

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: P651373

Luminaire Tested: **GALN-SA4D-840-U-T3**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651373
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-SA4D-840-U-T3
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25522.7 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

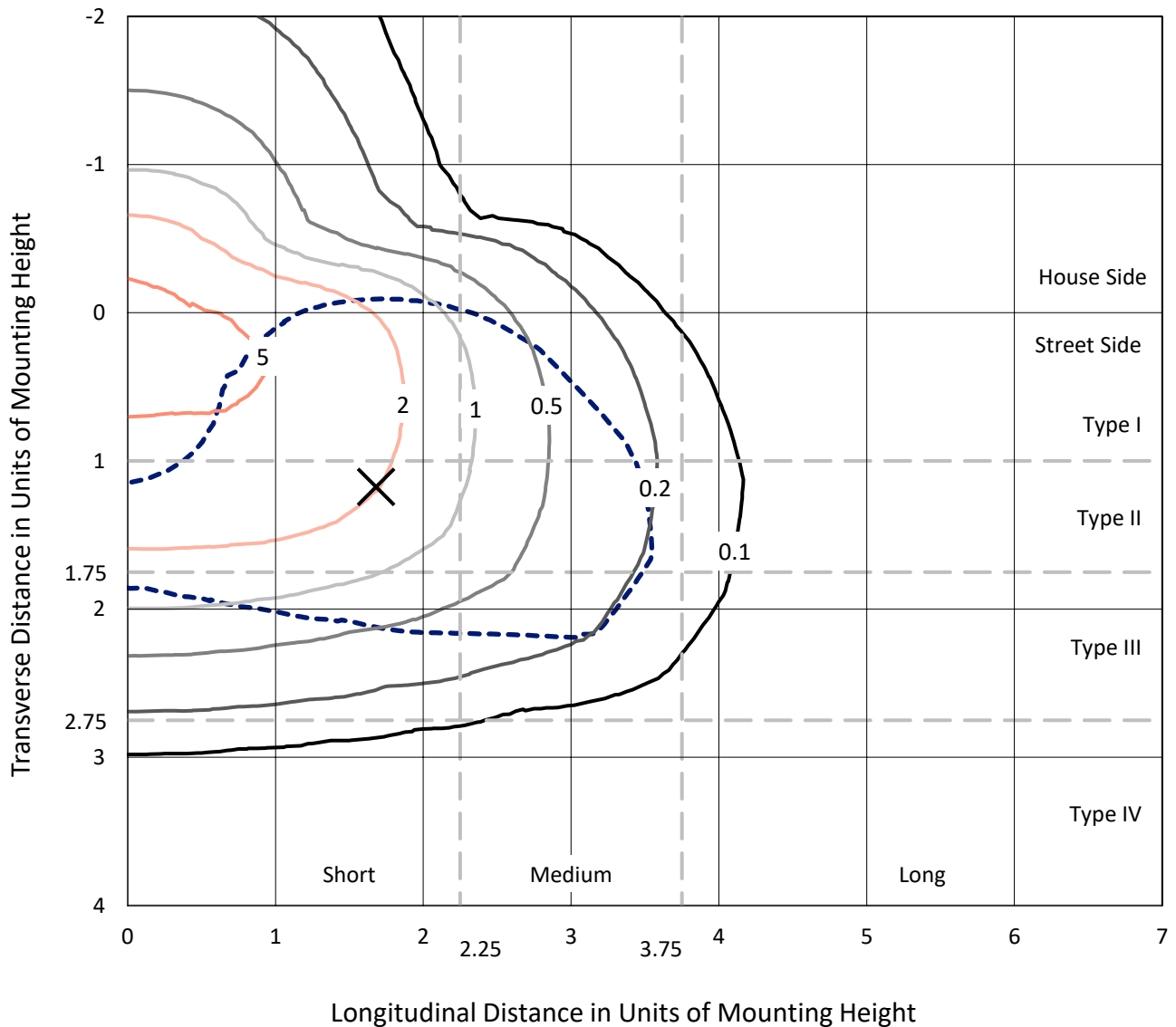
Input Watts (W): 245
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

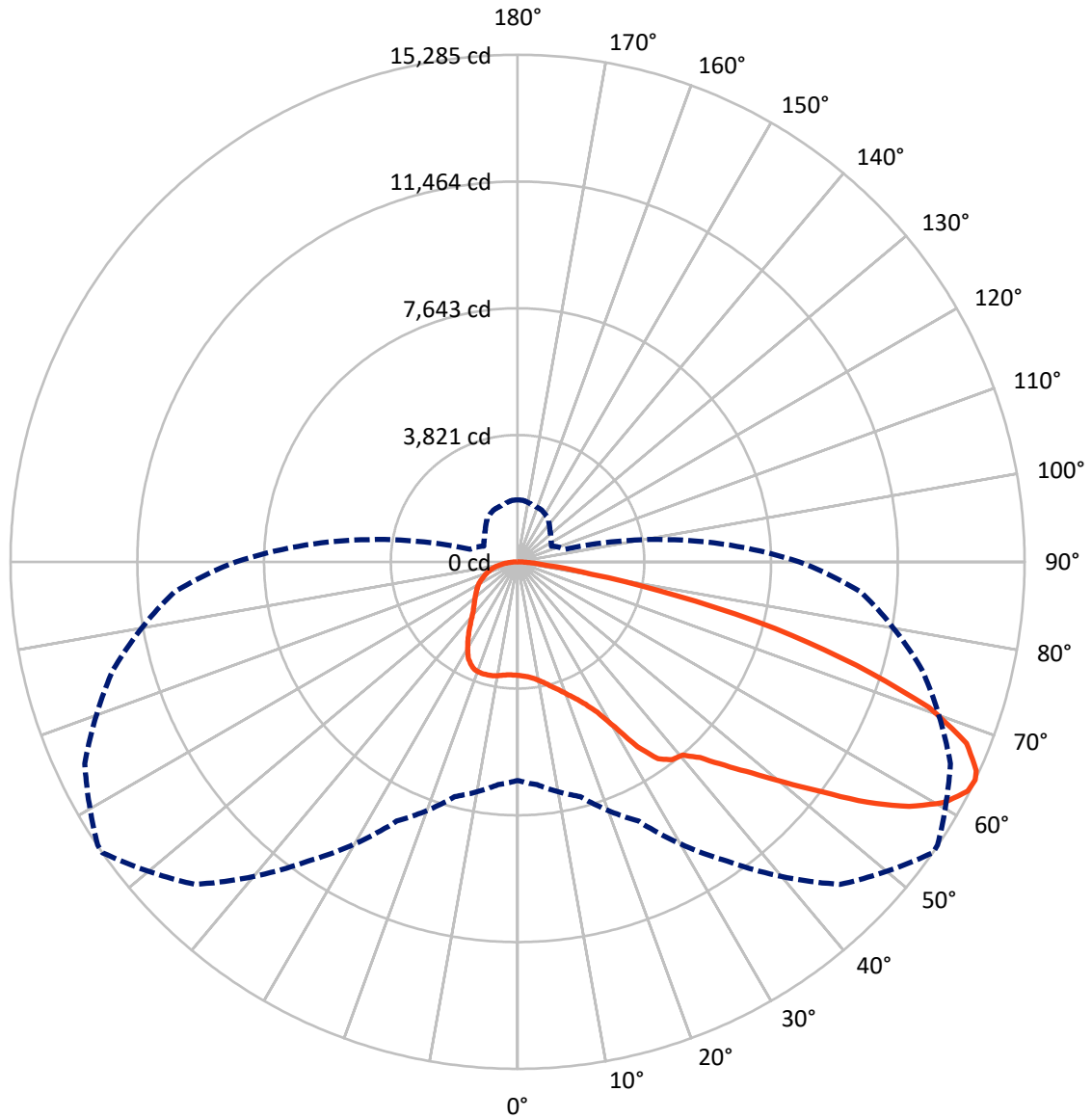
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 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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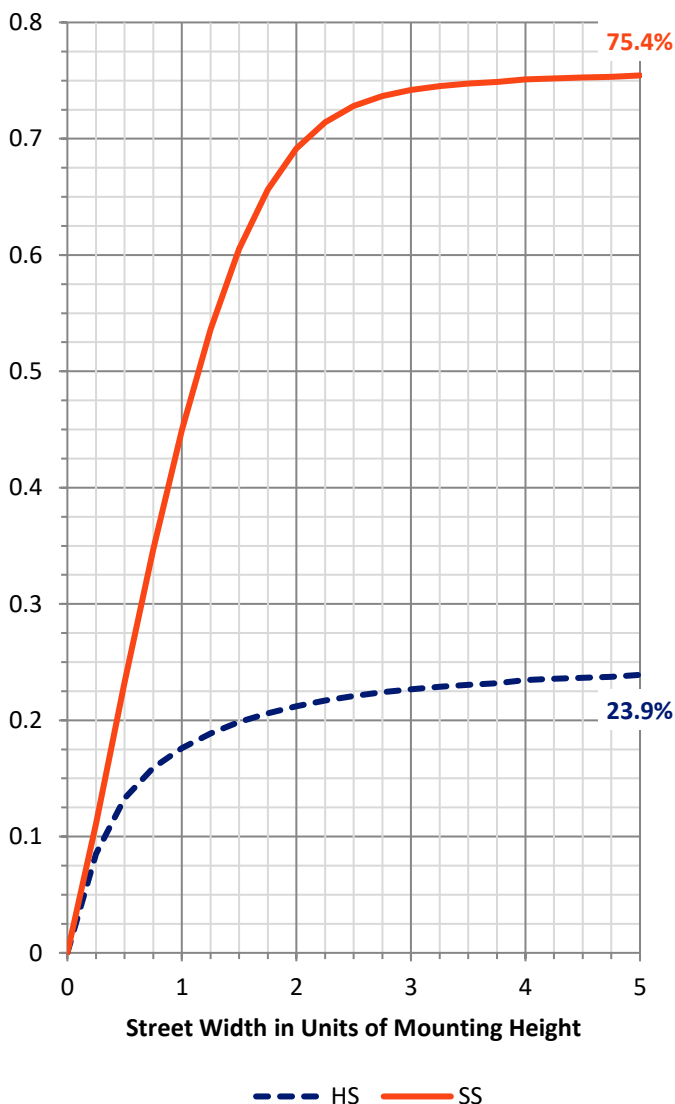
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6200.0	0.0	6200.0
	% Fixture	24.3	0.0	24.3
Street Side	Lumens	19322.7	0.0	19322.7
	% Fixture	75.7	0.0	75.7
Total	Lumens	25522.7	0.0	25522.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	333.1	1.3
10°-20°	1051.0	4.1
20°-30°	1871.1	7.3
30°-40°	2878.9	11.3
40°-50°	4081.1	16.0
50°-60°	5907.3	23.1
60°-70°	6113.4	24.0
70°-80°	2862.9	11.2
80°-90°	423.8	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°	25522.7	100.0
0°-180°	25522.7	100.0

Coefficient of Utilization



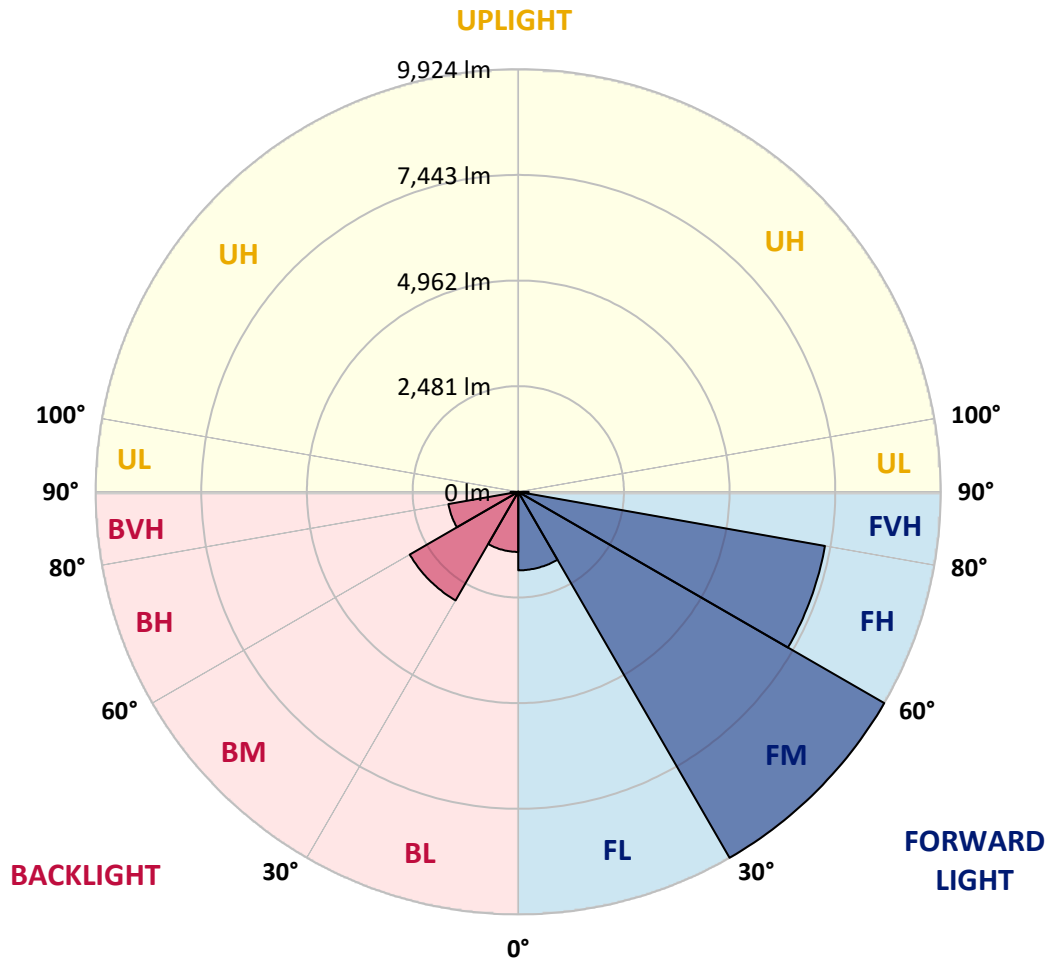
