

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: P300298

Luminaire Tested: **GAA-AF-01-LED-U-AFL**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300298  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)  
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-AFL  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 4000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

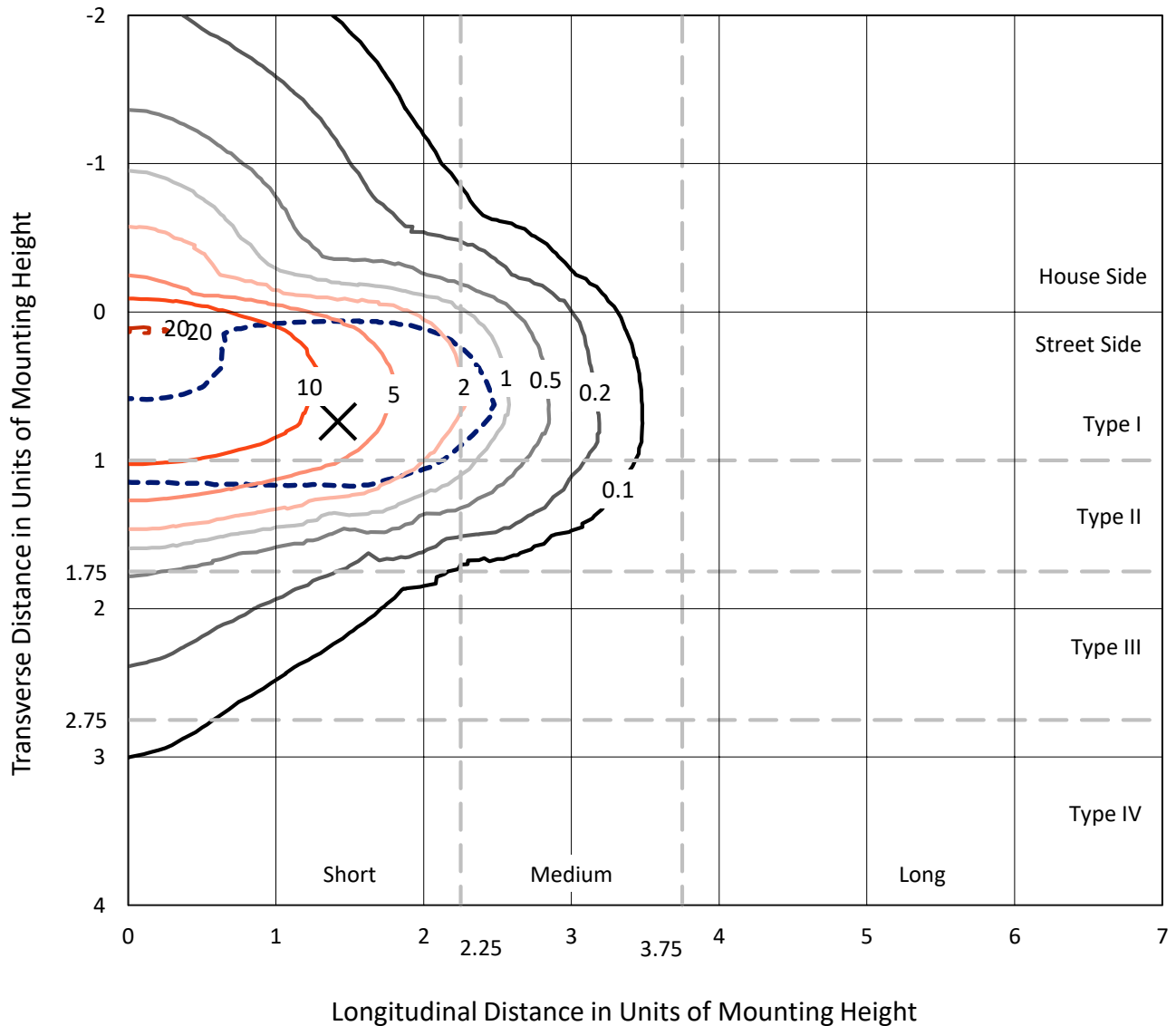
Lumens per Lamp: N/A  
Luminaire Lumens: 6372 lumens  
Efficiency: N/A  
Efficacy: 108.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 59  
Input Voltage (V): NR  
Input Current (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-AFL

