

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: P651857

Luminaire Tested: **GALN-SA4A-840-U-T2R-GRSWH**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651857  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4A-840-U-T2R-GRSWH  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH WHITE GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13369.4 lumens  
Efficiency: N/A  
Efficacy: 110.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

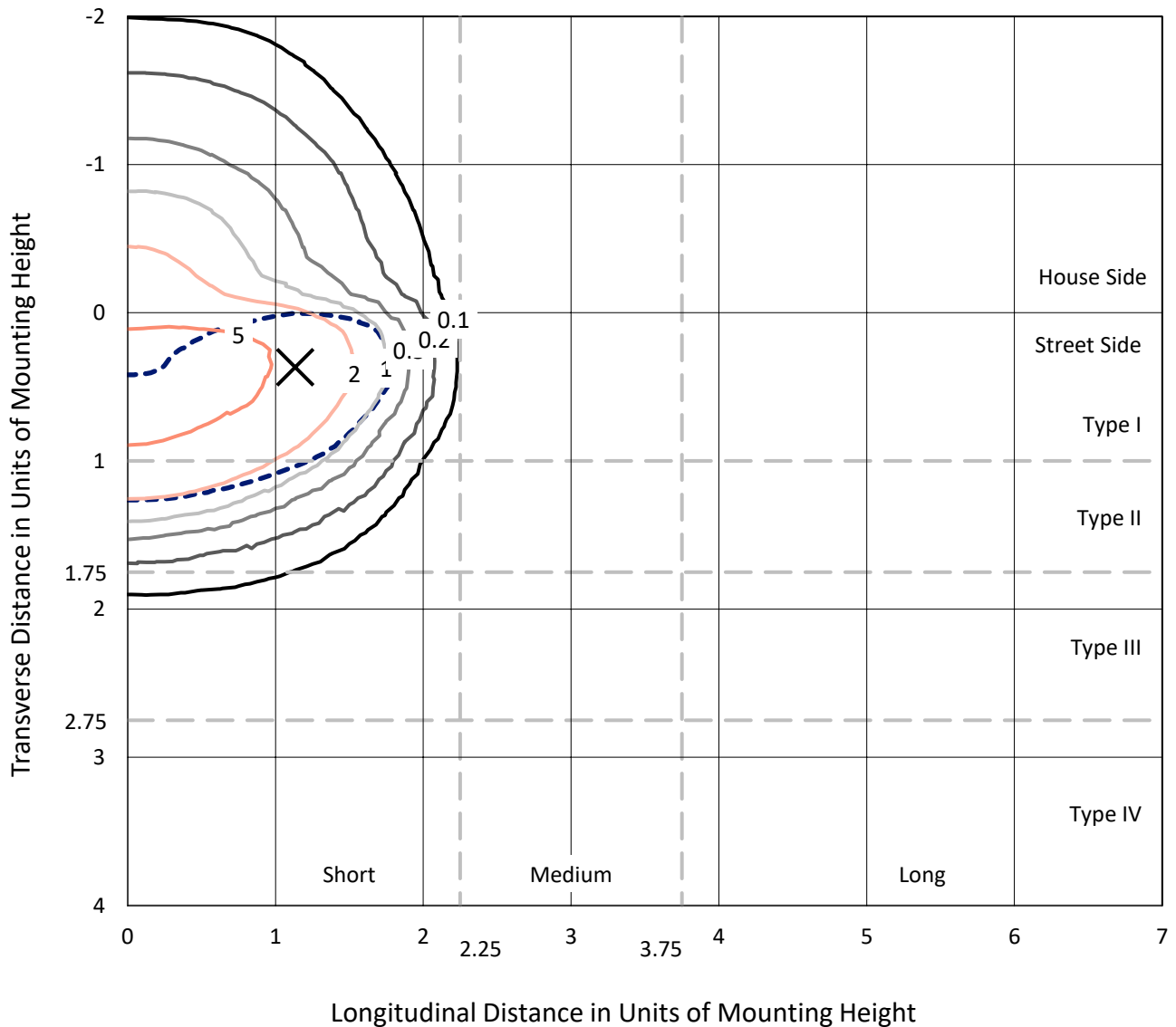
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

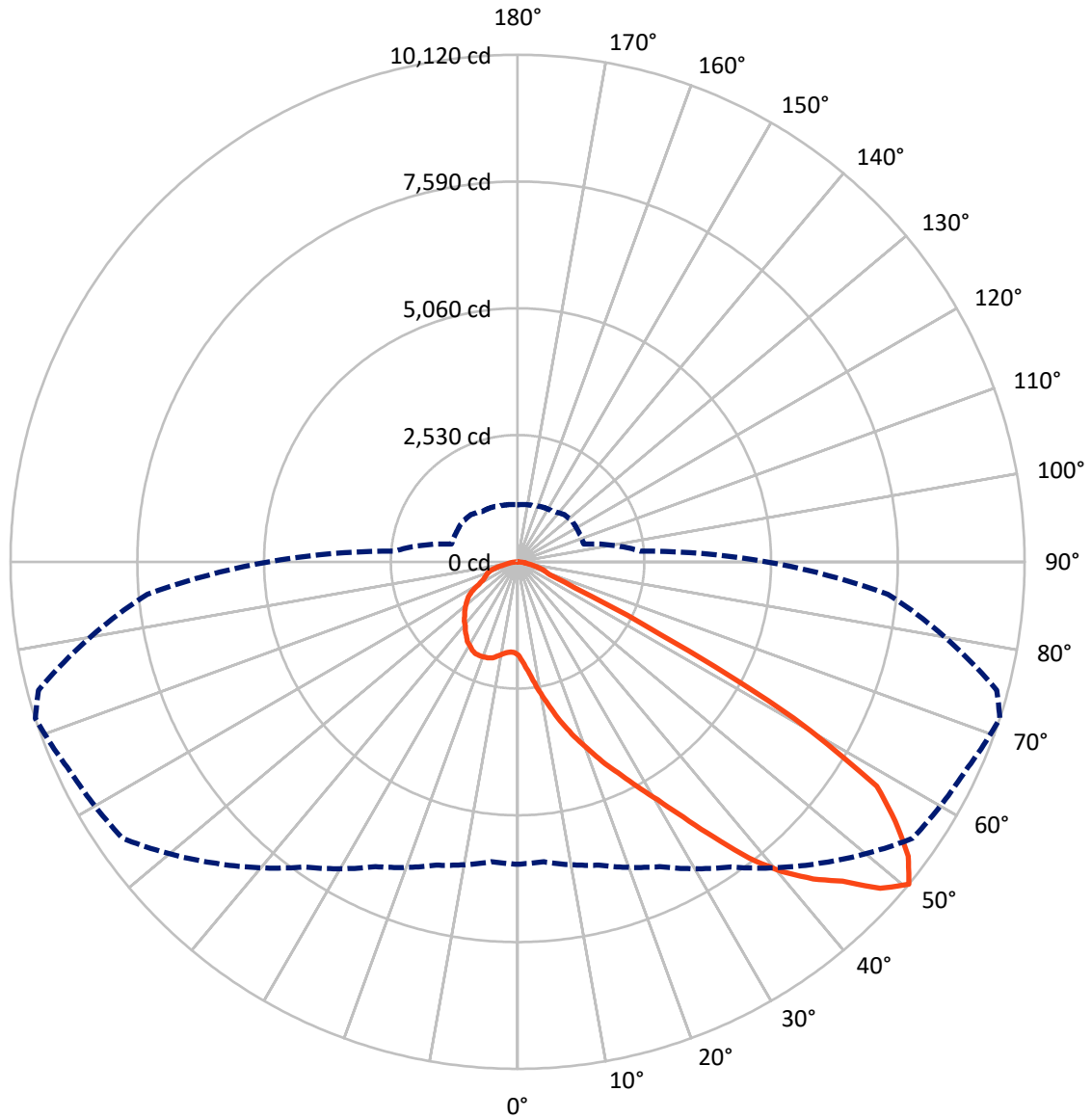
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 72-Deg Lateral      - - - Horizontal Cone Through 50-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3063.0	0.0	3063.0
	% Fixture	22.9	0.0	22.9
<b>Street Side</b>	Lumens	10306.4	0.0	10306.4
	% Fixture	77.1	0.0	77.1
<b>Total</b>	Lumens	13369.4	0.0	13369.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	218.9	1.6
10°-20°	818.4	6.1
20°-30°	1586.8	11.9
30°-40°	2628.8	19.7
40°-50°	3678.2	27.5
50°-60°	3103.0	23.2
60°-70°	945.8	7.1
70°-80°	331.8	2.5
80°-90°	57.7	0.4
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°	13369.4	100.0
0°-180°	13369.4	100.0

**Coefficient of Utilization**

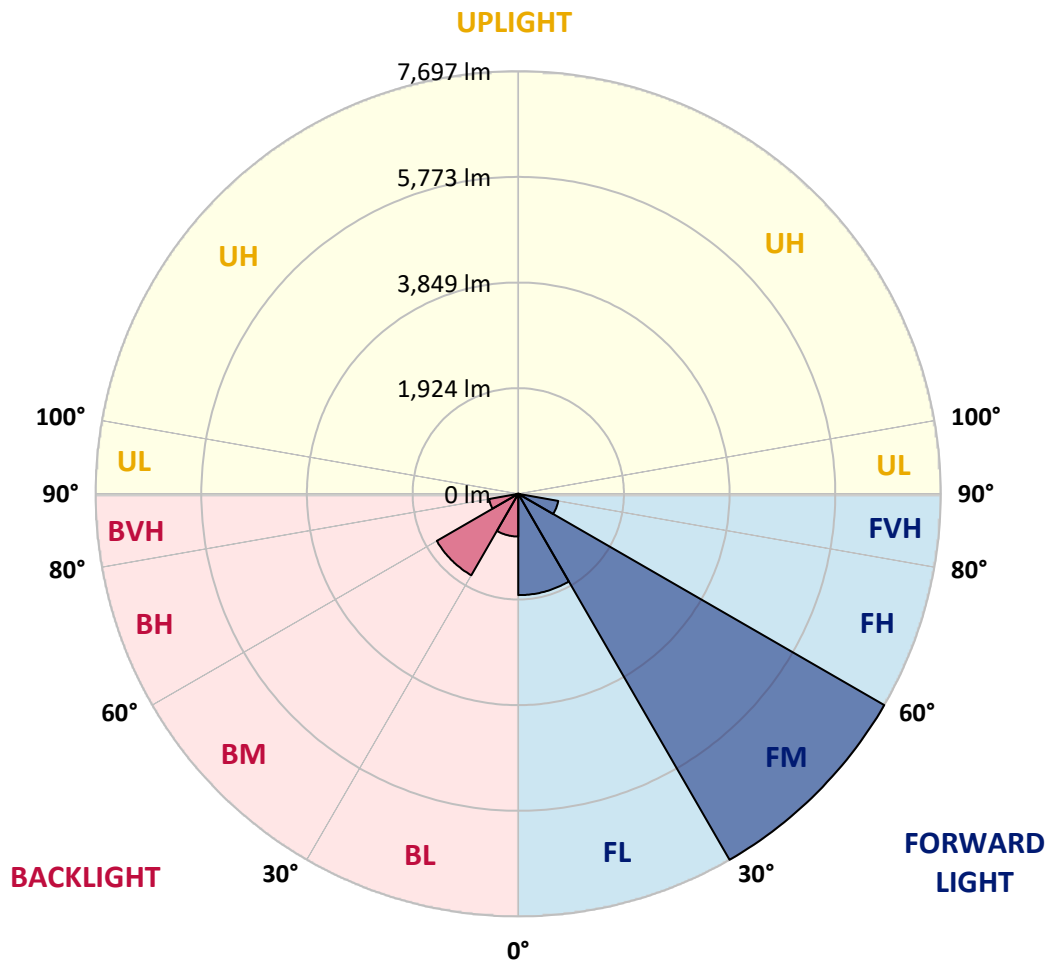


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1845.5	13.8			
FM (30°-60°)	7697.1	57.6			
FH (60°-80°)	738.0	5.5			G1/1800
FVH (80°-90°)	25.8	0.2			G1/100
