

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: P647405

Luminaire Tested: **GALN-SA4D-835-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P647405
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4D-835-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24098.4 lumens
Efficiency: N/A
Efficacy: 98.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

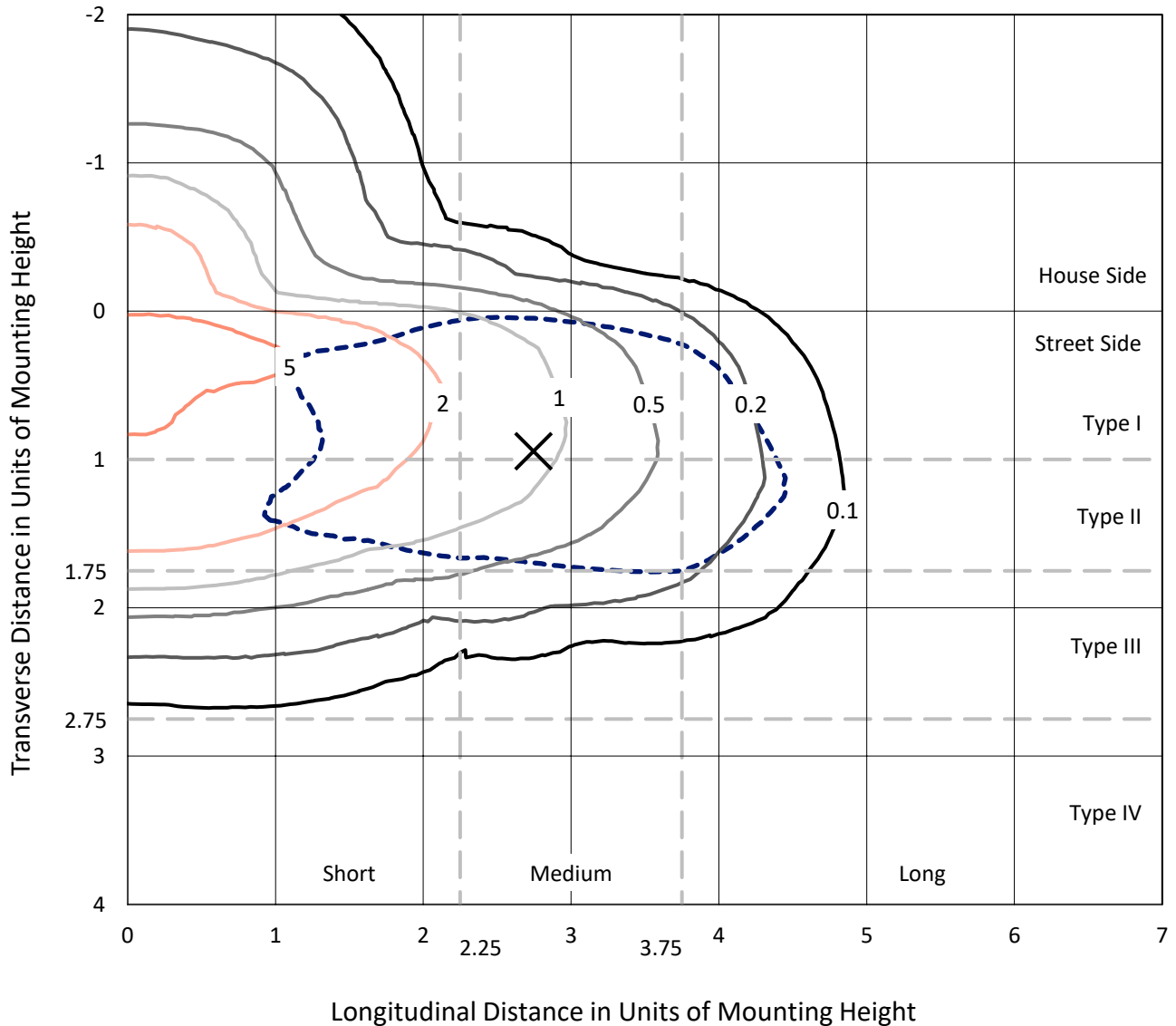
Input Watts (W): 245
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

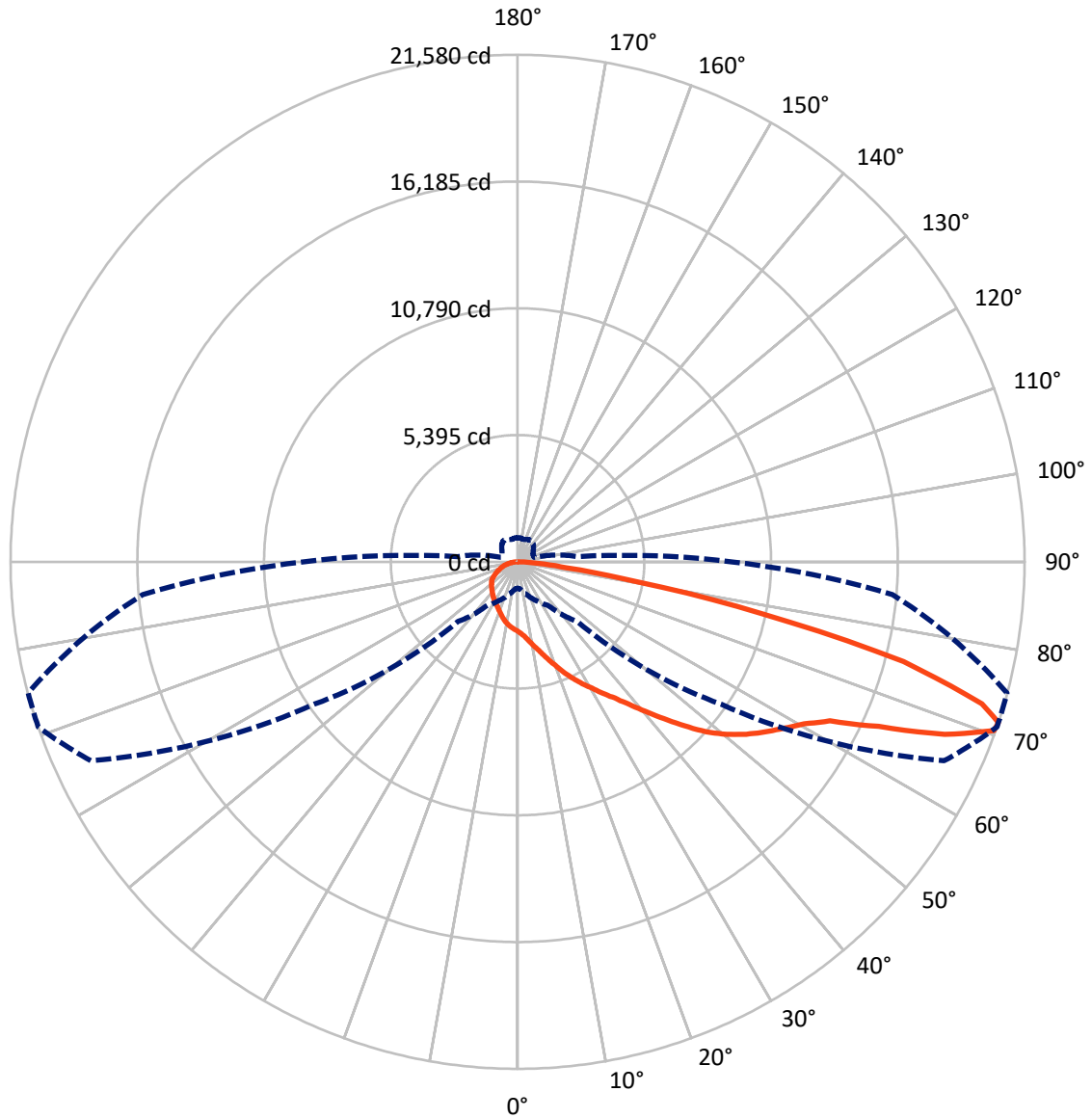
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 71-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4334.0	0.0	4334.0
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	19764.4	0.0	19764.4
	% Fixture	82.0	0.0	82.0
Total	Lumens	24098.4	0.0	24098.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.0	1.2
10°-20°	964.8	4.0
20°-30°	1686.1	7.0
30°-40°	2507.8	10.4
40°-50°	3695.0	15.3
50°-60°	5173.0	21.5
60°-70°	5785.8	24.0
70°-80°	3534.2	14.7
80°-90°	454.6	1.9
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°	24098.4	100.0
0°-180°	24098.4	100.0

Coefficient of Utilization

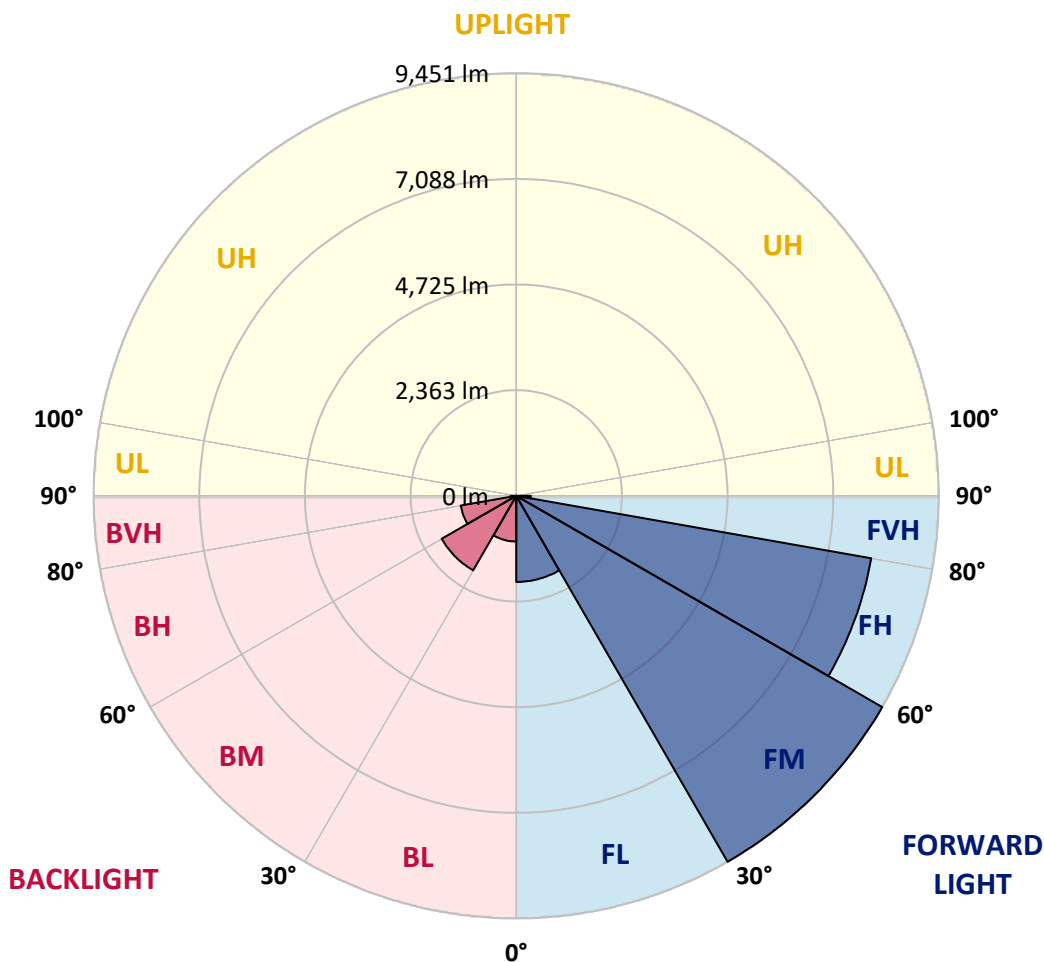


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1925.5	8.0			
FM (30°-60°)	9450.9	39.2			
FH (60°-80°)	8060.8	33.4			G4/12000
FVH (80°-90°)	327.1	1.4			G3/500
BL (0°-30°)	1022.4	4.2	B3/2500		
BM (30°-60°)	1924.9	8.0	B2/2500		
BH (60°-80°)	1259.2	5.2	B3/2500		G3/2500
BVH (80°-90°)	127.5	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4
 Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	2957.6	2957.6	2957.6	2957.6	2957.6	2957.6	2957.6	2957.6	2957.6	2957.6	2957.6
2.5°	3283.4	3267.5	3268.9	3246.3	3217.2	3185.4	3140.4	3100.7	3068.9	3050.3	2996.0
5°	3638.4	3622.5	3602.7	3553.6	3532.4	3454.3	3354.9	3264.9	3196.0	3157.6	3049.0
7.5°	3925.8	3921.8	3916.6	3888.7	3834.4	3725.8	3641.0	3484.7	3382.8	3309.9	3124.5
10°	4103.3	4109.9	4113.9	4119.2	4096.7	4039.7	3923.1	3725.8	3596.0	3503.3	3222.5
12.5°	4193.4	4200.0	4222.5	4271.5	4302.0	4295.4	4200.0	4006.6	3827.8	3705.9	3327.1
15°	4248.9	4259.6	4299.3	4364.2	4466.2	4531.1	4484.7	4306.0	4109.9	3965.6	3451.6
17.5°	4309.9	4321.8	4365.5	4458.2	4592.1	4732.5	4782.7	4629.1	4415.9	4243.7	3590.7
20°	4344.3	4360.2	4422.5	4544.4	4700.7	4904.6	5071.5	4990.7	4757.6	4566.8	3751.0
22.5°	4400.0	4413.2	4466.2	4596.0	4782.7	5038.4	5360.3	5343.0	5137.7	4891.4	3927.1
25°	4551.0	4572.2	4598.6	4676.8	4856.9	5174.8	5599.9	5719.2	5505.9	5230.4	4088.7
27.5°	4835.7	4853.0	4851.6	4862.2	4964.2	5292.7	5807.9	6091.3	5871.5	5573.5	4245.0
30°	5160.2	5166.9	5172.2	5148.3	5170.9	5413.2	5998.6	6459.6	6239.7	5925.8	4381.4
32.5°	5554.9	5568.1	5523.1	5462.2	5443.7	5592.0	6156.3	6827.8	6675.5	6283.4	4516.5
35°	6021.2	6055.6	5964.2	5856.9	5781.4	5849.0	6368.2	7203.9	7121.9	6740.4	4695.3
37.5°	6553.6	6596.0	6511.2	6300.6	6193.4	6211.9	6645.0	7668.9	7686.1	7260.9	4961.6
40°	6989.4	7045.0	7047.6	6749.6	6586.8	6607.9	6996.0	8169.5	8366.8	7904.6	5275.5
42.5°	7276.8	7331.1	7388.1	7213.2	7042.4	7162.9	7405.3	8712.5	9132.4	8686.1	5713.9
