

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: P320183

Luminaire Tested: **GAN-SA9D-830-U-SL4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P320183
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-830-U-SL4
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 3000K, 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: 52377 lumens
Efficiency: N/A
Efficacy: 91.1 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

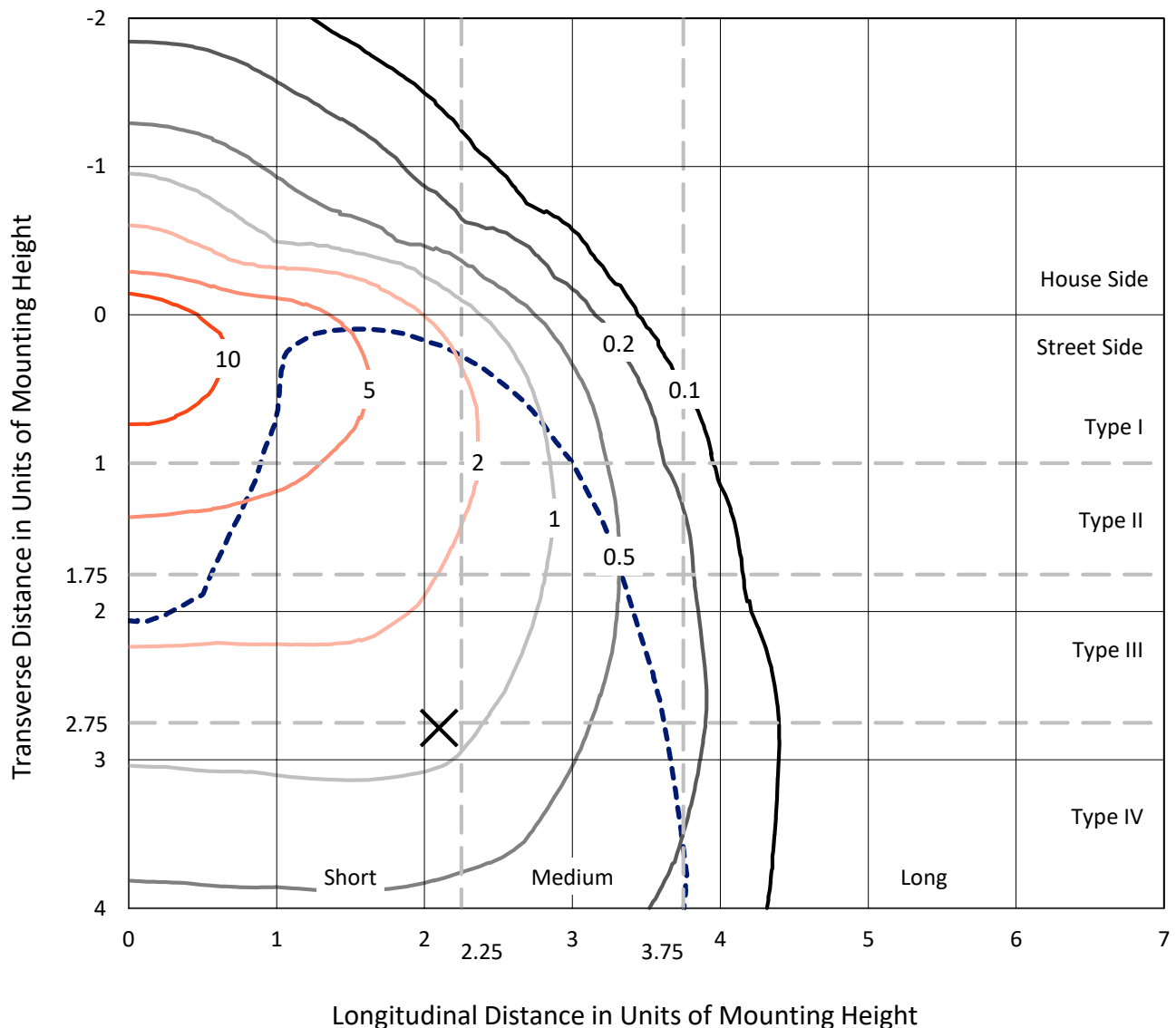
Input Watts (W): 575
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

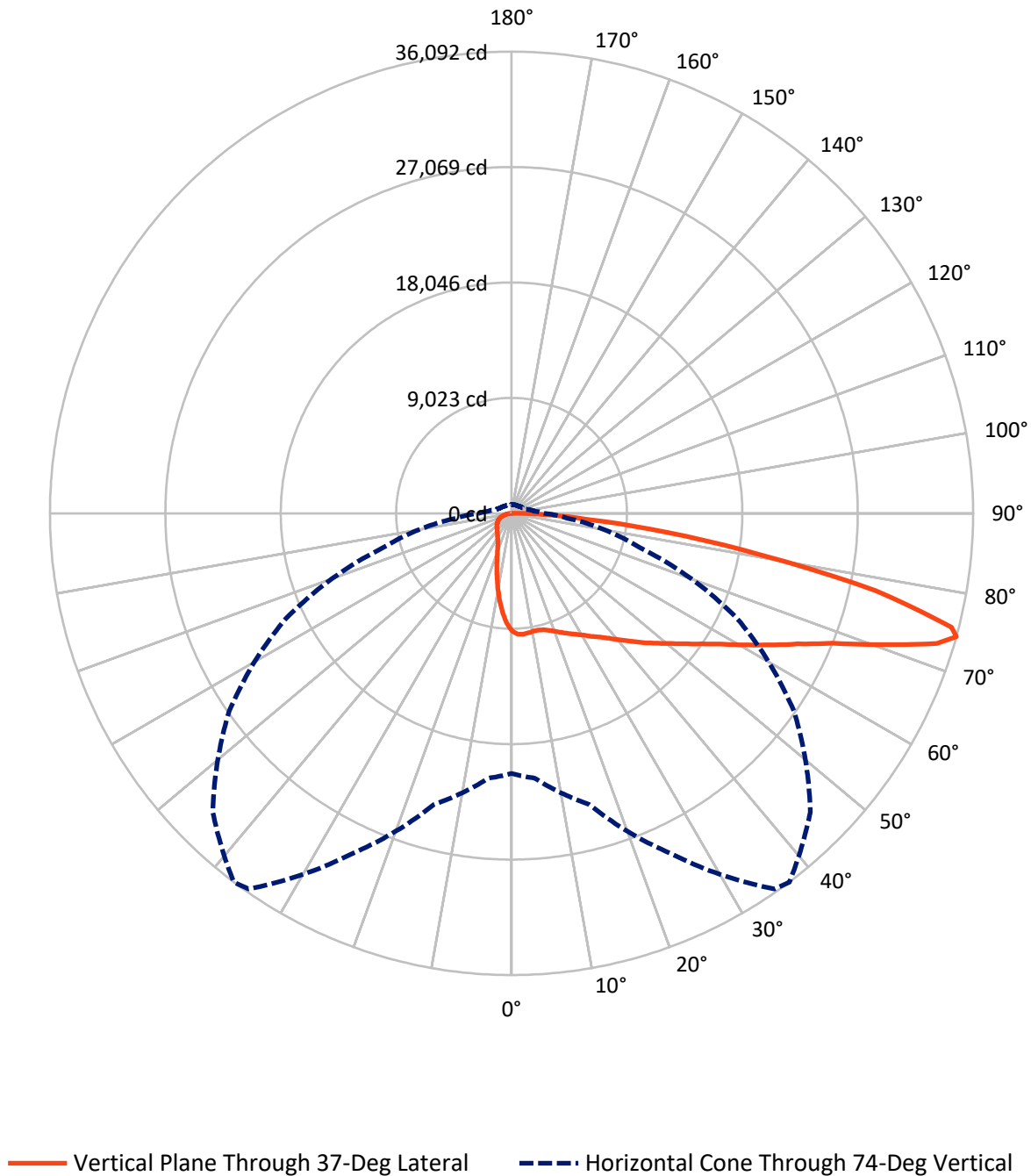
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15 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	7206.7	0.0	7206.7
	% Fixture	13.8	0.0	13.8
Street Side	Lumens	45170.3	0.0	45170.3
	% Fixture	86.2	0.0	86.2
Total	Lumens	52377.0	0.0	52377.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	812.7	1.6
10°-20°	2083.1	4.0
20°-30°	3209.7	6.1
30°-40°	4667.4	8.9
40°-50°	6869.6	13.1
50°-60°	9647.0	18.4
60°-70°	12210.2	23.3
70°-80°	10751.5	20.5
80°-90°	2125.8	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°	52377.0	100.0
0°-180°	52377.0	100.0

Coefficient of Utilization



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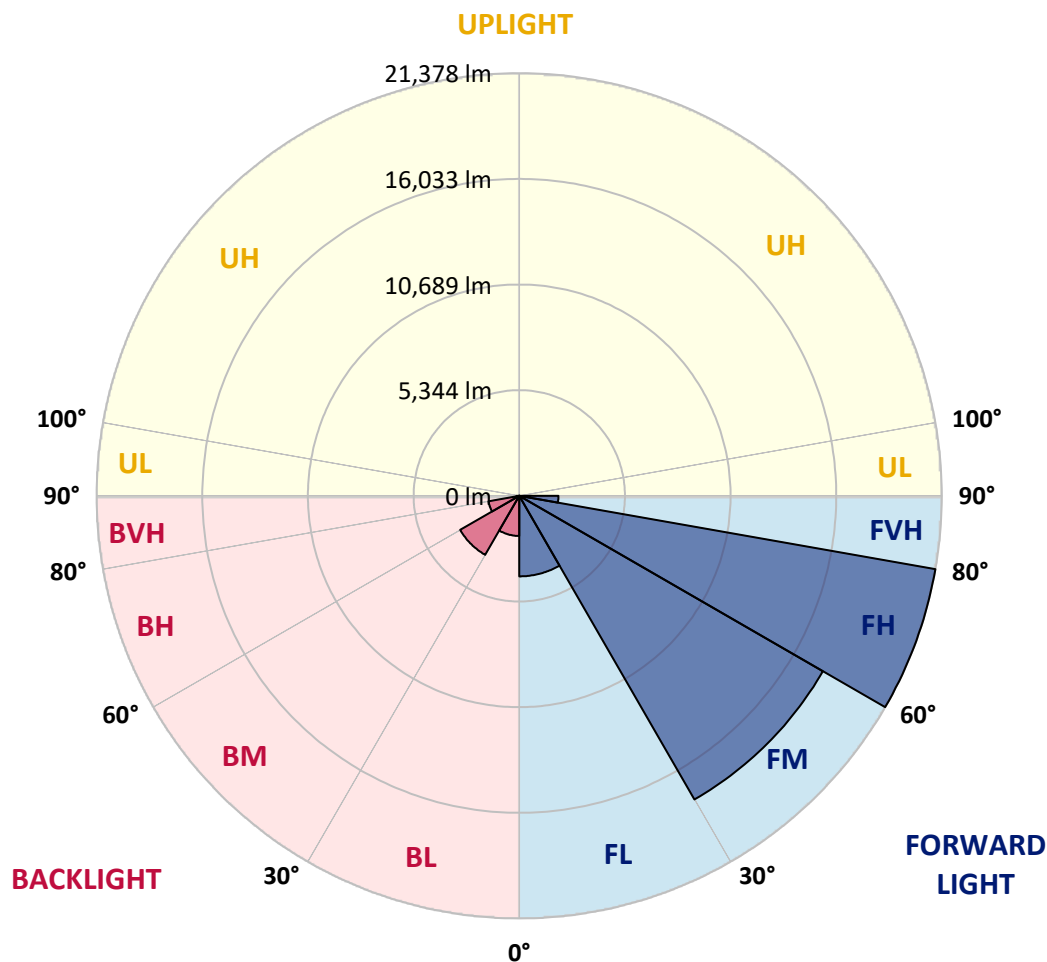
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4075.5	7.8			
