

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: P300461

Luminaire Tested: **GLNA-AF-08-LED-E1-T4FT-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300461  
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-08-LED-E1-T4FT-600  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

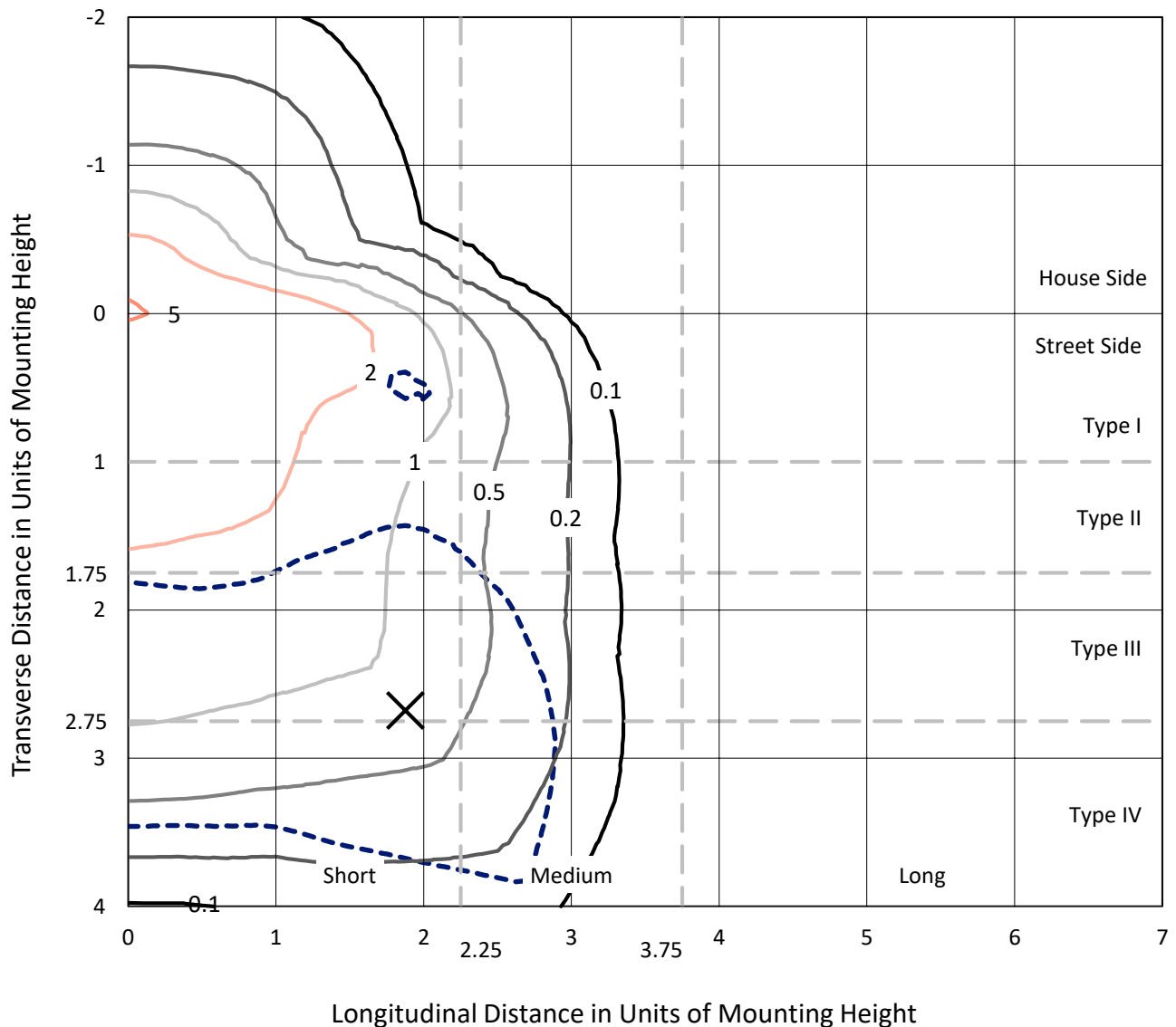
Lumens per Lamp: N/A  
Luminaire Lumens: 31508.1 lumens  
Efficiency: N/A  
Efficacy: 122.6 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G5  
  
Input Watts (W): 257  
Input Voltage (V): NR  
Input Current (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

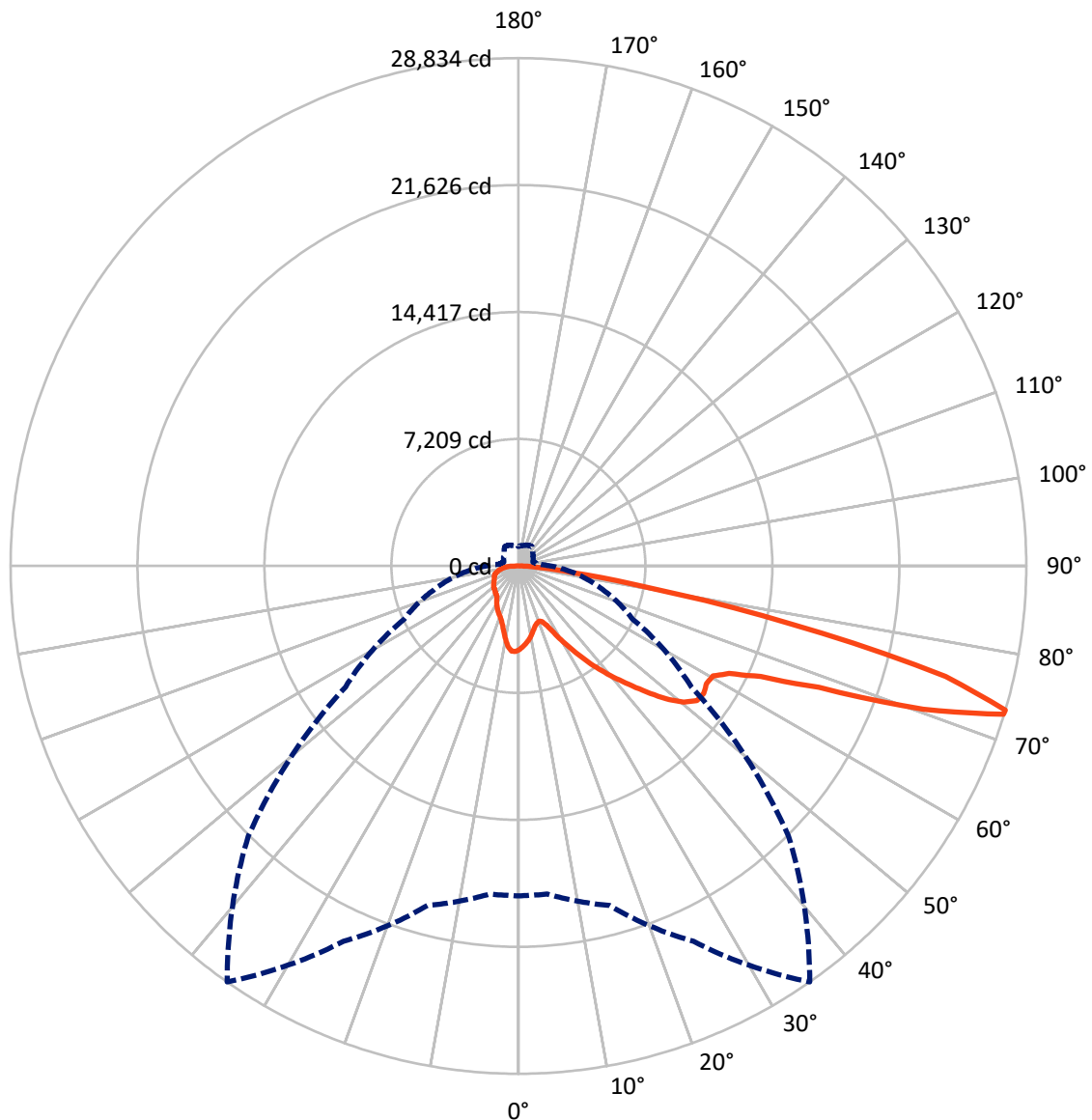
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.3 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	6009.5	0.0	6009.5
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	25498.6	0.0	25498.6
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	31508.1	0.0	31508.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	430.5	1.4
10°-20°	1074.5	3.4
20°-30°	1737.1	5.5
30°-40°	2912.8	9.2
40°-50°	4490.0	14.3
50°-60°	6023.8	19.1
60°-70°	8025.0	25.5
70°-80°	6120.6	19.4
80°-90°	693.7	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°	31508.1	100.0
0°-180°	31508.1	100.0

**Coefficient of Utilization**



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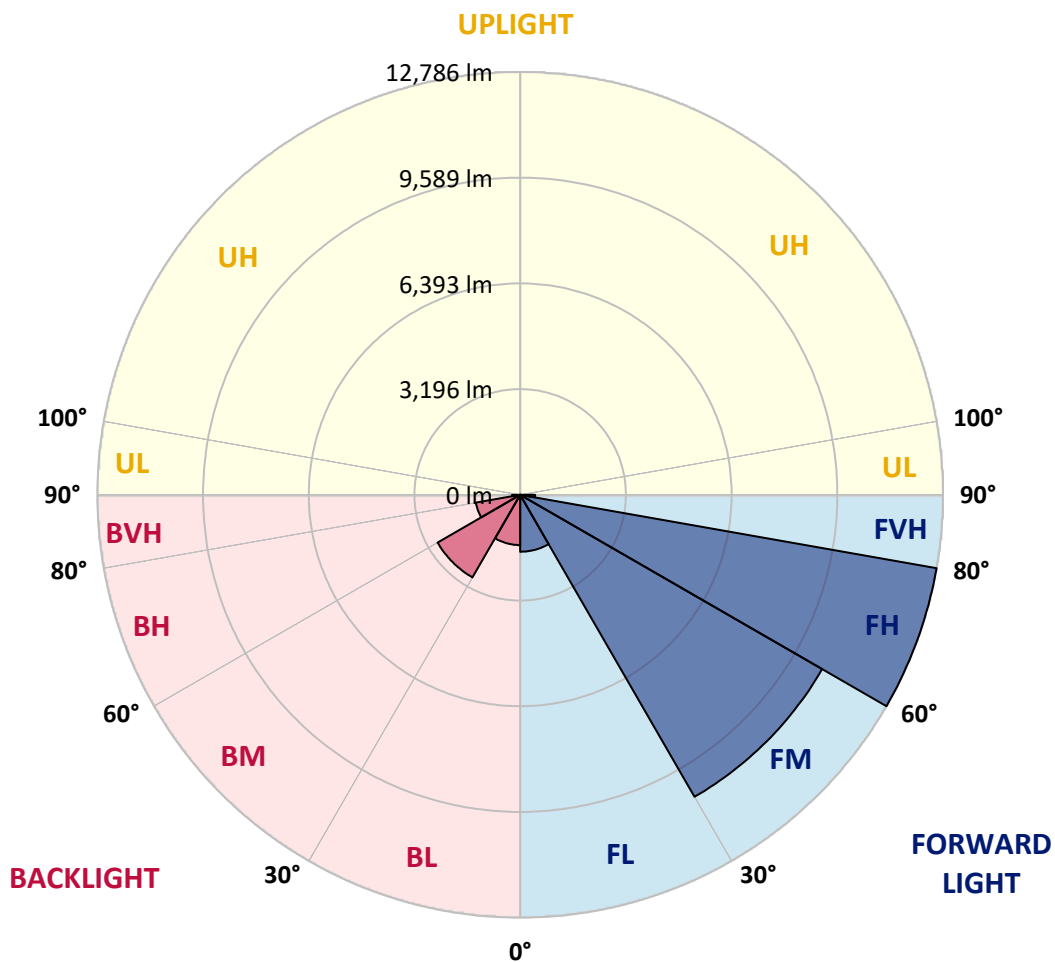
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1721.4	5.5			
FM	(30°-60°)	10542.8	33.5			
FH	(60°-80°)	12786.0	40.6			G5
FVH	(80°-90°)	448.4	1.4			G3/500
