

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: P648394

Luminaire Tested: **GALN-SA4B-835-U-T2R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P648394  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4B-835-U-T2R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 3500K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17962.8 lumens  
Efficiency: N/A  
Efficacy: 109.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

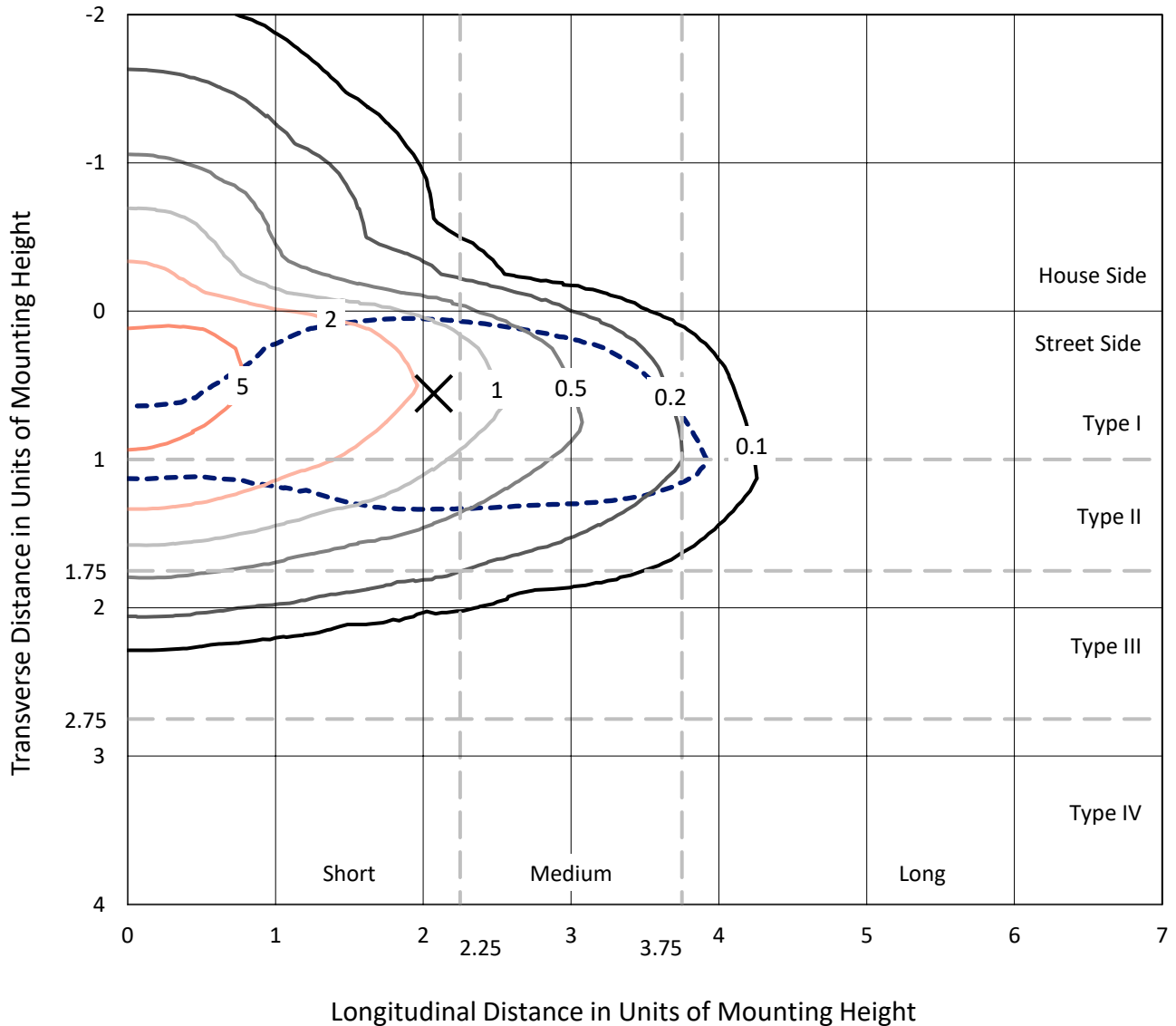
Input Watts (W): 164  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

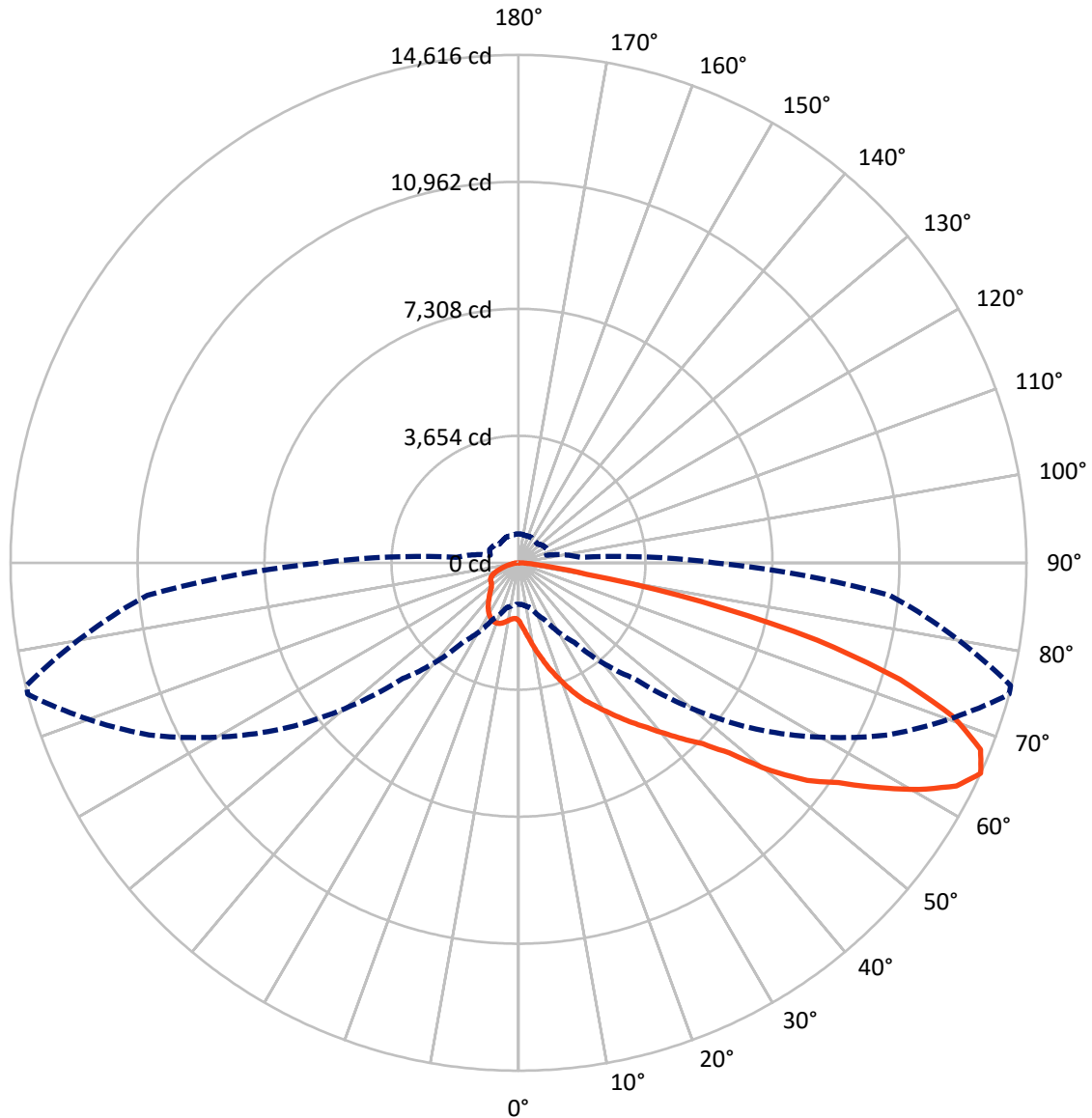
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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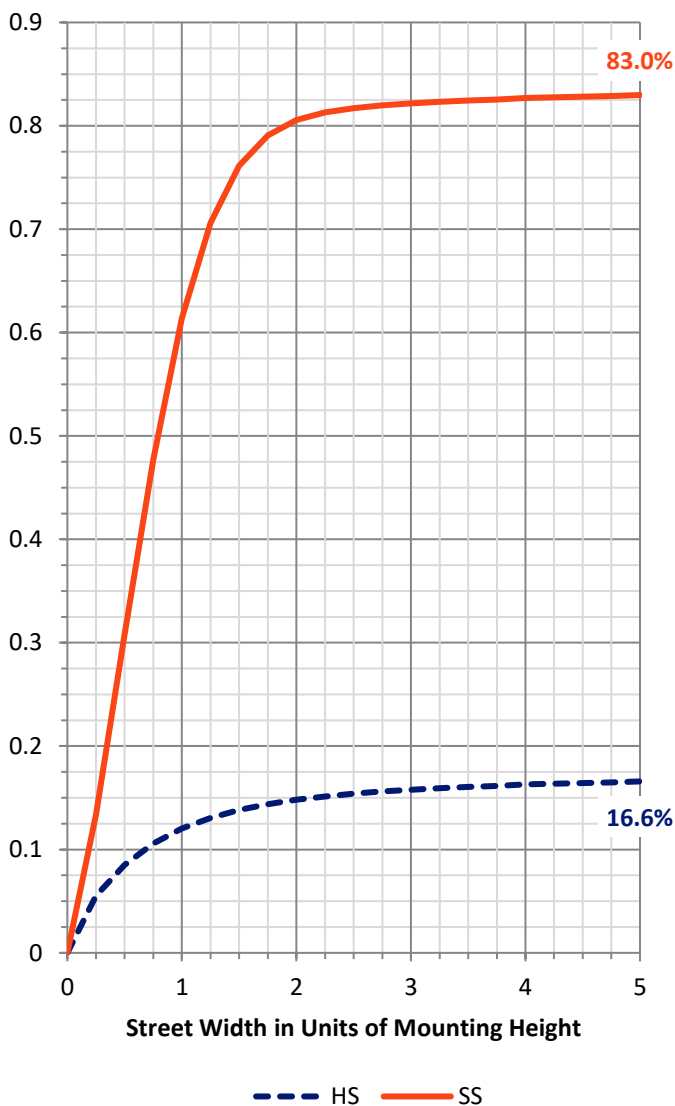
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3019.8	0.0	3019.8
	% Fixture	16.8	0.0	16.8
<b>Street Side</b>	Lumens	14943.0	0.0	14943.0
	% Fixture	83.2	0.0	83.2
<b>Total</b>	Lumens	17962.8	0.0	17962.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	202.8	1.1
10°-20°	794.2	4.4
20°-30°	1534.2	8.5
30°-40°	2492.0	13.9
40°-50°	3428.0	19.1
50°-60°	4047.3	22.5
60°-70°	3546.1	19.7
70°-80°	1692.9	9.4
80°-90°	225.3	1.3
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°	17962.8	100.0
