

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: P191513

Luminaire Tested: **GLEON-AF-05-LED-E1-T4FT-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191513  
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: GLEON-AF-05-LED-E1-T4FT-600  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20171.6 lumens  
Efficiency: N/A  
Efficacy: 124.5 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 - G4

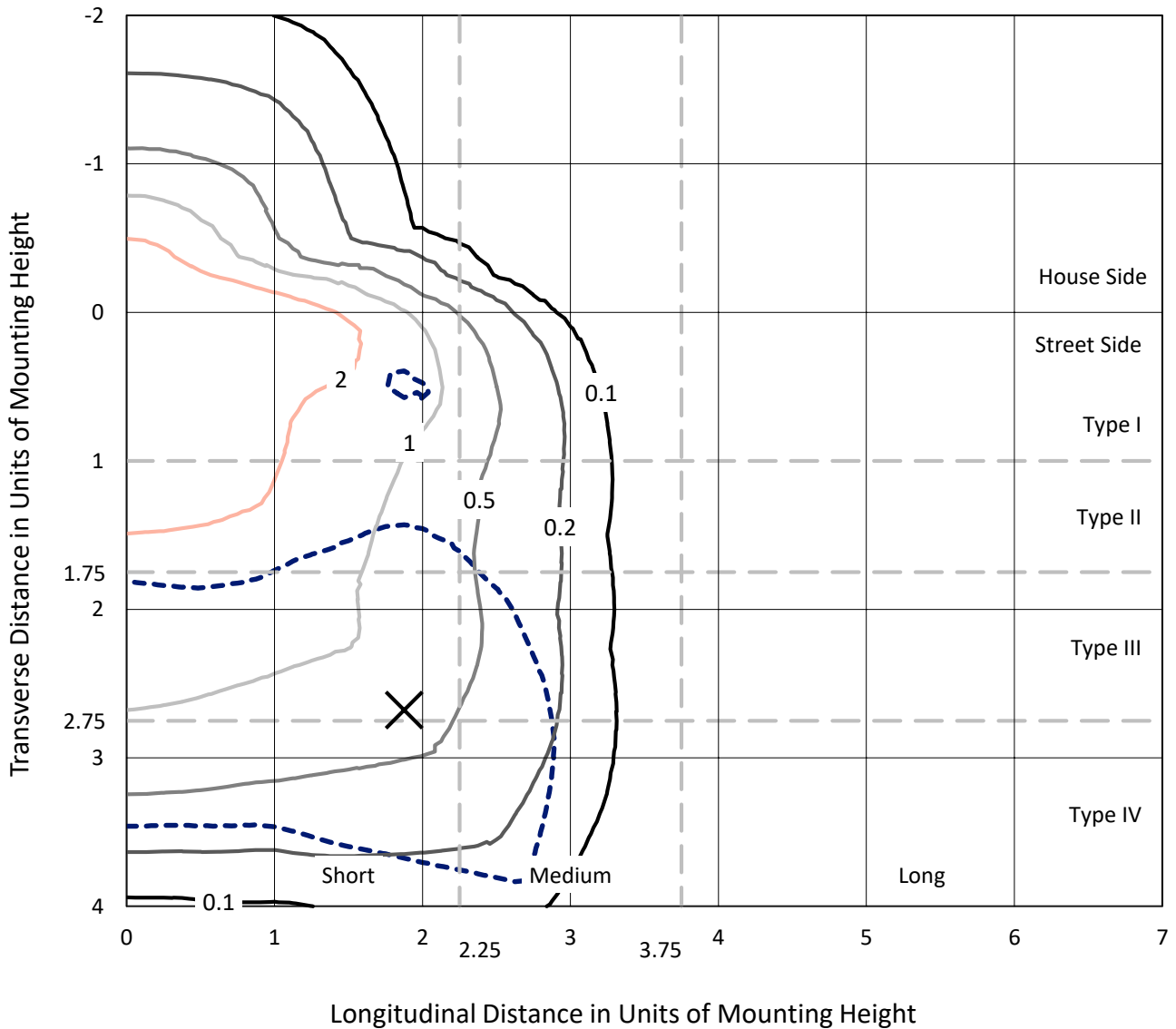
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

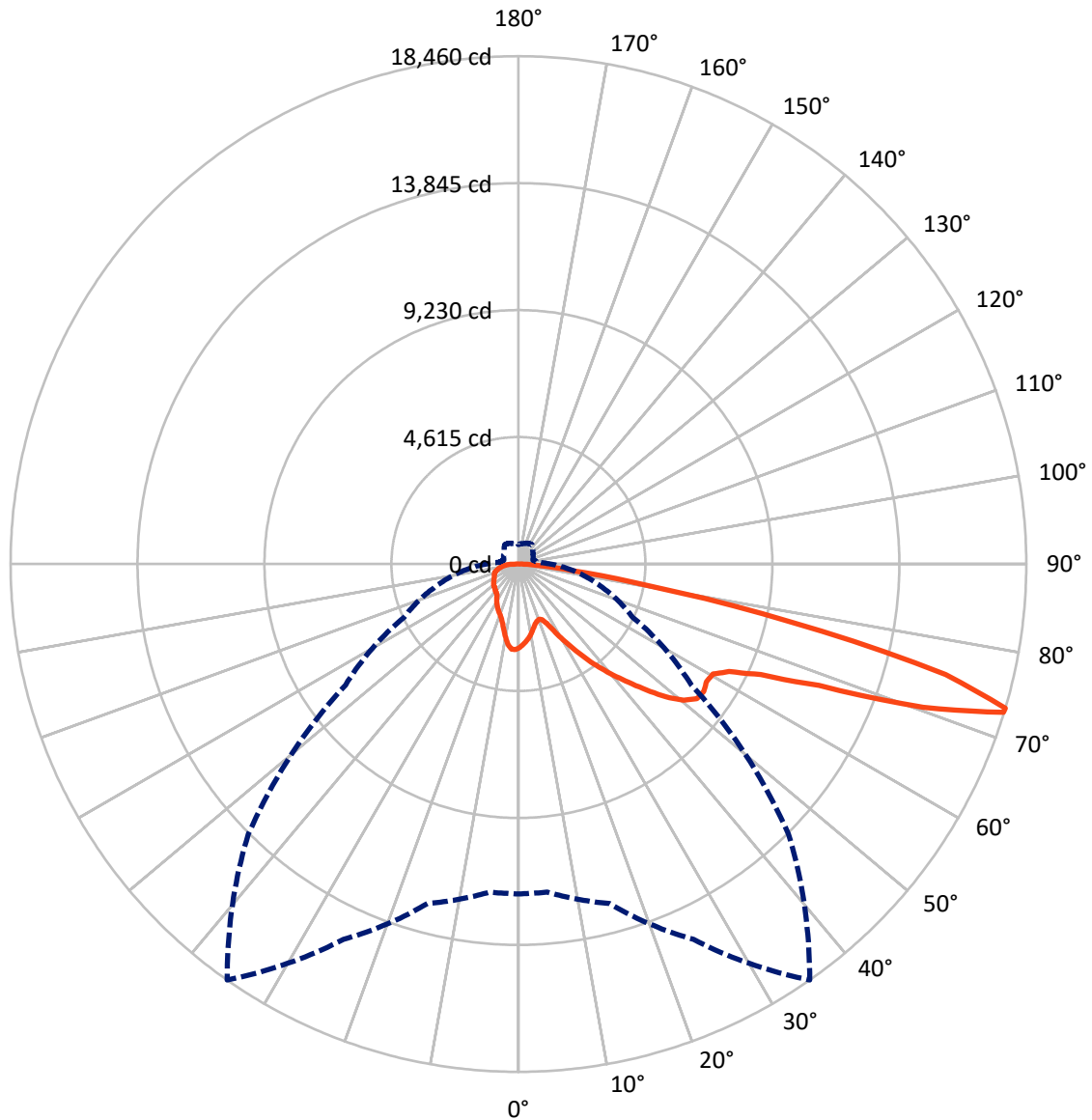
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 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
<b>House Side</b>	Lumens	3847.3	0.0	3847.3
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	16324.3	0.0	16324.3
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	20171.6	0.0	20171.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	275.6	1.4
10°-20°	687.9	3.4
20°-30°	1112.1	5.5
30°-40°	1864.8	9.2
40°-50°	2874.5	14.3
50°-60°	3856.5	19.1
60°-70°	5137.6	25.5
70°-80°	3918.4	19.4
80°-90°	444.1	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°	20171.6	100.0
0°-180°	20171.6	100.0



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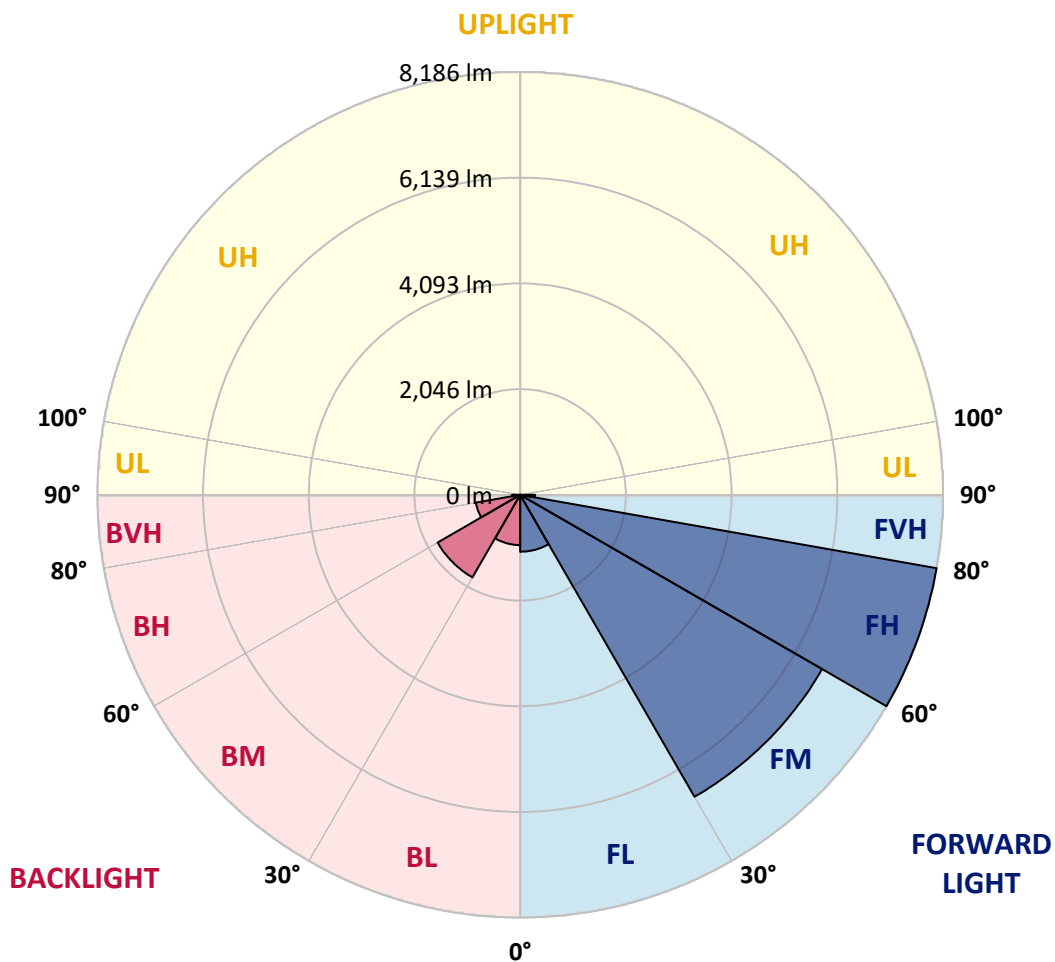
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1102.0	5.5			
FM	(30°-60°)	6749.5	33.5			
FH	(60°-80°)	8185.6	40.6			G4/12000
FVH	(80°-90°)	287.1	1.4			G3/500
BL	(0°-30°)	973.5	4.8	B2/1000		
BM	(30°-60°)	1846.3	9.2	B2/2500		
