

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: P650870

Luminaire Tested: **GALN-SA4C-840-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P650870
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4C-840-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23522.8 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

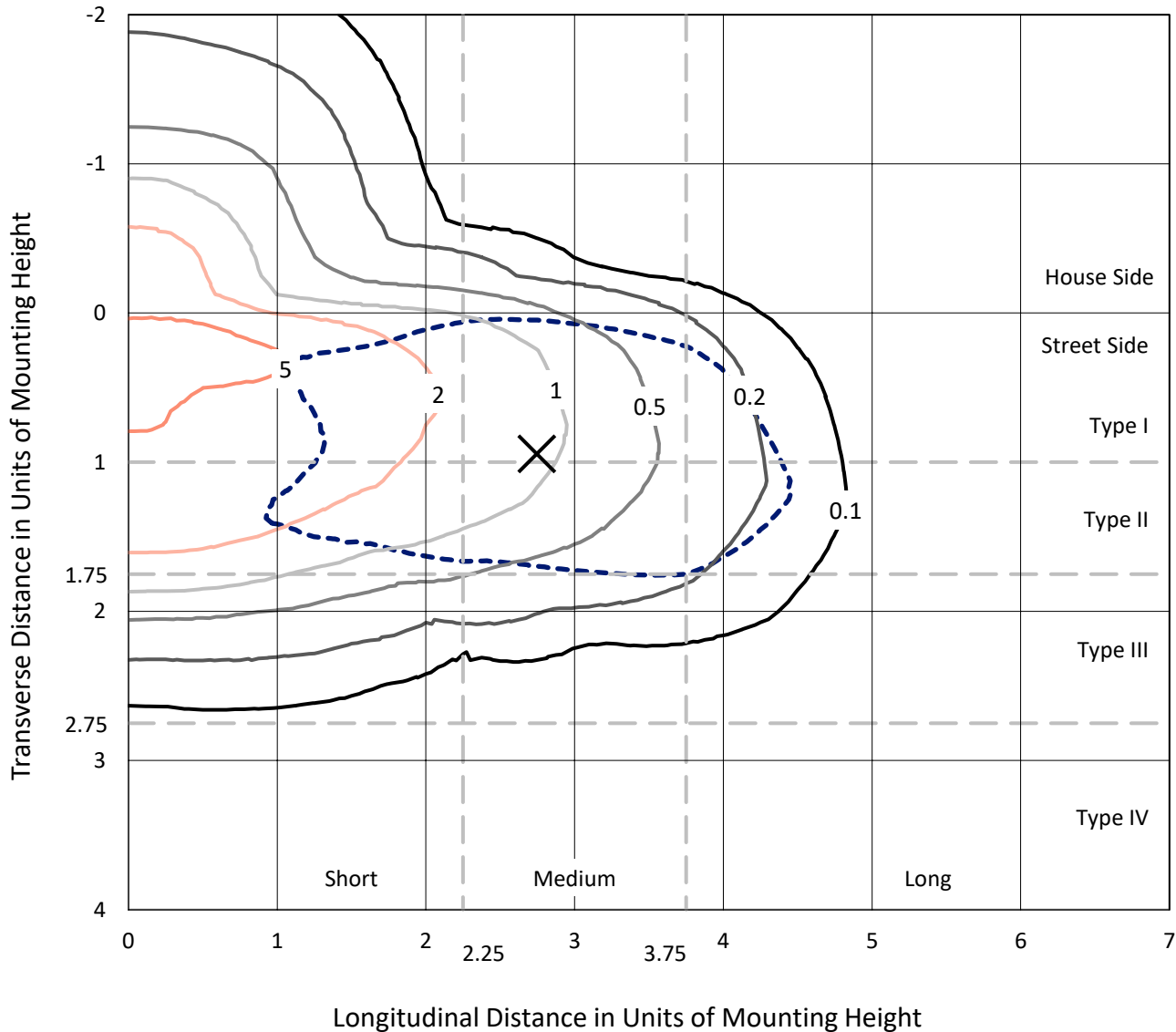
Input Watts (W): 213
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P650870
 CATALOG NUMBER: GALN-SA4C-840-U-T2

