

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: P651390

Luminaire Tested: **GALN-SA5D-840-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651390
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA5D-840-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32899.9 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

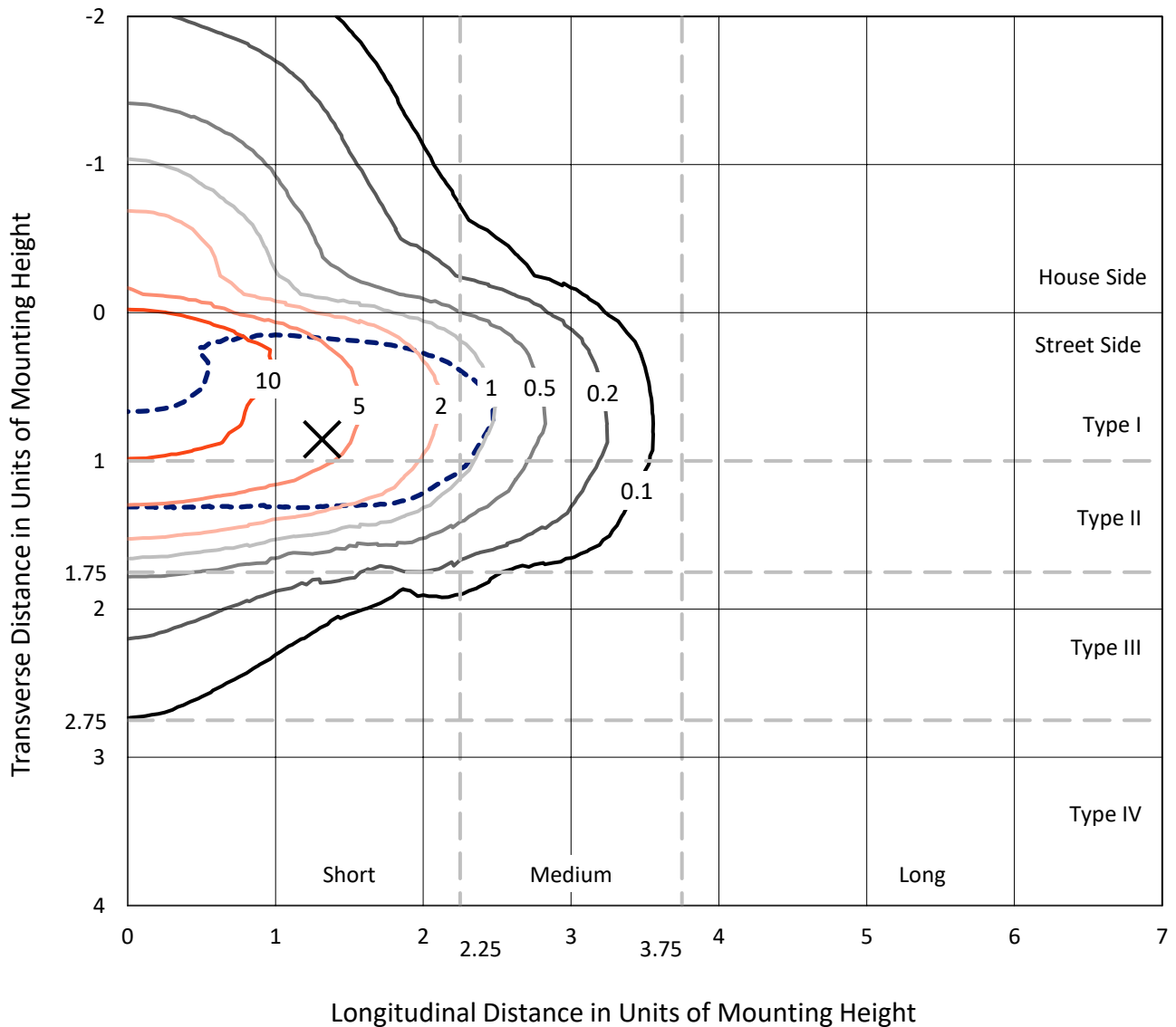
Input Watts (W): 309
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

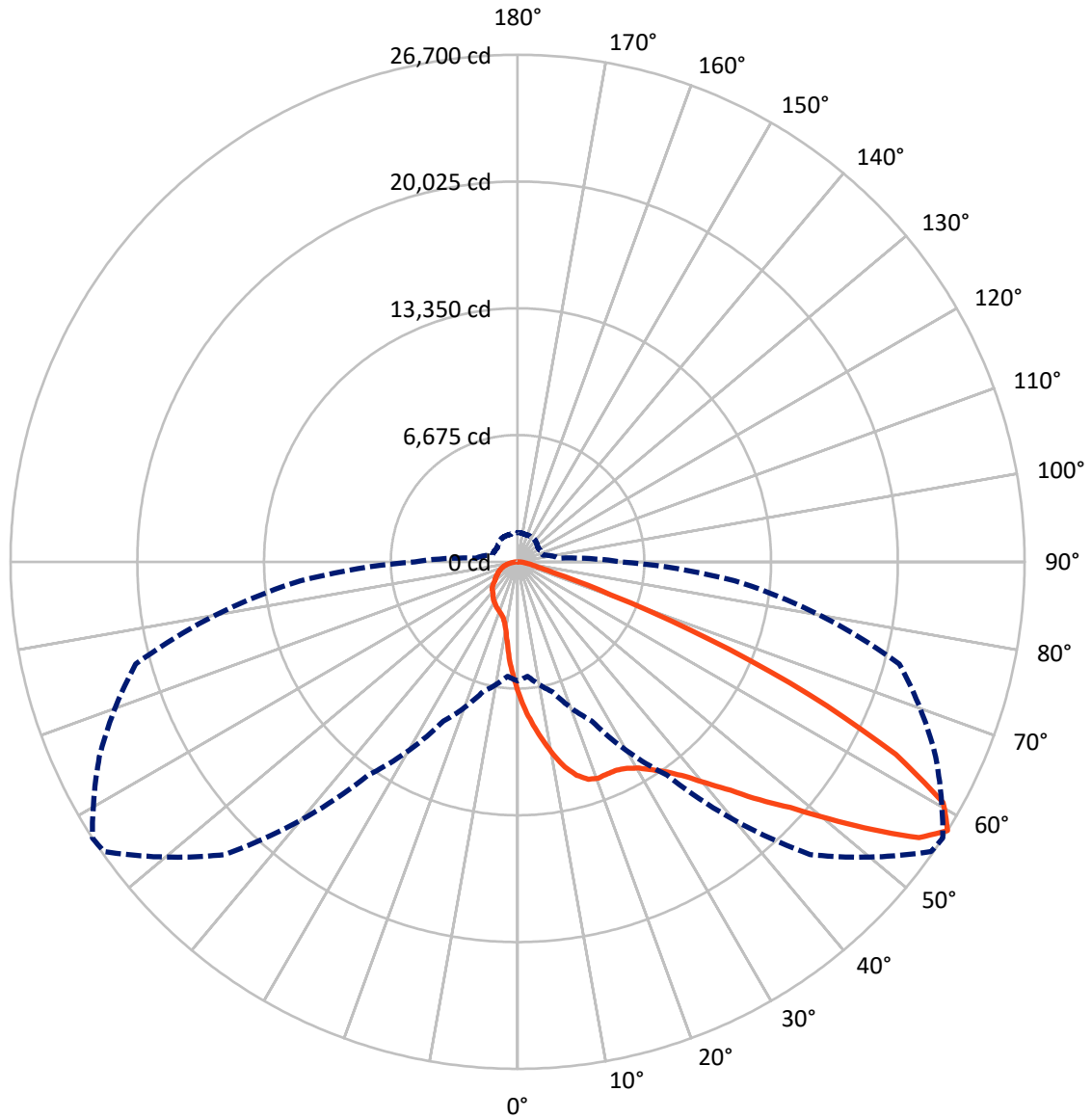
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16.8 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5003.2	0.0	5003.2
	% Fixture	15.2	0.0	15.2
Street Side	Lumens	27896.8	0.0	27896.8
	% Fixture	84.8	0.0	84.8
Total	Lumens	32899.9	0.0	32899.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	664.3	2.0
10°-20°	1957.7	6.0
20°-30°	3250.9	9.9
30°-40°	4896.7	14.9
40°-50°	7352.0	22.3
50°-60°	8240.6	25.0
60°-70°	4822.8	14.7
70°-80°	1426.5	4.3
80°-90°	288.3	0.9
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°	32899.9	100.0
0°-180°	32899.9	100.0

Coefficient of Utilization



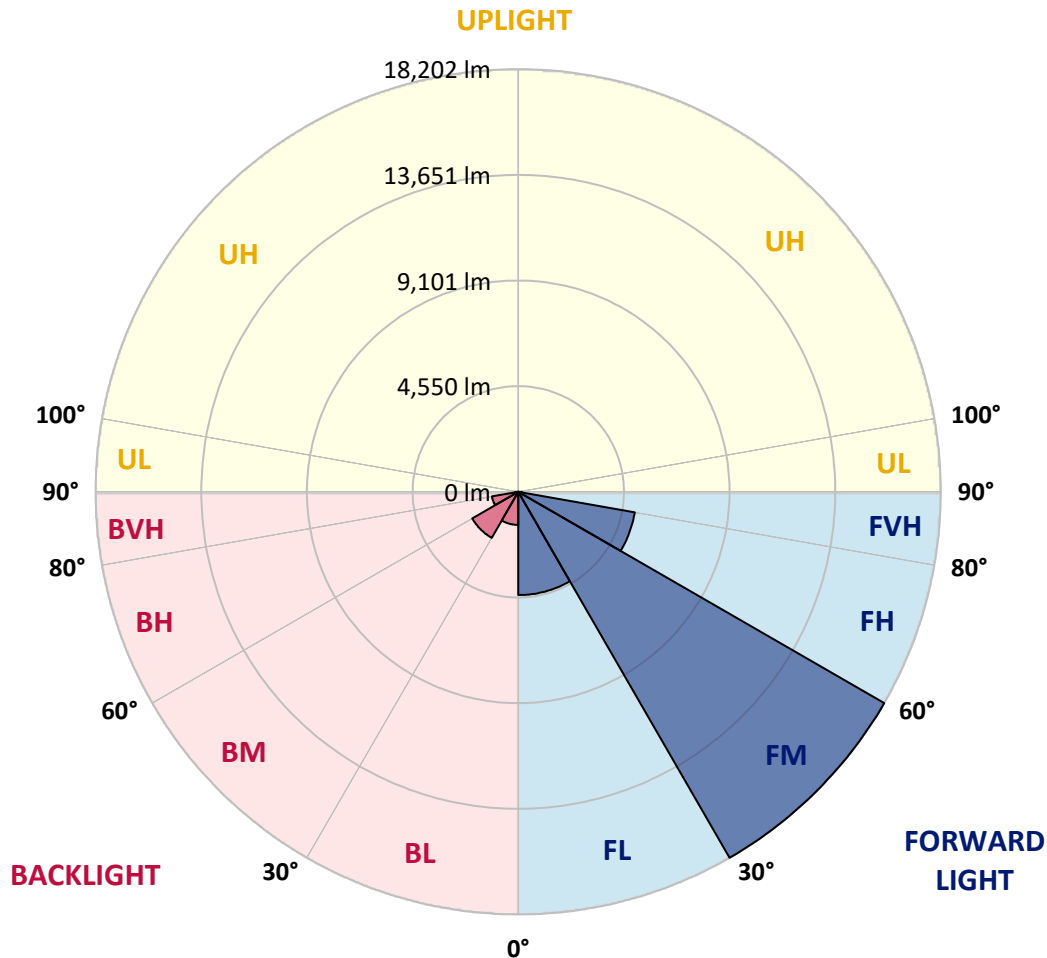
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4447.3	13.5			
FM (30°-60°)	18201.7	55.3			
FH (60°-80°)	5098.2	15.5			G3/7500
FVH (80°-90°)	149.6	0.5			G2/225
BL (0°-30°)	1425.6	4.3	B3/2500		
BM (30°-60°)	2287.6	7.0	B2/2500		
BH (60°-80°)	1151.2	3.5	B3/2500		G3/2500
BVH (80°-90°)	138.7	0.4			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	6911.9	6911.9	6911.9	6911.9	6911.9	6911.9	6911.9	6911.9	6911.9	6911.9	6911.9