BH	(60°-80°)	870.4	4.3	B2/1000		G2/1000
BVH	(80°-90°)	157.0	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-G4**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3044.5	3044.5	3044.5	3044.5	3044.5	3044.5	3044.5	3044.5	3044.5	3044.5	3044.5
2.5°	2924.4	2930.2	2923.4	2932.2	2946.7	2962.2	2972.8	2988.3	3005.7	3030.0	3035.8
5°	2786.8	2795.5	2795.5	2811.1	2839.2	2864.4	2887.6	2912.8	2949.6	2991.2	3007.7
7.5°	2635.7	2640.5	2649.3	2672.6	2713.3	2749.1	2782.0	2822.7	2873.1	2928.3	2957.4
10°	2453.6	2460.4	2474.0	2506.9	2562.1	2611.5	2659.0	2715.2	2779.2	2847.9	2884.7
12.5°	2324.8	2322.8	2328.6	2352.9	2401.3	2461.4	2530.2	2601.9	2680.3	2760.7	2805.2
15°	2281.2	2270.5	2248.2	2242.4	2268.6	2328.6	2408.1	2496.2	2590.2	2687.1	2742.3
17.5°	2308.3	2289.9	2228.9	2184.3	2180.4	2226.0	2310.2	2409.0	2517.6	2635.7	2704.5
20°	2478.8	2435.2	2285.1	2181.4	2145.6	2167.8	2241.5	2346.1	2474.0	2630.9	2719.0
22.5°	2886.7	2822.7	2504.0	2311.3	2190.1	2163.0	2218.3	2329.7	2478.8	2691.0	2803.3
25°	3480.4	3389.3	2879.8	2634.8	2384.8	2240.6	2253.2	2367.4	2547.6	2830.4	2966.0
27.5°	3949.2	3890.2	3370.9	3091.1	2739.4	2449.8	2366.5	2462.3	2688.0	3059.0	3197.5
30°	4228.3	4192.4	3896.0	3608.3	3191.7	2782.9	2583.5	2640.5	2907.9	3375.8	3490.1
32.5°	4551.7	4530.4	4385.2	4120.8	3680.0	3220.9	2927.3	2906.9	3202.4	3756.5	3808.8
35°	4886.9	4880.1	4794.9	4605.0	4204.0	3798.1	3383.5	3246.0	3523.0	4151.7	4118.8
37.5°	5198.8	5187.2	5137.8	5027.4	4752.3	4418.1	3848.5	3593.7	3868.8	4529.5	4383.2
