

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: P317621

Luminaire Tested: **GAN-SA7D-830-U-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P317621
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-8)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA7D-830-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 45435 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

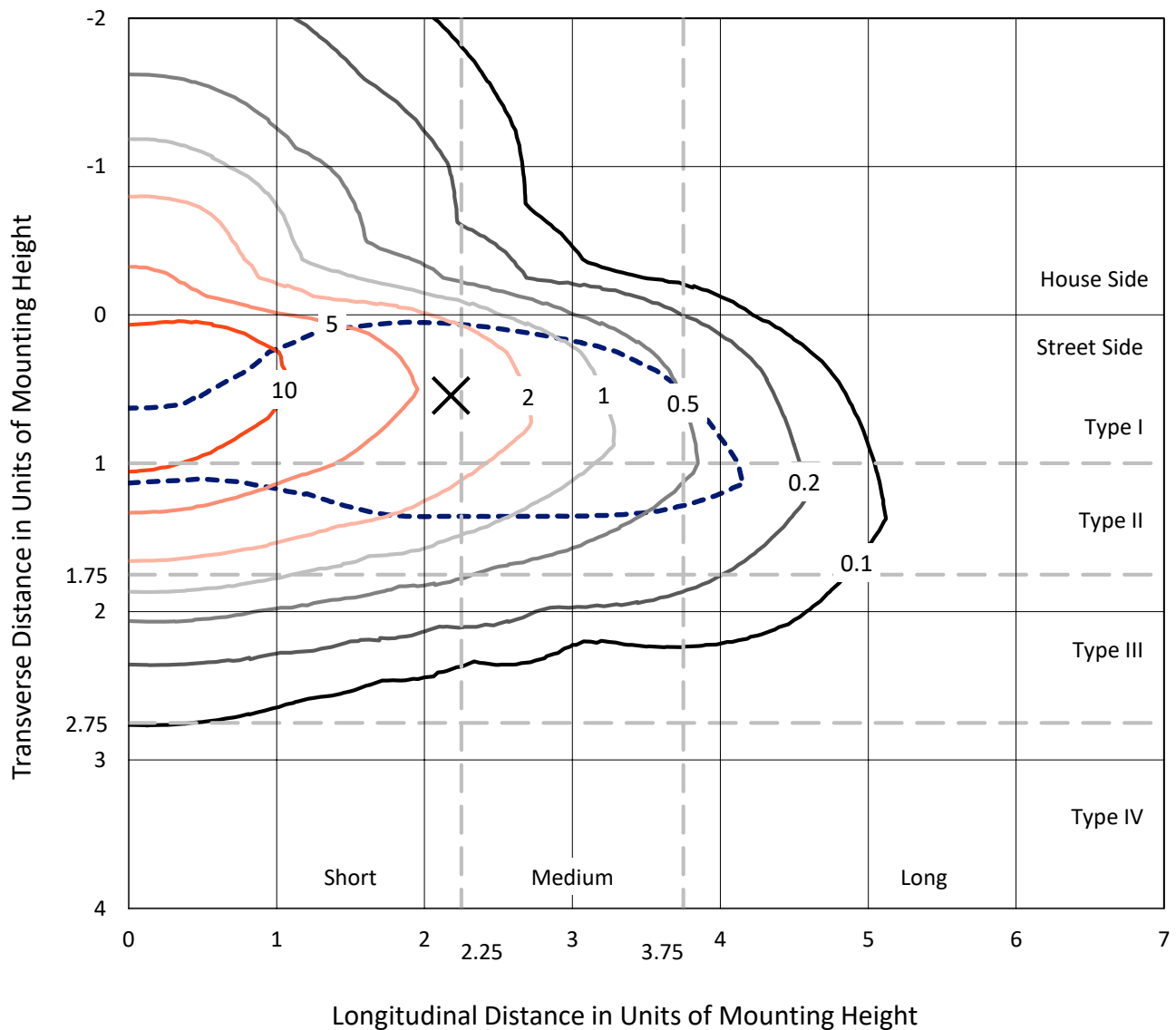
Input Watts (W): 448
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P317621
CATALOG NUMBER: GAN-SA7D-830-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

