

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: P456842

Luminaire Tested: **GALN-SA8A-827-U-SL4**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P456842  
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-SA8A-827-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 80 CRI, 2700K, 615mA 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: 26572 lumens  
Efficiency: N/A  
Efficacy: 108.9 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

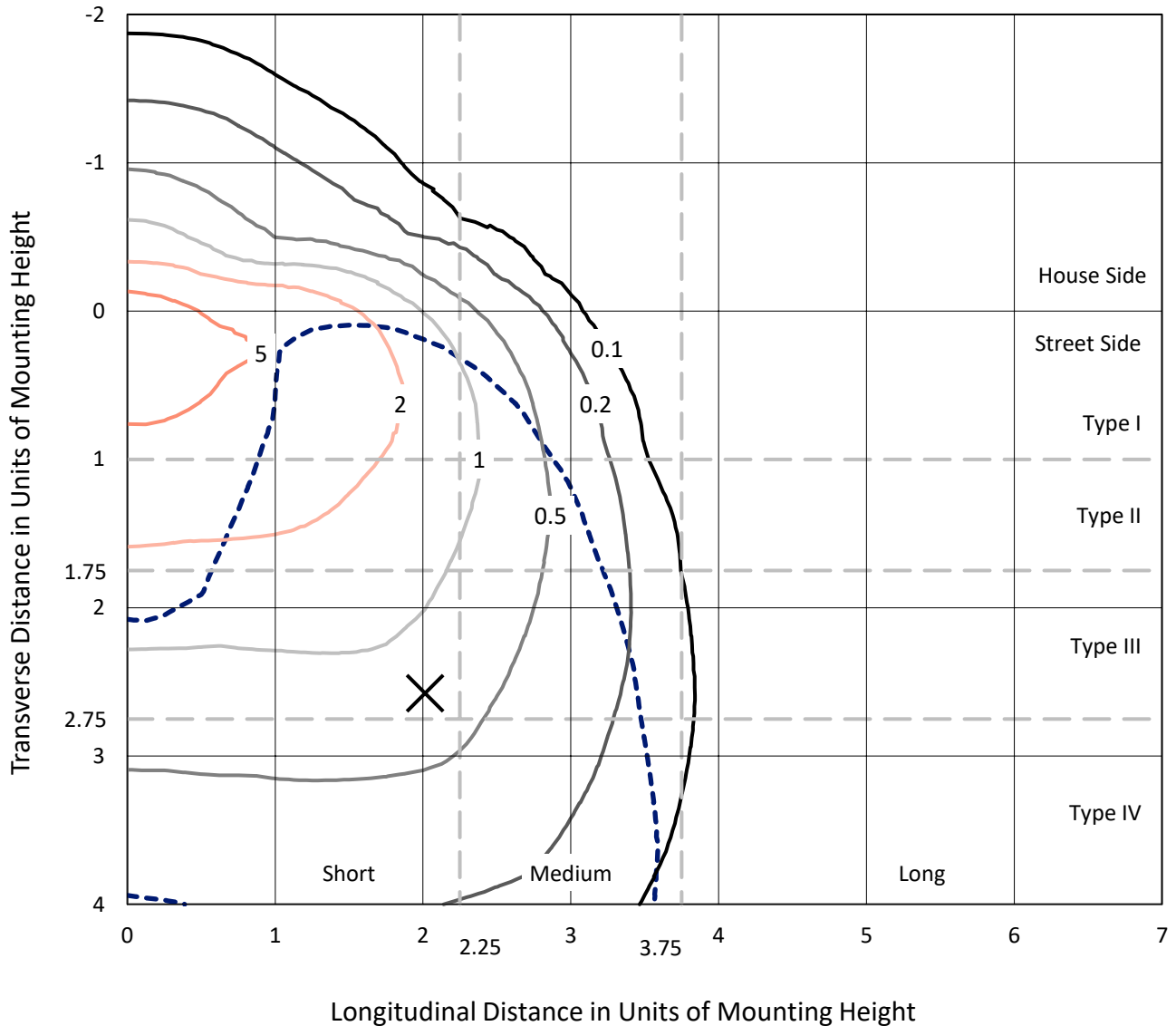
Input Watts (W): 244  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

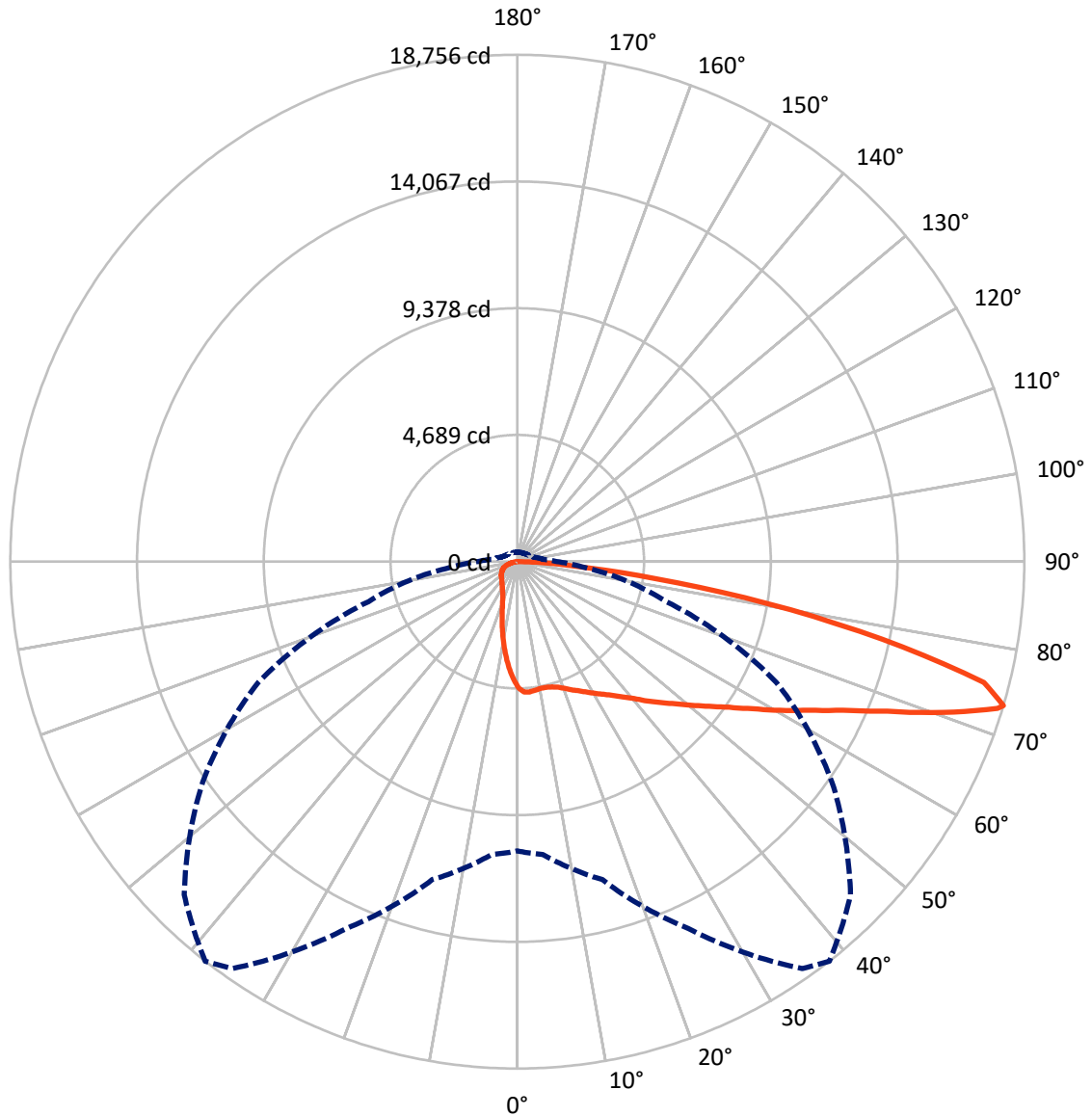
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 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	3572.1	0.0	3572.1
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	22999.9	0.0	22999.9
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	26572.0	0.0	26572.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	407.5	1.5
10°-20°	1044.9	3.9
20°-30°	1627.2	6.1
30°-40°	2386.7	9.0
40°-50°	3540.3	13.3
50°-60°	5016.0	18.9
60°-70°	6362.9	23.9
70°-80°	5296.6	19.9
80°-90°	889.9	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°	26572.0	100.0
0°-180°	26572.0	100.0

**Coefficient of Utilization**



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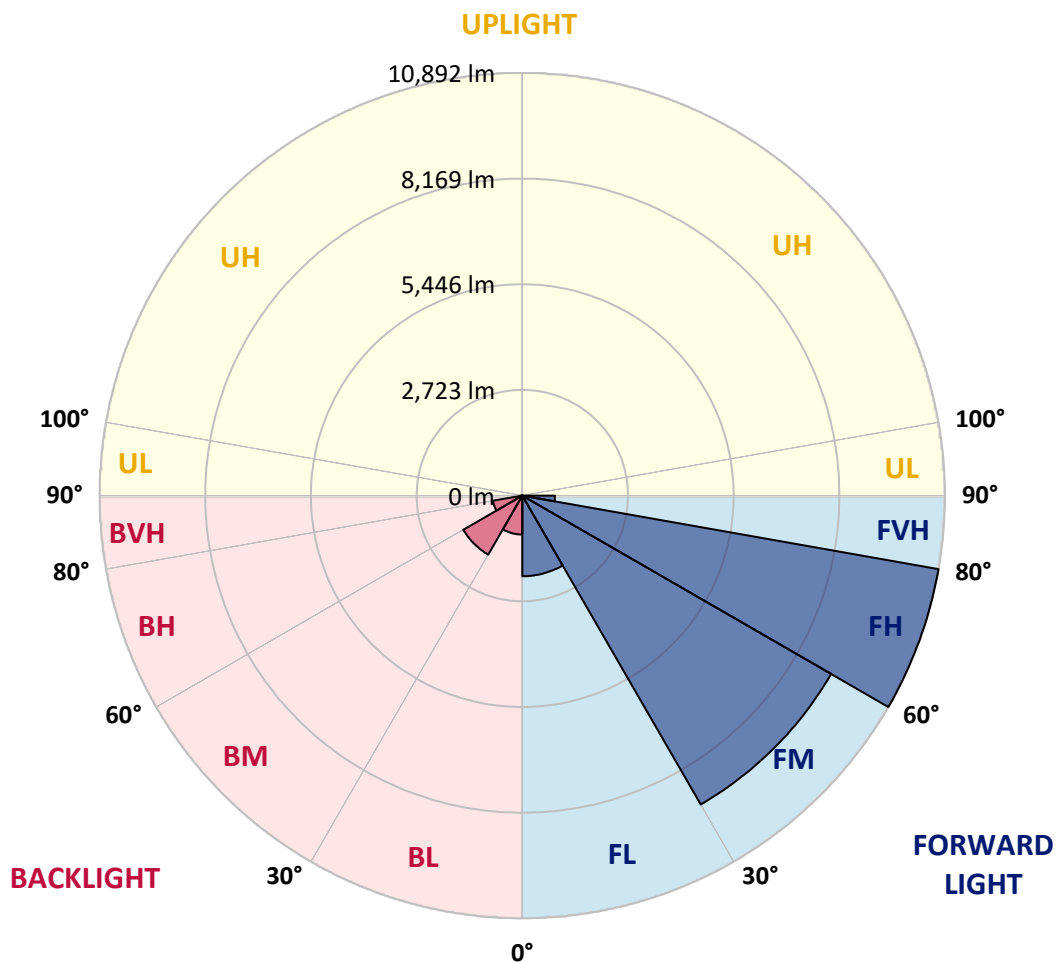
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2077.2	7.8			
FM	(30°-60°)	9189.3	34.6			
FH	(60°-80°)	10891.8	41.0			G4/12000
FVH	(80°-90°)	841.7	3.2			G5
BL	(0°-30°)	1002.4	3.8	B3/2500		