FM	(30°-60°)	17735.3	33.9			
FH	(60°-80°)	21377.6	40.8			G5
FVH	(80°-90°)	1981.9	3.8			G5
BL	(0°-30°)	2030.0	3.9	B3/2500		
BM	(30°-60°)	3448.7	6.6	B3/5000		
BH	(60°-80°)	1584.1	3.0	B3/2500		G3/2500
BVH	(80°-90°)	144.0	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°	9228.6	9228.6	9228.6	9228.6	9228.6	9228.6	9228.6	9228.6	9228.6	9228.6	9228.6
2.5°	9544.1	9546.0	9544.1	9529.4	9494.3	9464.8	9440.8	9405.7	9328.3	9269.2	9180.7
5°	9634.5	9623.5	9616.1	9588.4	9533.0	9499.8	9453.7	9387.3	9260.0	9141.9	8998.0
7.5°	9592.1	9579.2	9562.6	9529.4	9466.6	9439.0	9374.4	9287.7	9134.5	8979.6	8772.9
10°	9461.1	9457.4	9450.0	9442.6	9389.1	9367.0	9308.0	9215.7	9064.4	8876.2	8634.5
12.5°	9315.3	9324.6	9354.1	9392.8	9368.8	9357.8	9320.9	9258.1	9103.2	8900.2	8608.7
15°	9223.1	9248.9	9328.3	9429.7	9450.0	9446.3	9437.1	9396.5	9232.3	9007.2	8667.7
17.5°	9191.7	9234.2	9385.4	9553.3	9612.4	9625.3	9629.0	9558.9	9376.2	9138.2	8728.6
20°	9248.9	9302.4	9523.8	9754.4	9848.5	9855.9	9839.3	9717.5	9512.8	9250.8	8761.8
22.5°	9422.3	9470.3	9747.1	10007.2	10114.2	10125.3	10075.5	9891.0	9656.7	9383.6	8808.0
25°	9756.3	9815.3	10092.1	10352.2	10407.6	10409.4	10337.5	10108.7	9844.9	9569.9	8907.6
27.5°	10191.7	10250.7	10499.8	10754.4	10724.9	10708.3	10610.5	10381.7	10090.2	9826.4	9084.7
