	3469.3
80°	172.2	178.0	213.9	272.7	378.9	376.1	325.8	483.7	525.3	1528.7	2253.5
82.5°	123.4	127.7	162.2	195.2	262.7	377.5	245.4	328.7	344.5	677.5	908.6
85°	83.3	83.3	112.0	129.2	169.4	238.3	198.1	222.5	232.5	321.5	245.4
87.5°	35.9	35.9	60.3	66.0	89.0	110.5	147.8	112.0	114.8	173.7	100.5
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°	1378.0	1378.0	1378.0	1378.0	1378.0	1378.0	1378.0	1378.0	1378.0	1378.0	1378.0
2.5°	1372.2	1373.6	1376.5	1385.1	1390.9	1399.5	1403.8	1409.5	1409.5	1406.7	1408.1
5°	1369.3	1373.6	1383.7	1399.5	1409.5	1425.3	1436.8	1445.4	1448.3	1445.4	1446.8
7.5°	1367.9	1375.1	1392.3	1415.3	1429.6	1449.7	1465.5	1475.6	1482.7	1479.9	1481.3
10°	1363.6	1375.1	1396.6	1425.3	1446.8	1466.9	1481.3	1485.6	1489.9	1487.0	1485.6
12.5°	1369.3	1382.3	1405.2	1439.7	1464.1	1479.9	1484.2	1477.0	1466.9	1461.2	1459.8
15°	1380.8	1393.7	1416.7	1452.6	1474.1	1479.9	1469.8	1446.8	1423.9	1411.0	1409.5
17.5°	1396.6	1405.2	1423.9	1455.5	1472.7	1465.5	1445.4	1418.1	1400.9	1390.9	1392.3
20°	1406.7	1406.7	1421.0	1445.4	1459.8	1454.0	1429.6	1399.5	1372.2	1359.3	1355.0
22.5°	1421.0	1413.8	1415.3	1436.8	1456.9	1448.3	1396.6	1343.5	1304.7	1290.4	1289.0
25°	1459.8	1439.7	1426.8	1439.7	1487.0	1416.7	1313.4	1251.6	1215.8	1202.8	1204.3
27.5°	1507.1	1479.9	1452.6	1474.1	1511.4	1344.9	1207.1	1136.8	1115.3	1105.2	1109.5
30°	1554.5	1518.6	1482.7	1560.2	1494.2	1233.0	1070.8	1001.9	983.2	976.0	981.8
32.5°	1642.1	1583.2	1540.1	1675.1	1441.1	1105.2	922.9	859.8	842.6	833.9	831.1
35°	1788.5	1713.8	1670.8	1775.5	1366.5	963.1	788.0	743.5	724.9	706.2	703.3
37.5°	1999.5	1909.0	1870.3	1833.0	1261.7	822.5	684.7	654.5	627.3	598.5	597.1
40°	2252.1	2134.4	2105.7	1858.8	1116.7	690.4	612.9	584.2	549.7	522.5	523.9
42.5°	2543.5	2392.8	2331.0	1851.6	937.3	620.1	561.2	529.7	499.5	475.1	473.7
45°	2854.9	2684.1	2542.0	1801.4	759.3	571.3	529.7	492.3	462.2	434.9	432.0
47.5°	3199.4	3008.5	2737.2	1703.8	627.3	536.8	511.0	457.9	430.6	413.4	413.4
50°	3546.8	3318.6	2916.7	1555.9	549.7	511.0	483.7	439.2	417.7	403.3	403.3
52.5°	3843.9	3641.5	3064.5	1379.4	500.9	489.5	465.1	430.6	407.6	394.7	393.3
55°	4132.4	3941.5	3196.6	1204.3	460.8	460.8	460.8	423.4	397.6	386.1	384.7
57.5°	4419.5	4257.3	3334.4	1089.4	424.9	436.4	452.1	414.8	389.0	378.9	377.5
60°	4743.9	4636.2	3493.7	1009.1	393.3	410.5	440.7	404.8	374.6	366.0	364.6
62.5°	5088.4	5088.4	3638.7	895.7	364.6	389.0	423.4	391.9	361.7	354.5	353.1
65°	5358.2	5474.5	3732.0	726.3	335.9	367.5	403.3	374.6	344.5	343.1	340.2
67.5°	5389.8	5572.1	3673.1	548.3	310.0	344.5	383.2	356.0	327.3	327.3	323.0
70°	5163.0	5348.2	3489.4	410.5	291.4	321.5	357.4	333.0	305.7	308.6	301.4
72.5°	4784.1	4830.0	3032.9	324.4	269.8	297.1	325.8	307.2	282.8	282.8	272.7
75°	4284.6	4029.1	2203.3	271.3	244.0	268.4	294.3	278.5	256.9	249.8	244.0
77.5°	3410.4	2919.5	1280.3	234.0	222.5	241.1	258.4	246.9	228.2	212.4	212.4
80°	2078.4	1711.0	565.5	202.4	196.6	211.0	222.5	209.6	193.8	178.0	173.7
82.5°	790.9	660.3	274.2	173.7	172.2	180.9	189.5	176.6	165.1	157.9	136.4
85°	216.7	199.5	188.0	145.0	142.1	140.7	150.7	145.0	129.2	106.2	94.7
87.5°	81.8	93.3	101.9	89.0	94.7	87.6	100.5	91.9	81.8	53.1	47.4
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)