

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: P321078

Luminaire Tested: **GAN-SA4B-827-U-AFL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321078
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-29)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA4B-827-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17386 lumens
Efficiency: N/A
Efficacy: 101.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 171
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



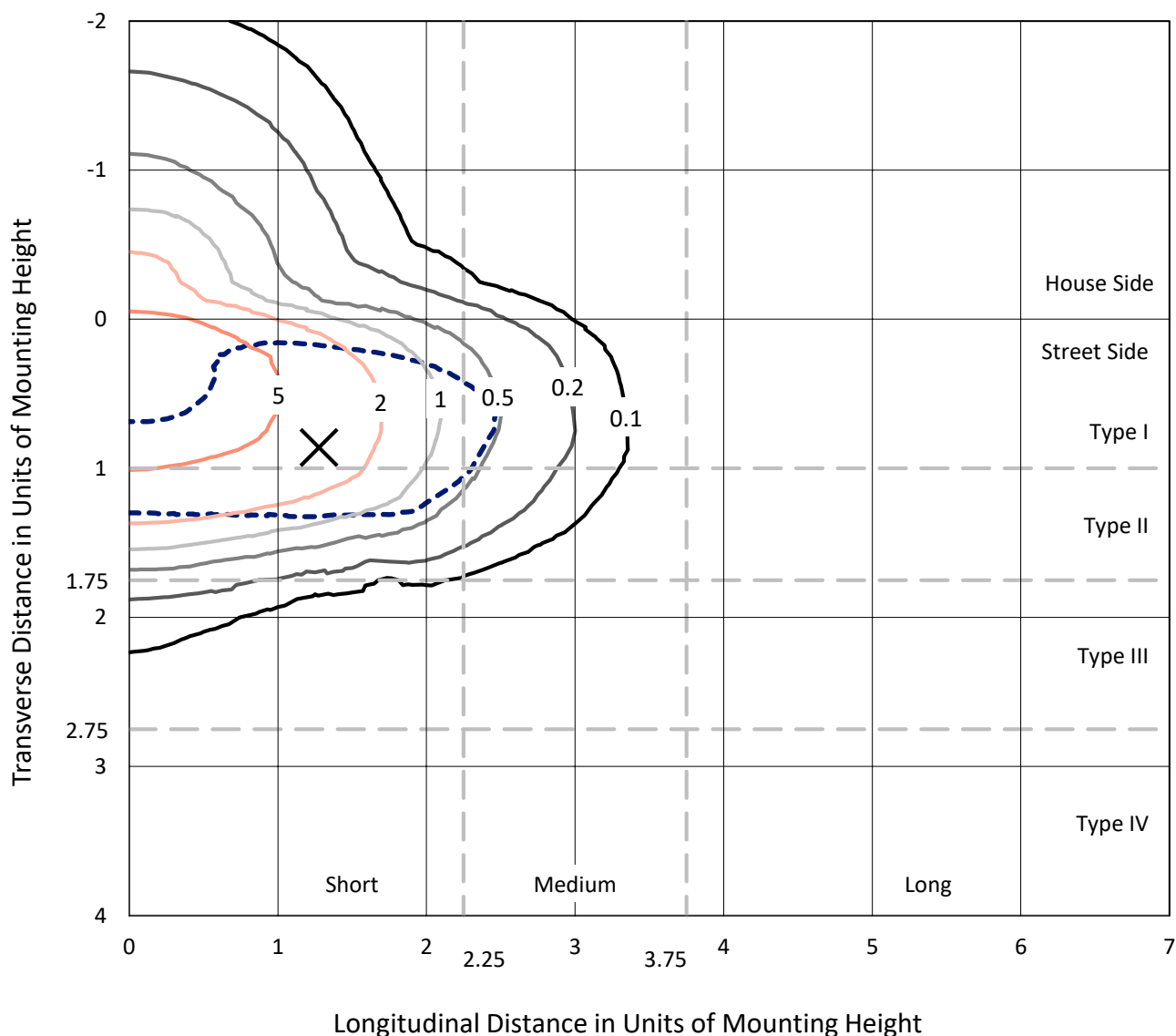
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

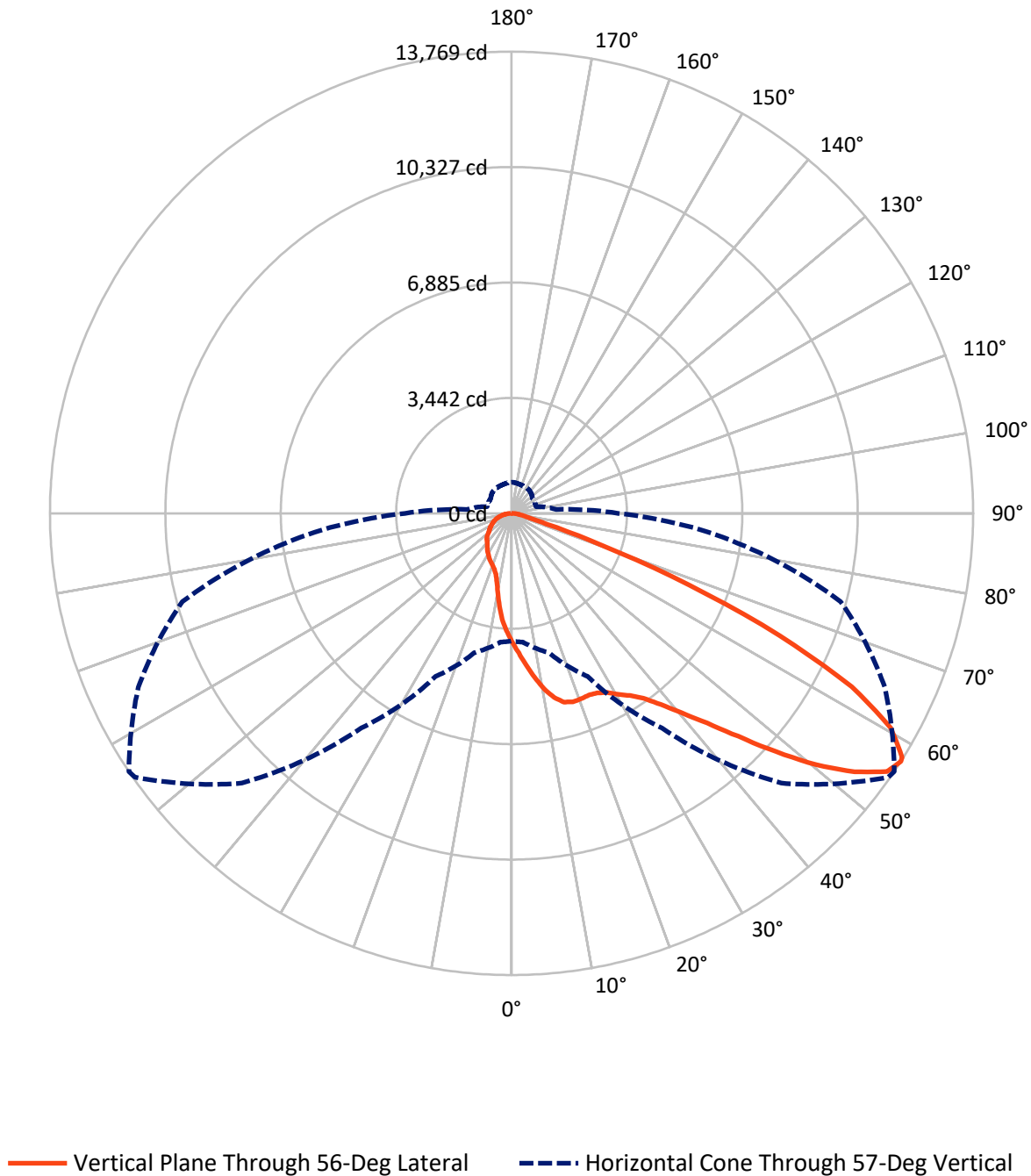


Based on 25 foot mounting height. Maximum calculated value = 8.5 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2997.0	0.0	2997.0
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	14389.0	0.0	14389.0
	% Fixture	82.8	0.0	82.8
Total	Lumens	17386.0	0.0	17386.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	368.4	2.1
10°-20°	1041.5	6.0
20°-30°	1696.3	9.8
30°-40°	2535.8	14.6
40°-50°	3846.3	22.1
50°-60°	4311.0	24.8
60°-70°	2546.3	14.6
70°-80°	834.3	4.8
80°-90°	206.1	1.2
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°	17386.0	100.0
0°-180°	17386.0	100.0

Coefficient of Utilization



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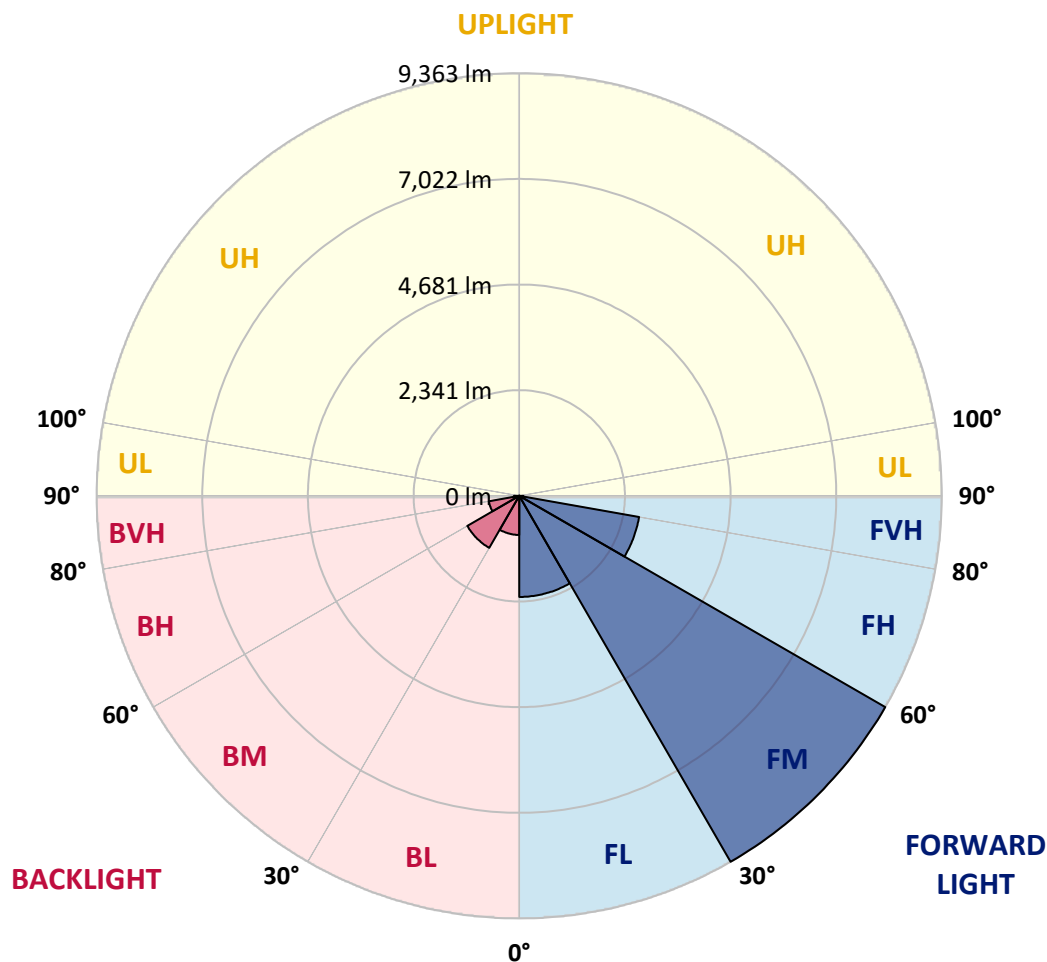
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2239.6	12.9			
FM	(30°-60°)	9362.9	53.9			
FH	(60°-80°)	2695.8	15.5			G2/5000
FVH	(80°-90°)	90.8	0.5			G1/100
BL	(0°-30°)	866.6	5.0	B2/1000		
