

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: P191517

Luminaire Tested: **GLEON-AF-09-LED-E1-T4FT-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191517  
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-09-LED-E1-T4FT-600  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 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: 36081.5 lumens  
Efficiency: N/A  
Efficacy: 124.4 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G5

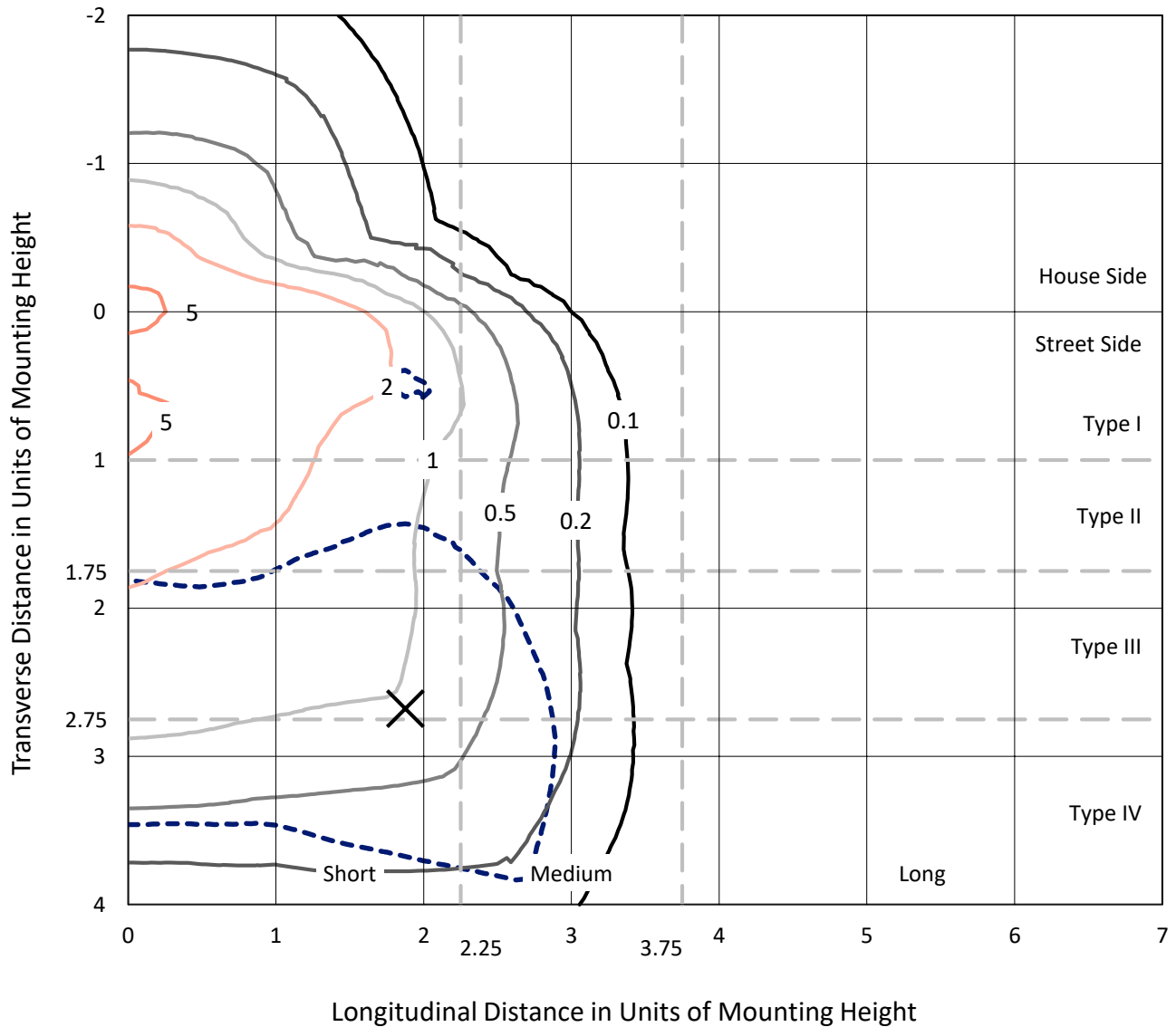
Input Watts (W): 290  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

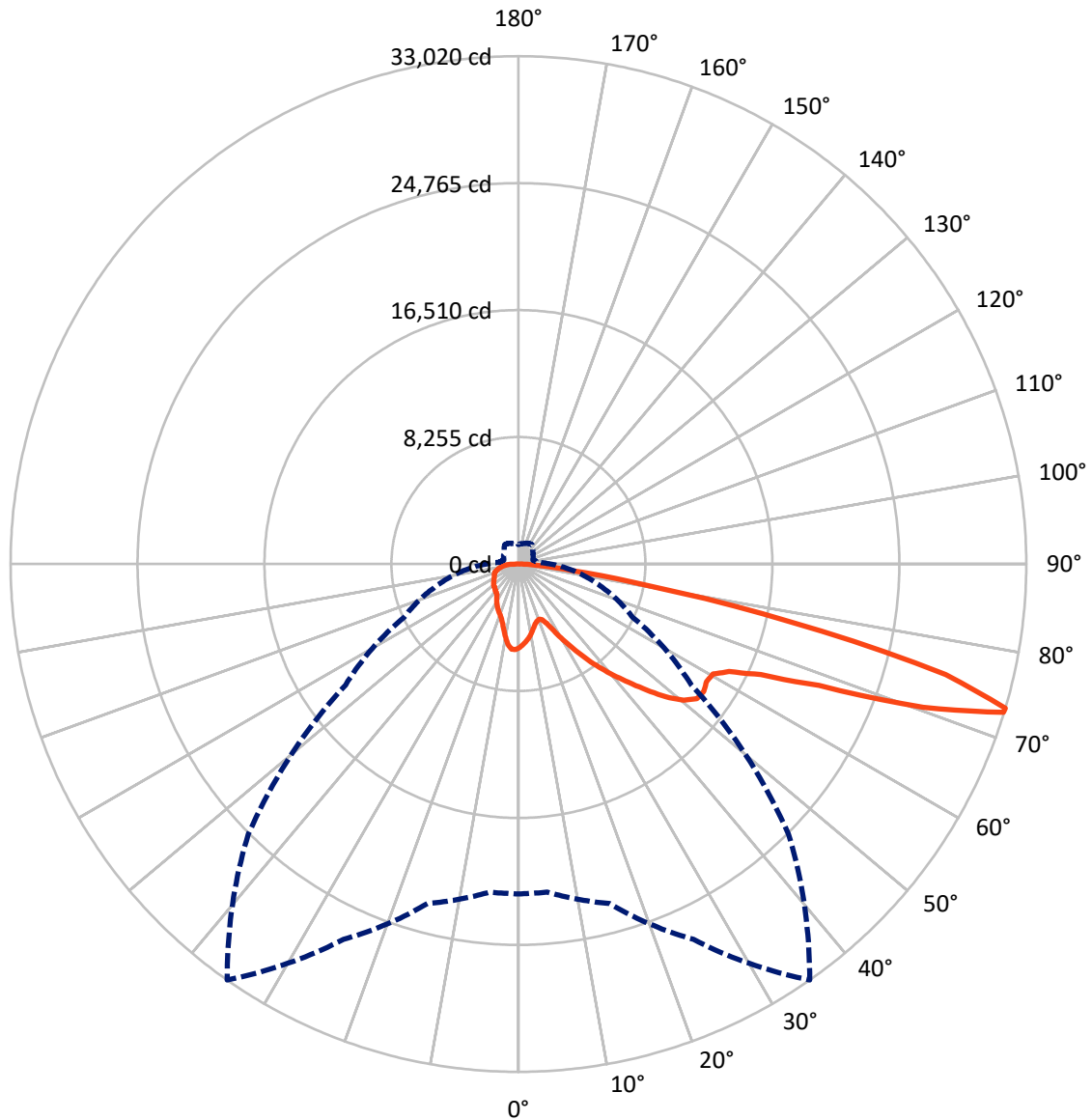
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.1 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
<b>House Side</b>	Lumens	6881.7	0.0	6881.7
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	29199.8	0.0	29199.8
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	36081.5	0.0	36081.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	493.0	1.4
10°-20°	1230.5	3.4
20°-30°	1989.2	5.5
30°-40°	3335.6	9.2
40°-50°	5141.7	14.3
50°-60°	6898.2	19.1
60°-70°	9189.8	25.5
70°-80°	7009.0	19.4
80°-90°	794.4	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°	36081.5	100.0
0°-180°	36081.5	100.0



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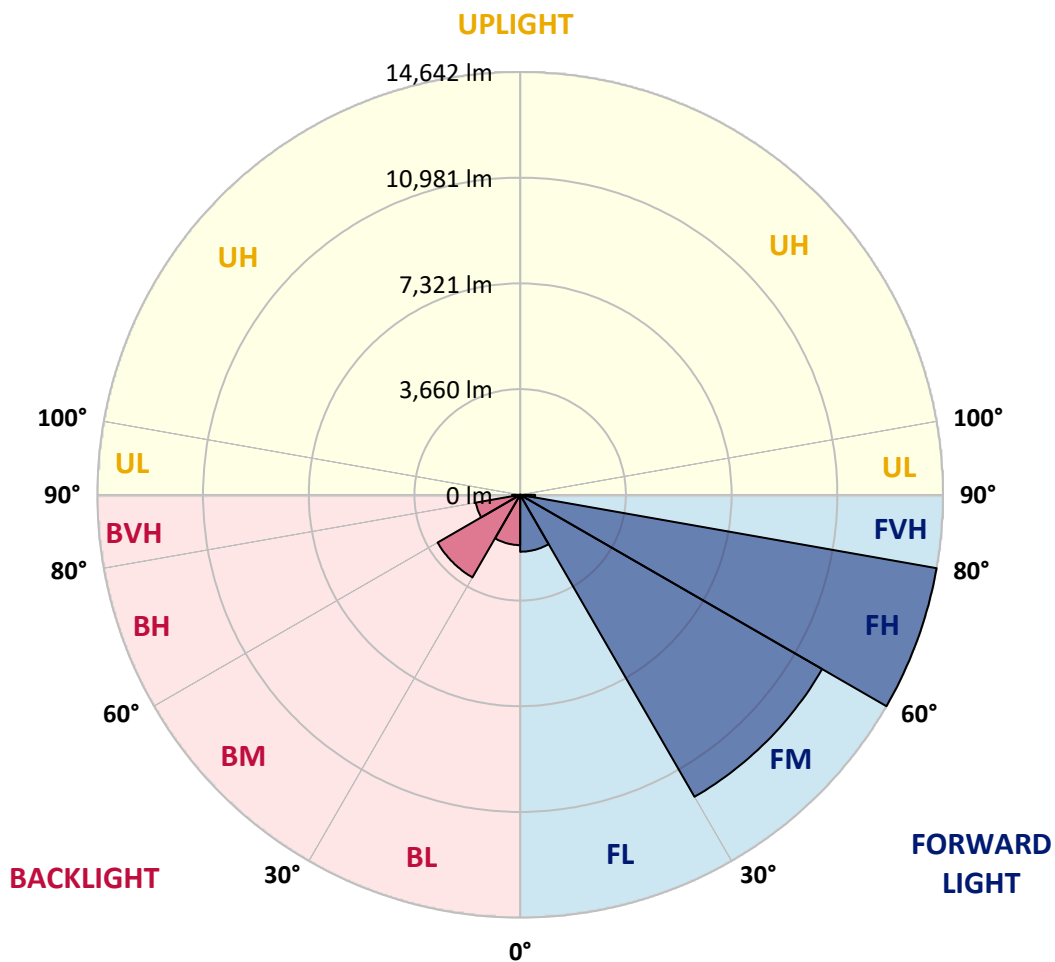
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1971.3	5.5			
FM	(30°-60°)	12073.1	33.5			
FH	(60°-80°)	14641.9	40.6			G5
FVH	(80°-90°)	513.5	1.4			G4/750
BL	(0°-30°)	1741.4	4.8	B3/2500		
