

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: P452209

Luminaire Tested: **GALN-SA3A-827-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P452209
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA3A-827-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10093 lumens
Efficiency: N/A
Efficacy: 108.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

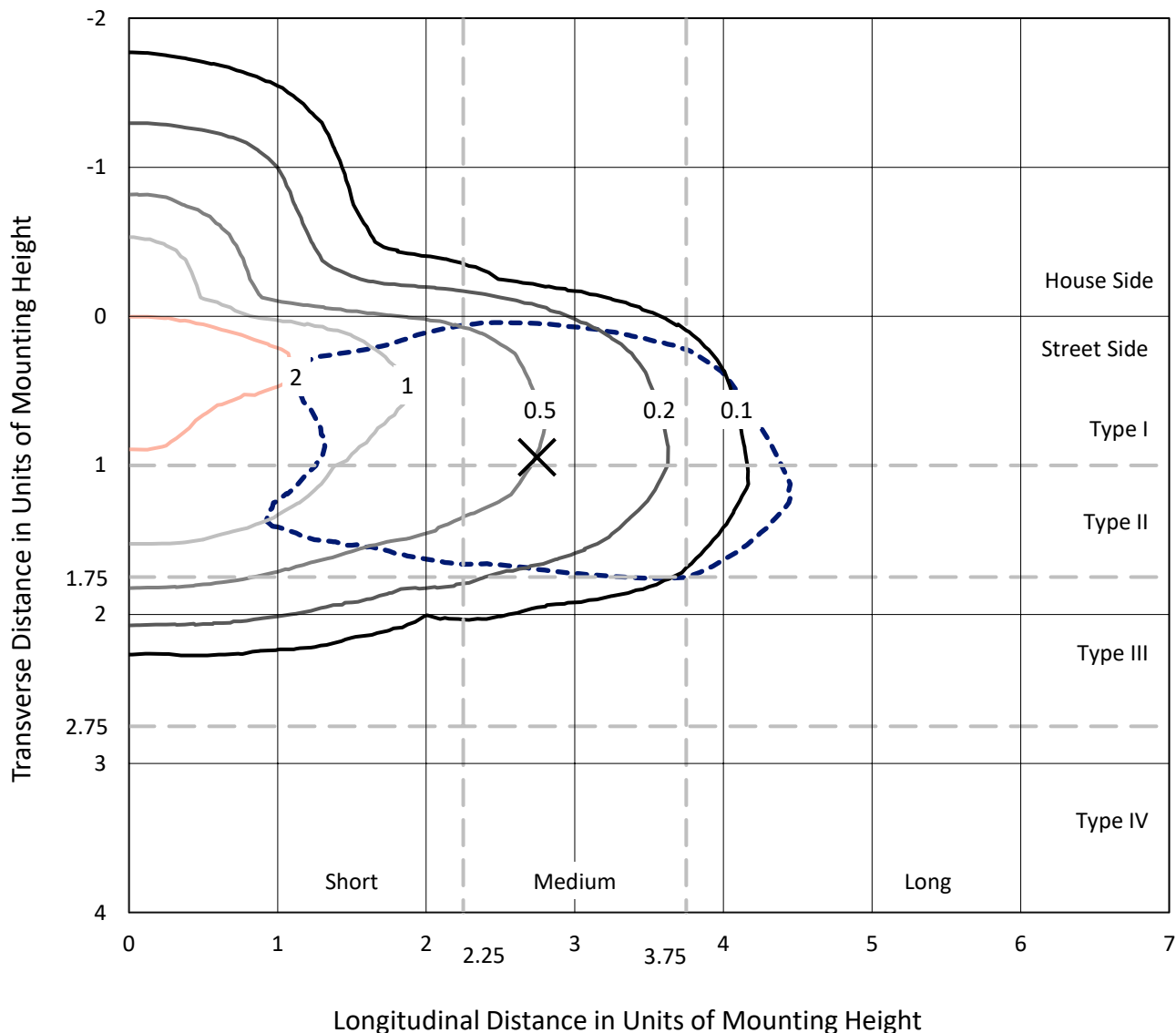
Input Watts (W): 93
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

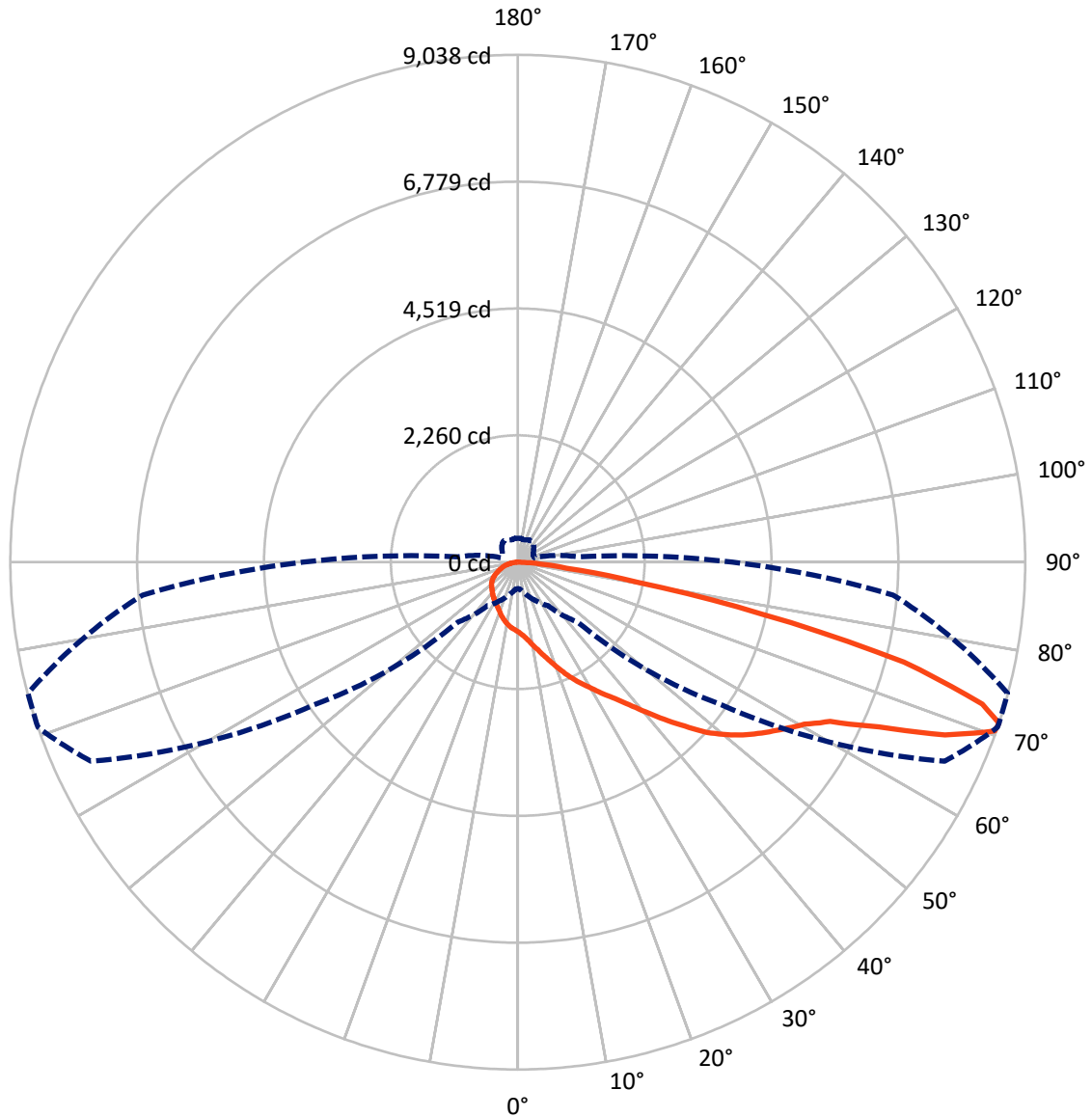
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1815.2	0.0	1815.2
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	8277.8	0.0	8277.8
	% Fixture	82.0	0.0	82.0
Total	Lumens	10093.0	0.0	10093.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.4	1.2
10°-20°	404.1	4.0
20°-30°	706.2	7.0
30°-40°	1050.3	10.4
40°-50°	1547.5	15.3
50°-60°	2166.6	21.5
60°-70°	2423.3	24.0
70°-80°	1480.2	14.7
80°-90°	190.4	1.9
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°	10093.0	100.0
0°-180°	10093.0	100.0

Coefficient of Utilization



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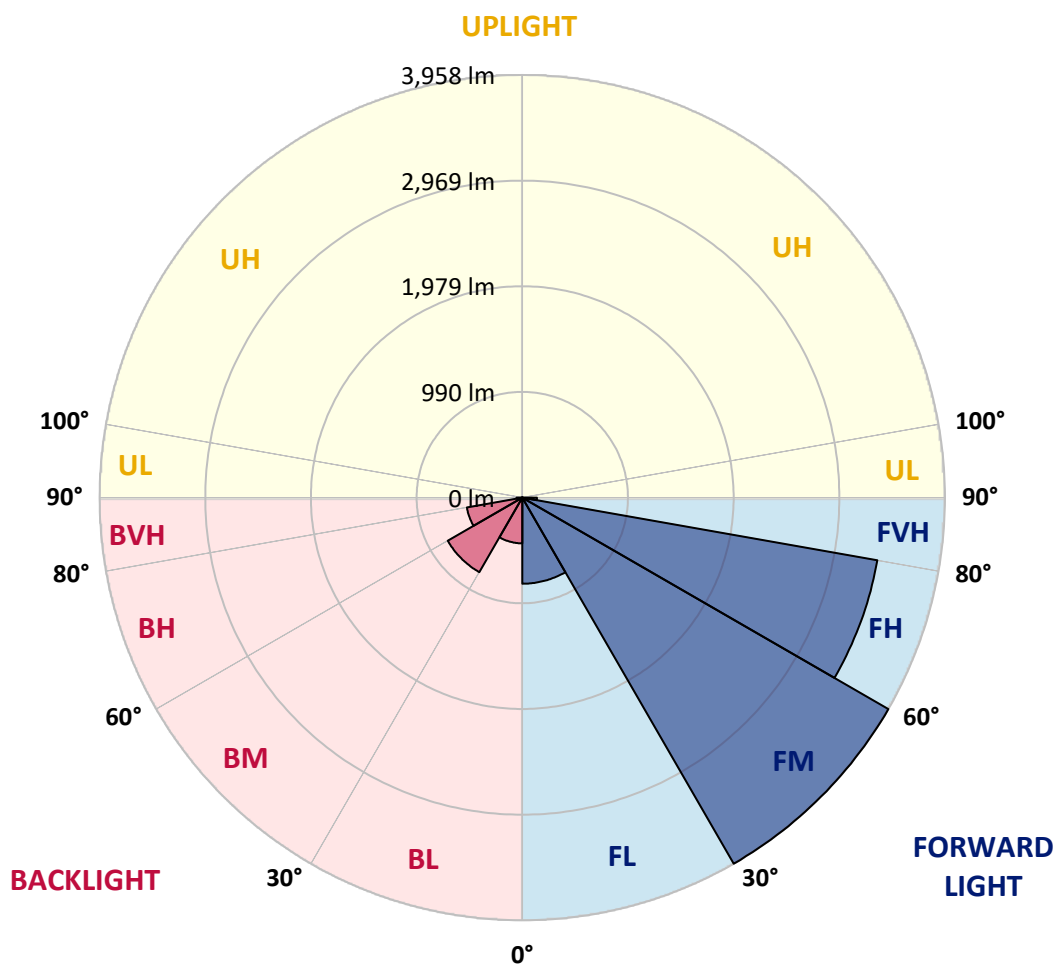
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	806.4	8.0			
FM	(30°-60°)	3958.3	39.2			
FH	(60°-80°)	3376.1	33.4			G2/5000
FVH	(80°-90°)	137.0	1.4			G2/225
BL	(0°-30°)	428.2	4.2	B1/500		
BM	(30°-60°)	806.2	8.0	B1/1000		
BH	(60°-80°)	527.4	5.2	B2/1000		G2/1000
BVH	(80°-90°)	53.4	0.5			G1/100
