

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: P453362

Luminaire Tested: **GALN-SA4B-827-U-SL4**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453362
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-18)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4B-827-U-SL4
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16197 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

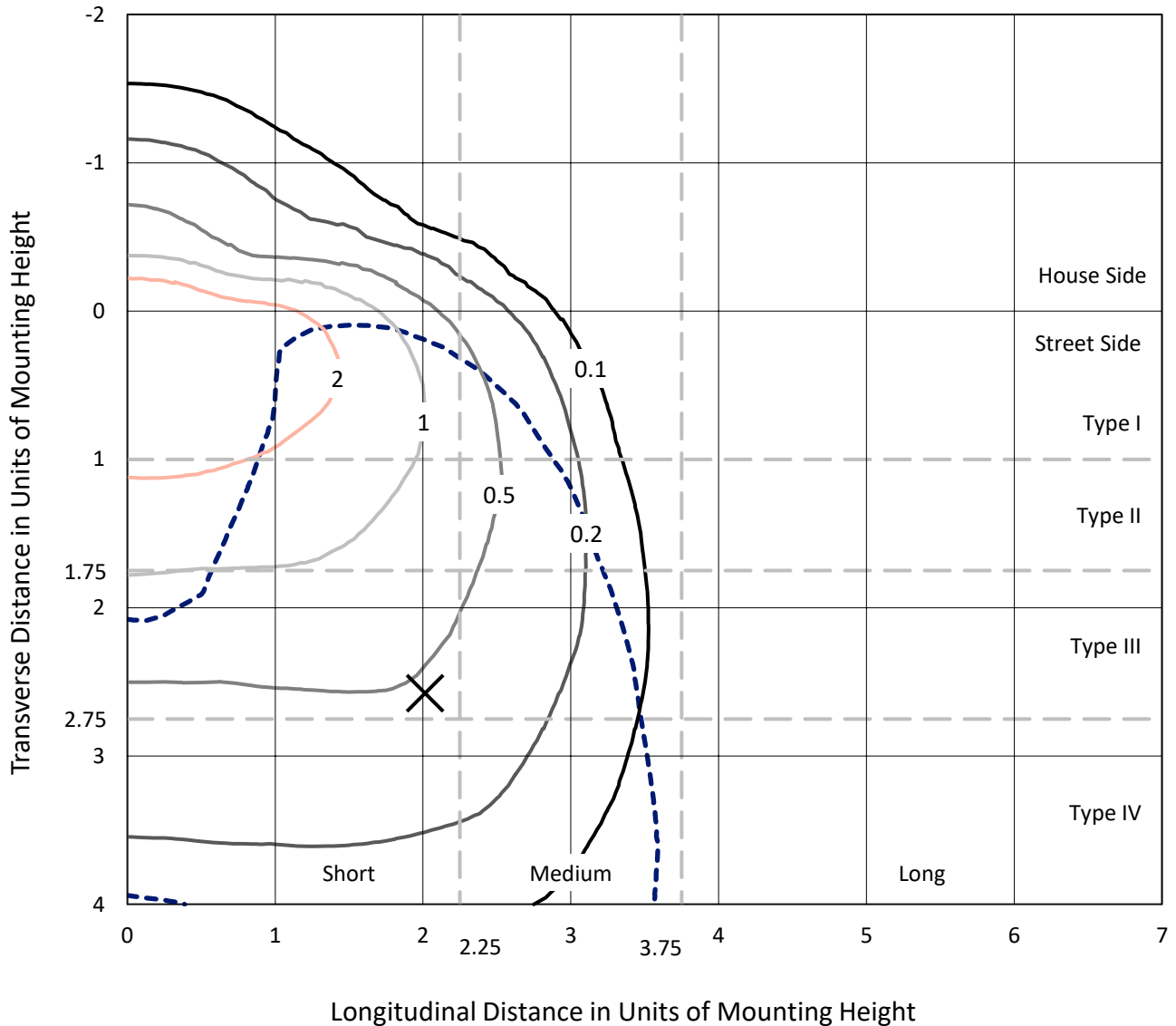
Input Watts (W): 164
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P453362
 CATALOG NUMBER: GALN-SA4B-827-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

