

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: P651860

Luminaire Tested: **GALN-SA4A-840-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651860
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4A-840-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15301.2 lumens
Efficiency: N/A
Efficacy: 126.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G3

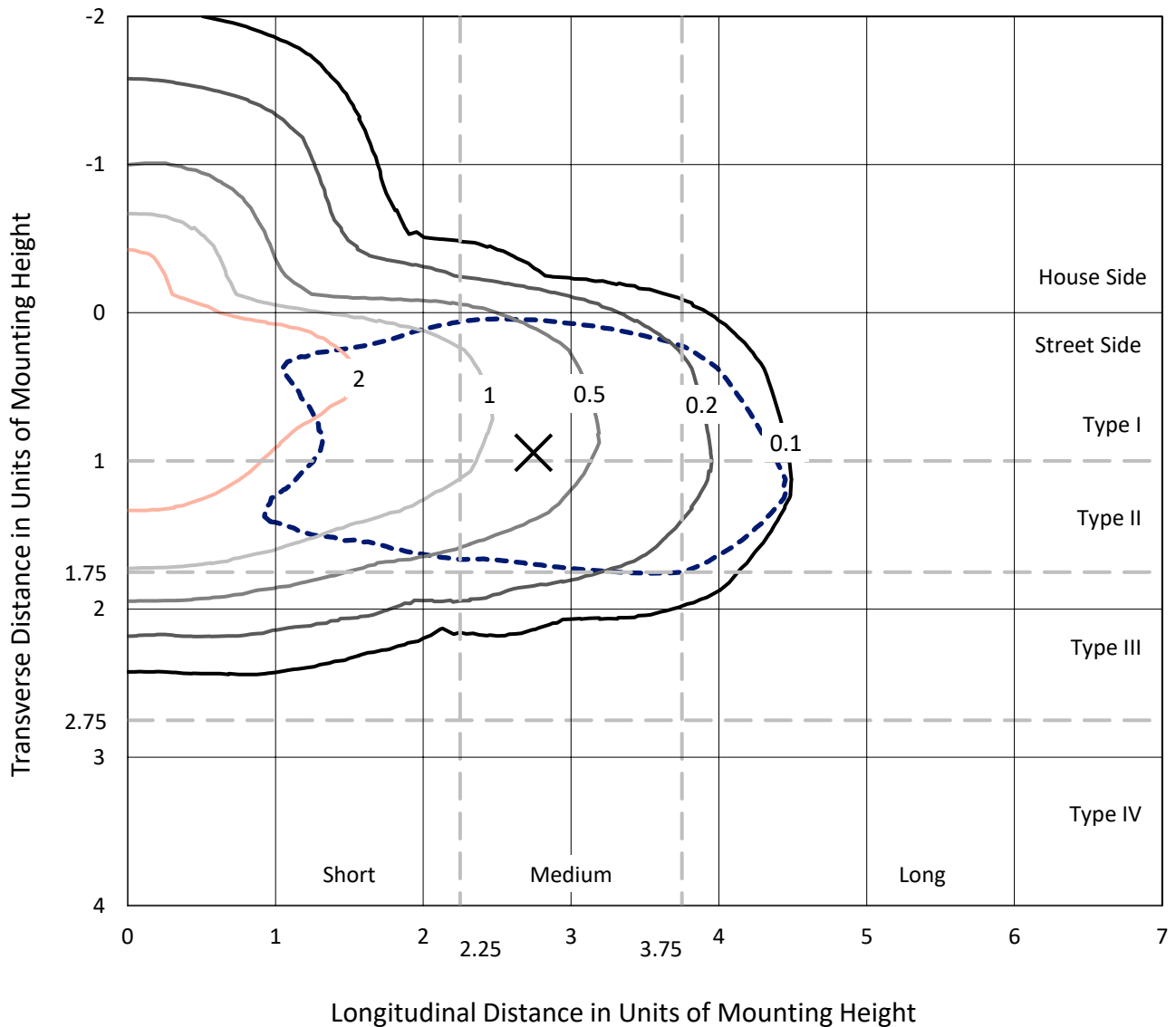
Input Watts (W): 121
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

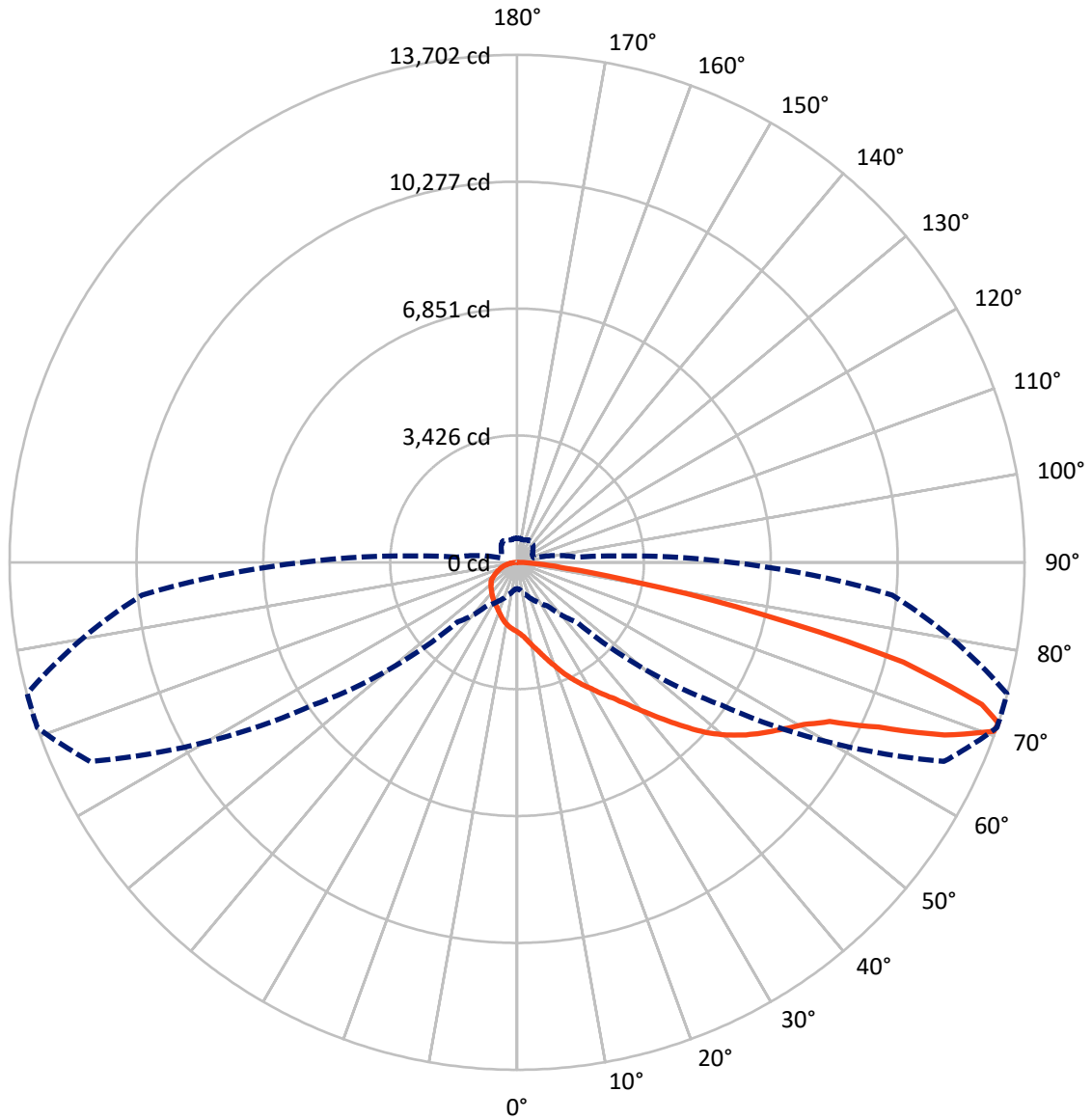
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 71-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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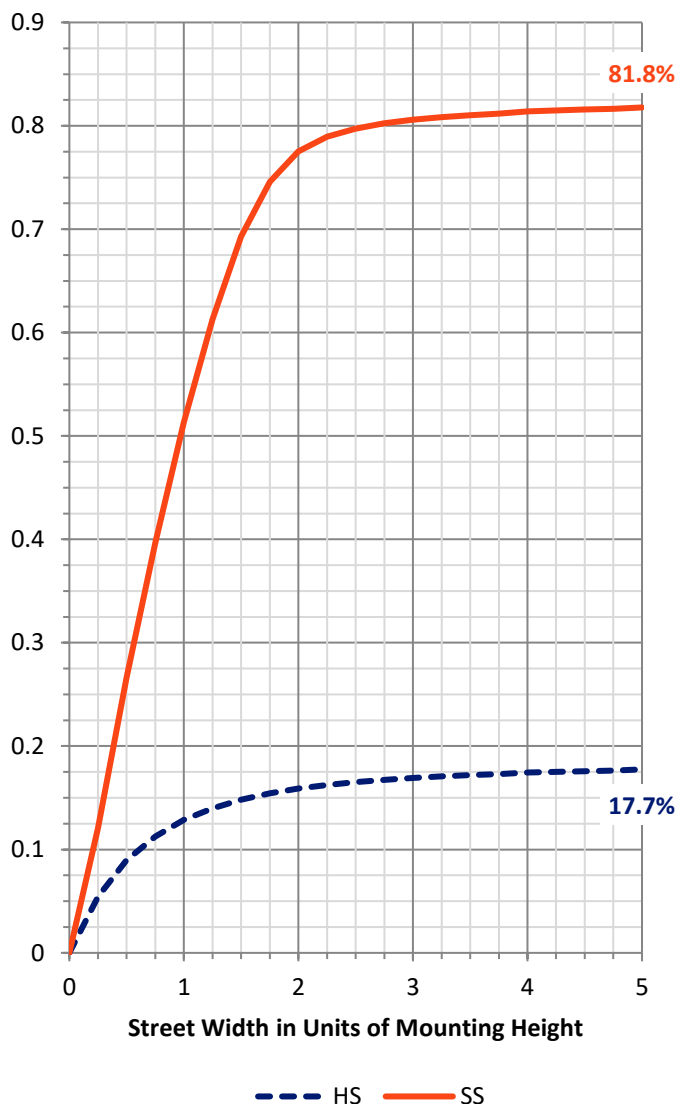
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2751.9	0.0	2751.9
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	12549.3	0.0	12549.3
	% Fixture	82.0	0.0	82.0
Total	Lumens	15301.2	0.0	15301.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.6	1.2
10°-20°	612.6	4.0
20°-30°	1070.6	7.0
30°-40°	1592.3	10.4
40°-50°	2346.1	15.3
50°-60°	3284.6	21.5
60°-70°	3673.7	24.0
70°-80°	2244.0	14.7
80°-90°	288.7	1.9
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°	15301.2	100.0
0°-180°	15301.2	100.0

Coefficient of Utilization

