

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: P454051

Luminaire Tested: **GALN-SA5A-827-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454051
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-SA5A-827-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17000 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

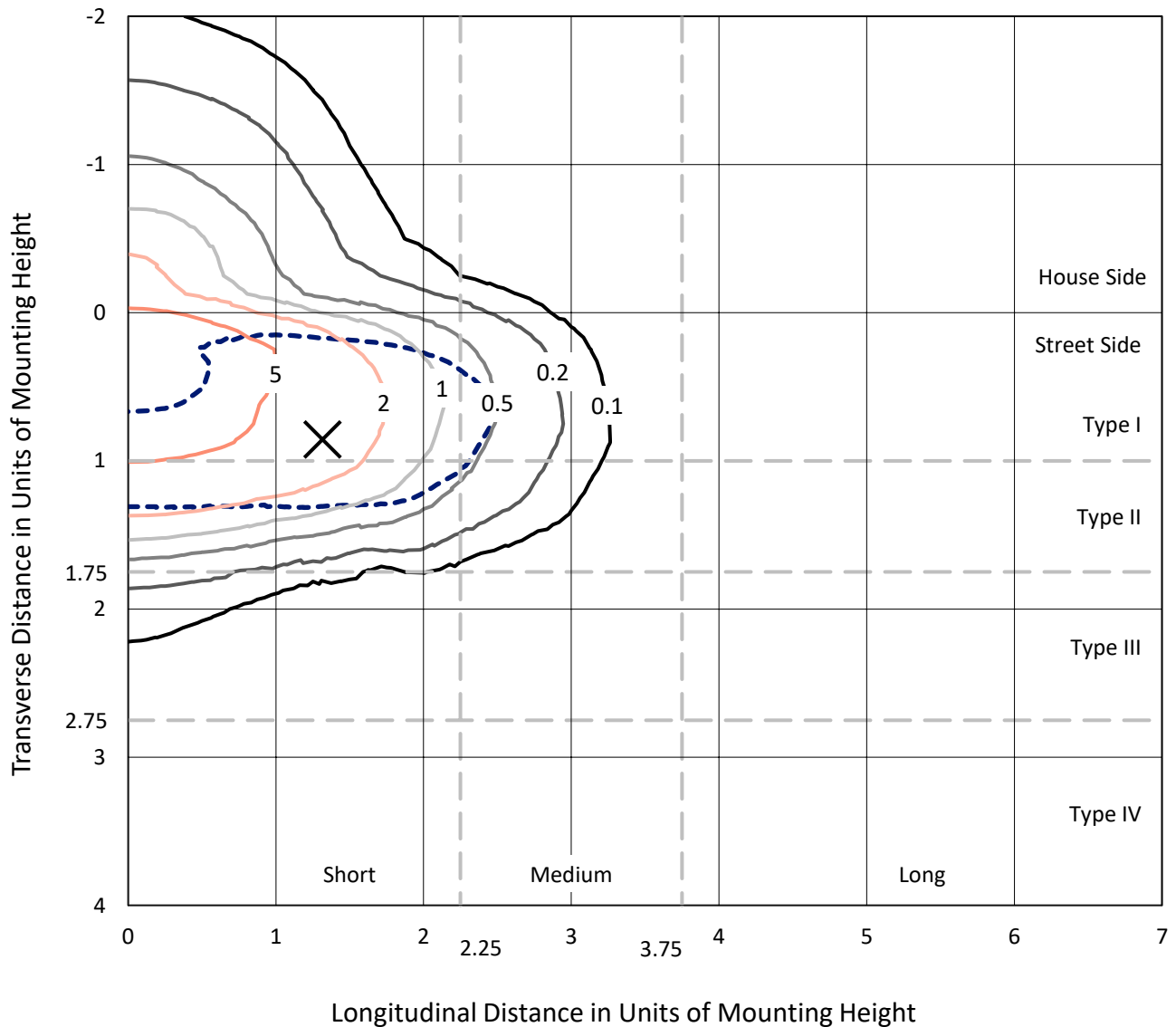
Input Watts (W): 154
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

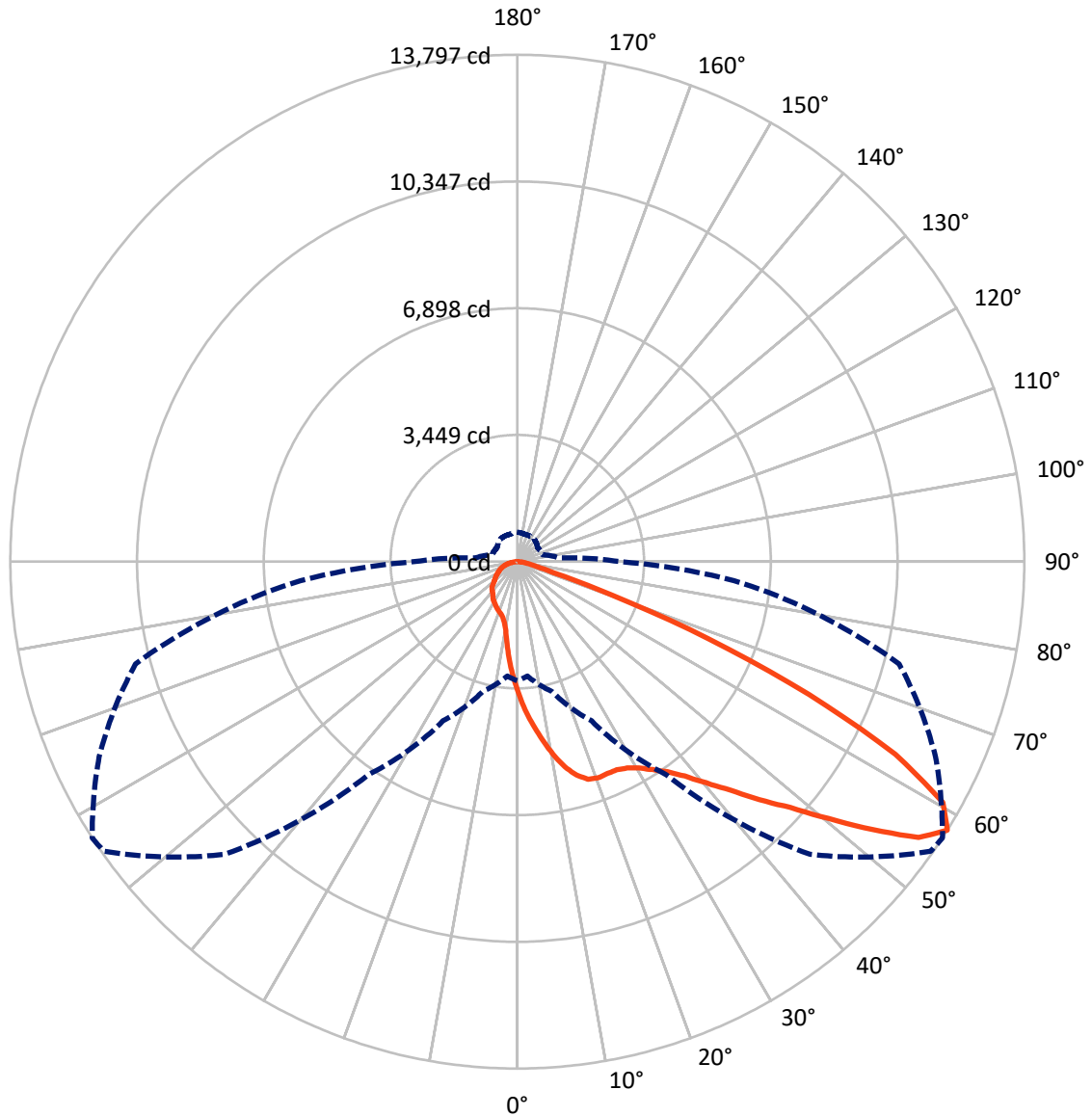
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.7 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	2585.2	0.0	2585.2
	% Fixture	15.2	0.0	15.2
Street Side	Lumens	14414.8	0.0	14414.8
	% Fixture	84.8	0.0	84.8
Total	Lumens	17000.0	0.0	17000.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	343.3	2.0
10°-20°	1011.6	6.0
20°-30°	1679.8	9.9
30°-40°	2530.2	14.9
40°-50°	3798.9	22.3
50°-60°	4258.1	25.0
60°-70°	2492.0	14.7
70°-80°	737.1	4.3
80°-90°	149.0	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°	17000.0	100.0
0°-180°	17000.0	100.0

Coefficient of Utilization



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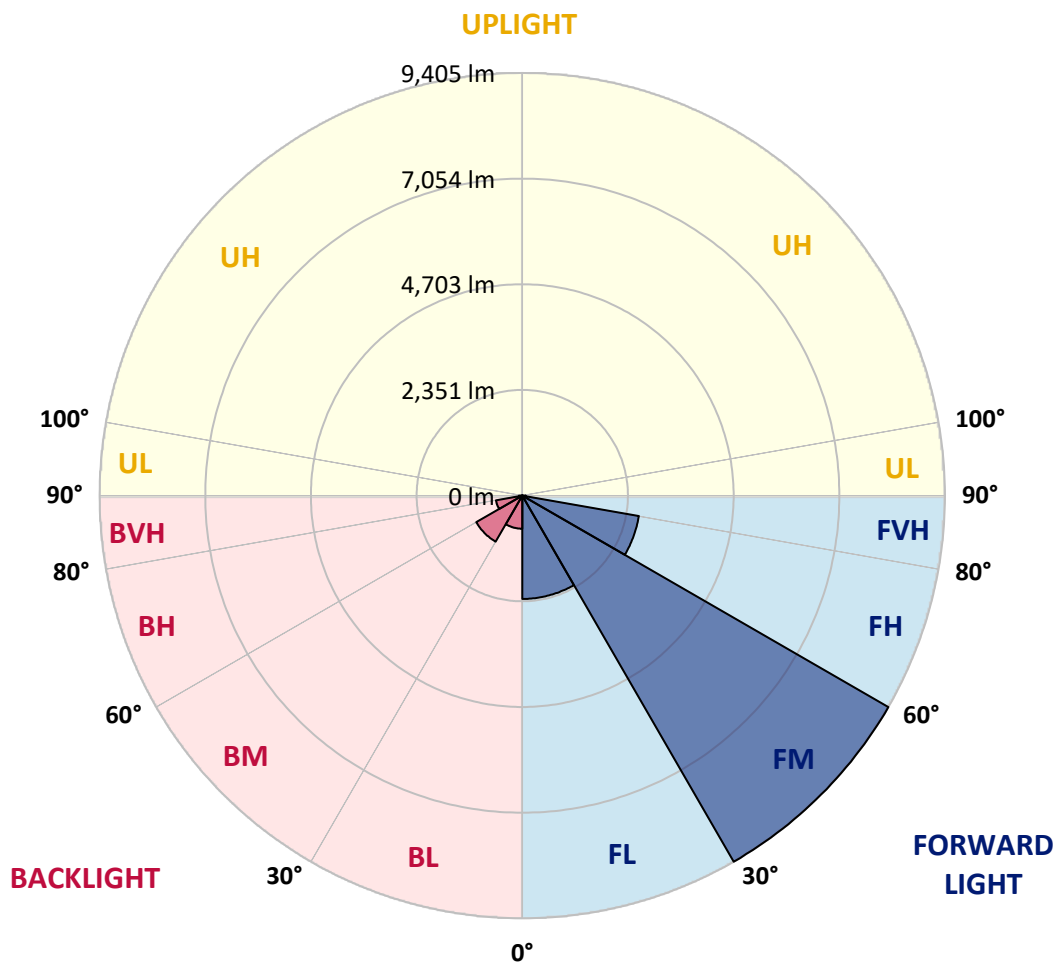
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2298.0	13.5			
FM	(30°-60°)	9405.1	55.3			
FH	(60°-80°)	2634.3	15.5			G2/5000
FVH	(80°-90°)	77.3	0.5			G1/100
BL	(0°-30°)	736.6	4.3	B2/1000		
BM	(30°-60°)	1182.1	7.0	B2/2500		
BH	(60°-80°)	594.8	3.5	B2/1000		G2/1000
