

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: P454299

Luminaire Tested: **GALN-SA5B-827-U-T2R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P454299  
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-SA5B-827-U-T2R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21349 lumens  
Efficiency: N/A  
Efficacy: 104.7 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G3

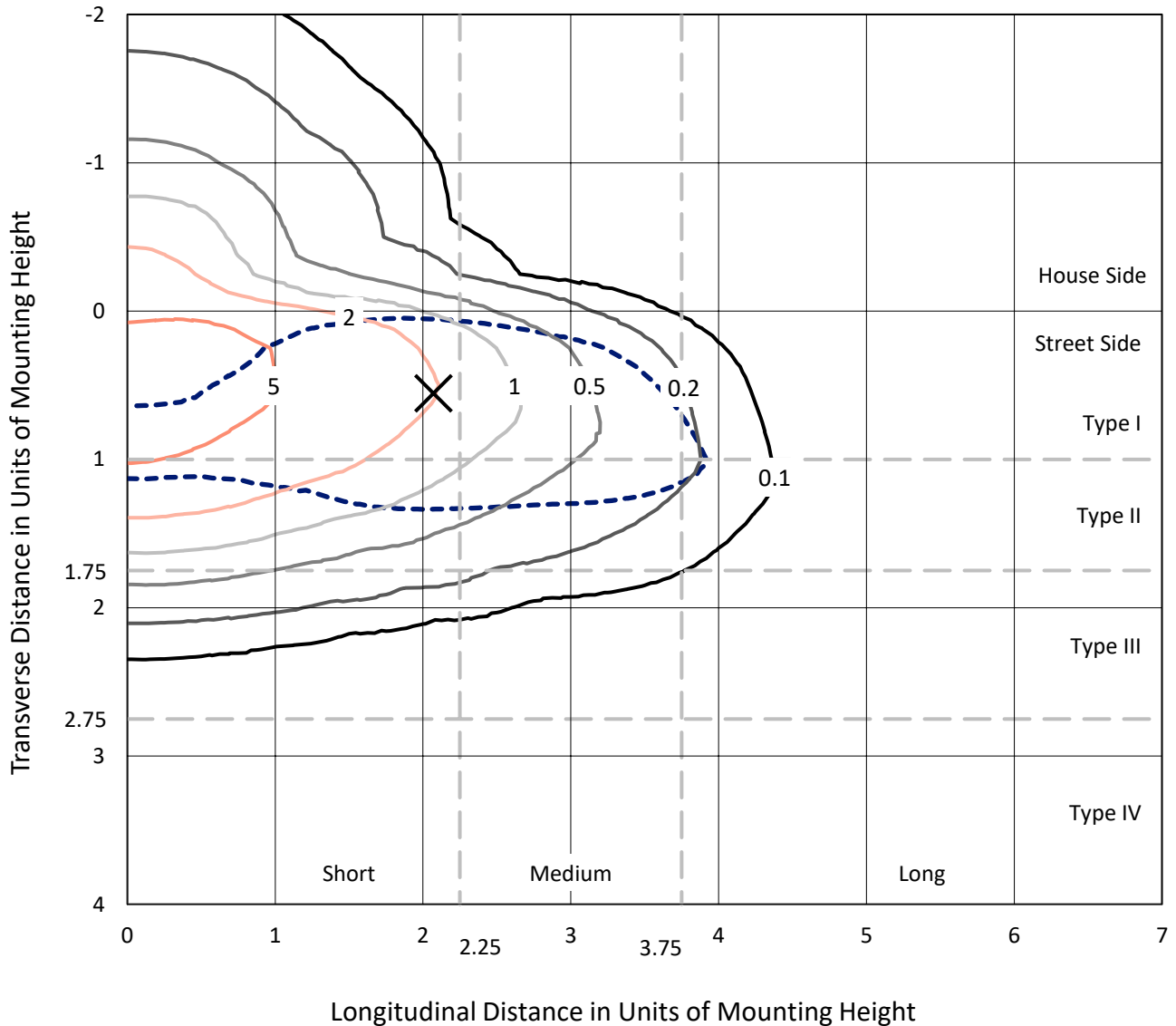
Input Watts (W): 204  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

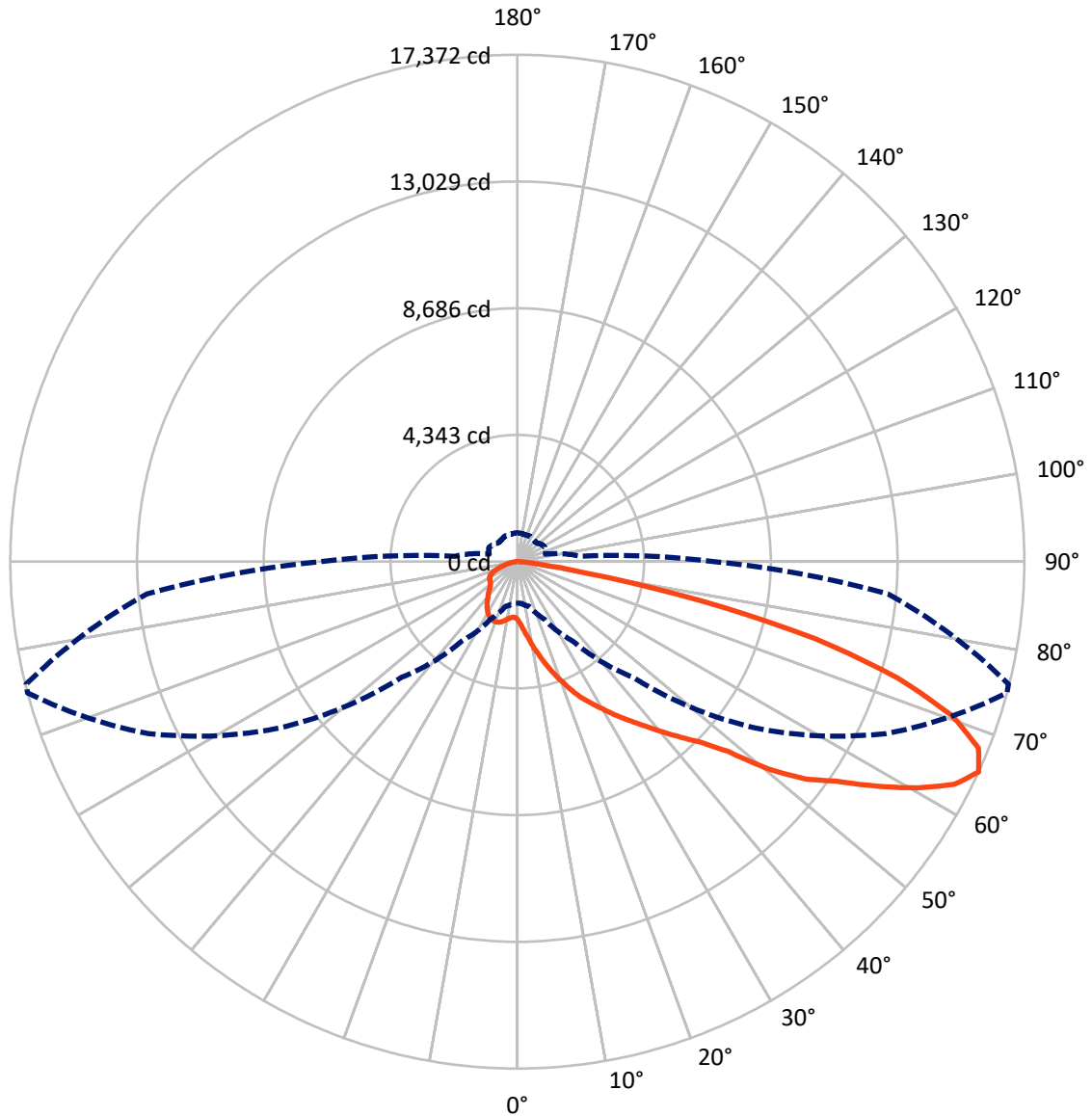
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.2 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3589.0	0.0	3589.0
	% Fixture	16.8	0.0	16.8
<b>Street Side</b>	Lumens	17760.0	0.0	17760.0
	% Fixture	83.2	0.0	83.2
<b>Total</b>	Lumens	21349.0	0.0	21349.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	241.0	1.1
10°-20°	944.0	4.4
20°-30°	1823.4	8.5
30°-40°	2961.8	13.9
40°-50°	4074.2	19.1
50°-60°	4810.2	22.5
60°-70°	4214.6	19.7
70°-80°	2012.1	9.4
80°-90°	267.7	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°	21349.0	100.0
0°-180°	21349.0	100.0

**Coefficient of Utilization**



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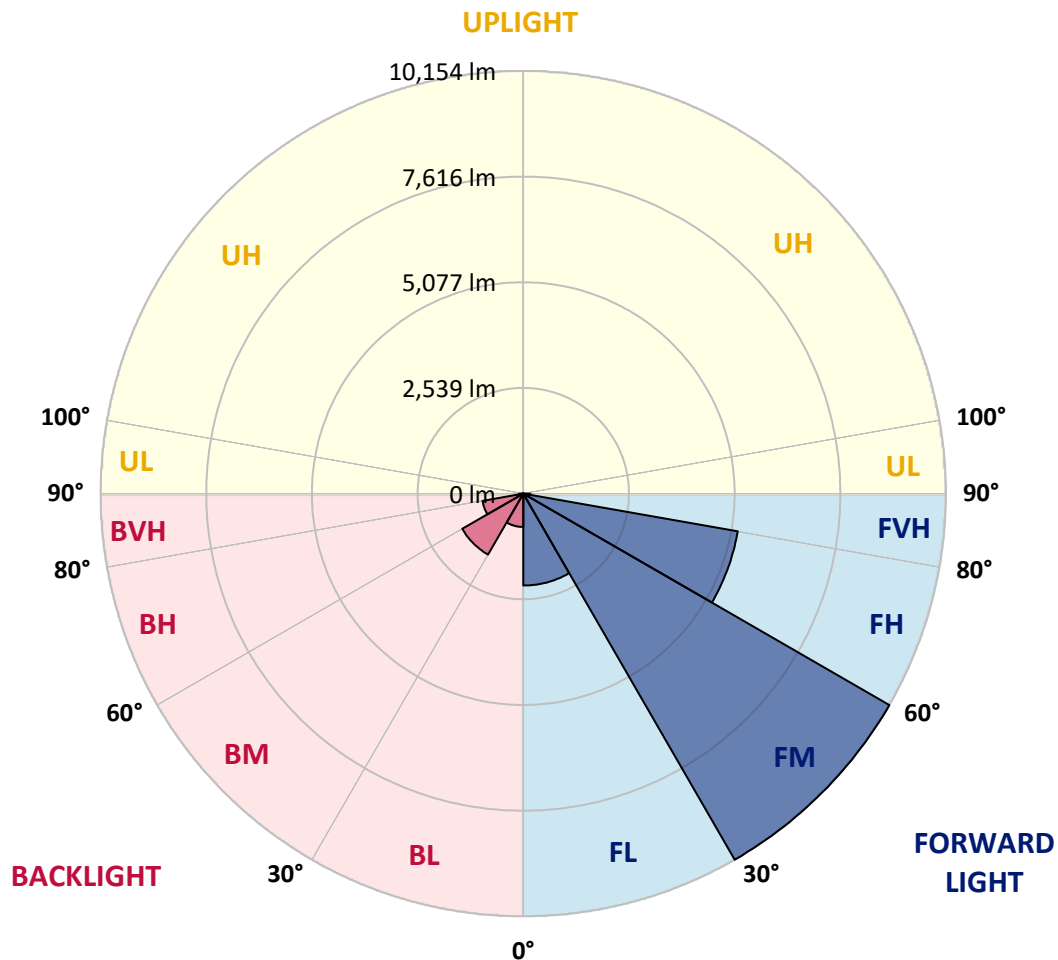
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2207.1	10.3			
FM	(30°-60°)	10154.0	47.6			
FH	(60°-80°)	5231.5	24.5			G3/7500
FVH	(80°-90°)	167.3	0.8			G2/225
BL	(0°-30°)	801.2	3.8	B2/1000		
BM	(30°-60°)	1692.2	7.9	B2/2500		