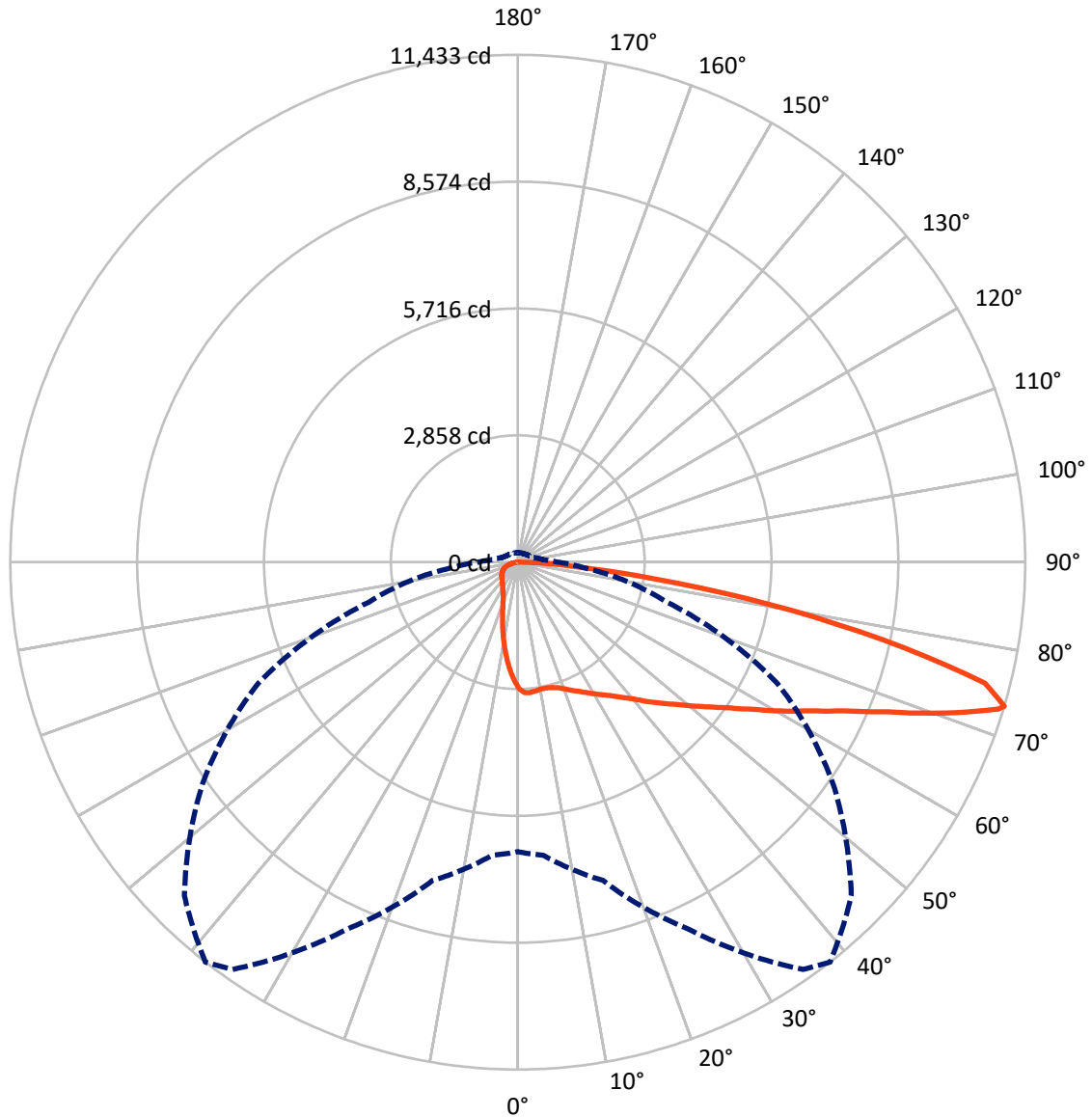
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type IV - Short - N/A

REPORT NUMBER: P453362
CATALOG NUMBER: GALN-SA4B-827-U-SL4

Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

REPORT NUMBER: P453362

CATALOG NUMBER: GALN-SA4B-827-U-SL4

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2177.4	0.0	2177.4
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	14019.6	0.0	14019.6
	% Fixture	86.6	0.0	86.6
Total	Lumens	16197.0	0.0	16197.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.4	1.5
10°-20°	636.9	3.9
20°-30°	991.8	6.1
30°-40°	1454.8	9.0
40°-50°	2158.0	13.3
50°-60°	3057.5	18.9
60°-70°	3878.5	23.9
70°-80°	3228.6	19.9
80°-90°	542.5	3.3
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°	16197.0	100.0
0°-180°	16197.0	100.0

