

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: P300302

Luminaire Tested: **GLNA-AF-02-LED-E1-T4FT-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300302
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24295)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-02-LED-E1-T4FT-7027
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10608.6 lumens
Efficiency: N/A
Efficacy: 93.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

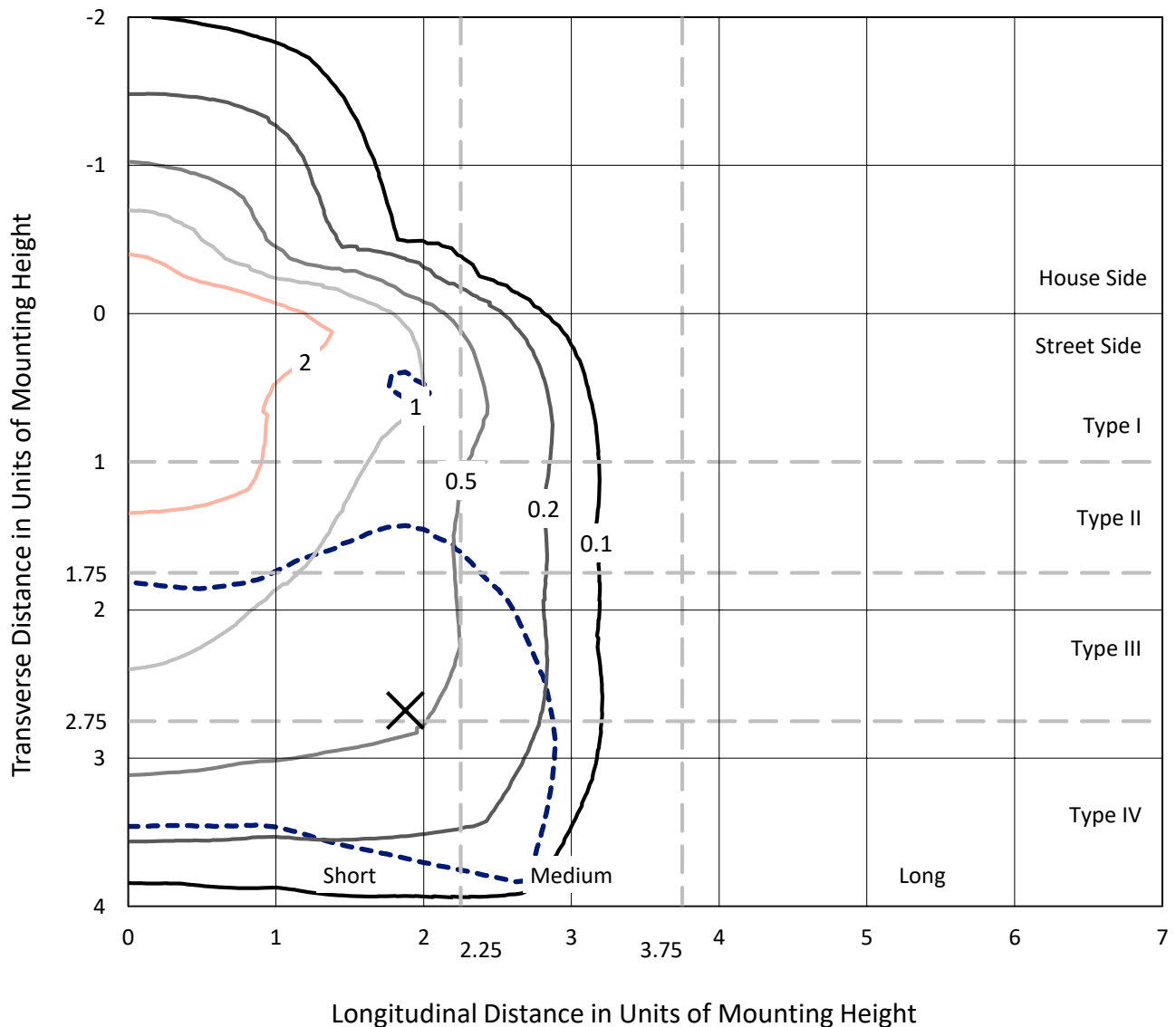
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P300302
 CATALOG NUMBER: GLNA-AF-02-LED-E1-T4FT-7027

