

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: P300440

Luminaire Tested: **GLNA-AF-05-LED-E1-T4FT-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300440
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-05-LED-E1-T4FT-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17072.4 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U0 - G3

Input Watts (W): 162
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

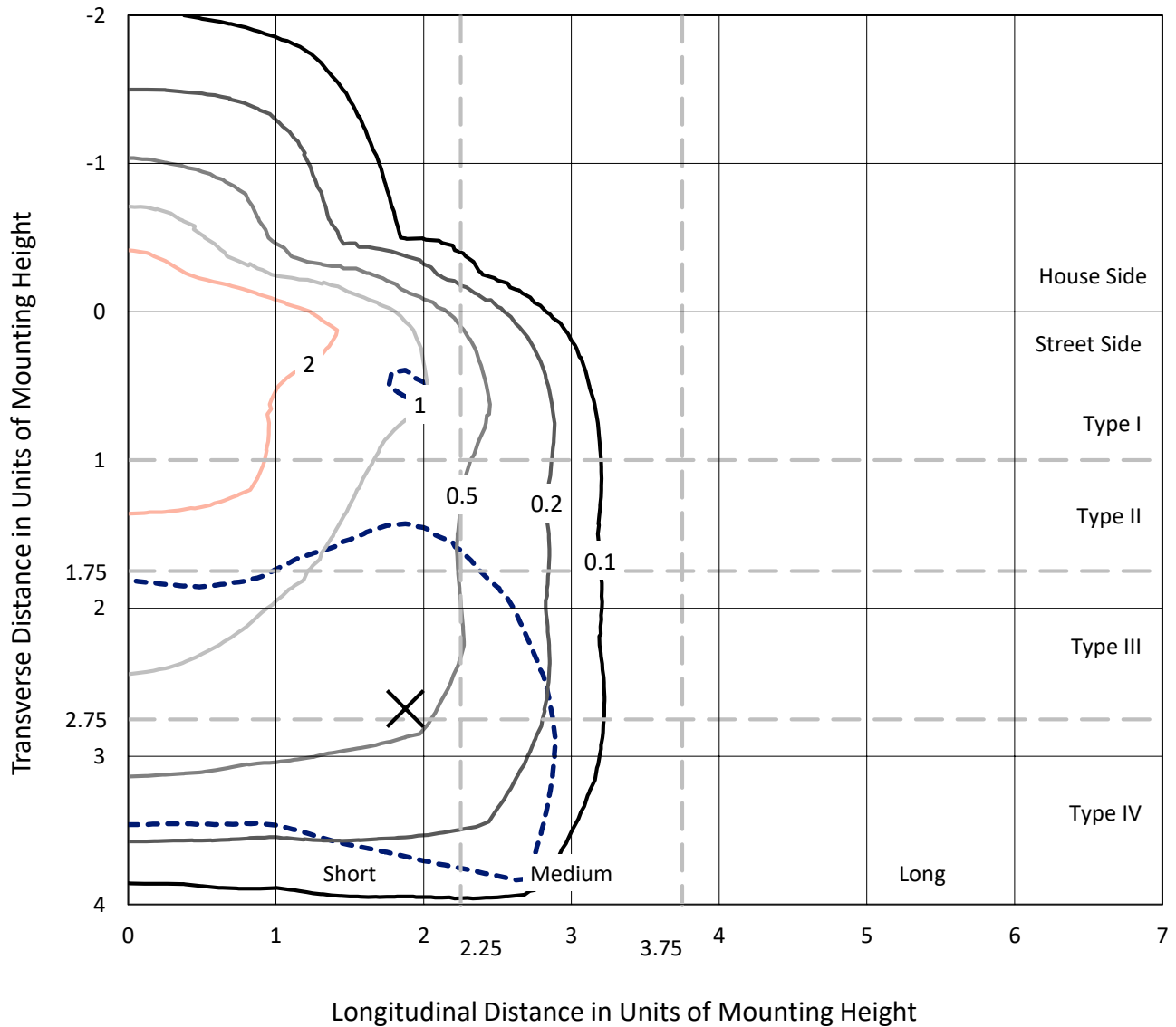


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Iso-Footcandle Lines of Horizontal Illumination

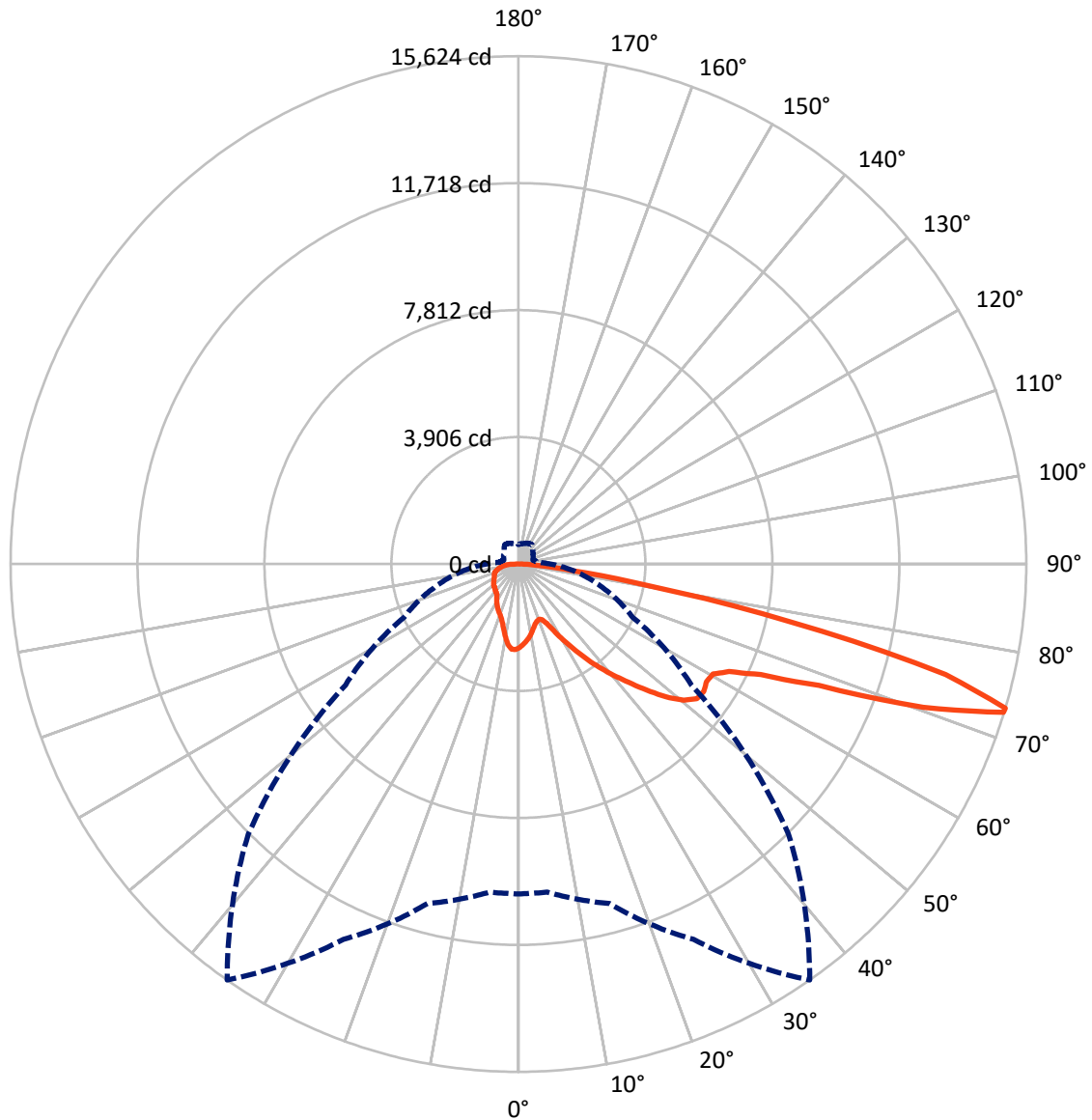
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3256.2	0.0	3256.2
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	13816.2	0.0	13816.2
	% Fixture	80.9	0.0	80.9
Total	Lumens	17072.4	0.0	17072.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	233.3	1.4
10°-20°	582.2	3.4
20°-30°	941.2	5.5
30°-40°	1578.3	9.2
40°-50°	2432.9	14.3
50°-60°	3264.0	19.1
60°-70°	4348.3	25.5
70°-80°	3316.4	19.4
80°-90°	375.9	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°	17072.4	100.0
0°-180°	17072.4	100.0



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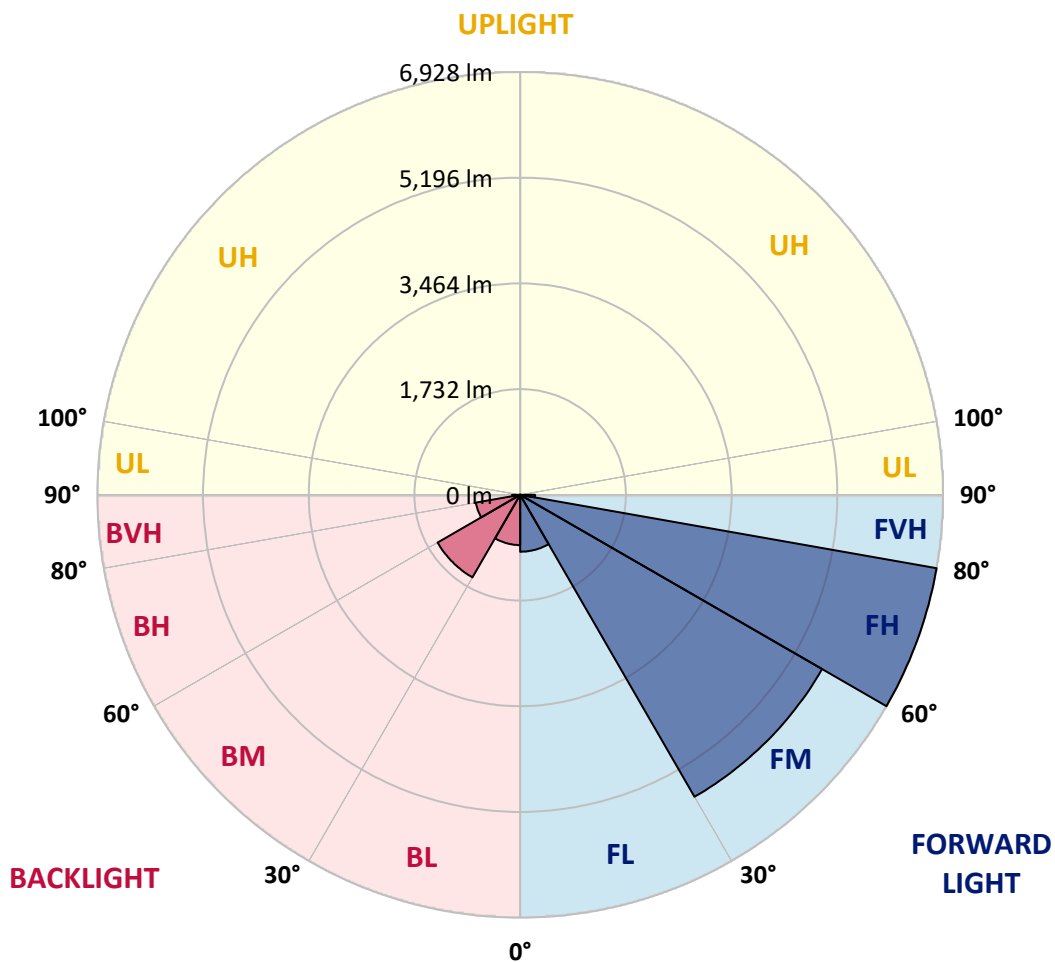
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	932.7	5.5			
FM	(30°-60°)	5712.5	33.5			
FH	(60°-80°)	6928.0	40.6			G3/7500
FVH	(80°-90°)	243.0	1.4			G3/500
BL	(0°-30°)	824.0	4.8	B2/1000		