BM	(30°-60°)	3302.5	9.2	B3/5000		
BH	(60°-80°)	1556.9	4.3	B3/2500		G3/2500
BVH	(80°-90°)	280.9	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°	5445.8	5445.8	5445.8	5445.8	5445.8	5445.8	5445.8	5445.8	5445.8	5445.8	5445.8
2.5°	5231.0	5241.4	5229.2	5244.9	5270.9	5298.6	5317.6	5345.3	5376.5	5419.8	5430.2
5°	4984.9	5000.5	5000.5	5028.2	5078.5	5123.6	5165.1	5210.2	5276.0	5350.5	5380.0
7.5°	4714.7	4723.3	4738.9	4780.5	4853.3	4917.3	4976.2	5049.1	5139.1	5237.9	5289.9
10°	4388.9	4401.0	4425.3	4484.2	4582.9	4671.3	4756.2	4856.7	4971.0	5094.1	5160.0
12.5°	4158.4	4155.0	4165.4	4208.7	4295.4	4402.8	4525.7	4654.0	4794.4	4938.2	5017.9
15°	4080.4	4061.4	4021.5	4011.2	4057.9	4165.4	4307.4	4465.1	4633.1	4806.4	4905.3
17.5°	4128.9	4096.1	3987.0	3907.2	3900.3	3981.7	4132.4	4309.2	4503.2	4714.7	4837.6
20°	4434.0	4355.9	4087.4	3902.0	3837.9	3877.7	4009.5	4196.6	4425.3	4706.0	4863.6
22.5°	5163.3	5049.1	4479.0	4134.2	3917.6	3869.1	3967.8	4167.1	4434.0	4813.4	5014.4
25°	6225.6	6062.6	5151.3	4712.9	4265.9	4007.7	4030.2	4234.7	4556.9	5062.9	5305.4
27.5°	7064.2	6958.4	6029.8	5528.9	4900.0	4381.9	4233.0	4404.5	4808.2	5471.8	5719.6
30°	7563.2	7499.0	6968.9	6454.2	5709.2	4978.0	4621.1	4723.3	5201.5	6038.4	6242.9
32.5°	8141.9	8103.7	7843.9	7370.9	6582.5	5761.2	5236.2	5199.8	5728.2	6719.4	6813.0
35°	8741.4	8729.2	8576.8	8237.2	7519.8	6793.8	6052.3	5806.3	6301.8	7426.3	7367.4
37.5°	9299.3	9278.5	9190.2	8992.7	8500.5	7902.8	6883.9	6428.2	6920.4	8102.0	7840.4
40°	10326.8	10163.9	9860.7	9711.7	9491.7	8836.7	7544.1	7008.7	7561.4	8746.5	8249.3
