

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: P300448

Luminaire Tested: **GLNA-AF-06-LED-E1-AFL-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300448  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)  
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-AFL-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(6) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23978.8 lumens  
Efficiency: N/A  
Efficacy: 124.2 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B3 - U0 - G2

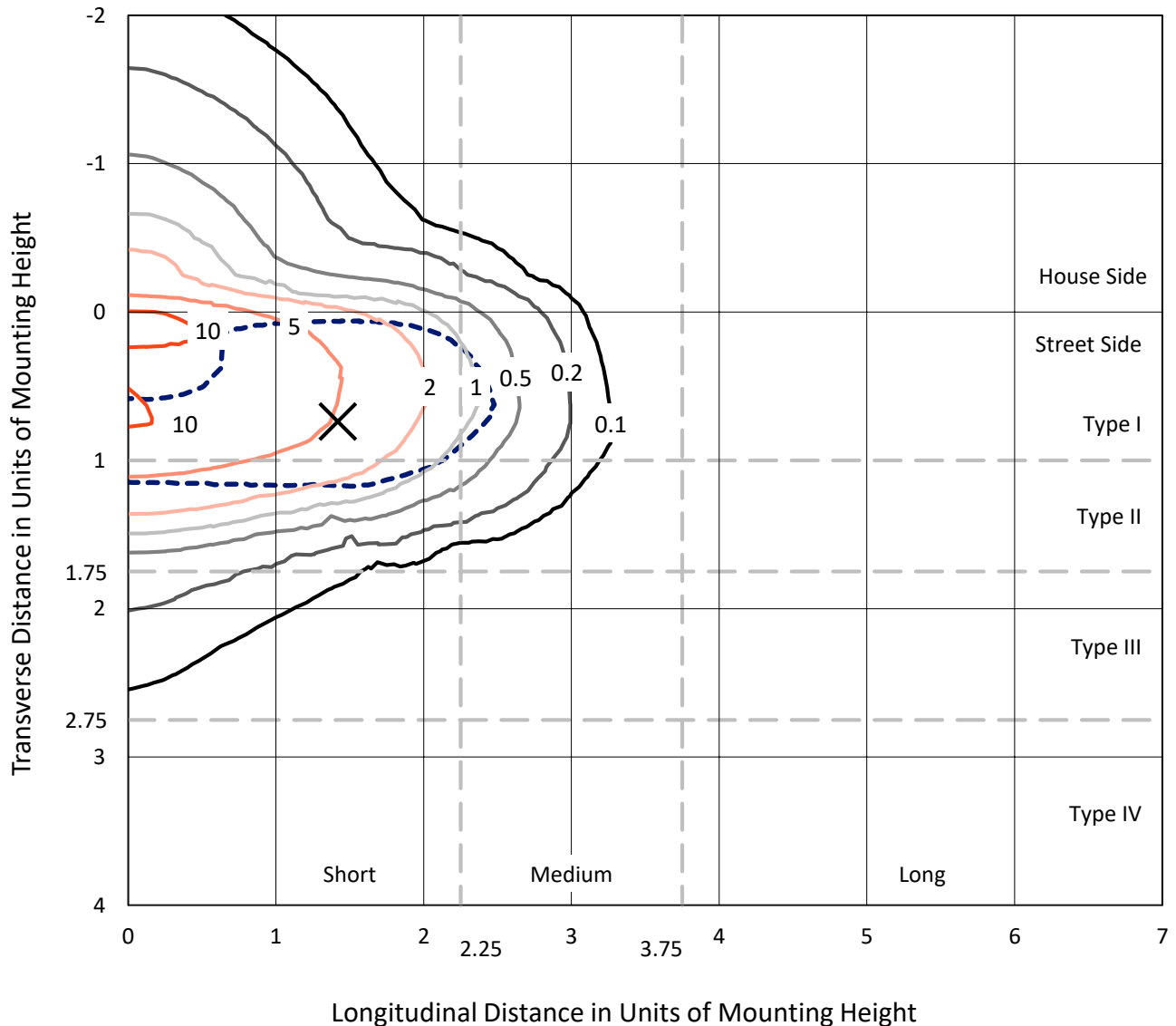
Input Watts (W): 193  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

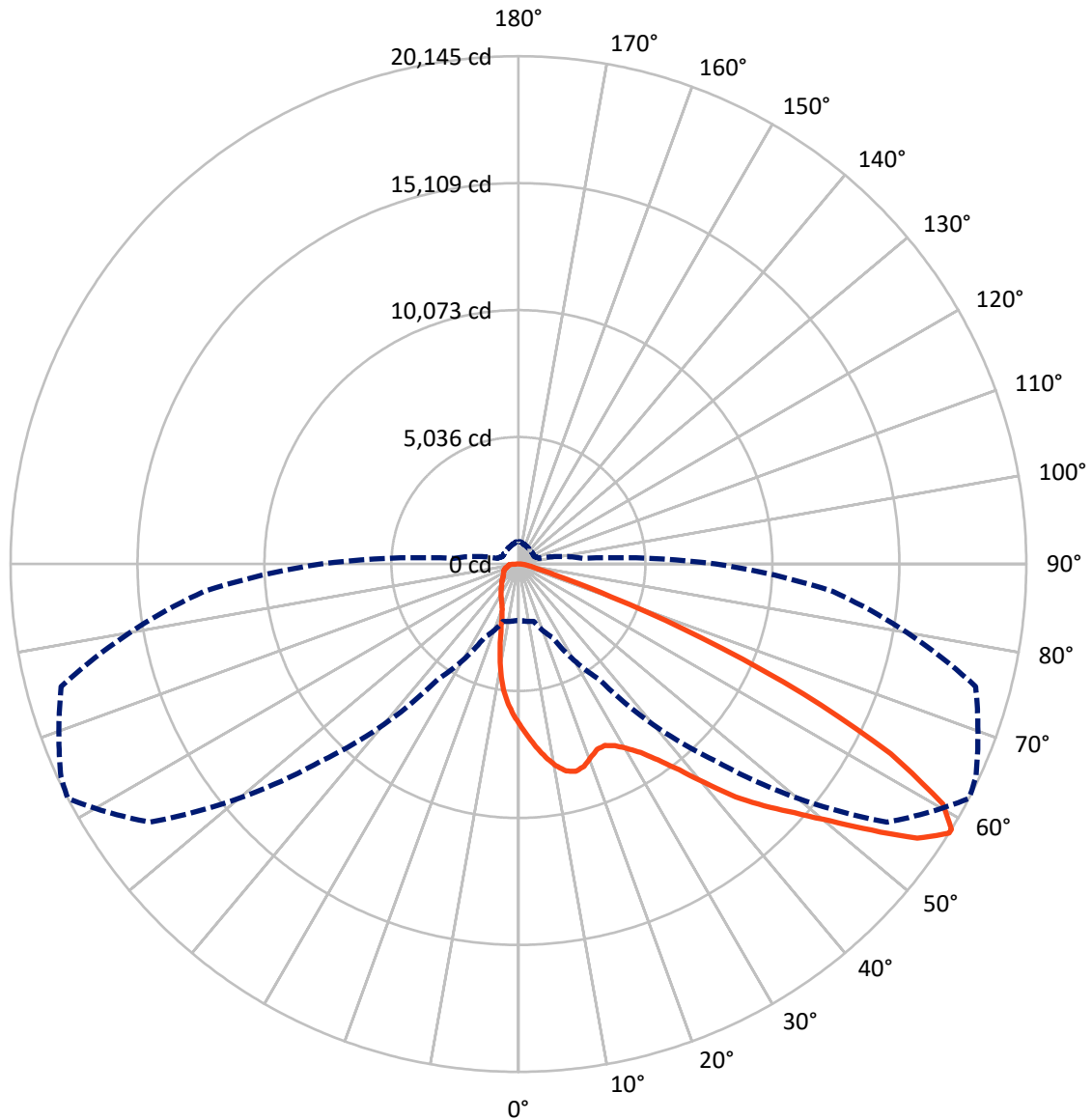
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.4 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral    - - - Horizontal Cone Through 58-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3656.9	0.0	3656.9
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	20321.9	0.0	20321.9
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	23978.8	0.0	23978.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	569.7	2.4
10°-20°	1456.1	6.1
20°-30°	2353.9	9.8
30°-40°	3736.8	15.6
40°-50°	5467.7	22.8
50°-60°	5718.7	23.8
60°-70°	3378.6	14.1
70°-80°	951.8	4.0
80°-90°	345.5	1.4
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°	23978.8	100.0
0°-180°	23978.8	100.0

**Coefficient of Utilization**



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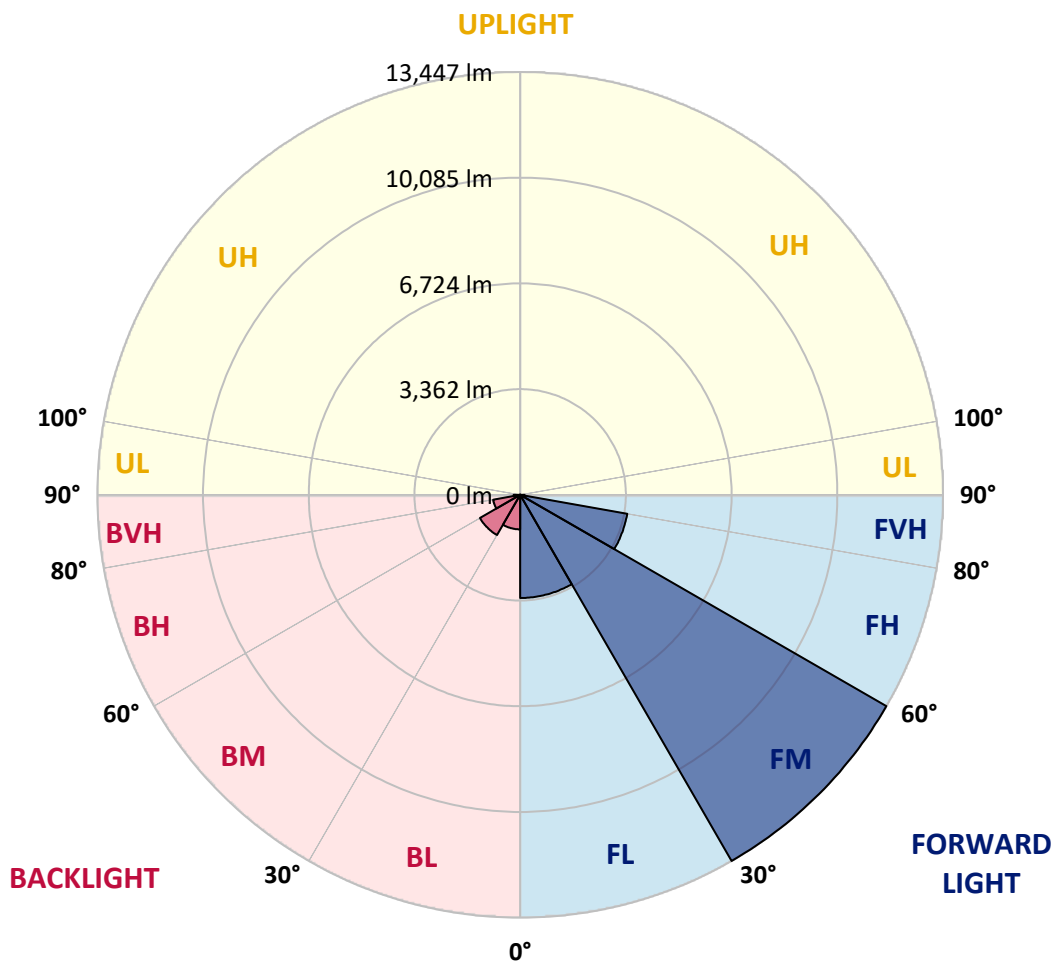
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3280.6	13.7			
FM	(30°-60°)	13447.2	56.1			
