

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: P319543

Luminaire Tested: **GAN-SA9D-830-U-SL2**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P319543
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-20)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA9D-830-U-SL2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 53998 lumens
Efficiency: N/A
Efficacy: 93.9 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B4 - U0 - G5

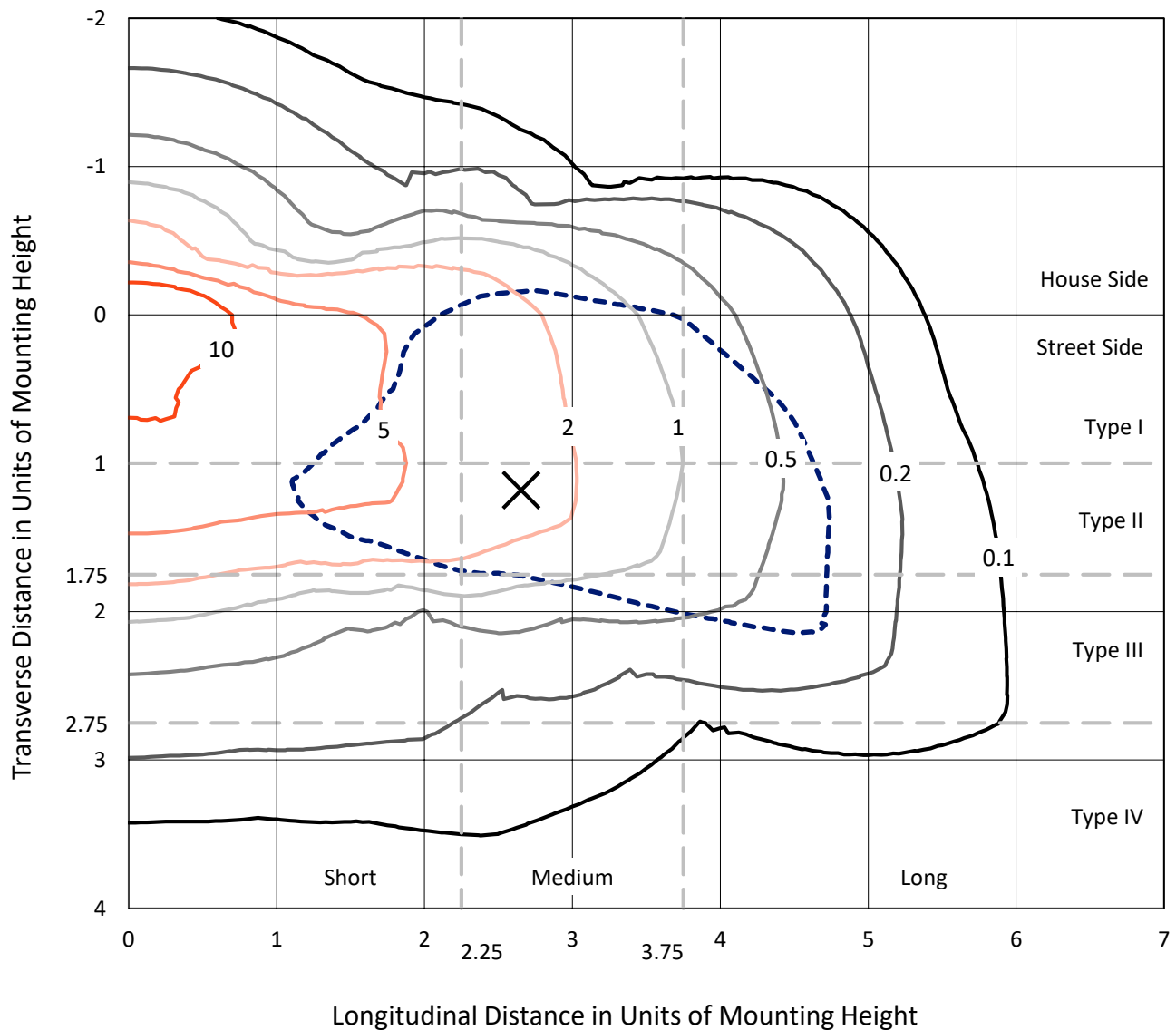
Input Watts (W): 575
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

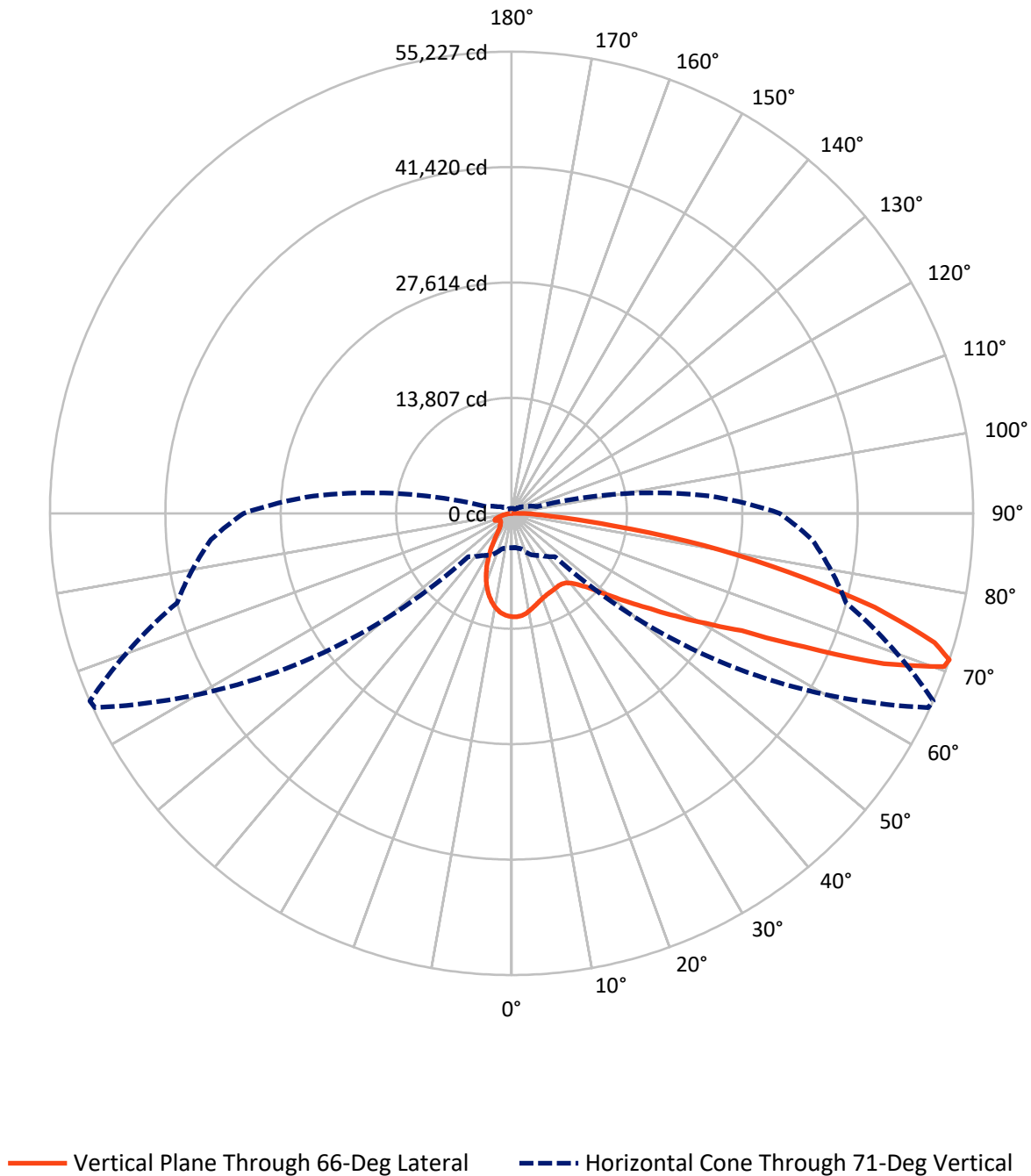
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 19.8 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10007.3	0.0	10007.3
	% Fixture	18.5	0.0	18.5
Street Side	Lumens	43990.7	0.0	43990.7
	% Fixture	81.5	0.0	81.5
Total	Lumens	53998.0	0.0	53998.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1088.8	2.0
10°-20°	2611.5	4.8
20°-30°	3507.9	6.5
30°-40°	4614.6	8.5
40°-50°	6713.1	12.4
50°-60°	10486.5	19.4
60°-70°	13136.1	24.3
70°-80°	10019.9	18.6
80°-90°	1819.5	3.4
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°	53998.0	100.0
0°-180°	53998.0	100.0

Coefficient of Utilization



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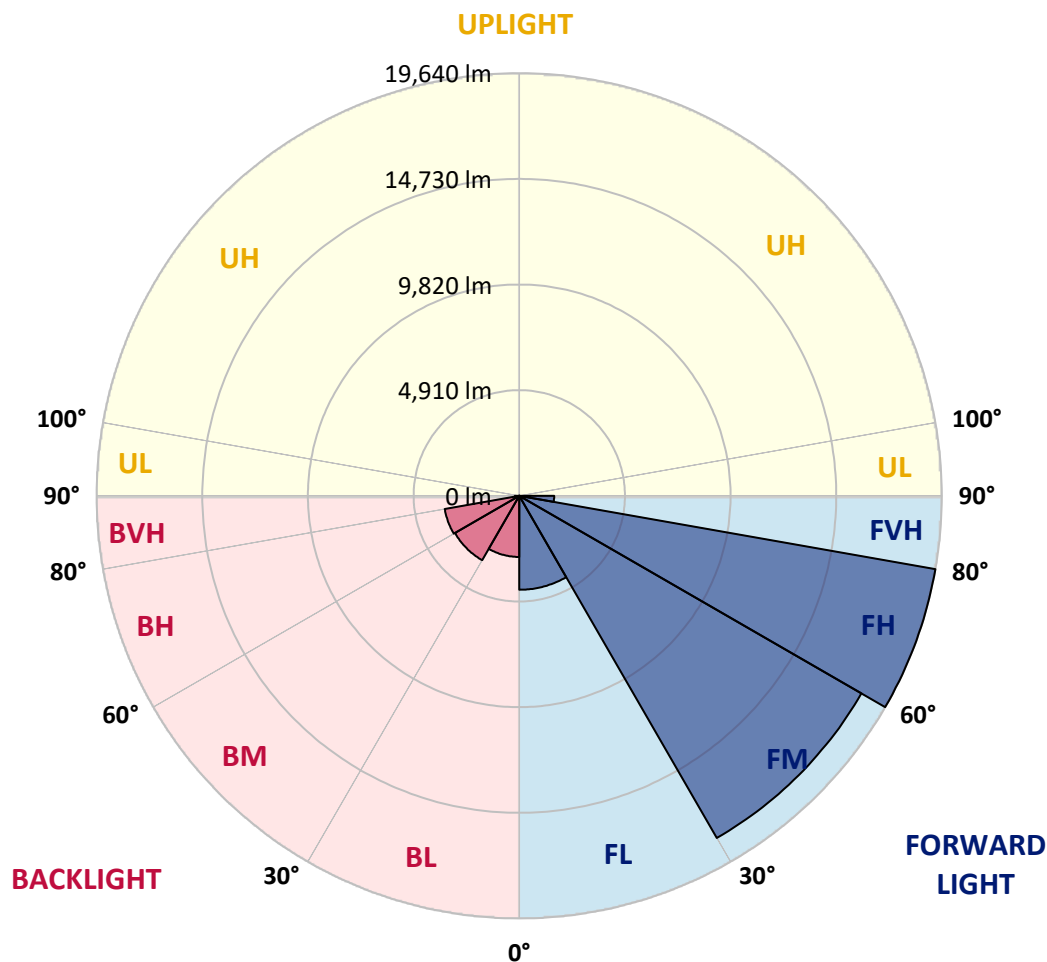
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4366.5	8.1			
