

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: P651419

Luminaire Tested: **GALN-SA5D-840-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651419
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-SA5D-840-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33204.4 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

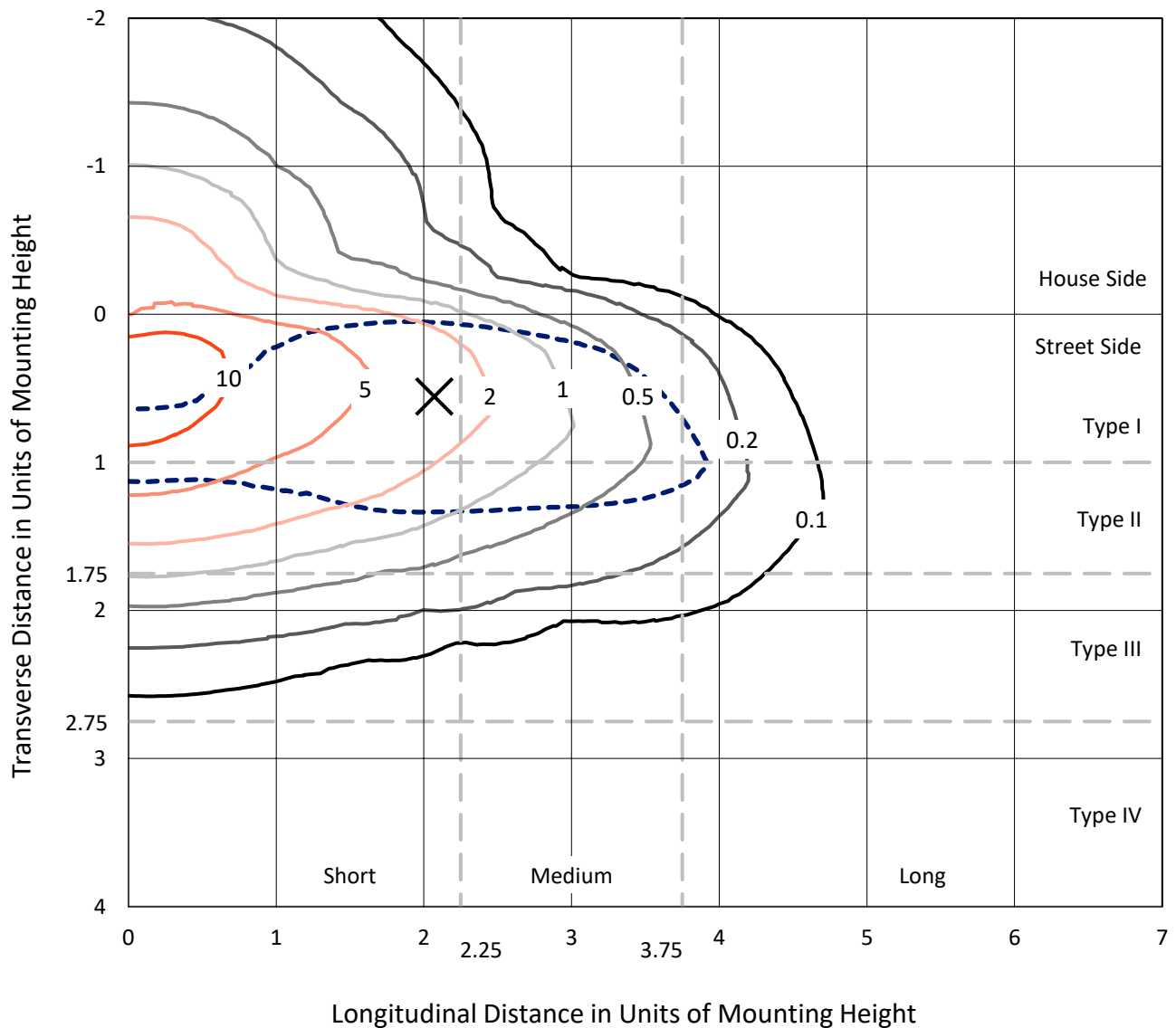
Input Watts (W): 309
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

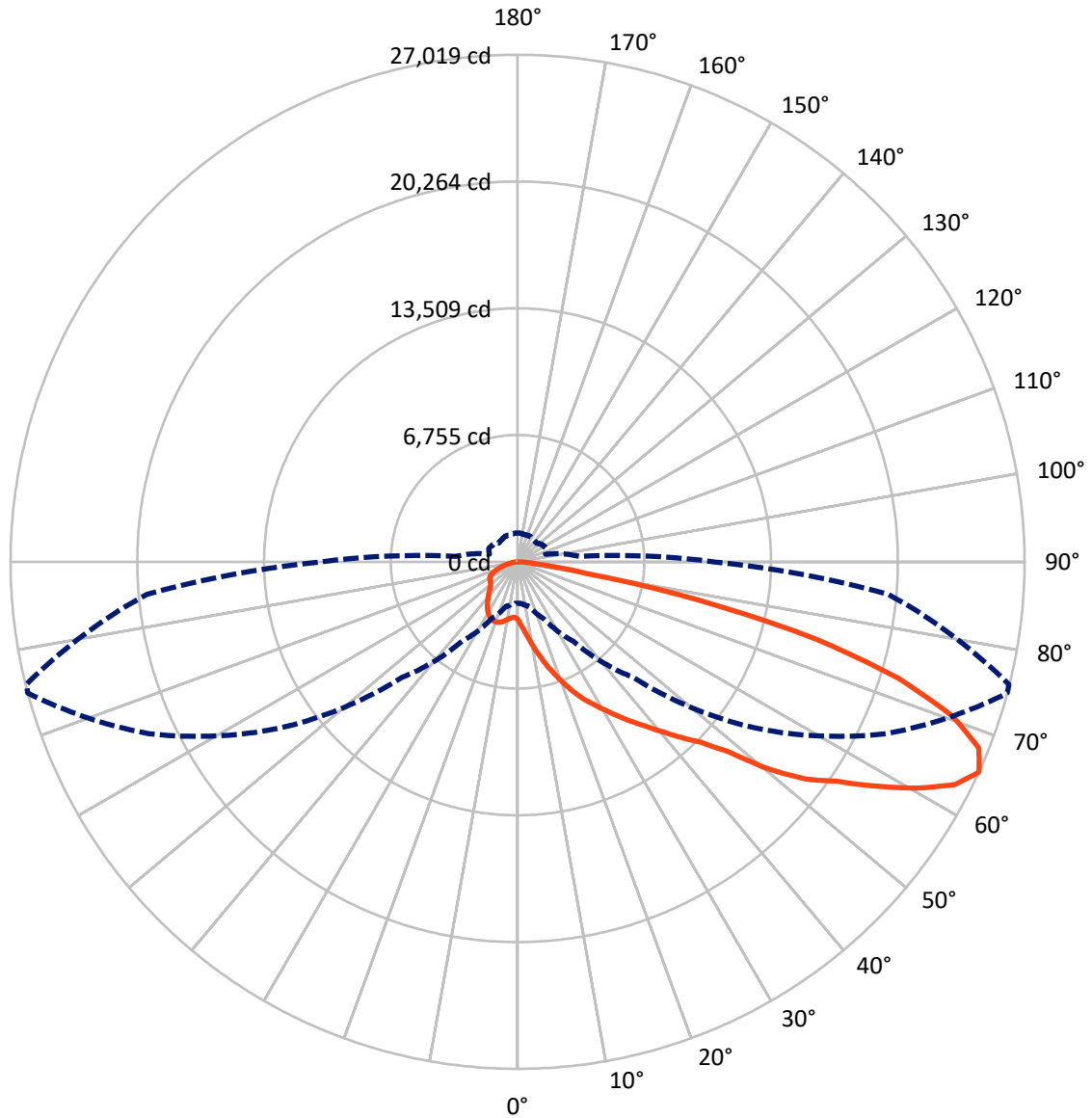
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.8 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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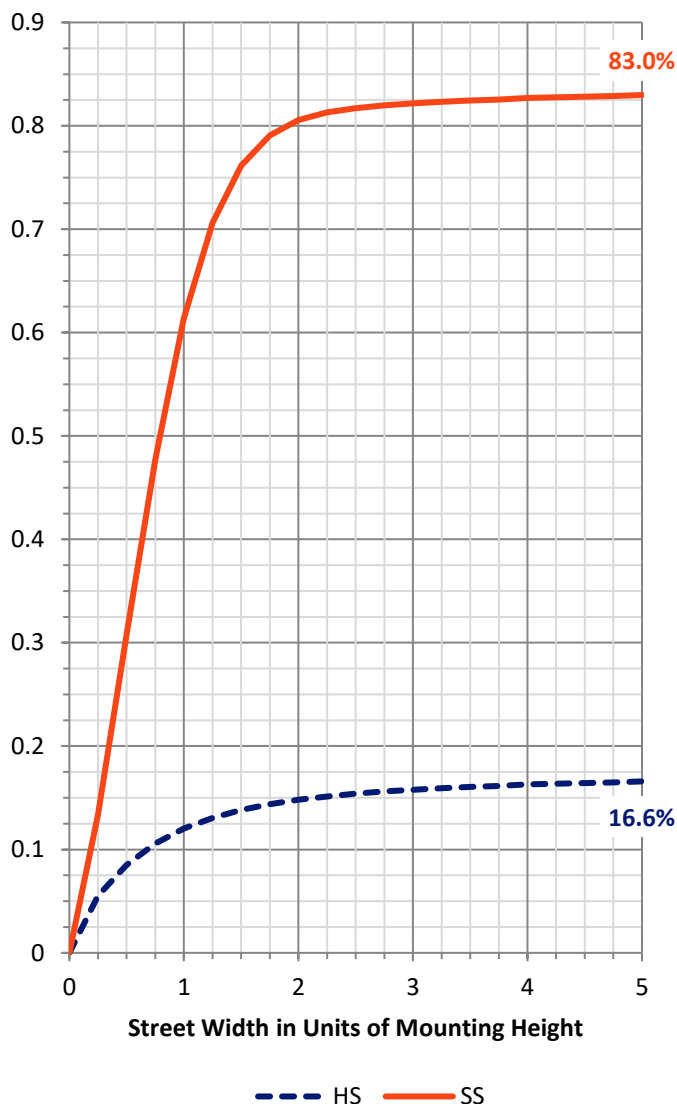
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5582.1	0.0	5582.1
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	27622.3	0.0	27622.3
	% Fixture	83.2	0.0	83.2
Total	Lumens	33204.4	0.0	33204.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	374.8	1.1
10°-20°	1468.2	4.4
20°-30°	2836.0	8.5
30°-40°	4606.5	13.9
40°-50°	6336.7	19.1
50°-60°	7481.4	22.5
60°-70°	6555.0	19.7
70°-80°	3129.4	9.4
80°-90°	416.4	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°	33204.4	100.0
0°-180°	33204.4	100.0

Coefficient of Utilization

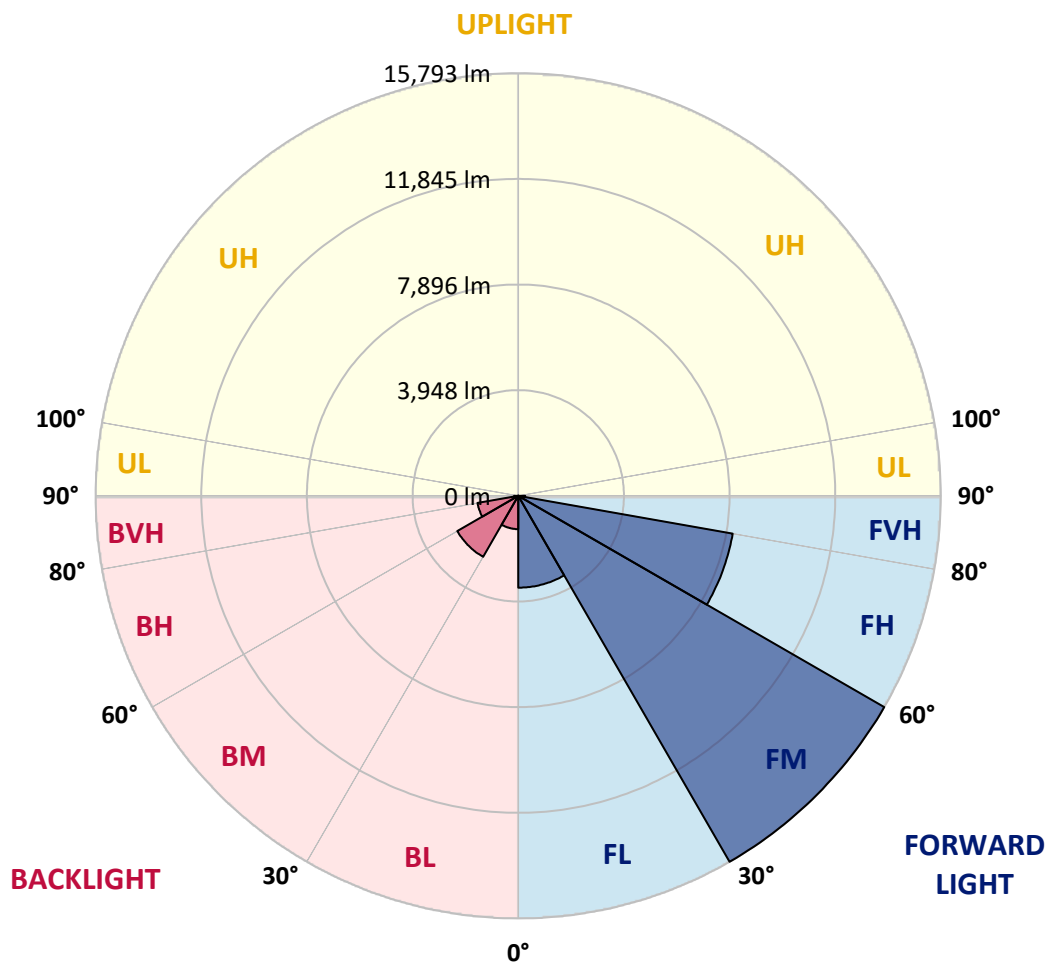


