

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: P190972

Luminaire Tested: **GAN-AF-04-LED-U-AFL**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P190972  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-AF-04-LED-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25199.4 lumens  
Efficiency: N/A  
Efficacy: 112.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B3 - U0 - G2

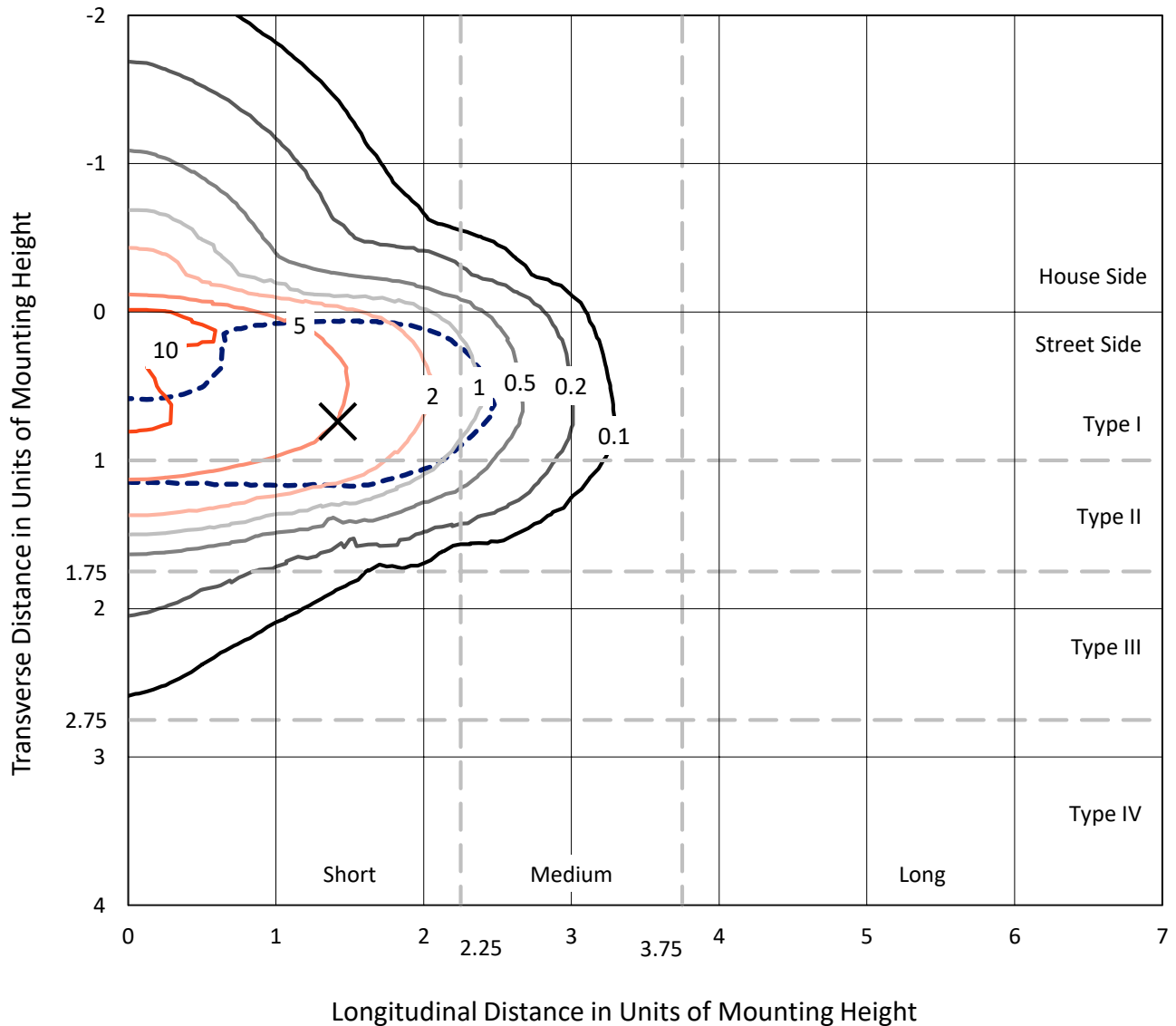
Input Watts (W): 225  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

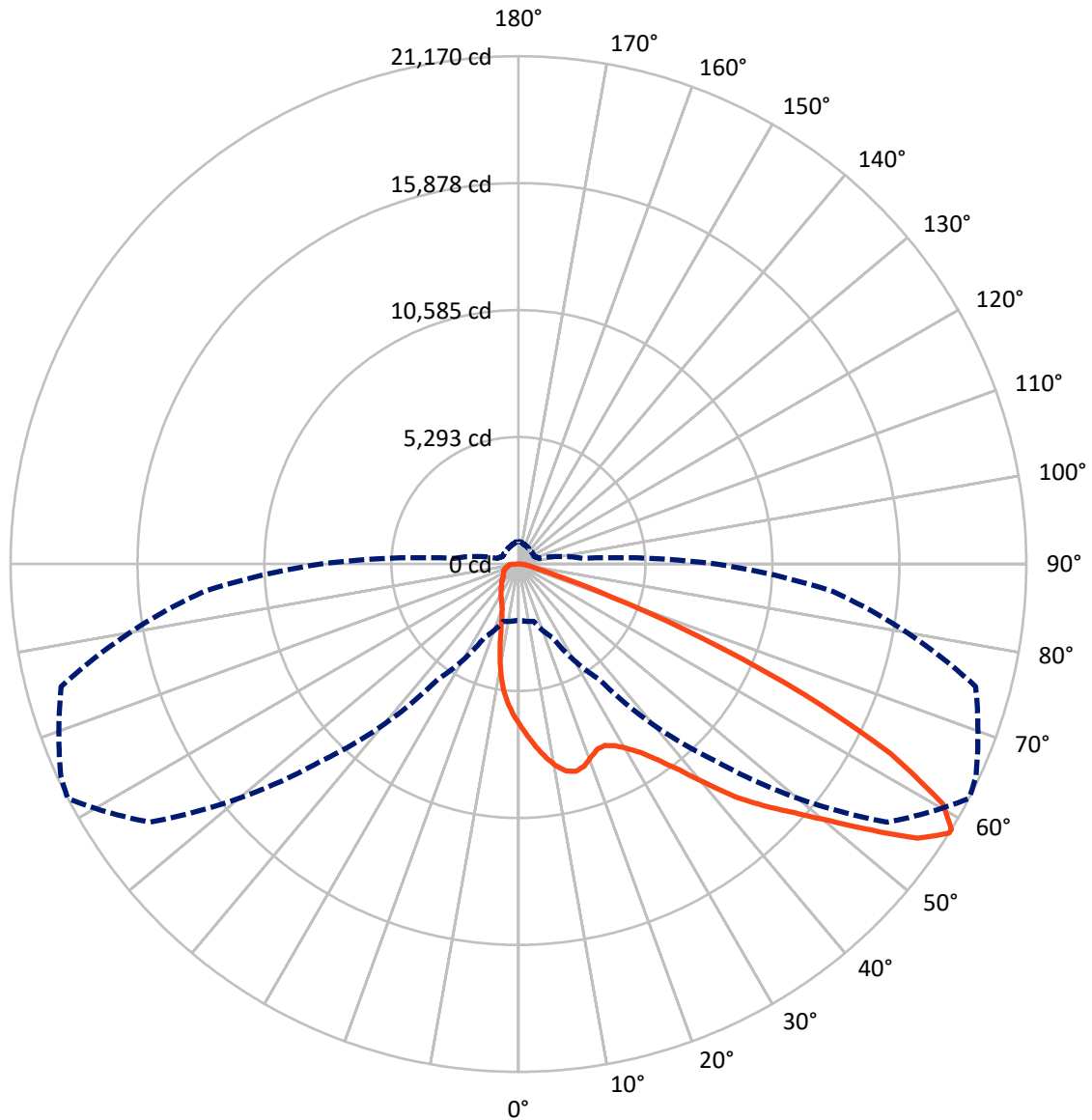
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.1 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral    - - - Horizontal Cone Through 58-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3843.0	0.0	3843.0
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	21356.4	0.0	21356.4
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	25199.4	0.0	25199.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	598.7	2.4
10°-20°	1530.3	6.1
20°-30°	2473.7	9.8
30°-40°	3927.0	15.6
40°-50°	5746.0	22.8
50°-60°	6009.8	23.8
60°-70°	3550.6	14.1
70°-80°	1000.2	4.0
80°-90°	363.1	1.4
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°	25199.4	100.0
0°-180°	25199.4	100.0



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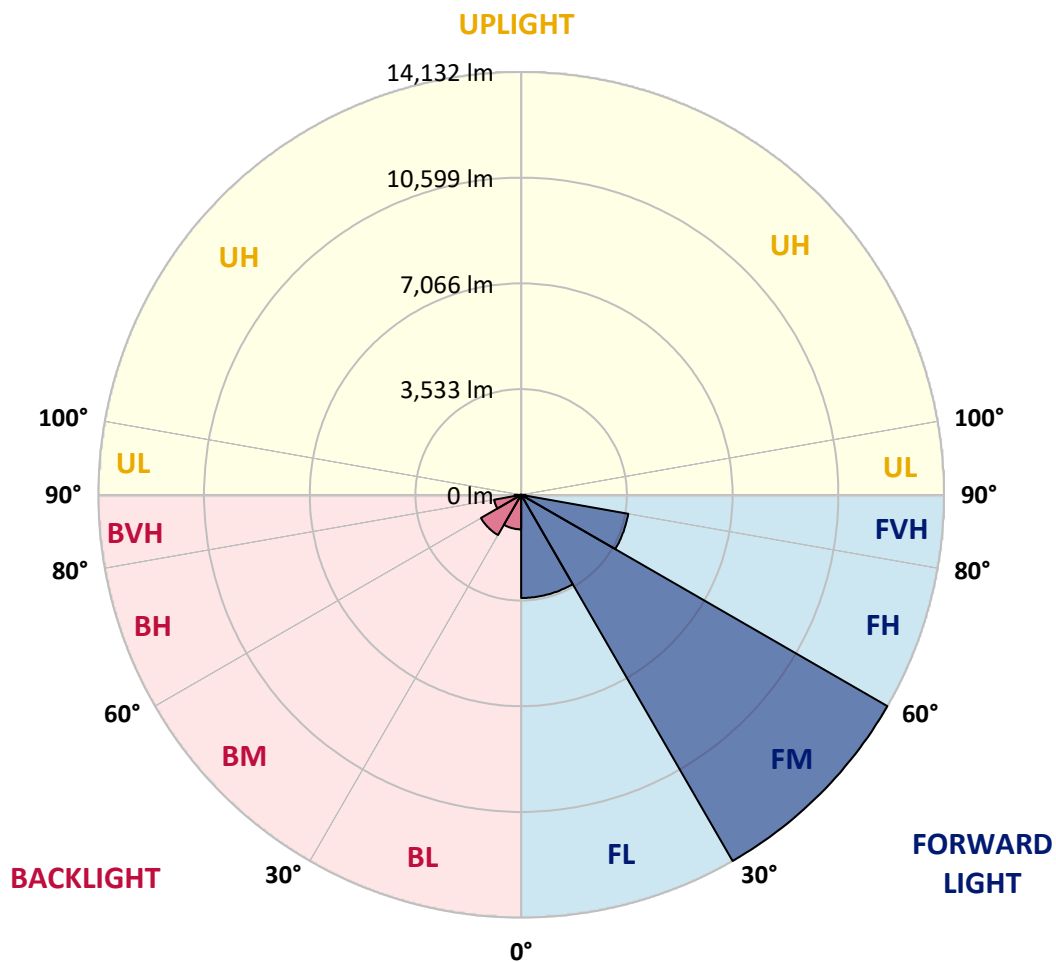
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3447.6	13.7			
FM	(30°-60°)	14131.7	56.1			
FH	(60°-80°)	3633.9	14.4			G2/5000
FVH	(80°-90°)	143.3	0.6			G2/225
BL	(0°-30°)	1155.0	4.6	B3/2500		
