

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: P299815

Luminaire Tested: **GAA-AF-01-LED-U-5WQ-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299815  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAA-AF-01-LED-U-5WQ-7027  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

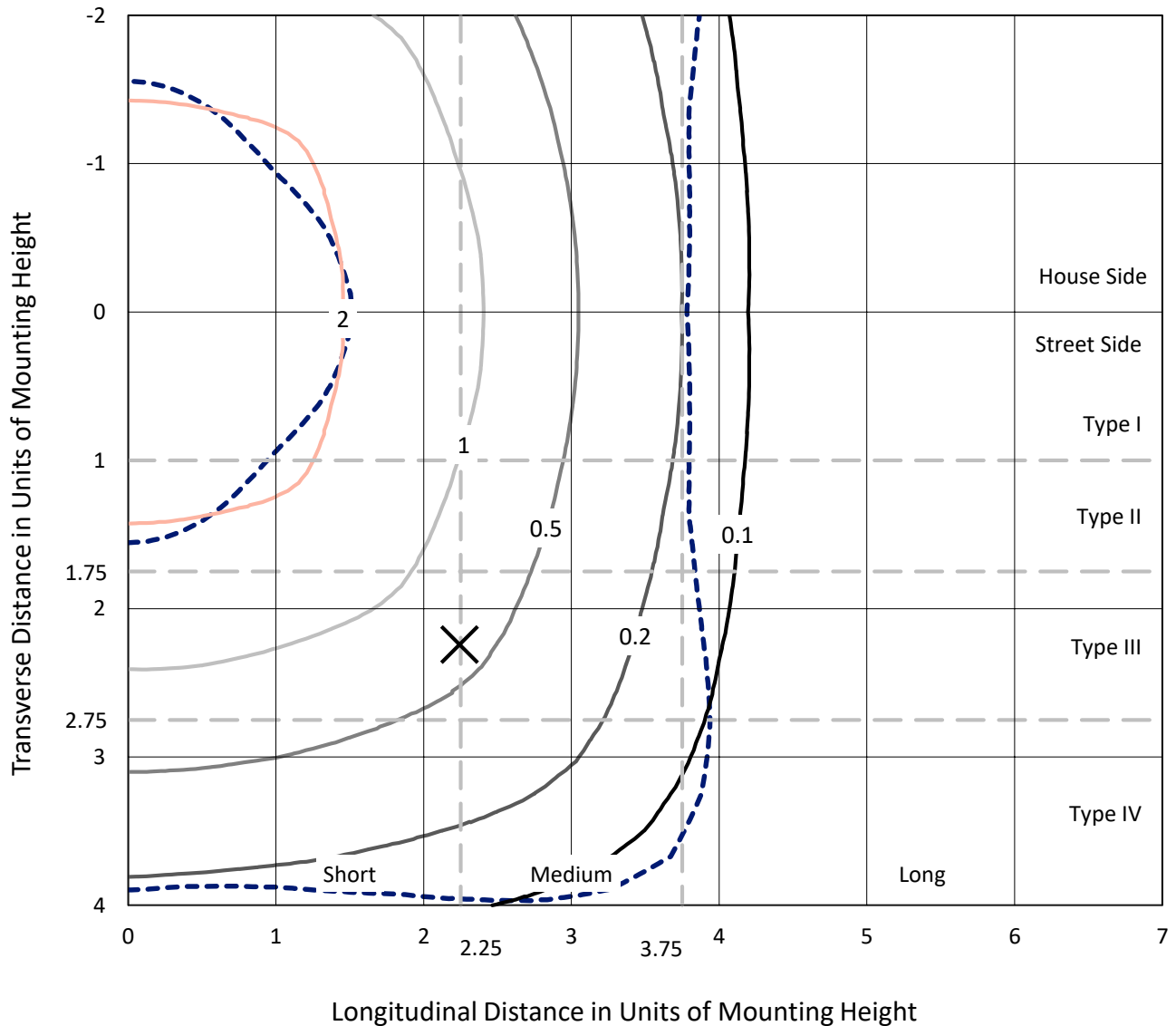
Lumens per Lamp: N/A  
Luminaire Lumens: 5683.7 lumens  
Efficiency: N/A  
Efficacy: 96.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B3 - U0 - G1  
  