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3432.8	10.3			
FM (30°-60°)	15792.7	47.6			
FH (60°-80°)	8136.6	24.5			G4/12000
FVH (80°-90°)	260.2	0.8			G3/500
BL (0°-30°)	1246.2	3.8	B3/2500		
BM (30°-60°)	2631.9	7.9	B3/5000		
BH (60°-80°)	1547.8	4.7	B3/2500		G3/2500
BVH (80°-90°)	156.2	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3085.1	3085.1	3085.1	3085.1	3085.1	3085.1	3085.1	3085.1	3085.1	3085.1	3085.1
2.5°	4099.0	4072.0	4043.3	3964.0	3879.4	3783.9	3647.0	3515.5	3340.9	3335.4	3205.8
5°	5235.5	5217.5	5089.6	5015.8	4819.4	4558.3	4336.8	3992.8	3674.0	3636.2	3384.1
7.5°	6280.1	6209.9	6161.2	6028.0	5833.4	5498.5	5069.8	4605.1	4072.0	4021.7	3603.8
10°	7067.1	7059.9	7034.7	6919.4	6773.6	6440.4	5964.9	5298.6	4576.3	4477.3	3870.4
12.5°	7656.0	7661.4	7657.8	7656.0	7551.6	7268.8	6753.7	6051.3	5086.0	5015.8	4178.3
15°	8043.2	8097.2	8118.8	8208.9	8217.9	8028.9	7585.8	6779.0	5660.5	5556.1	4509.7
17.5°	8299.0	8326.0	8426.8	8580.0	8704.2	8670.0	8275.6	7452.5	6247.6	6072.9	4853.7
20°	8543.9	8590.7	8668.2	8877.1	9096.8	9197.7	8920.3	8142.3	6829.3	6717.7	5233.7
22.5°	9053.6	9120.2	9147.2	9253.5	9440.8	9619.1	9493.0	8803.3	7466.9	7315.6	5637.1
25°	9916.3	9986.5	9910.8	9885.7	9946.9	10035.1	10008.2	9426.4	8068.5	7852.3	6019.0
