

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: P457777

Luminaire Tested: **GALN-SA9A-827-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P457777
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-SA9A-827-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30650 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

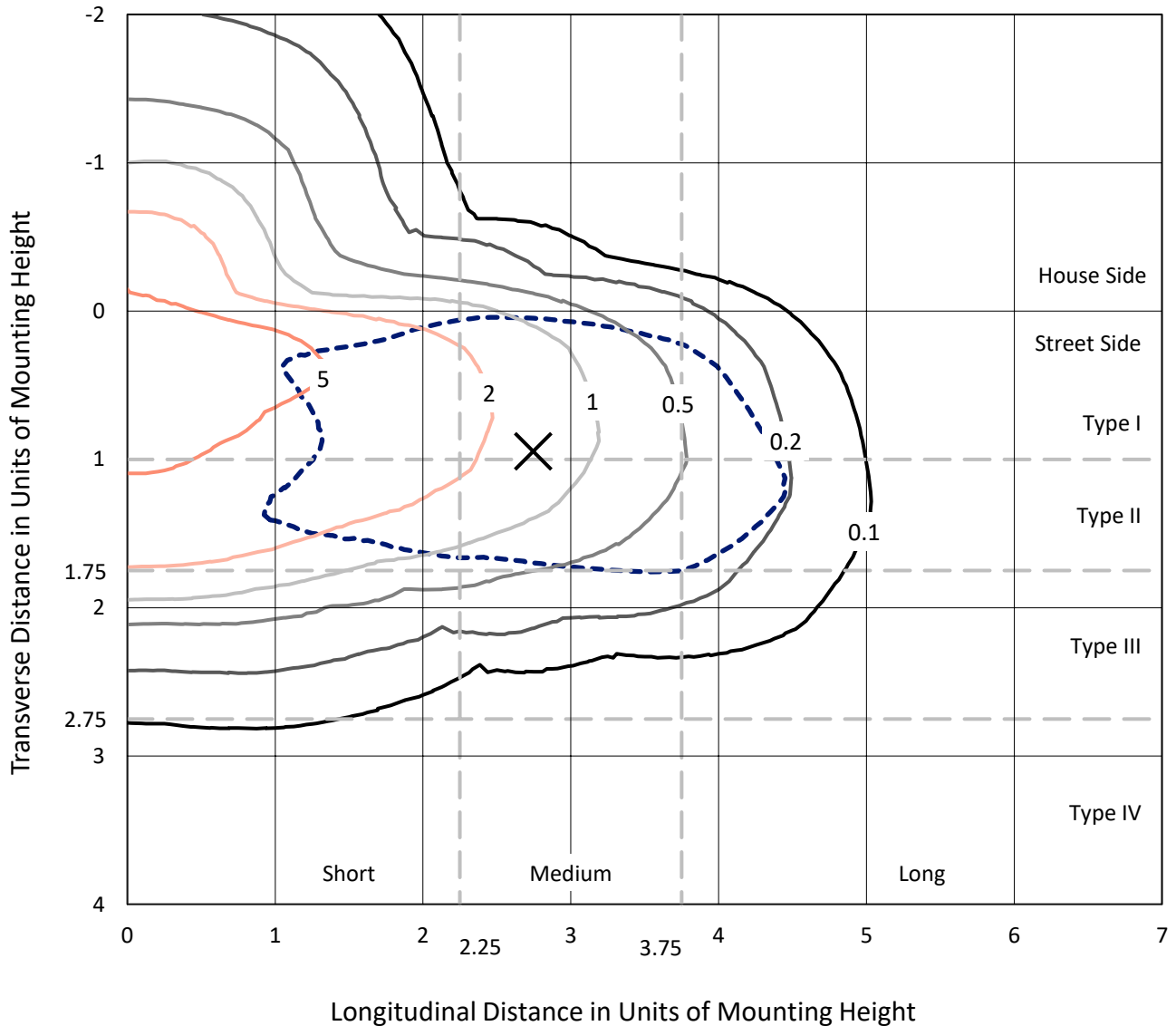
Input Watts (W): 274
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

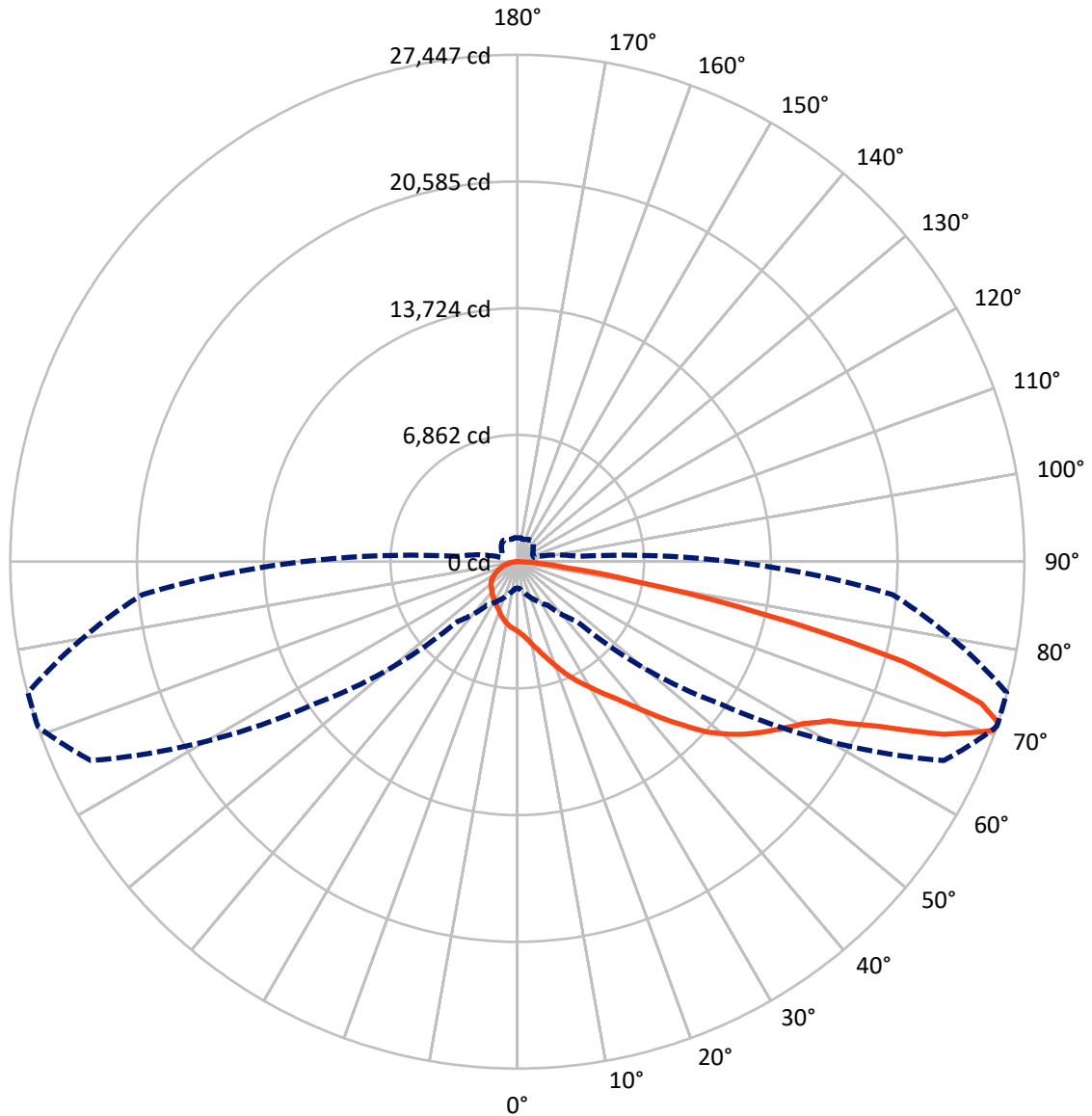
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 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	5512.3	0.0	5512.3
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	25137.7	0.0	25137.7
	% Fixture	82.0	0.0	82.0
Total	Lumens	30650.0	0.0	30650.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	377.7	1.2
10°-20°	1227.1	4.0
20°-30°	2144.5	7.0
30°-40°	3189.6	10.4
40°-50°	4699.5	15.3
50°-60°	6579.4	21.5
60°-70°	7358.8	24.0
70°-80°	4495.1	14.7
80°-90°	578.2	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°	30650.0	100.0
0°-180°	30650.0	100.0

Coefficient of Utilization



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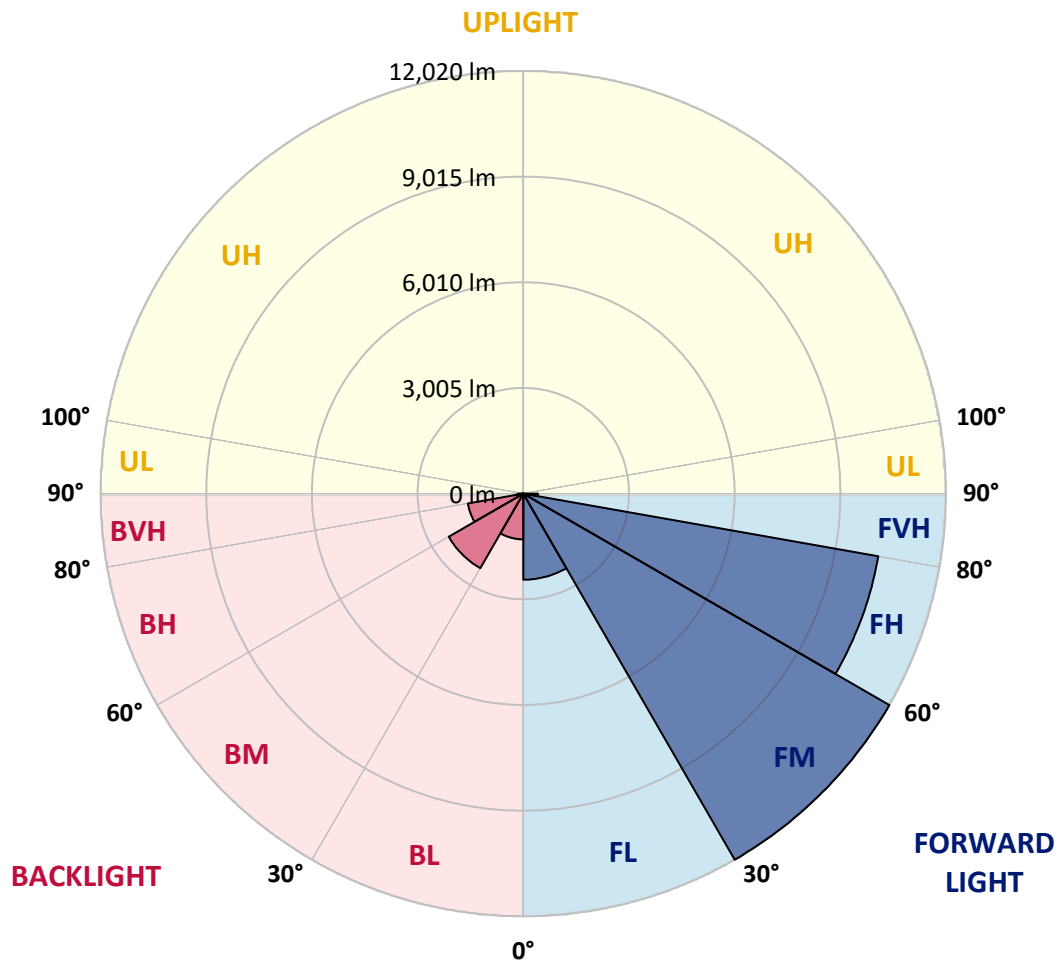
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2448.9	8.0			
FM	(30°-60°)	12020.3	39.2			
FH	(60°-80°)	10252.3	33.4			G4/12000
FVH	(80°-90°)	416.1	1.4			G3/500
BL	(0°-30°)	1300.3	4.2	B3/2500		
BM	(30°-60°)	2448.2	8.0	B2/2500		
BH	(60°-80°)	1601.6	5.2	B3/2500		G3/2500
BVH	(80°-90°)	162.2	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°	3761.7	3761.7	3761.7	3761.7	3761.7	3761.7	3761.7	3761.7	3761.7	3761.7	3761.7
