

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: STREETWORKS

Report Number: P320143

Luminaire Tested: **GAN-SA9D-827-U-SL4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P320143
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-24)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA9D-827-U-SL4
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 48454 lumens
Efficiency: N/A
Efficacy: 84.3 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

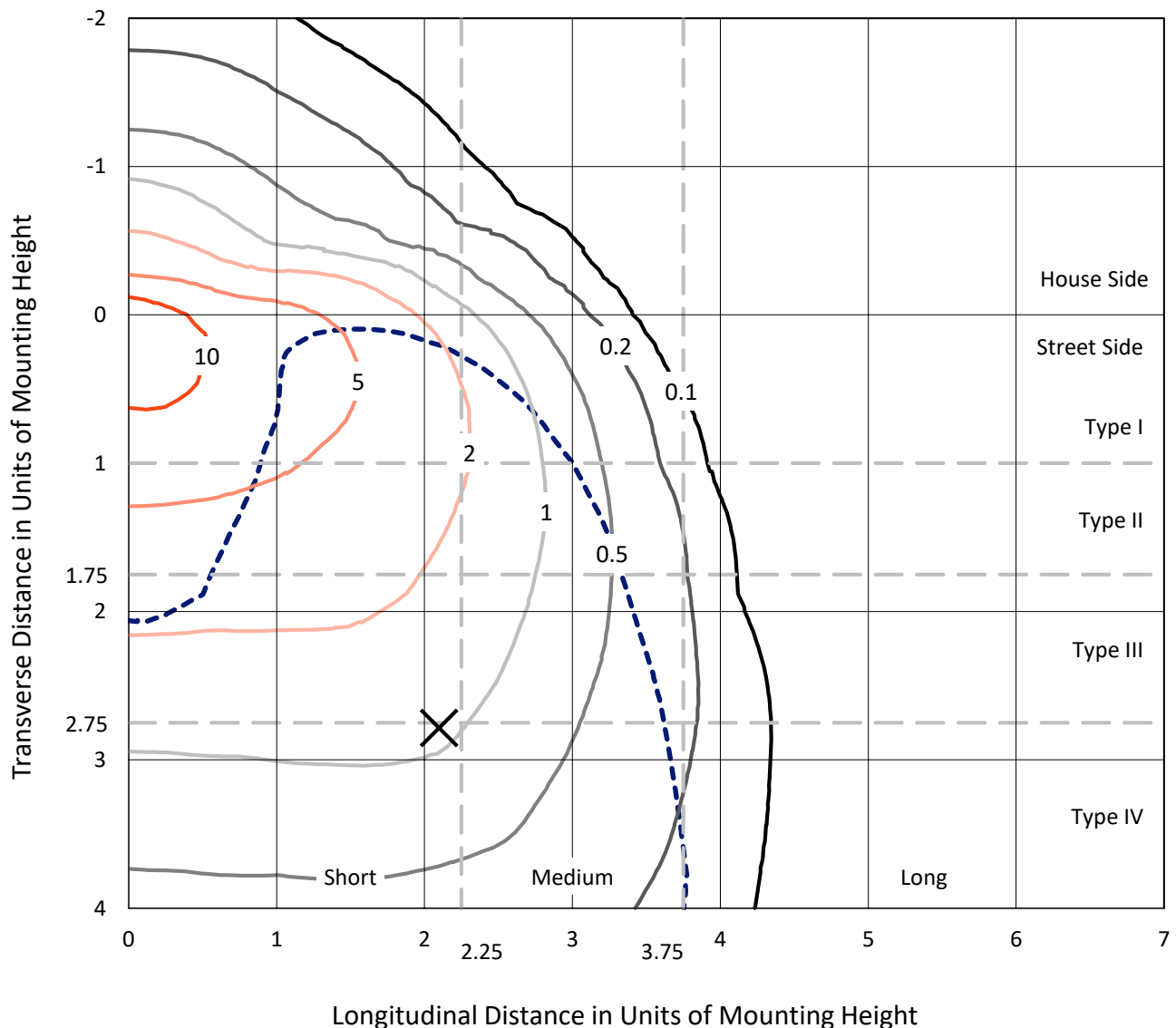
Input Watts (W): 575
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

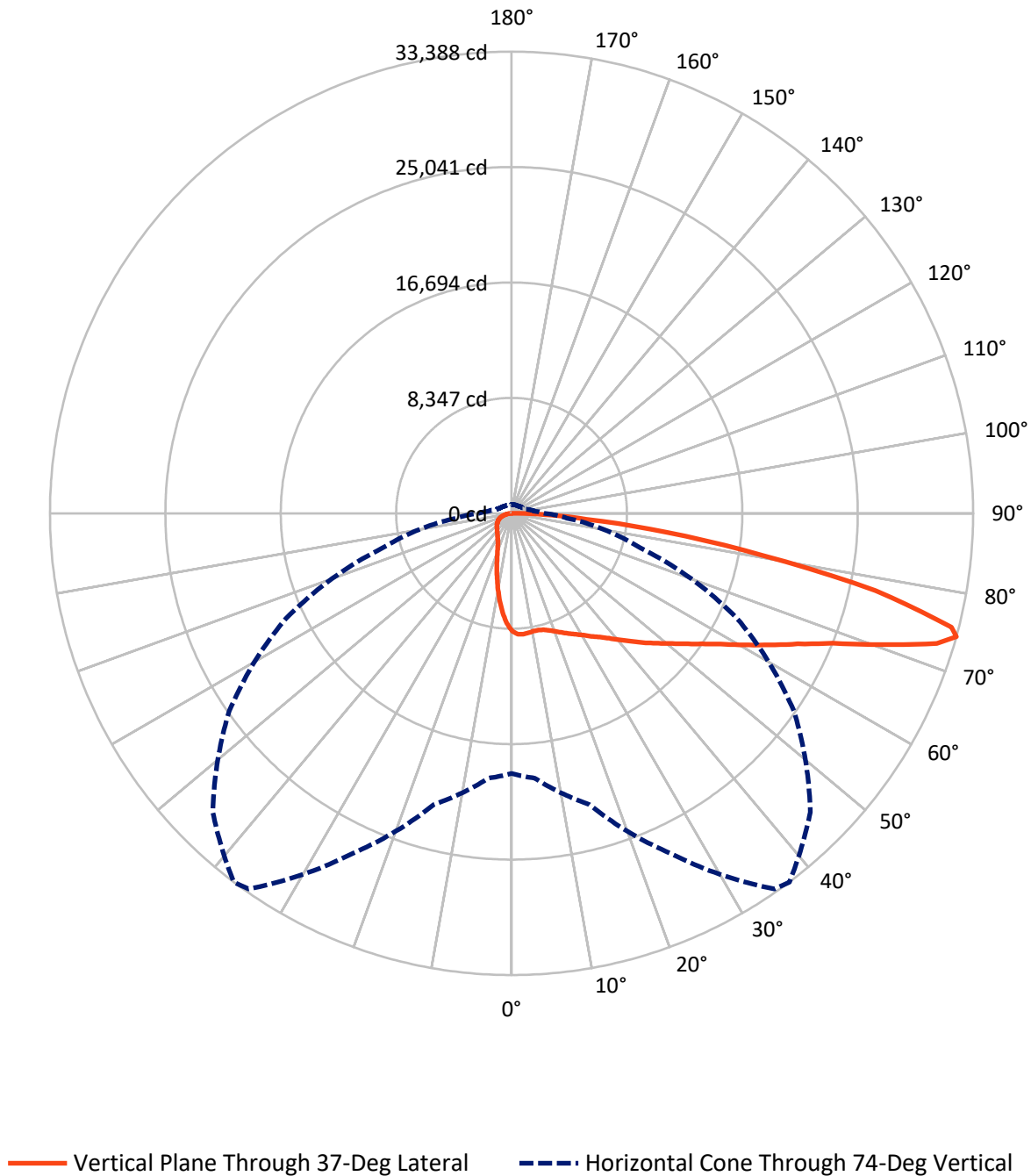
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6666.9	0.0	6666.9
	% Fixture	13.8	0.0	13.8
Street Side	Lumens	41787.1	0.0	41787.1
	% Fixture	86.2	0.0	86.2
Total	Lumens	48454.0	0.0	48454.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	751.8	1.6
10°-20°	1927.1	4.0
20°-30°	2969.3	6.1
30°-40°	4317.8	8.9
40°-50°	6355.0	13.1
50°-60°	8924.5	18.4
60°-70°	11295.7	23.3
70°-80°	9946.3	20.5
80°-90°	1966.6	4.1
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°	48454.0	100.0
0°-180°	48454.0	100.0

Coefficient of Utilization



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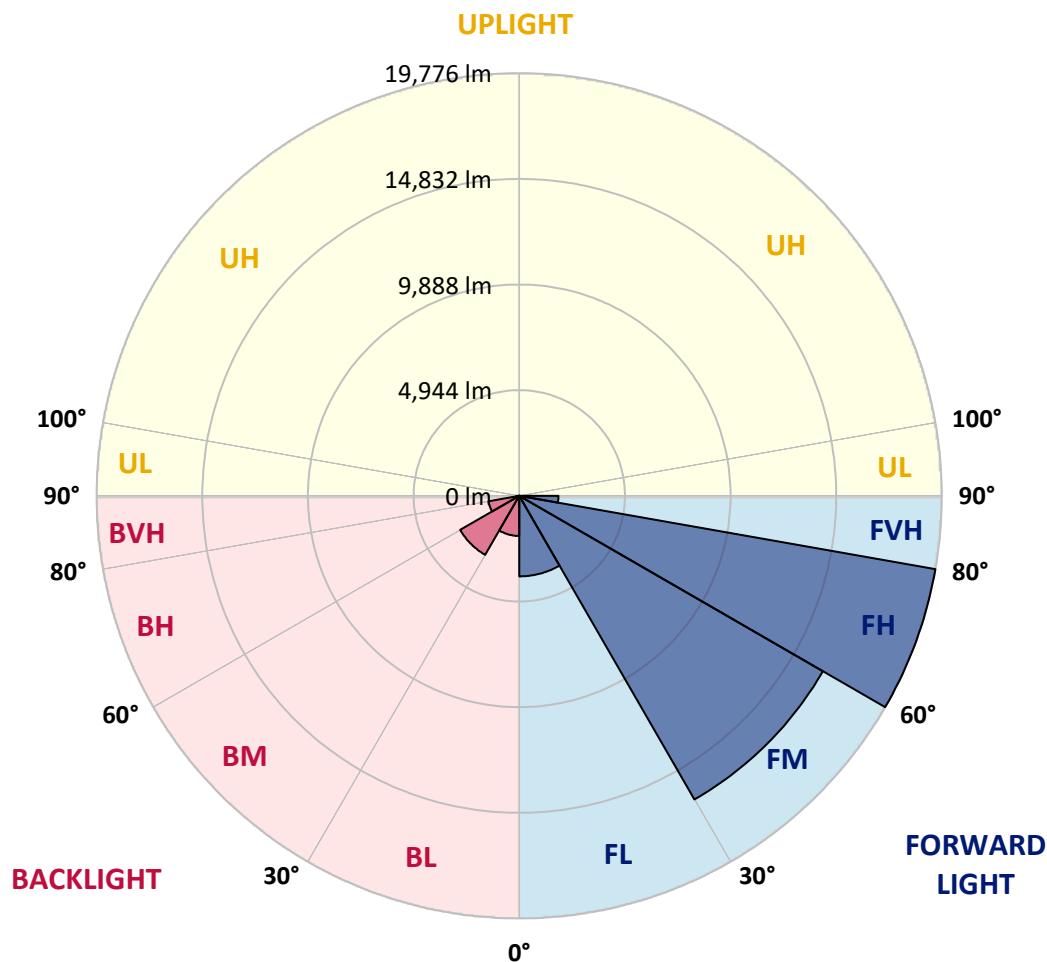
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3770.3	7.8			
