

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: P651365

Luminaire Tested: **GALN-SA4D-840-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651365
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-SA4D-840-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25883.5 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

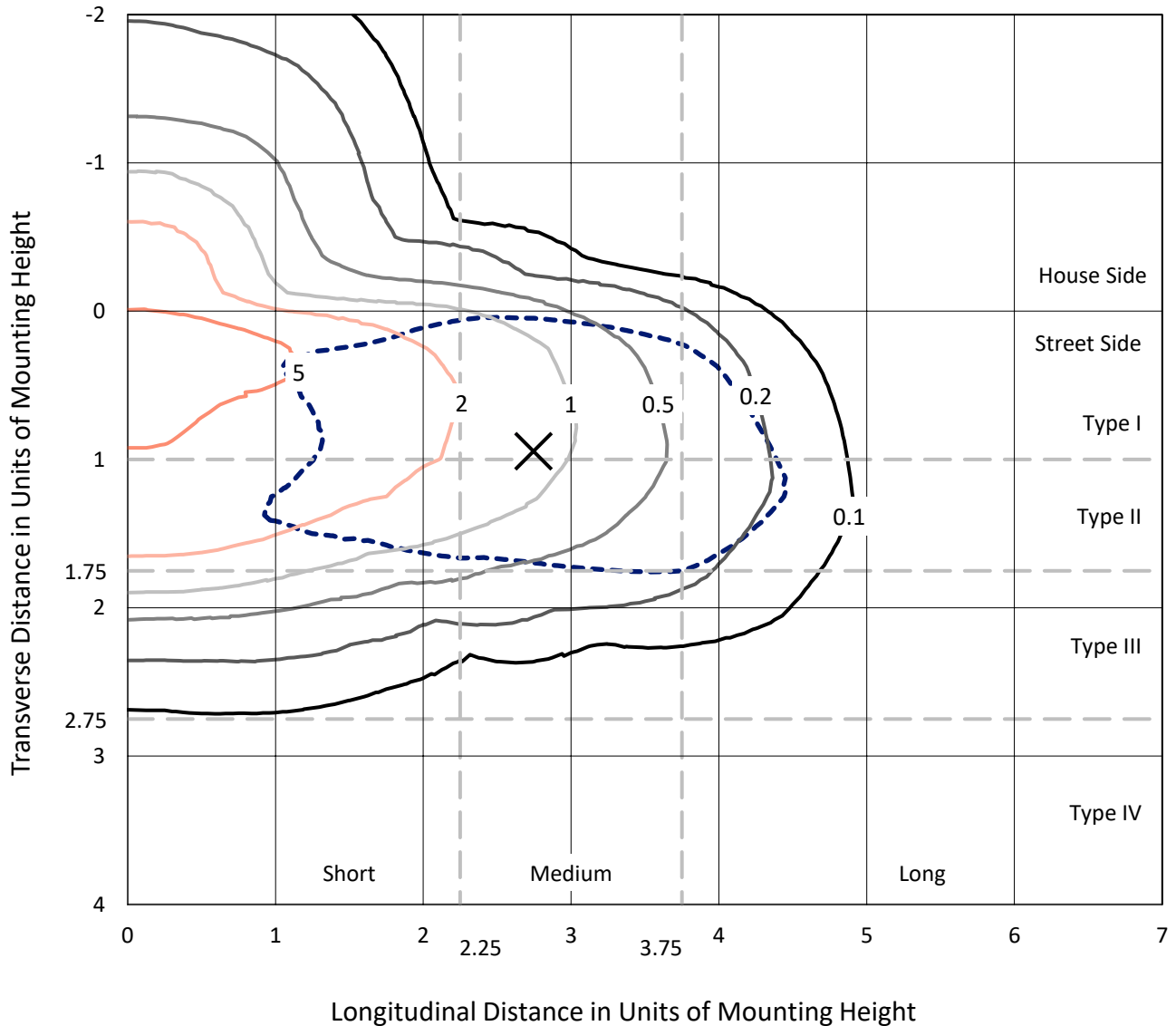
Input Watts (W): 245
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

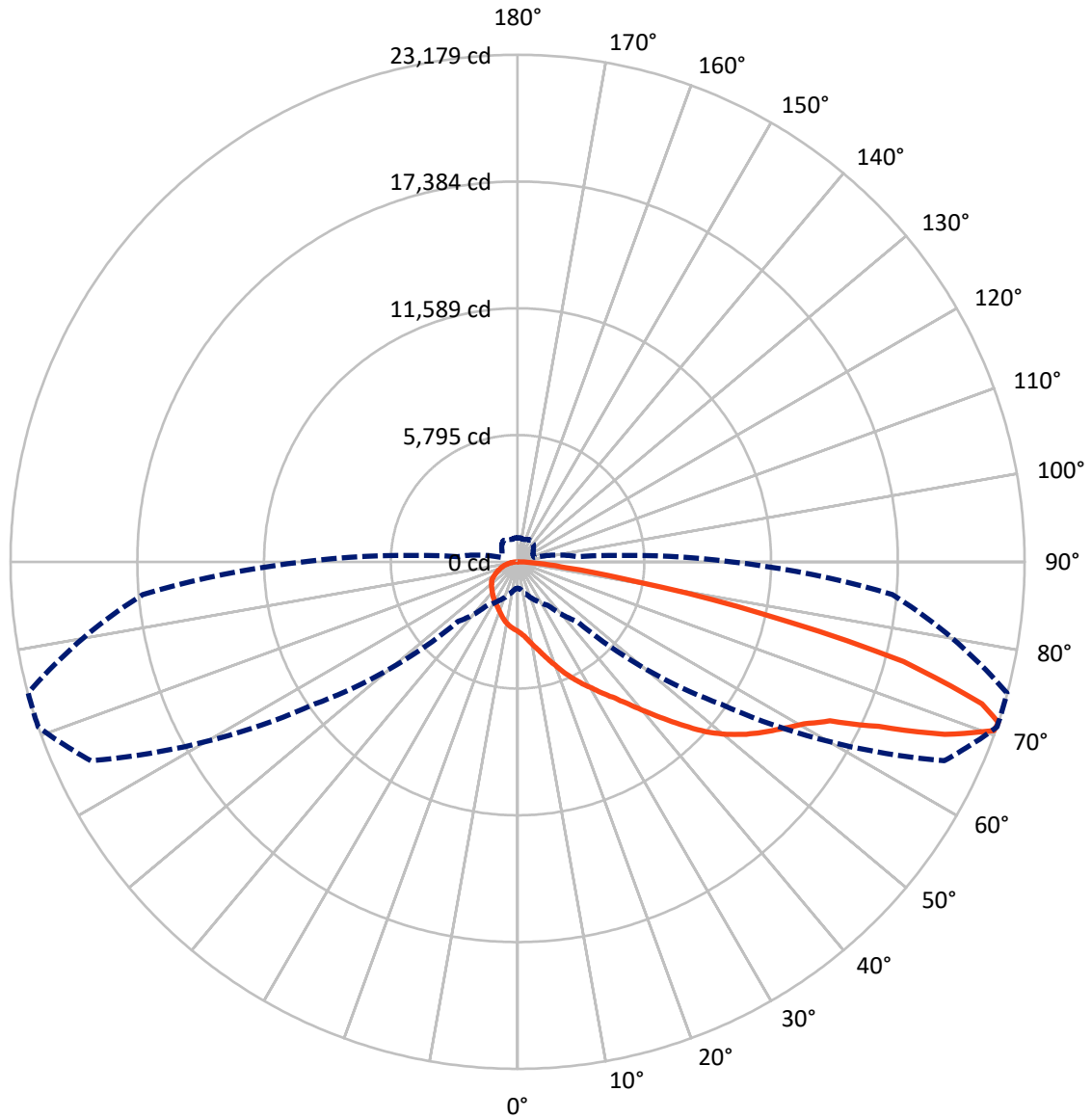
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 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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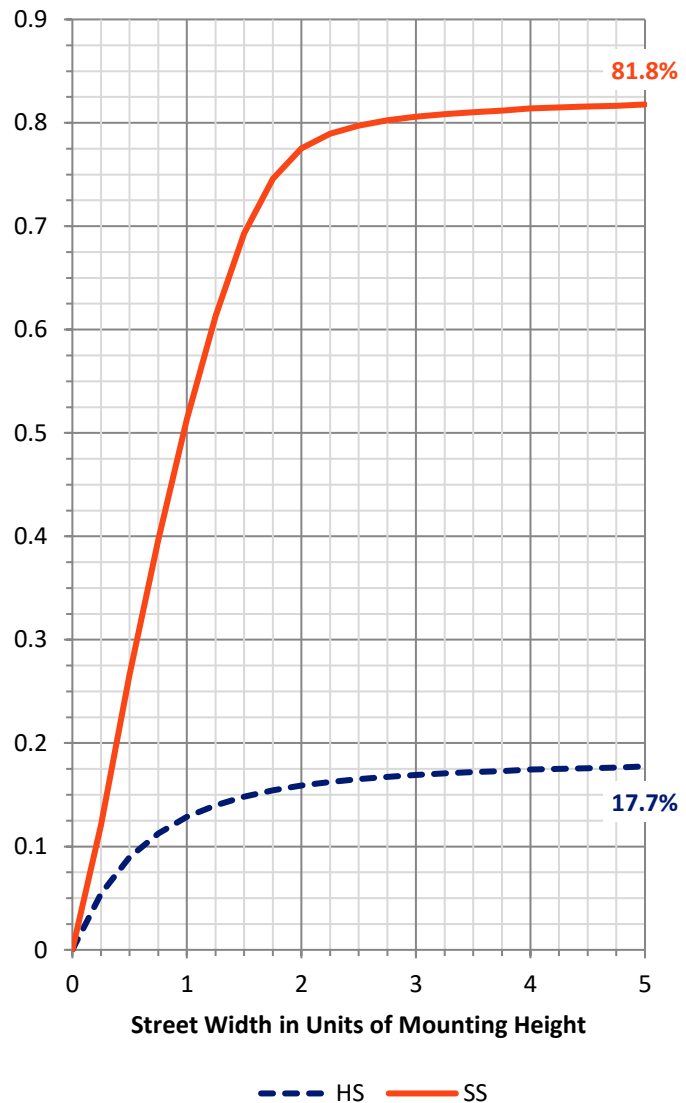
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4655.1	0.0	4655.1
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	21228.4	0.0	21228.4
	% Fixture	82.0	0.0	82.0
Total	Lumens	25883.5	0.0	25883.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	319.0	1.2
10°-20°	1036.3	4.0
20°-30°	1811.0	7.0
30°-40°	2693.6	10.4
40°-50°	3968.7	15.3
50°-60°	5556.2	21.5
60°-70°	6214.4	24.0
70°-80°	3796.0	14.7
80°-90°	488.3	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°	25883.5	100.0
0°-180°	25883.5	100.0

Coefficient of Utilization

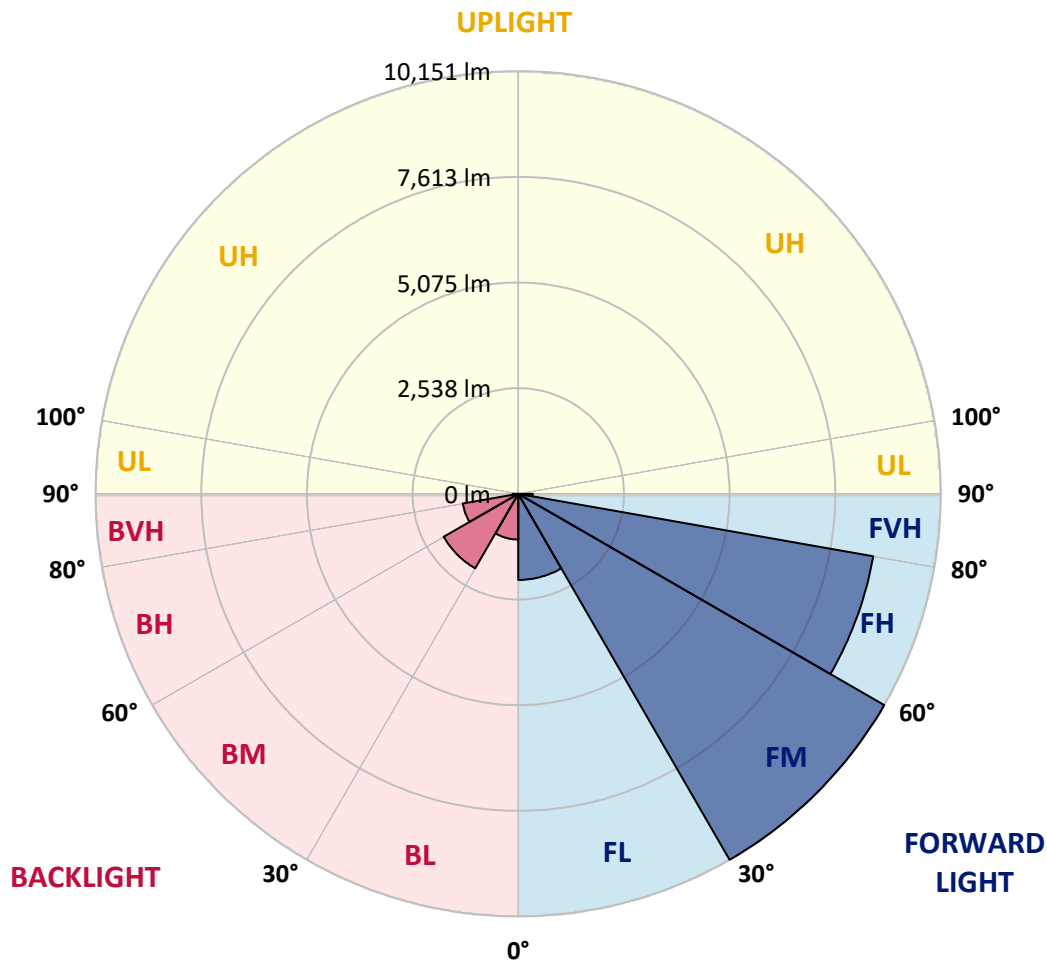


