

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: P646880

Luminaire Tested: **GALN-SA4C-835-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P646880
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-SA4C-835-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3500K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21989.8 lumens
Efficiency: N/A
Efficacy: 103.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

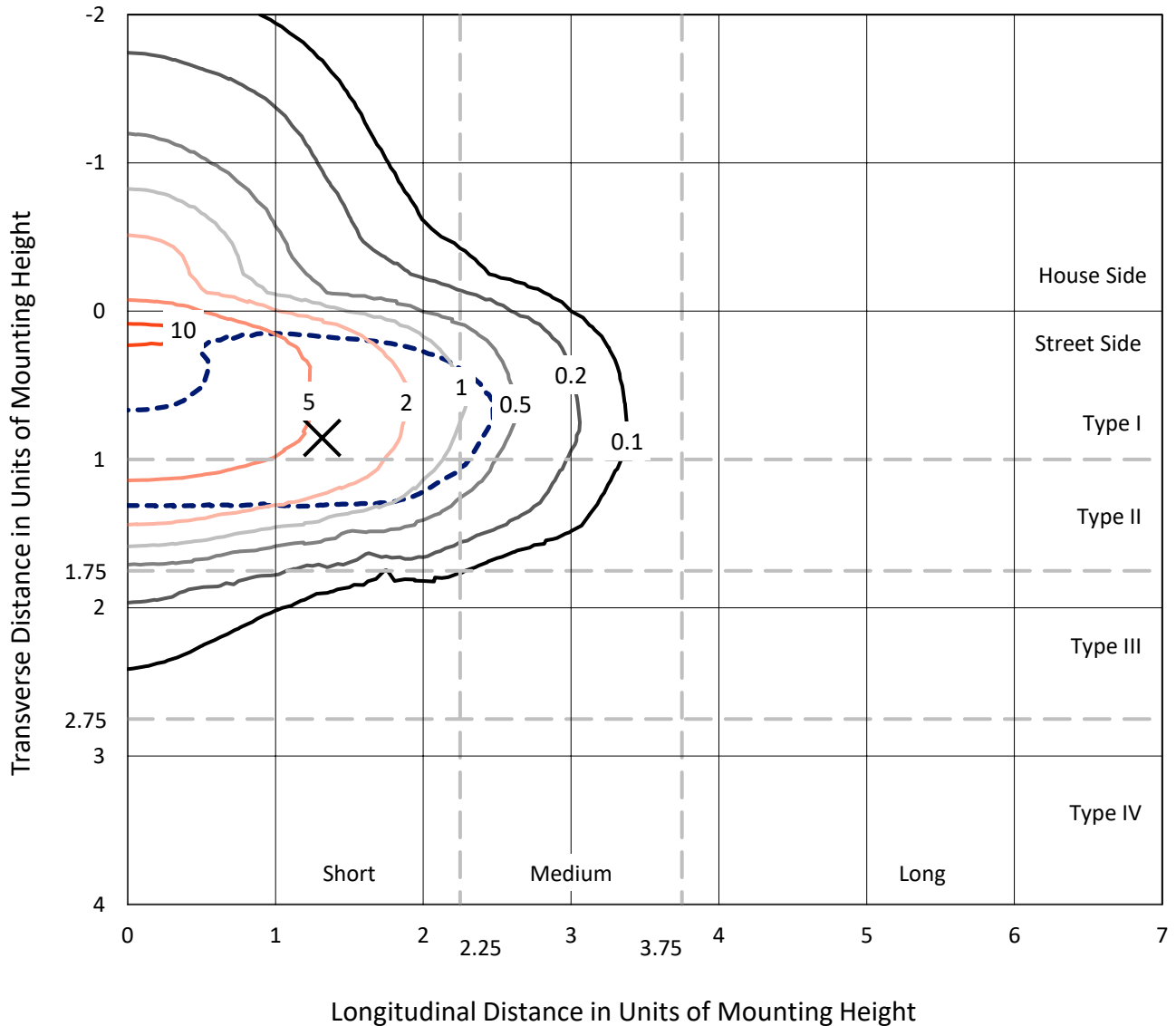
Input Watts (W): 213
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

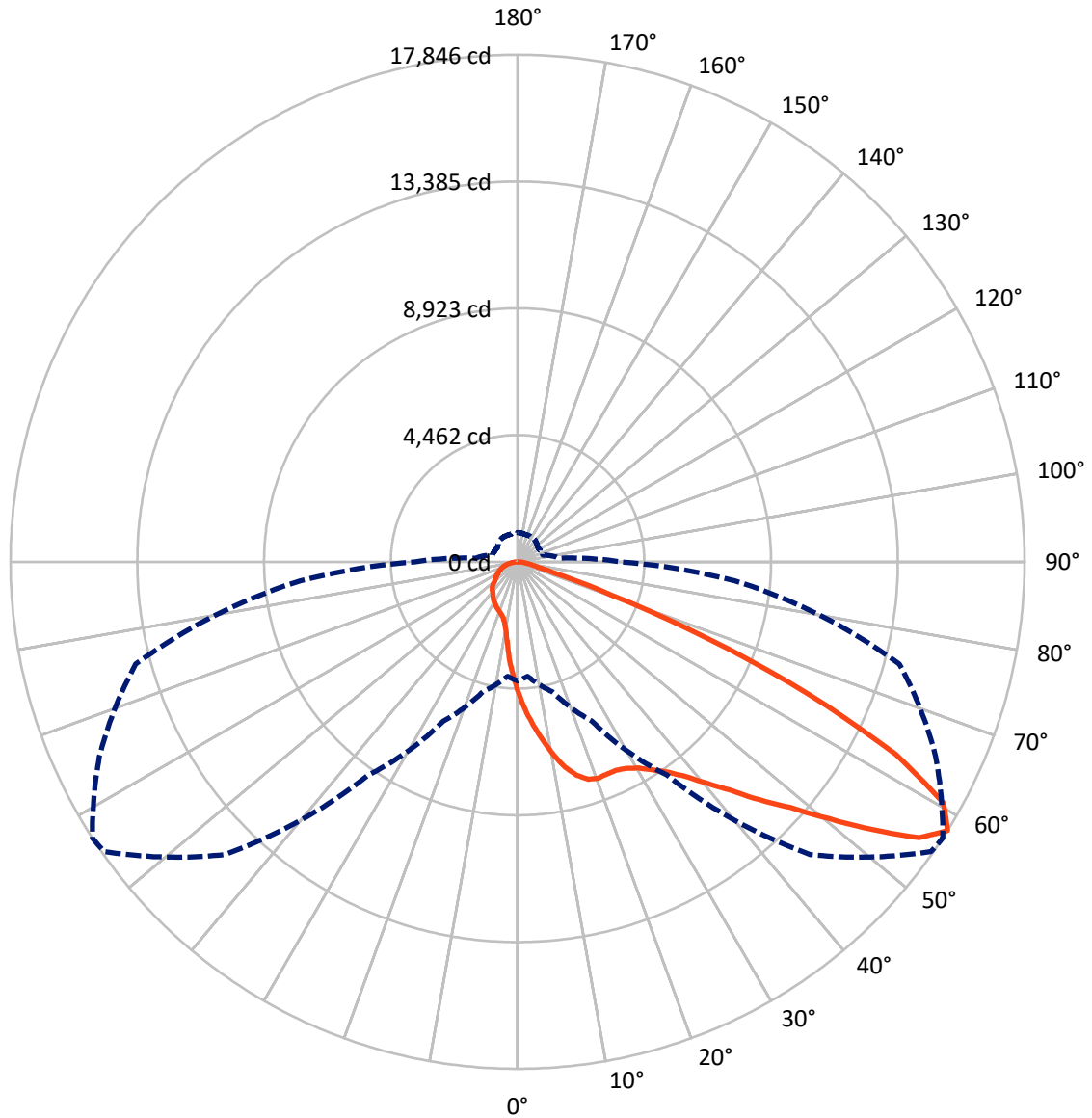
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.2 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	3344.0	0.0	3344.0
	% Fixture	15.2	0.0	15.2
Street Side	Lumens	18645.7	0.0	18645.7
	% Fixture	84.8	0.0	84.8
Total	Lumens	21989.8	0.0	21989.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	444.0	2.0
10°-20°	1308.5	6.0
20°-30°	2172.8	9.9
30°-40°	3272.9	14.9
40°-50°	4913.9	22.3
50°-60°	5507.9	25.0
60°-70°	3223.5	14.7
70°-80°	953.5	4.3
80°-90°	192.7	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°	21989.8	100.0
0°-180°	21989.8	100.0

Coefficient of Utilization



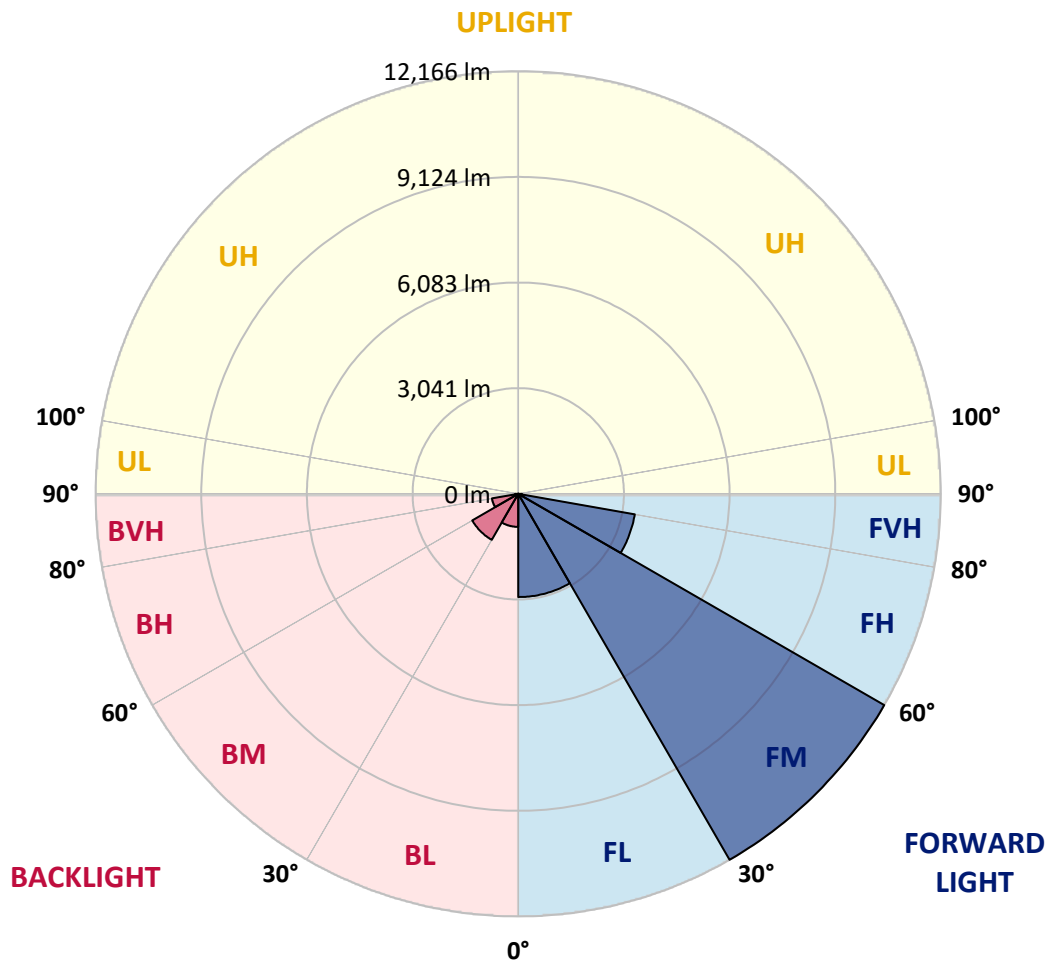
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2972.5	13.5			
FM (30°-60°)	12165.7	55.3			
FH (60°-80°)	3407.5	15.5			G2/5000
FVH (80°-90°)	100.0	0.5			G1/100
BL (0°-30°)	952.8	4.3	B2/1000		
BM (30°-60°)	1529.0	7.0	B2/2500		
BH (60°-80°)	769.4	3.5	B2/1000		G2/1000