42.5°	11579.5	11314.4	10749.6	10545.1	10513.9	9573.1	7994.6	7571.8	8207.7	9386.0	8651.3
45°	12565.4	12315.9	11829.0	11570.9	11685.2	10240.1	8446.8	8173.1	8873.1	10056.5	9065.4
47.5°	13617.1	13225.5	12581.0	12659.0	12908.5	10870.9	8907.8	8819.4	9602.5	10806.8	9580.0
50°	13655.3	13355.5	13073.1	13539.2	13927.3	11451.3	9484.7	9496.9	10494.9	11751.0	10264.4
52.5°	12863.4	12799.4	13248.1	13981.0	14540.6	11910.4	10141.4	10196.9	11636.7	12835.7	11016.4
55°	12586.2	12513.5	13031.5	13826.8	14623.8	12289.9	10853.5	10954.1	13017.7	13979.2	11749.3
57.5°	13261.9	13100.8	13135.5	13754.1	14421.2	12705.8	11629.7	11832.5	14518.1	14979.1	12220.6
60°	15150.6	14805.8	14150.8	14135.2	14530.3	13329.6	12527.3	12775.1	16077.6	15457.3	12037.0
62.5°	17799.9	17455.0	16228.3	15429.6	15370.7	14358.8	13629.3	13695.2	16978.5	14809.3	10915.9
65°	20667.4	20359.1	18988.4	17860.5	17316.4	16063.7	14909.7	14105.8	16684.0	13026.4	8954.5
67.5°	24148.4	23817.5	22639.2	21597.9	21074.6	18815.2	15809.0	13712.5	14814.5	10091.1	6436.9
70°	26582.8	26244.9	25780.6	26624.4	27904.9	22784.8	15925.1	12113.2	11065.0	6707.2	3874.3
72.5°	23406.9	23249.1	24096.4	27650.2	32983.3	25193.2	14395.2	8819.4	6426.5	3560.7	2242.1
73°	21445.4	21410.8	22855.8	26931.1	33019.7	24822.4	13724.6	8197.3	5511.7	3150.0	2049.8
75°	9684.0	9962.9	13130.3	20570.4	28688.0	20454.3	9659.7	4702.5	3113.7	2176.2	1547.3
77.5°	2327.0	2424.0	4108.2	9768.9	18117.0	12189.4	4376.8	2325.3	1990.9	1536.9	1129.7
80°	991.1	1024.0	1581.9	3609.2	8530.0	4908.7	2016.8	1557.6	1377.5	1072.6	791.9