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2068.1	8.0			
FM (30°-60°)	10151.0	39.2			
FH (60°-80°)	8657.9	33.4			G4/12000
FVH (80°-90°)	351.4	1.4			G3/500
BL (0°-30°)	1098.1	4.2	B3/2500		
BM (30°-60°)	2067.5	8.0	B2/2500		
BH (60°-80°)	1352.5	5.2	B3/2500		G3/2500
BVH (80°-90°)	137.0	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 Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	3176.7	3176.7	3176.7	3176.7	3176.7	3176.7	3176.7	3176.7	3176.7	3176.7	3176.7
2.5°	3526.6	3509.6	3511.0	3486.8	3455.5	3421.4	3373.0	3330.4	3296.2	3276.3	3217.9
5°	3907.9	3890.8	3869.5	3816.9	3794.1	3710.2	3603.4	3506.7	3432.8	3391.5	3274.9
7.5°	4216.6	4212.3	4206.7	4176.7	4118.5	4001.8	3910.7	3742.9	3633.4	3555.1	3355.9
10°	4407.3	4414.3	4418.6	4424.3	4400.1	4339.0	4213.7	4001.8	3862.4	3762.8	3461.2
12.5°	4504.0	4511.1	4535.3	4587.9	4620.6	4613.6	4511.1	4303.4	4111.3	3980.5	3573.6
15°	4563.7	4575.1	4617.8	4687.5	4797.1	4866.8	4816.9	4624.9	4414.3	4259.3	3707.3
17.5°	4629.2	4642.0	4688.9	4788.5	4932.2	5083.0	5137.0	4972.0	4743.0	4558.1	3856.7
20°	4666.1	4683.2	4750.1	4881.0	5048.9	5267.9	5447.2	5360.4	5110.0	4905.1	4028.8
22.5°	4725.9	4740.1	4797.1	4936.4	5137.0	5411.6	5757.3	5738.8	5518.3	5253.7	4218.0
25°	4888.1	4910.9	4939.3	5023.2	5216.7	5558.2	6014.7	6142.8	5913.7	5617.9	4391.6
