

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: P454290

Luminaire Tested: **GALN-SA5B-827-U-SL4**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P454290  
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-SA5B-827-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 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: 20505 lumens  
Efficiency: N/A  
Efficacy: 100.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G4

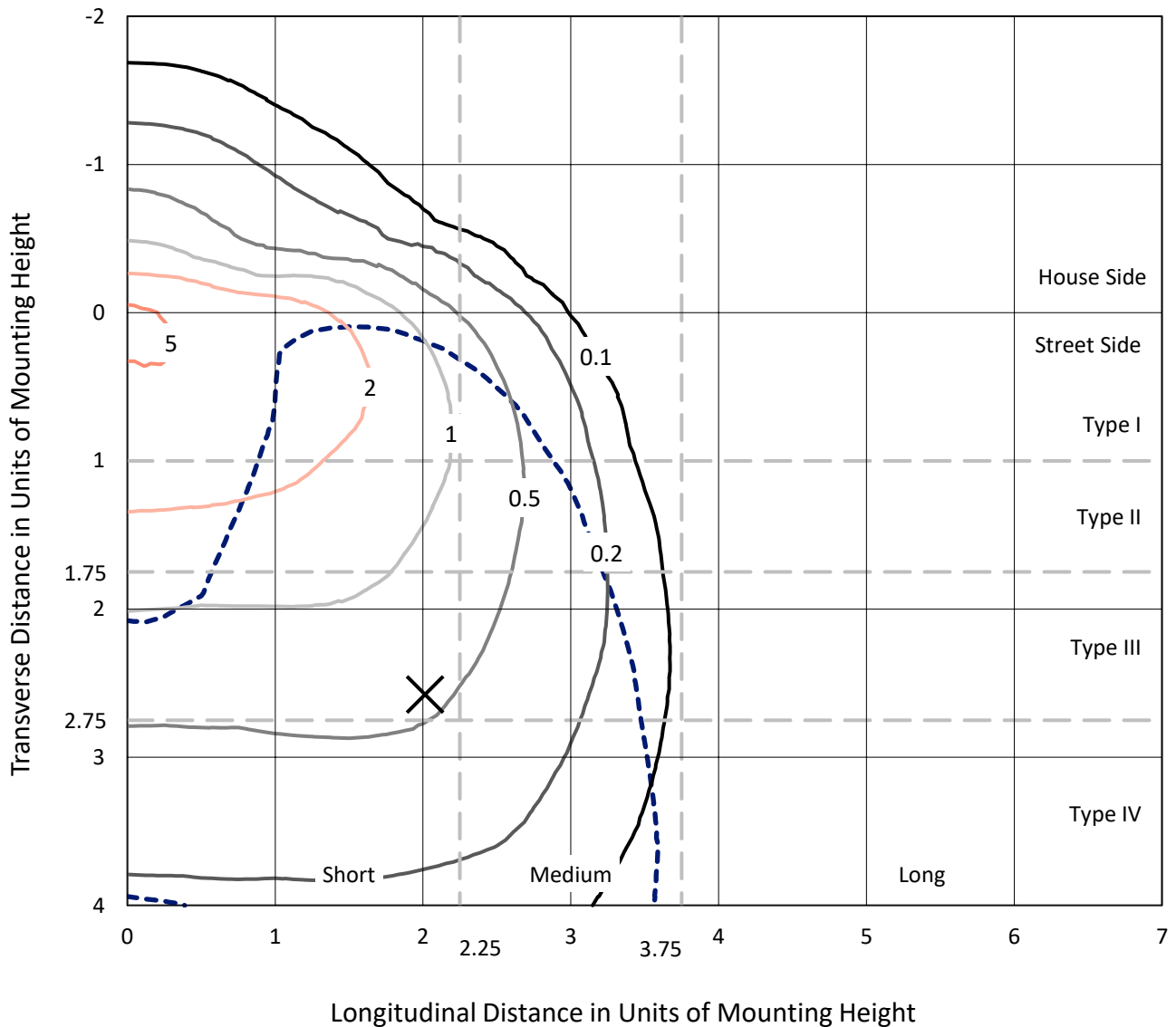
Input Watts (W): 204  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

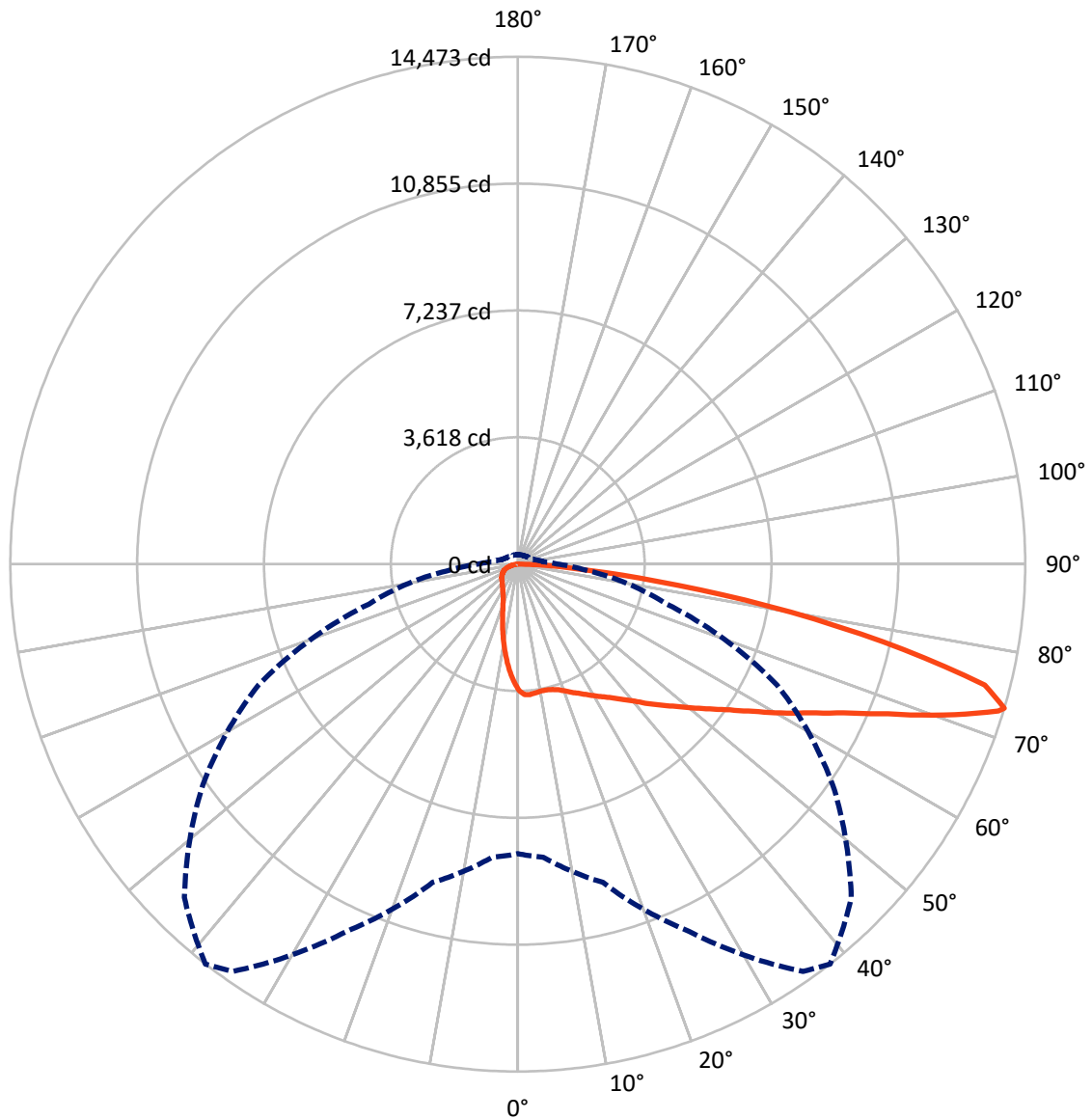
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2756.5	0.0	2756.5
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	17748.5	0.0	17748.5
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	20505.0	0.0	20505.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	314.4	1.5
10°-20°	806.3	3.9
20°-30°	1255.6	6.1
30°-40°	1841.7	9.0
40°-50°	2732.0	13.3
50°-60°	3870.7	18.9
60°-70°	4910.1	23.9
70°-80°	4087.3	19.9
80°-90°	686.7	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°	20505.0	100.0
0°-180°	20505.0	100.0

**Coefficient of Utilization**



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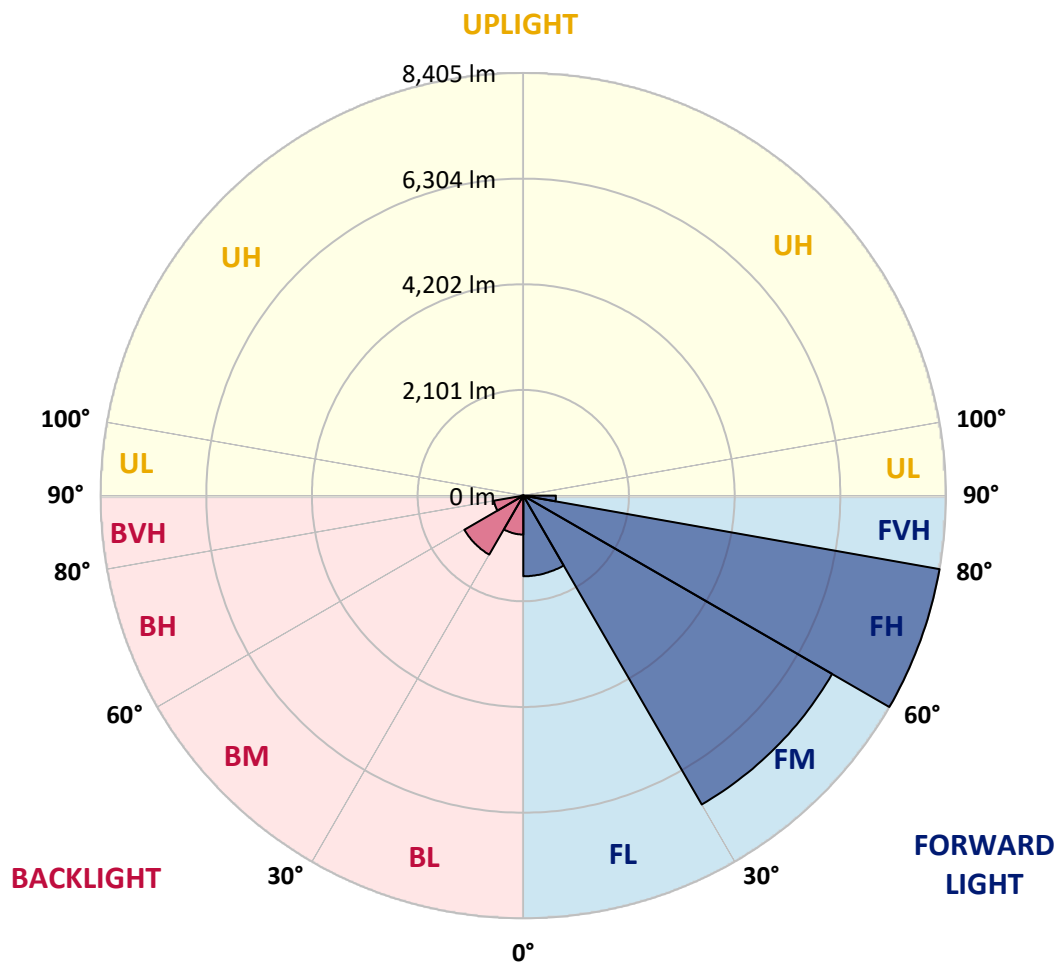
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1602.9	7.8			
FM	(30°-60°)	7091.2	34.6			
FH	(60°-80°)	8404.9	41.0			G4/12000
FVH	(80°-90°)	649.5	3.2			G4/750
BL	(0°-30°)	773.5	3.8	B2/1000		
BM	(30°-60°)	1353.3	6.6	B2/2500		
