

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: P320106

Luminaire Tested: **GLEON-SA2A-827-U-SL4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P320106  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA2A-827-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6659 lumens  
Efficiency: N/A  
Efficacy: 100.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G3

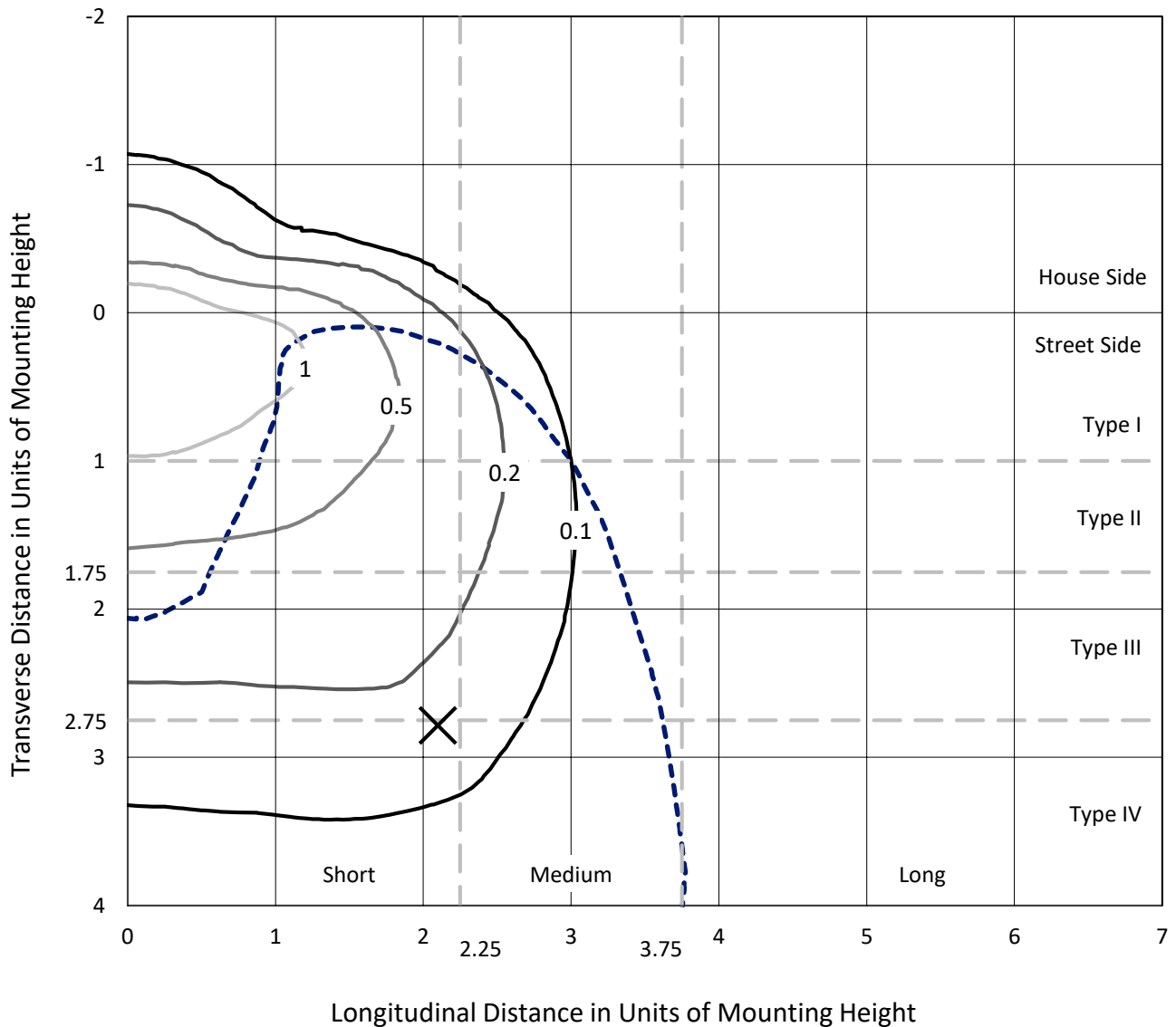
Input Watts (W): 66  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

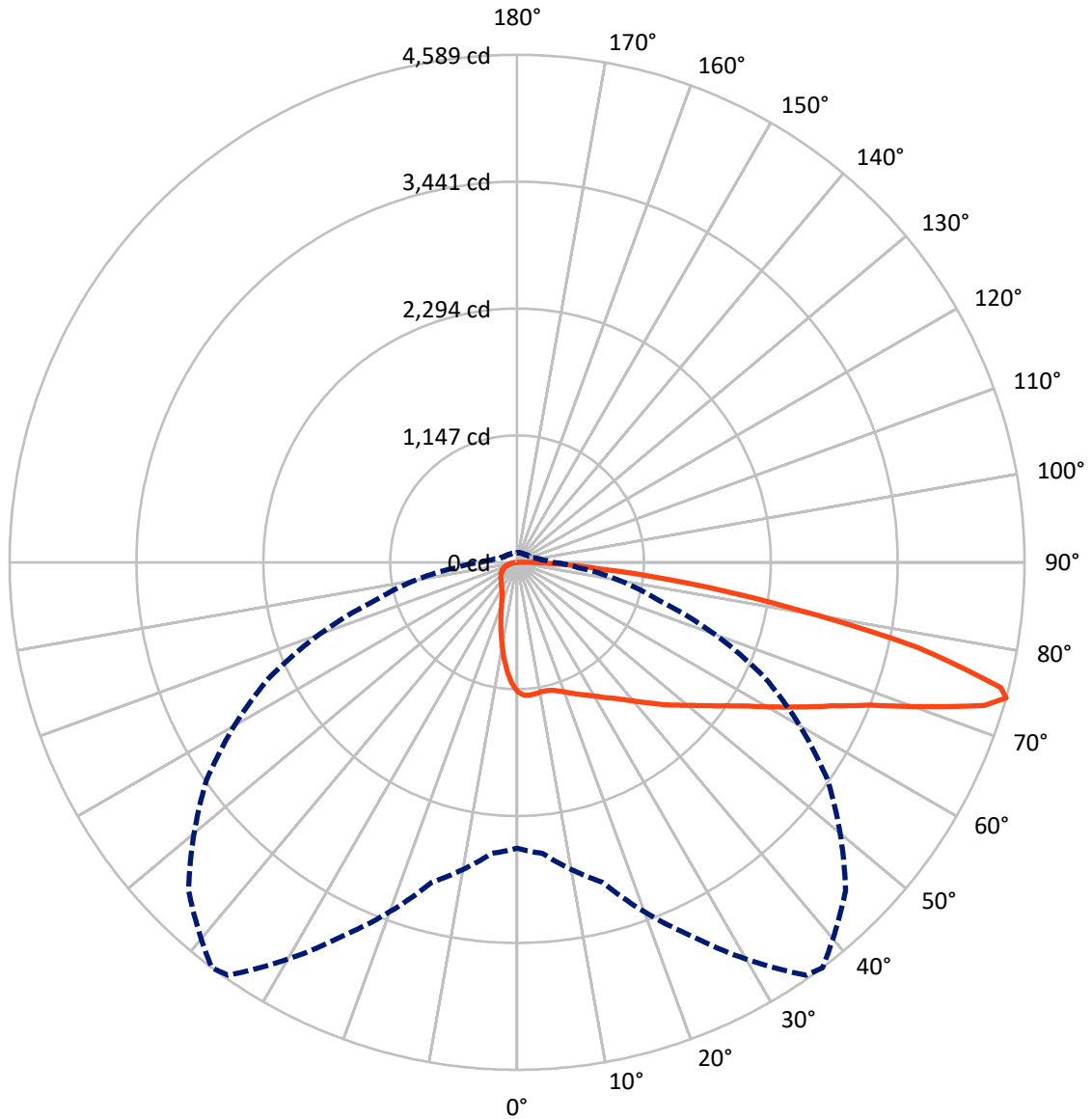
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 37-Deg Lateral      - - - Horizontal Cone Through 74-Deg Vertical

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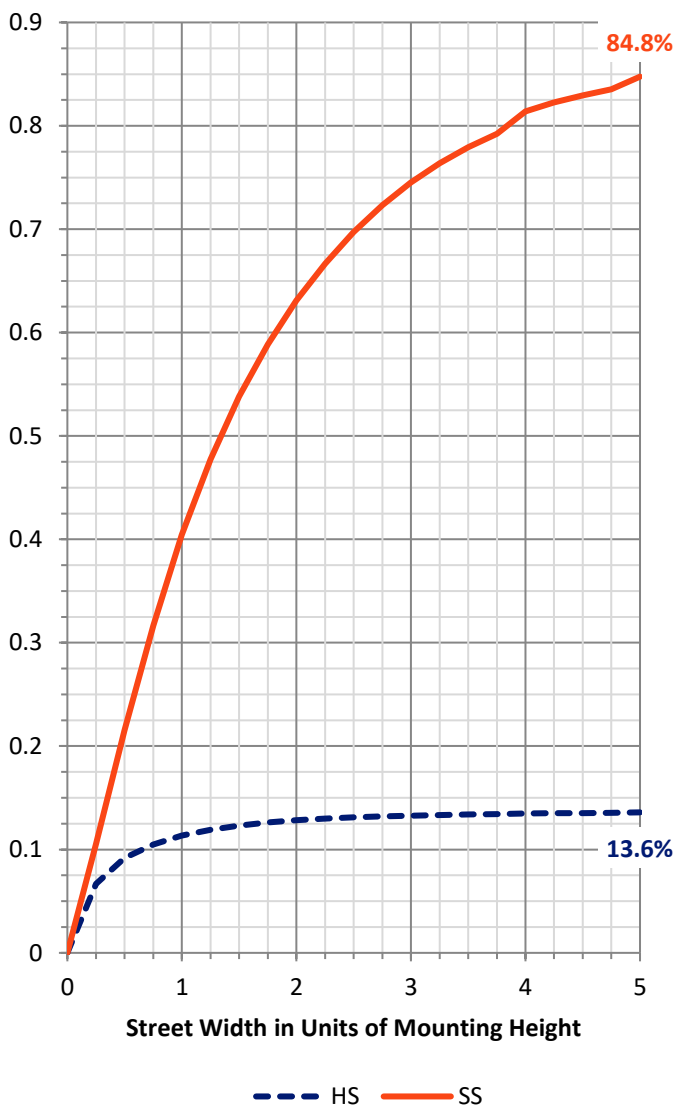
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	916.2	0.0	916.2
	% Fixture	13.8	0.0	13.8
<b>Street Side</b>	Lumens	5742.8	0.0	5742.8
	% Fixture	86.2	0.0	86.2
<b>Total</b>	Lumens	6659.0	0.0	6659.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.3	1.6
10°-20°	264.8	4.0
20°-30°	408.1	6.1
30°-40°	593.4	8.9
40°-50°	873.4	13.1
50°-60°	1226.5	18.4
60°-70°	1552.4	23.3
70°-80°	1366.9	20.5
80°-90°	270.3	4.1
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°	6659.0	100.0