Iso-Footcandle Lines of Horizontal Illumination

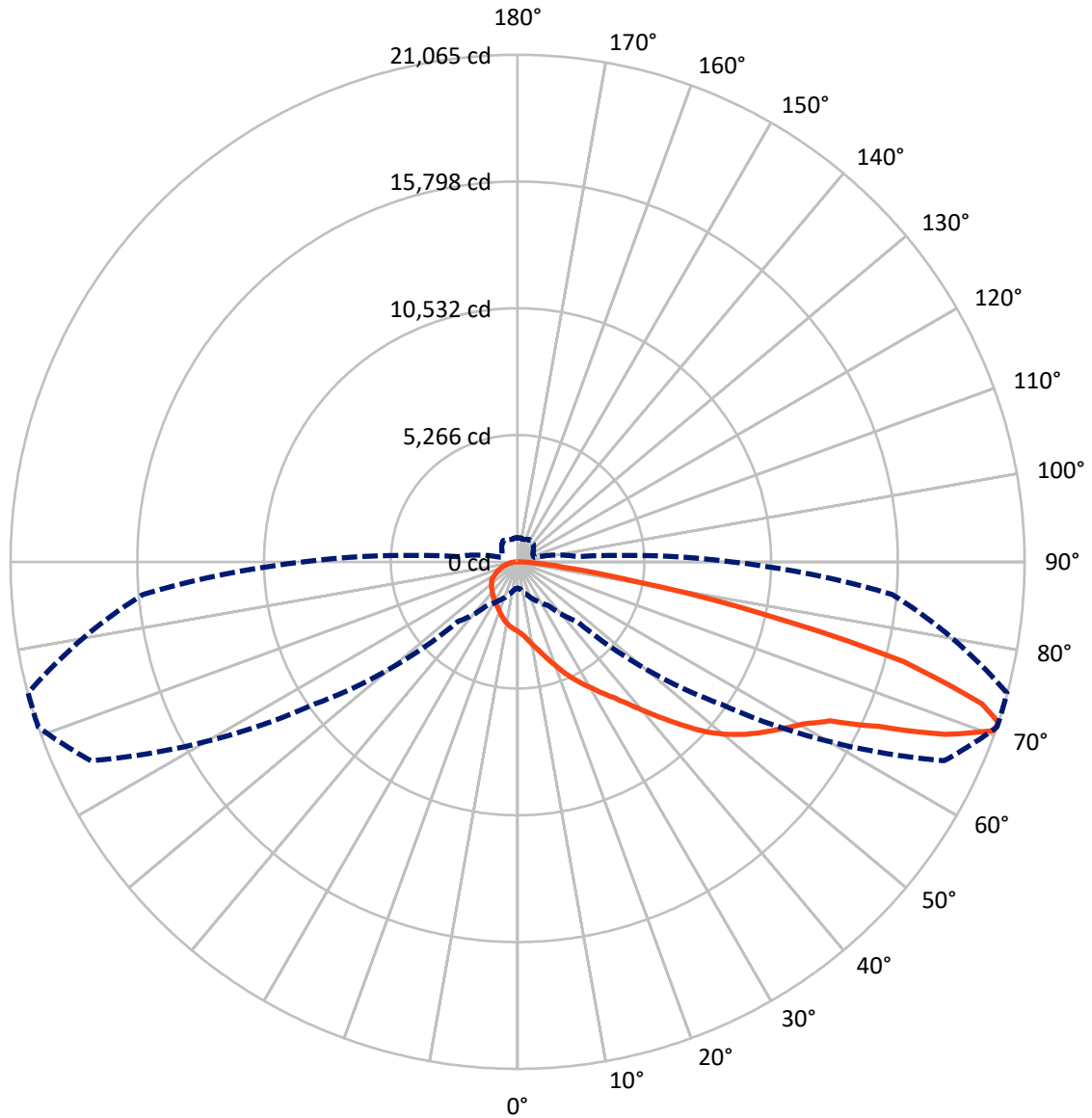
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc
 Type II - Medium - N/A