2.5°	8588.5	8494.9	8421.1	8356.3	8271.6	8042.9	7814.2	7810.5	7628.6	7347.7	7059.6
5°	9987.9	9861.8	9878.0	9676.3	9474.6	9143.2	8658.8	8633.5	8246.3	7720.5	7185.7
7.5°	10899.1	10900.9	10850.5	10735.2	10517.3	10140.9	9591.7	9467.4	8928.9	8131.1	7329.7
10°	10852.3	10900.9	10985.6	11084.6	11151.2	10965.7	10465.1	10313.9	9613.3	8628.2	7490.0
12.5°	10229.2	10304.8	10425.5	10674.0	11075.6	11381.8	11210.7	11088.2	10405.7	9123.4	7666.5
15°	9840.2	9885.2	9951.8	10119.3	10551.5	11284.5	11727.5	11662.7	11153.0	9683.5	7864.6
17.5°	9721.3	9766.4	9788.0	9890.6	10198.6	10949.6	11931.0	12046.3	11815.8	10198.6	8064.5
20°	9840.2	9861.8	9861.8	9923.0	10164.3	10753.3	11922.0	12154.4	12359.7	10816.3	8251.8
22.5°	10151.7	10160.7	10148.1	10169.7	10349.9	10807.3	11837.4	12125.5	12799.1	11340.3	8397.6
25°	10657.8	10672.2	10589.4	10538.9	10670.4	11045.0	11884.2	12148.9	13143.1	11841.0	8494.9
27.5°	11232.3	11250.3	11149.5	11032.4	11093.6	11338.5	12067.9	12305.6	13400.6	12334.4	8556.2
30°	11936.4	11943.6	11774.3	11633.9	11594.3	11776.2	12381.3	12602.8	13721.2	12916.2	8648.0
32.5°	12656.8	12710.8	12492.9	12294.8	12228.2	12284.0	12844.1	13058.4	14102.9	13541.0	8795.7
35°	13636.5	13645.5	13384.3	13143.1	12923.3	12995.4	13436.6	13591.5	14630.6	14263.2	9004.6
37.5°	14859.3	14942.1	14582.0	14131.7	13861.6	13757.2	14153.4	14322.7	15370.8	15149.3	9319.7
40°	16217.2	16247.8	15939.9	15658.9	15165.5	14862.9	15136.7	15320.3	16283.9	16206.4	9685.3