### Iso-Footcandle Lines of Horizontal Illumination

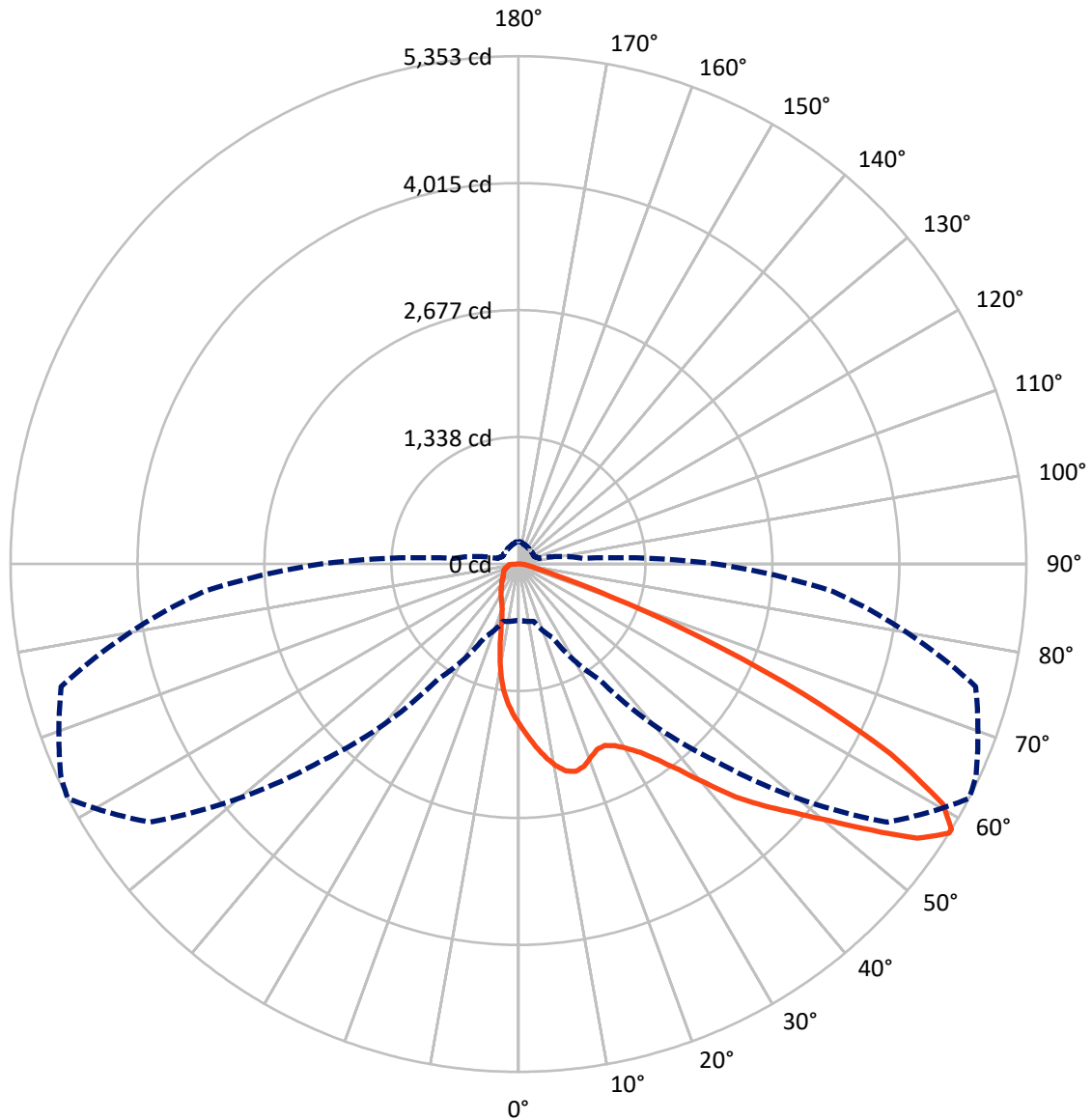
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 20.6 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P300298  
CATALOG NUMBER: GAA-AF-01-LED-U-AFL

### Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral    - - - Horizontal Cone Through 58-Deg Vertical

