

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: P454761

Luminaire Tested: **GALN-SA5D-827-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454761
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-827-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28641 lumens
Efficiency: N/A
Efficacy: 92.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

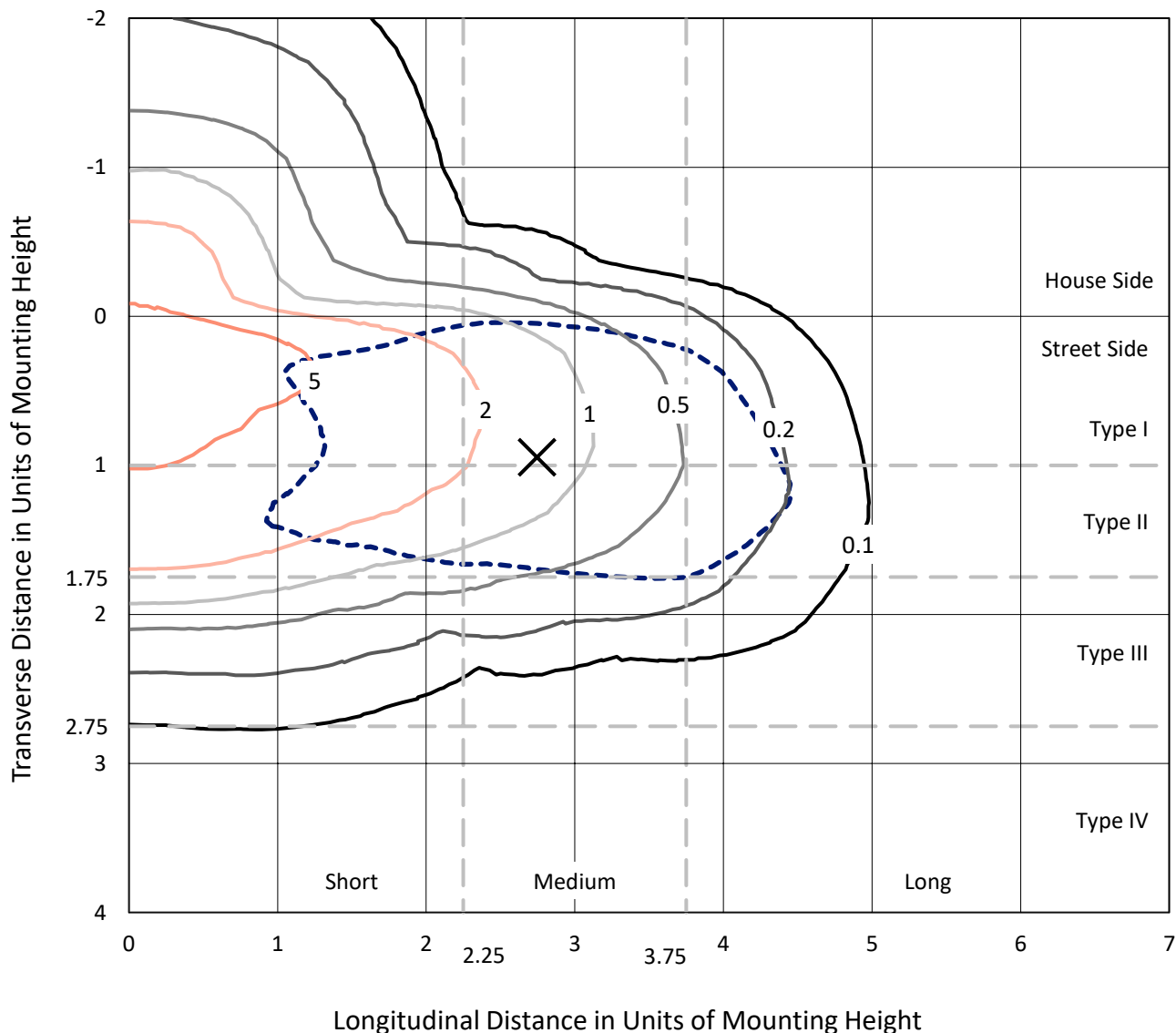
Input Watts (W): 309
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

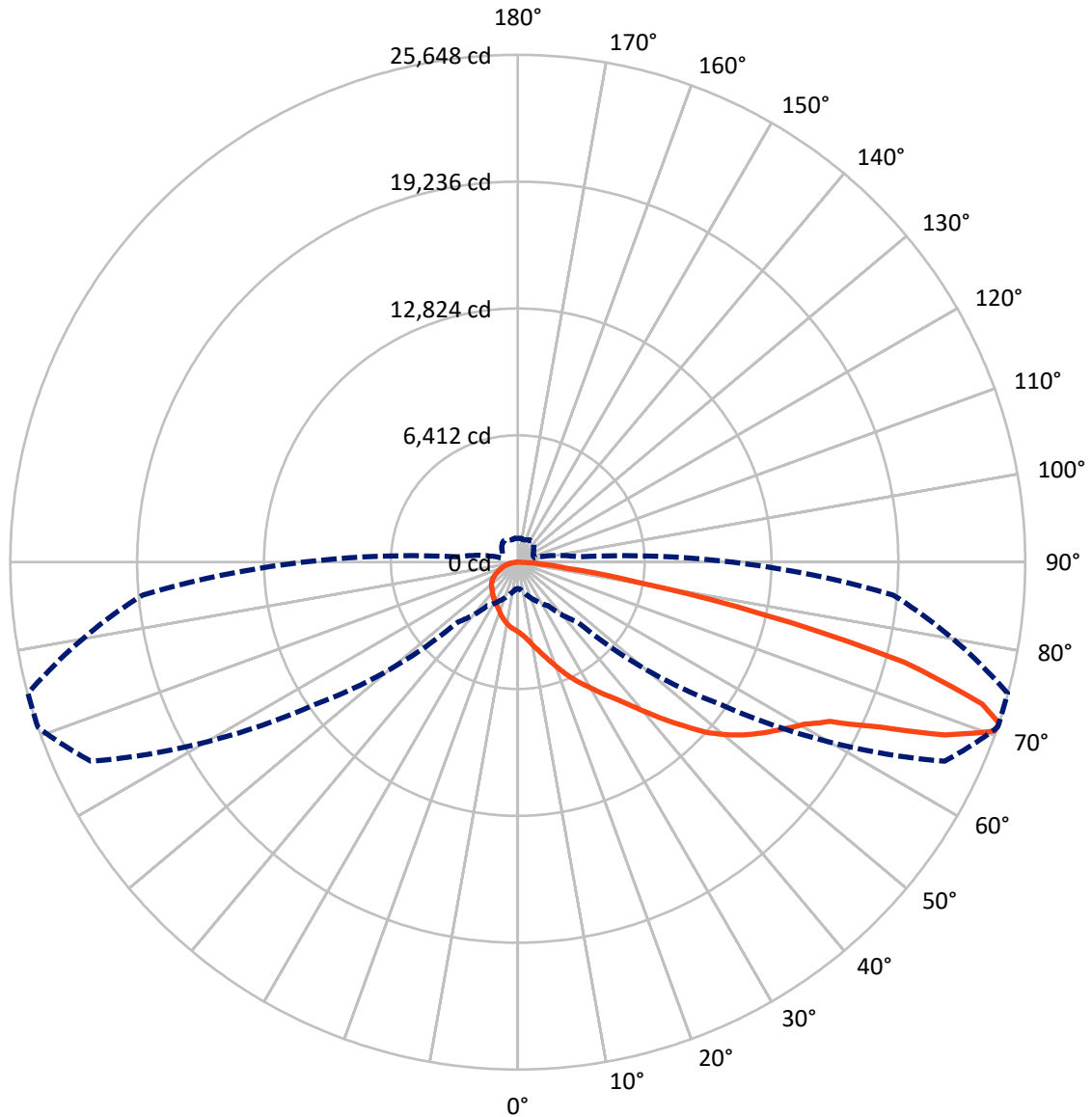
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5151.0	0.0	5151.0
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	23490.0	0.0	23490.0
	% Fixture	82.0	0.0	82.0
Total	Lumens	28641.0	0.0	28641.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	352.9	1.2
10°-20°	1146.7	4.0
20°-30°	2003.9	7.0
30°-40°	2980.6	10.4
40°-50°	4391.5	15.3
50°-60°	6148.1	21.5
60°-70°	6876.5	24.0
70°-80°	4200.4	14.7
80°-90°	540.3	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°	28641.0	100.0
0°-180°	28641.0	100.0

Coefficient of Utilization



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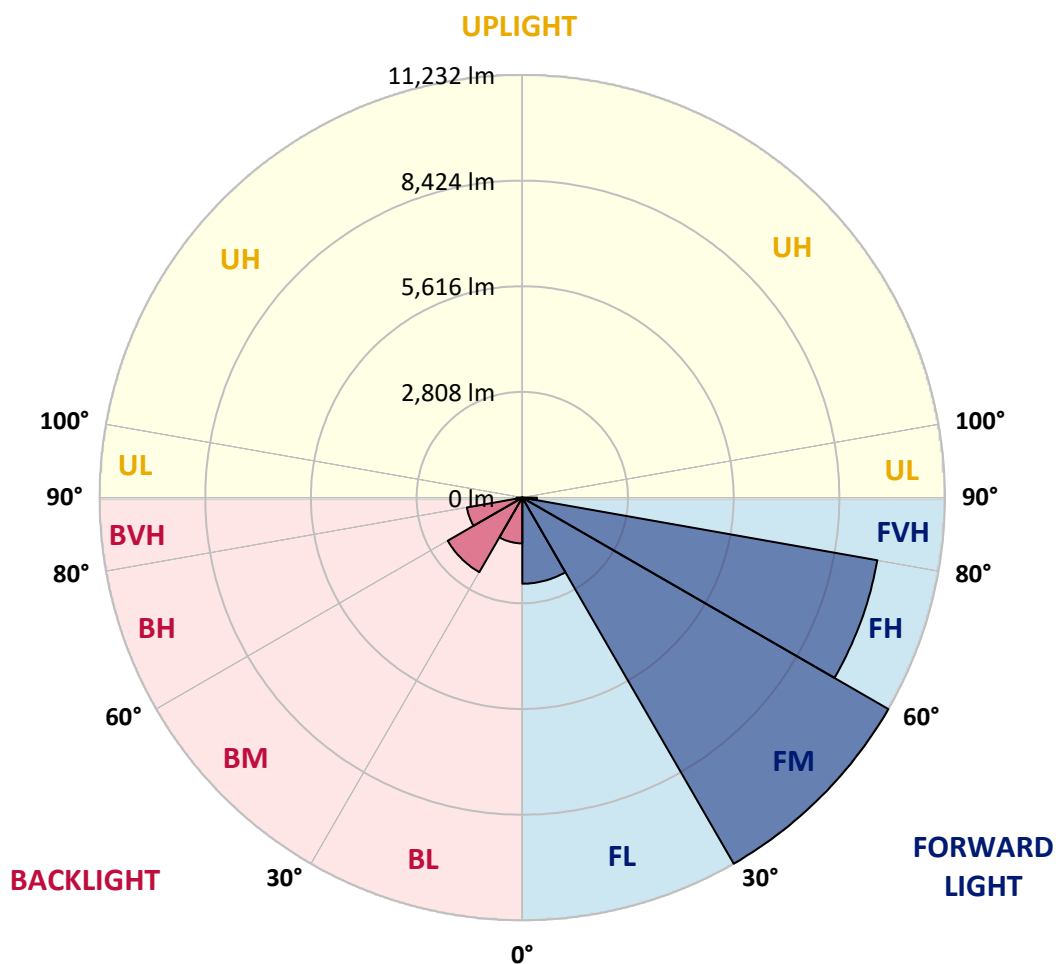
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2288.4	8.0			
FM	(30°-60°)	11232.4	39.2			
FH	(60°-80°)	9580.3	33.4			G4/12000
FVH	(80°-90°)	388.8	1.4			G3/500
BL	(0°-30°)	1215.1	4.2	B3/2500		
BM	(30°-60°)	2287.8	8.0	B2/2500		
BH	(60°-80°)	1496.6	5.2	B3/2500		G3/2500
BVH	(80°-90°)	151.5	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	3515.1	3515.1	3515.1	3515.1	3515.1	3515.1	3515.1	3515.1	3515.1	3515.1	3515.1