BM	(30°-60°)	1330.3	7.7	B2/2500		
BH	(60°-80°)	684.8	3.9	B2/1000		G2/1000
BVH	(80°-90°)	115.4	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	3856.2	3856.2	3856.2	3856.2	3856.2	3856.2	3856.2	3856.2	3856.2	3856.2	3856.2
2.5°	4428.0	4468.7	4450.7	4388.6	4340.8	4273.3	4198.0	4175.3	4095.8	4006.8	3899.8
5°	5128.9	5108.6	5079.3	4982.5	4880.3	4761.4	4572.6	4542.8	4365.9	4164.5	3951.8
7.5°	5528.0	5526.2	5508.9	5452.1	5358.9	5203.6	4975.9	4940.7	4673.6	4349.8	4019.9
10°	5470.1	5465.9	5494.6	5553.7	5581.8	5549.5	5357.7	5322.5	4994.5	4554.7	4098.8
12.5°	5140.8	5143.2	5189.2	5313.5	5482.6	5685.8	5654.7	5637.4	5327.3	4786.5	4194.4
15°	4884.5	4889.9	4926.3	5034.5	5234.1	5602.7	5835.1	5841.1	5649.3	5042.3	4306.1
17.5°	4772.2	4783.5	4800.3	4876.2	5059.0	5437.2	5878.2	5910.4	5931.3	5307.5	4413.7
20°	4808.0	4818.8	4823.6	4872.0	5021.9	5336.8	5848.3	5906.2	6147.6	5557.3	4521.2
22.5°	4968.8	4975.3	4978.3	4990.9	5107.4	5365.5	5828.6	5889.5	6304.2	5781.4	4602.5
25°	5235.2	5230.5	5211.3	5195.2	5273.5	5479.0	5874.0	5931.9	6431.4	5984.5	4655.7
27.5°	5554.3	5548.3	5511.3	5467.1	5511.9	5655.9	6004.8	6050.8	6545.6	6174.5	4682.6
30°	5937.3	5921.8	5851.9	5799.3	5816.6	5921.2	6220.5	6262.3	6721.8	6390.2	4708.9
32.5°	6380.0	6363.3	6262.3	6175.1	6175.1	6262.3	6442.8	6477.4	6871.2	6634.0	4751.3
35°	6934.5	6913.6	6782.2	6635.8	6594.5	6638.8	6745.7	6770.2	7140.1	6941.1	4828.4
37.5°	7588.2	7560.1	7389.8	7193.8	7103.6	7101.2	7178.3	7228.5	7569.7	7344.4	4959.2
40°	8243.6	8223.9	8075.1	7921.0	7744.1	7687.4	7806.3	7821.8	8131.3	7845.1	5126.5