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 Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7
2.5°	1375.2	1368.5	1369.1	1359.6	1347.4	1334.1	1315.3	1298.6	1285.3	1277.5	1254.8
5°	1523.8	1517.2	1508.9	1488.3	1479.5	1446.7	1405.1	1367.4	1338.6	1322.5	1277.0
7.5°	1644.2	1642.6	1640.3	1628.7	1605.9	1560.5	1525.0	1459.5	1416.8	1386.3	1308.6
10°	1718.6	1721.3	1723.0	1725.2	1715.8	1691.9	1643.1	1560.5	1506.1	1467.3	1349.7
12.5°	1756.3	1759.1	1768.5	1789.0	1801.8	1799.0	1759.1	1678.1	1603.2	1552.1	1393.5
15°	1779.6	1784.0	1800.7	1827.8	1870.6	1897.7	1878.3	1803.4	1721.3	1660.9	1445.6
17.5°	1805.1	1810.1	1828.4	1867.2	1923.3	1982.1	2003.1	1938.8	1849.5	1777.4	1503.9
20°	1819.5	1826.2	1852.3	1903.3	1968.7	2054.2	2124.1	2090.2	1992.6	1912.7	1571.0
22.5°	1842.8	1848.4	1870.6	1924.9	2003.1	2110.2	2245.0	2237.8	2151.8	2048.6	1644.8
25°	1906.1	1914.9	1926.0	1958.8	2034.2	2167.3	2345.4	2395.3	2306.0	2190.6	1712.5
27.5°	2025.3	2032.5	2032.0	2036.4	2079.1	2216.7	2432.5	2551.2	2459.1	2334.3	1777.9
30°	2161.2	2164.0	2166.2	2156.2	2165.7	2267.2	2512.4	2705.4	2613.3	2481.9	1835.1
32.5°	2326.5	2332.1	2313.2	2287.7	2279.9	2342.1	2578.4	2859.6	2795.8	2631.6	1891.6
35°	2521.8	2536.2	2498.0	2453.0	2421.4	2449.7	2667.2	3017.2	2982.8	2823.0	1966.5
37.5°	2744.8	2762.6	2727.1	2638.9	2593.9	2601.7	2783.1	3211.9	3219.1	3041.0	2078.0
40°	2927.3	2950.6	2951.7	2826.9	2758.7	2767.6	2930.1	3421.6	3504.2	3310.6	2209.5
