

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: P459084

Luminaire Tested: **GALN-SA5D-735-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P459084
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-735-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 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: 36779 lumens
Efficiency: N/A
Efficacy: 119.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

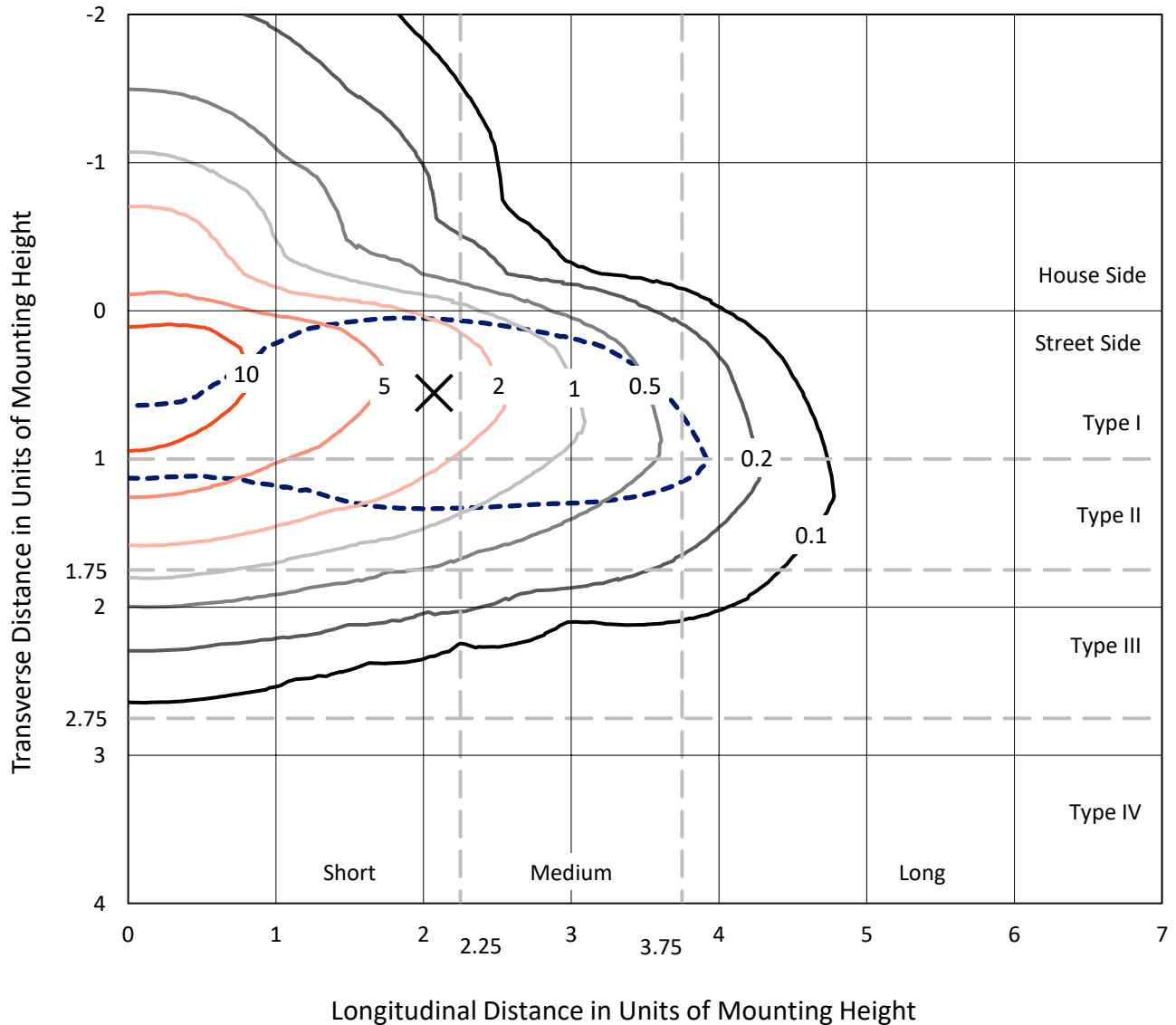
Input Watts (W): 309
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P459084
 CATALOG NUMBER: GALN-SA5D-735-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