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1843.1	7.2			
FM (30°-60°)	9923.9	38.9			
FH (60°-80°)	7313.0	28.7			G3/7500
FVH (80°-90°)	242.7	1.0			G3/500
BL (0°-30°)	1412.1	5.5	B3/2500		
BM (30°-60°)	2943.4	11.5	B3/5000		
BH (60°-80°)	1663.3	6.5	B3/2500		G3/2500
BVH (80°-90°)	181.2	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°	3424.4	3424.4	3424.4	3424.4	3424.4	3424.4	3424.4	3424.4	3424.4	3424.4	3424.4
2.5°	3462.8	3461.4	3465.6	3461.4	3464.2	3454.2	3450.0	3452.8	3448.5	3441.5	3428.7
5°	3505.5	3504.0	3505.5	3499.7	3502.6	3497.0	3487.0	3489.8	3482.7	3467.0	3448.5
7.5°	3578.0	3572.3	3572.3	3570.9	3565.3	3556.7	3549.6	3546.7	3539.6	3519.7	3491.2
10°	3671.9	3671.9	3673.3	3662.0	3669.0	3653.4	3646.3	3644.9	3620.7	3595.1	3555.2
12.5°	3795.7	3802.8	3798.5	3792.8	3790.0	3784.3	3760.1	3765.8	3738.7	3694.7	3646.3
15°	3949.3	3960.7	3953.6	3950.8	3943.6	3922.3	3912.3	3908.0	3872.6	3808.5	3744.5
17.5°	4152.8	4138.6	4132.8	4125.8	4095.8	4080.2	4063.1	4060.3	4029.0	3953.6	3854.1
20°	4330.6	4350.5	4339.1	4332.1	4302.1	4272.3	4259.5	4255.2	4228.2	4145.6	3986.3
22.5°	4542.6	4546.9	4551.2	4534.1	4519.9	4497.1	4474.3	4467.2	4457.2	4371.9	4177.0
25°	4768.8	4785.9	4771.7	4754.6	4737.5	4736.1	4757.5	4754.6	4750.3	4667.8	4430.2
27.5°	5137.2	5152.9	5157.2	5138.7	5073.2	5079.0	5127.3	5143.0	5208.4	5071.8	4756.0