BL (0°-30°)	778.6	5.8	B2/1000		
BM (30°-60°)	1712.9	12.8	B2/2500		
BH (60°-80°)	539.6	4.0	B2/1000		G2/1000
BVH (80°-90°)	31.8	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	72°	75°	85°
0°	1861.1	1861.1	1861.1	1861.1	1861.1	1861.1	1861.1	1861.1	1861.1	1861.1	1861.1
2.5°	2393.8	2378.9	2334.3	2319.4	2266.4	2170.5	2137.4	2039.8	1998.5	1960.4	1915.7
5°	3027.4	2958.0	2953.0	2868.7	2746.2	2675.1	2463.3	2321.1	2190.4	2124.2	2001.7
7.5°	3431.1	3432.8	3432.8	3363.2	3265.7	3085.4	2895.1	2638.6	2441.8	2344.2	2135.7
10°	3814.9	3781.8	3763.6	3757.0	3690.8	3515.5	3312.0	2994.4	2724.7	2610.5	2236.6
12.5°	4086.3	4058.1	4099.5	4077.9	4030.0	3915.8	3723.9	3361.6	3024.2	2870.2	2398.8
15°	4215.3	4235.1	4268.2	4327.8	4306.3	4263.2	4051.5	3738.8	3346.8	3173.0	2542.7
17.5°	4413.7	4359.2	4398.9	4473.4	4532.9	4513.1	4392.3	4011.7	3666.0	3452.6	2736.3
20°	4552.8	4521.3	4541.1	4627.2	4671.8	4784.4	4721.5	4369.1	3972.0	3747.1	2964.6
22.5°	4949.8	4903.5	4838.9	4852.1	4868.7	4948.1	4963.0	4761.2	4327.8	4089.5	3181.3
25°	5439.5	5396.4	5320.3	5242.6	5194.6	5179.7	5231.0	5068.9	4668.6	4422.1	3414.5
27.5°	5978.8	5906.0	5858.0	5697.5	5568.5	5548.7	5523.9	5436.1	5072.2	4805.9	3677.6
30°	6503.2	6445.3	6380.8	6124.3	5990.4	5968.8	5846.5	5871.3	5510.6	5214.5	3975.4
32.5°	6900.2	6905.2	6757.9	6564.4	6438.7	6324.6	6279.8	6351.0	6073.1	5834.9	4307.9
35°	7221.2	7236.0	7095.4	6920.1	6784.4	6863.8	6844.0	6877.1	6744.7	6453.6	4695.1
37.5°	7533.8	7459.4	7308.9	7224.5	7153.4	7284.1	7452.8	7480.9	7505.8	7163.3	5145.0