FM	(30°-60°)	16406.9	33.9			
FH	(60°-80°)	19776.5	40.8			G5
FVH	(80°-90°)	1833.4	3.8			G5
BL	(0°-30°)	1877.9	3.9	B3/2500		
BM	(30°-60°)	3190.4	6.6	B3/5000		
BH	(60°-80°)	1465.5	3.0	B3/2500		G3/2500
BVH	(80°-90°)	133.2	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37°	45°	55°	65°	75°	85°
0°	8537.4	8537.4	8537.4	8537.4	8537.4	8537.4	8537.4	8537.4	8537.4	8537.4	8537.4
2.5°	8829.3	8831.0	8829.3	8815.6	8783.2	8755.9	8733.7	8701.3	8629.6	8575.0	8493.0
5°	8912.9	8902.7	8895.8	8870.2	8819.0	8788.3	8745.6	8684.2	8566.4	8457.2	8324.1
7.5°	8873.6	8861.7	8846.3	8815.6	8757.6	8732.0	8672.2	8592.0	8450.4	8307.0	8115.8
10°	8752.5	8749.1	8742.2	8735.4	8685.9	8665.4	8610.8	8525.5	8385.5	8211.4	7987.8
12.5°	8617.6	8626.2	8653.5	8689.3	8667.1	8656.9	8622.7	8564.7	8421.3	8233.6	7963.9
15°	8532.3	8556.2	8629.6	8723.4	8742.2	8738.8	8730.3	8692.7	8540.8	8332.6	8018.5
17.5°	8503.3	8542.5	8682.5	8837.8	8892.4	8904.4	8907.8	8842.9	8674.0	8453.8	8074.9
20°	8556.2	8605.7	8810.5	9023.8	9110.9	9117.7	9102.4	8989.7	8800.3	8557.9	8105.6
22.5°	8716.6	8761.0	9017.0	9257.7	9356.7	9366.9	9320.8	9150.1	8933.4	8680.8	8148.3
25°	9025.6	9080.2	9336.2	9576.8	9628.1	9629.8	9563.2	9351.5	9107.5	8853.2	8240.4
27.5°	9428.4	9483.0	9713.4	9948.9	9921.6	9906.3	9815.8	9604.2	9334.5	9090.4	8404.3