30°	5345.0	5360.6	5396.2	5465.9	5569.8	5660.8	5777.5	5813.1	5875.6	5618.1	5143.0
32.5°	5473.1	5478.7	5542.7	5672.2	5983.8	6323.8	6641.0	6653.8	6693.7	6332.3	5497.2
35°	5675.1	5679.3	5730.5	5872.8	6238.5	6804.6	7295.4	7311.1	7278.4	6554.2	5662.2
37.5°	5924.0	5935.4	5968.1	6086.2	6523.0	7207.3	7567.2	7555.8	7265.6	6730.7	5953.9
40°	6286.8	6286.8	6248.4	6407.7	6823.1	7437.7	7662.5	7642.6	7565.8	7241.4	6397.7
42.5°	6606.9	6601.2	6692.3	6800.4	7198.7	7793.4	8062.2	8095.0	8221.6	7883.0	6902.8
45°	7023.7	7049.3	7100.6	7296.9	7837.5	8400.9	8748.0	8779.3	8958.6	8638.5	7493.2
47.5°	7444.9	7453.4	7614.2	7875.9	8628.5	9224.6	9509.1	9560.3	9724.0	9522.0	8129.2
50°	7743.6	7824.7	8082.2	8494.8	9443.7	10229.0	10450.9	10512.2	10801.0	10483.7	8870.4
52.5°	8059.5	8139.1	8453.5	9082.4	10379.8	11256.2	11529.4	11570.6	11870.8	11456.8	9628.6
55°	8329.8	8403.7	8760.8	9603.0	11125.3	12304.7	12799.8	12751.4	12895.1	12206.5	10213.4
57.5°	8373.8	8433.6	8883.1	9935.9	11685.9	13203.8	13913.8	13942.2	13775.7	12767.1	10695.7
60°	8032.4	8154.8	8671.2	9900.3	11937.7	13829.8	14744.6	14764.5	14292.1	13054.4	10887.7
62.5°	7427.8	7414.9	8039.5	9328.5	11584.9	13972.0	15234.0	15212.6	14494.2	12916.4	10701.3
64°	6592.7	6746.3	7329.6	8625.6	11015.8	13753.0	15285.2	15273.8	14397.4	12629.0	10384.1