BH	(60°-80°)	995.2	4.7	B2/1000		G2/1000
BVH	(80°-90°)	100.4	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1983.6	1983.6	1983.6	1983.6	1983.6	1983.6	1983.6	1983.6	1983.6	1983.6	1983.6
2.5°	2635.5	2618.2	2599.6	2548.7	2494.3	2432.9	2344.9	2260.3	2148.0	2144.5	2061.2
5°	3366.2	3354.6	3272.4	3224.9	3098.7	2930.8	2788.4	2567.2	2362.2	2337.9	2175.8
7.5°	4037.8	3992.7	3961.4	3875.7	3750.6	3535.3	3259.7	2960.9	2618.2	2585.7	2317.1
10°	4543.8	4539.2	4523.0	4448.9	4355.1	4140.9	3835.2	3406.7	2942.4	2878.7	2488.5
12.5°	4922.5	4926.0	4923.7	4922.5	4855.3	4673.5	4342.4	3890.8	3270.1	3224.9	2686.5
15°	5171.5	5206.2	5220.1	5278.0	5283.8	5162.2	4877.3	4358.6	3639.5	3572.3	2899.5
17.5°	5335.9	5353.3	5418.1	5516.5	5596.4	5574.4	5320.8	4791.7	4017.0	3904.7	3120.7
20°	5493.4	5523.5	5573.3	5707.6	5848.9	5913.7	5735.4	5235.2	4391.0	4319.2	3365.0
22.5°	5821.1	5863.9	5881.3	5949.6	6070.0	6184.7	6103.6	5660.1	4800.9	4703.6	3624.4
25°	6375.7	6420.9	6372.3	6356.1	6395.4	6452.2	6434.8	6060.8	5187.7	5048.7	3869.9
27.5°	7098.3	7104.1	7009.2	6918.8	6821.6	6792.6	6739.3	6416.3	5523.5	5407.7	4116.6
30°	7874.2	7846.4	7688.9	7525.6	7361.2	7199.1	7046.2	6759.0	5897.5	5764.3	4358.6
32.5°	8594.4	8579.4	8404.5	8150.9	7873.0	7720.1	7411.0	7105.3	6298.2	6169.6	4607.5
35°	9134.0	9156.0	8963.8	8687.0	8383.7	8248.2	7857.9	7468.9	6712.7	6572.6	4878.5
37.5°	9517.3	9505.7	9335.5	9095.8	8829.5	8711.4	8380.2	7866.0	7158.5	7024.2	5174.9
40°	9653.9	9647.0	9520.8	9345.9	9176.9	9135.2	8926.7	8294.5	7669.2	7511.7	5531.6
