

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: P646917

Luminaire Tested: **GALN-SA4C-835-U-T3R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P646917
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4C-835-U-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3500K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22285 lumens
Efficiency: N/A
Efficacy: 104.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

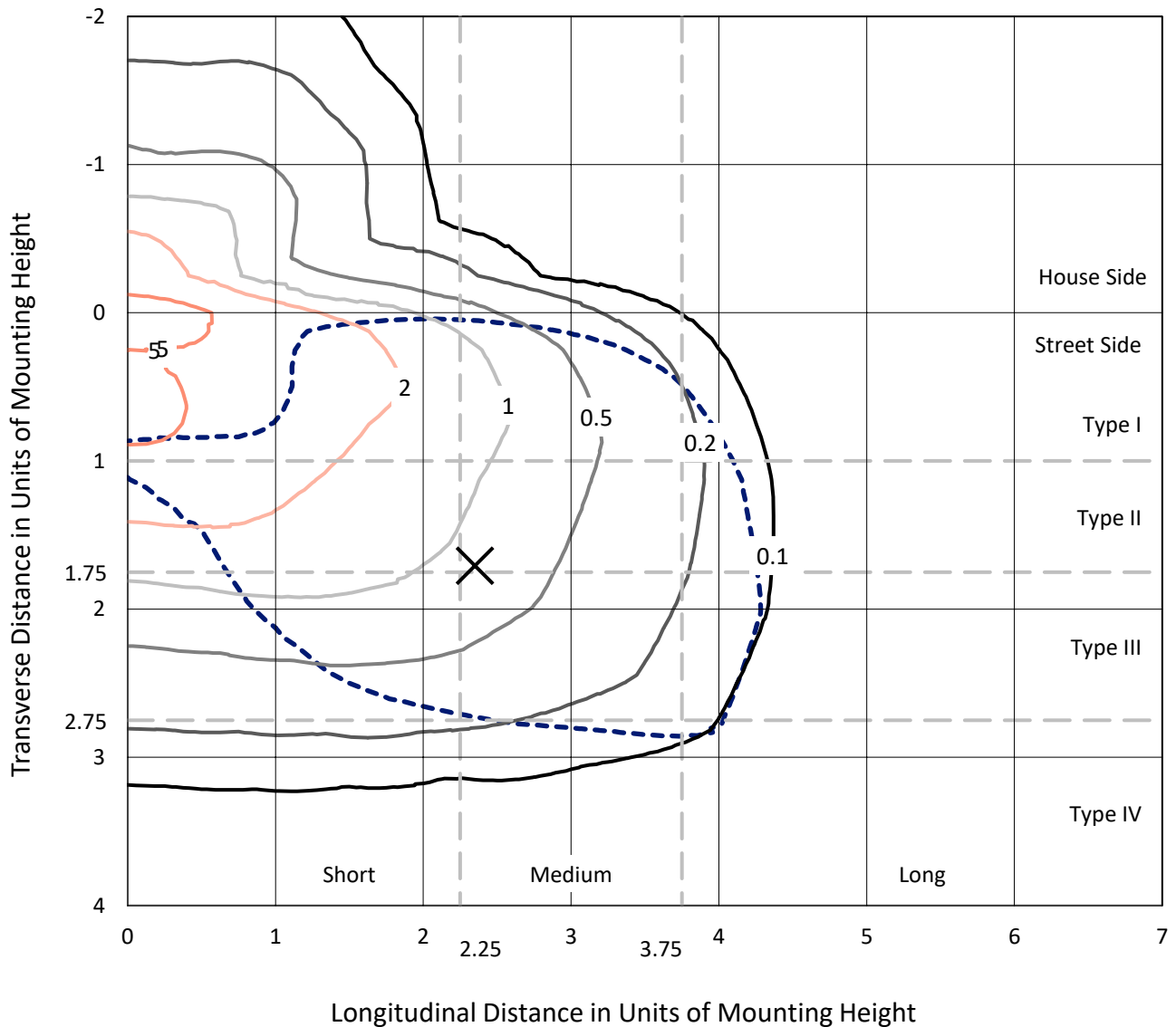
Input Watts (W): 213
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

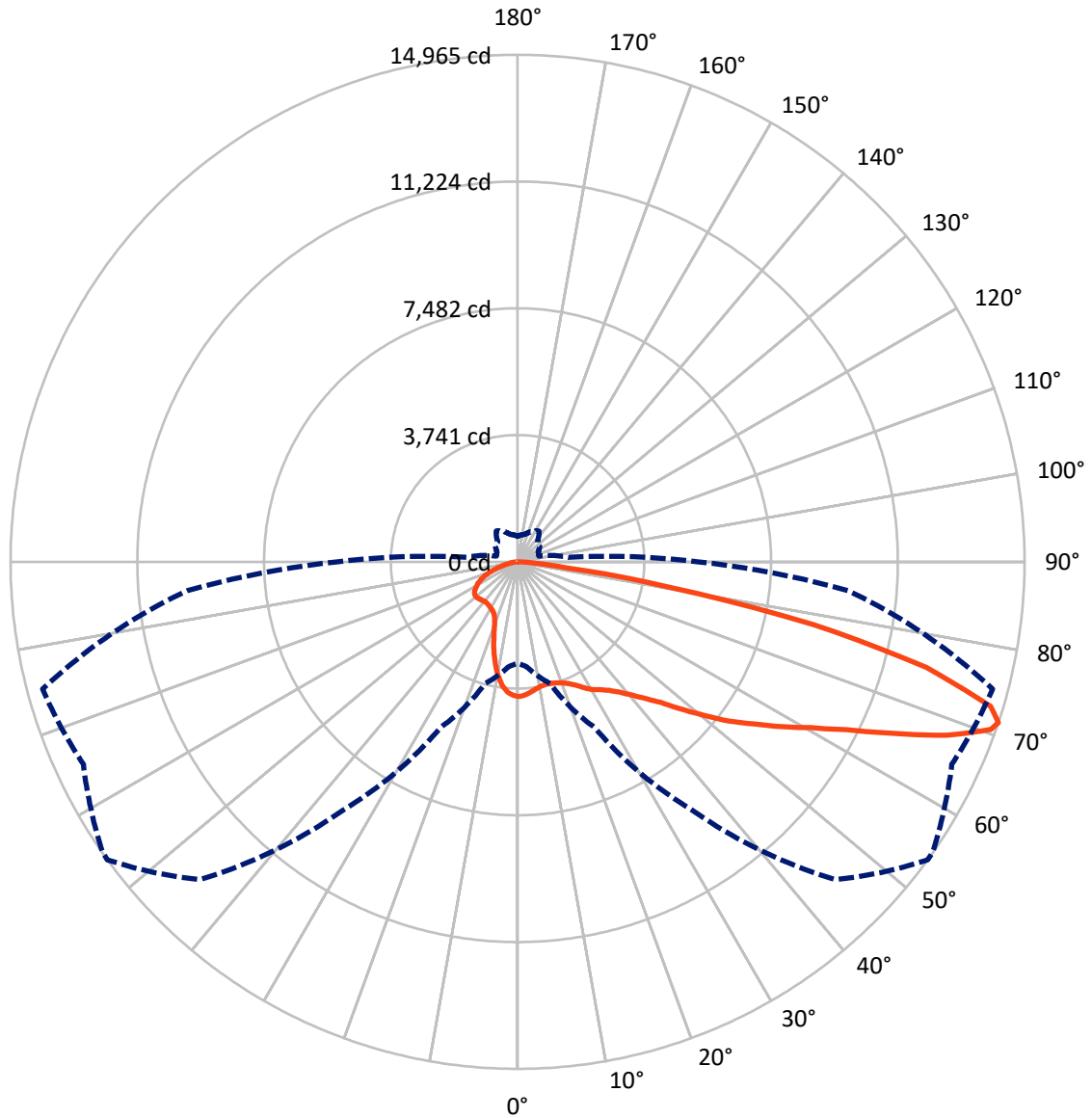
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical



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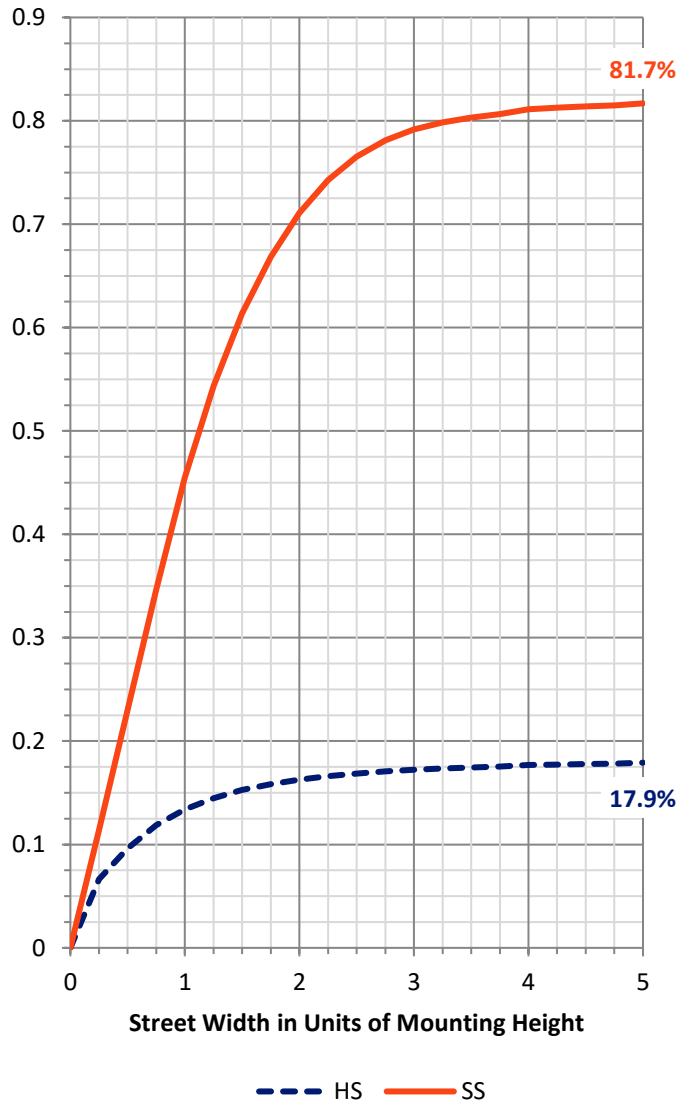
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4023.4	0.0	4023.4
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	18261.6	0.0	18261.6
	% Fixture	81.9	0.0	81.9
Total	Lumens	22285.0	0.0	22285.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	354.3	1.6
10°-20°	935.6	4.2
20°-30°	1557.8	7.0
30°-40°	2303.4	10.3
40°-50°	3244.5	14.6
50°-60°	4344.5	19.5
60°-70°	5475.9	24.6
70°-80°	3740.0	16.8
80°-90°	328.9	1.5
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°	22285.0	100.0
0°-180°	22285.0	100.0

Coefficient of Utilization



