

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: McGRAW-EDISON

Report Number: P317549

Luminaire Tested: **GLEON-SA5A-827-U-T2R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P317549  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA5A-827-U-T2R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17838 lumens  
Efficiency: N/A  
Efficacy: 110.1 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

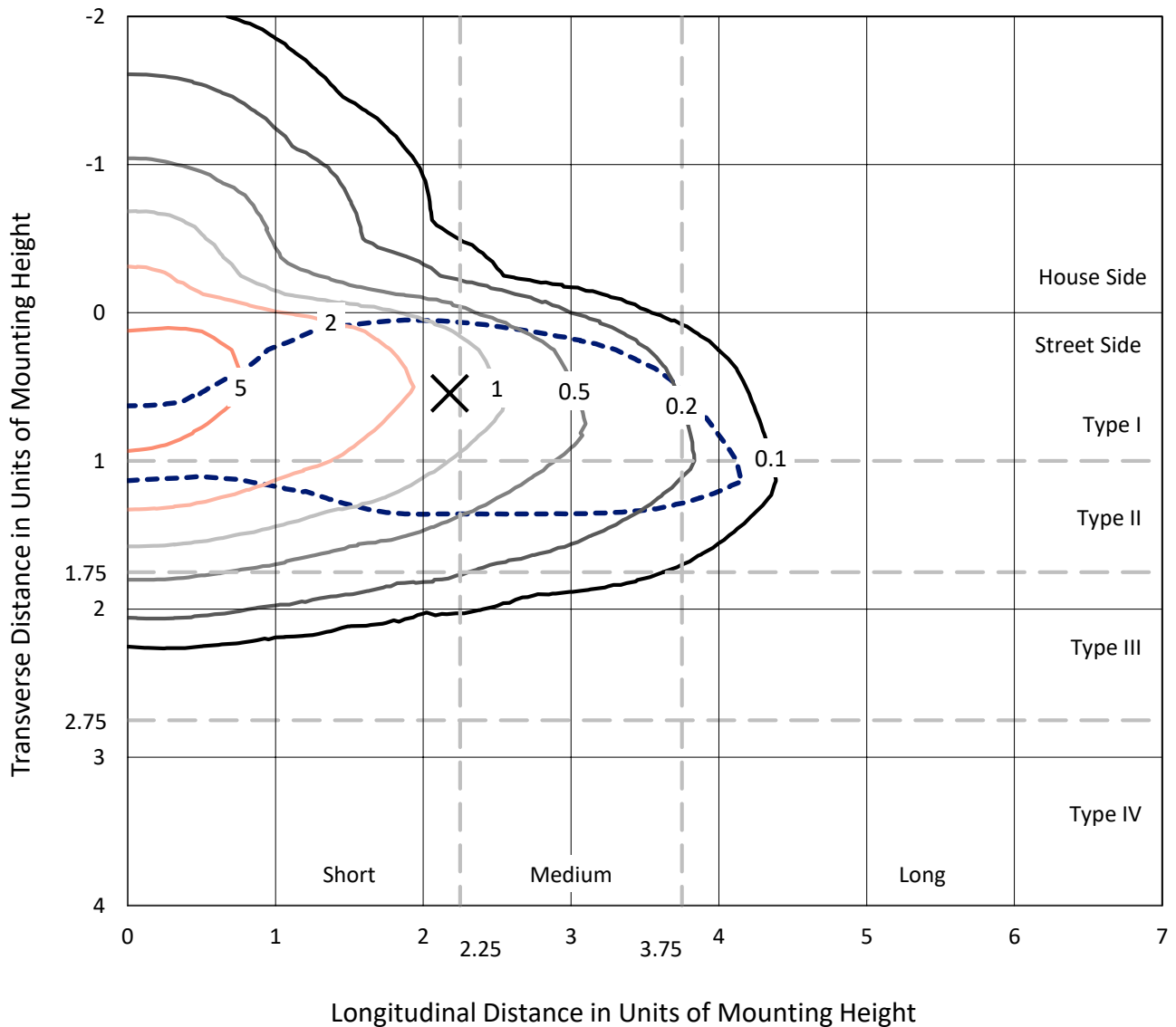
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

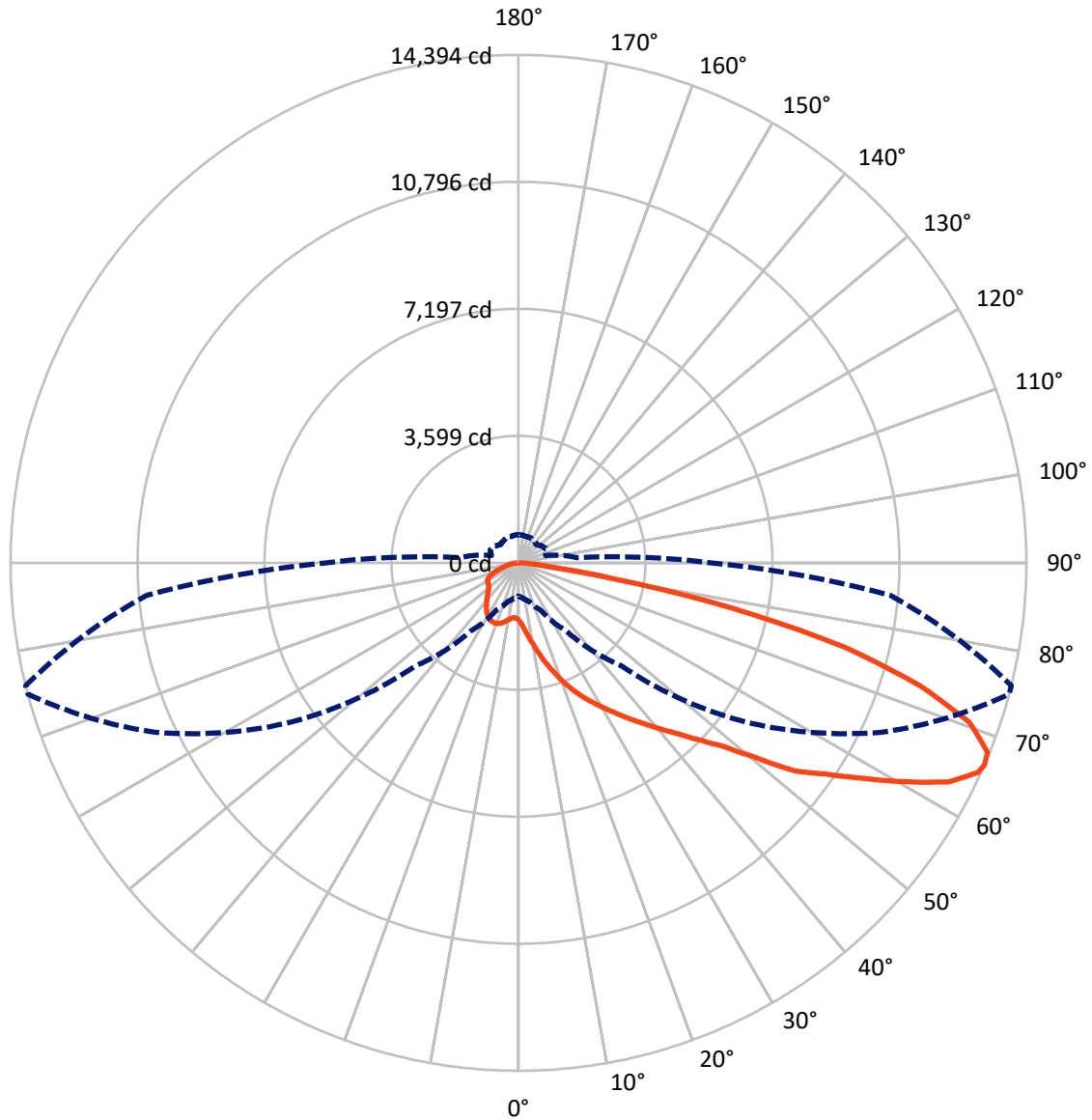
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 66-Deg Vertical

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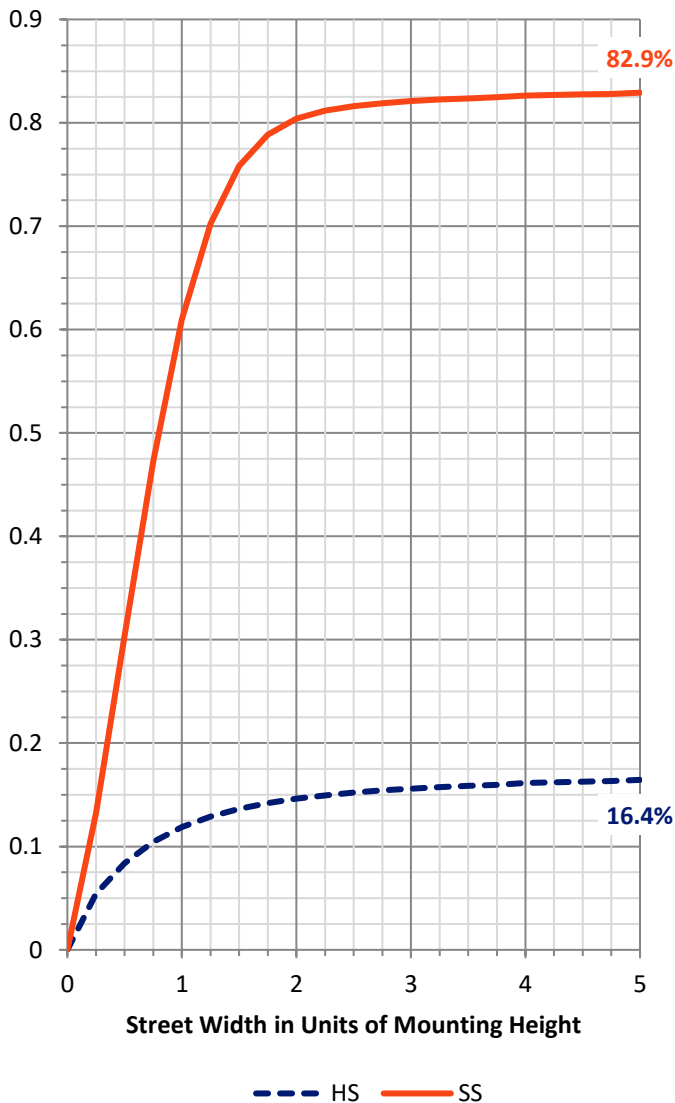
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3001.5	0.0	3001.5
	% Fixture	16.8	0.0	16.8
<b>Street Side</b>	Lumens	14836.5	0.0	14836.5
	% Fixture	83.2	0.0	83.2
<b>Total</b>	Lumens	17838.0	0.0	17838.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	197.0	1.1
10°-20°	777.9	4.4
20°-30°	1511.7	8.5
30°-40°	2467.4	13.8
40°-50°	3371.0	18.9
50°-60°	3926.6	22.0
60°-70°	3520.2	19.7
70°-80°	1779.0	10.0
80°-90°	287.3	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°	17838.0	100.0
0°-180°	17838.0	100.0