BM	(30°-60°)	1562.6	9.2	B2/2500		
BH	(60°-80°)	736.7	4.3	B2/1000		G2/1000
BVH	(80°-90°)	132.9	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7
2.5°	2475.1	2480.0	2474.3	2481.6	2493.9	2507.1	2516.1	2529.2	2544.0	2564.5	2569.4
5°	2358.7	2366.1	2366.1	2379.2	2402.9	2424.3	2443.9	2465.3	2496.4	2531.7	2545.6
7.5°	2230.8	2234.9	2242.3	2261.9	2296.4	2326.7	2354.6	2389.0	2431.6	2478.4	2503.0
10°	2076.6	2082.4	2093.9	2121.7	2168.5	2210.3	2250.5	2298.0	2352.1	2410.3	2441.5
12.5°	1967.6	1966.0	1970.9	1991.4	2032.4	2083.2	2141.4	2202.1	2268.5	2336.5	2374.2
15°	1930.7	1921.7	1902.8	1897.9	1920.1	1970.9	2038.1	2112.7	2192.2	2274.2	2321.0
17.5°	1953.7	1938.1	1886.4	1848.7	1845.5	1884.0	1955.3	2038.9	2130.8	2230.8	2289.0
20°	2098.0	2061.1	1934.0	1846.3	1815.9	1834.8	1897.1	1985.6	2093.9	2226.7	2301.3
22.5°	2443.1	2389.0	2119.3	1956.1	1853.7	1830.7	1877.4	1971.7	2098.0	2277.5	2372.6
25°	2945.7	2868.6	2437.4	2230.0	2018.4	1896.3	1906.9	2003.7	2156.2	2395.6	2510.3
27.5°	3342.5	3292.5	2853.0	2616.1	2318.5	2073.4	2002.9	2084.0	2275.0	2589.0	2706.3
30°	3578.6	3548.3	3297.4	3053.9	2701.4	2355.4	2186.5	2234.9	2461.2	2857.1	2953.9
32.5°	3852.4	3834.4	3711.4	3487.6	3114.6	2726.0	2477.5	2460.3	2710.4	3179.3	3223.6
35°	4136.1	4130.3	4058.2	3897.5	3558.1	3214.6	2863.7	2747.3	2981.7	3513.8	3485.9
37.5°	4400.1	4390.2	4348.4	4255.0	4022.1	3739.3	3257.2	3041.6	3274.4	3833.6	3709.8
40°	4886.2	4809.2	4665.7	4595.2	4491.1	4181.2	3569.6	3316.2	3577.8	4138.5	3903.2