BL	(0°-30°)	1520.7	4.8	B3/2500		
BM	(30°-60°)	2883.9	9.2	B3/5000		
BH	(60°-80°)	1359.6	4.3	B3/2500		G3/2500
BVH	(80°-90°)	245.3	0.8			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4755.5	4755.5	4755.5	4755.5	4755.5	4755.5	4755.5	4755.5	4755.5	4755.5	4755.5
2.5°	4567.9	4577.0	4566.4	4580.0	4602.7	4626.9	4643.6	4667.8	4695.0	4732.8	4741.9
5°	4353.1	4366.7	4366.7	4390.9	4434.8	4474.1	4510.4	4549.8	4607.3	4672.3	4698.0
7.5°	4117.0	4124.6	4138.2	4174.5	4238.1	4294.1	4345.5	4409.1	4487.7	4574.0	4619.4
10°	3832.6	3843.2	3864.4	3915.8	4002.0	4079.2	4153.3	4241.1	4341.0	4448.4	4505.9
12.5°	3631.3	3628.3	3637.4	3675.2	3750.9	3844.7	3952.1	4064.1	4186.6	4312.2	4381.8
15°	3563.3	3546.6	3511.8	3502.7	3543.6	3637.4	3761.5	3899.2	4045.9	4197.2	4283.5
17.5°	3605.6	3576.9	3481.5	3411.9	3405.9	3477.0	3608.6	3763.0	3932.4	4117.0	4224.5
20°	3871.9	3803.8	3569.3	3407.4	3351.4	3386.2	3501.2	3664.6	3864.4	4109.5	4247.2
22.5°	4508.9	4409.1	3911.3	3610.2	3421.0	3378.7	3464.9	3638.9	3871.9	4203.3	4378.8
25°	5436.4	5294.2	4498.3	4115.5	3725.2	3499.7	3519.4	3697.9	3979.3	4421.2	4633.0
27.5°	6168.7	6076.4	5265.4	4828.2	4278.9	3826.5	3696.4	3846.2	4198.7	4778.2	4994.6
30°	6604.5	6548.5	6085.5	5636.1	4985.5	4347.0	4035.3	4124.6	4542.2	5273.0	5451.6
32.5°	7109.9	7076.6	6849.6	6436.6	5748.1	5030.9	4572.5	4540.7	5002.2	5867.6	5949.3
35°	7633.4	7622.8	7489.6	7193.1	6566.7	5932.7	5285.1	5070.3	5503.0	6485.0	6433.5
37.5°	8120.6	8102.4	8025.3	7852.8	7423.1	6901.1	6011.4	5613.5	6043.2	7075.1	6846.6
40°	9017.8	8875.6	8610.8	8480.7	8288.5	7716.6	6587.9	6120.3	6603.0	7637.9	7203.7