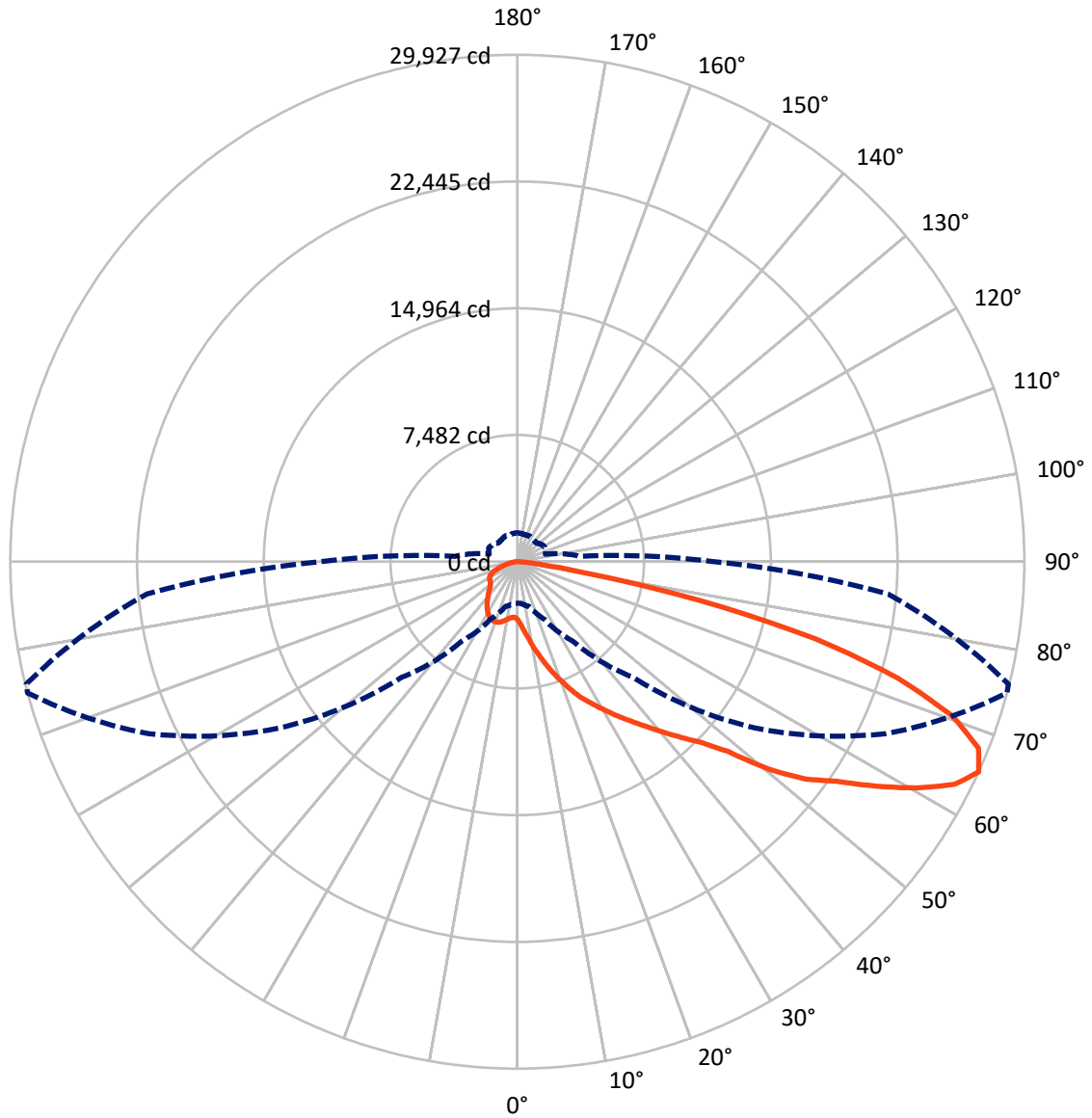
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.2 fc
 Type II - Short - N/A