2.5°	4176.1	4155.9	4157.6	4128.9	4091.9	4051.4	3994.2	3943.6	3903.2	3879.6	3810.5
5°	4627.6	4607.3	4582.1	4519.7	4492.8	4393.4	4267.1	4152.5	4064.9	4016.1	3877.9
7.5°	4993.1	4988.1	4981.3	4945.9	4876.9	4738.7	4630.9	4432.1	4302.4	4209.8	3973.9
10°	5218.9	5227.3	5232.3	5239.1	5210.4	5138.0	4989.7	4738.7	4573.7	4455.7	4098.6
12.5°	5333.4	5341.8	5370.5	5432.8	5471.5	5463.1	5341.8	5095.9	4868.5	4713.5	4231.7
15°	5404.2	5417.6	5468.2	5550.7	5680.4	5763.0	5704.0	5476.6	5227.3	5043.7	4390.0
17.5°	5481.6	5496.8	5552.4	5670.3	5840.5	6019.0	6083.0	5887.6	5616.4	5397.4	4566.9
20°	5525.4	5545.7	5624.8	5779.8	5978.6	6238.0	6450.3	6347.5	6051.0	5808.5	4770.8
22.5°	5596.2	5613.0	5680.4	5845.5	6083.0	6408.2	6817.5	6795.6	6534.5	6221.2	4994.8
25°	5788.2	5815.2	5848.9	5948.3	6177.4	6581.7	7122.4	7274.0	7002.8	6652.4	5200.3
27.5°	6150.4	6172.3	6170.6	6184.1	6313.8	6731.6	7386.9	7747.4	7467.8	7088.7	5399.1
30°	6563.2	6571.6	6578.3	6548.0	6576.6	6884.9	7629.5	8215.7	7936.1	7536.8	5572.6
32.5°	7065.2	7082.0	7024.7	6947.2	6923.7	7112.3	7830.0	8684.0	8490.3	7991.7	5744.4
35°	7658.1	7701.9	7585.7	7449.2	7353.2	7439.1	8099.5	9162.5	9058.0	8572.9	5971.9
37.5°	8335.3	8389.2	8281.4	8013.6	7877.1	7900.7	8451.6	9753.8	9775.7	9234.9	6310.5
40°	8889.6	8960.3	8963.7	8584.7	8377.5	8404.4	8898.0	10390.5	10641.5	10053.6	6709.7
42.5°	9255.1	9324.2	9396.6	9174.3	8956.9	9110.2	9418.5	11081.2	11615.2	11047.5	7267.3
45°	9656.1	9718.4	9758.8	9657.7	9536.4	9934.0	10046.9	11815.7	12652.9	12157.7	7877.1
