

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: P459082

Luminaire Tested: **GALN-SA5D-735-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P459082
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-SA5D-735-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36295 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G5

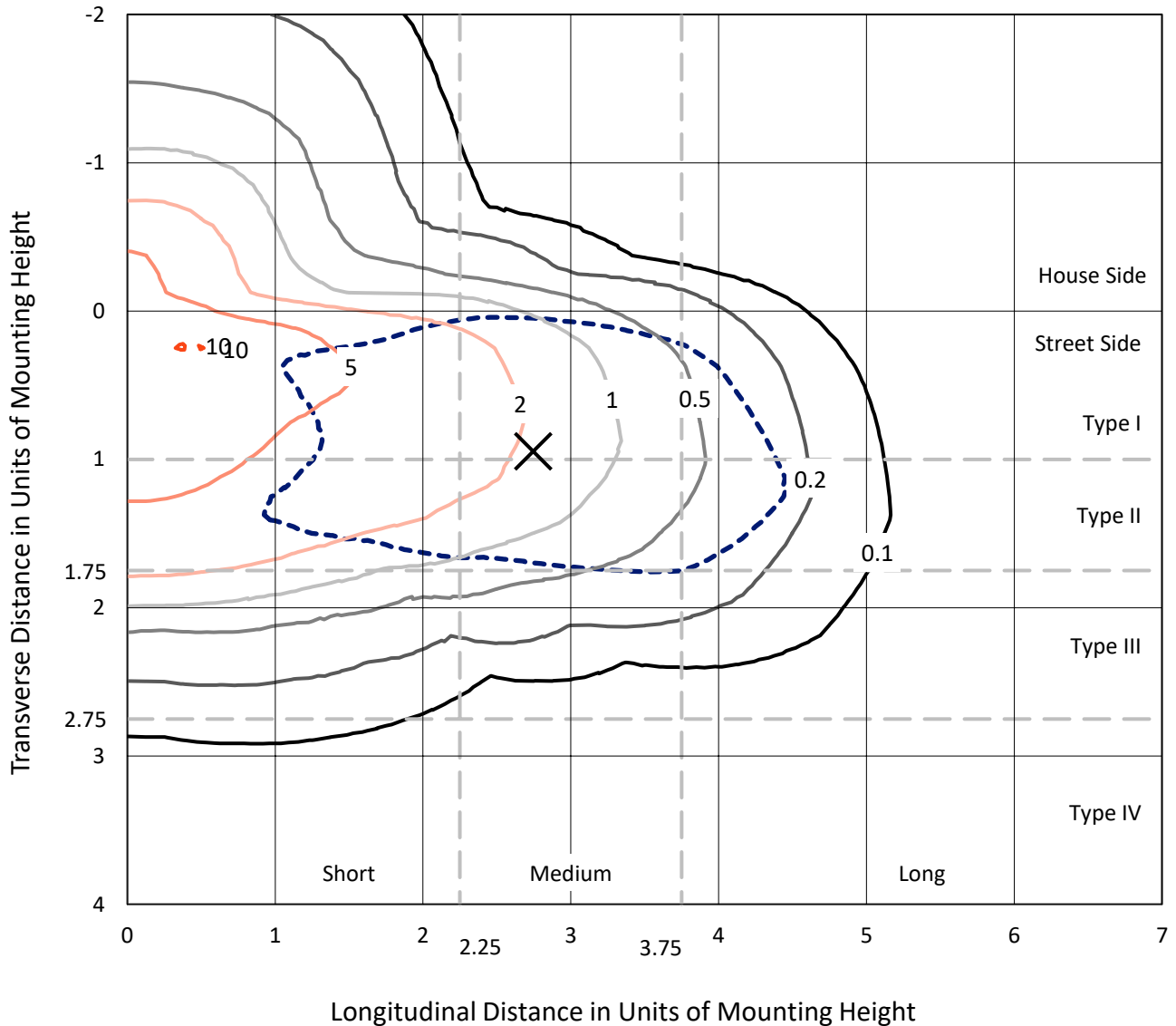
Input Watts (W): 309
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P459082
 CATALOG NUMBER: GALN-SA5D-735-U-T2

