

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: P651652

Luminaire Tested: **GALN-SA9D-840-U-T4W**

Issue Date: 5/13/2021

Test Information

Test Method: LM-79-08
Report Number: P651652
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2011-042-41)
Test Lab: INNOVATION CENTER
Issue Date: 5/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA9D-840-U-T4W
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 59023.1 lumens
Efficiency: N/A
Efficacy: 106.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

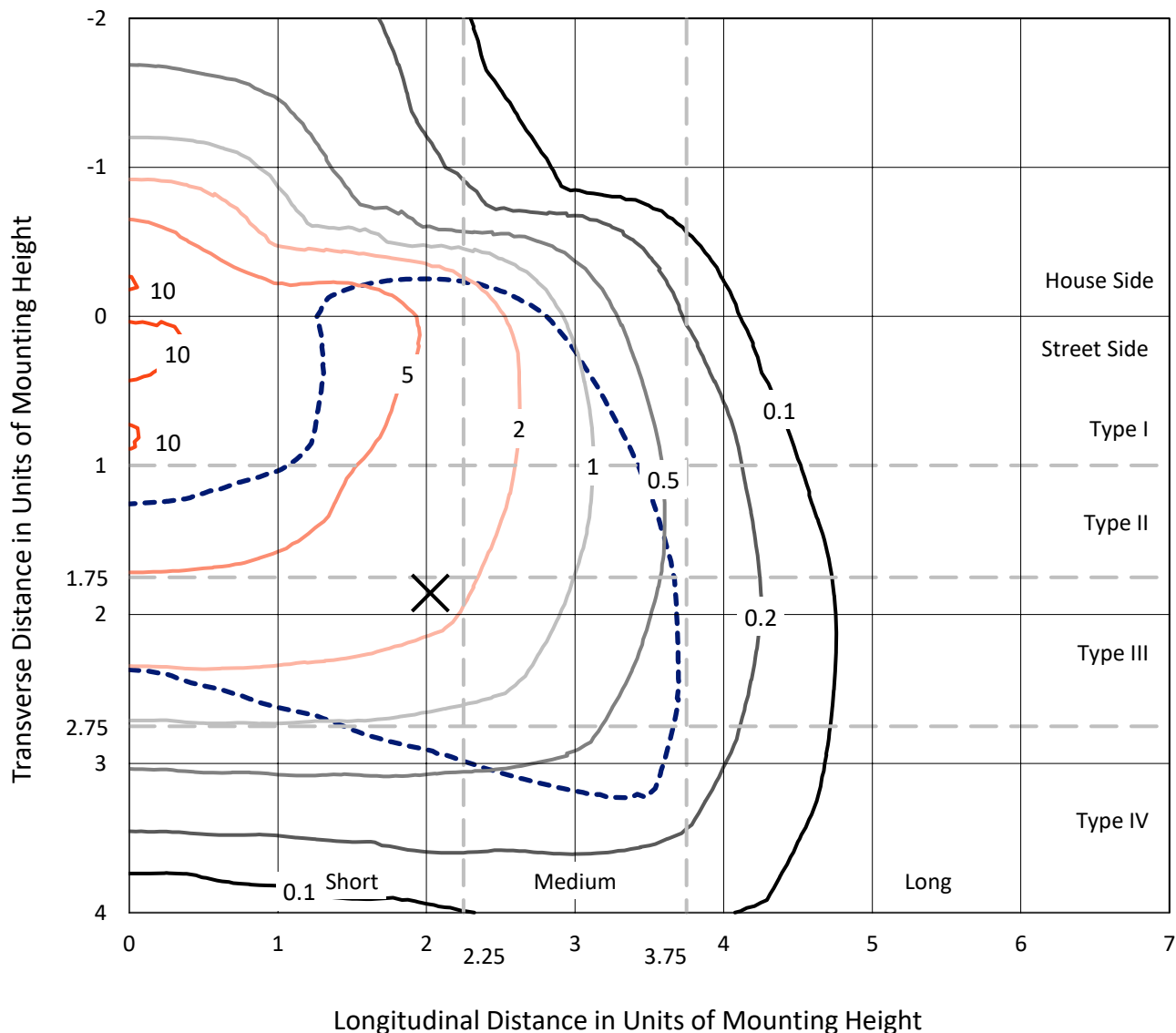
Input Watts (W): 552
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P651652
 CATALOG NUMBER: GALN-SA9D-840-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