82.5°	551.0	585.6	897.5	1637.3	3442.8	1673.8	1230.2	1084.6	906.2	646.3	514.6
85°	311.9	330.9	525.0	914.8	1458.9	672.3	736.4	720.8	511.2	332.7	253.0
87.5°	147.3	159.4	253.0	424.5	571.8	263.4	374.3	412.4	320.6	202.7	131.7
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°	5445.8	5445.8	5445.8	5445.8	5445.8	5445.8	5445.8	5445.8	5445.8	5445.8
2.5°	5442.4	5473.5	5509.9	5528.9	5546.3	5567.1	5587.9	5587.9	5591.3	5593.1
5°	5404.2	5468.4	5525.6	5549.8	5555.0	5555.0	5549.8	5522.1	5497.8	5508.2
7.5°	5324.6	5418.1	5466.6	5458.0	5392.1	5315.9	5251.7	5173.8	5134.0	5127.0
10°	5210.2	5317.6	5326.3	5239.7	5076.8	4913.8	4778.7	4647.1	4584.7	4569.1
12.5°	5083.7	5182.5	5127.0	4948.5	4687.0	4449.5	4278.0	4144.6	4085.7	4070.1
15°	4981.5	5049.1	4908.7	4628.0	4298.7	4047.5	3905.4	3806.7	3765.1	3753.0
17.5°	4927.8	4941.6	4685.2	4305.7	3955.8	3746.0	3657.7	3610.9	3595.4	3586.7
20°	4953.7	4856.7	4472.0	4006.0	3675.1	3527.7	3507.0	3494.8	3491.3	3486.1
22.5°	5083.7	4830.7	4276.2	3721.8	3428.9	3364.9	3382.2	3380.4	3377.0	3373.5
25°	5315.9	4853.3	4085.7	3451.5	3222.8	3208.9	3240.1	3240.1	3226.3	3226.3
27.5°	5622.5	4900.0	3872.6	3195.1	3035.7	3037.3	3061.7	3054.7	3039.1	3028.8
30°	5996.8	4929.5	3623.1	2964.6	2860.7	2853.7	2860.7	2831.2	2784.5	2781.0
32.5°	6379.7	4893.1	3333.7	2760.1	2675.2	2659.7	2654.5	2612.9	2559.2	2543.6
35°	6726.3	4759.7	3039.1	2597.3	2498.6	2463.9	2488.1	2474.3	2425.7	2413.7
37.5°	6979.3	4511.9	2774.0	2453.4	2372.0	2363.4	2379.0	2384.2	2327.0	2314.8
40°	7149.1	4175.8	2547.0	2332.2	2347.8	2314.8	2262.9	2226.5	2209.2	2203.9
