

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: P451731

Luminaire Tested: **GALN-SA2C-827-U-AFL**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P451731  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA2C-827-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 80 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10495 lumens  
Efficiency: N/A  
Efficacy: 97.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

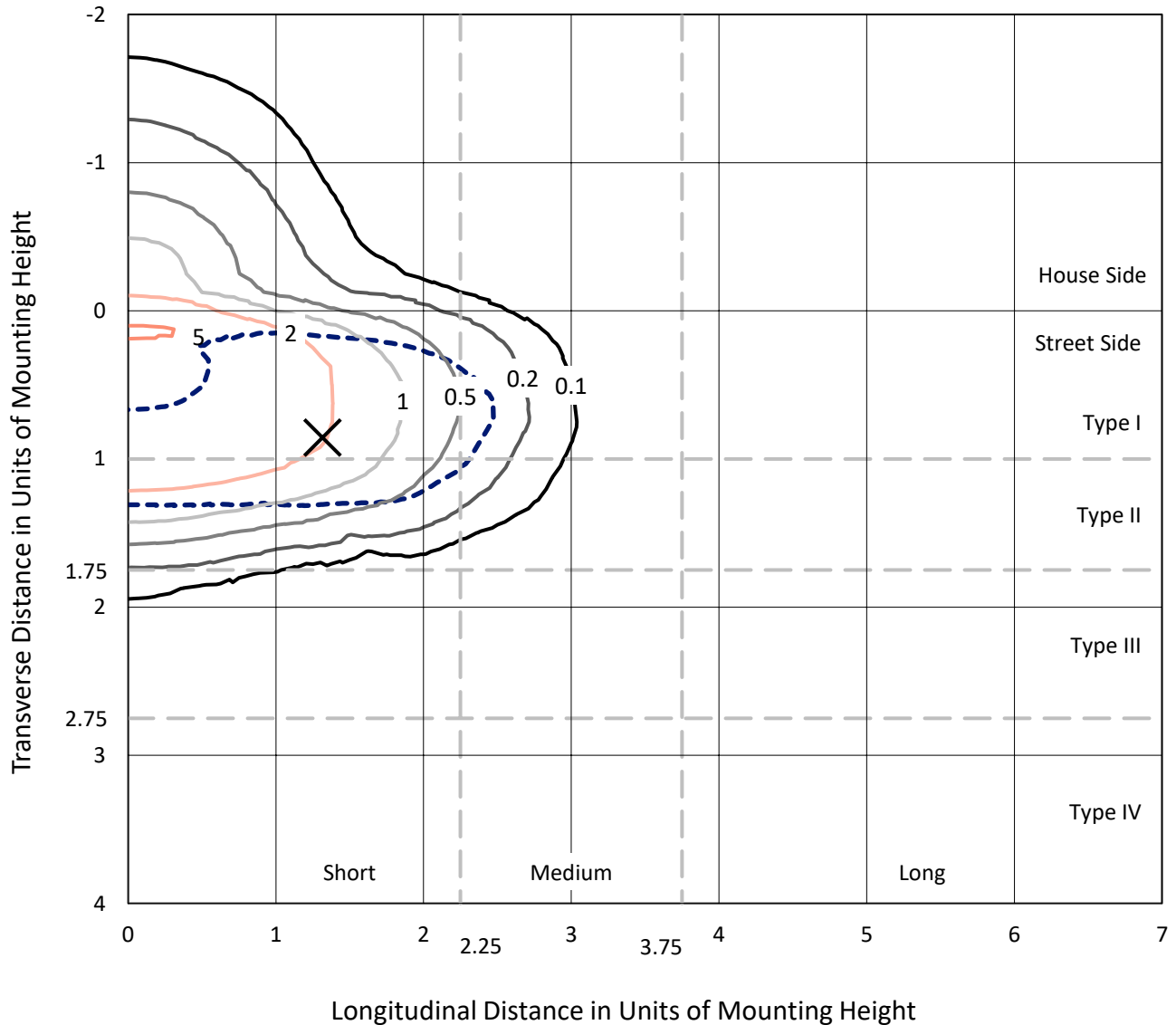
Input Watts (W): 108  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

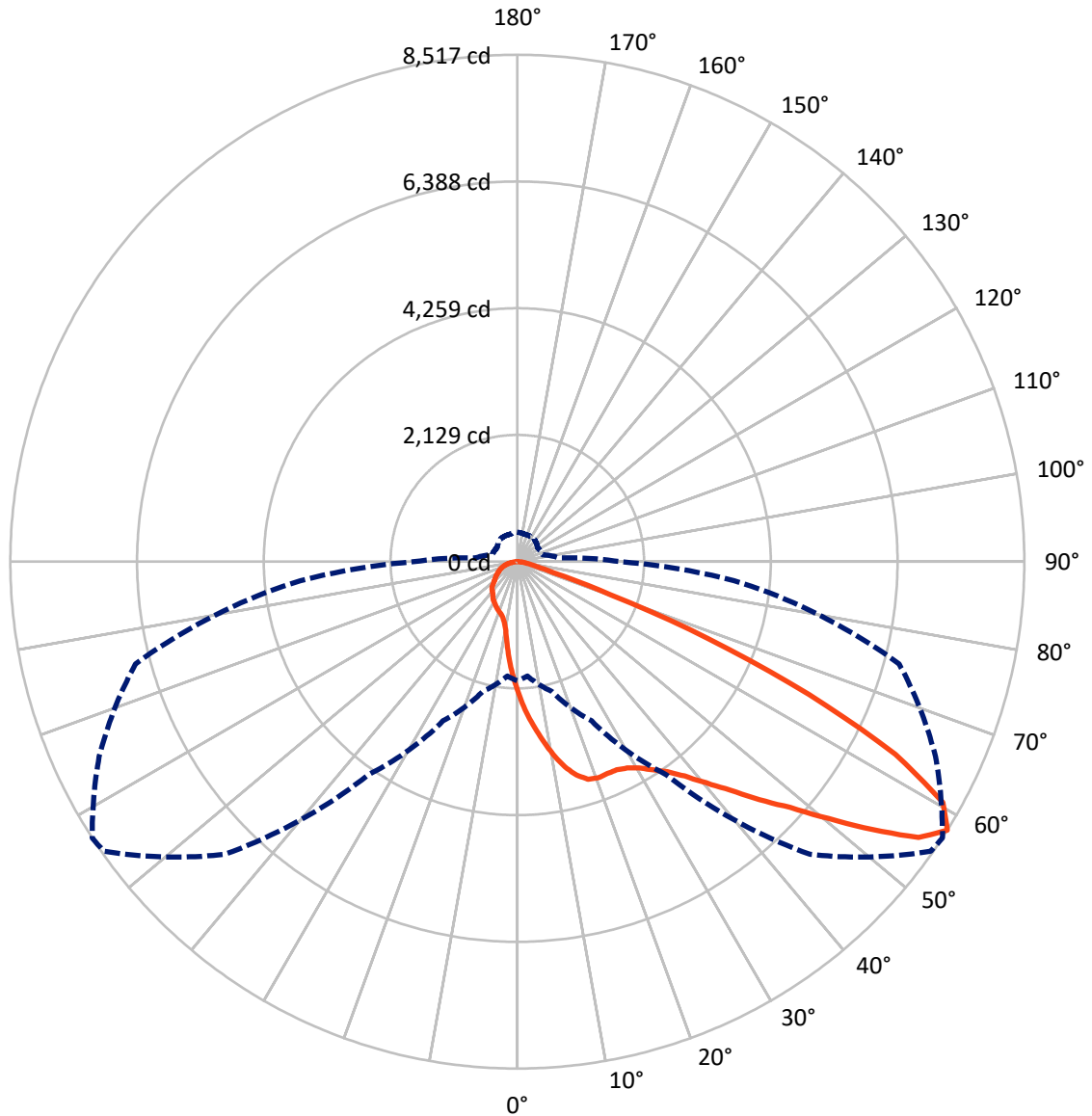
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral    - - - Horizontal Cone Through 57.5-Deg Vertical

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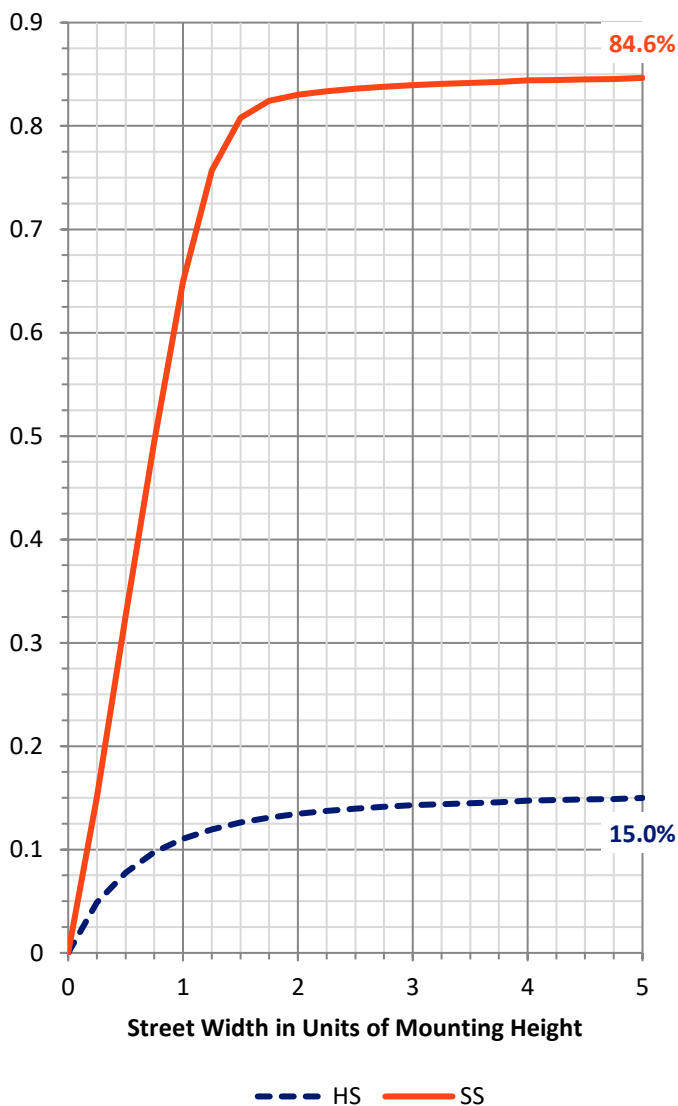
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1596.0	0.0	1596.0
	% Fixture	15.2	0.0	15.2
<b>Street Side</b>	Lumens	8899.0	0.0	8899.0
	% Fixture	84.8	0.0	84.8
<b>Total</b>	Lumens	10495.0	0.0	10495.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	211.9	2.0
10°-20°	624.5	6.0
20°-30°	1037.0	9.9
30°-40°	1562.0	14.9
40°-50°	2345.3	22.3
50°-60°	2628.7	25.0
60°-70°	1538.5	14.7
70°-80°	455.1	4.3
80°-90°	92.0	0.9
