

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: P453605

Luminaire Tested: **GALN-SA4C-827-U-T3**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453605
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4C-827-U-T3
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20274 lumens
Efficiency: N/A
Efficacy: 95.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

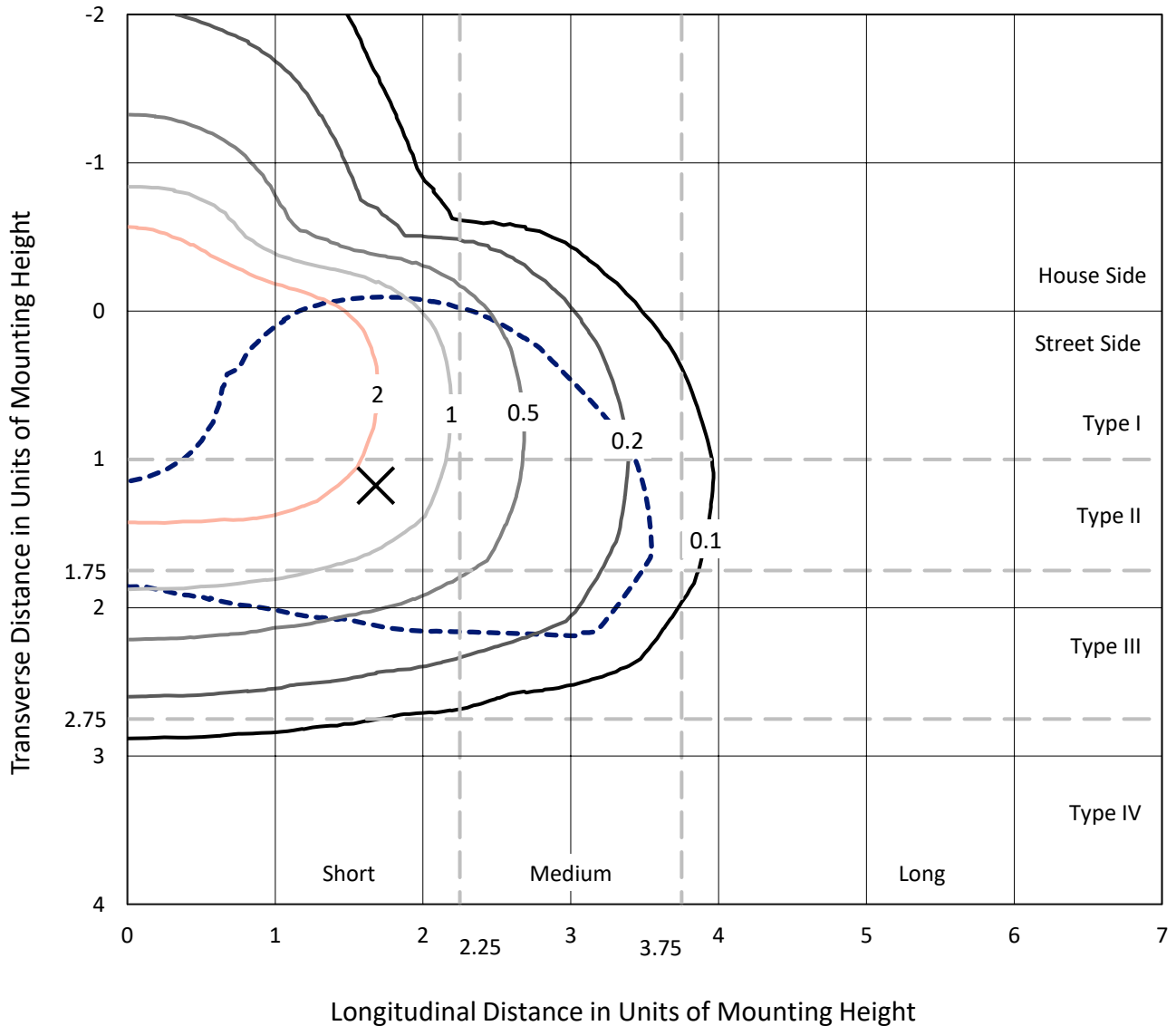
Input Watts (W): 213
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

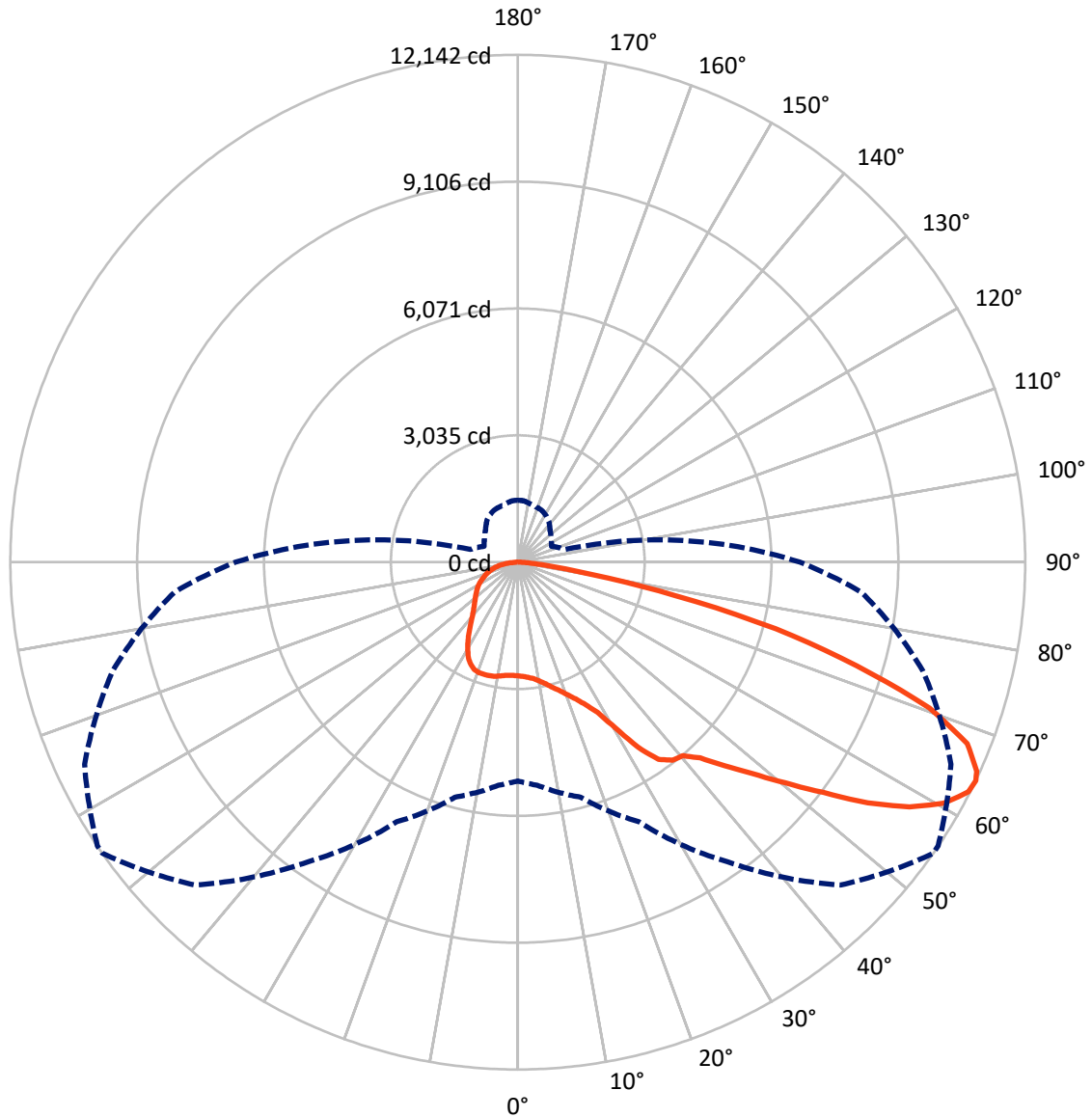
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 64-Deg Vertical

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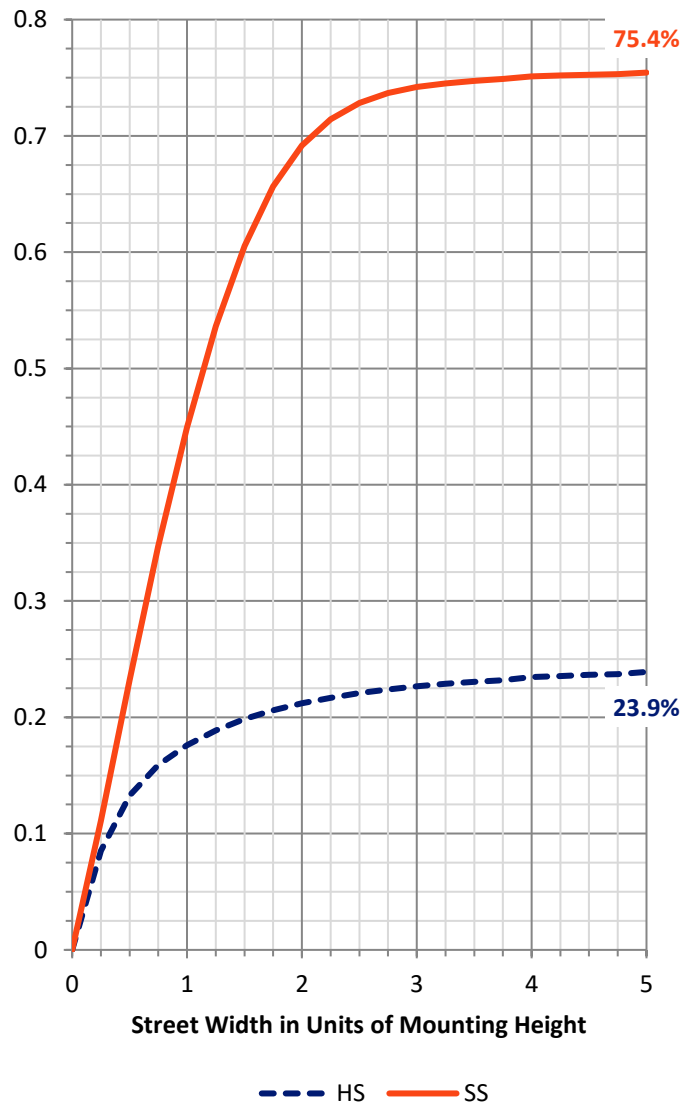
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4924.9	0.0	4924.9
	% Fixture	24.3	0.0	24.3
Street Side	Lumens	15349.0	0.0	15349.0
	% Fixture	75.7	0.0	75.7
Total	Lumens	20274.0	0.0	20274.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.6	1.3
10°-20°	834.9	4.1
20°-30°	1486.3	7.3
30°-40°	2286.9	11.3
40°-50°	3241.8	16.0
50°-60°	4692.5	23.1
60°-70°	4856.2	24.0
70°-80°	2274.2	11.2
80°-90°	336.7	1.7
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°	20274.0	100.0
0°-180°	20274.0	100.0



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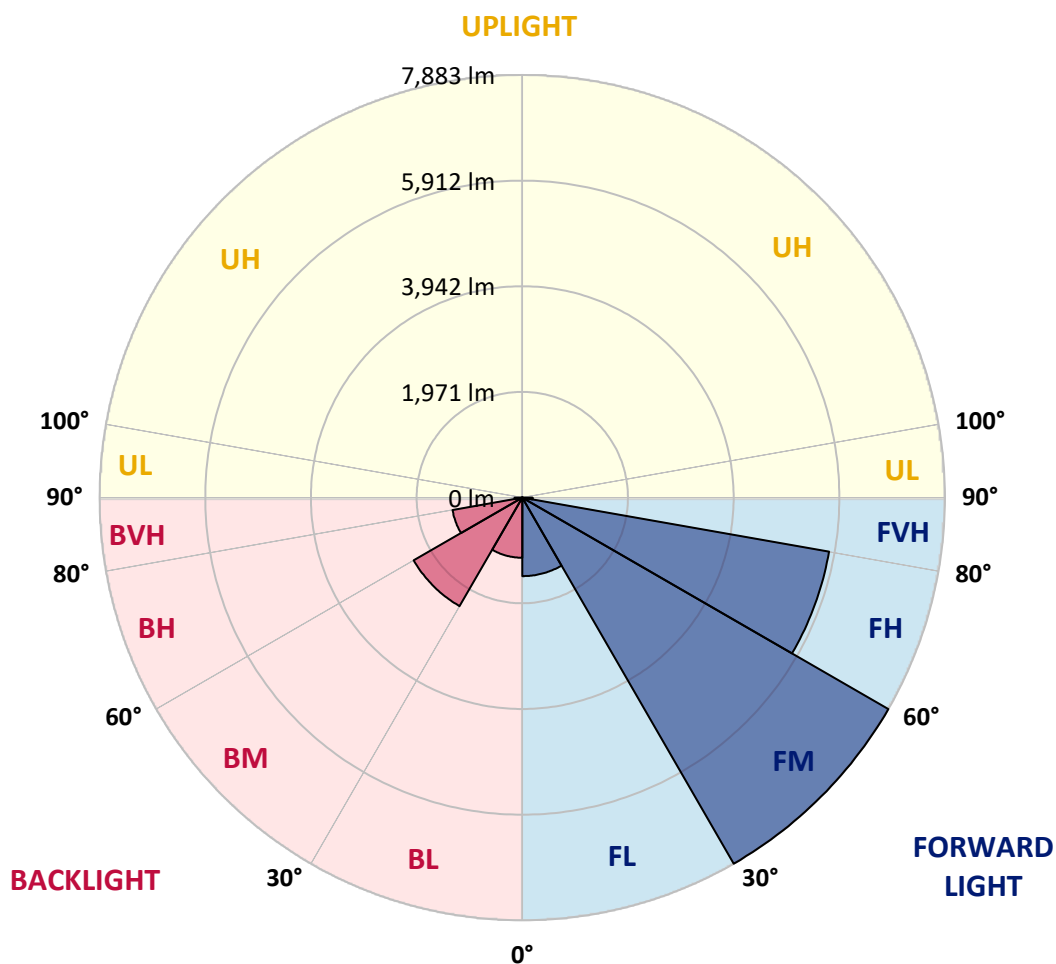