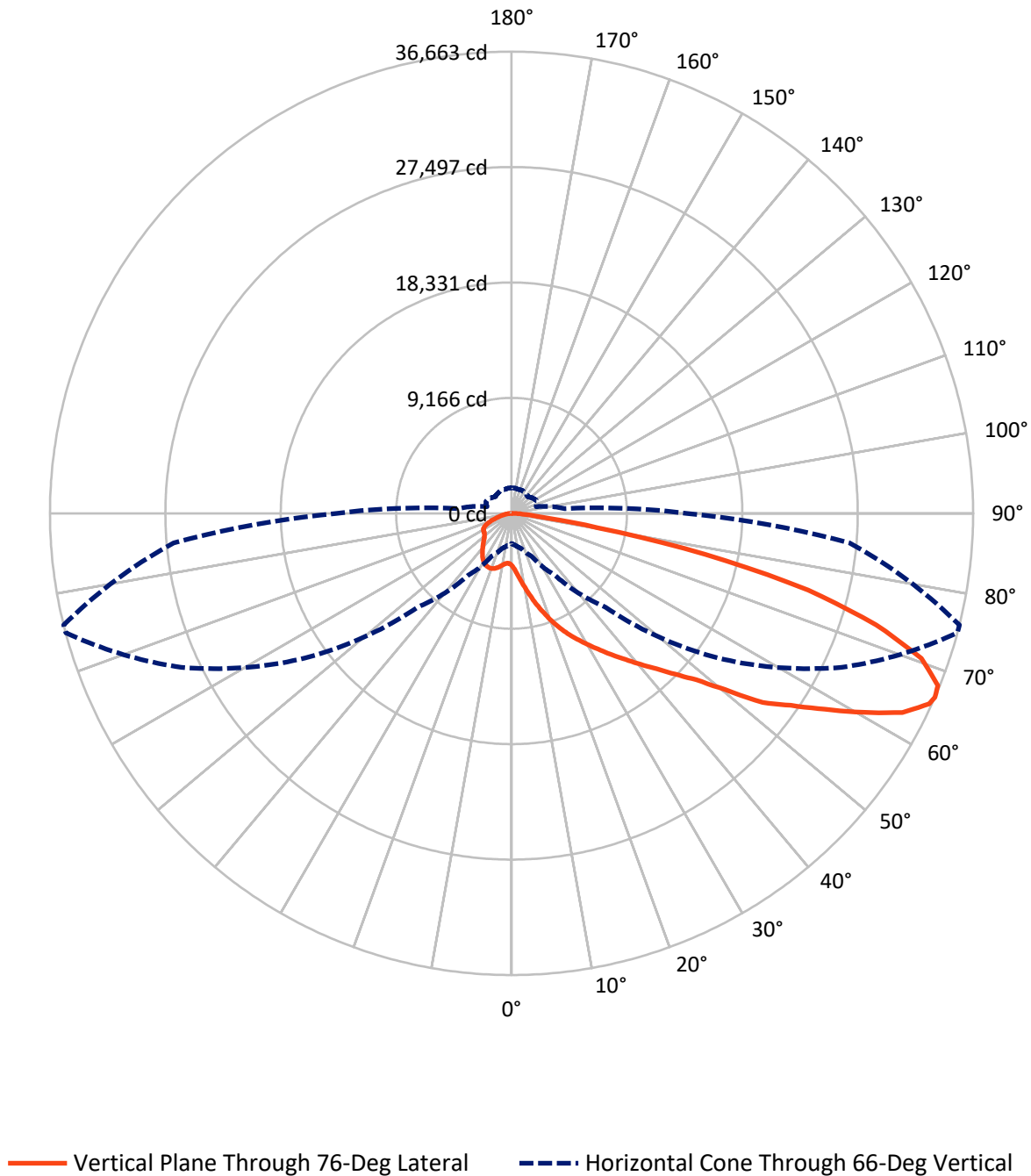
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 17.6 fc
Type II - Short - N/A