45°	7592.0	7641.1	7672.8	7593.4	7498.0	7810.6	7899.3	9290.1	9948.3	9558.9	6193.4
47.5°	7957.6	8011.9	8042.3	7966.9	7931.1	8378.8	8431.7	9829.1	10819.8	10406.5	6723.2
50°	8445.0	8486.1	8470.2	8422.5	8414.5	8814.5	8943.0	10333.7	11539.0	11319.1	7272.8
52.5°	9051.6	9100.7	9117.8	9050.3	9019.8	9125.8	9354.9	10793.3	12193.3	12103.2	7859.6
55°	9418.5	9496.6	9758.9	9864.9	9937.7	9528.4	9798.6	11300.6	12780.0	12929.8	8490.0
57.5°	8948.3	9049.0	9635.8	10165.5	10850.3	10535.0	10427.8	11830.4	13366.8	13731.1	9245.0
60°	7801.3	7823.8	8580.1	9556.3	10933.7	11829.1	11740.4	12672.8	14002.5	14539.0	10239.7
62.5°	5411.9	5459.5	6353.6	7911.2	9903.2	12295.3	13973.4	14127.1	14913.8	15748.2	11697.9
65°	2790.7	2728.4	3543.0	4972.1	7466.2	11188.1	15782.7	16801.2	16890.0	17639.7	13751.0
67.5°	1717.9	1745.7	2127.2	2903.3	4414.6	8131.1	15593.3	20068.8	19601.2	19961.5	15656.9
70°	1290.1	1324.5	1586.7	1986.8	2691.4	4649.0	12540.4	20860.8	21513.8	21421.1	16237.0
71°	1121.9	1157.6	1430.5	1807.9	2260.9	3588.1	10565.5	20031.7	21580.0	21564.1	16018.5
72.5°	956.3	978.8	1192.0	1531.2	1906.0	2515.2	7937.7	17965.5	20659.5	21188.0	15238.4
75°	751.0	768.2	863.6	1168.2	1500.6	1544.4	4259.6	13468.8	16968.2	17974.8	12686.0
77.5°	611.9	623.8	672.8	867.6	1157.6	1094.0	2234.4	8766.9	10630.4	11643.7	7472.8
80°	486.1	499.3	528.4	588.1	867.6	780.1	1066.2	4442.4	5135.1	5124.5	2982.8
82.5°	377.5	381.5	415.9	431.8	593.4	553.7	577.5	1880.8	2083.4	2152.3	1076.8
85°	238.4	250.3	368.2	331.1	354.9	324.5	284.8	747.0	920.5	907.3	430.5
87.5°	72.8	76.8	124.5	140.4	157.6	141.7	104.6	219.9	268.9	291.4	107.3