Iso-Footcandle Lines of Horizontal Illumination

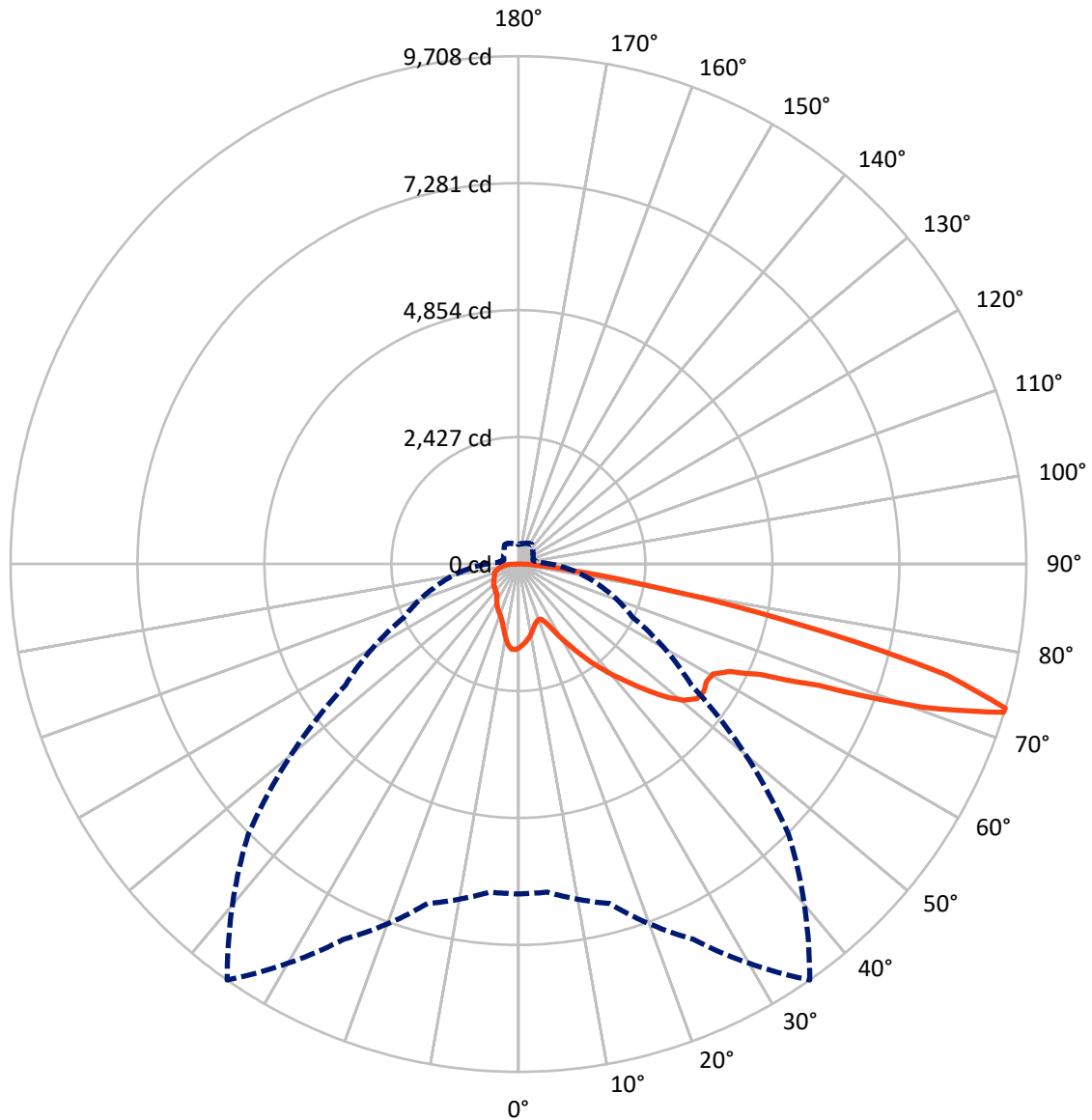
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P300302
CATALOG NUMBER: GLNA-AF-02-LED-E1-T4FT-7027

Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

REPORT NUMBER: P300302

CATALOG NUMBER: GLNA-AF-02-LED-E1-T4FT-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2023.4	0.0	2023.4
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	8585.3	0.0	8585.3
	% Fixture	80.9	0.0	80.9
Total	Lumens	10608.6	0.0	10608.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.0	1.4
10°-20°	361.8	3.4
20°-30°	584.9	5.5
30°-40°	980.7	9.2
40°-50°	1511.8	14.3
50°-60°	2028.2	19.1
60°-70°	2702.0	25.5
70°-80°	2060.8	19.4
80°-90°	233.6	2.2
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°	10608.6	100.0
0°-180°	10608.6	100.0



