

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: P647399

Luminaire Tested: **GALN-SA4D-835-U-T2-GRSWH**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P647399
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-14)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4D-835-U-T2-GRSWH
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH WHITE GLARE REDUCTION SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20098.8 lumens
Efficiency: N/A
Efficacy: 82.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

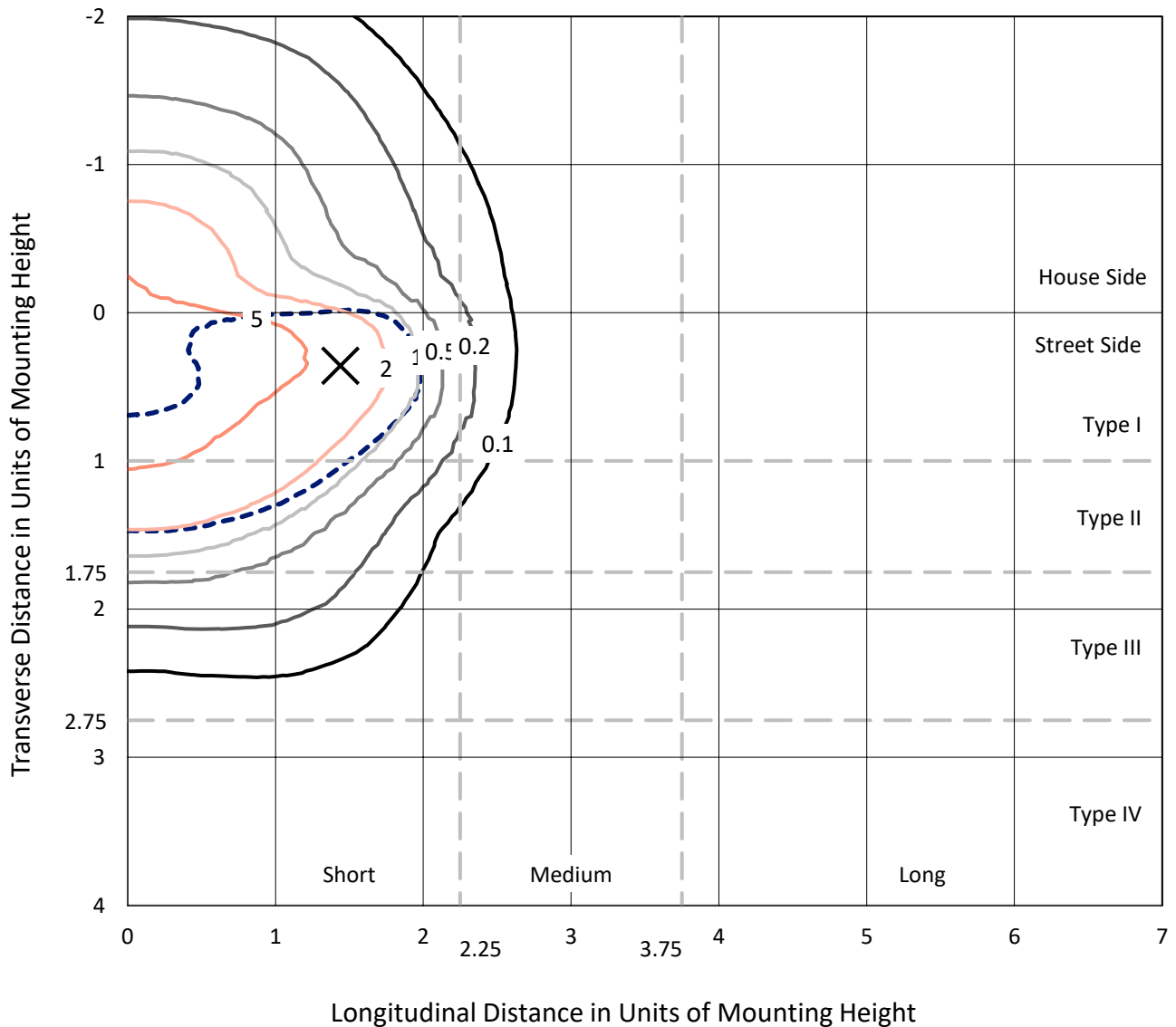
Input Watts (W): 245
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

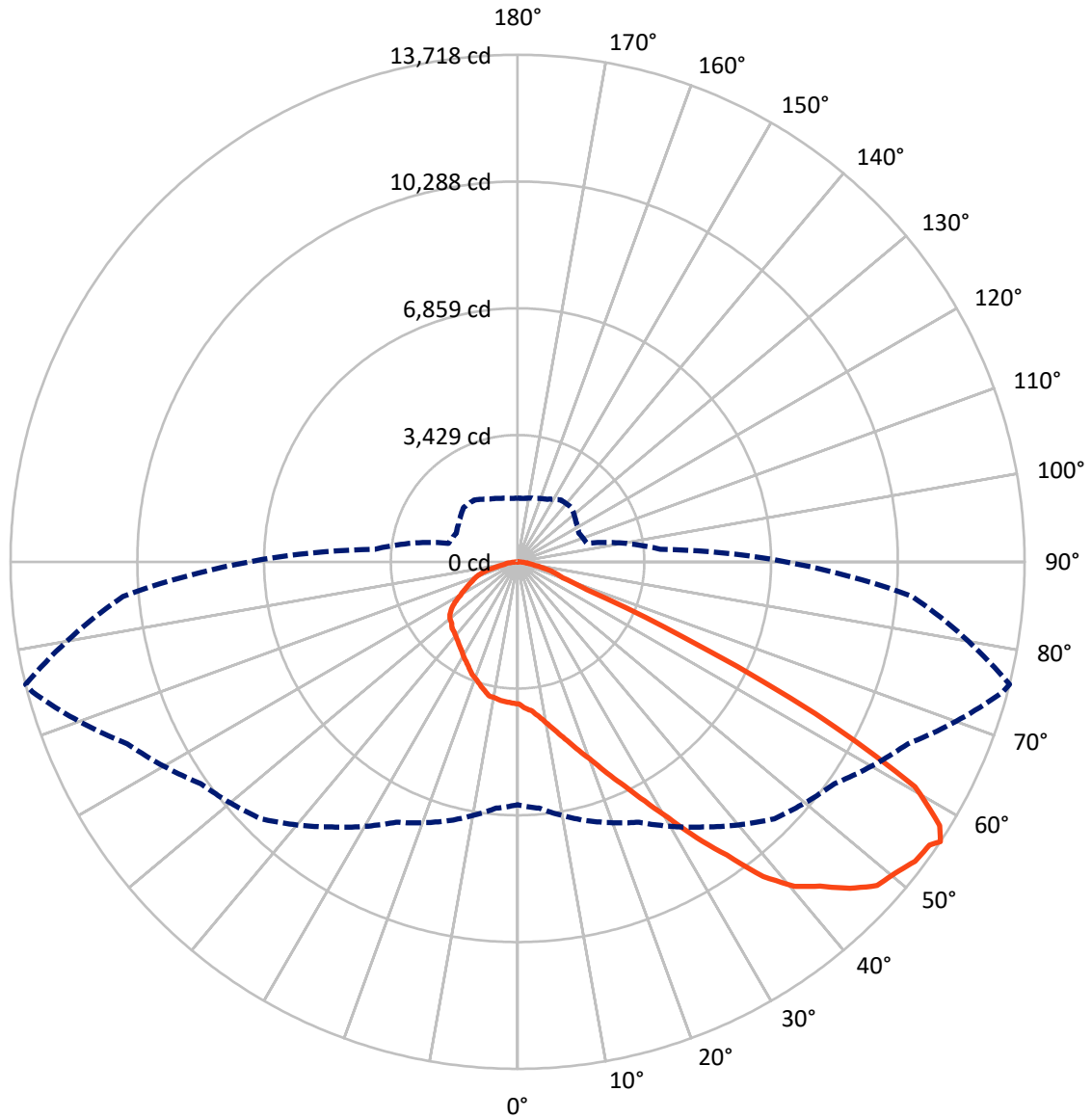
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 56-Deg Vertical

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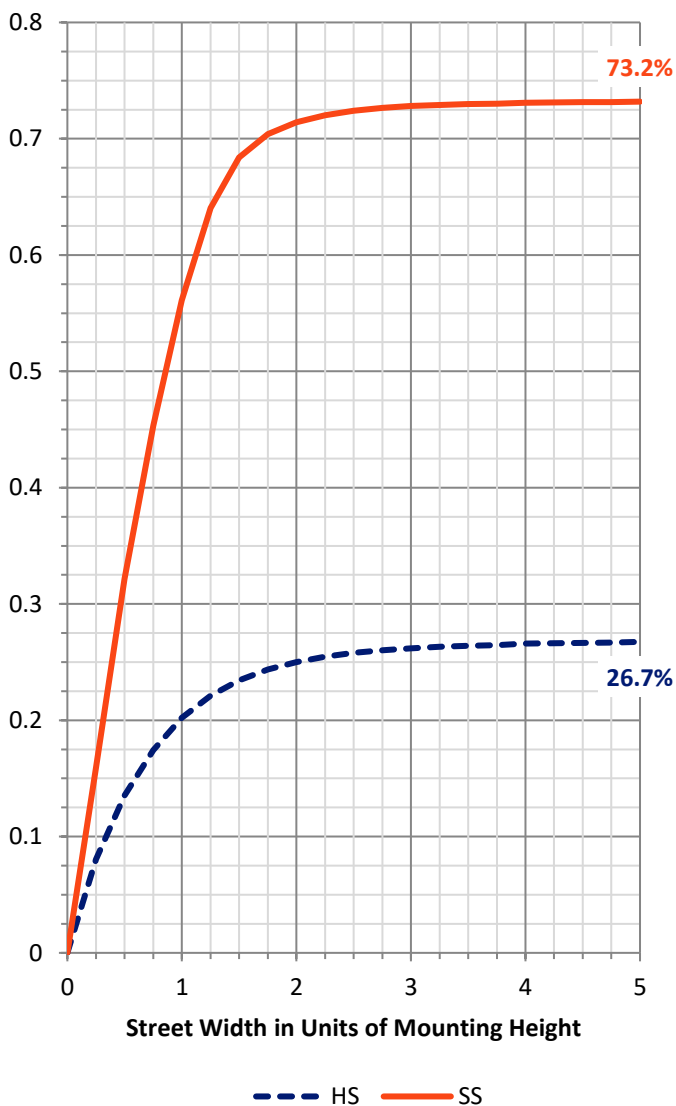
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5404.0	0.0	5404.0
	% Fixture	26.9	0.0	26.9
Street Side	Lumens	14694.9	0.0	14694.9
	% Fixture	73.1	0.0	73.1
Total	Lumens	20098.8	0.0	20098.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	381.4	1.9
10°-20°	1198.0	6.0
20°-30°	2095.2	10.4
30°-40°	3280.4	16.3
40°-50°	4772.1	23.7
50°-60°	5244.8	26.1
60°-70°	2341.1	11.6
70°-80°	676.2	3.4
80°-90°	109.7	0.5