BVH (80°-90°)	92.7	0.4			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°	57°	65°	75°	85°
0°	4619.8	4619.8	4619.8	4619.8	4619.8	4619.8	4619.8	4619.8	4619.8	4619.8	4619.8
2.5°	5740.4	5677.8	5628.5	5585.1	5528.6	5375.7	5222.8	5220.4	5098.9	4911.1	4718.5
5°	6675.7	6591.5	6602.3	6467.5	6332.7	6111.2	5787.4	5770.6	5511.8	5160.3	4802.8
7.5°	7284.8	7286.0	7252.3	7175.3	7029.6	6778.0	6410.9	6327.8	5967.9	5434.7	4899.1
10°	7253.5	7286.0	7342.6	7408.7	7453.3	7329.3	6994.7	6893.6	6425.4	5767.0	5006.2
12.5°	6837.0	6887.6	6968.2	7134.3	7402.7	7607.4	7493.0	7411.2	6955.0	6097.9	5124.2
15°	6577.0	6607.1	6651.7	6763.6	7052.5	7542.4	7838.5	7795.2	7454.5	6472.3	5256.6
17.5°	6497.6	6527.6	6542.1	6610.7	6816.6	7318.5	7974.5	8051.5	7897.5	6816.6	5390.2
20°	6577.0	6591.5	6591.5	6632.4	6793.7	7187.3	7968.5	8123.8	8261.0	7229.4	5515.4
22.5°	6785.2	6791.3	6782.8	6797.3	6917.6	7223.4	7911.9	8104.5	8554.7	7579.7	5612.9
25°	7123.5	7133.1	7077.8	7044.0	7132.0	7382.3	7943.2	8120.2	8784.6	7914.3	5677.8
27.5°	7507.5	7519.5	7452.1	7373.9	7414.8	7578.5	8066.0	8224.9	8956.7	8244.1	5718.8
30°	7978.1	7982.9	7869.8	7775.9	7749.4	7871.0	8275.4	8423.5	9171.0	8633.0	5780.2
32.5°	8459.6	8495.7	8350.1	8217.7	8173.1	8210.5	8584.8	8728.0	9426.1	9050.6	5878.8
35°	9114.4	9120.5	8945.9	8784.6	8637.7	8685.9	8980.8	9084.3	9778.9	9533.3	6018.5
37.5°	9931.7	9987.1	9746.4	9445.4	9264.8	9195.1	9459.9	9573.0	10273.6	10125.5	6229.2
40°	10839.3	10859.7	10654.0	10466.2	10136.3	9934.2	10117.1	10239.8	10883.9	10832.1	6473.5
