

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: P457545

Luminaire Tested: **GALN-SA8D-827-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P457545
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA8D-827-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 46183 lumens
Efficiency: N/A
Efficacy: 93.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G5

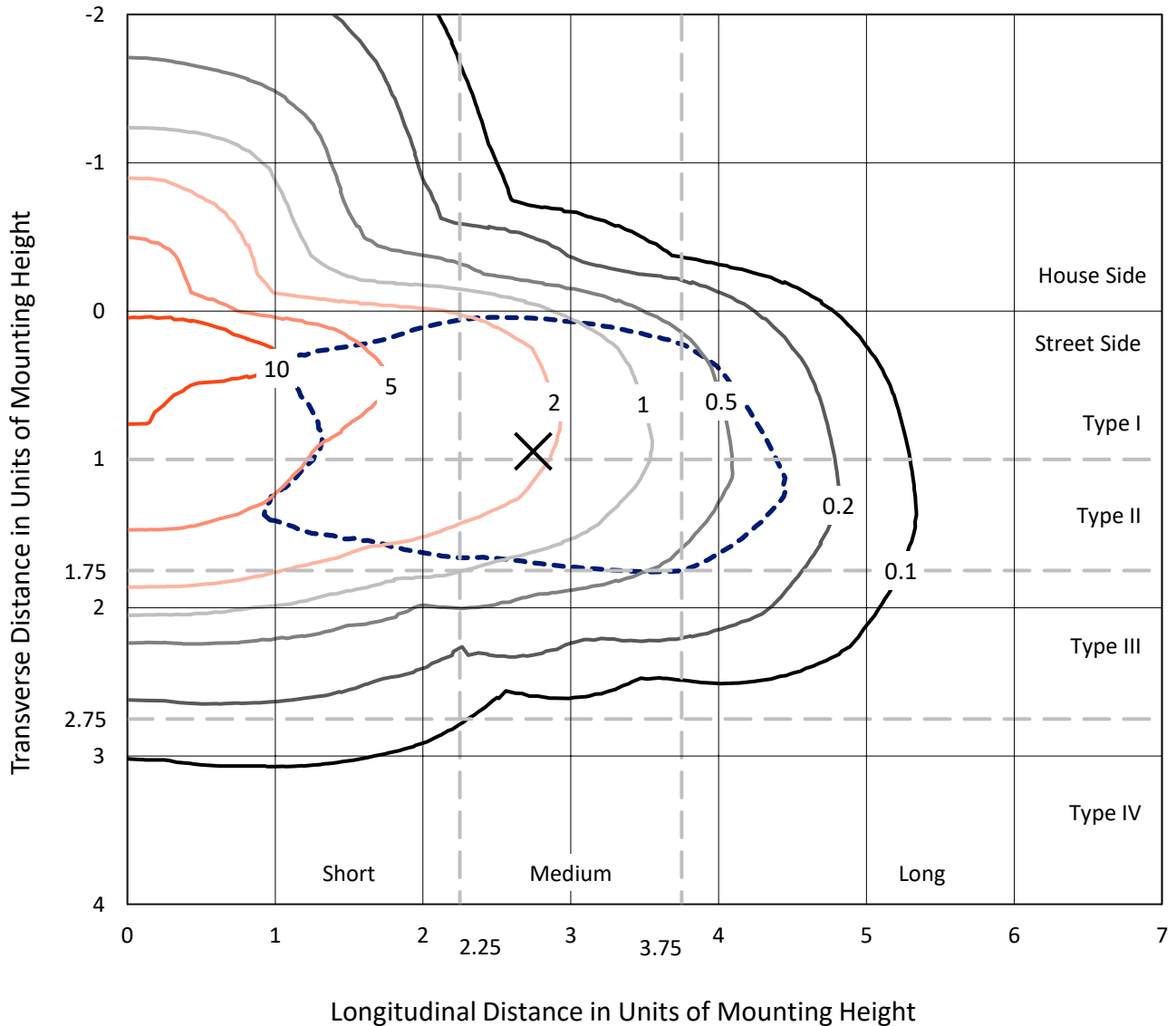
Input Watts (W): 493
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

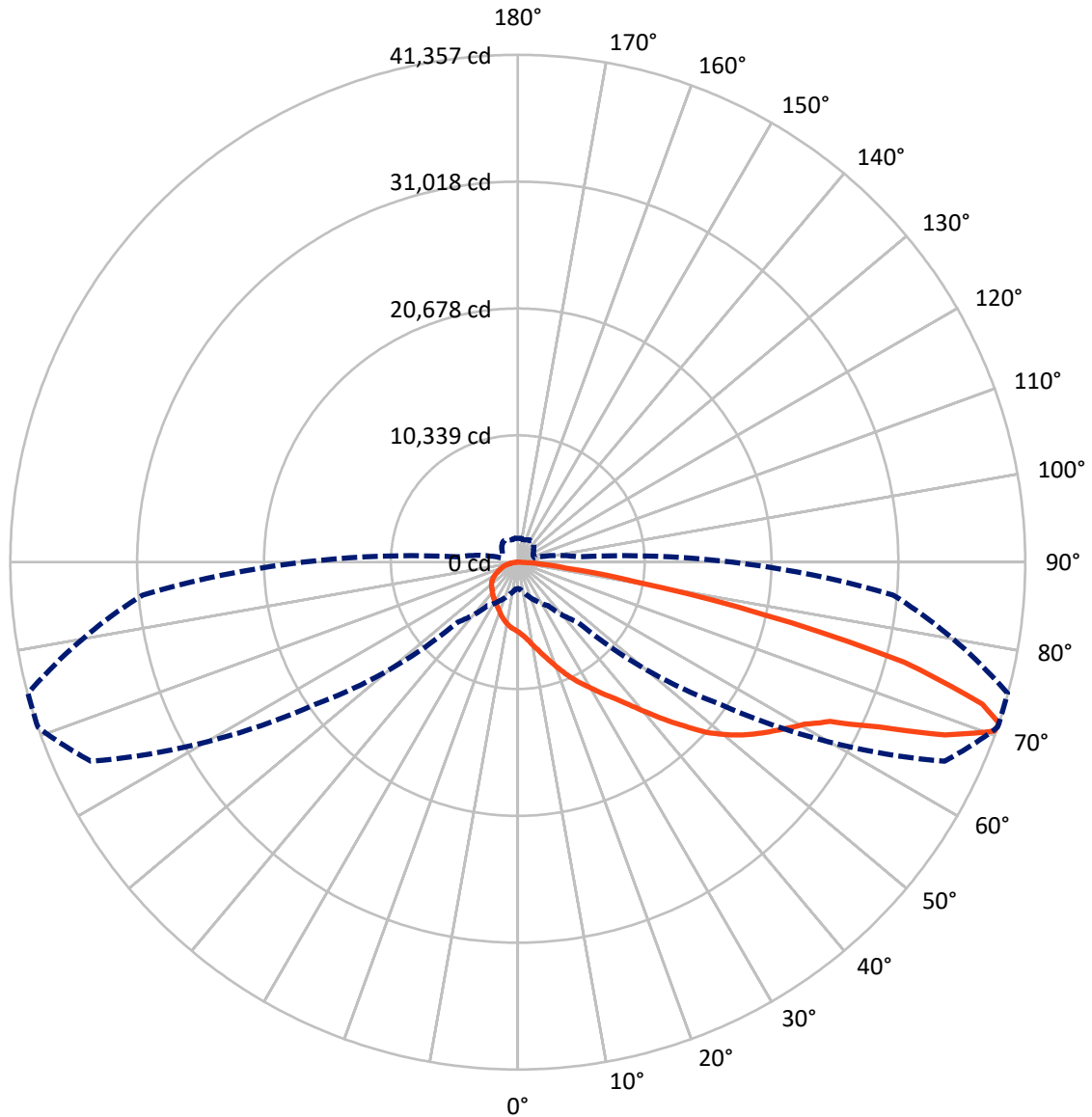
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.9 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8305.9	0.0	8305.9
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	37877.1	0.0	37877.1
	% Fixture	82.0	0.0	82.0
Total	Lumens	46183.0	0.0	46183.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	569.1	1.2
10°-20°	1849.0	4.0
20°-30°	3231.3	7.0
30°-40°	4806.1	10.4
40°-50°	7081.2	15.3
50°-60°	9913.8	21.5
60°-70°	11088.2	24.0
70°-80°	6773.1	14.7
80°-90°	871.3	1.9
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°	46183.0	100.0
0°-180°	46183.0	100.0

Coefficient of Utilization



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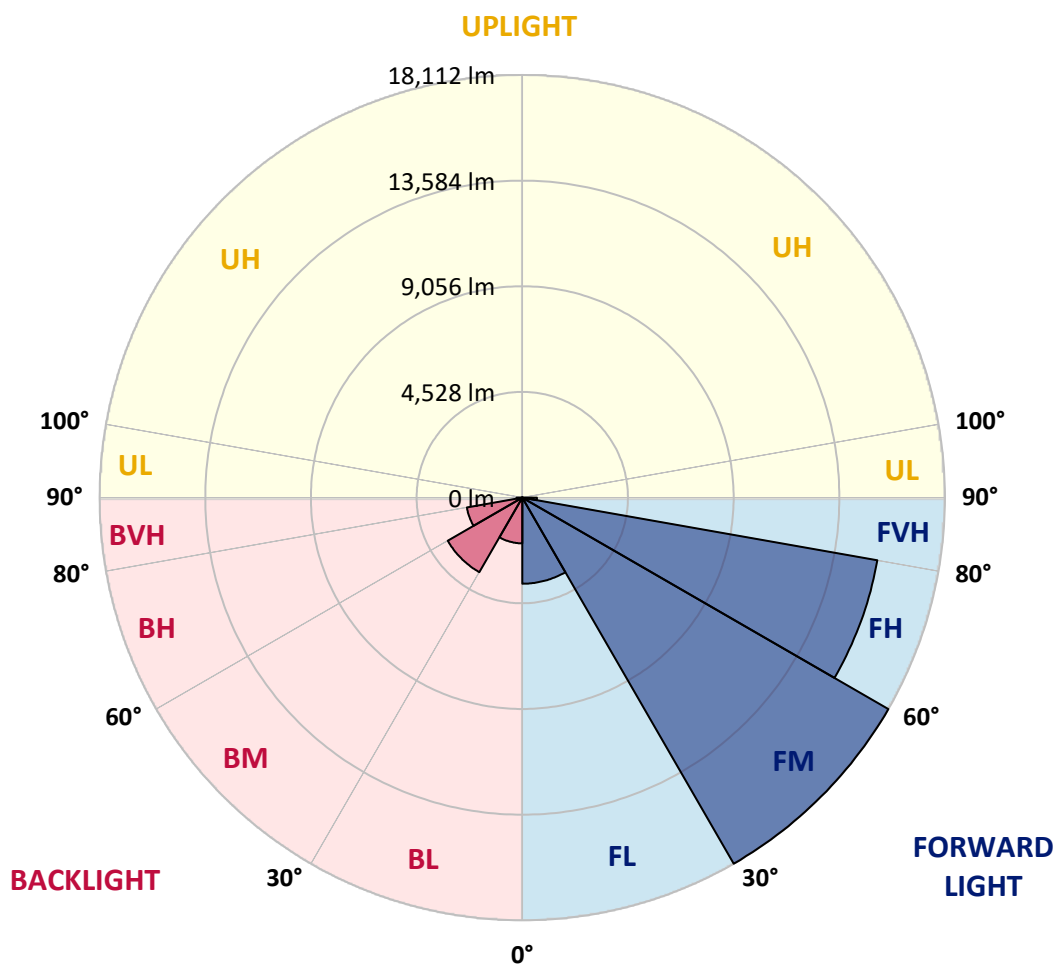
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3690.0	8.0			
FM	(30°-60°)	18112.1	39.2			