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°	20098.8	100.0
0°-180°	20098.8	100.0

Coefficient of Utilization



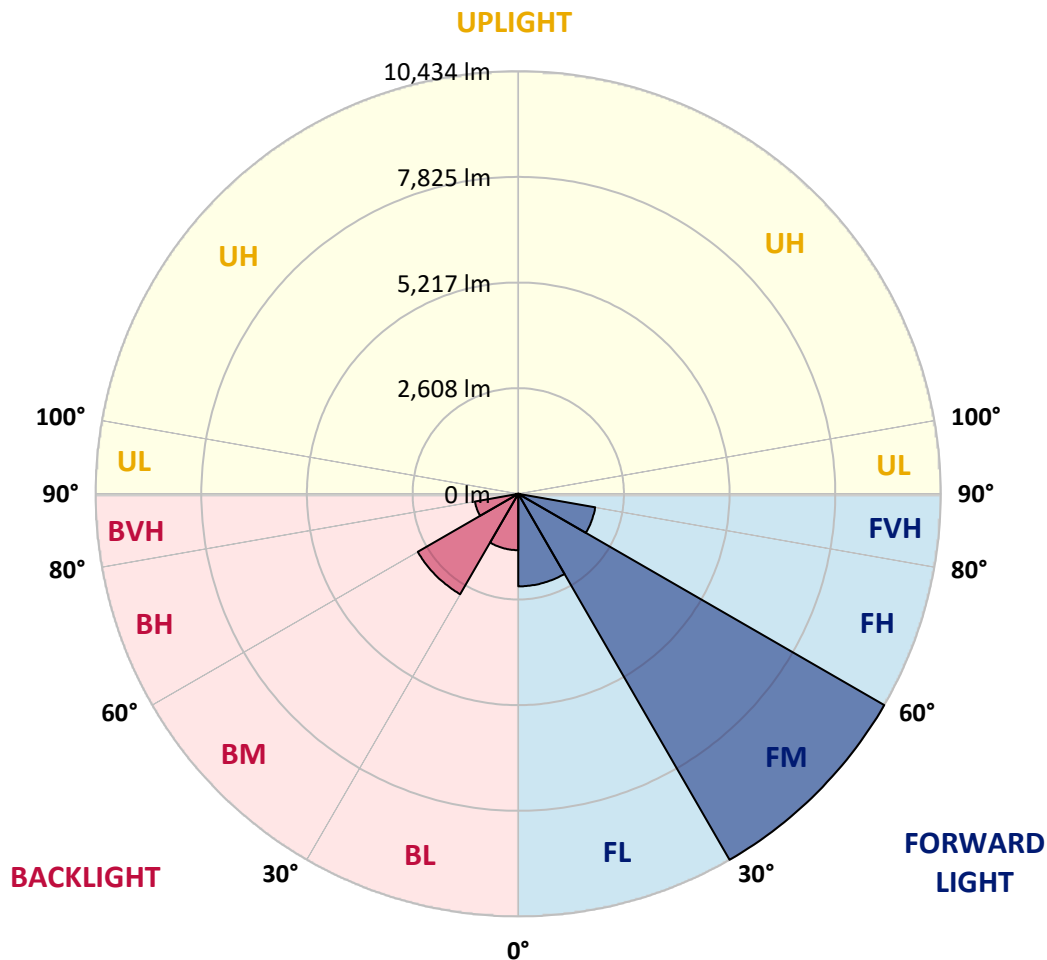
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2284.0	11.4			
FM (30°-60°)	10433.7	51.9			
FH (60°-80°)	1930.0	9.6			G2/5000
FVH (80°-90°)	47.2	0.2			G1/100
BL (0°-30°)	1390.5	6.9	B3/2500		
BM (30°-60°)	2863.7	14.2	B3/5000		
BH (60°-80°)	1087.3	5.4	B3/2500		G3/2500
BVH (80°-90°)	62.5	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3845.6	3845.6	3845.6	3845.6	3845.6	3845.6	3845.6	3845.6	3845.6	3845.6	3845.6
2.5°	4236.5	4168.7	4163.5	4145.3	4155.7	4108.8	4059.3	3994.2	3926.4	3968.1	3869.1
5°	4533.5	4442.3	4478.8	4416.3	4424.0	4361.5	4259.9	4184.4	4101.0	4051.5	3981.2
7.5°	4637.7	4645.5	4671.6	4661.2	4609.1	4609.1	4541.3	4408.4	4262.5	4233.8	4116.6
10°	4778.4	4781.0	4752.3	4760.2	4833.1	4799.2	4739.3	4682.0	4494.4	4460.5	4252.1
12.5°	4827.9	4781.0	4827.9	4869.6	4955.6	5002.5	4989.4	4947.8	4747.2	4723.7	4418.9
15°	4835.7	4807.1	4846.1	4939.9	5015.5	5213.5	5312.5	5283.8	5018.1	5020.7	4606.5
17.5°	4799.2	4838.3	4854.0	4934.7	5109.3	5294.3	5580.9	5620.0	5401.1	5367.2	4843.6
20°	4848.7	4820.1	4840.9	4913.9	5145.8	5435.0	5810.2	6068.1	5760.7	5737.2	5088.5
22.5°	5038.9	4999.8	4994.7	5041.6	5208.3	5507.9	6052.5	6516.3	6198.4	6211.4	5393.3
