

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: P651804

Luminaire Tested: **GALN-SA3A-840-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651804
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-SA3A-840-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11700.8 lumens
Efficiency: N/A
Efficacy: 125.8 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): 93
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

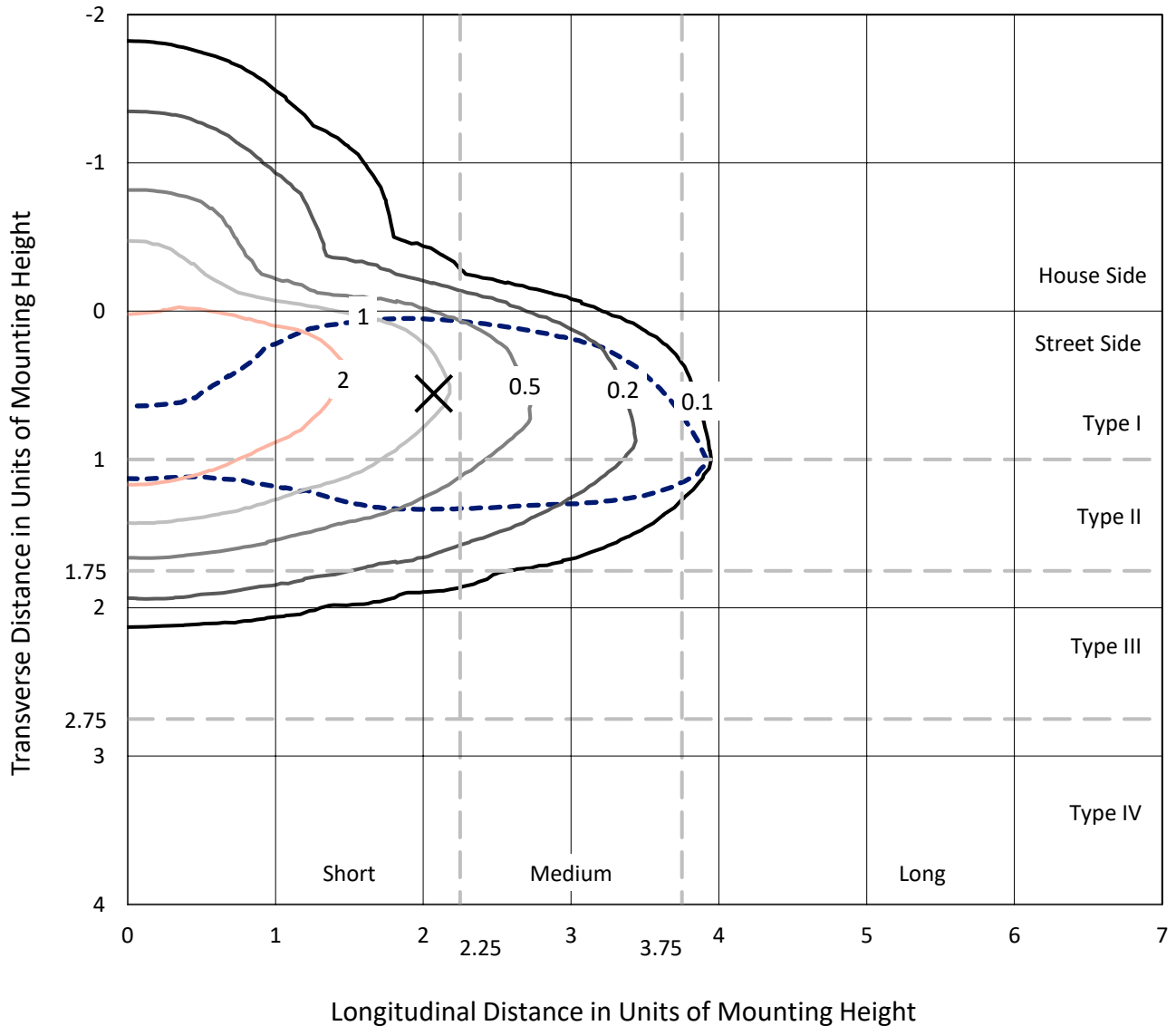




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Iso-Footcandle Lines of Horizontal Illumination

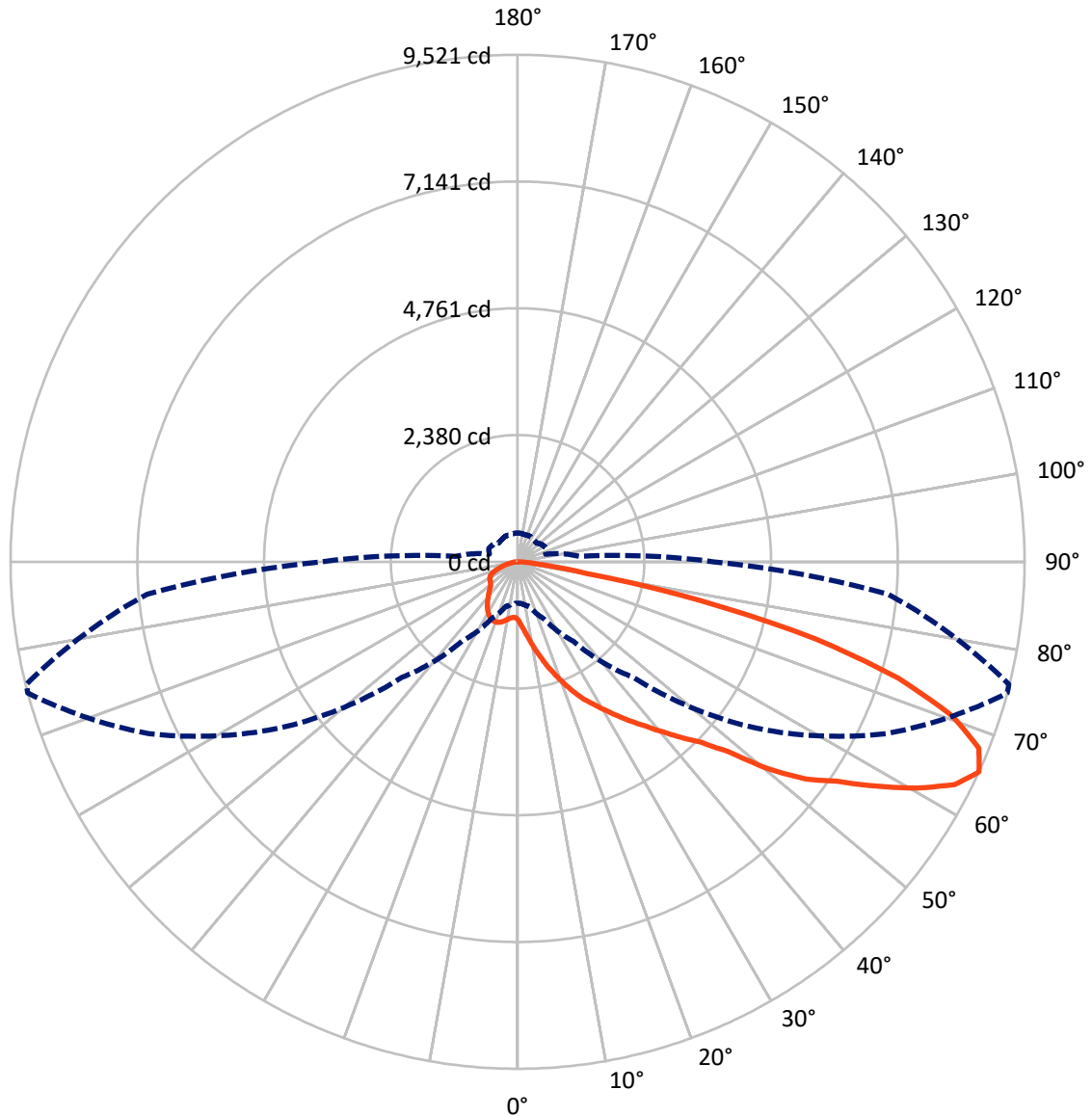
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 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
House Side	Lumens	1967.1	0.0	1967.1
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	9733.8	0.0	9733.8
	% Fixture	83.2	0.0	83.2
Total	Lumens	11700.8	0.0	11700.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.1	1.1
10°-20°	517.4	4.4
20°-30°	999.4	8.5
30°-40°	1623.3	13.9
40°-50°	2233.0	19.1
50°-60°	2636.4	22.5
60°-70°	2309.9	19.7
70°-80°	1102.8	9.4
80°-90°	146.7	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°	11700.8	100.0
0°-180°	11700.8	100.0

Coefficient of Utilization



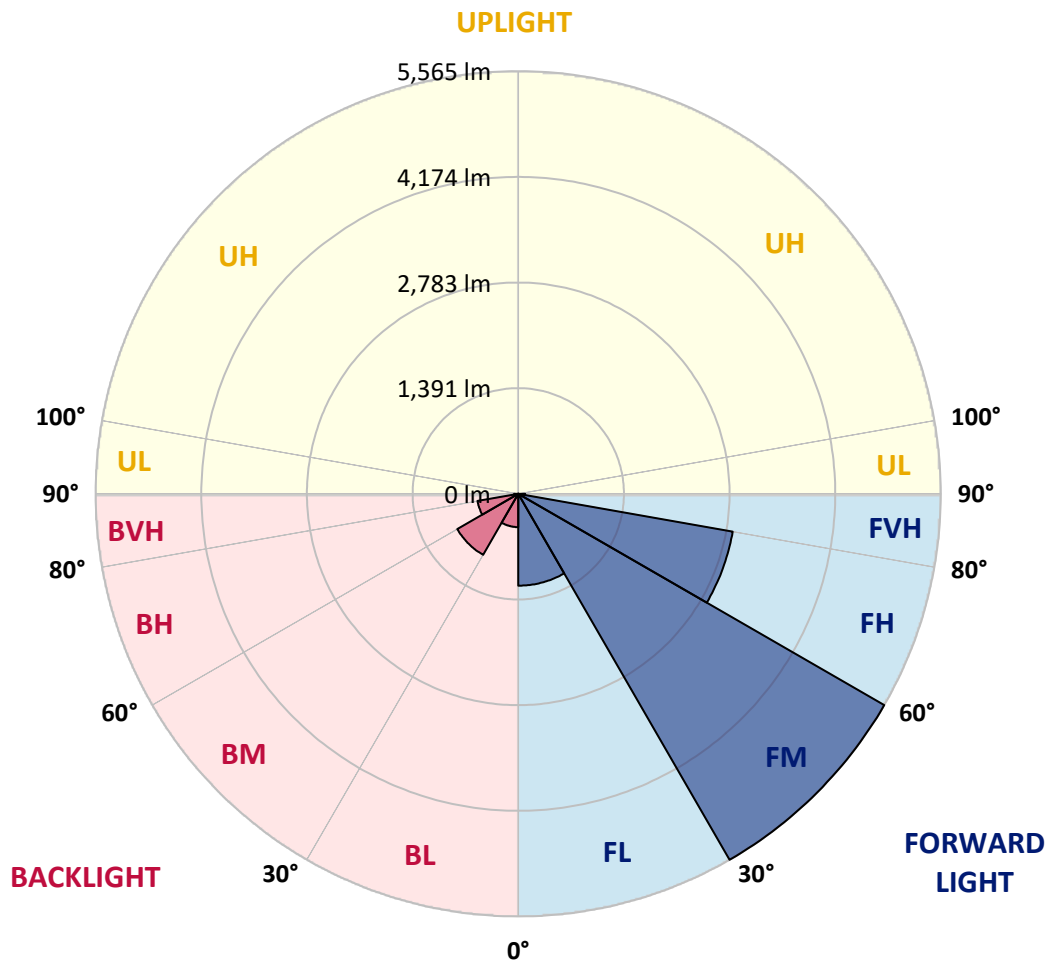
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1209.7	10.3			
FM (30°-60°)	5565.2	47.6			
FH (60°-80°)	2867.2	24.5			G2/5000
FVH (80°-90°)	91.7	0.8			G1/100