42.5°	10111.8	9880.3	9387.0	9208.5	9181.2	8359.7	6981.3	6612.1	7167.4	8196.2	7554.7
45°	10972.7	10754.8	10329.7	10104.2	10204.1	8942.2	7376.2	7137.1	7748.4	8781.8	7916.3
47.5°	11891.1	11549.2	10986.3	11054.4	11272.3	9492.9	7778.6	7701.5	8385.4	9437.0	8365.7
50°	11924.4	11662.7	11416.0	11823.0	12162.0	9999.8	8282.5	8293.1	9164.6	10261.6	8963.4
52.5°	11233.0	11177.0	11568.9	12208.9	12697.6	10400.8	8855.9	8904.4	10161.7	11208.7	9620.0
55°	10990.9	10927.3	11379.7	12074.2	12770.2	10732.1	9477.8	9565.6	11367.6	12207.4	10260.1
57.5°	11581.0	11440.2	11470.5	12010.7	12593.2	11095.3	10155.7	10332.7	12677.9	13080.4	10671.6
60°	13230.2	12929.1	12357.2	12343.5	12688.5	11640.0	10939.4	11155.8	14039.7	13498.0	10511.2
62.5°	15543.7	15242.6	14171.3	13473.8	13422.3	12538.7	11901.7	11959.2	14826.5	12932.1	9532.3
65°	18047.8	17778.4	16581.6	15596.6	15121.5	14027.6	13019.9	12317.8	14569.2	11375.2	7819.5
67.5°	21087.5	20798.5	19769.6	18860.3	18403.3	16430.3	13805.2	11974.4	12936.7	8812.1	5621.0
70°	23213.4	22918.3	22512.8	23249.7	24367.8	19896.7	13906.5	10577.8	9662.4	5857.1	3383.2
72.5°	20439.9	20302.2	21042.1	24145.4	28802.6	21999.9	12570.5	7701.5	5611.9	3109.3	1957.9
73°	18727.1	18696.9	19958.8	23517.5	28834.4	21676.1	11984.9	7158.3	4813.0	2750.7	1789.9
75°	8456.5	8700.1	11466.0	17963.0	25051.7	17861.7	8435.3	4106.4	2719.0	1900.4	1351.2
77.5°	2032.0	2116.8	3587.5	8530.6	15820.5	10644.4	3822.0	2030.5	1738.5	1342.1	986.5
80°	865.5	894.2	1381.4	3151.7	7448.8	4286.5	1761.2	1360.2	1202.9	936.6	691.5