FH	(60°-80°)	15448.1	33.4			G5
FVH	(80°-90°)	626.9	1.4			G4/750
BL	(0°-30°)	1959.3	4.2	B3/2500		
BM	(30°-60°)	3689.0	8.0	B3/5000		
BH	(60°-80°)	2413.2	5.2	B3/2500		G3/2500
BVH	(80°-90°)	244.4	0.5			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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	5668.1	5668.1	5668.1	5668.1	5668.1	5668.1	5668.1	5668.1	5668.1	5668.1	5668.1
2.5°	6292.5	6262.0	6264.6	6221.4	6165.6	6104.6	6018.3	5942.2	5881.3	5845.7	5741.7
5°	6972.7	6942.3	6904.2	6810.3	6769.7	6619.9	6429.5	6256.9	6124.9	6051.3	5843.2
7.5°	7523.6	7515.9	7505.8	7452.5	7348.4	7140.3	6977.8	6678.3	6482.9	6343.2	5987.9
10°	7863.7	7876.4	7884.0	7894.2	7851.0	7741.9	7518.5	7140.3	6891.5	6713.8	6175.7
12.5°	8036.3	8049.0	8092.1	8186.1	8244.4	8231.7	8049.0	7678.4	7335.7	7102.2	6376.2
15°	8142.9	8163.2	8239.4	8363.7	8559.2	8683.6	8594.7	8252.1	7876.4	7599.7	6614.8
17.5°	8259.7	8282.5	8366.3	8544.0	8800.3	9069.4	9165.8	8871.4	8462.7	8132.8	6881.4
20°	8325.7	8356.1	8475.4	8709.0	9008.5	9399.4	9719.2	9564.4	9117.6	8752.1	7188.5
22.5°	8432.3	8457.7	8559.2	8807.9	9165.8	9655.7	10272.6	10239.6	9846.1	9374.0	7526.1
25°	8721.6	8762.3	8813.0	8962.8	9308.0	9917.2	10732.0	10960.4	10551.8	10023.8	7835.8
27.5°	9267.4	9300.4	9297.8	9318.1	9513.6	10143.1	11130.5	11673.7	11252.3	10681.2	8135.3