Iso-Footcandle Lines of Horizontal Illumination

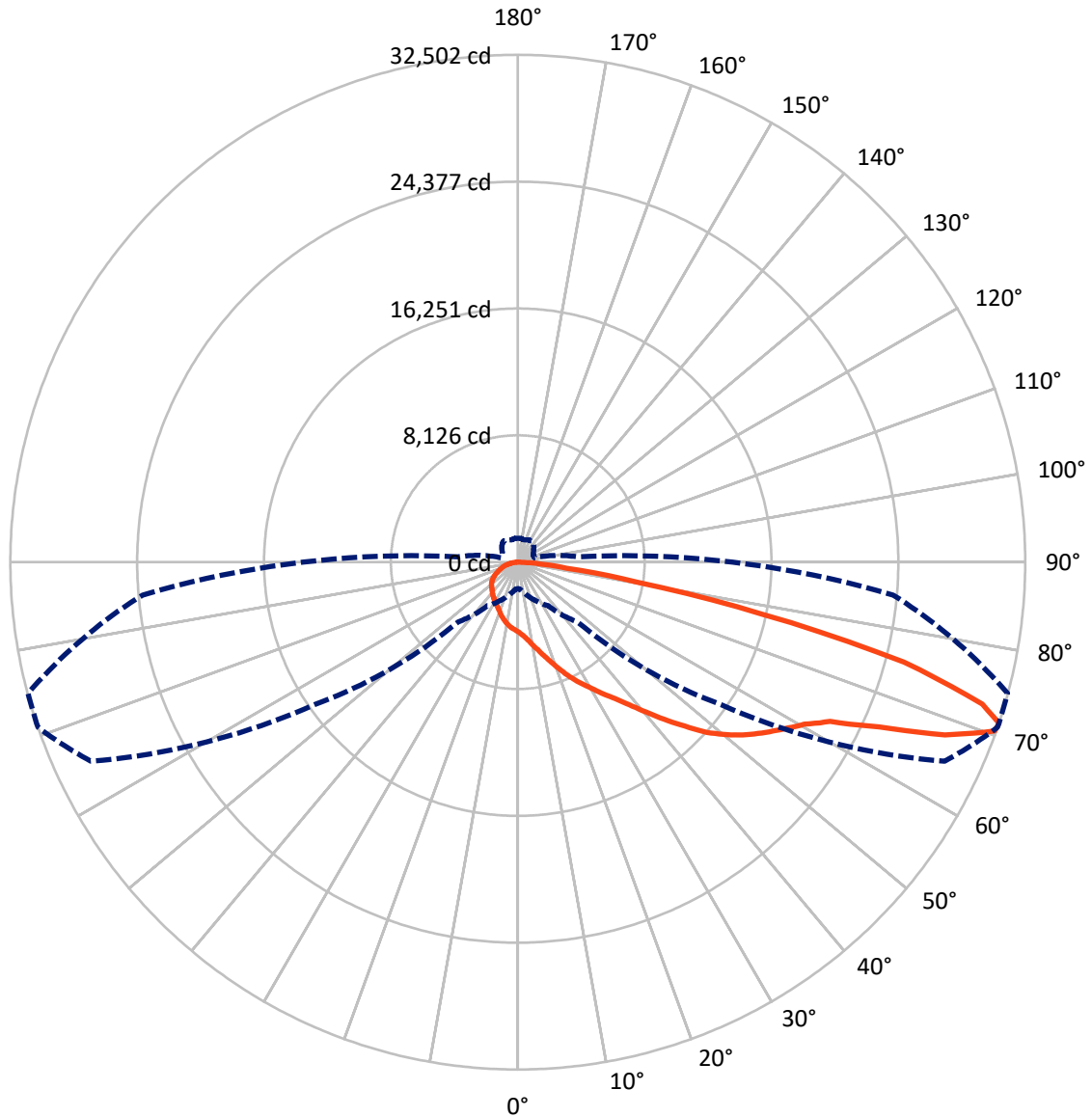
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.1 fc
 Type II - Medium - N/A