40°	5773.2	5682.2	5512.7	5429.4	5306.4	4940.2	4217.5	3918.2	4227.2	4889.8	4611.8
42.5°	6473.6	6325.4	6009.6	5895.3	5877.9	5351.9	4469.4	4233.1	4588.5	5247.2	4836.5
45°	7024.8	6885.3	6613.1	6468.7	6532.7	5724.8	4722.2	4569.2	4960.5	5622.1	5068.1
47.5°	7612.7	7393.8	7033.5	7077.1	7216.5	6077.5	4979.9	4930.5	5368.3	6041.5	5355.8
50°	7634.1	7466.5	7308.6	7569.1	7786.1	6401.9	5302.5	5309.2	5867.2	6569.5	5738.3
52.5°	7191.3	7155.5	7406.4	7816.2	8129.1	6658.6	5669.6	5700.6	6505.6	7175.9	6158.8
55°	7036.4	6995.7	7285.4	7729.9	8175.5	6870.8	6067.7	6123.9	7277.6	7815.2	6568.6
57.5°	7414.1	7324.1	7343.5	7689.3	8062.2	7103.3	6501.7	6615.0	8116.4	8374.1	6832.0
60°	8470.0	8277.2	7911.1	7902.4	8123.3	7452.0	7003.4	7141.9	8988.3	8641.5	6729.3
62.5°	9951.1	9758.3	9072.6	8625.9	8593.0	8027.3	7619.6	7656.4	9492.0	8279.2	6102.6
65°	11554.2	11381.9	10615.6	9985.0	9680.8	8980.5	8335.4	7885.9	9327.3	7282.4	5006.0
67.5°	13500.3	13315.2	12656.6	12074.4	11781.8	10518.7	8838.1	7666.0	8282.1	5641.5	3598.6
70°	14861.2	14672.4	14412.8	14884.5	15600.4	12738.0	8903.0	6771.9	6185.9	3749.7	2165.9
72.5°	13085.7	12997.5	13471.2	15458.0	18439.5	14084.4	8047.7	4930.5	3592.8	1990.6	1253.4
73°	11989.2	11969.8	12777.7	15056.0	18459.9	13877.1	7672.8	4582.7	3081.3	1761.0	1145.9
75°	5413.9	5569.9	7340.6	11500.0	16038.2	11435.1	5400.4	2629.0	1740.7	1216.6	865.0
77.5°	1300.9	1355.2	2296.7	5461.3	10128.3	6814.6	2446.9	1300.0	1113.0	859.2	631.6
80°	554.0	572.4	884.3	2017.8	4768.7	2744.3	1127.5	870.8	770.1	599.7	442.6