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°	10495.0	100.0
0°-180°	10495.0	100.0

**Coefficient of Utilization**



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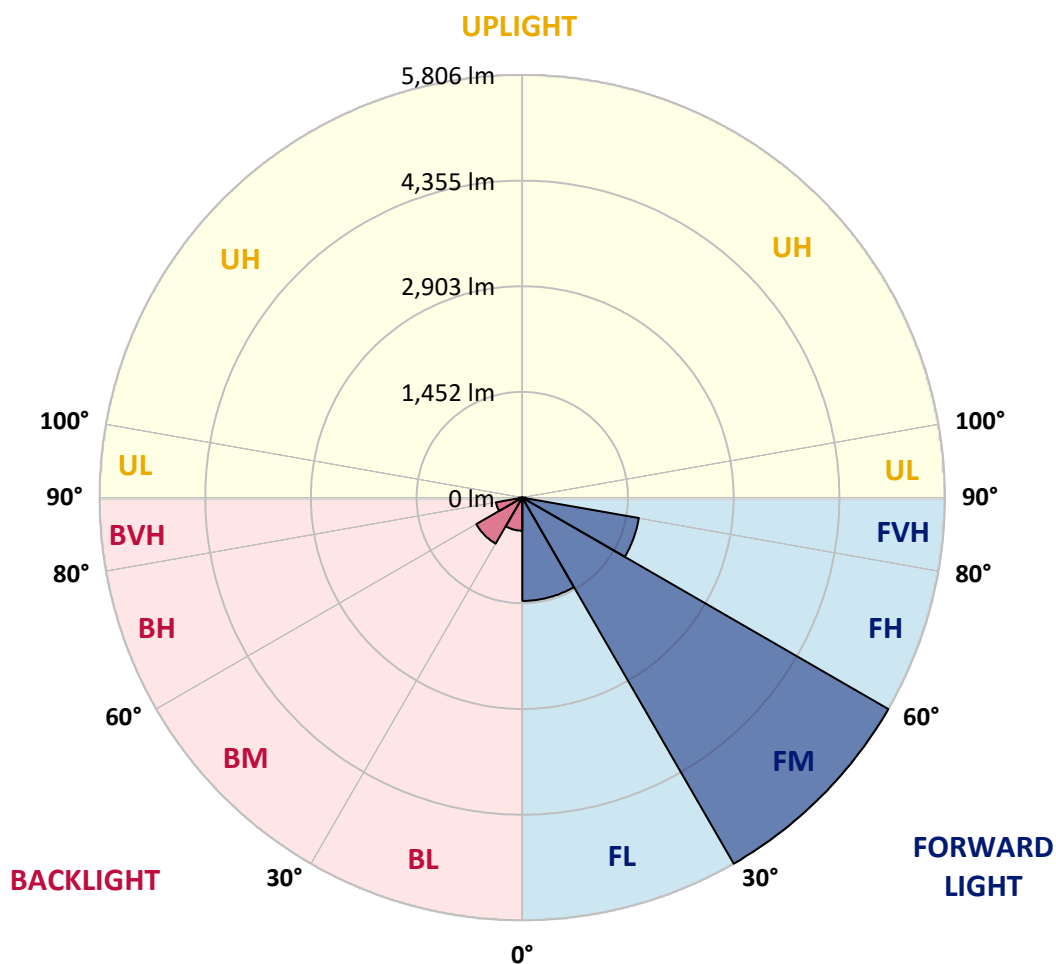
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1418.7	13.5			
FM	(30°-60°)	5806.3	55.3			
FH	(60°-80°)	1626.3	15.5			G1/1800
FVH	(80°-90°)	47.7	0.5			G1/100
BL	(0°-30°)	454.8	4.3	B1/500		
BM	(30°-60°)	729.7	7.0	B1/1000		
BH	(60°-80°)	367.2	3.5	B1/500		G1/500
BVH	(80°-90°)	44.3	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2204.9	2204.9	2204.9	2204.9	2204.9	2204.9	2204.9	2204.9	2204.9	2204.9	2204.9
2.5°	2739.7	2709.9	2686.3	2665.6	2638.6	2565.7	2492.7	2491.5	2433.5	2343.9	2252.0
5°	3186.1	3145.9	3151.1	3086.7	3022.4	2916.7	2762.1	2754.1	2630.6	2462.8	2292.2
7.5°	3476.8	3477.4	3461.3	3424.5	3355.0	3234.9	3059.7	3020.1	2848.3	2593.8	2338.2
10°	3461.9	3477.4	3504.4	3536.0	3557.2	3498.0	3338.3	3290.1	3066.6	2752.4	2389.3
12.5°	3263.1	3287.2	3325.7	3405.0	3533.1	3630.8	3576.2	3537.1	3319.4	2910.3	2445.6
15°	3139.0	3153.4	3174.6	3228.0	3365.9	3599.7	3741.1	3720.4	3557.8	3089.0	2508.8
17.5°	3101.1	3115.4	3122.3	3155.1	3253.3	3492.9	3806.0	3842.7	3769.2	3253.3	2572.6