Input Watts (W): 59  
Input Voltage (V): NR  
Input Current (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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 CATALOG NUMBER: GAA-AF-01-LED-U-5WQ-7027

### Iso-Footcandle Lines of Horizontal Illumination

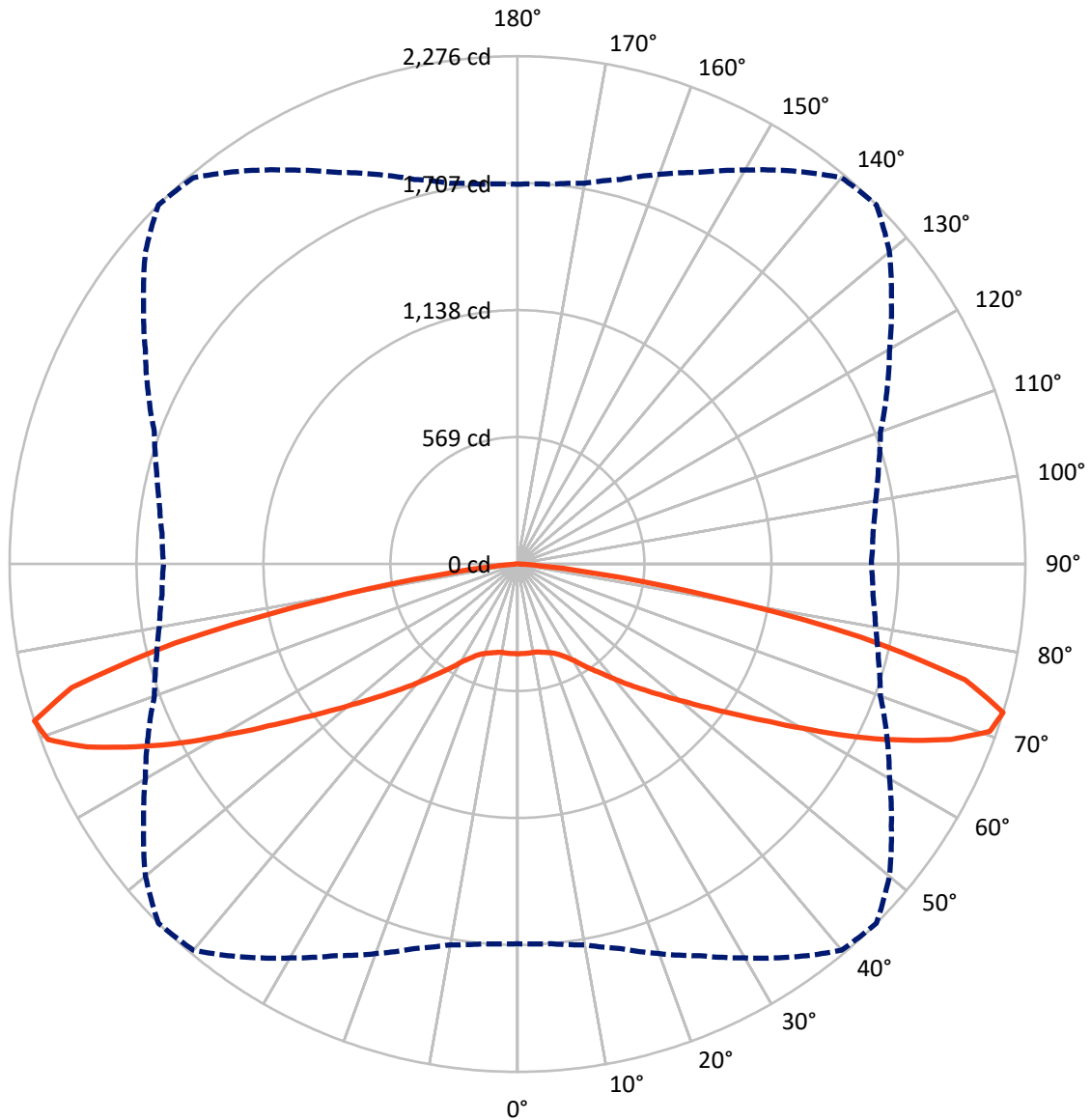
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4 fc  
 Type V - Short - Semi-Cutoff