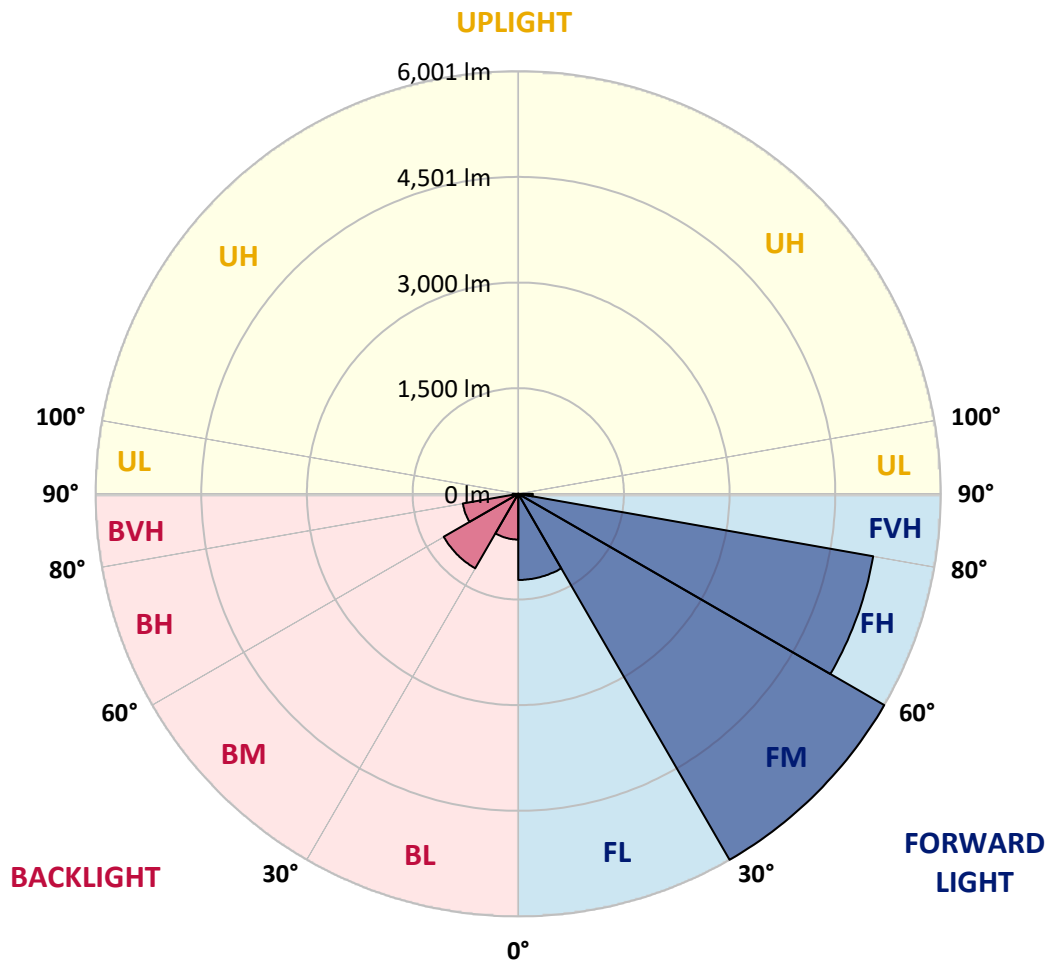


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1222.6	8.0			
FM (30°-60°)	6000.8	39.2			
FH (60°-80°)	5118.2	33.4			G3/7500
FVH (80°-90°)	207.7	1.4			G2/225
BL (0°-30°)	649.2	4.2	B2/1000		
BM (30°-60°)	1222.2	8.0	B2/2500		
BH (60°-80°)	799.6	5.2	B2/1000		G2/1000
BVH (80°-90°)	81.0	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-G3
 Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	1878.0	1878.0	1878.0	1878.0	1878.0	1878.0	1878.0	1878.0	1878.0	1878.0	1878.0
2.5°	2084.8	2074.7	2075.5	2061.3	2042.8	2022.6	1994.0	1968.8	1948.6	1936.8	1902.3
5°	2310.1	2300.1	2287.4	2256.3	2242.9	2193.2	2130.2	2073.0	2029.3	2004.9	1936.0
7.5°	2492.6	2490.1	2486.8	2469.1	2434.6	2365.6	2311.8	2212.6	2147.8	2101.6	1983.9
10°	2605.3	2609.5	2612.1	2615.4	2601.1	2565.0	2491.0	2365.6	2283.2	2224.4	2046.2
12.5°	2662.5	2666.7	2681.0	2712.1	2731.5	2727.3	2666.7	2543.9	2430.4	2353.0	2112.5
15°	2697.8	2704.6	2729.8	2771.0	2835.8	2877.0	2847.5	2734.0	2609.5	2517.9	2191.6
17.5°	2736.5	2744.1	2771.9	2830.7	2915.7	3004.8	3036.8	2939.2	2803.8	2694.5	2279.9
20°	2758.4	2768.5	2808.0	2885.4	2984.6	3114.1	3220.1	3168.8	3020.8	2899.7	2381.6
22.5°	2793.7	2802.1	2835.8	2918.2	3036.8	3199.1	3403.4	3392.5	3262.2	3105.7	2493.5