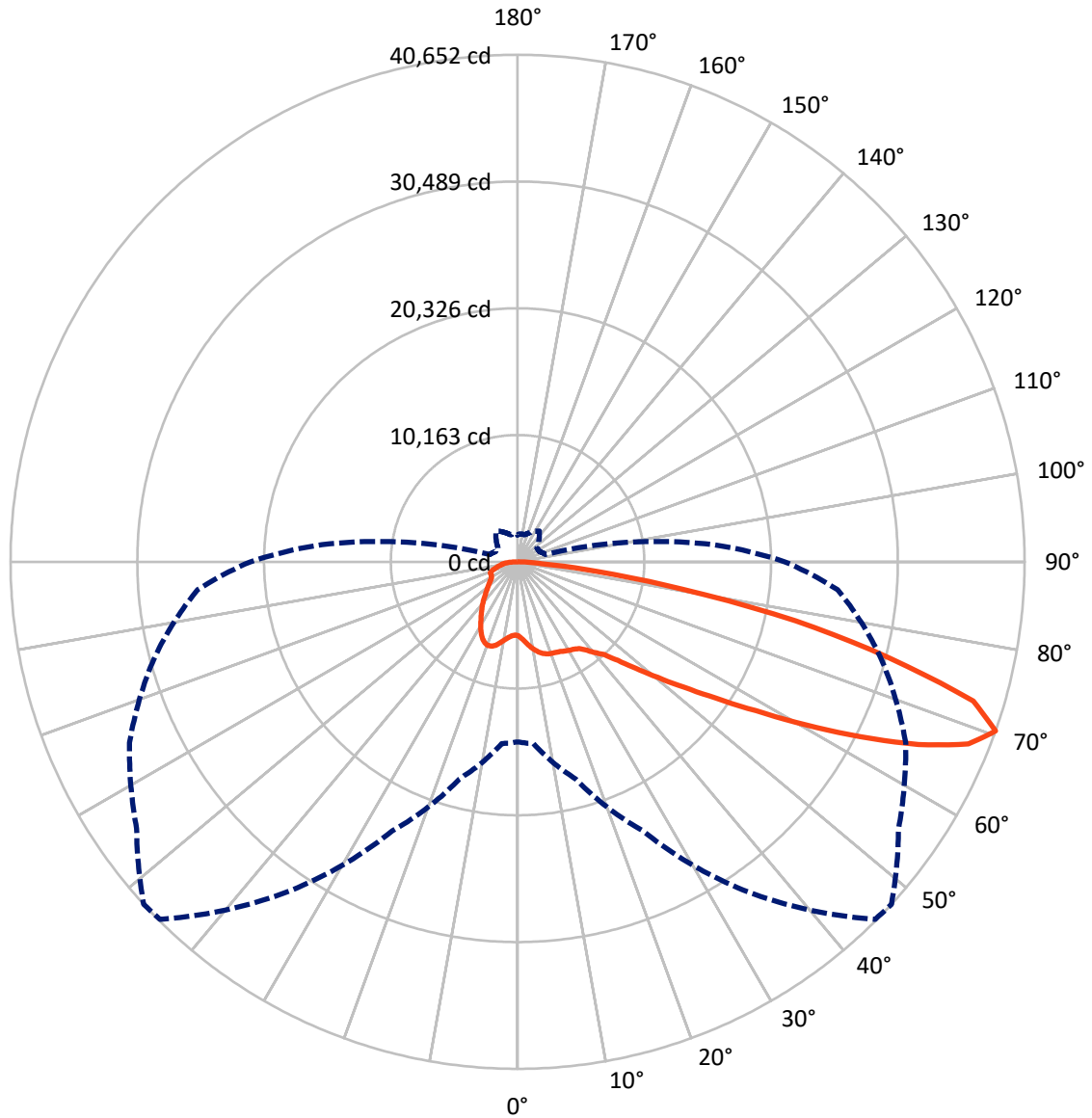
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12 fc
 Type IV - Short - N/A

REPORT NUMBER: P651652
CATALOG NUMBER: GALN-SA9D-840-U-T4W

Luminous Intensity Polar Plot



— Vertical Plane Through 47.5-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P651652
 CATALOG NUMBER: GALN-SA9D-840-U-T4W

