

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: P300374

Luminaire Tested: **GLNA-AF-04-LED-E1-T4FT-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300374  
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-04-LED-E1-T4FT-7027-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16897.9 lumens  
Efficiency: N/A  
Efficacy: 98.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G3

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: 25 FT

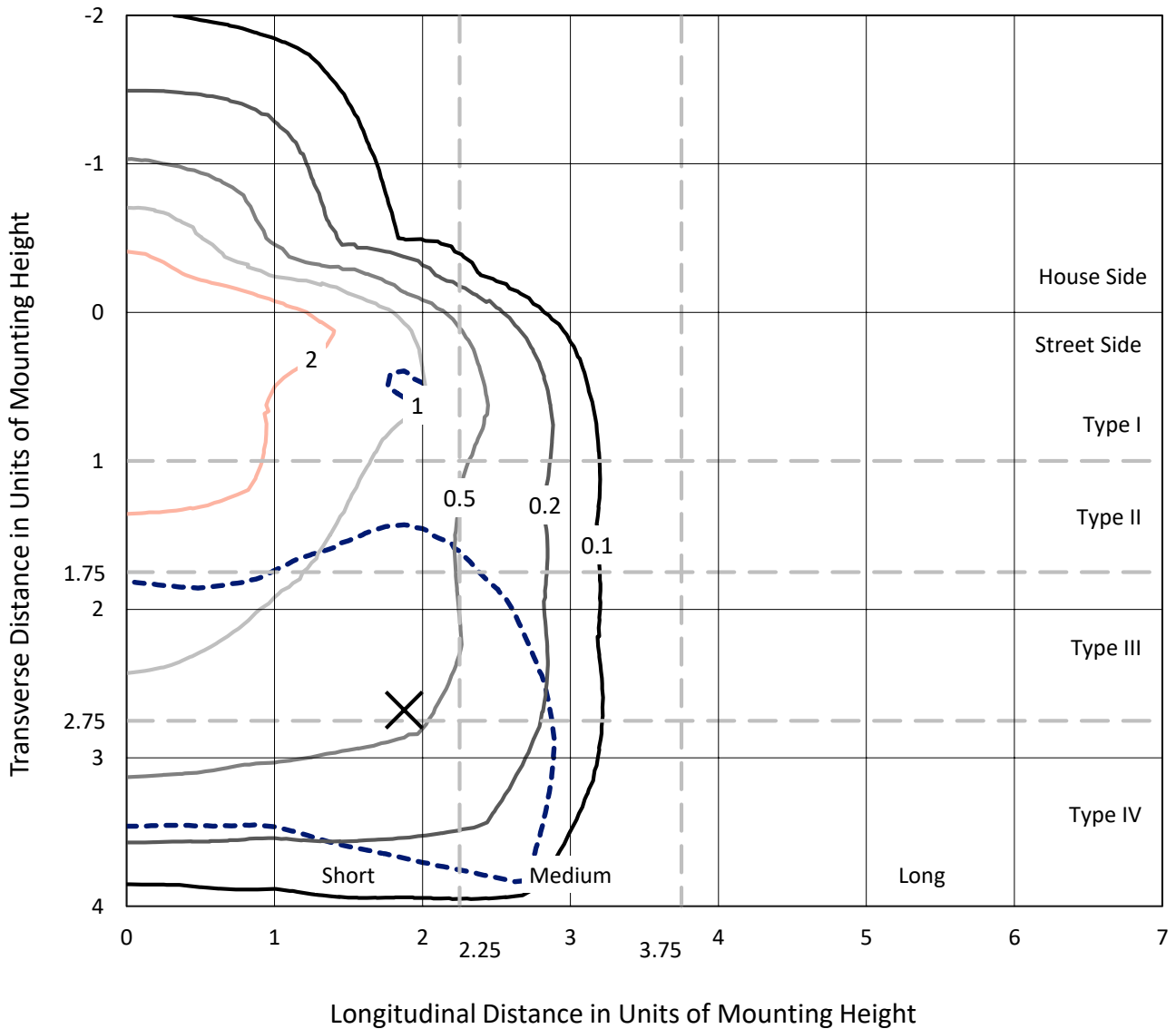


REPORT NUMBER: P300374

CATALOG NUMBER: GLNA-AF-04-LED-E1-T4FT-7027-800

### Iso-Footcandle Lines of Horizontal Illumination

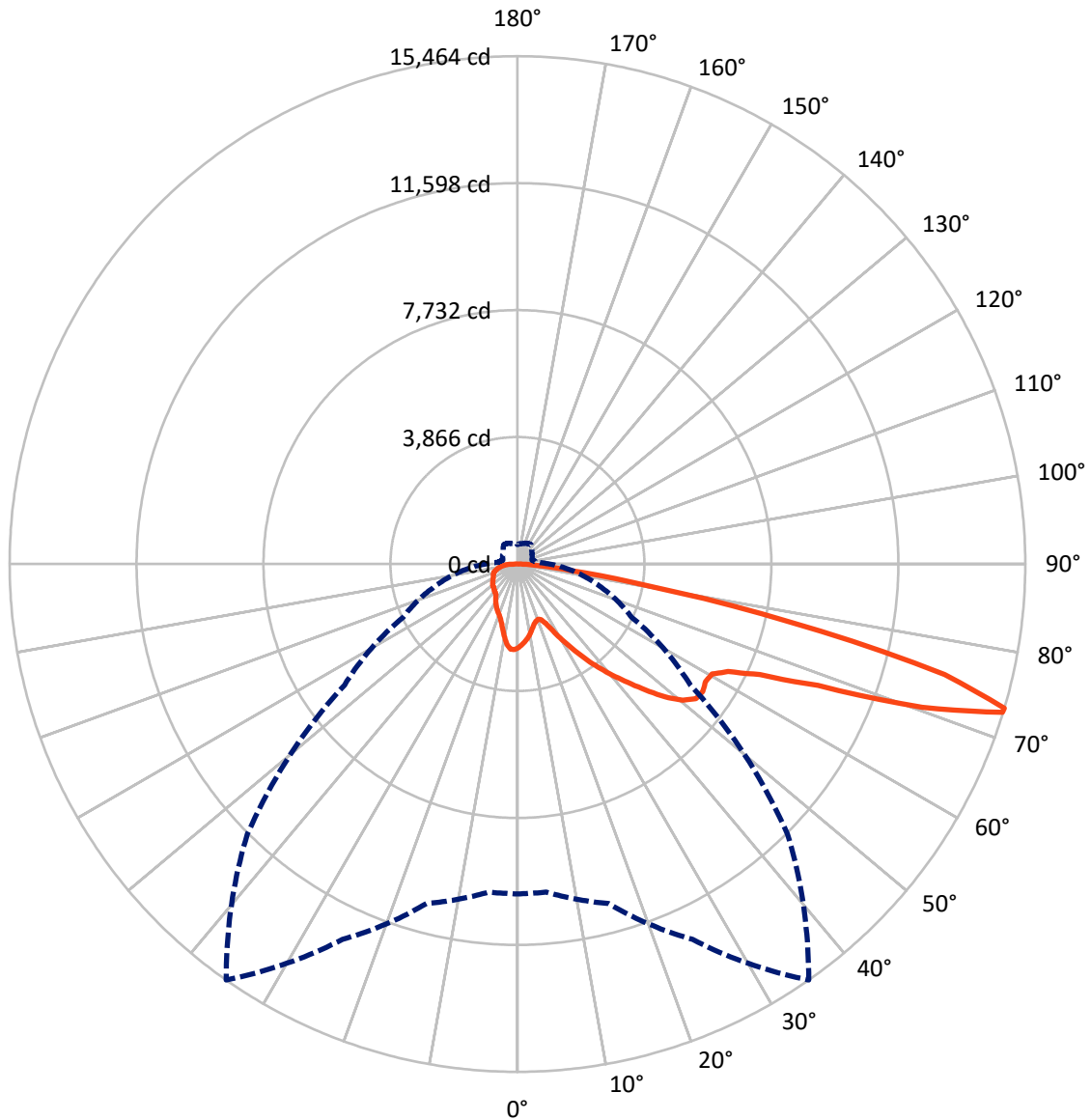
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P300374  
CATALOG NUMBER: GLNA-AF-04-LED-E1-T4FT-7027-800

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P300374

CATALOG NUMBER: GLNA-AF-04-LED-E1-T4FT-7027-800

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3222.9	0.0	3222.9
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	13675.0	0.0	13675.0
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	16897.9	0.0	16897.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	230.9	1.4
10°-20°	576.3	3.4
20°-30°	931.6	5.5
30°-40°	1562.2	9.2
40°-50°	2408.0	14.3
50°-60°	3230.6	19.1
60°-70°	4303.8	25.5
70°-80°	3282.5	19.4
80°-90°	372.1	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°	16897.9	100.0
0°-180°	16897.9	100.0