30°	9877.2	9937.0	10155.5	10322.7	10257.9	10227.1	10153.7	9880.7	9650.2	9414.7	8655.2
32.5°	10341.5	10396.1	10587.3	10701.6	10619.7	10606.0	10495.1	10245.9	10061.6	9909.7	9061.4
35°	10817.7	10856.9	11044.7	11109.6	11000.3	10996.9	10966.2	10737.5	10621.4	10693.1	9651.9
37.5°	11304.1	11314.4	11474.8	11478.2	11445.8	11459.4	11491.9	11348.5	11380.9	11604.5	10420.0
40°	11737.7	11765.0	11881.0	11916.9	11973.2	12021.0	12183.1	12089.3	12340.2	12736.1	11375.8
42.5°	12058.5	12111.4	12297.5	12389.7	12572.3	12647.4	12876.1	12963.1	13468.3	14062.3	12512.5
45°	12329.9	12411.8	12710.5	12900.0	13208.9	13340.3	13668.0	13959.9	14743.3	15501.1	13709.0
47.5°	12623.5	12727.6	13101.4	13463.2	13883.1	14031.6	14627.3	15064.2	16103.6	16948.5	14837.2
50°	13055.3	13135.5	13500.8	14069.1	14593.1	14784.3	15608.7	16235.1	17486.2	18327.6	15815.2
52.5°	13657.8	13627.1	13936.0	14733.1	15436.3	15671.8	16656.6	17481.0	18887.4	19575.3	16641.3
55°	14263.7	14212.5	14429.3	15427.8	16419.4	16666.9	17810.4	18732.1	20220.4	20698.3	17274.5
57.5°	14937.9	14840.6	15023.2	16211.2	17539.1	17834.3	19102.5	20061.7	21531.3	21606.4	17677.3
60°	15632.6	15501.1	15706.0	17182.3	18960.8	19309.0	20614.7	21358.9	22767.0	22333.5	17807.0
62.5°	16240.2	16148.0	16463.8	18266.2	20563.5	20945.8	22099.6	22738.0	23985.6	22635.6	17339.4
65°	16771.0	16786.4	17332.5	19484.8	22350.5	22758.5	23803.0	24437.9	24944.9	22456.4	16245.3
