

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: P317558

Luminaire Tested: **GLEON-SA4B-827-U-T2R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P317558  
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-SA4B-827-U-T2R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17655 lumens  
Efficiency: N/A  
Efficacy: 103.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

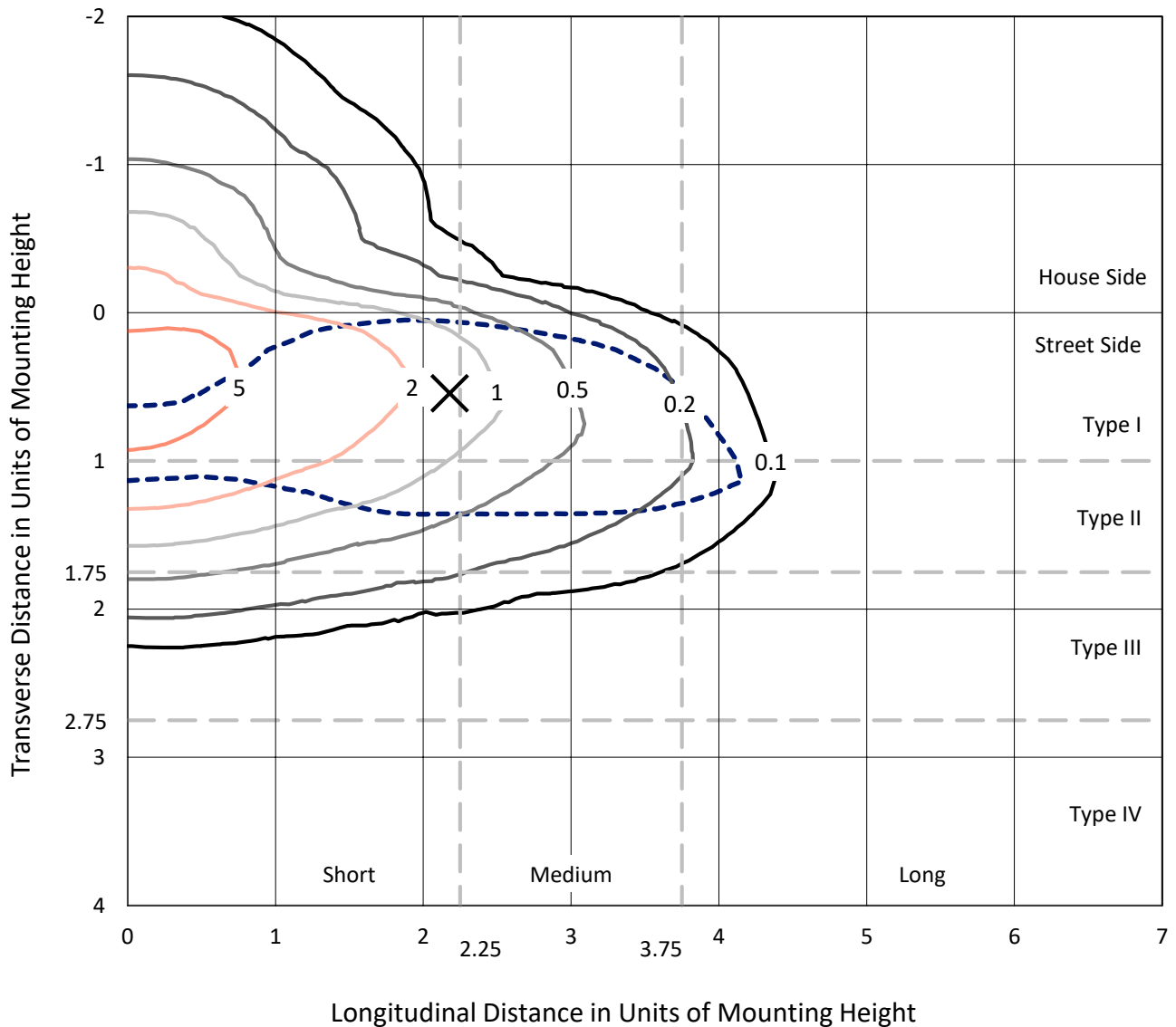
Input Watts (W): 171  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

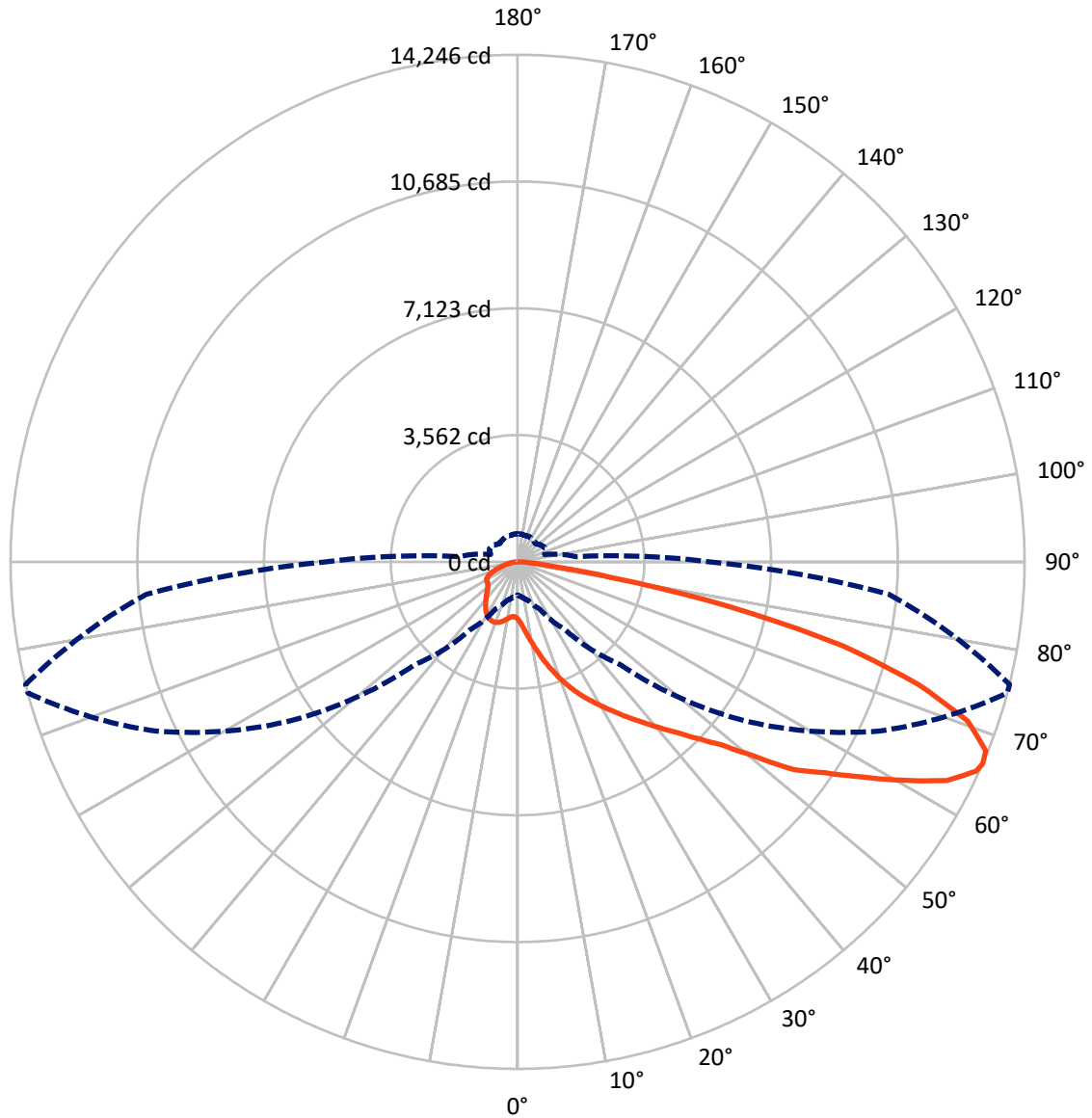
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 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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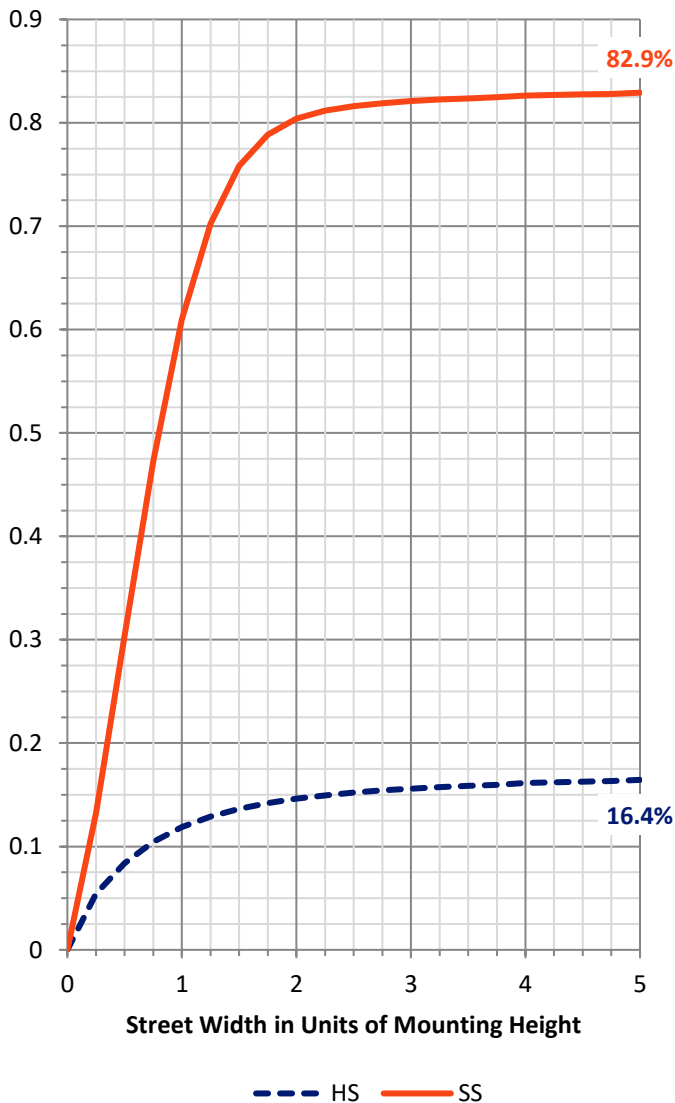
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2970.7	0.0	2970.7
	% Fixture	16.8	0.0	16.8
<b>Street Side</b>	Lumens	14684.3	0.0	14684.3
	% Fixture	83.2	0.0	83.2
<b>Total</b>	Lumens	17655.0	0.0	17655.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	195.0	1.1
10°-20°	769.9	4.4
20°-30°	1496.2	8.5
30°-40°	2442.1	13.8
40°-50°	3336.4	18.9
50°-60°	3886.3	22.0
60°-70°	3484.1	19.7
70°-80°	1760.7	10.0
80°-90°	284.3	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°	17655.0	100.0
0°-180°	17655.0	100.0