REPORT NUMBER: P300302

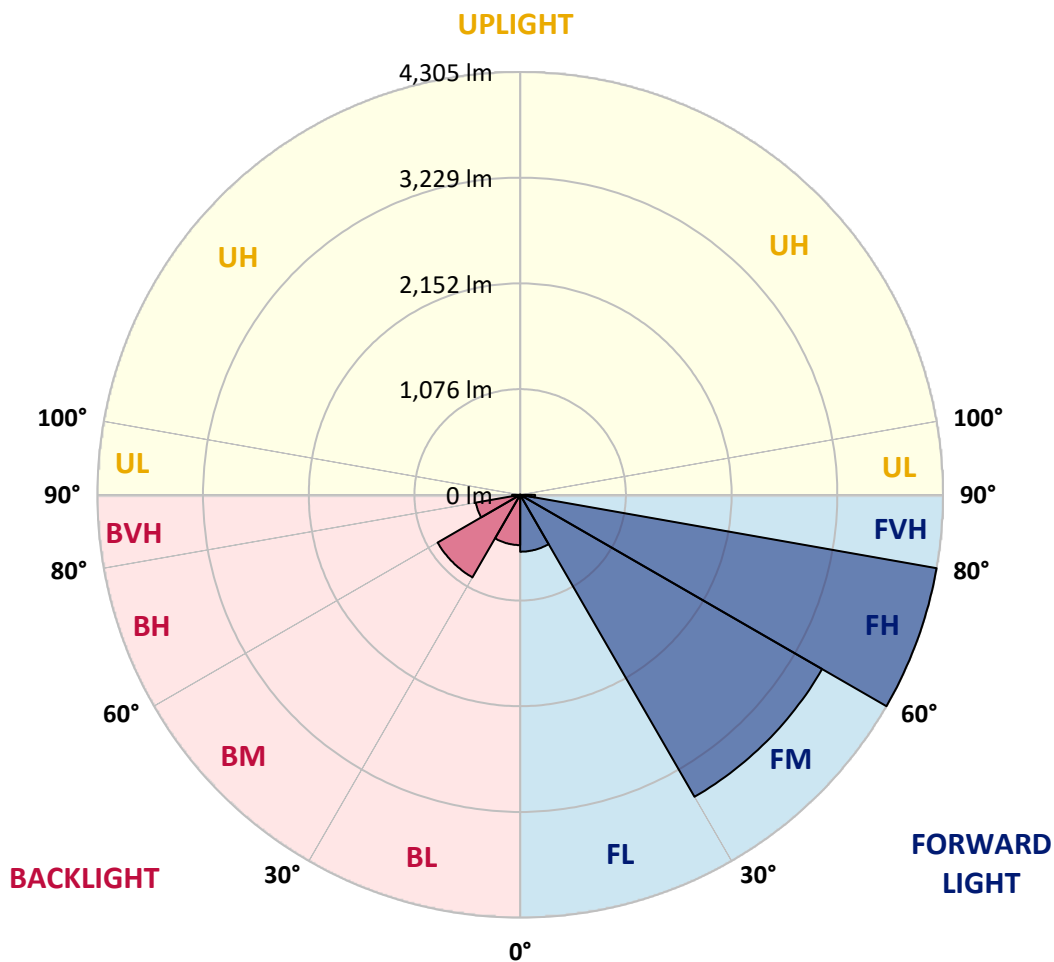
CATALOG NUMBER: GLNA-AF-02-LED-E1-T4FT-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	579.6	5.5			
FM	(30°-60°)	3549.7	33.5			
FH	(60°-80°)	4305.0	40.6			G2/5000
FVH	(80°-90°)	151.0	1.4			G2/225
BL	(0°-30°)	512.0	4.8	B2/1000		
BM	(30°-60°)	971.0	9.2	B1/1000		
BH	(60°-80°)	457.8	4.3	B1/500		G1/500
BVH	(80°-90°)	82.6	0.8			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 IV Short