65°	6083.4	6074.8	6651.0	8050.9	10449.5	13422.9	15194.2	15178.5	14195.4	12371.5	10138.0
67.5°	4391.8	4411.7	4980.7	6212.8	8494.8	12132.5	14600.9	14542.6	13398.7	11517.9	9201.8
70°	2660.4	2671.8	3118.5	4121.5	6097.6	9807.9	13161.1	13164.0	12179.5	10243.2	7831.8
72.5°	1401.4	1431.2	1610.4	2340.3	3703.2	6881.5	10677.2	10930.4	10456.7	8742.3	6187.2
75°	779.6	783.9	910.6	1153.8	1889.3	3851.2	8025.3	8097.8	8278.6	7036.6	4575.3
77.5°	594.7	603.2	643.0	745.5	1028.6	1785.4	4857.0	5221.2	5834.4	4960.9	2610.6
80°	482.3	490.8	525.0	586.2	684.3	846.5	2256.3	2452.7	3122.8	2202.3	1018.6
82.5°	375.6	369.9	414.0	453.8	498.0	500.8	926.2	1024.3	1271.8	947.5	441.0
85°	278.9	278.9	314.4	305.9	321.5	293.1	408.3	451.0	509.3	402.6	204.9
87.5°	110.9	122.4	206.3	184.9	143.7	115.2	150.8	159.4	176.4	157.9	85.4
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°	3424.4	3424.4	3424.4	3424.4	3424.4	3424.4	3424.4	3424.4	3424.4	3424.4	3424.4
2.5°	3430.1	3434.3	3424.4	3417.2	3414.4	3410.2	3405.9	3407.3	3413.0	3418.7	3417.2
5°	3447.2	3448.5	3431.4	3423.0	3417.2	3411.6	3411.6	3415.8	3427.2	3435.7	3435.7
7.5°	3489.8	3489.8	3465.6	3450.0	3441.5	3431.4	3428.7	3430.1	3438.6	3450.0	3451.4
10°	3556.7	3551.0	3519.7	3495.5	3479.9	3455.7	3434.3	3423.0	3427.2	3434.3	3434.3