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°	2957.6	2957.6	2957.6	2957.6	2957.6	2957.6	2957.6	2957.6	2957.6	2957.6	2957.6
2.5°	2974.9	2960.3	2908.6	2866.2	2826.5	2782.8	2745.7	2735.1	2725.8	2721.9	2720.5
5°	3002.6	2959.0	2856.9	2773.5	2707.3	2646.4	2607.9	2590.7	2573.5	2573.5	2578.8
7.5°	3042.3	2962.9	2805.3	2680.8	2597.4	2540.4	2512.6	2509.9	2513.9	2517.9	2519.2
10°	3086.1	2960.3	2729.8	2574.8	2500.7	2474.1	2475.5	2498.0	2519.2	2535.1	2537.7
12.5°	3128.5	2944.4	2641.1	2475.5	2427.8	2433.1	2470.2	2520.6	2561.6	2584.1	2585.4
15°	3176.2	2919.2	2533.8	2381.4	2365.5	2406.6	2475.5	2552.3	2614.6	2651.6	2655.6
17.5°	3215.9	2876.8	2421.2	2290.0	2309.9	2385.4	2480.8	2580.1	2655.6	2702.0	2709.9
20°	3260.9	2822.5	2304.6	2202.7	2259.6	2361.6	2470.2	2577.5	2655.6	2700.6	2711.2
22.5°	3296.7	2745.7	2193.3	2131.1	2214.6	2332.4	2434.4	2520.6	2584.1	2607.9	2623.8
25°	3311.2	2649.0	2088.7	2072.8	2178.8	2284.8	2353.6	2402.6	2422.5	2419.9	2426.5
27.5°	3303.3	2537.7	1998.7	2026.5	2133.8	2210.6	2245.0	2241.0	2205.3	2172.2	2188.1
30°	3270.2	2405.3	1923.2	1978.8	2075.5	2117.9	2112.5	2060.9	1993.4	1931.1	1935.1
32.5°	3210.6	2262.2	1853.0	1924.5	1993.4	2011.9	1976.1	1908.6	1811.9	1731.1	1719.2
35°	3160.3	2125.8	1790.7	1862.2	1911.2	1902.0	1867.5	1780.2	1692.7	1621.2	1609.3
37.5°	3152.3	2009.3	1731.1	1792.1	1819.8	1806.6	1764.3	1690.0	1658.2	1604.0	1597.3
40°	3194.7	1927.1	1670.2	1717.9	1731.1	1720.5	1674.1	1631.8	1660.9	1647.7	1647.7
42.5°	3309.9	1883.4	1615.9	1643.7	1654.3	1662.2	1629.1	1593.4	1629.1	1568.2	1548.3