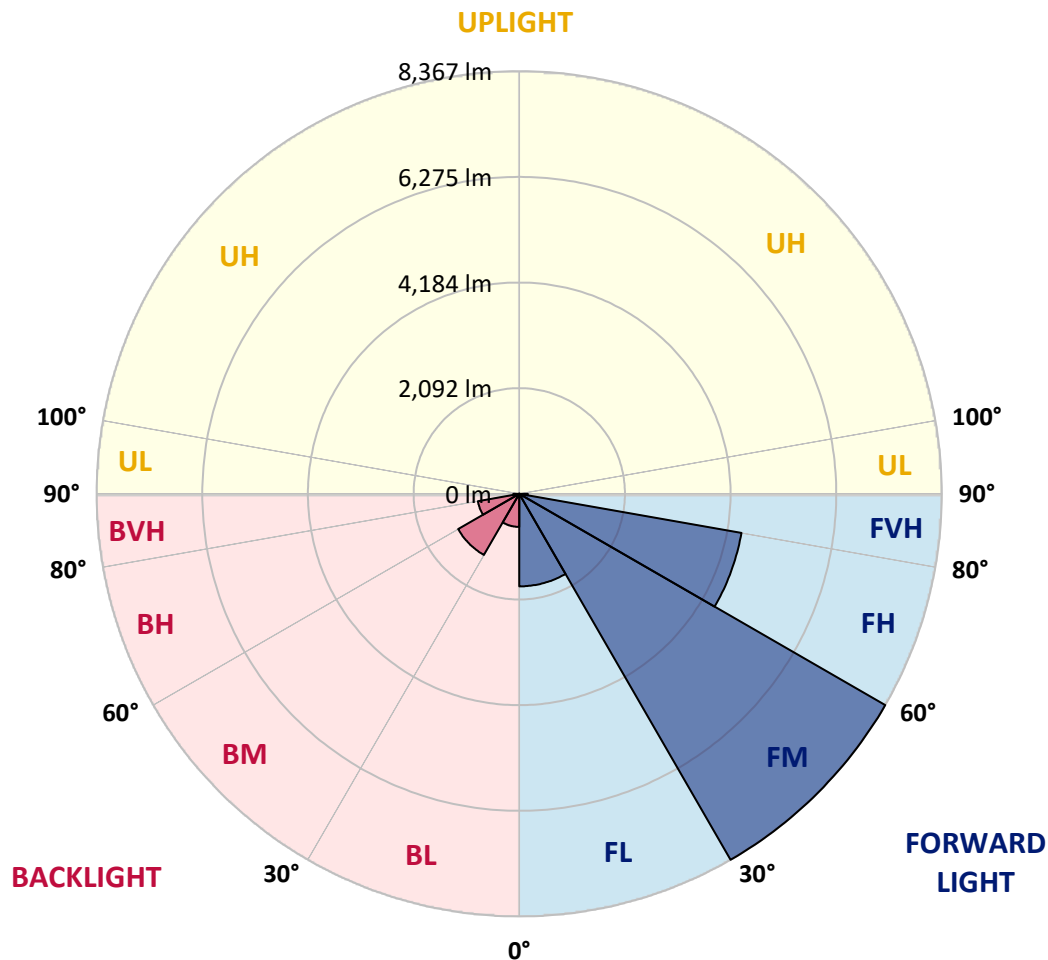
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1831.9	10.3			
FM (30°-60°)	8367.3	46.9			
FH (60°-80°)	4467.6	25.0			G2/5000
FVH (80°-90°)	169.7	1.0			G2/225
BL (0°-30°)	654.6	3.7	B2/1000		
BM (30°-60°)	1397.7	7.8	B2/2500		
BH (60°-80°)	831.6	4.7	B2/1000		G2/1000
BVH (80°-90°)	117.6	0.7			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0
2.5°	2162.5	2129.8	2126.8	2079.0	2068.1	1976.6	1909.4	1839.1	1759.2	1743.5	1680.5
5°	2777.8	2774.8	2733.0	2654.9	2593.7	2437.5	2283.0	2119.5	1940.3	1911.2	1769.5
7.5°	3331.3	3326.5	3294.4	3210.2	3121.8	2929.8	2709.4	2458.7	2168.0	2125.0	1890.0
10°	3751.6	3749.8	3738.9	3677.1	3602.0	3417.9	3174.5	2832.3	2432.6	2373.9	2040.8
12.5°	4076.2	4079.8	4087.1	4065.3	4029.5	3872.7	3623.2	3228.3	2714.8	2656.7	2208.6
15°	4296.0	4306.9	4344.4	4375.3	4394.1	4297.8	4056.2	3633.5	3030.9	2961.3	2394.5
17.5°	4406.8	4418.9	4483.7	4577.0	4663.0	4653.3	4461.3	4019.8	3334.3	3267.1	2594.3
20°	4502.5	4511.6	4584.2	4696.3	4848.3	4915.5	4807.7	4391.7	3666.8	3586.9	2806.3
22.5°	4779.8	4791.4	4813.2	4876.7	5011.2	5134.7	5082.6	4743.5	3971.4	3896.9	3007.3
25°	5315.2	5329.1	5281.9	5228.0	5253.4	5339.4	5349.1	5064.5	4280.2	4196.1	3223.5
