

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: P457547

Luminaire Tested: **GALN-SA8D-827-U-T2R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P457547  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)  
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-T2R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 46800 lumens  
Efficiency: N/A  
Efficacy: 94.9 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G4

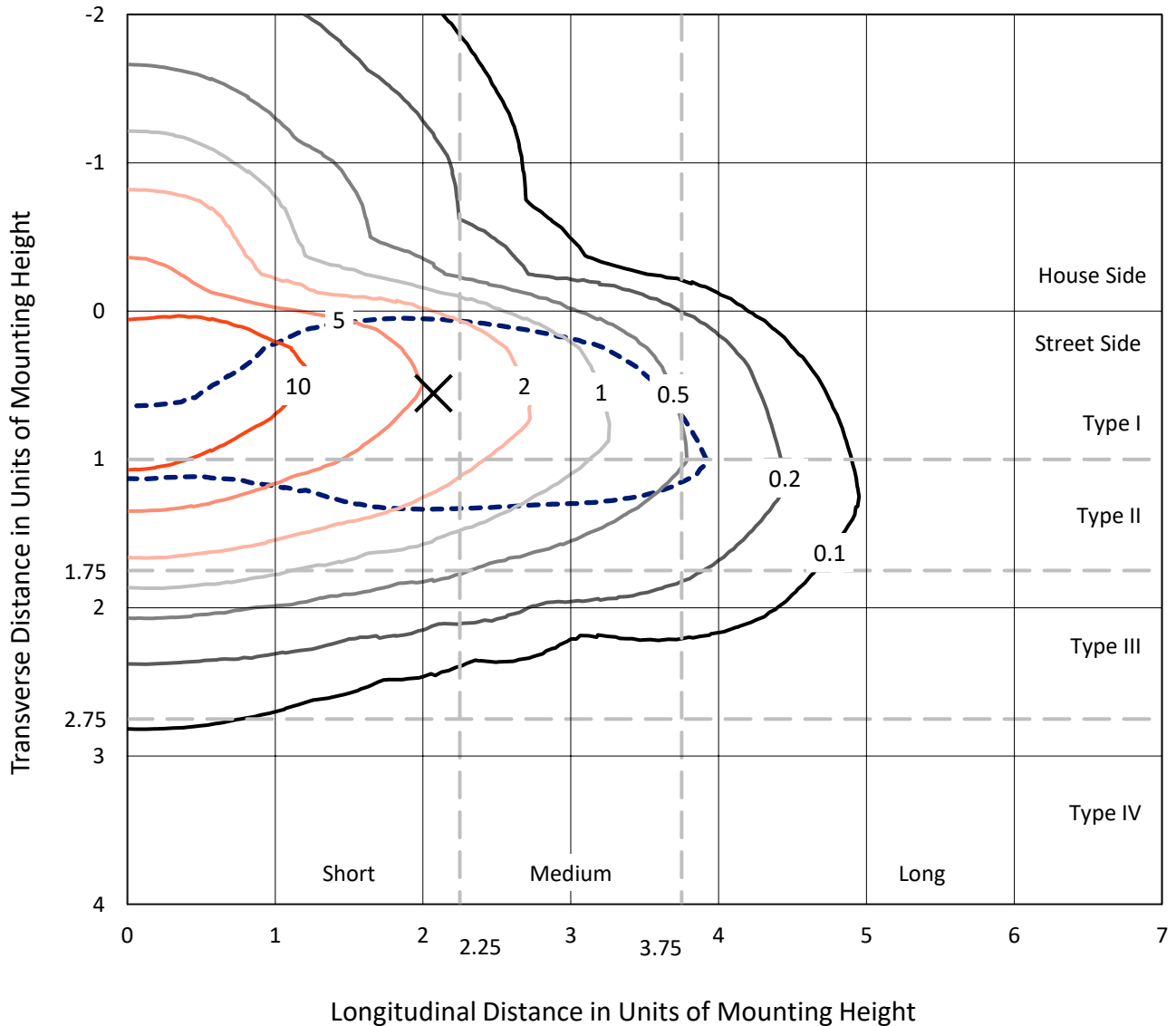
Input Watts (W): 493  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

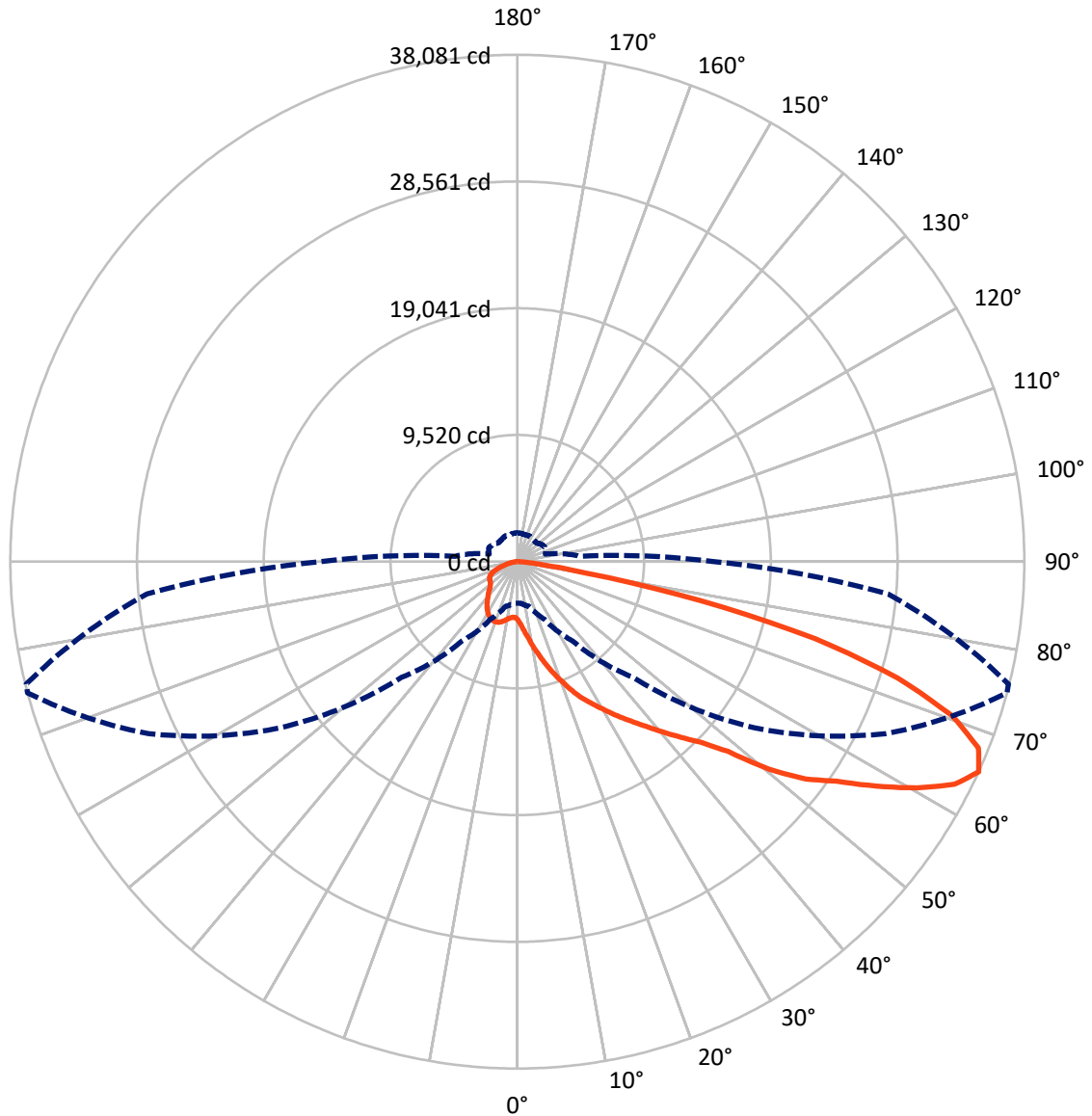
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 18.1 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7867.7	0.0	7867.7
	% Fixture	16.8	0.0	16.8
<b>Street Side</b>	Lumens	38932.3	0.0	38932.3
	% Fixture	83.2	0.0	83.2
<b>Total</b>	Lumens	46800.0	0.0	46800.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	528.3	1.1
10°-20°	2069.3	4.4
20°-30°	3997.2	8.5
30°-40°	6492.7	13.9
40°-50°	8931.2	19.1
50°-60°	10544.7	22.5
60°-70°	9238.9	19.7
70°-80°	4410.7	9.4
80°-90°	586.9	1.3
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°	46800.0	100.0
0°-180°	46800.0	100.0

**Coefficient of Utilization**



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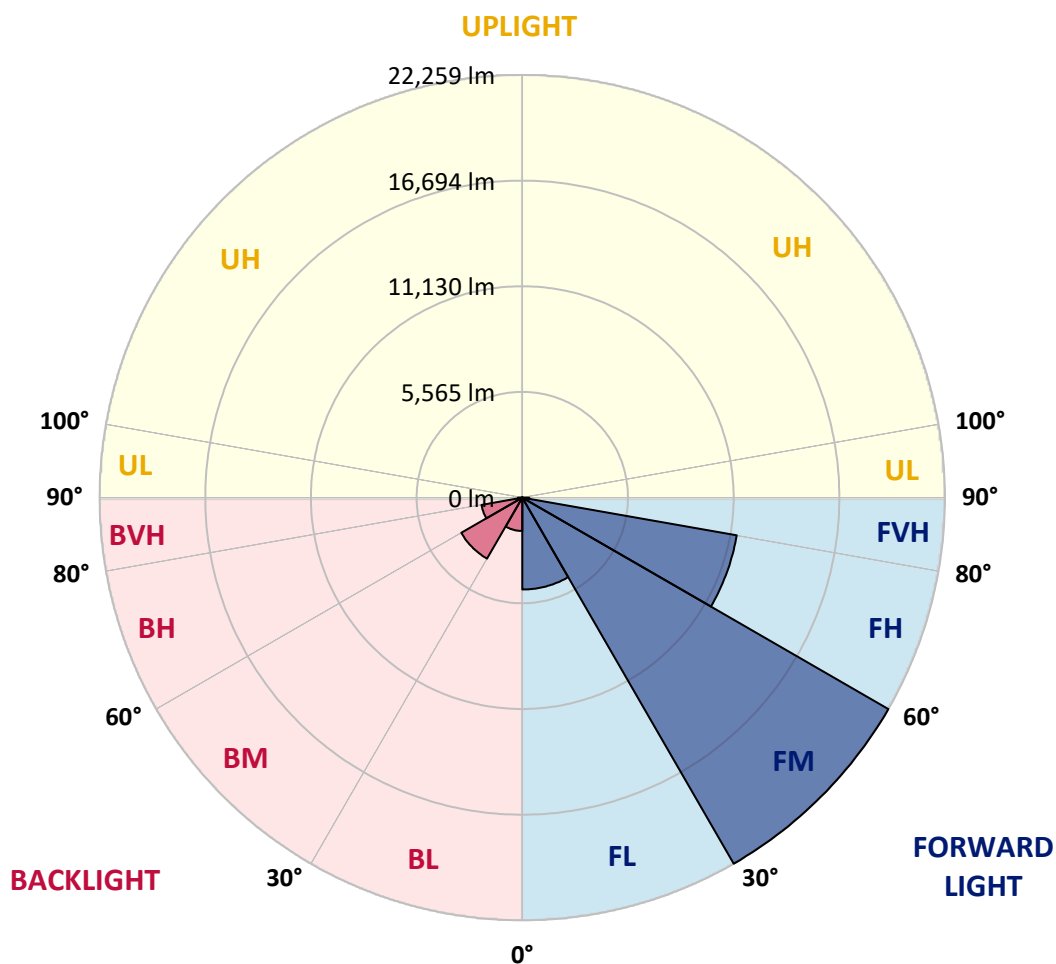
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4838.4	10.3			
FM	(30°-60°)	22259.1	47.6			
FH	(60°-80°)	11468.1	24.5			G4/12000
FVH	(80°-90°)	366.8	0.8			G3/500
BL	(0°-30°)	1756.4	3.8	B3/2500		
BM	(30°-60°)	3709.6	7.9	B3/5000		
BH	(60°-80°)	2181.6	4.7	B3/2500		G3/2500
