

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: P299245

Luminaire Tested: **GLNA-AF-06-LED-E1-T3-7027-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299245  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-06-LED-E1-T3-7027-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(6) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20311.1 lumens  
Efficiency: N/A  
Efficacy: 105.2 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B3 - U0 - G3

Input Watts (W): 193  
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

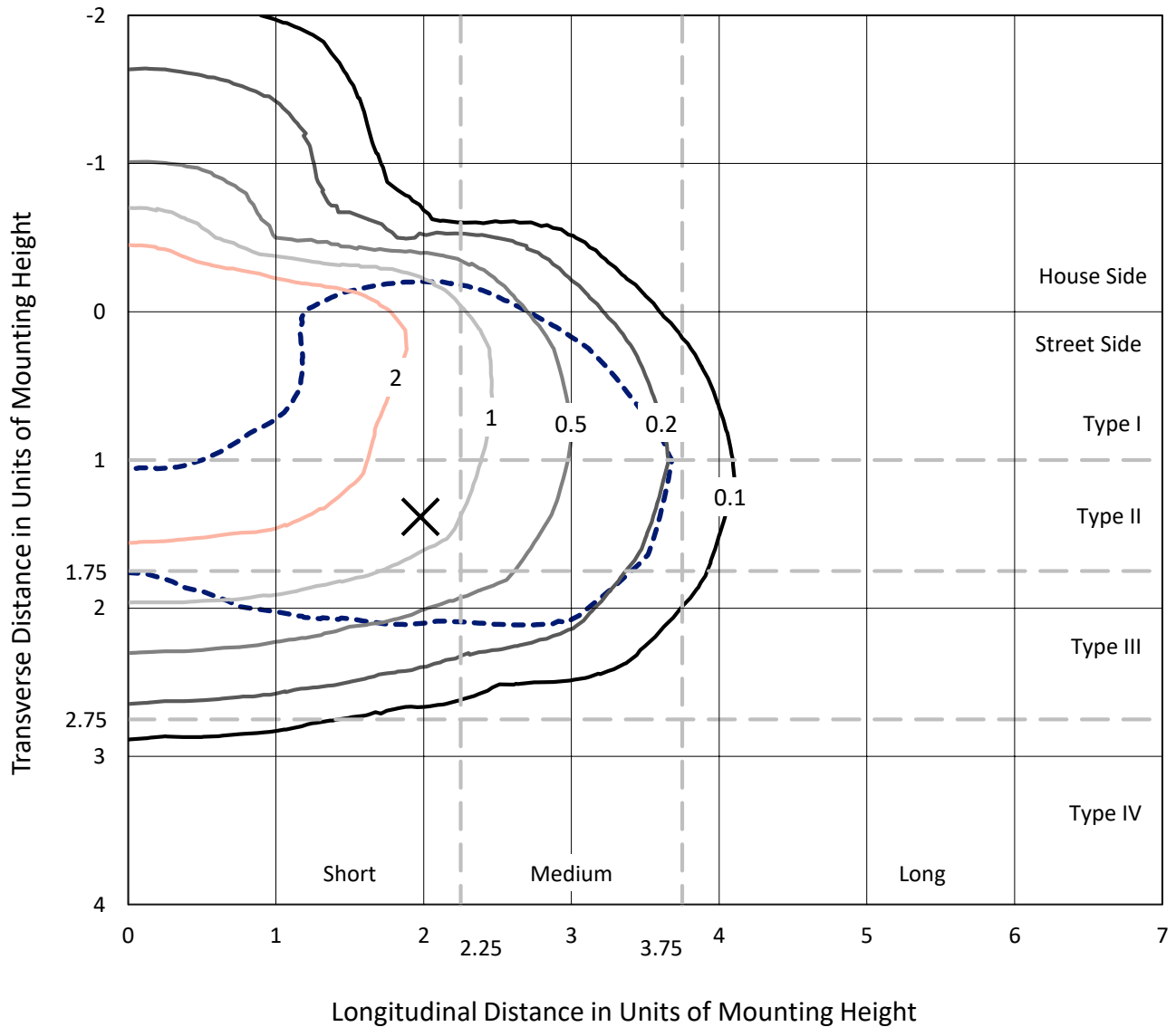


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### Iso-Footcandle Lines of Horizontal Illumination

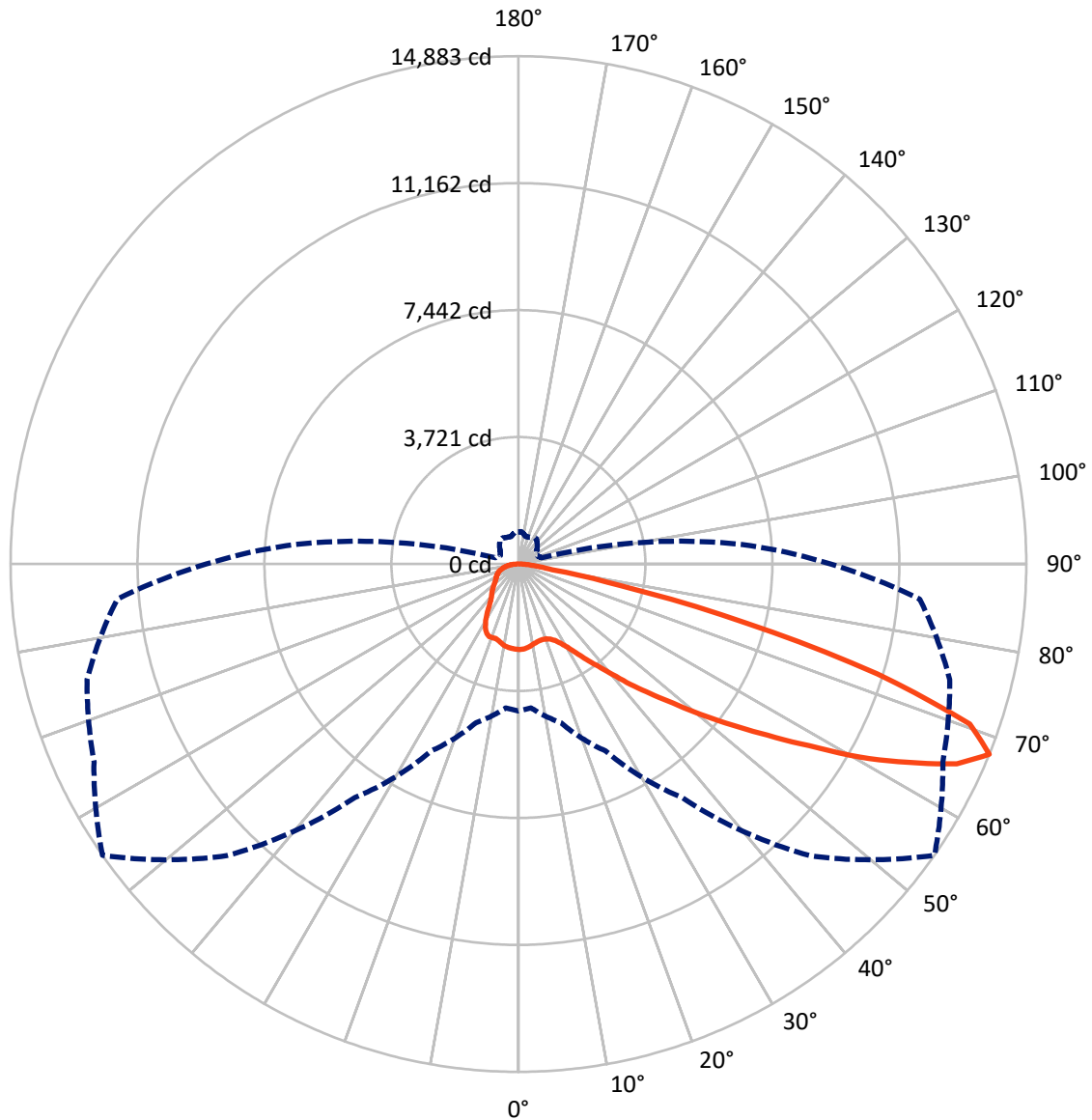
× Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4387.6	0.0	4387.6
	% Fixture	21.6	0.0	21.6
<b>Street Side</b>	Lumens	15923.4	0.0	15923.4
	% Fixture	78.4	0.0	78.4
<b>Total</b>	Lumens	20311.1	0.0	20311.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	233.8	1.2
10°-20°	662.1	3.3
20°-30°	1109.1	5.5
30°-40°	1823.8	9.0
40°-50°	3070.0	15.1
50°-60°	4832.0	23.8
60°-70°	5766.5	28.4
70°-80°	2476.2	12.2
80°-90°	337.6	1.7
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°	20311.1	100.0
0°-180°	20311.1	100.0



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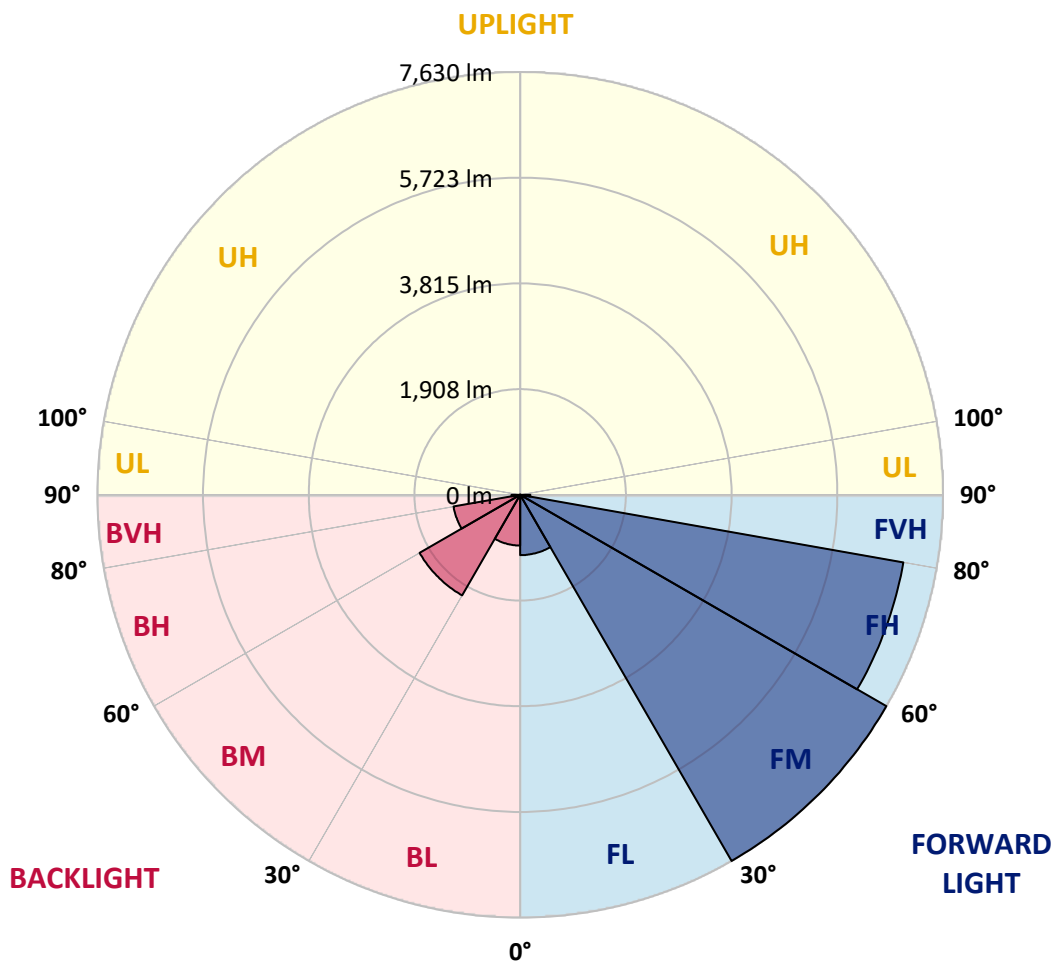
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1088.7	5.4			
FM (30°-60°)	7630.3	37.6			