FM	(30°-60°)	18362.0	34.0			
FH	(60°-80°)	19639.6	36.4			G5
FVH	(80°-90°)	1622.5	3.0			G5
BL	(0°-30°)	2841.8	5.3	B4/5000		
BM	(30°-60°)	3452.2	6.4	B3/5000		
BH	(60°-80°)	3516.3	6.5	B4/5000		G4/5000
BVH	(80°-90°)	197.0	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	12369.9	12369.9	12369.9	12369.9	12369.9	12369.9	12369.9	12369.9	12369.9	12369.9	12369.9
2.5°	12140.6	12121.9	12177.9	12235.7	12258.0	12295.3	12351.3	12382.9	12381.1	12386.7	12368.0
5°	11335.2	11311.0	11422.8	11514.2	11689.4	11887.0	12127.5	12299.1	12302.8	12399.7	12425.8
7.5°	10572.7	10555.9	10684.5	10831.8	11035.0	11337.1	11726.7	12095.8	12118.2	12381.1	12472.4
10°	9961.2	9957.4	10082.4	10242.7	10479.5	10816.9	11264.3	11805.0	11838.6	12291.6	12479.9
12.5°	9483.9	9491.4	9599.5	9782.2	10032.0	10384.4	10869.1	11478.7	11532.8	12149.9	12437.0
15°	9131.5	9161.4	9249.0	9433.6	9679.7	10037.6	10535.4	11176.7	11258.7	11991.4	12412.8
17.5°	8930.2	8963.7	9025.3	9178.1	9409.3	9754.2	10225.9	10928.8	11003.3	11870.3	12414.6
20°	8870.5	8898.5	8933.9	9027.1	9222.9	9536.1	9981.7	10705.0	10785.2	11773.3	12433.3
22.5°	8988.0	9008.5	9012.2	9004.8	9124.1	9379.5	9804.6	10541.0	10626.7	11709.9	12446.3
25°	9239.7	9267.6	9247.1	9178.1	9139.0	9295.6	9713.2	10432.8	10518.6	11663.3	12420.2
27.5°	9618.1	9621.9	9605.1	9515.6	9331.0	9304.9	9685.2	10369.5	10451.5	11609.2	12366.2