FH	(60°-80°)	3457.8	14.4			G2/5000
FVH	(80°-90°)	136.3	0.6			G2/225
BL	(0°-30°)	1099.1	4.6	B3/2500		
BM	(30°-60°)	1476.0	6.2	B2/2500		
BH	(60°-80°)	872.6	3.6	B2/1000		G2/1000
BVH	(80°-90°)	209.2	0.9			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	6369.5	6369.5	6369.5	6369.5	6369.5	6369.5	6369.5	6369.5	6369.5	6369.5	6369.5
2.5°	7278.4	7219.7	7182.5	7149.7	7106.8	7015.4	6892.3	6814.4	6774.8	6640.5	6481.3
5°	7992.1	7940.1	7901.7	7857.7	7780.9	7637.5	7438.8	7280.7	7202.8	6934.1	6615.6
7.5°	7824.9	7846.4	7913.0	8029.3	8128.7	8109.5	7932.2	7731.2	7628.5	7254.7	6771.5
10°	6817.8	6855.0	6970.2	7242.3	7682.7	8134.3	8272.1	8133.2	8029.3	7572.0	6931.8
12.5°	6615.6	6614.5	6623.5	6695.8	6957.8	7593.5	8283.4	8423.4	8361.3	7874.6	7095.5
15°	6698.1	6700.3	6693.5	6724.0	6805.3	7057.1	7937.9	8535.2	8579.2	8179.5	7264.9
17.5°	6914.9	6909.2	6883.2	6883.2	6912.6	7010.8	7531.4	8431.3	8634.5	8449.4	7413.9
20°	7278.4	7252.5	7183.6	7120.4	7088.7	7141.8	7364.3	8191.9	8538.6	8685.4	7537.0
22.5°	7718.8	7698.5	7586.7	7451.2	7341.7	7340.5	7450.1	7983.0	8372.6	8907.8	7640.9
25°	8287.9	8255.1	8089.2	7872.4	7680.4	7607.0	7637.5	7972.9	8282.2	9149.4	7733.5
27.5°	8956.3	8896.5	8700.0	8387.3	8105.0	7957.1	7913.0	8156.9	8364.7	9448.6	7862.2
30°	9767.1	9698.2	9446.4	9038.8	8640.2	8397.4	8303.7	8483.2	8637.9	9813.4	8068.8
32.5°	10689.6	10590.2	10298.9	9849.5	9325.6	8955.2	8802.8	8914.6	9037.6	10252.6	8327.4
35°	11964.4	11845.8	11424.6	10804.7	10213.1	9703.8	9459.9	9541.2	9660.9	10907.5	8701.2
37.5°	12833.8	12780.7	12500.7	11918.1	11274.5	10688.4	10311.3	10358.7	10426.5	11726.1	9179.9
