

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: P300451

Luminaire Tested: **GAA-AF-07-LED-U-AFL-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300451
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: GAA-AF-07-LED-U-AFL-7027-600
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24638.3 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B3 - U0 - G2

Input Watts (W): 226
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

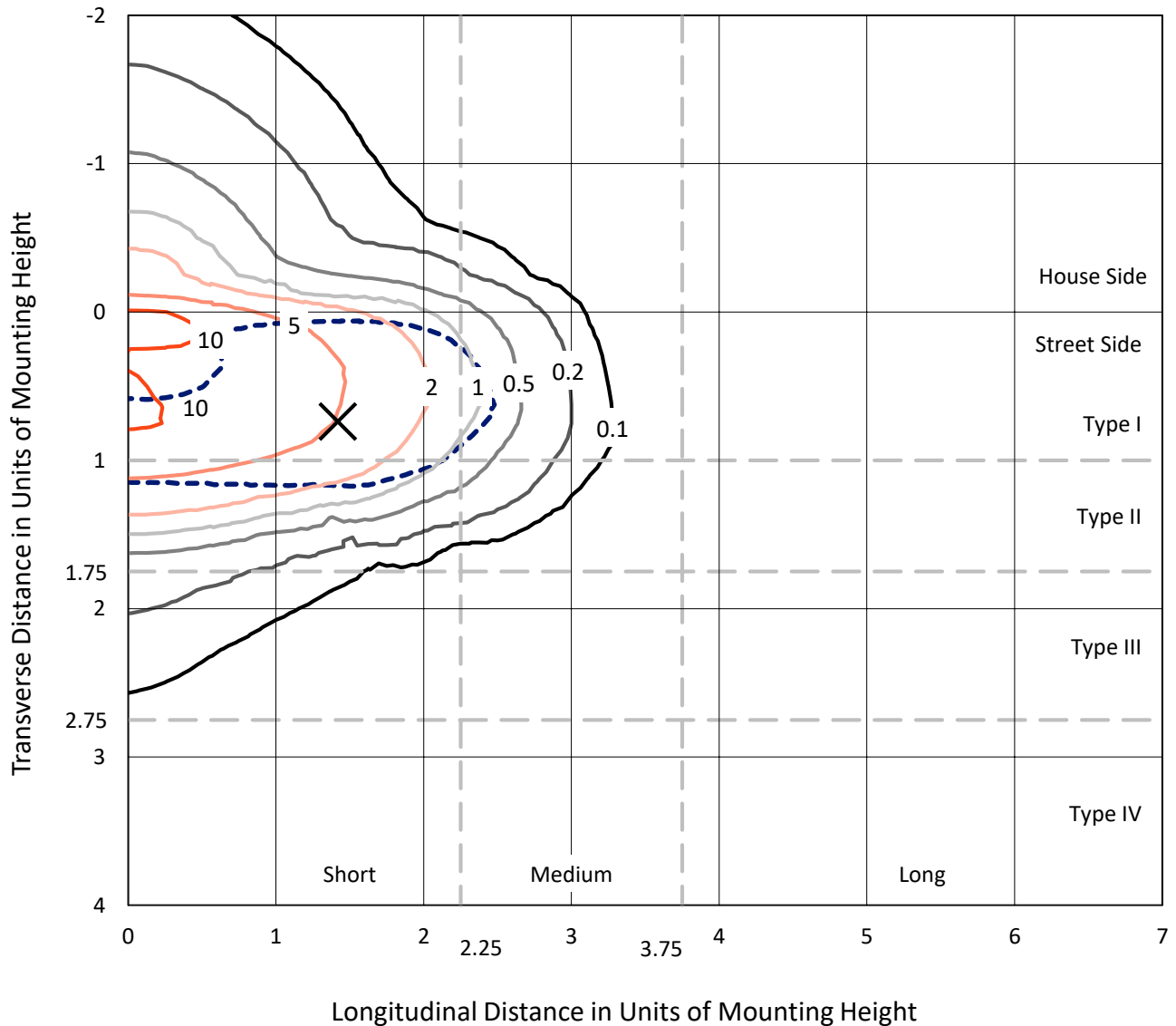


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Iso-Footcandle Lines of Horizontal Illumination

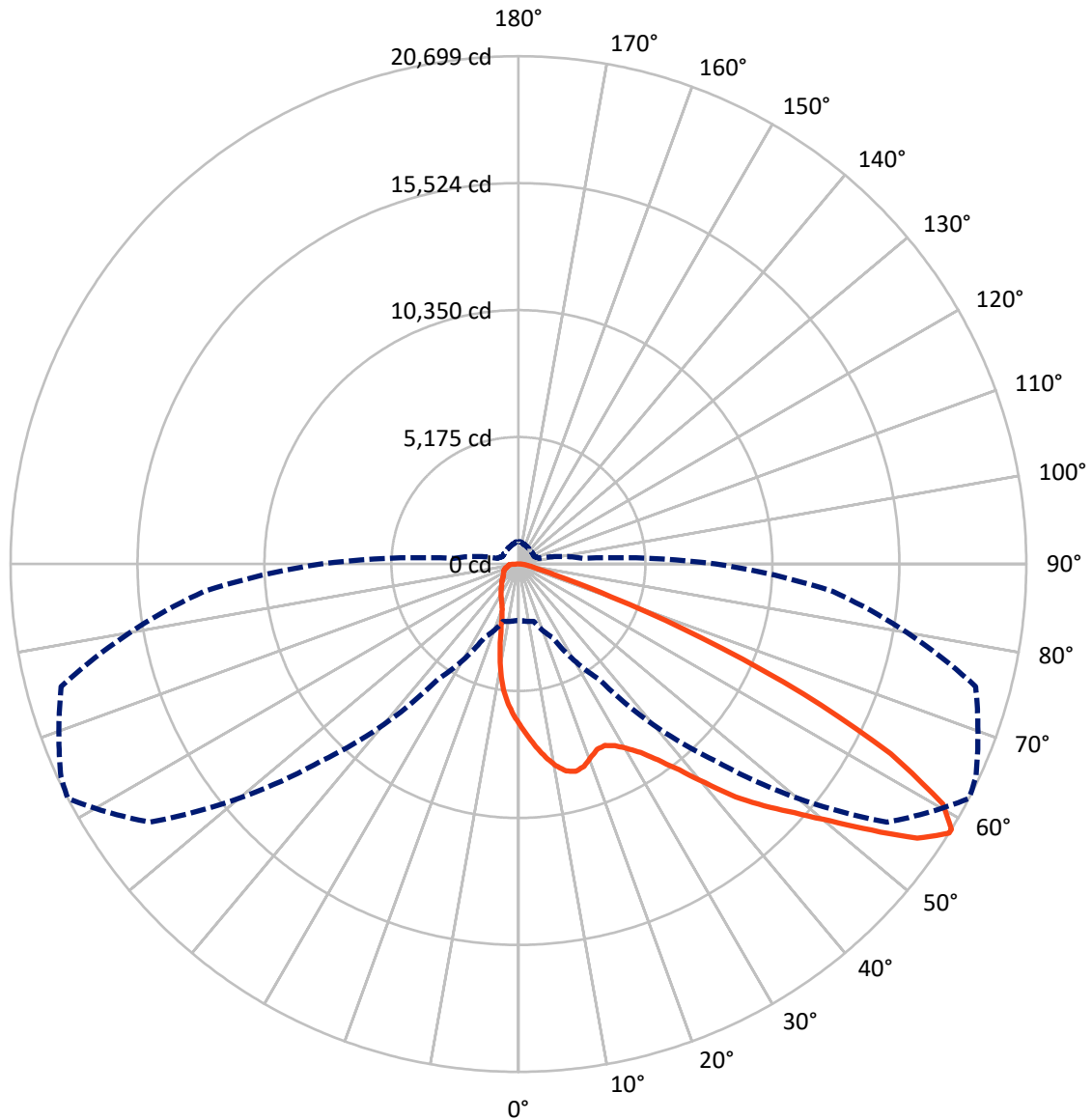
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.8 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
House Side	Lumens	3757.4	0.0	3757.4
	% Fixture	15.3	0.0	15.3
Street Side	Lumens	20880.8	0.0	20880.8
	% Fixture	84.7	0.0	84.7
Total	Lumens	24638.3	0.0	24638.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	585.3	2.4
10°-20°	1496.2	6.1
20°-30°	2418.6	9.8
30°-40°	3839.5	15.6
40°-50°	5618.0	22.8
50°-60°	5876.0	23.8
60°-70°	3471.5	14.1
70°-80°	978.0	4.0
80°-90°	355.0	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°	24638.3	100.0
0°-180°	24638.3	100.0



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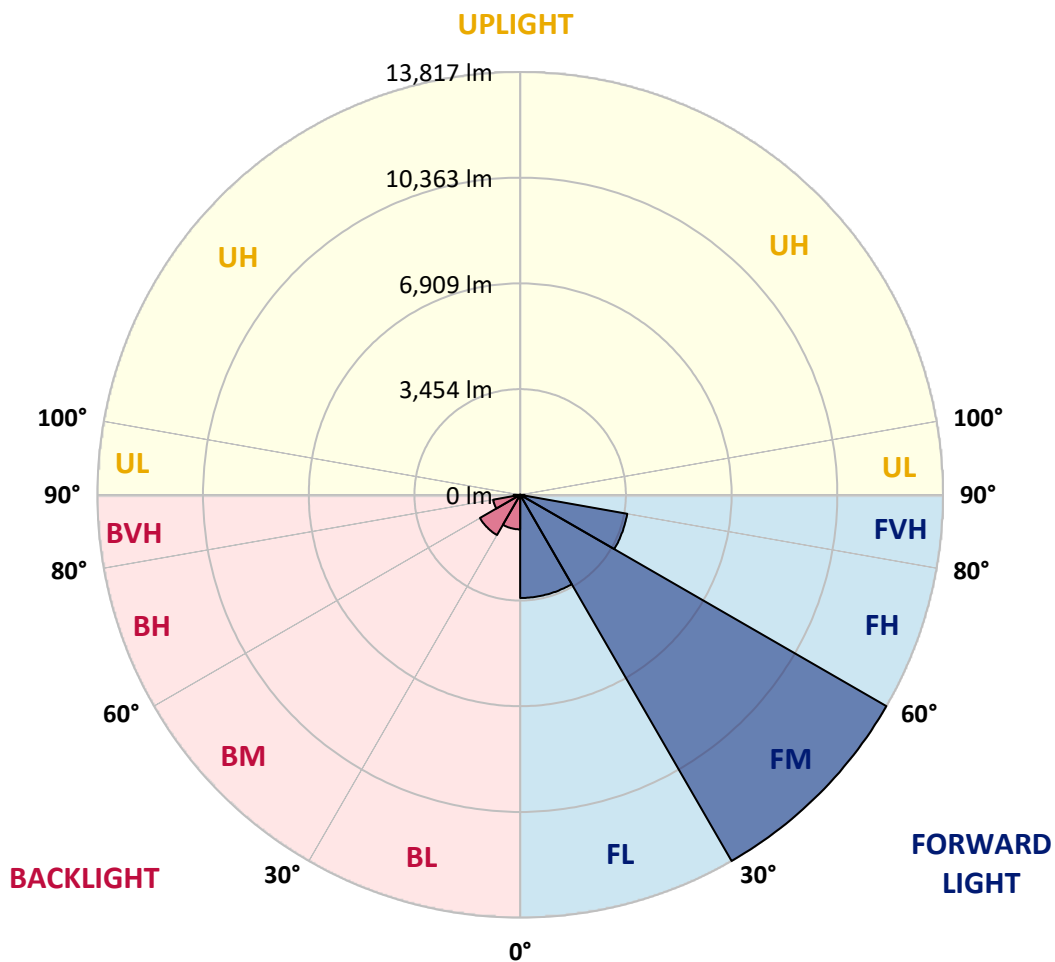
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3370.8	13.7			
FM (30°-60°)	13817.0	56.1			
FH (60°-80°)	3552.9	14.4			G2/5000
FVH (80°-90°)	140.1	0.6			G2/225
BL (0°-30°)	1129.3	4.6	B3/2500		
BM (30°-60°)	1516.6	6.2	B2/2500		