82.5°	308.0	327.4	501.8	915.4	1924.8	935.7	687.7	606.4	506.6	361.3	287.7
85°	174.3	185.1	293.5	511.5	815.6	375.8	411.6	402.9	285.7	186.0	141.5
87.5°	82.3	89.1	141.5	237.3	319.7	147.2	209.2	230.6	179.2	113.3	73.7
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°	3044.5	3044.5	3044.5	3044.5	3044.5	3044.5	3044.5	3044.5	3044.5	3044.5
2.5°	3042.6	3060.1	3080.3	3091.1	3100.7	3112.3	3124.0	3124.0	3125.9	3126.9
5°	3021.3	3057.1	3089.1	3102.6	3105.6	3105.6	3102.6	3087.2	3073.6	3079.4
7.5°	2976.7	3029.1	3056.2	3051.3	3014.5	2971.9	2936.1	2892.4	2870.2	2866.3
10°	2912.8	2972.8	2977.7	2929.2	2838.2	2747.1	2671.5	2598.0	2563.1	2554.4
12.5°	2842.1	2897.3	2866.3	2766.5	2620.3	2487.5	2391.7	2317.1	2284.1	2275.3
15°	2784.9	2822.7	2744.3	2587.3	2403.2	2262.8	2183.4	2128.1	2104.9	2098.2
17.5°	2754.9	2762.7	2619.3	2407.1	2211.4	2094.3	2044.9	2018.7	2010.0	2005.2
20°	2769.4	2715.2	2500.1	2239.5	2054.5	1972.2	1960.6	1953.8	1951.9	1948.9
22.5°	2842.1	2700.6	2390.6	2080.7	1917.0	1881.1	1890.8	1889.9	1888.0	1886.0
25°	2971.9	2713.3	2284.1	1929.6	1801.7	1793.9	1811.4	1811.4	1803.7	1803.7
27.5°	3143.3	2739.4	2165.0	1786.2	1697.1	1698.1	1711.6	1707.7	1699.0	1693.2
30°	3352.5	2755.8	2025.4	1657.4	1599.3	1595.4	1599.3	1582.8	1556.6	1554.7
32.5°	3566.6	2735.5	1863.7	1543.1	1495.7	1486.9	1484.0	1460.8	1430.7	1422.0
35°	3760.4	2660.9	1699.0	1452.1	1396.8	1377.4	1391.0	1383.2	1356.1	1349.4
37.5°	3901.7	2522.4	1550.8	1371.7	1326.2	1321.2	1329.9	1332.9	1300.9	1294.1
