

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: P454651

Luminaire Tested: **GALN-SA5D-730-U-T3R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P454651  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA5D-730-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 36105 lumens  
Efficiency: N/A  
Efficacy: 116.8 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G5

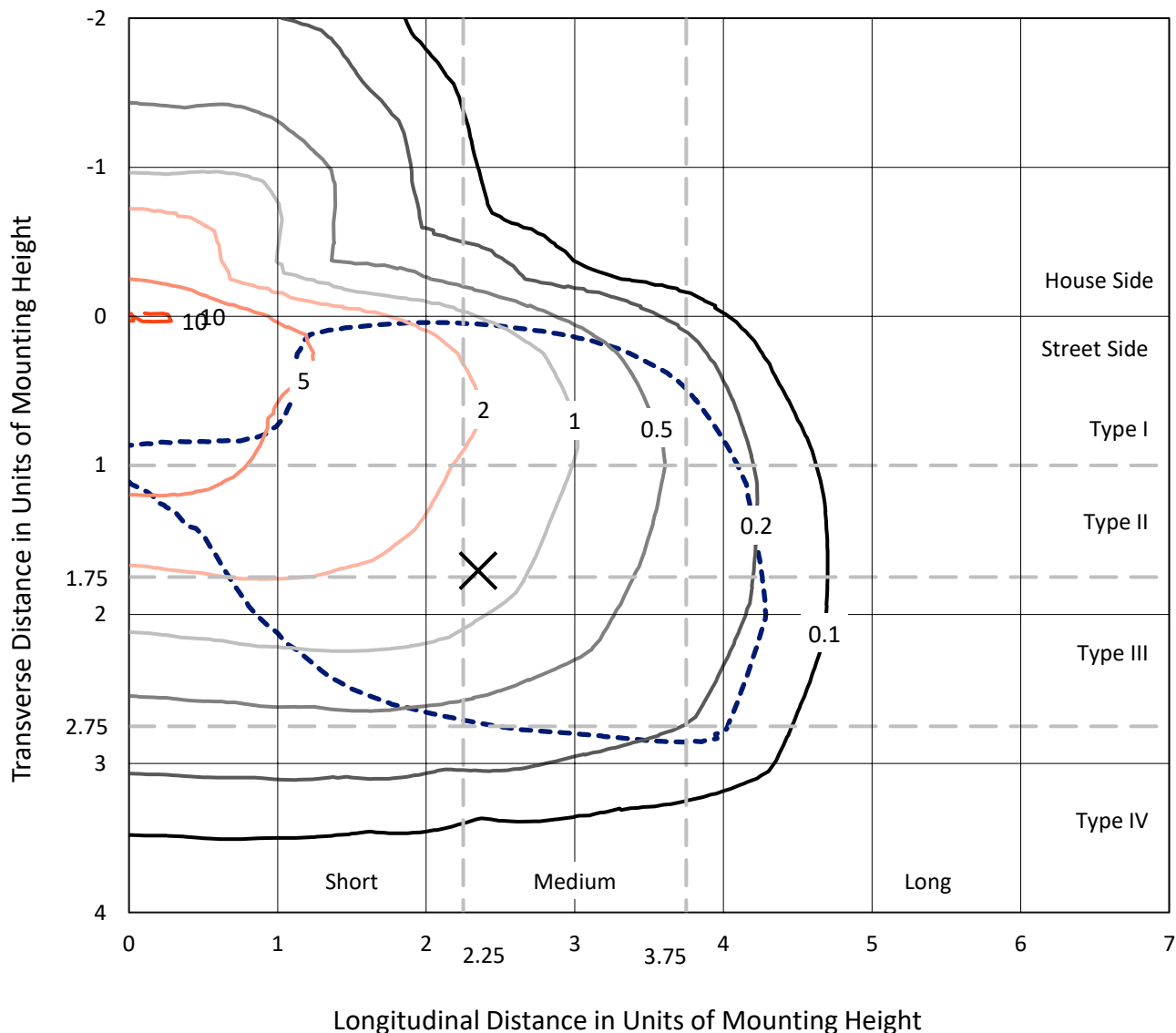
Input Watts (W): 309  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

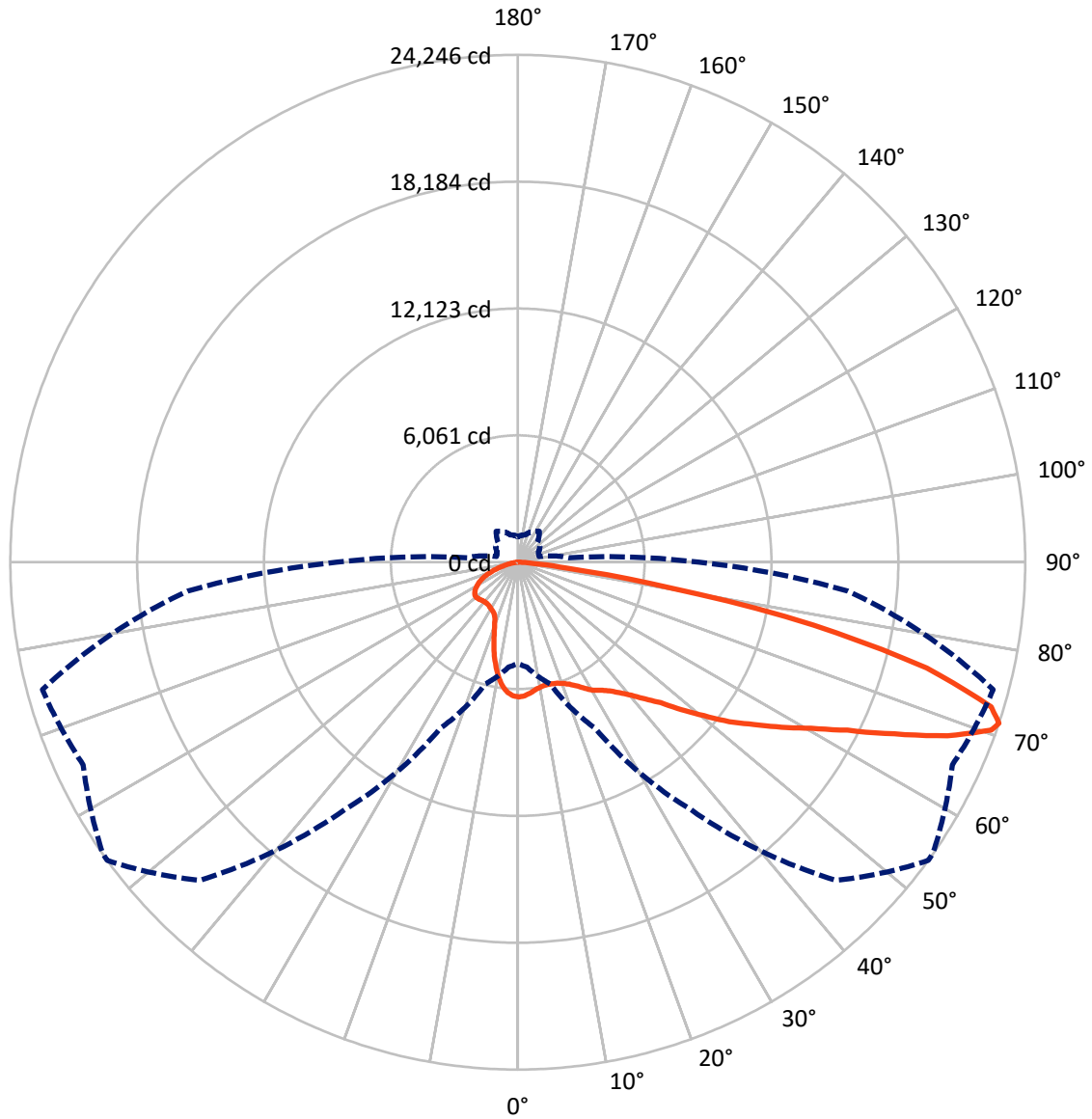
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.4 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6518.5	0.0	6518.5
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	29586.5	0.0	29586.5
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	36105.0	0.0	36105.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	574.1	1.6
10°-20°	1515.8	4.2
20°-30°	2523.8	7.0
30°-40°	3731.9	10.3
40°-50°	5256.6	14.6
50°-60°	7038.8	19.5
60°-70°	8871.8	24.6
70°-80°	6059.4	16.8
80°-90°	532.9	1.5
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°	36105.0	100.0
0°-180°	36105.0	100.0



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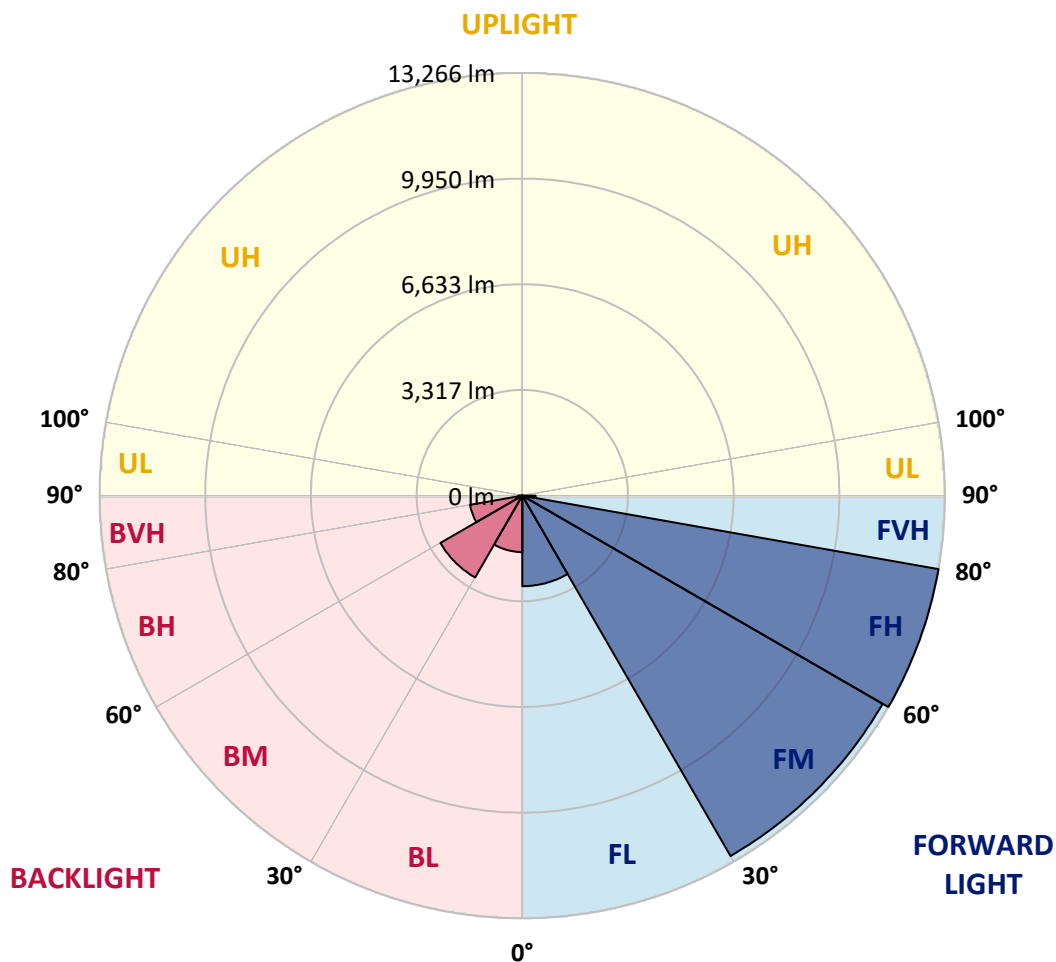
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2842.1	7.9			