27.5°	5960.1	5980.1	5899.6	5760.9	5639.8	5606.5	5595.0	5327.3	4575.2	4477.7	3437.3
30°	6591.7	6626.3	6521.5	6341.6	6119.4	5963.2	5847.5	5584.7	4865.8	4772.6	3638.9
32.5°	7208.8	7194.9	7042.9	6867.3	6606.9	6411.3	6131.5	5860.8	5192.9	5085.7	3839.4
35°	7631.5	7636.4	7495.3	7287.0	7038.7	6888.5	6511.8	6158.8	5526.5	5427.8	4067.1
37.5°	7991.2	7968.8	7809.0	7614.6	7400.8	7336.6	6956.9	6487.0	5888.1	5780.3	4309.3
40°	8111.1	8085.1	7980.3	7840.5	7669.1	7663.6	7448.0	6858.8	6296.8	6190.2	4582.4
42.5°	8038.5	8005.2	7962.2	7924.0	7871.3	7895.6	7909.5	7294.8	6746.2	6626.9	4898.5
45°	7770.2	7719.9	7750.2	7833.2	7947.6	8084.5	8326.1	7777.5	7249.4	7149.5	5269.8
47.5°	7357.8	7312.4	7406.9	7584.3	7895.6	8242.0	8720.4	8310.4	7850.1	7750.8	5798.4
50°	6777.7	6791.0	6926.0	7248.8	7719.3	8314.6	9206.0	9015.9	8723.4	8630.7	6519.7
52.5°	5825.7	5828.1	6208.4	6738.3	7406.9	8277.1	9475.5	9917.6	9915.8	9803.7	7206.4
55°	4941.5	4995.4	5296.4	6000.7	6900.6	8126.9	9663.9	10356.0	10698.8	10567.4	7846.5
57.5°	4078.0	4109.5	4394.7	5102.0	6178.1	7726.6	9857.0	10882.3	11601.1	11518.1	8642.2
60°	3095.7	3144.2	3439.1	4092.5	5254.0	7016.3	9875.2	11431.5	12679.6	12596.1	9530.6
62.5°	2009.3	2092.9	2369.0	2981.3	4136.1	5994.6	9453.7	11790.7	13701.9	13672.2	10319.1