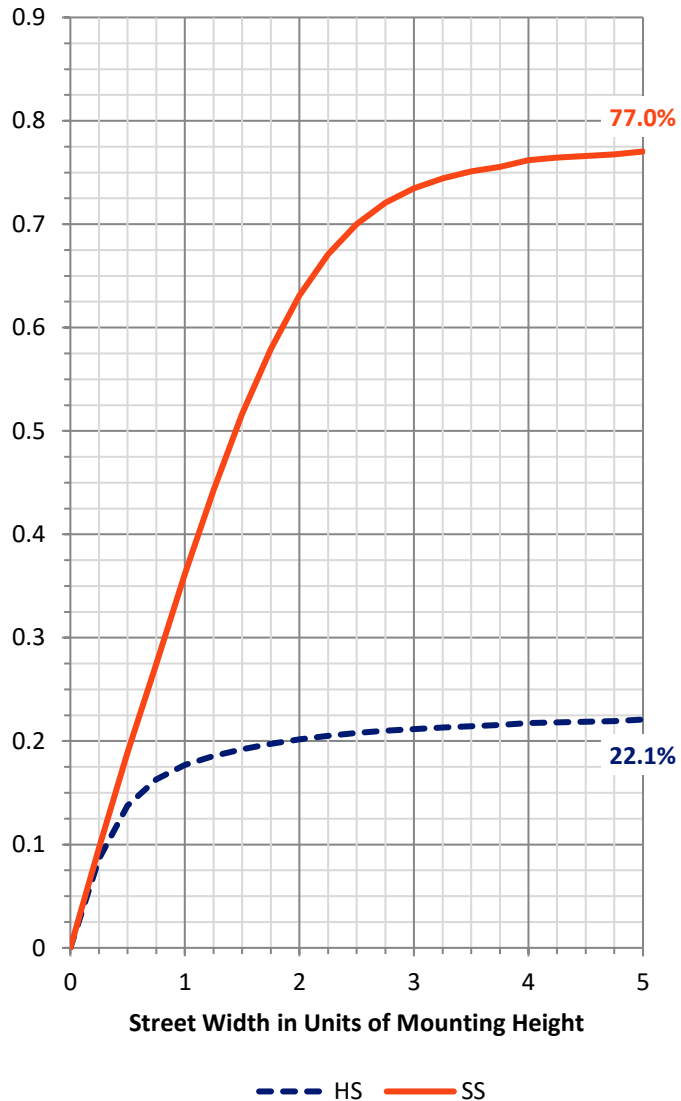
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13364.0	0.0	13364.0
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	45659.1	0.0	45659.1
	% Fixture	77.4	0.0	77.4
Total	Lumens	59023.1	0.0	59023.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	610.8	1.0
10°-20°	2041.8	3.5
20°-30°	3395.5	5.8
30°-40°	4812.7	8.2
40°-50°	7104.5	12.0
50°-60°	12305.4	20.8
60°-70°	17381.7	29.4
70°-80°	9992.0	16.9
80°-90°	1378.7	2.3
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°	59023.1	100.0
0°-180°	59023.1	100.0