25°	5187.5	5208.3	5190.0	5187.5	5291.7	5617.4	6372.9	7050.4	6792.4	6716.9	5752.9
27.5°	5442.8	5492.3	5455.8	5505.4	5481.9	5781.5	6602.3	7641.8	7433.3	7331.8	6078.5
30°	5797.2	5823.2	5789.3	5789.3	5719.0	6010.8	6810.7	8259.3	8173.3	8035.2	6461.6
32.5°	6263.5	6302.6	6234.9	6195.8	6185.4	6352.1	7185.8	8869.0	9014.9	8897.6	6969.6
35°	6881.0	6857.6	6776.8	6740.3	6599.6	6875.8	7743.4	9569.8	9952.9	9744.4	7584.5
37.5°	7425.6	7389.1	7383.8	7180.7	7214.5	7441.2	8217.6	10101.3	10862.2	10802.2	8233.2
40°	7933.6	7967.5	8022.2	7907.6	7855.4	8105.5	8770.0	10507.8	11568.2	11544.8	8733.5
42.5°	8478.2	8446.9	8543.3	8446.9	8368.7	8723.1	9369.2	10789.2	12188.3	11995.5	9257.2
45°	9267.6	9168.6	9202.4	9210.3	9153.0	9283.2	9616.7	10992.4	12623.4	12602.6	9640.2
47.5°	9926.8	9929.4	9872.1	9827.7	9653.2	9783.5	9892.9	11120.1	13123.7	13089.8	9788.7
50°	10171.7	10137.8	10304.6	10401.0	10411.4	10145.6	10109.2	11190.4	13386.8	13238.3	9937.2
52.5°	9291.1	9322.3	9585.5	10158.6	10489.5	10518.2	10361.9	11336.4	13493.7	13462.4	10057.1
55°	7477.6	7628.8	8061.3	8723.1	9507.3	10369.7	10635.5	11487.5	13551.0	13524.9	10588.6
56°	6573.6	6690.8	7253.6	7772.1	8756.9	9830.4	10463.5	11649.0	13595.2	13717.7	10713.6
57.5°	5291.7	5427.1	5831.0	6419.8	7581.9	8803.8	9989.3	11451.0	13423.3	13470.2	10804.9