65°	1154.8	1217.8	1409.8	1882.1	2853.5	4712.0	8451.5	11652.6	14331.1	14314.1	10614.0
66°	943.5	982.9	1130.0	1471.0	2354.5	4137.9	7868.9	11361.3	14393.4	14394.0	10580.1
67.5°	754.6	772.1	838.1	1053.1	1737.4	3279.8	6827.9	10718.8	14315.9	14337.1	10361.5
70°	624.4	633.4	654.0	706.1	948.3	1977.8	4846.5	9049.2	13537.8	13554.1	9508.2
72.5°	560.2	565.6	573.5	580.8	669.2	1105.2	2960.1	7239.1	11869.4	11890.6	8208.0
75°	507.5	510.5	509.3	509.9	561.4	704.3	1529.7	5404.8	9597.2	9554.9	6287.7
77.5°	445.7	448.7	442.7	443.9	496.6	541.4	761.2	3783.7	6476.7	6177.5	3542.6
80°	376.7	379.1	376.7	380.9	432.4	408.8	442.7	2128.6	2863.8	2708.8	1259.6
82.5°	284.6	294.9	302.2	319.1	356.1	290.7	296.1	829.0	872.0	830.3	386.4
85°	124.7	152.0	227.7	244.0	267.7	174.4	194.4	337.9	354.9	344.0	140.5
87.5°	32.7	35.7	112.6	141.7	148.4	78.7	101.1	153.8	162.3	153.8	46.6
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°	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0
2.5°	1647.2	1617.5	1564.2	1517.0	1481.3	1457.0	1432.8	1420.7	1413.4	1406.2	1407.4
5°	1699.9	1639.9	1548.5	1483.7	1447.3	1424.3	1412.2	1407.4	1404.3	1397.1	1397.1
7.5°	1779.2	1694.4	1568.5	1501.8	1473.4	1455.8	1448.5	1446.1	1442.5	1434.0	1435.2
10°	1879.1	1760.4	1610.2	1545.4	1519.4	1500.0	1489.7	1486.1	1479.4	1469.7	1471.0