42.5°	3047.7	3070.4	3094.3	3021.1	2949.5	3000.0	3101.5	3649.0	3824.9	3637.9	2393.1
45°	3179.7	3200.2	3213.6	3180.3	3140.3	3271.3	3308.4	3890.9	4166.6	4003.5	2593.9
47.5°	3332.8	3355.6	3368.3	3336.7	3321.7	3509.2	3531.4	4116.7	4531.6	4358.5	2815.8
50°	3537.0	3554.2	3547.5	3527.5	3524.2	3691.7	3745.6	4328.0	4832.8	4740.7	3046.0
52.5°	3791.0	3811.6	3818.8	3790.5	3777.7	3822.1	3918.1	4520.5	5106.9	5069.1	3291.8
55°	3944.7	3977.4	4087.3	4131.6	4162.2	3990.7	4103.9	4733.0	5352.6	5415.3	3555.8
57.5°	3747.8	3789.9	4035.7	4257.6	4544.4	4412.3	4367.4	4954.9	5598.4	5750.9	3872.0
60°	3267.4	3276.8	3593.6	4002.4	4579.3	4954.3	4917.1	5307.7	5864.6	6089.3	4288.6
62.5°	2266.6	2286.6	2661.0	3313.4	4147.7	5149.6	5852.4	5916.8	6246.3	6595.8	4899.4
65°	1168.8	1142.7	1483.9	2082.5	3127.0	4685.8	6610.2	7036.8	7073.9	7387.9	5759.2
67.5°	719.5	731.1	890.9	1216.0	1848.9	3405.5	6530.9	8405.3	8209.5	8360.4	6557.5
70°	540.3	554.7	664.6	832.1	1127.2	1947.1	5252.2	8737.0	9010.5	8971.7	6800.5
71°	469.9	484.8	599.1	757.2	946.9	1502.8	4425.1	8389.8	9038.2	9031.6	6708.9
72.5°	400.5	409.9	499.3	641.3	798.3	1053.4	3324.5	7524.4	8652.7	8874.0	6382.2
75°	314.5	321.7	361.7	489.3	628.5	646.8	1784.0	5641.1	7106.7	7528.3	5313.2
77.5°	256.3	261.3	281.8	363.3	484.8	458.2	935.8	3671.8	4452.3	4876.6	3129.8
80°	203.6	209.1	221.3	246.3	363.3	326.7	446.6	1860.6	2150.7	2146.3	1249.3
82.5°	158.1	159.8	174.2	180.8	248.5	231.9	241.9	787.7	872.6	901.4	451.0
85°	99.9	104.8	154.2	138.7	148.7	135.9	119.3	312.9	385.5	380.0	180.3