0°-180°	17962.8	100.0

**Coefficient of Utilization**

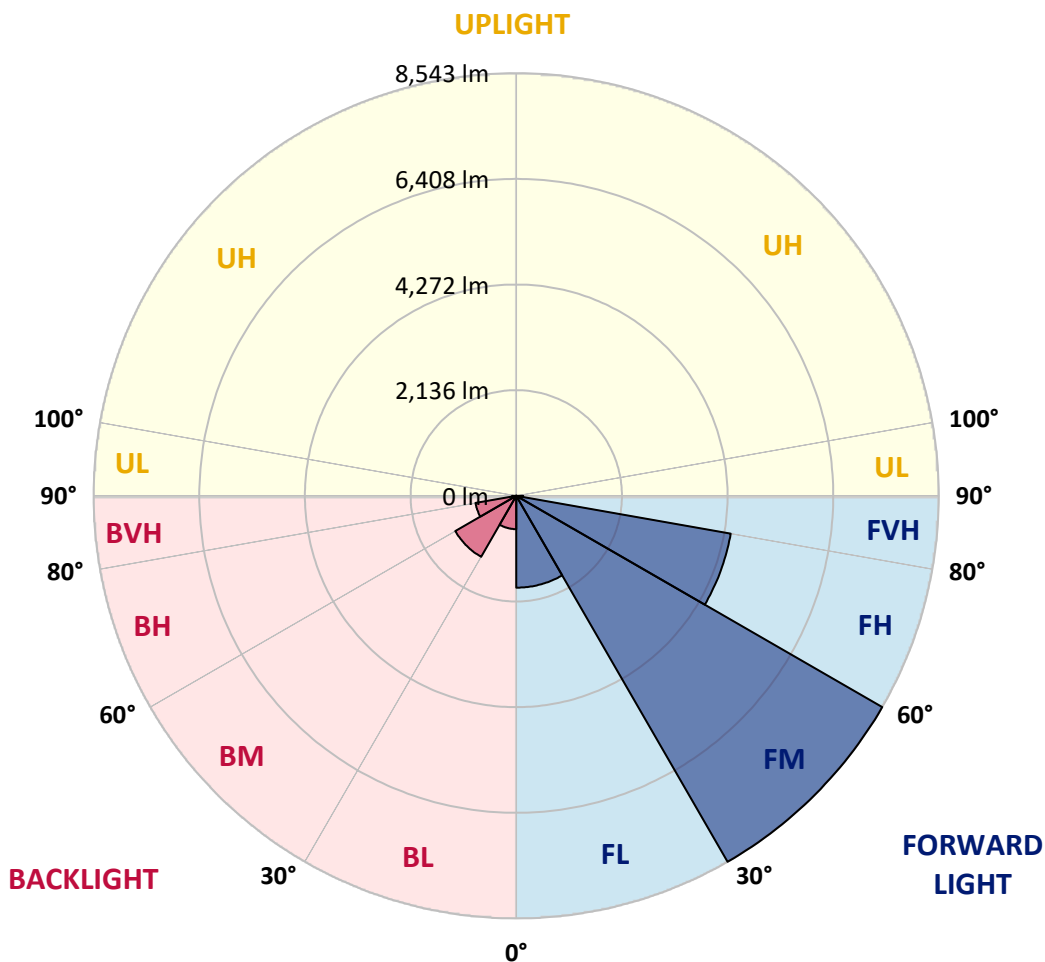


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1857.1	10.3			
FM (30°-60°)	8543.5	47.6			
FH (60°-80°)	4401.7	24.5			G2/5000
FVH (80°-90°)	140.8	0.8			G2/225
BL (0°-30°)	674.2	3.8	B2/1000		
BM (30°-60°)	1423.8	7.9	B2/2500		
BH (60°-80°)	837.3	4.7	B2/1000		G2/1000
BVH (80°-90°)	84.5	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1669.0	1669.0	1669.0	1669.0	1669.0	1669.0	1669.0	1669.0	1669.0	1669.0	1669.0
2.5°	2217.5	2202.9	2187.3	2144.4	2098.7	2047.0	1972.9	1901.8	1807.3	1804.4	1734.3
5°	2832.3	2822.6	2753.3	2713.4	2607.2	2466.0	2346.1	2160.0	1987.6	1967.1	1830.7
7.5°	3397.4	3359.4	3333.1	3261.0	3155.7	2974.5	2742.6	2491.3	2202.9	2175.6	1949.6
10°	3823.2	3819.2	3805.6	3743.3	3664.4	3484.1	3226.9	2866.4	2475.7	2422.1	2093.7
12.5°	4141.8	4144.7	4142.7	4141.8	4085.2	3932.2	3653.6	3273.6	2751.4	2713.4	2260.4
15°	4351.2	4380.4	4392.2	4440.9	4445.7	4343.4	4103.7	3667.3	3062.2	3005.7	2439.7
17.5°	4489.6	4504.2	4558.7	4641.5	4708.8	4690.2	4476.9	4031.7	3379.8	3285.3	2625.7
20°	4622.0	4647.4	4689.3	4802.3	4921.2	4975.7	4825.7	4404.8	3694.5	3634.1	2831.3
22.5°	4897.8	4933.8	4948.5	5006.0	5107.3	5203.7	5135.5	4762.4	4039.4	3957.6	3049.6
