

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: P651650

Luminaire Tested: **GALN-SA9D-840-U-T4FT**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651650
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-28)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA9D-840-U-T4FT
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 4000K, 1200mA 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: 58849.8 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

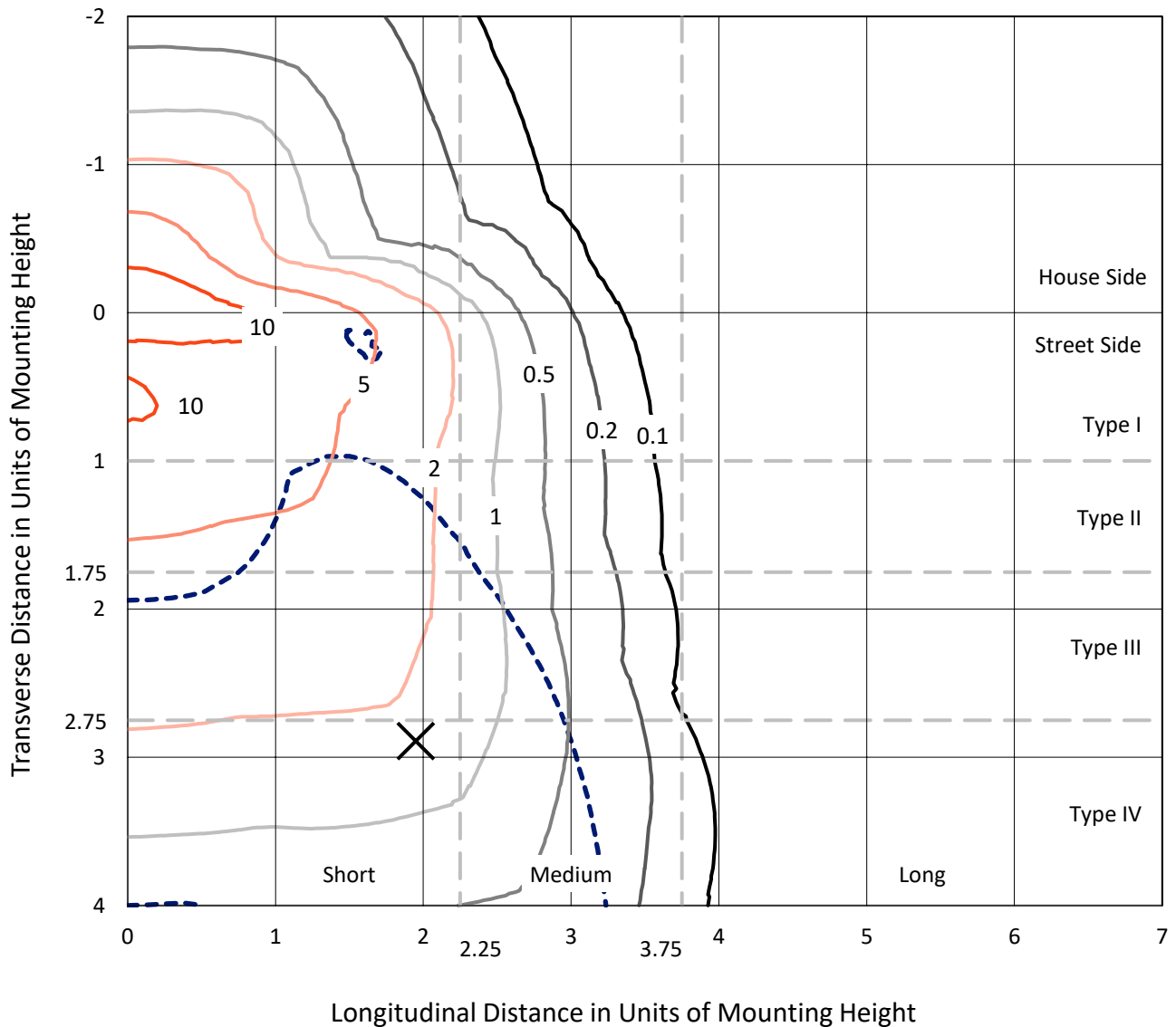
Input Watts (W): 552
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P651650
 CATALOG NUMBER: GALN-SA9D-840-U-T4FT