40°	7585.1	7591.8	7504.1	7563.6	7474.3	7671.2	8063.3	8026.8	8127.8	7828.4	5633.0
42.5°	7512.3	7527.2	7562.0	7646.4	7861.4	8098.0	8680.3	8531.4	8653.8	8387.5	6107.8
45°	7393.2	7332.0	7375.1	7696.0	8068.2	8594.3	9244.4	9128.6	9088.9	8865.6	6673.6
47.5°	6824.1	6887.0	7021.0	7416.4	7975.5	8680.3	9644.8	9618.3	9737.4	9580.3	7188.1
50°	6035.0	6010.2	6268.3	6713.3	7434.6	8511.6	9623.3	9863.2	10119.6	9901.2	7418.0
52.5°	4519.6	4652.0	4873.7	5426.2	6455.3	7591.8	9153.4	9553.8	9762.2	9715.9	7232.8
55°	2857.0	2896.7	3030.7	3687.5	4614.0	6093.0	7846.5	8774.6	9146.8	9320.6	7062.4
57.5°	1388.0	1313.6	1477.3	2005.0	2665.1	4097.8	6051.6	7643.0	8452.0	8766.3	6691.8
60°	724.6	752.7	817.3	1005.8	1378.1	2127.5	3771.9	5093.7	6329.5	6812.6	5072.2
62.5°	600.6	610.5	653.5	747.7	916.5	1224.2	1925.6	2483.1	3227.6	3662.7	2885.1
65°	509.6	514.5	560.9	623.7	731.2	861.9	991.0	1037.3	1255.6	1288.7	1025.7
67.5°	425.1	430.1	479.8	539.3	608.8	643.5	676.6	673.3	698.1	688.2	686.6
70°	327.6	332.5	383.8	446.7	481.4	461.5	564.1	587.3	597.2	605.5	618.7
72.5°	236.6	246.5	286.2	330.8	312.7	359.0	464.9	499.6	512.8	517.8	534.4
75°	172.1	175.3	185.3	172.1	198.6	249.8	327.6	370.5	387.1	392.1	416.9
77.5°	76.1	77.8	79.4	99.2	127.4	155.5	195.2	229.9	253.1	259.7	266.3
80°	39.7	41.4	51.3	67.9	91.0	114.1	142.3	162.1	177.0	178.6	185.3
82.5°	24.8	26.5	36.4	47.9	64.5	84.4	104.2	120.8	132.4	134.0	135.7
85°	11.6	14.9	21.5	29.8	43.0	54.6	56.3	47.9	51.3	52.9	49.6
