

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: P647459

Luminaire Tested: **GALN-SA5D-835-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P647459
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA5D-835-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30914.4 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

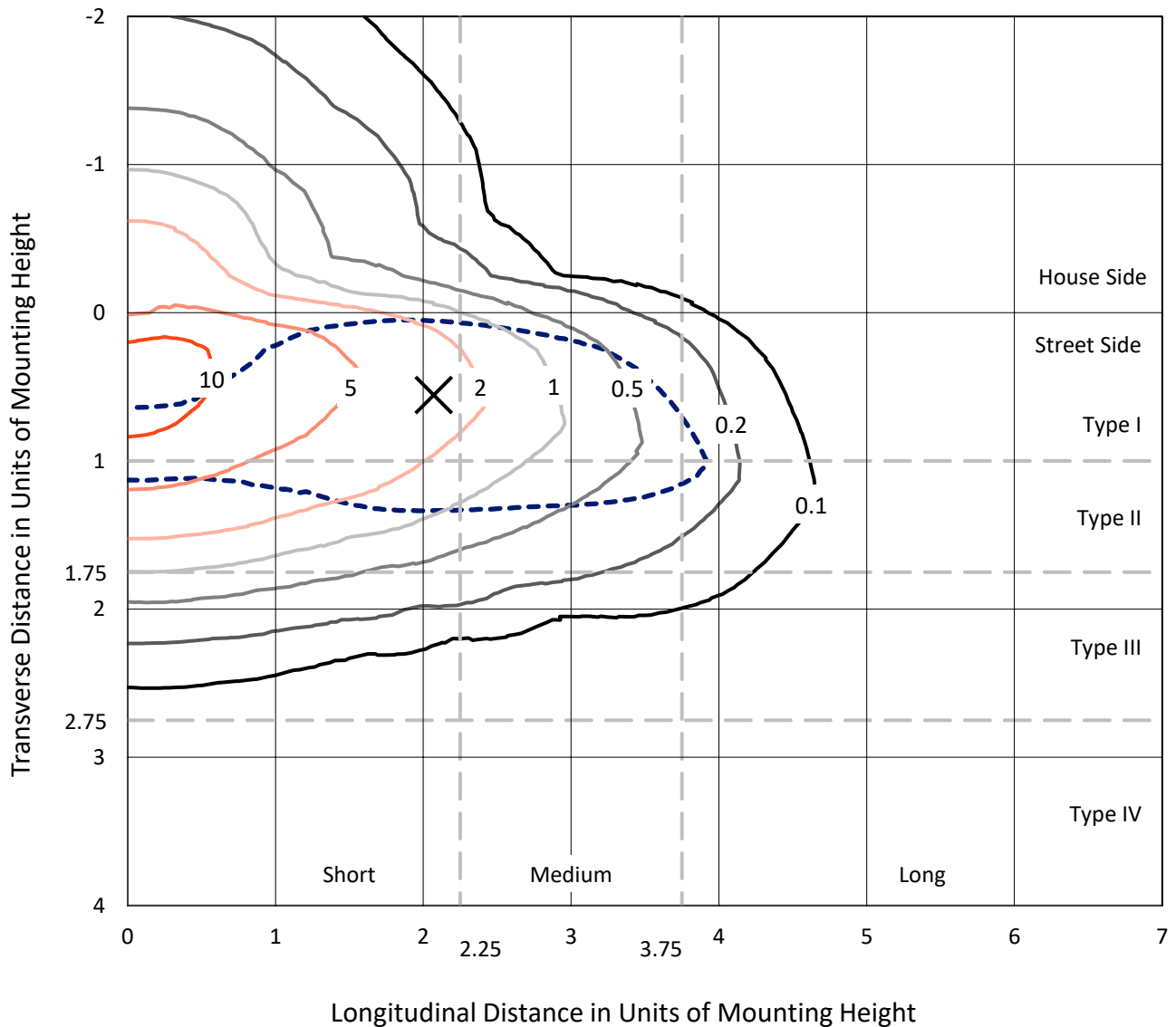
Input Watts (W): 309
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

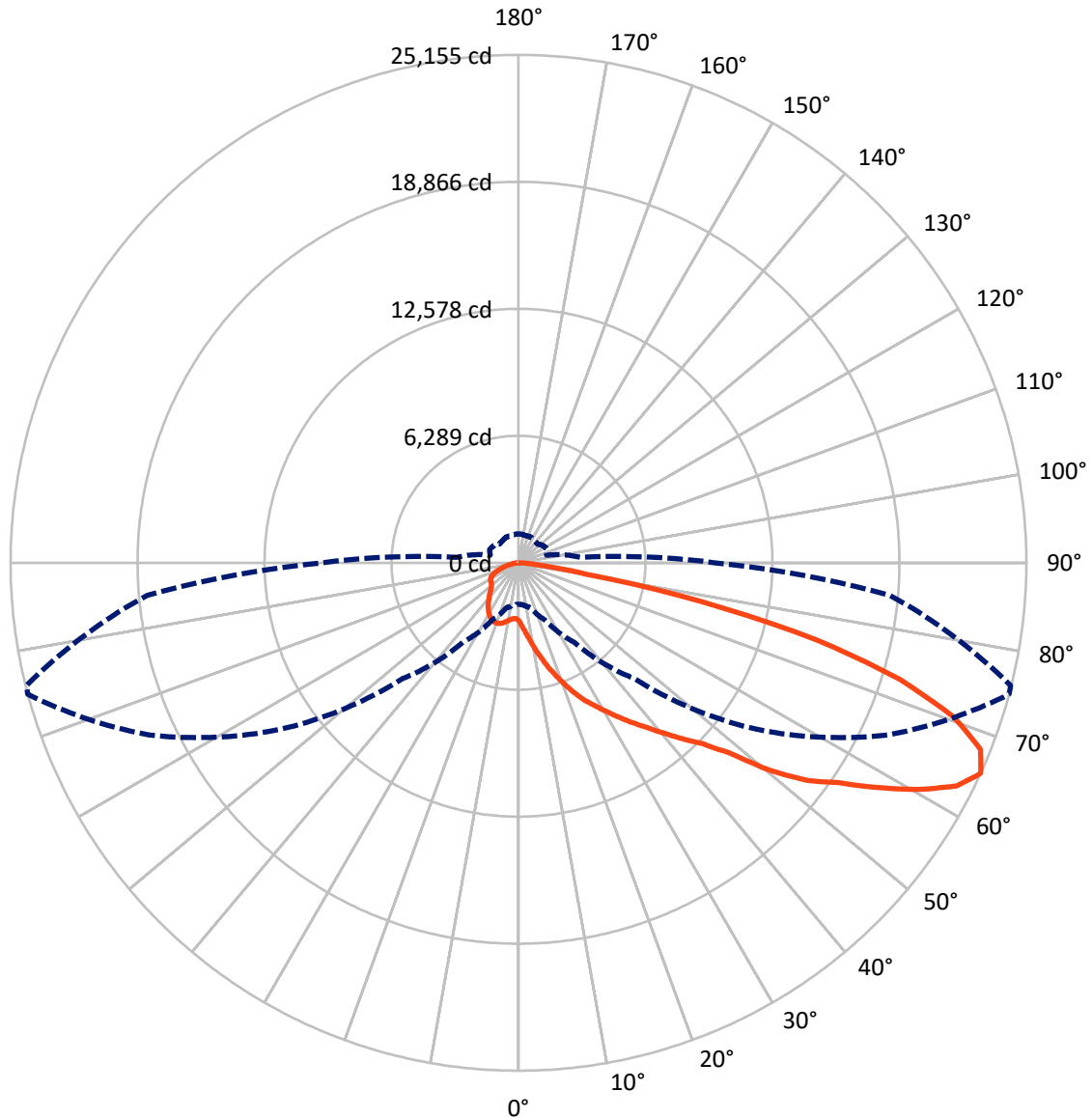
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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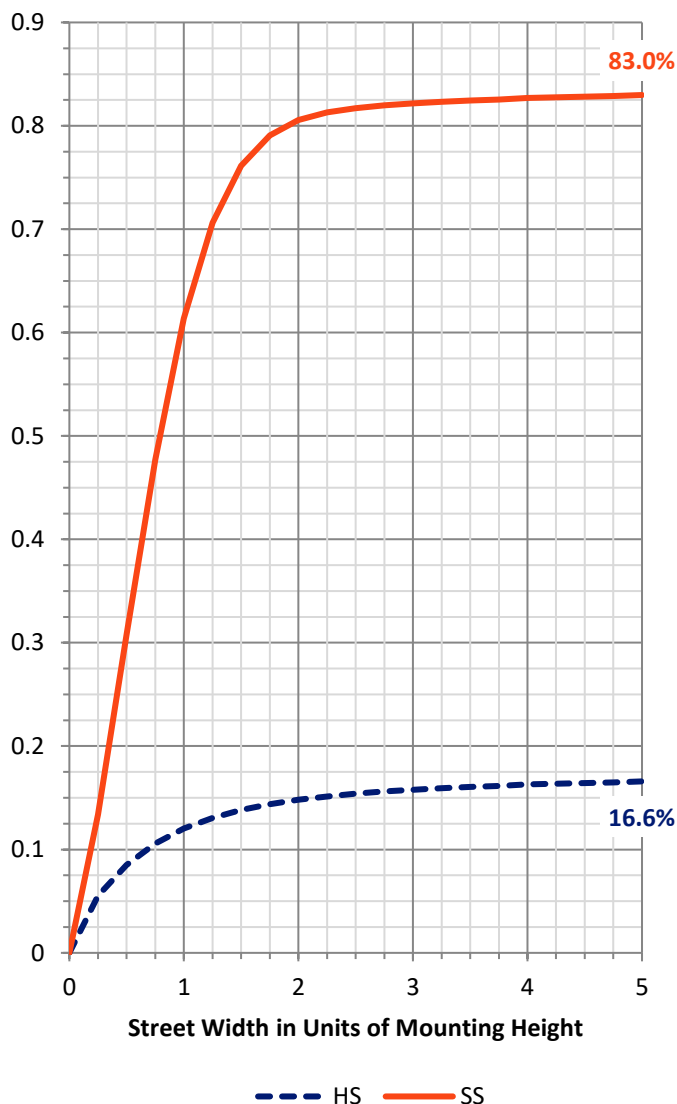
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5197.1	0.0	5197.1
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	25717.3	0.0	25717.3
	% Fixture	83.2	0.0	83.2
Total	Lumens	30914.4	0.0	30914.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	349.0	1.1
10°-20°	1366.9	4.4
20°-30°	2640.4	8.5
30°-40°	4288.8	13.9
40°-50°	5899.6	19.1
50°-60°	6965.5	22.5
60°-70°	6102.9	19.7
70°-80°	2913.6	9.4
80°-90°	387.7	1.3
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°	30914.4	100.0
0°-180°	30914.4	100.0

Coefficient of Utilization



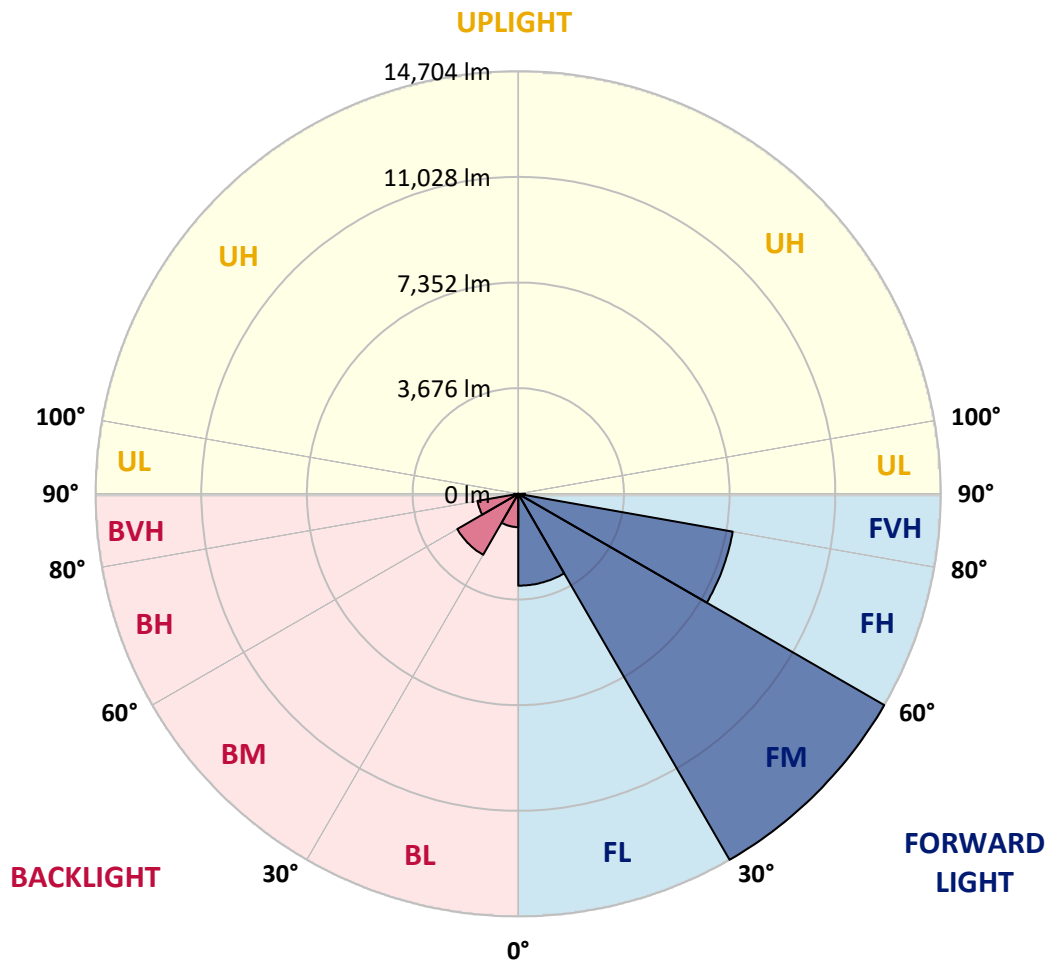
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3196.1	10.3			