67.5°	17404.2	17491.3	18423.2	21089.2	24600.1	25047.3	26281.3	26291.5	25480.8	21405.0	14091.3
70°	18327.6	18506.8	19923.5	23314.9	27798.6	28413.1	29365.5	27380.5	24728.1	18554.6	11087.4
72.5°	19146.9	19481.4	21519.3	25861.4	31697.0	32162.9	31169.6	26752.4	21582.5	13905.3	6907.4
74°	18814.0	19228.8	21809.5	27115.9	33164.8	33388.4	30560.2	24919.3	17994.8	9629.8	4014.4
75°	18097.2	18547.8	21386.2	27104.0	32978.8	32854.2	29089.0	22825.0	14820.1	6567.8	2671.1
77.5°	14605.1	15081.3	18020.4	23229.5	27040.8	26923.0	22345.4	15311.7	6491.0	2154.0	1356.9
80°	8491.3	8854.9	11186.4	14751.9	18233.7	18447.1	14695.5	7576.5	2553.4	1210.1	920.0
82.5°	3772.0	4022.9	5403.7	7530.4	11003.7	11278.5	7696.0	3970.0	1577.1	735.6	553.0
85°	2474.9	2660.9	3280.5	3586.0	5239.9	5427.6	3766.9	3091.0	1041.1	404.5	406.2
87.5°	1780.2	1959.4	2437.3	2128.4	2404.9	2276.9	2049.9	2860.6	418.2	230.4	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°	8537.4	8537.4	8537.4	8537.4	8537.4	8537.4	8537.4	8537.4	8537.4	8537.4	8537.4
2.5°	8457.2	8429.9	8368.4	8252.4	8187.5	8132.9	8042.4	7989.5	7965.6	7963.9	7974.2
5°	8247.3	8184.1	8025.4	7830.8	7675.5	7533.8	7358.0	7252.2	7177.1	7132.7	7144.7
7.5°	8003.2	7904.2	7655.0	7344.4	7095.2	6820.4	6549.0	6386.8	6260.5	6166.7	6183.7
10°	7835.9	7699.4	7335.8	6888.6	6473.9	6074.5	5700.7	5477.1	5299.6	5163.1	5173.3