12.5°	3637.7	3622.1	3582.3	3549.6	3511.2	3465.6	3421.5	3398.7	3397.3	3404.5	3401.6
15°	3724.5	3707.5	3652.0	3592.2	3525.4	3458.5	3405.9	3373.2	3347.5	3340.5	3356.1
17.5°	3825.5	3790.0	3713.2	3630.7	3531.1	3444.3	3361.8	3294.9	3249.4	3236.6	3240.9
20°	3947.9	3901.0	3797.1	3667.7	3526.8	3393.1	3265.0	3175.4	3101.4	3078.6	3081.5
22.5°	4117.2	4036.1	3883.9	3686.1	3491.2	3296.3	3118.5	3001.9	2912.2	2876.6	2898.0
25°	4309.3	4221.1	3966.4	3681.9	3398.7	3141.2	2944.9	2792.7	2711.6	2659.0	2670.3
27.5°	4573.9	4417.4	4054.6	3643.5	3266.4	2952.1	2724.4	2580.7	2506.8	2479.7	2492.6
30°	4912.4	4672.1	4149.9	3539.6	3057.3	2713.1	2502.5	2408.6	2364.5	2330.3	2341.7
32.5°	5157.2	4851.3	4171.3	3364.6	2831.1	2495.3	2351.7	2282.0	2233.6	2200.9	2208.0
35°	5332.2	5003.5	4161.4	3149.8	2595.0	2316.1	2232.2	2175.2	2097.0	2025.9	2013.1
37.5°	5566.9	5194.2	4088.8	2915.1	2361.6	2195.2	2135.5	2030.2	1917.7	1822.4	1818.2
40°	5926.9	5417.6	3933.7	2639.1	2162.5	2105.5	2033.0	1896.5	1775.5	1698.7	1693.0
42.5°	6298.2	5623.9	3723.1	2348.8	1998.9	2011.7	1923.5	1788.3	1714.3	1664.5	1658.9
45°	6752.0	5847.2	3495.5	2097.0	1878.0	1923.5	1828.2	1749.9	1705.8	1673.1	1664.5
47.5°	7242.9	6076.2	3239.4	1870.8	1775.5	1842.4	1788.3	1752.7	1728.5	1705.8	1695.8
50°	7772.0	6332.3	2999.0	1688.7	1683.0	1758.4	1784.0	1771.2	1757.0	1749.9	1741.4