12.5°	1996.6	1842.2	1665.3	1597.5	1566.0	1540.0	1523.0	1512.7	1501.2	1488.5	1489.1
15°	2125.0	1931.2	1724.7	1644.2	1601.2	1564.8	1537.6	1520.0	1501.8	1486.1	1485.5
17.5°	2255.2	2017.2	1770.1	1669.6	1611.4	1563.6	1526.7	1499.4	1477.0	1457.6	1455.8
20°	2395.7	2094.7	1795.5	1667.2	1592.1	1535.1	1486.1	1452.2	1427.4	1408.0	1404.9
22.5°	2538.6	2167.4	1799.8	1642.3	1549.1	1479.4	1428.0	1390.4	1365.0	1345.0	1337.7
25°	2669.4	2223.7	1782.2	1594.5	1489.1	1414.0	1363.8	1325.6	1305.0	1281.4	1274.1
27.5°	2788.7	2263.1	1747.1	1533.3	1421.9	1348.0	1300.8	1268.1	1245.7	1227.5	1221.5
30°	2895.9	2284.2	1689.6	1460.7	1352.9	1285.6	1245.7	1223.3	1203.9	1180.9	1176.6
32.5°	2997.6	2284.2	1615.7	1381.3	1284.4	1230.5	1206.9	1193.0	1171.2	1148.8	1142.7
35°	3099.4	2270.3	1528.5	1298.4	1221.5	1191.2	1190.0	1173.6	1140.3	1110.0	1102.2
37.5°	3206.5	2241.9	1430.4	1220.9	1170.0	1173.6	1183.9	1147.6	1100.3	1057.3	1045.8
40°	3327.7	2202.5	1328.6	1153.6	1127.0	1165.7	1167.6	1110.0	1018.0	978.6	968.3
42.5°	3470.0	2163.1	1234.2	1094.3	1093.1	1142.1	1136.7	1028.9	973.8	953.8	948.3
45°	3657.1	2140.7	1144.5	1038.0	1066.4	1104.0	1084.0	984.1	961.1	949.6	944.7
47.5°	3952.0	2152.2	1062.2	993.2	1039.8	1065.8	985.9	965.9	949.6	935.6	930.8