27.5°	5193.9	5212.4	5211.0	5222.4	5331.9	5684.7	6238.1	6542.6	6306.4	5986.3	4559.5
30°	5542.4	5549.6	5555.3	5529.7	5553.9	5814.2	6443.0	6938.1	6701.9	6364.8	4706.0
32.5°	5966.4	5980.6	5932.2	5866.8	5846.9	6006.3	6612.3	7333.5	7169.9	6748.9	4851.1
35°	6467.2	6504.1	6406.0	6290.8	6209.7	6282.3	6839.9	7737.5	7649.4	7239.7	5043.1
37.5°	7039.1	7084.6	6993.5	6767.4	6652.1	6672.1	7137.2	8236.9	8255.4	7798.8	5329.1
40°	7507.1	7566.8	7569.7	7249.6	7074.7	7097.4	7514.3	8774.7	8986.6	8490.1	5666.2
42.5°	7815.8	7874.1	7935.3	7747.5	7564.0	7693.5	7953.8	9357.9	9808.9	9329.5	6137.1
45°	8154.4	8207.1	8241.1	8155.8	8053.4	8389.1	8484.4	9978.2	10685.2	10266.9	6652.1
47.5°	8547.0	8605.4	8638.1	8557.0	8518.6	8999.5	9056.3	10557.2	11621.3	11177.4	7221.2
50°	9070.5	9114.7	9097.6	9046.4	9037.8	9467.5	9605.5	11099.2	12393.7	12157.6	7811.5
52.5°	9722.1	9774.8	9793.2	9720.7	9688.0	9801.8	10047.8	11592.8	13096.6	12999.8	8441.8
55°	10116.1	10200.1	10481.8	10595.6	10673.8	10234.2	10524.4	12137.7	13726.7	13887.5	9118.9
57.5°	9611.1	9719.3	10349.5	10918.5	11654.0	11315.4	11200.2	12706.8	14357.0	14748.2	9929.8
60°	8379.1	8403.4	9215.7	10264.2	11743.6	12705.3	12610.0	13611.5	15039.8	15615.9	10998.2
62.5°	5812.7	5864.0	6824.2	8497.2	10636.8	13206.1	15008.5	15173.6	16018.5	16914.8	12564.5