BM	(30°-60°)	1753.7	6.6	B2/2500		
BH	(60°-80°)	767.8	2.9	B2/1000		G2/1000
BVH	(80°-90°)	48.3	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	4668.3	4668.3	4668.3	4668.3	4668.3	4668.3	4668.3	4668.3	4668.3	4668.3	4668.3
2.5°	4855.8	4879.8	4867.8	4851.3	4840.8	4830.3	4815.3	4771.8	4737.3	4699.8	4641.2
5°	4891.8	4906.8	4896.3	4875.3	4851.3	4840.8	4812.3	4755.3	4699.8	4636.7	4549.7
7.5°	4870.8	4876.8	4864.8	4839.3	4818.3	4798.8	4765.8	4702.8	4635.2	4558.7	4444.7
10°	4795.8	4818.3	4818.3	4797.3	4776.3	4765.8	4732.8	4672.8	4611.2	4524.2	4389.1
12.5°	4734.3	4758.3	4777.8	4771.8	4770.3	4770.3	4744.8	4699.8	4627.7	4545.2	4384.6
15°	4692.3	4720.8	4762.8	4786.8	4801.8	4806.3	4795.8	4756.8	4683.3	4587.2	4402.7
17.5°	4683.3	4717.8	4794.3	4846.8	4885.8	4884.3	4881.3	4827.3	4746.3	4647.2	4425.2
20°	4723.8	4768.8	4875.3	4957.9	5014.9	5004.4	4987.9	4917.3	4822.8	4711.8	4446.2
22.5°	4845.3	4891.8	5008.9	5098.9	5154.4	5154.4	5104.9	5011.9	4911.3	4786.8	4474.7
25°	5019.4	5070.4	5194.9	5286.5	5312.0	5292.5	5243.0	5130.4	5014.9	4894.8	4534.7
27.5°	5232.5	5294.0	5409.5	5486.1	5478.6	5463.5	5412.5	5268.5	5152.9	5043.4	4636.7
30°	5498.1	5543.1	5663.1	5681.1	5654.1	5651.1	5579.1	5435.0	5327.0	5243.0	4782.3
32.5°	5748.7	5789.2	5885.2	5892.7	5844.7	5850.7	5783.2	5651.1	5589.6	5559.6	5026.9
35°	6014.3	6035.3	6117.8	6108.8	6077.3	6072.8	6045.8	5919.7	5939.2	5993.2	5373.5
37.5°	6236.3	6278.4	6324.9	6332.4	6330.9	6345.9	6363.9	6303.9	6416.4	6586.0	5828.2
40°	6440.4	6476.4	6545.5	6569.5	6628.0	6658.0	6719.5	6721.0	6980.6	7259.7	6387.9