42.5°	8750.3	8746.7	8719.2	8739.6	8558.5	8443.8	8537.0	8549.6	8817.2	8387.0	5304.6
45°	9018.0	9024.0	9157.2	9452.4	9519.3	9435.6	9481.6	9485.2	9601.1	8933.7	5467.7
47.5°	8803.5	8834.6	9171.5	9831.8	10379.7	10657.5	10581.0	10625.2	10361.2	9403.4	5595.5
50°	7967.6	8005.8	8579.4	9662.7	10781.2	11840.0	11799.9	11789.8	10974.2	9747.5	5664.8
52.5°	6932.1	6962.0	7435.2	8783.8	10486.6	12493.6	12861.1	12808.5	11519.1	10005.0	5678.0
55°	5355.3	5401.9	5855.4	7029.5	9295.2	12243.9	13641.4	13594.2	12015.6	10140.1	5662.5
57°	3807.2	3856.2	4306.7	5364.9	7819.4	11379.3	13719.1	13769.3	12283.9	10162.8	5679.8
57.5°	3397.4	3447.5	3893.9	4921.6	7359.3	11066.8	13652.2	13735.8	12332.3	10159.2	5689.3
60°	1710.6	1729.7	2014.2	2747.3	4652.1	8946.9	12779.2	12994.9	12375.9	9983.5	5730.6
62.5°	1063.5	1049.8	1040.8	1265.5	2263.3	5933.1	10977.8	11393.0	11541.2	9558.1	5630.8
65°	935.1	909.4	810.8	792.9	999.6	2881.7	8266.9	8783.8	9757.7	8887.7	5393.0
67.5°	878.3	853.2	742.1	675.2	675.8	1142.4	5132.5	5714.4	7601.3	7754.3	4831.9
70°	819.8	797.1	693.1	614.2	575.4	632.7	2361.3	2802.8	4955.0	6095.0	4038.5
72.5°	744.5	728.9	630.4	549.1	507.9	473.8	904.0	1067.7	2868.6	4093.4	2804.6
75°	665.6	651.3	567.0	489.3	439.2	372.8	509.1	548.5	1457.3	2094.2	1380.8
77.5°	579.0	570.6	504.3	432.6	392.6	308.9	360.3	379.4	625.0	898.0	692.5
80°	460.7	476.8	441.0	385.4	348.3	247.4	255.1	267.7	363.9	438.6	393.2
82.5°	299.9	328.0	345.4	313.1	286.8	194.8	183.4	188.8	237.2	267.7	170.9
85°	124.9	140.4	227.0	204.9	190.6	142.2	123.1	125.5	147.0	152.4	69.9