27.5°	11040.1	11049.1	10901.5	10760.9	10609.6	10564.6	10481.8	9979.3	8590.7	8410.7	6402.5
30°	12246.7	12203.6	11958.6	11704.7	11449.0	11196.8	10959.1	10512.4	9172.5	8965.3	6779.0
32.5°	13367.0	13343.6	13071.7	12677.2	12245.0	12007.2	11526.4	11050.9	9795.6	9595.7	7166.2
35°	14206.3	14240.5	13941.5	13511.1	13039.2	12828.5	12221.6	11616.4	10440.3	10222.4	7587.6
37.5°	14802.4	14784.4	14519.6	14146.8	13732.6	13548.8	13033.8	12234.2	11133.7	10924.8	8048.6
40°	15014.9	15004.1	14807.8	14535.8	14272.9	14208.0	13883.9	12900.5	11928.0	11683.1	8603.3
42.5°	14879.8	14903.2	14773.6	14699.8	14651.1	14697.9	14728.5	13774.0	12794.3	12569.2	9204.9
45°	14465.6	14453.0	14435.0	14555.6	14829.4	15137.3	15564.2	14598.8	13736.2	13556.1	10011.8
47.5°	13725.4	13815.4	13860.4	14193.6	14791.6	15521.0	16525.9	15704.7	15103.2	14946.4	11241.8
50°	12689.8	12761.8	13028.4	13620.9	14512.4	15665.1	17466.1	17512.9	17383.2	17089.6	12578.2
52.5°	11072.5	11184.2	11733.5	12819.4	13939.7	15605.6	18035.2	19063.5	19234.6	19014.9	13894.7
55°	9262.5	9419.2	9999.2	11423.7	13150.9	15281.5	18427.8	19962.2	20644.8	20441.3	15162.6
57.5°	7490.4	7656.0	8252.1	9631.7	11774.9	14564.6	18685.3	20963.6	22564.7	22300.0	16740.3
60°	5613.7	5786.6	6298.1	7719.0	9815.4	13163.5	18510.7	21831.7	24482.7	24369.2	18319.8