FM (30°-60°)	14703.5	47.6			
FH (60°-80°)	7575.4	24.5			G4/12000
FVH (80°-90°)	242.3	0.8			G3/500
BL (0°-30°)	1160.2	3.8	B3/2500		
BM (30°-60°)	2450.4	7.9	B2/2500		
BH (60°-80°)	1441.1	4.7	B3/2500		G3/2500
BVH (80°-90°)	145.4	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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2872.4	2872.4	2872.4	2872.4	2872.4	2872.4	2872.4	2872.4	2872.4	2872.4	2872.4
2.5°	3816.3	3791.2	3764.4	3690.6	3611.8	3523.0	3395.5	3273.1	3110.5	3105.4	2984.7
5°	4874.4	4857.7	4738.6	4669.9	4487.1	4243.9	4037.7	3717.4	3420.6	3385.5	3150.7
7.5°	5847.0	5781.6	5736.3	5612.2	5431.1	5119.3	4720.2	4287.6	3791.2	3744.3	3355.2
10°	6579.7	6573.1	6549.6	6442.2	6306.4	5996.2	5553.5	4933.1	4260.7	4168.5	3603.4
12.5°	7128.0	7133.1	7129.7	7128.0	7030.8	6767.5	6288.0	5634.0	4735.3	4669.9	3890.2
15°	7488.5	7538.8	7558.9	7642.8	7651.2	7475.1	7062.7	6311.4	5270.1	5172.9	4198.7
17.5°	7726.6	7751.8	7845.7	7988.2	8103.9	8072.0	7704.9	6938.6	5816.8	5654.1	4518.9
20°	7954.7	7998.3	8070.4	8264.9	8469.5	8563.4	8305.1	7580.8	6358.4	6254.4	4872.8
22.5°	8429.2	8491.2	8516.4	8615.3	8789.7	8955.7	8838.3	8196.1	6951.9	6811.1	5248.4
25°	9232.4	9297.8	9227.3	9203.9	9260.9	9343.1	9317.9	8776.3	7512.0	7310.8	5603.9