**Coefficient of Utilization**



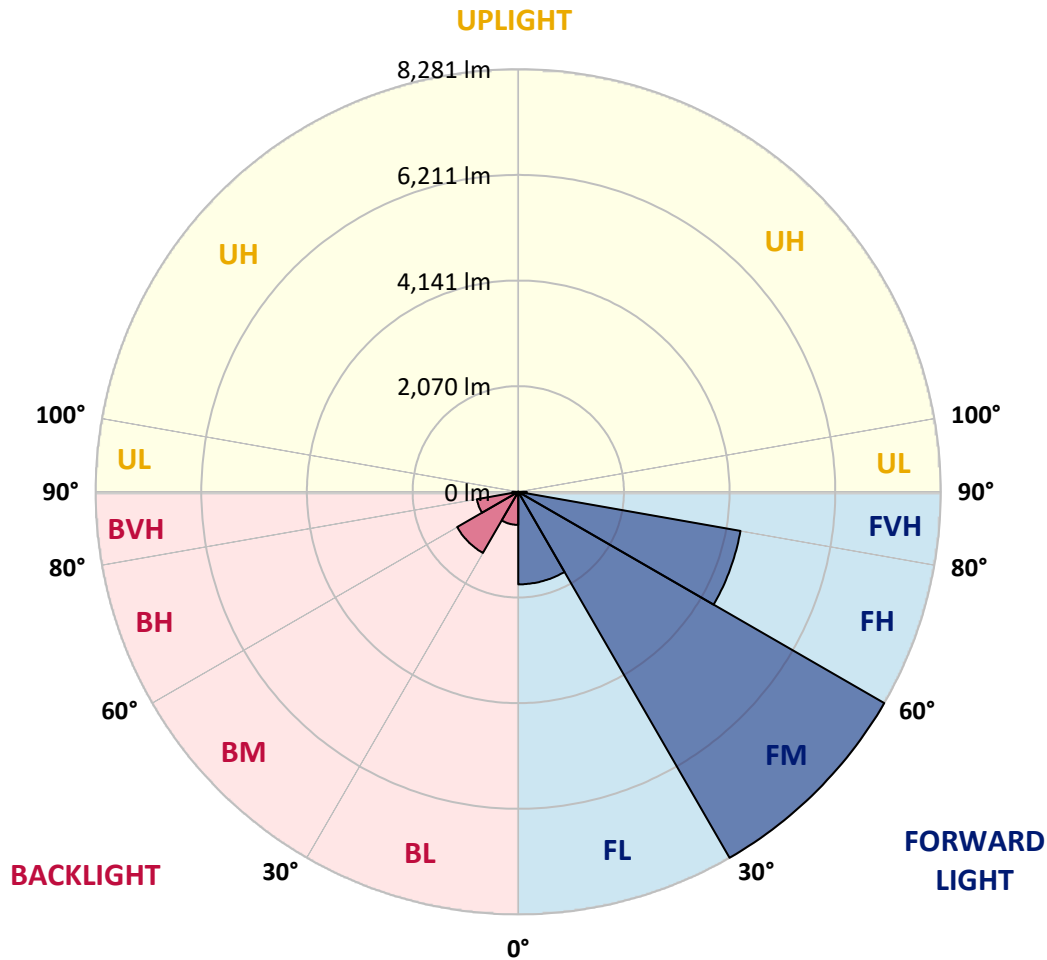
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 CATALOG NUMBER: GLEON-SA4B-827-U-T2R

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1813.1	10.3			
FM (30°-60°)	8281.4	46.9			
FH (60°-80°)	4421.8	25.0			G2/5000
FVH (80°-90°)	167.9	1.0			G2/225
BL (0°-30°)	647.9	3.7	B2/1000		
BM (30°-60°)	1383.4	7.8	B2/2500		
BH (60°-80°)	823.0	4.7	B2/1000		G2/1000
BVH (80°-90°)	116.4	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°	1612.3	1612.3	1612.3	1612.3	1612.3	1612.3	1612.3	1612.3	1612.3	1612.3	1612.3
2.5°	2140.3	2108.0	2105.0	2057.6	2046.8	1956.3	1889.8	1820.3	1741.2	1725.6	1663.2
5°	2749.3	2746.3	2704.9	2627.6	2567.1	2412.5	2259.6	2097.8	1920.4	1891.6	1751.4
7.5°	3297.1	3292.3	3260.6	3177.2	3089.7	2899.7	2681.6	2433.4	2145.7	2103.2	1870.6
10°	3713.1	3711.3	3700.5	3639.4	3565.0	3382.8	3141.9	2803.2	2407.7	2349.5	2019.9
12.5°	4034.3	4037.9	4045.1	4023.6	3988.2	3833.0	3586.0	3195.2	2687.0	2629.4	2185.9
15°	4251.9	4262.7	4299.9	4330.4	4349.0	4253.7	4014.6	3596.2	2999.8	2930.9	2369.9
17.5°	4361.6	4373.6	4437.7	4530.0	4615.1	4605.5	4415.5	3978.6	3300.1	3233.6	2567.7
20°	4456.3	4465.3	4537.2	4648.1	4798.5	4865.1	4758.4	4346.6	3629.2	3550.1	2777.5
22.5°	4730.8	4742.2	4763.8	4826.7	4959.8	5082.0	5030.5	4694.8	3930.7	3856.9	2976.5
