

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: P459436

Luminaire Tested: **GALN-SA8D-735-U-T3R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P459436
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA8D-735-U-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 59550 lumens
Efficiency: N/A
Efficacy: 120.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B4 - U0 - G5

Input Watts (W): 493
Input Voltage (V): NR
Input Current (A_{in}): 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

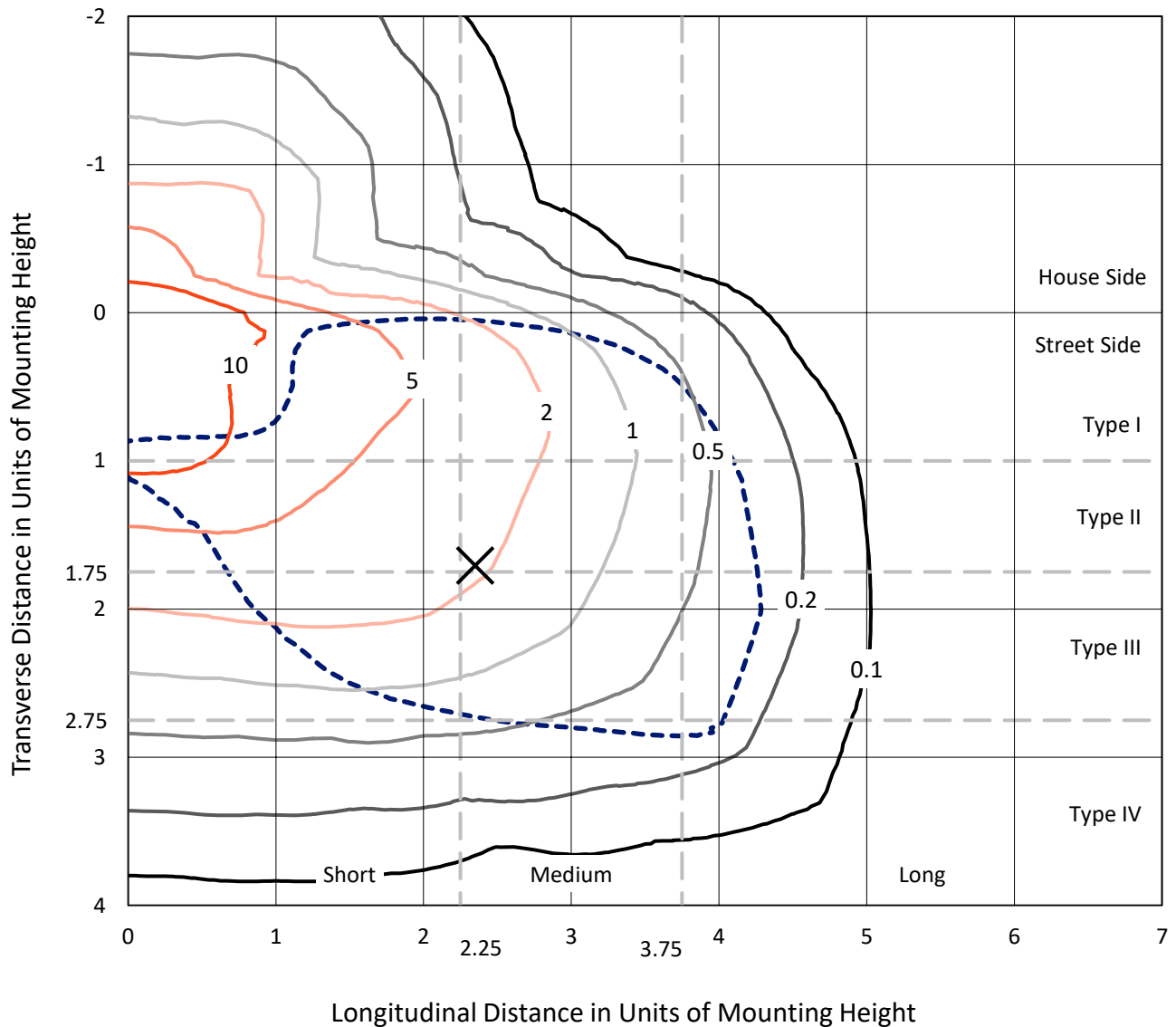




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Iso-Footcandle Lines of Horizontal Illumination

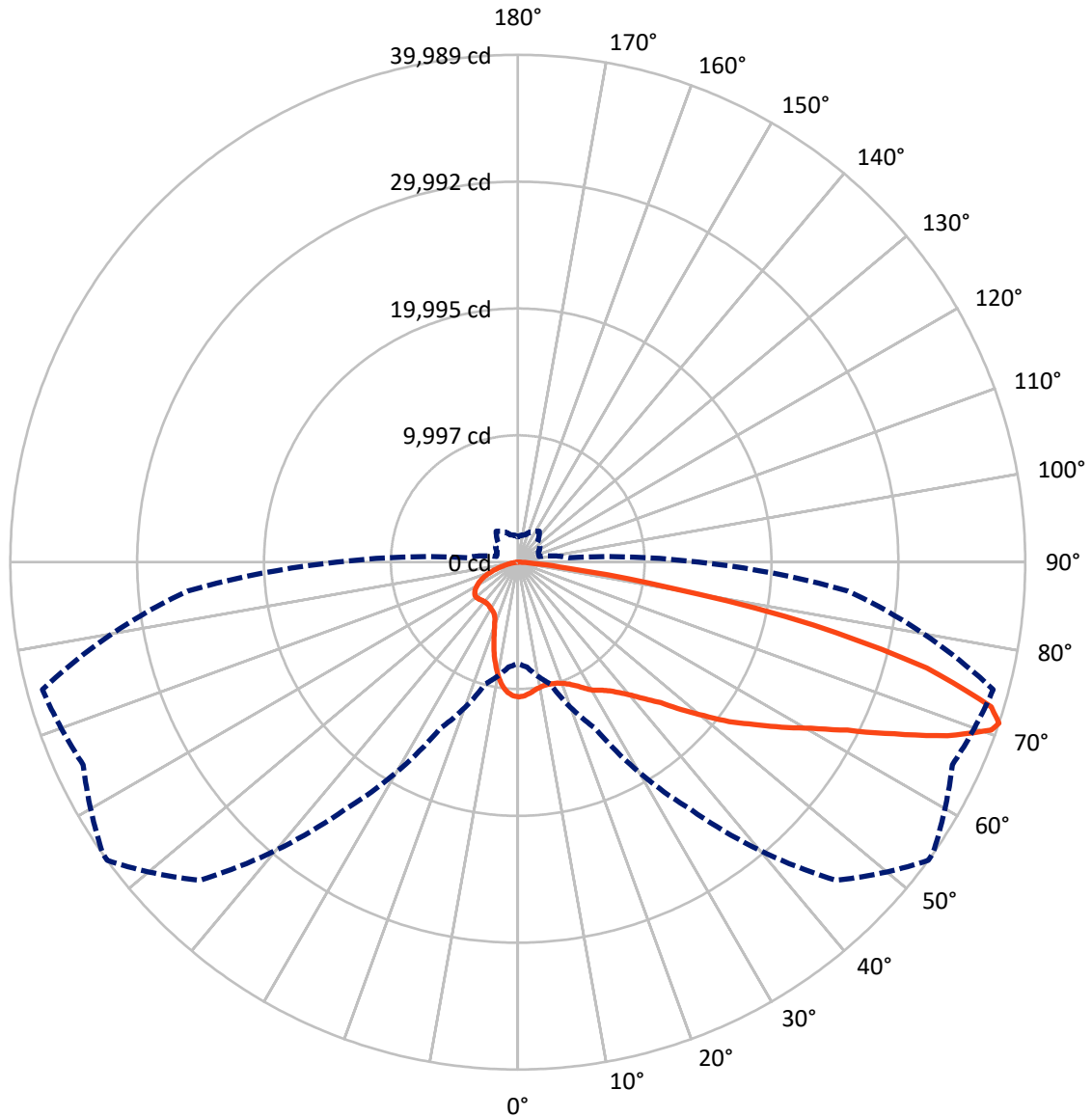
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 17.1 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10751.4	0.0	10751.4
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	48798.6	0.0	48798.6
	% Fixture	81.9	0.0	81.9
Total	Lumens	59550.0	0.0	59550.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	946.8	1.6
10°-20°	2500.1	4.2
20°-30°	4162.7	7.0
30°-40°	6155.3	10.3
40°-50°	8669.9	14.6
50°-60°	11609.4	19.5
60°-70°	14632.8	24.6
70°-80°	9994.1	16.8
80°-90°	878.9	1.5
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°	59550.0	100.0
0°-180°	59550.0	100.0

Coefficient of Utilization



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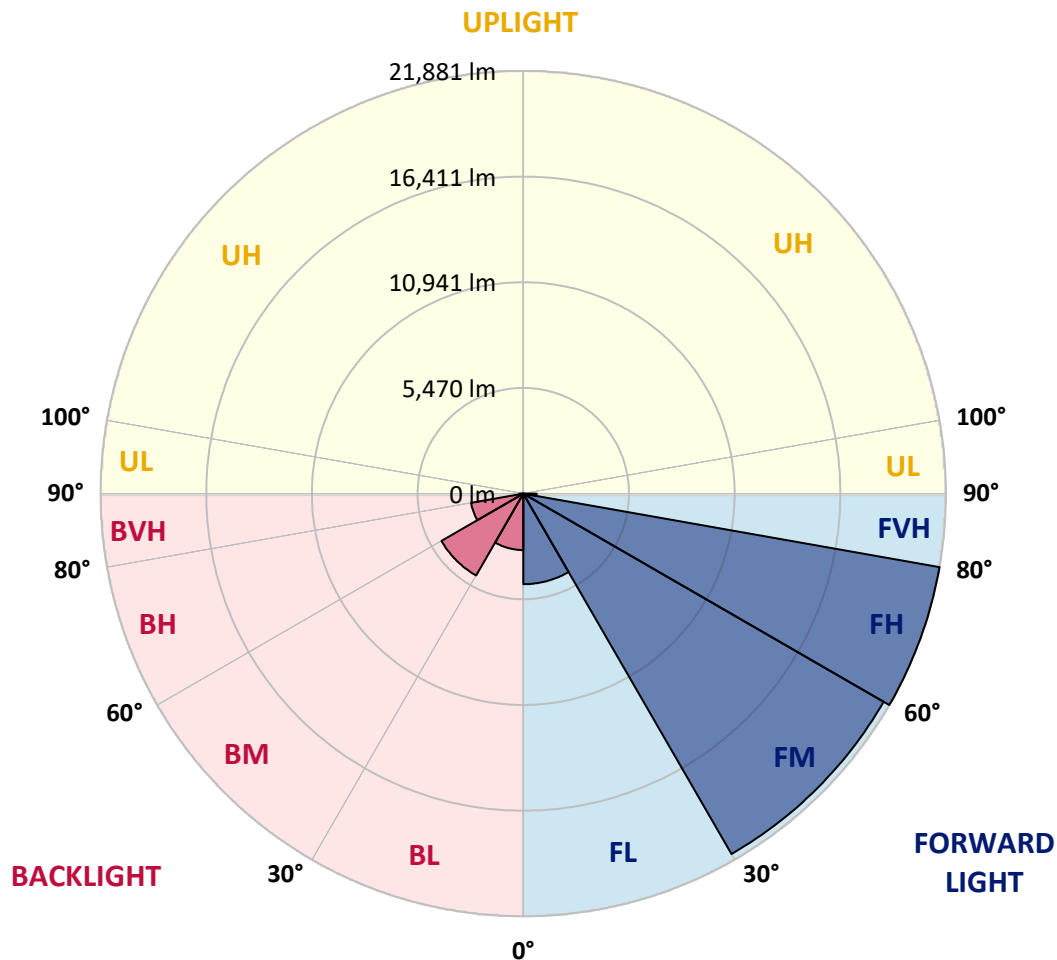