62.5°	3621.8	3812.7	4257.6	5433.6	7544.4	11249.0	17575.9	22310.7	26143.2	26006.4	19472.3
65°	2206.2	2227.8	2472.8	3373.3	5163.5	8709.6	15438.2	21675.0	27018.6	26977.1	19823.5
67.5°	1426.4	1460.6	1572.2	2020.8	3095.9	6049.6	12344.0	19576.8	26507.1	26492.7	19097.8
70°	1204.9	1215.7	1266.1	1363.3	1799.2	3668.6	8668.2	16232.4	24563.8	24563.8	17352.6
72.5°	1077.0	1091.4	1109.4	1140.1	1284.1	2078.4	5172.5	12635.8	21208.5	21349.0	14770.0
75°	977.9	974.3	985.1	990.5	1095.0	1358.0	2674.5	9345.4	16407.1	16126.1	10696.1
77.5°	837.5	842.9	837.5	860.8	967.2	1033.8	1358.0	6271.1	9943.3	9579.5	5368.8
80°	688.0	697.0	706.0	720.4	826.6	785.2	815.9	2858.1	3677.6	3600.2	1658.7
82.5°	516.9	529.5	543.9	578.1	650.2	518.6	515.1	1221.0	1327.4	1215.7	610.6
85°	208.9	246.7	372.8	407.0	408.8	284.6	317.0	509.6	542.1	529.5	239.5
87.5°	48.6	57.6	120.7	181.9	167.5	106.2	117.1	165.7	189.1	174.7	81.1
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°	3085.1	3085.1	3085.1	3085.1	3085.1	3085.1	3085.1	3085.1	3085.1	3085.1	3085.1
2.5°	3146.3	3083.3	2975.2	2892.4	2833.0	2780.8	2748.3	2728.5	2721.3	2719.5	2721.3
5°	3252.6	3141.0	2969.8	2861.8	2802.4	2768.2	2748.3	2746.5	2748.3	2750.2	2744.7
7.5°	3398.5	3238.2	3014.9	2914.0	2869.0	2843.8	2834.8	2831.1	2833.0	2831.1	2831.1
10°	3593.0	3373.3	3103.1	2998.7	2960.8	2932.0	2917.6	2908.6	2901.4	2894.2	2890.6