**Coefficient of Utilization**



REPORT NUMBER: P300374

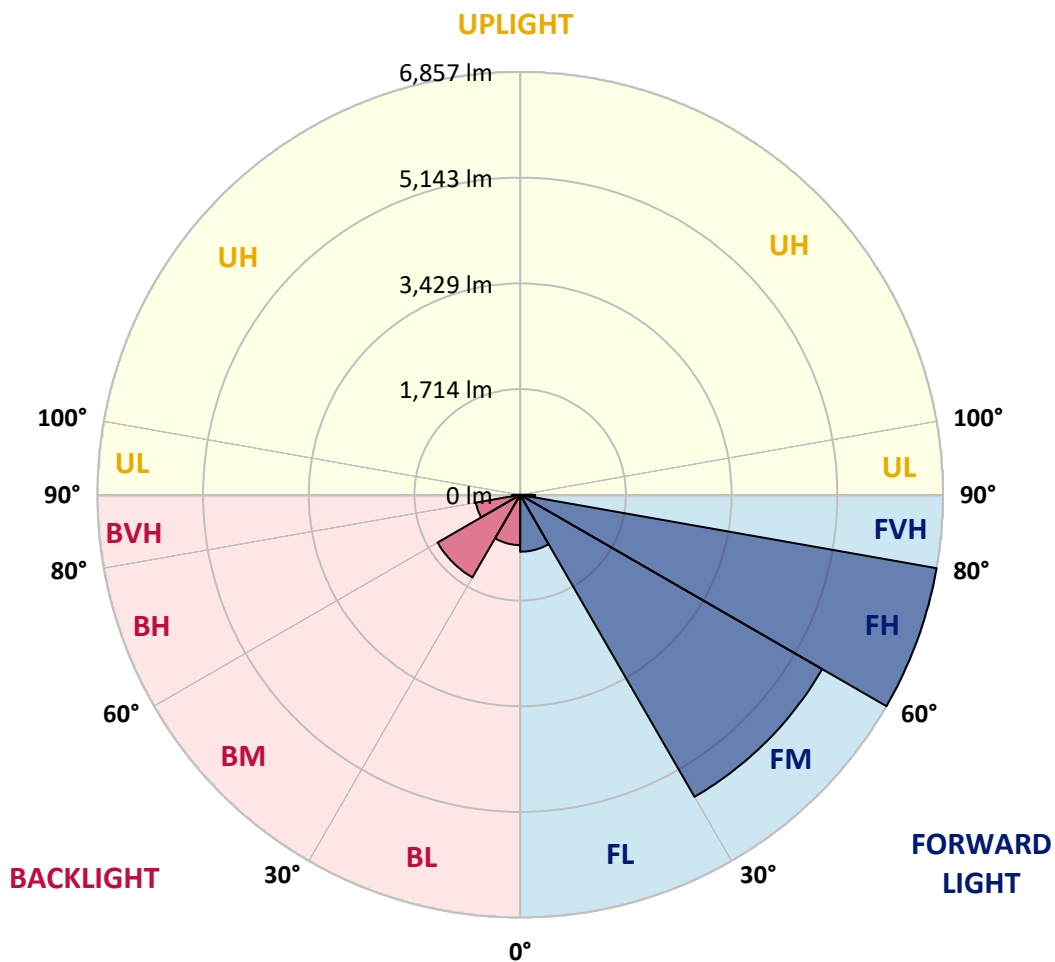
CATALOG NUMBER: GLNA-AF-04-LED-E1-T4FT-7027-800

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	923.2	5.5			
FM	(30°-60°)	5654.2	33.5			
FH	(60°-80°)	6857.2	40.6			G3/7500
FVH	(80°-90°)	240.5	1.4			G3/500
BL	(0°-30°)	815.5	4.8	B2/1000		
BM	(30°-60°)	1546.6	9.2	B2/2500		
BH	(60°-80°)	729.2	4.3	B2/1000		G2/1000
BVH	(80°-90°)	131.6	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type IV Short