REPORT NUMBER: P317621
CATALOG NUMBER: GAN-SA7D-830-U-T2R

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7645.2	0.0	7645.2
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	37789.8	0.0	37789.8
	% Fixture	83.2	0.0	83.2
Total	Lumens	45435.0	0.0	45435.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	501.8	1.1
10°-20°	1981.4	4.4
20°-30°	3850.3	8.5
30°-40°	6284.6	13.8
40°-50°	8586.3	18.9
50°-60°	10001.3	22.0
60°-70°	8966.4	19.7
70°-80°	4531.2	10.0
80°-90°	731.7	1.6
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°	45435.0	100.0
0°-180°	45435.0	100.0

Coefficient of Utilization



REPORT NUMBER: P317621

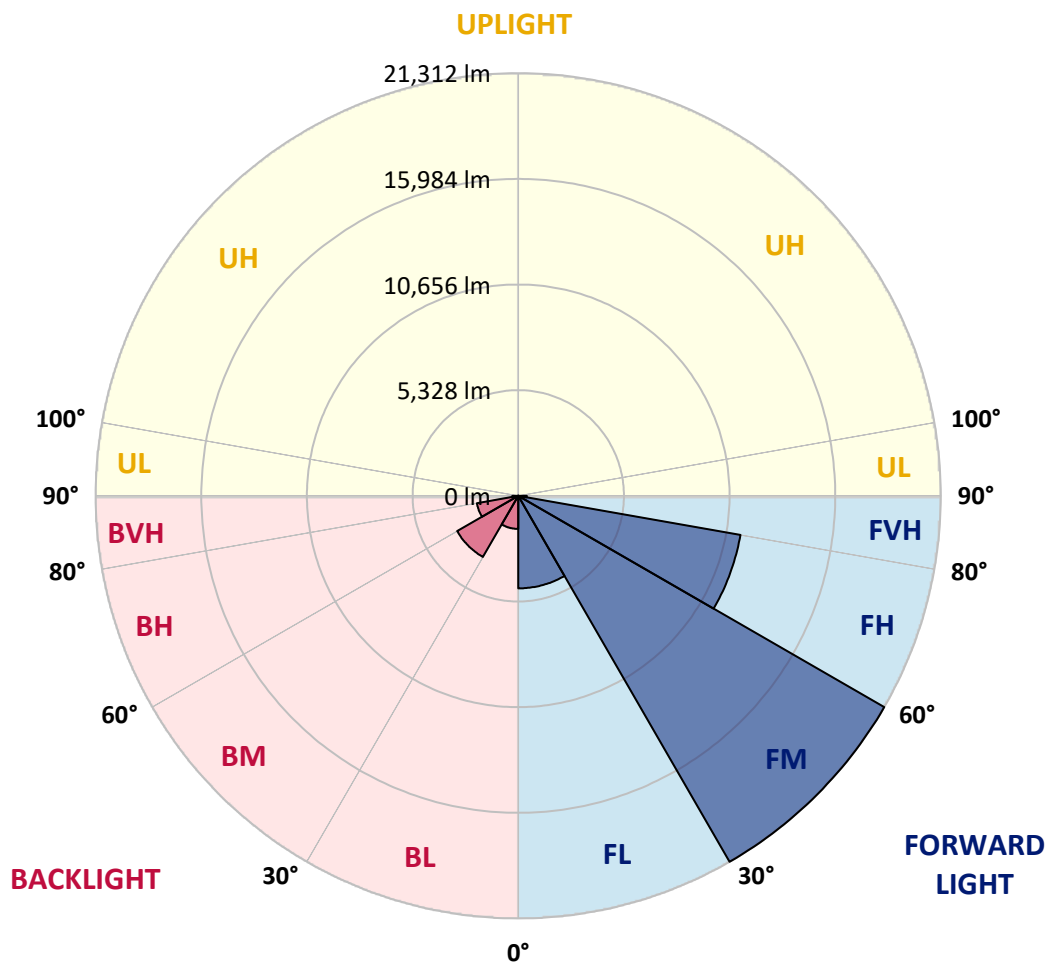
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4666.1	10.3			
FM	(30°-60°)	21312.2	46.9			
FH	(60°-80°)	11379.5	25.0			G4/12000
FVH	(80°-90°)	432.1	1.0			G3/500
BL	(0°-30°)	1667.4	3.7	B3/2500		
BM	(30°-60°)	3560.0	7.8	B3/5000		
BH	(60°-80°)	2118.1	4.7	B3/2500		G3/2500
BVH	(80°-90°)	299.6	0.7			G3/500
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 Short