87.5°	3.3	5.0	6.6	5.0	6.6	6.6	8.2	9.9	9.9	9.9	11.6
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°	1861.1	1861.1	1861.1	1861.1	1861.1	1861.1	1861.1	1861.1	1861.1	1861.1	1861.1
2.5°	1890.9	1876.0	1818.2	1796.6	1740.4	1750.3	1720.5	1718.8	1712.3	1710.6	1708.9
5°	1937.2	1890.9	1821.4	1768.5	1737.1	1733.7	1712.3	1712.3	1718.8	1723.8	1712.3
7.5°	2013.4	1960.4	1843.0	1793.3	1765.2	1760.2	1745.3	1733.7	1748.6	1743.6	1730.4
10°	2101.0	2008.4	1884.3	1841.3	1794.9	1783.3	1783.3	1788.3	1763.5	1771.8	1758.5
12.5°	2198.6	2074.6	1937.2	1887.6	1833.0	1826.4	1823.1	1786.7	1799.9	1793.3	1760.2
15°	2322.7	2150.6	2005.0	1920.7	1874.3	1844.6	1801.6	1794.9	1786.7	1770.1	1755.3
17.5°	2456.7	2233.4	2036.5	1930.6	1861.1	1839.6	1806.6	1771.8	1747.0	1750.3	1738.7
20°	2570.9	2309.5	2048.1	1940.5	1851.2	1809.8	1758.5	1737.1	1710.6	1708.9	1707.3
22.5°	2706.5	2412.0	2064.7	1914.0	1821.4	1778.4	1743.6	1705.6	1687.5	1664.3	1675.9
25°	2868.7	2451.8	2067.9	1899.1	1799.9	1723.8	1705.6	1664.3	1657.6	1624.6	1631.2
27.5°	2986.1	2473.2	2041.4	1852.9	1750.3	1692.4	1659.3	1629.5	1617.9	1593.1	1586.5
30°	3143.2	2506.3	1985.2	1794.9	1700.7	1636.2	1616.3	1609.7	1576.6	1550.1	1546.8
32.5°	3322.0	2527.8	1948.8	1735.4	1649.4	1599.8	1609.7	1578.2	1536.8	1513.7	1507.1
35°	3464.2	2536.1	1857.9	1667.5	1614.6	1583.2	1571.7	1565.0	1505.5	1483.9	1467.4
37.5°	3680.9	2517.9	1781.7	1619.6	1576.6	1565.0	1555.1	1510.4	1442.6	1411.1	1388.0
40°	3934.0	2512.9	1684.1	1551.7	1540.2	1553.4	1523.6	1454.2	1359.9	1325.2	1308.6
