

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: P300336

Luminaire Tested: **GLNA-AF-07-LED-E1-T4FT-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300336  
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-07-LED-E1-T4FT-7050  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 5000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 42212.9 lumens  
Efficiency: N/A  
Efficacy: 108.0 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

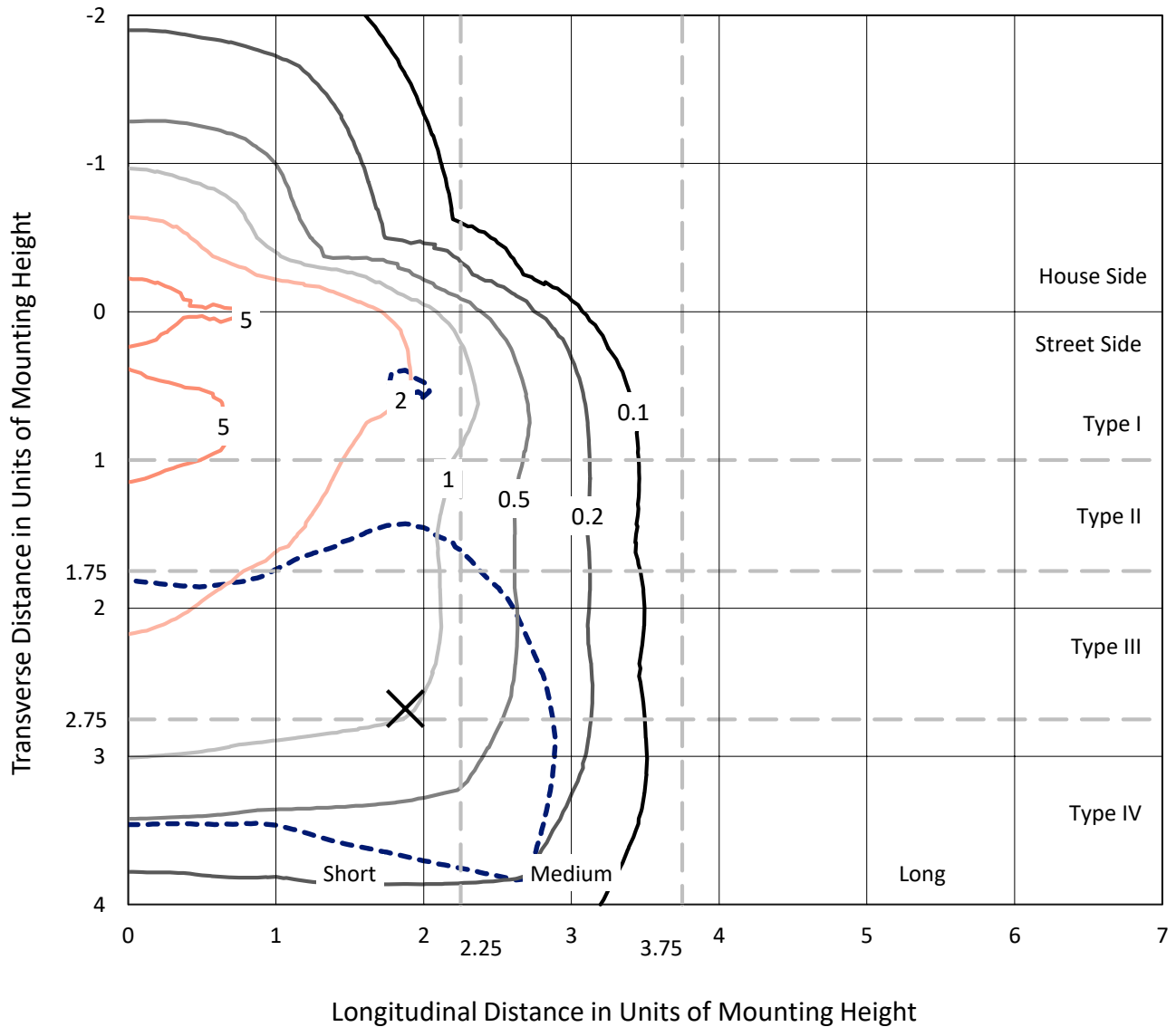
Input Watts (W): 391  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

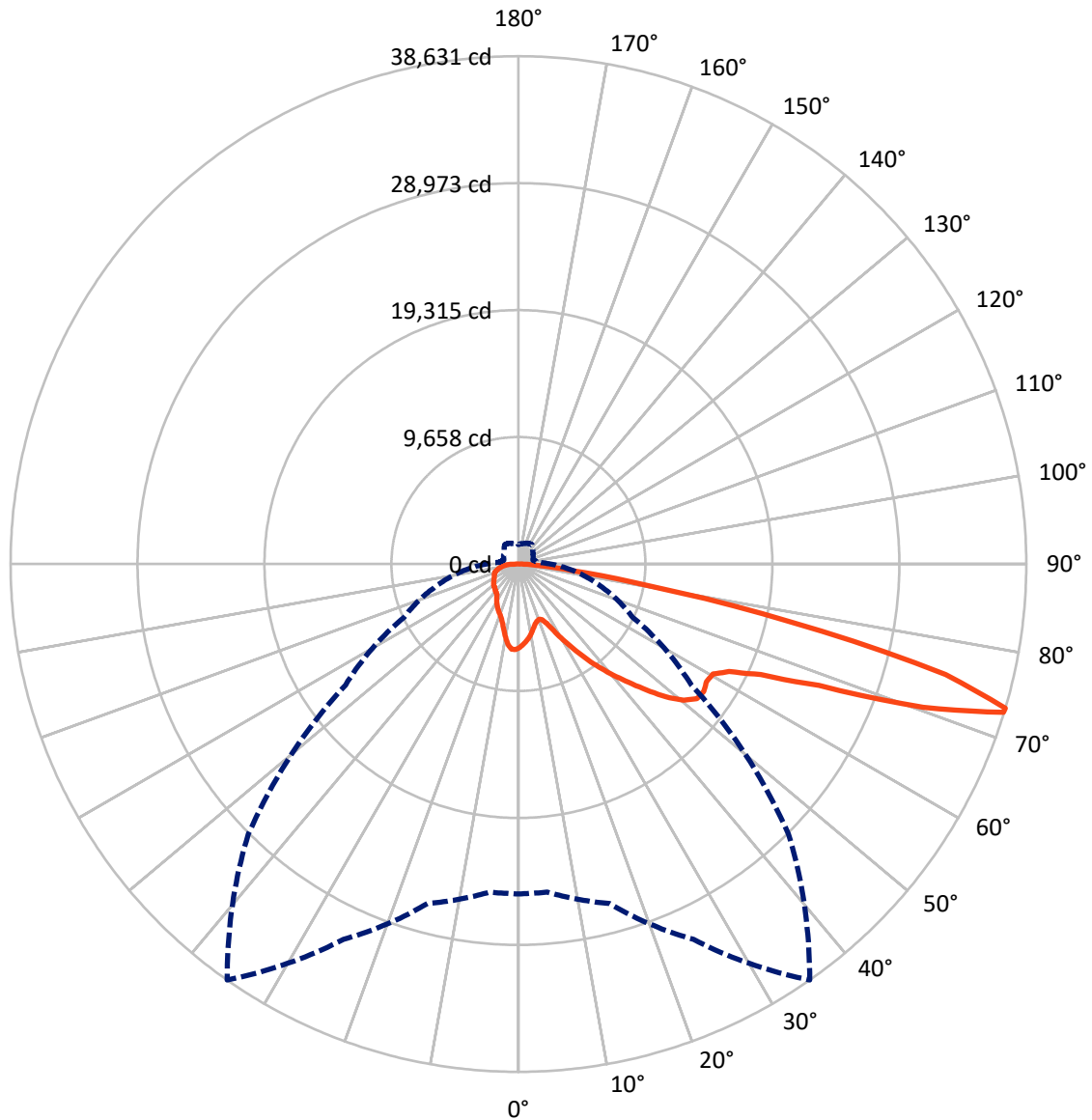
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.1 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	8051.2	0.0	8051.2
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	34161.7	0.0	34161.7
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	42212.9	0.0	42212.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	576.8	1.4
10°-20°	1439.5	3.4
20°-30°	2327.2	5.5
30°-40°	3902.5	9.2
40°-50°	6015.5	14.3
50°-60°	8070.4	19.1
60°-70°	10751.4	25.5
70°-80°	8200.1	19.4
80°-90°	929.4	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°	42212.9	100.0
0°-180°	42212.9	100.0



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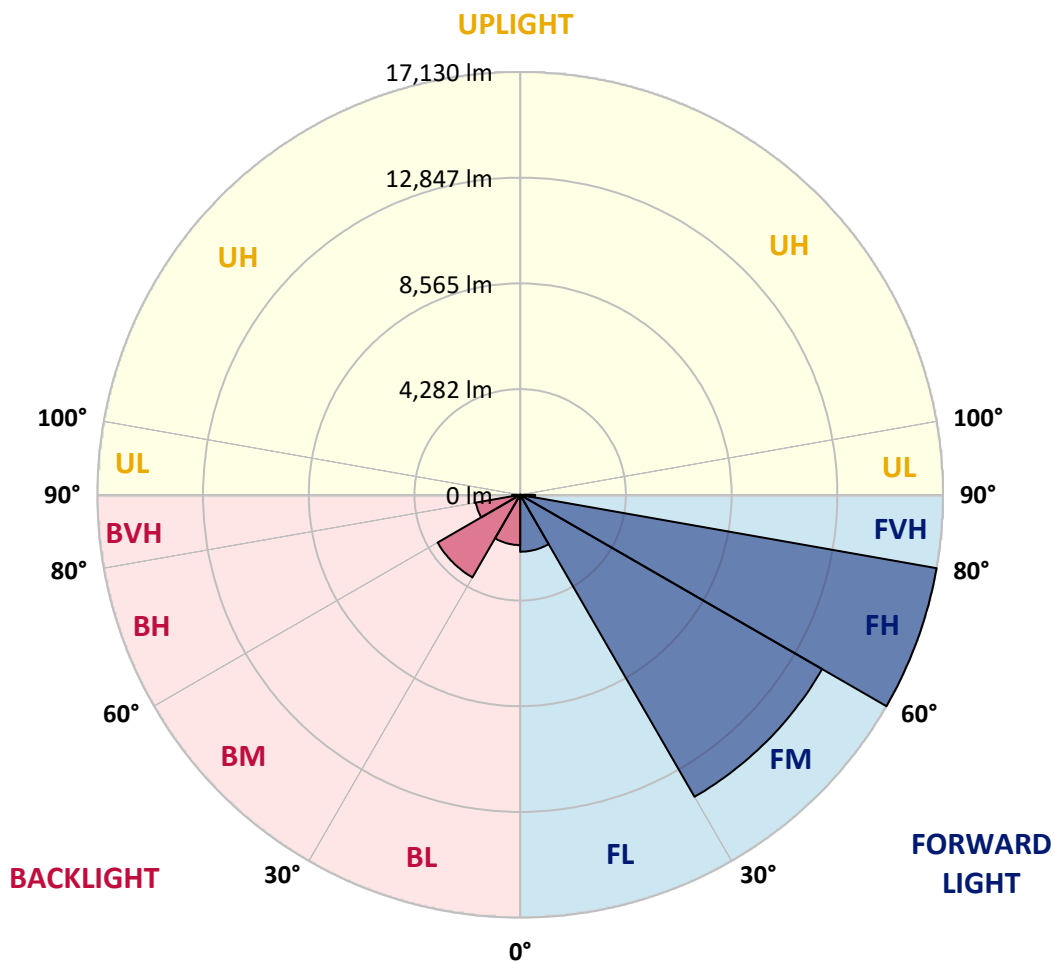
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2306.2	5.5			
FM	(30°-60°)	14124.7	33.5			
FH	(60°-80°)	17130.0	40.6			G5
FVH	(80°-90°)	600.8	1.4			G4/750
BL	(0°-30°)	2037.3	4.8	B3/2500		
BM	(30°-60°)	3863.7	9.2	B3/5000		
