

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: P451519

Luminaire Tested: **GALN-SA2B-827-U-T3R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P451519  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA2B-827-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8608 lumens  
Efficiency: N/A  
Efficacy: 105.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G2

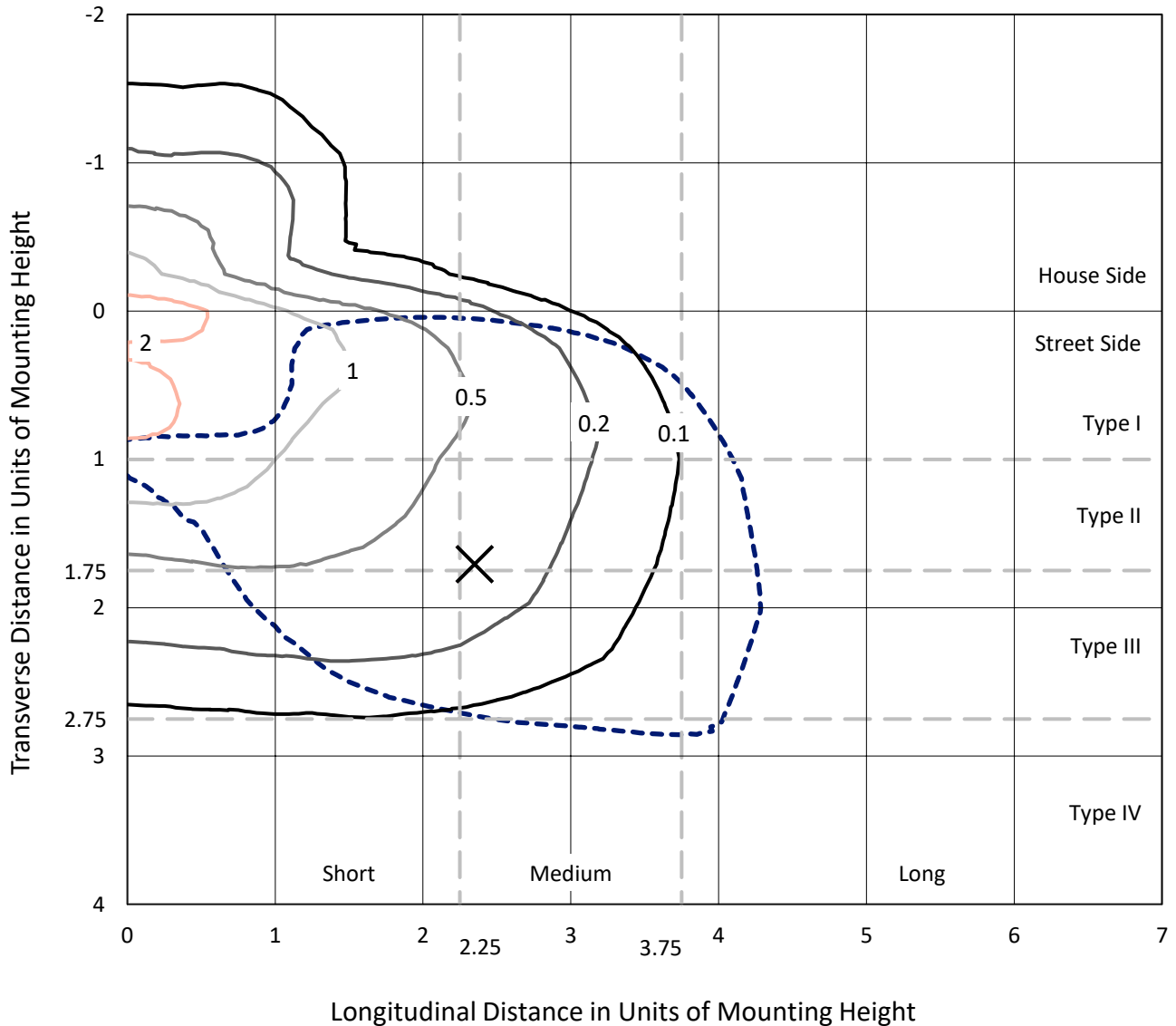
Input Watts (W): 82  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

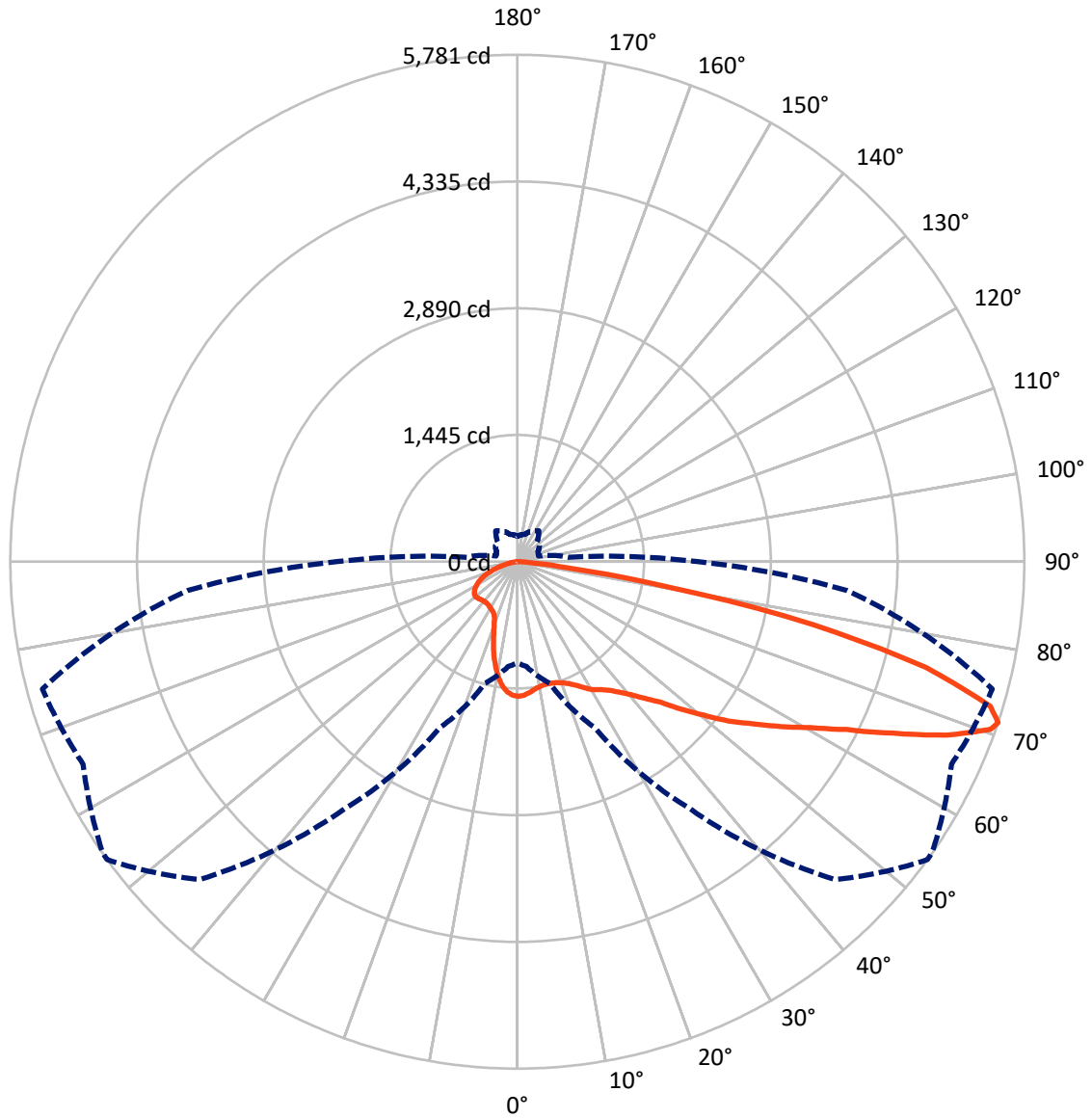
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1554.1	0.0	1554.1
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	7053.9	0.0	7053.9
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	8608.0	0.0	8608.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.9	1.6
10°-20°	361.4	4.2
20°-30°	601.7	7.0
30°-40°	889.7	10.3
40°-50°	1253.2	14.6
50°-60°	1678.1	19.5
60°-70°	2115.2	24.6
70°-80°	1444.7	16.8
80°-90°	127.0	1.5
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°	8608.0	100.0
0°-180°	8608.0	100.0

**Coefficient of Utilization**



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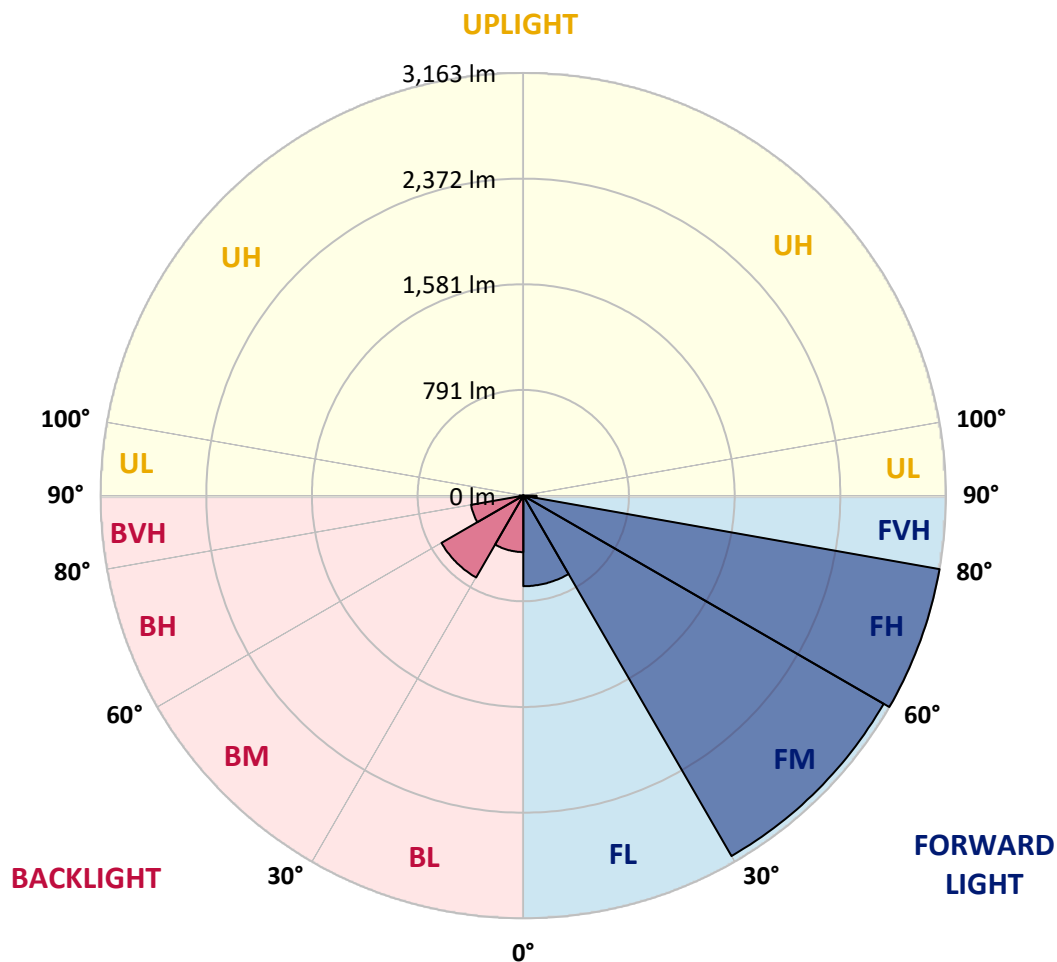
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	677.6	7.9			
FM (30°-60°)	3114.1	36.2			
FH (60°-80°)	3162.9	36.7			G2/5000
FVH (80°-90°)	99.3	1.2			G1/100
BL (0°-30°)	422.4	4.9	B1/500		
BM (30°-60°)	707.1	8.2	B1/1000		
BH (60°-80°)	396.9	4.6	B1/500		G1/500