BVH	(80°-90°)	71.7	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°	3571.5	3571.5	3571.5	3571.5	3571.5	3571.5	3571.5	3571.5	3571.5	3571.5	3571.5
2.5°	4437.9	4389.5	4351.3	4317.8	4274.1	4155.9	4037.7	4035.9	3941.9	3796.7	3647.8
5°	5160.9	5095.8	5104.1	4999.9	4895.7	4724.5	4474.2	4461.1	4261.1	3989.3	3713.0
7.5°	5631.8	5632.7	5606.6	5547.1	5434.5	5240.0	4956.2	4892.0	4613.7	4201.5	3787.4
10°	5607.6	5632.7	5676.4	5727.6	5762.1	5666.2	5407.5	5329.3	4967.4	4458.3	3870.2
12.5°	5285.6	5324.7	5387.0	5515.5	5723.0	5881.2	5792.8	5729.5	5376.8	4714.2	3961.4
15°	5084.6	5107.9	5142.3	5228.8	5452.2	5830.9	6059.8	6026.3	5763.0	5003.6	4063.8
17.5°	5023.2	5046.4	5057.6	5110.7	5269.8	5657.8	6165.0	6224.5	6105.4	5269.8	4167.1
20°	5084.6	5095.8	5095.8	5127.4	5252.1	5556.4	6160.3	6280.4	6386.5	5589.0	4263.8
22.5°	5245.6	5250.2	5243.7	5254.9	5348.0	5584.3	6116.6	6265.5	6613.5	5859.8	4339.2
25°	5507.1	5514.5	5471.7	5445.7	5513.6	5707.2	6140.8	6277.6	6791.3	6118.5	4389.5
27.5°	5803.9	5813.2	5761.1	5700.6	5732.3	5858.8	6235.7	6358.5	6924.3	6373.4	4421.1
30°	6167.8	6171.5	6084.0	6011.4	5991.0	6085.0	6397.6	6512.1	7090.0	6674.0	4468.6
32.5°	6540.0	6567.9	6455.3	6353.0	6318.5	6347.4	6636.8	6747.5	7287.2	6996.9	4544.9
35°	7046.2	7050.9	6916.0	6791.3	6677.7	6715.0	6942.9	7023.0	7559.9	7370.1	4652.8
37.5°	7678.1	7720.9	7534.8	7302.1	7162.6	7108.6	7313.3	7400.8	7942.4	7827.9	4815.7
40°	8379.7	8395.6	8236.4	8091.3	7836.3	7679.9	7821.4	7916.3	8414.2	8374.1	5004.6
