

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: P454305

Luminaire Tested: **GALN-SA5B-827-U-T4FT**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454305
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-SA5B-827-U-T4FT
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 800mA 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: 20902 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

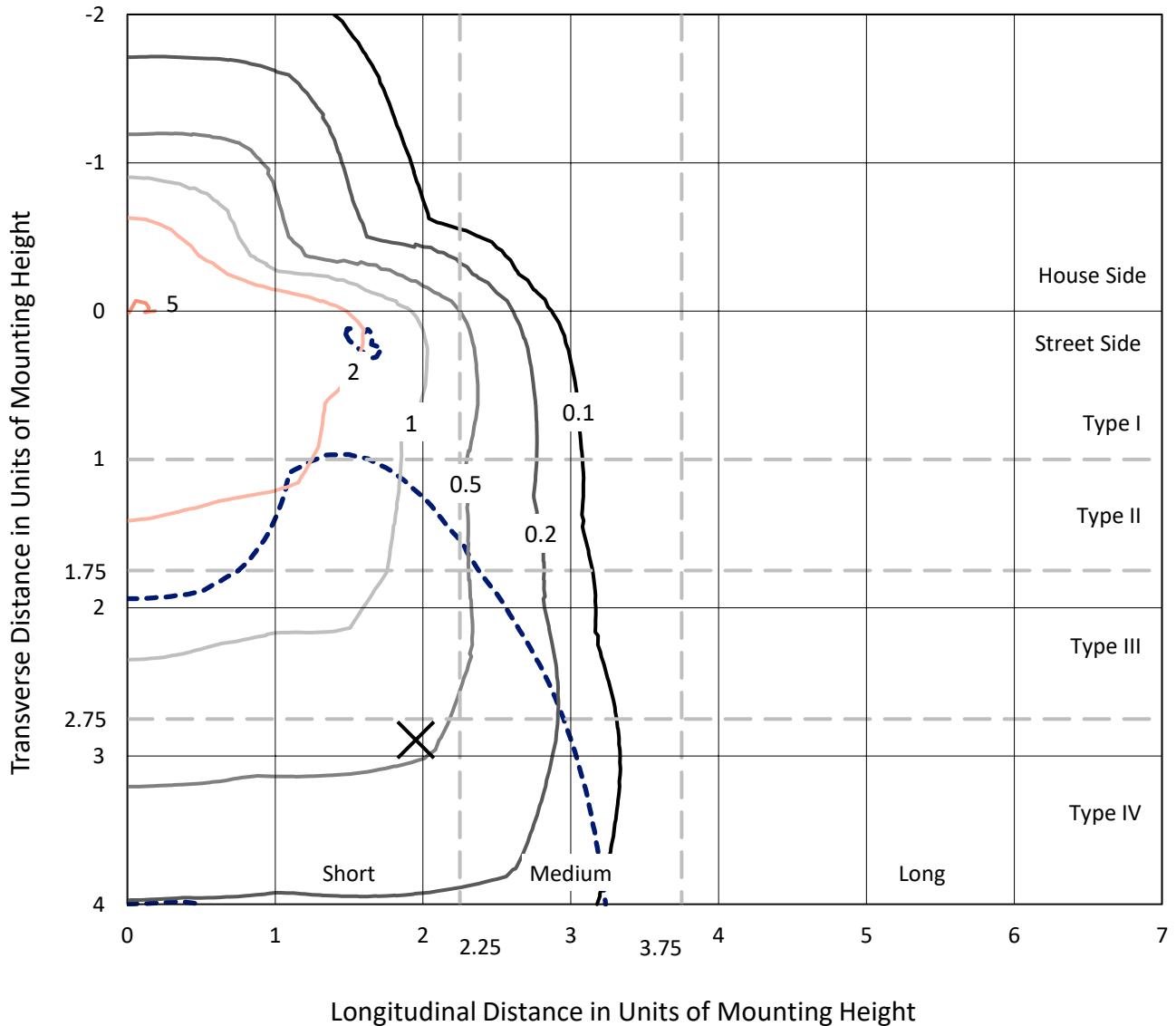
Input Watts (W): 204
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

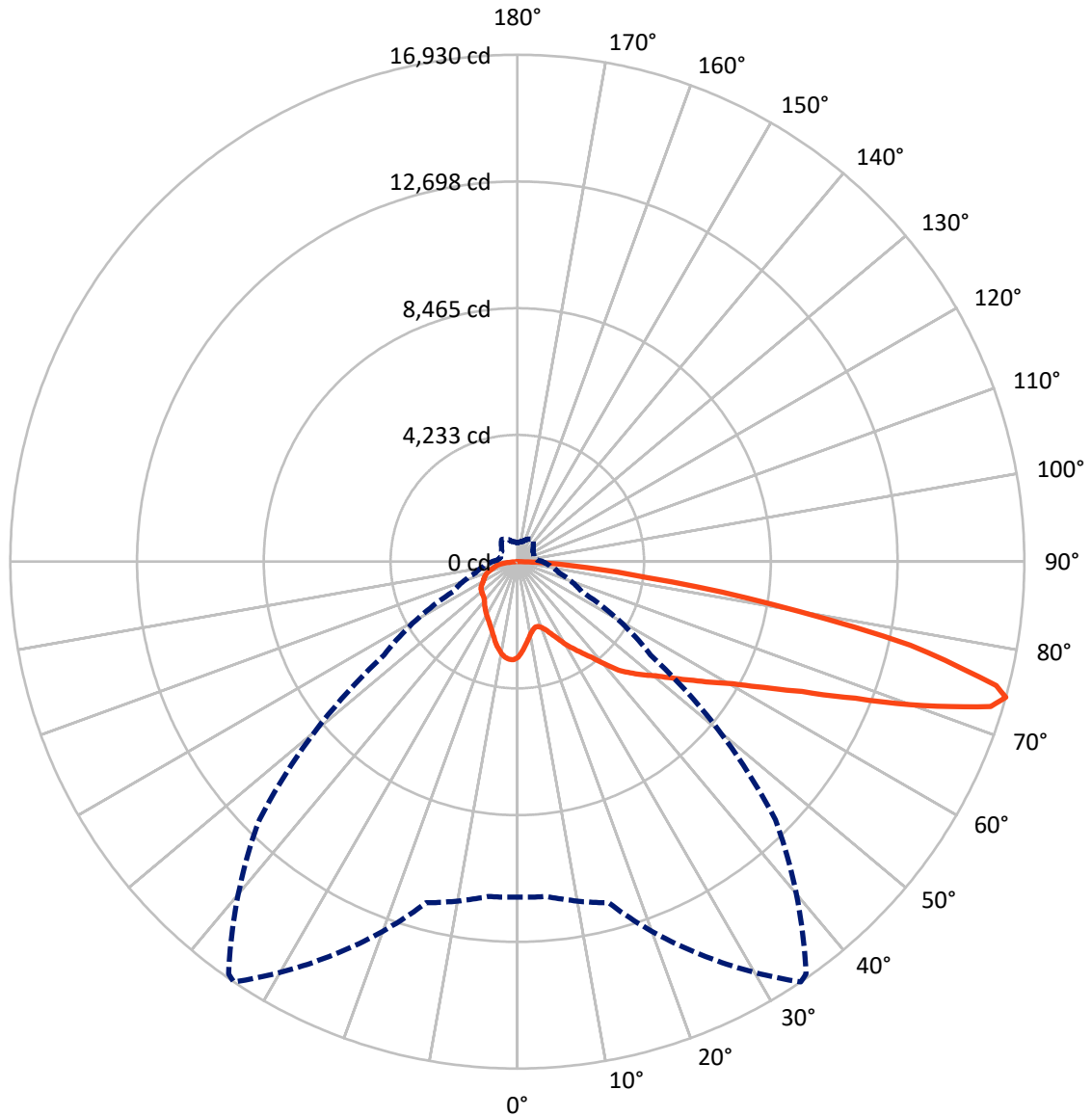
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4448.1	0.0	4448.1
	% Fixture	21.3	0.0	21.3
Street Side	Lumens	16453.9	0.0	16453.9
	% Fixture	78.7	0.0	78.7
Total	Lumens	20902.0	0.0	20902.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.2	1.4
10°-20°	794.5	3.8
20°-30°	1309.9	6.3
30°-40°	1962.1	9.4
40°-50°	2852.4	13.6
50°-60°	3984.2	19.1
60°-70°	4988.0	23.9
70°-80°	4124.6	19.7
80°-90°	596.0	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°	20902.0	100.0
0°-180°	20902.0	100.0

Coefficient of Utilization



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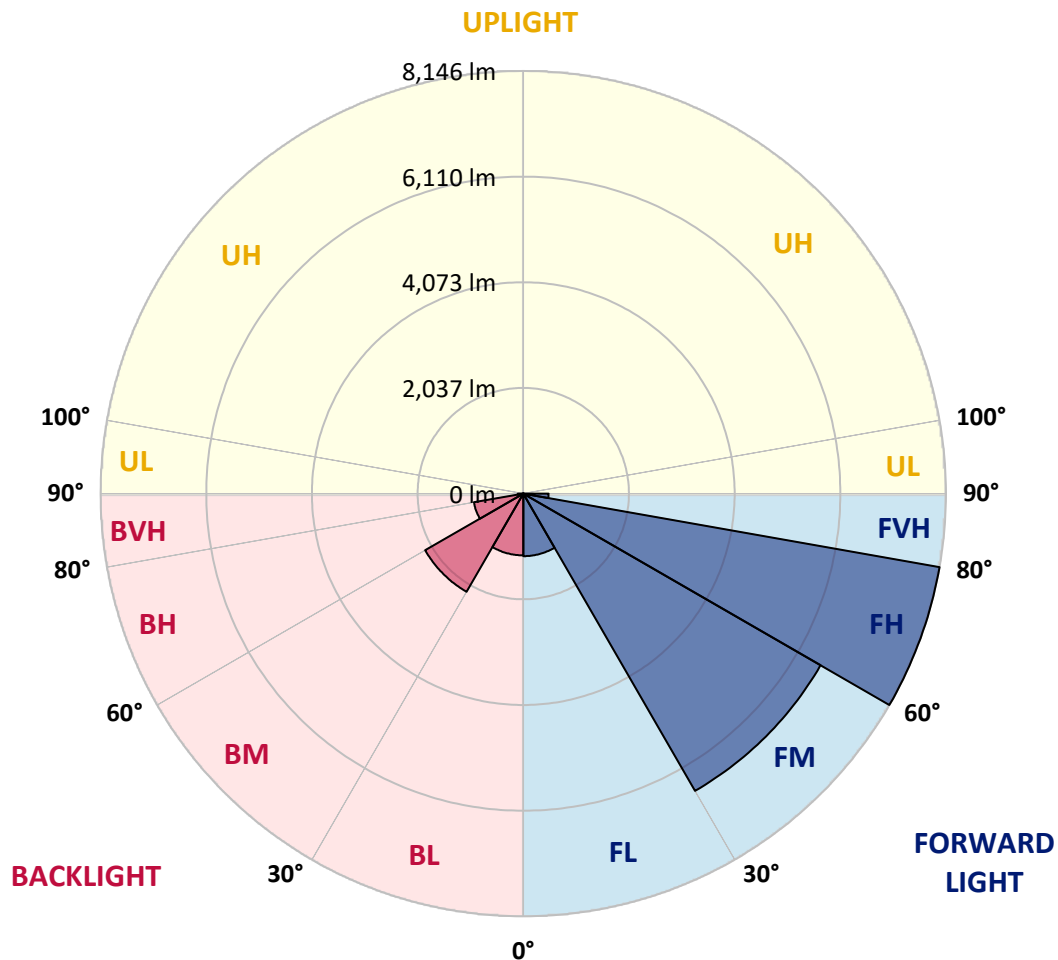
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1204.9	5.8			
FM	(30°-60°)	6614.3	31.6			
FH	(60°-80°)	8146.5	39.0			G4/12000
FVH	(80°-90°)	488.2	2.3			G3/500
BL	(0°-30°)	1189.8	5.7	B3/2500		
BM	(30°-60°)	2184.5	10.5	B2/2500		
BH	(60°-80°)	966.1	4.6	B2/1000		G2/1000
