

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: P300342

Luminaire Tested: **GLNA-AF-08-LED-E1-T4FT-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300342  
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-7050  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 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: 47829.1 lumens  
Efficiency: N/A  
Efficacy: 107.5 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

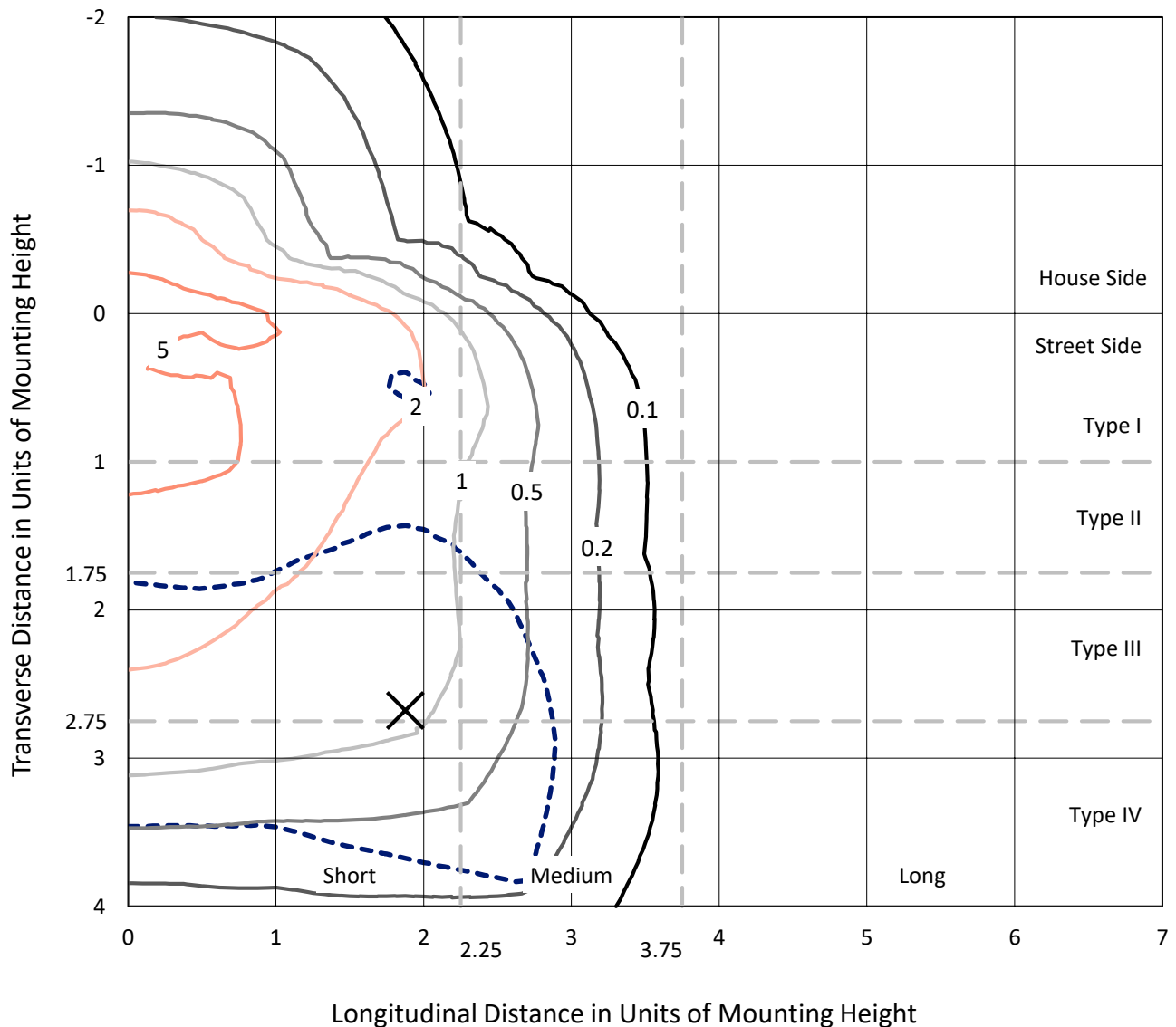
Input Watts (W): 445  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

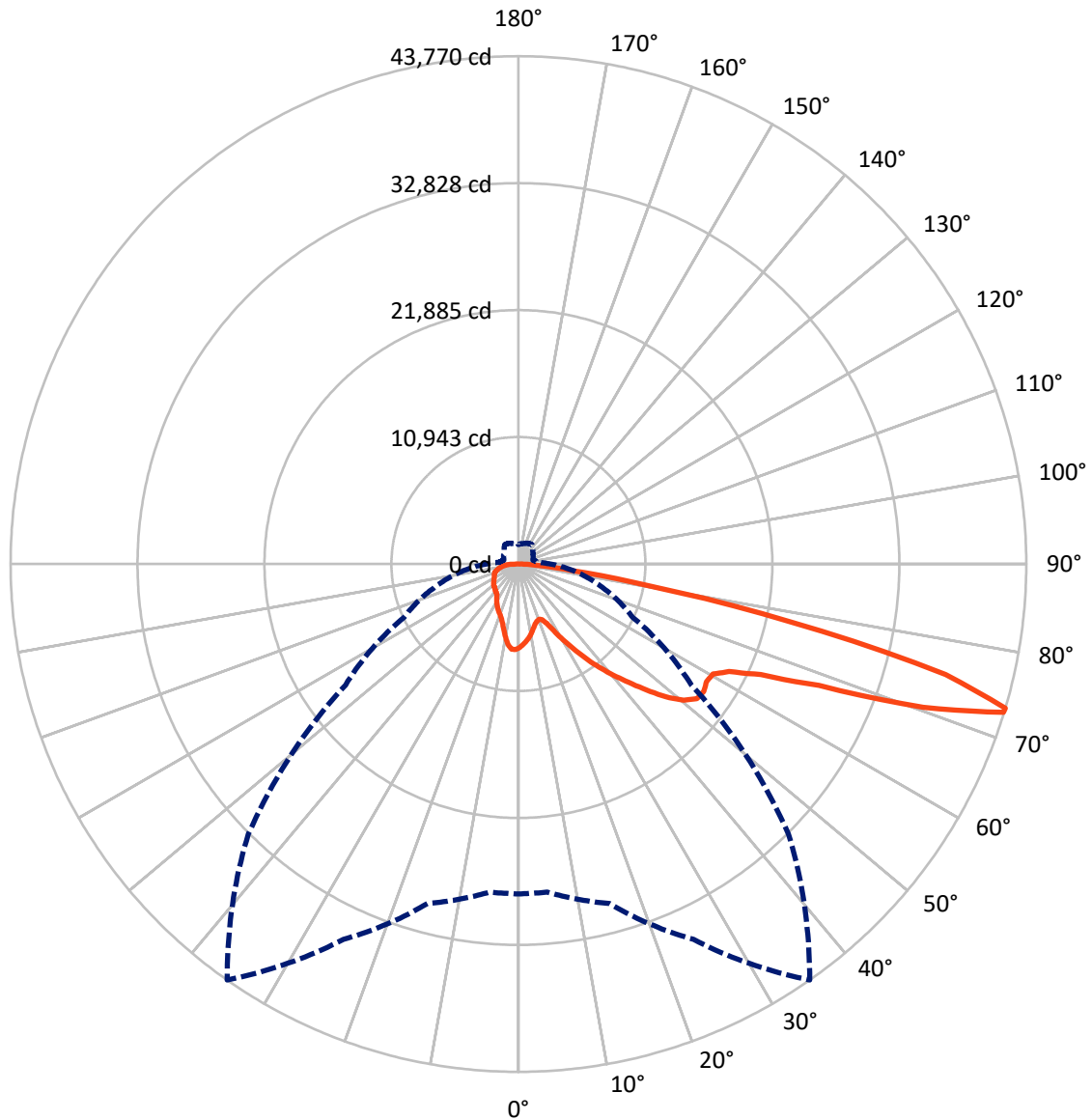
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8 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	9122.3	0.0	9122.3
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	38706.7	0.0	38706.7
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	47829.1	0.0	47829.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	653.5	1.4
10°-20°	1631.1	3.4
20°-30°	2636.9	5.5
30°-40°	4421.7	9.2
40°-50°	6815.8	14.3
50°-60°	9144.1	19.1
60°-70°	12181.8	25.5
70°-80°	9291.0	19.4
80°-90°	1053.1	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°	47829.1	100.0
0°-180°	47829.1	100.0



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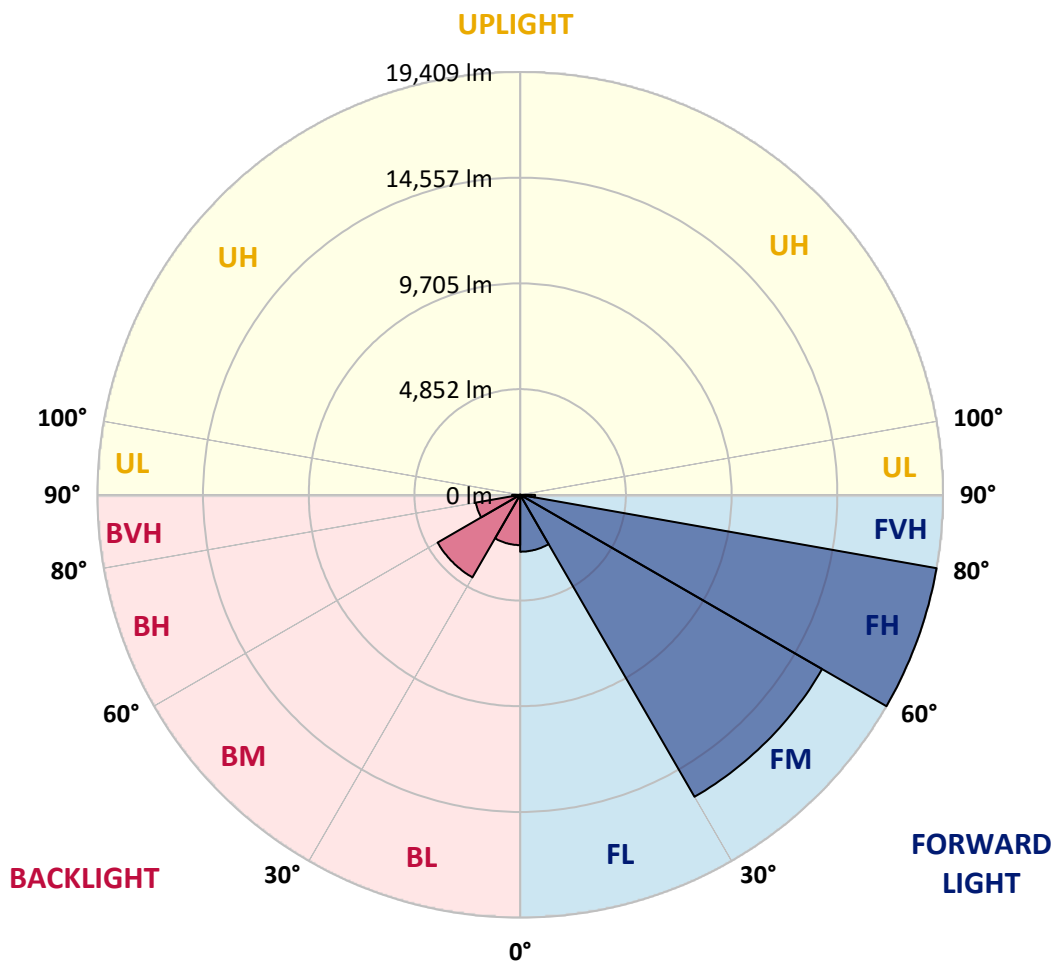
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2613.1	5.5			
FM	(30°-60°)	16003.9	33.5			
FH	(60°-80°)	19409.0	40.6			G5
FVH	(80°-90°)	680.7	1.4			G4/750
BL	(0°-30°)	2308.4	4.8	B3/2500		
BM	(30°-60°)	4377.7	9.2	B3/5000		
BH	(60°-80°)	2063.9	4.3	B3/2500		G3/2500