25°	2889.6	2903.0	2919.9	2969.5	3083.9	3285.7	3555.7	3631.4	3496.0	3321.0	2596.1
27.5°	3070.4	3081.3	3080.5	3087.2	3152.0	3360.6	3687.7	3867.7	3728.1	3538.8	2695.3
30°	3276.5	3280.7	3284.0	3268.9	3283.2	3437.1	3808.8	4101.5	3961.9	3762.5	2781.9
32.5°	3527.1	3535.5	3506.9	3468.2	3456.4	3550.6	3908.9	4335.3	4238.6	3989.6	2867.7
35°	3823.1	3845.0	3786.9	3718.8	3670.9	3713.8	4043.4	4574.1	4522.0	4279.8	2981.3
37.5°	4161.2	4188.1	4134.3	4000.6	3932.4	3944.2	4219.2	4869.3	4880.2	4610.3	3150.3
40°	4437.9	4473.2	4474.9	4285.7	4182.2	4195.7	4442.1	5187.2	5312.5	5019.0	3349.6
42.5°	4620.4	4654.9	4691.0	4580.0	4471.5	4548.0	4701.9	5532.0	5798.6	5515.2	3628.0
45°	4820.5	4851.6	4871.8	4821.4	4760.8	4959.3	5015.6	5898.7	6316.6	6069.4	3932.4
47.5°	5052.6	5087.1	5106.5	5058.5	5035.8	5320.1	5353.7	6240.9	6870.0	6607.6	4268.8
50°	5362.1	5388.2	5378.1	5347.8	5342.8	5596.8	5678.3	6561.3	7326.6	7187.0	4617.8
52.5°	5747.3	5778.4	5789.4	5746.5	5727.1	5794.4	5939.9	6853.1	7742.1	7684.9	4990.4
55°	5980.3	6029.9	6196.4	6263.6	6309.9	6050.1	6221.5	7175.2	8114.6	8209.7	5390.7
57.5°	5681.7	5745.6	6118.2	6454.5	6889.3	6689.1	6621.0	7511.6	8487.2	8718.5	5870.1
60°	4953.4	4967.7	5447.9	6067.7	6942.3	7510.8	7454.5	8046.5	8890.9	9231.5	6501.6
62.5°	3436.2	3466.5	4034.2	5023.2	6288.0	7806.8	8872.4	8969.9	9469.5	9999.3	7427.5