FM	(30°-60°)	13061.5	36.2			
FH	(60°-80°)	13266.4	36.7			G5
FVH	(80°-90°)	416.5	1.2			G3/500
BL	(0°-30°)	1771.6	4.9	B3/2500		
BM	(30°-60°)	2965.7	8.2	B3/5000		
BH	(60°-80°)	1664.8	4.6	B3/2500		G3/2500
BVH	(80°-90°)	116.4	0.3			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 IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	6441.7	6441.7	6441.7	6441.7	6441.7	6441.7	6441.7	6441.7	6441.7	6441.7	6441.7
2.5°	6223.2	6252.5	6260.3	6279.8	6320.8	6353.9	6387.1	6383.2	6430.0	6449.5	6467.0
5°	5946.3	5954.1	5983.4	6022.4	6094.5	6186.2	6275.9	6277.8	6392.9	6484.6	6529.4
7.5°	5743.5	5768.8	5788.3	5829.3	5905.3	6004.8	6147.2	6158.9	6363.7	6545.0	6640.6
10°	5610.9	5640.1	5661.6	5712.3	5788.3	5899.5	6053.6	6075.0	6342.2	6640.6	6808.3
12.5°	5489.9	5519.2	5538.7	5605.0	5704.5	5841.0	6014.6	6039.9	6350.0	6751.8	6991.6
15°	5564.1	5587.5	5579.7	5599.2	5665.5	5821.5	6030.2	6055.5	6379.3	6859.0	7173.0
17.5°	5893.6	5913.1	5848.8	5774.7	5743.5	5858.5	6078.9	6106.2	6437.8	6970.2	7358.3
20°	6379.3	6431.9	6291.5	6125.7	5975.6	5991.2	6180.3	6209.6	6519.7	7081.3	7547.5
22.5°	7011.1	7050.1	6878.5	6605.5	6328.6	6186.2	6332.5	6350.0	6642.5	7225.7	7754.2
25°	7754.2	7777.6	7539.7	7188.6	6788.8	6519.7	6541.1	6572.3	6845.4	7389.5	7937.5
27.5°	8475.8	8549.9	8274.9	7845.8	7319.3	6870.7	6827.8	6847.3	7065.7	7481.1	8064.3