65°	2997.4	2930.5	3805.4	5340.4	8019.3	12016.8	16951.8	18045.8	18141.1	18946.3	14769.6
67.5°	1845.2	1875.0	2284.7	3118.3	4741.6	8733.4	16748.3	21555.3	21053.2	21440.1	16816.6
70°	1385.6	1422.6	1704.3	2134.0	2890.8	4993.4	13469.3	22406.1	23107.4	23007.8	17439.7
71°	1205.0	1243.3	1536.4	1941.9	2428.4	3853.9	11348.1	21515.6	23178.5	23161.5	17205.0
72.5°	1027.1	1051.3	1280.3	1644.6	2047.2	2701.5	8525.7	19296.2	22189.9	22757.5	16367.1
75°	806.6	825.1	927.5	1254.8	1611.8	1658.8	4575.1	14466.5	18225.1	19306.2	13625.7
77.5°	657.2	670.0	722.7	931.8	1243.3	1175.0	2400.0	9416.3	11417.8	12506.2	8026.3
80°	522.1	536.3	567.6	631.7	931.8	837.9	1145.2	4771.4	5515.4	5504.1	3203.7
82.5°	405.4	409.7	446.7	463.8	637.3	594.7	620.2	2020.1	2237.7	2311.7	1156.5
85°	256.1	268.9	395.5	355.7	381.2	348.5	305.9	802.3	988.7	974.5	462.4
87.5°	78.2	82.5	133.7	150.8	169.3	152.2	112.4	236.2	288.8	312.9	115.2
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°	3176.7	3176.7	3176.7	3176.7	3176.7	3176.7	3176.7	3176.7	3176.7	3176.7	3176.7
2.5°	3195.2	3179.6	3124.1	3078.6	3035.8	2988.9	2949.1	2937.7	2927.7	2923.5	2922.1
5°	3225.1	3178.1	3068.6	2978.9	2907.8	2842.4	2801.1	2782.6	2764.1	2764.1	2769.8
7.5°	3267.7	3182.3	3013.1	2879.3	2789.8	2728.5	2698.7	2695.8	2700.1	2704.4	2705.8
10°	3314.7	3179.6	2932.0	2765.5	2685.9	2657.4	2658.8	2683.0	2705.8	2722.9	2725.7