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4687.6	7.9			
FM	(30°-60°)	21543.0	36.2			
FH	(60°-80°)	21881.0	36.7			G5
FVH	(80°-90°)	687.0	1.2			G4/750
BL	(0°-30°)	2922.0	4.9	B4/5000		
BM	(30°-60°)	4891.6	8.2	B3/5000		
BH	(60°-80°)	2745.9	4.6	B4/5000		G4/5000
BVH	(80°-90°)	191.9	0.3			G2/225
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 Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	10624.6	10624.6	10624.6	10624.6	10624.6	10624.6	10624.6	10624.6	10624.6	10624.6	10624.6
2.5°	10264.3	10312.6	10325.5	10357.6	10425.2	10479.9	10534.5	10528.1	10605.3	10637.5	10666.4
5°	9807.6	9820.4	9868.7	9933.0	10052.0	10203.2	10351.2	10354.4	10544.2	10695.4	10769.4
7.5°	9473.0	9514.9	9547.0	9614.6	9740.0	9904.1	10138.9	10158.2	10495.9	10795.1	10952.7
10°	9254.3	9302.6	9337.9	9421.6	9547.0	9730.4	9984.5	10019.9	10460.6	10952.7	11229.3
12.5°	9054.9	9103.1	9135.3	9244.7	9408.7	9633.9	9920.2	9962.0	10473.4	11136.0	11531.7
15°	9177.1	9215.7	9202.8	9235.0	9344.4	9601.7	9945.9	9987.7	10521.7	11313.0	11830.8
17.5°	9720.7	9752.9	9646.7	9524.5	9473.0	9662.8	10026.3	10071.3	10618.2	11496.3	12136.4
20°	10521.7	10608.5	10376.9	10103.5	9855.8	9881.6	10193.6	10241.8	10753.3	11679.7	12448.4
22.5°	11563.9	11628.2	11345.1	10894.8	10438.0	10203.2	10444.5	10473.4	10955.9	11917.7	12789.4
25°	12789.4	12828.0	12435.6	11856.6	11197.2	10753.3	10788.7	10840.1	11290.4	12187.9	13091.8