REPORT NUMBER: P299815  
CATALOG NUMBER: GAA-AF-01-LED-U-5WQ-7027

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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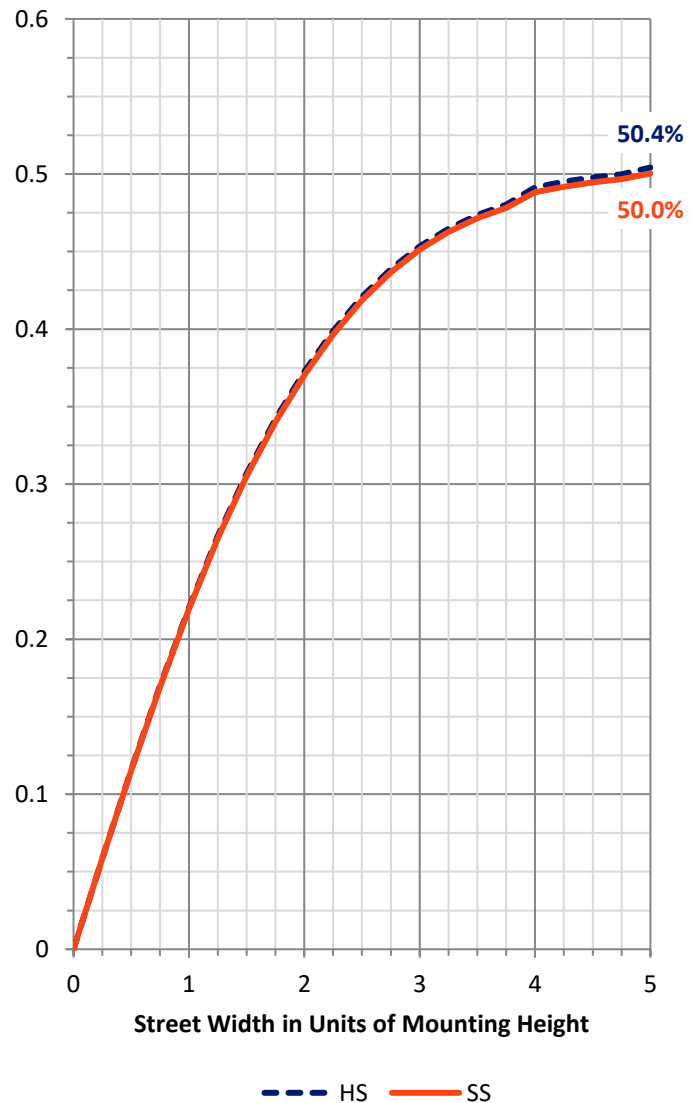
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2841.8	0.0	2841.8
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	2841.8	0.0	2841.8
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	5683.7	0.0	5683.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.4	0.7
10°-20°	116.7	2.1
20°-30°	213.3	3.8
30°-40°	367.8	6.5
40°-50°	628.7	11.1
50°-60°	1019.1	17.9
60°-70°	1690.6	29.7
70°-80°	1489.0	26.2
80°-90°	120.1	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°	5683.7	100.0
0°-180°	5683.7	100.0