47.5°	10121.0	10190.1	10228.8	10132.8	10087.3	10656.7	10724.1	12501.3	13761.4	13235.8	8551.0
50°	10740.9	10793.1	10772.9	10712.3	10702.2	11210.9	11374.3	13143.1	14676.1	14396.5	9250.1
52.5°	11512.5	11574.8	11596.7	11510.8	11472.0	11606.8	11898.2	13727.7	15508.3	15393.8	9996.3
55°	11979.1	12078.5	12412.0	12546.8	12639.5	12118.9	12462.6	14372.9	16254.6	16444.9	10798.2
57.5°	11381.1	11509.1	12255.4	12929.2	13800.1	13399.2	13262.8	15046.7	17000.9	17464.1	11758.4
60°	9922.2	9950.9	10912.8	12154.3	13906.3	15045.0	14932.2	16118.1	17809.5	18491.7	13023.5
62.5°	6883.2	6943.9	8081.0	10062.0	12595.7	15638.0	17772.4	17967.8	18968.5	20029.7	14878.3
65°	3549.4	3470.2	4506.3	6323.9	9496.0	14229.7	20073.5	21369.0	21481.9	22435.3	17489.4
67.5°	2184.9	2220.3	2705.4	3692.6	5614.7	10341.7	19832.6	25524.9	24930.2	25388.4	19913.5
70°	1640.8	1684.6	2018.1	2526.9	3423.1	5912.9	15949.7	26532.2	27362.7	27244.8	20651.4
71°	1426.8	1472.3	1819.4	2299.5	2875.6	4563.5	13438.0	25477.7	27447.0	27426.8	20373.4
72.5°	1216.3	1244.9	1516.1	1947.4	2424.1	3199.0	10095.7	22849.7	26276.2	26948.3	19381.2
75°	955.2	977.1	1098.4	1485.8	1908.6	1964.2	5417.6	17130.6	21581.2	22861.5	16135.0
77.5°	778.3	793.4	855.8	1103.4	1472.3	1391.5	2841.9	11150.3	13520.5	14809.2	9504.4
80°	618.2	635.1	672.2	748.0	1103.4	992.2	1356.1	5650.1	6531.1	6517.7	3793.7
82.5°	480.1	485.2	529.0	549.2	754.7	704.2	734.5	2392.1	2649.9	2737.5	1369.6
85°	303.2	318.4	468.3	421.1	451.5	412.7	362.2	950.1	1170.8	1153.9	547.5
87.5°	92.7	97.7	158.4	178.6	200.5	180.3	133.1	279.6	342.0	370.6	136.5