52.5°	8352.5	6594.1	2797.0	1560.6	1601.9	1698.7	1785.4	1795.5	1795.5	1791.2	1785.4
55°	8745.1	6776.2	2592.1	1456.8	1519.4	1650.3	1782.6	1821.0	1835.2	1829.6	1823.9
57.5°	9035.4	6875.8	2334.6	1367.2	1449.7	1603.4	1766.9	1823.9	1838.1	1845.2	1842.4
60°	9095.2	6783.3	1997.5	1273.3	1374.3	1535.1	1710.1	1781.2	1799.7	1843.8	1848.0
62.5°	8826.3	6498.7	1661.6	1180.8	1281.9	1431.2	1633.2	1732.8	1769.8	1838.1	1845.2
64°	8496.2	6180.1	1475.3	1122.5	1222.1	1372.8	1594.8	1720.0	1768.4	1859.5	1865.1
65°	8254.3	5948.2	1358.6	1085.5	1183.6	1334.5	1573.5	1724.3	1781.2	1892.2	1900.7
67.5°	7363.7	5150.0	1123.9	998.7	1092.6	1269.0	1577.7	1759.9	1778.4	1904.9	1903.5
70°	6093.3	4100.1	941.8	919.0	1004.4	1216.4	1560.6	1702.9	1704.4	1788.3	1768.4
72.5°	4562.5	3030.3	816.6	836.5	906.3	1091.2	1473.9	1626.1	1601.9	1613.3	1593.4
75°	3134.2	2004.5	702.8	748.3	803.8	964.5	1351.6	1476.7	1438.4	1424.1	1409.9
77.5°	1673.1	1108.3	584.7	661.5	698.5	833.7	1179.4	1300.4	1260.5	1205.0	1186.5
80°	677.2	522.1	470.9	547.7	569.1	671.5	981.6	1057.1	1027.2	930.4	899.1
82.5°	340.0	313.0	369.9	431.1	432.5	479.5	729.8	801.0	734.1	616.0	589.0
85°	177.9	183.5	254.7	303.0	267.4	258.9	438.2	485.2	445.3	386.9	348.6
87.5°	64.0	74.0	133.7	132.3	93.9	49.8	96.7	46.9	25.6	15.6	19.9
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)