20°	3139.0	3145.9	3145.9	3165.4	3242.4	3430.3	3803.1	3877.2	3942.7	3450.4	2632.3
22.5°	3238.4	3241.3	3237.2	3244.1	3301.6	3447.5	3776.1	3868.0	4082.9	3617.5	2678.8
25°	3399.8	3404.4	3378.0	3361.9	3403.8	3523.3	3791.0	3875.5	4192.6	3777.2	2709.9
27.5°	3583.1	3588.8	3556.6	3519.3	3538.8	3617.0	3849.6	3925.5	4274.8	3934.7	2729.4
30°	3807.7	3810.0	3756.0	3711.2	3698.5	3756.6	3949.6	4020.3	4377.0	4120.2	2758.7
32.5°	4037.5	4054.7	3985.2	3922.0	3900.8	3918.6	4097.2	4165.6	4498.8	4319.6	2805.8
35°	4350.0	4352.9	4269.6	4192.6	4122.5	4145.5	4286.2	4335.6	4667.1	4549.9	2872.4
37.5°	4740.1	4766.5	4651.6	4508.0	4421.8	4388.5	4514.9	4568.9	4903.2	4832.6	2973.0
40°	5173.3	5183.0	5084.8	4995.2	4837.8	4741.2	4828.6	4887.2	5194.5	5169.8	3089.6
42.5°	5445.6	5466.8	5474.3	5465.1	5346.7	5184.7	5218.1	5245.6	5539.2	5486.3	3209.1
45°	5537.5	5569.1	5675.9	5902.3	5914.9	5755.2	5677.7	5704.1	5914.9	5805.8	3323.4
47.5°	5385.2	5439.2	5636.3	6100.5	6448.0	6460.1	6226.3	6168.3	6257.3	6070.6	3406.1
50°	4991.7	5003.2	5304.8	5977.0	6697.9	7134.0	6892.1	6784.1	6582.5	6266.5	3463.0
52.5°	4382.8	4396.0	4648.7	5403.0	6544.0	7605.1	7671.1	7478.1	6912.8	6418.7	3500.3
55°	3253.3	3329.7	3607.8	4336.8	5814.4	7560.8	8290.4	8180.7	7312.1	6539.4	3558.9