30°	10132.7	10156.9	10127.1	10005.9	9703.9	9454.1	9718.8	10307.9	10382.5	11540.3	12278.5
32.5°	10734.9	10794.5	10792.7	10665.9	10233.4	9787.8	9856.8	10270.6	10328.4	11467.6	12172.3
35°	11359.4	11441.5	11594.3	11540.3	11005.2	10315.4	10121.5	10330.3	10369.5	11458.2	12097.7
37.5°	12008.2	12090.2	12405.3	12550.7	11924.3	11070.5	10539.1	10541.0	10559.6	11572.0	12092.1
40°	12686.8	12774.5	13248.0	13626.5	13115.6	12026.9	11212.1	10981.0	10960.5	11851.6	12202.1
42.5°	13637.6	13715.9	14284.6	14767.4	14437.4	13251.7	12142.4	11659.6	11616.7	12399.7	12554.5
45°	14840.1	14907.3	15511.3	16027.7	15858.1	14650.0	13311.4	12593.6	12586.2	13313.3	13268.5
47.5°	16270.1	16322.3	16864.8	17364.5	17426.0	16258.9	14780.5	14034.8	13913.6	14566.1	14374.1
50°	17759.7	17817.5	18186.6	18723.6	19180.3	18412.2	16670.9	15800.3	15638.1	16219.8	15940.1
52.5°	18745.9	18822.4	19143.0	19823.5	21152.8	20772.5	18906.3	17940.5	17694.5	18223.9	18009.5
55°	18306.0	18477.5	18967.8	20058.4	22730.0	24378.1	21663.6	20436.9	20159.1	20599.1	20472.3
57.5°	16305.5	16540.4	17209.7	18893.2	22951.9	27554.9	25832.3	23377.0	23181.2	23054.4	23112.2
60°	12649.5	12875.1	13704.8	15899.1	21406.4	29874.2	32105.8	27001.2	26717.9	25519.1	25571.3
62.5°	8952.6	8838.8	9407.5	11012.7	17394.3	30146.4	39244.4	31848.5	30916.4	28121.7	27892.4