12.5°	7779.6	7595.3	7091.7	6494.4	5912.4	5366.2	4878.0	4535.0	4352.3	4197.0	4209.0
15°	7788.1	7540.6	6886.9	6139.4	5407.1	4719.3	4127.0	3725.9	3478.5	3370.9	3372.6
17.5°	7794.9	7477.5	6671.9	5758.7	4907.0	4115.1	3471.6	3065.4	2831.6	2732.6	2734.3
20°	7772.8	7375.1	6405.6	5321.8	4384.8	3560.4	2937.4	2592.6	2415.1	2338.3	2338.3
22.5°	7743.7	7253.9	6105.2	4883.2	3869.3	3079.1	2555.1	2292.2	2189.8	2138.6	2136.9
25°	7757.4	7163.4	5798.0	4432.6	3394.8	2695.0	2300.8	2126.7	2058.4	2026.0	2024.3
27.5°	7830.8	7120.8	5514.7	3983.7	2980.1	2406.6	2130.1	2007.2	1962.8	1942.3	1942.3
30°	7963.9	7120.8	5219.4	3601.3	2635.3	2193.2	1998.7	1915.0	1884.3	1870.7	1870.7
32.5°	8196.0	7160.0	4934.4	3222.4	2360.5	2026.0	1889.4	1833.1	1809.2	1802.4	1802.4
35°	8595.4	7293.2	4656.1	2864.0	2138.6	1889.4	1785.3	1752.9	1735.8	1734.1	1739.2
37.5°	9157.0	7564.5	4395.0	2599.5	1981.6	1778.5	1698.3	1672.7	1662.4	1671.0	1677.8
40°	9863.6	7933.2	4157.8	2360.5	1862.1	1689.7	1618.0	1601.0	1595.9	1607.8	1618.0
42.5°	10717.0	8431.6	3963.2	2188.1	1770.0	1614.6	1549.8	1529.3	1524.2	1537.8	1551.5
45°	11640.4	8967.5	3826.6	2060.1	1698.3	1558.3	1490.0	1467.8	1457.6	1464.4	1479.8
47.5°	12480.1	9474.4	3772.0	1969.6	1630.0	1510.5	1437.1	1409.8	1392.7	1389.3	1401.3
50°	13188.4	9851.6	3797.6	1915.0	1575.4	1457.6	1385.9	1355.2	1329.6	1314.2	1322.8