BL (0°-30°)	439.1	3.8	B1/500		
BM (30°-60°)	927.5	7.9	B1/1000		
BH (60°-80°)	545.4	4.7	B2/1000		G2/1000
BVH (80°-90°)	55.0	0.5			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°	75°	76°	85°
0°	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2
2.5°	1444.5	1434.9	1424.8	1396.9	1367.0	1333.4	1285.1	1238.9	1177.3	1175.4	1129.7
5°	1844.9	1838.6	1793.5	1767.5	1698.3	1606.3	1528.3	1407.0	1294.7	1281.3	1192.5
7.5°	2213.0	2188.3	2171.1	2124.2	2055.7	1937.6	1786.5	1622.8	1434.9	1417.2	1269.9
10°	2490.4	2487.8	2478.9	2438.3	2386.9	2269.5	2102.0	1867.1	1612.6	1577.7	1363.8
12.5°	2697.9	2699.8	2698.5	2697.9	2661.1	2561.4	2379.9	2132.4	1792.3	1767.5	1472.4
15°	2834.3	2853.3	2861.0	2892.7	2895.9	2829.3	2673.1	2388.9	1994.7	1957.9	1589.2
17.5°	2924.5	2934.0	2969.5	3023.5	3067.3	3055.2	2916.3	2626.2	2201.6	2140.0	1710.3
20°	3010.8	3027.3	3054.6	3128.2	3205.6	3241.1	3143.4	2869.2	2406.6	2367.2	1844.3
22.5°	3190.4	3213.9	3223.4	3260.8	3326.8	3389.7	3345.2	3102.2	2631.2	2577.9	1986.4
25°	3494.4	3519.2	3492.5	3483.6	3505.2	3536.2	3526.7	3321.8	2843.3	2767.1	2121.0
27.5°	3890.4	3893.6	3841.5	3792.1	3738.7	3722.9	3693.7	3516.6	3027.3	2963.9	2256.2
30°	4315.6	4300.4	4214.1	4124.6	4034.4	3945.6	3861.9	3704.4	3232.3	3159.3	2388.9
32.5°	4710.4	4702.1	4606.3	4467.3	4315.0	4231.2	4061.8	3894.3	3451.9	3381.4	2525.3
35°	5006.1	5018.2	4912.8	4761.2	4594.9	4520.6	4306.8	4093.5	3679.0	3602.3	2673.8
37.5°	5216.2	5209.8	5116.6	4985.2	4839.2	4774.4	4593.0	4311.2	3923.4	3849.8	2836.3