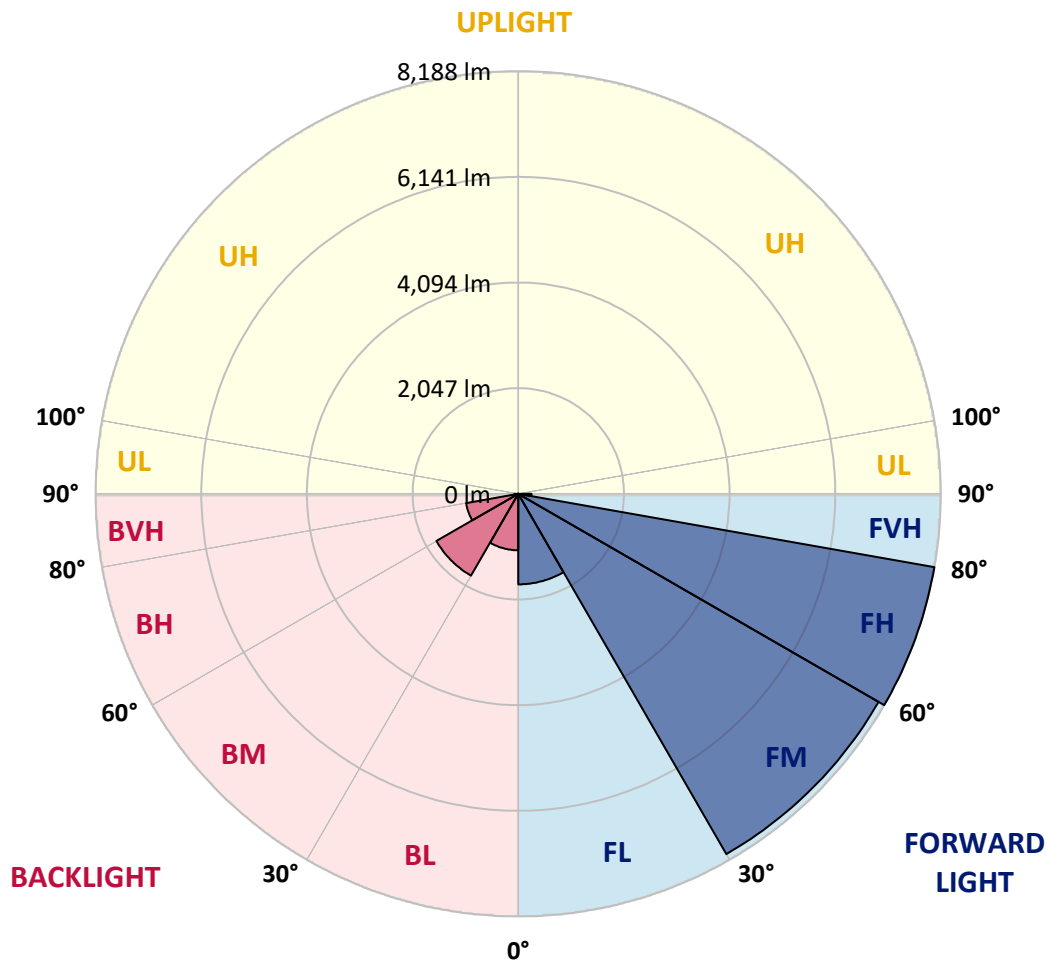
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1754.2	7.9			
FM (30°-60°)	8061.9	36.2			
FH (60°-80°)	8188.4	36.7			G4/12000
FVH (80°-90°)	257.1	1.2			G3/500
BL (0°-30°)	1093.5	4.9	B3/2500		
BM (30°-60°)	1830.5	8.2	B2/2500		
BH (60°-80°)	1027.6	4.6	B3/2500		G3/2500
BVH (80°-90°)	71.8	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-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	3976.0	3976.0	3976.0	3976.0	3976.0	3976.0	3976.0	3976.0	3976.0	3976.0	3976.0
2.5°	3841.2	3859.2	3864.0	3876.1	3901.3	3921.8	3942.2	3939.8	3968.7	3980.8	3991.6
5°	3670.2	3675.0	3693.1	3717.1	3761.7	3818.3	3873.7	3874.8	3945.9	4002.5	4030.1
7.5°	3545.0	3560.7	3572.8	3598.0	3644.9	3706.3	3794.2	3801.4	3927.8	4039.7	4098.8
10°	3463.2	3481.2	3494.5	3525.8	3572.8	3641.3	3736.4	3749.6	3914.6	4098.8	4202.3
12.5°	3388.5	3406.6	3418.7	3459.5	3520.9	3605.2	3712.4	3728.0	3919.4	4167.4	4315.4
15°	3434.3	3448.7	3443.9	3455.9	3496.9	3593.2	3722.0	3737.7	3937.5	4233.6	4427.4
17.5°	3637.7	3649.7	3610.0	3564.3	3545.0	3616.1	3752.1	3768.9	3973.6	4302.2	4541.7
20°	3937.5	3970.0	3883.3	3781.0	3688.2	3697.9	3814.7	3832.7	4024.2	4370.8	4658.5
22.5°	4327.5	4351.5	4245.6	4077.1	3906.2	3818.3	3908.6	3919.4	4099.9	4459.9	4786.1
25°	4786.1	4800.5	4653.7	4437.0	4190.2	4024.2	4037.4	4056.6	4225.1	4561.0	4899.2