42.5°	17070.9	17137.5	17160.9	17132.1	16761.0	16253.3	16357.7	16444.2	17364.4	17198.7	10059.9
45°	17359.0	17458.1	17793.0	18502.6	18542.2	18041.6	17798.4	17881.3	18542.2	18200.0	10418.3
47.5°	16881.7	17051.0	17668.7	19123.8	20213.4	20251.3	19518.3	19336.4	19615.5	19030.2	10677.6
50°	15648.2	15684.1	16629.6	18736.6	20996.8	22363.7	21605.5	21267.0	20634.9	19644.3	10855.9
52.5°	13739.2	13780.5	14572.9	16937.6	20514.2	23840.5	24047.6	23442.5	21670.4	20121.6	10972.9
55°	10198.6	10438.1	11309.7	13595.1	18227.0	23701.8	25988.9	25644.9	22922.0	20499.8	11156.6
57.5°	6270.7	6051.1	7084.8	9249.5	13708.6	21796.4	26588.6	26700.3	24299.7	20816.8	11464.6
60°	2885.1	2928.3	3355.1	4770.6	8356.3	17051.0	25043.5	25749.4	25061.5	20805.9	11542.1
62.5°	1988.2	1948.6	1840.5	2094.4	3810.7	10783.9	21153.5	22349.3	23534.3	20159.4	11234.1
65°	1777.5	1737.8	1528.9	1458.7	1750.5	4700.3	15378.0	16887.1	19815.4	18527.7	10466.9
67.5°	1660.5	1606.4	1390.3	1253.4	1249.8	1871.1	9067.6	10884.7	14697.2	15664.3	9069.4
70°	1537.9	1494.8	1280.4	1129.2	1064.4	1176.0	3985.4	5217.2	9543.0	11288.1	7065.0
72.5°	1415.5	1365.1	1172.4	1010.3	925.7	880.6	1527.2	1986.4	5391.9	6767.9	4331.2
75°	1237.2	1212.0	1048.1	914.8	823.0	711.4	968.9	1105.7	2578.9	3108.3	2173.7
77.5°	1082.4	1055.4	931.1	799.6	732.9	578.1	687.9	751.0	1087.7	1260.7	981.5
80°	792.4	819.4	785.2	705.9	653.7	453.8	462.8	515.0	646.6	714.9	599.7
82.5°	502.4	552.9	605.1	543.9	495.3	358.4	320.6	340.4	441.2	468.3	266.5
85°	210.7	214.3	351.2	331.4	282.7	212.5	192.7	203.5	235.9	246.7	124.3