BH (60°-80°)	896.6	3.6	B2/1000		G2/1000
BVH (80°-90°)	215.0	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°	6544.7	6544.7	6544.7	6544.7	6544.7	6544.7	6544.7	6544.7	6544.7	6544.7	6544.7
2.5°	7478.6	7418.3	7380.0	7346.3	7302.3	7208.3	7081.8	7001.8	6961.2	6823.1	6659.5
5°	8211.8	8158.5	8119.0	8073.8	7994.9	7847.5	7643.4	7480.9	7400.9	7124.7	6797.6
7.5°	8040.1	8062.2	8130.6	8250.1	8352.2	8332.5	8150.4	7943.8	7838.3	7454.2	6957.7
10°	7005.2	7043.5	7161.9	7441.5	7894.0	8358.0	8499.6	8356.9	8250.1	7780.3	7122.4
12.5°	6797.6	6796.4	6805.7	6879.9	7149.1	7802.3	8511.2	8655.0	8591.2	8091.2	7290.7
15°	6882.3	6884.6	6877.6	6909.0	6992.5	7251.2	8156.2	8769.9	8815.2	8404.4	7464.7
17.5°	7105.0	7099.2	7072.5	7072.5	7102.7	7203.6	7738.5	8663.2	8872.0	8681.7	7617.8
20°	7478.6	7451.9	7381.2	7316.2	7283.7	7338.2	7566.8	8417.2	8773.4	8924.2	7744.3
22.5°	7931.1	7910.2	7795.3	7656.1	7543.6	7542.4	7655.0	8202.6	8602.8	9152.8	7851.0
25°	8515.8	8482.2	8311.6	8088.9	7891.6	7816.2	7847.5	8192.1	8510.0	9401.0	7946.2
27.5°	9202.7	9141.2	8939.3	8617.9	8327.9	8175.9	8130.6	8381.2	8594.7	9708.5	8078.4
30°	10035.7	9964.9	9706.2	9287.3	8877.8	8628.4	8532.1	8716.5	8875.5	10083.2	8290.7
32.5°	10983.6	10881.5	10582.1	10120.4	9582.0	9201.5	9044.9	9159.7	9286.2	10534.6	8556.4
35°	12293.4	12171.6	11738.8	11101.9	10494.0	9970.7	9720.1	9803.6	9926.6	11207.5	8940.5
37.5°	13186.8	13132.2	12844.5	12245.8	11584.5	10982.4	10594.9	10643.6	10713.2	12048.6	9432.4
40°	13178.6	13200.7	13206.5	13212.3	12762.1	12185.5	11769.0	11718.0	11704.0	12972.1	9991.6