25°	5260.7	5274.4	5227.7	5174.3	5199.5	5284.6	5294.2	5012.5	4236.3	4153.0	3190.4
27.5°	5899.0	5918.8	5839.0	5701.8	5581.9	5548.9	5537.6	5272.6	4528.2	4431.7	3402.0
30°	6524.1	6558.3	6454.6	6276.6	6056.6	5902.0	5787.5	5527.4	4815.9	4723.6	3601.6
32.5°	7134.9	7121.1	6970.6	6796.8	6539.1	6345.5	6068.6	5800.7	5139.6	5033.5	3800.0
35°	7553.2	7558.0	7418.4	7212.2	6966.5	6817.8	6445.0	6095.6	5469.8	5372.1	4025.4
37.5°	7909.3	7887.1	7728.8	7536.5	7324.9	7261.3	6885.5	6420.4	5827.7	5721.0	4265.1
40°	8027.9	8002.2	7898.5	7760.0	7590.4	7585.0	7371.6	6788.4	6232.2	6126.7	4535.4
42.5°	7956.0	7923.0	7880.5	7842.7	7790.6	7814.6	7828.3	7220.0	6677.0	6558.9	4848.3
45°	7690.5	7640.7	7670.7	7752.8	7866.1	8001.6	8240.7	7697.7	7175.0	7076.1	5215.7
47.5°	7282.3	7237.4	7330.9	7506.5	7814.6	8157.4	8630.9	8225.1	7769.6	7671.3	5738.9
50°	6708.1	6721.3	6855.0	7174.4	7640.1	8229.3	9111.6	8923.4	8633.9	8542.2	6452.8
52.5°	5765.9	5768.3	6144.7	6669.2	7330.9	8192.2	9378.3	9815.8	9814.1	9703.2	7132.5
55°	4890.8	4944.2	5242.1	5939.1	6829.8	8043.5	9564.7	10249.8	10589.0	10459.0	7766.0
57.5°	4036.1	4067.3	4349.6	5049.7	6114.8	7647.3	9755.9	10770.6	11482.1	11400.0	8553.6
60°	3064.0	3111.9	3403.8	4050.5	5200.1	6944.3	9773.9	11314.3	12549.6	12466.9	9432.9