BVH	(80°-90°)	372.4	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°	7218.9	7218.9	7218.9	7218.9	7218.9	7218.9	7218.9	7218.9	7218.9	7218.9	7218.9
2.5°	6934.1	6947.9	6931.8	6952.5	6986.9	7023.7	7048.9	7085.7	7127.0	7184.4	7198.2
5°	6607.9	6628.6	6628.6	6665.4	6732.0	6791.7	6846.8	6906.5	6993.8	7092.6	7131.6
7.5°	6249.6	6261.1	6281.8	6336.9	6433.4	6518.4	6596.5	6692.9	6812.4	6943.3	7012.2
10°	5817.8	5833.9	5866.1	5944.2	6075.1	6192.2	6304.8	6438.0	6589.6	6752.6	6839.9
12.5°	5512.4	5507.8	5521.5	5579.0	5693.8	5836.2	5999.3	6169.2	6355.3	6545.9	6651.6
15°	5409.0	5383.7	5330.9	5317.1	5379.1	5521.5	5709.9	5918.9	6141.7	6371.4	6502.3
17.5°	5473.3	5429.7	5285.0	5179.3	5170.1	5278.1	5477.9	5712.2	5969.4	6249.6	6412.7
20°	5877.6	5774.2	5418.2	5172.4	5087.4	5140.3	5314.8	5562.9	5866.1	6238.2	6447.2
22.5°	6844.5	6692.9	5937.3	5480.2	5193.1	5128.8	5259.7	5523.8	5877.6	6380.6	6647.0
25°	8252.5	8036.6	6828.4	6247.3	5654.8	5312.5	5342.4	5613.4	6040.6	6711.3	7032.9
27.5°	9364.1	9224.0	7992.9	7329.1	6495.4	5808.6	5611.1	5838.5	6373.7	7253.3	7581.8
30°	10025.6	9940.6	9237.8	8555.6	7568.0	6598.8	6125.6	6261.1	6895.0	8004.4	8275.4
32.5°	10792.7	10742.2	10397.7	9770.7	8725.6	7636.9	6941.0	6892.7	7593.3	8907.1	9031.1
35°	11587.4	11571.4	11369.2	10919.1	9968.2	9005.8	8022.8	7696.6	8353.5	9844.2	9766.1
37.5°	12327.0	12299.4	12182.3	11920.5	11268.2	10475.8	9125.2	8521.2	9173.5	10739.9	10393.1
40°	13689.0	13473.1	13071.2	12873.7	12582.0	11713.8	10000.3	9290.6	10023.3	11594.3	10935.1