40°	12825.9	12847.4	12853.0	12858.7	12420.5	11859.4	11454.0	11404.3	11390.8	12624.9	9724.2
42.5°	12183.4	12271.5	12556.0	13133.0	13399.5	13142.1	12770.6	12627.2	12556.0	13684.1	10301.2
45°	11199.9	11247.4	11780.3	12907.2	13900.9	14412.4	14131.2	13679.5	13550.8	14657.4	10779.9
47.5°	10693.0	10744.9	11080.3	12308.8	13895.2	15438.7	15601.3	14740.9	14510.6	15504.2	11193.2
50°	9485.9	9594.3	10016.6	11267.7	13388.2	15910.7	17138.1	16005.6	15529.1	16328.5	11607.6
52.5°	7269.4	7436.5	7909.6	9555.9	12102.1	15677.0	18367.7	17538.9	16866.0	17182.1	11963.2
55°	4585.4	4709.6	5107.1	6748.9	9681.3	14460.9	18834.1	19197.7	18599.2	17990.6	12271.5
57.5°	2493.1	2548.5	2697.5	3726.2	6297.2	11772.4	18154.3	20141.6	19893.2	18677.1	12504.1
58°	2231.2	2268.4	2361.0	3229.3	5584.7	11037.4	17852.8	20145.0	20020.8	18777.6	12522.2
60°	1655.3	1636.1	1553.7	1842.8	3108.5	7625.1	16030.4	19338.8	19703.5	18900.7	12434.1
62.5°	1454.3	1408.0	1239.8	1220.6	1511.9	3512.8	12265.9	16565.6	17427.2	18198.4	11898.9
65°	1366.3	1316.6	1099.8	1029.8	1090.7	1485.9	7225.4	12423.9	13504.5	16068.8	10530.4
67.5°	1300.8	1236.4	1010.6	914.6	919.1	982.4	2896.2	7824.9	9041.0	12200.4	8190.8
70°	1237.5	1167.5	934.9	824.3	798.3	776.8	1151.7	3917.0	5020.2	7706.4	5222.3
72.5°	1169.8	1100.9	868.3	753.1	702.3	631.2	752.0	1602.3	2238.0	3646.0	2368.9
75°	1071.6	1009.5	801.7	689.9	617.6	522.8	568.0	836.7	1003.8	1452.1	1141.6
77.5°	950.7	899.9	727.2	638.0	547.6	424.6	437.0	580.4	643.6	831.0	678.6
80°	683.1	701.2	647.0	573.6	487.8	344.4	335.4	423.4	457.3	534.1	441.5