30°	9331.9	9326.1	9035.5	8538.2	7863.4	7253.0	7098.9	7095.0	7184.7	7526.0	8155.9
32.5°	10014.5	10094.5	9809.7	9267.6	8485.5	7648.9	7286.1	7278.3	7276.4	7604.0	8292.5
35°	10790.7	10802.4	10541.1	9995.0	9158.4	8146.2	7547.5	7508.5	7463.6	7771.7	8477.7
37.5°	11485.0	11539.6	11299.7	10687.4	9819.5	8663.0	7906.3	7880.9	7744.4	8062.3	8774.2
40°	12027.2	12068.1	11923.8	11340.7	10470.9	9220.8	8362.7	8315.9	8150.1	8538.2	9170.1
42.5°	12204.6	12288.5	12345.1	12058.4	11219.8	9881.9	8924.3	8865.8	8739.1	9259.8	9626.4
45°	12218.3	12350.9	12649.3	12663.0	11972.6	10673.7	9579.6	9538.7	9528.9	10184.2	10268.1
47.5°	12114.9	12249.5	12750.7	13021.8	12643.5	11473.3	10525.5	10461.1	10467.0	11327.0	10987.7
50°	11865.3	12025.2	12633.7	13251.9	13168.1	12304.1	11524.0	11502.6	11623.5	12631.8	11734.6
52.5°	11395.3	11588.4	12512.8	13396.2	13558.1	13019.9	12659.1	12598.6	12904.8	14047.6	12551.8
55°	10094.5	10385.1	12070.1	13476.2	13928.7	13704.4	13681.0	13790.2	14195.8	15592.2	13450.9
57.5°	9415.8	9634.2	11108.6	13489.9	14396.7	14500.1	14874.5	14901.8	15611.7	17232.4	14466.9
60°	9045.2	9238.3	10582.0	13400.1	15050.1	15485.0	16095.4	16192.9	16994.5	19009.1	15520.1
62.5°	8721.5	8887.3	10266.1	13090.1	15787.3	16945.7	17677.0	17723.8	18564.4	20971.0	16559.5
65°	7959.0	8148.1	9630.3	12780.0	16423.0	18771.1	19775.5	19720.9	20235.8	22663.8	17210.9