30°	10676.9	10741.5	10977.7	11158.5	11088.4	11055.2	10975.8	10680.6	10431.6	10176.9	9355.9
32.5°	11178.8	11237.8	11444.5	11568.1	11479.5	11464.7	11344.8	11075.5	10876.2	10712.0	9795.0
35°	11693.5	11736.0	11938.9	12009.0	11890.9	11887.3	11854.0	11606.8	11481.4	11558.8	10433.4
37.5°	12219.3	12230.4	12403.8	12407.5	12372.5	12387.2	12422.3	12267.3	12302.4	12544.1	11263.6
40°	12688.0	12717.5	12843.0	12881.7	12942.6	12994.2	13169.5	13068.0	13339.3	13767.3	12296.8
42.5°	13034.8	13092.0	13293.1	13392.8	13590.2	13671.4	13918.6	14012.7	14558.8	15200.8	13525.6
45°	13328.2	13416.7	13739.6	13944.4	14278.4	14420.4	14774.7	15090.1	15937.0	16756.2	14818.9
47.5°	13645.5	13758.1	14162.1	14553.3	15007.1	15167.6	15811.5	16283.9	17407.5	18320.7	16038.5
50°	14112.3	14199.0	14593.8	15208.2	15774.6	15981.3	16872.4	17549.5	18901.9	19811.5	17095.6
52.5°	14763.6	14730.4	15064.3	15925.9	16686.1	16940.7	18005.2	18896.4	20416.6	21160.2	17988.6
55°	15418.6	15363.2	15597.5	16676.8	17748.8	18016.3	19252.4	20248.7	21857.6	22374.2	18673.1
57.5°	16147.3	16042.2	16239.6	17523.7	18959.1	19278.3	20649.1	21686.0	23274.5	23355.7	19108.5
60°	16898.2	16756.2	16977.6	18573.5	20496.0	20872.3	22283.8	23088.2	24610.3	24141.7	19248.7
62.5°	17555.1	17455.4	17796.7	19745.0	22228.4	22641.7	23888.9	24578.9	25927.6	24468.2	18743.2
65°	18128.8	18145.4	18735.8	21062.4	24160.1	24601.1	25730.2	26416.5	26964.5	24274.5	17560.6