FH (60°-80°)	7021.6	34.6			G3/7500
FVH (80°-90°)	182.8	0.9			G2/225
BL (0°-30°)	916.2	4.5	B2/1000		
BM (30°-60°)	2095.5	10.3	B2/2500		
BH (60°-80°)	1221.1	6.0	B3/2500		G3/2500
BVH (80°-90°)	154.9	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2504.6	2504.6	2504.6	2504.6	2504.6	2504.6	2504.6	2504.6	2504.6	2504.6	2504.6
2.5°	2483.0	2484.0	2485.9	2493.8	2500.7	2498.7	2499.7	2495.7	2494.8	2488.9	2494.8
5°	2451.6	2454.5	2455.5	2468.3	2476.1	2478.1	2475.1	2470.2	2464.4	2458.5	2461.4
7.5°	2380.0	2387.8	2388.8	2406.5	2419.2	2435.9	2436.9	2437.9	2434.9	2431.0	2436.9
10°	2334.9	2336.8	2335.8	2348.6	2358.4	2377.0	2387.8	2406.5	2414.3	2416.3	2420.2
12.5°	2331.9	2330.0	2327.0	2327.0	2324.1	2331.9	2351.5	2378.0	2396.7	2402.5	2407.5
15°	2363.3	2362.3	2352.5	2337.8	2319.2	2313.3	2330.0	2359.4	2383.9	2396.7	2401.6
17.5°	2433.9	2428.1	2412.4	2379.0	2338.8	2323.1	2325.0	2349.6	2378.0	2394.7	2399.6
20°	2563.4	2563.4	2530.1	2467.3	2395.7	2358.4	2340.7	2355.5	2382.9	2405.5	2412.4
22.5°	2787.1	2789.1	2733.2	2630.1	2509.5	2430.0	2385.9	2382.9	2415.3	2440.8	2448.7
25°	3104.0	3096.1	3017.7	2870.5	2687.0	2555.6	2479.1	2461.4	2488.9	2517.3	2527.1
27.5°	3472.9	3444.4	3351.2	3173.6	2936.2	2743.9	2626.2	2597.8	2624.3	2656.6	2666.4
30°	3837.8	3808.4	3697.5	3503.3	3239.4	2996.1	2827.3	2781.2	2818.5	2864.6	2870.5
32.5°	4202.7	4202.7	4079.1	3852.5	3565.1	3297.3	3095.2	3040.2	3102.0	3157.9	3170.7
35°	4639.3	4641.3	4521.6	4248.9	3939.8	3656.3	3433.6	3393.4	3486.6	3525.8	3556.2