42.5°	5479.0	5353.5	5086.3	4989.5	4974.8	4529.6	3782.7	3582.7	3883.6	4441.1	4093.4
45°	5945.5	5827.4	5597.0	5474.9	5529.0	4845.2	3996.7	3867.2	4198.4	4758.3	4289.4
47.5°	6443.1	6257.8	5952.8	5989.7	6107.8	5143.7	4214.8	4173.0	4543.5	5113.3	4532.9
50°	6461.1	6319.3	6185.7	6406.2	6589.9	5418.3	4487.8	4493.5	4965.8	5560.1	4856.7
52.5°	6086.5	6056.1	6268.5	6615.3	6880.1	5635.6	4798.5	4824.7	5506.0	6073.4	5212.5
55°	5955.3	5920.9	6166.0	6542.3	6919.4	5815.1	5135.5	5183.0	6159.4	6614.5	5559.3
57.5°	6275.0	6198.8	6215.2	6507.9	6823.5	6011.9	5502.8	5598.7	6869.4	7087.5	5782.3
60°	7168.7	7005.5	6695.6	6688.2	6875.2	6307.0	5927.4	6044.7	7607.3	7313.8	5695.4
62.5°	8422.2	8259.0	7678.6	7300.7	7272.8	6794.0	6448.8	6480.0	8033.6	7007.2	5165.0
65°	9779.0	9633.1	8984.6	8450.9	8193.5	7600.7	7054.7	6674.3	7894.2	6163.5	4236.9
67.5°	11426.1	11269.5	10712.0	10219.3	9971.7	8902.6	7480.2	6488.2	7009.6	4774.7	3045.7
70°	12577.9	12418.1	12198.4	12597.6	13203.5	10780.9	7535.1	5731.5	5235.5	3173.6	1833.2
72.5°	11075.2	11000.6	11401.5	13083.0	15606.4	11920.4	6811.2	4173.0	3040.8	1684.8	1060.9
73°	10147.1	10130.7	10814.5	12742.7	15623.6	11745.0	6493.9	3878.7	2607.9	1490.5	969.9
75°	4582.1	4714.1	6212.7	9733.1	13574.1	9678.2	4570.6	2225.0	1473.2	1029.7	732.1
77.5°	1101.0	1147.0	1943.8	4622.2	8572.2	5767.6	2070.9	1100.2	942.0	727.2	534.5
80°	468.9	484.5	748.5	1707.7	4036.1	2322.6	954.3	737.0	651.8	507.5	374.7