REPORT NUMBER: P317621

CATALOG NUMBER: GAN-SA7D-830-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	4149.2	4149.2	4149.2	4149.2	4149.2	4149.2	4149.2	4149.2	4149.2	4149.2	4149.2
2.5°	5508.2	5424.9	5417.1	5295.3	5267.5	5034.6	4863.4	4684.5	4480.9	4440.8	4280.4
5°	7075.3	7067.6	6961.2	6762.2	6606.4	6208.4	5815.1	5398.6	4942.1	4868.0	4507.1
7.5°	8485.1	8472.8	8391.0	8176.6	7951.4	7462.5	6901.0	6262.4	5522.0	5412.5	4814.0
10°	9555.6	9551.0	9523.2	9365.9	9174.6	8705.7	8085.6	7214.1	6196.1	6046.5	5198.1
12.5°	10382.4	10391.6	10410.1	10354.6	10263.6	9864.1	9228.6	8222.9	6914.9	6766.8	5625.4
15°	10942.3	10970.0	11065.7	11144.3	11192.2	10946.9	10331.5	9254.8	7720.1	7542.7	6098.9
17.5°	11224.5	11255.4	11420.4	11658.0	11877.0	11852.3	11363.4	10238.9	8492.8	8321.6	6607.9
20°	11468.3	11491.4	11676.5	11961.8	12349.0	12520.2	12245.7	11186.0	9339.6	9136.0	7147.8
22.5°	12174.7	12204.0	12259.5	12421.5	12763.9	13078.6	12945.9	12082.2	10115.5	9925.8	7659.9
25°	13538.2	13573.7	13453.4	13316.1	13380.9	13599.9	13624.6	12899.7	10902.2	10687.8	8210.6
27.5°	15181.0	15231.9	15026.7	14673.5	14365.0	14280.2	14250.9	13569.1	11653.3	11405.0	8755.1
30°	16789.8	16877.7	16610.8	16152.7	15586.6	15188.7	14894.1	14224.6	12393.7	12156.2	9268.7
32.5°	18361.5	18326.1	17938.9	17491.6	16828.3	16330.1	15617.5	14928.0	13226.7	12953.7	9779.3
35°	19438.2	19450.5	19091.1	18560.5	17928.1	17545.6	16586.2	15686.9	14076.6	13825.1	10359.2
37.5°	20354.4	20297.3	19890.1	19395.0	18850.5	18687.0	17719.9	16522.9	14997.4	14722.9	10976.2
40°	20659.8	20593.5	20326.6	19970.3	19533.8	19519.9	18970.8	17470.0	16038.6	15767.1	11671.9
42.5°	20474.7	20389.9	20280.4	20183.2	20049.0	20110.7	20146.2	18580.6	17183.1	16879.2	12477.0
45°	19791.4	19663.4	19740.5	19951.8	20243.4	20592.0	21207.4	19809.9	18464.9	18210.4	13422.6
47.5°	18741.0	18625.3	18865.9	19317.9	20110.7	20993.0	22211.5	21167.3	19995.0	19742.1	14769.1
50°	17263.3	17297.2	17641.2	18463.3	19661.8	21178.1	23448.6	22964.3	22219.3	21983.3	16606.2
52.5°	14838.5	14844.7	15813.4	17163.0	18865.9	21082.5	24135.0	25261.0	25256.4	24971.0	18355.4
55°	12586.5	12723.8	13490.4	15284.3	17576.4	20699.9	24614.7	26377.8	27250.8	26916.1	19985.8