Iso-Footcandle Lines of Horizontal Illumination

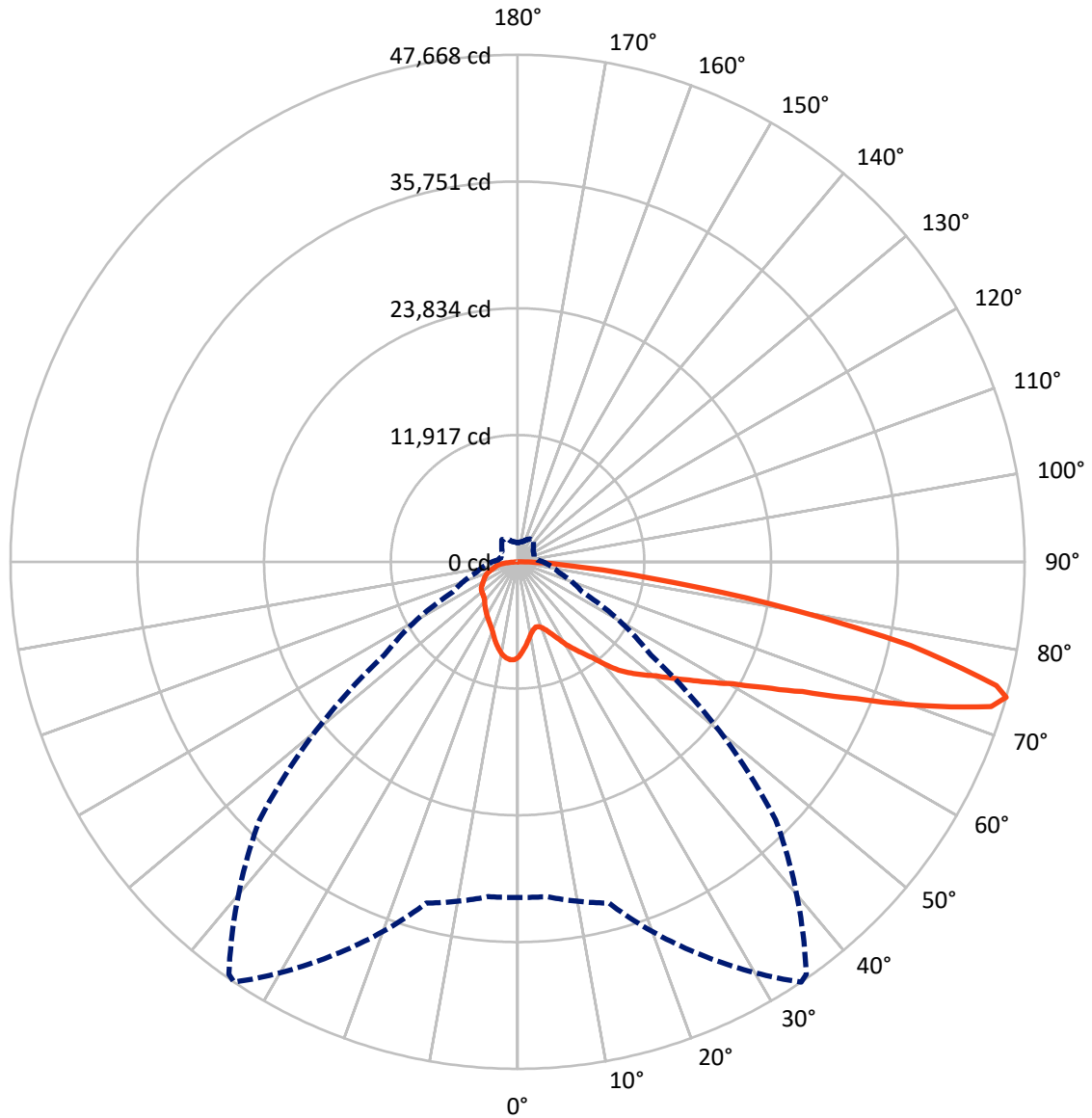
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.4 fc
 Type IV - Short - N/A