REPORT NUMBER: P300298

CATALOG NUMBER: GAA-AF-01-LED-U-AFL

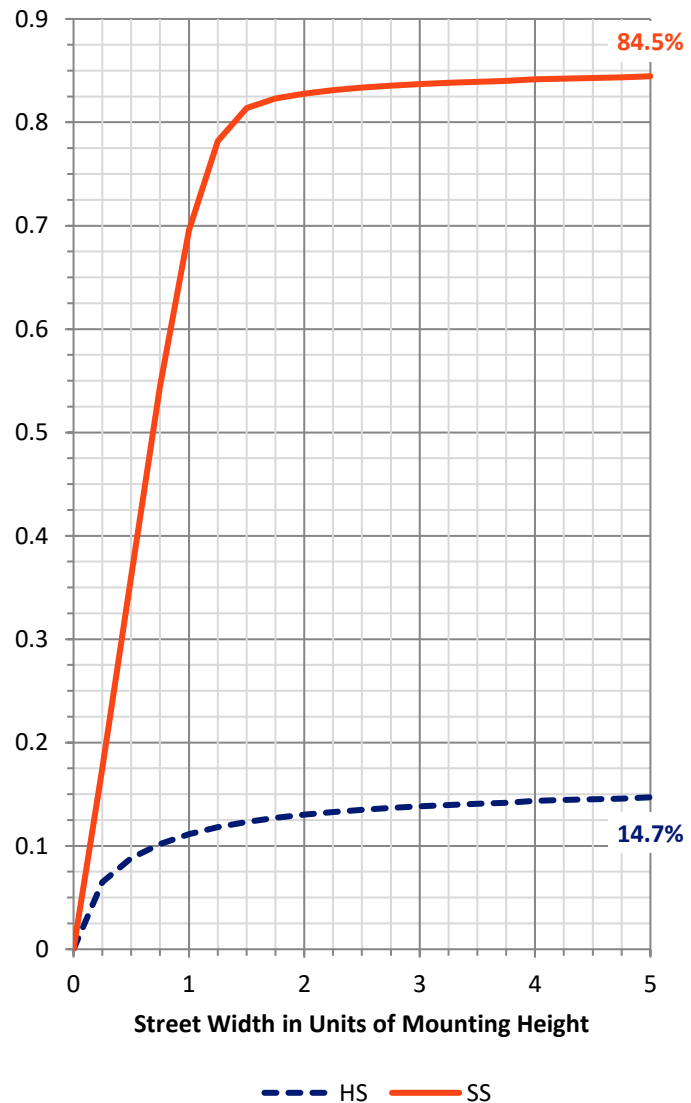
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	971.7	0.0	971.7
	% Fixture	15.2	0.0	15.2
<b>Street Side</b>	Lumens	5400.3	0.0	5400.3
	% Fixture	84.8	0.0	84.8
<b>Total</b>	Lumens	6372.0	0.0	6372.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.4	2.4
10°-20°	386.9	6.1
20°-30°	625.5	9.8
30°-40°	993.0	15.6
40°-50°	1453.0	22.8
50°-60°	1519.7	23.8
60°-70°	897.8	14.1
70°-80°	252.9	4.0
80°-90°	91.8	1.4
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°	6372.0	100.0
0°-180°	6372.0	100.0