REPORT NUMBER: P459084
CATALOG NUMBER: GALN-SA5D-735-U-T2R

Luminous Intensity Polar Plot



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

REPORT NUMBER: P459084

CATALOG NUMBER: GALN-SA5D-735-U-T2R

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6183.0	0.0	6183.0
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	30596.0	0.0	30596.0
	% Fixture	83.2	0.0	83.2
Total	Lumens	36779.0	0.0	36779.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	415.2	1.1
10°-20°	1626.2	4.4
20°-30°	3141.3	8.5
30°-40°	5102.4	13.9
40°-50°	7018.8	19.1
50°-60°	8286.9	22.5
60°-70°	7260.7	19.7
70°-80°	3466.3	9.4
80°-90°	461.2	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°	36779.0	100.0
0°-180°	36779.0	100.0

Coefficient of Utilization



REPORT NUMBER: P459084

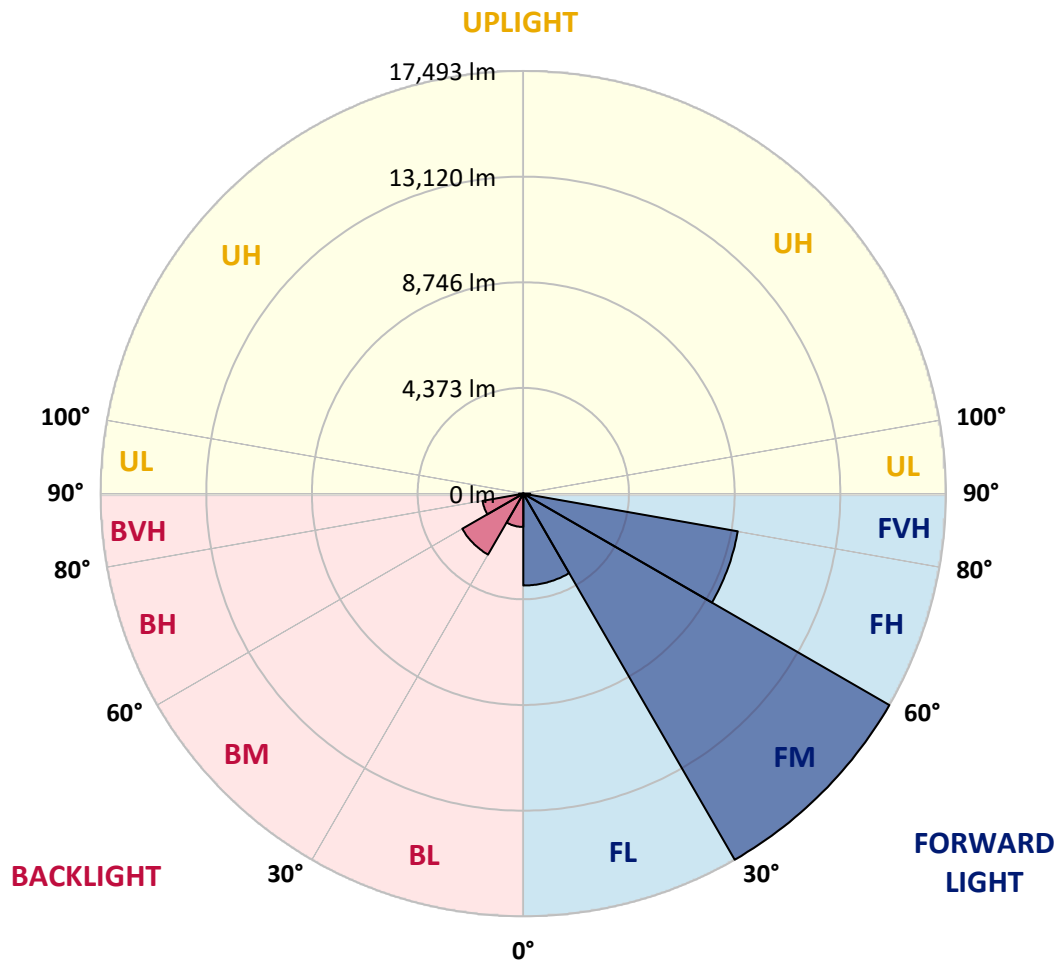
CATALOG NUMBER: GALN-SA5D-735-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3802.4	10.3			
FM	(30°-60°)	17492.9	47.6			
FH	(60°-80°)	9012.5	24.5			G4/12000
FVH	(80°-90°)	288.2	0.8			G3/500
BL	(0°-30°)	1380.3	3.8	B3/2500		
BM	(30°-60°)	2915.3	7.9	B3/5000		
BH	(60°-80°)	1714.4	4.7	B3/2500		G3/2500
BVH	(80°-90°)	173.0	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