52.5°	13703.9	10088.9	3821.5	1891.1	1532.7	1399.6	1329.6	1300.6	1266.4	1240.8	1240.8
55°	14077.7	10143.5	3768.6	1872.4	1500.3	1336.4	1266.4	1239.1	1205.0	1176.0	1172.6
57.5°	14224.5	9989.9	3572.3	1845.0	1478.1	1276.7	1199.9	1179.4	1150.4	1116.2	1114.5
60°	14026.5	9515.4	3193.4	1787.0	1449.1	1227.2	1133.3	1119.7	1106.0	1073.6	1071.9
62.5°	13231.1	8474.3	2703.6	1669.2	1391.0	1174.3	1071.9	1078.7	1080.4	1058.2	1054.8
65°	11788.9	7044.0	2225.7	1515.6	1304.0	1111.1	1008.7	1041.1	1059.9	1056.5	1051.4
67.5°	9692.9	5482.2	1886.0	1353.5	1189.6	1024.1	940.4	978.0	993.4	1005.3	1001.9
70°	7194.2	3865.9	1560.0	1182.8	1051.4	921.7	851.7	870.5	860.2	873.9	879.0
72.5°	4011.0	2319.5	1271.6	1012.1	908.0	802.2	752.7	749.3	727.1	727.1	727.1
74°	2406.6	1701.7	1118.0	906.3	821.0	723.7	681.0	665.7	645.2	646.9	645.2
75°	1935.5	1462.7	1025.8	836.3	759.5	677.6	634.9	614.4	599.1	599.1	597.4
77.5°	1222.1	1111.1	826.1	665.7	607.6	558.1	529.1	501.8	501.8	500.1	498.4
80°	923.4	884.1	643.5	503.5	466.0	428.4	409.6	397.7	397.7	402.8	401.1
82.5°	633.2	665.7	452.3	351.6	332.8	305.5	302.1	303.8	298.7	291.9	290.2
85°	462.5	500.1	305.5	221.9	203.1	186.0	199.7	206.5	198.0	182.6	175.8
87.5°	177.5	327.7	163.9	92.2	85.3	73.4	85.3	88.8	95.6	75.1	76.8
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)