BH	(60°-80°)	592.5	2.9	B2/1000		G2/1000
BVH	(80°-90°)	37.2	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	3602.4	3602.4	3602.4	3602.4	3602.4	3602.4	3602.4	3602.4	3602.4	3602.4	3602.4
2.5°	3747.1	3765.7	3756.4	3743.7	3735.5	3727.4	3715.9	3682.3	3655.6	3626.7	3581.5
5°	3774.9	3786.5	3778.4	3762.2	3743.7	3735.5	3713.5	3669.5	3626.7	3578.1	3510.9
7.5°	3758.7	3763.3	3754.1	3734.4	3718.2	3703.1	3677.6	3629.0	3576.9	3517.9	3429.8
10°	3700.8	3718.2	3718.2	3702.0	3685.8	3677.6	3652.2	3605.9	3558.4	3491.2	3387.0
12.5°	3653.3	3671.9	3686.9	3682.3	3681.1	3681.1	3661.4	3626.7	3571.1	3507.4	3383.5
15°	3620.9	3642.9	3675.3	3693.9	3705.4	3708.9	3700.8	3670.7	3614.0	3539.9	3397.4
17.5°	3614.0	3640.6	3699.6	3740.2	3770.3	3769.1	3766.8	3725.1	3662.6	3586.2	3414.8
20°	3645.2	3680.0	3762.2	3825.9	3869.9	3861.8	3849.0	3794.6	3721.6	3636.0	3431.0
22.5°	3739.0	3774.9	3865.2	3934.7	3977.6	3977.6	3939.3	3867.6	3790.0	3693.9	3453.0
25°	3873.3	3912.7	4008.8	4079.5	4099.1	4084.1	4045.9	3959.0	3869.9	3777.2	3499.3
27.5°	4037.8	4085.2	4174.4	4233.5	4227.7	4216.1	4176.7	4065.6	3976.4	3891.9	3578.1
30°	4242.7	4277.5	4370.1	4384.0	4363.2	4360.8	4305.3	4194.1	4110.7	4045.9	3690.4
32.5°	4436.1	4467.4	4541.5	4547.3	4510.2	4514.8	4462.7	4360.8	4313.4	4290.2	3879.1
35°	4641.1	4657.3	4721.0	4714.0	4689.7	4686.2	4665.4	4568.1	4583.2	4624.9	4146.6
37.5°	4812.4	4844.9	4880.8	4886.5	4885.4	4897.0	4910.9	4864.5	4951.4	5082.2	4497.5
40°	4969.9	4997.7	5051.0	5069.5	5114.7	5137.8	5185.3	5186.5	5386.8	5602.2	4929.4