Coefficient of Utilization

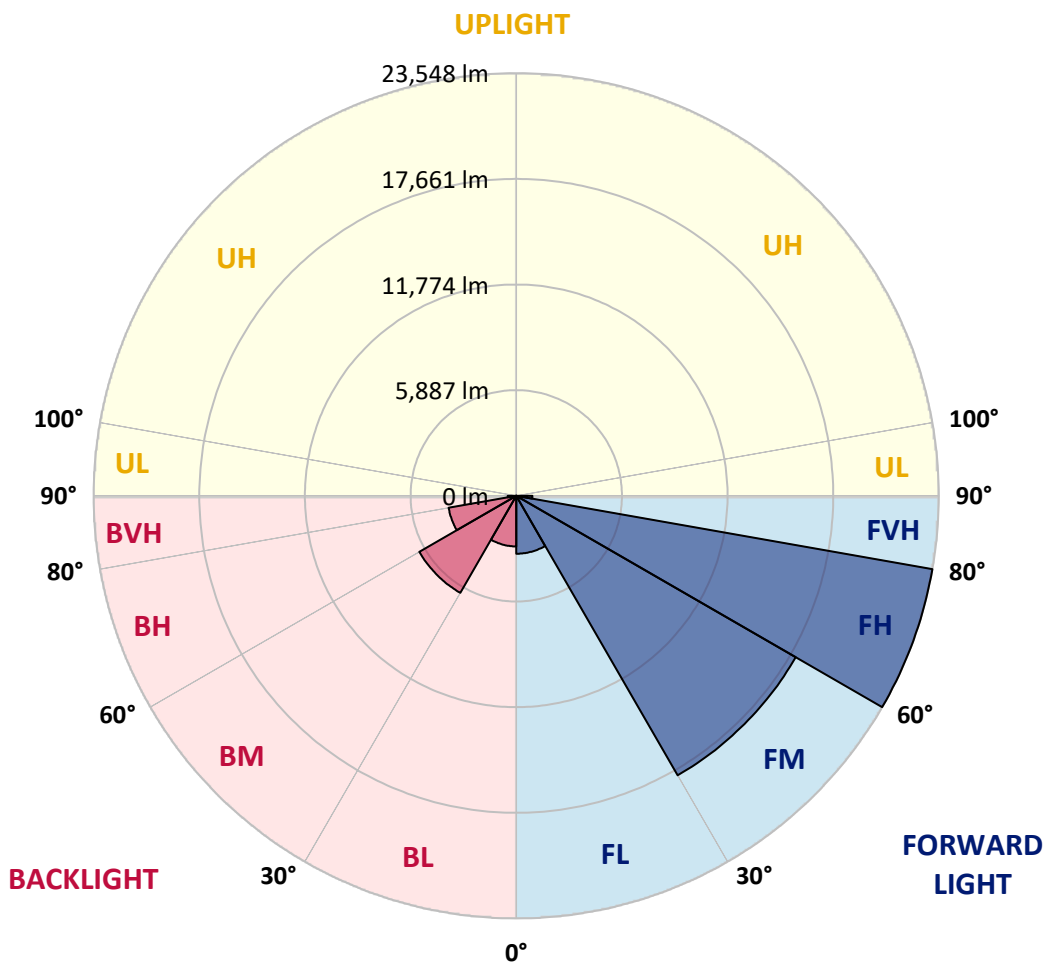


REPORT NUMBER: P651652
 CATALOG NUMBER: GALN-SA9D-840-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3227.6	5.5			
FM (30°-60°)	17983.2	30.5			
FH (60°-80°)	23547.7	39.9			G5
FVH (80°-90°)	900.6	1.5			G5
BL (0°-30°)	2820.6	4.8	B4/5000		
BM (30°-60°)	6239.4	10.6	B4/8500		
BH (60°-80°)	3825.9	6.5	B4/5000		G4/5000
BVH (80°-90°)	478.1	0.8			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5
 Type IV Short