BH	(60°-80°)	1821.5	4.3	B3/2500		G3/2500
BVH	(80°-90°)	328.7	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°	6371.2	6371.2	6371.2	6371.2	6371.2	6371.2	6371.2	6371.2	6371.2	6371.2	6371.2
2.5°	6119.9	6132.0	6117.8	6136.1	6166.5	6198.9	6221.2	6253.7	6290.1	6340.8	6353.0
5°	5832.0	5850.3	5850.3	5882.7	5941.5	5994.2	6042.8	6095.5	6172.6	6259.7	6294.2
7.5°	5515.8	5525.9	5544.2	5592.8	5678.0	5753.0	5821.9	5907.0	6012.4	6128.0	6188.8
10°	5134.7	5148.9	5177.3	5246.2	5361.7	5465.1	5564.4	5682.0	5815.8	5959.7	6036.8
12.5°	4865.1	4861.0	4873.2	4923.9	5025.2	5150.9	5294.8	5444.8	5609.0	5777.3	5870.5
15°	4773.9	4751.6	4704.9	4692.8	4747.5	4873.2	5039.4	5223.9	5420.5	5623.2	5738.8
17.5°	4830.6	4792.1	4664.4	4571.2	4563.0	4658.3	4834.7	5041.4	5268.5	5515.8	5659.7
20°	5187.4	5096.2	4782.0	4565.1	4490.1	4536.7	4690.8	4909.7	5177.3	5505.7	5690.1
22.5°	6040.8	5907.0	5240.1	4836.7	4583.3	4526.6	4642.1	4875.2	5187.4	5631.3	5866.5
25°	7283.4	7092.9	6026.6	5513.8	4990.8	4688.7	4715.1	4954.3	5331.3	5923.2	6207.0
27.5°	8264.6	8140.9	7054.4	6468.5	5732.7	5126.6	4952.3	5152.9	5625.3	6401.6	6691.5
30°	8848.4	8773.4	8153.1	7551.0	6679.4	5823.9	5406.3	5525.9	6085.4	7064.5	7303.7
32.5°	9525.4	9480.8	9176.8	8623.4	7701.0	6740.2	6126.0	6083.4	6701.7	7861.2	7970.6
35°	10226.8	10212.6	10034.2	9636.9	8797.7	7948.3	7080.7	6792.9	7372.6	8688.2	8619.3
37.5°	10879.5	10855.2	10751.8	10520.7	9945.0	9245.7	8053.7	7520.6	8096.3	9478.8	9172.7
40°	12081.6	11891.1	11536.3	11362.0	11104.6	10338.3	8826.1	8199.7	8846.3	10232.9	9651.1