42.5°	11409.9	11454.4	11470.1	11450.8	11202.9	10863.4	10933.2	10991.0	11606.1	11495.3	6723.9
45°	11602.5	11668.7	11892.5	12366.8	12393.3	12058.7	11896.2	11951.6	12393.3	12164.6	6963.4
47.5°	11283.5	11396.6	11809.5	12782.1	13510.4	13535.6	13045.7	12924.1	13110.7	12719.5	7136.7
50°	10458.9	10483.0	11115.0	12523.3	14033.9	14947.5	14440.8	14214.5	13792.0	13130.0	7255.9
52.5°	9183.0	9210.7	9740.4	11320.8	13711.3	15934.6	16073.0	15668.5	14484.1	13449.0	7334.1
55°	6816.6	6976.6	7559.2	9086.7	12182.6	15841.9	17370.6	17140.7	15320.7	13701.7	7456.9
57.5°	4191.3	4044.4	4735.3	6182.2	9162.6	14568.3	17771.4	17846.1	16241.5	13913.6	7662.8
60°	1928.3	1957.2	2242.5	3188.6	5585.1	11396.6	16738.7	17210.5	16750.7	13906.3	7714.5
62.5°	1328.9	1302.4	1230.2	1399.9	2547.0	7207.7	14138.6	14937.9	15729.9	13474.2	7508.7
65°	1188.0	1161.6	1022.0	975.0	1170.0	3141.6	10278.4	11287.1	13244.3	12383.7	6995.9
67.5°	1109.8	1073.7	929.3	837.8	835.4	1250.6	6060.7	7275.2	9823.4	10469.8	6061.8
70°	1027.9	999.1	855.8	754.7	711.4	786.1	2663.8	3487.1	6378.4	7544.8	4722.1
72.5°	946.1	912.4	783.6	675.3	618.7	588.6	1020.7	1327.7	3603.9	4523.5	2894.9
75°	826.9	810.1	700.6	611.4	550.1	475.4	647.6	739.1	1723.7	2077.6	1452.9
77.5°	723.4	705.4	622.3	534.5	489.9	386.4	459.8	502.0	727.0	842.6	656.0
80°	529.6	547.7	524.8	471.8	436.9	303.3	309.4	344.3	432.1	477.9	400.8
82.5°	335.8	369.5	404.4	363.5	331.1	239.5	214.2	227.5	294.9	313.0	178.1
85°	140.9	143.2	234.7	221.5	189.0	142.0	128.8	136.0	157.7	164.9	83.1