65°	1772.0	1732.5	2249.6	3157.0	4740.6	7103.8	10021.2	10667.8	10724.2	11200.2	8731.1
67.5°	1090.8	1108.4	1350.6	1843.5	2803.0	5162.8	9900.9	12742.6	12445.7	12674.5	9941.3
70°	819.1	841.0	1007.5	1261.5	1708.9	2951.8	7962.4	13245.5	13660.1	13601.2	10309.7
71°	712.3	735.0	908.3	1148.0	1435.6	2278.2	6708.5	12719.0	13702.2	13692.1	10170.9
72.5°	607.2	621.5	756.9	972.2	1210.2	1597.1	5040.0	11407.1	13117.7	13453.2	9675.5
75°	476.8	487.8	548.3	741.8	952.9	980.6	2704.6	8552.0	10773.8	11413.0	8054.9
77.5°	388.5	396.1	427.2	550.9	735.0	694.7	1418.8	5566.5	6749.7	7393.1	4744.8
80°	308.6	317.1	335.6	373.4	550.9	495.3	677.0	2820.6	3260.5	3253.7	1893.9
82.5°	239.7	242.2	264.1	274.2	376.8	351.5	366.7	1194.2	1322.9	1366.6	683.7
85°	151.4	158.9	233.8	210.2	225.4	206.0	180.8	474.3	584.5	576.1	273.3
87.5°	46.3	48.8	79.1	89.1	100.1	90.0	66.4	139.6	170.7	185.0	68.1
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°	1878.0	1878.0	1878.0	1878.0	1878.0	1878.0	1878.0	1878.0	1878.0	1878.0	1878.0
2.5°	1888.9	1879.6	1846.8	1819.9	1794.7	1766.9	1743.4	1736.7	1730.8	1728.3	1727.4
5°	1906.5	1878.8	1814.0	1761.1	1719.0	1680.3	1655.9	1645.0	1634.1	1634.1	1637.4
7.5°	1931.8	1881.3	1781.2	1702.2	1649.2	1613.0	1595.4	1593.7	1596.2	1598.7	1599.6