42.5°	8820.8	8855.2	8867.3	8852.5	8660.8	8398.3	8452.3	8497.0	8972.5	8886.9	5198.1
45°	8969.7	9020.9	9194.0	9560.6	9581.1	9322.4	9196.8	9239.6	9581.1	9404.3	5383.3
47.5°	8723.1	8810.6	9129.8	9881.7	10444.7	10464.2	10085.5	9991.5	10135.7	9833.3	5517.3
50°	8085.7	8104.3	8592.8	9681.6	10849.4	11555.7	11164.0	10989.0	10662.4	10150.6	5609.4
52.5°	7099.3	7120.7	7530.1	8752.0	10600.1	12318.8	12425.8	12113.2	11197.5	10397.2	5669.9
55°	5269.8	5393.6	5843.9	7024.8	9418.2	12247.2	13429.0	13251.2	11844.2	10592.6	5764.8
57.5°	3240.2	3126.7	3660.8	4779.4	7083.5	11262.6	13738.8	13796.5	12556.1	10756.4	5924.0
60°	1490.8	1513.1	1733.6	2465.1	4317.8	8810.6	12940.4	13305.2	12949.7	10750.8	5964.0
62.5°	1027.3	1006.9	951.0	1082.2	1969.1	5572.2	10930.4	11548.3	12160.6	10416.7	5804.9
65°	918.5	898.0	790.0	753.8	904.5	2428.8	7946.1	8725.9	10239.0	9573.6	5408.4
67.5°	858.0	830.1	718.4	647.7	645.8	966.9	4685.4	5624.3	7594.3	8094.0	4686.3
70°	794.7	772.4	661.6	583.5	550.0	607.7	2059.3	2695.8	4931.1	5832.8	3650.6
72.5°	731.4	705.4	605.8	522.0	478.3	455.0	789.1	1026.4	2786.1	3497.1	2238.0
75°	639.3	626.3	541.6	472.7	425.3	367.6	500.6	571.4	1332.6	1606.2	1123.2
77.5°	559.3	545.3	481.1	413.2	378.7	298.7	355.5	388.0	562.1	651.4	507.2
80°	409.4	423.4	405.7	364.8	337.8	234.5	239.2	266.1	334.1	369.4	309.9
82.5°	259.6	285.7	312.7	281.0	255.9	185.2	165.6	175.9	228.0	241.9	137.7
85°	108.9	110.7	181.5	171.2	146.1	109.8	99.6	105.2	121.9	127.5	64.2