40°	5291.1	5287.3	5218.1	5122.3	5029.6	5006.7	4892.5	4546.0	4203.3	4116.9	3031.7
42.5°	5243.5	5251.7	5206.0	5180.0	5162.9	5179.4	5190.1	4853.8	4508.5	4429.2	3243.7
45°	5097.5	5093.1	5086.7	5129.3	5225.7	5334.2	5484.7	5144.5	4840.5	4777.0	3528.0
47.5°	4836.7	4868.4	4884.3	5001.7	5212.3	5469.4	5823.6	5534.1	5322.2	5266.9	3961.4
50°	4471.8	4497.2	4591.0	4799.8	5114.0	5520.2	6154.9	6171.3	6125.7	6022.2	4432.4
52.5°	3901.8	3941.2	4134.8	4517.4	4912.2	5499.2	6355.4	6717.7	6778.0	6700.7	4896.3
55°	3264.0	3319.3	3523.5	4025.6	4634.2	5385.0	6493.7	7034.5	7275.0	7203.2	5343.1
57.5°	2639.5	2697.9	2907.9	3394.1	4149.3	5132.5	6584.5	7387.3	7951.5	7858.2	5899.1
60°	1978.2	2039.1	2219.4	2720.1	3458.9	4638.6	6523.0	7693.2	8627.4	8587.5	6455.7
62.5°	1276.3	1343.6	1500.3	1914.7	2658.6	3964.1	6193.5	7862.0	9212.6	9164.4	6861.8
65°	777.4	785.1	871.4	1188.7	1819.5	3069.1	5440.2	7638.0	9521.0	9506.4	6985.6
67.5°	502.7	514.7	554.1	712.1	1090.9	2131.8	4349.9	6898.6	9340.7	9335.7	6729.9
70°	424.6	428.4	446.2	480.5	634.0	1292.8	3054.6	5720.1	8656.0	8656.0	6114.8
72.5°	379.5	384.6	391.0	401.7	452.5	732.4	1822.7	4452.7	7473.6	7523.2	5204.8
75°	344.6	343.4	347.2	349.1	385.9	478.5	942.4	3293.2	5781.6	5682.6	3769.2
77.5°	295.1	297.0	295.1	303.3	340.8	364.3	478.5	2209.8	3503.9	3375.7	1891.9
80°	242.5	245.6	248.8	253.9	291.3	276.7	287.5	1007.2	1296.0	1268.6	584.5
82.5°	182.2	186.6	191.7	203.7	229.1	182.7	181.5	430.3	467.8	428.4	215.1