27.5°	10278.7	10287.1	10149.6	10018.8	9877.9	9836.0	9758.9	9291.1	7998.3	7830.6	5961.0
30°	11402.1	11362.0	11133.9	10897.5	10659.4	10424.6	10203.3	9787.4	8539.9	8347.0	6311.4
32.5°	12445.2	12423.3	12170.2	11802.9	11400.5	11179.1	10731.5	10288.8	9120.1	8934.0	6671.9
35°	13226.5	13258.4	12980.0	12579.3	12139.9	11943.8	11378.7	10815.3	9720.3	9517.4	7064.3
37.5°	13781.5	13764.7	13518.3	13171.2	12785.5	12614.4	12134.9	11390.5	10365.9	10171.4	7493.5
40°	13979.4	13969.3	13786.6	13533.4	13288.5	13228.2	12926.4	12010.8	11105.4	10877.4	8010.0
42.5°	13853.6	13875.4	13754.7	13686.0	13640.6	13684.3	13712.8	12824.1	11911.9	11702.3	8570.1
45°	13468.0	13456.2	13439.5	13551.8	13806.6	14093.4	14490.8	13592.0	12788.9	12621.2	9321.3
47.5°	12778.8	12862.7	12904.5	13214.8	13771.5	14450.6	15386.2	14621.6	14061.6	13915.6	10466.5
50°	11814.7	11881.7	12129.9	12681.5	13511.5	14584.7	16261.5	16305.1	16184.4	15911.0	11710.7
52.5°	10308.9	10412.9	10924.3	11935.3	12978.4	14529.3	16791.4	17748.8	17908.1	17703.6	12936.4
55°	8623.7	8769.6	9309.6	10635.9	12243.9	14227.6	17156.9	18585.5	19221.0	19031.5	14116.9
57.5°	6973.8	7128.0	7683.0	8967.5	10962.9	13560.2	17396.7	19517.8	21008.5	20762.0	15585.8
60°	5226.5	5387.5	5863.7	7186.7	9138.5	12255.7	17234.1	20326.1	22794.2	22688.6	17056.3