REPORT NUMBER: P650870
CATALOG NUMBER: GALN-SA4C-840-U-T2

Luminous Intensity Polar Plot



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

REPORT NUMBER: P650870
 CATALOG NUMBER: GALN-SA4C-840-U-T2

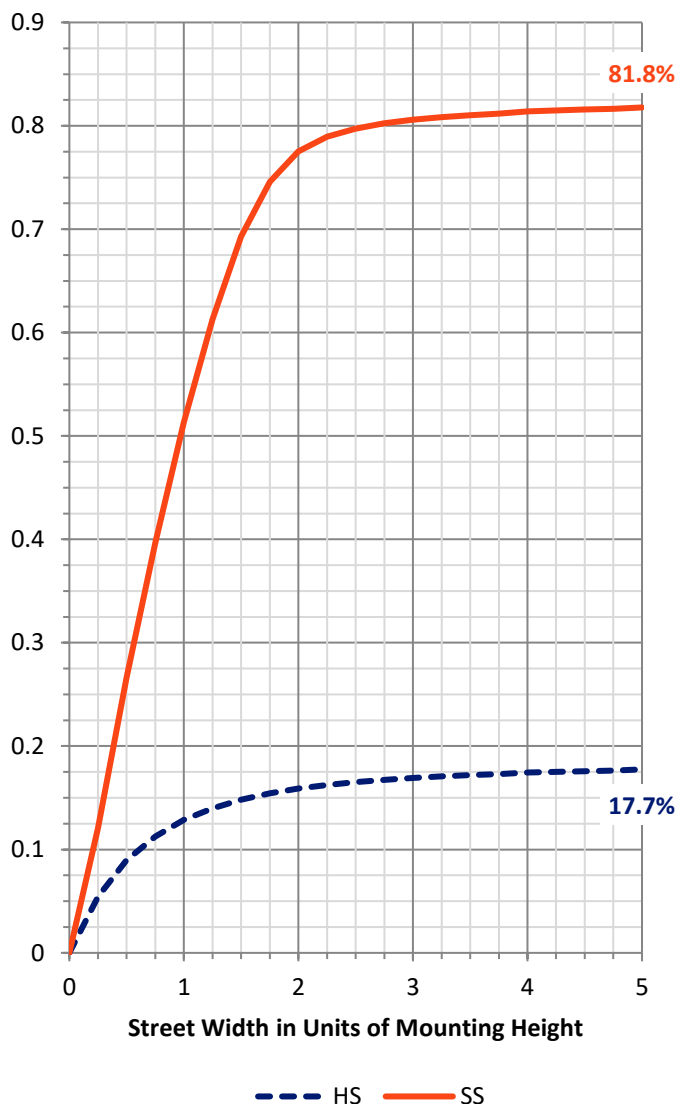
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4230.5	0.0	4230.5
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	19292.3	0.0	19292.3
	% Fixture	82.0	0.0	82.0
Total	Lumens	23522.8	0.0	23522.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	289.9	1.2
10°-20°	941.8	4.0
20°-30°	1645.8	7.0
30°-40°	2447.9	10.4
40°-50°	3606.7	15.3
50°-60°	5049.5	21.5
60°-70°	5647.6	24.0
70°-80°	3449.8	14.7
80°-90°	443.8	1.9
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°	23522.8	100.0
0°-180°	23522.8	100.0