REPORT NUMBER: P300298

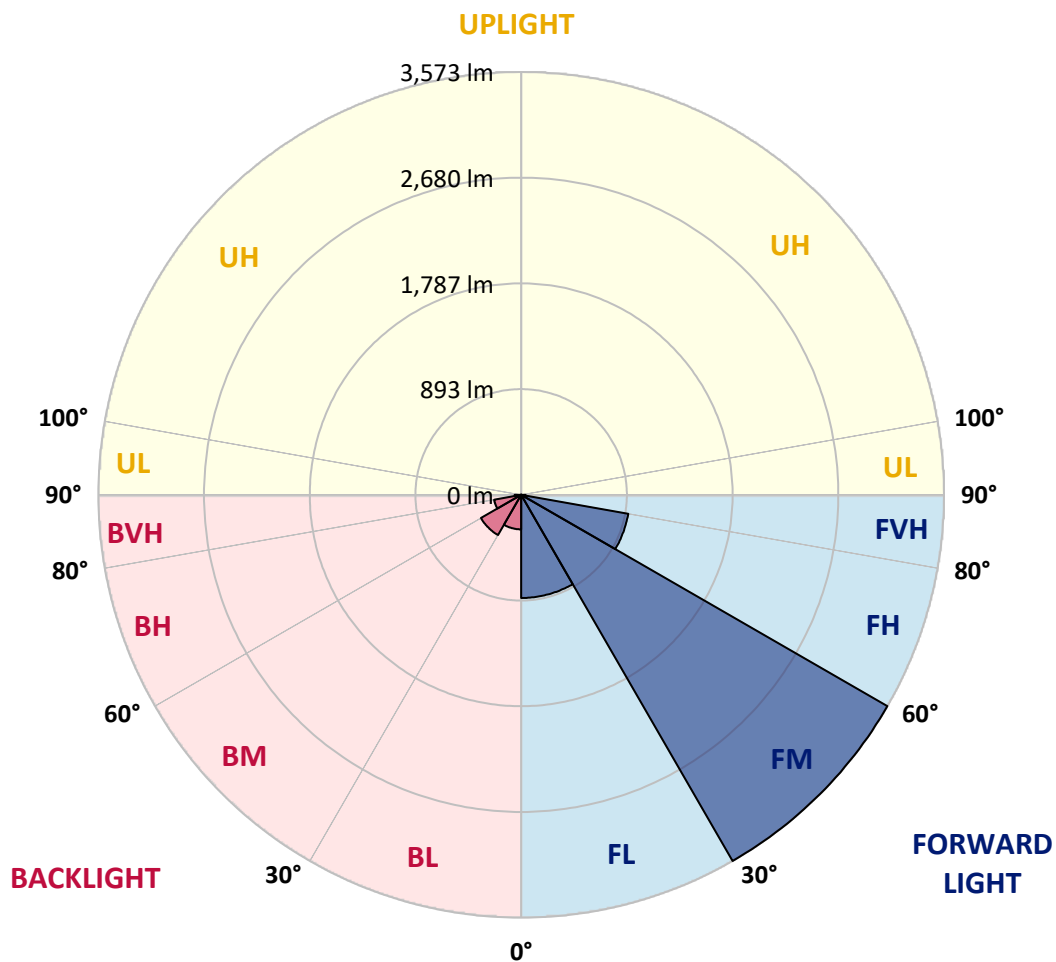
CATALOG NUMBER: GAA-AF-01-LED-U-AFL

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	871.8	13.7			
FM	(30°-60°)	3573.4	56.1			
FH	(60°-80°)	918.9	14.4			G1/1800
FVH	(80°-90°)	36.2	0.6			G1/100
BL	(0°-30°)	292.1	4.6	B1/500		
BM	(30°-60°)	392.2	6.2	B1/1000		
BH	(60°-80°)	231.8	3.6	B1/500		G1/500
BVH	(80°-90°)	55.6	0.9			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Short