BVH	(80°-90°)	220.1	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	4348.3	4348.3	4348.3	4348.3	4348.3	4348.3	4348.3	4348.3	4348.3	4348.3	4348.3
2.5°	5777.4	5739.4	5698.7	5587.1	5467.8	5333.2	5140.3	4955.0	4708.8	4701.2	4518.4
5°	7379.2	7353.8	7173.6	7069.5	6792.8	6424.7	6112.5	5627.7	5178.4	5125.1	4769.7
7.5°	8851.5	8752.5	8683.9	8496.1	8221.9	7749.8	7145.6	6490.7	5739.4	5668.3	5079.4
10°	9960.8	9950.6	9915.1	9752.6	9547.0	9077.4	8407.2	7468.0	6450.1	6310.5	5455.1
12.5°	10790.8	10798.4	10793.4	10790.8	10643.6	10245.1	9519.1	8529.1	7168.5	7069.5	5889.1
15°	11336.6	11412.7	11443.2	11570.1	11582.8	11316.3	10691.8	9554.6	7978.2	7831.0	6356.2
17.5°	11697.0	11735.1	11877.3	12093.0	12268.2	12219.9	11664.0	10504.0	8805.8	8559.5	6841.0
20°	12042.3	12108.3	12217.4	12511.9	12821.6	12963.7	12572.8	11476.2	9625.7	9468.3	7376.6
22.5°	12760.6	12854.6	12892.6	13042.4	13306.4	13557.7	13380.0	12407.8	10524.3	10311.1	7945.3
25°	13976.5	14075.5	13968.9	13933.4	14019.7	14144.1	14106.0	13286.1	11372.1	11067.5	8483.4
27.5°	15560.5	15573.2	15365.0	15167.1	14953.8	14890.4	14773.6	14065.4	12108.3	11854.4	9024.1
30°	17261.2	17200.3	16855.1	16497.2	16136.7	15781.3	15446.3	14816.7	12928.2	12636.2	9554.6
32.5°	18840.1	18807.1	18423.8	17867.9	17258.7	16923.6	16245.9	15575.7	13806.5	13524.7	10100.4
35°	20023.0	20071.3	19649.9	19043.2	18378.2	18081.2	17225.7	16372.8	14715.2	14408.1	10694.4
37.5°	20863.3	20837.9	20464.7	19939.3	19355.4	19096.5	18370.5	17243.5	15692.5	15398.0	11344.2
40°	21162.8	21147.6	20870.9	20487.6	20117.0	20025.6	19568.7	18182.7	16811.9	16466.7	12126.0