REPORT NUMBER: P459084

CATALOG NUMBER: GALN-SA5D-735-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3417.2	3417.2	3417.2	3417.2	3417.2	3417.2	3417.2	3417.2	3417.2	3417.2	3417.2
2.5°	4540.4	4510.4	4478.5	4390.7	4297.0	4191.2	4039.6	3894.0	3700.5	3694.5	3550.9
5°	5799.1	5779.2	5637.5	5555.7	5338.3	5049.0	4803.7	4422.7	4069.6	4027.7	3748.4
7.5°	6956.2	6878.4	6824.5	6676.9	6461.4	6090.4	5615.6	5100.9	4510.4	4454.6	3991.8
10°	7827.9	7819.9	7792.0	7664.3	7502.8	7133.7	6607.1	5868.9	5069.0	4959.3	4287.0
12.5°	8480.2	8486.2	8482.2	8480.2	8364.5	8051.3	7480.8	6702.8	5633.5	5555.7	4628.1
15°	8909.1	8969.0	8992.9	9092.7	9102.6	8893.2	8402.4	7508.7	6269.9	6154.2	4995.2
17.5°	9192.4	9222.3	9334.1	9503.6	9641.3	9603.4	9166.5	8254.8	6920.2	6726.7	5376.2
20°	9463.7	9515.6	9601.4	9832.8	10076.2	10187.9	9880.7	9018.9	7564.6	7440.9	5797.1
22.5°	10028.3	10102.1	10132.0	10249.7	10457.2	10654.7	10515.0	9751.0	8270.8	8103.2	6244.0
25°	10983.8	11061.6	10977.8	10949.9	11017.7	11115.5	11085.6	10441.2	8937.1	8697.7	6666.9
27.5°	12228.6	12238.6	12075.0	11919.4	11751.9	11702.0	11610.2	11053.6	9515.6	9316.1	7091.8
30°	13565.2	13517.3	13246.0	12964.7	12681.5	12402.2	12138.9	11644.1	10159.9	9930.5	7508.7
32.5°	14806.0	14780.1	14478.9	14042.0	13563.2	13299.9	12767.2	12240.6	10850.2	10628.7	7937.6
35°	15735.6	15773.5	15442.4	14965.6	14442.9	14209.5	13537.3	12867.0	11564.3	11323.0	8404.4
37.5°	16395.9	16376.0	16082.7	15669.8	15211.0	15007.5	14437.0	13551.2	12332.4	12101.0	8915.1
40°	16631.3	16619.4	16401.9	16100.7	15809.4	15737.6	15378.5	14289.3	13212.1	12940.8	9529.6
42.5°	16481.7	16507.7	16364.0	16282.2	16228.4	16280.2	16314.1	15256.9	14171.6	13922.3	10195.8