87.5°	81.1	79.2	124.3	115.2	88.2	61.2	61.2	68.5	93.7	86.5	39.6
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°	6911.9	6911.9	6911.9	6911.9	6911.9	6911.9	6911.9	6911.9	6911.9	6911.9	6911.9
2.5°	6935.3	6807.5	6553.5	6238.4	6007.9	5748.5	5519.8	5355.9	5294.7	5265.8	5211.8
5°	6929.9	6677.8	6151.9	5600.8	5157.8	4704.0	4320.4	4071.9	4050.3	3884.6	3868.3
7.5°	6931.7	6546.3	5708.9	4898.5	4223.2	3758.5	3441.5	3358.7	3259.6	3234.4	3247.0
10°	6937.1	6378.8	5233.5	4203.3	3549.6	3245.3	3126.4	3094.0	3097.6	3108.3	3110.2
12.5°	6944.3	6216.8	4740.0	3675.7	3171.4	3045.3	3032.7	3061.6	3092.2	3115.6	3121.0
15°	6953.3	6031.2	4259.2	3250.6	2982.3	2971.5	3012.9	3061.6	3104.8	3138.9	3144.4
17.5°	6942.5	5815.2	3855.7	2989.5	2877.8	2930.0	2998.5	3059.7	3099.3	3131.8	3135.4
20°	6917.3	5573.8	3466.8	2805.8	2813.1	2897.7	2971.5	3029.1	3072.3	3088.6	3101.2
22.5°	6820.1	5285.7	3128.2	2663.5	2735.6	2852.7	2940.9	2975.1	2926.5	2892.3	2901.3
25°	6654.3	4911.1	2813.1	2548.3	2665.4	2789.6	2879.7	2796.8	2757.2	2742.8	2750.0
27.5°	6447.3	4500.4	2575.3	2427.6	2575.3	2719.4	2694.1	2679.8	2661.8	2638.3	2643.8
30°	6224.0	4098.9	2373.6	2333.9	2478.1	2560.9	2571.7	2595.1	2575.3	2539.3	2553.7
32.5°	6016.9	3720.7	2220.5	2254.7	2409.6	2397.0	2478.1	2505.1	2413.2	2292.6	2297.9
35°	5840.3	3369.5	2105.3	2177.3	2292.6	2297.9	2379.0	2285.3	2186.3	2128.7	2132.3
37.5°	5707.1	3095.8	2029.6	2110.7	2143.1	2211.5	2168.3	2119.7	2107.0	2067.4	2069.3
40°	5627.9	2856.2	1981.0	2058.4	2053.0	2099.9	1961.2	2009.8	2027.8	2015.2	2017.1