0°-180°	6659.0	100.0

**Coefficient of Utilization**



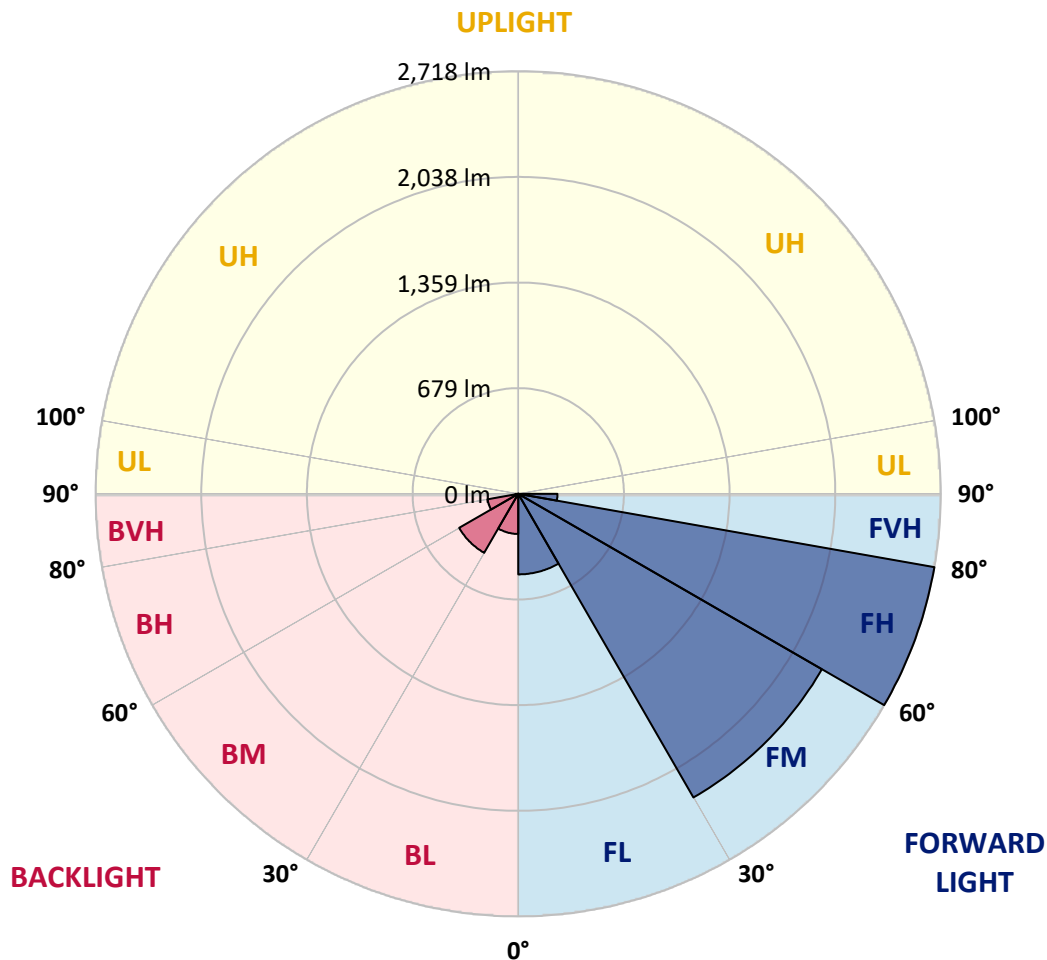
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	518.1	7.8			
FM (30°-60°)	2254.8	33.9			
FH (60°-80°)	2717.9	40.8			G2/5000
FVH (80°-90°)	252.0	3.8			G3/500
BL (0°-30°)	258.1	3.9	B1/500		
BM (30°-60°)	438.5	6.6	B1/1000		
BH (60°-80°)	201.4	3.0	B1/500		G1/500
BVH (80°-90°)	18.3	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	37°	45°	55°	65°	75°	85°
0°	1173.3	1173.3	1173.3	1173.3	1173.3	1173.3	1173.3	1173.3	1173.3	1173.3	1173.3
2.5°	1213.4	1213.6	1213.4	1211.5	1207.1	1203.3	1200.3	1195.8	1186.0	1178.5	1167.2
5°	1224.9	1223.5	1222.5	1219.0	1212.0	1207.8	1201.9	1193.5	1177.3	1162.3	1144.0
7.5°	1219.5	1217.9	1215.7	1211.5	1203.5	1200.0	1191.8	1180.8	1161.3	1141.6	1115.4
10°	1202.8	1202.4	1201.4	1200.5	1193.7	1190.9	1183.4	1171.6	1152.4	1128.5	1097.8
12.5°	1184.3	1185.5	1189.2	1194.2	1191.1	1189.7	1185.0	1177.0	1157.3	1131.5	1094.5
15°	1172.6	1175.9	1186.0	1198.9	1201.4	1201.0	1199.8	1194.6	1173.8	1145.1	1102.0
17.5°	1168.6	1174.0	1193.2	1214.6	1222.1	1223.7	1224.2	1215.3	1192.1	1161.8	1109.7
20°	1175.9	1182.7	1210.8	1240.1	1252.1	1253.0	1250.9	1235.4	1209.4	1176.1	1113.9
22.5°	1197.9	1204.0	1239.2	1272.3	1285.9	1287.3	1281.0	1257.5	1227.7	1193.0	1119.8