BVH	(80°-90°)	107.7	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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	3191.3	3191.3	3191.3	3191.3	3191.3	3191.3	3191.3	3191.3	3191.3	3191.3	3191.3
2.5°	2949.3	2964.4	2972.5	3001.4	3008.4	3017.6	3041.9	3074.4	3116.1	3153.1	3185.5
5°	2703.8	2727.0	2740.9	2766.4	2816.1	2820.8	2885.6	2959.7	3044.3	3123.0	3187.8
7.5°	2471.1	2496.5	2508.1	2554.4	2620.5	2630.9	2725.8	2842.8	2984.0	3103.3	3202.9
10°	2296.2	2309.0	2334.4	2369.2	2447.9	2454.9	2578.8	2735.1	2918.0	3094.1	3228.4
12.5°	2201.3	2208.2	2214.0	2251.1	2328.6	2339.1	2468.8	2645.9	2865.9	3101.0	3270.1
15°	2215.2	2217.5	2192.0	2199.0	2261.5	2276.5	2405.1	2586.9	2833.5	3118.4	3332.6
17.5°	2332.1	2324.0	2261.5	2229.1	2273.1	2280.0	2392.3	2563.7	2818.5	3150.8	3397.4
20°	2516.2	2504.7	2397.0	2325.2	2350.6	2356.4	2434.0	2581.1	2833.5	3204.1	3498.2
22.5°	2745.5	2740.9	2577.6	2490.8	2489.6	2489.6	2530.1	2643.6	2878.7	3277.0	3603.6
25°	3066.3	3041.9	2828.9	2716.6	2685.3	2683.0	2678.3	2746.7	2936.6	3354.6	3728.6
27.5°	3395.1	3353.4	3163.5	2991.0	2923.8	2915.7	2885.6	2892.6	3010.7	3442.6	3871.0
30°	3690.4	3663.8	3485.4	3294.4	3214.5	3196.0	3112.6	3074.4	3134.6	3601.2	4098.0
32.5°	3916.2	3900.0	3761.0	3587.3	3469.2	3465.8	3344.2	3312.9	3328.0	3793.5	4357.4
35°	4099.2	4104.9	4034.3	3883.8	3748.3	3728.6	3647.6	3608.2	3564.2	4071.4	4683.9
37.5°	4349.3	4362.0	4357.4	4227.7	4062.1	4066.7	4048.2	3983.4	3866.4	4381.7	5046.4
40°	4624.9	4634.1	4633.0	4583.2	4496.3	4501.0	4494.0	4419.9	4245.1	4776.6	5449.3
42.5°	5005.8	4961.8	4847.2	4897.0	4947.9	4969.9	5017.4	4946.8	4707.1	5198.1	5828.0