62.5°	3372.0	3549.7	3963.9	5058.9	7024.1	10473.3	16363.8	20772.1	24340.3	24212.9	18129.4
65°	2054.0	2074.2	2302.3	3140.6	4807.4	8109.0	14373.5	20180.2	25155.2	25116.6	18456.4
67.5°	1328.0	1359.9	1463.8	1881.4	2882.4	5632.4	11492.7	18226.7	24679.0	24665.6	17780.7
70°	1121.8	1131.8	1178.8	1269.3	1675.2	3415.6	8070.4	15112.9	22869.7	22869.7	16155.9
72.5°	1002.7	1016.1	1032.9	1061.4	1195.6	1935.0	4815.8	11764.3	19745.9	19876.7	13751.4
75°	910.5	907.1	917.2	922.2	1019.5	1264.3	2490.0	8700.9	15275.5	15013.9	9958.4
77.5°	779.7	784.7	779.7	801.5	900.4	962.5	1264.3	5838.6	9257.6	8918.8	4998.5
80°	640.6	649.0	657.3	670.7	769.6	731.1	759.6	2661.0	3424.0	3351.9	1544.3
82.5°	481.2	493.0	506.4	538.2	605.3	482.9	479.6	1136.8	1235.8	1131.8	568.5
85°	194.5	229.7	347.1	379.0	380.6	265.0	295.1	474.5	504.7	493.0	223.0
87.5°	45.3	53.6	112.4	169.4	156.0	98.9	109.0	154.3	176.1	162.6	75.5
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°	2872.4	2872.4	2872.4	2872.4	2872.4	2872.4	2872.4	2872.4	2872.4	2872.4	2872.4
2.5°	2929.4	2870.6	2770.0	2692.9	2637.6	2589.0	2558.8	2540.4	2533.6	2532.0	2533.6
5°	3028.3	2924.3	2765.0	2664.4	2609.1	2577.2	2558.8	2557.1	2558.8	2560.5	2555.4
7.5°	3164.1	3014.9	2807.0	2713.0	2671.1	2647.6	2639.3	2635.9	2637.6	2635.9	2635.9
10°	3345.2	3140.6	2889.1	2791.9	2756.6	2729.8	2716.4	2708.0	2701.3	2694.6	2691.2