REPORT NUMBER: P651650
CATALOG NUMBER: GALN-SA9D-840-U-T4FT

Luminous Intensity Polar Plot



— Vertical Plane Through 34-Deg Lateral - - - Horizontal Cone Through 74-Deg Vertical

REPORT NUMBER: P651650
 CATALOG NUMBER: GALN-SA9D-840-U-T4FT

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12523.7	0.0	12523.7
	% Fixture	21.3	0.0	21.3
Street Side	Lumens	46326.1	0.0	46326.1
	% Fixture	78.7	0.0	78.7
Total	Lumens	58849.8	0.0	58849.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	817.2	1.4
10°-20°	2237.0	3.8
20°-30°	3688.2	6.3
30°-40°	5524.4	9.4
40°-50°	8031.0	13.6
50°-60°	11217.4	19.1
60°-70°	14043.6	23.9
70°-80°	11613.0	19.7
80°-90°	1678.0	2.9
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°	58849.8	100.0
0°-180°	58849.8	100.0

Coefficient of Utilization

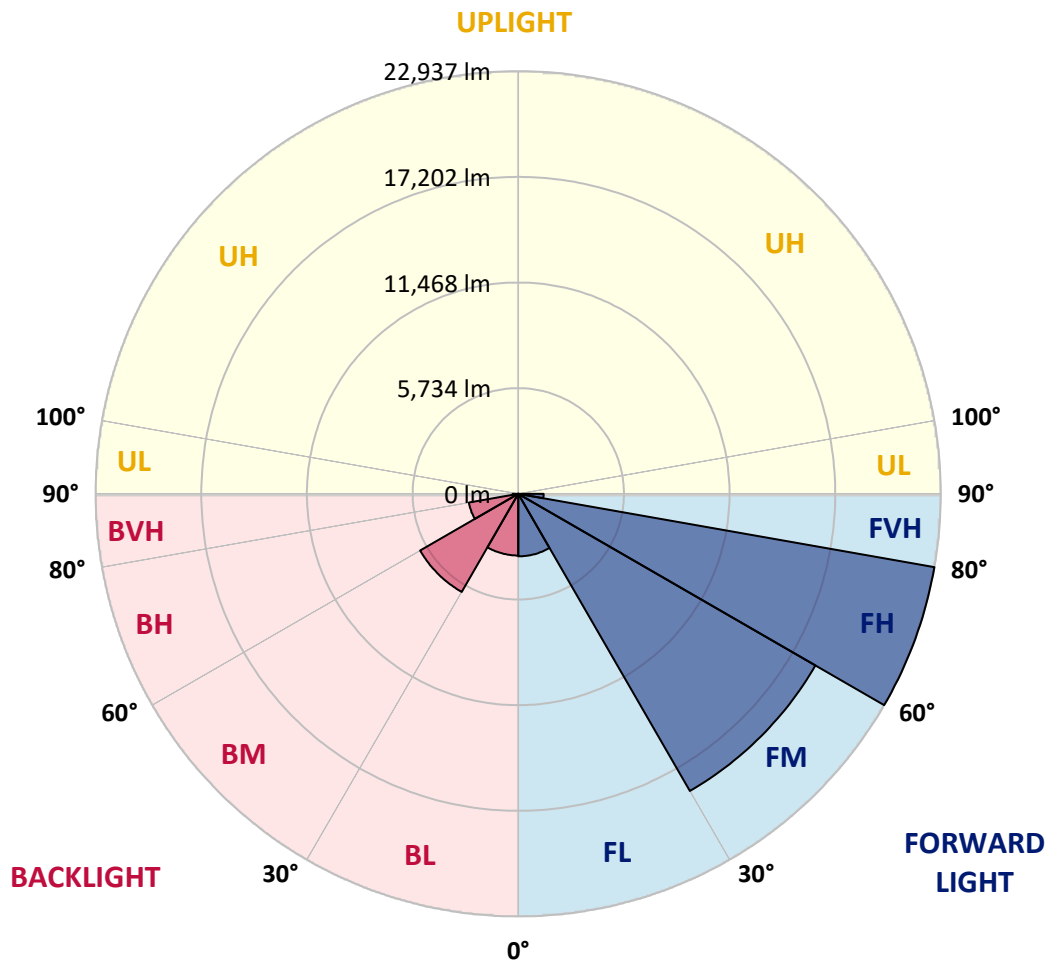


REPORT NUMBER: P651650
 CATALOG NUMBER: GALN-SA9D-840-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3392.4	5.8			
FM (30°-60°)	18622.5	31.6			
FH (60°-80°)	22936.5	39.0			G5
FVH (80°-90°)	1374.7	2.3			G5
BL (0°-30°)	3349.9	5.7	B4/5000		
BM (30°-60°)	6150.4	10.5	B4/8500		
BH (60°-80°)	2720.1	4.6	B4/5000		G4/5000
BVH (80°-90°)	303.3	0.5			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5
 Type IV Short