45°	5432.0	5348.6	5089.2	5112.4	5301.1	5342.8	5604.5	5507.2	5208.5	5682.1	6273.8
47.5°	5700.6	5618.4	5399.5	5394.9	5645.0	5685.6	6148.7	6112.8	5664.7	6204.3	6818.0
50°	5940.3	5928.7	5682.1	5741.1	5985.5	6045.7	6741.6	6708.0	6119.8	6820.4	7410.9
52.5°	6295.8	6202.0	6005.2	6126.7	6449.8	6528.5	7329.9	7231.4	6537.8	7364.6	7986.4
55°	6455.6	6433.6	6422.0	6527.4	6970.9	7027.6	7901.9	7676.1	6894.5	7825.5	8424.1
57.5°	6882.9	6842.4	6957.0	7028.8	7584.6	7671.4	8499.4	8140.4	7207.1	8191.4	8637.2
60°	7436.4	7414.4	7519.8	7649.4	8270.1	8402.1	9180.3	8536.4	7458.4	8375.5	8520.2
62.5°	8263.2	8260.8	8241.2	8519.1	9241.6	9363.2	9961.9	8922.0	7497.8	8237.7	7915.8
65°	9448.9	9407.2	9235.8	9539.2	10450.5	10593.0	10775.9	9137.4	7260.4	7530.2	6665.2
67.5°	10689.1	10686.8	10547.8	10941.5	12186.3	12333.4	11793.8	9089.9	6601.5	6100.1	4733.7
70°	11717.3	11667.5	11844.7	12893.8	14403.8	14574.0	12684.2	8530.6	5258.3	4028.5	2812.7
72.5°	11964.0	11966.3	12334.5	14399.2	16533.3	16559.9	13005.0	6914.1	3519.0	2222.1	1406.9
74°	11204.4	11224.1	11794.9	14474.4	16930.4	16810.0	12185.2	5434.3	2379.6	1450.9	1014.4
75°	10227.1	10103.2	10928.8	13973.0	16518.2	16388.5	11225.2	4360.9	1815.7	1159.1	888.2
77.5°	5467.9	5594.1	6867.8	10427.4	13419.5	13270.2	7611.2	2091.3	980.8	807.1	639.2
80°	1946.5	2146.8	3017.6	5456.3	8603.6	8649.9	3632.5	958.8	690.1	595.2	451.6
82.5°	794.4	816.4	1295.8	2421.3	4369.0	4410.6	1483.3	569.7	493.3	409.9	269.8
85°	310.3	319.6	573.2	1088.5	1864.3	1985.9	513.0	301.1	303.4	235.1	137.8