30°	9889.3	9902.0	9912.1	9866.4	9909.6	10374.1	11496.0	12379.4	11958.0	11356.4	8396.7
32.5°	10645.7	10671.1	10584.8	10468.0	10432.5	10716.8	11798.1	13085.0	12793.1	12041.8	8655.6
35°	11539.2	11605.2	11430.0	11224.4	11079.7	11209.2	12204.2	13805.9	13648.5	12917.5	8998.3
37.5°	12559.6	12640.8	12478.3	12074.8	11869.2	11904.7	12734.7	14696.8	14729.8	13915.0	9508.5
40°	13394.7	13501.3	13506.4	12935.2	12623.0	12663.6	13407.4	15656.3	16034.5	15148.7	10110.1
42.5°	13945.5	14049.6	14158.7	13823.7	13496.2	13727.2	14191.7	16697.0	17501.7	16646.3	10950.3
45°	14549.6	14643.5	14704.4	14552.1	14369.4	14968.4	15138.5	17803.7	19065.3	18319.0	11869.2
47.5°	15250.2	15354.3	15412.6	15268.0	15199.4	16057.4	16158.9	18836.8	20735.5	19943.5	12884.5
50°	16184.3	16263.0	16232.5	16141.1	16125.9	16892.5	17138.7	19803.9	22113.8	21692.4	13937.9
52.5°	17346.8	17440.7	17473.7	17344.3	17285.9	17489.0	17928.1	20684.7	23367.7	23195.1	15062.3
55°	18049.9	18199.7	18702.3	18905.4	19045.0	18260.6	18778.4	21656.9	24492.2	24779.0	16270.6
57.5°	17148.8	17341.8	18466.2	19481.6	20793.9	20189.7	19984.1	22672.2	25616.7	26314.7	17717.4
60°	14950.7	14993.8	16443.2	18313.9	20953.8	22669.7	22499.6	24286.6	26835.0	27863.1	19623.7
62.5°	10371.5	10462.9	12176.3	15161.3	18979.0	23563.2	26779.2	27073.6	28581.4	30180.5	22418.4
65°	5348.2	5228.9	6790.0	9528.8	14308.5	21441.1	30246.5	32198.5	32368.6	33805.2	26352.8