42.5°	15349.6	14998.2	14249.4	13978.4	13937.1	12689.9	10597.5	10037.1	10880.0	12441.9	11468.0
45°	16656.5	16325.8	15680.4	15338.1	15489.7	13574.2	11197.0	10834.1	11762.0	13330.7	12016.9
47.5°	18050.7	17531.6	16677.2	16780.5	17111.3	14410.2	11807.9	11690.8	12729.0	14325.2	12699.1
50°	18101.2	17703.9	17329.5	17947.3	18461.8	15179.7	12572.8	12588.8	13911.8	15577.0	13606.3
52.5°	17051.6	16966.6	17561.5	18533.0	19274.9	15788.3	13443.3	13516.8	15425.4	17014.8	14603.2
55°	16684.1	16587.6	17274.4	18328.6	19385.1	16291.3	14387.3	14520.5	17256.0	18530.7	15574.7
57.5°	17579.8	17366.2	17412.2	18232.1	19116.4	16842.6	15416.2	15685.0	19245.0	19856.0	16199.4
60°	20083.4	19626.3	18758.1	18737.4	19261.1	17669.4	16606.0	16934.4	21312.2	20489.9	15956.0
62.5°	23595.2	23138.1	21512.0	20453.1	20375.1	19033.7	18066.8	18154.0	22506.5	19630.9	14469.9
65°	27396.4	26987.6	25170.8	23675.6	22954.4	21293.8	19764.1	18698.4	22116.0	17267.5	11869.9
67.5°	32010.7	31572.0	30010.2	28629.8	27936.2	24941.1	20956.1	18177.0	19637.8	13376.7	8532.7
70°	35237.7	34789.9	34174.3	35292.9	36990.2	30203.1	21110.0	16057.0	14667.5	8891.0	5135.7
72.5°	31027.7	30818.7	31941.8	36652.6	43722.2	33395.7	19081.9	11690.8	8518.9	4720.0	2972.1
73°	28427.7	28381.8	30297.3	35699.4	43770.4	32904.2	18193.1	10866.2	7306.2	4175.6	2717.1
75°	12836.9	13206.7	17405.3	27267.8	38028.4	27113.9	12804.7	6233.6	4127.4	2884.8	2051.1
77.5°	3084.6	3213.2	5445.8	12949.4	24015.5	16158.1	5801.8	3082.3	2639.0	2037.3	1497.5
80°	1313.8	1357.4	2097.0	4784.3	11307.2	6506.9	2673.5	2064.8	1826.0	1421.7	1049.6