45°	16022.9	16008.9	15989.0	16122.6	16425.9	16767.0	17239.8	16170.5	15215.0	15015.5	11089.6
47.5°	15203.0	15302.7	15352.6	15721.7	16384.0	17191.9	18305.0	17395.4	16729.1	16555.5	12452.1
50°	14055.9	14135.7	14431.0	15087.3	16074.8	17351.5	19346.4	19398.2	19254.6	18929.4	13932.3
52.5°	12264.5	12388.2	12996.7	14199.6	15440.4	17285.7	19976.8	21115.8	21305.3	21062.0	15390.5
55°	10259.7	10433.2	11075.6	12653.5	14566.6	16926.6	20411.6	22111.3	22867.3	22641.9	16794.9
57.5°	8296.7	8480.2	9140.6	10668.6	13042.5	16132.6	20696.9	23220.4	24993.9	24700.6	18542.4
60°	6218.0	6409.6	6976.1	8550.1	10872.1	14580.6	20503.4	24182.0	27118.4	26992.8	20291.9
62.5°	4011.7	4223.2	4715.9	6018.6	8356.6	12460.0	19468.1	24712.6	28957.7	28806.1	21568.7
65°	2443.7	2467.7	2739.0	3736.4	5719.3	9647.3	17100.1	24008.4	29927.2	29881.3	21957.7
67.5°	1579.9	1617.8	1741.5	2238.3	3429.2	6700.8	13672.9	21684.4	29360.7	29344.7	21153.7
70°	1334.6	1346.5	1402.4	1510.1	1992.9	4063.6	9601.4	17979.9	27208.2	27208.2	19220.7
72.5°	1192.9	1208.9	1228.8	1262.8	1422.4	2302.1	5729.3	13996.1	23491.7	23647.3	16360.0
75°	1083.2	1079.2	1091.2	1097.2	1212.9	1504.1	2962.4	10351.4	18173.4	17862.2	11847.6
77.5°	927.6	933.6	927.6	953.6	1071.3	1145.1	1504.1	6946.2	11013.7	10610.8	5946.7
80°	762.0	772.0	782.0	798.0	915.7	869.8	903.7	3165.9	4073.5	3987.8	1837.3
82.5°	572.5	586.5	602.5	640.4	720.2	574.5	570.5	1352.5	1470.2	1346.5	676.3
85°	231.4	273.3	412.9	450.8	452.8	315.2	351.1	564.6	600.5	586.5	265.3
87.5°	53.9	63.8	133.7	201.5	185.5	117.7	129.7	183.5	209.5	193.5	89.8
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: P459084