Coefficient of Utilization

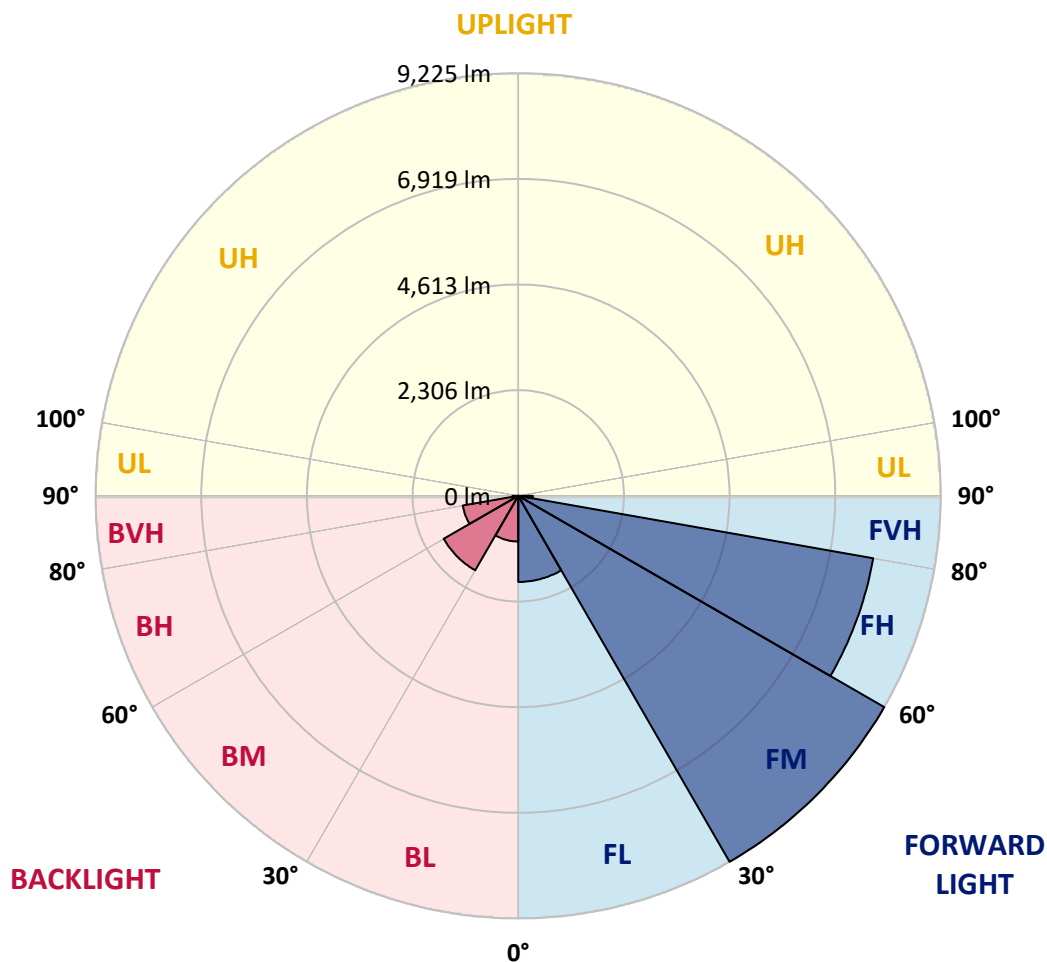


REPORT NUMBER: P650870
 CATALOG NUMBER: GALN-SA4C-840-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1879.5	8.0			
FM (30°-60°)	9225.2	39.2			
FH (60°-80°)	7868.3	33.4			G4/12000
FVH (80°-90°)	319.3	1.4			G3/500
BL (0°-30°)	998.0	4.2	B2/1000		
BM (30°-60°)	1878.9	8.0	B2/2500		
BH (60°-80°)	1229.2	5.2	B3/2500		G3/2500
BVH (80°-90°)	124.5	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 Medium