Coefficient of Utilization

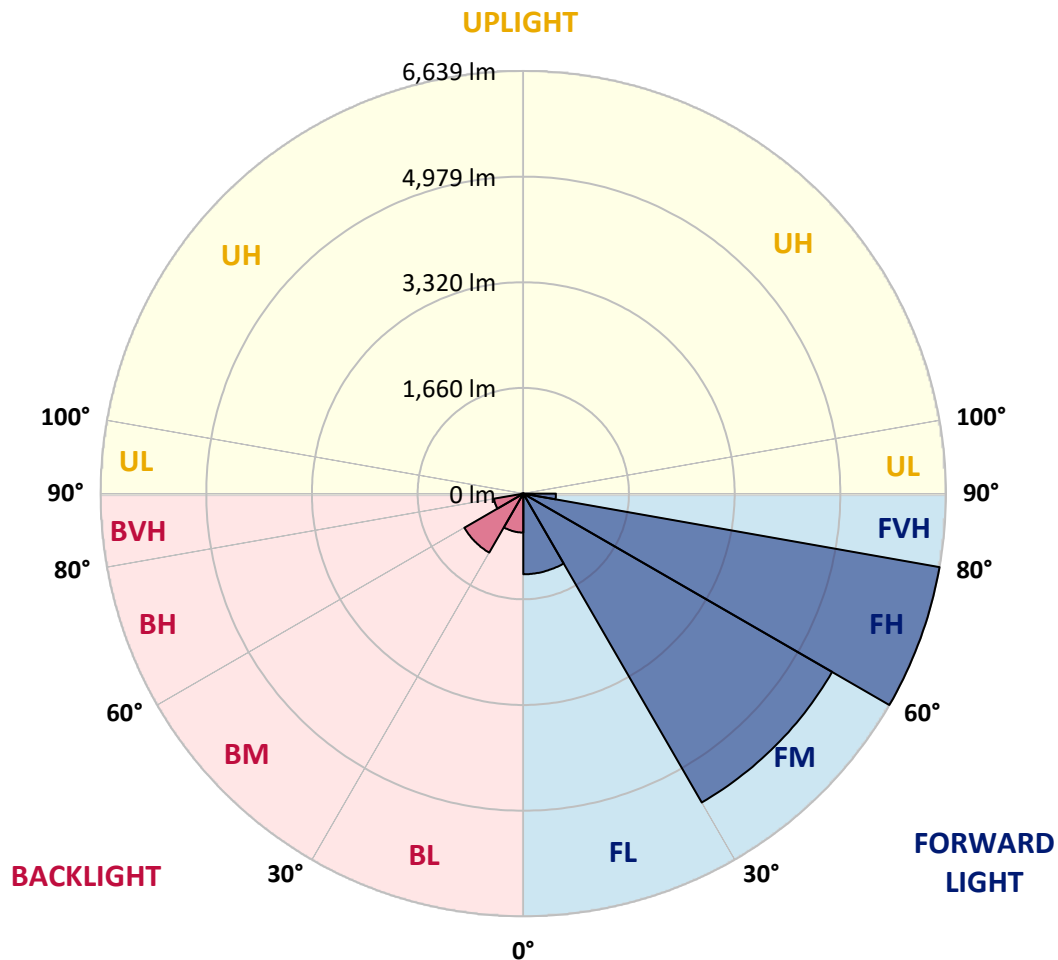


REPORT NUMBER: P453362
 CATALOG NUMBER: GALN-SA4B-827-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1266.2	7.8			
FM (30°-60°)	5601.4	34.6			
FH (60°-80°)	6639.1	41.0			G3/7500
FVH (80°-90°)	513.0	3.2			G4/750
BL (0°-30°)	611.0	3.8	B2/1000		
BM (30°-60°)	1069.0	6.6	B2/2500		
BH (60°-80°)	468.0	2.9	B1/500		G1/500
BVH (80°-90°)	29.4	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4
 Type IV Short