82.5°	479.9	490.0	535.2	468.6	403.1	271.0	247.3	298.1	318.4	351.2	238.2
85°	330.8	319.5	367.0	326.3	291.3	180.7	169.4	202.1	214.5	217.9	123.1
87.5°	198.7	198.7	212.3	175.0	157.0	93.7	91.5	115.2	123.1	117.4	67.7
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6369.5	6369.5	6369.5	6369.5	6369.5	6369.5	6369.5	6369.5	6369.5	6369.5	6369.5
2.5°	6386.4	6306.3	6135.8	5999.1	5826.4	5646.8	5546.3	5439.1	5365.7	5312.6	5397.3
5°	6435.0	6271.2	5919.0	5584.7	5215.5	4831.6	4540.3	4269.3	4080.7	3963.3	4073.9
7.5°	6511.8	6260.0	5698.8	5127.4	4464.6	3825.5	3254.2	2896.2	2687.4	2584.6	2649.0
10°	6599.8	6241.9	5440.2	4507.5	3559.1	2754.0	2327.2	2182.6	2135.2	2116.0	2125.0
12.5°	6673.2	6203.5	5122.9	3757.8	2672.7	2174.7	2051.6	2048.3	2058.4	2060.7	2064.1
15°	6725.2	6147.0	4652.1	2976.4	2137.5	1981.6	1974.9	1995.2	2014.4	2022.3	2026.8
17.5°	6760.2	6030.7	4120.2	2353.1	1915.0	1887.9	1903.7	1929.7	1950.0	1955.7	1960.2
20°	6756.8	5860.2	3486.8	1962.4	1794.2	1794.2	1821.3	1841.6	1842.8	1836.0	1839.4
22.5°	6721.8	5626.5	2872.5	1754.7	1686.9	1706.1	1733.2	1714.0	1635.0	1583.1	1586.4
25°	6663.1	5347.6	2346.4	1622.6	1587.6	1621.4	1613.5	1469.0	1356.1	1305.3	1305.3
27.5°	6611.1	5017.9	1942.1	1507.4	1488.2	1530.0	1390.0	1259.0	1211.6	1187.9	1180.0
30°	6573.9	4662.2	1672.3	1396.7	1394.5	1364.0	1205.9	1169.8	1161.9	1142.7	1135.9
32.5°	6582.9	4302.0	1499.5	1299.6	1307.5	1167.5	1117.8	1125.8	1119.0	1098.7	1089.6
35°	6657.4	3959.9	1386.6	1211.6	1187.9	1054.6	1065.9	1080.6	1078.3	1050.1	1041.1
37.5°	6790.7	3635.8	1312.1	1138.2	1036.6	998.2	1016.2	1038.8	1033.2	1014.0	1007.2