REPORT NUMBER: P459082
CATALOG NUMBER: GALN-SA5D-735-U-T2

Luminous Intensity Polar Plot



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

REPORT NUMBER: P459082

CATALOG NUMBER: GALN-SA5D-735-U-T2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6527.6	0.0	6527.6
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	29767.4	0.0	29767.4
	% Fixture	82.0	0.0	82.0
Total	Lumens	36295.0	0.0	36295.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	447.3	1.2
10°-20°	1453.1	4.0
20°-30°	2539.4	7.0
30°-40°	3777.1	10.4
40°-50°	5565.1	15.3
50°-60°	7791.2	21.5
60°-70°	8714.2	24.0
70°-80°	5323.0	14.7
80°-90°	684.7	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°	36295.0	100.0
0°-180°	36295.0	100.0

Coefficient of Utilization



REPORT NUMBER: P459082

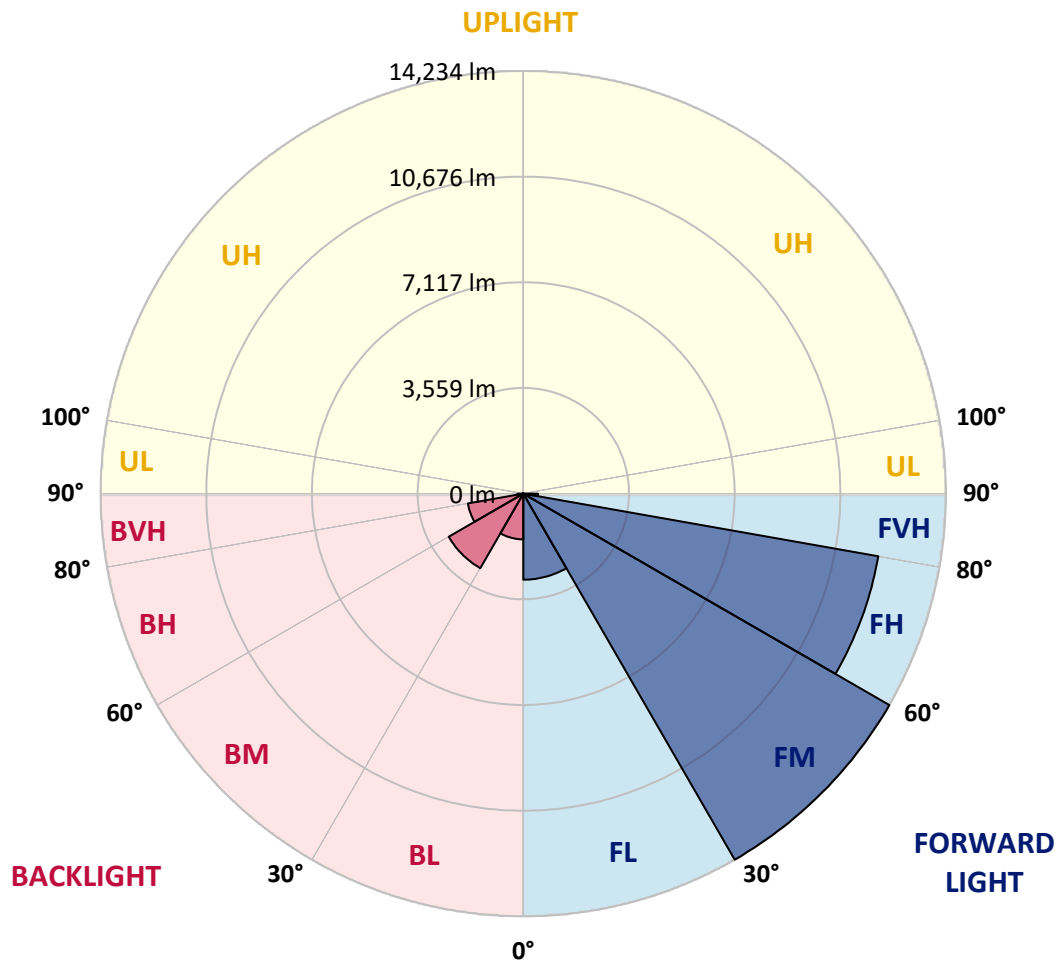
CATALOG NUMBER: GALN-SA5D-735-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2900.0	8.0			
FM (30°-60°)	14234.2	39.2			
FH (60°-80°)	12140.6	33.4			G5
FVH (80°-90°)	492.7	1.4			G3/500
BL (0°-30°)	1539.8	4.2	B3/2500		
BM (30°-60°)	2899.1	8.0	B3/5000		
BH (60°-80°)	1896.5	5.2	B3/2500		G3/2500
BVH (80°-90°)	192.0	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-G5