10°	1959.5	1879.6	1733.3	1634.9	1587.8	1571.0	1571.8	1586.1	1599.6	1609.7	1611.4
12.5°	1986.4	1869.5	1677.0	1571.8	1541.6	1544.9	1568.5	1600.4	1626.5	1640.8	1641.6
15°	2016.7	1853.6	1608.8	1512.1	1502.0	1528.1	1571.8	1620.6	1660.1	1683.7	1686.2
17.5°	2041.9	1826.7	1537.3	1454.1	1466.7	1514.6	1575.2	1638.3	1686.2	1715.6	1720.7
20°	2070.5	1792.2	1463.3	1398.6	1434.7	1499.5	1568.5	1636.6	1686.2	1714.8	1721.5
22.5°	2093.2	1743.4	1392.7	1353.2	1406.2	1481.0	1545.8	1600.4	1640.8	1655.9	1666.0
25°	2102.4	1682.0	1326.3	1316.2	1383.4	1450.7	1494.5	1525.6	1538.2	1536.5	1540.7
27.5°	2097.4	1611.4	1269.1	1286.7	1354.9	1403.6	1425.5	1423.0	1400.3	1379.2	1389.3
30°	2076.3	1527.3	1221.1	1256.5	1317.8	1344.8	1341.4	1308.6	1265.7	1226.2	1228.7
32.5°	2038.6	1436.4	1176.6	1222.0	1265.7	1277.5	1254.8	1211.9	1150.5	1099.2	1091.6
35°	2006.6	1349.8	1137.0	1182.4	1213.6	1207.7	1185.8	1130.3	1074.8	1029.4	1021.8
37.5°	2001.6	1275.8	1099.2	1137.9	1155.5	1147.1	1120.2	1073.1	1052.9	1018.5	1014.2
40°	2028.5	1223.7	1060.5	1090.8	1099.2	1092.5	1063.0	1036.1	1054.6	1046.2	1046.2
42.5°	2101.6	1195.9	1026.0	1043.7	1050.4	1055.5	1034.4	1011.7	1034.4	995.7	983.1
45°	2217.6	1196.7	994.9	997.4	1017.6	1035.3	1021.0	987.3	975.6	898.2	883.0
47.5°	2388.4	1225.3	969.7	953.7	989.9	1019.3	999.1	950.3	898.2	846.9	837.6