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1464.1	7.2			
FM	(30°-60°)	7883.1	38.9			
FH	(60°-80°)	5809.1	28.7			G3/7500
FVH	(80°-90°)	192.8	1.0			G2/225
BL	(0°-30°)	1121.7	5.5	B3/2500		
BM	(30°-60°)	2338.1	11.5	B2/2500		
BH	(60°-80°)	1321.3	6.5	B3/2500		G3/2500
BVH	(80°-90°)	143.9	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	2720.2	2720.2	2720.2	2720.2	2720.2	2720.2	2720.2	2720.2	2720.2	2720.2	2720.2
2.5°	2750.7	2749.5	2752.9	2749.5	2751.8	2743.9	2740.5	2742.8	2739.4	2733.7	2723.5
5°	2784.6	2783.4	2784.6	2780.1	2782.3	2777.8	2769.9	2772.1	2766.5	2754.1	2739.4
7.5°	2842.2	2837.7	2837.7	2836.6	2832.0	2825.3	2819.6	2817.3	2811.7	2795.9	2773.3
10°	2916.8	2916.8	2917.9	2908.9	2914.5	2902.1	2896.5	2895.3	2876.1	2855.8	2824.1
12.5°	3015.1	3020.8	3017.4	3012.9	3010.6	3006.1	2986.9	2991.4	2969.9	2934.9	2896.5
15°	3137.2	3146.2	3140.6	3138.3	3132.6	3115.7	3107.8	3104.4	3076.1	3025.3	2974.4
17.5°	3298.8	3287.5	3283.0	3277.3	3253.6	3241.1	3227.6	3225.3	3200.5	3140.6	3061.5
20°	3440.0	3455.9	3446.8	3441.2	3417.4	3393.7	3383.5	3380.1	3358.7	3293.1	3166.5
22.5°	3608.4	3611.8	3615.2	3601.6	3590.3	3572.3	3554.2	3548.5	3540.6	3472.8	3318.0
25°	3788.1	3801.7	3790.4	3776.8	3763.2	3762.1	3779.1	3776.8	3773.4	3707.9	3519.1