82.5°	260.7	277.1	424.7	774.7	1629.0	792.0	582.1	513.2	428.8	305.8	243.5
85°	147.6	156.6	248.4	432.9	690.3	318.1	348.4	341.1	241.9	157.4	119.7
87.5°	69.7	75.4	119.7	200.9	270.5	124.6	177.1	195.1	151.7	95.9	62.3
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7
2.5°	2575.1	2589.9	2607.1	2616.1	2624.3	2634.1	2644.0	2644.0	2645.6	2646.4
5°	2557.1	2587.4	2614.5	2625.9	2628.4	2628.4	2625.9	2612.8	2601.3	2606.3
7.5°	2519.4	2563.6	2586.6	2582.5	2551.3	2515.3	2484.9	2448.0	2429.2	2425.9
10°	2465.3	2516.1	2520.2	2479.2	2402.1	2325.1	2261.1	2198.8	2169.3	2161.9
12.5°	2405.4	2452.1	2425.9	2341.5	2217.7	2105.3	2024.2	1961.1	1933.2	1925.8
15°	2357.0	2389.0	2322.6	2189.8	2034.0	1915.1	1847.9	1801.2	1781.5	1775.8
17.5°	2331.6	2338.2	2216.8	2037.3	1871.7	1772.5	1730.7	1708.5	1701.2	1697.1
20°	2343.9	2298.0	2116.0	1895.5	1738.9	1669.2	1659.4	1653.6	1652.0	1649.5
22.5°	2405.4	2285.7	2023.4	1761.0	1622.5	1592.1	1600.3	1599.5	1597.9	1596.2
25°	2515.3	2296.4	1933.2	1633.1	1524.9	1518.3	1533.1	1533.1	1526.5	1526.5
27.5°	2660.4	2318.5	1832.3	1511.8	1436.4	1437.2	1448.7	1445.4	1438.0	1433.1
30°	2837.5	2332.4	1714.3	1402.7	1353.6	1350.3	1353.6	1339.6	1317.5	1315.8
32.5°	3018.6	2315.2	1577.4	1306.0	1265.8	1258.5	1256.0	1236.3	1210.9	1203.5
35°	3182.6	2252.1	1438.0	1228.9	1182.2	1165.8	1177.3	1170.7	1147.8	1142.0
37.5°	3302.3	2134.9	1312.6	1160.9	1122.4	1118.3	1125.6	1128.1	1101.0	1095.3