67.5°	6931.2	7171.1	8442.6	11709.3	16737.0	20766.2	22139.2	22070.9	21885.7	23773.5	17398.2
70°	5618.7	5747.4	6923.4	9858.5	15483.0	21813.5	24005.6	23933.4	22907.6	23919.8	16512.7
71°	4834.7	5035.5	6028.2	8756.6	14439.6	21493.7	24245.5	24226.0	22909.6	23516.1	15845.8
72.5°	3773.7	3896.6	4774.2	6784.9	12272.9	19676.0	23652.6	23726.7	22412.2	22394.7	14470.8
75°	2387.1	2441.7	2995.6	3994.1	6734.2	13934.5	20190.9	20391.8	19900.3	18330.4	10761.5
77.5°	1386.6	1456.8	1794.2	2353.9	2909.8	7563.1	14447.4	14665.9	13827.3	10092.5	4405.6
80°	807.4	885.4	1181.8	1367.1	1335.9	2806.4	7356.3	7728.8	5987.3	2549.0	1236.5
82.5°	448.6	501.2	830.8	832.8	711.8	916.6	2314.9	2422.2	1708.4	1027.8	505.1
85°	325.7	368.6	536.3	485.6	341.3	393.9	805.5	844.5	690.4	433.0	163.8
87.5°	115.1	163.8	294.5	234.0	93.6	81.9	232.1	189.2	175.5	120.9	37.1
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°	6441.7	6441.7	6441.7	6441.7	6441.7	6441.7	6441.7	6441.7	6441.7	6441.7	6441.7
2.5°	6476.8	6480.7	6461.2	6426.1	6391.0	6346.1	6295.4	6256.4	6238.8	6236.9	6234.9
5°	6547.0	6556.7	6482.6	6373.4	6252.5	6104.3	5977.5	5833.2	5796.1	5737.6	5755.2
7.5°	6660.1	6654.2	6508.0	6275.9	5993.1	5679.1	5413.9	5259.8	5099.9	5055.0	5057.0
10°	6822.0	6784.9	6508.0	6077.0	5605.0	5138.9	4768.4	4534.3	4407.6	4302.2	4263.2