42.5°	7286.0	3825.7	2356.5	2275.0	2353.0	2257.7	2145.0	2086.1	2117.3	2131.2
45°	7443.6	3484.4	2197.0	2203.9	2327.0	2191.9	2063.6	2006.4	2018.6	2022.1
47.5°	7660.2	3068.5	2025.5	2089.6	2240.4	2146.8	2013.4	1931.9	1874.8	1848.8
50°	7960.0	2576.5	1847.0	1961.4	2155.5	2113.8	1935.4	1848.8	1743.1	1718.9
52.5°	8167.9	2117.3	1699.7	1854.0	2079.2	2048.0	1873.0	1760.4	1649.5	1628.7
55°	8055.2	1758.7	1571.6	1734.4	1978.7	1966.6	1821.1	1670.3	1583.6	1566.3
57.5°	7492.1	1531.7	1472.7	1621.8	1855.7	1897.3	1751.7	1594.1	1531.7	1519.6
60°	6417.9	1389.6	1410.4	1545.6	1755.2	1828.0	1682.4	1552.5	1510.9	1502.2
62.5°	4979.7	1294.3	1363.6	1490.1	1677.2	1779.4	1644.3	1547.3	1531.7	1521.3
65°	3567.6	1218.0	1313.4	1434.7	1606.2	1734.4	1630.5	1540.4	1543.8	1535.1
67.5°	2424.0	1150.5	1252.7	1372.3	1536.9	1694.5	1611.4	1516.1	1559.4	1549.1
70°	1696.3	1084.6	1181.7	1292.6	1450.2	1639.1	1576.8	1479.7	1476.2	1434.7
72.5°	1323.8	998.0	1084.6	1181.7	1339.3	1561.1	1507.4	1398.3	1341.1	1297.8
73°	1263.1	977.2	1060.4	1157.5	1315.1	1542.1	1488.4	1375.8	1311.6	1271.8
75°	1044.8	887.1	963.4	1050.0	1211.2	1452.0	1394.8	1273.5	1192.0	1167.8
77.5°	821.3	758.9	831.7	909.6	1067.3	1320.3	1256.2	1140.1	1095.1	1074.3
80°	608.1	629.0	693.0	762.4	925.3	1180.0	1122.8	1006.7	1207.7	1157.5
82.5°	428.0	476.5	535.4	597.8	776.2	1043.1	973.7	854.2	883.6	734.7
85°	253.0	311.9	367.3	421.0	559.7	864.6	803.9	681.0	557.9	531.9
87.5°	147.3	173.3	188.8	244.3	384.6	651.5	566.6	504.2	289.4	195.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)