25°	1240.4	1247.9	1283.1	1316.1	1323.2	1323.4	1314.3	1285.2	1251.6	1216.7	1132.5
27.5°	1295.7	1303.2	1334.9	1367.3	1363.5	1361.4	1349.0	1319.9	1282.8	1249.3	1155.0
30°	1357.4	1365.6	1395.7	1418.6	1409.7	1405.5	1395.4	1357.9	1326.2	1293.9	1189.5
32.5°	1421.2	1428.7	1455.0	1470.7	1459.5	1457.6	1442.3	1408.1	1382.8	1361.9	1245.3
35°	1486.7	1492.1	1517.9	1526.8	1511.8	1511.3	1507.1	1475.6	1459.7	1469.5	1326.5
37.5°	1553.5	1554.9	1577.0	1577.4	1573.0	1574.9	1579.3	1559.6	1564.1	1594.8	1432.0
40°	1613.1	1616.9	1632.8	1637.7	1645.5	1652.0	1674.3	1661.4	1695.9	1750.3	1563.4
42.5°	1657.2	1664.5	1690.0	1702.7	1727.8	1738.1	1769.6	1781.5	1850.9	1932.6	1719.6
45°	1694.5	1705.8	1746.8	1772.8	1815.3	1833.4	1878.4	1918.5	2026.2	2130.3	1884.0
47.5°	1734.8	1749.1	1800.5	1850.2	1907.9	1928.4	2010.2	2070.3	2213.1	2329.2	2039.1
50°	1794.2	1805.2	1855.4	1933.5	2005.5	2031.8	2145.1	2231.2	2403.1	2518.8	2173.5
52.5°	1877.0	1872.8	1915.2	2024.8	2121.4	2153.8	2289.1	2402.4	2595.7	2690.2	2287.0
55°	1960.3	1953.2	1983.0	2120.2	2256.5	2290.5	2447.7	2574.3	2778.9	2844.6	2374.0
57.5°	2052.9	2039.5	2064.6	2227.9	2410.4	2451.0	2625.2	2757.1	2959.0	2969.3	2429.4
60°	2148.4	2130.3	2158.5	2361.4	2605.8	2653.6	2833.1	2935.3	3128.9	3069.3	2447.2