82.5°	481.2	511.4	783.8	1429.8	3006.4	1461.6	1074.3	947.2	791.3	564.4	449.4
85°	272.4	289.0	458.5	798.9	1274.0	587.1	643.1	629.4	446.4	290.5	220.9
87.5°	128.6	139.2	220.9	370.7	499.3	230.0	326.8	360.1	279.9	177.0	115.0
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°	4755.5	4755.5	4755.5	4755.5	4755.5	4755.5	4755.5	4755.5	4755.5	4755.5
2.5°	4752.5	4779.8	4811.5	4828.2	4843.3	4861.5	4879.6	4879.6	4882.6	4884.2
5°	4719.2	4775.2	4825.1	4846.3	4850.9	4850.9	4846.3	4822.1	4800.9	4810.0
7.5°	4649.6	4731.3	4773.7	4766.1	4708.6	4642.1	4586.1	4518.0	4483.2	4477.1
10°	4549.8	4643.6	4651.1	4575.5	4433.3	4291.0	4173.0	4058.0	4003.6	3989.9
12.5°	4439.3	4525.6	4477.1	4321.3	4092.8	3885.5	3735.7	3619.2	3567.8	3554.2
15°	4350.0	4409.1	4286.5	4041.4	3753.9	3534.5	3410.4	3324.2	3287.9	3277.3
17.5°	4303.1	4315.2	4091.3	3760.0	3454.3	3271.2	3194.1	3153.2	3139.6	3132.0
20°	4325.8	4241.1	3905.2	3498.2	3209.2	3080.6	3062.4	3051.8	3048.8	3044.3
22.5°	4439.3	4218.4	3734.2	3250.1	2994.3	2938.4	2953.5	2952.0	2949.0	2945.9
25°	4642.1	4238.1	3567.8	3014.0	2814.3	2802.2	2829.4	2829.4	2817.3	2817.3
27.5°	4909.9	4278.9	3381.7	2790.1	2650.9	2652.4	2673.6	2667.5	2653.9	2644.8
30°	5236.7	4304.7	3163.8	2588.8	2498.1	2492.0	2498.1	2472.3	2431.5	2428.5
32.5°	5571.1	4272.9	2911.1	2410.3	2336.2	2322.5	2318.0	2281.7	2234.8	2221.2
35°	5873.7	4156.4	2653.9	2268.1	2181.8	2151.6	2172.8	2160.6	2118.3	2107.7
37.5°	6094.6	3940.0	2422.4	2142.5	2071.4	2063.8	2077.4	2082.0	2032.0	2021.4
40°	6242.9	3646.5	2224.2	2036.6	2050.2	2021.4	1976.1	1944.3	1929.2	1924.6