12.5°	3544.7	3279.8	2978.0	2884.1	2833.8	2791.9	2761.6	2739.9	2724.8	2709.7	2706.4
15°	3767.7	3427.3	3076.9	2946.1	2874.0	2812.0	2760.0	2724.8	2698.0	2676.1	2674.5
17.5°	3980.7	3566.6	3144.0	2974.6	2869.0	2781.8	2713.0	2664.4	2630.9	2602.4	2599.0
20°	4208.7	3699.0	3174.1	2956.2	2818.6	2713.0	2622.5	2563.8	2525.3	2493.4	2488.4
22.5°	4438.4	3811.3	3170.8	2897.5	2731.5	2607.4	2511.9	2449.8	2404.5	2372.6	2360.9
25°	4658.1	3901.9	3128.9	2803.6	2610.8	2481.6	2384.4	2327.4	2287.1	2248.5	2248.5
27.5°	4856.0	3955.6	3050.1	2689.6	2486.7	2350.9	2273.8	2221.8	2184.9	2159.7	2144.6
30°	5050.5	3980.7	2942.7	2545.4	2355.9	2240.2	2178.1	2148.0	2114.4	2085.9	2082.5
32.5°	5224.9	3975.7	2808.6	2404.5	2231.8	2149.6	2124.5	2101.0	2065.8	2025.5	2015.5
35°	5394.2	3942.1	2649.4	2250.3	2127.9	2096.0	2102.7	2069.2	2005.4	1955.2	1946.8
37.5°	5578.6	3881.8	2474.9	2124.5	2040.7	2070.8	2087.6	2013.8	1909.9	1831.0	1812.6
40°	5791.6	3813.1	2293.9	1998.8	1971.9	2047.4	2047.4	1911.5	1769.0	1720.4	1706.9
42.5°	6041.5	3756.0	2142.9	1893.1	1914.9	1990.4	1981.9	1775.7	1717.0	1691.9	1685.2
45°	6437.2	3735.8	1987.0	1800.9	1867.9	1923.3	1854.5	1728.8	1695.2	1675.2	1668.4
47.5°	7062.7	3759.3	1849.5	1732.2	1814.3	1856.2	1712.0	1696.9	1673.4	1644.9	1641.6