42.5°	5076.5	5123.9	5223.5	5257.1	5367.1	5436.6	5507.2	5582.5	5873.1	6149.9	5438.9
45°	5169.1	5231.6	5397.2	5501.4	5650.8	5735.3	5884.7	6042.2	6460.2	6822.6	5956.5
47.5°	5309.2	5364.8	5554.7	5738.8	5964.6	6061.9	6285.4	6520.4	7067.0	7464.1	6452.1
50°	5503.7	5537.3	5730.7	6030.6	6318.9	6444.0	6739.3	7078.5	7715.4	8097.5	6887.5
52.5°	5752.7	5766.6	5920.6	6320.1	6699.9	6855.1	7246.4	7642.5	8282.8	8647.6	7232.6
55°	6046.8	6023.7	6144.1	6626.9	7135.3	7337.9	7758.3	8213.3	8920.8	9092.2	7483.8
57.5°	6337.5	6301.6	6397.7	6999.8	7672.6	7916.9	8406.7	8801.6	9490.6	9507.9	7659.8
60°	6645.5	6618.8	6733.5	7437.5	8331.4	8620.9	9073.7	9411.8	10041.7	9797.4	7687.6
62.5°	6961.6	6918.7	7082.0	7929.6	9073.7	9336.5	9775.4	10060.3	10582.5	9905.1	7420.1
65°	7268.4	7248.8	7501.2	8514.4	9919.0	10217.7	10643.9	10837.2	11015.6	9743.0	6756.6
67.5°	7595.0	7634.4	8037.3	9294.9	11021.4	11396.5	11856.2	11674.4	11139.5	8975.3	5690.2
70°	8092.9	8118.4	8741.4	10317.3	12442.2	12894.9	13117.3	11972.0	10542.0	7517.4	4277.5
72.5°	8307.1	8419.5	9370.1	11390.7	14056.3	14333.1	13541.1	11308.5	8781.9	5106.6	2247.6
73°	8259.7	8394.0	9399.1	11554.0	14182.6	14473.2	13450.7	10966.9	8163.5	4397.9	1926.8
75°	7667.9	7833.5	9022.7	11417.4	13937.1	13763.4	11998.7	9347.0	5516.5	1999.8	877.7
77.5°	6050.3	6097.8	7149.2	9219.6	10975.0	10653.1	8979.9	5841.9	2253.4	743.4	497.9
80°	3035.0	3209.8	4029.7	5281.4	7339.1	7233.7	5668.2	2762.9	939.1	436.5	330.0
82.5°	1460.2	1584.1	1962.7	2575.3	4055.1	3959.0	2806.9	1510.0	596.3	254.7	194.5