REPORT NUMBER: P300298

CATALOG NUMBER: GAA-AF-01-LED-U-AFL

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6
2.5°	1934.2	1918.5	1908.6	1899.9	1888.5	1864.2	1831.5	1810.8	1800.3	1764.6	1722.3
5°	2123.8	2110.0	2099.8	2088.1	2067.7	2029.6	1976.8	1934.8	1914.0	1842.6	1758.0
7.5°	2079.4	2085.1	2102.8	2133.7	2160.1	2155.0	2107.9	2054.5	2027.2	1927.9	1799.4
10°	1811.7	1821.6	1852.2	1924.5	2041.6	2161.6	2198.2	2161.3	2133.7	2012.2	1842.0
12.5°	1758.0	1757.7	1760.1	1779.3	1848.9	2017.9	2201.2	2238.4	2221.9	2092.6	1885.5
15°	1779.9	1780.5	1778.7	1786.8	1808.4	1875.3	2109.4	2268.1	2279.8	2173.6	1930.6
17.5°	1837.5	1836.0	1829.1	1829.1	1836.9	1863.0	2001.4	2240.5	2294.5	2245.3	1970.2
20°	1934.2	1927.3	1908.9	1892.1	1883.7	1897.8	1957.0	2176.9	2269.0	2308.0	2002.9
22.5°	2051.2	2045.8	2016.1	1980.1	1951.0	1950.7	1979.8	2121.4	2224.9	2367.1	2030.5
25°	2202.4	2193.7	2149.6	2092.0	2041.0	2021.5	2029.6	2118.7	2200.9	2431.3	2055.1
27.5°	2380.0	2364.1	2311.9	2228.8	2153.8	2114.5	2102.8	2167.6	2222.8	2510.9	2089.3
30°	2595.5	2577.2	2510.3	2401.9	2296.0	2231.5	2206.6	2254.3	2295.4	2607.8	2144.2
32.5°	2840.6	2814.2	2736.8	2617.4	2478.2	2379.7	2339.2	2368.9	2401.6	2724.5	2212.9
35°	3179.4	3147.9	3036.0	2871.2	2714.0	2578.7	2513.9	2535.5	2567.3	2898.5	2312.2
37.5°	3410.4	3396.3	3321.9	3167.1	2996.0	2840.3	2740.1	2752.7	2770.7	3116.1	2439.4
40°	3408.3	3414.0	3415.5	3417.0	3300.6	3151.5	3043.8	3030.6	3026.9	3354.9	2584.1
42.5°	3237.6	3261.0	3336.6	3489.9	3560.7	3492.3	3393.6	3355.5	3336.6	3636.4	2737.4
45°	2976.2	2988.8	3130.5	3429.9	3694.0	3829.9	3755.2	3635.2	3601.0	3895.0	2864.6
47.5°	2841.5	2855.3	2944.4	3270.9	3692.5	4102.6	4145.9	3917.2	3856.0	4120.0	2974.4
50°	2520.8	2549.6	2661.8	2994.2	3557.7	4228.1	4554.2	4253.3	4126.6	4339.1	3084.6
52.5°	1931.8	1976.2	2101.9	2539.4	3216.0	4166.0	4881.0	4660.7	4481.9	4565.9	3179.1
55°	1218.5	1251.5	1357.1	1793.4	2572.7	3842.8	5004.9	5101.5	4942.5	4780.8	3261.0
57.5°	662.5	677.2	716.8	990.2	1673.4	3128.4	4824.3	5352.4	5286.4	4963.2	3322.8
58°	592.9	602.8	627.4	858.2	1484.1	2933.0	4744.2	5353.3	5320.3	4989.9	3327.6
60°	439.9	434.8	412.9	489.7	826.1	2026.3	4259.9	5139.0	5236.0	5022.6	3304.2
62.5°	386.5	374.2	329.5	324.4	401.8	933.5	3259.5	4402.1	4631.0	4836.0	3162.0
65°	363.1	349.9	292.3	273.6	289.9	394.9	1920.0	3301.5	3588.7	4270.1	2798.3
67.5°	345.7	328.6	268.5	243.0	244.2	261.0	769.6	2079.4	2402.5	3242.1	2176.6
70°	328.9	310.3	248.4	219.0	212.1	206.4	306.1	1040.9	1334.0	2047.9	1387.8
72.5°	310.9	292.6	230.7	200.1	186.6	167.7	199.8	425.8	594.7	968.9	629.5
75°	284.8	268.2	213.0	183.3	164.1	138.9	150.9	222.3	266.7	385.9	303.4
77.5°	252.6	239.1	193.2	169.5	145.5	112.8	116.1	154.2	171.0	220.8	180.3
80°	181.5	186.3	171.9	152.4	129.6	91.5	89.1	112.5	121.5	141.9	117.3
82.5°	127.5	130.2	142.2	124.5	107.1	72.0	65.7	79.2	84.6	93.3	63.3
85°	87.9	84.9	97.5	86.7	77.4	48.0	45.0	53.7	57.0	57.9	32.7
87.5°	52.8	52.8	56.4	46.5	41.7	24.9	24.3	30.6	32.7	31.2	18.0
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: P300298