42.5°	9567.1	9582.1	9498.8	9451.3	9420.0	9450.1	9469.8	8856.1	8226.2	8081.4	5918.4
45°	9300.8	9292.7	9281.1	9358.7	9534.7	9732.7	10007.1	9386.5	8831.8	8716.0	6437.1
47.5°	8824.8	8882.7	8911.7	9125.9	9510.4	9979.3	10625.5	10097.4	9710.7	9609.9	7228.0
50°	8159.0	8205.3	8376.7	8757.7	9330.9	10072.0	11229.9	11260.0	11176.7	10987.9	8087.2
52.5°	7119.2	7191.0	7544.1	8242.4	8962.6	10033.8	11595.8	12257.0	12367.1	12225.8	8933.7
55°	5955.4	6056.1	6429.0	7345.0	8455.5	9825.3	11848.3	12834.9	13273.7	13142.9	9748.9
57.5°	4816.0	4922.5	5305.8	6192.8	7570.8	9364.5	12013.9	13478.7	14508.1	14337.9	10763.3
60°	3609.4	3720.5	4049.4	4963.0	6310.9	8463.6	11901.6	14036.8	15741.4	15668.4	11778.8
62.5°	2328.7	2451.4	2737.4	3493.6	4850.7	7232.6	11300.6	14344.9	16809.0	16721.0	12519.9
65°	1418.5	1432.4	1589.9	2168.9	3319.9	5599.9	9926.1	13936.1	17371.8	17345.1	12745.7
67.5°	917.1	939.1	1010.9	1299.2	1990.5	3889.6	7936.7	12587.1	17042.9	17033.6	12279.0
70°	774.7	781.6	814.0	876.6	1156.8	2358.8	5573.3	10436.7	15793.5	15793.5	11157.0
72.5°	692.5	701.7	713.3	733.0	825.6	1336.3	3325.7	8124.3	13636.2	13726.5	9496.5
75°	628.8	626.5	633.4	636.9	704.0	873.1	1719.6	6008.7	10549.0	10368.4	6877.1
77.5°	538.5	541.9	538.5	553.5	621.8	664.7	873.1	4032.0	6393.1	6159.2	3451.9
80°	442.3	448.1	453.9	463.2	531.5	504.9	524.6	1837.7	2364.6	2314.8	1066.5
82.5°	332.3	340.4	349.7	371.7	418.0	333.5	331.2	785.1	853.4	781.6	392.5
85°	134.3	158.6	239.7	261.7	262.9	183.0	203.8	327.7	348.5	340.4	154.0