87.5°	54.2	52.9	83.1	77.0	59.0	41.0	41.0	45.7	62.6	57.8	26.5
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°	4619.8	4619.8	4619.8	4619.8	4619.8	4619.8	4619.8	4619.8	4619.8	4619.8	4619.8
2.5°	4635.4	4550.0	4380.3	4169.6	4015.5	3842.2	3689.3	3579.8	3538.8	3519.6	3483.5
5°	4631.8	4463.3	4111.8	3743.5	3447.4	3144.1	2887.7	2721.6	2707.1	2596.3	2585.5
7.5°	4633.0	4375.5	3815.7	3274.0	2822.6	2512.1	2300.3	2244.9	2178.7	2161.9	2170.2
10°	4636.6	4263.5	3498.0	2809.4	2372.5	2169.1	2089.6	2068.0	2070.3	2077.6	2078.8
12.5°	4641.5	4155.1	3168.2	2456.7	2119.7	2035.5	2027.0	2046.3	2066.7	2082.4	2086.0
15°	4647.5	4031.2	2846.8	2172.7	1993.4	1986.1	2013.8	2046.3	2075.2	2098.0	2101.7
17.5°	4640.3	3886.7	2577.1	1998.1	1923.5	1958.4	2004.2	2045.1	2071.6	2093.3	2095.6
20°	4623.4	3725.4	2317.1	1875.4	1880.2	1936.8	1986.1	2024.6	2053.5	2064.4	2072.8
22.5°	4558.4	3532.9	2090.8	1780.3	1828.4	1906.7	1965.6	1988.5	1956.0	1933.1	1939.2
25°	4447.7	3282.5	1880.2	1703.3	1781.5	1864.6	1924.7	1869.3	1842.9	1833.2	1838.0
27.5°	4309.2	3008.1	1721.3	1622.6	1721.3	1817.6	1800.7	1791.1	1779.1	1763.4	1767.0
30°	4160.0	2739.6	1586.5	1560.0	1656.3	1711.6	1718.9	1734.5	1721.3	1697.2	1706.9
32.5°	4021.6	2486.8	1484.2	1507.0	1610.6	1602.1	1656.3	1674.4	1613.0	1532.3	1535.9
35°	3903.6	2252.1	1407.1	1455.3	1532.3	1535.9	1590.1	1527.5	1461.3	1422.8	1425.2
37.5°	3814.5	2069.2	1356.5	1410.7	1432.4	1478.1	1449.3	1416.8	1408.3	1381.8	1383.0
40°	3761.5	1909.0	1324.1	1375.8	1372.2	1403.5	1310.8	1343.3	1355.4	1346.9	1348.2