REPORT NUMBER: P453362

CATALOG NUMBER: GALN-SA4B-827-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5
2.5°	2959.9	2974.5	2967.2	2957.1	2950.7	2944.3	2935.2	2908.7	2887.6	2864.7	2829.1
5°	2981.8	2991.0	2984.6	2971.8	2957.1	2950.7	2933.3	2898.6	2864.7	2826.3	2773.3
7.5°	2969.0	2972.7	2965.4	2949.8	2937.0	2925.1	2905.0	2866.6	2825.4	2778.8	2709.3
10°	2923.3	2937.0	2937.0	2924.2	2911.4	2905.0	2884.9	2848.3	2810.8	2757.7	2675.4
12.5°	2885.8	2900.4	2912.3	2908.7	2907.7	2907.7	2892.2	2864.7	2820.8	2770.5	2672.7
15°	2860.2	2877.6	2903.2	2917.8	2926.9	2929.7	2923.3	2899.5	2854.7	2796.1	2683.6
17.5°	2854.7	2875.7	2922.4	2954.4	2978.2	2977.3	2975.4	2942.5	2893.1	2832.7	2697.4
20°	2879.4	2906.8	2971.8	3022.1	3056.8	3050.4	3040.4	2997.4	2939.7	2872.1	2710.2
22.5°	2953.5	2981.8	3053.2	3108.0	3141.9	3141.9	3111.7	3055.0	2993.7	2917.8	2727.5
25°	3059.6	3090.7	3166.6	3222.4	3237.9	3226.0	3195.9	3127.3	3056.8	2983.7	2764.1
27.5°	3189.5	3227.0	3297.4	3344.0	3339.5	3330.3	3299.2	3211.4	3141.0	3074.2	2826.3
30°	3351.4	3378.8	3452.0	3462.9	3446.5	3444.6	3400.7	3312.9	3247.1	3195.9	2915.1
32.5°	3504.1	3528.8	3587.3	3591.9	3562.6	3566.3	3525.1	3444.6	3407.1	3388.9	3064.1
35°	3666.0	3678.8	3729.1	3723.6	3704.4	3701.7	3685.2	3608.4	3620.3	3653.2	3275.4
37.5°	3801.4	3827.0	3855.3	3859.9	3859.0	3868.1	3879.1	3842.5	3911.1	4014.5	3552.6
40°	3925.8	3947.7	3989.8	4004.4	4040.1	4058.4	4095.9	4096.8	4255.0	4425.2	3893.8
42.5°	4009.9	4047.4	4126.1	4152.6	4239.5	4294.4	4350.2	4409.6	4639.2	4857.8	4296.2
45°	4083.1	4132.5	4263.3	4345.6	4463.6	4530.4	4648.4	4772.7	5102.9	5389.2	4705.1
47.5°	4193.8	4237.7	4387.7	4533.1	4711.5	4788.3	4964.8	5150.5	5582.2	5896.0	5096.5
50°	4347.4	4374.0	4526.7	4763.6	4991.4	5090.1	5323.4	5591.4	6094.4	6396.3	5440.5
52.5°	4544.1	4555.1	4676.7	4992.3	5292.3	5414.8	5724.0	6036.8	6542.6	6830.8	5713.0
55°	4776.4	4758.1	4853.2	5234.7	5636.2	5796.3	6128.3	6487.8	7046.6	7182.0	5911.5
57.5°	5006.0	4977.6	5053.6	5529.2	6060.6	6253.6	6640.5	6952.4	7496.6	7510.4	6050.5
60°	5249.3	5228.3	5318.8	5874.9	6581.1	6809.7	7167.4	7434.4	7932.0	7739.0	6072.5
62.5°	5499.0	5465.2	5594.1	6263.7	7167.4	7375.0	7721.6	7946.7	8359.2	7824.1	5861.2
65°	5741.4	5725.8	5925.2	6725.6	7835.1	8071.0	8407.6	8560.4	8701.3	7696.0	5337.1
67.5°	5999.3	6030.4	6348.7	7342.1	8705.8	9002.2	9365.3	9221.7	8799.1	7089.6	4494.7
70°	6392.6	6412.8	6904.8	8149.7	9828.1	10185.8	10361.4	9456.8	8327.2	5938.0	3378.8
72.5°	6561.8	6650.6	7401.5	8997.6	11103.2	11321.8	10696.2	8932.7	6936.9	4033.7	1775.4
73°	6524.3	6630.4	7424.4	9126.6	11202.9	11432.5	10624.8	8662.8	6448.4	3473.9	1522.0
75°	6056.9	6187.7	7127.1	9018.6	11009.0	10871.8	9477.8	7383.2	4357.5	1579.6	693.3
77.5°	4779.2	4816.7	5647.2	7282.6	8669.2	8415.0	7093.3	4614.5	1779.9	587.2	393.3
80°	2397.4	2535.5	3183.1	4171.8	5797.2	5713.9	4477.3	2182.4	741.8	344.8	260.7
82.5°	1153.4	1251.3	1550.4	2034.2	3203.2	3127.3	2217.2	1192.7	471.1	201.2	153.7
85°	742.7	815.9	986.9	970.5	1317.1	1257.7	996.1	902.8	279.0	105.2	107.0