BVH (80°-90°)	27.7	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-G2**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	1535.8	1535.8	1535.8	1535.8	1535.8	1535.8	1535.8	1535.8	1535.8	1535.8	1535.8
2.5°	1483.7	1490.7	1492.6	1497.2	1507.0	1514.9	1522.8	1521.8	1533.0	1537.7	1541.8
5°	1417.7	1419.6	1426.5	1435.8	1453.0	1474.9	1496.3	1496.7	1524.2	1546.0	1556.7
7.5°	1369.3	1375.4	1380.0	1389.8	1407.9	1431.6	1465.6	1468.4	1517.2	1560.4	1583.2
10°	1337.7	1344.7	1349.8	1361.9	1380.0	1406.5	1443.3	1448.4	1512.1	1583.2	1623.2
12.5°	1308.9	1315.9	1320.5	1336.3	1360.0	1392.6	1434.0	1440.0	1513.9	1609.7	1666.9
15°	1326.6	1332.1	1330.3	1334.9	1350.7	1387.9	1437.7	1443.7	1520.9	1635.3	1710.2
17.5°	1405.1	1409.8	1394.4	1376.8	1369.3	1396.8	1449.3	1455.8	1534.9	1661.8	1754.3
20°	1520.9	1533.5	1500.0	1460.5	1424.7	1428.4	1473.5	1480.5	1554.4	1688.3	1799.4
22.5°	1671.6	1680.9	1639.9	1574.9	1508.8	1474.9	1509.8	1513.9	1583.7	1722.7	1848.7
25°	1848.7	1854.3	1797.6	1713.9	1618.6	1554.4	1559.5	1566.9	1632.0	1761.8	1892.4
27.5°	2020.8	2038.4	1972.9	1870.6	1745.0	1638.1	1627.9	1632.5	1684.6	1783.6	1922.6
30°	2224.9	2223.5	2154.2	2035.6	1874.8	1729.2	1692.5	1691.6	1712.9	1794.3	1944.5
32.5°	2387.6	2406.7	2338.8	2209.5	2023.1	1823.6	1737.1	1735.3	1734.8	1812.9	1977.1
35°	2572.7	2575.5	2513.2	2383.0	2183.5	1942.2	1799.4	1790.1	1779.4	1852.9	2021.2
37.5°	2738.2	2751.2	2694.0	2548.0	2341.1	2065.4	1885.0	1878.9	1846.4	1922.2	2091.9
40°	2867.5	2877.2	2842.8	2703.8	2496.4	2198.4	1993.8	1982.6	1943.1	2035.6	2186.3