27.5°	4080.8	4093.2	4096.6	4081.9	4029.9	4034.5	4072.9	4085.3	4137.3	4028.8	3777.9
30°	4245.8	4258.2	4286.5	4341.9	4424.4	4496.7	4589.3	4617.6	4667.3	4462.8	4085.3
32.5°	4347.5	4352.0	4402.9	4505.7	4753.2	5023.3	5275.3	5285.5	5317.1	5030.1	4366.7
35°	4508.0	4511.4	4552.1	4665.1	4955.5	5405.3	5795.2	5807.6	5781.6	5206.4	4497.8
37.5°	4705.8	4714.8	4740.8	4834.6	5181.5	5725.1	6011.0	6002.0	5771.4	5346.5	4729.5
40°	4993.9	4993.9	4963.4	5090.0	5420.0	5908.2	6086.7	6070.9	6009.9	5752.2	5082.1
42.5°	5248.2	5243.7	5316.0	5401.9	5718.3	6190.7	6404.3	6430.3	6530.9	6261.9	5483.3
45°	5579.3	5599.7	5640.3	5796.3	6225.7	6673.3	6949.0	6973.9	7116.3	6862.0	5952.3
47.5°	5913.8	5920.6	6048.3	6256.3	6854.1	7327.6	7553.6	7594.3	7724.3	7563.8	6457.4
50°	6151.2	6215.6	6420.1	6747.8	7501.6	8125.4	8301.7	8350.3	8579.7	8327.7	7046.2
52.5°	6402.0	6465.3	6715.1	7214.6	8245.2	8941.4	9158.4	9191.1	9429.6	9100.7	7648.5
55°	6616.8	6675.5	6959.2	7628.2	8837.4	9774.3	10167.5	10129.1	10243.3	9696.3	8113.0
57.5°	6651.8	6699.3	7056.4	7892.6	9282.7	10488.5	11052.4	11075.0	10942.8	10141.5	8496.1
60°	6380.6	6477.8	6888.0	7864.4	9482.7	10985.7	11712.4	11728.2	11353.0	10369.8	8648.7
62.5°	5900.3	5890.1	6386.2	7410.1	9202.4	11098.7	12101.1	12084.2	11513.5	10260.2	8500.6
64°	5236.9	5359.0	5822.3	6851.8	8750.4	10924.7	12141.8	12132.8	11436.6	10031.9	8248.6