REPORT NUMBER: P300374

CATALOG NUMBER: GLNA-AF-04-LED-E1-T4FT-7027-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2550.4	2550.4	2550.4	2550.4	2550.4	2550.4	2550.4	2550.4	2550.4	2550.4	2550.4
2.5°	2449.8	2454.7	2449.0	2456.3	2468.5	2481.4	2490.4	2503.4	2518.0	2538.2	2543.1
5°	2334.6	2341.9	2341.9	2354.9	2378.4	2399.5	2419.0	2440.1	2470.9	2505.8	2519.6
7.5°	2208.0	2212.0	2219.3	2238.8	2272.9	2302.9	2330.5	2364.6	2406.8	2453.0	2477.4
10°	2055.4	2061.1	2072.5	2100.1	2146.3	2187.7	2227.5	2274.5	2328.1	2385.7	2416.5
12.5°	1947.5	1945.9	1950.8	1971.0	2011.6	2061.9	2119.5	2179.6	2245.3	2312.7	2350.0
15°	1911.0	1902.1	1883.4	1878.5	1900.4	1950.8	2017.3	2091.1	2169.8	2251.0	2297.2
17.5°	1933.7	1918.3	1867.2	1829.8	1826.6	1864.7	1935.3	2018.1	2109.0	2208.0	2265.6
20°	2076.5	2040.0	1914.2	1827.4	1797.4	1816.0	1877.7	1965.4	2072.5	2203.9	2277.8
22.5°	2418.2	2364.6	2097.6	1936.1	1834.7	1812.0	1858.2	1951.6	2076.5	2254.2	2348.4
25°	2915.6	2839.3	2412.5	2207.2	1997.8	1876.9	1887.5	1983.2	2134.1	2371.1	2484.7
27.5°	3308.3	3258.8	2823.9	2589.4	2294.8	2052.2	1982.4	2062.7	2251.8	2562.6	2678.6
30°	3542.0	3512.0	3263.7	3022.7	2673.8	2331.3	2164.2	2212.0	2436.0	2827.9	2923.7
32.5°	3813.1	3795.2	3673.5	3452.0	3082.7	2698.1	2452.2	2435.2	2682.7	3146.8	3190.7
35°	4093.8	4088.1	4016.7	3857.7	3521.7	3181.7	2834.4	2719.2	2951.3	3477.9	3450.3
37.5°	4355.1	4345.4	4304.0	4211.5	3981.0	3701.1	3223.9	3010.5	3241.0	3794.4	3671.9
40°	4836.3	4760.0	4618.0	4548.2	4445.2	4138.5	3533.1	3282.4	3541.2	4096.3	3863.4
42.5°	5423.0	5298.8	5034.3	4938.6	4923.9	4483.3	3744.1	3546.1	3843.9	4395.7	4051.6
45°	5884.7	5767.9	5539.8	5418.9	5472.5	4795.7	3955.9	3827.7	4155.5	4709.7	4245.6
47.5°	6377.3	6193.9	5892.0	5928.5	6045.4	5091.1	4171.7	4130.3	4497.1	5061.1	4486.6
50°	6395.1	6254.7	6122.5	6340.8	6522.5	5362.9	4441.9	4447.6	4915.0	5503.3	4807.1
52.5°	6024.3	5994.3	6204.4	6547.7	6809.8	5578.0	4749.5	4775.4	5449.8	6011.3	5159.3
55°	5894.5	5860.4	6103.0	6475.5	6848.7	5755.7	5083.0	5130.1	6096.5	6546.9	5502.5
57.5°	6210.9	6135.5	6151.7	6441.4	6753.8	5950.4	5446.5	5541.5	6799.2	7015.1	5723.2
60°	7095.4	6933.9	6627.2	6619.9	6804.9	6242.6	5866.9	5982.9	7529.5	7239.0	5637.2
62.5°	8336.1	8174.7	7600.1	7226.1	7198.5	6724.6	6383.0	6413.8	7951.5	6935.6	5112.2
65°	9679.1	9534.7	8892.8	8364.5	8109.7	7523.1	6982.6	6606.1	7813.6	6100.6	4193.6
67.5°	11309.3	11154.3	10602.5	10114.9	9869.8	8811.7	7403.8	6421.9	6938.0	4725.9	3014.6
70°	12449.4	12291.2	12073.7	12468.9	13068.6	10670.7	7458.1	5672.9	5182.0	3141.2	1814.4
72.5°	10962.0	10888.2	11285.0	12949.3	15447.0	11798.6	6741.6	4130.3	3009.7	1667.6	1050.0
73°	10043.5	10027.2	10704.0	12612.5	15464.0	11625.0	6427.6	3839.0	2581.3	1475.2	960.0
75°	4535.3	4665.9	6149.3	9633.7	13435.4	9579.3	4523.9	2202.3	1458.2	1019.2	724.6
77.5°	1089.8	1135.2	1924.0	4575.0	8484.6	5708.6	2049.8	1089.0	932.4	719.8	529.1
80°	464.2	479.6	740.9	1690.3	3994.8	2298.9	944.5	729.5	645.1	502.3	370.8
82.5°	258.0	274.3	420.3	766.8	1612.4	783.9	576.1	508.0	424.4	302.7	241.0
85°	146.1	155.0	245.9	428.5	683.3	314.8	344.9	337.6	239.4	155.8	118.5
87.5°	69.0	74.7	118.5	198.8	267.8	123.3	175.3	193.1	150.1	94.9	61.7
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: P300374