27.5°	13979.6	14101.8	13648.3	12940.6	12072.1	11332.3	11261.5	11293.7	11653.9	12339.1	13300.9
30°	15391.7	15382.0	14902.7	14082.5	12969.5	11962.7	11708.6	11702.2	11850.1	12413.1	13452.0
32.5°	16517.5	16649.4	16179.8	15285.5	13995.7	12615.7	12017.4	12004.5	12001.3	12541.7	13677.2
35°	17797.7	17817.0	17386.0	16485.3	15105.4	13436.0	12448.4	12384.1	12310.1	12818.4	13982.8
37.5°	18942.9	19032.9	18637.3	17627.3	16195.8	14288.4	13040.3	12998.5	12773.3	13297.6	14471.7
40°	19837.1	19904.6	19666.6	18704.8	17270.2	15208.3	13793.0	13715.8	13442.4	14082.5	15124.7
42.5°	20129.8	20268.1	20361.4	19888.6	18505.4	16298.8	14719.4	14622.9	14413.8	15272.7	15877.4
45°	20152.3	20371.1	20863.2	20885.7	19747.0	17604.7	15800.2	15732.6	15716.6	16797.4	16935.7
47.5°	19981.8	20203.8	21030.5	21477.6	20853.6	18923.6	17360.3	17254.1	17263.8	18682.3	18122.6
50°	19570.1	19833.9	20837.5	21857.2	21718.8	20293.9	19007.2	18971.8	19171.2	20834.3	19354.6
52.5°	18794.9	19113.3	20638.0	22095.2	22362.2	21474.4	20879.3	20779.6	21284.6	23169.5	20702.4
55°	16649.4	17128.7	19907.9	22227.1	22973.3	22603.4	22564.8	22744.9	23414.0	25717.1	22185.2
57.5°	15530.0	15890.3	18322.1	22249.6	23745.3	23915.8	24533.4	24578.4	25749.3	28422.3	23861.1
60°	14918.8	15237.3	17453.6	22101.6	24822.9	25540.2	26547.0	26707.9	28029.9	31352.7	25598.1