37.5°	5175.9	5186.7	5032.7	4703.1	4364.6	4066.4	3801.5	3746.6	3839.8	3946.7	4044.8
40°	5755.7	5769.5	5599.7	5193.6	4855.1	4543.2	4256.7	4157.6	4312.6	4516.7	4643.2
42.5°	6309.0	6379.7	6215.8	5797.9	5433.9	5111.2	4820.8	4676.6	4870.8	5178.9	5288.7
45°	7108.6	7159.6	6874.1	6495.4	6153.0	5792.0	5407.5	5255.4	5527.1	5915.6	5938.2
47.5°	7641.3	7603.0	7457.8	7222.4	7005.6	6668.1	6089.3	5922.5	6283.5	6740.7	6614.1
50°	7924.8	7936.6	7916.9	7930.7	7938.5	7726.6	6925.1	6696.5	7127.2	7679.5	7388.2
52.5°	8189.7	8111.2	8175.9	8497.7	8886.2	8807.7	7834.5	7596.1	8031.7	8721.4	8206.3
55°	8183.8	8064.1	8275.0	8843.0	9685.7	9776.0	8855.8	8581.1	8988.2	9838.8	9073.6
57.5°	7894.4	7900.3	8225.0	8968.6	10243.0	10686.4	10040.9	9628.8	10002.6	10970.9	9865.3
60°	7496.1	7550.0	8018.0	8948.0	10689.3	11433.0	11494.8	10758.0	10996.4	12000.0	10520.6
62.5°	6853.5	6910.4	7555.9	8734.1	10621.6	12152.0	12809.3	12039.2	12035.3	12623.9	10712.9
65°	5840.1	5823.4	6501.3	7934.6	10053.6	12683.8	14115.1	13146.8	12818.2	12633.7	10326.3
67.5°	4306.7	4232.2	4813.9	6043.2	8356.4	12088.3	14883.2	13723.7	13085.0	11802.8	9145.2
70°	2234.8	2160.2	2631.1	3528.8	5495.7	9434.6	14032.7	13425.4	12495.4	9893.7	7164.5
72.5°	955.5	942.8	1134.1	1548.1	2658.6	5441.8	11003.3	11620.3	10721.7	7371.5	4925.8
75°	642.6	638.7	710.3	843.7	1195.9	2208.3	6885.9	8248.5	7844.3	4570.6	2770.4
77.5°	504.3	499.3	541.5	606.3	775.0	871.2	3055.9	4428.4	4098.8	1989.5	1212.6