60°	3309.0	3322.0	3806.6	4194.8	5012.9	6206.2	7623.6	9963.3	12422.8	12355.0	9705.3
62.5°	2170.3	2173.0	2613.3	2931.2	3303.7	3577.3	4486.6	6607.4	9166.0	9046.2	6909.7
65°	1524.2	1558.1	1899.4	2324.1	2475.2	2331.9	2303.2	3483.5	5119.7	4947.8	3712.8
67.5°	1115.1	1117.7	1420.0	1875.9	2094.8	1774.3	1440.8	1701.4	2027.0	2021.9	1719.6
70°	737.4	768.6	1000.5	1401.7	1651.9	1425.2	1177.6	1216.8	1289.7	1289.7	1279.3
72.5°	429.9	458.5	612.3	888.5	927.5	891.1	932.8	1042.2	1089.1	1086.5	1073.4
75°	244.9	257.9	291.8	370.0	461.2	544.6	685.2	789.4	836.3	865.0	831.2
77.5°	143.3	151.1	171.9	211.0	239.7	294.4	372.6	445.5	508.1	500.3	505.4
80°	75.6	75.6	96.4	125.0	166.8	208.4	247.5	289.2	323.1	330.9	338.7
82.5°	44.3	46.9	62.6	91.2	119.9	148.5	190.2	218.8	250.1	252.8	257.9
85°	23.4	26.1	39.1	59.9	80.8	91.2	93.8	88.6	96.4	91.2	104.2
87.5°	7.8	7.8	13.0	10.4	10.4	13.0	15.7	15.7	20.8	20.8	20.8
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°	3845.6	3845.6	3845.6	3845.6	3845.6	3845.6	3845.6	3845.6	3845.6	3845.6	3845.6
2.5°	3866.5	3866.5	3822.2	3738.8	3725.8	3691.9	3660.7	3658.1	3634.6	3613.8	3603.4
5°	3939.4	3858.7	3793.6	3718.0	3629.4	3587.7	3540.8	3488.7	3467.8	3488.7	3486.1
7.5°	4022.8	3955.1	3759.7	3618.9	3517.4	3475.7	3423.6	3368.9	3374.1	3374.1	3337.6
10°	4103.6	4012.4	3699.8	3520.0	3371.4	3340.2	3311.5	3332.4	3358.4	3363.6	3340.2