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°	3761.7	3761.7	3761.7	3761.7	3761.7	3761.7	3761.7	3761.7	3761.7	3761.7	3761.7
2.5°	3783.6	3765.1	3699.4	3645.4	3594.9	3539.3	3492.1	3478.7	3466.9	3461.8	3460.1
5°	3819.0	3763.4	3633.7	3527.5	3443.3	3365.8	3317.0	3295.1	3273.2	3273.2	3279.9
7.5°	3869.5	3768.4	3568.0	3409.6	3303.5	3231.0	3195.7	3192.3	3197.3	3202.4	3204.1
10°	3925.1	3765.1	3471.9	3274.8	3180.5	3146.8	3148.5	3177.1	3204.1	3224.3	3227.7
12.5°	3979.0	3744.8	3359.1	3148.5	3087.8	3094.6	3141.8	3205.8	3258.0	3286.6	3288.3
15°	4039.6	3712.8	3222.6	3028.9	3008.7	3060.9	3148.5	3246.2	3325.4	3372.5	3377.6
17.5°	4090.2	3658.9	3079.4	2912.7	2937.9	3033.9	3155.2	3281.6	3377.6	3436.6	3446.7
20°	4147.5	3589.9	2931.2	2801.5	2873.9	3003.6	3141.8	3278.2	3377.6	3434.9	3448.3
22.5°	4192.9	3492.1	2789.7	2710.5	2816.6	2966.6	3096.3	3205.8	3286.6	3317.0	3337.2
25°	4211.5	3369.2	2656.6	2636.4	2771.1	2905.9	2993.5	3055.8	3081.1	3077.7	3086.2
27.5°	4201.4	3227.7	2542.0	2577.4	2713.9	2811.6	2855.4	2850.3	2804.8	2762.7	2782.9
30°	4159.2	3059.2	2446.0	2516.8	2639.7	2693.7	2686.9	2621.2	2535.3	2456.1	2461.2
32.5°	4083.4	2877.3	2356.7	2447.7	2535.3	2558.9	2513.4	2427.5	2304.5	2201.8	2186.6
35°	4019.4	2703.8	2277.6	2368.5	2430.9	2419.1	2375.3	2264.1	2152.9	2061.9	2046.8
37.5°	4009.3	2555.5	2201.8	2279.2	2314.6	2297.8	2243.9	2149.5	2109.1	2040.0	2031.6
40°	4063.2	2451.1	2124.3	2184.9	2201.8	2188.3	2129.3	2075.4	2112.5	2095.6	2095.6
42.5°	4209.8	2395.5	2055.2	2090.6	2104.0	2114.2	2072.0	2026.6	2072.0	1994.6	1969.3