27.5°	5231.5	5277.2	5107.5	4842.7	4517.7	4240.8	4214.3	4226.3	4361.2	4617.6	4977.5
30°	5759.9	5756.3	5576.9	5270.0	4853.5	4476.7	4381.7	4379.2	4434.6	4645.2	5034.1
32.5°	6181.2	6230.6	6054.9	5720.2	5237.5	4721.1	4497.2	4492.4	4491.1	4693.4	5118.3
35°	6660.4	6667.6	6506.3	6169.2	5652.8	5028.0	4658.5	4634.4	4606.7	4796.9	5232.7
37.5°	7088.8	7122.6	6974.5	6596.5	6060.9	5347.0	4880.0	4864.3	4780.1	4976.3	5415.6
40°	7423.5	7448.8	7359.7	6999.8	6462.9	5691.3	5161.7	5132.8	5030.5	5270.0	5660.0
42.5°	7533.0	7584.8	7619.7	7442.7	6925.2	6099.3	5508.3	5472.2	5394.0	5715.4	5941.7
45°	7541.5	7623.3	7807.4	7815.9	7389.8	6588.1	5912.8	5887.5	5881.5	6285.9	6337.7
47.5°	7477.6	7560.7	7870.1	8037.4	7803.8	7081.6	6496.6	6456.9	6460.5	6991.3	6781.9
50°	7323.6	7422.3	7797.8	8179.5	8127.7	7594.4	7112.9	7099.7	7174.3	7796.6	7242.9
52.5°	7033.5	7152.6	7723.2	8268.6	8368.5	8036.2	7813.5	7776.2	7965.1	8670.6	7747.3
55°	6230.6	6410.0	7450.0	8317.9	8597.1	8458.7	8444.3	8511.7	8762.1	9623.9	8302.2
57.5°	5811.7	5946.5	6856.5	8326.3	8886.0	8949.8	9181.0	9197.8	9636.0	10636.3	8929.4
60°	5582.9	5702.1	6531.6	8270.9	9289.3	9557.8	9934.5	9994.7	10489.5	11732.9	9579.4
62.5°	5383.1	5485.5	6336.5	8079.5	9744.3	10459.3	10910.7	10939.6	11458.4	12943.9	10221.0