57.5°	2000.4	1930.3	2260.0	2950.6	4373.0	6953.0	8481.7	8517.3	7751.5	6640.5	3657.2
60°	920.3	934.1	1070.3	1521.8	2665.6	5439.2	7988.8	8214.0	7994.6	6637.0	3681.9
62.5°	634.2	621.6	587.1	668.1	1215.6	3440.0	6747.9	7129.4	7507.4	6430.8	3583.6
65°	567.0	554.4	487.7	465.3	558.4	1499.4	4905.5	5387.0	6321.1	5910.3	3338.9
67.5°	529.7	512.4	443.5	399.8	398.7	596.9	2892.5	3472.2	4688.4	4996.9	2893.1
70°	490.6	476.8	408.5	360.2	339.5	375.1	1271.3	1664.3	3044.2	3600.9	2253.7
72.5°	451.5	435.5	374.0	322.3	295.3	280.9	487.2	633.7	1720.0	2158.9	1381.6
75°	394.7	386.6	334.4	291.8	262.5	226.9	309.1	352.7	822.7	991.6	693.4
77.5°	345.3	336.6	297.0	255.1	233.8	184.4	219.5	239.6	347.0	402.1	313.1
80°	252.8	261.4	250.5	225.2	208.5	144.8	147.6	164.3	206.2	228.1	191.3
82.5°	160.3	176.4	193.0	173.5	158.0	114.3	102.3	108.6	140.7	149.4	85.0
85°	67.2	68.4	112.0	105.7	90.2	67.8	61.5	64.9	75.3	78.7	39.6
87.5°	25.9	25.3	39.6	36.8	28.1	19.5	19.5	21.8	29.9	27.6	12.6
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°	2204.9	2204.9	2204.9	2204.9	2204.9	2204.9	2204.9	2204.9	2204.9	2204.9	2204.9
2.5°	2212.3	2171.6	2090.6	1990.0	1916.5	1833.8	1760.8	1708.5	1689.0	1679.8	1662.6
5°	2210.6	2130.2	1962.4	1786.7	1645.3	1500.6	1378.2	1298.9	1292.0	1239.2	1234.0