12.5°	3807.3	3522.8	3198.6	3097.7	3043.7	2998.7	2966.2	2942.8	2926.6	2910.4	2906.8
15°	4046.8	3681.2	3304.8	3164.3	3086.9	3020.3	2964.4	2926.6	2897.8	2874.4	2872.6
17.5°	4275.6	3830.8	3376.9	3195.0	3081.5	2987.8	2914.0	2861.8	2825.8	2795.1	2791.5
20°	4520.5	3973.0	3409.2	3175.2	3027.4	2914.0	2816.8	2753.7	2712.3	2678.1	2672.7
22.5°	4767.2	4093.7	3405.7	3112.1	2933.8	2800.5	2697.9	2631.2	2582.6	2548.4	2535.8
25°	5003.2	4191.0	3360.6	3011.3	2804.1	2665.5	2561.0	2499.8	2456.6	2415.1	2415.1
27.5°	5215.7	4248.6	3276.0	2888.8	2670.8	2525.0	2442.2	2386.3	2346.7	2319.6	2303.5
30°	5424.6	4275.6	3160.7	2733.9	2530.4	2406.1	2339.5	2307.1	2271.0	2240.4	2236.8
32.5°	5611.9	4270.2	3016.7	2582.6	2397.1	2308.9	2281.9	2256.7	2218.8	2175.6	2164.8
35°	5793.8	4234.1	2845.6	2416.9	2285.5	2251.3	2258.4	2222.4	2154.0	2100.0	2091.0
37.5°	5991.9	4169.3	2658.2	2281.9	2191.8	2224.2	2242.3	2163.0	2051.4	1966.7	1946.9
40°	6220.6	4095.5	2463.8	2146.8	2118.0	2199.0	2199.0	2053.1	1900.1	1847.8	1833.4
42.5°	6489.0	4034.2	2301.6	2033.3	2056.7	2137.8	2128.7	1907.2	1844.2	1817.2	1810.0
45°	6914.0	4012.6	2134.2	1934.3	2006.3	2065.7	1991.9	1856.8	1820.8	1799.2	1792.0
47.5°	7585.8	4037.8	1986.5	1860.5	1948.7	1993.7	1838.8	1822.6	1797.4	1766.8	1763.2