42.5°	12518.5	12609.0	12901.4	13494.2	13768.0	13503.5	13121.8	12974.4	12901.4	14060.4	10584.4
45°	11508.0	11556.7	12104.3	13262.2	14283.1	14808.7	14519.8	14055.7	13923.5	15060.5	11076.4
47.5°	10987.0	11040.4	11385.0	12647.3	14277.3	15863.3	16030.4	15146.3	14909.6	15930.6	11501.0
50°	9746.8	9858.2	10292.1	11577.6	13756.4	16348.3	17609.4	16445.7	15956.1	16777.6	11926.8
52.5°	7469.3	7641.0	8127.2	9818.7	12435.0	16108.1	18872.9	18021.3	17329.8	17654.7	12292.3
55°	4711.5	4839.2	5247.6	6934.5	9947.5	14858.6	19352.0	19725.6	19110.7	18485.4	12609.0
57.5°	2561.7	2618.6	2771.7	3828.6	6470.4	12096.2	18653.6	20695.5	20440.3	19190.8	12848.0
58°	2292.5	2330.8	2426.0	3318.2	5738.3	11340.9	18343.8	20699.0	20571.4	19294.0	12866.5
60°	1700.8	1681.1	1596.4	1893.4	3194.0	7834.8	16471.3	19870.6	20245.4	19420.5	12776.1
62.5°	1494.3	1446.8	1273.9	1254.2	1553.5	3609.4	12603.2	17021.2	17906.4	18698.8	12226.1
65°	1403.8	1352.8	1130.0	1058.1	1120.7	1526.8	7424.1	12765.6	13875.9	16510.7	10820.0
67.5°	1336.5	1270.4	1038.4	939.8	944.4	1009.4	2975.9	8040.1	9289.7	12535.9	8416.0
70°	1271.6	1199.6	960.6	846.9	820.3	798.2	1183.4	4024.7	5158.2	7918.3	5365.9
72.5°	1202.0	1131.2	892.2	773.8	721.6	648.5	772.7	1646.3	2299.5	3746.3	2434.1
75°	1101.0	1037.2	823.7	708.9	634.6	537.2	583.6	859.7	1031.4	1492.0	1173.0
77.5°	976.9	924.7	747.2	655.5	562.7	436.2	449.0	596.3	661.3	853.9	697.3
80°	701.9	720.5	664.8	589.4	501.2	353.9	344.6	435.1	469.9	548.8	453.6
82.5°	493.1	503.5	549.9	481.5	414.2	278.4	254.1	306.3	327.2	360.8	244.8