42.5°	13547.2	13237.1	12576.2	12337.0	12300.6	11199.8	9353.1	8858.5	9602.5	10980.9	10121.4
45°	14700.7	14408.8	13839.1	13537.1	13670.9	11980.3	9882.2	9561.9	10380.9	11765.4	10605.9
47.5°	15931.1	15473.0	14718.9	14810.1	15102.0	12718.1	10421.4	10318.0	11234.3	12643.1	11207.9
50°	15975.7	15625.0	15294.6	15839.9	16294.0	13397.2	11096.4	11110.6	12278.3	13747.9	12008.7
52.5°	15049.3	14974.3	15499.4	16356.8	17011.6	13934.4	11864.7	11929.6	13614.1	15016.9	12888.4
55°	14725.0	14639.9	15246.0	16176.4	17108.9	14378.4	12697.9	12815.4	15229.7	16354.8	13745.9
57.5°	15515.6	15327.0	15367.6	16091.3	16871.7	14864.9	13606.0	13843.2	16985.2	17524.4	14297.3
60°	17725.1	17321.7	16555.5	16537.2	16999.4	15594.6	14656.1	14945.9	18809.6	18083.9	14082.4
62.5°	20824.6	20421.2	18986.0	18051.5	17982.6	16798.7	15945.3	16022.3	19863.7	17325.8	12770.8
65°	24179.5	23818.6	22215.2	20895.5	20259.0	18793.4	17443.4	16502.8	19519.1	15239.9	10476.1
67.5°	28252.0	27864.8	26486.3	25268.0	24655.8	22012.5	18495.4	16042.6	17331.9	11805.9	7530.7
70°	31100.1	30704.8	30161.5	31148.7	32646.7	26656.6	18631.2	14171.6	12945.2	7847.0	4532.6
72.5°	27384.3	27199.9	28191.1	32348.8	38588.2	29474.3	16841.3	10318.0	7518.6	4165.7	2623.1
73°	25089.6	25049.1	26739.7	31507.5	38630.8	29040.5	16056.8	9590.3	6448.3	3685.3	2398.1
75°	11329.6	11655.9	15361.5	24066.0	33563.0	23930.1	11301.2	5501.6	3642.7	2546.1	1810.2
77.5°	2722.4	2835.9	4806.3	11428.9	21195.6	14260.8	5120.5	2720.4	2329.2	1798.1	1321.7
80°	1159.5	1198.0	1850.8	4222.5	9979.5	5742.8	2359.6	1822.4	1611.6	1254.8	926.4