CATALOG NUMBER: GLNA-AF-04-LED-E1-T4FT-7027-800

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2550.4	2550.4	2550.4	2550.4	2550.4	2550.4	2550.4	2550.4	2550.4	2550.4
2.5°	2548.8	2563.4	2580.4	2589.4	2597.5	2607.2	2617.0	2617.0	2618.6	2619.4
5°	2530.9	2561.0	2587.7	2599.1	2601.5	2601.5	2599.1	2586.1	2574.8	2579.6
7.5°	2493.6	2537.4	2560.2	2556.1	2525.3	2489.6	2459.5	2423.0	2404.4	2401.1
10°	2440.1	2490.4	2494.4	2453.9	2377.6	2301.3	2238.0	2176.3	2147.1	2139.8
12.5°	2380.8	2427.1	2401.1	2317.5	2195.0	2083.8	2003.5	1941.0	1913.4	1906.1
15°	2332.9	2364.6	2298.9	2167.4	2013.2	1895.6	1829.0	1782.8	1763.3	1757.6
17.5°	2307.8	2314.3	2194.2	2016.5	1852.6	1754.4	1713.0	1691.1	1683.8	1679.7
20°	2320.0	2274.5	2094.4	1876.1	1721.1	1652.1	1642.4	1636.7	1635.1	1632.7
22.5°	2380.8	2262.4	2002.7	1743.0	1605.9	1575.9	1584.0	1583.2	1581.5	1579.9
25°	2489.6	2272.9	1913.4	1616.4	1509.3	1502.8	1517.4	1517.4	1510.9	1510.9
27.5°	2633.2	2294.8	1813.6	1496.3	1421.7	1422.5	1433.9	1430.6	1423.3	1418.4
30°	2808.5	2308.6	1696.8	1388.4	1339.7	1336.5	1339.7	1325.9	1304.0	1302.4
32.5°	2987.8	2291.6	1561.3	1292.7	1252.9	1245.6	1243.2	1223.7	1198.5	1191.2
35°	3150.1	2229.1	1423.3	1216.4	1170.1	1153.9	1165.3	1158.8	1136.0	1130.4
37.5°	3268.6	2113.0	1299.1	1149.0	1110.9	1106.8	1114.1	1116.6	1089.8	1084.1
40°	3348.1	1955.6	1192.8	1092.2	1099.5	1084.1	1059.8	1042.7	1034.6	1032.2
42.5°	3412.2	1791.7	1103.6	1065.4	1102.0	1057.3	1004.6	977.0	991.6	998.1
45°	3486.0	1631.8	1028.9	1032.2	1089.8	1026.5	966.4	939.7	945.4	947.0
47.5°	3587.5	1437.1	948.6	978.6	1049.2	1005.4	942.9	904.8	878.0	865.8
50°	3727.9	1206.6	865.0	918.6	1009.5	990.0	906.4	865.8	816.3	805.0
52.5°	3825.2	991.6	796.0	868.3	973.8	959.1	877.2	824.4	772.5	762.8
55°	3772.5	823.6	736.0	812.3	926.7	921.0	852.8	782.2	741.7	733.6
57.5°	3508.8	717.3	689.7	759.5	869.1	888.5	820.4	746.5	717.3	711.7
60°	3005.7	650.8	660.5	723.8	822.0	856.1	787.9	727.1	707.6	703.5
62.5°	2332.1	606.2	638.6	697.9	785.5	833.4	770.1	724.6	717.3	712.5
65°	1670.8	570.5	615.1	671.9	752.2	812.3	763.6	721.4	723.0	719.0
67.5°	1135.2	538.8	586.7	642.7	719.8	793.6	754.7	710.0	730.3	725.4
70°	794.4	508.0	553.4	605.3	679.2	767.6	738.4	693.0	691.4	671.9
72.5°	620.0	467.4	508.0	553.4	627.3	731.1	706.0	654.8	628.1	607.8
73°	591.6	457.7	496.6	542.1	615.9	722.2	697.0	644.3	614.3	595.6
75°	489.3	415.5	451.2	491.7	567.2	680.0	653.2	596.4	558.3	546.9
77.5°	384.6	355.4	389.5	426.0	499.9	618.3	588.3	533.9	512.8	503.1
80°	284.8	294.6	324.6	357.0	433.3	552.6	525.8	471.5	565.6	542.1
82.5°	200.4	223.2	250.7	280.0	363.5	488.5	456.0	400.1	413.8	344.1
85°	118.5	146.1	172.0	197.2	262.1	404.9	376.5	318.9	261.3	249.1
87.5°	69.0	81.1	88.4	114.4	180.1	305.1	265.3	236.1	135.5	91.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)