62.5°	1988.7	2071.4	2344.7	2950.7	4093.7	5933.1	9356.7	11669.7	13561.3	13531.9	10213.2
65°	1143.0	1205.3	1395.3	1862.8	2824.2	4663.7	8364.8	11533.0	14184.0	14167.3	10505.1
66°	933.8	972.8	1118.4	1455.9	2330.3	4095.5	7788.2	11244.7	14245.8	14246.4	10471.6
67.5°	746.8	764.2	829.5	1042.3	1719.6	3246.2	6757.9	10608.8	14169.1	14190.0	10255.2
70°	617.9	626.9	647.3	698.9	938.6	1957.5	4796.7	8956.4	13398.9	13415.1	9410.7
72.5°	554.4	559.8	567.6	574.8	662.3	1093.8	2929.7	7164.8	11747.6	11768.6	8123.8
75°	502.3	505.3	504.1	504.7	555.6	697.1	1514.0	5349.4	9498.8	9456.8	6223.2
77.5°	441.1	444.1	438.1	439.3	491.5	535.8	753.4	3744.9	6410.2	6114.2	3506.3
80°	372.8	375.2	372.8	377.0	427.9	404.6	438.1	2106.8	2834.4	2681.0	1246.7
82.5°	281.7	291.9	299.1	315.9	352.4	287.7	293.1	820.5	863.1	821.7	382.4
85°	123.5	150.4	225.4	241.5	264.9	172.6	192.4	334.4	351.2	340.4	139.1
87.5°	32.4	35.4	111.5	140.3	146.8	77.9	100.1	152.2	160.6	152.2	46.2
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°	1612.3	1612.3	1612.3	1612.3	1612.3	1612.3	1612.3	1612.3	1612.3	1612.3	1612.3
2.5°	1630.3	1600.9	1548.2	1501.4	1466.1	1442.1	1418.1	1406.1	1398.9	1391.7	1392.9
5°	1682.4	1623.1	1532.6	1468.5	1432.5	1409.7	1397.7	1392.9	1389.9	1382.7	1382.7
7.5°	1760.9	1677.0	1552.4	1486.4	1458.3	1440.9	1433.7	1431.3	1427.7	1419.3	1420.5