62.5°	2231.9	2219.2	2262.6	2510.3	2826.0	2878.6	3037.1	3124.9	3296.3	3110.8	2382.9
65°	2304.8	2306.9	2382.0	2677.8	3071.6	3127.7	3271.2	3358.5	3428.2	3086.2	2232.6
67.5°	2391.9	2403.8	2531.9	2898.3	3380.8	3442.2	3611.8	3613.2	3501.8	2941.7	1936.6
70°	2518.8	2543.4	2738.1	3204.1	3820.3	3904.8	4035.7	3762.9	3398.4	2549.9	1523.7
72.5°	2631.3	2677.3	2957.4	3554.1	4356.1	4420.1	4283.6	3676.6	2966.1	1911.0	949.3
74°	2585.6	2642.6	2997.3	3726.5	4557.8	4588.5	4199.9	3424.6	2473.0	1323.4	551.7
75°	2487.1	2549.0	2939.1	3724.9	4532.2	4515.1	3997.7	3136.8	2036.7	902.6	367.1
77.5°	2007.2	2072.6	2476.5	3192.4	3716.2	3700.0	3070.9	2104.3	892.0	296.0	186.5
80°	1167.0	1216.9	1537.3	2027.3	2505.8	2535.2	2019.6	1041.2	350.9	166.3	126.4
82.5°	518.4	552.9	742.6	1034.9	1512.2	1550.0	1057.6	545.6	216.7	101.1	76.0
85°	340.1	365.7	450.8	492.8	720.1	745.9	517.7	424.8	143.1	55.6	55.8
87.5°	244.7	269.3	335.0	292.5	330.5	312.9	281.7	393.1	57.5	31.7	18.8
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°	1173.3	1173.3	1173.3	1173.3	1173.3	1173.3	1173.3	1173.3	1173.3	1173.3	1173.3
2.5°	1162.3	1158.5	1150.1	1134.1	1125.2	1117.7	1105.3	1098.0	1094.7	1094.5	1095.9
5°	1133.4	1124.7	1102.9	1076.2	1054.8	1035.4	1011.2	996.7	986.3	980.2	981.9