67.5°	18813.3	18907.4	19914.8	22796.7	26591.8	27075.2	28409.1	28420.2	27543.8	23138.0	15232.2
70°	19811.5	20005.2	21536.5	25202.5	30049.3	30713.5	31743.0	29597.3	26730.2	20056.9	11985.0
72.5°	20697.1	21058.7	23261.6	27955.2	34263.3	34766.9	33693.2	28918.3	23329.9	15031.1	7466.7
74°	20337.3	20785.6	23575.2	29311.3	35849.9	36091.6	33034.5	26936.8	19451.7	10409.4	4339.4
75°	19562.4	20049.5	23117.7	29298.4	35648.8	35514.2	31444.1	24673.0	16020.0	7099.5	2887.4
77.5°	15787.6	16302.3	19479.4	25110.3	29230.1	29102.8	24154.6	16551.4	7016.5	2328.4	1466.8
80°	9178.8	9571.8	12092.0	15946.2	19710.0	19940.6	15885.3	8189.9	2760.1	1308.1	994.4
82.5°	4077.4	4348.6	5841.2	8140.1	11894.6	12191.7	8319.0	4291.4	1704.8	795.2	597.8
85°	2675.2	2876.3	3546.1	3876.3	5664.1	5867.1	4071.9	3341.3	1125.4	437.3	439.1
87.5°	1924.3	2118.0	2634.6	2300.7	2599.6	2461.2	2215.8	3092.2	452.0	249.1	147.6
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°	9228.6	9228.6	9228.6	9228.6	9228.6	9228.6	9228.6	9228.6	9228.6	9228.6	9228.6
2.5°	9141.9	9112.4	9046.0	8920.5	8850.4	8791.4	8693.6	8636.4	8610.6	8608.7	8619.8
5°	8915.0	8846.7	8675.1	8464.8	8296.9	8143.8	7953.7	7839.3	7758.2	7710.2	7723.1
7.5°	8651.1	8544.1	8274.8	7939.0	7669.6	7372.6	7079.2	6903.9	6767.4	6665.9	6684.4