10°	1859.8	1742.4	1593.7	1529.6	1503.8	1484.6	1474.4	1470.8	1464.3	1454.7	1455.9
12.5°	1976.1	1823.3	1648.3	1581.1	1550.0	1524.2	1507.4	1497.2	1485.8	1473.2	1473.8
15°	2103.2	1911.4	1707.0	1627.3	1584.7	1548.8	1521.8	1504.4	1486.4	1470.8	1470.2
17.5°	2232.0	1996.5	1752.0	1652.5	1594.9	1547.6	1511.0	1484.0	1461.9	1442.7	1440.9
20°	2371.1	2073.2	1777.1	1650.1	1575.7	1519.4	1470.8	1437.3	1412.7	1393.5	1390.5
22.5°	2512.6	2145.1	1781.3	1625.5	1533.2	1464.3	1413.3	1376.1	1351.0	1331.2	1324.0
25°	2642.0	2200.9	1763.9	1578.1	1473.8	1399.5	1349.8	1312.0	1291.6	1268.3	1261.1
27.5°	2760.1	2239.8	1729.2	1517.6	1407.3	1334.2	1287.4	1255.1	1232.9	1214.9	1208.9
30°	2866.2	2260.8	1672.2	1445.7	1339.0	1272.5	1232.9	1210.7	1191.5	1168.8	1164.6
32.5°	2966.9	2260.8	1599.1	1367.2	1271.3	1217.9	1194.5	1180.8	1159.2	1137.0	1131.0
35°	3067.6	2247.0	1512.8	1285.0	1208.9	1179.0	1177.8	1161.6	1128.6	1098.6	1090.8
37.5°	3173.7	2218.9	1415.7	1208.3	1158.0	1161.6	1171.8	1135.8	1089.1	1046.5	1035.1
40°	3293.5	2179.9	1315.0	1141.8	1115.4	1153.8	1155.6	1098.6	1007.5	968.6	958.4
42.5°	3434.4	2140.9	1221.5	1083.1	1081.9	1130.4	1125.0	1018.3	963.8	944.0	938.6
45°	3619.6	2118.8	1132.8	1027.3	1055.5	1092.6	1072.9	974.0	951.2	939.8	935.0
47.5°	3911.5	2130.2	1051.3	983.0	1029.1	1054.9	975.8	956.0	939.8	926.0	921.2