40°	3382.7	1975.8	1205.2	1103.5	1110.9	1095.3	1070.7	1053.5	1045.3	1042.8
42.5°	3447.4	1810.2	1115.0	1076.4	1113.3	1068.2	1015.0	987.1	1001.8	1008.4
45°	3522.0	1648.7	1039.6	1042.8	1101.0	1037.1	976.4	949.4	955.1	956.8
47.5°	3624.5	1451.9	958.4	988.7	1060.1	1015.8	952.7	914.1	887.1	874.8
50°	3766.3	1219.1	873.9	928.1	1019.9	1000.2	915.8	874.8	824.8	813.3
52.5°	3864.7	1001.8	804.3	877.2	983.8	969.0	886.2	833.0	780.5	770.6
55°	3811.4	832.1	743.6	820.7	936.3	930.5	861.6	790.3	749.3	741.1
57.5°	3545.0	724.7	696.9	767.4	878.0	897.7	828.9	754.3	724.7	719.0
60°	3036.7	657.5	667.3	731.3	830.5	864.9	796.1	734.6	714.9	710.8
62.5°	2356.2	612.4	645.2	705.1	793.6	842.0	778.0	732.1	724.7	719.8
65°	1688.0	576.3	621.4	678.8	760.0	820.7	771.5	728.8	730.5	726.4
67.5°	1147.0	544.4	592.7	649.3	727.2	801.8	762.4	717.4	737.9	732.9
70°	802.6	513.2	559.1	611.6	686.2	775.6	746.1	700.1	698.5	678.8
72.5°	626.4	472.2	513.2	559.1	633.7	738.7	713.3	661.6	634.6	614.1
73°	597.7	462.4	501.7	547.7	622.3	729.7	704.2	651.0	620.6	601.8
75°	494.4	419.8	455.8	496.8	573.1	687.0	660.0	602.6	564.0	552.6
77.5°	388.6	359.1	393.5	430.4	505.0	624.7	594.4	539.5	518.1	508.3
80°	287.8	297.6	327.9	360.7	437.8	558.3	531.3	476.3	571.4	547.7
82.5°	202.5	225.5	253.3	282.8	367.3	493.5	460.7	404.2	418.1	347.6
85°	119.7	147.6	173.8	199.2	264.8	409.1	380.4	322.2	264.0	251.7
87.5°	69.7	82.0	89.4	115.6	182.0	308.3	268.1	238.6	136.9	92.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)