42.5°	2909.8	2929.8	2943.3	2874.9	2675.0	2356.0	2127.7	2113.8	2083.5	2207.7	2295.1
45°	2913.0	2944.7	3015.8	3019.0	2854.4	2544.8	2283.9	2274.2	2271.8	2428.1	2448.1
47.5°	2888.4	2920.5	3040.0	3104.6	3014.4	2735.4	2509.4	2494.1	2495.5	2700.5	2619.6
50°	2828.9	2867.0	3012.1	3159.5	3139.5	2933.5	2747.5	2742.4	2771.2	3011.6	2797.7
52.5°	2716.8	2762.8	2983.2	3193.9	3232.5	3104.1	3018.1	3003.7	3076.7	3349.2	2992.5
55°	2406.7	2476.0	2877.7	3212.9	3320.8	3267.3	3261.8	3287.8	3384.5	3717.4	3206.9
57.5°	2244.9	2296.9	2648.5	3216.2	3432.4	3457.0	3546.3	3552.8	3722.1	4108.5	3449.1
60°	2156.5	2202.6	2522.9	3194.8	3588.2	3691.9	3837.4	3860.6	4051.7	4532.1	3700.2
62.5°	2079.3	2118.9	2447.6	3120.9	3763.9	4040.1	4214.5	4225.6	4426.0	4999.8	3948.1
65°	1897.5	1942.6	2296.0	3046.9	3915.5	4475.3	4714.8	4701.8	4824.5	5403.4	4103.4
67.5°	1652.5	1709.7	2012.9	2791.7	3990.4	4951.0	5278.3	5262.1	5217.9	5668.0	4148.0
70°	1339.6	1370.3	1650.6	2350.4	3691.4	5200.7	5723.3	5706.1	5461.5	5702.9	3936.9
71°	1152.7	1200.6	1437.2	2087.7	3442.6	5124.4	5780.5	5775.9	5462.0	5606.6	3777.9
72.5°	899.7	929.0	1138.2	1617.6	2926.1	4691.1	5639.2	5656.8	5343.4	5339.2	3450.1
75°	569.1	582.1	714.2	952.3	1605.5	3322.2	4813.8	4861.7	4744.6	4370.2	2565.7
77.5°	330.6	347.3	427.8	561.2	693.7	1803.2	3444.5	3496.6	3296.6	2406.2	1050.4
80°	192.5	211.1	281.8	325.9	318.5	669.1	1753.9	1842.7	1427.5	607.7	294.8
82.5°	106.9	119.5	198.1	198.5	169.7	218.5	551.9	577.5	407.3	245.0	120.4