12.5°	6993.6	6900.0	6445.6	5798.1	5105.7	4534.3	4136.5	3820.5	3738.6	3652.8	3654.8
15°	7157.4	7001.4	6322.7	5406.1	4567.5	3888.8	3502.6	3313.5	3288.1	3297.9	3295.9
17.5°	7305.6	7073.5	6135.5	4969.2	3939.5	3334.9	3130.1	3143.8	3212.1	3260.8	3266.7
20°	7455.8	7116.5	5856.6	4384.2	3346.6	2999.5	3007.3	3114.5	3217.9	3284.2	3294.0
22.5°	7598.2	7136.0	5529.0	3818.6	2917.6	2857.1	2972.2	3087.2	3188.7	3253.0	3262.8
25°	7691.8	7091.1	5064.8	3227.7	2706.9	2806.4	2927.3	3024.8	3110.6	3177.0	3192.6
27.5°	7717.1	6946.8	4489.5	2749.8	2609.4	2757.6	2868.8	2941.0	3007.3	3069.7	3081.4
30°	7703.5	6734.2	3857.6	2469.0	2552.9	2701.1	2786.9	2839.6	2919.5	2968.3	2978.0
32.5°	7682.0	6486.5	3198.4	2318.8	2506.1	2648.4	2699.1	2745.9	2744.0	2724.5	2738.1
35°	7689.8	6190.1	2664.0	2229.1	2465.1	2609.4	2652.3	2593.8	2426.1	2418.3	2410.5
37.5°	7730.8	5897.5	2275.9	2166.7	2443.7	2603.6	2627.0	2357.8	2209.6	2141.4	2123.8
40°	7836.1	5556.3	2020.5	2119.9	2441.7	2648.4	2511.9	2238.9	1954.1	1821.5	1811.8
42.5°	7976.5	5220.8	1864.4	2090.7	2465.1	2716.7	2465.1	2071.2	1761.1	1683.1	1671.4
45°	8185.2	4836.6	1778.6	2077.0	2500.2	2742.0	2449.5	1948.3	1683.1	1620.7	1620.7
47.5°	8421.2	4470.0	1731.8	2067.3	2545.1	2724.5	2311.0	1909.3	1646.0	1653.8	1690.9
50°	8655.2	4152.1	1696.7	2045.8	2584.1	2714.7	2254.5	1907.3	1655.8	1755.2	1821.5