REPORT NUMBER: P300302

CATALOG NUMBER: GLNA-AF-02-LED-E1-T4FT-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1601.2	1601.2	1601.2	1601.2	1601.2	1601.2	1601.2	1601.2	1601.2	1601.2	1601.2
2.5°	1538.0	1541.1	1537.5	1542.1	1549.7	1557.9	1563.5	1571.6	1580.8	1593.5	1596.6
5°	1465.7	1470.2	1470.2	1478.4	1493.2	1506.4	1518.6	1531.9	1551.2	1573.2	1581.8
7.5°	1386.2	1388.7	1393.3	1405.5	1426.9	1445.8	1463.1	1484.5	1511.0	1540.0	1555.3
10°	1290.4	1294.0	1301.1	1318.4	1347.5	1373.5	1398.4	1428.0	1461.6	1497.8	1517.1
12.5°	1222.7	1221.6	1224.7	1237.4	1262.9	1294.5	1330.7	1368.4	1409.6	1451.9	1475.3
15°	1199.7	1194.1	1182.4	1179.4	1193.1	1224.7	1266.5	1312.8	1362.2	1413.2	1442.2
17.5°	1214.0	1204.3	1172.2	1148.8	1146.8	1170.7	1215.0	1267.0	1324.0	1386.2	1422.4
20°	1303.7	1280.7	1201.8	1147.3	1128.4	1140.1	1178.8	1233.9	1301.1	1383.6	1430.0
22.5°	1518.1	1484.5	1316.9	1215.5	1151.8	1137.6	1166.6	1225.2	1303.7	1415.2	1474.3
25°	1830.4	1782.5	1514.6	1385.7	1254.2	1178.3	1185.0	1245.1	1339.8	1488.6	1559.9
27.5°	2077.0	2045.9	1772.9	1625.6	1440.7	1288.4	1244.6	1295.0	1413.7	1608.8	1681.7
30°	2223.7	2204.9	2049.0	1897.7	1678.6	1463.6	1358.7	1388.7	1529.3	1775.4	1835.5
32.5°	2393.9	2382.7	2306.2	2167.2	1935.4	1693.9	1539.5	1528.8	1684.2	1975.6	2003.1
35°	2570.1	2566.6	2521.7	2421.9	2211.0	1997.5	1779.5	1707.1	1852.8	2183.5	2166.1
37.5°	2734.2	2728.1	2702.1	2644.0	2499.3	2323.6	2024.0	1890.0	2034.7	2382.1	2305.2
40°	3036.3	2988.4	2899.2	2855.4	2790.7	2598.1	2218.1	2060.7	2223.2	2571.7	2425.4
42.5°	3404.6	3326.6	3160.6	3100.5	3091.3	2814.7	2350.6	2226.3	2413.2	2759.6	2543.6
45°	3694.5	3621.1	3478.0	3402.0	3435.7	3010.8	2483.5	2403.0	2608.8	2956.8	2665.4
47.5°	4003.7	3888.6	3699.1	3722.0	3795.3	3196.2	2619.0	2593.1	2823.3	3177.4	2816.7
50°	4014.9	3926.8	3843.7	3980.8	4094.9	3366.9	2788.7	2792.2	3085.7	3455.0	3017.9
52.5°	3782.1	3763.2	3895.2	4110.7	4275.2	3501.9	2981.8	2998.1	3421.4	3773.9	3239.0
55°	3700.6	3679.2	3831.5	4065.3	4299.7	3613.5	3191.1	3220.7	3827.4	4110.2	3454.5
57.5°	3899.3	3851.9	3862.1	4043.9	4240.1	3735.7	3419.4	3479.0	4268.6	4404.1	3593.1
60°	4454.6	4353.2	4160.6	4156.0	4272.2	3919.1	3683.3	3756.1	4727.1	4544.7	3539.1
62.5°	5233.5	5132.1	4771.4	4536.6	4519.3	4221.7	4007.3	4026.6	4992.0	4354.2	3209.5
65°	6076.6	5985.9	5583.0	5251.3	5091.4	4723.0	4383.7	4147.4	4905.4	3830.0	2632.8
67.5°	7100.1	7002.8	6656.4	6350.2	6196.3	5532.0	4648.1	4031.7	4355.7	2967.0	1892.6
70°	7815.8	7716.5	7580.0	7828.1	8204.5	6699.1	4682.3	3561.5	3253.3	1972.0	1139.1
72.5°	6882.0	6835.7	7084.8	8129.7	9697.7	7407.3	4232.4	2593.1	1889.5	1046.9	659.2
73°	6305.4	6295.2	6720.0	7918.2	9708.4	7298.3	4035.3	2410.2	1620.5	926.2	602.7
75°	2847.3	2929.3	3860.5	6048.1	8434.8	6014.0	2840.1	1382.6	915.5	639.9	454.9
77.5°	684.2	712.7	1207.9	2872.2	5326.7	3583.9	1286.8	683.7	585.3	451.9	332.2
80°	291.4	301.1	465.1	1061.2	2508.0	1443.2	593.0	458.0	405.0	315.3	232.8
82.5°	162.0	172.2	263.9	481.4	1012.3	492.1	361.7	318.9	266.4	190.0	151.3
85°	91.7	97.3	154.4	269.0	428.9	197.7	216.5	211.9	150.3	97.8	74.4
87.5°	43.3	46.9	74.4	124.8	168.1	77.4	110.0	121.2	94.2	59.6	38.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P300302