87.5°	41.9	40.9	64.2	59.6	45.6	31.6	31.6	35.4	48.4	44.7	20.5
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°	3571.5	3571.5	3571.5	3571.5	3571.5	3571.5	3571.5	3571.5	3571.5	3571.5	3571.5
2.5°	3583.6	3517.5	3386.3	3223.5	3104.4	2970.4	2852.2	2767.5	2735.9	2721.0	2693.1
5°	3580.8	3450.5	3178.8	2894.1	2665.1	2430.6	2232.4	2104.0	2092.8	2007.2	1998.9
7.5°	3581.7	3382.6	2949.9	2531.1	2182.2	1942.1	1778.3	1735.5	1684.3	1671.3	1677.8
10°	3584.5	3296.1	2704.2	2171.9	1834.1	1676.9	1615.5	1598.7	1600.6	1606.2	1607.1
12.5°	3588.3	3212.3	2449.2	1899.3	1638.7	1573.6	1567.1	1582.0	1597.8	1609.9	1612.7
15°	3592.9	3116.5	2200.8	1679.7	1541.0	1535.4	1556.8	1582.0	1604.3	1622.0	1624.8
17.5°	3587.3	3004.8	1992.3	1544.7	1487.0	1514.0	1549.4	1581.0	1601.5	1618.3	1620.1
20°	3574.3	2880.1	1791.3	1449.8	1453.5	1497.3	1535.4	1565.2	1587.5	1595.9	1602.4
22.5°	3524.0	2731.2	1616.4	1376.3	1413.5	1474.0	1519.6	1537.3	1512.2	1494.5	1499.1
25°	3438.4	2537.6	1453.5	1316.7	1377.2	1441.4	1488.0	1445.2	1424.7	1417.2	1421.0
27.5°	3331.4	2325.5	1330.7	1254.4	1330.7	1405.2	1392.1	1384.7	1375.4	1363.3	1366.1
30°	3216.0	2118.0	1226.5	1206.0	1280.5	1323.3	1328.8	1340.9	1330.7	1312.1	1319.5
32.5°	3109.0	1922.5	1147.4	1165.1	1245.1	1238.6	1280.5	1294.4	1247.0	1184.6	1187.4
35°	3017.8	1741.1	1087.8	1125.1	1184.6	1187.4	1229.3	1180.9	1129.7	1099.9	1101.8
37.5°	2949.0	1599.6	1048.7	1090.6	1107.4	1142.7	1120.4	1095.3	1088.8	1068.3	1069.2
40°	2908.0	1475.9	1023.6	1063.6	1060.8	1085.0	1013.4	1038.5	1047.8	1041.3	1042.2