50°	4321.4	2145.6	995.6	962.3	1009.5	1025.9	941.7	942.3	933.8	918.1	910.8
52.5°	4599.4	2093.5	952.6	944.7	982.9	955.0	913.8	919.3	915.0	892.0	884.1
55°	4867.7	2048.7	930.8	938.0	963.5	866.6	881.1	894.4	890.2	867.8	864.2
57.5°	5201.3	2040.2	917.5	939.9	947.1	822.4	849.6	867.2	864.2	854.5	852.7
60°	5610.1	2042.6	905.3	942.9	929.0	789.7	820.0	842.4	844.2	842.4	841.2
62.5°	5834.8	1976.6	875.1	934.4	896.9	761.2	789.1	821.8	822.4	826.0	825.4
65°	5644.0	1779.2	818.7	904.7	843.0	737.6	762.4	798.2	789.1	805.4	805.4
66°	5458.7	1665.3	790.9	885.4	820.0	728.5	753.9	786.0	774.5	796.9	796.9
67.5°	5080.2	1473.4	740.6	844.2	787.3	715.8	744.3	766.1	750.3	783.6	781.2
70°	4388.6	1139.7	639.5	750.9	733.4	697.0	730.9	726.1	703.1	753.9	744.3
72.5°	3700.1	866.0	513.5	628.6	651.6	673.4	712.2	675.2	646.2	681.9	660.7
75°	2871.1	651.0	405.7	488.7	550.5	636.5	689.8	616.5	574.7	571.1	559.6
77.5°	1552.1	446.9	321.6	373.0	437.2	590.4	674.6	553.5	490.5	476.0	466.9
80°	614.7	290.7	233.8	282.8	305.8	523.8	638.3	480.2	404.5	390.0	376.1
82.5°	253.7	172.0	150.8	189.5	199.2	448.1	572.9	393.6	312.5	432.4	459.0
85°	109.0	94.5	89.6	98.1	112.6	314.3	456.0	300.4	337.3	301.0	239.2
87.5°	32.7	40.0	38.2	37.5	41.2	75.1	242.8	167.1	247.7	93.9	70.2
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)