87.5°	30.5	32.2	52.1	58.8	66.0	59.4	43.8	92.1	112.6	122.0	44.9
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°	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7
2.5°	1245.9	1239.8	1218.2	1200.4	1183.8	1165.5	1150.0	1145.5	1141.6	1140.0	1139.4
5°	1257.6	1239.3	1196.6	1161.6	1133.9	1108.4	1092.3	1085.1	1077.8	1077.8	1080.1
7.5°	1274.2	1240.9	1174.9	1122.8	1087.8	1064.0	1052.3	1051.2	1052.9	1054.5	1055.1
10°	1292.5	1239.8	1143.3	1078.4	1047.3	1036.2	1036.8	1046.2	1055.1	1061.8	1062.9
12.5°	1310.3	1233.2	1106.1	1036.8	1016.8	1019.0	1034.6	1055.7	1072.9	1082.3	1082.8
15°	1330.2	1222.6	1061.2	997.4	990.8	1007.9	1036.8	1069.0	1095.0	1110.6	1112.2
17.5°	1346.9	1204.9	1014.1	959.1	967.5	999.1	1039.0	1080.6	1112.2	1131.7	1135.0
20°	1365.8	1182.1	965.2	922.5	946.4	989.1	1034.6	1079.5	1112.2	1131.1	1135.5
22.5°	1380.7	1150.0	918.6	892.6	927.5	976.9	1019.6	1055.7	1082.3	1092.3	1098.9
25°	1386.8	1109.5	874.8	868.2	912.5	956.9	985.8	1006.3	1014.6	1013.5	1016.3
27.5°	1383.5	1062.9	837.1	848.7	893.7	925.8	940.3	938.6	923.6	909.8	916.4
30°	1369.6	1007.4	805.5	828.8	869.3	887.0	884.8	863.2	834.9	808.8	810.5
32.5°	1344.7	947.5	776.1	806.0	834.9	842.6	827.7	799.4	758.9	725.0	720.0
35°	1323.6	890.3	750.0	780.0	800.5	796.6	782.2	745.6	708.9	679.0	674.0
37.5°	1320.3	841.5	725.0	750.6	762.2	756.7	738.9	707.8	694.5	671.8	669.0
40°	1338.0	807.1	699.5	719.5	725.0	720.6	701.2	683.4	695.6	690.1	690.1