42.5°	20972.4	21005.4	20822.6	20718.6	20650.0	20716.0	20759.2	19413.8	18032.9	17715.6	12973.9
45°	20388.6	20370.8	20345.4	20515.5	20901.3	21335.4	21937.0	20576.4	19360.5	19106.7	14111.1
47.5°	19345.3	19472.2	19535.7	20005.3	20848.0	21876.1	23292.5	22135.0	21287.2	21066.3	15844.8
50°	17885.7	17987.2	18362.9	19198.1	20454.6	22079.2	24617.6	24683.6	24500.8	24087.1	17728.3
52.5°	15606.2	15763.6	16537.8	18068.5	19647.4	21995.4	25419.7	26869.2	27110.3	26800.6	19583.9
55°	13055.1	13275.9	14093.3	16101.2	18535.5	21538.5	25973.1	28135.8	29097.9	28811.1	21370.9
57.5°	10557.3	10790.8	11631.0	13575.5	16596.2	20528.2	26336.1	29547.2	31803.8	31430.7	23594.6
60°	7912.3	8155.9	8876.8	10879.7	13834.4	18553.3	26089.9	30770.7	34507.3	34347.3	25820.8
62.5°	5104.8	5373.8	6000.8	7658.4	10633.4	15855.0	24772.4	31445.9	36847.7	36654.8	27445.4
65°	3109.6	3140.0	3485.2	4754.5	7277.6	12275.8	21759.3	30549.9	38081.4	38023.0	27940.4
67.5°	2010.4	2058.7	2216.0	2848.1	4363.5	8526.5	17398.3	27592.6	37360.4	37340.1	26917.4
70°	1698.2	1713.4	1784.5	1921.6	2535.9	5170.8	12217.4	22878.8	34621.5	34621.5	24457.7
72.5°	1518.0	1538.3	1563.7	1606.8	1809.9	2929.3	7290.3	17809.5	29892.4	30090.4	20817.6
75°	1378.4	1373.3	1388.5	1396.1	1543.4	1914.0	3769.6	13171.9	23125.0	22729.0	15075.7
77.5°	1180.4	1188.0	1180.4	1213.4	1363.1	1457.1	1914.0	8838.8	14014.6	13501.8	7567.0
80°	969.7	982.4	995.1	1015.4	1165.1	1106.8	1149.9	4028.5	5183.5	5074.3	2337.9
82.5°	728.5	746.3	766.6	814.8	916.4	731.1	726.0	1721.0	1870.8	1713.4	860.5