42.5°	6578.5	6640.0	6769.0	6812.6	6955.1	7045.1	7136.7	7234.2	7610.9	7969.5	7048.1
45°	6698.5	6779.5	6994.1	7129.2	7322.7	7432.3	7625.9	7829.9	8371.6	8841.3	7718.9
47.5°	6880.1	6952.1	7198.2	7436.8	7729.4	7855.4	8145.1	8449.7	9157.9	9672.6	8361.1
50°	7132.2	7175.7	7426.3	7814.9	8188.6	8350.6	8733.3	9172.9	9998.2	10493.4	8925.3
52.5°	7454.8	7472.8	7672.4	8190.1	8682.3	8883.3	9390.5	9903.7	10733.5	11206.2	9372.5
55°	7835.9	7805.9	7962.0	8587.7	9246.5	9509.1	10053.8	10643.5	11560.3	11782.4	9698.1
57.5°	8212.6	8166.1	8290.6	9070.9	9942.7	10259.3	10894.1	11405.8	12298.6	12321.1	9926.2
60°	8611.7	8577.2	8725.8	9638.1	10796.5	11171.7	11758.4	12196.6	13012.9	12696.3	9962.2
62.5°	9021.4	8965.9	9177.4	10275.9	11758.4	12099.0	12667.7	13036.9	13713.6	12835.8	9615.6
65°	9419.0	9393.5	9720.6	11033.6	12853.8	13241.0	13793.2	14043.8	14274.9	12625.7	8755.8
67.5°	9842.2	9893.2	10415.4	12045.0	14282.4	14768.5	15364.3	15128.7	14435.4	11630.9	7373.8
70°	10487.4	10520.4	11327.7	13370.0	16123.5	16710.3	16998.4	15514.3	13661.1	9741.7	5543.1
72.5°	10765.0	10910.6	12142.6	14761.0	18215.3	18574.0	17547.6	14654.5	11380.3	6617.5	2912.6
73°	10703.5	10877.6	12180.1	14972.6	18378.9	18755.5	17430.5	14211.8	10579.0	5699.1	2496.9
75°	9936.7	10151.3	11692.4	14795.5	18060.8	17835.7	15548.8	12112.5	7148.7	2591.5	1137.4
77.5°	7840.4	7902.0	9264.5	11947.5	14222.3	13805.2	11636.9	7570.3	2920.1	963.4	645.2
80°	3933.0	4159.6	5222.0	6844.1	9510.6	9374.0	7345.3	3580.3	1217.0	565.7	427.7
82.5°	1892.2	2052.8	2543.5	3337.3	5255.0	5130.4	3637.4	1956.7	772.8	330.1	252.1