65°	4832.3	4825.5	5283.2	6395.3	8300.6	10662.5	12069.5	12057.1	11276.2	9827.4	8053.1
67.5°	3488.6	3504.5	3956.5	4935.2	6747.8	9637.5	11598.3	11551.9	10643.3	9149.3	7309.5
70°	2113.3	2122.3	2477.2	3273.9	4843.6	7790.9	10454.6	10456.8	9674.8	8136.7	6221.2
72.5°	1113.2	1136.9	1279.3	1859.0	2941.7	5466.3	8481.4	8682.6	8306.3	6944.5	4914.8
75°	619.3	622.7	723.3	916.5	1500.8	3059.2	6374.9	6432.5	6576.1	5589.5	3634.4
77.5°	472.4	479.2	510.8	592.2	817.1	1418.3	3858.2	4147.5	4634.6	3940.7	2073.7
80°	383.1	389.9	417.0	465.6	543.6	672.4	1792.3	1948.3	2480.6	1749.4	809.2
82.5°	298.3	293.8	328.9	360.5	395.5	397.8	735.7	813.7	1010.3	752.6	350.3
85°	221.5	221.5	249.8	243.0	255.4	232.8	324.3	358.2	404.6	319.8	162.7
87.5°	88.1	97.2	163.9	146.9	114.1	91.5	119.8	126.6	140.1	125.4	67.8
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°	2720.2	2720.2	2720.2	2720.2	2720.2	2720.2	2720.2	2720.2	2720.2	2720.2	2720.2
2.5°	2724.7	2728.1	2720.2	2714.5	2712.2	2708.9	2705.5	2706.6	2711.1	2715.6	2714.5
5°	2738.2	2739.4	2725.8	2719.0	2714.5	2710.0	2710.0	2713.4	2722.4	2729.2	2729.2
7.5°	2772.1	2772.1	2752.9	2740.5	2733.7	2725.8	2723.5	2724.7	2731.5	2740.5	2741.6
10°	2825.3	2820.7	2795.9	2776.7	2764.2	2745.0	2728.1	2719.0	2722.4	2728.1	2728.1