85°	73.6	87.0	131.4	143.4	144.1	100.2	111.7	179.6	191.0	186.6	84.4
87.5°	17.2	20.3	42.6	64.1	59.0	37.4	41.3	58.4	66.6	61.6	28.6
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°	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2
2.5°	1108.8	1086.5	1048.5	1019.2	998.3	979.9	968.5	961.5	959.0	958.3	959.0
5°	1146.2	1106.8	1046.5	1008.4	987.5	975.5	968.5	967.8	968.5	969.1	967.2
7.5°	1197.6	1141.1	1062.4	1026.9	1011.0	1002.1	998.9	997.7	998.3	997.7	997.7
10°	1266.1	1188.7	1093.5	1056.7	1043.3	1033.2	1028.1	1024.9	1022.4	1019.9	1018.6
12.5°	1341.6	1241.4	1127.1	1091.6	1072.5	1056.7	1045.3	1037.0	1031.3	1025.6	1024.3
15°	1426.1	1297.2	1164.6	1115.1	1087.7	1064.3	1044.6	1031.3	1021.1	1012.9	1012.2
17.5°	1506.7	1349.9	1189.9	1125.8	1085.9	1052.8	1026.9	1008.4	995.7	985.0	983.7
20°	1592.9	1400.0	1201.4	1118.9	1066.8	1026.9	992.6	970.3	955.8	943.7	941.8
22.5°	1679.9	1442.6	1200.1	1096.7	1033.8	986.9	950.7	927.2	910.0	898.0	893.6
25°	1763.1	1476.8	1184.3	1061.2	988.2	939.3	902.5	880.9	865.6	851.1	851.1
27.5°	1837.9	1497.1	1154.4	1017.9	941.2	889.8	860.6	840.9	827.0	817.5	811.7
30°	1911.6	1506.7	1113.8	963.4	891.7	847.9	824.4	813.0	800.3	789.5	788.3
32.5°	1977.5	1504.7	1063.0	910.0	844.7	813.6	804.1	795.2	781.9	766.7	762.9
35°	2041.7	1492.1	1002.7	851.7	805.3	793.3	795.8	783.1	759.0	740.0	736.8
37.5°	2111.5	1469.2	936.7	804.1	772.4	783.8	790.1	762.2	722.8	693.1	686.1