87.5°	104.2	118.1	235.1	362.4	633.4	620.7	149.4	89.2	108.8	101.9	42.8
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°	3191.3	3191.3	3191.3	3191.3	3191.3	3191.3	3191.3	3191.3	3191.3	3191.3	3191.3
2.5°	3201.7	3223.7	3238.8	3255.0	3270.1	3274.7	3271.2	3281.6	3282.8	3284.0	3285.1
5°	3220.3	3250.4	3279.3	3295.5	3302.5	3296.7	3277.0	3266.6	3257.3	3250.4	3252.7
7.5°	3245.7	3288.6	3315.2	3322.2	3303.6	3277.0	3228.4	3190.2	3165.8	3149.6	3148.5
10°	3285.1	3326.8	3348.8	3329.1	3278.2	3213.3	3136.9	3065.1	3010.7	2994.5	2993.3
12.5°	3334.9	3382.4	3381.2	3323.3	3234.2	3118.4	2994.5	2911.1	2837.0	2799.9	2815.0
15°	3399.8	3435.7	3402.1	3297.9	3156.6	2997.9	2845.1	2731.6	2648.2	2608.9	2611.2
17.5°	3475.0	3506.3	3417.1	3252.7	3047.7	2843.9	2666.8	2559.1	2493.1	2464.1	2461.8
20°	3568.8	3578.1	3417.1	3174.0	2907.6	2664.5	2495.4	2420.1	2383.1	2368.0	2372.6
22.5°	3669.6	3651.0	3398.6	3062.8	2723.5	2476.9	2363.4	2329.8	2311.3	2309.0	2311.3
25°	3783.0	3730.9	3360.4	2912.3	2531.3	2314.8	2248.7	2254.5	2258.0	2258.0	2266.1
27.5°	3922.0	3817.8	3296.7	2722.4	2306.6	2164.2	2145.7	2186.2	2204.7	2208.2	2214.0
30°	4104.9	3912.7	3191.3	2485.0	2115.6	2028.7	2061.2	2115.6	2136.4	2149.2	2146.8
32.5°	4322.6	4016.9	3048.9	2247.6	1961.6	1933.8	1973.2	2028.7	2051.9	2058.8	2049.6
35°	4578.6	4135.1	2861.3	2025.3	1827.3	1843.5	1889.8	1907.2	1928.0	1928.0	1932.6
37.5°	4854.1	4230.0	2632.0	1821.5	1723.0	1782.1	1815.7	1799.5	1790.2	1778.6	1784.4
40°	5134.4	4300.6	2334.4	1620.0	1618.8	1718.4	1727.7	1681.3	1644.3	1632.7	1626.9