12.5°	3360.2	3162.5	2836.7	2658.8	2607.6	2613.3	2653.2	2707.3	2751.3	2775.5	2776.9
15°	3411.4	3135.4	2721.5	2557.8	2540.7	2584.9	2658.8	2741.4	2808.3	2848.0	2852.3
17.5°	3454.1	3089.9	2600.5	2459.7	2481.0	2562.1	2664.5	2771.3	2852.3	2902.1	2910.6
20°	3502.4	3031.6	2475.3	2365.8	2427.0	2536.5	2653.2	2768.4	2852.3	2900.7	2912.0
22.5°	3540.9	2949.1	2355.8	2288.9	2378.6	2505.2	2614.8	2707.3	2775.5	2801.1	2818.2
25°	3556.5	2845.2	2243.5	2226.4	2340.2	2454.0	2528.0	2580.6	2602.0	2599.1	2606.3
27.5°	3548.0	2725.7	2146.7	2176.6	2291.8	2374.3	2411.3	2407.0	2368.7	2333.1	2350.2
30°	3512.4	2583.5	2065.7	2125.4	2229.2	2274.7	2269.0	2213.6	2141.0	2074.2	2078.4
32.5°	3448.4	2429.8	1990.2	2067.0	2141.0	2160.9	2122.5	2049.9	1946.2	1859.4	1846.6
35°	3394.4	2283.3	1923.4	2000.2	2052.8	2042.9	2005.9	1912.0	1818.1	1741.3	1728.5
37.5°	3385.8	2158.1	1859.4	1924.8	1954.7	1940.4	1894.9	1815.2	1781.1	1722.8	1715.6
40°	3431.4	2069.9	1793.9	1845.2	1859.4	1847.9	1798.1	1752.6	1783.9	1769.7	1769.7
42.5°	3555.1	2022.9	1735.6	1765.4	1776.9	1785.4	1749.8	1711.4	1749.8	1684.4	1663.0
45°	3751.4	2024.4	1682.9	1687.2	1721.4	1751.2	1727.1	1670.1	1650.2	1519.4	1493.7
47.5°	4040.2	2072.7	1640.3	1613.2	1674.4	1724.2	1690.1	1607.6	1519.4	1432.6	1416.9
50°	4377.4	2159.5	1601.9	1536.4	1611.8	1690.1	1664.4	1567.7	1476.6	1424.1	1414.1