80°	394.4	390.5	416.9	452.3	557.2	549.4	1005.6	1761.9	1363.6	762.3	589.6
82.5°	311.0	311.0	332.6	333.6	395.4	374.8	524.9	776.0	680.8	444.4	361.0
85°	284.5	284.5	307.1	249.2	258.0	236.4	325.7	460.1	431.7	182.5	157.0
87.5°	143.2	139.3	258.0	220.7	140.3	125.6	158.9	222.7	239.4	101.0	78.5
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°	2504.6	2504.6	2504.6	2504.6	2504.6	2504.6	2504.6	2504.6	2504.6	2504.6
2.5°	2492.8	2491.8	2493.8	2494.8	2502.6	2513.4	2518.3	2525.2	2529.1	2527.1
5°	2463.4	2465.3	2473.2	2479.1	2492.8	2510.5	2520.3	2528.1	2535.0	2532.0
7.5°	2438.8	2443.8	2455.5	2460.4	2468.3	2473.2	2472.2	2475.1	2481.0	2474.2
10°	2425.1	2431.0	2439.8	2433.0	2414.3	2387.8	2363.3	2350.6	2354.5	2349.6
12.5°	2411.4	2419.2	2412.4	2380.0	2328.0	2293.7	2275.0	2277.0	2285.8	2287.8
15°	2403.5	2406.5	2377.0	2316.2	2263.2	2258.3	2268.1	2266.2	2267.2	2267.2
17.5°	2403.5	2395.7	2340.7	2279.9	2257.4	2248.5	2218.1	2179.9	2163.2	2157.3
20°	2416.3	2395.7	2329.0	2288.7	2239.7	2164.2	2083.7	2013.1	1981.7	1972.9
22.5°	2454.5	2419.2	2362.3	2292.7	2153.4	2026.8	1899.3	1814.9	1758.0	1748.2
25°	2532.0	2492.8	2428.1	2240.7	2016.0	1835.5	1690.3	1596.1	1539.2	1531.4
27.5°	2667.4	2641.9	2463.4	2125.9	1833.5	1640.3	1505.9	1433.3	1391.1	1388.2
30°	2871.5	2858.7	2445.7	1956.2	1608.9	1450.9	1386.2	1344.0	1312.6	1311.6
32.5°	3197.2	3094.2	2387.8	1749.2	1403.9	1316.5	1290.1	1264.6	1240.0	1240.0
35°	3616.1	3284.5	2278.0	1527.5	1279.3	1242.0	1208.6	1168.4	1136.0	1134.1