BM	(30°-60°)	1551.1	6.2	B2/2500		
BH	(60°-80°)	917.0	3.6	B2/1000		G2/1000
BVH	(80°-90°)	219.9	0.9			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	6693.7	6693.7	6693.7	6693.7	6693.7	6693.7	6693.7	6693.7	6693.7	6693.7	6693.7
2.5°	7648.9	7587.2	7548.0	7513.7	7468.6	7372.4	7243.1	7161.3	7119.7	6978.5	6811.2
5°	8398.8	8344.3	8303.9	8257.7	8177.0	8026.3	7817.4	7651.3	7569.4	7287.0	6952.4
7.5°	8223.3	8245.8	8315.8	8438.0	8542.5	8522.3	8336.0	8124.8	8016.8	7624.1	7116.2
10°	7164.7	7203.9	7324.9	7611.0	8073.7	8548.4	8693.1	8547.2	8438.0	7957.4	7284.6
12.5°	6952.4	6951.2	6960.7	7036.7	7312.0	7980.0	8705.0	8852.1	8786.8	8275.5	7456.7
15°	7039.0	7041.4	7034.2	7066.3	7151.8	7416.4	8342.0	8969.6	9015.9	8595.9	7634.7
17.5°	7266.8	7260.9	7233.6	7233.6	7264.5	7367.7	7914.8	8860.5	9074.1	8879.4	7791.3
20°	7648.9	7621.6	7549.3	7482.8	7449.5	7505.4	7739.1	8608.8	8973.2	9127.5	7920.7
22.5°	8111.7	8090.3	7972.9	7830.5	7715.4	7714.2	7829.3	8389.4	8798.7	9361.2	8029.9
25°	8709.7	8675.3	8500.9	8273.1	8071.4	7994.3	8026.3	8378.7	8703.8	9615.1	8127.1
27.5°	9412.3	9349.4	9142.8	8814.2	8517.5	8362.1	8315.8	8572.1	8790.4	9929.6	8262.4
30°	10264.2	10191.9	9927.2	9498.8	9080.0	8824.9	8726.4	8915.0	9077.6	10312.9	8479.5
32.5°	11233.7	11129.3	10823.1	10350.8	9800.3	9411.0	9250.9	9368.3	9497.7	10774.4	8751.2
35°	12573.4	12448.8	12006.2	11354.8	10732.9	10197.8	9941.4	10026.9	10152.7	11462.7	9144.1
37.5°	13487.1	13431.3	13137.0	12524.7	11848.3	11232.5	10836.2	10886.0	10957.2	12323.0	9647.1
40°	13478.8	13501.3	13507.2	13513.2	13052.8	12463.0	12037.1	11984.8	11970.6	13267.6	10219.2