85°	1218.5	1338.5	1619.1	1592.1	2160.8	2063.3	1634.1	1481.1	457.7	172.6	175.6
87.5°	804.3	880.8	1056.4	844.8	786.3	711.3	721.8	834.3	90.0	66.0	24.0
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°	4668.3	4668.3	4668.3	4668.3	4668.3	4668.3	4668.3	4668.3	4668.3	4668.3	4668.3
2.5°	4617.2	4597.7	4533.2	4470.2	4410.2	4353.1	4315.6	4266.1	4233.1	4242.1	4255.6
5°	4501.7	4458.2	4344.1	4233.1	4128.0	4003.5	3903.0	3821.9	3760.4	3737.9	3733.4
7.5°	4380.1	4306.6	4143.1	3952.5	3773.9	3619.4	3440.8	3352.3	3248.7	3212.7	3200.7
10°	4306.6	4207.6	3978.0	3712.4	3443.8	3187.2	2993.6	2836.1	2693.5	2666.5	2653.0
12.5°	4285.6	4155.1	3845.9	3503.8	3146.7	2831.6	2545.0	2337.9	2199.8	2168.3	2121.8
15°	4273.6	4111.5	3722.9	3293.7	2840.6	2456.4	2154.8	1913.2	1787.2	1703.1	1704.6
17.5°	4263.1	4062.0	3584.8	3064.1	2576.5	2133.8	1800.7	1583.1	1467.6	1422.5	1418.0
20°	4248.1	4003.5	3425.8	2822.6	2274.9	1839.7	1538.1	1376.0	1298.0	1260.5	1259.0
22.5°	4242.1	3946.5	3269.7	2576.5	2007.8	1613.1	1364.0	1250.0	1200.5	1174.9	1174.9
25°	4257.1	3906.0	3106.2	2342.4	1770.7	1419.5	1244.0	1165.9	1137.4	1123.9	1119.4
27.5°	4303.6	3888.0	2944.1	2108.3	1553.1	1287.5	1162.9	1108.9	1087.9	1077.4	1078.9
30°	4392.1	3886.5	2785.0	1877.2	1391.0	1186.9	1098.4	1060.9	1044.4	1038.4	1036.9
32.5°	4534.7	3919.5	2629.0	1686.6	1254.5	1102.9	1038.4	1011.4	1003.9	999.4	997.9
35°	4776.3	4012.5	2474.4	1512.6	1149.4	1027.9	981.4	967.9	957.4	961.9	963.4
37.5°	5101.9	4173.1	2327.4	1376.0	1069.9	972.4	933.3	921.3	915.3	919.8	924.3