Type II Medium





REPORT NUMBER: P459082

CATALOG NUMBER: GALN-SA5D-735-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	4454.5	4454.5	4454.5	4454.5	4454.5	4454.5	4454.5	4454.5	4454.5	4454.5	4454.5
2.5°	4945.2	4921.3	4923.3	4889.4	4845.5	4797.6	4729.8	4669.9	4622.1	4594.1	4512.3
5°	5479.8	5455.9	5426.0	5352.2	5320.3	5202.6	5052.9	4917.3	4813.6	4755.7	4592.1
7.5°	5912.7	5906.7	5898.8	5856.9	5775.1	5611.5	5483.8	5248.4	5094.8	4985.1	4705.8
10°	6180.0	6190.0	6196.0	6204.0	6170.1	6084.3	5908.7	5611.5	5416.0	5276.4	4853.5
12.5°	6315.7	6325.7	6359.6	6433.4	6479.3	6469.3	6325.7	6034.4	5765.1	5581.6	5011.1
15°	6399.5	6415.4	6475.3	6573.0	6726.6	6824.4	6754.6	6485.3	6190.0	5972.6	5198.6
17.5°	6491.2	6509.2	6575.0	6714.7	6916.1	7127.6	7203.4	6972.0	6650.8	6391.5	5408.0
20°	6543.1	6567.0	6660.8	6844.3	7079.7	7386.9	7638.3	7516.6	7165.5	6878.2	5649.4
22.5°	6626.9	6646.8	6726.6	6922.1	7203.4	7588.4	8073.1	8047.2	7738.0	7367.0	5914.7
25°	6854.3	6886.2	6926.1	7043.8	7315.1	7793.9	8434.2	8613.8	8292.6	7877.7	6158.1
27.5°	7283.2	7309.1	7307.1	7323.1	7476.7	7971.4	8747.4	9174.3	8843.2	8394.3	6393.5
30°	7771.9	7781.9	7789.9	7754.0	7787.9	8152.9	9034.7	9728.9	9397.7	8924.9	6599.0
32.5°	8366.4	8386.3	8318.5	8226.8	8198.8	8422.2	9272.1	10283.4	10054.0	9463.6	6802.4
35°	9068.6	9120.4	8982.8	8821.2	8707.5	8809.2	9591.2	10850.0	10726.3	10151.8	7071.7
37.5°	9870.5	9934.3	9806.7	9489.5	9327.9	9355.8	10008.2	11550.2	11576.1	10935.8	7472.7
40°	10526.8	10610.6	10614.6	10165.7	9920.4	9952.3	10536.8	12304.2	12601.5	11905.3	7945.5
42.5°	10959.7	11041.5	11127.3	10863.9	10606.6	10788.1	11153.2	13122.1	13754.5	13082.2	8605.8
45°	11434.5	11508.3	11556.2	11436.5	11292.8	11763.6	11897.3	13991.9	14983.3	14396.8	9327.9
47.5°	11985.0	12066.8	12112.7	11999.0	11945.1	12619.4	12699.2	14803.8	16295.9	15673.5	10125.8
50°	12719.2	12781.0	12757.1	12685.2	12673.3	13275.7	13469.2	15563.8	17379.1	17048.0	10953.7
52.5°	13632.8	13706.6	13732.5	13630.8	13584.9	13744.5	14089.6	16256.0	18364.6	18228.9	11837.4
55°	14185.4	14303.1	14698.0	14857.6	14967.3	14350.9	14757.9	17020.0	19248.3	19473.7	12787.0
57.5°	13477.2	13628.8	14512.5	15310.5	16341.8	15867.0	15705.4	17818.0	20132.0	20680.6	13924.0