37.5°	4108.6	3402.2	2080.8	1348.9	1220.4	1192.0	1142.9	1083.1	1026.2	1016.3
40°	4605.9	3437.5	1803.1	1239.0	1183.1	1141.9	1082.1	1011.4	956.5	953.6
42.5°	5062.1	3369.8	1508.8	1163.5	1145.8	1090.9	1028.1	965.3	922.2	921.2
45°	5444.7	3194.2	1261.6	1091.9	1106.6	1044.8	988.9	937.9	904.5	897.6
47.5°	5804.8	2946.0	1088.0	1016.3	1067.4	1019.3	972.2	924.1	891.8	886.9
50°	6222.7	2678.2	966.3	942.8	1033.0	1010.5	985.9	935.9	881.9	876.1
52.5°	6728.9	2446.7	871.2	878.0	1006.5	1022.2	1021.3	969.3	875.1	867.2
55°	7294.0	2189.7	799.5	825.0	995.7	1043.8	1030.1	1000.7	881.0	869.2
57.5°	7850.2	1889.5	749.5	784.8	980.1	1041.9	987.9	945.7	894.7	878.0
60°	8267.2	1486.3	711.2	749.5	945.7	1009.5	941.8	885.9	891.8	879.0
62.5°	8294.6	1148.8	665.1	719.1	893.7	977.1	911.4	859.4	904.5	892.7
65°	7807.1	868.2	621.0	682.8	837.8	956.5	881.9	844.7	931.0	918.2
67.5°	6572.9	698.5	583.7	645.5	781.9	913.3	855.5	830.9	954.5	932.0
70°	4745.3	595.5	547.4	600.4	731.9	864.3	831.9	806.4	890.8	855.5
72.5°	2921.5	516.0	506.2	540.5	693.6	813.3	796.6	760.3	802.5	774.0
75°	1458.8	447.4	460.1	481.7	639.6	755.4	737.7	701.4	707.3	701.4
77.5°	698.5	382.6	406.1	422.8	570.0	689.7	671.0	633.7	626.9	627.9
80°	442.4	319.8	342.4	354.2	509.2	613.1	594.5	557.2	635.7	589.6
82.5°	276.7	260.0	265.9	287.4	443.4	533.7	509.2	475.8	572.9	453.2
85°	153.0	181.5	189.3	208.0	341.4	446.4	421.8	379.7	340.4	334.5
87.5°	91.2	107.9	110.9	124.6	229.6	322.8	285.5	270.8	224.7	223.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)