65°	6827.2	6801.1	7056.5	7567.4	10535.4	26889.4	43496.9	39995.7	38539.6	31183.0	30642.3
67.5°	5609.8	5563.2	5814.9	6558.7	6784.3	17347.7	43590.1	49447.9	48017.9	34993.7	33822.9
70°	4612.4	4560.2	4795.1	5755.2	6269.8	8797.8	36686.5	54983.1	54906.7	39818.6	36224.1
71°	4135.1	4097.8	4379.3	5445.7	6159.8	7332.4	31675.1	54998.0	55227.3	41451.7	36082.4
72.5°	3367.0	3380.0	3678.3	4847.3	6077.7	6474.9	23280.0	52434.6	52919.3	43008.5	34794.2
75°	2237.2	2248.4	2639.9	3728.7	5893.2	6335.0	12795.0	43998.4	44889.6	42076.3	31749.7
77.5°	1502.7	1498.9	1765.5	2557.9	5134.4	6335.0	7502.1	32907.5	33886.2	33479.8	24476.9
80°	1034.7	1027.3	1215.5	1765.5	3887.1	6411.5	5800.0	23061.9	23358.3	18080.4	9948.1
82.5°	633.9	639.5	794.2	1247.2	2645.5	5770.1	5475.6	12575.0	12252.4	5071.0	2485.2
85°	363.5	361.7	507.1	844.5	1698.4	4869.7	5339.5	5412.2	4964.7	1526.9	898.6
87.5°	130.5	139.8	272.2	467.9	973.2	3391.2	4530.3	2815.2	2537.4	689.8	406.4
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°	12369.9	12369.9	12369.9	12369.9	12369.9	12369.9	12369.9	12369.9	12369.9	12369.9	12369.9
2.5°	12355.0	12366.2	12353.1	12278.5	12215.2	12112.6	12054.8	11974.7	11950.4	11939.2	11969.1
5°	12401.6	12405.3	12295.3	12099.6	11879.6	11620.4	11434.0	11204.7	11096.6	11049.9	11079.8
7.5°	12444.5	12427.7	12187.2	11812.5	11406.0	10954.9	10554.0	10186.8	9972.4	9884.7	9892.2