12.5°	4239.1	4033.2	3671.1	3420.9	3327.2	3259.4	3277.6	3335.0	3389.7	3374.1	3392.3
15°	4340.7	4051.5	3540.8	3319.4	3202.1	3233.4	3298.5	3337.6	3428.8	3418.3	3436.6
17.5°	4439.7	4061.9	3413.2	3183.8	3134.3	3220.3	3269.8	3381.9	3410.5	3473.1	3496.5
20°	4643.0	4082.7	3282.9	3100.5	3084.9	3183.8	3269.8	3322.0	3384.5	3439.2	3439.2
22.5°	4747.2	4072.3	3196.9	2991.1	3040.5	3103.1	3181.3	3269.8	3269.8	3322.0	3324.5
25°	4877.4	4030.6	3061.4	2939.0	2975.4	3035.4	3123.9	3092.7	3126.5	3126.5	3168.3
27.5°	5025.9	3942.1	2944.2	2845.2	2918.1	2983.2	2996.3	2975.4	2936.3	2931.2	2915.5
30°	5145.8	3832.6	2858.2	2813.9	2873.8	2910.3	2868.6	2824.3	2756.6	2751.4	2714.9
32.5°	5309.9	3697.2	2751.4	2735.7	2803.5	2806.0	2793.0	2725.3	2626.3	2584.6	2542.9
35°	5586.1	3618.9	2670.6	2694.1	2714.9	2707.1	2683.7	2610.7	2511.6	2493.4	2477.8
37.5°	5789.3	3561.6	2587.2	2615.8	2634.1	2644.5	2574.2	2493.4	2496.0	2459.6	2449.1
40°	6018.6	3525.1	2519.5	2532.5	2535.1	2568.9	2483.0	2443.9	2462.1	2438.7	2454.3
42.5°	6313.0	3535.6	2449.1	2438.7	2488.2	2475.2	2433.5	2381.4	2391.8	2321.4	2331.9
45°	6469.4	3605.9	2407.4	2360.5	2415.2	2412.7	2357.9	2308.4	2245.9	2110.4	2115.7
47.5°	6573.6	3624.2	2308.4	2277.2	2334.5	2368.3	2305.9	2191.2	2102.6	2006.2	1982.7
50°	6680.4	3658.1	2261.5	2196.4	2219.9	2300.6	2222.5	2113.0	2027.0	1941.1	1954.1