7.5°	2211.2	2088.3	1821.1	1562.6	1347.2	1199.0	1097.8	1071.4	1039.8	1031.8	1035.8
10°	2212.9	2034.8	1669.5	1340.9	1132.3	1035.2	997.3	987.0	988.1	991.6	992.1
12.5°	2215.2	1983.1	1512.0	1172.5	1011.7	971.5	967.4	976.6	986.4	993.9	995.6
15°	2218.1	1924.0	1358.7	1036.9	951.3	947.9	961.1	976.6	990.4	1001.3	1003.1
17.5°	2214.6	1855.0	1230.0	953.6	918.0	934.7	956.5	976.1	988.7	999.0	1000.2
20°	2206.6	1778.0	1105.9	895.1	897.3	924.3	947.9	966.3	980.1	985.2	989.3
22.5°	2175.6	1686.1	997.9	849.7	872.6	910.0	938.1	949.1	933.5	922.6	925.5
25°	2122.7	1566.6	897.3	812.9	850.2	889.9	918.6	892.2	879.5	874.9	877.2
27.5°	2056.7	1435.6	821.5	774.4	821.5	867.5	859.4	854.8	849.1	841.6	843.3
30°	1985.4	1307.5	757.2	744.5	790.5	816.9	820.4	827.8	821.5	810.0	814.6
32.5°	1919.4	1186.9	708.3	719.3	768.7	764.6	790.5	799.1	769.8	731.3	733.0
35°	1863.1	1074.9	671.6	694.6	731.3	733.0	758.9	729.0	697.4	679.0	680.2
37.5°	1820.5	987.5	647.4	673.3	683.6	705.5	691.7	676.2	672.1	659.5	660.1
40°	1795.3	911.1	631.9	656.6	654.9	669.9	625.6	641.1	646.9	642.9	643.4
42.5°	1770.0	857.1	615.8	633.7	633.1	603.8	594.0	607.2	622.2	623.9	622.7
45°	1749.9	815.2	599.2	598.6	610.1	564.1	561.3	569.3	590.6	600.9	600.3