10°	12450.1	12379.2	11993.3	11413.5	10783.3	10121.5	9506.3	8939.5	8581.6	8348.5	8419.4
12.5°	12392.3	12273.0	11708.1	10897.1	10022.7	9120.4	8288.9	7438.7	6927.9	6691.1	6698.6
15°	12347.5	12131.3	11357.6	10289.3	9114.8	7919.7	6784.3	5785.0	5240.7	4998.3	4884.6
17.5°	12310.2	11978.4	10951.1	9605.1	8042.8	6527.1	5162.4	4271.2	3972.9	3902.1	3872.2
20°	12258.0	11816.2	10498.1	8812.7	6821.6	4968.5	3769.7	3329.7	3331.6	3413.6	3424.8
22.5°	12185.3	11631.6	10015.2	7923.4	5511.0	3618.7	2955.0	2828.2	2956.8	3113.4	3141.4
25°	12077.2	11413.5	9478.3	6940.9	4202.2	2781.6	2524.3	2518.7	2675.3	2839.4	2863.6
27.5°	11924.3	11128.2	8881.7	5885.7	3096.7	2364.0	2261.4	2300.6	2416.2	2535.5	2544.8
30°	11719.2	10796.4	8223.6	4772.7	2427.4	2104.8	2093.7	2129.1	2199.9	2283.8	2291.3
32.5°	11493.7	10458.9	7520.7	3695.1	2078.7	1965.0	1976.2	1993.0	2026.5	2060.1	2067.6
35°	11288.6	10114.0	6801.1	2807.7	1912.8	1873.7	1866.2	1862.5	1866.2	1855.0	1856.9
37.5°	11156.2	9828.8	6051.6	2235.3	1817.7	1793.5	1771.1	1743.2	1711.5	1692.8	1696.5
40°	11107.7	9616.3	5292.9	1931.5	1739.4	1722.7	1679.8	1620.1	1582.8	1571.6	1571.6
42.5°	11238.2	9506.3	4560.2	1778.6	1674.2	1646.2	1575.4	1506.4	1478.4	1476.6	1474.7
45°	11637.2	9551.0	3862.9	1694.7	1614.5	1560.5	1467.2	1409.4	1390.8	1394.5	1392.7
47.5°	12353.1	9832.5	3266.3	1638.8	1554.9	1484.0	1379.6	1333.0	1310.6	1310.6	1312.5