50°	4277.1	2123.6	985.4	952.4	999.1	1015.3	932.0	932.6	924.2	908.6	901.4
52.5°	4552.2	2072.0	942.8	935.0	972.8	945.2	904.4	909.8	905.6	882.9	875.1
55°	4817.7	2027.7	921.2	928.4	953.6	857.7	872.1	885.3	881.1	858.9	855.3
57.5°	5148.0	2019.3	908.0	930.2	937.4	813.9	840.9	858.3	855.3	845.7	843.9
60°	5552.5	2021.7	896.1	933.2	919.4	781.6	811.5	833.7	835.5	833.7	832.5
62.5°	5774.9	1956.3	866.1	924.8	887.7	753.4	781.0	813.3	813.9	817.5	816.9
65°	5586.1	1760.9	810.3	895.5	834.3	730.0	754.6	790.0	781.0	797.2	797.2
66°	5402.7	1648.3	782.8	876.3	811.5	721.0	746.2	778.0	766.6	788.8	788.8
67.5°	5028.1	1458.3	733.0	835.5	779.2	708.5	736.6	758.2	742.6	775.6	773.2
70°	4343.6	1128.0	632.9	743.2	725.8	689.9	723.4	718.6	695.9	746.2	736.6
72.5°	3662.1	857.1	508.3	622.1	644.9	666.5	704.9	668.3	639.5	674.9	653.9
75°	2841.6	644.3	401.6	483.7	544.8	629.9	682.7	610.2	568.8	565.2	553.8
77.5°	1536.2	442.3	318.3	369.2	432.7	584.4	667.7	547.8	485.5	471.1	462.1
80°	608.4	287.7	231.4	279.9	302.7	518.5	631.7	475.3	400.4	386.0	372.2
82.5°	251.1	170.2	149.2	187.6	197.2	443.5	567.0	389.6	309.3	427.9	454.3
85°	107.9	93.5	88.7	97.1	111.5	311.1	451.3	297.3	333.8	297.9	236.8
87.5°	32.4	39.6	37.8	37.2	40.8	74.3	240.3	165.4	245.1	92.9	69.5
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)