42.5°	4177.2	2547.6	1622.9	1515.4	1500.5	1505.5	1464.1	1359.9	1313.6	1293.7	1267.2
45°	4584.2	2620.5	1522.0	1459.1	1452.5	1449.2	1399.6	1290.3	1263.9	1239.1	1234.2
47.5°	4951.5	2572.5	1457.5	1401.2	1407.8	1389.7	1283.8	1249.1	1219.3	1194.5	1186.1
50°	4972.9	2458.3	1366.5	1356.5	1358.2	1326.8	1225.8	1202.7	1164.6	1148.1	1136.5
52.5°	4860.5	2271.4	1282.1	1285.4	1290.3	1239.1	1154.7	1138.2	1106.8	1083.6	1077.0
55°	4544.4	1980.2	1199.4	1212.6	1225.8	1128.3	1101.8	1060.4	1035.6	1002.6	1004.2
57.5°	4003.5	1594.8	1083.6	1105.1	1133.2	1025.7	1005.8	954.5	918.1	891.7	888.3
60°	2683.4	1134.8	909.9	918.1	981.0	938.1	936.4	885.1	835.4	812.3	799.0
62.5°	1583.2	866.9	785.8	777.5	775.9	800.7	842.1	823.8	759.3	714.7	727.9
65°	828.8	749.4	731.2	703.1	686.6	679.9	711.4	719.6	676.6	628.6	625.4
67.5°	696.5	696.5	681.5	671.6	648.5	620.4	600.6	574.1	567.4	554.2	537.7
70°	633.6	650.2	645.2	622.0	602.2	570.8	519.5	476.4	435.0	420.2	430.1
72.5°	552.5	569.1	569.1	557.5	531.0	483.1	433.5	383.8	349.1	322.6	319.3
75°	425.1	433.5	453.3	440.1	405.3	375.5	324.3	273.0	239.9	215.0	210.1
77.5°	271.3	284.5	284.5	282.9	258.1	229.9	196.9	160.5	135.7	117.5	112.5
80°	180.3	188.6	195.2	188.6	172.1	150.5	125.7	100.9	82.8	67.9	64.5
82.5°	132.4	142.3	147.3	140.6	124.0	107.6	89.3	71.1	52.9	41.4	38.0
85°	51.3	52.9	59.5	71.1	69.5	67.9	54.6	39.7	29.8	21.5	19.8
87.5°	13.2	11.6	13.2	13.2	11.6	9.9	9.9	9.9	9.9	5.0	6.6
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)