45°	3492.7	1884.8	1566.9	1570.9	1602.6	1630.4	1608.0	1555.0	1536.4	1414.6	1390.7
47.5°	3761.6	1929.8	1527.2	1502.0	1559.0	1605.3	1573.5	1496.7	1414.6	1333.8	1319.2
50°	4075.5	2010.6	1491.4	1430.5	1500.6	1573.5	1549.6	1459.6	1374.8	1325.9	1316.5
52.5°	4423.8	2112.5	1447.7	1351.0	1429.1	1559.0	1555.0	1454.3	1337.8	1304.6	1296.6
55°	4854.3	2213.2	1393.3	1258.3	1365.6	1547.1	1540.4	1410.6	1329.8	1306.0	1303.3
57.5°	5354.9	2358.9	1315.2	1164.2	1292.7	1498.0	1483.5	1384.1	1303.3	1286.1	1284.7
60°	6161.6	2585.4	1203.9	1078.1	1218.5	1411.9	1430.5	1339.1	1260.9	1256.9	1255.6
62.5°	7222.5	2903.3	1088.8	989.4	1132.5	1300.6	1353.7	1278.2	1215.9	1235.7	1238.4
65°	8687.4	3170.8	969.5	913.9	1037.1	1193.4	1280.8	1221.2	1165.6	1203.9	1203.9
67.5°	9642.3	3176.2	860.9	835.8	940.4	1103.3	1203.9	1153.7	1100.7	1165.6	1168.2
70°	9443.7	2782.8	770.9	753.6	846.3	1006.6	1119.2	1079.4	1018.5	1076.8	1055.6
71°	9123.1	2564.2	735.1	721.8	809.2	960.3	1079.4	1046.3	985.4	1023.9	1011.9
72.5°	8611.9	2226.5	676.8	679.5	753.6	902.0	1023.9	989.4	928.5	949.7	945.7
75°	7279.5	1944.3	578.8	590.7	647.7	802.7	912.6	886.1	823.9	823.9	819.9
77.5°	4551.0	1358.9	480.8	487.4	549.7	687.4	784.1	761.6	702.0	682.1	676.8
80°	1698.0	702.0	376.2	384.1	422.5	541.8	649.0	627.8	566.9	544.3	523.2
82.5°	642.4	352.4	276.8	270.2	311.2	413.3	508.6	483.4	435.7	381.5	365.6
85°	242.4	174.8	169.5	164.3	182.8	245.0	315.2	309.9	259.6	221.2	217.2
87.5°	63.6	56.9	66.2	49.0	51.7	46.4	47.7	19.9	9.2	4.0	2.7
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)