REPORT NUMBER: P650870

CATALOG NUMBER: GALN-SA4C-840-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	2887.0	2887.0	2887.0	2887.0	2887.0	2887.0	2887.0	2887.0	2887.0	2887.0	2887.0
2.5°	3205.0	3189.5	3190.8	3168.8	3140.4	3109.3	3065.4	3026.6	2995.6	2977.5	2924.4
5°	3551.5	3536.0	3516.6	3468.7	3448.0	3371.7	3274.9	3186.9	3119.7	3082.2	2976.1
7.5°	3832.0	3828.1	3823.0	3795.9	3742.9	3636.8	3554.1	3401.5	3301.9	3230.9	3049.9
10°	4005.3	4011.7	4015.6	4020.8	3998.8	3943.2	3829.4	3636.8	3510.1	3419.6	3145.5
12.5°	4093.2	4099.6	4121.7	4169.5	4199.2	4192.7	4099.6	3910.9	3736.4	3617.4	3247.7
15°	4147.5	4157.8	4196.6	4260.0	4359.5	4422.9	4377.7	4203.1	4011.7	3870.8	3369.2
17.5°	4206.9	4218.6	4261.3	4351.8	4482.4	4619.4	4668.5	4518.5	4310.4	4142.3	3505.0
20°	4240.6	4256.1	4316.9	4435.8	4588.3	4787.5	4950.4	4871.5	4643.9	4457.8	3661.4
22.5°	4294.9	4307.8	4359.5	4486.2	4668.5	4918.0	5232.2	5215.4	5015.0	4774.5	3833.4
25°	4442.2	4462.9	4488.8	4565.1	4740.9	5051.2	5466.2	5582.6	5374.4	5105.5	3991.0
27.5°	4720.2	4737.0	4735.8	4746.1	4845.7	5166.3	5669.2	5945.9	5731.2	5440.3	4143.6
30°	5037.0	5043.5	5048.6	5025.3	5047.3	5283.9	5855.4	6305.3	6090.7	5784.2	4276.8
32.5°	5422.3	5435.2	5391.2	5331.8	5313.7	5458.4	6009.2	6664.7	6516.0	6133.3	4408.7
35°	5877.3	5911.0	5821.7	5717.0	5643.4	5709.3	6216.1	7031.9	6951.7	6579.4	4583.2
37.5°	6397.1	6438.4	6355.7	6150.1	6045.4	6063.5	6486.3	7485.7	7502.5	7087.4	4843.1
40°	6822.4	6876.7	6879.3	6588.4	6429.4	6450.0	6828.9	7974.4	8167.0	7715.8	5149.4
42.5°	7103.0	7156.0	7211.6	7040.9	6874.2	6991.8	7228.4	8504.4	8914.3	8478.5	5577.4
45°	7410.6	7458.5	7489.5	7412.0	7318.9	7624.0	7710.6	9068.1	9710.7	9330.6	6045.4
47.5°	7767.5	7820.5	7850.2	7776.6	7741.7	8178.6	8230.4	9594.3	10561.4	10158.0	6562.6
50°	8243.3	8283.3	8267.9	8221.3	8213.5	8604.0	8729.4	10086.9	11263.4	11048.8	7099.1
52.5°	8835.4	8883.2	8900.1	8834.1	8804.3	8907.8	9131.5	10535.5	11902.1	11814.1	7671.9
55°	9193.6	9269.8	9525.8	9629.2	9700.3	9300.9	9564.6	11030.6	12474.8	12620.9	8287.2
57.5°	8734.5	8832.9	9405.6	9922.7	10591.1	10283.4	10178.7	11547.9	13047.5	13403.1	9024.2
60°	7614.9	7637.0	8375.2	9328.0	10672.5	11546.5	11459.9	12370.1	13668.1	14191.7	9995.1
62.5°	5282.7	5329.2	6201.9	7722.2	9666.7	12001.7	13639.7	13789.6	14557.6	15372.1	11418.5
65°	2724.1	2663.3	3458.4	4853.4	7287.9	10920.8	15405.7	16399.9	16486.5	17218.3	13422.4
67.5°	1676.9	1704.0	2076.3	2833.9	4309.1	7936.9	15220.8	19589.4	19133.0	19484.7	15282.9
70°	1259.2	1292.9	1548.9	1939.3	2627.1	4538.0	12240.8	20362.5	20999.9	20909.4	15849.1
71°	1095.1	1130.0	1396.3	1764.8	2207.0	3502.3	10313.2	19553.2	21064.5	21049.1	15635.9
72.5°	933.4	955.5	1163.6	1494.5	1860.5	2455.1	7748.1	17536.4	20166.0	20681.9	14874.3
75°	733.0	749.8	842.9	1140.3	1464.8	1507.5	4157.8	13147.1	16562.8	17545.4	12383.1
77.5°	597.3	609.0	656.7	846.8	1130.0	1067.9	2181.0	8557.4	10376.5	11365.5	7294.3
80°	474.5	487.4	515.9	574.1	846.8	761.5	1040.7	4336.3	5012.4	5002.1	2911.5
82.5°	368.4	372.3	406.0	421.5	579.2	540.4	563.7	1835.9	2033.7	2100.9	1051.1
85°	232.7	244.3	359.4	323.2	346.5	316.7	278.0	729.1	898.5	885.6	420.2