62.5°	14384.9	14658.3	16932.5	21590.2	26038.8	27949.5	29155.7	29232.9	30619.3	34588.7	27312.6
65°	13127.2	13439.2	15883.8	21078.7	27087.4	30960.3	32616.9	32526.8	33376.0	37380.7	28387.0
67.5°	11432.0	11827.6	13924.9	19312.8	27605.3	34250.9	36515.4	36402.9	36097.3	39211.0	28695.8
70°	9267.2	9479.5	11419.1	16260.2	25537.0	35978.3	39593.8	39474.8	37782.8	39452.2	27235.4
71°	7974.1	8305.4	9942.7	14442.8	23816.1	35450.7	39989.4	39957.3	37786.0	38786.4	26135.3
72.5°	6224.2	6426.9	7874.4	11190.7	20242.4	32452.8	39011.6	39133.8	36965.8	36936.8	23867.6
75°	3937.2	4027.2	4940.8	6587.7	11107.1	22983.0	33302.0	33633.3	32822.7	30233.3	17749.5
77.5°	2287.0	2402.8	2959.3	3882.5	4799.2	12474.2	23829.0	24189.2	22806.1	16646.2	7266.4
80°	1331.7	1460.4	1949.3	2254.9	2203.4	4628.8	12133.2	12747.6	9875.1	4204.2	2039.4
82.5°	739.8	826.7	1370.3	1373.5	1174.1	1511.8	3818.2	3995.1	2817.8	1695.2	833.1
85°	537.2	607.9	884.6	800.9	562.9	649.8	1328.5	1392.8	1138.7	714.1	270.2
87.5°	189.8	270.2	485.7	386.0	154.4	135.1	382.8	312.0	289.5	199.4	61.1
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	10624.6	10624.6	10624.6	10624.6	10624.6	10624.6	10624.6	10624.6	10624.6	10624.6	10624.6
2.5°	10682.5	10688.9	10656.8	10598.9	10541.0	10467.0	10383.4	10319.0	10290.1	10286.9	10283.6
5°	10798.3	10814.4	10692.2	10512.0	10312.6	10068.1	9859.0	9621.0	9559.9	9463.4	9492.3
7.5°	10984.9	10975.2	10734.0	10351.2	9884.8	9366.9	8929.4	8675.3	8411.5	8337.6	8340.8