50°	7642.8	3737.6	1752.3	1693.6	1767.3	1775.7	1653.3	1658.3	1644.9	1613.1	1606.3
52.5°	8117.4	3668.8	1690.2	1673.4	1727.1	1634.9	1597.9	1616.4	1611.4	1571.2	1564.4
55°	8638.8	3626.9	1660.0	1673.4	1700.3	1512.4	1546.0	1572.8	1566.2	1537.6	1535.9
57.5°	9271.0	3635.3	1638.2	1678.4	1673.4	1450.4	1494.0	1525.9	1524.2	1515.8	1515.8
60°	9918.2	3638.6	1604.7	1676.8	1641.6	1401.8	1440.3	1485.7	1489.0	1494.0	1494.0
62.5°	10132.8	3492.7	1539.3	1646.6	1571.2	1354.8	1390.1	1452.1	1448.7	1462.2	1463.8
65°	9732.1	3088.6	1442.1	1577.8	1480.6	1321.3	1351.5	1408.5	1390.1	1425.3	1432.0
67.5°	8858.5	2555.4	1291.1	1453.8	1380.0	1286.1	1326.3	1348.2	1314.6	1383.3	1385.0
70°	7656.3	1995.4	1100.0	1277.7	1266.0	1249.2	1306.2	1272.7	1225.7	1309.6	1292.8
72.5°	6402.0	1524.2	878.6	1044.6	1113.4	1193.8	1271.0	1175.4	1110.1	1135.2	1105.0
75°	4809.0	1126.8	706.0	818.2	927.2	1115.1	1239.2	1058.1	957.5	934.0	927.2
77.5°	2451.5	736.1	528.2	612.0	695.9	1007.7	1195.6	920.6	793.1	756.2	739.5
80°	875.3	457.7	372.2	422.6	469.5	866.9	1044.6	761.2	615.4	608.7	615.4
82.5°	405.8	295.1	249.9	276.6	278.4	578.5	796.5	568.5	467.8	711.0	600.3
85°	174.4	147.6	140.9	137.5	127.5	258.2	447.7	305.2	476.2	213.0	196.2
87.5°	52.0	58.7	52.0	38.6	28.5	28.5	45.3	16.8	11.7	8.4	8.4
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)