42.5°	12803.6	12896.1	13195.1	13801.6	14081.5	13811.1	13420.6	13269.9	13195.1	14380.6	10825.5
45°	11770.1	11819.9	12380.0	13564.2	14608.5	15146.0	14850.5	14375.8	14240.6	15403.5	11328.7
47.5°	11237.2	11291.8	11644.2	12935.3	14602.5	16224.6	16395.4	15491.3	15249.2	16293.5	11762.9
50°	9968.8	10082.7	10526.5	11841.3	14069.7	16720.6	18010.5	16820.3	16319.5	17159.7	12198.4
52.5°	7639.4	7815.0	8312.3	10042.3	12718.1	16474.9	19302.7	18431.7	17724.5	18056.7	12572.2
55°	4818.8	4949.3	5367.0	7092.4	10174.1	15197.0	19792.8	20174.8	19545.9	18906.4	12896.1
57.5°	2620.1	2678.2	2834.8	3915.9	6617.8	12371.7	19078.4	21166.9	20905.8	19627.8	13140.6
58°	2344.7	2383.9	2481.2	3393.7	5869.0	11599.1	18761.5	21170.4	21039.8	19733.4	13159.5
60°	1739.5	1719.4	1632.8	1936.5	3266.8	8013.2	16846.4	20323.2	20706.5	19862.7	13067.0
62.5°	1528.4	1479.7	1302.9	1282.8	1588.8	3691.5	12890.2	17408.9	18314.2	19124.7	12504.6
65°	1435.8	1383.6	1155.7	1082.2	1146.3	1561.6	7593.2	13056.3	14191.9	16886.8	11066.4
67.5°	1367.0	1299.4	1062.0	961.2	965.9	1032.4	3043.7	8223.3	9501.3	12821.4	8607.7
70°	1300.6	1226.9	982.5	866.2	838.9	816.4	1210.4	4116.4	5275.7	8098.7	5488.1
72.5°	1229.4	1157.0	912.5	791.5	738.1	663.3	790.3	1683.8	2351.9	3831.6	2489.6
75°	1126.1	1060.8	842.5	725.1	649.1	549.4	596.9	879.3	1054.9	1526.0	1199.7
77.5°	999.1	945.7	764.1	670.4	575.5	446.2	459.2	609.9	676.4	873.4	713.2
80°	717.9	736.9	680.0	602.8	512.6	361.9	352.4	445.0	480.6	561.3	464.0
82.5°	504.3	515.0	562.4	492.4	423.6	284.8	259.8	313.2	334.6	369.1	250.4