85°	339.9	328.3	377.1	335.3	299.3	185.6	174.0	207.7	220.4	223.9	126.5
87.5°	204.2	204.2	218.1	179.8	161.3	96.3	94.0	118.3	126.5	120.7	69.6
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°	6544.7	6544.7	6544.7	6544.7	6544.7	6544.7	6544.7	6544.7	6544.7	6544.7	6544.7
2.5°	6562.1	6479.7	6304.5	6164.1	5986.6	5802.1	5698.9	5588.7	5513.2	5458.7	5545.7
5°	6611.9	6443.7	6081.7	5738.3	5358.9	4964.5	4665.1	4386.7	4192.9	4072.3	4186.0
7.5°	6690.8	6432.1	5855.5	5268.4	4587.4	3930.7	3343.7	2975.9	2761.3	2655.7	2721.8
10°	6781.3	6413.5	5589.8	4631.5	3656.9	2829.7	2391.2	2242.7	2193.9	2174.2	2183.5
12.5°	6856.7	6374.1	5263.8	3861.1	2746.2	2234.5	2108.1	2104.6	2115.0	2117.4	2120.8
15°	6910.1	6316.1	4780.0	3058.3	2196.2	2036.1	2029.2	2050.1	2069.8	2077.9	2082.5
17.5°	6946.1	6196.6	4233.5	2417.8	1967.7	1939.8	1956.1	1982.8	2003.7	2009.5	2014.1
20°	6942.6	6021.4	3582.7	2016.4	1843.5	1843.5	1871.4	1892.3	1893.4	1886.5	1890.0
22.5°	6906.6	5781.2	2951.5	1802.9	1733.3	1753.1	1780.9	1761.2	1680.0	1626.6	1630.1
25°	6846.3	5494.7	2410.9	1667.2	1631.2	1666.0	1657.9	1509.4	1393.4	1341.2	1341.2
27.5°	6792.9	5155.9	1995.5	1548.9	1529.1	1572.1	1428.2	1293.6	1244.9	1220.5	1212.4
30°	6754.6	4790.4	1718.2	1435.2	1432.8	1401.5	1239.1	1202.0	1193.8	1174.1	1167.2
32.5°	6763.9	4420.3	1540.7	1335.4	1343.5	1199.6	1148.6	1156.7	1149.8	1128.9	1119.6
35°	6840.5	4068.8	1424.7	1244.9	1220.5	1083.6	1095.2	1110.3	1108.0	1079.0	1069.7
37.5°	6977.4	3735.8	1348.1	1169.5	1065.1	1025.6	1044.2	1067.4	1061.6	1041.9	1034.9
40°	7121.3	3422.6	1285.5	1110.3	973.4	986.2	1002.4	1015.2	1021.0	1026.8	1022.1