82.5°	644.6	685.2	1050.0	1915.6	4027.9	1958.2	1439.3	1269.0	1060.2	756.1	602.1
85°	364.9	387.2	614.2	1070.3	1706.8	786.5	861.5	843.3	598.0	389.2	296.0
87.5°	172.3	186.5	296.0	496.6	668.9	308.1	437.9	482.5	375.0	237.2	154.1
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°	6371.2	6371.2	6371.2	6371.2	6371.2	6371.2	6371.2	6371.2	6371.2	6371.2
2.5°	6367.2	6403.7	6446.2	6468.5	6488.8	6513.1	6537.5	6537.5	6541.5	6543.5
5°	6322.6	6397.6	6464.5	6492.9	6498.9	6498.9	6492.9	6460.4	6432.0	6444.2
7.5°	6229.3	6338.8	6395.6	6385.4	6308.4	6219.2	6144.2	6053.0	6006.4	5998.2
10°	6095.5	6221.2	6231.4	6130.0	5939.5	5748.9	5590.8	5436.7	5363.8	5345.5
12.5°	5947.6	6063.1	5998.2	5789.5	5483.4	5205.6	5005.0	4848.9	4779.9	4761.7
15°	5828.0	5907.0	5742.8	5414.4	5029.3	4735.3	4569.1	4453.6	4404.9	4390.7
17.5°	5765.1	5781.3	5481.3	5037.4	4627.9	4382.6	4279.2	4224.5	4206.3	4196.1
20°	5795.5	5682.0	5232.0	4686.7	4299.5	4127.2	4102.9	4088.7	4084.6	4078.6
22.5°	5947.6	5651.6	5002.9	4354.3	4011.7	3936.7	3956.9	3954.9	3950.9	3946.8
25°	6219.2	5678.0	4779.9	4038.0	3770.4	3754.2	3790.7	3790.7	3774.5	3774.5
27.5°	6578.0	5732.7	4530.6	3738.0	3551.5	3553.5	3581.9	3573.8	3555.6	3543.4
30°	7015.9	5767.2	4238.7	3468.4	3346.8	3338.7	3346.8	3312.3	3257.6	3253.5
32.5°	7463.9	5724.6	3900.2	3229.2	3129.9	3111.6	3105.5	3056.9	2994.1	2975.8
35°	7869.3	5568.5	3555.6	3038.7	2923.1	2882.6	2910.9	2894.7	2838.0	2823.8
37.5°	8165.2	5278.6	3245.4	2870.4	2775.1	2765.0	2783.2	2789.3	2722.4	2708.2
40°	8363.9	4885.4	2979.9	2728.5	2746.7	2708.2	2647.4	2604.8	2584.6	2578.5