42.5°	5378.7	4344.6	2065.8	1463.7	1520.4	1655.9	1662.8	1588.7	1529.7	1494.9	1483.3
45°	5667.0	4395.6	1802.9	1334.0	1428.9	1606.1	1623.5	1523.9	1437.0	1364.1	1345.5
47.5°	6061.9	4511.4	1595.7	1233.2	1362.9	1574.8	1599.1	1470.6	1356.0	1261.0	1246.0
50°	6507.7	4670.0	1434.7	1164.9	1312.0	1547.0	1577.1	1416.2	1280.7	1175.3	1163.7
52.5°	6916.5	4755.7	1295.8	1103.5	1262.2	1496.1	1548.2	1376.8	1206.6	1089.6	1079.2
55°	7139.9	4616.8	1159.1	1043.3	1193.9	1430.1	1507.7	1322.4	1134.8	1044.5	1029.4
57.5°	7170.1	4329.6	1035.2	978.5	1122.1	1349.0	1432.4	1256.4	1088.5	1013.2	1000.5
60°	6937.3	3901.1	939.1	925.2	1049.1	1257.5	1347.9	1198.5	1041.0	978.5	965.7
62.5°	6358.3	3435.7	871.9	876.6	975.0	1161.4	1285.3	1142.9	995.8	940.3	928.7
65°	5362.5	2835.8	807.1	826.8	909.0	1086.2	1228.6	1096.6	950.7	911.3	900.9
67.5°	3725.1	2047.3	753.8	774.7	846.5	1009.7	1162.6	1046.8	899.7	878.9	862.7
70°	2062.3	1259.9	691.3	715.6	781.6	924.0	1088.5	971.5	825.6	816.4	793.2
72.5°	1083.8	802.5	620.7	647.3	693.6	814.0	975.0	889.3	752.7	713.3	683.2
74°	846.5	657.7	573.2	601.0	632.2	749.2	907.8	830.3	700.6	654.2	631.1
75°	737.6	585.9	532.7	568.6	596.3	705.2	855.7	788.6	671.6	627.6	606.8
77.5°	521.1	438.9	435.4	478.2	493.3	618.3	771.2	717.9	598.7	552.3	532.7
80°	365.9	328.9	345.1	371.7	392.5	546.6	715.6	620.7	491.0	436.5	429.6
82.5°	238.5	215.4	246.6	271.0	277.9	403.0	577.8	471.3	357.8	290.6	269.8
85°	110.0	107.7	141.3	137.8	136.6	196.9	342.8	275.6	206.1	154.0	144.7
87.5°	27.8	26.6	34.7	28.9	34.7	30.1	31.3	8.1	1.2	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)