42.5°	7261.7	3095.4	1208.9	1050.0	935.1	949.0	956.0	968.8	1000.1	1022.1	1021.0
45°	7345.2	2787.9	1130.0	964.1	905.0	913.1	908.4	934.0	972.2	1008.2	1009.4
47.5°	7438.0	2548.9	1067.4	885.2	875.9	881.7	867.8	893.3	928.2	972.2	976.9
50°	7550.5	2406.2	1017.5	822.6	836.5	836.5	833.0	856.2	905.0	956.0	965.3
52.5°	7678.2	2378.4	975.7	777.3	797.1	795.9	799.4	834.2	887.5	937.4	945.6
55°	7833.6	2453.8	930.5	743.7	758.8	763.4	775.0	814.5	859.7	916.6	920.0
57.5°	8014.6	2607.0	894.5	717.0	724.0	739.0	757.6	793.6	842.3	905.0	908.4
58°	8044.8	2639.4	888.7	714.7	717.0	734.4	755.3	790.1	838.8	907.3	910.8
60°	8045.9	2747.3	875.9	704.2	690.3	719.3	742.5	777.3	833.0	915.4	923.5
62.5°	7760.5	2746.2	866.7	689.2	662.5	698.4	725.1	765.7	827.2	935.1	951.4
65°	6833.5	2495.6	822.6	666.0	640.4	679.9	710.0	757.6	843.5	1021.0	1031.4
67.5°	5345.0	2045.4	740.2	633.5	611.4	661.3	700.8	756.4	860.9	1040.7	1047.7
70°	3533.9	1530.3	649.7	596.3	581.3	639.3	705.4	795.9	841.1	998.9	980.4
72.5°	1834.3	1074.3	576.6	549.9	546.5	619.5	772.7	791.3	821.4	939.8	916.6
75°	963.0	746.0	512.8	498.9	504.7	614.9	911.9	770.4	795.9	899.1	943.2
77.5°	589.4	602.1	458.3	452.5	464.1	601.0	910.8	743.7	758.8	827.2	875.9
80°	394.5	488.4	416.5	417.7	425.8	549.9	817.9	701.9	713.5	782.0	831.9
82.5°	249.4	288.9	378.2	397.9	387.5	453.6	695.0	639.3	655.5	894.5	945.6
85°	126.5	181.0	328.3	382.9	349.2	317.9	563.9	560.4	568.5	645.1	674.1
87.5°	58.0	99.8	256.4	334.1	263.4	198.4	409.5	415.3	447.8	458.3	458.3
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)