85°	347.7	335.8	385.7	342.9	306.2	189.9	178.0	212.4	225.5	229.0	129.3
87.5°	208.9	208.9	223.1	183.9	164.9	98.5	96.2	121.0	129.3	123.4	71.2
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°	6693.7	6693.7	6693.7	6693.7	6693.7	6693.7	6693.7	6693.7	6693.7	6693.7	6693.7
2.5°	6711.5	6627.3	6448.1	6304.4	6123.0	5934.2	5828.7	5715.9	5638.8	5583.1	5672.1
5°	6762.5	6590.5	6220.3	5869.0	5481.0	5077.5	4771.3	4486.6	4288.4	4165.0	4281.4
7.5°	6843.2	6578.6	5988.9	5388.4	4691.9	4020.3	3419.8	3043.7	2824.2	2716.1	2783.8
10°	6935.8	6559.6	5717.1	4737.0	3740.2	2894.1	2445.6	2293.8	2243.8	2223.7	2233.2
12.5°	7012.9	6519.3	5383.7	3949.1	2808.7	2285.4	2156.1	2152.5	2163.2	2165.6	2169.2
15°	7067.5	6459.9	4888.9	3127.9	2246.3	2082.5	2075.4	2096.7	2116.9	2125.2	2130.0
17.5°	7104.3	6337.7	4329.9	2472.9	2012.5	1984.0	2000.6	2027.9	2049.3	2055.2	2059.9
20°	7100.7	6158.6	3664.3	2062.4	1885.5	1885.5	1914.0	1935.3	1936.5	1929.4	1933.0
22.5°	7063.9	5912.9	3018.7	1844.0	1772.8	1792.9	1821.5	1801.3	1718.3	1663.6	1667.2
25°	7002.2	5619.8	2465.8	1705.2	1668.4	1703.9	1695.6	1543.8	1425.2	1371.8	1371.8
27.5°	6947.7	5273.3	2041.0	1584.1	1564.0	1607.9	1460.8	1323.1	1273.3	1248.3	1240.0
30°	6908.5	4899.5	1757.3	1467.8	1465.5	1433.5	1267.3	1229.4	1221.0	1200.8	1193.8
32.5°	6918.0	4521.0	1575.9	1365.8	1374.1	1226.9	1174.8	1183.0	1176.0	1154.6	1145.1
35°	6996.3	4161.5	1457.2	1273.3	1248.3	1108.3	1120.1	1135.6	1133.2	1103.6	1094.0
37.5°	7136.3	3820.9	1378.8	1196.1	1089.3	1048.9	1068.0	1091.7	1085.8	1065.6	1058.4
40°	7283.4	3500.5	1314.8	1135.6	995.5	1008.6	1025.2	1038.3	1044.2	1050.2	1045.5