87.5°	31.3	37.1	77.6	117.0	107.7	68.3	75.3	106.5	121.6	112.3	52.1
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°	1983.6	1983.6	1983.6	1983.6	1983.6	1983.6	1983.6	1983.6	1983.6	1983.6	1983.6
2.5°	2023.0	1982.4	1913.0	1859.7	1821.5	1787.9	1767.1	1754.3	1749.7	1748.5	1749.7
5°	2091.3	2019.5	1909.5	1840.0	1801.8	1779.8	1767.1	1765.9	1767.1	1768.2	1764.7
7.5°	2185.1	2082.0	1938.4	1873.6	1844.6	1828.4	1822.6	1820.3	1821.5	1820.3	1820.3
10°	2310.1	2168.9	1995.2	1928.0	1903.7	1885.2	1875.9	1870.1	1865.5	1860.8	1858.5
12.5°	2447.9	2265.0	2056.5	1991.7	1957.0	1928.0	1907.2	1892.1	1881.7	1871.3	1869.0
15°	2601.9	2366.9	2124.9	2034.5	1984.7	1941.9	1906.0	1881.7	1863.2	1848.1	1847.0
17.5°	2749.0	2463.0	2171.2	2054.2	1981.3	1921.1	1873.6	1840.0	1816.8	1797.2	1794.8
20°	2906.5	2554.5	2192.0	2041.5	1946.5	1873.6	1811.1	1770.5	1743.9	1721.9	1718.4
22.5°	3065.1	2632.1	2189.7	2001.0	1886.3	1800.6	1734.6	1691.8	1660.5	1638.5	1630.4
25°	3216.8	2694.6	2160.8	1936.1	1802.9	1713.8	1646.6	1607.3	1579.5	1552.8	1552.8
27.5°	3353.5	2731.6	2106.3	1857.4	1717.3	1623.5	1570.2	1534.3	1508.8	1491.5	1481.0
30°	3487.8	2749.0	2032.2	1757.8	1626.9	1547.0	1504.2	1483.4	1460.2	1440.5	1438.2
32.5°	3608.2	2745.5	1939.6	1660.5	1541.2	1484.5	1467.1	1450.9	1426.6	1398.8	1391.9
35°	3725.2	2722.4	1829.6	1554.0	1469.5	1447.5	1452.1	1428.9	1384.9	1350.2	1344.4
37.5°	3852.5	2680.7	1709.2	1467.1	1409.2	1430.1	1441.7	1390.7	1318.9	1264.5	1251.8
40°	3999.6	2633.2	1584.1	1380.3	1361.8	1413.9	1413.9	1320.1	1221.7	1188.1	1178.8