42.5°	1386.3	788.8	676.8	688.4	692.9	696.2	682.3	667.3	682.3	656.8	648.5
45°	1462.8	789.4	656.2	657.9	671.2	682.9	673.4	651.3	643.5	592.5	582.5
47.5°	1575.4	808.2	639.6	629.1	652.9	672.3	659.0	626.8	592.5	558.6	552.5
50°	1706.9	842.1	624.6	599.1	628.5	659.0	649.0	611.3	575.8	555.3	551.4
52.5°	1852.8	884.8	606.3	565.8	598.6	652.9	651.3	609.1	560.3	546.4	543.1
55°	2033.1	927.0	583.6	527.0	571.9	647.9	645.2	590.8	557.0	547.0	545.9
57.5°	2242.8	988.0	550.8	487.6	541.4	627.4	621.3	579.7	545.9	538.6	538.1
60°	2580.6	1082.8	504.3	451.6	510.4	591.3	599.1	560.8	528.1	526.4	525.9
62.5°	3025.0	1216.0	456.0	414.4	474.3	544.7	566.9	535.3	509.2	517.6	518.7
65°	3638.5	1328.0	406.1	382.8	434.4	499.8	536.4	511.5	488.2	504.3	504.3
67.5°	4038.4	1330.2	360.6	350.0	393.9	462.1	504.3	483.2	461.0	488.2	489.3
70°	3955.2	1165.5	322.9	315.6	354.5	421.6	468.7	452.1	426.6	451.0	442.1
71°	3821.0	1074.0	307.9	302.3	338.9	402.2	452.1	438.2	412.7	428.8	423.8
72.5°	3606.9	932.5	283.5	284.6	315.6	377.8	428.8	414.4	388.9	397.7	396.1
75°	3048.8	814.3	242.4	247.4	271.3	336.2	382.2	371.1	345.0	345.0	343.4
77.5°	1906.1	569.2	201.4	204.1	230.2	287.9	328.4	319.0	294.0	285.7	283.5
80°	711.2	294.0	157.5	160.9	177.0	226.9	271.8	262.9	237.4	228.0	219.1
82.5°	269.0	147.6	115.9	113.2	130.4	173.1	213.0	202.5	182.5	159.8	153.1
85°	101.5	73.2	71.0	68.8	76.6	102.6	132.0	129.8	108.7	92.6	91.0
87.5°	26.6	23.9	27.7	20.5	21.6	19.4	20.0	8.3	3.9	1.7	1.1
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)