42.5°	7427.0	3165.9	1236.4	1073.9	956.5	970.7	977.7	990.8	1022.8	1045.5	1044.2
45°	7512.4	2851.5	1155.7	986.1	925.6	933.9	929.1	955.2	994.4	1031.1	1032.4
47.5°	7607.4	2607.0	1091.7	905.4	895.9	901.8	887.6	913.7	949.3	994.4	999.1
50°	7722.5	2461.0	1040.6	841.3	855.6	855.6	852.0	875.7	925.6	977.7	987.2
52.5°	7853.0	2432.6	998.0	795.0	815.2	814.1	817.5	853.1	907.8	958.8	967.1
55°	8012.1	2509.7	951.7	760.7	776.0	780.8	792.7	833.0	879.3	937.4	941.0
57.5°	8197.1	2666.3	914.9	733.4	740.4	755.9	774.9	811.6	861.5	925.6	929.1
58°	8228.0	2699.6	909.0	731.0	733.4	751.2	772.5	808.1	857.9	927.9	931.5
60°	8229.2	2809.9	895.9	720.3	706.0	735.7	759.4	795.0	852.0	936.2	944.6
62.5°	7937.3	2808.7	886.4	704.8	677.6	714.3	741.6	783.2	846.1	956.5	973.0
65°	6989.2	2552.4	841.3	681.1	655.0	695.4	726.2	774.9	862.7	1044.2	1054.9
67.5°	5466.8	2092.0	757.1	647.9	625.3	676.4	716.7	773.7	880.5	1064.4	1071.5
70°	3614.4	1565.1	664.5	609.9	594.5	653.9	721.5	814.1	860.3	1021.7	1002.7
72.5°	1876.0	1098.9	589.7	562.4	558.9	633.6	790.3	809.3	840.1	961.2	937.4
75°	984.9	763.0	524.5	510.2	516.2	628.9	932.7	787.9	814.1	919.6	964.7
77.5°	602.8	615.8	468.7	462.8	474.6	614.7	931.5	760.7	776.0	846.1	895.9
80°	403.5	499.6	426.0	427.2	435.5	562.4	836.6	717.9	729.8	799.7	850.8
82.5°	255.1	295.4	386.9	407.0	396.3	464.0	710.7	653.9	670.4	914.9	967.1
85°	129.3	185.2	335.8	391.6	357.2	325.1	576.7	573.2	581.4	659.8	689.5
87.5°	59.3	102.1	262.3	341.8	269.3	203.0	418.9	424.8	458.1	468.7	468.7
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)