85°	294.5	347.8	525.5	573.7	576.2	401.1	446.8	718.4	764.1	746.3	337.6
87.5°	68.5	81.2	170.1	256.4	236.1	149.8	165.0	233.5	266.5	246.2	114.2
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°	4348.3	4348.3	4348.3	4348.3	4348.3	4348.3	4348.3	4348.3	4348.3	4348.3	4348.3
2.5°	4434.6	4345.8	4193.5	4076.7	3992.9	3919.3	3873.6	3845.7	3835.6	3833.0	3835.6
5°	4584.4	4427.0	4185.9	4033.5	3949.8	3901.5	3873.6	3871.1	3873.6	3876.2	3868.5
7.5°	4790.0	4564.1	4249.3	4107.2	4043.7	4008.2	3995.5	3990.4	3992.9	3990.4	3990.4
10°	5064.1	4754.5	4373.7	4226.5	4173.2	4132.5	4112.2	4099.5	4089.4	4079.2	4074.2
12.5°	5366.2	4965.1	4508.2	4366.1	4289.9	4226.5	4180.8	4147.8	4124.9	4102.1	4097.0
15°	5703.8	5188.5	4658.0	4460.0	4350.8	4256.9	4178.2	4124.9	4084.3	4051.3	4048.8
17.5°	6026.2	5399.2	4759.5	4503.2	4343.2	4211.2	4107.2	4033.5	3982.8	3939.6	3934.5
20°	6371.4	5599.8	4805.2	4475.2	4267.1	4107.2	3970.1	3881.2	3822.9	3774.6	3767.0
22.5°	6719.2	5769.8	4800.1	4386.4	4135.1	3947.2	3802.6	3708.6	3640.1	3591.9	3574.1
25°	7051.7	5906.9	4736.7	4244.2	3952.3	3756.9	3609.6	3523.3	3462.4	3404.0	3404.0
27.5°	7351.3	5988.1	4617.4	4071.6	3764.5	3558.9	3442.1	3363.4	3307.6	3269.5	3246.6
30°	7645.7	6026.2	4454.9	3853.3	3566.5	3391.3	3297.4	3251.7	3200.9	3157.8	3152.7
32.5°	7909.7	6018.6	4251.9	3640.1	3378.6	3254.3	3216.2	3180.6	3127.3	3066.4	3051.2
35°	8166.1	5967.8	4010.7	3406.6	3221.3	3173.0	3183.2	3132.4	3035.9	2959.8	2947.1
37.5°	8445.3	5876.4	3746.7	3216.2	3089.3	3134.9	3160.3	3048.6	2891.3	2772.0	2744.0
40°	8767.7	5772.4	3472.6	3025.8	2985.2	3099.4	3099.4	2893.8	2678.0	2604.4	2584.1