42.5°	3708.6	1795.9	1290.4	1327.7	1326.5	1265.1	1244.7	1272.3	1303.6	1307.2	1304.8
45°	3666.5	1708.0	1255.5	1254.3	1278.3	1182.0	1176.0	1192.9	1237.4	1259.1	1257.9
47.5°	3619.5	1634.6	1202.5	1168.8	1176.0	1130.3	1120.6	1127.8	1182.0	1216.9	1226.6
50°	3560.5	1561.2	1136.3	1090.6	1060.5	1082.1	1084.5	1085.7	1139.9	1179.6	1188.0
52.5°	3513.6	1505.9	1060.5	1026.7	990.7	1038.8	1056.8	1059.2	1091.7	1124.2	1130.3
55°	3541.3	1474.5	985.8	961.8	929.3	994.3	1029.2	1034.0	1041.2	1065.3	1068.9
57.5°	3624.4	1481.7	925.7	894.3	870.3	941.3	1000.3	1003.9	999.1	1027.9	1032.8
60°	3649.6	1478.1	881.1	819.7	805.2	884.7	958.2	965.4	964.2	1006.3	1014.7
62.5°	3543.7	1432.4	836.6	757.2	747.5	826.9	899.2	928.1	934.0	994.3	1005.1
65°	3294.6	1338.5	777.6	690.9	690.9	765.5	842.6	882.3	899.2	979.8	991.8
67.5°	2965.9	1227.7	717.4	634.4	632.0	706.6	782.4	823.3	849.8	959.3	966.5
70°	2461.6	1078.5	642.8	573.0	573.0	640.3	709.0	758.3	796.9	920.8	920.8
72.5°	1686.3	896.8	552.5	503.2	504.3	567.0	636.7	692.1	737.9	843.8	846.2
75°	1066.4	700.6	453.8	428.5	433.3	492.4	564.5	622.3	713.8	834.1	837.8
77.5°	567.0	492.4	361.1	355.1	361.1	415.3	496.0	575.3	716.2	723.4	711.4
80°	367.1	349.1	285.2	273.3	275.6	334.7	441.8	546.5	575.3	582.6	556.1
82.5°	199.8	221.5	202.2	190.2	190.2	261.2	376.8	434.6	412.9	343.0	327.4
85°	85.4	103.5	104.7	91.5	87.9	161.3	252.8	237.1	220.3	210.6	208.3
87.5°	24.0	33.7	33.7	25.3	19.3	44.6	50.6	14.4	0.0	1.2	2.4
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)