85°	940.3	1032.9	1249.4	1228.6	1667.4	1592.2	1261.0	1142.9	353.2	133.2	135.5
87.5°	620.7	679.7	815.2	651.9	606.8	548.9	557.0	643.8	69.5	50.9	18.5
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°	3602.4	3602.4	3602.4	3602.4	3602.4	3602.4	3602.4	3602.4	3602.4	3602.4	3602.4
2.5°	3563.0	3548.0	3498.2	3449.5	3403.2	3359.2	3330.3	3292.1	3266.6	3273.5	3283.9
5°	3473.8	3440.3	3352.3	3266.6	3185.5	3089.4	3011.8	2949.3	2901.8	2884.5	2881.0
7.5°	3380.1	3323.3	3197.1	3050.0	2912.2	2793.0	2655.2	2586.9	2507.0	2479.2	2469.9
10°	3323.3	3246.9	3069.7	2864.8	2657.5	2459.5	2310.1	2188.5	2078.5	2057.7	2047.3
12.5°	3307.1	3206.4	2967.8	2703.8	2428.2	2185.1	1963.9	1804.1	1697.6	1673.2	1637.3
15°	3297.8	3172.8	2872.9	2541.7	2192.0	1895.6	1662.8	1476.4	1379.1	1314.3	1315.4
17.5°	3289.7	3134.6	2766.3	2364.5	1988.2	1646.6	1389.5	1221.6	1132.5	1097.7	1094.3
20°	3278.2	3089.4	2643.6	2178.1	1755.5	1419.6	1186.9	1061.8	1001.6	972.7	971.5
22.5°	3273.5	3045.4	2523.2	1988.2	1549.3	1244.8	1052.6	964.6	926.4	906.7	906.7
25°	3285.1	3014.1	2397.0	1807.6	1366.4	1095.4	959.9	899.7	877.7	867.3	863.8
27.5°	3321.0	3000.2	2271.9	1626.9	1198.5	993.5	897.4	855.7	839.5	831.4	832.6
30°	3389.3	2999.1	2149.2	1448.6	1073.4	915.9	847.6	818.7	805.9	801.3	800.1
32.5°	3499.3	3024.6	2028.7	1301.5	968.0	851.1	801.3	780.5	774.7	771.2	770.0
35°	3685.8	3096.4	1909.5	1167.2	887.0	793.2	757.3	746.9	738.8	742.2	743.4
37.5°	3937.0	3220.3	1796.0	1061.8	825.6	750.4	720.2	711.0	706.3	709.8	713.3