87.5°	55.6	59.2	99.8	93.8	80.7	49.0	52.6	57.4	78.3	74.1	26.9
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°	3856.2	3856.2	3856.2	3856.2	3856.2	3856.2	3856.2	3856.2	3856.2	3856.2	3856.2
2.5°	3859.8	3809.6	3723.6	3628.6	3550.9	3488.8	3426.0	3383.0	3332.8	3305.9	3292.2
5°	3862.8	3764.2	3583.2	3397.4	3231.3	3079.5	2934.9	2823.8	2719.8	2663.6	2648.1
7.5°	3875.4	3727.2	3434.4	3128.5	2833.3	2563.8	2355.9	2225.7	2131.9	2090.0	2078.1
10°	3885.5	3683.6	3250.4	2797.5	2396.0	2122.9	1961.6	1888.7	1856.4	1851.0	1845.7
12.5°	3909.4	3638.7	3056.8	2452.1	2056.0	1867.2	1811.0	1806.2	1815.2	1828.3	1828.3
15°	3947.0	3594.5	2835.7	2155.8	1839.7	1773.4	1784.7	1811.0	1835.5	1855.8	1858.8
17.5°	3974.5	3540.2	2597.9	1918.6	1724.4	1742.3	1782.9	1820.0	1845.1	1864.8	1866.6
20°	3994.3	3455.9	2344.0	1737.5	1658.0	1713.6	1764.4	1797.3	1814.6	1834.3	1837.3
22.5°	3984.1	3343.0	2118.7	1607.9	1604.3	1671.8	1720.2	1759.6	1746.5	1727.4	1739.9
25°	3935.1	3187.6	1886.9	1511.1	1547.5	1615.6	1675.4	1649.1	1604.9	1596.5	1601.3
27.5°	3847.9	2989.3	1672.4	1421.4	1481.8	1563.6	1560.1	1533.8	1518.2	1507.5	1514.1
30°	3754.1	2774.2	1484.8	1343.2	1408.9	1476.4	1462.7	1462.1	1446.5	1429.2	1437.6
32.5°	3661.4	2557.9	1336.0	1278.6	1353.9	1362.9	1392.8	1401.7	1371.3	1334.8	1332.4
35°	3580.8	2353.5	1223.1	1220.1	1287.6	1288.8	1332.4	1319.9	1244.0	1206.3	1206.3
37.5°	3520.4	2149.8	1137.0	1167.5	1200.4	1231.4	1253.5	1201.6	1189.0	1168.1	1167.5
40°	3494.1	1970.5	1083.3	1127.5	1138.8	1178.3	1121.5	1141.8	1147.8	1137.0	1137.0