REPORT NUMBER: P299815

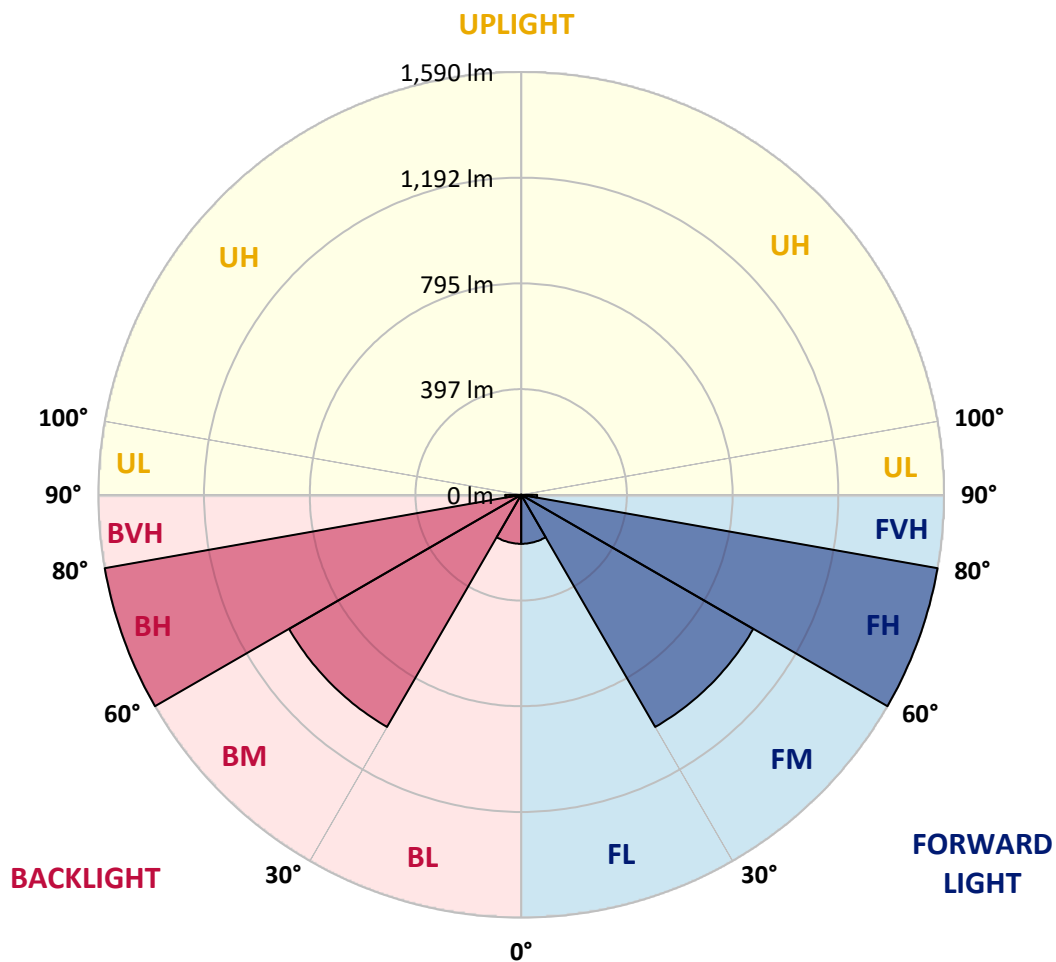
CATALOG NUMBER: GAA-AF-01-LED-U-5WQ-7027

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	184.2	3.2			
FM	(30°-60°)	1007.8	17.7			
FH	(60°-80°)	1589.8	28.0			G1/1800
FVH	(80°-90°)	60.0	1.1			G1/100
BL	(0°-30°)	184.2	3.2	B1/500		
BM	(30°-60°)	1007.8	17.7	B2/2500		
BH	(60°-80°)	1589.8	28.0	B3/2500		G1/1800
BVH	(80°-90°)	60.0	1.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G1**