52.5°	8926.3	3927.8	1653.8	2010.7	2584.1	2652.3	2236.9	1946.3	1683.1	1712.3	1741.6
55°	9253.9	3857.6	1599.2	1934.6	2537.3	2496.3	2227.2	2002.9	1702.6	1634.3	1646.0
57.5°	9686.9	3970.7	1546.5	1839.1	2430.0	2334.4	2223.3	2018.5	1657.7	1601.2	1589.5
60°	10190.0	4195.0	1530.9	1741.6	2283.7	2196.0	2199.9	1973.7	1595.3	1536.8	1546.5
62.5°	10543.0	4329.5	1521.2	1667.5	2123.8	2043.9	2143.3	1919.0	1568.0	1517.3	1527.0
65°	10543.0	4165.7	1431.5	1554.3	1917.1	1860.5	2075.1	1850.8	1532.9	1474.4	1464.6
67.5°	10143.2	3687.9	1295.0	1384.7	1688.9	1651.9	1979.5	1768.9	1480.2	1435.4	1412.0
70°	9101.8	2796.7	1123.3	1185.8	1400.3	1433.4	1856.6	1657.7	1392.5	1337.9	1302.8
71°	8643.5	2435.9	1051.2	1084.3	1289.1	1337.9	1798.1	1610.9	1353.5	1275.5	1213.1
72.5°	7760.0	2051.7	942.0	955.6	1101.9	1189.7	1675.3	1521.2	1279.4	1168.2	1098.0
75°	5895.6	1497.8	758.6	750.8	815.2	943.9	1417.8	1355.4	1121.4	971.2	930.3
77.5°	2547.0	815.2	567.5	573.4	553.9	715.7	1115.5	1164.3	961.5	789.9	752.8
80°	772.3	470.0	388.1	395.9	370.5	479.8	785.9	912.7	772.3	614.3	563.6
82.5°	395.9	280.8	265.2	261.3	236.0	271.1	475.9	624.1	551.9	384.2	339.3
85°	171.6	150.2	130.7	126.8	111.2	97.5	169.7	312.0	292.5	214.5	204.8
87.5°	42.9	39.0	25.4	23.4	13.7	2.0	0.0	0.0	0.0	0.0	0.0
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)