2.5°	3902.4	3883.5	3885.0	3858.3	3823.7	3785.9	3732.4	3685.1	3647.3	3625.3	3560.8
5°	4324.2	4305.4	4281.7	4223.5	4198.3	4105.4	3987.4	3880.3	3798.5	3752.8	3623.7
7.5°	4665.8	4661.1	4654.8	4621.8	4557.2	4428.1	4327.4	4141.6	4020.4	3933.8	3713.5
10°	4876.8	4884.6	4889.4	4895.7	4868.9	4801.2	4662.7	4428.1	4273.9	4163.7	3830.0
12.5°	4983.8	4991.7	5018.4	5076.7	5112.9	5105.0	4991.7	4761.9	4549.3	4404.5	3954.3
15°	5049.9	5062.5	5109.8	5186.9	5308.1	5385.2	5330.1	5117.6	4884.6	4713.1	4102.3
17.5°	5122.3	5136.5	5188.5	5298.7	5457.6	5624.5	5684.3	5501.7	5248.3	5043.6	4267.6
20°	5163.3	5182.2	5256.1	5401.0	5586.7	5829.1	6027.5	5931.5	5654.4	5427.7	4458.0
22.5°	5229.4	5245.1	5308.1	5462.4	5684.3	5988.1	6370.7	6350.2	6106.2	5813.4	4667.4
25°	5408.8	5434.0	5465.5	5558.4	5772.5	6150.3	6655.6	6797.3	6543.8	6216.4	4859.5
27.5°	5747.3	5767.8	5766.2	5778.8	5900.0	6290.4	6902.7	7239.6	6978.3	6624.1	5045.2
30°	6133.0	6140.8	6147.1	6118.8	6145.6	6433.6	7129.4	7677.2	7415.9	7042.8	5207.3
32.5°	6602.1	6617.8	6564.3	6491.9	6469.8	6646.1	7316.7	8114.8	7933.8	7467.9	5367.9
35°	7156.2	7197.1	7088.5	6961.0	6871.2	6951.5	7568.6	8561.9	8464.3	8010.9	5580.4
37.5°	7789.0	7839.4	7738.6	7488.3	7360.8	7382.8	7897.6	9114.4	9134.9	8629.6	5896.8
40°	8306.9	8373.0	8376.1	8022.0	7828.3	7853.5	8314.8	9709.5	9944.0	9394.6	6269.9
42.5°	8648.5	8713.0	8780.7	8572.9	8369.9	8513.1	8801.2	10354.9	10853.9	10323.4	6791.0
45°	9023.1	9081.4	9119.2	9024.7	8911.4	9282.9	9388.3	11041.2	11823.6	11360.8	7360.8