65°	4912.5	5029.2	5944.1	7888.1	10136.7	11586.1	12206.0	12172.3	12490.0	13988.7	10623.0
67.5°	4278.1	4426.1	5211.0	7227.2	10330.5	12817.5	13664.9	13622.8	13508.4	14673.7	10738.6
70°	3468.0	3547.5	4273.3	6084.9	9556.5	13463.8	14816.9	14772.3	14139.2	14763.9	10192.1
71°	2984.1	3108.0	3720.7	5404.8	8912.5	13266.4	14964.9	14952.9	14140.4	14514.8	9780.5
72.5°	2329.3	2405.1	2946.7	4187.8	7575.1	12144.6	14599.0	14644.8	13833.4	13822.6	8931.8
75°	1473.4	1507.1	1849.0	2465.3	4156.6	8600.8	12462.4	12586.3	12283.0	11314.0	6642.3
77.5°	855.9	899.2	1107.5	1452.9	1796.0	4668.1	8917.4	9052.2	8534.5	6229.4	2719.3
80°	498.4	546.5	729.4	843.8	824.6	1732.2	4540.5	4770.4	3695.5	1573.3	763.2
82.5°	276.9	309.4	512.8	514.0	439.3	565.8	1428.8	1495.1	1054.5	634.4	311.8
85°	201.0	227.5	331.1	299.7	210.6	243.1	497.1	521.2	426.1	267.2	101.1
87.5°	71.0	101.1	181.7	144.5	57.8	50.6	143.2	116.7	108.4	74.6	22.9
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°	3976.0	3976.0	3976.0	3976.0	3976.0	3976.0	3976.0	3976.0	3976.0	3976.0	3976.0
2.5°	3997.6	4000.0	3988.0	3966.4	3944.7	3917.0	3885.7	3861.6	3850.8	3849.5	3848.4
5°	4041.0	4047.0	4001.2	3933.9	3859.2	3767.7	3689.5	3600.4	3577.5	3541.4	3552.2
7.5°	4110.8	4107.1	4016.9	3873.7	3699.1	3505.3	3341.6	3246.5	3147.8	3120.1	3121.3