50°	13570.5	10490.6	2790.9	1592.1	1504.5	1413.2	1316.2	1258.4	1228.6	1226.7	1226.7
52.5°	15343.5	11668.9	2494.5	1553.0	1448.6	1349.8	1252.8	1180.1	1144.7	1137.2	1133.5
55°	17565.8	13358.0	2412.5	1526.9	1374.0	1280.8	1176.4	1103.7	1064.5	1047.8	1045.9
57.5°	20051.0	15412.5	2574.7	1495.2	1297.6	1198.8	1092.5	1023.5	982.5	962.0	960.1
60°	22566.0	17655.3	3236.5	1450.5	1234.2	1109.3	1006.7	943.4	902.3	880.0	876.2
62.5°	25084.7	20019.3	4588.1	1446.7	1189.4	1023.5	919.1	865.1	825.9	801.7	796.1
65°	27926.0	22607.0	6124.4	1545.5	1174.5	945.2	829.6	786.8	753.2	730.8	729.0
67.5°	31188.5	25528.4	5977.1	1748.8	1224.9	874.4	745.7	712.2	687.9	669.3	667.4
70°	32719.2	25071.6	3715.6	1892.3	1295.7	805.4	665.6	641.3	622.7	609.6	604.0
71°	32077.8	23805.8	3115.3	1875.5	1288.3	775.6	633.9	615.2	596.6	585.4	579.8
72.5°	30329.1	21710.2	2598.9	1745.0	1204.4	721.5	592.9	574.2	557.4	544.4	540.7
75°	27215.6	19389.1	2080.6	1394.5	960.1	609.6	520.2	499.6	486.6	479.1	471.7
77.5°	20006.2	13837.1	1608.9	1101.8	706.6	497.8	443.7	428.8	415.7	404.6	399.0
80°	7664.3	5360.0	1083.2	822.2	518.3	393.4	358.0	350.5	337.4	330.0	330.0
82.5°	2063.8	1601.5	577.9	497.8	346.8	287.1	274.1	270.3	259.1	244.2	246.1
85°	835.2	706.6	324.4	274.1	212.5	169.7	184.6	186.4	173.4	154.7	156.6
87.5°	367.3	300.2	180.8	121.2	93.2	65.3	83.9	83.9	76.4	63.4	57.8
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)