25°	5364.5	5402.5	5361.6	5347.9	5381.0	5428.8	5414.1	5099.4	4364.8	4247.9	3256.1
27.5°	5972.4	5977.3	5897.4	5821.4	5739.5	5715.2	5670.4	5398.6	4647.4	4549.9	3463.6
30°	6625.2	6601.9	6469.3	6332.0	6193.6	6057.2	5928.6	5687.0	4962.1	4850.1	3667.3
32.5°	7231.2	7218.6	7071.4	6858.1	6624.3	6495.6	6235.5	5978.3	5299.2	5191.1	3876.7
35°	7685.2	7703.8	7542.0	7309.1	7053.9	6939.9	6611.6	6284.2	5648.0	5530.1	4104.7
37.5°	8007.7	7998.0	7854.8	7653.1	7429.0	7329.7	7051.0	6618.4	6023.1	5910.1	4354.1
40°	8122.7	8116.9	8010.6	7863.6	7721.3	7686.2	7510.8	6978.9	6452.8	6320.3	4654.2
42.5°	8049.6	8062.3	7992.2	7952.2	7925.9	7951.2	7967.8	7451.4	6921.4	6799.7	4979.6
45°	7825.5	7818.7	7809.0	7874.2	8022.4	8189.0	8419.9	7897.7	7431.0	7333.5	5416.1
47.5°	7425.1	7473.8	7498.2	7678.4	8001.9	8396.5	8940.1	8495.9	8170.4	8085.7	6081.6
50°	6864.9	6903.9	7048.1	7368.6	7850.9	8474.4	9448.8	9474.1	9403.9	9245.1	6804.5
52.5°	5990.0	6050.4	6347.5	6935.0	7541.1	8442.3	9756.6	10313.0	10405.5	10286.7	7516.7
55°	5010.8	5095.6	5409.3	6180.0	7114.3	8266.9	9969.0	10799.1	11168.4	11058.3	8202.6
57.5°	4052.1	4141.8	4464.2	5210.6	6369.9	7879.2	10108.4	11340.8	12207.0	12063.8	9056.1
60°	3036.9	3130.4	3407.1	4175.8	5309.9	7121.2	10013.9	11810.5	13244.6	13183.2	9910.6