47.5°	9457.6	9522.1	9558.3	9468.6	9426.1	9958.2	10021.2	11681.9	12859.4	12368.2	7990.5
50°	10036.9	10085.7	10066.8	10010.1	10000.7	10476.1	10628.8	12281.7	13714.2	13452.8	8643.8
52.5°	10757.9	10816.1	10836.6	10756.3	10720.1	10846.0	11118.4	12827.9	14491.8	14384.7	9341.1
55°	11193.9	11286.8	11598.5	11724.4	11811.0	11324.6	11645.7	13430.8	15189.1	15367.0	10090.4
57.5°	10635.1	10754.7	11452.1	12081.7	12895.6	12520.9	12393.4	14060.5	15886.5	16319.4	10987.7
60°	9271.9	9298.6	10197.5	11357.6	12994.8	14058.9	13953.4	15061.6	16642.1	17279.6	12169.9
62.5°	6432.1	6488.7	7551.3	9402.5	11770.1	14613.0	16607.5	16790.1	17725.1	18716.9	13903.1
65°	3316.8	3242.8	4210.9	5909.4	8873.6	13297.0	18757.8	19968.3	20073.8	20964.8	16343.0
67.5°	2041.7	2074.8	2528.1	3450.6	5246.7	9663.8	18532.7	23851.8	23296.1	23724.3	18608.2
70°	1533.2	1574.2	1885.9	2361.3	3198.7	5525.3	14904.2	24793.2	25569.2	25459.0	19297.7
71°	1333.3	1375.8	1700.1	2148.7	2687.1	4264.4	12557.1	23807.7	25647.9	25629.0	19038.0
72.5°	1136.5	1163.3	1416.8	1819.7	2265.2	2989.3	9434.0	21352.0	24553.9	25182.0	18110.8
75°	892.6	913.0	1026.4	1388.4	1783.5	1835.5	5062.5	16007.7	20166.7	21363.0	15077.4
77.5°	727.3	741.4	799.7	1031.1	1375.8	1300.3	2655.6	10419.4	12634.3	13838.5	8881.5
80°	577.7	593.5	628.1	698.9	1031.1	927.2	1267.2	5279.8	6103.1	6090.5	3545.0
82.5°	448.6	453.4	494.3	513.2	705.2	658.0	686.3	2235.3	2476.2	2558.0	1279.8
85°	283.4	297.5	437.6	393.5	421.9	385.7	338.4	887.8	1094.0	1078.3	511.6
87.5°	86.6	91.3	148.0	166.9	187.3	168.4	124.4	261.3	319.6	346.3	127.5