57.5°	10387.0	10467.2	11193.7	12995.3	15736.3	19680.4	25106.8	27718.2	29549.1	29337.8	22012.6
60°	7885.1	8008.5	8759.7	10424.0	13382.5	17871.0	25153.0	29117.2	32296.2	32083.3	24275.4
62.5°	5117.9	5330.8	6034.1	7593.6	10535.1	15268.9	24079.5	30031.9	34899.9	34824.3	26283.7
65°	2941.5	3101.9	3590.9	4794.0	7268.1	12001.9	21526.7	29680.2	36502.5	36459.3	27034.8
66°	2403.2	2503.4	2878.2	3746.7	5997.1	10539.7	20042.8	28938.3	36661.4	36662.9	26948.5
67.5°	1921.9	1966.6	2134.8	2682.4	4425.3	8354.0	17391.3	27301.7	36464.0	36517.9	26391.6
70°	1590.3	1613.4	1665.9	1798.5	2415.5	5037.7	12344.4	23049.1	34481.9	34523.5	24218.3
72.5°	1426.8	1440.7	1460.7	1479.2	1704.4	2815.0	7539.6	18438.7	30232.4	30286.4	20906.6
75°	1292.6	1300.3	1297.2	1298.8	1429.9	1793.9	3896.3	13766.5	24445.0	24337.1	16015.5
77.5°	1135.3	1143.0	1127.5	1130.6	1264.8	1379.0	1938.9	9637.3	16496.7	15734.7	9023.4
80°	959.4	965.6	959.4	970.2	1101.3	1041.2	1127.5	5421.8	7294.3	6899.5	3208.3
82.5°	725.0	751.2	769.7	812.9	907.0	740.4	754.3	2111.6	2221.2	2114.7	984.1
85°	317.7	387.2	580.0	621.6	681.8	444.2	495.1	860.7	903.9	876.1	357.9
87.5°	83.3	91.0	286.9	360.9	377.9	200.5	257.6	391.8	413.4	391.8	118.8
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°	4149.2	4149.2	4149.2	4149.2	4149.2	4149.2	4149.2	4149.2	4149.2	4149.2	4149.2
2.5°	4195.5	4119.9	3984.2	3863.9	3772.9	3711.2	3649.5	3618.6	3600.1	3581.6	3584.7
5°	4329.7	4177.0	3944.1	3779.0	3686.5	3627.9	3597.0	3584.7	3577.0	3558.5	3558.5
7.5°	4531.8	4315.8	3995.0	3825.3	3752.8	3708.1	3689.6	3683.4	3674.2	3652.6	3655.7
10°	4786.3	4484.0	4101.4	3936.4	3870.1	3820.7	3794.5	3785.2	3768.3	3743.6	3746.7
12.5°	5085.5	4692.2	4241.8	4069.0	3988.8	3922.5	3879.3	3853.1	3823.8	3791.4	3792.9
15°	5412.5	4918.9	4393.0	4187.8	4078.3	3985.7	3916.3	3871.6	3825.3	3785.2	3783.7
17.5°	5744.2	5138.0	4508.6	4252.6	4104.5	3982.7	3888.6	3819.2	3762.1	3712.7	3708.1
20°	6102.0	5335.4	4573.4	4246.4	4055.1	3910.2	3785.2	3698.8	3635.6	3586.2	3578.5
22.5°	6466.0	5520.5	4584.2	4183.2	3945.6	3768.3	3637.1	3541.5	3476.7	3425.8	3407.3
25°	6799.2	5663.9	4539.5	4061.3	3792.9	3601.7	3473.6	3376.5	3324.0	3263.9	3245.4