82.5°	730.4	776.3	1189.8	2170.5	4563.8	2218.7	1630.7	1437.8	1201.2	856.7	682.2
85°	413.4	438.7	695.9	1212.7	1933.9	891.2	976.1	955.5	677.6	441.0	335.3
87.5°	195.2	211.3	335.3	562.7	757.9	349.1	496.1	546.6	424.9	268.7	174.6
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°	7218.9	7218.9	7218.9	7218.9	7218.9	7218.9	7218.9	7218.9	7218.9	7218.9
2.5°	7214.3	7255.6	7303.9	7329.1	7352.1	7379.7	7407.2	7407.2	7411.8	7414.1
5°	7163.8	7248.8	7324.5	7356.7	7363.6	7363.6	7356.7	7320.0	7287.8	7301.6
7.5°	7058.1	7182.1	7246.5	7235.0	7147.7	7046.6	6961.6	6858.3	6805.5	6796.3
10°	6906.5	7048.9	7060.4	6945.6	6729.7	6513.8	6334.6	6160.1	6077.4	6056.7
12.5°	6738.9	6869.8	6796.3	6559.7	6212.9	5898.2	5670.8	5494.0	5415.9	5395.2
15°	6603.3	6692.9	6506.9	6134.8	5698.4	5365.4	5177.0	5046.1	4991.0	4974.9
17.5°	6532.1	6550.5	6210.6	5707.6	5243.6	4965.7	4848.6	4786.6	4765.9	4754.4
20°	6566.6	6438.0	5928.1	5310.2	4871.5	4676.3	4648.8	4632.7	4628.1	4621.2
22.5°	6738.9	6403.5	5668.5	4933.6	4545.4	4460.4	4483.4	4481.1	4476.5	4471.9
25°	7046.6	6433.4	5415.9	4575.3	4272.1	4253.7	4295.0	4295.0	4276.7	4276.7
27.5°	7453.2	6495.4	5133.4	4235.3	4024.0	4026.3	4058.5	4049.3	4028.6	4014.8
30°	7949.3	6534.4	4802.6	3929.9	3792.0	3782.9	3792.0	3753.0	3691.0	3686.4
32.5°	8456.9	6486.2	4419.1	3658.8	3546.3	3525.6	3518.7	3463.6	3392.4	3371.7
35°	8916.2	6309.4	4028.6	3442.9	3312.0	3266.1	3298.2	3279.9	3215.5	3199.5
37.5°	9251.6	5980.9	3677.2	3252.3	3144.3	3132.9	3153.5	3160.4	3084.6	3068.5
40°	9476.7	5535.3	3376.3	3091.5	3112.2	3068.5	2999.6	2951.4	2928.4	2921.5