7.5°	1099.9	1086.3	1052.0	1009.3	975.1	937.3	900.0	877.7	860.4	847.5	849.8
10°	1076.9	1058.1	1008.2	946.7	889.7	834.8	783.4	752.7	728.3	709.6	711.0
12.5°	1069.1	1043.8	974.6	892.5	812.5	737.5	670.4	623.2	598.1	576.8	578.4
15°	1070.3	1036.3	946.5	843.7	743.1	648.6	567.2	512.1	478.0	463.3	463.5
17.5°	1071.3	1027.6	916.9	791.4	674.4	565.5	477.1	421.3	389.1	375.5	375.8
20°	1068.2	1013.6	880.3	731.4	602.6	489.3	403.7	356.3	331.9	321.4	321.4
22.5°	1064.2	996.9	839.0	671.1	531.8	423.2	351.1	315.0	300.9	293.9	293.7
25°	1066.1	984.5	796.8	609.2	466.5	370.4	316.2	292.3	282.9	278.4	278.2
27.5°	1076.2	978.6	757.9	547.5	409.5	330.7	292.7	275.8	269.7	266.9	266.9
30°	1094.5	978.6	717.3	494.9	362.2	301.4	274.7	263.2	259.0	257.1	257.1
32.5°	1126.4	984.0	678.1	442.9	324.4	278.4	259.7	251.9	248.6	247.7	247.7
35°	1181.3	1002.3	639.9	393.6	293.9	259.7	245.4	240.9	238.6	238.3	239.0
37.5°	1258.4	1039.6	604.0	357.2	272.3	244.4	233.4	229.9	228.5	229.6	230.6
40°	1355.5	1090.3	571.4	324.4	255.9	232.2	222.4	220.0	219.3	221.0	222.4
42.5°	1472.8	1158.7	544.7	300.7	243.2	221.9	213.0	210.2	209.5	211.3	213.2
45°	1599.7	1232.4	525.9	283.1	233.4	214.2	204.8	201.7	200.3	201.3	203.4
47.5°	1715.1	1302.1	518.4	270.7	224.0	207.6	197.5	193.8	191.4	190.9	192.6