40°	4274.0	3398.6	1701.0	977.3	781.6	714.5	687.8	679.7	675.1	680.9	682.0
42.5°	4645.7	3604.7	1622.3	911.3	745.7	684.3	658.9	649.6	646.1	649.6	650.8
45°	5027.8	3844.4	1581.8	863.8	715.6	662.3	635.7	625.3	617.2	614.9	618.3
47.5°	5404.2	4052.8	1580.6	834.9	691.3	642.7	613.7	602.1	591.7	585.9	584.8
50°	5711.0	4218.4	1608.4	822.1	670.5	620.7	591.7	580.1	566.2	554.7	557.0
52.5°	5942.6	4326.1	1621.1	816.4	658.9	597.5	568.6	558.1	541.9	526.9	526.9
55°	6092.0	4351.6	1589.9	810.6	649.6	573.2	541.9	532.7	516.4	501.4	501.4
57.5°	6142.9	4272.8	1477.5	796.7	640.3	552.3	515.3	507.2	494.4	479.4	477.1
60°	6024.8	4006.5	1280.7	755.0	621.8	530.3	486.3	482.9	478.2	465.5	464.3
62.5°	5569.7	3441.4	1066.5	700.6	590.6	507.2	459.7	465.5	469.0	462.0	460.9
65°	4812.4	2794.1	911.3	625.3	548.9	474.8	430.8	445.8	455.1	455.1	452.8
67.5°	3903.4	2145.7	767.7	560.4	496.8	430.8	398.3	409.9	416.9	414.5	420.3
70°	2774.4	1453.2	625.3	486.3	430.8	381.0	356.6	356.6	352.0	349.7	349.7
72.5°	1345.5	830.2	507.2	406.4	367.1	325.4	305.7	297.6	288.3	287.2	281.4
73°	1124.4	744.6	484.0	391.4	352.0	317.3	295.3	282.5	276.7	272.1	271.0
75°	684.3	565.1	404.1	330.0	299.9	273.3	253.6	242.0	236.2	232.7	231.6
77.5°	450.4	421.5	313.8	252.4	229.3	213.1	205.0	193.4	189.9	185.3	185.3
80°	335.8	321.9	224.6	178.3	164.4	150.5	148.2	145.9	136.6	130.8	128.5
82.5°	216.5	229.3	152.8	119.3	104.2	92.6	93.8	97.3	88.0	79.9	77.6
85°	154.0	165.6	92.6	54.4	44.0	38.2	42.8	38.2	39.4	31.3	25.5
87.5°	25.5	44.0	16.2	6.9	3.5	2.3	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)