REPORT NUMBER: P651650
 CATALOG NUMBER: GALN-SA9D-840-U-T4FT

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	8985.2	8985.2	8985.2	8985.2	8985.2	8985.2	8985.2	8985.2	8985.2	8985.2	8985.2
2.5°	8303.8	8346.2	8369.0	8450.5	8470.0	8496.2	8564.7	8655.9	8773.3	8877.6	8968.9
5°	7612.6	7677.8	7716.9	7788.7	7928.9	7941.9	8124.5	8333.1	8571.1	8792.8	8975.4
7.5°	6957.3	7029.1	7061.6	7192.1	7377.9	7407.3	7674.6	8003.9	8401.6	8737.4	9017.8
10°	6465.0	6500.9	6572.7	6670.5	6892.2	6911.7	7260.5	7700.7	8215.8	8711.3	9089.5
12.5°	6197.7	6217.3	6233.6	6337.9	6556.4	6585.7	6950.8	7449.7	8069.1	8730.9	9206.9
15°	6236.9	6243.3	6171.6	6191.2	6367.2	6409.6	6771.5	7283.4	7977.8	8779.8	9383.0
17.5°	6566.1	6543.3	6367.2	6276.0	6399.8	6419.4	6735.7	7218.1	7935.4	8871.1	9565.5
20°	7084.5	7051.9	6748.7	6546.5	6618.2	6634.6	6853.0	7267.1	7977.8	9021.1	9849.2
22.5°	7730.1	7716.9	7257.2	7012.8	7009.5	7009.5	7123.6	7443.1	8105.0	9226.4	10145.8
25°	8633.1	8564.7	7964.8	7648.5	7560.5	7553.9	7540.9	7733.2	8268.0	9444.9	10498.0
27.5°	9559.0	9441.7	8906.9	8421.2	8232.1	8209.3	8124.5	8144.1	8476.6	9692.7	10898.9
30°	10390.4	10315.4	9813.3	9275.4	9050.4	8998.3	8763.5	8655.9	8825.5	10139.3	11537.9
32.5°	11026.1	10980.4	10589.2	10100.2	9767.6	9757.9	9415.6	9327.5	9369.9	10680.5	12268.3
35°	11541.2	11557.5	11358.6	10934.9	10553.4	10498.0	10269.7	10158.9	10035.0	11463.0	13187.6
37.5°	12245.5	12281.3	12268.3	11903.1	11436.9	11450.0	11397.7	11215.2	10885.9	12336.7	14208.1
40°	13021.4	13047.4	13044.2	12904.0	12659.5	12672.5	12652.9	12444.3	11952.0	13448.4	15342.7
42.5°	14094.0	13970.1	13647.3	13787.5	13931.0	13992.9	14126.6	13927.7	13252.8	14635.2	16408.8
45°	15293.8	15059.0	14328.7	14394.0	14925.3	15042.7	15779.5	15505.7	14664.5	15998.0	17663.9
47.5°	16050.1	15818.6	15202.5	15189.4	15893.6	16007.8	17311.8	17210.8	15949.1	17468.3	19196.2
50°	16725.0	16692.4	15998.0	16164.3	16852.1	17021.7	18981.1	18886.5	17230.3	19202.8	20865.5
52.5°	17725.9	17461.9	16907.5	17249.9	18159.5	18381.2	20637.3	20360.2	18407.3	20735.1	22485.8
55°	18175.8	18113.9	18081.2	18378.0	19626.6	19786.4	22247.8	21612.1	19411.5	22032.7	23718.2
57.5°	19378.8	19264.7	19587.5	19789.7	21354.5	21599.1	23930.2	22919.4	20291.7	23062.9	24318.1