40°	5538.6	4404.2	2204.3	1266.5	1012.9	925.8	891.3	880.8	874.8	882.3	883.8
42.5°	6020.3	4671.3	2102.3	1180.9	966.4	886.8	853.8	841.8	837.3	841.8	843.3
45°	6515.4	4981.9	2049.8	1119.4	927.3	858.3	823.8	810.3	799.8	796.8	801.3
47.5°	7003.1	5252.0	2048.3	1081.9	895.8	832.8	795.3	780.3	766.8	759.3	757.8
50°	7400.8	5466.5	2084.3	1065.4	868.8	804.3	766.8	751.8	733.8	718.8	721.8
52.5°	7700.9	5606.1	2100.8	1057.9	853.8	774.3	736.8	723.3	702.3	682.8	682.8
55°	7894.5	5639.1	2060.3	1050.4	841.8	742.8	702.3	690.3	669.3	649.7	649.7
57.5°	7960.5	5537.1	1914.7	1032.4	829.8	715.8	667.8	657.2	640.7	621.2	618.2
60°	7807.4	5191.9	1659.6	978.4	805.8	687.3	630.2	625.7	619.7	603.2	601.7
62.5°	7217.7	4459.7	1382.0	907.8	765.3	657.2	595.7	603.2	607.7	598.7	597.2
65°	6236.3	3620.9	1180.9	810.3	711.3	615.2	558.2	577.7	589.7	589.7	586.7
67.5°	5058.4	2780.5	994.9	726.3	643.7	558.2	516.2	531.2	540.2	537.2	544.7
70°	3595.3	1883.2	810.3	630.2	558.2	493.7	462.2	462.2	456.2	453.2	453.2
72.5°	1743.7	1075.9	657.2	526.7	475.7	421.7	396.1	385.6	373.6	372.1	364.6
73°	1457.0	964.9	627.2	507.2	456.2	411.2	382.6	366.1	358.6	352.6	351.1
75°	886.8	732.3	523.7	427.7	388.6	354.1	328.6	313.6	306.1	301.6	300.1
77.5°	583.7	546.2	406.7	327.1	297.1	276.1	265.6	250.6	246.1	240.1	240.1
80°	435.2	417.2	291.1	231.1	213.1	195.1	192.1	189.1	177.1	169.6	166.6
82.5°	280.6	297.1	198.1	154.6	135.1	120.0	121.5	126.0	114.0	103.5	100.5
85°	199.6	214.6	120.0	70.5	57.0	49.5	55.5	49.5	51.0	40.5	33.0
87.5°	33.0	57.0	21.0	9.0	4.5	3.0	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)