47.5°	1727.5	780.2	573.9	557.8	561.3	539.4	534.8	538.3	564.1	580.8	585.4
50°	1699.3	745.1	542.3	520.5	506.1	516.5	517.6	518.2	544.0	563.0	567.0
52.5°	1676.9	718.7	506.1	490.0	472.8	495.8	504.4	505.5	521.1	536.6	539.4
55°	1690.1	703.7	470.5	459.0	443.5	474.5	491.2	493.5	496.9	508.4	510.1
57.5°	1729.8	707.2	441.8	426.8	415.4	449.2	477.4	479.1	476.8	490.6	492.9
60°	1741.8	705.5	420.5	391.2	384.3	422.2	457.3	460.7	460.2	480.3	484.3
62.5°	1691.3	683.6	399.3	361.4	356.8	394.7	429.1	442.9	445.8	474.5	479.7
65°	1572.4	638.8	371.1	329.8	329.8	365.4	402.1	421.1	429.1	467.6	473.4
67.5°	1415.5	586.0	342.4	302.8	301.6	337.2	373.4	392.9	405.6	457.9	461.3
70°	1174.8	514.7	306.8	273.5	273.5	305.6	338.4	361.9	380.3	439.5	439.5
72.5°	804.9	428.0	263.7	240.1	240.7	270.6	303.9	330.3	352.2	402.7	403.9
75°	509.0	334.4	216.6	204.5	206.8	235.0	269.4	297.0	340.7	398.1	399.8
77.5°	270.6	235.0	172.3	169.5	172.3	198.2	236.7	274.6	341.8	345.3	339.5
80°	175.2	166.6	136.2	130.4	131.6	159.7	210.8	260.8	274.6	278.1	265.4
82.5°	95.4	105.7	96.5	90.8	90.8	124.7	179.8	207.4	197.0	163.7	156.3
85°	40.8	49.4	50.0	43.7	41.9	77.0	120.6	113.2	105.1	100.5	99.4
87.5°	11.5	16.1	16.1	12.1	9.2	21.3	24.1	6.9	0.0	0.6	1.1
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)