42.5°	2867.1	1388.4	997.6	1026.4	1025.5	978.0	962.2	983.6	1007.8	1010.6	1008.7
45°	2834.5	1320.5	970.6	969.6	988.3	913.8	909.2	922.2	956.6	973.4	972.4
47.5°	2798.2	1263.7	929.6	903.6	909.2	873.8	866.4	871.9	913.8	940.8	948.2
50°	2752.6	1206.9	878.5	843.1	819.8	836.6	838.4	839.4	881.2	912.0	918.5
52.5°	2716.3	1164.1	819.8	793.8	765.9	803.1	817.0	818.9	844.0	869.1	873.8
55°	2737.7	1139.9	762.1	743.5	718.4	768.6	795.6	799.4	804.9	823.5	826.3
57.5°	2801.9	1145.5	715.6	691.4	672.8	727.7	773.3	776.1	772.4	794.7	798.4
60°	2821.5	1142.7	681.2	633.7	622.5	684.0	740.7	746.3	745.4	778.0	784.5
62.5°	2739.6	1107.4	646.7	585.3	577.9	639.3	695.1	717.5	722.1	768.6	777.0
65°	2547.0	1034.8	601.1	534.1	534.1	591.8	651.4	682.1	695.1	757.5	766.8
67.5°	2292.9	949.2	554.6	490.4	488.5	546.2	604.9	636.5	657.0	741.7	747.2
70°	1903.0	833.8	496.9	442.9	442.9	495.1	548.1	586.3	616.0	711.9	711.9
72.5°	1303.7	693.3	427.1	389.0	389.9	438.3	492.3	535.1	570.4	652.3	654.2
75°	824.5	541.6	350.8	331.3	335.0	380.6	436.4	481.1	551.8	644.9	647.7
77.5°	438.3	380.6	279.2	274.5	279.2	321.0	383.4	444.8	553.7	559.3	550.0
80°	283.8	269.9	220.5	211.2	213.1	258.7	341.5	422.5	444.8	450.4	429.9
82.5°	154.5	171.2	156.3	147.0	147.0	201.9	291.3	335.9	319.2	265.2	253.1
85°	66.1	80.0	81.0	70.7	67.9	124.7	195.4	183.3	170.3	162.8	161.0
87.5°	18.6	26.1	26.1	19.5	14.9	34.4	39.1	11.2	0.0	0.9	1.9
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)