CATALOG NUMBER: GLNA-AF-02-LED-E1-T4FT-7027

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1601.2	1601.2	1601.2	1601.2	1601.2	1601.2	1601.2	1601.2	1601.2	1601.2
2.5°	1600.2	1609.3	1620.0	1625.6	1630.7	1636.8	1642.9	1642.9	1644.0	1644.5
5°	1588.9	1607.8	1624.6	1631.7	1633.3	1633.3	1631.7	1623.6	1616.5	1619.5
7.5°	1565.5	1593.0	1607.3	1604.7	1585.4	1563.0	1544.1	1521.2	1509.5	1507.4
10°	1531.9	1563.5	1566.0	1540.5	1492.7	1444.8	1405.0	1366.3	1348.0	1343.4
12.5°	1494.7	1523.7	1507.4	1455.0	1378.0	1308.2	1257.8	1218.6	1201.3	1196.7
15°	1464.6	1484.5	1443.2	1360.7	1263.9	1190.1	1148.3	1119.2	1107.0	1103.4
17.5°	1448.9	1452.9	1377.5	1266.0	1163.1	1101.4	1075.4	1061.7	1057.1	1054.5
20°	1456.5	1428.0	1314.9	1177.8	1080.5	1037.2	1031.1	1027.5	1026.5	1025.0
22.5°	1494.7	1420.3	1257.3	1094.3	1008.2	989.3	994.4	993.9	992.9	991.9
25°	1563.0	1426.9	1201.3	1014.8	947.6	943.5	952.7	952.7	948.6	948.6
27.5°	1653.1	1440.7	1138.6	939.4	892.5	893.0	900.2	898.1	893.6	890.5
30°	1763.2	1449.4	1065.2	871.7	841.1	839.0	841.1	832.4	818.7	817.7
32.5°	1875.8	1438.7	980.2	811.5	786.6	782.0	780.5	768.2	752.4	747.9
35°	1977.6	1399.4	893.6	763.7	734.6	724.4	731.6	727.5	713.2	709.7
37.5°	2052.0	1326.6	815.6	721.4	697.4	694.9	699.5	701.0	684.2	680.6
40°	2102.0	1227.8	748.9	685.7	690.3	680.6	665.3	654.6	649.5	648.0
42.5°	2142.2	1124.8	692.8	668.9	691.8	663.8	630.7	613.4	622.5	626.6
45°	2188.6	1024.5	646.0	648.0	684.2	644.4	606.7	589.9	593.5	594.5
47.5°	2252.2	902.2	595.5	614.4	658.7	631.2	592.0	568.0	551.2	543.6
50°	2340.4	757.5	543.1	576.7	633.7	621.5	569.0	543.6	512.5	505.4
52.5°	2401.5	622.5	499.8	545.1	611.3	602.2	550.7	517.6	485.0	478.9
55°	2368.4	517.1	462.1	510.0	581.8	578.2	535.4	491.1	465.6	460.5
57.5°	2202.8	450.3	433.0	476.8	545.6	557.8	515.0	468.7	450.3	446.8
60°	1887.0	408.6	414.7	454.4	516.1	537.5	494.7	456.5	444.2	441.7
62.5°	1464.1	380.6	400.9	438.1	493.1	523.2	483.5	454.9	450.3	447.3
65°	1048.9	358.1	386.2	421.8	472.3	510.0	479.4	452.9	453.9	451.4
67.5°	712.7	338.3	368.3	403.5	451.9	498.2	473.8	445.8	458.5	455.4
70°	498.7	318.9	347.4	380.0	426.4	481.9	463.6	435.1	434.0	421.8
72.5°	389.2	293.4	318.9	347.4	393.8	459.0	443.2	411.1	394.3	381.6
73°	371.4	287.3	311.8	340.3	386.7	453.4	437.6	404.5	385.6	373.9
75°	307.2	260.8	283.2	308.7	356.1	426.9	410.1	374.4	350.5	343.4
77.5°	241.5	223.1	244.5	267.5	313.8	388.2	369.3	335.2	322.0	315.9
80°	178.8	184.9	203.8	224.2	272.0	346.9	330.1	296.0	355.1	340.3
82.5°	125.8	140.1	157.4	175.8	228.2	306.7	286.3	251.2	259.8	216.0
85°	74.4	91.7	108.0	123.8	164.5	254.2	236.4	200.2	164.0	156.4
87.5°	43.3	50.9	55.5	71.8	113.1	191.5	166.6	148.2	85.1	57.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)