42.5°	9145.9	5686.1	3244.1	2865.9	2898.9	3013.1	3000.4	2688.2	2599.3	2561.3	2551.1
45°	9745.0	5655.6	3008.0	2726.3	2827.8	2911.6	2807.5	2617.1	2566.3	2535.9	2525.7
47.5°	10691.8	5691.1	2799.9	2622.2	2746.6	2810.0	2591.7	2568.9	2533.3	2490.2	2485.1
50°	11570.1	5658.1	2652.6	2563.8	2675.5	2688.2	2502.9	2510.5	2490.2	2442.0	2431.8
52.5°	12288.5	5554.1	2558.7	2533.3	2614.6	2475.0	2419.1	2447.0	2439.4	2378.5	2368.3
55°	13077.9	5490.6	2513.0	2533.3	2574.0	2289.7	2340.4	2381.0	2370.9	2327.7	2325.2
57.5°	14034.9	5503.3	2480.0	2541.0	2533.3	2195.7	2261.7	2310.0	2307.4	2294.7	2294.7
60°	15014.7	5508.4	2429.3	2538.4	2485.1	2122.1	2180.5	2249.0	2254.1	2261.7	2261.7
62.5°	15339.7	5287.5	2330.3	2492.7	2378.5	2051.0	2104.3	2198.3	2193.2	2213.5	2216.0
65°	14733.0	4675.8	2183.0	2388.7	2241.4	2000.3	2046.0	2132.3	2104.3	2157.7	2167.8
67.5°	13410.5	3868.5	1954.6	2200.8	2089.1	1947.0	2007.9	2040.9	1990.1	2094.2	2096.7
70°	11590.4	3020.7	1665.2	1934.3	1916.5	1891.1	1977.4	1926.7	1855.6	1982.5	1957.1
72.5°	9691.7	2307.4	1330.1	1581.4	1685.5	1807.4	1924.1	1779.4	1680.4	1718.5	1672.8
75°	7280.2	1705.8	1068.7	1238.7	1403.7	1688.0	1875.9	1601.7	1449.4	1413.9	1403.7
77.5°	3711.2	1114.4	799.6	926.5	1053.4	1525.6	1809.9	1393.6	1200.7	1144.8	1119.4
80°	1325.1	693.0	563.5	639.7	710.8	1312.4	1581.4	1152.4	931.6	921.4	931.6
82.5°	614.3	446.8	378.2	418.8	421.4	875.8	1205.7	860.5	708.2	1076.3	908.8
85°	264.0	223.4	213.2	208.2	192.9	390.9	677.8	462.0	720.9	322.4	297.0
87.5°	78.7	88.8	78.7	58.4	43.2	43.2	68.5	25.4	17.8	12.7	12.7
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)