Type V Short





REPORT NUMBER: P299815

CATALOG NUMBER: GAA-AF-01-LED-U-5WQ-7027

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	402.5	402.5	402.5	402.5	402.5	402.5	402.5	402.5	402.5	402.5	402.5
2.5°	402.5	402.8	403.0	402.8	402.8	402.5	402.2	402.5	402.2	401.7	402.0
5°	403.8	404.3	404.3	403.8	404.1	403.8	403.3	403.5	403.0	402.2	402.2
7.5°	405.4	405.6	405.6	405.1	405.4	404.8	404.3	404.1	403.5	402.5	401.7
10°	407.7	408.0	407.7	407.2	407.2	406.4	405.1	404.6	403.5	402.0	401.2
12.5°	410.3	410.6	410.3	409.8	409.5	408.2	407.2	406.4	405.6	404.3	403.0
15°	414.0	414.5	414.0	412.9	412.1	411.1	410.6	410.8	411.1	410.1	408.7
17.5°	420.7	421.0	420.2	417.9	416.8	415.8	415.8	416.3	417.1	416.6	415.3
20°	433.3	432.5	430.6	427.8	426.5	424.6	424.4	424.6	424.6	424.4	423.3
22.5°	448.9	448.4	446.0	442.4	440.6	439.5	437.9	436.6	436.4	435.6	434.6
25°	467.7	467.4	464.5	461.4	460.1	458.8	457.5	455.7	454.1	452.3	451.2
27.5°	491.6	490.6	486.4	484.9	483.0	482.3	480.4	478.4	477.0	474.7	473.4
30°	518.0	518.0	514.6	514.1	514.1	512.2	510.2	506.5	504.2	501.8	501.0
32.5°	544.3	544.6	541.2	542.2	543.0	544.3	544.8	543.5	542.0	541.7	540.1
35°	582.4	581.3	577.9	578.7	578.5	578.2	578.2	581.1	581.6	582.1	579.0
37.5°	629.5	629.5	626.2	626.2	624.6	623.0	620.9	622.8	625.6	626.4	624.3
40°	683.5	685.3	681.2	680.9	681.4	676.5	674.1	677.0	678.8	681.9	679.6
42.5°	747.1	745.8	741.6	741.1	738.2	736.7	734.6	736.9	739.8	741.9	742.7
45°	808.1	807.1	802.4	802.4	799.5	798.2	799.2	803.2	804.5	807.3	810.2
47.5°	868.3	867.0	863.9	865.2	865.5	867.8	871.2	874.8	878.5	882.4	883.7
50°	929.9	930.1	926.7	929.9	933.8	940.3	949.4	955.4	963.0	967.9	969.5
52.5°	985.9	986.9	990.6	997.9	1005.7	1018.5	1034.1	1048.7	1061.2	1069.6	1069.1
55°	1053.2	1054.7	1063.6	1076.1	1088.9	1108.2	1131.4	1157.2	1178.0	1190.0	1182.5
57.5°	1139.2	1142.6	1152.5	1169.4	1188.4	1213.5	1245.3	1284.1	1316.4	1332.6	1320.4
60°	1257.3	1259.4	1271.3	1290.1	1313.1	1344.1	1386.6	1438.7	1484.3	1505.7	1491.6
62.5°	1412.9	1416.8	1426.4	1445.5	1468.9	1504.1	1556.0	1621.2	1678.0	1707.7	1675.9
65°	1598.8	1611.3	1619.4	1638.6	1660.5	1697.8	1752.0	1821.9	1882.9	1902.5	1865.7
67.5°	1782.8	1793.7	1807.8	1830.0	1852.1	1894.1	1944.4	2012.2	2079.2	2096.9	2039.8
70°	1863.4	1869.6	1891.5	1921.7	1964.2	2013.8	2071.9	2148.0	2230.9	2245.5	2173.0
72.5°	1702.0	1708.2	1732.7	1784.1	1858.1	1936.9	2038.3	2150.1	2259.6	2276.0	2176.2
75°	1287.2	1277.1	1313.3	1381.4	1481.2	1590.9	1732.7	1893.1	2051.3	2071.9	1952.8
77.5°	665.3	664.0	691.3	775.8	894.9	1019.8	1175.9	1357.1	1512.0	1574.5	1477.5
80°	187.4	189.5	202.5	244.5	314.1	404.3	526.3	696.0	822.7	887.4	833.1
82.5°	73.5	79.2	84.2	92.0	101.1	114.4	152.8	227.3	305.0	364.4	298.5
85°	26.3	28.2	39.9	47.2	48.0	50.6	57.6	67.3	81.1	96.7	79.5
87.5°	9.9	10.9	12.8	21.1	20.9	19.0	23.2	24.2	18.2	16.7	20.6
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: P299815