10°	8470.3	8322.7	7929.8	7446.4	6998.0	6566.3	6162.3	5920.6	5728.7	5581.1	5592.2
12.5°	8409.5	8210.2	7665.9	7020.2	6391.0	5800.6	5273.0	4902.1	4704.7	4536.8	4549.7
15°	8418.7	8151.2	7444.5	6636.4	5844.9	5101.4	4461.2	4027.6	3760.1	3643.8	3645.7
17.5°	8426.1	8082.9	7212.1	6225.0	5304.3	4448.3	3752.7	3313.6	3060.8	2953.8	2955.7
20°	8402.1	7972.2	6924.2	5752.7	4739.8	3848.6	3175.2	2802.5	2610.7	2527.6	2527.6
22.5°	8370.7	7841.2	6599.5	5278.5	4182.6	3328.4	2761.9	2477.8	2367.1	2311.8	2309.9
25°	8385.5	7743.4	6267.4	4791.4	3669.7	2913.2	2487.0	2298.9	2225.1	2190.0	2188.2
27.5°	8464.8	7697.3	5961.2	4306.2	3221.3	2601.4	2302.5	2169.7	2121.7	2099.6	2099.6
30°	8608.7	7697.3	5642.0	3892.9	2848.7	2370.8	2160.5	2070.1	2036.9	2022.1	2022.1
32.5°	8859.6	7739.7	5333.9	3483.3	2551.6	2190.0	2042.4	1981.5	1955.7	1948.3	1948.3
35°	9291.4	7883.6	5033.1	3095.9	2311.8	2042.4	1929.9	1894.8	1876.4	1874.5	1880.0
37.5°	9898.4	8177.0	4750.8	2809.9	2142.0	1922.5	1835.8	1808.1	1797.0	1806.2	1813.6
40°	10662.2	8575.5	4494.4	2551.6	2012.9	1826.5	1749.0	1730.6	1725.1	1738.0	1749.0
42.5°	11584.7	9114.2	4284.1	2365.3	1913.3	1745.4	1675.2	1653.1	1647.6	1662.3	1677.1
45°	12582.8	9693.6	4136.5	2226.9	1835.8	1684.5	1610.7	1586.7	1575.6	1583.0	1599.6
47.5°	13490.5	10241.5	4077.4	2129.1	1762.0	1632.8	1553.5	1524.0	1505.5	1501.8	1514.7
50°	14256.2	10649.3	4105.1	2070.1	1702.9	1575.6	1498.1	1464.9	1437.2	1420.6	1429.9