50°	8208.9	4014.4	1882.1	1819.0	1898.2	1907.2	1775.8	1781.2	1766.8	1732.5	1725.3
52.5°	8718.6	3940.6	1815.4	1797.4	1855.0	1756.0	1716.3	1736.2	1730.8	1687.6	1680.3
55°	9278.8	3895.5	1783.0	1797.4	1826.2	1624.5	1660.6	1689.3	1682.2	1651.5	1649.7
57.5°	9957.7	3904.6	1759.5	1802.8	1797.4	1557.9	1604.7	1638.9	1637.1	1628.1	1628.1
60°	10652.9	3908.1	1723.5	1801.0	1763.2	1505.6	1547.0	1595.7	1599.2	1604.7	1604.7
62.5°	10883.4	3751.4	1653.3	1768.5	1687.6	1455.2	1493.0	1559.6	1556.0	1570.5	1572.2
65°	10453.0	3317.4	1548.9	1694.7	1590.2	1419.2	1451.6	1512.9	1493.0	1530.9	1538.0
67.5°	9514.7	2744.7	1386.7	1561.5	1482.2	1381.3	1424.6	1448.0	1412.0	1485.8	1487.6
70°	8223.4	2143.2	1181.4	1372.3	1359.7	1341.7	1403.0	1367.0	1316.5	1406.6	1388.6
72.5°	6876.2	1637.1	943.7	1122.0	1195.9	1282.3	1365.2	1262.5	1192.3	1219.3	1186.8
75°	5165.3	1210.3	758.2	878.8	995.9	1197.7	1331.0	1136.4	1028.4	1003.1	995.9
77.5°	2633.1	790.6	567.3	657.3	747.4	1082.4	1284.1	988.8	851.8	812.2	794.2
80°	940.2	491.6	399.8	453.9	504.3	931.2	1122.0	817.6	660.9	653.8	660.9
82.5°	435.8	317.0	268.4	297.1	299.0	621.3	855.5	610.6	502.5	763.6	644.8
85°	187.3	158.5	151.3	147.7	136.9	277.4	480.9	327.8	511.5	228.8	210.8
87.5°	55.8	63.1	55.8	41.5	30.6	30.6	48.6	18.0	12.6	9.0	9.0
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)