40°	6930.7	3331.0	1251.1	1080.6	947.3	959.8	975.6	988.0	993.6	999.3	994.8
42.5°	7067.3	3012.5	1176.6	1021.9	910.1	923.6	930.4	942.8	973.3	994.8	993.6
45°	7148.6	2713.3	1099.8	938.3	880.7	888.6	884.1	909.0	946.2	981.2	982.4
47.5°	7238.9	2480.7	1038.8	861.5	852.5	858.1	844.6	869.4	903.3	946.2	950.7
50°	7348.4	2341.8	990.3	800.6	814.1	814.1	810.7	833.3	880.7	930.4	939.4
52.5°	7472.7	2314.7	949.6	756.5	775.7	774.6	778.0	811.9	863.8	912.3	920.2
55°	7624.0	2388.1	905.6	723.8	738.5	743.0	754.3	792.7	836.7	892.0	895.4
57.5°	7800.1	2537.2	870.6	697.8	704.6	719.3	737.3	772.3	819.8	880.7	884.1
58°	7829.5	2568.8	864.9	695.6	697.8	714.7	735.1	768.9	816.4	883.0	886.4
60°	7830.6	2673.8	852.5	685.4	671.8	700.1	722.7	756.5	810.7	890.9	898.8
62.5°	7552.8	2672.7	843.5	670.7	644.7	679.7	705.7	745.2	805.1	910.1	925.9
65°	6650.6	2428.8	800.6	648.1	623.3	661.7	691.0	737.3	820.9	993.6	1003.8
67.5°	5202.0	1990.7	720.4	616.5	595.1	643.6	682.0	736.2	837.8	1012.8	1019.6
70°	3439.4	1489.3	632.3	580.4	565.7	622.2	686.5	774.6	818.6	972.2	954.1
72.5°	1785.2	1045.6	561.2	535.2	531.8	603.0	752.0	770.1	799.4	914.6	892.0
75°	937.2	726.0	499.1	485.5	491.2	598.4	887.5	749.7	774.6	875.1	918.0
77.5°	573.6	586.0	446.0	440.4	451.7	584.9	886.4	723.8	738.5	805.1	852.5
80°	383.9	475.4	405.4	406.5	414.4	535.2	796.0	683.1	694.4	761.0	809.6
82.5°	242.8	281.2	368.1	387.3	377.1	441.5	676.4	622.2	638.0	870.6	920.2
85°	123.1	176.1	319.5	372.6	339.9	309.4	548.8	545.4	553.3	627.8	656.0
87.5°	56.5	97.1	249.5	325.2	256.3	193.1	398.6	404.2	435.8	446.0	446.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)