85°	77.6	87.9	127.9	115.8	81.4	93.9	192.0	201.3	164.6	103.2	39.1
87.5°	27.4	39.1	70.2	55.8	22.3	19.5	55.3	45.1	41.8	28.8	8.8
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°	1535.8	1535.8	1535.8	1535.8	1535.8	1535.8	1535.8	1535.8	1535.8	1535.8	1535.8
2.5°	1544.2	1545.1	1540.4	1532.1	1523.7	1513.0	1500.9	1491.6	1487.4	1487.0	1486.5
5°	1560.9	1563.2	1545.6	1519.5	1490.7	1455.4	1425.1	1390.7	1381.9	1367.9	1372.1
7.5°	1587.9	1586.5	1551.6	1496.3	1428.9	1354.0	1290.8	1254.0	1215.9	1205.2	1205.7
10°	1626.5	1617.6	1551.6	1448.8	1336.3	1225.2	1136.9	1081.1	1050.8	1025.7	1016.4
12.5°	1667.4	1645.1	1536.7	1382.4	1217.3	1081.1	986.2	910.9	891.3	870.9	871.4
15°	1706.4	1669.2	1507.4	1288.9	1089.0	927.1	835.1	790.0	783.9	786.3	785.8
17.5°	1741.8	1686.4	1462.8	1184.7	939.2	795.1	746.3	749.5	765.8	777.4	778.8
20°	1777.6	1696.7	1396.3	1045.3	797.9	715.1	717.0	742.6	767.2	783.0	785.3
22.5°	1811.5	1701.3	1318.2	910.4	695.6	681.2	708.6	736.0	760.2	775.6	777.9
25°	1833.8	1690.6	1207.5	769.5	645.4	669.1	697.9	721.2	741.6	757.4	761.2
27.5°	1839.9	1656.2	1070.4	655.6	622.1	657.5	684.0	701.2	717.0	731.9	734.7
30°	1836.6	1605.5	919.7	588.7	608.6	644.0	664.4	677.0	696.1	707.7	710.0
32.5°	1831.5	1546.5	762.6	552.8	597.5	631.4	643.5	654.7	654.2	649.6	652.8
35°	1833.4	1475.8	635.1	531.5	587.7	622.1	632.4	618.4	578.4	576.6	574.7
37.5°	1843.1	1406.1	542.6	516.6	582.6	620.7	626.3	562.1	526.8	510.5	506.4
40°	1868.2	1324.7	481.7	505.4	582.1	631.4	598.9	533.8	465.9	434.3	432.0