40°	3996.7	2334.5	1423.9	1303.9	1312.5	1294.1	1265.1	1244.7	1235.0	1232.1
42.5°	4073.3	2138.8	1317.4	1271.8	1315.4	1262.2	1199.2	1166.3	1183.8	1191.4
45°	4161.4	1948.0	1228.3	1232.1	1300.9	1225.4	1153.7	1121.7	1128.5	1130.5
47.5°	4282.5	1715.5	1132.4	1168.2	1252.5	1200.1	1125.6	1080.0	1048.1	1033.6
50°	4450.0	1440.4	1032.6	1096.5	1205.0	1181.8	1082.0	1033.6	974.5	961.0
52.5°	4566.2	1183.8	950.2	1036.5	1162.4	1145.0	1047.1	984.2	922.2	910.5
55°	4503.3	983.2	878.6	969.7	1106.2	1099.5	1018.0	933.7	885.4	875.6
57.5°	4188.5	856.3	823.4	906.6	1037.5	1060.7	979.3	891.2	856.3	849.6
60°	3587.9	776.8	788.5	864.1	981.2	1021.9	940.6	868.0	844.7	839.8
62.5°	2784.0	723.6	762.3	833.1	937.6	994.8	919.2	865.0	856.3	850.5
65°	1994.4	681.0	734.3	802.1	897.9	969.7	911.6	861.1	863.1	858.3
67.5°	1355.2	643.2	700.3	767.2	859.2	947.4	900.8	847.6	871.8	866.0
70°	948.3	606.4	660.6	722.6	810.8	916.4	881.5	827.3	825.3	802.1
72.5°	740.1	557.9	606.4	660.6	748.8	872.8	842.7	781.7	749.7	725.6
73°	706.1	546.4	592.8	647.1	735.2	862.1	832.1	769.2	733.3	711.0
75°	584.1	495.9	538.6	587.0	677.1	811.7	779.8	712.0	666.5	652.8
77.5°	459.1	424.3	464.9	508.5	596.7	738.2	702.3	637.4	612.2	600.6
80°	340.0	351.6	387.5	426.3	517.3	659.7	627.7	562.8	675.1	647.1
82.5°	239.3	266.4	299.3	334.2	433.9	583.2	544.4	477.5	494.0	410.7
85°	141.5	174.3	205.3	235.4	312.9	483.3	449.5	380.6	311.9	297.4
87.5°	82.3	96.9	105.6	136.6	215.0	364.2	316.7	281.9	161.7	109.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)