12.5°	2889.7	2877.2	2845.6	2819.6	2789.1	2752.9	2717.9	2699.8	2698.7	2704.3	2702.1
15°	2958.6	2945.0	2901.0	2853.5	2800.4	2747.3	2705.5	2679.5	2659.1	2653.5	2665.9
17.5°	3038.8	3010.6	2949.6	2884.0	2804.9	2736.0	2670.4	2617.3	2581.2	2571.0	2574.4
20°	3136.0	3098.7	3016.2	2913.4	2801.5	2695.3	2593.6	2522.4	2463.6	2445.5	2447.8
22.5°	3270.5	3206.1	3085.2	2928.1	2773.3	2618.4	2477.2	2384.5	2313.3	2285.1	2302.0
25°	3423.1	3353.0	3150.7	2924.7	2699.8	2495.3	2339.3	2218.4	2154.0	2112.2	2121.2
27.5°	3633.3	3509.0	3220.8	2894.2	2594.7	2345.0	2164.1	2050.0	1991.2	1969.8	1979.9
30°	3902.2	3711.3	3296.5	2811.7	2428.6	2155.1	1987.9	1913.3	1878.2	1851.1	1860.2
32.5°	4096.6	3853.7	3313.5	2672.7	2248.9	1982.2	1868.1	1812.7	1774.3	1748.3	1753.9
35°	4235.6	3974.6	3305.6	2502.0	2061.3	1839.8	1773.1	1727.9	1665.8	1609.3	1599.1
37.5°	4422.1	4126.0	3247.9	2315.6	1876.0	1743.7	1696.3	1612.7	1523.4	1447.7	1444.3
40°	4708.0	4303.4	3124.7	2096.3	1717.8	1672.6	1614.9	1506.4	1410.4	1349.3	1344.8
42.5°	5003.0	4467.3	2957.5	1865.8	1587.8	1598.0	1527.9	1420.5	1361.8	1322.2	1317.7
45°	5363.5	4644.7	2776.7	1665.8	1491.7	1527.9	1452.2	1390.0	1355.0	1329.0	1322.2
47.5°	5753.4	4826.7	2573.2	1486.1	1410.4	1463.5	1420.5	1392.3	1373.1	1355.0	1347.1
50°	6173.8	5030.1	2382.3	1341.4	1336.9	1396.8	1417.1	1407.0	1395.7	1390.0	1383.2