45°	4442.3	2397.2	1992.9	1997.9	2038.4	2073.7	2045.1	1977.7	1954.1	1799.1	1768.8
47.5°	4784.2	2454.4	1942.3	1910.3	1982.8	2041.7	2001.3	1903.6	1799.1	1696.4	1677.8
50°	5183.5	2557.2	1896.8	1819.4	1908.6	2001.3	1971.0	1856.4	1748.6	1686.3	1674.5
52.5°	5626.5	2686.9	1841.3	1718.3	1817.7	1982.8	1977.7	1849.7	1701.4	1659.3	1649.2
55°	6174.0	2814.9	1772.2	1600.4	1736.8	1967.6	1959.2	1794.1	1691.3	1661.0	1657.6
57.5°	6810.8	3000.2	1672.8	1480.8	1644.2	1905.3	1886.7	1760.4	1657.6	1635.7	1634.0
60°	7836.7	3288.3	1531.3	1371.3	1549.8	1795.8	1819.4	1703.1	1603.7	1598.7	1597.0
62.5°	9186.1	3692.6	1384.7	1258.4	1440.3	1654.3	1721.6	1625.6	1546.5	1571.7	1575.1
65°	11049.2	4032.9	1233.1	1162.4	1319.0	1517.8	1629.0	1553.2	1482.4	1531.3	1531.3
67.5°	12263.8	4039.6	1095.0	1063.0	1196.1	1403.3	1531.3	1467.3	1399.9	1482.4	1485.8
70°	12011.1	3539.3	980.4	958.5	1076.5	1280.3	1423.5	1372.9	1295.4	1369.6	1342.6
71°	11603.4	3261.4	934.9	918.1	1029.3	1221.3	1372.9	1330.8	1253.3	1302.2	1287.0
72.5°	10953.2	2831.8	860.8	864.2	958.5	1147.2	1302.2	1258.4	1180.9	1207.8	1202.8
75°	9258.5	2473.0	736.2	751.3	823.8	1020.9	1160.7	1127.0	1047.8	1047.8	1042.8
77.5°	5788.2	1728.4	611.5	619.9	699.1	874.3	997.3	968.6	892.8	867.6	860.8
80°	2159.6	892.8	478.4	488.5	537.4	689.0	825.4	798.5	721.0	692.4	665.4
82.5°	817.0	448.1	352.1	343.7	395.9	525.6	646.9	614.9	554.2	485.2	464.9
85°	308.3	222.4	215.6	208.9	232.5	311.6	400.9	394.2	330.2	281.3	276.3
87.5°	80.9	72.4	84.2	62.3	65.7	59.0	60.6	25.3	11.8	5.1	3.4
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)