67.5°	3292.2	3345.5	4076.5	5564.0	8460.2	15582.7	29883.6	38460.5	37564.5	38254.9	30005.4
70°	2472.3	2538.3	3040.9	3807.5	5157.9	8909.5	24032.7	39978.4	41229.8	41052.1	31117.2
71°	2150.0	2218.5	2741.4	3464.8	4332.9	6876.3	20248.1	38389.4	41356.7	41326.3	30698.4
72.5°	1832.7	1875.8	2284.5	2934.3	3652.6	4820.3	15212.1	34429.7	39592.6	40605.4	29203.3
75°	1439.2	1472.2	1655.0	2238.8	2875.9	2959.7	8163.2	25812.1	32518.3	34447.4	24312.0
77.5°	1172.7	1195.5	1289.5	1662.6	2218.5	2096.6	4282.1	16801.1	20372.5	22314.3	14321.2
80°	931.6	956.9	1012.8	1127.0	1662.6	1495.1	2043.3	8513.5	9841.0	9820.7	5716.3
82.5°	723.4	731.0	797.0	827.5	1137.2	1061.0	1106.7	3604.4	3992.8	4124.8	2063.6
85°	456.9	479.7	705.7	634.6	680.3	621.9	545.7	1431.6	1764.1	1738.7	825.0
87.5°	139.6	147.2	238.6	269.1	302.1	271.6	200.5	421.4	515.3	558.4	205.6
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5668.1	5668.1	5668.1	5668.1	5668.1	5668.1	5668.1	5668.1	5668.1	5668.1	5668.1
2.5°	5701.1	5673.1	5574.1	5492.9	5416.8	5333.0	5261.9	5241.6	5223.8	5216.2	5213.7
5°	5754.4	5670.6	5475.1	5315.2	5188.3	5071.5	4997.9	4964.9	4931.9	4931.9	4942.1
7.5°	5830.5	5678.2	5376.1	5137.5	4977.6	4868.5	4815.2	4810.1	4817.7	4825.3	4827.9
10°	5914.3	5673.1	5231.5	4934.5	4792.3	4741.6	4744.1	4787.3	4827.9	4858.3	4863.4