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°	3515.1	3515.1	3515.1	3515.1	3515.1	3515.1	3515.1	3515.1	3515.1	3515.1	3515.1
2.5°	3535.6	3518.3	3456.9	3406.5	3359.3	3307.3	3263.3	3250.7	3239.6	3234.9	3233.3
5°	3568.6	3516.7	3395.5	3296.3	3217.6	3145.2	3099.5	3079.1	3058.6	3058.6	3064.9
7.5°	3615.9	3521.4	3334.1	3186.1	3086.9	3019.3	2986.2	2983.0	2987.8	2992.5	2994.1
10°	3667.8	3518.3	3244.4	3060.2	2972.0	2940.5	2942.1	2968.9	2994.1	3013.0	3016.1
12.5°	3718.2	3499.4	3138.9	2942.1	2885.5	2891.7	2935.8	2995.6	3044.4	3071.2	3072.8
15°	3774.9	3469.5	3011.4	2830.4	2811.5	2860.3	2942.1	3033.4	3107.4	3151.5	3156.2
17.5°	3822.1	3419.1	2877.6	2721.7	2745.3	2835.1	2948.4	3066.5	3156.2	3211.3	3220.7
20°	3875.6	3354.6	2739.1	2617.8	2685.5	2806.7	2935.8	3063.3	3156.2	3209.7	3222.3
22.5°	3918.1	3263.3	2606.8	2532.8	2632.0	2772.1	2893.3	2995.6	3071.2	3099.5	3118.4
25°	3935.4	3148.3	2482.5	2463.6	2589.5	2715.4	2797.3	2855.5	2879.2	2876.0	2883.9
27.5°	3926.0	3016.1	2375.4	2408.5	2536.0	2627.3	2668.2	2663.5	2621.0	2581.6	2600.5
30°	3886.6	2858.7	2285.7	2351.8	2466.7	2517.1	2510.8	2449.4	2369.1	2295.1	2299.9
32.5°	3815.8	2688.7	2202.3	2287.3	2369.1	2391.2	2348.7	2268.4	2153.5	2057.4	2043.3
35°	3756.0	2526.5	2128.3	2213.3	2271.5	2260.5	2219.6	2115.7	2011.8	1926.8	1912.6
37.5°	3746.5	2388.0	2057.4	2129.8	2162.9	2147.2	2096.8	2008.6	1970.9	1906.3	1898.4
40°	3796.9	2290.4	1985.0	2041.7	2057.4	2044.8	1989.7	1939.4	1974.0	1958.3	1958.3
42.5°	3933.8	2238.5	1920.5	1953.5	1966.1	1975.6	1936.2	1893.7	1936.2	1863.8	1840.2