REPORT NUMBER: P651652
 CATALOG NUMBER: GALN-SA9D-840-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47.5°	55°	65°	75°	85°
0°	5925.2	5925.2	5925.2	5925.2	5925.2	5925.2	5925.2	5925.2	5925.2	5925.2	5925.2
2.5°	6307.4	6285.3	6282.1	6234.8	6209.4	6162.1	6143.2	6098.9	6045.2	5991.5	5941.0
5°	6803.3	6803.3	6781.2	6714.8	6610.6	6503.2	6455.9	6370.6	6218.9	6095.7	5991.5
7.5°	7311.7	7318.0	7273.9	7175.9	7027.5	6853.8	6809.6	6683.3	6468.5	6288.4	6133.7
10°	7750.7	7750.7	7690.8	7558.2	7371.8	7182.2	7138.1	6995.9	6755.8	6531.6	6329.5
12.5°	8085.5	8085.5	8006.6	7832.9	7630.7	7460.2	7409.6	7273.9	7049.6	6800.1	6544.2
15°	8303.5	8287.7	8199.2	8003.5	7807.6	7659.2	7624.4	7510.7	7305.4	7052.8	6765.3
17.5°	8312.9	8306.6	8221.4	8057.1	7886.6	7785.6	7763.4	7687.6	7526.5	7286.5	6983.2
20°	8129.8	8142.4	8085.5	7968.7	7886.6	7842.4	7832.9	7807.6	7693.9	7469.7	7166.5
22.5°	7934.0	7956.1	7902.4	7839.2	7832.9	7877.1	7883.4	7889.8	7817.1	7599.2	7321.2
25°	7886.6	7902.4	7848.7	7791.9	7826.6	7943.4	7968.7	7994.0	7937.1	7753.9	7504.4
27.5°	8126.7	8114.0	8009.8	7886.6	7908.7	8066.6	8101.4	8129.8	8101.4	7943.4	7731.8
30°	8805.7	8764.6	8556.2	8196.1	8082.4	8192.9	8227.7	8306.6	8306.6	8189.8	7978.1
32.5°	9942.7	9863.8	9481.6	8774.1	8379.3	8312.9	8347.7	8477.2	8543.6	8452.0	8221.4
35°	11323.0	11240.8	10694.4	9743.7	8922.6	8553.1	8543.6	8688.8	8865.7	8660.4	8360.4
37.5°	12709.5	12624.3	11967.3	10899.7	9715.3	9058.3	9001.5	9052.0	9127.9	8752.0	8553.1
40°	14096.1	13995.0	13420.2	12191.6	10685.0	9727.9	9579.5	9352.1	9320.6	9052.0	8925.7
42.5°	15469.9	15378.4	15087.8	13641.3	11847.3	10381.7	10154.3	9762.7	9882.7	9721.6	9611.1
45°	16856.5	16862.8	16553.3	15267.9	13249.6	11588.2	11281.9	10669.2	10953.4	10893.4	10956.5
47.5°	18085.1	18069.4	17958.8	16847.1	14989.9	13142.2	12747.4	12036.7	12523.2	12744.3	13227.5
50°	19275.9	19266.4	19272.7	18637.9	17011.2	14989.9	14554.0	13808.6	14904.6	15672.1	16537.5
52.5°	20981.4	21035.1	20652.9	20485.6	19468.6	17172.4	16692.3	15921.6	17718.8	18928.5	20618.2
55°	22693.3	22649.1	22349.0	22522.7	22039.5	19755.9	19253.8	18641.0	20851.9	22175.3	24714.6
57.5°	23700.8	23716.6	24023.0	24872.6	25213.7	22977.5	22522.7	22049.0	24373.5	25311.6	28359.5
60°	24607.3	24679.9	25561.1	27165.6	28091.0	26935.0	26530.8	26069.7	27604.6	27977.3	31524.2
62.5°	24891.6	25115.8	26654.0	29054.4	30895.7	31401.1	30898.8	29881.8	30680.9	30535.6	33668.8
65°	23473.4	23779.8	26537.1	29761.8	33400.3	35639.6	35320.7	33431.9	33302.4	32427.5	34019.4
67.5°	19740.1	20046.5	23587.1	28277.4	34436.3	39309.8	38990.8	36021.8	34894.3	32604.4	31366.4
70°	14443.5	14636.2	18022.0	23808.2	32354.9	40541.6	40652.1	37285.2	34325.8	30200.9	25753.8
72.5°	8322.5	8748.8	11120.8	16749.1	26432.9	37427.4	38194.9	34657.4	30731.5	25194.8	18006.1
75°	3578.5	3588.0	5141.9	9238.4	17901.9	30084.0	30826.3	28729.1	24133.5	17421.9	9614.2
77.5°	1702.4	1734.0	2261.4	4124.9	9854.2	20785.6	22788.1	20296.0	15435.2	8369.8	3632.2
80°	1105.4	1127.5	1383.4	2046.7	4832.4	12052.5	13448.6	11708.3	6809.6	2991.0	1566.6
82.5°	669.6	675.9	925.4	1250.7	2659.4	5457.8	6433.7	5081.9	2905.7	1790.8	922.2
85°	407.5	410.6	562.2	773.8	1614.0	1885.6	1936.2	1920.3	1705.5	1171.8	492.7
87.5°	195.8	202.2	290.6	366.3	634.9	584.3	552.7	641.2	805.4	631.7	211.6