42.5°	9658.1	5071.4	3123.7	3015.7	3119.1	2992.8	2843.5	2765.4	2806.7	2825.1
45°	9867.1	4618.9	2912.4	2921.5	3084.6	2905.5	2735.5	2659.7	2675.8	2680.4
47.5°	10154.2	4067.7	2685.0	2770.0	2969.8	2845.8	2668.9	2560.9	2485.2	2450.7
50°	10551.6	3415.4	2448.4	2600.0	2857.2	2802.1	2565.5	2450.7	2310.6	2278.4
52.5°	10827.2	2806.7	2253.2	2457.6	2756.2	2714.8	2482.9	2333.6	2186.6	2159.0
55°	10677.9	2331.3	2083.2	2299.1	2623.0	2606.9	2414.0	2214.1	2099.3	2076.3
57.5°	9931.4	2030.4	1952.3	2149.8	2459.9	2515.0	2322.1	2113.1	2030.4	2014.3
60°	8507.4	1842.0	1869.6	2048.8	2326.7	2423.1	2230.2	2057.9	2002.8	1991.3
62.5°	6601.0	1715.7	1807.6	1975.3	2223.3	2358.8	2179.7	2051.1	2030.4	2016.6
65°	4729.1	1614.7	1741.0	1901.8	2129.1	2299.1	2161.3	2041.9	2046.5	2035.0
67.5°	3213.2	1525.1	1660.6	1819.1	2037.3	2246.3	2136.0	2009.7	2067.1	2053.4
70°	2248.6	1437.8	1566.4	1713.4	1922.4	2172.8	2090.1	1961.5	1956.9	1901.8
72.5°	1754.8	1323.0	1437.8	1566.4	1775.4	2069.4	1998.2	1853.5	1777.7	1720.3
73°	1674.4	1295.4	1405.7	1534.3	1743.3	2044.2	1973.0	1823.7	1738.7	1685.9
75°	1385.0	1176.0	1277.0	1391.9	1605.5	1924.7	1848.9	1688.2	1580.2	1548.1
77.5°	1088.7	1006.0	1102.5	1205.8	1414.8	1750.2	1665.2	1511.3	1451.6	1424.0
80°	806.2	833.7	918.7	1010.6	1226.5	1564.1	1488.3	1334.4	1600.9	1534.3
82.5°	567.3	631.6	709.7	792.4	1029.0	1382.7	1290.8	1132.3	1171.4	973.8
85°	335.3	413.4	486.9	558.1	741.9	1146.1	1065.7	902.6	739.6	705.1
87.5°	195.2	229.7	250.4	323.9	509.9	863.6	751.1	668.4	383.6	259.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)