CATALOG NUMBER: GAA-AF-01-LED-U-5WQ-7027

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	402.5	402.5	402.5	402.5	402.5	402.5	402.5	402.5
2.5°	401.4	401.7	401.7	402.0	402.2	402.2	402.8	402.8
5°	401.7	401.7	401.2	401.4	401.2	401.2	401.4	401.4
7.5°	401.2	400.9	400.4	400.1	399.6	399.6	399.6	399.6
10°	400.4	400.1	399.6	399.4	399.1	399.1	399.1	399.1
12.5°	402.5	401.7	401.2	400.9	400.9	400.9	400.9	400.9
15°	408.0	406.1	404.8	404.8	405.1	405.6	405.6	406.1
17.5°	414.7	412.7	411.4	410.3	410.8	411.6	412.1	412.7
20°	422.8	421.8	420.0	418.9	418.9	420.0	420.5	420.7
22.5°	434.0	433.3	432.5	431.2	431.2	431.7	432.7	432.7
25°	450.7	450.2	449.7	448.6	448.4	448.4	448.9	449.4
27.5°	471.6	471.8	471.3	471.1	470.3	470.0	470.8	470.5
30°	499.5	500.8	502.1	501.0	499.7	498.9	498.2	497.1
32.5°	537.3	535.7	534.7	532.8	530.5	528.4	526.8	525.0
35°	573.0	570.4	569.3	570.9	570.6	569.3	567.5	565.9
37.5°	616.8	616.3	616.8	619.6	619.1	620.4	616.8	616.5
40°	672.0	672.6	676.2	679.6	681.4	683.2	681.2	679.1
42.5°	736.2	735.9	737.2	741.9	745.0	747.1	742.7	742.2
45°	803.9	802.1	803.2	807.1	810.2	812.5	807.6	807.6
47.5°	878.5	875.4	872.0	876.4	878.2	879.8	875.9	874.6
50°	961.7	955.1	947.8	949.7	949.7	949.1	944.2	943.9
52.5°	1057.1	1045.1	1031.8	1026.8	1024.0	1020.8	1012.2	1008.1
55°	1166.8	1148.8	1128.0	1115.2	1108.4	1099.8	1085.5	1081.6
57.5°	1295.1	1266.9	1230.9	1215.3	1200.2	1186.1	1170.2	1165.8
60°	1447.0	1405.6	1357.9	1329.0	1312.5	1299.0	1282.6	1281.8
62.5°	1616.5	1551.1	1497.1	1471.0	1459.0	1447.0	1431.4	1433.5
65°	1788.8	1720.5	1669.9	1648.8	1637.6	1627.7	1612.1	1614.4
67.5°	1958.8	1895.9	1840.4	1818.8	1806.3	1793.7	1779.7	1782.0
70°	2080.8	2002.8	1940.3	1892.3	1862.3	1828.4	1806.5	1801.0
72.5°	2045.8	1925.7	1826.3	1731.2	1675.4	1630.0	1599.3	1586.0
75°	1770.5	1606.3	1478.6	1361.8	1296.1	1242.7	1203.8	1179.6
77.5°	1314.9	1130.3	979.4	844.9	738.5	667.1	616.8	584.2
80°	719.7	547.4	400.1	281.3	206.7	171.8	151.7	142.1
82.5°	224.2	144.7	106.6	92.0	85.5	81.9	75.9	66.2
85°	71.4	62.6	58.1	55.5	52.9	46.1	31.8	28.9
87.5°	27.6	28.4	28.2	26.6	27.1	19.6	15.6	13.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)