42.5°	3466.7	1814.6	1036.7	1097.0	1095.2	1089.8	1061.2	1087.4	1111.3	1111.9	1110.1
45°	3439.2	1680.2	995.4	1031.9	1057.0	999.0	1004.4	1032.5	1065.9	1077.9	1077.9
47.5°	3408.7	1573.8	957.8	963.2	1002.0	963.2	959.0	980.5	1019.9	1039.0	1043.2
50°	3341.8	1478.2	914.8	902.8	913.6	926.7	930.3	940.5	984.1	1014.5	1021.7
52.5°	3249.2	1392.8	859.8	847.2	847.2	896.8	913.6	916.6	953.6	990.0	997.2
55°	3172.1	1338.4	803.0	800.6	798.3	865.2	893.9	898.6	924.3	953.0	956.6
57°	3177.5	1334.2	759.4	761.8	761.2	832.9	875.3	885.5	898.6	923.1	927.3
57.5°	3180.5	1337.2	749.9	751.1	750.5	823.9	870.0	881.3	891.5	917.2	921.3
60°	3225.3	1345.0	711.0	697.9	700.9	776.1	839.5	853.8	860.4	894.4	899.8
62.5°	3159.0	1310.3	679.9	648.3	648.3	726.0	797.1	819.8	829.9	875.9	884.9
65°	2966.6	1212.9	643.5	592.1	598.1	675.8	746.3	783.3	798.9	856.2	865.8
67.5°	2669.6	1100.0	604.7	541.9	547.9	623.2	693.7	733.7	758.2	834.7	842.5
70°	2283.0	962.0	552.1	488.8	495.9	565.8	631.6	677.0	713.4	814.4	816.8
72.5°	1683.1	788.7	478.6	430.2	438.0	498.9	568.8	621.4	670.4	763.6	762.4
75°	1000.8	616.6	397.3	371.0	376.4	433.2	512.1	576.0	649.5	743.9	755.2
77.5°	607.1	464.3	323.8	310.7	317.3	375.2	471.4	539.5	640.5	701.5	697.9
80°	366.9	331.6	258.7	250.4	256.9	320.9	436.2	512.1	559.9	599.3	599.3
82.5°	191.8	202.6	190.0	183.4	192.4	260.5	396.7	446.9	494.7	424.8	396.7
85°	78.3	105.8	115.3	114.7	120.1	180.4	342.4	382.4	319.1	302.9	310.1
87.5°	26.3	44.8	56.2	48.4	50.8	113.5	237.2	184.6	219.3	153.0	145.2
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)