62.5°	1959.3	2062.6	2303.3	2939.5	4081.3	6085.5	9508.2	12069.6	14142.9	14068.9	10534.1
65°	1193.5	1205.2	1337.7	1824.9	2793.3	4711.7	8351.7	11725.7	14616.4	14594.0	10724.1
67.5°	771.6	790.1	850.6	1093.1	1674.8	3272.6	6677.8	10590.6	14339.7	14331.9	10331.5
70°	651.8	657.6	685.0	737.5	973.3	1984.7	4689.3	8781.3	13288.4	13288.4	9387.4
72.5°	582.6	590.5	600.2	616.8	694.7	1124.3	2798.2	6835.7	11473.3	11549.3	7990.2
75°	529.1	527.1	532.9	535.9	592.3	734.6	1446.8	5055.6	8875.9	8723.9	5786.4
77.5°	453.0	455.9	453.0	465.7	523.2	559.2	734.6	3392.5	5379.1	5182.3	2904.4
80°	372.2	377.0	381.9	389.7	447.2	424.8	441.4	1546.2	1989.5	1947.6	897.3
82.5°	279.6	286.4	294.3	312.7	351.7	280.6	278.7	660.5	718.1	657.6	330.3
85°	113.0	133.5	201.7	220.2	221.2	153.9	171.5	275.7	293.2	286.4	129.6
87.5°	26.3	31.2	65.3	98.4	90.6	57.5	63.3	89.7	102.3	94.5	43.8
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°	1669.0	1669.0	1669.0	1669.0	1669.0	1669.0	1669.0	1669.0	1669.0	1669.0	1669.0
2.5°	1702.1	1668.0	1609.5	1564.7	1532.6	1504.3	1486.8	1476.0	1472.2	1471.2	1472.2
5°	1759.6	1699.2	1606.6	1548.1	1516.0	1497.5	1486.8	1485.8	1486.8	1487.8	1484.8
7.5°	1838.5	1751.8	1631.0	1576.4	1552.1	1538.4	1533.5	1531.6	1532.6	1531.6	1531.6