52.5°	4751.5	2269.0	1554.9	1451.1	1535.0	1674.4	1670.1	1562.0	1436.8	1401.3	1392.7
55°	5213.9	2377.2	1496.6	1351.5	1466.7	1661.6	1654.5	1515.1	1428.3	1402.7	1399.8
57.5°	5751.6	2533.7	1412.6	1250.5	1388.5	1609.0	1593.4	1486.6	1399.8	1381.3	1379.9
60°	6618.0	2776.9	1293.1	1158.0	1308.8	1516.5	1536.4	1438.3	1354.3	1350.1	1348.6
62.5°	7757.5	3118.3	1169.4	1062.7	1216.3	1397.0	1453.9	1372.8	1306.0	1327.3	1330.1
65°	9330.9	3405.7	1041.3	981.6	1113.9	1281.8	1375.6	1311.6	1251.9	1293.1	1293.1
67.5°	10356.6	3411.4	924.7	897.7	1010.0	1185.1	1293.1	1239.1	1182.2	1251.9	1254.8
70°	10143.2	2988.9	828.0	809.5	909.0	1081.2	1202.1	1159.4	1094.0	1156.5	1133.8
71°	9798.9	2754.2	789.5	775.3	869.2	1031.4	1159.4	1123.8	1058.4	1099.7	1086.9
72.5°	9249.8	2391.4	727.0	729.8	809.5	968.8	1099.7	1062.7	997.3	1020.0	1015.8
75°	7818.7	2088.4	621.7	634.5	695.7	862.1	980.2	951.8	884.9	884.9	880.6
77.5°	4888.1	1459.6	516.4	523.5	590.4	738.3	842.2	818.0	754.0	732.7	727.0
80°	1823.8	754.0	404.0	412.6	453.8	581.9	697.1	674.3	608.9	584.7	562.0
82.5°	690.0	378.4	297.3	290.2	334.3	443.9	546.3	519.2	468.0	409.7	392.7
85°	260.4	187.8	182.1	176.4	196.3	263.1	338.6	332.9	278.8	237.6	233.3
87.5°	68.3	61.1	71.1	52.6	55.5	49.8	51.2	21.4	9.9	4.3	2.9
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)