87.5°	490.3	536.9	643.9	515.0	479.3	433.6	440.0	508.6	54.9	40.2	14.6
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: P453362
 CATALOG NUMBER: GALN-SA4B-827-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5	2845.5
2.5°	2814.4	2802.5	2763.2	2724.8	2688.2	2653.5	2630.6	2600.4	2580.3	2585.8	2594.0
5°	2744.0	2717.5	2648.0	2580.3	2516.3	2440.3	2379.1	2329.7	2292.2	2278.4	2275.7
7.5°	2669.9	2625.1	2525.4	2409.2	2300.4	2206.2	2097.3	2043.4	1980.3	1958.3	1951.0
10°	2625.1	2564.7	2424.8	2262.9	2099.2	1942.8	1824.8	1728.7	1641.8	1625.4	1617.1
12.5°	2612.3	2532.7	2344.3	2135.8	1918.1	1726.0	1551.3	1425.1	1340.9	1321.7	1293.3
15°	2605.0	2506.2	2269.3	2007.7	1731.5	1497.3	1313.5	1166.2	1089.4	1038.2	1039.1
17.5°	2598.6	2476.0	2185.1	1867.8	1570.5	1300.7	1097.6	965.0	894.5	867.1	864.4
20°	2589.4	2440.3	2088.2	1720.5	1386.6	1121.4	937.5	838.8	791.2	768.3	767.4
22.5°	2585.8	2405.6	1993.1	1570.5	1223.8	983.3	831.4	761.9	731.7	716.2	716.2
25°	2594.9	2380.9	1893.4	1427.8	1079.3	865.3	758.3	710.7	693.3	685.1	682.3
27.5°	2623.3	2369.9	1794.6	1285.1	946.7	784.8	708.9	675.9	663.1	656.7	657.6
30°	2677.2	2369.0	1697.6	1144.3	847.9	723.5	669.5	646.7	636.6	633.0	632.0
32.5°	2764.1	2389.1	1602.5	1028.1	764.7	672.3	633.0	616.5	611.9	609.2	608.3
35°	2911.4	2445.8	1508.3	922.0	700.6	626.5	598.2	590.0	583.6	586.3	587.2
37.5°	3109.9	2543.7	1418.7	838.8	652.2	592.7	568.9	561.6	557.9	560.7	563.4
40°	3376.0	2684.6	1343.7	772.0	617.4	564.4	543.3	536.9	533.3	537.8	538.7
42.5°	3669.7	2847.4	1281.5	719.8	589.0	540.6	520.4	513.1	510.4	513.1	514.0
45°	3971.5	3036.7	1249.4	682.3	565.3	523.2	502.2	493.9	487.5	485.7	488.4
47.5°	4268.8	3201.3	1248.5	659.5	546.1	507.6	484.8	475.6	467.4	462.8	461.9
50°	4511.2	3332.1	1270.5	649.4	529.6	490.3	467.4	458.2	447.3	438.1	440.0
52.5°	4694.1	3417.2	1280.5	644.8	520.4	472.0	449.1	440.9	428.1	416.2	416.2
55°	4812.1	3437.3	1255.8	640.3	513.1	452.8	428.1	420.7	407.9	396.1	396.1
57.5°	4852.3	3375.1	1167.1	629.3	505.8	436.3	407.0	400.6	390.6	378.7	376.8
60°	4759.0	3164.8	1011.6	596.4	491.2	418.9	384.2	381.4	377.8	367.7	366.8
62.5°	4399.6	2718.4	842.4	553.4	466.5	400.6	363.1	367.7	370.4	365.0	364.0
65°	3801.4	2207.1	719.8	493.9	433.6	375.0	340.3	352.1	359.5	359.5	357.6
67.5°	3083.4	1694.9	606.4	442.7	392.4	340.3	314.6	323.8	329.3	327.5	332.0
70°	2191.5	1147.9	493.9	384.2	340.3	300.9	281.7	281.7	278.1	276.2	276.2
72.5°	1062.8	655.8	400.6	321.0	290.0	257.0	241.5	235.1	227.8	226.8	222.3
73°	888.1	588.1	382.3	309.2	278.1	250.6	233.2	223.2	218.6	214.9	214.0
75°	540.6	446.4	319.2	260.7	236.9	215.9	200.3	191.2	186.6	183.8	182.9
77.5°	355.8	332.9	247.9	199.4	181.1	168.3	161.9	152.7	150.0	146.3	146.3
80°	265.3	254.3	177.4	140.9	129.9	118.9	117.1	115.2	107.9	103.4	101.5
82.5°	171.0	181.1	120.7	94.2	82.3	73.2	74.1	76.8	69.5	63.1	61.3
85°	121.7	130.8	73.2	43.0	34.8	30.2	33.8	30.2	31.1	24.7	20.1
87.5°	20.1	34.8	12.8	5.5	2.7	1.8	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)