10°	1943.7	1824.9	1678.8	1622.2	1601.8	1586.1	1578.4	1573.5	1569.6	1565.7	1563.7
12.5°	2059.7	1905.7	1730.4	1675.8	1646.6	1622.2	1604.7	1592.0	1583.2	1574.5	1572.5
15°	2189.3	1991.5	1787.8	1711.9	1670.0	1633.9	1603.7	1583.2	1567.6	1555.0	1554.0
17.5°	2313.0	2072.4	1826.8	1728.4	1667.0	1616.3	1576.4	1548.1	1528.7	1512.1	1510.2
20°	2445.5	2149.3	1844.4	1717.7	1637.8	1576.4	1523.8	1489.7	1467.3	1448.8	1445.9
22.5°	2579.0	2214.6	1842.4	1683.6	1587.1	1515.0	1459.5	1423.4	1397.1	1378.6	1371.8
25°	2706.6	2267.2	1818.0	1629.0	1517.0	1442.0	1385.4	1352.3	1328.9	1306.5	1306.5
27.5°	2821.5	2298.3	1772.2	1562.8	1444.9	1365.9	1321.2	1290.9	1269.5	1254.9	1246.1
30°	2934.6	2313.0	1709.9	1479.0	1368.9	1301.7	1265.6	1248.1	1228.6	1212.0	1210.0
32.5°	3035.9	2310.1	1631.9	1397.1	1296.8	1249.0	1234.4	1220.8	1200.3	1176.9	1171.1
35°	3134.3	2290.6	1539.4	1307.5	1236.4	1217.9	1221.8	1202.3	1165.3	1136.1	1131.1
37.5°	3241.5	2255.5	1438.1	1234.4	1185.7	1203.2	1213.0	1170.1	1109.7	1063.9	1053.2
40°	3365.3	2215.6	1332.8	1161.3	1145.8	1189.6	1189.6	1110.7	1027.9	999.7	991.8
42.5°	3510.4	2182.5	1245.1	1100.0	1112.6	1156.5	1151.6	1031.8	997.7	983.1	979.1
45°	3740.3	2170.7	1154.5	1046.4	1085.4	1117.5	1077.6	1004.5	985.0	973.3	969.4