87.5°	71.1	75.0	121.5	137.1	153.8	138.3	102.1	214.6	262.5	284.4	104.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P650870
 CATALOG NUMBER: GALN-SA4C-840-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2887.0	2887.0	2887.0	2887.0	2887.0	2887.0	2887.0	2887.0	2887.0	2887.0	2887.0
2.5°	2903.8	2889.5	2839.1	2797.8	2759.0	2716.3	2680.1	2669.8	2660.7	2656.8	2655.5
5°	2930.9	2888.2	2788.7	2707.3	2642.6	2583.1	2545.6	2528.8	2512.1	2512.1	2517.2
7.5°	2969.7	2892.1	2738.3	2616.8	2535.3	2479.7	2452.5	2450.0	2453.9	2457.7	2459.0
10°	3012.4	2889.5	2664.6	2513.3	2440.9	2415.1	2416.4	2438.3	2459.0	2474.6	2477.1
12.5°	3053.8	2874.0	2578.0	2416.4	2369.9	2375.0	2411.1	2460.3	2500.4	2522.4	2523.7
15°	3100.3	2849.5	2473.2	2324.5	2309.0	2349.2	2416.4	2491.4	2552.1	2588.3	2592.2
17.5°	3139.0	2808.1	2363.4	2235.4	2254.7	2328.5	2421.5	2518.5	2592.2	2637.5	2645.2
20°	3183.0	2755.1	2249.6	2150.0	2205.6	2305.2	2411.1	2515.9	2592.2	2636.1	2646.5
22.5°	3217.9	2680.1	2141.0	2080.2	2161.6	2276.8	2376.2	2460.3	2522.4	2545.6	2561.2
25°	3232.1	2585.7	2038.8	2023.4	2126.7	2230.2	2297.4	2345.2	2364.6	2362.0	2368.5
27.5°	3224.4	2477.1	1951.0	1978.1	2082.8	2157.8	2191.4	2187.5	2152.6	2120.3	2135.8
30°	3192.1	2347.8	1877.2	1931.5	2025.9	2067.3	2062.1	2011.7	1945.7	1885.0	1888.9
32.5°	3133.9	2208.2	1808.7	1878.5	1945.7	1963.8	1928.9	1863.0	1768.6	1689.7	1678.1
35°	3084.8	2075.0	1747.9	1817.7	1865.6	1856.5	1823.0	1737.6	1652.3	1582.4	1570.8
37.5°	3077.0	1961.3	1689.7	1749.3	1776.4	1763.5	1722.1	1649.7	1618.7	1565.7	1559.2
40°	3118.3	1881.1	1630.3	1676.9	1689.7	1679.4	1634.1	1592.8	1621.3	1608.3	1608.3
42.5°	3230.9	1838.4	1577.3	1604.5	1614.8	1622.5	1590.2	1555.3	1590.2	1530.7	1511.4
45°	3409.2	1839.8	1529.4	1533.3	1564.3	1591.5	1569.6	1517.8	1499.8	1380.8	1357.5
47.5°	3671.7	1883.7	1490.7	1466.1	1521.7	1567.0	1535.9	1460.9	1380.8	1301.9	1287.7
50°	3978.1	1962.6	1455.8	1396.3	1464.8	1535.9	1512.6	1424.7	1342.0	1294.1	1285.1
52.5°	4318.1	2062.1	1413.1	1318.7	1395.0	1521.7	1517.8	1419.5	1305.8	1273.4	1265.7
55°	4738.4	2160.4	1360.1	1228.2	1332.9	1510.1	1503.6	1376.9	1298.0	1274.8	1272.2
57.5°	5227.1	2302.6	1283.8	1136.4	1261.8	1462.2	1448.0	1351.1	1272.2	1255.4	1254.1
60°	6014.4	2523.7	1175.2	1052.4	1189.4	1378.1	1396.3	1307.1	1230.8	1226.9	1225.6
62.5°	7049.9	2833.9	1062.8	965.8	1105.4	1269.6	1321.3	1247.6	1186.8	1206.2	1208.9
65°	8479.9	3095.1	946.4	892.0	1012.3	1164.9	1250.2	1192.0	1137.7	1175.2	1175.2
67.5°	9412.1	3100.3	840.3	815.8	918.0	1077.0	1175.2	1126.1	1074.4	1137.7	1140.3
70°	9218.1	2716.3	752.4	735.6	826.1	982.5	1092.5	1053.7	994.2	1051.1	1030.4
71°	8905.2	2503.0	717.5	704.6	790.0	937.3	1053.7	1021.4	961.9	999.4	987.8
72.5°	8406.2	2173.3	660.7	663.2	735.6	880.4	999.4	965.8	906.3	927.0	923.1
75°	7105.5	1897.9	565.0	576.6	632.2	783.5	890.8	864.9	804.2	804.2	800.3
77.5°	4442.2	1326.5	469.3	475.8	536.6	671.0	765.4	743.4	685.2	665.8	660.7
80°	1657.4	685.2	367.2	374.9	412.4	528.8	633.5	612.8	553.4	531.3	510.7
82.5°	627.0	343.9	270.2	263.7	303.9	403.3	496.4	471.9	425.4	372.3	356.8
85°	236.6	170.6	165.5	160.3	178.4	239.2	307.7	302.5	253.4	215.9	212.0
87.5°	62.1	55.6	64.7	47.9	50.5	45.2	46.5	19.4	9.1	3.9	2.6
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)