10°	4210.7	4187.8	4016.9	3750.9	3459.5	3171.9	2943.1	2798.7	2720.5	2655.5	2631.3
12.5°	4316.6	4258.8	3978.3	3578.7	3151.4	2798.7	2553.1	2358.2	2307.6	2254.6	2255.8
15°	4417.8	4321.5	3902.6	3336.8	2819.2	2400.3	2161.9	2045.2	2029.5	2035.6	2034.3
17.5°	4509.2	4366.0	3787.0	3067.2	2431.5	2058.4	1932.0	1940.4	1982.6	2012.6	2016.3
20°	4601.9	4392.5	3614.9	2706.0	2065.6	1851.3	1856.2	1922.3	1986.2	2027.1	2033.1
22.5°	4689.8	4404.5	3412.6	2356.9	1800.8	1763.5	1834.5	1905.5	1968.1	2007.8	2013.9
25°	4747.6	4376.8	3126.1	1992.2	1670.8	1732.2	1806.9	1867.0	1920.0	1960.9	1970.5
27.5°	4763.2	4287.7	2771.0	1697.3	1610.6	1702.1	1770.7	1815.2	1856.2	1894.7	1901.9
30°	4754.8	4156.6	2381.0	1524.0	1575.7	1667.2	1720.2	1752.7	1802.0	1832.1	1838.1
32.5°	4741.5	4003.6	1974.2	1431.2	1546.8	1634.7	1666.0	1694.9	1693.7	1681.6	1690.0
35°	4746.4	3820.6	1644.3	1375.9	1521.5	1610.6	1637.1	1601.0	1497.5	1492.6	1487.9
37.5°	4771.7	3640.1	1404.8	1337.4	1508.3	1607.0	1621.4	1455.4	1363.8	1321.7	1310.9
40°	4836.7	3429.5	1247.1	1308.5	1507.1	1634.7	1550.4	1381.9	1206.1	1124.3	1118.3
42.5°	4923.3	3222.4	1150.8	1290.4	1521.5	1676.8	1521.5	1278.4	1087.0	1038.8	1031.6
45°	5052.2	2985.3	1097.8	1282.0	1543.2	1692.5	1511.9	1202.5	1038.8	1000.3	1000.3
47.5°	5197.8	2759.0	1069.0	1276.0	1570.9	1681.6	1426.5	1178.5	1015.9	1020.8	1043.7