60°	20937.2	20875.3	21171.9	21537.1	23284.6	23656.2	25847.1	24034.4	20999.2	23581.3	23988.8
62.5°	23265.0	23258.5	23203.1	23985.6	26020.0	26362.2	28047.8	25120.1	21110.0	23193.3	22286.9
65°	26603.5	26486.1	26003.6	26857.8	29423.6	29824.6	30339.7	25726.5	20441.7	21201.3	18765.9
67.5°	30095.2	30088.7	29697.5	30805.9	34310.7	34724.7	33205.5	25592.8	18586.6	17174.9	13327.8
70°	32990.3	32850.1	33348.9	36302.7	40554.0	41033.3	35712.6	24018.1	14804.7	11342.3	7919.1
72.5°	33684.7	33691.2	34728.0	40541.0	46549.6	46624.6	36615.7	19466.9	9907.8	6256.4	3961.2
74°	31546.0	31601.4	33208.7	40752.9	47667.9	47328.8	34307.4	15300.3	6699.7	4085.1	2856.0
75°	28794.4	28445.6	30770.1	39341.2	46507.2	46142.1	31604.7	12278.0	5112.0	3263.5	2500.6
77.5°	15394.8	15750.2	19336.4	29358.4	37782.9	37362.3	21429.5	5888.0	2761.4	2272.4	1799.7
80°	5480.5	6044.4	8496.2	15362.2	24223.6	24353.9	10227.3	2699.4	1943.1	1675.8	1271.5
82.5°	2236.6	2298.5	3648.2	6817.1	12300.9	12418.2	4176.3	1604.0	1388.8	1154.1	759.7
85°	873.7	899.8	1613.8	3064.6	5249.0	5591.3	1444.2	847.6	854.2	661.9	388.0
87.5°	293.4	332.5	661.9	1020.5	1783.3	1747.5	420.6	251.0	306.5	286.9	120.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P651650
 CATALOG NUMBER: GALN-SA9D-840-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8985.2	8985.2	8985.2	8985.2	8985.2	8985.2	8985.2	8985.2	8985.2	8985.2	8985.2
2.5°	9014.5	9076.5	9118.9	9164.5	9206.9	9220.0	9210.1	9239.5	9242.8	9246.0	9249.3
5°	9066.7	9151.5	9233.0	9278.6	9298.2	9281.9	9226.4	9197.1	9171.0	9151.5	9158.0
7.5°	9138.5	9259.1	9334.0	9353.6	9301.5	9226.4	9089.5	8982.0	8913.5	8867.8	8864.6
10°	9249.3	9366.6	9428.6	9373.2	9229.7	9047.1	8832.0	8629.8	8476.6	8430.9	8427.7
12.5°	9389.5	9523.1	9519.9	9356.9	9105.8	8779.8	8430.9	8196.2	7987.6	7883.3	7925.7
15°	9572.0	9673.1	9578.6	9285.1	8887.4	8440.8	8010.4	7690.9	7456.1	7345.3	7351.9
17.5°	9783.9	9872.0	9621.0	9158.0	8581.0	8007.2	7508.3	7205.1	7019.3	6937.7	6931.3
20°	10048.0	10074.1	9621.0	8936.3	8186.5	7501.8	7025.8	6813.9	6709.6	6667.2	6680.2
22.5°	10331.7	10279.5	9568.8	8623.3	7668.1	6973.7	6654.2	6559.5	6507.4	6500.9	6507.4
25°	10651.2	10504.5	9461.2	8199.5	7126.9	6517.2	6331.4	6347.7	6357.5	6357.5	6380.2