27.5°	7103.1	5764.2	4450.0	3905.5	3621.7	3433.5	3313.2	3229.9	3172.9	3126.6	3111.2
30°	7376.1	5818.2	4303.5	3720.4	3445.9	3274.7	3172.9	3115.8	3066.4	3007.8	2997.0
32.5°	7635.2	5818.2	4115.3	3518.4	3271.6	3134.3	3074.1	3038.7	2983.1	2926.1	2910.6
35°	7894.4	5782.7	3893.2	3307.1	3111.2	3034.0	3031.0	2989.3	2904.5	2827.3	2807.3
37.5°	8167.4	5710.2	3643.3	3109.6	2980.0	2989.3	3015.5	2923.0	2802.7	2693.1	2663.8
40°	8475.9	5610.0	3384.2	2938.4	2870.5	2969.3	2973.9	2827.3	2592.9	2492.6	2466.4
42.5°	8838.3	5509.7	3143.6	2787.2	2784.2	2909.1	2895.2	2620.7	2480.3	2429.4	2415.5
45°	9315.0	5452.6	2915.3	2643.8	2716.3	2811.9	2761.0	2506.5	2447.9	2418.6	2406.3
47.5°	10066.1	5481.9	2705.5	2529.6	2648.4	2714.7	2511.1	2460.2	2418.6	2383.1	2370.8
50°	11007.1	5465.0	2535.8	2451.0	2571.3	2612.9	2398.5	2400.1	2378.5	2338.4	2319.9
52.5°	11715.0	5332.3	2426.3	2406.3	2503.4	2432.5	2327.6	2341.5	2330.7	2272.1	2252.0
55°	12398.4	5218.2	2370.8	2389.3	2454.1	2207.3	2244.3	2278.2	2267.4	2210.4	2201.1
57.5°	13248.3	5196.6	2336.8	2393.9	2412.4	2094.7	2164.1	2208.8	2201.1	2176.4	2171.8
60°	14289.4	5202.7	2306.0	2401.6	2366.1	2011.4	2088.5	2145.6	2150.2	2145.6	2142.5
62.5°	14861.7	5034.6	2228.9	2380.0	2284.4	1938.9	2009.8	2093.1	2094.7	2103.9	2102.4
65°	14375.8	4531.8	2085.4	2304.4	2147.1	1878.7	1942.0	2033.0	2009.8	2051.5	2051.5
66°	13903.8	4241.8	2014.5	2255.1	2088.5	1855.6	1920.4	2002.1	1972.8	2029.9	2029.9
67.5°	12939.8	3752.8	1886.4	2150.2	2005.2	1823.2	1895.7	1951.2	1911.1	1996.0	1989.8
70°	11178.3	2902.9	1628.8	1912.7	1867.9	1775.4	1861.8	1849.4	1790.8	1920.4	1895.7
72.5°	9424.5	2205.7	1308.0	1601.1	1659.7	1715.2	1813.9	1719.9	1645.8	1736.8	1682.8
75°	7312.8	1658.2	1033.5	1244.8	1402.1	1621.1	1756.9	1570.2	1463.8	1454.5	1425.2
77.5°	3953.3	1138.3	819.1	950.2	1113.7	1503.9	1718.3	1409.8	1249.4	1212.4	1189.2
80°	1565.6	740.4	595.4	720.3	778.9	1334.2	1625.8	1223.2	1030.4	993.3	957.9
82.5°	646.3	438.1	384.1	482.8	507.5	1141.4	1459.2	1002.6	795.9	1101.3	1169.2
85°	277.6	240.6	228.3	249.9	286.9	800.5	1161.5	765.1	859.2	766.6	609.3
87.5°	83.3	101.8	97.2	95.6	104.9	191.3	618.5	425.7	630.9	239.1	178.9
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)