50°	2587.7	1276.6	947.0	908.3	952.9	999.1	984.0	926.8	873.0	841.8	836.0
52.5°	2808.9	1341.4	919.2	857.8	907.4	989.9	987.3	923.4	849.4	828.4	823.3
55°	3082.2	1405.3	884.7	798.9	867.1	982.3	978.1	895.7	844.4	829.2	827.5
57.5°	3400.1	1497.8	835.1	739.2	820.8	951.2	941.9	878.8	827.5	816.6	815.8
60°	3912.2	1641.6	764.5	684.6	773.7	896.5	908.3	850.3	800.6	798.1	797.3
62.5°	4585.9	1843.5	691.3	628.2	719.1	825.9	859.5	811.6	772.0	784.7	786.3
65°	5516.0	2013.4	615.6	580.3	658.5	757.7	813.2	775.4	740.1	764.5	764.5
67.5°	6122.4	2016.7	546.6	530.7	597.1	700.6	764.5	732.5	698.9	740.1	741.8
70°	5996.2	1766.9	489.5	478.5	537.4	639.2	710.6	685.4	646.7	683.7	670.3
71°	5792.7	1628.2	466.8	458.3	513.9	609.7	685.4	664.4	625.7	650.1	642.5
72.5°	5468.1	1413.7	429.8	431.4	478.5	572.7	650.1	628.2	589.5	603.0	600.5
75°	4622.1	1234.6	367.5	375.1	411.2	509.6	579.4	562.6	523.1	523.1	520.6
77.5°	2889.6	862.9	305.3	309.5	349.0	436.5	497.9	483.6	445.7	433.1	429.8
80°	1078.2	445.7	238.8	243.9	268.3	344.0	412.1	398.6	359.9	345.7	332.2
82.5°	407.9	223.7	175.8	171.6	197.6	262.4	322.9	307.0	276.7	242.2	232.1
85°	153.9	111.0	107.6	104.3	116.1	155.6	200.2	196.8	164.8	140.4	137.9
87.5°	40.4	36.2	42.0	31.1	32.8	29.4	30.3	12.6	5.9	2.5	1.7
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)