27.5°	11042.4	10749.0	9281.9	7664.8	6494.4	6093.4	6041.2	6155.3	6207.5	6217.3	6233.6
30°	11557.5	11016.3	8985.2	6996.4	5956.5	5711.9	5803.2	5956.5	6015.2	6051.0	6044.4
32.5°	12170.4	11309.8	8584.2	6328.1	5522.8	5444.5	5555.5	5711.9	5777.2	5796.7	5770.6
35°	12890.9	11642.3	8056.0	5702.1	5144.6	5190.3	5320.7	5369.6	5428.3	5428.3	5441.4
37.5°	13666.9	11909.7	7410.5	5128.3	4851.2	5017.5	5112.0	5066.4	5040.3	5007.7	5024.0
40°	14455.9	12108.5	6572.7	4561.1	4557.8	4838.2	4864.3	4733.8	4629.5	4596.9	4580.6
42.5°	15143.8	12232.4	5816.3	4120.9	4280.7	4662.2	4681.7	4473.0	4306.8	4209.0	4176.3
45°	15955.6	12375.8	5076.2	3755.8	4023.1	4522.0	4570.8	4290.4	4046.0	3840.6	3788.4
47.5°	17067.3	12701.9	4492.6	3472.2	3837.3	4433.9	4502.4	4140.5	3817.7	3550.4	3508.0
50°	18322.5	13148.5	4039.4	3279.8	3693.8	4355.7	4440.4	3987.3	3605.8	3309.2	3276.5
52.5°	19473.4	13389.8	3648.2	3107.0	3553.6	4212.2	4358.9	3876.4	3397.1	3067.9	3038.5
55°	20102.6	12998.6	3263.5	2937.4	3361.3	4026.4	4244.9	3723.2	3195.0	2940.7	2898.3
57.5°	20187.4	12190.0	2914.7	2754.9	3159.1	3798.2	4032.9	3537.3	3064.6	2852.7	2816.8
60°	19532.1	10983.7	2644.0	2604.9	2953.8	3540.6	3794.9	3374.3	2931.0	2754.9	2719.0
62.5°	17901.9	9673.1	2455.0	2468.0	2745.1	3270.0	3618.8	3217.8	2803.8	2647.3	2614.7
65°	15098.1	7984.3	2272.4	2327.8	2559.2	3058.1	3459.1	3087.5	2676.7	2565.8	2536.5
67.5°	10488.2	5764.1	2122.4	2181.1	2383.2	2842.9	3273.3	2947.3	2533.2	2474.6	2428.9
70°	5806.5	3547.2	1946.3	2014.8	2200.6	2601.6	3064.6	2735.4	2324.5	2298.5	2233.3
72.5°	3051.6	2259.3	1747.5	1822.4	1952.9	2292.0	2745.1	2503.8	2119.2	2008.3	1923.5
74°	2383.2	1851.8	1613.8	1692.1	1780.1	2109.4	2556.1	2337.6	1972.5	1842.0	1776.9
75°	2076.8	1649.7	1499.7	1600.8	1679.1	1985.5	2409.3	2220.2	1890.9	1767.0	1708.3
77.5°	1467.1	1235.6	1225.8	1346.4	1388.8	1741.0	2171.3	2021.3	1685.5	1555.1	1499.7
80°	1030.2	925.9	971.5	1046.5	1105.2	1538.9	2014.8	1747.5	1382.4	1229.1	1209.5
82.5°	671.6	606.4	694.4	762.9	782.5	1134.6	1626.8	1326.9	1007.4	818.3	759.7
85°	309.7	303.2	397.7	388.0	384.7	554.2	965.0	775.9	580.3	433.6	407.5
87.5°	78.2	75.0	97.8	81.5	97.8	84.8	88.1	22.8	3.3	0.0	0.0
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)