50°	5342.3	2562.8	1047.3	1262.7	1595.0	1675.6	1391.5	1177.2	1022.0	1083.4	1124.3
52.5°	5509.5	2424.3	1020.8	1241.1	1595.0	1637.1	1380.7	1201.4	1038.8	1056.9	1075.0
55°	5711.8	2381.0	987.0	1194.2	1566.1	1540.8	1374.7	1236.3	1050.9	1008.7	1015.9
57.5°	5979.0	2450.8	954.6	1135.1	1499.8	1440.9	1372.3	1245.9	1023.1	988.3	981.0
60°	6289.5	2589.2	944.9	1075.0	1409.6	1355.5	1357.8	1218.2	984.7	948.5	954.6
62.5°	6507.4	2672.3	938.9	1029.2	1310.9	1261.5	1322.9	1184.5	967.8	936.5	942.5
65°	6507.4	2571.2	883.5	959.4	1183.3	1148.3	1280.8	1142.3	946.2	910.0	904.0
67.5°	6260.7	2276.3	799.3	854.6	1042.4	1019.5	1221.8	1091.8	913.6	886.0	871.5
70°	5617.9	1726.2	693.3	731.9	864.3	884.8	1146.0	1023.1	859.5	825.8	804.1
71°	5335.0	1503.4	648.8	669.3	795.7	825.8	1109.8	994.3	835.4	787.2	748.7
72.5°	4789.7	1266.3	581.4	589.8	680.1	734.3	1034.0	938.9	789.7	721.1	677.7
75°	3638.9	924.5	468.2	463.5	503.2	582.6	875.2	836.6	692.2	599.5	574.2
77.5°	1572.1	503.2	350.3	353.9	341.9	441.8	688.6	718.6	593.4	487.5	464.6
80°	476.7	290.1	239.5	244.4	228.7	296.1	485.1	563.4	476.7	379.2	347.9
82.5°	244.4	173.4	163.7	161.3	145.6	167.3	293.7	385.2	340.7	237.2	209.5
85°	105.9	92.7	80.6	78.2	68.6	60.2	104.7	192.6	180.6	132.4	126.4
87.5°	26.5	24.0	15.7	14.4	8.5	1.2	0.0	0.0	0.0	0.0	0.0
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)