52.5°	14813.4	10905.7	4130.9	2044.2	1656.8	1512.9	1437.2	1405.9	1369.0	1341.3	1341.3
55°	15217.5	10964.8	4073.7	2024.0	1621.7	1444.6	1369.0	1339.5	1302.6	1271.2	1267.5
57.5°	15376.1	10798.7	3861.6	1994.4	1597.8	1380.1	1297.0	1274.9	1243.5	1206.6	1204.8
60°	15162.1	10285.8	3452.0	1931.7	1566.4	1326.5	1225.1	1210.3	1195.6	1160.5	1158.7
62.5°	14302.3	9160.4	2922.5	1804.4	1503.7	1269.4	1158.7	1166.0	1167.9	1143.9	1140.2
65°	12743.3	7614.3	2405.9	1638.3	1409.6	1201.1	1090.4	1125.4	1145.7	1142.0	1136.5
67.5°	10477.7	5926.1	2038.7	1463.1	1286.0	1107.0	1016.6	1057.2	1073.8	1086.7	1083.0
70°	7776.6	4178.9	1686.3	1278.6	1136.5	996.3	920.6	940.9	929.9	944.6	950.2
72.5°	4335.7	2507.3	1374.5	1094.1	981.5	867.1	813.6	809.9	786.0	786.0	786.0
74°	2601.4	1839.5	1208.5	979.7	887.4	782.3	736.1	719.5	697.4	699.3	697.4
75°	2092.2	1581.2	1108.8	904.0	821.0	732.5	686.3	664.2	647.6	647.6	645.7
77.5°	1321.0	1201.1	893.0	719.5	656.8	603.3	571.9	542.4	542.4	540.6	538.7
80°	998.1	955.7	695.6	544.3	503.7	463.1	442.8	429.9	429.9	435.4	433.6
82.5°	684.5	719.5	488.9	380.1	359.8	330.3	326.6	328.4	322.9	315.5	313.6
85°	500.0	540.6	330.3	239.8	219.6	201.1	215.9	223.2	214.0	197.4	190.0
87.5°	191.9	354.2	177.1	99.6	92.2	79.3	92.2	95.9	103.3	81.2	83.0
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)