12.5°	5995.5	5642.7	5061.4	4744.1	4652.7	4662.9	4734.0	4830.4	4909.1	4952.2	4954.8
15°	6086.9	5594.4	4855.8	4563.9	4533.4	4612.1	4744.1	4891.3	5010.6	5081.7	5089.3
17.5°	6163.0	5513.2	4640.0	4388.7	4426.8	4571.5	4754.3	4944.6	5089.3	5178.2	5193.4
20°	6249.3	5409.1	4416.7	4221.2	4330.4	4525.8	4734.0	4939.6	5089.3	5175.6	5195.9
22.5°	6317.9	5261.9	4203.4	4084.1	4244.1	4470.0	4665.4	4830.4	4952.2	4997.9	5028.4
25°	6345.8	5076.6	4002.9	3972.5	4175.5	4378.6	4510.6	4604.5	4642.6	4637.5	4650.2
27.5°	6330.6	4863.4	3830.3	3883.6	4089.2	4236.4	4302.4	4294.8	4226.3	4162.8	4193.3
30°	6267.1	4609.6	3685.6	3792.2	3977.5	4058.8	4048.6	3949.6	3820.2	3700.9	3708.5
32.5°	6152.9	4335.4	3551.1	3688.2	3820.2	3855.7	3787.2	3657.7	3472.4	3317.6	3294.7
35°	6056.4	4074.0	3431.8	3568.9	3662.8	3645.0	3579.0	3411.5	3244.0	3106.9	3084.0
37.5°	6041.2	3850.6	3317.6	3434.3	3487.6	3462.3	3381.0	3238.9	3178.0	3073.9	3061.2
40°	6122.4	3693.2	3200.8	3292.2	3317.6	3297.3	3208.4	3127.2	3183.0	3157.7	3157.7
42.5°	6343.2	3609.5	3096.7	3150.0	3170.4	3185.6	3122.1	3053.6	3122.1	3005.4	2967.3
45°	6693.5	3612.0	3002.8	3010.4	3071.4	3124.7	3081.5	2980.0	2944.4	2710.9	2665.2
47.5°	7208.8	3698.3	2926.7	2878.4	2987.6	3076.4	3015.5	2868.3	2710.9	2556.1	2528.2
50°	7810.4	3853.2	2858.1	2741.4	2875.9	3015.5	2969.8	2797.2	2634.8	2540.9	2523.1