45°	4151.1	2240.0	1862.2	1867.0	1904.7	1937.8	1911.0	1848.1	1826.0	1681.2	1652.9
47.5°	4470.6	2293.6	1815.0	1785.1	1852.8	1907.9	1870.1	1778.8	1681.2	1585.2	1567.9
50°	4843.7	2389.6	1772.5	1700.1	1783.5	1870.1	1841.8	1734.7	1634.0	1575.7	1564.7
52.5°	5257.7	2510.8	1720.6	1605.7	1698.5	1852.8	1848.1	1728.4	1589.9	1550.6	1541.1
55°	5769.3	2630.4	1656.0	1495.5	1623.0	1838.6	1830.8	1676.5	1580.5	1552.1	1549.0
57.5°	6364.4	2803.6	1563.1	1383.7	1536.4	1780.4	1763.1	1645.0	1549.0	1528.5	1526.9
60°	7323.0	3072.8	1430.9	1281.4	1448.2	1678.1	1700.1	1591.5	1498.6	1493.9	1492.3
62.5°	8583.9	3450.6	1294.0	1175.9	1345.9	1545.8	1608.8	1519.1	1445.1	1468.7	1471.8
65°	10325.0	3768.6	1152.3	1086.2	1232.6	1418.3	1522.2	1451.4	1385.3	1430.9	1430.9
67.5°	11459.9	3774.9	1023.2	993.3	1117.7	1311.3	1430.9	1371.1	1308.1	1385.3	1388.4
70°	11223.8	3307.3	916.2	895.7	1005.9	1196.4	1330.2	1282.9	1210.5	1279.8	1254.6
71°	10842.9	3047.6	873.7	857.9	961.8	1141.3	1282.9	1243.6	1171.2	1216.8	1202.7
72.5°	10235.2	2646.2	804.4	807.5	895.7	1072.0	1216.8	1175.9	1103.5	1128.7	1124.0
75°	8651.6	2310.9	687.9	702.1	769.8	953.9	1084.6	1053.1	979.1	979.1	974.4
77.5°	5408.8	1615.1	571.4	579.3	653.3	817.0	931.9	905.1	834.3	810.7	804.4
80°	2018.1	834.3	447.1	456.5	502.2	643.8	771.3	746.2	673.7	647.0	621.8
82.5°	763.5	418.7	329.0	321.1	369.9	491.1	604.5	574.6	517.9	453.4	434.5
85°	288.1	207.8	201.5	195.2	217.2	291.2	374.7	368.4	308.5	262.9	258.2
87.5°	75.6	67.7	78.7	58.2	61.4	55.1	56.7	23.6	11.0	4.7	3.1
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)