42.5°	4172.1	2593.8	1479.9	1307.3	1322.4	1374.5	1368.7	1226.3	1185.8	1168.4	1163.8
45°	4445.4	2579.9	1372.2	1243.7	1290.0	1328.2	1280.7	1193.9	1170.7	1156.8	1152.2
47.5°	4877.3	2596.2	1277.2	1196.2	1252.9	1281.9	1182.3	1171.9	1155.6	1136.0	1133.6
50°	5278.0	2581.1	1210.1	1169.5	1220.5	1226.3	1141.8	1145.2	1136.0	1114.0	1109.3
52.5°	5605.7	2533.6	1167.2	1155.6	1192.7	1129.0	1103.5	1116.3	1112.8	1085.0	1080.4
55°	5965.8	2504.7	1146.4	1155.6	1174.2	1044.5	1067.6	1086.2	1081.5	1061.9	1060.7
57.5°	6402.4	2510.5	1131.3	1159.1	1155.6	1001.6	1031.7	1053.7	1052.6	1046.8	1046.8
60°	6849.4	2512.8	1108.2	1158.0	1133.6	968.1	994.7	1026.0	1028.3	1031.7	1031.7
62.5°	6997.6	2412.0	1063.0	1137.1	1085.0	935.6	960.0	1002.8	1000.5	1009.7	1010.9
65°	6720.8	2133.0	995.8	1089.6	1022.5	912.5	933.3	972.7	960.0	984.3	988.9
67.5°	6117.5	1764.7	891.6	1004.0	953.0	888.2	915.9	931.0	907.8	955.3	956.5
70°	5287.3	1378.0	759.6	882.4	874.3	862.7	902.1	878.9	846.5	904.4	892.8
72.5°	4421.1	1052.6	606.8	721.4	768.9	824.5	877.7	811.7	766.6	783.9	763.1
75°	3321.0	778.2	487.5	565.1	640.4	770.0	855.7	730.7	661.2	645.0	640.4
77.5°	1692.9	508.3	364.8	422.7	480.6	695.9	825.6	635.7	547.7	522.2	510.7
80°	604.5	316.1	257.1	291.8	324.2	598.7	721.4	525.7	425.0	420.3	425.0
82.5°	280.2	203.8	172.5	191.1	192.2	399.5	550.0	392.5	323.1	491.0	414.6
85°	120.4	101.9	97.3	95.0	88.0	178.3	309.2	210.7	328.9	147.1	135.5
87.5°	35.9	40.5	35.9	26.6	19.7	19.7	31.3	11.6	8.1	5.8	5.8
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)