47.5°	4103.7	2184.4	1074.7	1006.5	1054.2	1078.6	994.7	986.0	972.3	955.8	953.9
50°	4440.9	2171.7	1018.1	984.1	1026.9	1031.8	960.7	963.6	955.8	937.3	933.4
52.5°	4716.6	2131.8	982.1	972.3	1003.5	949.9	928.5	939.2	936.3	912.9	909.0
55°	5019.6	2107.4	964.6	972.3	987.9	878.8	898.3	913.9	910.0	893.4	892.5
57.5°	5386.9	2112.3	951.9	975.3	972.3	842.7	868.1	886.6	885.7	880.8	880.8
60°	5763.0	2114.3	932.4	974.3	953.9	814.5	836.9	863.3	865.2	868.1	868.1
62.5°	5887.7	2029.5	894.4	956.7	912.9	787.2	807.7	843.8	841.8	849.6	850.6
65°	5654.8	1794.6	837.9	916.8	860.3	767.7	785.3	818.4	807.7	828.2	832.0
67.5°	5147.2	1484.8	750.2	844.7	801.9	747.3	770.7	783.3	763.8	803.8	804.8
70°	4448.6	1159.4	639.2	742.4	735.6	725.8	759.0	739.5	712.2	760.9	751.2
72.5°	3719.9	885.7	510.5	607.0	646.9	693.7	738.5	683.0	645.0	659.6	642.1
75°	2794.3	654.7	410.2	475.4	538.8	647.9	720.0	614.8	556.3	542.7	538.8
77.5°	1424.4	427.8	306.9	355.6	404.3	585.5	694.7	534.9	460.9	439.4	429.6
80°	508.6	266.0	216.3	245.5	272.8	503.7	607.0	442.3	357.6	353.7	357.6
82.5°	235.8	171.5	145.2	160.7	161.8	336.1	462.8	330.3	271.9	413.1	348.8
85°	101.3	85.7	81.8	79.9	74.1	150.0	260.1	177.3	276.7	123.7	114.0
87.5°	30.2	34.1	30.2	22.4	16.6	16.6	26.3	9.7	6.8	4.9	4.9
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)