40°	2192.1	1443.2	868.2	756.5	746.4	774.9	774.9	723.5	669.5	651.2	646.1
42.5°	2286.7	1421.6	811.1	716.5	724.8	753.4	750.2	672.1	649.8	640.3	637.8
45°	2436.5	1414.0	752.0	681.6	707.0	728.0	701.9	654.3	641.6	634.0	631.5
47.5°	2673.1	1422.9	700.0	655.6	686.7	702.6	648.0	642.3	633.4	622.6	621.3
50°	2892.7	1414.6	663.2	641.0	668.9	672.1	625.8	627.6	622.6	610.6	608.0
52.5°	3072.3	1388.6	639.7	633.4	653.7	618.8	604.8	611.8	609.9	594.7	592.1
55°	3269.7	1372.8	628.3	633.4	643.5	572.5	585.2	595.3	592.7	582.0	581.3
57.5°	3509.0	1376.0	620.1	635.3	633.4	549.0	565.5	577.5	576.9	573.7	573.7
60°	3754.0	1377.2	607.4	634.6	621.3	530.6	545.1	562.3	563.6	565.5	565.5
62.5°	3835.2	1322.0	582.6	623.3	594.7	512.8	526.1	549.6	548.3	553.4	554.1
65°	3683.5	1169.0	545.8	597.2	560.4	500.1	511.5	533.1	526.1	539.4	542.0
67.5°	3352.8	967.2	488.7	550.3	522.3	486.8	502.0	510.2	497.5	523.6	524.2
70°	2897.8	755.2	416.3	483.6	479.2	472.8	494.4	481.7	463.9	495.7	489.3
72.5°	2423.1	576.9	332.5	395.4	421.4	451.9	481.1	444.9	420.2	429.7	418.2
75°	1820.2	426.5	267.2	309.7	350.9	422.0	469.0	400.5	362.4	353.5	350.9
77.5°	927.9	278.6	199.9	231.6	263.4	381.4	452.5	348.4	300.2	286.2	279.9
80°	331.3	173.2	140.9	160.0	177.7	328.1	395.4	288.1	233.0	230.3	233.0
82.5°	153.6	111.7	94.5	104.7	105.4	218.9	301.5	215.1	177.0	269.1	227.2
85°	66.0	55.8	53.3	52.1	48.3	97.7	169.5	115.5	180.2	80.6	74.3
87.5°	19.7	22.2	19.7	14.6	10.8	10.8	17.2	6.3	4.5	3.2	3.2
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)