42.5°	8524.0	4475.9	2756.9	2661.6	2752.8	2641.3	2509.6	2440.7	2477.1	2493.4
45°	8708.5	4076.5	2570.4	2578.5	2722.4	2564.3	2414.3	2347.4	2361.6	2365.6
47.5°	8961.9	3590.0	2369.7	2444.7	2621.1	2511.6	2355.5	2260.2	2193.3	2162.9
50°	9312.6	3014.3	2160.9	2294.7	2521.7	2473.1	2264.3	2162.9	2039.3	2010.9
52.5°	9555.8	2477.1	1988.6	2169.0	2432.5	2396.1	2191.3	2059.6	1929.8	1905.5
55°	9424.1	2057.5	1838.6	2029.1	2315.0	2300.8	2130.5	1954.1	1852.8	1832.5
57.5°	8765.3	1792.0	1723.1	1897.4	2171.0	2219.7	2049.4	1864.9	1792.0	1777.8
60°	7508.4	1625.7	1650.1	1808.2	2053.5	2138.6	1968.3	1816.3	1767.6	1757.5
62.5°	5825.9	1514.3	1595.3	1743.3	1962.3	2081.9	1923.7	1810.2	1792.0	1779.8
65°	4173.8	1425.1	1536.6	1678.5	1879.1	2029.1	1907.5	1802.1	1806.2	1796.0
67.5°	2835.9	1346.0	1465.6	1605.5	1798.1	1982.5	1885.2	1773.7	1824.4	1812.2
70°	1984.5	1269.0	1382.5	1512.2	1696.7	1917.7	1844.7	1731.2	1727.1	1678.5
72.5°	1548.7	1167.6	1269.0	1382.5	1567.0	1826.4	1763.6	1635.9	1569.0	1518.3
73°	1477.8	1143.3	1240.6	1354.1	1538.6	1804.1	1741.3	1609.5	1534.5	1487.9
75°	1222.4	1037.9	1127.1	1228.4	1417.0	1698.7	1631.8	1489.9	1394.7	1366.3
77.5°	960.9	887.9	973.0	1064.2	1248.7	1544.7	1469.7	1333.8	1281.1	1256.8
80°	711.5	735.8	810.8	891.9	1082.5	1380.5	1313.6	1177.8	1412.9	1354.1
82.5°	500.7	557.5	626.4	699.4	908.1	1220.3	1139.2	999.4	1033.8	859.5
85°	296.0	364.9	429.7	492.6	654.8	1011.5	940.6	796.7	652.7	622.3
87.5°	172.3	202.7	221.0	285.8	450.0	762.2	662.9	589.9	338.5	229.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)