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: P651652
 CATALOG NUMBER: GALN-SA9D-840-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5925.2	5925.2	5925.2	5925.2	5925.2	5925.2	5925.2	5925.2	5925.2	5925.2	5925.2
2.5°	5918.9	5909.5	5887.3	5877.8	5871.5	5874.6	5871.5	5871.5	5874.6	5874.6	5874.6
5°	5947.3	5931.5	5896.8	5896.8	5915.8	5959.9	6001.0	6032.6	6067.3	6064.2	6064.2
7.5°	6070.5	6042.1	6001.0	6013.7	6061.0	6130.5	6203.1	6272.6	6342.1	6348.5	6345.3
10°	6250.6	6222.1	6177.9	6193.7	6269.5	6373.7	6465.3	6566.4	6642.1	6664.3	6657.9
12.5°	6455.9	6399.0	6361.1	6405.3	6525.3	6664.3	6752.7	6828.5	6882.2	6913.8	6901.2
15°	6664.3	6610.6	6566.4	6657.9	6803.3	6932.8	6976.9	6989.6	6999.1	7030.7	7024.4
17.5°	6866.4	6793.8	6778.0	6898.0	7037.0	7093.8	7068.5	7014.9	6973.8	6999.1	6995.9
20°	7046.5	6989.6	6983.2	7103.3	7157.0	7103.3	6995.9	6901.2	6828.5	6834.8	6831.7
22.5°	7217.0	7172.8	7179.1	7229.7	7144.4	6961.2	6784.3	6654.8	6575.9	6591.7	6601.1
25°	7406.5	7362.3	7378.1	7295.9	7014.9	6695.9	6440.0	6329.5	6297.9	6329.5	6351.6
27.5°	7652.8	7624.4	7615.0	7299.1	6784.3	6304.2	6013.7	5972.6	6001.0	6070.5	6105.2
30°	7918.2	7918.2	7867.6	7245.5	6468.5	5833.6	5581.0	5587.3	5685.2	5783.1	5817.8
32.5°	8174.0	8227.7	8069.8	7100.1	6061.0	5375.7	5183.0	5189.3	5274.6	5394.6	5426.2
35°	8385.6	8540.4	8243.5	6834.8	5581.0	4990.3	4845.0	4759.7	4762.9	4854.5	4879.7
37.5°	8676.2	8963.6	8344.6	6440.0	5069.3	4661.8	4497.6	4349.1	4251.3	4213.3	4213.3
40°	9181.5	9604.8	8369.8	5855.7	4586.1	4349.1	4115.4	3938.6	3749.0	3578.5	3546.9
42.5°	10037.5	10571.3	8319.3	5183.0	4150.2	4004.8	3777.4	3559.5	3297.4	3057.4	3038.4
45°	11553.5	11828.3	8183.5	4485.0	3761.7	3673.2	3452.1	3215.3	2937.4	2722.6	2706.8
47.5°	13982.4	13593.8	8003.5	3865.9	3407.9	3382.7	3212.1	2937.4	2659.4	2511.0	2495.2
50°	17529.3	16373.3	7978.1	3417.4	3123.6	3136.3	2997.3	2744.7	2501.5	2378.3	2359.3
52.5°	21799.5	19730.7	8145.6	3101.6	2874.2	2921.5	2852.1	2618.4	2403.6	2299.3	2280.4
55°	25943.3	22750.1	8246.7	2855.2	2640.4	2728.9	2738.4	2542.5	2346.7	2242.4	2229.8
57.5°	29307.0	25024.2	7798.2	2631.0	2438.3	2574.1	2643.6	2498.3	2318.3	2239.3	2226.7
60°	31647.4	26098.1	6522.1	2432.0	2289.9	2450.9	2608.9	2501.5	2387.8	2397.3	2403.6
62.5°	32392.8	25621.1	4892.4	2283.6	2188.8	2409.9	2665.7	2631.0	2514.1	2586.7	2599.4
65°	31157.9	23650.3	3546.9	2166.7	2100.3	2438.3	2836.3	2725.7	2469.8	2523.6	2523.6
67.5°	27023.5	20375.0	2760.5	2059.3	1999.3	2492.0	3006.8	2716.3	2365.6	2428.8	2372.0
70°	21436.2	15760.5	2299.3	1939.3	1891.9	2413.0	3022.6	2618.4	2242.4	2255.1	2147.7
72.5°	14225.5	10362.8	1977.2	1825.6	1727.7	2169.9	2893.1	2492.0	2122.4	2049.9	1942.5
75°	6970.6	5167.2	1724.5	1683.4	1512.9	1888.7	2716.3	2372.0	1993.0	1879.3	1819.3
77.5°	2700.5	2198.3	1471.8	1503.4	1317.1	1664.5	2482.5	2201.4	1822.4	1667.6	1620.3
80°	1310.8	1247.5	1206.5	1253.9	1083.4	1418.1	2267.8	2053.0	1664.5	1494.0	1424.5
82.5°	814.8	770.7	925.4	976.0	833.9	1295.0	2150.9	1926.6	1465.5	1238.1	1181.3
85°	413.8	442.2	619.1	666.4	596.9	1029.6	1771.9	1446.5	1058.1	878.0	884.4
87.5°	157.9	211.6	325.3	350.6	319.0	543.3	976.0	843.3	679.0	461.1	426.4
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)