42.5°	6362.4	3340.8	2057.8	1986.6	2054.7	1971.5	1873.2	1821.7	1849.0	1861.1
45°	6500.1	3042.8	1918.6	1924.6	2032.0	1914.0	1802.1	1752.1	1762.7	1765.7
47.5°	6689.2	2679.6	1768.8	1824.7	1956.4	1874.7	1758.2	1687.1	1637.1	1614.4
50°	6951.0	2249.9	1612.9	1712.8	1882.2	1845.9	1690.1	1614.4	1522.1	1501.0
52.5°	7132.6	1849.0	1484.3	1619.0	1815.7	1788.4	1635.6	1537.3	1440.4	1422.3
55°	7034.2	1535.8	1372.3	1514.6	1727.9	1717.3	1590.2	1458.6	1382.9	1367.8
57.5°	6542.5	1337.5	1286.1	1416.2	1620.5	1656.8	1529.7	1392.0	1337.5	1327.0
60°	5604.4	1213.5	1231.6	1349.6	1532.7	1596.3	1469.2	1355.7	1319.4	1311.8
62.5°	4348.5	1130.3	1190.8	1301.2	1464.6	1553.9	1435.9	1351.2	1337.5	1328.5
65°	3115.4	1063.7	1146.9	1252.8	1402.6	1514.6	1423.8	1345.1	1348.1	1340.6
67.5°	2116.8	1004.7	1093.9	1198.3	1342.1	1479.8	1407.1	1323.9	1361.8	1352.7
70°	1481.3	947.2	1031.9	1128.7	1266.4	1431.4	1376.9	1292.2	1289.1	1252.8
72.5°	1156.0	871.5	947.2	1031.9	1169.6	1363.3	1316.4	1221.0	1171.1	1133.3
73°	1103.0	853.4	926.0	1010.7	1148.4	1346.6	1299.7	1201.4	1145.4	1110.6
75°	912.4	774.7	841.3	916.9	1057.6	1267.9	1218.0	1112.1	1041.0	1019.8
77.5°	717.2	662.7	726.3	794.4	932.0	1153.0	1097.0	995.6	956.3	938.1
80°	531.1	549.2	605.2	665.7	808.0	1030.4	980.5	879.1	1054.6	1010.7
82.5°	373.7	416.1	467.5	522.0	677.9	910.9	850.3	745.9	771.7	641.5
85°	220.9	272.4	320.8	367.7	488.7	755.0	702.1	594.6	487.2	464.5
87.5°	128.6	151.3	164.9	213.3	335.9	568.9	494.8	440.3	252.7	171.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)