42.5°	1901.7	1244.7	444.5	498.4	587.7	647.7	587.7	493.8	419.9	401.3	398.5
45°	1951.5	1153.1	424.1	495.2	596.1	653.7	584.0	464.5	401.3	386.4	386.4
47.5°	2007.7	1065.7	412.9	492.9	606.8	649.6	551.0	455.2	392.4	394.3	403.1
50°	2063.5	989.9	404.5	487.8	616.1	647.2	537.5	454.7	394.8	418.5	434.3
52.5°	2128.2	936.4	394.3	479.4	616.1	632.4	533.3	464.0	401.3	408.2	415.2
55°	2206.3	919.7	381.3	461.2	604.9	595.2	531.0	477.5	405.9	389.6	392.4
57.5°	2309.5	946.7	368.7	438.5	579.4	556.6	530.1	481.2	395.2	381.7	379.0
60°	2429.5	1000.1	365.0	415.2	544.5	523.6	524.5	470.5	380.3	366.4	368.7
62.5°	2513.6	1032.2	362.7	397.5	506.4	487.3	511.0	457.5	373.8	361.7	364.1
65°	2513.6	993.2	341.3	370.6	457.1	443.6	494.7	441.3	365.5	351.5	349.2
67.5°	2418.3	879.3	308.7	330.1	402.7	393.8	471.9	421.7	352.9	342.2	336.6
70°	2170.0	666.8	267.8	282.7	333.8	341.8	442.7	395.2	332.0	319.0	310.6
71°	2060.7	580.7	250.6	258.5	307.3	319.0	428.7	384.1	322.7	304.1	289.2
72.5°	1850.1	489.1	224.6	227.8	262.7	283.6	399.4	362.7	305.0	278.5	261.8
75°	1405.6	357.1	180.9	179.0	194.4	225.0	338.0	323.2	267.4	231.6	221.8
77.5°	607.3	194.4	135.3	136.7	132.1	170.6	266.0	277.6	229.2	188.3	179.5
80°	184.1	112.1	92.5	94.4	88.3	114.4	187.4	217.6	184.1	146.5	134.4
82.5°	94.4	67.0	63.2	62.3	56.3	64.6	113.5	148.8	131.6	91.6	80.9
85°	40.9	35.8	31.2	30.2	26.5	23.2	40.5	74.4	69.7	51.1	48.8
87.5°	10.2	9.3	6.0	5.6	3.3	0.5	0.0	0.0	0.0	0.0	0.0
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)