50°	1812.5	1353.9	521.9	263.2	216.5	200.3	190.5	186.2	182.7	180.6	181.8
52.5°	1883.3	1386.5	525.2	259.9	210.6	192.3	182.7	178.7	174.0	170.5	170.5
55°	1934.7	1394.0	517.9	257.3	206.2	183.7	174.0	170.3	165.6	161.6	161.1
57.5°	1954.9	1372.9	490.9	253.6	203.1	175.5	164.9	162.1	158.1	153.4	153.2
60°	1927.6	1307.7	438.9	245.6	199.1	168.7	155.8	153.9	152.0	147.5	147.3
62.5°	1818.3	1164.6	371.5	229.4	191.2	161.4	147.3	148.2	148.5	145.4	145.0
65°	1620.1	968.0	305.9	208.3	179.2	152.7	138.6	143.1	145.7	145.2	144.5
67.5°	1332.1	753.4	259.2	186.0	163.5	140.7	129.2	134.4	136.5	138.2	137.7
70°	988.7	531.3	214.4	162.6	144.5	126.7	117.0	119.6	118.2	120.1	120.8
72.5°	551.2	318.8	174.8	139.1	124.8	110.2	103.4	103.0	99.9	99.9	99.9
74°	330.7	233.9	153.6	124.6	112.8	99.5	93.6	91.5	88.7	88.9	88.7
75°	266.0	201.0	141.0	114.9	104.4	93.1	87.3	84.4	82.3	82.3	82.1
77.5°	167.9	152.7	113.5	91.5	83.5	76.7	72.7	69.0	69.0	68.7	68.5
80°	126.9	121.5	88.4	69.2	64.0	58.9	56.3	54.7	54.7	55.4	55.1
82.5°	87.0	91.5	62.2	48.3	45.7	42.0	41.5	41.8	41.0	40.1	39.9
85°	63.6	68.7	42.0	30.5	27.9	25.6	27.4	28.4	27.2	25.1	24.2
87.5°	24.4	45.0	22.5	12.7	11.7	10.1	11.7	12.2	13.1	10.3	10.6
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)