10°	11251.8	11190.7	10734.0	10023.1	9244.7	8475.9	7864.7	7478.7	7269.6	7095.9	7031.6
12.5°	11534.9	11380.5	10631.0	9563.1	8421.2	7478.7	6822.5	6301.4	6166.3	6024.8	6028.0
15°	11805.1	11547.8	10428.4	8916.6	7533.4	6414.0	5777.1	5465.1	5423.3	5439.4	5436.1
17.5°	12049.6	11666.8	10119.6	8196.0	6497.6	5500.5	5162.7	5185.2	5297.8	5378.2	5387.9
20°	12297.3	11737.6	9659.6	7231.0	5519.8	4947.2	4960.1	5137.0	5307.5	5416.8	5432.9
22.5°	12532.1	11769.7	9119.2	6298.2	4812.1	4712.4	4902.2	5092.0	5259.2	5365.4	5381.5
25°	12686.5	11695.7	8353.6	5323.6	4464.7	4628.8	4828.2	4989.0	5130.6	5239.9	5265.7
27.5°	12728.3	11457.7	7404.7	4535.5	4303.9	4548.3	4731.7	4850.7	4960.1	5063.0	5082.3
30°	12705.8	11107.1	6362.5	4072.3	4210.6	4455.1	4596.6	4683.4	4815.3	4895.7	4911.8
32.5°	12670.4	10698.6	5275.3	3824.6	4133.4	4368.2	4451.8	4529.0	4525.8	4493.7	4516.2
35°	12683.3	10209.7	4393.9	3676.6	4065.8	4303.9	4374.6	4278.1	4001.5	3988.6	3975.8
37.5°	12750.8	9727.2	3753.8	3573.7	4030.5	4294.2	4332.8	3888.9	3644.5	3531.9	3502.9
40°	12924.5	9164.2	3332.5	3496.5	4027.2	4368.2	4143.0	3692.7	3223.1	3004.4	2988.3
42.5°	13156.1	8611.0	3075.1	3448.3	4065.8	4480.8	4065.8	3416.1	2904.6	2776.0	2756.7
45°	13500.3	7977.3	2933.6	3425.7	4123.7	4522.6	4040.1	3213.4	2776.0	2673.0	2673.0
47.5°	13889.5	7372.6	2856.4	3409.7	4197.7	4493.7	3811.7	3149.1	2714.9	2727.7	2788.8