52.5°	8478.0	4048.6	2774.4	2589.1	2738.8	2987.6	2980.0	2787.1	2563.7	2500.2	2485.0
55°	9302.9	4241.5	2670.3	2411.4	2617.0	2964.7	2952.1	2703.3	2548.5	2502.8	2497.7
57.5°	10262.4	4520.7	2520.5	2231.2	2477.4	2870.8	2842.9	2652.5	2497.7	2464.7	2462.2
60°	11808.2	4954.8	2307.3	2066.2	2335.2	2705.8	2741.4	2566.2	2416.5	2408.9	2406.3
62.5°	13841.4	5564.0	2086.5	1896.1	2170.3	2492.6	2594.2	2449.5	2330.2	2368.2	2373.3
65°	16648.8	6076.7	1858.0	1751.4	1987.5	2287.0	2454.5	2340.3	2233.7	2307.3	2307.3
67.5°	18478.9	6086.9	1649.9	1601.7	1802.2	2114.4	2307.3	2210.9	2109.3	2233.7	2238.8
70°	18098.2	5333.0	1477.3	1444.3	1622.0	1929.1	2144.9	2068.7	1952.0	2063.6	2023.0
71°	17483.9	4914.2	1408.8	1383.4	1550.9	1840.3	2068.7	2005.3	1888.5	1962.1	1939.3
72.5°	16504.1	4266.9	1297.1	1302.2	1444.3	1728.6	1962.1	1896.1	1779.4	1820.0	1812.4
75°	13950.6	3726.2	1109.2	1132.1	1241.2	1538.2	1748.9	1698.1	1578.8	1578.8	1571.2
77.5°	8721.6	2604.3	921.4	934.1	1053.4	1317.4	1502.7	1459.5	1345.3	1307.2	1297.1
80°	3254.1	1345.3	720.9	736.1	809.7	1038.2	1243.8	1203.2	1086.4	1043.2	1002.6
82.5°	1231.1	675.2	530.5	517.8	596.5	792.0	974.7	926.5	835.1	731.0	700.6
85°	464.5	335.1	324.9	314.8	350.3	469.6	604.1	594.0	497.5	423.9	416.3
87.5°	121.8	109.1	126.9	93.9	99.0	88.8	91.4	38.1	17.8	7.6	5.1
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)