CATALOG NUMBER: GALN-SA5D-735-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3417.2	3417.2	3417.2	3417.2	3417.2	3417.2	3417.2	3417.2	3417.2	3417.2	3417.2
2.5°	3485.1	3415.2	3295.5	3203.8	3138.0	3080.1	3044.2	3022.2	3014.3	3012.3	3014.3
5°	3602.8	3479.1	3289.6	3169.9	3104.0	3066.1	3044.2	3042.2	3044.2	3046.2	3040.2
7.5°	3764.3	3586.8	3339.4	3227.7	3177.8	3149.9	3139.9	3136.0	3138.0	3136.0	3136.0
10°	3979.8	3736.4	3437.2	3321.5	3279.6	3247.7	3231.7	3221.7	3213.8	3205.8	3201.8
12.5°	4217.2	3902.0	3542.9	3431.2	3371.4	3321.5	3285.6	3259.6	3241.7	3223.7	3219.7
15°	4482.5	4077.5	3660.6	3505.0	3419.2	3345.4	3283.6	3241.7	3209.8	3183.8	3181.8
17.5°	4735.9	4243.1	3740.4	3538.9	3413.2	3309.5	3227.7	3169.9	3130.0	3096.1	3092.1
20°	5007.2	4400.7	3776.3	3517.0	3353.4	3227.7	3120.0	3050.2	3004.3	2966.4	2960.4
22.5°	5280.5	4534.4	3772.3	3447.2	3249.7	3102.0	2988.3	2914.5	2860.7	2822.8	2808.8
25°	5541.8	4642.1	3722.5	3335.4	3106.0	2952.4	2836.7	2768.9	2721.0	2675.1	2675.1
27.5°	5777.2	4705.9	3628.7	3199.8	2958.4	2796.8	2705.1	2643.2	2599.3	2569.4	2551.5
30°	6008.6	4735.9	3501.0	3028.2	2802.8	2665.2	2591.4	2555.4	2515.5	2481.6	2477.6
32.5°	6216.1	4729.9	3341.4	2860.7	2655.2	2557.4	2527.5	2499.6	2457.7	2409.8	2397.8
35°	6417.5	4690.0	3151.9	2677.1	2531.5	2493.6	2501.6	2461.7	2385.9	2326.0	2316.1
37.5°	6637.0	4618.2	2944.4	2527.5	2427.8	2463.7	2483.6	2395.9	2272.2	2178.4	2156.5
40°	6890.3	4536.4	2729.0	2377.9	2346.0	2435.8	2435.8	2274.2	2104.6	2046.7	2030.8
42.5°	7187.6	4468.5	2549.5	2252.2	2278.2	2367.9	2358.0	2112.6	2042.8	2012.8	2004.9
45°	7658.4	4444.6	2363.9	2142.5	2222.3	2288.1	2206.3	2056.7	2016.8	1992.9	1984.9
47.5°	8402.4	4472.5	2200.4	2060.7	2158.5	2208.3	2036.8	2018.8	1990.9	1957.0	1953.0
50°	9092.7	4446.6	2084.7	2014.8	2102.6	2112.6	1967.0	1972.9	1957.0	1919.1	1911.1
52.5°	9657.2	4364.8	2010.8	1990.9	2054.7	1945.0	1901.1	1923.1	1917.1	1869.2	1861.2
55°	10277.6	4314.9	1974.9	1990.9	2022.8	1799.4	1839.3	1871.2	1863.2	1829.3	1827.3
57.5°	11029.7	4324.9	1949.0	1996.9	1990.9	1725.6	1777.4	1815.3	1813.3	1803.4	1803.4
60°	11799.7	4328.9	1909.1	1994.9	1953.0	1667.7	1713.6	1767.5	1771.5	1777.4	1777.4
62.5°	12055.1	4155.3	1831.3	1959.0	1869.2	1611.9	1653.8	1727.6	1723.6	1739.5	1741.5
65°	11578.3	3674.6	1715.6	1877.2	1761.5	1572.0	1607.9	1675.7	1653.8	1695.7	1703.6
67.5°	10539.0	3040.2	1536.1	1729.6	1641.8	1530.1	1578.0	1603.9	1564.0	1645.8	1647.8
70°	9108.6	2373.9	1308.6	1520.1	1506.1	1486.2	1554.0	1514.1	1458.3	1558.0	1538.1
72.5°	7616.5	1813.3	1045.3	1242.8	1324.6	1420.4	1512.1	1398.4	1320.6	1350.5	1314.6
75°	5721.3	1340.6	839.8	973.5	1103.2	1326.6	1474.2	1258.8	1139.1	1111.1	1103.2
77.5°	2916.5	875.8	628.4	728.1	827.9	1198.9	1422.4	1095.2	943.6	899.7	879.7
80°	1041.3	544.6	442.9	502.7	558.6	1031.4	1242.8	905.7	732.1	724.1	732.1
82.5°	482.8	351.1	297.2	329.2	331.2	688.2	947.6	676.3	556.6	845.8	714.2
85°	207.5	175.5	167.6	163.6	151.6	307.2	532.6	363.1	566.5	253.4	233.4
87.5°	61.8	69.8	61.8	45.9	33.9	33.9	53.9	19.9	14.0	10.0	10.0
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)