60°	11749.7	11783.6	12922.6	14392.8	16467.5	17816.0	17682.3	19086.7	21089.5	21897.4	15422.2
62.5°	8150.9	8222.8	9569.3	11915.2	14915.5	18518.2	21045.6	21277.0	22462.0	23718.7	17618.5
65°	4203.1	4109.4	5336.2	7488.7	11245.0	16850.5	23770.6	25304.6	25438.3	26567.4	20710.5
67.5°	2587.3	2629.2	3203.7	4372.7	6648.8	12246.4	23485.3	30225.9	29521.8	30064.4	23581.1
70°	1943.0	1994.8	2389.8	2992.3	4053.5	7001.9	18887.2	31418.9	32402.3	32262.7	24454.8
71°	1689.6	1743.5	2154.4	2723.0	3405.2	5404.0	15912.9	30170.1	32502.1	32478.1	24125.7
72.5°	1440.3	1474.2	1795.4	2306.0	2870.6	3788.2	11955.1	27058.1	31115.6	31911.6	22950.7
75°	1131.1	1157.0	1300.6	1759.5	2260.2	2326.0	6415.4	20285.6	25556.0	27072.1	19106.7
77.5°	921.6	939.6	1013.4	1306.6	1743.5	1647.7	3365.3	13203.9	16010.6	17536.7	11254.9
80°	732.1	752.1	795.9	885.7	1306.6	1175.0	1605.9	6690.7	7734.0	7718.1	4492.4
82.5°	568.5	574.5	626.4	650.3	893.7	833.8	869.8	2832.7	3137.9	3241.6	1621.8
85°	359.1	377.0	554.6	498.7	534.6	488.7	428.9	1125.1	1386.4	1366.5	648.3
87.5°	109.7	115.7	187.5	211.5	237.4	213.4	157.6	331.1	405.0	438.9	161.6
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: P459082
 CATALOG NUMBER: GALN-SA5D-735-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4454.5	4454.5	4454.5	4454.5	4454.5	4454.5	4454.5	4454.5	4454.5	4454.5	4454.5
2.5°	4480.4	4458.5	4380.7	4316.9	4257.0	4191.2	4135.3	4119.4	4105.4	4099.4	4097.4
5°	4522.3	4456.5	4302.9	4177.2	4077.5	3985.7	3927.9	3901.9	3876.0	3876.0	3884.0
7.5°	4582.2	4462.5	4225.1	4037.6	3911.9	3826.1	3784.2	3780.2	3786.2	3792.2	3794.2
10°	4648.0	4458.5	4111.4	3878.0	3766.3	3726.4	3728.4	3762.3	3794.2	3818.1	3822.1
12.5°	4711.8	4434.5	3977.7	3728.4	3656.6	3664.5	3720.4	3796.2	3858.0	3891.9	3893.9
15°	4783.6	4396.6	3816.1	3586.7	3562.8	3624.6	3728.4	3844.1	3937.8	3993.7	3999.7
17.5°	4843.5	4332.8	3646.6	3449.1	3479.0	3592.7	3736.4	3886.0	3999.7	4069.5	4081.5
20°	4911.3	4251.0	3471.0	3317.4	3403.2	3556.8	3720.4	3882.0	3999.7	4067.5	4083.5
22.5°	4965.2	4135.3	3303.5	3209.7	3335.4	3512.9	3666.5	3796.2	3891.9	3927.9	3951.8
25°	4987.1	3989.7	3145.9	3121.9	3281.5	3441.1	3544.8	3618.7	3648.6	3644.6	3654.6