52.5°	6774.2	3723.2	2170.3	2073.9	2115.7	2204.2	2162.5	2029.6	1935.9	1865.5	1844.7
55°	7191.1	3869.1	2016.6	1891.6	1990.5	2102.6	2079.2	1917.6	1816.0	1779.5	1774.3
56°	7256.2	3874.3	1935.9	1829.0	1920.2	2068.8	2040.1	1868.1	1776.9	1719.6	1722.2
57.5°	7266.6	3811.8	1821.2	1771.7	1849.8	2019.2	1982.7	1829.0	1704.0	1651.9	1636.2
60°	6393.8	2975.4	1677.9	1646.6	1737.9	1868.1	1855.1	1722.2	1581.5	1521.6	1550.3
62.5°	4359.0	2180.7	1565.8	1560.7	1607.6	1735.2	1701.4	1581.5	1464.3	1425.2	1407.0
65°	2537.7	1654.5	1456.5	1435.6	1474.7	1542.4	1565.8	1440.8	1318.3	1292.3	1284.5
67.5°	1498.1	1367.9	1315.8	1281.8	1268.9	1310.5	1328.8	1255.9	1133.4	1096.9	1128.1
70°	1253.2	1216.8	1219.4	1162.1	1130.7	1102.1	1086.5	1021.3	919.7	872.8	859.8
72.5°	1081.2	1065.7	1055.2	1003.1	974.4	909.3	841.6	776.4	700.9	661.8	664.4
75°	825.9	820.7	825.9	799.9	750.3	698.3	635.7	552.3	495.0	445.5	455.9
77.5°	492.4	508.1	515.9	505.4	484.6	437.7	398.6	343.9	289.2	250.1	244.9
80°	338.7	351.7	364.8	351.7	330.9	297.0	255.3	213.7	174.5	153.7	148.5
82.5°	257.9	271.0	278.7	265.8	239.7	203.2	174.5	145.9	114.6	93.8	88.6
85°	93.8	106.8	104.2	125.0	135.5	130.3	112.0	86.0	65.1	46.9	44.3
87.5°	26.1	23.4	26.1	26.1	26.1	23.4	20.8	20.8	20.8	13.0	10.4
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)