CATALOG NUMBER: GAA-AF-01-LED-U-AFL

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6	1692.6
2.5°	1697.1	1675.8	1630.5	1594.2	1548.3	1500.6	1473.9	1445.4	1425.9	1411.8	1434.3
5°	1710.0	1666.5	1572.9	1484.1	1386.0	1283.9	1206.5	1134.5	1084.4	1053.2	1082.6
7.5°	1730.4	1663.5	1514.4	1362.5	1186.4	1016.6	864.8	769.6	714.1	686.8	703.9
10°	1753.8	1658.7	1445.7	1197.8	945.8	731.8	618.4	580.0	567.4	562.3	564.7
12.5°	1773.3	1648.5	1361.3	998.6	710.2	577.9	545.2	544.3	547.0	547.6	548.5
15°	1787.1	1633.5	1236.2	790.9	568.0	526.6	524.8	530.2	535.3	537.4	538.6
17.5°	1796.4	1602.6	1094.9	625.3	508.9	501.7	505.9	512.8	518.2	519.7	520.9
20°	1795.5	1557.3	926.6	521.5	476.8	476.8	484.0	489.4	489.7	487.9	488.8
22.5°	1786.2	1495.2	763.3	466.3	448.3	453.4	460.6	455.5	434.5	420.7	421.6
25°	1770.6	1421.1	623.5	431.2	421.9	430.9	428.8	390.4	360.4	346.9	346.9
27.5°	1756.8	1333.4	516.1	400.6	395.5	406.6	369.4	334.6	322.0	315.7	313.6
30°	1746.9	1238.9	444.4	371.2	370.6	362.5	320.5	310.9	308.8	303.7	301.9
32.5°	1749.3	1143.2	398.5	345.4	347.5	310.3	297.1	299.2	297.4	292.0	289.6
35°	1769.1	1052.3	368.5	322.0	315.7	280.3	283.3	287.2	286.6	279.1	276.7
37.5°	1804.5	966.2	348.7	302.5	275.5	265.2	270.0	276.1	274.5	269.4	267.6
40°	1841.7	885.2	332.5	287.2	251.7	255.0	259.2	262.5	264.0	265.5	264.3
42.5°	1878.0	800.5	312.7	271.5	241.8	245.4	247.2	250.5	258.6	264.3	264.0
45°	1899.6	721.0	292.3	249.3	234.0	236.1	234.9	241.5	251.4	260.7	261.0
47.5°	1923.6	659.2	276.1	228.9	226.5	228.0	224.4	231.0	240.0	251.4	252.6
50°	1952.8	622.3	263.1	212.7	216.3	216.3	215.4	221.4	234.0	247.2	249.6
52.5°	1985.8	615.1	252.3	201.0	206.1	205.8	206.7	215.7	229.5	242.4	244.5
55°	2026.0	634.6	240.6	192.3	196.2	197.4	200.4	210.6	222.3	237.0	237.9
57.5°	2072.8	674.2	231.3	185.4	187.2	191.1	195.9	205.2	217.8	234.0	234.9
58°	2080.6	682.6	229.8	184.8	185.4	189.9	195.3	204.3	216.9	234.6	235.5
60°	2080.9	710.5	226.5	182.1	178.5	186.0	192.0	201.0	215.4	236.7	238.8
62.5°	2007.1	710.2	224.1	178.2	171.3	180.6	187.5	198.0	213.9	241.8	246.0
65°	1767.3	645.4	212.7	172.2	165.6	175.8	183.6	195.9	218.1	264.0	266.7
67.5°	1382.4	529.0	191.4	163.8	158.1	171.0	181.2	195.6	222.6	269.1	270.9
70°	914.0	395.8	168.0	154.2	150.3	165.3	182.4	205.8	217.5	258.3	253.5
72.5°	474.4	277.9	149.1	142.2	141.3	160.2	199.8	204.6	212.4	243.0	237.0
75°	249.0	192.9	132.6	129.0	130.5	159.0	235.8	199.2	205.8	232.5	243.9
77.5°	152.4	155.7	118.5	117.0	120.0	155.4	235.5	192.3	196.2	213.9	226.5
80°	102.0	126.3	107.7	108.0	110.1	142.2	211.5	181.5	184.5	202.2	215.1
82.5°	64.5	74.7	97.8	102.9	100.2	117.3	179.7	165.3	169.5	231.3	244.5
85°	32.7	46.8	84.9	99.0	90.3	82.2	145.8	144.9	147.0	166.8	174.3
87.5°	15.0	25.8	66.3	86.4	68.1	51.3	105.9	107.4	115.8	118.5	118.5
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)