42.5°	5548.6	2687.0	1930.6	1986.4	1984.6	1892.8	1862.1	1903.6	1950.4	1955.8	1952.2
45°	5485.6	2555.5	1878.4	1876.5	1912.6	1768.5	1759.5	1784.7	1851.4	1883.8	1882.0
47.5°	5415.4	2445.6	1799.2	1748.7	1759.5	1691.1	1676.6	1687.5	1768.5	1820.7	1835.1
50°	5327.1	2335.8	1700.1	1631.6	1586.6	1619.0	1622.6	1624.4	1705.5	1764.9	1777.5
52.5°	5256.8	2253.0	1586.6	1536.2	1482.2	1554.2	1581.2	1584.8	1633.4	1682.1	1691.1
55°	5298.3	2206.1	1474.9	1439.0	1390.3	1487.6	1539.8	1547.0	1557.8	1593.8	1599.2
57.5°	5422.5	2217.0	1384.9	1338.1	1302.0	1408.3	1496.6	1501.9	1494.8	1537.9	1545.2
60°	5460.4	2211.5	1318.3	1226.4	1204.8	1323.6	1433.5	1444.3	1442.6	1505.6	1518.2
62.5°	5301.9	2143.1	1251.7	1132.7	1118.4	1237.2	1345.3	1388.5	1397.5	1487.6	1503.8
65°	4929.1	2002.6	1163.4	1033.8	1033.8	1145.4	1260.7	1320.0	1345.3	1465.9	1483.9
67.5°	4437.5	1836.9	1073.4	949.1	945.5	1057.1	1170.6	1231.8	1271.4	1435.3	1446.1
70°	3682.8	1613.6	961.7	857.2	857.2	958.1	1060.8	1134.6	1192.2	1377.7	1377.7
72.5°	2523.1	1341.6	826.6	752.8	754.5	848.2	952.7	1035.5	1104.0	1262.4	1266.0
75°	1595.6	1048.1	678.9	641.1	648.3	736.5	844.6	931.1	1067.9	1248.0	1253.4
77.5°	848.2	736.5	540.3	531.3	540.3	621.3	742.0	860.8	1071.5	1082.4	1064.4
80°	549.3	522.3	426.8	408.8	412.4	500.6	660.9	817.6	860.8	871.6	832.0
82.5°	299.0	331.4	302.6	284.5	284.5	390.8	563.7	650.1	617.7	513.3	489.9
85°	127.8	154.9	156.7	136.8	131.4	241.3	378.2	354.8	329.6	315.1	311.6
87.5°	36.0	50.5	50.5	37.8	28.8	66.6	75.6	21.6	0.0	1.8	3.6
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)