50°	14275.5	6848.3	2798.5	3374.3	4262.1	4477.6	3718.4	3145.9	2730.9	2895.0	3004.4
52.5°	14722.6	6478.3	2727.7	3316.4	4262.1	4374.6	3689.5	3210.2	2776.0	2824.2	2872.5
55°	15263.0	6362.5	2637.7	3190.9	4184.9	4117.3	3673.4	3303.5	2808.1	2695.6	2714.9
57.5°	15977.1	6549.1	2550.8	3033.3	4007.9	3850.3	3667.0	3329.2	2734.2	2640.9	2621.6
60°	16807.0	6919.0	2525.1	2872.5	3766.7	3622.0	3628.4	3255.3	2631.2	2534.7	2550.8
62.5°	17389.2	7141.0	2509.0	2750.2	3502.9	3371.1	3535.1	3165.2	2586.2	2502.6	2518.6
65°	17389.2	6870.8	2361.0	2563.7	3162.0	3068.7	3422.5	3052.6	2528.3	2431.8	2415.7
67.5°	16729.8	6082.7	2135.9	2283.8	2785.6	2724.5	3264.9	2917.5	2441.4	2367.5	2328.9
70°	15012.1	4612.7	1852.8	1955.7	2309.6	2364.2	3062.3	2734.2	2296.7	2206.6	2148.7
71°	14256.2	4017.6	1733.8	1788.5	2126.2	2206.6	2965.8	2657.0	2232.4	2103.7	2000.8
72.5°	12799.1	3383.9	1553.6	1576.2	1817.4	1962.2	2763.1	2509.0	2110.1	1926.8	1811.0
75°	9723.9	2470.4	1251.3	1238.4	1344.6	1556.9	2338.5	2235.6	1849.6	1601.9	1534.3
77.5°	4200.9	1344.6	936.0	945.7	913.5	1180.5	1839.9	1920.3	1585.8	1302.7	1241.6
80°	1273.8	775.2	640.1	653.0	611.2	791.3	1296.3	1505.4	1273.8	1013.2	929.6
82.5°	653.0	463.2	437.5	431.0	389.2	447.1	784.9	1029.3	910.3	633.7	559.7
85°	283.1	247.7	215.5	209.1	183.3	160.8	279.8	514.7	482.5	353.8	337.7
87.5°	70.8	64.3	41.8	38.6	22.5	3.2	0.0	0.0	0.0	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)