52.5°	6634.8	5238.0	2221.8	1239.7	1272.5	1349.3	1418.3	1426.2	1426.2	1422.8	1418.3
55°	6946.7	5382.7	2059.0	1157.2	1207.0	1310.9	1416.0	1446.5	1457.8	1453.3	1448.8
57.5°	7177.3	5461.8	1854.5	1086.0	1151.6	1273.6	1403.6	1448.8	1460.1	1465.7	1463.5
60°	7224.8	5388.3	1586.7	1011.4	1091.7	1219.4	1358.4	1414.9	1429.6	1464.6	1468.0
62.5°	7011.2	5162.3	1320.0	938.0	1018.2	1136.9	1297.4	1376.5	1405.8	1460.1	1465.7
64°	6749.0	4909.2	1171.9	891.7	970.8	1090.5	1266.8	1366.3	1404.7	1477.0	1481.6
65°	6556.9	4725.0	1079.2	862.3	940.2	1060.0	1249.9	1369.7	1414.9	1503.0	1509.8
67.5°	5849.4	4091.0	892.8	793.3	867.9	1008.1	1253.3	1397.9	1412.6	1513.2	1512.1
70°	4840.2	3257.0	748.1	730.0	797.9	966.2	1239.7	1352.7	1353.9	1420.5	1404.7
72.5°	3624.2	2407.1	648.7	664.5	719.9	866.8	1170.8	1291.7	1272.5	1281.5	1265.7
75°	2489.6	1592.3	558.3	594.4	638.5	766.2	1073.6	1173.0	1142.5	1131.2	1119.9
77.5°	1329.0	880.4	464.5	525.5	554.9	662.2	936.9	1032.9	1001.3	957.2	942.5
80°	537.9	414.7	374.1	435.1	452.0	533.4	779.8	839.7	815.9	739.1	714.2
82.5°	270.1	248.6	293.8	342.4	343.6	380.8	579.7	636.2	583.1	489.3	467.9
85°	141.3	145.8	202.3	240.7	212.5	205.7	348.1	385.4	353.7	307.4	276.9
87.5°	50.9	58.8	106.2	105.1	74.6	39.6	76.8	37.3	20.3	12.4	15.8
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)