27.5°	4975.2	3822.1	3010.2	3052.1	3213.7	3329.4	3381.3	3375.3	3321.4	3271.6	3295.5
30°	4925.3	3622.6	2896.5	2980.3	3125.9	3189.8	3181.8	3104.0	3002.2	2908.5	2914.5
32.5°	4835.5	3407.2	2790.8	2898.5	3002.2	3030.2	2976.3	2874.6	2729.0	2607.3	2589.3
35°	4759.7	3201.7	2697.0	2804.8	2878.6	2864.6	2812.7	2681.1	2549.4	2441.7	2423.7
37.5°	4747.7	3026.2	2607.3	2699.0	2740.9	2721.0	2657.1	2545.4	2497.5	2415.8	2405.8
40°	4811.6	2902.5	2515.5	2587.3	2607.3	2591.3	2521.5	2457.7	2501.5	2481.6	2481.6
42.5°	4985.1	2836.7	2433.7	2475.6	2491.6	2503.5	2453.7	2399.8	2453.7	2361.9	2332.0
45°	5260.4	2838.7	2359.9	2365.9	2413.8	2455.7	2421.7	2342.0	2314.0	2130.5	2094.6
47.5°	5665.4	2906.5	2300.1	2262.2	2347.9	2417.8	2369.9	2254.2	2130.5	2008.8	1986.9
50°	6138.1	3028.2	2246.2	2154.4	2260.2	2369.9	2334.0	2198.3	2070.7	1996.8	1982.9
52.5°	6662.8	3181.8	2180.4	2034.7	2152.4	2347.9	2342.0	2190.3	2014.8	1964.9	1953.0
55°	7311.1	3333.4	2098.6	1895.1	2056.7	2330.0	2320.0	2124.5	2002.8	1966.9	1962.9
57.5°	8065.2	3552.8	1980.9	1753.5	1947.0	2256.2	2234.2	2084.6	1962.9	1937.0	1935.0
60°	9280.0	3893.9	1813.3	1623.8	1835.3	2126.5	2154.4	2016.8	1899.1	1893.1	1891.1
62.5°	10877.9	4372.7	1639.8	1490.2	1705.6	1958.9	2038.7	1925.0	1831.3	1861.2	1865.2
65°	13084.2	4775.7	1460.2	1376.4	1562.0	1797.4	1929.0	1839.2	1755.5	1813.3	1813.3
67.5°	14522.5	4783.6	1296.7	1258.7	1416.3	1661.7	1813.3	1737.5	1657.7	1755.5	1759.5
70°	14223.3	4191.2	1161.0	1135.1	1274.7	1516.1	1685.6	1625.8	1534.0	1621.8	1589.9
71°	13740.5	3862.0	1107.1	1087.2	1218.9	1446.3	1625.8	1575.9	1484.2	1542.0	1524.1
72.5°	12970.5	3353.3	1019.4	1023.4	1135.1	1358.5	1542.0	1490.2	1398.4	1430.3	1424.3
75°	10963.7	2928.4	871.7	889.7	975.5	1208.9	1374.5	1334.6	1240.8	1240.8	1234.8
77.5°	6854.3	2046.7	724.1	734.1	827.9	1035.3	1180.9	1147.0	1057.3	1027.3	1019.4
80°	2557.4	1057.3	566.5	578.5	636.4	815.9	977.5	945.6	853.8	819.9	788.0
82.5°	967.5	530.6	416.9	406.9	468.8	622.4	766.0	728.1	656.3	574.5	550.6
85°	365.1	263.3	255.3	247.4	275.3	369.0	474.8	466.8	391.0	333.1	327.2
87.5°	95.8	85.8	99.7	73.8	77.8	69.8	71.8	29.9	14.0	6.0	4.0
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)